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 – 4d. Barge Dewatering

Apex Laboratories Work Order #:

A9J0959

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

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APEX LABORATORIES, LLC
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Analytical Case Narrative

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

Analytical Case Narrative

Client: Anchor QEA, LLC Date: 12/24/2019
Project: Gasco PreRD_DG 2019 4d. Barge Dewatering
Apex Work Order Number: A9J0959

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, November 18, 2019

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

RE: A9J0959 - Gasco PreRD_DG 2019 - 4d. Barge Dewatering - [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 A9J0959, which was received by the laboratory on 10/25/2019 at 2:40:00PM.

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 3.9 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PDI-026SW-34-00-191024	**A9J0959-01**	**WS**	**10/24/19 10:30**	**10/25/19 14:40**

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AMENDED REPORT

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**	**Report ID:**
Portland, OR 97219	Project Manager:	**Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL CASE NARRATIVE

Work Order: A9J0959

Amended Report Revision 1

Change to Sample Identification:

This report supersedes all previous reports.

The sample matrix for client sample "PDI-026SW-34-00-191024" (A9J0959-01) was listed as "Water" in the original report.
The sample matrix has been changed to "WS", which is consistent with the Chain of Custody.

David Jack
Technical Manager
November 18, 2019

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Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**		**Batch: 9101622**		
Ethylbenzene	ND	0.250	0.500	ug/L	1	10/28/19 17:00	EPA 8260C	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*102 %*	*Limits:* *80-120 %*	*1*	*10/28/19 17:00*	*EPA 8260C*	
Toluene-d8 (Surr)			*102 %*	*80-120 %*	*1*	*10/28/19 17:00*	*EPA 8260C*	
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*	*1*	*10/28/19 17:00*	*EPA 8260C*	

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**		**Batch: 9101705**		**C-07**
Aroclor 1016	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1221	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1232	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1242	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1248	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1254	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Aroclor 1260	ND	0.00943	0.0189	ug/L	1	10/31/19 10:26	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 85 %*		*Limits: 40-135 %*	*1*	*10/31/19 10:26*	*EPA 8082A*	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**		**Batch: 9101643**		
Aldrin	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
cis-Chlordane	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
trans-Chlordane	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
4,4'-DDD	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
4,4'-DDE	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
4,4'-DDT	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
cis-Nonachlor	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
trans-Nonachlor	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
2,4'-DDD	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
2,4'-DDE	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
2,4'-DDT	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
Oxychlordane	ND	0.00472	0.00943	ug/L	1	10/31/19 21:56	EPA 8081B	
Surrogate: 2,4,5,6-TCMX (Surr)			*Recovery: 73 %*	*Limits: 25-140 %*	*1*	*10/31/19 21:56*	*EPA 8081B*	
Decachlorobiphenyl (Surr)			*91 %*	*30-135 %*	*1*	*10/31/19 21:56*	*EPA 8081B*	

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01RE2)				**Matrix: WS**		**Batch: 9101635**		
Benz(a)anthracene	**0.0101**	0.00952	0.0190	ug/L	1	10/29/19 17:20	EPA 8270D	**J**
Benzo(a)pyrene	**0.0167**	0.0143	0.0286	ug/L	1	10/29/19 17:20	EPA 8270D	**J**
Benzo(b)fluoranthene	**0.0165**	0.0143	0.0286	ug/L	1	10/29/19 17:20	EPA 8270D	**J**
Benzo(k)fluoranthene	ND	0.0143	0.0286	ug/L	1	10/29/19 17:20	EPA 8270D	
Chrysene	ND	0.00952	0.0190	ug/L	1	10/29/19 17:20	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00952	0.0190	ug/L	1	10/29/19 17:20	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00952	0.0190	ug/L	1	10/29/19 17:20	EPA 8270D	
Naphthalene	**0.0426**	0.0190	0.0381	ug/L	1	10/29/19 17:20	EPA 8270D	
Pentachlorophenol (PCP)	ND	0.0952	0.190	ug/L	1	10/29/19 17:20	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.190	0.381	ug/L	1	10/29/19 17:20	EPA 8270D	
Hexachlorobenzene	ND	0.00952	0.0190	ug/L	1	10/29/19 17:20	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*70 %*	*Limits: 44-120 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*66 %*	*44-120 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	
Phenol-d6 (Surr)			*20 %*	*10-120 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*70 %*	*50-133 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	
2-Fluorophenol (Surr)			*38 %*	*19-120 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*85 %*	*43-140 %*	*1*	*10/29/19 17:20*	*EPA 8270D*	

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**				
Batch: 9101684								
Arsenic	**0.588**	0.500	1.00	ug/L	1	10/30/19 00:38	EPA 6020A	**J**
Chromium	ND	0.500	1.00	ug/L	1	10/30/19 00:38	EPA 6020A	
Copper	**1.32**	0.500	1.00	ug/L	1	10/30/19 00:38	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	10/30/19 00:38	EPA 6020A	

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Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**				
Batch: 9101637								
Total Suspended Solids	ND	5.00	5.00	mg/L	1	10/29/19 11:28	SM 2540 D	

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Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
PDI-026SW-34-00-191024 (A9J0959-01)				**Matrix: WS**				
Batch: 9101615								
pH	**7.40**			pH Units	1	10/25/19 17:00	SM 4500-H+ B	**H-12**
pH Temperature (deg C)	**21.1**			pH Units	1	10/25/19 17:00	SM 4500-H+ B	**H-12**

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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**	**A9J0959 - 11 18 19 1628**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101622 - EPA 5030B												**Water**
Blank (9101622-BLK1)				Prepared: 10/28/19 08:00 Analyzed: 10/28/19 10:17								
EPA 8260C												
Ethylbenzene	ND	0.250	0.500	ug/L	1	---	---	---	---	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*101 %*	*80-120 %*			*"*					
LCS (9101622-BS1)				Prepared: 10/28/19 08:00 Analyzed: 10/28/19 09:24								
EPA 8260C												
Ethylbenzene	19.3	0.250	0.500	ug/L	1	20.0	---	96	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*100 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*98 %*	*80-120 %*			*"*					
Duplicate (9101622-DUP1)				Prepared: 10/28/19 10:12 Analyzed: 10/28/19 15:13								
QC Source Sample: Non-SDG (A9J0952-02)												
Ethylbenzene	ND	2.50	5.00	ug/L	10	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*101 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*100 %*	*80-120 %*			*"*					
Duplicate (9101622-DUP2)				Prepared: 10/28/19 10:12 Analyzed: 10/28/19 19:42								
QC Source Sample: Non-SDG (A9J0955-03)												
Ethylbenzene	ND	0.625	1.25	ug/L	2.5	---	ND	---	---	---	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 102 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*102 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*102 %*	*80-120 %*			*"*					
Matrix Spike (9101622-MS1)				Prepared: 10/28/19 10:12 Analyzed: 10/28/19 20:35								
QC Source Sample: Non-SDG (A9J0975-01)												
EPA 8260C												
Ethylbenzene	22.2	0.250	0.500	ug/L	1	20.0	ND	111	79-121%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*	*Limits: 80-120 %*			*Dilution: 1x*					

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

QUALITY CONTROL (QC) SAMPLE RESULTS

BTEX Compounds by EPA 8260C

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101622 - EPA 5030B												**Water**
Matrix Spike (9101622-MS1)					Prepared: 10/28/19 10:12 Analyzed: 10/28/19 20:35							
QC Source Sample: Non-SDG (A9J0975-01)												
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*		*Limits: 80-120 %*							*Dilution: 1x*
4-Bromofluorobenzene (Surr)			*98 %*		*80-120 %*							*"*

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101705 - EPA 3510C (Neutral pH)							**Water**					
Blank (9101705-BLK1)			Prepared: 10/29/19 12:34		Analyzed: 10/31/19 08:58							**C-07**
EPA 8082A												
Aroclor 1016	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1221	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1232	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1242	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1248	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1254	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Aroclor 1260	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 94 %*		*Limits: 40-135 %*			*Dilution: 1x*				
LCS (9101705-BS1)			Prepared: 10/29/19 12:34		Analyzed: 10/31/19 09:15							**C-07**
EPA 8082A												
Aroclor 1016	0.650	0.0100	0.0200	ug/L	1	1.25	---	52	46-129%	---	---	
Aroclor 1260	0.888	0.0100	0.0200	ug/L	1	1.25	---	71	45-134%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 87 %*		*Limits: 40-135 %*			*Dilution: 1x*				
LCS Dup (9101705-BSD1)			Prepared: 10/29/19 12:34		Analyzed: 10/31/19 09:33							**C-07, Q-19**
EPA 8082A												
Aroclor 1016	0.673	0.0100	0.0200	ug/L	1	1.25	---	54	46-129%	3	30%	
Aroclor 1260	0.899	0.0100	0.0200	ug/L	1	1.25	---	72	45-134%	1	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 84 %*		*Limits: 40-135 %*			*Dilution: 1x*				

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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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101643 - EPA 3510C (Neutral pH)												**Water**
Blank (9101643-BLK1)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 17:22									
EPA 8081B												
Aldrin	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
cis-Chlordane	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
trans-Chlordane	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
4,4'-DDD	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
4,4'-DDE	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
4,4'-DDT	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
cis-Nonachlor	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
trans-Nonachlor	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
2,4'-DDD	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
2,4'-DDE	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
2,4'-DDT	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
Oxychlordane	ND	0.00455	0.00909	ug/L	1	---	---	---	---	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 35 %*		*Limits: 25-140 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*73 %*		*30-135 %*			*"*				
LCS (9101643-BS1)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 17:39									
EPA 8081B												
Aldrin	0.328	0.00500	0.0100	ug/L	1	0.500	---	66	45-134%	---	---	
cis-Chlordane	0.441	0.00500	0.0100	ug/L	1	0.500	---	88	60-129%	---	---	
trans-Chlordane	0.432	0.00500	0.0100	ug/L	1	0.500	---	86	56-136%	---	---	
4,4'-DDD	0.446	0.00500	0.0100	ug/L	1	0.500	---	89	56-143%	---	---	
4,4'-DDE	0.411	0.00500	0.0100	ug/L	1	0.500	---	82	57-135%	---	---	
4,4'-DDT	0.488	0.00500	0.0100	ug/L	1	0.500	---	98	51-143%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 36 %*		*Limits: 25-140 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*82 %*		*30-135 %*			*"*				
LCS (9101643-BS2)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 18:13									
EPA 8081B												
cis-Nonachlor	0.455	0.00500	0.0100	ug/L	1	0.500	---	91	25-120%	---	---	
trans-Nonachlor	0.425	0.00500	0.0100	ug/L	1	0.500	---	85	25-120%	---	---	
2,4'-DDD	0.406	0.00500	0.0100	ug/L	1	0.500	---	81	30-135%	---	---	
2,4'-DDE	0.400	0.00500	0.0100	ug/L	1	0.500	---	80	50-140%	---	---	
2,4'-DDT	0.474	0.00500	0.0100	ug/L	1	0.500	---	95	45-140%	---	---	

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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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

QUALITY CONTROL (QC) SAMPLE RESULTS

Organochlorine Pesticides by EPA 8081B

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101643 - EPA 3510C (Neutral pH)							**Water**					
LCS (9101643-BS2)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 18:13									
Oxychlordane	0.411	0.00500	0.0100	ug/L	1	0.500	---	82	25-120%	---	---	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 39 %*		*Limits: 25-140 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*76 %*		*30-135 %*			*"*				
LCS Dup (9101643-BSD1)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 17:56									**Q-19**
EPA 8081B												
Aldrin	0.333	0.00500	0.0100	ug/L	1	0.500	---	67	45-134%	1	30%	
cis-Chlordane	0.437	0.00500	0.0100	ug/L	1	0.500	---	87	60-129%	1	30%	
trans-Chlordane	0.418	0.00500	0.0100	ug/L	1	0.500	---	84	56-136%	3	30%	
4,4'-DDD	0.446	0.00500	0.0100	ug/L	1	0.500	---	89	56-143%	0.2	30%	
4,4'-DDE	0.412	0.00500	0.0100	ug/L	1	0.500	---	82	57-135%	0.2	30%	
4,4'-DDT	0.494	0.00500	0.0100	ug/L	1	0.500	---	99	51-143%	1	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 42 %*		*Limits: 25-140 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*77 %*		*30-135 %*			*"*				
LCS Dup (9101643-BSD2)			Prepared: 10/28/19 11:17 Analyzed: 10/31/19 18:31									**Q-19**
EPA 8081B												
cis-Nonachlor	0.480	0.00500	0.0100	ug/L	1	0.500	---	96	25-120%	5	30%	
trans-Nonachlor	0.449	0.00500	0.0100	ug/L	1	0.500	---	90	25-120%	5	30%	
2,4'-DDD	0.423	0.00500	0.0100	ug/L	1	0.500	---	85	30-135%	4	30%	
2,4'-DDE	0.409	0.00500	0.0100	ug/L	1	0.500	---	82	50-140%	2	30%	
2,4'-DDT	0.508	0.00500	0.0100	ug/L	1	0.500	---	102	45-140%	7	30%	
Oxychlordane	0.414	0.00500	0.0100	ug/L	1	0.500	---	83	25-120%	0.9	30%	
Surr: 2,4,5,6-TCMX (Surr)			*Recovery: 39 %*		*Limits: 25-140 %*			*Dilution: 1x*				
Decachlorobiphenyl (Surr)			*84 %*		*30-135 %*			*"*				

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9101635-BLK2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 15:16							
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	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

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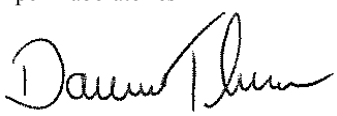

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9101635-BLK2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 15:16							
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
N-Nitrosodimethylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitroso-di-n-propylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
N-Nitrosodiphenylamine	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethoxy) methane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Chloroethyl) ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2,2'-Oxybis(1-Chloropropane)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorobenzene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Hexachlorobutadiene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Hexachlorocyclopentadiene	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Hexachloroethane	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Chloronaphthalene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Bromophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
4-Chlorophenyl phenyl ether	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
3-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
4-Nitroaniline	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Nitrobenzene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2,6-Dinitrotoluene	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Benzoic acid	ND	1.14	2.27	ug/L	1	---	---	---	---	---	---	
Benzyl alcohol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9101635-BLK2)			Prepared: 10/28/19 10:04 Analyzed: 10/28/19 15:16									
Isophorone	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Azobenzene (1,2-DPH)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
Bis(2-Ethylhexyl) adipate	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
3,3'-Dichlorobenzidine	ND	0.455	0.909	ug/L	1	---	---	---	---	---	---	Q-52
1,2-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,3-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
1,4-Dinitrobenzene	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 81 %*		*Limits: 44-120 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*73 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*23 %*		*10-120 %*			*"*				
p-Terphenyl-d14 (Surr)			*84 %*		*50-133 %*			*"*				
2-Fluorophenol (Surr)			*38 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*88 %*		*43-140 %*			*"*				
LCS (9101635-BS2)			Prepared: 10/28/19 10:04 Analyzed: 10/28/19 15:52									
EPA 8270D												
Acenaphthene	3.87	0.0400	0.0800	ug/L	4	4.00	---	97	47-122%	---	---	
Acenaphthylene	3.93	0.0400	0.0800	ug/L	4	4.00	---	98	41-130%	---	---	
Anthracene	4.15	0.0400	0.0800	ug/L	4	4.00	---	104	57-123%	---	---	
Benz(a)anthracene	4.23	0.0400	0.0800	ug/L	4	4.00	---	106	58-125%	---	---	
Benzo(a)pyrene	3.82	0.0600	0.120	ug/L	4	4.00	---	95	54-128%	---	---	
Benzo(b)fluoranthene	4.33	0.0600	0.120	ug/L	4	4.00	---	108	53-131%	---	---	
Benzo(k)fluoranthene	4.63	0.0600	0.120	ug/L	4	4.00	---	116	57-129%	---	---	
Benzo(g,h,i)perylene	4.43	0.0400	0.0800	ug/L	4	4.00	---	111	50-134%	---	---	
Chrysene	4.11	0.0400	0.0800	ug/L	4	4.00	---	103	59-123%	---	---	
Dibenz(a,h)anthracene	4.20	0.0400	0.0800	ug/L	4	4.00	---	105	51-134%	---	---	
Fluoranthene	4.19	0.0400	0.0800	ug/L	4	4.00	---	105	57-128%	---	---	
Fluorene	3.96	0.0400	0.0800	ug/L	4	4.00	---	99	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	4.03	0.0400	0.0800	ug/L	4	4.00	---	101	52-133%	---	---	
1-Methylnaphthalene	3.84	0.0800	0.160	ug/L	4	4.00	---	96	41-120%	---	---	
2-Methylnaphthalene	3.92	0.0800	0.160	ug/L	4	4.00	---	98	40-121%	---	---	
Naphthalene	3.78	0.0800	0.160	ug/L	4	4.00	---	94	40-121%	---	---	
Phenanthrene	4.10	0.0400	0.0800	ug/L	4	4.00	---	102	59-120%	---	---	
Pyrene	4.36	0.0400	0.0800	ug/L	4	4.00	---	109	57-126%	---	---	

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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
LCS (9101635-BS2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 15:52							
Carbazole	3.99	0.0600	0.120	ug/L	4	4.00	---	100	60-122%	---	---	
Dibenzofuran	4.03	0.0400	0.0800	ug/L	4	4.00	---	101	53-120%	---	---	
4-Chloro-3-methylphenol	3.45	0.400	0.800	ug/L	4	4.00	---	86	52-120%	---	---	
2-Chlorophenol	3.41	0.200	0.400	ug/L	4	4.00	---	85	38-120%	---	---	
2,4-Dichlorophenol	3.81	0.200	0.400	ug/L	4	4.00	---	95	47-121%	---	---	
2,4-Dimethylphenol	3.00	0.200	0.400	ug/L	4	4.00	---	75	31-124%	---	---	
2,4-Dinitrophenol	5.10	1.00	2.00	ug/L	4	4.00	---	128	23-143%	---	---	Q-41
4,6-Dinitro-2-methylphenol	5.19	1.00	2.00	ug/L	4	4.00	---	130	44-137%	---	---	
2-Methylphenol	2.83	0.100	0.200	ug/L	4	4.00	---	71	30-120%	---	---	
3+4-Methylphenol(s)	2.62	0.100	0.200	ug/L	4	4.00	---	66	29-120%	---	---	
2-Nitrophenol	3.49	0.400	0.800	ug/L	4	4.00	---	87	47-123%	---	---	
4-Nitrophenol	1.55	0.400	0.800	ug/L	4	4.00	---	39	5-120%	---	---	
Pentachlorophenol (PCP)	4.06	0.400	0.800	ug/L	4	4.00	---	101	35-138%	---	---	
Phenol	1.19	0.800	0.800	ug/L	4	4.00	---	30	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	4.02	0.200	0.400	ug/L	4	4.00	---	100	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	4.01	0.200	0.400	ug/L	4	4.00	---	100	50-121%	---	---	
2,4,5-Trichlorophenol	3.90	0.200	0.400	ug/L	4	4.00	---	98	53-123%	---	---	
2,4,6-Trichlorophenol	3.83	0.200	0.400	ug/L	4	4.00	---	96	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	3.68	0.800	1.60	ug/L	4	4.00	---	92	55-135%	---	---	
Butyl benzyl phthalate	3.68	0.800	1.60	ug/L	4	4.00	---	92	53-134%	---	---	
Diethylphthalate	3.88	0.800	1.60	ug/L	4	4.00	---	97	55-125%	---	---	
Dimethylphthalate	4.03	0.800	1.60	ug/L	4	4.00	---	101	45-127%	---	---	
Di-n-butylphthalate	4.05	0.800	1.60	ug/L	4	4.00	---	101	59-127%	---	---	
Di-n-octyl phthalate	3.40	0.800	1.60	ug/L	4	4.00	---	85	51-140%	---	---	
N-Nitrosodimethylamine	1.10	0.100	0.200	ug/L	4	4.00	---	28	6-120%	---	---	
N-Nitroso-di-n-propylamine	3.46	0.100	0.200	ug/L	4	4.00	---	86	49-120%	---	---	
N-Nitrosodiphenylamine	3.97	0.100	0.200	ug/L	4	4.00	---	99	51-123%	---	---	
Bis(2-Chloroethoxy) methane	3.76	0.100	0.200	ug/L	4	4.00	---	94	48-120%	---	---	
Bis(2-Chloroethyl) ether	3.30	0.100	0.200	ug/L	4	4.00	---	82	43-120%	---	---	
2,2'-Oxybis(1-Chloropropane)	2.99	0.100	0.200	ug/L	4	4.00	---	75	37-130%	---	---	
Hexachlorobenzene	4.29	0.0400	0.0800	ug/L	4	4.00	---	107	52-125%	---	---	
Hexachlorobutadiene	3.67	0.100	0.200	ug/L	4	4.00	---	92	22-124%	---	---	
Hexachlorocyclopentadiene	3.60	0.200	0.400	ug/L	4	4.00	---	90	5-127%	---	---	
Hexachloroethane	3.51	0.100	0.200	ug/L	4	4.00	---	88	21-120%	---	---	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
LCS (9101635-BS2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 15:52							
2-Chloronaphthalene	3.97	0.0400	0.0800	ug/L	4	4.00	---	99	40-120%	---	---	
1,2-Dichlorobenzene	3.49	0.100	0.200	ug/L	4	4.00	---	87	32-120%	---	---	
1,3-Dichlorobenzene	3.43	0.100	0.200	ug/L	4	4.00	---	86	28-120%	---	---	
1,4-Dichlorobenzene	3.40	0.100	0.200	ug/L	4	4.00	---	85	29-120%	---	---	
1,2,4-Trichlorobenzene	3.70	0.100	0.200	ug/L	4	4.00	---	93	29-120%	---	---	
4-Bromophenyl phenyl ether	4.17	0.100	0.200	ug/L	4	4.00	---	104	54-124%	---	---	
4-Chlorophenyl phenyl ether	4.05	0.100	0.200	ug/L	4	4.00	---	101	53-121%	---	---	
2-Nitroaniline	3.98	0.800	1.60	ug/L	4	4.00	---	99	54-127%	---	---	
3-Nitroaniline	2.19	0.800	1.60	ug/L	4	4.00	---	55	41-128%	---	---	
4-Nitroaniline	4.00	0.800	1.60	ug/L	4	4.00	---	100	35-120%	---	---	
Nitrobenzene	3.58	0.400	0.800	ug/L	4	4.00	---	89	45-121%	---	---	
2,4-Dinitrotoluene	4.35	0.400	0.800	ug/L	4	4.00	---	109	57-128%	---	---	
2,6-Dinitrotoluene	4.33	0.400	0.800	ug/L	4	4.00	---	108	57-124%	---	---	
Benzoic acid	4.30	4.00	4.00	ug/L	4	8.00	---	54	5-120%	---	---	
Benzyl alcohol	1.66	0.400	0.800	ug/L	4	4.00	---	41	31-120%	---	---	
Isophorone	3.66	0.100	0.200	ug/L	4	4.00	---	92	42-124%	---	---	
Azobenzene (1,2-DPH)	3.47	0.100	0.200	ug/L	4	4.00	---	87	61-120%	---	---	
Bis(2-Ethylhexyl) adipate	3.71	1.00	2.00	ug/L	4	4.00	---	93	40-125%	---	---	
3,3'-Dichlorobenzidine	11.2	2.00	4.00	ug/L	4	8.00	---	**140**	**27-129%**	---	---	Q-29
1,2-Dinitrobenzene	4.02	1.00	2.00	ug/L	4	4.00	---	100	59-120%	---	---	
1,3-Dinitrobenzene	4.34	1.00	2.00	ug/L	4	4.00	---	108	49-128%	---	---	
1,4-Dinitrobenzene	4.61	1.00	2.00	ug/L	4	4.00	---	115	40-120%	---	---	Q-41
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 88 %*		*Limits: 44-120 %*			*Dilution: 4x*				
2-Fluorobiphenyl (Surr)			*94 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*27 %*		*10-120 %*			*"*				
p-Terphenyl-d14 (Surr)			*102 %*		*50-133 %*			*"*				
2-Fluorophenol (Surr)			*45 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*101 %*		*43-140 %*			*"*				
LCS Dup (9101635-BSD2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 16:27							**Q-19**
EPA 8270D												
Acenaphthene	3.51	0.0400	0.0800	ug/L	4	4.00	---	88	47-122%	10	30%	
Acenaphthylene	3.55	0.0400	0.0800	ug/L	4	4.00	---	89	41-130%	10	30%	
Anthracene	3.85	0.0400	0.0800	ug/L	4	4.00	---	96	57-123%	7	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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9101635-BSD2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 16:27							**Q-19**
Benz(a)anthracene	3.97	0.0400	0.0800	ug/L	4	4.00	---	99	58-125%	6	30%	
Benzo(a)pyrene	3.61	0.0600	0.120	ug/L	4	4.00	---	90	54-128%	6	30%	
Benzo(b)fluoranthene	4.06	0.0600	0.120	ug/L	4	4.00	---	101	53-131%	6	30%	
Benzo(k)fluoranthene	4.34	0.0600	0.120	ug/L	4	4.00	---	109	57-129%	6	30%	
Benzo(g,h,i)perylene	3.99	0.0400	0.0800	ug/L	4	4.00	---	100	50-134%	11	30%	
Chrysene	3.82	0.0400	0.0800	ug/L	4	4.00	---	95	59-123%	7	30%	
Dibenz(a,h)anthracene	3.83	0.0400	0.0800	ug/L	4	4.00	---	96	51-134%	9	30%	
Fluoranthene	3.97	0.0400	0.0800	ug/L	4	4.00	---	99	57-128%	5	30%	
Fluorene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	52-124%	8	30%	
Indeno(1,2,3-cd)pyrene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	52-133%	10	30%	
1-Methylnaphthalene	3.46	0.0800	0.160	ug/L	4	4.00	---	87	41-120%	10	30%	
2-Methylnaphthalene	3.48	0.0800	0.160	ug/L	4	4.00	---	87	40-121%	12	30%	
Naphthalene	3.36	0.0800	0.160	ug/L	4	4.00	---	84	40-121%	12	30%	
Phenanthrene	3.77	0.0400	0.0800	ug/L	4	4.00	---	94	59-120%	8	30%	
Pyrene	4.17	0.0400	0.0800	ug/L	4	4.00	---	104	57-126%	4	30%	
Carbazole	3.92	0.0600	0.120	ug/L	4	4.00	---	98	60-122%	2	30%	
Dibenzofuran	3.72	0.0400	0.0800	ug/L	4	4.00	---	93	53-120%	8	30%	
4-Chloro-3-methylphenol	3.26	0.400	0.800	ug/L	4	4.00	---	82	52-120%	6	30%	
2-Chlorophenol	3.15	0.200	0.400	ug/L	4	4.00	---	79	38-120%	8	30%	
2,4-Dichlorophenol	3.51	0.200	0.400	ug/L	4	4.00	---	88	47-121%	8	30%	
2,4-Dimethylphenol	2.89	0.200	0.400	ug/L	4	4.00	---	72	31-124%	4	30%	
2,4-Dinitrophenol	5.62	1.00	2.00	ug/L	4	4.00	---	141	23-143%	10	30%	Q-41
4,6-Dinitro-2-methylphenol	5.65	1.00	2.00	ug/L	4	4.00	---	**141**	**44-137%**	9	30%	Q-29
2-Methylphenol	2.73	0.100	0.200	ug/L	4	4.00	---	68	30-120%	4	30%	
3+4-Methylphenol(s)	2.49	0.100	0.200	ug/L	4	4.00	---	62	29-120%	5	30%	
2-Nitrophenol	3.38	0.400	0.800	ug/L	4	4.00	---	84	47-123%	3	30%	
4-Nitrophenol	1.60	0.400	0.800	ug/L	4	4.00	---	40	5-120%	3	30%	
Pentachlorophenol (PCP)	4.22	0.400	0.800	ug/L	4	4.00	---	106	35-138%	4	30%	
Phenol	1.10	0.800	0.800	ug/L	4	4.00	---	27	5-120%	8	30%	
2,3,4,6-Tetrachlorophenol	3.99	0.200	0.400	ug/L	4	4.00	---	100	50-128%	0.7	30%	
2,3,5,6-Tetrachlorophenol	4.01	0.200	0.400	ug/L	4	4.00	---	100	50-121%	0.08	30%	
2,4,5-Trichlorophenol	3.72	0.200	0.400	ug/L	4	4.00	---	93	53-123%	5	30%	
2,4,6-Trichlorophenol	3.68	0.200	0.400	ug/L	4	4.00	---	92	50-125%	4	30%	
Bis(2-ethylhexyl)phthalate	3.51	0.800	1.60	ug/L	4	4.00	---	88	55-135%	5	30%	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9101635-BSD2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 16:27							**Q-19**
Butyl benzyl phthalate	3.55	0.800	1.60	ug/L	4	4.00	---	89	53-134%	4	30%	
Diethylphthalate	3.65	0.800	1.60	ug/L	4	4.00	---	91	55-125%	6	30%	
Dimethylphthalate	3.72	0.800	1.60	ug/L	4	4.00	---	93	45-127%	8	30%	
Di-n-butylphthalate	3.89	0.800	1.60	ug/L	4	4.00	---	97	59-127%	4	30%	
Di-n-octyl phthalate	3.36	0.800	1.60	ug/L	4	4.00	---	84	51-140%	1	30%	
N-Nitrosodimethylamine	0.971	0.100	0.200	ug/L	4	4.00	---	24	6-120%	13	30%	
N-Nitroso-di-n-propylamine	3.30	0.100	0.200	ug/L	4	4.00	---	83	49-120%	4	30%	
N-Nitrosodiphenylamine	3.70	0.100	0.200	ug/L	4	4.00	---	92	51-123%	7	30%	
Bis(2-Chloroethoxy) methane	3.44	0.100	0.200	ug/L	4	4.00	---	86	48-120%	9	30%	
Bis(2-Chloroethyl) ether	3.07	0.100	0.200	ug/L	4	4.00	---	77	43-120%	7	30%	
2,2'-Oxybis(1-Chloropropane)	2.77	0.100	0.200	ug/L	4	4.00	---	69	37-130%	7	30%	
Hexachlorobenzene	3.86	0.0400	0.0800	ug/L	4	4.00	---	96	52-125%	10	30%	
Hexachlorobutadiene	3.23	0.100	0.200	ug/L	4	4.00	---	81	22-124%	13	30%	
Hexachlorocyclopentadiene	3.28	0.200	0.400	ug/L	4	4.00	---	82	5-127%	9	30%	
Hexachloroethane	3.05	0.100	0.200	ug/L	4	4.00	---	76	21-120%	14	30%	
2-Chloronaphthalene	3.60	0.0400	0.0800	ug/L	4	4.00	---	90	40-120%	10	30%	
1,2-Dichlorobenzene	3.16	0.100	0.200	ug/L	4	4.00	---	79	32-120%	10	30%	
1,3-Dichlorobenzene	3.00	0.100	0.200	ug/L	4	4.00	---	75	28-120%	13	30%	
1,4-Dichlorobenzene	3.02	0.100	0.200	ug/L	4	4.00	---	75	29-120%	12	30%	
1,2,4-Trichlorobenzene	3.28	0.100	0.200	ug/L	4	4.00	---	82	29-120%	12	30%	
4-Bromophenyl phenyl ether	3.90	0.100	0.200	ug/L	4	4.00	---	97	54-124%	7	30%	
4-Chlorophenyl phenyl ether	3.80	0.100	0.200	ug/L	4	4.00	---	95	53-121%	6	30%	
2-Nitroaniline	4.05	0.800	1.60	ug/L	4	4.00	---	101	54-127%	2	30%	
3-Nitroaniline	2.26	0.800	1.60	ug/L	4	4.00	---	57	41-128%	3	30%	
4-Nitroaniline	4.19	0.800	1.60	ug/L	4	4.00	---	105	35-120%	5	30%	
Nitrobenzene	3.46	0.400	0.800	ug/L	4	4.00	---	86	45-121%	3	30%	
2,4-Dinitrotoluene	4.24	0.400	0.800	ug/L	4	4.00	---	106	57-128%	3	30%	
2,6-Dinitrotoluene	4.08	0.400	0.800	ug/L	4	4.00	---	102	57-124%	6	30%	
Benzoic acid	4.69	4.00	4.00	ug/L	4	8.00	---	59	5-120%	9	30%	
Benzyl alcohol	1.56	0.400	0.800	ug/L	4	4.00	---	39	31-120%	6	30%	
Isophorone	3.37	0.100	0.200	ug/L	4	4.00	---	84	42-124%	8	30%	
Azobenzene (1,2-DPH)	3.19	0.100	0.200	ug/L	4	4.00	---	80	61-120%	8	30%	
Bis(2-Ethylhexyl) adipate	3.50	1.00	2.00	ug/L	4	4.00	---	88	40-125%	6	30%	
3,3'-Dichlorobenzidine	11.3	2.00	4.00	ug/L	4	8.00	---	**141**	**27-129%**	0.3	30%	Q-29

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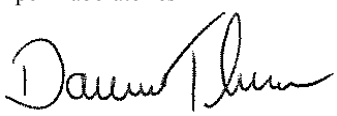

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101635 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9101635-BSD2)			Prepared: 10/28/19 10:04		Analyzed: 10/28/19 16:27							**Q-19**
1,2-Dinitrobenzene	3.97	1.00	2.00	ug/L	4	4.00	---	99	59-120%	1	30%	
1,3-Dinitrobenzene	4.27	1.00	2.00	ug/L	4	4.00	---	107	49-128%	2	30%	
1,4-Dinitrobenzene	4.74	1.00	2.00	ug/L	4	4.00	---	119	40-120%	3	30%	Q-41
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 84 %*		*Limits: 44-120 %*		*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*87 %*		*44-120 %*		*"*					
Phenol-d6 (Surr)			*25 %*		*10-120 %*		*"*					
p-Terphenyl-d14 (Surr)			*95 %*		*50-133 %*		*"*					
2-Fluorophenol (Surr)			*41 %*		*19-120 %*		*"*					
2,4,6-Tribromophenol (Surr)			*100 %*		*43-140 %*		*"*					

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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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101684 - EPA 3015A							**Water**					
Blank (9101684-BLK1)			Prepared: 10/29/19 08:43		Analyzed: 10/30/19 00:10							
EPA 6020A												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Chromium	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
LCS (9101684-BS1)			Prepared: 10/29/19 08:43		Analyzed: 10/30/19 00:15							
EPA 6020A												
Arsenic	54.2	0.500	1.00	ug/L	1	55.6	---	98	80-120%	---	---	
Chromium	55.2	0.500	1.00	ug/L	1	55.6	---	99	80-120%	---	---	
Copper	55.7	0.500	1.00	ug/L	1	55.6	---	100	80-120%	---	---	
Zinc	53.7	2.00	4.00	ug/L	1	55.6	---	97	80-120%	---	---	
Duplicate (9101684-DUP1)			Prepared: 10/29/19 08:43		Analyzed: 10/30/19 00:24							
QC Source Sample: Non-SDG (A9J0957-04)												
Arsenic	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Chromium	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Copper	ND	0.500	1.00	ug/L	1	---	ND	---	---	---	20%	
Zinc	ND	2.00	4.00	ug/L	1	---	ND	---	---	---	20%	
Matrix Spike (9101684-MS1)			Prepared: 10/29/19 08:43		Analyzed: 10/30/19 00:29							
QC Source Sample: Non-SDG (A9J0957-04)												
EPA 6020A												
Arsenic	54.2	0.500	1.00	ug/L	1	55.6	ND	98	75-125%	---	---	
Chromium	54.7	0.500	1.00	ug/L	1	55.6	ND	98	75-125%	---	---	
Copper	55.3	0.500	1.00	ug/L	1	55.6	ND	99	75-125%	---	---	
Zinc	53.4	2.00	4.00	ug/L	1	55.6	ND	96	75-125%	---	---	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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 9101637 - Total Suspended Solids								Water				
Blank (9101637-BLK1)			Prepared: 10/28/19 10:08		Analyzed: 10/29/19 11:28							
SM 2540 D												
Total Suspended Solids	ND	5.00	5.00	mg/L	1	---	---	---	---	---	---	
Duplicate (9101637-DUP1)			Prepared: 10/28/19 10:08		Analyzed: 10/29/19 11:28							
QC Source Sample: Non-SDG (A9J0848-01)												
Total Suspended Solids	**188**	10.0	10.0	mg/L	1	---	192	---	---	2	10%	
Duplicate (9101637-DUP2)			Prepared: 10/28/19 10:08		Analyzed: 10/29/19 11:28							
QC Source Sample: Non-SDG (A9J0925-05)												
Total Suspended Solids	ND	5.00	5.00	mg/L	1	---	ND	---	---	---	10%	
Reference (9101637-SRM1)			Prepared: 10/28/19 10:08		Analyzed: 10/29/19 11:28							
SM 2540 D												
Total Suspended Solids	93.0			mg/L	1	100		93	77.1-110%	---	---	

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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 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9101615 - Method Prep: Aq							**Water**					
Duplicate (9101615-DUP1)			Prepared: 10/25/19 16:46		Analyzed: 10/25/19 17:03							
QC Source Sample: PDI-026SW-34-00-191024 (A9J0959-01)												
SM 4500-H+ B												
pH	**7.39**			pH Units	1	---	7.40	---	---	0.1	5%	H-12
pH Temperature (deg C)	**20.6**			pH Units	1	---	21.1	---	---	2	30%	H-12
Reference (9101615-SRM1)			Prepared: 10/25/19 16:46		Analyzed: 10/25/19 16:55							
SM 4500-H+ B												
pH	5.99			pH Units	1	6.00		100	33333-101.666	---	---	
pH Temperature (deg C)	22.2			pH Units	1	20.0		111	50-200%	---	---	
Reference (9101615-SRM2)			Prepared: 10/25/19 16:46		Analyzed: 10/25/19 17:05							
SM 4500-H+ B												
pH	7.93			pH Units	1	8.00		99	98.75-101.25%	---	---	
pH Temperature (deg C)	22.1			pH Units	1	20.0		110	50-200%	---	---	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

SAMPLE PREPARATION INFORMATION

BTEX Compounds by EPA 8260C

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101622							
A9J0959-01	WS	EPA 8260C	10/24/19 10:30	10/28/19 10:12	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: 9101705							
A9J0959-01	WS	EPA 8082A	10/24/19 10:30	10/29/19 12:35	1060mL/1mL	1000mL/1mL	0.94

Organochlorine Pesticides by EPA 8081B

Prep: EPA 3510C (Neutral pH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101643							
A9J0959-01	WS	EPA 8081B	10/24/19 10:30	10/28/19 15:27	1060mL/5mL	1000mL/5mL	0.94

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: 9101635							
A9J0959-01RE2	WS	EPA 8270D	10/24/19 10:30	10/28/19 13:47	1050mL/1mL	1000mL/1mL	0.95

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: 9101684							
A9J0959-01	WS	EPA 6020A	10/24/19 10:30	10/29/19 08:43	45mL/50mL	45mL/50mL	1.00

Solid and Moisture Determinations

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101637							
A9J0959-01	WS	SM 2540 D	10/24/19 10:30	10/28/19 10:08			NA

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Tigard, OR 97223
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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

SAMPLE PREPARATION INFORMATION

Solid and Moisture Determinations

Prep: Total Suspended Solids

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

Conventional Chemistry Parameters

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9101615							
A9J0959-01	WS	SM 4500-H+ B	10/24/19 10:30	10/25/19 16:46	20mL/20mL	20mL/20mL	NA

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QUALIFIER DEFINITIONS

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

Apex Laboratories

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.
H-12	Sample analysis was performed >15 minutes after sample collection. Consult regulator or permit manager to determine the usability of data for intended use.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-29	Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
Q-52	Due to erratic or low blank spike recoveries, results for this analyte are considered Estimated Values.

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Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

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

NR Result Not Reported

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

Blanks:

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

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Apex Laboratories, LLC

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

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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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
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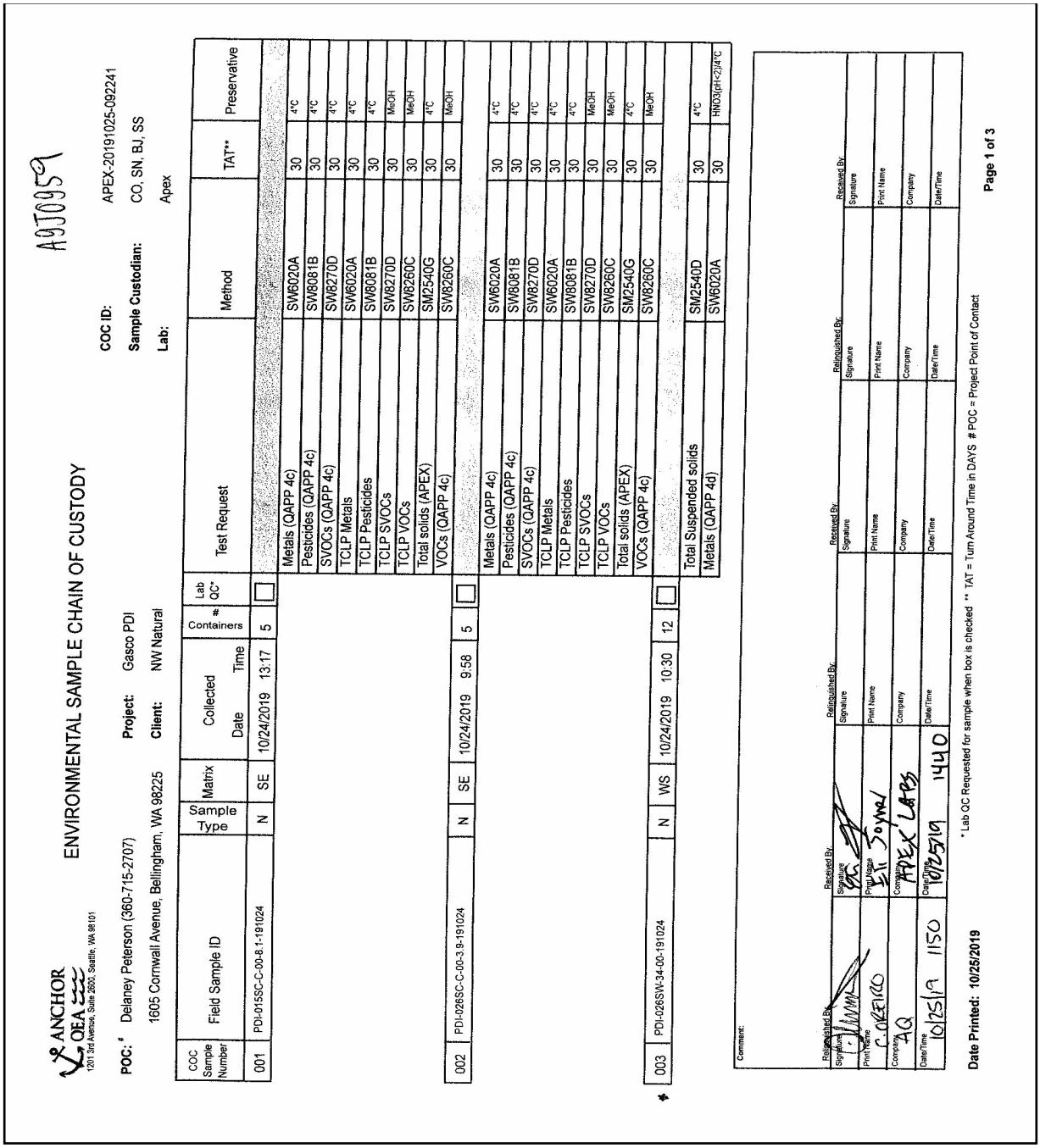

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

A9J0959

COC ID: APEX-20191025-092241
Sample Custodian: CO, SN, BJ, SS
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-015SC-C-00-8.1-191024	N	SE	10/24/2019	13:17	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
002	PDI-026SC-C-00-3.9-191024	N	SE	10/24/2019	9:58	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
003	PDI-026SW-34-00-191024	N	WS	10/24/2019	10:30	12	☐	Total Suspended solids	SM2540D	30	4°C
								Metals (QAPP 4d)	SW6020A	30	HNO3(pH<2)/4°C

Comment:

Relinquished By: Signature / Print Name / Company / Date/Time — 10/25/19 1150
Received By: Signature / Print Name / Company: APEX LABS / Date/Time: 10/25/19 1440
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: 10/25/2019

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

Page 1 of 3

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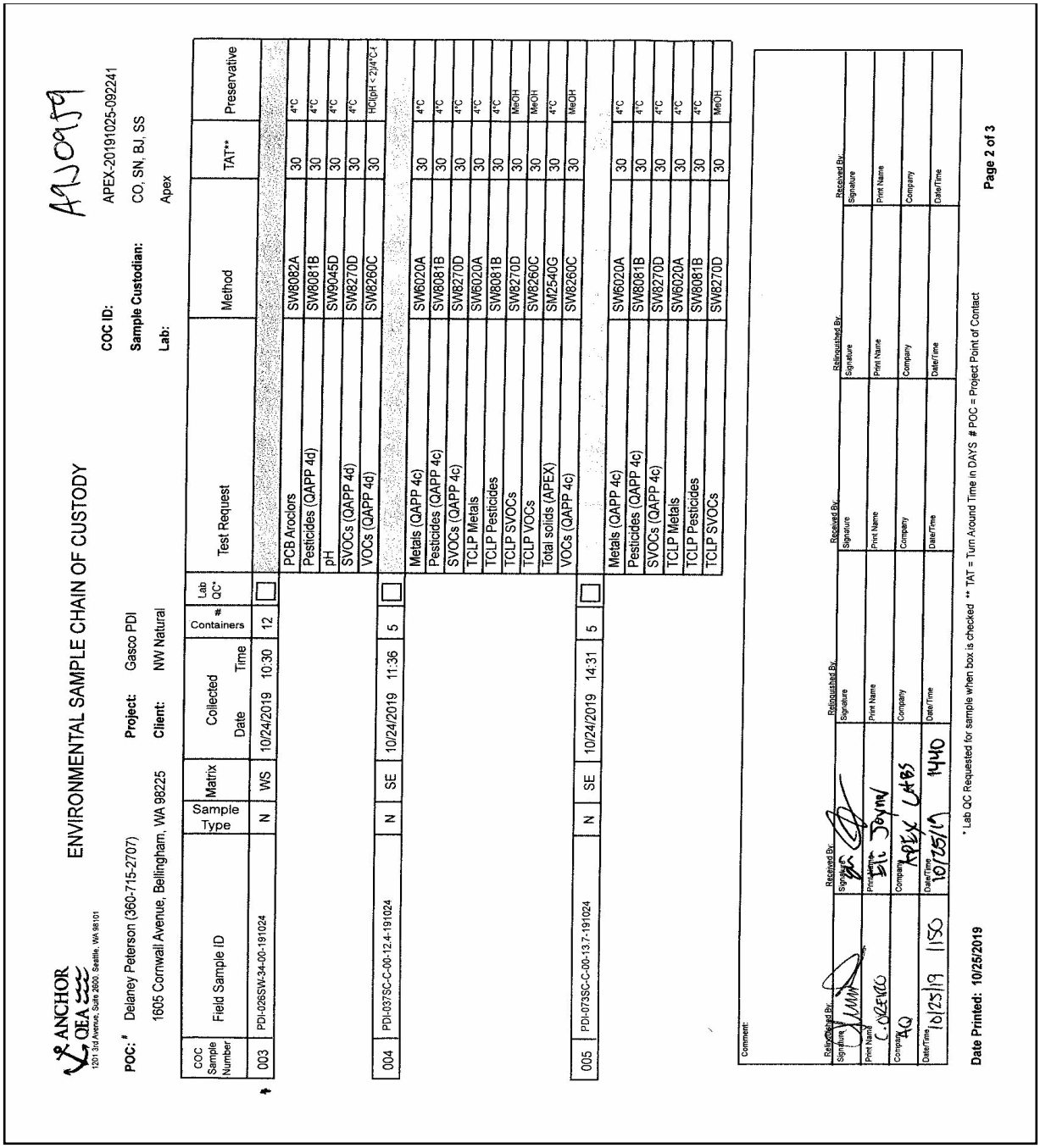
503-718-2323
EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

A9J0959

POC:* Delaney Peterson (360-715-2707) Project: Gasco PDI COC ID: APEX-20191025-092241

1605 Cornwall Avenue, Bellingham, WA 98225 Client: NW Natural Sample Custodian: CO, SN, BJ, SS

Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
003	PDI-026SW-34-00-191024	N	WS	10/24/2019	10:30	12	☐	PCB Aroclors	SW8082A	30	4°C
								Pesticides (QAPP 4d)	SW8081B	30	4°C
								pH	SW9045D	30	4°C
								SVOCs (QAPP 4d)	SW8270D	30	4°C
								VOCs (QAPP 4d)	SW8260C	30	HCl(pH < 2)/4°C
004	PDI-037SC-C-00-12.4-191024	N	SE	10/24/2019	11:36	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
005	PDI-073SC-C-00-13.7-191024	N	SE	10/24/2019	14:31	5	☐	Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH

Comment:

Relinquished By: Signature / Print Name: C. Odello / Company: AQ / Date/Time: 10/25/19 1150

Received By: Signature / Print Name: Eric Joyner / Company: Apex Labs / Date/Time: 10/25/19 1440

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

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

Page 2 of 3

Date Printed: 10/25/2019

Apex Laboratories

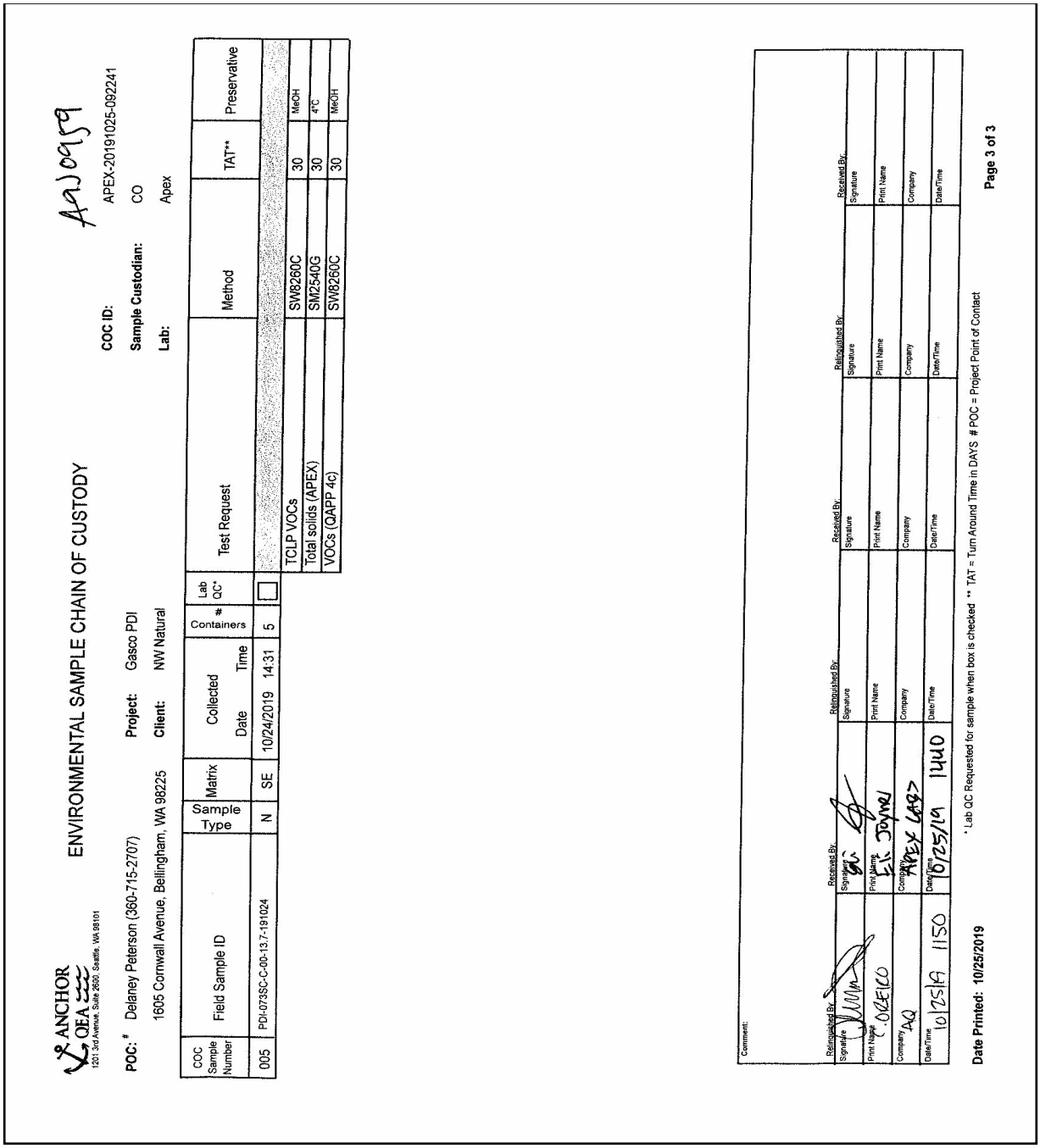
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

A9J0959

COC ID: APEX-20191025-092241

POC: # Delaney Peterson (360-715-2707) Project: Gasco PDI Sample Custodian: CO

1605 Cornwall Avenue, Bellingham, WA 98225 Client: NW Natural 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-073SC-C-00-13.7-191024	N	SE	10/24/2019	14:31	5	☐	TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH

Comment:

Relinquished By: Signature / Print Name / Company / Date/Time: 10/25/19 1150

Received By: Signature / Print Name: E. Jayne / Company: APEX LABS / Date/Time: 10/25/19 1440

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

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

Date Printed: 10/25/2019

Page 3 of 3

Apex Laboratories

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

Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 4d. Barge Dewatering**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9J0959 - 11 18 19 1628**

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A9 J0959

Project/Project #: Gasco PDI

Delivery Info:

Date/time received: 10/25/19 @ 1440 By: EJ

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

Cooler Inspection Date/time inspected: 10/25/19 @ ~~1440~~ 1530 @10/25/19 By: 8

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

Signed/dated by client? Yes X No

Signed/dated by Apex? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other) @10/25/19	Real						
Condition:	Good						

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

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

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

Samples Inspection: Date/time inspected: 10/25/19 @ 1600 By: JS

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:

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

Apex Laboratories

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

Darwin Thomas, Business Development Director

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

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

A9J0959

Apex Laboratories

Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 4d. Barge Dewatering
Project Manager: Darwin Thomas
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: 11/08/19 17:00 (10 day TAT)
Received By: Eli S. Joyner
Date Received: 10/25/19 14:40
Logged In By: Cameron L O'Brien
Date Logged In: 10/25/19 16:18

Cooler #1 received at 3.9°C

Custody Seals	Yes	Containers Intact	Yes	COC/Labels Agree	Yes	PH Confirmed	Yes	Received On Ice	Yes
Temperature OK	Yes								

Analysis	Due	TAT	Expires	Comments
A9J0959-01 PDI-026SW-34-00-191024 [Water] Sampled 10/24/19 10:30				
(GMT-08:00) Pacific Time (US & Canada) 12 Containers				
Metals				
Metals, Select 1	11/07/19 17:00	10	04/21/20 10:30	
Project Mgmt				
Data Package	12/23/19 17:00	10	01/31/20 10:30	
Semivols (ECD)				
8081B Pesticides + Add	11/07/19 17:00	10	10/31/19 10:30	custom
8082 PCBs - Low Level (1000/1mL)	11/07/19 17:00	10	10/23/20 10:30	
Semivols (Scan)				
8270D LL Full List	11/07/19 17:00	10	10/31/19 10:30	Acid extraction only, custom
Volatiles				
8260C BTEX	11/01/19 17:00	5	11/07/19 10:30	EB only
Wet Chem				
pH - SM4500-H+ B (Aq)	11/07/19 17:00	10	10/24/19 10:44	
Solids, TSS (SM 2540 D)	11/07/19 17:00	10	10/31/19 10:30	

Analysis groups included in this work order

Metals, Select 1

As (Arsenic) - 6020 - Total	Cr (Chromium) - 6020 - Total	Cu (Copper) - 6020 - Total	Zn (Zinc) - 6020 - Total

Reviewed By

Date

A9J0959

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: APEX-20191025-092241

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: CO, SN, BJ, SS
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-015SC-C-00-8.1-191024	N	SE	10/24/2019	13:17	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
002	PDI-026SC-C-00-3.9-191024	N	SE	10/24/2019	9:58	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
* 003	PDI-026SW-34-00-191024	N	WS	10/24/2019	10:30	12	☐				
								Total Suspended solids	SM2540D	30	4°C
								Metals (QAPP 4d)	SW6020A	30	HNO3(pH<2)/4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: C. OREIRO	Print Name: Eli Joyner	Print Name	Print Name	Print Name	Print Name
Company: AQ	Company: APEX LABS	Company	Company	Company	Company
Date/Time: 10/25/19 1150	Date/Time: 10/25/19 1440	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 10/25/2019

* 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

A9J0959

COC ID: APEX-20191025-092241

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: CO, SN, BJ, SS
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
003	PDI-026SW-34-00-191024	N	WS	10/24/2019	10:30	12	☐				
								PCB Aroclors	SW8082A	30	4°C
								Pesticides (QAPP 4d)	SW8081B	30	4°C
								pH	SW9045D	30	4°C
								SVOCs (QAPP 4d)	SW8270D	30	4°C
								VOCs (QAPP 4d)	SW8260C	30	HCl(pH < 2)/4°C-f
004	PDI-037SC-C-00-12.4-191024	N	SE	10/24/2019	11:36	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH
								TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH
005	PDI-073SC-C-00-13.7-191024	N	SE	10/24/2019	14:31	5	☐				
								Metals (QAPP 4c)	SW6020A	30	4°C
								Pesticides (QAPP 4c)	SW8081B	30	4°C
								SVOCs (QAPP 4c)	SW8270D	30	4°C
								TCLP Metals	SW6020A	30	4°C
								TCLP Pesticides	SW8081B	30	4°C
								TCLP SVOCs	SW8270D	30	MeOH

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name C. OREKO	Print Name Eli Joyner	Print Name	Print Name	Print Name	Print Name
Company AQ	Company APEX LABS	Company	Company	Company	Company
Date/Time 10/25/19 1150	Date/Time 10/25/19 1440	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 10/25/2019

* 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

AQ10959

COC ID: APEX-20191025-092241

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: CO
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
005	PDI-073SC-C-00-13.7-191024	N	SE	10/24/2019	14:31	5	☐	TCLP VOCs	SW8260C	30	MeOH
								Total solids (APEX)	SM2540G	30	4°C
								VOCs (QAPP 4c)	SW8260C	30	MeOH

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name C. OREICO	Print Name Eli Joyner	Print Name	Print Name	Print Name	Print Name
Company AQ	Company APEX LABS	Company	Company	Company	Company
Date/Time 10/25/19 1150	Date/Time 10/25/19 1440	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 10/25/2019

* 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 J0959

Project/Project #: Gasco PDI

Delivery Info:

Date/time received: 10/25/19 @ 1440 By: EJ

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

Cooler Inspection Date/time inspected: 10/25/19 @ ~~1440~~ 1530 @10/25/19 By: (8)

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

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	3.9						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other) @10/25/19	Y real						
Condition:	good						

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

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

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

Samples Inspection: Date/time inspected: 10/25/19 @ 1400 By: JS

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: ___

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

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

CLP-Like Forms

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GCMS

METHOD: EPA 8260C

ANALYSES DATA PACKAGE COVER PAGE

EPA 8260C

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
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 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Ethylbenzene	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-026SW-34-00-191024

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	WS	Laboratory ID:	A9J0959-01	File ID:	VI19102821.D
Sampled:	10/24/19 10:30	Prepared:	10/28/19 10:12	Analyzed:	10/28/19 17:00
		Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL

Batch: 9101622 Sequence: 9J28025 Calibration: A9J2503 Instrument: VOA-GCMS9

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-41-4	Ethylbenzene	1	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	50.9	102	80 - 120	
Toluene-d8 (Surr)	50.0	51.2	102	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	51.2	102	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	96110	6.217	110053	6.217	
Chlorobenzene-d5 (ISTD)	258947	9.916	304194	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	115915	11.856	150051	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 - 4d. Barge Dewatering
Batch: 9101622 Batch Matrix: Water Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101622-BLK1	VI19102806.D	10/28/19 08:00	
LCS	9101622-BS1	VI19102804.D	10/28/19 08:00	
PDI-026SW-34-00-191024	A9J0959-01	VI19102821.D	10/28/19 10:12	

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

METHOD BLANK DATA SHEET
EPA 8260C

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101622-BLK1	File ID:	VI19102806.D
Prepared:	10/28/19 08:00	Preparation:	EPA 5030B	Initial/Final:	5 mL / 5 mL
Analyzed:	10/28/19 10:17	Instrument:	VOA-GCMS9		
Batch:	9101622	Sequence:	9J28025	Calibration:	A9J2503

CAS NO.	COMPOUND	CONC. (ug/L)	Q
100-41-4	Ethylbenzene	0.250	U

SYSTEM MONITORING COMPOUND	ADDED (ng/mL)	CONC (ng/mL)	% REC	QC LIMITS	Q
1,4-Difluorobenzene (Surr)	50.0	50.4	101	80 - 120	
Toluene-d8 (Surr)	50.0	50.5	101	80 - 120	
4-Bromofluorobenzene (Surr)	50.0	50.5	101	80 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene (ISTD)	105942	6.217	110053	6.217	
Chlorobenzene-d5 (ISTD)	281327	9.916	304194	9.916	
1,4-Dichlorobenzene-d4 (ISTD)	128106	11.85	150051	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 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101622	Laboratory ID:	9101622-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.
Ethylbenzene	20.0	19.3	96	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 - 4d. Barge Dewatering
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 - 4d. Barge Dewatering
Sequence:	9J28025	Instrument:	VOA-GCMS9
Matrix:	Water	Calibration:	A9J2503

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J28025-TUN1	VI19102803.D	10/28/19 08:57
Calibration Check	9J28025-CCV1	VI19102804.D	10/28/19 09:24
Blank	9101622-BLK1	VI19102806.D	10/28/19 10:17
PDI-026SW-34-00-191024	A9J0959-01	VI19102821.D	10/28/19 17:00

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.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
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 - 4d. Barge Dewatering
Lab File ID:	VI19102803.D	Injection Date:	10/28/19
Instrument ID:	VOA-GCMS9	Injection Time:	08:57
Sequence:	9J28025	Lab Sample ID:	9J28025-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 95	50 - 200% of m/z 174	119.03	PASS
m/z 96	5 - 9% of m/z 95	6.80	PASS
m/z 173	Less than 2% of m/z 174	0.31	PASS
m/z 174	50 - 200% of m/z 95	84.01	PASS
m/z 175	5 - 9% of m/z 174	7.27	PASS
m/z 176	95 - 105% of m/z 174	98.06	PASS
m/z 177	5 - 10% of m/z 176	6.52	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8260C

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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
Ethylbenzene	1.541948	Ave	3.605451	9.952	2.233646E-03			20	
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 - 4d. Barge Dewateri

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
Benzene	0.1	3.949114	0.2	3.449838	0.4	3.773943	1	3.582293	2	4.047071	5	3.909918
Ethylbenzene	0.1	1.531324	0.2	1.514156	0.4	1.521884	1	1.409441	2	1.608459	5	1.560351
Toluene	0.1	1.589846	0.2	1.439067	0.4	1.488338	1	1.454325	2	1.498804	5	1.474176
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
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 - 4d. Barge Dewateri
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
Benzene	10	3.71399	20	3.910312	50	3.758482	100	4.021863	200	3.910748		
Ethylbenzene	10	1.534653	20	1.591212	50	1.51604	100	1.593904	200	1.579999		
Toluene	10	1.44486	20	1.492292	50	1.390623	100	1.461836	200	1.439258		
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		
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 - 4d. Barge Dewate
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
Benzene	20.0	19.7	-1.6	70 - 130
Ethylbenzene	20.0	20.1	0.7	70 - 130
Toluene	20.0	19.4	-3.1	70 - 130
Xylenes, total	60.0	61.9	3.2	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 - 4d. Barge Dewatering
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 - 4d. Barge Dewatering
Sequence:	9J28025	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 (9101622-BS1)			Lab File ID: VI19102804.D		Analyzed: 10/28/19 09:24			
1,4-Difluorobenzene (Surr)	50.0	101	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	100	80 - 120	8.297	8.297273	-0.0003	+/-1.0	
4-Bromofluorobenzene (Surr)	50.0	98	80 - 120	10.974	10.974	0.0000	+/-1.0	
Blank (9101622-BLK1)			Lab File ID: VI19102806.D		Analyzed: 10/28/19 10:17			
1,4-Difluorobenzene (Surr)	50.0	101	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	101	80 - 120	10.974	10.974	0.0000	+/-1.0	
PDI-026SW-34-00-191024 (A9J0959-01)			Lab File ID: VI19102821.D		Analyzed: 10/28/19 17:00			
1,4-Difluorobenzene (Surr)	50.0	102	80 - 120	6.783	6.780727	0.0023	+/-1.0	
Toluene-d8 (Surr)	50.0	102	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	

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 - 4d. Barge Dewatering
Sequence:	9J28025	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 (9101622-BS1)			Lab File ID: VI19102804.D			Analyzed: 10/28/19 09:24			
Pentafluorobenzene (ISTD)	110053	6.217	110053	6.217	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	304194	9.916	304194	9.916	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	150051	11.85	150051	11.85	100	50 - 200	0.0000	+/-0.50	
Calibration Check (9J28025-CCV1)			Lab File ID: VI19102804.D			Analyzed: 10/28/19 09:24			
Pentafluorobenzene (ISTD)	110053	6.217	112406	6.211	98	50 - 200	0.0060	+/-0.50	
Chlorobenzene-d5 (ISTD)	304194	9.916	307093	9.91	99	50 - 200	0.0060	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	150051	11.85	151591	11.85	99	50 - 200	0.0000	+/-0.50	
Blank (9101622-BLK1)			Lab File ID: VI19102806.D			Analyzed: 10/28/19 10:17			
Pentafluorobenzene (ISTD)	105942	6.217	110053	6.217	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	281327	9.916	304194	9.916	92	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	128106	11.85	150051	11.85	85	50 - 200	0.0000	+/-0.50	
Duplicate (9101622-DUP1)			Lab File ID: VI19102817.D			Analyzed: 10/28/19 15:13			
Pentafluorobenzene (ISTD)	95273	6.217	110053	6.217	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	261277	9.916	304194	9.916	86	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	120855	11.856	150051	11.85	81	50 - 200	0.0060	+/-0.50	
PDI-026SW-34-00-191024 (A9J0959-01)			Lab File ID: VI19102821.D			Analyzed: 10/28/19 17:00			
Pentafluorobenzene (ISTD)	96110	6.217	110053	6.217	87	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	258947	9.916	304194	9.916	85	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	115915	11.856	150051	11.85	77	50 - 200	0.0060	+/-0.50	
Duplicate (9101622-DUP2)			Lab File ID: VI19102827.D			Analyzed: 10/28/19 19:42			
Pentafluorobenzene (ISTD)	98111	6.217	110053	6.217	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	262984	9.916	304194	9.916	86	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	118399	11.856	150051	11.85	79	50 - 200	0.0060	+/-0.50	
Matrix Spike (9101622-MS1)			Lab File ID: VI19102829.D			Analyzed: 10/28/19 20:35			
Pentafluorobenzene (ISTD)	93063	6.217	110053	6.217	85	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5 (ISTD)	257486	9.916	304194	9.916	85	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4 (ISTD)	127030	11.856	150051	11.85	85	50 - 200	0.0060	+/-0.50	

HOLDING TIME SUMMARY

EPA 8260C

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/28/19 10:12	3.99	14.00	10/28/19 17:00	4.27	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 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
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 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Aroclor 1016	0.0100	0.0200	ug/L
Aroclor 1221	0.0100	0.0200	ug/L
Aroclor 1232	0.0100	0.0200	ug/L
Aroclor 1242	0.0100	0.0200	ug/L
Aroclor 1248	0.0100	0.0200	ug/L
Aroclor 1254	0.0100	0.0200	ug/L
Aroclor 1260	0.0100	0.0200	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-026SW-34-00-191024

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	WS	Laboratory ID:	A9J0959-01	File ID:	ECD2R010.D
Sampled:	10/24/19 10:30	Prepared:	10/29/19 12:35	Analyzed:	10/31/19 10:26
		Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1060 mL / 1 mL

Batch: 9101705 Sequence: 9J31014 Calibration: A9J2803 Instrument: DUALECD2R

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
12674-11-2	Aroclor 1016	1	0.00943	U
11104-28-2	Aroclor 1221	1	0.00943	U
11141-16-5	Aroclor 1232	1	0.00943	U
53469-21-9	Aroclor 1242	1	0.00943	U
12672-29-6	Aroclor 1248	1	0.00943	U
11097-69-1	Aroclor 1254	1	0.00943	U
11096-82-5	Aroclor 1260	1	0.00943	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	0.472	0.401	85	40 - 135	

* 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 - 4d. Barge Dewatering
Batch: 9101705 Batch Matrix: Water
Preparation: EPA 3510C (Neutral pH)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101705-BLK1	ECD2R005.D	10/29/19 12:34	
LCS	9101705-BS1	ECD2R006.D	10/29/19 12:34	
LCS Dup	9101705-BSD1	ECD2R007.D	10/29/19 12:34	
PDI-026SW-34-00-191024	A9J0959-01	ECD2R010.D	10/29/19 12:35	

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

METHOD BLANK DATA SHEET

EPA 8082A

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101705-BLK1	File ID:	ECD2R005.D
Prepared:	10/29/19 12:34	Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/31/19 08:58	Instrument:	DUALECD2R		
Batch:	9101705	Sequence:	9J31014	Calibration:	A9J2803

CAS NO.	COMPOUND	CONC. (ug/L)	Q
12674-11-2	Aroclor 1016	0.00909	U
11104-28-2	Aroclor 1221	0.00909	U
11141-16-5	Aroclor 1232	0.00909	U
53469-21-9	Aroclor 1242	0.00909	U
12672-29-6	Aroclor 1248	0.00909	U
11097-69-1	Aroclor 1254	0.00909	U
11096-82-5	Aroclor 1260	0.00909	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	0.455	0.426	94	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 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101705	Laboratory ID:	9101705-BS1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	1.25	0.650	52	46 - 129
Aroclor 1260	1.25	0.888	71	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 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101705	Laboratory ID:	9101705-BSD1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS
Aroclor 1016	1.25	0.673	54	3	30	46 - 129
Aroclor 1260	1.25	0.899	72	1	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 - 4d. Barge Dewatering
Sequence:	9J25014	Instrument:	DUALECD2R
Matrix:	Water	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 - 4d. Barge Dewatering
Sequence:	9J31014	Instrument:	DUALECD2R
Matrix:	Water	Calibration:	A9J2803

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9J31014-CCV1	ECD2R003.D	10/31/19 08:17
Calibration Blank	9J31014-CCB1	ECD2R004.D	10/31/19 08:35
Blank	9101705-BLK1	ECD2R005.D	10/31/19 08:58
LCS	9101705-BS1	ECD2R006.D	10/31/19 09:15
LCS Dup	9101705-BSD1	ECD2R007.D	10/31/19 09:33
PDI-026SW-34-00-191024	A9J0959-01	ECD2R010.D	10/31/19 10:26
Calibration Check	9J31014-CCV2	ECD2R011.D	10/31/19 10:43
Calibration Blank	9J31014-CCB2	ECD2R012.D	10/31/19 11:01

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.

INITIAL CALIBRATION DATA (Summary)

EPA 8082A

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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	
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 - 4d. Barge Dewateri

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 - 4d. Barge Dewateri
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 - 4d. Barge Dewateri
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~~								

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
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 - 4d. Barge Dewate
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 - 4d. Barge Dewate
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 - 4d. Barge Dewate
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 - 4d. Barge Dewate
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

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R003.D	Calibration Date:	10/28/19 10:35
Sequence:	9J31014	Injection Date:	10/31/19
Lab Sample ID:	9J31014-CCV1	Injection Time:	08:17

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	478				-4.5	20
Aroclor 1260	Ave	500	500				-0.006	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 - 4d. Barge Dewatering
Instrument ID:	DUALECD2R	Calibration:	A9J2803
Lab File ID:	ECD2R011.D	Calibration Date:	10/28/19 10:35
Sequence:	9J31014	Injection Date:	10/31/19
Lab Sample ID:	9J31014-CCV2	Injection Time:	10:43

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	480				-4.0	20
Aroclor 1260	Ave	500	515				3.0	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 - 4d. Barge Dewatering
Sequence:	9J25014	Instrument:	DUALECD2R
Matrix:	Water	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 - 4d. Barge Dewatering
Sequence:	9J31014	Instrument:	DUALECD2R
Matrix:	Water	Calibration:	A9J2803

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9J31014-CCV1)			Lab File ID: ECD2R003.D		Analyzed: 10/31/19 08:17			
Decachlorobiphenyl (Surr)	250	100	80 - 120	10.709	10.701	0.0080	+/-1.0	
Calibration Blank (9J31014-CCB1)			Lab File ID: ECD2R004.D		Analyzed: 10/31/19 08:35			
Decachlorobiphenyl (Surr)	100	106	40 - 135	10.71	10.701	0.0090	+/-1.0	
Blank (9101705-BLK1)			Lab File ID: ECD2R005.D		Analyzed: 10/31/19 08:58			
Decachlorobiphenyl (Surr)	0.455	94	40 - 135	10.712	10.701	0.0110	+/-1.0	
LCS (9101705-BS1)			Lab File ID: ECD2R006.D		Analyzed: 10/31/19 09:15			
Decachlorobiphenyl (Surr)	0.500	87	40 - 135	10.711	10.701	0.0100	+/-1.0	
LCS Dup (9101705-BSD1)			Lab File ID: ECD2R007.D		Analyzed: 10/31/19 09:33			
Decachlorobiphenyl (Surr)	0.500	84	40 - 135	10.712	10.701	0.0110	+/-1.0	
PDI-026SW-34-00-191024 (A9J0959-01)			Lab File ID: ECD2R010.D		Analyzed: 10/31/19 10:26			
Decachlorobiphenyl (Surr)	0.472	85	40 - 135	10.709	10.701	0.0080	+/-1.0	
Calibration Check (9J31014-CCV2)			Lab File ID: ECD2R011.D		Analyzed: 10/31/19 10:43			
Decachlorobiphenyl (Surr)	250	104	80 - 120	10.711	10.701	0.0100	+/-1.0	
Calibration Blank (9J31014-CCB2)			Lab File ID: ECD2R012.D		Analyzed: 10/31/19 11:01			
Decachlorobiphenyl (Surr)	100	105	40 - 135	10.708	10.701	0.0070	+/-1.0	

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/29/19 12:35	5.09	365.00	10/31/19 10:26	1.91	40.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: GC

METHOD: EPA 8081B

ANALYSES DATA PACKAGE COVER PAGE

EPA 8081B

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Aldrin [2C]	0.00500	0.0100	ug/L
cis-Chlordane [2C]	0.00500	0.0100	ug/L
trans-Chlordane [2C]	0.00500	0.0100	ug/L
4,4'-DDD [2C]	0.00500	0.0100	ug/L
4,4'-DDE [2C]	0.00500	0.0100	ug/L
4,4'-DDT [2C]	0.00500	0.0100	ug/L
cis-Nonachlor [2C]	0.00500	0.0100	ug/L
trans-Nonachlor [2C]	0.00500	0.0100	ug/L
2,4'-DDD	0.00500	0.0100	ug/L
2,4'-DDD [2C]	0.00500	0.0100	ug/L
2,4'-DDE [2C]	0.00500	0.0100	ug/L
2,4'-DDT [2C]	0.00500	0.0100	ug/L
Hexachlorobenzene	0.0150	0.0300	ug/L
Hexachlorobutadiene	0.00500	0.0100	ug/L
Oxychlordane [2C]	0.00500	0.0100	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8081B

PDI-026SW-34-00-191024

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	WS	Laboratory ID:	A9J0959-01	File ID:	ECD5-10311935.D
Sampled:	10/24/19 10:30	Prepared:	10/28/19 15:27	Analyzed:	10/31/19 21:56
		Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1060 mL / 5 mL

Batch: 9101643 Sequence: 9J31040 Calibration: A9H2608 Instrument: DUALECD5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
309-00-2	Aldrin [2C]	1	0.00472	U
5103-71-9	cis-Chlordane [2C]	1	0.00472	U
5103-74-2	trans-Chlordane [2C]	1	0.00472	U
72-54-8	4,4'-DDD [2C]	1	0.00472	U
72-55-9	4,4'-DDE [2C]	1	0.00472	U
50-29-3	4,4'-DDT [2C]	1	0.00472	U
5103-73-1	cis-Nonachlor [2C]	1	0.00472	U
39765-80-5	trans-Nonachlor [2C]	1	0.00472	U
53-19-0	2,4'-DDD [2C]	1	0.00472	U
3424-82-6	2,4'-DDE [2C]	1	0.00472	U
789-02-6	2,4'-DDT [2C]	1	0.00472	U
27304-13-8	Oxychlordane [2C]	1	0.00472	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2,4,5,6-TCMX (Surr) [2C]	0.472	0.344	73	25 - 140	
Decachlorobiphenyl (Surr) [2C]	0.472	0.429	91	30 - 135	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Batch: 9101643 Batch Matrix: Water Preparation: EPA 3510C (Neutral pH)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101643-BLK1	ECD5-10311919.D	10/28/19 11:17	
LCS	9101643-BS1	ECD5-10311920.D	10/28/19 11:17	
LCS	9101643-BS2	ECD5-10311922.D	10/28/19 11:17	
LCS Dup	9101643-BSD1	ECD5-10311921.D	10/28/19 11:17	
LCS Dup	9101643-BSD2	ECD5-10311923.D	10/28/19 11:17	
PDI-026SW-34-00-191024	A9J0959-01	ECD5-10311935.D	10/28/19 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.

METHOD BLANK DATA SHEET

EPA 8081B

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101643-BLK1	File ID:	ECD5-10311919.D
Prepared:	10/28/19 11:17	Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1100 mL / 5 mL
Analyzed:	10/31/19 17:22	Instrument:	DUALECD5		
Batch:	9101643	Sequence:	9J31040	Calibration:	A9H2608

CAS NO.	COMPOUND	CONC. (ug/L)	Q
309-00-2	Aldrin [2C]	0.00455	U
5103-71-9	cis-Chlordane [2C]	0.00455	U
5103-74-2	trans-Chlordane [2C]	0.00455	U
72-54-8	4,4'-DDD [2C]	0.00455	U
72-55-9	4,4'-DDE [2C]	0.00455	U
50-29-3	4,4'-DDT [2C]	0.00455	U
5103-73-1	cis-Nonachlor [2C]	0.00455	U
39765-80-5	trans-Nonachlor [2C]	0.00455	U
53-19-0	2,4'-DDD	0.00455	U
3424-82-6	2,4'-DDE [2C]	0.00455	U
789-02-6	2,4'-DDT [2C]	0.00455	U
27304-13-8	Oxychlordane [2C]	0.00455	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2,4,5,6-TCMX (Surr) [2C]	0.455	0.158	35	25 - 140	
Decachlorobiphenyl (Surr) [2C]	0.455	0.330	73	30 - 135	

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101643	Laboratory ID:	9101643-BS1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Aldrin [2C]	0.500	0.328	66	45 - 134
cis-Chlordane [2C]	0.500	0.441	88	60 - 129
trans-Chlordane [2C]	0.500	0.432	86	56 - 136
4,4'-DDD [2C]	0.500	0.446	89	56 - 143
4,4'-DDE [2C]	0.500	0.411	82	57 - 135
4,4'-DDT [2C]	0.500	0.488	98	51 - 143

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101643	Laboratory ID:	9101643-BSD1
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
Aldrin [2C]	0.500	0.333	67	1	30	45 - 134
cis-Chlordane [2C]	0.500	0.437	87	1	30	60 - 129
trans-Chlordane [2C]	0.500	0.418	84	3	30	56 - 136
4,4'-DDD [2C]	0.500	0.446	89	0.2	30	56 - 143
4,4'-DDE [2C]	0.500	0.412	82	0.2	30	57 - 135
4,4'-DDT [2C]	0.500	0.494	99	1	30	51 - 143

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101643	Laboratory ID:	9101643-BS2
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
cis-Nonachlor [2C]	0.500	0.455	91	25 - 120
trans-Nonachlor [2C]	0.500	0.425	85	25 - 120
2,4'-DDD	0.500	0.406	81	30 - 135
2,4'-DDE [2C]	0.500	0.400	80	50 - 140
2,4'-DDT [2C]	0.500	0.474	95	45 - 140
Oxychlordane [2C]	0.500	0.411	82	25 - 120

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101643	Laboratory ID:	9101643-BSD2
Preparation:	EPA 3510C (Neutral pH)	Initial/Final:	1000 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
cis-Nonachlor [2C]	0.500	0.480	96	5	30	25 - 120
trans-Nonachlor [2C]	0.500	0.449	90	5	30	25 - 120
2,4'-DDD	0.500	0.423	85	4	30	30 - 135
2,4'-DDE [2C]	0.500	0.409	82	2	30	50 - 140
2,4'-DDT [2C]	0.500	0.508	102	7	30	45 - 140
Oxychlordane [2C]	0.500	0.414	83	0.9	30	25 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9H23034	Instrument:	DUALECD5
Matrix:	Water	Calibration:	A9H2608

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9H23034-ICB1	ECD5-08231907.D	08/23/19 13:33
Cal Standard	9H23034-CAL1	ECD5-08231908.D	08/23/19 13:51
Cal Standard	9H23034-CAL2	ECD5-08231909.D	08/23/19 14:08
Cal Standard	9H23034-CAL3	ECD5-08231910.D	08/23/19 14:25
Cal Standard	9H23034-CAL4	ECD5-08231911.D	08/23/19 14:42
Cal Standard	9H23034-CAL5	ECD5-08231912.D	08/23/19 15:00
Cal Standard	9H23034-CAL6	ECD5-08231913.D	08/23/19 15:17
Cal Standard	9H23034-CAL7	ECD5-08231914.D	08/23/19 15:34
Cal Standard	9H23034-CAL8	ECD5-08231915.D	08/23/19 15:52
Initial Cal Check	9H23034-ICV1	ECD5-08231917.D	08/23/19 16:26
Cal Standard	9H23034-CAL9	ECD5-08231918.D	08/23/19 16:44
Cal Standard	9H23034-CALA	ECD5-08231919.D	08/23/19 17:01
Cal Standard	9H23034-CALB	ECD5-08231920.D	08/23/19 17:18
Cal Standard	9H23034-CALC	ECD5-08231921.D	08/23/19 17:35
Cal Standard	9H23034-CALD	ECD5-08231922.D	08/23/19 17:53
Cal Standard	9H23034-CALE	ECD5-08231923.D	08/23/19 18:10
Cal Standard	9H23034-CALF	ECD5-08231924.D	08/23/19 18:27
Cal Standard	9H23034-CALG	ECD5-08231925.D	08/23/19 18:45
Initial Cal Check	9H23034-ICV2	ECD5-08231927.D	08/23/19 19:19
Cal Standard	9H23034-CALH	ECD5-08231928.D	08/23/19 19:36
Cal Standard	9H23034-CALI	ECD5-08231929.D	08/23/19 19:54
Cal Standard	9H23034-CALJ	ECD5-08231930.D	08/23/19 20:11
Cal Standard	9H23034-CALK	ECD5-08231931.D	08/23/19 20:28
Cal Standard	9H23034-CALL	ECD5-08231932.D	08/23/19 20:45
Cal Standard	9H23034-CALM	ECD5-08231933.D	08/23/19 21:02
Initial Cal Check	9H23034-ICV3	ECD5-08231935.D	08/23/19 21:37
Cal Standard	9H23034-CALN	ECD5-08231936.D	08/23/19 21:54
Cal Standard	9H23034-CALO	ECD5-08231937.D	08/23/19 22:11
Cal Standard	9H23034-CALP	ECD5-08231938.D	08/23/19 22:28
Cal Standard	9H23034-CALQ	ECD5-08231939.D	08/23/19 22:45
Cal Standard	9H23034-CALR	ECD5-08231940.D	08/23/19 23:03
Cal Standard	9H23034-CALS	ECD5-08231941.D	08/23/19 23:20
Initial Cal Check	9H23034-ICV4	ECD5-08231943.D	08/23/19 23:54

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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J31040	Instrument:	DUALECD5
Matrix:	Water	Calibration:	A9H2608

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9J31040-CCV3	ECD5-10311911.D	10/31/19 15:04
Calibration Check	9J31040-CCV4	ECD5-10311912.D	10/31/19 15:21
Calibration Blank	9J31040-CCB2	ECD5-10311913.D	10/31/19 15:39
Blank	9101643-BLK1	ECD5-10311919.D	10/31/19 17:22
LCS	9101643-BS1	ECD5-10311920.D	10/31/19 17:39
LCS Dup	9101643-BSD1	ECD5-10311921.D	10/31/19 17:56
LCS	9101643-BS2	ECD5-10311922.D	10/31/19 18:13
LCS Dup	9101643-BSD2	ECD5-10311923.D	10/31/19 18:31
Calibration Check	9J31040-CCV5	ECD5-10311924.D	10/31/19 18:48
Calibration Check	9J31040-CCV6	ECD5-10311925.D	10/31/19 19:05
Calibration Blank	9J31040-CCB3	ECD5-10311926.D	10/31/19 19:22
PDI-026SW-34-00-191024	A9J0959-01	ECD5-10311935.D	10/31/19 21:56
Calibration Check	9J31040-CCV7	ECD5-10311936.D	10/31/19 22:13
Calibration Check	9J31040-CCV8	ECD5-10311937.D	10/31/19 22:30
Calibration Blank	9J31040-CCB4	ECD5-10311938.D	10/31/19 22:47

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

EPA 8081B

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9H2608

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

Instrument: DUALECD5

Calibration Date: 08/26/19 15:54

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
Aldrin	1	205523	2	199775	5	202546.6	10	201080.2	25	193814.2	50	186553.4
Aldrin [2C]	1	317466	2	317729	5	320199	10	334109.3	25	315143	50	325288.4
alpha-BHC	1	231994	2	229182.5	5	229586.4	10	234706.5	25	222123.8	50	227391.8
alpha-BHC [2C]	1	393119	2	392293	5	397087.6	10	409589	25	396434.5	50	405316.4
beta-BHC	1	104326	2	97084	5	91390.8	10	91087.5	25	82415.12	50	82017.16
beta-BHC [2C]	1	176262	2	167630	5	157726	10	158084.7	25	147086.2	50	150320.2
delta-BHC	1	199840	2	193490	5	200802.4	10	200649.3	25	186686.6	50	192214.8
delta-BHC [2C]	1	349123	2	334561	5	343490	10	361351.7	25	329911	50	346225.2
gamma-BHC (Lindane)	1	207427	2	203013.5	5	204144.8	10	203485.9	25	195026.3	50	195720
gamma-BHC (Lindane) [2C]	1	352286	2	345461	5	348535.4	10	347673.3	25	340335.4	50	347621.4
cis-Chlordane	1	209780	2	194999.5	5	181759	10	184334.6	25	169776.5	50	172453.5
cis-Chlordane [2C]	1	299422	2	289833.5	5	286971	10	285957.3	25	277434.3	50	280042.4
trans-Chlordane	1	197202	2	191135.5	5	185315.4	10	184799.6	25	176058.2	50	179186.1
trans-Chlordane [2C]	1	364142	2	322227	5	300423.8	10	300278.2	25	286299.2	50	293574.4
4,4'-DDD	1	164956	2	157311	5	158099.6	10	156597.4	25	149081.4	50	154523.9
4,4'-DDD [2C]	1	251549	2	244060	5	241728.4	10	242549.6	25	245858.8	50	263189
4,4'-DDE	1	193435	2	194309	5	190670.2	10	189093.1	25	182842.6	50	183547.8
4,4'-DDE [2C]	1	298463	2	299033	5	297599.8	10	304979.2	25	300041.9	50	311094.2
4,4'-DDT	1	113897	2	109095	5	110601.8	10	114655.6	25	116978.7	50	124107.4
4,4'-DDT [2C]	1	179700	2	170891	5	174730.6	10	184111.9	25	179215.5	50	185709.8
Dieldrin	1	197721	2	197864	5	194401.8	10	195489	25	183292.2	50	187733.3
Dieldrin [2C]	1	296684	2	291906	5	292507.6	10	289886.6	25	293355.6	50	308682.2
Endosulfan I	1	185217	2	178684	5	172301.8	10	170933.2	25	164451.4	50	159688.2
Endosulfan I [2C]	1	278874	2	270221	5	265438.2	10	272427.2	25	262860.5	50	274246.6
Endosulfan II	1	158139	2	149553	5	141908.8	10	144808	25	134874.6	50	136818.4
Endosulfan II [2C]	1	232156	2	231128	5	219271.8	10	224361	25	217904.1	50	230690.6
Endosulfan sulfate	1	176097	2	161081.5	5	153759.6	10	155354	25	145816.4	50	148411.5
Endosulfan sulfate [2C]	1	265797	2	249383.5	5	235181.6	10	242458.4	25	239156.2	50	242985.8
Endrin	1	156412	2	149257.5	5	147790.6	10	147550.8	25	140356.2	50	139591.4
Endrin [2C]	1	222882	2	212444.5	5	218575.4	10	224448.3	25	213035.3	50	220307.6
Endrin Aldehyde	1	241285	2	164091	5	136678.6	10	137512.9	25	124790.7	50	124489

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9H2608

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

Instrument: DUALECD5

Calibration Date: 08/26/19 15:54

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
Endrin Aldehyde [2C]	1	348624	2	238847	5	209173.8	10	212502.8	25	193940.2	50	204180.6
Endrin ketone	1	177552	2	165634.5	5	162276.8	10	166438	25	160358.3	50	163814.1
Endrin ketone [2C]	1	255763	2	246555	5	241000.8	10	249698.5	25	235747.6	50	259091.4
Heptachlor	1	192066	2	184807.5	5	179818.2	10	181962.1	25	172572.2	50	174703.2
Heptachlor [2C]	1	309811	2	293382.5	5	301643.6	10	300591.5	25	291291.3	50	291902.8
Heptachlor epoxide	1	200503	2	196026	5	184724	10	186542.8	25	173771.4	50	177386
Heptachlor epoxide [2C]	1	310098	2	303120	5	291188.2	10	295930.1	25	282589.2	50	296755.8
Methoxychlor	1	59659	2	55733	5	54077.6	10	56170.6	25	55611.32	50	57213.66
Methoxychlor [2C]	1	95155	2	89037	5	82760.4	10	88306.9	25	86666.36	50	86923.98
2,4,5,6-TCMX (Surr)	1	176748	2	174986	5	166841.2	10	164444.7	25	160633.3	50	161429.6
2,4,5,6-TCMX (Surr) [2C]	1	300053	2	300383	5	287575.2	10	286585.4	25	282916.9	50	283935
Decachlorobiphenyl (Surr)	1	163865	2	154952	5	140210	10	133546.8	25	133705.4	50	133579.8
Decachlorobiphenyl (Surr) [2C]	1	191572	2	195003	5	174184.2	10	167872.8	25	166529.2	50	174613.8

INITIAL CALIBRATION DATA (Continued)

EPA 8081B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9H2608
Instrument: DUALECD5
Matrix:
Calibration Date: 08/26/19 15:54

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
Aldrin	100	191080.7	200	199192								
Aldrin [2C]	100	339064.2	200	366140.9								
alpha-BHC	100	223635.8	200	236011.2								
alpha-BHC [2C]	100	416992.1	200	471883.8								
beta-BHC	100	83554.16	200	91193.5								
beta-BHC [2C]	100	146251.8	200	162767.2								
delta-BHC	100	194755.8	200	205083								
delta-BHC [2C]	100	351766.3	200	404898.8								
gamma-BHC (Lindane)	100	195950.9	200	209448.6								
gamma-BHC (Lindane) [2C]	100	367889.9	200	403828.4								
cis-Chlordane	100	167425.8	200	176039.7								
cis-Chlordane [2C]	100	290428.6	200	319885.3								
trans-Chlordane	100	177327.9	200	188107								
trans-Chlordane [2C]	100	307422.7	200	332239.8								
4,4'-DDD	100	154371.5	200	162184								
4,4'-DDD [2C]	100	262974.8	200	297801.4								
4,4'-DDE	100	180525.5	200	193815.4								
4,4'-DDE [2C]	100	324996	200	349211.8								
4,4'-DDT	100	121769.6	200	145376.1								
4,4'-DDT [2C]	100	197895	200	241017.2								
Dieldrin	100	183244.2	200	196088.8								
Dieldrin [2C]	100	310019.6	200	350158.9								
Endosulfan I	100	160900	200	169263								
Endosulfan I [2C]	100	272127.1	200	305217.6								
Endosulfan II	100	135435	200	147355.2								
Endosulfan II [2C]	100	230163.7	200	259174.4								
Endosulfan sulfate	100	143667.9	200	155632.6								
Endosulfan sulfate [2C]	100	244773.2	200	272964								
Endrin	100	138127.1	200	157131.5								
Endrin [2C]	100	231024.1	200	263897.9								
Endrin Aldehyde	100	123638.1	200	133138.3								

INITIAL CALIBRATION DATA (Continued)

EPA 8081B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9H2608
Instrument: DUALECD5
Matrix:
Calibration Date: 08/26/19 15:54

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
Endrin Aldehyde [2C]	100	205027.4	200	225422.7								
Endrin ketone	100	162519.4	200	175473.6								
Endrin ketone [2C]	100	266365.6	200	304306.9								
Heptachlor	100	175515.3	200	188928.5								
Heptachlor [2C]	100	302778.2	200	356415.9								
Heptachlor epoxide	100	173184.4	200	181290.8								
Heptachlor epoxide [2C]	100	300455.1	200	326650.4								
Methoxychlor	100	58773.29	200	71355.7								
Methoxychlor [2C]	100	94449.87	200	118570.5								
cis-Nonachlor					1	219220	2	211721	5	205179.8	10	203201
cis-Nonachlor [2C]					1	332745	2	312391.5	5	317448.6	10	314805.4
trans-Nonachlor					1	236836	2	207563	5	186644.4	10	181755.2
trans-Nonachlor [2C]					1	306202	2	293882.5	5	293544.6	10	284440.4
2,4'-DDD					1	120240	2	116544.5	5	112188.4	10	110358.7
2,4'-DDD [2C]					1	192040	2	186798	5	179739.4	10	177879
2,4'-DDE					1	137947	2	132606	5	126633.6	10	124526.5
2,4'-DDE [2C]					1	219164	2	205906	5	205937.4	10	201833.1
2,4'-DDT					1	107110	2	102104.5	5	107393.4	10	105156.5
2,4'-DDT [2C]					1	173338	2	166085	5	174614.8	10	170256.8
Hexachlorobenzene					1	194679	2	181041	5	170758.6	10	171188.4
Hexachlorobenzene [2C]					1	328025	2	316415	5	297116.6	10	293629.4
Hexachlorobutadiene					1	198207	2	187897	5	191842.2	10	183818.7
Hexachlorobutadiene [2C]					1	383198	2	377274	5	375496.8	10	370153.2
Mirex					1	147356	2	133385	5	125723.6	10	119636.5
Mirex [2C]					1	209783	2	194099.5	5	179104.6	10	172296
Oxychlordane					1	176844	2	169685	5	163949.6	10	159161.3
Oxychlordane [2C]					1	279143	2	270511.5	5	265108.6	10	253890.3
2,4,5,6-TCMX (Surr)	100	158509.2	200	164212.7								
2,4,5,6-TCMX (Surr) [2C]	100	292563.3	200	312922.3								
Decachlorobiphenyl (Surr)	100	134054	200	134876.2								
Decachlorobiphenyl (Surr) [2C]	100	177840.7	200	190488.9								

INITIAL CALIBRATION DATA (Continued)

EPA 8081B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9H2608
Instrument: DUALECD5
Matrix:
Calibration Date: 08/26/19 15:54

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
Chlordane 1 (g)									50	20182.86	100	19788.97
Chlordane 2									50	25733.1	100	25195.2
Chlordane 3 (a)									50	5761.74	100	5481.96
Chlordane (Technical)									50	~~107.3~~	100	~~49.38~~
Chlordane 1 (g) [2C]									50	35094.14	100	33783.88
Chlordane 2 (a) [2C]									50	29448	100	29059.41
Chlordane 3 [2C]									50	8780.4	100	8744.65
Chlordane (Technical) [2C]									50	~~0~~	100	~~0~~
cis-Nonachlor	25	199724.4	50	212320.4	100	209326.4	200	200230.9				
cis-Nonachlor [2C]	25	328775.7	50	354424.6	100	360726.4	200	362279.1				
trans-Nonachlor	25	175641.8	50	191635.9	100	183512.5	200	175139.6				
trans-Nonachlor [2C]	25	283691.5	50	316154.2	100	319752.7	200	315418.2				
2,4'-DDD	25	109807.1	50	118401.9	100	115875.5	200	109584.8				
2,4'-DDD [2C]	25	175567.4	50	198498.7	100	201189.2	200	199196.5				
2,4'-DDE	25	122376.8	50	130211.8	100	127690.7	200	124096				
2,4'-DDE [2C]	25	199969.3	50	220128	100	221644	200	222523				
2,4'-DDT	25	109151.8	50	113746.5	100	117713.5	200	115124.8				
2,4'-DDT [2C]	25	176222.2	50	176211.8	100	189989.7	200	199996.2				
Hexachlorobenzene	25	167382	50	178232.5	100	176700.2	200	170367.3				
Hexachlorobenzene [2C]	25	296653	50	321883.2	100	327667.1	200	331309.8				
Hexachlorobutadiene	25	174559.5	50	175234.9	100	179521.3	200	170832.6				
Hexachlorobutadiene [2C]	25	355689.5	50	372712.4	100	392988.8	200	379942.8				
Mirex	25	116432.7	50	124366.8	100	119607.5	200	116425				
Mirex [2C]	25	165524.6	50	182019.2	100	193632	200	192127.6				
Oxychlordane	25	155250.2	50	167657.5	100	163592.2	200	160163.2				
Oxychlordane [2C]	25	248111.6	50	283450.8	100	297321.5	200	293684.9				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-08231917.D		
Sequence:	9H23034	Inject Date:	08/23/19
Lab Sample ID:	9H23034-ICV1	Inject Time:	16:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aldrin	50.0	52.8	5.5	70 - 130
Aldrin [2C]	50.0	53.9	7.7	70 - 130
alpha-BHC	50.0	51.1	2.1	70 - 130
alpha-BHC [2C]	50.0	52.4	4.8	70 - 130
beta-BHC	50.0	48.8	-2.4	70 - 130
beta-BHC [2C]	50.0	50.1	0.2	70 - 130
delta-BHC	50.0	51.7	3.3	70 - 130
delta-BHC [2C]	50.0	52.6	5.3	70 - 130
gamma-BHC (Lindane)	50.0	51.4	2.8	70 - 130
gamma-BHC (Lindane) [2C]	50.0	52.7	5.5	70 - 130
cis-Chlordane	50.0	48.8	-2.3	70 - 130
cis-Chlordane [2C]	50.0	51.6	3.3	70 - 130
trans-Chlordane	50.0	51.1	2.2	70 - 130
trans-Chlordane [2C]	50.0	50.7	1.4	70 - 130
4,4'-DDD	50.0	51.2	2.4	70 - 130
4,4'-DDD [2C]	50.0	55.1	10.2	70 - 130
4,4'-DDE	50.0	51.3	2.6	70 - 130
4,4'-DDE [2C]	50.0	52.7	5.3	70 - 130
4,4'-DDT	50.0	53.8	7.5	70 - 130
4,4'-DDT [2C]	50.0	54.1	8.2	70 - 130
Dieldrin	50.0	49.8	-0.3	70 - 130
Dieldrin [2C]	50.0	51.8	3.6	70 - 130
Endosulfan I	50.0	49.7	-0.6	70 - 130
Endosulfan I [2C]	50.0	51.0	2.1	70 - 130
Endosulfan II	50.0	53.2	6.4	70 - 130
Endosulfan II [2C]	50.0	53.4	6.7	70 - 130
Endosulfan sulfate	50.0	51.8	3.5	70 - 130
Endosulfan sulfate [2C]	50.0	52.0	3.9	70 - 130
Endrin	50.0	52.7	5.4	70 - 130
Endrin [2C]	50.0	53.1	6.3	70 - 130
Endrin Aldehyde	50.0	60.7	21.3	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-08231917.D		
Sequence:	9H23034	Inject Date:	08/23/19
Lab Sample ID:	9H23034-ICV1	Inject Time:	16:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Endrin Aldehyde [2C]	50.0	61.1	22.3	70 - 130
Endrin ketone	50.0	53.4	6.7	70 - 130
Endrin ketone [2C]	50.0	54.2	8.5	70 - 130
Heptachlor	50.0	51.2	2.4	70 - 130
Heptachlor [2C]	50.0	52.3	4.6	70 - 130
Heptachlor epoxide	50.0	50.1	0.1	70 - 130
Heptachlor epoxide [2C]	50.0	51.4	2.7	70 - 130
Methoxychlor	50.0	55.4	10.7	70 - 130
Methoxychlor [2C]	50.0	56.3	12.5	70 - 130
2,4,5,6-TCMX (Surr)	50.0	49.5	-1.1	70 - 130
2,4,5,6-TCMX (Surr) [2C]	50.0	49.3	-1.4	70 - 130
Decachlorobiphenyl (Surr)	50.0	49.1	-1.8	70 - 130
Decachlorobiphenyl (Surr) [2C]	50.0	48.2	-3.6	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-08231927.D		
Sequence:	9H23034	Inject Date:	08/23/19
Lab Sample ID:	9H23034-ICV2	Inject Time:	19:19

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
cis-Nonachlor	50.0	45.9	-8.2	70 - 130
cis-Nonachlor [2C]	50.0	48.9	-2.2	70 - 130
trans-Nonachlor	50.0	50.4	0.8	70 - 130
trans-Nonachlor [2C]	50.0	50.8	1.5	70 - 130
2,4'-DDD	50.0	47.7	-4.7	70 - 130
2,4'-DDD [2C]	50.0	48.8	-2.4	70 - 130
2,4'-DDE	50.0	47.1	-5.7	70 - 130
2,4'-DDE [2C]	50.0	47.9	-4.3	70 - 130
2,4'-DDT	50.0	48.6	-2.8	70 - 130
2,4'-DDT [2C]	50.0	47.1	-5.8	70 - 130
Hexachlorobenzene	50.0	47.8	-4.5	70 - 130
Hexachlorobenzene [2C]	50.0	47.9	-4.1	70 - 130
Hexachlorobutadiene	50.0	47.4	-5.2	70 - 130
Hexachlorobutadiene [2C]	50.0	48.5	-3.0	70 - 130
Mirex	50.0	47.1	-5.9	70 - 130
Mirex [2C]	50.0	46.4	-7.1	70 - 130
Oxychlordane	50.0	49.0	-2.0	70 - 130
Oxychlordane [2C]	50.0	50.1	0.2	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-08231935.D		
Sequence:	9H23034	Inject Date:	08/23/19
Lab Sample ID:	9H23034-ICV3	Inject Time:	21:37

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Chlordane 1 (g)	500	545	8.9	65 - 135
Chlordane 2	500	535	6.9	65 - 135
Chlordane 3 (a)	500	550	9.9	65 - 135
Chlordane (Technical)	500	543	8.6	65 - 135
Chlordane 1 (g) [2C]	500	549	9.8	65 - 135
Chlordane 2 (a) [2C]	500	536	7.3	65 - 135
Chlordane 3 [2C]	500	541	8.2	65 - 135
Chlordane (Technical) [2C]	500	542	8.4	65 - 135

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-08231943.D		
Sequence:	9H23034	Inject Date:	08/23/19
Lab Sample ID:	9H23034-ICV4	Inject Time:	23:54

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Toxaphene 1	500	476	-4.9	65 - 135
Toxaphene 2	500	474	-5.1	65 - 135
Toxaphene 3	500	487	-2.7	65 - 135
Toxaphene 4	500	485	-3.0	65 - 135
Toxaphene 5	500	495	-1.0	65 - 135
Toxaphene 6	500	489	-2.2	65 - 135
Toxaphene (Total)	500	484	-3.2	65 - 135
Toxaphene 1 [2C]	500	477	-4.5	65 - 135
Toxaphene 2 [2C]	500	492	-1.6	65 - 135
Toxaphene 3 [2C]	500	483	-3.4	65 - 135
Toxaphene 4 [2C]	500	484	-3.1	65 - 135
Toxaphene 5 [2C]	500	488	-2.3	65 - 135
Toxaphene 6 [2C]	500	498	-0.5	65 - 135
Toxaphene (Total) [2C]	500	487	-2.6	65 - 135

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311911.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV3	Injection Time:	15:04

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aldrin	Ave	50.0	52.1		197445.6	205613	4.1	20
Aldrin [2C]	Ave	50.0	52.4		329392.5	345302.6	4.8	20
alpha-BHC	Ave	50.0	52.0		229329	238446.2	4.0	20
alpha-BHC [2C]	Ave	50.0	47.7		410339.4	391262	-4.6	20
beta-BHC	Ave	50.0	43.1		90383.53	77924.02	-13.8	20
beta-BHC [2C]	Ave	50.0	41.1		158266	129979.1	-17.9	20
delta-BHC	Ave	50.0	44.1		196690.2	173641.5	-11.7	20
delta-BHC [2C]	Ave	50.0	42.9		352665.9	302523.6	-14.2	20
gamma-BHC (Lindane)	Ave	50.0	50.6		201777.1	204120.6	1.2	20
gamma-BHC (Lindane) [2C]	Ave	50.0	48.9		356703.9	348641.2	-2.3	20
cis-Chlordane	Ave	50.0	50.8		182071.1	184950.7	1.6	20
cis-Chlordane [2C]	Ave	50.0	50.8		291246.8	296150.8	1.7	20
trans-Chlordane	Ave	50.0	52.3		184891.5	193327.5	4.6	20
trans-Chlordane [2C]	Ave	50.0	48.5		313325.9	303651.2	-3.1	20
4,4'-DDD	Ave	50.0	43.7		157140.6	137440.4	-12.5	20
4,4'-DDD [2C]	Ave	50.0	41.8		256213.9	214281.4	-16.4	20
4,4'-DDE	Ave	50.0	46.4		188529.8	175101.7	-7.1	20
4,4'-DDE [2C]	Ave	50.0	42.7		310677.4	265481.4	-14.5	20
4,4'-DDT	Ave	50.0	55.5		119560.1	132750.8	11.0	20
4,4'-DDT [2C]	XXX	50.0	55.1	10.3				20
Dieldrin	Ave	50.0	52.7		191979.3	202374.2	5.4	20
Dieldrin [2C]	Ave	50.0	54.2		304150.1	329813.4	8.4	20
Endosulfan I	Ave	50.0	54.0		170179.8	183738.8	8.0	20
Endosulfan I [2C]	Ave	50.0	52.3		275176.5	287585.2	4.5	20
Endosulfan II	Ave	50.0	50.4		143611.5	144689.3	0.8	20
Endosulfan II [2C]	Ave	50.0	52.1		230606.2	240480.4	4.3	20
Endosulfan sulfate	Ave	50.0	48.7		154977.6	150832.4	-2.7	20
Endosulfan sulfate [2C]	Ave	50.0	46.6		249087.5	232052.4	-6.8	20
Endrin	Ave	50.0	56.7		147027.1	166812.1	13.5	20
Endrin [2C]	Ave	50.0	54.5		225826.9	246077	9.0	20

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311911.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV3	Injection Time:	15:04

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Endrin Aldehyde	XXX	50.0	50.6	1.2				20
Endrin Aldehyde [2C]	XXX	50.0	50.6	1.2				20
Endrin ketone	Ave	50.0	50.4		166758.3	168097.7	0.8	20
Endrin ketone [2C]	Ave	50.0	49.8		257316.1	256086.2	-0.5	20
Heptachlor	Ave	50.0	52.2		181296.6	189154.6	4.3	20
Heptachlor [2C]	Ave	50.0	53.6		305977.1	328028.6	7.2	20
Heptachlor epoxide	Ave	50.0	50.7		184178.6	186655	1.3	20
Heptachlor epoxide [2C]	Ave	50.0	51.2		300848.3	308315.6	2.5	20
Methoxychlor	Ave	50.0	54.2		58574.27	63440.68	8.3	20
Methoxychlor [2C]	XXX	50.0	56.1	12.2				20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311912.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV4	Injection Time:	15:21

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
cis-Nonachlor	Ave	50.0	48.3		207615.5	200465.2	-3.4	20
cis-Nonachlor [2C]	Ave	50.0	46.9		335449.5	314789.6	-6.2	20
trans-Nonachlor	XXX	50.0	46.8	-6.4				20
trans-Nonachlor [2C]	Ave	50.0	45.9		301635.8	276755.2	-8.2	20
2,4'-DDD	Ave	50.0	41.2		114125.1	94119.3	-17.5	20
2,4'-DDD [2C]	Ave	50.0	39.4		188863.5	148709.4	-21.3*	20
2,4'-DDE	Ave	50.0	41.3		128261.1	106036.9	-17.3	20
2,4'-DDE [2C]	Ave	50.0	40.1		212138.1	169984.1	-19.9	20
2,4'-DDT	Ave	50.0	48.1		109687.6	105500.2	-3.8	20
2,4'-DDT [2C]	Ave	50.0	46.0		178339.3	164160	-8.0	20
Hexachlorobenzene	Ave	50.0	42.2		176293.6	148629.3	-15.7	20
Hexachlorobenzene [2C]	Ave	50.0	31.7		314087.4	198830.6	-36.7*	20
Hexachlorobutadiene	Ave	50.0	52.6		182739.2	192195	5.2	20
Hexachlorobutadiene [2C]	Ave	50.0	52.2		375931.9	392357.2	4.4	20
Mirex	Ave	50.0	44.6		125366.6	111732.2	-10.9	20
Mirex [2C]	Ave	50.0	44.8		186073.3	166729.3	-10.4	20
Oxychlordane	Ave	50.0	46.1		164537.9	151668.1	-7.8	20
Oxychlordane [2C]	Ave	50.0	44.6		273902.8	244071.6	-10.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311924.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV5	Injection Time:	18:48

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aldrin	Ave	100	107		197445.6	211771.6	7.3	20
Aldrin [2C]	Ave	100	116		329392.5	381700.4	15.9	20
alpha-BHC	Ave	100	106		229329	242509.1	5.7	20
alpha-BHC [2C]	Ave	100	107		410339.4	440084.5	7.2	20
beta-BHC	Ave	100	90.9		90383.53	82127.46	-9.1	20
beta-BHC [2C]	Ave	100	94.4		158266	149451.7	-5.6	20
delta-BHC	Ave	100	91.7		196690.2	180333.8	-8.3	20
delta-BHC [2C]	Ave	100	98.2		352665.9	346330.3	-1.8	20
gamma-BHC (Lindane)	Ave	100	103		201777.1	208375.5	3.3	20
gamma-BHC (Lindane) [2C]	Ave	100	112		356703.9	399264.4	11.9	20
cis-Chlordane	Ave	100	104		182071.1	190177.6	4.5	20
cis-Chlordane [2C]	Ave	100	114		291246.8	332737	14.2	20
trans-Chlordane	Ave	100	106		184891.5	196366.4	6.2	20
trans-Chlordane [2C]	Ave	100	109		313325.9	342465.7	9.3	20
4,4'-DDD	Ave	100	89.2		157140.6	140160.2	-10.8	20
4,4'-DDD [2C]	Ave	100	102		256213.9	260464.1	1.7	20
4,4'-DDE	Ave	100	96.7		188529.8	182227.9	-3.3	20
4,4'-DDE [2C]	Ave	100	102		310677.4	317392.9	2.2	20
4,4'-DDT	Ave	100	120		119560.1	144062	20.5*	20
4,4'-DDT [2C]	XXX	100	117	17.3				20
Dieldrin	Ave	100	108		191979.3	206898.8	7.8	20
Dieldrin [2C]	Ave	100	118		304150.1	359271.1	18.1	20
Endosulfan I	Ave	100	109		170179.8	184659.5	8.5	20
Endosulfan I [2C]	Ave	100	113		275176.5	310115.1	12.7	20
Endosulfan II	Ave	100	103		143611.5	147900.6	3.0	20
Endosulfan II [2C]	Ave	100	111		230606.2	254951	10.6	20
Endosulfan sulfate	Ave	100	100		154977.6	155257.1	0.2	20
Endosulfan sulfate [2C]	Ave	100	106		249087.5	265116.5	6.4	20
Endrin	Ave	100	116		147027.1	169955.2	15.6	20
Endrin [2C]	Ave	100	129		225826.9	291175.6	28.9*	20

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311924.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV5	Injection Time:	18:48

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Endrin Aldehyde	XXX	100	104	3.8				20
Endrin Aldehyde [2C]	XXX	100	109	8.9				20
Endrin ketone	Ave	100	109		166758.3	181039	8.6	20
Endrin ketone [2C]	Ave	100	111		257316.1	286616.1	11.4	20
Heptachlor	Ave	100	113		181296.6	204240.6	12.7	20
Heptachlor [2C]	Ave	100	122		305977.1	372059.1	21.6*	20
Heptachlor epoxide	Ave	100	102		184178.6	187906.4	2.0	20
Heptachlor epoxide [2C]	Ave	100	112		300848.3	335937.9	11.7	20
Methoxychlor	Ave	100	116		58574.27	68211.84	16.5	20
Methoxychlor [2C]	XXX	100	114	14.2				20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311925.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV6	Injection Time:	19:05

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
cis-Nonachlor	Ave	100	97.3		207615.5	202099.5	-2.7	20
cis-Nonachlor [2C]	Ave	100	103		335449.5	343987	2.5	20
trans-Nonachlor	XXX	100	99.4	-0.6				20
trans-Nonachlor [2C]	Ave	100	104		301635.8	314750.3	4.3	20
2,4'-DDD	Ave	100	85.1		114125.1	97138.38	-14.9	20
2,4'-DDD [2C]	Ave	100	91.7		188863.5	173194.8	-8.3	20
2,4'-DDE	Ave	100	85.9		128261.1	110220.8	-14.1	20
2,4'-DDE [2C]	Ave	100	91.6		212138.1	194304.4	-8.4	20
2,4'-DDT	Ave	100	106		109687.6	115722.2	5.5	20
2,4'-DDT [2C]	Ave	100	107		178339.3	191703.2	7.5	20
Hexachlorobenzene	Ave	100	87.9		176293.6	155008.5	-12.1	20
Hexachlorobenzene [2C]	Ave	100	78.1		314087.4	245305.4	-21.9*	20
Hexachlorobutadiene	Ave	100	103		182739.2	187722.3	2.7	20
Hexachlorobutadiene [2C]	Ave	100	111		375931.9	415989.4	10.7	20
Mirex	Ave	100	89.8		125366.6	112636	-10.2	20
Mirex [2C]	Ave	100	98.5		186073.3	183341.8	-1.5	20
Oxychlordane	Ave	100	95.1		164537.9	156525.4	-4.9	20
Oxychlordane [2C]	Ave	100	98.2		273902.8	268932.2	-1.8	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311936.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV7	Injection Time:	22:13

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aldrin	Ave	50.0	53.9		197445.6	212688.6	7.7	20
Aldrin [2C]	Ave	50.0	56.2		329392.5	370274.6	12.4	20
alpha-BHC	Ave	50.0	53.3		229329	244553	6.6	20
alpha-BHC [2C]	Ave	50.0	52.3		410339.4	429447.6	4.7	20
beta-BHC	Ave	50.0	43.7		90383.53	78956.62	-12.6	20
beta-BHC [2C]	Ave	50.0	45.1		158266	142734.3	-9.8	20
delta-BHC	Ave	50.0	45.5		196690.2	178940.4	-9.0	20
delta-BHC [2C]	Ave	50.0	46.7		352665.9	329359.2	-6.6	20
gamma-BHC (Lindane)	Ave	50.0	52.2		201777.1	210573.2	4.4	20
gamma-BHC (Lindane) [2C]	Ave	50.0	54.0		356703.9	385202.2	8.0	20
cis-Chlordane	Ave	50.0	51.7		182071.1	188138	3.3	20
cis-Chlordane [2C]	Ave	50.0	53.5		291246.8	311694	7.0	20
trans-Chlordane	Ave	50.0	51.3		184891.5	189853.8	2.7	20
trans-Chlordane [2C]	Ave	50.0	52.8		313325.9	331072.6	5.7	20
4,4'-DDD	Ave	50.0	48.1		157140.6	151090.6	-3.9	20
4,4'-DDD [2C]	Ave	50.0	50.9		256213.9	260623.4	1.7	20
4,4'-DDE	Ave	50.0	47.0		188529.8	177201.5	-6.0	20
4,4'-DDE [2C]	Ave	50.0	49.1		310677.4	305144.8	-1.8	20
4,4'-DDT	Ave	50.0	52.9		119560.1	126448.5	5.8	20
4,4'-DDT [2C]	XXX	50.0	52.8	5.6				20
Dieldrin	Ave	50.0	54.6		191979.3	209642.2	9.2	20
Dieldrin [2C]	Ave	50.0	57.7		304150.1	350692.4	15.3	20
Endosulfan I	Ave	50.0	56.2		170179.8	191376.8	12.5	20
Endosulfan I [2C]	Ave	50.0	53.6		275176.5	294890.8	7.2	20
Endosulfan II	Ave	50.0	52.2		143611.5	149806.7	4.3	20
Endosulfan II [2C]	Ave	50.0	55.9		230606.2	257744.4	11.8	20
Endosulfan sulfate	Ave	50.0	52.3		154977.6	162102	4.6	20
Endosulfan sulfate [2C]	Ave	50.0	53.3		249087.5	265722	6.7	20
Endrin	Ave	50.0	59.0		147027.1	173597.5	18.1	20
Endrin [2C]	Ave	50.0	61.0		225826.9	275585.2	22.0*	20

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311936.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV7	Injection Time:	22:13

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Endrin Aldehyde	XXX	50.0	54.6	9.2				20
Endrin Aldehyde [2C]	XXX	50.0	55.0	10.0				20
Endrin ketone	Ave	50.0	54.9		166758.3	183223.2	9.9	20
Endrin ketone [2C]	Ave	50.0	56.7		257316.1	291971.6	13.5	20
Heptachlor	Ave	50.0	56.6		181296.6	205193.4	13.2	20
Heptachlor [2C]	Ave	50.0	59.5		305977.1	364119.6	19.0	20
Heptachlor epoxide	Ave	50.0	51.6		184178.6	189897.3	3.1	20
Heptachlor epoxide [2C]	Ave	50.0	54.0		300848.3	324902	8.0	20
Methoxychlor	Ave	50.0	53.8		58574.27	63001.22	7.6	20
Methoxychlor [2C]	XXX	50.0	58.2	16.3				20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	DUALECD5	Calibration:	A9H2608
Lab File ID:	ECD5-10311937.D	Calibration Date:	08/26/19 15:54
Sequence:	9J31040	Injection Date:	10/31/19
Lab Sample ID:	9J31040-CCV8	Injection Time:	22:30

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
cis-Nonachlor	Ave	50.0	47.3		207615.5	196200.1	-5.5	20
cis-Nonachlor [2C]	Ave	50.0	49.0		335449.5	328648.8	-2.0	20
trans-Nonachlor	XXX	50.0	48.1	-3.9				20
trans-Nonachlor [2C]	Ave	50.0	49.1		301635.8	296254.4	-1.8	20
2,4'-DDD	Ave	50.0	43.3		114125.1	98774.26	-13.5	20
2,4'-DDD [2C]	Ave	50.0	45.1		188863.5	170382.1	-9.8	20
2,4'-DDE	Ave	50.0	44.4		128261.1	113826.3	-11.3	20
2,4'-DDE [2C]	Ave	50.0	43.6		212138.1	184834.4	-12.9	20
2,4'-DDT	Ave	50.0	48.0		109687.6	105372	-3.9	20
2,4'-DDT [2C]	Ave	50.0	45.9		178339.3	163794	-8.2	20
Hexachlorobenzene	Ave	50.0	43.4		176293.6	153136.4	-13.1	20
Hexachlorobenzene [2C]	Ave	50.0	36.3		314087.4	228090.4	-27.4*	20
Hexachlorobutadiene	Ave	50.0	52.6		182739.2	192080.3	5.1	20
Hexachlorobutadiene [2C]	Ave	50.0	53.8		375931.9	404411.2	7.6	20
Mirex	Ave	50.0	46.9		125366.6	117491.3	-6.3	20
Mirex [2C]	Ave	50.0	47.7		186073.3	177534.1	-4.6	20
Oxychlordane	Ave	50.0	49.6		164537.9	163235.7	-0.8	20
Oxychlordane [2C]	Ave	50.0	47.3		273902.8	259207.4	-5.4	20

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

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9H23034	Instrument:	DUALECD5
Matrix:	Water	Calibration:	A9H2608

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9H23034-ICV1)				Lab File ID: ECD5-08231917.D		Analyzed: 08/23/19 16:26		
2,4,5,6-TCMX (Surr)	50.0	99	70 - 130	5.395	5.39525	-0.0003	+/-1.0	
2,4,5,6-TCMX (Surr) [2C]	50.0	99	70 - 130	5.989	5.98975	-0.0008	+/-1.0	
Decachlorobiphenyl (Surr)	50.0	98	70 - 130	9.589	9.5925	-0.0035	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	50.0	96	70 - 130	10.539	10.54062	-0.0016	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J31040	Instrument:	DUALECD5
Matrix:	Water	Calibration:	A9H2608

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9J31040-CCV3)			Lab File ID: ECD5-10311911.D		Analyzed: 10/31/19 15:04			
2,4,5,6-TCMX (Surr)	50.0	100	80 - 120	5.144	5.39525	-0.2513	+/-1.0	
2,4,5,6-TCMX (Surr) [2C]	50.0	82	80 - 120	5.742	5.98975	-0.2478	+/-1.0	
Decachlorobiphenyl (Surr)	50.0	93	80 - 120	9.331	9.5925	-0.2615	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	50.0	108	80 - 120	10.253	10.54062	-0.2876	+/-1.0	
Calibration Blank (9J31040-CCB2)			Lab File ID: ECD5-10311913.D		Analyzed: 10/31/19 15:39			
2,4,5,6-TCMX (Surr) [2C]	100	84	25 - 140	5.739	5.98975	-0.2508	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	100	111	30 - 135	10.25	10.54062	-0.2906	+/-1.0	
Blank (9101643-BLK1)			Lab File ID: ECD5-10311919.D		Analyzed: 10/31/19 17:22			
2,4,5,6-TCMX (Surr) [2C]	0.455	35	25 - 140	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.455	73	30 - 135	10.248	10.54062	-0.2926	+/-1.0	
LCS (9101643-BS1)			Lab File ID: ECD5-10311920.D		Analyzed: 10/31/19 17:39			
2,4,5,6-TCMX (Surr) [2C]	0.500	36	25 - 140	5.738	5.98975	-0.2517	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.500	82	30 - 135	10.248	10.54062	-0.2926	+/-1.0	
LCS Dup (9101643-BSD1)			Lab File ID: ECD5-10311921.D		Analyzed: 10/31/19 17:56			
2,4,5,6-TCMX (Surr) [2C]	0.500	42	25 - 140	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.500	77	30 - 135	10.248	10.54062	-0.2926	+/-1.0	
LCS (9101643-BS2)			Lab File ID: ECD5-10311922.D		Analyzed: 10/31/19 18:13			
2,4,5,6-TCMX (Surr) [2C]	0.500	39	25 - 140	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.500	76	30 - 135	10.248	10.54062	-0.2926	+/-1.0	
LCS Dup (9101643-BSD2)			Lab File ID: ECD5-10311923.D		Analyzed: 10/31/19 18:31			
2,4,5,6-TCMX (Surr) [2C]	0.500	39	25 - 140	5.74	5.98975	-0.2498	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.500	84	30 - 135	10.25	10.54062	-0.2906	+/-1.0	
Calibration Check (9J31040-CCV5)			Lab File ID: ECD5-10311924.D		Analyzed: 10/31/19 18:48			
2,4,5,6-TCMX (Surr)	100	101	80 - 120	5.139	5.39525	-0.2563	+/-1.0	
2,4,5,6-TCMX (Surr) [2C]	100	97	80 - 120	5.738	5.98975	-0.2517	+/-1.0	
Decachlorobiphenyl (Surr)	100	94	80 - 120	9.328	9.5925	-0.2645	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	100	113	80 - 120	10.249	10.54062	-0.2916	+/-1.0	
Calibration Blank (9J31040-CCB3)			Lab File ID: ECD5-10311926.D		Analyzed: 10/31/19 19:22			
2,4,5,6-TCMX (Surr) [2C]	100	87	25 - 140	5.738	5.98975	-0.2517	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	100	85	30 - 135	10.249	10.54062	-0.2916	+/-1.0	
PDI-026SW-34-00-191024 (A9J0959-01)			Lab File ID: ECD5-10311935.D		Analyzed: 10/31/19 21:56			
2,4,5,6-TCMX (Surr) [2C]	0.472	73	25 - 140	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	0.472	91	30 - 135	10.246	10.54062	-0.2946	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8081B

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J31040	Instrument:	DUALECD5
Matrix:	Water	Calibration:	A9H2608

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9J31040-CCV7)			Lab File ID: ECD5-10311936.D		Analyzed: 10/31/19 22:13			
2,4,5,6-TCMX (Surr)	50.0	105	80 - 120	5.139	5.39525	-0.2563	+/-1.0	
2,4,5,6-TCMX (Surr) [2C]	50.0	91	80 - 120	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr)	50.0	98	80 - 120	9.326	9.5925	-0.2665	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	50.0	116	80 - 120	10.247	10.54062	-0.2936	+/-1.0	
Calibration Blank (9J31040-CCB4)			Lab File ID: ECD5-10311938.D		Analyzed: 10/31/19 22:47			
2,4,5,6-TCMX (Surr) [2C]	100	91	25 - 140	5.737	5.98975	-0.2528	+/-1.0	
Decachlorobiphenyl (Surr) [2C]	100	115	30 - 135	10.248	10.54062	-0.2926	+/-1.0	

HOLDING TIME SUMMARY

EPA 8081B

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/28/19 15:27	4.21	7.00	10/31/19 21:56	3.27	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 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:18PM
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 - 4d. Barge Dewat

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
4-Chloro-3-methylphenol	0.100	0.200	ug/L
2-Chlorophenol	0.0500	0.100	ug/L
2,4-Dichlorophenol	0.0500	0.100	ug/L
2,4-Dimethylphenol	0.0500	0.100	ug/L
2,4-Dinitrophenol	0.250	0.500	ug/L
4,6-Dinitro-2-methylphenol	0.250	0.500	ug/L
2-Methylphenol	0.0250	0.0500	ug/L
3+4-Methylphenol(s)	0.0250	0.0500	ug/L
2-Nitrophenol	0.100	0.200	ug/L
4-Nitrophenol	0.100	0.200	ug/L
Pentachlorophenol (PCP)	0.100	0.200	ug/L
Phenol	0.200	0.400	ug/L
2,3,4,6-Tetrachlorophenol	0.0500	0.100	ug/L
2,3,5,6-Tetrachlorophenol	0.0500	0.100	ug/L
2,4,5-Trichlorophenol	0.0500	0.100	ug/L
2,4,6-Trichlorophenol	0.0500	0.100	ug/L
Bis(2-ethylhexyl)phthalate	0.200	0.400	ug/L

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

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

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Butyl benzyl phthalate	0.200	0.400	ug/L
Diethylphthalate	0.200	0.400	ug/L
Dimethylphthalate	0.200	0.400	ug/L
Di-n-butylphthalate	0.200	0.400	ug/L
Di-n-octyl phthalate	0.200	0.400	ug/L
N-Nitrosodimethylamine	0.0250	0.0500	ug/L
N-Nitroso-di-n-propylamine	0.0250	0.0500	ug/L
N-Nitrosodiphenylamine	0.0250	0.0500	ug/L
Hexachlorobenzene	0.0100	0.0200	ug/L
Hexachlorobutadiene	0.0250	0.0500	ug/L
Hexachlorocyclopentadiene	0.0500	0.100	ug/L
Hexachloroethane	0.0250	0.0500	ug/L
2-Chloronaphthalene	0.0100	0.0200	ug/L
1,2-Dichlorobenzene	0.0250	0.0500	ug/L
1,3-Dichlorobenzene	0.0250	0.0500	ug/L
1,4-Dichlorobenzene	0.0250	0.0500	ug/L
1,2,4-Trichlorobenzene	0.0250	0.0500	ug/L
4-Bromophenyl phenyl ether	0.0250	0.0500	ug/L
4-Chlorophenyl phenyl ether	0.0250	0.0500	ug/L
2-Nitroaniline	0.200	0.400	ug/L
3-Nitroaniline	0.200	0.400	ug/L
4-Nitroaniline	0.200	0.400	ug/L
Nitrobenzene	0.100	0.200	ug/L
2,4-Dinitrotoluene	0.100	0.200	ug/L
2,6-Dinitrotoluene	0.100	0.200	ug/L
Benzoic acid	1.25	2.50	ug/L
Benzyl alcohol	0.100	0.200	ug/L
Azobenzene (1,2-DPH)	0.0250	0.0500	ug/L
3,3'-Dichlorobenzidine	0.500	1.00	ug/L
1,2-Dinitrobenzene	0.250	0.500	ug/L
1,3-Dinitrobenzene	0.250	0.500	ug/L
1,4-Dinitrobenzene	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 8270D

PDI-026SW-34-00-191024

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	WS	Laboratory ID:	A9J0959-01RE2	File ID:	E10291916.D
Sampled:	10/24/19 10:30	Prepared:	10/28/19 13:47	Analyzed:	10/29/19 17:20
		Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1050 mL / 1 mL

Batch: 9101635 Sequence: 9J29025 Calibration: A9J0804 Instrument: SV-GCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
56-55-3	Benz(a)anthracene	1	0.0101	J
50-32-8	Benzo(a)pyrene	1	0.0167	J
205-99-2	Benzo(b)fluoranthene	1	0.0165	J
207-08-9	Benzo(k)fluoranthene	1	0.0143	U
218-01-9	Chrysene	1	0.00952	U
53-70-3	Dibenz(a,h)anthracene	1	0.00952	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.00952	U
91-20-3	Naphthalene	1	0.0426	
87-86-5	Pentachlorophenol (PCP)	1	0.0952	U
117-81-7	Bis(2-ethylhexyl)phthalate	1	0.190	U
118-74-1	Hexachlorobenzene	1	0.00952	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.76	3.35	70	44 - 120	
2-Fluorobiphenyl (Surr)	4.76	3.13	66	44 - 120	
Phenol-d6 (Surr)	4.76	0.975	20	10 - 120	
p-Terphenyl-d14 (Surr)	4.76	3.35	70	50 - 133	
2-Fluorophenol (Surr)	4.76	1.80	38	19 - 120	
2,4,6-Tribromophenol (Surr)	4.76	4.03	85	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	437935	6.765	431591	6.76	
Naphthalene-d8 (ISTD)	1750097	8.017	1777566	8.012	
Acenaphthene-d10 (ISTD)	935336	9.793	940479	9.793	
Phenanthrene-d10 (ISTD)	1920028	11.306	1884325	11.307	
Chrysene-d12 (ISTD)	2028061	15.238	2066385	15.243	
Perylene-d12 (ISTD)	1795322	18.746	1730033	18.747	
Dibenz(a,h)anthracene-d14 (ISTD)	1351208	21.132	1177238	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 - 4d. Barge Dewatering
Batch: 9101635 Batch Matrix: Water
Preparation: EPA 3510C (Acid Extraction)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101635-BLK2	I10281911.D	10/28/19 10:04	
LCS	9101635-BS2	I10281912.D	10/28/19 10:04	
LCS Dup	9101635-BSD2	I10281913.D	10/28/19 10:04	
PDI-026SW-34-00-191024	A9J0959-01RE2	E10291916.D	10/28/19 13:47	

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 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101635-BLK2	File ID:	I10281911.D
Prepared:	10/28/19 10:04	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/28/19 15:16	Instrument:	SV-GCMS9		
Batch:	9101635	Sequence:	9J28055	Calibration:	A9J1803

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
59-50-7	4-Chloro-3-methylphenol	0.0909	U
95-57-8	2-Chlorophenol	0.0455	U
120-83-2	2,4-Dichlorophenol	0.0455	U
105-67-9	2,4-Dimethylphenol	0.0455	U
51-28-5	2,4-Dinitrophenol	0.227	U
534-52-1	4,6-Dinitro-2-methylphenol	0.227	U
95-48-7	2-Methylphenol	0.0227	U
NA	3+4-Methylphenol(s)	0.0227	U
88-75-5	2-Nitrophenol	0.0909	U
100-02-7	4-Nitrophenol	0.0909	U
87-86-5	Pentachlorophenol (PCP)	0.0909	U
108-95-2	Phenol	0.182	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.0455	U
935-95-5	2,3,5,6-Tetrachlorophenol	0.0455	U
95-95-4	2,4,5-Trichlorophenol	0.0455	U

METHOD BLANK DATA SHEET

EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101635-BLK2	File ID:	I10281911.D
Prepared:	10/28/19 10:04	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/28/19 15:16	Instrument:	SV-GCMS9		
Batch:	9101635	Sequence:	9J28055	Calibration:	A9J1803

CAS NO.	COMPOUND	CONC. (ug/L)	Q
88-06-2	2,4,6-Trichlorophenol	0.0455	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.182	U
85-68-7	Butyl benzyl phthalate	0.182	U
84-66-2	Diethylphthalate	0.182	U
131-11-3	Dimethylphthalate	0.182	U
84-74-2	Di-n-butylphthalate	0.182	U
117-84-0	Di-n-octyl phthalate	0.182	U
62-75-9	N-Nitrosodimethylamine	0.0227	U
621-64-7	N-Nitroso-di-n-propylamine	0.0227	U
86-30-6	N-Nitrosodiphenylamine	0.0227	U
111-91-1	Bis(2-Chloroethoxy) methane	0.0227	U
111-44-4	Bis(2-Chloroethyl) ether	0.0227	U
108-60-1	2,2'-Oxybis(1-Chloropropane)	0.0227	U
118-74-1	Hexachlorobenzene	0.00909	U
87-68-3	Hexachlorobutadiene	0.0227	U
77-47-4	Hexachlorocyclopentadiene	0.0455	U
67-72-1	Hexachloroethane	0.0227	U
91-58-7	2-Chloronaphthalene	0.00909	U
95-50-1	1,2-Dichlorobenzene	0.0227	U
541-73-1	1,3-Dichlorobenzene	0.0227	U
106-46-7	1,4-Dichlorobenzene	0.0227	U
120-82-1	1,2,4-Trichlorobenzene	0.0227	U
101-55-3	4-Bromophenyl phenyl ether	0.0227	U
7005-72-3	4-Chlorophenyl phenyl ether	0.0227	U
88-74-4	2-Nitroaniline	0.182	U
99-09-2	3-Nitroaniline	0.182	U
100-01-6	4-Nitroaniline	0.182	U
98-95-3	Nitrobenzene	0.0909	U
121-14-2	2,4-Dinitrotoluene	0.0909	U
606-20-2	2,6-Dinitrotoluene	0.0909	U
65-85-0	Benzoic acid	1.14	U
100-51-6	Benzyl alcohol	0.0909	U
78-59-1	Isophorone	0.0227	U
103-33-3	Azobenzene (1,2-DPH)	0.0227	U
103-23-1	Bis(2-Ethylhexyl) adipate	0.227	U

METHOD BLANK DATA SHEET

EPA 8270D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101635-BLK2	File ID:	I10281911.D
Prepared:	10/28/19 10:04	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/28/19 15:16	Instrument:	SV-GCMS9		
Batch:	9101635	Sequence:	9J28055	Calibration:	A9J1803

CAS NO.	COMPOUND	CONC. (ug/L)	Q
91-94-1	3,3'-Dichlorobenzidine	0.455	U
528-29-0	1,2-Dinitrobenzene	0.227	U
99-65-0	1,3-Dinitrobenzene	0.227	U
100-25-4	1,4-Dinitrobenzene	0.227	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.55	3.68	81	44 - 120	
2-Fluorobiphenyl (Surr)	4.55	3.34	73	44 - 120	
Phenol-d6 (Surr)	4.55	1.04	23	10 - 120	
p-Terphenyl-d14 (Surr)	4.55	3.82	84	50 - 133	
2-Fluorophenol (Surr)	4.55	1.72	38	19 - 120	
2,4,6-Tribromophenol (Surr)	4.55	3.98	88	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	113545	6.653	108911	6.653	
Naphthalene-d8 (ISTD)	431077	7.916	416091	7.916	
Acenaphthene-d10 (ISTD)	224942	9.691	213634	9.691	
Phenanthrene-d10 (ISTD)	393865	11.205	406610	11.205	
Chrysene-d12 (ISTD)	390753	15.035	382244	15.035	
Perylene-d12 (ISTD)	370461	18.527	369041	18.533	
Dibenz(a,h)anthracene-d14 (ISTD)	319013	20.929	325094	20.929	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101635	Laboratory ID:	9101635-BS2
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	3.87	97	47 - 122
Acenaphthylene	4.00	3.93	98	41 - 130
Anthracene	4.00	4.15	104	57 - 123
Benz(a)anthracene	4.00	4.23	106	58 - 125
Benzo(a)pyrene	4.00	3.82	95	54 - 128
Benzo(b)fluoranthene	4.00	4.33	108	53 - 131
Benzo(k)fluoranthene	4.00	4.63	116	57 - 129
Benzo(g,h,i)perylene	4.00	4.43	111	50 - 134
Chrysene	4.00	4.11	103	59 - 123
Dibenz(a,h)anthracene	4.00	4.20	105	51 - 134
Fluoranthene	4.00	4.19	105	57 - 128
Fluorene	4.00	3.96	99	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	4.03	101	52 - 133
1-Methylnaphthalene	4.00	3.84	96	41 - 120
2-Methylnaphthalene	4.00	3.92	98	40 - 121
Naphthalene	4.00	3.78	94	40 - 121
Phenanthrene	4.00	4.10	102	59 - 120
Pyrene	4.00	4.36	109	57 - 126
Carbazole	4.00	3.99	100	60 - 122
Dibenzofuran	4.00	4.03	101	53 - 120
4-Chloro-3-methylphenol	4.00	3.45	86	52 - 120
2-Chlorophenol	4.00	3.41	85	38 - 120
2,4-Dichlorophenol	4.00	3.81	95	47 - 121
2,4-Dimethylphenol	4.00	3.00	75	31 - 124
2,4-Dinitrophenol	4.00	5.10	128	23 - 143
4,6-Dinitro-2-methylphenol	4.00	5.19	130	44 - 137
2-Methylphenol	4.00	2.83	71	30 - 120
3+4-Methylphenol(s)	4.00	2.62	66	29 - 120
2-Nitrophenol	4.00	3.49	87	47 - 123
4-Nitrophenol	4.00	1.55	39	5 - 120

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101635	Laboratory ID:	9101635-BS2
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.
Pentachlorophenol (PCP)	4.00	4.06	101	35 - 138
Phenol	4.00	1.19	30	5 - 120
2,3,4,6-Tetrachlorophenol	4.00	4.02	100	50 - 128
2,3,5,6-Tetrachlorophenol	4.00	4.01	100	50 - 121
2,4,5-Trichlorophenol	4.00	3.90	98	53 - 123
2,4,6-Trichlorophenol	4.00	3.83	96	50 - 125
Bis(2-ethylhexyl)phthalate	4.00	3.68	92	55 - 135
Butyl benzyl phthalate	4.00	3.68	92	53 - 134
Diethylphthalate	4.00	3.88	97	55 - 125
Dimethylphthalate	4.00	4.03	101	45 - 127
Di-n-butylphthalate	4.00	4.05	101	59 - 127
Di-n-octyl phthalate	4.00	3.40	85	51 - 140
N-Nitrosodimethylamine	4.00	1.10	28	6 - 120
N-Nitroso-di-n-propylamine	4.00	3.46	86	49 - 120
N-Nitrosodiphenylamine	4.00	3.97	99	51 - 123
Bis(2-Chloroethoxy) methane	4.00	3.76	94	48 - 120
Bis(2-Chloroethyl) ether	4.00	3.30	82	43 - 120
2,2'-Oxybis(1-Chloropropane)	4.00	2.99	75	37 - 130
Hexachlorobenzene	4.00	4.29	107	52 - 125
Hexachlorobutadiene	4.00	3.67	92	22 - 124
Hexachlorocyclopentadiene	4.00	3.60	90	5 - 127
Hexachloroethane	4.00	3.51	88	21 - 120
2-Chloronaphthalene	4.00	3.97	99	40 - 120
1,2-Dichlorobenzene	4.00	3.49	87	32 - 120
1,3-Dichlorobenzene	4.00	3.43	86	28 - 120
1,4-Dichlorobenzene	4.00	3.40	85	29 - 120
1,2,4-Trichlorobenzene	4.00	3.70	93	29 - 120
4-Bromophenyl phenyl ether	4.00	4.17	104	54 - 124
4-Chlorophenyl phenyl ether	4.00	4.05	101	53 - 121
2-Nitroaniline	4.00	3.98	99	54 - 127

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101635	Laboratory ID:	9101635-BS2
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.
3-Nitroaniline	4.00	2.19	55	41 - 128
4-Nitroaniline	4.00	4.00	100	35 - 120
Nitrobenzene	4.00	3.58	89	45 - 121
2,4-Dinitrotoluene	4.00	4.35	109	57 - 128
2,6-Dinitrotoluene	4.00	4.33	108	57 - 124
Benzoic acid	8.00	4.30	54	5 - 120
Benzyl alcohol	4.00	1.66	41	31 - 120
Isophorone	4.00	3.66	92	42 - 124
Azobenzene (1,2-DPH)	4.00	3.47	87	61 - 120
Bis(2-Ethylhexyl) adipate	4.00	3.71	93	40 - 125
3,3'-Dichlorobenzidine	8.00	11.2	140 *	27 - 129
1,2-Dinitrobenzene	4.00	4.02	100	59 - 120
1,3-Dinitrobenzene	4.00	4.34	108	49 - 128
1,4-Dinitrobenzene	4.00	4.61	115	40 - 120

* = 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 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101635	Laboratory ID:	9101635-BSD2
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	3.51	88		10	30	47 - 122
Acenaphthylene	4.00	3.55	89		10	30	41 - 130
Anthracene	4.00	3.85	96		7	30	57 - 123
Benz(a)anthracene	4.00	3.97	99		6	30	58 - 125
Benzo(a)pyrene	4.00	3.61	90		6	30	54 - 128
Benzo(b)fluoranthene	4.00	4.06	101		6	30	53 - 131
Benzo(k)fluoranthene	4.00	4.34	109		6	30	57 - 129
Benzo(g,h,i)perylene	4.00	3.99	100		11	30	50 - 134
Chrysene	4.00	3.82	95		7	30	59 - 123
Dibenz(a,h)anthracene	4.00	3.83	96		9	30	51 - 134
Fluoranthene	4.00	3.97	99		5	30	57 - 128
Fluorene	4.00	3.67	92		8	30	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.67	92		10	30	52 - 133
1-Methylnaphthalene	4.00	3.46	87		10	30	41 - 120
2-Methylnaphthalene	4.00	3.48	87		12	30	40 - 121
Naphthalene	4.00	3.36	84		12	30	40 - 121
Phenanthrene	4.00	3.77	94		8	30	59 - 120
Pyrene	4.00	4.17	104		4	30	57 - 126
Carbazole	4.00	3.92	98		2	30	60 - 122
Dibenzofuran	4.00	3.72	93		8	30	53 - 120
4-Chloro-3-methylphenol	4.00	3.26	82		6	30	52 - 120
2-Chlorophenol	4.00	3.15	79		8	30	38 - 120
2,4-Dichlorophenol	4.00	3.51	88		8	30	47 - 121
2,4-Dimethylphenol	4.00	2.89	72		4	30	31 - 124
2,4-Dinitrophenol	4.00	5.62	141		10	30	23 - 143
4,6-Dinitro-2-methylphenol	4.00	5.65	141	*	9	30	44 - 137
2-Methylphenol	4.00	2.73	68		4	30	30 - 120
3+4-Methylphenol(s)	4.00	2.49	62		5	30	29 - 120
2-Nitrophenol	4.00	3.38	84		3	30	47 - 123
4-Nitrophenol	4.00	1.60	40		3	30	5 - 120

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix: Water
Batch: 9101635
Laboratory ID: 9101635-BSD2
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	QC LIMITS
Pentachlorophenol (PCP)	4.00	4.22	106	4	30	35 - 138
Phenol	4.00	1.10	27	8	30	5 - 120
2,3,4,6-Tetrachlorophenol	4.00	3.99	100	0.7	30	50 - 128
2,3,5,6-Tetrachlorophenol	4.00	4.01	100	0.08	30	50 - 121
2,4,5-Trichlorophenol	4.00	3.72	93	5	30	53 - 123
2,4,6-Trichlorophenol	4.00	3.68	92	4	30	50 - 125
Bis(2-ethylhexyl)phthalate	4.00	3.51	88	5	30	55 - 135
Butyl benzyl phthalate	4.00	3.55	89	4	30	53 - 134
Diethylphthalate	4.00	3.65	91	6	30	55 - 125
Dimethylphthalate	4.00	3.72	93	8	30	45 - 127
Di-n-butylphthalate	4.00	3.89	97	4	30	59 - 127
Di-n-octyl phthalate	4.00	3.36	84	1	30	51 - 140
N-Nitrosodimethylamine	4.00	0.971	24	13	30	6 - 120
N-Nitroso-di-n-propylamine	4.00	3.30	83	4	30	49 - 120
N-Nitrosodiphenylamine	4.00	3.70	92	7	30	51 - 123
Bis(2-Chloroethoxy) methane	4.00	3.44	86	9	30	48 - 120
Bis(2-Chloroethyl) ether	4.00	3.07	77	7	30	43 - 120
2,2'-Oxybis(1-Chloropropane)	4.00	2.77	69	7	30	37 - 130
Hexachlorobenzene	4.00	3.86	96	10	30	52 - 125
Hexachlorobutadiene	4.00	3.23	81	13	30	22 - 124
Hexachlorocyclopentadiene	4.00	3.28	82	9	30	5 - 127
Hexachloroethane	4.00	3.05	76	14	30	21 - 120
2-Chloronaphthalene	4.00	3.60	90	10	30	40 - 120
1,2-Dichlorobenzene	4.00	3.16	79	10	30	32 - 120
1,3-Dichlorobenzene	4.00	3.00	75	13	30	28 - 120
1,4-Dichlorobenzene	4.00	3.02	75	12	30	29 - 120
1,2,4-Trichlorobenzene	4.00	3.28	82	12	30	29 - 120
4-Bromophenyl phenyl ether	4.00	3.90	97	7	30	54 - 124
4-Chlorophenyl phenyl ether	4.00	3.80	95	6	30	53 - 121
2-Nitroaniline	4.00	4.05	101	2	30	54 - 127

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101635	Laboratory ID:	9101635-BSD2
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	
3-Nitroaniline	4.00	2.26	57		3	30	41 - 128
4-Nitroaniline	4.00	4.19	105		5	30	35 - 120
Nitrobenzene	4.00	3.46	86		3	30	45 - 121
2,4-Dinitrotoluene	4.00	4.24	106		3	30	57 - 128
2,6-Dinitrotoluene	4.00	4.08	102		6	30	57 - 124
Benzoic acid	8.00	4.69	59		9	30	5 - 120
Benzyl alcohol	4.00	1.56	39		6	30	31 - 120
Isophorone	4.00	3.37	84		8	30	42 - 124
Azobenzene (1,2-DPH)	4.00	3.19	80		8	30	61 - 120
Bis(2-Ethylhexyl) adipate	4.00	3.50	88		6	30	40 - 125
3,3'-Dichlorobenzidine	8.00	11.3	141	*	0.3	30	27 - 129
1,2-Dinitrobenzene	4.00	3.97	99		1	30	59 - 120
1,3-Dinitrobenzene	4.00	4.27	107		2	30	49 - 128
1,4-Dinitrobenzene	4.00	4.74	119		3	30	40 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J04044	Instrument:	SV-GCMS5
Matrix:	Water	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 - 4d. Barge Dewatering
Sequence:	9J16053	Instrument:	SV-GCMS9
Matrix:	Water	Calibration:	A9J1803

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J16053-TUN1	I10161910.D	10/16/19 16:07
Initial Cal Blank	9J16053-ICB1	I10161911.D	10/16/19 16:34
Cal Standard	9J16053-CAL1	I10161912.D	10/16/19 17:09
Cal Standard	9J16053-CAL2	I10161913.D	10/16/19 17:44
Cal Standard	9J16053-CAL3	I10161914.D	10/16/19 18:19
Cal Standard	9J16053-CAL4	I10161915.D	10/16/19 18:54
Cal Standard	9J16053-CAL5	I10161916.D	10/16/19 19:30
Cal Standard	9J16053-CAL6	I10161917.D	10/16/19 20:05
Cal Standard	9J16053-CAL7	I10161918.D	10/16/19 20:40
Cal Standard	9J16053-CAL8	I10161919.D	10/16/19 21:14
Cal Standard	9J16053-CAL9	I10161920.D	10/16/19 21:49
Cal Standard	9J16053-CALA	I10161921.D	10/16/19 22:24
Initial Cal Check	9J16053-ICV1	I10161923.D	10/16/19 23:33

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 - 4d. Barge Dewatering
Sequence:	9J28055	Instrument:	SV-GCMS9
Matrix:	Water	Calibration:	A9J1803

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J28055-TUN1	I10281908.D	10/28/19 13:39
Calibration Check	9J28055-CCV1	I10281909.D	10/28/19 14:07
Calibration Blank	9J28055-CCB1	I10281910.D	10/28/19 14:42
Blank	9101635-BLK2	I10281911.D	10/28/19 15:16
LCS	9101635-BS2	I10281912.D	10/28/19 15:52
LCS Dup	9101635-BSD2	I10281913.D	10/28/19 16:27

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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J29025	Instrument:	SV-GCMS5
Matrix:	Water	Calibration:	A9J0804

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J29025-TUN1	E10291901.D	10/29/19 08:34
Calibration Check	9J29025-CCV1	E10291903.D	10/29/19 09:37
Calibration Blank	9J29025-CCB1	E10291904.D	10/29/19 10:13
PDI-026SW-34-00-191024	A9J0959-01RE2	E10291916.D	10/29/19 17:20

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.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
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 - 4d. Barge Dewatering
Lab File ID:	I10161910.D	Injection Date:	10/16/19
Instrument ID:	SV-GCMS9	Injection Time:	16:07
Sequence:	9J16053	Lab Sample ID:	9J16053-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.49	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	7.24	PASS
m/z 365	1 - 100% of m/z 198	4.51	PASS
m/z 441	Less than 150% of m/z 443	16.35	PASS
m/z 442	0.1 - 200% of m/z 198	159.87	PASS
m/z 443	15 - 24% of m/z 442	20.35	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 - 4d. Barge Dewatering
Lab File ID:	I10281908.D	Injection Date:	10/28/19
Instrument ID:	SV-GCMS9	Injection Time:	13:39
Sequence:	9J28055	Lab Sample ID:	9J28055-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.51	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	7.01	PASS
m/z 365	1 - 100% of m/z 198	4.55	PASS
m/z 441	Less than 150% of m/z 443	14.11	PASS
m/z 442	0.1 - 200% of m/z 198	160.64	PASS
m/z 443	15 - 24% of m/z 442	20.97	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 - 4d. Barge Dewatering
Lab File ID:	E10291901.D	Injection Date:	10/29/19
Instrument ID:	SV-GCMS5	Injection Time:	08:34
Sequence:	9J29025	Lab Sample ID:	9J29025-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	0.50	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	6.73	PASS
m/z 365	1 - 100% of m/z 198	3.03	PASS
m/z 441	Less than 150% of m/z 443	76.29	PASS
m/z 442	0.1 - 200% of m/z 198	106.00	PASS
m/z 443	15 - 24% of m/z 442	19.66	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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
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				
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	
Indeno(1,2,3-cd)pyrene	1.216987	Ave	6.588168	21.1619	0.1562016			20	
Naphthalene	1.063357	Ave	6.599756	8.0472	5.828113E-02			20	
Pentachlorophenol (PCP)	9.070953E-02	XXX	39.54388	11.12071	2.752602E-02				
Bis(2-ethylhexyl)phthalate	0.6733201	XXX	25.8604	15.391	6.252756E-02				
Hexachlorobenzene	0.2321269	Ave	2.893075	10.9297	6.528016E-02			20	
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 - 4d. Barge Dewateri

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 - 4d. Barge Dewateri

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
N-Nitrosodimethylamine	20	0.6431586	50	0.7415093	100	0.8038808	200	0.7903023	500	0.8217341	1000	0.7975171
N-Nitroso-di-n-propylamine	20	0.6826088	50	0.790048	100	0.856868	200	0.881435	500	0.9441772	1000	0.9267714
N-Nitrosodiphenylamine	20	0.5186693	50	0.5723015	100	0.6291099	200	0.6635756	500	0.6828541	1000	0.6662114
Bis(2-Chloroethoxy) methane	20	0.3649532	50	0.4066424	100	0.4116381	200	0.4178361	500	0.4211988	1000	0.4096746
Bis(2-Chloroethyl) ether	20	1.27755	50	1.373726	100	1.401014	200	1.427187	500	1.413855	1000	1.364418
2,2'-Oxybis(1-Chloropropane)	20	1.558484	50	1.596275	100	1.68253	200	1.651179	500	1.612573	1000	1.543497
Hexachlorobenzene	20	0.2187771	50	0.2351125	100	0.2419679	200	0.2348884	500	0.2339296	1000	0.2344632
Hexachlorobutadiene	20	0.1417443	50	0.1658077	100	0.1692857	200	0.1703106	500	0.1682649	1000	0.1641015
Hexachlorocyclopentadiene	20	~~0.2048681~~	50	0.2255551	100	0.2499257	200	0.2741562	500	0.3006074	1000	0.3070027
Hexachloroethane	20	0.5016956	50	0.51451	100	0.5337437	200	0.5470127	500	0.5532524	1000	0.5431295
2-Chloronaphthalene	20	1.253455	50	1.298678	100	1.334702	200	1.359443	500	1.3394	1000	1.294832
1,2-Dichlorobenzene	20	1.394506	50	1.534631	100	1.580662	200	1.564812	500	1.557954	1000	1.499475
1,3-Dichlorobenzene	20	1.537962	50	1.550406	100	1.618085	200	1.613253	500	1.621874	1000	1.55078
1,4-Dichlorobenzene	20	1.542146	50	1.588752	100	1.635722	200	1.623769	500	1.631591	1000	1.576651
1,2,4-Trichlorobenzene	20	0.2869683	50	0.3274186	100	0.3370048	200	0.3295122	500	0.3353472	1000	0.3234842
4-Bromophenyl phenyl ether	20	0.1755453	50	0.1958819	100	0.2026664	200	0.2085492	500	0.2153119	1000	0.2104573
4-Chlorophenyl phenyl ether	20	0.6590214	50	0.679116	100	0.6801786	200	0.7070529	500	0.7136408	1000	0.6812402
Aniline	20	~~0.6563087~~	50	1.628068	100	1.796717	200	1.802214	500	1.934659	1000	1.928465
4-Chloroaniline	20	0.1806856	50	0.333166	100	0.3486455	200	0.363685	500	0.3873245	1000	0.3850468

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J0804

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

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
2-Nitroaniline	20	~~0.1458832~~	50	0.1726587	100	0.2020547	200	0.2434135	500	0.335656	1000	0.3656452
3-Nitroaniline	20	~~0.1288703~~	50	~~0.1662049~~	100	~~0.2038328~~	200	0.2538283	500	0.3040356	1000	0.304038
4-Nitroaniline	20	~~0.1367146~~	50	~~0.1584441~~	100	~~0.1943758~~	200	0.2422396	500	0.3100716	1000	0.3028416
Nitrobenzene	20	0.9677265	50	1.046737	100	1.126145	200	1.194393	500	1.271917	1000	1.259452
2,4-Dinitrotoluene	20	~~0.1086993~~	50	~~0.1408392~~	100	0.1711242	200	0.2342729	500	0.3301555	1000	0.3618447
2,6-Dinitrotoluene	20	~~0.1069674~~	50	0.1385926	100	0.1801708	200	0.2363097	500	0.2924183	1000	0.3062674
Benzoic acid	40	~~1.663065E-03~~	100	~~1.023377E-03~~	200	~~7.535709E-04~~	400	~~1.381713E-03~~	1000	2.632737E-02	2000	6.932196E-02
Benzyl alcohol	20	~~0.5469239~~	50	0.2885625	100	0.3298113	200	0.4670451	500	0.6580195	1000	0.7292741
Isophorone	20	0.4694449	50	0.5237415	100	0.5663284	200	0.6041585	500	0.6350424	1000	0.6321003
Azobenzene (1,2-DPH)	20	0.5377225	50	0.6071029	100	0.6737468	200	0.7135143	500	0.7265766	1000	0.7047601
Benzidine	40	~~0.2567441~~	100	~~0.1127993~~	200	0.1585894	400	0.2367267	1000	0.4053906	2000	0.4733696
Bis(2-Ethylhexyl) adipate	20	~~0.2769726~~	50	~~0.2089986~~	100	0.2272622	200	0.2843975	500	0.3873862	1000	0.4107321
3,3'-Dichlorobenzidine	40	0.1077441	100	0.1467533	200	0.1891868	400	0.2389145	1000	0.2999547	2000	0.2358516
1,2-Dinitrobenzene	20	~~4.095325E-02~~	50	5.583734E-02	100	7.637869E-02	200	9.765637E-02	500	0.127641	1000	0.1349881
1,3-Dinitrobenzene	20	~~5.246499E-02~~	50	~~7.046044E-02~~	100	9.109169E-02	200	0.1239944	500	0.1692494	1000	0.1936266
1,4-Dinitrobenzene	20	~~0.0497144~~	50	~~0.0539584~~	100	6.658955E-02	200	0.0842917	500	0.1260886	1000	0.148737
Pyridine	20	~~1.235311E-02~~	50	1.031771	100	1.205684	200	1.226136	500	1.310112	1000	1.300999
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 - 4d. Barge Dewateri
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 - 4d. Barge Dewateri
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				
N-Nitrosodimethylamine	2000	0.8123163	4000	0.8268334	6000	0.8076595	8000	0.7932519				
N-Nitroso-di-n-propylamine	2000	0.9159498	4000	0.8885405	6000	0.8568913	8000	0.8356985				
N-Nitrosodiphenylamine	2000	0.6684563	4000	0.6473951	6000	0.6176016	8000	0.5879013				
Bis(2-Chloroethoxy) methane	2000	0.4060067	4000	0.3933099	6000	0.3784182	8000	0.362946				
Bis(2-Chloroethyl) ether	2000	1.350378	4000	1.319363	6000	1.226912	8000	1.233087				
2,2'-Oxybis(1-Chloropropane)	2000	1.516201	4000	1.43944	6000	1.360099	8000	1.276981				
Hexachlorobenzene	2000	0.235093	4000	0.2350153	6000	0.2286215	8000	0.2234				
Hexachlorobutadiene	2000	0.1652884	4000	0.1645836	6000	0.163015	8000	0.1593156				
Hexachlorocyclopentadiene	2000	0.3341439	4000	0.3319067	6000	0.3305206	8000	0.3079897				
Hexachloroethane	2000	0.5569717	4000	0.5549044	6000	0.5447798	8000	0.5282166				
2-Chloronaphthalene	2000	1.308349	4000	1.24941	6000	1.208998	8000	1.132504				
1,2-Dichlorobenzene	2000	1.519702	4000	1.505836	6000	1.460788	8000	1.419068				
1,3-Dichlorobenzene	2000	1.561607	4000	1.558847	6000	1.526248	8000	1.482811				
1,4-Dichlorobenzene	2000	1.591202	4000	1.581381	6000	1.542357	8000	1.486477				
1,2,4-Trichlorobenzene	2000	0.3247628	4000	0.3188572	6000	0.3111934	8000	0.3006835				
4-Bromophenyl phenyl ether	2000	0.2169771	4000	0.2167769	6000	0.2118026	8000	0.2094167				
4-Chlorophenyl phenyl ether	2000	0.6935086	4000	0.6594419	6000	0.6385359	8000	0.6029504				
Aniline	2000	2.050227	4000	2.076159	6000	2.076893	8000	1.97319				
4-Chloroaniline	2000	0.4137829	4000	0.4230488	6000	0.4101048	8000	0.4036331				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
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
2-Nitroaniline	2000	0.4083336	4000	0.4305314	6000	0.4308012	8000	0.4258405				
3-Nitroaniline	2000	0.322603	4000	0.3475852	6000	0.3499721	8000	0.3467764				
4-Nitroaniline	2000	0.3351146	4000	0.3562582	6000	0.3595833	8000	0.3544131				
Nitrobenzene	2000	1.287305	4000	1.26576	6000	1.233472	8000	1.195069				
2,4-Dinitrotoluene	2000	0.4099883	4000	0.4311185	6000	0.4298931	8000	0.4099176				
2,6-Dinitrotoluene	2000	0.3301348	4000	0.339443	6000	0.3395443	8000	0.3309857				
Benzoic acid	4000	0.1039849	8000	0.1699748	12000	0.1893159	16000	0.2031919				
Benzyl alcohol	2000	0.7977238	4000	0.8359902	6000	0.8121979	8000	0.8176693				
Isophorone	2000	0.6323574	4000	0.6294067	6000	0.6186243	8000	0.6139141				
Azobenzene (1,2-DPH)	2000	0.6952226	4000	0.6571878	6000	0.6146541	8000	0.5754243				
Benzidine	4000	0.5393282	8000	0.6208792	12000	0.5980003	16000	0.5767627				
Bis(2-Ethylhexyl) adipate	2000	0.4795229	4000	0.4999004	6000	0.4991293	8000	0.4913318				
3,3'-Dichlorobenzidine	4000	0.2139974	8000	0.3429507	12000	0.3732705	16000	0.3887961				
1,2-Dinitrobenzene	2000	0.1503708	4000	0.1581829	6000	0.158711	8000	0.151863				
1,3-Dinitrobenzene	2000	0.219566	4000	0.2356341	6000	0.2411823	8000	0.2409559				
1,4-Dinitrobenzene	2000	0.18168	4000	0.2023083	6000	0.2112431	8000	0.2139288				
Pyridine	2000	1.364027	4000	1.390195	6000	1.381756	8000	1.357328				
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				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

Calibration: A9J1803 Date: 10/18/19 14:37 Instrument: SV-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benz(a)anthracene	1.158137	Ave	4.035555	15.0329	0.1026238			20	
Benzo(a)pyrene	0.9680317	XXX	14.93874	18.4176	0.1727398				
Benzo(b)fluoranthene	1.116814	Ave	14.2187	17.6388	0.1495077			20	
Benzo(k)fluoranthene	1.038377	Ave	12.66775	17.709	0.161502			20	
Chrysene	1.047439	Ave	3.471752	15.1184	0.1428354			20	
Dibenz(a,h)anthracene	1.032824	Ave	5.622327	21.0299	0.1502476			20	
Indeno(1,2,3-cd)pyrene	1.181299	Ave	1.882894	20.9626	0.1677169			20	
Naphthalene	1.027308	Ave	13.57574	7.9448	5.985529E-02			20	
Pentachlorophenol (PCP)	0.1259349	XXX	25.12494	11.02237	3.824211E-02				
Bis(2-ethylhexyl)phthalate	0.7350275	Ave	9.027666	15.20714	7.353713E-02			20	
Hexachlorobenzene	0.2772973	Ave	7.01503	10.8293	5.546932E-02			20	
Nitrobenzene-d5 (Surr)	1.300669	Ave	10.50682	7.2032	9.179795E-02			20	
2-Fluorobiphenyl (Surr)	1.469509	Ave	13.1077	9.0078	5.187103E-02			20	
Phenol-d6 (Surr)	1.782102	Ave	10.17121	6.2976	0.13622			20	
p-Terphenyl-d14 (Surr)	0.9704079	Ave	5.838011	13.0243	5.545816E-02			20	
2-Fluorophenol (Surr)	1.47269	Ave	7.135994	5.4102	0.1230205			20	
2,4,6-Tribromophenol (Surr)	0.1140922	XXX	19.74819	10.50367	6.062349E-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: A9J1803

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

Instrument: SV-GCMS9

Calibration Date: 10/18/19 14:37

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	1.348024	50	1.368122	100	1.420777	200	1.374623	500	1.36458	1000	1.306021
Acenaphthylene	20	1.894319	50	2.09133	100	2.220481	200	2.214576	500	2.24394	1000	2.117469
Anthracene	20	1.029901	50	1.136585	100	1.176434	200	1.167405	500	1.163478	1000	1.094853
Benz(a)anthracene	20	1.240287	50	1.141585	100	1.153208	200	1.171386	500	1.208394	1000	1.164429
Benzo(a)pyrene	20	0.6605372	50	0.7900506	100	0.9014438	200	1.023675	500	1.073483	1000	1.091986
Benzo(b)fluoranthene	20	0.8086366	50	0.8872934	100	1.013216	200	1.139208	500	1.175368	1000	1.200896
Benzo(k)fluoranthene	20	0.7947305	50	0.8993068	100	1.031266	200	1.123132	500	1.185756	1000	1.178863
Benzo(b+k)fluoranthene(s)	40	0.8015677	100	0.9304757	200	1.060563	400	1.161498	1000	1.206076	2000	1.217101
Benzo(g,h,i)perylene	20	0.8993165	50	1.029782	100	1.134226	200	1.205434	500	1.258114	1000	1.226717
Chrysene	20	1.004836	50	1.055864	100	1.062939	200	1.068909	500	1.096782	1000	1.055785
Dibenz(a,h)anthracene	20	0.9992406	50	1.012221	100	1.059179	200	1.09878	500	1.112885	1000	1.070652
Fluoranthene	20	1.112589	50	1.206321	100	1.289271	200	1.31775	500	1.362013	1000	1.335171
Fluorene	20	1.388701	50	1.47419	100	1.57822	200	1.508717	500	1.523522	1000	1.427787
Indeno(1,2,3-cd)pyrene	20	1.155693	50	1.175648	100	1.170037	200	1.201141	500	1.227099	1000	1.174735
1-Methylnaphthalene	20	0.6775022	50	0.7370515	100	0.7733677	200	0.7639427	500	0.7810577	1000	0.7448339
2-Methylnaphthalene	20	0.6811035	50	0.7244937	100	0.7815215	200	0.8088201	500	0.8222188	1000	0.7920122
Naphthalene	20	1.135098	50	1.123024	100	1.148489	200	1.135465	500	1.129272	1000	1.071215
Phenanthrene	20	1.148809	50	1.168756	100	1.169649	200	1.162457	500	1.130058	1000	1.082055
Pyrene	20	1.102342	50	1.236181	100	1.312332	200	1.367553	500	1.378337	1000	1.316204
Carbazole	20	0.8964571	50	0.9703356	100	1.004997	200	1.024052	500	1.007109	1000	0.8542514
Dibenzofuran	20	1.735985	50	1.893602	100	1.980096	200	1.91458	500	1.92252	1000	1.809066
4-Chloro-3-methylphenol	20	~~0.1174937~~	50	0.1746427	100	0.2070542	200	0.2407304	500	0.3058227	1000	0.3214361
2-Chlorophenol	20	1.274052	50	1.432473	100	1.431239	200	1.451791	500	1.546235	1000	1.520498
2,4-Dichlorophenol	20	0.1291981	50	0.1695299	100	0.196227	200	0.232648	500	0.2621911	1000	0.2785966
2,4-Dimethylphenol	20	0.2435407	50	0.2476572	100	0.2716166	200	0.2944716	500	0.2984019	1000	0.3080494
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~8.871242E-03~~	200	1.354481E-02	500	0.0277345	1000	4.826226E-02
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~1.805415E-02~~	100	~~2.936984E-02~~	200	4.019749E-02	500	7.122033E-02	1000	0.1062377
2-Methylphenol	20	1.101834	50	0.9707556	100	1.133049	200	1.092755	500	1.223238	1000	1.177676
3+4-Methylphenol(s)	20	1.135196	50	1.156208	100	1.310941	200	1.254213	500	1.520781	1000	1.481195
2-Nitrophenol	20	~~8.305592E-02~~	50	~~8.297099E-02~~	100	0.1029256	200	0.1182888	500	0.1592929	1000	0.1868278
4-Nitrophenol	20	~~6.517051E-02~~	50	~~6.579347E-02~~	100	7.811861E-02	200	0.1047319	500	0.1747827	1000	0.2144009

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J1803

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

Instrument: SV-GCMS9

Calibration Date: 10/18/19 14:37

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	~~0.2139868~~	50	~~7.782719E-02~~	100	7.890978E-02	200	8.370261E-02	500	0.1108285	1000	0.1263173
Phenol	20	1.830379	50	1.906021	100	1.821016	200	1.723857	500	2.000526	1000	1.949177
2,3,4,6-Tetrachlorophenol	20	0.1771413	50	0.2024147	100	0.2690656	200	0.2694543	500	0.3394395	1000	0.351438
2,3,5,6-Tetrachlorophenol	20	~~0.111096~~	50	0.1364477	100	0.1987847	200	0.219688	500	0.2901318	1000	0.3130027
2,4,5-Trichlorophenol	20	~~0.1456495~~	50	0.2616115	100	0.2517538	200	0.3003015	500	0.3767462	1000	0.4005824
2,4,6-Trichlorophenol	20	~~0.1561468~~	50	0.2048451	100	0.2604528	200	0.3132783	500	0.3851577	1000	0.4010757
Bis(2-ethylhexyl)phthalate	20	~~0.3160971~~	50	~~0.3804649~~	100	~~0.4839904~~	200	0.6057346	500	0.7390758	1000	0.7693364
Butyl benzyl phthalate	20	~~0.2827261~~	50	0.3195753	100	0.3815821	200	0.4384383	500	0.5487677	1000	0.5851562
Diethylphthalate	20	1.411445	50	1.464295	100	1.536878	200	1.537904	500	1.530862	1000	1.443514
Dimethylphthalate	20	1.422817	50	1.542241	100	1.609312	200	1.600122	500	1.603618	1000	1.536443
Di-n-butylphthalate	20	~~1.015365~~	50	1.218554	100	1.255297	200	1.341113	500	1.387555	1000	1.357923
Di-n-octyl phthalate	20	~~0.4146319~~	50	~~0.4614304~~	100	0.6313393	200	0.8512331	500	1.102486	1000	1.277898
N-Nitrosodimethylamine	20	1.106342	50	1.22684	100	1.169156	200	1.119138	500	1.195972	1000	1.172211
N-Nitroso-di-n-propylamine	20	1.228067	50	1.243541	100	1.270607	200	1.223503	500	1.324401	1000	1.224911
N-Nitrosodiphenylamine	20	0.5475966	50	0.6378363	100	0.6990372	200	0.7114968	500	0.6943802	1000	0.6438628
Bis(2-Chloroethoxy) methane	20	0.4308104	50	0.4428408	100	0.455546	200	0.4609645	500	0.4848529	1000	0.4696525
Bis(2-Chloroethyl) ether	20	1.531026	50	1.689254	100	1.802522	200	1.712288	500	1.843234	1000	1.78854
2,2'-Oxybis(1-Chloropropane)	20	2.558924	50	2.66662	100	2.627519	200	2.539553	500	2.564863	1000	2.370644
Hexachlorobenzene	20	0.2897639	50	0.2784634	100	0.2952355	200	0.3020187	500	0.2928269	1000	0.2795559
Hexachlorobutadiene	20	0.1733145	50	0.1901605	100	0.193509	200	0.2011891	500	0.1925226	1000	0.187227
Hexachlorocyclopentadiene	20	0.2759906	50	0.2831376	100	0.3029142	200	0.3403679	500	0.3556016	1000	0.3794297
Hexachloroethane	20	0.4571439	50	0.4578904	100	0.4841835	200	0.4954434	500	0.5008838	1000	0.4965959
2-Chloronaphthalene	20	1.053226	50	1.267436	100	1.34128	200	1.364967	500	1.384992	1000	1.311741
1,2-Dichlorobenzene	20	1.578814	50	1.578609	100	1.574433	200	1.58437	500	1.613568	1000	1.514684
1,3-Dichlorobenzene	20	1.588733	50	1.665594	100	1.673947	200	1.703799	500	1.68605	1000	1.61896
1,4-Dichlorobenzene	20	1.580618	50	1.601225	100	1.607369	200	1.614415	500	1.627709	1000	1.539193
1,2,4-Trichlorobenzene	20	0.3416772	50	0.3531425	100	0.3561403	200	0.3629487	500	0.3555077	1000	0.3459489
4-Bromophenyl phenyl ether	20	0.2351949	50	0.2267391	100	0.2334553	200	0.2448055	500	0.246862	1000	0.2384005
4-Chlorophenyl phenyl ether	20	0.663952	50	0.7037645	100	0.7459595	200	0.7224625	500	0.7408664	1000	0.7155961
Aniline	20	~~0.9205994~~	50	2.063986	100	2.173454	200	2.088386	500	2.159232	1000	1.926508
4-Chloroaniline	20	0.1373011	50	0.2580622	100	0.2699235	200	0.3195226	500	0.352554	1000	0.3607065

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9J1803

SDG: Gasco_PreRD_DG 2019

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri

Instrument: SV-GCMS9

Calibration Date: 10/18/19 14:37

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
2-Nitroaniline	20	~~0.1159073~~	50	~~0.1393988~~	100	0.1747549	200	0.2223096	500	0.3246704	1000	0.3748482
3-Nitroaniline	20	~~8.878936E-02~~	50	0.1418292	100	0.180181	200	0.2234893	500	0.2942214	1000	0.2736474
4-Nitroaniline	20	~~0.107597~~	50	~~0.1421764~~	100	0.1780277	200	0.1971862	500	0.2639867	1000	0.2449727
Nitrobenzene	20	1.352497	50	1.243541	100	1.256693	200	1.303899	500	1.539708	1000	1.50287
2,4-Dinitrotoluene	20	~~0.1342775~~	50	~~0.1234279~~	100	0.1573569	200	0.1944772	500	0.3087048	1000	0.3622799
2,6-Dinitrotoluene	20	~~9.316322E-02~~	50	0.1374893	100	0.1702762	200	0.2211736	500	0.2957572	1000	0.3140082
Benzoic acid	40	~~7.202681E-03~~	100	~~6.009791E-03~~	200	~~1.156242E-02~~	400	~~2.108791E-02~~	1000	4.552789E-02	2000	0.1030198
Benzyl alcohol	20	0.8565812	50	0.6332527	100	0.6629562	200	0.6831176	500	0.8312771	1000	0.8904795
Isophorone	20	0.7114899	50	0.7695223	100	0.8070079	200	0.8496786	500	0.861201	1000	0.8319945
Azobenzene (1,2-DPH)	20	0.8061441	50	0.9023331	100	0.8941053	200	0.9132201	500	0.8922208	1000	0.8120053
Benzidine	40	~~0.4303566~~	100	~~0.1632156~~	200	0.2385325	400	0.2756031	1000	0.4359378	2000	0.4309328
Bis(2-Ethylhexyl) adipate	20	~~0.2947767~~	50	~~0.2877034~~	100	~~0.3297572~~	200	0.3893734	500	0.4906088	1000	0.51746
3,3'-Dichlorobenzidine	40	~~0.1844672~~	100	~~0.2436536~~	200	0.2841403	400	0.2807724	1000	0.2367345	2000	0.1801298
1,2-Dinitrobenzene	20	~~0~~	50	~~5.364164E-02~~	100	7.105607E-02	200	9.258531E-02	500	0.1282073	1000	0.1435157
1,3-Dinitrobenzene	20	~~2.274407E-02~~	50	~~6.093274E-02~~	100	~~6.640512E-02~~	200	8.253594E-02	500	0.140119	1000	0.1709478
1,4-Dinitrobenzene	20	~~0~~	50	~~4.513536E-02~~	100	~~4.719845E-02~~	200	5.579587E-02	500	9.072198E-02	1000	0.1185119
Pyridine	20	~~0.7709231~~	50	1.638802	100	1.724672	200	1.714036	500	1.83939	1000	1.851875
2,3,5-Trimethylnaphthalene	20	1.138516	50	1.208933	100	1.268846	200	1.242714	500	1.289252	1000	1.226429
2,6-Dimethylnaphthalene	20	1.177006	50	1.305627	100	1.369616	200	1.365054	500	1.388546	1000	1.323864
Benzo(e)pyrene	20	0.8264827	50	0.9703471	100	1.032377	200	1.119723	500	1.164733	1000	1.172233
1,1'-Biphenyl	20	1.44075	50	1.643274	100	1.821878	200	1.860445	500	1.872123	1000	1.77876
Perylene	20	0.8515136	50	0.8628881	100	0.8889475	200	0.9230576	500	0.9536409	1000	0.9503091
Nitrobenzene-d5 (Surr)	20	1.200115	50	1.108192	100	1.172855	200	1.120553	500	1.404462	1000	1.399717
2-Fluorobiphenyl (Surr)	20	1.393512	50	1.494154	100	1.665382	200	1.659326	500	1.690304	1000	1.58961
Phenol-d6 (Surr)	20	1.458893	50	1.601921	100	1.654396	200	1.625983	500	1.875722	1000	1.881426
p-Terphenyl-d14 (Surr)	20	0.8618512	50	0.9039252	100	0.9599334	200	1.002361	500	1.041212	1000	1.000571
2-Fluorophenol (Surr)	20	1.352497	50	1.350359	100	1.341764	200	1.381382	500	1.497176	1000	1.500368
2,4,6-Tribromophenol (Surr)	20	~~7.958975E-02~~	50	7.031417E-02	100	8.906414E-02	200	0.1011571	500	0.1165657	1000	0.1223403

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9J1803
Instrument: SV-GCMS9
Matrix:
Calibration Date: 10/18/19 14:37

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	1.262216	4000	1.12837	6000	1.044155	8000	0.9754524				
Acenaphthylene	2000	1.966573	4000	1.72159	6000	1.553506	8000	~~1.389081~~				
Anthracene	2000	1.038701	4000	0.9071059	6000	0.8223905	8000	0.7517352				
Benz(a)anthracene	2000	1.174929	4000	1.13591	6000	1.120902	8000	1.070336				
Benzo(a)pyrene	2000	1.106492	4000	1.053211	6000	1.007048	8000	0.9723904				
Benzo(b)fluoranthene	2000	1.257817	4000	1.232516	6000	1.216883	8000	1.236308				
Benzo(k)fluoranthene	2000	1.156639	4000	1.083754	6000	0.9930956	8000	0.9372229				
Benzo(b+k)fluoranthene(s)	4000	1.230317	8000	1.181897	12000	1.130451	16000	1.113979				
Benzo(g,h,i)perylene	2000	1.21608	4000	1.140558	6000	1.102552	8000	1.048816				
Chrysene	2000	1.083197	4000	1.047747	6000	1.020032	8000	0.9783019				
Dibenz(a,h)anthracene	2000	1.06579	4000	1.007416	6000	0.9710271	8000	0.9310457				
Fluoranthene	2000	1.2606	4000	1.136817	6000	1.046115	8000	~~0.9636008~~				
Fluorene	2000	1.345569	4000	1.172242	6000	1.063949	8000	~~0.9874251~~				
Indeno(1,2,3-cd)pyrene	2000	1.183298	4000	1.191923	6000	1.183455	8000	1.149961				
1-Methylnaphthalene	2000	0.7172449	4000	0.6602146	6000	0.6129864	8000	0.566073				
2-Methylnaphthalene	2000	0.7751795	4000	0.7185898	6000	0.6677423	8000	0.616983				
Naphthalene	2000	1.010474	4000	0.9111305	6000	0.8395099	8000	0.7693983				
Phenanthrene	2000	1.036609	4000	0.9087333	6000	0.8467551	8000	0.777969				
Pyrene	2000	1.235503	4000	1.093965	6000	1.01797	8000	0.9311508				
Carbazole	2000	0.6444017	4000	~~0.4523411~~	6000	~~0.376204~~	8000	~~0.3849147~~				
Dibenzofuran	2000	1.745003	4000	1.538178	6000	1.406759	8000	1.296001				
4-Chloro-3-methylphenol	2000	0.3343176	4000	0.3346253	6000	0.3176341	8000	0.3023566				
2-Chlorophenol	2000	1.51838	4000	1.457597	6000	1.435797	8000	1.350092				
2,4-Dichlorophenol	2000	0.295869	4000	0.2860752	6000	0.2696074	8000	0.2574342				
2,4-Dimethylphenol	2000	0.3140946	4000	0.2991469	6000	0.2806716	8000	0.2667603				
2,4-Dinitrophenol	2000	0.0740148	4000	0.1124359	6000	0.1268895	8000	~~0.1329418~~				
4,6-Dinitro-2-methylphenol	2000	0.1419412	4000	0.1799418	6000	0.1852602	8000	0.1911006				
2-Methylphenol	2000	1.178545	4000	1.094775	6000	1.05605	8000	0.9629765				
3+4-Methylphenol(s)	2000	1.506152	4000	1.385189	6000	1.324741	8000	~~1.207034~~				
2-Nitrophenol	2000	0.1819452	4000	0.1975186	6000	0.1932634	8000	0.1884848				
4-Nitrophenol	2000	0.2474795	4000	0.2682337	6000	0.2714787	8000	~~0.2562546~~				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9J1803
Instrument: SV-GCMS9
Matrix:
Calibration Date: 10/18/19 14:37

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	0.144815	4000	0.1553731	6000	0.156272	8000	0.1512611				
Phenol	2000	1.956176	4000	2.046919	6000	1.854384	8000	1.786646				
2,3,4,6-Tetrachlorophenol	2000	0.3602122	4000	0.3677027	6000	0.3592527	8000	0.3521752				
2,3,5,6-Tetrachlorophenol	2000	0.3391036	4000	0.3512111	6000	0.3497742	8000	0.341807				
2,4,5-Trichlorophenol	2000	0.4162262	4000	0.4035457	6000	0.3908094	8000	0.3711759				
2,4,6-Trichlorophenol	2000	0.4209246	4000	0.4217126	6000	0.4057378	8000	0.4005818				
Bis(2-ethylhexyl)phthalate	2000	0.8132417	4000	0.7740551	6000	0.7380275	8000	0.7057213				
Butyl benzyl phthalate	2000	0.6424573	4000	0.650034	6000	0.6305064	8000	0.6178051				
Diethylphthalate	2000	1.332903	4000	1.15571	6000	1.034341	8000	~~0.9555838~~				
Dimethylphthalate	2000	1.487006	4000	1.348961	6000	1.255734	8000	1.187945				
Di-n-butylphthalate	2000	1.2916	4000	1.121337	6000	1.009695	8000	~~0.9118865~~				
Di-n-octyl phthalate	2000	1.433328	4000	1.433627	6000	1.335146	8000	1.327822				
N-Nitrosodimethylamine	2000	1.225796	4000	1.224093	6000	1.191745	8000	1.181233				
N-Nitroso-di-n-propylamine	2000	1.149908	4000	1.025219	6000	0.980519	8000	0.9067643				
N-Nitrosodiphenylamine	2000	0.5896081	4000	0.4983187	6000	~~0.4416175~~	8000	~~0.4137926~~				
Bis(2-Chloroethoxy) methane	2000	0.4562662	4000	0.4227209	6000	0.3917115	8000	0.3626439				
Bis(2-Chloroethyl) ether	2000	1.971316	4000	1.774451	6000	1.478082	8000	1.397753				
2,2'-Oxybis(1-Chloropropane)	2000	2.179334	4000	1.89874	6000	1.753674	8000	~~1.510488~~				
Hexachlorobenzene	2000	0.2754968	4000	0.2661266	6000	0.2528429	8000	0.2406424				
Hexachlorobutadiene	2000	0.1877888	4000	0.1846128	6000	0.1779547	8000	0.1711964				
Hexachlorocyclopentadiene	2000	0.4072307	4000	0.3986078	6000	0.3833113	8000	0.3635606				
Hexachloroethane	2000	0.508406	4000	0.5023034	6000	0.5068014	8000	0.4861106				
2-Chloronaphthalene	2000	1.227497	4000	1.081102	6000	1.004457	8000	0.9232991				
1,2-Dichlorobenzene	2000	1.485414	4000	1.371142	6000	1.324918	8000	1.223473				
1,3-Dichlorobenzene	2000	1.614584	4000	1.528535	6000	1.501961	8000	1.415573				
1,4-Dichlorobenzene	2000	1.516718	4000	1.431711	6000	1.40731	8000	1.310726				
1,2,4-Trichlorobenzene	2000	0.3387443	4000	0.322795	6000	0.305903	8000	0.2880484				
4-Bromophenyl phenyl ether	2000	0.2383221	4000	0.23609	6000	0.2268098	8000	0.2188491				
4-Chlorophenyl phenyl ether	2000	0.705272	4000	0.6630593	6000	0.6230779	8000	0.586883				
Aniline	2000	1.815078	4000	1.784572	6000	1.886541	8000	1.784424				
4-Chloroaniline	2000	0.393282	4000	0.3922367	6000	0.3578092	8000	0.3382095				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewateri
Calibration: A9J1803
Instrument: SV-GCMS9
Matrix:
Calibration Date: 10/18/19 14:37

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
2-Nitroaniline	2000	0.4055715	4000	0.4135884	6000	0.4040878	8000	0.4015496				
3-Nitroaniline	2000	0.2309323	4000	~~0.1717698~~	6000	~~0.1397608~~	8000	~~0.1604668~~				
4-Nitroaniline	2000	0.2443227	4000	0.2610937	6000	0.2592235	8000	0.2420753				
Nitrobenzene	2000	1.486522	4000	1.386811	6000	1.322422	8000	~~1.197805~~				
2,4-Dinitrotoluene	2000	0.4101378	4000	0.4223418	6000	0.4059896	8000	0.3797755				
2,6-Dinitrotoluene	2000	0.3312337	4000	0.3230539	6000	0.3109711	8000	0.2966667				
Benzoic acid	4000	0.1326233	8000	0.2005641	12000	0.217593	16000	0.2075313				
Benzyl alcohol	2000	0.9487846	4000	0.9562684	6000	0.9452642	8000	0.8929416				
Isophorone	2000	0.8105835	4000	0.7851367	6000	0.7497189	8000	0.7320915				
Azobenzene (1,2-DPH)	2000	0.7401068	4000	0.6076975	6000	~~0.5390385~~	8000	~~0.4858888~~				
Benzidine	4000	0.4457108	8000	0.4401225	12000	0.4093505	16000	0.3759457				
Bis(2-Ethylhexyl) adipate	2000	0.557048	4000	0.5474977	6000	0.5247413	8000	0.5031472				
3,3'-Dichlorobenzidine	4000	0.1544715	8000	0.1374539	12000	~~0.1378669~~	16000	~~0.1317219~~				
1,2-Dinitrobenzene	2000	0.1529336	4000	0.1554308	6000	0.150991	8000	0.1423422				
1,3-Dinitrobenzene	2000	0.2050175	4000	0.2172552	6000	0.2144045	8000	0.2092211				
1,4-Dinitrobenzene	2000	0.1562714	4000	0.1838025	6000	0.192694	8000	0.1934428				
Pyridine	2000	1.93958	4000	1.970311	6000	1.900232	8000	1.950497				
2,3,5-Trimethylnaphthalene	2000	1.169662	4000	1.034713	6000	0.956238	8000	0.8827995				
2,6-Dimethylnaphthalene	2000	1.249931	4000	1.107462	6000	1.003877	8000	0.9404066				
Benzo(e)pyrene	2000	1.193816	4000	1.161045	6000	1.110688	8000	1.093838				
1,1'-Biphenyl	2000	1.69128	4000	1.485529	6000	1.350438	8000	1.239661				
Perylene	2000	0.9539474	4000	0.9204651	6000	0.894342	8000	0.8762402				
Nitrobenzene-d5 (Surr)	2000	1.455077	4000	1.433906	6000	1.399863	8000	1.31195				
2-Fluorobiphenyl (Surr)	2000	1.504082	4000	1.337329	6000	1.227974	8000	1.133417				
Phenol-d6 (Surr)	2000	1.966987	4000	1.985867	6000	1.921086	8000	1.848738				
p-Terphenyl-d14 (Surr)	2000	1.028803	4000	1.002033	6000	0.9677689	8000	0.9356206				
2-Fluorophenol (Surr)	2000	1.579486	4000	1.593877	6000	1.567146	8000	1.562846				
2,4,6-Tribromophenol (Surr)	2000	0.1290112	4000	0.133301	6000	0.1340835	8000	0.1309928				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
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 - 4d. Barge Dewate
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
N-Nitrosodimethylamine	1000	1000	-0.01	70 - 130
N-Nitroso-di-n-propylamine	1000	1020	2.0	70 - 130
N-Nitrosodiphenylamine	1000	1040	4.1	70 - 130
Bis(2-Chloroethoxy) methane	1000	1010	0.7	70 - 130
Bis(2-Chloroethyl) ether	1000	976	-2.4	70 - 130
2,2'-Oxybis(1-Chloropropane)	1000	937	-6.3	70 - 130
Hexachlorobenzene	1000	1000	-0.05	70 - 130
Hexachlorobutadiene	1000	1010	1.0	70 - 130
Hexachlorocyclopentadiene	1000	959	-4.1	70 - 130
Hexachloroethane	1000	985	-1.5	70 - 130
2-Chloronaphthalene	1000	1010	0.8	70 - 130
1,2-Dichlorobenzene	1000	981	-1.9	70 - 130
1,3-Dichlorobenzene	1000	978	-2.2	70 - 130
1,4-Dichlorobenzene	1000	984	-1.6	70 - 130
1,2,4-Trichlorobenzene	1000	1010	0.5	70 - 130
4-Bromophenyl phenyl ether	1000	1020	2.2	70 - 130
4-Chlorophenyl phenyl ether	1000	1030	3.5	70 - 130
Aniline	1000	996	-0.4	70 - 130
4-Chloroaniline	1000	941	-5.9	70 - 130
2-Nitroaniline	1000	1100	9.6	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 - 4d. Barge Dewate
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
3-Nitroaniline	1000	914	-8.6	70 - 130
4-Nitroaniline	1000	992	-0.8	70 - 130
Nitrobenzene	1000	1040	4.5	70 - 130
2,4-Dinitrotoluene	1000	1050	5.0	70 - 130
2,6-Dinitrotoluene	1000	1050	5.4	70 - 130
Benzoic acid	2000	1850	-7.3	70 - 130
Benzyl alcohol	1000	945	-5.5	70 - 130
Isophorone	1000	1030	3.0	70 - 130
Azobenzene (1,2-DPH)	1000	1050	5.1	70 - 130
Bis(2-Ethylhexyl) adipate	1000	978	-2.2	70 - 130
3,3'-Dichlorobenzidine	2000	1920	-3.8	70 - 130
1,2-Dinitrobenzene	1000	1070	6.8	70 - 130
1,3-Dinitrobenzene	1000	1050	5.5	70 - 130
1,4-Dinitrobenzene	1000	1080	8.4	70 - 130
Pyridine	1000	818	-18.2	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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10161923.D		
Sequence:	9J16053	Inject Date:	10/16/19
Lab Sample ID:	9J16053-ICV1	Inject Time:	23:33

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1020	2.4	70 - 130
Acenaphthylene	1000	1040	4.0	70 - 130
Anthracene	1000	1030	2.6	70 - 130
Benz(a)anthracene	1000	1030	2.7	70 - 130
Benzo(a)pyrene	1000	951	-4.9	70 - 130
Benzo(b)fluoranthene	1000	1050	4.8	70 - 130
Benzo(k)fluoranthene	1000	1120	12.1	70 - 130
Benzo(g,h,i)perylene	1000	1070	6.5	70 - 130
Chrysene	1000	999	-0.1	70 - 130
Dibenz(a,h)anthracene	1000	1000	0.3	70 - 130
Fluoranthene	1000	1050	5.2	70 - 130
Fluorene	1000	1000	0.5	70 - 130
Indeno(1,2,3-cd)pyrene	1000	981	-1.9	70 - 130
1-Methylnaphthalene	1000	1060	5.9	70 - 130
2-Methylnaphthalene	1000	1070	6.6	70 - 130
Naphthalene	1000	1030	2.9	70 - 130
Phenanthrene	1000	1020	2.1	70 - 130
Pyrene	1000	1070	6.7	70 - 130
Carbazole	1000	833	-16.7	70 - 130
Dibenzofuran	1000	1030	2.8	70 - 130
4-Chloro-3-methylphenol	1000	995	-0.5	70 - 130
2-Chlorophenol	1000	1060	6.4	70 - 130
2,4-Dichlorophenol	1000	1050	5.4	70 - 130
2,4-Dimethylphenol	1000	1040	4.0	70 - 130
2,4-Dinitrophenol	1000	966	-3.4	70 - 130
4,6-Dinitro-2-methylphenol	1000	1020	1.5	70 - 130
2-Methylphenol	1000	1100	10.3	70 - 130
3+4-Methylphenol(s)	1000	1060	6.1	70 - 130
2-Nitrophenol	1000	1120	12.2	70 - 130
4-Nitrophenol	1000	980	-2.0	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 - 4d. Barge Dewate
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10161923.D		
Sequence:	9J16053	Inject Date:	10/16/19
Lab Sample ID:	9J16053-ICV1	Inject Time:	23:33

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1020	1.8	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1000	0.4	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1000	0.3	70 - 130
2,4,5-Trichlorophenol	1000	1030	3.3	70 - 130
2,4,6-Trichlorophenol	1000	1020	1.5	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1030	2.9	70 - 130
Butyl benzyl phthalate	1000	996	-0.4	70 - 130
Diethylphthalate	1000	1020	2.0	70 - 130
Dimethylphthalate	1000	1040	3.7	70 - 130
Di-n-butylphthalate	1000	1060	6.2	70 - 130
Di-n-octyl phthalate	1000	966	-3.4	70 - 130
N-Nitrosodimethylamine	1000	962	-3.8	70 - 130
N-Nitroso-di-n-propylamine	1000	1020	2.2	70 - 130
N-Nitrosodiphenylamine	1000	984	-1.6	70 - 130
Bis(2-Chloroethoxy) methane	1000	1040	4.1	70 - 130
Bis(2-Chloroethyl) ether	1000	1050	5.5	70 - 130
2,2'-Oxybis(1-Chloropropane)	1000	942	-5.8	70 - 130
Hexachlorobenzene	1000	1060	6.2	70 - 130
Hexachlorobutadiene	1000	1020	1.7	70 - 130
Hexachlorocyclopentadiene	1000	994	-0.6	70 - 130
Hexachloroethane	1000	1020	2.2	70 - 130
2-Chloronaphthalene	1000	1070	6.6	70 - 130
1,2-Dichlorobenzene	1000	1010	1.5	70 - 130
1,3-Dichlorobenzene	1000	1010	0.8	70 - 130
1,4-Dichlorobenzene	1000	997	-0.3	70 - 130
1,2,4-Trichlorobenzene	1000	1030	2.9	70 - 130
4-Bromophenyl phenyl ether	1000	1010	0.8	70 - 130
4-Chlorophenyl phenyl ether	1000	1030	2.8	70 - 130
Aniline	1000	920	-8.0	70 - 130
4-Chloroaniline	1000	927	-7.3	70 - 130
2-Nitroaniline	1000	1030	2.9	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 - 4d. Barge Dewate
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10161923.D		
Sequence:	9J16053	Inject Date:	10/16/19
Lab Sample ID:	9J16053-ICV1	Inject Time:	23:33

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
3-Nitroaniline	1000	869	-13.1	70 - 130
4-Nitroaniline	1000	934	-6.6	70 - 130
Nitrobenzene	1000	1090	8.6	70 - 130
2,4-Dinitrotoluene	1000	994	-0.6	70 - 130
2,6-Dinitrotoluene	1000	1050	4.6	70 - 130
Benzoic acid	2000	1750	-12.6	70 - 130
Benzyl alcohol	1000	972	-2.8	70 - 130
Isophorone	1000	1030	2.7	70 - 130
Azobenzene (1,2-DPH)	1000	949	-5.1	70 - 130
Bis(2-Ethylhexyl) adipate	1000	1010	1.0	70 - 130
3,3'-Dichlorobenzidine	2000	1770	-11.7	70 - 130
1,2-Dinitrobenzene	1000	991	-0.9	70 - 130
1,3-Dinitrobenzene	1000	999	-0.1	70 - 130
1,4-Dinitrobenzene	1000	1000	0.4	70 - 130
Pyridine	1000	870	-13.0	70 - 130
Nitrobenzene-d5 (Surr)	1000	1120	12.4	70 - 130
2-Fluorobiphenyl (Surr)	1000	1070	7.4	70 - 130
Phenol-d6 (Surr)	1000	1030	3.4	70 - 130
p-Terphenyl-d14 (Surr)	1000	1040	4.2	70 - 130
2-Fluorophenol (Surr)	1000	980	-2.0	70 - 130
2,4,6-Tribromophenol (Surr)	1000	992	-0.8	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10281909.D	Calibration Date:	10/18/19 14:37
Sequence:	9J28055	Injection Date:	10/28/19
Lab Sample ID:	9J28055-CCV1	Injection Time:	14:07

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		1.259234	1.296395	3.0	20
Acenaphthylene	Ave	1000	1040		2.002643	2.092261	4.5	20
Anthracene	Ave	1000	1020		1.028859	1.054209	2.5	20
Benz(a)anthracene	Ave	1000	997		1.158137	1.154959	-0.3	20
Benzo(a)pyrene	XXX	1000	1000	0.4				20
Benzo(b)fluoranthene	Ave	1000	1080		1.116814	1.2014	7.6	20
Benzo(k)fluoranthene	Ave	1000	1110		1.038377	1.151503	10.9	20
Benzo(g,h,i)perylene	Ave	1000	1050		1.12616	1.182944	5.0	20
Chrysene	Ave	1000	991		1.047439	1.038248	-0.9	20
Dibenz(a,h)anthracene	Ave	1000	1010		1.032824	1.043557	1.0	20
Fluoranthene	Ave	1000	1020		1.229627	1.248444	1.5	20
Fluorene	Ave	1000	1030		1.386989	1.431598	3.2	20
Indeno(1,2,3-cd)pyrene	Ave	1000	955		1.181299	1.128634	-4.5	20
1-Methylnaphthalene	Ave	1000	1050		0.7034275	0.7369734	4.8	20
2-Methylnaphthalene	Ave	1000	1060		0.7388664	0.7866789	6.5	20
Naphthalene	Ave	1000	1030		1.027308	1.054962	2.7	20
Phenanthrene	Ave	1000	1020		1.043185	1.059374	1.6	20
Pyrene	Ave	1000	1050		1.199154	1.253653	4.5	20
Carbazole	Ave	1000	934		0.9145148	0.8545387	-6.6	20
Dibenzofuran	Ave	1000	1060		1.724179	1.832573	6.3	20
4-Chloro-3-methylphenol	XXX	1000	968	-3.2				20
2-Chlorophenol	Ave	1000	1010		1.441815	1.462625	1.4	20
2,4-Dichlorophenol	XXX	1000	1080	7.6				20
2,4-Dimethylphenol	Ave	1000	933		0.2824411	0.2636491	-6.7	20
2,4-Dinitrophenol	XXX	1000	1290	28.5 *				20
4,6-Dinitro-2-methylphenol	XXX	1000	1180	18.0				20
2-Methylphenol	Ave	1000	966		1.099165	1.061252	-3.4	20
3+4-Methylphenol(s)	Ave	1000	1000		1.341624	1.348238	0.5	20
2-Nitrophenol	XXX	1000	991	-0.9				20
4-Nitrophenol	XXX	1000	960	-4.0				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10281909.D	Calibration Date:	10/18/19 14:37
Sequence:	9J28055	Injection Date:	10/28/19
Lab Sample ID:	9J28055-CCV1	Injection Time:	14:07

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	976	-2.4				20
Phenol	Ave	1000	978		1.88751	1.846884	-2.2	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1060	5.9				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1030	3.3				20
2,4,5-Trichlorophenol	XXX	1000	1060	6.0				20
2,4,6-Trichlorophenol	XXX	1000	1040	3.7				20
Bis(2-ethylhexyl)phthalate	Ave	1000	872		0.7350275	0.6406379	-12.8	20
Butyl benzyl phthalate	XXX	1000	912	-8.8				20
Diethylphthalate	Ave	1000	974		1.383095	1.347707	-2.6	20
Dimethylphthalate	Ave	1000	1020		1.45942	1.482498	1.6	20
Di-n-butylphthalate	Ave	1000	940		1.247884	1.172765	-6.0	20
Di-n-octyl phthalate	XXX	1000	813	-18.7				20
N-Nitrosodimethylamine	Ave	1000	820		1.181253	0.968791	-18.0	20
N-Nitroso-di-n-propylamine	Ave	1000	938		1.157744	1.086373	-6.2	20
N-Nitrosodiphenylamine	Ave	1000	1010		0.6277671	0.6322225	0.7	20
Bis(2-Chloroethoxy) methane	Ave	1000	1010		0.437801	0.4405046	0.6	20
Bis(2-Chloroethyl) ether	Ave	1000	1090		1.698847	1.854009	9.1	20
2,2'-Oxybis(1-Chloropropane)	Ave	1000	842		2.351097	1.980057	-15.8	20
Hexachlorobenzene	Ave	1000	1080		0.2772973	0.2990138	7.8	20
Hexachlorobutadiene	Ave	1000	1060		0.1859475	0.1979134	6.4	20
Hexachlorocyclopentadiene	Ave	1000	1010		0.3490152	0.3533239	1.2	20
Hexachloroethane	Ave	1000	1010		0.4895762	0.4964971	1.4	20
2-Chloronaphthalene	Ave	1000	1090		1.196	1.305167	9.1	20
1,2-Dichlorobenzene	Ave	1000	1030		1.484942	1.530295	3.1	20
1,3-Dichlorobenzene	Ave	1000	1000		1.599774	1.600683	0.06	20
1,4-Dichlorobenzene	Ave	1000	1010		1.523699	1.539973	1.1	20
1,2,4-Trichlorobenzene	Ave	1000	1060		0.3370856	0.3572872	6.0	20
4-Bromophenyl phenyl ether	Ave	1000	1060		0.2345528	0.2482871	5.9	20
4-Chlorophenyl phenyl ether	Ave	1000	1090		0.6870893	0.7469691	8.7	20
Aniline	Ave	1000	631		1.964687	1.238957	-36.9*	20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS9	Calibration:	A9J1803
Lab File ID:	I10281909.D	Calibration Date:	10/18/19 14:37
Sequence:	9J28055	Injection Date:	10/28/19
Lab Sample ID:	9J28055-CCV1	Injection Time:	14:07

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
4-Chloroaniline	XXX	1000	762	-23.8 *				20
2-Nitroaniline	XXX	1000	1070	6.7				20
3-Nitroaniline	XXX	1000	965	-3.5				20
4-Nitroaniline	Ave	1000	1010		0.2363611	0.2378086	0.6	20
Nitrobenzene	Ave	1000	1020		1.377218	1.403182	1.9	20
2,4-Dinitrotoluene	XXX	1000	1150	15.1				20
2,6-Dinitrotoluene	XXX	1000	1110	11.4				20
Benzoic acid	XXX	2000	1940	-3.0				20
Benzyl alcohol	Ave	1000	852		0.8300923	0.7074584	-14.8	20
Isophorone	Ave	1000	954		0.7908425	0.7541331	-4.6	20
Azobenzene (1,2-DPH)	Ave	1000	878		0.8209791	0.7207644	-12.2	20
Bis(2-Ethylhexyl) adipate	Ave	1000	867		0.5042681	0.436967	-13.3	20
3,3'-Dichlorobenzidine	XXX	2000	1700	-14.8				20
1,2-Dinitrobenzene	XXX	1000	1090	9.1				20
1,3-Dinitrobenzene	XXX	1000	1120	11.6				20
1,4-Dinitrobenzene	XXX	1000	1230	23.4 *				20
Pyridine	Ave	1000	853		1.836599	1.566215	-14.7	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 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E10291903.D	Calibration Date:	10/08/19 10:22
Sequence:	9J29025	Injection Date:	10/29/19
Lab Sample ID:	9J29025-CCV1	Injection Time:	09:37

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1020		1.329653	1.357281	2.1	20
Acenaphthylene	Ave	1000	1060		1.93331	2.043691	5.7	20
Anthracene	Ave	1000	1100		1.087198	1.199568	10.3	20
Benz(a)anthracene	Ave	1000	1030		1.075856	1.107658	3.0	20
Benzo(a)pyrene	XXX	1000	1070	7.1				20
Benzo(b)fluoranthene	XXX	1000	1060	5.5				20
Benzo(k)fluoranthene	XXX	1000	1090	9.3				20
Benzo(g,h,i)perylene	Ave	1000	834		1.168957	0.9749855	-16.6	20
Chrysene	Ave	1000	1010		1.074563	1.082827	0.8	20
Dibenz(a,h)anthracene	Ave	1000	991		1.120896	1.111196	-0.9	20
Fluoranthene	Ave	1000	1200		1.092995	1.307985	19.7	20
Fluorene	Ave	1000	1090		1.410382	1.537587	9.0	20
Indeno(1,2,3-cd)pyrene	Ave	1000	888		1.216987	1.080816	-11.2	20
1-Methylnaphthalene	Ave	1000	1040		0.6800911	0.7067676	3.9	20
2-Methylnaphthalene	Ave	1000	1040		0.7165955	0.7467773	4.2	20
Naphthalene	Ave	1000	1000		1.063357	1.063588	0.02	20
Phenanthrene	Ave	1000	1020		1.137752	1.158284	1.8	20
Pyrene	Ave	1000	1210		1.124682	1.356398	20.6*	20
Carbazole	Ave	1000	1210		0.8965568	1.080603	20.5*	20
Dibenzofuran	Ave	1000	1040		1.77537	1.848148	4.1	20
4-Chloro-3-methylphenol	XXX	1000	1050	5.5				20
2-Chlorophenol	Ave	1000	1060		1.296925	1.376614	6.1	20
2,4-Dichlorophenol	XXX	1000	1120	12.1				20
2,4-Dimethylphenol	XXX	1000	972	-2.8				20
2,4-Dinitrophenol	XXX	1000	1030	2.9				20
4,6-Dinitro-2-methylphenol	XXX	1000	1200	19.8				20
2-Methylphenol	Ave	1000	1050		0.9850931	1.03549	5.1	20
3+4-Methylphenol(s)	Ave	1000	1060		1.214925	1.288424	6.0	20
2-Nitrophenol	XXX	1000	1180	18.3				20
4-Nitrophenol	XXX	1000	979	-2.1				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E10291903.D	Calibration Date:	10/08/19 10:22
Sequence:	9J29025	Injection Date:	10/29/19
Lab Sample ID:	9J29025-CCV1	Injection Time:	09:37

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	902	-9.8				20
Phenol	Ave	1000	1070		1.506949	1.616169	7.2	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1090	9.2				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1110	10.7				20
2,4,5-Trichlorophenol	XXX	1000	1050	4.6				20
2,4,6-Trichlorophenol	XXX	1000	1050	4.8				20
Bis(2-ethylhexyl)phthalate	XXX	1000	917	-8.3				20
Butyl benzyl phthalate	XXX	1000	1030	3.1				20
Diethylphthalate	Ave	1000	1070		1.31622	1.412291	7.3	20
Dimethylphthalate	Ave	1000	1040		1.369023	1.428293	4.3	20
Di-n-butylphthalate	Ave	1000	1150		1.126034	1.291549	14.7	20
Di-n-octyl phthalate	XXX	1000	1130	13.2				20
N-Nitrosodimethylamine	Ave	1000	973		0.7838163	0.7625507	-2.7	20
N-Nitroso-di-n-propylamine	Ave	1000	1040		0.8578988	0.8911632	3.9	20
N-Nitrosodiphenylamine	Ave	1000	1070		0.6254076	0.6708089	7.3	20
Bis(2-Chloroethoxy) methane	Ave	1000	974		0.3972624	0.3869595	-2.6	20
Bis(2-Chloroethyl) ether	Ave	1000	1000		1.338749	1.338698	-0.004	20
2,2'-Oxybis(1-Chloropropane)	Ave	1000	924		1.523726	1.407606	-7.6	20
Hexachlorobenzene	Ave	1000	987		0.2321269	0.229021	-1.3	20
Hexachlorobutadiene	Ave	1000	1020		0.1631717	0.1656827	1.5	20
Hexachlorocyclopentadiene	Ave	1000	775		0.2957564	0.2293406	-22.5*	20
Hexachloroethane	Ave	1000	982		0.5378216	0.5281528	-1.8	20
2-Chloronaphthalene	Ave	1000	995		1.277977	1.271982	-0.5	20
1,2-Dichlorobenzene	Ave	1000	1010		1.503743	1.523716	1.3	20
1,3-Dichlorobenzene	Ave	1000	995		1.562187	1.554615	-0.5	20
1,4-Dichlorobenzene	Ave	1000	989		1.580005	1.562377	-1.1	20
1,2,4-Trichlorobenzene	Ave	1000	993		0.3195232	0.3174183	-0.7	20
4-Bromophenyl phenyl ether	Ave	1000	1040		0.2063385	0.2146838	4.0	20
4-Chlorophenyl phenyl ether	Ave	1000	1080		0.6714687	0.7281843	8.4	20
Aniline	Ave	1000	952		1.91851	1.826164	-4.8	20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID:	SV-GCMS5	Calibration:	A9J0804
Lab File ID:	E10291903.D	Calibration Date:	10/08/19 10:22
Sequence:	9J29025	Injection Date:	10/29/19
Lab Sample ID:	9J29025-CCV1	Injection Time:	09:37

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
4-Chloroaniline	XXX	1000	765	-23.5 *				20
2-Nitroaniline	XXX	1000	1120	11.8				20
3-Nitroaniline	Ave	1000	1060		0.3184055	0.3384807	6.3	20
4-Nitroaniline	Ave	1000	1160		0.3229317	0.375817	16.4	20
Nitrobenzene	Ave	1000	1010		1.184798	1.199798	1.3	20
2,4-Dinitrotoluene	XXX	1000	1150	15.4				20
2,6-Dinitrotoluene	XXX	1000	1090	9.2				20
Benzoic acid	XXX	2000	1800	-10.0				20
Benzyl alcohol	XXX	1000	1100	10.5				20
Isophorone	Ave	1000	988		0.5925118	0.5852722	-1.2	20
Azobenzene (1,2-DPH)	Ave	1000	955		0.6505912	0.6212739	-4.5	20
Bis(2-Ethylhexyl) adipate	XXX	1000	1040	4.1				20
3,3'-Dichlorobenzidine	XXX	2000	2630	31.7 *				20
1,2-Dinitrobenzene	XXX	1000	1180	18.1				20
1,3-Dinitrobenzene	XXX	1000	1130	12.8				20
1,4-Dinitrobenzene	XXX	1000	1190	18.7				20
Pyridine	Ave	1000	933		1.285334	1.198723	-6.7	20

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

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J04044	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
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 - 4d. Barge Dewatering
Sequence:	9J16053	Instrument:	SV-GCMS9
Matrix:	Water	Calibration:	A9J1803

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9J16053-ICV1)			Lab File ID: I10161923.D		Analyzed: 10/16/19 23:33			
Nitrobenzene-d5 (Surr)	1000	112	70 - 130	7.199	7.2032	-0.0042	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	107	70 - 130	9.007	9.0078	-0.0008	+/-1.0	
Phenol-d6 (Surr)	1000	103	70 - 130	6.295	6.2976	-0.0026	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	104	70 - 130	13.023	13.0243	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	1000	98	70 - 130	5.407	5.4102	-0.0032	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	99	70 - 130	10.499	10.50367	-0.0047	+/-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 - 4d. Barge Dewatering
Sequence:	9J28055	Instrument:	SV-GCMS9
Matrix:	Water	Calibration:	A9J1803

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9J28055-CCV1)			Lab File ID: I10281909.D		Analyzed: 10/28/19 14:07			
Nitrobenzene-d5 (Surr)	1000	104	80 - 120	7.194	7.2032	-0.0092	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	110	80 - 120	8.996	9.0078	-0.0118	+/-1.0	
Phenol-d6 (Surr)	1000	94	80 - 120	6.295	6.2976	-0.0026	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	107	80 - 120	13.013	13.0243	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	1000	95	80 - 120	5.407	5.4102	-0.0032	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	106	80 - 120	10.494	10.50367	-0.0097	+/-1.0	
Calibration Blank (9J28055-CCB1)			Lab File ID: I10281910.D		Analyzed: 10/28/19 14:42			
Nitrobenzene-d5 (Surr)			44 - 120	0	7.2032	-7.2032	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	9.0078	-9.0078	+/-1.0	
Phenol-d6 (Surr)			10 - 120	0	6.2976	-6.2976	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	0	13.0243	-13.0243	+/-1.0	
2-Fluorophenol (Surr)			19 - 120	0	5.4102	-5.4102	+/-1.0	
2,4,6-Tribromophenol (Surr)			43 - 140	0	10.50367	-10.5037	+/-1.0	
Blank (9101635-BLK2)			Lab File ID: I10281911.D		Analyzed: 10/28/19 15:16			
Nitrobenzene-d5 (Surr)	4.55	81	44 - 120	7.199	7.2032	-0.0042	+/-1.0	
2-Fluorobiphenyl (Surr)	4.55	73	44 - 120	9.001	9.0078	-0.0068	+/-1.0	
Phenol-d6 (Surr)	4.55	23	10 - 120	6.295	6.2976	-0.0026	+/-1.0	
p-Terphenyl-d14 (Surr)	4.55	84	50 - 133	13.018	13.0243	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	4.55	38	19 - 120	5.412	5.4102	0.0018	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.55	88	43 - 140	10.494	10.50367	-0.0097	+/-1.0	
LCS (9101635-BS2)			Lab File ID: I10281912.D		Analyzed: 10/28/19 15:52			
Nitrobenzene-d5 (Surr)	5.00	88	44 - 120	7.194	7.2032	-0.0092	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	94	44 - 120	9.001	9.0078	-0.0068	+/-1.0	
Phenol-d6 (Surr)	5.00	27	10 - 120	6.295	6.2976	-0.0026	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	102	50 - 133	13.013	13.0243	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	5.00	45	19 - 120	5.412	5.4102	0.0018	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	101	43 - 140	10.494	10.50367	-0.0097	+/-1.0	
LCS Dup (9101635-BSD2)			Lab File ID: I10281913.D		Analyzed: 10/28/19 16:27			
Nitrobenzene-d5 (Surr)	5.00	84	44 - 120	7.199	7.2032	-0.0042	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	87	44 - 120	9.001	9.0078	-0.0068	+/-1.0	
Phenol-d6 (Surr)	5.00	25	10 - 120	6.3	6.2976	0.0024	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	95	50 - 133	13.013	13.0243	-0.0113	+/-1.0	
2-Fluorophenol (Surr)	5.00	41	19 - 120	5.418	5.4102	0.0078	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	100	43 - 140	10.494	10.50367	-0.0097	+/-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 - 4d. Barge Dewatering
Sequence:	9J29025	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 (9J29025-CCV1)			Lab File ID: E10291903.D		Analyzed: 10/29/19 09:37			
Nitrobenzene-d5 (Surr)	1000	106	80 - 120	7.295	7.3101	-0.0151	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	102	80 - 120	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	1000	99	80 - 120	6.418	6.4125	0.0055	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	106	80 - 120	13.152	13.1583	-0.0063	+/-1.0	
2-Fluorophenol (Surr)	1000	105	80 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	110	80 - 120	10.595	10.60533	-0.0103	+/-1.0	
Calibration Blank (9J29025-CCB1)			Lab File ID: E10291904.D		Analyzed: 10/29/19 10:13			
Nitrobenzene-d5 (Surr)			44 - 120	7.327	7.3101	0.0169	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	9.1062	-9.1062	+/-1.0	
Phenol-d6 (Surr)			10 - 120	6.402	6.4125	-0.0105	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	13.173	13.1583	0.0147	+/-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	
PDI-026SW-34-00-191024 (A9J0959-01RE2)			Lab File ID: E10291916.D		Analyzed: 10/29/19 17:20			
Nitrobenzene-d5 (Surr)	4.76	70	44 - 120	7.3	7.3101	-0.0101	+/-1.0	
2-Fluorobiphenyl (Surr)	4.76	66	44 - 120	9.098	9.1062	-0.0082	+/-1.0	
Phenol-d6 (Surr)	4.76	20	10 - 120	6.423	6.4125	0.0105	+/-1.0	
p-Terphenyl-d14 (Surr)	4.76	70	50 - 133	13.157	13.1583	-0.0013	+/-1.0	
2-Fluorophenol (Surr)	4.76	38	19 - 120	5.557	5.56	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.76	85	43 - 140	10.6	10.60533	-0.0053	+/-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 - 4d. Barge Dewatering
Sequence:	9J29025	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 (9J29025-CCV1)			Lab File ID: E10291903.D			Analyzed: 10/29/19 09:37			
1,4-Dichlorobenzene-d4 (ISTD)	431591	6.76	506660	6.776	85	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	1777566	8.012	1967039	8.028	90	50 - 200	-0.0160	+/-0.50	
Acenaphthene-d10 (ISTD)	940479	9.793	1014623	9.804	93	50 - 200	-0.0110	+/-0.50	
Phenanthrene-d10 (ISTD)	1884325	11.307	1837465	11.312	103	50 - 200	-0.0050	+/-0.50	
Chrysene-d12 (ISTD)	2066385	15.243	1661969	15.248	124	50 - 200	-0.0050	+/-0.50	
Perylene-d12 (ISTD)	1730033	18.747	1540594	18.757	112	50 - 200	-0.0100	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1177238	21.137	1155569	21.148	102	50 - 200	-0.0110	+/-0.50	
Calibration Blank (9J29025-CCB1)			Lab File ID: E10291904.D			Analyzed: 10/29/19 10:13			
1,4-Dichlorobenzene-d4 (ISTD)	396446	6.765	431591	6.76	92	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	1555435	8.017	1777566	8.012	88	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	858026	9.793	940479	9.793	91	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1942221	11.306	1884325	11.307	103	50 - 200	-0.0010	+/-0.50	
Chrysene-d12 (ISTD)	1879356	15.232	2066385	15.243	91	50 - 200	-0.0110	+/-0.50	
Perylene-d12 (ISTD)	1545372	18.741	1730033	18.747	89	50 - 200	-0.0060	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1054122	21.132	1177238	21.137	90	50 - 200	-0.0050	+/-0.50	
PDI-026SW-34-00-191024 (A9J0959-01RE2)			Lab File ID: E10291916.D			Analyzed: 10/29/19 17:20			
1,4-Dichlorobenzene-d4 (ISTD)	437935	6.765	431591	6.76	101	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	1750097	8.017	1777566	8.012	98	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	935336	9.793	940479	9.793	99	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1920028	11.306	1884325	11.307	102	50 - 200	-0.0010	+/-0.50	
Chrysene-d12 (ISTD)	2028061	15.238	2066385	15.243	98	50 - 200	-0.0050	+/-0.50	
Perylene-d12 (ISTD)	1795322	18.746	1730033	18.747	104	50 - 200	-0.0010	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1351208	21.132	1177238	21.137	115	50 - 200	-0.0050	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/28/19 13:47	4.14	7.00	10/29/19 17:20	1.15	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 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
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 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Arsenic	0.500	1.00	ug/L
Chromium	0.500	1.00	ug/L
Copper	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-026SW-34-00-191024

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix: WS
Laboratory ID: A9J0959-01
File ID: 9J29041-098
Sampled: 10/24/19 10:30
Prepared: 10/29/19 08:43
Analyzed: 10/30/19 00:38
Solids: N/A
Preparation: EPA 3015A
Initial/Final: 45 mL / 50 mL
Batch: 9101684
Sequence: 9J29041
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7440-38-2	Arsenic	0.588	1	J	EPA 6020A
7440-47-3	Chromium	0.500	1	U	EPA 6020A
7440-50-8	Copper	1.32	1		EPA 6020A
7440-66-6	Zinc	2.00	1	U	EPA 6020A

PREPARATION BATCH SUMMARY

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Batch: 9101684 Batch Matrix: Water Preparation: EPA 3015A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101684-BLK1	9J29041-092	10/29/19 08:43	
LCS	9101684-BS1	9J29041-093	10/29/19 08:43	
PDI-026SW-34-00-191024	A9J0959-01	9J29041-098	10/29/19 08:43	

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 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101684-BLK1	File ID:	9J29041-092
Prepared:	10/29/19 08:43	Preparation:	EPA 3015A	Initial/Final:	45 mL / 50 mL
Analyzed:	10/30/19 00:10	Instrument:	ICPMS6		
Batch:	9101684	Sequence:	9J29041	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7440-38-2	Arsenic	0.500	U
7440-47-3	Chromium	0.500	U
7440-50-8	Copper	0.500	U
7440-66-6	Zinc	2.00	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water		
Batch:	9101684	Laboratory ID:	9101684-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	54.2	98	80 - 120
Chromium	55.6	55.2	99	80 - 120
Copper	55.6	55.7	100	80 - 120
Zinc	55.6	53.7	97	80 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J29041	Instrument:	ICPMS6
Matrix:	Water	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	9J29041-ICV1	9J29041-014	10/29/19 17:08
Initial Cal Blank	9J29041-ICB1	9J29041-015	10/29/19 17:13
Instrument RL Check	9J29041-CRL1	9J29041-016	10/29/19 17:17
Instrument RL Check	9J29041-CRL2	9J29041-017	10/29/19 17:22
Instrument RL Check	9J29041-CRL3	9J29041-018	10/29/19 17:27
Calibration Check	9J29041-CCV1	9J29041-031	10/29/19 18:47
Calibration Blank	9J29041-CCB1	9J29041-032	10/29/19 18:52
Calibration Check	9J29041-CCV2	9J29041-037	10/29/19 19:46
Calibration Blank	9J29041-CCB2	9J29041-038	10/29/19 19:54
Instrument RL Check	9J29041-CRL4	9J29041-039	10/29/19 19:59
Instrument RL Check	9J29041-CRL5	9J29041-040	10/29/19 20:04
Instrument RL Check	9J29041-CRL6	9J29041-041	10/29/19 20:08
Instrument RL Check	9J29041-CRL7	9J29041-042	10/29/19 20:14
Calibration Check	9J29041-CCV3	9J29041-053	10/29/19 21:09
Calibration Blank	9J29041-CCB3	9J29041-054	10/29/19 21:14
Calibration Check	9J29041-CCV4	9J29041-065	10/29/19 22:05
Calibration Blank	9J29041-CCB4	9J29041-066	10/29/19 22:09
Calibration Check	9J29041-CCV5	9J29041-077	10/29/19 23:01
Calibration Blank	9J29041-CCB5	9J29041-078	10/29/19 23:05
Calibration Check	9J29041-CCV6	9J29041-089	10/29/19 23:56
Calibration Blank	9J29041-CCB6	9J29041-090	10/30/19 00:01
Blank	9101684-BLK1	9J29041-092	10/30/19 00:10
LCS	9101684-BS1	9J29041-093	10/30/19 00:15
PDI-026SW-34-00-191024	A9J0959-01	9J29041-098	10/30/19 00:38
Calibration Check	9J29041-CCV7	9J29041-101	10/30/19 00:52
Calibration Blank	9J29041-CCB7	9J29041-102	10/30/19 00:57
Calibration Check	9J29041-CCV8	9J29041-113	10/30/19 01:48
Calibration Blank	9J29041-CCB8	9J29041-114	10/30/19 01:53
Calibration Check	9J29041-CCV9	9J29041-125	10/30/19 02:44
Calibration Blank	9J29041-CCB9	9J29041-126	10/30/19 02:49
Calibration Check	9J29041-CCVA	9J29041-128	10/30/19 02:58
Calibration Blank	9J29041-CCBA	9J29041-129	10/30/19 03:03
Instrument RL Check	9J29041-CRL8	9J29041-130	10/30/19 03:07

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence:	9J29041	Instrument:	ICPMS6
Matrix:	Water	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Instrument RL Check	9J29041-CRL9	9J29041-131	10/30/19 03:12
Instrument RL Check	9J29041-CRLA	9J29041-132	10/30/19 03:17
Instrument RL Check	9J29041-CRLB	9J29041-133	10/30/19 03:21
Calibration Check	9J29041-CCVB	9J29041-140	10/30/19 03:54
Calibration Blank	9J29041-CCBB	9J29041-141	10/30/19 03:59
Instrument RL Check	9J29041-CRLC	9J29041-142	10/30/19 04:03
Instrument RL Check	9J29041-CRLD	9J29041-143	10/30/19 04:08
Instrument RL Check	9J29041-CRLE	9J29041-144	10/30/19 04:13
Instrument RL Check	9J29041-CRLF	9J29041-145	10/30/19 04:17

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 AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 9J29041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9J29041-ICV1	Arsenic	100	98.5	98	ug/L	EPA 6020A
	Chromium	100	99.3	99	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	99.3	99	ug/L	EPA 6020A
9J29041-CCV1	Arsenic	100	98.3	98	ug/L	EPA 6020A
	Chromium	100	97.8	98	ug/L	EPA 6020A
	Copper	100	99.5	100	ug/L	EPA 6020A
	Zinc	100	97.3	97	ug/L	EPA 6020A
9J29041-CCV2	Arsenic	100	98.4	98	ug/L	EPA 6020A
	Chromium	100	100	100	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Zinc	100	99.1	99	ug/L	EPA 6020A
9J29041-CCV3	Arsenic	100	98.1	98	ug/L	EPA 6020A
	Chromium	100	100	100	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	99.1	99	ug/L	EPA 6020A
9J29041-CCV4	Arsenic	100	99.5	100	ug/L	EPA 6020A
	Chromium	100	101	101	ug/L	EPA 6020A
	Copper	100	103	103	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J29041-CCV5	Arsenic	100	98.8	99	ug/L	EPA 6020A
	Chromium	100	101	101	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	101	101	ug/L	EPA 6020A
9J29041-CCV6	Arsenic	100	100	100	ug/L	EPA 6020A
	Chromium	100	102	102	ug/L	EPA 6020A
	Copper	100	104	104	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J29041-CCV7	Arsenic	100	100	100	ug/L	EPA 6020A
	Chromium	100	102	102	ug/L	EPA 6020A
	Copper	100	104	104	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J29041-CCV8	Arsenic	100	98.9	99	ug/L	EPA 6020A
	Chromium	100	100	100	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	99.6	100	ug/L	EPA 6020A
9J29041-CCV9	Arsenic	100	99.2	99	ug/L	EPA 6020A
	Chromium	100	100	100	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	99.7	100	ug/L	EPA 6020A
9J29041-CCVA	Arsenic	100	99.8	100	ug/L	EPA 6020A
	Chromium	100	102	102	ug/L	EPA 6020A
	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J29041-CCVB	Arsenic	100	100	100	ug/L	EPA 6020A
	Chromium	100	102	102	ug/L	EPA 6020A

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Control Limt: +/- 10.00%

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Calibration: UNASSIGNED
Sequence: 9J29041

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9J29041-CCVB	Copper	100	102	102	ug/L	EPA 6020A
	Zinc	100	101	101	ug/L	EPA 6020A

* Values outside of QC limits

INSTRUMENT BLANKS

EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence: 9J29041
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9J29041-ICB1	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
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
9J29041-CCB1	Arsenic	ND	0.450 (Inst)	ug/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
9J29041-CCB2	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
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCB3	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
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCB4	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCB5	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
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCB6	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCB7	Arsenic	ND	0.450 (Inst)	ug/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
9J29041-CCB8	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Sequence: 9J29041
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9J29041-CCB8	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
9J29041-CCB9	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
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCBA	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Chromium	ND	0.450 (Inst)	ug/L		EPA 6020A
9J29041-CCBB	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
	Arsenic	ND	0.450 (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 - 4d. Barge Dewatering
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J29041

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J29041-CRL1	Arsenic	0.180	0.182	101	ug/L	70 - 130
	Chromium	0.180	0.178	99	ug/L	70 - 130
	Copper	0.180	0.220	122	ug/L	70 - 130
	Zinc	0.180	0.159	88	ug/L	70 - 130
9J29041-CRL2	Arsenic	0.900	0.887	99	ug/L	70 - 130
	Chromium	0.900	0.857	95	ug/L	70 - 130
	Copper	0.900	0.971	108	ug/L	70 - 130
	Zinc	0.900	0.799	89	ug/L	70 - 130
9J29041-CRL3	Arsenic	1.80	1.81	101	ug/L	70 - 130
	Chromium	1.80	1.72	95	ug/L	70 - 130
	Copper	1.80	1.82	101	ug/L	70 - 130
	Zinc	1.80	1.78	99	ug/L	70 - 130
9J29041-CRL4	Arsenic	0.180	0.184	102	ug/L	70 - 130
	Chromium	0.180	0.150	83	ug/L	70 - 130
	Copper	0.180	0.161	89	ug/L	70 - 130
9J29041-CRL5	Arsenic	0.900	0.913	101	ug/L	70 - 130
	Chromium	0.900	0.902	100	ug/L	70 - 130
	Copper	0.900	0.880	98	ug/L	70 - 130
	Zinc	0.900	0.791	88	ug/L	70 - 130
9J29041-CRL6	Arsenic	1.80	1.74	96	ug/L	70 - 130
	Chromium	1.80	1.67	93	ug/L	70 - 130
	Copper	1.80	1.72	96	ug/L	70 - 130
	Zinc	1.80	1.68	93	ug/L	70 - 130
9J29041-CRL7	Arsenic	3.60	3.57	99	ug/L	70 - 130
	Chromium	3.60	3.48	97	ug/L	70 - 130
	Copper	3.60	3.59	100	ug/L	70 - 130
	Zinc	3.60	3.57	99	ug/L	70 - 130
9J29041-CRL8	Arsenic	0.180	0.218	121	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 - 4d. Barge Dewatering
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J29041

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J29041-CRL8	Chromium	0.180	0.160	89	ug/L	70 - 130
	Copper	0.180	0.132	73	ug/L	70 - 130
	Zinc	0.180	0.143	80	ug/L	70 - 130
9J29041-CRL9	Arsenic	0.900	0.927	103	ug/L	70 - 130
	Chromium	0.900	0.837	93	ug/L	70 - 130
	Copper	0.900	0.825	92	ug/L	70 - 130
	Zinc	0.900	0.773	86	ug/L	70 - 130
9J29041-CRLA	Arsenic	1.80	1.84	102	ug/L	70 - 130
	Chromium	1.80	1.78	99	ug/L	70 - 130
	Copper	1.80	1.75	97	ug/L	70 - 130
	Zinc	1.80	1.69	94	ug/L	70 - 130
9J29041-CRLB	Arsenic	3.60	3.58	99	ug/L	70 - 130
	Chromium	3.60	3.42	95	ug/L	70 - 130
	Copper	3.60	3.47	97	ug/L	70 - 130
	Zinc	3.60	3.32	92	ug/L	70 - 130
9J29041-CRLC	Arsenic	0.180	0.214	119	ug/L	70 - 130
	Chromium	0.180	0.158	88	ug/L	70 - 130
	Copper	0.180	0.148	82	ug/L	70 - 130
9J29041-CRLD	Arsenic	0.900	0.914	102	ug/L	70 - 130
	Chromium	0.900	0.899	100	ug/L	70 - 130
	Copper	0.900	0.791	88	ug/L	70 - 130
	Zinc	0.900	0.745	83	ug/L	70 - 130
9J29041-CRLE	Arsenic	1.80	1.76	98	ug/L	70 - 130
	Chromium	1.80	1.70	95	ug/L	70 - 130
	Copper	1.80	1.73	96	ug/L	70 - 130
	Zinc	1.80	1.70	95	ug/L	70 - 130
9J29041-CRLF	Arsenic	3.60	3.60	100	ug/L	70 - 130
	Chromium	3.60	3.44	95	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 - 4d. Barge Dewatering
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J29041

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J29041-CRLF	Copper	3.60	3.48	97	ug/L	70 - 130
	Zinc	3.60	3.39	94	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 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/29/19 08:43	4.93	180.00	10/30/19 00:38	5.59	180.00	

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: SM 2540 D

ANALYSES DATA PACKAGE COVER PAGE

SM 2540 D

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

SM 2540 D

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units
Total Suspended Solids	5.00	5.00	mg/L

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

INORGANIC ANALYSIS DATA SHEET

SM 2540 D

PDI-026SW-34-00-191024

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix: WS
Laboratory ID: A9J0959-01
Sampled: 10/24/19 10:30
Prepared: 10/28/19 10:08
Analyzed: 10/29/19 11:28
Solids: N/A
Preparation: Total Suspended Solids
Initial/Final: 1 N/A / 1 N/A
Batch: 9101637
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
TSS	Total Suspended Solids	5.00	1	U	SM 2540 D

PREPARATION BATCH SUMMARY

SM 2540 D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Batch: 9101637 Batch Matrix: Water Preparation: Total Suspended Solids

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9101637-BLK1		10/28/19 10:08	
Reference	9101637-SRM1		10/28/19 10:08	
PDI-026SW-34-00-191024	A9J0959-01		10/28/19 10:08	

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

METHOD BLANK DATA SHEET
SM 2540 D

Laboratory:	Apex Laboratories			SDG:	Gasco_PreRD_DG 2019
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix:	Water	Laboratory ID:	9101637-BLK1	File ID:	
Prepared:	10/28/19 10:08	Preparation:	Total Suspended Solids	Initial/Final:	1 N/A / 1 N/A
Analyzed:	10/29/19 11:28	Instrument:	Wet Chem Balance 1		
Batch:	9101637	Sequence:		Calibration:	

CAS NO.	COMPOUND	CONC. (mg/L)	Q
TSS	Total Suspended Solids	5.00	U

STANDARD REFERENCE MATERIAL RECOVERY

SM 2540 D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Matrix: Water
Batch: 9101637
Laboratory ID: 9101637-SRM1
Preparation: Total Suspended Solids
Initial/Final: 1 N/A / 1 N/A

ANALYTE	TRUE (mg/L)	FOUND (mg/L)	SRM % REC.	QC LIMITS REC.
Total Suspended Solids	100	93.0	93	77.1 - 110

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 2540 D

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/28/19 10:08	3.98	7.00	10/29/19 11:28	1.06		

Apex Laboratories

SDG: Gasco PreRD_DG 2019

CLASS: WET

METHOD: SM 4500-H+ B

ANALYSES DATA PACKAGE COVER PAGE

SM 4500-H+ B

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC

SDG: Gasco PreRD_DG 2019
Project: Gasco PreRD_DG 2019 - 4d. Barge Dewatering

Client Sample Id:	Lab Sample Id:	Matrix
PDI-026SW-34-00-191024	A9J0959-01	WS

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: 12/17/2019 4:10PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

SM 4500-H+ B

Laboratory: Apex Laboratories

SDG: Gasco_PreRD_DG 2019

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewat

Batch Matrix: Water

Analyte	MDL	MRL	Units

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

INORGANIC ANALYSIS DATA SHEET

SM 4500-H+ B

PDI-026SW-34-00-191024

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Matrix: WS
Laboratory ID: A9J0959-01
Sampled: 10/24/19 10:30
Prepared: 10/25/19 16:46
Analyzed: 10/25/19 17:00
Solids: N/A
Preparation: Method Prep: Aq
Initial/Final: 20 mL / 20 mL
Batch: 9101615
Calibration:
Instrument: pH meter 3

CAS NO.	Analyte	Concentration (pH Units)	Dilution Factor	Q	Method
pH	pH	7.40	1		SM 4500-H+ B
pH Temp	pH Temperature (deg C)	21.1	1		SM 4500-H+ B

PREPARATION BATCH SUMMARY

SM 4500-H+ B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering
Batch: 9101615 Batch Matrix: Water Preparation: Method Prep: Aq

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
PDI-026SW-34-00-191024 (Dup)	9101615-DUP1		10/25/19 16:46	
Reference	9101615-SRM1		10/25/19 16:46	
Reference	9101615-SRM2		10/25/19 16:46	
PDI-026SW-34-00-191024	A9J0959-01		10/25/19 16:46	

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

PDI-026SW-34-00-191024

DUPLICATES

SM 4500-H+ B

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Water
Batch: 9101615
Preparation: Method Prep: Aq
Source Sample Name: PDI-026SW-34-00-191024

SDG: Gasco_PreRD_DG 2019
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Laboratory ID: 9101615-DUP1
Lab Source ID: A9J0959-01
Initial/Final: 20 mL / 20 mL
% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (pH Units)	C	DUPLICATE CONCENTRATION (pH Units)	C	RPD %	Q	METHOD
pH	5	7.40		7.39		0.1		SM 4500-H+ B
pH Temperature (deg C)	30	21.1		20.6		2		SM 4500-H+ B

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

SM 4500-H+ B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Matrix: Water
Batch: 9101615
Laboratory ID: 9101615-SRM1
Preparation: Method Prep: Aq
Initial/Final: 20 mL / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
pH	6.00	5.99	100	98.33333 - 101.6667
pH Temperature (deg C)	20.0	22.2	111	50 - 200

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

SM 4500-H+ B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewate
Matrix: Water
Batch: 9101615
Laboratory ID: 9101615-SRM2
Preparation: Method Prep: Aq
Initial/Final: 20 mL / 20 mL

ANALYTE	TRUE (pH Units)	FOUND (pH Units)	SRM % REC.	QC LIMITS REC.
pH	8.00	7.93	99	98.75 - 101.25
pH Temperature (deg C)	20.0	22.1	110	50 - 200

* Values outside of QC limits

HOLDING TIME SUMMARY

SM 4500-H+ B

Laboratory: Apex Laboratories
SDG: Gasco_PreRD_DG 2019
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 4d. Barge Dewatering

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-026SW-34-00-191024	10/24/19 10:30	10/25/19 14:40	10/25/19 16:46	1.26	0.01	10/25/19 17:00	1.27	0.01	*

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

BTEX Compounds by EPA 8260C
Benchsheet & Analysis Sequence Data

Batch 9101622
Sequence 9J28025 (A9J0959-01)

PREPARATION BENCH SHEET

BATCH #: 9101622 (Water)

Apex Laboratories

Prep Method: EPA 5030B

OCT 2 9 2019

Lab Number	Cont.	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	ClientID / Sample	Extraction Comments	pH*
9101622-BLK1		QC	10/28/19 08:00	5	5							
9101622-BS1		QC	10/28/19 08:00	5	5	A19J352		5				
9101622-BS2		QC	10/28/19 08:00	5	5	A19J354		5				
A9J0824-09RE1	B	8260C Halogenated VOCs	10/28/19 10:12	5	5					P89332 / EW5A-102219	10X RR-02 Cis12DCE	<2
A9J0824-16RE1	B	8260C Halogenated VOCs	10/28/19 10:12	5	5		Hold time	Ok		P89332 / MW56-1-102219	1X RR-03	~~<2~~ 7
A9J0922-10RE1	B	8260C Full List	10/28/19 10:12	5	5					17-16165 B2	1X RR-01	~~<2~~ 7
A9J0922-11RE1	B	8260C Full List	10/28/19 10:12	5	5					17-16165 B2-Duplicate	1X RR-01	~~<2~~ 7
A9J0922-12RE1	B	8260C Full List	10/28/19 10:12	5	5					17-16165 B8	1X RR-01	<2
A9J0942-04	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-16		<2
A9J0942-04	A	8260C BTEX+N	10/28/19 10:12	5	5					MW-16		<2
A9J0942-05	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-17		<2
A9J0942-05	A	8260C BTEX+N	10/28/19 10:12	5	5					MW-17		<2
A9J0942-06	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-18		<2
A9J0942-06	A	8260C BTEX+N	10/28/19 10:12	5	5					MW-18		<2
A9J0942-07	A	8260C BTEX+N	10/28/19 10:12	5	5					MW-99		<2
A9J0942-07	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-99		<2
A9J0952-02	A	8260C BTEX	10/28/19 10:12	5	5					MW-9	Added for BatchQC in: 9101622	<2
A9J0952-02	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-9		<2
A9J0952-02	A	8260C RBDM List	10/28/19 10:12	5	5					MW-9		<2
A9J0952-02	A	8260C BTEX+N	10/28/19 10:12	5	5					MW-9	Added for BatchQC in: 9101622	<2
A9J0952-02	A	8260C Full List	10/28/19 10:12	5	5					MW-9	Added for BatchQC in: 9101622	<2
A9J0952-02	A	8260C Halogenated VOCs	10/28/19 10:12	5	5					MW-9	Added for BatchQC in: 9101622	<2

10/29/19

Prepared By: Date

Reviewed By: 10/29/19 Date

PREPARATION BENCH SHEET

BATCH #: 9101622 (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*
9101622-DUP1		QC	10/28/19 10:12	5	5		A9J0952-02					<2
A9J0952-03	A	8260C RBDM List	10/28/19 10:12	5	5					MW-11		<2
A9J0952-03	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-11		<2
A9J0952-04	A	NWTPH-Gx	10/28/19 10:12	5	5					MW-7		<2
A9J0952-04	A	8260C RBDM List	10/28/19 10:12	5	5					MW-7		<2
A9J0954-03	A	8260C Full List	10/28/19 10:12	5	5					PDI-TB-1910250959		<2
A9J0955-01	A	8260C Full List	10/28/19 10:12	5	5					P89332 / MW3R-20191023	Run trip blanks at all times	<2
A9J0955-02	A	8260C Full List	10/28/19 10:12	5	5					P89332 / DUP05-20191023	Run trip blanks at all times	<2
A9J0955-03	A	8260C Halogenated VOCs	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Added for BatchQC in: 9101622	<2
A9J0955-03	A	8260C Full List	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Run trip blanks at all times	<2
A9J0955-03	A	8260C RBDM List	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Added for BatchQC in: 9101622	<2
A9J0955-03	A	8260C BTEX	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Added for BatchQC in: 9101622	<2
A9J0955-03	A	NWTPH-Gx	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Added for BatchQC in: 9101622	<2
A9J0955-03	A	8260C BTEX+N	10/28/19 10:12	5	5					P89332 / MW66-2-20191023	Added for BatchQC in: 9101622	<2
9101622-DUP2		QC	10/28/19 10:12	5	5		A9J0955-03					<2
A9J0959-01	A	8260C BTEX	10/28/19 10:12	5	5					PDI-026SW-34-00-191024	EB only	<2
A9J0974-01	A	8260C RBDM List	10/28/19 10:12	5	5					DA6-DISCH-2019.10.28		<2
A9J0975-01	A	NWTPH-Gx	10/28/19 10:12	5	5					DA6-PRE-2019.10.28	Added for BatchQC in: 9101622	<2
A9J0975-01	A	8260C BTEX+N	10/28/19 10:12	5	5					DA6-PRE-2019.10.28	Added for BatchQC in: 9101622	<2
A9J0975-01	A	8260C BTEX	10/28/19 10:12	5	5					DA6-PRE-2019.10.28	Added for BatchQC in: 9101622	<2
A9J0975-01	A	8260C Full List	10/28/19 10:12	5	5					DA6-PRE-2019.10.28	Added for BatchQC in: 9101622	<2
A9J0975-01	A	8260C Halogenated VOCs	10/28/19 10:12	5	5					DA6-PRE-2019.10.28	Added for BatchQC in: 9101622	<2

Prepared By: Date

Reviewed By: Date

PREPARATION BENCH SHEET

BATCH #: 9101622 (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*
A9J0975-01	A	8260C RBDM List	10/28/19 10:12	5	5					DA6-PRE-2019.10.28		<2
9101622-MS1		QC	10/28/19 10:12	5	5	A19J352	A9J0975-01	5				<2

*pH <2 verified 10/29/19 hd

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J352	11/09/19	8260 Cal. Std. B VOCR+OXY Spike (20-40ug/r
A19J354	04/21/20	Prim NWTPH-Gx Spike (500 ug/mL)

Surrogate(s)

Std ID	Exp. Date	Description

GCMS9

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J28025**	Instrument:	**VOA-GCMS9**
Date:	**10/28/19 07:42**	Calibration:	**A9J2503**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J28025-IBL1	Water	QC	QC			A19I040	
2	9J28025-IBL2	Water	QC	QC			A19I040	
3	9J28025-TUN1	Water	QC	QC			A19I040	
4	9J28025-CCV1	Water	QC	QC			A19I040	
5	9101622-BS1	Water	QC	QC		9101622	A19I040	
6	9J28025-CCV2	Water	QC	QC			A19I040	
7	9101622-BS2	Water	QC	QC		9101622	A19I040	
8	9101622-BLK1	Water	QC	QC		9101622	A19I040	
9	A9J0954-03	Water	8260C Full List	Anchor QEA, LLC	11/07/19	9101622	A19I040	
10	A9J0942-04	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
11	A9J0942-05	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
12	A9J0942-06	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
13	A9J0942-07	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
14	A9J0922-10RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
15	A9J0922-11RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
16	A9J0922-12RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
17	A9J0824-16RE1	Water	8260C Halogenated VOCs		11/04/19	9101622	A19I040	
18	A9J0952-02	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
"	"	Water	8260C Full List	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
19	9101622-DUP1	Water	QC	QC		9101622	A19I040	
20	A9J0952-03	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
21	A9J0952-04	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
22	9J28025-IBL3	Water	QC	QC			A19I040	
23	A9J0959-01	Water	8260C BTEX	Anchor QEA, LLC	11/01/19	9101622	A19I040	
24	A9J0824-09RE1	Water	8260C Halogenated VOCs		11/04/19	9101622	A19I040	
25	A9J0974-01	Water	8260C RBDM List		10/29/19	9101622	A19I040	
26	A9J0955-01	Water	8260C Full List		11/07/19	9101622	A19I040	
27	A9J0955-02	Water	8260C Full List		11/07/19	9101622	A19I040	
28	A9J0955-03	Water	8260C Full List		11/07/19	9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
"	"	Water	8260C RBDM List	(QC Source)		9101622	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9101622	A19I040	
29	9101622-DUP2	Water	QC	QC		9101622	A19I040	
30	A9J0975-01	Water	8260C RBDM List		10/29/19	9101622	A19I040	
"	"	Water	8260C Full List	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9101622	A19I040	

Sequence:	**9J28025**	Instrument:	**VOA-GCMS9**
Date:	**10/28/19 07:42**	Calibration:	**A9J2503**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
31	9101622-MS1	Water	QC	QC		9101622	A19I040	
32	9J28025-IBL4	Water	QC	QC			A19I040	
33	9J28025-IBL5	Water	QC	QC			A19I040	
34	9J28025-IBL7	Water	QC	QC			A19I040	
35	9J28025-IBL6	Water	QC	QC			A19I040	

Data Entered By: 10/29/19

Comments:

Data Reviewed By: 10/29/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	9J28025	Instrument:	VOA-GCMS9
Date:	10/28/19 07:42	Calibration:	A9J2503

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J28025-IBL1	Water	QC	QC			A19I040	
2	9J28025-IBL2	Water	QC	QC			A19I040	
3	9J28025-TUN1	Water	QC	QC			A19I040	
4	9J28025-CCV1	Water	QC	QC			A19I040	
5	9101622-BS1	Water	QC	QC		9101622	A19I040	
6	9J28025-CCV2	Water	QC	QC			A19I040	
7	9101622-BS2	Water	QC	QC		9101622	A19I040	
8	9101622-BLK1	Water	QC	QC		9101622	A19I040	
9	A9J0954-03	Water	8260C Full List	Anchor QEA, LLC	11/07/19	9101622	A19I040	
10	A9J0942-04	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
11	A9J0942-05	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
12	A9J0942-06	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
13	A9J0942-07	Water	8260C BTEX+N		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
14	A9J0922-10RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
15	A9J0922-11RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
16	A9J0922-12RE1	Water	8260C Full List		10/29/19	9101622	A19I040	
17	A9J0824-16RE1	Water	8260C Halogenated VOCs		11/04/19	9101622	A19I040	
18	A9J0952-02	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
"	"	Water	8260C Full List	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
19	9101622-DUP1	Water	QC	QC		9101622	A19I040	
20	A9J0952-03	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
21	A9J0952-04	Water	8260C RBDM List		11/01/19	9101622	A19I040	
"	"	Water	NWTPH-Gx	"	11/01/19	9101622	A19I040	
22	9J28025-IBL3	Water	QC	QC			A19I040	
23	A9J0959-01	Water	8260C BTEX	Anchor QEA, LLC	11/01/19	9101622	A19I040	
24	A9J0824-09RE1	Water	8260C Halogenated VOCs		11/04/19	9101622	A19I040	
25	A9J0974-01	Water	8260C RBDM List		10/29/19	9101622	A19I040	
26	A9J0955-01	Water	8260C Full List		11/07/19	9101622	A19I040	
27	A9J0955-02	Water	8260C Full List		11/07/19	9101622	A19I040	
28	A9J0955-03	Water	8260C Full List		11/07/19	9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
"	"	Water	8260C RBDM List	(QC Source)		9101622	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9101622	A19I040	
29	A9J0975-01	Water	8260C RBDM List		10/29/19	9101622	A19I040	
"	"	Water	8260C Full List	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX	(QC Source)		9101622	A19I040	
"	"	Water	8260C BTEX+N	(QC Source)		9101622	A19I040	
"	"	Water	8260C Halogenated VOCs	(QC Source)		9101622	A19I040	
"	"	Water	NWTPH-Gx	(QC Source)		9101622	A19I040	
30	9101622-MS1	Water	QC	QC		9101622	A19I040	

Sequence:	9J28025	Instrument:	VOA-GCMS9
Date:	10/28/19 07:42	Calibration:	A9J2503

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
31	9J28025-IBL4	Water	QC	QC			A19I040	
32	9J28025-IBL5	Water	QC	QC			A19I040	
33	9J28025-IBL7	Water	QC	QC			A19I040	
34	9J28025-IBL6	Water	QC	QC			A19I040	

A9J0459-01 → BTEX EB only.

Comments: DCM → MDL↑ MRL↑ @ 2.5ppb/5ppb.
Vccly MDL = MRL @ 1ppb Q55
1,2-Dibromoethane MDL = MRL @ 5ppb

Data Entered By: 10/29/19

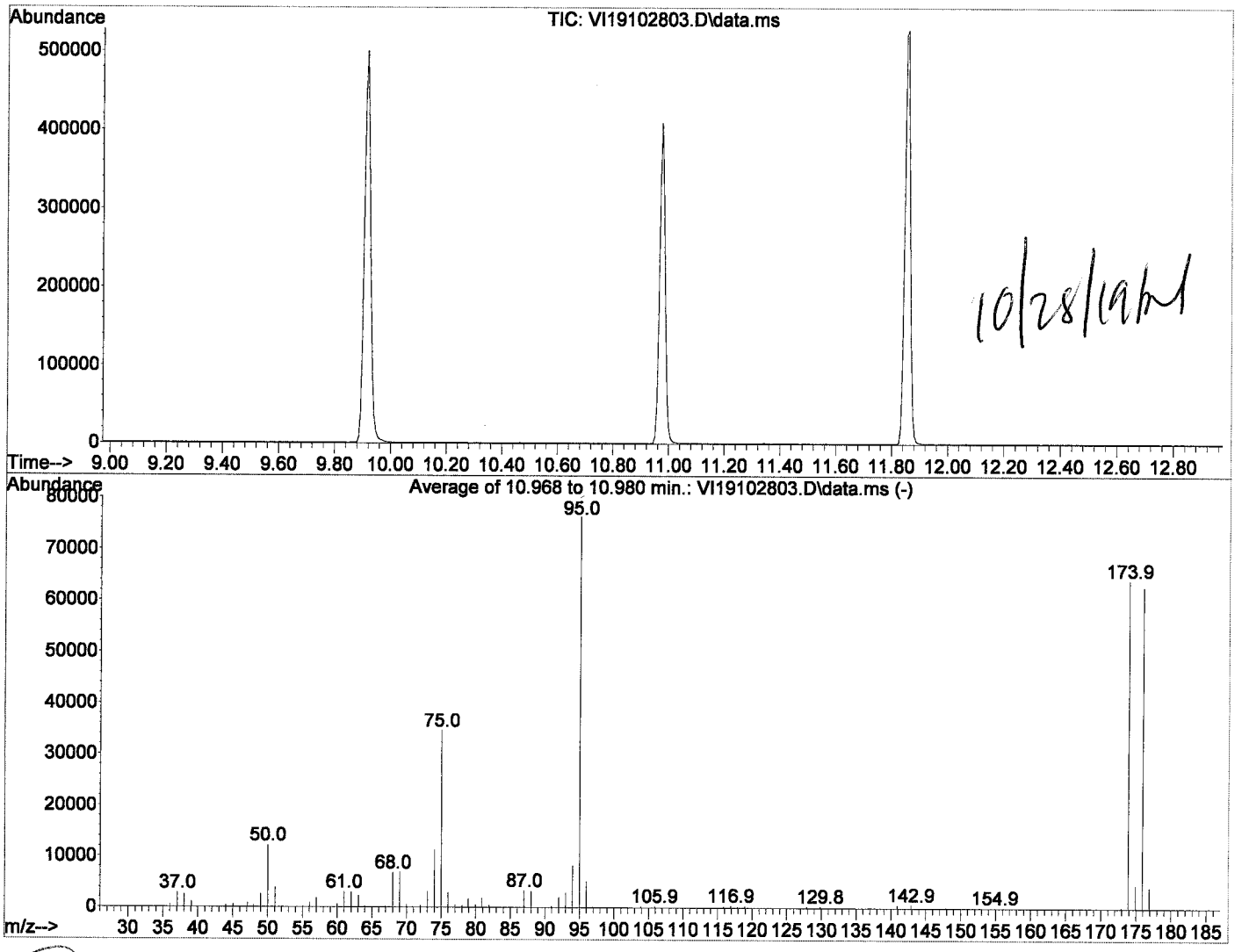
Data Reviewed By: 10/29/19

BFB

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102803.D
Acq On : 28 Oct 2019 8:57 am
Operator : TNL
Sample : 9J28025-TUN1
Misc : A19I040 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



10/28/19 AM

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	119.0	76248	PASS
96	95	5	9	6.8	5185	PASS
173	174	0.00	2	0.3	199	PASS
174	95	50	200	84.0	64056	PASS
175	174	5	9	7.3	4657	PASS
176	174	95	105	98.1	62813	PASS
177	176	5	10	6.5	4094	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102803.D
Acq On : 28 Oct 2019 8:57 am
Operator : TNL
Sample : 9J28025-TUN1
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:00 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	104890	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	281059	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.856	152	126964	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	100239	48.64	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	334683	50.51	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	375640	50.92	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	103931	50.66	ug/L	0.00
Target Compounds						Qvalue
5) Bromomethane	2.378	96	179	0.13	ug/L	# 1
6) Chloroethane	2.506	64	189	0.18	ug/L	# 36
14) Methylene Chloride	3.881	84	2951	0.68	ug/L	# 78
15) Acetone	3.948	43	681	0.74	ug/L	# 44

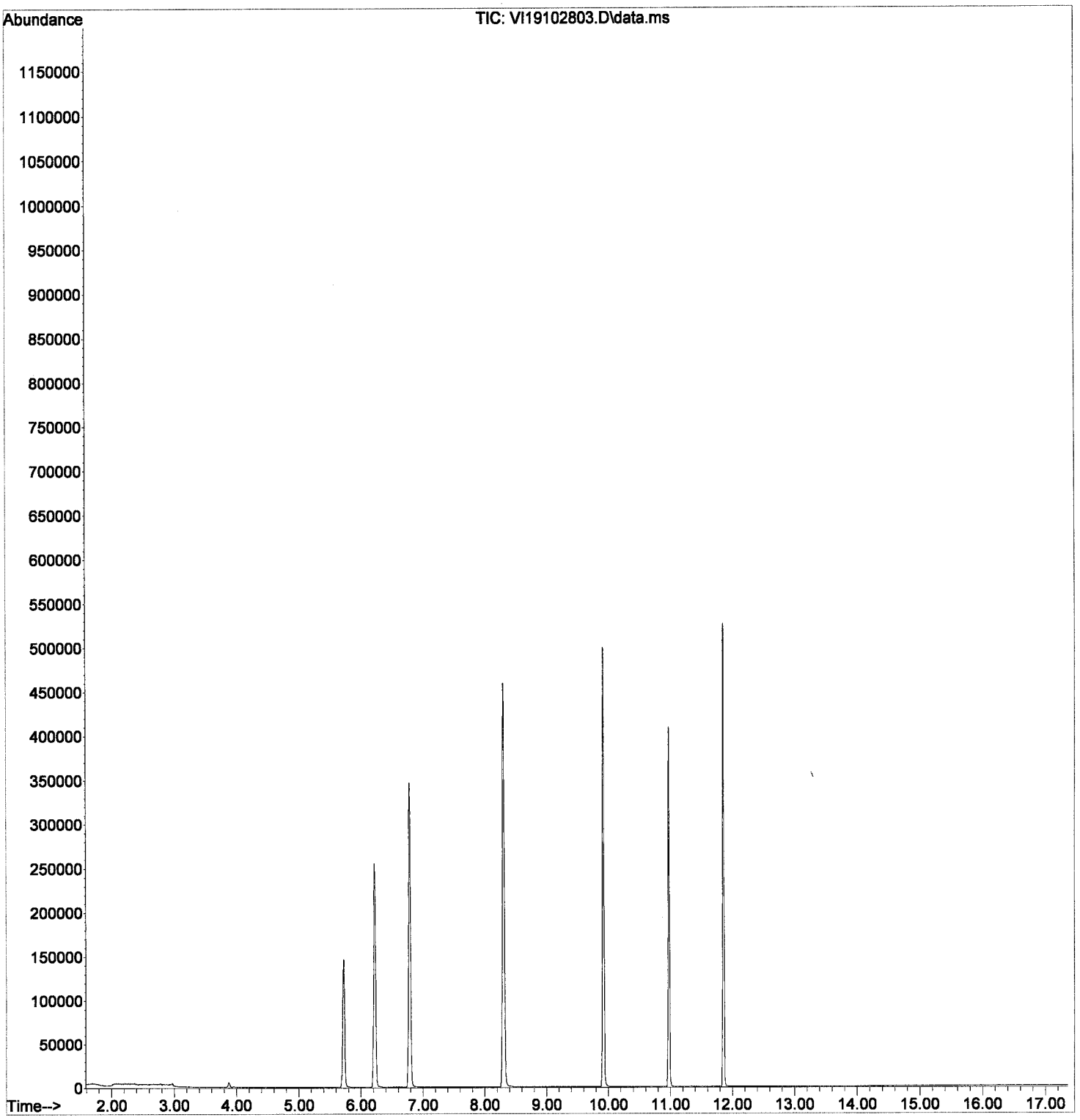
10/28/19 TNL

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102803.D
Acq On : 28 Oct 2019 8:57 am
Operator : TNL
Sample : 9J28025-TUN1
Misc : A19I040 BFB (IS/SURR)
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:00 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\2019-10\9J28025\
Data File : VI19102804.D
Acq On : 28 Oct 2019 9:24 am
Operator : TNL
Sample : 9101622-BS1
Misc : 1X 5mL 20/40PPB VOCR A19J352
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:03 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

10/28/19 MM

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	98	0.00	
2		Dichlorodifluoromethane	20.000	21.089		-5.4	105	0.01	
3	P	Chloromethane	20.000	17.181		14.1	91	0.01	
4	C	Vinyl Chloride	20.000	19.907		0.5	95	0.01	
5		Bromomethane	20.000	22.532		-12.7	115	0.01	
6		Chloroethane	20.000	17.108		14.5	95	0.01	
7		Trichlorofluoromethane	20.000	19.668		1.7	92	0.01	
8		Ethanol	1250.000	920.054	NR	26.4#	69	0.01	
9	C	1,1-Dichloroethene	20.000	19.208		4.0	93	0.00	
10		Carbon Disulfide	20.000	19.238		3.8	94	0.01	
11		Freon 113	20.000	19.622		1.9	93	0.01	
12		Iodomethane	20.000	13.290	NR	33.6#	77	0.01	
13		Acrolein	20.000	18.379		8.1	88	0.01	
14		Methylene Chloride	20.000	19.783		1.1	95	0.00	
15		Acetone	40.000	36.358		9.1	89	0.00	
16		t-1,2-Dichloroethene	20.000	20.218		-1.1	92	0.01	
17		n-Hexane	20.000	20.815		-4.1	97	0.00	
18		Methyl-tert-butyl-ether	20.000	18.553		7.2	89	0.00	
19		tert-Butanol (TBA)	1250.000	986.671	NR	21.1#	68	0.00	
20		Diisopropyl ether (DIPE)	5.000	4.261		14.8	78	0.00	
21	P	1,1-Dichloroethane	20.000	19.077		4.6	90	0.01	
22		Acrylonitrile	20.000	21.123		-5.6	98	0.00	
23		Ethyl-tert-butyl ether (ET	5.000	4.142		17.2	76	0.00	
24		Vinyl Acetate	20.000	16.371		18.1	78	0.00	
25		c-1,2-Dichloroethene	20.000	19.574		2.1	92	0.00	
26		2,2-Dichloropropane	20.000	16.291		18.5	78	0.00	
27		Bromochloromethane	20.000	22.136		-10.7	96	0.00	
28	C	Chloroform	20.000	19.986		0.1	91	0.00	
29		Carbon Tetrachloride	20.000	14.101		29.5#	68	0.00	055
30		Tetrahydrofuran	20.000	19.968		0.2	95	0.00	
31		1,1,1-Trichloroethane	20.000	17.278		13.6	82	0.00	
32	S	Dibromofluoromethane (S)	50.000	48.842		2.3	96	0.00	
33		1,1-Dichloropropene	20.000	19.193		4.0	91	0.00	
34		2-Butanone (MEK)	40.000	39.226		1.9	93	0.00	
35		Benzene	20.000	19.552		2.2	94	0.00	
36		tert-Amyl methyl ether (TA	5.000	4.084		18.3	77	0.00	
37		1,2-Dichloroethane (EDC)	20.000	19.436		2.8	91	0.00	
38		iso-Butyl Alcohol	500.000	365.954	NR	26.8#	67	0.00	
39	S	1,4-Difluorobenzene (S)	50.000	50.737		-1.5	99	0.00	
40		Trichloroethene (TCE)	20.000	20.375		-1.9	93	0.00	
41		Tert-Amyl-Ethyl-Ether (TAEE	5.000	4.059		18.8	74	0.00	
42		Dibromomethane	20.000	20.949		-4.7	96	0.00	
43	C	1,2-Dichloropropane	20.000	19.348		3.3	91	0.00	
44		Bromodichloromethane	20.000	18.405		8.0	86	0.00	
45		Chlorobenzene-d5 (I)	50.000	50.000		0.0	99	0.00	
46		2-Chloroethyl Vinyl Ether	20.000	19.298		3.5	91	0.00	
47		c-1,3-Dichloropropene	20.000	17.896		10.5	83	0.00	
48	S	Toluene-d8 (S)	50.000	50.090		-0.2	100	0.00	
49	C	Toluene	20.000	19.008		5.0	93	0.00	
50		Tetrachloroethene (PCE)	20.000	20.210		-1.1	93	0.00	

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102804.D
Acq On : 28 Oct 2019 9:24 am
Operator : TNL
Sample : 9101622-BS1
Misc : 1X 5mL 20/40PPB VOCR A19J352
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:03 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	40.414	-1.0	91	0.00
52		t-1,3-Dichloropropene	20.000	16.385	18.1	77	0.00
53		1,1,2-Trichloroethane	20.000	20.573	-2.9	94	0.00
54		Dibromochloromethane	20.000	18.766	6.2	81	0.00
55		1,3-Dichloropropane	20.000	20.049	-0.2	93	0.00
56		1,2-Dibromoethane (EDB)	20.000	19.289	3.6	89	0.00
57		2-Hexanone	40.000	39.781	0.5	90	0.00
58	P	Chlorobenzene	20.000	19.922	0.4	94	0.00
59	C	Ethylbenzene	20.000	19.296	3.5	93	0.00
60		1,1,1,2-Tetrachloroethane	20.000	16.440	17.8	75	0.00
61		m,p-Xylenes (2)	40.000	39.013	2.5	91	0.00
62		o-Xylene	20.000	19.678	1.6	90	0.00
63		Styrene	20.000	19.908	0.5	91	0.00
64	P	Bromoform	20.000	16.379	18.1	79	0.00
65		Isopropylbenzene	20.000	19.823	0.9	91	0.00
66	I	1,4-Dichlorobenzene-d4 (I)	50.000	50.000	0.0	99	0.00
67	S	4-Bromofluorobenzene (S)	50.000	48.999	2.0	98	0.00
68		Bromobenzene	20.000	19.919	0.4	93	0.00
69		n-Propylbenzene	20.000	19.373	3.1	92	0.00
70	P	1,1,2,2-Tetrachloroethane	20.000	19.344	3.3	91	0.00
71		2-Chlorotoluene	20.000	19.160	4.2	90	0.00
72		1,3,5-Trimethylbenzene	20.000	19.873	0.6	91	0.00
73		1,2,3-Trichloropropane	20.000	19.924	0.4	94	0.00
74		t-1,4-Dichloro-2-butene	20.000	18.213	8.9	86	0.00
75		4-Chlorotoluene	20.000	19.450	2.8	92	0.00
76		tert-Butylbenzene	20.000	18.741	6.3	87	0.00
77		1,2,4-Trimethylbenzene	20.000	19.994	0.0	91	0.00
78		sec-Butylbenzene	20.000	19.513	2.4	91	0.00
79		4-Isopropyltoluene	20.000	20.366	-1.8	89	0.00
80		1,3-Dichlorobenzene	20.000	19.871	0.6	93	0.00
81		1,4-Dichlorobenzene	20.000	19.855	0.7	94	0.00
82		n-Butylbenzene	20.000	21.055	-5.3	91	0.00
83		1,2-Dichlorobenzene	20.000	19.625	1.9	92	0.00
84		1,2-Dibromo-3-Chloropropane	20.000	14.827	25.9#	72	0.00
85		Hexachlorobutadiene	20.000	19.752	1.2	90	0.00
86		1,2,4-Trichlorobenzene	20.000	20.704	-3.5	92	0.00
87		Naphthalene	20.000	19.844	0.8	88	0.00
88		1,2,3-Trichlorobenzene	20.000	20.372	-1.9	91	0.00

055

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102804.D
Acq On : 28 Oct 2019 9:24 am
Operator : TNL
Sample : 9101622-BS1
Misc : 1X 5mL 20/40PPB VOCR A19J352
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:03 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	110053	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	304194	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	150051	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (S)	5.718	111	105615	48.84 ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	352766	50.74 ug/L	0.00
48) Toluene-d8 (S)	8.297	98	399932	50.09 ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	118797	49.00 ug/L	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.685	85	37939	21.09 ug/L	99
3) Chloromethane	1.904	50	40987	17.18 ug/L	98
4) Vinyl Chloride	2.007	62	47578	19.91 ug/L	97
5) Bromomethane	2.366	96	31747	22.53 ug/L	98
6) Chloroethane	2.500	64	18793	17.11 ug/L	82
7) Trichlorofluoromethane	2.670	101	53228	19.67 ug/L	95
8) Ethanol	3.242	45	48659	920.05 ug/L	88
9) 1,1-Dichloroethene	3.236	61	50110	19.21 ug/L	92
10) Carbon Disulfide	3.254	76	92615	19.24 ug/L	98
11) Freon 113	3.291	101	36808	19.62 ug/L	96
12) Iodomethane	3.394	142	8787	13.29 ug/L	93
13) Acrolein	3.625	56	9190	18.38 ug/L	70
14) Methylene Chloride	3.875	84	41424	19.78 ug/L	88
15) Acetone	3.942	43	35064	36.36 ug/L	92
16) t-1,2-Dichloroethene	4.045	61	51625	20.22 ug/L	91
17) n-Hexane	4.124	86	8092	20.82 ug/L	93
18) Methyl-tert-butyl-ether	4.173	73	110114	18.55 ug/L	92
19) tert-Butanol (TBA)	4.294	59	420403	986.67 ug/L	97
20) Diisopropyl ether (DIPE)	4.568	45	27215	4.26 ug/L	95
21) 1,1-Dichloroethane	4.690	63	67655	19.08 ug/L	95
22) Acrylonitrile	4.751	53	22548	21.12 ug/L	97
23) Ethyl-tert-butyl ether...	4.945	59	25422	4.14 ug/L	98
24) Vinyl Acetate	4.957	43	70122	16.37 ug/L	97
25) c-1,2-Dichloroethene	5.243	61	53588	19.57 ug/L	91
26) 2,2-Dichloropropane	5.353	77	37701	16.29 ug/L	81
27) Bromochloromethane	5.450	130	29737	22.14 ug/L	94
28) Chloroform	5.529	83	69296	19.99 ug/L	97
29) Carbon Tetrachloride	5.663	117	29737	14.10 ug/L	92
30) Tetrahydrofuran	5.700	42	20264	19.97 ug/L	87
31) 1,1,1-Trichloroethane	5.736	97	50568	17.28 ug/L	97
33) 1,1-Dichloropropene	5.864	75	53942	19.19 ug/L	96
34) 2-Butanone (MEK)	5.858	43	59973	39.23 ug/L	95
35) Benzene	6.126	78	164420	19.55 ug/L	96
36) tert-Amyl methyl ether...	6.253	73	23305	4.08 ug/L	93
37) 1,2-Dichloroethane (EDC)	6.345	62	53543	19.44 ug/L	91
38) iso-Butyl Alcohol	6.375	43	56055	365.95 ug/L	95
40) Trichloroethene (TCE)	6.746	130	44150	20.37 ug/L	95
41) Tert-Amyl-Ethyl-Ether ...	6.995	59	16723	4.06 ug/L	85
42) Dibromomethane	7.202	93	28274	20.95 ug/L	97
43) 1,2-Dichloropropane	7.312	63	40585	19.35 ug/L	93
44) Bromodichloromethane	7.385	83	44513	18.40 ug/L	95
46) 2-Chloroethyl Vinyl Ether	8.024	63	30134	19.30 ug/L #	100
47) c-1,3-Dichloropropene	8.091	75	53821	17.90 ug/L	86

10/28/19 MM

Q5J

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102804.D
Acq On : 28 Oct 2019 9:24 am
Operator : TNL
Sample : 9101622-BS1
Misc : 1X 5mL 20/40PPB VOCR A19J352
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:03 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

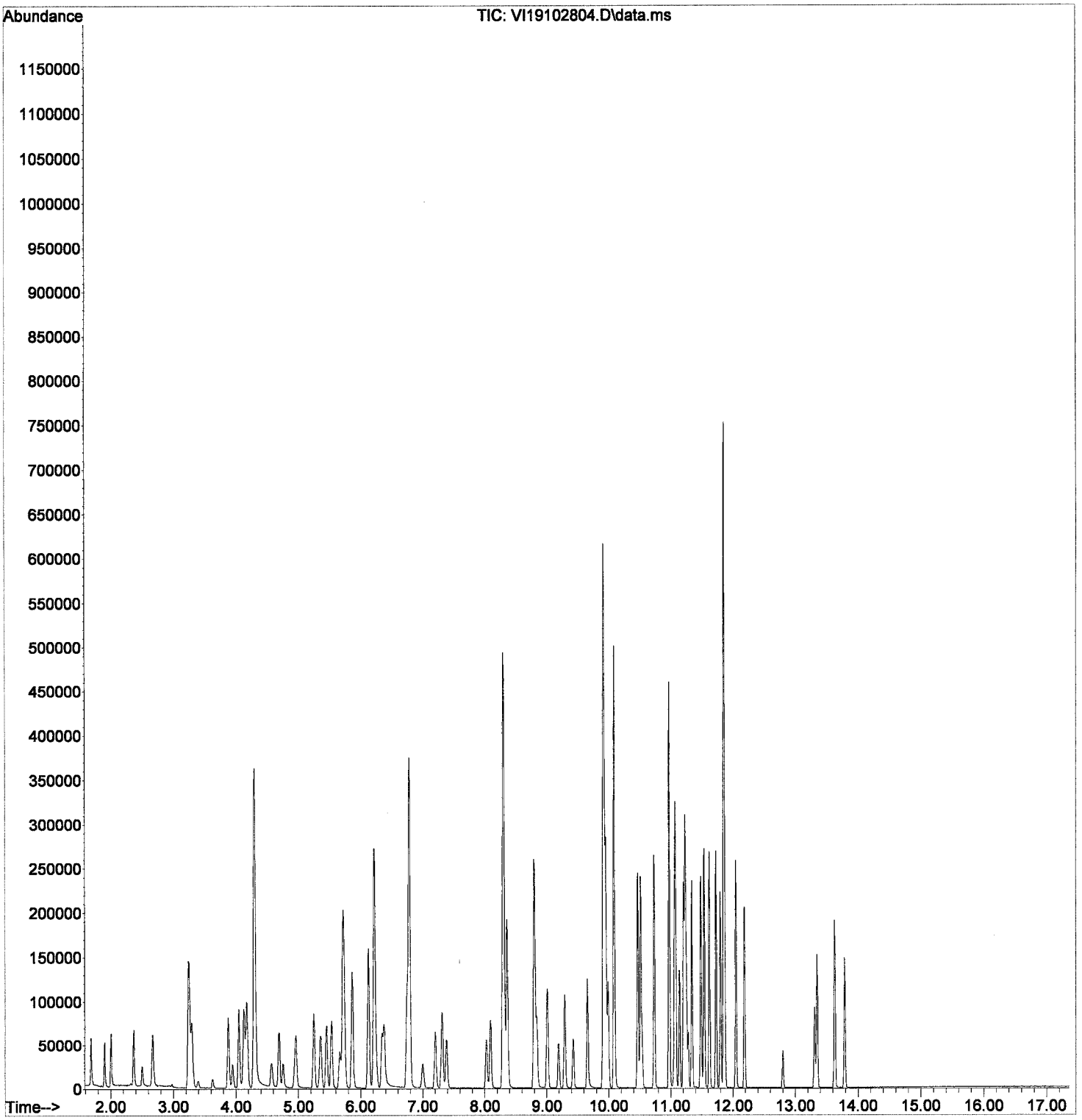
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
49) Toluene	8.358	91	170027	19.01 ug/L		98
50) Tetrachloroethene (PCE)	8.796	166	42082	20.21 ug/L		89
51) 4-Methyl-2-Pentanone (...	8.802	43	109749	40.41 ug/L		94
52) t-1,3-Dichloropropene	8.839	75	43707	16.38 ug/L		96
53) 1,1,2-Trichloroethane	9.009	97	40796	20.57 ug/L		91
54) Dibromochloromethane	9.192	129	30085	18.77 ug/L		99
55) 1,3-Dichloropropane	9.289	76	68581	20.05 ug/L		91
56) 1,2-Dibromoethane (EDB)	9.423	107	41646	19.29 ug/L		91
57) 2-Hexanone	9.654	43	79159	39.78 ug/L		90
58) Chlorobenzene	9.928	112	113755	19.92 ug/L		98
59) Ethylbenzene	9.952	91	181017	19.30 ug/L		97
60) 1,1,1,2-Tetrachloroethane	9.989	131	27375	16.44 ug/L		95
61) m,p-Xylenes (2)	10.086	91	269505	39.01 ug/L		100
62) o-Xylene	10.469	91	134767	19.68 ug/L		100
63) Styrene	10.512	104	109590	19.91 ug/L		97
64) Bromoform	10.536	173	18794	16.38 ug/L		97
65) Isopropylbenzene	10.731	105	165630	19.82 ug/L		99
68) Bromobenzene	11.059	156	46325	19.92 ug/L		90
69) n-Propylbenzene	11.071	91	193185	19.37 ug/L		99
70) 1,1,2,2-Tetrachloroethane	11.138	85	37979	19.34 ug/L		96
71) 2-Chlorotoluene	11.205	126	41171	19.16 ug/L		99
72) 1,3,5-Trimethylbenzene	11.230	105	135424	19.87 ug/L		97
73) 1,2,3-Trichloropropane	11.248	110	19023	19.92 ug/L		97
74) t-1,4-Dichloro-2-butene	11.278	53	12443	18.21 ug/L	#	56
75) 4-Chlorotoluene	11.339	91	119384	19.45 ug/L		98
76) tert-Butylbenzene	11.485	91	71313	18.74 ug/L		98
77) 1,2,4-Trimethylbenzene	11.540	105	137070	19.99 ug/L		98
78) sec-Butylbenzene	11.619	105	163838	19.51 ug/L		99
79) 4-Isopropyltoluene	11.729	119	135295	20.37 ug/L		98
80) 1,3-Dichlorobenzene	11.795	146	80507	19.87 ug/L		98
81) 1,4-Dichlorobenzene	11.862	146	83883	19.85 ug/L		97
82) n-Butylbenzene	12.045	91	118871	21.06 ug/L		99
83) 1,2-Dichlorobenzene	12.185	146	77214	19.62 ug/L		97
84) 1,2-Dibromo-3-Chloropr...	12.799	157	9864	14.83 ug/L		86
85) Hexachlorobutadiene	13.304	223	10859	19.75 ug/L		96
86) 1,2,4-Trichlorobenzene	13.347	180	46948	20.70 ug/L		98
87) Naphthalene	13.627	128	143070	19.84 ug/L		98
88) 1,2,3-Trichlorobenzene	13.785	180	43858	20.37 ug/L		94

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102804.D
Acq On : 28 Oct 2019 9:24 am
Operator : TNL
Sample : 9101622-BS1
Misc : 1X 5mL 20/40PPB VOCR A19J352
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:04:03 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\2019-10\9J28025\
Data File : VI19102805.D
Acq On : 28 Oct 2019 9:51 am
Operator : TNL
Sample : 9101622-BS2
Misc : 1X 5mL 500PPB GX A19J354
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:10:12 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	102	0.00
2	S	1,4-Difluorobenzene (Sur)	50.000	49.869	0.3	103	0.00
3	S	4-Bromofluorobenzene (Sur)	50.000	48.487	3.0	100	0.00
4	H	NWTPH-Gx (TPH)	500.000	489.762	2.0	102	0.00
5	H	TPHg (C5-C9)	500.000	485.692	2.9	100	0.00
6	H	TPHg (C6-C10)	500.000	490.465	1.9	101	0.00
7	H	CA-LUFT (C5-C12)	500.000	483.517	3.3	101	0.00
8		Benzene (NR)	-1.000	0.000	0.0	103	0.00
9	S	Toluene-d8 (NR)	-1.000	0.000	0.0	101	0.00
10		Toluene (NR)	-1.000	0.000	0.0	101	0.00
11	S	Chlorobenzene-d5 (NR)	-1.000	0.000	0.0	101	0.00
12	S	1,4-Dichlorobenzene-d4 (NR)	-1.000	0.000	0.0	101	0.00
13		Naphthalene (NR)	-1.000	0.000	0.0	114	0.00

10/28/19 JM

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102805.D
Acq On : 28 Oct 2019 9:51 am
Operator : TNL
Sample : 9101622-BS2
Misc : 1X 5mL 500PPB GX A19J354
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:10:12 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	219404	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.783	114	355767	49.87 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115479	48.49 ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	401162	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	303808	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.856	150	226286	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	3022778m	~~489.76 ug/L~~	
5) TPHg (C5-C9)	9.890	TIC	4152741m	485.69 ug/L	
6) TPHg (C6-C10)	9.890	TIC	3553471m	490.46 ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	4902294m	483.52 ug/L	

NR

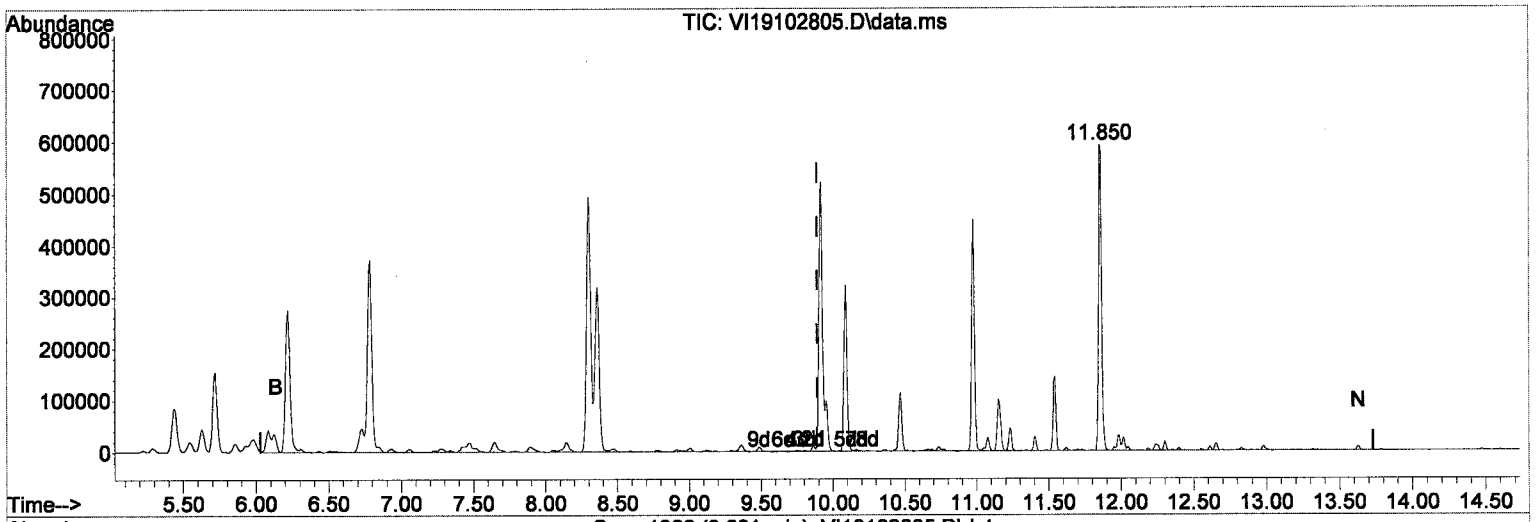
12/28/19 DG

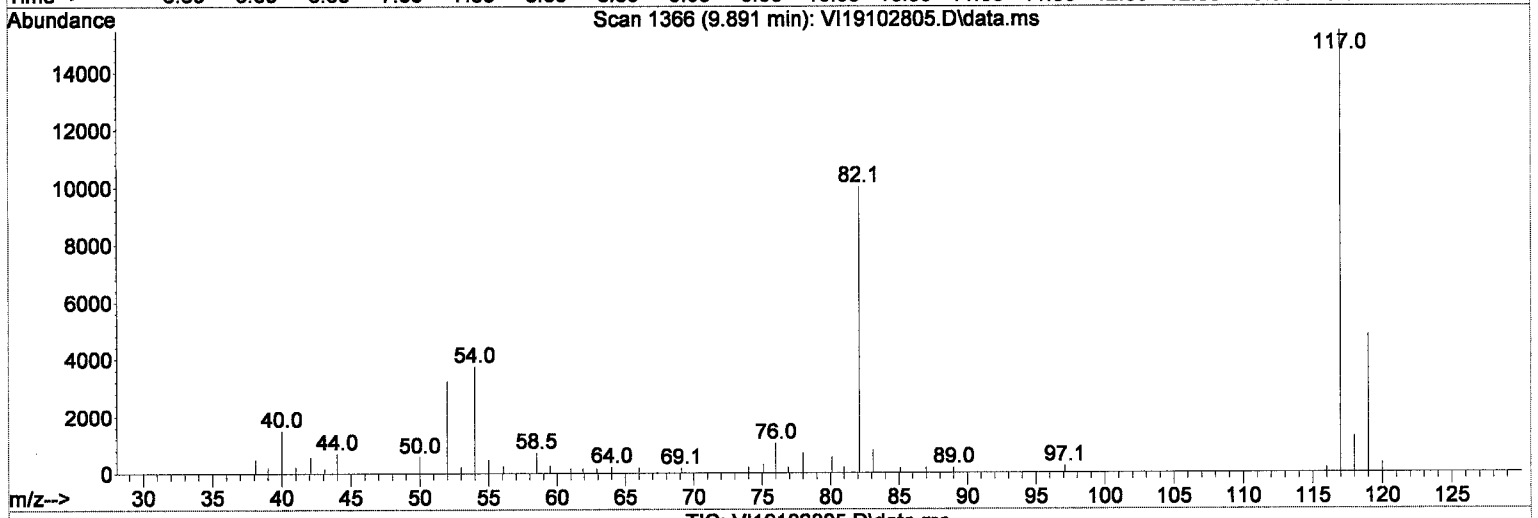
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102805.D
Acq On : 28 Oct 2019 9:51 am
Operator : TNL
Sample : 9101622-BS2
Misc : 1X 5mL 500PPB GX A19J354
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:10:12 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: VI19102805.D\data.ms

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

9.890min (0.000) 489.76 ug/L m

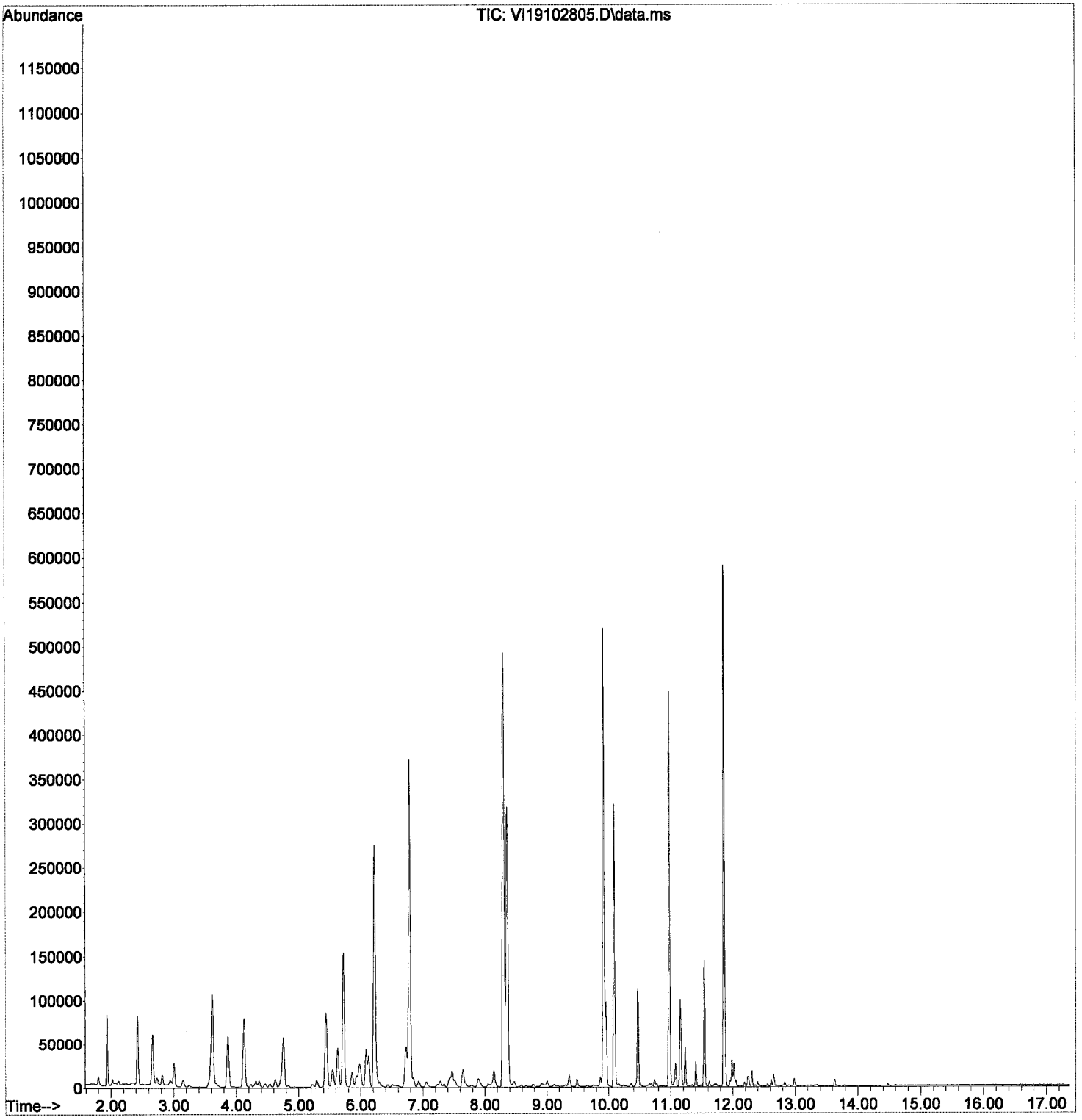
response 3022778

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\9J28025\
Data File : VI19102805.D
Acq On : 28 Oct 2019 9:51 am
Operator : TNL
Sample : 9101622-BS2
Misc : 1X 5mL 500PPB GX A19J354
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:07:29 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\2019-10\9J28025\
Data File : VI19102806.D
Acq On : 28 Oct 2019 10:17 am
Operator : TNL
Sample : 9101622-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:10:15 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	207319	50.00 ug/L	0.00
System Monitoring Compounds					
2) 1,4-Difluorobenzene (Sur)	6.783	114	337411	50.05 ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	104498	46.43 ug/L	0.00
9) Toluene-d8 (NR)	8.297	98	373000	0.00 ug/L	0.00
11) Chlorobenzene-d5 (NR)	9.916	117	281327	0.00 ug/L	0.00
12) 1,4-Dichlorobenzene-d4...	11.850	150	199347	0.00 ug/L	0.00
Target Compounds					Qvalue
4) NWTPH-Gx (TPH)	9.890	TIC	-37352m	18.51 ug/L	
5) TPHg (C5-C9)	9.890	TIC	312107m	12.99 ug/L	
6) TPHg (C6-C10)	9.890	TIC	287624m	14.10 ug/L	
7) CA-LUFT (C5-C12)	9.890	TIC	293550m	15.08 ug/L	

10/28/2019

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102806.D
Acq On : 28 Oct 2019 10:17 am
Operator : TNL
Sample : 9101622-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:07:32 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	105942	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	281327	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	128106	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	99002	47.56	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	337411	50.41	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	372607	50.46	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	104498	50.48	ug/L	0.00
Target Compounds						Qvalue
3) Chloromethane	1.904	50	234	0.10	ug/L	# 47
6) Chloroethane	2.463	64	125	0.12	ug/L	# 49
14) Methylene Chloride	3.881	84	2264	0.30	ug/L	# 80
15) Acetone	3.954	43	711	0.77	ug/L	# 44

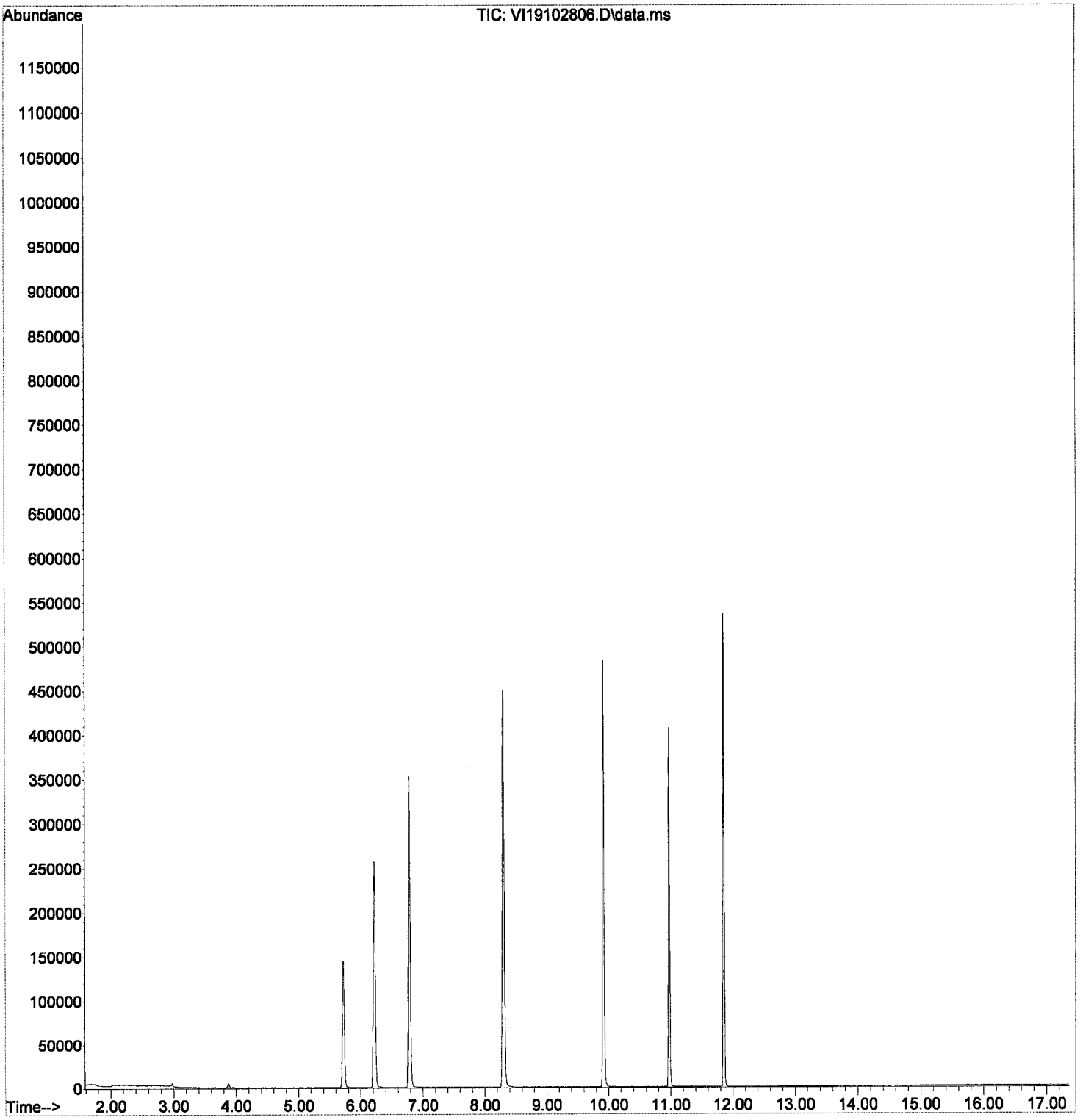
10/28/19 m

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102806.D
Acq On : 28 Oct 2019 10:17 am
Operator : TNL
Sample : 9101622-BLK1
Misc : 1X 5mL DI
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 28 11:07:32 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\9J28025\
Data File : VI19102821.D
Acq On : 28 Oct 2019 5:00 pm
Operator : TNL
Sample : A9J0959-01
Misc : 1X 5mL EB ONLY
ALS Vial : 21 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 29 09:33:18 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	96110	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	258947	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.856	152	115915	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (S)	5.718	111	92830	49.16	ug/L	0.00
39) 1,4-Difluorobenzene (S)	6.783	114	309199	50.92	ug/L	0.00
48) Toluene-d8 (S)	8.297	98	348185	51.23	ug/L	0.00
67) 4-Bromofluorobenzene (S)	10.974	174	95902	51.20	ug/L	0.00
Target Compounds						Qvalue
6) Chloroethane	2.482	64	348	0.36	ug/L	# 36
15) Acetone	3.954	43	1919	2.28	ug/L	80

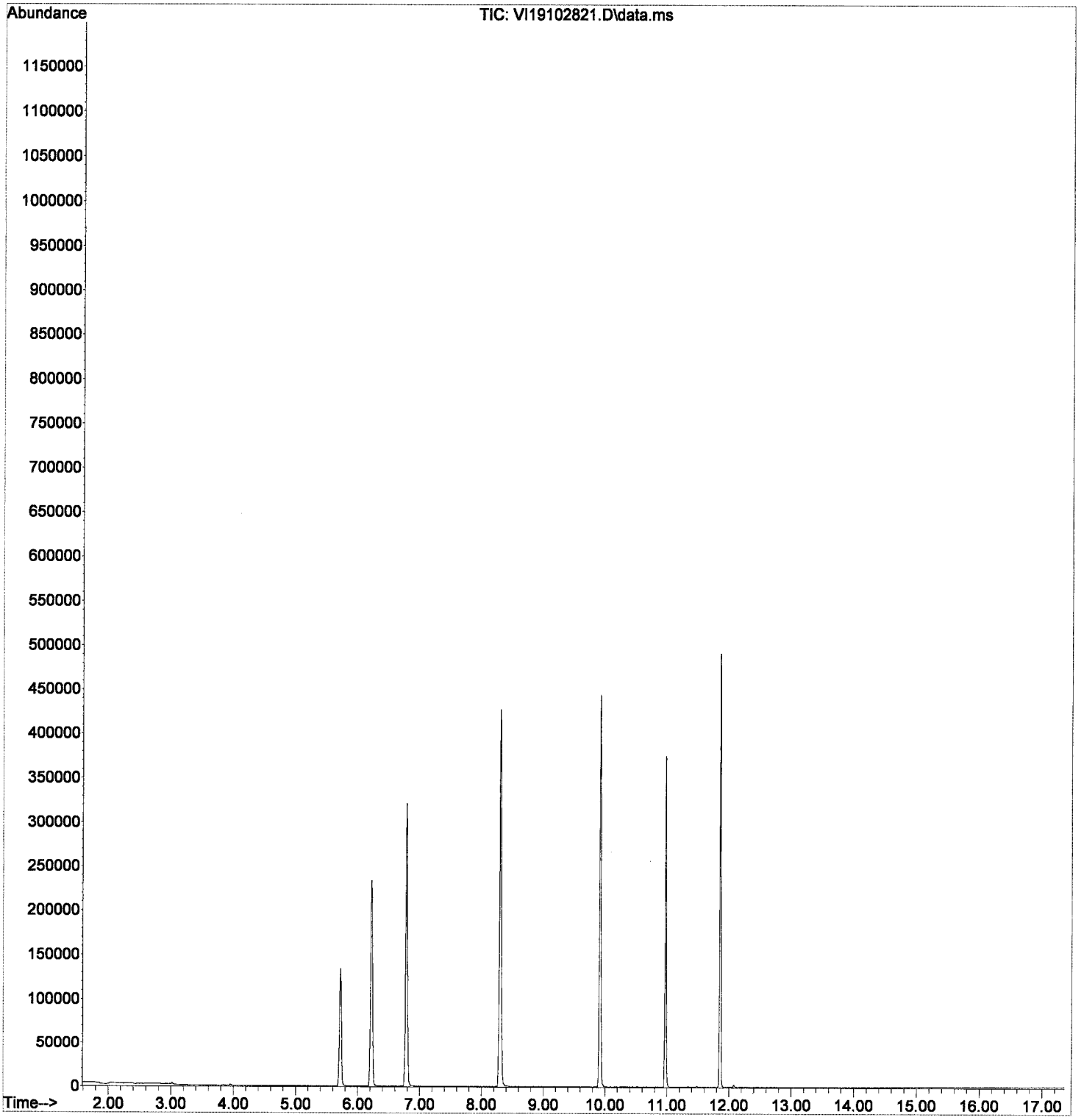
10/29/19 MM

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28025\
Data File : VI19102821.D
Acq On : 28 Oct 2019 5:00 pm
Operator : TNL
Sample : A9J0959-01
Misc : 1X 5mL EB ONLY
ALS Vial : 21 Sample Multiplier: 1
DataAcq Meth:VI1611RUN.M

Quant Time: Oct 29 09:33:18 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

BTEX 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.

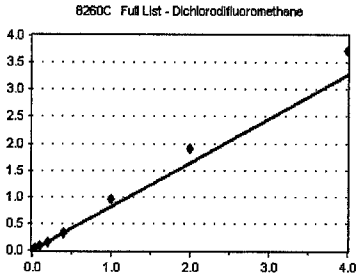
Element Calibration Review Sheet

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**

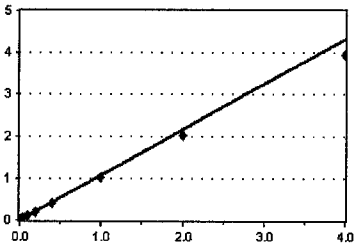


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	562	0.627	1.67
9J24043-CAL4	1	1583	0.682	1.68
9J24043-CAL5	2	3731	0.842	1.69
9J24043-CAL6	5	9010	0.812	1.68
9J24043-CAL7	10	18118	0.770	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**

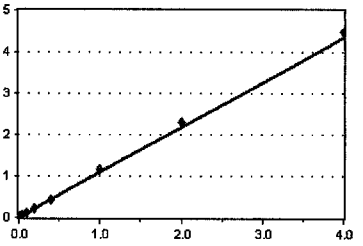


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~479~~	~~2.063~~	~~1.90~~
9J24043-CAL2	0.2	669	1.457	1.90
9J24043-CAL3	0.4	1136	1.268	1.89
9J24043-CAL4	1	2407	1.037	1.89
9J24043-CAL5	2	4743	1.070	1.90
9J24043-CAL6	5	11370	1.024	1.89
9J24043-CAL7	10	22449	0.954	1.90
9J24043-CAL8	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**

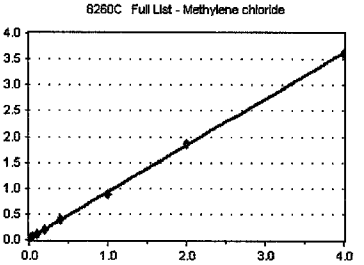


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	406	0.884	2.01
9J24043-CAL3	0.4	967	1.079	2.00
9J24043-CAL4	1	2351	1.013	2.00
9J24043-CAL5	2	5030	1.135	2.01
9J24043-CAL6	5	12653	1.140	2.00
9J24043-CAL7	10	25149	1.069	2.00
9J24043-CAL8	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**

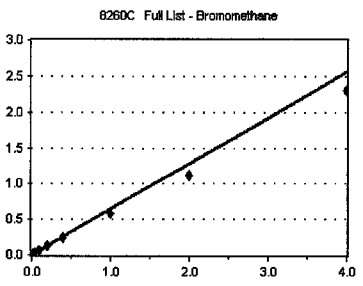
Element Calibration Review Sheet

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**

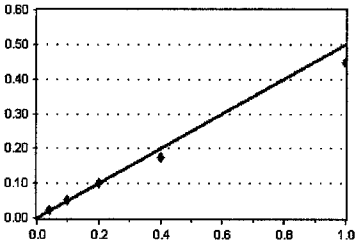


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~839~~	~~0.937~~	~~2.36~~
9J24043-CAL4	1	1763	0.760	2.36
9J24043-CAL5	2	3140	0.709	2.37
9J24043-CAL6	5	7782	0.701	2.36
9J24043-CAL7	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**

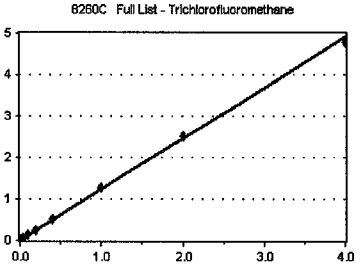


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL5	2	2540	0.573	2.52
9J24043-CAL6	5	5899	0.531	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**

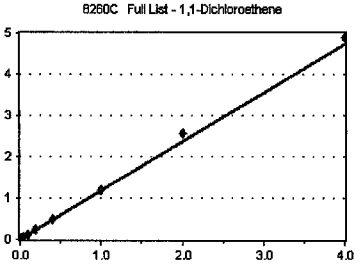


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	958	1.069	2.66
9J24043-CAL4	1	2784	1.200	2.66
9J24043-CAL5	2	5667	1.279	2.68
9J24043-CAL6	5	14236	1.282	2.66
9J24043-CAL7	10	29038	1.235	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**

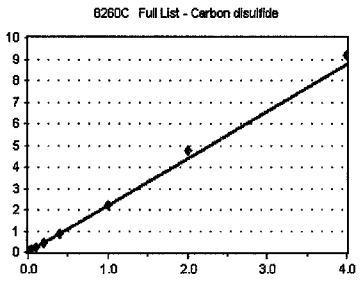
Element Calibration Review Sheet

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**

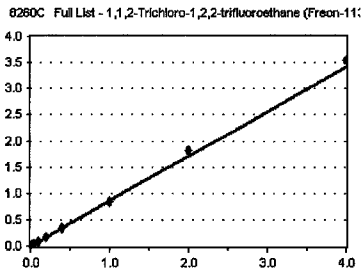


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	4573	1.970	3.25
9J24043-CAL5	2	9757	2.202	3.26
9J24043-CAL6	5	24060	2.167	3.25
9J24043-CAL7	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**

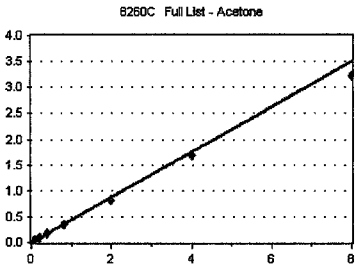


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	1717	0.740	3.29
9J24043-CAL5	2	3803	0.858	3.30
9J24043-CAL6	5	9544	0.860	3.29
9J24043-CAL7	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**

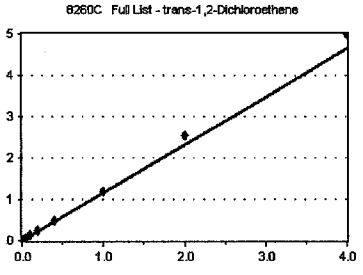


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.4~~	~~1168~~	~~1.272~~	~~3.95~~
~~9J24043-CAL3~~	~~0.8~~	~~1616~~	~~0.902~~	~~3.95~~
~~9J24043-CAL4~~	~~2~~	~~2940~~	~~0.633~~	~~3.95~~
9J24043-CAL5	4	4523	0.510	3.95
9J24043-CAL6	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**

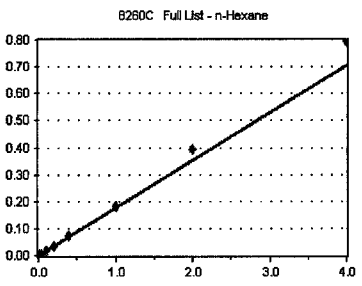
Element Calibration Review Sheet

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**

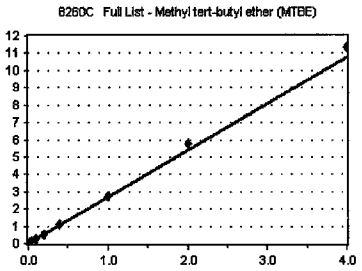


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	357	0.154	4.12
9J24043-CAL5	2	709	0.160	4.13
9J24043-CAL6	5	1836	0.165	4.12
9J24043-CAL7	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**

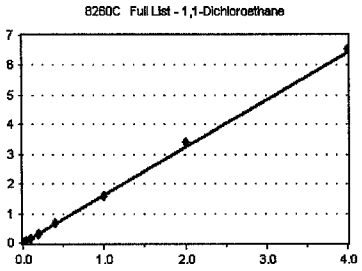


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	2309	2.577	4.17
9J24043-CAL4	1	5789	2.494	4.17
9J24043-CAL5	2	11957	2.698	4.17
9J24043-CAL6	5	29908	2.694	4.17
9J24043-CAL7	10	61557	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**

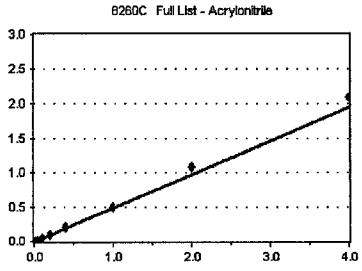


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1323	1.477	4.68
9J24043-CAL4	1	3672	1.582	4.68
9J24043-CAL5	2	7227	1.631	4.69
9J24043-CAL6	5	18307	1.649	4.68
9J24043-CAL7	10	36999	1.573	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**

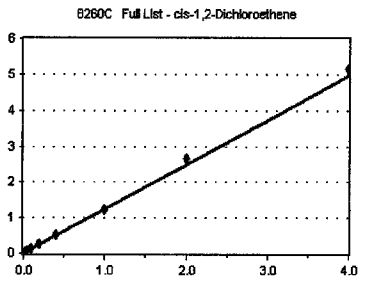
Element Calibration Review Sheet

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**

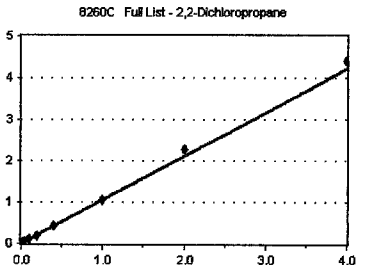


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1008	1.125	5.24
9J24043-CAL4	1	2744	1.182	5.24
9J24043-CAL5	2	5568	1.256	5.25
9J24043-CAL6	5	13959	1.257	5.24
9J24043-CAL7	10	28723	1.221	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**

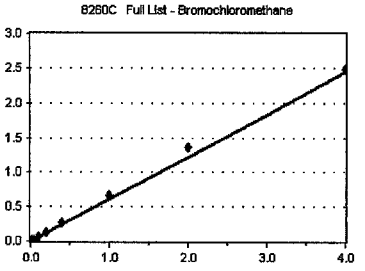


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	853	0.952	5.35
9J24043-CAL4	1	2316	0.998	5.35
9J24043-CAL5	2	4776	1.078	5.35
9J24043-CAL6	5	11793	1.062	5.35
9J24043-CAL7	10	23663	1.006	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**

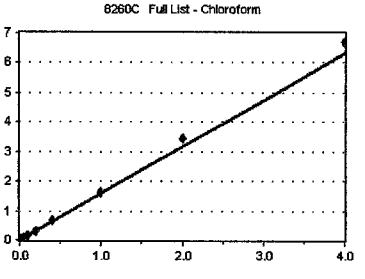


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	391	0.436	5.44
9J24043-CAL4	1	1188	0.512	5.45
9J24043-CAL5	2	2679	0.605	5.46
9J24043-CAL6	5	7172	0.646	5.44
9J24043-CAL7	10	14961	0.636	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**

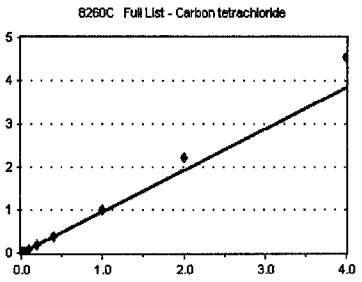
Element Calibration Review Sheet

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**

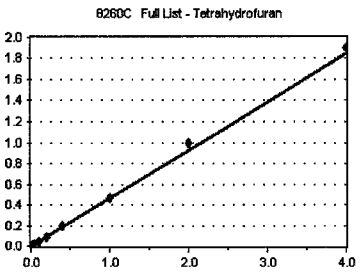


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~618~~	~~0.690~~	~~5.65~~
9J24043-CAL4	1	1791	0.772	5.66
9J24043-CAL5	2	4001	0.903	5.66
9J24043-CAL6	5	9957	0.897	5.66
9J24043-CAL7	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**

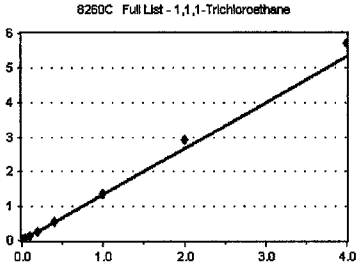


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	945	0.407	5.71
9J24043-CAL5	2	2045	0.461	5.71
9J24043-CAL6	5	5112	0.460	5.71
9J24043-CAL7	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**

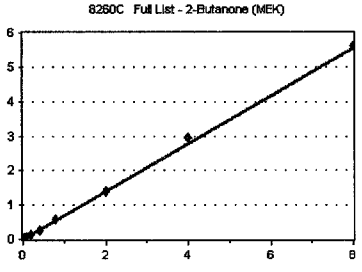


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1012	1.130	5.73
9J24043-CAL4	1	2903	1.251	5.73
9J24043-CAL5	2	5937	1.340	5.74
9J24043-CAL6	5	14957	1.347	5.73
9J24043-CAL7	10	30210	1.284	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**

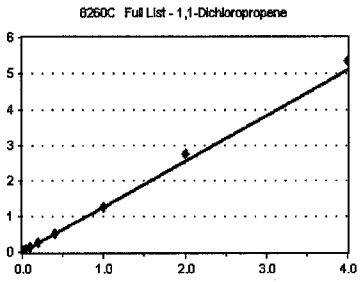
Element Calibration Review Sheet

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**

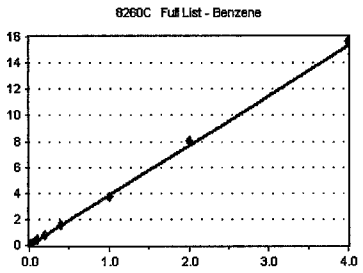


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1049	1.171	5.87
9J24043-CAL4	1	2749	1.184	5.86
9J24043-CAL5	2	5724	1.292	5.87
9J24043-CAL6	5	14423	1.299	5.86
9J24043-CAL7	10	29295	1.245	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**

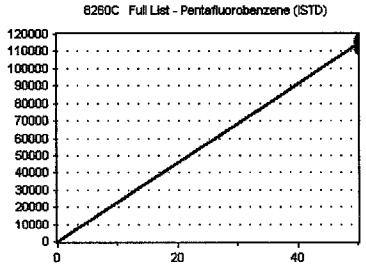


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	917	3.949	6.13
9J24043-CAL2	0.2	1584	3.450	6.13
9J24043-CAL3	0.4	3381	3.774	6.12
9J24043-CAL4	1	8314	3.582	6.13
9J24043-CAL5	2	17935	4.047	6.13
9J24043-CAL6	5	43404	3.910	6.12
9J24043-CAL7	10	87359	3.714	6.12
9J24043-CAL8	20	175817	3.910	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**

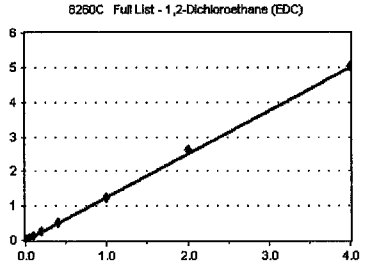


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	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**

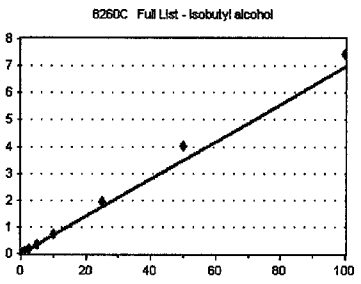
Element Calibration Review Sheet

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**

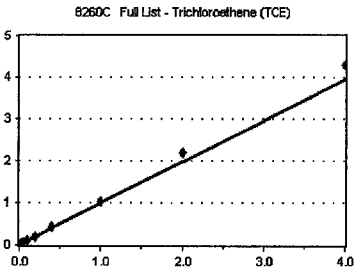


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~2.5~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~5~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	10	1172	5.233	6.39
9J24043-CAL4	25	3120	5.377	6.38
9J24043-CAL5	50	7968	7.192	6.38
9J24043-CAL6	125	20710	7.462	6.38
9J24043-CAL7	250	39286	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**

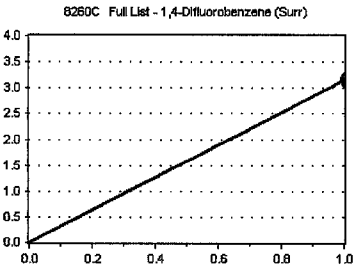


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	372	0.810	6.75
9J24043-CAL3	0.4	718	0.801	6.75
9J24043-CAL4	1	2166	0.933	6.74
9J24043-CAL5	2	4576	1.033	6.75
9J24043-CAL6	5	11340	1.022	6.74
9J24043-CAL7	10	23449	0.997	6.74
9J24043-CAL8	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**

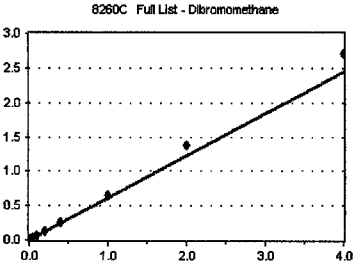


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	364447	3.139	6.78
9J24043-CAL2	50	359462	3.132	6.78
9J24043-CAL3	50	352302	3.146	6.78
9J24043-CAL4	50	366642	3.160	6.78
9J24043-CAL5	50	347212	3.134	6.78
9J24043-CAL6	50	353918	3.188	6.78
9J24043-CAL7	50	367409	3.124	6.78
9J24043-CAL8	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**

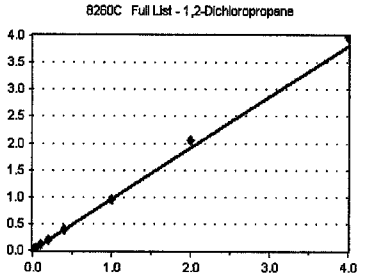
Element Calibration Review Sheet

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**

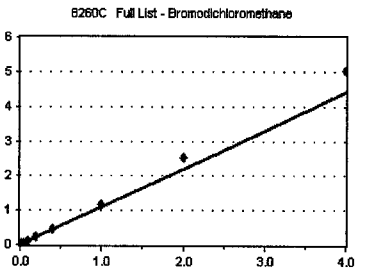


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	797	0.890	7.31
9J24043-CAL4	1	1944	0.838	7.31
9J24043-CAL5	2	4373	0.987	7.31
9J24043-CAL6	5	10897	0.982	7.31
9J24043-CAL7	10	21915	0.932	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**

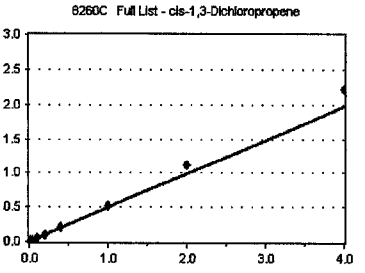


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	800	0.893	7.38
9J24043-CAL4	1	2259	0.973	7.38
9J24043-CAL5	2	4681	1.056	7.39
9J24043-CAL6	5	12021	1.083	7.38
9J24043-CAL7	10	25055	1.065	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**

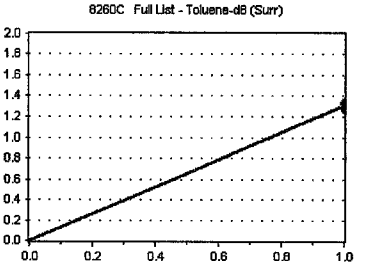


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	1014	0.431	8.09
9J24043-CAL4	1	2667	0.429	8.09
9J24043-CAL5	2	5578	0.468	8.09
9J24043-CAL6	5	14229	0.474	8.09
9J24043-CAL7	10	30482	0.487	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**

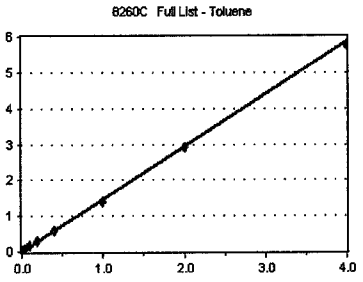
Element Calibration Review Sheet

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**

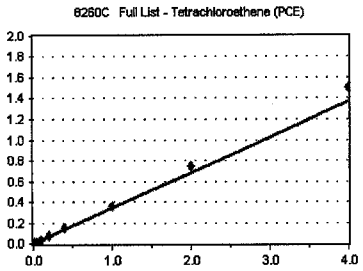


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	978	1.590	8.36
9J24043-CAL2	0.2	1744	1.439	8.35
9J24043-CAL3	0.4	3505	1.488	8.36
9J24043-CAL4	1	9040	1.454	8.35
9J24043-CAL5	2	17851	1.499	8.36
9J24043-CAL6	5	44272	1.474	8.36
9J24043-CAL7	10	90400	1.445	8.36
9J24043-CAL8	20	183309	1.492	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**

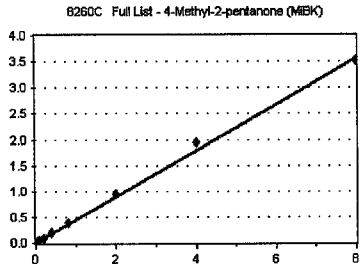


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	267	0.220	8.81
9J24043-CAL3	0.4	787	0.334	8.80
9J24043-CAL4	1	1994	0.321	8.80
9J24043-CAL5	2	4333	0.364	8.80
9J24043-CAL6	5	10847	0.361	8.80
9J24043-CAL7	10	22099	0.353	8.80
9J24043-CAL8	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**

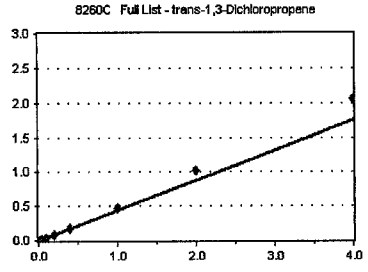


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.4	890	0.367	8.80
9J24043-CAL3	0.8	1912	0.406	8.81
9J24043-CAL4	2	5042	0.406	8.80
9J24043-CAL5	4	11029	0.463	8.81
9J24043-CAL6	10	28183	0.469	8.80
9J24043-CAL7	20	58009	0.464	8.80
9J24043-CAL8	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**

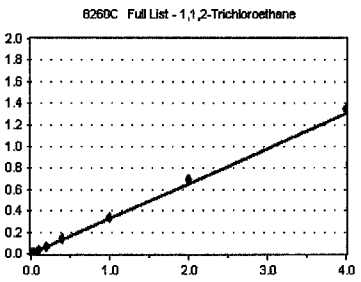
Element Calibration Review Sheet

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**

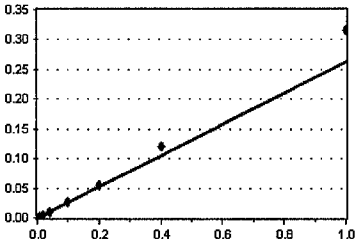


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	288	0.238	9.01
9J24043-CAL3	0.4	717	0.304	9.00
9J24043-CAL4	1	1944	0.313	9.00
9J24043-CAL5	2	4134	0.347	9.00
9J24043-CAL6	5	10336	0.344	9.00
9J24043-CAL7	10	21402	0.342	9.01
9J24043-CAL8	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**

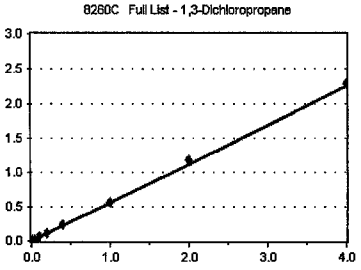


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	505	0.214	9.19
9J24043-CAL4	1	1349	0.217	9.19
9J24043-CAL5	2	3038	0.255	9.19
9J24043-CAL6	5	8016	0.267	9.19
9J24043-CAL7	10	17208	0.275	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**

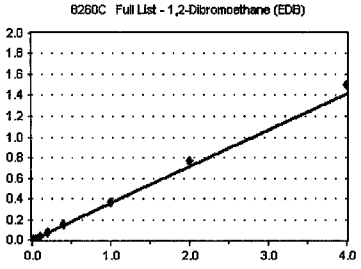


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	568	0.469	9.29
9J24043-CAL3	0.4	1253	0.532	9.29
9J24043-CAL4	1	3361	0.541	9.29
9J24043-CAL5	2	6889	0.578	9.29
9J24043-CAL6	5	17551	0.584	9.29
9J24043-CAL7	10	36354	0.581	9.29
9J24043-CAL8	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**

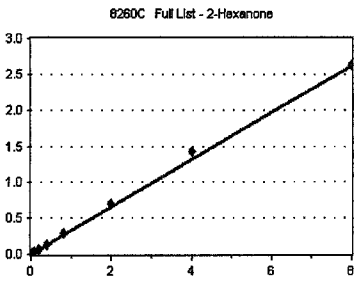
Element Calibration Review Sheet

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**

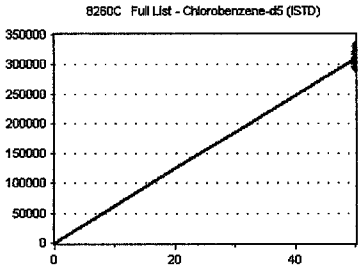


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.8	1346	0.286	9.66
9J24043-CAL4	2	3526	0.284	9.66
9J24043-CAL5	4	7610	0.319	9.66
9J24043-CAL6	10	19724	0.328	9.65
9J24043-CAL7	20	41881	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**

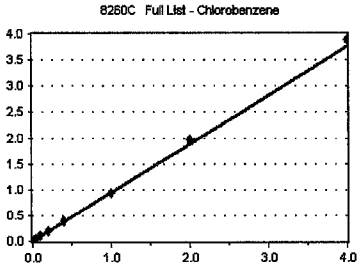


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	307577	6151.540	9.91
9J24043-CAL2	50	302974	6059.480	9.92
9J24043-CAL3	50	294372	5887.440	9.91
9J24043-CAL4	50	310797	6215.940	9.91
9J24043-CAL5	50	297754	5955.080	9.92
9J24043-CAL6	50	300317	6006.340	9.91
9J24043-CAL7	50	312833	6256.660	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**

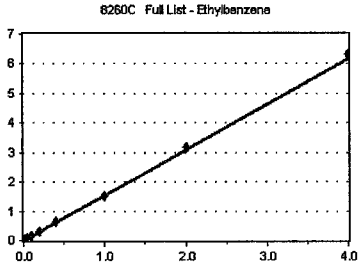


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	480	0.780	9.93
9J24043-CAL2	0.2	1045	0.862	9.93
9J24043-CAL3	0.4	2226	0.945	9.93
9J24043-CAL4	1	5770	0.928	9.93
9J24043-CAL5	2	11701	0.982	9.93
9J24043-CAL6	5	29555	0.984	9.93
9J24043-CAL7	10	60359	0.965	9.93
9J24043-CAL8	20	120984	0.985	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**

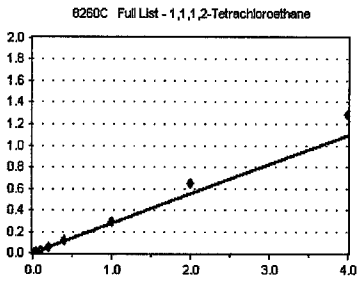
Element Calibration Review Sheet

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**

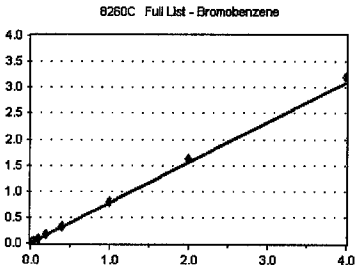


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~129~~	~~0.106~~	~~0.00~~
9J24043-CAL3	0.4	470	0.200	9.99
9J24043-CAL4	1	1476	0.237	9.99
9J24043-CAL5	2	2985	0.251	9.99
9J24043-CAL6	5	7981	0.266	9.99
9J24043-CAL7	10	16995	0.272	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**

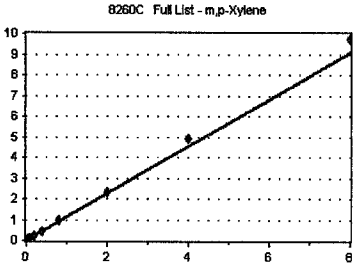


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	124	0.444	0.00
9J24043-CAL2	0.2	432	0.800	11.06
9J24043-CAL3	0.4	875	0.813	11.06
9J24043-CAL4	1	2220	0.771	11.06
9J24043-CAL5	2	4634	0.830	11.06
9J24043-CAL6	5	11623	0.819	11.06
9J24043-CAL7	10	24222	0.812	11.06
9J24043-CAL8	20	50013	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**

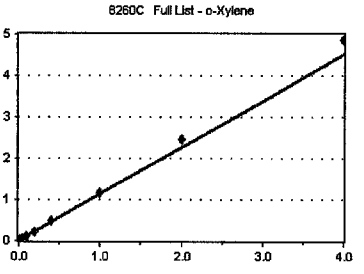


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.2	1368	1.112	10.09
9J24043-CAL2	0.4	2470	1.019	10.09
9J24043-CAL3	0.8	5197	1.103	10.09
9J24043-CAL4	2	12789	1.029	10.09
9J24043-CAL5	4	27092	1.137	10.09
9J24043-CAL6	10	68847	1.146	10.09
9J24043-CAL7	20	142004	1.135	10.09
9J24043-CAL8	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**

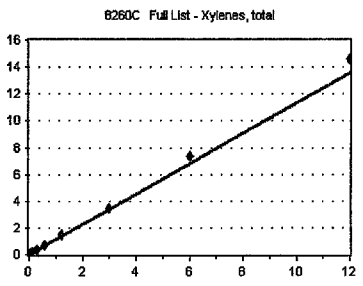
Element Calibration Review Sheet

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**

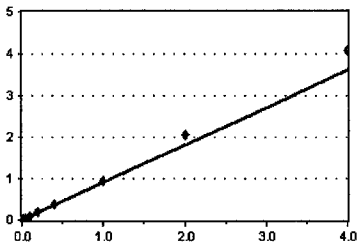


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.3	1953	1.058	10.47
9J24043-CAL2	0.6	3691	1.015	10.47
9J24043-CAL3	1.2	7802	1.104	10.47
9J24043-CAL4	3	19419	1.041	10.46
9J24043-CAL5	6	40697	1.139	10.47
9J24043-CAL6	15	103303	1.147	10.46
9J24043-CAL7	30	213421	1.137	10.46
9J24043-CAL8	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**

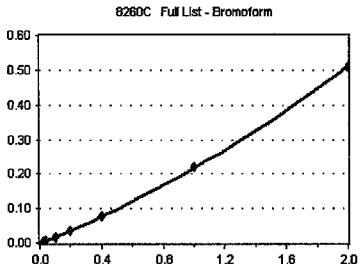


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~754~~	~~0.622~~	~~10.52~~
9J24043-CAL3	0.4	1656	0.703	10.52
9J24043-CAL4	1	4878	0.785	10.52
9J24043-CAL5	2	10363	0.870	10.52
9J24043-CAL6	5	26739	0.890	10.51
9J24043-CAL7	10	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**

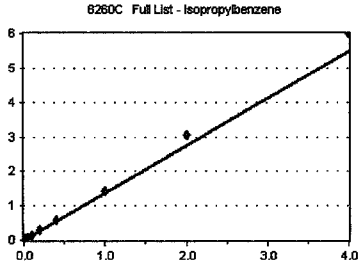


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	795	0.128	10.54
9J24043-CAL5	2	1771	0.149	10.54
9J24043-CAL6	5	4690	0.156	10.54
9J24043-CAL7	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**

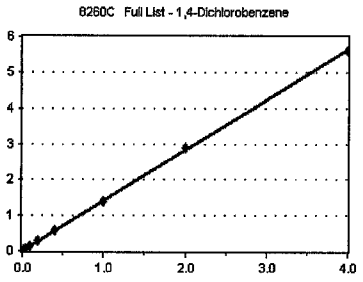
Element Calibration Review Sheet

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**

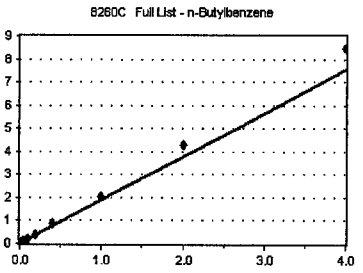


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	311	1.113	0.00
9J24043-CAL2	0.2	725	1.342	11.86
9J24043-CAL3	0.4	1564	1.454	11.86
9J24043-CAL4	1	4177	1.451	11.86
9J24043-CAL5	2	8550	1.531	11.86
9J24043-CAL6	5	20421	1.440	11.86
9J24043-CAL7	10	42771	1.433	11.86
9J24043-CAL8	20	89594	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**

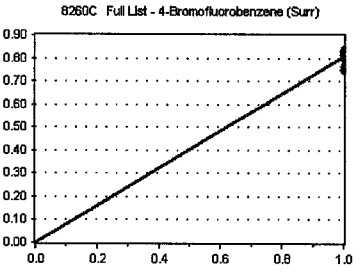


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	379	1.357	0.00
9J24043-CAL2	0.2	805	1.491	12.05
9J24043-CAL3	0.4	1867	1.735	12.05
9J24043-CAL4	1	4997	1.735	12.05
9J24043-CAL5	2	10626	1.903	12.05
9J24043-CAL6	5	28526	2.011	12.05
9J24043-CAL7	10	59515	1.994	12.05
9J24043-CAL8	20	130970	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**

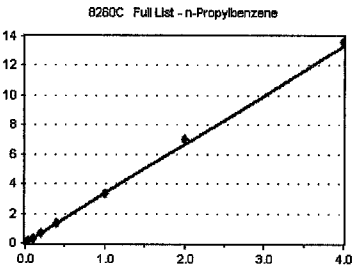


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116090	0.831	10.97
9J24043-CAL2	50	113180	0.838	10.97
9J24043-CAL3	50	112304	0.835	10.97
9J24043-CAL4	50	118563	0.823	10.97
9J24043-CAL5	50	115163	0.825	10.97
9J24043-CAL6	50	115652	0.815	10.97
9J24043-CAL7	50	121121	0.812	10.97
9J24043-CAL8	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**

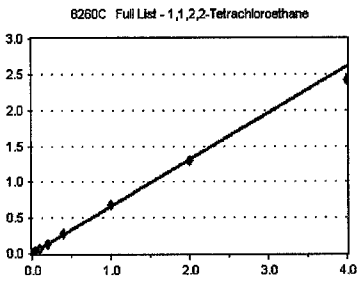
Element Calibration Review Sheet

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**

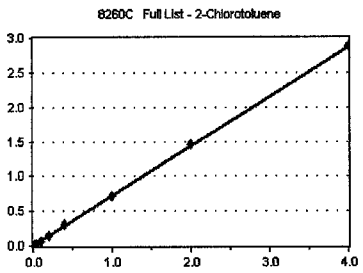


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	305	0.565	11.14
9J24043-CAL3	0.4	671	0.624	11.14
9J24043-CAL4	1	1876	0.651	11.14
9J24043-CAL5	2	4008	0.718	11.14
9J24043-CAL6	5	9843	0.694	11.14
9J24043-CAL7	10	20098	0.673	11.14
9J24043-CAL8	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**

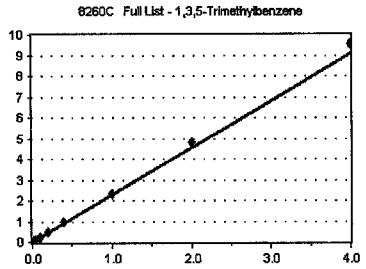


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.4	719	0.668	11.21
9J24043-CAL4	1	1910	0.663	11.21
9J24043-CAL5	2	4172	0.747	11.21
9J24043-CAL6	5	10150	0.716	11.21
9J24043-CAL7	10	21625	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**

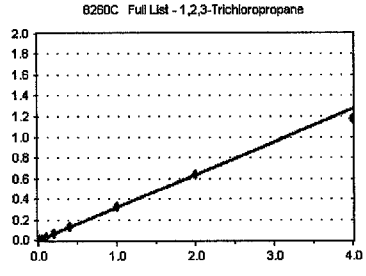


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	556	1.990	11.23
9J24043-CAL2	0.2	1127	2.087	11.23
9J24043-CAL3	0.4	2289	2.127	11.23
9J24043-CAL4	1	6197	2.152	11.23
9J24043-CAL5	2	13089	2.344	11.23
9J24043-CAL6	5	33314	2.349	11.23
9J24043-CAL7	10	69892	2.342	11.23
9J24043-CAL8	20	148694	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**

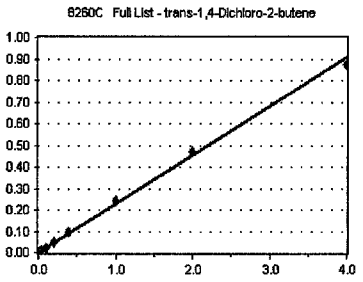
Element Calibration Review Sheet

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**

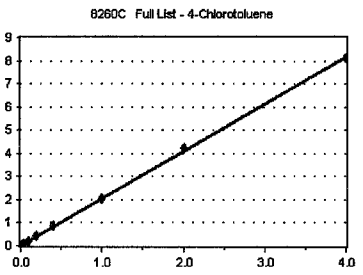


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	531	0.184	11.29
9J24043-CAL5	2	1313	0.235	11.28
9J24043-CAL6	5	3293	0.232	11.28
9J24043-CAL7	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**

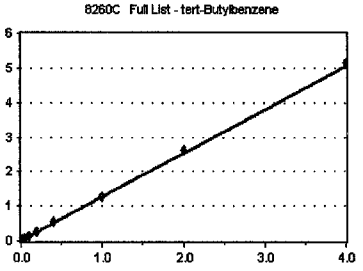


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	1020	1.889	11.34
9J24043-CAL3	0.4	2178	2.024	11.34
9J24043-CAL4	1	5461	1.896	11.34
9J24043-CAL5	2	11718	2.099	11.34
9J24043-CAL6	5	30239	2.132	11.34
9J24043-CAL7	10	61742	2.069	11.34
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**

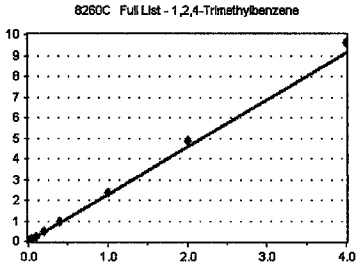


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	602	1.115	11.49
9J24043-CAL3	0.4	1248	1.160	11.49
9J24043-CAL4	1	3551	1.233	11.49
9J24043-CAL5	2	7395	1.324	11.49
9J24043-CAL6	5	18808	1.326	11.48
9J24043-CAL7	10	38411	1.287	11.48
9J24043-CAL8	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**

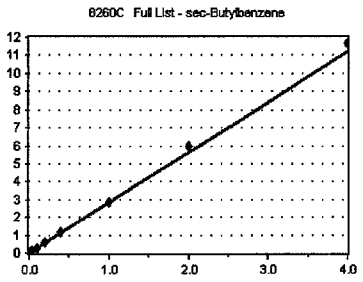
Element Calibration Review Sheet

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**

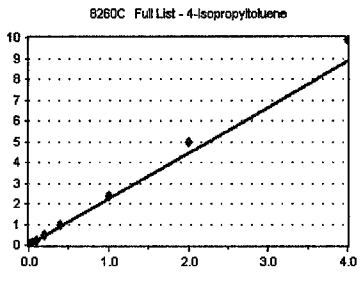


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	1301	2.409	11.62
9J24043-CAL3	0.4	2990	2.779	11.62
9J24043-CAL4	1	7450	2.587	11.62
9J24043-CAL5	2	15756	2.822	11.62
9J24043-CAL6	5	40240	2.837	11.62
9J24043-CAL7	10	83977	2.814	11.62
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**

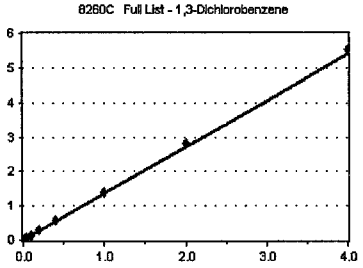


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	0.1	481	1.722	11.73
9J24043-CAL2	0.2	919	1.702	11.72
9J24043-CAL3	0.4	2236	2.078	11.73
9J24043-CAL4	1	6086	2.114	11.73
9J24043-CAL5	2	12523	2.243	11.73
9J24043-CAL6	5	33176	2.339	11.73
9J24043-CAL7	10	68628	2.300	11.73
9J24043-CAL8	20	151382	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**

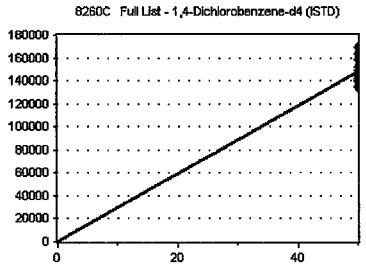


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	629	1.165	11.80
9J24043-CAL3	0.4	1412	1.312	11.80
9J24043-CAL4	1	3650	1.268	11.80
9J24043-CAL5	2	7718	1.382	11.80
9J24043-CAL6	5	19712	1.390	11.80
9J24043-CAL7	10	41299	1.384	11.80
9J24043-CAL8	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**

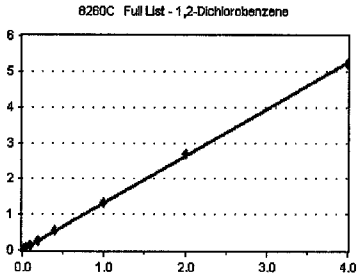
Element Calibration Review Sheet

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**

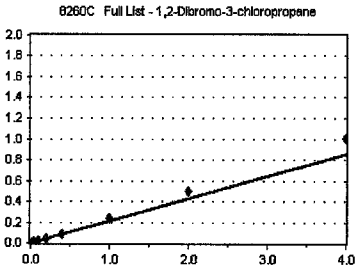


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL2	0.2	624	1.155	12.19
9J24043-CAL3	0.4	1284	1.193	12.19
9J24043-CAL4	1	3650	1.268	12.19
9J24043-CAL5	2	7854	1.407	12.19
9J24043-CAL6	5	19460	1.372	12.19
9J24043-CAL7	10	40125	1.345	12.18
9J24043-CAL8	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**

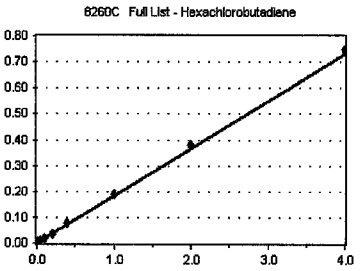


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	1	447	0.155	12.80
9J24043-CAL5	2	1006	0.180	12.80
9J24043-CAL6	5	2728	0.192	12.80
9J24043-CAL7	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**

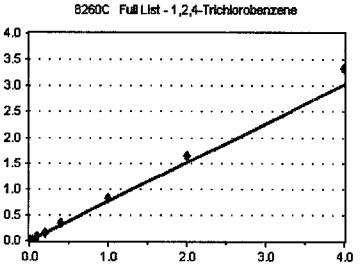


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	443	0.154	13.31
9J24043-CAL5	2	963	0.172	13.30
9J24043-CAL6	5	2715	0.191	13.30
9J24043-CAL7	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**

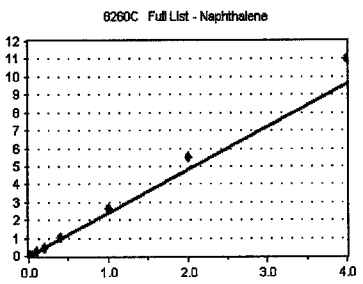
Element Calibration Review Sheet

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**

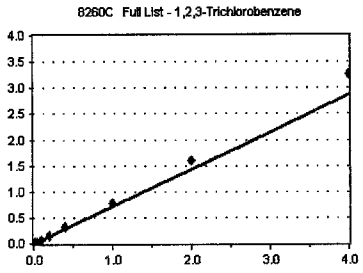


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~924~~	~~1.711~~	~~13.63~~
9J24043-CAL3	0.4	2009	1.867	13.63
9J24043-CAL4	1	5345	1.856	13.63
9J24043-CAL5	2	12724	2.279	13.63
9J24043-CAL6	5	32892	2.319	13.63
9J24043-CAL7	10	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**

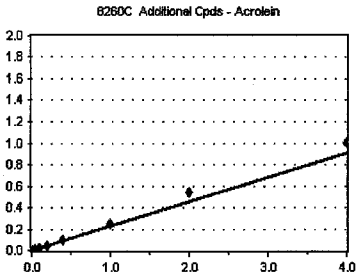
Element Calibration Review Sheet

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**

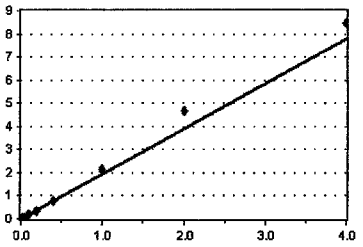


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	420	0.181	3.63
9J24043-CAL5	2	927	0.209	3.63
9J24043-CAL6	5	2465	0.222	3.62
9J24043-CAL7	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**

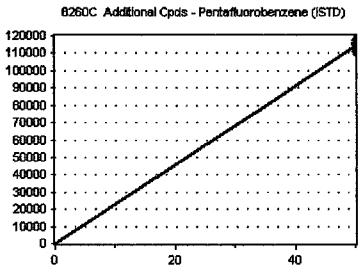


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL4	1	3620	1.560	4.96
9J24043-CAL5	2	7854	1.772	4.96
9J24043-CAL6	5	20467	1.844	4.96
9J24043-CAL7	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**

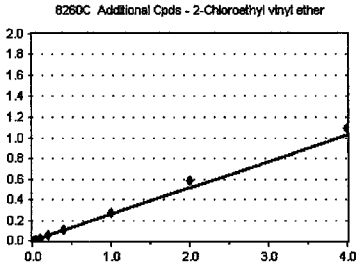


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	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**

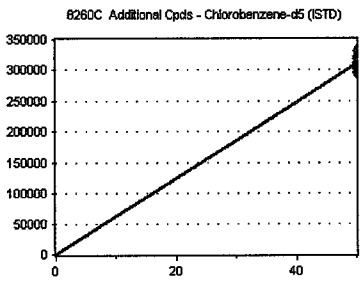
Element Calibration Review Sheet

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**

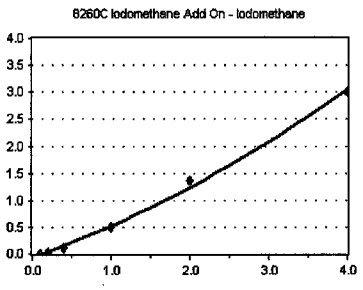
Element Calibration Review Sheet

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**

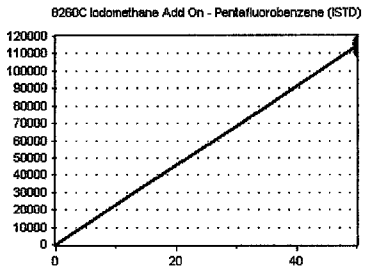


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.2~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL3~~	~~0.4~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL4~~	~~1~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL5~~	~~2~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL6	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**

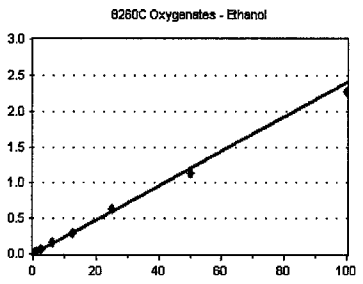
Element Calibration Review Sheet

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**

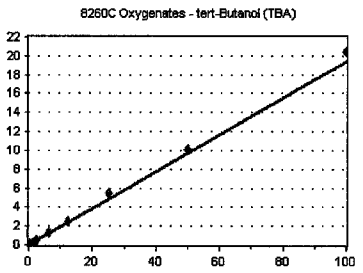


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~6.25~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~12.5~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	25	1315	2.349	3.23
9J24043-CAL4	62.5	3446	2.376	3.24
9J24043-CAL5	125	7229	2.610	3.24
9J24043-CAL6	312	17243	2.489	3.23
9J24043-CAL7	625	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**

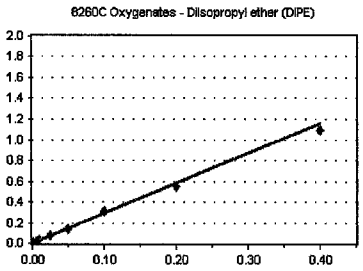


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	6.25	2472	0.170	4.30
9J24043-CAL2	12.5	4690	0.163	4.30
9J24043-CAL3	25	10086	0.180	4.29
9J24043-CAL4	62.5	25977	0.179	4.30
9J24043-CAL5	125	58093	0.210	4.30
9J24043-CAL6	312	143817	0.208	4.29
9J24043-CAL7	625	292252	0.199	4.29
9J24043-CAL8	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**

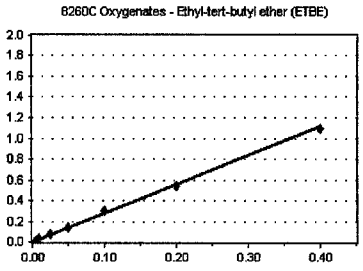


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.1	638	2.849	4.56
9J24043-CAL4	0.25	1604	2.764	4.56
9J24043-CAL5	0.5	3305	2.983	4.57
9J24043-CAL6	1.25	8576	3.090	4.57
9J24043-CAL7	2.5	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**

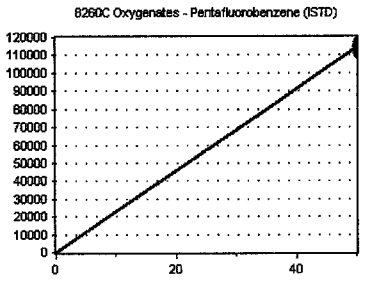
Element Calibration Review Sheet

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**

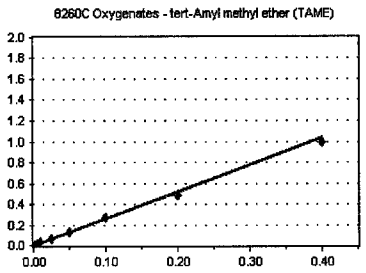


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116102	2322.040	6.22
9J24043-CAL2	50	114788	2295.760	6.22
9J24043-CAL3	50	111985	2239.700	6.21
9J24043-CAL4	50	116043	2320.860	6.21
9J24043-CAL5	50	110790	2215.800	6.22
9J24043-CAL6	50	111010	2220.200	6.21
9J24043-CAL7	50	117608	2352.160	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**

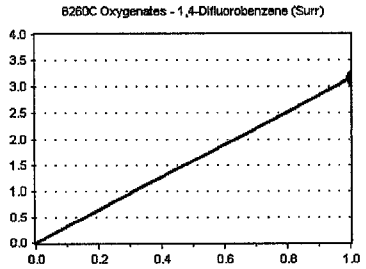


Standard	Concentration	Response	Response Factor	RT
~~9J24043-CAL1~~	~~0.025~~	~~0~~	~~0.000~~	~~0.00~~
~~9J24043-CAL2~~	~~0.05~~	~~0~~	~~0.000~~	~~0.00~~
9J24043-CAL3	0.1	580	2.590	6.25
9J24043-CAL4	0.25	1462	2.520	6.25
9J24043-CAL5	0.5	2996	2.704	6.25
9J24043-CAL6	1.25	7445	2.683	6.25
9J24043-CAL7	2.5	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**

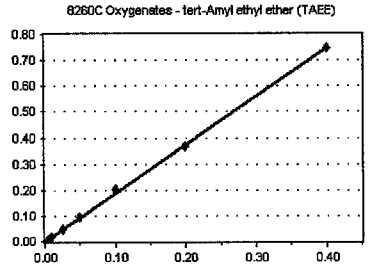


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	364447	3.139	6.78
9J24043-CAL2	50	359462	3.132	6.78
9J24043-CAL3	50	352302	3.146	6.78
9J24043-CAL4	50	366642	3.160	6.78
9J24043-CAL5	50	347212	3.134	6.78
9J24043-CAL6	50	353918	3.188	6.78
9J24043-CAL7	50	367409	3.124	6.78
9J24043-CAL8	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**

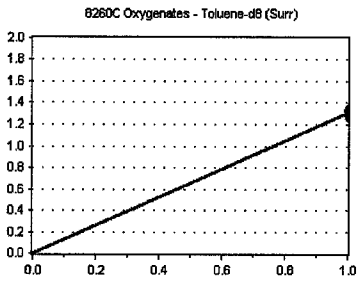
Element Calibration Review Sheet

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**

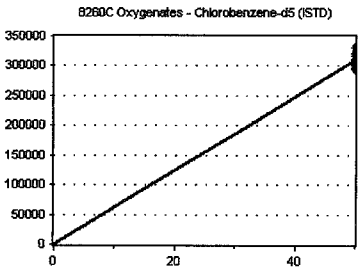


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	406288	1.321	8.30
9J24043-CAL2	50	403793	1.333	8.30
9J24043-CAL3	50	396027	1.345	8.30
9J24043-CAL4	50	410518	1.321	8.30
9J24043-CAL5	50	395017	1.327	8.30
9J24043-CAL6	50	397005	1.322	8.30
9J24043-CAL7	50	415174	1.327	8.30
9J24043-CAL8	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**

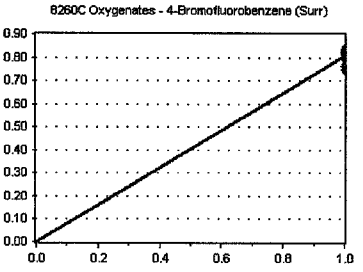


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	307577	6151.540	9.91
9J24043-CAL2	50	302974	6059.480	9.92
9J24043-CAL3	50	294372	5887.440	9.91
9J24043-CAL4	50	310797	6215.940	9.91
9J24043-CAL5	50	297754	5955.080	9.92
9J24043-CAL6	50	300317	6006.340	9.91
9J24043-CAL7	50	312833	6256.660	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**

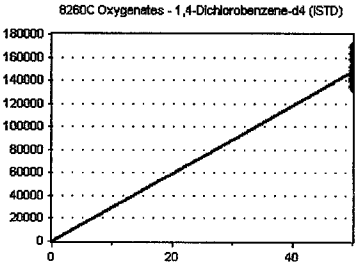


Standard	Concentration	Response	Response Factor	RT
9J24043-CAL1	50	116090	0.831	10.97
9J24043-CAL2	50	113180	0.838	10.97
9J24043-CAL3	50	112304	0.835	10.97
9J24043-CAL4	50	118563	0.823	10.97
9J24043-CAL5	50	115163	0.825	10.97
9J24043-CAL6	50	115652	0.815	10.97
9J24043-CAL7	50	121121	0.812	10.97
9J24043-CAL8	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

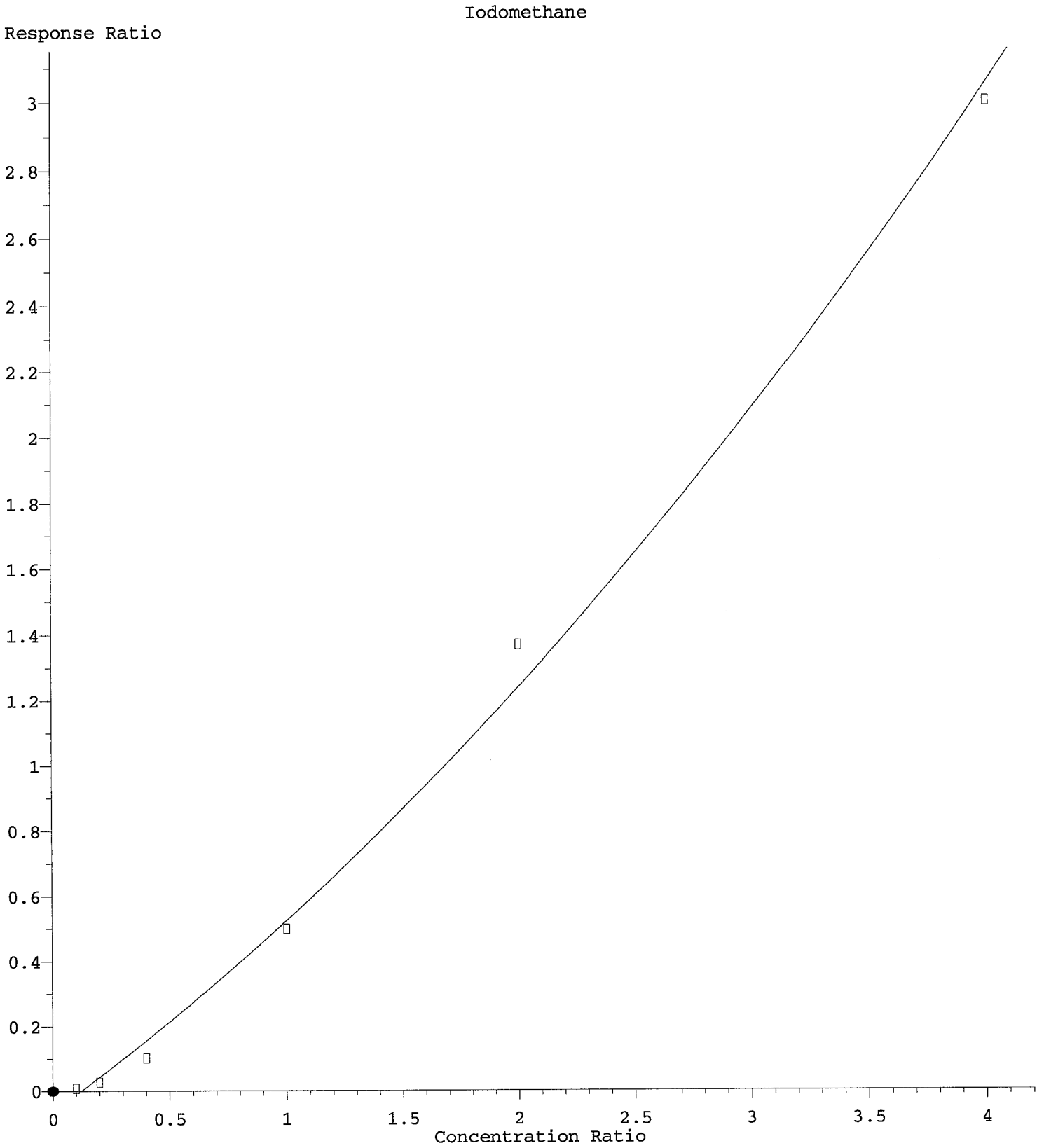
Total Cpnds : 88

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

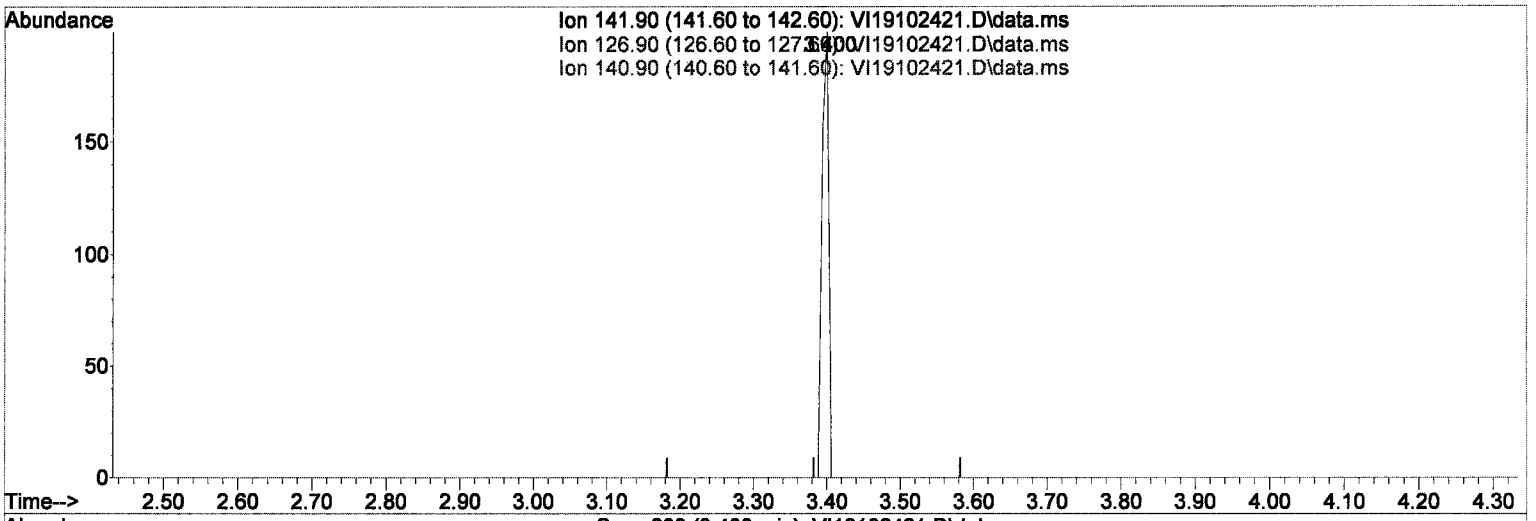


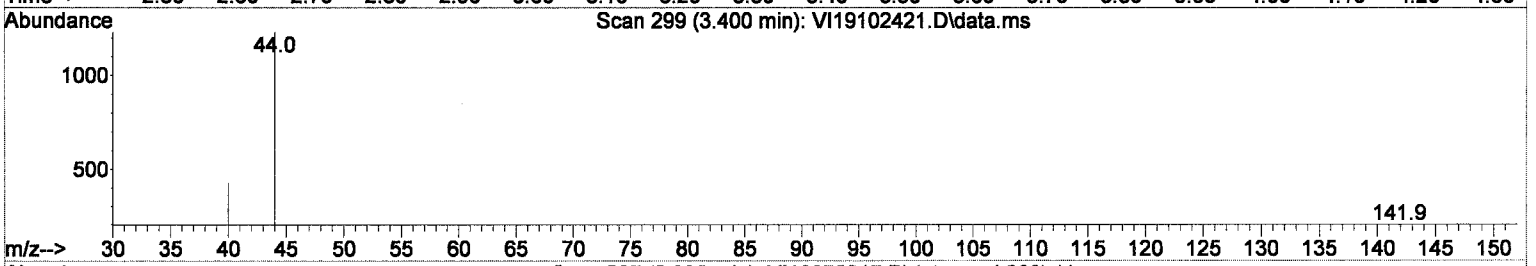
R = 6.36e-002 A*A + 5.25e-001 A - 6.41e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025W.M
Calibration Table Last Updated: Fri Oct 25 08:33:22 2019

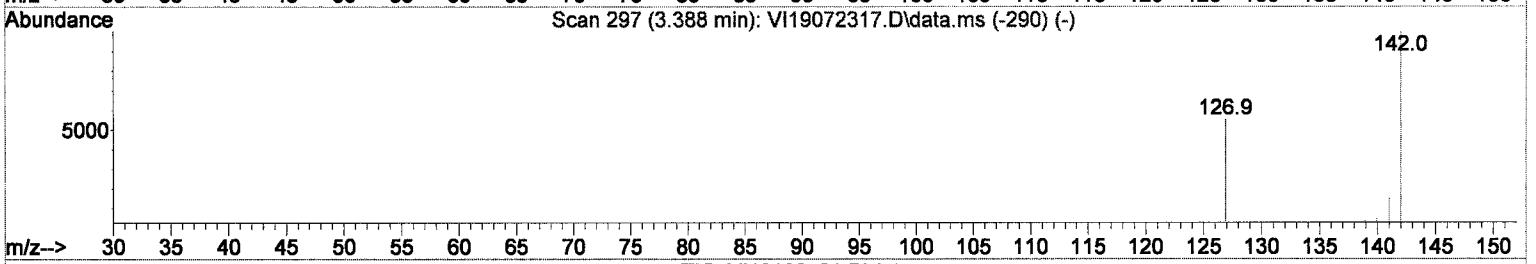
Quantitation Report (Qedit)

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







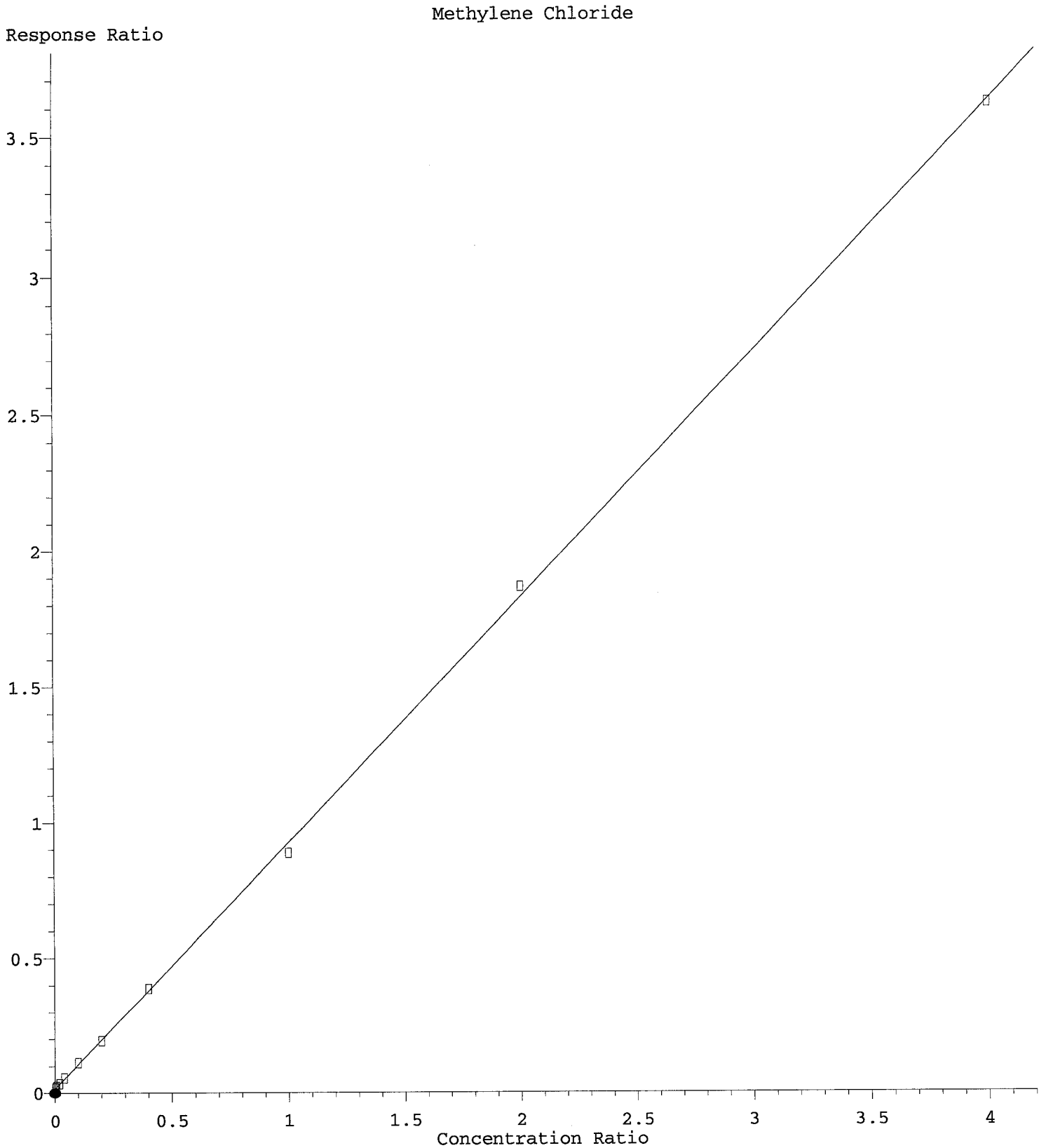
TIC: VI19102421.D\data.ms

(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

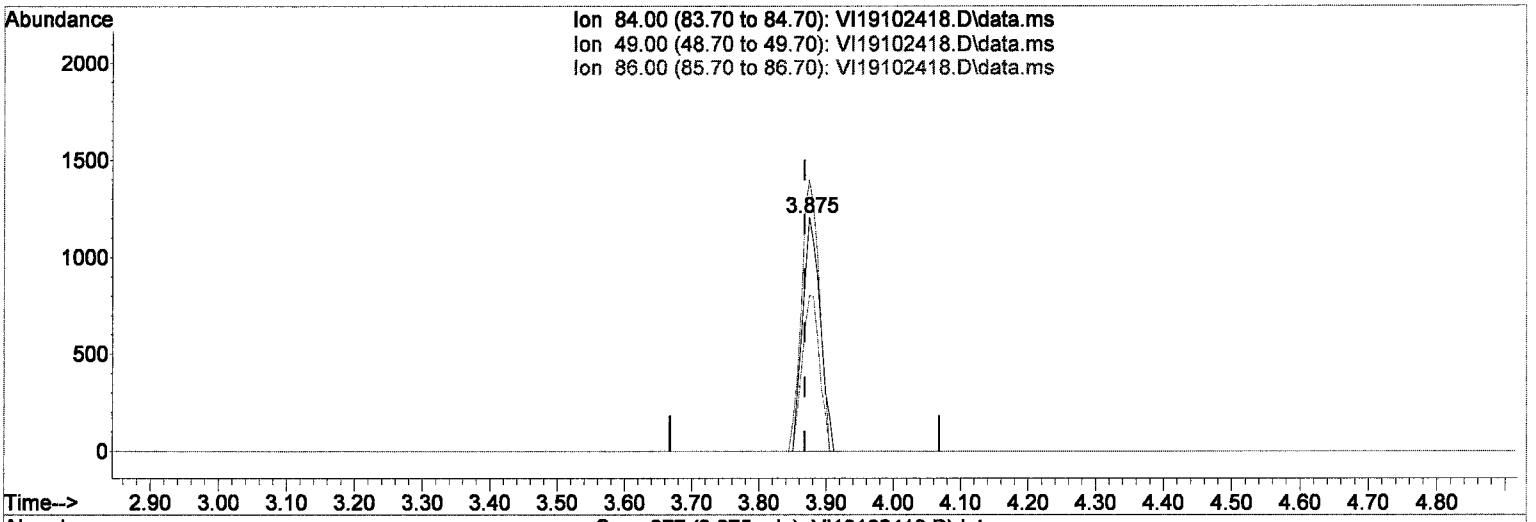


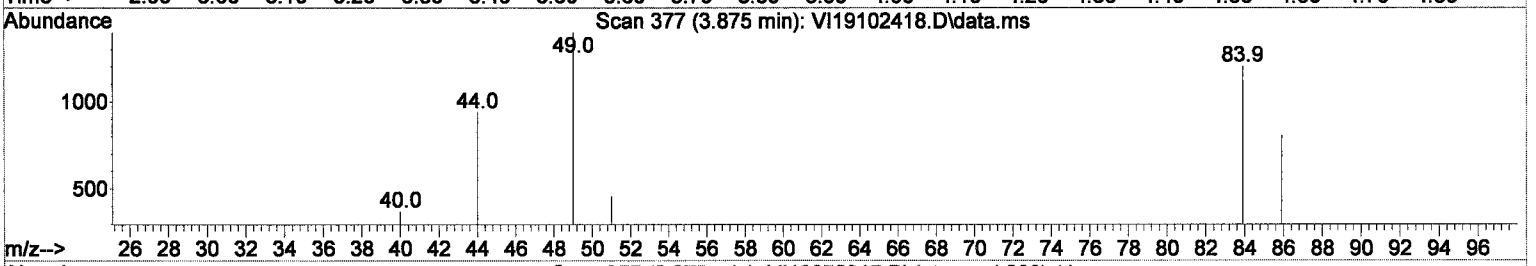
R = -2.46e-003 A*A + 9.12e-001 A + 1.58e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025W.M
Calibration Table Last Updated: Fri Oct 25 08:34:03 2019

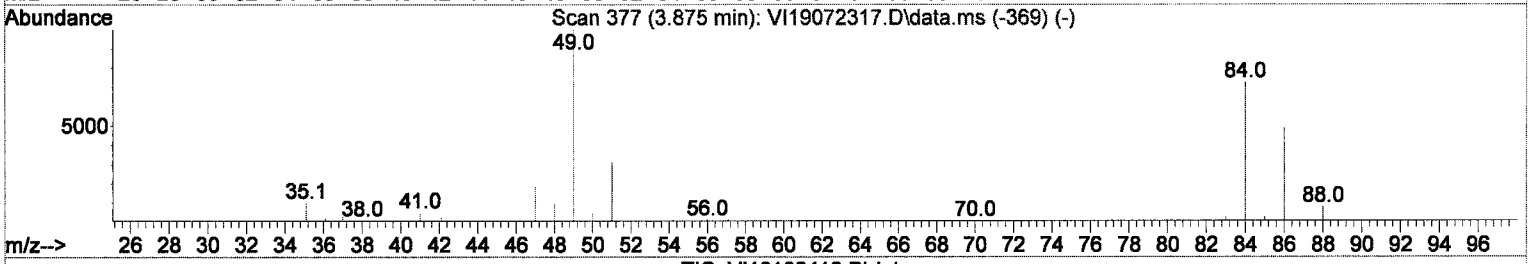
Quantitation Report (Qedit)

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







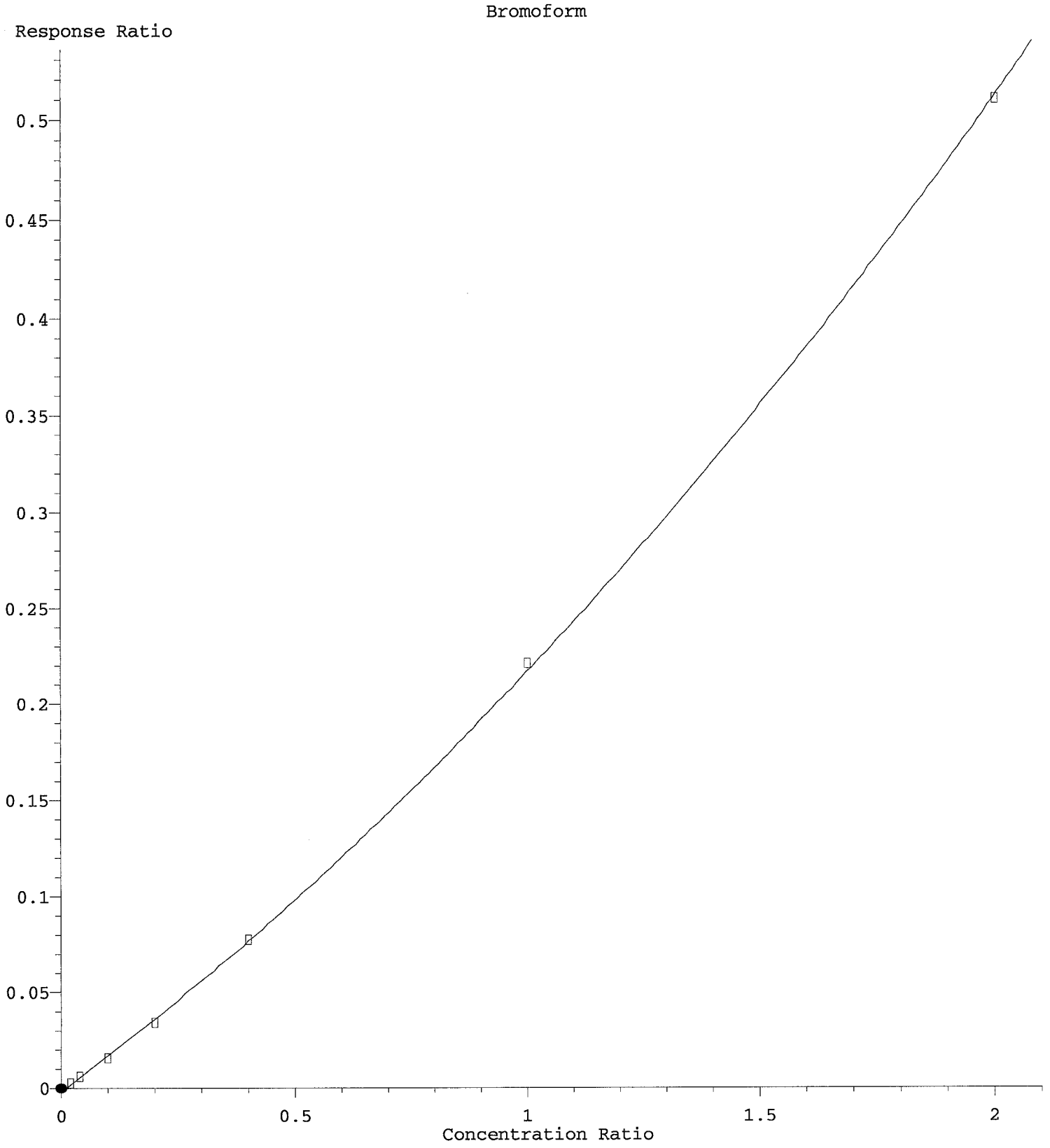
TIC: VI19102418.D\data.ms

(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

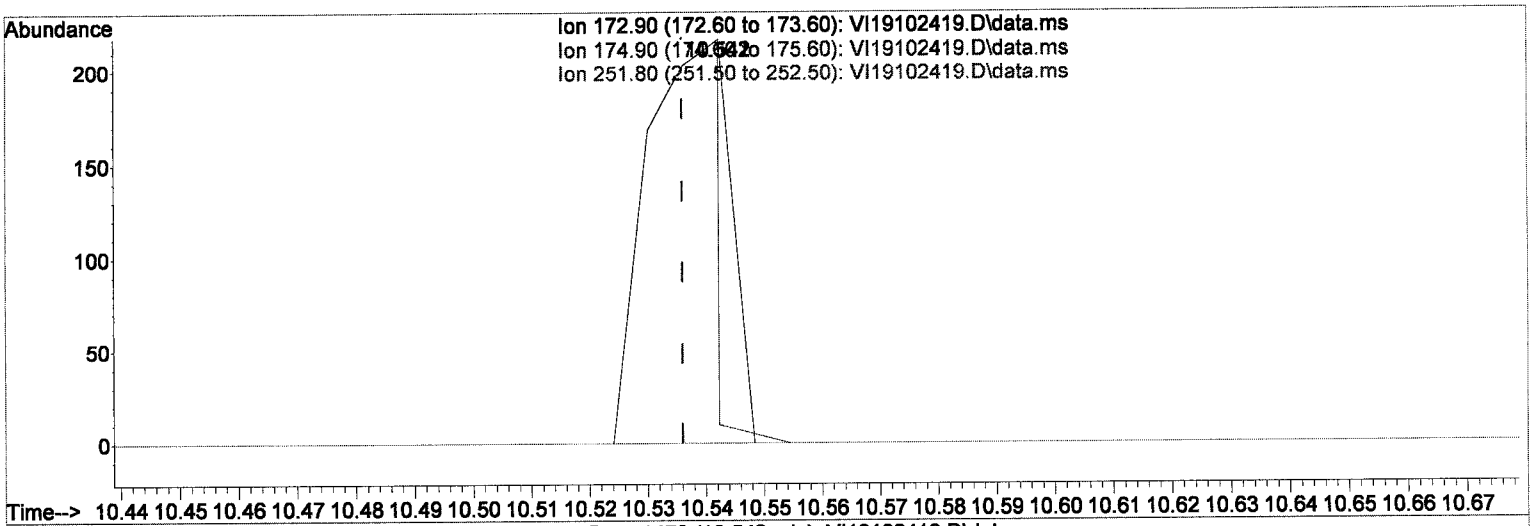


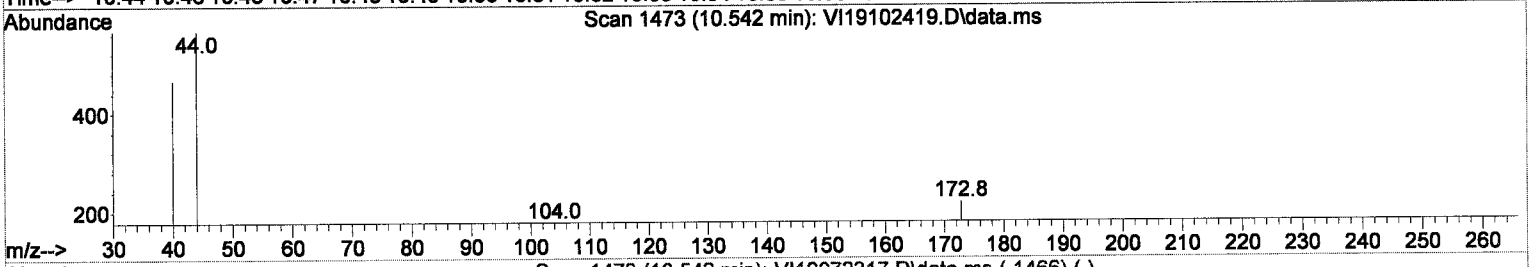
R = 3.82e-002 A*A + 1.80e-001 A - 1.40e-003
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w/(1/a)
Method Name: C:\msdchem\1\methods\V1191025W.M
Calibration Table Last Updated: Fri Oct 25 08:48:07 2019

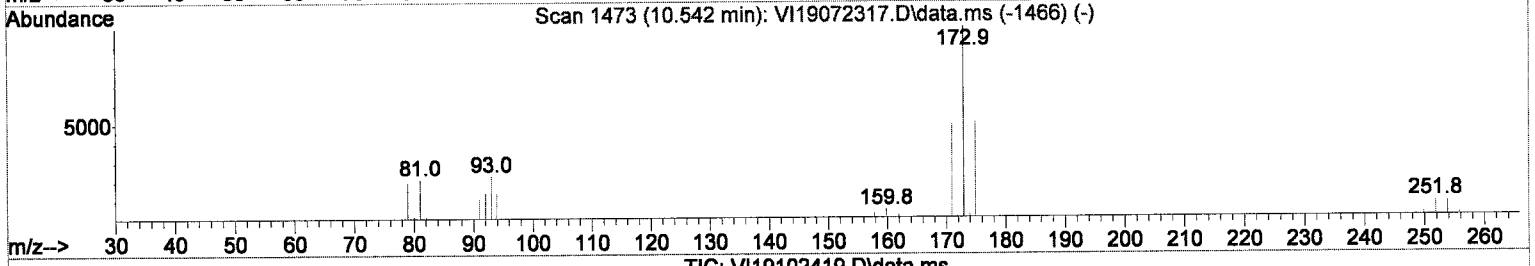
Quantitation Report (Qedit)

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

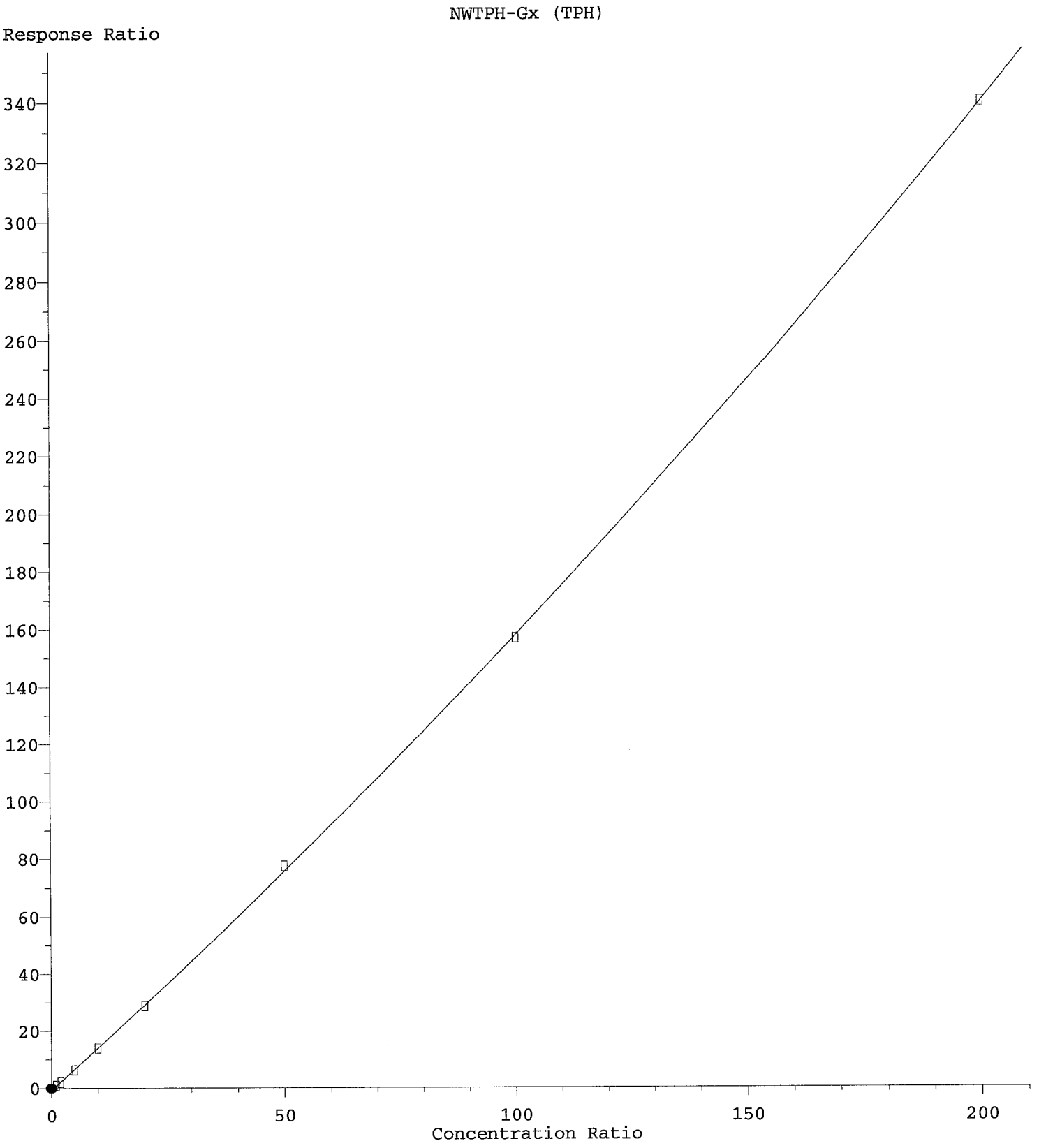
Method Path : C:\msdchem\1\methods\
Method File : VI191025G.M
Title : NWTPH-Gx by GC/MS
Last Update : Fri Oct 25 10:31:05 2019
Response Via : Initial Calibration

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

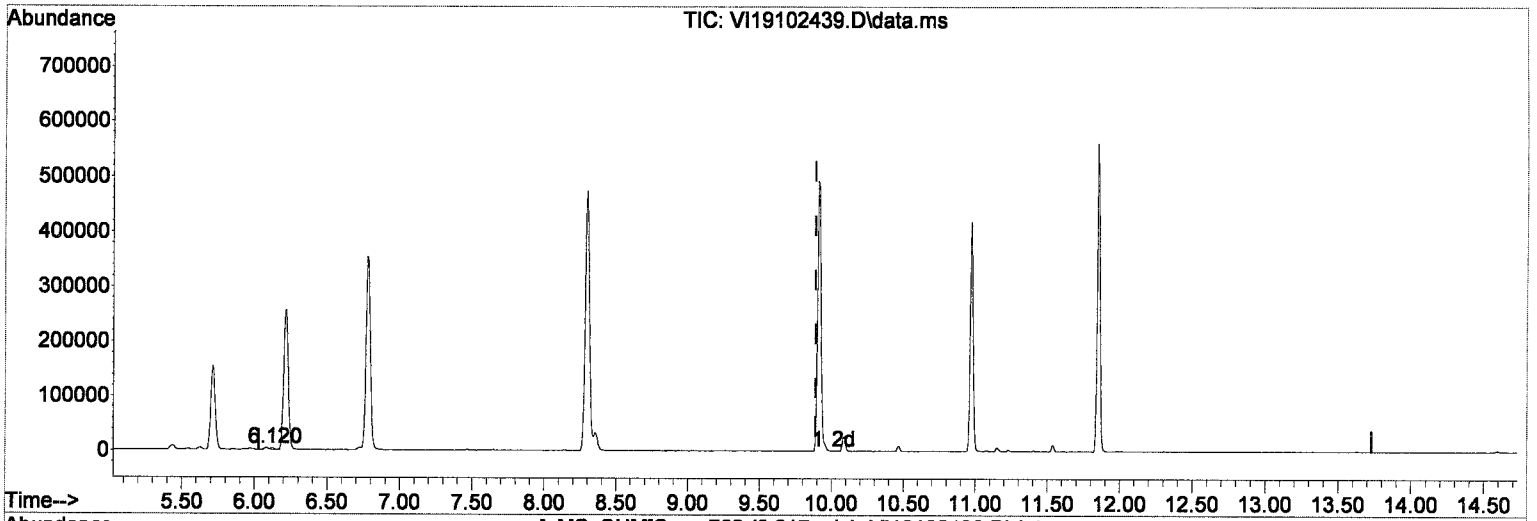


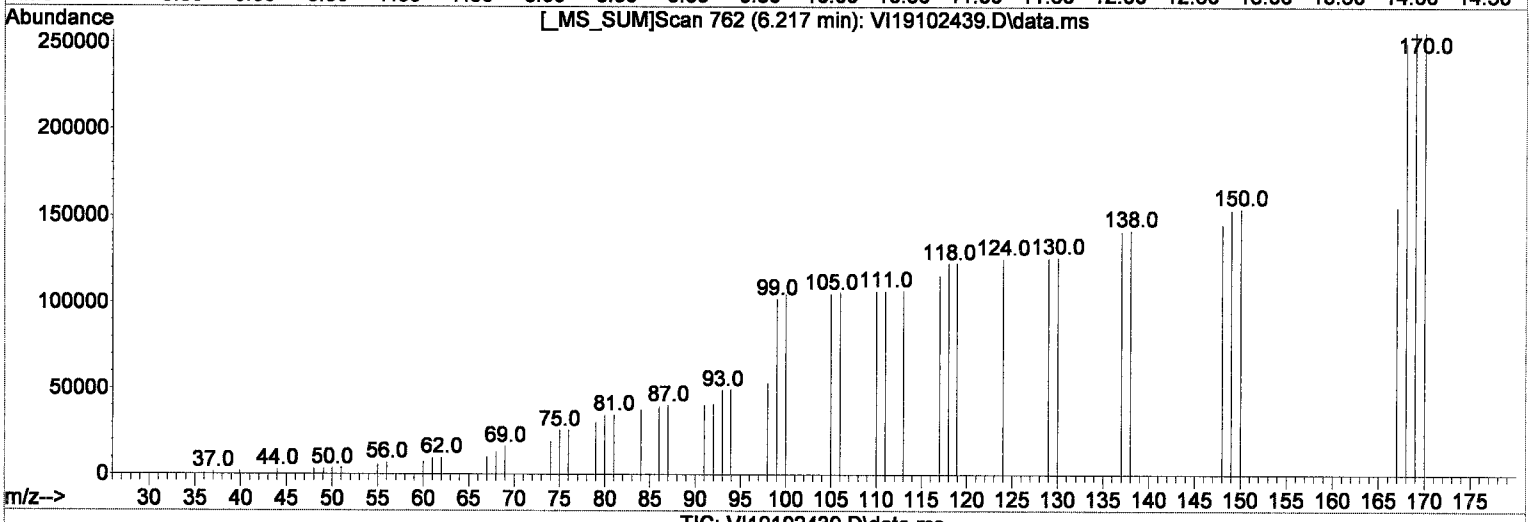
R = 1.17e-003 A*A + 1.47e+000 A - 7.24e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

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





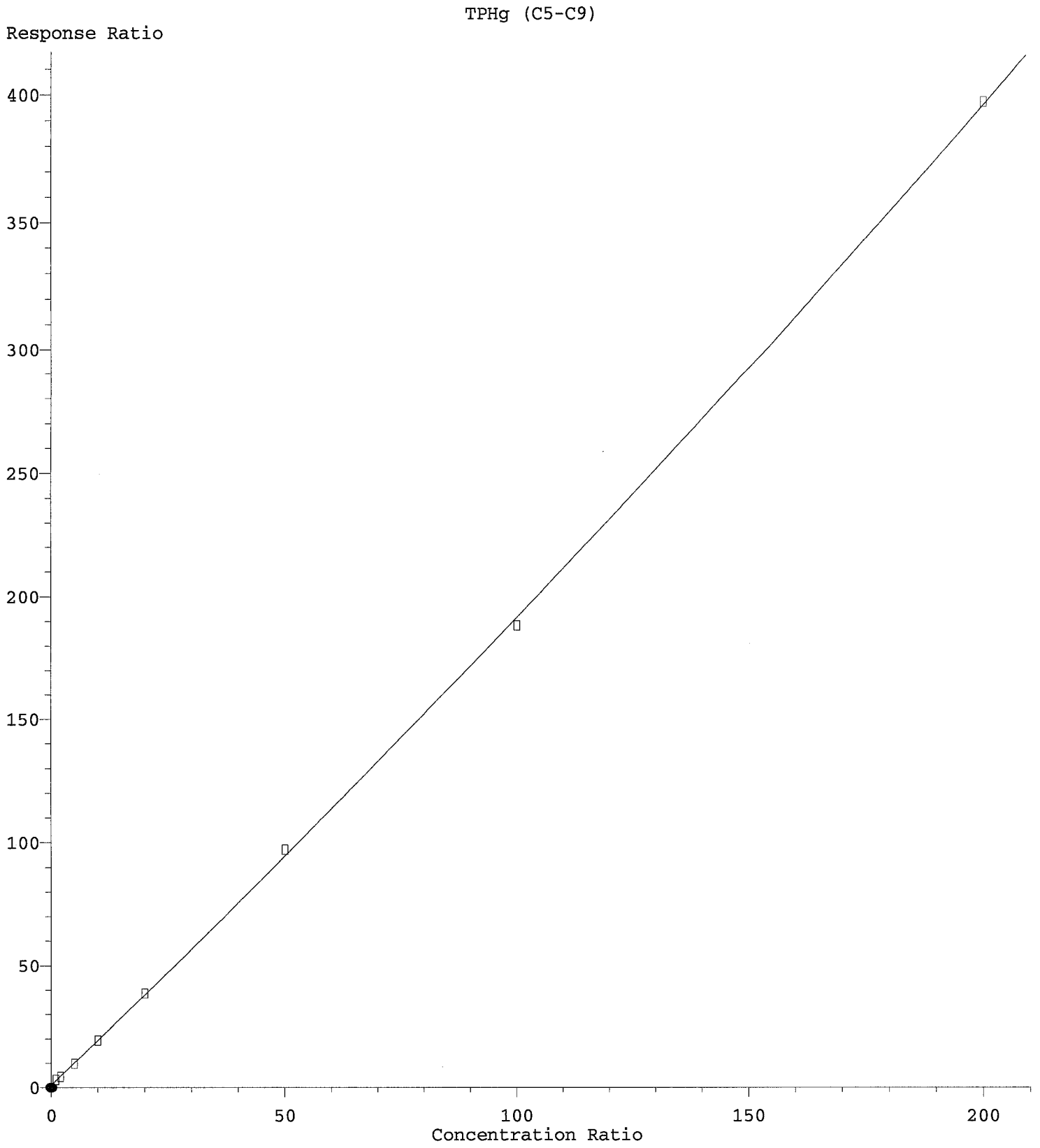
TIC: VI19102439.D\data.ms

(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

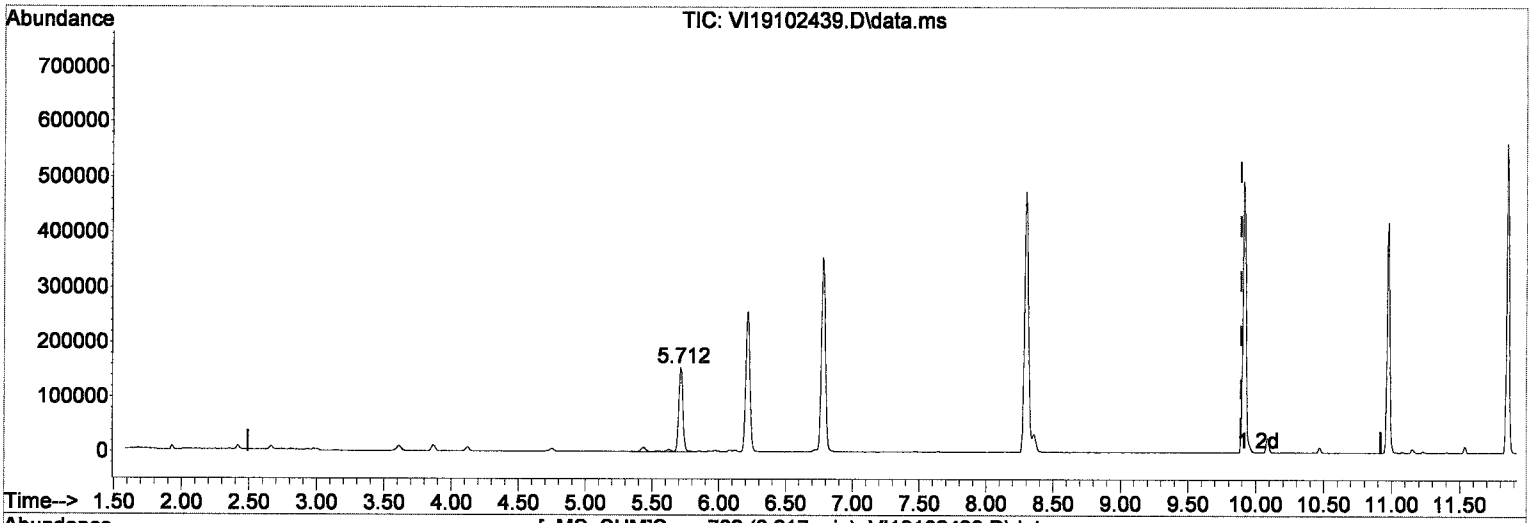


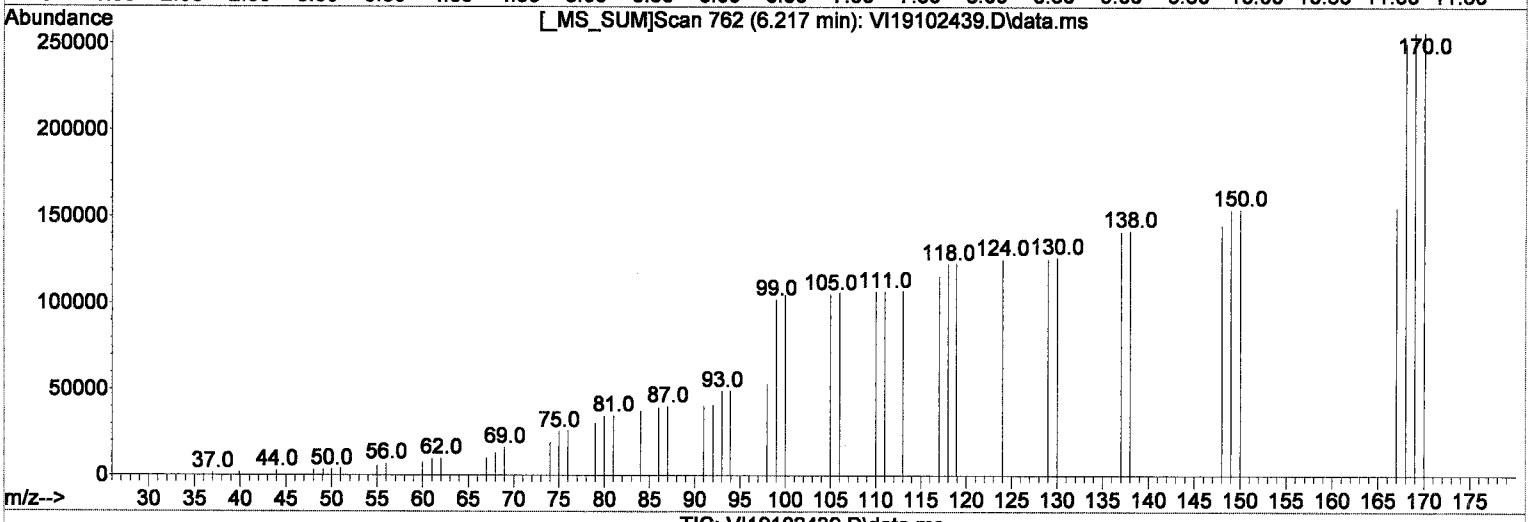
R = 6.91e-004 A*A + 1.84e+000 A + 1.03e+000
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

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





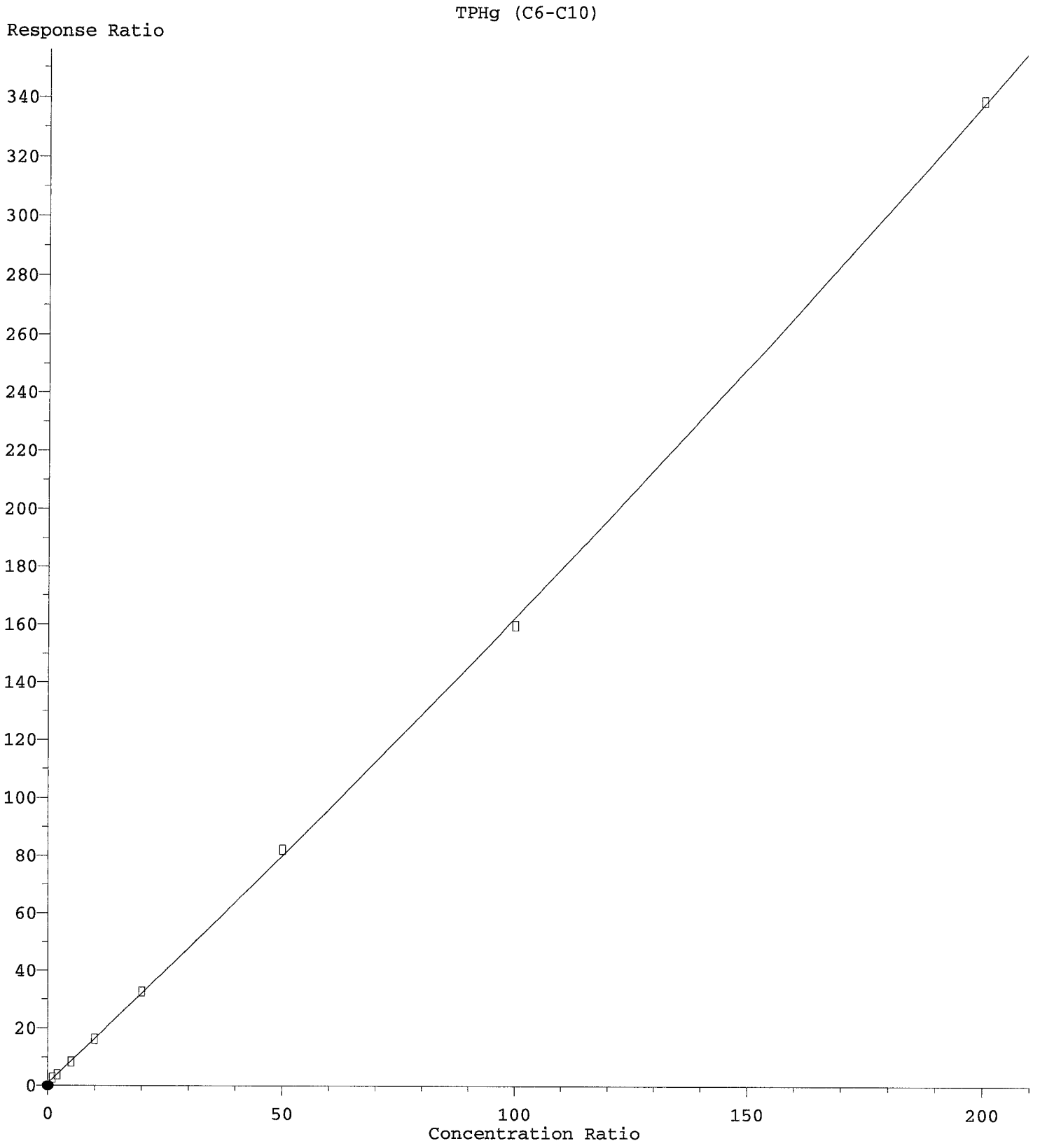
TIC: VI19102439.D\data.ms

(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

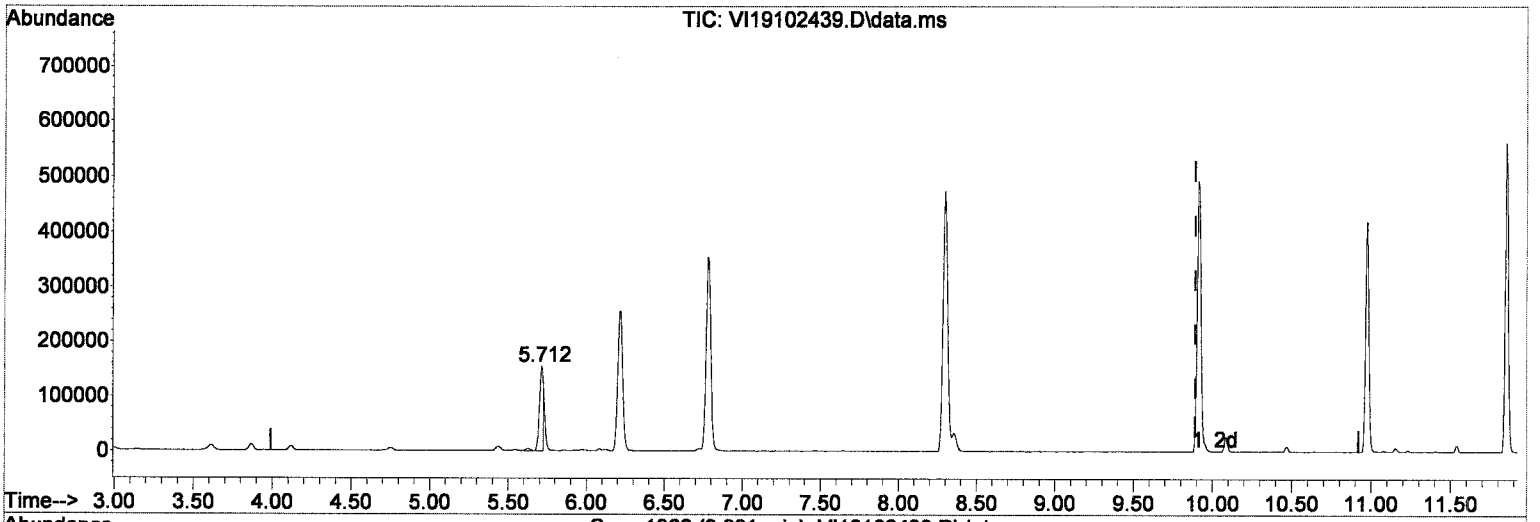


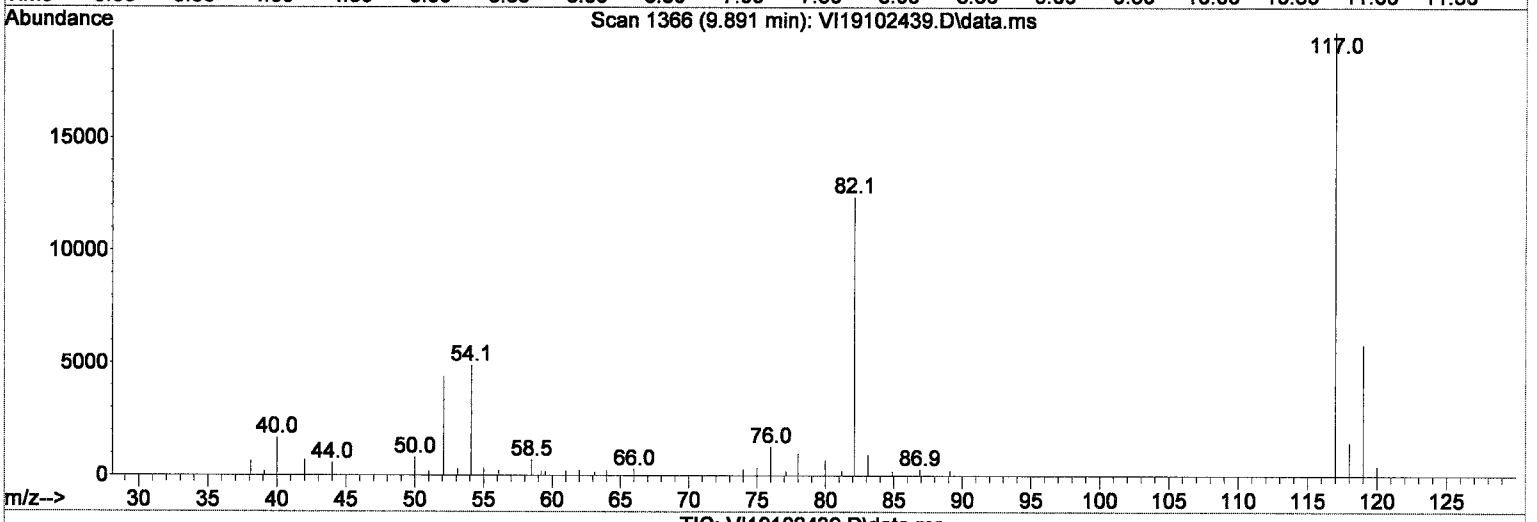
R = 6.87e-004 A*A + 1.55e+000 A + 9.51e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

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





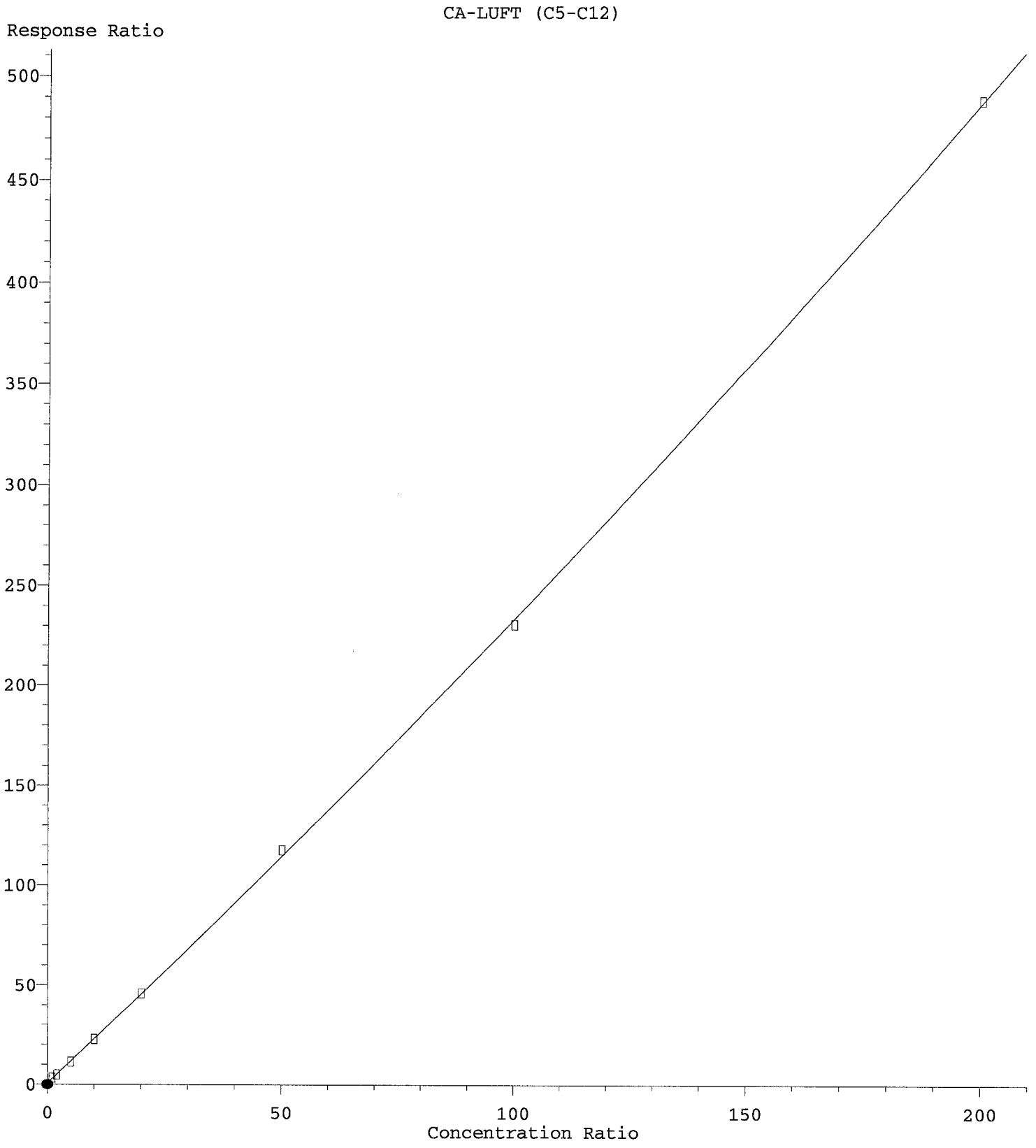
TIC: VI19102439.D\data.ms

(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

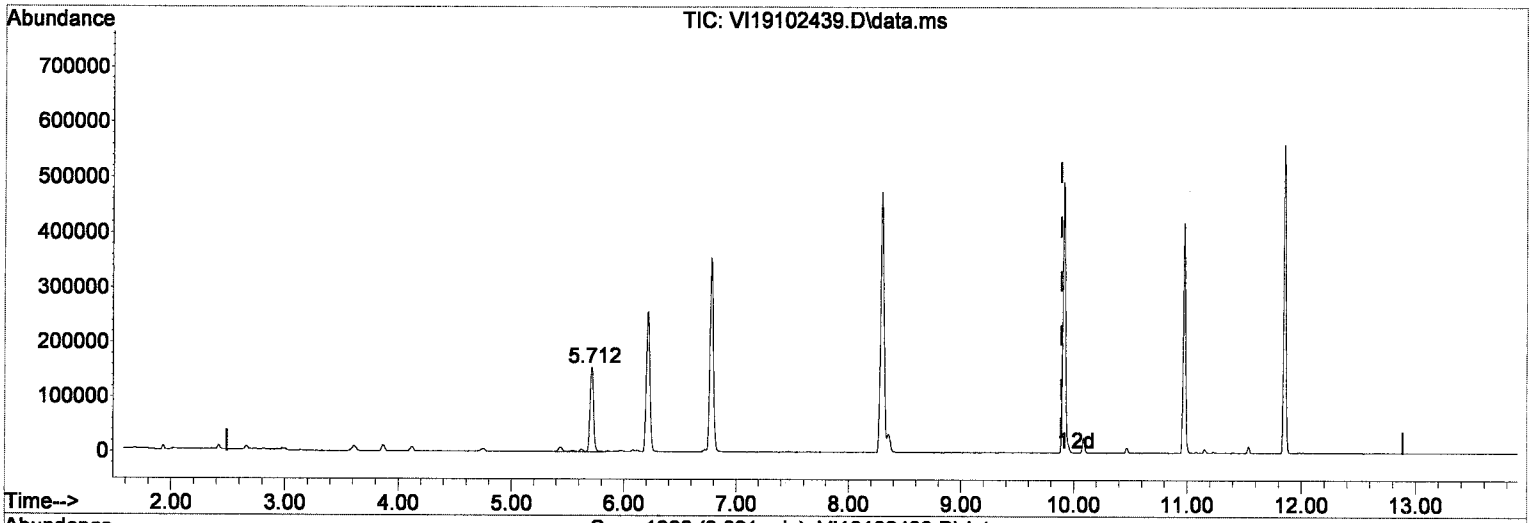


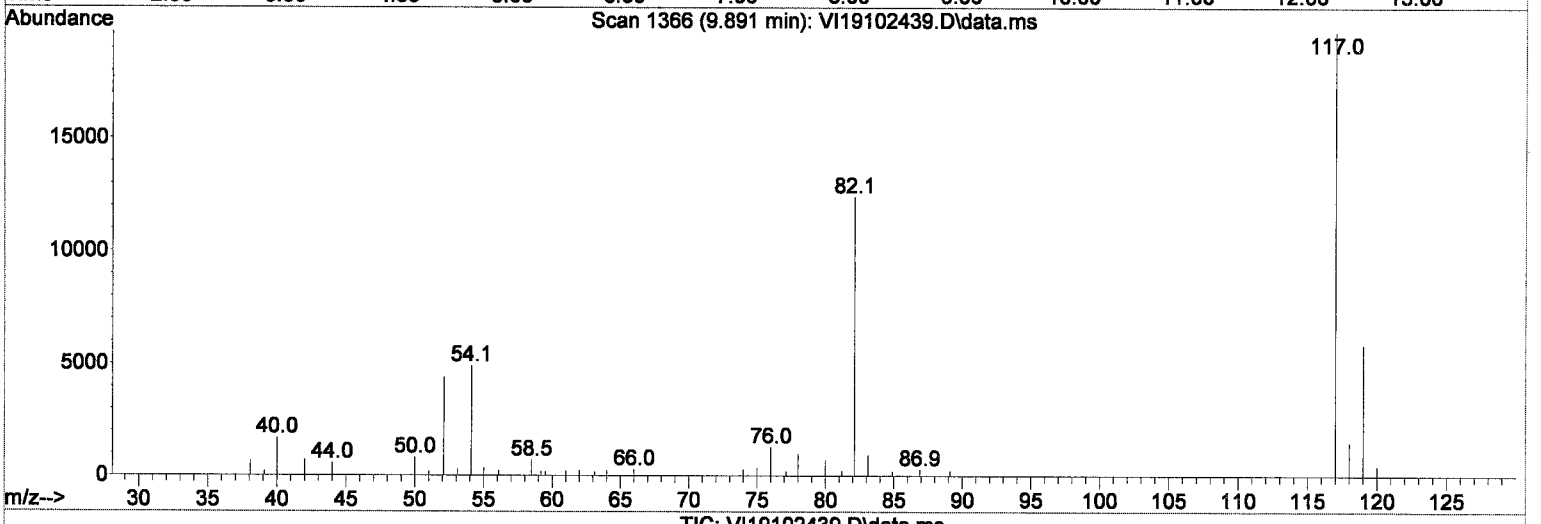
R = 1.05e-003 A*A + 2.22e+000 A + 7.45e-001
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\VI191025G.M
Calibration Table Last Updated: Fri Oct 25 10:31:34 2019

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

(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.

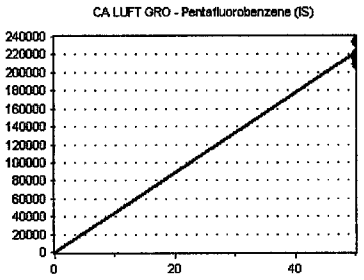
Element Calibration Review Sheet

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**

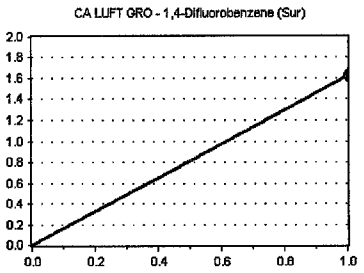


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	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**

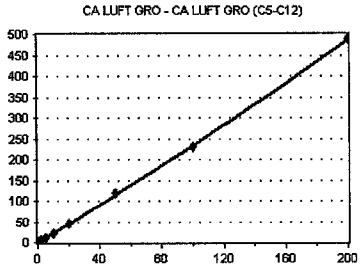


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	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**

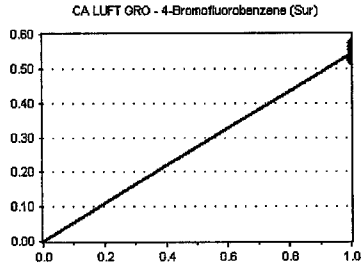


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	681991	3.259	9.89
9J24043-CALD	100	1014687	2.422	9.89
9J24043-CALE	250	2493143	2.257	9.89
9J24043-CALF	500	4877141	2.271	9.89
9J24043-CALG	1000	1.073362E+07	2.291	9.89
9J24043-CALH	2500	2.54612E+07	2.353	9.89
9J24043-CALI	5000	5.393736E+07	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**

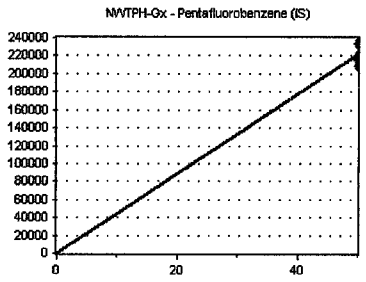
Element Calibration Review Sheet

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**

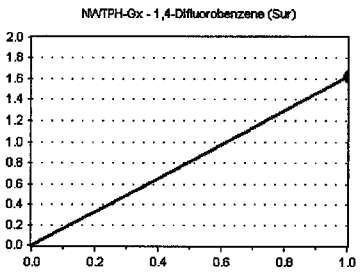


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	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**

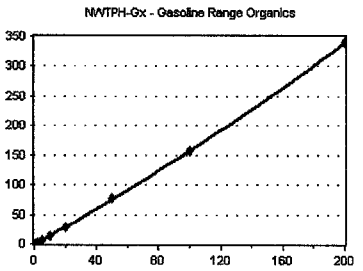


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	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**

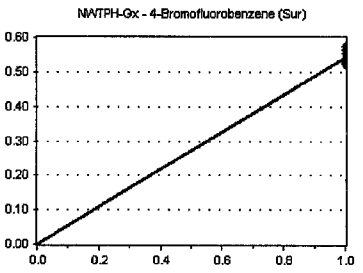


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	193702	0.926	9.89
9J24043-CALD	100	430822	1.028	9.89
9J24043-CALE	250	1374008	1.244	9.89
9J24043-CALF	500	2976997	1.386	9.89
9J24043-CALG	1000	6735895	1.437	9.89
9J24043-CALH	2500	1.67752E+07	1.550	9.89
9J24043-CALI	5000	3.669824E+07	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**

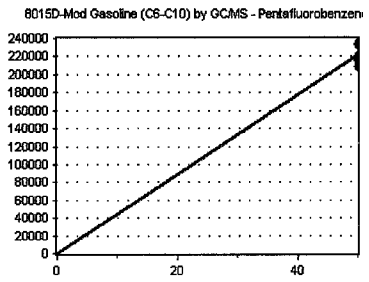
Element Calibration Review Sheet

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**

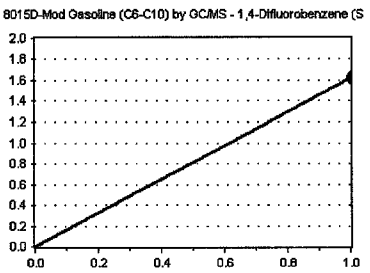


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	209290	4185.800	6.22
9J24043-CALD	50	209478	4189.560	6.22
9J24043-CALE	50	220921	4418.420	6.22
9J24043-CALF	50	214780	4295.600	6.22
9J24043-CALG	50	234293	4685.860	6.22
9J24043-CALH	50	216435	4328.700	6.22
9J24043-CALI	50	233849	4676.980	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**

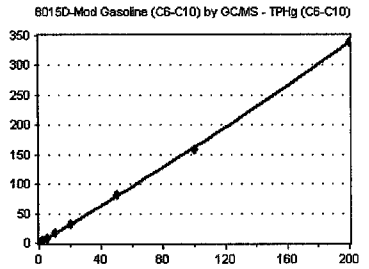


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	341977	1.634	6.78
9J24043-CALD	50	342473	1.635	6.78
9J24043-CALE	50	357958	1.620	6.78
9J24043-CALF	50	347086	1.616	6.78
9J24043-CALG	50	376297	1.606	6.78
9J24043-CALH	50	352248	1.628	6.78
9J24043-CALI	50	379658	1.624	6.78
9J24043-CALJ	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**

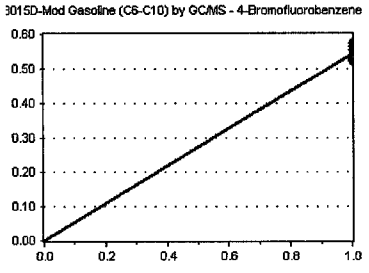


Standard	Concentration	Response	Response Factor	RT
9J24043-CALC	50	557886	2.666	9.89
9J24043-CALD	100	799328	1.908	9.89
9J24043-CALE	250	1839524	1.665	9.89
9J24043-CALF	500	3507779	1.633	9.89
9J24043-CALG	1000	7648071	1.632	9.89
9J24043-CALH	2500	1.778026E+07	1.643	9.89
9J24043-CALI	5000	3.735262E+07	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

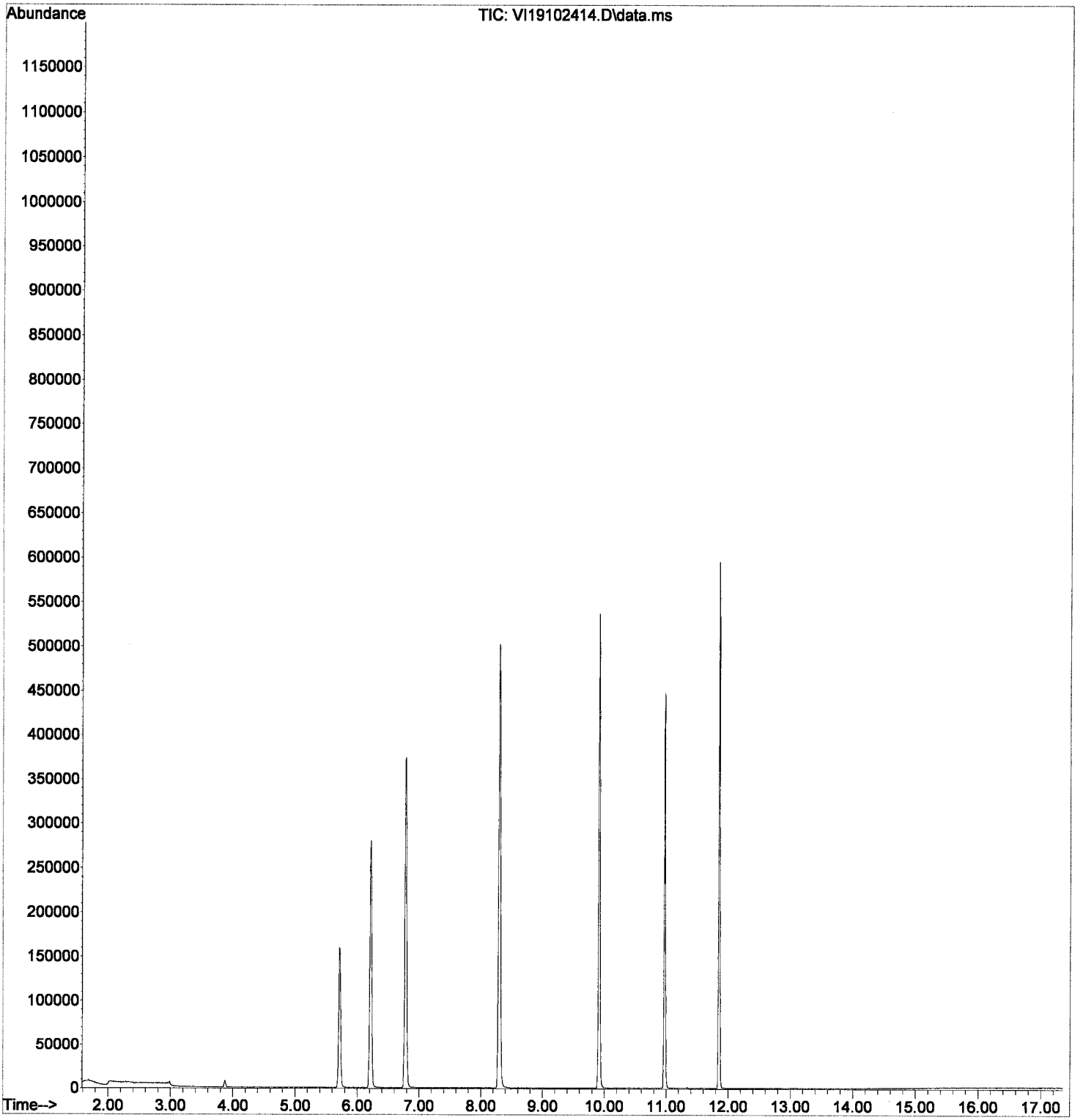
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (I)	6.217	99	116268	50.00	ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.909	117	306026	50.00	ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	138672	50.00	ug/L	0.00
System Monitoring Compounds						
32) Dibromofluoromethane (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

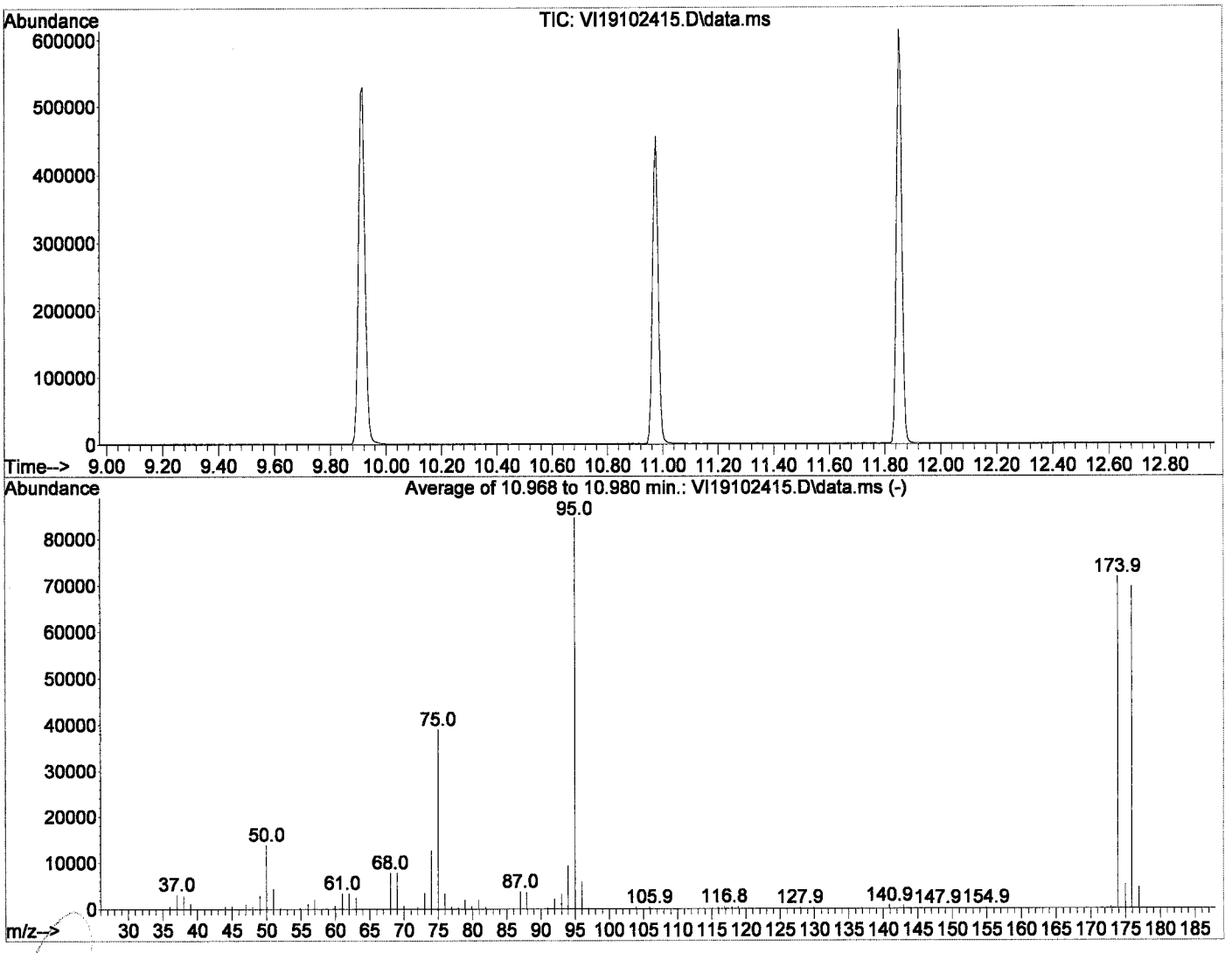


BFB

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

M 10/25/19

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

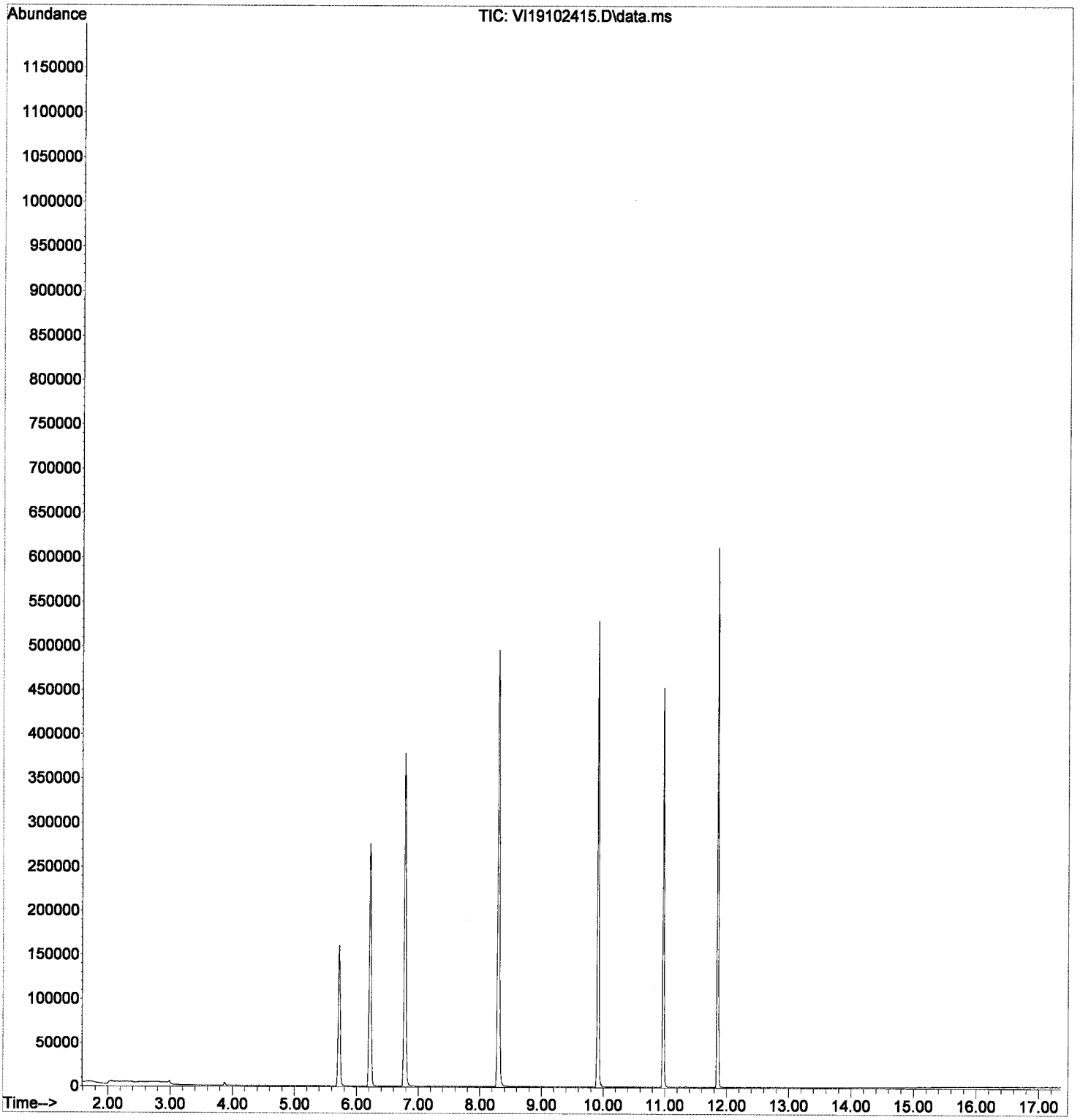
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	115135	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.916	117	306446	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	141323	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (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

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

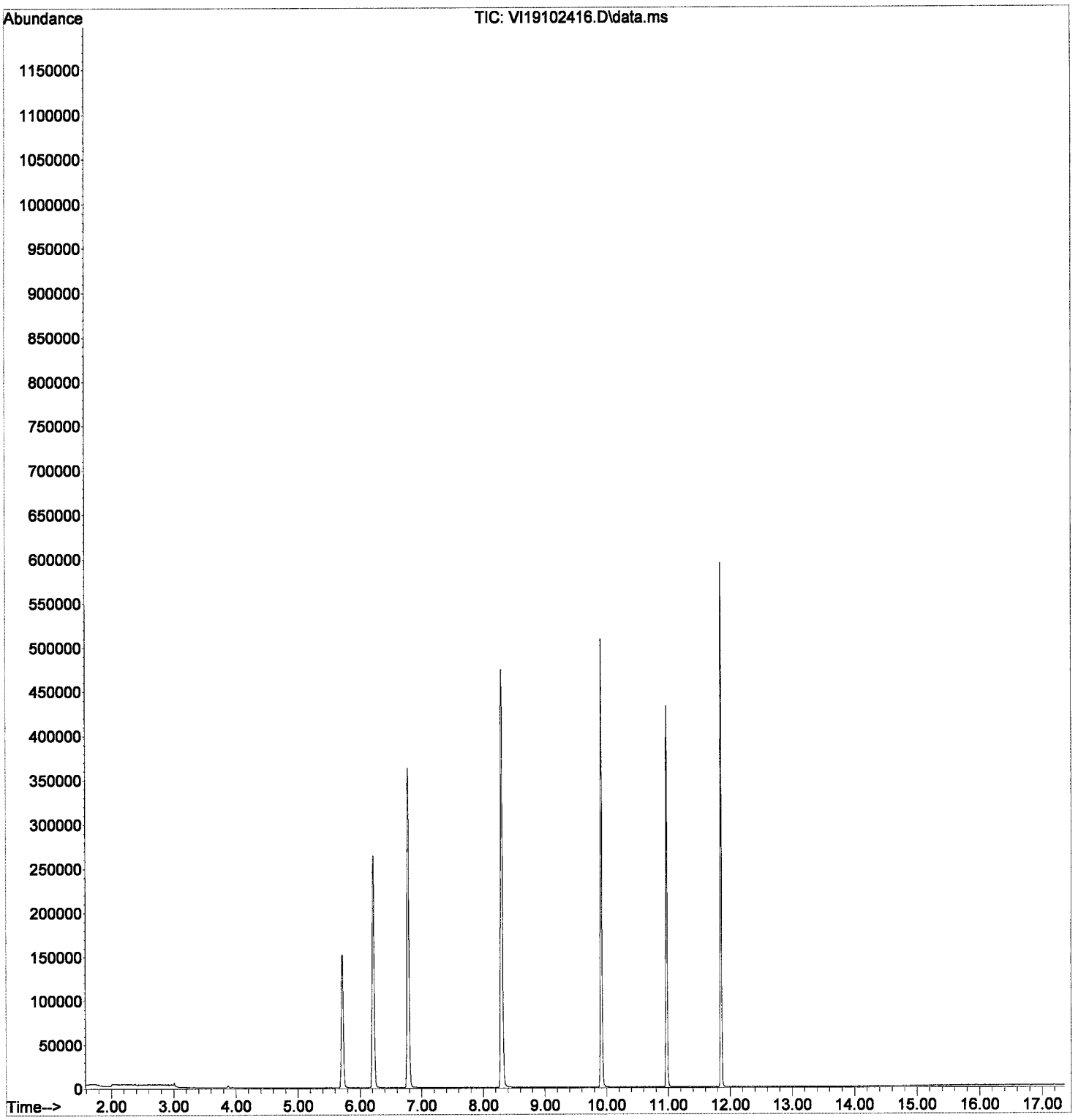
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	109157	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	292802	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	134268	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (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

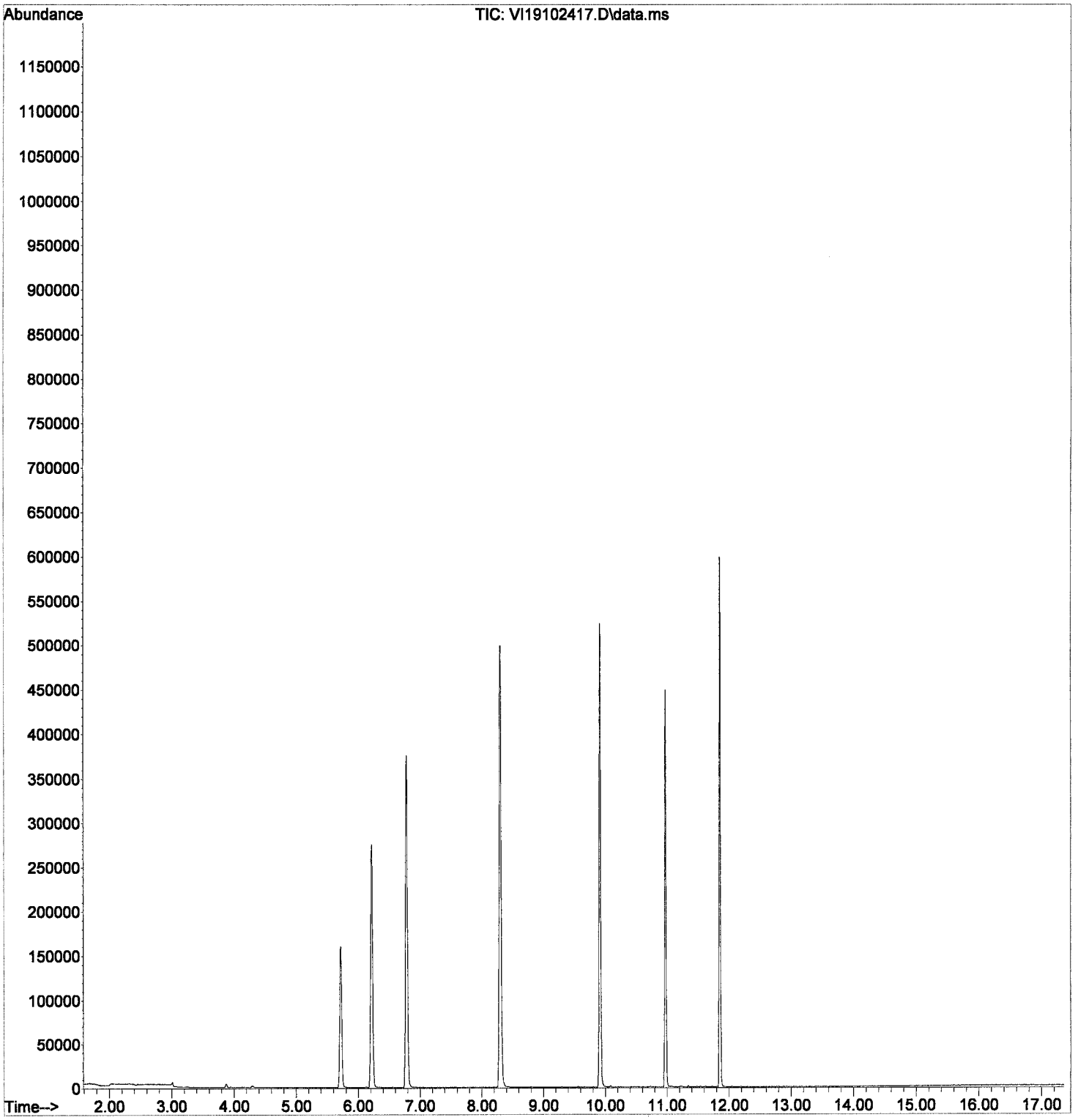
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	978	0.11	ug/L		85
50) Tetrachloroethene (PCE)	0.000		0	N.D.			
51) 4-Methyl-2-Pentanone (...	8.808	43	433	0.16	ug/L	#	43
52) t-1,3-Dichloropropene	0.000		0	N.D.			
53) 1,1,2-Trichloroethane	0.000		0	N.D.			
54) Dibromochloromethane	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.	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

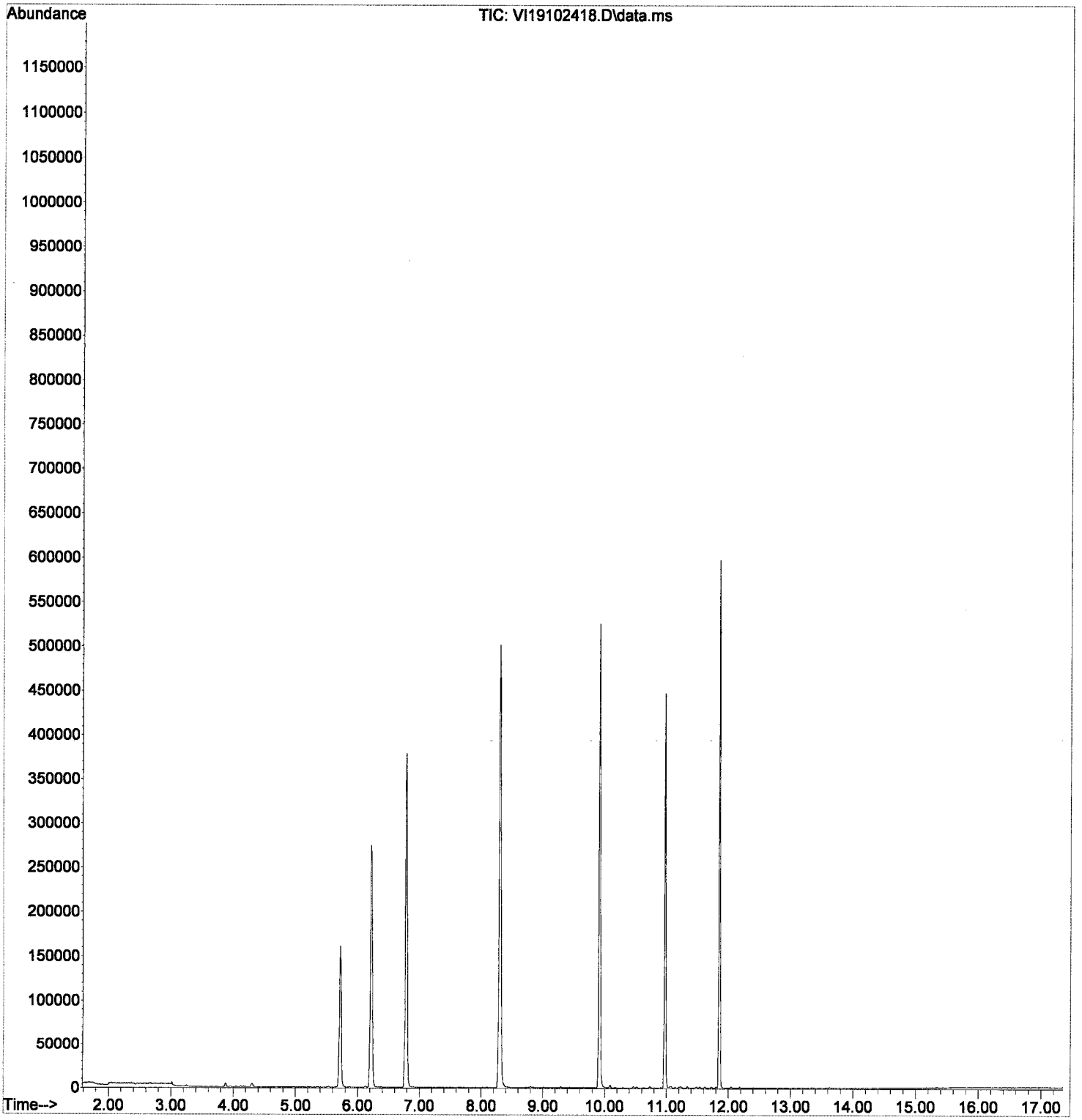
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.352	91	1744	0.21	ug/L		93
50) Tetrachloroethene (PCE)	8.808	166	267	0.14	ug/L	#	25
51) 4-Methyl-2-Pentanone (...	8.796	43	890	0.33	ug/L		85
52) t-1,3-Dichloropropene	8.839	75	300	0.11	ug/L	#	45
53) 1,1,2-Trichloroethane	9.009	97	288	0.14	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\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	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

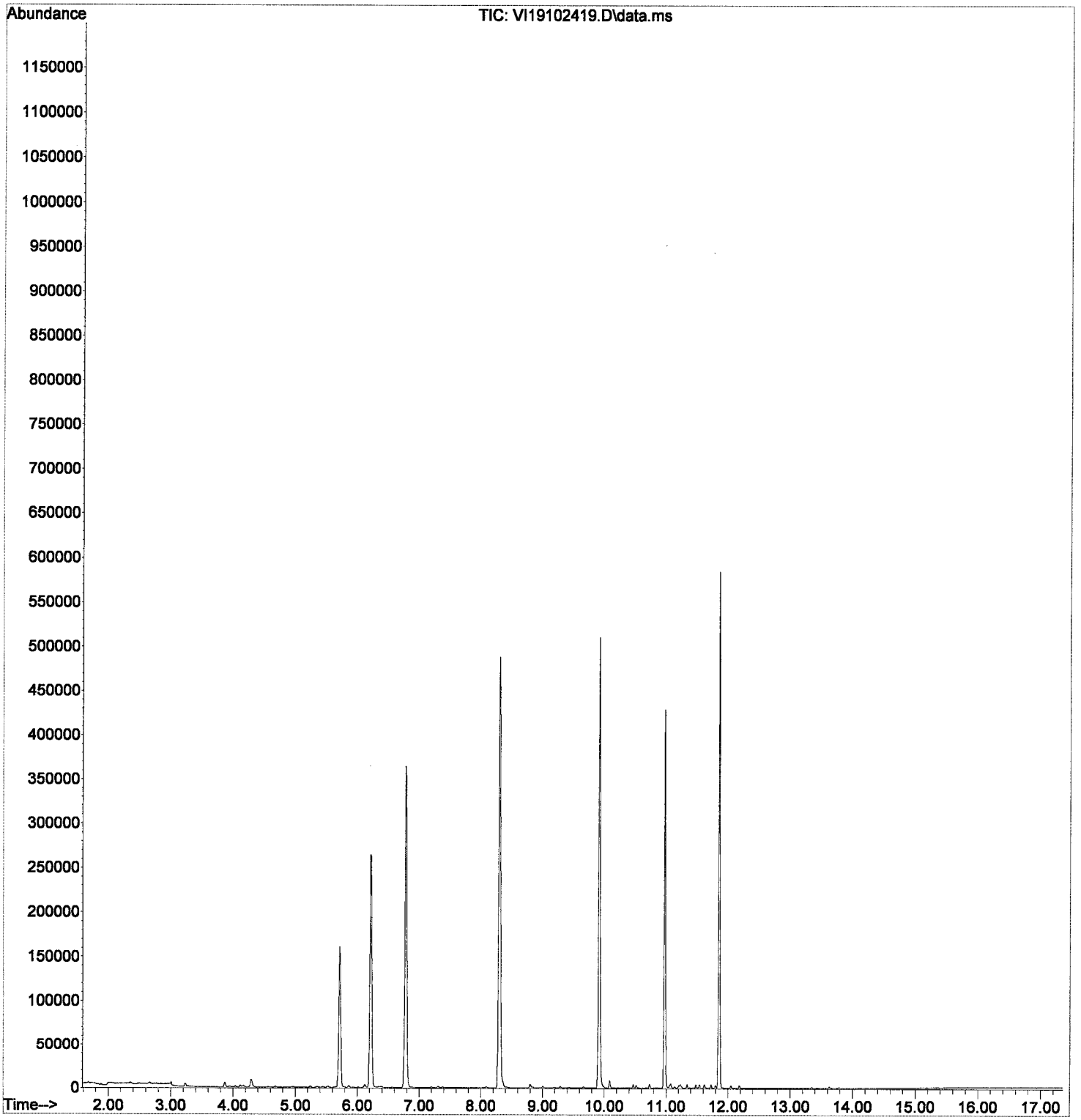
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	3505	0.43	ug/L		93
50) Tetrachloroethene (PCE)	8.796	166	787	0.42	ug/L		94
51) 4-Methyl-2-Pentanone (...	8.808	43	1912	0.73	ug/L		91
52) t-1,3-Dichloropropene	8.839	75	610	0.22	ug/L	#	45
53) 1,1,2-Trichloroethane	9.003	97	717	0.36	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

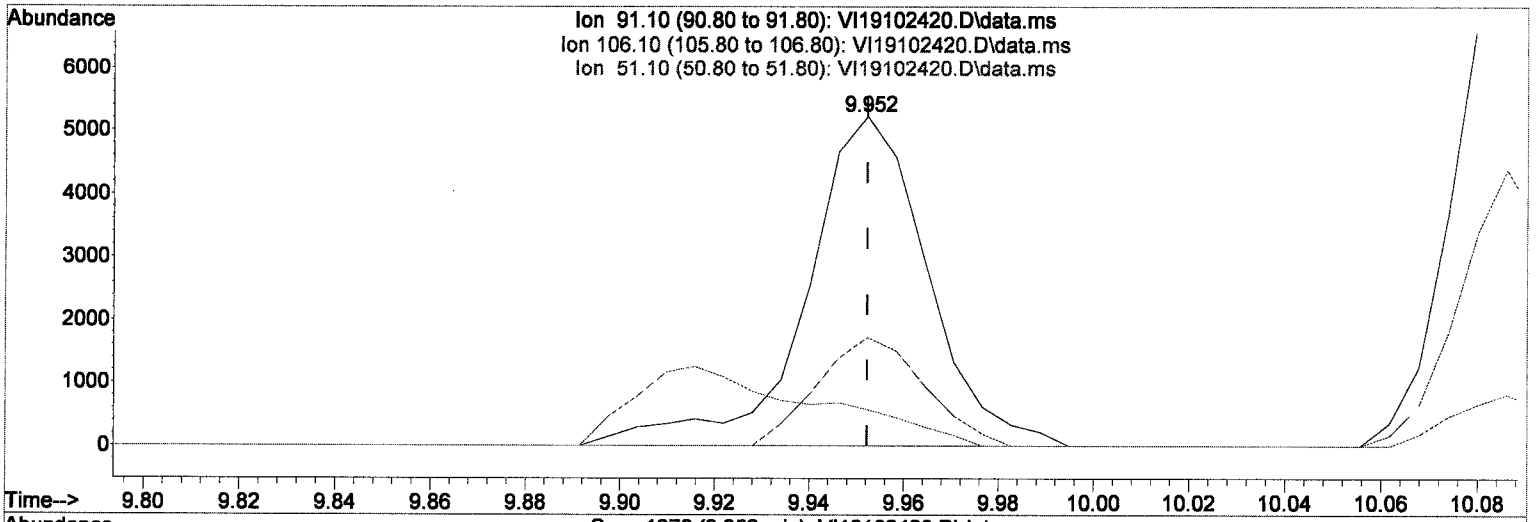
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.352	91	9040	1.04	ug/L		99
50) Tetrachloroethene (PCE)	8.796	166	1994	1.00	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.802	43	5042	1.83	ug/L		93
52) t-1,3-Dichloropropene	8.839	75	2122	0.72	ug/L		95
53) 1,1,2-Trichloroethane	9.003	97	1944	0.93	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

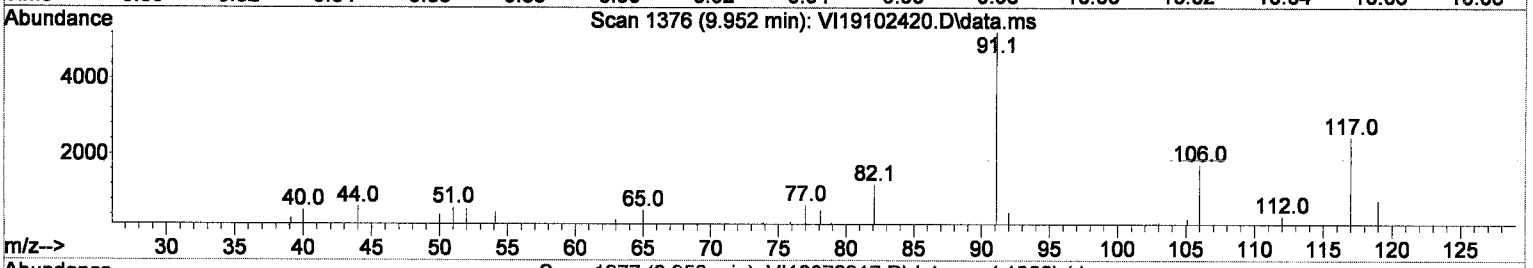
(#) = qualifier out of range (m) = manual integration (+) = signals summed

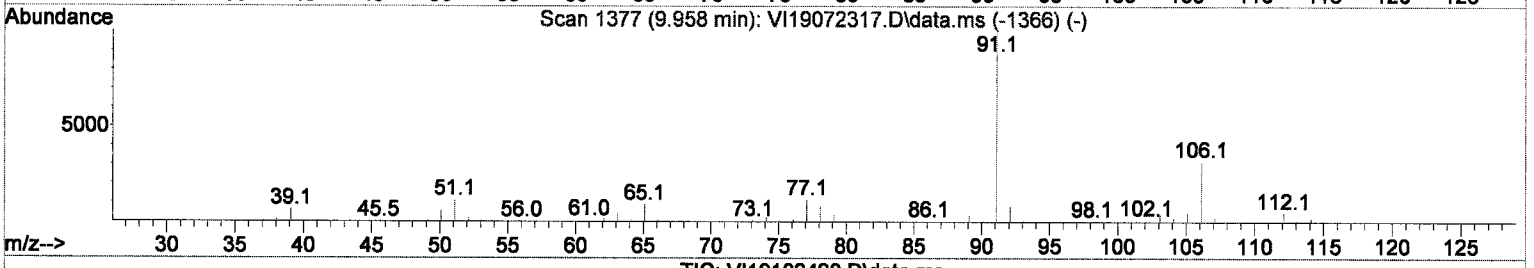
Quantitation Report (Qedit)

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

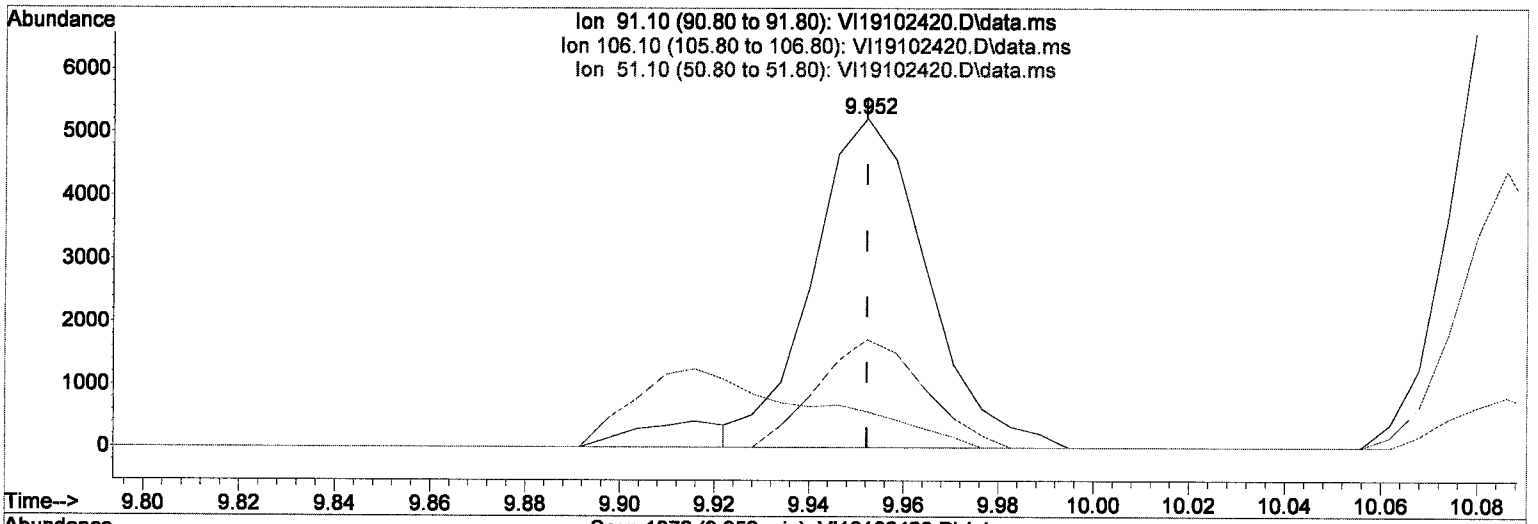
Ion	Exp%	Act%
91.10	100.00	100.00
106.10	30.80	32.98
51.10	10.40	11.11
0.00	0.00	0.00

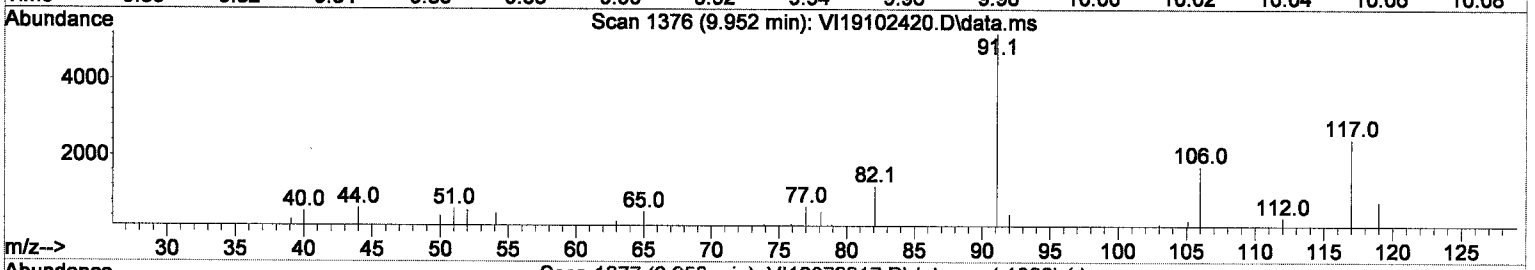
M.2

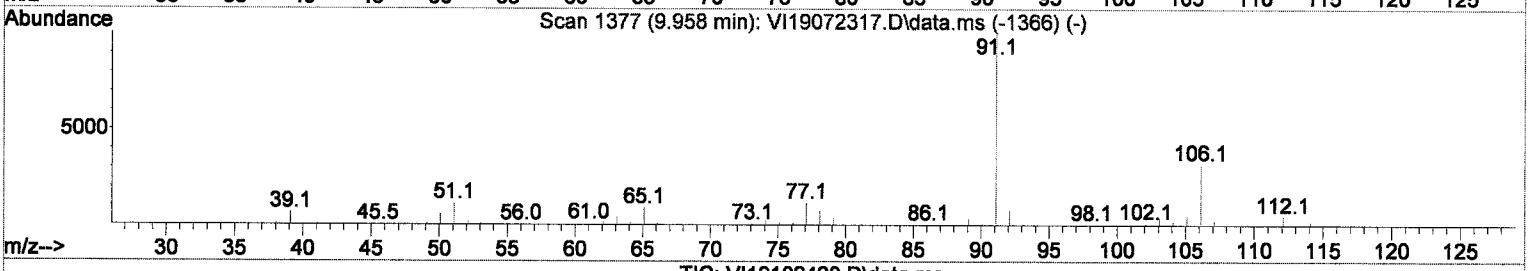
Quantitation Report (Qedit)

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

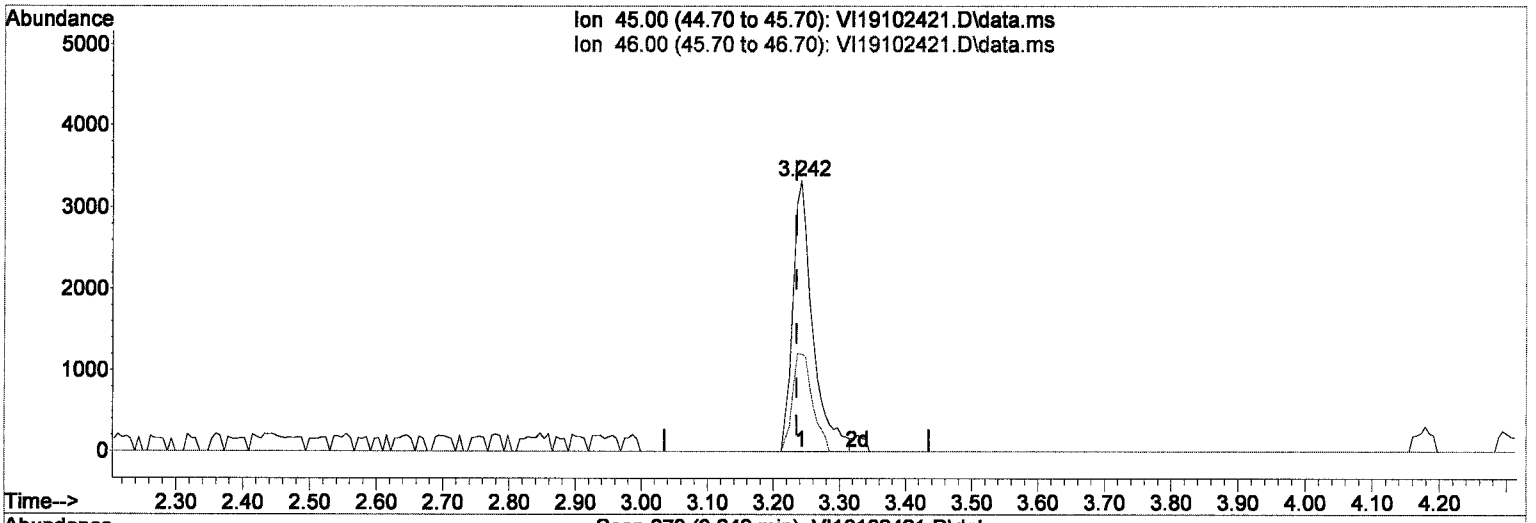
response 8761

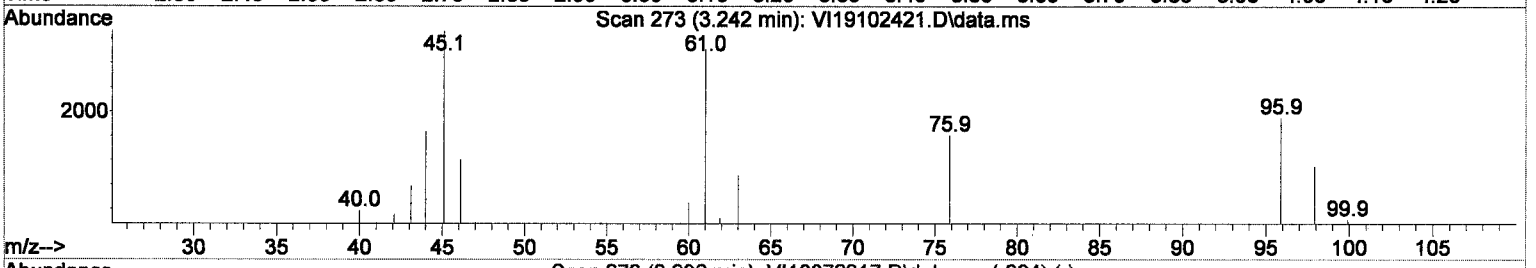
Ion	Exp%	Act%
91.10	100.00	100.00
106.10	30.80	32.98
51.10	10.40	11.11
0.00	0.00	0.00

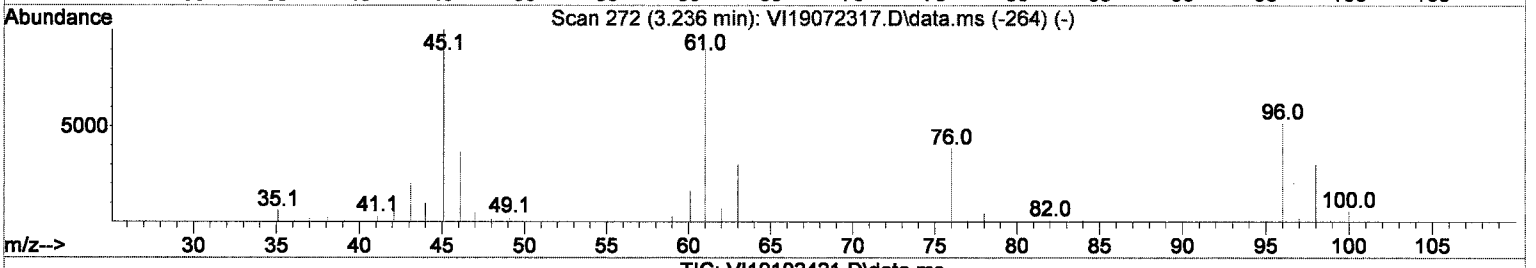
Quantitation Report (Qedit)

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

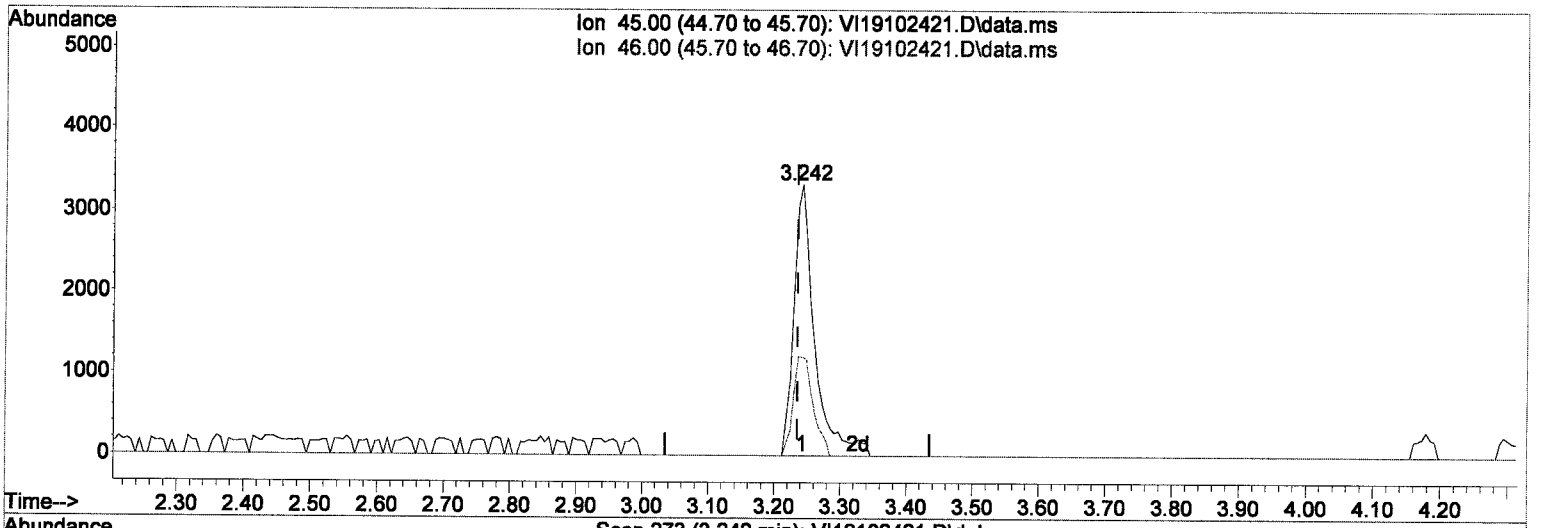
M.2.

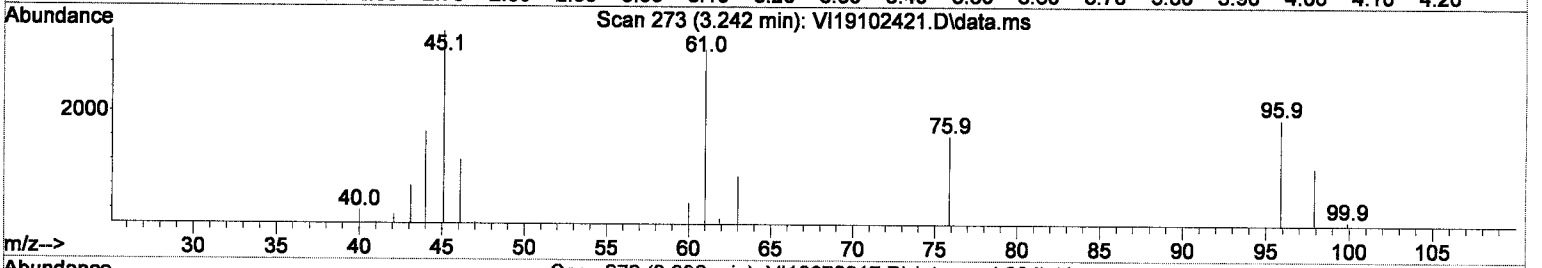
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	36.12
0.00	0.00	0.00
0.00	0.00	0.00

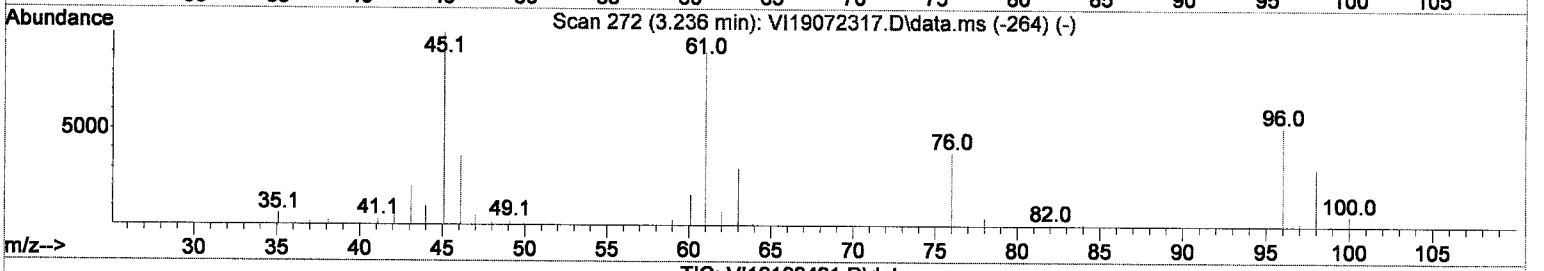
Quantitation Report (Qedit)

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

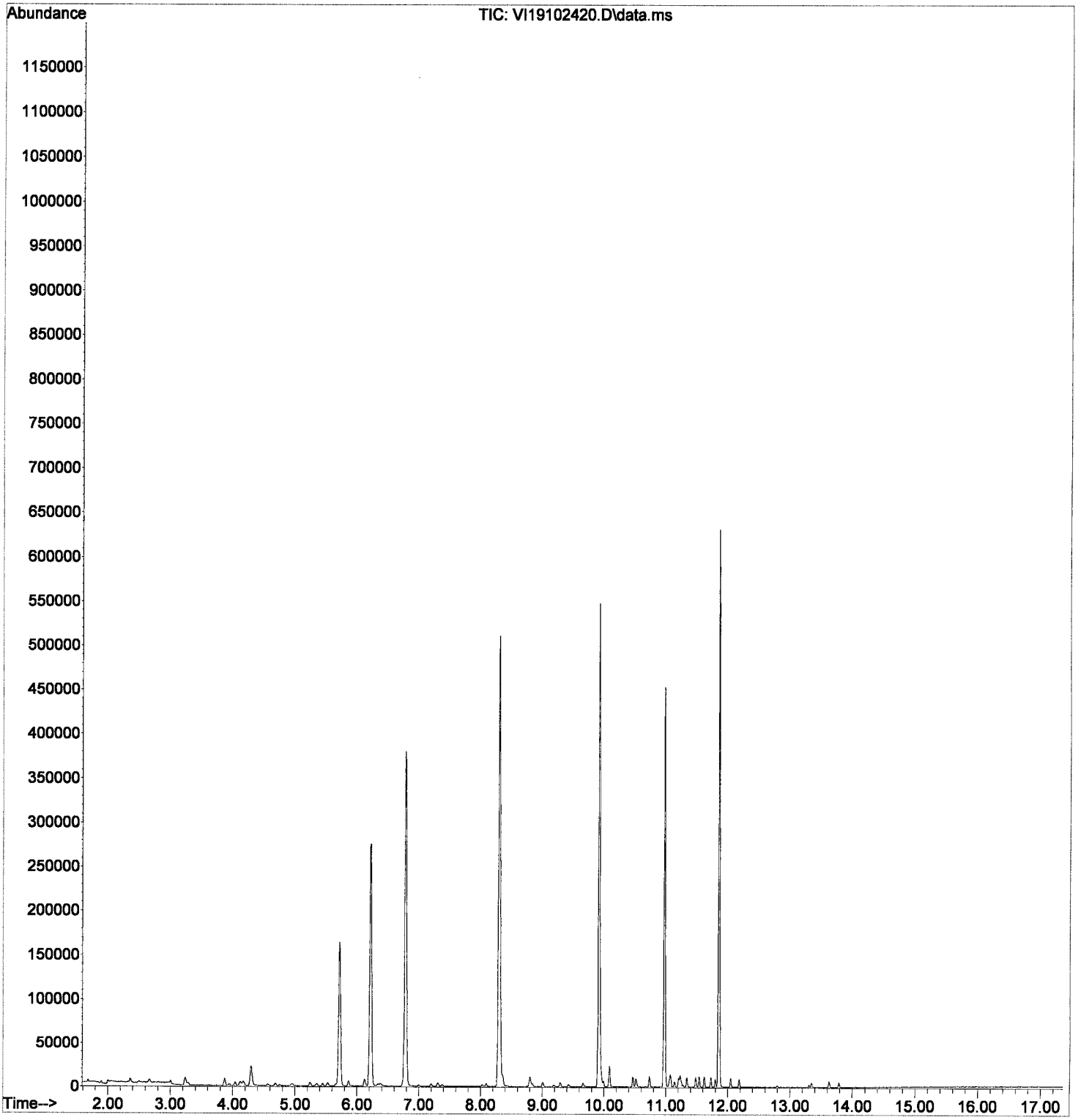
Ion	Exp%	Act%
45.00	100.00	100.00
46.00	47.50	36.12
0.00	0.00	0.00
0.00	0.00	0.00

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

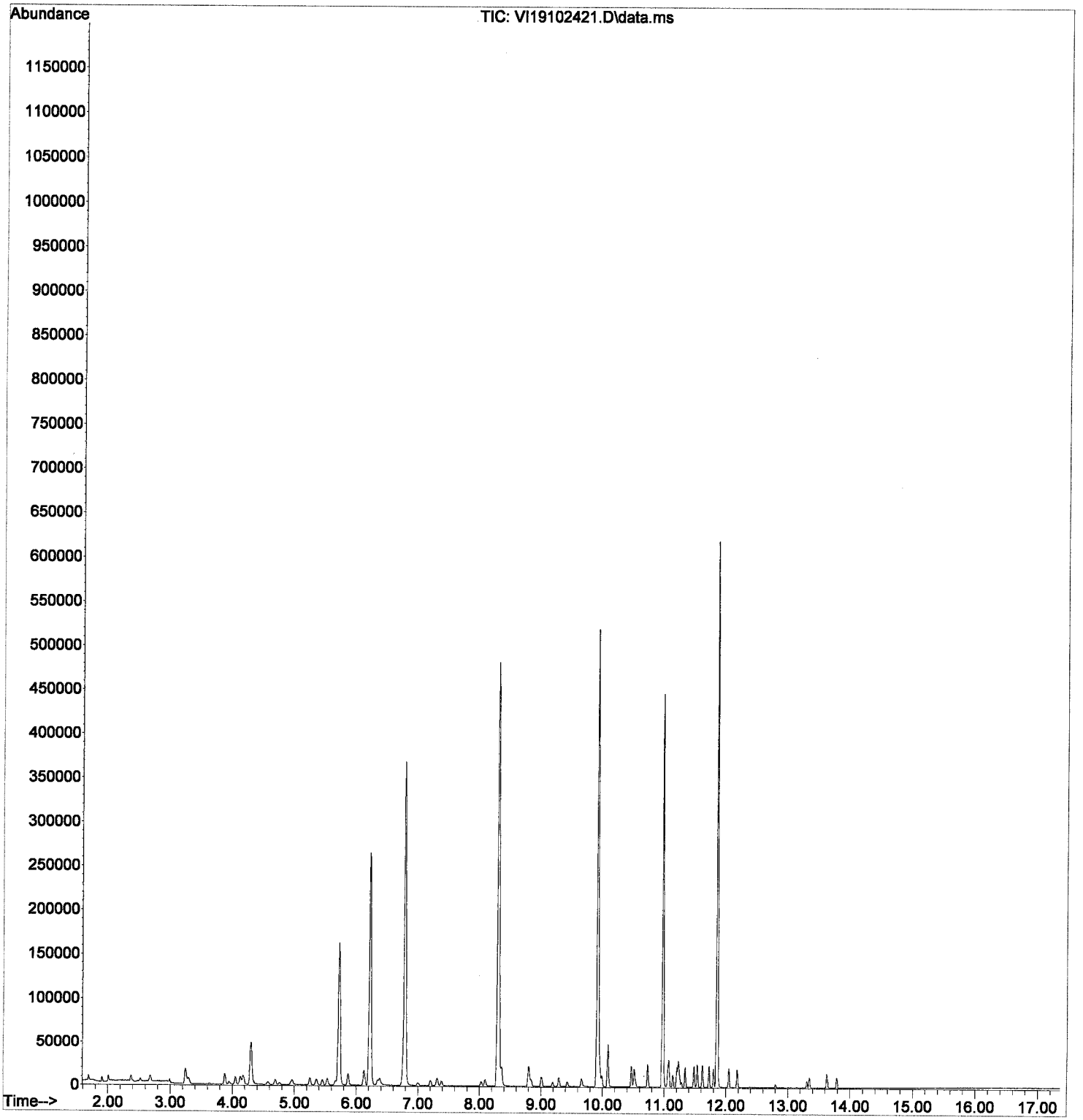
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	17851	2.14	ug/L		99
50) Tetrachloroethene (PCE)	8.796	166	4333	2.28	ug/L		92
51) 4-Methyl-2-Pentanone (...	8.809	43	11029	4.18	ug/L		98
52) t-1,3-Dichloropropene	8.839	75	4500	1.60	ug/L		95
53) 1,1,2-Trichloroethane	9.003	97	4134	2.06	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

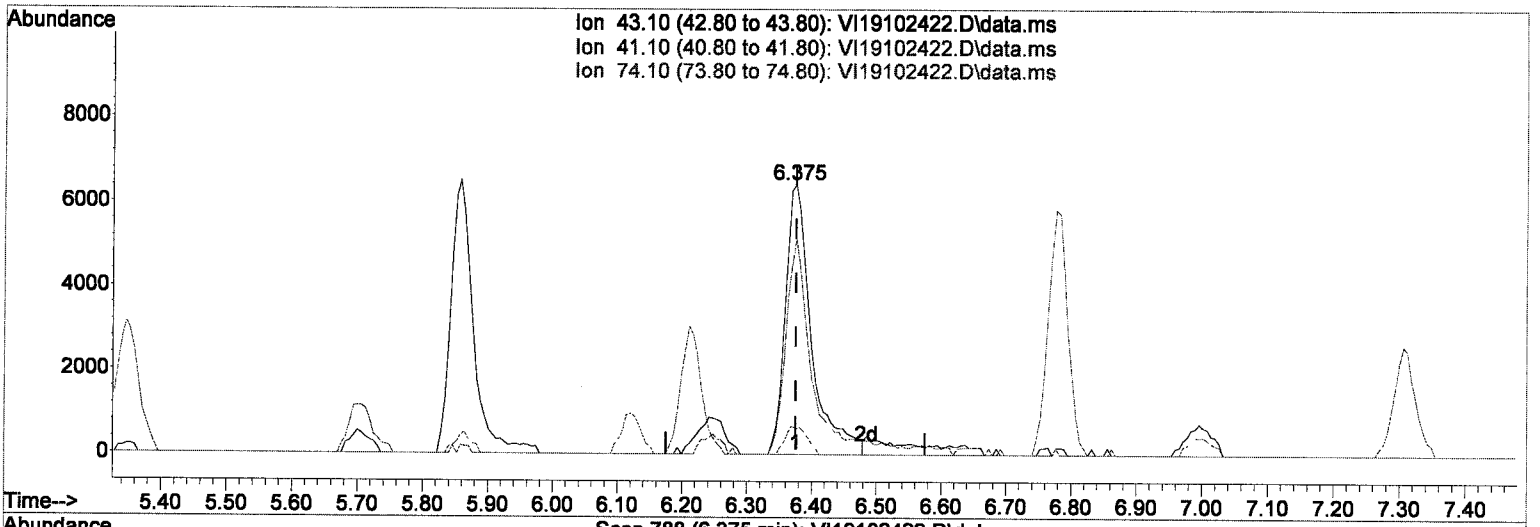
Quant Time: Oct 25 08:10:29 2019
Quant Method : C:\msdchem\1\methods\VI191025W.M
Quant Title : EPA 8260: Volatile Organic Compounds
QLast Update : Tue Aug 06 08:58:13 2019
Response via : Initial Calibration

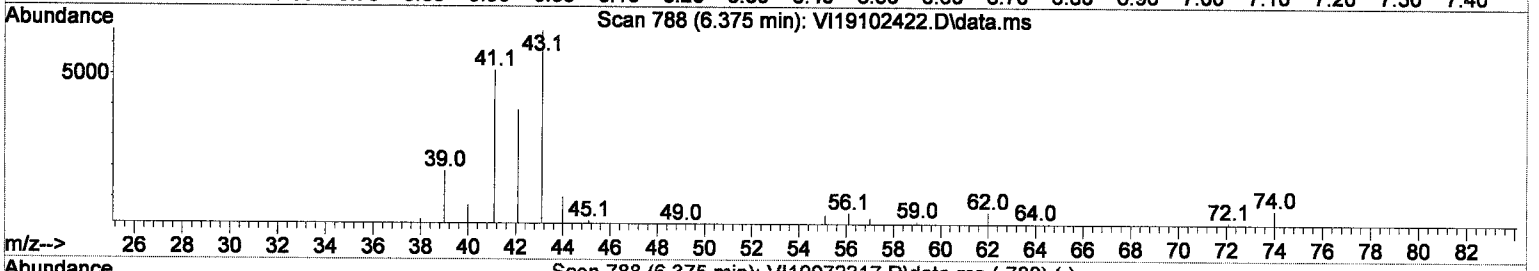
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	111010	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	300317	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	141843	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (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

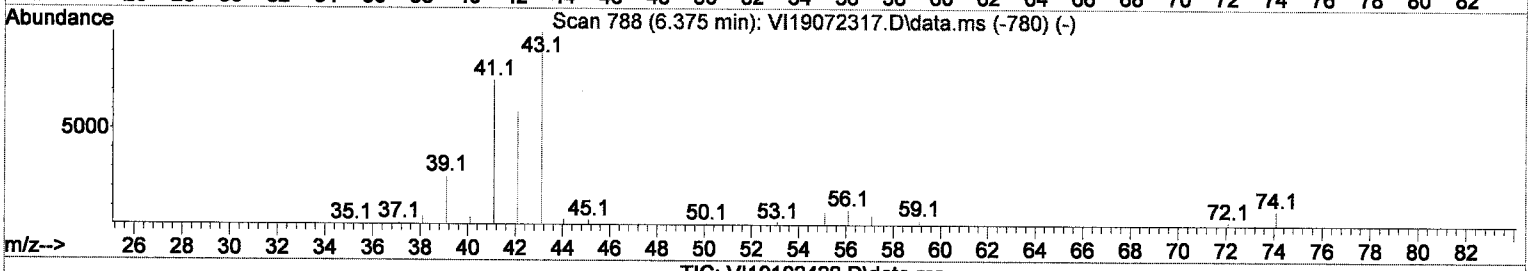
Quantitation Report (Qedit)

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

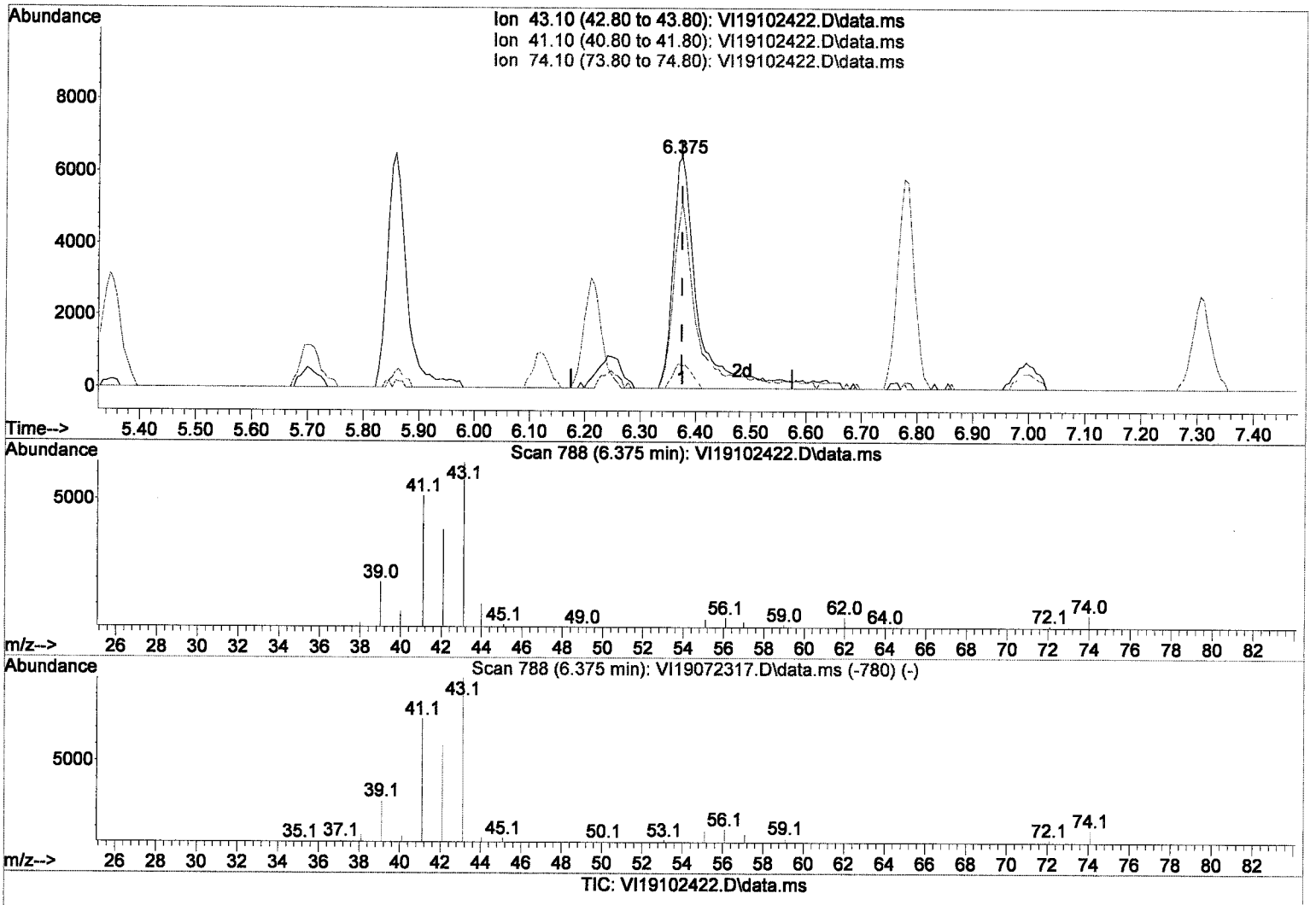
response 18074

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

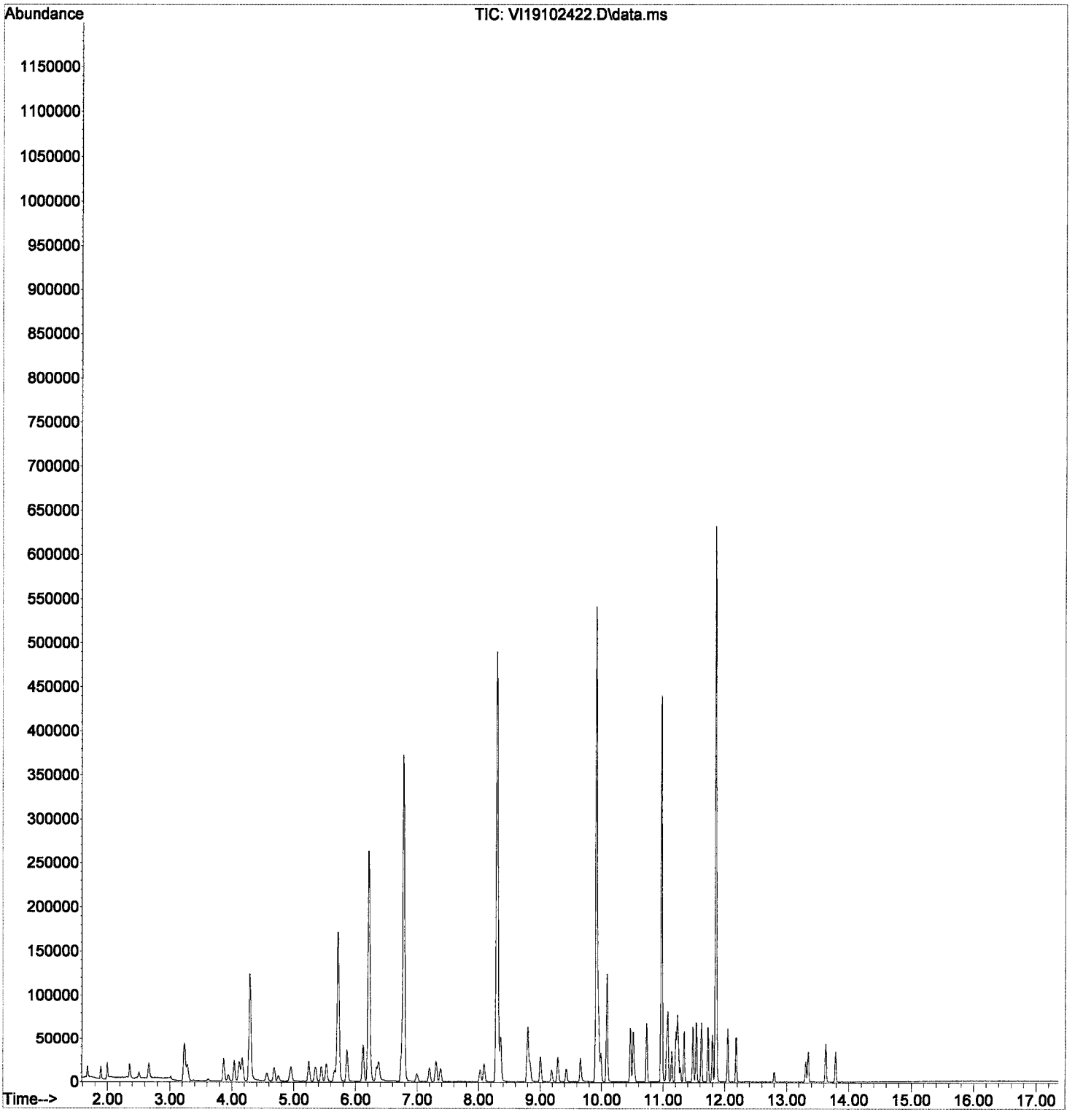
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	44272	5.27	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	10847	5.65	ug/L		90
51) 4-Methyl-2-Pentanone (...	8.796	43	28183	10.59	ug/L		97
52) t-1,3-Dichloropropene	8.839	75	12130	4.29	ug/L		98
53) 1,1,2-Trichloroethane	9.003	97	10336	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

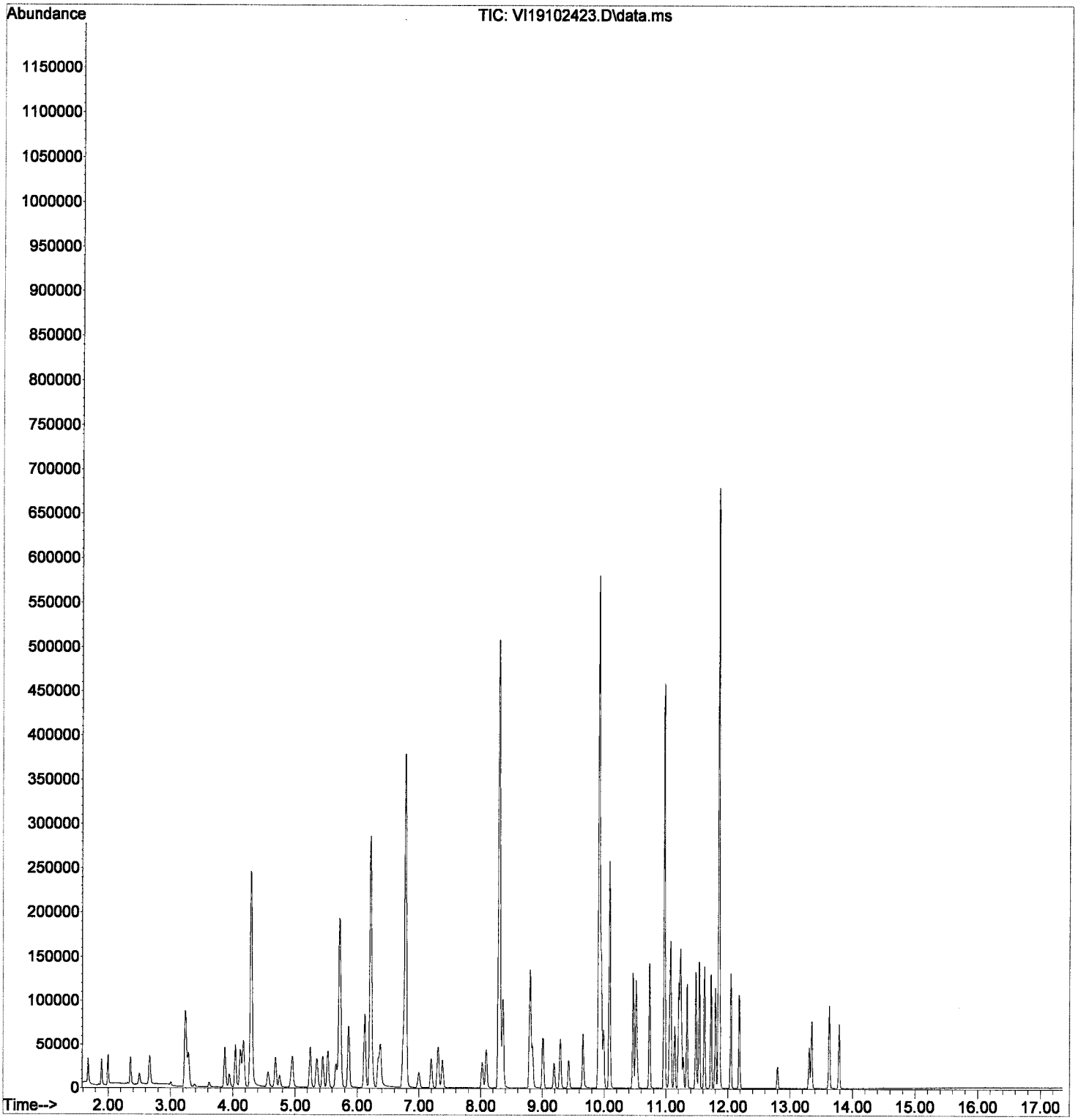
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	90400	10.33	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	22099	11.06	ug/L		92
51) 4-Methyl-2-Pentanone (...	8.802	43	58009	20.92	ug/L		92
52) t-1,3-Dichloropropene	8.839	75	26302	8.92	ug/L		96
53) 1,1,2-Trichloroethane	9.009	97	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

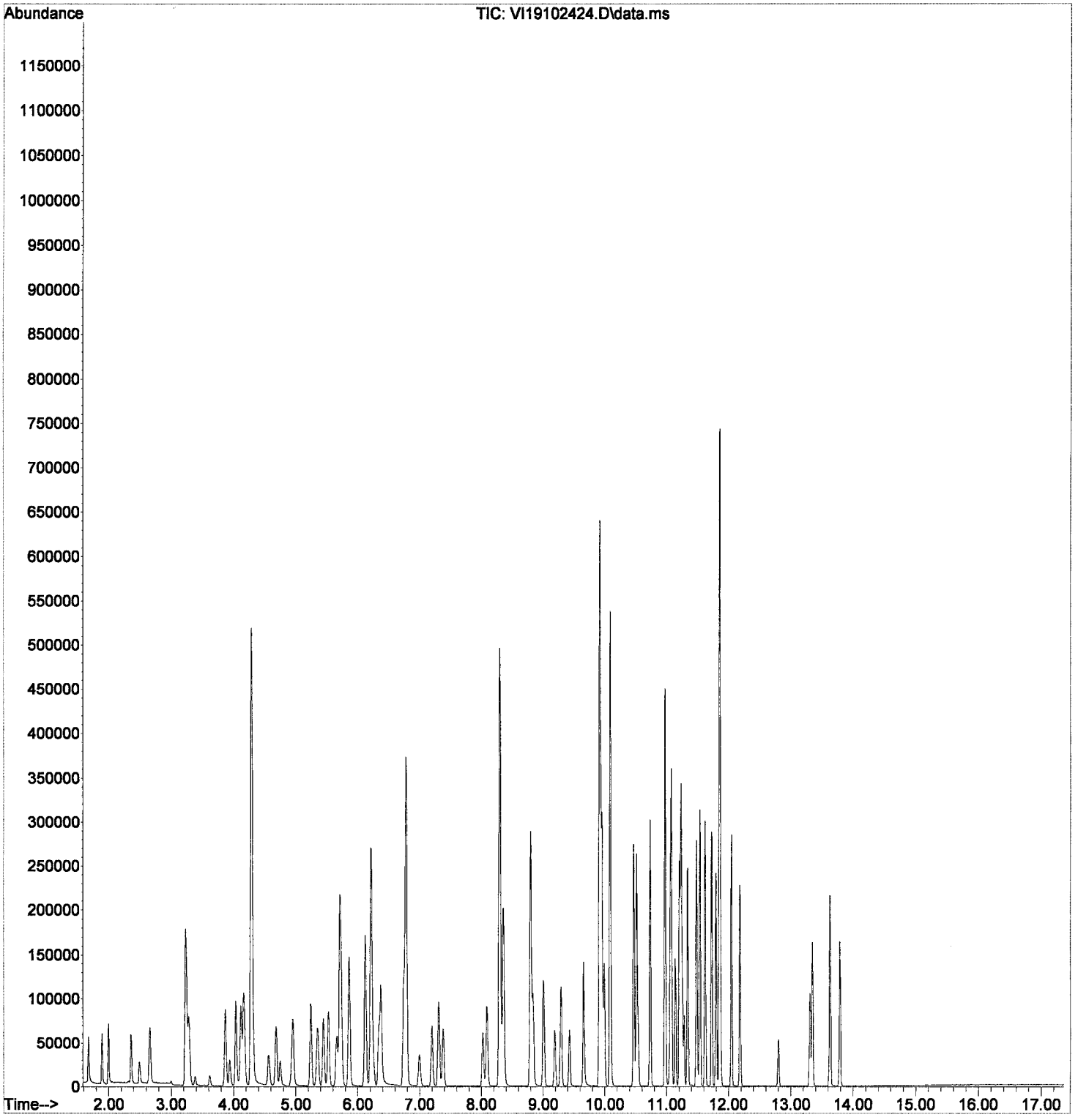
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	183309	21.33	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	45467	23.17	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.796	43	120524	44.27	ug/L		94
52) t-1,3-Dichloropropene	8.833	75	57085	19.72	ug/L		96
53) 1,1,2-Trichloroethane	9.003	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

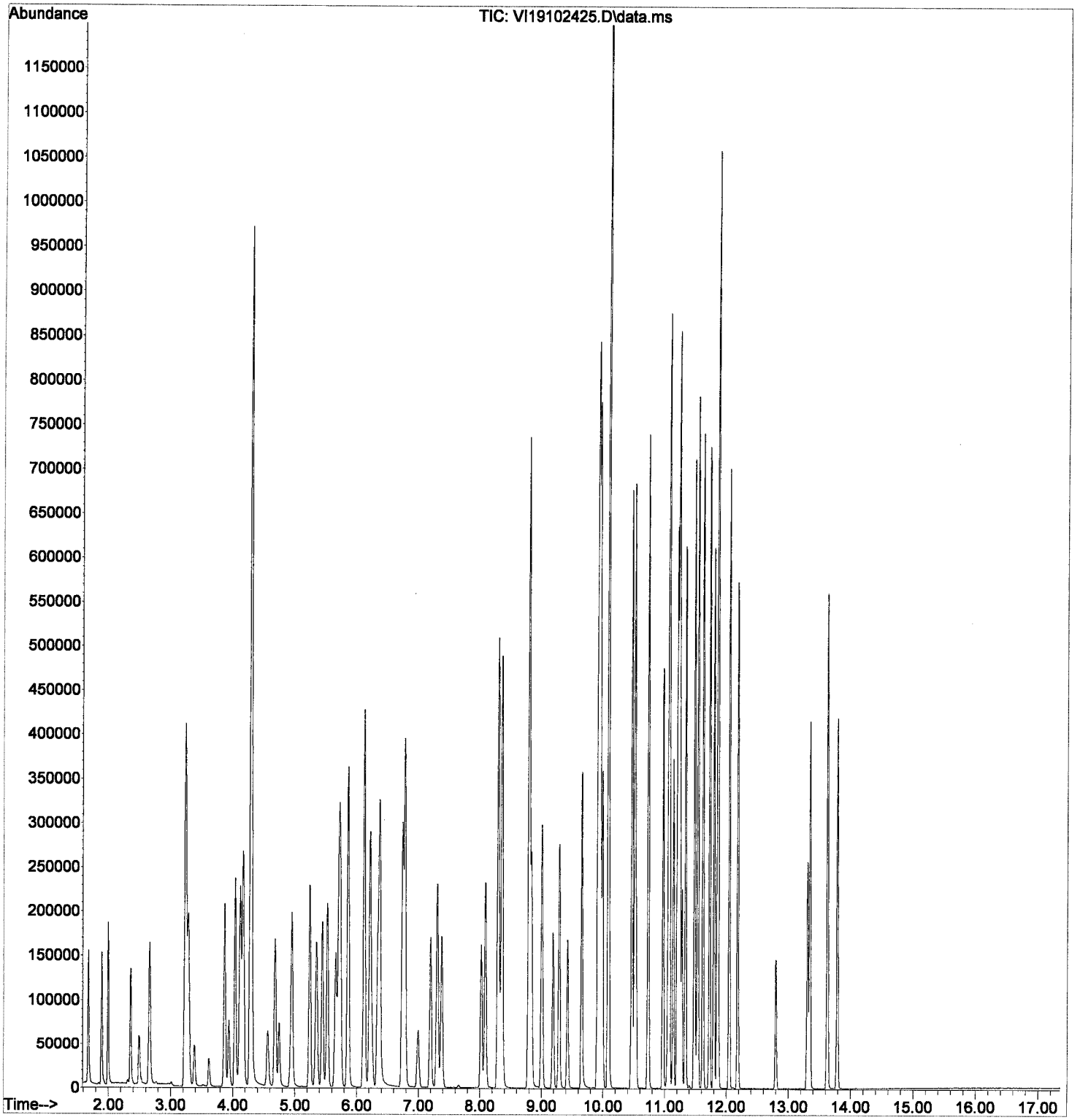
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	446611	49.69	ug/L	99
50) Tetrachloroethene (PCE)	8.796	166	113079	55.11	ug/L	92
51) 4-Methyl-2-Pentanone (...	8.796	43	304356	106.90	ug/L	94
52) t-1,3-Dichloropropene	8.833	75	151987	50.21	ug/L	97
53) 1,1,2-Trichloroethane	9.003	97	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

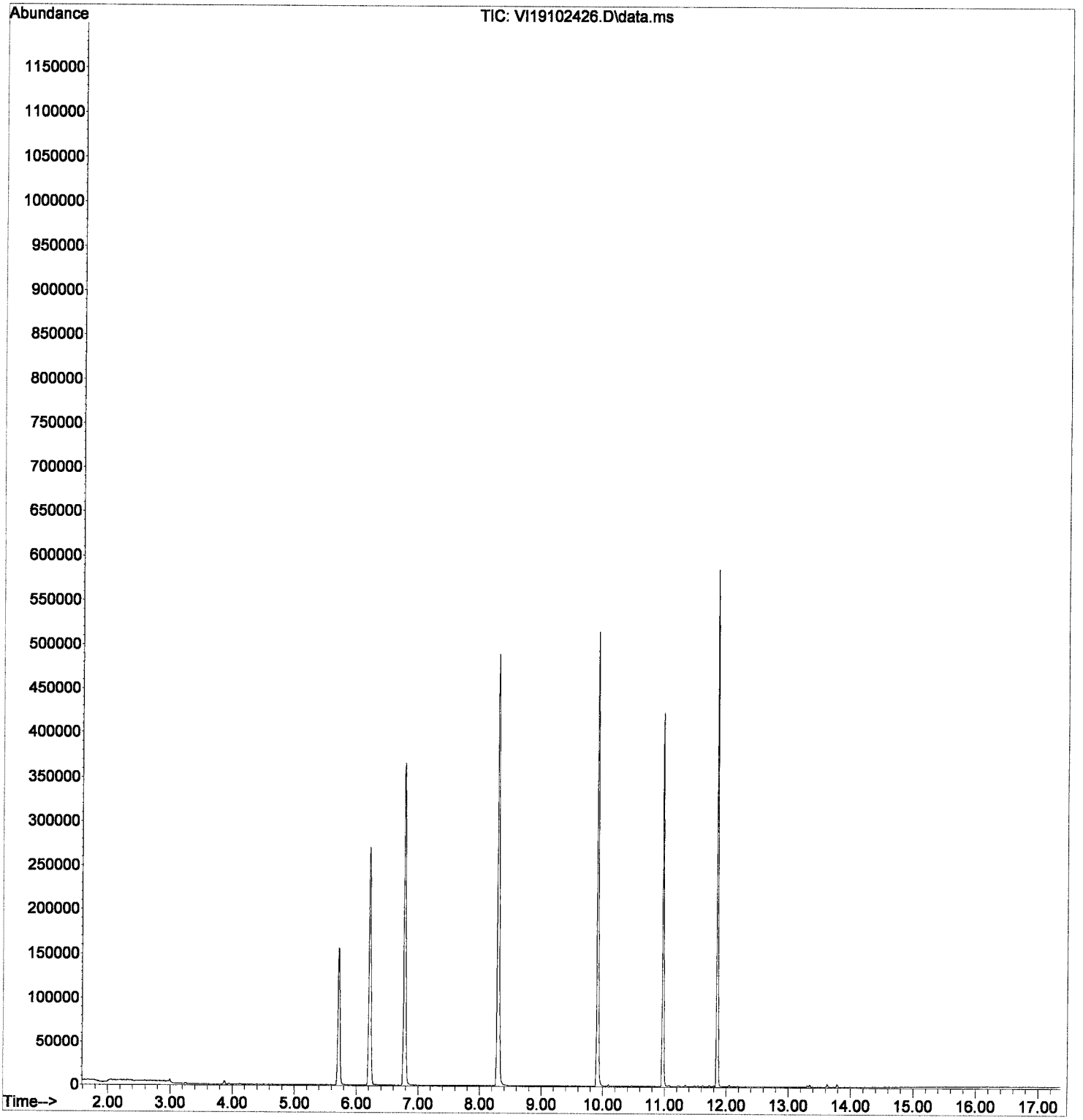
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.217	99	112457	50.00	ug/L	#	0.00
45) Chlorobenzene-d5 (I)	9.910	117	299558	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	136435	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (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

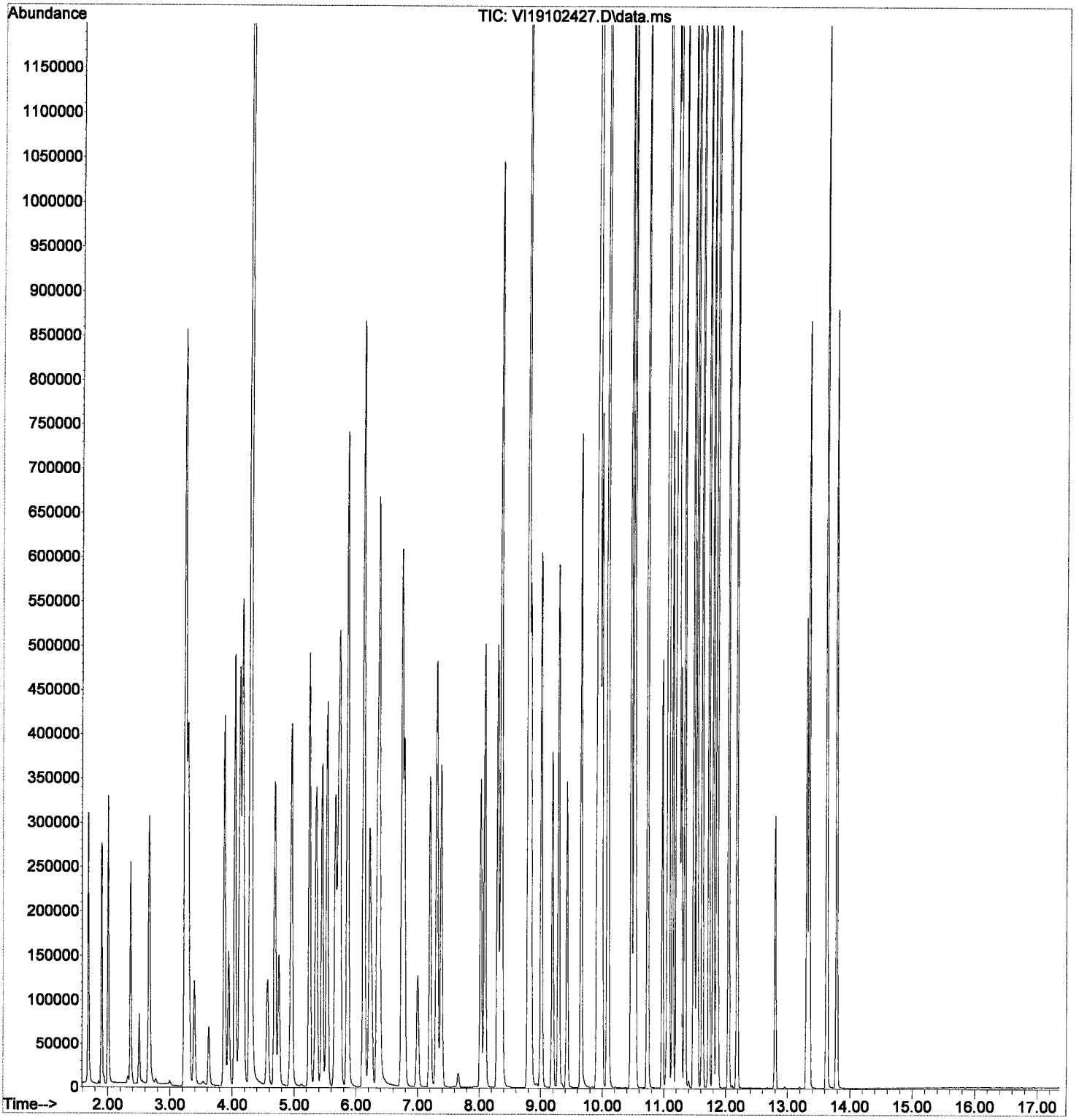
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	931584	104.48	ug/L	99
50) Tetrachloroethene (PCE)	8.796	166	236880	116.36	ug/L	92
51) 4-Methyl-2-Pentanone (...	8.796	43	616767	218.34	ug/L	92
52) t-1,3-Dichloropropene	8.839	75	327146	108.93	ug/L	98
53) 1,1,2-Trichloroethane	9.009	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

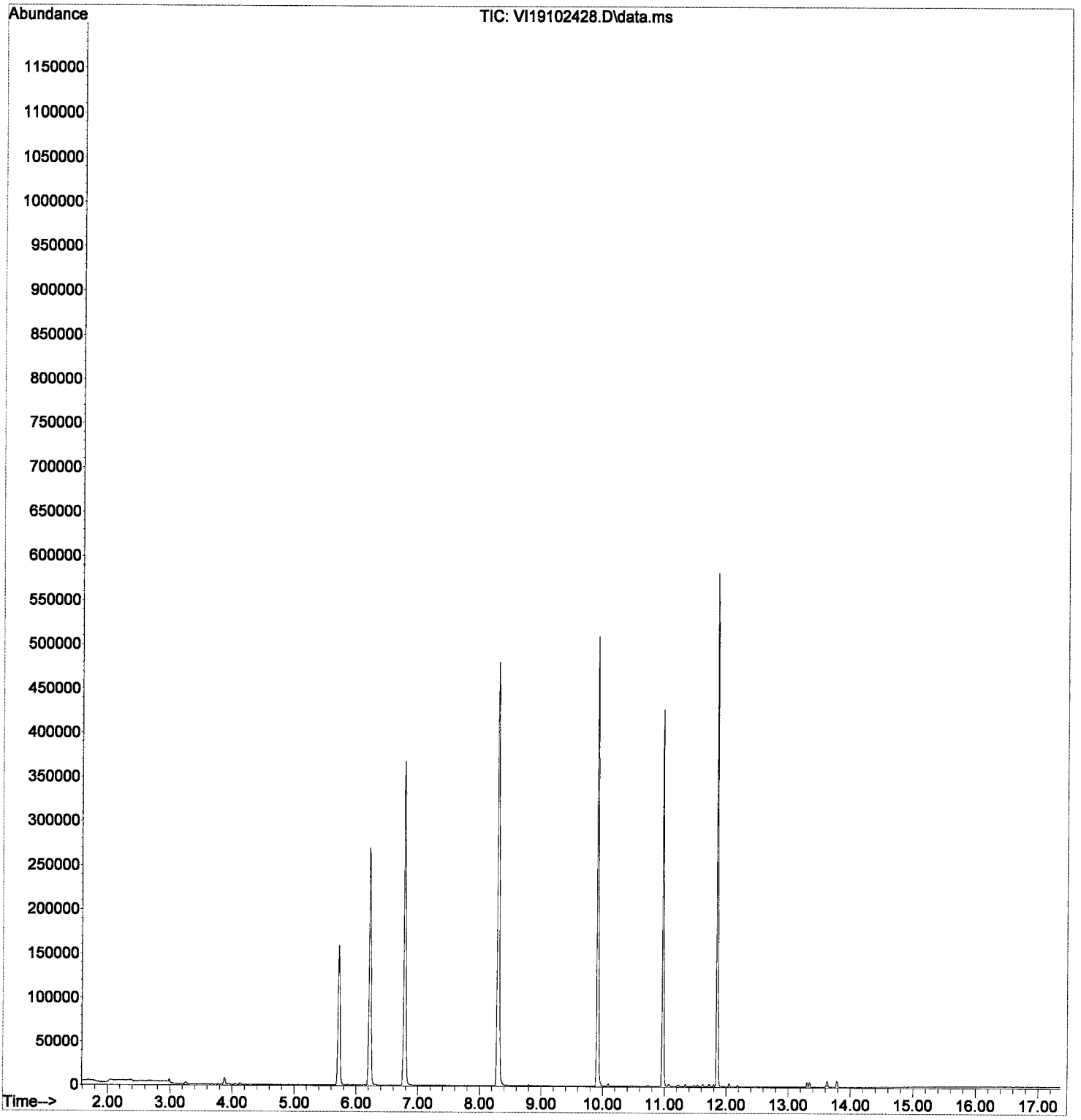
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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

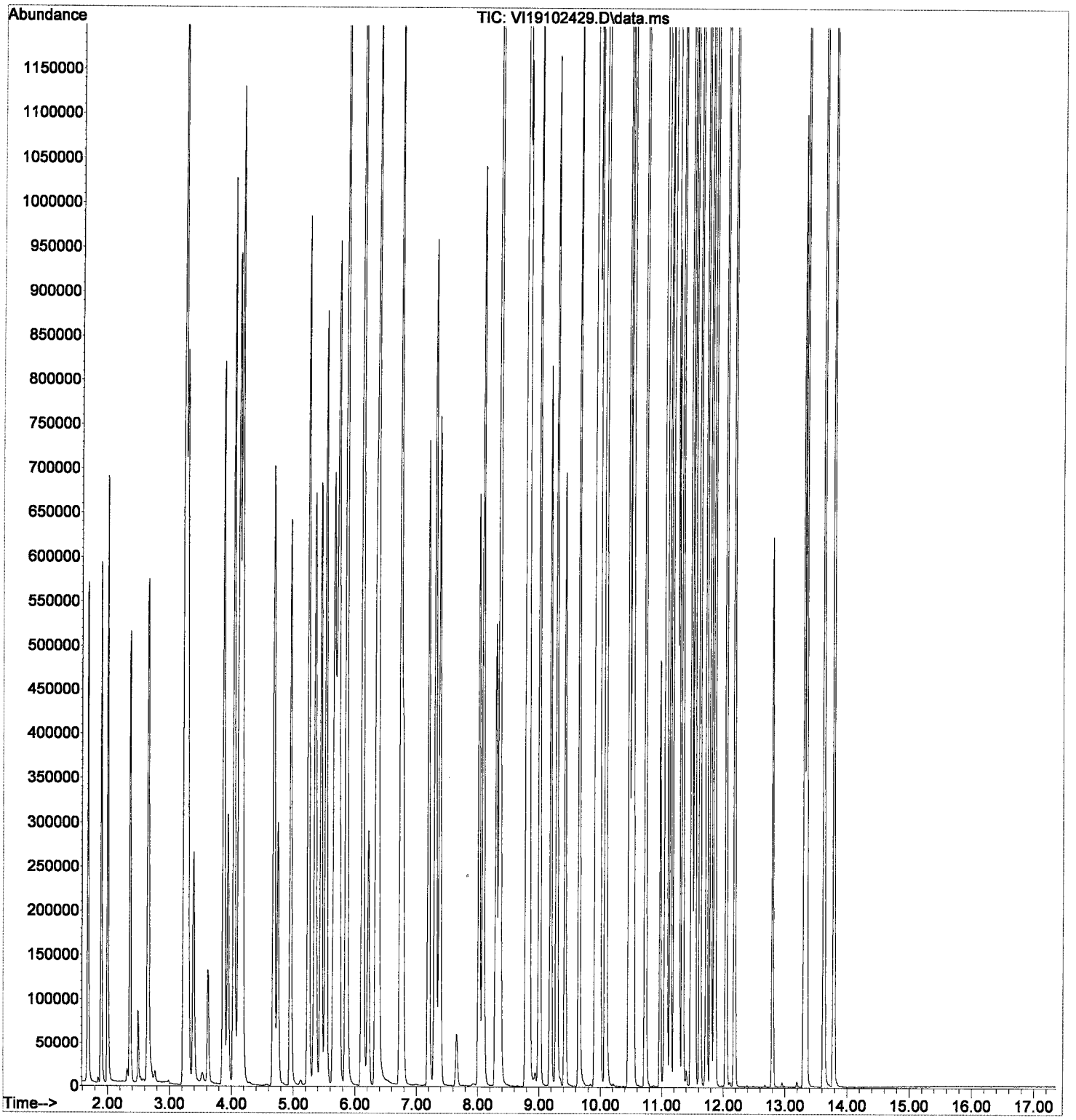
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) Toluene	8.358	91	1905088	205.73	ug/L	100
50) Tetrachloroethene (PCE)	8.796	166	496433	234.81	ug/L	93
51) 4-Methyl-2-Pentanone (...	8.796	43	1166981	397.79	ug/L	90
52) t-1,3-Dichloropropene	8.839	75	678927	217.67	ug/L	98
53) 1,1,2-Trichloroethane	9.009	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

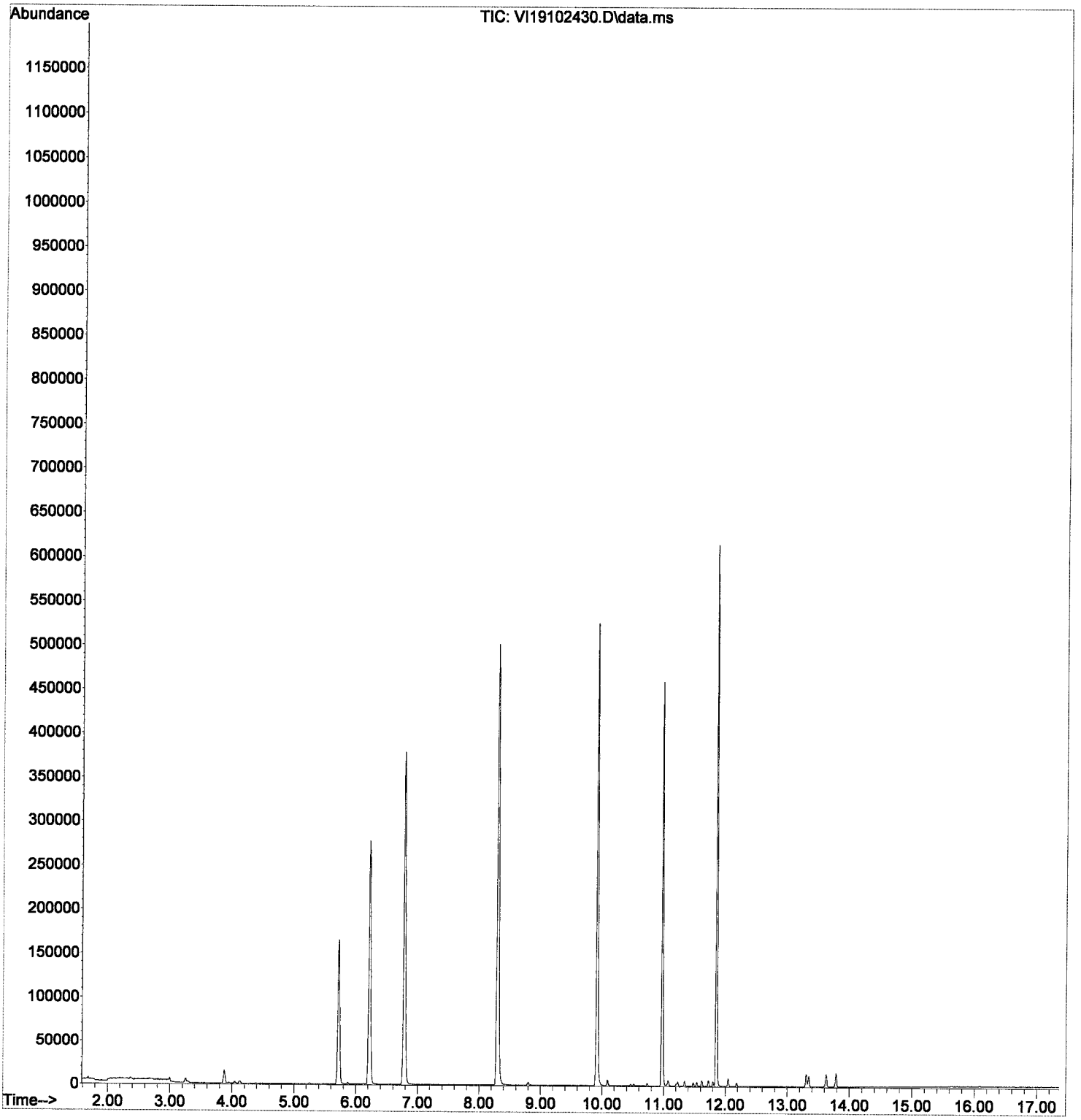
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
88) 1,2,3-Trichlorobenzene	13.785	180	5992	2.88	ug/L	97

(#) = 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

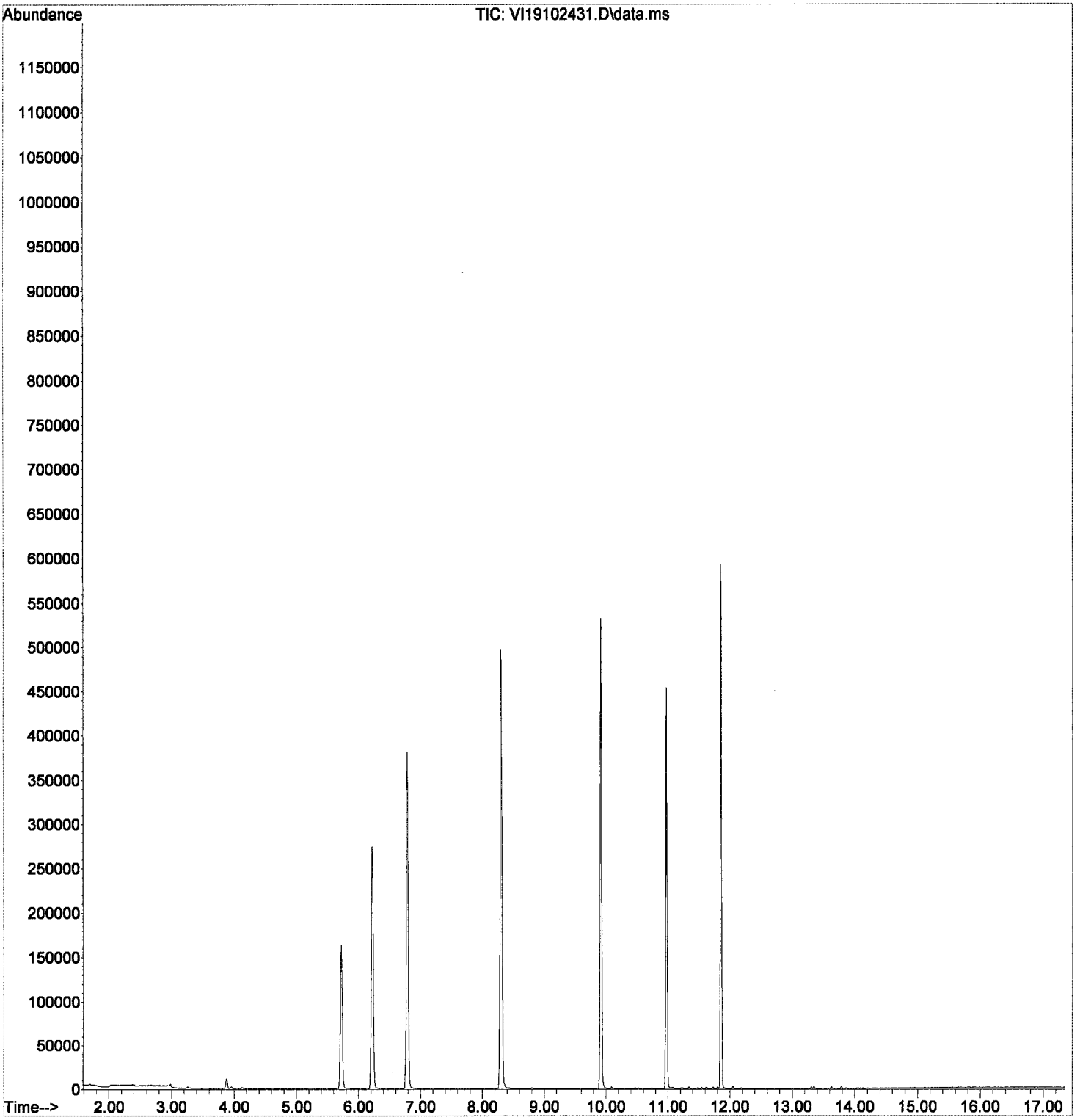
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (I)	6.217	99	114296	50.00 ug/L	# 0.00
45) Chlorobenzene-d5 (I)	9.916	117	308297	50.00 ug/L	0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	139384	50.00 ug/L	0.00
System Monitoring Compounds					
32) Dibromofluoromethane (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

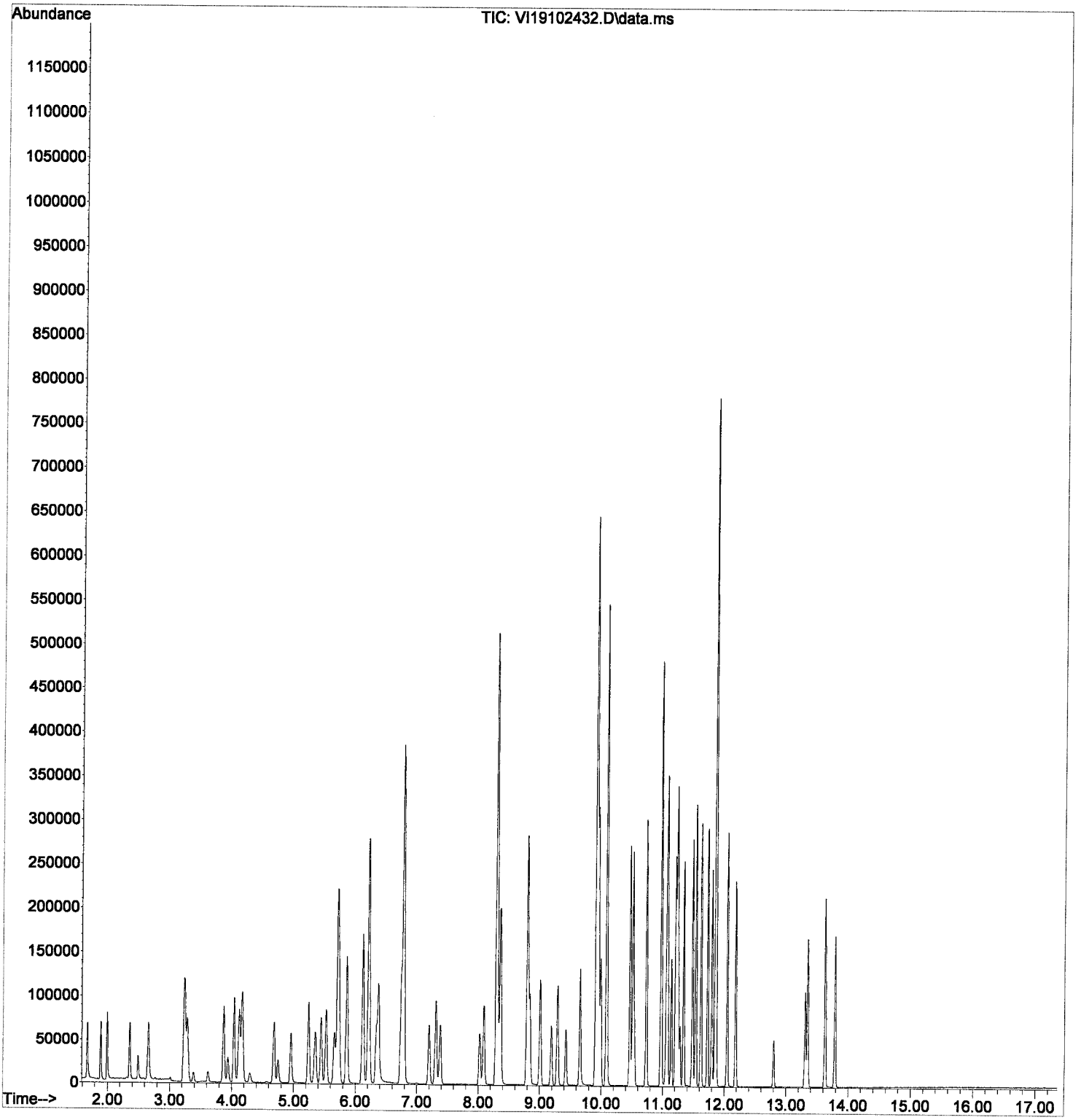
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
49) Toluene	8.358	91	182339	19.39	ug/L		100
50) Tetrachloroethene (PCE)	8.796	166	45736	20.89	ug/L		91
51) 4-Methyl-2-Pentanone (...	8.796	43	117185	41.04	ug/L		94
52) t-1,3-Dichloropropene	8.839	75	58067	20.70	ug/L		99
53) 1,1,2-Trichloroethane	9.003	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

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

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

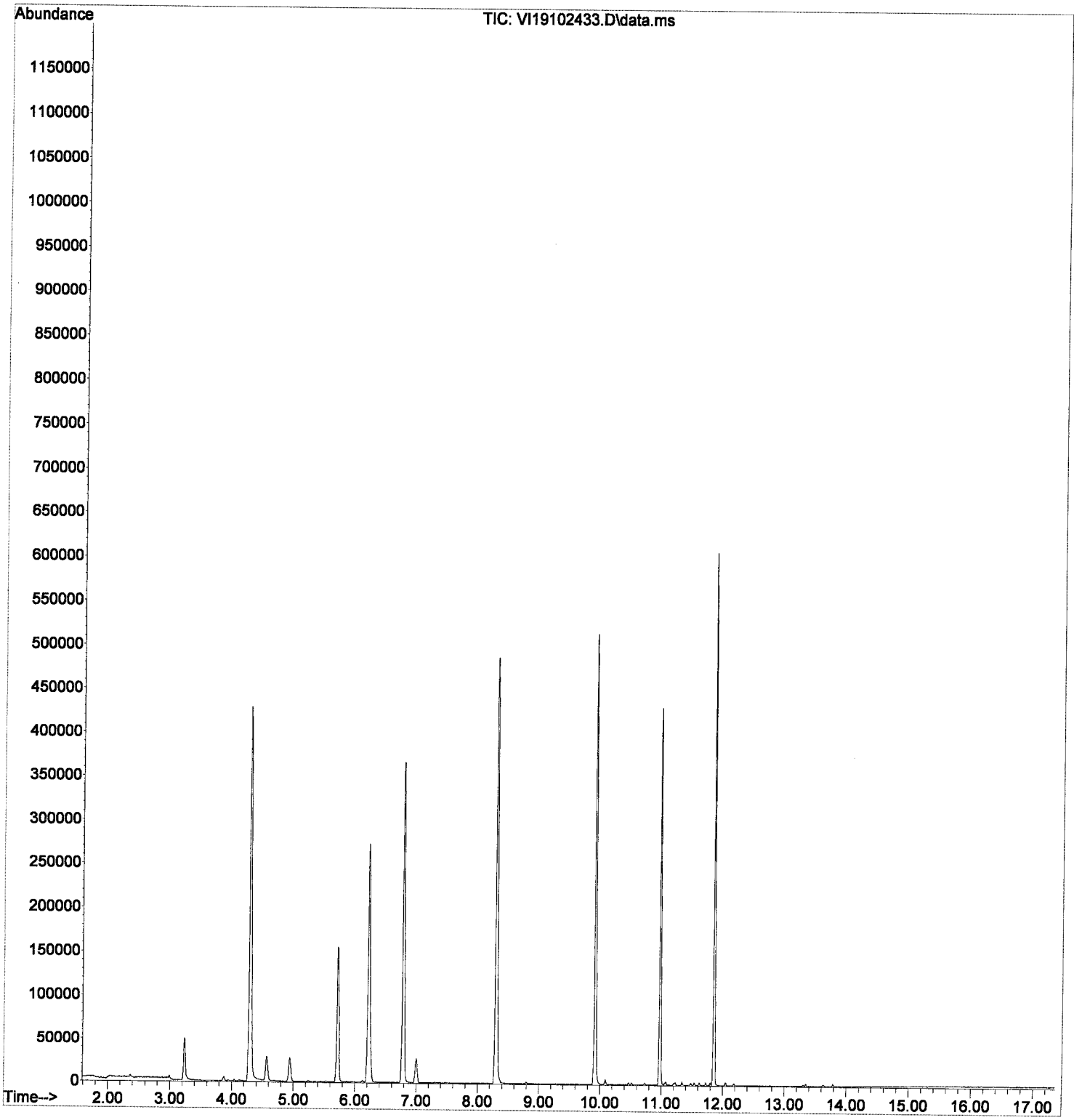
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
75) 4-Chlorotoluene	11.339	91	2029	0.36	ug/L		92
76) tert-Butylbenzene	11.479	91	857	0.24	ug/L		90
77) 1,2,4-Trimethylbenzene	11.540	105	1902	0.30	ug/L		99
78) sec-Butylbenzene	11.619	105	2140	0.28	ug/L		96
79) 4-Isopropyltoluene	11.729	119	1814	0.30	ug/L		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

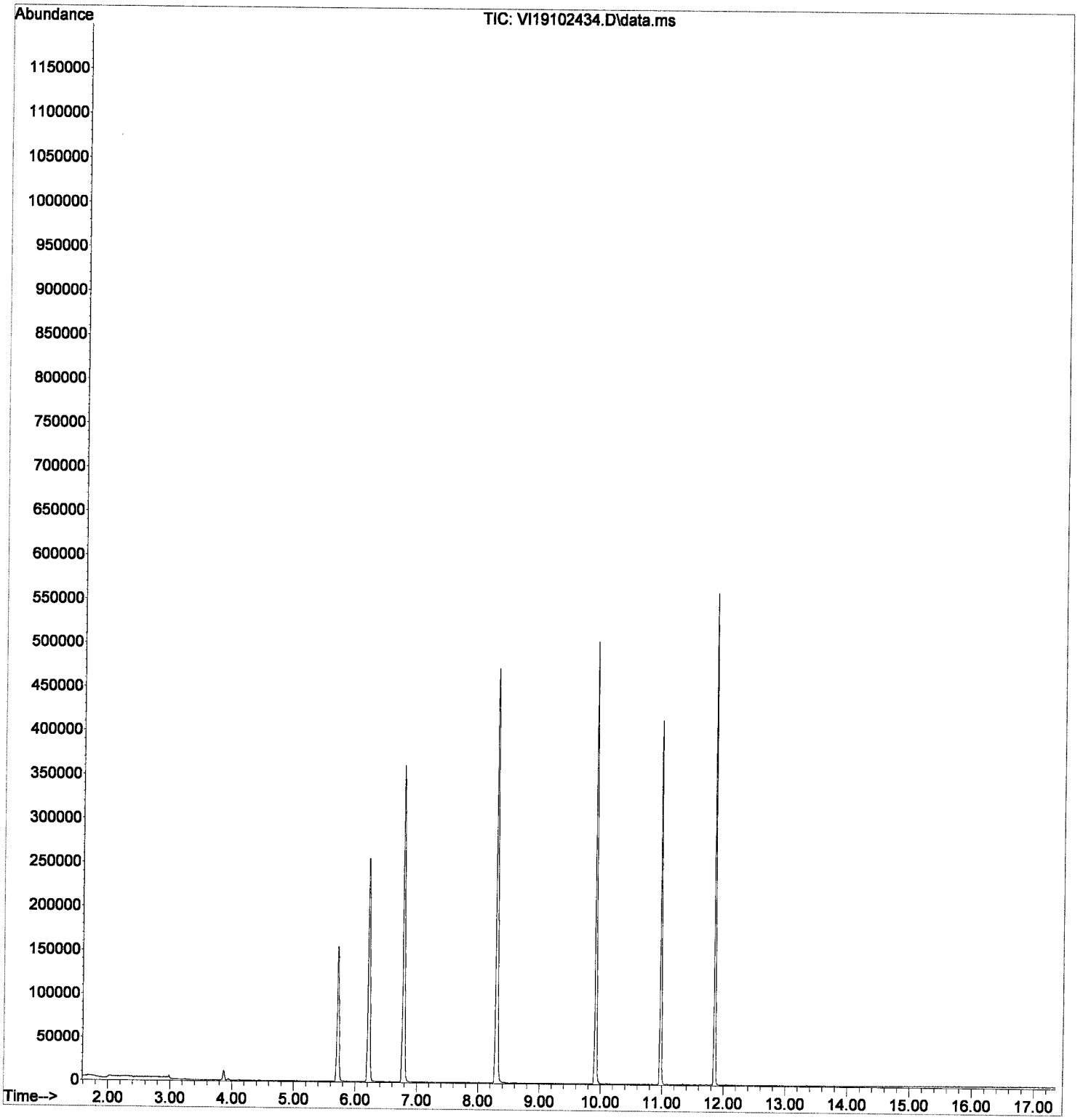
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene (I)	6.211	99	109647	50.00	ug/L		0.00
45) Chlorobenzene-d5 (I)	9.910	117	290801	50.00	ug/L		0.00
66) 1,4-Dichlorobenzene-d4...	11.850	152	129266	50.00	ug/L		0.00
System Monitoring Compounds							
32) Dibromofluoromethane (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

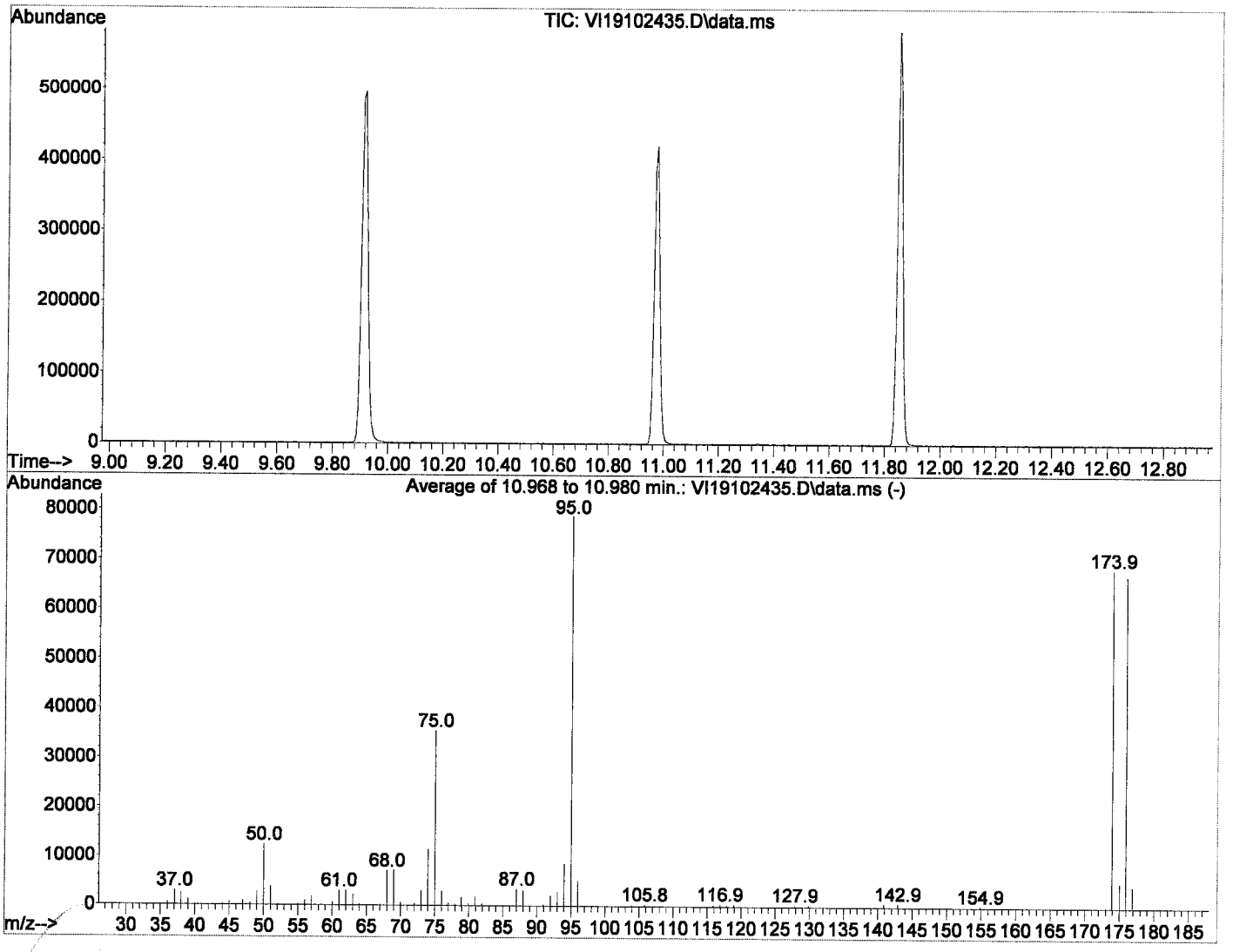


BFB

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

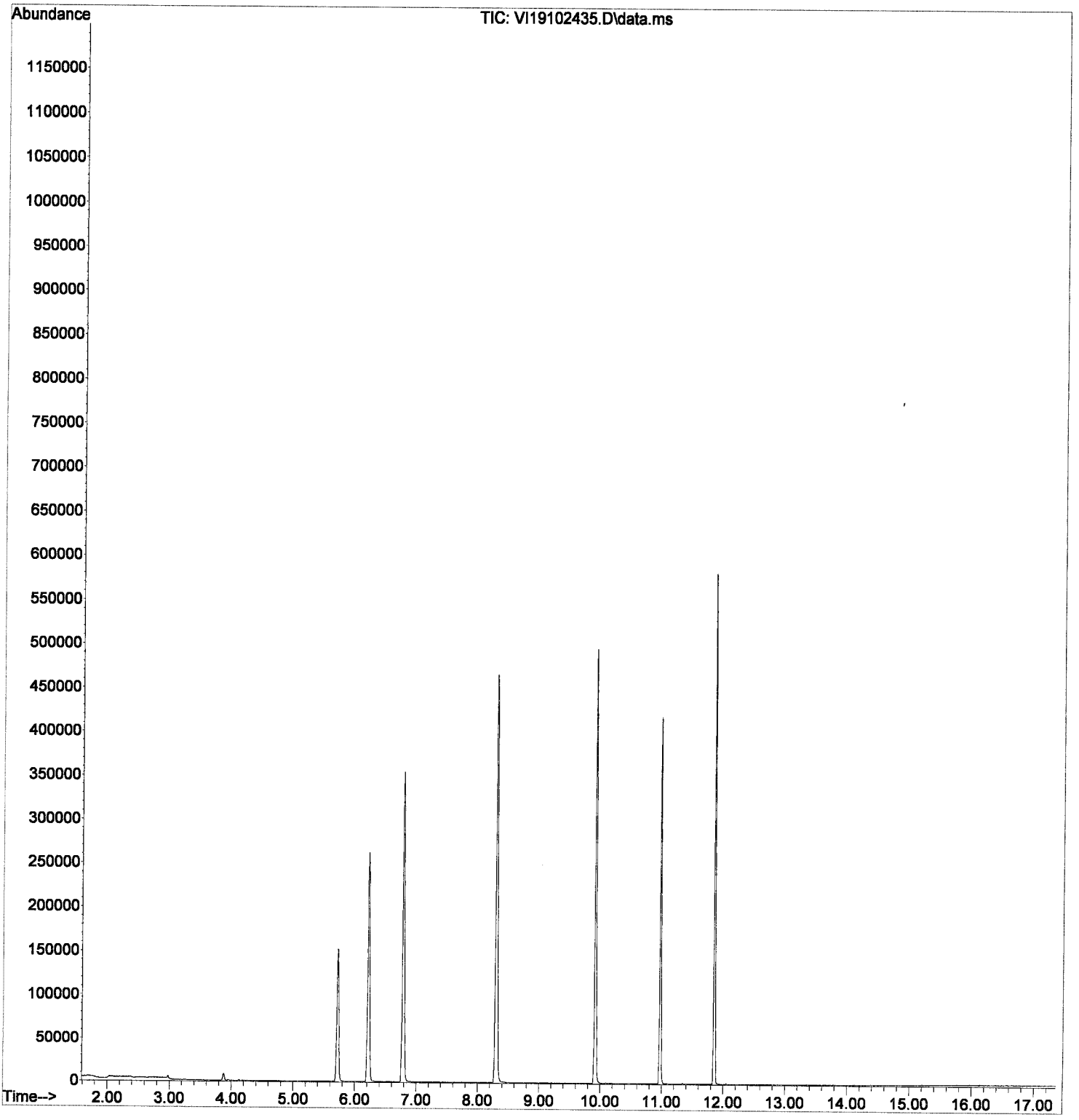
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210406	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342441	50.05	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	110054	48.18	ug/L	0.00
9) Toluene-d8 (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

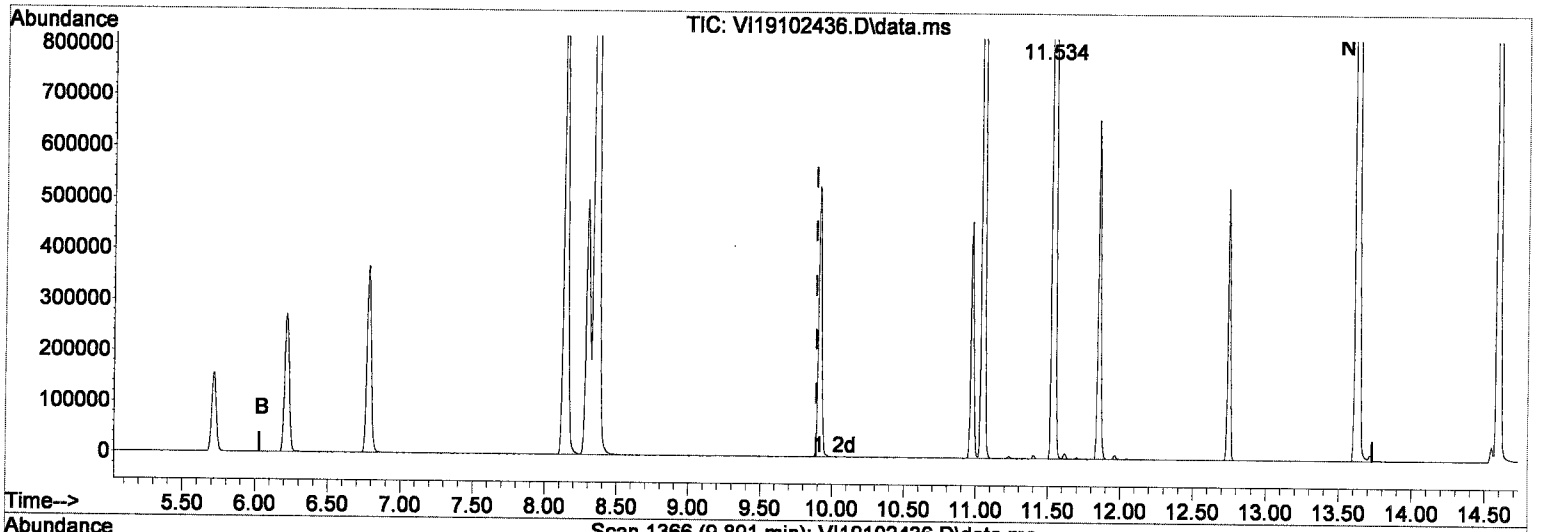
Quant Time: Oct 25 10:34:47 2019
Quant Method : C:\msdchem\1\methods\VI191025G.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Fri Oct 25 10:31:05 2019
Response via : Initial Calibration

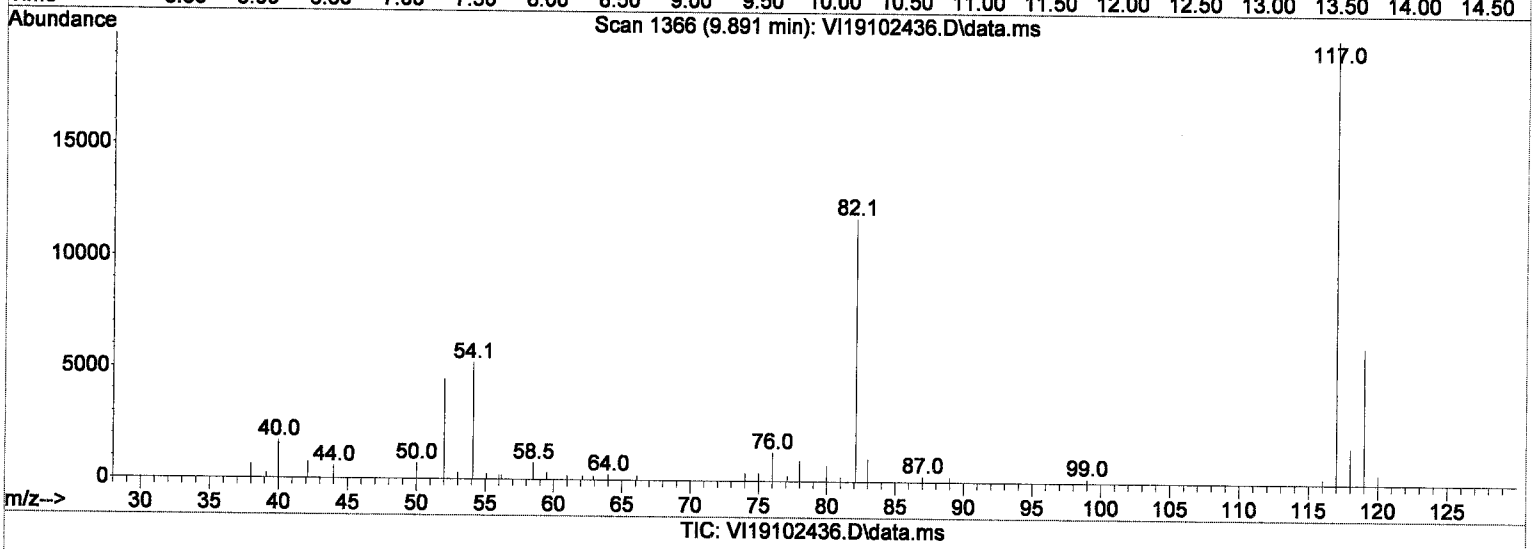


Quantitation Report (Qedit)

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

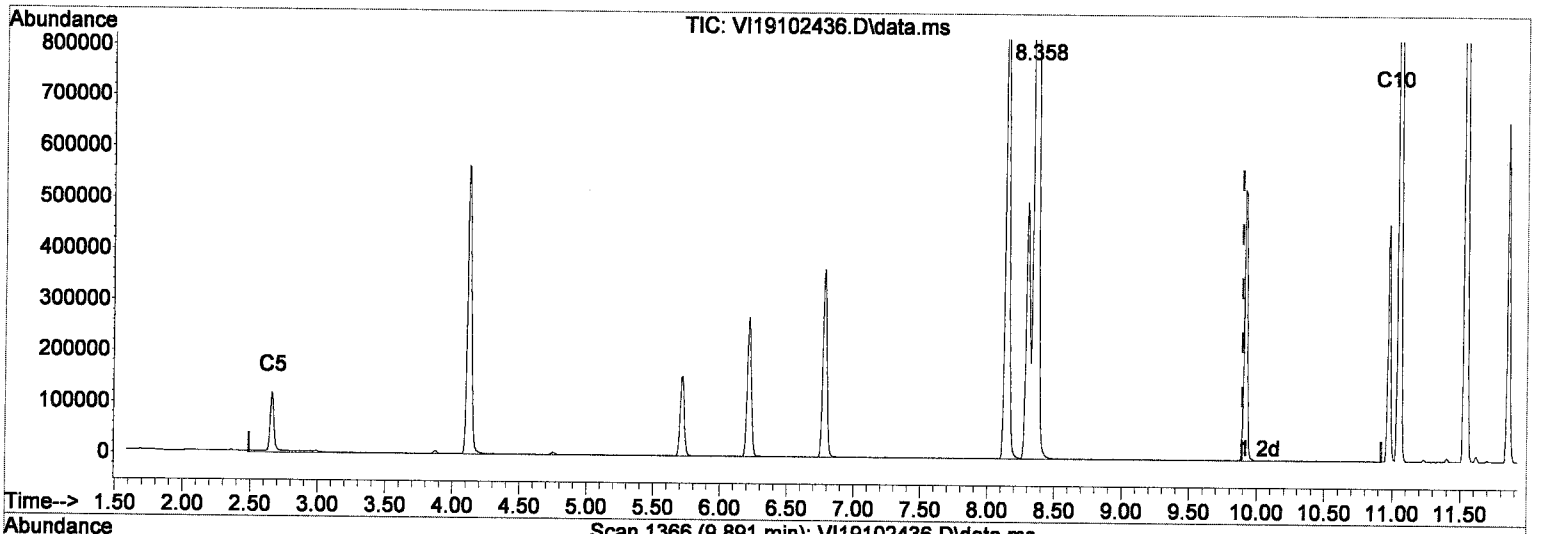
response 19501721

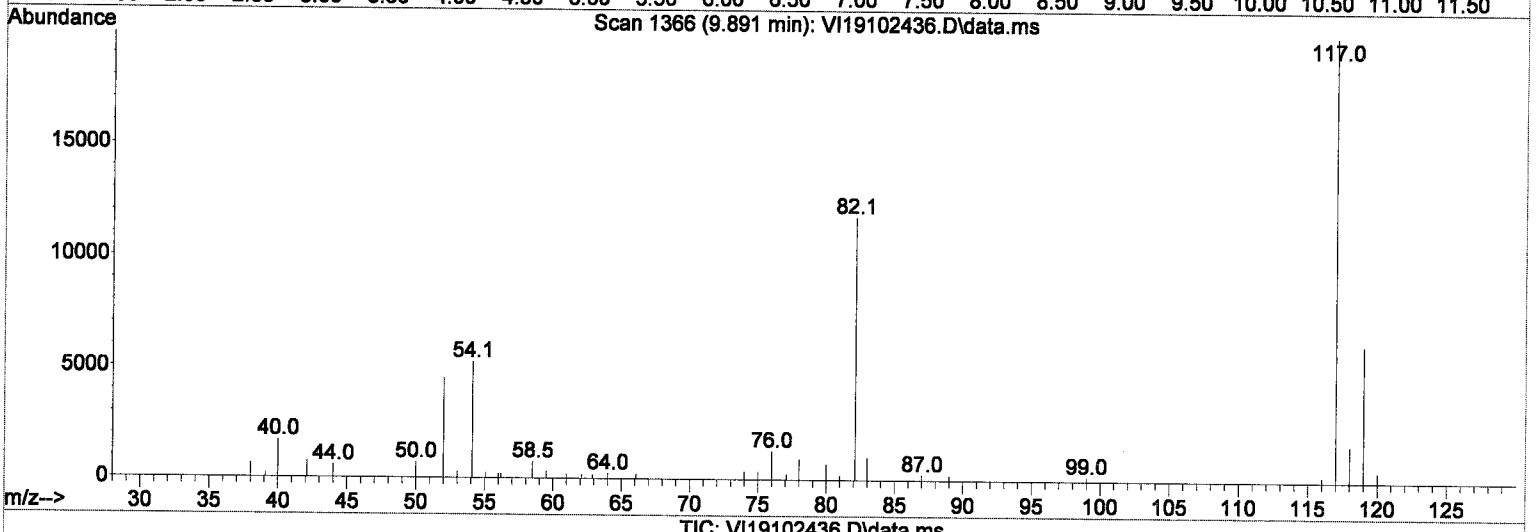
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	1.04#
0.00	0.00	0.76#
0.00	0.00	0.00

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

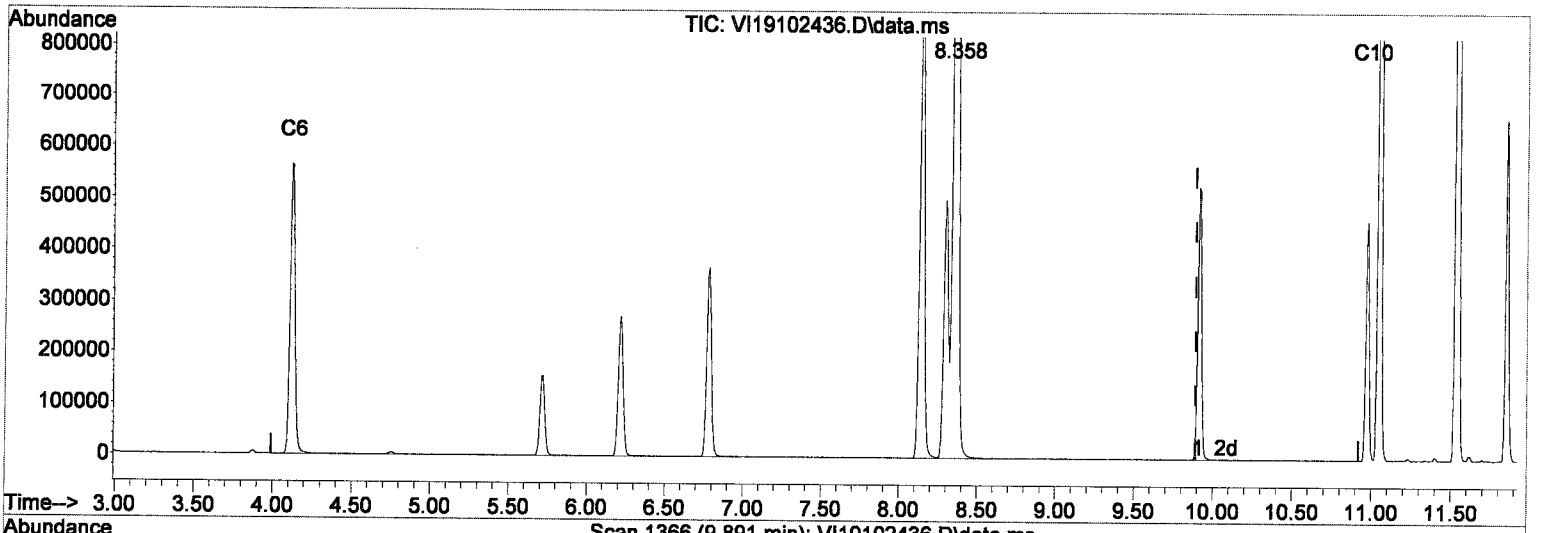
response 8083029

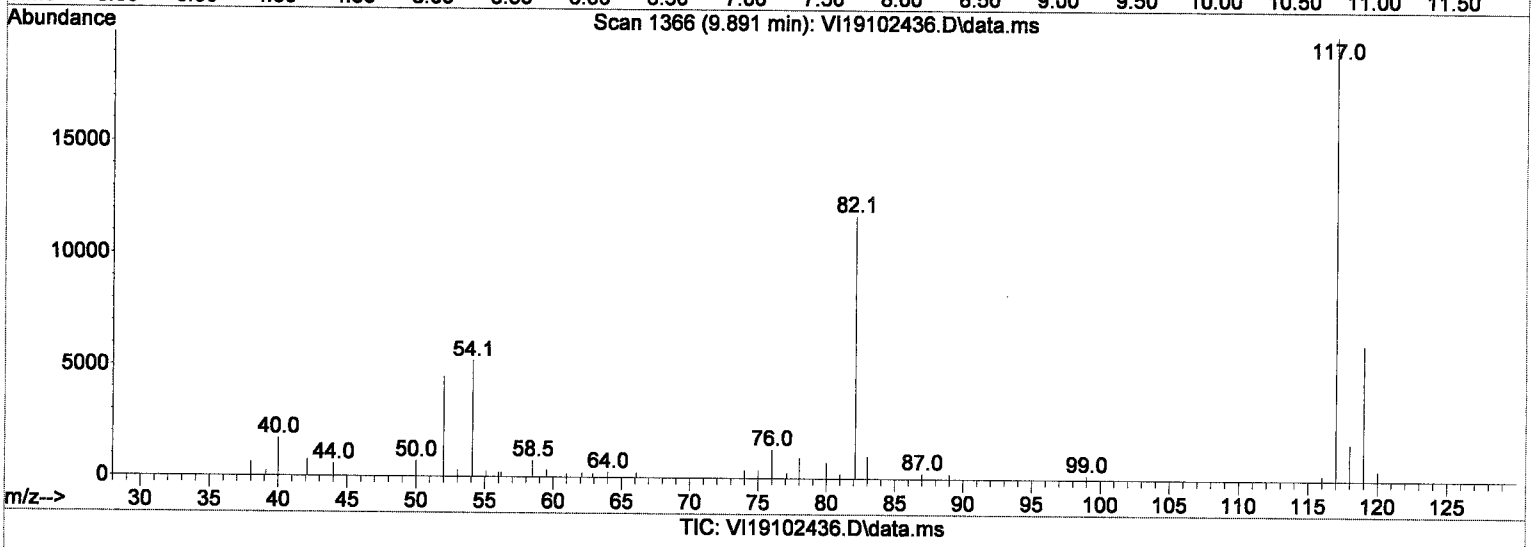
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.52#
0.00	0.00	1.83#
0.00	0.00	0.00

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

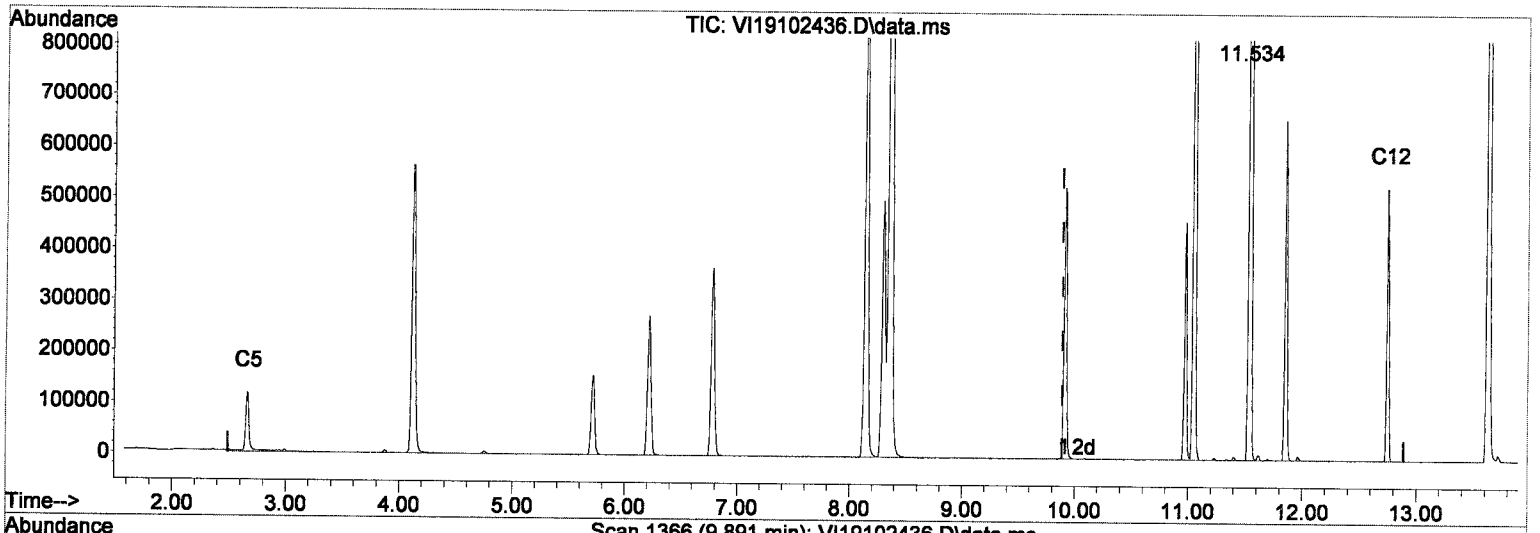
response 7845020

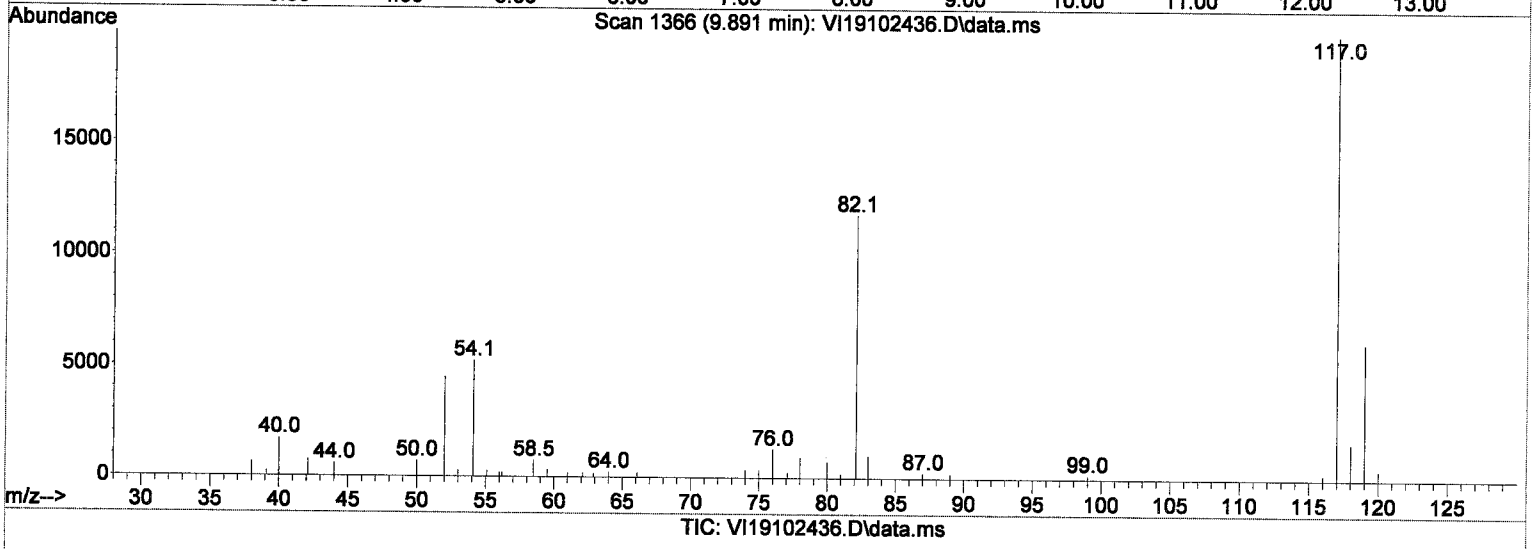
Signal	Exp%	Act%
TIC	100.00	100.00
0.00	0.00	2.60#
0.00	0.00	1.88#
0.00	0.00	0.00

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





TIC: VI19102436.D\data.ms

(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

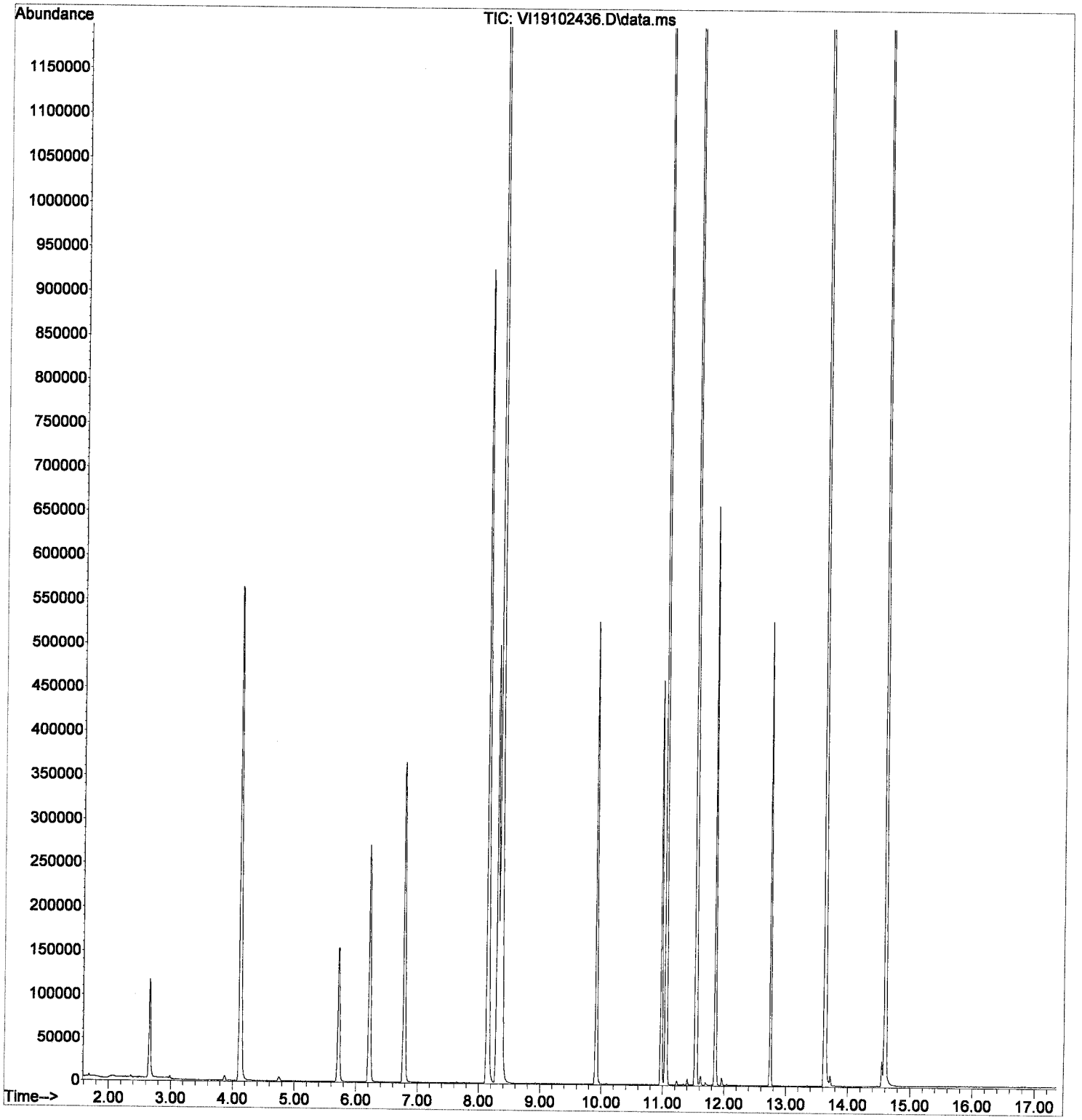
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	218196	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	354554	49.97	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	120603	50.92	ug/L	0.00
9) Toluene-d8 (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

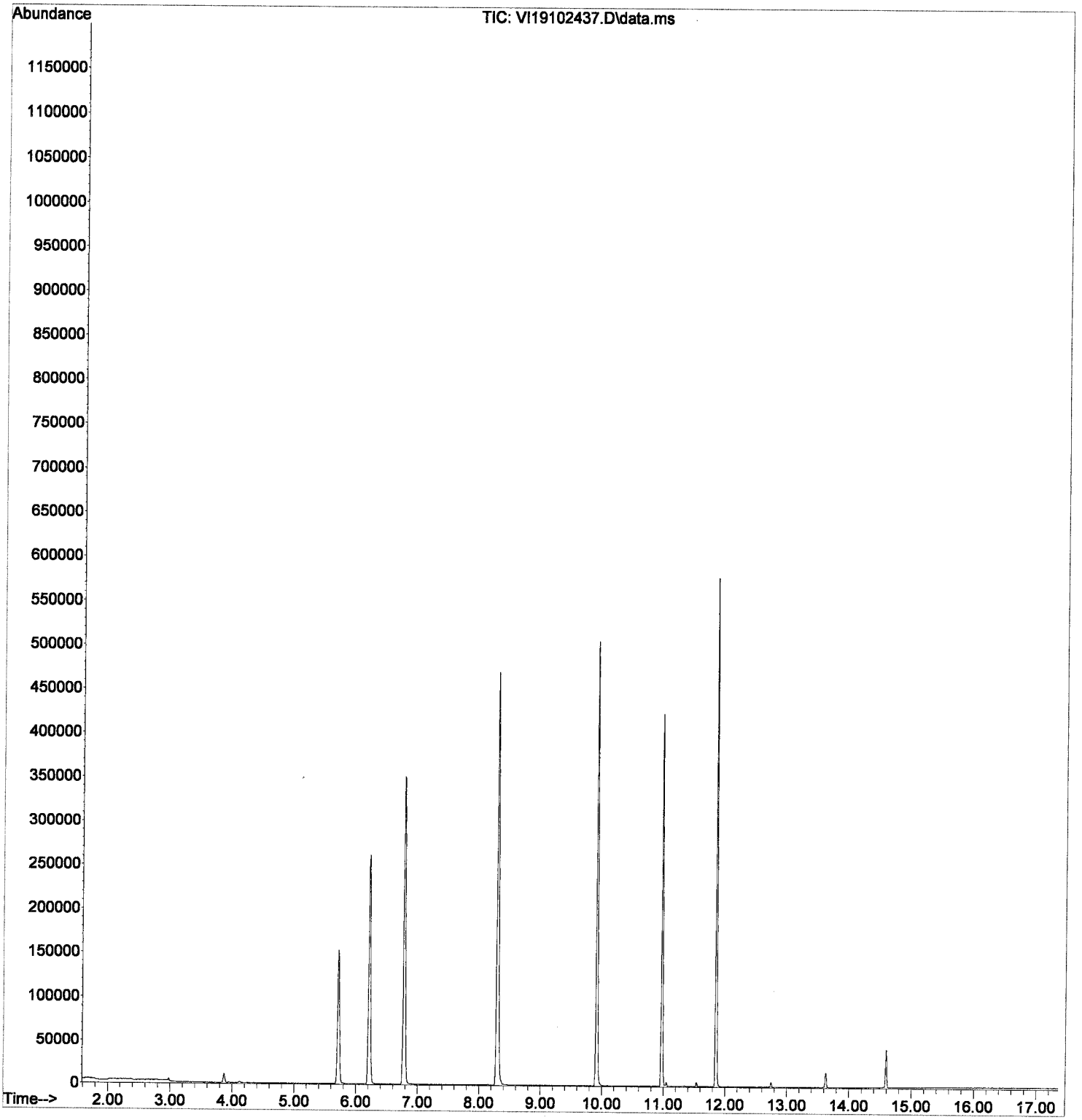
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210247	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	345936	50.60	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	111405	48.81	ug/L	0.00
9) Toluene-d8 (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

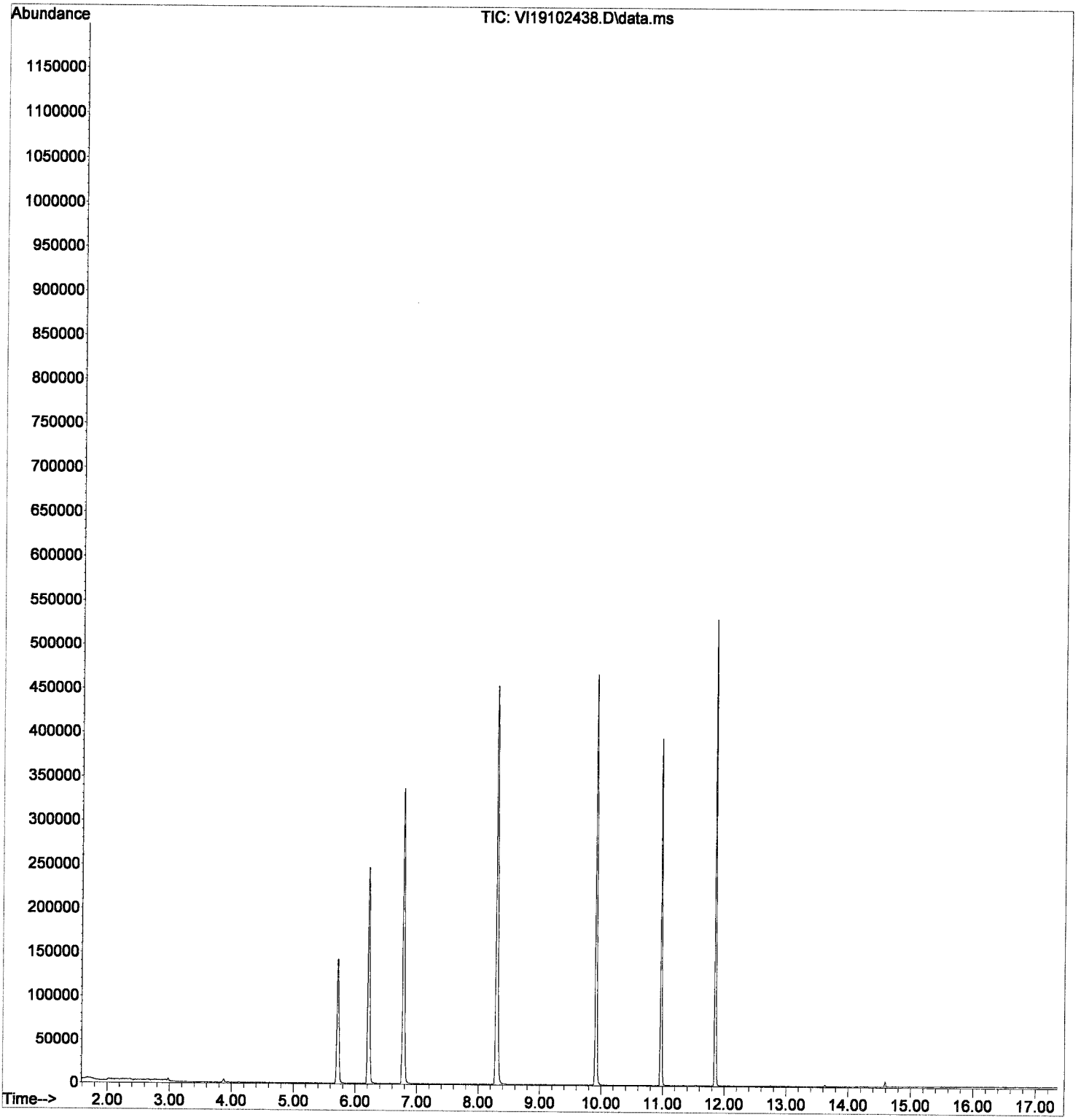
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	197519	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	324404	50.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	100113	46.69	ug/L	0.00
9) Toluene-d8 (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

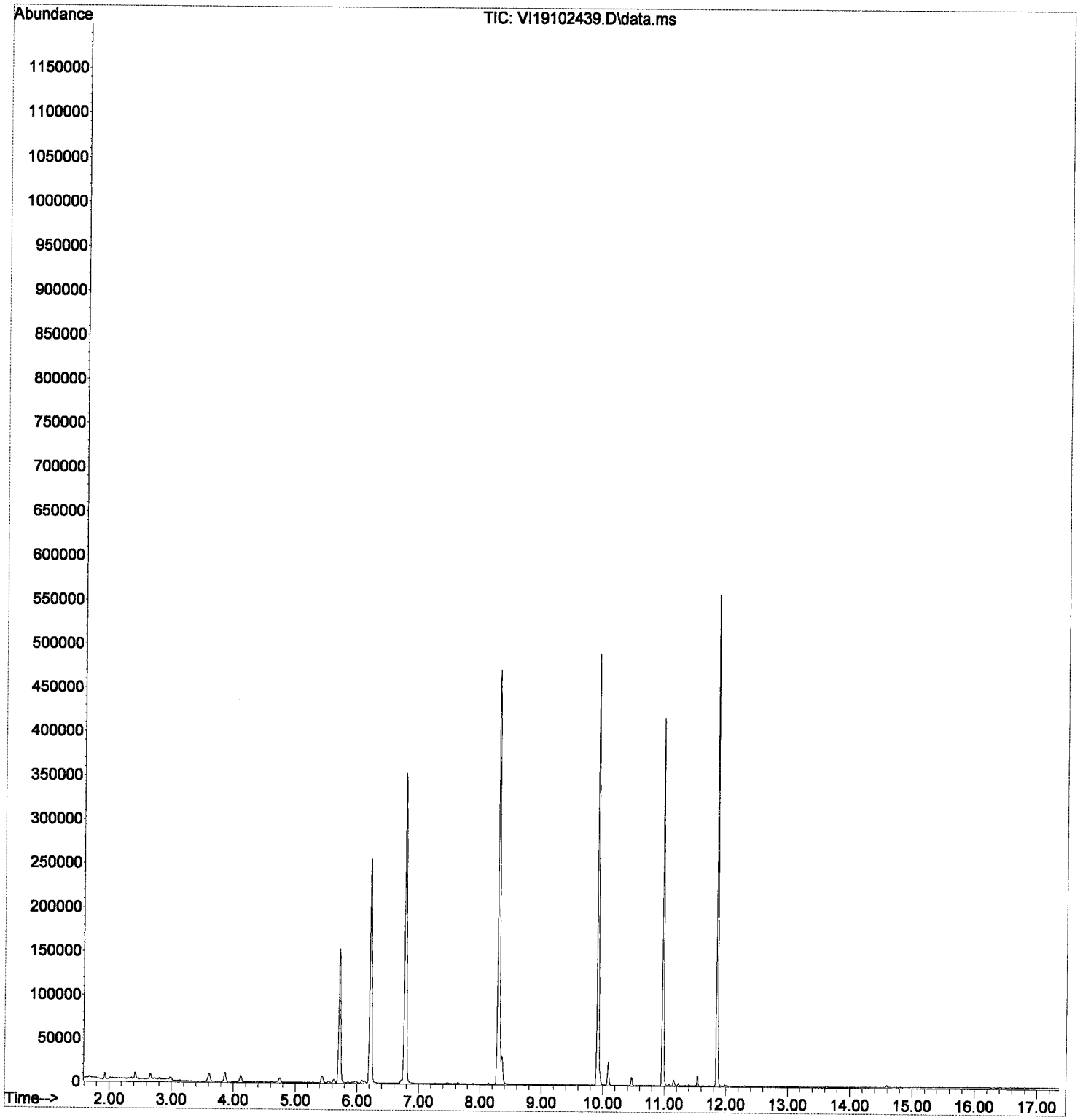
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	209290	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.777	114	341977	48.13	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.974	174	109139	43.97	ug/L	0.00
9) Toluene-d8 (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

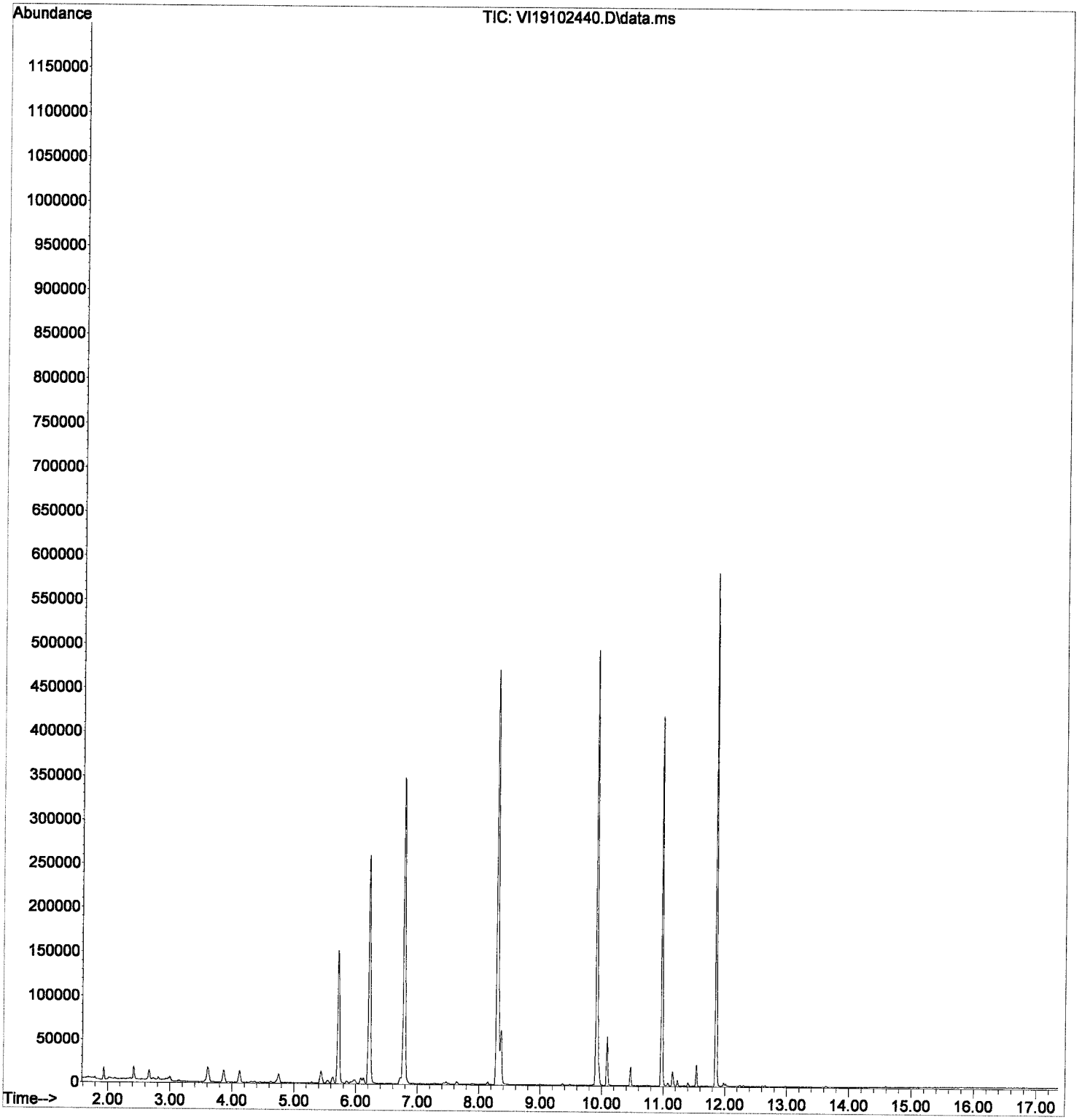
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	209478	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342473	48.16	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	110020	44.29	ug/L	0.00
9) Toluene-d8 (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\VI~~191025G~~.M
Quant Title : NWTPH-Gx by GC/MS
QLast Update : Tue Aug 06 09:35:12 2019
Response via : Initial Calibration

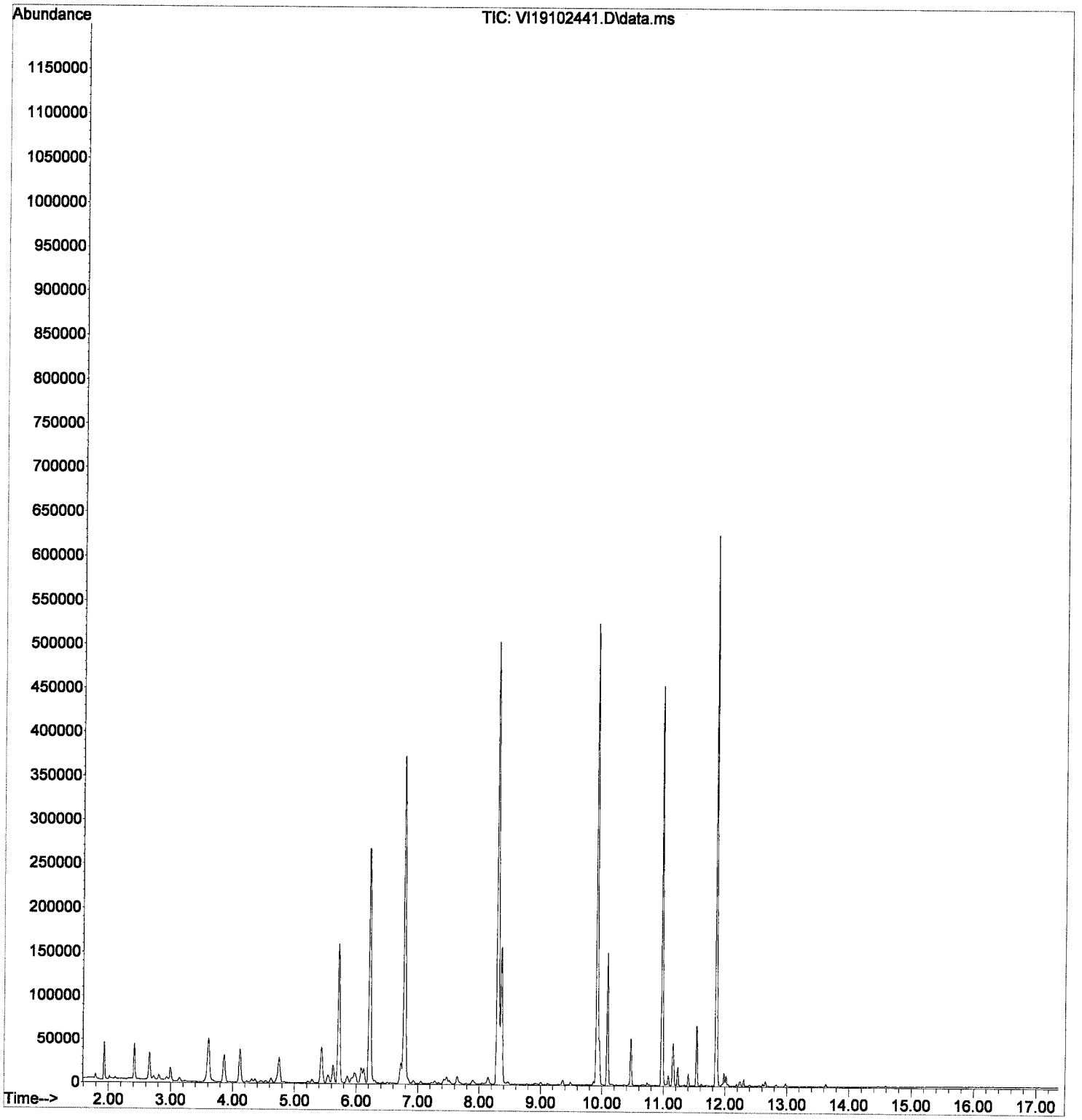
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220921	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.777	114	357958	47.73	ug/L	-0.01
3) 4-Bromofluorobenzene (...	10.974	174	116770	44.57	ug/L	0.00
9) Toluene-d8 (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

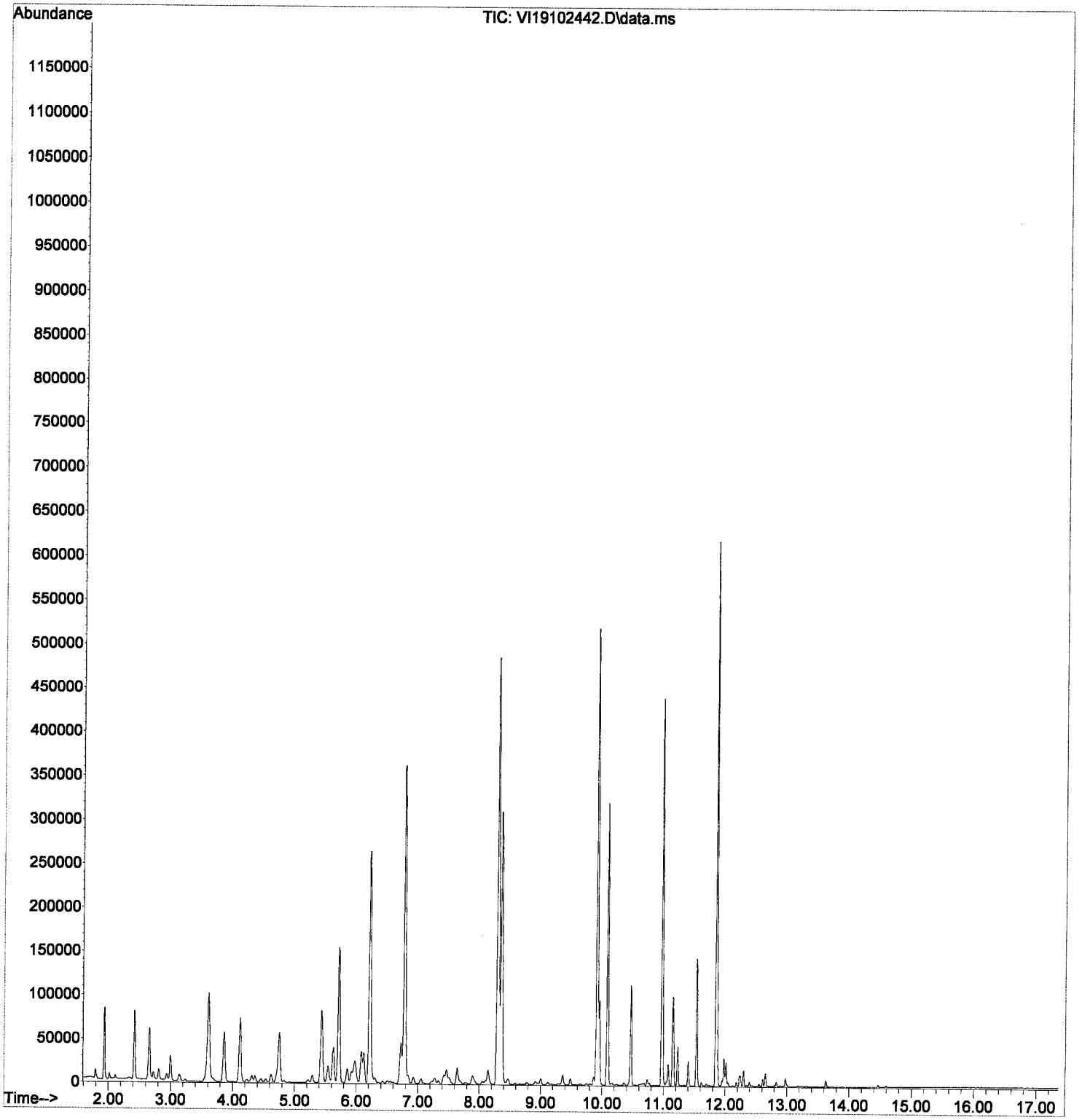
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	214780	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	347086	47.60	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115043	45.16	ug/L	0.00
9) Toluene-d8 (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

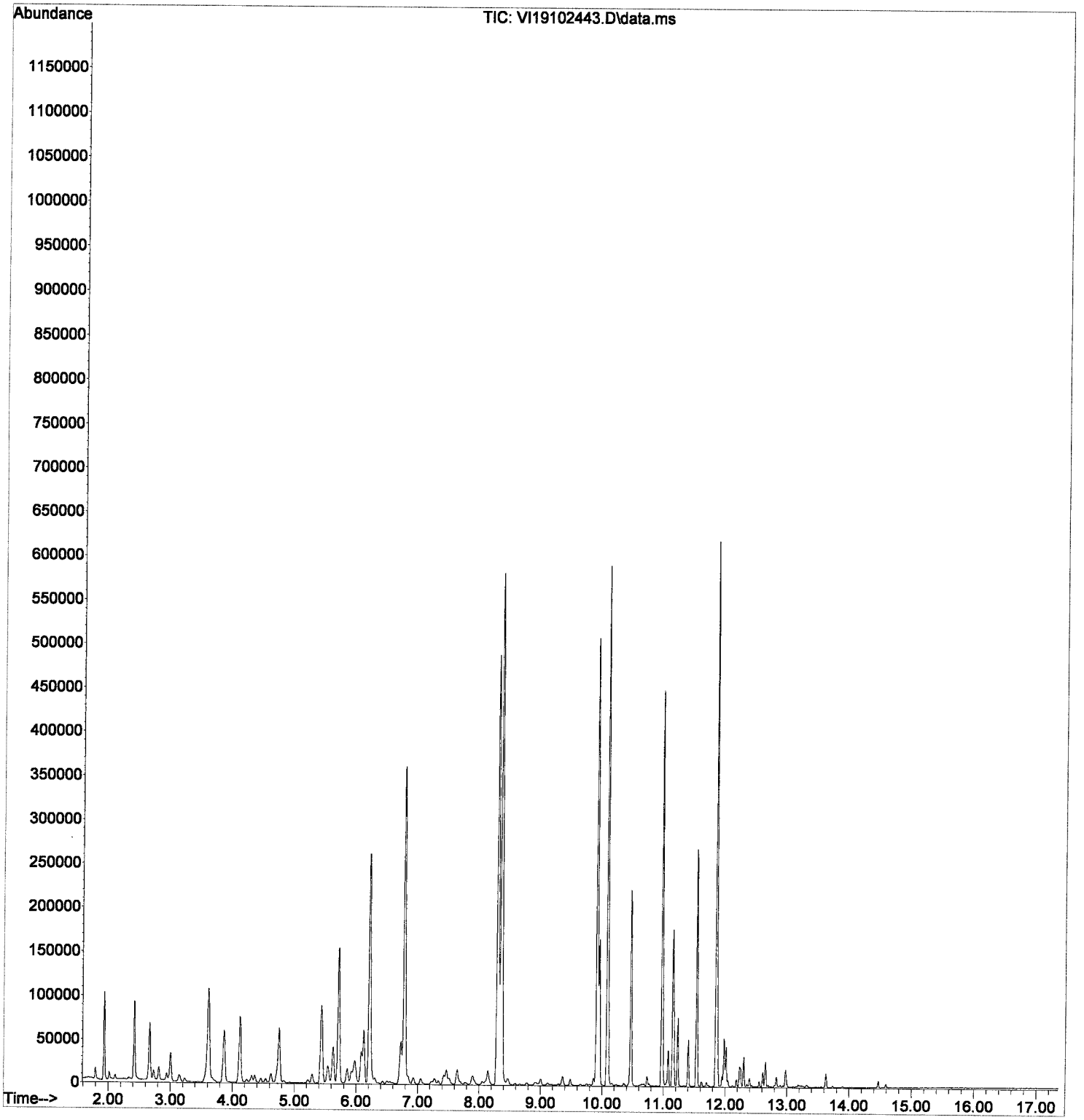
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	211453	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	348407	48.54	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115114	45.90	ug/L	0.00
9) Toluene-d8 (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

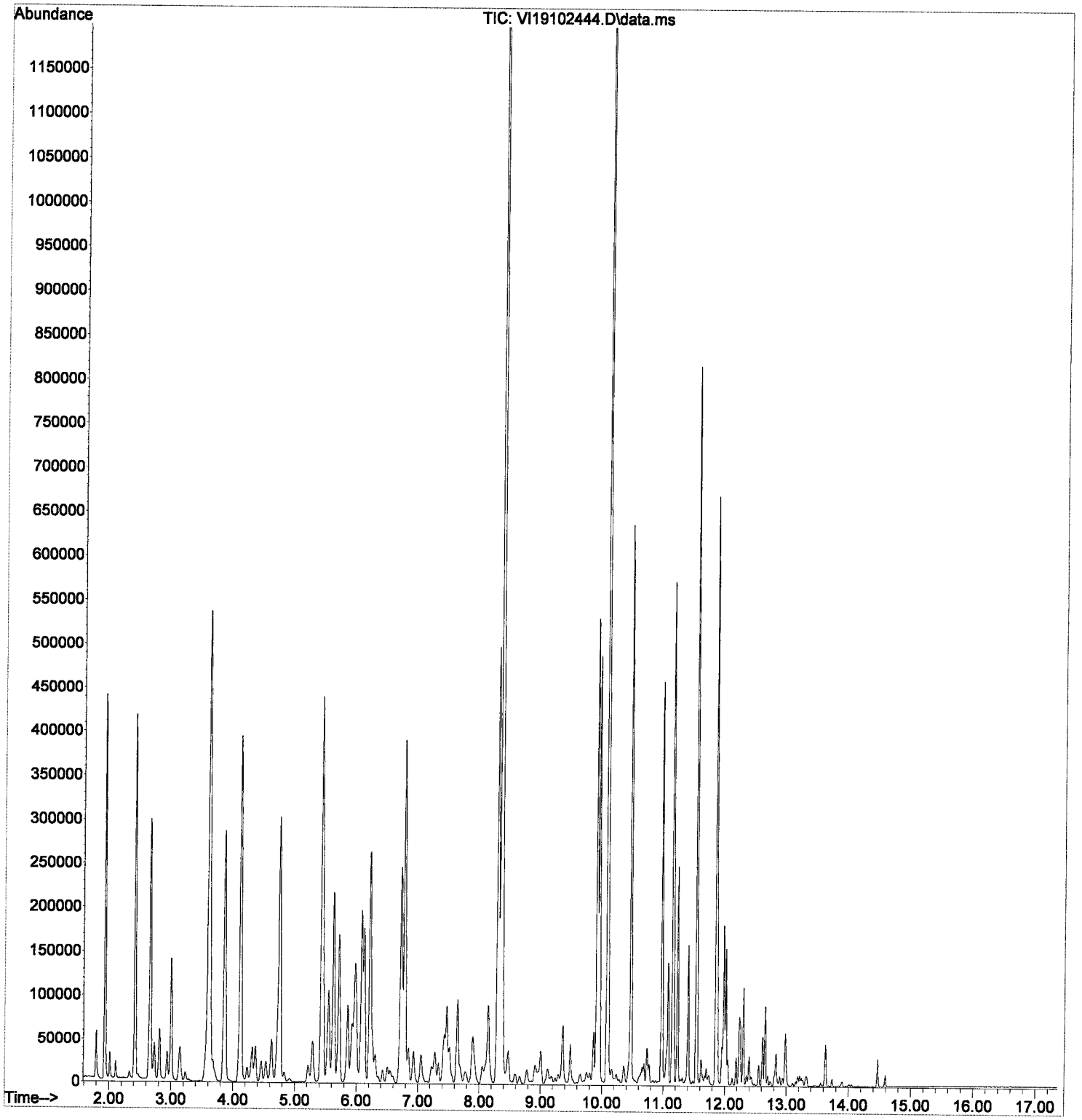
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	216435	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	352248	47.94	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	120135	46.80	ug/L	0.00
9) Toluene-d8 (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

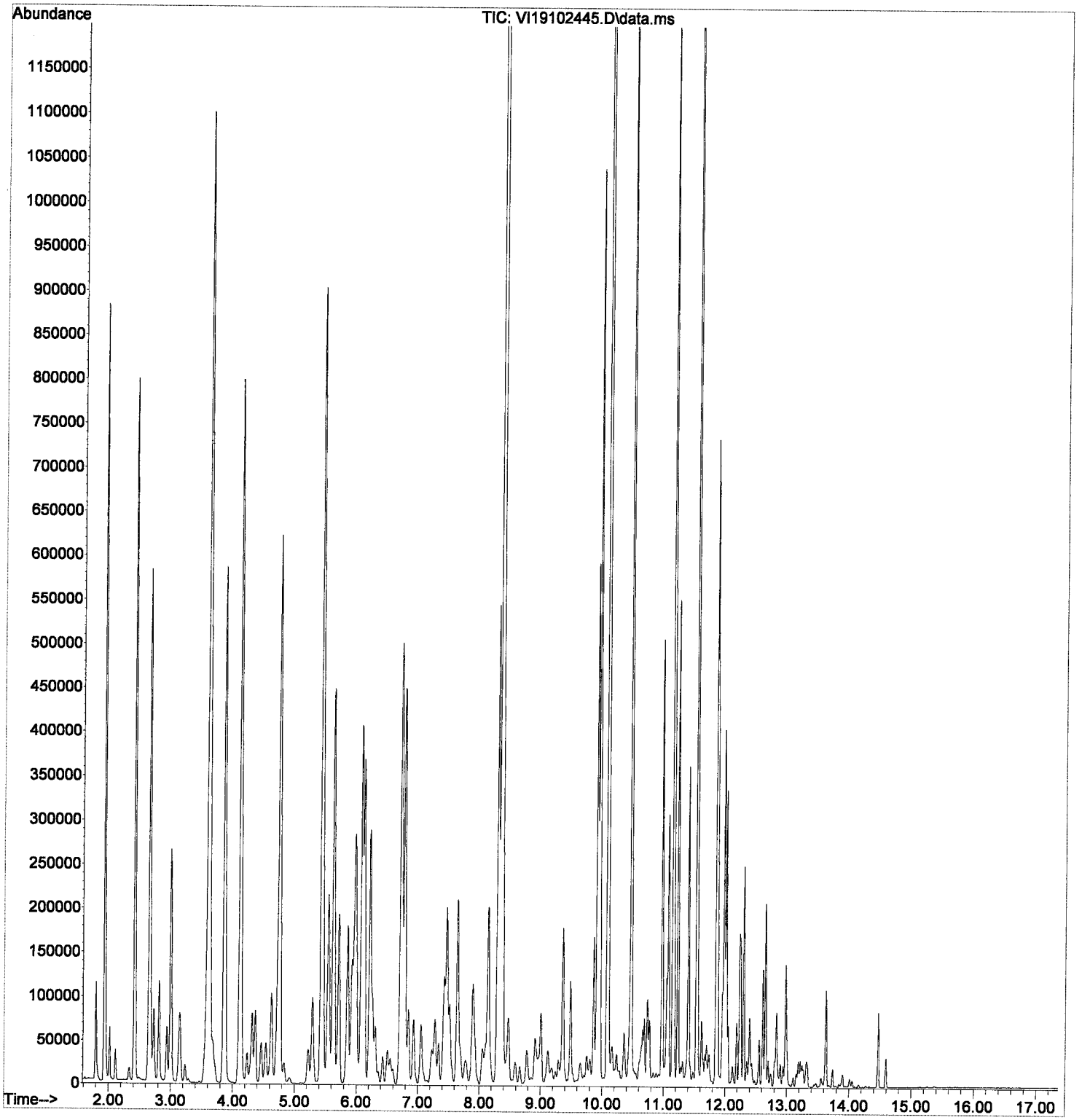
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	233849	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	379658	47.83	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	131653	47.47	ug/L	0.00
9) Toluene-d8 (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

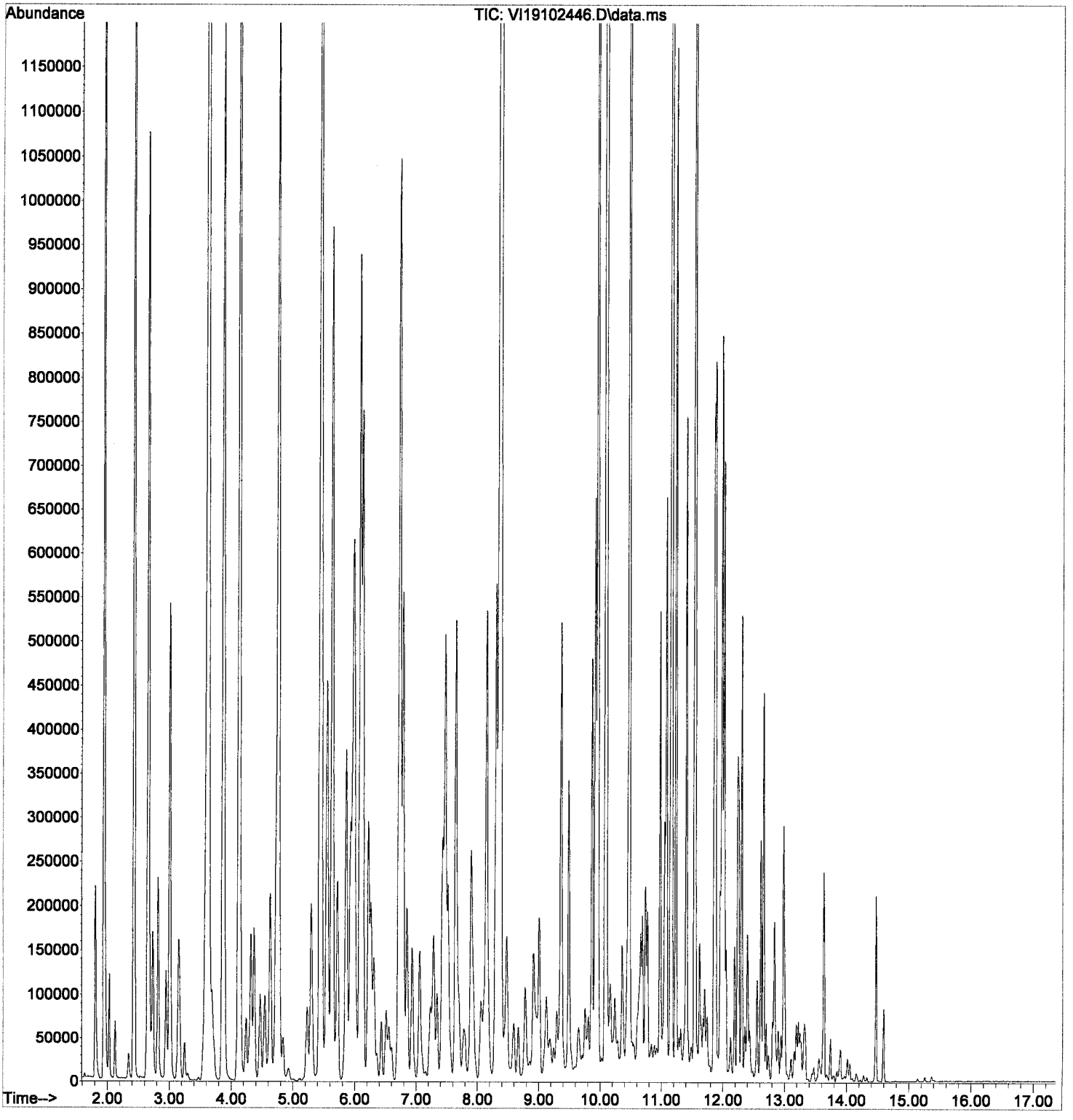
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	234183	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	384961	48.42	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	134509	48.43	ug/L	0.00
9) Toluene-d8 (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

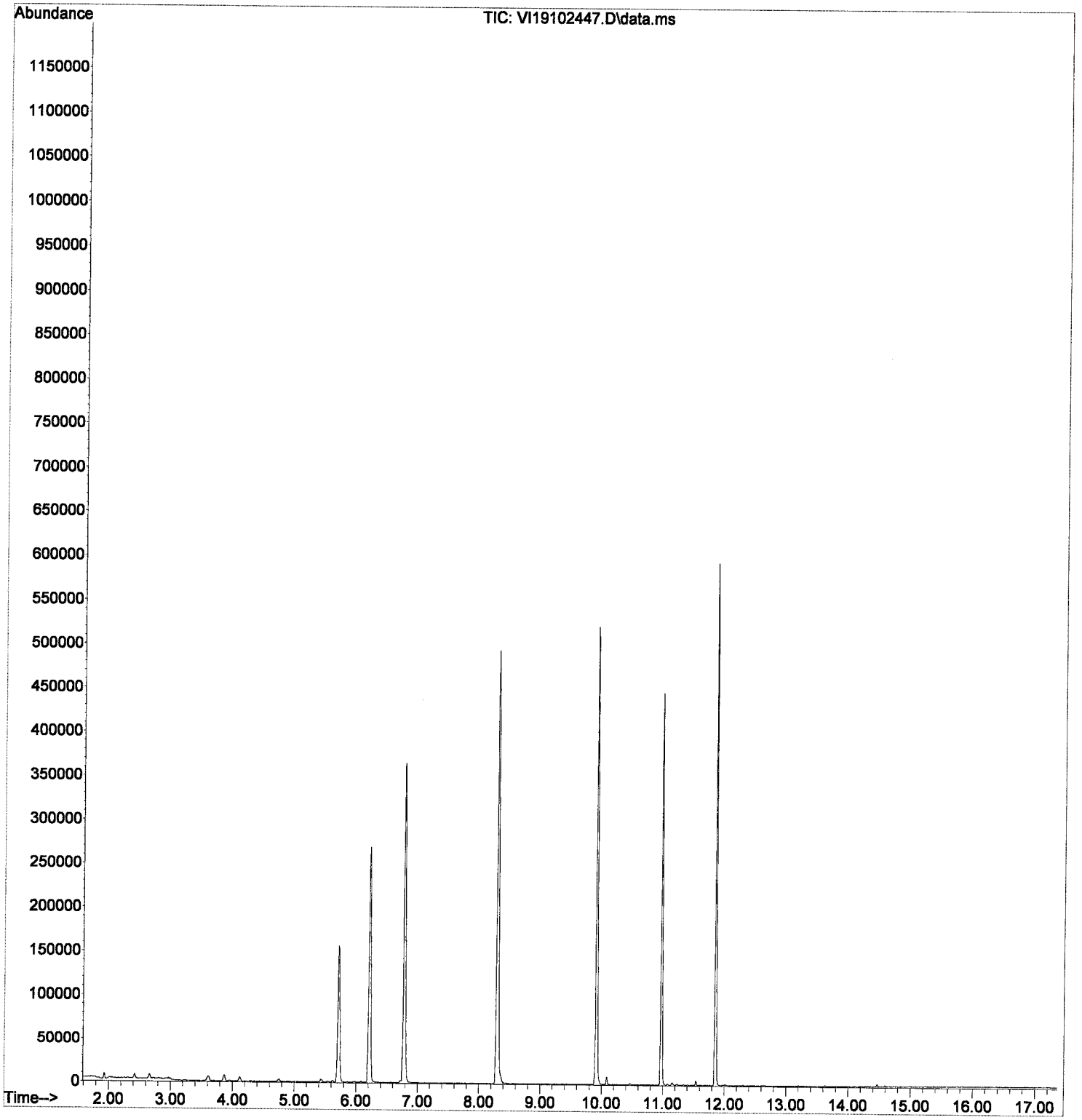
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220300	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	358131	50.00	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	115759	48.41	ug/L	0.00
9) Toluene-d8 (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

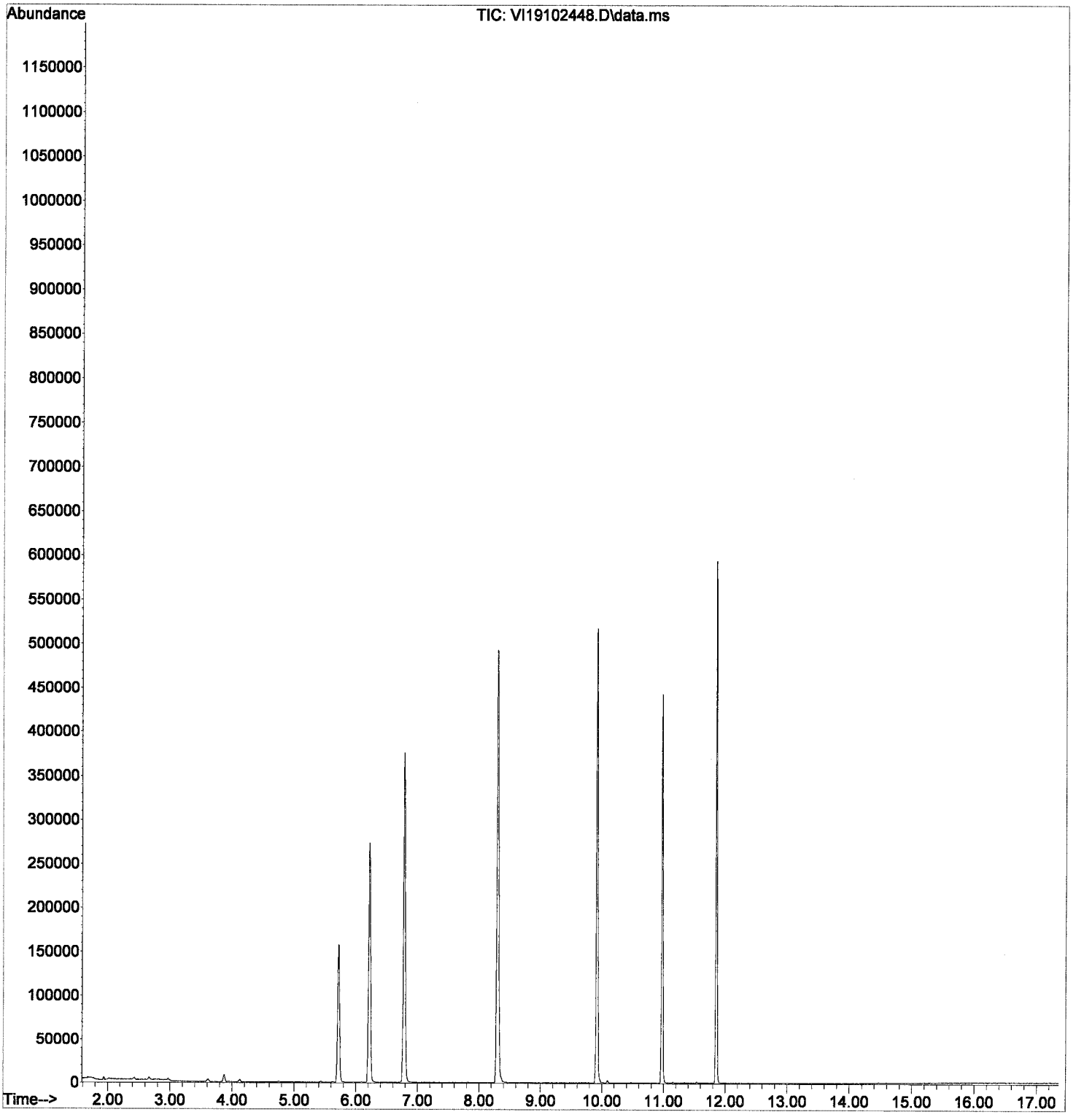
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	224165	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	364141	49.96	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	116148	47.73	ug/L	0.00
9) Toluene-d8 (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

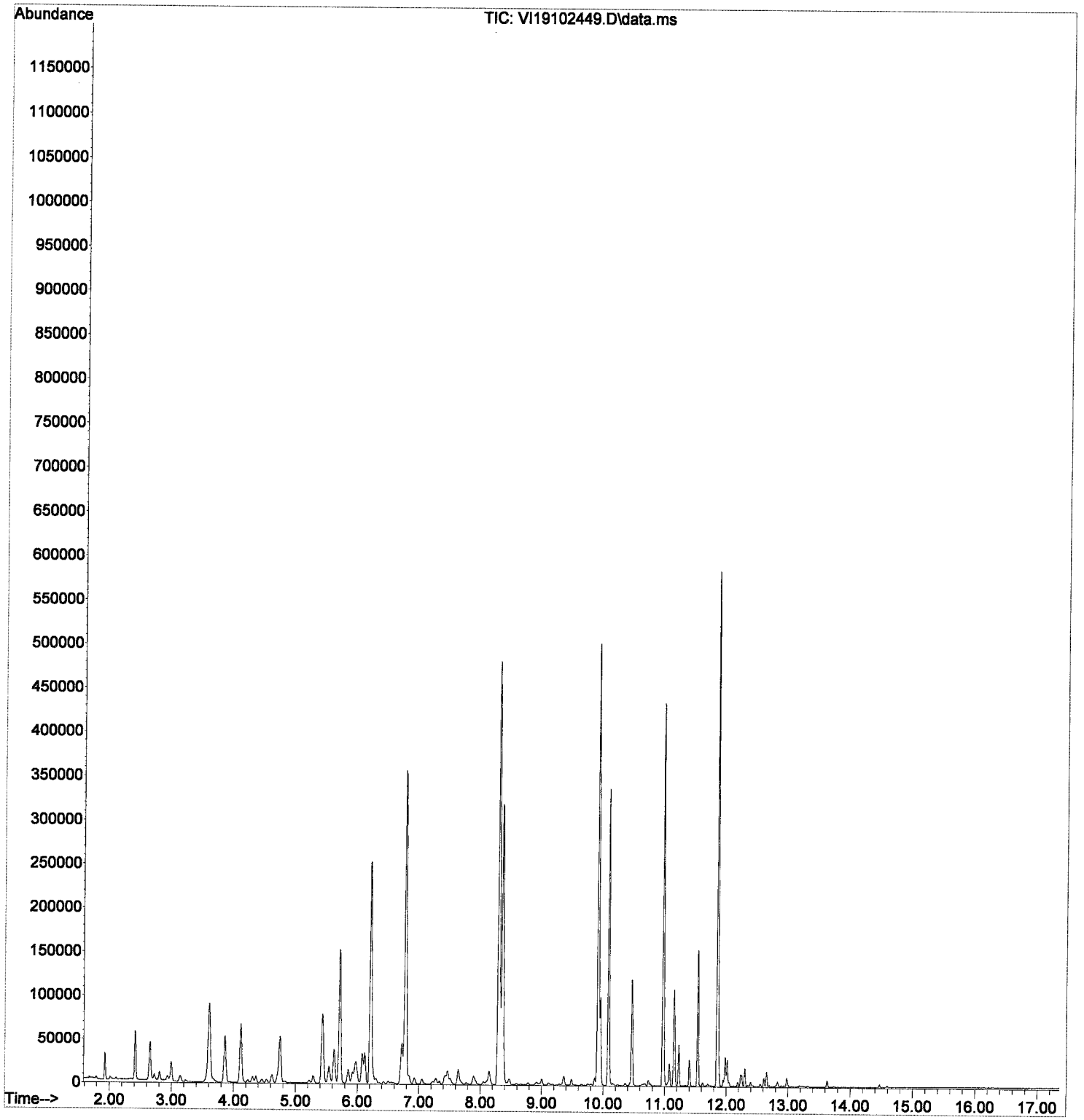
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	210169	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	342543	50.13	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	111447	48.85	ug/L	0.00
9) Toluene-d8 (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

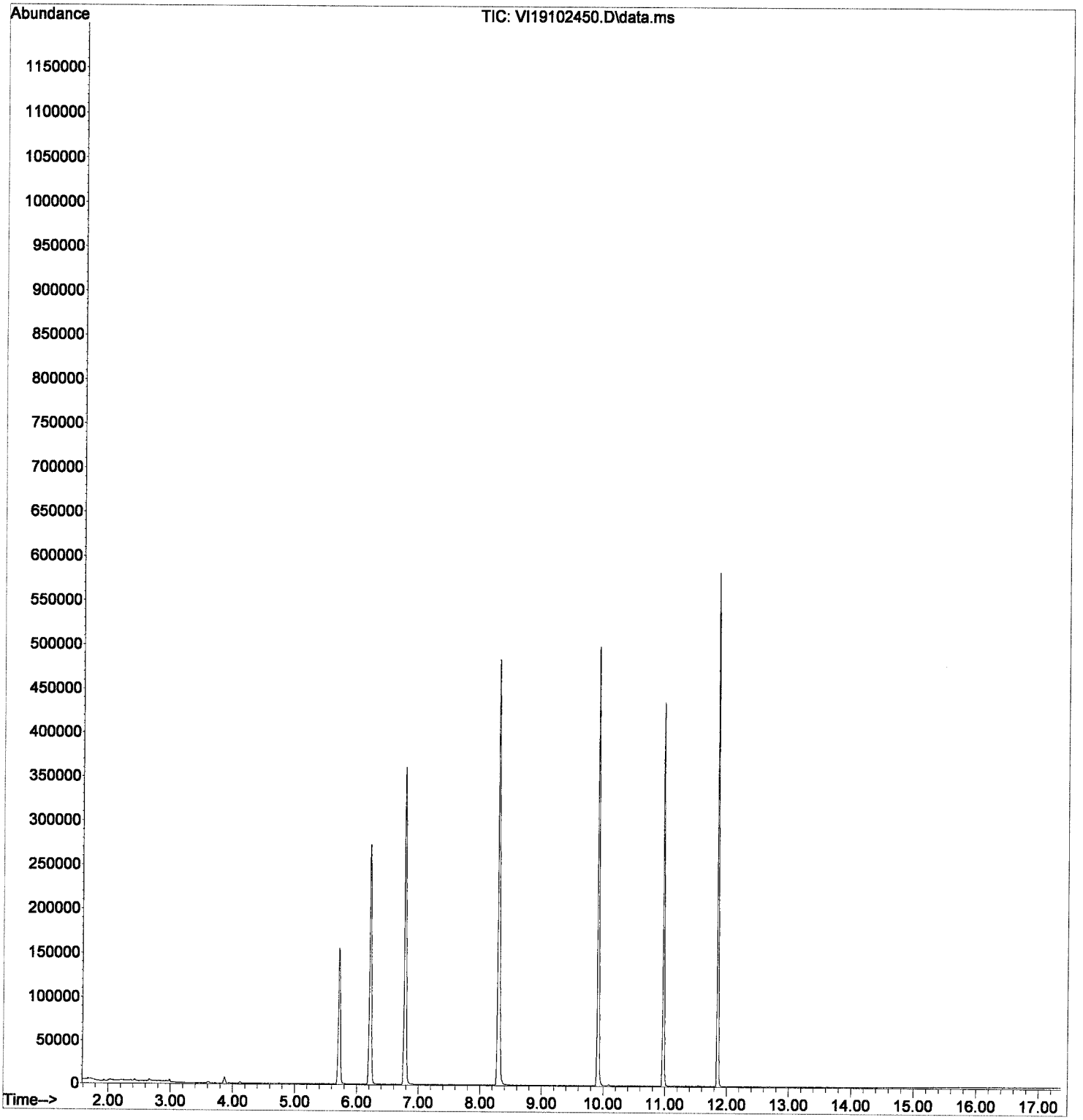
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220005	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	355641	49.72	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	113694	47.61	ug/L	0.00
9) Toluene-d8 (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

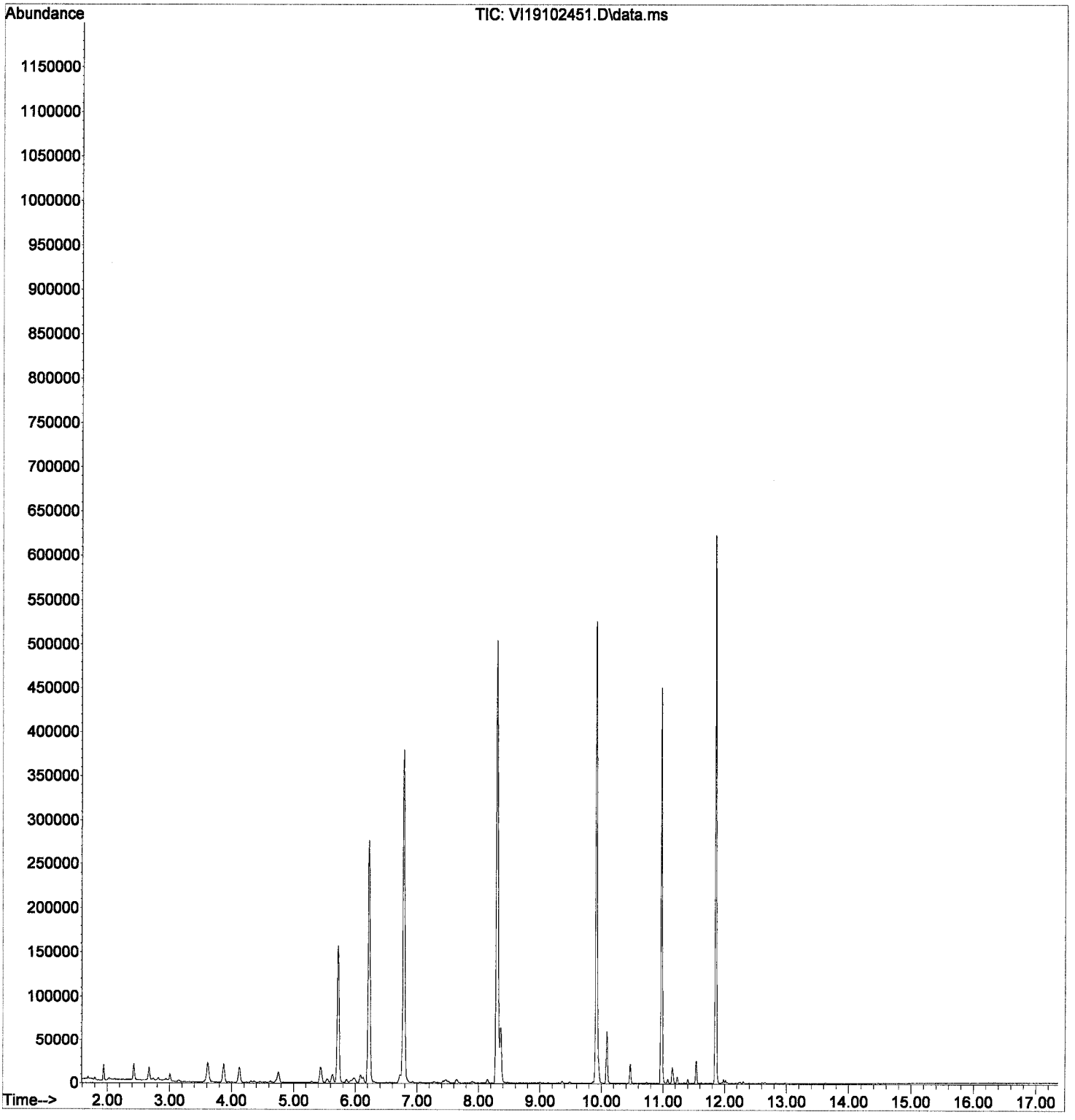
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	220874	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	362775	50.51	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	117808	49.14	ug/L	0.00
9) Toluene-d8 (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		

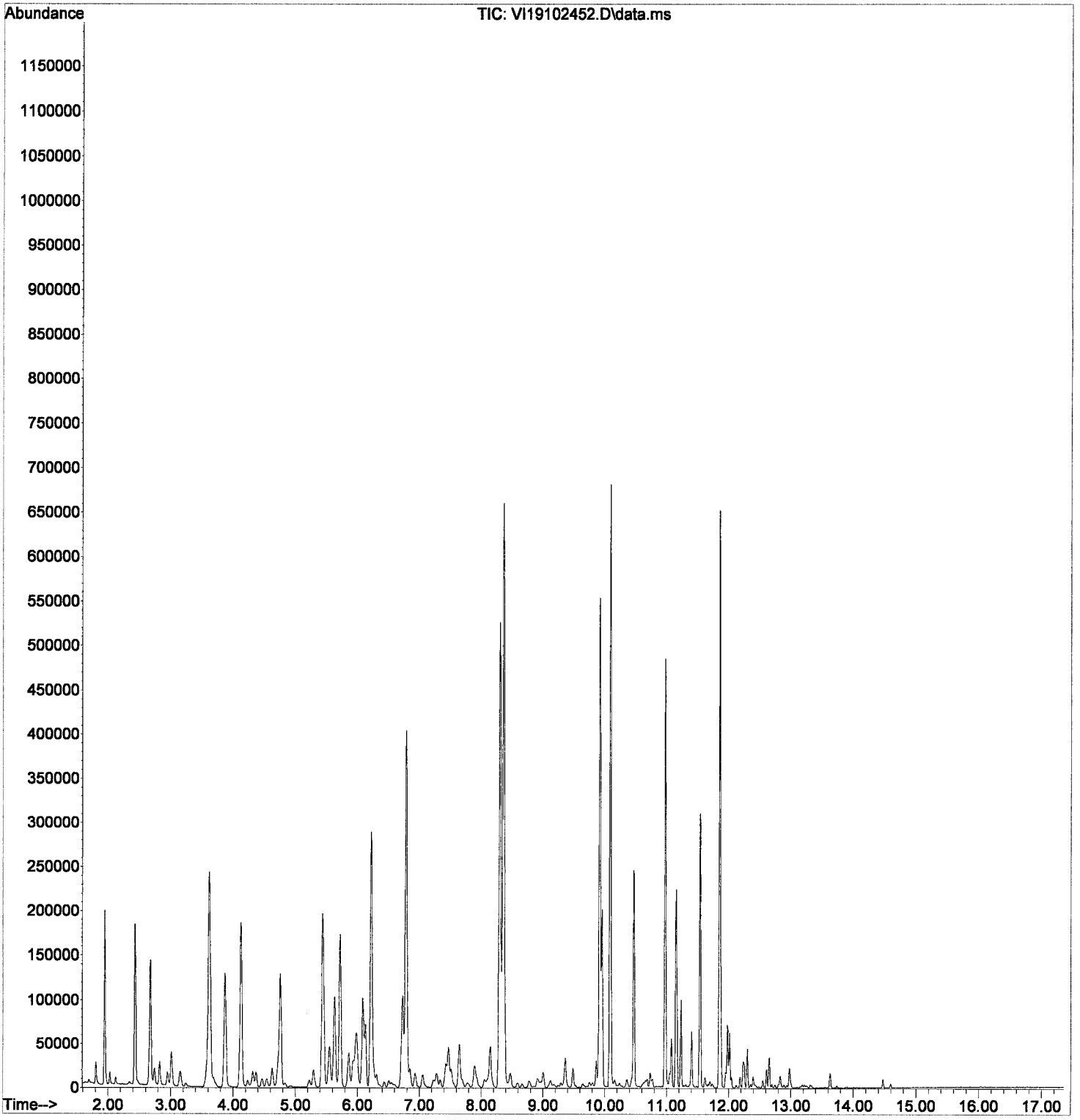
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

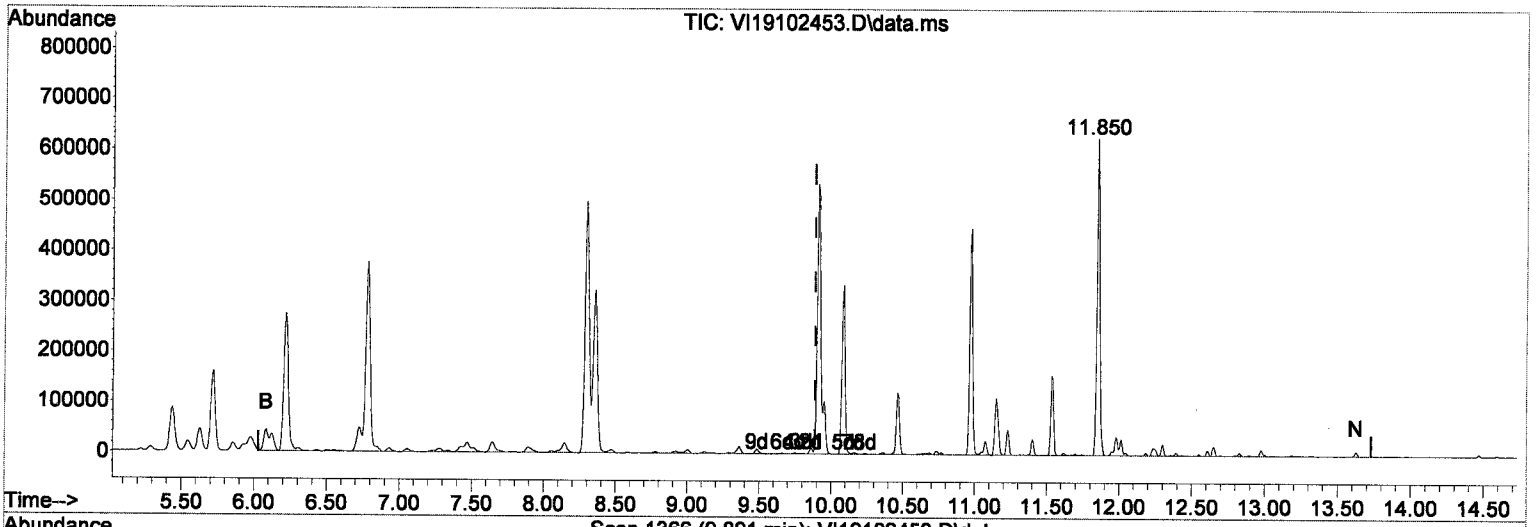
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	6.217	168	221958	50.00	ug/L	0.00
System Monitoring Compounds						
2) 1,4-Difluorobenzene (Sur)	6.783	114	358721	49.70	ug/L	0.00
3) 4-Bromofluorobenzene (...	10.974	174	117543	48.79	ug/L	0.00
9) Toluene-d8 (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	

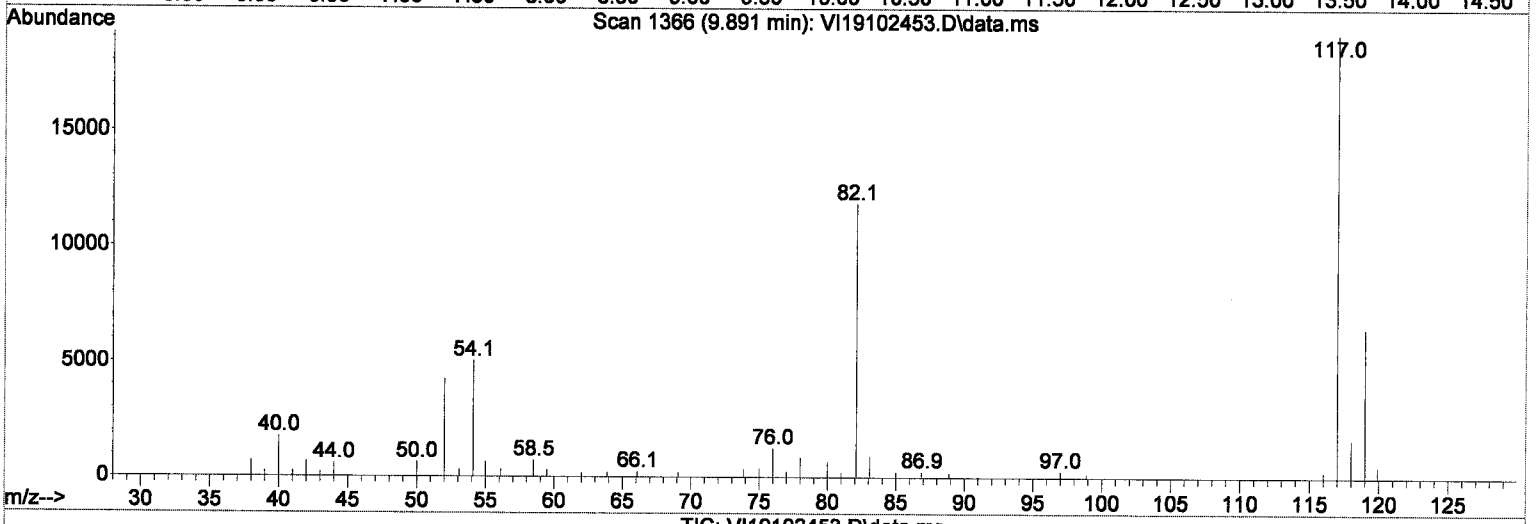
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

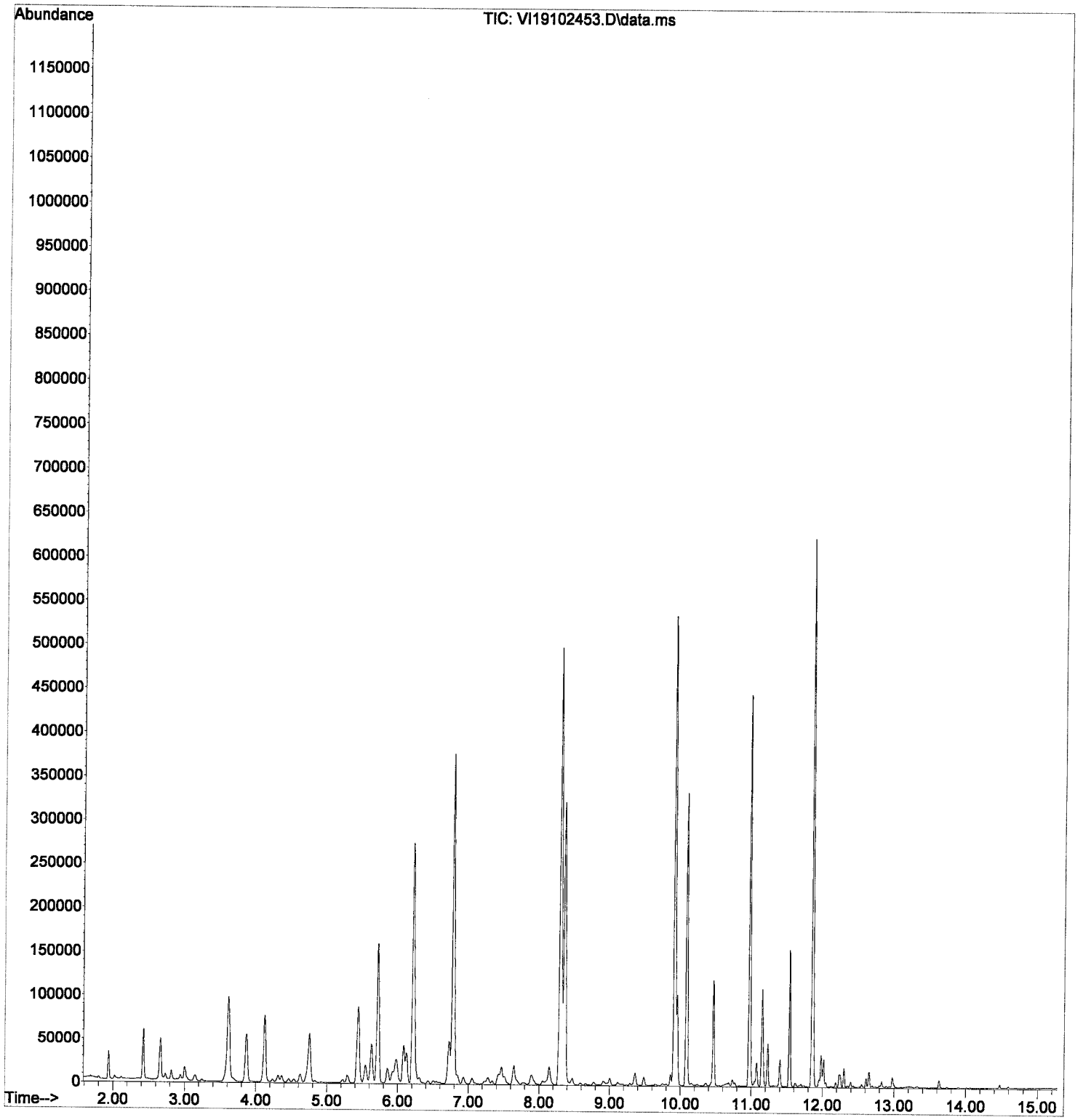
response 3205343

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 9101705
Sequence 9J31014 (A9J0959-01)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101705 (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
	9101705-BLK1		QC	10/29/19 12:34	1100	1				100					
	9101705-BSD1		QC	10/29/19 12:34	1000	1	A19J314		50	100					
	9101705-BS1		QC	10/29/19 12:34	1000	1	A19J314		50	100					
	A9J0841-04	F	8082 PCBs - Low Level (2mL FV)	10/29/19 12:34	950	2				100	PDI-FB-191022131313	Waters only,+1262,1268			
	A9J0841-05	G	8082 PCBs - Low Level (2mL FV)	10/29/19 12:34	1030	2				100	PDI-RB-191022191318	Waters only,+1262,1268			
	A9J0959-01	I	8082 PCBs - Low Level (1000/1mL)	10/29/19 12:35	1060	1				100	PDI-026SW-34-00-191024				

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
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J314	02/28/20	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19J262	04/17/20	8082 PCB Surrogate Spike

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: _____ Date 10/31/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101705 (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
	9101705-BLK1		QC	10/29/19 12:34	~~1000~~ 1100	1				100				6	
	9101705-BSD1		QC	10/29/19 12:34	1000	1	A19J314		50	100				6	
	9101705-BS1		QC	10/29/19 12:34	1000	1	A19J314		50	100				6	
	A9J0841-04	E F	8082 PCBs - Low Level (2mL FV)	10/29/19 12:34	~~1000~~ 950	2				100	PDI-FB-1910221313	Waters only,+1262,1268 ✱		6	
	A9J0841-05	E G	8082 PCBs - Low Level (2mL FV)	10/29/19 12:34	~~1000~~ 1030	2				100	PDI-RB-1910221 91318	Waters only,+1262,1268 E ✱		6	
	A9J0959-01	G I	8082 PCBs - Low Level (1000/1mL)	10/29/19 12:35	~~1000~~ 1060	1				100	PDI-026SW-34-00-191024			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
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J314	02/28/20	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19J262	04/17/20	8082 PCB Surrogate Spike

E = Emulsion

✱ = Potential Sample Switch.

Witness: JJG 10/29/19

Bottle Check: JJG 10/29/19

Prepared By: 10/29/19 (Date)

Reviewed By: SCG 10/29/2019 (Date)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J31014**	Instrument:	**DUALECD2R**
Date:	**10/31/19 07:12**	Calibration:	**A9J2803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J31014-CCV1	Sediment	QC	QC				A19J268
2	9J31014-CCB1	Sediment	QC	QC				A19J194
3	9101705-BLK1	Water	QC	QC		9101705		
4	9101705-BS1	Water	QC	QC		9101705		
5	9101705-BSD1	Water	QC	QC		9101705		
6	A9J0841-04	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/05/19	9101705		
7	A9J0841-05	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/05/19	9101705		
8	A9J0959-01	Water	8082 PCBs - Low Level (1000/1mL)	Anchor QEA, LLC	11/07/19	9101705		
9	9J31014-CCV2	Sediment	QC	QC				A19J268
10	9J31014-CCB2	Sediment	QC	QC				A19J194
11	9101736-BLK1	Sediment	QC	QC		9101736		
12	9101736-BS1	Sediment	QC	QC		9101736		
13	A9J0417-28	Sediment	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	10/24/19	9101736		
14	9J31014-IBL1	Sediment	QC	QC				
15	A9J0470-02	Sediment	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	10/25/19	9101736		
16	9J31014-IBL2	Sediment	QC	QC				
17	9101736-MS1	Sediment	QC	QC		9101736		
18	9J31014-IBL3	Sediment	QC	QC				
19	9101736-MSD1	Sediment	QC	QC		9101736		
20	9J31014-IBL4	Sediment	QC	QC				
21	A9J0470-03	Sediment	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	10/25/19	9101736		
22	9J31014-IBL5	Sediment	QC	QC				
23	A9J0470-05	Sediment	8082 PCBs - Low Level (30g/2mL)	Anchor QEA, LLC	10/25/19	9101736		
24	9J31014-IBL6	Sediment	QC	QC				
25	9J31014-CCV3	Sediment	QC	QC				A19J268
26	9J31014-CCB3	Sediment	QC	QC				A19J194

Comments:

Data Entered By: 11/1/19

Data Reviewed By: 11/5/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J31014**	Instrument:	**DUALECD2R**
Date:	**10/31/19 07:12**	Calibration:	**A9J2803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J31014-CCV1	Water	QC	QC				A19J268
2	9J31014-CCB1	Water	QC	QC				A19J194
3	9101705-BLK1	Water	QC	QC		9101705		
4	9101705-BS1	Water	QC	QC		9101705		
5	9101705-BSD1	Water	QC	QC		9101705		
6	A9J0841-04	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/05/19	9101705		
7	A9J0841-05	Water	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	11/05/19	9101705		
8	A9J0959-01	Water	8082 PCBs - Low Level (1000/1mL)	Anchor QEA, LLC	11/07/19	9101705		
9	9J31014-CCV2	Water	QC	QC				A19J268
10	9J31014-CCB2	Water	QC	QC				A19J194

Comments: Partial

Data Entered By: [signature] 10/31/19

Data Reviewed By: [signature] 10/31/19

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.

9J31014-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	475.22
1016 (2)	492.32
1016 (3)	482.92
1016 (4)	466.68
1016 (5)	472.86
1016 (6)	475.67
Average:	**477.61**

Aroclor 1260

Peak	Initial Res
1260 (1)	490.98
1260 (2)	504.94
1260 (3)	492.39
1260 (4)	499.28
1260 (5)	504.43
1260 (6)	507.82
Average:	**499.97**

9101705-BS1

Aroclor 1016

Peak	Initial Res
1016 (1)	597.67
1016 (2)	694.28
1016 (3)	552.69
1016 (4)	729.71
1016 (5)	700.29
1016 (6)	627.72
Average:	**650.39**

Aroclor 1260

Peak	Initial Res
1260 (1)	817.98
1260 (2)	919.97
1260 (3)	778.01
1260 (4)	988.39
1260 (5)	881.49
1260 (6)	943.89
Average:	**888.29**

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.

9101705-BSD1

Aroclor 1016

Peak	Initial Res
1016 (1)	612.09
1016 (2)	715.92
1016 (3)	559.75
1016 (4)	747.87
1016 (5)	743.14
1016 (6)	659.19
Average:	**672.99**

Aroclor 1260

Peak	Initial Res
1260 (1)	835.56
1260 (2)	928.27
1260 (3)	811.28
1260 (4)	986.88
1260 (5)	845.21
1260 (6)	983.84
Average:	**898.51**

9J31014-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	484.38
1016 (2)	477.49
1016 (3)	491.98
1016 (4)	475.25
1016 (5)	468.55
1016 (6)	483.63
Average:	**480.21**

Aroclor 1260

Peak	Initial Res
1260 (1)	507.13
1260 (2)	506.04
1260 (3)	510.81
1260 (4)	519.89
1260 (5)	518.29
1260 (6)	528.30
Average:	**515.08**

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.

9J31014-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	484.38
1016 (2)	477.49
1016 (3)	491.98
1016 (4)	475.25
1016 (5)	468.55
1016 (6)	483.63
Average:	**480.21**

Aroclor 1260

Peak	Initial Res
1260 (1)	507.13
1260 (2)	506.04
1260 (3)	510.81
1260 (4)	519.89
1260 (5)	518.29
1260 (6)	528.30
Average:	**515.08**

9101736-BS1

Aroclor 1016

Peak	Initial Res
1016 (1)	802.57
1016 (2)	898.56
1016 (3)	761.90
1016 (4)	886.45
1016 (5)	892.42
1016 (6)	817.28
Average:	**843.20**

Aroclor 1260

Peak	Initial Res
1260 (1)	999.26
1260 (2)	1,051.96
1260 (3)	1,023.74
1260 (4)	1,177.88
1260 (5)	1,080.89
1260 (6)	1,116.07
Average:	**1,074.97**

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.

9101736-MS1

Aroclor 1016

Peak	Initial Res
1016 (1)	488.42
1016 (2)	619.08
1016 (3)	538.82
1016 (4)	520.64
1016 (5)	547.57
1016 (6)	480.16
Average:	**532.45**

Aroclor 1260

Peak	Initial Res
1260 (1)	523.19
1260 (2)	582.78
1260 (3)	508.41
1260 (4)	525.76
1260 (5)	513.52
1260 (6)	504.71
Average:	**526.40**

9101736-MSD1

Aroclor 1016

Peak	Initial Res
1016 (1)	534.75
1016 (2)	679.47
1016 (3)	593.39
1016 (4)	610.85
1016 (5)	615.63
1016 (6)	547.88
Average:	**597.00**

Aroclor 1260

Peak	Initial Res
1260 (1)	601.32
1260 (2)	646.14
1260 (3)	564.27
1260 (4)	629.14
1260 (5)	590.06
1260 (6)	586.54
Average:	**602.91**

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.

9J31014-CCV3

Aroclor 1016

Peak	Initial Res
1016 (1)	499.82
1016 (2)	532.67
1016 (3)	513.07
1016 (4)	473.87
1016 (5)	496.13
1016 (6)	498.79
Average:	**502.39**

Aroclor 1260

Peak	Initial Res
1260 (1)	515.17
1260 (2)	523.59
1260 (3)	515.85
1260 (4)	517.56
1260 (5)	549.52
1260 (6)	544.45
Average:	**527.69**

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:17
Operator : MJB / KAK
Sample : 9J31014-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:24 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

10/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.720	67576975	257.601 ng/ml
62) S	DCBP (S)	10.709	36865037	251.141 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.392	4221465	475.225 ng/ml
3)	Aroclor 1016 (2)	6.882	8056000	492.322 ng/ml
4)	Aroclor 1016 (3)	7.008	3557095	482.918 ng/ml
5)	Aroclor 1016 (4)	7.095	3480206	466.684 ng/ml
6)	Aroclor 1016 (5)	7.140	3901585	472.858 ng/ml
7)	Aroclor 1016 (6)	7.265	3915317	475.674 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.894	282895	131.956 ng/ml
10)	Aroclor 1221 (2)	5.968	538845	246.498 ng/ml
11)	Aroclor 1221 (3)	6.055	2580823	364.791 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.055	2580823	450.825 ng/ml
14)	Aroclor 1232 (2)	6.392	4221465	1214.376 ng/ml
15)	Aroclor 1232 (3)	6.882	8056000	1244.313 ng/ml
16)	Aroclor 1232 (4)	7.095	3480206	1457.616 ng/ml
17)	Aroclor 1232 (5)	7.140	3901585	1427.923 ng/ml
18)	Aroclor 1232 (6)	7.265	3915317	1320.057 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.392	4221465	644.354 ng/ml
21)	Aroclor 1242 (2)	6.882	8056000	680.881 ng/ml
22)	Aroclor 1242 (3)	7.008	3557095	673.380 ng/ml
23)	Aroclor 1242 (4)	7.095	3480206	697.054 ng/ml
24)	Aroclor 1242 (5)	7.140	3901585	671.059 ng/ml
25)	Aroclor 1242 (6)	7.265	3915317	632.004 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.854	6563856	879.594 ng/ml
28)	Aroclor 1248 (2)	7.095	3480206	372.766 ng/ml
29)	Aroclor 1248 (3)	7.140	3901585	444.900 ng/ml
30)	Aroclor 1248 (4)	7.265	3915317	373.936 ng/ml
31)	Aroclor 1248 (5)	7.630	875242	67.675 ng/ml
32)	Aroclor 1248 (6)	7.789	3202427	271.597 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.608	2760286	213.561 ng/ml
35)	Aroclor 1254 (2)	7.789	3202427	158.163 ng/ml
36)	Aroclor 1254 (3)	8.100	1828438	85.331 ng/ml
37)	Aroclor 1254 (4)	8.339	1272192	77.025 ng/ml
38)	Aroclor 1254 (5)	8.674	9912879	631.669 ng/ml
39)	Aroclor 1254 (6)	8.892	1401116	286.518 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.236	7749043	490.978 ng/ml
42)	Aroclor 1260 (2)	8.442	9883479	504.936 ng/ml
43)	Aroclor 1260 (3)	8.674	9912879	492.390 ng/ml
44)	Aroclor 1260 (4)	9.165	15450748	499.278 ng/ml
45)	Aroclor 1260 (5)	9.433	9027896	504.431 ng/ml
46)	Aroclor 1260 (6)	10.020	3503242	507.823 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

477.61

499.97

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:17
Operator : MJB / KAK
Sample : 9J31014-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:24 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

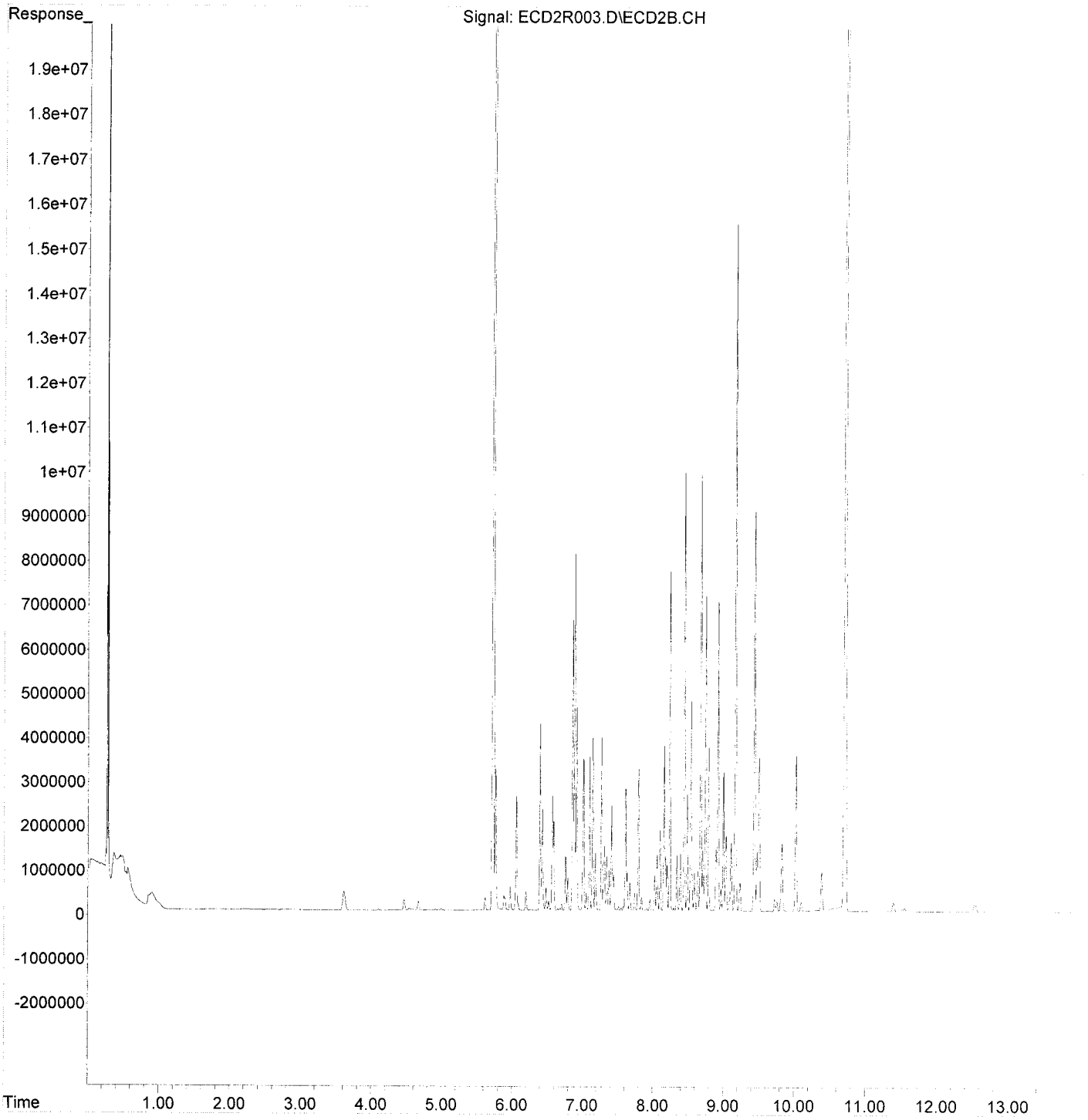
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.442	9883479	653.085	ng/ml
49)	Aroclor 1262 (2)	8.742	7105600	335.895	ng/ml
50)	Aroclor 1262 (3)	8.920	6965497	398.751	ng/ml
51)	Aroclor 1262 (4)	9.165	15450748	431.473	ng/ml
52)	Aroclor 1262 (5)	9.433	9027896	411.016	ng/ml
53)	Aroclor 1262 (6)	10.020	3503242	361.139	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.962	494379	52.969	ng/ml
56)	Aroclor 1268 (2)	9.433	9027896	230.091	ng/ml
57)	Aroclor 1268 (3)	9.500	3462755	109.834	ng/ml
58)	Aroclor 1268 (4)	9.723	274925	10.150	ng/ml
59)	Aroclor 1268 (5)	10.020	3503242	330.614	ng/ml
60)	Aroclor 1268 (6)	10.384	875659	11.917	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\9J31014\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:17
Operator : MJB / KAK
Sample : 9J31014-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:24 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\9J31014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:35
Operator : MJB / KAK
Sample : 9J31014-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:44 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

10/31/19
Clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.719	27856363	106.188 ng/ml
62) S	DCBP (S)	10.710	15557407	105.984 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.391	7233	0.814 ng/ml
3)	Aroclor 1016 (2)	6.872	10172	0.622 ng/ml
4)	Aroclor 1016 (3)	7.009	9790	1.329 ng/ml
5)	Aroclor 1016 (4)	7.082	9403	1.261 ng/ml
6)	Aroclor 1016 (5)	7.125	9553	1.158 ng/ml
7)	Aroclor 1016 (6)	7.280	11184	1.359 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.937f	7345	3.426 ng/ml
10)	Aroclor 1221 (2)	5.968	6410	2.932 ng/ml
11)	Aroclor 1221 (3)	6.039	51168	7.232 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.039	51168	8.938 ng/ml
14)	Aroclor 1232 (2)	6.391	7233	2.081 ng/ml
15)	Aroclor 1232 (3)	6.872	10172	1.571 ng/ml
16)	Aroclor 1232 (4)	7.104	9476	3.969 ng/ml
17)	Aroclor 1232 (5)	7.150	9430	3.451 ng/ml
18)	Aroclor 1232 (6)	7.280	11184	3.771 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.391	7233	1.104 ng/ml
21)	Aroclor 1242 (2)	6.872	10172	0.860 ng/ml
22)	Aroclor 1242 (3)	7.009	9790	1.853 ng/ml
23)	Aroclor 1242 (4)	7.082	9403	1.883 ng/ml
24)	Aroclor 1242 (5)	7.125	9553	1.643 ng/ml
25)	Aroclor 1242 (6)	7.280	11184	1.805 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.862	10611	1.422 ng/ml
28)	Aroclor 1248 (2)	7.082	9403	1.007 ng/ml
29)	Aroclor 1248 (3)	7.150	9430	1.075 ng/ml
30)	Aroclor 1248 (4)	7.280	11184	1.068 ng/ml
31)	Aroclor 1248 (5)	7.634	18549	1.434 ng/ml
32)	Aroclor 1248 (6)	7.789	25893	2.196 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.588	9534	0.738 ng/ml
35)	Aroclor 1254 (2)	7.789	25893	1.279 ng/ml
36)	Aroclor 1254 (3)	8.100	9675	0.452 ng/ml
37)	Aroclor 1254 (4)	8.320	6615	0.401 ng/ml
38)	Aroclor 1254 (5)	8.671	4124	0.263 ng/ml
39)	Aroclor 1254 (6)	8.886	2724	0.557 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.235	8699	0.551 ng/ml
42)	Aroclor 1260 (2)	8.436	5663	0.289 ng/ml
43)	Aroclor 1260 (3)	8.671	4124	0.205 ng/ml
44)	Aroclor 1260 (4)	9.166	3087	0.100 ng/ml
45)	Aroclor 1260 (5)	9.435	2670	0.149 ng/ml
46)	Aroclor 1260 (6)	10.015	1253	0.182 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:35
Operator : MJB / KAK
Sample : 9J31014-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:44 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

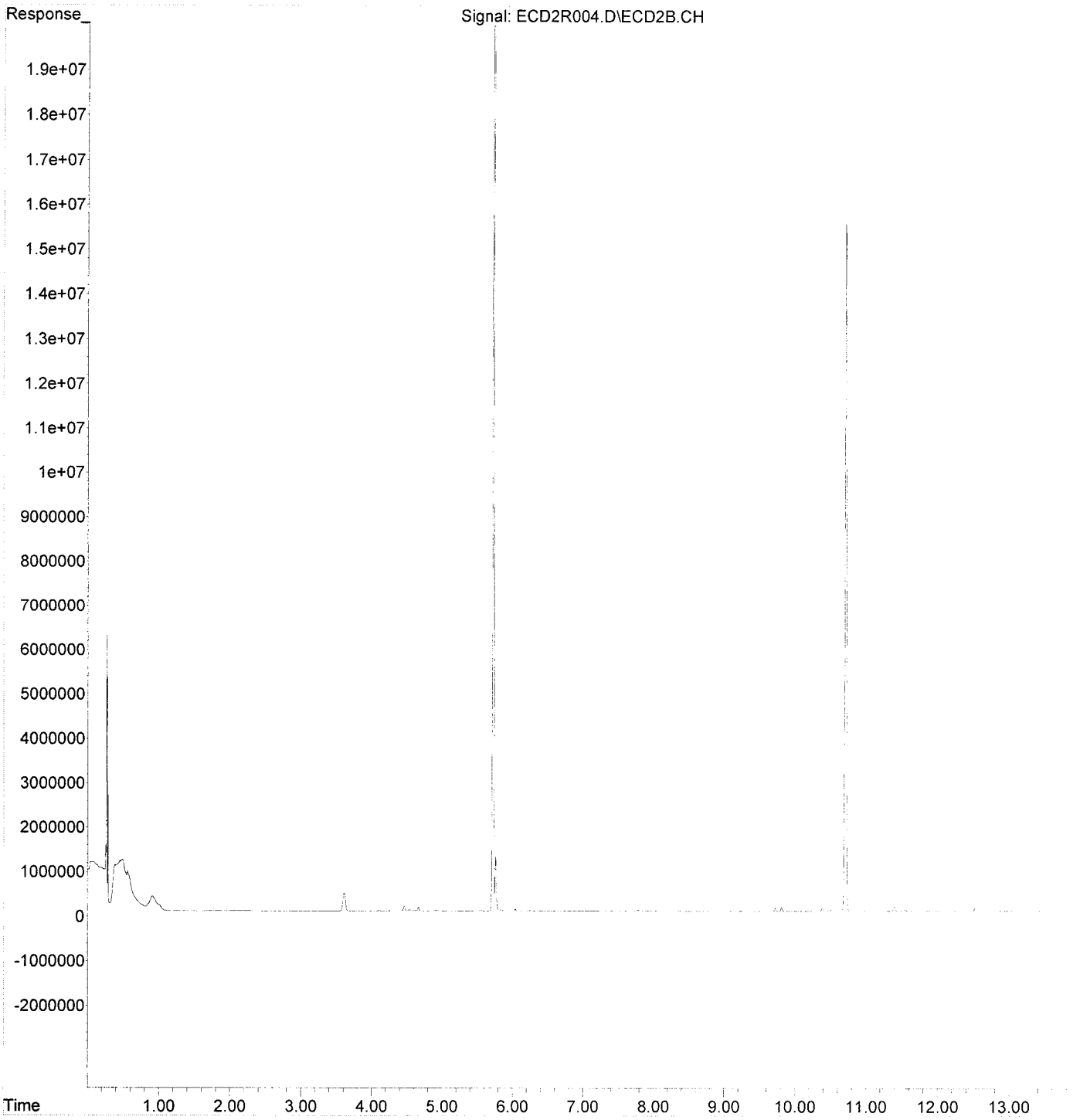
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.436	5663	0.374 ng/ml
49)	Aroclor 1262 (2)	8.740	3822	0.181 ng/ml
50)	Aroclor 1262 (3)	8.920	4454	0.255 ng/ml
51)	Aroclor 1262 (4)	9.166	3087	0.086 ng/ml
52)	Aroclor 1262 (5)	9.435	2670	0.122 ng/ml
53)	Aroclor 1262 (6)	10.015	1253	0.129 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.965	4975	0.533 ng/ml
56)	Aroclor 1268 (2)	9.435	2670	0.068 ng/ml
57)	Aroclor 1268 (3)	9.500	3023	0.096 ng/ml
58)	Aroclor 1268 (4)	9.724	82797	3.057 ng/ml
59)	Aroclor 1268 (5)	10.015	1253	0.118 ng/ml
60)	Aroclor 1268 (6)	10.386	72083	0.981 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\9J31014\
Data File : ECD2R004.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:35
Operator : MJB / KAK
Sample : 9J31014-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:41:44 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\9J31014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:58
Operator : MJB / KAK
Sample : 9101705-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:04 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

10/31/19

Clear

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.719	91403352	348.426 ng/ml
62) S	DCBP (S)	10.712	68803852	468.722 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.390	14889	1.676 ng/ml
3)	Aroclor 1016 (2)	6.881	17052	1.042 ng/ml
4)	Aroclor 1016 (3)	7.008	13043	1.771 ng/ml
5)	Aroclor 1016 (4)	7.092	14348	1.924 ng/ml
6)	Aroclor 1016 (5)	7.140	13551	1.642 ng/ml
7)	Aroclor 1016 (6)	7.265	14442	1.755 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.897	13186	6.151 ng/ml
10)	Aroclor 1221 (2)	5.957	8512	3.894 ng/ml
11)	Aroclor 1221 (3)	6.038	115813	16.370 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.038	115813	20.231 ng/ml
14)	Aroclor 1232 (2)	6.390	14889	4.283 ng/ml
15)	Aroclor 1232 (3)	6.881	17052	2.634 ng/ml
16)	Aroclor 1232 (4)	7.092	14348	6.009 ng/ml
17)	Aroclor 1232 (5)	7.140	13551	4.960 ng/ml
18)	Aroclor 1232 (6)	7.265	14442	4.869 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.390	14889	2.273 ng/ml
21)	Aroclor 1242 (2)	6.881	17052	1.441 ng/ml
22)	Aroclor 1242 (3)	7.008	13043	2.469 ng/ml
23)	Aroclor 1242 (4)	7.092	14348	2.874 ng/ml
24)	Aroclor 1242 (5)	7.140	13551	2.331 ng/ml
25)	Aroclor 1242 (6)	7.265	14442	2.331 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.854	16864	2.260 ng/ml
28)	Aroclor 1248 (2)	7.092	14348	1.537 ng/ml
29)	Aroclor 1248 (3)	7.140	13551	1.545 ng/ml
30)	Aroclor 1248 (4)	7.265	14442	1.379 ng/ml
31)	Aroclor 1248 (5)	7.635	25754	1.991 ng/ml
32)	Aroclor 1248 (6)	7.786	35902	3.045 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.579	9979	0.772 ng/ml
35)	Aroclor 1254 (2)	7.786	35902	1.773 ng/ml
36)	Aroclor 1254 (3)	8.099	11613	0.542 ng/ml
37)	Aroclor 1254 (4)	8.360	23407	1.417 ng/ml
38)	Aroclor 1254 (5)	8.674	7075	0.451 ng/ml
39)	Aroclor 1254 (6)	8.888	1477	0.302 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.235	11899	0.754 ng/ml
42)	Aroclor 1260 (2)	8.442	11344	0.580 ng/ml
43)	Aroclor 1260 (3)	8.674	7075	0.351 ng/ml
44)	Aroclor 1260 (4)	9.167	3885	0.126 ng/ml
45)	Aroclor 1260 (5)	9.434	4438	0.248 ng/ml
46)	Aroclor 1260 (6)	10.005	12061	1.748 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:58
Operator : MJB / KAK
Sample : 9101705-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:04 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

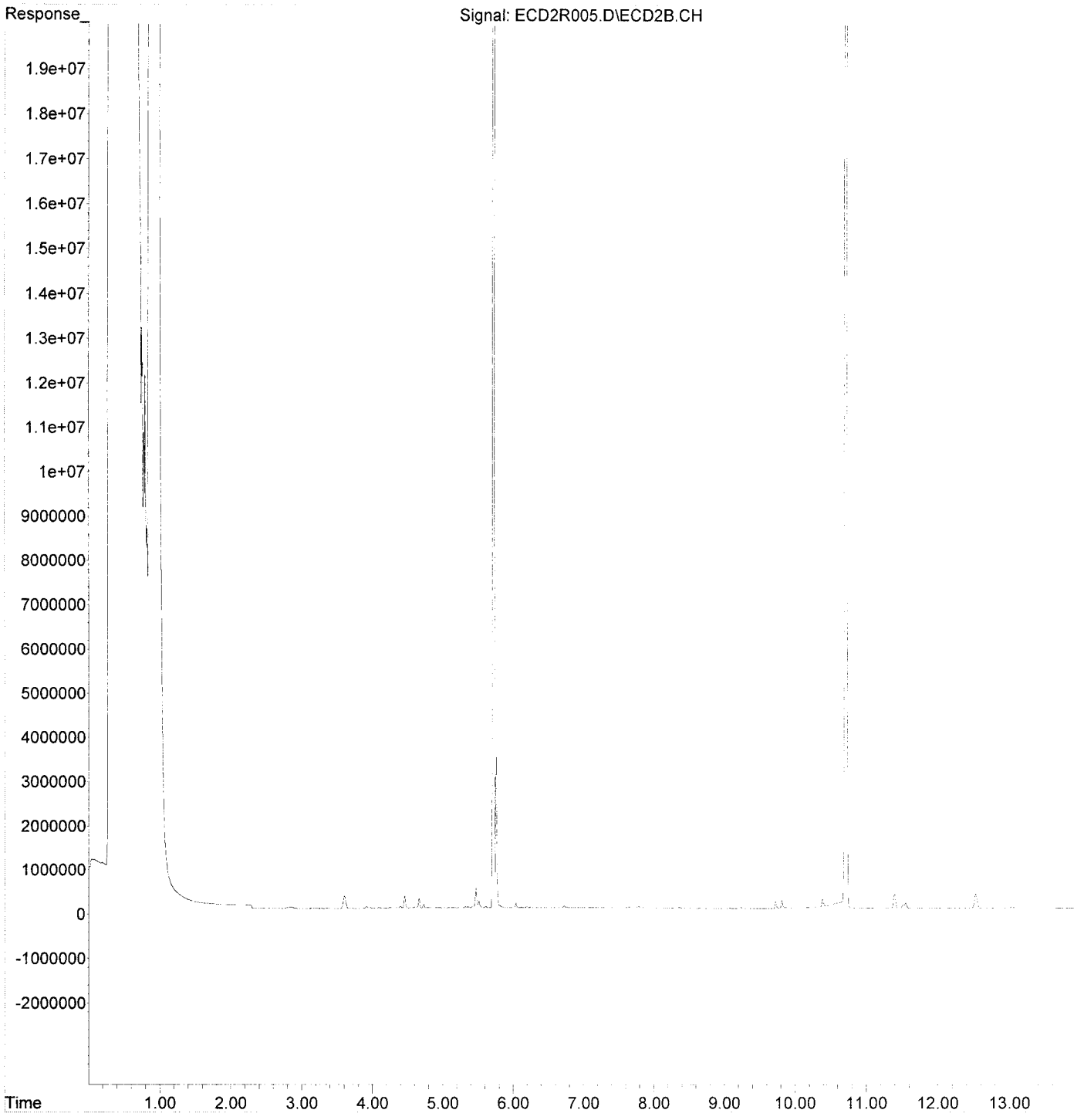
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.442	11344	0.750 ng/ml
49)	Aroclor 1262 (2)	8.744	3763	0.178 ng/ml
50)	Aroclor 1262 (3)	8.921	3359	0.192 ng/ml
51)	Aroclor 1262 (4)	9.167	3885	0.108 ng/ml
52)	Aroclor 1262 (5)	9.434	4438	0.202 ng/ml
53)	Aroclor 1262 (6)	10.005	12061	1.243 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.964	2902	0.311 ng/ml
56)	Aroclor 1268 (2)	9.434	4438	0.113 ng/ml
57)	Aroclor 1268 (3)	9.502	3554	0.113 ng/ml
58)	Aroclor 1268 (4)	9.725	155479	5.740 ng/ml
59)	Aroclor 1268 (5)	10.005	12061	1.138 ng/ml
60)	Aroclor 1268 (6)	10.387	202159	2.751 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\9J31014\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 8:58
Operator : MJB / KAK
Sample : 9101705-BLK1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:04 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\9J31014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:15
Operator : MJB / KAK
Sample : 9101705-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:23 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

10/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.721	80147639	305.520	ng/ml
62)	S DCBP (S)	10.711	63841032	434.913	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.393	5309159	597.670	ng/ml
3)	Aroclor 1016 (2)	6.882	11360632	694.276	ng/ml
4)	Aroclor 1016 (3)	7.009	4070994	552.686	ng/ml
5)	Aroclor 1016 (4)	7.095	5441663	729.708	ng/ml
6)	Aroclor 1016 (5)	7.140	5778144	700.291	ng/ml
7)	Aroclor 1016 (6)	7.266	5166831	627.721	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.896	326162	152.138	ng/ml
10)	Aroclor 1221 (2)	5.969	638936	292.286	ng/ml
11)	Aroclor 1221 (3)	6.056	3002108	424.339	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	6.056	3002108	524.416	ng/ml
14)	Aroclor 1232 (2)	6.393	5309159	1527.269	ng/ml
15)	Aroclor 1232 (3)	6.882	11360632	1754.740	ng/ml
16)	Aroclor 1232 (4)	7.095	5441663	2279.134	ng/ml
17)	Aroclor 1232 (5)	7.140	5778144	2114.716	ng/ml
18)	Aroclor 1232 (6)	7.266	5166831	1742.008	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.393	5309159	810.377	ng/ml
21)	Aroclor 1242 (2)	6.882	11360632	960.183	ng/ml
22)	Aroclor 1242 (3)	7.009	4070994	770.664	ng/ml
23)	Aroclor 1242 (4)	7.095	5441663	1089.916	ng/ml
24)	Aroclor 1242 (5)	7.140	5778144	993.821	ng/ml
25)	Aroclor 1242 (6)	7.266	5166831	834.021	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.855	9700177	1299.879	ng/ml
28)	Aroclor 1248 (2)	7.095	5441663	582.859	ng/ml
29)	Aroclor 1248 (3)	7.140	5778144	658.885	ng/ml
30)	Aroclor 1248 (4)	7.266	5166831	493.463	ng/ml
31)	Aroclor 1248 (5)	7.631	1288085	99.597	ng/ml
32)	Aroclor 1248 (6)	7.789	5420891	459.745	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.608	4141093	320.393	ng/ml
35)	Aroclor 1254 (2)	7.789	5420891	267.730	ng/ml
36)	Aroclor 1254 (3)	8.100	2487281	116.078	ng/ml
37)	Aroclor 1254 (4)	8.339	1976408	119.662	ng/ml
38)	Aroclor 1254 (5)	8.675	15663122	998.086	ng/ml
39)	Aroclor 1254 (6)	8.892	2537932	518.989	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.236	12910092	817.981	ng/ml
42)	Aroclor 1260 (2)	8.443	18007177	919.967	ng/ml
43)	Aroclor 1260 (3)	8.675	15663122	778.015	ng/ml
44)	Aroclor 1260 (4)	9.167	30586956	988.392	ng/ml
45)	Aroclor 1260 (5)	9.435	15776193	881.490	ng/ml
46)	Aroclor 1260 (6)	10.021	6511499	943.895	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

650.39

888.29

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:15
Operator : MJB / KAK
Sample : 9101705-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:23 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

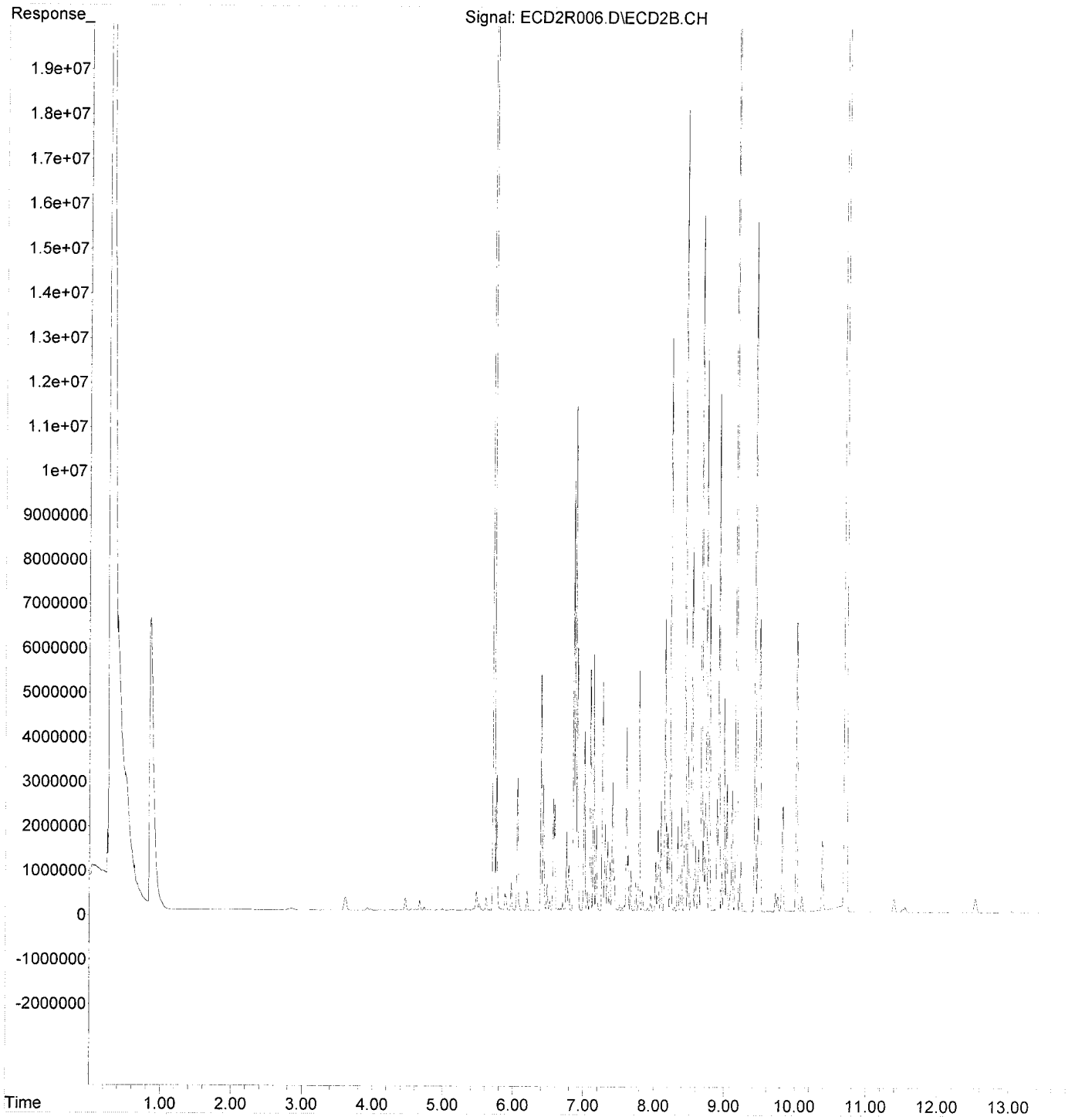
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.443	18007177	1189.887	ng/ml
49)	Aroclor 1262 (2)	8.744	12746074	602.530	ng/ml
50)	Aroclor 1262 (3)	8.922	12046971	689.649	ng/ml
51)	Aroclor 1262 (4)	9.167	30586956	854.162	ng/ml
52)	Aroclor 1262 (5)	9.435	15776193	718.248	ng/ml
53)	Aroclor 1262 (6)	10.021	6511499	671.252	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.962	896475	96.051	ng/ml
56)	Aroclor 1268 (2)	9.435	15776193	402.083	ng/ml
57)	Aroclor 1268 (3)	9.499	6619738	209.969	ng/ml
58)	Aroclor 1268 (4)	9.723	424879	15.687	ng/ml
59)	Aroclor 1268 (5)	10.021	6511499	614.514	ng/ml
60)	Aroclor 1268 (6)	10.384	1592395	21.671	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\9J31014\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:15
Operator : MJB / KAK
Sample : 9101705-BS1
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:23 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\9J31014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:33
Operator : MJB / KAK
Sample : 9101705-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:42 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

10/31/19

Q-19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.720	81942263	312.361	ng/ml
62)	S	DCBP (S)	10.712	61882562	421.571	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.392	5437278	612.093	ng/ml
3)		Aroclor 1016 (2)	6.882	11714770	715.919	ng/ml
4)		Aroclor 1016 (3)	7.009	4123023	559.749	ng/ml
5)		Aroclor 1016 (4)	7.095	5577066	747.865	ng/ml
6)		Aroclor 1016 (5)	7.140	6131658	743.136	ng/ml
7)		Aroclor 1016 (6)	7.266	5425881	659.194	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	5.895	337977	157.649	ng/ml
10)		Aroclor 1221 (2)	5.968	649824	297.266	ng/ml
11)		Aroclor 1221 (3)	6.056	3194693	451.560	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	6.056	3194693	558.057	ng/ml
14)		Aroclor 1232 (2)	6.392	5437278	1564.125	ng/ml
15)		Aroclor 1232 (3)	6.882	11714770	1809.440	ng/ml
16)		Aroclor 1232 (4)	7.095	5577066	2335.845	ng/ml
17)		Aroclor 1232 (5)	7.140	6131658	2244.097	ng/ml
18)		Aroclor 1232 (6)	7.266	5425881	1829.347	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.392	5437278	829.933	ng/ml
21)		Aroclor 1242 (2)	6.882	11714770	990.114	ng/ml
22)		Aroclor 1242 (3)	7.009	4123023	780.513	ng/ml
23)		Aroclor 1242 (4)	7.095	5577066	1117.036	ng/ml
24)		Aroclor 1242 (5)	7.140	6131658	1054.624	ng/ml
25)		Aroclor 1242 (6)	7.266	5425881	875.836	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.855	9859443	1321.221	ng/ml
28)		Aroclor 1248 (2)	7.095	5577066	597.362	ng/ml
29)		Aroclor 1248 (3)	7.140	6131658	699.196	ng/ml
30)		Aroclor 1248 (4)	7.266	5425881	518.204	ng/ml
31)		Aroclor 1248 (5)	7.630	1344816	103.983	ng/ml
32)		Aroclor 1248 (6)	7.789	5618646	476.516	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.608	4324851	334.610	ng/ml
35)		Aroclor 1254 (2)	7.789	5618646	277.497	ng/ml
36)		Aroclor 1254 (3)	8.100	2592677	120.997	ng/ml
37)		Aroclor 1254 (4)	8.339	2003705	121.315	ng/ml
38)		Aroclor 1254 (5)	8.675	16332897	1040.766	ng/ml
39)		Aroclor 1254 (6)	8.892	2590096	529.656	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.236	13187601	835.564	ng/ml
42)		Aroclor 1260 (2)	8.443	18169711	928.270	ng/ml
43)		Aroclor 1260 (3)	8.675	16332897	811.283	ng/ml
44)		Aroclor 1260 (4)	9.167	30540254	986.883	ng/ml
45)		Aroclor 1260 (5)	9.435	15126976	845.215	ng/ml
46)		Aroclor 1260 (6)	10.021	6787056	983.839	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Q-30

672.99

898.51

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:33
Operator : MJB / KAK
Sample : 9101705-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:42 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

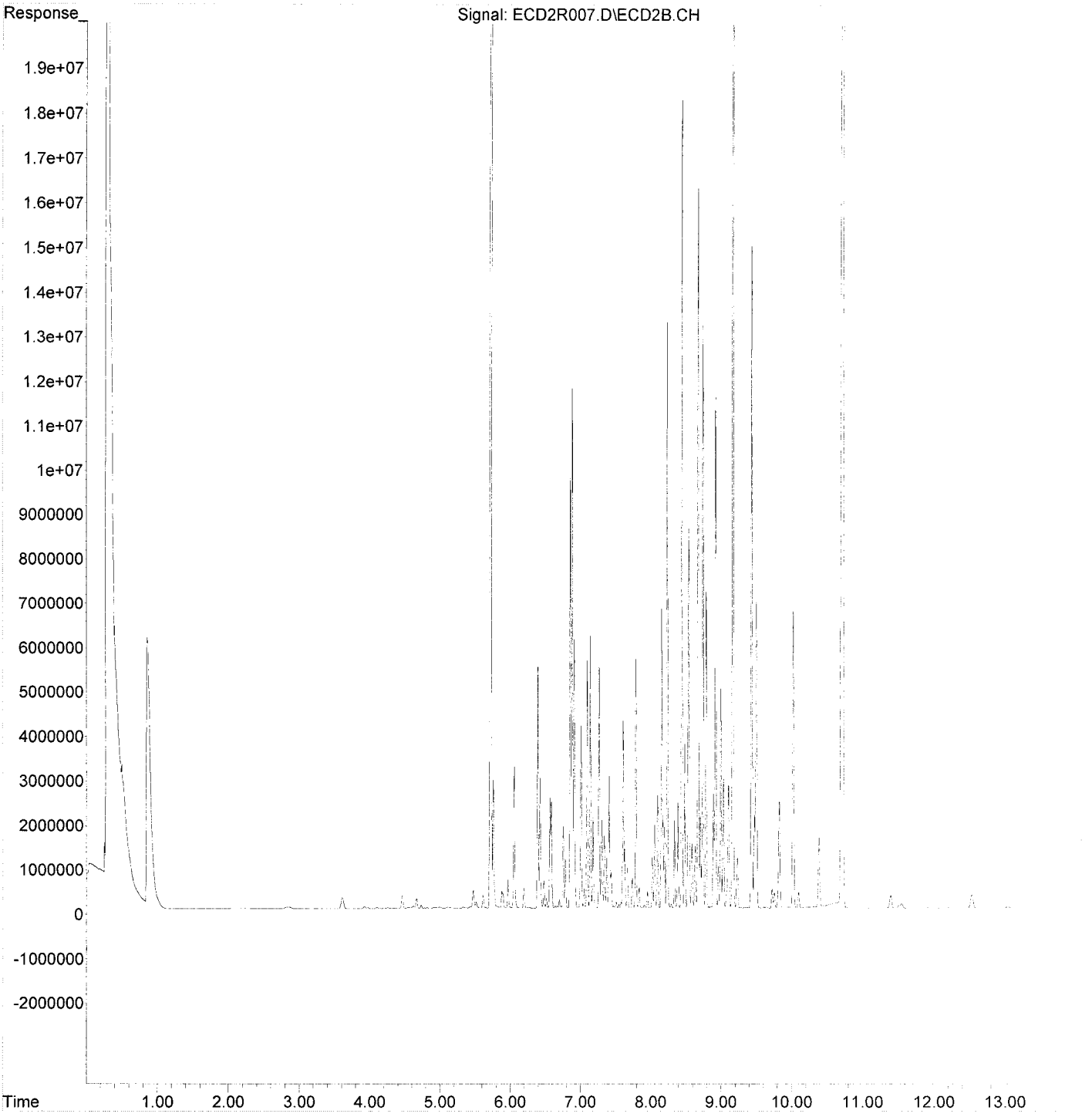
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.443	18169711	1200.627	ng/ml
49)	Aroclor 1262 (2)	8.743	13226564	625.243	ng/ml
50)	Aroclor 1262 (3)	8.922	11504167	658.575	ng/ml
51)	Aroclor 1262 (4)	9.167	30540254	852.857	ng/ml
52)	Aroclor 1262 (5)	9.435	15126976	688.691	ng/ml
53)	Aroclor 1262 (6)	10.021	6787056	699.658	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.963	940512	100.769	ng/ml
56)	Aroclor 1268 (2)	9.435	15126976	385.536	ng/ml
57)	Aroclor 1268 (3)	9.500	6916638	219.387	ng/ml
58)	Aroclor 1268 (4)	9.723	429197	15.846	ng/ml
59)	Aroclor 1268 (5)	10.021	6787056	640.519	ng/ml
60)	Aroclor 1268 (6)	10.385	1563842	21.282	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\9J31014\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 9:33
Operator : MJB / KAK
Sample : 9101705-BSD1
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:42:42 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\9J31014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:26
Operator : MJB / KAK
Sample : A9J0959-01
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:43:38 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

10/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.722	88502289	337.368 ng/ml
62) S	DCBP (S)	10.709	62370396	424.894 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.395	11421	1.286 ng/ml
3)	Aroclor 1016 (2)	6.883	11658	0.712 ng/ml
4)	Aroclor 1016 (3)	7.007	10819	1.469 ng/ml
5)	Aroclor 1016 (4)	7.095	12013	1.611 ng/ml
6)	Aroclor 1016 (5)	7.138	11417	1.384 ng/ml
7)	Aroclor 1016 (6)	7.272	13114	1.593 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.900	13685	6.383 ng/ml
10)	Aroclor 1221 (2)	5.960	8144	3.725 ng/ml
11)	Aroclor 1221 (3)	6.040	111288	15.730 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.040	111288	19.440 ng/ml
14)	Aroclor 1232 (2)	6.395	11421	3.286 ng/ml
15)	Aroclor 1232 (3)	6.883	11658	1.801 ng/ml
16)	Aroclor 1232 (4)	7.095	12013	5.031 ng/ml
17)	Aroclor 1232 (5)	7.138	11417	4.178 ng/ml
18)	Aroclor 1232 (6)	7.272	13114	4.421 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.395	11421	1.743 ng/ml
21)	Aroclor 1242 (2)	6.883	11658	0.985 ng/ml
22)	Aroclor 1242 (3)	7.007	10819	2.048 ng/ml
23)	Aroclor 1242 (4)	7.095	12013	2.406 ng/ml
24)	Aroclor 1242 (5)	7.138	11417	1.964 ng/ml
25)	Aroclor 1242 (6)	7.272	13114	2.117 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.858	11635	1.559 ng/ml
28)	Aroclor 1248 (2)	7.095	12013	1.287 ng/ml
29)	Aroclor 1248 (3)	7.138	11417	1.302 ng/ml
30)	Aroclor 1248 (4)	7.272	13114	1.252 ng/ml
31)	Aroclor 1248 (5)	7.632	19002	1.469 ng/ml
32)	Aroclor 1248 (6)	7.785	33687	2.857 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.632	19002	1.470 ng/ml
35)	Aroclor 1254 (2)	7.785	33687	1.664 ng/ml
36)	Aroclor 1254 (3)	8.086	17288	0.807 ng/ml
37)	Aroclor 1254 (4)	8.376f	24555	1.487 ng/ml
38)	Aroclor 1254 (5)	8.673	8675	0.553 ng/ml
39)	Aroclor 1254 (6)	8.920	5356	1.095 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.235	12062	0.764 ng/ml
42)	Aroclor 1260 (2)	8.431	19192	0.981 ng/ml
43)	Aroclor 1260 (3)	8.673	8675	0.431 ng/ml
44)	Aroclor 1260 (4)	9.165	6907	0.223 ng/ml
45)	Aroclor 1260 (5)	9.433	7163	0.400 ng/ml
46)	Aroclor 1260 (6)	10.002	8250	1.196 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:26
Operator : MJB / KAK
Sample : A9J0959-01
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:43:38 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

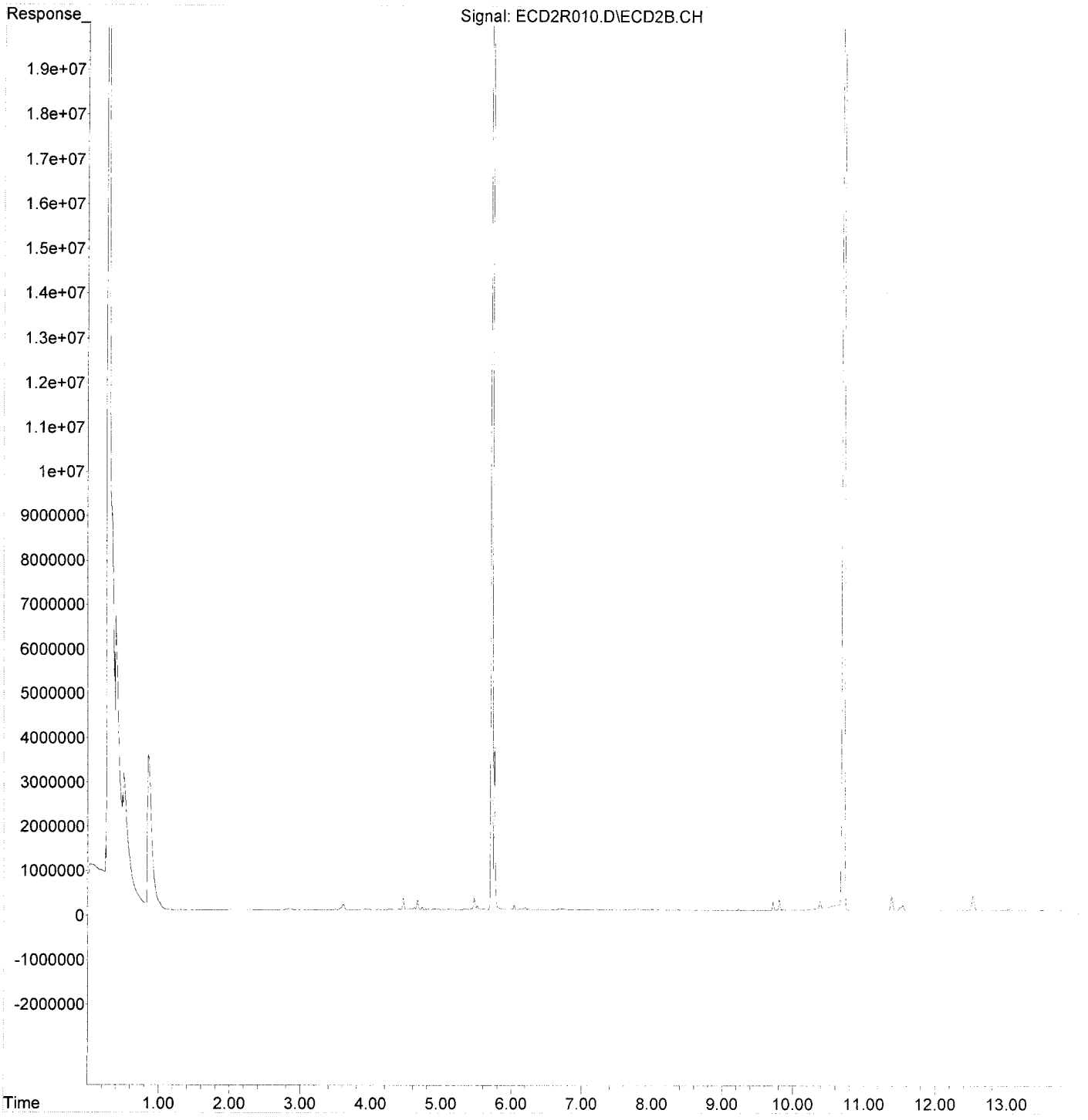
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.431	19192	1.268 ng/ml
49)	Aroclor 1262 (2)	8.742	4580	0.217 ng/ml
50)	Aroclor 1262 (3)	8.920	5356	0.307 ng/ml
51)	Aroclor 1262 (4)	9.165	6907	0.193 ng/ml
52)	Aroclor 1262 (5)	9.433	7163	0.326 ng/ml
53)	Aroclor 1262 (6)	10.002	8250	0.851 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.964	3203	0.343 ng/ml
56)	Aroclor 1268 (2)	9.433	7163	0.183 ng/ml
57)	Aroclor 1268 (3)	9.502	6149	0.195 ng/ml
58)	Aroclor 1268 (4)	9.723	199032	7.348 ng/ml
59)	Aroclor 1268 (5)	10.002	8250	0.779 ng/ml
60)	Aroclor 1268 (6)	10.384	214372	2.917 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\9J31014\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:26
Operator : MJB / KAK
Sample : A9J0959-01
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 10:43:38 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\9J31014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:43
Operator : MJB / KAK
Sample : 9J31014-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:06:10 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

10/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.720	68526097	261.219 ng/ml
62)	S DCBP (S)	10.711	38063250	259.303 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.392	4302758	484.376 ng/ml
3)	Aroclor 1016 (2)	6.881	7813243	477.487 ng/ml
4)	Aroclor 1016 (3)	7.008	3623857	491.982 ng/ml
5)	Aroclor 1016 (4)	7.095	3544087	475.250 ng/ml
6)	Aroclor 1016 (5)	7.140	3866012	468.547 ng/ml
7)	Aroclor 1016 (6)	7.265	3980812	483.631 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.895	277383	129.385 ng/ml
10)	Aroclor 1221 (2)	5.968	544266	248.978 ng/ml
11)	Aroclor 1221 (3)	6.055	2599714	367.462 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.055	2599714	454.125 ng/ml
14)	Aroclor 1232 (2)	6.392	4302758	1237.761 ng/ml
15)	Aroclor 1232 (3)	6.881	7813243	1206.818 ng/ml
16)	Aroclor 1232 (4)	7.095	3544087	1484.372 ng/ml
17)	Aroclor 1232 (5)	7.140	3866012	1414.904 ng/ml
18)	Aroclor 1232 (6)	7.265	3980812	1342.139 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.392	4302758	656.763 ng/ml
21)	Aroclor 1242 (2)	6.881	7813243	660.363 ng/ml
22)	Aroclor 1242 (3)	7.008	3623857	686.018 ng/ml
23)	Aroclor 1242 (4)	7.095	3544087	709.849 ng/ml
24)	Aroclor 1242 (5)	7.140	3866012	664.941 ng/ml
25)	Aroclor 1242 (6)	7.265	3980812	642.576 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.855	6668120	893.566 ng/ml
28)	Aroclor 1248 (2)	7.095	3544087	379.609 ng/ml
29)	Aroclor 1248 (3)	7.140	3866012	440.843 ng/ml
30)	Aroclor 1248 (4)	7.265	3980812	380.191 ng/ml
31)	Aroclor 1248 (5)	7.630	883493	68.313 ng/ml
32)	Aroclor 1248 (6)	7.788	3437759	291.556 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.608	2751030	212.845 ng/ml
35)	Aroclor 1254 (2)	7.788	3437759	169.786 ng/ml
36)	Aroclor 1254 (3)	8.099	1975446	92.191 ng/ml
37)	Aroclor 1254 (4)	8.339	1320808	79.969 ng/ml
38)	Aroclor 1254 (5)	8.675	10283658	655.296 ng/ml
39)	Aroclor 1254 (6)	8.893	1409832	288.301 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.236	8003888	507.125 ng/ml
42)	Aroclor 1260 (2)	8.442	9905030	506.037 ng/ml
43)	Aroclor 1260 (3)	8.675	10283658	510.807 ng/ml
44)	Aroclor 1260 (4)	9.166	16088686	519.892 ng/ml
45)	Aroclor 1260 (5)	9.434	9275903	518.288 ng/ml
46)	Aroclor 1260 (6)	10.021	3644520	528.303 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

480.21

515.08

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:43
Operator : MJB / KAK
Sample : 9J31014-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:06:10 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

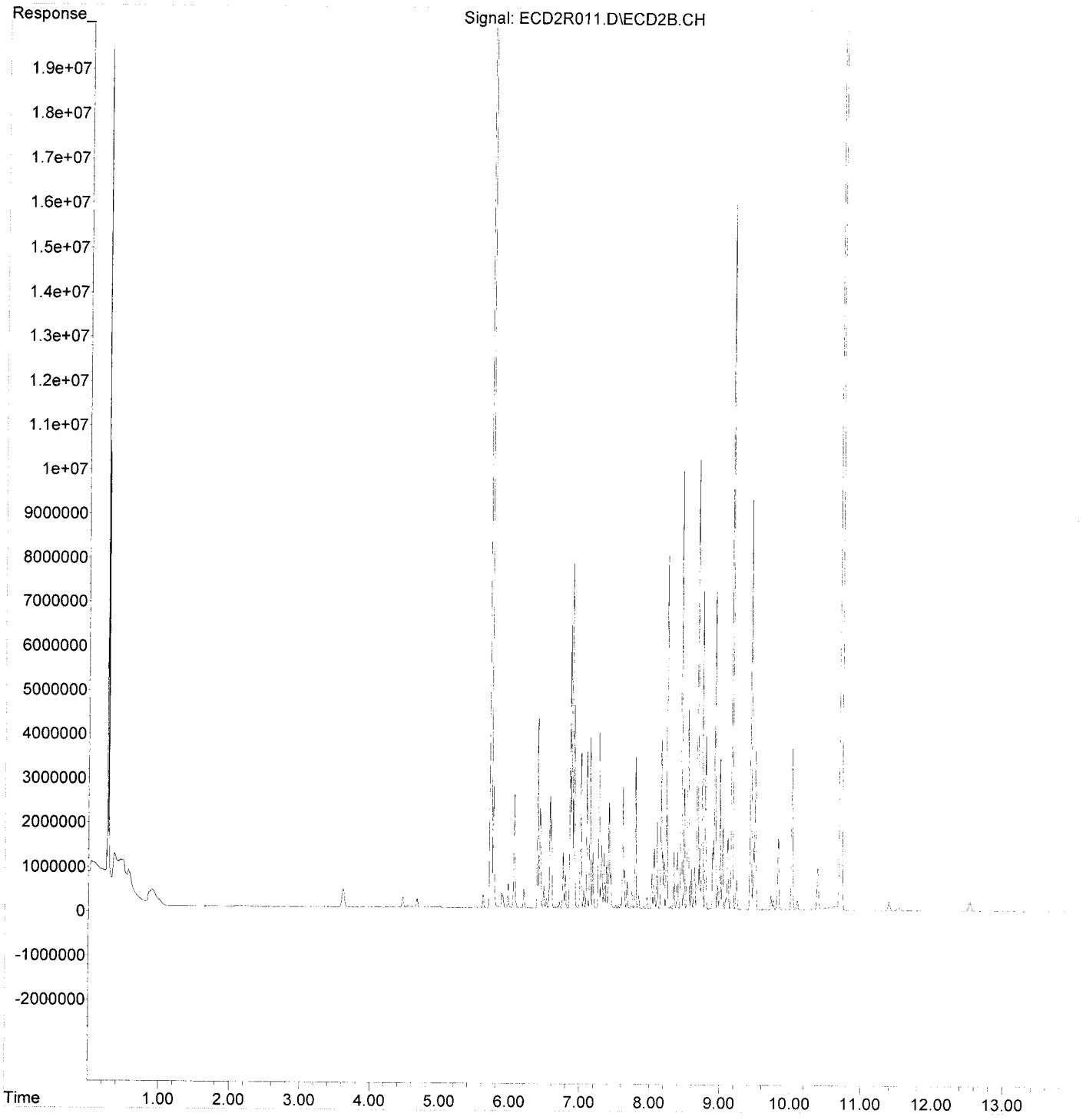
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.442	9905030	654.509 ng/ml
49)	Aroclor 1262 (2)	8.743	7426102	351.045 ng/ml
50)	Aroclor 1262 (3)	8.922	7207429	412.601 ng/ml
51)	Aroclor 1262 (4)	9.166	16088686	449.287 ng/ml
52)	Aroclor 1262 (5)	9.434	9275903	422.307 ng/ml
53)	Aroclor 1262 (6)	10.021	3644520	375.703 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.963	543622	58.245 ng/ml
56)	Aroclor 1268 (2)	9.434	9275903	236.412 ng/ml
57)	Aroclor 1268 (3)	9.500	3590082	113.873 ng/ml
58)	Aroclor 1268 (4)	9.724	321661	11.876 ng/ml
59)	Aroclor 1268 (5)	10.021	3644520	343.947 ng/ml
60)	Aroclor 1268 (6)	10.385	924443	12.581 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 : K:\DATA\9J31014\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 10:43
Operator : MJB / KAK
Sample : 9J31014-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:06:10 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\9J31014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:01
Operator : MJB / KAK
Sample : 9J31014-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:21:47 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

10/31/19
clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.719	26455182	100.846 ng/ml
62) S	DCBP (S)	10.708	15363829	104.665 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.385	10193	1.147 ng/ml
3)	Aroclor 1016 (2)	6.877	14857	0.908 ng/ml
4)	Aroclor 1016 (3)	7.009	14969	2.032 ng/ml
5)	Aroclor 1016 (4)	7.098	15376	2.062 ng/ml
6)	Aroclor 1016 (5)	7.148	15691	1.902 ng/ml
7)	Aroclor 1016 (6)	7.278	19085	2.319 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.892	12183	5.683 ng/ml
10)	Aroclor 1221 (2)	5.968	8396	3.841 ng/ml
11)	Aroclor 1221 (3)	6.039	51829	7.326 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.039	51829	9.054 ng/ml
14)	Aroclor 1232 (2)	6.385	10193	2.932 ng/ml
15)	Aroclor 1232 (3)	6.877	14857	2.295 ng/ml
16)	Aroclor 1232 (4)	7.098	15376	6.440 ng/ml
17)	Aroclor 1232 (5)	7.148	15691	5.743 ng/ml
18)	Aroclor 1232 (6)	7.278	19085	6.434 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.385	10193	1.556 ng/ml
21)	Aroclor 1242 (2)	6.877	14857	1.256 ng/ml
22)	Aroclor 1242 (3)	7.009	14969	2.834 ng/ml
23)	Aroclor 1242 (4)	7.098	15376	3.080 ng/ml
24)	Aroclor 1242 (5)	7.148	15691	2.699 ng/ml
25)	Aroclor 1242 (6)	7.278	19085	3.081 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.861	15734	2.108 ng/ml
28)	Aroclor 1248 (2)	7.098	15376	1.647 ng/ml
29)	Aroclor 1248 (3)	7.148	15691	1.789 ng/ml
30)	Aroclor 1248 (4)	7.278	19085	1.823 ng/ml
31)	Aroclor 1248 (5)	7.647	25611	1.980 ng/ml
32)	Aroclor 1248 (6)	7.778	37142	3.150 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.596	16682	1.291 ng/ml
35)	Aroclor 1254 (2)	7.778	37142	1.834 ng/ml
36)	Aroclor 1254 (3)	8.098	17305	0.808 ng/ml
37)	Aroclor 1254 (4)	8.324	12963	0.785 ng/ml
38)	Aroclor 1254 (5)	8.665	7905	0.504 ng/ml
39)	Aroclor 1254 (6)	8.908	5754	1.177 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.233	16029	1.016 ng/ml
42)	Aroclor 1260 (2)	8.442	11719	0.599 ng/ml
43)	Aroclor 1260 (3)	8.674	8174	0.406 ng/ml
44)	Aroclor 1260 (4)	9.163	3717	0.120 ng/ml
45)	Aroclor 1260 (5)	9.430	3353	0.187 ng/ml
46)	Aroclor 1260 (6)	10.012	4225	0.612 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:01
Operator : MJB / KAK
Sample : 9J31014-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:21:47 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

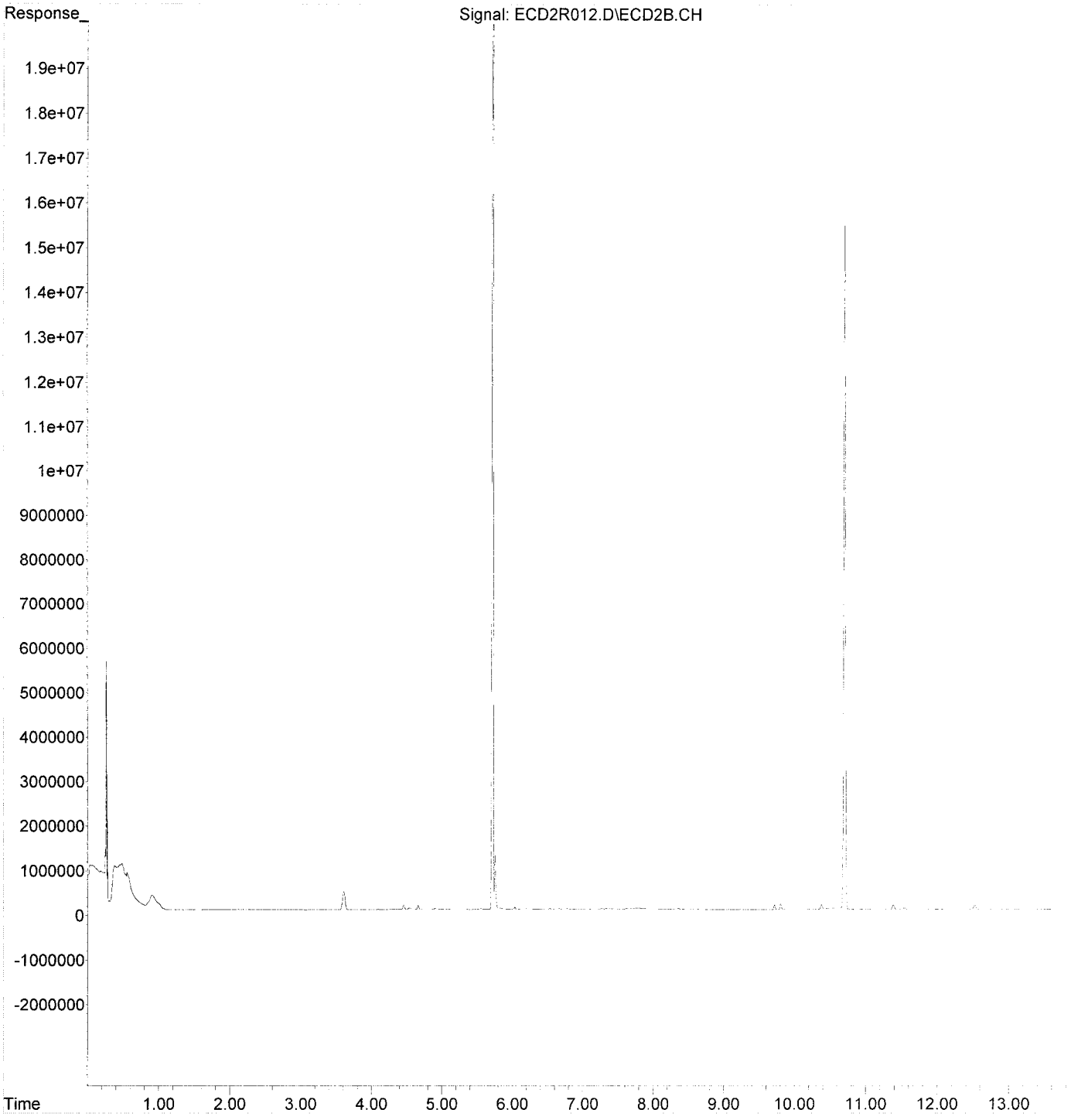
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.433	11300	0.747 ng/ml
49)	Aroclor 1262 (2)	8.736	7086	0.335 ng/ml
50)	Aroclor 1262 (3)	8.918	6123	0.351 ng/ml
51)	Aroclor 1262 (4)	9.163	3717	0.104 ng/ml
52)	Aroclor 1262 (5)	9.430	3353	0.153 ng/ml
53)	Aroclor 1262 (6)	10.012	4225	0.435 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.959	5829	0.625 ng/ml
56)	Aroclor 1268 (2)	9.430	3353	0.085 ng/ml
57)	Aroclor 1268 (3)	9.497	3911	0.124 ng/ml
58)	Aroclor 1268 (4)	9.722	105853	3.908 ng/ml
59)	Aroclor 1268 (5)	10.012	4225	0.399 ng/ml
60)	Aroclor 1268 (6)	10.383	107167	1.458 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\9J31014\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:01
Operator : MJB / KAK
Sample : 9J31014-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 11:21:47 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\9J31014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:18
Operator : MJB / KAK
Sample : 9101736-BLK1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:01 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

11/1/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.719	54539259	207.902 ng/ml
62)	S DCBP (S)	10.708	35081119	238.988 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.393	5622	0.633 ng/ml
3)	Aroclor 1016 (2)	6.879	8404	0.514 ng/ml
4)	Aroclor 1016 (3)	7.006	8374	1.137 ng/ml
5)	Aroclor 1016 (4)	7.094	9633	1.292 ng/ml
6)	Aroclor 1016 (5)	7.154	8749	1.060 ng/ml
7)	Aroclor 1016 (6)	7.267	10617	1.290 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.967f	5372	2.506 ng/ml
10)	Aroclor 1221 (2)	5.967	5372	2.457 ng/ml
11)	Aroclor 1221 (3)	6.038	75103	10.616 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.038	75103	13.119 ng/ml
14)	Aroclor 1232 (2)	6.393	5622	1.617 ng/ml
15)	Aroclor 1232 (3)	6.879	8404	1.298 ng/ml
16)	Aroclor 1232 (4)	7.094	9633	4.035 ng/ml
17)	Aroclor 1232 (5)	7.154	8749	3.202 ng/ml
18)	Aroclor 1232 (6)	7.267	10617	3.580 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.393	5622	0.858 ng/ml
21)	Aroclor 1242 (2)	6.879	8404	0.710 ng/ml
22)	Aroclor 1242 (3)	7.006	8374	1.585 ng/ml
23)	Aroclor 1242 (4)	7.094	9633	1.929 ng/ml
24)	Aroclor 1242 (5)	7.154	8749	1.505 ng/ml
25)	Aroclor 1242 (6)	7.267	10617	1.714 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.857	7960	1.067 ng/ml
28)	Aroclor 1248 (2)	7.094	9633	1.032 ng/ml
29)	Aroclor 1248 (3)	7.154	8749	0.998 ng/ml
30)	Aroclor 1248 (4)	7.267	10617	1.014 ng/ml
31)	Aroclor 1248 (5)	7.645	16365	1.265 ng/ml
32)	Aroclor 1248 (6)	7.789	28770	2.440 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.585	9649	0.747 ng/ml
35)	Aroclor 1254 (2)	7.789	28770	1.421 ng/ml
36)	Aroclor 1254 (3)	8.098	12243	0.571 ng/ml
37)	Aroclor 1254 (4)	8.375f	21338	1.292 ng/ml
38)	Aroclor 1254 (5)	8.672	5534	0.353 ng/ml
39)	Aroclor 1254 (6)	8.908	2506	0.512 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.235	9907	0.628 ng/ml
42)	Aroclor 1260 (2)	8.440	7970	0.407 ng/ml
43)	Aroclor 1260 (3)	8.672	5534	0.275 ng/ml
44)	Aroclor 1260 (4)	9.165	2146	0.069 ng/ml
45)	Aroclor 1260 (5)	9.432	4049	0.226 ng/ml
46)	Aroclor 1260 (6)	10.013	2034	0.295 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:18
Operator : MJB / KAK
Sample : 9101736-BLK1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:01 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

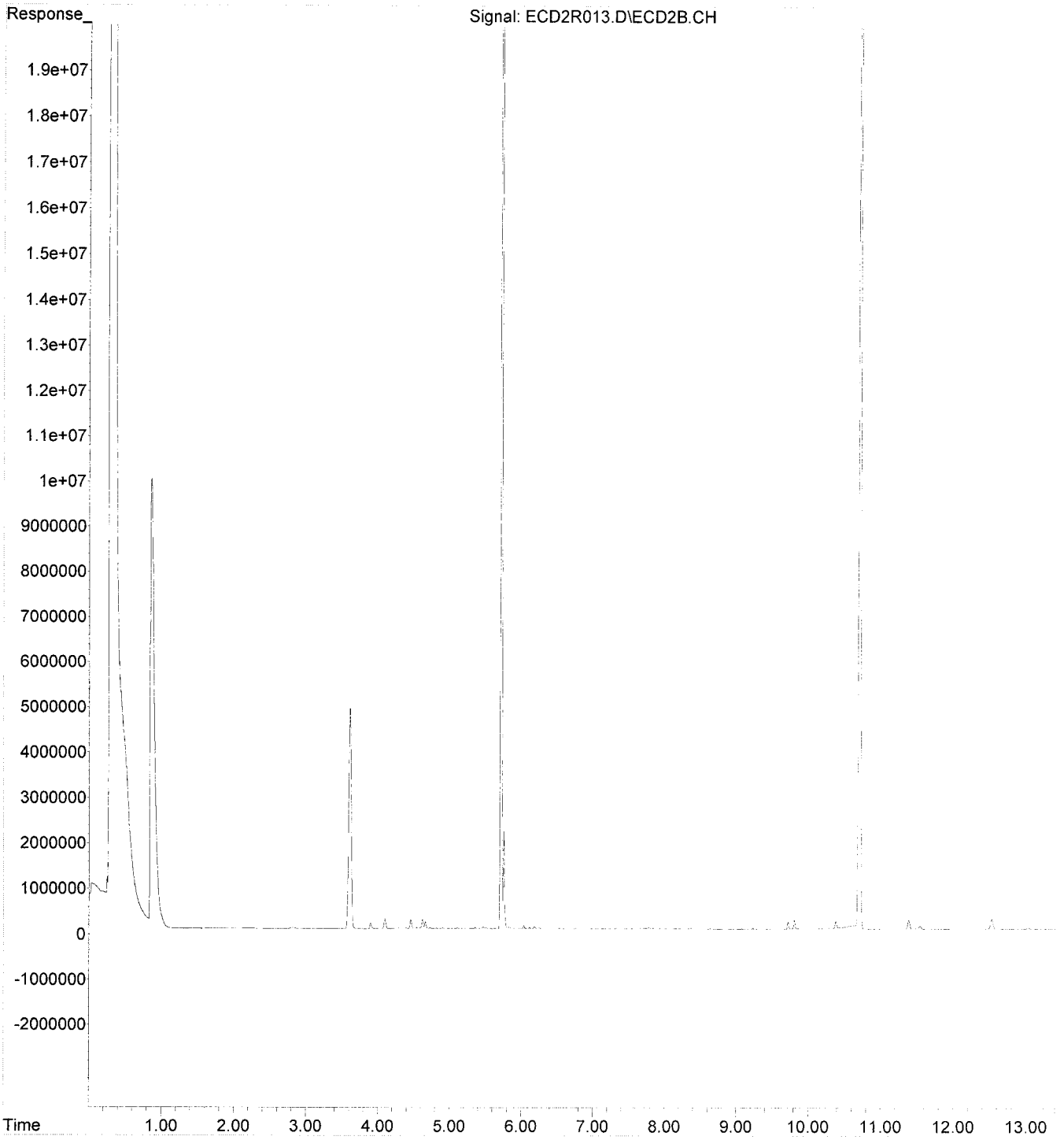
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.440	7970	0.527 ng/ml
49)	Aroclor 1262 (2)	8.740	2691	0.127 ng/ml
50)	Aroclor 1262 (3)	8.920	2686	0.154 ng/ml
51)	Aroclor 1262 (4)	9.165	2146	0.060 ng/ml
52)	Aroclor 1262 (5)	9.432	4049	0.184 ng/ml
53)	Aroclor 1262 (6)	10.013	2034	0.210 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.961	2747	0.294 ng/ml
56)	Aroclor 1268 (2)	9.432	4049	0.103 ng/ml
57)	Aroclor 1268 (3)	9.499	3488	0.111 ng/ml
58)	Aroclor 1268 (4)	9.723	157561	5.817 ng/ml
59)	Aroclor 1268 (5)	10.013	2034	0.192 ng/ml
60)	Aroclor 1268 (6)	10.383	144578	1.968 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\9J31014\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:18
Operator : MJB / KAK
Sample : 9101736-BLK1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:01 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\9J31014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:36
Operator : MJB / KAK
Sample : 9101736-BS1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:18 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

11/1/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.720	53589506	204.281	ng/ml	
62)	S DCBP (S)	10.709	35456208	241.543	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.392	7129272	802.566	ng/ml	843.20
3)	Aroclor 1016 (2)	6.882	14703394	898.561	ng/ml	
4)	Aroclor 1016 (3)	7.009	5612035	761.901	ng/ml	
5)	Aroclor 1016 (4)	7.095	6610548	886.452	ng/ml	
6)	Aroclor 1016 (5)	7.140	7363388	892.417	ng/ml	
7)	Aroclor 1016 (6)	7.265	6727104	817.280	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.895	434585	202.712	ng/ml	
10)	Aroclor 1221 (2)	5.968	863179	394.867	ng/ml	
11)	Aroclor 1221 (3)	6.055	4170966	589.553	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	6.055	4170966	728.595	ng/ml	
14)	Aroclor 1232 (2)	6.392	7129272	2050.855	ng/ml	
15)	Aroclor 1232 (3)	6.882	14703394	2271.057	ng/ml	
16)	Aroclor 1232 (4)	7.095	6610548	2768.699	ng/ml	
17)	Aroclor 1232 (5)	7.140	7363388	2694.892	ng/ml	
18)	Aroclor 1232 (6)	7.265	6727104	2268.057	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.392	7129272	1088.195	ng/ml	
21)	Aroclor 1242 (2)	6.882	14703394	1242.708	ng/ml	
22)	Aroclor 1242 (3)	7.009	5612035	1062.392	ng/ml	
23)	Aroclor 1242 (4)	7.095	6610548	1324.033	ng/ml	
24)	Aroclor 1242 (5)	7.140	7363388	1266.478	ng/ml	
25)	Aroclor 1242 (6)	7.265	6727104	1085.878	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.854	11903664	1595.158	ng/ml	
28)	Aroclor 1248 (2)	7.095	6610548	708.059	ng/ml	
29)	Aroclor 1248 (3)	7.140	7363388	839.651	ng/ml	
30)	Aroclor 1248 (4)	7.265	6727104	642.479	ng/ml	
31)	Aroclor 1248 (5)	7.630	1567145	121.174	ng/ml	
32)	Aroclor 1248 (6)	7.789	6557463	556.137	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.608	5274467	408.081	ng/ml	
35)	Aroclor 1254 (2)	7.789	6557463	323.864	ng/ml	
36)	Aroclor 1254 (3)	8.100	3321475	155.008	ng/ml	
37)	Aroclor 1254 (4)	8.339	2506291	151.744	ng/ml	
38)	Aroclor 1254 (5)	8.674	20610088	1313.317	ng/ml	
39)	Aroclor 1254 (6)	8.892	3053957	624.512	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.236	15771182	999.259	ng/ml	1074.97
42)	Aroclor 1260 (2)	8.442	20590867	1051.964	ng/ml	
43)	Aroclor 1260 (3)	8.674	20610088	1023.739	ng/ml	
44)	Aroclor 1260 (4)	9.167	36450848	1177.879	ng/ml	
45)	Aroclor 1260 (5)	9.434	19344969	1080.894	ng/ml	
46)	Aroclor 1260 (6)	10.019	7699262	1116.070	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:36
Operator : MJB / KAK
Sample : 9101736-BS1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:18 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

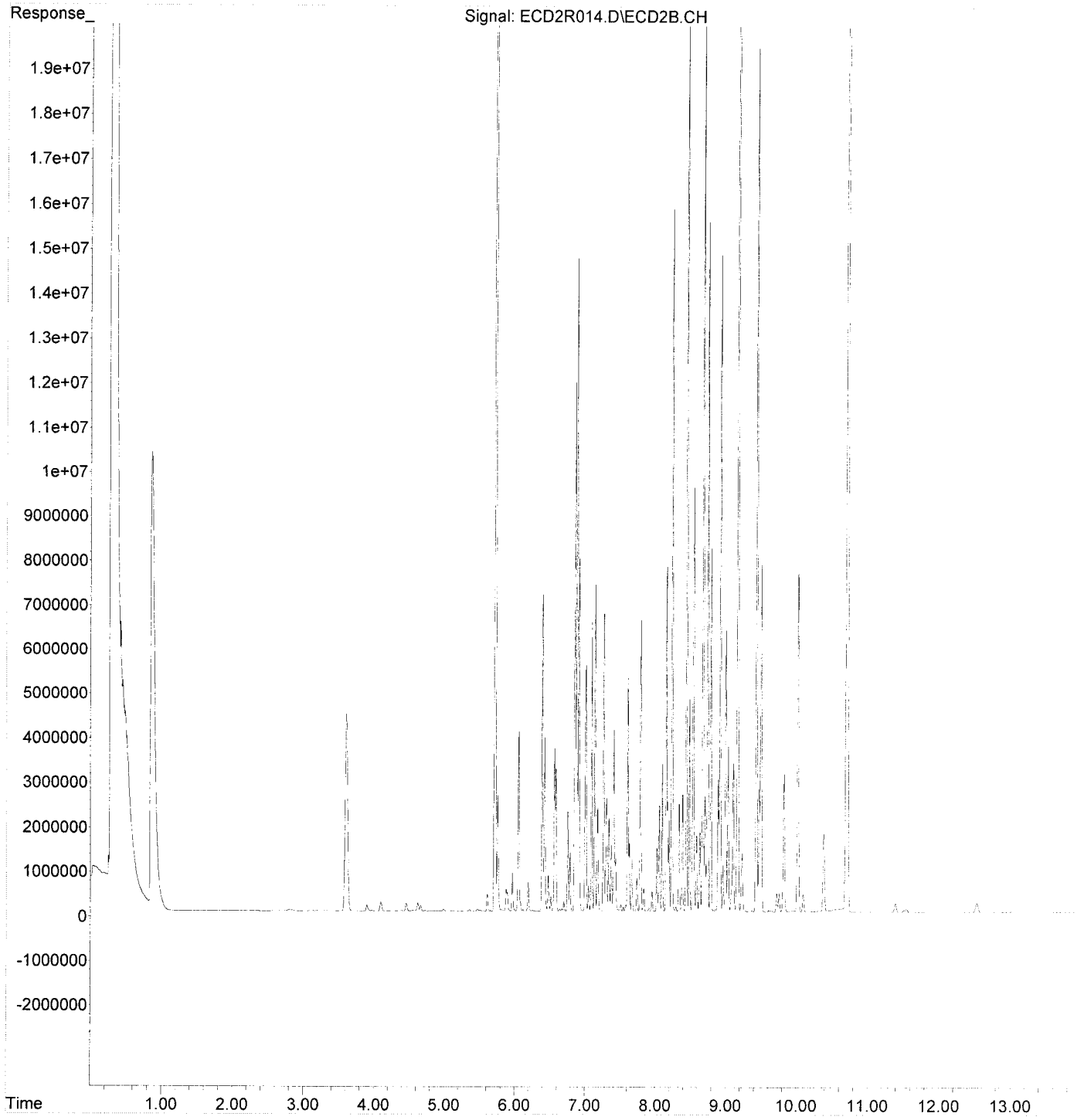
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.442	20590867	1360.614	ng/ml
49)	Aroclor 1262 (2)	8.743	15517481	733.539	ng/ml
50)	Aroclor 1262 (3)	8.921	14750162	844.397	ng/ml
51)	Aroclor 1262 (4)	9.167	36450848	1017.915	ng/ml
52)	Aroclor 1262 (5)	9.434	19344969	880.725	ng/ml
53)	Aroclor 1262 (6)	10.019	7699262	793.695	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.962	1033928	110.778	ng/ml
56)	Aroclor 1268 (2)	9.434	19344969	493.039	ng/ml
57)	Aroclor 1268 (3)	9.498	7806392	247.609	ng/ml
58)	Aroclor 1268 (4)	9.722	430081	15.879	ng/ml
59)	Aroclor 1268 (5)	10.019	7699262	726.607	ng/ml
60)	Aroclor 1268 (6)	10.384	1733144	23.586	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\9J31014\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 11:36
Operator : MJB / KAK
Sample : 9101736-BS1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Oct 31 13:33:18 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 (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R027.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:25
Operator : MJB / KAK
Sample : 9J31014-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:57:02 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

11/1/19

		Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds							
1)	S	TCMX (S)	5.719	70246925	267.779	ng/ml	
62)	S	DCBP (S)	10.709	40715872	277.374	ng/ml	
Target Compounds							
2)		Aroclor 1016 (1)	6.391	4439905	499.815	ng/ml	502.39
3)		Aroclor 1016 (2)	6.880	8716254	532.672	ng/ml	
4)		Aroclor 1016 (3)	7.008	3779153	513.065	ng/ml	
5)		Aroclor 1016 (4)	7.094	3533834	473.875	ng/ml	
6)		Aroclor 1016 (5)	7.139	4093602	496.130	ng/ml	
7)		Aroclor 1016 (6)	7.264	4105621	498.794	ng/ml	
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)		Aroclor 1221 (1)	5.894	286453	133.616	ng/ml	
10)		Aroclor 1221 (2)	5.967	569380	260.467	ng/ml	
11)		Aroclor 1221 (3)	6.055	2689064	380.091	ng/ml	
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)		Aroclor 1232 (1)	6.055	2689064	469.733	ng/ml	
14)		Aroclor 1232 (2)	6.391	4439905	1277.214	ng/ml	
15)		Aroclor 1232 (3)	6.880	8716254	1346.295	ng/ml	
16)		Aroclor 1232 (4)	7.094	3533834	1480.077	ng/ml	
17)		Aroclor 1232 (5)	7.139	4093602	1498.198	ng/ml	
18)		Aroclor 1232 (6)	7.264	4105621	1384.219	ng/ml	
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)		Aroclor 1242 (1)	6.391	4439905	677.697	ng/ml	
21)		Aroclor 1242 (2)	6.880	8716254	736.684	ng/ml	
22)		Aroclor 1242 (3)	7.008	3779153	715.417	ng/ml	
23)		Aroclor 1242 (4)	7.094	3533834	707.795	ng/ml	
24)		Aroclor 1242 (5)	7.139	4093602	704.086	ng/ml	
25)		Aroclor 1242 (6)	7.264	4105621	662.722	ng/ml	
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)		Aroclor 1248 (1)	6.854	6851315	918.115	ng/ml	
28)		Aroclor 1248 (2)	7.094	3533834	378.511	ng/ml	
29)		Aroclor 1248 (3)	7.139	4093602	466.796	ng/ml	
30)		Aroclor 1248 (4)	7.264	4105621	392.111	ng/ml	
31)		Aroclor 1248 (5)	7.629	886936	68.579	ng/ml	
32)		Aroclor 1248 (6)	7.788	3421386	290.167	ng/ml	
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)		Aroclor 1254 (1)	7.607	2920360	225.946	ng/ml	
35)		Aroclor 1254 (2)	7.788	3421386	168.978	ng/ml	
36)		Aroclor 1254 (3)	8.099	1912981	89.276	ng/ml	
37)		Aroclor 1254 (4)	8.338	1321043	79.983	ng/ml	
38)		Aroclor 1254 (5)	8.674	10385248	661.769	ng/ml	
39)		Aroclor 1254 (6)	8.891	1484451	303.560	ng/ml	
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)		Aroclor 1260 (1)	8.235	8130824	515.168	ng/ml	527.09
42)		Aroclor 1260 (2)	8.441	10248679	523.594	ng/ml	
43)		Aroclor 1260 (3)	8.674	10385248	515.853	ng/ml	
44)		Aroclor 1260 (4)	9.165	16016384	517.556	ng/ml	
45)		Aroclor 1260 (5)	9.432	9834941	549.524	ng/ml	
46)		Aroclor 1260 (6)	10.019	3755934	544.453	ng/ml	
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R027.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:25
Operator : MJB / KAK
Sample : 9J31014-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:57:02 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

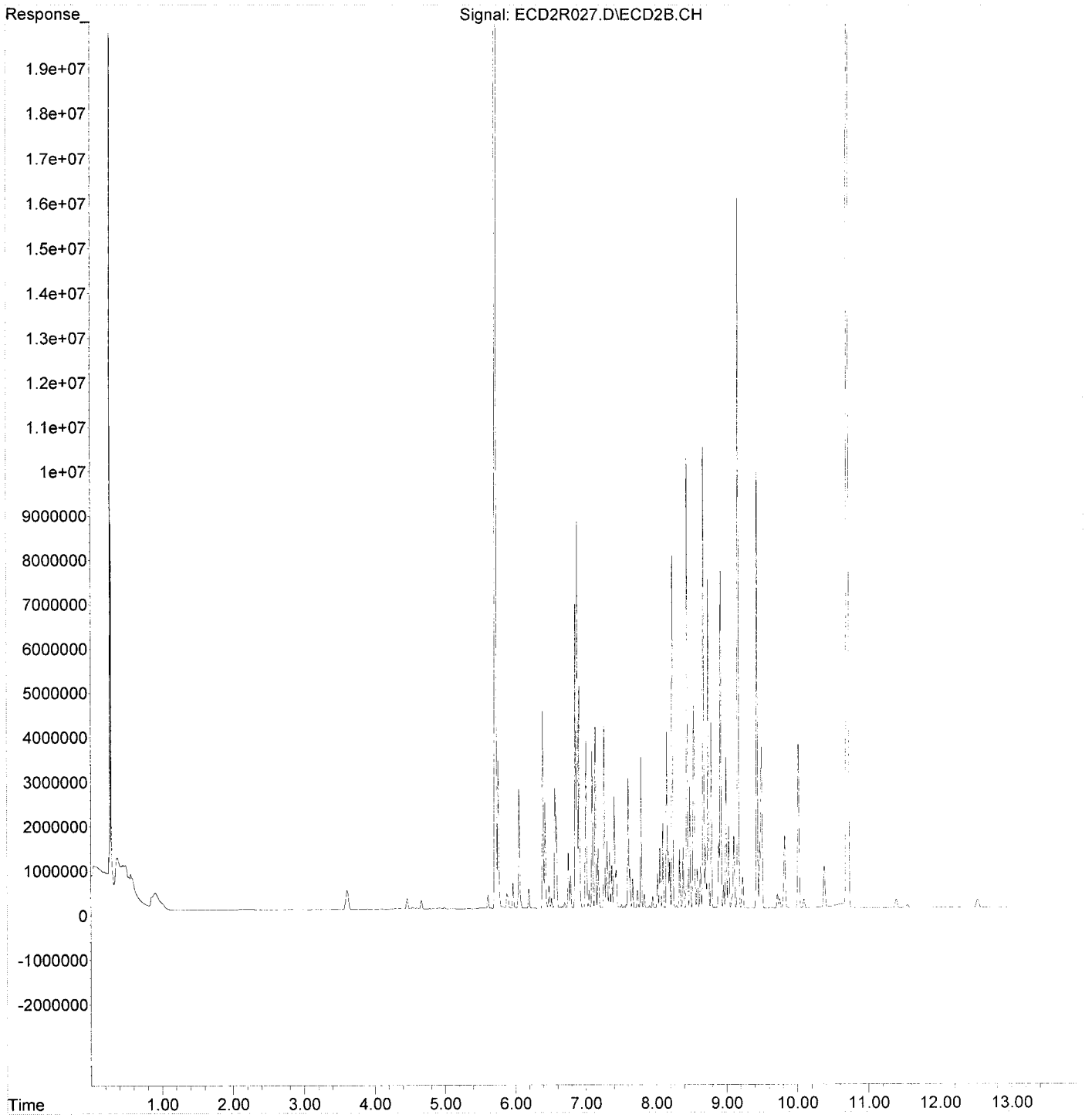
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.441	10248679	677.217 ng/ml
49)	Aroclor 1262 (2)	8.742	7420071	350.760 ng/ml
50)	Aroclor 1262 (3)	8.920	7616452	436.016 ng/ml
51)	Aroclor 1262 (4)	9.165	16016384	447.268 ng/ml
52)	Aroclor 1262 (5)	9.432	9834941	447.759 ng/ml
53)	Aroclor 1262 (6)	10.019	3755934	387.189 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.961	515737	55.257 ng/ml
56)	Aroclor 1268 (2)	9.432	9834941	250.660 ng/ml
57)	Aroclor 1268 (3)	9.498	3632205	115.209 ng/ml
58)	Aroclor 1268 (4)	9.722	317017	11.704 ng/ml
59)	Aroclor 1268 (5)	10.019	3755934	354.461 ng/ml
60)	Aroclor 1268 (6)	10.382	937073	12.753 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\9J31014\
Data File : ECD2R027.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:25
Operator : MJB / KAK
Sample : 9J31014-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:57:02 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\9J31014\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:43
Operator : MJB / KAK
Sample : 9J31014-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:58:06 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

11/1/19

clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.719	28029442	106.847 ng/ml
62) S	DCBP (S)	10.707	16859331	114.853 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.387	13767	1.550 ng/ml
3)	Aroclor 1016 (2)	6.876	18704	1.143 ng/ml
4)	Aroclor 1016 (3)	7.001	18225	2.474 ng/ml
5)	Aroclor 1016 (4)	7.091	18191	2.439 ng/ml
6)	Aroclor 1016 (5)	7.133	18165	2.202 ng/ml
7)	Aroclor 1016 (6)	7.264	20224	2.457 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.903	13495	6.295 ng/ml
10)	Aroclor 1221 (2)	5.962	9984	4.567 ng/ml
11)	Aroclor 1221 (3)	6.039	55110	7.790 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	6.039	55110	9.627 ng/ml
14)	Aroclor 1232 (2)	6.387	13767	3.960 ng/ml
15)	Aroclor 1232 (3)	6.876	18704	2.889 ng/ml
16)	Aroclor 1232 (4)	7.091	18191	7.619 ng/ml
17)	Aroclor 1232 (5)	7.133	18165	6.648 ng/ml
18)	Aroclor 1232 (6)	7.264	20224	6.819 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.387	13767	2.101 ng/ml
21)	Aroclor 1242 (2)	6.876	18704	1.581 ng/ml
22)	Aroclor 1242 (3)	7.001	18225	3.450 ng/ml
23)	Aroclor 1242 (4)	7.091	18191	3.644 ng/ml
24)	Aroclor 1242 (5)	7.133	18165	3.124 ng/ml
25)	Aroclor 1242 (6)	7.264	20224	3.265 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.861	19090	2.558 ng/ml
28)	Aroclor 1248 (2)	7.091	18191	1.948 ng/ml
29)	Aroclor 1248 (3)	7.133	18165	2.071 ng/ml
30)	Aroclor 1248 (4)	7.264	20224	1.932 ng/ml
31)	Aroclor 1248 (5)	7.629	32363	2.502 ng/ml
32)	Aroclor 1248 (6)	7.773	42967	3.644 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.589	17178	1.329 ng/ml
35)	Aroclor 1254 (2)	7.773	42967	2.122 ng/ml
36)	Aroclor 1254 (3)	8.098	16528	0.771 ng/ml
37)	Aroclor 1254 (4)	8.327	13937	0.844 ng/ml
38)	Aroclor 1254 (5)	8.671	6373	0.406 ng/ml
39)	Aroclor 1254 (6)	8.905	3415	0.698 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.225	15972	1.012 ng/ml
42)	Aroclor 1260 (2)	8.437	12913	0.660 ng/ml
43)	Aroclor 1260 (3)	8.671	6373	0.317 ng/ml
44)	Aroclor 1260 (4)	9.162	2687	0.087 ng/ml
45)	Aroclor 1260 (5)	9.433	3977	0.222 ng/ml
46)	Aroclor 1260 (6)	10.002	2564	0.372 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9J31014\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:43
Operator : MJB / KAK
Sample : 9J31014-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:58:06 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

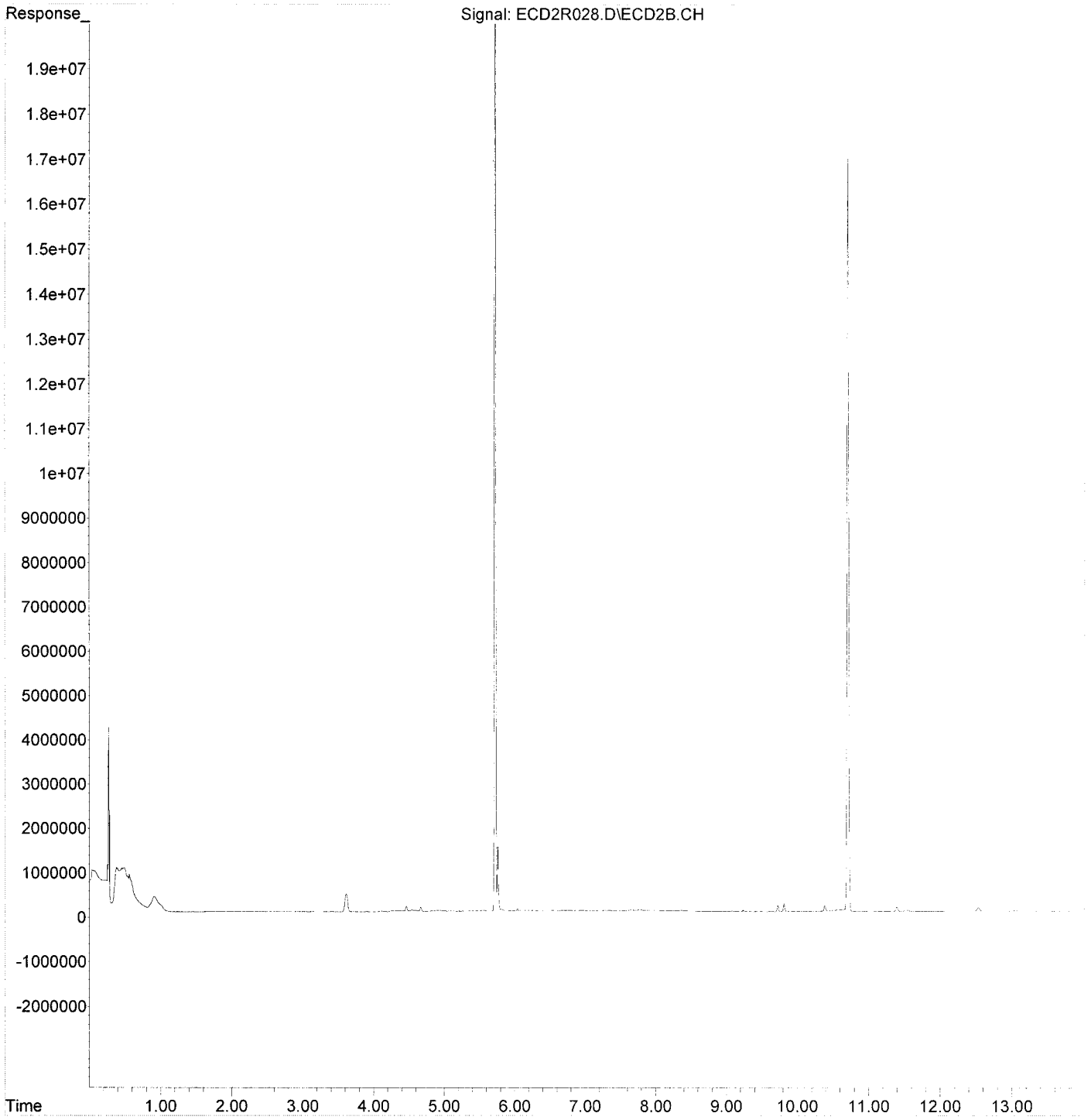
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.437	12913	0.853 ng/ml
49)	Aroclor 1262 (2)	8.736	6190	0.293 ng/ml
50)	Aroclor 1262 (3)	8.912	3550	0.203 ng/ml
51)	Aroclor 1262 (4)	9.162	2687	0.075 ng/ml
52)	Aroclor 1262 (5)	9.433	3977	0.181 ng/ml
53)	Aroclor 1262 (6)	10.002	2564	0.264 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.958	6735	0.722 ng/ml
56)	Aroclor 1268 (2)	9.433	3977	0.101 ng/ml
57)	Aroclor 1268 (3)	9.495	4543	0.144 ng/ml
58)	Aroclor 1268 (4)	9.723	134979	4.983 ng/ml
59)	Aroclor 1268 (5)	10.002	2564	0.242 ng/ml
60)	Aroclor 1268 (6)	10.383	127739	1.738 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\9J31014\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 Oct 2019 15:43
Operator : MJB / KAK
Sample : 9J31014-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Nov 01 08:58:06 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
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: MH 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	

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

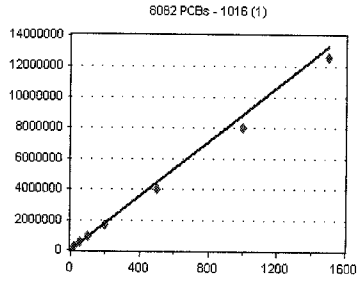
RECD2_QUANTPCB_191025.M Mon Oct 28 09:51:12 2019

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)

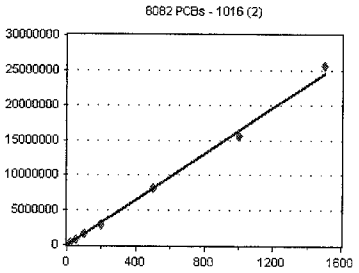


Curve Fit: **AVERAGE RF**

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)

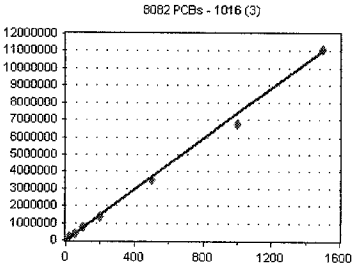


Curve Fit: **AVERAGE RF**

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)

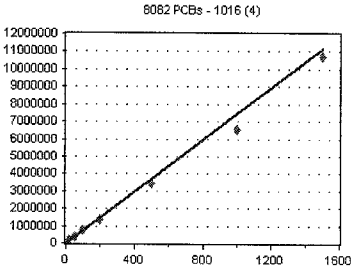


Curve Fit: **AVERAGE RF**

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

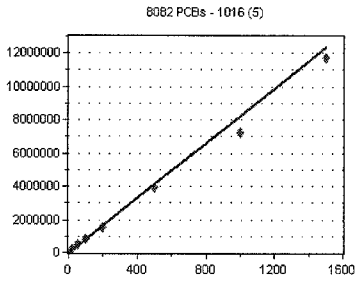
AVE RF **7457.311** RF RSD **11.17** AVE RT **7.09**

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)

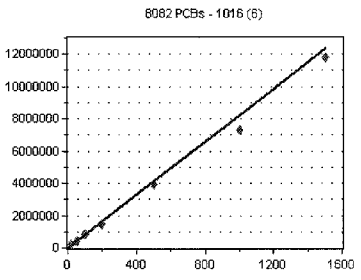


Curve Fit: **AVERAGE RF**

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)

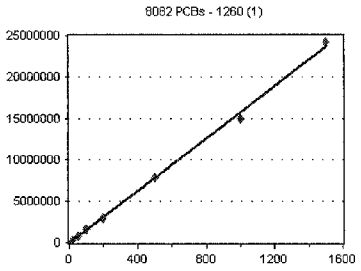


Curve Fit: **AVERAGE RF**

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)

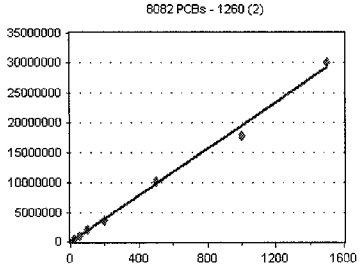


Curve Fit: **AVERAGE RF**

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**

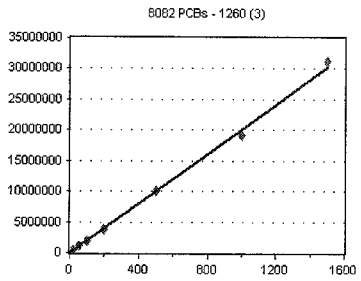
Element Calibration Review Sheet

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**

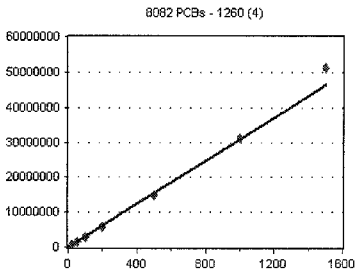


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	418334	20916.700	8.67
9J25014-CAL2	50	1053008	21060.160	8.67
9J25014-CAL3	100	1985447	19854.470	8.67
9J25014-CAL4	200	3824049	19120.240	8.67
9J25014-CAL5	500	006718E+07	20134.360	8.67
9J25014-CAL6	1000	.90367E+07	19036.700	8.67
9J25014-CAL7	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**

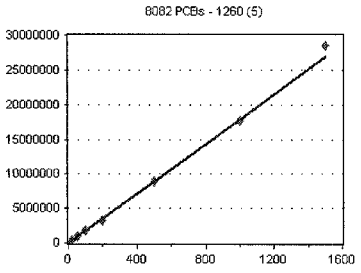


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	618662	30933.100	9.16
9J25014-CAL2	50	1549626	30992.520	9.16
9J25014-CAL3	100	3069980	30699.800	9.16
9J25014-CAL4	200	5726786	28633.930	9.16
9J25014-CAL5	500	499636E+07	29992.720	9.16
9J25014-CAL6	1000	122851E+07	31228.510	9.16
9J25014-CAL7	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**

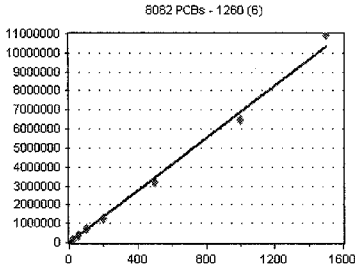


Standard	Concentration	Response	Response Factor	RT
9J25014-CAL1	20	361157	18057.850	9.43
9J25014-CAL2	50	930309	18606.180	9.43
9J25014-CAL3	100	1747257	17472.570	9.43
9J25014-CAL4	200	3291800	16459.000	9.43
9J25014-CAL5	500	8974797	17949.590	9.43
9J25014-CAL6	1000	.76817E+07	17681.700	9.43
9J25014-CAL7	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**

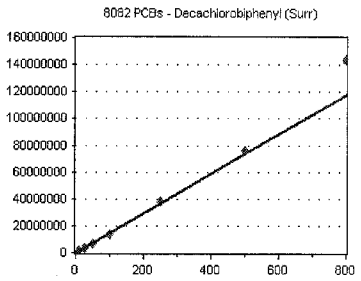
Element Calibration Review Sheet

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

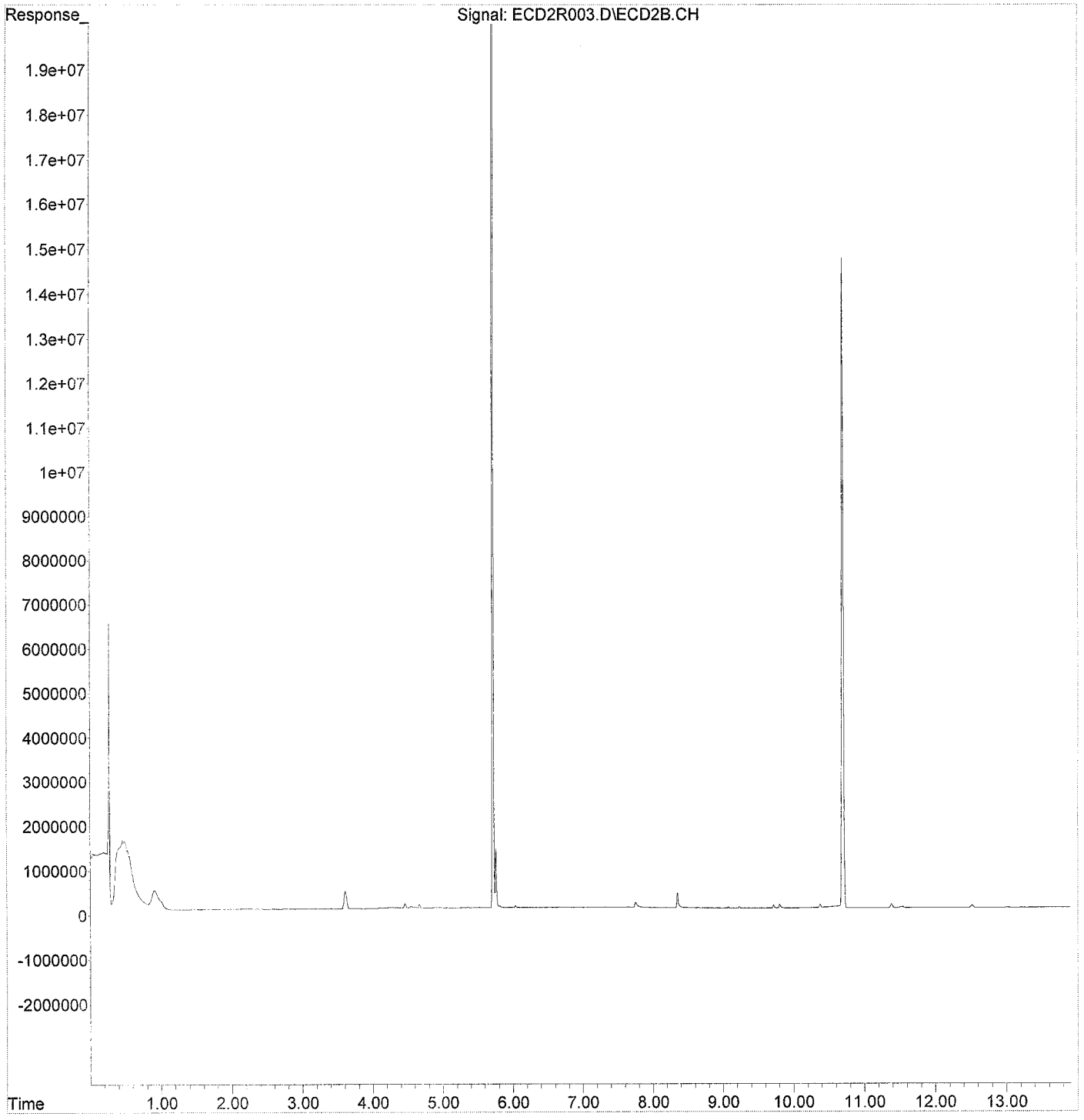
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.434	21295	1.407 ng/ml
49)	Aroclor 1262 (2)	8.737	8663	0.410 ng/ml
50)	Aroclor 1262 (3)	8.915	8112	0.464 ng/ml
51)	Aroclor 1262 (4)	9.156	3952	0.110 ng/ml
52)	Aroclor 1262 (5)	9.427	3726	0.170 ng/ml
53)	Aroclor 1262 (6)	10.013	4782	0.493 ng/ml
54)	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

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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

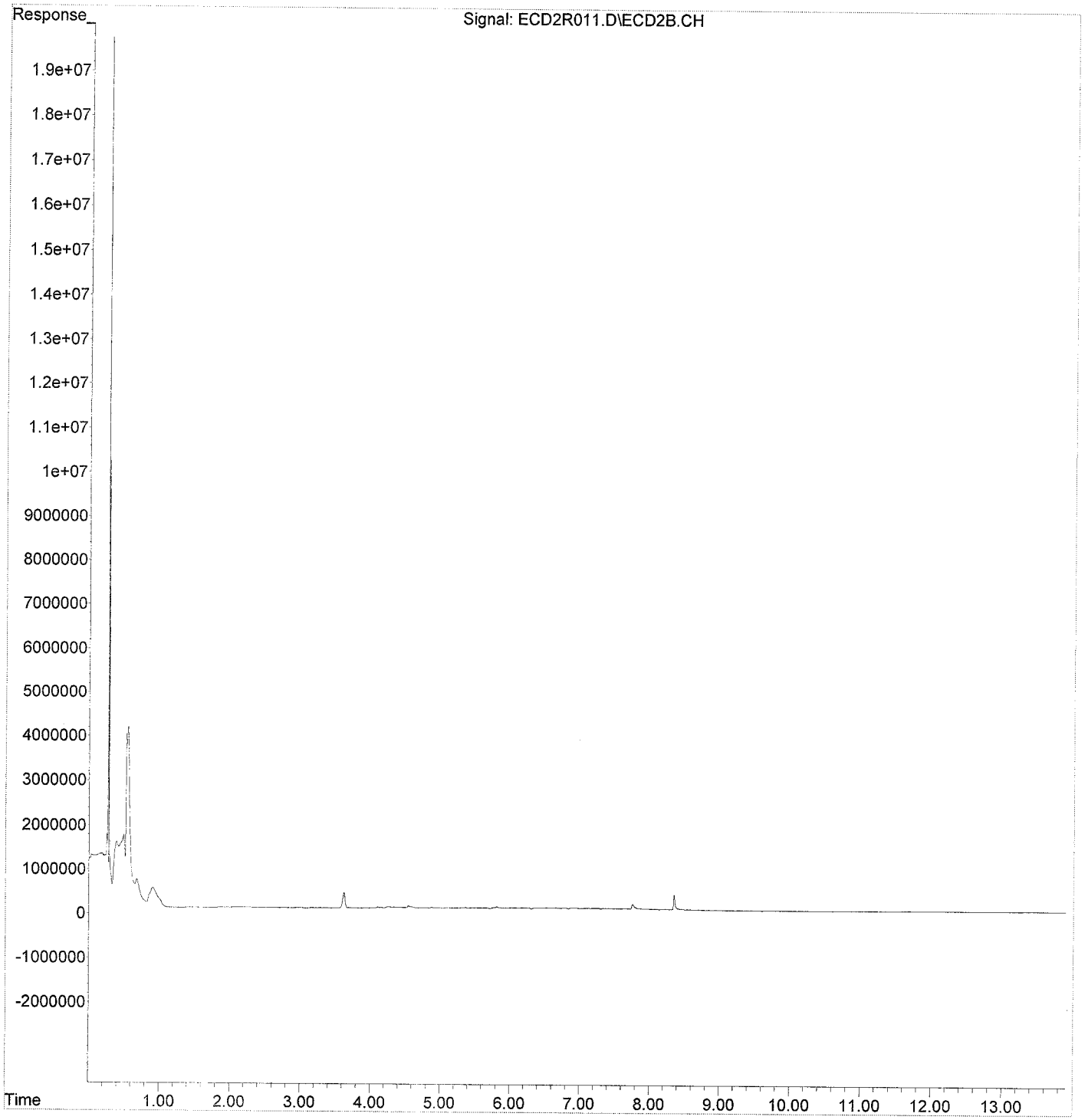
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.467	21567	1.425 ng/ml
49)	Aroclor 1262 (2)	8.734	11593	0.548 ng/ml
50)	Aroclor 1262 (3)	8.915	9304	0.533 ng/ml
51)	Aroclor 1262 (4)	9.161	6575	0.184 ng/ml
52)	Aroclor 1262 (5)	9.428	3767	0.172 ng/ml
53)	Aroclor 1262 (6)	10.008	2564	0.264 ng/ml
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

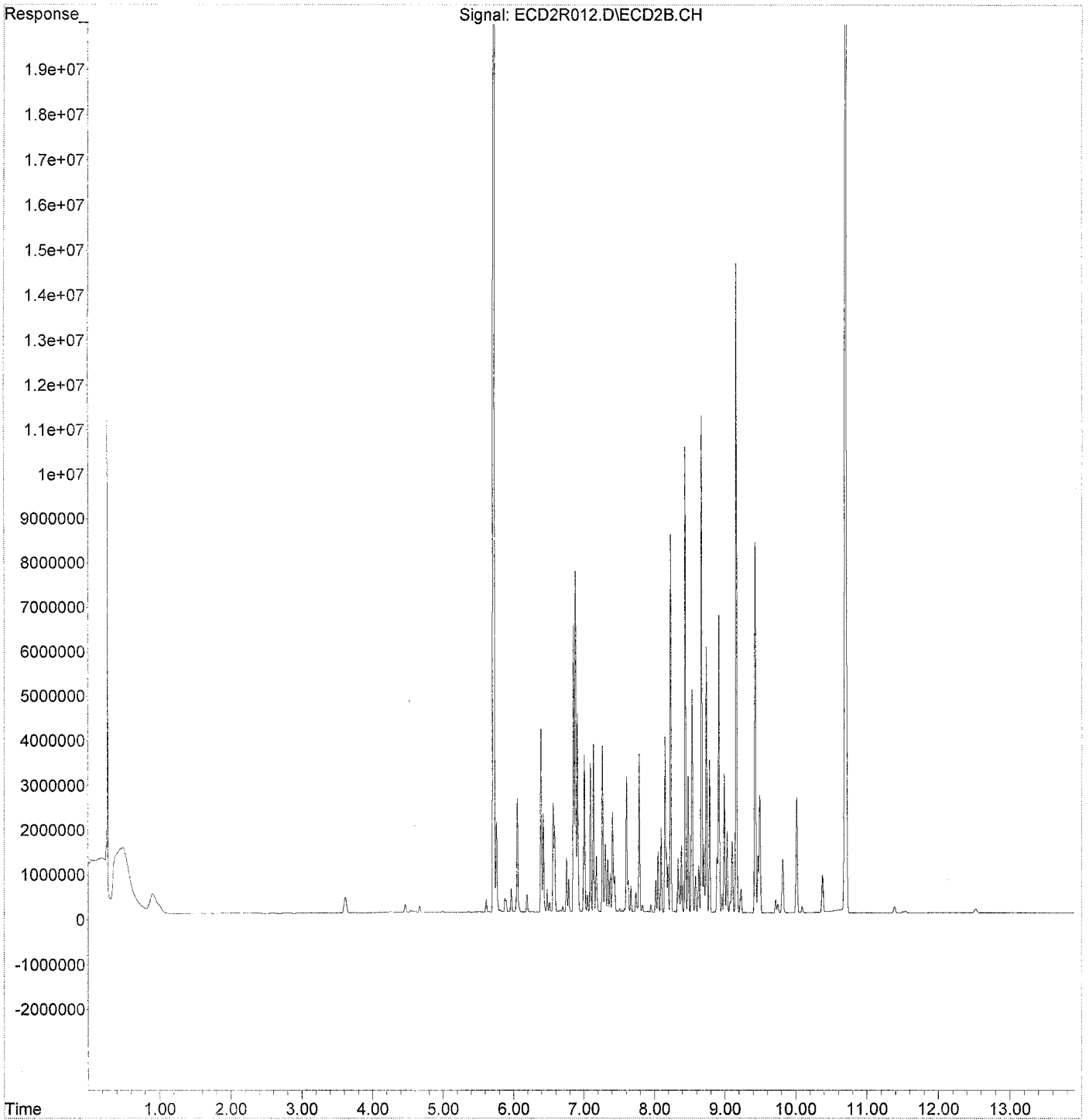
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.439	10443443	690.087 ng/ml
49)	Aroclor 1262 (2)	8.739	5949076	281.224 ng/ml
50)	Aroclor 1262 (3)	8.917	6667821	381.710 ng/ml
51)	Aroclor 1262 (4)	9.161	14517371	405.407 ng/ml
52)	Aroclor 1262 (5)	9.429	8301461	377.943 ng/ml
53)	Aroclor 1262 (6)	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
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
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

1067.588

516.477

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

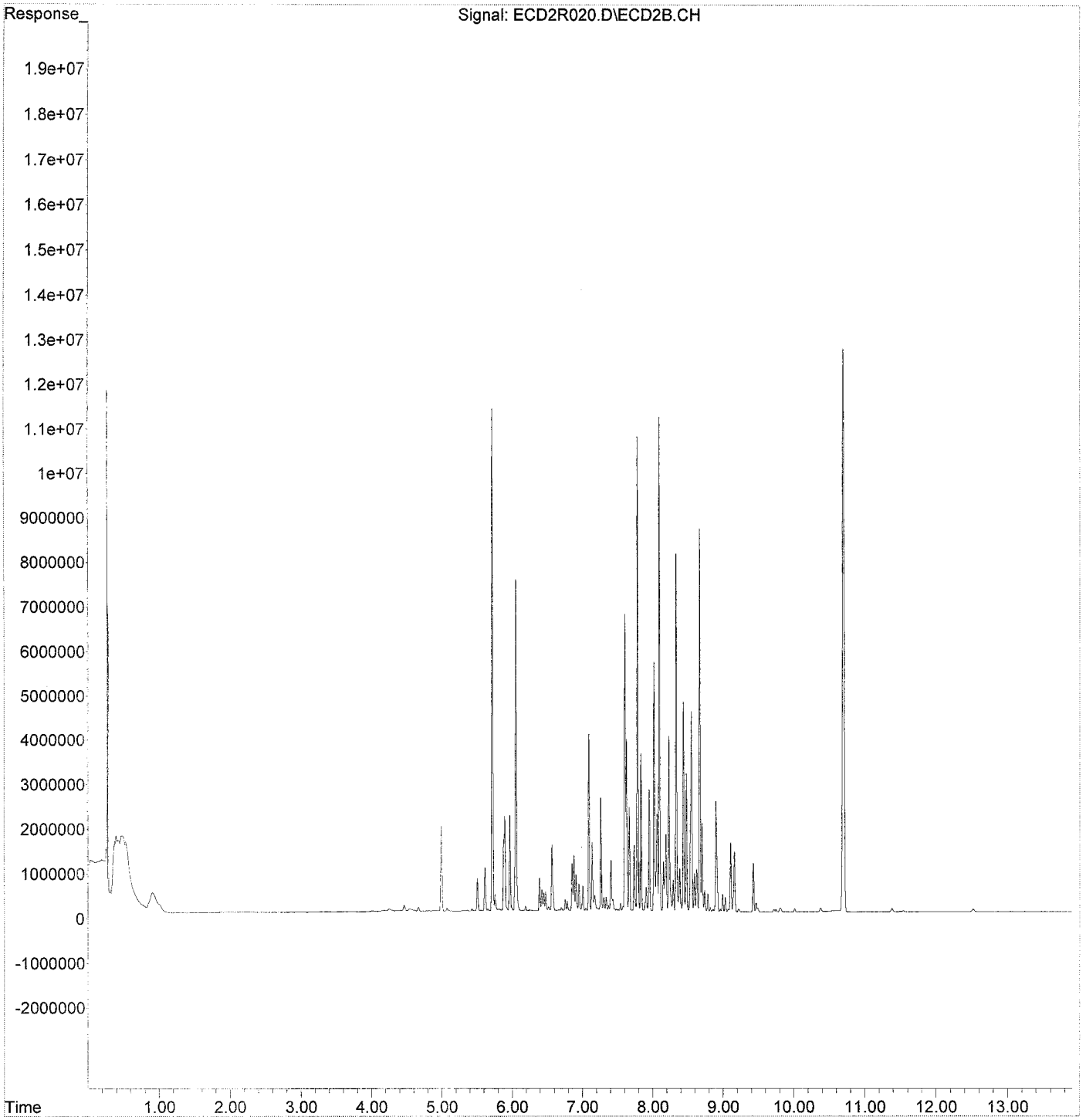
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.438	4714974	311.558 ng/ml
49)	Aroclor 1262 (2)	8.738	489237	23.127 ng/ml
50)	Aroclor 1262 (3)	8.900	2472718	141.555 ng/ml
51)	Aroclor 1262 (4)	9.160	1356478	37.881 ng/ml
52)	Aroclor 1262 (5)	9.427	1090849	49.663 ng/ml
53)	Aroclor 1262 (6)	10.012	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

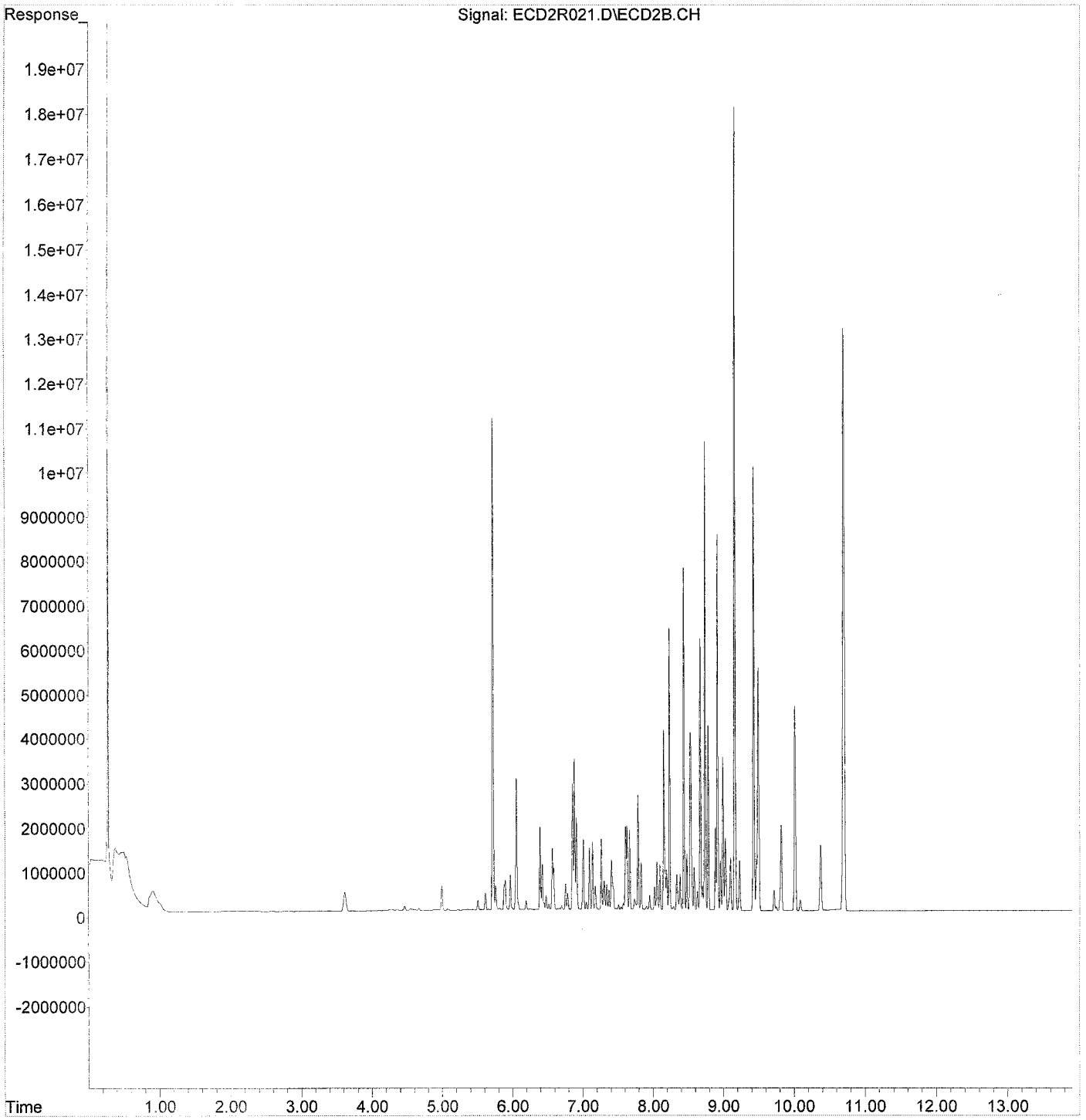
486.081

(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

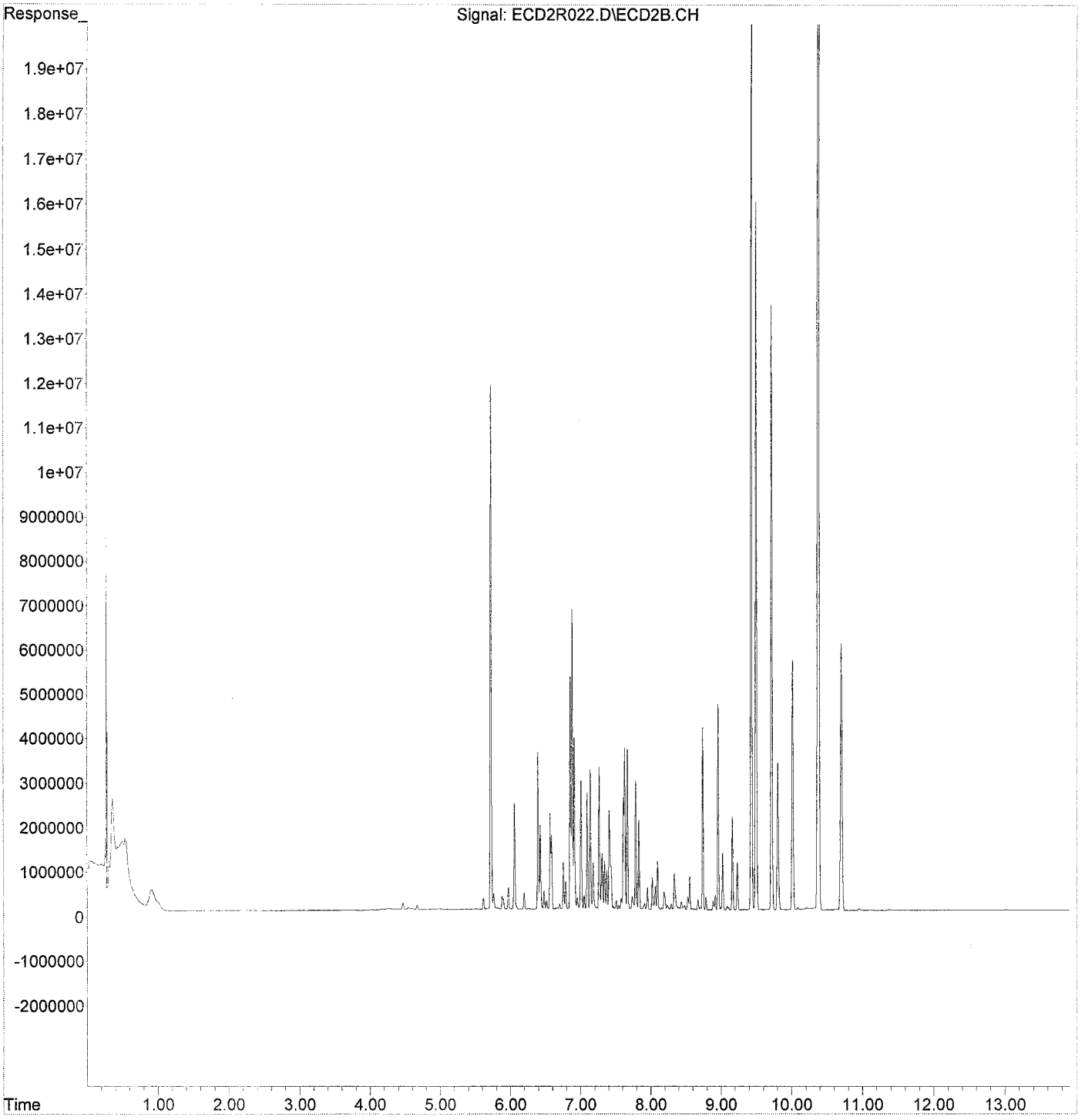
509.321

(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

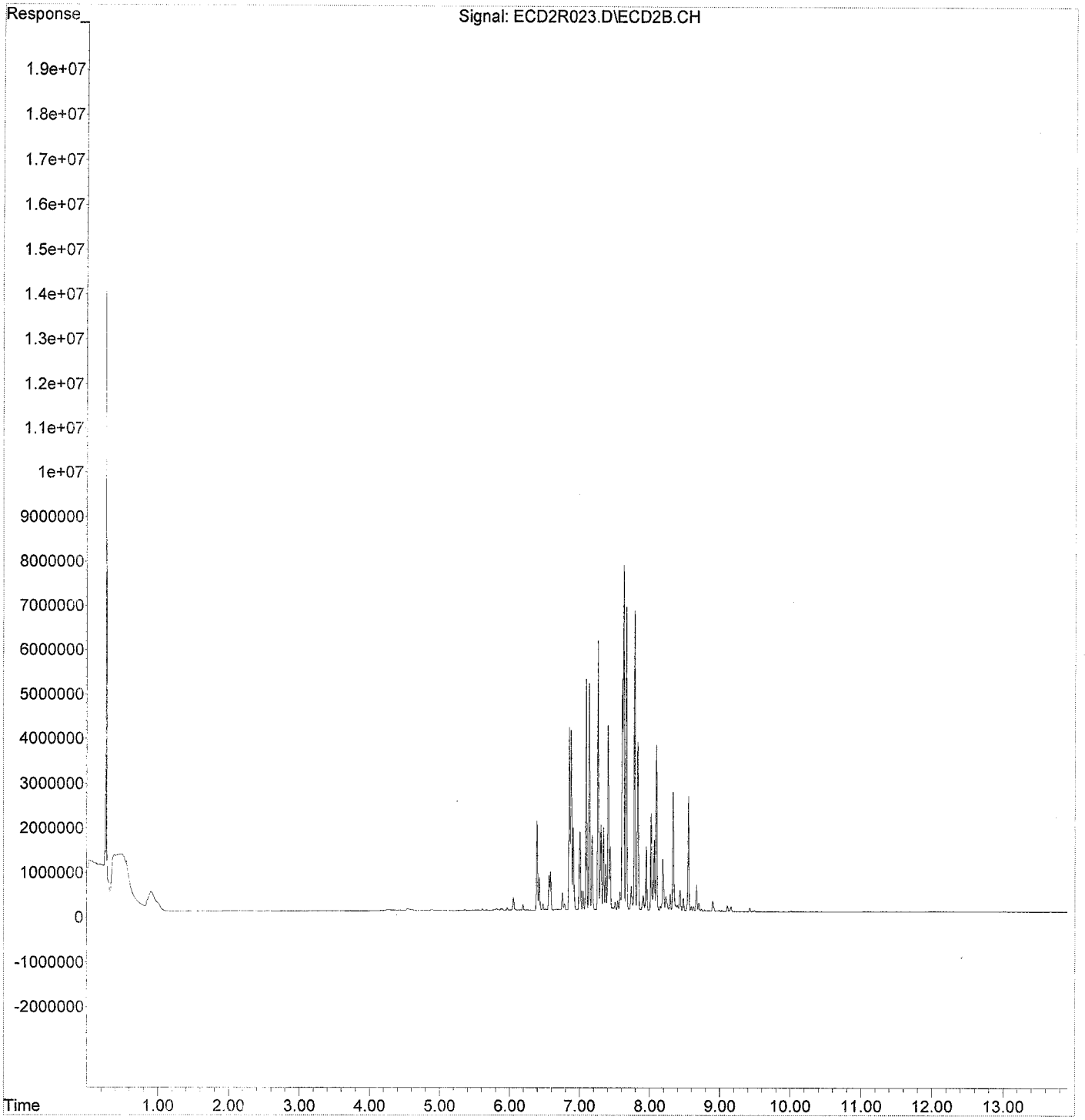
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.434	477807	31.573 ng/ml
49)	Aroclor 1262 (2)	8.738	58424	2.762 ng/ml
50)	Aroclor 1262 (3)	8.899	233869	13.388 ng/ml
51)	Aroclor 1262 (4)	9.159	114546	3.199 ng/ml
52)	Aroclor 1262 (5)	9.427	79254	3.608 ng/ml
53)	Aroclor 1262 (6)	10.012	22494	2.319 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

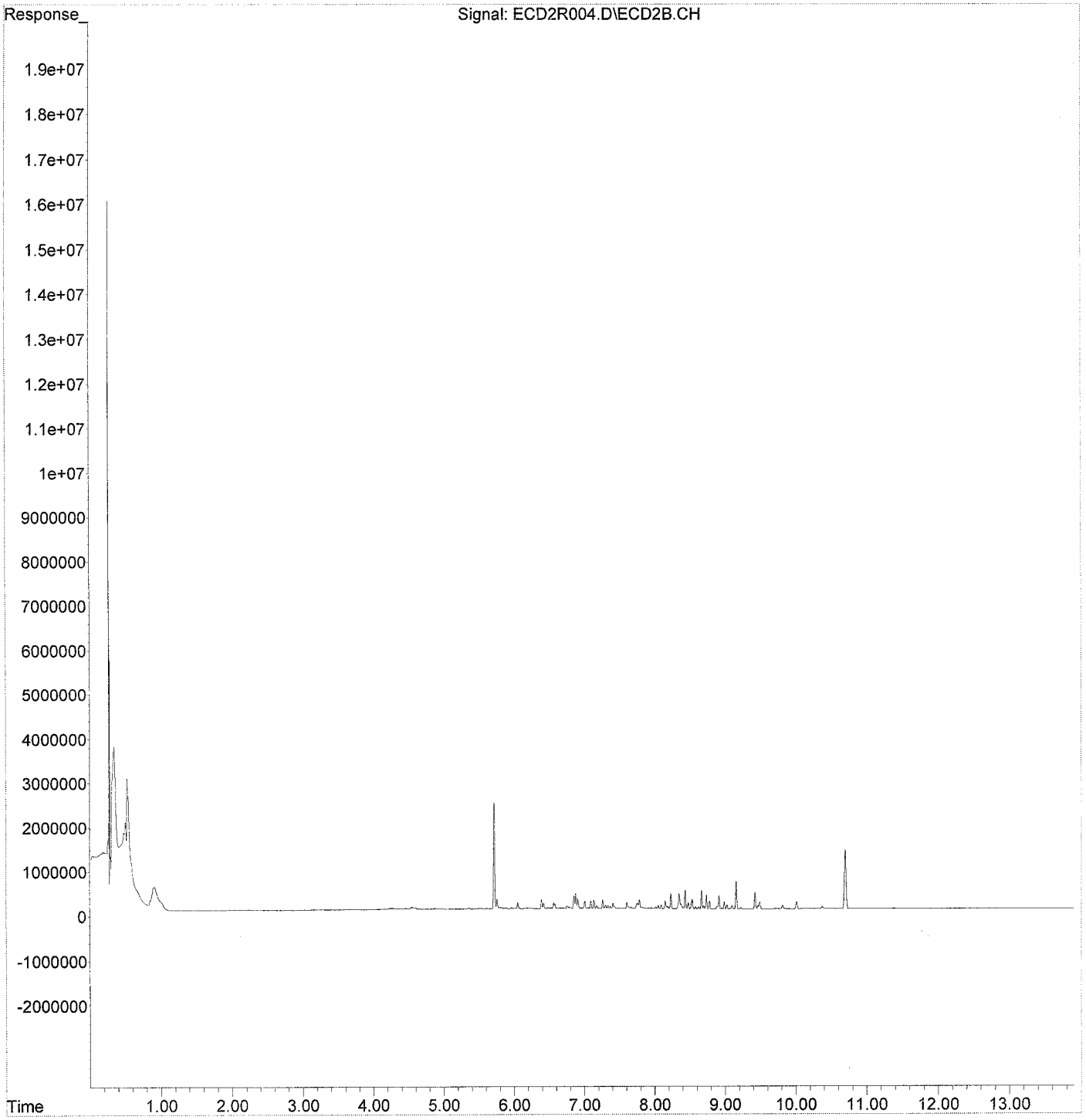
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

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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

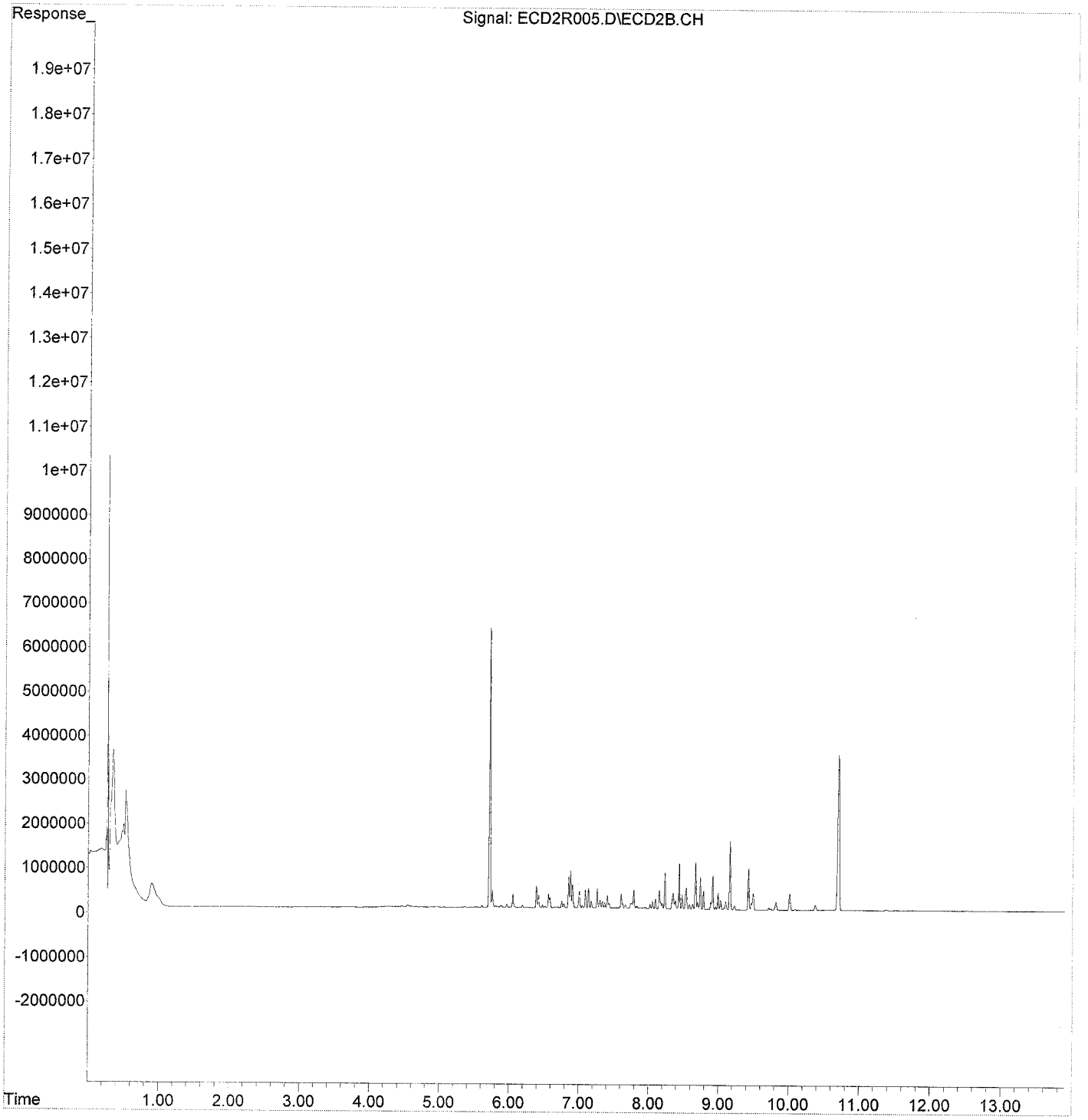
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

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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

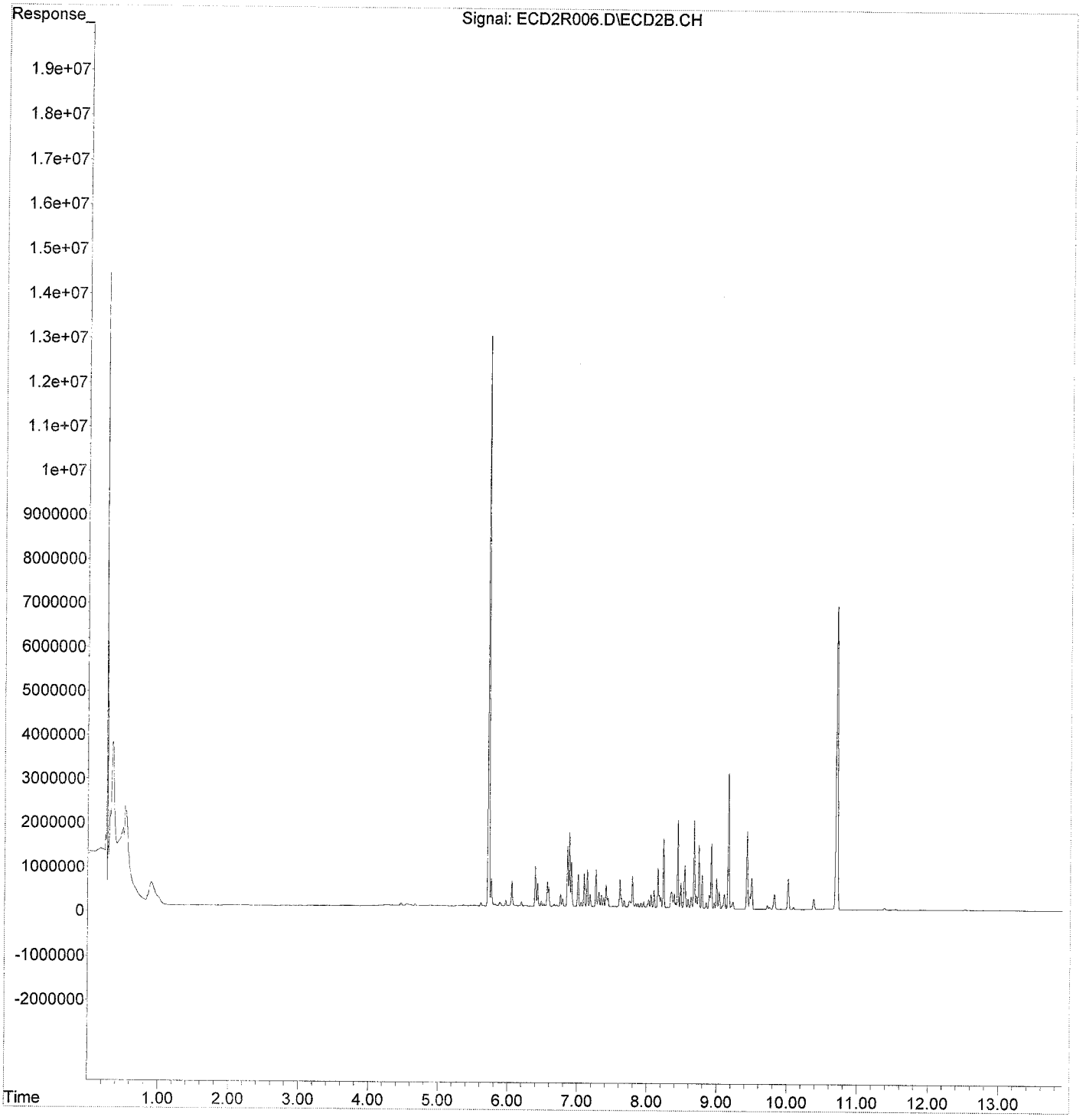
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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	

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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

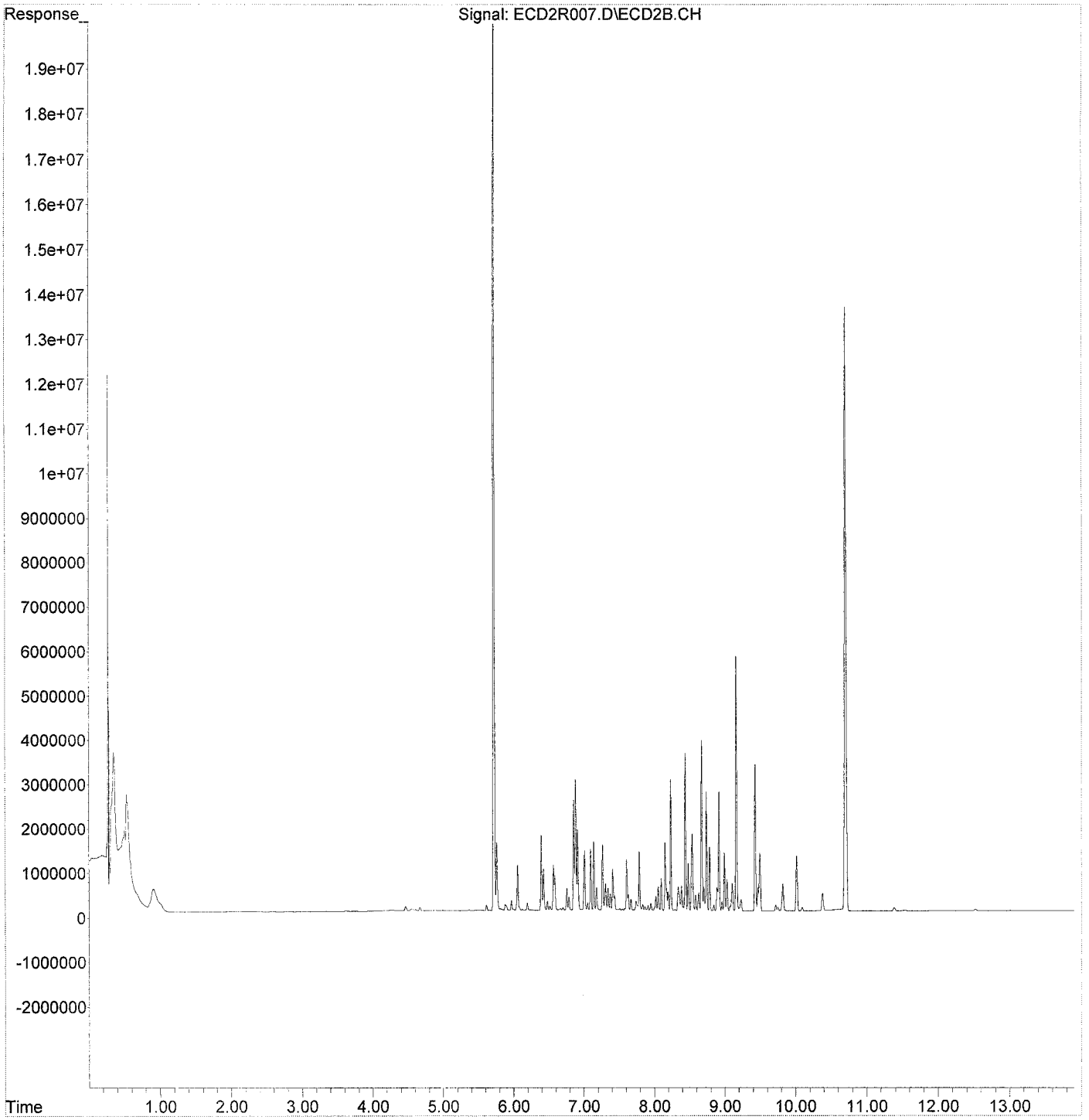
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

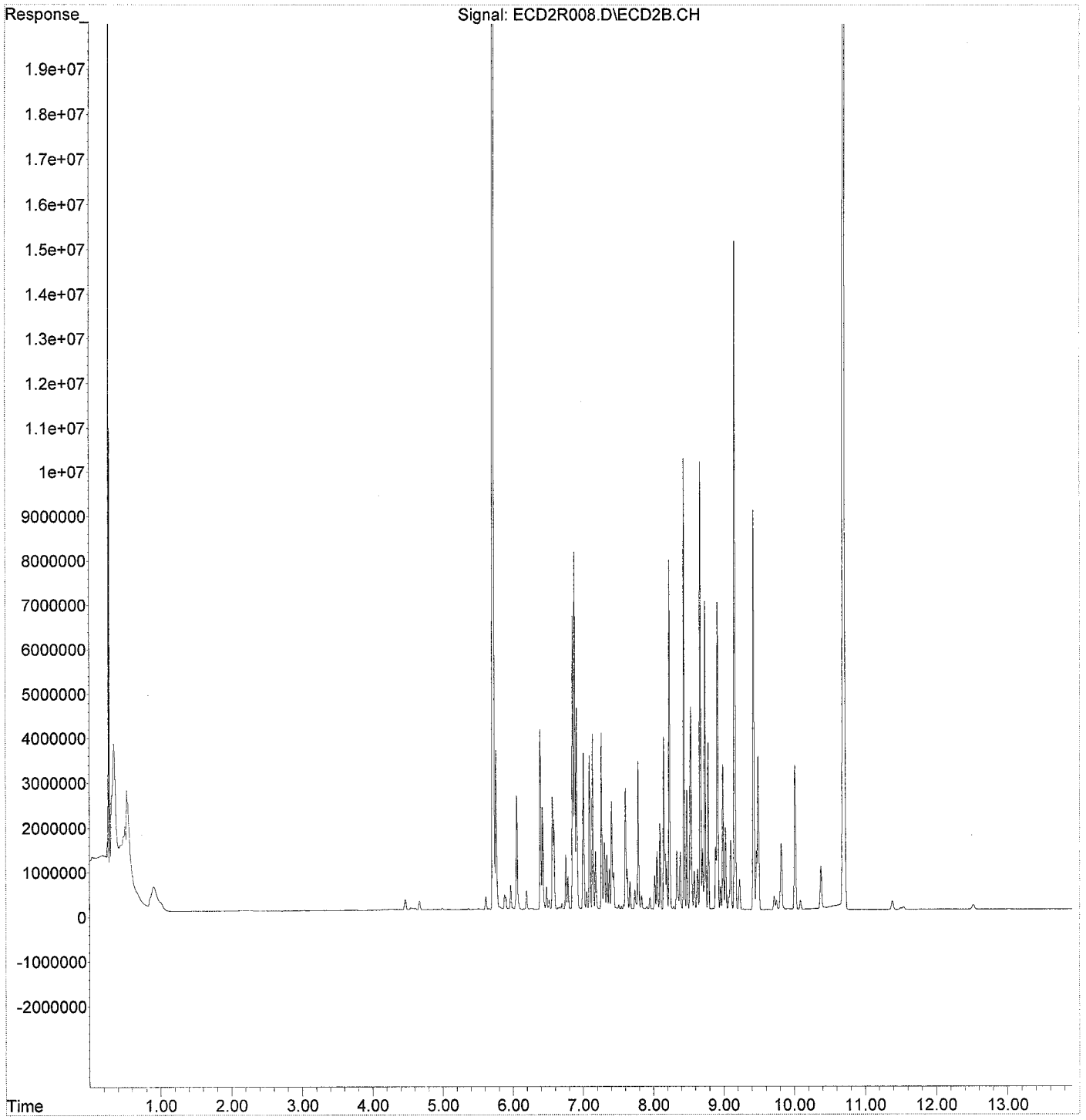
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

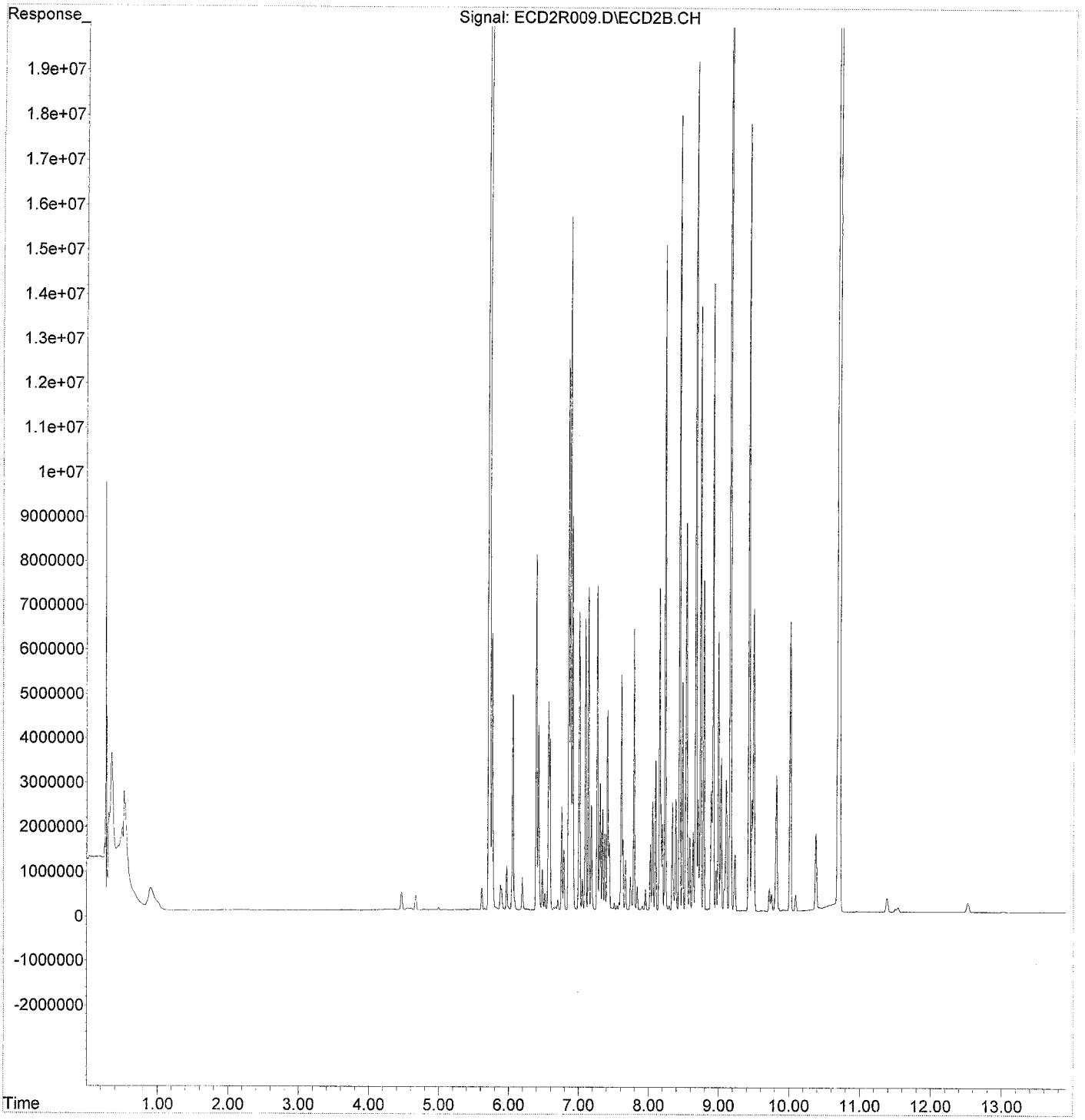
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

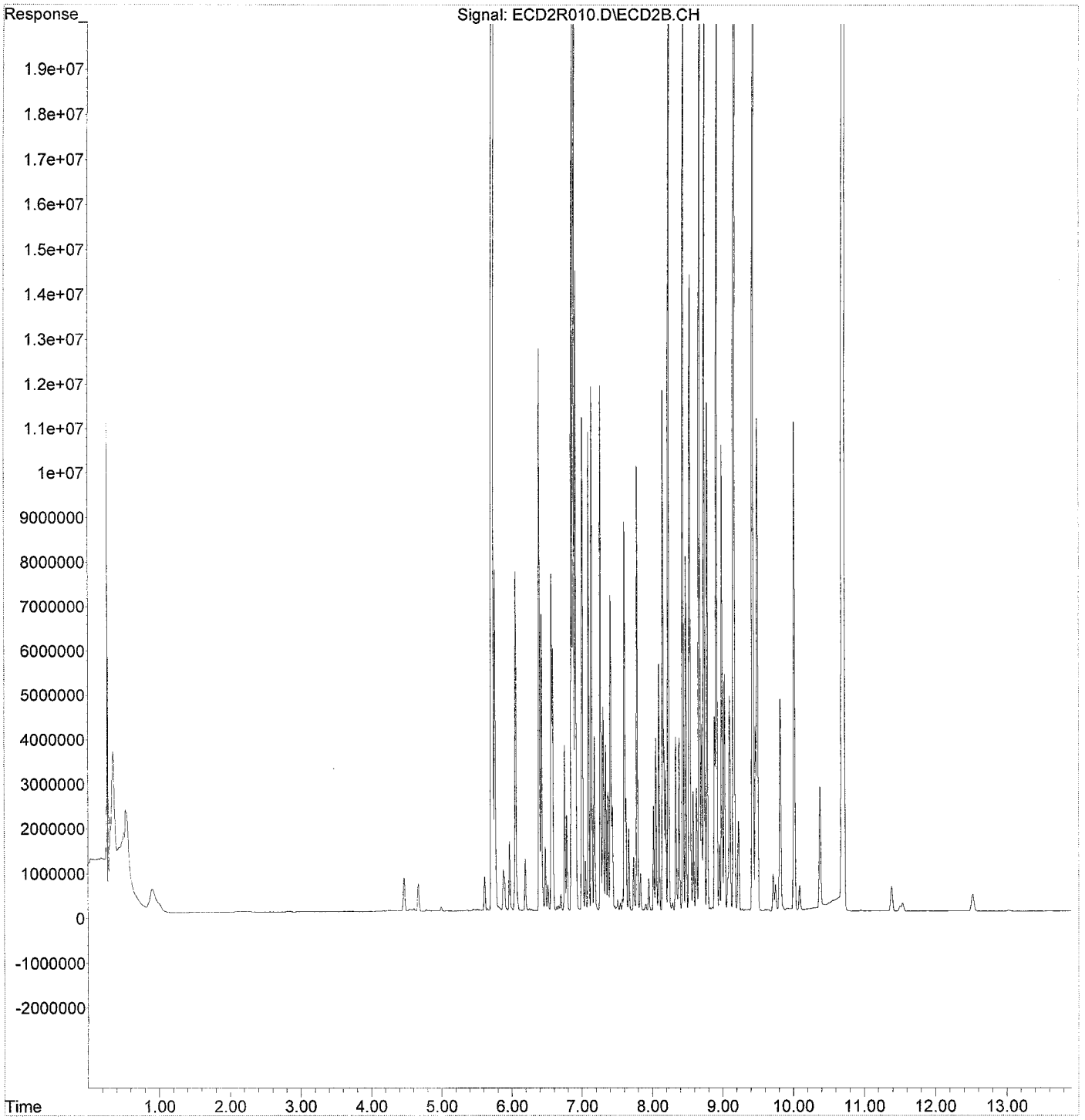
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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		

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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/mld

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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

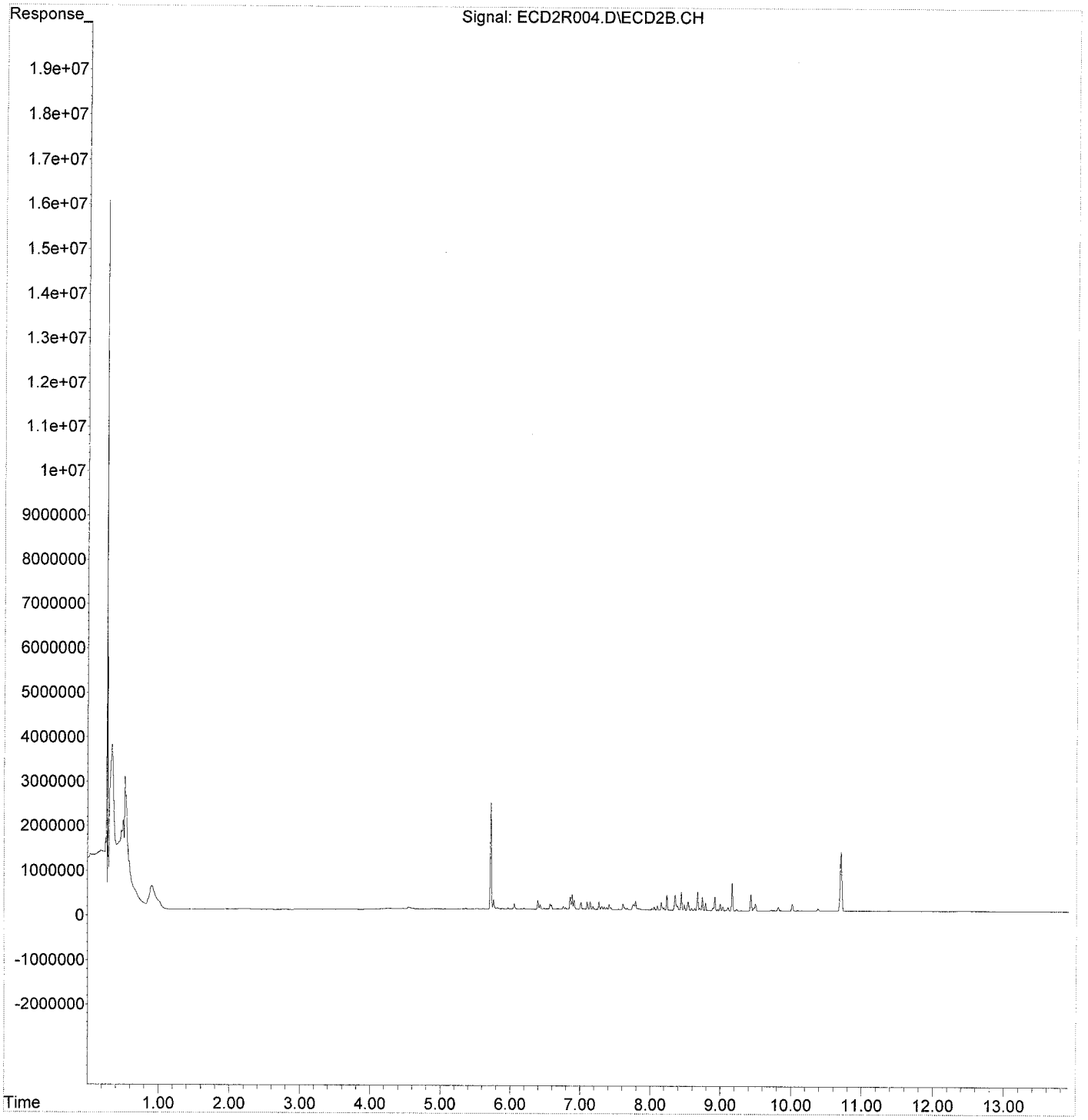
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

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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

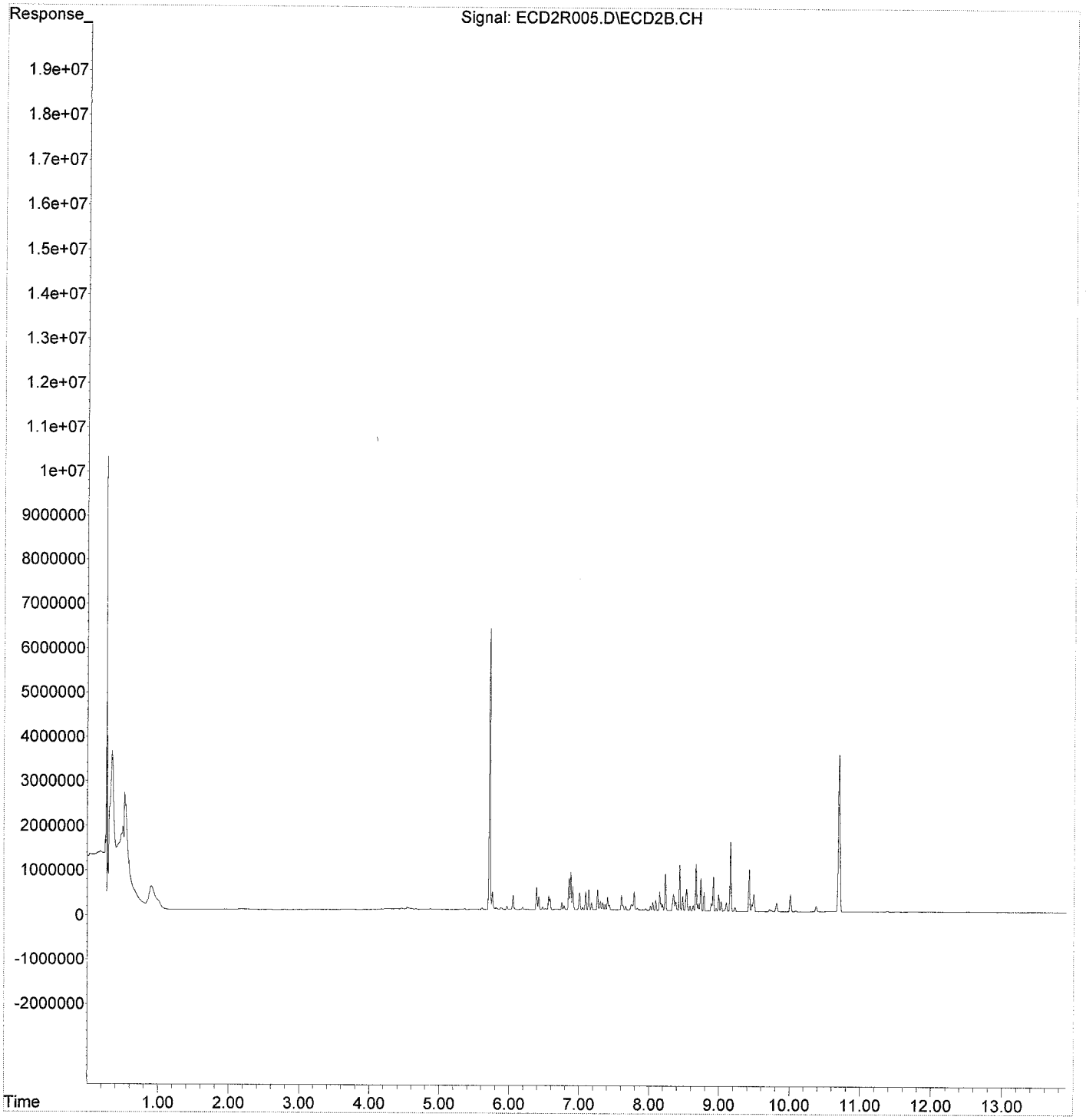
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

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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

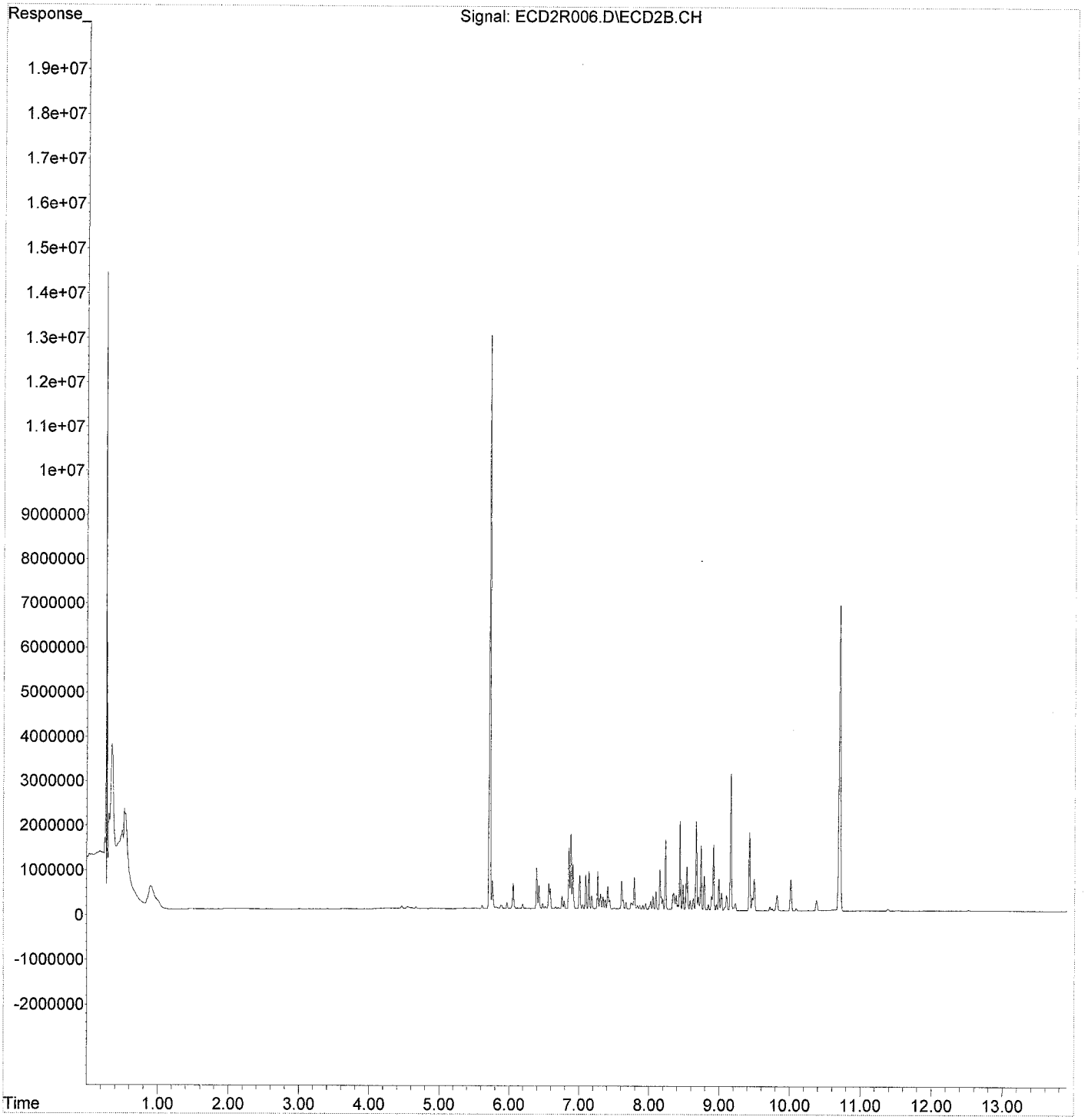
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

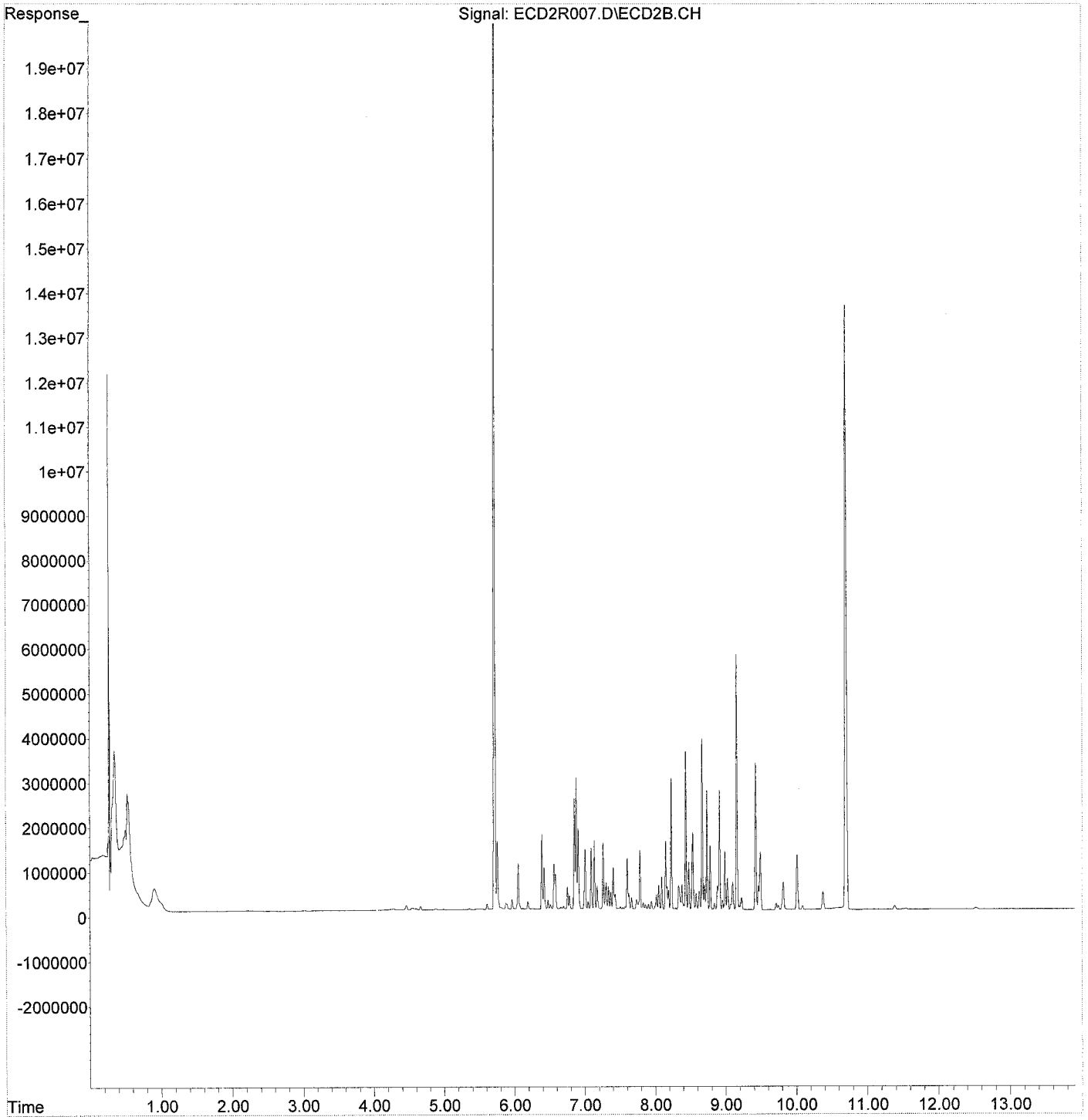
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

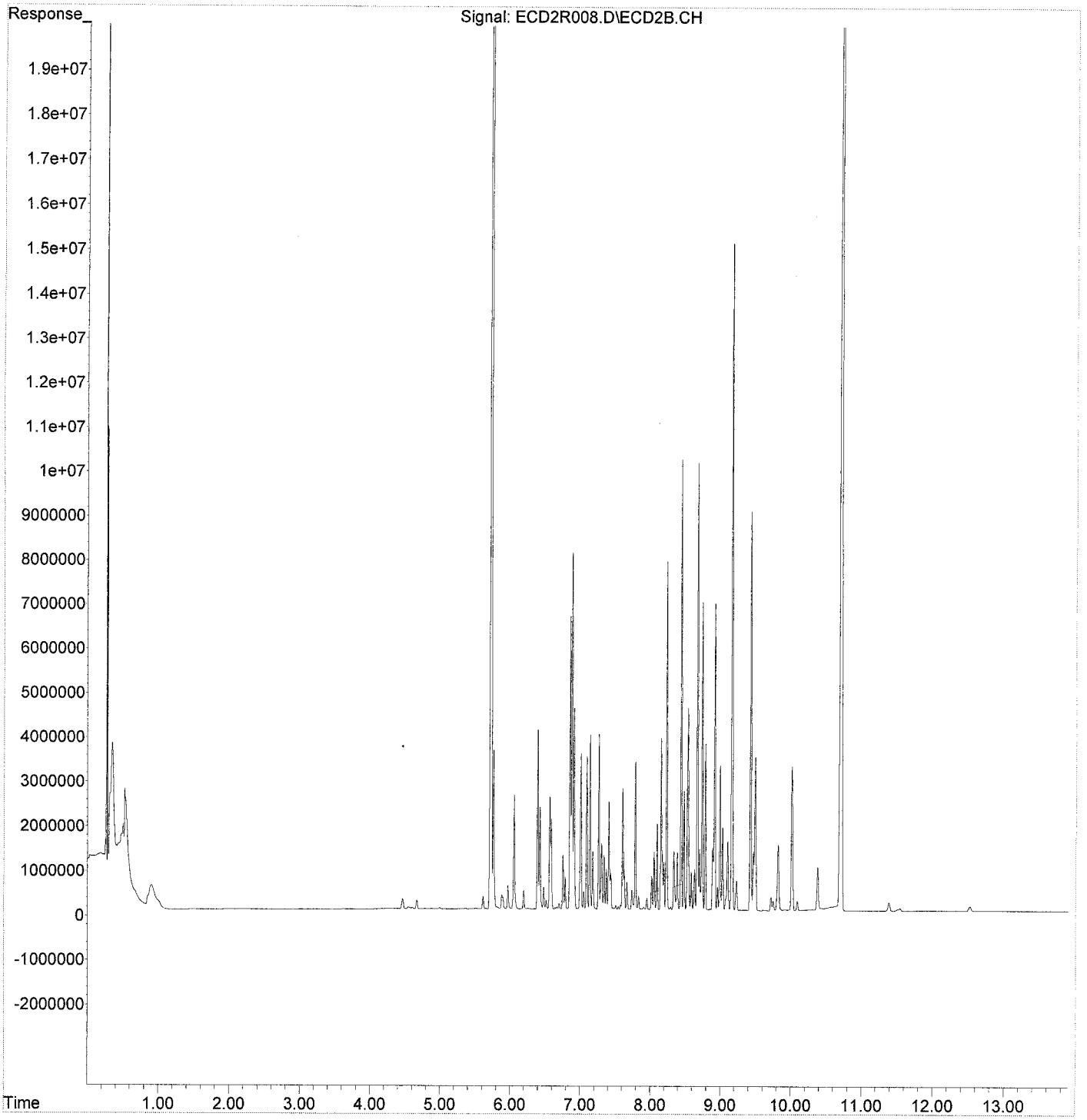
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

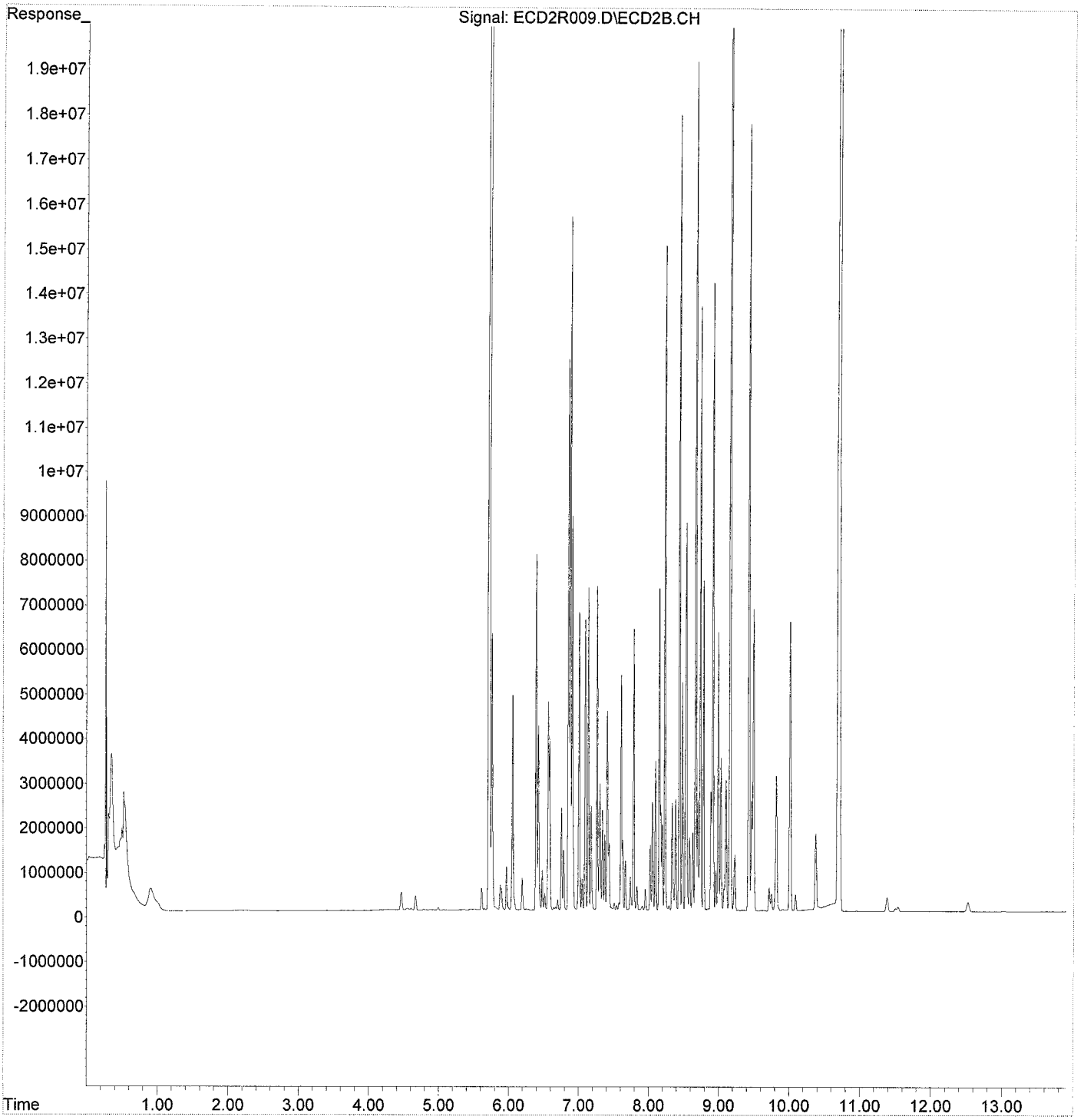
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

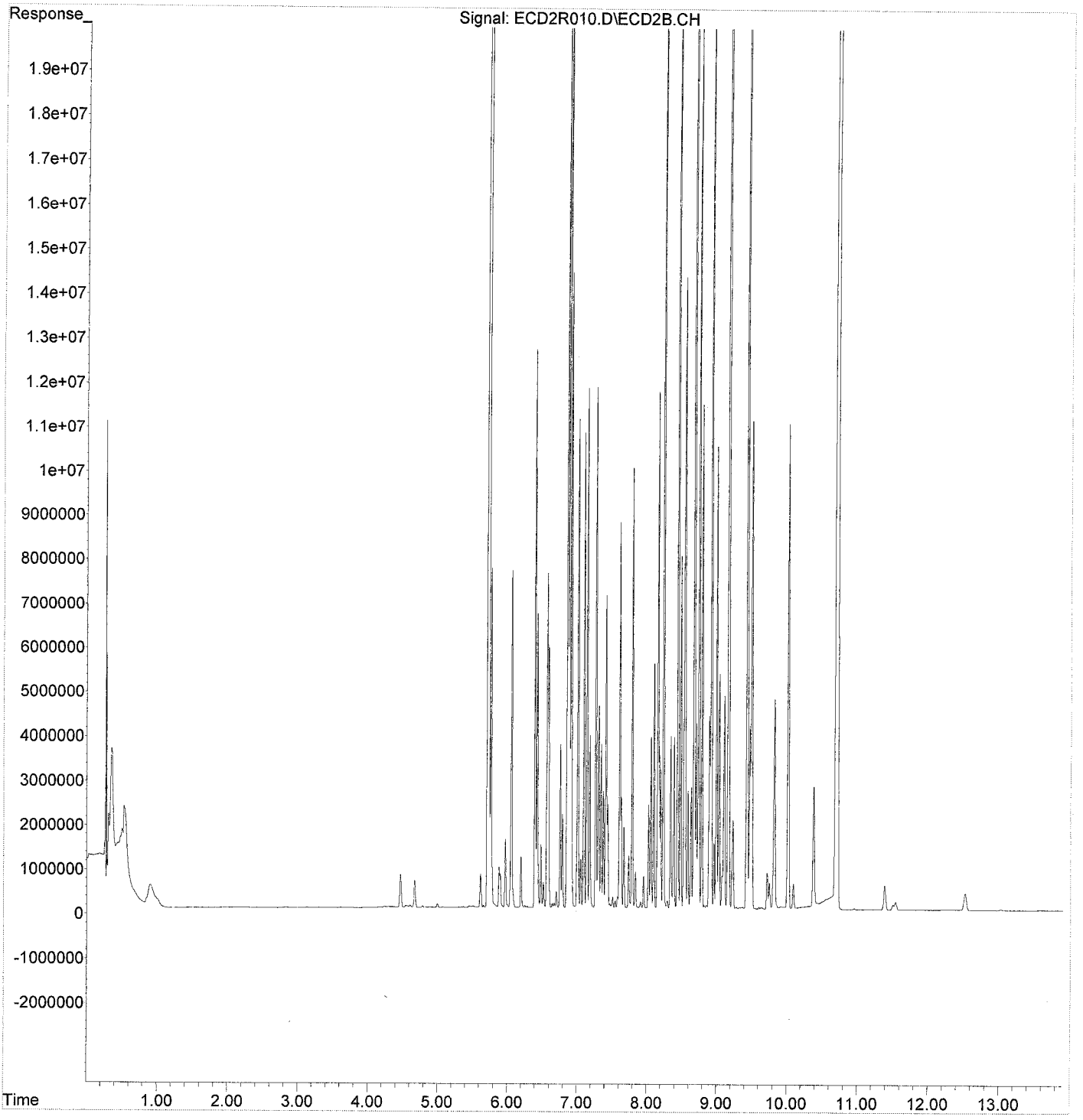
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

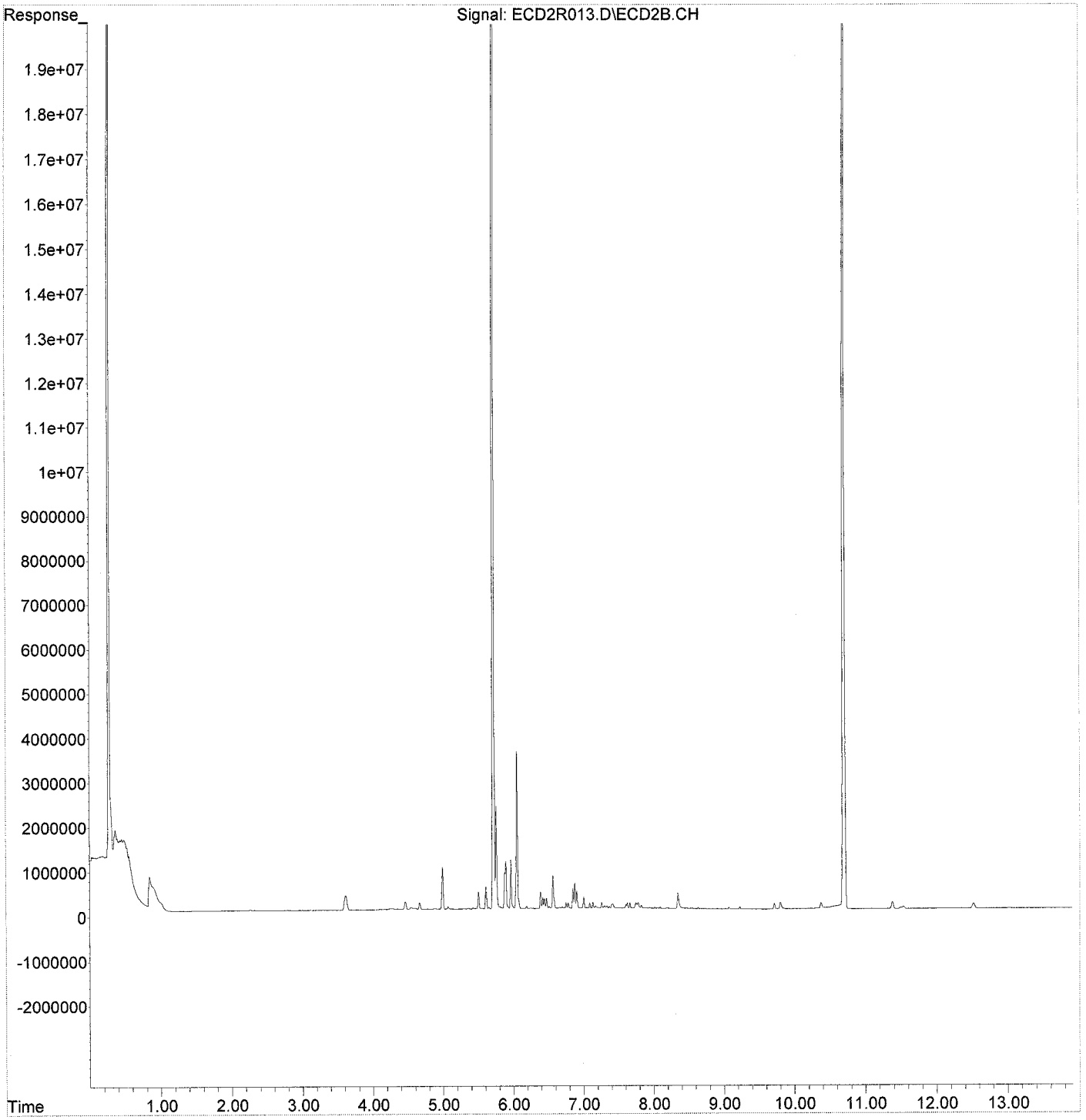
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

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

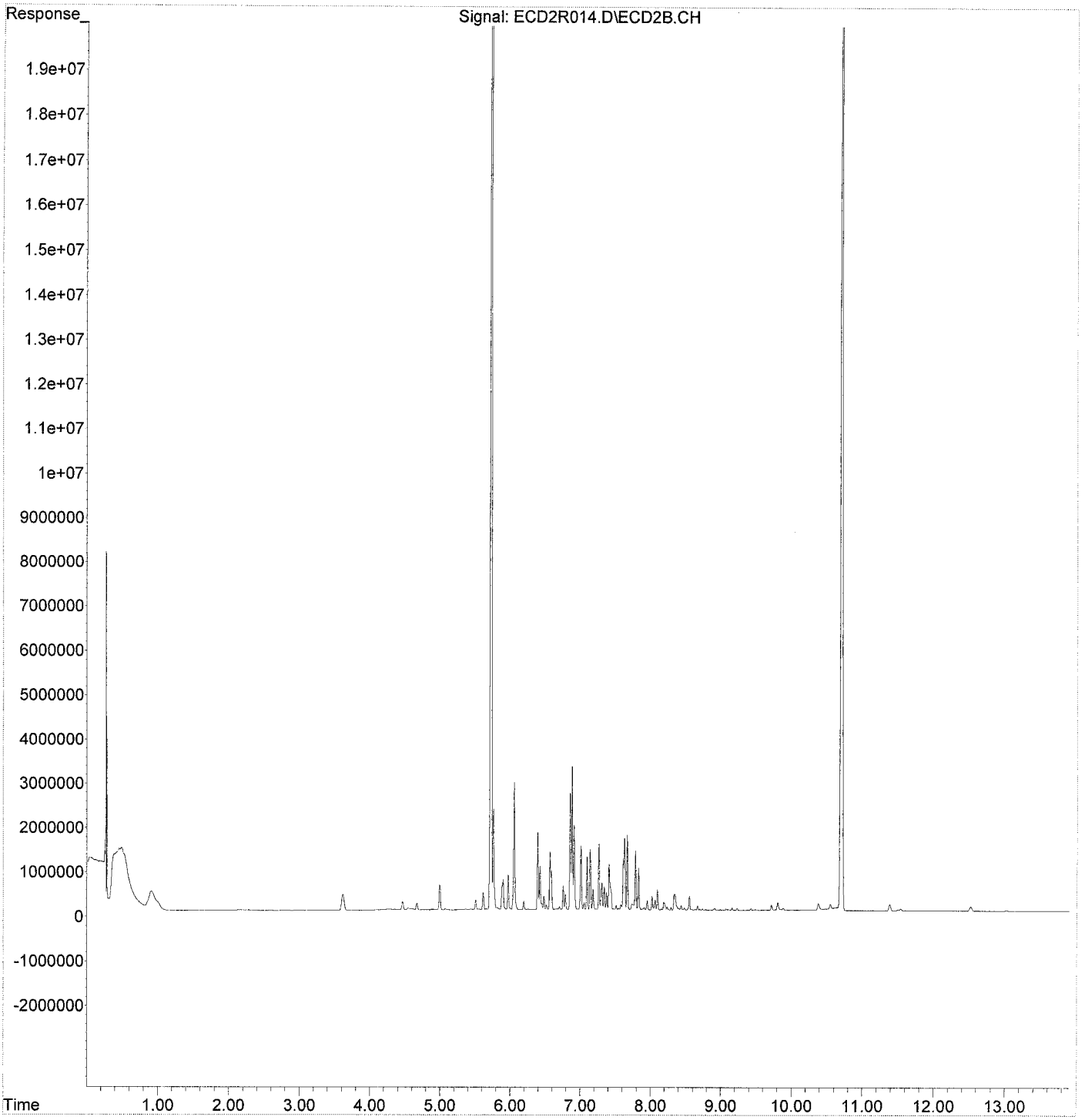
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

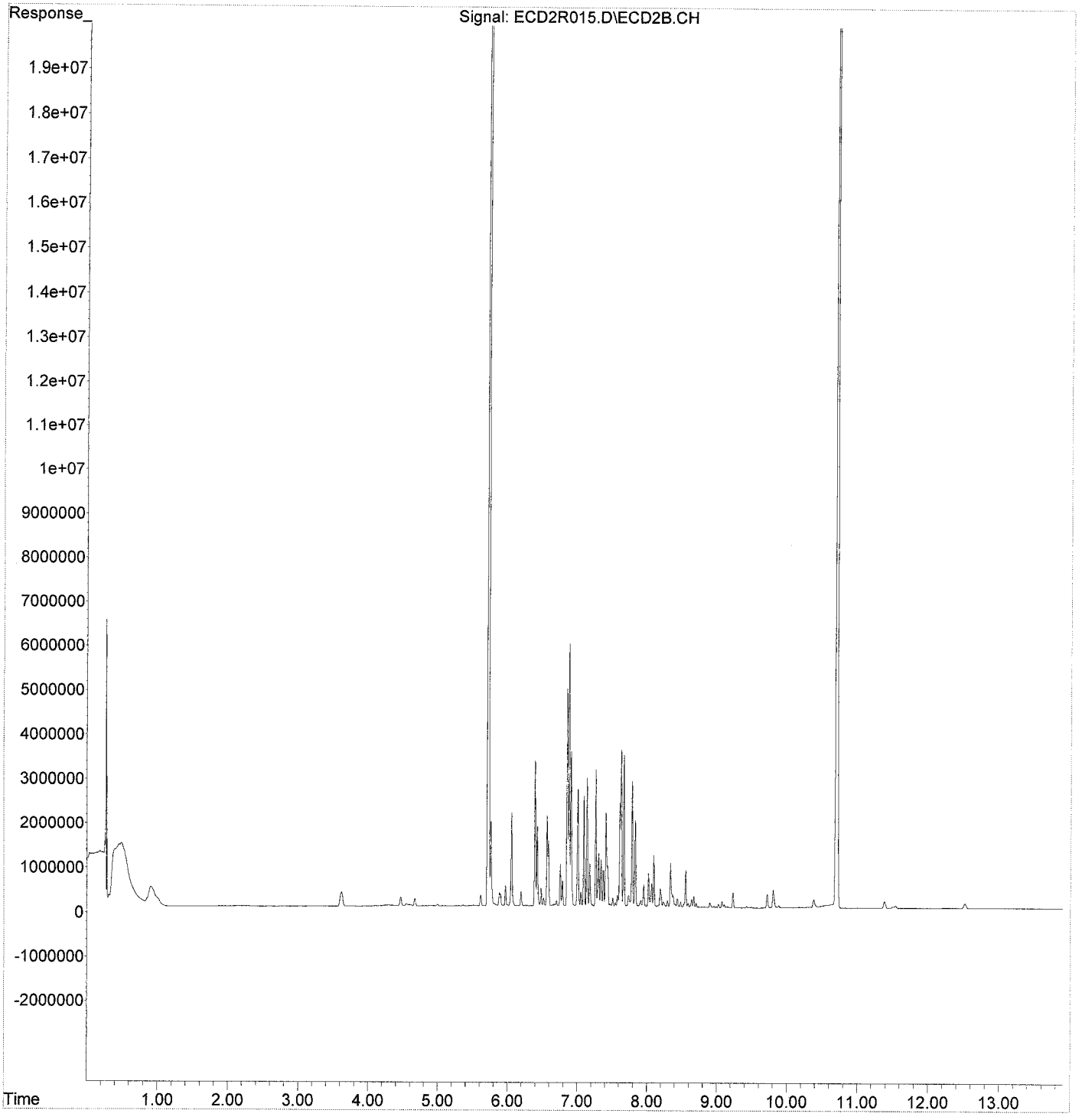
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

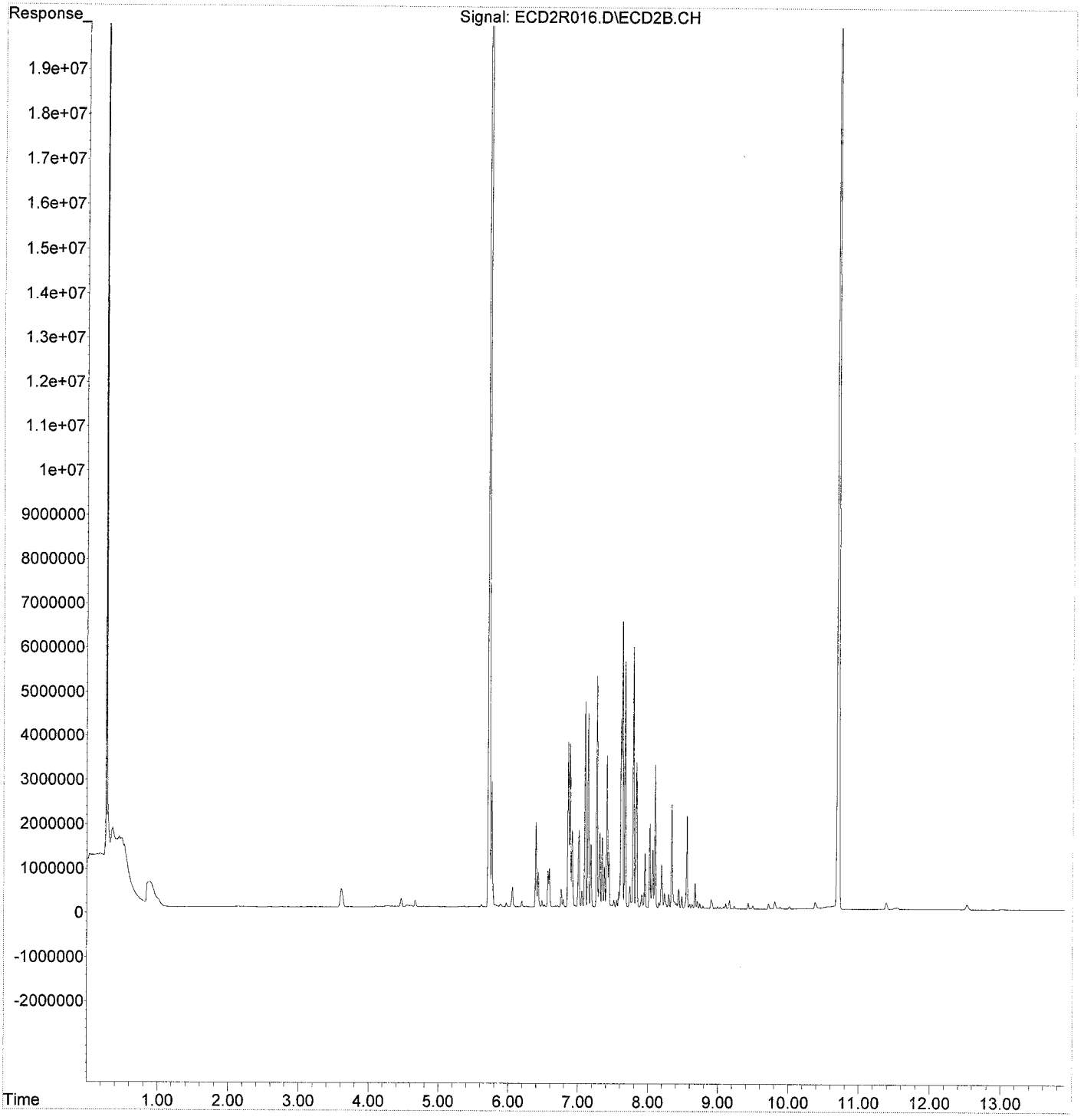
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	0.000	0	N.D. ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D. ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D. ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D. ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D. ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D. ng/mld
54)	Aroclor 1262 - AVE	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

10/26/19

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

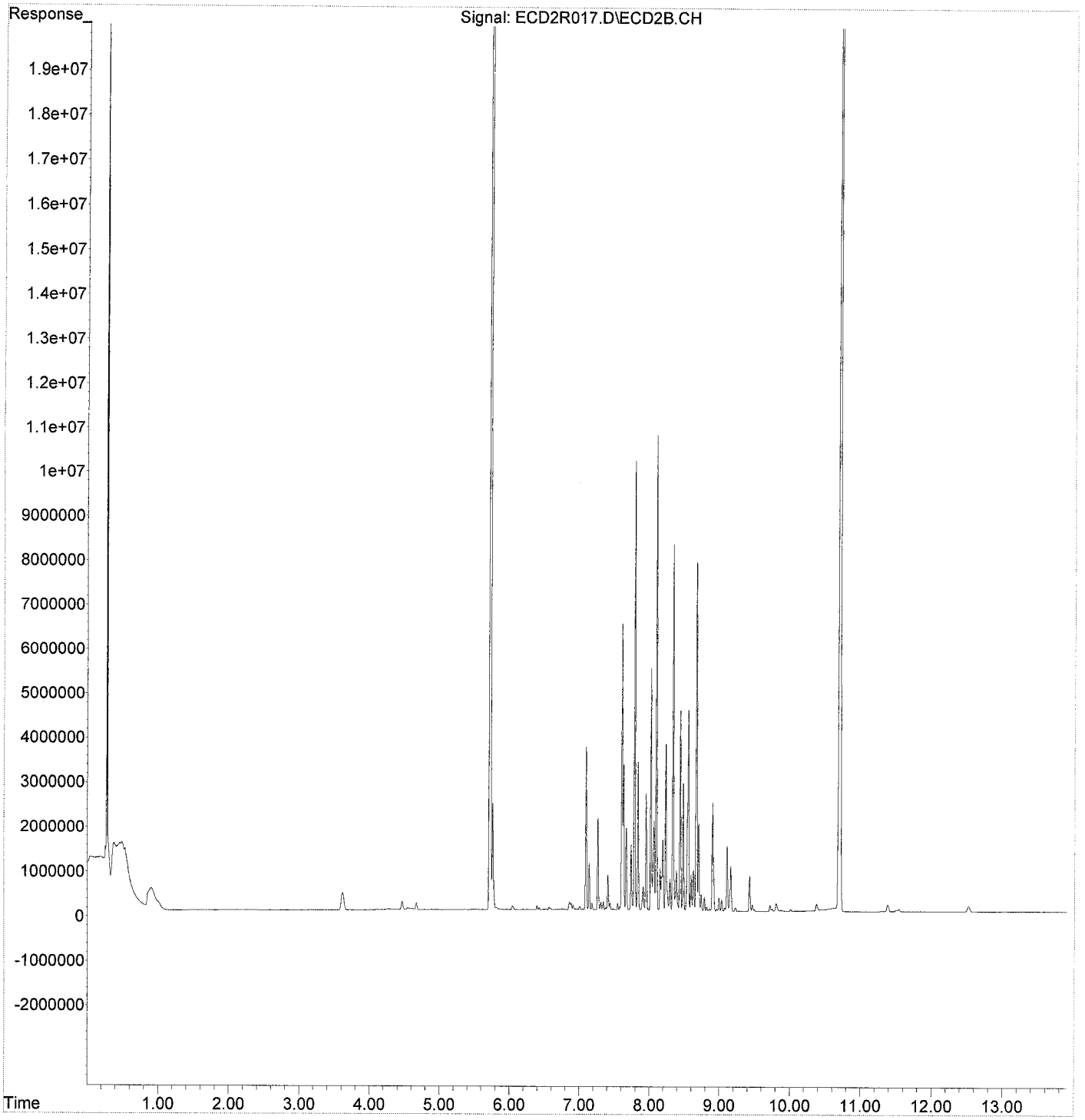
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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

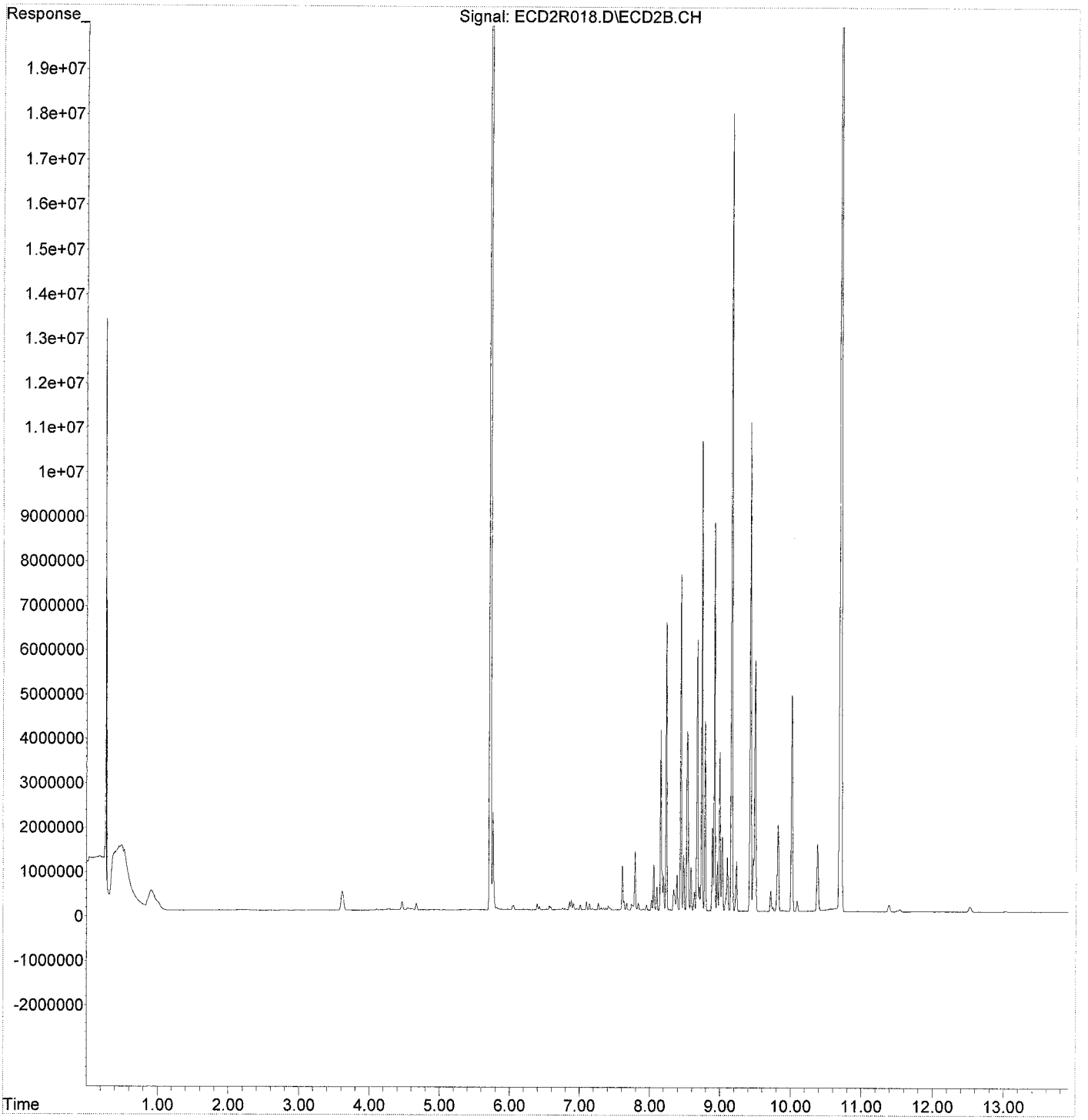
(f)=RT Delta > 1/2 Window (m)=manual int.

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

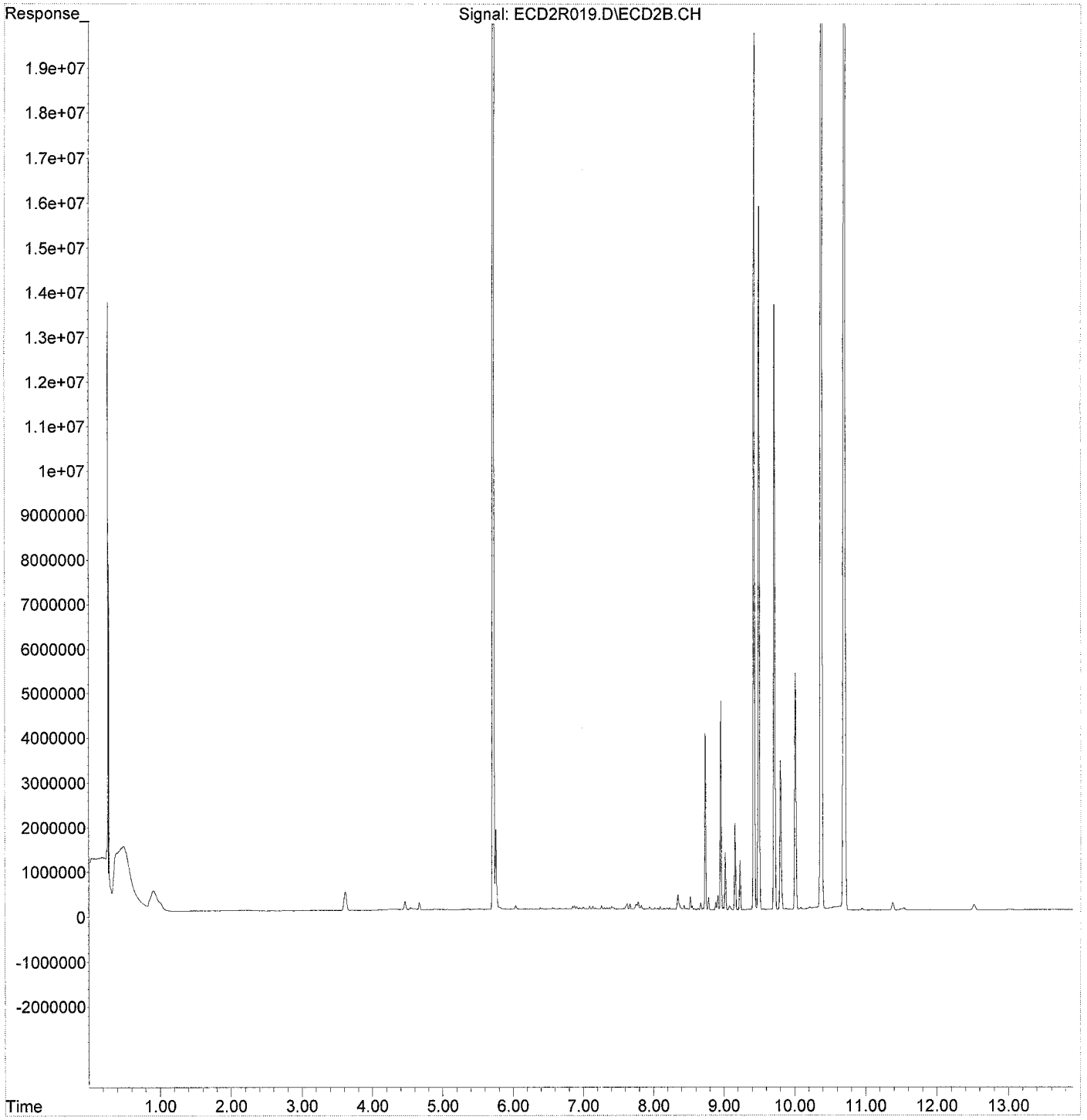
10/25/19

(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

Organochloride Pesticides by EPA 8081B
Benchsheet & Analysis Sequence Data

Batch 9101643
Sequence 9J31040 (A9J0959-01)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

DEC 16 2019

BATCH #: 9101643 (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
	9101643-BLK1		QC	10/28/19 11:17	1100	5				100					
	9101643-BSD1		QC	10/28/19 11:17	1000	5	A19E266		100	100					
	9101643-BSD2		QC	10/28/19 11:17	1000	5	A19E210		100	100					
	9101643-BS1		QC	10/28/19 11:17	1000	5	A19E266		100	100					
	9101643-BS2		QC	10/28/19 11:17	1000	5	A19E210		100	100					
	A9J0812-01	N	608 Pesticides (SW)	10/28/19 11:17	950	5				100	1200Z-Trestle 001	MDL			
	A9J0841-04	J	8081B 2,4+4,4-DDx Only (+Add)	10/28/19 11:17	1040	5				100	PDI-FB-1910221 313	MDL. Use Custom Spike.			
	A9J0841-05	F	8081B 2,4+4,4-DDx Only (+Add)	10/28/19 15:27	1070	5				100	PDI-RB-1910221 91318	MDL. Use Custom Spike.			
	A9J0918-01	B	608 Pesticides (SW)	10/28/19 11:17	1060	5				100	9296014-01				
	A9J0918-02	B	608 Pesticides (SW)	10/28/19 11:17	1050	5				100	9296014-03				
	A9J0918-03	B	608 Pesticides (SW)	10/28/19 11:17	1050	5				100	9296014-05				
	A9J0918-04	B	608 Pesticides (SW)	10/28/19 11:17	1000	5				100	9296014-07				
	A9J0918-05	B	608 Pesticides (SW)	10/28/19 11:17	1040	5				100	9296014-09				
	A9J0959-01	H	8081B Pesticides + Add	10/28/19 15:27	1060	5				100	PDI-026SW-34-0 0-191024	custom			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19I263	03/18/20	DCM CHEM PROD. 194934
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E210	11/09/19	8081 OGC 9-42 Pesticide Spike
A19E266	11/21/19	Mix AB Pesticide Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19J262	04/17/20	8082 PCB Surrogate Spike

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: MJB Date 11/1/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101643 (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
	9101643-BLK1		QC	10/28/19 11:17	~~1000~~ 1100	5				100					
	9101643-BSD1		QC	10/28/19 11:17	1000	5	A19E266		100	100					
	9101643-BSD2		QC	10/28/19 11:17	1000	5	A19E210		100	100					
	9101643-BS1		QC	10/28/19 11:17	1000	5	A19E266		100	100					
	9101643-BS2		QC	10/28/19 11:17	1000	5	A19E210		100	100					
	A9J0812-01	N	608 Pesticides (SW)	10/28/19 11:17	950	5				100	1200Z-Trestle 001	MDL			
	A9J0841-04	J	8081B 2,4+4,4-DDx Only (+Add)	10/28/19 11:17	1040	5				100	PDI-FB-1910221 313	MDL. Use Custom Spike.			
	A9J0841-05	~~E~~ F	8081B 2,4+4,4-DDx Only (+Add)	10/28/19 15:27	~~1000~~ 1070	5				100	PDI-RB-1910221 91318	MDL. Use Custom Spike. #		7	
	A9J0918-01	B	608 Pesticides (SW)	10/28/19 11:17	1060	5				100	9296014-01				
	A9J0918-02	B	608 Pesticides (SW)	10/28/19 11:17	1050	5				100	9296014-03				
	A9J0918-03	B	608 Pesticides (SW)	10/28/19 11:17	1050	5				100	9296014-05				
	A9J0918-04	B	608 Pesticides (SW)	10/28/19 11:17	1000	5				100	9296014-07				
	A9J0918-05	B	608 Pesticides (SW)	10/28/19 11:17	1040	5				100	9296014-09				
	A9J0959-01	~~G~~ H	8081B Pesticides + Add	10/28/19 15:27	~~1000~~ 1060	5				100	PDI-026SW-34-0 0-191024	custom #		6	

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
~~A19H436~~ A19E048	~~07/31/21~~ 03/31/20	Sodium Sulfate Lot #~~190116~~ 191177
A191263	03/18/20	DCM CHEM PROD. 194934 am 10-28-19

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E210	11/09/19	8081 OGC 9-42 Pesticide Spike
A19E266	11/21/19	Mix AB Pesticide Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19J262	04/17/20	8082 PCB Surrogate Spike

= 2nd Hexane exchange

Witness: _____

Bottle Check: [illegible] 10/28/19

Prepared By: [illegible] 10·28·19 Date

am 10·29·19

Reviewed By: SCG 10/28/2019 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101643 (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	9101643-BLK1		QC	10/28/19 11:17	~~1000~~ 1100	5 ✓				100		#		6	
2	9101643-BSD1		QC	10/28/19 11:17	1000	5 ✓	A19E266		100	100		#		6	
3	9101643-BSD2		QC	10/28/19 11:17	1000	5 ✓	A19E210		100	100		#		6	
4	9101643-BS1		QC	10/28/19 11:17	1000	5 ✓	A19E266		100	100		#		6	
5	9101643-BS2		QC	10/28/19 11:17	1000	5 ✓	A19E210		100	100		#		6	
6	A9J0812-01	N	608 Pesticides (SW)	10/28/19 11:17	~~1000~~ 950	5 ✓				100	1200Z-Trestle 001 ✓	MDL #		7	
7	A9J0841-04	J	8081B 2,4+4,4-DDx Only (+Add)	10/28/19 11:17	~~1000~~ 1090	5 ✓				100	PDI-FB-1910221 313 ✓	MDL. Use Custom Spike. #		7	
8	A9J0918-01	B	608 Pesticides (SW)	10/28/19 11:17	~~1000~~ 1060	5 ✓				100	9296014-01 ✓	#		7	
9	A9J0918-02	B	608 Pesticides (SW)	10/28/19 11:17	~~1000~~ 1050	5 ✓				100	9296014-03 ✓	#		6	
10	A9J0918-03	B	608 Pesticides (SW)	10/28/19 11:17	~~1000~~ 1050	5 ✓				100	9296014-05 ✓	#		7	
11	A9J0918-04	B	608 Pesticides (SW)	10/28/19 11:17	1000	5 ✓				100	9296014-07 ✓	#		6	
12	A9J0918-05	B	608 Pesticides (SW)	10/28/19 11:17	~~1000~~ 1040	5 ✓				100	9296014-09 ✓	#		7	

am 10-28-19

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
~~A19H436~~ A19J048	~~07/31/21~~ 05/30/20	Sodium Sulfate Lot # ~~190116~~ 191177
A19J263	03/18/2020	DCM CHEM PROD. 194934 am 10-28-19

Analyte Spike(s) am

Std ID	Exp. Date	Description
A19E210	11/09/19	8081 OGC 9-42 Pesticide Spike
A19E266	11/21/19	Mix AB Pesticide Matrix Spike

Surrogate(s) am

Std ID	Exp. Date	Description
A19J262	04/17/20	8082 PCB Surrogate Spike

Witness: JC 10/23/19

Bottle Check: JC 10/28/19

= 2mL Hexane exchange

am 10:28.19
Prepared By: Date

10-29-19

Cas 10/28/19
Reviewed By: Date

Printed: 10/28/2019 11:22:34AM

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9J31040** Instrument: **DUALECD5**

Date: **10/31/19 11:10** Calibration: **A9H2608**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J31040-BKD1	Water	QC	QC				A19J201
2	9J31040-BKD2	Water	QC	QC				A19J201
3	9J31040-CCV1	Water	QC	QC				A19H383
4	9J31040-CCV2	Water	QC	QC				A19J408
5	9J31040-CCB1	Water	QC	QC				A19J194
6	9J31040-BKD3	Water	QC	QC				A19J201
7	9J31040-CCV3	Water	QC	QC				A19H383
8	9J31040-CCV4	Water	QC	QC				A19J408
9	9J31040-CCB2	Water	QC	QC				A19J194
10	9101731-BLK1	Sediment	QC	QC		9101731		
11	9101731-BS1	Sediment	QC	QC		9101731		
12	9101731-BS2	Sediment	QC	QC		9101731		
13	9101731-BS3	Sediment	QC	QC		9101731		
14	9101731-BS4	Sediment	QC	QC		9101731		
15	9101643-BLK1	Water	QC	QC		9101643		
16	9101643-BS1	Water	QC	QC		9101643		
17	9101643-BSD1	Water	QC	QC		9101643		
18	9101643-BS2	Water	QC	QC		9101643		
19	9101643-BSD2	Water	QC	QC		9101643		
20	9J31040-CCV5	Water	QC	QC				A19H384
21	9J31040-CCV6	Water	QC	QC				A19J409
22	9J31040-CCB3	Water	QC	QC				A19J194
23	A9J0812-01	Water	608 Pesticides (SW)		11/04/19	9101643		
24	A9J0841-04	Water	8081B 2,4+4,4-DDx Only (+Add)	Anchor QEA, LLC	11/05/19	9101643		
25	A9J0841-05	Water	8081B 2,4+4,4-DDx Only (+Add)	Anchor QEA, LLC	11/05/19	9101643		
26	A9J0918-01	Water	608 Pesticides (SW)		11/01/19	9101643		
27	A9J0918-02	Water	608 Pesticides (SW)		11/01/19	9101643		
28	A9J0918-03	Water	608 Pesticides (SW)		11/01/19	9101643		
29	A9J0918-04	Water	608 Pesticides (SW)		11/01/19	9101643		
30	A9J0918-05	Water	608 Pesticides (SW)		11/01/19	9101643		
31	A9J0959-01	Water	8081B Pesticides + Add	Anchor QEA, LLC	11/07/19	9101643		
32	9J31040-CCV7	Water	QC	QC				A19H383
33	9J31040-CCV8	Water	QC	QC				A19J408
34	9J31040-CCB4	Water	QC	QC				A19J194
35	9J31040-IBL1	Water	QC	QC				
36	9J31040-IBL2	Water	QC	QC				

Comments:

Data Entered By: MJB 11/1/19

Data Reviewed By: 11/1/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 11:52
Operator : MJB
Sample : 9J31040-BKD1
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Oct 31 12:06:11 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	4,4'-DDE	7.355	914169	NoCal	ng/mL
2)	Endrin	7.709	74044832	NoCal	ng/mL
3)	4,4'-DDD	7.771	10296884	NoCal	ng/mL
4)	4,4'-DDT	7.965	133539546	NoCal	ng/mL
5)	Endrin Aldehyde	8.153	5013107	NoCal	ng/mL
6)	Endrin Ketone	8.644	8752046	NoCal	ng/mL
8)	4,4'-DDE [2C]	8.118	1944034	NoCal	ng/mL
9)	Endrin [2C]	8.473	111889537	NoCal	ng/mL
10)	4,4'-DDD [2C]	8.531	18671266	NoCal	ng/mL
11)	Endrin Aldehyde [2C]	8.858	8403235	NoCal	ng/mL
12)	4,4'-DDT [2C]	8.752	209426090	NoCal	ng/mL
13)	Endrin Ketone [2C]	9.441	13734926	NoCal	ng/mL

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

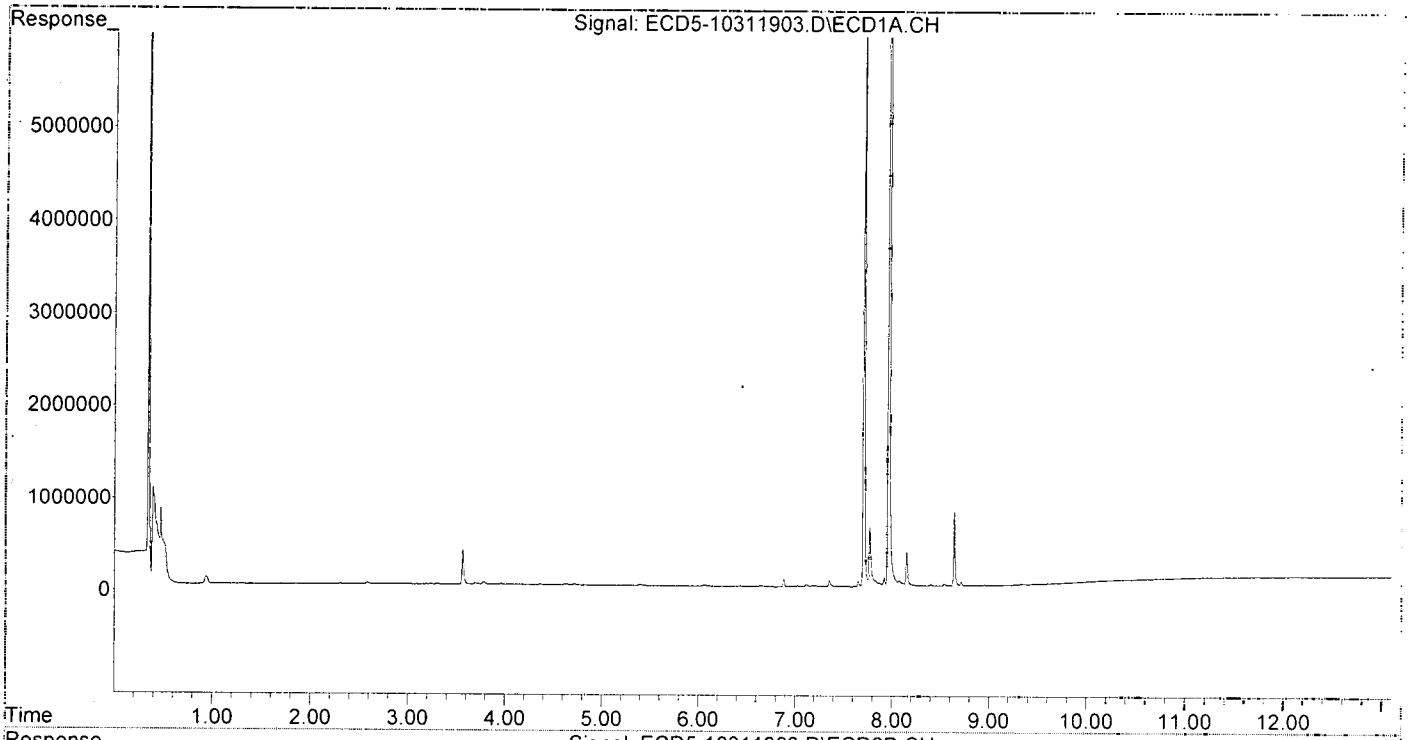
Breakdown failed. maintenance performed.

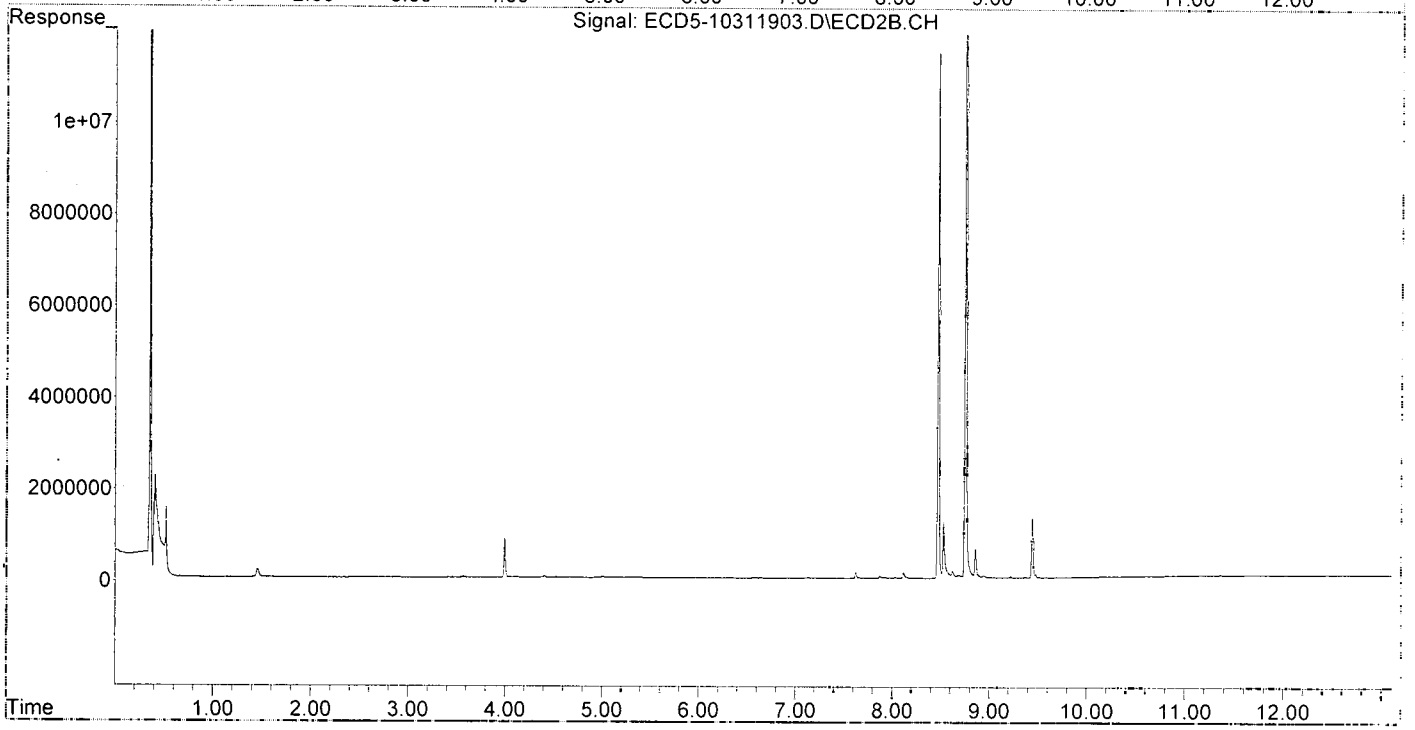
MJB 11/1/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311903.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 11:52
Operator : MJB
Sample : 9J31040-BKD1
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Oct 31 12:06:11 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 12:57
Operator : MJB
Sample : 9J31040-BKD2
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:43:06 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	4,4'-DDE	7.337	671369	NoCal	ng/mL
2)	Endrin	7.694	83606447	NoCal	ng/mL
3)	4,4'-DDD	7.753	5145947	NoCal	ng/mL
4)	4,4'-DDT	7.948	146218204	NoCal	ng/mL
5)	Endrin Aldehyde	8.138	1750690	NoCal	ng/mL
6)	Endrin Ketone	8.628	5779193	NoCal	ng/mL
8)	4,4'-DDE [2C]	8.101	1032735	NoCal	ng/mL
9)	Endrin [2C]	8.458	130878570	NoCal	ng/mL
10)	4,4'-DDD [2C]	8.514	10070492	NoCal	ng/mL
11)	Endrin Aldehyde [2C]	8.844	3723629	NoCal	ng/mL
12)	4,4'-DDT [2C]	8.738	239044023	NoCal	ng/mL
13)	Endrin Ketone [2C]	9.426	9708665	NoCal	ng/mL

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

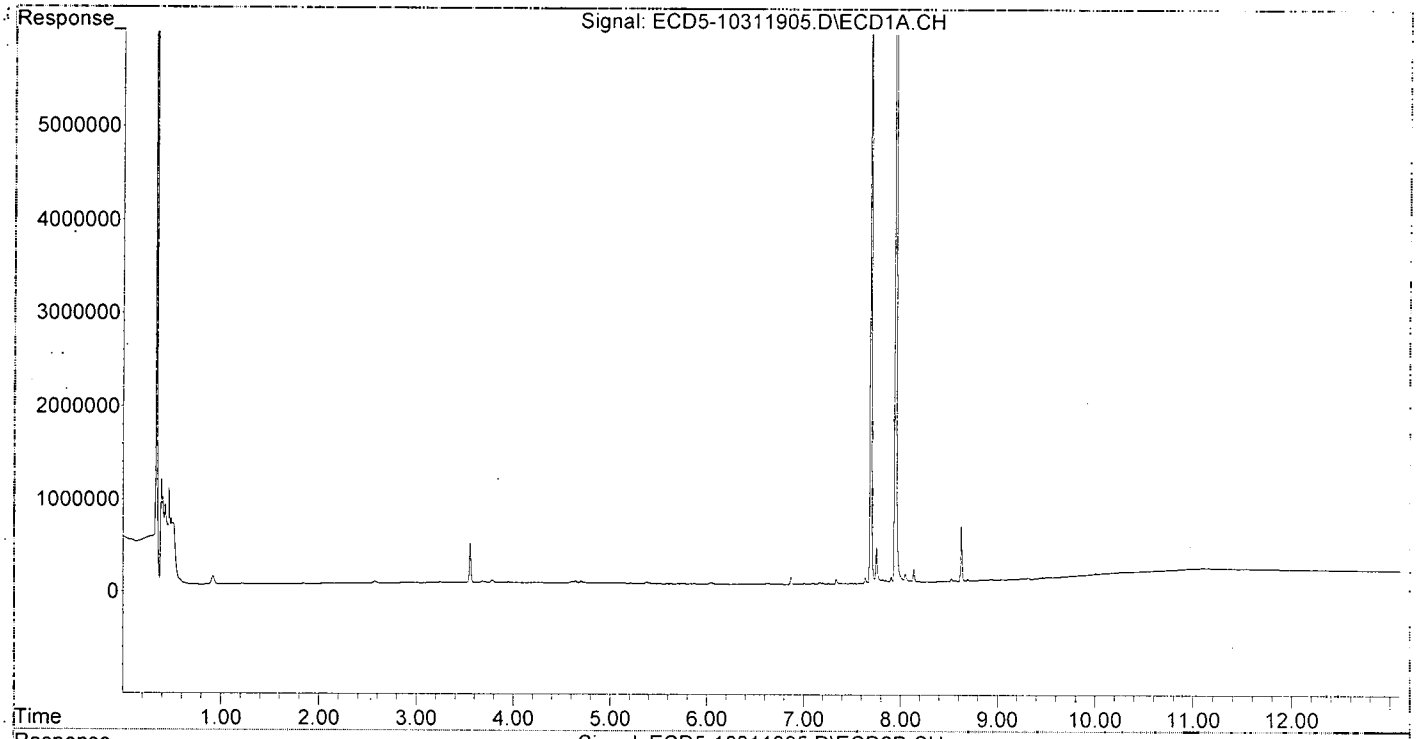
Cut ~ 9" off guard column &
Replaced inlet liner.

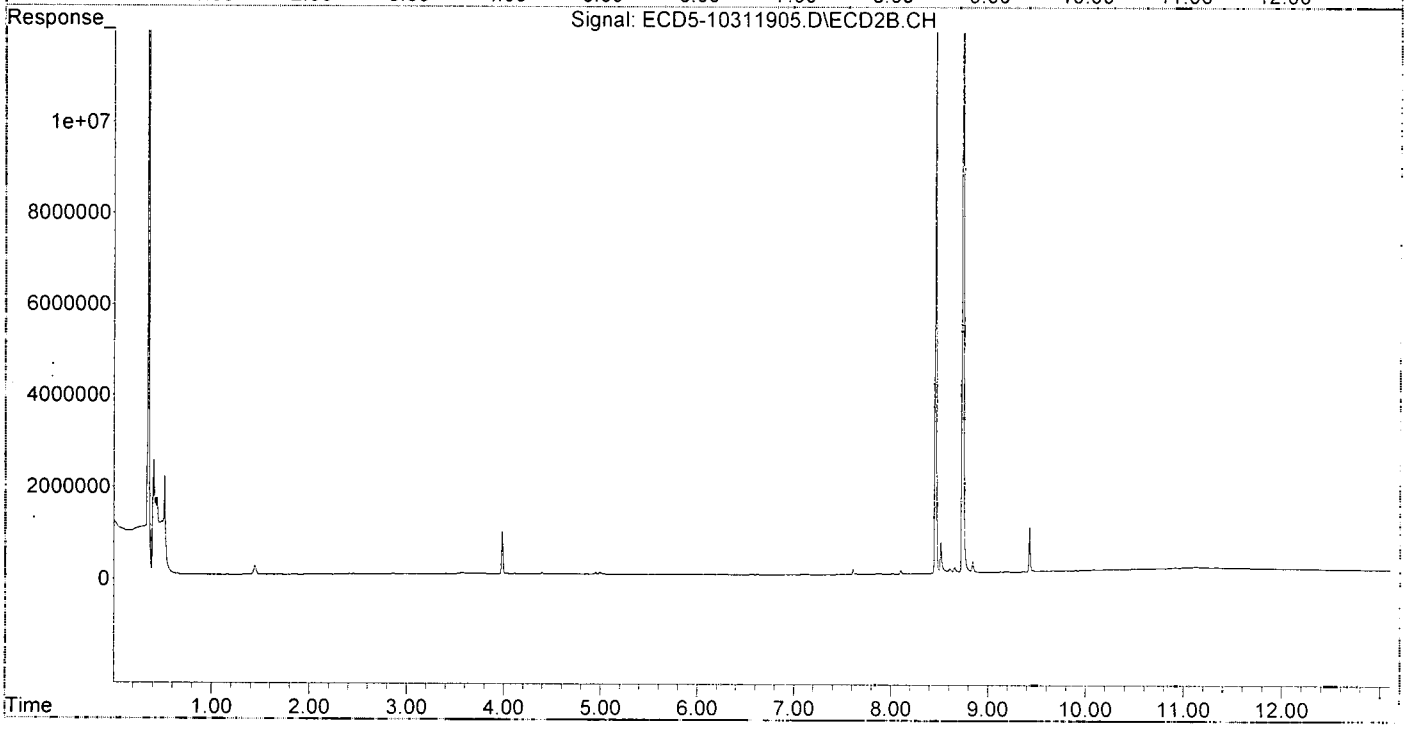
MP 11/1/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311905.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 12:57
Operator : MJB
Sample : 9J31040-BKD2
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:43:06 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:14
Operator : MJB
Sample : 9J31040-CCV1
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:46:51 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

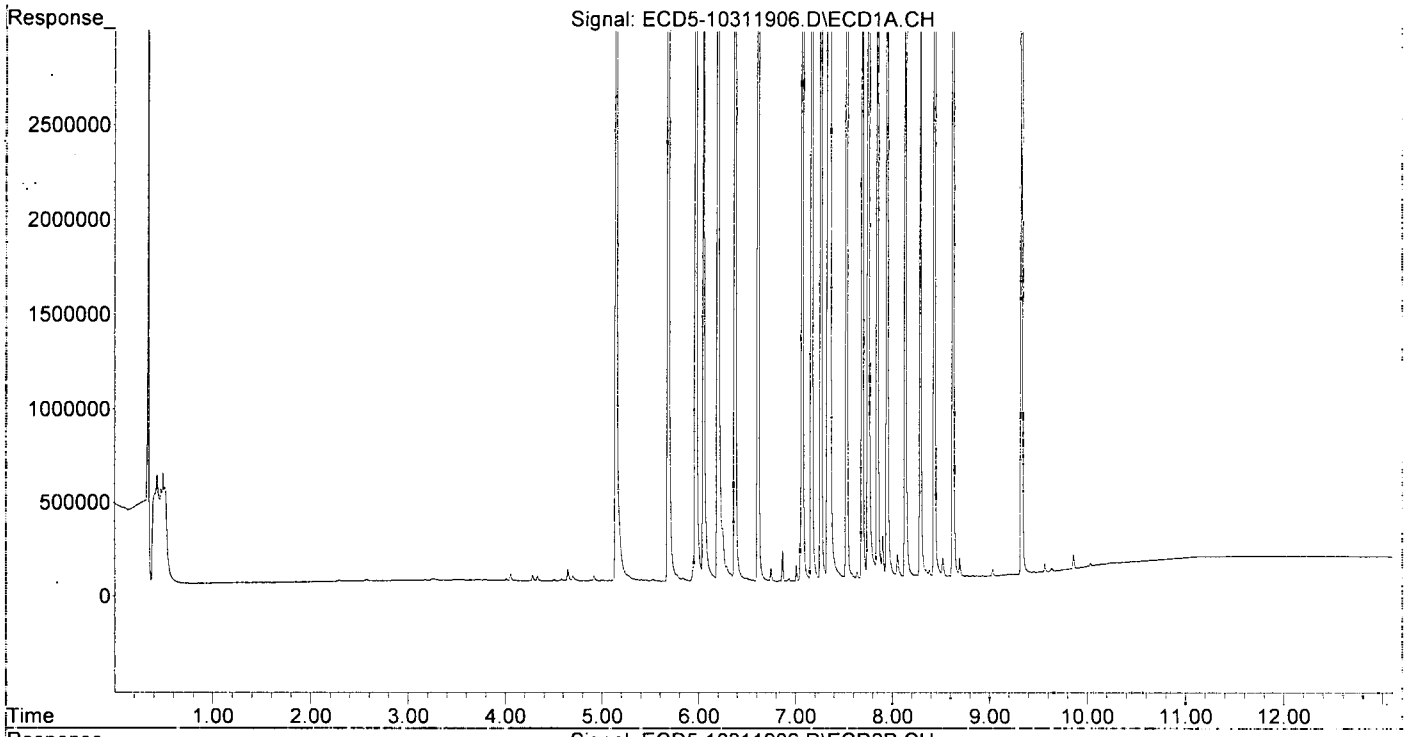
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.147	5.746	8015254	12605380	48.292	42.968	
22)	S	DCBP (S)	9.332	10.254	6630044	9638489	46.989	53.618	
		Target Compounds							
2)		a-BHC	5.686	6.353	11494412	21302981	50.122	51.916	
3)		g-BHC	5.970	6.671	9687367	17816950	48.010	49.949	
4)		b-BHC	6.052	6.740	3821708	6696931	42.283	42.314	
5)		Heptachlor	6.377	7.039	9493866	17666816	52.366	57.739	
6)		d-BHC	6.200	6.991	8413707	15618782	42.776	44.288	
7)		Aldrin	6.615	7.301	10482363	19127399	53.090	58.069	
8)		Heptachlo...	7.073	7.740	9290810	16187578	50.445	53.806	
9)		trans-Chl...	7.169	7.879	9614555	16325858	52.001	52.105	
10)		cis-Chlor...	7.265	7.986	9562480	15891034	52.521	54.562	
11)		Endosulfa...	7.359	8.034	9244540	15411679	54.322	56.007	
12)		4,4'-DDE	7.336	8.101	8285967	13641021	43.950	43.907	
13)		Dieldrin	7.530	8.233	10390512	17820338	54.123	58.591	
14)		Endrin	7.693	8.458	8506406	13483648	57.856	59.708	
15)		4,4'-DDD	7.753	8.514	6654148	11338362	42.345	44.254	
16)		Endosulfa...	7.848	8.606	7380910	12653692	51.395	54.871	
17)		4,4'-DDT	7.949	8.737	6533350	10282793	54.645	54.279	
18)		Endrin Al...	8.137	8.843	6656885	11114808	54.162	56.228	
19)		Endosulfa...	8.436	9.033	7980990	13044297	51.498	52.368	
20)		Methoxychlor	8.292	9.218	3132358	5143049	53.477	56.627	
21)		Endrin Ke...	8.627	9.426	8617166	14547959	51.675	56.537	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.528	0.000	10900	0	0.062	N.D.	#
25)		Oxychlordane	7.011	7.656	85521	6132	0.520	0.022	#
26)		2,4'-DDE	7.073	7.879	9290810	16325858	72.437	76.959	
27)		trans-Non...	7.265	7.939	9562480	65099	53.089	0.216	#
28)		2,4'-DDD	0.000	8.233	0	17820338	N.D.	94.356	#
29)		2,4'-DDT	7.636	8.458	40910	13483648	0.373	75.607	#
30)		cis-Nonac...	7.693f	8.514	8506406	11338362	40.972	33.800	
31)		Mirex	0.000	9.426	0	14547959	N.D.	78.184	#
32)		Chlordane...	7.265f	7.939	9562480	65099	485.661	1.799	#
33)		Chlordane...	7.336	8.034	8285967	15411679	330.588	507.563	#
34)		Chlordane...	7.903f	8.737f	225048	10282793	38.928	1146.881	#
35)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)		Toxaphene...	0.000	8.369	0	11365	N.D.	4.331	#
37)		Toxaphene...	7.693	8.737f	8506406	10282793	5267.325	3124.495	#
38)		Toxaphene...	0.000	8.737	0	10282793	N.D.	2028.838	#
39)		Toxaphene...	0.000	8.843f	0	11114808	N.D.	1331.141	#
40)		Toxaphene...	8.436f	0.000	7980990	0	3329.377	N.D.	#
41)		Toxaphene...	8.523	9.353	100957	152549	31.902	32.114	
42)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

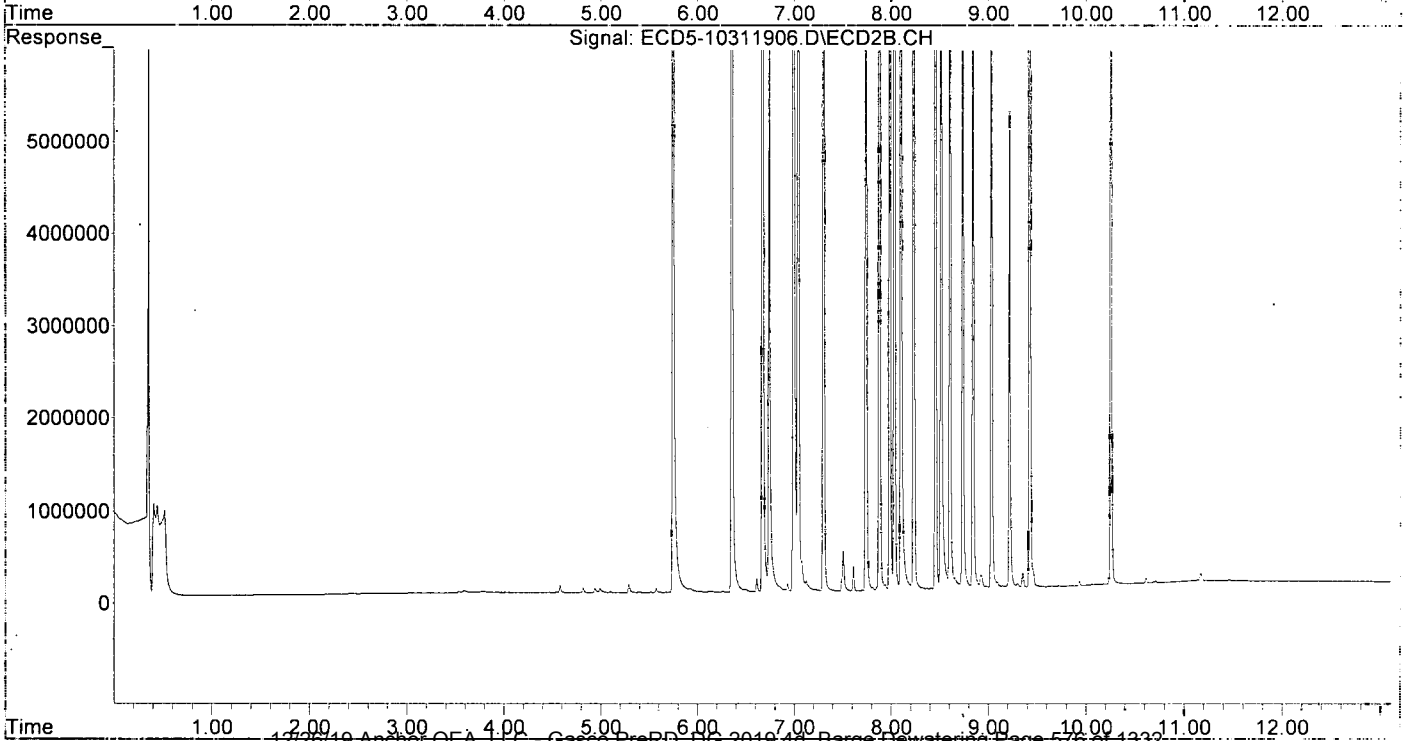
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:14
Operator : MJB
Sample : 9J31040-CCV1
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:46:51 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:31
Operator : MJB
Sample : 9J31040-CCV2
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:46:58 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Q-14
MJB 12/1/19

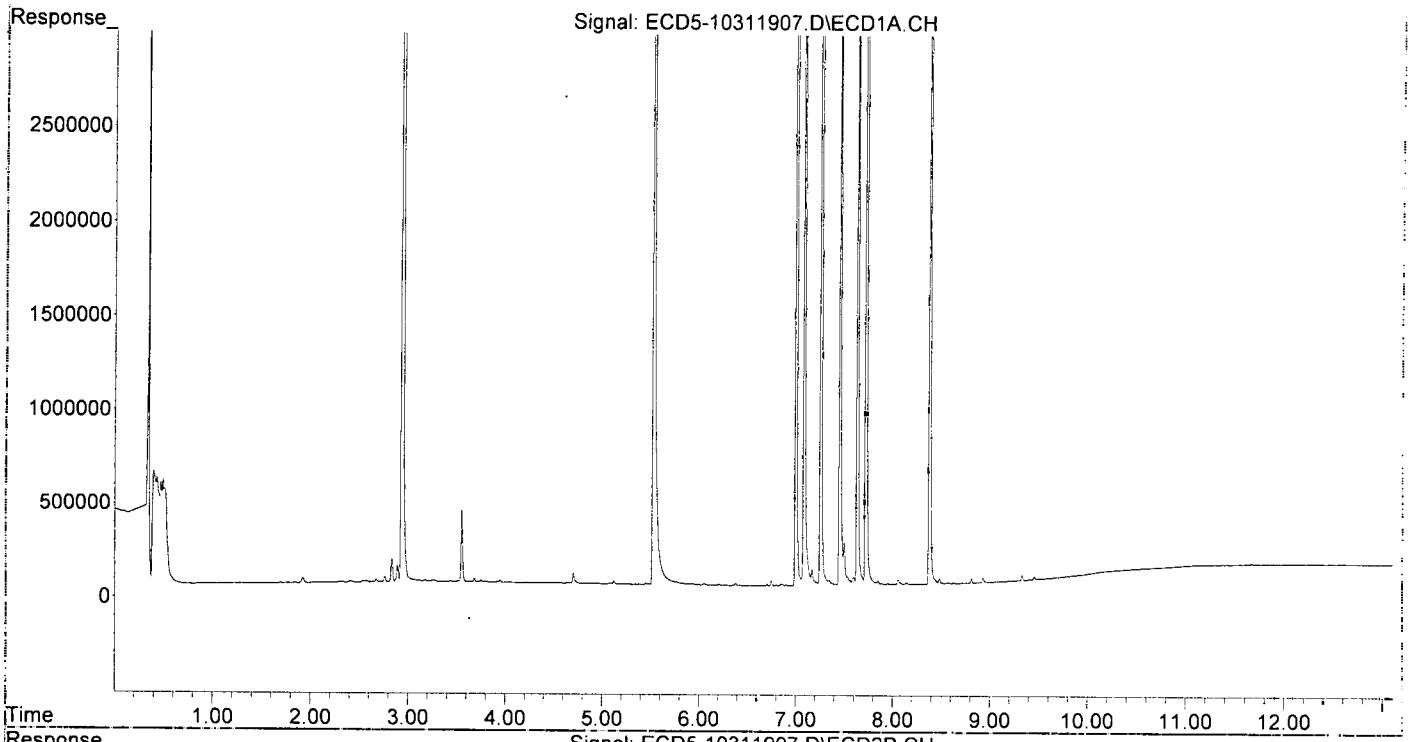
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.122f	0.000	15214	0	0.092	N.D.	#
22)	S DCBP (S)	9.332	10.253	28563	34267	0.202	0.191	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)	b-BHC	6.053	0.000	9358	0	0.104	N.D.	#
5)	Heptachlor	6.377	7.039	12012	21562	0.066	0.070	
6)	d-BHC	6.205	6.994	6185	11465	0.031	0.033	
7)	Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)	Heptachlo...	7.085	7.737	5206187	48141	28.267	0.160	#
9)	trans-Chl...	7.168	7.878	84116	8521476	0.455	27.197	#
10)	cis-Chlor...	7.258	0.000	8541356	0	46.912	N.D.	#
11)	Endosulfa...	7.346	8.050	27295	22353	0.160	0.081	#
12)	4,4'-DDE	7.346	0.000	27295	0	0.145	N.D.	#
13)	Dieldrin	7.500f	8.249	226203	7494430	1.178	24.641	#
14)	Endrin	7.723f	8.470	9754737	8491354	66.347	37.601	#
15)	4,4'-DDD	7.723f	8.505	9754737	16356474	62.076	63.839	
16)	Endosulfa...	7.849	8.599	23347	31739	0.163	0.138	
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.144	8.843	8820	7018	BelowCal	BelowCal	
19)	Endosulfa...	0.000	9.033	0	9617	N.D.	0.039	#
20)	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)	Endrin Ke...	8.629	9.410	3513	8783746	0.021	34.136	#
23)	Hexachlor...	2.939	3.442	9643776	19822023	~~52.773~~	~~52.728~~	
24)	Hexachlor...	5.529	6.212	6837386	10543553	38.784	33.569	
25)	Oxychlordane	7.002	7.668	7470123	13135282	45.401	47.956	
26)	2,4'-DDE	7.085	7.878	5206187	8521476	40.591	40.169	
27)	trans-Non...	7.258	7.942	8541356	14475067	47.383	~~47.989~~	
28)	2,4'-DDD	7.455	8.249	4643720	7494430	40.690	39.682	
29)	2,4'-DDT	7.635	8.470	5406964	8491354	49.294	47.613	
30)	cis-Nonac...	7.723	8.505	9754737	16356474	46.985	48.760	
31)	Mirex	8.381	9.410	5534907	8783746	44.150	47.206	
32)	Chlordane...	7.258	7.942	8541356	14475067	433.800	400.034	
33)	Chlordane...	7.346	8.050	27295	22353	1.089	0.736	
34)	Chlordane...	7.849f	0.000	23347	0	4.038	N.D.	#
35)	Chlordane...	0.000	3.309f	0	251231	N.D.	NoCal	
36)	Toxaphene...	0.000	8.359	0	260072	N.D.	99.103	#
37)	Toxaphene...	7.723f	0.000	9754737	0	6040.315	N.D.	#
38)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)	Toxaphene...	0.000	8.843f	0	7018	N.D.	0.841	#
40)	Toxaphene...	8.482	0.000	29442	0	12.282	N.D.	#
41)	Toxaphene...	8.568f	0.000	4628	0	1.463	N.D.	#
42)	Toxaphene...	0.000	3.309f	0	251231	N.D.	NoCal	

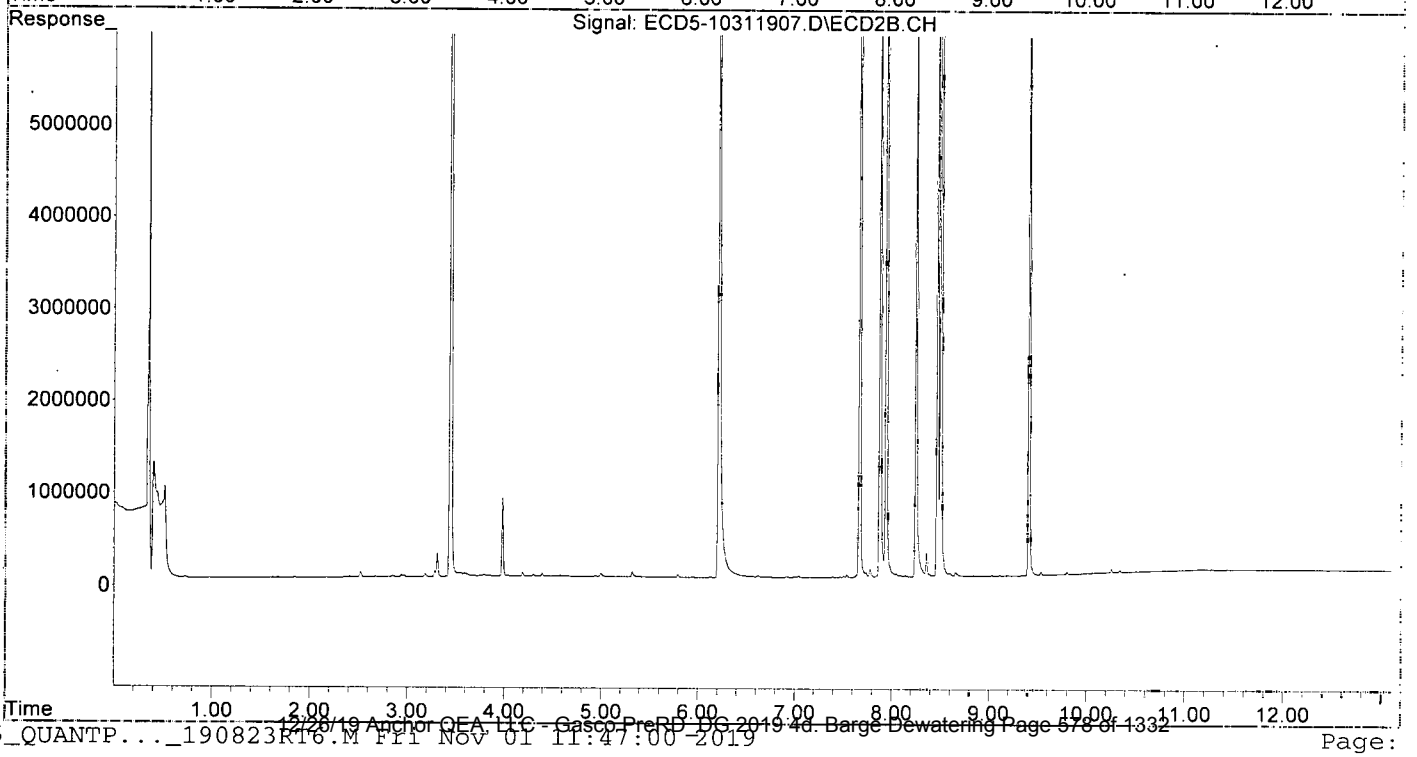
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:31
Operator : MJB
Sample : 9J31040-CCV2
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:46:58 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:49
Operator : MJB
Sample : 9J31040-CCB1
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:04 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Q-14

MJB 11/1/19

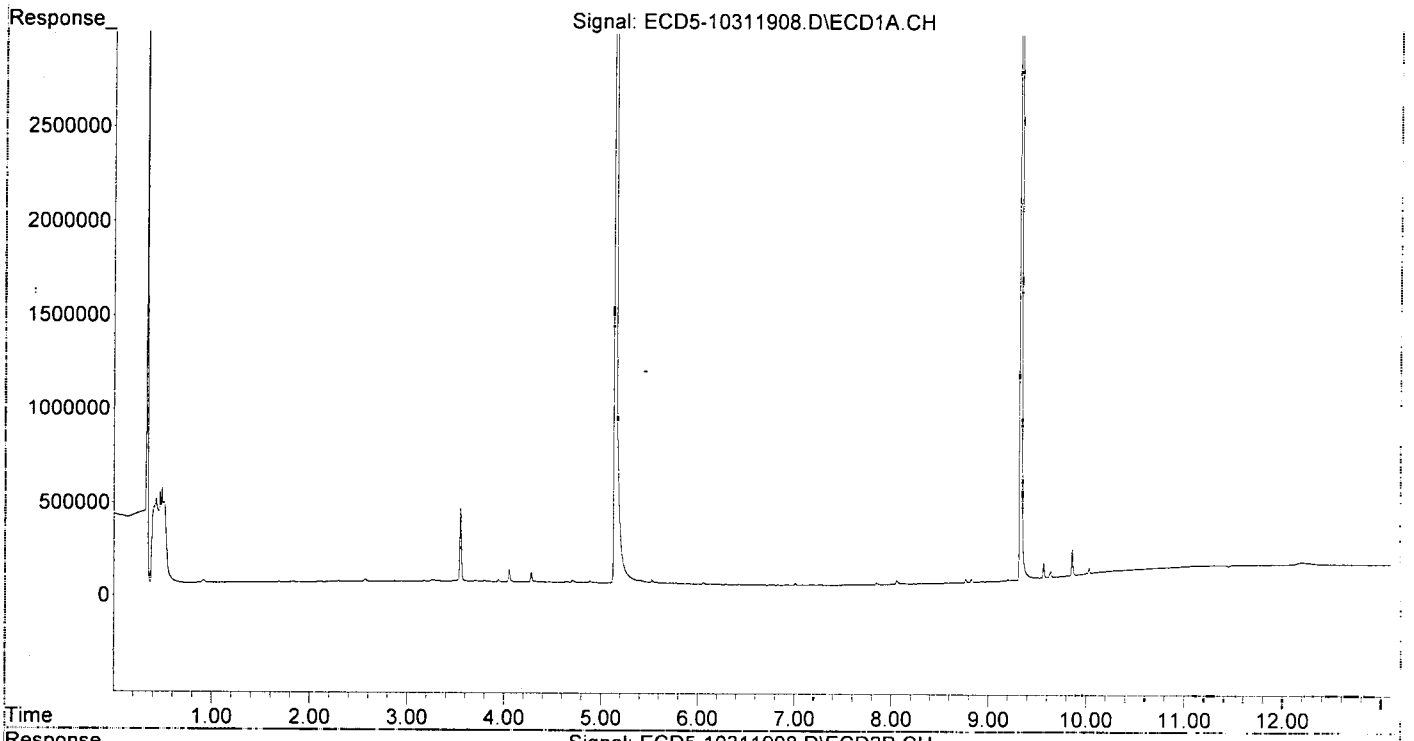
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.145	5.744	15720393	25373181	94.715	86.490	
22)	S DCBP (S)	9.330	10.253	12956774	20196503	91.828	112.351	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)	b-BHC	6.058	0.000	8160	0	0.090	N.D.	#
5)	Heptachlor	0.000	0.000	0	0	N.D.	N.D.	
6)	d-BHC	0.000	0.000	0	0	N.D.	N.D.	
7)	Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)	Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)	trans-Chl...	7.166	0.000	4689	0	0.025	N.D.	#
10)	cis-Chlor...	7.263	0.000	3781	0	0.021	N.D.	#
11)	Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)	Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)	Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)	4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)	Endosulfa...	7.849	8.598	12186	15185	0.085	0.066	
17)	4,4'-DDT	7.936	0.000	1824	0	0.015	N.D.	#
18)	Endrin Al...	8.139	0.000	5771	0	BelowCal	N.D.	
19)	Endosulfa...	8.437	9.032	2529	4017	0.016	0.016	
20)	Methoxychlor	8.279	0.000	4489	0	0.077	N.D.	#
21)	Endrin Ke...	8.629	0.000	1240	0	0.007	N.D.	#
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.529	0.000	20673	0	0.117	N.D.	#
25)	Oxychlordane	7.010	7.640f	10783	18443	0.066	0.067	
26)	2,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
27)	trans-Non...	7.263	0.000	3781	0	87346.679	N.D.	#
28)	2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)	2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)	cis-Nonac...	0.000	0.000	0	0	N.D.	N.D.	
31)	Mirex	8.393	0.000	3163	0	0.025	N.D.	#
32)	Chlordane...	7.263f	0.000	3781	0	0.192	N.D.	#
33)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
34)	Chlordane...	7.849f	0.000	12186	0	2.108	N.D.	#
35)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)	Toxaphene...	8.012	0.000	1999	0	0.594	N.D.	#
39)	Toxaphene...	8.237	0.000	3689	0	1.139	N.D.	#
40)	Toxaphene...	8.437f	0.000	2529	0	1.055	N.D.	#
41)	Toxaphene...	8.566f	0.000	3392	0	1.072	N.D.	#
42)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

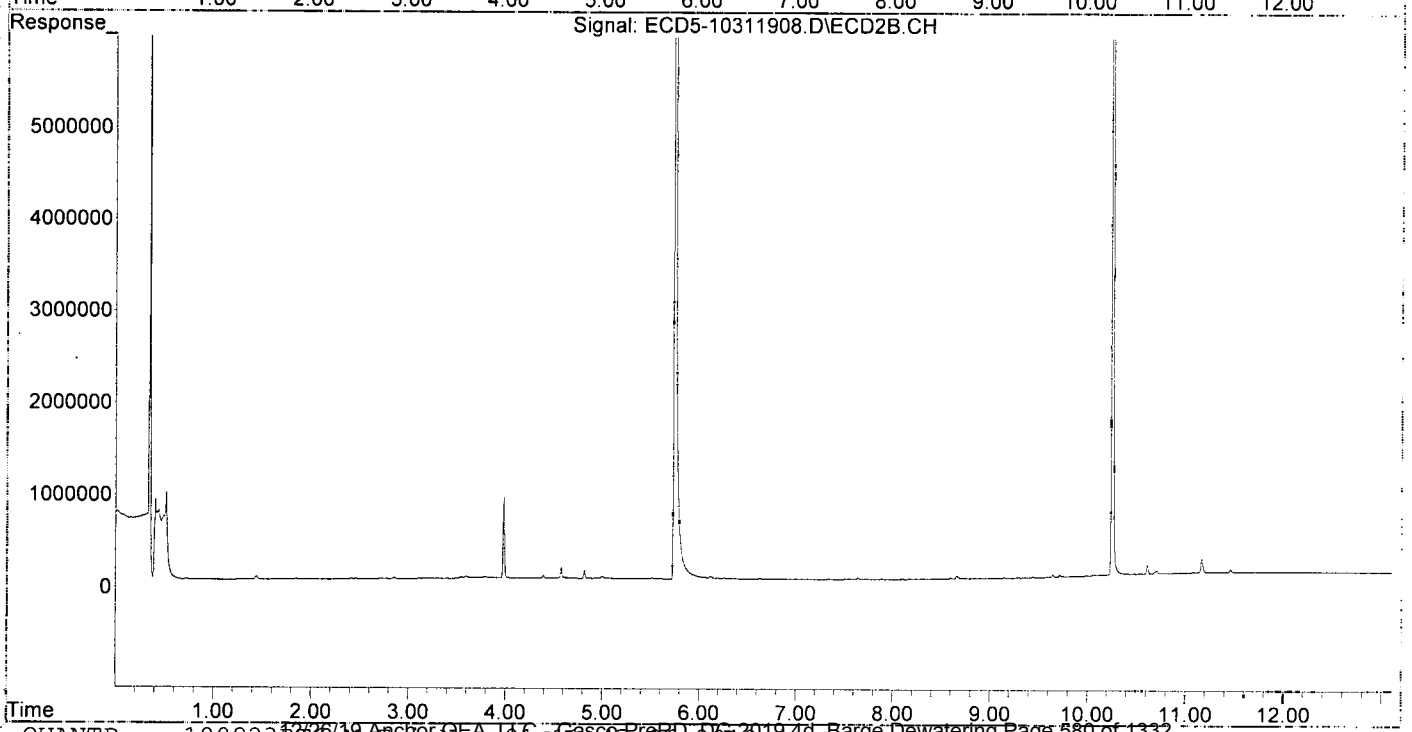
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 13:49
Operator : MJB
Sample : 9J31040-CCB1
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:04 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Pesticide Breakdown Check (Validated 8/8/2013)

Sequence: 9J31040 BKD3
Data File: ECD5-10311910.D

First Column Area Counts		Percent Breakdown	
DDE	815900		
DDD	5239050		
DDT	136820973	**4.24**	**PASS**
Endrin	76850789	**12.17**	**PASS**
Endrin Aldehyde	3276063		
Endrin Ketone	7371802		

Second Column Area Counts		Percent Breakdown	
DDE	1412908		
DDD	8747004		
DDT	209178384	**4.63**	**PASS**
Endrin	112506091	**11.79**	**PASS**
Endrin Aldehyde	5324179		
Endrin Ketone	9714626		

Breakdown must be less than 15% to accept sample data.

MW
11/1/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 14:47
Operator : MJB
Sample : 9J31040-BKD3
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:41:09 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	4,4'-DDE	7.333	815900	NoCal	ng/mL
2)	Endrin	7.690	76850789	NoCal	ng/mL
3)	4,4'-DDD	7.750	5239050	NoCal	ng/mL
4)	4,4'-DDT	7.946	136820973	NoCal	ng/mL
5)	Endrin Aldehyde	8.135	3276063	NoCal	ng/mL
6)	Endrin Ketone	8.625	7371802	NoCal	ng/mL
8)	4,4'-DDE [2C]	8.098	1412908	NoCal	ng/mL
9)	Endrin [2C]	8.455	112506091	NoCal	ng/mL
10)	4,4'-DDD [2C]	8.511	8747004	NoCal	ng/mL
11)	Endrin Aldehyde [2C]	8.840	5324179	NoCal	ng/mL
12)	4,4'-DDT [2C]	8.734	209178384	NoCal	ng/mL
13)	Endrin Ketone [2C]	9.423	9714626	NoCal	ng/mL

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

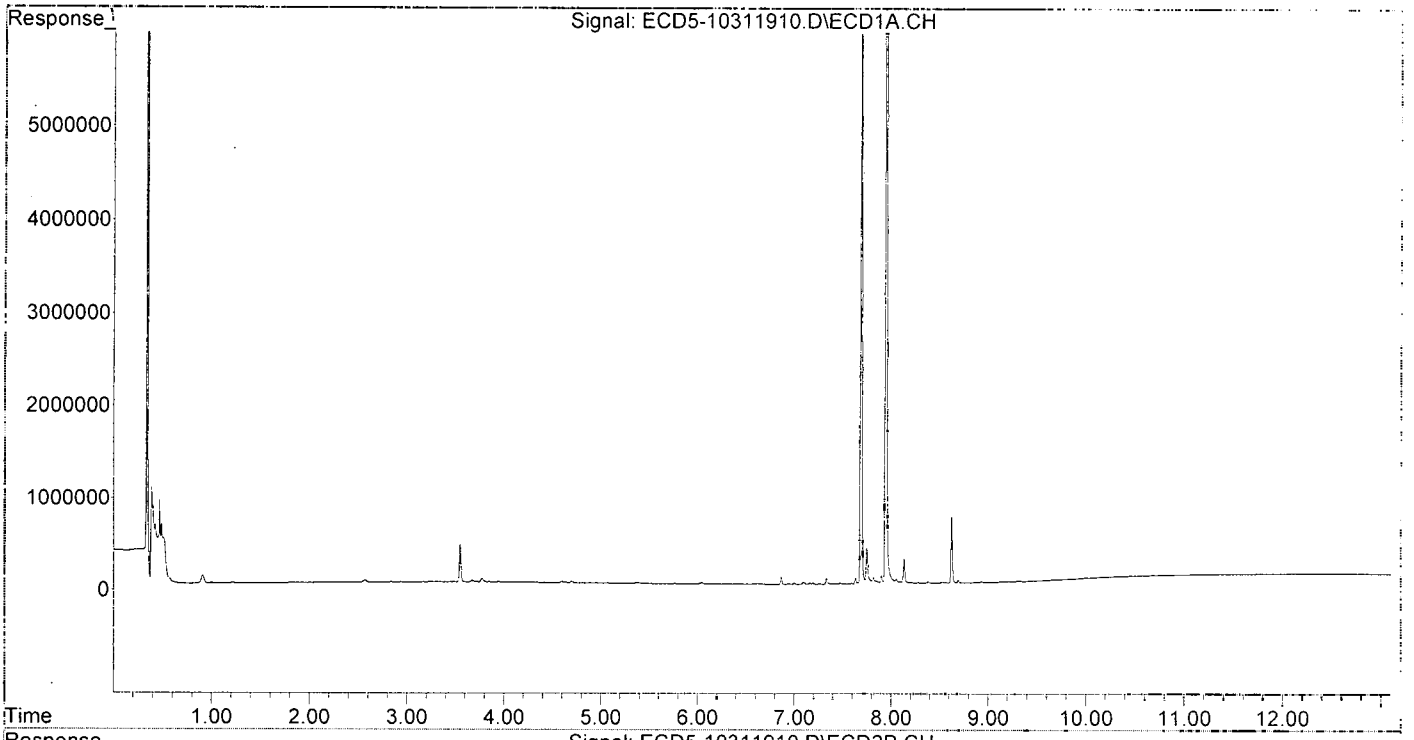
Replaced w/ split.

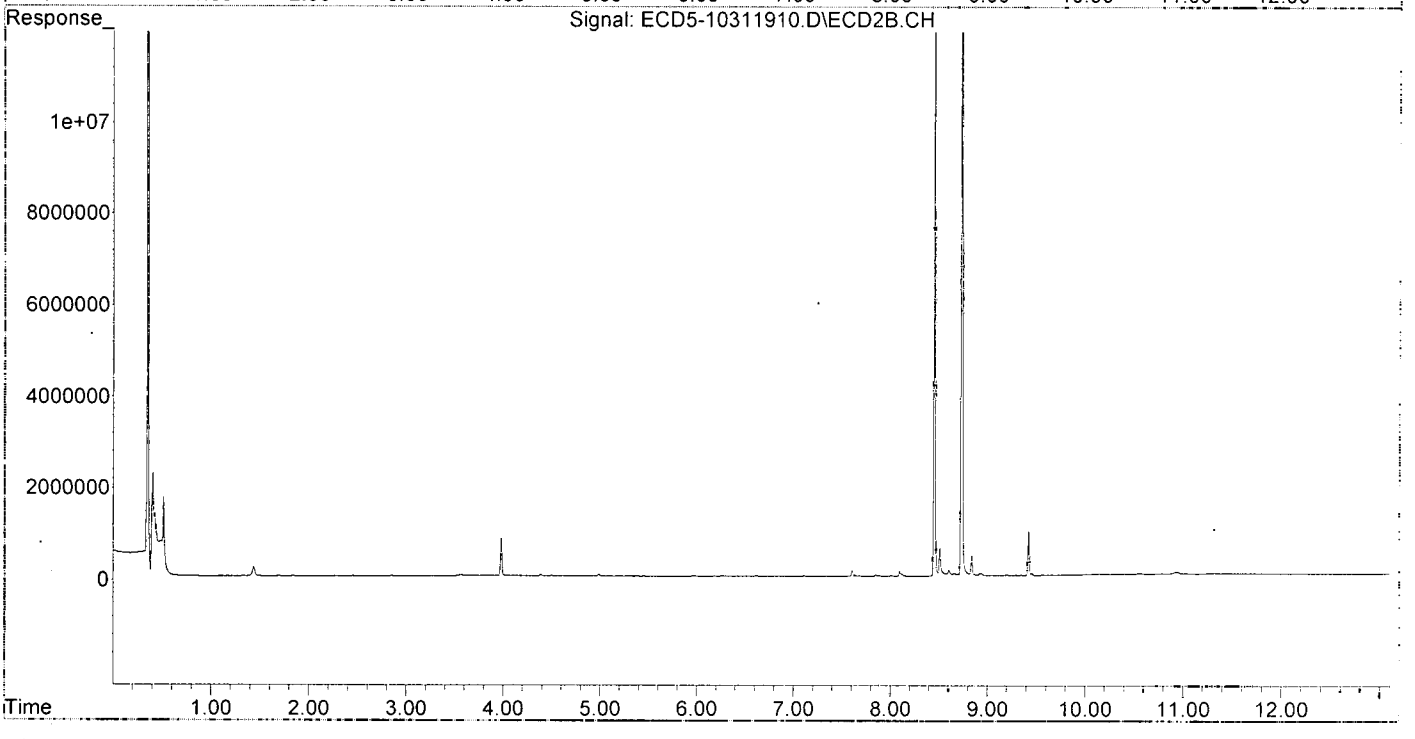
MJB 11/1/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-10\9J31040\
Data File : ECD5-10311910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 14:47
Operator : MJB
Sample : 9J31040-BKD3
Misc : A19J201
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:41:09 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823RT6.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:04
Operator : MJB
Sample : 9J31040-CCV3
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:11 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

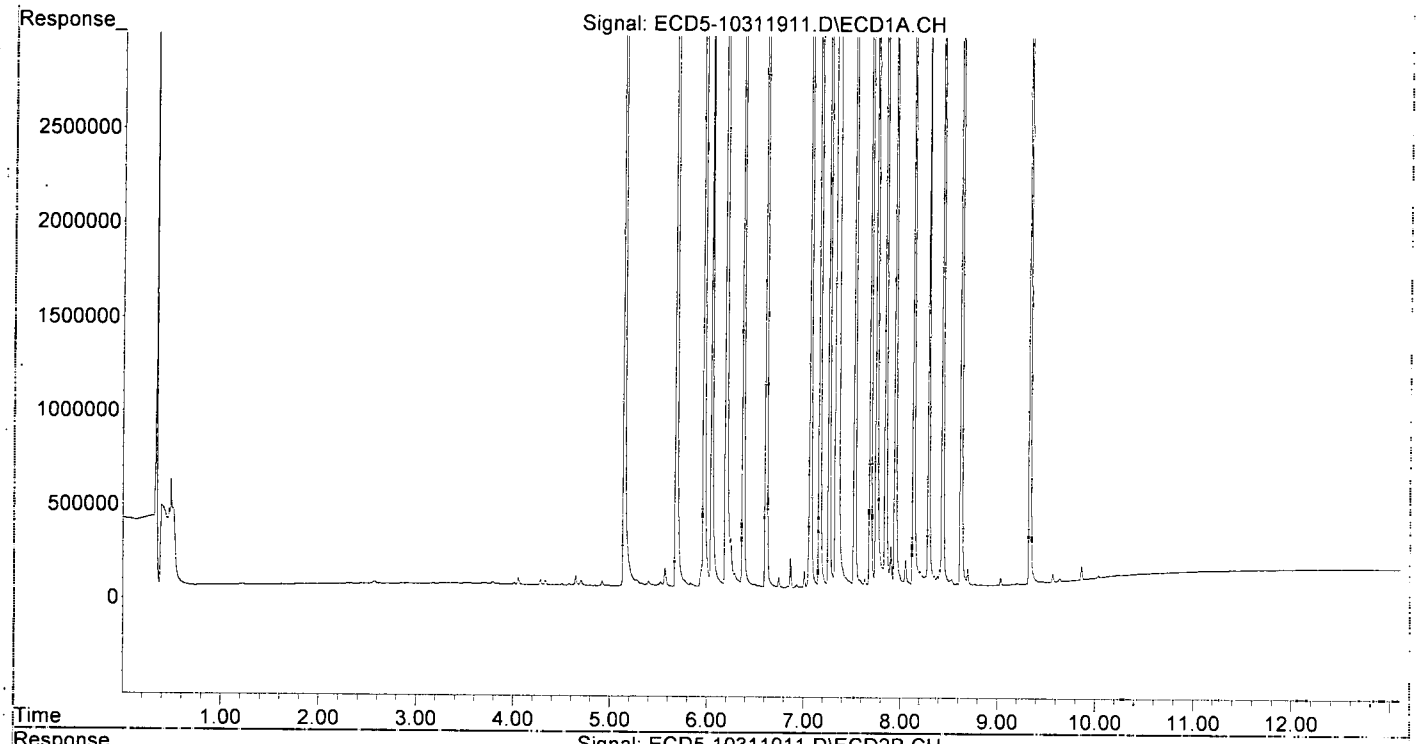
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.144	5.742	8297261	11982680	49.991	40.845	
22)	S	DCBP (S)	9.331	10.253	6556627	9662728	46.468	53.753	
		Target Compounds							
2)		a-BHC	5.683	6.351	11922306	19563096	51.988	47.675	
3)		g-BHC	5.968	6.668	10206025	17432055	50.581	48.870	
4)		b-BHC	6.049	6.737	3896201	6498957	43.107	41.064	
5)		Heptachlor	6.374	7.036	9457729	16401427	52.167	53.603	
6)		d-BHC	6.196	6.988	8682077	15126182	44.141	42.891	
7)		Aldrin	6.611	7.299	10280647	17265130	52.068	52.415	
8)		Heptachlo...	7.070	7.737	9332749	15415784	50.672	51.241	
9)		trans-Chl...	7.166	7.876	9666375	15182555	52.281	48.456	
10)		cis-Chlor...	7.262	7.983	9247533	14807538	50.791	50.842	
11)		Endosulfa...	7.357	8.031	9186941	14379261	53.984	52.255	
12)		4,4'-DDE	7.333	8.098	8755084	13274069	46.439	42.726	
13)		Dieldrin	7.528	8.231	10118707	16490668	52.707	54.219	
14)		Endrin	7.691	8.456	8340605	12303845	56.728	54.484	
15)		4,4'-DDD	7.751	8.511	6872020	10714072	43.732	41.817	
16)		Endosulfa...	7.846	8.604	7234463	12024018	50.375	52.141	
17)		4,4'-DDT	7.947	8.735	6637541	10461003	55.516	55.138	
18)		Endrin Al...	8.135	8.841	6214783	9954480	50.619	50.594	
19)		Endosulfa...	8.434	9.031	7541620	11602623	48.663	46.581	
20)		Methoxychlor	8.291	9.217	3172034	5088489	54.154	56.084	
21)		Endrin Ke...	8.625	9.424	8404886	12804312	50.402	49.761	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.523	0.000	24818	0	0.141	N.D.	#
25)		Oxychlordane	7.008	7.653	90955	5916	0.553	0.022	#
26)		2,4'-DDE	7.070	7.876	9332749	15182555	72.764	71.569	
27)		trans-Non...	7.262	7.938	9247533	55776	51.329	0.185	#
28)		2,4'-DDD	0.000	8.231	0	16490668	N.D.	87.315	#
29)		2,4'-DDT	7.634	8.456	44711	12303845	0.408	68.991	#
30)		cis-Nonac...	7.691f	8.511	8340605	10714072	40.173	31.939	
31)		Mirex	0.000	9.424	0	12804312	N.D.	68.813	#
32)		Chlordane...	7.262f	7.938	9247533	55776	469.666	1.541	#
33)		Chlordane...	7.333	8.031f	8755084	14379261	349.305	473.562	
34)		Chlordane...	7.901f	8.735f	213625	10461003	36.952	1166.757	#
35)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)		Toxaphene...	7.691	8.735f	8340605	10461003	5164.658	3178.646	
38)		Toxaphene...	0.000	8.735	0	10461003	N.D.	2064.000	#
39)		Toxaphene...	0.000	8.841f	0	9954480	N.D.	1192.177	#
40)		Toxaphene...	8.434f	9.031f	7541620	11602623	3146.088	2489.642	
41)		Toxaphene...	8.526	9.345f	33559	183134	10.605	38.553	#
42)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

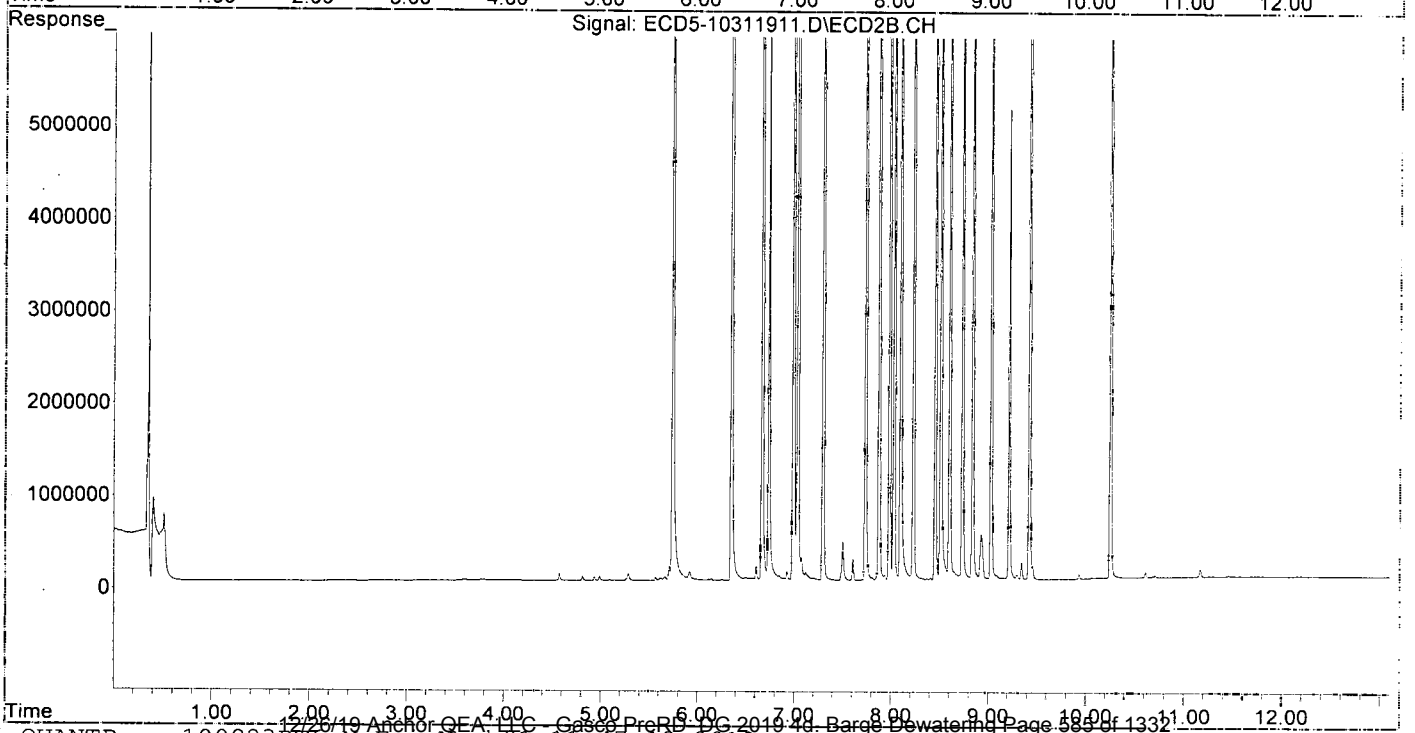
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:04
Operator : MJB
Sample : 9J31040-CCV3
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:11 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:21
Operator : MJB
Sample : 9J31040-CCV4
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:17 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

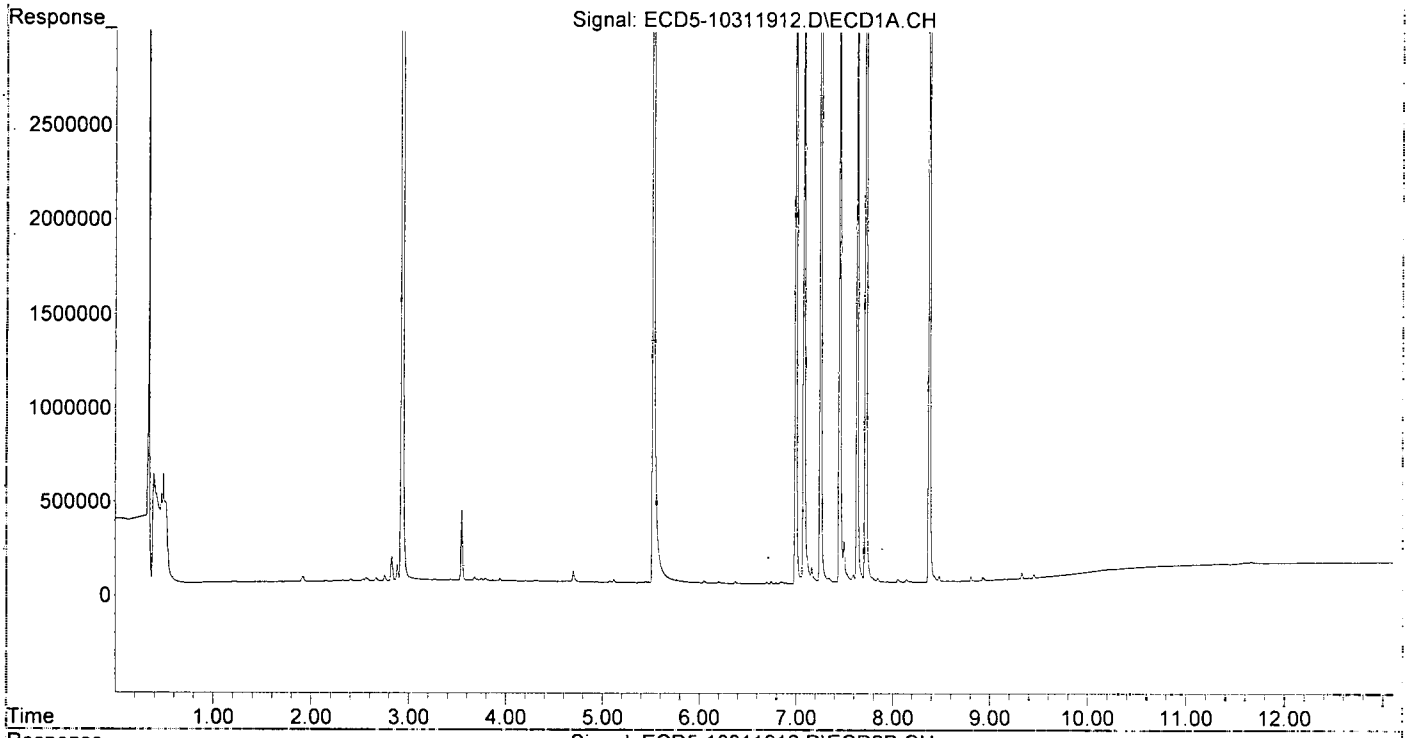
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.117f	0.000	15552	0	0.094	N.D.	#
22)	S DCBP (S)	9.329	10.251	33248	39968	0.236	0.222	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)	b-BHC	6.052	6.741	11699	5030	0.129	0.032	#
5)	Heptachlor	6.374	7.035	12869	21349	0.071	0.070	
6)	d-BHC	6.203	6.990	9577	13238	0.049	0.038	
7)	Aldrin	0.000	7.336f	0	6149	N.D.	0.019	#
8)	Heptachlo...	7.082	7.734	5301847	40317	28.786	0.134	#
9)	trans-Chl...	7.165	7.874	88377	8499206	0.478	27.126	#
10)	cis-Chlor...	7.255	0.000	8435646	0	46.332	N.D.	#
11)	Endosulfa...	7.342	8.047	28516	20649	0.168	0.075	#
12)	4,4'-DDE	7.342	0.000	28516	0	0.151	N.D.	#
13)	Dieldrin	7.498f	8.246	224614	7435470	1.170	24.447	#
14)	Endrin	7.721f	8.467	10023262	8207998	68.173	36.346	#
15)	4,4'-DDD	7.721f	8.501	10023262	15739480	63.785	61.431	
16)	Endosulfa...	7.847	8.598	24092	28348	0.168	0.123	
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.143	8.841	15763	10295	BelowCal	BelowCal	
19)	Endosulfa...	0.000	9.030	0	13274	N.D.	0.053	#
20)	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)	Endrin Ke...	8.626	9.407	5377	8336465	0.032	32.398	#
23)	Hexachlor...	2.935	3.438	9609752	19617857	52.587	52.185	
24)	Hexachlor...	5.524	6.208	7431463	9941530	42.154	31.652	Q-31
25)	Oxychlordane	6.998	7.665	7583407	12203584	46.089	44.554	
26)	2,4'-DDE	7.082	7.874	5301847	8499206	41.336	40.064	
27)	trans-Non...	7.255	7.939	8435646	13837763	46.793	45.876	
28)	2,4'-DDD	7.452	8.246	4705965	7435470	41.235	39.370	Q-21
29)	2,4'-DDT	7.632	8.467	5275011	8207998	48.091	46.025	
30)	cis-Nonac...	7.721	8.501	10023262	15739480	48.278	46.921	
31)	Mirex	8.378	9.407	5586611	8336465	44.562	44.802	
32)	Chlordane...	7.255	7.939	8435646	13837763	428.431	382.422	
33)	Chlordane...	7.342	8.047	28516	20649	1.138	0.680	#
34)	Chlordane...	7.847f	0.000	24092	0	4.167	N.D.	#
35)	Chlordane...	0.000	3.305f	0	249732	N.D.	NoCal	
36)	Toxaphene...	0.000	8.356	0	237419	N.D.	90.471	#
37)	Toxaphene...	7.721f	0.000	10023262	0	6206.591	N.D.	#
38)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)	Toxaphene...	0.000	8.841f	0	10295	N.D.	1.233	#
40)	Toxaphene...	8.479	9.030f	30427	13274	12.693	2.848	#
41)	Toxaphene...	8.567f	9.407f	4096	8336465	1.294	1754.970	#
42)	Toxaphene...	0.000	3.305f	0	249732	N.D.	NoCal	

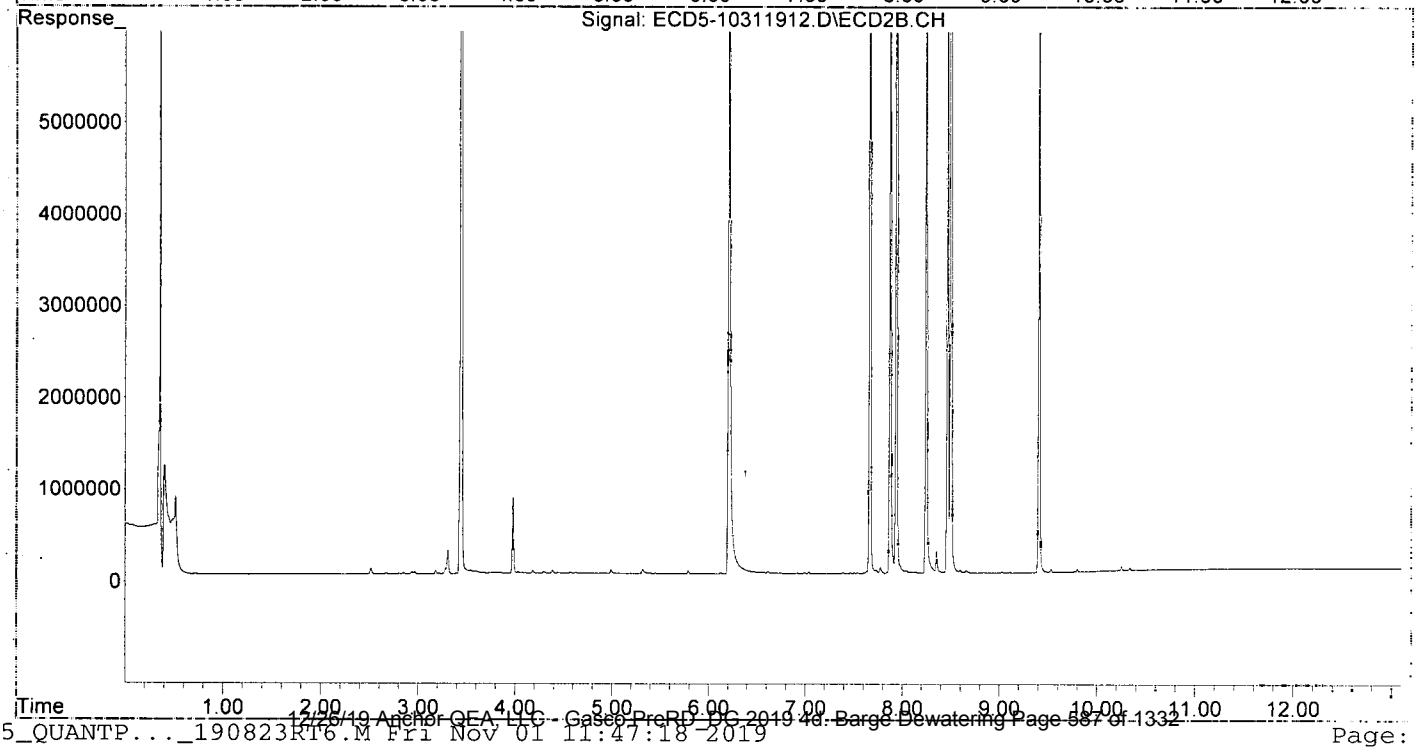
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:21
Operator : MJB
Sample : 9J31040-CCV4
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:17 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:39
Operator : MJB
Sample : 9J31040-CCB2
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:23 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

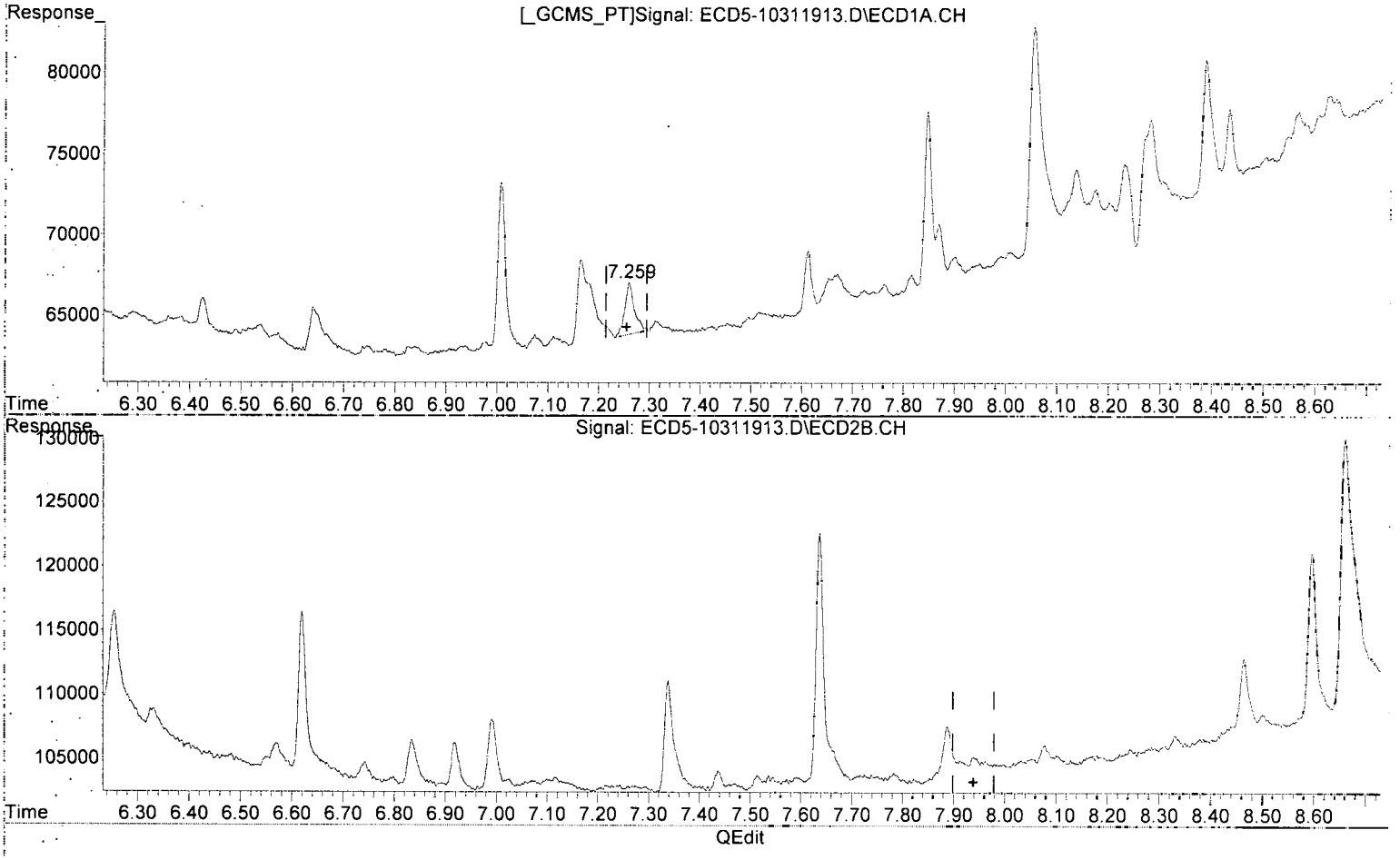
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.141	5.739	16112138	24560357	97.075	83.719	
22)	S DCBP (S)	9.328	10.250	12700964	19928633	90.015	110.861	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)	b-BHC	6.054	0.000	9707	0	0.107	N.D.	#
5)	Heptachlor	0.000	0.000	0	0	N.D.	N.D.	
6)	d-BHC	0.000	0.000	0	0	N.D.	N.D.	
7)	Aldrin	0.000	7.338f	0	8532	N.D.	0.026	#
8)	Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)	trans-Chl...	7.166	0.000	5048	0	0.027	N.D.	#
10)	cis-Chlor...	7.260	0.000	3107	0	0.017	N.D.	#
11)	Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)	4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)	Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)	Endrin	0.000	8.464	0	5441	N.D.	0.024	#
15)	4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)	Endosulfa...	7.848	8.596	10316	12712	0.072	0.055	
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.138	0.000	5316	0	BelowCal	N.D.	
19)	Endosulfa...	8.434	9.029	4896	5654	0.032	0.023	
20)	Methoxychlor	8.281	0.000	7272	0	0.124	N.D.	#
21)	Endrin Ke...	8.627	0.000	2017	0	0.012	N.D.	#
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.524	6.190	22476	5799	0.127	0.018	#
25)	Oxychlordane	7.008	7.636f	10330	19329	0.063	0.071	
26)	2,4'-DDE	0.000	0.000	0	0	N.D. Q-PQL	N.D.	
27)	trans-Non...	7.260	0.000	3107	0	~~87346.683~~	N.D.	#
28)	2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)	2,4'-DDT	7.612	8.464	3406	5441	0.031	0.031	
30)	cis-Nonac...	0.000	8.464f	0	5441	N.D.	0.016	#
31)	Mirex	8.389	0.000	8864	0	0.071	N.D.	#
32)	Chlordane...	7.260f	0.000	3107	0	0.158	N.D.	#
33)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
34)	Chlordane...	7.848f	0.000	10316	0	1.784	N.D.	#
35)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)	Toxaphene...	8.232	0.000	5189	0	1.602	N.D.	#
40)	Toxaphene...	8.434f	9.029f	4896	5654	2.043	1.213	#
41)	Toxaphene...	8.567f	0.000	2220	0	0.701	N.D.	#
42)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:39
Operator : MJB
Sample : 9J31040-CCB2
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:23 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(27) trans-Nonachlor

7.260min 87346.683 ng/mL

response 3107

MJH 10/1/19

(27) trans-Nonachlor #2

0.000min 0.000 ng/mL

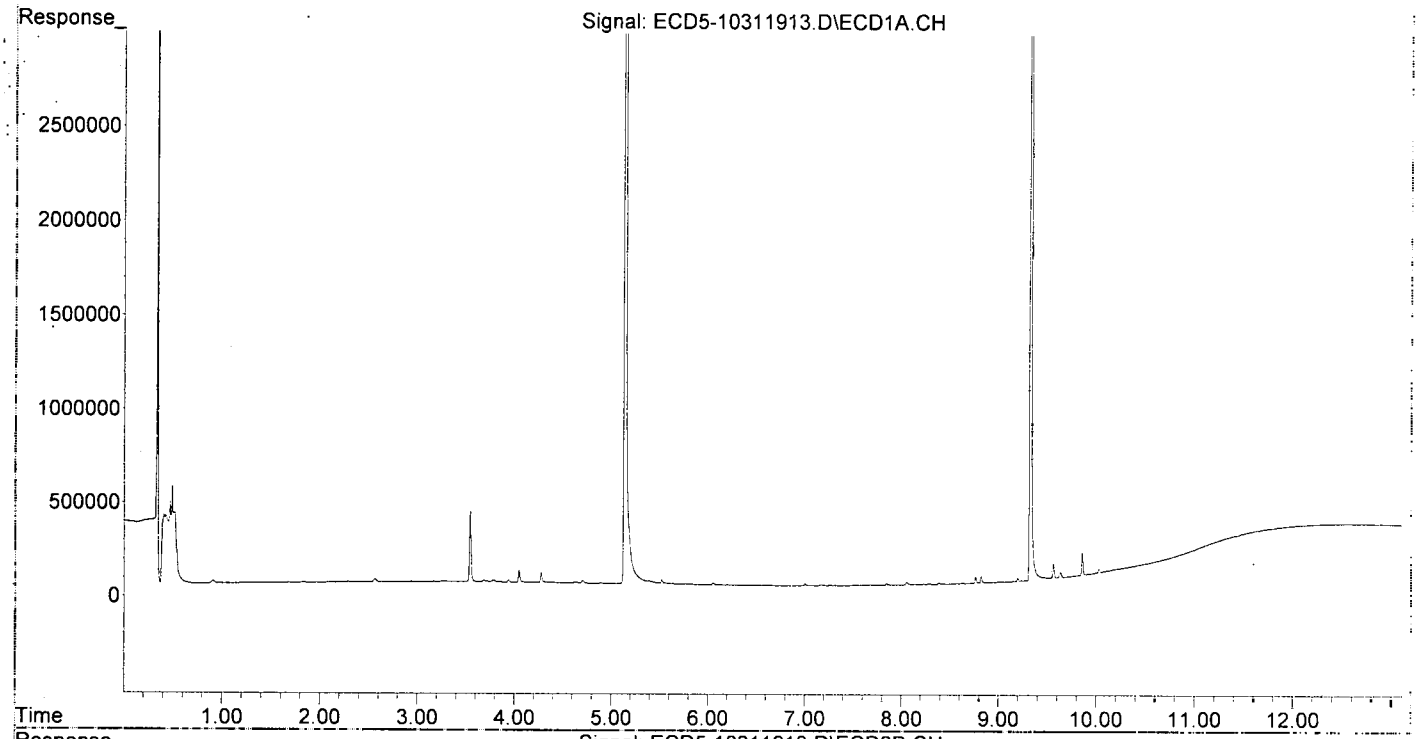
response 0

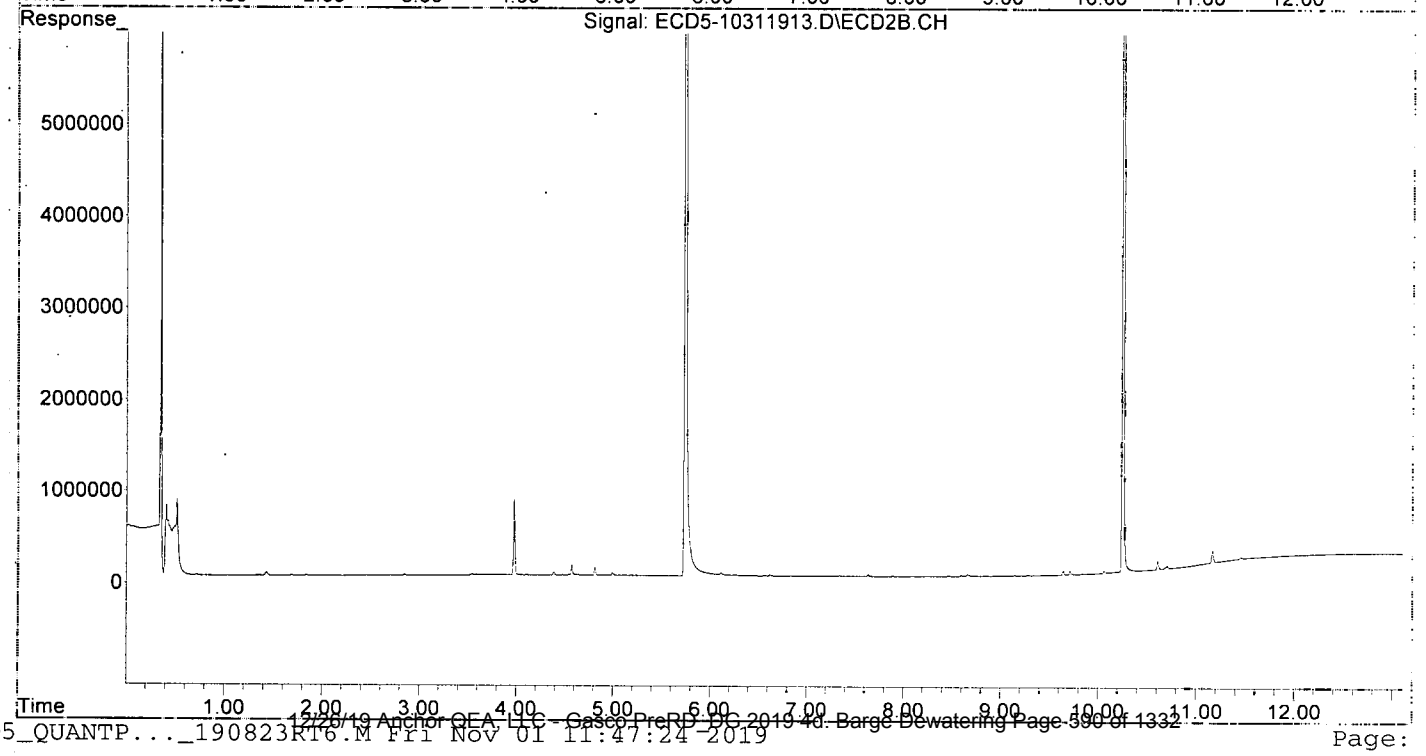
(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:39
Operator : MJB
Sample : 9J31040-CCB2
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:23 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 12:58:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

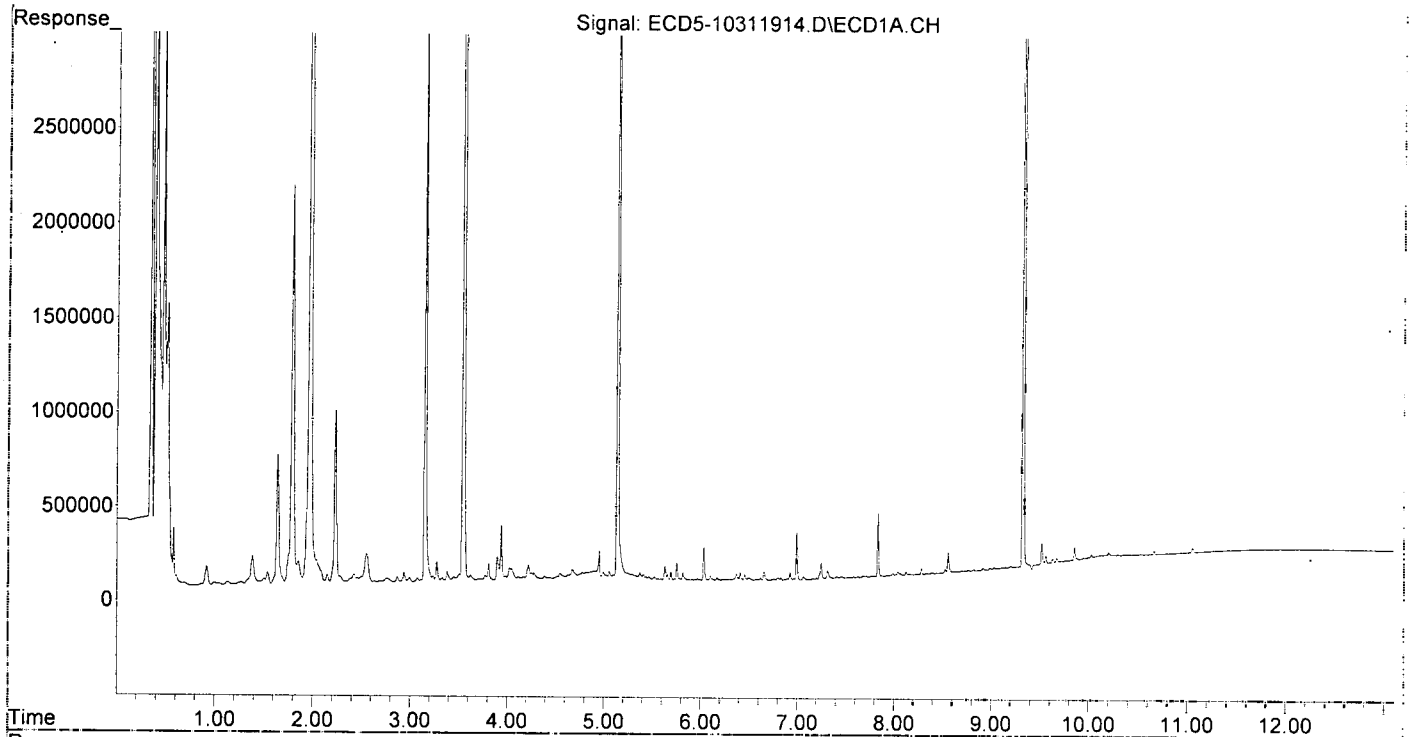
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.140	5.738	6115581	9487087	36.846	32.339	
22)	S	DCBP (S)	9.325	10.248	6994105	10143152	49.569	56.425	
		Target Compounds							
2)		a-BHC	5.693	6.311f	50107	70661	0.218	0.172	
3)		g-BHC	5.969	0.000	9406	0	0.047	N.D.	#
4)		b-BHC	6.043	6.726	70746	17766	0.783m	0.112	#
5)		Heptachlor	6.370	7.014f	34611	11633	0.191	0.038	#
6)		d-BHC	6.170f	6.967f	15178	44329	0.077	0.126	#
7)		Aldrin	6.619	7.285	11731	13933	0.059	0.042	
8)		Heptachlo...	7.062	7.720	15297	64077	0.083	0.213	#
9)		trans-Chl...	7.161	7.879	3528	143616	0.019	0.458	#
10)		cis-Chlor...	7.248	7.965	87380	19283	0.480	0.066	#
11)		Endosulfa...	0.000	8.018	0	42192	N.D.	0.153	#
12)		4,4'-DDE	7.315	8.075f	41174	5351	0.218	0.017m	#
13)		Dieldrin	7.530	8.244	3062	7119	0.016	0.023	#
14)		Endrin	7.680	8.463	7889	6537	0.054	0.029	#
15)		4,4'-DDD	7.762	8.499	2980	5126	0.019	0.020	
16)		Endosulfa...	7.841	8.596	187328	158588	1.304m	0.688m	#
17)		4,4'-DDT	7.961	8.737	6588	4795	0.055m	BelowCal	#
18)		Endrin Al...	8.124	8.828	16781	18153	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.026	0	3163	N.D.	0.013	#
20)		Methoxychlor	8.283	9.211	33037	48304	0.564	0.414	
21)		Endrin Ke...	8.625	9.428	7465	69841	0.045	0.271	#
23)		Hexachlor...	2.938	3.415f	60388	4891547	0.330	13.012	#
24)		Hexachlor...	5.521	6.190	21895	59357	0.124	0.189	#
25)		Oxychlordane	6.994	7.661	252368	13723	1.534	0.050	#
26)		2,4'-DDE	7.062	7.879	15297	143616	0.119	0.677	#
27)		trans-Non...	7.248	7.948	87380	19311	0.171	0.064	#
28)		2,4'-DDD	7.456	8.244	9686	7119	0.085	0.038	#
29)		2,4'-DDT	7.628	8.463	3736	6537	0.034	0.037	
30)		cis-Nonac...	7.717	8.499	4641	5126	0.022	0.015	
31)		Mirex	8.390	9.428f	8629	69841	0.069	0.375	#
32)		Chlordane...	7.248	7.948	87380	19311	4.438	0.534	#
33)		Chlordane...	7.315	8.049	41174	11442	1.643	0.377	#
34)		Chlordane...	0.000	8.711	0	6499	N.D.	0.725	#
35)		Chlordane...	3.329f	3.354f	28725	49767	NoCal	NoCal	
36)		Toxaphene...	7.409	0.000	9846	0	10.993	N.D.	#
37)		Toxaphene...	7.680	8.711	7889	6499	4.885	1.975	#
38)		Toxaphene...	7.990	8.737	12220	4795	3.629	0.946	#
39)		Toxaphene...	8.233	8.828	2029	18153	0.626	2.174	#
40)		Toxaphene...	0.000	9.026f	0	3163	N.D.	0.679	#
41)		Toxaphene...	8.527	9.350f	21788	3024	6.885	0.637	#
42)		Toxaphene...	3.329f	3.354	28725	49767	NoCal	NoCal	

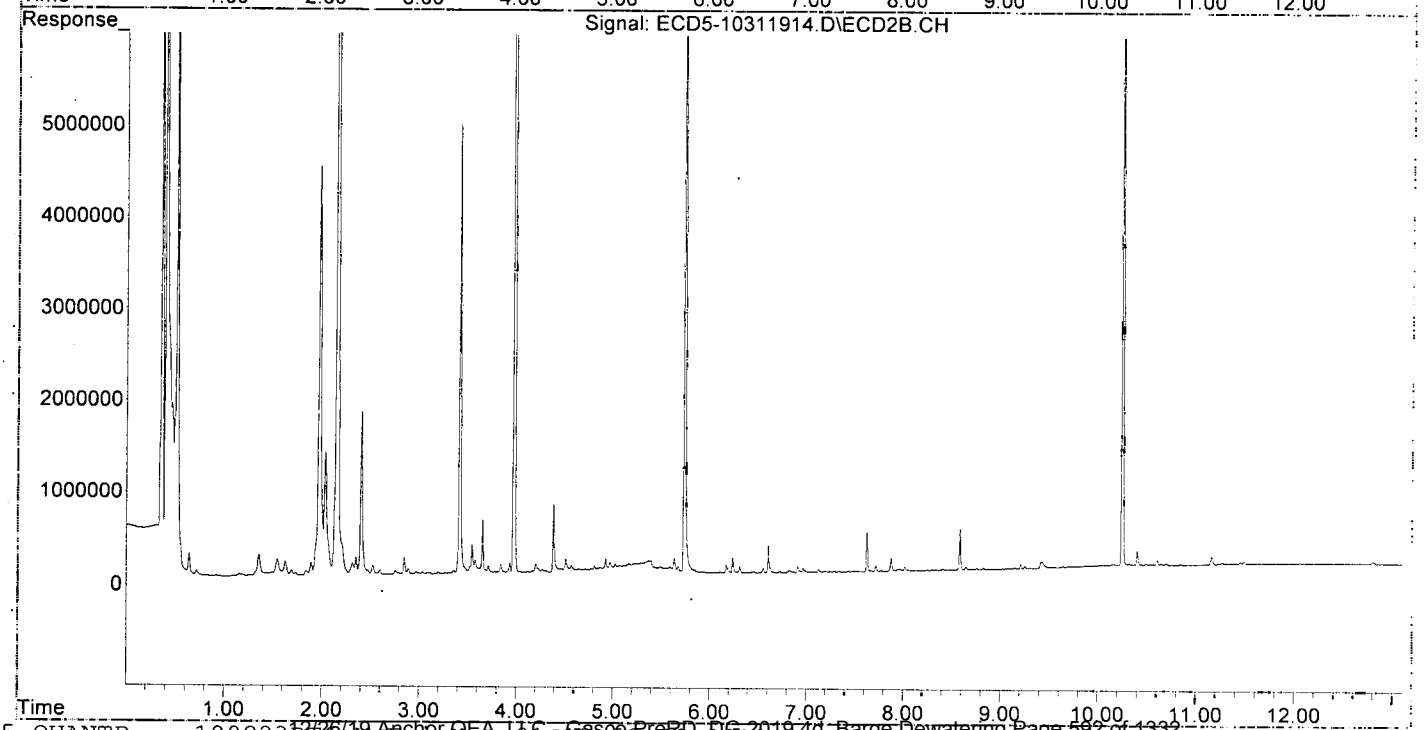
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 12:58:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

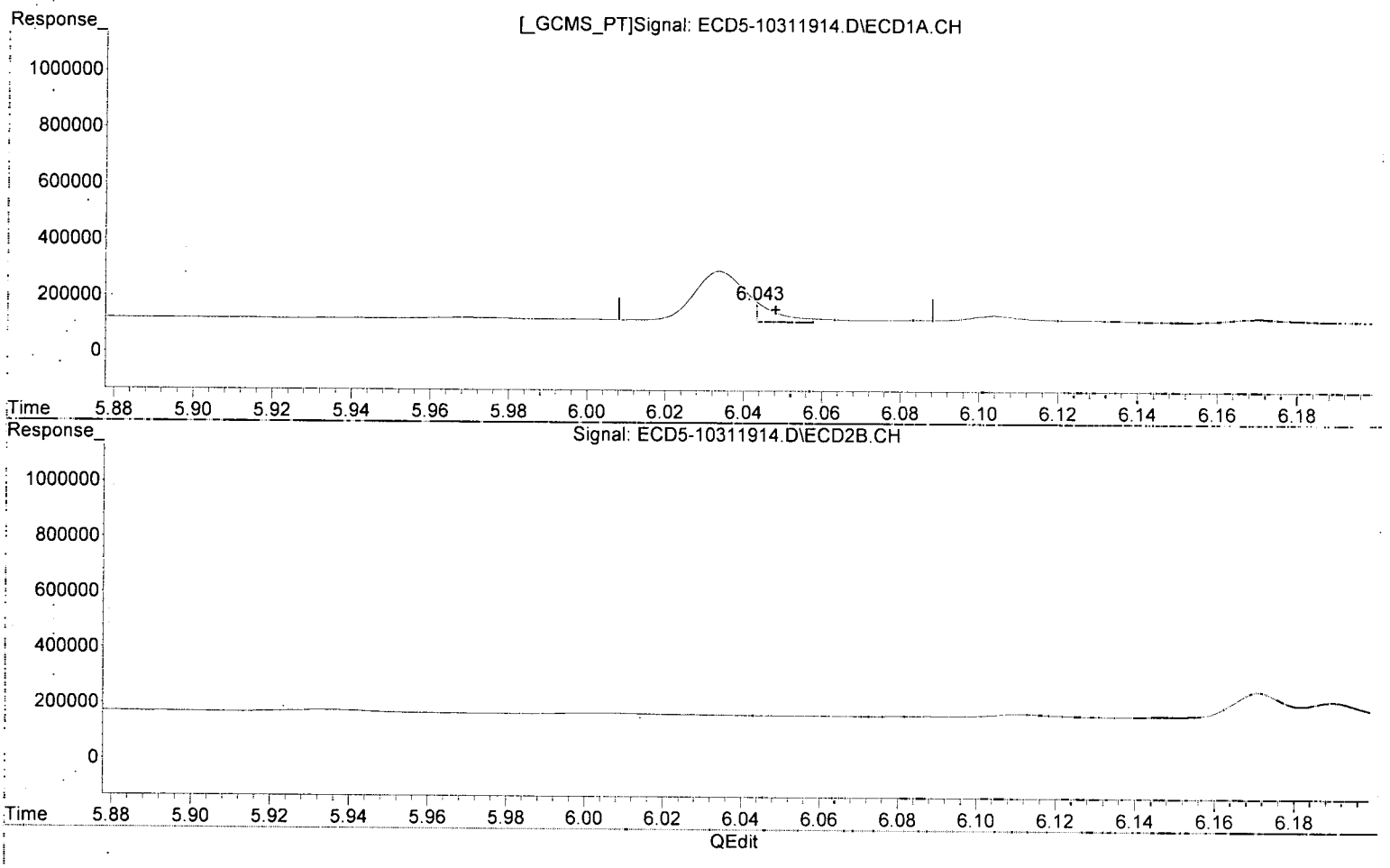




Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(4) b-BHC

6.043min 0.783 ng/mL (m)

response 70746

WB 11/1/19

(4) b-BHC #2

6.726min 0.112 ng/mL

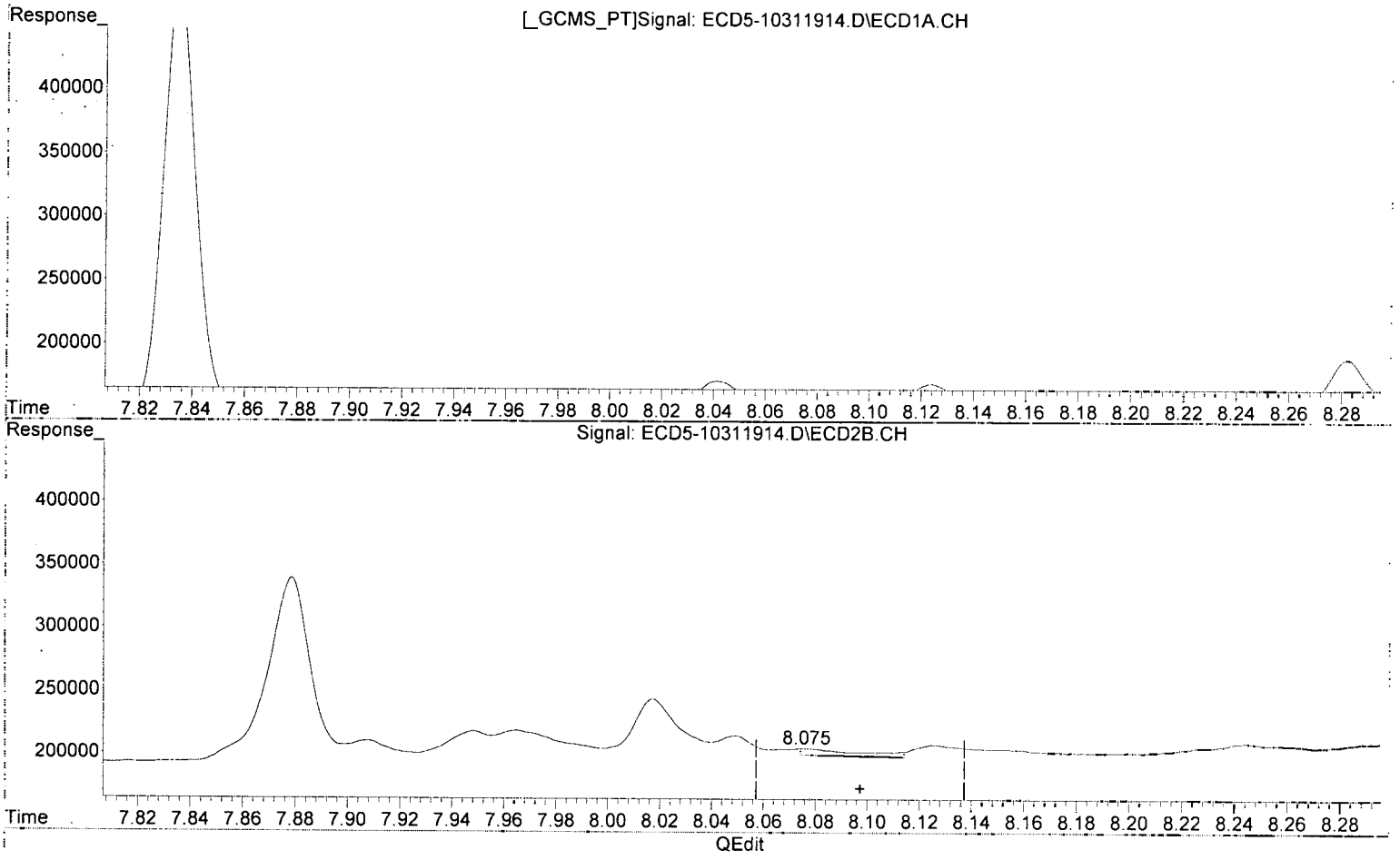
response 17766

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(12) 4,4'-DDE

7.315min 0.218 ng/mL

response 41174

MB 11/1/19

(12) 4,4'-DDE #2

8.075min 0.017 ng/mL m

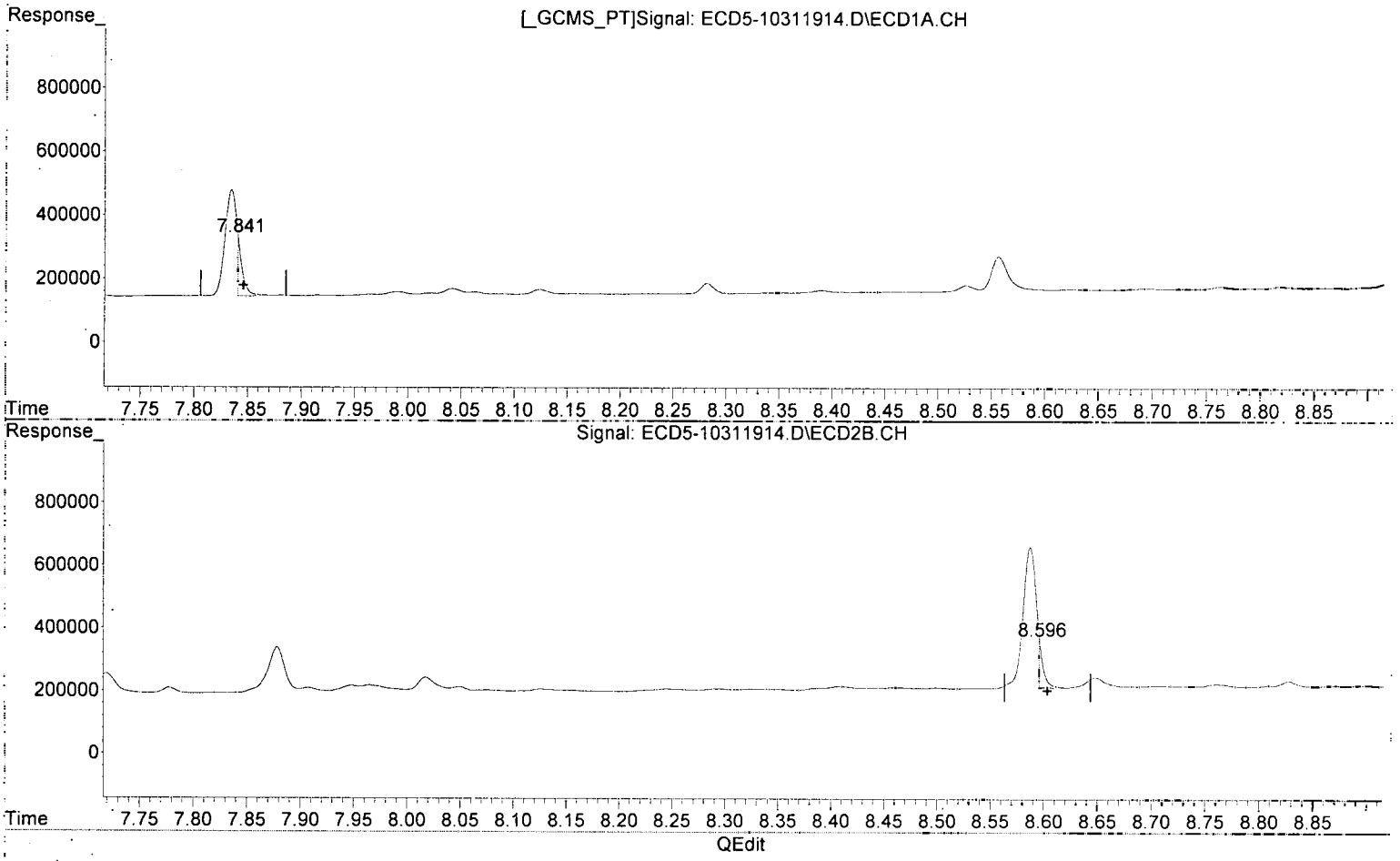
response 5351

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(16) Endosulfan II

7.841min 1.304 ng/mL m

response 187328

MJB 11/1/19

(16) Endosulfan II #2

8.596min 0.688 ng/mL m

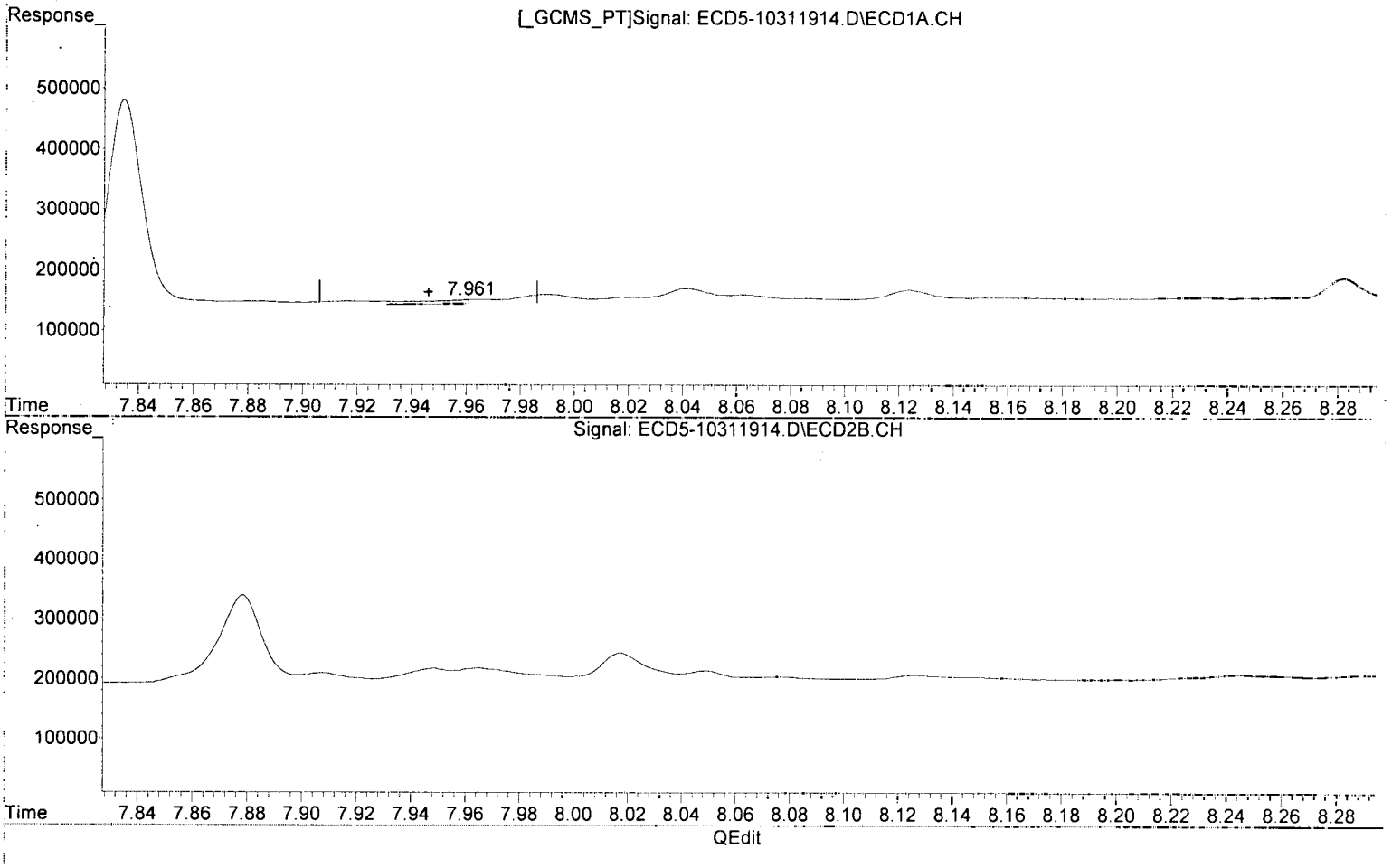
response 158588

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(17) 4,4'-DDT

7.961min 0.055 ng/mL m

response 6588

MJH 11/1/19

(17) 4,4'-DDT #2

8.737min -0.010 ng/mL

response 4795

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MI LWB 11/1/19

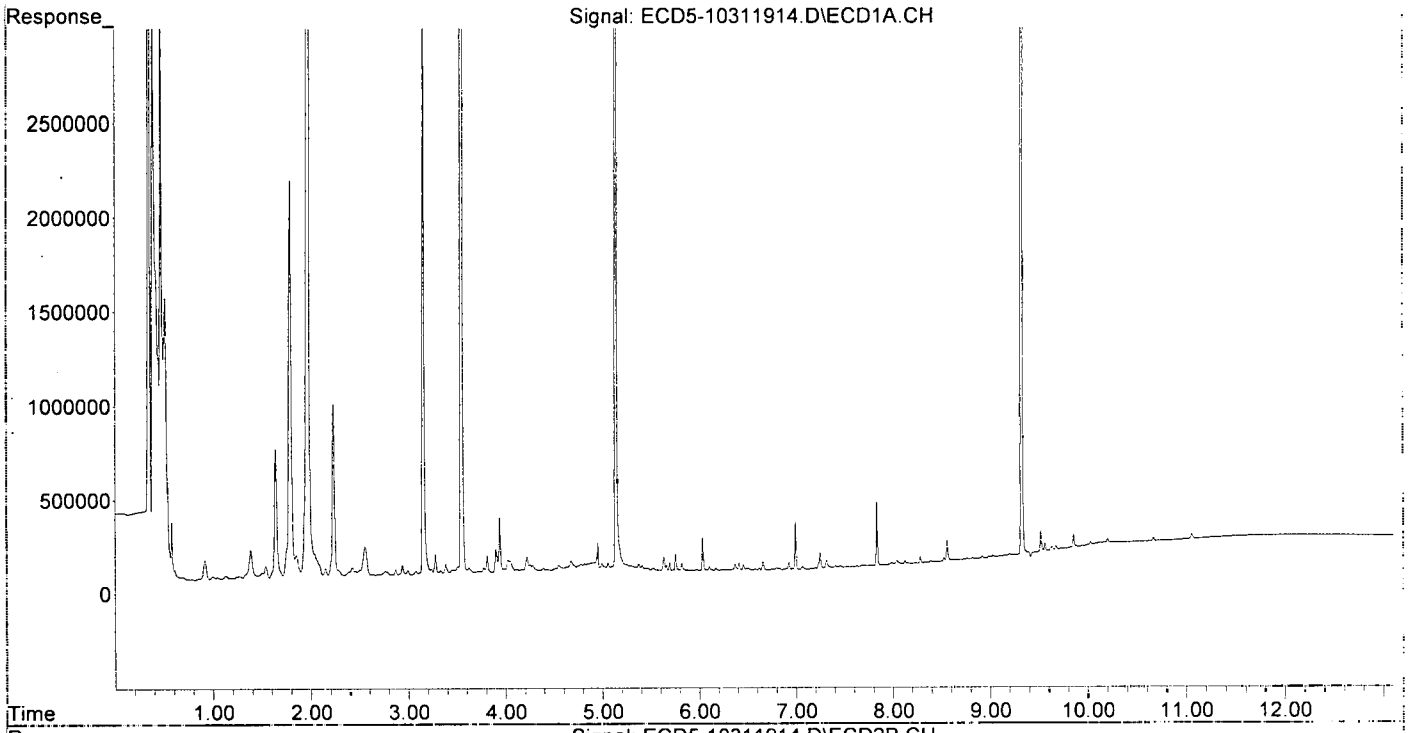
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.140	5.738	6115581	9487087	36.846	32.339	
22)	S	DCBP (S)	9.325	10.248	6994105	10143152	49.569	56.425	
		Target Compounds							
2)		a-BHC	5.693	6.311f	50107	70661	0.218	0.172	
3)		g-BHC	5.969	0.000	9406	0	0.047	N.D.	#
4)		b-BHC	6.034	6.726	175053	17766	1.937	0.112	#
5)		Heptachlor	6.370	7.014f	34611	11633	0.191	0.038	#
6)		d-BHC	6.170f	6.967f	15178	44329	0.077	0.126	#
7)		Aldrin	6.619	7.285	11731	13933	0.059	0.042	
8)		Heptachlo...	7.062	7.720	15297	64077	0.083	0.213	#
9)		trans-Chl...	7.161	7.879	3528	143616	0.019	0.458	#
10)		cis-Chlor...	7.248	7.965	87380	19283	0.480	0.066	#
11)		Endosulfa...	0.000	8.018	0	42192	N.D.	0.153	#
12)		4,4'-DDE	7.315	8.126f	41174	6574	0.218	0.021	#
13)		Dieldrin	7.530	8.244	3062	7119	0.016	0.023	#
14)		Endrin	7.680	8.463	7889	6537	0.054	0.029	#
15)		4,4'-DDD	7.762	8.499	2980	5126	0.019	0.020	
16)		Endosulfa...	7.835	8.587	334624	448251	2.330	1.944	
17)		4,4'-DDT	7.919f	8.737	2175	4795	0.018	BelowCal	#
18)		Endrin Al...	8.124	8.828	16781	18153	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.026	0	3163	N.D.	0.013	#
20)		Methoxychlor	8.283	9.211	33037	48304	0.564	0.414	
21)		Endrin Ke...	8.625	9.428	7465	69841	0.045	0.271	#
23)		Hexachlor...	2.938	3.415f	60388	4891547	0.330	13.012	#
24)		Hexachlor...	5.521	6.190	21895	59357	0.124	0.189	#
25)		Oxychlordane	6.994	7.661	252368	13723	1.534	0.050	#
26)		2,4'-DDE	7.062	7.879	15297	143616	0.119	0.677	#
27)		trans-Non...	7.248	7.948	87380	19311	0.171	0.064	#
28)		2,4'-DDD	7.456	8.244	9686	7119	0.085	0.038	#
29)		2,4'-DDT	7.628	8.463	3736	6537	0.034	0.037	
30)		cis-Nonac...	7.717	8.499	4641	5126	0.022	0.015	
31)		Mirex	8.390	9.428f	8629	69841	0.069	0.375	#
32)		Chlordane...	7.248	7.948	87380	19311	4.438	0.534	#
33)		Chlordane...	7.315	8.049	41174	11442	1.643	0.377	#
34)		Chlordane...	0.000	8.711	0	6499	N.D.	0.725	#
35)		Chlordane...	3.329f	3.354f	28725	49767	NoCal	NoCal	
36)		Toxaphene...	7.409	0.000	9846	0	10.993	N.D.	#
37)		Toxaphene...	7.680	8.711	7889	6499	4.885	1.975	#
38)		Toxaphene...	7.990	8.737	12220	4795	3.629	0.946	#
39)		Toxaphene...	8.233	8.828	2029	18153	0.626	2.174	#
40)		Toxaphene...	0.000	9.026f	0	3163	N.D.	0.679	#
41)		Toxaphene...	8.527	9.350f	21788	3024	6.885	0.637	#
42)		Toxaphene...	3.329f	3.354	28725	49767	NoCal	NoCal	

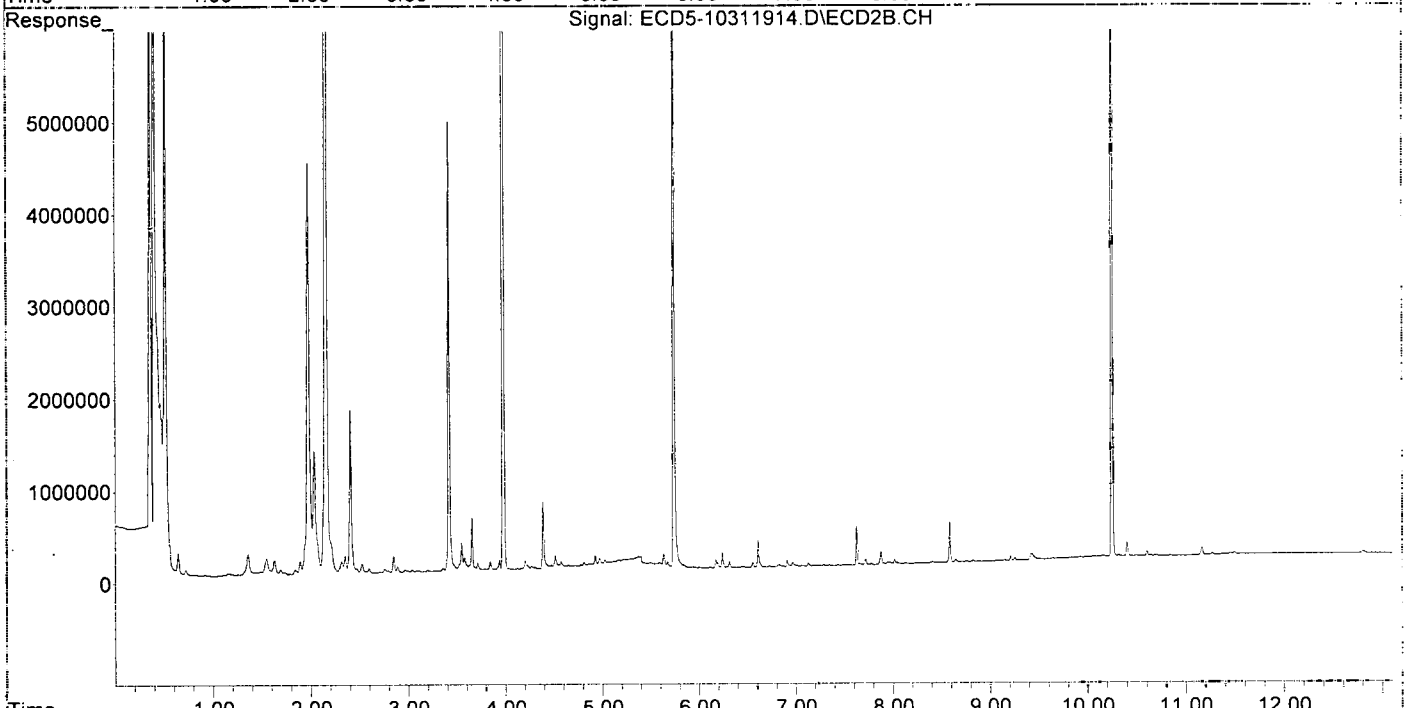
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 15:56
Operator : MJB
Sample : 9101731-BLK1
Misc : 1x, 8081B, GPC
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:13
Operator : MJB
Sample : 9101731-BS1
Misc : 1x, 8081B, GPC
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:37 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

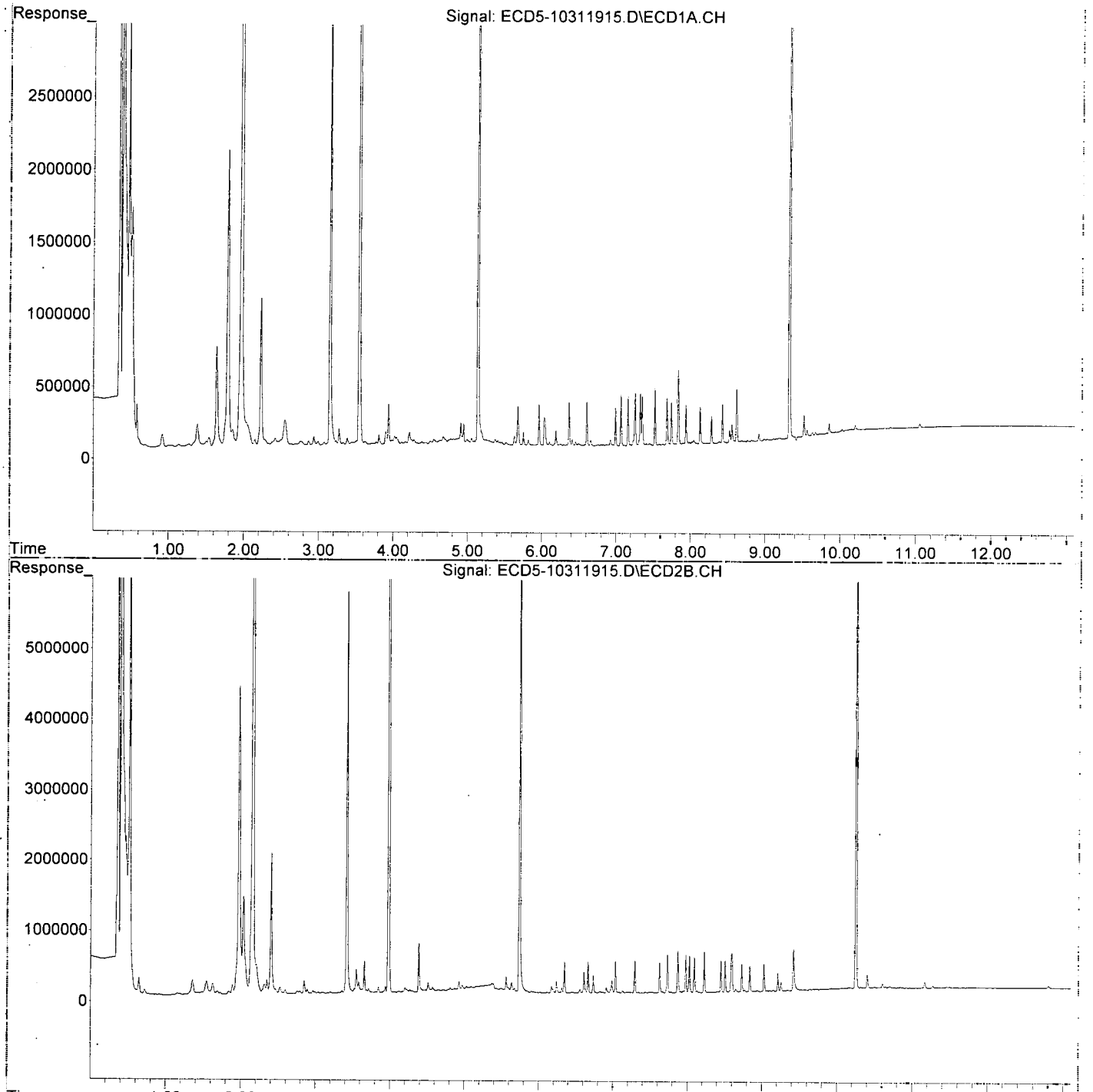
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.737	5462570	8326654	32.912	28.383	
22)	S	DCBP (S)	9.325	10.249	6652096	9415832	47.145	52.379	
		Target Compounds							
2)		a-BHC	5.678	6.345	276295	445854	1.205	1.087	
3)		g-BHC	5.963	6.663	285535	443515	1.415	1.243	
4)		b-BHC	6.037	6.733	191687	251811	2.121	1.591	
5)		Heptachlor	6.368	7.031	309128	442226	1.705	1.445	
6)		d-BHC	6.191	6.983	103773	177114	0.528	0.502	
7)		Aldrin	6.606	7.293	303344	461203	1.536	1.400	
8)		Heptachlo...	7.066	7.732	353500	533608	1.919	1.774	
9)		trans-Chl...	7.161	7.872	340111	586387	1.840	1.871	
10)		cis-Chlor...	7.257	7.979	368652	532441	2.025	1.828	
11)		Endosulfa...	7.353	8.027	345367	528556	2.029	1.921	
12)		4,4'-DDE	7.326	8.092	363771	503648	1.930	1.621	
13)		Dieldrin	7.524	8.226	390407	570818	2.034	1.877	
14)		Endrin	7.686	8.451	327742	449751	2.229	1.992	
15)		4,4'-DDD	7.744	8.506	298326	441111	1.898	1.722	
16)		Endosulfa...	7.837	8.596	512140	539391	3.566	2.339	
17)		4,4'-DDT	7.941	8.730	277316	391126	2.319	2.234	
18)		Endrin Al...	8.131	8.836	252407	364574	1.145	1.145	
19)		Endosulfa...	8.429	9.026	266629	391259	1.720	1.571	
20)		Methoxychlor	8.282	9.212	188098	259590	3.211	3.020	
21)		Endrin Ke...	8.621	9.420	368940	588237	2.212	2.286	
23)		Hexachlor...	2.937	3.414f	71693	5687638	0.392	15.129	#
24)		Hexachlor...	5.520	6.189	24337	62357	0.138	0.199	#
25)		Oxychlordane	6.993	7.661	263495	17441	1.601	0.064	#
26)		2,4'-DDE	7.066	7.872	353500	586387	2.756	2.764	
27)		trans-Non...	7.257	7.948	368652	24294	1.741	0.081	#
28)		2,4'-DDD	7.453	8.226	11962	570818	0.105	3.022	#
29)		2,4'-DDT	7.627	8.451	7170	449751	0.065	2.522	#
30)		cis-Nonac...	7.744f	8.506	298326	441111	1.437	1.315	
31)		Mirex	8.388	9.420	9278	588237	0.074	3.161	#
32)		Chlordane...	7.257	7.948	368652	24294	18.723	0.671	#
33)		Chlordane...	7.326	8.027f	363771	528556	14.513	17.407	
34)		Chlordane...	7.896f	8.730f	10400	391126	1.799	43.624	#
35)		Chlordane...	3.327f	3.353f	28444	44635	NoCal	NoCal	
36)		Toxaphene...	7.408	0.000	12144	0	13.559	N.D.	#
37)		Toxaphene...	7.686	8.730	327742	391126	202.944	118.846	#
38)		Toxaphene...	8.019	8.730	16083	391126	4.776	77.171	#
39)		Toxaphene...	8.238	8.836f	2263	364574	0.698	43.662	#
40)		Toxaphene...	0.000	9.026f	0	391259	N.D.	83.955	#
41)		Toxaphene...	8.526	9.361	86832	9149	27.439	1.926	#
42)		Toxaphene...	3.327f	3.353	28444	44635	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:13
Operator : MJB
Sample : 9101731-BS1
Misc : 1x, 8081B, GPC
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:37 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:30
Operator : MJB
Sample : 9101731-BS2
Misc : 1x, 8081B, GPC
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

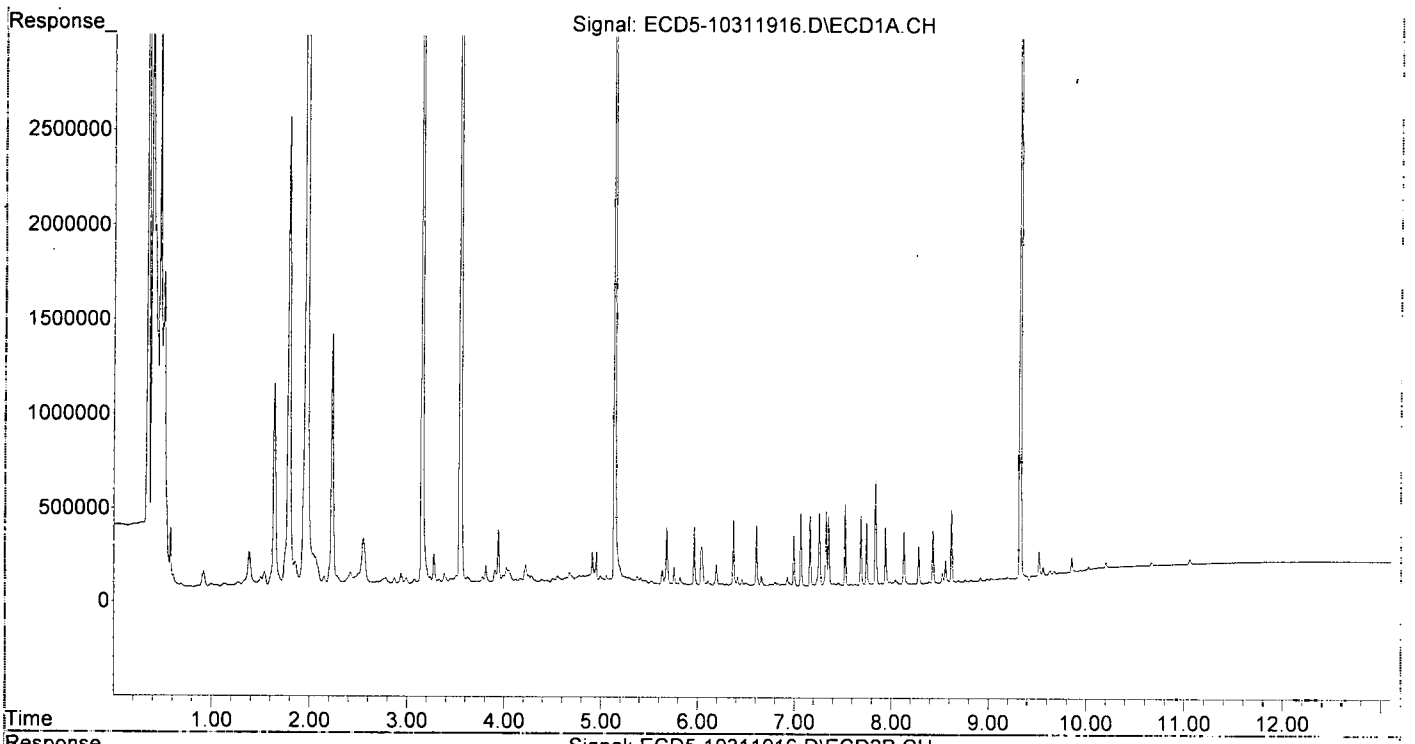
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.141	5.739	5931377	9197912	35.736	31.353	
22)	S	DCBP (S)	9.326	10.250	7113429	10292922	50.415	57.258	
		Target Compounds							
2)		a-BHC	5.680	6.347	312893	508676	1.364	1.240	
3)		g-BHC	5.965	6.665	316703	499755	1.570	1.401	
4)		b-BHC	6.042	6.735	210916	287592	2.334	1.817	
5)		Heptachlor	6.371	7.033	346809	515982	1.913	1.686	
6)		d-BHC	6.193	6.985	115522	200231	0.587	0.568	
7)		Aldrin	6.608	7.295	321235	491882	1.627	1.493	
8)		Heptachlo...	7.068	7.734	383411	566005	2.082	1.881	
9)		trans-Chl...	7.163	7.874	370836	630855	2.006	2.013	
10)		cis-Chlor...	7.259	7.980	385830	554214	2.119	1.903	
11)		Endosulfa...	7.354	8.029	366691	557111	2.155	2.025	
12)		4,4'-DDE	7.328	8.094	391018	537233	2.074	1.729	
13)		Dieldrin	7.525	8.228	431043	615424	2.245	2.023	
14)		Endrin	7.688	8.453	364520	483907	2.479	2.143	
15)		4,4'-DDD	7.746	8.508	329607	478949	2.098	1.869	
16)		Endosulfa...	7.840	8.598	548559	584425	3.820	2.534	
17)		4,4'-DDT	7.942	8.731	311262	430731	2.603	2.463	
18)		Endrin Al...	8.132	8.838	282835	396160	1.406	1.318	
19)		Endosulfa...	8.431	9.028	287780	414246	1.857	1.663	
20)		Methoxychlor	8.284	9.213	203370	292472	3.472	3.423	
21)		Endrin Ke...	8.622	9.421	390905	616497	2.344	2.396	
23)		Hexachlor...	2.938	3.416f	73145	8376725	0.400	22.283	#
24)		Hexachlor...	5.521	6.191	27302	72512	0.155	0.231	#
25)		Oxychlordane	6.995	7.661	267087	16044	1.623	0.059	#
26)		2,4'-DDE	7.068	7.874	383411	630855	2.989	2.974	
27)		trans-Non...	7.259	7.949	385830	23569	1.837	0.078	#
28)		2,4'-DDD	7.453	8.228	12939	615424	0.113	3.259	#
29)		2,4'-DDT	7.629	8.453	3816	483907	0.035	2.713	#
30)		cis-Nonac...	7.746f	8.508	329607	478949	1.588	1.428	
31)		Mirex	8.391	9.421	8973	616497	0.072	3.313	#
32)		Chlordane...	7.259f	7.949	385830	23569	19.596	0.651	#
33)		Chlordane...	7.328	8.029f	391018	557111	15.601	18.348	
34)		Chlordane...	7.898f	8.731f	8490	430731	1.469	48.041	#
35)		Chlordane...	3.329f	3.354f	39588	65409	NoCal	NoCal	
36)		Toxaphene...	7.410	0.000	11626	0	12.981	N.D.	#
37)		Toxaphene...	7.688	8.731	364520	430731	225.718	130.881	#
38)		Toxaphene...	7.991	8.731	13672	430731	4.060	84.985	#
39)		Toxaphene...	8.284f	8.838f	203370	396160	62.766	47.445	
40)		Toxaphene...	0.000	9.028f	0	414246	N.D.	88.887	#
41)		Toxaphene...	8.528	9.343f	52843	8499	16.698	1.789	#
42)		Toxaphene...	3.329f	3.354	39588	65409	NoCal	NoCal	

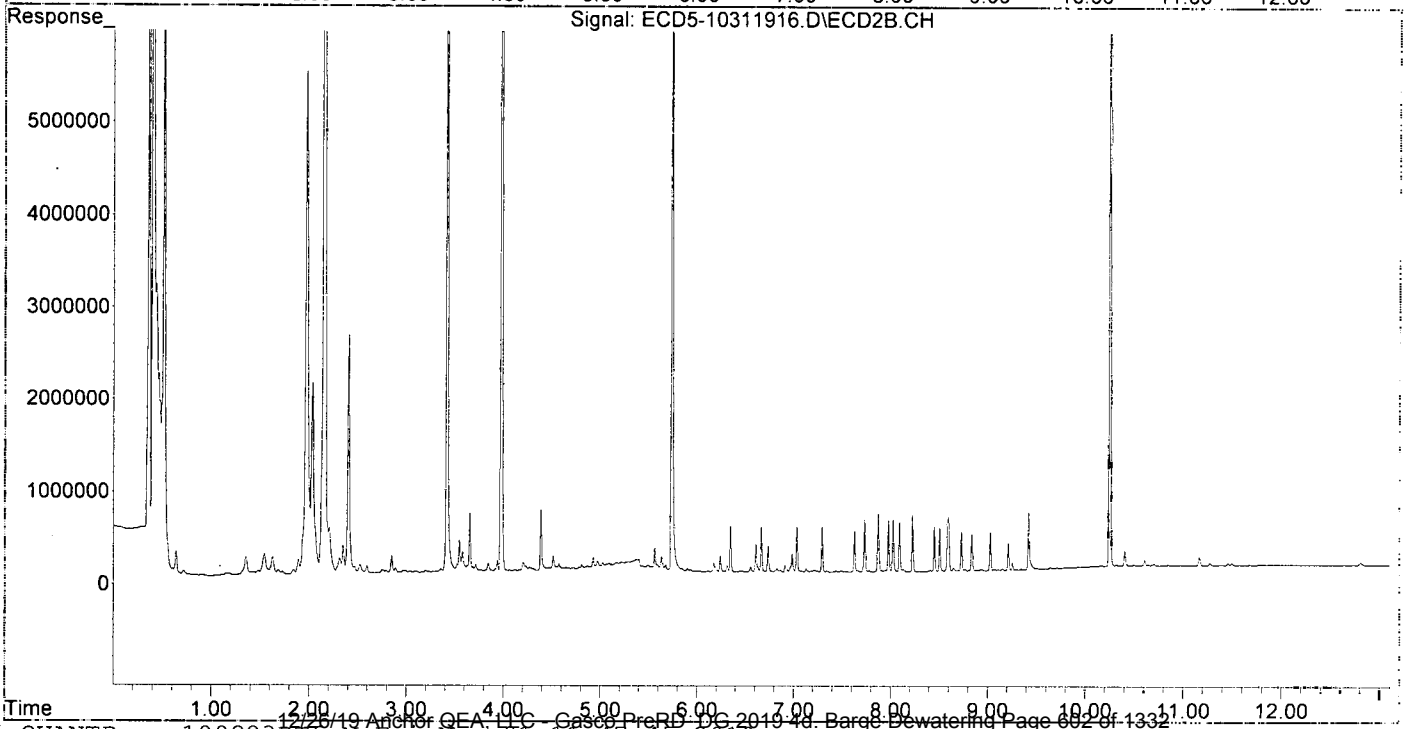
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:30
Operator : MJB
Sample : 9101731-BS2
Misc : 1x, 8081B, GPC
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:47
Operator : MJB
Sample : 9101731-BS3
Misc : 1x, 8081B, GPC
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:50 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

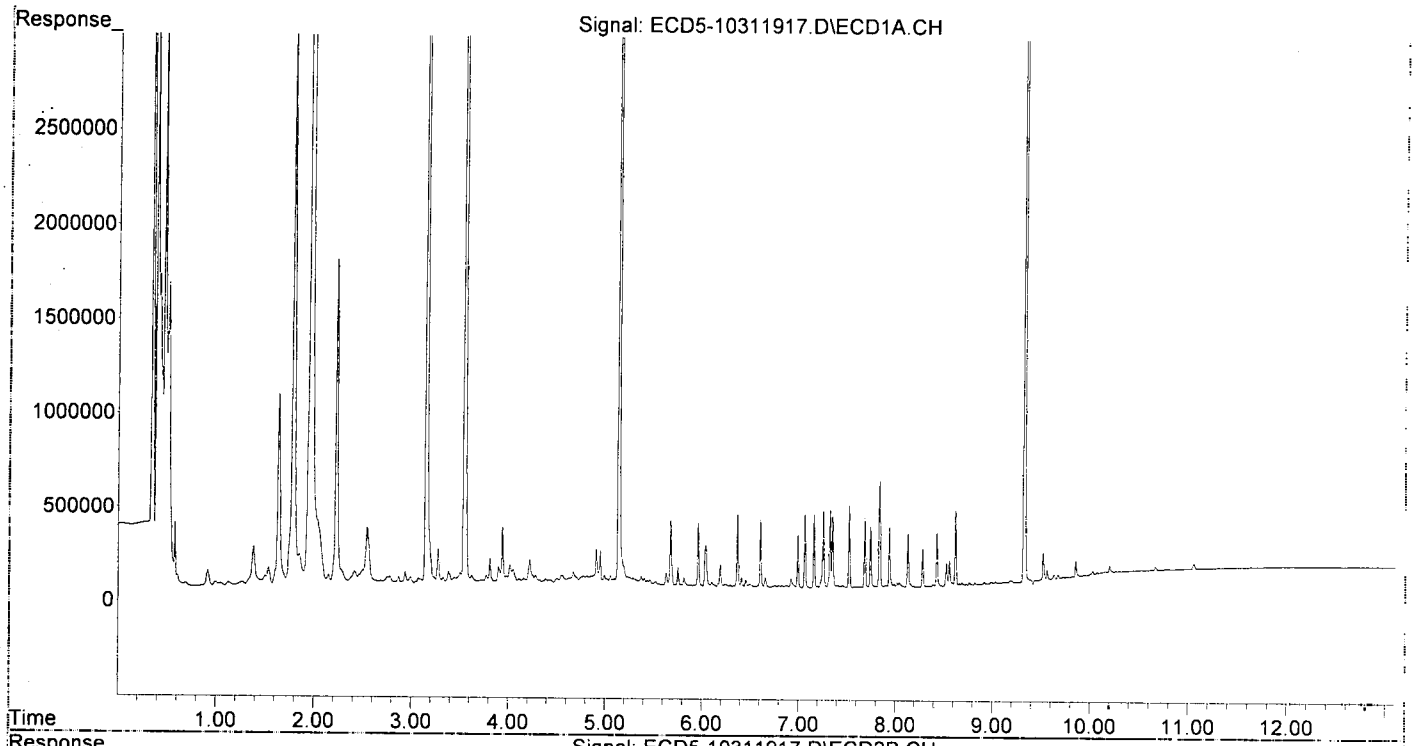
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.138	5.737	6655752	10556451	40.101	35.984	
22)	S	DCBP (S)	9.325	10.247	7219437	10327878	51.166	57.453	
		Target Compounds							
2)		a-BHC	5.677	6.344	355462	550359	1.550	1.341	
3)		g-BHC	5.961	6.662	343140	549559	1.701	1.541	
4)		b-BHC	6.039	6.733	222425	298956	2.461	1.889	
5)		Heptachlor	6.368	7.031	386168	555651	2.130	1.816	
6)		d-BHC	6.190	6.983	118138	203421	0.601	0.577	
7)		Aldrin	6.605	7.293	359552	568370	1.821	1.726	
8)		Heptachlo...	7.065	7.732	387510	596005	2.104	1.981	
9)		trans-Chl...	7.160	7.871	386031	660160	2.088	2.107	
10)		cis-Chlor...	7.256	7.978	401193	592442	2.203	2.034	
11)		Endosulfa...	7.352	8.026	377742	579956	2.220	2.108	
12)		4,4'-DDE	7.325	8.092	411887	570642	2.185	1.837	
13)		Dieldrin	7.523	8.226	434703	642279	2.264	2.112	
14)		Endrin	7.685	8.451	363893	499707	2.475	2.213	
15)		4,4'-DDD	7.744	8.505	325002	481569	2.068	1.880	
16)		Endosulfa...	7.837	8.595	563498	588870	3.924	2.554	
17)		4,4'-DDT	7.940	8.729	320596	434689	2.681	2.486	
18)		Endrin Al...	8.130	8.836	289807	406806	1.466	1.376	
19)		Endosulfa...	8.428	9.026	288529	423142	1.862	1.699	
20)		Methoxychlor	8.281	9.211	202385	294180	3.455	3.444	
21)		Endrin Ke...	8.620	9.419	397593	622731	2.384	2.420	
23)		Hexachlor...	2.937	3.413f	79029	9908772	0.432	26.358	#
24)		Hexachlor...	5.519	6.188	29806	73274	0.169	0.233	
25)		Oxychlordane	6.992	7.659	278791	14443	1.694	0.053	#
26)		2,4'-DDE	7.065	7.871	387510	660160	3.021	3.112	
27)		trans-Non...	7.256	7.948	401193	25435	1.923	0.084	#
28)		2,4'-DDD	7.454	8.226	11432	642279	0.100	3.401	#
29)		2,4'-DDT	7.626	8.451	4406	499707	0.040	2.802	#
30)		cis-Nonac...	7.744f	8.505	325002	481569	1.565	1.436	
31)		Mirex	8.389	9.419	10039	622731	0.080	3.347	#
32)		Chlordane...	7.256	7.948	401193	25435	20.376	0.703	#
33)		Chlordane...	7.325	8.026f	411887	579956	16.433	19.100	
34)		Chlordane...	7.837f	8.729f	563498	434689	97.472	48.483	#
35)		Chlordane...	3.326f	3.353f	48161	39798	NoCal	NoCal	
36)		Toxaphene...	7.406	0.000	12979	0	14.491	N.D.	#
37)		Toxaphene...	7.685	8.729	363893	434689	225.329	132.083	#
38)		Toxaphene...	8.018	8.729	22430	434689	6.661	85.766	#
39)		Toxaphene...	8.281f	8.836f	202385	406806	62.462	48.720	
40)		Toxaphene...	0.000	9.026f	0	423142	N.D.	90.796	#
41)		Toxaphene...	8.526	9.361	119197	11293	37.666	2.377	#
42)		Toxaphene...	3.383f	3.353	80719	39798	NoCal	NoCal	

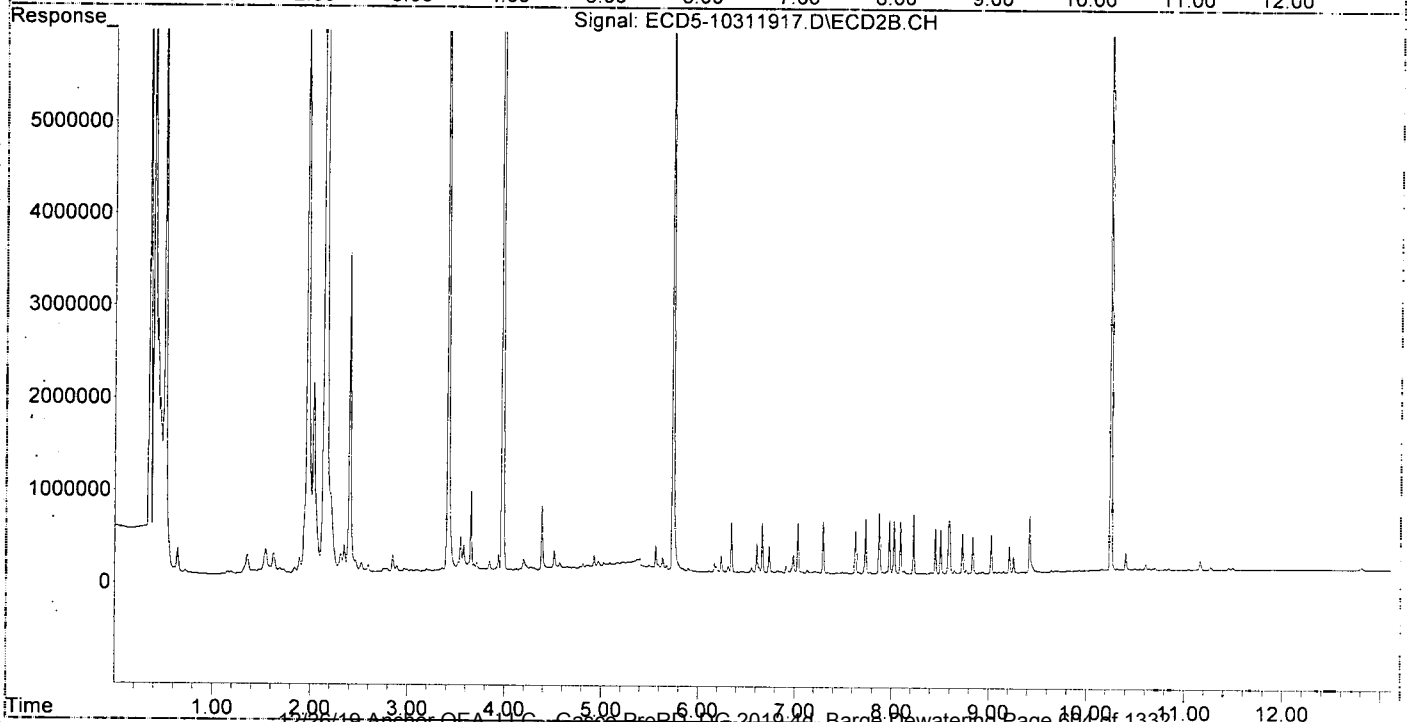
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 16:47
Operator : MJB
Sample : 9101731-BS3
Misc : 1x, 8081B, GPC
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:50 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:05
Operator : MJB
Sample : 9101731-BS4
Misc : 1x, 8081B, GPC
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:57 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

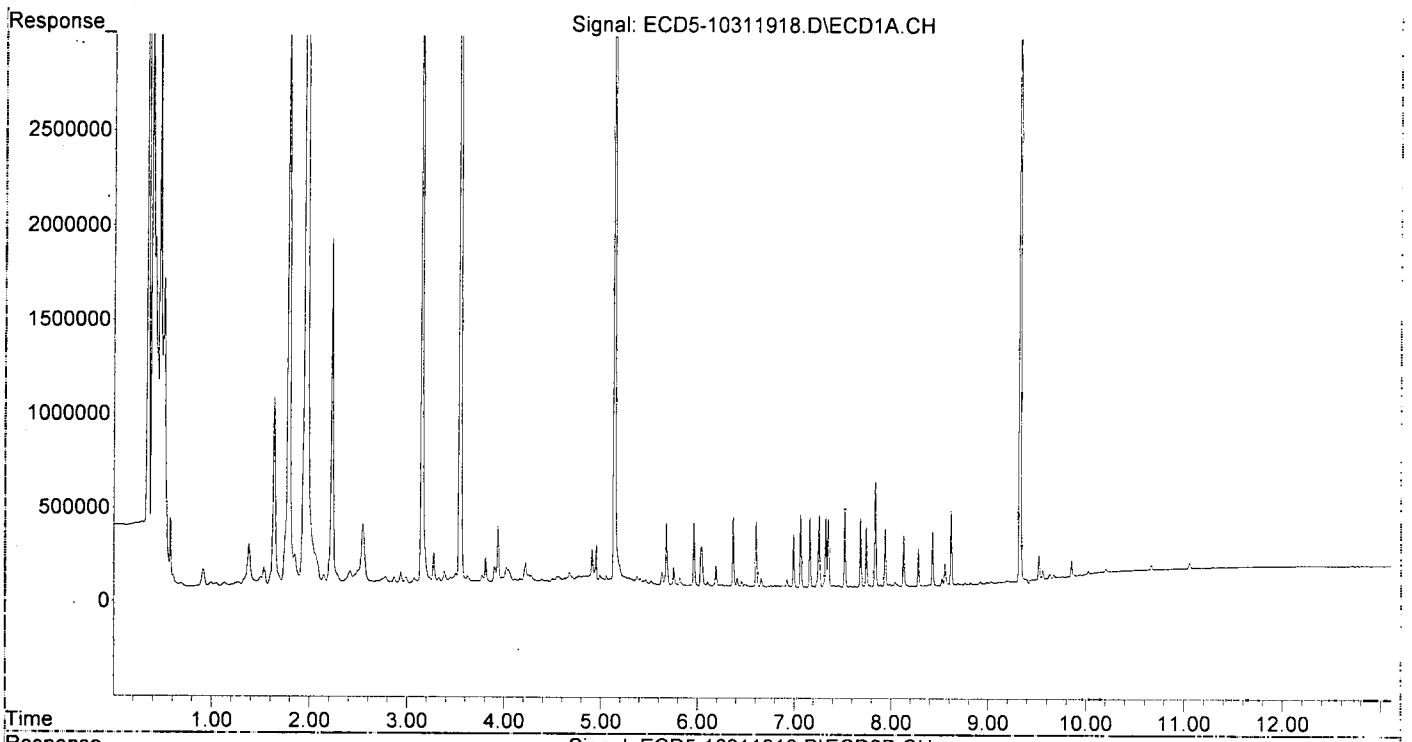
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.738	6438693	10196961	38.793	34.758	
22)	S	DCBP (S)	9.325	10.247	6844224	10006559	48.507	55.665	
		Target Compounds							
2)		a-BHC	5.678	6.345	344676	547404	1.503	1.334	
3)		g-BHC	5.963	6.663	340765	531884	1.689	1.491	
4)		b-BHC	6.040	6.734	215480	284597	2.384	1.798	
5)		Heptachlor	6.369	7.031	376177	553149	2.075	1.808	
6)		d-BHC	6.192	6.983	115018	192445	0.585	0.546	
7)		Aldrin	6.606	7.293	349138	559726	1.768	1.699	
8)		Heptachlo...	7.066	7.732	382849	602306	2.079	2.002	
9)		trans-Chl...	7.161	7.871	369620	644355	1.999	2.057	
10)		cis-Chlor...	7.257	7.978	392375	554903	2.155	1.905	
11)		Endosulfa...	7.352	8.026	369837	566191	2.173	2.058	
12)		4,4'-DDE	7.326	8.092	374232	541966	1.985	1.744	
13)		Dieldrin	7.523	8.226	413665	629122	2.155	2.068	
14)		Endrin	7.685	8.451	367699	494128	2.501	2.188	
15)		4,4'-DDD	7.744	8.506	318704	448157	2.028	1.749	
16)		Endosulfa...	7.838	8.595	555161	591970	3.866	2.567	
17)		4,4'-DDT	7.939	8.729	303888	415731	2.542	2.376	
18)		Endrin Al...	8.130	8.836	269335	393405	1.291	1.303	
19)		Endosulfa...	8.429	9.026	287983	404463	1.858	1.624	
20)		Methoxychlor	8.282	9.211	200176	284336	3.417	3.323	
21)		Endrin Ke...	8.620	9.419	390496	584262	2.342	2.271	
23)		Hexachlor...	2.936	3.414f	78052	9372212	0.427	24.931	#
24)		Hexachlor...	5.521	6.189	32091	73974	0.182	0.236	
25)		Oxychlordane	6.994	7.659	283404	14234	1.722	0.052	#
26)		2,4'-DDE	7.066	7.871	382849	644355	2.985	3.037	
27)		trans-Non...	7.257	7.947	392375	22858	1.874	0.076	#
28)		2,4'-DDD	7.456	8.226	10276	629122	0.090	3.331	#
29)		2,4'-DDT	7.627	8.451	3557	494128	0.032	2.771	#
30)		cis-Nonac...	7.744f	8.506	318704	448157	1.535	1.336	
31)		Mirex	8.391	9.419	8942	584262	0.071	3.140	#
32)		Chlordane...	7.257	7.947	392375	22858	19.928	0.632	#
33)		Chlordane...	7.326	8.026f	374232	566191	14.931	18.647	
34)		Chlordane...	7.895	8.729f	9535	415731	1.649	46.368	#
35)		Chlordane...	3.327f	3.353f	50362	45146	NoCal	NoCal	
36)		Toxaphene...	7.407	0.000	12084	0	13.492	N.D.	#
37)		Toxaphene...	7.685	8.729	367699	415731	227.686	126.323	#
38)		Toxaphene...	7.989	8.763	14133	17461	4.197	3.445	
39)		Toxaphene...	8.282f	8.836f	200176	393405	61.780	47.115	
40)		Toxaphene...	0.000	9.026f	0	404463	N.D.	86.788	#
41)		Toxaphene...	8.526	9.341f	38433	8431	12.145	1.775	#
42)		Toxaphene...	3.382f	3.353	83501	45146	NoCal	NoCal	

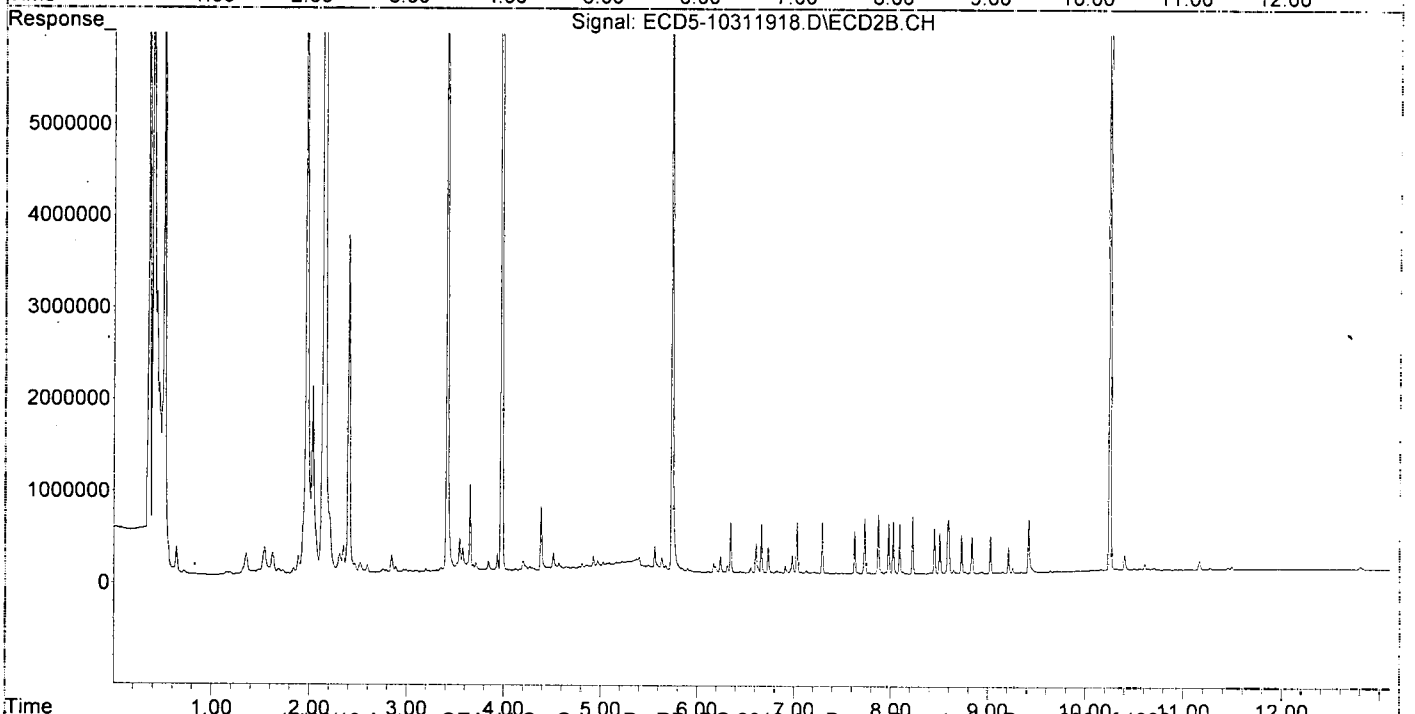
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:05
Operator : MJB
Sample : 9101731-BS4
Misc : 1x, 8081B, GPC
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:47:57 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 648 MJB 11/1/19
Sample : 9101~~731~~-BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 13:05:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

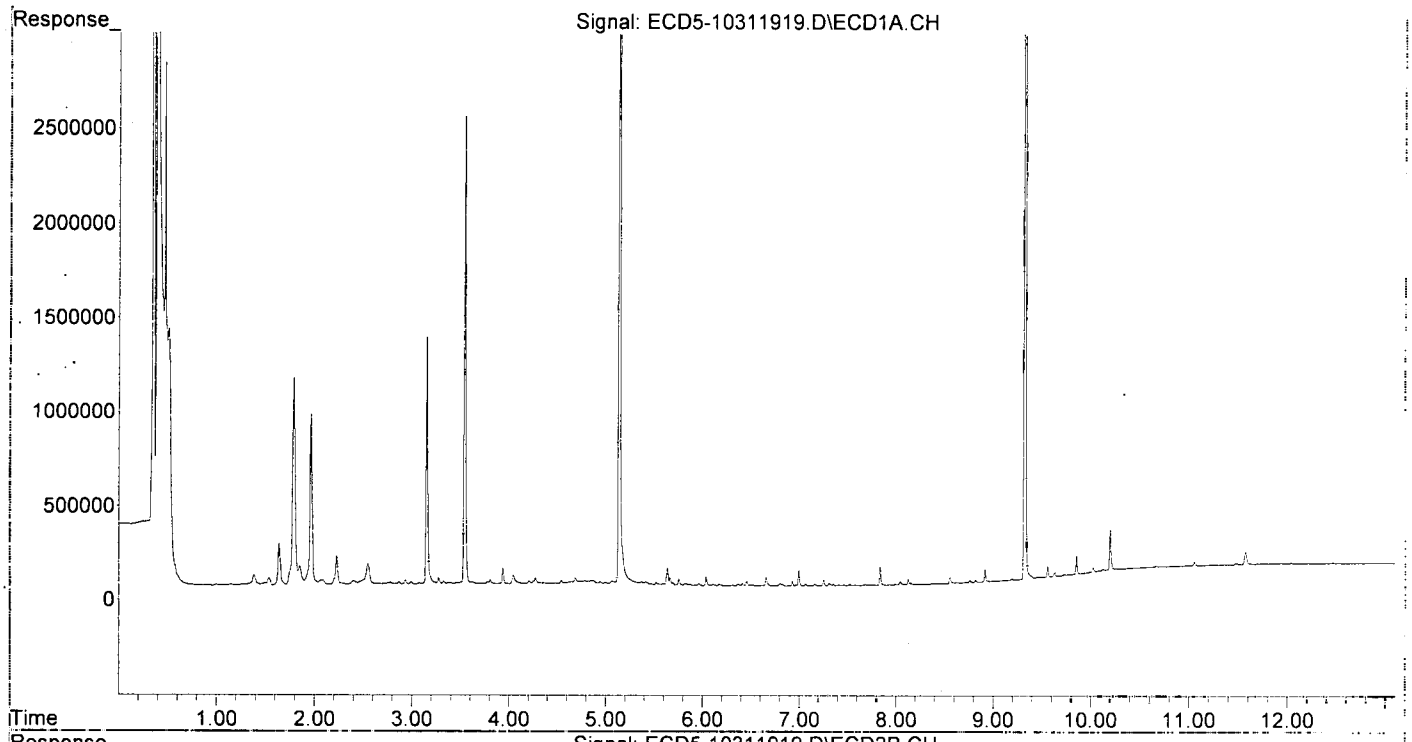
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.139	5.737	6531618	10183704	39.353	34.713	
22)	S DCBP (S)	9.326	10.248	8856388	13033794	62.767	72.505	
	Target Compounds							
2)	a-BHC	5.696	6.345	15572	16494	0.068	0.040	#
3)	g-BHC	5.965	6.663	12457	19326	0.062	0.054	
4)	b-BHC	6.041	6.727	47826	13645	0.529	0.086	#
5)	Heptachlor	6.371	7.032	12186	14483	0.067	0.047	
6)	d-BHC	6.174f	6.984	8893	7722	0.045	0.022	#
7)	Aldrin	6.625	7.293	4616	6721	0.023	0.020	
8)	Heptachlo...	7.067	7.726	11278	34709	0.061	0.115	#
9)	trans-Chl...	7.162	7.881	11108	45881	0.060	0.146	#
10)	cis-Chlor...	7.254	7.979	30094	13810	0.165	0.047	#
11)	Endosulfa...	7.355	8.028	8056	11883	0.047	0.043	
12)	4,4'-DDE	7.325	8.093	6854	7176	0.036m	0.023	
13)	Dieldrin	7.526	8.227	6064	9711	0.032	0.032	
14)	Endrin	7.687	8.452	5289	8046	0.036	0.036	
15)	4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)	Endosulfa...	7.840	8.590	99352	146227	0.692	0.634	
17)	4,4'-DDT	7.943	0.000	2242	0	0.019	N.D.	#
18)	Endrin Al...	8.128	8.829	28117	34730	BelowCal	BelowCal	
19)	Endosulfa...	8.439	9.066f	2396	6690	0.015	0.027	#
20)	Methoxychlor	8.316f	0.000	1636	0	0.028	N.D.	#
21)	Endrin Ke...	8.623	9.433	3702	96976	0.022	0.377	#
23)	Hexachlor...	2.934	3.415f	23189	1927196	0.127	5.126	#
24)	Hexachlor...	5.522	6.189	13353	19510	0.076	0.062	
25)	Oxychlordane	6.999	7.664	82722	8826	0.503	0.032	#
26)	2,4'-DDE	7.067	7.881	11278	45881	0.088 QDel	0.216	#
27)	trans-Non...	7.254	0.000	30094	0	~~87346.532~~	N.D.	#
28)	2,4'-DDD	0.000	8.227	0	9711	N.D.	0.051	#
29)	2,4'-DDT	0.000	8.452	0	8046	N.D.	0.045	#
30)	cis-Nonac...	7.721	0.000	3162	0	0.015m	N.D.	#
31)	Mirex	8.388	9.433f	4066	96976	0.032	0.521	#
32)	Chlordane...	7.254	7.979f	30094	13810	1.528	0.382	#
33)	Chlordane...	7.310f	8.028f	13212	11883	0.527	0.391	
34)	Chlordane...	7.840f	0.000	99352	0	17.186	N.D.	#
35)	Chlordane...	3.327f	3.353	16769	8714	NoCal	NoCal	
36)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)	Toxaphene...	7.687	0.000	5289	0	3.275	N.D.	#
38)	Toxaphene...	7.996	0.000	3543	0	1.052	N.D.	#
39)	Toxaphene...	0.000	8.829	0	34730	N.D.	4.159	#
40)	Toxaphene...	8.500f	0.000	1008	0	0.420	N.D.	#
41)	Toxaphene...	8.559	0.000	32322	0	10.214	N.D.	#
42)	Toxaphene...	3.378f	3.353	9300	8714	NoCal	NoCal	

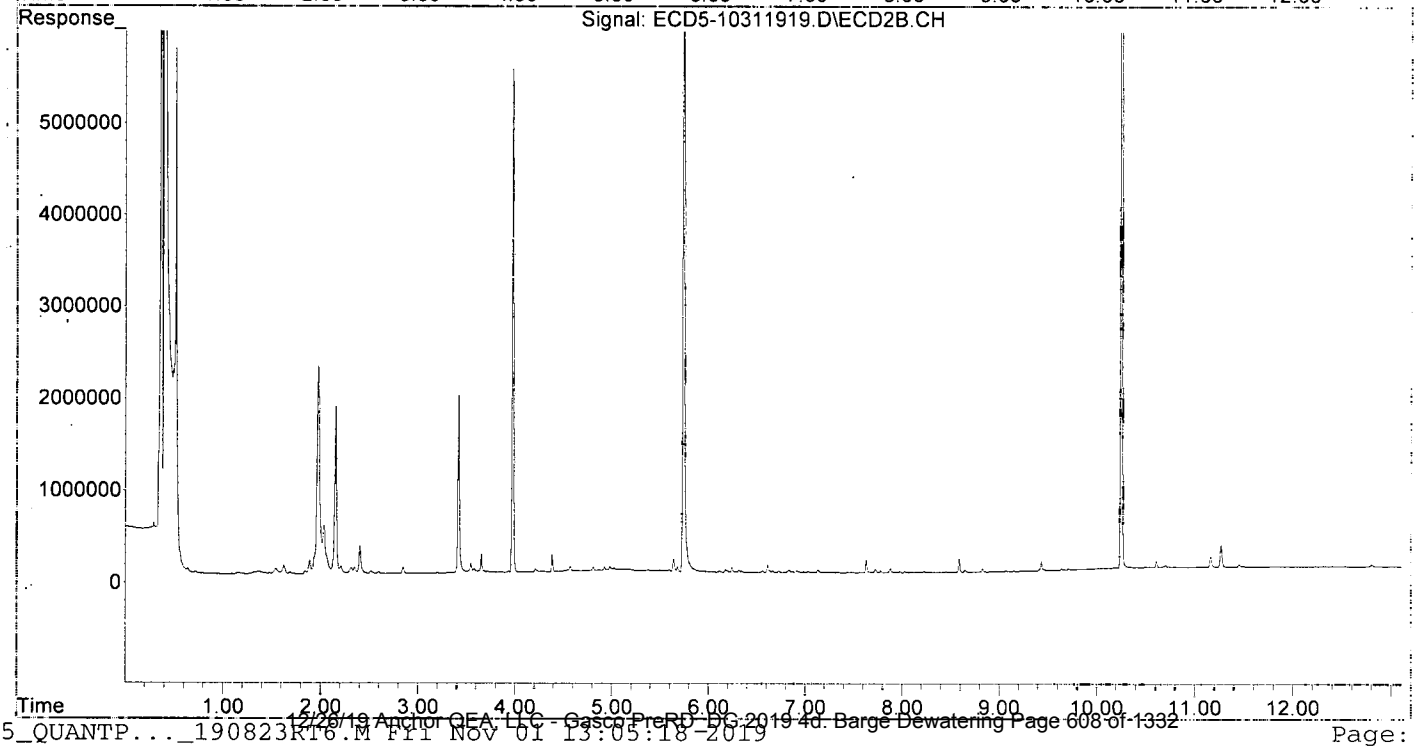
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 13:05:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

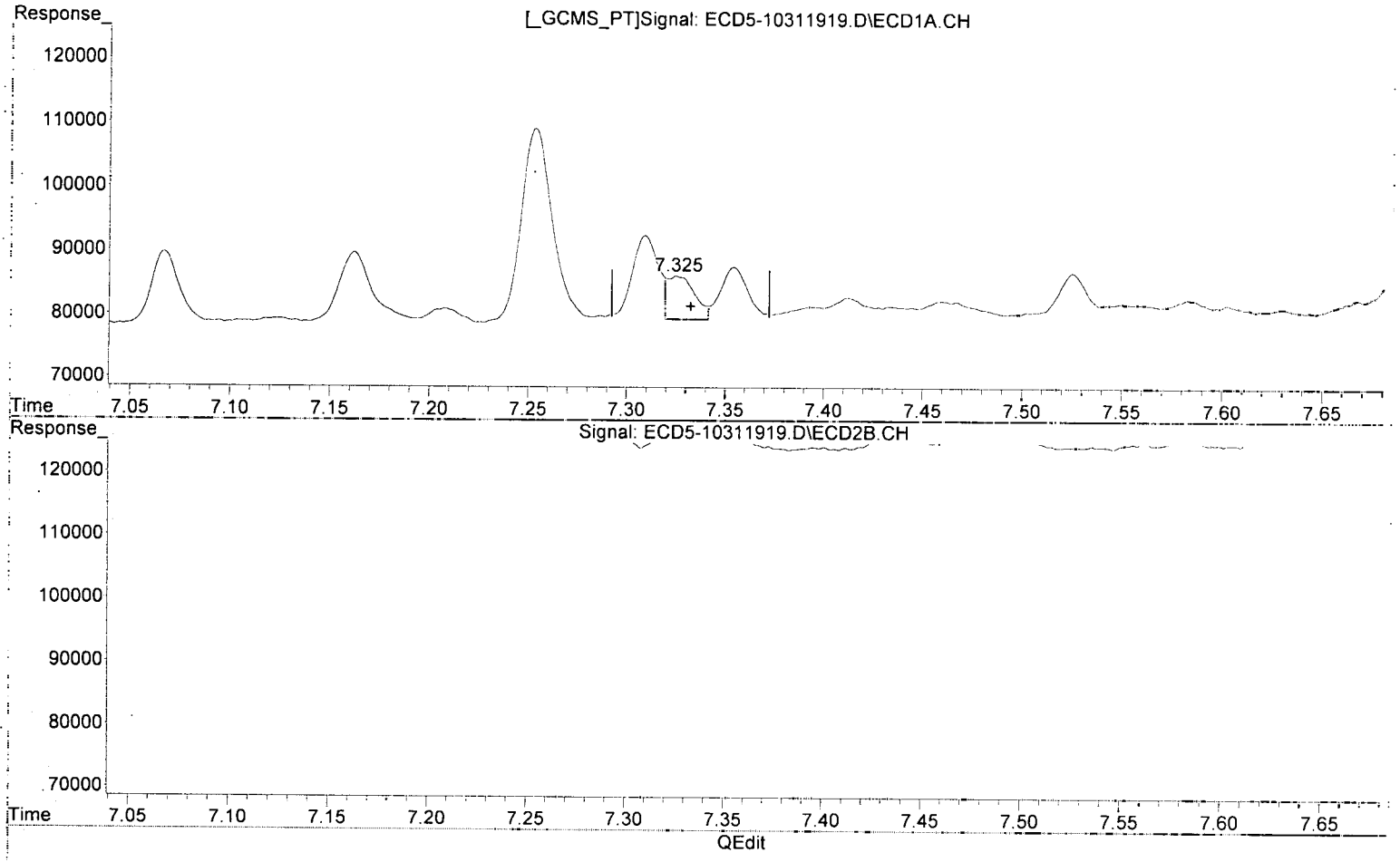




Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(12) 4,4'-DDE

7.325min 0.036 ng/mL (m)

response 6854

MJB 11/1/19

(12) 4,4'-DDE #2

8.093min 0.023 ng/mL

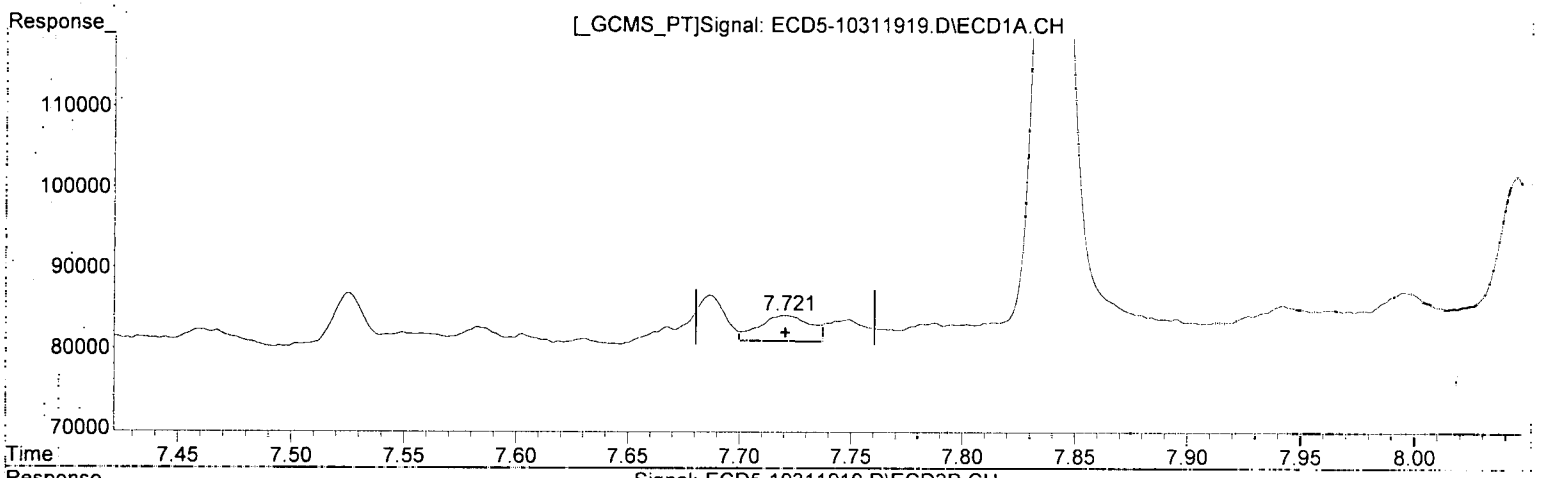
response 7176

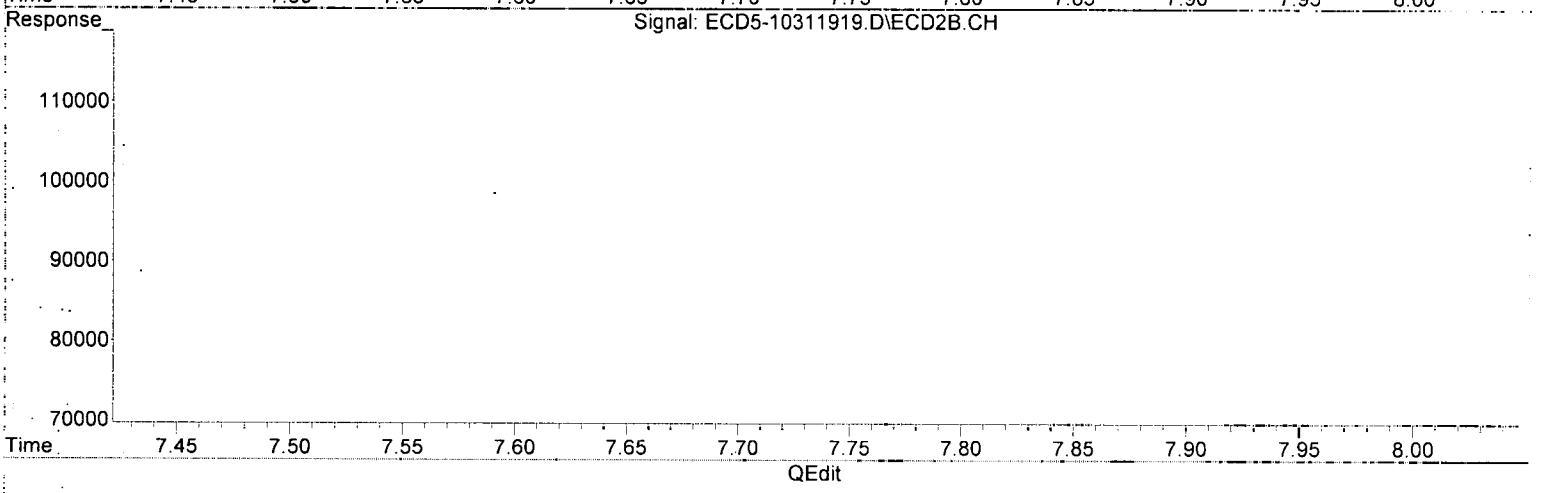
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 6/3 WT 11/1/19
Sample : 9101~~731~~-BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





(30) cis-Nonachlor

7.721min 0.015 ng/mL (m)

response 3162

WT 11/1/19

(30) cis-Nonachlor #2

0.000min 0.000 ng/mL

response 0

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 693 MJB 11/1/19
Sample : 9101731-BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MI MJB 11/1/19

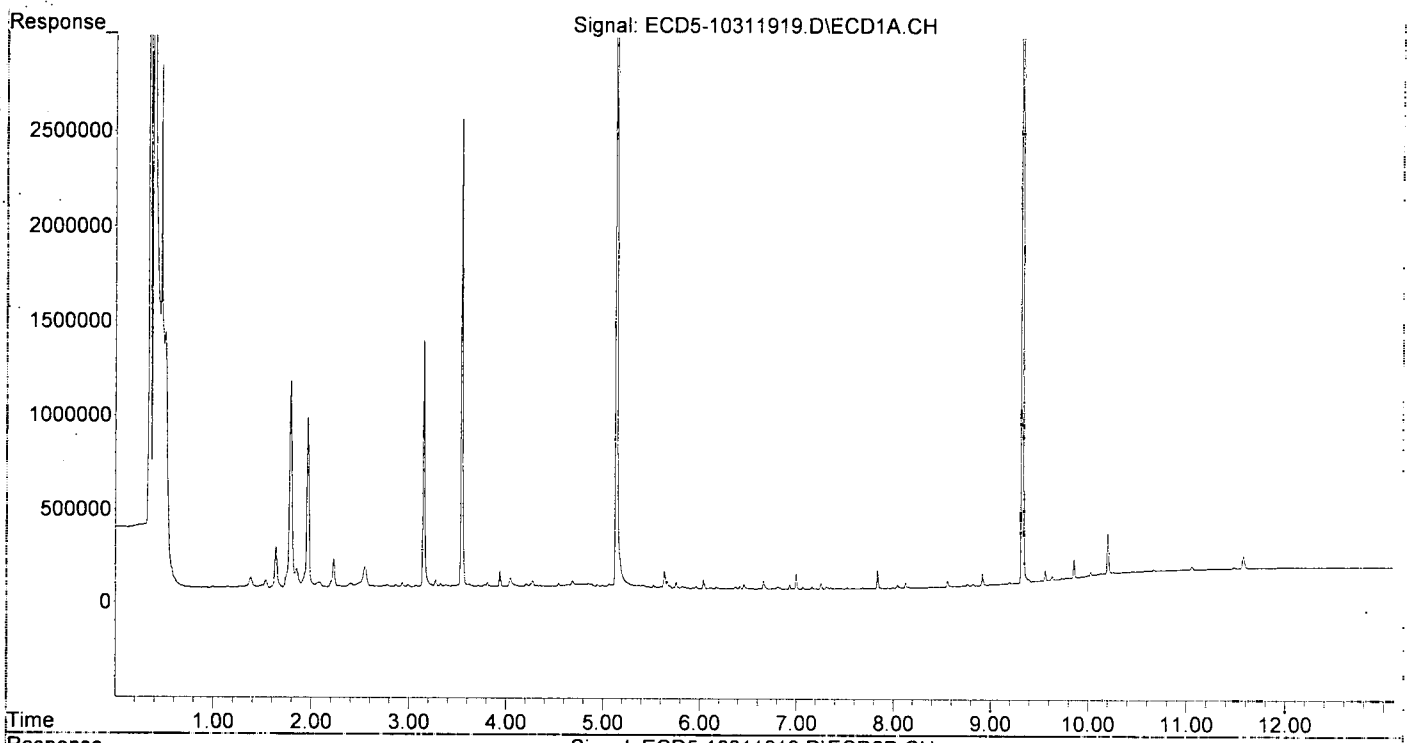
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.139	5.737	6531618	10183704	39.353	34.713	
22)	S DCBP (S)	9.326	10.248	8856388	13033794	62.767	72.505	
	Target Compounds							
2)	a-BHC	5.696	6.345	15572	16494	0.068	0.040	#
3)	g-BHC	5.965	6.663	12457	19326	0.062	0.054	
4)	b-BHC	6.041	6.727	47826	13645	0.529	0.086	#
5)	Heptachlor	6.371	7.032	12186	14483	0.067	0.047	
6)	d-BHC	6.174f	6.984	8893	7722	0.045	0.022	#
7)	Aldrin	6.625	7.293	4616	6721	0.023	0.020	
8)	Heptachlo...	7.067	7.726	11278	34709	0.061	0.115	#
9)	trans-Chl...	7.162	7.881	11108	45881	0.060	0.146	#
10)	cis-Chlor...	7.254	7.979	30094	13810	0.165	0.047	#
11)	Endosulfa...	7.355	8.028	8056	11883	0.047	0.043	
12)	4,4'-DDE	7.355f	8.093	8056	7176	0.043	0.023	#
13)	Dieldrin	7.526	8.227	6064	9711	0.032	0.032	
14)	Endrin	7.687	8.452	5289	8046	0.036	0.036	
15)	4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)	Endosulfa...	7.840	8.590	99352	146227	0.692	0.634	
17)	4,4'-DDT	7.943	0.000	2242	0	0.019	N.D.	#
18)	Endrin Al...	8.128	8.829	28117	34730	BelowCal	BelowCal	
19)	Endosulfa...	8.439	9.066f	2396	6690	0.015	0.027	#
20)	Methoxychlor	8.316f	0.000	1636	0	0.028	N.D.	#
21)	Endrin Ke...	8.623	9.433	3702	96976	0.022	0.377	#
23)	Hexachlor...	2.934	3.415f	23189	1927196	0.127	5.126	#
24)	Hexachlor...	5.522	6.189	13353	19510	0.076	0.062	
25)	Oxychlordane	6.999	7.664	82722	8826	0.503	0.032	#
26)	2,4'-DDE	7.067	7.881	11278	45881	0.088	0.216	#
27)	trans-Non...	7.254	0.000	30094	0	87346.532	N.D.	#
28)	2,4'-DDD	0.000	8.227	0	9711	N.D.	0.051	#
29)	2,4'-DDT	0.000	8.452	0	8046	N.D.	0.045	#
30)	cis-Nonac...	7.687f	0.000	5289	0	0.025	N.D.	#
31)	Mirex	8.388	9.433f	4066	96976	0.032	0.521	#
32)	Chlordane...	7.254	7.979f	30094	13810	1.528	0.382	#
33)	Chlordane...	7.310f	8.028f	13212	11883	0.527	0.391	
34)	Chlordane...	7.840f	0.000	99352	0	17.186	N.D.	#
35)	Chlordane...	3.327f	3.353	16769	8714	NoCal	NoCal	
36)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)	Toxaphene...	7.687	0.000	5289	0	3.275	N.D.	#
38)	Toxaphene...	7.996	0.000	3543	0	1.052	N.D.	#
39)	Toxaphene...	0.000	8.829	0	34730	N.D.	4.159	#
40)	Toxaphene...	8.500f	0.000	1008	0	0.420	N.D.	#
41)	Toxaphene...	8.559	0.000	32322	0	10.214	N.D.	#
42)	Toxaphene...	3.378f	3.353	9300	8714	NoCal	NoCal	

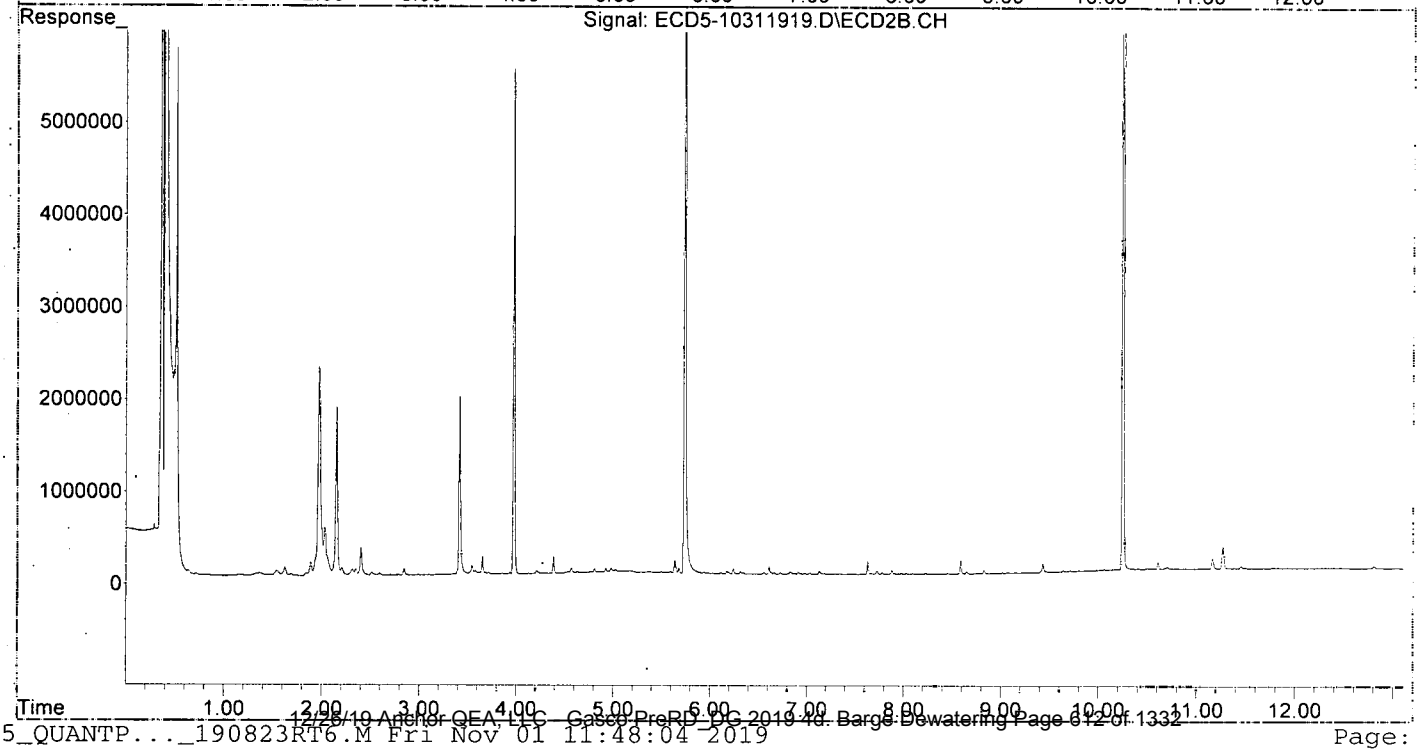
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:22
Operator : MJB 693 MJB 11/1/19
Sample : 9101~~731~~-BLK1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:39
Operator : MJB 6W MJB 11/1/19
Sample : 9101~~731~~-BS1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

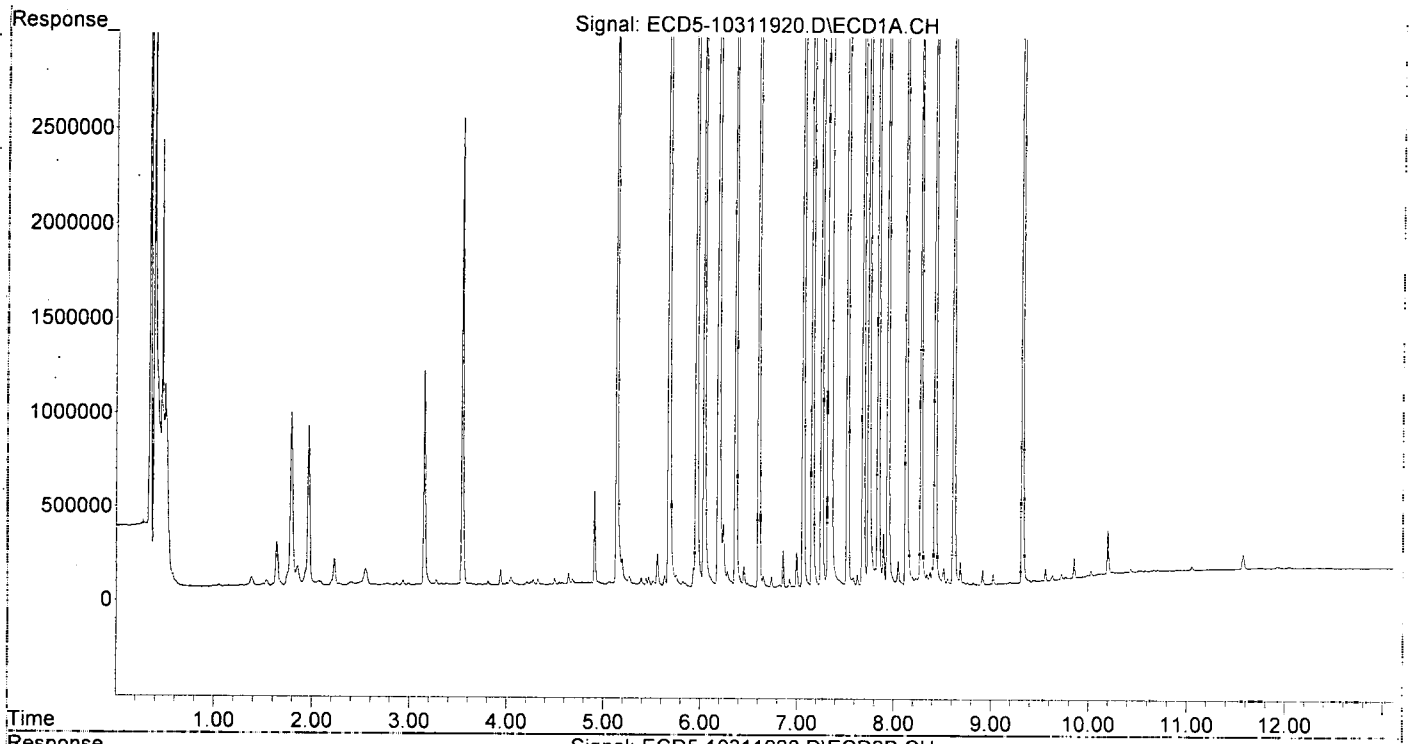
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.738	6939475	10688018	41.810	36.432	
22)	S	DCBP (S)	9.326	10.248	9825877	14812360	69.638	82.399	
		Target Compounds							
2)		a-BHC	5.678	6.346	18601063	33792328	81.111	82.352	
3)		g-BHC	5.962	6.664	17444031	31910716	86.452	89.460	
4)		b-BHC	6.042	6.732	7196050	13058294	79.617	82.509	
5)		Heptachlor	6.369	7.032	12822311	21895237	70.726	71.558	
6)		d-BHC	6.190	6.983	16132788	30025519	82.021	85.139	
7)		Aldrin	6.607	7.294	11987108	21624251	60.711	65.649	
8)		Heptachlo...	7.066	7.733	15566597	27253551	84.519	90.589	
9)		trans-Chl...	7.161	7.872	15620879	27094449	84.487	86.474	
10)		cis-Chlor...	7.257	7.979	14933088	25696793	82.018	88.230	
11)		Endosulfa...	7.352	8.027	15134544	25269889	88.933	91.832	
12)		4,4'-DDE	7.327	8.093	14441752	25567325	76.602	82.295	
13)		Dieldrin	7.523	8.227	17324206	30408565	90.240	99.979	
14)		Endrin	7.686	8.452	14879883	24151140	101.205	106.945	
15)		4,4'-DDD	7.745	8.507	13179772	22830409	83.872	89.107	
16)		Endosulfa...	7.841	8.599	13385236	23014422	93.205	99.800	
17)		4,4'-DDT	7.941	8.730	12281189	19902416	102.720	97.694	
18)		Endrin Al...	8.130	8.837	11508630	18893410	92.032	92.394	
19)		Endosulfa...	8.429	9.027	13811162	23672173	89.117	95.036	
20)		Methoxychlor	8.283	9.212	6464320	10728736	110.361	107.523	
21)		Endrin Ke...	8.620	9.420	15585227	25239153	93.460	98.086	
23)		Hexachlor...	2.934	3.415f	27208	1720185	0.149	4.576	#
24)		Hexachlor...	5.517	6.191	29710	17928	0.169	0.057	#
25)		Oxychlordane	7.001	7.668	187774	42782	1.141	0.156	#
26)		2,4'-DDE	7.066	7.872	15566597	27094449	121.367	127.721	
27)		trans-Non...	7.257	7.933	14933088	86139	83.112	0.286	#
28)		2,4'-DDD	0.000	8.227	0	30408565	N.D.	161.008	#
29)		2,4'-DDT	7.628	8.452	63619	24151140	0.580	135.422	#
30)		cis-Nonac...	7.745f	8.507	13179772	22830409	63.482	68.059	
31)		Mirex	8.376	9.420	70807	25239153	0.565	135.641	#
32)		Chlordane...	7.257	7.933	14933088	86139	758.425	2.381	#
33)		Chlordane...	7.327	8.027f	14441752	25269889	576.188	832.230	#
34)		Chlordane...	7.896	8.730f	277703	19902416	48.036	2219.795	#
35)		Chlordane...	3.327f	3.353f	9497	7976	NoCal	NoCal	
36)		Toxaphene...	0.000	8.357	0	12276	N.D.	4.678	#
37)		Toxaphene...	7.686	8.730	14879883	19902416	9213.901	6047.482	
38)		Toxaphene...	0.000	8.730	0	19902416	N.D.	3926.830	#
39)		Toxaphene...	8.231	8.837f	41069	18893410	12.675	2262.729	#
40)		Toxaphene...	0.000	9.027f	0	23672173	N.D.	5079.475	#
41)		Toxaphene...	8.557	9.341f	36937	316401	11.672	66.608	#
42)		Toxaphene...	3.379f	3.353	8182	7976	NoCal	NoCal	

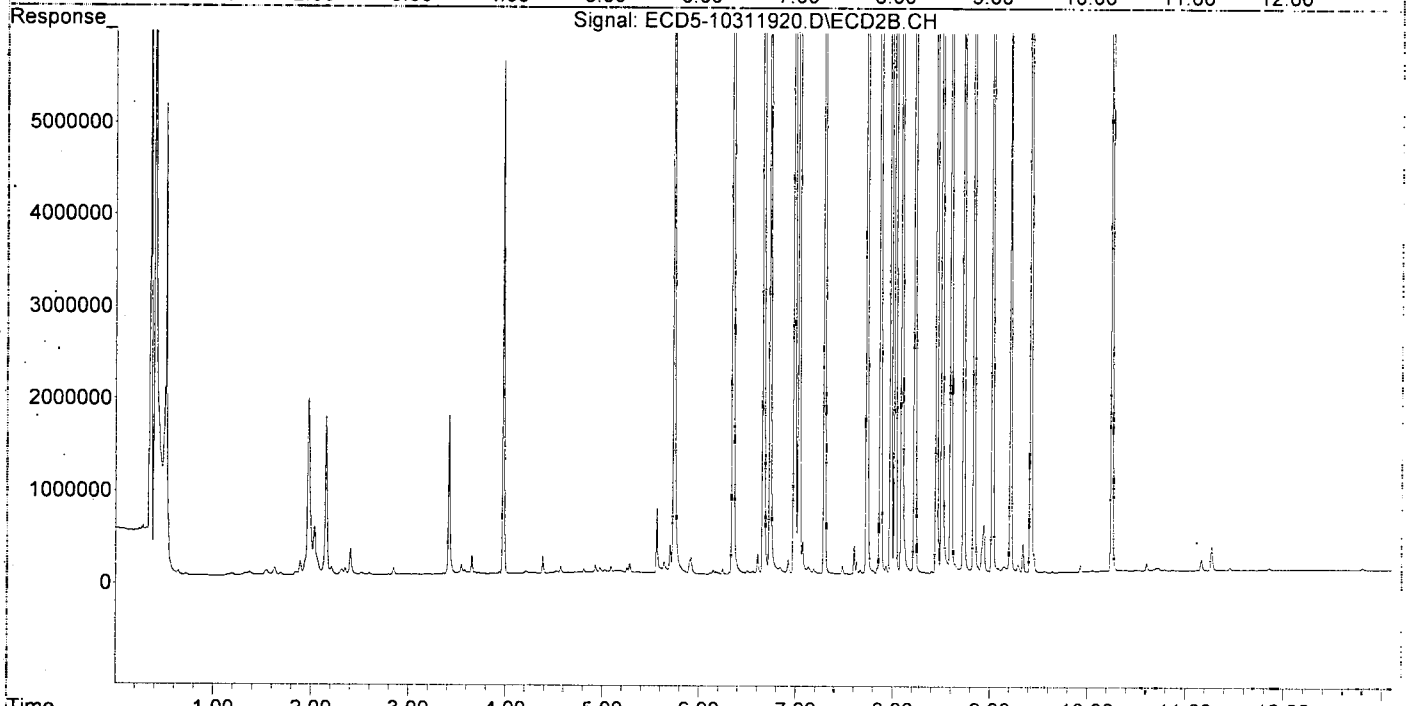
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:39
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BS1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:56
Operator : MJB 6/3 MJB 11/1/19
Sample : 9101~~731~~-BSD1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Q19 MJB 11/1/19

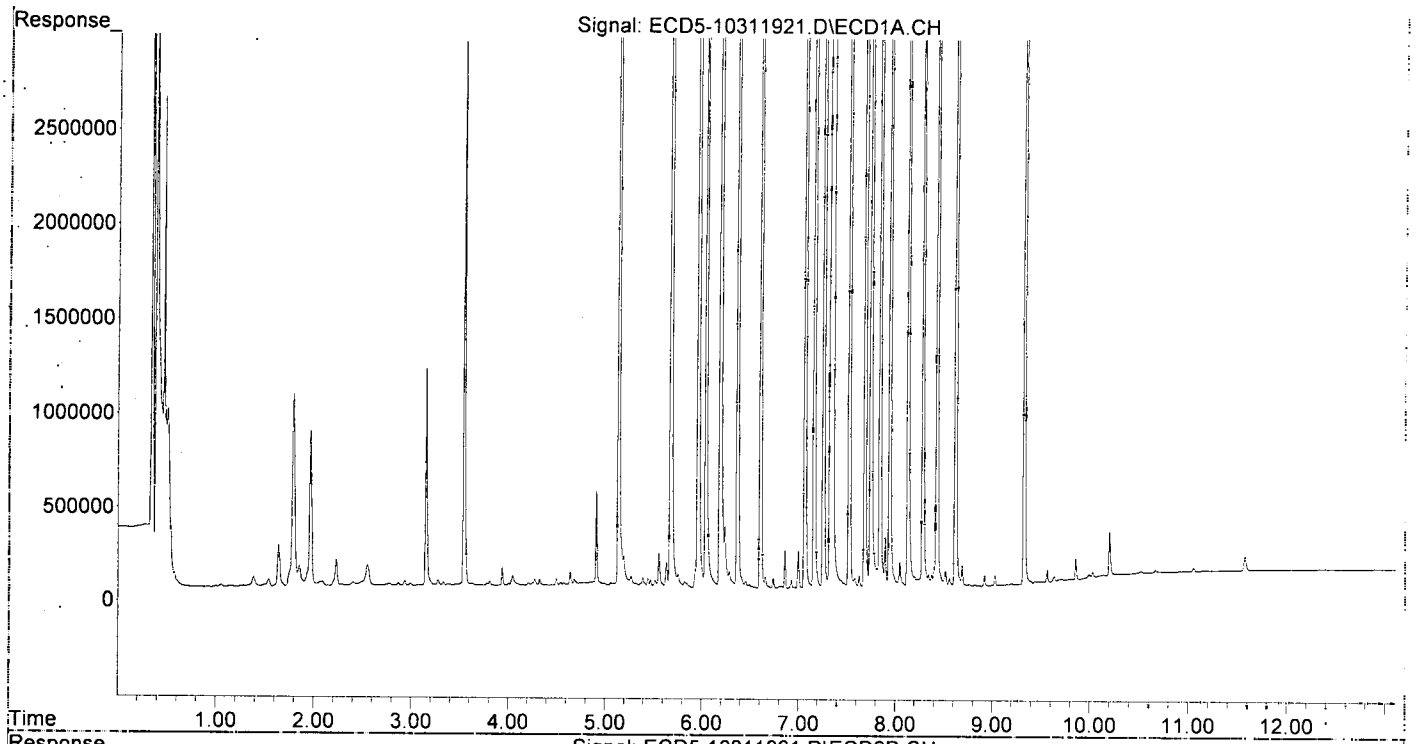
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.139	5.737	7854015	12299400	47.320	41.925	
22)	S DCBP (S)	9.326	10.248	9664119	13859617	68.492	77.099	
	Target Compounds							
2)	a-BHC	5.678	6.346	19784817	35200681	86.273	85.784	
3)	g-BHC	5.961	6.663	17641520	32314166	87.431	90.591	
4)	b-BHC	6.041	6.731	7323335	13150431	81.025	83.091	
5)	Heptachlor	6.368	7.031	13659381	24232693	75.343	79.198	
6)	d-BHC	6.189	6.983	15708869	30160955	79.866	85.523	
7)	Aldrin	6.606	7.293	12984213	21939853	65.761	66.607	
8)	Heptachlo...	7.065	7.732	16066483	28327298	87.233	94.158	
9)	trans-Chl...	7.160	7.871	15320123	26223912	82.860	83.695	
10)	cis-Chlor...	7.257	7.978	14959555	25449121	82.163	87.380	
11)	Endosulfa...	7.351	8.026	15474022	25745525	90.927	93.560	
12)	4,4'-DDE	7.327	8.093	14988092	25625974	79.500	82.484	
13)	Dieldrin	7.523	8.226	17390379	30260139	90.585	99.491	
14)	Endrin	7.685	8.451	14722226	24286093	100.133	107.543	
15)	4,4'-DDD	7.745	8.506	12831822	22873295	81.658	89.274	
16)	Endosulfa...	7.841	8.599	13333171	22317540	92.842	96.778	
17)	4,4'-DDT	7.941	8.730	12469082	20170485	104.291	98.829	
18)	Endrin Al...	8.130	8.836	11096747	18846364	88.886	92.183	
19)	Endosulfa...	8.429	9.026	13789769	22609709	88.979	90.770	
20)	Methoxychlor	8.284	9.211	6618480	10929790	112.993	109.210	
21)	Endrin Ke...	8.620	9.419	15504900	25361747	92.978	98.563	
23)	Hexachlor...	2.934	3.415f	37687	1721695	0.206	4.580	#
24)	Hexachlor...	5.520	6.204	40858	23088	0.232	0.074	#
25)	Oxychlordane	7.000	7.671	198157	41817	1.204	0.153	#
26)	2,4'-DDE	7.065	7.871	16066483	26223912	125.264	123.617	
27)	trans-Non...	7.257	7.933	14959555	82670	83.260	0.274	#
28)	2,4'-DDD	0.000	8.226	0	30260139	N.D.	160.222	#
29)	2,4'-DDT	7.627	8.451	61620	24286093	0.562	136.179	#
30)	cis-Nonac...	7.745f	8.506	12831822	22873295	61.806	68.187	
31)	Mirex	8.377	9.419	63292	25361747	0.505	136.300	#
32)	Chlordane...	7.257	7.933	14959555	82670	759.769	2.285	#
33)	Chlordane...	7.327	8.026f	14988092	25745525	597.986	847.894	#
34)	Chlordane...	7.895	8.730f	270789	20170485	46.840	2249.694	#
35)	Chlordane...	3.328f	3.353f	30718	8989	NoCal	NoCal	
36)	Toxaphene...	0.000	8.359	0	13336	N.D.	5.082	#
37)	Toxaphene...	7.685	8.730	14722226	20170485	9116.276	6128.937	
38)	Toxaphene...	0.000	8.730	0	20170485	N.D.	3979.721	#
39)	Toxaphene...	8.230	8.836f	41916	18846364	12.936	2257.095	#
40)	Toxaphene...	0.000	9.026f	0	22609709	N.D.	4851.496	#
41)	Toxaphene...	8.558	9.340f	44931	314845	14.198	66.280	#
42)	Toxaphene...	3.377f	3.353	20643	8989	NoCal	NoCal	

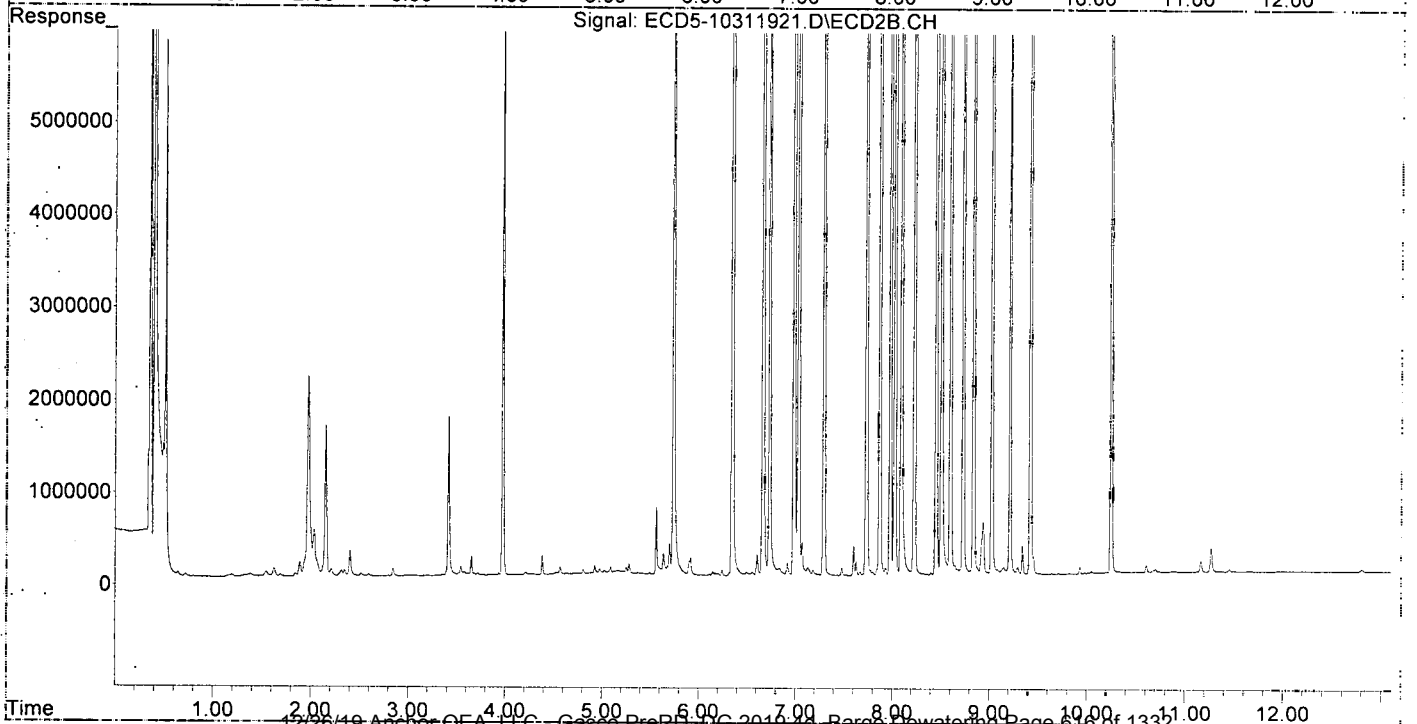
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 17:56
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BSD1
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)/608 (SW)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:13
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BS2
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:21 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

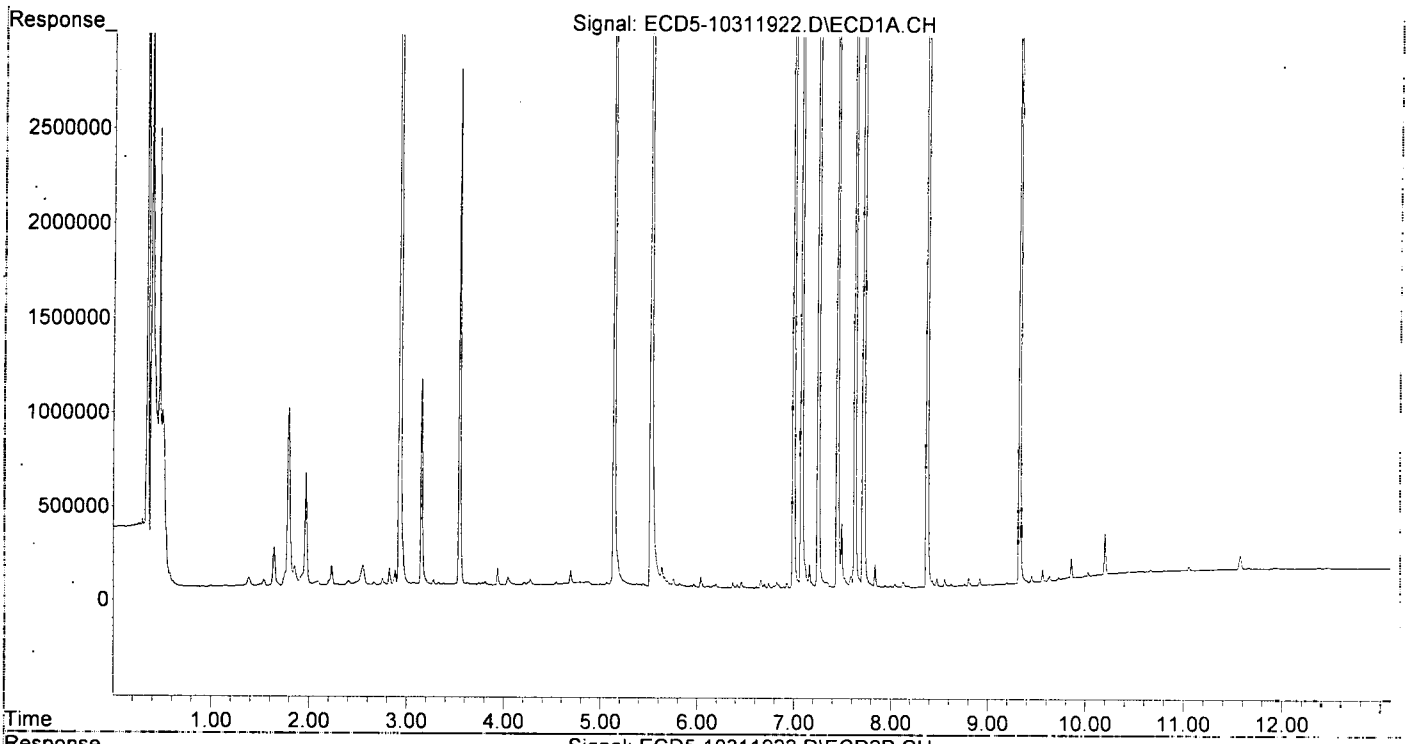
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.737	7483122	11536248	45.086	39.324	
22)	S	DCBP (S)	9.326	10.248	9312173	13717895	65.998	76.311	
		Target Compounds							
2)		a-BHC	5.694	6.344	41473	55431	0.181	0.135	
3)		g-BHC	5.965	6.663	20345	22482	0.101	0.063	
4)		b-BHC	6.039	6.732	61063	22432	0.676	0.142	#
5)		Heptachlor	6.370	7.031	31482	42286	0.174	0.138	
6)		d-BHC	6.193	6.984	22745	31955	0.116	0.091	
7)		Aldrin	6.608	7.292	6867	12085	0.035	0.037	
8)		Heptachlo...	7.077	7.723	9805031	64438	53.237	0.214	#
9)		trans-Chl...	7.161	7.870	125336	16967318	0.678	54.152	#
10)		cis-Chlor...	7.251	7.976	14938263	101319	82.046	0.348	#
11)		Endosulfa...	7.332f	8.026	31416	40952	0.185	0.149	
12)		4,4'-DDE	7.332	8.091	31416	20497	0.167	0.066	#
13)		Dieldrin	7.494f	8.242	348841	15570028	1.817	51.192	#
14)		Endrin	7.717f	8.464	17777894	16899990	120.916	74.836	
15)		4,4'-DDD	7.717f	8.498	17777894	30528080	113.134	119.151	
16)		Endosulfa...	7.840	8.589	125867	167827	0.876	0.728	
17)		4,4'-DDT	7.943	8.729	12464	11246	0.104	0.027	#
18)		Endrin Al...	8.130	8.831	31967	31289	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.026	0	23312	N.D.	0.094	#
20)		Methoxychlor	8.285	0.000	2604	0	0.044	N.D.	#
21)		Endrin Ke...	8.622	9.404	13830	15253595	0.083	59.280	#
23)		Hexachlor...	2.931	3.434	7439940	15175323	40.713	40.367	
24)		Hexachlor...	5.520	6.204	11454338	18798798	64.973	59.852	
25)		Oxychlordane	6.994	7.662	12847480	22495139	78.082	82.128	
26)		2,4'-DDE	7.077	7.870	9805031	16967318	76.446	79.982	
27)		trans-Non...	7.251	7.936	14938263	25653645	83.141	85.048	
28)		2,4'-DDD	7.447	8.242	9277098	15570028	81.289	82.441	
29)		2,4'-DDT	7.628	8.464	10197656	16899990	92.970	94.763	
30)		cis-Nonac...	7.717	8.498	17777894	30528080	85.629	91.006	
31)		Mirex	8.374	9.404	9758418	15253595	77.839	81.976	
32)		Chlordane...	7.251	7.936	14938263	25653645	758.687	708.966	
33)		Chlordane...	7.332	8.042	31416	36561	1.253	1.204	
34)		Chlordane...	7.840f	8.729f	125867	11246	21.772	1.254	#
35)		Chlordane...	3.327f	3.302f	27881	179142	NoCal	NoCal	
36)		Toxaphene...	0.000	8.380	0	32597	N.D.	12.421	#
37)		Toxaphene...	7.717f	8.729	17777894	11246	11008.403	3.417	#
38)		Toxaphene...	7.997	8.729	9961	11246	2.958	2.219	
39)		Toxaphene...	0.000	8.831	0	31289	N.D.	3.747	#
40)		Toxaphene...	8.476	9.026f	45632	23312	19.036	5.002	#
41)		Toxaphene...	8.558	9.404f	40419	15253595	12.772	3211.146	#
42)		Toxaphene...	3.378f	3.302f	22017	179142	NoCal	NoCal	

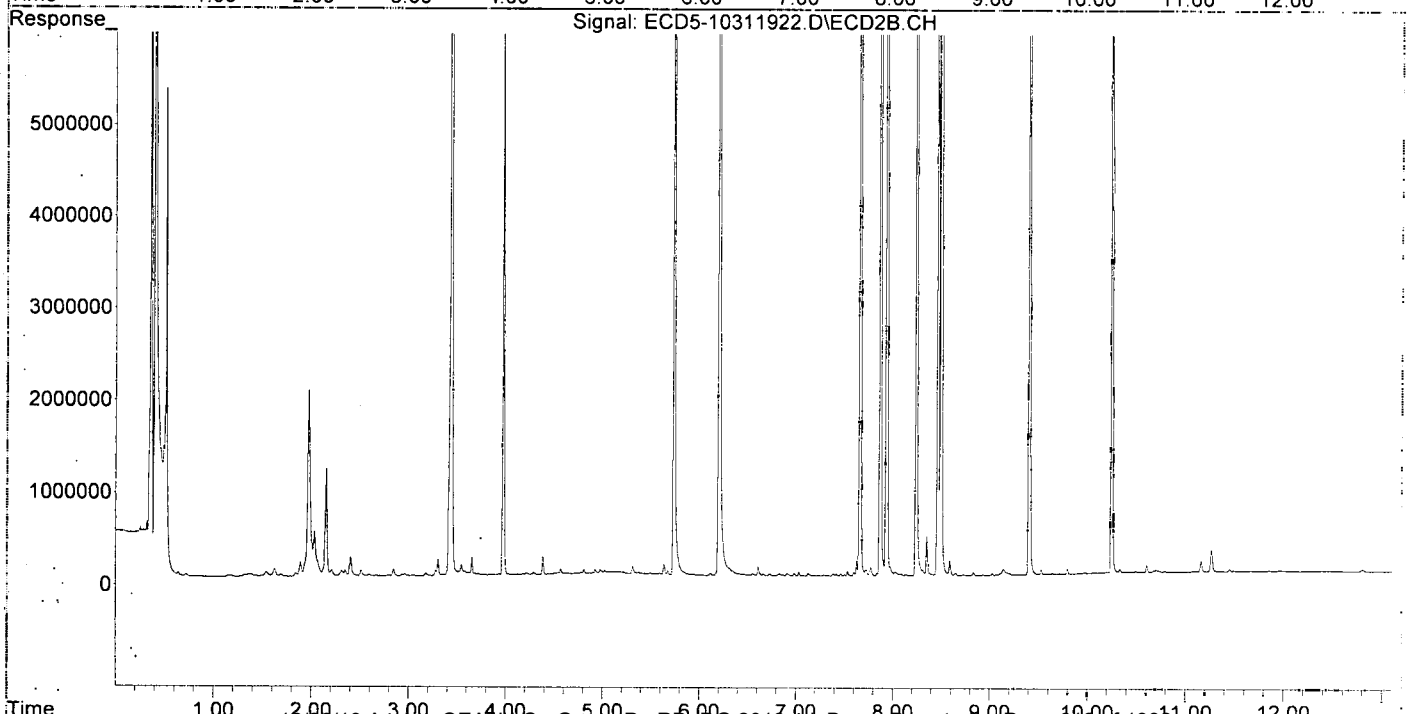
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:13
Operator : MJB 643 MJB 11/1/19
Sample : 910172~~31~~-BS2
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:21 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:31
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BSD2
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:28 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Q19 MJB 11/1/19

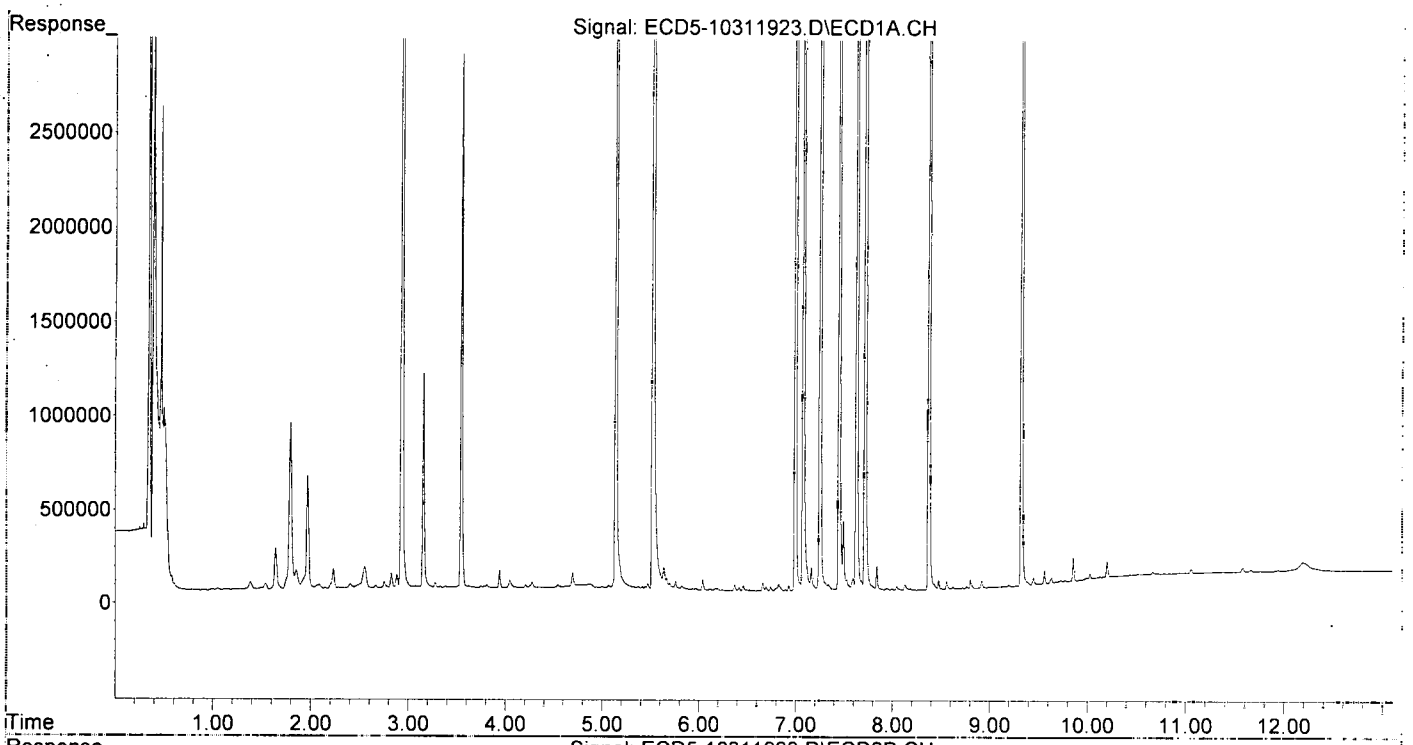
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.141	5.740	7197826	11326245	43.367	38.608	
22)	S	DCBP (S)	9.327	10.250	10409089	15138802	73.772	84.215	
		Target Compounds							
2)		a-BHC	5.698	6.314f	42253	90745	0.184	0.221	
3)		g-BHC	5.968	6.665	13891	14393	0.069	0.040	#
4)		b-BHC	6.041	6.732	59637	20480	0.660	0.129	#
5)		Heptachlor	6.371	7.034	33981	35211	0.187	0.115	
6)		d-BHC	6.195	6.986	13635	18790	0.069	0.053	
7)		Aldrin	6.623	7.294	5117	7936	0.026	0.024	
8)		Heptachlo...	7.079	7.722	10504806	65059	57.036	0.216	#
9)		trans-Chl...	7.163	7.872	125797	17343544	0.680	55.353	#
10)		cis-Chlor...	7.252	0.000	15921617	0	87.447	N.D.	#
11)		Endosulfa...	7.337	8.028	30848	35326	0.181	0.128	
12)		4,4'-DDE	7.337	0.000	30848	0	0.164	N.D.	#
13)		Dieldrin	7.495f	8.244	367918	15776408	1.916	51.870	#
14)		Endrin	7.719f	8.465	18674727	18134908	127.016	80.304	
15)		4,4'-DDD	7.719f	8.500	18674727	32171018	118.841	125.563	
16)		Endosulfa...	7.841	8.591	128859	180106	0.897	0.781	
17)		4,4'-DDT	7.944	8.732	12551	14826	0.105	0.048	#
18)		Endrin Al...	8.132	8.832	29096	30544	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.028	0	14011	N.D.	0.056	#
20)		Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)		Endrin Ke...	8.624	9.406	10220	16356306	0.061	63.565	#
23)		Hexachlor...	2.932	3.436	6612107	13599297	36.183	36.175	
24)		Hexachlor...	5.522	6.205	11528224	18653316	65.392	59.389	
25)		Oxychlordane	6.997	7.664	13536315	22688956	82.269	82.836	
26)		2,4'-DDE	7.079	7.872	10504806	17343544	81.902	81.756	
27)		trans-Non...	7.252	7.937	15921617	27071766	88.641	89.750	
28)		2,4'-DDD	7.449	8.244	9645863	15776408	84.520	83.533	
29)		2,4'-DDT	7.630	8.465	10939867	18134908	99.737	101.688	
30)		cis-Nonac...	7.719	8.500	18674727	32171018	89.949	95.904	
31)		Mirex	8.376	9.406	10684648	16356306	85.227	87.902	
32)		Chlordane...	7.252	7.937	15921617	27071766	808.630	748.158	
33)		Chlordane...	7.337	8.044	30848	37421	1.231	1.232	
34)		Chlordane...	7.841f	8.732f	128859	14826	22.290	1.654	#
35)		Chlordane...	3.328f	3.354f	22183	10887	NoCal	NoCal	
36)		Toxaphene...	0.000	8.354	0	476178	N.D.	181.452	#
37)		Toxaphene...	7.719f	8.732	18674727	14826	11563.739	4.505	#
38)		Toxaphene...	7.998	8.732	9076	14826	2.695	2.925	
39)		Toxaphene...	0.000	8.832	0	30544	N.D.	3.658	#
40)		Toxaphene...	8.477	9.028f	47269	14011	19.719	3.006	#
41)		Toxaphene...	8.561f	9.406f	39415	16356306	12.455	3443.286	#
42)		Toxaphene...	3.379f	3.354	22197	10887	NoCal	NoCal	

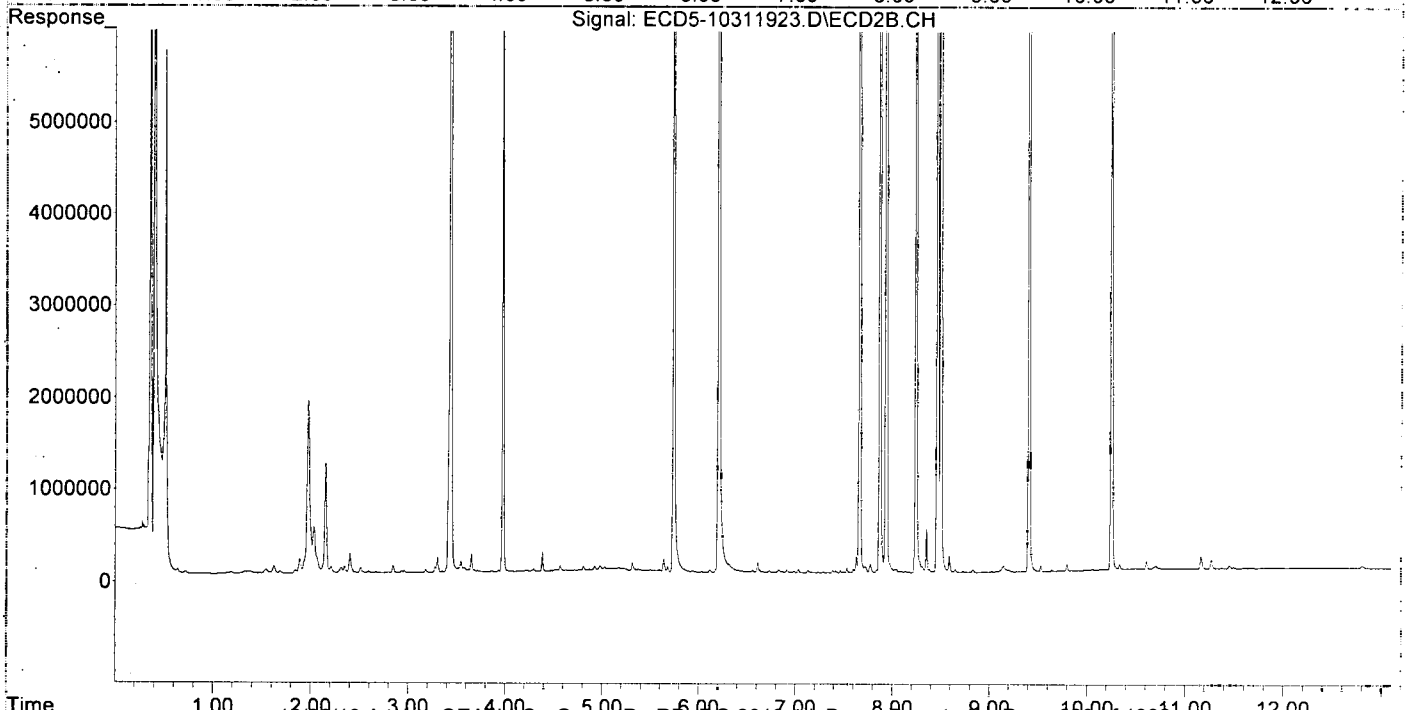
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:31
Operator : MJB 643 MJB 11/1/19
Sample : 9101~~731~~-BSD2
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:28 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 13:09:59 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

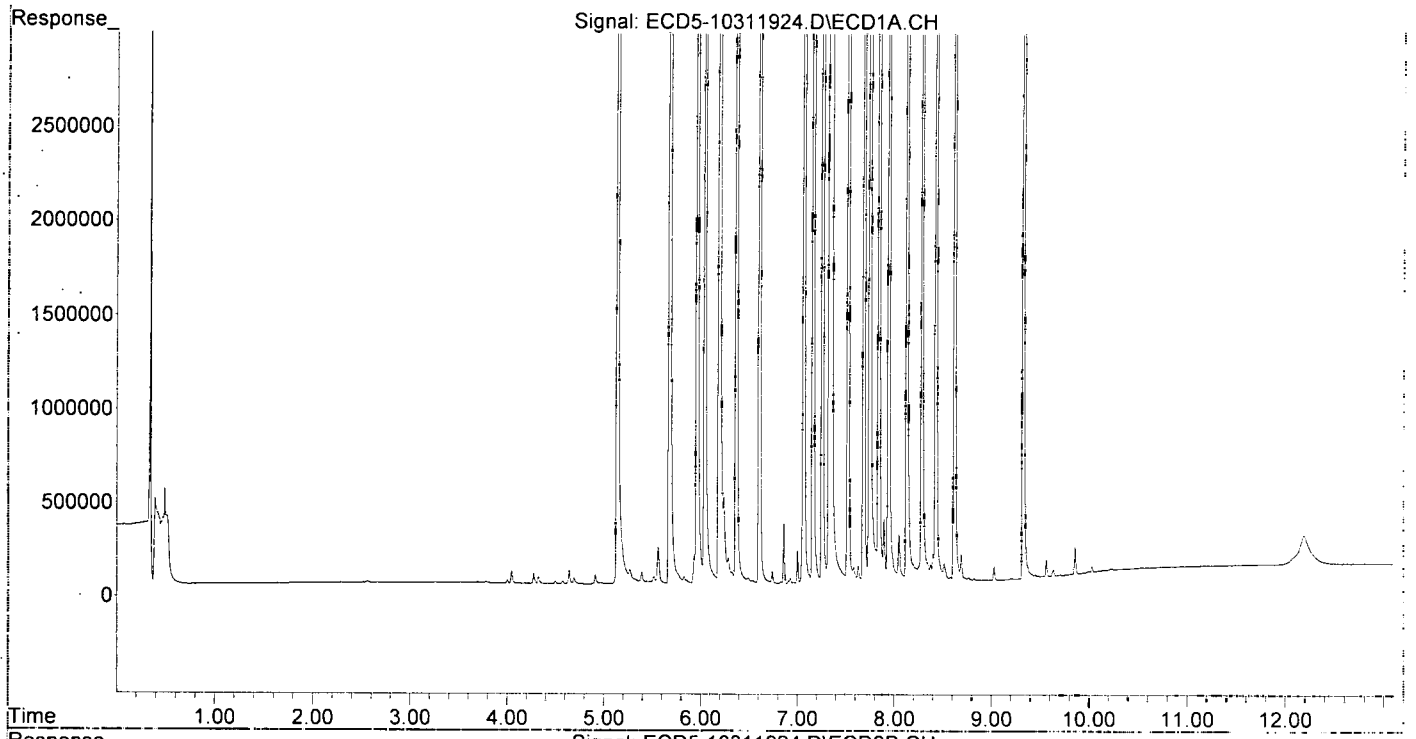
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.738	16770370	28516799	101.041	97.205	
22)	S	DCBP (S)	9.328	10.249	13315133	20366514	94.368	113.296	
		Target Compounds							
2)		a-BHC	5.678	6.346	24250914	44008450	105.747	107.249	
3)		g-BHC	5.962	6.664	20837550	39926443	103.270	111.932	
4)		b-BHC	6.043	6.732	8212746	14945166	90.866	94.431	
5)		Heptachlor	6.369	7.032	20424059	37205909	112.655	121.597	Q-41
6)		d-BHC	6.191	6.984	18033385	34633033	91.684	98.204	
7)		Aldrin	6.608	7.294	21177159	38170044	107.256	115.880	
8)		Heptachlo...	7.066	7.733	18790636	33593790	102.024	111.664	
9)		trans-Chl...	7.161	7.872	19636641	34246568	106.206	109.300	
10)		cis-Chlor...	7.258	7.979	19017758	33273698	104.452	114.246	
11)		Endosulfa...	7.352	8.027	18465954	31011511	108.508m	112.697	
12)		4,4'-DDE	7.328	8.094	18222794	31739292	96.657m	102.162	
13)		Dieldrin	7.524	8.227	20689883	35927113	107.771	118.123	
14)		Endrin	7.686	8.452	16995517	29117559	115.594	128.938	Q-41
15)		4,4'-DDD	7.747	8.508	14016015	26046406	89.194	101.659	
16)		Endosulfa...	7.842	8.600	14790063	25495099	102.987	110.557	
17)		4,4'-DDT	7.943	8.731	14406202	24658459	120.493	117.316	
18)		Endrin Al...	8.131	8.837	13062949	22642579	103.797	108.941	
19)		Endosulfa...	8.430	9.027	15525713	26511654	100.180	106.435	
20)		Methoxychlor	8.287	9.213	6821184	11525410	116.454	114.161	
21)		Endrin Ke...	8.621	9.420	18103904	28661613	108.564	111.387	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.517	0.000	38619	0	0.219	N.D.	#
25)		Oxychlordane	7.003	7.649	173943	12669	1.057	0.046	#
26)		2,4'-DDE	7.066	7.872	18790636	34246568	146.503	161.435	
27)		trans-Non...	7.258	7.933	19017758	107233	105.961	0.356	#
28)		2,4'-DDD	0.000	8.227	0	35927113	N.D.	190.228	#
29)		2,4'-DDT	7.629	8.452	87832	29117559	0.801	163.271	#
30)		cis-Nonac...	7.747f	8.508	14016015	26046406	67.510	77.646	
31)		Mirex	0.000	9.420	0	28661613	N.D.	154.034	#
32)		Chlordane...	7.258	7.933	19017758	107233	965.878	2.964	#
33)		Chlordane...	7.352	8.027f	18458940	31011511	736.464	1021.323	
34)		Chlordane...	7.896	8.731f	333858	24658459	57.750	2750.256	#
35)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)		Toxaphene...	0.000	8.363	0	31437	N.D.	11.979	#
37)		Toxaphene...	7.686	8.731	16995517	24658459	10523.940	7492.638	
38)		Toxaphene...	0.000	8.731	0	24658459	N.D.	4865.217	#
39)		Toxaphene...	0.000	8.837f	0	22642579	N.D.	2711.740	#
40)		Toxaphene...	0.000	9.027f	0	26511654	N.D.	5688.759	#
41)		Toxaphene...	8.517f	9.341f	90057	370999	28.458	78.102	#
42)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

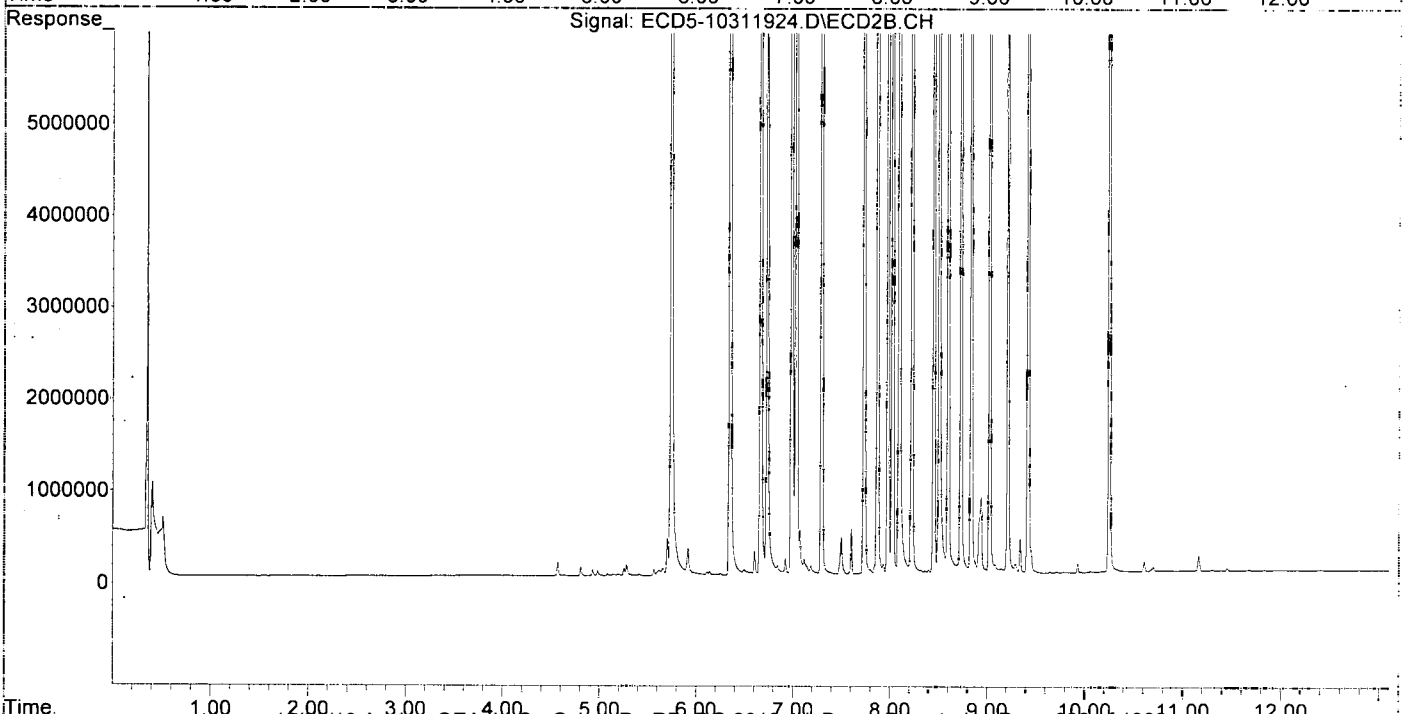
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 13:09:59 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

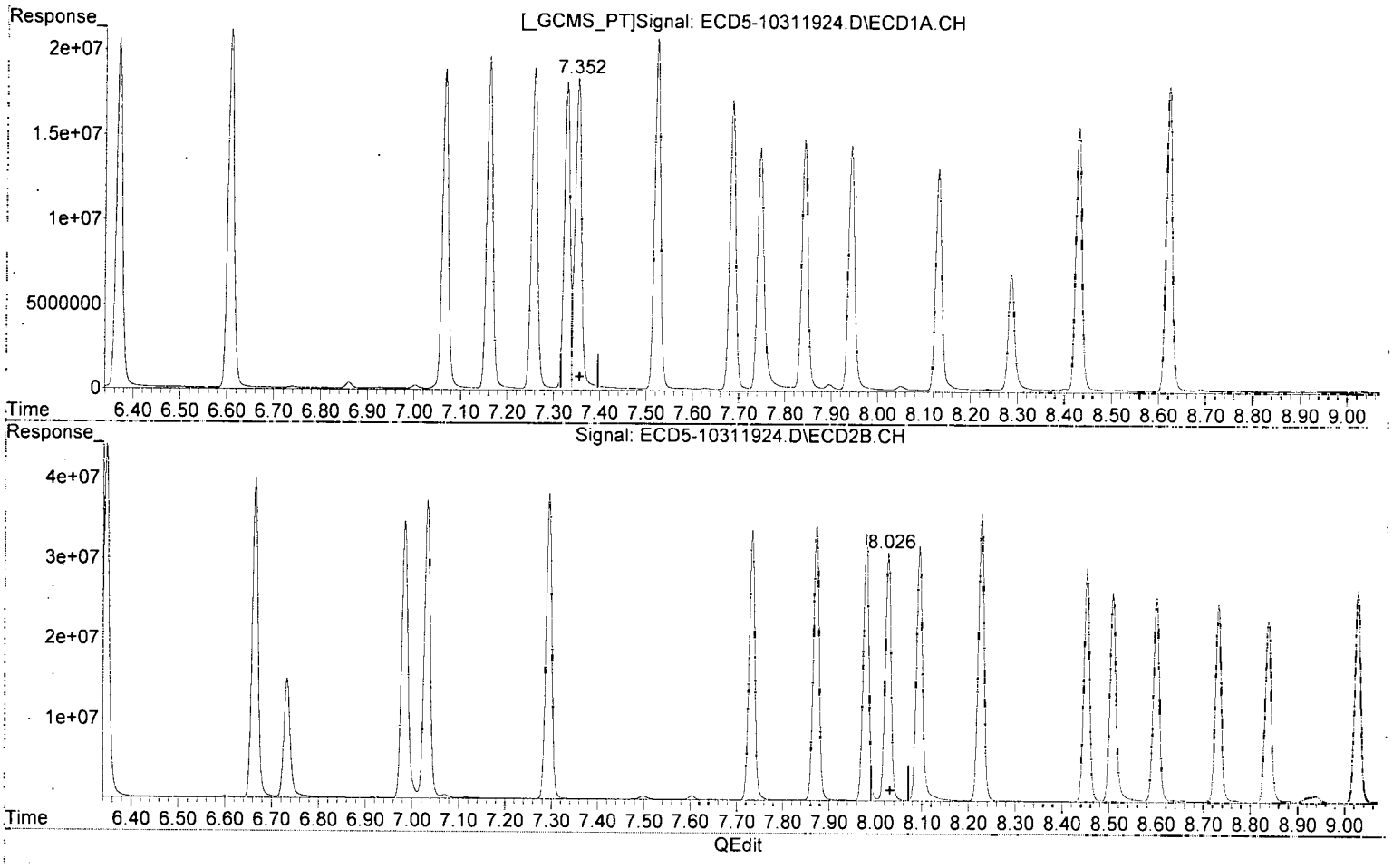




Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(11) Endosulfan I

7.352min 108.508 ng/mL m

response 18465954

WB 11/1/19

(11) Endosulfan I #2

8.027min 112.697 ng/mL

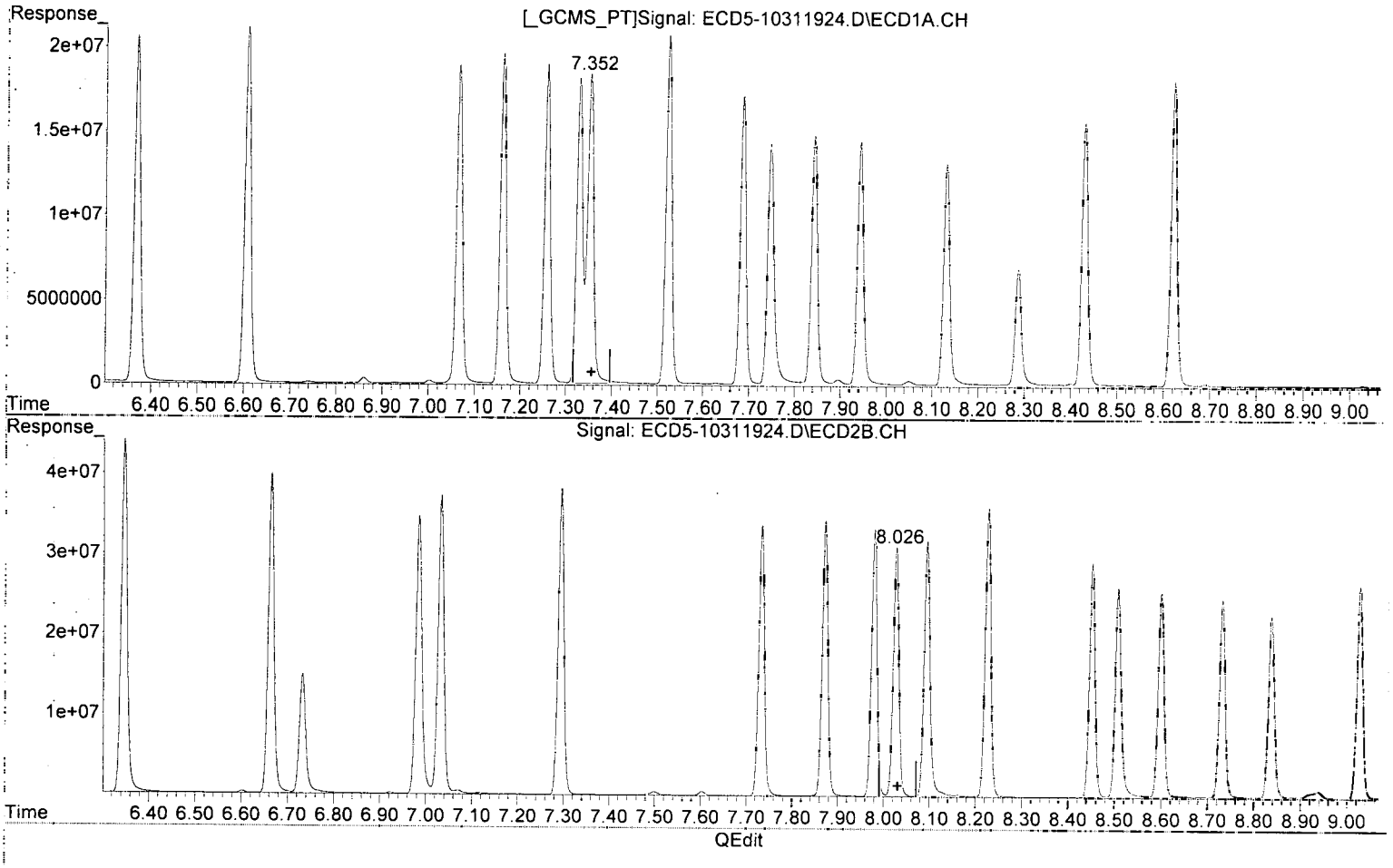
response 31011511

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(11) Endosulfan I

7.352min 108.467 ng/mL

response 18458940

MB 11/1/19

(11) Endosulfan I #2

8.027min 112.697 ng/mL

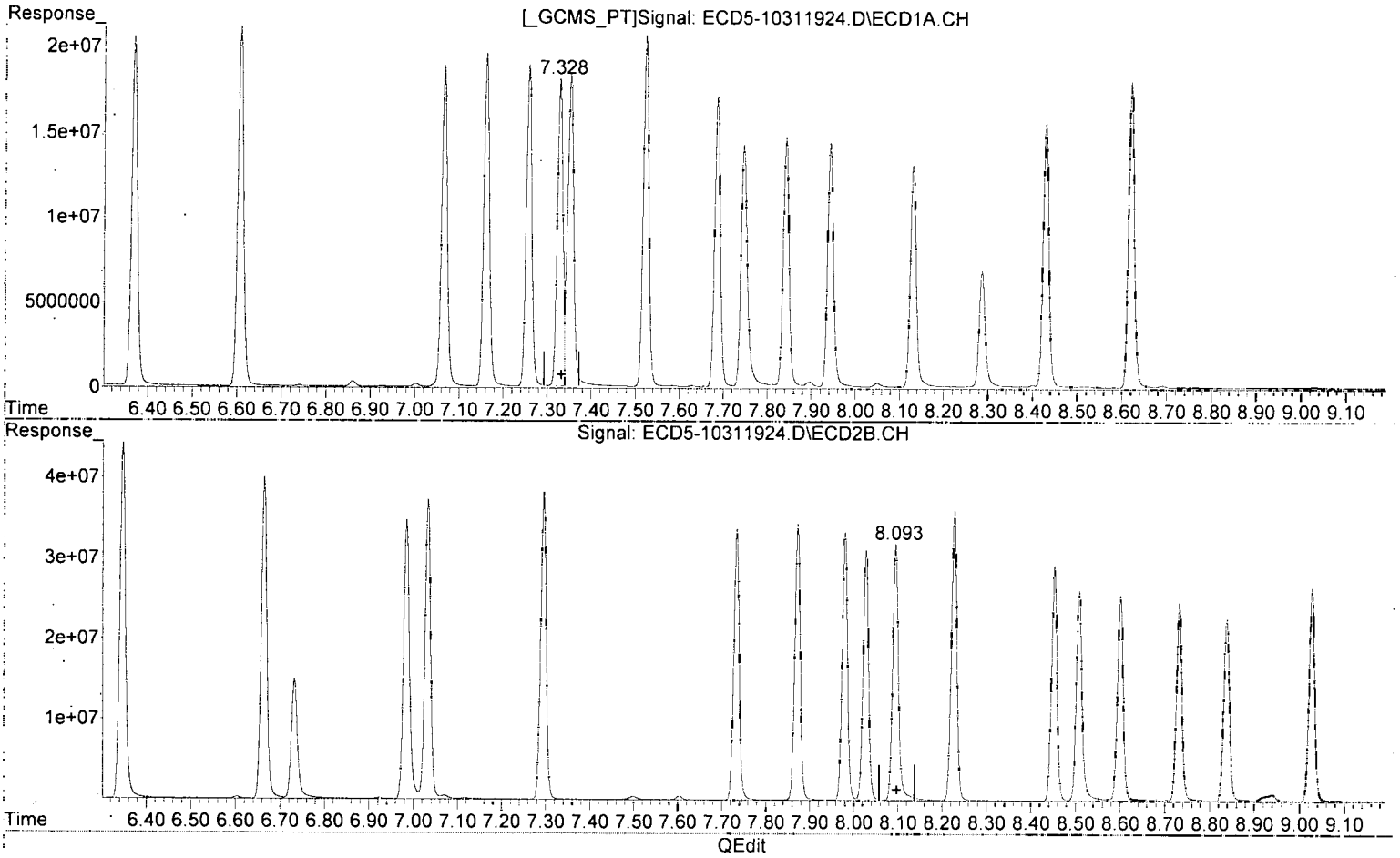
response 31011511

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(12) 4,4'-DDE

7.328min 96.657 ng/mL (m)

response 18222794

MJB 11/1/19

(12) 4,4'-DDE #2

8.094min 102.162 ng/mL

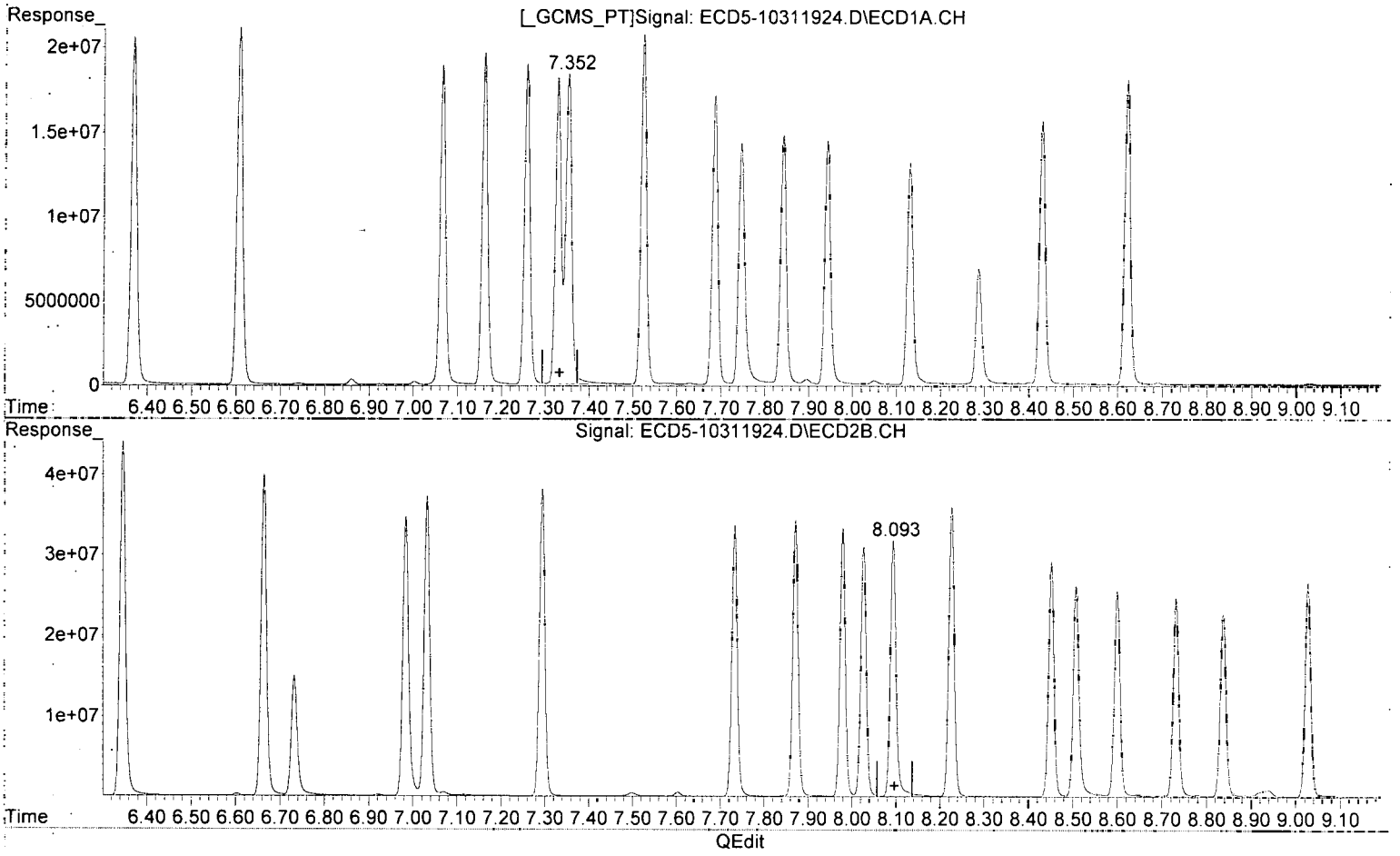
response 31739292

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(12) 4,4'-DDE

7.352min 97.910 ng/mL

response 18458940

MJB 11/1/19

(12) 4,4'-DDE #2

8.094min 102.162 ng/mL

response 31739292

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MF
MJB 11/1/19

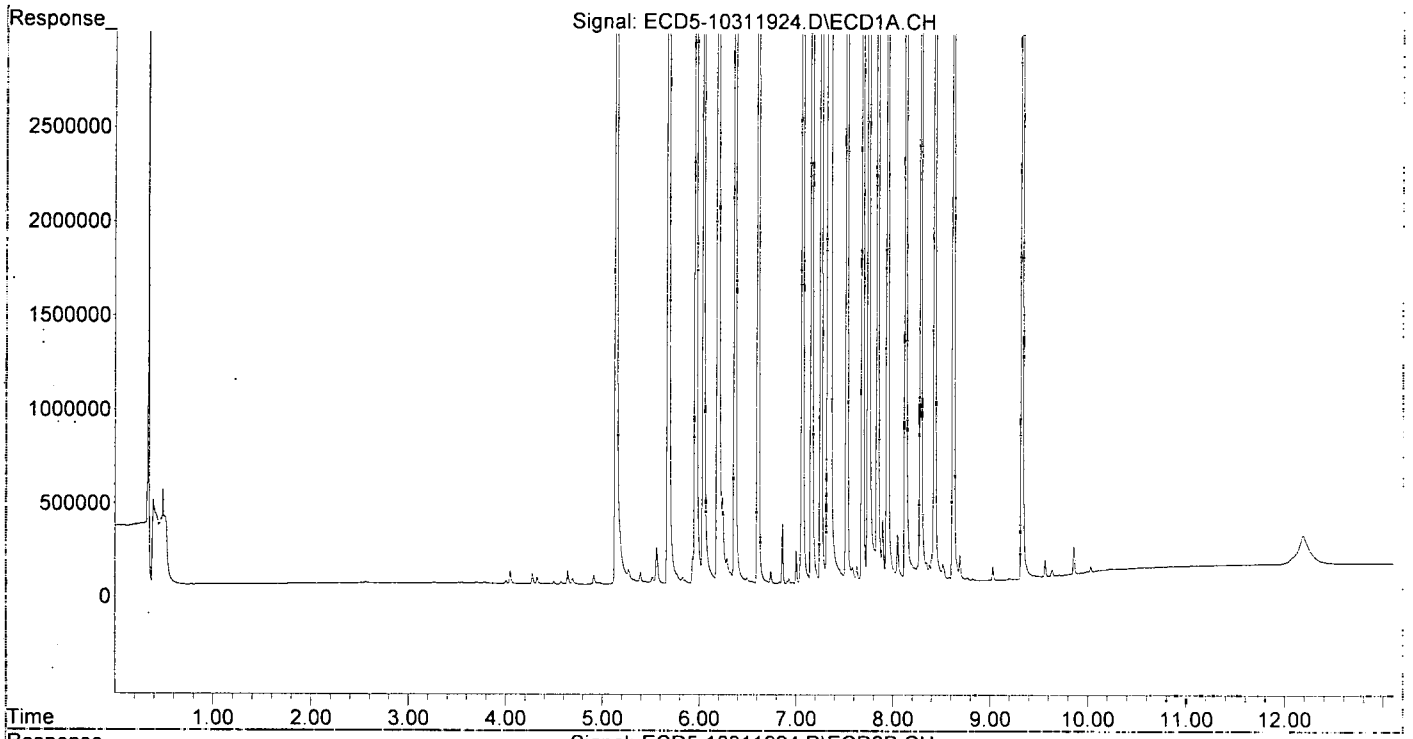
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1) S	TCMX (S)	5.139	5.738	16770370	28516799	101.041	97.205	
22) S	DCBP (S)	9.328	10.249	13315133	20366514	94.368	113.296	
	Target Compounds							
2)	a-BHC	5.678	6.346	24250914	44008450	105.747	107.249	
3)	g-BHC	5.962	6.664	20837550	39926443	103.270	111.932	
4)	b-BHC	6.043	6.732	8212746	14945166	90.866	94.431	
5)	Heptachlor	6.369	7.032	20424059	37205909	112.655	121.597	Q-41
6)	d-BHC	6.191	6.984	18033385	34633033	91.684	98.204	
7)	Aldrin	6.608	7.294	21177159	38170044	107.256	115.880	
8)	Heptachlo...	7.066	7.733	18790636	33593790	102.024	111.664	
9)	trans-Chl...	7.161	7.872	19636641	34246568	106.206	109.300	
10)	cis-Chlor...	7.258	7.979	19017758	33273698	104.452	114.246	
11)	Endosulfa...	7.352	8.027	18458940	31011511	108.467	112.697	
12)	4,4'-DDE	7.352	8.094	18458940	31739292	97.910	102.162	
13)	Dieldrin	7.524	8.227	20689883	35927113	107.771	118.123	
14)	Endrin	7.686	8.452	16995517	29117559	115.594	128.938	Q-41
15)	4,4'-DDD	7.747	8.508	14016015	26046406	89.194	101.659	
16)	Endosulfa...	7.842	8.600	14790063	25495099	102.987	110.557	
17)	4,4'-DDT	7.943	8.731	14406202	24658459	120.493	117.316	
18)	Endrin Al...	8.131	8.837	13062949	22642579	103.797	108.941	
19)	Endosulfa...	8.430	9.027	15525713	26511654	100.180	106.435	
20)	Methoxychlor	8.287	9.213	6821184	11525410	116.454	114.161	
21)	Endrin Ke...	8.621	9.420	18103904	28661613	108.564	111.387	
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.517	0.000	38619	0	0.219	N.D.	#
25)	Oxychlordane	7.003	7.649	173943	12669	1.057	0.046	#
26)	2,4'-DDE	7.066	7.872	18790636	34246568	146.503	161.435	
27)	trans-Non...	7.258	7.933	19017758	107233	105.961	0.356	#
28)	2,4'-DDD	0.000	8.227	0	35927113	N.D.	190.228	#
29)	2,4'-DDT	7.629	8.452	87832	29117559	0.801	163.271	#
30)	cis-Nonac...	7.747f	8.508	14016015	26046406	67.510	77.646	
31)	Mirex	0.000	9.420	0	28661613	N.D.	154.034	#
32)	Chlordane...	7.258	7.933	19017758	107233	965.878	2.964	#
33)	Chlordane...	7.352	8.027f	18458940	31011511	736.464	1021.323	
34)	Chlordane...	7.896	8.731f	333858	24658459	57.750	2750.256	#
35)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)	Toxaphene...	0.000	8.363	0	31437	N.D.	11.979	#
37)	Toxaphene...	7.686	8.731	16995517	24658459	10523.940	7492.638	
38)	Toxaphene...	0.000	8.731	0	24658459	N.D.	4865.217	#
39)	Toxaphene...	0.000	8.837f	0	22642579	N.D.	2711.740	#
40)	Toxaphene...	0.000	9.027f	0	26511654	N.D.	5688.759	#
41)	Toxaphene...	8.517f	9.341f	90057	370999	28.458	78.102	#
42)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

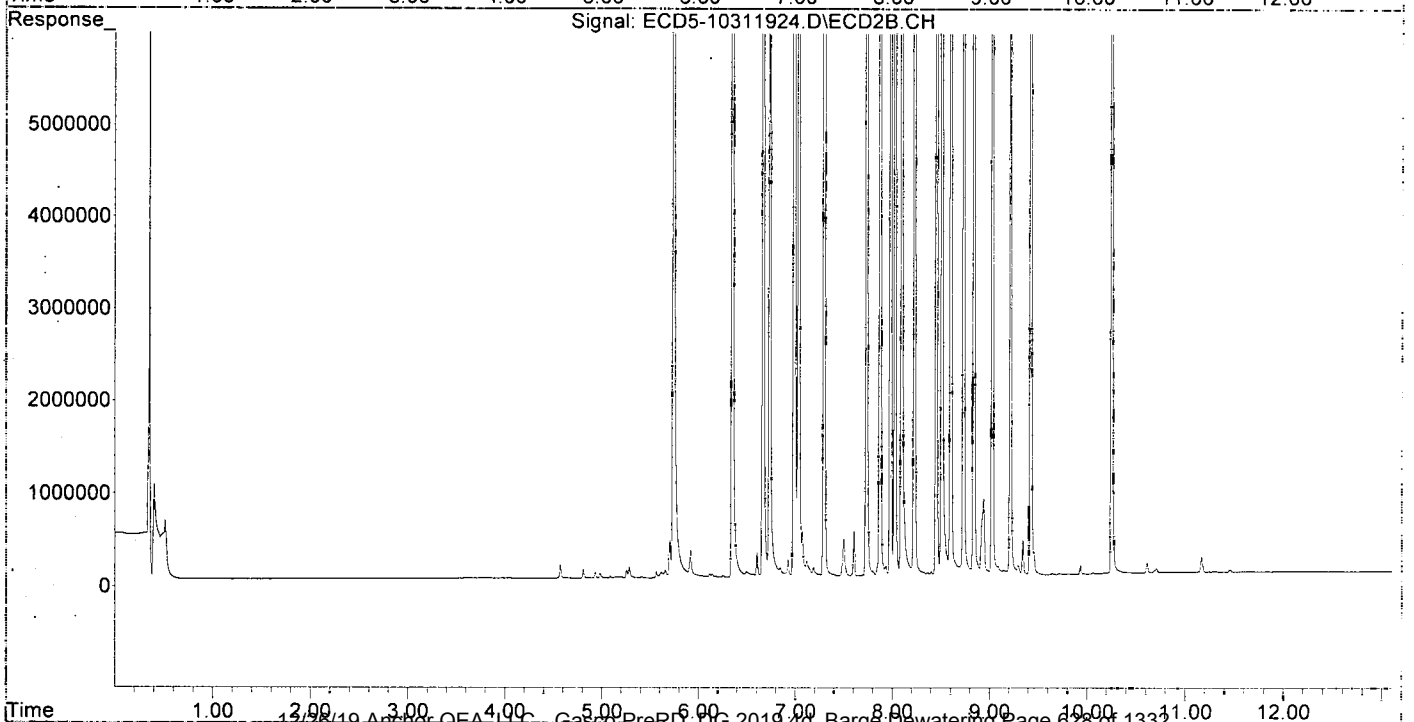
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 18:48
Operator : MJB
Sample : 9J31040-CCV5
Misc : A19H384, AB 100 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 19:05
Operator : MJB
Sample : 9J31040-CCV6
Misc : A19J409, 9-42 100 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

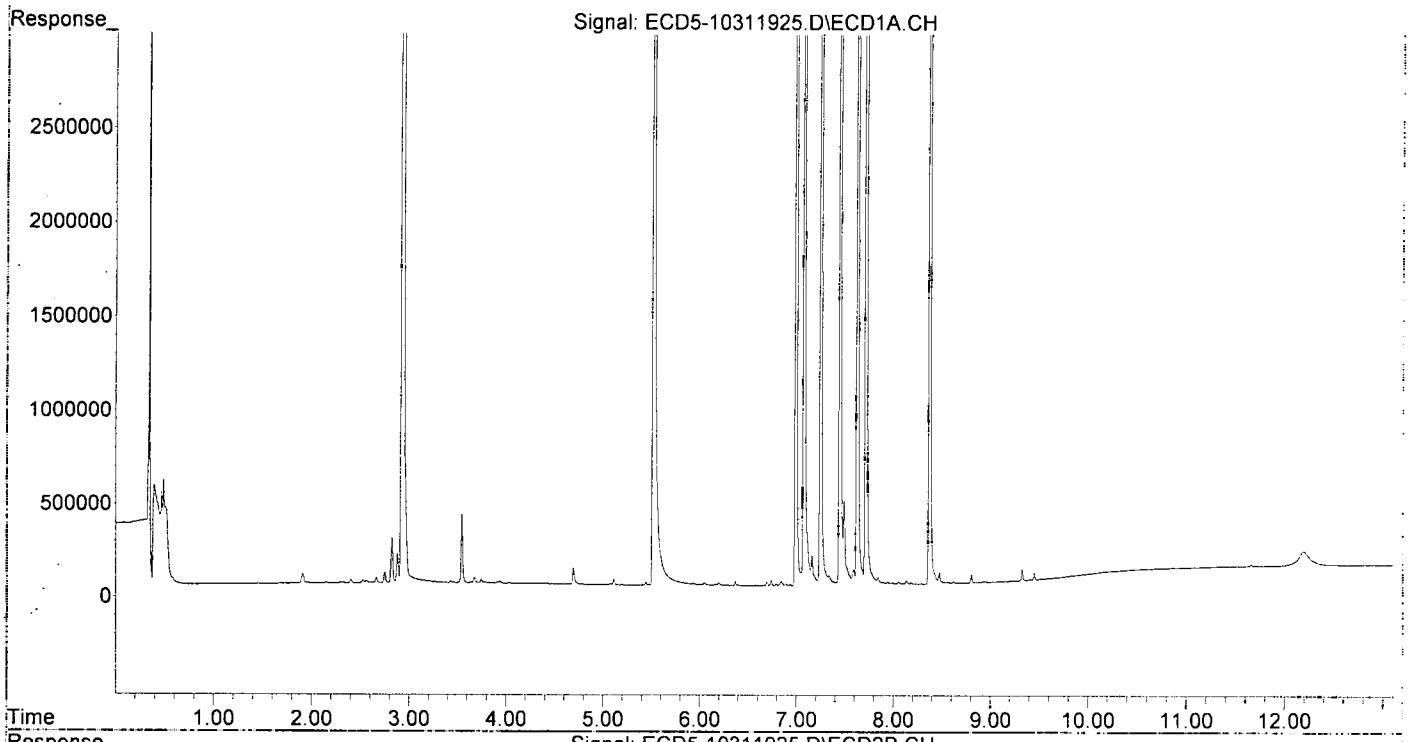
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.114f	0.000	31302	0	0.189	N.D.	#
22)	S	DCBP (S)	9.328	10.249	61054	74046	0.433	0.412	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	5.935f	0.000	11275	0	0.056	N.D.	#
4)		b-BHC	6.048	6.738	13343	8842	0.148	0.056	#
5)		Heptachlor	6.372	7.032	20968	35701	0.116	0.117	
6)		d-BHC	6.199	6.987	14326	20974	0.073	0.059	
7)		Aldrin	0.000	7.292	0	5593	N.D.	0.017	#
8)		Heptachlo...	7.079	7.730	11022084	81815	59.845	0.272	#
9)		trans-Chl...	7.162	7.871	163027	19430440	0.882	62.014	#
10)		cis-Chlor...	7.251	0.000	17850890	0	98.043	N.D.	#
11)		Endosulfa...	7.338	8.044	51502	60228	0.303	0.219	
12)		4,4'-DDE	7.338	8.137f	51502	25511	0.273	0.082	#
13)		Dieldrin	7.495f	8.243	450589	17319482	2.347	56.944	#
14)		Endrin	7.718f	8.464	20209952	19170319	137.457	84.889	
15)		4,4'-DDD	7.718f	8.499	20209952	34398698	128.611	134.258	
16)		Endosulfa...	7.845	8.596	38261	50865	0.266	0.221	
17)		4,4'-DDT	7.945	8.731	10830	9288	0.091	0.016	#
18)		Endrin Al...	8.139	8.838	18065	16226	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.028	0	22174	N.D.	0.089	#
20)		Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)		Endrin Ke...	8.624	9.405	9187	18334181	0.055	71.252	#
23)		Hexachlor...	2.931	3.435	18772228	41598941	102.727	110.656	
24)		Hexachlor...	5.521	6.204	15500853	24530536	87.926	78.101	Q-3
25)		Oxychlordane	6.996	7.662	15652544	26893219	95.130	98.185	
26)		2,4'-DDE	7.079	7.871	11022084	19430440	85.935	91.593	
27)		trans-Non...	7.251	7.936	17850890	31475026	99.432	104.348	
28)		2,4'-DDD	7.449	8.243	9713838	17319482	85.116	91.704	
29)		2,4'-DDT	7.630	8.464	11572215	19170319	105.502	107.494	
30)		cis-Nonac...	7.718	8.499	20209952	34398698	97.343	102.545	
31)		Mirex	8.376	9.405	11263599	18334181	89.845	98.532	
32)		Chlordane...	7.251	7.936	17850890	31475026	906.615	869.846	
33)		Chlordane...	7.338	8.044	51502	60228	2.055	1.984	
34)		Chlordane...	7.845f	8.731f	38261	9288	6.618	1.036	#
35)		Chlordane...	0.000	3.301f	0	468736	N.D.	NoCal	
36)		Toxaphene...	0.000	8.353	0	508854	N.D.	193.904	#
37)		Toxaphene...	7.718f	8.731	20209952	9288	12514.379	2.822	#
38)		Toxaphene...	7.998	8.731	8221	9288	2.441	1.833	
39)		Toxaphene...	0.000	8.838f	0	16226	N.D.	1.943	#
40)		Toxaphene...	8.477	9.028f	57303	22174	23.905	4.758	#
41)		Toxaphene...	8.566f	9.405f	5897	18334181	1.863	3859.663	#
42)		Toxaphene...	0.000	3.301f	0	468736	N.D.	NoCal	

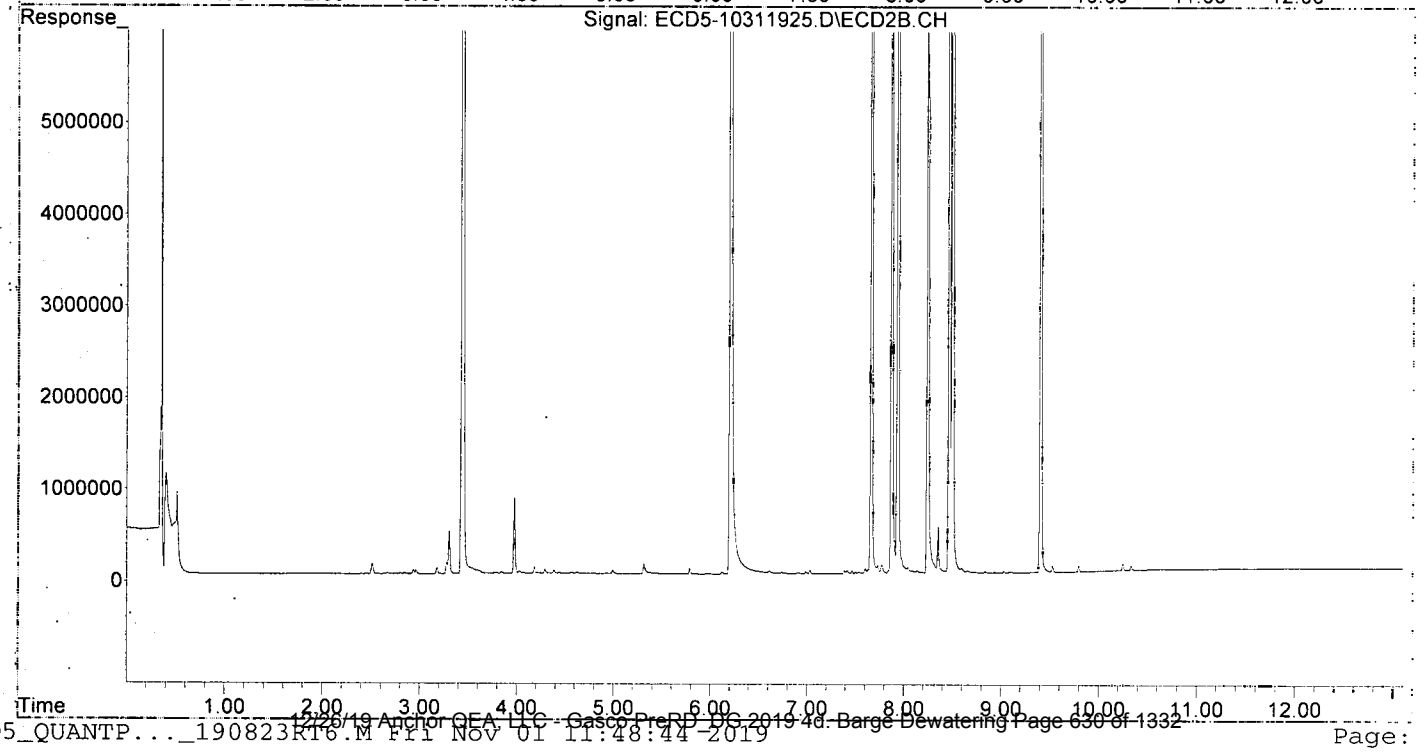
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 19:05
Operator : MJB
Sample : 9J31040-CCV6
Misc : A19J409, 9-42 100 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 19:22
Operator : MJB
Sample : 9J31040-CCB3
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

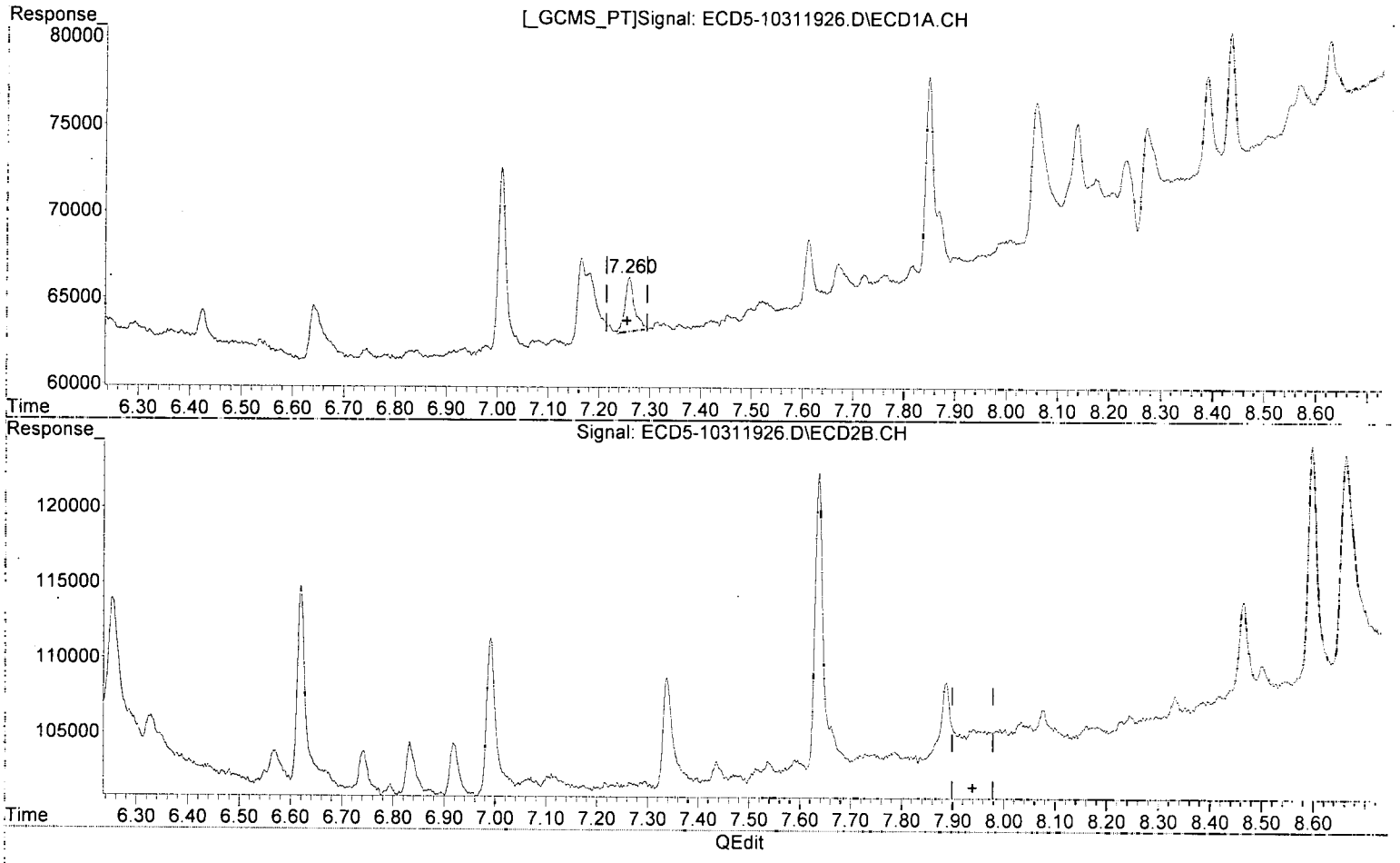
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.140	5.738	15306061	25581899	92.219	87.201	
22)	S	DCBP (S)	9.328	10.249	9920333	15294628	70.308	85.082	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)		b-BHC	6.053	0.000	11072	0	0.122	N.D.	#
5)		Heptachlor	0.000	0.000	0	0	N.D.	N.D.	
6)		d-BHC	6.204	6.990	5814	9778	0.030	0.028	
7)		Aldrin	0.000	7.337f	0	6850	N.D.	0.021	#
8)		Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)		trans-Chl...	7.166	0.000	4592	0	0.025	N.D.	#
10)		cis-Chlor...	7.259	0.000	3101	0	0.017	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	8.463	0	5600	N.D.	0.025	#
15)		4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)		Endosulfa...	7.848	8.595	11043	14980	0.077	0.065	
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.136	8.839	6678	7725	BelowCal	BelowCal	
19)		Endosulfa...	8.434	9.028	7800	10349	0.050	0.042	
20)		Methoxychlor	8.272	0.000	5436	0	0.093	N.D.	#
21)		Endrin Ke...	8.625	9.422	3714	6188	0.022	0.024	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.524	6.186f	19935	5863	0.113	0.019	#
25)		Oxychlordane	7.008	7.636f	10491	19026	0.064	0.069	
26)		2,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
27)		trans-Non...	7.259	0.000	3101	0	~~87346.683~~	N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	7.612	8.463	3643	5600	0.033	0.031	
30)		cis-Nonac...	0.000	8.463f	0	5600	N.D.	0.017	#
31)		Mirex	8.388	9.422	6204	6188	0.049	0.033	
32)		Chlordane...	7.259f	0.000	3101	0	0.157	N.D.	#
33)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
34)		Chlordane...	7.848f	0.000	11043	0	1.910	N.D.	#
35)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)		Toxaphene...	8.272f	8.839f	5436	7725	1.678	0.925	#
40)		Toxaphene...	8.434f	9.028f	7800	10349	3.254	2.221	
41)		Toxaphene...	8.567f	0.000	2281	0	0.721	N.D.	#
42)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 19:22
Operator : MJB
Sample : 9J31040-CCB3
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(27) trans-Nonachlor

7.259min 87346.683 ng/mL QDO

response 3101

NB 11/1/19

(27) trans-Nonachlor #2

0.000min 0.000 ng/mL

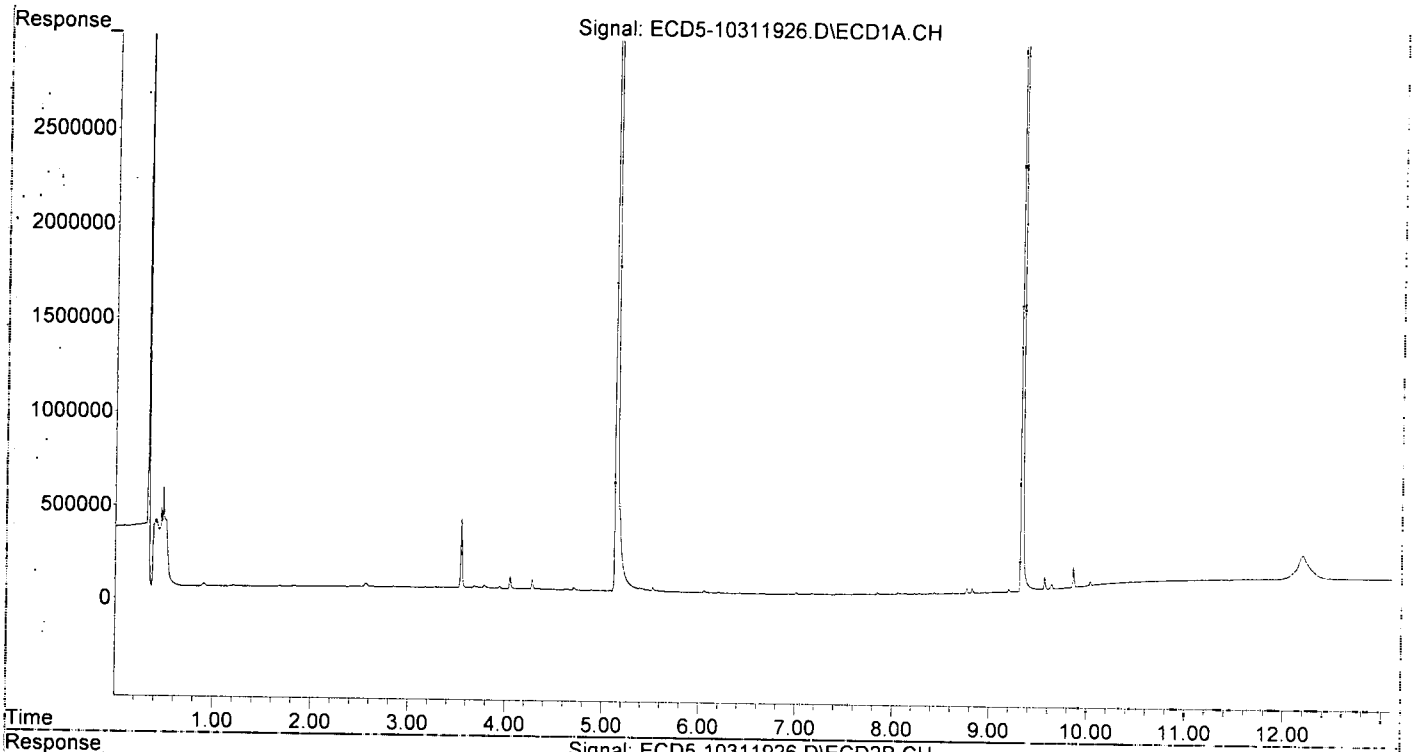
response 0

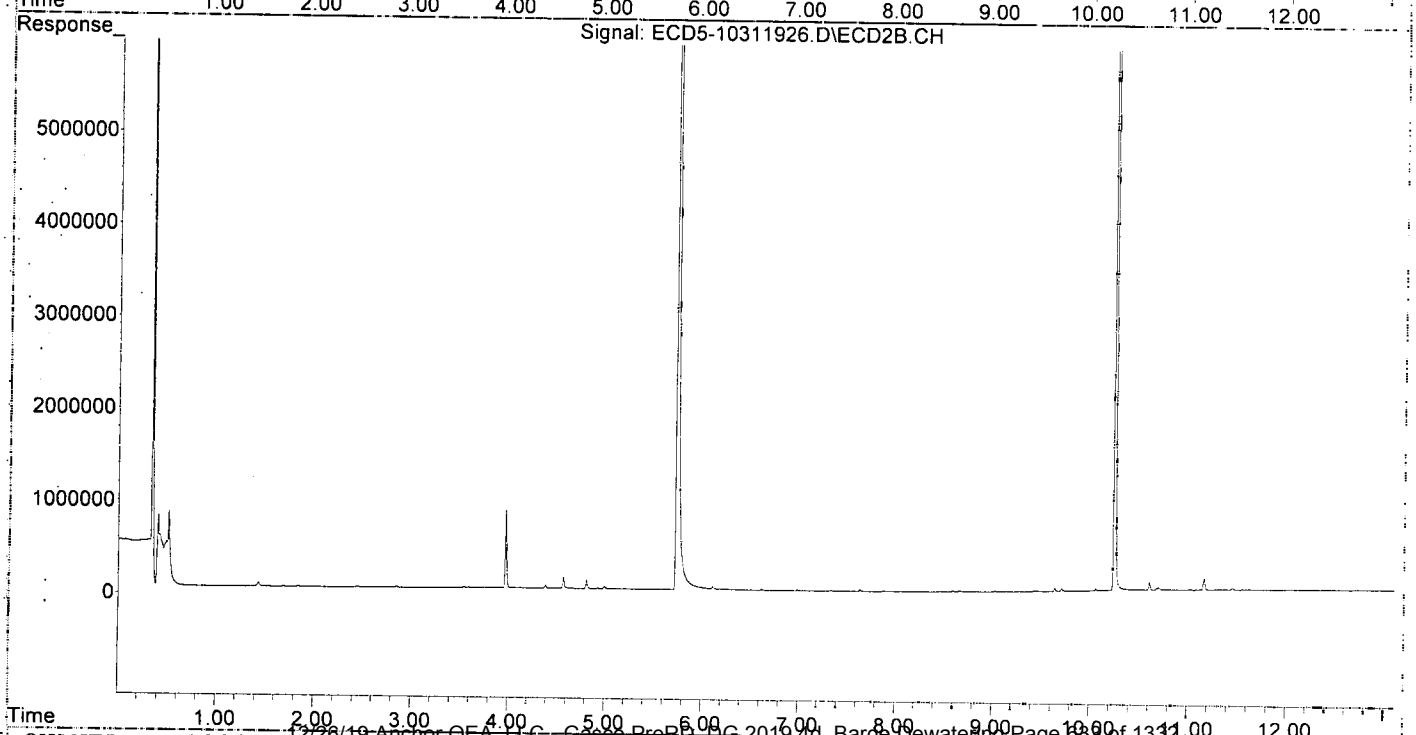
(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 19:22
Operator : MJB
Sample : 9J31040-CCB3
Misc : A19J194
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:48:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc : 1x, 8081B ~~2,4+4,4-DDx Only~~/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 14:29:00 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

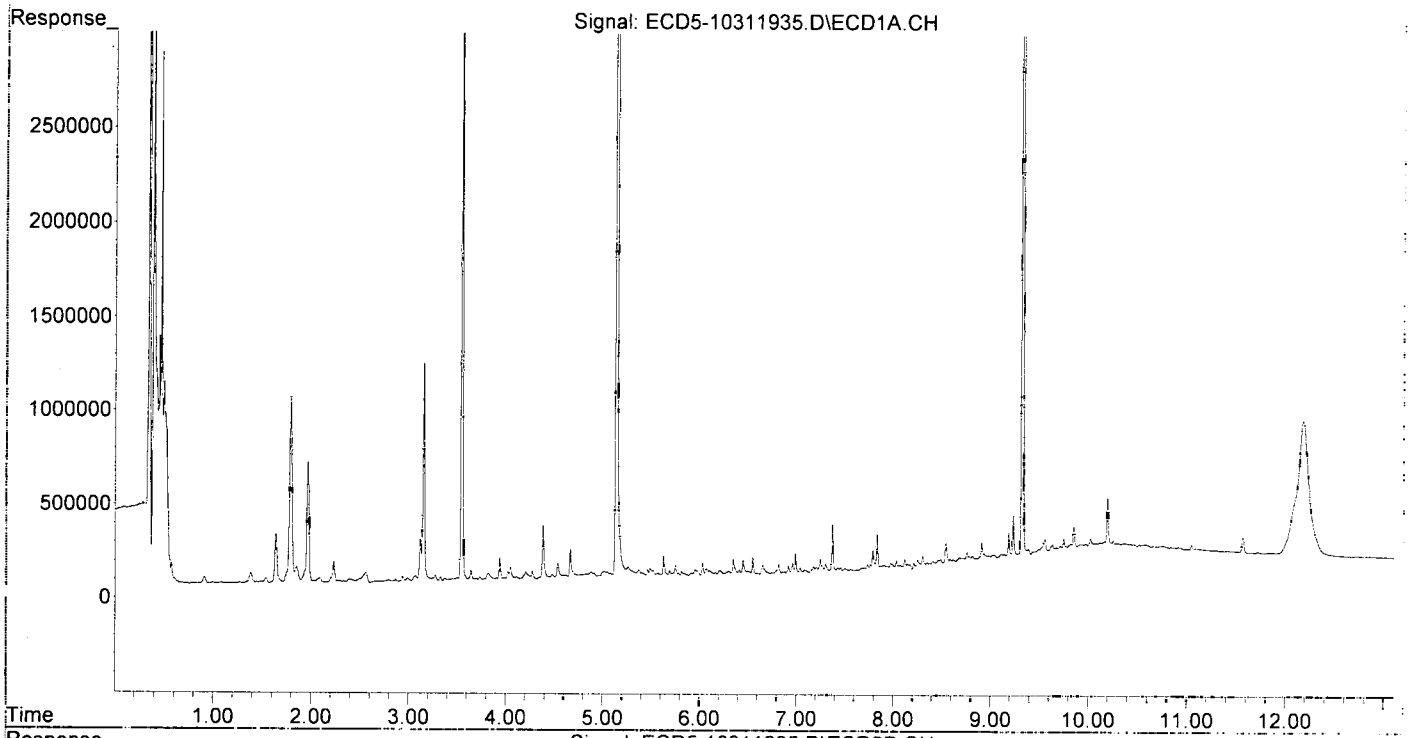
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.139	5.737	12939300	21424363	77.959	73.029	
22)	S DCBP (S)	9.324	10.246	10728035	16331882	76.032	90.852	
	Target Compounds							
2)	a-BHC	5.692	6.316f	31025	53140	0.135	0.130	
3)	g-BHC	5.955	6.660	29990	70686	0.149	0.198	
4)	b-BHC	6.033	6.725	68067	26697	0.753	0.169	#
5)	Heptachlor	6.350f	7.035	80217	23351	0.442	0.076	#
6)	d-BHC	6.210	6.977	22355	19400	0.114	0.055	#
7)	Aldrin	0.000	7.287	0	29863	N.D.	0.091	#
8)	Heptachlo...	7.082	7.745	14301	21472	0.078	0.071	
9)	trans-Chl...	7.178	7.878	30111	60197	0.163	0.192	
10)	cis-Chlor...	7.248	7.980	69778	43076	0.383	0.148	#
11)	Endosulfa...	7.375	8.048	256709	77831	1.508	0.283	#
12)	4,4'-DDE	7.305f	8.087	42247	28991	0.224	0.093	#
13)	Dieldrin	7.498f	8.227	14916	99116	0.078	0.326	#
14)	Endrin	7.682	8.429f	15741	120159	0.107	0.532	#
15)	4,4'-DDD	7.739	8.505	32624	24767	0.208	0.097	#
16)	Endosulfa...	7.836	8.618	192775	33894	1.342	0.147	#
17)	4,4'-DDT	7.917f	8.737	24948	29304	0.209	0.133	
18)	Endrin Al...	8.120	8.835	54871	90964	BelowCal	BelowCal	
19)	Endosulfa...	8.412f	9.003f	40064	146811	0.259	0.589	#
20)	Methoxychlor	8.306	9.235	69970	45426	1.195	0.378	#
21)	Endrin Ke...	8.617	9.428	47171	195995	0.283	0.762	#
23)	Hexachlor...	2.936	3.414f	30320	2062218	0.166	5.486	#
24)	Hexachlor...	5.521	6.189	33959	26628	0.193	0.085	#
25)	Oxychlordane	6.993	7.661	104904	34499	0.638	0.126	#
26)	2,4'-DDE	7.082	7.878	14301	60197	0.111	0.284	#
27)	trans-Non...	7.248	7.945	69778	17937	0.073	0.059	
28)	2,4'-DDD	7.458	8.227	20024	99116	0.175	0.525	#
29)	2,4'-DDT	7.621	8.454	6769	32462	0.062	0.182m	#
30)	cis-Nonac...	7.727	8.505	23032	24767	0.111m	0.074	
31)	Mirex	8.351f	9.428f	33997	195995	0.271	1.053	#
32)	Chlordane...	7.248	7.945	69778	17937	3.544	0.496	#
33)	Chlordane...	7.305f	8.048	42247	77831	1.686	2.563	#
34)	Chlordane...	7.873	8.695	25861	21147	4.473	2.359	#
35)	Chlordane...	3.372	3.368f	14919	29288	NoCal	NoCal	
36)	Toxaphene...	7.375f	8.383	256709	15077	286.619	5.745	#
37)	Toxaphene...	7.682	8.722	15741	28742	9.747	8.733	
38)	Toxaphene...	7.977f	8.737	36669	29304	10.889	5.782	#
39)	Toxaphene...	8.255	8.835	52227	90964	16.119	10.894	
40)	Toxaphene...	8.465	9.003	46789	146811	19.519	31.502	#
41)	Toxaphene...	8.544	9.360	133163	51277	42.079	10.795	#
42)	Toxaphene...	3.372	3.368f	14919	29288	NoCal	NoCal	

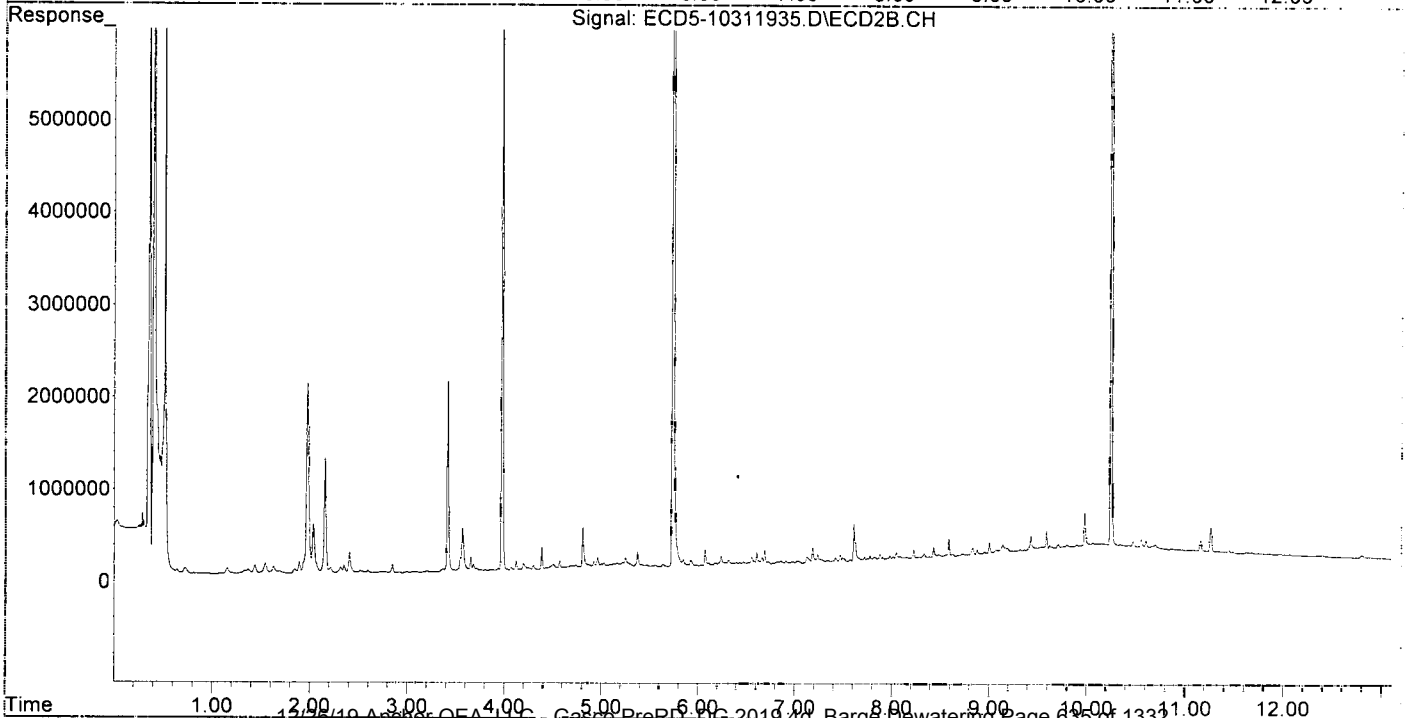
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 14:29:00 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

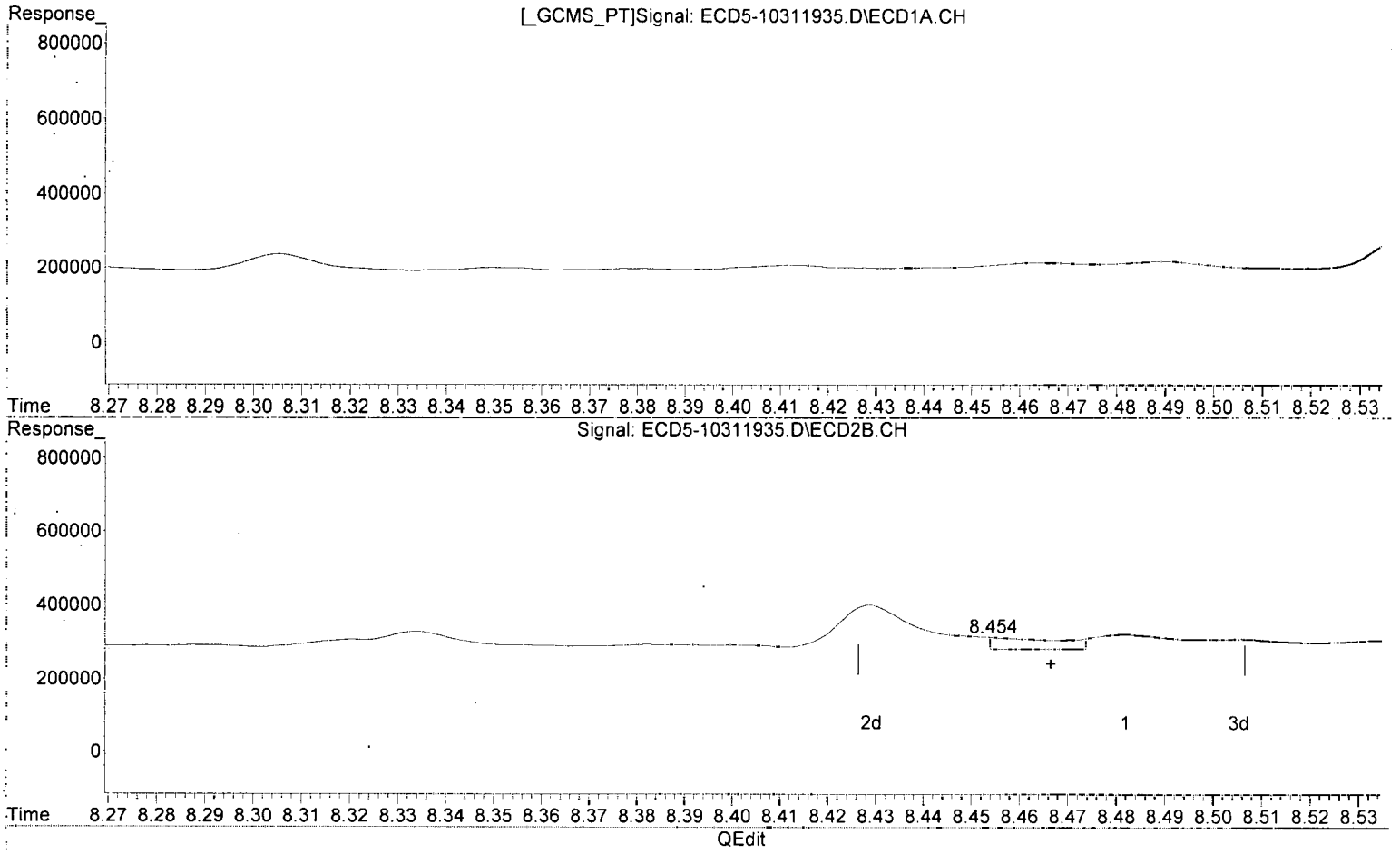




Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc. : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(29) 2,4'-DDT

7.621min 0.062 ng/mL

response 6769

MJB 11-1-19

(29) 2,4'-DDT #2

8.454min 0.182 ng/mL m

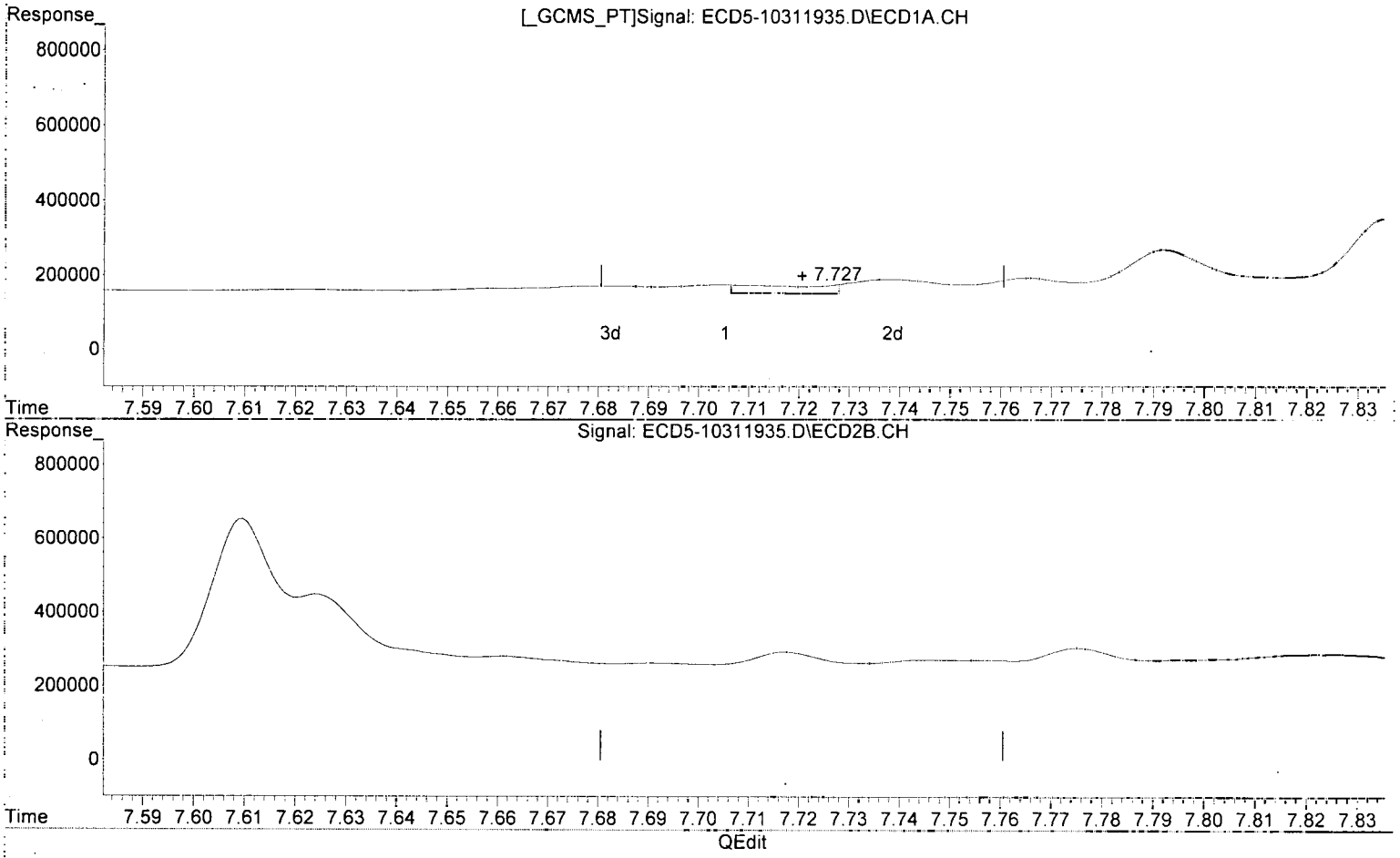
response 32462

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(30) cis-Nonachlor

7.727min 0.111 ng/mL (m)

response 23032

MJB 11/1/19

(30) cis-Nonachlor #2

8.505min 0.074 ng/mL

response 24767

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

ME MJB 11/1/19

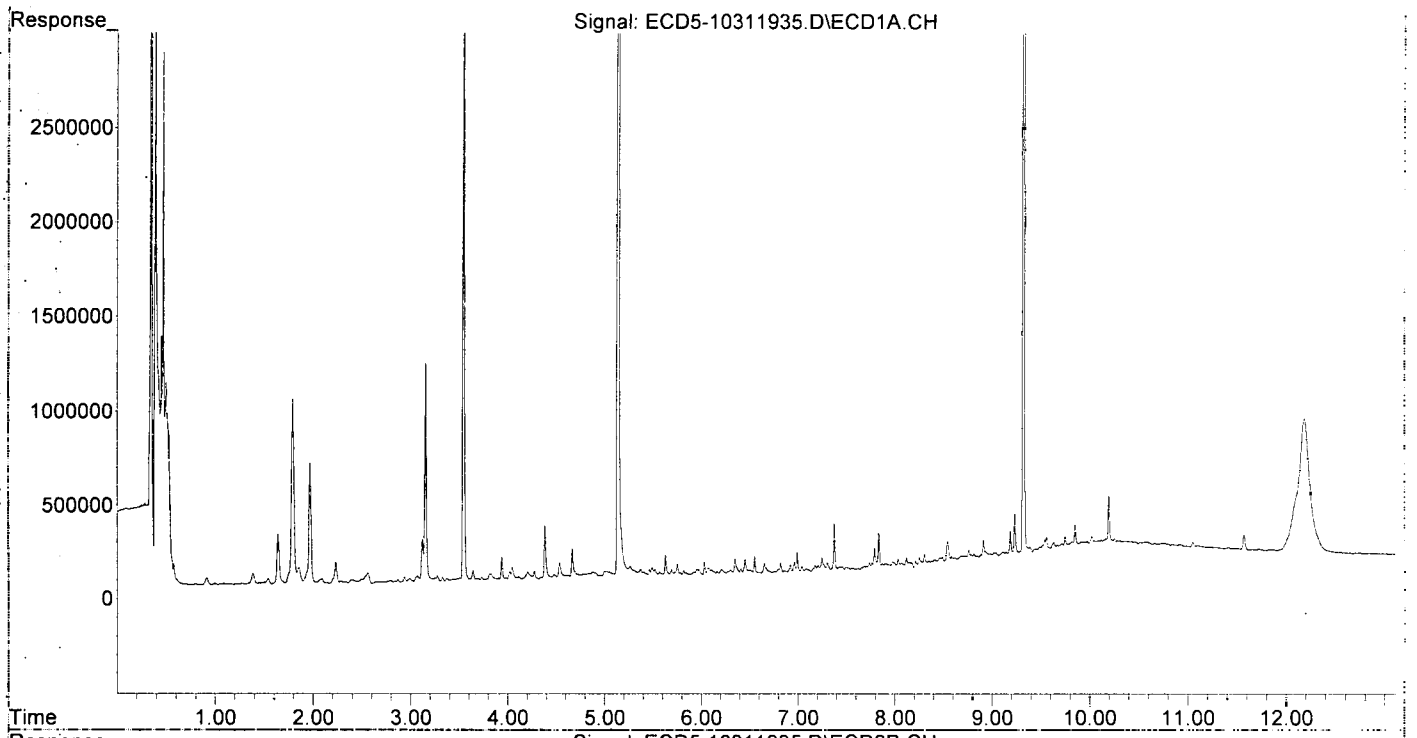
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.737	12939300	21424363	77.959	73.029	
22)	S	DCBP (S)	9.324	10.246	10728035	16331882	76.032	90.852	
		Target Compounds							
2)		a-BHC	5.692	6.316f	31025	53140	0.135	0.130	
3)		g-BHC	5.955	6.660	29990	70686	0.149	0.198	
4)		b-BHC	6.033	6.725	68067	26697	0.753	0.169	#
5)		Heptachlor	6.350f	7.035	80217	23351	0.442	0.076	#
6)		d-BHC	6.210	6.977	22355	19400	0.114	0.055	#
7)		Aldrin	0.000	7.287	0	29863	N.D.	0.091	#
8)		Heptachlo...	7.082	7.745	14301	21472	0.078	0.071	
9)		trans-Chl...	7.178	7.878	30111	60197	0.163	0.192	
10)		cis-Chlor...	7.248	7.980	69778	43076	0.383	0.148	#
11)		Endosulfa...	7.375	8.048	256709	77831	1.508	0.283	#
12)		4,4'-DDE	7.305f	8.087	42247	28991	0.224	0.093	#
13)		Dieldrin	7.498f	8.227	14916	99116	0.078	0.326	#
14)		Endrin	7.682	8.429f	15741	120159	0.107	0.532	#
15)		4,4'-DDD	7.739	8.505	32624	24767	0.208	0.097	#
16)		Endosulfa...	7.836	8.618	192775	33894	1.342	0.147	#
17)		4,4'-DDT	7.917f	8.737	24948	29304	0.209	0.133	
18)		Endrin Al...	8.120	8.835	54871	90964	BelowCal	BelowCal	
19)		Endosulfa...	8.412f	9.003f	40064	146811	0.259	0.589	#
20)		Methoxychlor	8.306	9.235	69970	45426	1.195	0.378	#
21)		Endrin Ke...	8.617	9.428	47171	195995	0.283	0.762	#
23)		Hexachlor...	2.936	3.414f	30320	2062218	0.166	5.486	#
24)		Hexachlor...	5.521	6.189	33959	26628	0.193	0.085	#
25)		Oxychlordane	6.993	7.661	104904	34499	0.638	0.126	#
26)		2,4'-DDE	7.082	7.878	14301	60197	0.111	0.284	#
27)		trans-Non...	7.248	7.945	69778	17937	0.073	0.059	
28)		2,4'-DDD	7.458	8.227	20024	99116	0.175	0.525	#
29)		2,4'-DDT	7.621	8.482	6769	38547	0.062	0.216	#
30)		cis-Nonac...	7.705	8.505	18065	24767	0.087	0.074	
31)		Mirex	8.351f	9.428f	33997	195995	0.271	1.053	#
32)		Chlordane...	7.248	7.945	69778	17937	3.544	0.496	#
33)		Chlordane...	7.305f	8.048	42247	77831	1.686	2.563	#
34)		Chlordane...	7.873	8.695	25861	21147	4.473	2.359	#
35)		Chlordane...	3.372	3.368f	14919	29288	NoCal	NoCal	
36)		Toxaphene...	7.375f	8.383	256709	15077	286.619	5.745	#
37)		Toxaphene...	7.682	8.722	15741	28742	9.747	8.733	
38)		Toxaphene...	7.977f	8.737	36669	29304	10.889	5.782	#
39)		Toxaphene...	8.255	8.835	52227	90964	16.119	10.894	
40)		Toxaphene...	8.465	9.003	46789	146811	19.519	31.502	#
41)		Toxaphene...	8.544	9.360	133163	51277	42.079	10.795	#
42)		Toxaphene...	3.372	3.368f	14919	29288	NoCal	NoCal	

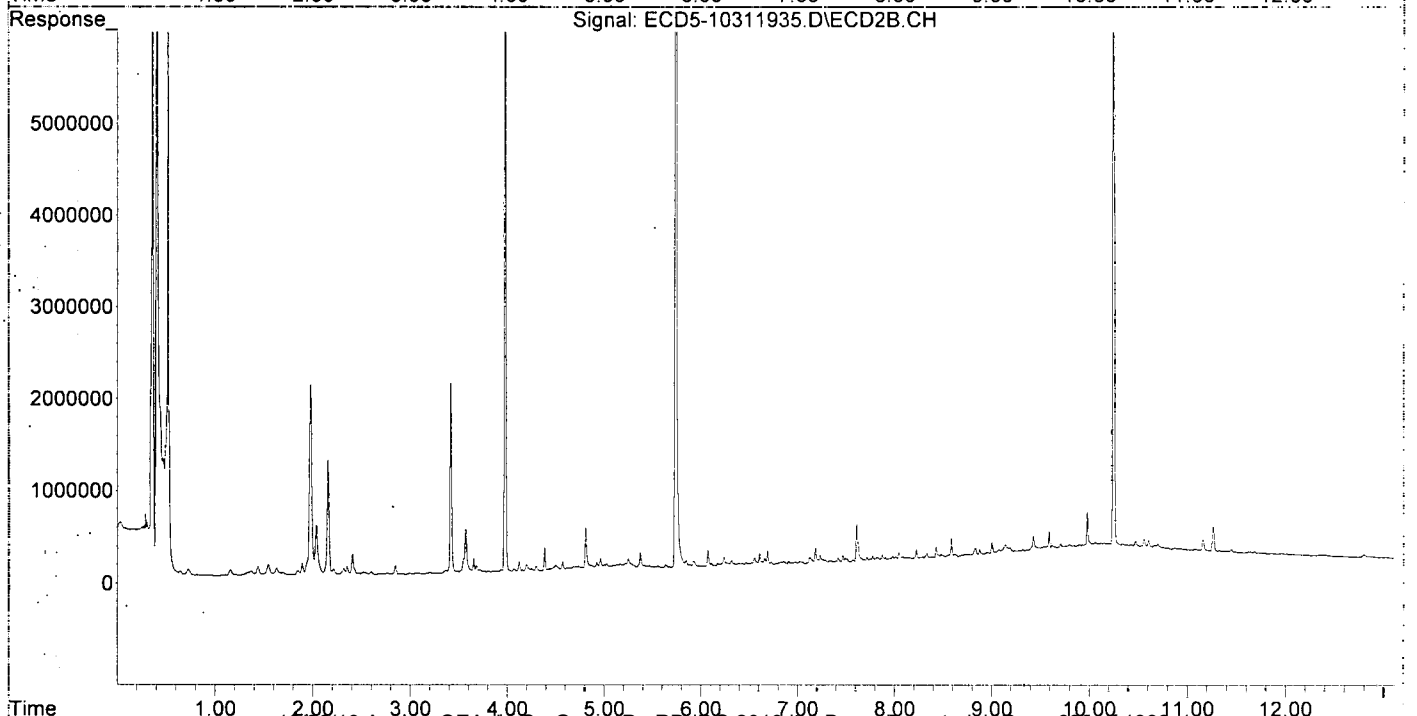
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 21:56
Operator : MJB
Sample : A9J0959-01
Misc : 1x, 8081B 2,4+4,4-DDx Only/(+Add)
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:13
Operator : MJB
Sample : 9J31040-CCV7
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MR 11/1/19

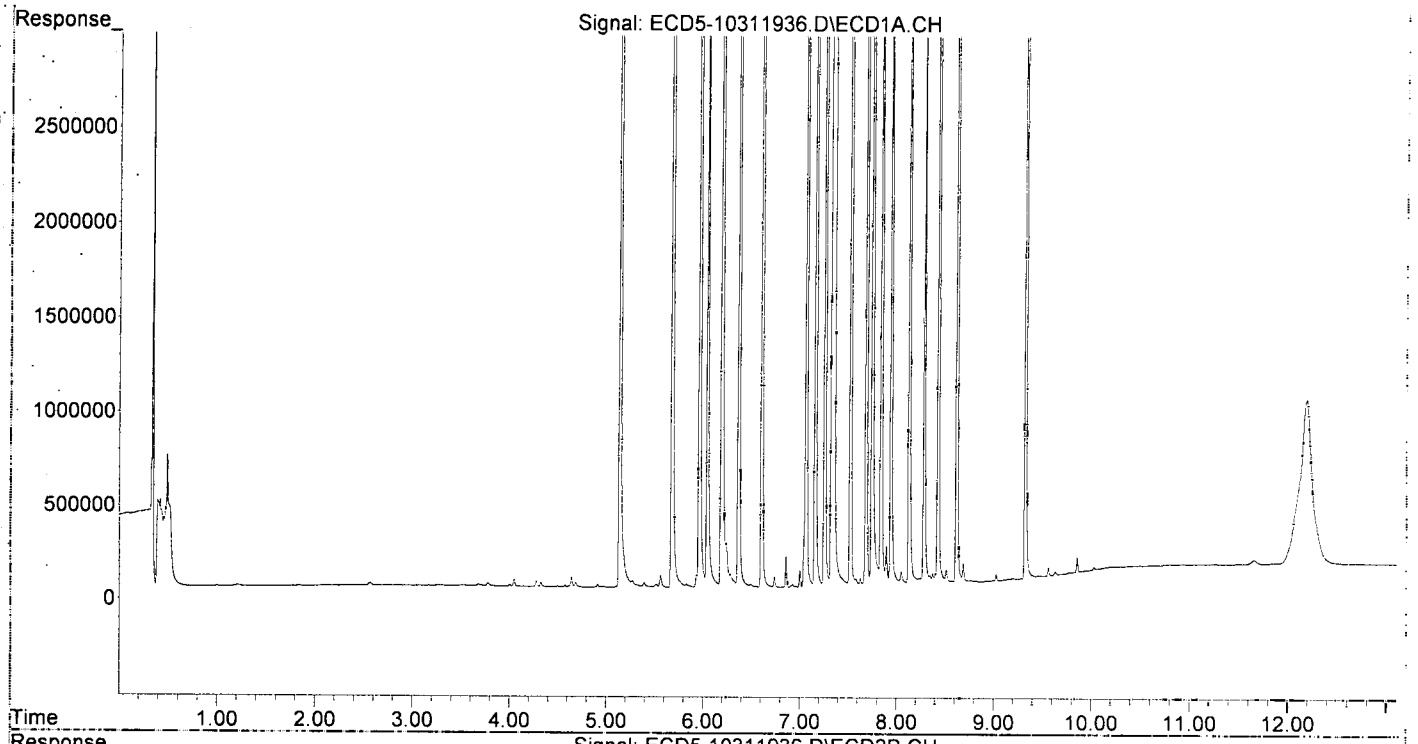
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.139	5.737	8688460	13316652	52.348	45.392	
22)	S DCBP (S)	9.326	10.247	6904291	10419262	48.932	57.961	
	Target Compounds							
2)	a-BHC	5.678	6.345	12227648	21472382	53.319	52.328	
3)	g-BHC	5.962	6.663	10528662	19260114	52.180	53.995	
4)	b-BHC	6.043	6.731	3947831	7136714	43.679	45.093	
5)	Heptachlor	6.369	7.031	10259673	18205978	56.591	59.501	
6)	d-BHC	6.191	6.983	8947020	16467957	45.488	46.696	
7)	Aldrin	6.606	7.293	10634429	18513733	53.860	56.206	
8)	Heptachlo...	7.065	7.732	9494865	16245102	51.553	53.998	
9)	trans-Chl...	7.161	7.871	9492689	16553627	51.342	52.832	
10)	cis-Chlor...	7.257	7.978	9406898	15584703	51.666	53.510	
11)	Endosulfa...	7.351	8.026	9568841	14744543	56.228	53.582	
12)	4,4'-DDE	7.328	8.092	8860075	15257237	46.996	49.110	
13)	Dieldrin	7.523	8.226	10482114	17534620	54.600	~~57.651~~	
14)	Endrin	7.685	8.451	8679874	13779259	59.036	61.017	Q41
15)	4,4'-DDD	7.746	8.506	7554528	13031168	48.075	50.861	
16)	Endosulfa...	7.841	8.598	7490334	12887221	52.157	55.884	
17)	4,4'-DDT	7.941	8.730	6322426	9978921	52.881	52.810	
18)	Endrin Al...	8.130	8.836	6709049	10863690	54.579	55.014	
19)	Endosulfa...	8.429	9.026	8105100	13286098	52.299	53.339	
20)	Methoxychlor	8.285	9.212	3150061	5297086	53.779	58.153	
21)	Endrin Ke...	8.620	9.419	9161161	14598575	54.937	56.734	
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.517	6.175f	17867	6775	0.101	0.022	#
25)	Oxychlordane	7.002	7.670	91880	4866	0.558	0.018	#
26)	2,4'-DDE	7.065	7.871	9494865	16553627	74.028	78.032	
27)	trans-Non...	7.257	7.932	9406898	51342	52.220	0.170	#
28)	2,4'-DDD	0.000	8.226	0	17534620	N.D.	92.843	#
29)	2,4'-DDT	7.628	8.451	35932	13779259	0.328	77.264	#
30)	cis-Nonac...	7.746f	8.506	7554528	13031168	36.387	38.847	
31)	Mirex	8.376	9.419	48650	14598575	0.388	78.456	#
32)	Chlordane...	7.257	7.932	9406898	51342	477.759	1.419	#
33)	Chlordane...	7.328	8.026f	8860075	14744543	353.494	485.592	
34)	Chlordane...	7.895	8.730f	206355	9978921	35.695	1112.989	#
35)	Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)	Toxaphene...	0.000	8.401f	0	16074	N.D.	6.125	#
37)	Toxaphene...	7.685	8.730	8679874	9978921	5374.740	3032.162	#
38)	Toxaphene...	0.000	8.730	0	9978921	N.D.	1968.883	#
39)	Toxaphene...	8.285f	8.836f	3150061	10863690	972.195	1301.067	
40)	Toxaphene...	0.000	9.026f	0	13286098	N.D.	2850.875	#
41)	Toxaphene...	8.515f	9.340f	62768	181734	19.835	38.258	#
42)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

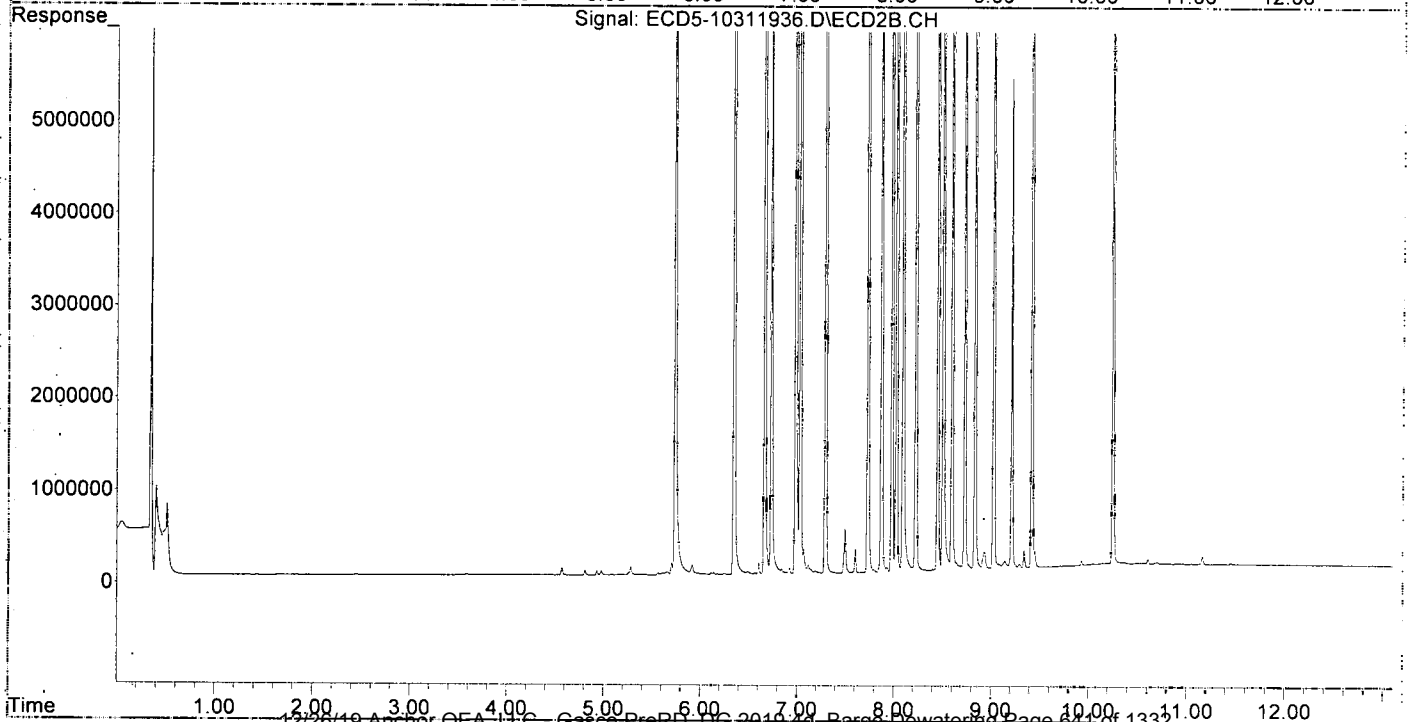
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:13
Operator : MJB
Sample : 9J31040-CCV7
Misc : A19H383, AB 50 ppb
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:49:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:30
Operator : MJB
Sample : 9J31040-CCV8
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:50:02 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

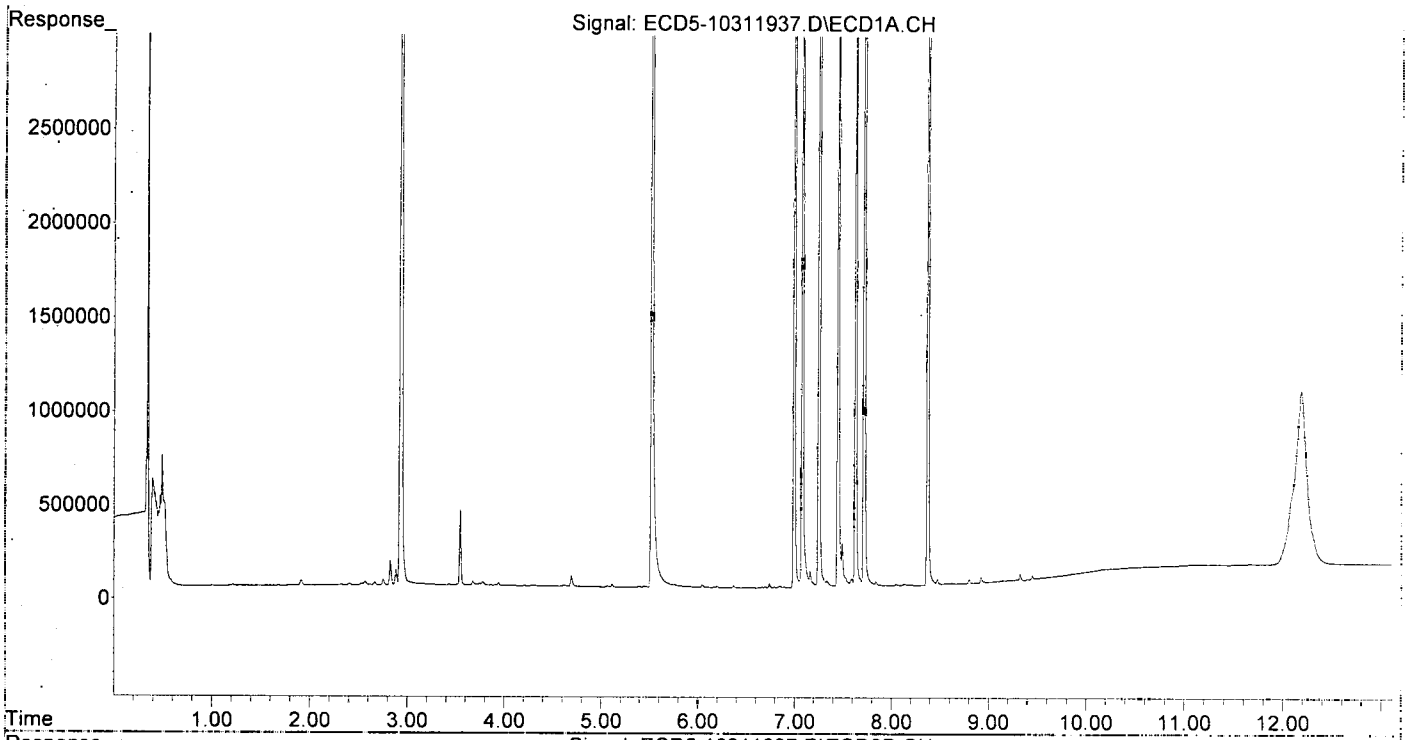
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.114f	0.000	16510	0	0.099	N.D.	#
22)	S DCBP (S)	9.326	10.247	37701	47103	0.267	0.262	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)	b-BHC	6.046	0.000	13859	0	0.153	N.D.	#
5)	Heptachlor	6.370	7.031	12116	21263	0.067	0.069	
6)	d-BHC	6.198	6.986	7221	12039	0.037	0.034	
7)	Aldrin	0.000	7.331f	0	7186	N.D.	0.022	#
8)	Heptachlo...	7.079	7.730	5691315	42141	30.901	0.140	#
9)	trans-Chl...	7.162	7.870	86927	9241721	0.470	29.496	#
10)	cis-Chlor...	7.251	0.000	8664576	0	47.589	N.D.	#
11)	Endosulfa...	7.337	8.043	33148	32769	0.195	0.119	
12)	4,4'-DDE	7.337	8.076f	33148	17716	0.176	0.057	#
13)	Dieldrin	7.494f	8.242	230213	8519104	1.199	28.010	#
14)	Endrin	7.718f	8.463	9810006	8189700	66.722	36.265	#
15)	4,4'-DDD	7.718f	8.497	9810006	16432443	62.428	64.136	
16)	Endosulfa...	7.842	8.592	26474	34753	0.184	0.151	
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.136	8.836	9776	7526	BelowCal	BelowCal	
19)	Endosulfa...	0.000	9.026	0	10824	N.D.	0.043	#
20)	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)	Endrin Ke...	8.623	9.403f	5777	8876705	0.035	34.497	#
23)	Hexachlor...	2.933	3.436	9604013	20220561	52.556	53.788	
24)	Hexachlor...	5.521	6.204	7656821	11404521	43.432	36.310	Q-21
25)	Oxychlordane	6.995	7.661	8161786	12960367	49.604	47.317	
26)	2,4'-DDE	7.079	7.870	5691315	9241721	44.373	43.565	
27)	trans-Non...	7.251	7.935	8664576	14812724	48.072	49.108	
28)	2,4'-DDD	7.448	8.242	4938713	8519104	43.275	45.107	
29)	2,4'-DDT	7.629	8.463	5268598	8189700	48.033	45.922	
30)	cis-Nonac...	7.718	8.497	9810006	16432443	47.251	48.986	
31)	Mirex	8.375	9.403	5874564	8876705	46.859	47.705	
32)	Chlordane...	7.251	7.935	8664576	14812724	440.058	409.366	
33)	Chlordane...	7.337	8.043	33148	32769	1.323	1.079	
34)	Chlordane...	7.842f	0.000	26474	0	4.579	N.D.	#
35)	Chlordane...	0.000	3.303f	0	259309	N.D.	NoCal	
36)	Toxaphene...	0.000	8.352	0	249559	N.D.	95.097	#
37)	Toxaphene...	7.718f	0.000	9810006	0	6074.539	N.D.	#
38)	Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)	Toxaphene...	0.000	8.836f	0	7526	N.D.	0.901	#
40)	Toxaphene...	8.476	9.026f	30019	10824	12.523	2.323	#
41)	Toxaphene...	8.561f	9.403f	6032	8876705	1.906	1868.700	#
42)	Toxaphene...	0.000	3.303f	0	259309	N.D.	NoCal	

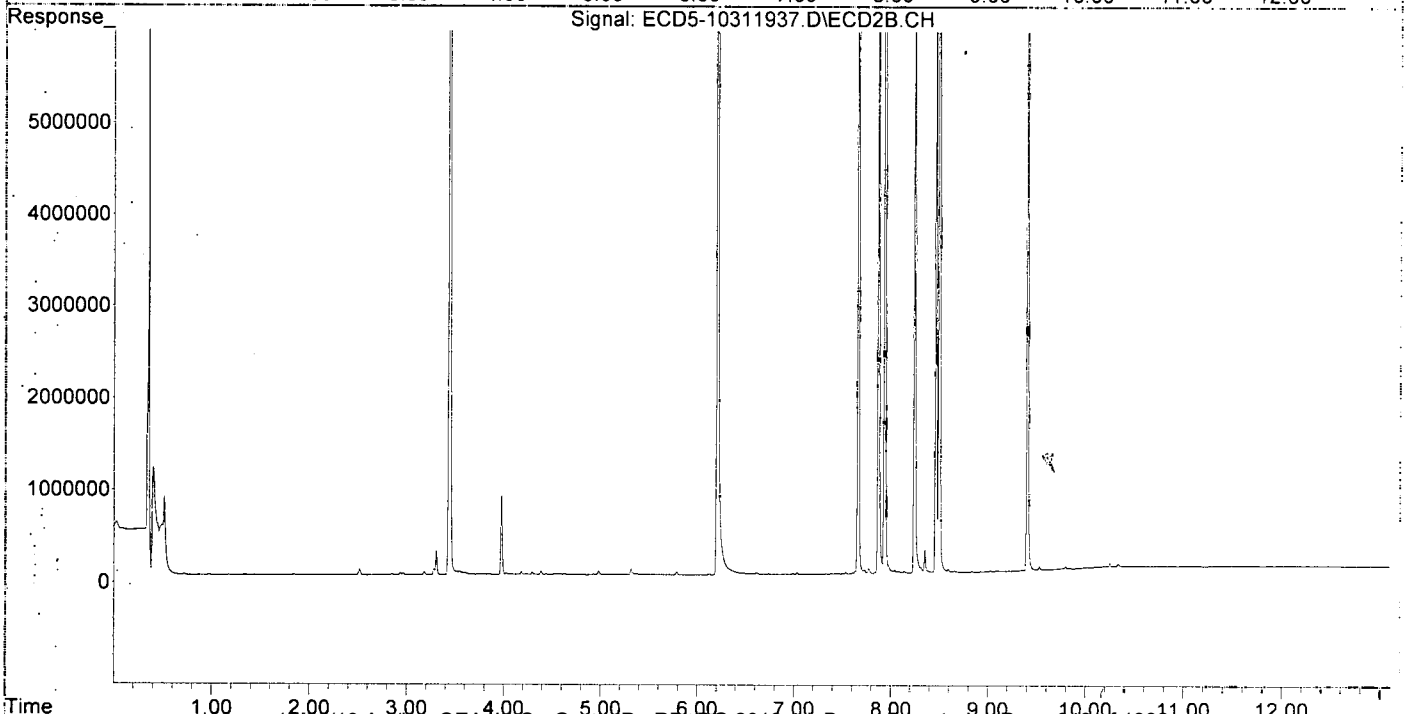
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:30
Operator : MJB
Sample : 9J31040-CCV8
Misc : A19J408, 9-42 50 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:50:02 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:47
Operator : MJB
Sample : 9J31040-CCB24 MJB 11/1/19
Misc : A19J194
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:50:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 11/1/19

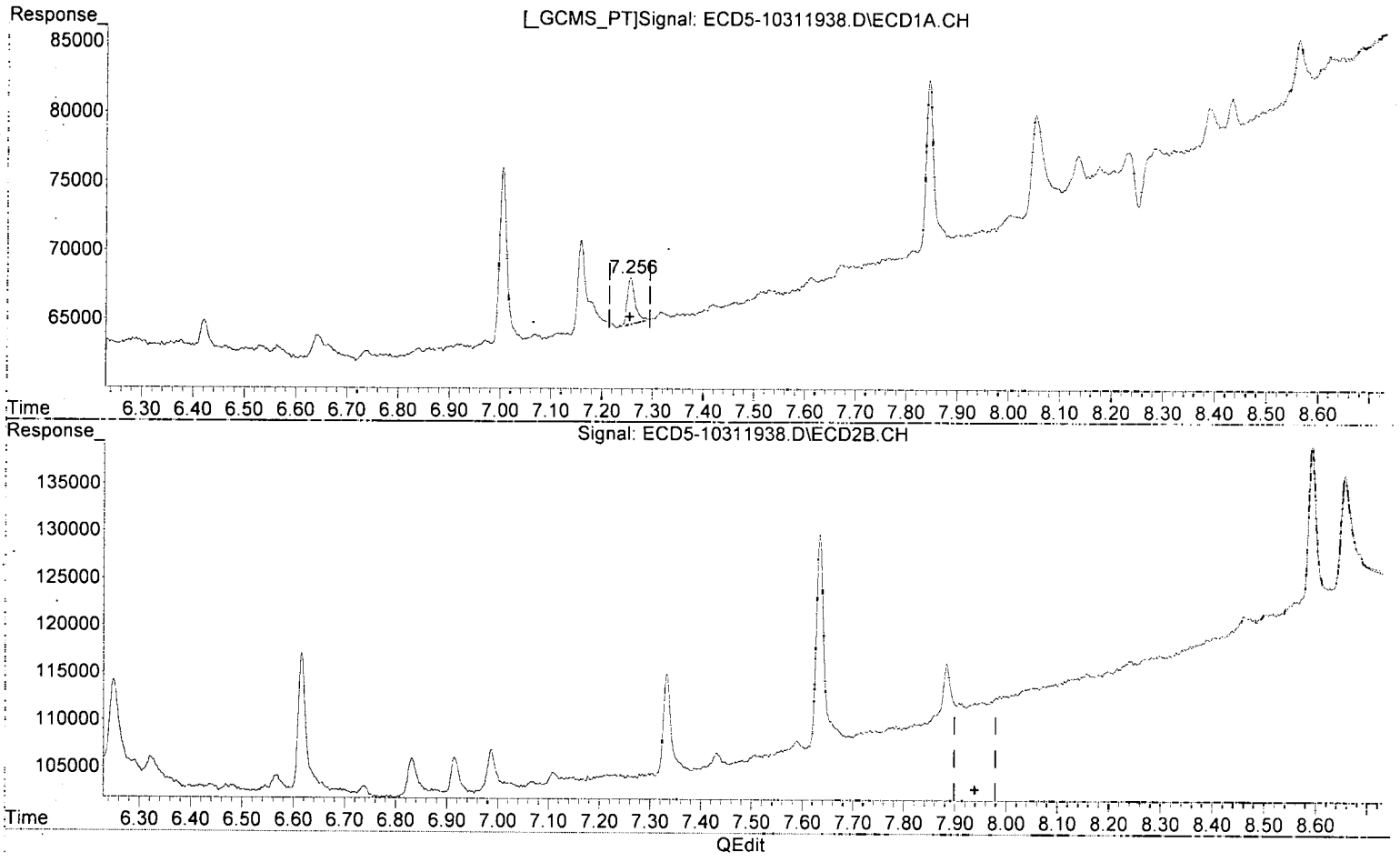
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.139	5.737	16416581	26702578	98.910	91.021	
22)	S	DCBP (S)	9.326	10.248	12764093	20685195	90.462	115.069	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	0.000	0.000	0	0	N.D.	N.D.	
4)		b-BHC	6.049	0.000	8243	0	0.091	N.D.	#
5)		Heptachlor	0.000	0.000	0	0	N.D.	N.D.	
6)		d-BHC	0.000	0.000	0	0	N.D.	N.D.	
7)		Aldrin	0.000	7.332f	0	10370	N.D.	0.031	#
8)		Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)		trans-Chl...	7.159	7.883	6707	5051	0.036	0.016	#
10)		cis-Chlor...	7.256	0.000	3337	0	0.018	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)		Endosulfa...	7.843	8.591	12728	15810	0.089	0.069	
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.134	0.000	4737	0	BelowCal	N.D.	
19)		Endosulfa...	8.432	9.025	3356	3724	0.022	0.015	
20)		Methoxychlor	8.284	0.000	3420	0	0.058	N.D.	#
21)		Endrin Ke...	0.000	9.440	0	6164	N.D.	0.024	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.522	0.000	18025	0	0.102	N.D.	#
25)		Oxychlordane	7.004	7.633f	12471	21995	0.076	0.080	
26)		2,4'-DDE	0.000	7.883	0	5051	N.D. Q-DCI	0.024	#
27)		trans-Non...	7.256	0.000	3337	0	~~87346.682~~	N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	0.000	0.000	0	0	N.D.	N.D.	
31)		Mirex	8.389	9.440f	3753	6164	0.030	0.033	
32)		Chlordane...	7.256	0.000	3337	0	0.169	N.D.	#
33)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
34)		Chlordane...	7.843f	0.000	12728	0	2.202	N.D.	#
35)		Chlordane...	0.000	0.000	0	0	N.D.	N.D.	
36)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)		Toxaphene...	8.231	0.000	4124	0	1.273	N.D.	#
40)		Toxaphene...	0.000	9.025f	0	3724	N.D.	0.799	#
41)		Toxaphene...	8.562f	9.351	4357	586	1.377	0.123	#
42)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:47
Operator : MJB
Sample : 9J31040-CCB24 WB 11/1/19
Misc : A19J194
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:50:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(27) trans-Nonachlor

7.256min 87346.882 ng/mL QDel WB 11/1/19

response 3837

(27) trans-Nonachlor #2

0.000min 0.000 ng/mL

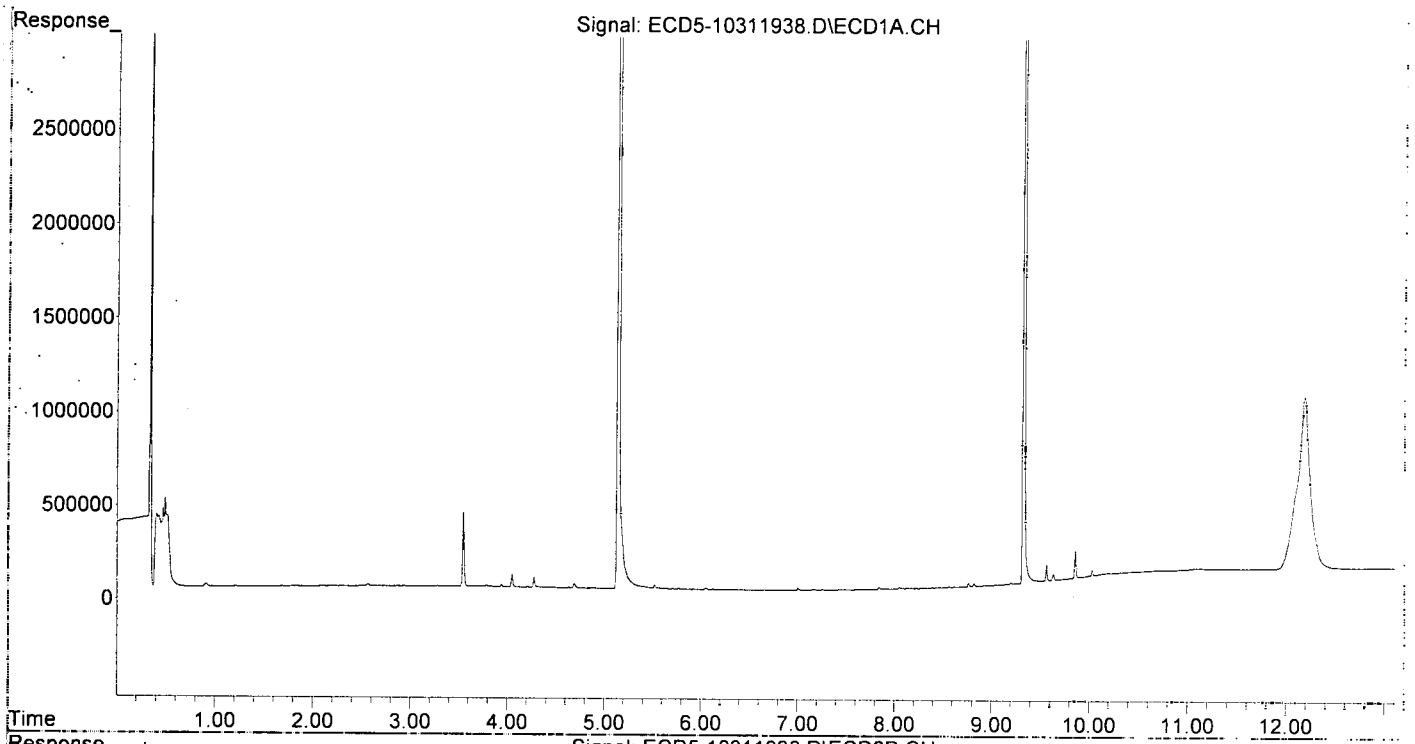
response 0

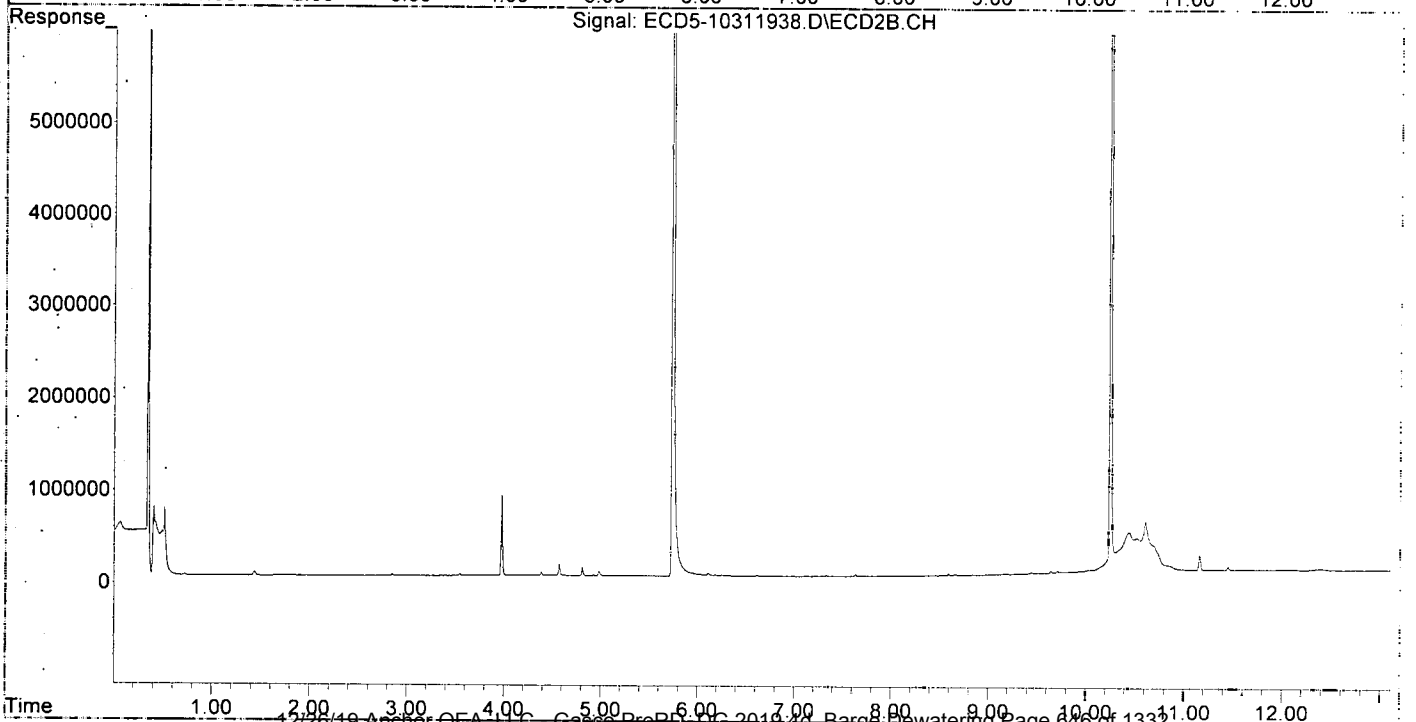
(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-10\9J31040\
Data File : ECD5-10311938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 31 Oct 2019 22:47
Operator : MJB
Sample : 9J31040-CCB/4 MJB 11/1/19
Misc : A19J194
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Nov 01 11:50:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823RT6.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 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

Organochloride Pesticides by EPA 8081B
Calibration Data

Sequence 9H23034 (Cal ID A9H2608) DualECD5

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9H23034**	Instrument:	**DUALECD5**
Date:	**08/23/19 11:23**	Calibration:	**A9H2608**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9H23034-BKD1	Water	QC	QC				A19G138
2	9H23034-BKD2	Water	QC	QC				A19G138
3	9H23034-ICB1	Water	QC	QC				A19H348
4	9H23034-CAL1	Water	QC	QC				A19E245
5	9H23034-CAL2	Water	QC	QC				A19E246
6	9H23034-CAL3	Water	QC	QC				A19E247
7	9H23034-CAL4	Water	QC	QC				A19E249
8	9H23034-CAL5	Water	QC	QC				A19E250
9	9H23034-CAL6	Water	QC	QC				A19H383
10	9H23034-CAL7	Water	QC	QC				A19H384
11	9H23034-CAL8	Water	QC	QC				A19E244
12	9H23034-IBL1	Water	QC	QC				
13	9H23034-ICV1	Water	QC	QC				A19E106
14	9H23034-CAL9	Water	QC	QC				A19E272
15	9H23034-CALA	Water	QC	QC				A19E273
16	9H23034-CALB	Water	QC	QC				A19E274
17	9H23034-CALC	Water	QC	QC				A19E275
18	9H23034-CALD	Water	QC	QC				A19E276
19	9H23034-CALE	Water	QC	QC				A19E154
20	9H23034-CALF	Water	QC	QC				A19E155
21	9H23034-CALG	Water	QC	QC				A19E271
22	9H23034-IBL2	Water	QC	QC				
23	9H23034-ICV2	Water	QC	QC				A19E043
24	9H23034-CALH	Water	QC	QC				A19F232
25	9H23034-CALI	Water	QC	QC				A19F233
26	9H23034-CALJ	Water	QC	QC				A19F234
27	9H23034-CALK	Water	QC	QC				A19F235
28	9H23034-CALL	Water	QC	QC				A19F236
29	9H23034-CALM	Water	QC	QC				A19F231
30	9H23034-IBL3	Water	QC	QC				
31	9H23034-ICV3	Water	QC	QC				A19E108
32	9H23034-CALN	Water	QC	QC				A19D122
33	9H23034-CALO	Water	QC	QC				A19D123
34	9H23034-CALP	Water	QC	QC				A19D124
35	9H23034-CALQ	Water	QC	QC				A19D125
36	9H23034-CALR	Water	QC	QC				A19D126
37	9H23034-CALS	Water	QC	QC				A19D121
38	9H23034-IBL4	Water	QC	QC				
39	9H23034-ICV4	Water	QC	QC				A19D127

Data Entered By: MJB 8/26/19

Comments: ICAL

Data Reviewed By: [illegible] 8/30/19

Calibration Status Report DUALECD5

Method Path : R:\methods\
Method File : ECD5_QUANTPEST_190823.M
Title : Instrument: DualECD5
Last Update : Mon Aug 26 11:48:23 2019
Response Via : Initial Calibration

A9H2608

MJB 8/26/19

#	ID	Conc	ISTD Conc	Path\File
1	1	50	0	R:\data\2019-08\9H23034\ECD5-08231936.D
2	2	100	0	R:\data\2019-08\9H23034\ECD5-08231937.D
3	3	200	0	R:\data\2019-08\9H23034\ECD5-08231938.D
4	4	500	0	R:\data\2019-08\9H23034\ECD5-08231939.D
5	5	1000	0	R:\data\2019-08\9H23034\ECD5-08231940.D
6	6	2000	0	R:\data\2019-08\9H23034\ECD5-08231941.D
7	7	-1	0	R:\data\2019-08\9H23034\ECD5-08231924.D
8	8	-1	0	R:\data\2019-08\9H23034\ECD5-08231925.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Aug 26 11:47 2019	Aug 26 11:37 2019	23 Aug 2019 21:54
2	2	Aug 26 11:47 2019	Aug 26 11:38 2019	23 Aug 2019 22:11
3	3	Aug 26 11:48 2019	Aug 26 11:39 2019	23 Aug 2019 22:28
4	4	Aug 26 11:48 2019	Aug 26 11:36 2019	23 Aug 2019 22:45
5	5	Aug 26 11:48 2019	Aug 26 11:40 2019	23 Aug 2019 23:03
6	6	Aug 26 11:48 2019	Aug 26 11:40 2019	23 Aug 2019 23:20
7	7	Aug 26 11:46 2019	Aug 26 11:26 2019	23 Aug 2019 18:27
8	8	Aug 26 11:46 2019	Aug 26 11:27 2019	23 Aug 2019 18:45

ECD5_QUANTPEST_190823.M Mon Aug 26 16:04:23 2019

Response Factor Report DUALECD5

Method Path : C:\msdchem\4\methods\
Method File : ECD5_QUANTPEST_190823.M
Title : Instrument: DualECD5
Last Update : Mon Aug 26 11:48:23 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD5-08231936.D 2 =ECD5-08231937.D 3 =ECD5-08231938.D 4 =ECD5-08231939.D 5 =ECD5-08231940.D
6 =ECD5-08231941.D 7 =ECD5-08231924.D 8 =ECD5-08231925.D

		Compound	1	2	3	4	5	6	7	8	Avg		%RSD
1)	S	TCMX (S)	1.767	1.750	1.668	1.644	1.606	1.614	1.585	1.642	1.660	E5	4.00
2)		a-BHC	2.320	2.292	2.296	2.347	2.221	2.274	2.236	2.360	2.293	E5	2.14
3)		g-BHC	2.074	2.030	2.041	2.035	1.950	1.957	1.960	2.094	2.018	E5	2.76
4)		b-BHC	1.043	0.971	0.914	0.911	0.824	0.820	0.836	0.912	0.904	E5	8.59
5)		Heptachlor	1.921	1.848	1.798	1.820	1.726	1.747	1.755	1.889	1.813	E5	3.86
6)		d-BHC	1.998	1.935	2.008	2.006	1.867	1.922	1.948	2.051	1.967	E5	3.02
7)		Aldrin	2.055	1.998	2.025	2.011	1.938	1.866	1.911	1.992	1.974	E5	3.23
8)		Heptachlor Exp...	2.005	1.960	1.847	1.865	1.738	1.774	1.732	1.813	1.842	E5	5.42
9)		trans-Chlordane	1.972	1.911	1.853	1.848	1.761	1.792	1.773	1.881	1.849	E5	3.93
10)		cis-Chlordane	2.098	1.950	1.818	1.843	1.698	1.725	1.674	1.760	1.821	E5	7.86
11)		Endosulfan I	1.852	1.787	1.723	1.709	1.645	1.597	1.609	1.693	1.702	E5	5.13
12)		4,4'-DDE	1.934	1.943	1.907	1.891	1.828	1.835	1.805	1.938	1.885	E5	2.92
13)		Dieldrin	1.977	1.979	1.944	1.955	1.833	1.877	1.832	1.961	1.920	E5	3.25
14)		Endrin	1.564	1.493	1.478	1.476	1.404	1.396	1.381	1.571	1.470	E5	4.98
15)		4,4'-DDD	1.650	1.573	1.581	1.566	1.491	1.545	1.544	1.622	1.571	E5	3.11
16)		Endosulfan II	1.581	1.496	1.419	1.448	1.349	1.368	1.354	1.474	1.436	E5	5.61
17)		4,4'-DDT	1.139	1.091	1.106	1.147	1.170	1.241	1.218	1.454	1.196	E5	9.72
18)		Endrin Aldehyde	2.413	1.641	1.367	1.375	1.248	1.245	1.236	1.331	1.482	E5	26.87
19)		Endosulfan Sul...	1.761	1.611	1.538	1.554	1.458	1.484	1.437	1.556	1.550	E5	6.64
20)		Methoxychlor	5.966	5.573	5.408	5.617	5.561	5.721	5.877	7.136	5.857	E4	9.33
21)		Endrin Ketone	1.776	1.656	1.623	1.664	1.604	1.638	1.625	1.755	1.668	E5	3.80
22)	S	DCBP (S)	1.639	1.550	1.402	1.335	1.337	1.336	1.341	1.349	1.411	E5	8.33
23)		Hexachlorobuta...	1.982	1.879	1.918	1.838	1.746	1.752	1.795	1.708	1.827	E5	5.17
24)		Hexachlorobenzene	1.947	1.810	1.708	1.712	1.674	1.782	1.767	1.704	1.763	E5	4.96
25)		Oxychlordane	1.768	1.697	1.639	1.592	1.553	1.677	1.636	1.602	1.645	E5	4.13
26)		2,4'-DDE	1.379	1.326	1.266	1.245	1.224	1.302	1.277	1.241	1.283	E5	4.01
27)		trans-Nonachlor	2.368	2.076	1.866	1.818	1.756	1.916	1.835	1.751	1.923	E5	10.78
28)		2,4'-DDD	1.202	1.165	1.122	1.104	1.098	1.184	1.159	1.096	1.141	E5	3.65
29)		2,4'-DDT	1.071	1.021	1.074	1.052	1.092	1.137	1.177	1.151	1.097	E5	4.88
30)		cis-Nonachlor	2.192	2.117	2.052	2.032	1.997	2.123	2.093	2.002	2.076	E5	3.25
31)		Mirex	1.474	1.334	1.257	1.196	1.164	1.244	1.196	1.164	1.254	E5	8.39
32)		Chlordane (1)	2.018	1.979	1.925	1.926	1.964	2.002			1.969	E4	1.96
33)		Chlordane (2)	2.573	2.520	2.453	2.435	2.508	2.549			2.506	E4	2.14
34)		Chlordane (3)	5.762	5.482	5.508	5.843	5.988	6.104			5.781	E3	4.34
35)		Chlordane - AVE									0.000		-1.00
36)		Toxaphene (1)	9.850	9.158	8.802	8.837	8.719	8.373			8.956	E2	5.64
37)		Toxaphene (2)	1.766	1.661	1.588	1.639	1.556	1.479			1.615	E3	6.08
38)		Toxaphene (3)	3.388	3.328	3.222	3.355	3.496	3.416			3.367	E3	2.72
39)		Toxaphene (4)	3.286	3.203	3.162	3.299	3.287	3.204			3.240	E3	1.78
40)		Toxaphene (5)	2.294	2.290	2.272	2.443	2.546	2.537			2.397	E3	5.33
41)		Toxaphene (6)	3.063	3.026	2.990	3.247	3.407	3.255			3.165	E3	5.17
42)		Toxaphene - AVE									0.000		-1.00

MJB 5/26/19

Method Path : C:\msdchem\4\methods\
Method File : ECD5_QUANTPEST_190823.M
Title : Instrument: DualECD5

Signal #2 Calibration Files
1 =ECD5-08231936.D 2 =ECD5-08231937.D 3 =ECD5-08231938.D
4 =ECD5-08231939.D 5 =ECD5-08231940.D 6 =ECD5-08231941.D

		Compound	1	2	3	4	5	6	Avg		%RSD
44)	S	TCMX (S) #2	3.001	3.004	2.876	2.866	2.829	2.839	2.926	3.129 2.934 E5	3.54
45)		a-BHC #2	3.931	3.923	3.971	4.096	3.964	4.053	4.170	4.719 4.103 E5	6.41
46)		g-BHC #2	3.523	3.455	3.485	3.477	3.403	3.476	3.679	4.038 3.567 E5	5.79
47)		b-BHC #2	1.763	1.676	1.577	1.581	1.471	1.503	1.463	1.628 1.583 E5	6.60
48)		Heptachlor #2	3.098	2.934	3.016	3.006	2.913	2.919	3.028	3.564 3.060 E5	6.98
49)		d-BHC #2	3.491	3.346	3.435	3.614	3.299	3.462	3.518	4.049 3.527 E5	6.60
50)		Aldrin #2	3.175	3.177	3.202	3.341	3.151	3.253	3.391	3.661 3.294 E5	5.19
51)		Heptachlor Exp...	3.101	3.031	2.912	2.959	2.826	2.968	3.005	3.267 3.008 E5	4.40
52)		trans-Chlordan...	3.641	3.222	3.004	3.003	2.863	2.936	3.074	3.322 3.133 E5	8.10
53)		cis-Chlordane #2	2.994	2.898	2.870	2.860	2.774	2.800	2.904	3.199 2.912 E5	4.59
54)		Endosulfan I #2	2.789	2.702	2.654	2.724	2.629	2.742	2.721	3.052 2.752 E5	4.77
55)		4,4'-DDE #2	2.985	2.990	2.976	3.050	3.000	3.111	3.250	3.492 3.107 E5	5.82
56)		Dieldrin #2	2.967	2.919	2.925	2.899	2.934	3.087	3.100	3.502 3.042 E5	6.61
57)		Endrin #2	2.229	2.124	2.186	2.244	2.130	2.203	2.310	2.639 2.258 E5	7.32
58)		4,4'-DDD #2	2.515	2.441	2.417	2.425	2.459	2.632	2.630	2.978 2.562 E5	7.37
59)		Endosulfan II #2	2.322	2.311	2.193	2.244	2.179	2.307	2.302	2.592 2.306 E5	5.55
60)		4,4'-DDT #2	1.797	1.709	1.747	1.841	1.792	1.857	1.979	2.410 1.892 E5	11.88
61)		Endrin Aldehyd...	3.486	2.388	2.092	2.125	1.939	2.042	2.050	2.254 2.297 E5	21.77
62)		Endosulfan Sul...	2.658	2.494	2.352	2.425	2.392	2.430	2.448	2.730 2.491 E5	5.35
63)		Methoxychlor #2	0.952	0.890	0.828	0.883	0.867	0.869	0.944	1.186 0.927 E5	12.09
64)		Endrin Ketone #2	2.558	2.466	2.410	2.497	2.357	2.591	2.664	3.043 2.573 E5	8.31
65)	S	DCBP (S) #2	1.916	1.950	1.742	1.679	1.665	1.746	1.778	1.905 1.798 E5	6.18
66)		Hexachlorobuta...	3.832	3.773	3.755	3.702	3.557	3.727	3.930	3.799 3.759 E5	2.87
67)		Hexachlorobenz...	3.280	3.164	2.971	2.936	2.967	3.219	3.277	3.313 3.141 E5	5.04
68)		Oxychlordane #2	2.791	2.705	2.651	2.539	2.481	2.835	2.973	2.937 2.739 E5	6.49
69)		2,4'-DDE #2	2.192	2.059	2.059	2.018	2.000	2.201	2.216	2.225 2.121 E5	4.52
70)		trans-Nonachlo...	3.062	2.939	2.935	2.844	2.837	3.162	3.198	3.154 3.016 E5	4.84
71)		2,4'-DDD #2	1.920	1.868	1.797	1.779	1.756	1.985	2.012	1.992 1.889 E5	5.47
72)		2,4'-DDT #2	1.733	1.661	1.746	1.703	1.762	1.762	1.900	2.000 1.783 E5	6.24
73)		cis-Nonachlor #2	3.327	3.124	3.174	3.148	3.288	3.544	3.607	3.623 3.354 E5	6.23
74)		Mirex #2	2.098	1.941	1.791	1.723	1.655	1.820	1.936	1.921 1.861 E5	7.59
75)		Chlordane (1) #2	3.509	3.378	3.376	3.566	3.797	4.085		3.618 E4	7.62
76)		Chlordane (2) #2	2.945	2.906	2.942	2.962	3.149	3.314		3.036 E4	5.30
77)		Chlordane (3) #2	8.780	8.745	8.659	8.543	9.359	9.709		8.966 E3	5.14
78)		Chlordane - AV...								0.000	-1.00
79)		Toxaphene (1) #2	2.737	2.675	2.545	2.618	2.655	2.515		2.624 E3	3.16
80)		Toxaphene (2) #2	3.294	3.241	3.227	3.295	3.384	3.305		3.291 E3	1.70
81)		Toxaphene (3) #2	5.097	4.944	4.978	4.950	5.168	5.273		5.068 E3	2.65
82)		Toxaphene (4) #2	8.327	8.119	7.902	8.505	8.650	8.595		8.350 E3	3.51
83)		Toxaphene (5) #2	4.664	4.522	4.477	4.681	4.900	4.718		4.660 E3	3.24
84)		Toxaphene (6) #2	4.618	4.525	4.526	4.740	5.047	5.045		4.750 E3	5.10
85)		Toxaphene - AV...								0.000	-1.00

(#) = Out of Range

MJB 8/26/19

Compound List Report DUALECD5

Method Path : R:\methods\
Method File : ECD5_QUANTPEST_190823.M
Title : Instrument: DualECD5
Last Update : Mon Aug 26 11:48:23 2019
Response Via : Initial Calibration

Total Cpnds : 85

MJB 8/26/19

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	5.394	1.000	A	H	R
2		a-BHC	5.934	1.000	A	H	R
3		g-BHC	6.218	1.000	A	H	R
4		b-BHC	6.296	1.000	A	H	R
5		Heptachlor	6.632	1.000	A	H	R
6		d-BHC	6.446	1.000	A	H	R
7		Aldrin	6.873	1.000	A	H	R
8		Heptachlor Expoxide	7.332	1.000	A	H	R
9		trans-Chlordane	7.428	1.000	A	H	R
10		cis-Chlordane	7.524	1.000	A	H	R
11		Endosulfan I	7.621	1.000	A	H	R
12		4,4'-DDE	7.583	1.000	A	H	R
13		Dieldrin	7.792	1.000	A	H	R
14		Endrin	7.957	1.000	A	H	R
15		4,4'-DDD	8.003	1.000	A	H	R
16		Endosulfan II	8.114	1.000	A	H	R
17		4,4'-DDT	8.202	1.000	A	H	R
18		Endrin Aldehyde	8.403	1.000	Q	H	R
19		Endosulfan Sulfate	8.705	1.000	A	H	R
20		Methoxychlor	8.540	1.000	A	H	R
21		Endrin Ketone	8.899	1.000	A	H	R
22	S	DCBP (S)	9.592	1.000	A	H	R
23		Hexachlorobutadiene	3.198	1.000	A	H	R
24		Hexachlorobenzene	5.774	1.000	A	H	R
25		Oxychlordane	7.261	1.000	A	H	R
26		2,4'-DDE	7.333	1.000	A	H	R
27		trans-Nonachlor	7.515	1.000	Q	H	R
28		2,4'-DDD	7.705	1.000	A	H	R
29		2,4'-DDT	7.887	1.000	A	H	R
30		cis-Nonachlor	7.985	1.000	A	H	R
31		Mirex	8.652	1.000	A	H	R
32		Chlordane (1)	7.427	1.000	A	H	R
33		Chlordane (2)	7.520	1.000	A	H	R
34		Chlordane (3)	8.067	1.000	A	H	R
35		Chlordane - AVE	3.447	1.000	A	H	R
36		Toxaphene (1)	7.502	1.000	A	H	R
37		Toxaphene (2)	7.794	1.000	A	H	R
38		Toxaphene (3)	8.105	1.000	A	H	R
39		Toxaphene (4)	8.346	1.000	A	H	R
40		Toxaphene (5)	8.574	1.000	A	H	R
41		Toxaphene (6)	8.640	1.000	A	H	R
42		Toxaphene - AVE	3.450	1.000	A	H	R
43		Signal #2	3.544	1.000	A	H	R
44	S	TCMX (S) #2	5.988	1.000	A	H	R
45		a-BHC #2	6.595	1.000	A	H	R
46		g-BHC #2	6.914	1.000	A	H	R
47		b-BHC #2	6.978	1.000	A	H	R
48		Heptachlor #2	7.290	1.000	A	H	R
49		d-BHC #2	7.231	1.000	A	H	R
50		Aldrin #2	7.555	1.000	A	H	R
51		Heptachlor Expoxide #2	7.992	1.000	A	H	R
52		trans-Chlordane #2	8.131	1.000	A	H	R
53		cis-Chlordane #2	8.238	1.000	A	H	R
54		Endosulfan I #2	8.289	1.000	A	H	R
55		4,4'-DDE #2	8.343	1.000	A	H	R
56		Dieldrin #2	8.489	1.000	A	H	R

57		Endrin #2	8.715	1.000	A	H	R
58		4,4'-DDD #2	8.758	1.000	A	H	R
59		Endosulfan II #2	8.863	1.000	A	H	R
60		4,4'-DDT #2	8.984	1.000	Q	H	R
61		Endrin Aldehyde #2	9.099	1.000	Q	H	R
62		Endosulfan Sulfate #2	9.289	1.000	A	H	R
63		Methoxychlor #2	9.463	1.000	Q	H	R
64		Endrin Ketone #2	9.687	1.000	A	H	R
65	S	DCBP (S) #2	10.541	1.000	A	H	R
66		Hexachlorobutadiene #2	3.688	1.000	A	H	R
67		Hexachlorobenzene #2	6.454	1.000	A	H	R
68		Oxychlordane #2	7.920	1.000	A	H	R
69		2,4'-DDE #2	8.122	1.000	A	H	R
70		trans-Nonachlor #2	8.194	1.000	A	H	R
71		2,4'-DDD #2	8.495	1.000	A	H	R
72		2,4'-DDT #2	8.718	1.000	A	H	R
73		cis-Nonachlor #2	8.758	1.000	A	H	R
74		Mirex #2	9.679	1.000	A	H	R
75		Chlordane (1) #2	8.129	1.000	A	H	R
76		Chlordane (2) #2	8.236	1.000	A	H	R
77		Chlordane (3) #2	8.896	1.000	A	H	R
78		Chlordane - AVE #2	3.428	1.000	A	H	R
79		Toxaphene (1) #2	8.466	1.000	A	H	R
80		Toxaphene (2) #2	8.812	1.000	A	H	R
81		Toxaphene (3) #2	8.848	1.000	A	H	R
82		Toxaphene (4) #2	8.915	1.000	A	H	R
83		Toxaphene (5) #2	9.091	1.000	A	H	R
84		Toxaphene (6) #2	9.470	1.000	A	H	R
85		Toxaphene - AVE #2	3.434	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

ECD5_QUANTPEST_190823.M Mon Aug 26 16:04:34 2019

Calibration Report DUALECD5

Method Path : R:\methods\
Method File : ECD5_QUANTPEST_190823.M
Title : Instrument: DualECD5
Last Update : Mon Aug 26 11:48:23 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD5-08231936 2 =ECD5-08231937 3 =ECD5-08231938 4 =ECD5-08231939 5 =ECD5-08

6 =ECD5-08231941 7 =ECD5-08231924 8 =ECD5-08231925

MJB 5/26/19

		Compound	Fit	Constant	Linear	Quad	RSD/Cf
1)	S	TCMX (S)	Avg	-----	1.6598 e5	-----	0.0400
2)		a-BHC	Avg	-----	2.2933 e5	-----	0.0214
3)		g-BHC	Avg	-----	2.0178 e5	-----	0.0276
4)		b-BHC	Avg	-----	9.0384 e4	-----	0.0859
5)		Heptachlor	Avg	-----	1.8130 e5	-----	0.0386
6)		d-BHC	Avg	-----	1.9669 e5	-----	0.0302
7)		Aldrin	Avg	-----	1.9745 e5	-----	0.0323
8)		Heptachlor Expoxide	Avg	-----	1.8418 e5	-----	0.0542
9)		trans-Chlordane	Avg	-----	1.8489 e5	-----	0.0393
10)		cis-Chlordane	Avg	-----	1.8207 e5	-----	0.0786
11)		Endosulfan I	Avg	-----	1.7018 e5	-----	0.0513
12)		4,4'-DDE	Avg	-----	1.8853 e5	-----	0.0292
13)		Dieldrin	Avg	-----	1.9198 e5	-----	0.0325
14)		Endrin	Avg	-----	1.4703 e5	-----	0.0498
15)		4,4'-DDD	Avg	-----	1.5714 e5	-----	0.0311
16)		Endosulfan II	Avg	-----	1.4361 e5	-----	0.0561
17)		4,4'-DDT	Avg	-----	1.1956 e5	-----	0.0972
18)		Endrin Aldehyde	Quad	1.1904 e5	1.1635 e5	8.0472 e1	0.9966
19)		Endosulfan Sulfate	Avg	-----	1.5498 e5	-----	0.0664
20)		Methoxychlor	Avg	-----	5.8574 e4	-----	0.0933
21)		Endrin Ketone	Avg	-----	1.6676 e5	-----	0.0380
22)	S	DCBP (S)	Avg	-----	1.4110 e5	-----	0.0833
23)		Hexachlorobutadiene	Avg	-----	1.8274 e5	-----	0.0517
24)		Hexachlorobenzene	Avg	-----	1.7629 e5	-----	0.0496
25)		Oxychlordane	Avg	-----	1.6454 e5	-----	0.0413
26)		2,4'-DDE	Avg	-----	1.2826 e5	-----	0.0401
27)		trans-Nonachlor	Quad	5.6661 e4	1.7916 e5	-2.0512	0.9987
28)		2,4'-DDD	Avg	-----	1.1413 e5	-----	0.0365
29)		2,4'-DDT	Avg	-----	1.0969 e5	-----	0.0488
30)		cis-Nonachlor	Avg	-----	2.0762 e5	-----	0.0325
31)		Mirex	Avg	-----	1.2537 e5	-----	0.0839
32)		Chlordane (1)	Avg	-----	1.9690 e4	-----	0.0196
33)		Chlordane (2)	Avg	-----	2.5064 e4	-----	0.0214
34)		Chlordane (3)	Avg	-----	5.7811 e3	-----	0.0434
35)		Chlordane - AVE	Avg	-----	-----	-----	0.0000
36)		Toxaphene (1)	Avg	-----	8.9565 e2	-----	0.0564
37)		Toxaphene (2)	Avg	-----	1.6149 e3	-----	0.0608
38)		Toxaphene (3)	Avg	-----	3.3675 e3	-----	0.0272
39)		Toxaphene (4)	Avg	-----	3.2402 e3	-----	0.0178
40)		Toxaphene (5)	Avg	-----	2.3971 e3	-----	0.0533
41)		Toxaphene (6)	Avg	-----	3.1646 e3	-----	0.0517
42)		Toxaphene - AVE	Avg	-----	-----	-----	0.0000

Signal #2

		Compound	Fit	Constant	Linear	Quad	RSD/Cf
1)	S	TCMX (S)	Avg	-----	2.9337 e5	-----	0.0354
2)		a-BHC	Avg	-----	4.1034 e5	-----	0.0641
3)		g-BHC	Avg	-----	3.5670 e5	-----	0.0579
4)		b-BHC	Avg	-----	1.5827 e5	-----	0.0660
5)		Heptachlor	Avg	-----	3.0598 e5	-----	0.0698
6)		d-BHC	Avg	-----	3.5267 e5	-----	0.0660
7)		Aldrin	Avg	-----	3.2939 e5	-----	0.0519

8)		Heptachlor Expoxide	Avg	-----	3.0085 e5	-----	0.0440
9)		trans-Chlordane	Avg	-----	3.1333 e5	-----	0.0810
10)		cis-Chlordane	Avg	-----	2.9125 e5	-----	0.0459
11)		Endosulfan I	Avg	-----	2.7518 e5	-----	0.0477
12)		4,4'-DDE	Avg	-----	3.1068 e5	-----	0.0582
13)		Dieldrin	Avg	-----	3.0415 e5	-----	0.0661
14)		Endrin	Avg	-----	2.2583 e5	-----	0.0732
15)		4,4'-DDD	Avg	-----	2.5621 e5	-----	0.0737
16)		Endosulfan II	Avg	-----	2.3061 e5	-----	0.0555
17)		4,4'-DDT	Quad	6.5669 e3	1.7140 e5	3.3014 e2	0.9992
18)		Endrin Aldehyde	Quad	1.5509 e5	1.8265 e5	2.1823 e2	0.9961
19)		Endosulfan Sulfate	Avg	-----	2.4909 e5	-----	0.0535
20)		Methoxychlor	Quad	1.4992 e4	8.0453 e4	1.7846 e2	0.9988
21)		Endrin Ketone	Avg	-----	2.5732 e5	-----	0.0831
22)	S	DCBP (S)	Avg	-----	1.7976 e5	-----	0.0618
23)		Hexachlorobutadiene	Avg	-----	3.7593 e5	-----	0.0287
24)		Hexachlorobenzene	Avg	-----	3.1409 e5	-----	0.0504
25)		Oxychlordane	Avg	-----	2.7390 e5	-----	0.0649
26)		2,4'-DDE	Avg	-----	2.1214 e5	-----	0.0452
27)		trans-Nonachlor	Avg	-----	3.0164 e5	-----	0.0484
28)		2,4'-DDD	Avg	-----	1.8886 e5	-----	0.0547
29)		2,4'-DDT	Avg	-----	1.7834 e5	-----	0.0624
30)		cis-Nonachlor	Avg	-----	3.3545 e5	-----	0.0623
31)		Mirex	Avg	-----	1.8607 e5	-----	0.0759
32)		Chlordane (1)	Avg	-----	3.6185 e4	-----	0.0762
33)		Chlordane (2)	Avg	-----	3.0364 e4	-----	0.0530
34)		Chlordane (3)	Avg	-----	8.9659 e3	-----	0.0514
35)		Chlordane - AVE	Avg	-----	-----	-----	0.0000
36)		Toxaphene (1)	Avg	-----	2.6243 e3	-----	0.0316
37)		Toxaphene (2)	Avg	-----	3.2910 e3	-----	0.0170
38)		Toxaphene (3)	Avg	-----	5.0683 e3	-----	0.0265
39)		Toxaphene (4)	Avg	-----	8.3498 e3	-----	0.0351
40)		Toxaphene (5)	Avg	-----	4.6604 e3	-----	0.0324
41)		Toxaphene (6)	Avg	-----	4.7502 e3	-----	0.0510
42)		Toxaphene - AVE	Avg	-----	-----	-----	0.0000

ECD5_QUANTPEST_190823.M Mon Aug 26 16:04:42 2019

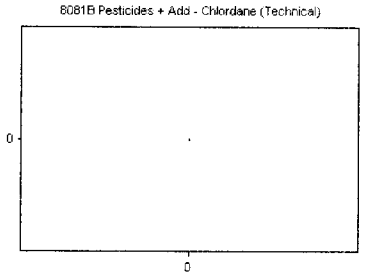
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Chlordane (Technical)

Curve Fit: **AVERAGE RF**

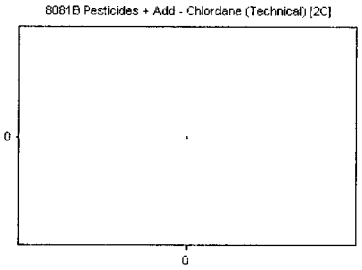


Standard	Concentration	Response	Response Factor	RT
~~9H23034-CALH~~	~~50~~	~~5365~~	~~107.300~~	~~3.45~~
~~9H23034-CALI~~	~~100~~	~~4938~~	~~49.380~~	~~3.45~~
~~9H23034-CALJ~~	~~200~~	~~4503~~	~~22.515~~	~~3.45~~
~~9H23034-CALK~~	~~500~~	~~4056~~	~~8.112~~	~~3.45~~
~~9H23034-CALL~~	~~1000~~	~~4825~~	~~4.825~~	~~3.45~~
~~9H23034-CALM~~	~~2000~~	~~4939~~	~~2.469~~	~~3.45~~

AVE RF **0.000** RF RSD **0.00** AVE RT **0.00**

Chlordane (Technical) [2C]

Curve Fit: **AVERAGE RF**

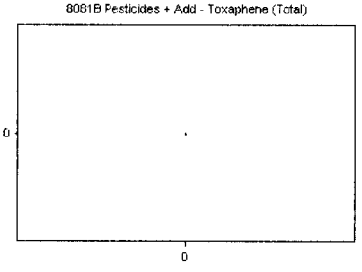


Standard	Concentration	Response	Response Factor	RT
~~9H23034-CALH~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALI~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALJ~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALK~~	~~500~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALL~~	~~1000~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALM~~	~~2000~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.000** RF RSD **0.00** AVE RT **0.00**

Toxaphene (Total)

Curve Fit: **AVERAGE RF**

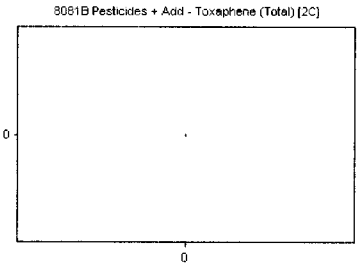


Standard	Concentration	Response	Response Factor	RT
~~9H23034-CALN~~	~~50~~	~~4023~~	~~80.460~~	~~3.45~~
~~9H23034-CALO~~	~~100~~	~~3536~~	~~35.360~~	~~3.45~~
~~9H23034-CALP~~	~~200~~	~~3919~~	~~19.595~~	~~3.45~~
~~9H23034-CALQ~~	~~500~~	~~4132~~	~~8.264~~	~~3.45~~
~~9H23034-CALR~~	~~1000~~	~~2687~~	~~2.687~~	~~3.45~~
~~9H23034-CALS~~	~~2000~~	~~4166~~	~~2.083~~	~~3.45~~

AVE RF **0.000** RF RSD **0.00** AVE RT **0.00**

Toxaphene (Total) [2C]

Curve Fit: **AVERAGE RF**

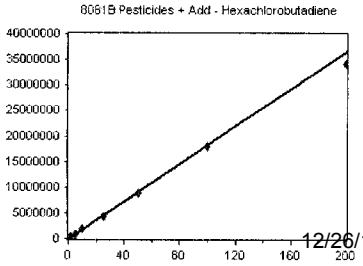


Standard	Concentration	Response	Response Factor	RT
~~9H23034-CALN~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALO~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALP~~	~~200~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALQ~~	~~500~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALR~~	~~1000~~	~~0~~	~~0.000~~	~~0.00~~
~~9H23034-CALS~~	~~2000~~	~~0~~	~~0.000~~	~~0.00~~

AVE RF **0.000** RF RSD **0.00** AVE RT **0.00**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	198207	198207.000	3.20
9H23034-CALA	2	375794	187897.000	3.20
9H23034-CALB	5	959211	191842.200	3.20
9H23034-CALC	10	1838187	183818.700	3.20
9H23034-CALD	25	4363988	174559.500	3.20
9H23034-CALE	50	8761747	175234.900	3.20
9H23034-CALF	100	795213E+07	179521.300	3.20
9H23034-CALG	200	416653E+07	170832.600	3.20

AVE RF ~~182789.200~~ RF RSD ~~5.17~~ AVE RT **3.20**

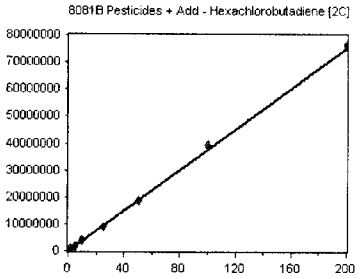
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Hexachlorobutadiene [2C]

Curve Fit: **AVERAGE RF**

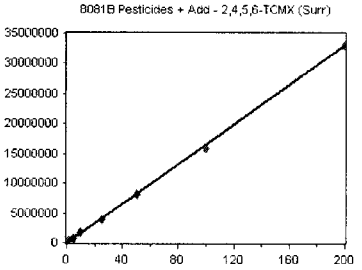


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	383198	383198.000	3.69
9H23034-CALA	2	754548	377274.000	3.69
9H23034-CALB	5	1877484	375496.800	3.69
9H23034-CALC	10	3701532	370153.200	3.69
9H23034-CALD	25	8892238	355689.500	3.69
9H23034-CALE	50	863562E+07	372712.400	3.69
9H23034-CALF	100	929888E+07	392988.800	3.69
9H23034-CALG	200	598857E+07	379942.800	3.69

AVE RF **375931.900** RF RSD **2.87** AVE RT **3.69**

2,4,5,6-TCMX (Surr)

Curve Fit: **AVERAGE RF**

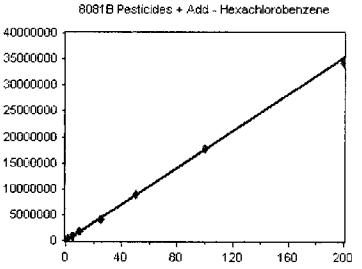


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	176748	176748.000	5.40
9H23034-CAL2	2	349972	174986.000	5.40
9H23034-CAL3	5	834206	166841.200	5.40
9H23034-CAL4	10	1644447	164444.700	5.40
9H23034-CAL5	25	4015832	160633.300	5.39
9H23034-CAL6	50	8071481	161429.600	5.39
9H23034-CAL7	100	585092E+07	158509.200	5.40
9H23034-CAL8	200	284254E+07	164212.700	5.39

AVE RF **165975.600** RF RSD **4.00** AVE RT **5.40**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**

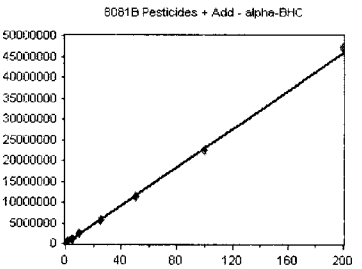


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	194679	194679.000	5.78
9H23034-CALA	2	362082	181041.000	5.78
9H23034-CALB	5	853793	170758.600	5.78
9H23034-CALC	10	1711884	171188.400	5.77
9H23034-CALD	25	4184551	167382.000	5.77
9H23034-CALE	50	8911624	178232.500	5.77
9H23034-CALF	100	767002E+07	176700.200	5.78
9H23034-CALG	200	407346E+07	170367.300	5.77

AVE RF **176293.600** RF RSD **4.96** AVE RT **5.77**

alpha-BHC

Curve Fit: **AVERAGE RF**

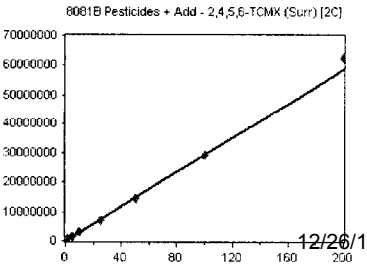


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	231994	231994.000	5.94
9H23034-CAL2	2	458365	229182.500	5.94
9H23034-CAL3	5	1147932	229586.400	5.94
9H23034-CAL4	10	2347065	234706.500	5.94
9H23034-CAL5	25	5553096	222123.800	5.94
9H23034-CAL6	50	136959E+07	227391.800	5.94
9H23034-CAL7	100	236358E+07	223635.800	5.94
9H23034-CAL8	200	720225E+07	236011.200	5.94

AVE RF **229329.000** RF RSD **2.14** AVE RT **5.94**

2,4,5,6-TCMX (Surr) [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	300053	300053.000	5.99
9H23034-CAL2	2	600766	300383.000	5.99
9H23034-CAL3	5	1437876	287575.200	5.99
9H23034-CAL4	10	2865854	286585.400	5.99
9H23034-CAL5	25	7072923	282916.900	5.99
9H23034-CAL6	50	419675E+07	283935.000	5.99
9H23034-CAL7	100	925633E+07	292563.300	5.99
9H23034-CAL8	200	258445E+07	312922.300	5.99

AVE RF **293366.800** RF RSD **3.54** AVE RT **5.99**

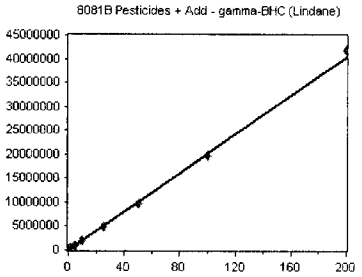
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

gamma-BHC (Lindane)

Curve Fit: **AVERAGE RF**

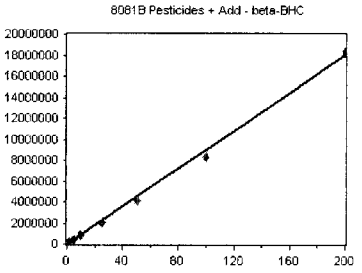


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	207427	207427.000	6.22
9H23034-CAL2	2	406027	203013.500	6.22
9H23034-CAL3	5	1020724	204144.800	6.22
9H23034-CAL4	10	2034859	203485.900	6.22
9H23034-CAL5	25	4875657	195026.300	6.22
9H23034-CAL6	50	9785999	195720.000	6.22
9H23034-CAL7	100	959509E+07	195950.900	6.22
9H23034-CAL8	200	188973E+07	209448.600	6.22

AVE RF **201777.100** RF RSD **2.76** AVE RT **6.22**

beta-BHC

Curve Fit: **AVERAGE RF**

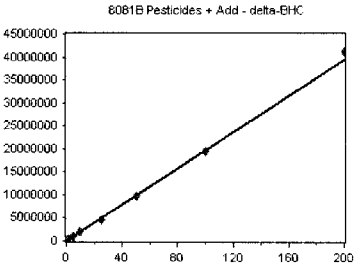


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	104326	104326.000	6.30
9H23034-CAL2	2	194168	97084.000	6.30
9H23034-CAL3	5	456954	91390.800	6.30
9H23034-CAL4	10	910875	91087.500	6.30
9H23034-CAL5	25	2060378	82415.120	6.30
9H23034-CAL6	50	4100858	82017.160	6.30
9H23034-CAL7	100	8355416	83554.160	6.30
9H23034-CAL8	200	.82387E+07	91193.500	6.29

AVE RF **90383.530** RF RSD **8.59** AVE RT **6.30**

delta-BHC

Curve Fit: **AVERAGE RF**

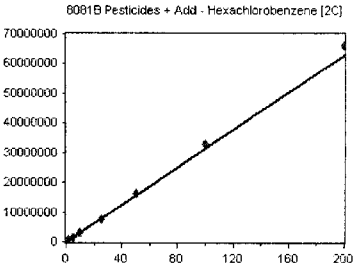


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	199840	199840.000	6.45
9H23034-CAL2	2	386980	193490.000	6.45
9H23034-CAL3	5	1004012	200802.400	6.45
9H23034-CAL4	10	2006493	200649.300	6.45
9H23034-CAL5	25	4667166	186686.600	6.45
9H23034-CAL6	50	9610742	192214.800	6.45
9H23034-CAL7	100	947558E+07	194755.800	6.45
9H23034-CAL8	200	101659E+07	205083.000	6.45

AVE RF **196690.200** RF RSD **3.02** AVE RT **6.45**

Hexachlorobenzene [2C]

Curve Fit: **AVERAGE RF**

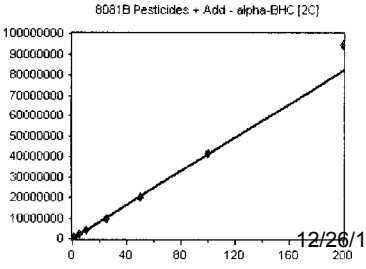


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	328025	328025.000	6.45
9H23034-CALA	2	632830	316415.000	6.45
9H23034-CALB	5	1485583	297116.600	6.45
9H23034-CALC	10	2936294	293629.400	6.45
9H23034-CALD	25	7416324	296653.000	6.45
9H23034-CALE	50	309416E+07	321883.200	6.45
9H23034-CALF	100	276671E+07	327667.100	6.46
9H23034-CALG	200	326197E+07	331309.800	6.45

AVE RF **314087.400** RF RSD **5.04** AVE RT **6.45**

alpha-BHC [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	393119	393119.000	6.60
9H23034-CAL2	2	784586	392293.000	6.60
9H23034-CAL3	5	1985438	397087.600	6.60
9H23034-CAL4	10	4095890	409589.000	6.60
9H23034-CAL5	25	9910863	396434.500	6.60
9H23034-CAL6	50	026582E+07	405316.400	6.60
9H23034-CAL7	100	169921E+07	416992.100	6.60
9H23034-CAL8	200	437675E+07	471883.800	6.60

AVE RF **410399.400** RF RSD **6.41** AVE RT **6.60**

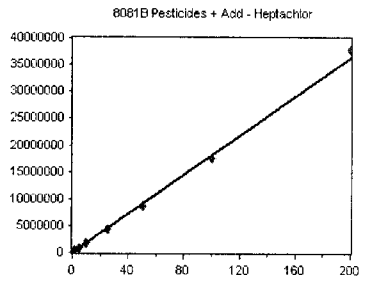
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Heptachlor

Curve Fit: **AVERAGE RF**

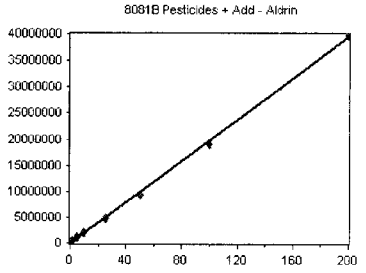


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	192066	192066.000	6.64
9H23034-CAL2	2	369615	184807.500	6.64
9H23034-CAL3	5	899091	179818.200	6.64
9H23034-CAL4	10	1819621	181962.100	6.63
9H23034-CAL5	25	4314306	172572.200	6.63
9H23034-CAL6	50	8735158	174703.200	6.63
9H23034-CAL7	100	755153E+07	175515.300	6.63
9H23034-CAL8	200	3.77857E+07	188928.500	6.63

AVE RF **181296.600** RF RSD **3.86** AVE RT **6.63**

Aldrin

Curve Fit: **AVERAGE RF**

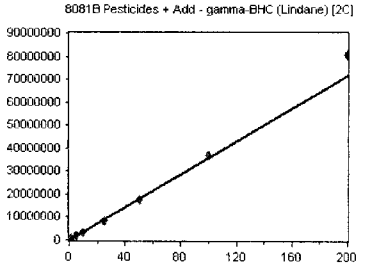


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	205523	205523.000	6.88
9H23034-CAL2	2	399550	199775.000	6.88
9H23034-CAL3	5	1012733	202546.600	6.88
9H23034-CAL4	10	2010802	201080.200	6.88
9H23034-CAL5	25	4845355	193814.200	6.87
9H23034-CAL6	50	9327672	186553.400	6.87
9H23034-CAL7	100	910807E+07	191080.700	6.87
9H23034-CAL8	200	3.98384E+07	199192.000	6.87

AVE RF **197445.600** RF RSD **3.23** AVE RT **6.87**

gamma-BHC (Lindane) [2C]

Curve Fit: **AVERAGE RF**

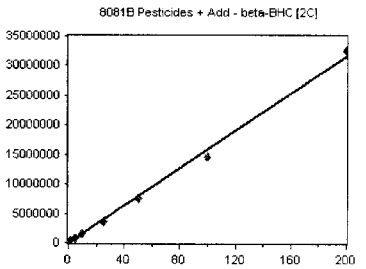


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	352286	352286.000	6.92
9H23034-CAL2	2	690922	345461.000	6.92
9H23034-CAL3	5	1742677	348535.400	6.92
9H23034-CAL4	10	3476733	347673.300	6.92
9H23034-CAL5	25	8508386	340335.400	6.91
9H23034-CAL6	50	738107E+07	347621.400	6.91
9H23034-CAL7	100	678899E+07	367889.900	6.91
9H23034-CAL8	200	076568E+07	403828.400	6.91

AVE RF **356703.900** RF RSD **5.79** AVE RT **6.91**

beta-BHC [2C]

Curve Fit: **AVERAGE RF**

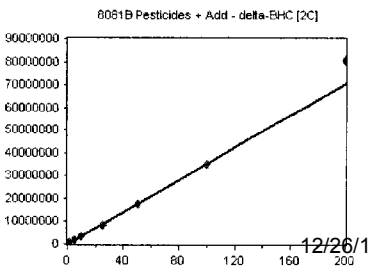


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	176262	176262.000	6.98
9H23034-CAL2	2	335260	167630.000	6.98
9H23034-CAL3	5	788630	157726.000	6.98
9H23034-CAL4	10	1580847	158084.700	6.98
9H23034-CAL5	25	3677155	147086.200	6.98
9H23034-CAL6	50	7516011	150320.200	6.98
9H23034-CAL7	100	462518E+07	146251.800	6.98
9H23034-CAL8	200	255343E+07	162767.200	6.98

AVE RF **158266.000** RF RSD **6.60** AVE RT **6.98**

delta-BHC [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	349123	349123.000	7.23
9H23034-CAL2	2	669122	334561.000	7.23
9H23034-CAL3	5	1717450	343490.000	7.23
9H23034-CAL4	10	3613517	361351.700	7.23
9H23034-CAL5	25	8247775	329911.000	7.23
9H23034-CAL6	50	731126E+07	346225.200	7.23
9H23034-CAL7	100	517663E+07	351766.300	7.23
9H23034-CAL8	200	097975E+07	404898.800	7.23

AVE RF **352665.900** RF RSD **6.60** AVE RT **7.23**

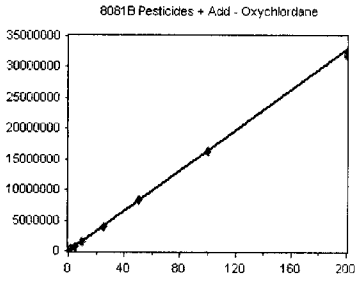
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Oxychlordane

Curve Fit: **AVERAGE RF**

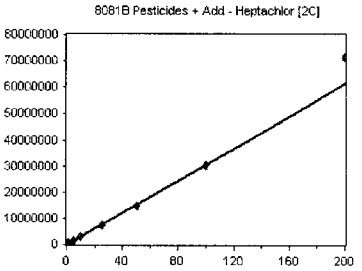


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	176844	176844.000	7.26
9H23034-CALA	2	339370	169685.000	7.26
9H23034-CALB	5	819748	163949.600	7.26
9H23034-CALC	10	1591613	159161.300	7.26
9H23034-CALD	25	3881255	155250.200	7.26
9H23034-CALE	50	8382873	167657.500	7.26
9H23034-CALF	100	535922E+07	163592.200	7.26
9H23034-CALG	200	203263E+07	160163.200	7.26

AVE RF **164537.900** RF RSD **4.13** AVE RT **7.26**

Heptachlor [2C]

Curve Fit: **AVERAGE RF**

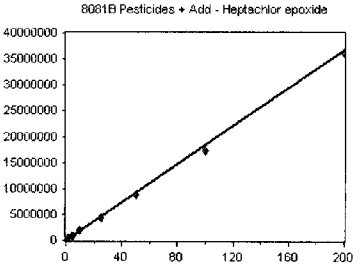


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	309811	309811.000	7.29
9H23034-CAL2	2	586765	293382.500	7.29
9H23034-CAL3	5	1508218	301643.600	7.29
9H23034-CAL4	10	3005915	300591.500	7.29
9H23034-CAL5	25	7282282	291291.300	7.29
9H23034-CAL6	50	459514E+07	291902.800	7.29
9H23034-CAL7	100	027782E+07	302778.200	7.29
9H23034-CAL8	200	128318E+07	356415.900	7.29

AVE RF **305977.100** RF RSD **6.98** AVE RT **7.29**

Heptachlor epoxide

Curve Fit: **AVERAGE RF**

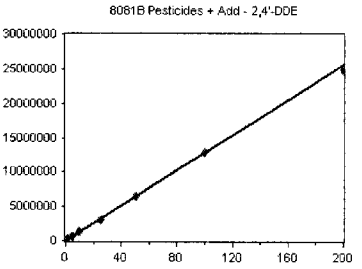


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	200503	200503.000	7.34
9H23034-CAL2	2	392052	196026.000	7.34
9H23034-CAL3	5	923620	184724.000	7.34
9H23034-CAL4	10	1865428	186542.800	7.34
9H23034-CAL5	25	4344286	173771.400	7.33
9H23034-CAL6	50	8869300	177386.000	7.33
9H23034-CAL7	100	731844E+07	173184.400	7.33
9H23034-CAL8	200	625817E+07	181290.800	7.33

AVE RF **184178.600** RF RSD **5.42** AVE RT **7.33**

2,4'-DDE

Curve Fit: **AVERAGE RF**

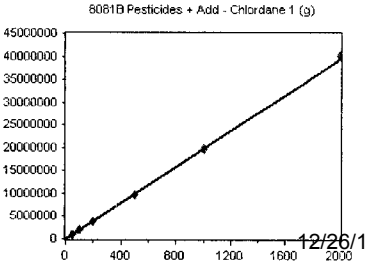


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	137947	137947.000	7.34
9H23034-CALA	2	265212	132606.000	7.33
9H23034-CALB	5	633168	126633.600	7.33
9H23034-CALC	10	1245265	124526.500	7.33
9H23034-CALD	25	3059421	122376.800	7.33
9H23034-CALE	50	6510588	130211.800	7.33
9H23034-CALF	100	276907E+07	127690.700	7.33
9H23034-CALG	200	1.48192E+07	124096.000	7.33

AVE RF **128261.100** RF RSD **4.01** AVE RT **7.33**

Chlordane 1 (g)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	1009143	20182.860	7.43
9H23034-CALI	100	1978897	19788.970	7.43
9H23034-CALJ	200	3849299	19246.490	7.43
9H23034-CALK	500	9628671	19257.340	7.43
9H23034-CALL	1000	964377E+07	19643.770	7.43
9H23034-CALM	2000	1.00365E+07	20018.250	7.43

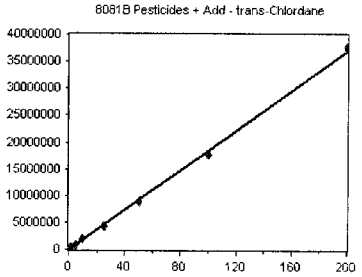
AVE RF **19689.610** RF RSD **1.96** AVE RT **7.43**

Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

trans-Chlordane

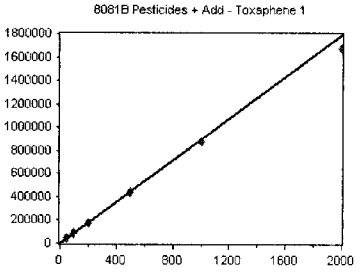


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	197202	197202.000	7.43
9H23034-CAL2	2	382271	191135.500	7.43
9H23034-CAL3	5	926577	185315.400	7.43
9H23034-CAL4	10	1847996	184799.600	7.43
9H23034-CAL5	25	4401456	176058.200	7.43
9H23034-CAL6	50	8959305	179186.100	7.43
9H23034-CAL7	100	773279E+07	177327.900	7.43
9H23034-CAL8	200	762141E+07	188107.000	7.43

AVE RF **184891.500** RF RSD **3.93** AVE RT **7.43**

Toxaphene 1

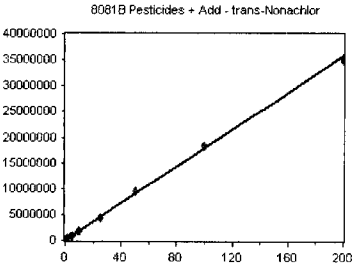


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	49250	985.000	7.51
9H23034-CALO	100	91576	915.760	7.50
9H23034-CALP	200	176047	880.235	7.50
9H23034-CALQ	500	441826	883.652	7.50
9H23034-CALR	1000	871889	871.889	7.50
9H23034-CALS	2000	1674674	837.337	7.50

AVE RF **895.646** RF RSD **5.63** AVE RT **7.50**

trans-Nonachlor

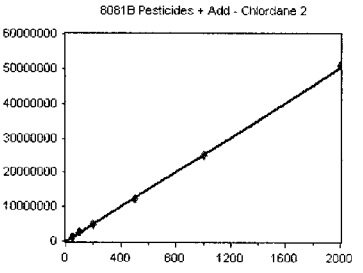


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	236836	236836.000	7.52
9H23034-CALA	2	415126	207563.000	7.52
9H23034-CALB	5	933222	186644.400	7.52
9H23034-CALC	10	1817552	181755.200	7.52
9H23034-CALD	25	4391046	175641.800	7.52
9H23034-CALE	50	9581794	191635.900	7.52
9H23034-CALF	100	835125E+07	183512.500	7.52
9H23034-CALG	200	502792E+07	175139.600	7.51

AVE RF **192341.100** RF RSD **10.78** AVE RT **7.52**

Chlordane 2

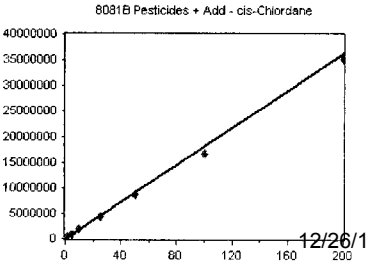


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	1286655	25733.100	7.52
9H23034-CALI	100	2519520	25195.200	7.52
9H23034-CALJ	200	4906320	24531.600	7.52
9H23034-CALK	500	217652E+07	24353.040	7.52
9H23034-CALL	1000	508324E+07	25083.240	7.52
9H23034-CALM	2000	097914E+07	25489.570	7.52

AVE RF **25064.290** RF RSD **2.14** AVE RT **7.52**

cis-Chlordane



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	209780	209780.000	7.53
9H23034-CAL2	2	389999	194999.500	7.53
9H23034-CAL3	5	908795	181759.000	7.53
9H23034-CAL4	10	1843346	184334.600	7.53
9H23034-CAL5	25	4244413	169776.500	7.53
9H23034-CAL6	50	8622674	172453.500	7.52
9H23034-CAL7	100	574258E+07	167425.800	7.52
9H23034-CAL8	200	520794E+07	176039.700	7.52

AVE RF **192071.100** RF RSD **7.86** AVE RT **7.53**

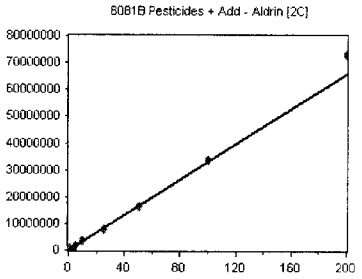
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Aldrin [2C]

Curve Fit: **AVERAGE RF**

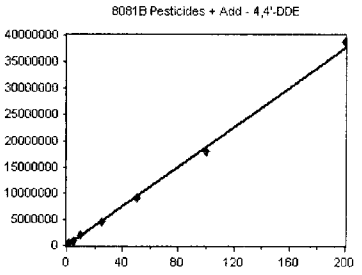


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	317466	317466.000	7.56
9H23034-CAL2	2	635458	317729.000	7.56
9H23034-CAL3	5	1600995	320199.000	7.56
9H23034-CAL4	10	3341093	334109.300	7.56
9H23034-CAL5	25	7878574	315143.000	7.56
9H23034-CAL6	50	526442E+07	325288.400	7.56
9H23034-CAL7	100	390642E+07	339064.200	7.56
9H23034-CAL8	200	322818E+07	366140.900	7.55

AVE RF **329392.500** RF RSD **5.19** AVE RT **7.56**

4,4'-DDE

Curve Fit: **AVERAGE RF**

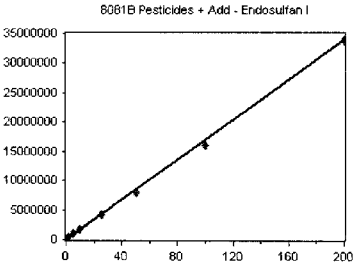


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	193435	193435.000	7.59
9H23034-CAL2	2	388618	194309.000	7.59
9H23034-CAL3	5	953351	190670.200	7.59
9H23034-CAL4	10	1890931	189093.100	7.59
9H23034-CAL5	25	4571066	182842.600	7.58
9H23034-CAL6	50	9177389	183547.800	7.58
9H23034-CAL7	100	805255E+07	180525.500	7.58
9H23034-CAL8	200	876308E+07	193815.400	7.58

AVE RF **188529.800** RF RSD **2.92** AVE RT **7.58**

Endosulfan I

Curve Fit: **AVERAGE RF**

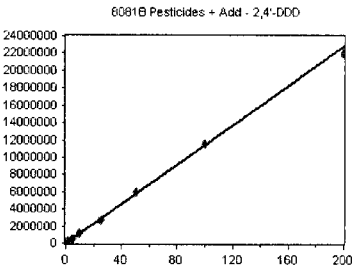


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	185217	185217.000	7.63
9H23034-CAL2	2	357368	178684.000	7.63
9H23034-CAL3	5	861509	172301.800	7.62
9H23034-CAL4	10	1709332	170933.200	7.62
9H23034-CAL5	25	4111285	164451.400	7.62
9H23034-CAL6	50	7984410	159688.200	7.62
9H23034-CAL7	100	1.609E+07	160900.000	7.62
9H23034-CAL8	200	385259E+07	169263.000	7.62

AVE RF **170179.800** RF RSD **5.13** AVE RT **7.62**

2,4'-DDD

Curve Fit: **AVERAGE RF**

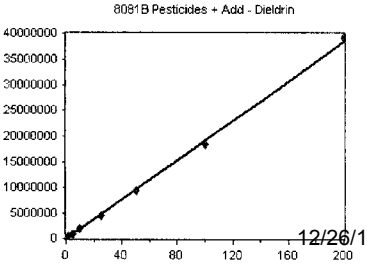


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	120240	120240.000	7.71
9H23034-CALA	2	233089	116544.500	7.71
9H23034-CALB	5	560942	112188.400	7.71
9H23034-CALC	10	1103587	110358.700	7.71
9H23034-CALD	25	2745178	109807.100	7.71
9H23034-CALE	50	5920095	118401.900	7.71
9H23034-CALF	100	158755E+07	115875.500	7.71
9H23034-CALG	200	191696E+07	109584.800	7.70

AVE RF **114125.100** RF RSD **3.65** AVE RT **7.71**

Dieldrin

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	197721	197721.000	7.80
9H23034-CAL2	2	395728	197864.000	7.80
9H23034-CAL3	5	972009	194401.800	7.80
9H23034-CAL4	10	1954890	195489.000	7.80
9H23034-CAL5	25	4582306	183292.200	7.79
9H23034-CAL6	50	9386664	187733.300	7.79
9H23034-CAL7	100	832442E+07	183244.200	7.79
9H23034-CAL8	200	921777E+07	196088.800	7.79

AVE RF **191979.300** RF RSD **3.25** AVE RT **7.79**

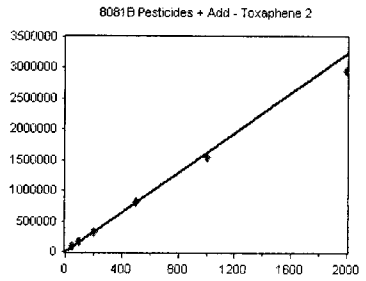
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Toxaphene 2

Curve Fit: **AVERAGE RF**

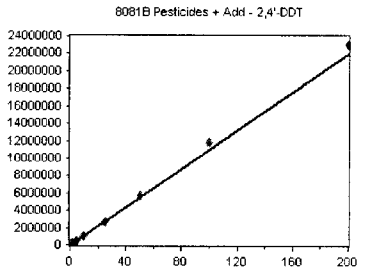


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	88321	1766.420	7.79
9H23034-CALO	100	166085	1660.850	7.80
9H23034-CALP	200	317587	1587.935	7.80
9H23034-CALQ	500	819454	1638.908	7.79
9H23034-CALR	1000	1556013	1556.013	7.79
9H23034-CALS	2000	2958997	1479.499	7.79

AVE RF **1614.937** RF RSD **6.08** AVE RT **7.79**

2,4'-DDT

Curve Fit: **AVERAGE RF**

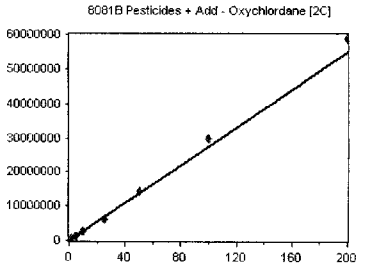


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	107110	107110.000	7.89
9H23034-CALA	2	204209	102104.500	7.89
9H23034-CALB	5	536967	107393.400	7.89
9H23034-CALC	10	1051565	105156.500	7.89
9H23034-CALD	25	2728794	109151.800	7.89
9H23034-CALE	50	5687323	113746.500	7.89
9H23034-CALF	100	177135E+07	117713.500	7.89
9H23034-CALG	200	302496E+07	115124.800	7.89

AVE RF **109687.600** RF RSD **4.88** AVE RT **7.89**

Oxychlordane [2C]

Curve Fit: **AVERAGE RF**

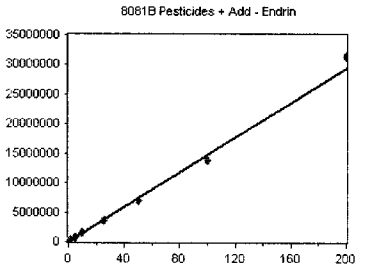


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	279143	279143.000	7.92
9H23034-CALA	2	541023	270511.500	7.92
9H23034-CALB	5	1325543	265108.600	7.92
9H23034-CALC	10	2538903	253890.300	7.92
9H23034-CALD	25	6202791	248111.600	7.92
9H23034-CALE	50	417254E+07	283450.800	7.92
9H23034-CALF	100	973215E+07	297321.500	7.92
9H23034-CALG	200	873698E+07	293684.900	7.92

AVE RF **273902.800** RF RSD **6.49** AVE RT **7.92**

Endrin

Curve Fit: **AVERAGE RF**

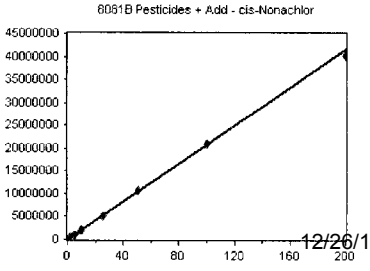


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	156412	156412.000	7.96
9H23034-CAL2	2	298515	149257.500	7.96
9H23034-CAL3	5	738953	147790.600	7.96
9H23034-CAL4	10	1475508	147550.800	7.96
9H23034-CAL5	25	3508904	140356.200	7.96
9H23034-CAL6	50	6979572	139591.400	7.96
9H23034-CAL7	100	381271E+07	138127.100	7.96
9H23034-CAL8	200	142631E+07	157131.500	7.96

AVE RF **147027.100** RF RSD **4.98** AVE RT **7.96**

cis-Nonachlor

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	219220	219220.000	7.99
9H23034-CALA	2	423442	211721.000	7.99
9H23034-CALB	5	1025899	205179.800	7.99
9H23034-CALC	10	2032010	203201.000	7.99
9H23034-CALD	25	4993110	199724.400	7.99
9H23034-CALE	50	061602E+07	212320.400	7.99
9H23034-CALF	100	093264E+07	209326.400	7.99
9H23034-CALG	200	004618E+07	200230.900	7.98

AVE RF **207615.500** RF RSD **3.25** AVE RT **7.99**

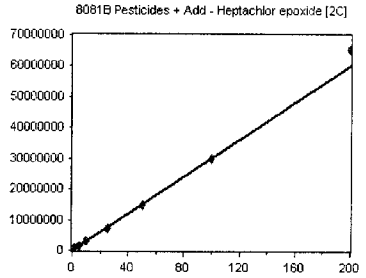
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Heptachlor epoxide [2C]

Curve Fit: **AVERAGE RF**

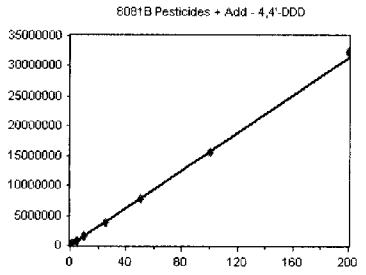


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	310098	310098.000	7.99
9H23034-CAL2	2	606240	303120.000	7.99
9H23034-CAL3	5	1455941	291188.200	7.99
9H23034-CAL4	10	2959301	295930.100	7.99
9H23034-CAL5	25	7064729	282589.200	7.99
9H23034-CAL6	50	483779E+07	296755.800	7.99
9H23034-CAL7	100	004551E+07	300455.100	7.99
9H23034-CAL8	200	533007E+07	326650.400	7.99

AVE RF **300848.300** RF RSD **4.40** AVE RT **7.99**

4,4'-DDD

Curve Fit: **AVERAGE RF**

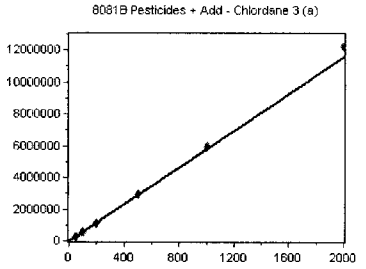


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	164956	164956.000	8.01
9H23034-CAL2	2	314622	157311.000	8.01
9H23034-CAL3	5	790498	158099.600	8.01
9H23034-CAL4	10	1565974	156597.400	8.01
9H23034-CAL5	25	3727035	149081.400	8.00
9H23034-CAL6	50	7726197	154523.900	8.00
9H23034-CAL7	100	543715E+07	154371.500	8.00
9H23034-CAL8	200	3.24368E+07	162184.000	8.00

AVE RF **157140.600** RF RSD **3.11** AVE RT **8.00**

Chlordane 3 (a)

Curve Fit: **AVERAGE RF**

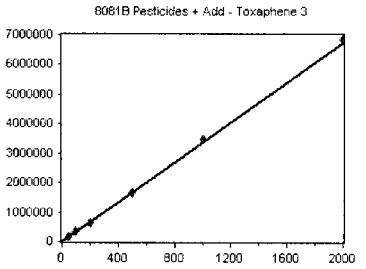


Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	288087	5761.740	8.07
9H23034-CALI	100	548196	5481.960	8.07
9H23034-CALJ	200	1101677	5508.385	8.07
9H23034-CALK	500	2921278	5842.556	8.07
9H23034-CALL	1000	5987927	5987.927	8.07
9H23034-CALM	2000	220831E+07	6104.155	8.07

AVE RF **5781.121** RF RSD **4.34** AVE RT **8.07**

Toxaphene 3

Curve Fit: **AVERAGE RF**

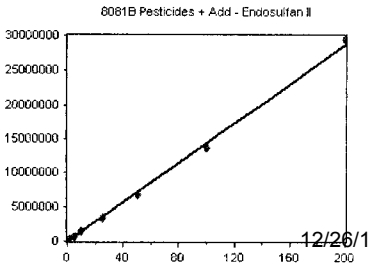


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	169381	3387.620	8.11
9H23034-CALO	100	332842	3328.420	8.11
9H23034-CALP	200	644464	3222.320	8.11
9H23034-CALQ	500	1677481	3354.962	8.11
9H23034-CALR	1000	3495877	3495.877	8.11
9H23034-CALS	2000	6831460	3415.730	8.10

AVE RF **3367.488** RF RSD **2.72** AVE RT **8.11**

Endosulfan II

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	158139	158139.000	8.12
9H23034-CAL2	2	299106	149553.000	8.12
9H23034-CAL3	5	709544	141908.800	8.12
9H23034-CAL4	10	1448080	144808.000	8.12
9H23034-CAL5	25	3371864	134874.600	8.12
9H23034-CAL6	50	6840920	136818.400	8.11
9H23034-CAL7	100	.35435E+07	135435.000	8.11
9H23034-CAL8	200	947104E+07	147355.200	8.11

AVE RF **143611.500** RF RSD **5.61** AVE RT **8.12**

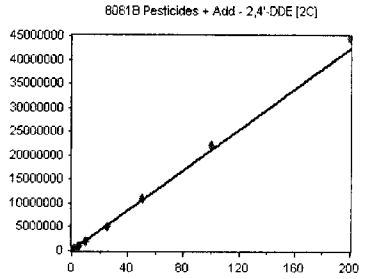
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

2,4'-DDE [2C]

Curve Fit: **AVERAGE RF**

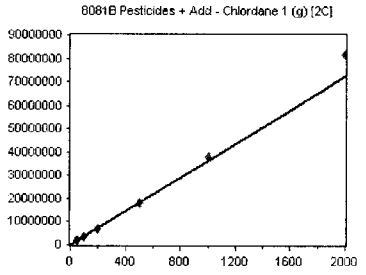


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	219164	219164.000	8.12
9H23034-CALA	2	411812	205906.000	8.12
9H23034-CALB	5	1029687	205937.400	8.12
9H23034-CALC	10	2018331	201833.100	8.12
9H23034-CALD	25	4999232	199969.300	8.12
9H23034-CALE	50	.10064E+07	220128.000	8.12
9H23034-CALF	100	:.21644E+07	221644.000	8.12
9H23034-CALG	200	450459E+07	222523.000	8.12

AVE RF **212138.100** RF RSD **4.52** AVE RT **8.12**

Chlordane 1 (g) [2C]

Curve Fit: **AVERAGE RF**

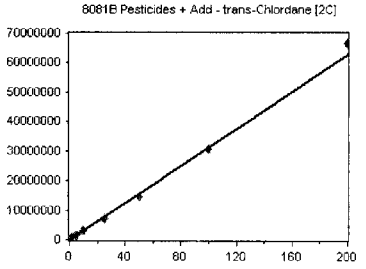


Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	1754707	35094.140	8.13
9H23034-CALI	100	3378388	33783.880	8.13
9H23034-CALJ	200	6751197	33755.980	8.13
9H23034-CALK	500	783043E+07	35660.860	8.13
9H23034-CALL	1000	796674E+07	37966.740	8.13
9H23034-CALM	2000	169171E+07	40845.860	8.13

AVE RF **36184.580** RF RSD **7.62** AVE RT **8.13**

trans-Chlordane [2C]

Curve Fit: **AVERAGE RF**

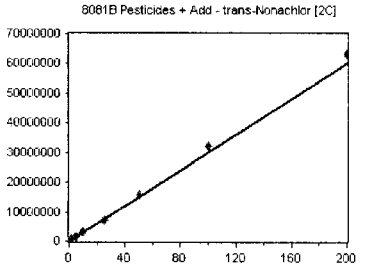


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	364142	364142.000	8.14
9H23034-CAL2	2	644454	322227.000	8.14
9H23034-CAL3	5	1502119	300423.800	8.13
9H23034-CAL4	10	3002782	300278.200	8.13
9H23034-CAL5	25	7157480	286299.200	8.13
9H23034-CAL6	50	467872E+07	293574.400	8.13
9H23034-CAL7	100	074227E+07	307422.700	8.13
9H23034-CAL8	200	644797E+07	332239.800	8.13

AVE RF **313325.900** RF RSD **8.10** AVE RT **8.13**

trans-Nonachlor [2C]

Curve Fit: **AVERAGE RF**

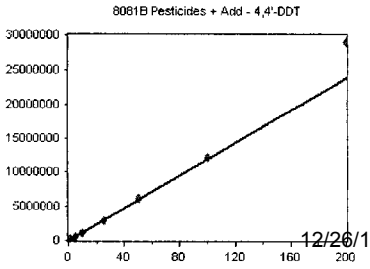


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	306202	306202.000	8.20
9H23034-CALA	2	587765	293882.500	8.19
9H23034-CALB	5	1467723	293544.600	8.19
9H23034-CALC	10	2844404	284440.400	8.19
9H23034-CALD	25	7092288	283691.500	8.19
9H23034-CALE	50	580771E+07	316154.200	8.19
9H23034-CALF	100	197527E+07	319752.700	8.20
9H23034-CALG	200	308364E+07	315418.200	8.19

AVE RF **301635.800** RF RSD **4.84** AVE RT **8.19**

4,4'-DDT

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	113897	113897.000	8.21
9H23034-CAL2	2	218190	109095.000	8.20
9H23034-CAL3	5	553009	110601.800	8.21
9H23034-CAL4	10	1146556	114655.600	8.20
9H23034-CAL5	25	2924467	116978.700	8.20
9H23034-CAL6	50	6205369	124107.400	8.20
9H23034-CAL7	100	217696E+07	121769.600	8.20
9H23034-CAL8	200	907522E+07	145376.100	8.20

AVE RF **119560.100** RF RSD **9.72** AVE RT **8.20**

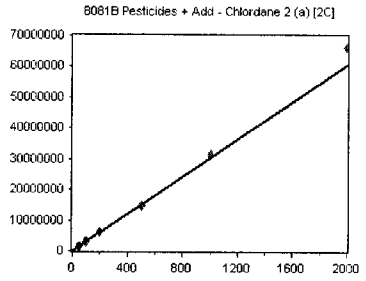
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Chlordane 2 (a) [2C]

Curve Fit: **AVERAGE RF**

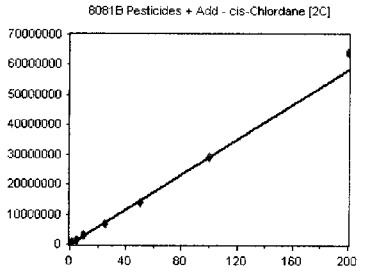


Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	1472400	29448.000	8.24
9H23034-CALI	100	2905941	29059.410	8.24
9H23034-CALJ	200	5883615	29418.070	8.24
9H23034-CALK	500	481227E+07	29624.540	8.24
9H23034-CALL	1000	149368E+07	31493.680	8.24
9H23034-CALM	2000	528139E+07	33140.700	8.24

AVE RF **30364.070** RF RSD **5.30** AVE RT **8.24**

cis-Chlordane [2C]

Curve Fit: **AVERAGE RF**

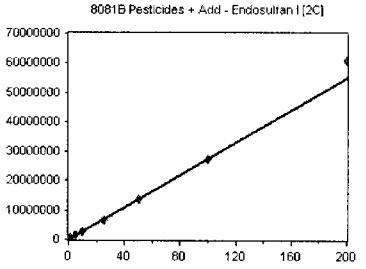


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	299422	299422.000	8.24
9H23034-CAL2	2	579667	289833.500	8.24
9H23034-CAL3	5	1434855	286971.000	8.24
9H23034-CAL4	10	2859573	285957.300	8.24
9H23034-CAL5	25	6935857	277434.300	8.24
9H23034-CAL6	50	400212E+07	280042.400	8.24
9H23034-CAL7	100	904286E+07	290428.600	8.24
9H23034-CAL8	200	397706E+07	319885.300	8.24

AVE RF **291246.800** RF RSD **4.59** AVE RT **8.24**

Endosulfan I [2C]

Curve Fit: **AVERAGE RF**

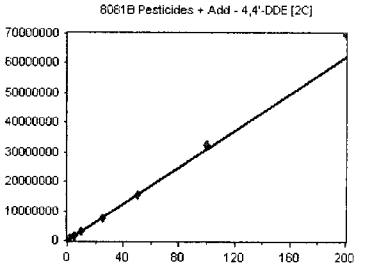


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	278874	278874.000	8.29
9H23034-CAL2	2	540442	270221.000	8.29
9H23034-CAL3	5	1327191	265438.200	8.29
9H23034-CAL4	10	2724272	272427.200	8.29
9H23034-CAL5	25	6571512	262860.500	8.29
9H23034-CAL6	50	371233E+07	274246.600	8.29
9H23034-CAL7	100	721271E+07	272127.100	8.29
9H23034-CAL8	200	104351E+07	305217.600	8.29

AVE RF **275176.500** RF RSD **4.77** AVE RT **8.29**

4,4'-DDE [2C]

Curve Fit: **AVERAGE RF**

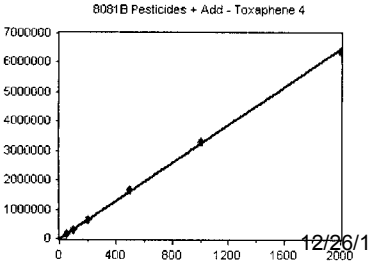


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	298463	298463.000	8.35
9H23034-CAL2	2	598066	299033.000	8.35
9H23034-CAL3	5	1487999	297599.800	8.35
9H23034-CAL4	10	3049792	304979.200	8.35
9H23034-CAL5	25	7501047	300041.900	8.34
9H23034-CAL6	50	555471E+07	311094.200	8.34
9H23034-CAL7	100	3.24996E+07	324996.000	8.34
9H23034-CAL8	200	984235E+07	349211.800	8.34

AVE RF **310677.400** RF RSD **5.82** AVE RT **8.34**

Toxaphene 4

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	164317	3286.340	8.35
9H23034-CALO	100	320313	3203.130	8.35
9H23034-CALP	200	632351	3161.755	8.35
9H23034-CALQ	500	1649569	3299.138	8.35
9H23034-CALR	1000	3287014	3287.014	8.35
9H23034-CALS	2000	6407070	3203.535	8.35

AVE RF **3240.162** RF RSD **1.78** AVE RT **8.35**

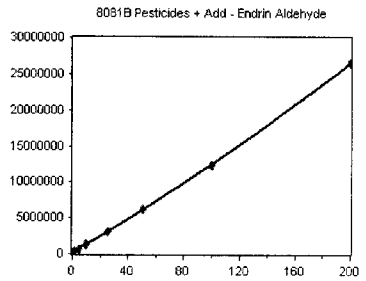
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Endrin Aldehyde

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

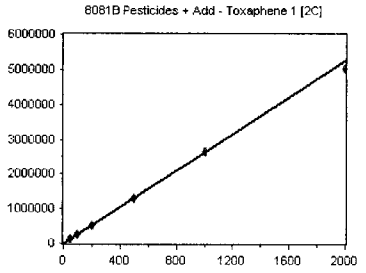


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	241285	241285.000	8.41
9H23034-CAL2	2	328182	164091.000	8.41
9H23034-CAL3	5	683393	136678.600	8.41
9H23034-CAL4	10	1375129	137512.900	8.41
9H23034-CAL5	25	3119767	124790.700	8.40
9H23034-CAL6	50	6224451	124489.000	8.40
9H23034-CAL7	100	236381E+07	123638.100	8.40
9H23034-CAL8	200	662767E+07	133138.300	8.40

AVE RF **148203.000** RF RSD **26.87** AVE RT **8.41**

Toxaphene 1 [2C]

Curve Fit: **AVERAGE RF**

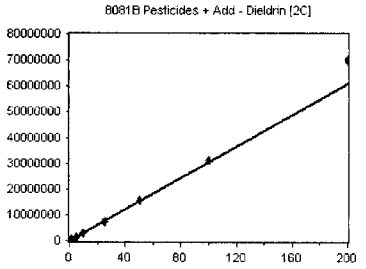


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	136848	2736.960	8.47
9H23034-CALO	100	267534	2675.340	8.47
9H23034-CALP	200	508983	2544.915	8.47
9H23034-CALQ	500	1308994	2617.988	8.47
9H23034-CALR	1000	2654886	2654.886	8.47
9H23034-CALS	2000	5030917	2515.458	8.47

AVE RF **2624.258** RF RSD **3.16** AVE RT **8.47**

Dieldrin [2C]

Curve Fit: **AVERAGE RF**

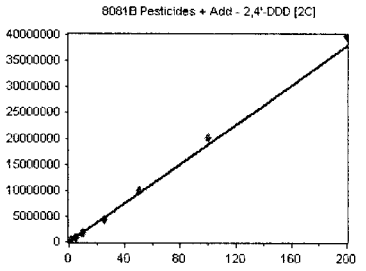


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	296684	296684.000	8.49
9H23034-CAL2	2	583812	291906.000	8.49
9H23034-CAL3	5	1462538	292507.600	8.49
9H23034-CAL4	10	2898866	289886.600	8.49
9H23034-CAL5	25	7333890	293355.600	8.49
9H23034-CAL6	50	543411E+07	308682.200	8.49
9H23034-CAL7	100	100196E+07	310019.600	8.49
9H23034-CAL8	200	003178E+07	350158.900	8.49

AVE RF **304150.100** RF RSD **6.61** AVE RT **8.49**

2,4'-DDD [2C]

Curve Fit: **AVERAGE RF**

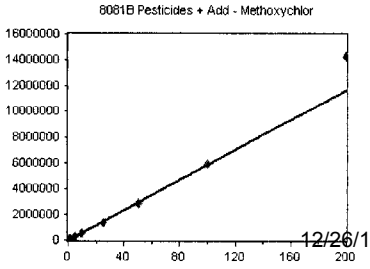


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	192040	192040.000	8.50
9H23034-CALA	2	373596	186798.000	8.50
9H23034-CALB	5	898697	179739.400	8.50
9H23034-CALC	10	1778790	177879.000	8.50
9H23034-CALD	25	4389185	175567.400	8.50
9H23034-CALE	50	9924934	198498.700	8.50
9H23034-CALF	100	011892E+07	201189.200	8.50
9H23034-CALG	200	.98393E+07	199196.500	8.49

AVE RF **188863.500** RF RSD **5.47** AVE RT **8.50**

Methoxychlor

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	59659	59659.000	8.54
9H23034-CAL2	2	111466	55733.000	8.54
9H23034-CAL3	5	270388	54077.600	8.54
9H23034-CAL4	10	561706	56170.600	8.54
9H23034-CAL5	25	1390283	55611.320	8.54
9H23034-CAL6	50	2860683	57213.660	8.54
9H23034-CAL7	100	5877329	58773.290	8.54
9H23034-CAL8	200	427114E+07	71355.700	8.54

AVE RF **58374.270** RF RSD **9.93** AVE RT **8.54**

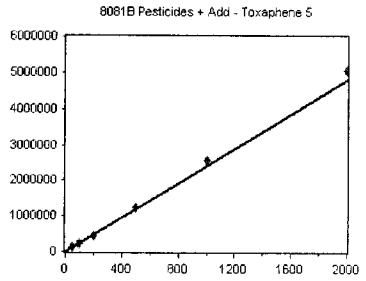
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Toxaphene 5

Curve Fit: **AVERAGE RF**

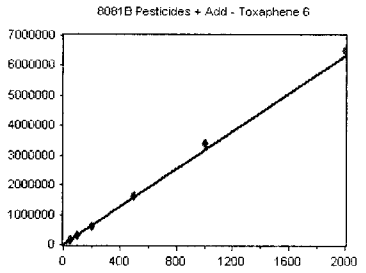


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	114720	2294.400	8.57
9H23034-CALO	100	228960	2289.600	8.57
9H23034-CALP	200	454431	2272.155	8.57
9H23034-CALQ	500	1221560	2443.120	8.57
9H23034-CALR	1000	2546293	2546.293	8.57
9H23034-CALS	2000	5074570	2537.285	8.57

AVE RF **2397.142** RF RSD **5.33** AVE RT **8.57**

Toxaphene 6

Curve Fit: **AVERAGE RF**

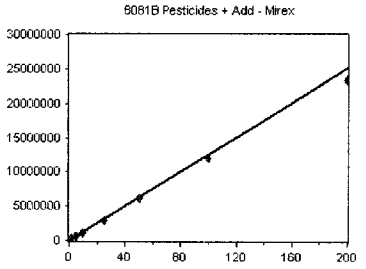


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	153138	3062.760	8.64
9H23034-CALO	100	302577	3025.770	8.64
9H23034-CALP	200	597991	2989.955	8.64
9H23034-CALQ	500	1623402	3246.804	8.64
9H23034-CALR	1000	3406737	3406.737	8.64
9H23034-CALS	2000	6510950	3255.475	8.64

AVE RF **3164.584** RF RSD **5.17** AVE RT **8.64**

Mirex

Curve Fit: **AVERAGE RF**

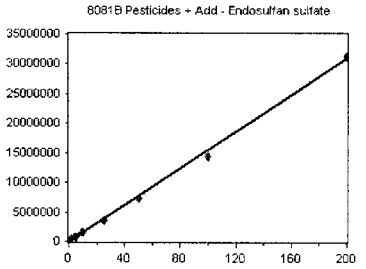


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	147356	147356.000	8.66
9H23034-CALA	2	266770	133385.000	8.66
9H23034-CALB	5	628618	125723.600	8.65
9H23034-CALC	10	1196365	119636.500	8.65
9H23034-CALD	25	2910818	116432.700	8.65
9H23034-CALE	50	6218341	124366.800	8.65
9H23034-CALF	100	196075E+07	119607.500	8.65
9H23034-CALG	200	2.3285E+07	116425.000	8.65

AVE RF **125366.600** RF RSD **8.39** AVE RT **8.65**

Endosulfan sulfate

Curve Fit: **AVERAGE RF**

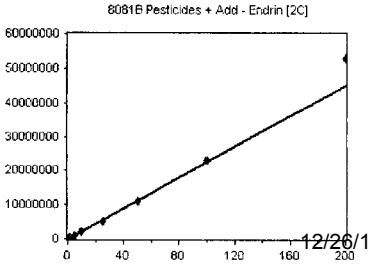


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	176097	176097.000	8.71
9H23034-CAL2	2	322163	161081.500	8.71
9H23034-CAL3	5	768798	153759.600	8.71
9H23034-CAL4	10	1553540	155354.000	8.71
9H23034-CAL5	25	3645411	145816.400	8.71
9H23034-CAL6	50	7420576	148411.500	8.71
9H23034-CAL7	100	436679E+07	143667.900	8.70
9H23034-CAL8	200	112652E+07	155632.600	8.70

AVE RF **154977.600** RF RSD **6.64** AVE RT **8.71**

Endrin [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	222882	222882.000	8.72
9H23034-CAL2	2	424889	212444.500	8.72
9H23034-CAL3	5	1092877	218575.400	8.72
9H23034-CAL4	10	2244483	224448.300	8.72
9H23034-CAL5	25	5325883	213035.300	8.72
9H23034-CAL6	50	101538E+07	220307.600	8.72
9H23034-CAL7	100	310241E+07	231024.100	8.72
9H23034-CAL8	200	277958E+07	263897.900	8.72

AVE RF **225826.900** RF RSD **7.92** AVE RT **8.72**

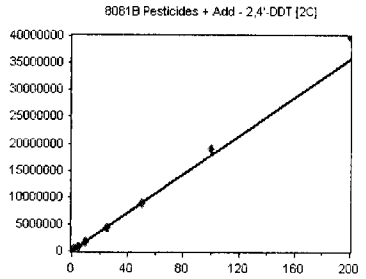
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

2,4'-DDT [2C]

Curve Fit: **AVERAGE RF**

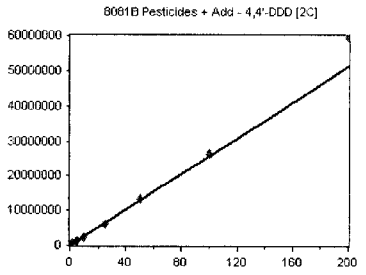


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	173338	173338.000	8.72
9H23034-CALA	2	332170	166085.000	8.72
9H23034-CALB	5	873074	174614.800	8.72
9H23034-CALC	10	1702568	170256.800	8.72
9H23034-CALD	25	4405554	176222.200	8.72
9H23034-CALE	50	8810591	176211.800	8.72
9H23034-CALF	100	899897E+07	189989.700	8.72
9H23034-CALG	200	999923E+07	199996.200	8.72

AVE RF **178339.300** RF RSD **6.24** AVE RT **8.72**

4,4'-DDD [2C]

Curve Fit: **AVERAGE RF**

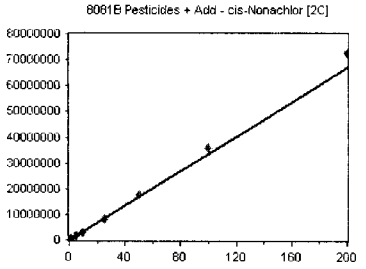


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	251549	251549.000	8.76
9H23034-CAL2	2	488120	244060.000	8.76
9H23034-CAL3	5	1208642	241728.400	8.76
9H23034-CAL4	10	2425496	242549.600	8.76
9H23034-CAL5	25	6146469	245858.800	8.76
9H23034-CAL6	50	315945E+07	263189.000	8.76
9H23034-CAL7	100	629748E+07	262974.800	8.76
9H23034-CAL8	200	956027E+07	297801.400	8.76

AVE RF **256213.900** RF RSD **7.37** AVE RT **8.76**

cis-Nonachlor [2C]

Curve Fit: **AVERAGE RF**

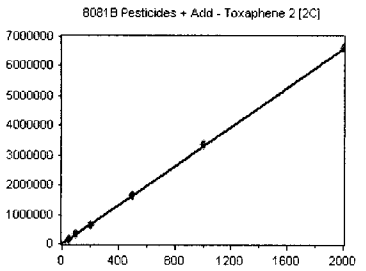


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	332745	332745.000	8.76
9H23034-CALA	2	624783	312391.500	8.76
9H23034-CALB	5	1587243	317448.600	8.76
9H23034-CALC	10	3148054	314805.400	8.76
9H23034-CALD	25	8219393	328775.700	8.76
9H23034-CALE	50	772123E+07	354424.600	8.76
9H23034-CALF	100	607264E+07	360726.400	8.76
9H23034-CALG	200	245582E+07	362279.100	8.76

AVE RF **335449.500** RF RSD **6.23** AVE RT **8.76**

Toxaphene 2 [2C]

Curve Fit: **AVERAGE RF**

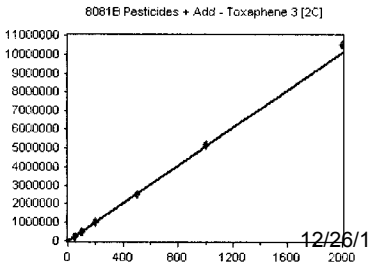


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	164706	3294.120	8.81
9H23034-CALO	100	324070	3240.700	8.81
9H23034-CALP	200	645322	3226.610	8.81
9H23034-CALQ	500	1647741	3295.482	8.81
9H23034-CALR	1000	3384036	3384.036	8.81
9H23034-CALS	2000	6610397	3305.198	8.81

AVE RF **3291.024** RF RSD **1.70** AVE RT **8.81**

Toxaphene 3 [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	254833	5096.660	8.85
9H23034-CALO	100	494430	4944.300	8.85
9H23034-CALP	200	995555	4977.775	8.85
9H23034-CALQ	500	2475022	4950.044	8.85
9H23034-CALR	1000	5168269	5168.269	8.85
9H23034-CALS	2000	054571E+07	5272.855	8.85

AVE RF **5068.317** RF RSD **2.65** AVE RT **8.85**

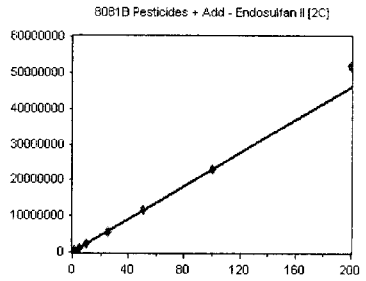
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Endosulfan II [2C]

Curve Fit: **AVERAGE RF**

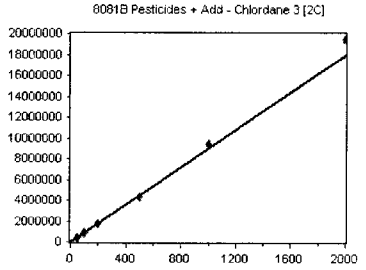


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	232156	232156.000	8.87
9H23034-CAL2	2	462256	231128.000	8.86
9H23034-CAL3	5	1096359	219271.800	8.87
9H23034-CAL4	10	2243610	224361.000	8.86
9H23034-CAL5	25	5447602	217904.100	8.86
9H23034-CAL6	50	153453E+07	230690.600	8.86
9H23034-CAL7	100	301637E+07	230163.700	8.86
9H23034-CAL8	200	183489E+07	259174.400	8.86

AVE RF **230606.200** RF RSD **5.55** AVE RT **8.86**

Chlordane 3 [2C]

Curve Fit: **AVERAGE RF**

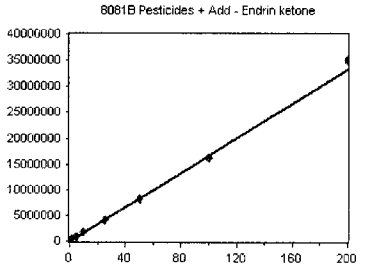


Standard	Concentration	Response	Response Factor	RT
9H23034-CALH	50	439020	8780.400	8.90
9H23034-CALI	100	874465	8744.650	8.90
9H23034-CALJ	200	1731727	8658.635	8.90
9H23034-CALK	500	4271709	8543.418	8.90
9H23034-CALL	1000	9358900	9358.900	8.90
9H23034-CALM	2000	941852E+07	9709.260	8.90

AVE RF **8965.877** RF RSD **5.14** AVE RT **8.90**

Endrin ketone

Curve Fit: **AVERAGE RF**

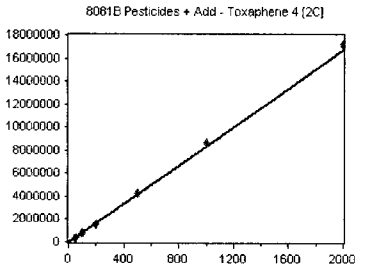


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	177552	177552.000	8.90
9H23034-CAL2	2	331269	165634.500	8.90
9H23034-CAL3	5	811384	162276.800	8.90
9H23034-CAL4	10	1664380	166438.000	8.90
9H23034-CAL5	25	4008958	160358.300	8.90
9H23034-CAL6	50	8190707	163814.100	8.90
9H23034-CAL7	100	525194E+07	162519.400	8.90
9H23034-CAL8	200	509472E+07	175473.600	8.90

AVE RF **166758.300** RF RSD **3.80** AVE RT **8.90**

Toxaphene 4 [2C]

Curve Fit: **AVERAGE RF**

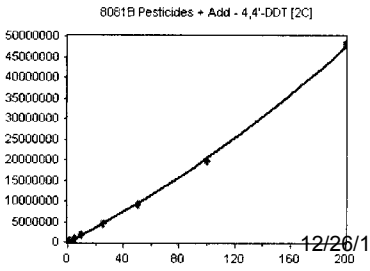


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	416348	8326.960	8.92
9H23034-CALO	100	811948	8119.480	8.92
9H23034-CALP	200	1580436	7902.180	8.91
9H23034-CALQ	500	4252640	8505.280	8.92
9H23034-CALR	1000	8650068	8650.068	8.92
9H23034-CALS	2000	719004E+07	8595.020	8.91

AVE RF **8349.831** RF RSD **3.51** AVE RT **8.91**

4,4'-DDT [2C]

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	179700	179700.000	8.99
9H23034-CAL2	2	341782	170891.000	8.99
9H23034-CAL3	5	873653	174730.600	8.99
9H23034-CAL4	10	1841119	184111.900	8.99
9H23034-CAL5	25	4480388	179215.500	8.98
9H23034-CAL6	50	9285492	185709.800	8.99
9H23034-CAL7	100	.97895E+07	197895.000	8.98
9H23034-CAL8	200	820344E+07	241017.200	8.98

AVE RF **189156.900** RF RSD **11.88** AVE RT **8.99**

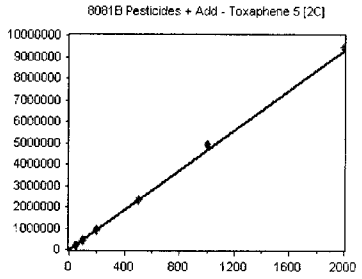
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Toxaphene 5 [2C]

Curve Fit: **AVERAGE RF**

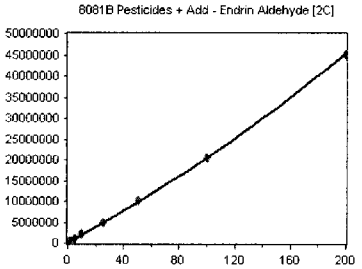


Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	233185	4663.700	9.09
9H23034-CALO	100	452209	4522.090	9.09
9H23034-CALP	200	895397	4476.985	9.09
9H23034-CALQ	500	2340668	4681.336	9.09
9H23034-CALR	1000	4900430	4900.430	9.09
9H23034-CALS	2000	9435236	4717.618	9.09

AVE RF **4660.360** RF RSD **3.24** AVE RT **9.09**

Endrin Aldehyde [2C]

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

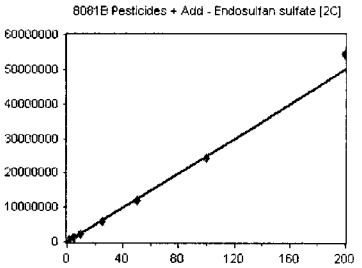


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	348624	348624.000	9.10
9H23034-CAL2	2	477694	238847.000	9.10
9H23034-CAL3	5	1045869	209173.800	9.10
9H23034-CAL4	10	2125028	212502.800	9.10
9H23034-CAL5	25	4848504	193940.200	9.10
9H23034-CAL6	50	020903E+07	204180.600	9.10
9H23034-CAL7	100	050274E+07	205027.400	9.10
9H23034-CAL8	200	508454E+07	225422.700	9.10

AVE RF **229714.800** RF RSD **21.77** AVE RT **9.10**

Endosulfan sulfate [2C]

Curve Fit: **AVERAGE RF**

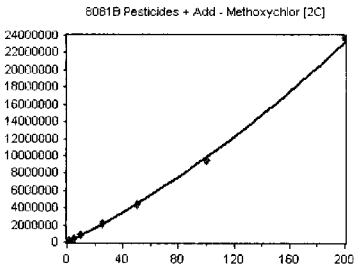


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	265797	265797.000	9.29
9H23034-CAL2	2	498767	249383.500	9.29
9H23034-CAL3	5	1175908	235181.600	9.29
9H23034-CAL4	10	2424584	242458.400	9.29
9H23034-CAL5	25	5978906	239156.200	9.29
9H23034-CAL6	50	214929E+07	242985.800	9.29
9H23034-CAL7	100	447732E+07	244773.200	9.29
9H23034-CAL8	200	459279E+07	272964.000	9.29

AVE RF **249087.500** RF RSD **5.35** AVE RT **9.29**

Methoxychlor [2C]

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

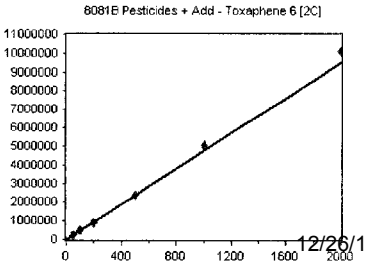


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	95155	95155.000	9.47
9H23034-CAL2	2	178074	89037.000	9.47
9H23034-CAL3	5	413802	82760.400	9.47
9H23034-CAL4	10	883069	88306.900	9.47
9H23034-CAL5	25	2166659	86666.360	9.46
9H23034-CAL6	50	4346199	86923.980	9.46
9H23034-CAL7	100	9444987	94449.870	9.46
9H23034-CAL8	200	1.37141E+07	118570.500	9.46

AVE RF **92733.750** RF RSD **12.09** AVE RT **9.46**

Toxaphene 6 [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CALN	50	230922	4618.440	9.47
9H23034-CALO	100	452485	4524.850	9.47
9H23034-CALP	200	905244	4526.220	9.47
9H23034-CALQ	500	2369795	4739.590	9.47
9H23034-CALR	1000	5046645	5046.645	9.47
9H23034-CALS	2000	009095E+07	5045.475	9.47

AVE RF **4750.203** RF RSD **3.10** AVE RT **9.47**

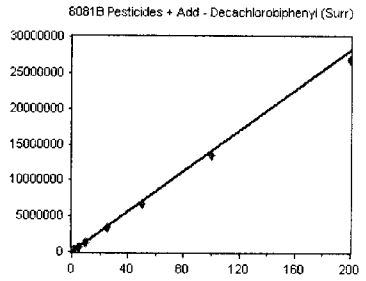
Element Calibration Review Sheet

Calibration ID: **A9H2608** Instrument: **DUALECD5** Calibration Date: **08/26/2019**

Analysis: **8081B Pesticides + Add** Instrument Cal ID: **ECD5_QUANTPEST_19082**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

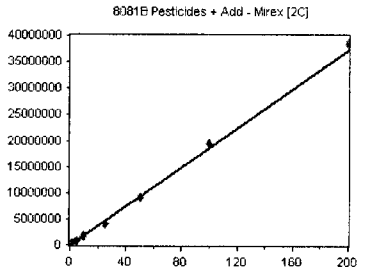


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	163865	163865.000	9.59
9H23034-CAL2	2	309904	154952.000	9.59
9H23034-CAL3	5	701050	140210.000	9.59
9H23034-CAL4	10	1335468	133546.800	9.59
9H23034-CAL5	25	3342634	133705.400	9.59
9H23034-CAL6	50	6678990	133579.800	9.59
9H23034-CAL7	100	.34054E+07	134054.000	9.59
9H23034-CAL8	200	697523E+07	134876.200	9.59

AVE RF **141098.600** RF RSD **8.33** AVE RT **9.59**

Mirex [2C]

Curve Fit: **AVERAGE RF**

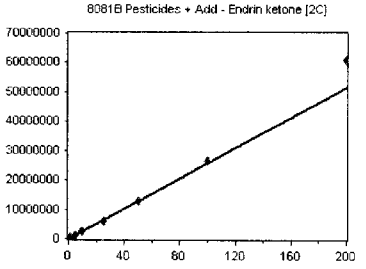


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL9	1	209783	209783.000	9.68
9H23034-CALA	2	388199	194099.500	9.68
9H23034-CALB	5	895523	179104.600	9.68
9H23034-CALC	10	1722960	172296.000	9.68
9H23034-CALD	25	4138115	165524.600	9.68
9H23034-CALE	50	9100959	182019.200	9.68
9H23034-CALF	100	.93632E+07	193632.000	9.68
9H23034-CALG	200	842553E+07	192127.600	9.68

AVE RF **186073.300** RF RSD **7.59** AVE RT **9.68**

Endrin ketone [2C]

Curve Fit: **AVERAGE RF**

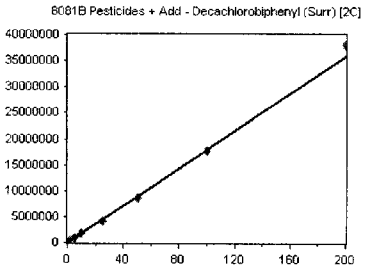


Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	255763	255763.000	9.69
9H23034-CAL2	2	493110	246555.000	9.69
9H23034-CAL3	5	1205004	241000.800	9.69
9H23034-CAL4	10	2496985	249698.500	9.69
9H23034-CAL5	25	5893691	235747.600	9.69
9H23034-CAL6	50	295457E+07	259091.400	9.69
9H23034-CAL7	100	563656E+07	266365.600	9.69
9H23034-CAL8	200	086138E+07	304306.900	9.69

AVE RF **257316.100** RF RSD **8.31** AVE RT **9.69**

Decachlorobiphenyl (Surr) [2C]

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9H23034-CAL1	1	191572	191572.000	10.54
9H23034-CAL2	2	390006	195003.000	10.54
9H23034-CAL3	5	870921	174184.200	10.54
9H23034-CAL4	10	1678728	167872.800	10.54
9H23034-CAL5	25	4163229	166529.200	10.54
9H23034-CAL6	50	8730692	174613.800	10.54
9H23034-CAL7	100	778407E+07	177840.700	10.54
9H23034-CAL8	200	809778E+07	190488.900	10.54

AVE RF **179763.100** RF RSD **6.18** AVE RT **10.54**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9H23034

Analysis Included

1311/8081B TCLP Pest Reg List
1311/8081B TCLP Pest Reg List +ADD
1311/8081B TCLP Pesticides (All)
1311/8081B TCLP Pesticides + Add (All)
1312/8081B SPLP Pesticides
608 Additionals Only (QC)
608 Pest (Chlordane)
608 Pesticides
608 Pesticides (DDT Only)
608 Pesticides (SW)
608 Pesticides (SW) Full List
608 Pesticides (TTO)
608 Pesticides + Adds
608.3 Additionals - DEVELOPMENT
608.3 Chlordane - DEVELOPMENT
608.3 PCBs - DEVELOPMENT
608.3 Pesticides - DEVELOPMENT
608.3 Pesticides + Adds - DEVELOPMENT
608.3 Toxaphene - DEVELOPMENT
8081B Pesticides
8081B 2,4+4,4-DDx Only (+Add)
8081B Chlordane
8081B DDT Only
8081B Pesticides + Add
8081B RSET FW Sed (+Add) (2016)
8081B RSET Sediment List (+Add)
8081B RSET Sediment Marine (2016) (+Add)
8081B Toxaphene

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9H23034

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9H23034-ICB1	Initial Cal Blank	Water	A19H348		8/23/2019 1:33:00PM
9H23034-CAL1	Cal Standard	Water	A19E245	"	8/23/2019 1:51:00PM
9H23034-CAL2	Cal Standard	Water	A19E246	"	8/23/2019 2:08:00PM
9H23034-CAL3	Cal Standard	Water	A19E247	"	8/23/2019 2:25:00PM
9H23034-CAL4	Cal Standard	Water	A19E249	"	8/23/2019 2:42:00PM
9H23034-CAL5	Cal Standard	Water	A19E250	"	8/23/2019 3:00:00PM
9H23034-CAL6	Cal Standard	Water	A19H383	"	8/23/2019 3:17:00PM
9H23034-CAL7	Cal Standard	Water	A19H384	"	8/23/2019 3:34:00PM
9H23034-CAL8	Cal Standard	Water	A19E244	"	8/23/2019 3:52:00PM
9H23034-ICV1	Initial Cal Check	Water	A19E106	"	8/23/2019 4:26:00PM
9H23034-CAL9	Cal Standard	Water	A19E272	"	8/23/2019 4:44:00PM
9H23034-CALA	Cal Standard	Water	A19E273	"	8/23/2019 5:01:00PM
9H23034-CALB	Cal Standard	Water	A19E274	"	8/23/2019 5:18:00PM
9H23034-CALC	Cal Standard	Water	A19E275	"	8/23/2019 5:35:00PM
9H23034-CALD	Cal Standard	Water	A19E276	"	8/23/2019 5:53:00PM
9H23034-CALE	Cal Standard	Water	A19E154	"	8/23/2019 6:10:00PM
9H23034-CALF	Cal Standard	Water	A19E155	"	8/23/2019 6:27:00PM
9H23034-CALG	Cal Standard	Water	A19E271	"	8/23/2019 6:45:00PM
9H23034-ICV2	Initial Cal Check	Water	A19E043	"	8/23/2019 7:19:00PM
9H23034-CALH	Cal Standard	Water	A19F232	"	8/23/2019 7:36:00PM
9H23034-CALI	Cal Standard	Water	A19F233	"	8/23/2019 7:54:00PM
9H23034-CALJ	Cal Standard	Water	A19F234	"	8/23/2019 8:11:00PM
9H23034-CALK	Cal Standard	Water	A19F235	"	8/23/2019 8:28:00PM
9H23034-CALL	Cal Standard	Water	A19F236	"	8/23/2019 8:45:00PM
9H23034-CALM	Cal Standard	Water	A19F231	"	8/23/2019 9:02:00PM
9H23034-ICV3	Initial Cal Check	Water	A19E108	"	8/23/2019 9:37:00PM
9H23034-CALN	Cal Standard	Water	A19D122	"	8/23/2019 9:54:00PM
9H23034-CALO	Cal Standard	Water	A19D123	"	8/23/2019 10:11:00PM
9H23034-CALP	Cal Standard	Water	A19D124	"	8/23/2019 10:28:00PM
9H23034-CALQ	Cal Standard	Water	A19D125	"	8/23/2019 10:45:00PM
9H23034-CALR	Cal Standard	Water	A19D126	"	8/23/2019 11:03:00PM
9H23034-CALS	Cal Standard	Water	A19D121	"	8/23/2019 11:20:00PM
9H23034-ICV4	Initial Cal Check	Water	A19D127	"	8/23/2019 11:54:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9H2608** Instrument: **DualECD5F**

1311/8081B TCLP Pest Reg L Sequence: **9H23034** Matrix: **Water**

9H23034-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9H23034-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9H23034-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9H23034-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9H23034-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9H23034

9H23034-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALB	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALC	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALD	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALE	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALF	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALG	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALH	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALI	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALJ	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALK	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALL	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALM	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALN	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALO	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALP	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALQ	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALR	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9H23034-CALS	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: 9H23034

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).

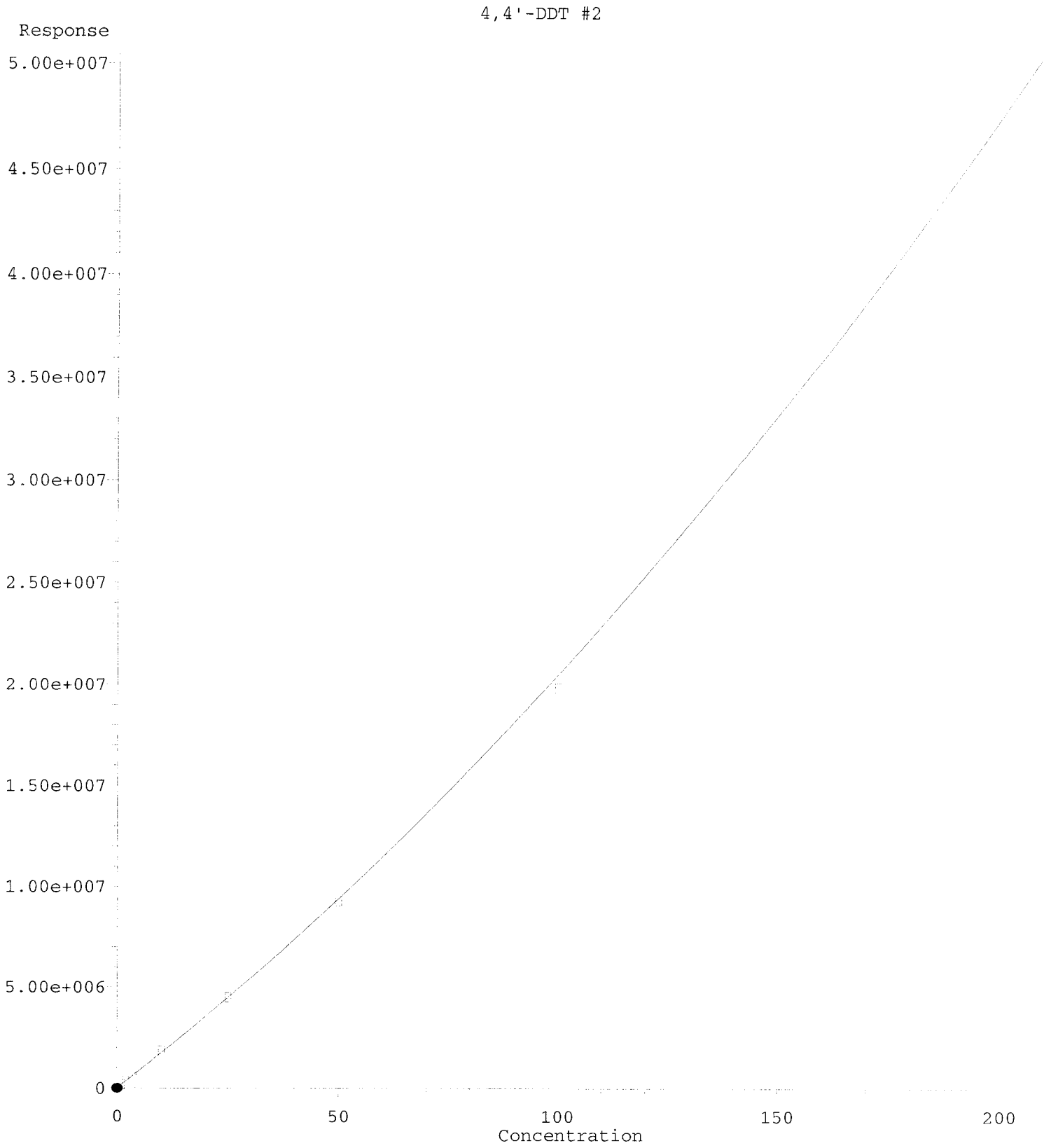
ICV RECOVERIES

Calibration: **A9H2608** Instrument: **DualECD5F**

608 Pesticides (SW) Full List Sequence: **9H23034** Matrix: **Water**

9H23034-ICV1	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9H23034-ICV2	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9H23034-ICV3	**Inst. MRL**	**ICV Level**	**Result**	**%Rec.**	**Qual**
9H23034-ICV4	**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.

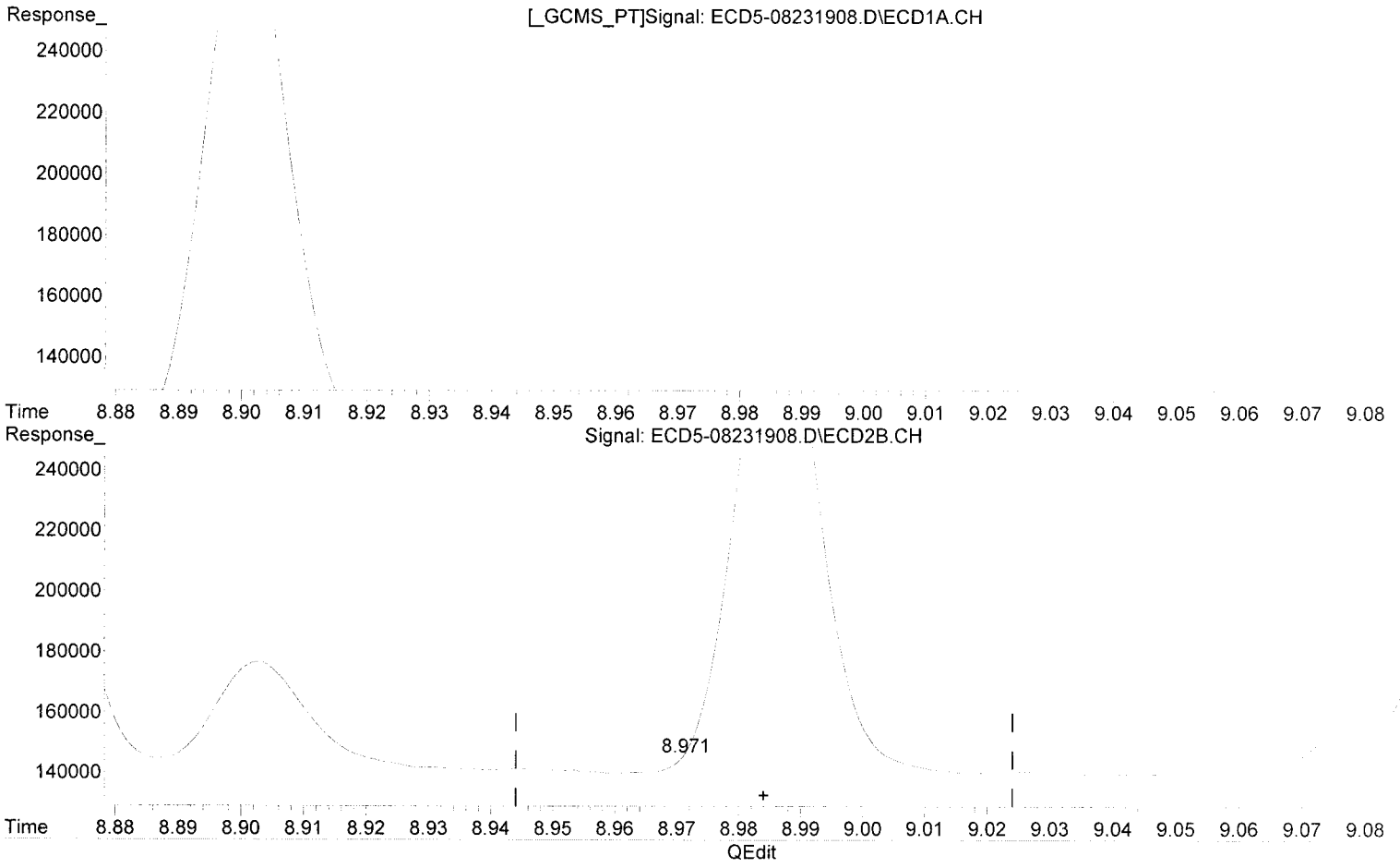


R = 3.30e+002 A*A + 1.71e+005 A + 6.57e+003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: R:\methods\ECD5_QUANTPEST_190823-M
Calibration Table Last Updated: Mon Aug 26 11:58:51 2019

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(17) 4,4'-DDT

8.205min 0.953 ng/mL

response 113897

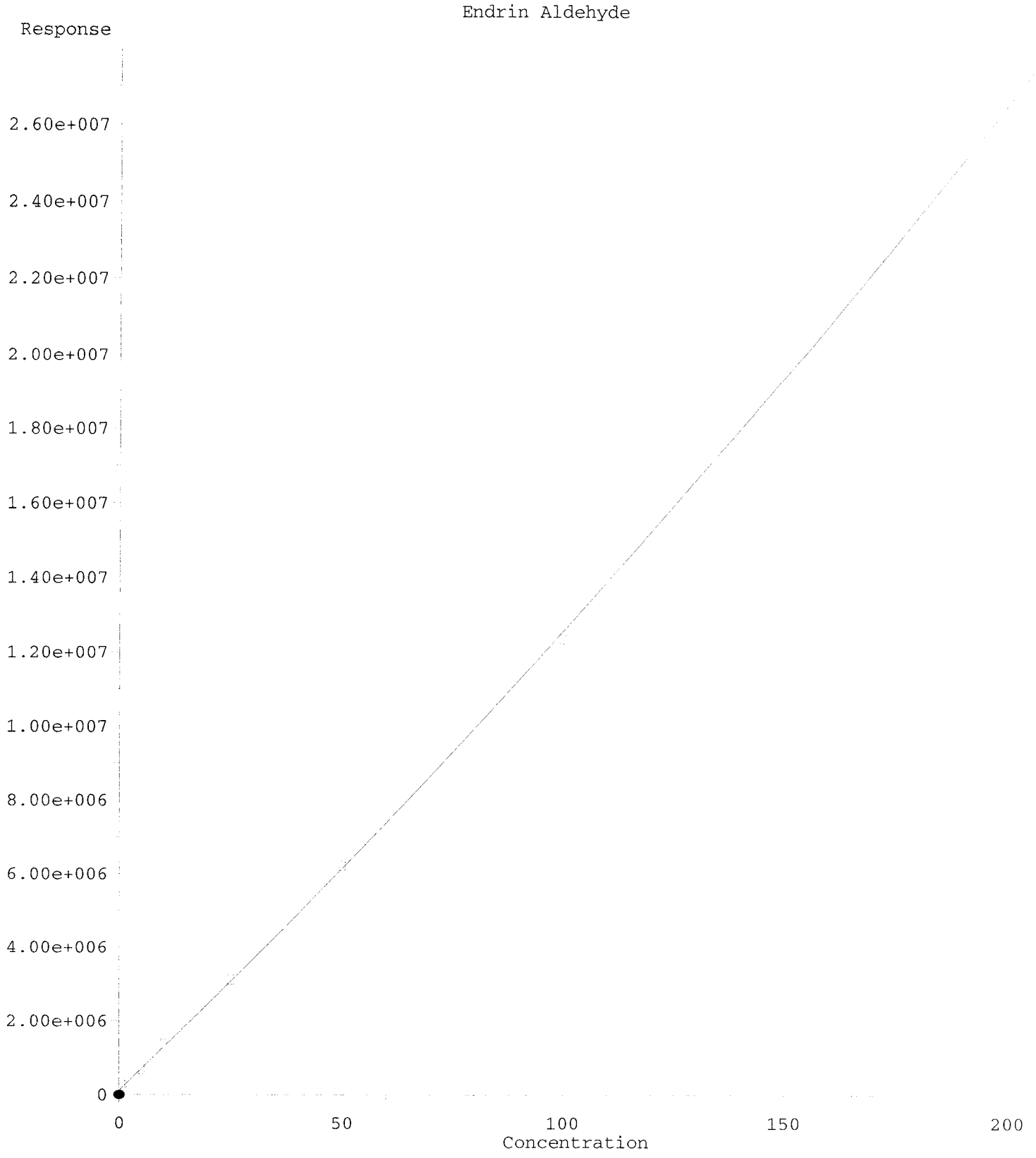
MJB 8/26/19

(17) 4,4'-DDT #2

8.971min -0.006 ng/mL m

response 5621

(+) = Expected Retention Time

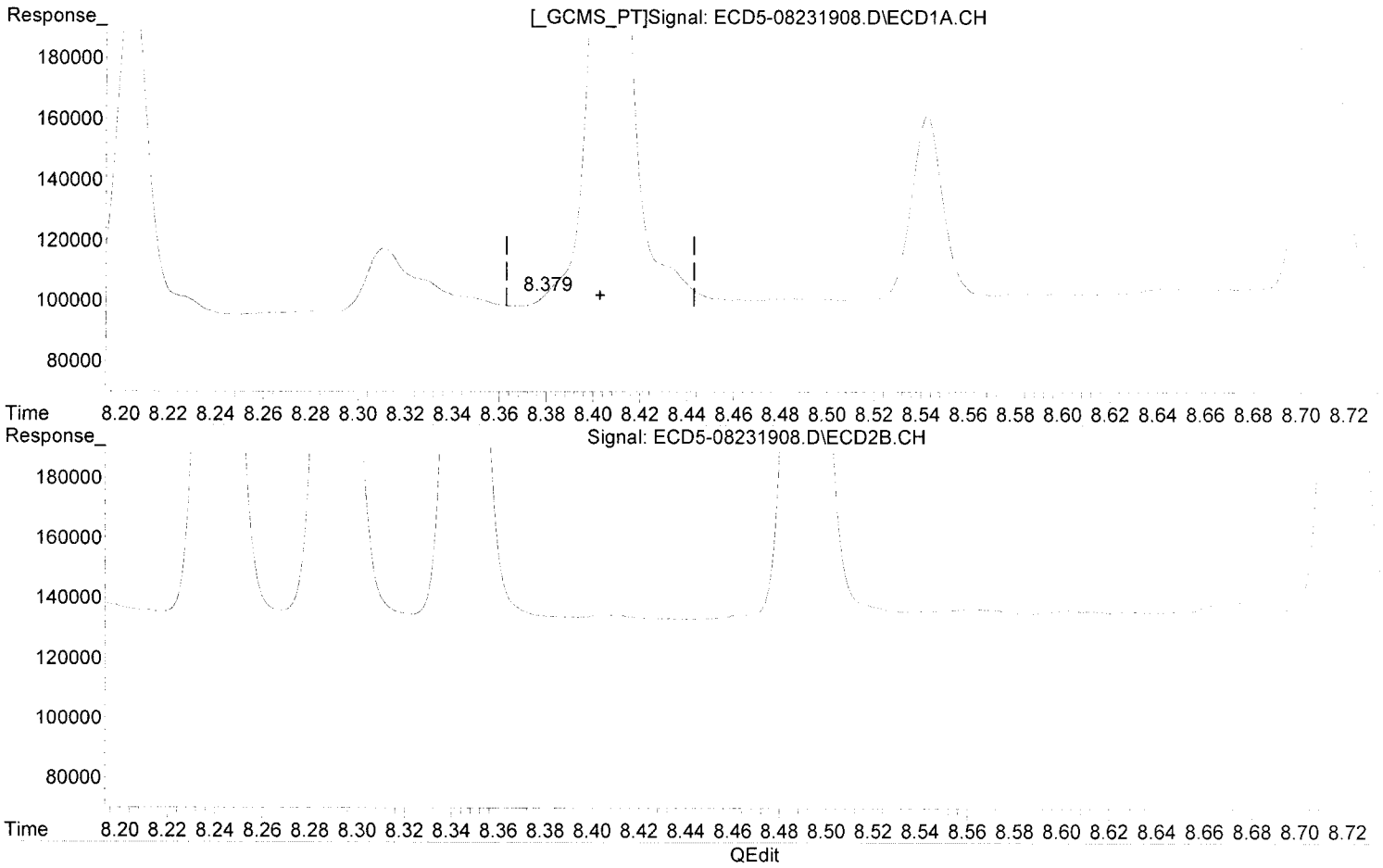


R = 8.05e+001 A*A + 1.16e+005 A + 1.19e+005
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: R:\methods\ECD5_QUANTPEST_190823-M
Calibration Table Last Updated: Mon Aug 26 11:58:51 2019

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(18) Endrin Aldehyde

8.379min -0.993 ng/mL (m)

response 3543

MJB 9/26/19

(18) Endrin Aldehyde #2

9.101min 1.058 ng/mL

response 348624

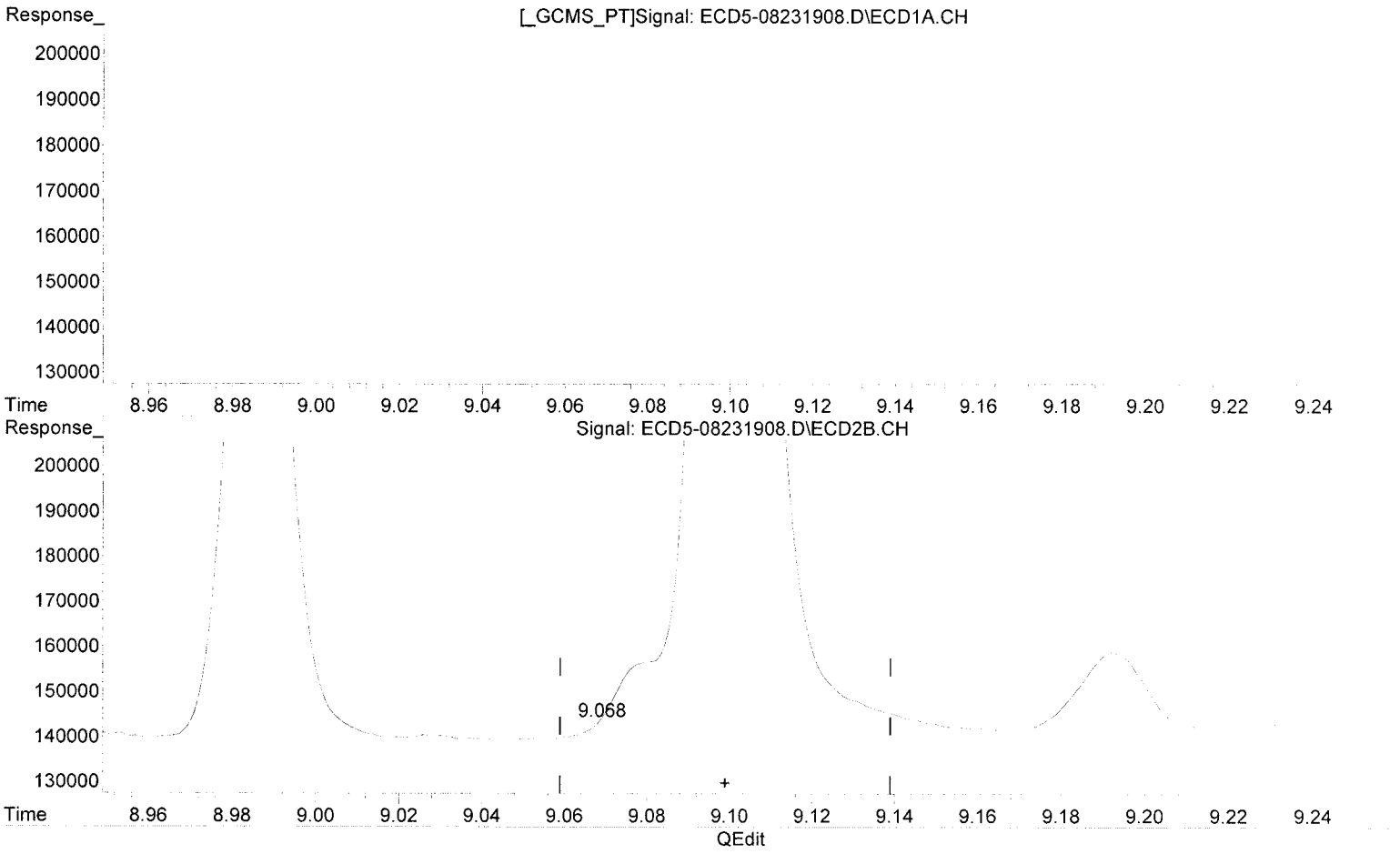
(+) = Expected Retention Time

R = 2.18e+002 A*A + 1.83e+005 A + 1.55e+005
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: R:\methods\ECD5_QUANTPEST_190823-M
Calibration Table Last Updated: Mon Aug 26 11:58:51 2019

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(18) Endrin Aldehyde

8.379min -0.993 ng/mL m

response 3543

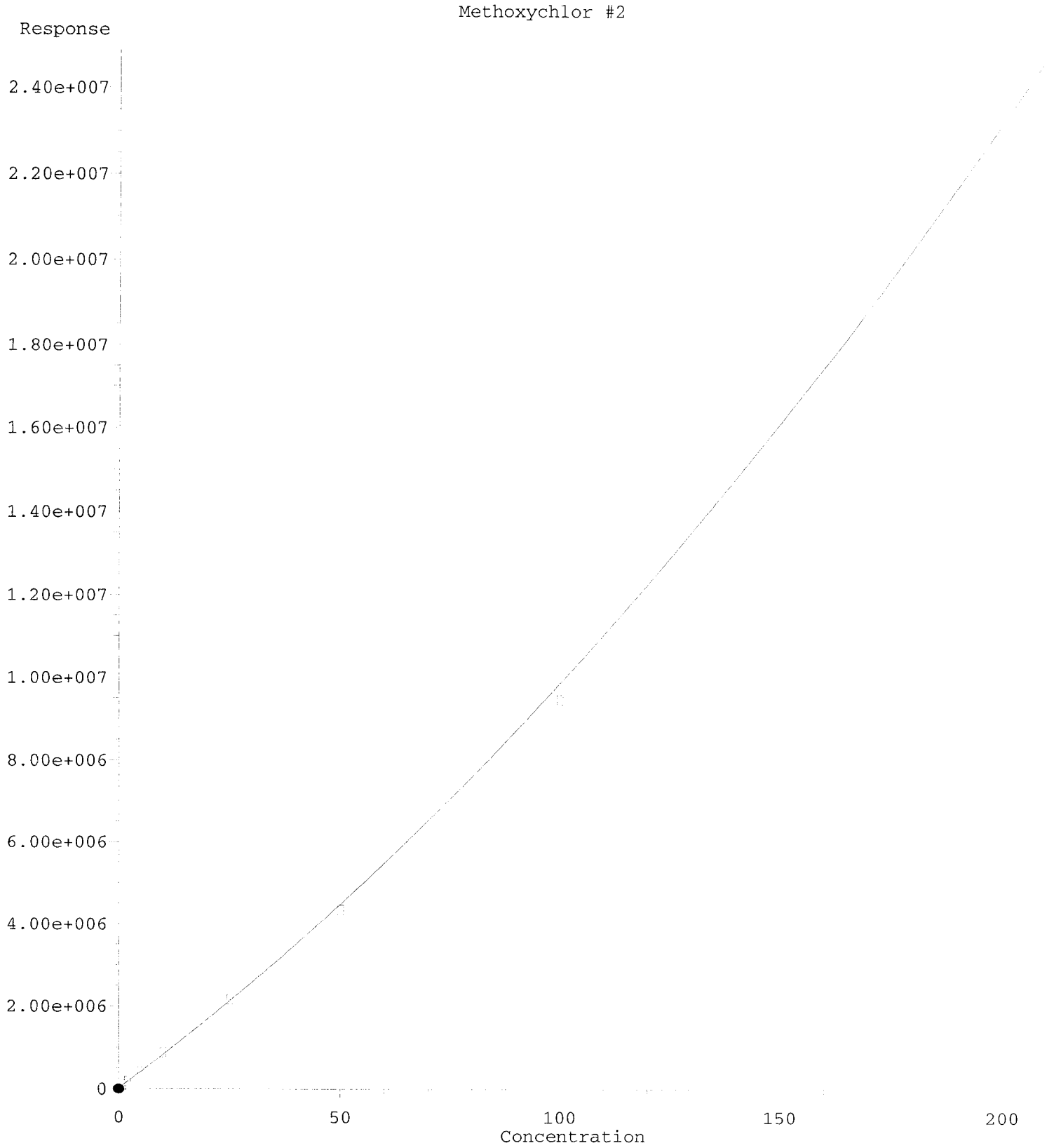
MJB 8/26/19

(18) Endrin Aldehyde #2

9.068min -0.831 ng/mL m

response 3374

(+) = Expected Retention Time

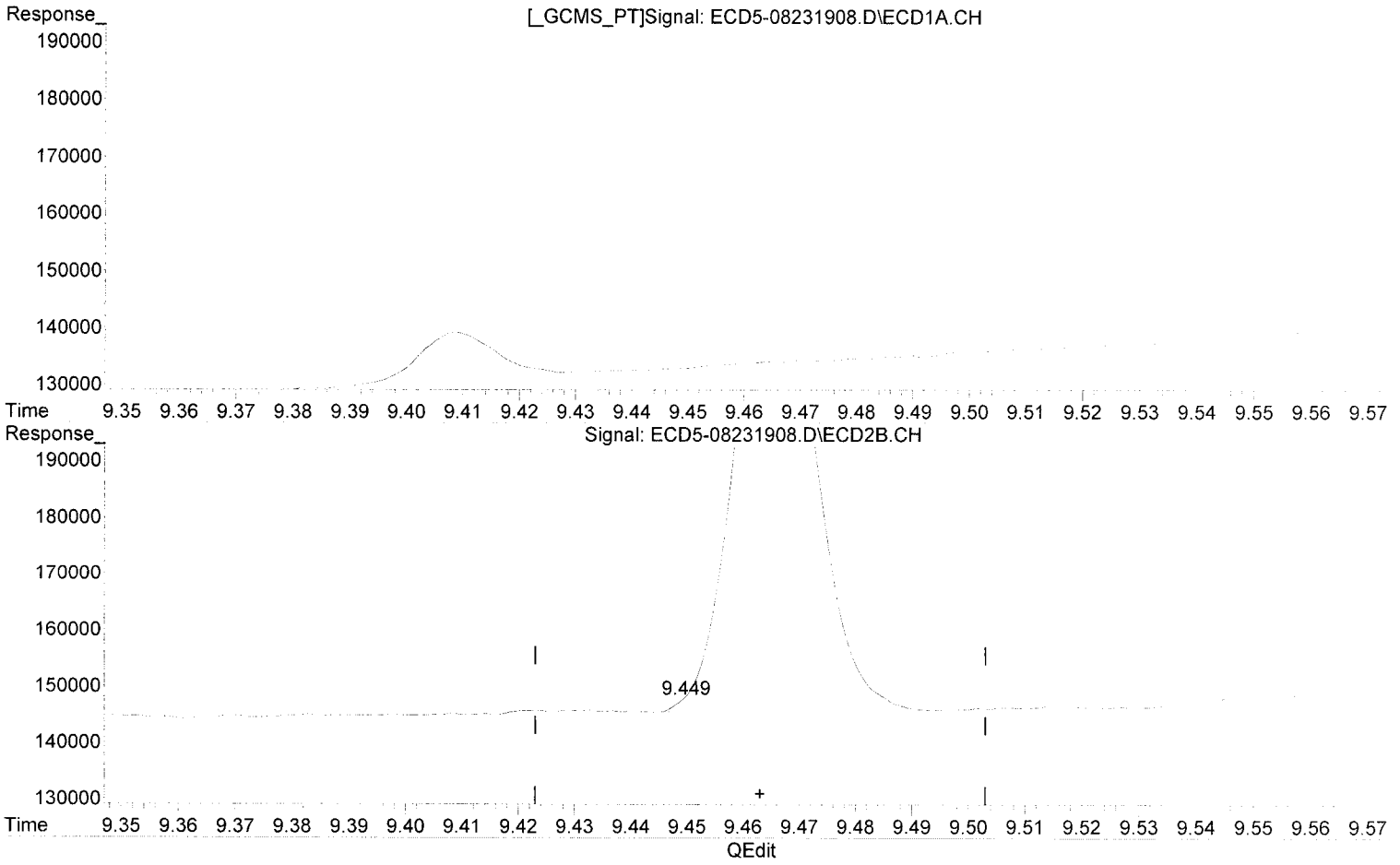


R = 1.78e+002 A*A + 8.05e+004 A + 1.50e+004
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: R:\methods\ECD5_QUANTPEST_190823-M
Calibration Table Last Updated: Mon Aug 26 11:58:51 2019

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(20) Methoxychlor

8.543min 1.019 ng/mL

response 59659

MJB 4/26/19

(20) Methoxychlor #2

9.449min -0.161 ng/mL (m)

response 2070

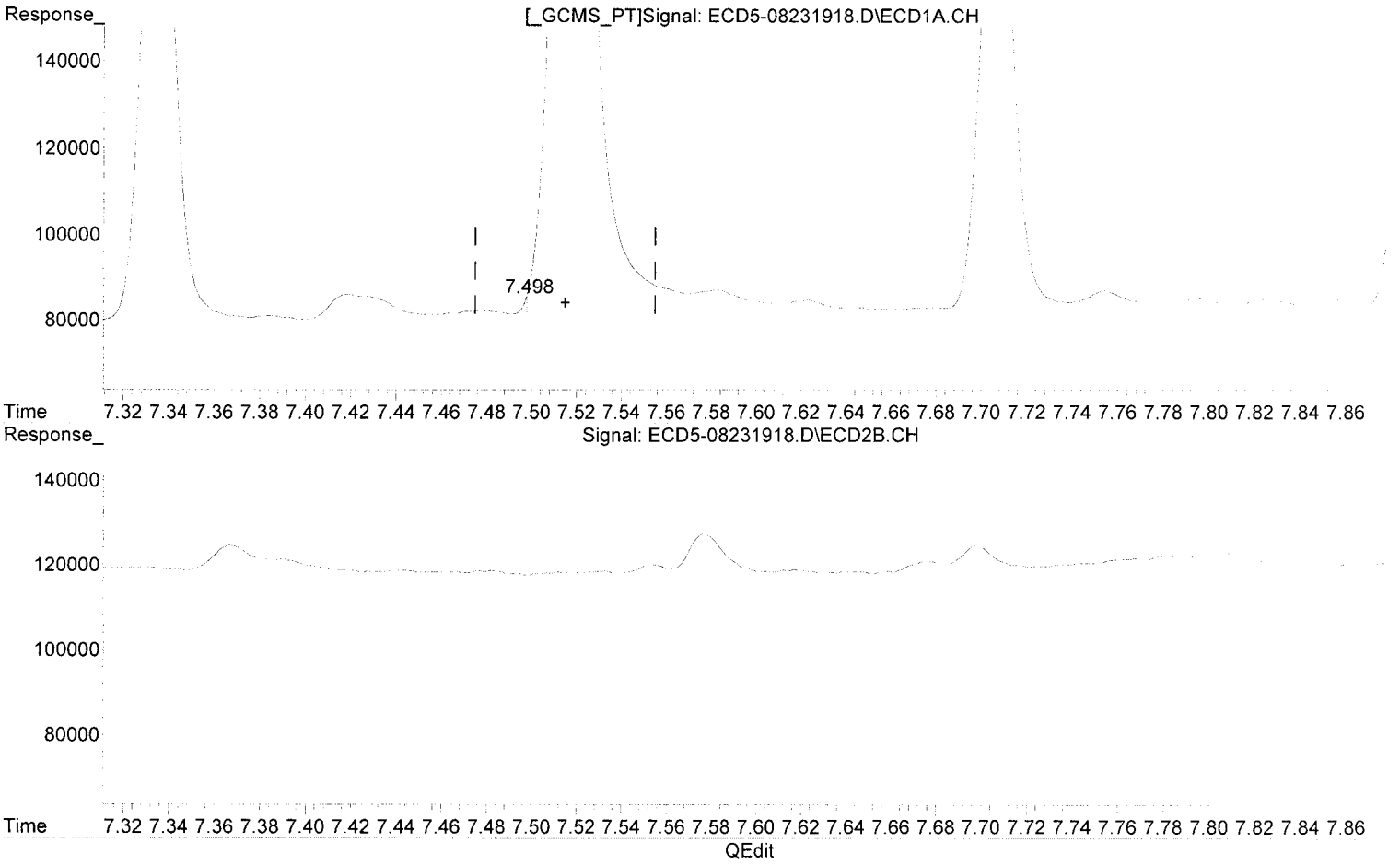
(+) = Expected Retention Time

R = -2.05e+000 A*A + 1.79e+005 A + 5.67e+004
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: R:\methods\ECD5_QUANTTEST_190823.M
Calibration Table Last Updated: Mon Aug 26 11:58:51 2019

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:44
Operator : MJB
Sample : 9H23034-CAL9
Misc : A19E272, 9-42 1 ppb
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(27) trans-Nonachlor

7.498min 87346.675 ng/mL (m)

response 4608

Q-011

MJB 8/26/19

(27) trans-Nonachlor #2

8.195min 1.015 ng/mL

response 306202

(+) = Expected Retention Time

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:33
Operator : MJB
Sample : 9H23034-ICB1
Misc : A19H348
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:44 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

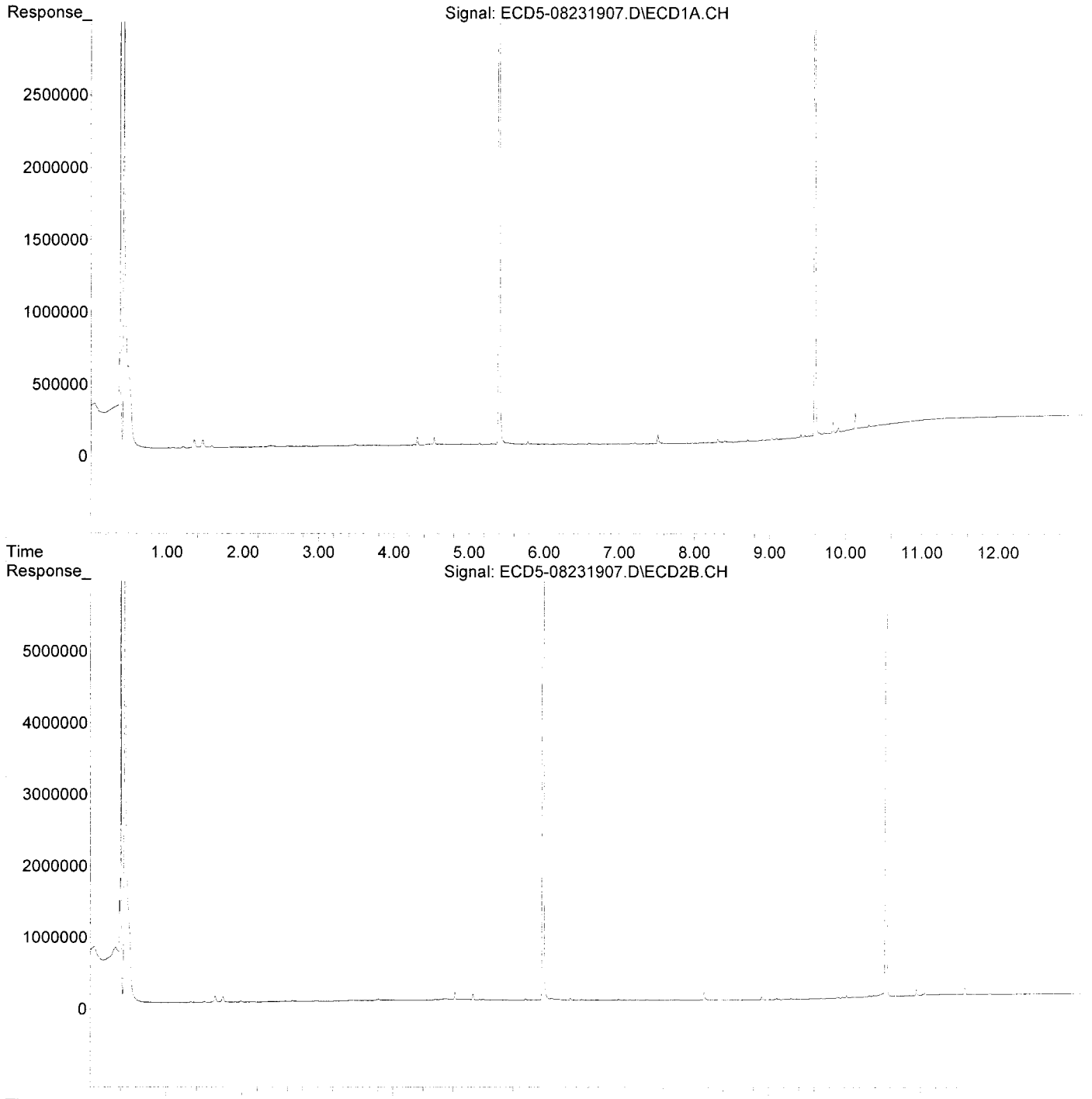
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.398	5.992	15096765	27637017	90.958	94.206	
22)	S	DCBP (S)	9.594	10.543	12462090	16576085	88.322	92.211	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.253f	0.000	6973	0	0.035	N.D.	#
4)		b-BHC	0.000	7.003f	0	10802	N.D.	0.068	#
5)		Heptachlor	6.596f	0.000	8260	0	0.046	N.D.	#
6)		d-BHC	6.451	7.234	5541	7061	0.028	0.020	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	7.318	0.000	2356	0	0.013	N.D.	#
9)		trans-Chl...	0.000	8.140	0	104395	N.D.	0.333	#
10)		cis-Chlor...	7.514	0.000	58774	0	0.323	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)		Endosulfa...	8.119	0.000	3735	0	0.026	N.D.	#
17)		4,4'-DDT	8.185	0.000	4049	0	0.034	N.D.	#
18)		Endrin Al...	8.408	9.102	14375	14948	BelowCal	BelowCal	
19)		Endosulfa...	8.709	9.292	12123	14809	0.078	0.059	
20)		Methoxychlor	8.542	0.000	4975	0	0.085	N.D.	#
21)		Endrin Ke...	8.903	9.690	4830	7943	0.029	0.031	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.779	0.000	21656	0	0.123	N.D.	#
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	7.318	8.140	2356	104395	0.018	0.492	#
27)		trans-Non...	7.514	0.000	58774	0	0.012	N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	0.000	0.000	0	0	N.D.	N.D.	
31)		Mirex	8.652	9.690	4544	7943	0.036	0.043	
32)		Chlordane...	0.000	8.140	0	104395	N.D.	2.885	#
33)		Chlordane...	7.514	0.000	58774	0	2.345	N.D.	#
34)		Chlordane...	0.000	8.904	0	37260	N.D.	4.156	#
35)		Chlordane...	3.445	0.000	6677	0	NoCal	N.D.	
36)		Toxaphene...	7.514	0.000	58774	0	65.621	N.D.	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.119	0.000	3735	0	1.109	N.D.	#
39)		Toxaphene...	8.312f	8.904	24186	37260	7.464	4.462	#
40)		Toxaphene...	8.542f	9.102	4975	14948	2.075	3.207	#
41)		Toxaphene...	8.652	0.000	4544	0	1.436	N.D.	#
42)		Toxaphene...	3.445	0.000	6677	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:33
Operator : MJB
Sample : 9H23034-ICB1
Misc : A19H348
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:44 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:09
Operator : MJB
Sample : 9H23034-IBL1
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:50 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Clean

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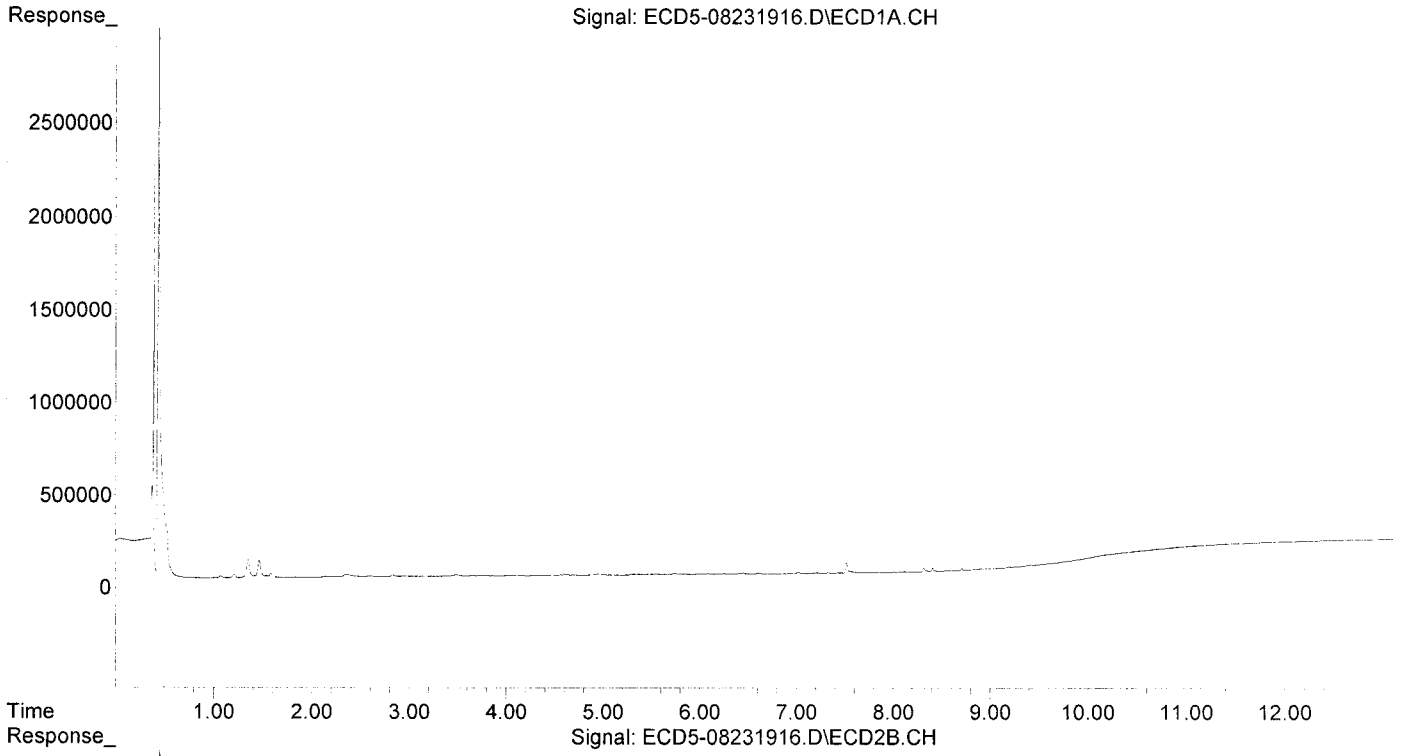
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	7755	N.D.	0.026	#
22)	S	DCBP (S)	9.595	10.540	5550	5660	0.039	0.031	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.249f	0.000	4370	0	0.022	N.D.	#
4)		b-BHC	0.000	7.003f	0	7432	N.D.	0.047	#
5)		Heptachlor	6.602f	0.000	4945	0	0.027	N.D.	#
6)		d-BHC	6.450	7.233	6336	9226	0.032	0.026	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)		trans-Chl...	0.000	8.142	0	99412	N.D.	0.317	#
10)		cis-Chlor...	7.516	0.000	56525	0	0.310	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	8.007	0.000	1177	0	0.007	N.D.	#
16)		Endosulfa...	8.117	8.865	3391	6280	0.024	0.027	
17)		4,4'-DDT	8.226f	0.000	1460	0	0.012	N.D.	#
18)		Endrin Al...	8.407	9.100	21929	28697	BelowCal	BelowCal	
19)		Endosulfa...	8.707	9.291	12087	18257	0.078	0.073	
20)		Methoxychlor	8.544	0.000	4198	0	0.072	N.D.	#
21)		Endrin Ke...	8.901	9.686	4385	18734	0.026	0.073	#
23)		Hexachlor...	0.000	3.689	0	2782	N.D.	0.007	#
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	0.000	8.142	0	99412	N.D. Q ok	0.469	#
27)		trans-Non...	7.516	0.000	56525	0 ~~87346.385~~		N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	8.007f	0.000	1177	0	0.006	N.D.	#
31)		Mirex	0.000	9.686	0	18734	N.D.	0.101	#
32)		Chlordane...	0.000	8.142	0	99412	N.D.	2.747	#
33)		Chlordane...	7.516	0.000	56525	0	2.255	N.D.	#
34)		Chlordane...	8.065	8.904	2775	39801	0.480	4.439	#
35)		Chlordane...	3.447	0.000	4520	0	NoCal	N.D.	
36)		Toxaphene...	7.516	0.000	56525	0	63.111	N.D.	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.117	8.865	3391	6280	1.007	1.239	
39)		Toxaphene...	8.314f	8.904	23317	39801	7.196	4.767	
40)		Toxaphene...	8.583	9.100	2463	28697	1.028	6.158	#
41)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
42)		Toxaphene...	3.447	0.000	4520	0	NoCal	N.D.	

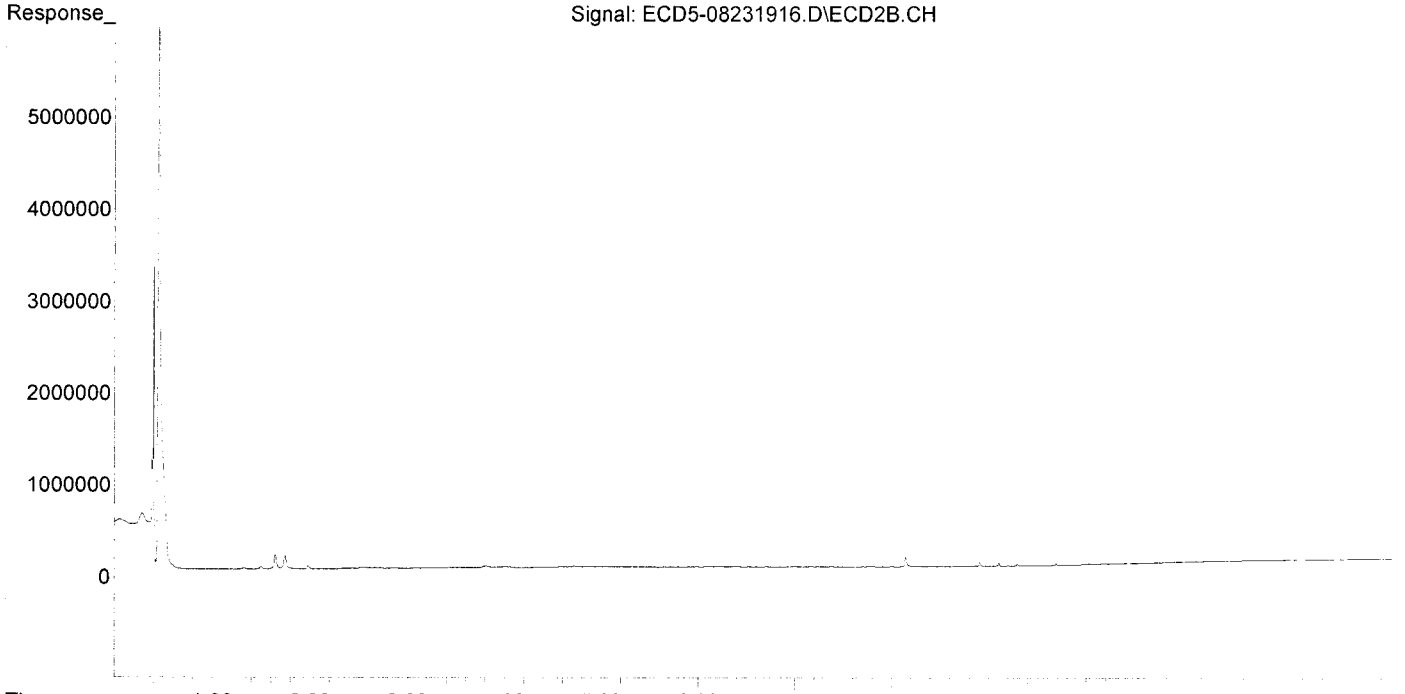
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231916.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:09
Operator : MJB
Sample : 9H23034-IBL1
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:50 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:26
Operator : MJB
Sample : 9H23034-ICV1
Misc : A19E106, AB 50 ppb
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

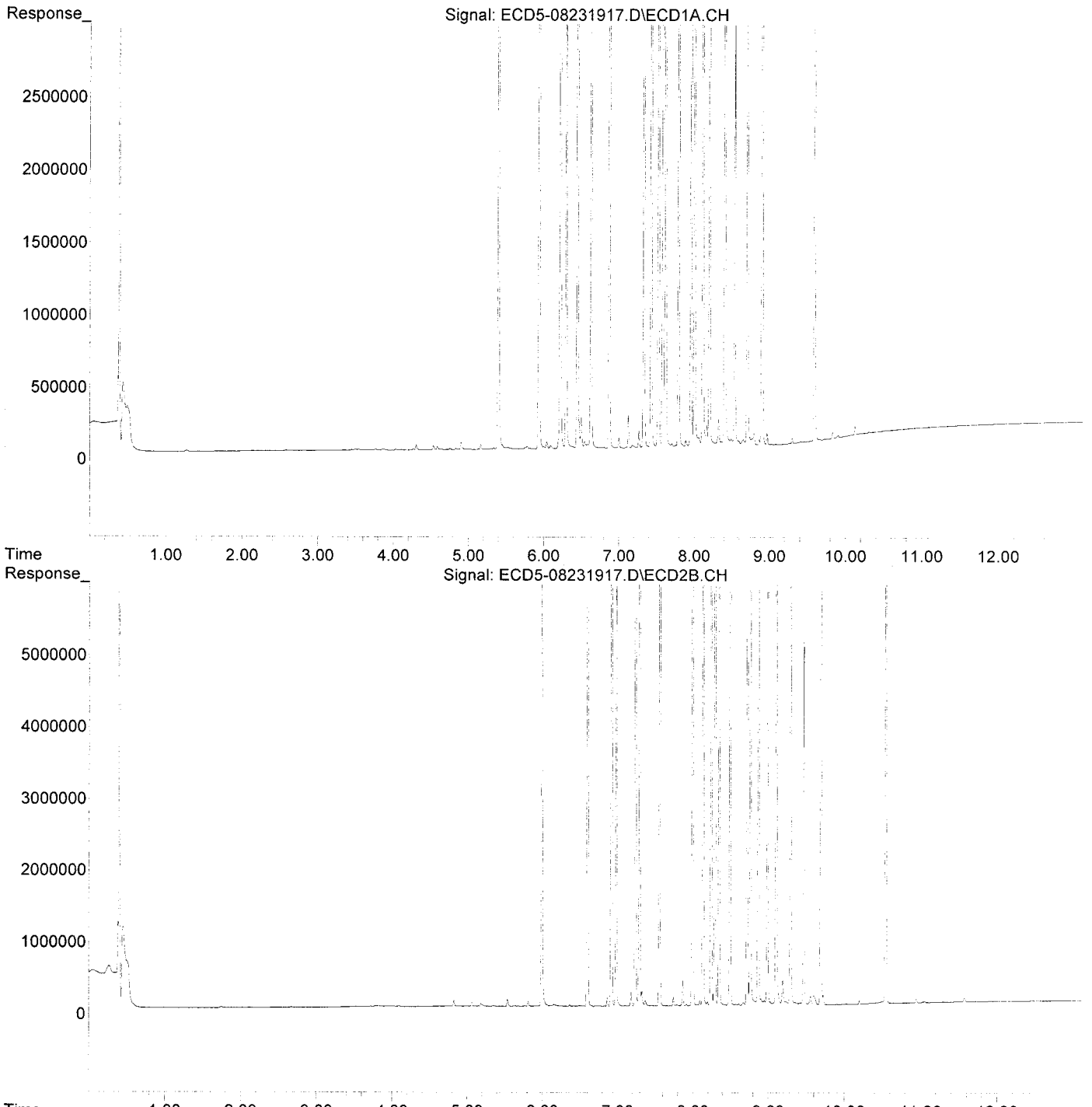
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.395	5.989	8209928	14467910	49.465	49.317	
22)	S	DCBP (S)	9.589	10.539	6928381	8667079	49.103	48.214	
		Target Compounds							
2)		a-BHC	5.935	6.596	11712240	21507667	51.072	52.414	
3)		g-BHC	6.218	6.913	10370774	18809716	51.397	52.732	
4)		b-BHC	6.296	6.977	4410789	7929442	48.801	50.102	
5)		Heptachlor	6.629	7.288	9286546	15998647	51.223	52.287	
6)		d-BHC	6.446	7.231	10162400	18561571	51.667	52.632	
7)		Aldrin	6.870	7.553	10415223	17743229	52.750	53.867	
8)		Heptachlo...	7.330	7.991	9218950	15454788	50.054	51.371	
9)		trans-Chl...	7.427	8.130	9449748	15882363	51.110	50.690	
10)		cis-Chlor...	7.523	8.238	8891439	15040020	48.835	51.640	
11)		Endosulfa...	7.620	8.288	8454858	14042285	49.682	51.030	
12)		4,4'-DDE	7.583	8.343	9669653	16358741	51.290	52.655	
13)		Dieldrin	7.792	8.489	9566646	15751562	49.832	51.789	
14)		Endrin	7.957	8.715	7744641	11999227	52.675	53.135	
15)		4,4'-DDD	8.003	8.758	8044313	14118585	51.192	55.105	
16)		Endosulfa...	8.114	8.862	7639079	12307624	53.193	53.371	
17)		4,4'-DDT	8.201	8.984	6427421	10243965	53.759	54.092	
18)		Endrin Al...	8.403	9.098	7471981	12138603	60.652	61.144	
19)		Endosulfa...	8.704	9.289	8022310	12945664	51.764	51.972	
20)		Methoxychlor	8.537	9.463	3243218	5107379	55.369	56.272	
21)		Endrin Ke...	8.898	9.687	8897553	13958232	53.356	54.245	
23)		Hexachlor...	0.000	3.713f	0	6424	N.D.	0.017	#
24)		Hexachlor...	5.778	6.482f	19713	11218	0.112	0.036	#
25)		Oxychlordane	7.266	7.916	116203	18640	0.706	0.068	#
26)		2,4'-DDE	7.330	8.130	9218950	15882363	71.876	74.868	
27)		trans-Non...	7.523	8.193	8891439	52587	49.340	0.174	#
28)		2,4'-DDD	7.704	8.489	22276	15751562	0.195	83.402	#
29)		2,4'-DDT	7.889	8.715	44366	11999227	0.404	67.283	#
30)		cis-Nonac...	8.003	8.758	8044313	14118585	38.746	42.089	
31)		Mirex	8.653	9.687	40409	13958232	0.322	75.015	#
32)		Chlordane...	7.427	8.130	9449748	15882363	479.936	438.926	
33)		Chlordane...	7.523	8.238	8891439	15040020	354.745	495.323	
34)		Chlordane...	0.000	8.899	0	79876	N.D.	8.909	#
35)		Chlordane...	3.446	0.000	5075	0	NoCal	N.D.	
36)		Toxaphene...	7.523f	8.489f	8891439	15751562	9927.388	6002.292	
37)		Toxaphene...	7.792	0.000	9566646	0	5923.845	N.D.	#
38)		Toxaphene...	8.114	8.862	7639079	12307624	2268.479	2428.346	
39)		Toxaphene...	8.324f	8.899	184731	79876	57.013	9.566	#
40)		Toxaphene...	8.537f	9.098	3243218	12138603	1352.952	2604.650	#
41)		Toxaphene...	8.653	9.463	40409	5107379	12.769	1075.192	#
42)		Toxaphene...	3.446	0.000	5075	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231917.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:26
Operator : MJB
Sample : 9H23034-ICV1
Misc : A19E106, AB 50 ppb
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:02:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:02
Operator : MJB
Sample : 9H23034-IBL2
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

clean
MJB 8/26/19

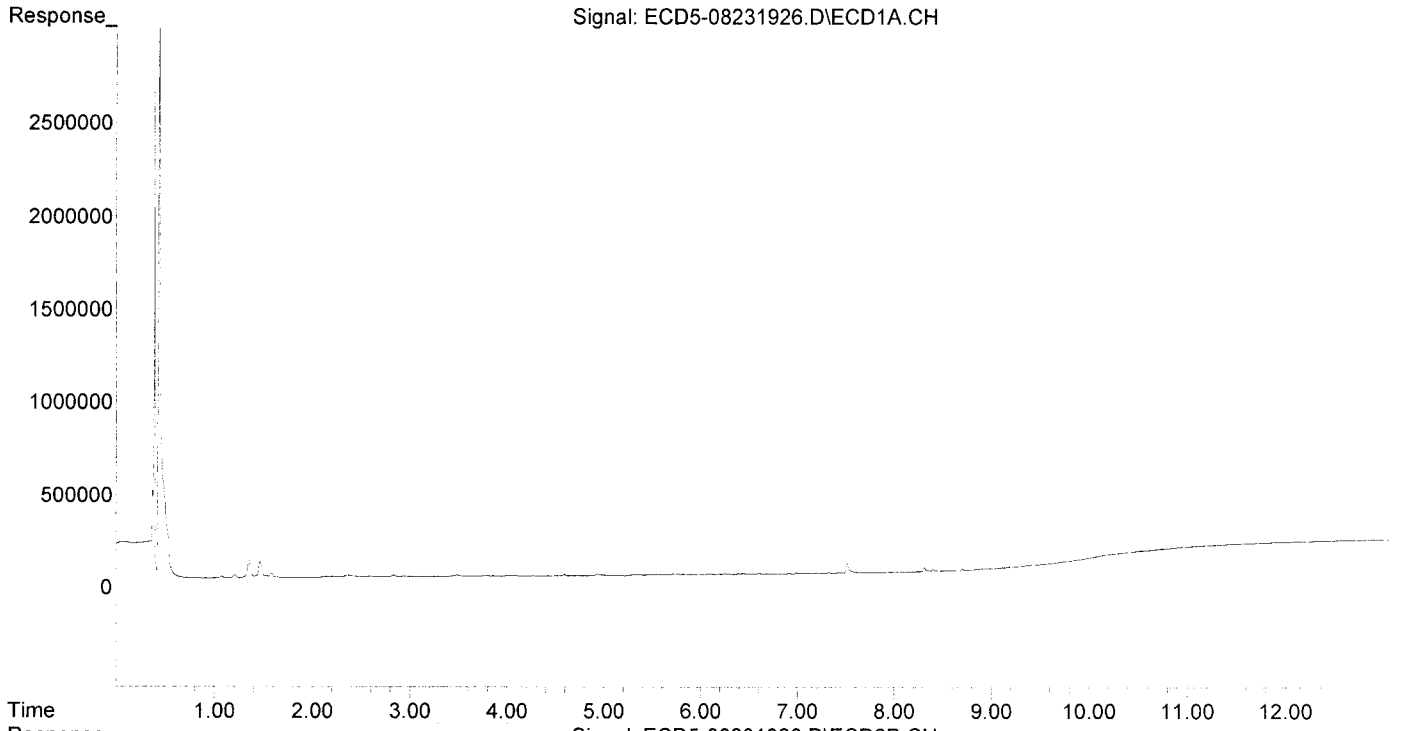
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.979	0	6612	N.D.	0.023	#
22)	S	DCBP (S)	0.000	0.000	0	0	N.D.	N.D.	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.246f	0.000	5266	0	0.026	N.D.	#
4)		b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)		Heptachlor	6.606f	0.000	2965	0	0.016	N.D.	#
6)		d-BHC	6.448	7.230	6262	8744	0.032	0.025	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)		trans-Chl...	0.000	8.141	0	95737	N.D.	0.306	#
10)		cis-Chlor...	7.516	0.000	51171	0	0.281	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)		Endosulfa...	8.115	8.861	2908	5919	0.020	0.026	
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.404	9.098	11210	14199	BelowCal	BelowCal	
19)		Endosulfa...	8.705	9.288	9669	15528	0.062	0.062	
20)		Methoxychlor	8.535	0.000	2114	0	0.036	N.D.	#
21)		Endrin Ke...	8.899	9.685	4160	14028	0.025	0.055	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	0.000	8.141	0	95737	N.D. Q-pu	0.451	#
27)		trans-Non...	7.516	0.000	51171	0	~~87346.415~~	N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	0.000	0.000	0	0	N.D.	N.D.	
31)		Mirex	8.653	9.685	1197	14028	0.010	0.075	#
32)		Chlordane...	0.000	8.141	0	95737	N.D.	2.646	#
33)		Chlordane...	7.516	0.000	51171	0	2.042	N.D.	#
34)		Chlordane...	8.051	8.903	2776	42860	0.480	4.780	#
35)		Chlordane...	3.446	0.000	4206	0	NoCal	N.D.	
36)		Toxaphene...	7.516	0.000	51171	0	57.133	N.D.	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.115	8.861	2908	5919	0.863	1.168	
39)		Toxaphene...	8.313f	8.903	23619	42860	7.290	5.133	
40)		Toxaphene...	8.535f	9.098	2114	14199	0.882	3.047	#
41)		Toxaphene...	8.653	0.000	1197	0	0.378	N.D.	#
42)		Toxaphene...	3.446	0.000	4206	0	NoCal	N.D.	

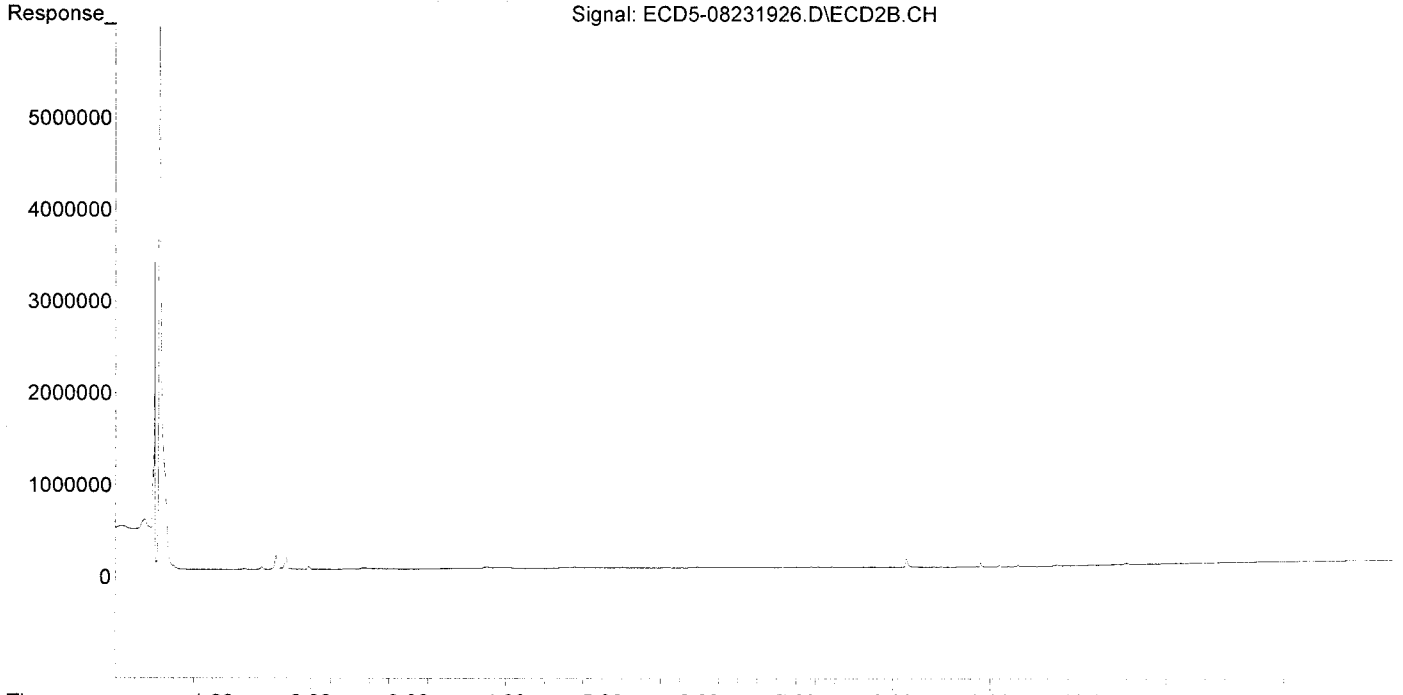
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231926.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:02
Operator : MJB
Sample : 9H23034-IBL2
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:03 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:19
Operator : MJB
Sample : 9H23034-ICV2
Misc : A19E043, 9-42 50 ppb
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

WP 8/26/19

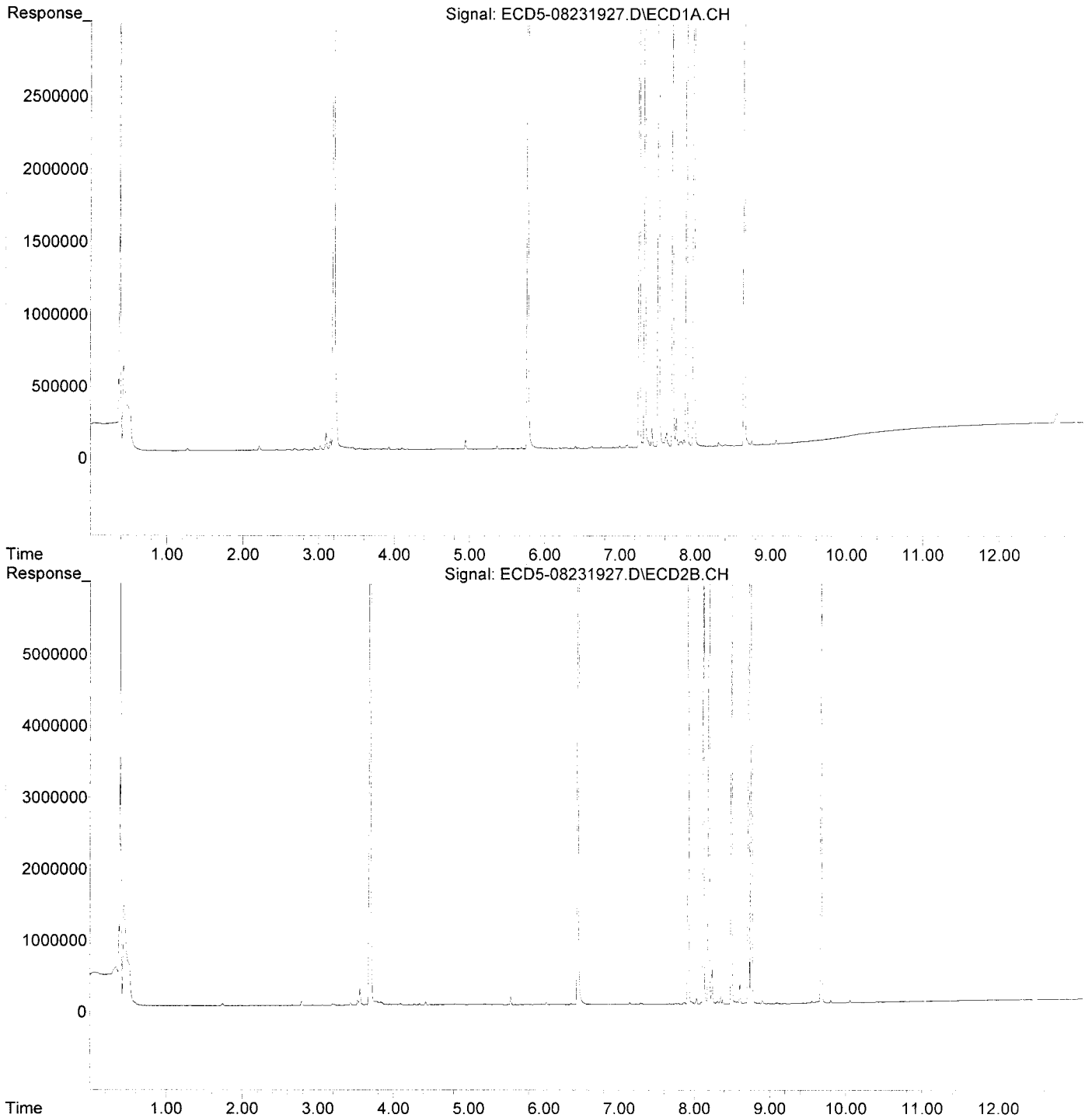
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.367f	5.979	21795	7434	0.131	0.025	#
22)	S	DCBP (S)	9.593	0.000	5164	0	0.037	N.D.	#
		Target Compounds							
2)		a-BHC	5.944	0.000	7626	0	0.033	N.D.	#
3)		g-BHC	6.193f	6.950f	4309	4488	0.021	0.013	#
4)		b-BHC	6.276f	6.950f	4448	4488	0.049	0.028	#
5)		Heptachlor	6.631	7.288	13910	18612	0.077	0.061	
6)		d-BHC	6.450	7.231	4193	7280	0.021	0.021	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	7.333	7.969f	6044730	30442	32.820	0.101	#
9)		trans-Chl...	7.428	8.122	135885	10152421	0.735	32.402	#
10)		cis-Chlor...	7.515	8.238	9079715	499411	49.869	1.715	#
11)		Endosulfa...	7.623	8.313f	100346	33305	0.590	0.121	#
12)		4,4'-DDE	7.585	8.350	33793	99515	0.179	0.320	#
13)		Dieldrin	7.801	8.494	35090	9221128	0.183	30.318	#
14)		Endrin	7.985f	8.719	9530740	8396212	64.823	37.180	#
15)		4,4'-DDD	7.985	8.758	9530740	16410440	60.651	64.050	
16)		Endosulfa...	0.000	8.903f	0	43832	N.D.	0.190	#
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.400	9.100	6045	8867	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.288	0	6758	N.D.	0.027	#
20)		Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)		Endrin Ke...	8.897	9.678	3909	8640754	0.023	33.580	#
23)		Hexachlor...	3.197	3.687	8657262	18235302	47.375	48.507	
24)		Hexachlor...	5.774	6.453	8419764	15057280	47.760	47.940	
25)		Oxychlordane	7.260	7.920	8060765	13729255	48.990	50.125	
26)		2,4'-DDE	7.333	8.122	6044730	10152421	47.128	47.858	
27)		trans-Non...	7.515	8.194	9079715	15314695	50.392	50.772	
28)		2,4'-DDD	7.704	8.494	5439144	9221128	47.659	48.824	
29)		2,4'-DDT	7.888	8.719	5329154	8396212	48.585	47.080	
30)		cis-Nonac...	7.985	8.758	9530740	16410440	45.906	48.921	
31)		Mirex	8.652	9.678	5900124	8640754	47.063	46.437	
32)		Chlordane...	7.428	8.122	135885	10152421	6.901	280.573	#
33)		Chlordane...	7.515	8.238	9079715	499411	362.257	16.447	#
34)		Chlordane...	0.000	8.903	0	43832	N.D.	4.889	#
35)		Chlordane...	3.444	3.433	15163	32758	NoCal	NoCal	
36)		Toxaphene...	7.515	8.494f	9079715	9221128	10137.600	3513.804	#
37)		Toxaphene...	7.801	0.000	35090	0	21.729	N.D.	#
38)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
39)		Toxaphene...	8.313f	8.903	24546	43832	7.576	5.249	
40)		Toxaphene...	0.000	9.100	0	8867	N.D.	1.903	#
41)		Toxaphene...	8.652	0.000	5900124	0	1864.424	N.D.	#
42)		Toxaphene...	3.444	3.433	15163	32758	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231927.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:19
Operator : MJB
Sample : 9H23034-ICV2
Misc : A19E043, 9-42 50 ppb
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231934.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:20
Operator : MJB
Sample : 9H23034-IBL3
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

clear MJB 8/26/19

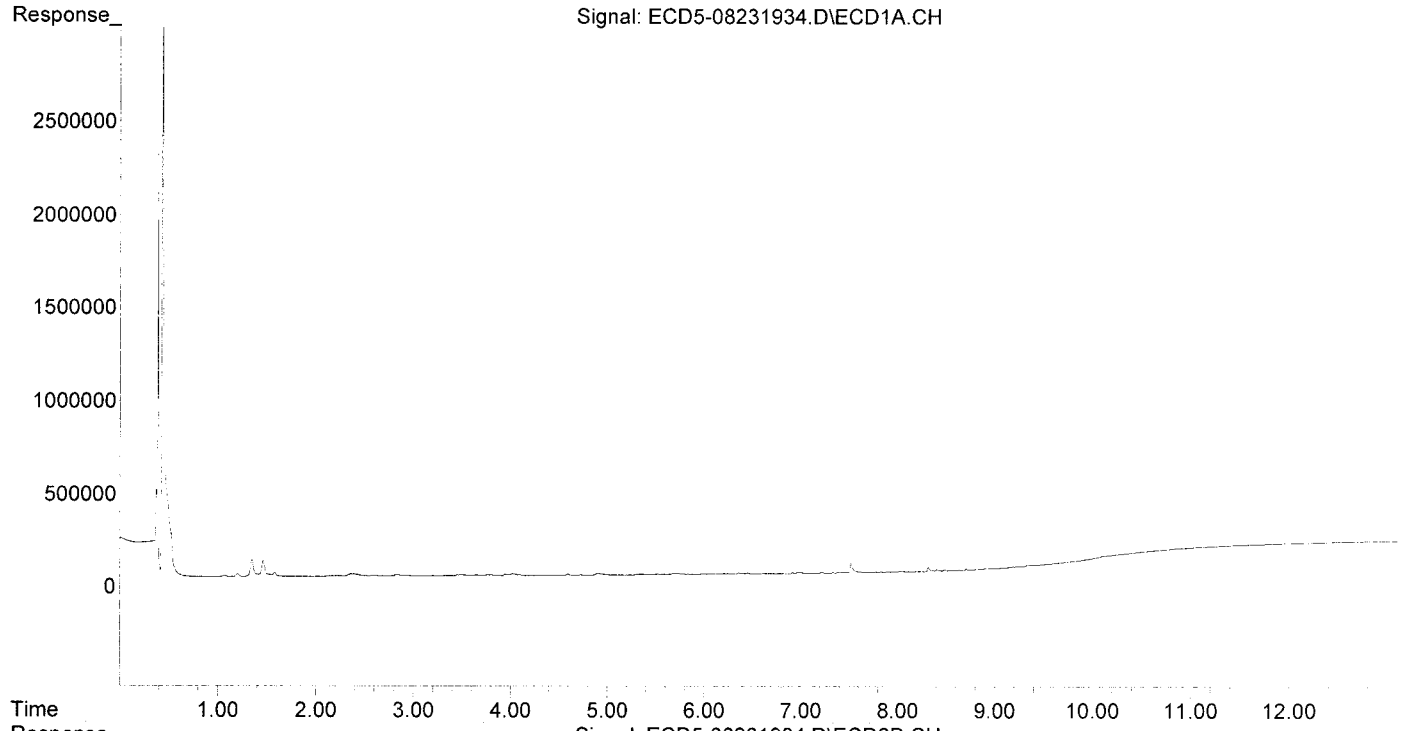
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.976	0	5923	N.D.	0.020	#
22)	S	DCBP (S)	0.000	0.000	0	0	N.D.	N.D.	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.207	0.000	3774	0	0.019	N.D.	#
4)		b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)		Heptachlor	6.609f	0.000	2731	0	0.015	N.D.	#
6)		d-BHC	6.450	7.231	5497	6832	0.028	0.019	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	0.000	0.000	0	0	N.D.	N.D.	
9)		trans-Chl...	0.000	8.142	0	83130	N.D.	0.265	#
10)		cis-Chlor...	7.519	0.000	51396	0	0.282	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	8.023f	0.000	4578	0	0.029	N.D.	#
16)		Endosulfa...	8.116	8.861	1913	3871	0.013	0.017	
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.405	9.098	8970	10610	BelowCal	BelowCal	
19)		Endosulfa...	8.706	9.288	7044	10525	0.045	0.042	
20)		Methoxychlor	8.536	0.000	1701	0	0.029	N.D.	#
21)		Endrin Ke...	8.919f	9.686	4032	9735	0.024	0.038	#
23)		Hexachlor...	0.000	3.679	0	2600	N.D.	0.007	#
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	0.000	8.142	0	83130	N.D. RDel	0.392	#
27)		trans-Non...	7.519	0.000	51396	0 ~~87346.414~~		N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	8.023f	0.000	4578	0	0.022	N.D.	#
31)		Mirex	0.000	9.686	0	9735	N.D.	0.052	#
32)		Chlordane...	0.000	8.142	0	83130	N.D.	2.297	#
33)		Chlordane...	7.519	0.000	51396	0	2.051	N.D.	#
34)		Chlordane...	0.000	8.904	0	38172	N.D.	4.258	#
35)		Chlordane...	3.449	0.000	3828	0	NoCal	N.D.	
36)		Toxaphene...	7.519	0.000	51396	0	57.384	N.D.	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.116	8.861	1913	3871	0.568	0.764	
39)		Toxaphene...	8.316f	8.904	21302	38172	6.574	4.572	
40)		Toxaphene...	8.536f	9.098	1701	10610	0.709	2.277	#
41)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
42)		Toxaphene...	3.449	0.000	3828	0	NoCal	N.D.	

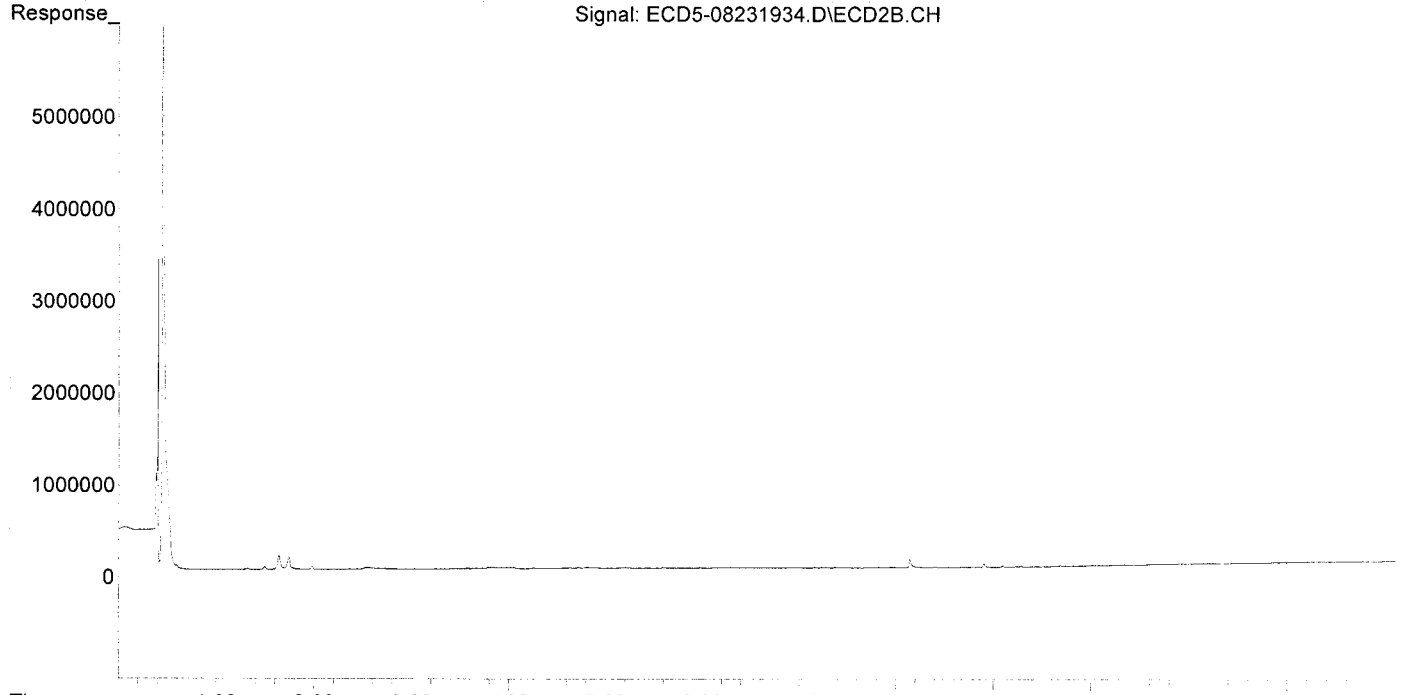
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231934.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:20
Operator : MJB
Sample : 9H23034-IBL3
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:37
Operator : MJB
Sample : 9H23034-ICV3
Misc : A19F108, CHLOR 500 ppb
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.975	0	8961	N.D.	0.031	#
22)	S	DCBP (S)	9.601	10.507f	18796	7616	0.133	0.042	#
		Target Compounds							
2)		a-BHC	5.934	6.622f	9141	348363	0.040	0.849	#
3)		g-BHC	6.194f	6.923	92353	182619	0.458	0.512	
4)		b-BHC	6.323f	7.017f	112667	560662	1.247	3.543	#
5)		Heptachlor	6.630	7.288	4625489	7814185	25.513	25.538	
6)		d-BHC	6.412f	7.222	337700	61064	1.717	0.173	#
7)		Aldrin	6.874	7.557	83911	133681	0.425	0.406	
8)		Heptachlo...	7.336	8.010	771372	473989	4.188	1.576	#
9)		trans-Chl...	7.427	8.130	10721056	19872286	57.986	63.424	
10)		cis-Chlor...	7.520	8.238	13401062	16289264	73.603	55.929	
11)		Endosulfa...	7.639	8.310f	285254	253033	1.676	0.920	#
12)		4,4'-DDE	7.578	8.333	311083	429833	1.650	1.384	
13)		Dieldrin	7.806	8.488	355046	1298858	1.849	4.270	#
14)		Endrin	7.984f	8.713	1829350	383068	12.442	1.696	#
15)		4,4'-DDD	7.984	8.759	1829350	3046940	11.641	11.892	
16)		Endosulfa...	8.118	8.873	216170	351371	1.505	1.524	
17)		4,4'-DDT	0.000	8.994	0	130946	N.D.	0.725	#
18)		Endrin Al...	8.427f	9.128f	55387	802635	BelowCal	3.530	
19)		Endosulfa...	8.708	9.290	120383	34589	0.777	0.139	#
20)		Methoxychlor	8.552	9.463	53824	27882	0.919	0.160	#
21)		Endrin Ke...	8.894	9.687	19548	156351	0.117	0.608	#
23)		Hexachlor...	3.198	3.688	5435	10087	0.030	0.027	
24)		Hexachlor...	5.768	6.431f	8591	38244	0.049	0.122	#
25)		Oxychlordane	7.253	7.933	114695	258636	0.697	0.944	
26)		2,4'-DDE	7.336	8.130	771372	19872286	6.014	93.676	#
27)		trans-Non...	7.520	8.195	13401062	14312099	74.546	47.448	
28)		2,4'-DDD	7.674f	8.488	831029	1298858	7.282	6.877	
29)		2,4'-DDT	7.913f	8.713	254540	383068	2.321	2.148	
30)		cis-Nonac...	7.984	8.759	1829350	3046940	8.811	9.083	
31)		Mirex	8.643	9.687	16477	156351	0.131	0.840	#
32)		Chlordane...	7.427	8.130	10721056	19872286	544.503	549.192	
33)		Chlordane...	7.520	8.238	13401062	16289264	534.667	536.465	
34)		Chlordane...	8.068	8.898	3177144	4850138	549.572	540.955	
35)		Chlordane...	3.448	0.000	3889	0	NoCal	N.D.	
36)		Toxaphene...	7.520	8.488f	13401062	1298858	14962.430	494.943	#
37)		Toxaphene...	7.806	8.814	355046	496679	219.851	150.919	
38)		Toxaphene...	8.118	8.851	216170	383467	64.193	75.660	
39)		Toxaphene...	8.347	8.898	132572	4850138	40.915	580.866	#
40)		Toxaphene...	8.552f	9.068f	53824	98957	22.453	21.234	
41)		Toxaphene...	8.643	9.463	16477	27882	5.207	5.870	
42)		Toxaphene...	3.448	0.000	3889	0	NoCal	N.D.	

A 542.91

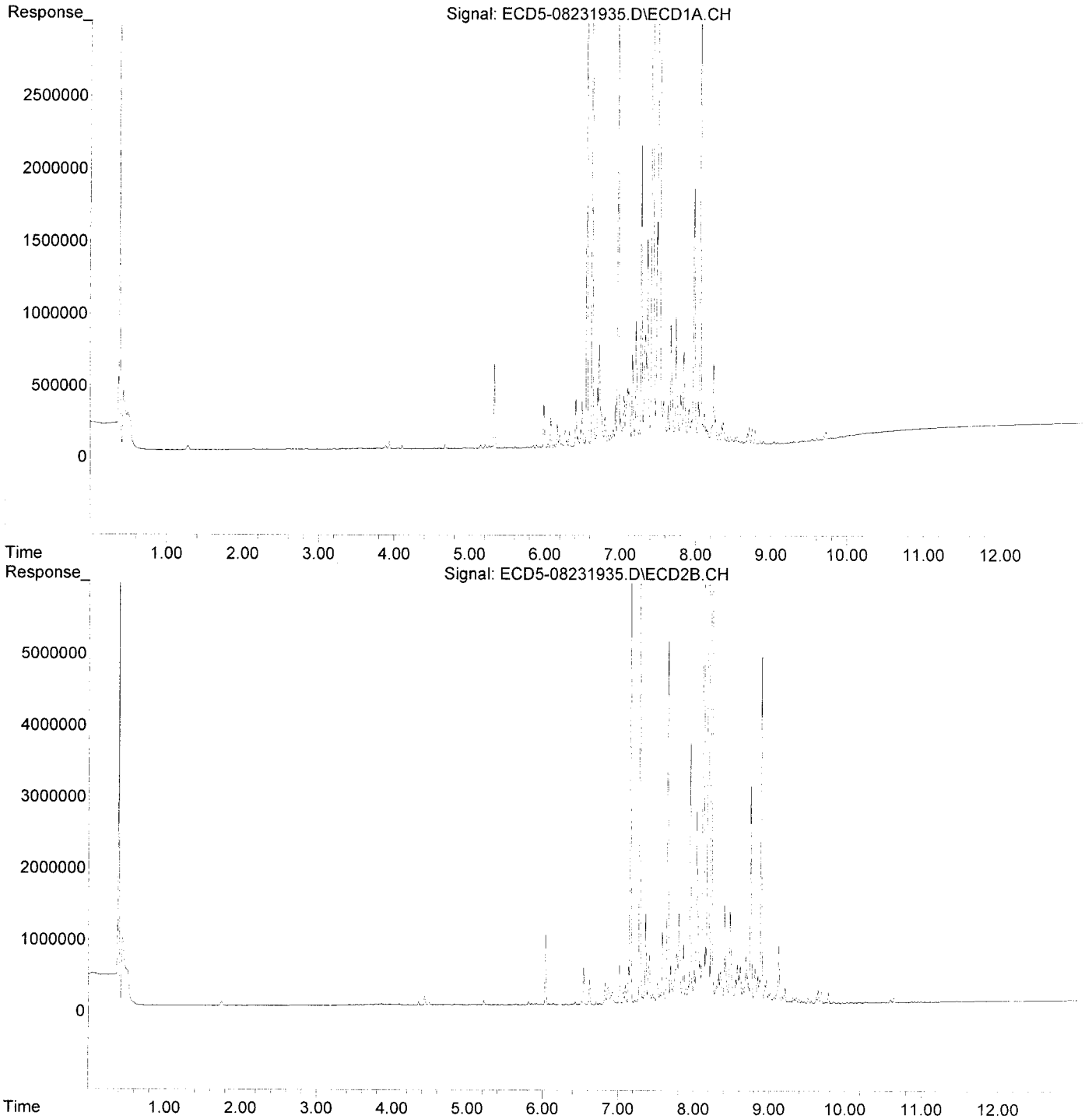
E 542.20

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231935.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:37
Operator : MJB
Sample : 9H23034-ICV3
Misc : A19F108, CHLOR 500 ppb
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:37
Operator : MJB
Sample : 9H23034-IBL4
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:28 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 9/12/19

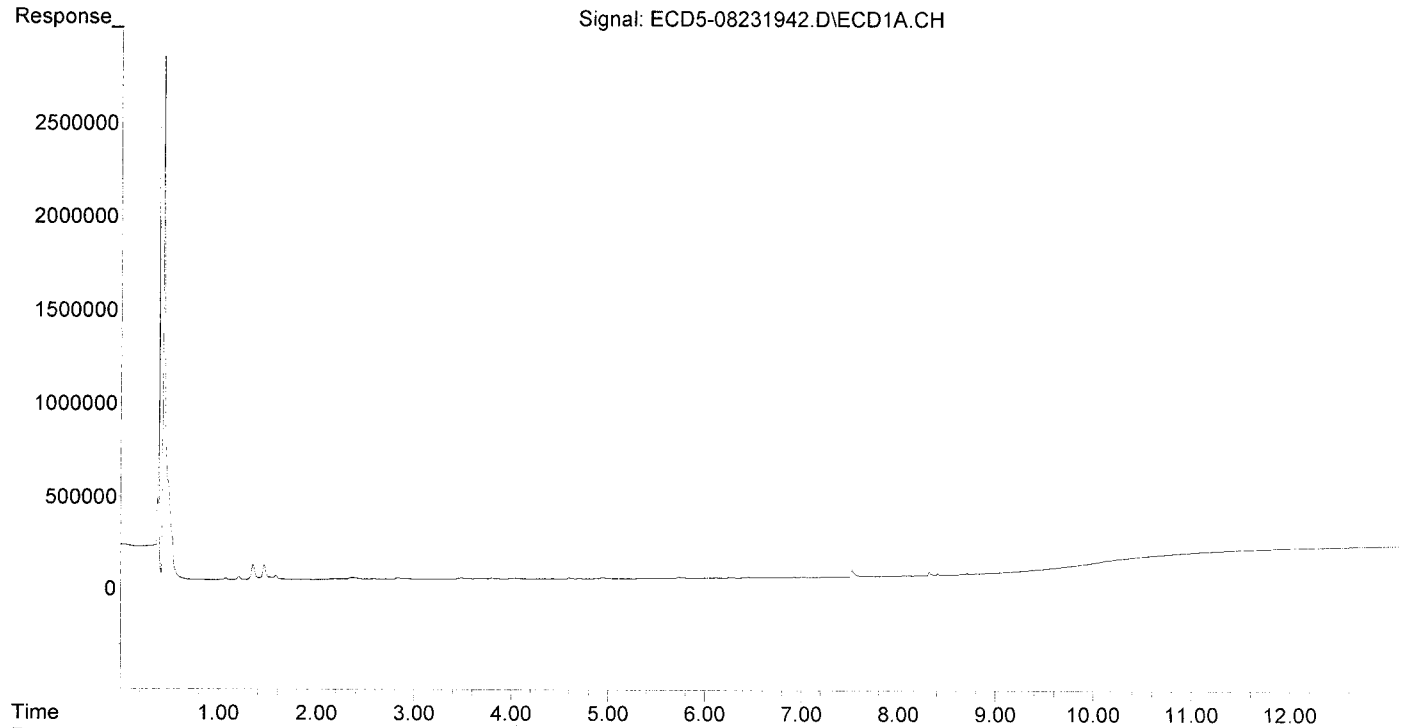
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.983	0	6142	N.D.	0.021	#
22)	S	DCBP (S)	0.000	0.000	0	0	N.D.	N.D.	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.248f	0.000	4243	0	0.021	N.D.	#
4)		b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)		Heptachlor	0.000	0.000	0	0	N.D.	N.D.	
6)		d-BHC	6.450	7.232	5264	7410	0.027	0.021	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	7.334	0.000	1978	0	0.011	N.D.	#
9)		trans-Chl...	7.425	8.145	1693	72982	0.009	0.233	#
10)		cis-Chlor...	7.522	0.000	38316	0	0.210	N.D.	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	0.000	0.000	0	0	N.D.	N.D.	
14)		Endrin	0.000	0.000	0	0	N.D.	N.D.	
15)		4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
16)		Endosulfa...	8.117	0.000	2505	0	0.017	N.D.	#
17)		4,4'-DDT	8.194	0.000	767	0	0.006	N.D.	#
18)		Endrin Al...	8.406	9.100	10140	13686	BelowCal	BelowCal	
19)		Endosulfa...	8.707	9.290	7273	12897	0.047	0.052	
20)		Methoxychlor	8.540	0.000	2018	0	0.034	N.D.	#
21)		Endrin Ke...	8.901	9.687	3565	7207	0.021	0.028	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	7.334	8.145f	1978	72982	0.015	0.344	#
27)		trans-Non...	7.522	0.000	38316	0	~~87346.487~~	N.D.	#
28)		2,4'-DDD	0.000	0.000	0	0	N.D.	N.D.	
29)		2,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
30)		cis-Nonac...	0.000	0.000	0	0	N.D.	N.D.	
31)		Mirex	8.644	9.687	766	7207	0.006	0.039	#
32)		Chlordane...	7.425	8.145	1693	72982	0.086	2.017	#
33)		Chlordane...	7.522	0.000	38316	0	1.529	N.D.	#
34)		Chlordane...	8.049	8.906	2785	37528	0.482	4.186	#
35)		Chlordane...	3.451	0.000	3890	0	NoCal	N.D.	
36)		Toxaphene...	7.522f	0.000	38316	0	42.781	N.D.	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.117	0.000	2505	0	0.744	N.D.	#
39)		Toxaphene...	8.318f	8.906	18960	37528	5.852	4.495	
40)		Toxaphene...	8.540f	9.100	2018	13686	0.842	2.937	#
41)		Toxaphene...	8.644	0.000	766	0	0.242	N.D.	#
42)		Toxaphene...	3.451	0.000	3890	0	NoCal	N.D.	

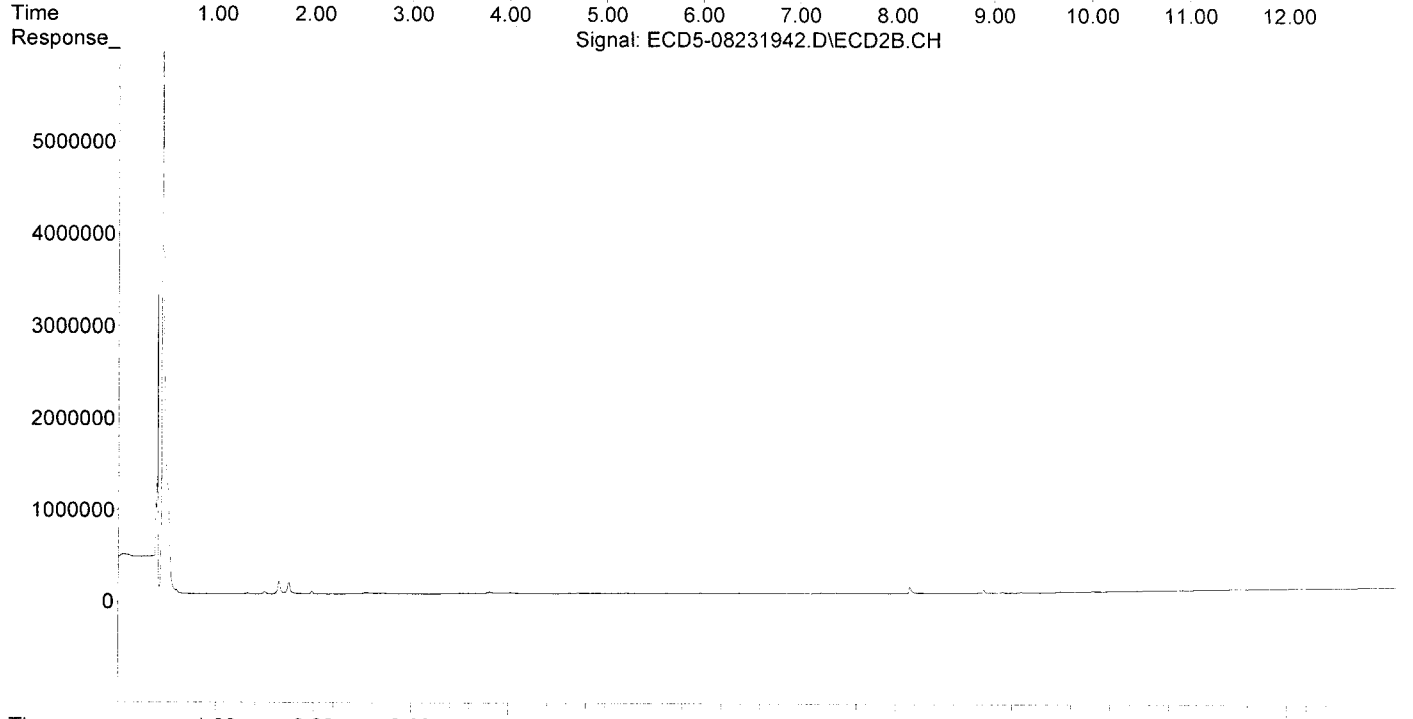
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231942.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:37
Operator : MJB
Sample : 9H23034-IBL4
Misc : Instrument Blank
ALS Vial : 1 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:28 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:54
Operator : MJB
Sample : 9H23034-ICV4
Misc : A19D127, TOX 500 ppb
ALS Vial : 35 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	5611	N.D.	0.019	#
22)	S	DCBP (S)	9.591	10.521	22246	40017	0.158	0.223	#
		Target Compounds							
2)		a-BHC	5.949	6.596	3272	7415	0.014	0.018	
3)		g-BHC	6.247f	6.907	6246	18839	0.031	0.053	#
4)		b-BHC	6.296	6.966	11447	24200	0.127	0.153	
5)		Heptachlor	6.631	7.293	23849	45477	0.132	0.149	
6)		d-BHC	6.434	7.233	11867	47325	0.060	0.134	#
7)		Aldrin	6.871	7.582f	53004	119759	0.268	0.364	
8)		Heptachlo...	7.358f	7.984	250185	414973	1.358	1.379	
9)		trans-Chl...	7.445	8.135	315388	332556	1.706	1.061	
10)		cis-Chlor...	7.501f	8.220	426074	475646	2.340	1.633	
11)		Endosulfa...	7.629	8.295	511717	592244	3.007	2.152	
12)		4,4'-DDE	7.551f	8.359	359885	753065	1.909	2.424	
13)		Dieldrin	7.794	8.506	766286	726725	3.992	2.389	#
14)		Endrin	7.934f	8.711	607064	1341537	4.129	5.941	#
15)		4,4'-DDD	8.021	8.761	679517	912025	4.324	3.560	
16)		Endosulfa...	8.105	8.848	1638713	2447077	11.411	10.611	
17)		4,4'-DDT	8.184	8.976	1416015	960593	11.844	5.508	#
18)		Endrin Al...	8.392	9.091	1088580	2275708	8.285	11.454	
19)		Endosulfa...	8.709	9.291	549140	929201	3.543	3.730	
20)		Methoxychlor	8.543	9.470	549172	2364076	9.376	27.518	#
21)		Endrin Ke...	8.893	9.712f	380224	458705	2.280	1.783	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.813f	6.462	3660	6563	0.021	0.021	
25)		Oxychlordane	7.265	7.936	334880	406205	2.035	1.483	
26)		2,4'-DDE	7.358f	8.112	250185	466633	1.951	2.200	
27)		trans-Non...	7.501	8.205	426074	457454	2.062	1.517	
28)		2,4'-DDD	7.712	8.506	575777	726725	5.045	3.848	
29)		2,4'-DDT	7.898	8.711	911632	1341537	8.311	7.522	
30)		cis-Nonac...	7.982	8.761	1096031	912025	5.279	2.719	#
31)		Mirex	8.641	9.712f	1546722	458705	12.338	2.465	#
32)		Chlordane...	7.445	8.135	315388	332556	16.018	9.191	#
33)		Chlordane...	7.501	8.220	426074	475646	16.999	15.665	
34)		Chlordane...	8.046f	8.915	705731	4045258	122.075	451.184	#
35)		Chlordane...	3.453	0.000	2732	0	NoCal	N.D.	
36)		Toxaphene...	7.501	8.466	426074	1252556	475.717	477.299	
37)		Toxaphene...	7.794	8.813	766286	1618562	474.499	491.811	
38)		Toxaphene...	8.105	8.848	1638713	2447077	486.627	482.818	
39)		Toxaphene...	8.346	8.915	1570667	4045258	484.751	484.472	
40)		Toxaphene...	8.573	9.091	1186452	2275708	494.944	488.312	
41)		Toxaphene...	8.641	9.470	1546722	2364076	488.760	497.679	
42)		Toxaphene...	3.453	0.000	2732	0	NoCal	N.D.	

A B

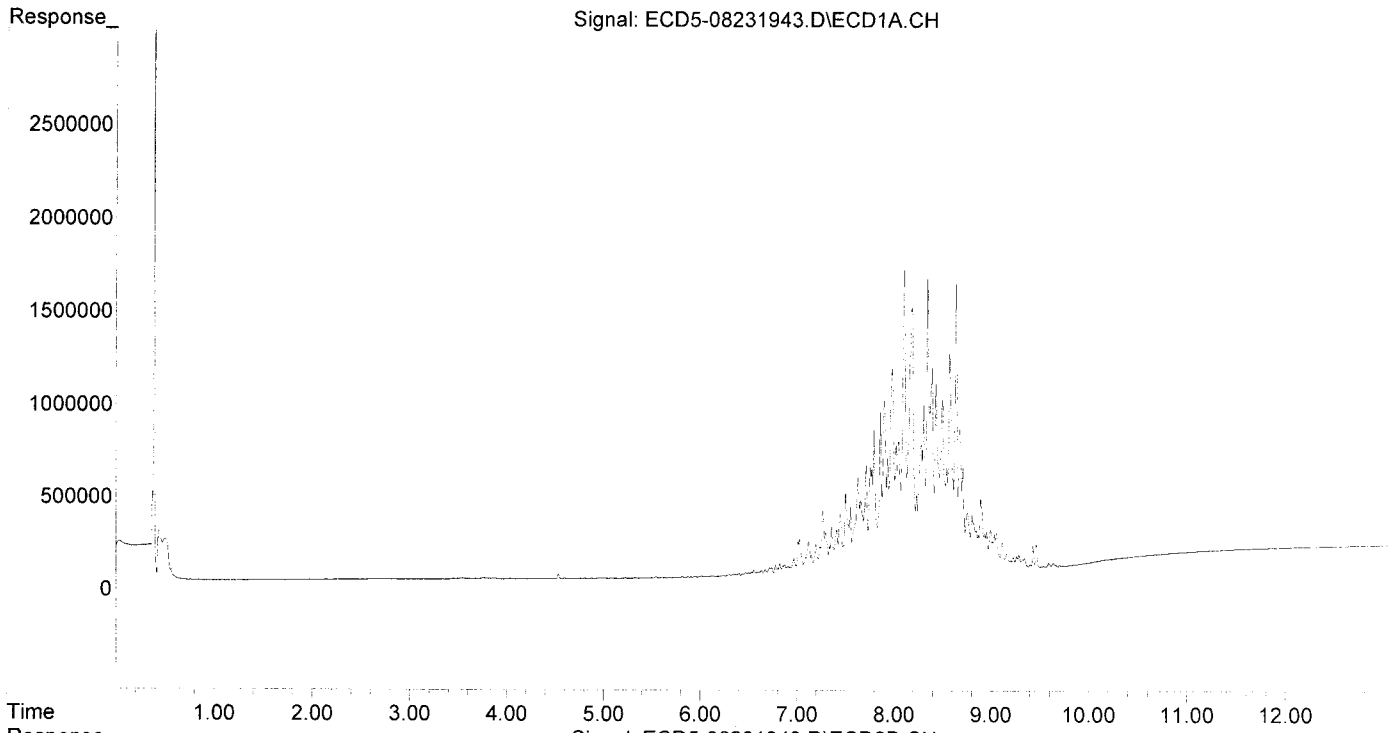
484.22 487.07

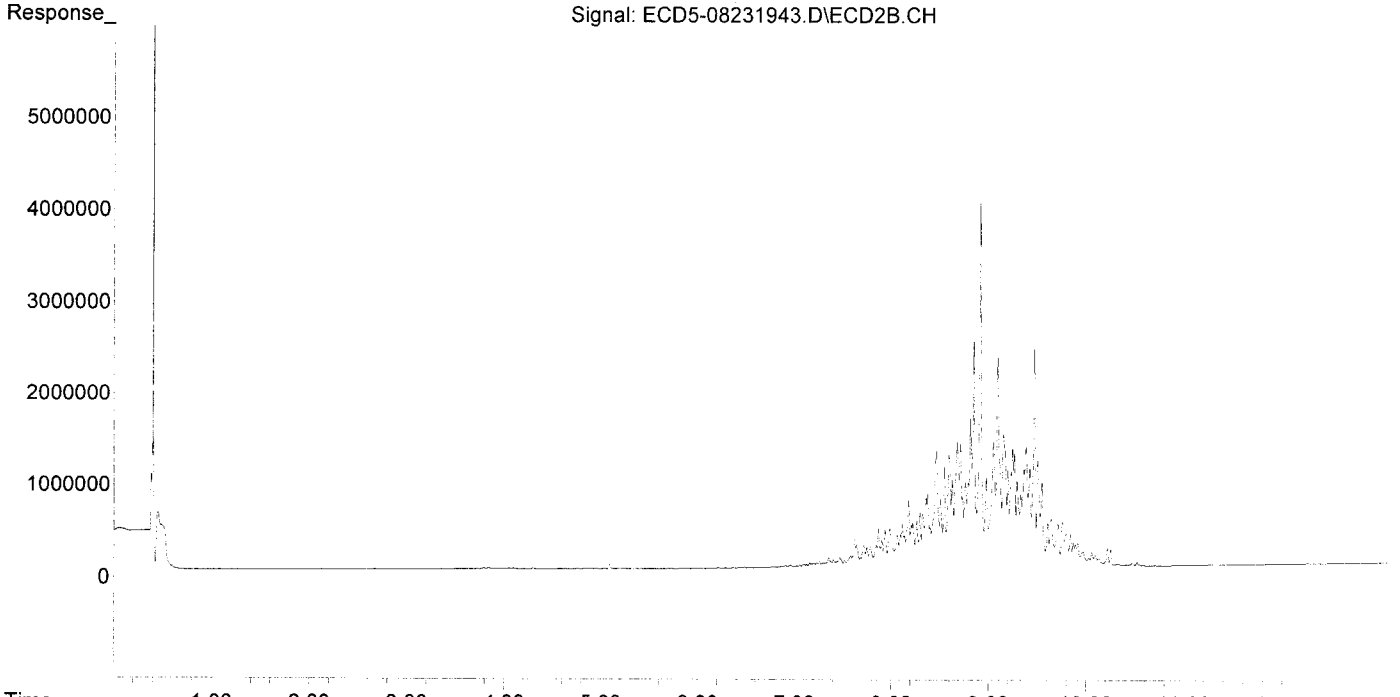
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231943.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:54
Operator : MJB
Sample : 9H23034-ICV4
Misc : A19D127, TOX 500 ppb
ALS Vial : 35 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 15:03:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

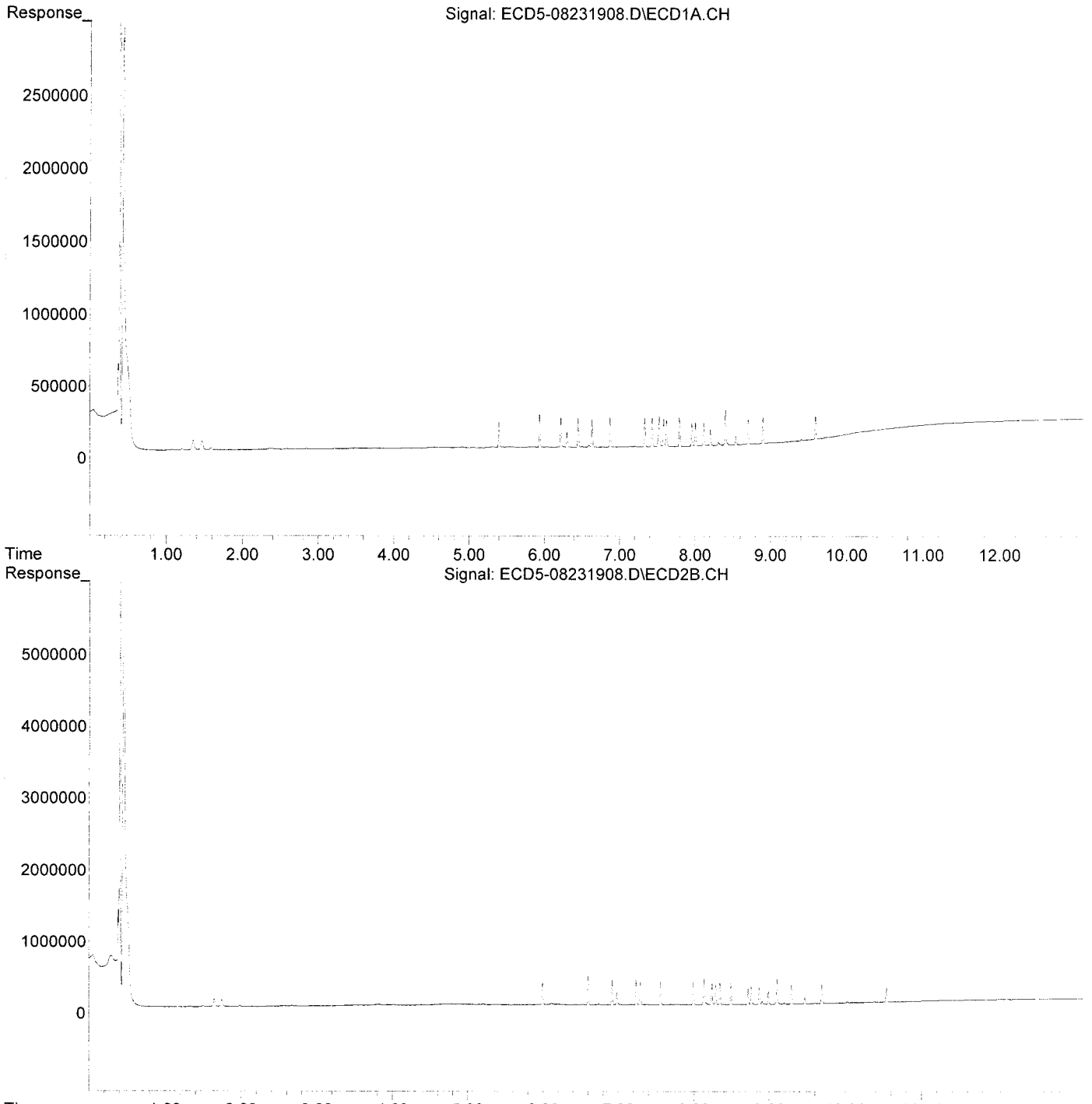
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.397	5.991	176748	300053	1.065	1.023	
22)	S	DCBP (S)	9.593	10.541	163865	191572	1.161	1.066	
		Target Compounds							
2)		a-BHC	5.937	6.597	231994	393119	1.012	0.958	
3)		g-BHC	6.221	6.915	207427	352286	1.028	0.988	
4)		b-BHC	6.300	6.980	104326	176262	1.154	1.114	
5)		Heptachlor	6.635	7.292	192066	309811	1.059	1.013	
6)		d-BHC	6.450	7.234	199840	349123	1.016	0.990	
7)		Aldrin	6.875	7.557	205523	317466	1.041	0.964	
8)		Heptachlo...	7.335	7.994	200503	310098	1.089	1.031	
9)		trans-Chl...	7.433	8.135	197202	364142	1.067	1.162	
10)		cis-Chlor...	7.528	8.241	209780	299422	1.152	1.028	
11)		Endosulfa...	7.625	8.291	185217	278874	1.088	1.013	
12)		4,4'-DDE	7.586	8.346	193435	298463	1.026	0.961	
13)		Dieldrin	7.796	8.491	197721	296684	1.030	0.975	
14)		Endrin	7.961	8.718	156412	222882	1.064	0.987	
15)		4,4'-DDD	8.007	8.760	164956	251549	1.050	0.982	
16)		Endosulfa...	8.118	8.865	158139	232156	1.101	1.007	
17)		4,4'-DDT	8.205	8.986	113897	179700	0.953	1.008	
18)		Endrin Al...	8.407	9.101	241285	348624	1.050	1.058	
19)		Endosulfa...	8.708	9.292	176097	265797	1.136	1.067	
20)		Methoxychlor	8.543	9.466	59659	95155	1.019	0.994	
21)		Endrin Ke...	8.901	9.690	177552	255763	1.065	0.994	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	0.000	0.000	0	0	N.D.	N.D.	
26)		2,4'-DDE	7.335	8.135	200503	364142	1.563	1.717	
27)		trans-Non...	7.528	0.000	209780	0	0.855	N.D.	#
28)		2,4'-DDD	0.000	8.491	0	296684	N.D.	1.571	#
29)		2,4'-DDT	0.000	8.718	0	222882	N.D.	1.250	#
30)		cis-Nonac...	8.007f	8.760	164956	251549	0.795	0.750	
31)		Mirex	0.000	9.690	0	255763	N.D.	1.375	#
32)		Chlordane...	7.433	8.135	197202	364142	10.016	10.063	
33)		Chlordane...	7.528	8.241	209780	299422	8.370	9.861	
34)		Chlordane...	0.000	8.903	0	37787	N.D.	4.214	#
35)		Chlordane...	3.445	0.000	4502	0	NoCal	N.D.	
36)		Toxaphene...	7.528f	8.491f	209780	296684	234.222	113.054	#
37)		Toxaphene...	7.796	0.000	197721	0	122.432	N.D.	#
38)		Toxaphene...	8.118	8.865	158139	232156	46.960	45.805	
39)		Toxaphene...	8.312f	8.903	20859	37787	6.438	4.525	
40)		Toxaphene...	8.543f	9.101	59659	348624	24.888	74.806	#
41)		Toxaphene...	0.000	9.466	0	95155	N.D.	20.032	#
42)		Toxaphene...	3.445	0.000	4502	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:59:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:08
Operator : MJB
Sample : 9H23034-CAL2
Misc : A19E246, AB 2 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:13 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

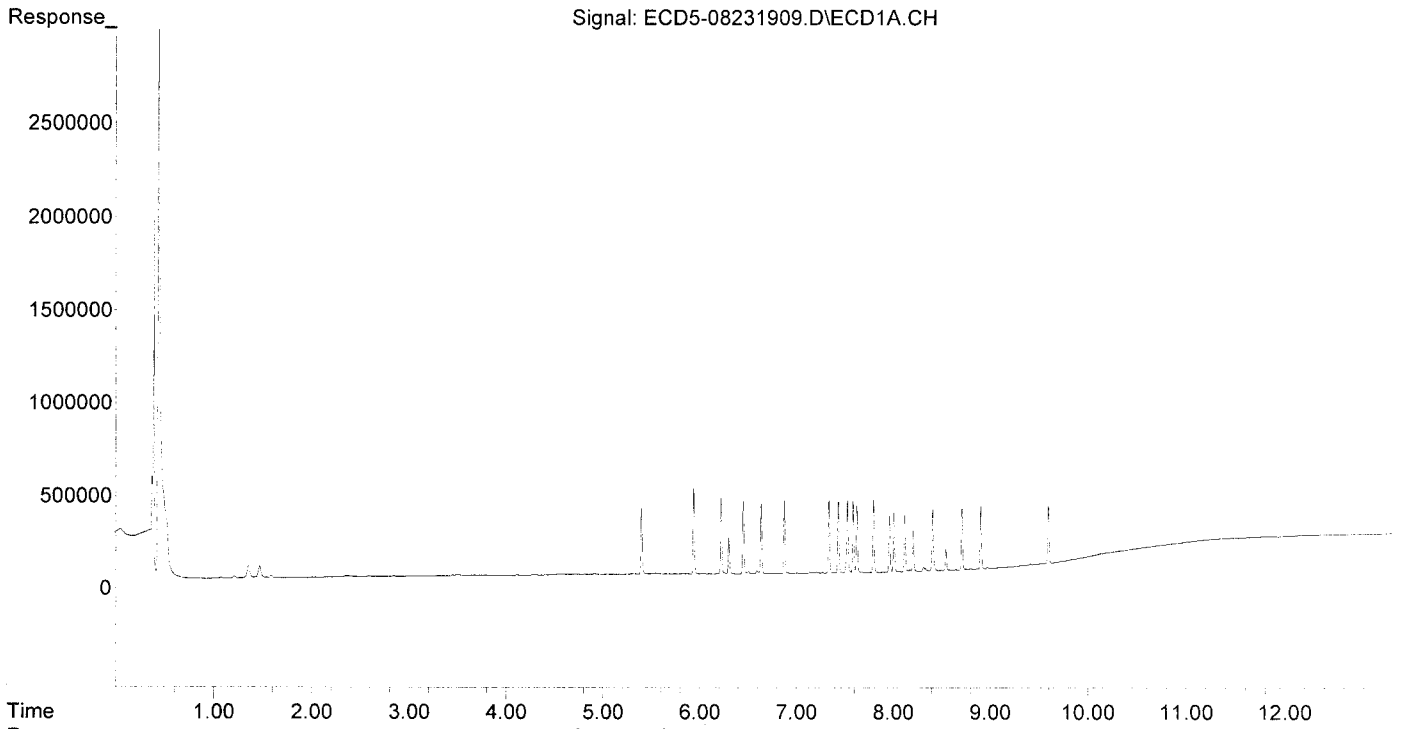
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.396	5.990	349972	600766	2.109	2.048	
22)	S	DCBP (S)	9.593	10.542	309904	390006	2.196	2.170	
		Target Compounds							
2)		a-BHC	5.936	6.597	458365	784586	1.999	1.912	
3)		g-BHC	6.220	6.915	406027	690922	2.012	1.937	
4)		b-BHC	6.300	6.980	194168	335260	2.148	2.118	
5)		Heptachlor	6.635	7.291	369615	586765	2.039	1.918	
6)		d-BHC	6.450	7.233	386980	669122	1.967	1.897	
7)		Aldrin	6.875	7.556	399550	635458	2.024	1.929	
8)		Heptachlo...	7.335	7.993	392052	606240	2.129	2.015	
9)		trans-Chl...	7.432	8.135	382271	644454	2.068	2.057	
10)		cis-Chlor...	7.527	8.241	389999	579667	2.142	1.990	
11)		Endosulfa...	7.625	8.291	357368	540442	2.100	1.964	
12)		4,4'-DDE	7.586	8.345	388618	598066	2.061	1.925	
13)		Dieldrin	7.796	8.491	395728	583812	2.061	1.919	
14)		Endrin	7.960	8.718	298515	424889	2.030	1.881	
15)		4,4'-DDD	8.006	8.760	314622	488120	2.002	1.905	
16)		Endosulfa...	8.118	8.864	299106	462256	2.083	2.005	
17)		4,4'-DDT	8.204	8.986	218190	341782	1.825	1.948	
18)		Endrin Al...	8.407	9.101	328182	477694	1.795	1.763	
19)		Endosulfa...	8.707	9.291	322163	498767	2.079	2.002	
20)		Methoxychlor	8.542	9.465	111466	178074	1.903	2.018	
21)		Endrin Ke...	8.901	9.689	331269	493110	1.987	1.916	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	7.271	0.000	4709	0	0.029	N.D.	#
26)		2,4'-DDE	7.335	8.135	392052	644454	3.057	3.038	
27)		trans-Non...	7.527	0.000	389999	0	1.861	N.D.	#
28)		2,4'-DDD	0.000	8.491	0	583812	N.D.	3.091	#
29)		2,4'-DDT	0.000	8.718	0	424889	N.D.	2.382	#
30)		cis-Nonac...	8.006f	8.760	314622	488120	1.515	1.455	
31)		Mirex	8.657	9.689	1737	493110	0.014	2.650	#
32)		Chlordane...	7.432	8.135	382271	644454	19.415	17.810	
33)		Chlordane...	7.527	8.241	389999	579667	15.560	19.091	
34)		Chlordane...	8.065	8.903	2900	40429	0.502	4.509	#
35)		Chlordane...	3.445	0.000	4897	0	NoCal	N.D.	
36)		Toxaphene...	7.527f	8.491f	389999	583812	435.438	222.468	#
37)		Toxaphene...	7.796	0.000	395728	0	245.042	N.D.	#
38)		Toxaphene...	8.118	8.864	299106	462256	88.822	91.205	
39)		Toxaphene...	8.312f	8.903	21365	40429	6.594	4.842	
40)		Toxaphene...	8.582	9.101	2314	477694	0.965	102.502	#
41)		Toxaphene...	8.657	9.465	1737	178074	0.549	37.488	#
42)		Toxaphene...	3.445	0.000	4897	0	NoCal	N.D.	

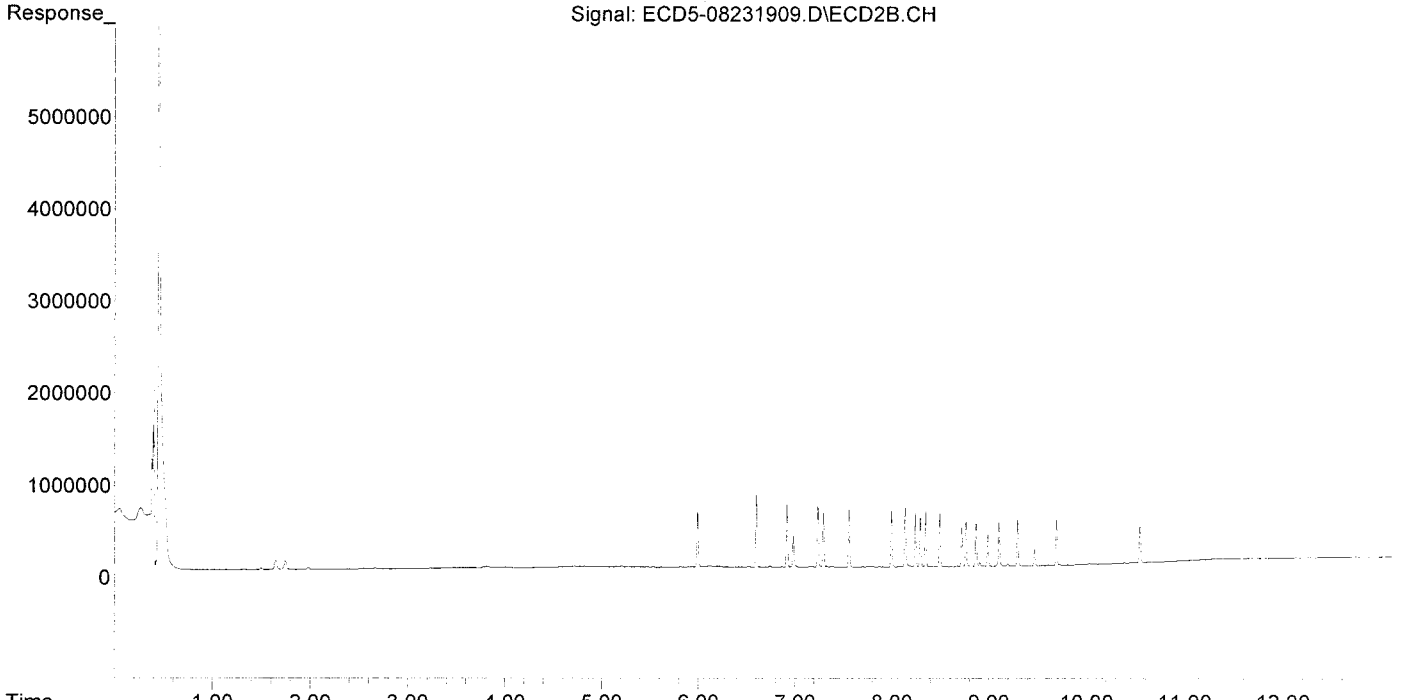
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:08
Operator : MJB
Sample : 9H23034-CAL2
Misc : A19E246, AB 2 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:13 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:25
Operator : MJB
Sample : 9H23034-CAL3
Misc : A19E247, AB 5 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:25 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

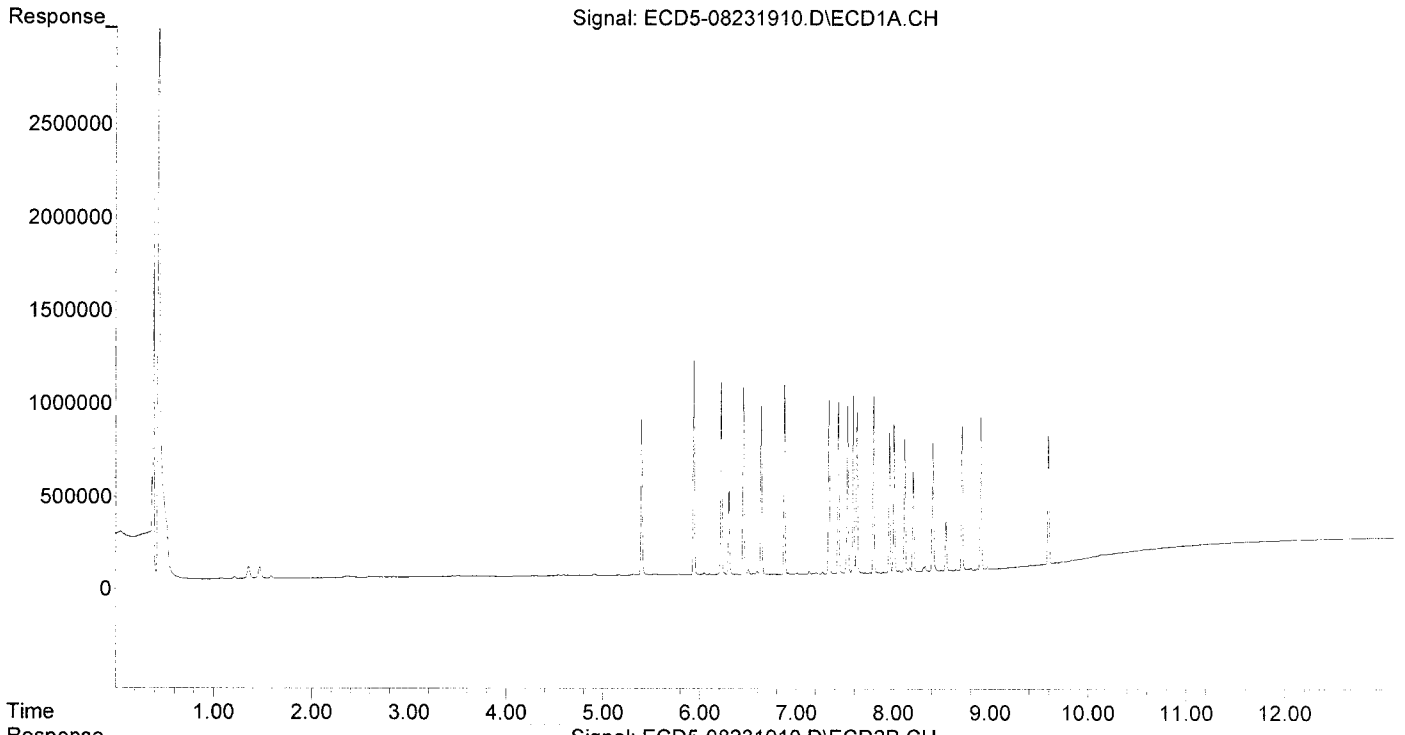
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1)	S TCMX (S)	5.396	5.990	834206	1437876	5.026	4.901	
22)	S DCBP (S)	9.594	10.542	701050	870921	4.969	4.845	
	Target Compounds							
2)	a-BHC	5.937	6.597	1147932	1985438	5.006	4.839	
3)	g-BHC	6.220	6.915	1020724	1742677	5.059	4.885	
4)	b-BHC	6.300	6.980	456954	788630	5.056	4.983	
5)	Heptachlor	6.635	7.291	899091	1508218	4.959	4.929	
6)	d-BHC	6.449	7.233	1004012	1717450	5.105	4.870	
7)	Aldrin	6.875	7.556	1012733	1600995	5.129	4.860	
8)	Heptachlo...	7.335	7.994	923620	1455941	5.015	4.839	
9)	trans-Chl...	7.432	8.134	926577	1502119	5.011	4.794	
10)	cis-Chlor...	7.528	8.241	908795	1434855	4.991	4.927	
11)	Endosulfa...	7.624	8.290	861509	1327191	5.062	4.823	
12)	4,4'-DDE	7.586	8.345	953351	1487999	5.057	4.790	
13)	Dieldrin	7.796	8.491	972009	1462538	5.063	4.809	
14)	Endrin	7.960	8.718	738953	1092877	5.026	4.839	
15)	4,4'-DDD	8.007	8.759	790498	1208642	5.031	4.717	
16)	Endosulfa...	8.118	8.865	709544	1096359	4.941	4.754	
17)	4,4'-DDT	8.205	8.986	553009	873653	4.625	5.010	
18)	Endrin Al...	8.407	9.101	683393	1045869	4.834	4.849	
19)	Endosulfa...	8.708	9.291	768798	1175908	4.961	4.721	
20)	Methoxychlor	8.542	9.466	270388	413802	4.616	4.904	
21)	Endrin Ke...	8.901	9.689	811384	1205004	4.866	4.683	
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.782	0.000	4389	0	0.025	N.D.	#
25)	Oxychlordane	7.271	0.000	11672	0	0.071	N.D.	#
26)	2,4'-DDE	7.335	8.134	923620	1502119	7.201	7.081	
27)	trans-Non...	7.528	0.000	908795	0	4.756	N.D.	#
28)	2,4'-DDD	0.000	8.491	0	1462538	N.D.	7.744	#
29)	2,4'-DDT	7.894	8.718	3329	1092877	0.030	6.128	#
30)	cis-Nonac...	8.007f	8.759	790498	1208642	3.808	3.603	
31)	Mirex	8.645	9.689	4292	1205004	0.034	6.476	#
32)	Chlordane...	7.432	8.134	926577	1502119	47.059	41.513	
33)	Chlordane...	7.528	8.241	908795	1434855	36.259	47.255	
34)	Chlordane...	8.063	8.903	7555	42265	1.307	4.714	#
35)	Chlordane...	3.446	0.000	4904	0	NoCal	N.D.	
36)	Toxaphene...	7.528f	8.491f	908795	1462538	1014.680	557.315	#
37)	Toxaphene...	7.796	0.000	972009	0	601.886	N.D.	#
38)	Toxaphene...	8.118	8.865	709544	1096359	210.704	216.316	
39)	Toxaphene...	8.328	8.903	27348	42265	8.440	5.062	#
40)	Toxaphene...	8.542f	9.101	270388	1045869	112.796	224.418	#
41)	Toxaphene...	8.645	9.466	4292	413802	1.356	87.113	#
42)	Toxaphene...	3.446	0.000	4904	0	NoCal	N.D.	

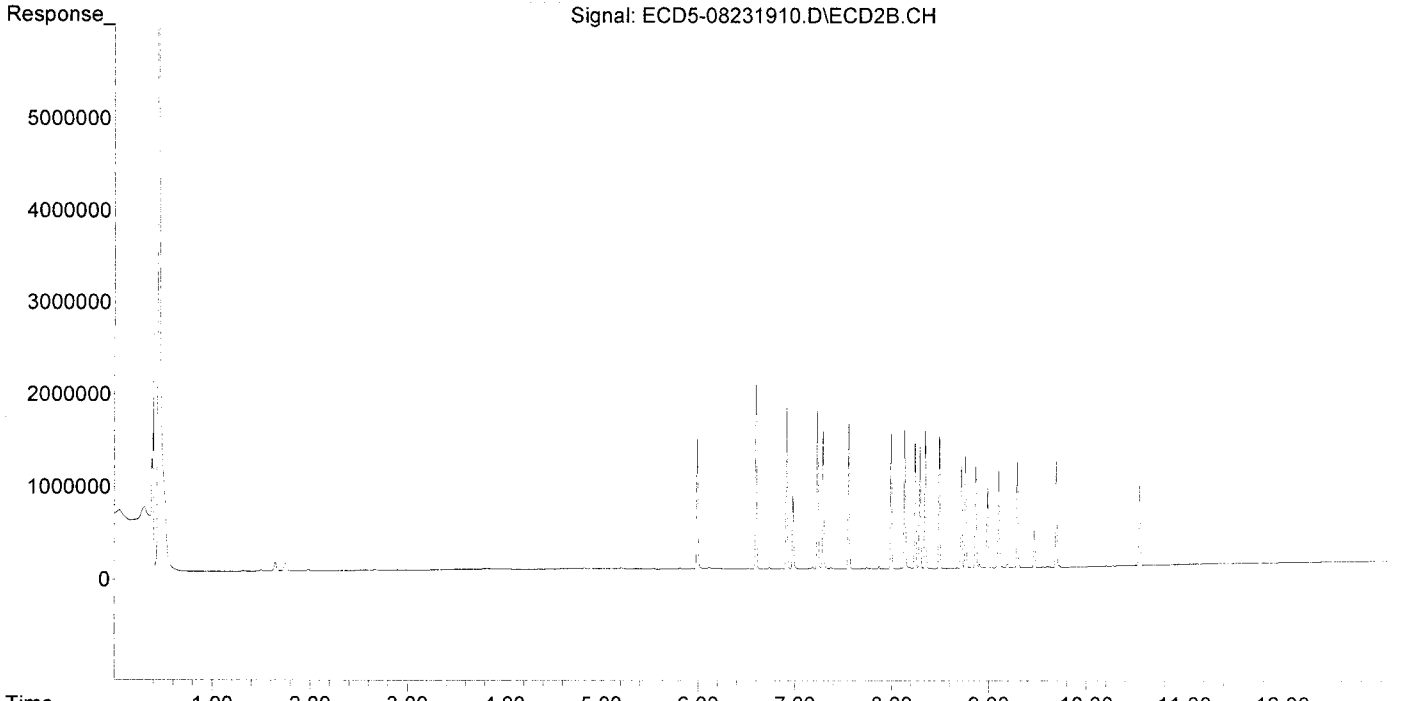
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:25
Operator : MJB
Sample : 9H23034-CAL3
Misc : A19E247, AB 5 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:25 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:42
Operator : MJB
Sample : 9H23034-CAL4
Misc : A19E249, AB 10 ppb
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:36 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

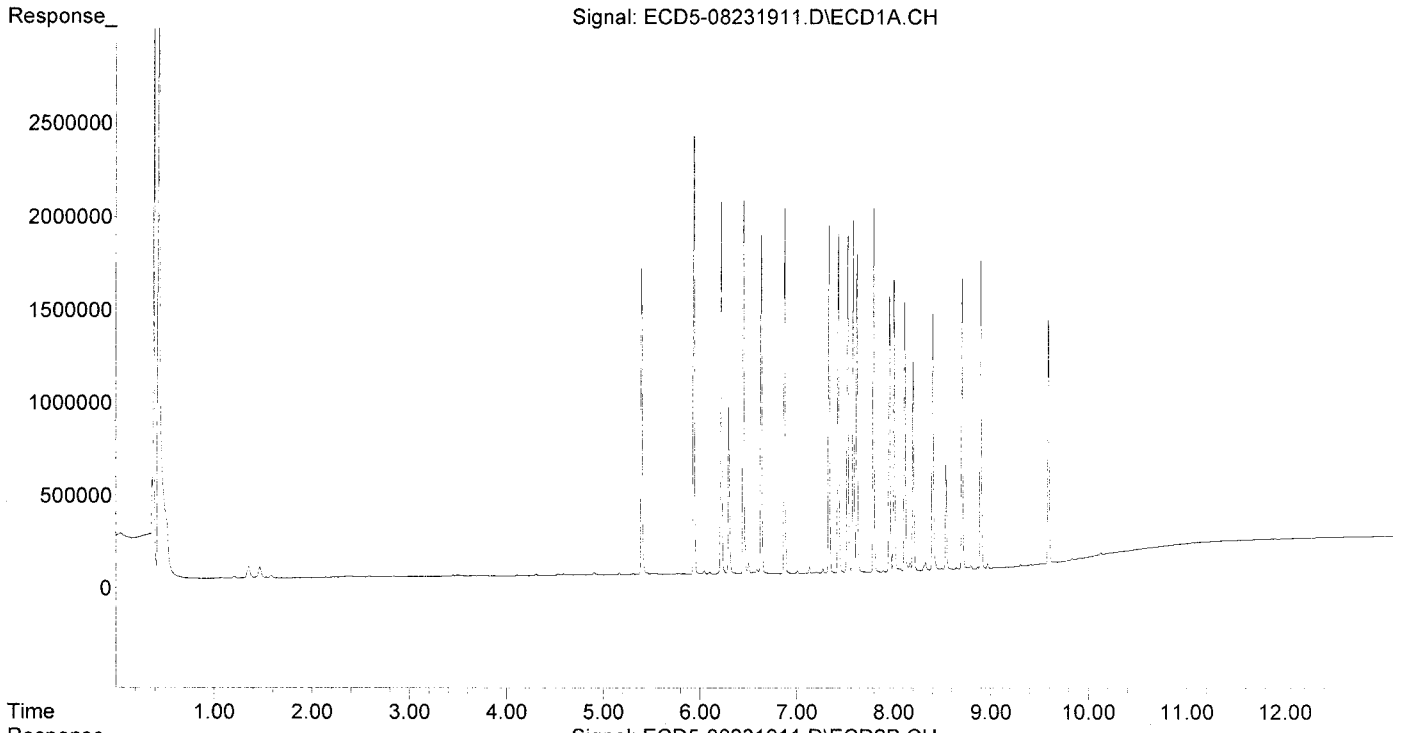
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1) S	TCMX (S)	5.396	5.990	1644447	2865854	9.908	9.769	
22) S	DCBP (S)	9.593	10.541	1335468	1678728	9.465	9.339	
	Target Compounds							
2)	a-BHC	5.936	6.597	2347065	4095890	10.234	9.982	
3)	g-BHC	6.220	6.915	2034859	3476733	10.085	9.747	
4)	b-BHC	6.299	6.980	910875	1580847	10.078	9.989	
5)	Heptachlor	6.634	7.291	1819621	3005915	10.037	9.824	
6)	d-BHC	6.449	7.234	2006493	3613517	10.201	10.246	
7)	Aldrin	6.875	7.556	2010802	3341093	10.184	10.143	
8)	Heptachlo...	7.335	7.994	1865428	2959301	10.128	9.837	
9)	trans-Chl...	7.431	8.134	1847996	3002782	9.995	9.584	
10)	cis-Chlor...	7.527	8.241	1843346	2859573	10.124	9.818	
11)	Endosulfa...	7.623	8.291	1709332	2724272	10.044	9.900	
12)	4,4'-DDE	7.585	8.346	1890931	3049792	10.030	9.817	
13)	Dieldrin	7.795	8.491	1954890	2898866	10.183	9.531	
14)	Endrin	7.960	8.718	1475508	2244483	10.036	9.939	
15)	4,4'-DDD	8.006	8.760	1565974	2425496	9.965	9.467	
16)	Endosulfa...	8.117	8.864	1448080	2243610	10.083	9.729	
17)	4,4'-DDT	8.204	8.987	1146556	1841119	9.590	10.491	
18)	Endrin Al...	8.406	9.101	1375129	2125028	10.716	10.650	
19)	Endosulfa...	8.707	9.292	1553540	2424584	10.024	9.734	
20)	Methoxychlor	8.542	9.465	561706	883069	9.590	10.543	
21)	Endrin Ke...	8.900	9.689	1664380	2496985	9.981	9.704	
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.781	0.000	6414	0	0.036	N.D.	#
25)	Oxychlordane	7.271	0.000	23125	0	0.141	N.D.	#
26)	2,4'-DDE	7.335	8.134	1865428	3002782	14.544	14.155	
27)	trans-Non...	7.527	0.000	1843346	0	9.974	N.D.	#
28)	2,4'-DDD	0.000	8.491	0	2898866	N.D.	15.349	#
29)	2,4'-DDT	7.893	8.718	6940	2244483	0.063	12.585	#
30)	cis-Nonac...	8.006f	8.760	1565974	2425496	7.543	7.231	
31)	Mirex	8.644	9.689	9584	2496985	0.076	13.419	#
32)	Chlordane...	7.431	8.134	1847996	3002782	93.856	82.985	
33)	Chlordane...	7.527	8.241	1843346	2859573	73.545	94.176	
34)	Chlordane...	8.062	8.903	15147	46214	2.620	5.154	#
35)	Chlordane...	3.446	0.000	4445	0	NoCal	N.D.	
36)	Toxaphene...	7.527f	8.491f	1843346	2898866	2058.116	1104.642	#
37)	Toxaphene...	7.795	0.000	1954890	0	1210.504	N.D.	#
38)	Toxaphene...	8.117	8.864	1448080	2243610	430.018	442.674	
39)	Toxaphene...	8.328	8.903	47046	46214	14.520	5.535	#
40)	Toxaphene...	8.542f	9.101	561706	2125028	234.323	455.980	#
41)	Toxaphene...	8.644	9.465	9584	883069	3.029	185.901	#
42)	Toxaphene...	3.446	0.000	4445	0	NoCal	N.D.	

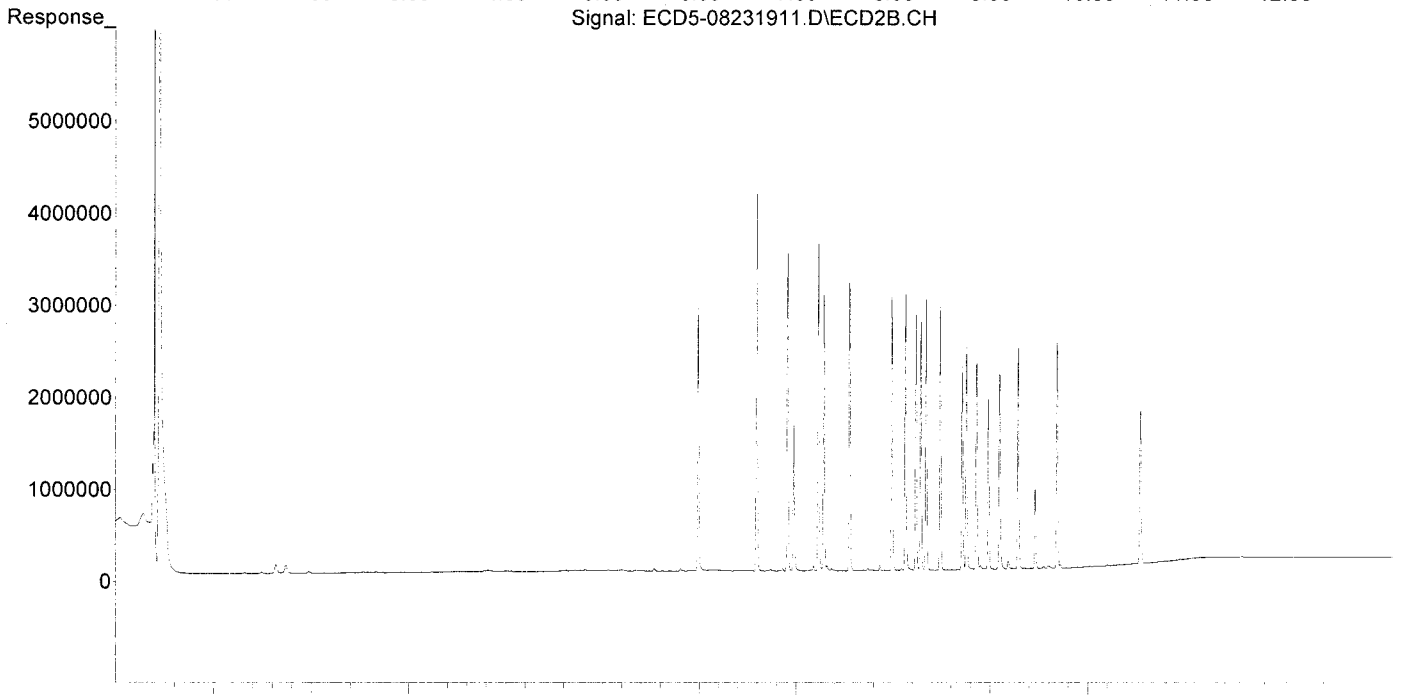
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:42
Operator : MJB
Sample : 9H23034-CAL4
Misc : A19E249, AB 10 ppb
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:00:36 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:00
Operator : MJB
Sample : 9H23034-CAL5
Misc : A19E250, AB 25 ppb
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:01 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

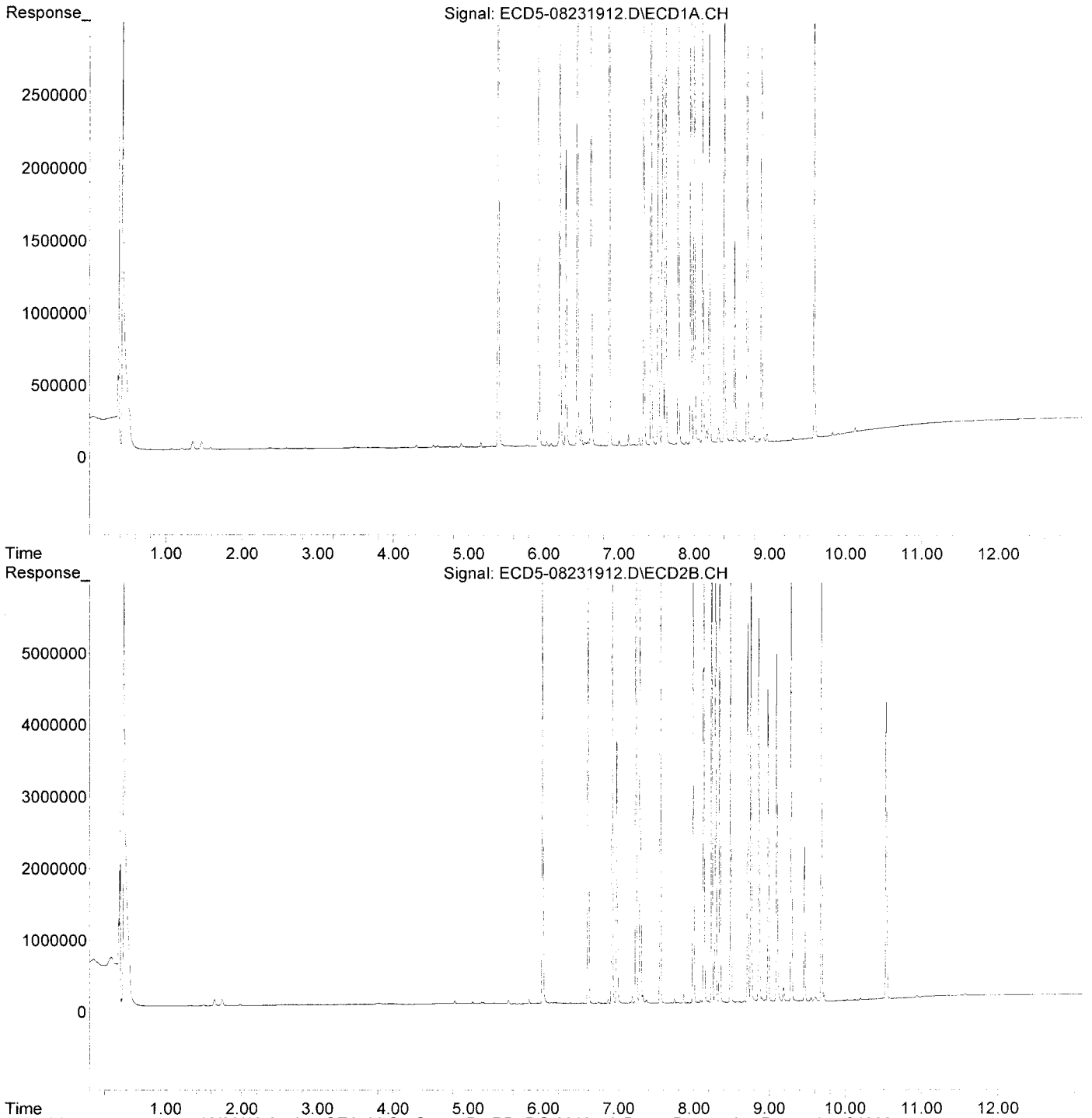
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.394	5.989	4015832	7072923	24.195	24.109	
22)	S	DCBP (S)	9.592	10.539	3342634	4163229	23.690	23.160	
		Target Compounds							
2)		a-BHC	5.935	6.596	5553096	9910863	24.215	24.153	
3)		g-BHC	6.218	6.913	4875657	8508386	24.164	23.853	
4)		b-BHC	6.297	6.978	2060378	3677155	22.796	23.234	
5)		Heptachlor	6.633	7.289	4314306	7282282	23.797	23.800	
6)		d-BHC	6.447	7.232	4667166	8247775	23.729	23.387	
7)		Aldrin	6.873	7.555	4845355	7878574	24.540	23.919	
8)		Heptachlo...	7.332	7.992	4344286	7064729	23.587	23.483	
9)		trans-Chl...	7.429	8.131	4401456	7157480	23.806	22.844	
10)		cis-Chlor...	7.525	8.239	4244413	6935857	23.312	23.814	
11)		Endosulfa...	7.621	8.288	4111285	6571512	24.158	23.881	
12)		4,4'-DDE	7.583	8.343	4571066	7501047	24.246	24.144	
13)		Dieldrin	7.792	8.489	4582306	7333890	23.869	24.113	
14)		Endrin	7.957	8.716	3508904	5325883	23.866	23.584	
15)		4,4'-DDD	8.004	8.758	3727035	6146469	23.718	23.990	
16)		Endosulfa...	8.115	8.862	3371864	5447602	23.479	23.623	
17)		4,4'-DDT	8.202	8.984	2924467	4480388	24.460	24.907	
18)		Endrin Al...	8.404	9.099	3119767	4848504	25.346	24.953	
19)		Endosulfa...	8.705	9.289	3645411	5978906	23.522	24.003	
20)		Methoxychlor	8.540	9.463	1390283	2166659	23.735	25.322	
21)		Endrin Ke...	8.899	9.688	4008958	5893691	24.041	22.904	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.779	0.000	7817	0	0.044	N.D.	#
25)		Oxychlordane	7.269	0.000	51278	0	0.312	N.D.	#
26)		2,4'-DDE	7.332	8.131	4344286	7157480	33.871	33.740	
27)		trans-Non...	7.525	8.192	4244413	24831	23.380	0.082	#
28)		2,4'-DDD	0.000	8.489	0	7333890	N.D.	38.832	#
29)		2,4'-DDT	7.891	8.716	15573	5325883	0.142	29.864	#
30)		cis-Nonac...	8.004	8.758	3727035	6146469	17.952	18.323	
31)		Mirex	8.651	9.688	18145	5893691	0.145	31.674	#
32)		Chlordane...	7.429	8.131	4401456	7157480	223.542	197.805	
33)		Chlordane...	7.525	8.239	4244413	6935857	169.341	228.423	
34)		Chlordane...	8.059	8.901	33094	57884	5.724	6.456	
35)		Chlordane...	3.446	0.000	4689	0	NoCal	N.D.	
36)		Toxaphene...	7.525f	8.489f	4244413	7333890	4738.933	2794.653	#
37)		Toxaphene...	7.792	0.000	4582306	0	2837.449	N.D.	#
38)		Toxaphene...	8.115	8.862	3371864	5447602	1001.299	1074.835	
39)		Toxaphene...	8.326f	8.901	104762	57884	32.332	6.932	#
40)		Toxaphene...	8.540f	9.099	1390283	4848504	579.975	1040.371	#
41)		Toxaphene...	8.651	9.463	18145	2166659	5.734	456.119	#
42)		Toxaphene...	3.446	0.000	4689	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:00
Operator : MJB
Sample : 9H23034-CAL5
Misc : A19E250, AB 25 ppb
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:01 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:17
Operator : MJB
Sample : 9H23034-CAL6
Misc : A19H383, AB 50 ppb
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

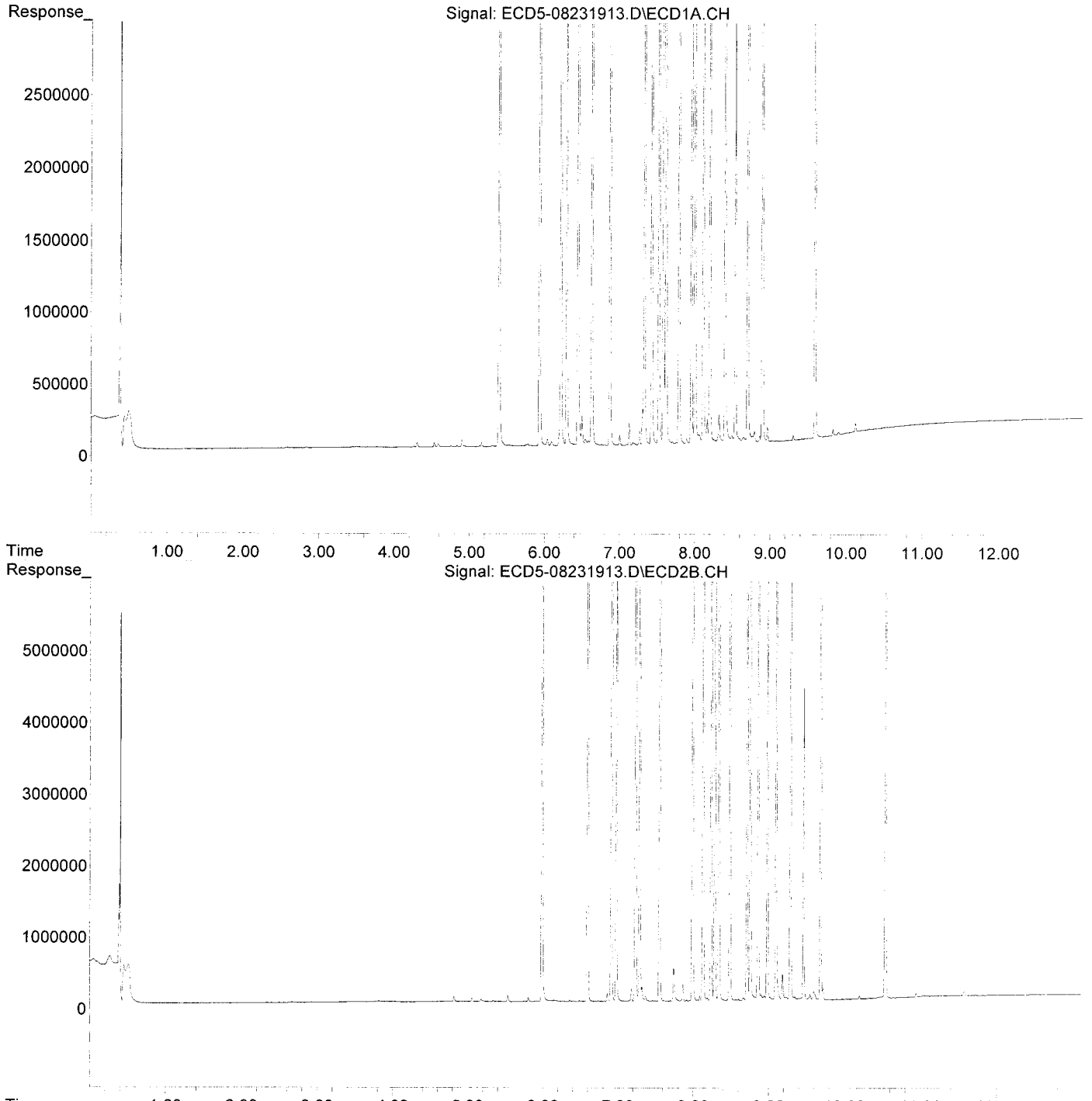
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.394	5.989	8071481	14196745	48.631	48.392	
22)	S	DCBP (S)	9.592	10.541	6678990	8730692	47.336	48.568	
		Target Compounds							
2)		a-BHC	5.935	6.596	11369592	20265817	49.578	49.388	
3)		g-BHC	6.218	6.914	9785999	17381069	48.499	48.727	
4)		b-BHC	6.296	6.978	4100858	7516011	45.372	47.490	
5)		Heptachlor	6.632	7.290	8735158	14595143	48.182	47.700	
6)		d-BHC	6.447	7.232	9610742	17311258	48.862	49.087	
7)		Aldrin	6.873	7.555	9327672	16264416	47.242	49.377	
8)		Heptachlo...	7.332	7.992	8869300	14837794	48.156	49.320	
9)		trans-Chl...	7.428	8.131	8959305	14678719	48.457	46.848	
10)		cis-Chlor...	7.524	8.238	8622674	14002116	47.359	48.076	
11)		Endosulfa...	7.621	8.289	7984410	13712329	46.917	49.831	
12)		4,4'-DDE	7.583	8.344	9177389	15554706	48.679	50.067	
13)		Dieldrin	7.792	8.489	9386664	15434113	48.894	50.745	
14)		Endrin	7.957	8.716	6979572	11015379	47.471	48.778	
15)		4,4'-DDD	8.004	8.758	7726197	13159451	49.167	51.361	
16)		Endosulfa...	8.114	8.863	6840920	11534525	47.635	50.018	
17)		4,4'-DDT	8.202	8.985	6205369	9285492	51.902	49.430	
18)		Endrin Al...	8.404	9.099	6224451	10209034	50.697	51.836	
19)		Endosulfa...	8.705	9.289	7420576	12149289	47.882	48.775	
20)		Methoxychlor	8.540	9.464	2860683	4346199	48.839	48.597	
21)		Endrin Ke...	8.899	9.687	8190707	12954568	49.117	50.345	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.777	6.487f	17034	6623	0.097	0.021	#
25)		Oxychlordane	7.268	7.916	93115	13858	0.566	0.051	#
26)		2,4'-DDE	7.332	8.131	8869300	14678719	69.150	69.194	
27)		trans-Non...	7.524	8.193	8622674	44541	47.838	0.148	#
28)		2,4'-DDD	7.705	8.489	15706	15434113	0.138	81.721	#
29)		2,4'-DDT	7.890	8.716	32276	11015379	0.294	61.766	#
30)		cis-Nonac...	8.004	8.758	7726197	13159451	37.214	39.229	
31)		Mirex	8.653	9.687	33100	12954568	0.264	69.621	#
32)		Chlordane...	7.428	8.131	8959305	14678719	455.027	405.662	
33)		Chlordane...	7.524	8.238	8622674	14002116	344.022	461.141	
34)		Chlordane...	8.059	8.901	56505	76664	9.774	8.551	
35)		Chlordane...	3.445	0.000	3954	0	NoCal	N.D.	
36)		Toxaphene...	7.524f	8.489f	8622674	15434113	9627.309	5881.324	
37)		Toxaphene...	7.792	8.823	9386664	45987	5812.397	13.973	#
38)		Toxaphene...	8.114	8.863	6840920	11534525	2031.460	2275.810	
39)		Toxaphene...	8.325f	8.901	190344	76664	58.746	9.182	#
40)		Toxaphene...	8.540f	9.099	2860683	10209034	1193.372	2190.611	#
41)		Toxaphene...	8.653	9.464	33100	4346199	10.460	914.950	#
42)		Toxaphene...	3.445	0.000	3954	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:17
Operator : MJB
Sample : 9H23034-CAL6
Misc : A19H383, AB 50 ppb
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:34
Operator : MJB
Sample : 9H23034-CAL7
Misc : A19H382, AB 100 ppb
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

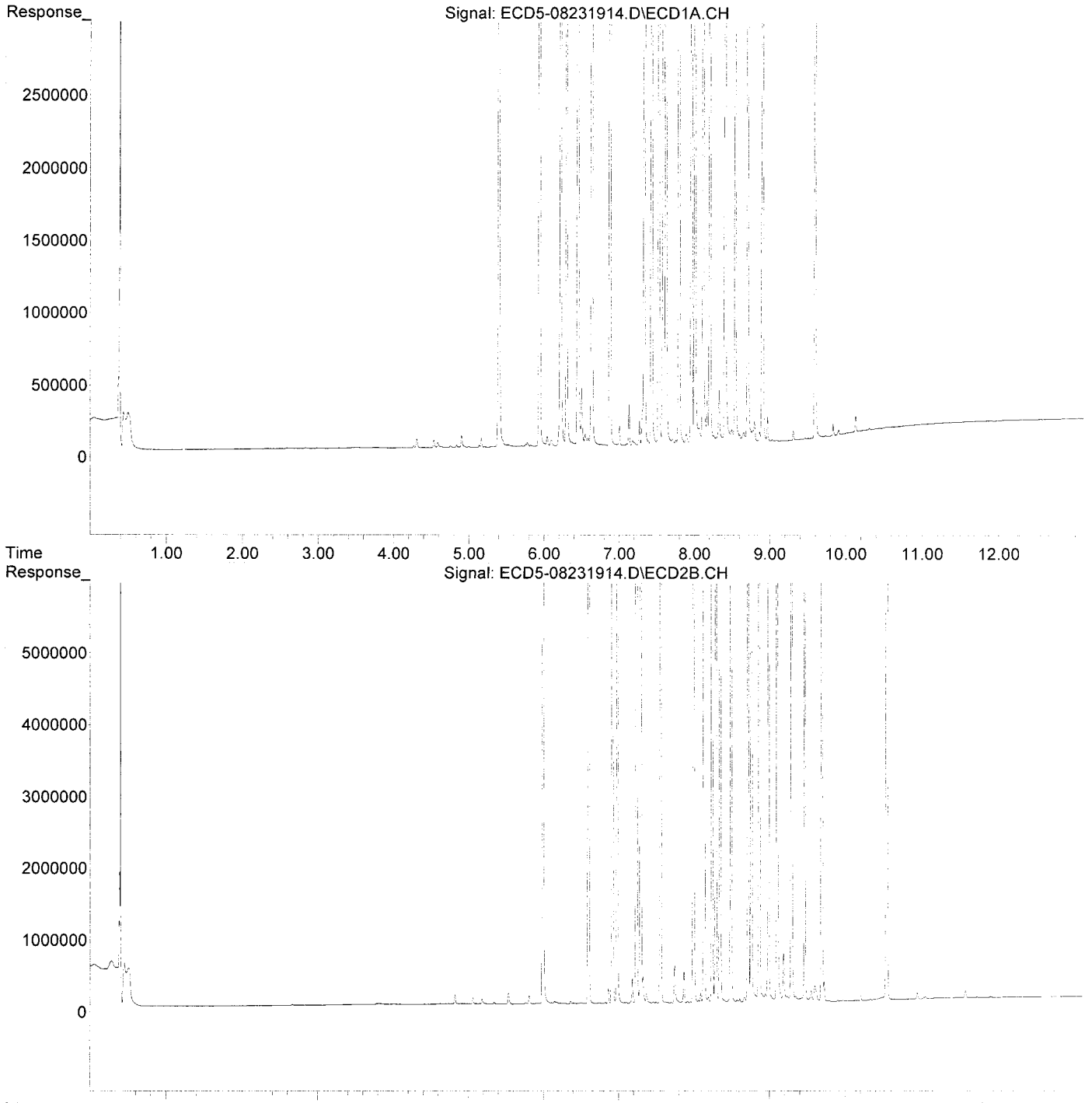
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.395	5.989	15850922	29256334	95.502	99.726	
22)	S	DCBP (S)	9.592	10.540	13405396	17784069	95.007	98.931	
		Target Compounds							
2)		a-BHC	5.935	6.596	22363584	41699210	97.517	101.621	
3)		g-BHC	6.218	6.914	19595093	36788994	97.113	103.136	
4)		b-BHC	6.296	6.977	8355416	14625175	92.444	92.409	
5)		Heptachlor	6.632	7.289	17551528	30277818	96.811	98.955	
6)		d-BHC	6.446	7.232	19475580	35176633	99.016	99.745	
7)		Aldrin	6.872	7.555	19108074	33906422	96.776	102.936	
8)		Heptachlo...	7.331	7.991	17318444	30045511	94.031	99.869	
9)		trans-Chl...	7.427	8.131	17732791	30742272	95.909	98.116	
10)		cis-Chlor...	7.523	8.238	16742584	29042863	91.956	99.719	
11)		Endosulfa...	7.619	8.288	16089996	27212707	94.547	98.892	
12)		4,4'-DDE	7.582	8.344	18052552	32499603	95.754	104.609	
13)		Dieldrin	7.791	8.488	18324422	31001958	95.450	101.930	
14)		Endrin	7.957	8.715	13812708	23102413	93.947	102.301	
15)		4,4'-DDD	8.003	8.758	15437146	26297484	98.238	102.639	
16)		Endosulfa...	8.113	8.861	13543500	23016371	94.307	99.808	
17)		4,4'-DDT	8.201	8.984	12176961	19789501	101.848	97.215	
18)		Endrin Al...	8.403	9.098	12363806	20502737	98.526	99.562	
19)		Endosulfa...	8.704	9.289	14366789	24477320	92.702	98.268	
20)		Methoxychlor	8.539	9.463	5877329	9444987	100.340	96.538	
21)		Endrin Ke...	8.898	9.687	16251943	26636559	97.458	103.517	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.777	0.000	29252	0	0.166	N.D.	#
25)		Oxychlordane	7.267	7.915	165864	25145	1.008	0.092	#
26)		2,4'-DDE	7.331	8.131	17318444	30742272	135.025	144.916	
27)		trans-Non...	7.523	8.192	16742584	77338	93.233	0.256	#
28)		2,4'-DDD	7.704	8.488	32176	31001958	0.282	164.150	#
29)		2,4'-DDT	7.889	8.715	66298	23102413	0.604	129.542	#
30)		cis-Nonac...	8.003	8.758	15437146	26297484	74.355	78.395	
31)		Mirex	8.651	9.687	63592	26636559	0.507	143.151	#
32)		Chlordane...	7.427	8.131	17732791	30742272	900.616	849.596	
33)		Chlordane...	7.523	8.238	16742584	29042863	667.985	956.488	#
34)		Chlordane...	8.059	8.899	102306	115089	17.697	12.836	
35)		Chlordane...	3.447	0.000	5362	0	NoCal	N.D.	
36)		Toxaphene...	7.523f	8.488f	16742584	31001958	18693.275	11813.609	
37)		Toxaphene...	7.791	0.000	18324422	0	11346.823	N.D.	#
38)		Toxaphene...	8.113	8.861	13543500	23016371	4021.839	4541.226	
39)		Toxaphene...	8.324f	8.899	362066	115089	111.744	13.783	#
40)		Toxaphene...	8.598f	9.098	51910	20502737	21.655	4399.391	#
41)		Toxaphene...	8.651	9.463	63592	9444987	20.095	1988.334	#
42)		Toxaphene...	3.447	0.000	5362	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:34
Operator : MJB
Sample : 9H23034-CAL7
Misc : A19H382, AB 100 ppb
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:52
Operator : MJB
Sample : 9H23034-CAL8
Misc : A19E244, AB 200 ppb
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

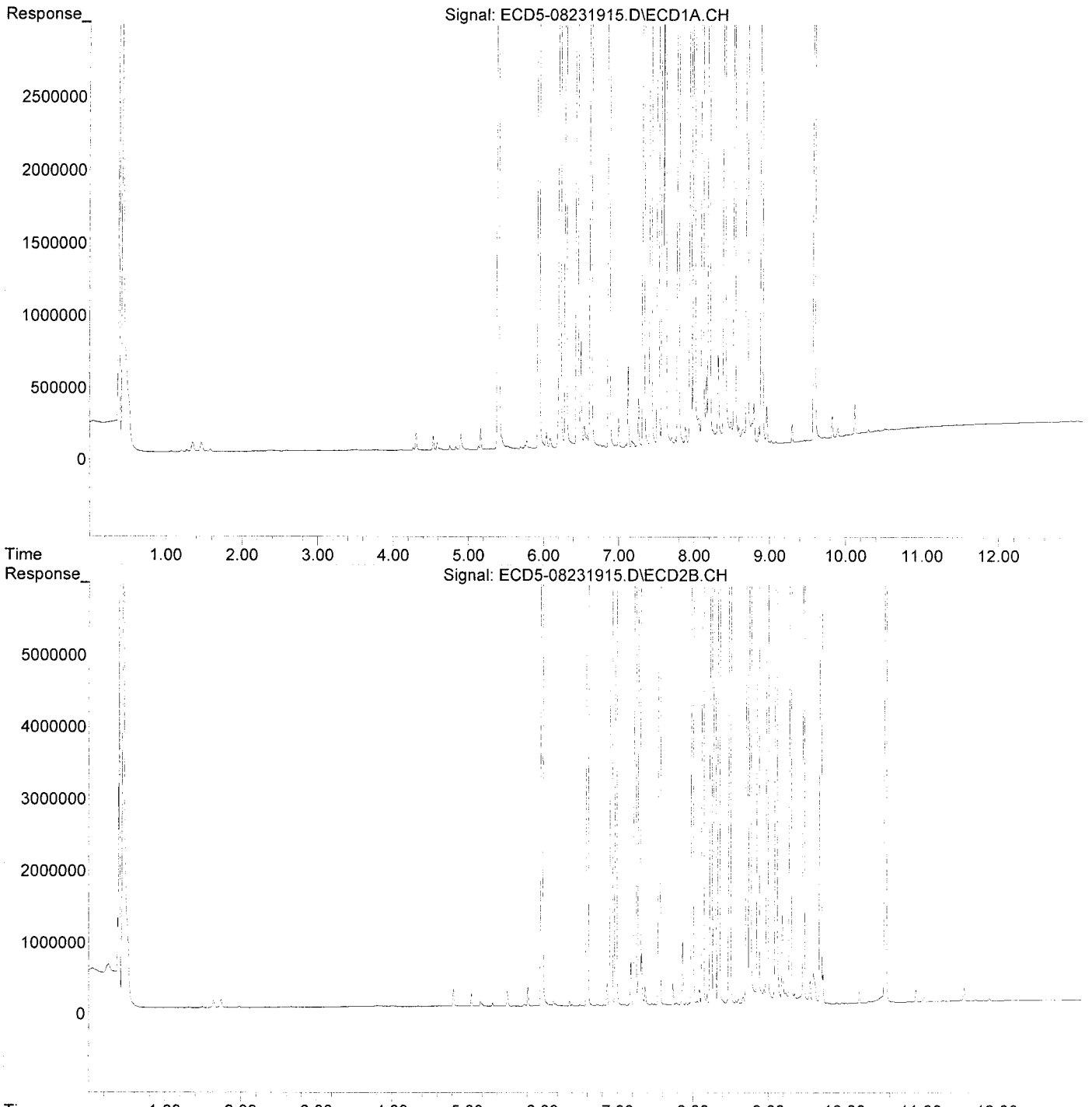
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.394	5.990	32842535	62584449	197.876	213.332	
22)	S	DCBP (S)	9.591	10.539	26975231	38097779	191.180	211.933	
		Target Compounds							
2)		a-BHC	5.935	6.597	47202252	94376748	205.828	229.997	
3)		g-BHC	6.218	6.914	41889726	80765680	207.604	226.422	
4)		b-BHC	6.294	6.977	18238696	32553433	201.792	205.688	
5)		Heptachlor	6.630	7.289	37785699	71283176	208.419	232.969	
6)		d-BHC	6.445	7.232	41016592	80979751	208.534	229.622	
7)		Aldrin	6.870	7.554	39838403	73228186	201.769	222.313	
8)		Heptachlo...	7.330	7.991	36258170	65330070	196.864	217.153	
9)		trans-Chl...	7.425	8.130	37621413	66447972	203.478	212.073	
10)		cis-Chlor...	7.521	8.238	35207945	63977063	193.375	219.666	
11)		Endosulfa...	7.618	8.288	33852593	61043507	198.922	221.834	
12)		4,4'-DDE	7.581	8.344	38763081	69842351	205.607	224.807	
13)		Dieldrin	7.791	8.489	39217772	70031781	204.281	230.254	
14)		Endrin	7.955	8.715	31426311	52779585	213.745	233.717	
15)		4,4'-DDD	8.002	8.758	32436804	59560270	206.419	232.463	
16)		Endosulfa...	8.112	8.862	29471042	51834888	205.214	224.777	
17)		4,4'-DDT	8.200	8.984	29075222	48203441	243.185	202.337	
18)		Endrin Al...	8.402	9.098	26627672	45084544	200.132	198.781	
19)		Endosulfa...	8.704	9.289	31126520	54592794	200.845	219.171	
20)		Methoxychlor	8.537	9.463	14271143	23714100	243.642	203.084	
21)		Endrin Ke...	8.898	9.688	35094718	60861376	210.452	236.524	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.776	0.000	55469	0	0.315	N.D.	#
25)		Oxychlordane	7.265	7.915	336226	30124	2.043	0.110	#
26)		2,4'-DDE	7.330	8.130	36258170	66447972	282.690	313.230	
27)		trans-Non...	7.521	8.191	35207945	140624	196.641	0.466	#
28)		2,4'-DDD	7.703	8.489	57049	70031781	0.500	370.806	#
29)		2,4'-DDT	7.886	8.715	129876	52779585	1.184	295.950	#
30)		cis-Nonac...	8.002	8.758	32436804	59560270	156.235	177.554	
31)		Mirex	8.651	9.688	103310	60861376	0.824	327.083	#
32)		Chlordane...	7.425	8.130	37621413	66447972	1910.724	1836.362	
33)		Chlordane...	7.521	8.238	35207945	63977063	1404.705	2106.999	#
34)		Chlordane...	8.058	8.862f	183720	51834888	31.779	5781.350	#
35)		Chlordane...	3.445	0.000	4872	0	NoCal	N.D.	
36)		Toxaphene...	7.521	8.489f	35207945	70031781	39310.050	26686.316	
37)		Toxaphene...	7.791	0.000	39217772	0	24284.375	N.D.	#
38)		Toxaphene...	8.112	8.862	29471042	51834888	8751.637	10227.240	
39)		Toxaphene...	8.322f	8.943f	634260	207653	195.750	24.869	#
40)		Toxaphene...	8.537f	9.098	14271143	45084544	5953.399	9674.052	#
41)		Toxaphene...	8.651	9.463	103310	23714100	32.646	4992.230	#
42)		Toxaphene...	3.445	0.000	4872	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:52
Operator : MJB
Sample : 9H23034-CAL8
Misc : A19E244, AB 200 ppb
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:01:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:44
Operator : MJB
Sample : 9H23034-CAL9
Misc : A19E272, 9-42 1 ppb
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

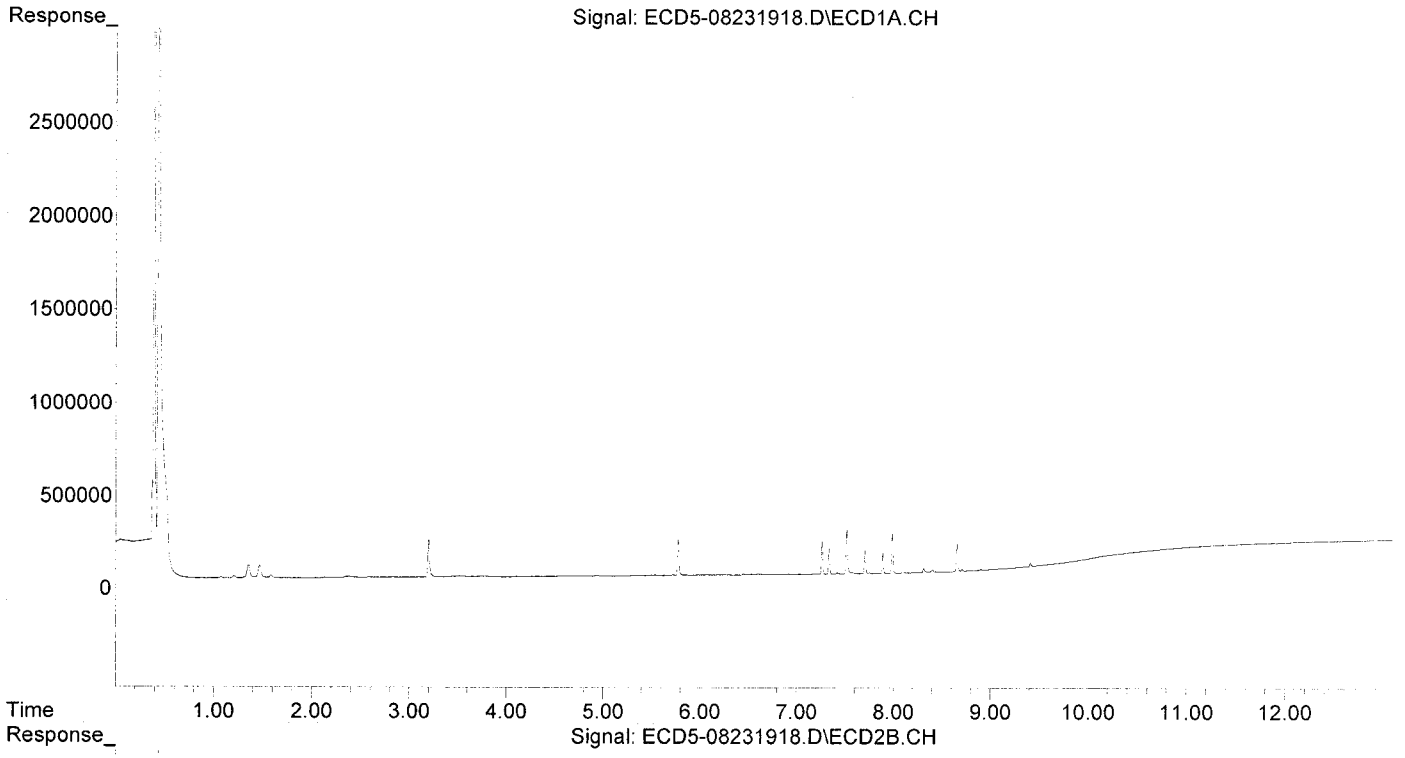
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	6576	N.D.	0.022	#
22)	S	DCBP (S)	9.593	10.540	2255	5805	0.016	0.032	#
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.249f	0.000	4648	0	0.023	N.D.	#
4)		b-BHC	0.000	7.002f	0	7162	N.D.	0.045	#
5)		Heptachlor	6.601f	0.000	3572	0	0.020	N.D.	#
6)		d-BHC	6.449	7.232	5321	8483	0.027	0.024	
7)		Aldrin	0.000	7.577f	0	8990	N.D.	0.027	#
8)		Heptachlo...	7.335	0.000	137947	0	0.749	N.D.	#
9)		trans-Chl...	7.420	8.123	5532	219164	0.030	0.699	#
10)		cis-Chlor...	7.518	0.000	236836	0	1.301	N.D.	#
11)		Endosulfa...	7.582f	0.000	5522	0	0.032	N.D.	#
12)		4,4'-DDE	7.582	0.000	5522	0	0.029	N.D.	#
13)		Dieldrin	7.755f	8.495	4087	192040	0.021	0.631	#
14)		Endrin	7.987f	8.719	219220	173338	1.491	0.768	#
15)		4,4'-DDD	7.987	8.759	219220	332745	1.395	1.299	
16)		Endosulfa...	8.116	8.903f	2586	40443	0.018	0.175	#
17)		4,4'-DDT	8.202	0.000	1027	0	0.009	N.D.	#
18)		Endrin Al...	8.404	9.099	13122	17799	BelowCal	BelowCal	
19)		Endosulfa...	8.706	9.290	8041	12118	0.052	0.049	
20)		Methoxychlor	8.548	0.000	665	0	0.011	N.D.	#
21)		Endrin Ke...	8.900	9.680	3962	209783	0.024	0.815	#
23)		Hexachlor...	3.198	3.687	198207	383198	1.085	1.019	
24)		Hexachlor...	5.775	6.453	194679	328025	1.104	1.044	
25)		Oxychlordane	7.263	7.922	176844	279143	1.075	1.019	
26)		2,4'-DDE	7.335	8.123	137947	219164	1.076	1.033	
27)		trans-Non...	7.518	8.195	236836	306202	1.006	1.015	
28)		2,4'-DDD	7.707	8.495	120240	192040	1.054	1.017	
29)		2,4'-DDT	7.890	8.719	107110	173338	0.977	0.972	
30)		cis-Nonac...	7.987	8.759	219220	332745	1.056	0.992	
31)		Mirex	8.655	9.680	147356	209783	1.175	1.127	
32)		Chlordane...	7.420	8.123	5532	219164	0.281	6.057	#
33)		Chlordane...	7.518	0.000	236836	0	9.449	N.D.	#
34)		Chlordane...	0.000	8.903	0	40443	N.D.	4.511	#
35)		Chlordane...	3.444	0.000	4642	0	NoCal	N.D.	
36)		Toxaphene...	7.518	8.495f	236836	192040	264.430	73.179	#
37)		Toxaphene...	7.755f	0.000	4087	0	2.531	N.D.	#
38)		Toxaphene...	8.116	0.000	2586	0	0.768	N.D.	#
39)		Toxaphene...	8.312f	8.903	22217	40443	6.857	4.844	
40)		Toxaphene...	8.548f	9.099	665	17799	0.277	3.819	#
41)		Toxaphene...	8.655	0.000	147356	0	46.564	N.D.	#
42)		Toxaphene...	3.444	0.000	4642	0	NoCal	N.D.	

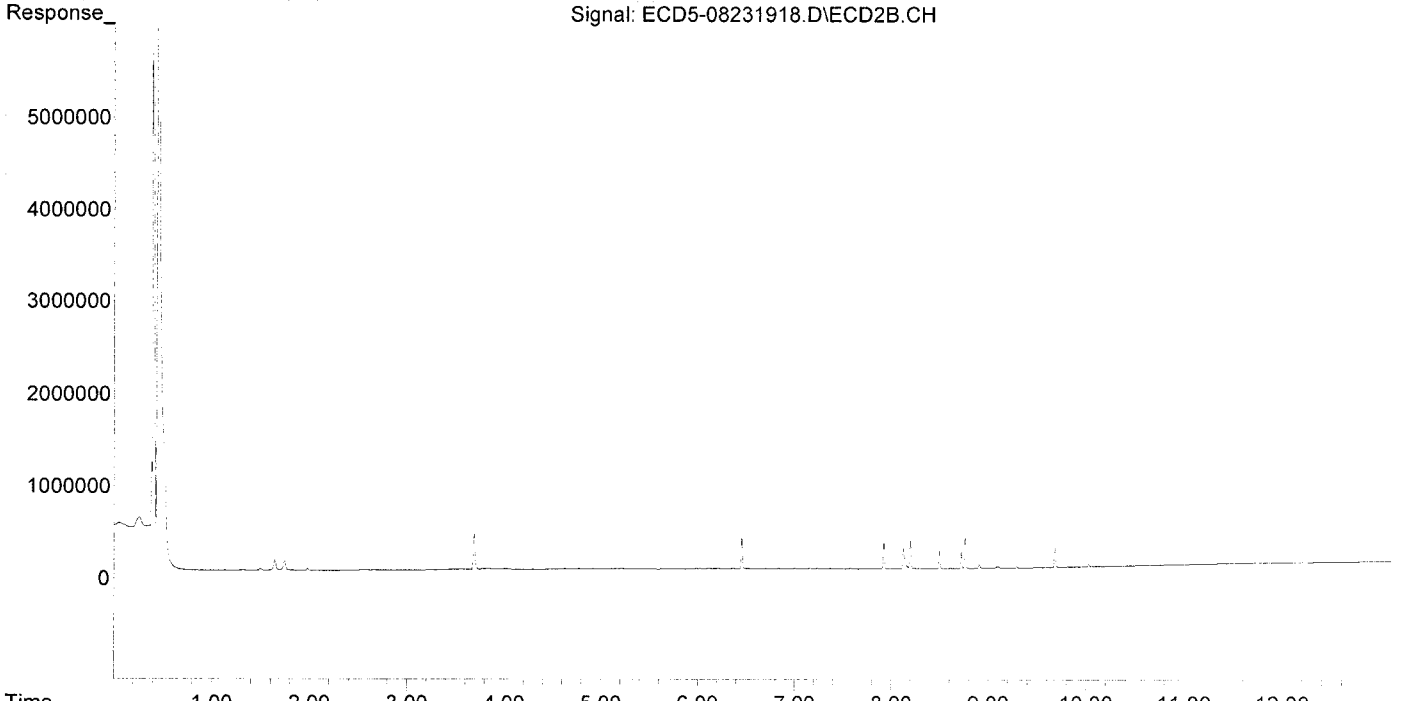
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:44
Operator : MJB
Sample : 9H23034-CAL9
Misc : A19E272, 9-42 1 ppb
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:15 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:01
Operator : MJB
Sample : 9H23034-CALA
Misc : A19E273, 9-42 2 ppb
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:30 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

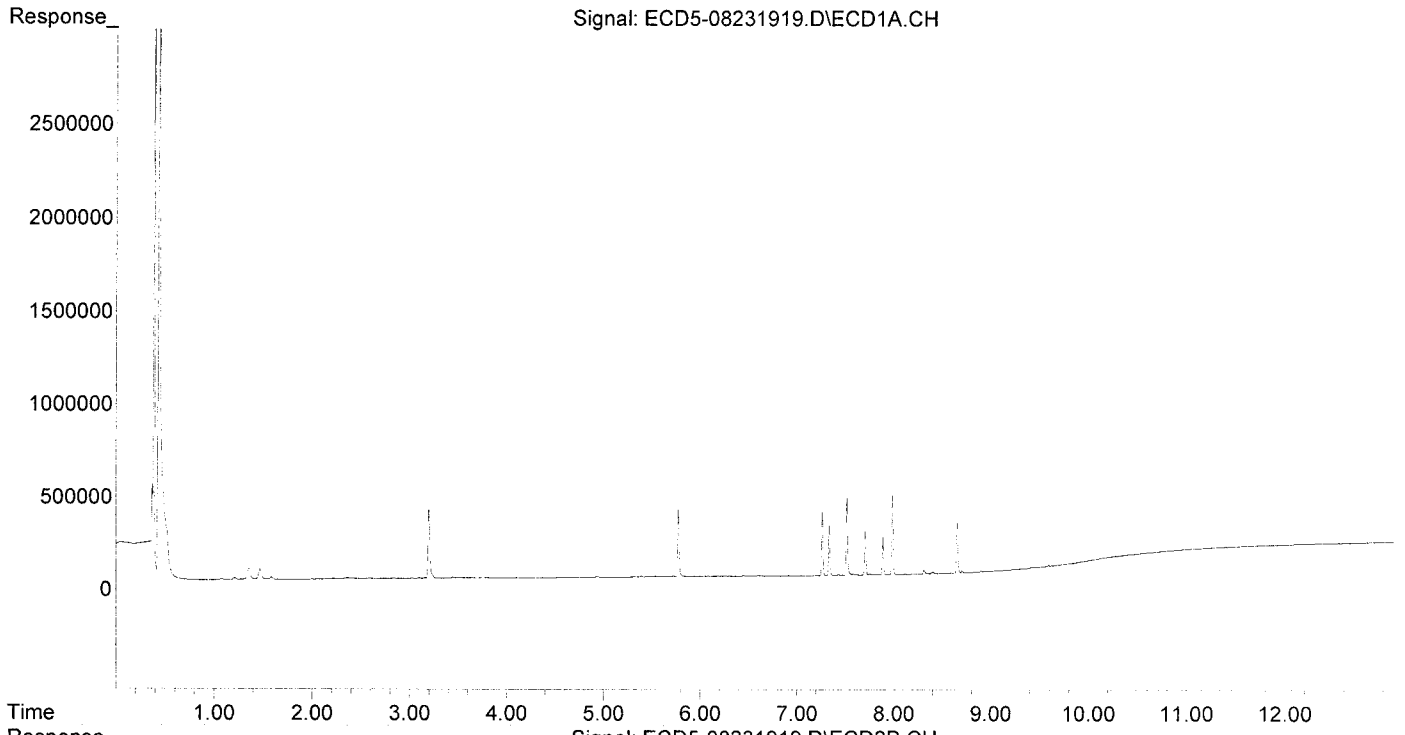
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.394	5.986	6323	13044	0.038	0.044	
22)	S	DCBP (S)	9.592	10.539	6116	7474	0.043	0.042	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.248f	0.000	3811	0	0.019	N.D.	#
4)		b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)		Heptachlor	6.631	0.000	3915	0	0.022	N.D.	#
6)		d-BHC	6.449	7.231	6839	9605	0.035	0.027	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	7.334	0.000	265212	0	1.440	N.D.	#
9)		trans-Chl...	7.429	8.123	4955	411812	0.027	1.314	#
10)		cis-Chlor...	7.518	0.000	415126	0	2.280	N.D.	#
11)		Endosulfa...	7.582f	0.000	3811	0	0.022	N.D.	#
12)		4,4'-DDE	7.582	0.000	3811	0	0.020	N.D.	#
13)		Dieldrin	7.754f	8.495	8020	373596	0.042	1.228	#
14)		Endrin	7.986f	8.718	423442	332170	2.880	1.471	#
15)		4,4'-DDD	7.986	8.758	423442	624783	2.695	2.439	
16)		Endosulfa...	8.116	8.862	3733	5461	0.026	0.024	
17)		4,4'-DDT	8.200	0.000	1311	0	0.011	N.D.	#
18)		Endrin Al...	8.405	9.099	11160	14424	BelowCal	BelowCal	
19)		Endosulfa...	8.705	9.289	10006	14488	0.065	0.058	
20)		Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)		Endrin Ke...	8.899	9.680	5404	388199	0.032	1.509	#
23)		Hexachlor...	3.198	3.687	375794	754548	2.056	2.007	
24)		Hexachlor...	5.775	6.453	362082	632830	2.054	2.015	
25)		Oxychlordane	7.262	7.921	339370	541023	2.063	1.975	
26)		2,4'-DDE	7.334	8.123	265212	411812	2.068	1.941	
27)		trans-Non...	7.518	8.194	415126	587765	2.001	1.949	
28)		2,4'-DDD	7.707	8.495	233089	373596	2.042	1.978	
29)		2,4'-DDT	7.889	8.718	204209	332170	1.862	1.863	
30)		cis-Nonac...	7.986	8.758	423442	624783	2.040	1.863	
31)		Mirex	8.655	9.680	266770	388199	2.128	2.086	
32)		Chlordane...	7.429	8.123	4955	411812	0.252	11.381	#
33)		Chlordane...	7.518	0.000	415126	0	16.562	N.D.	#
34)		Chlordane...	0.000	8.903	0	41985	N.D.	4.683	#
35)		Chlordane...	3.444	0.000	5015	0	NoCal	N.D.	
36)		Toxaphene...	7.518	8.495f	415126	373596	463.493	142.363	#
37)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
38)		Toxaphene...	8.116	8.862	3733	5461	1.108	1.077	
39)		Toxaphene...	8.312f	8.903	22876	41985	7.060	5.028	
40)		Toxaphene...	0.000	9.099	0	14424	N.D.	3.095	#
41)		Toxaphene...	8.655	0.000	266770	0	84.299	N.D.	#
42)		Toxaphene...	3.444	0.000	5015	0	NoCal	N.D.	

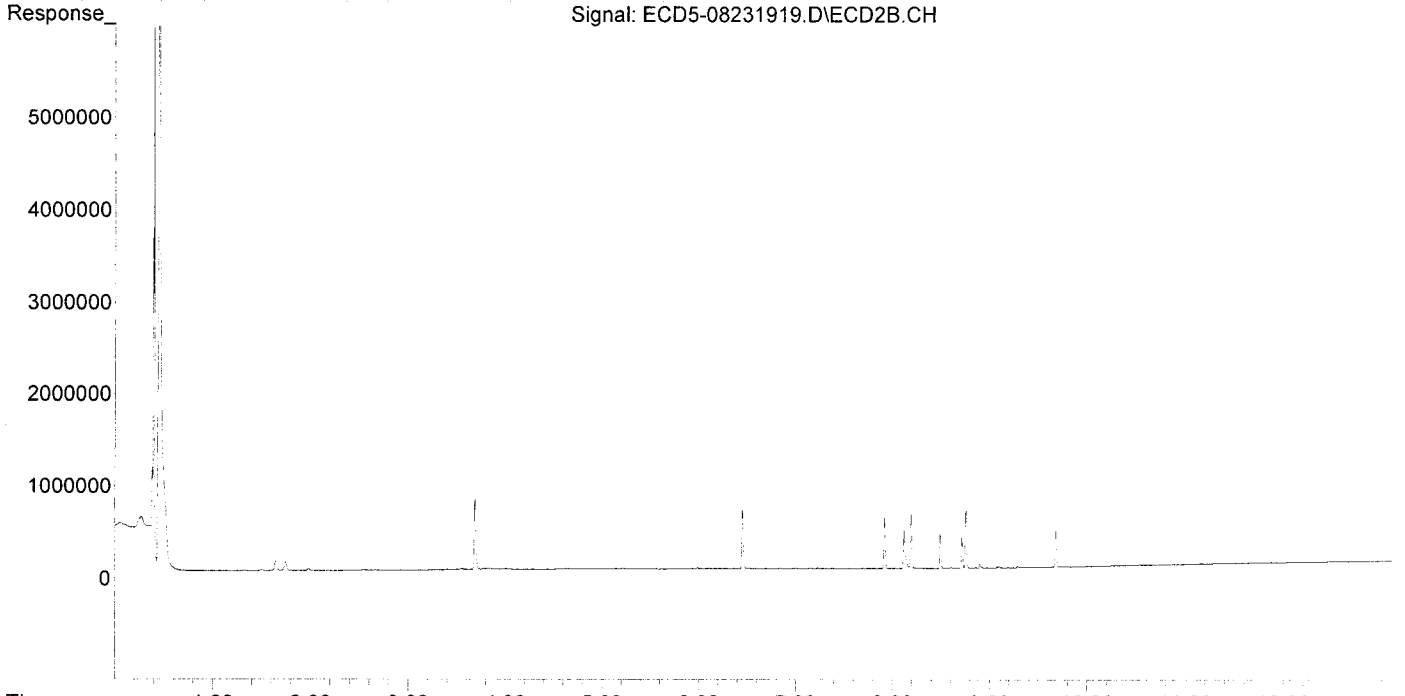
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:01
Operator : MJB
Sample : 9H23034-CALA
Misc : A19E273, 9-42 2 ppb
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:30 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:18
Operator : MJB
Sample : 9H23034-CALB
Misc : A19E274, 9-42 5 ppb
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:42 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/26/19

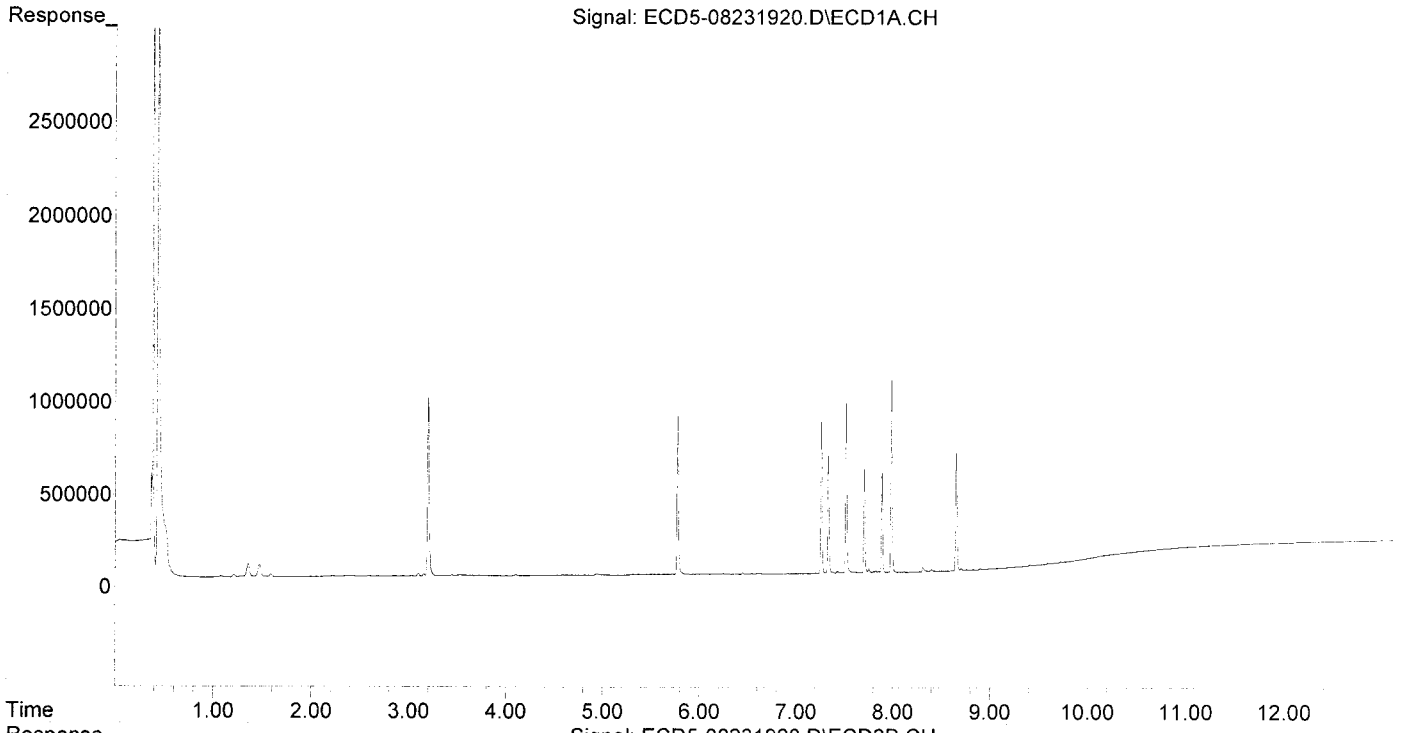
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.368f	5.982	4403	6341	0.027	0.022	
22)	S	DCBP (S)	9.592	10.539	7940	5412	0.056	0.030	#
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.247f	0.000	5412	0	0.027	N.D.	#
4)		b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)		Heptachlor	6.631	7.289	4685	5276	0.026	0.017	
6)		d-BHC	6.449	7.232	7597	11663	0.039	0.033	
7)		Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)		Heptachlo...	7.334	7.991	633168	6408	3.438	0.021	#
9)		trans-Chl...	7.429	8.123	9886	1029687	0.053	3.286	#
10)		cis-Chlor...	7.518	8.236	933222	8550	5.126	0.029	#
11)		Endosulfa...	0.000	0.000	0	0	N.D.	N.D.	
12)		4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.	
13)		Dieldrin	7.799	8.495	5522	898697	0.029	2.955	#
14)		Endrin	7.986f	8.719	1025899	873074	6.978	3.866	#
15)		4,4'-DDD	7.986	8.759	1025899	1587243	6.529	6.195	
16)		Endosulfa...	8.116	8.862	3810	5519	0.027	0.024	
17)		4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)		Endrin Al...	8.404	9.098	10319	12495	BelowCal	BelowCal	
19)		Endosulfa...	8.705	9.289	10733	14179	0.069	0.057	
20)		Methoxychlor	8.550	0.000	617	0	0.011	N.D.	#
21)		Endrin Ke...	8.899	9.679	5632	895523	0.034	3.480	#
23)		Hexachlor...	3.198	3.687	959211	1877484	5.249	4.994	
24)		Hexachlor...	5.775	6.453	853793	1485583	4.843	4.730	
25)		Oxychlordane	7.262	7.921	819748	1325543	4.982	4.839	
26)		2,4'-DDE	7.334	8.123	633168	1029687	4.937	4.854	
27)		trans-Non...	7.518	8.194	933222	1467723	4.893	4.866	
28)		2,4'-DDD	7.705	8.495	560942	898697	4.915	4.758	
29)		2,4'-DDT	7.889	8.719	536967	873074	4.895	4.896	
30)		cis-Nonac...	7.986	8.759	1025899	1587243	4.941	4.732	
31)		Mirex	8.654	9.679	628618	895523	5.014	4.813	
32)		Chlordane...	7.429	8.123	9886	1029687	0.502	28.457	#
33)		Chlordane...	7.518	8.236	933222	8550	37.233	0.282	#
34)		Chlordane...	0.000	8.903	0	41570	N.D.	4.636	#
35)		Chlordane...	3.443	3.434	5083	3848	NoCal	NoCal	
36)		Toxaphene...	7.518	8.495f	933222	898697	1041.953	342.457	#
37)		Toxaphene...	7.799	0.000	5522	0	3.419	N.D.	#
38)		Toxaphene...	8.116	8.862	3810	5519	1.131	1.089	
39)		Toxaphene...	8.312f	8.903	22738	41570	7.017	4.979	
40)		Toxaphene...	8.550f	9.098	617	12495	0.257	2.681	#
41)		Toxaphene...	8.654	0.000	628618	0	198.642	N.D.	#
42)		Toxaphene...	3.443	3.434	5083	3848	NoCal	NoCal	

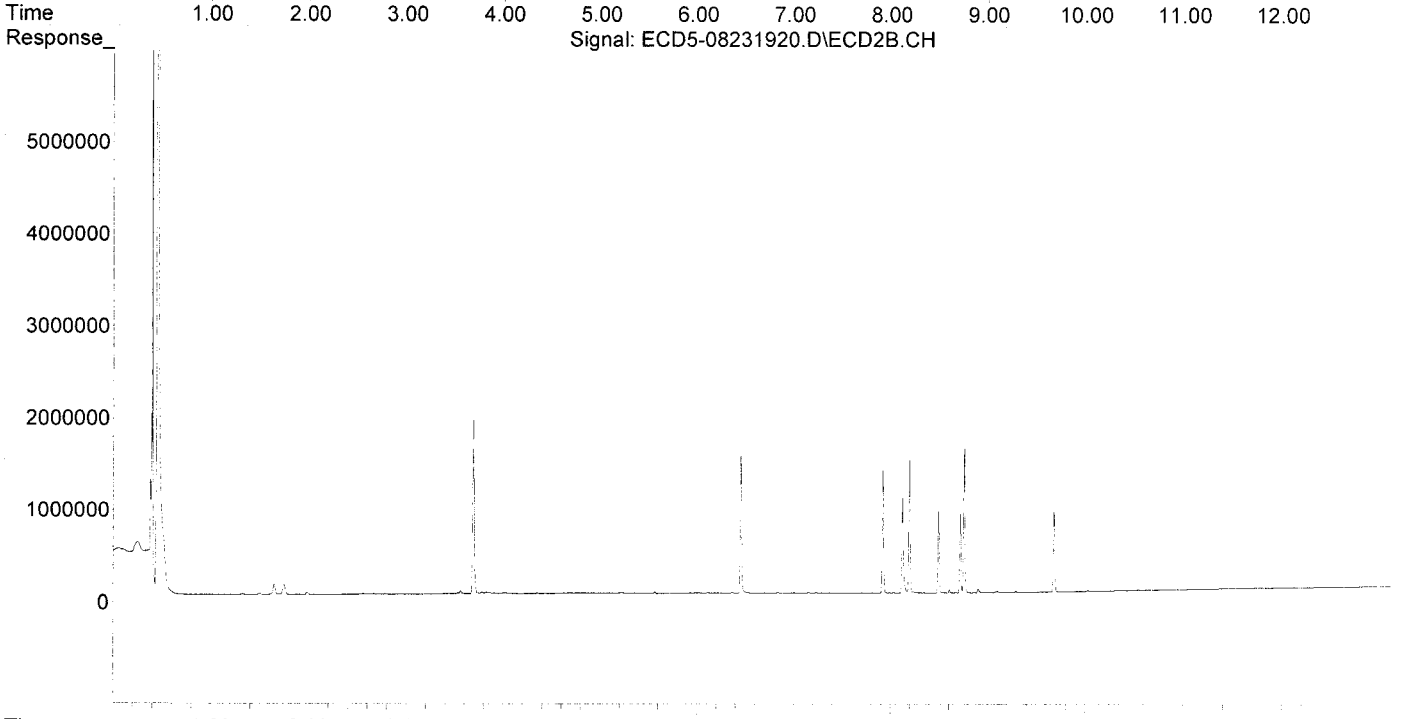
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:18
Operator : MJB
Sample : 9H23034-CALB
Misc : A19E274, 9-42 5 ppb
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:42 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:35
Operator : MJB
Sample : 9H23034-CALC
Misc : A19E275, 9-42 10 ppb
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/27/19

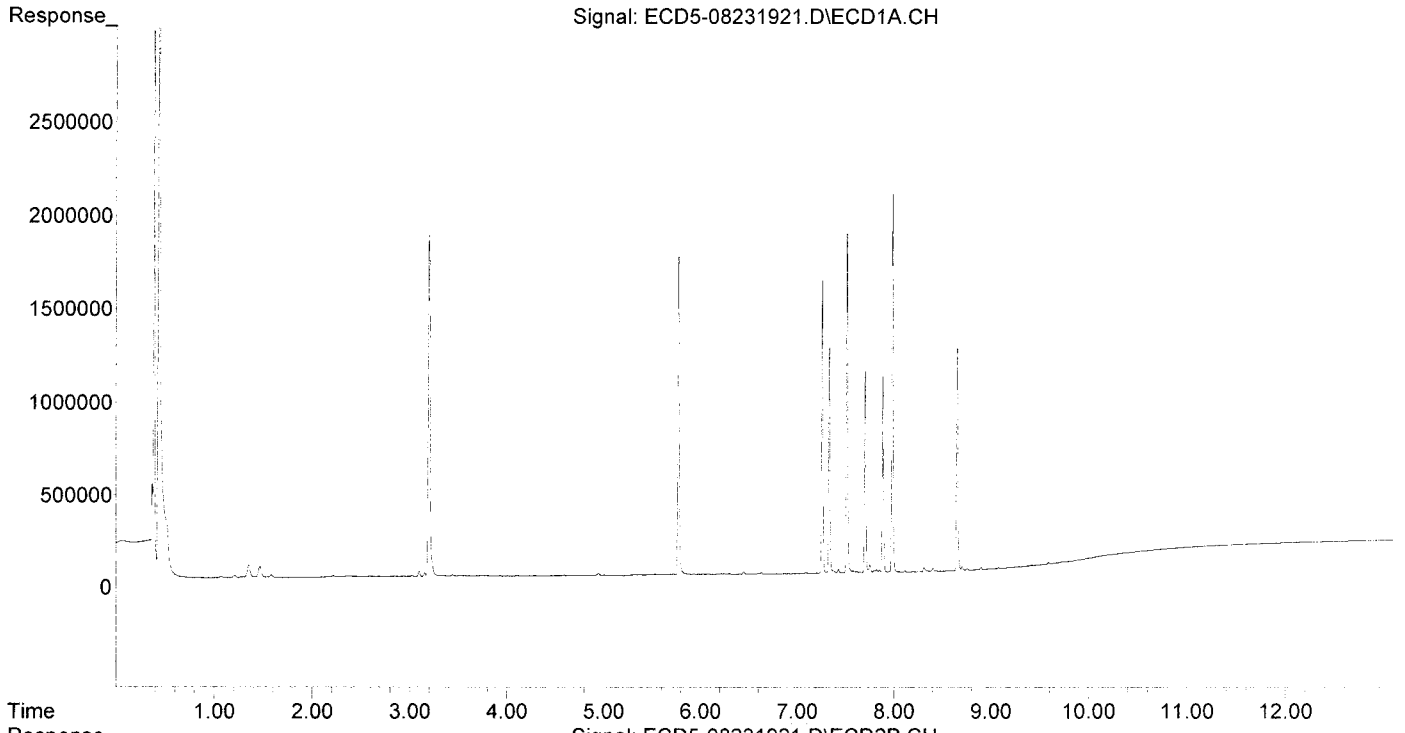
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.367f	5.983	5244	8048	0.032	0.027	
22)	S	DCBP (S)	9.591	10.539	8426	10511	0.060	0.058	
		Target Compounds							
2)		a-BHC	5.934	6.594	5268	9085	0.023	0.022	
3)		g-BHC	6.219	6.912	5161	7308	0.026	0.020	
4)		b-BHC	6.300	6.978	6085	7741	0.067	0.049	
5)		Heptachlor	6.631	7.288	8267	12275	0.046	0.040	
6)		d-BHC	6.449	7.232	14325	24245	0.073	0.069	
7)		Aldrin	6.872	7.553	3901	5863	0.020	0.018	
8)		Heptachlo...	7.333	7.990	1245265	15714	6.761	0.052	#
9)		trans-Chl...	7.428	8.122	20597	2018331	0.111	6.442	#
10)		cis-Chlor...	7.516	8.236	1817552	21137	9.983	0.073	#
11)		Endosulfa...	7.620	8.289	8045	10794	0.047	0.039	
12)		4,4'-DDE	7.582	8.342	11334	7910	0.060	0.025	#
13)		Dieldrin	7.797	8.495	12142	1778790	0.063	5.848	#
14)		Endrin	7.986f	8.719	2032010	1702568	13.821	7.539	#
15)		4,4'-DDD	7.986	8.759	2032010	3148054	12.931	12.287	
16)		Endosulfa...	8.115	8.863	8267	13466	0.058	0.058	
17)		4,4'-DDT	8.202	0.000	2833	0	0.024	N.D.	#
18)		Endrin Al...	8.404	9.098	18899	26666	BelowCal	BelowCal	
19)		Endosulfa...	8.705	9.289	20232	26713	0.131	0.107	
20)		Methoxychlor	8.543	0.000	1294	0	0.022	N.D.	#
21)		Endrin Ke...	8.899	9.679	11108	1722960	0.067	6.696	#
23)		Hexachlor...	3.198	3.687	1838187	3701532	10.059	9.846	
24)		Hexachlor...	5.774	6.453	1711884	2936294	9.710	9.349	
25)		Oxychlordane	7.261	7.921	1591613	2538903	9.673	9.269	
26)		2,4'-DDE	7.333	8.122	1245265	2018331	9.709	9.514	
27)		trans-Non...	7.516	8.194	1817552	2844404	9.830	9.430	
28)		2,4'-DDD	7.705	8.495	1103587	1778790	9.670	9.418	
29)		2,4'-DDT	7.888	8.719	1051565	1702568	9.587	9.547	
30)		cis-Nonac...	7.986	8.759	2032010	3148054	9.787	9.385	
31)		Mirex	8.654	9.679	1196365	1722960	9.543	9.260	
32)		Chlordane...	7.428	8.122	20597	2018331	1.046	55.779	#
33)		Chlordane...	7.516	8.236	1817552	21137	72.516	0.696	#
34)		Chlordane...	0.000	8.903	0	42511	N.D.	4.741	#
35)		Chlordane...	3.445	3.433	6229	7261	NoCal	NoCal	
36)		Toxaphene...	7.516	8.495f	1817552	1778790	2029.316	677.826	#
37)		Toxaphene...	7.797	0.000	12142	0	7.518	N.D.	#
38)		Toxaphene...	8.115	8.863	8267	13466	2.455	2.657	
39)		Toxaphene...	8.312f	8.903	23581	42511	7.278	5.091	
40)		Toxaphene...	8.582	9.098	560	26666	0.234	5.722	#
41)		Toxaphene...	8.654	0.000	1196365	0	378.048	N.D.	#
42)		Toxaphene...	3.445	3.433	6229	7261	NoCal	NoCal	

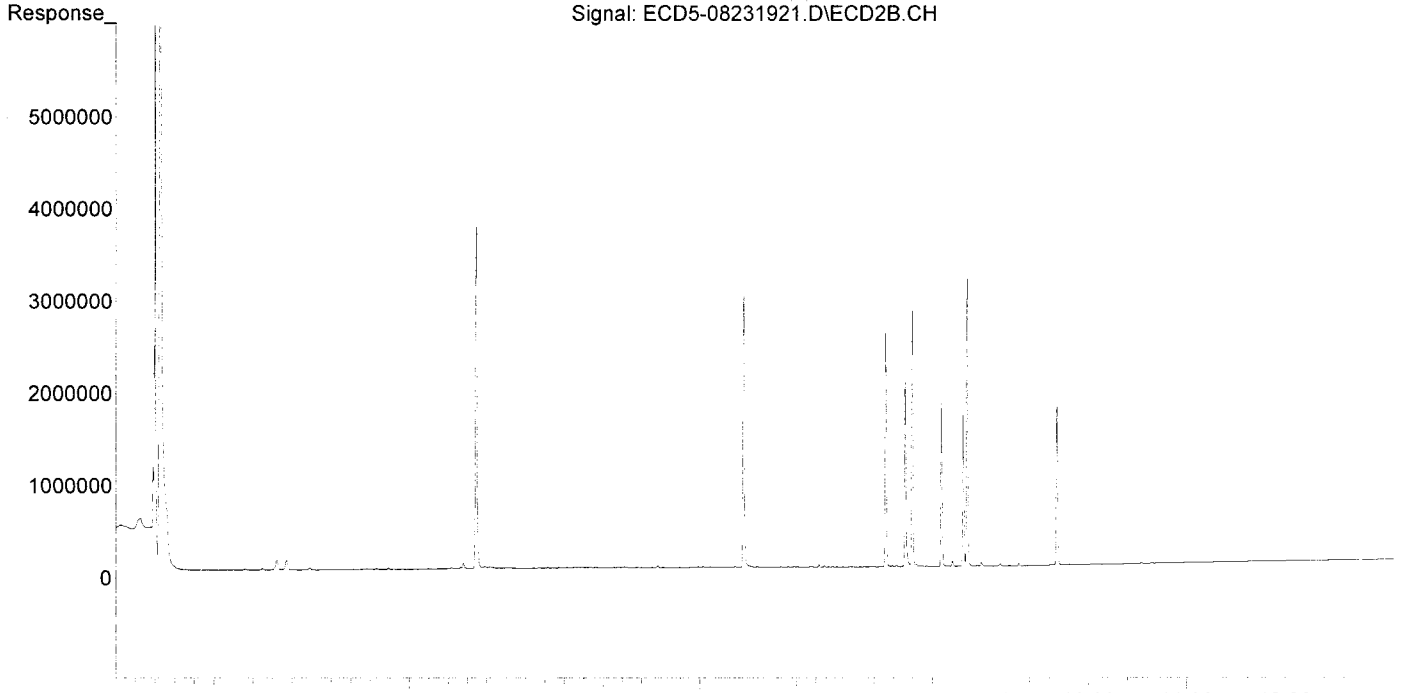
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:35
Operator : MJB
Sample : 9H23034-CALC
Misc : A19E275, 9-42 10 ppb
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:02:55 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:53
Operator : MJB
Sample : 9H23034-CALD
Misc : A19E276, 9-42 25 ppb
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:06 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

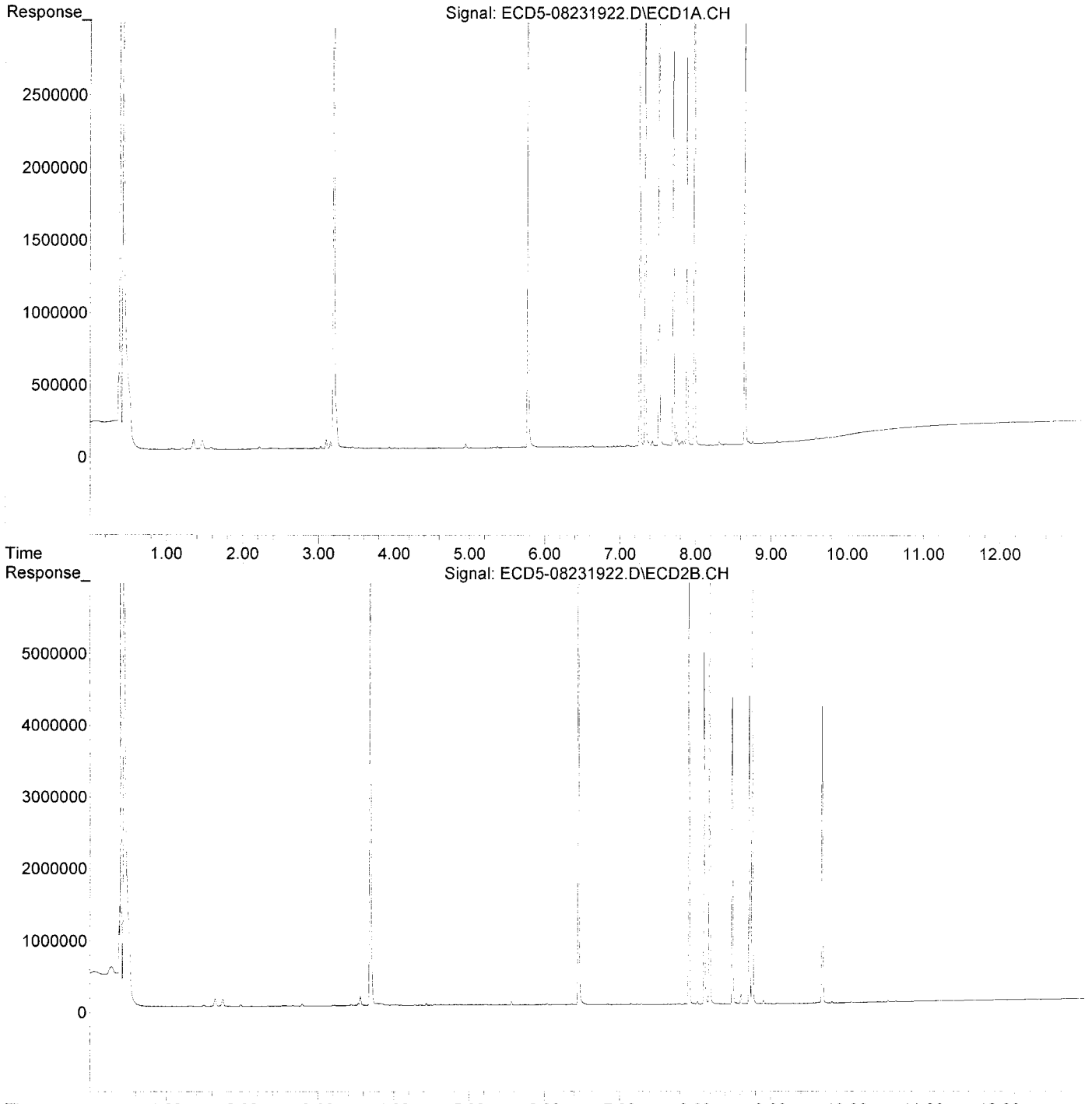
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1) S	TCMX (S)	5.367f	5.981	10828	6833	0.065	0.023	#
22) S	DCBP (S)	9.592	10.539	20297	20262	0.144	0.113	
	Target Compounds							
2)	a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)	g-BHC	6.248f	0.000	5786	0	0.029	N.D.	#
4)	b-BHC	0.000	0.000	0	0	N.D.	N.D.	
5)	Heptachlor	6.632	7.288	9958	12977	0.055	0.042	
6)	d-BHC	6.450	7.231	5090	7876	0.026	0.022	
7)	Aldrin	0.000	0.000	0	0	N.D.	N.D.	
8)	Heptachlo...	7.333	7.989	3059421	19960	16.611	0.066	#
9)	trans-Chl...	7.428	8.122	36083	4999232	0.195	15.955	#
10)	cis-Chlor...	7.516	8.235	4391046	27018	24.117	0.093	#
11)	Endosulfa...	7.604	8.299	11350	9999	0.067	0.036	#
12)	4,4'-DDE	7.604f	0.000	11350	0	0.060	N.D.	#
13)	Dieldrin	7.800	8.495	19961	4389185	0.104	14.431	#
14)	Endrin	7.986f	8.719	4993110	4405554	33.960	19.509	#
15)	4,4'-DDD	7.986	8.759	4993110	8219393	31.775	32.080	
16)	Endosulfa...	0.000	8.862	0	7977	N.D.	0.035	#
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.404	9.098	7779	9076	BelowCal	BelowCal	
19)	Endosulfa...	0.000	9.289	0	11382	N.D.	0.046	#
20)	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)	Endrin Ke...	8.899	9.679	4709	4138115	0.028	16.082	#
23)	Hexachlor...	3.198	3.687	4363988	8892238	23.881	23.654	
24)	Hexachlor...	5.774	6.453	4184551	7416324	23.736	23.612	
25)	Oxychlordane	7.261	7.920	3881255	6202791	23.589	22.646	
26)	2,4'-DDE	7.333	8.122	3059421	4999232	23.853	23.566	
27)	trans-Non...	7.516	8.194	4391046	7092288	24.199	23.513	
28)	2,4'-DDD	7.705	8.495	2745178	4389185	24.054	23.240	
29)	2,4'-DDT	7.888	8.719	2728794	4405554	24.878	24.703	
30)	cis-Nonac...	7.986	8.759	4993110	8219393	24.050	24.503	
31)	Mirex	8.654	9.679	2910818	4138115	23.218	22.239	
32)	Chlordane...	7.428	8.122	36083	4999232	1.833	138.159	#
33)	Chlordane...	7.516	8.235	4391046	27018	175.191	0.890	#
34)	Chlordane...	0.000	8.903	0	43328	N.D.	4.833	#
35)	Chlordane...	3.444	3.433	9286	16581	NoCal	NoCal	
36)	Toxaphene...	7.516	8.495f	4391046	4389185	4902.650	1672.543	#
37)	Toxaphene...	7.800	0.000	19961	0	12.360	N.D.	#
38)	Toxaphene...	0.000	8.862	0	7977	N.D.	1.574	#
39)	Toxaphene...	8.313f	8.903	24731	43328	7.633	5.189	
40)	Toxaphene...	8.607f	9.098	797	9076	0.332	1.947	#
41)	Toxaphene...	8.654	0.000	2910818	0	919.811	N.D.	#
42)	Toxaphene...	3.444	3.433	9286	16581	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:53
Operator : MJB
Sample : 9H23034-CALD
Misc : A19E276, 9-42 25 ppb
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:06 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:10
Operator : MJB
Sample : 9H23034-CALE
Misc : A19E154, 9-42 50 ppb
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:18 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

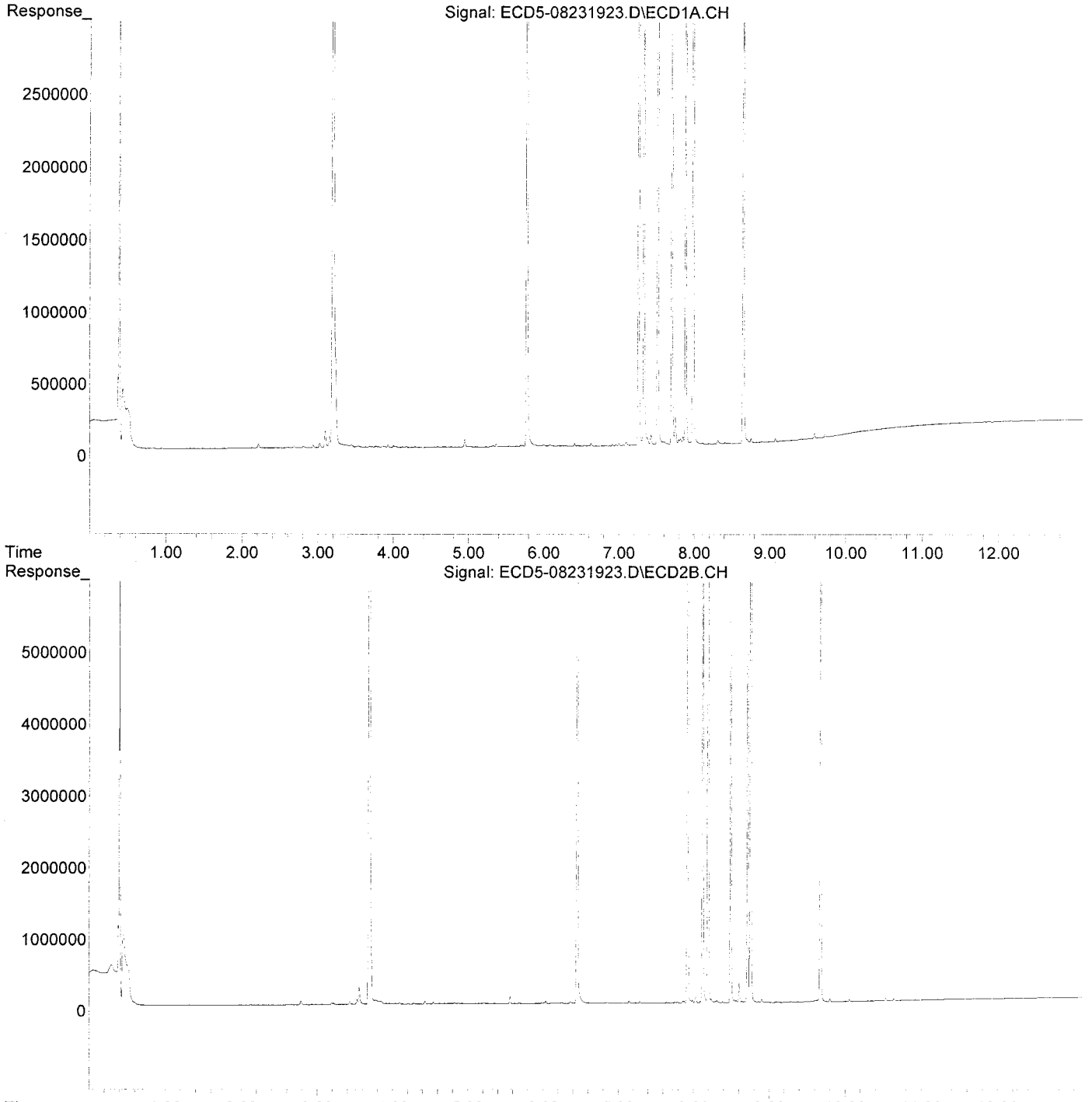
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1) S	TCMX (S)	5.367f	5.981	19019	8441	0.115	0.029	#
22) S	DCBP (S)	9.591	10.538	35203	39503	0.249	0.220	
	Target Compounds							
2)	a-BHC	5.949	0.000	5252	0	0.023	N.D.	#
3)	g-BHC	6.196f	6.951f	4084	3735	0.020	0.010	#
4)	b-BHC	0.000	6.951f	0	3735	N.D.	0.024	#
5)	Heptachlor	6.632	7.289	17900	26152	0.099	0.085	
6)	d-BHC	6.450	7.232	4458	7173	0.023	0.020	
7)	Aldrin	0.000	7.520f	0	4998	N.D.	0.015	#
8)	Heptachlo...	7.333	7.989	6510588	39220	35.349	0.130	#
9)	trans-Chl...	7.428	8.122	71663	11006400	0.388	35.128	#
10)	cis-Chlor...	7.516	8.236	9581794	53379	52.627	0.183	#
11)	Endosulfa...	7.604	8.299	22096	24918	0.130	0.091	
12)	4,4'-DDE	7.604f	8.314f	22096	29928	0.117	0.096	
13)	Dieldrin	7.798	8.495	33203	9924934	0.173	32.632	#
14)	Endrin	7.985f	8.718	10616019	8810591	72.204	39.015	#
15)	4,4'-DDD	7.985	8.758	10616019	17721229	67.557	69.166	
16)	Endosulfa...	0.000	8.862	0	12791	N.D.	0.055	#
17)	4,4'-DDT	0.000	0.000	0	0	N.D.	N.D.	
18)	Endrin Al...	8.409	9.099	5626	7468	BelowCal	BelowCal	
19)	Endosulfa...	0.000	9.289	0	9409	N.D.	0.038	#
20)	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)	Endrin Ke...	8.898	9.679	5162	9100959	0.031	35.369	#
23)	Hexachlor...	3.198	3.688	8761747	18635615	47.947	49.572	
24)	Hexachlor...	5.774	6.454	8911624	16094159	50.550	51.241	
25)	Oxychlordane	7.261	7.920	8382873	14172543	50.948	51.743	
26)	2,4'-DDE	7.333	8.122	6510588	11006400	50.760	51.883	
27)	trans-Non...	7.516	8.194	9581794	15807712	53.197	52.407	
28)	2,4'-DDD	7.705	8.495	5920095	9924934	51.874	52.551	
29)	2,4'-DDT	7.888	8.718	5687323	8810591	51.850	49.404	
30)	cis-Nonac...	7.985	8.758	10616019	17721229	51.133	52.828	
31)	Mirex	8.652	9.679	6218341	9100959	49.601	48.911	
32)	Chlordane...	7.428	8.122	71663	11006400	3.640	304.174	#
33)	Chlordane...	7.516	8.236	9581794	53379	382.289	1.758	#
34)	Chlordane...	0.000	8.903	0	43859	N.D.	4.892	#
35)	Chlordane...	3.445	3.433	16729	32384	NoCal	NoCal	
36)	Toxaphene...	7.516	8.495f	9581794	9924934	10698.176	3781.996	#
37)	Toxaphene...	7.798	0.000	33203	0	20.560	N.D.	#
38)	Toxaphene...	0.000	8.862	0	12791	N.D.	2.524	#
39)	Toxaphene...	8.314f	8.903	24262	43859	7.488	5.253	
40)	Toxaphene...	8.605f	9.099	1073	7468	0.448	1.603	#
41)	Toxaphene...	8.652	0.000	6218341	0	1964.980	N.D.	#
42)	Toxaphene...	3.445	3.433	16729	32384	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:10
Operator : MJB
Sample : 9H23034-CALE
Misc : A19E154, 9-42 50 ppb
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:18 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:27
Operator : MJB
Sample : 9H23034-CALF
Misc : A19E155, 9-42 100 ppb
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

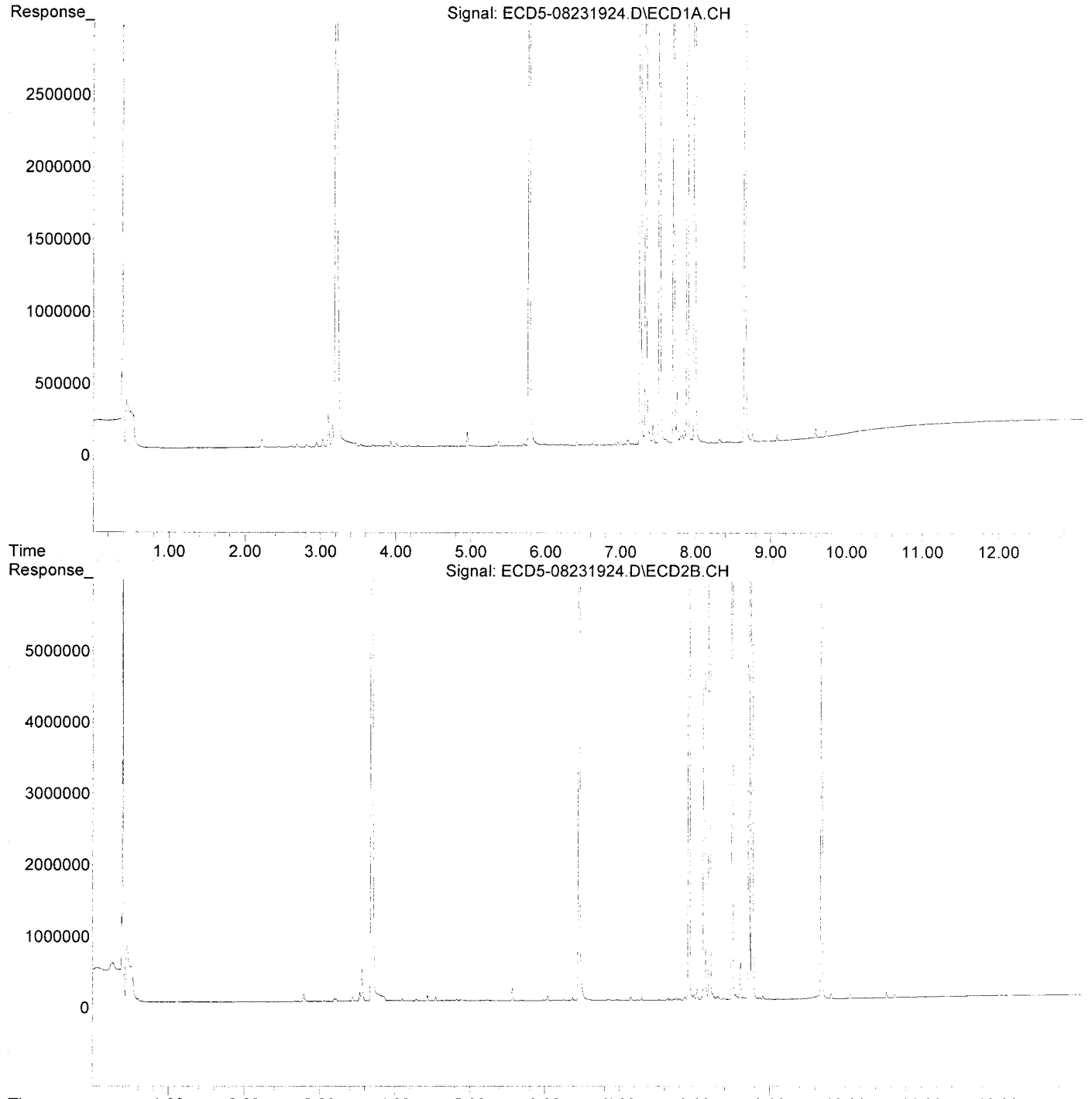
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.368f	5.981	33988	9402	0.205	0.032	#
22)	S	DCBP (S)	9.592	10.540	62236	73549	0.441	0.409	
		Target Compounds							
2)		a-BHC	5.950	0.000	8055	0	0.035	N.D.	#
3)		g-BHC	6.198	6.952f	8435	9250	0.042	0.026	
4)		b-BHC	6.301	6.979	5312	6852	0.059	0.043	
5)		Heptachlor	6.634	7.290	29320	42832	0.162	0.140	
6)		d-BHC	6.451	7.234	4881	8440	0.025	0.024	
7)		Aldrin	0.000	7.521f	0	8525	N.D.	0.026	#
8)		Heptachlo...	7.334	7.990	12769067	71027	69.330	0.236	#
9)		trans-Chl...	7.428	8.123	131019	22164400	0.709	70.739	#
10)		cis-Chlor...	7.516	8.237	18351251	88947	100.792	0.305	#
11)		Endosulfa...	7.604	8.299	36455	42308	0.214	0.154	
12)		4,4'-DDE	7.604f	8.315f	36455	43813	0.193	0.141	
13)		Dieldrin	7.798	8.496	56666	20118925	0.295	66.148	#
14)		Endrin	7.986f	8.721	20932641	18998968	142.373	84.131	#
15)		4,4'-DDD	7.986	8.760	20932641	36072644	133.210	140.791	
16)		Endosulfa...	8.115	8.863	14279	23343	0.099	0.101	
17)		4,4'-DDT	8.202	8.985	6473	9074	0.054	0.015	#
18)		Endrin Al...	8.415	9.101	7567	8073	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.290	0	9186	N.D.	0.037	#
20)		Methoxychlor	0.000	0.000	0	0	N.D.	N.D.	
21)		Endrin Ke...	8.898	9.680	6812	19363200	0.041	75.251	#
23)		Hexachlor...	3.199	3.690	17952134	39298885	98.239	104.537	
24)		Hexachlor...	5.776	6.455	17670025	32766708	100.231	104.324	
25)		Oxychlordane	7.261	7.922	16359215	29732149	99.425	108.550	
26)		2,4'-DDE	7.334	8.123	12769067	22164400	99.555	104.481	
27)		trans-Non...	7.516	8.195	18351251	31975271	102.232	106.006	
28)		2,4'-DDD	7.705	8.496	11587554	20118925	101.534	106.526	
29)		2,4'-DDT	7.888	8.721	11771354	18998968	107.317	106.533	
30)		cis-Nonac...	7.986	8.760	20932641	36072644	100.824	107.535	
31)		Mirex	8.653	9.680	11960753	19363200	95.406	104.062	
32)		Chlordane...	7.428	8.123	131019	22164400	6.654	612.537	#
33)		Chlordane...	7.516	8.237	18351251	88947	732.167	2.929	#
34)		Chlordane...	0.000	8.905	0	44814	N.D.	4.998	#
35)		Chlordane...	3.443	3.434	27193	63535	NoCal	NoCal	
36)		Toxaphene...	7.516	8.496f	18351251	20118925	20489.369	7666.519	#
37)		Toxaphene...	7.798	0.000	56666	0	35.089	N.D.	#
38)		Toxaphene...	8.115	8.863	14279	23343	4.240	4.606	
39)		Toxaphene...	8.316f	8.905	25592	44814	7.898	5.367	
40)		Toxaphene...	8.604f	9.101	1951	8073	0.814	1.732	#
41)		Toxaphene...	8.653	0.000	11960753	0	3779.567	N.D.	#
42)		Toxaphene...	3.443	3.434	27193	63535	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:27
Operator : MJB
Sample : 9H23034-CALF
Misc : A19E155, 9-42 100 ppb
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:45
Operator : MJB
Sample : 9H23034-CALG
Misc : A19E271, 9-42 200 ppb
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:40 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

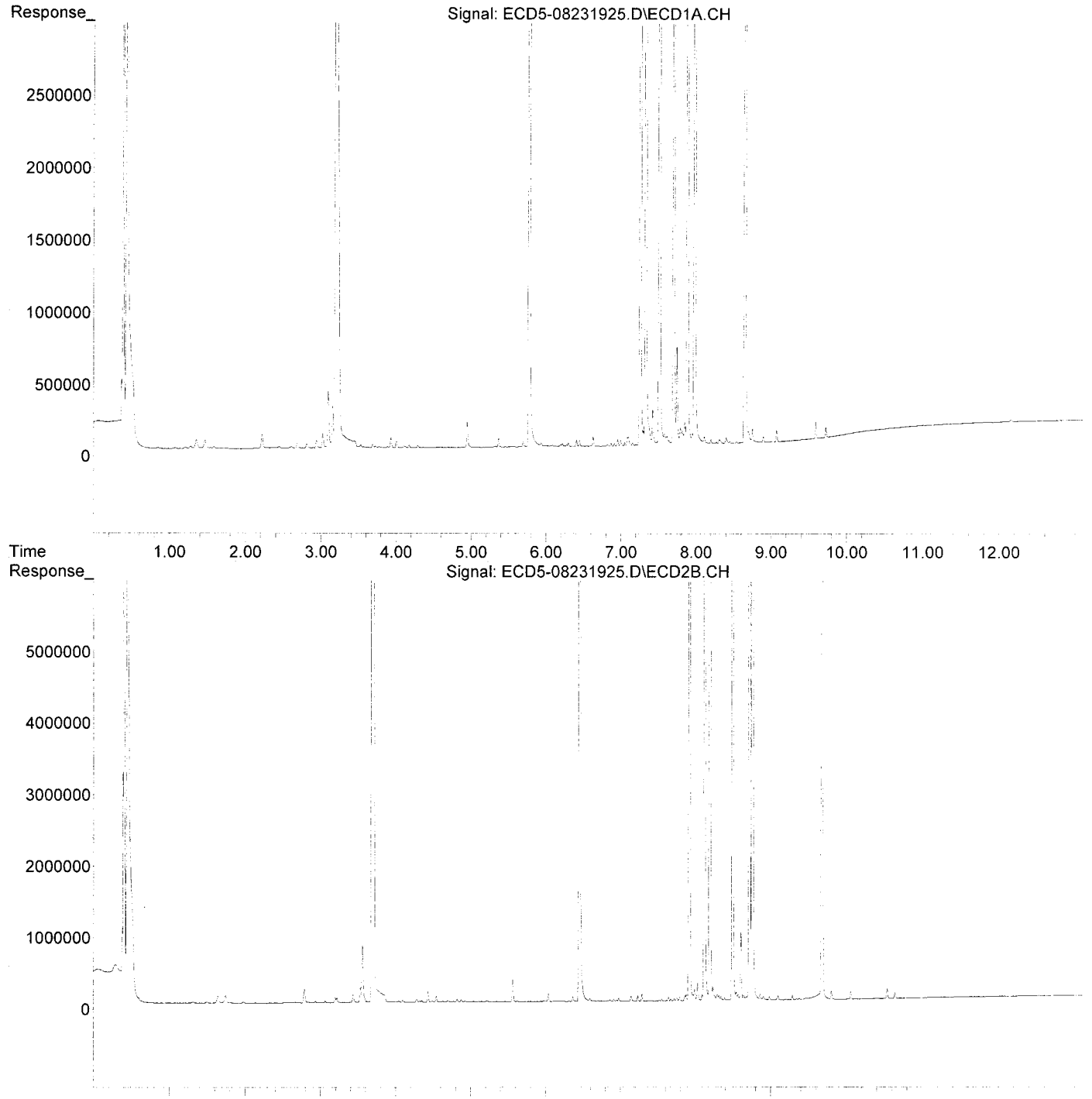
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.367f	5.980	60549	10992	0.365	0.037	#
22)	S	DCBP (S)	9.590	10.538	118766	140925	0.842	0.784	
		Target Compounds							
2)		a-BHC	5.933	6.593	27118	40902	0.118	0.100	
3)		g-BHC	6.218	6.912	21255	30993	0.105	0.087	
4)		b-BHC	6.299	6.977	25058	44238	0.277	0.280	
5)		Heptachlor	6.630	7.287	63252	104459	0.349	0.341	
6)		d-BHC	6.448	7.231	43545	78794	0.221	0.223	
7)		Aldrin	6.870	7.552	17012	29944	0.086	0.091	
8)		Heptachlo...	7.331	7.988	24819199	162906	134.756	0.541	#
9)		trans-Chl...	7.425	8.122	250239	44504592	1.353	142.039	#
10)		cis-Chlor...	7.514	8.235	35027918	188111	192.386	0.646	#
11)		Endosulfa...	7.581f	8.289	74592	84898	0.438	0.309	
12)		4,4'-DDE	7.581	8.341	74592	59877	0.396	0.193	#
13)		Dieldrin	7.794	8.494	114089	39839303	0.594	130.986	#
14)		Endrin	7.984f	8.719	40046185	39999231	272.373	177.123	
15)		4,4'-DDD	7.984	8.759	40046185	72455823	254.843	282.794	
16)		Endosulfa...	8.113	8.861	50946	84198	0.355	0.365	
17)		4,4'-DDT	8.201	8.983	28640	48189	0.240	0.243	
18)		Endrin Al...	8.404	9.098	39025	57504	BelowCal	BelowCal	
19)		Endosulfa...	0.000	9.289	0	61418	N.D.	0.247	#
20)		Methoxychlor	8.541	9.464	9687	26335	0.165	0.141	
21)		Endrin Ke...	8.898	9.679	37586	38425530	0.225	149.332	#
23)		Hexachlor...	3.199	3.689	34166533	75988565	186.969	202.134	
24)		Hexachlor...	5.774	6.454	34073459	66261966	193.277	210.967	
25)		Oxychlordane	7.258	7.920	32032634	58736982	194.683	214.445	
26)		2,4'-DDE	7.331	8.122	24819199	44504592	193.505	209.791	
27)		trans-Non...	7.514	8.194	35027918	63083636	195.632	209.138	
28)		2,4'-DDD	7.703	8.494	21916962	39839303	192.043	210.942	
29)		2,4'-DDT	7.887	8.719	23024956	39999231	209.914	224.287	
30)		cis-Nonac...	7.984	8.759	40046185	72455823	192.886	215.996	
31)		Mirex	8.652	9.679	23284997	38425530	185.735	206.507	
32)		Chlordane...	7.425	8.122	250239	44504592	12.709	1229.933	#
33)		Chlordane...	7.514	8.235	35027918	188111	1397.523	6.195	#
34)		Chlordane...	0.000	8.902	0	52051	N.D.	5.805	#
35)		Chlordane...	3.438	3.433	48985	106773	NoCal	NoCal	
36)		Toxaphene...	7.514	8.494f	35027918	39839303	39109.048	15181.168	#
37)		Toxaphene...	7.794	0.000	114089	0	70.646	N.D.	#
38)		Toxaphene...	8.113	8.861	50946	84198	15.129	16.613	
39)		Toxaphene...	8.313f	8.902	28693	52051	8.856	6.234	
40)		Toxaphene...	8.602f	9.098	3169	57504	1.322	12.339	#
41)		Toxaphene...	8.652	9.464	23284997	26335	7357.999	5.544	#
42)		Toxaphene...	3.438	3.433	48985	106773	NoCal	NoCal	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:45
Operator : MJB
Sample : 9H23034-CALG
Misc : A19E271, 9-42 200 ppb
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:03:40 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231928.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:36
Operator : MJB
Sample : 9H23034-CALH
Misc : A19F232, CHLOR 50 ppb
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 4/26/19

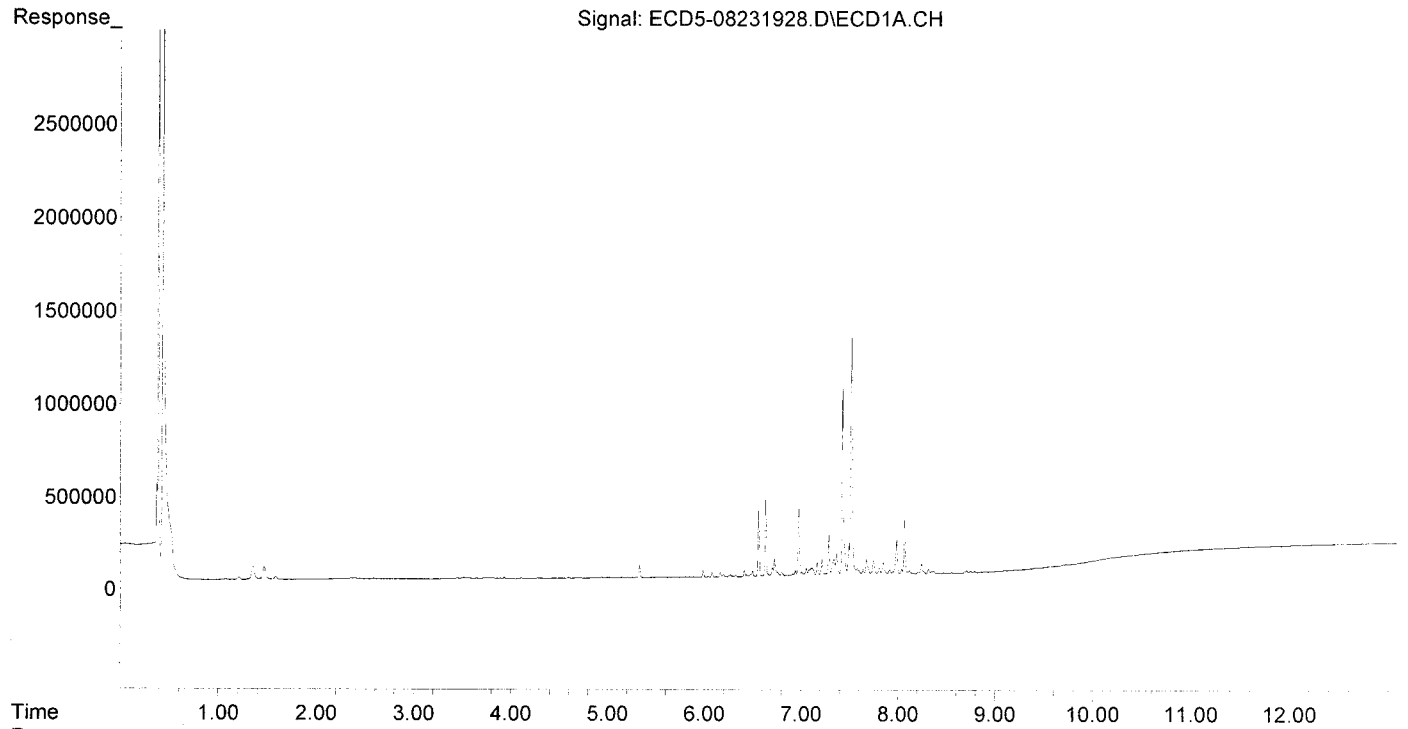
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	0.000	0	0	N.D.	N.D.	
22)	S	DCBP (S)	9.606	0.000	5901	0	0.042	N.D.	#
		Target Compounds							
2)		a-BHC	0.000	6.622f	0	41997	N.D.	0.102	#
3)		g-BHC	6.194f	6.924	13212	19652	0.065	0.055	
4)		b-BHC	6.323f	7.016f	10976	62438	0.121	0.395	#
5)		Heptachlor	6.632	7.288	412192	714454	2.274	2.335	
6)		d-BHC	6.412f	0.000	34416	0	0.175	N.D.	#
7)		Aldrin	6.877	7.558	6150	10093	0.031	0.031	
8)		Heptachlo...	7.337	8.010	84467	51183	0.459	0.170	#
9)		trans-Chl...	7.429	8.131	1009143	1754707	5.458	5.600	
10)		cis-Chlor...	7.521	8.237	1286655	1472400	7.067	5.056	
11)		Endosulfa...	7.640	8.308	29794	24027	0.175	0.087	#
12)		4,4'-DDE	7.579	8.333	33953	45018	0.180	0.145	
13)		Dieldrin	7.807	8.488	35520	119533	0.185	0.393	#
14)		Endrin	7.986f	8.714	182097	37218	1.239	0.165	#
15)		4,4'-DDD	7.986	8.759	182097	301826	1.159	1.178	
16)		Endosulfa...	8.118	8.873	19535	32870	0.136	0.143	
17)		4,4'-DDT	0.000	8.994	0	11155	N.D.	0.027	#
18)		Endrin Al...	8.368f	9.128f	14946	80647	BelowCal	BelowCal	
19)		Endosulfa...	8.708	9.316f	13079	6249	0.084	0.025	#
20)		Methoxychlor	8.553	0.000	3815	0	0.065	N.D.	#
21)		Endrin Ke...	8.899	9.686	2603	18155	0.016	0.071	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
25)		Oxychlordane	7.256	7.934	11579	24468	0.070	0.089	
26)		2,4'-DDE	7.337	8.131	84467	1754707	0.659	8.272	#
27)		trans-Non...	7.521	8.194	1286655	1274306	6.866	4.225	
28)		2,4'-DDD	7.675f	8.488	83034	119533	0.728	0.633	
29)		2,4'-DDT	7.914f	8.714	22312	37218	0.203	0.209	
30)		cis-Nonac...	7.986	8.759	182097	301826	0.877	0.900	
31)		Mirex	0.000	9.686	0	18155	N.D.	0.098	#
32)		Chlordane...	7.429	8.131	1009143	1754707	51.253	48.493	
33)		Chlordane...	7.521	8.237	1286655	1472400	51.334	48.492	
34)		Chlordane...	8.068	8.897	288087	439020	49.832	48.966	
35)		Chlordane...	3.446	0.000	5365	0	NoCal	N.D.	
36)		Toxaphene...	7.521	8.488f	1286655	119533	1436.564	45.549	#
37)		Toxaphene...	7.807	8.814	35520	51904	21.995	15.771	
38)		Toxaphene...	8.118	8.851	19535	35575	5.801	7.019	
39)		Toxaphene...	8.348	8.897	14389	439020	4.441	52.578	#
40)		Toxaphene...	8.553f	9.128f	3815	80647	1.591	17.305	#
41)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
42)		Toxaphene...	3.446	0.000	5365	0	NoCal	N.D.	

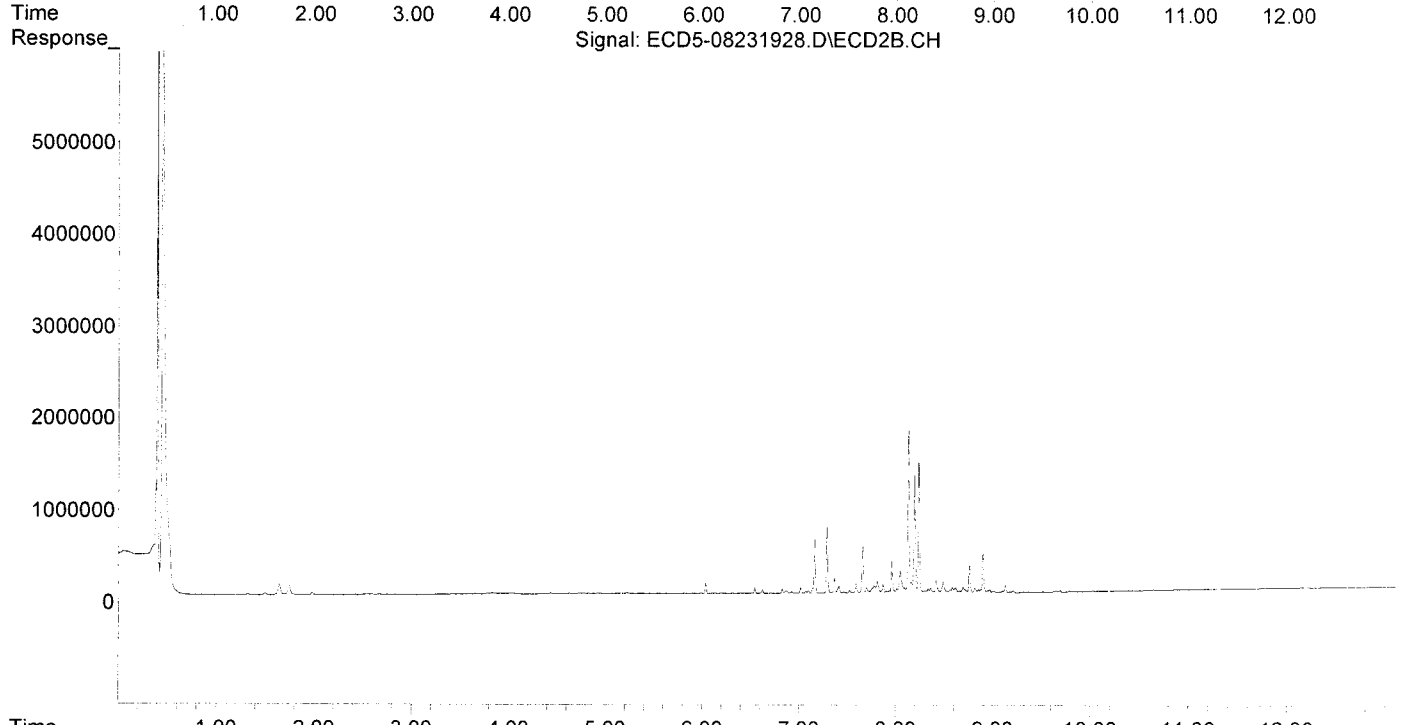
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231928.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:36
Operator : MJB
Sample : 9H23034-CALH
Misc : A19F232, CHLOR 50 ppb
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:54
Operator : MJB
Sample : 9H23034-CALI
Misc : A19F233, CHLOR 100 ppb
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

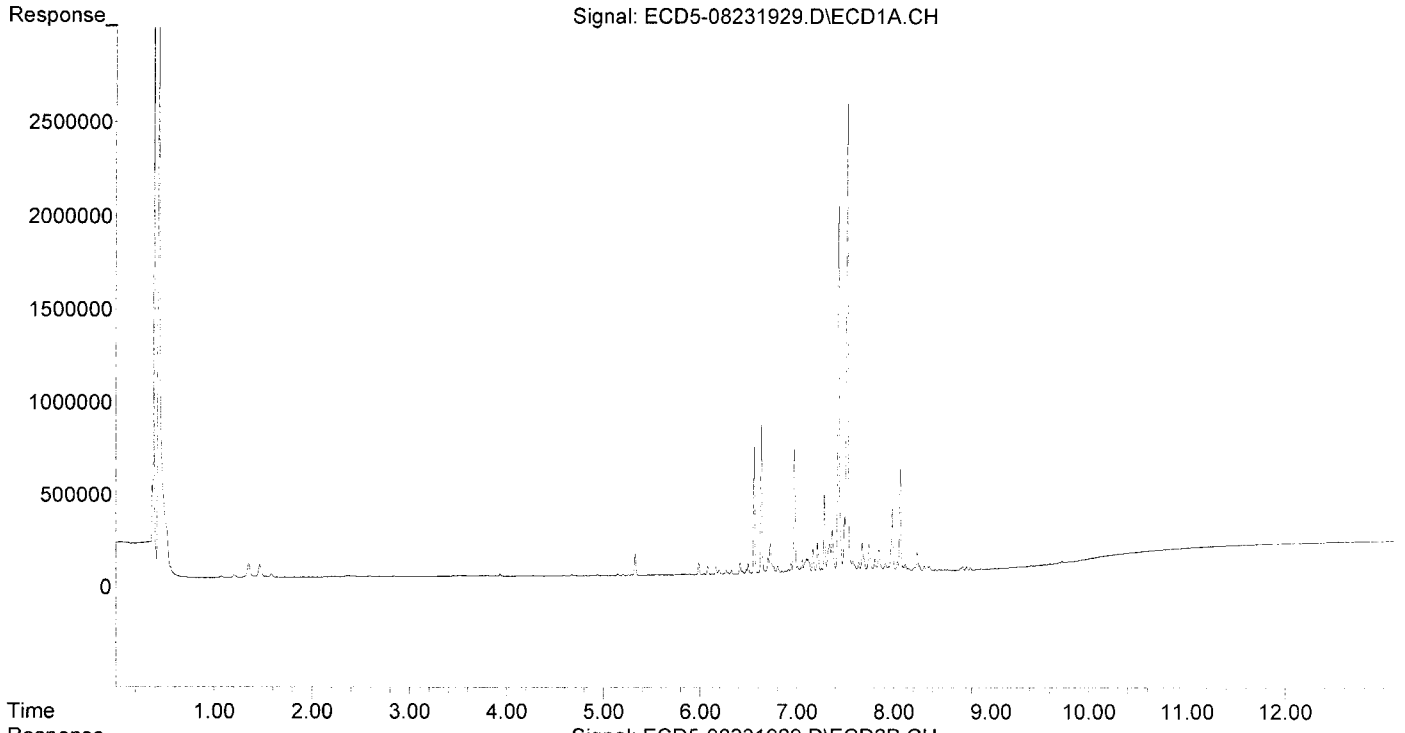
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	5943	N.D.	0.020	#
22)	S	DCBP (S)	9.606	0.000	7472	0	0.053	N.D.	#
		Target Compounds							
2)		a-BHC	0.000	6.622f	0	77932	N.D.	0.190	#
3)		g-BHC	6.194f	6.923	23514	36662	0.117	0.103	
4)		b-BHC	6.323f	7.016f	21053	115009	0.233	0.727	#
5)		Heptachlor	6.632	7.288	802906	1372147	4.429	4.484	
6)		d-BHC	6.412f	0.000	63497	0	0.323	N.D.	#
7)		Aldrin	6.877	7.558	12864	20481	0.065	0.062	
8)		Heptachlo...	7.338	8.010	155514	93915	0.844	0.312	#
9)		trans-Chl...	7.429	8.130	1978897	3378388	10.703	10.782	
10)		cis-Chlor...	7.521	8.238	2519520	2905941	13.838	9.978	
11)		Endosulfa...	7.641f	8.309f	56850	48968	0.334	0.178	#
12)		4,4'-DDE	7.579	8.334	63125	84256	0.335	0.271	
13)		Dieldrin	7.807	8.488	69910	230931	0.364	0.759	#
14)		Endrin	7.986f	8.713	344068	89428	2.340	0.396	#
15)		4,4'-DDD	7.986	8.760	344068	593441	2.190	2.316	
16)		Endosulfa...	8.118	8.873	39271	74727	0.273	0.324	
17)		4,4'-DDT	0.000	8.995	0	22043	N.D.	0.090	#
18)		Endrin Al...	8.428f	9.128f	7592	153472	BelowCal	BelowCal	
19)		Endosulfa...	8.709	9.317f	21141	11695	0.136	0.047	#
20)		Methoxychlor	8.553	0.000	6889	0	0.118	N.D.	#
21)		Endrin Ke...	8.897	9.687	3240	29883	0.019	0.116	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	6.430f	0	7921	N.D.	0.025	#
25)		Oxychlordane	7.255	7.934	24127	50634	0.147	0.185	
26)		2,4'-DDE	7.338	8.130	155514	3378388	1.212	15.925	#
27)		trans-Non...	7.521	8.195	2519520	2542319	13.749	8.428	
28)		2,4'-DDD	7.676f	8.488	159771	230931	1.400	1.223	
29)		2,4'-DDT	7.914f	8.713	44472	89428	0.405	0.501	
30)		cis-Nonac...	7.986	8.760	344068	593441	1.657	1.769	
31)		Mirex	0.000	9.687	0	29883	N.D.	0.161	#
32)		Chlordane...	7.429	8.130	1978897	3378388	100.505	93.365	
33)		Chlordane...	7.521	8.238	2519520	2905941	100.522	95.703	
34)		Chlordane...	8.068	8.898	548196	874465	94.825	97.533	
35)		Chlordane...	3.446	0.000	4938	0	NoCal	N.D.	
36)		Toxaphene...	7.521	8.488f	2519520	230931	2813.072	87.999	#
37)		Toxaphene...	7.807	8.815	69910	108014	43.289	32.821	
38)		Toxaphene...	8.118	8.851	39271	84269	11.662	16.627	#
39)		Toxaphene...	8.349	8.898	25383	874465	7.834	104.728	#
40)		Toxaphene...	8.553f	9.068f	6889	13931	2.874	2.989	
41)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
42)		Toxaphene...	3.446	0.000	4938	0	NoCal	N.D.	

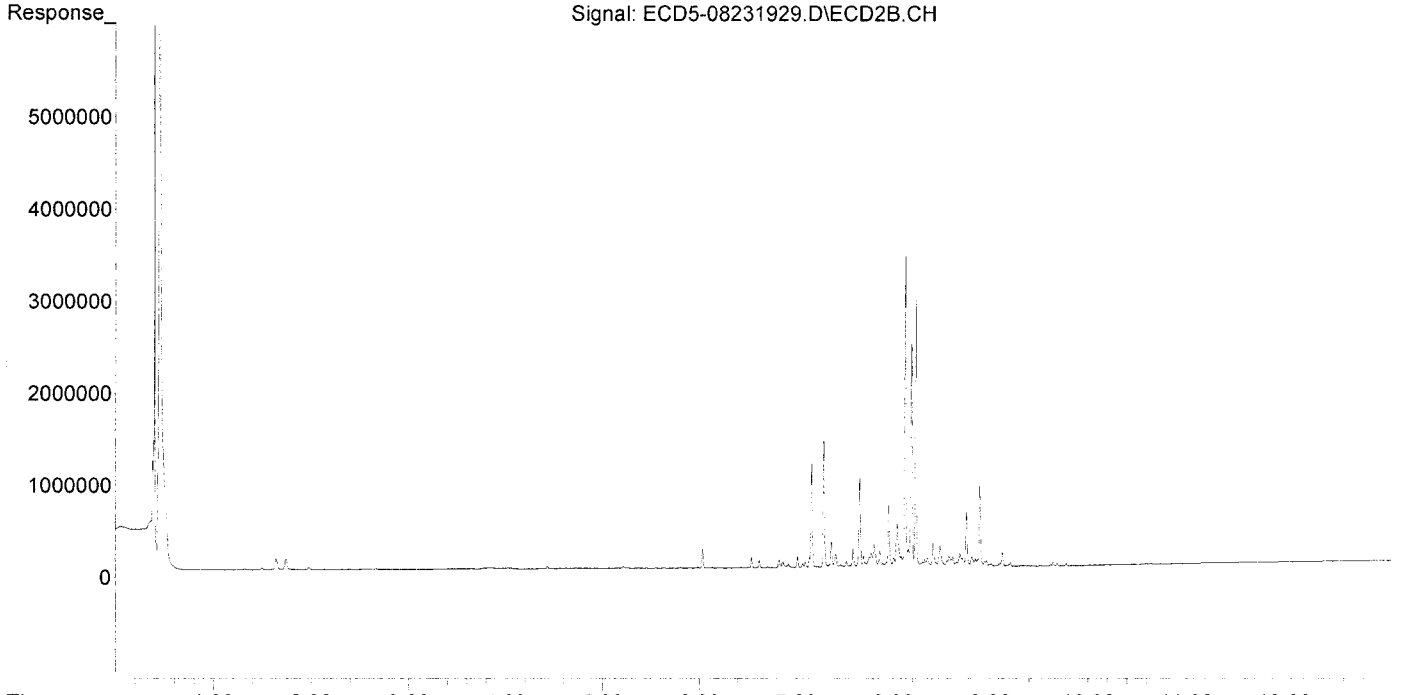
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:54
Operator : MJB
Sample : 9H23034-CALI
Misc : A19F233, CHLOR 100 ppb
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:11
Operator : MJB
Sample : 9H23034-CALJ
Misc : A19F234, CHLOR 200 ppb
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

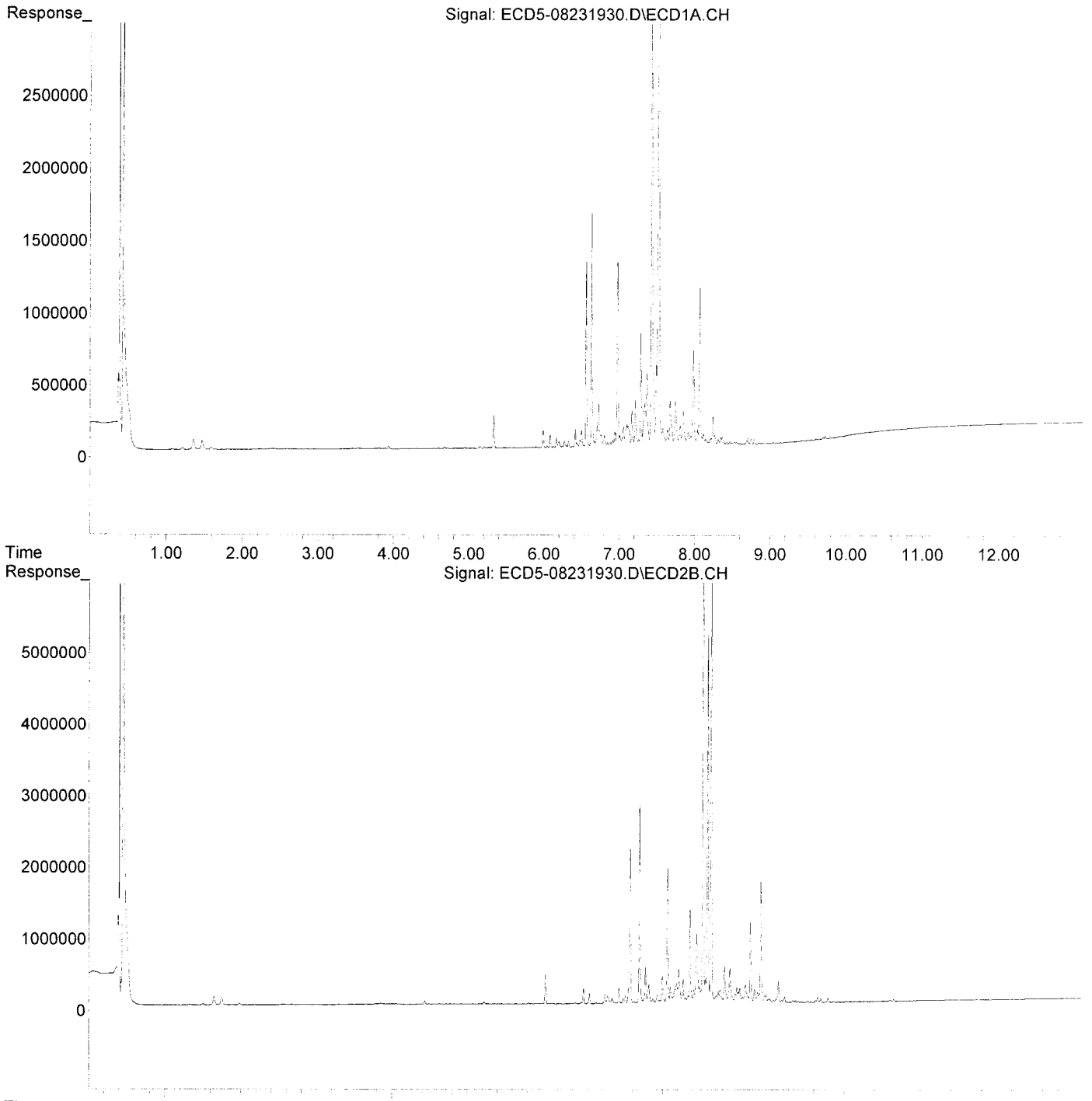
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	0.000	0	0	N.D.	N.D.	
22)	S	DCBP (S)	9.605	0.000	9631	0	0.068	N.D.	#
		Target Compounds							
2)		a-BHC	0.000	6.623f	0	141009	N.D.	0.344	#
3)		g-BHC	6.197f	6.925	44236	70355	0.219	0.197	
4)		b-BHC	6.269f	0.000	45994	0	0.509	N.D.	#
5)		Heptachlor	6.633	7.290	1604459	2790294	8.850	9.119	
6)		d-BHC	6.414f	7.222	125171	21783	0.636	0.062	#
7)		Aldrin	6.878	7.559	27966	42088	0.142	0.128	
8)		Heptachlo...	7.339	8.011	296306	184421	1.609	0.613	#
9)		trans-Chl...	7.429	8.131	3849299	6751197	20.819	21.547	
10)		cis-Chlor...	7.522	8.239	4906320	5883615	26.947	20.201	
11)		Endosulfa...	7.641f	8.311f	111658	101195	0.656	0.368	#
12)		4,4'-DDE	7.579	8.334	119469	162236	0.634	0.522	
13)		Dieldrin	7.808	8.488	135995	479651	0.708	1.577	#
14)		Endrin	7.986f	8.714	662867	142098	4.508	0.629	#
15)		4,4'-DDD	7.986	8.759	662867	1113368	4.218	4.345	
16)		Endosulfa...	8.119	8.852	78177	142714	0.544	0.619	
17)		4,4'-DDT	0.000	8.995	0	47222	N.D.	0.237	#
18)		Endrin Al...	8.429f	9.129f	17160	296262	BelowCal	0.772	
19)		Endosulfa...	8.709	9.317f	39967	28714	0.258	0.115	#
20)		Methoxychlor	8.528	9.426f	15895	10981	0.271	BelowCal	#
21)		Endrin Ke...	8.895	9.688	5405	57534	0.032	0.224	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.768	6.432f	3592	14719	0.020	0.047	#
25)		Oxychlordane	7.256	7.935	46857	97946	0.285	0.358	
26)		2,4'-DDE	7.339	8.131	296306	6751197	2.310	31.825	#
27)		trans-Non...	7.522	8.196	4906320	5159253	27.077	17.104	
28)		2,4'-DDD	7.676f	8.488	310109	479651	2.717	2.540	
29)		2,4'-DDT	7.915f	8.714	90205	142098	0.822	0.797	
30)		cis-Nonac...	7.986	8.759	662867	1113368	3.193	3.319	
31)		Mirex	8.690f	9.688	25315	57534	0.202	0.309	#
32)		Chlordane...	7.429	8.131	3849299	6751197	195.499	186.577	
33)		Chlordane...	7.522	8.239	4906320	5883615	195.749	193.769	
34)		Chlordane...	8.069	8.898	1101677	1731727	190.565	193.146	
35)		Chlordane...	3.448	0.000	4503	0	NoCal	N.D.	
36)		Toxaphene...	7.522f	8.488f	4906320	479651	5477.960	182.776	#
37)		Toxaphene...	7.808	8.815	135995	186597	84.211	56.699	
38)		Toxaphene...	8.119	8.852	78177	142714	23.215	28.158	
39)		Toxaphene...	8.349	8.898	48611	1731727	15.003	207.397	#
40)		Toxaphene...	8.553f	9.069f	15795	32796	6.589	7.037	
41)		Toxaphene...	0.000	0.000	0	0	N.D.	N.D.	
42)		Toxaphene...	3.448	0.000	4503	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:11
Operator : MJB
Sample : 9H23034-CALJ
Misc : A19F234, CHLOR 200 ppb
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:28
Operator : MJB
Sample : 9H23034-CALK
Misc : A19F235, CHLOR 500 ppb
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:52 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 6/26/19

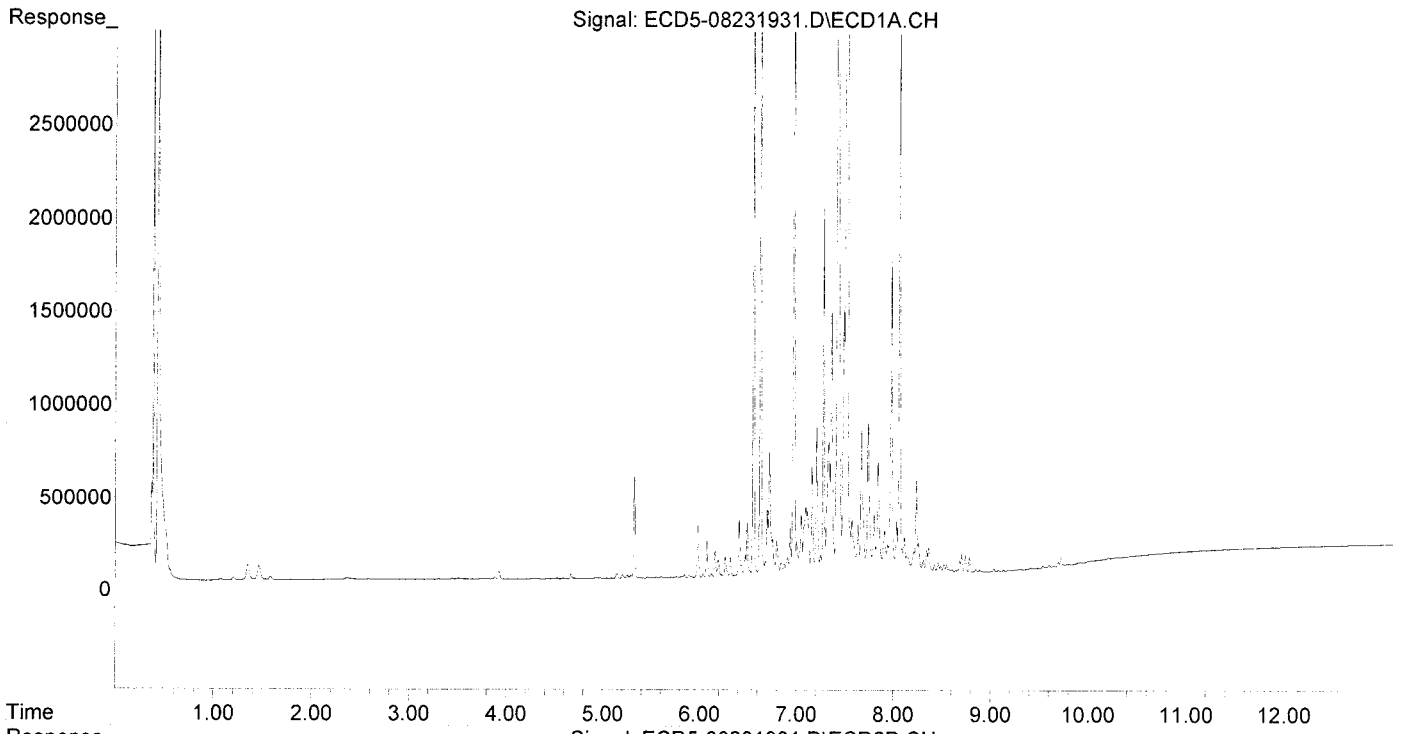
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.982	0	9372	N.D.	0.032	#
22)	S	DCBP (S)	9.605	10.512f	13871	6664	0.098	0.037	#
		Target Compounds							
2)		a-BHC	0.000	6.621f	0	314411	N.D.	0.766	#
3)		g-BHC	6.194f	6.923	92958	161395	0.461	0.452	
4)		b-BHC	6.322f	7.016f	105835	520011	1.171	3.286	#
5)		Heptachlor	6.631	7.288	4107971	7192687	22.659	23.507	
6)		d-BHC	6.412f	7.219	305503	51612	1.553	0.146	#
7)		Aldrin	6.876	7.558	67201	101902	0.340	0.309	
8)		Heptachlo...	7.336	8.009	709786	434942	3.854	1.446	#
9)		trans-Chl...	7.427	8.129	9628671	17830433	52.077	56.907	
10)		cis-Chlor...	7.520	8.237	12176524	14812273	66.878	50.858	
11)		Endosulfa...	7.639	8.308	267451	260205	1.572	0.946	
12)		4,4'-DDE	7.577	8.332	288716	403680	1.531	1.299	
13)		Dieldrin	7.806	8.487	320749	1311343	1.671	4.312	#
14)		Endrin	7.984f	8.712	1680286	346653	11.428	1.535	#
15)		4,4'-DDD	7.984	8.758	1680286	2798638	10.693	10.923	
16)		Endosulfa...	8.118	8.872	194466	323054	1.354	1.401	
17)		4,4'-DDT	0.000	8.994	0	120742	N.D.	0.665	#
18)		Endrin Al...	8.427f	9.127f	45775	749534	BelowCal	3.242	
19)		Endosulfa...	8.708	9.316f	99125	76741	0.640	0.308	#
20)		Methoxychlor	8.552	9.462	44336	19918	0.757	0.061	#
21)		Endrin Ke...	8.892	9.686	12903	140715	0.077	0.547	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.767	6.430f	6475	34351	0.037	0.109	#
25)		Oxychlordane	7.283f	7.933	1963331	230983	11.932	0.843	#
26)		2,4'-DDE	7.336	8.129	709786	17830433	5.534	84.051	#
27)		trans-Non...	7.520	8.194	12176524	13173616	67.700	43.674	
28)		2,4'-DDD	7.674f	8.487	765105	1311343	6.704	6.943	
29)		2,4'-DDT	7.913f	8.712	230360	346653	2.100	1.944	
30)		cis-Nonac...	7.984	8.758	1680286	2798638	8.093	8.343	
31)		Mirex	8.645	9.686	12290	140715	0.098	0.756	#
32)		Chlordane...	7.427	8.129	9628671	17830433	489.023	492.763	
33)		Chlordane...	7.520	8.237	12176524	14812273	485.812	487.822	
34)		Chlordane...	8.067	8.896	2921278	4271709	505.313	476.441	
35)		Chlordane...	3.447	0.000	4056	0	NoCal	N.D.	
36)		Toxaphene...	7.520	8.487f	12176524	1311343	13595.220	499.701	#
37)		Toxaphene...	7.806	8.813	320749	462807	198.614	140.627	
38)		Toxaphene...	8.118	8.850	194466	348421	57.748	68.745	
39)		Toxaphene...	8.348	8.896	120098	4271709	37.065	511.592	#
40)		Toxaphene...	8.552f	9.067f	44336	90716	18.495	19.465	
41)		Toxaphene...	8.645	9.462	12290	19918	3.884	4.193	
42)		Toxaphene...	3.447	0.000	4056	0	NoCal	N.D.	

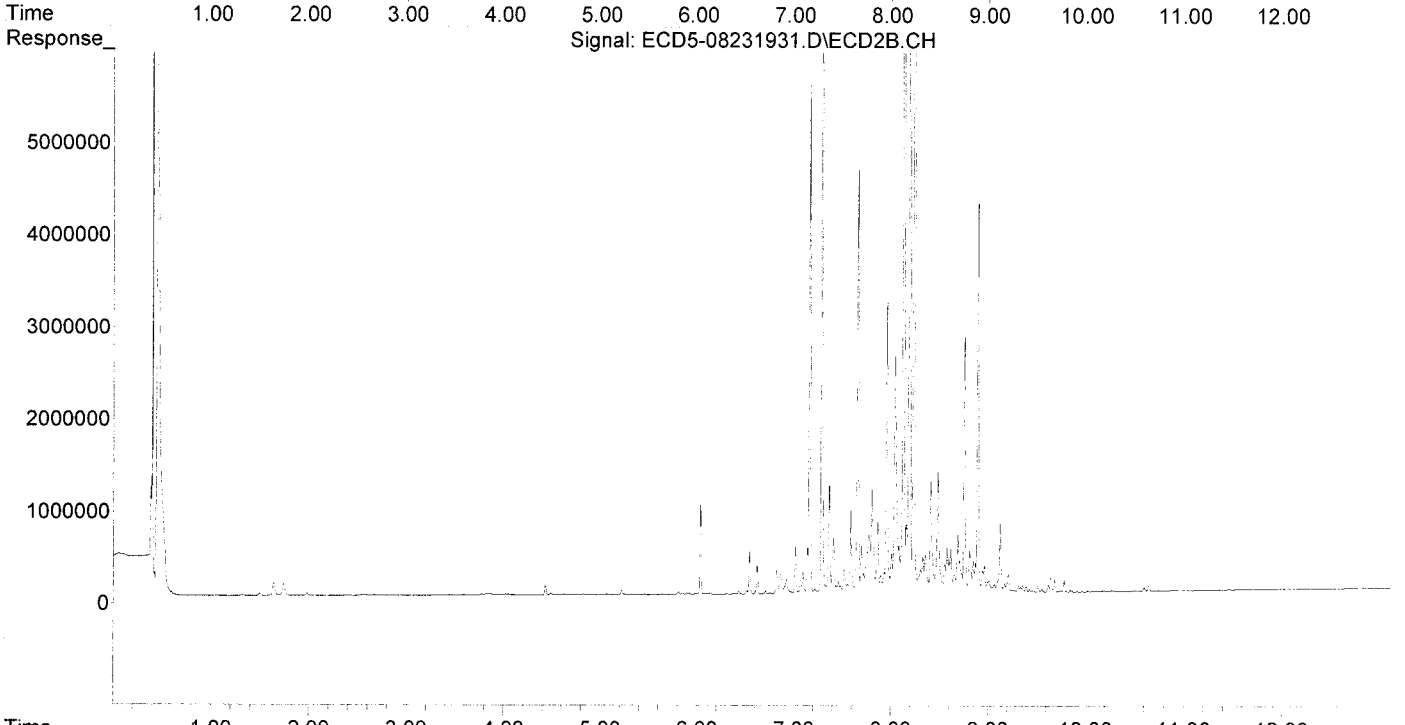
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:28
Operator : MJB
Sample : 9H23034-CALK
Misc : A19F235, CHLOR 500 ppb
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:04:52 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:45
Operator : MJB
Sample : 9H23034-CALL
Misc : A19F236, CHLOR 1000 ppb
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:04 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

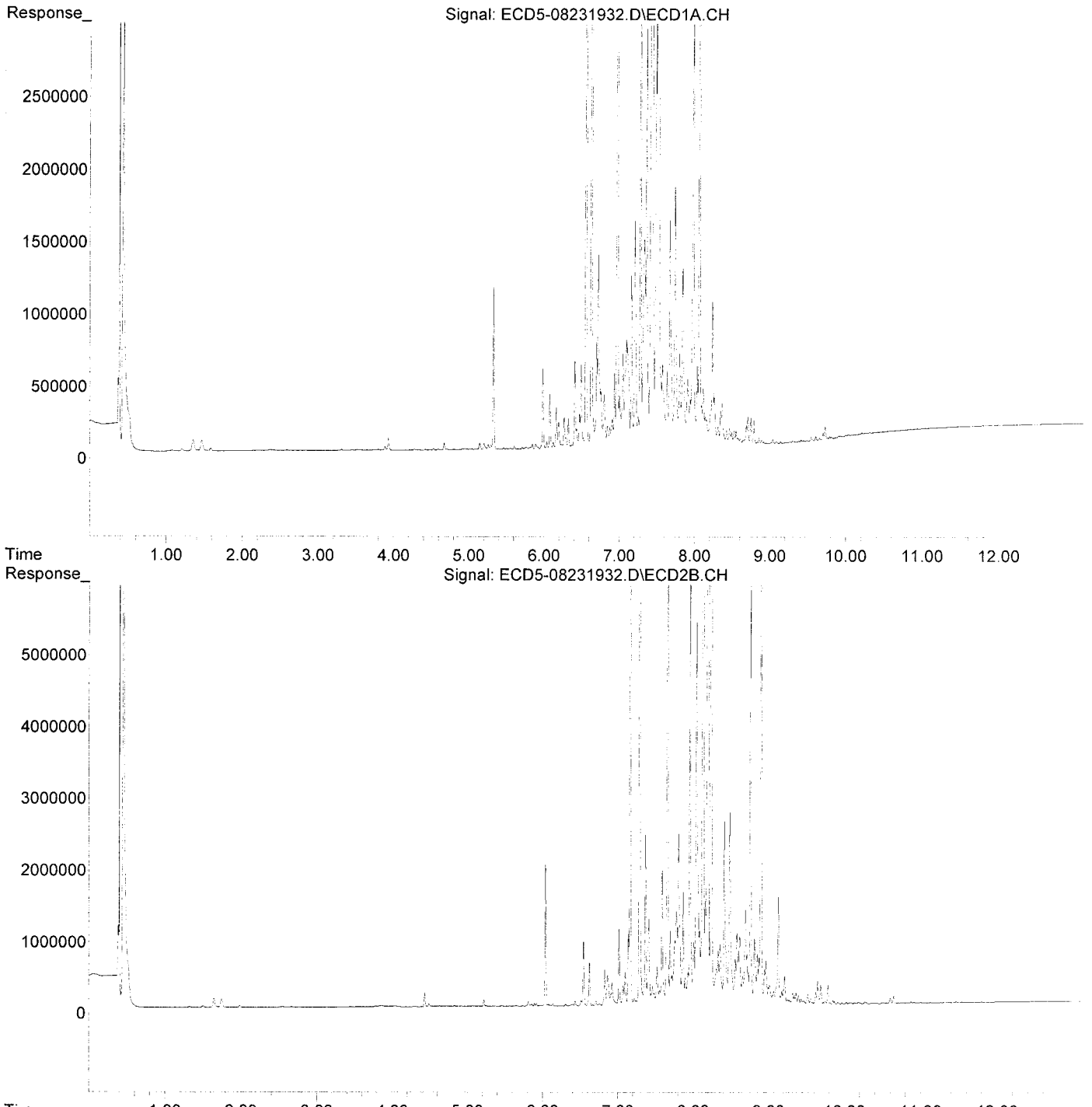
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.393	5.980	6433	11040	0.039	0.038	
22)	S	DCBP (S)	9.604	10.553	33011	8716	0.234	0.048	#
		Target Compounds							
2)		a-BHC	0.000	6.622f	0	610263	N.D.	1.487	#
3)		g-BHC	6.194f	6.923	179715	319626	0.891	0.896	
4)		b-BHC	6.322f	7.016f	206312	1070369	2.283	6.763	#
5)		Heptachlor	6.631	7.288	8491782	15019038	46.839	49.085	
6)		d-BHC	6.411f	7.241	615917	64884	3.131	0.184	#
7)		Aldrin	6.875	7.558	134371	205192	0.681	0.623	
8)		Heptachlo...	7.335	8.009	1431988	873449	7.775	2.903	#
9)		trans-Chl...	7.426	8.130	19643766	37966746	106.245	121.173	
10)		cis-Chlor...	7.519	8.237	25083239	31493677	137.766	108.134	
11)		Endosulfa...	7.638	8.309f	523226	508009	3.075	1.846	
12)		4,4'-DDE	7.576	8.332	564335	775935	2.993	2.498	
13)		Dieldrin	7.805	8.487	632206	2703774	3.293	8.890	#
14)		Endrin	7.985f	8.713	3305895	704023	22.485	3.118	#
15)		4,4'-DDD	7.985	8.758	3305895	5865563	21.038	22.893	
16)		Endosulfa...	8.118	8.872	392448	653843	2.733	2.835	
17)		4,4'-DDT	8.241f	8.994	1019486	242495	8.527	1.373	#
18)		Endrin Al...	8.427f	9.128f	96085	1500188	BelowCal	7.301	
19)		Endosulfa...	8.708	9.269	190049	57556	1.226	0.231	#
20)		Methoxychlor	8.552	9.462	93194	45695	1.591	0.381	#
21)		Endrin Ke...	8.891	9.687	25043	266287	0.150	1.035	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.767	6.430f	12323	65416	0.070	0.208	#
25)		Oxychlordane	7.252	7.933	207847	466300	1.263	1.702	
26)		2,4'-DDE	7.335	8.130	1431988	37966746	11.165	178.972	#
27)		trans-Non...	7.519	8.194	25083239	27721467	139.911	91.904	
28)		2,4'-DDD	7.673f	8.487	1536407	2703774	13.462	14.316	
29)		2,4'-DDT	7.912f	8.713	462112	704023	4.213	3.948	
30)		cis-Nonac...	7.985	8.758	3305895	5865563	15.923	17.486	
31)		Mirex	8.645	9.687	28961	266287	0.231	1.431	#
32)		Chlordane...	7.426	8.130	19643766	37966746	997.671	1049.252	
33)		Chlordane...	7.519	8.237	25083239	31493677	1000.756	1037.202	
34)		Chlordane...	8.067	8.897	5987927	9358900	1035.773	1043.835	
35)		Chlordane...	3.447	0.000	4825	0	NoCal	N.D.	
36)		Toxaphene...	7.519	8.487f	25083239	2703774	28005.706	1030.300	#
37)		Toxaphene...	7.805	8.814	632206	927954	391.474	281.965	
38)		Toxaphene...	8.118	8.850	392448	706508	116.540	139.397	
39)		Toxaphene...	8.348	8.897	233440	9358900	72.046	1120.849	#
40)		Toxaphene...	8.552f	9.067f	93194	183092	38.877	39.287	
41)		Toxaphene...	8.645	9.462	28961	45695	9.152	9.620	
42)		Toxaphene...	3.447	0.000	4825	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:45
Operator : MJB
Sample : 9H23034-CALL
Misc : A19F236, CHLOR 1000 ppb
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:04 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:02
Operator : MJB
Sample : 9H23034-CALM
Misc : A19F231, CHLOR 2000 ppb
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:14 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

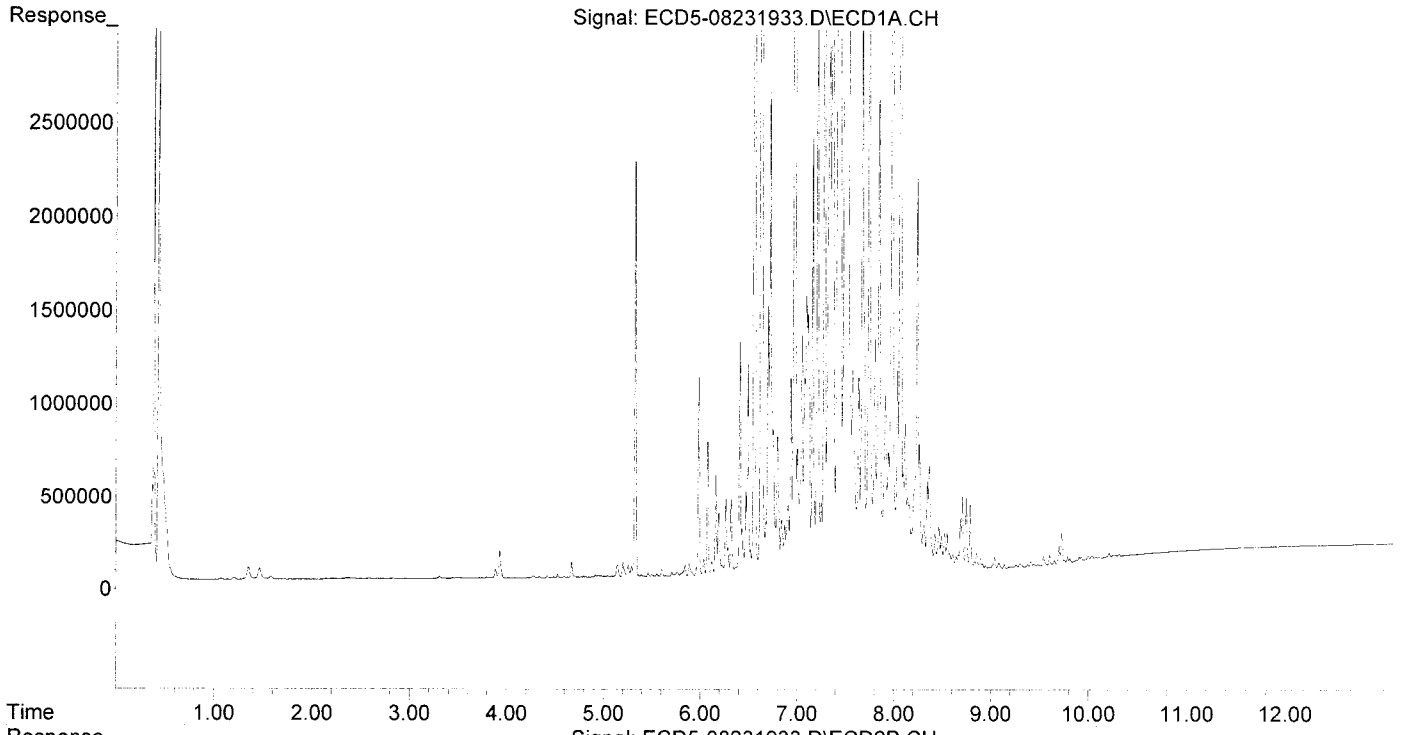
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.393	5.971	11655	15748	0.070	0.054	
22)	S	DCBP (S)	9.604	10.552	57777	17575	0.409	0.098	#
		Target Compounds							
2)		a-BHC	0.000	6.621f	0	1174704	N.D.	2.863	#
3)		g-BHC	6.193f	6.922	334417	594314	1.657	1.666	
4)		b-BHC	6.321f	7.016f	403109	2092681	4.460	13.223	#
5)		Heptachlor	6.630	7.288	16898199	31950039	93.207	104.420	
6)		d-BHC	6.411f	7.240	1241284	122584	6.311	0.348	#
7)		Aldrin	6.874	7.557	258489	381283	1.309	1.158	
8)		Heptachlo...	7.335	8.008	2829322	1755780	15.362	5.836	#
9)		trans-Chl...	7.426	8.130	40036500	81691713	216.541	260.724	
10)		cis-Chlor...	7.519	8.238	50979142	66281388	279.996	227.578	
11)		Endosulfa...	7.638	8.308	1047673	1022624	6.156	3.716	
12)		4,4'-DDE	7.576	8.332	1098754	1565142	5.828	5.038	
13)		Dieldrin	7.805	8.486	1246658	5614133	6.494	18.458	#
14)		Endrin	7.984f	8.692f	6820662	2823722	46.391	12.504	#
15)		4,4'-DDD	7.984	8.759	6820662	12014776	43.405	46.894	
16)		Endosulfa...	8.118	8.872	787524	1320218	5.484	5.725	
17)		4,4'-DDT	8.242f	8.993	2107649	483614	17.628	2.768	#
18)		Endrin Al...	8.427f	9.128f	193793	3090717	0.642	15.775	#
19)		Endosulfa...	8.709	9.268f	400484	128754	2.584	0.517	#
20)		Methoxychlor	8.552	9.462	195767	96597	3.342	1.012	#
21)		Endrin Ke...	8.892	9.686	57711	528113	0.346	2.052	#
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.766	6.430f	22503	117032	0.128	0.373	#
25)		Oxychlordane	7.252	7.932	378689	930396	2.302	3.397	#
26)		2,4'-DDE	7.335	8.130	2829322	81691713	22.059	385.087	#
27)		trans-Non...	7.519	8.194	50979142	59315099	285.157	196.645	
28)		2,4'-DDD	7.673f	8.486	3134690	5614133	27.467	29.726	
29)		2,4'-DDT	7.912f	8.692f	956476	2823722	8.720	15.833	#
30)		cis-Nonac...	7.984	8.759	6820662	12014776	32.852	35.817	
31)		Mirex	8.645	9.686	70178	528113	0.560	2.838	#
32)		Chlordane...	7.426	8.130	40036500	81691713	2033.382	2257.639	
33)		Chlordane...	7.519	8.238	50979142	66281388	2033.935	2182.889	
34)		Chlordane...	8.067	8.897	12208306	19418517	2111.754	2165.824	
35)		Chlordane...	3.449	0.000	4939	0	NoCal	N.D.	
36)		Toxaphene...	7.519	8.486f	50979142	5614133	56918.762	2139.322	#
37)		Toxaphene...	7.805	8.814	1246658	1872513	771.954	568.976	
38)		Toxaphene...	8.118	8.850	787524	1450920	233.861	286.273	
39)		Toxaphene...	8.368f	8.897	565943	19418517	174.666	2325.617	#
40)		Toxaphene...	8.552f	9.067f	195767	367185	81.667	78.789	
41)		Toxaphene...	8.645	9.462	70178	96597	22.176	20.335	
42)		Toxaphene...	3.449	0.000	4939	0	NoCal	N.D.	

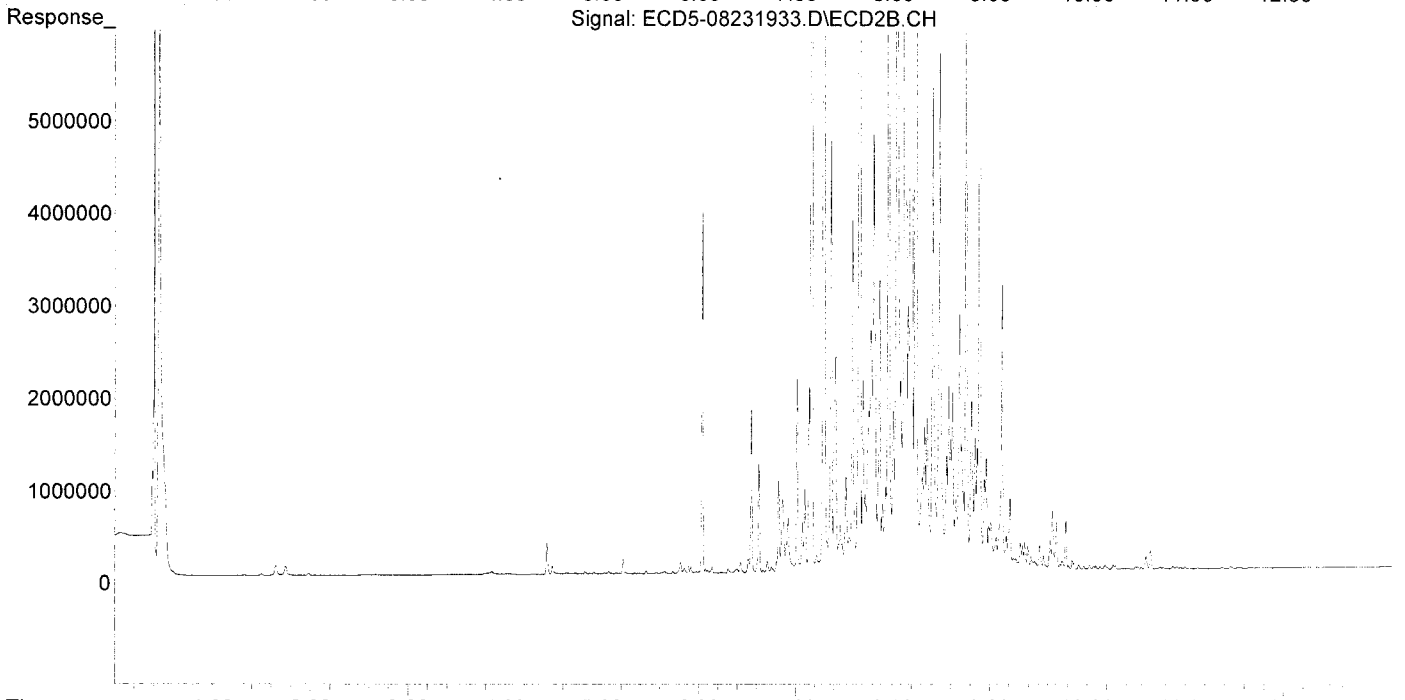
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:02
Operator : MJB
Sample : 9H23034-CALM
Misc : A19F231, CHLOR 2000 ppb
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:14 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:06:20 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

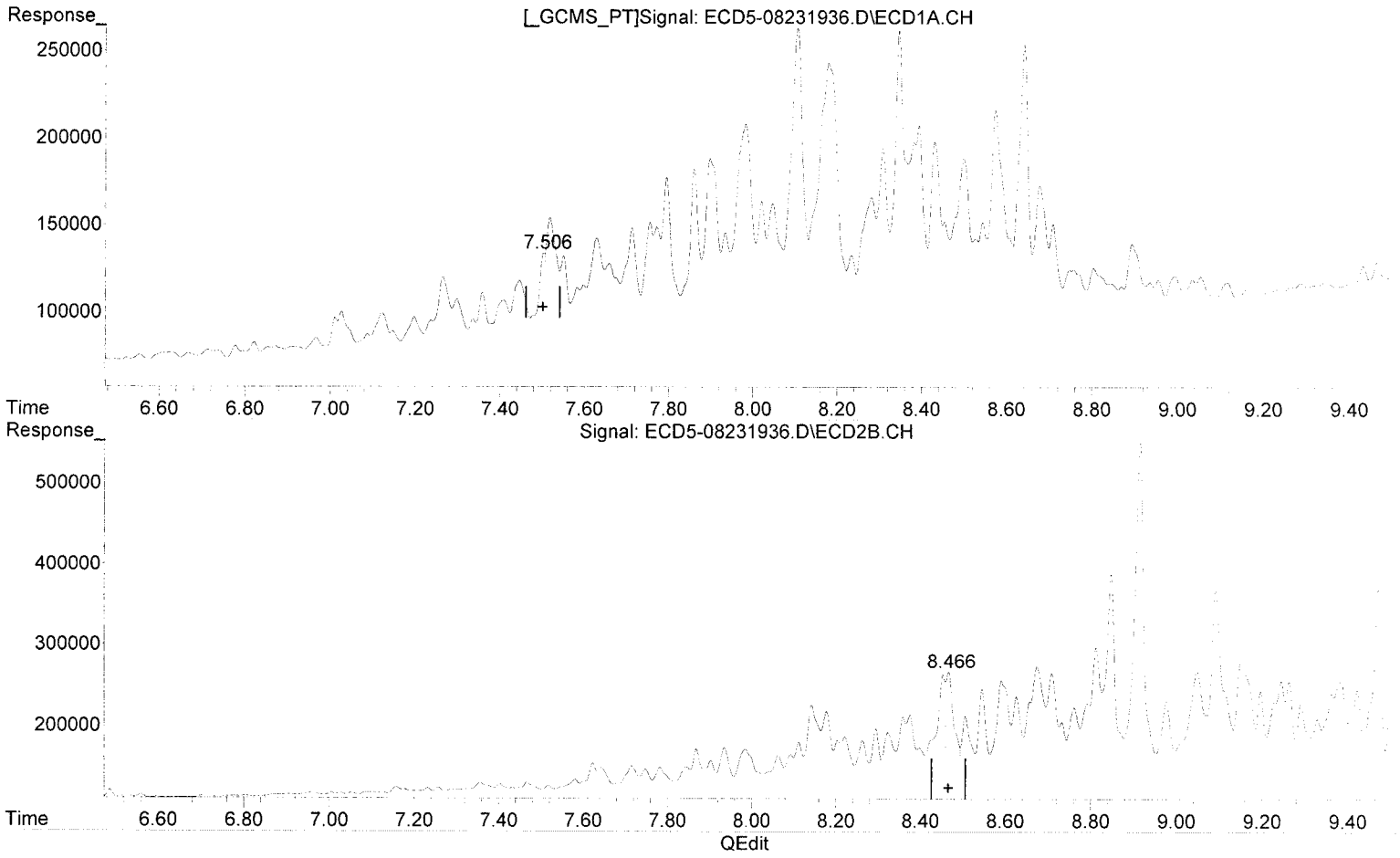
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	6201	N.D.	0.021	#
22)	S	DCBP (S)	0.000	0.000	0	0	N.D.	N.D.	
		Target Compounds							
2)		a-BHC	0.000	0.000	0	0	N.D.	N.D.	
3)		g-BHC	6.249f	0.000	4430	0	0.022	N.D.	#
4)		b-BHC	6.297	0.000	3017	0	0.033	N.D.	#
5)		Heptachlor	6.627	0.000	4370	0	0.024	N.D.	#
6)		d-BHC	6.469f	0.000	2958	0	0.015	N.D.	#
7)		Aldrin	6.871	7.582f	4859	11806	0.025	0.036	#
8)		Heptachlo...	7.336	7.985	13601	46078	0.074	0.153	#
9)		trans-Chl...	7.446	8.142	34060	99117	0.184	0.316	#
10)		cis-Chlor...	7.518	8.221	69068	59106	0.379	0.203	#
11)		Endosulfa...	7.629	8.294	55946	68659	0.329	0.250	
12)		4,4'-DDE	7.550f	8.359	47125	82546	0.250	0.266	
13)		Dieldrin	7.794	8.505	88321	82204	0.460	0.270	#
14)		Endrin	7.934f	8.709	54457	133121	0.370	0.589	#
15)		4,4'-DDD	8.020	8.762	70973	90688	0.452	0.354	
16)		Endosulfa...	8.105	8.847	169381	254833	1.179	1.105	
17)		4,4'-DDT	8.180f	8.977	146997	96725	1.229	0.525	#
18)		Endrin Al...	8.392	9.091	108459	233185	BelowCal	0.427	
19)		Endosulfa...	8.708	9.291	48053	90329	0.310	0.363	
20)		Methoxychlor	8.573f	9.470	114720	230922	1.959	2.668	
21)		Endrin Ke...	8.894	9.711f	33550	36259	0.201	0.141	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	0.000	6.487f	0	8846	N.D.	0.028	#
25)		Oxychlordane	7.265	7.935	38772	48452	0.236	0.177	
26)		2,4'-DDE	7.336	8.112	13601	53529	0.106	0.252	#
27)		trans-Non...	7.518	8.204	69068	54722	0.069	0.181	#
28)		2,4'-DDD	7.713	8.505	60294	82204	0.528	0.435	
29)		2,4'-DDT	7.899	8.709	96979	133121	0.884	0.746	
30)		cis-Nonac...	7.981	8.762	116026	90688	0.559	0.270	#
31)		Mirex	8.641	9.711f	153138	36259	1.222	0.195	#
32)		Chlordane...	7.446	8.142	34060	99117	1.730	2.739	#
33)		Chlordane...	7.518	8.221	69068	59106	2.756	1.947	
34)		Chlordane...	8.047f	8.915	69875	416348	12.087	46.437	#
35)		Chlordane...	3.449	0.000	4023	0	NoCal	N.D.	
36)		Toxaphene...	7.506	8.466	49110	136848	54.832m	52.147	
37)		Toxaphene...	7.794	8.813	88321	164706	54.690	50.047	
38)		Toxaphene...	8.105	8.847	169381	254833	50.299	50.280	
39)		Toxaphene...	8.346	8.915	164317	416348	50.713	49.863	
40)		Toxaphene...	8.573	9.091	114720	233185	47.857	50.036	
41)		Toxaphene...	8.641	9.470	153138	230922	48.391	48.613	
42)		Toxaphene...	3.449	0.000	4023	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.506min 54.832 ng/mL m

response 49110

MJB 8/26/19

(36) Toxaphene (1) #2

8.466min 52.147 ng/mL

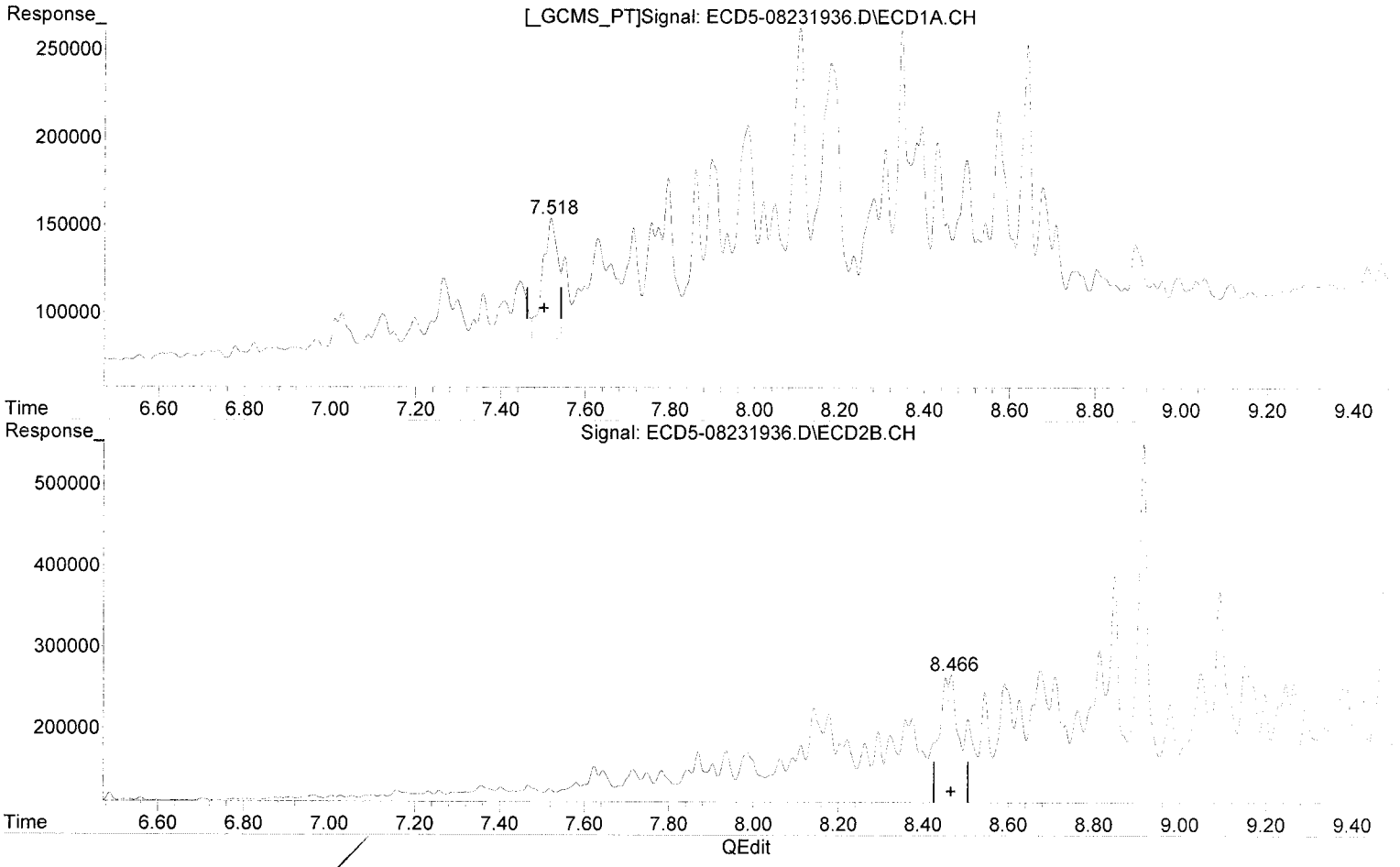
response 136848

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:05:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.518min 77.115 ng/mL

response 69068

MJB 8/26/19

(36) Toxaphene (1) #2

8.466min 52.147 ng/mL

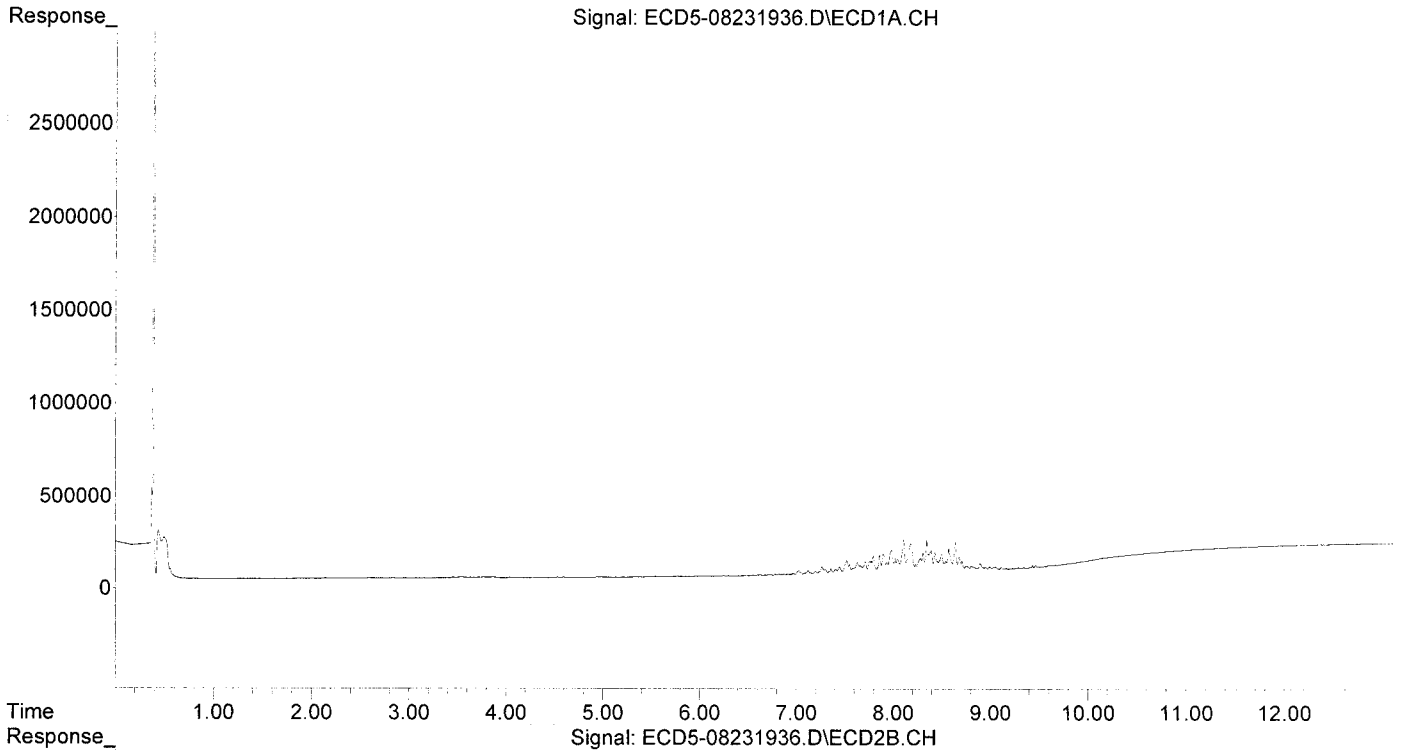
response 136848

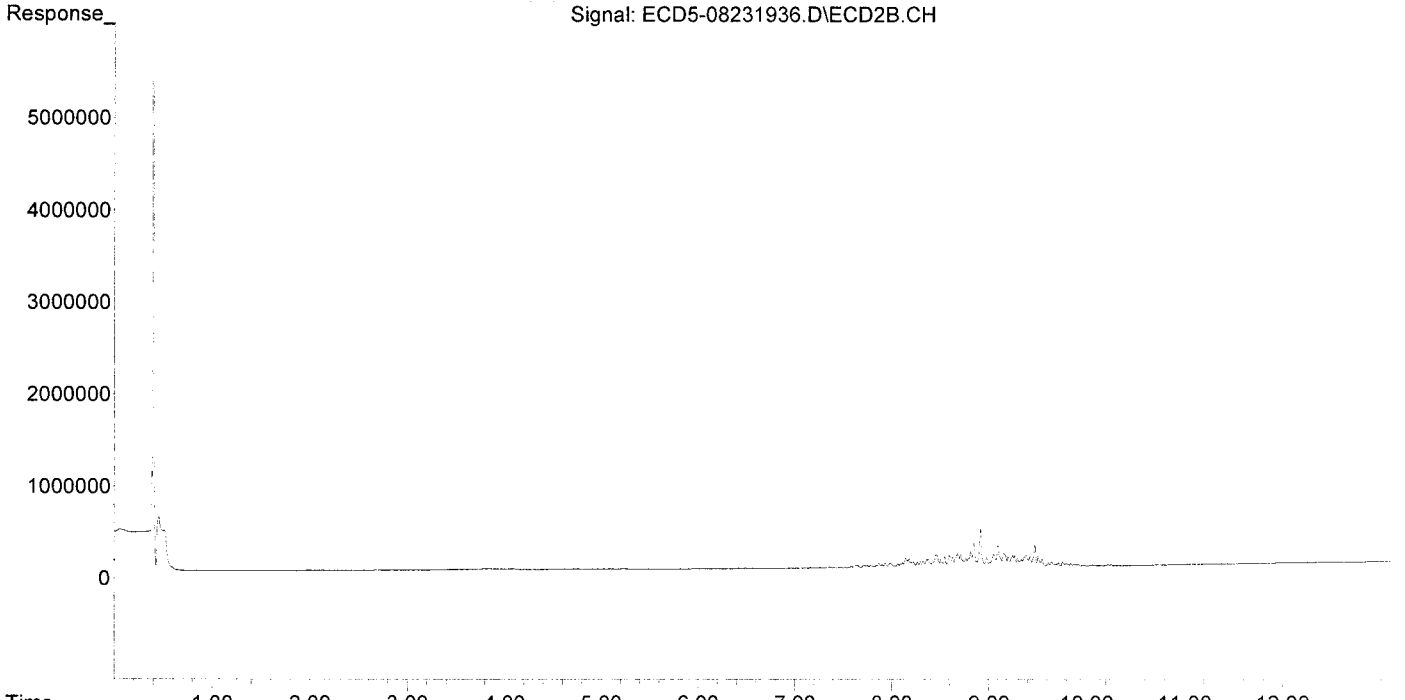
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:06:20 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

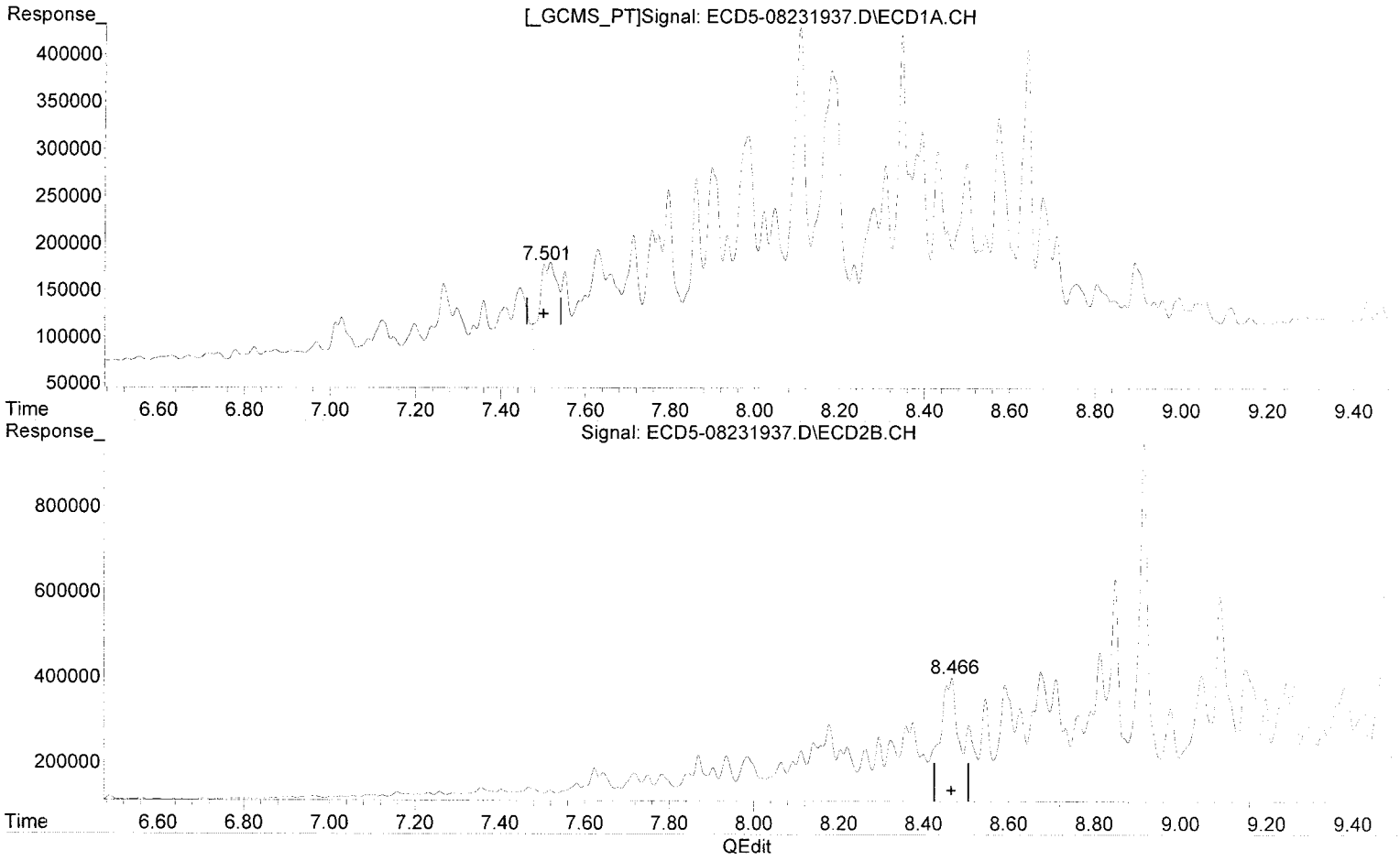
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.985	0	6562	N.D.	0.022	#
22)	S	DCBP (S)	9.592	0.000	4802	0	0.034	N.D.	#
		Target Compounds							
2)		a-BHC	5.952	0.000	2451	0	0.011	N.D.	#
3)		g-BHC	6.250f	0.000	4208	0	0.021	N.D.	#
4)		b-BHC	6.297	6.965	3419	5803	0.038	0.037	
5)		Heptachlor	6.629	7.259f	5698	7338	0.031	0.024	
6)		d-BHC	6.470f	7.259f	3844	7338	0.020	0.021	
7)		Aldrin	6.872	7.582f	9196	24729	0.047	0.075	#
8)		Heptachlo...	7.359f	7.984	53934	87078	0.293	0.289	
9)		trans-Chl...	7.445	8.141	66985	117380	0.362	0.375	
10)		cis-Chlor...	7.517	8.220	93146	107177	0.512	0.368	
11)		Endosulfa...	7.629	8.295	104883	129689	0.616	0.471	
12)		4,4'-DDE	7.551f	8.359	82562	155356	0.438	0.500	
13)		Dieldrin	7.795	8.506	166085	156611	0.865	0.515	#
14)		Endrin	7.934f	8.710	115324	262153	0.784	1.161	#
15)		4,4'-DDD	8.021	8.762	139852	178338	0.890	0.696	
16)		Endosulfa...	8.106	8.848	332842	494430	2.318	2.144	
17)		4,4'-DDT	8.182f	8.977	285351	192921	2.387	1.085	#
18)		Endrin Al...	8.393	9.091	215405	452209	0.828	1.624	#
19)		Endosulfa...	8.710	9.291	103697	183737	0.669	0.738	
20)		Methoxychlor	8.543	9.471	105544	452485	1.802	5.374	#
21)		Endrin Ke...	8.894	9.712f	71764	83930	0.430	0.326	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.811f	6.488f	2684	8988	0.015	0.029	#
25)		Oxychlordane	7.266	7.935	73507	87358	0.447	0.319	
26)		2,4'-DDE	7.359f	8.112	53934	99205	0.420	0.468	
27)		trans-Non...	7.517	8.204	93146	102328	0.204	0.339	#
28)		2,4'-DDD	7.713	8.506	118203	156611	1.036	0.829	
29)		2,4'-DDT	7.899	8.710	187872	262153	1.713	1.470	
30)		cis-Nonac...	7.982	8.762	219963	178338	1.059	0.532	#
31)		Mirex	8.641	9.712f	302577	83930	2.414	0.451	#
32)		Chlordane...	7.410	8.141	46689	117380	2.371	3.244	
33)		Chlordane...	7.517	8.220	93146	107177	3.716	3.530	
34)		Chlordane...	8.047f	8.915	142490	811948	24.647	90.560	#
35)		Chlordane...	3.450	0.000	3536	0	NoCal	N.D.	
36)		Toxaphene...	7.501	8.466	91358	267534	102.002m	101.946	
37)		Toxaphene...	7.795	8.813	166085	324070	102.843	98.471	
38)		Toxaphene...	8.106	8.848	332842	494430	98.840	97.553	
39)		Toxaphene...	8.346	8.915	320313	811948	98.857	97.241	
40)		Toxaphene...	8.574	9.091	228960	452209	95.514	97.033	
41)		Toxaphene...	8.641	9.471	302577	452485	95.614	95.256	
42)		Toxaphene...	3.450	0.000	3536	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:06:39 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.501min 102.002 ng/mL m

response 91358

(36) Toxaphene (1) #2

8.466min 101.946 ng/mL

response 267534

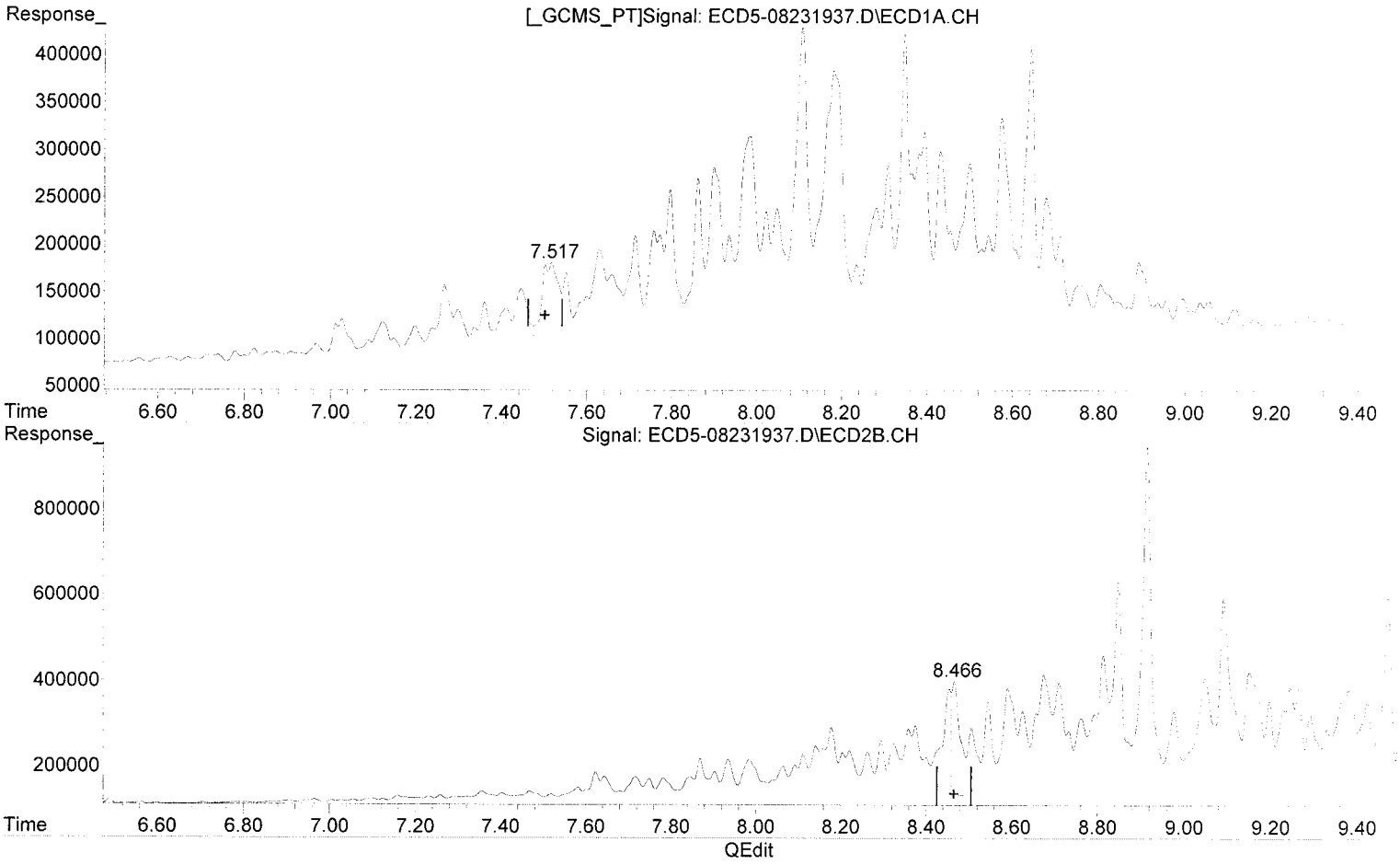
MJB 6/26/19
MJB 6/26/19

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:06:39 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.517min 103.998 ng/mL

response 93146

MJB 12611

(36) Toxaphene (1) #2

8.466min 101.946 ng/mL

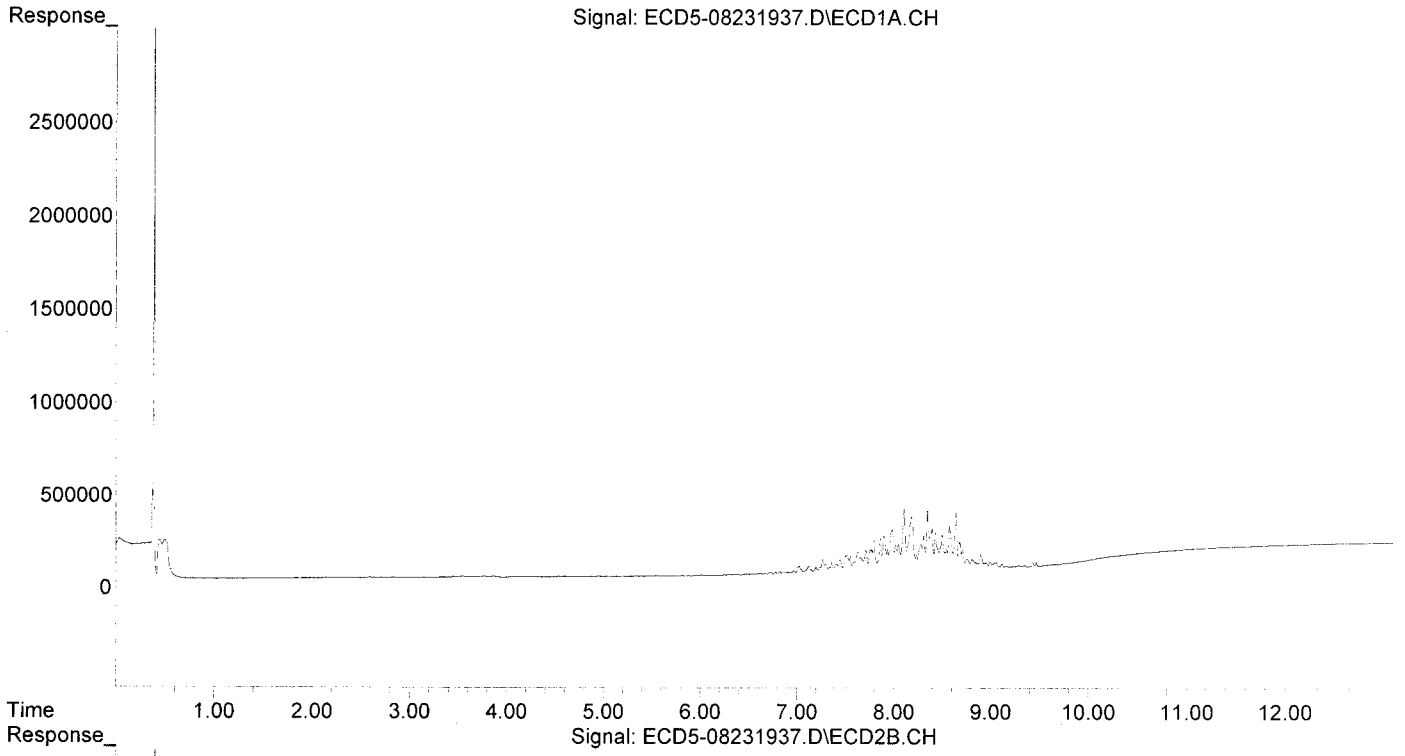
response 267534

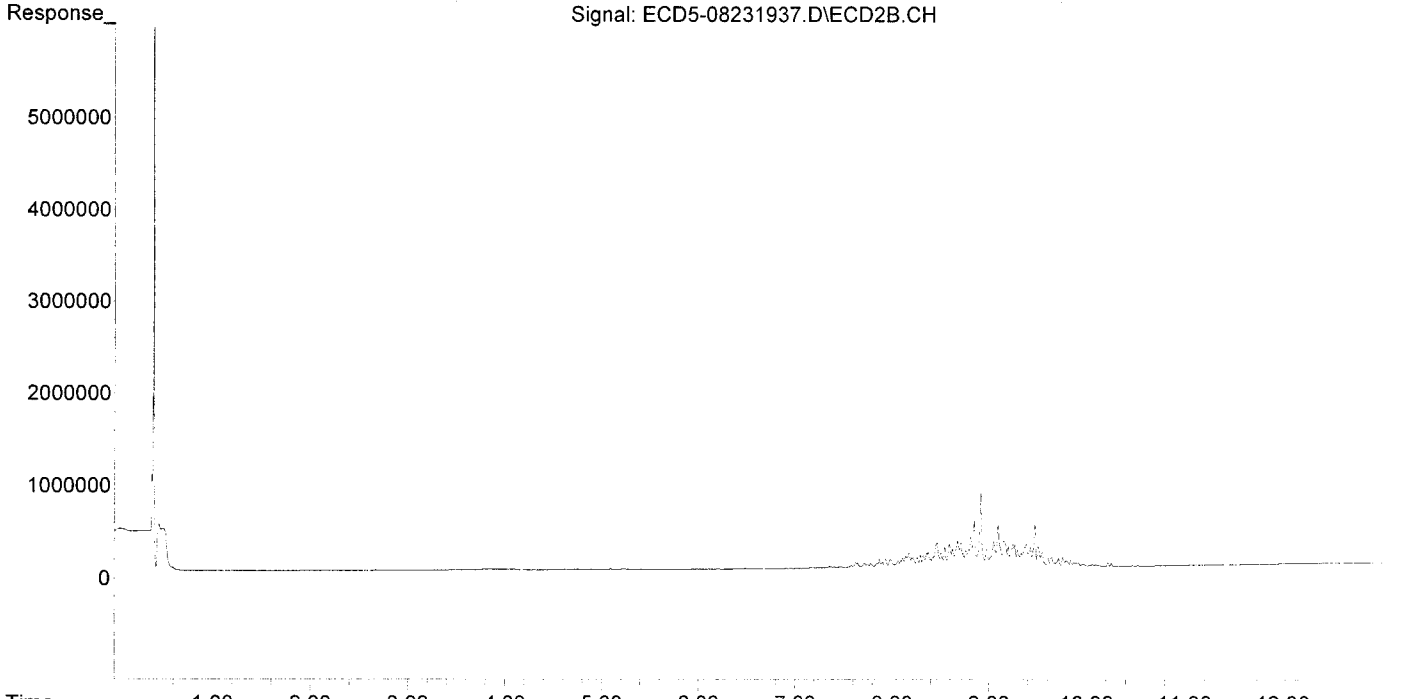
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:28
Operator : MJB
Sample : 9H23034-CALP
Misc : A19D124, TOX 200 ppb
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MWB 8/26/19

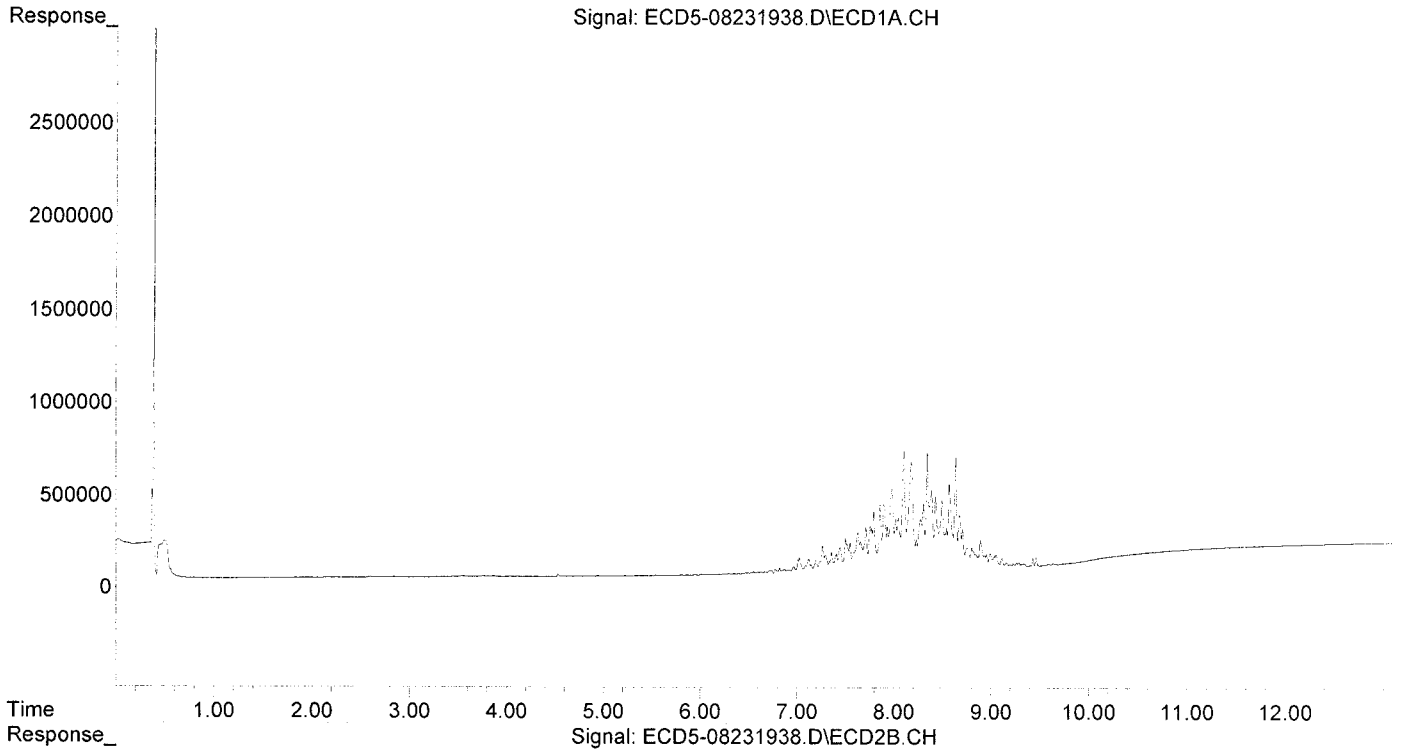
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
	System Monitoring Compounds							
1) S	TCMX (S)	0.000	5.984	0	6031	N.D.	0.021	#
22) S	DCBP (S)	9.591	10.521	8317	11024	0.059	0.061	
	Target Compounds							
2)	a-BHC	5.950	0.000	2445	0	0.011	N.D.	#
3)	g-BHC	6.249f	6.906	4762	8484	0.024	0.024	
4)	b-BHC	6.297	6.965	5553	11866	0.061	0.075	
5)	Heptachlor	6.630	7.292	9834	18991	0.054	0.062	
6)	d-BHC	6.469f	7.232	7279	22404	0.037	0.064	#
7)	Aldrin	6.872	7.582f	20475	52234	0.104	0.159	#
8)	Heptachlo...	7.336	7.984	58943	180203	0.320	0.599	#
9)	trans-Chl...	7.445	8.139	130754	171469	0.707	0.547	
10)	cis-Chlor...	7.502f	8.220	176047	207038	0.967	0.711	
11)	Endosulfa...	7.629	8.294	203563	255143	1.196	0.927	
12)	4,4'-DDE	7.551f	8.358	153844	307212	0.816	0.989	
13)	Dieldrin	7.795	8.506	317587	302159	1.654	0.993	
14)	Endrin	7.934f	8.709	233827	517355	1.590	2.291	#
15)	4,4'-DDD	8.021	8.761	271844	361076	1.730	1.409	
16)	Endosulfa...	8.105	8.847	644464	995555	4.488	4.317	
17)	4,4'-DDT	8.182f	8.976	572615	378347	4.789	2.160	#
18)	Endrin Al...	8.392	9.090	423151	895397	2.609	4.034	#
19)	Endosulfa...	8.709	9.290	207483	368442	1.339	1.479	
20)	Methoxychlor	8.543	9.469	215126	905244	3.673	10.806	#
21)	Endrin Ke...	8.893	9.711f	142657	173912	0.855	0.676	
23)	Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)	Hexachlor...	5.811f	6.487f	2563	8587	0.015	0.027	#
25)	Oxychlordane	7.266	7.935	140581	179085	0.854	0.654	
26)	2,4'-DDE	7.336	8.112	58943	198883	0.460	0.938	#
27)	trans-Non...	7.502	8.205	176047	199265	0.666	0.661	
28)	2,4'-DDD	7.713	8.506	232393	302159	2.036	1.600	
29)	2,4'-DDT	7.899	8.709	356627	517355	3.251	2.901	
30)	cis-Nonac...	7.982	8.761	437778	361076	2.109	1.076	#
31)	Mirex	8.640	9.711f	597991	173912	4.770	0.935	#
32)	Chlordane...	7.445	8.139	130754	171469	6.641	4.739	
33)	Chlordane...	7.502	8.220	176047	207038	7.024	6.819	
34)	Chlordane...	8.047f	8.914	280898	1580436	48.589	176.272	#
35)	Chlordane...	3.451	0.000	3919	0	NoCal	N.D.	
36)	Toxaphene...	7.502	8.466	176047	508983	196.559	193.953	
37)	Toxaphene...	7.795	8.812	317587	645322	196.656	196.085	
38)	Toxaphene...	8.105	8.847	644464	995555	191.378	196.427	
39)	Toxaphene...	8.346	8.914	632351	1580436	195.161	189.278	
40)	Toxaphene...	8.574	9.090	454431	895397	189.572	192.130	
41)	Toxaphene...	8.640	9.469	597991	905244	188.964	190.570	
42)	Toxaphene...	3.451	0.000	3919	0	NoCal	N.D.	

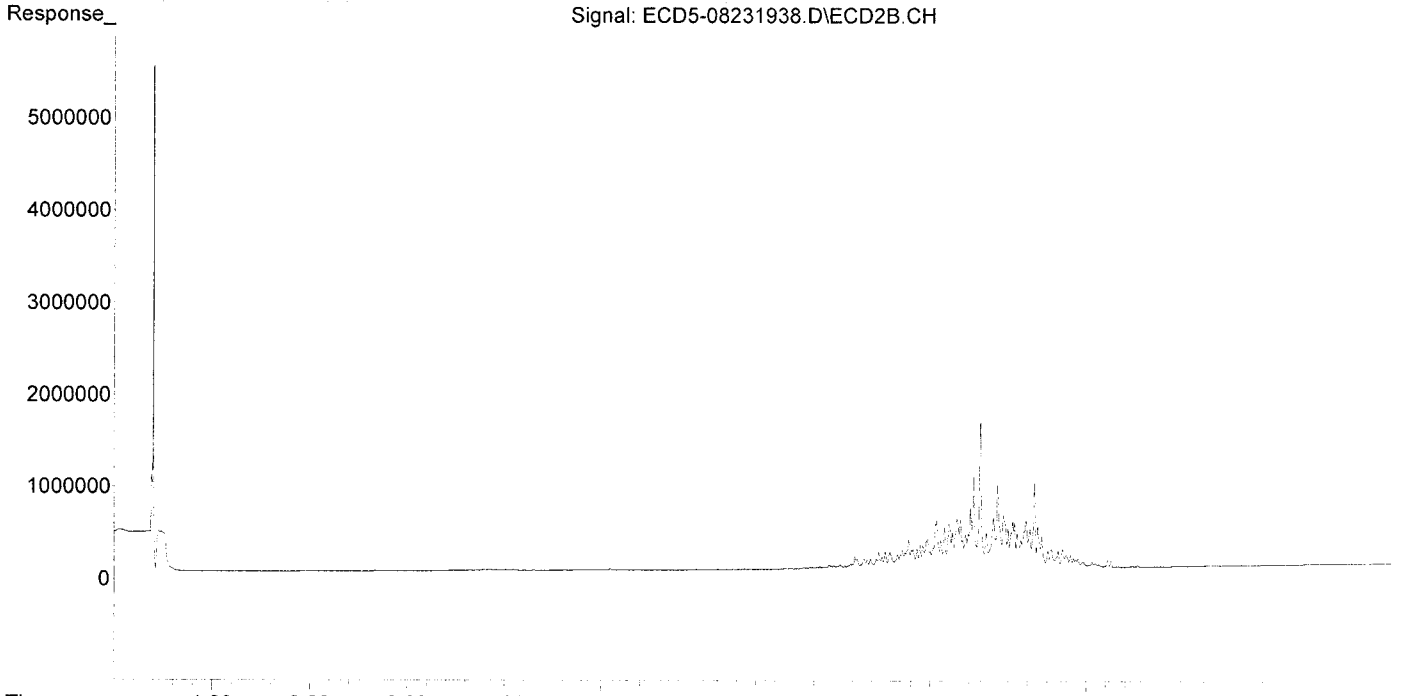
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:28
Operator : MJB
Sample : 9H23034-CALP
Misc : A19D124, TOX 200 ppb
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:22 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:45
Operator : MJB
Sample : 9H23034-CALQ
Misc : A19D125, TOX 500 ppb
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

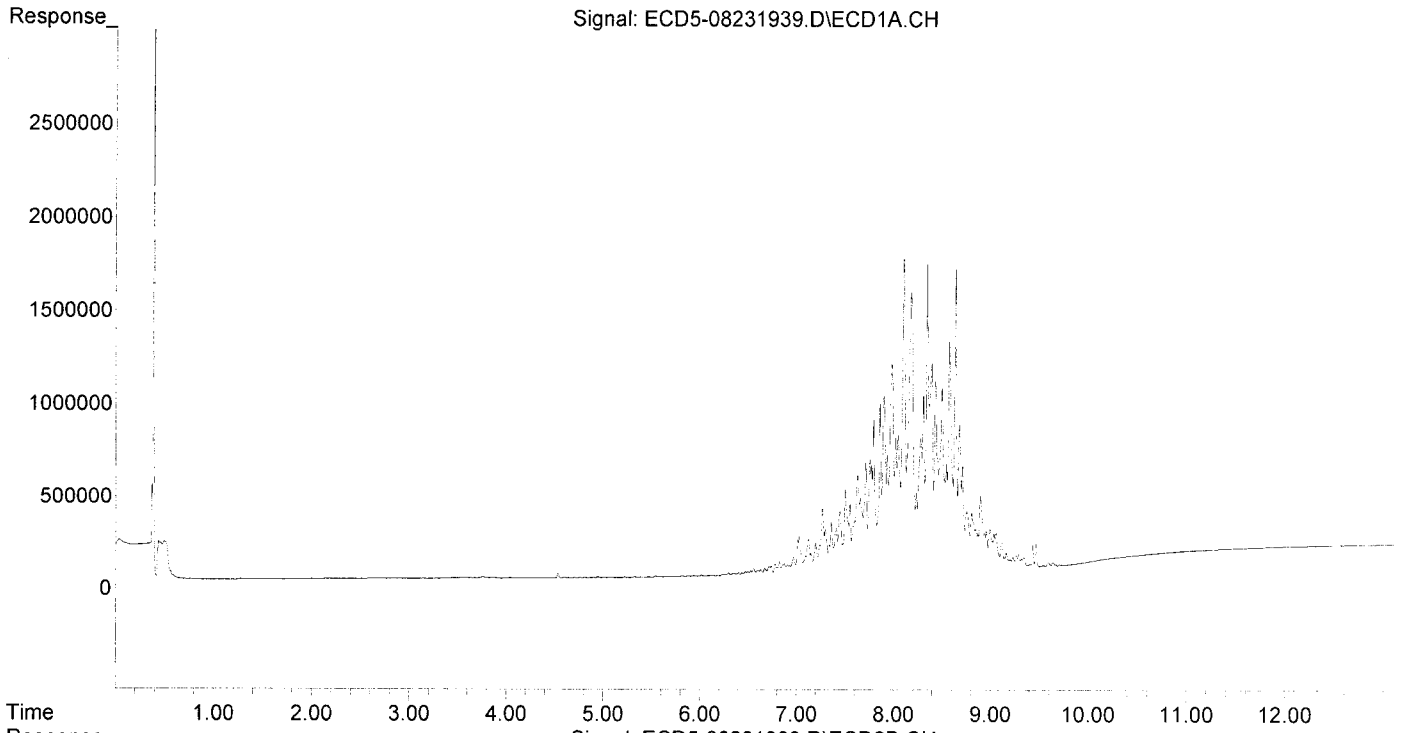
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	0.000	5.984	0	5601	N.D.	0.019	#
22)	S	DCBP (S)	9.591	10.521	21035	39647	0.149	0.221	#
		Target Compounds							
2)		a-BHC	5.938	6.598	3646	8422	0.016	0.021	
3)		g-BHC	6.246f	6.908	6276	21315	0.031	0.060	#
4)		b-BHC	6.296	6.966	12656	26420	0.140	0.167	
5)		Heptachlor	6.631	7.291	26275	48687	0.145	0.159	
6)		d-BHC	6.434	7.233	12949	50866	0.066	0.144	#
7)		Aldrin	6.871	7.582f	54986	128738	0.278	0.391	#
8)		Heptachlo...	7.337	7.985	148782	431601	0.808	1.435	#
9)		trans-Chl...	7.445	8.136	326510	348418	1.766	1.112	
10)		cis-Chlor...	7.502f	8.220	441826	492762	2.427	1.692	
11)		Endosulfa...	7.629	8.295	523361	619890	3.075	2.253	
12)		4,4'-DDE	7.551f	8.358	370244	790371	1.964	2.544	
13)		Dieldrin	7.794	8.506	819454	752423	4.268	2.474	#
14)		Endrin	7.934f	8.711	624315	1366705	4.246	6.052	#
15)		4,4'-DDD	8.021	8.761	715456	940917	4.553	3.672	
16)		Endosulfa...	8.105	8.848	1677481	2475022	11.681	10.733	
17)		4,4'-DDT	8.182f	8.977	1480674	1000646	12.384	5.736	#
18)		Endrin Al...	8.392	9.091	1117641	2340668	8.532	11.800	
19)		Endosulfa...	8.709	9.290	555797	952729	3.586	3.825	
20)		Methoxychlor	8.574f	9.470	1221560	2369795	20.855	27.582	
21)		Endrin Ke...	8.894	9.711f	386326	477017	2.317	1.854	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.814f	6.461	4241	6767	0.024	0.022	
25)		Oxychlordane	7.265	7.936	350487	422818	2.130	1.544	
26)		2,4'-DDE	7.337	8.112	148782	485681	1.160	2.289	#
27)		trans-Non...	7.502	8.205	441826	487255	2.150	1.615	
28)		2,4'-DDD	7.713	8.506	583556	752423	5.113	3.984	
29)		2,4'-DDT	7.899	8.711	935213	1366705	8.526	7.664	
30)		cis-Nonac...	7.981	8.761	1117997	940917	5.385	2.805	#
31)		Mirex	8.640	9.711f	1623402	477017	12.949	2.564	#
32)		Chlordane...	7.408	8.136	238293	348418	12.102	9.629	
33)		Chlordane...	7.502	8.220	441826	492762	17.628	16.228	
34)		Chlordane...	8.046f	8.915	731630	4252640	126.555	474.314	#
35)		Chlordane...	3.450	0.000	4132	0	NoCal	N.D.	
36)		Toxaphene...	7.502	8.466	441826	1308994	493.303	498.805	
37)		Toxaphene...	7.794	8.812	819454	1647741	507.421	500.677	
38)		Toxaphene...	8.105	8.848	1677481	2475022	498.140	488.332	
39)		Toxaphene...	8.346	8.915	1649569	4252640	509.102	509.308	
40)		Toxaphene...	8.574	9.091	1221560	2340668	509.590	502.251	
41)		Toxaphene...	8.640	9.470	1623402	2369795	512.991	498.883	
42)		Toxaphene...	3.450	0.000	4132	0	NoCal	N.D.	

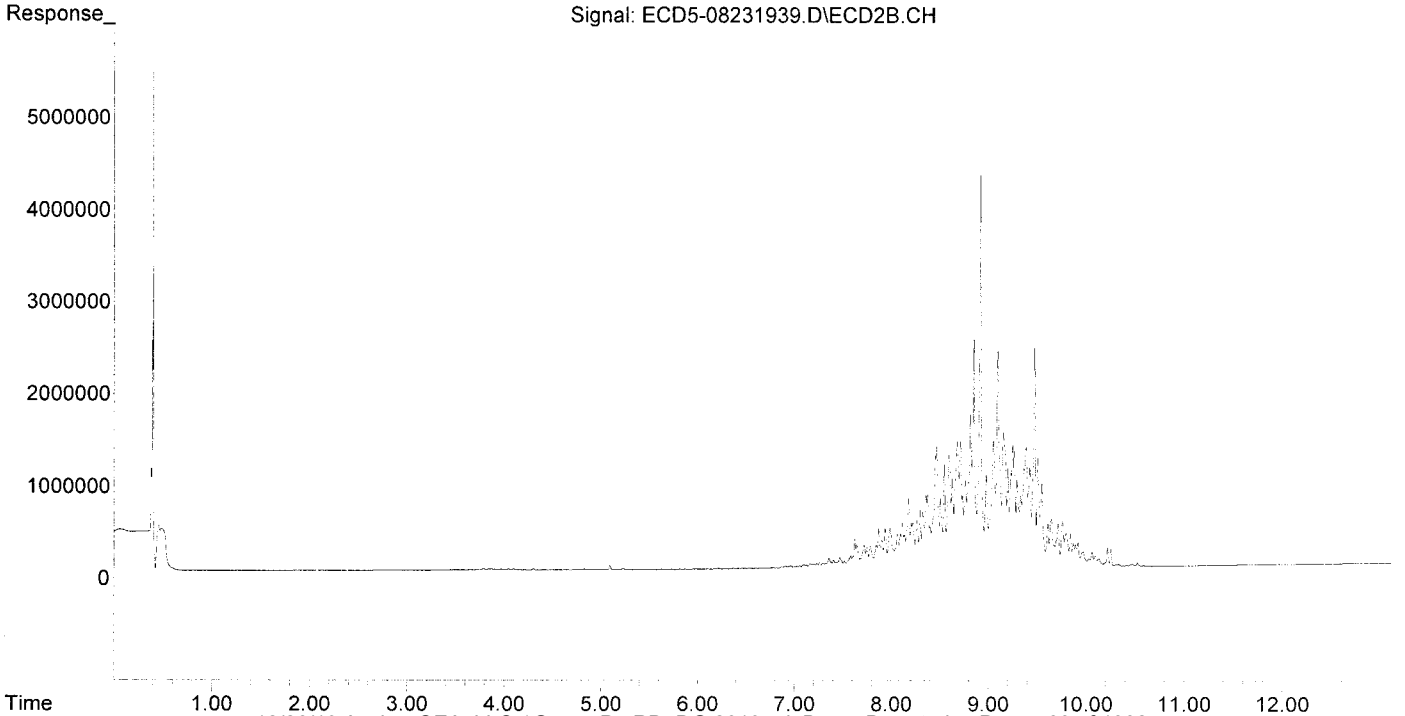
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:45
Operator : MJB
Sample : 9H23034-CALQ
Misc : A19D125, TOX 500 ppb
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:35 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:03
Operator : MJB
Sample : 9H23034-CALR
Misc : A19D126, TOX 1000 ppb
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:46 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 8/26/19

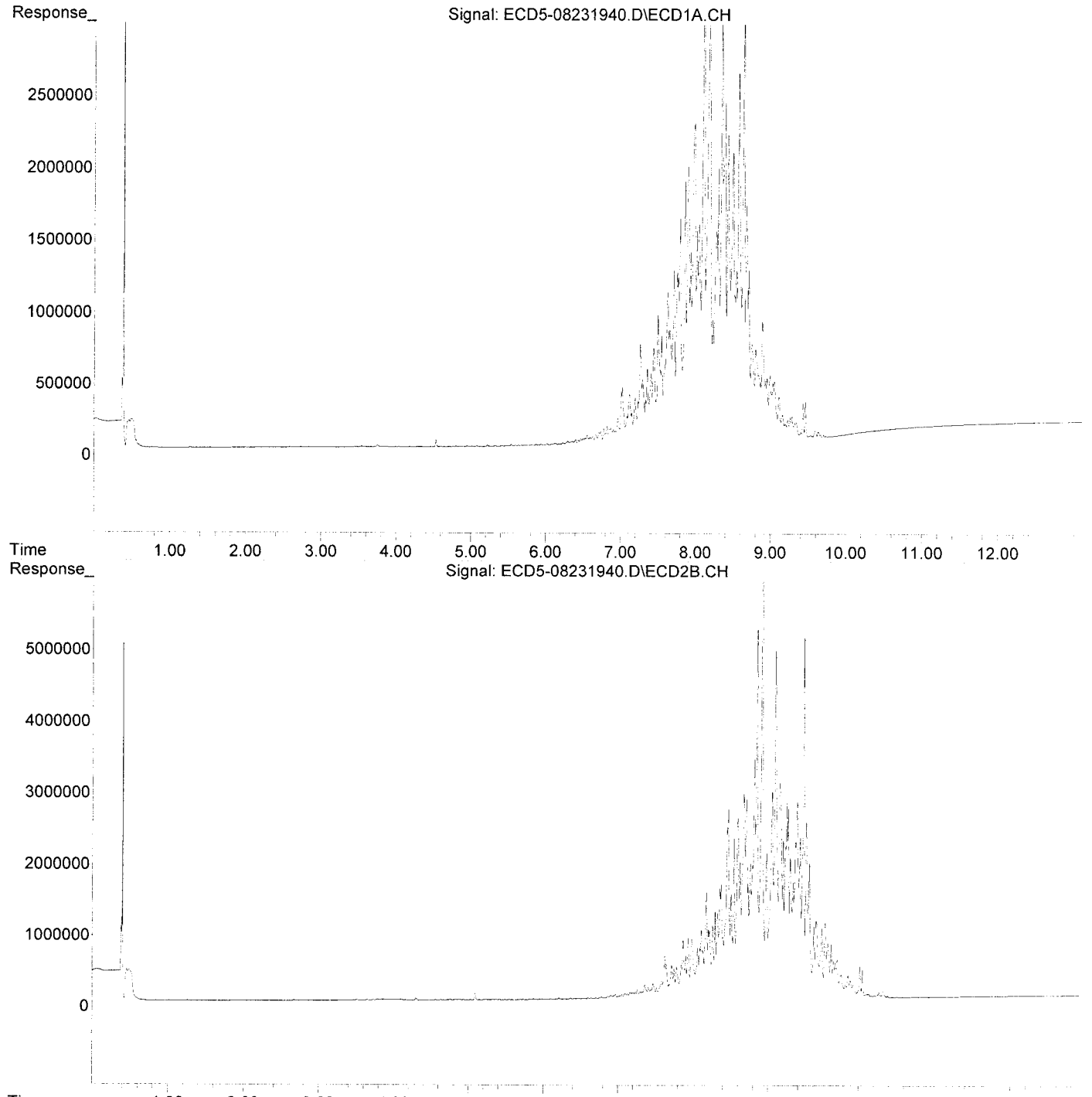
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.415f	5.982	2381	5264	0.014	0.018	
22)	S	DCBP (S)	9.591	10.522	47060	86882	0.334	0.483	#
		Target Compounds							
2)		a-BHC	5.937	6.597	7133	14957	0.031	0.036	
3)		g-BHC	6.231	6.907	12268	49388	0.061	0.138	#
4)		b-BHC	6.296	6.967	24041	58985	0.266	0.373	#
5)		Heptachlor	6.632	7.293	48435	95609	0.267	0.312	
6)		d-BHC	6.434	7.233	28416	100471	0.144	0.285	#
7)		Aldrin	6.871	7.551	108360	147580	0.549	0.448	
8)		Heptachlo...	7.336	7.985	294905	840940	1.601	2.795	#
9)		trans-Chl...	7.445	8.111f	659823	964498	3.569	3.078	
10)		cis-Chlor...	7.501f	8.220	871889	947518	4.789	3.253	
11)		Endosulfa...	7.628	8.295	1038833	1226540	6.104	4.457	
12)		4,4'-DDE	7.550f	8.358	746675	1543581	3.961	4.968	
13)		Dieldrin	7.793	8.506	1556013	1462579	8.105	4.809	#
14)		Endrin	7.933f	8.711	1312768	2786774	8.929	12.340	
15)		4,4'-DDD	8.020	8.762	1452045	1895471	9.240	7.398	
16)		Endosulfa...	8.105	8.848	3495877	5168269	24.343	22.412	
17)		4,4'-DDT	8.183	8.977	2996314	2028436	25.061	11.540	#
18)		Endrin Al...	8.391	9.091	2338006	4900430	18.826	25.221	
19)		Endosulfa...	8.709	9.291	1188299	2002950	7.668	8.041	
20)		Methoxychlor	8.543	9.470	1177404	5046645	20.101	55.668	#
21)		Endrin Ke...	8.893	9.712f	829327	990858	4.973	3.851	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.745f	6.463	2404	9221	0.014	0.029	#
25)		Oxychlordane	7.265	7.936	684836	845822	4.162	3.088	
26)		2,4'-DDE	7.336	8.111	294905	964498	2.299	4.547	#
27)		trans-Non...	7.501	8.204	871889	963521	4.550	3.194	
28)		2,4'-DDD	7.712	8.506	1203385	1462579	10.544	7.744	
29)		2,4'-DDT	7.898	8.711	1885482	2786774	17.190	15.626	
30)		cis-Nonac...	7.981	8.762	2207076	1895471	10.631	5.651	#
31)		Mirex	8.640	9.712f	3406737	990858	27.174	5.325	#
32)		Chlordane...	7.445	8.111	659823	964498	33.511	26.655	
33)		Chlordane...	7.501	8.220	871889	947518	34.786	31.205	
34)		Chlordane...	8.045f	8.915	1508434	8650068	260.924	964.776	#
35)		Chlordane...	3.451	0.000	2687	0	NoCal	N.D.	
36)		Toxaphene...	7.501	8.467	871889	2654886	973.473	1011.671	
37)		Toxaphene...	7.793	8.813	1556013	3384036	963.512	1028.262	
38)		Toxaphene...	8.105	8.848	3495877	5168269	1038.126	1019.721	
39)		Toxaphene...	8.345	8.915	3287014	8650068	1014.463	1035.957	
40)		Toxaphene...	8.573	9.091	2546293	4900430	1062.220	1051.514	
41)		Toxaphene...	8.640	9.470	3406737	5046645	1076.520	1062.406	
42)		Toxaphene...	3.451	0.000	2687	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:03
Operator : MJB
Sample : 9H23034-CALR
Misc : A19D126, TOX 1000 ppb
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:46 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:20
Operator : MJB
Sample : 9H23034-CALS
Misc : A19D121, TOX 2000 ppb
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:58 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

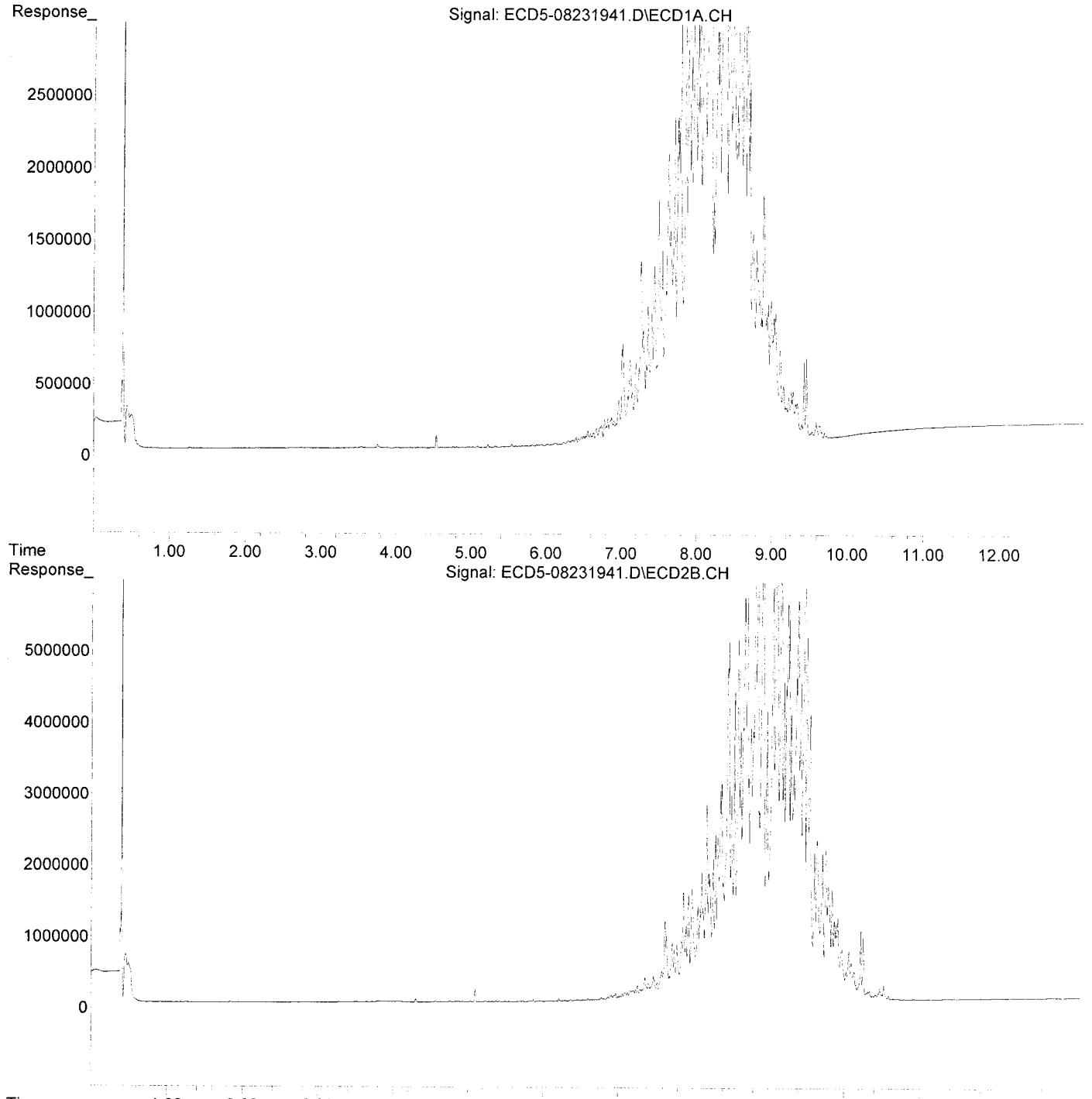
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL	
		System Monitoring Compounds							
1)	S	TCMX (S)	5.416f	5.979	3411	9459	0.021	0.032	#
22)	S	DCBP (S)	9.591	10.521	106938	194794	0.758	1.084	#
		Target Compounds							
2)		a-BHC	5.935	6.596	13246	39719	0.058	0.097	#
3)		g-BHC	6.231	6.908	20790	85564	0.103	0.240	#
4)		b-BHC	6.295	6.967	35592	107682	0.394	0.680	#
5)		Heptachlor	6.633	7.293	79787	161818	0.440	0.529	
6)		d-BHC	6.433	7.233	46116	159995	0.234	0.454	#
7)		Aldrin	6.871	7.581f	182635	424827	0.925	1.290	
8)		Heptachlo...	7.357f	7.984	952857	1568607	5.174	5.214	
9)		trans-Chl...	7.444	8.111f	1223688	1798529	6.618	5.740	
10)		cis-Chlor...	7.500f	8.218f	1674674	1710240	9.198	5.872	
11)		Endosulfa...	7.627	8.294	1999949	2341198	11.752	8.508	
12)		4,4'-DDE	7.549f	8.357	1335034	2938735	7.081	9.459	
13)		Dieldrin	7.792	8.505	2958997	2895788	15.413	9.521	
14)		Endrin	7.981f	8.711	4441487	5651216	30.209	25.025	
15)		4,4'-DDD	8.020	8.761	2883315	3832878	18.349	14.960	
16)		Endosulfa...	8.104	8.848	6831460	10545708	47.569	45.730	
17)		4,4'-DDT	8.183	8.977	5897786	4051156	49.329	22.612	#
18)		Endrin Al...	8.391	9.091	4718611	9435236	38.506	48.051	
19)		Endosulfa...	8.708	9.291	2483005	4046643	16.022	16.246	
20)		Methoxychlor	8.542	9.471	2322878	10090951	39.657	102.111	#
21)		Endrin Ke...	8.893	9.712f	1725359	2080010	10.346	8.083	
23)		Hexachlor...	0.000	0.000	0	0	N.D.	N.D.	
24)		Hexachlor...	5.744f	6.462	3614	25550	0.021	0.081	#
25)		Oxychlordane	7.264	7.935	1262060	1485955	7.670	5.425	
26)		2,4'-DDE	7.357f	8.111	952857	1798529	7.429	8.478	
27)		trans-Non...	7.500	8.204	1674674	1791431	9.032	5.939	
28)		2,4'-DDD	7.712	8.505	2255144	2895788	19.760	15.333	
29)		2,4'-DDT	7.898	8.711	3633258	5651216	33.124	31.688	
30)		cis-Nonac...	7.981	8.761	4441487	3832878	21.393	11.426	#
31)		Mirex	8.640	9.712f	6510950	2080010	51.935	11.178	#
32)		Chlordane...	7.444	8.111	1223688	1798529	62.149	49.704	
33)		Chlordane...	7.500	8.218	1674674	1710240	66.815	56.324	
34)		Chlordane...	8.044f	8.914	2935856	17190037	507.835	1917.273	#
35)		Chlordane...	3.452	0.000	4166	0	NoCal	N.D.	
36)		Toxaphene...	7.500	8.466	1674674	5030917	1869.791	1917.082	
37)		Toxaphene...	7.792	8.813	2958997	6610397	1832.266	2008.613	
38)		Toxaphene...	8.104	8.848	6831460	10545708	2028.651	2080.712	
39)		Toxaphene...	8.345	8.914	6407070	17190037	1977.398	2058.728	
40)		Toxaphene...	8.572	9.091	5074570	9435236	2116.925	2024.573	
41)		Toxaphene...	8.640	9.471	6510950	10090951	2057.443	2124.320	
42)		Toxaphene...	3.452	0.000	4166	0	NoCal	N.D.	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : R:\data\2019-08\9H23034\REQUANT\
Data File : ECD5-08231941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:20
Operator : MJB
Sample : 9H23034-CALS
Misc : A19D121, TOX 2000 ppb
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 12:07:58 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:48:23 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence Name: C:\msdchem\4\sequence\9H23034.s
Comment: Pesticides
Operator: MJB
Data Path: C:\MSDCHEM\4\DATA\2019-08\9H23034\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info
1)	Sample	100	CONDITIONING RUN
	Datafile		ECD5-08231901
	Method		ECD5_AQUPEST_160111
2)	Sample	100	CONDITIONING RUN
	Datafile		ECD5-08231902
	Method		ECD5_AQUPEST_160111
3)	Sample	1	Hexane
	Datafile		ECD5-08231903
	Method		ECD5_AQUPEST_160111
4)	Sample	2	9H23034-BKD1
	Datafile		ECD5-08231904
	Method		ECD5_AQUPEST_160111
5)	Sample	1	Hexane
	Datafile		ECD5-08231905
	Method		ECD5_AQUPEST_160111
6)	Sample	2	9H23034-BKD2
	Datafile		ECD5-08231906
	Method		ECD5_AQUPEST_160111
7)	Sample	3	9H23034-ICB1
	Datafile		ECD5-08231907
	Method		ECD5_AQUPEST_160111
8)	Sample	4	9H23034-CAL1
	Datafile		ECD5-08231908
	Method		ECD5_AQUPEST_160111
9)	Sample	5	9H23034-CAL2
	Datafile		ECD5-08231909
	Method		ECD5_AQUPEST_160111
10)	Sample	6	9H23034-CAL3
	Datafile		ECD5-08231910
	Method		ECD5_AQUPEST_160111
11)	Sample	7	9H23034-CAL4
	Datafile		ECD5-08231911
	Method		ECD5_AQUPEST_160111
12)	Sample	8	9H23034-CAL5
	Datafile		ECD5-08231912
	Method		ECD5_AQUPEST_160111
13)	Sample	9	9H23034-CAL6
	Datafile		ECD5-08231913
	Method		ECD5_AQUPEST_160111
14)	Sample	10	9H23034-CAL7
	Datafile		ECD5-08231914
	Method		ECD5_AQUPEST_160111
15)	Sample	11	9H23034-CAL8
	Datafile		ECD5-08231915
	Method		ECD5_AQUPEST_160111
16)	Sample	1	9H23034-IBL1
	Datafile		ECD5-08231916
	Method		ECD5_AQUPEST_160111
17)	Sample	12	9H23034-ICV1
	Datafile		ECD5-08231917
	Method		ECD5_AQUPEST_160111
18)	Sample	13	9H23034-CAL9
	Datafile		ECD5-08231918
	Method		ECD5_AQUPEST_160111
19)	Sample	14	9H23034-CALA
	Datafile		ECD5-08231919
	Method		ECD5_AQUPEST_160111
20)	Sample	15	9H23034-CALB

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     Datafile          ECD5-08231920
     Method            ECD5_AQUPEST_160111
21)  Sample        16  9H23034-CALC
     Datafile          ECD5-08231921
     Method            ECD5_AQUPEST_160111
22)  Sample        17  9H23034-CALD
     Datafile          ECD5-08231922
     Method            ECD5_AQUPEST_160111
23)  Sample        18  9H23034-CALE
     Datafile          ECD5-08231923
     Method            ECD5_AQUPEST_160111
24)  Sample        19  9H23034-CALF
     Datafile          ECD5-08231924
     Method            ECD5_AQUPEST_160111
25)  Sample        20  9H23034-CALG
     Datafile          ECD5-08231925
     Method            ECD5_AQUPEST_160111
26)  Sample         1  9H23034-IBL2
     Datafile          ECD5-08231926
     Method            ECD5_AQUPEST_160111
27)  Sample        21  9H23034-ICV2
     Datafile          ECD5-08231927
     Method            ECD5_AQUPEST_160111
28)  Sample        22  9H23034-CALH
     Datafile          ECD5-08231928
     Method            ECD5_AQUPEST_160111
29)  Sample        23  9H23034-CALI
     Datafile          ECD5-08231929
     Method            ECD5_AQUPEST_160111
30)  Sample        24  9H23034-CALJ
     Datafile          ECD5-08231930
     Method            ECD5_AQUPEST_160111
31)  Sample        25  9H23034-CALK
     Datafile          ECD5-08231931
     Method            ECD5_AQUPEST_160111
32)  Sample        26  9H23034-CALL
     Datafile          ECD5-08231932
     Method            ECD5_AQUPEST_160111
33)  Sample        27  9H23034-CALM
     Datafile          ECD5-08231933
     Method            ECD5_AQUPEST_160111
34)  Sample         1  9H23034-IBL3
     Datafile          ECD5-08231934
     Method            ECD5_AQUPEST_160111
35)  Sample        28  9H23034-ICV3
     Datafile          ECD5-08231935
     Method            ECD5_AQUPEST_160111
36)  Sample        29  9H23034-CALN
     Datafile          ECD5-08231936
     Method            ECD5_AQUPEST_160111
37)  Sample        30  9H23034-CALO
     Datafile          ECD5-08231937
     Method            ECD5_AQUPEST_160111
38)  Sample        31  9H23034-CALP
     Datafile          ECD5-08231938
     Method            ECD5_AQUPEST_160111
39)  Sample        32  9H23034-CALQ
     Datafile          ECD5-08231939
     Method            ECD5_AQUPEST_160111
40)  Sample        33  9H23034-CALR
     Datafile          ECD5-08231940
     Method            ECD5_AQUPEST_160111
41)  Sample        34  9H23034-CALS
     Datafile          ECD5-08231941
     Method            ECD5_AQUPEST_160111
42)  Sample         1  9H23034-IBL4
     Datafile          ECD5-08231942
     Method            ECD5_AQUPEST_160111
43)  Sample        35  9H23034-ICV4
     Datafile          ECD5-08231943
     Method            ECD5_AQUPEST_160111
```

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-08\9H23034\
Data File : ECD5-08231904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 12:24
Operator : MJB
Sample : 9H23034-BKD1
Misc : A19G138
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 23 12:40:24 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	4,4'-DDE	7.587	1120444	NoCal	ng/mL
2)	Endrin	7.960	63253664	NoCal	ng/mL
3)	4,4'-DDD	8.007	6621952	NoCal	ng/mL
4)	4,4'-DDT	8.205	107029729	NoCal	ng/mL
5)	Endrin Aldehyde	8.407	4202397	NoCal	ng/mL
6)	Endrin Ketone	8.901	6297738	NoCal	ng/mL
8)	4,4'-DDE [2C]	8.347	1706439	NoCal	ng/mL
9)	Endrin [2C]	8.719	95742281	NoCal	ng/mL
10)	4,4'-DDD [2C]	8.761	11347306	NoCal	ng/mL
11)	Endrin Aldehyde [2C]	9.102	6529476	NoCal	ng/mL
12)	4,4'-DDT [2C]	8.988	167003448	NoCal	ng/mL
13)	Endrin Ketone [2C]	9.690	10363842	NoCal	ng/mL

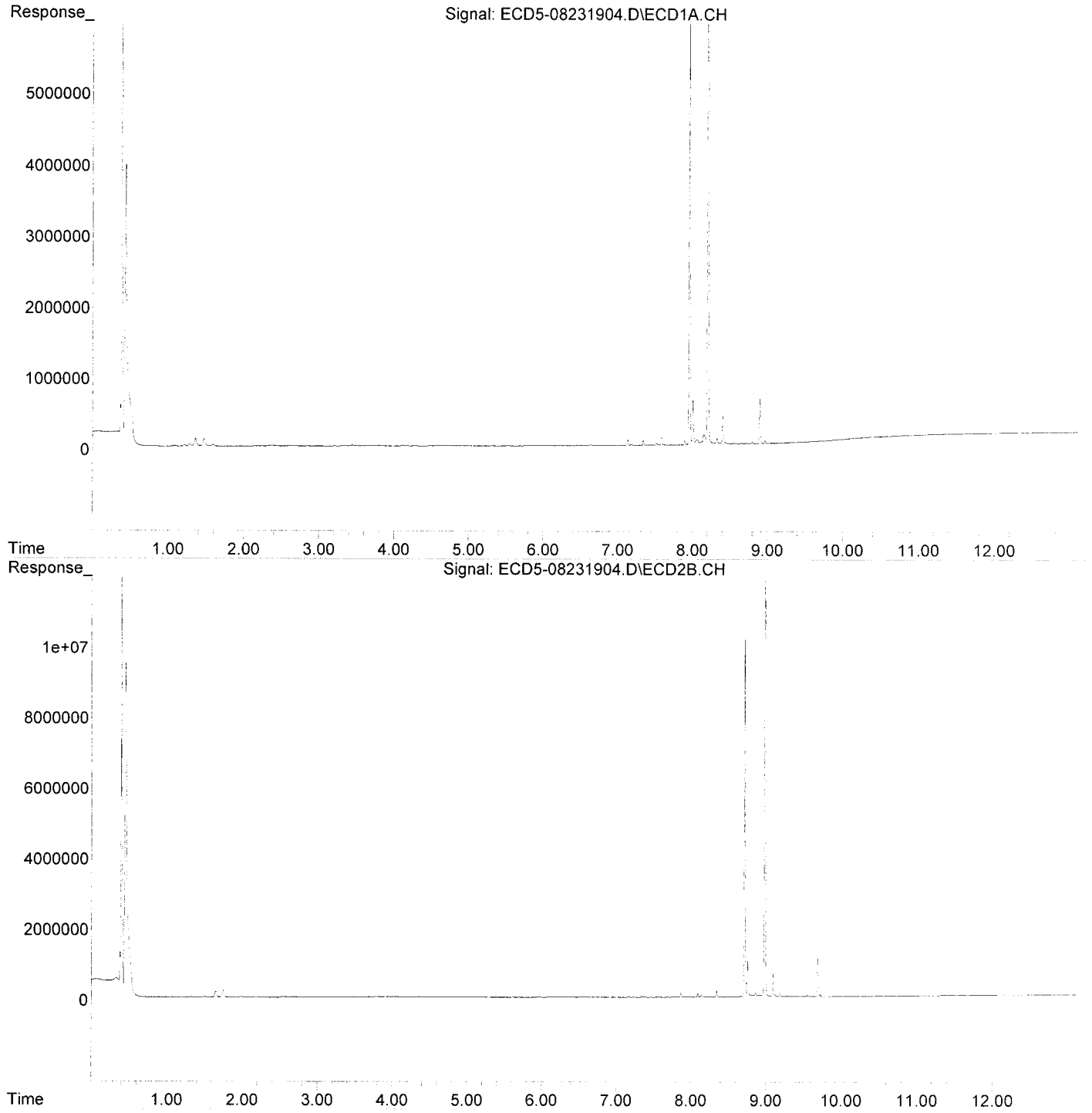
(f)=RT Delta > 1/2 Window (m)=manual int.

Breakdown passing, but the High maintenance performed
MJB 8/26/19
MJB 8/26/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-08\9H23034\
Data File : ECD5-08231904.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 12:24
Operator : MJB
Sample : 9H23034-BKD1
Misc : A19G138
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 23 12:40:24 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Pesticide Breakdown Check (Validated 8/8/2013)

Sequence: 9H23034 BKD2
Data File: ECD5-08231906.D

First Column Area Counts		Percent Breakdown	
DDE	734891		
DDD	4530463		
DDT	125149199	**4.04**	**PASS**
Endrin	70846235	**8.91**	**PASS**
Endrin Aldehyde	2399187		
Endrin Ketone	4532548		

Second Column Area Counts		Percent Breakdown	
DDE	977816		
DDD	7819328		
DDT	188765825	**4.45**	**PASS**
Endrin	109289125	**8.73**	**PASS**
Endrin Aldehyde	3703608		
Endrin Ketone	6751447		

Breakdown must be less than 15% to accept sample data.

MJB 9/26/13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-08\9H23034\
Data File : ECD5-08231906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:16
Operator : MJB
Sample : 9H23034-BKD2
Misc : A19G138
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 23 13:30:06 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	4,4'-DDE	7.586	734891	NoCal	ng/mL
2)	Endrin	7.960	70846235	NoCal	ng/mL
3)	4,4'-DDD	8.007	4530463	NoCal	ng/mL
4)	4,4'-DDT	8.205	125149199	NoCal	ng/mL
5)	Endrin Aldehyde	8.407	2399187	NoCal	ng/mL
6)	Endrin Ketone	8.902	4532548	NoCal	ng/mL
8)	4,4'-DDE [2C]	8.345	977816	NoCal	ng/mL
9)	Endrin [2C]	8.718	109289125	NoCal	ng/mL
10)	4,4'-DDD [2C]	8.760	7819328	NoCal	ng/mL
11)	Endrin Aldehyde [2C]	9.101	3703608	NoCal	ng/mL
12)	4,4'-DDT [2C]	8.988	188765825	NoCal	ng/mL
13)	Endrin Ketone [2C]	9.690	6751447	NoCal	ng/mL

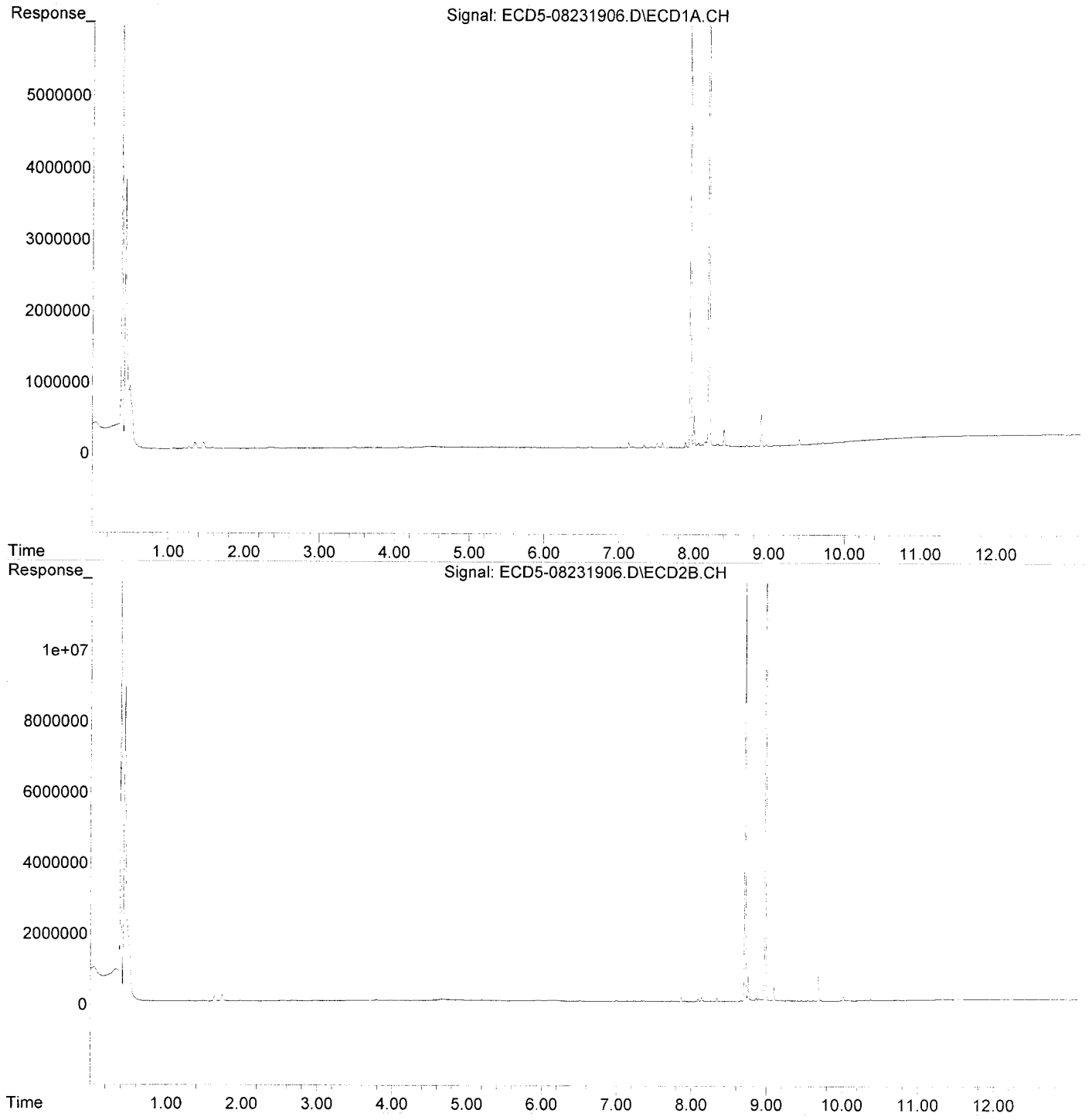
(f)=RT Delta > 1/2 Window (m)=manual int.

Swabbed in IBA w/ Hexane. MWP 8/26/19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\4\data\2019-08\9H23034\
Data File : ECD5-08231906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:16
Operator : MJB
Sample : 9H23034-BKD2
Misc : A19G138
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 23 13:30:06 2019
Quant Method : C:\msdchem\4\methods\PestBreakdownCHK_190823.M
Quant Title : Pesticides
QLast Update : Thu Aug 21 11:53:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:15:45 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJF 8/26/19

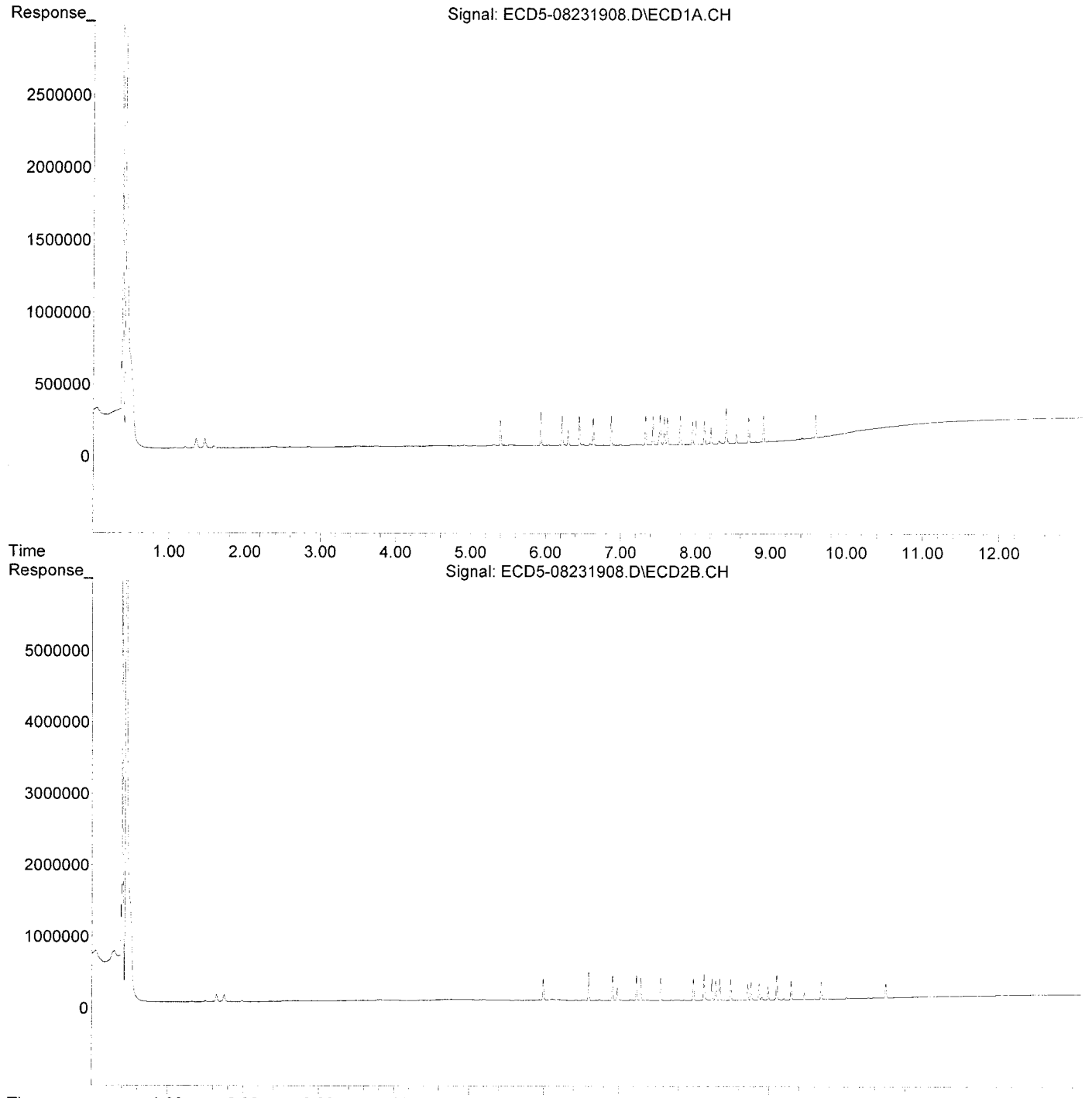
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.397	5.991	176748	300053	1.633	1.607
22)	S	DCBP (S)	9.593	10.541	163865	191572	1.202	1.206
		Target Compounds						
2)		a-BHC	5.937	6.597	231994	393119	1.665	1.296
3)		g-BHC	6.221	6.915	207427	352286	1.380	1.170
4)		b-BHC	6.300	6.980	104326	176262	1.760	1.450
5)		Heptachlor	6.635	7.292	192066	309811	1.183	1.054
6)		d-BHC	6.450	7.234	199840	349123	1.893	1.474
7)		Aldrin	6.875	7.557	205523	317466	1.221	1.096
8)		Heptachlo...	7.335	7.994	200503	310098	1.276	1.175
9)		trans-Chl...	7.433	8.135	197202	364142	1.276	1.384
10)		cis-Chlor...	7.528	8.241	209780	299422	1.367	1.179
11)		Endosulfa...	7.625	8.291	185217	278874	1.245	1.173
12)		4,4'-DDE	7.586	8.346	193435	298463	1.647	1.374
13)		Dieldrin	7.796	8.491	197721	296684	1.194	1.095
14)		Endrin	7.961	8.718	156412	222882	1.190	1.096
15)		4,4'-DDD	8.007	8.760	164956	251549	1.683	1.281
16)		Endosulfa...	8.118	8.865	158139	232156	1.378	1.183
17)		4,4'-DDT	8.205	8.986	113897	179700	1.686	1.607
18)		Endrin Al...	8.407	9.101	241285	348624	2.337	2.034
19)		Endosulfa...	8.708	9.292	176097	265797	1.418	1.337
20)		Methoxychlor	8.543	9.466	59659	95155	1.698	1.611
21)		Endrin Ke...	8.901	9.690	177552	255763	1.293	1.268
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231908.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 13:51
Operator : MJB
Sample : 9H23034-CAL1
Misc : A19E245, AB 1 ppb
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:15:45 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:08
Operator : MJB
Sample : 9H23034-CAL2
Misc : A19E246, AB 2 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:16:21 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

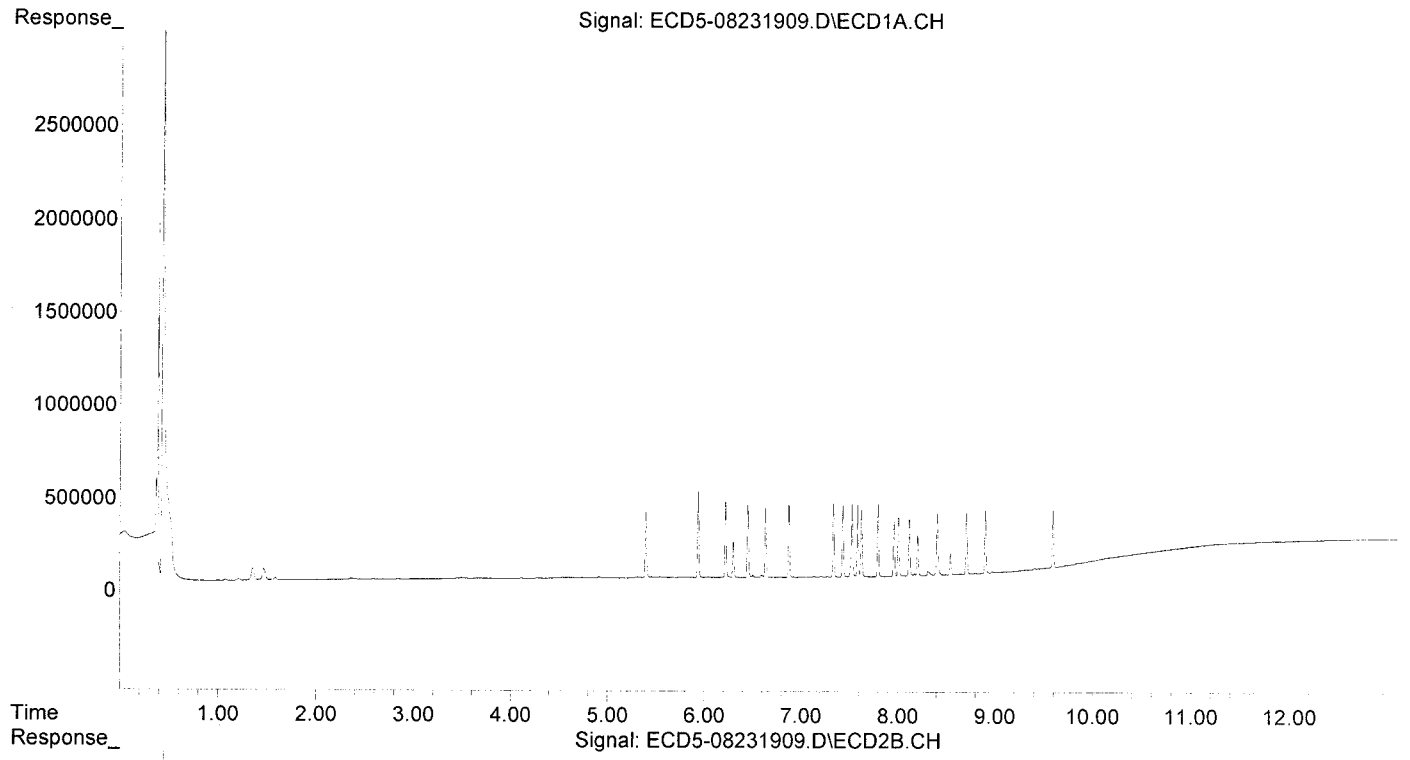
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	5.396	5.990	349972	600766	3.233	3.230
22) S	DCBP (S)	9.593	10.542	309904	390006	2.547	2.456
	Target Compounds						
2)	a-BHC	5.936	6.597	458365	784586	3.177	2.540
3)	g-BHC	6.220	6.915	406027	690922	2.702	2.295
4)	b-BHC	6.300	6.980	194168	335260	3.275	2.757
5)	Heptachlor	6.635	7.291	369615	586765	2.276	1.995
6)	d-BHC	6.450	7.233	386980	669122	3.575	2.783
7)	Aldrin	6.875	7.556	399550	635458	2.375	2.194
8)	Heptachlo...	7.335	7.993	392052	606240	2.495	2.296
9)	trans-Chl...	7.432	8.135	382271	644454	2.473	2.449
10)	cis-Chlor...	7.527	8.241	389999	579667	2.541	2.282
11)	Endosulfa...	7.625	8.291	357368	540442	2.402	2.273
12)	4,4'-DDE	7.586	8.345	388618	598066	3.268	2.709
13)	Dieldrin	7.796	8.491	395728	583812	2.390	2.154
14)	Endrin	7.960	8.718	298515	424889	2.271	2.149
15)	4,4'-DDD	8.006	8.760	314622	488120	3.236	2.486
16)	Endosulfa...	8.118	8.864	299106	462256	2.607	2.355
17)	4,4'-DDT	8.204	8.986	218190	341782	3.052	2.875
18)	Endrin Al...	8.407	9.101	328182	477694	3.179	2.786
19)	Endosulfa...	8.707	9.291	322163	498767	2.595	2.558
20)	Methoxychlor	8.542	9.465	111466	178074	3.136	2.980
21)	Endrin Ke...	8.901	9.689	331269	493110	2.413	2.461
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

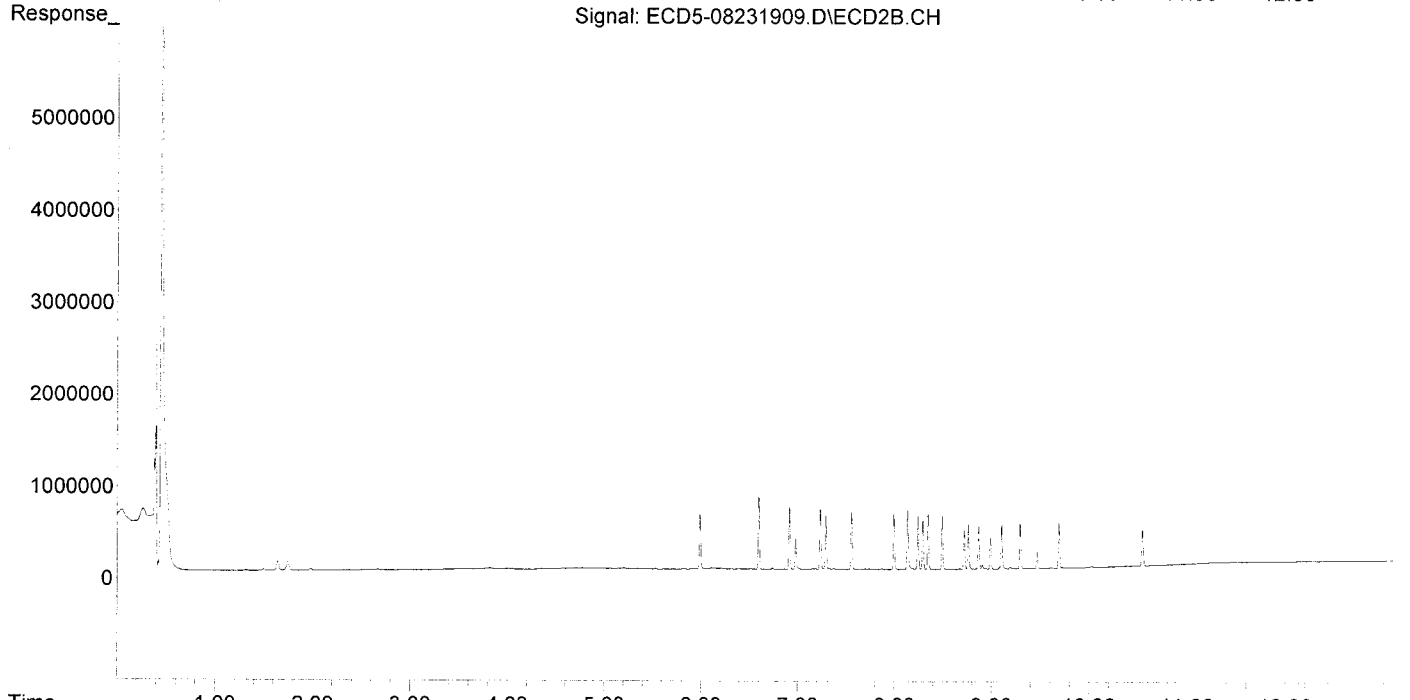
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:08
Operator : MJB
Sample : 9H23034-CAL2
Misc : A19E246, AB 2 ppb
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:16:21 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:25
Operator : MJB
Sample : 9H23034-CAL3
Misc : A19E247, AB 5 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:16:57 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

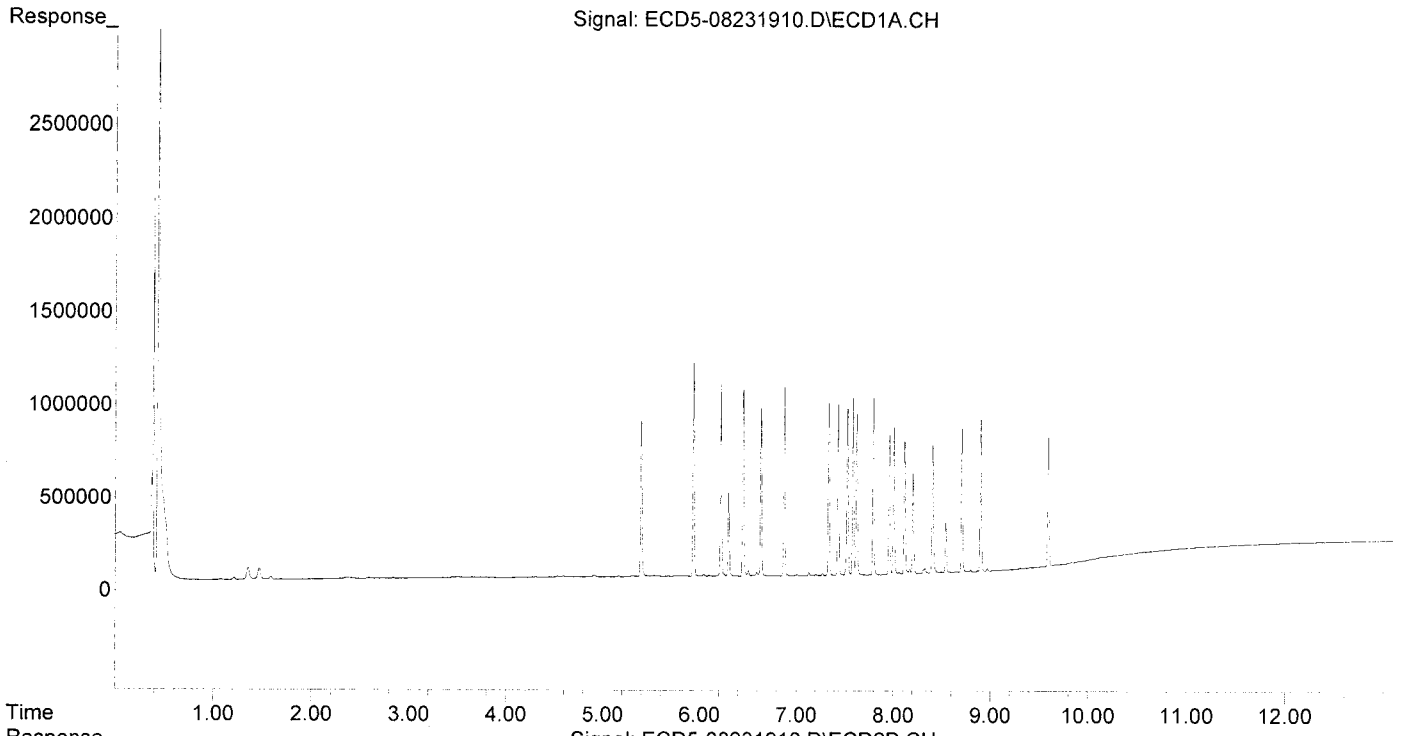
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.396	5.990	834206	1437876	7.707	7.700
22)	S	DCBP (S)	9.594	10.542	701050	870921	6.146	5.485
		Target Compounds						
2)		a-BHC	5.937	6.597	1147932	1985438	7.742	6.328
3)		g-BHC	6.220	6.915	1020724	1742677	6.792	5.790
4)		b-BHC	6.300	6.980	456954	788630	7.708	6.486
5)		Heptachlor	6.635	7.291	899091	1508218	5.537	5.129
6)		d-BHC	6.449	7.233	1004012	1717450	9.061	7.030
7)		Aldrin	6.875	7.556	1012733	1600995	6.019	5.528
8)		Heptachlo...	7.335	7.994	923620	1455941	5.877	5.514
9)		trans-Chl...	7.432	8.134	926577	1502119	5.993	5.707
10)		cis-Chlor...	7.528	8.241	908795	1434855	5.922	5.649
11)		Endosulfa...	7.624	8.290	861509	1327191	5.790	5.583
12)		4,4'-DDE	7.586	8.345	953351	1487999	7.901	6.642
13)		Dieldrin	7.796	8.491	972009	1462538	5.870	5.397
14)		Endrin	7.960	8.718	738953	1092877	5.622	5.608
15)		4,4'-DDD	8.007	8.759	790498	1208642	8.130	6.156
16)		Endosulfa...	8.118	8.865	709544	1096359	6.185	5.586
17)		4,4'-DDT	8.205	8.986	553009	873653	7.371	6.957
18)		Endrin Al...	8.407	9.101	683393	1045869	6.620	6.101
19)		Endosulfa...	8.708	9.291	768798	1175908	6.192	6.083
20)		Methoxychlor	8.542	9.466	270388	413802	7.493	6.808
21)		Endrin Ke...	8.901	9.689	811384	1205004	5.910	6.014
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

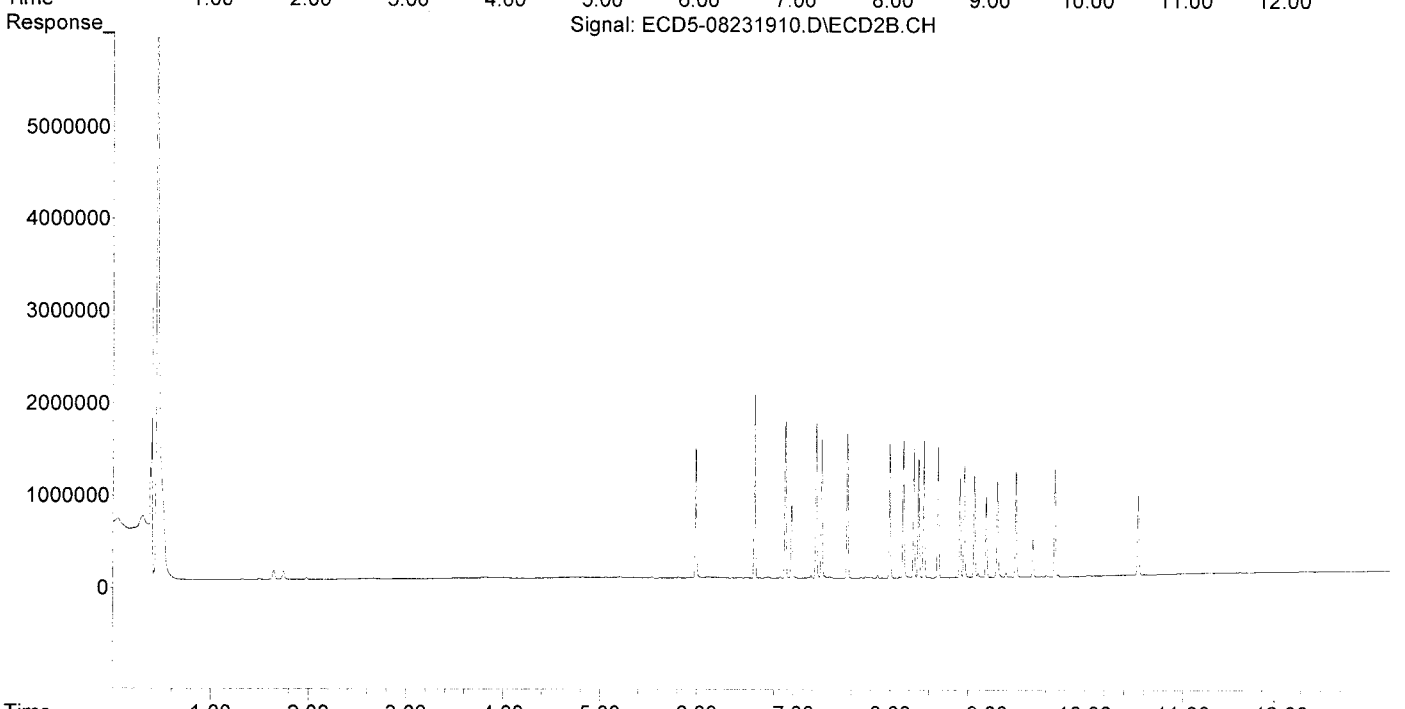
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231910.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:25
Operator : MJB
Sample : 9H23034-CAL3
Misc : A19E247, AB 5 ppb
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:16:57 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:42
Operator : MJB
Sample : 9H23034-CAL4
Misc : A19E249, AB 10 ppb
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:19:05 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

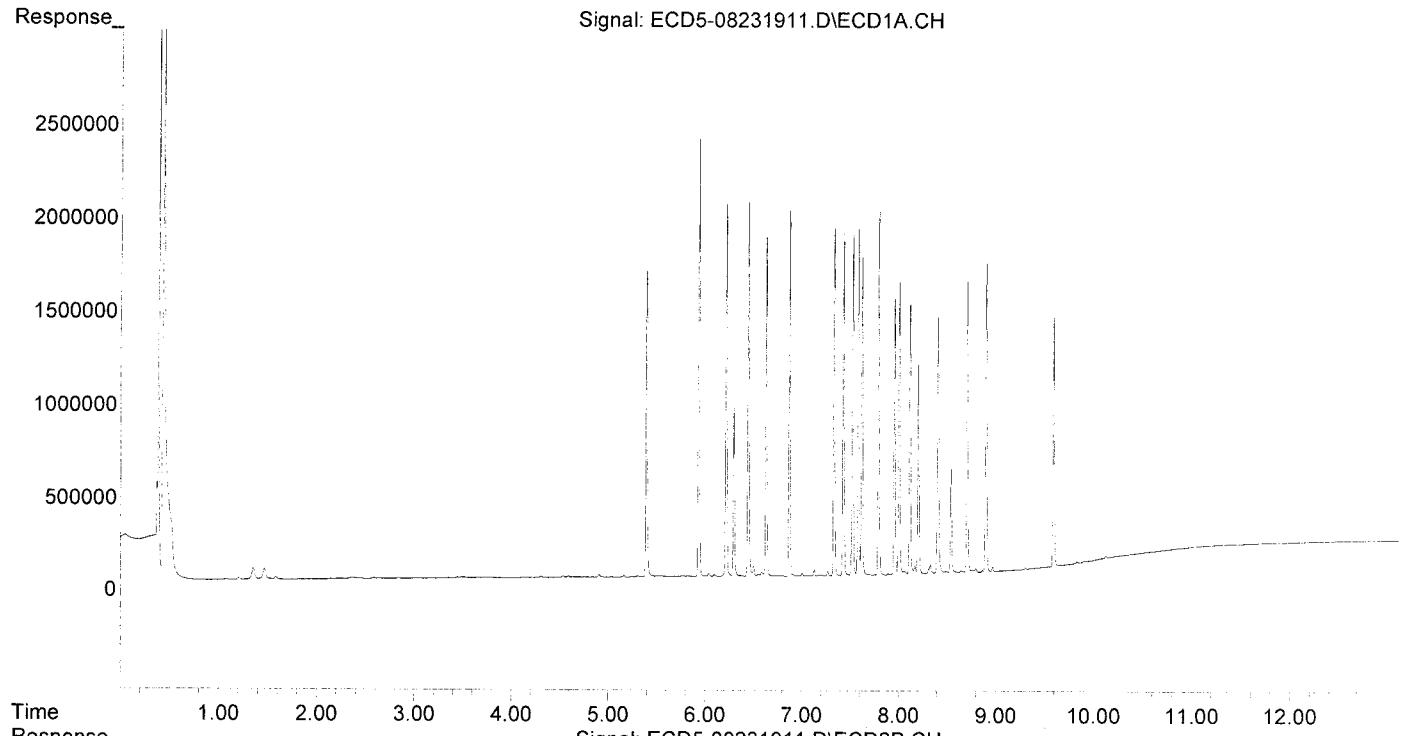
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.396	5.990	1644447	2865854	15.193	15.177
22)	S	DCBP (S)	9.593	10.541	1335468	1678728	11.976	10.572
		Target Compounds						
2)		a-BHC	5.936	6.597	2347065	4095890	15.530	12.883
3)		g-BHC	6.220	6.915	2034859	3476733	13.541	11.551
4)		b-BHC	6.299	6.980	910875	1580847	15.365	13.002
5)		Heptachlor	6.634	7.291	1819621	3005915	11.206	10.223
6)		d-BHC	6.449	7.234	2006493	3613517	17.784	14.564
7)		Aldrin	6.875	7.556	2010802	3341093	11.950	11.536
8)		Heptachlo...	7.335	7.994	1865428	2959301	11.869	11.208
9)		trans-Chl...	7.431	8.134	1847996	3002782	11.953	11.409
10)		cis-Chlor...	7.527	8.241	1843346	2859573	12.012	11.257
11)		Endosulfa...	7.623	8.291	1709332	2724272	11.488	11.460
12)		4,4'-DDE	7.585	8.346	1890931	3049792	15.482	13.444
13)		Dieldrin	7.795	8.491	1954890	2898866	11.805	10.697
14)		Endrin	7.960	8.718	1475508	2244483	11.225	11.476
15)		4,4'-DDD	8.006	8.760	1565974	2425496	15.969	12.353
16)		Endosulfa...	8.117	8.864	1448080	2243610	12.623	11.432
17)		4,4'-DDT	8.204	8.987	1146556	1841119	14.788	14.109
18)		Endrin Al...	8.406	9.101	1375129	2125028	13.321	12.396
19)		Endosulfa...	8.707	9.292	1553540	2424584	12.512	12.489
20)		Methoxychlor	8.542	9.465	561706	883069	15.275	14.167
21)		Endrin Ke...	8.900	9.689	1664380	2496985	12.124	12.365
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

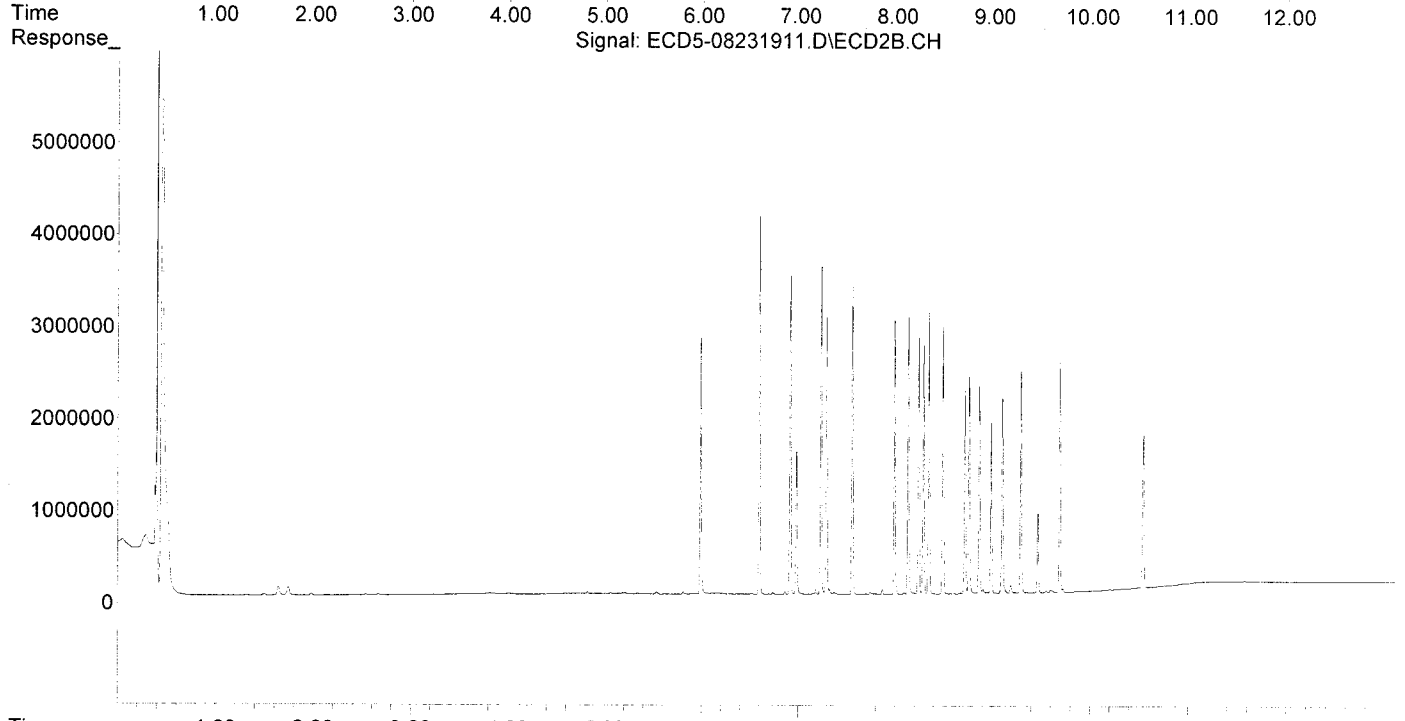
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231911.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 14:42
Operator : MJB
Sample : 9H23034-CAL4
Misc : A19E249, AB 10 ppb
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:19:05 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:00
Operator : MJB
Sample : 9H23034-CAL5
Misc : A19E250, AB 25 ppb
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:19:37 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

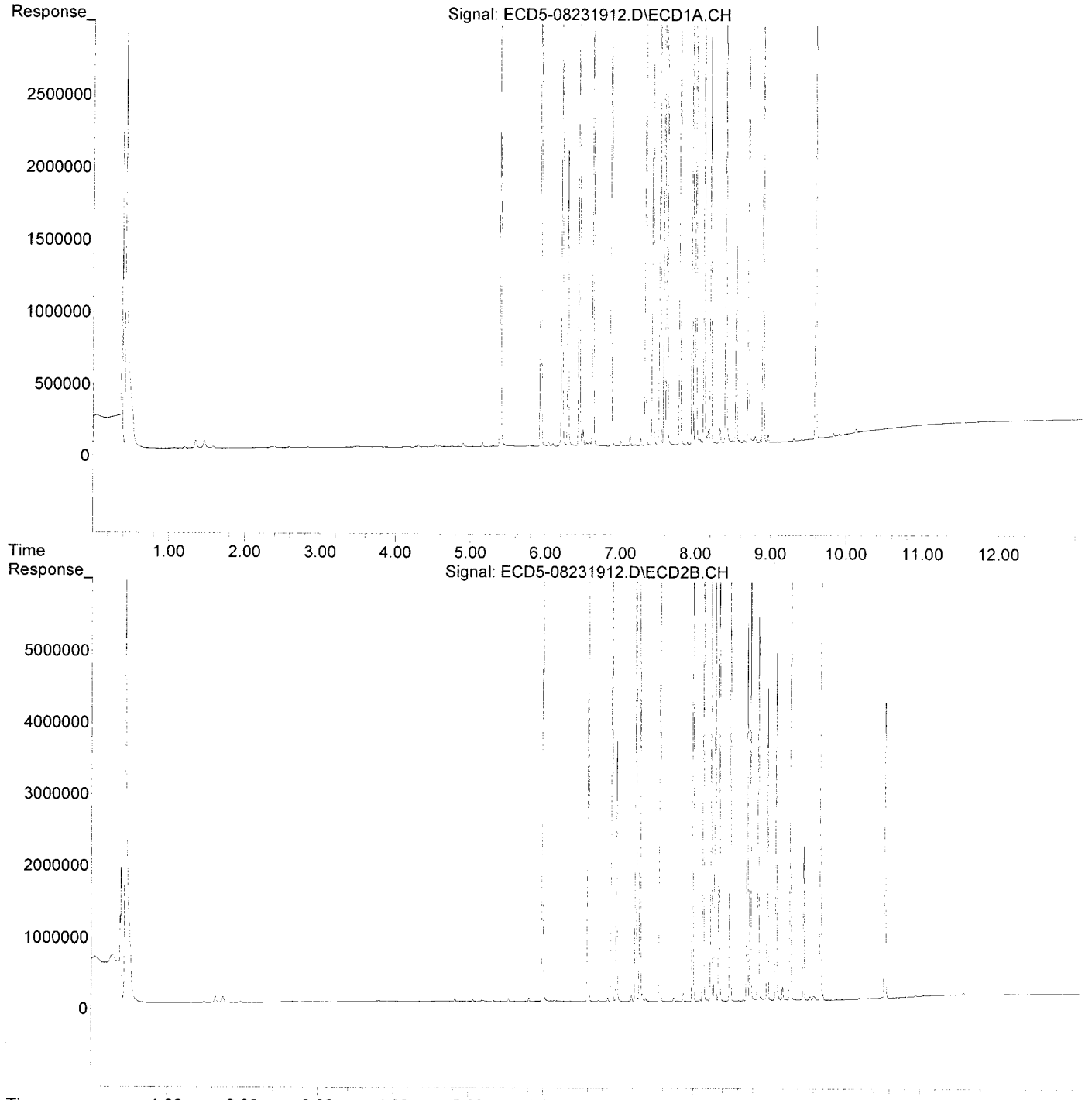
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.394	5.989	4015832	7072923	37.101	36.221
22)	S	DCBP (S)	9.592	10.539	3342634	4163229	30.365	26.219
		Target Compounds						
2)		a-BHC	5.935	6.596	5553096	9910863	35.515	30.324
3)		g-BHC	6.218	6.913	4875657	8508386	32.445	28.267
4)		b-BHC	6.297	6.978	2060378	3677155	34.755	30.244
5)		Heptachlor	6.633	7.289	4314306	7282282	26.568	24.766
6)		d-BHC	6.447	7.232	4667166	8247775	39.910	32.244
7)		Aldrin	6.873	7.555	4845355	7878574	28.797	27.203
8)		Heptachlo...	7.332	7.992	4344286	7064729	27.642	26.758
9)		trans-Chl...	7.429	8.131	4401456	7157480	28.469	27.194
10)		cis-Chlor...	7.525	8.239	4244413	6935857	27.657	27.304
11)		Endosulfa...	7.621	8.288	4111285	6571512	27.630	27.643
12)		4,4'-DDE	7.583	8.343	4571066	7501047	36.397	32.167
13)		Dieldrin	7.792	8.489	4582306	7333890	27.672	27.063
14)		Endrin	7.957	8.716	3508904	5325883	26.694	26.642
15)		4,4'-DDD	8.004	8.758	3727035	6146469	37.001	31.304
16)		Endosulfa...	8.115	8.862	3371864	5447602	29.393	27.758
17)		4,4'-DDT	8.202	8.984	2924467	4480388	36.460	32.123
18)		Endrin Al...	8.404	9.099	3119767	4848504	30.221	28.282
19)		Endosulfa...	8.705	9.289	3645411	5978906	29.360	30.102
20)		Methoxychlor	8.540	9.463	1390283	2166659	36.145	32.800
21)		Endrin Ke...	8.899	9.688	4008958	5893691	29.202	28.514
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231912.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:00
Operator : MJB
Sample : 9H23034-CAL5
Misc : A19E250, AB 25 ppb
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:19:37 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:17
Operator : MJB
Sample : 9H23034-CAL6
Misc : A19H383, AB 50 ppb
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 10:58:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Wed Aug 07 17:49:44 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

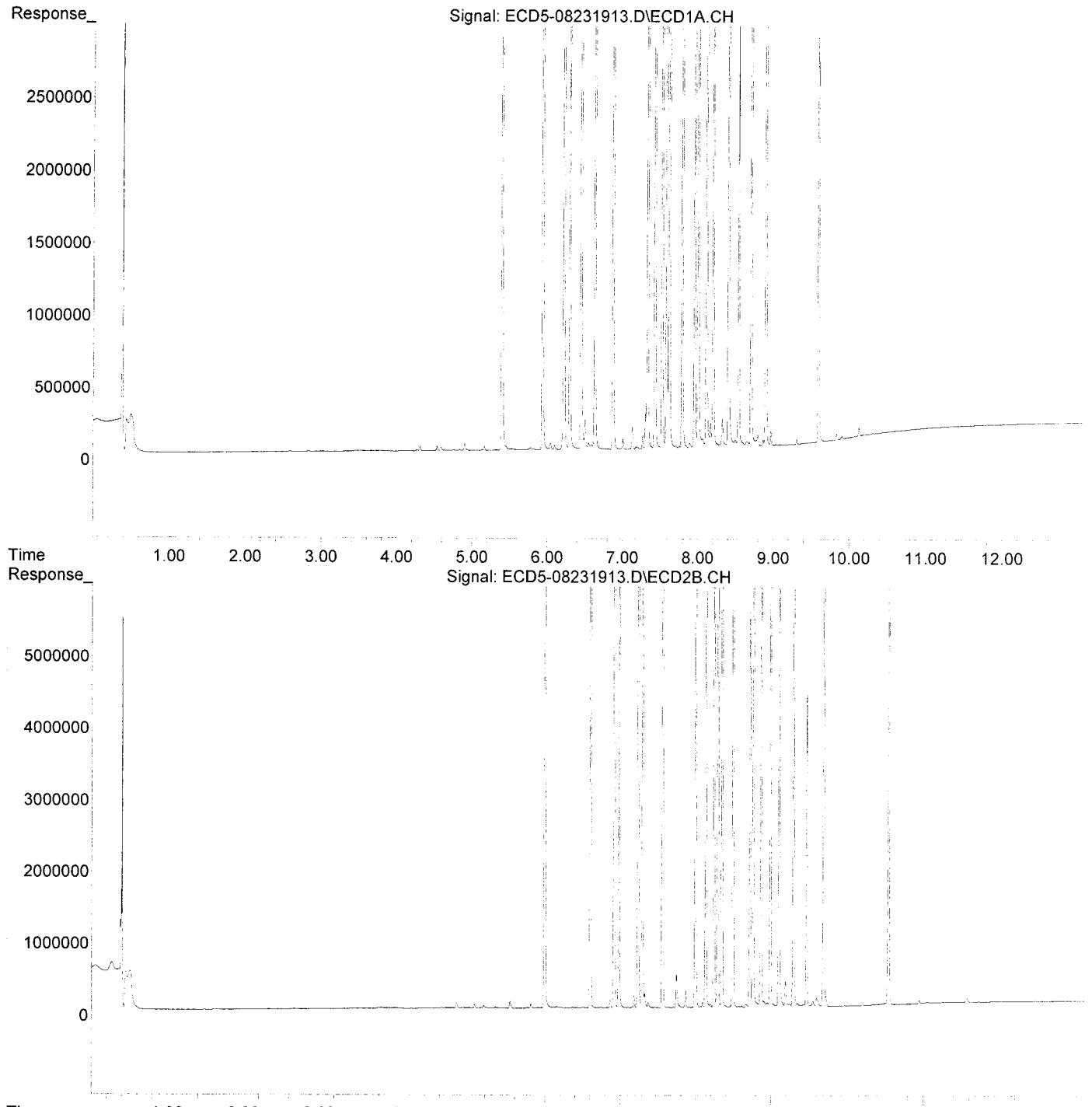
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1)	S TCMX (S)	5.394	5.989	8071481	14196745	74.571	69.077
22)	S DCBP (S)	9.592	10.541	6678990	8730692	60.740	54.984
	Target Compounds						
2)	a-BHC	5.935	6.596	11369592	20265817	69.154	59.445
3)	g-BHC	6.218	6.914	9785999	17381069	65.120	57.745
4)	b-BHC	6.296	6.978	4100858	7516011	69.174	61.818
5)	Heptachlor	6.632	7.290	8735158	14595143	53.793	49.636
6)	d-BHC	6.447	7.232	9610742	17311258	77.761	64.308
7)	Aldrin	6.873	7.555	9327672	16264416	55.436	56.158
8)	Heptachlo...	7.332	7.992	8869300	14837794	56.434	56.198
9)	trans-Chl...	7.428	8.131	8959305	14678719	57.950	55.771
10)	cis-Chlor...	7.524	8.238	8622674	14002116	56.187	55.122
11)	Endosulfa...	7.621	8.289	7984410	13712329	53.659	57.680
12)	4,4'-DDE	7.583	8.344	9177389	15554706	70.089	63.904
13)	Dieldrin	7.792	8.489	9386664	15434113	56.685	56.955
14)	Endrin	7.957	8.716	6979572	11015379	53.097	52.880
15)	4,4'-DDD	8.004	8.758	7726197	13159451	73.239	67.021
16)	Endosulfa...	8.114	8.863	6840920	11534525	59.632	58.774
17)	4,4'-DDT	8.202	8.985	6205369	9285492	69.085	60.834
18)	Endrin Al...	8.404	9.099	6224451	10209034	60.296	59.551
19)	Endosulfa...	8.705	9.289	7420576	12149289	59.766	58.797
20)	Methoxychlor	8.540	9.464	2860683	4346199	69.570	60.726
21)	Endrin Ke...	8.899	9.687	8190707	12954568	59.663	59.905
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231913.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:17
Operator : MJB
Sample : 9H23034-CAL6
Misc : A19H383, AB 50 ppb
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 10:58:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Wed Aug 07 17:49:44 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:34
Operator : MJB
Sample : 9H23034-CAL7
Misc : A19H382, AB 100 ppb
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:20:14 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

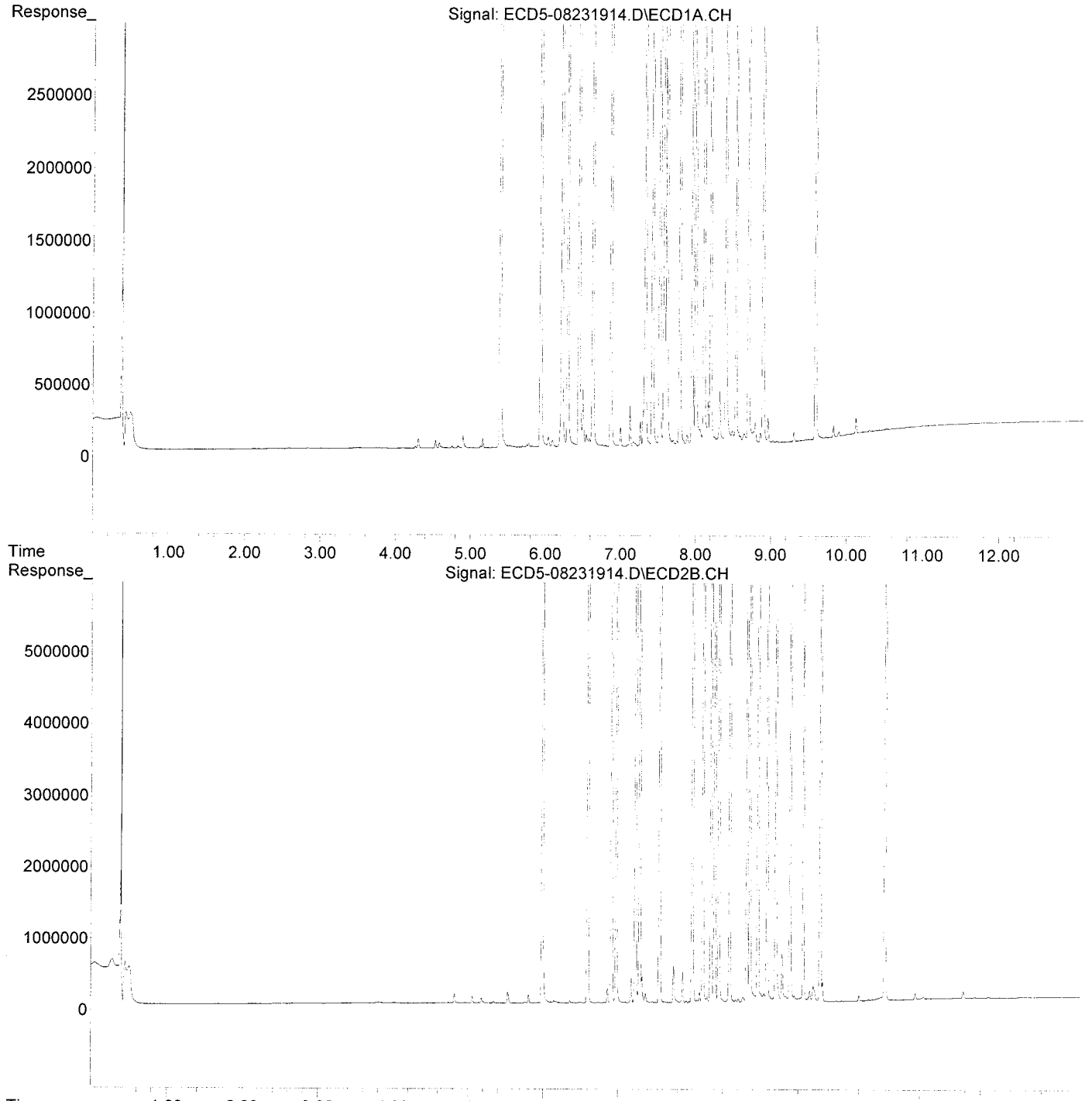
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.395	5.989	15850922	29256334	146.444	130.224
22)	S	DCBP (S)	9.592	10.540	13405396	17784069	121.277	111.999
		Target Compounds						
2)		a-BHC	5.935	6.596	22363584	41699210	125.842	113.668
3)		g-BHC	6.218	6.914	19595093	36788994	130.394	122.224
4)		b-BHC	6.296	6.977	8355416	14625175	140.940	120.290
5)		Heptachlor	6.632	7.289	17551528	30277818	108.086	102.970
6)		d-BHC	6.446	7.232	19475580	35176633	144.149	120.302
7)		Aldrin	6.872	7.555	19108074	33906422	113.562	117.072
8)		Heptachlo...	7.331	7.991	17318444	30045511	110.195	113.798
9)		trans-Chl...	7.427	8.131	17732791	30742272	114.698	116.803
10)		cis-Chlor...	7.523	8.238	16742584	29042863	109.098	114.333
11)		Endosulfa...	7.619	8.288	16089996	27212707	108.133	114.469
12)		4,4'-DDE	7.582	8.344	18052552	32499603	128.779	123.812
13)		Dieldrin	7.791	8.488	18324422	31001958	110.659	114.403
14)		Endrin	7.957	8.715	13812708	23102413	103.080	102.828
15)		4,4'-DDD	8.003	8.758	15437146	26297484	135.694	133.933
16)		Endosulfa...	8.113	8.861	13543500	23016371	118.059	117.279
17)		4,4'-DDT	8.201	8.984	12176961	19789501	120.685	112.516
18)		Endrin Al...	8.403	9.098	12363806	20502737	119.767	119.596
19)		Endosulfa...	8.704	9.289	14366789	24477320	115.711	110.592
20)		Methoxychlor	8.539	9.463	5877329	9444987	128.396	114.860
21)		Endrin Ke...	8.898	9.687	16251943	26636559	118.383	114.357
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231914.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:34
Operator : MJB
Sample : 9H23034-CAL7
Misc : A19H382, AB 100 ppb
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:20:14 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:52
Operator : MJB
Sample : 9H23034-CAL8
Misc : A19E244, AB 200 ppb
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:20:45 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

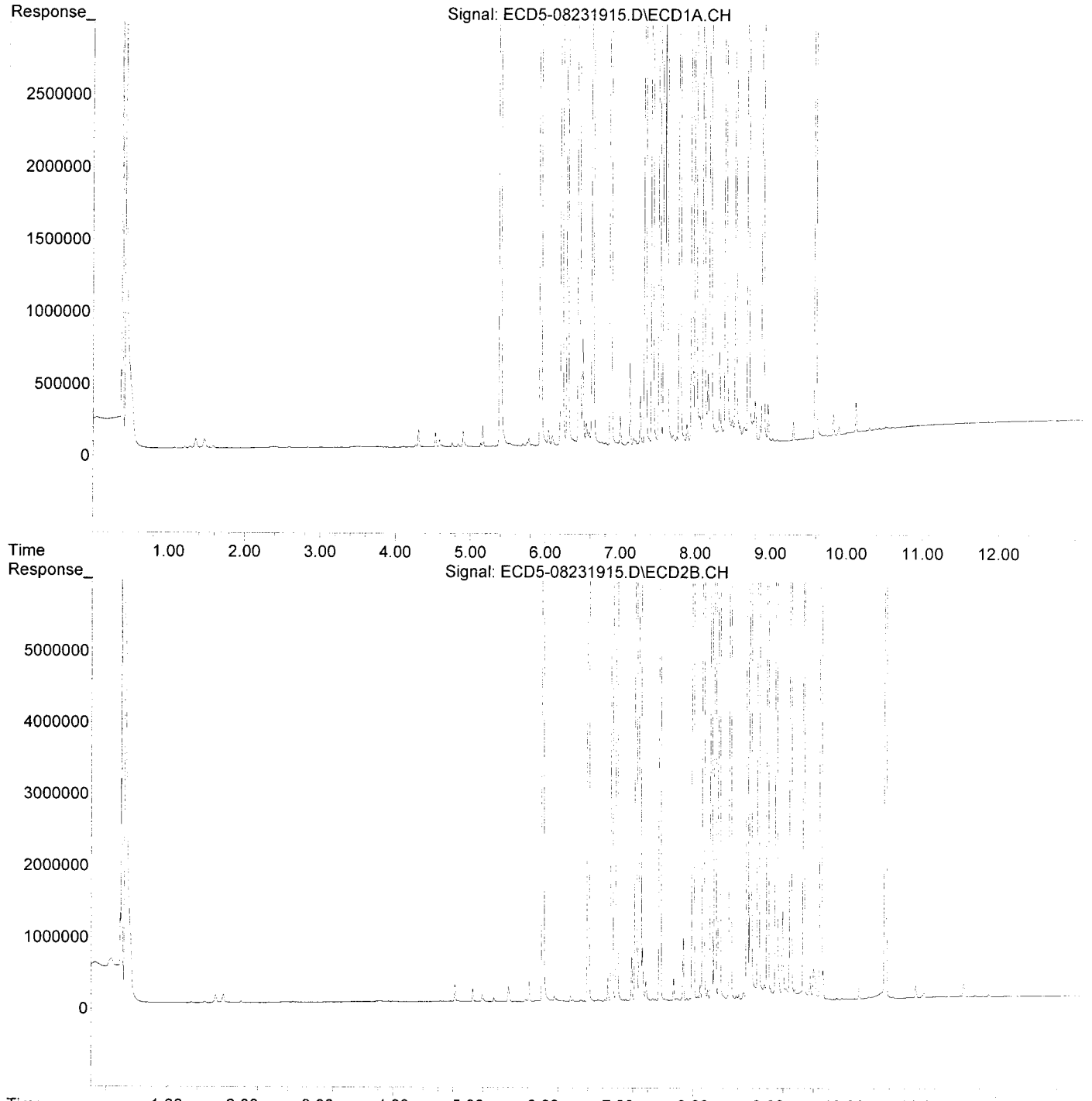
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	5.394	5.990	32842535	62584449	303.426	241.228
22)	S	DCBP (S)	9.591	10.539	26975231	38097779	240.687	239.929
		Target Compounds						
2)		a-BHC	5.935	6.597	47202252	94376748	232.879	224.790
3)		g-BHC	6.218	6.914	41889726	80765680	278.753	268.327
4)		b-BHC	6.294	6.977	18238696	32553433	307.652	267.747
5)		Heptachlor	6.630	7.289	37785699	71283176	232.692	242.422
6)		d-BHC	6.445	7.232	41016592	80979751	263.399	237.546
7)		Aldrin	6.870	7.554	39838403	73228186	236.765	252.843
8)		Heptachlo...	7.330	7.991	36258170	65330070	230.706	247.439
9)		trans-Chl...	7.425	8.130	37621413	66447972	243.340	252.464
10)		cis-Chlor...	7.521	8.238	35207945	63977063	229.421	251.859
11)		Endosulfa...	7.618	8.288	33852593	61043507	227.507	256.777
12)		4,4'-DDE	7.581	8.344	38763081	69842351	244.719	234.608
13)		Dieldrin	7.791	8.489	39217772	70031781	236.831	258.430
14)		Endrin	7.955	8.715	31426311	52779585	239.075	204.455
15)		4,4'-DDD	8.002	8.758	32436804	59560270	251.258	303.340
16)		Endosulfa...	8.112	8.862	29471042	51834888	256.899	264.124
17)		4,4'-DDT	8.200	8.984	29075222	48203441	232.877	216.675
18)		Endrin Al...	8.402	9.098	26627672	45084544	257.940	262.986
19)		Endosulfa...	8.704	9.289	31126520	54592794	250.696	216.937
20)		Methoxychlor	8.537	9.463	14271143	23714100	255.612	227.264
21)		Endrin Ke...	8.898	9.688	35094718	60861376	255.639	227.431
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231915.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 15:52
Operator : MJB
Sample : 9H23034-CAL8
Misc : A19E244, AB 200 ppb
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:20:45 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:44
Operator : MJB
Sample : 9H23034-CAL9
Misc : A19E272, 9-42 1 ppb
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:23:34 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

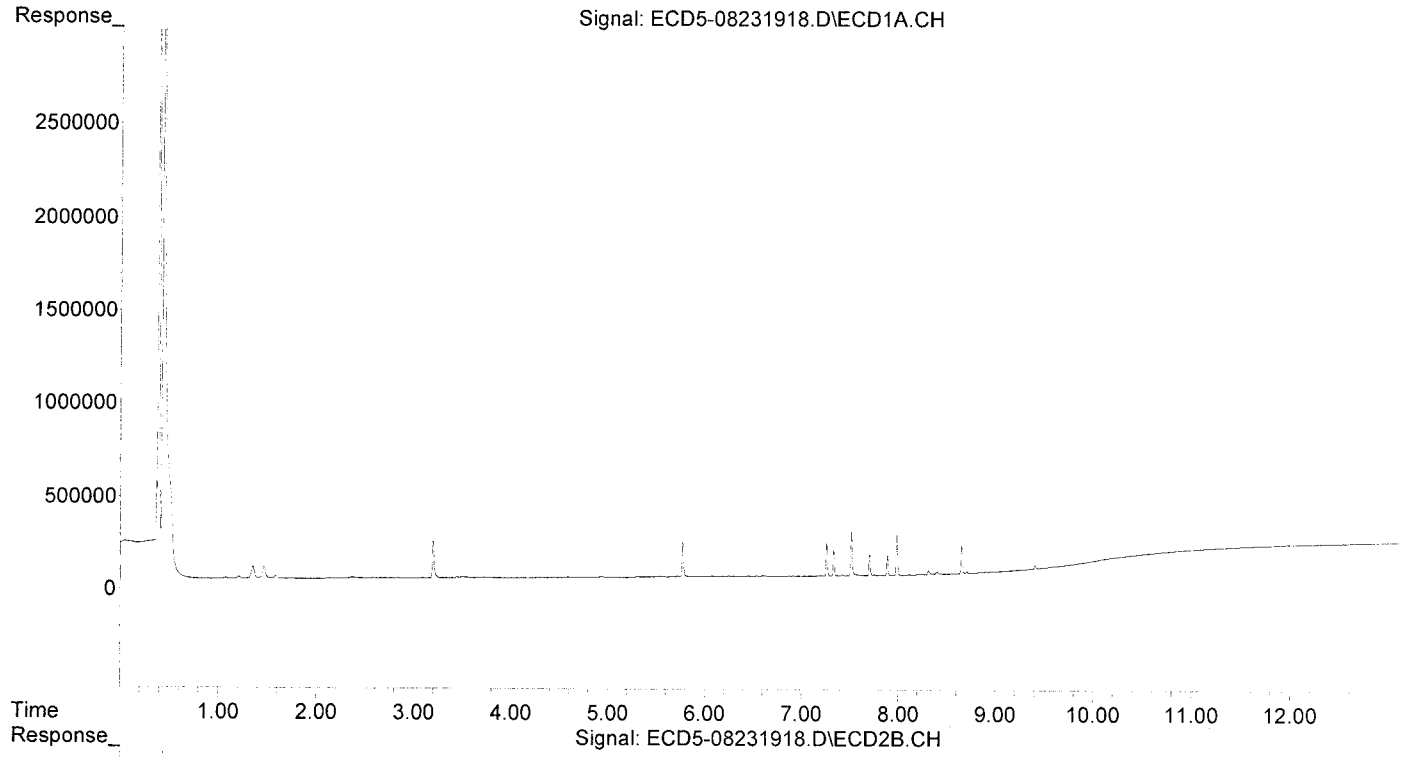
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	3.198	3.687	198207	383198	1.330	1.219
24)		Hexachlor...	5.775	6.453	194679	328025	1.585	1.463
25)		Oxychlordane	7.263	7.922	176844	279143	1.364	1.326
26)		2,4'-DDE	7.335	8.123	137947	219164	1.468	1.405
27)		trans-Non...	7.518	8.195	236836	306202	1.652	1.333
28)		2,4'-DDD	7.707	8.495	120240	192040	1.439	1.409
29)		2,4'-DDT	7.890	8.719	107110	173338	1.500	1.372
30)		cis-Nonac...	7.987	8.759	219220	332745	1.362	1.310
31)		Mirex	8.655	9.680	147356	209783	1.505	1.458
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

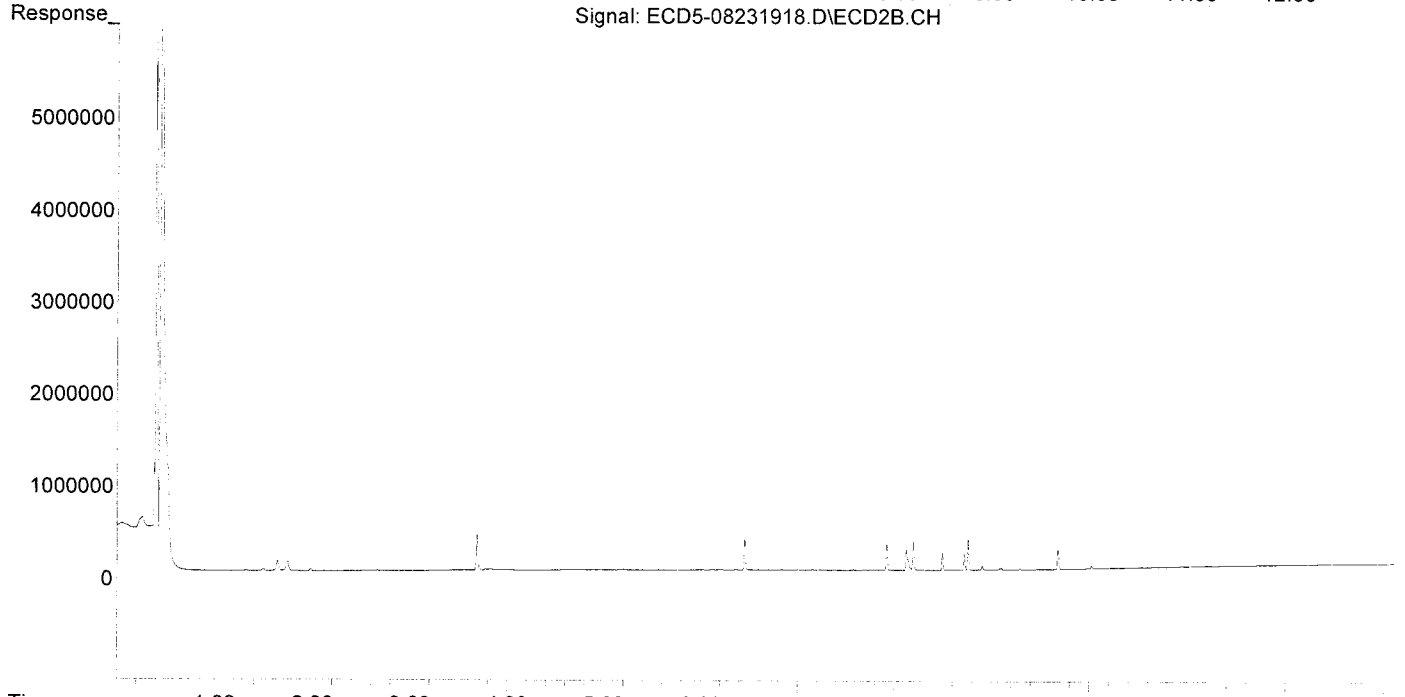
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231918.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 16:44
Operator : MJB
Sample : 9H23034-CAL9
Misc : A19E272, 9-42 1 ppb
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:23:34 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:01
Operator : MJB
Sample : 9H23034-CALA
Misc : A19E273, 9-42 2 ppb
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:24:10 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

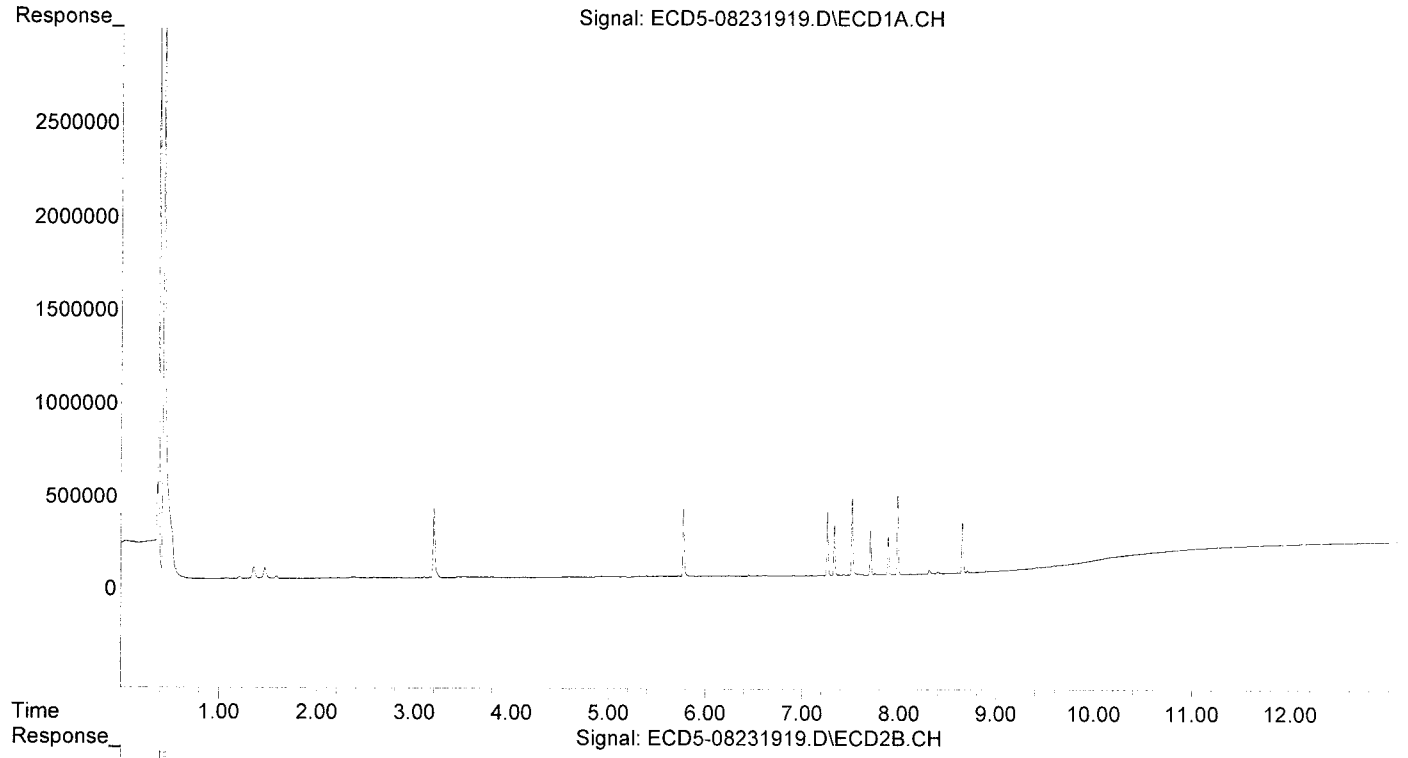
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.198	3.687	375794	754548	2.521	2.400
24)	Hexachlor...	5.775	6.453	362082	632830	2.948	2.823
25)	Oxychlordane	7.262	7.921	339370	541023	2.617	2.571
26)	2,4'-DDE	7.334	8.123	265212	411812	2.822	2.639
27)	trans-Non...	7.518	8.194	415126	587765	2.896	2.559
28)	2,4'-DDD	7.707	8.495	233089	373596	2.789	2.741
29)	2,4'-DDT	7.889	8.718	204209	332170	2.725	2.614
30)	cis-Nonac...	7.986	8.758	423442	624783	2.632	2.460
31)	Mirex	8.655	9.680	266770	388199	2.725	2.697
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

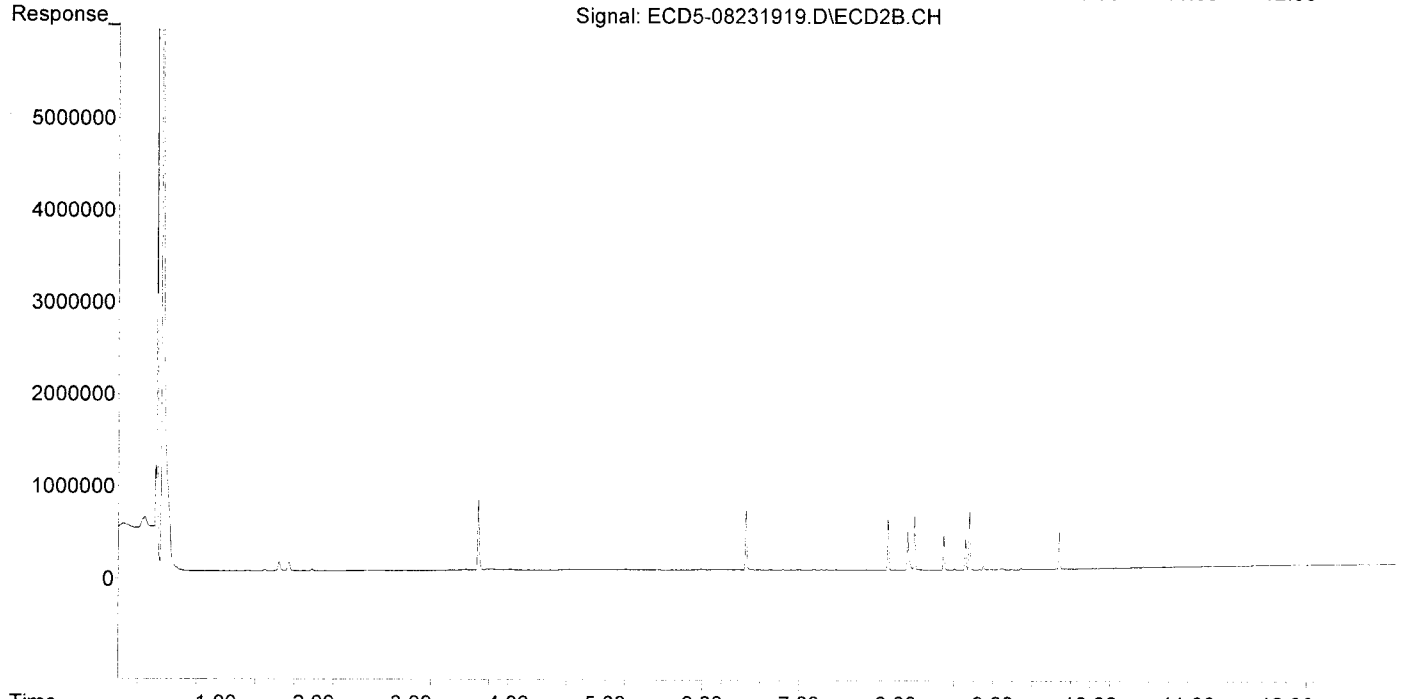
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231919.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:01
Operator : MJB
Sample : 9H23034-CALA
Misc : A19E273, 9-42 2 ppb
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:24:10 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:18
Operator : MJB
Sample : 9H23034-CALB
Misc : A19E274, 9-42 5 ppb
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:24:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

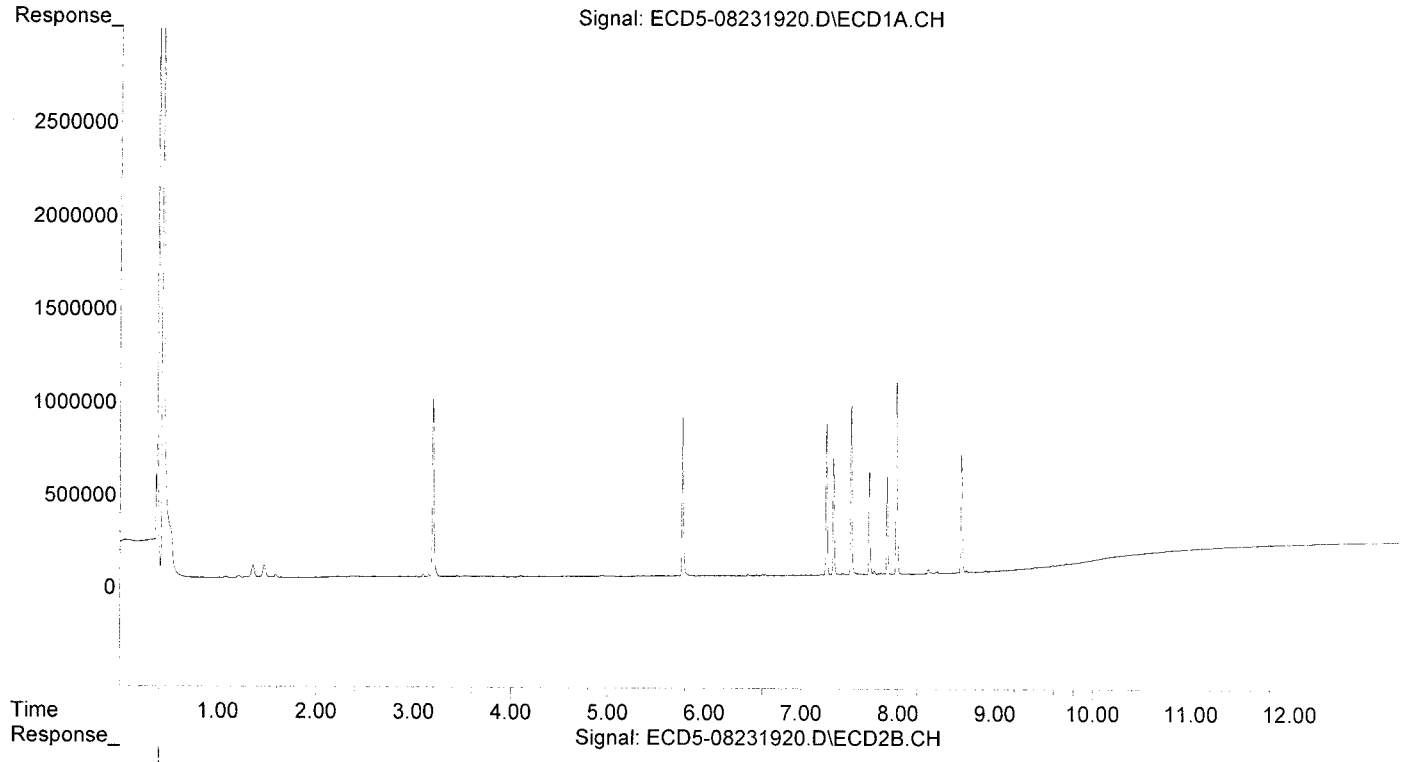
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.198	3.687	959211	1877484	6.435	5.971
24)	Hexachlor...	5.775	6.453	853793	1485583	6.951	6.626
25)	Oxychlordane	7.262	7.921	819748	1325543	6.321	6.298
26)	2,4'-DDE	7.334	8.123	633168	1029687	6.738	6.600
27)	trans-Non...	7.518	8.194	933222	1467723	6.510	6.390
28)	2,4'-DDD	7.705	8.495	560942	898697	6.711	6.593
29)	2,4'-DDT	7.889	8.719	536967	873074	6.892	6.802
30)	cis-Nonac...	7.986	8.759	1025899	1587243	6.376	6.249
31)	Mirex	8.654	9.679	628618	895523	6.422	6.222
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

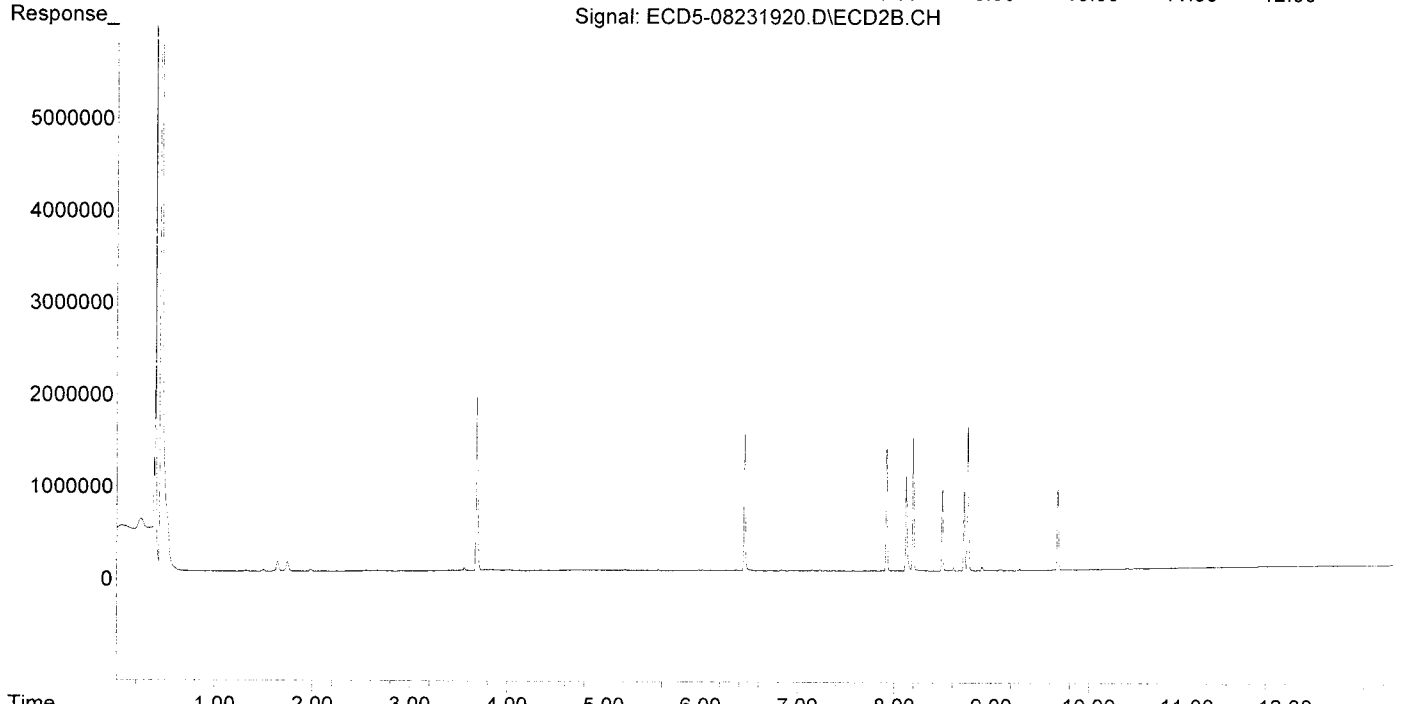
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231920.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:18
Operator : MJB
Sample : 9H23034-CALB
Misc : A19E274, 9-42 5 ppb
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:24:43 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:35
Operator : MJB
Sample : 9H23034-CALC
Misc : A19E275, 9-42 10 ppb
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:25:17 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

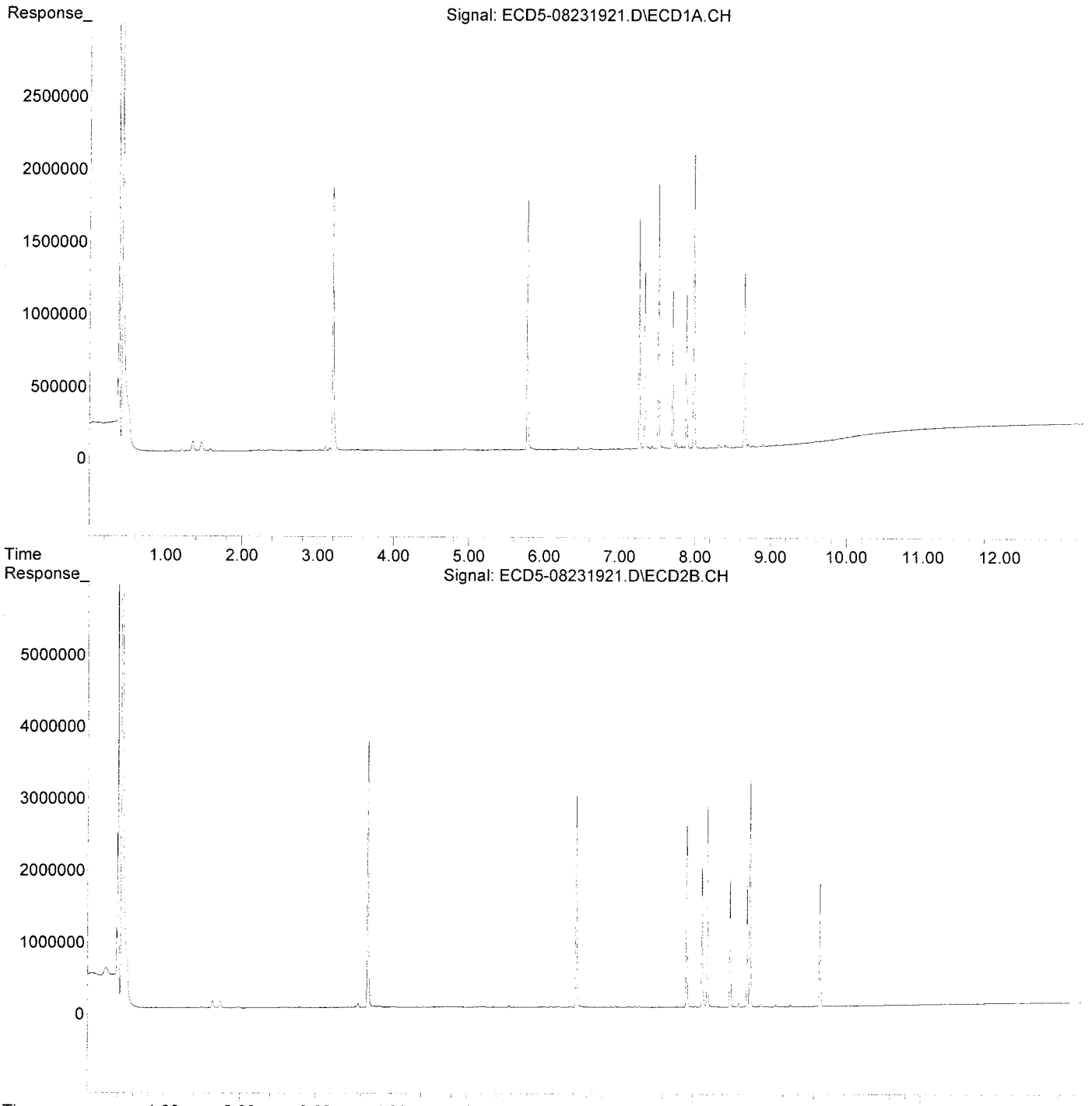
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.198	3.687	1838187	3701532	12.333	11.773
24)	Hexachlor...	5.774	6.453	1711884	2936294	13.936	13.097
25)	Oxychlordane	7.261	7.921	1591613	2538903	12.272	12.063
26)	2,4'-DDE	7.333	8.122	1245265	2018331	13.252	12.936
27)	trans-Non...	7.516	8.194	1817552	2844404	12.679	12.384
28)	2,4'-DDD	7.705	8.495	1103587	1778790	13.203	13.050
29)	2,4'-DDT	7.888	8.719	1051565	1702568	13.249	13.099
30)	cis-Nonac...	7.986	8.759	2032010	3148054	12.629	12.394
31)	Mirex	8.654	9.679	1196365	1722960	12.222	11.971
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231921.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:35
Operator : MJB
Sample : 9H23034-CALC
Misc : A19E275, 9-42 10 ppb
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:25:17 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:53
Operator : MJB
Sample : 9H23034-CALD
Misc : A19E276, 9-42 25 ppb
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:25:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

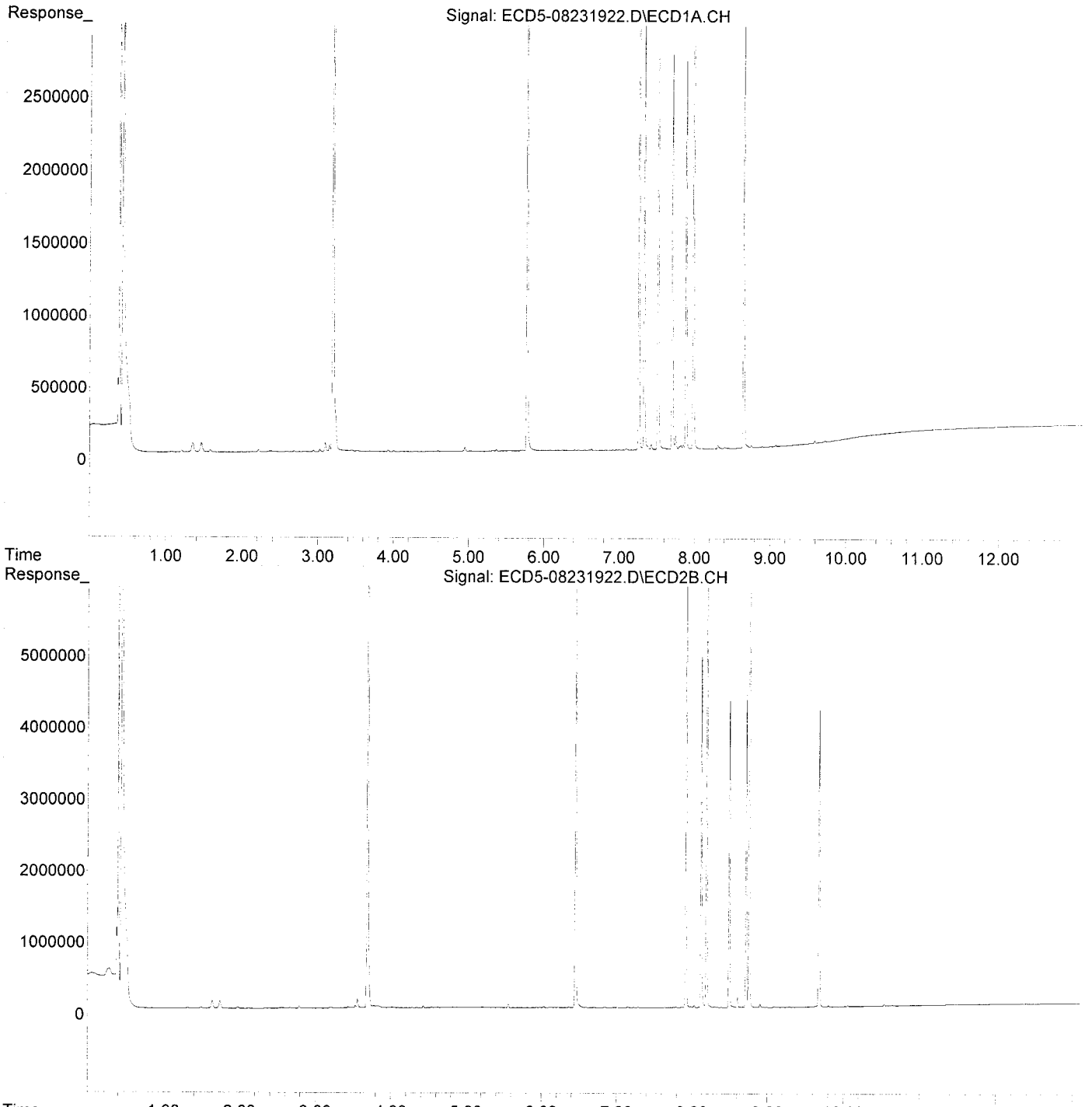
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.198	3.687	4363988	8892238	29.278	28.282
24)	Hexachlor...	5.774	6.453	4184551	7416324	34.066	33.080
25)	Oxychlordane	7.261	7.920	3881255	6202791	29.926	29.471
26)	2,4'-DDE	7.333	8.122	3059421	4999232	32.558	32.042
27)	trans-Non...	7.516	8.194	4391046	7092288	30.631	30.877
28)	2,4'-DDD	7.705	8.495	2745178	4389185	32.844	32.200
29)	2,4'-DDT	7.888	8.719	2728794	4405554	33.278	32.676
30)	cis-Nonac...	7.986	8.759	4993110	8219393	31.032	32.361
31)	Mirex	8.654	9.679	2910818	4138115	29.738	28.753
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231922.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 17:53
Operator : MJB
Sample : 9H23034-CALD
Misc : A19E276, 9-42 25 ppb
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:25:49 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:10
Operator : MJB
Sample : 9H23034-CALE
Misc : A19E154, 9-42 50 ppb
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:22:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

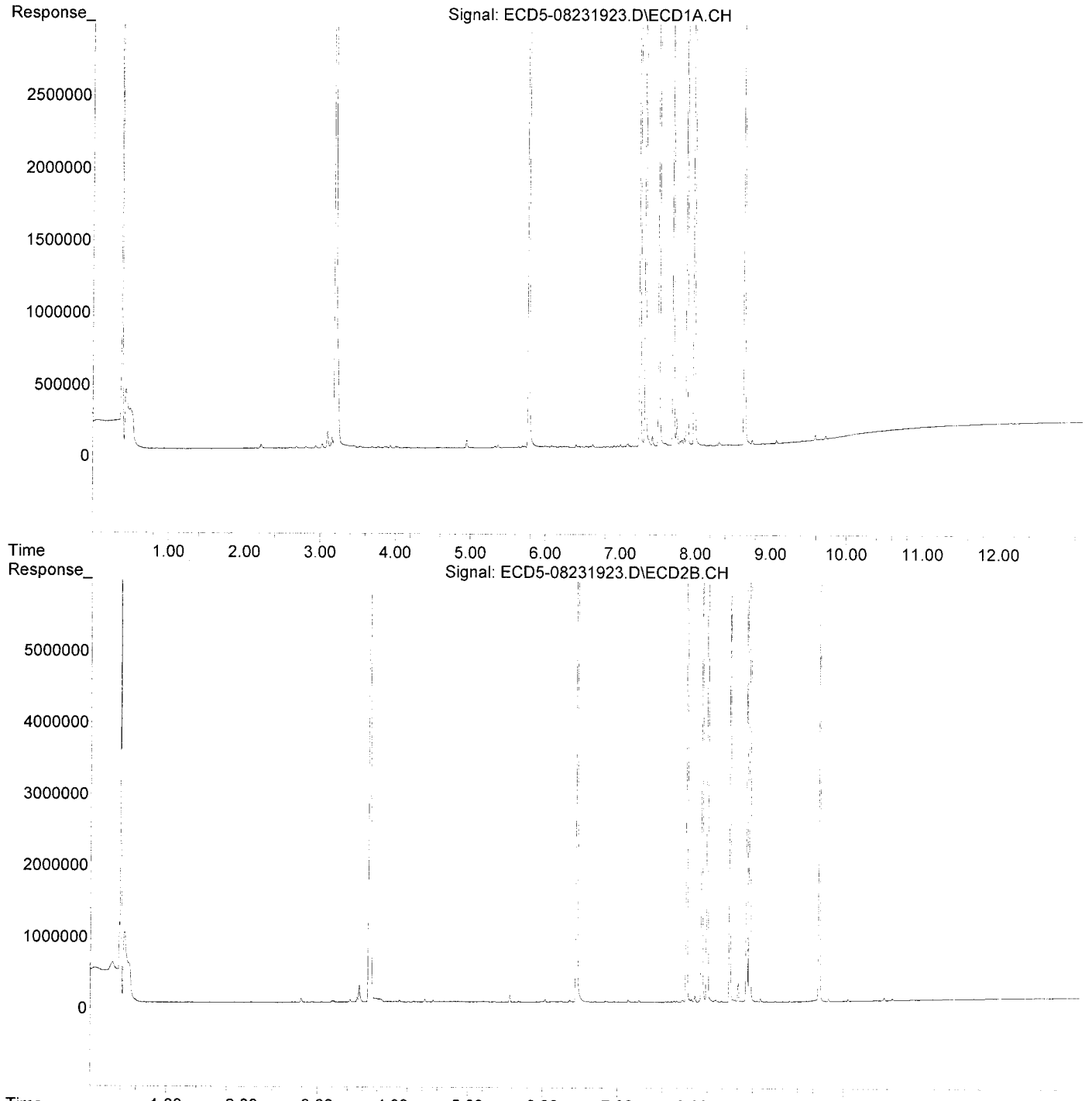
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.198	3.688	8761747	18635615	58.783	59.271
24)	Hexachlor...	5.774	6.454	8911624	16094159	72.549	71.786
25)	Oxychlordane	7.261	7.920	8382873	14172543	64.636	67.337
26)	2,4'-DDE	7.333	8.122	6510588	11006400	69.284	70.544
27)	trans-Non...	7.516	8.194	9581794	15807712	66.841	68.821
28)	2,4'-DDD	7.705	8.495	5920095	9924934	70.829	72.811
29)	2,4'-DDT	7.888	8.718	5687323	8810591	66.398	62.033
30)	cis-Nonac...	7.985	8.758	10616019	17721229	65.978	69.771
31)	Mirex	8.652	9.679	6218341	9100959	62.528	63.235
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231923.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:10
Operator : MJB
Sample : 9H23034-CALE
Misc : A19E154, 9-42 50 ppb
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:22:32 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 10:58:24 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:27
Operator : MJB
Sample : 9H23034-CALF
Misc : A19E155, 9-42 100 ppb
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:26:27 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/27/19

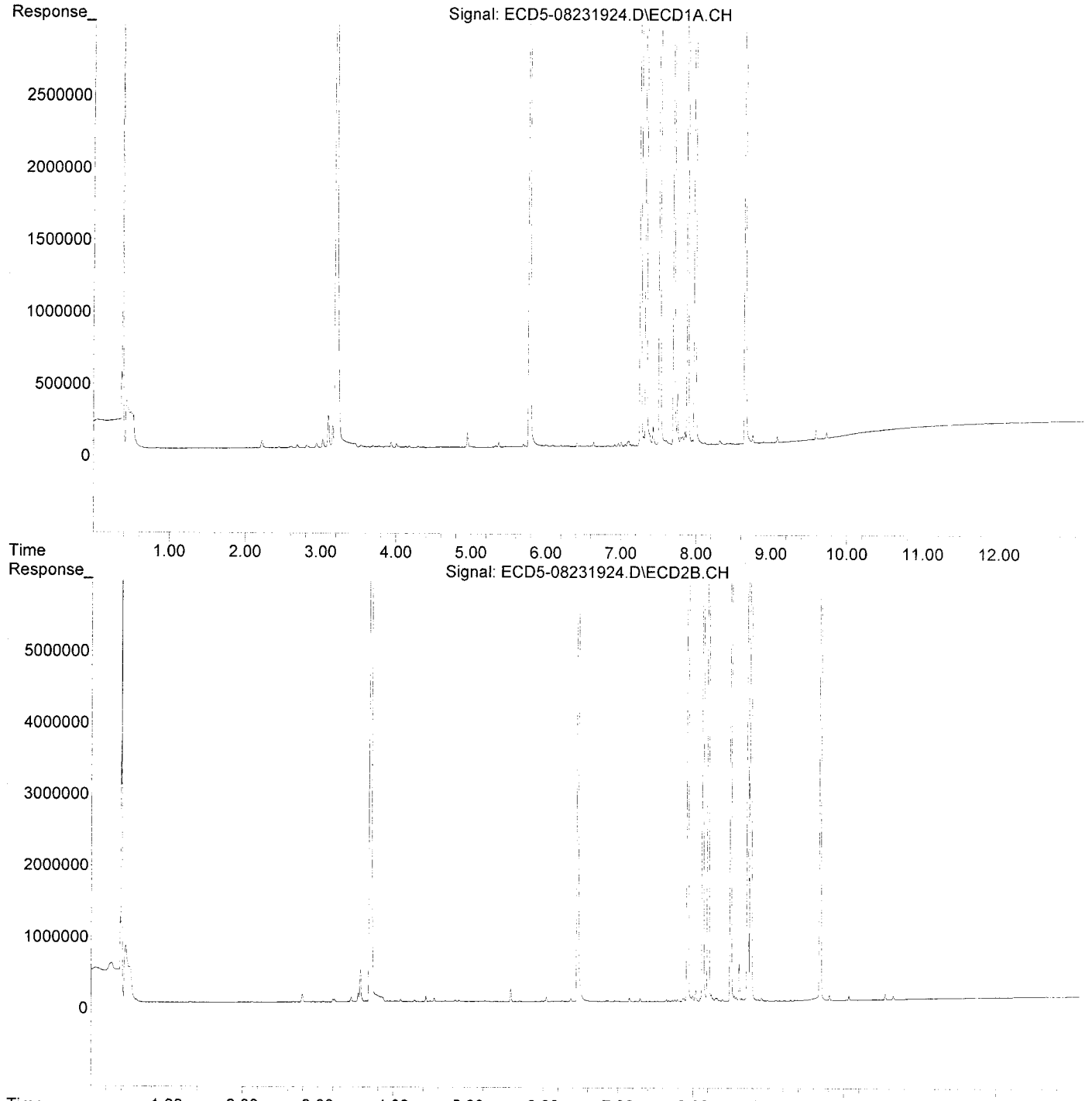
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	3.199	3.690	17952134	39298885	120.443	124.991
24)		Hexachlor...	5.776	6.455	17670025	32766708	143.851	146.152
25)		Oxychlordane	7.261	7.922	16359215	29732149	126.137	141.263
26)		2,4'-DDE	7.334	8.123	12769067	22164400	135.886	142.059
27)		trans-Non...	7.516	8.195	18351251	31975271	128.015	139.210
28)		2,4'-DDD	7.705	8.496	11587554	20118925	138.635	147.597
29)		2,4'-DDT	7.888	8.721	11771354	18998968	127.689	121.350
30)		cis-Nonac...	7.986	8.760	20932641	36072644	130.096	142.024
31)		Mirex	8.653	9.680	11960753	19363200	122.194	134.540
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231924.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:27
Operator : MJB
Sample : 9H23034-CALF
Misc : A19E155, 9-42 100 ppb
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:26:27 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:45
Operator : MJB
Sample : 9H23034-CALG
Misc : A19E271, 9-42 200 ppb
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:27:05 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

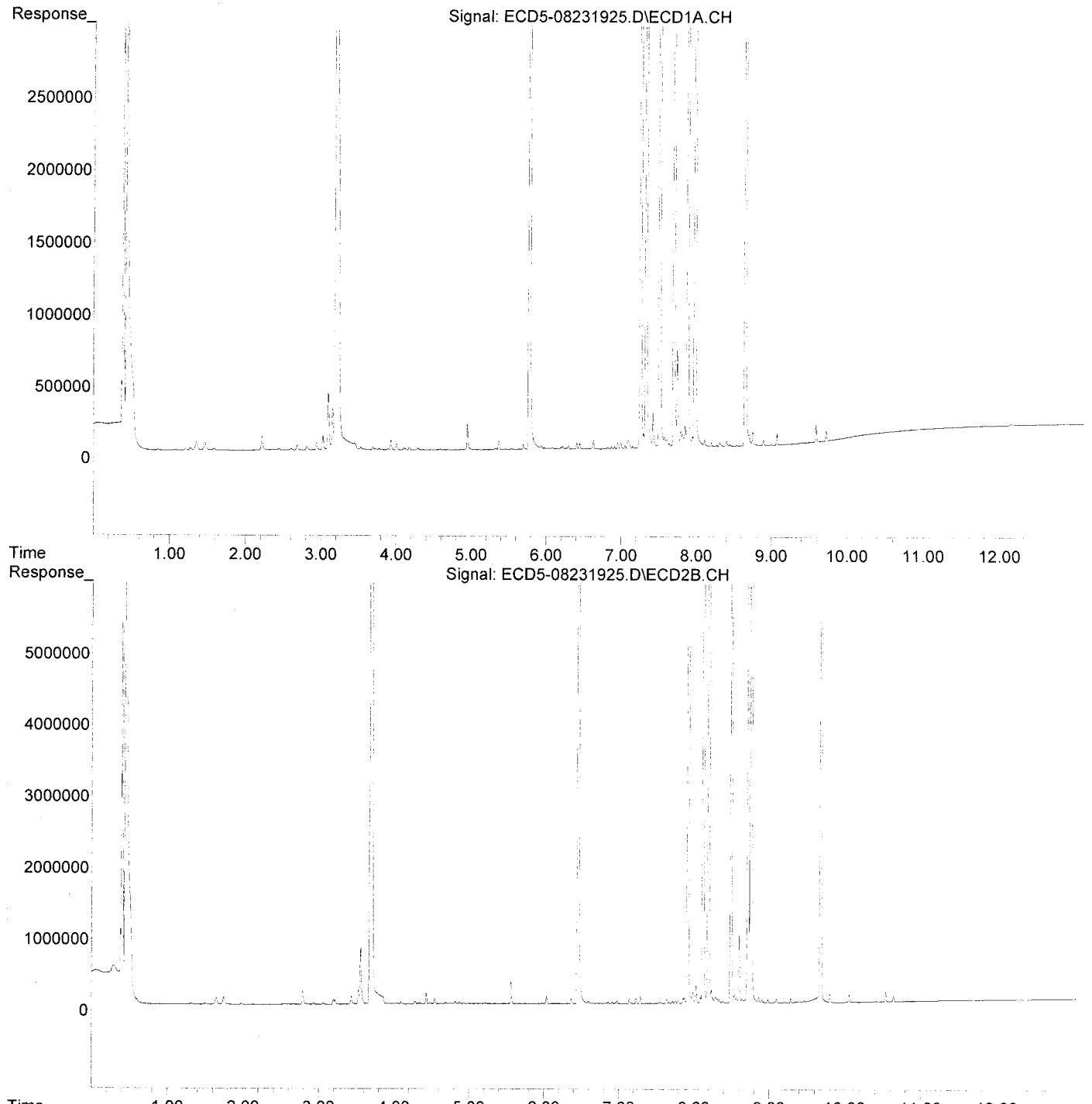
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	3.199	3.689	34166533	75988565	229.227	241.683
24)	Hexachlor...	5.774	6.454	34073459	66261966	277.392	295.553
25)	Oxychlordane	7.258	7.920	32032634	58736982	246.986	279.071
26)	2,4'-DDE	7.331	8.122	24819199	44504592	264.121	285.245
27)	trans-Non...	7.514	8.194	35027918	63083636	244.348	274.645
28)	2,4'-DDD	7.703	8.494	21916962	39839303	262.217	292.269
29)	2,4'-DDT	7.887	8.719	23024956	39999231	224.761	221.024
30)	cis-Nonac...	7.984	8.759	40046185	72455823	248.887	285.271
31)	Mirex	8.652	9.679	23284997	38425530	237.885	266.989
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231925.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 18:45
Operator : MJB
Sample : 9H23034-CALG
Misc : A19E271, 9-42 200 ppb
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:27:05 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231928.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:36
Operator : MJB
Sample : 9H23034-CALH
Misc : A19F232, CHLOR 50 ppb
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:31:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MP 12/26/19

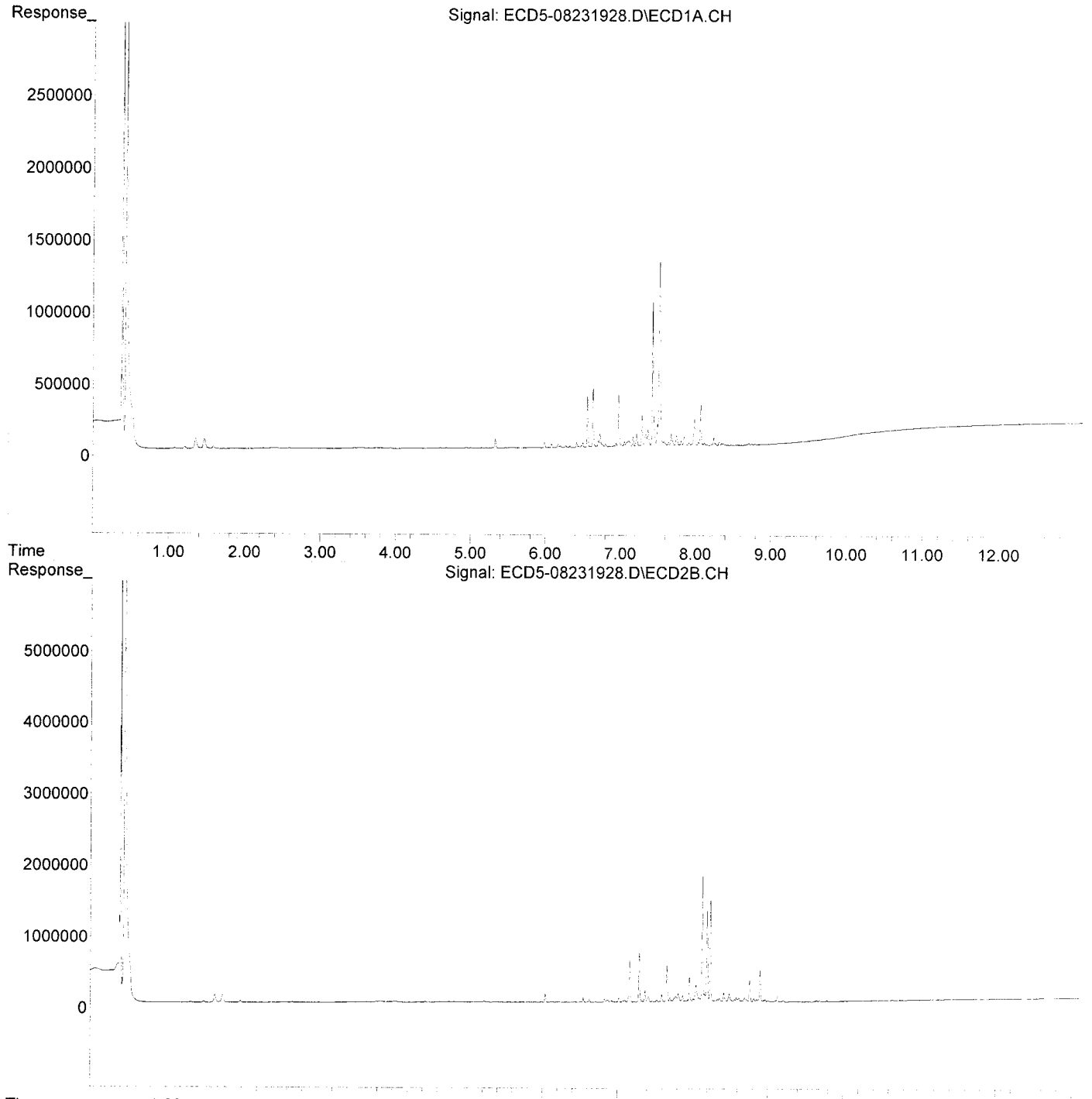
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	7.429	8.131	1009143	1754707	65.443	66.784
33)	Chlordane...	7.521	8.237	1286655	1472400	62.192	67.669
34)	Chlordane...	8.068	8.897	288087	439020	60.282	67.059
35)	Chlordane...	3.446	0.000	5365	0	NoCal	N.D.
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231928.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:36
Operator : MJB
Sample : 9H23034-CALH
Misc : A19F232, CHLOR 50 ppb
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:31:56 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:54
Operator : MJB
Sample : 9H23034-CALI
Misc : A19F233, CHLOR 100 ppb
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:32:31 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/26/19

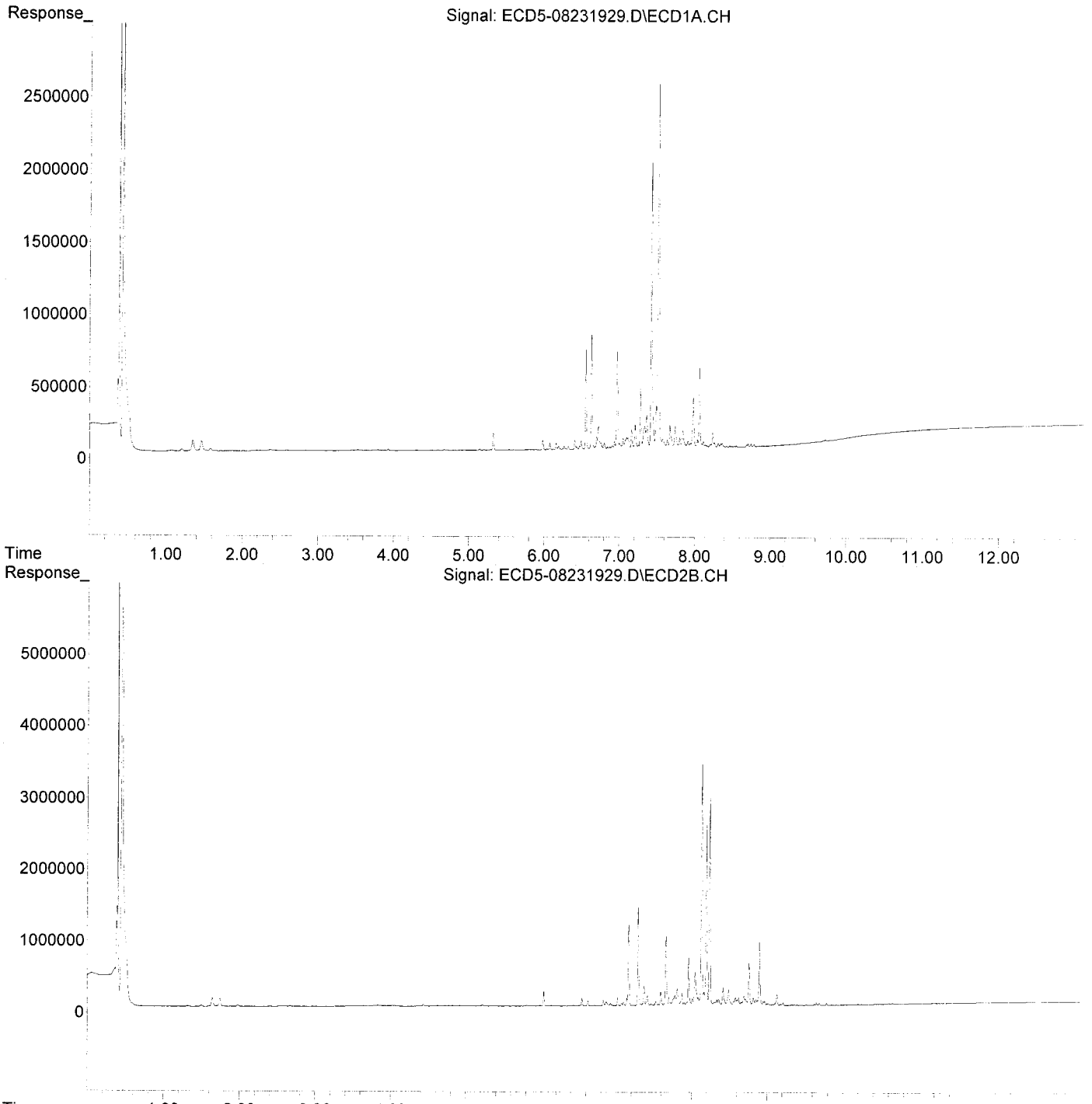
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	7.429	8.130	1978897	3378388	128.331	127.866
33)	Chlordane...	7.521	8.238	2519520	2905941	121.784	133.934
34)	Chlordane...	8.068	8.898	548196	874465	114.710	133.920
35)	Chlordane...	3.446	0.000	4938	0	NoCal	N.D.
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 19:54
Operator : MJB
Sample : 9H23034-CALI
Misc : A19F233, CHLOR 100 ppb
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:32:31 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:11
Operator : MJB
Sample : 9H23034-CALJ
Misc : A19F234, CHLOR 200 ppb
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:33:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/26/19

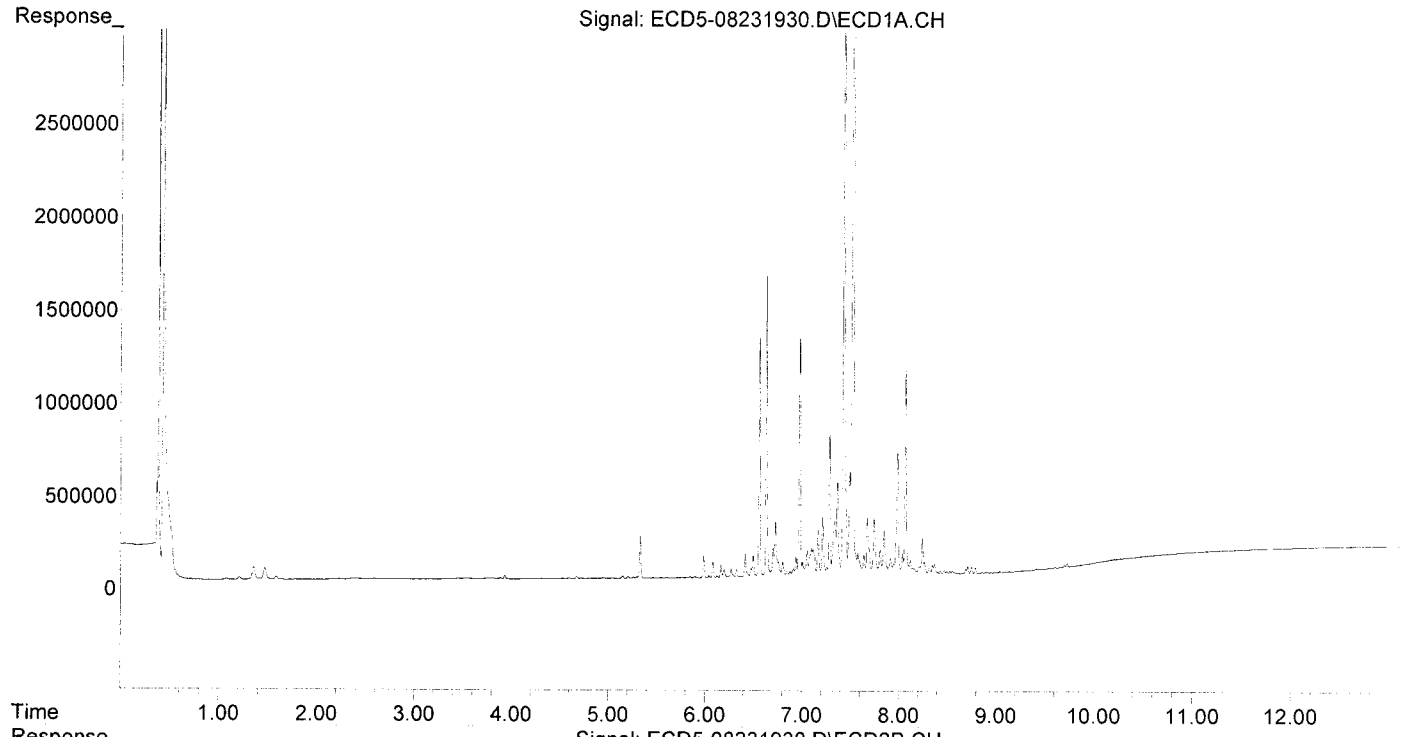
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	7.429	8.131	3849299	6751197	249.627	251.318
33)	Chlordane...	7.522	8.239	4906320	5883615	237.153	267.927
34)	Chlordane...	8.069	8.898	1101677	1731727	230.526	261.800
35)	Chlordane...	3.448	0.000	4503	0	NoCal	N.D.
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

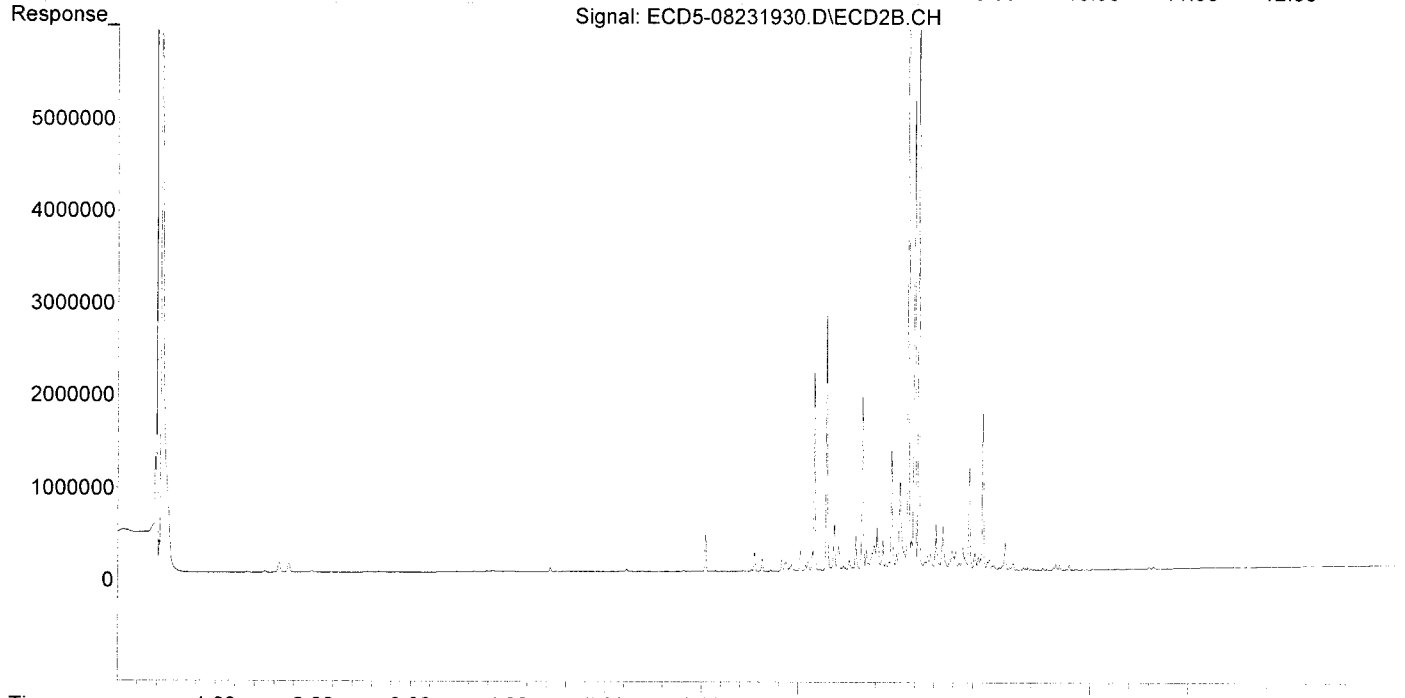
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:11
Operator : MJB
Sample : 9H23034-CALJ
Misc : A19F234, CHLOR 200 ppb
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:33:08 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:28
Operator : MJB
Sample : 9H23034-CALK
Misc : A19F235, CHLOR 500 ppb
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:28:33 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 9/26/19

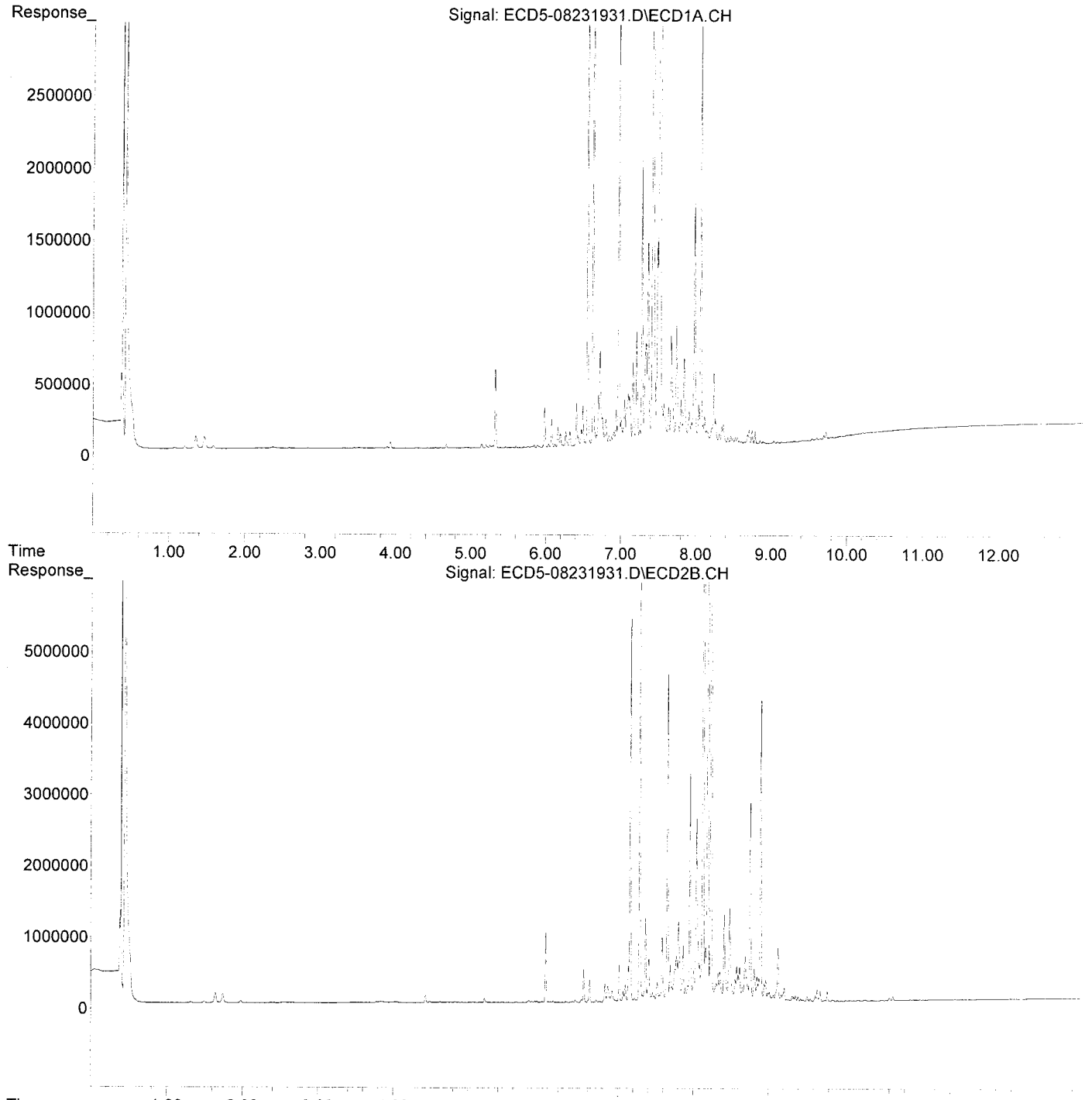
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	7.427	8.129	9628671	17830433	624.419	629.093
33)	Chlordane...	7.520	8.237	12176524	14812273	588.567	644.287
34)	Chlordane...	8.067	8.896	2921278	4271709	611.277	615.748
35)	Chlordane...	3.447	0.000	4056	0	NoCal	N.D.
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:28
Operator : MJB
Sample : 9H23034-CALK
Misc : A19F235, CHLOR 500 ppb
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:28:33 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:45
Operator : MJB
Sample : 9H23034-CALL
Misc : A19F236, CHLOR 1000 ppb
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:33:36 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

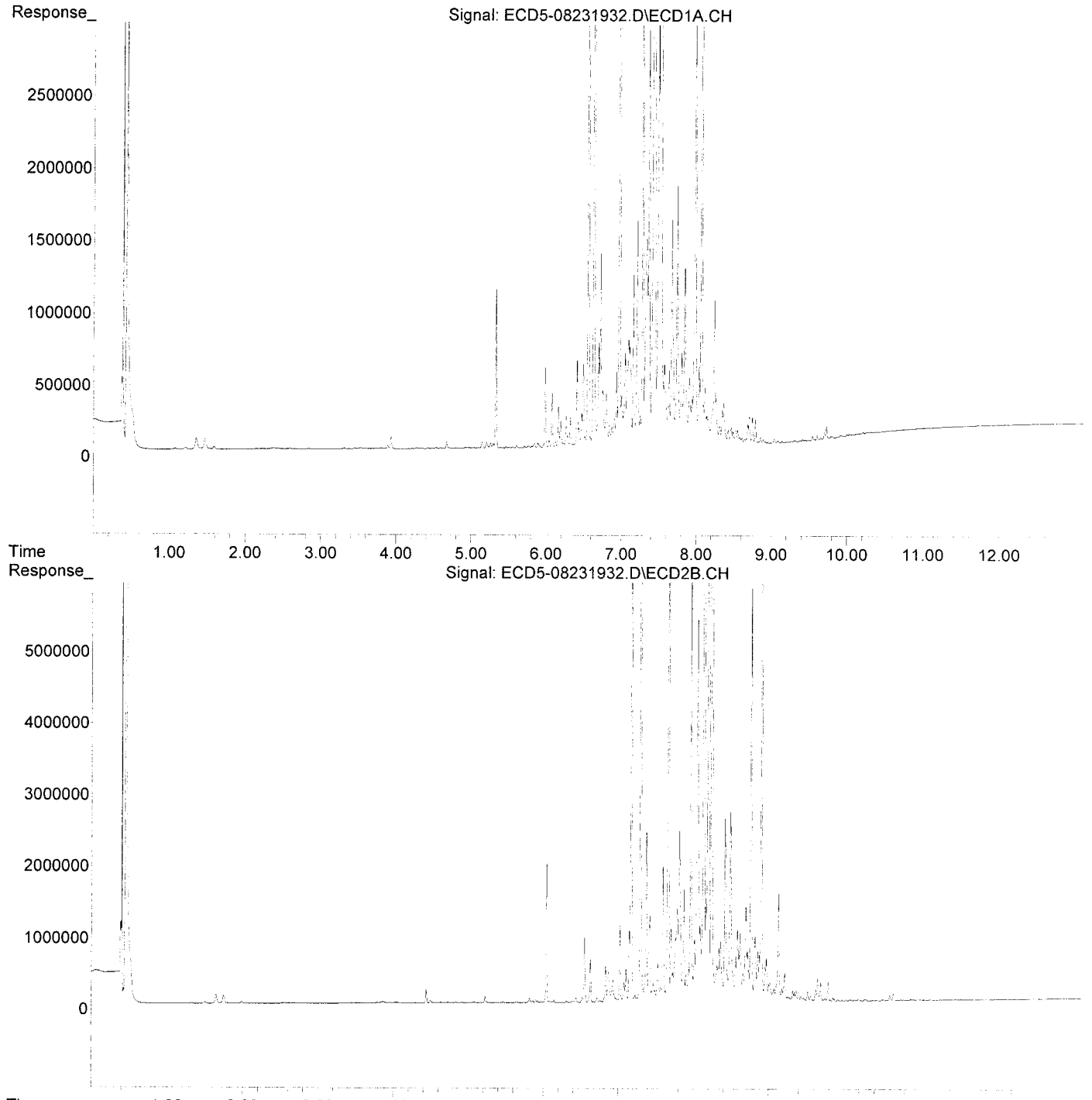
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	7.426	8.130	19643766	37966746	1273.898	1234.450
33)		Chlordane...	7.519	8.237	25083239	31493677	1212.428	1269.749
34)		Chlordane...	8.067	8.897	5987927	9358900	1252.974	1240.988
35)		Chlordane...	3.447	0.000	4825	0	NoCal	N.D.
36)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)		Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231932.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 20:45
Operator : MJB
Sample : 9H23034-CALL
Misc : A19F236, CHLOR 1000 ppb
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:33:36 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:22:42 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:02
Operator : MJB
Sample : 9H23034-CALM
Misc : A19F231, CHLOR 2000 ppb
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:34:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/26/19

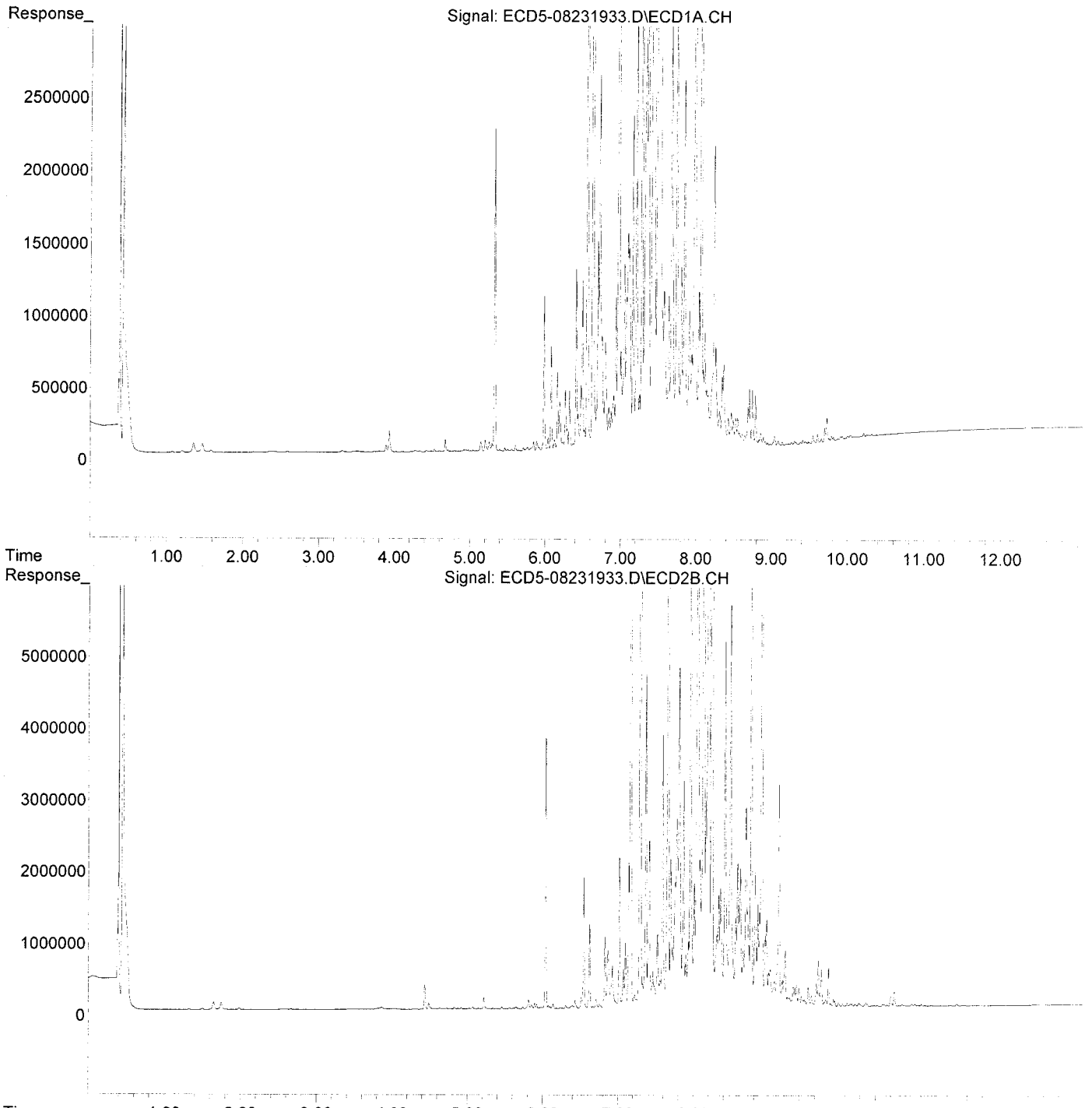
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	7.426	8.130	40036500	81691713	2596.366	2326.014
33)	Chlordane...	7.519	8.238	50979142	66281388	2464.138	2365.956
34)	Chlordane...	8.067	8.897	12208306	19418517	2554.588	2271.661
35)	Chlordane...	3.449	0.000	4939	0	NoCal	N.D.
36)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
37)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
38)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
39)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
40)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
41)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d
42)	Toxaphene...	0.000	0.000	0	0	N.D. d	N.D. d

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231933.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:02
Operator : MJB
Sample : 9H23034-CALM
Misc : A19F231, CHLOR 2000 ppb
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:34:12 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:37:48 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/6/19

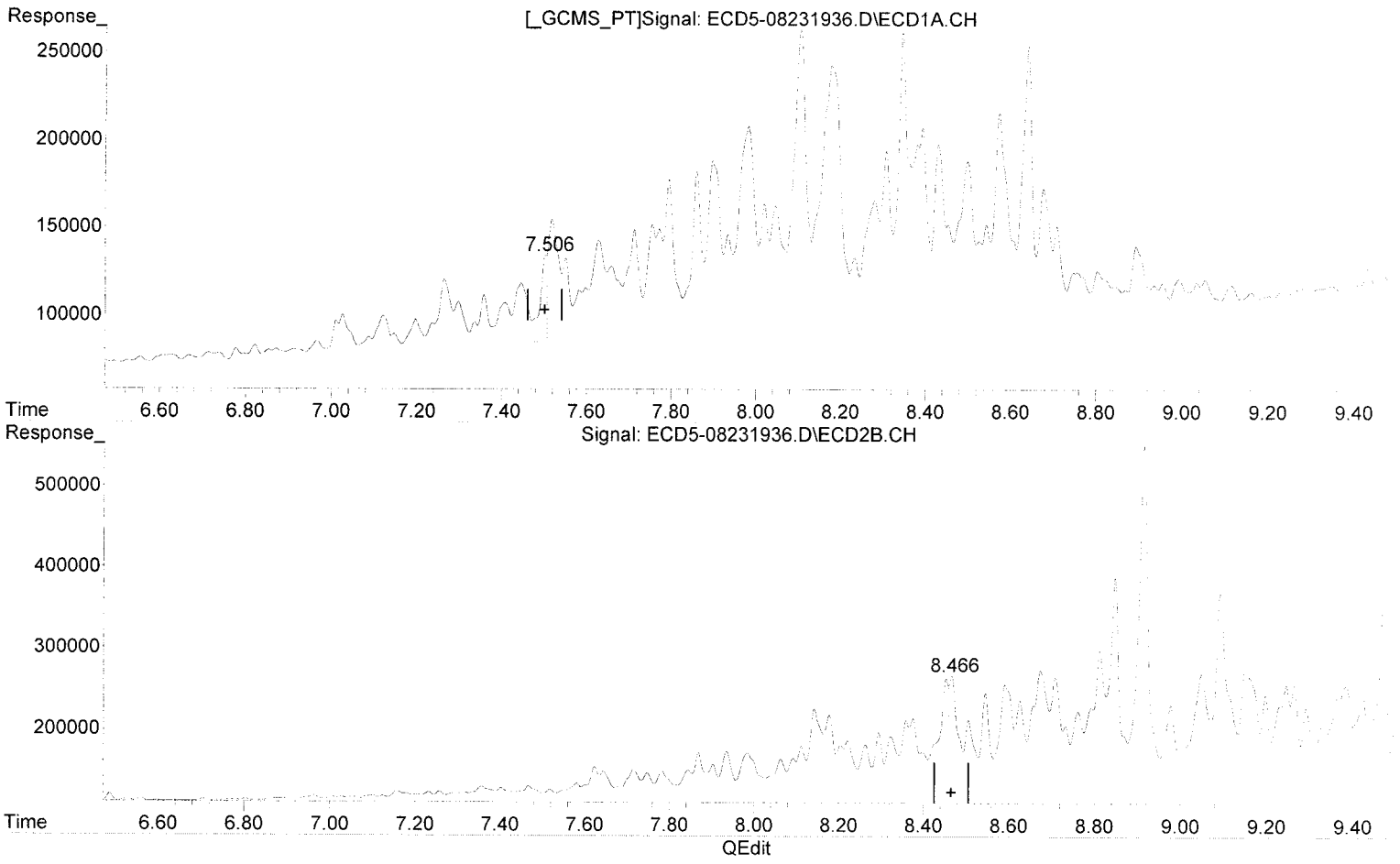
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	7.506	8.466	49250	136848	69.167m	65.864
37)	Toxaphene...	7.794	8.813	88321	164706	67.251	67.260
38)	Toxaphene...	8.105	8.847	169381	254833	62.397	67.028
39)	Toxaphene...	8.346	8.915	164317	416348	64.716	65.275
40)	Toxaphene...	8.573	9.091	114720	233185	60.554	65.984
41)	Toxaphene...	8.641	9.470	153138	230922	57.297	70.513
42)	Toxaphene...	3.449	0.000	4023	0	NoCal	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:37:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.506min 69.167 ng/mL (m)

response 49250

MJB 9/26/19

(36) Toxaphene (1) #2

8.466min 65.864 ng/mL

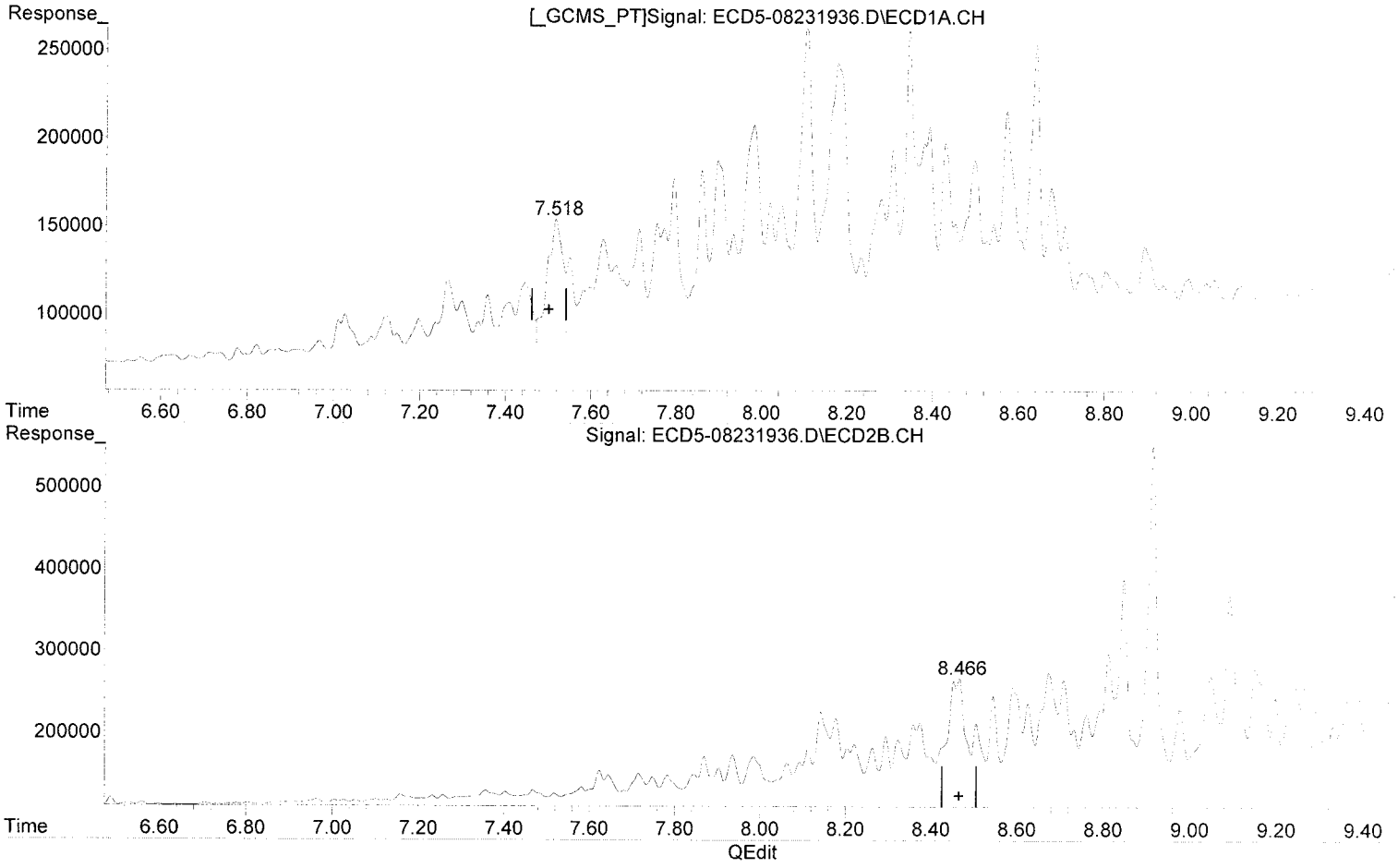
response 136848

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:37:09 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.518min 96.999 ng/mL

response 69068

MJB 6/26/19

(36) Toxaphene (1) #2

8.466min 65.864 ng/mL

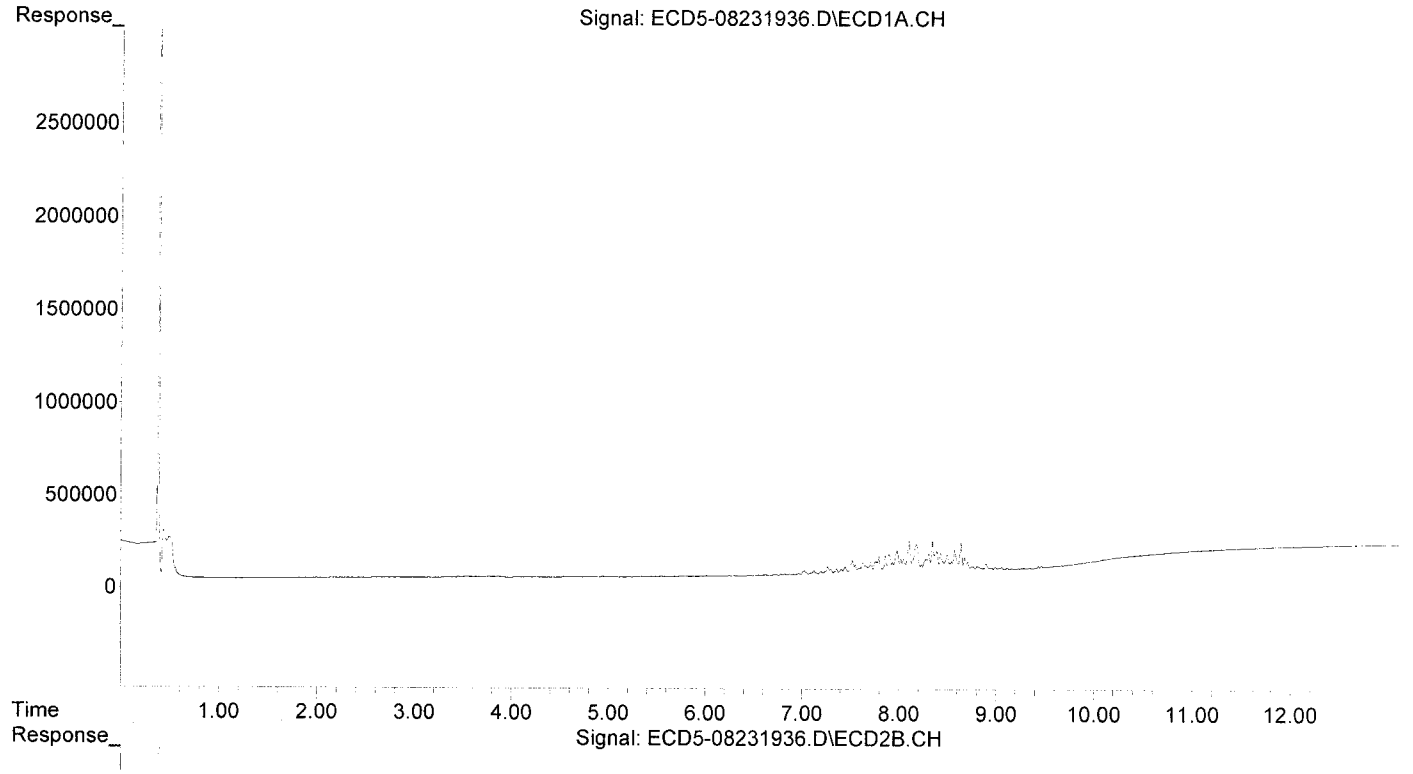
response 136848

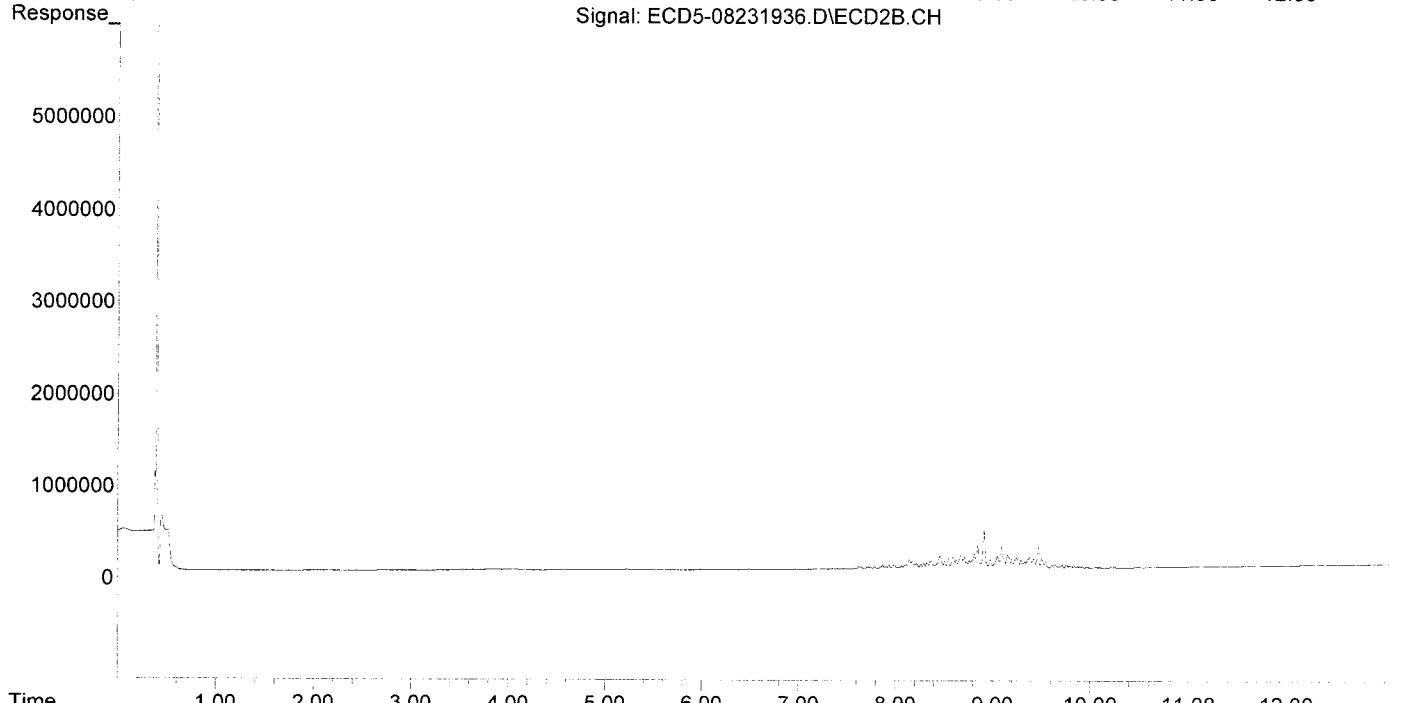
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231936.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 21:54
Operator : MJB
Sample : 9H23034-CALN
Misc : A19D122, TOX 50 ppb
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:37:48 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:38:53 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

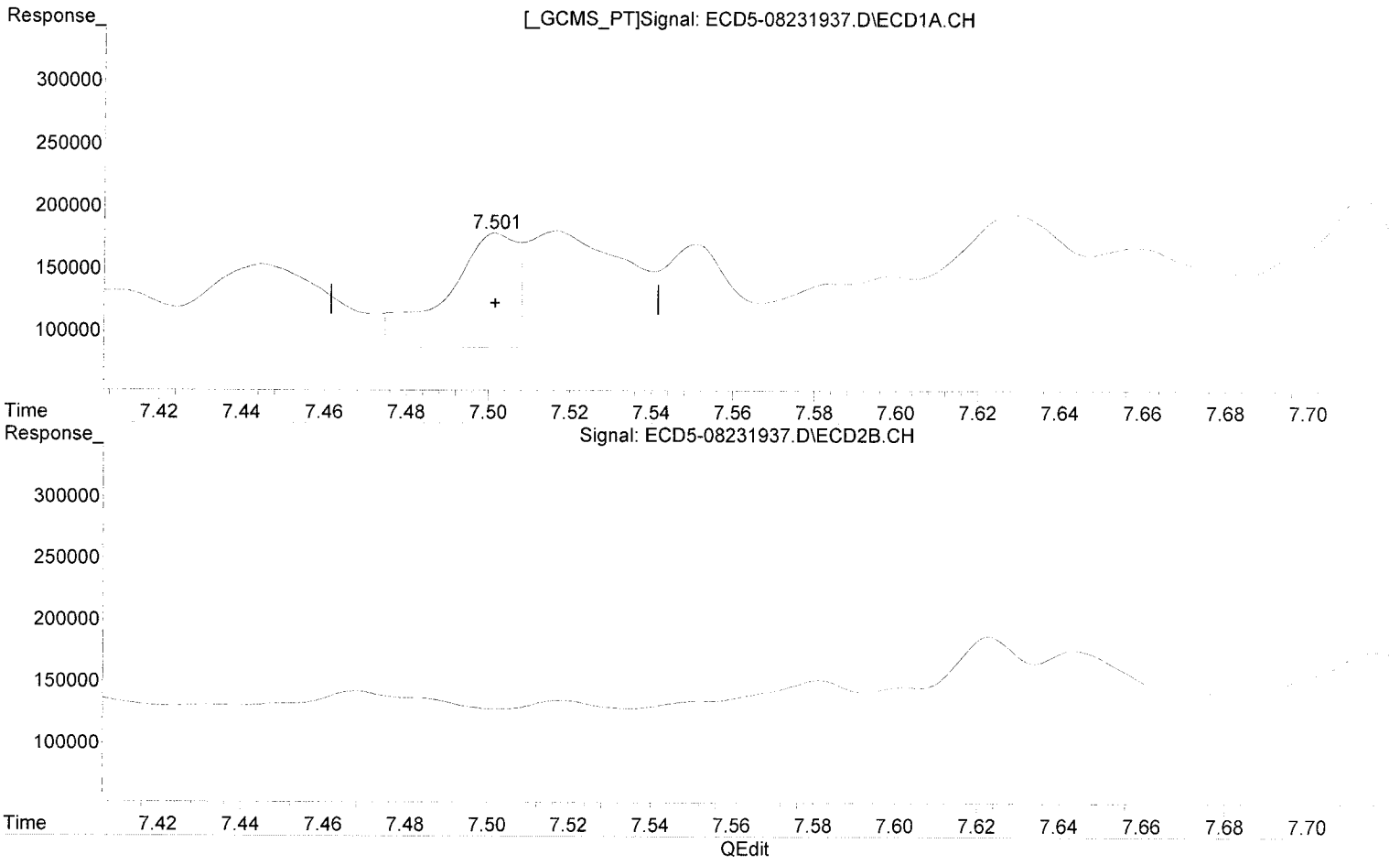
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	7.501	8.466	91576	267534	128.609m	128.761
37)	Toxaphene...	7.795	8.813	166085	324070	126.462	132.338
38)	Toxaphene...	8.106	8.848	332842	494430	122.613	130.048
39)	Toxaphene...	8.346	8.915	320313	811948	126.154	127.297
40)	Toxaphene...	8.574	9.091	228960	452209	120.854	127.962
41)	Toxaphene...	8.641	9.471	302577	452485	113.210	135.226
42)	Toxaphene...	3.450	0.000	3536	0	NoCal	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:38:11 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.501min 128.609 ng/mL m

response 91576

MJB 9/26/19

(36) Toxaphene (1) #2

8.466min 128.761 ng/mL

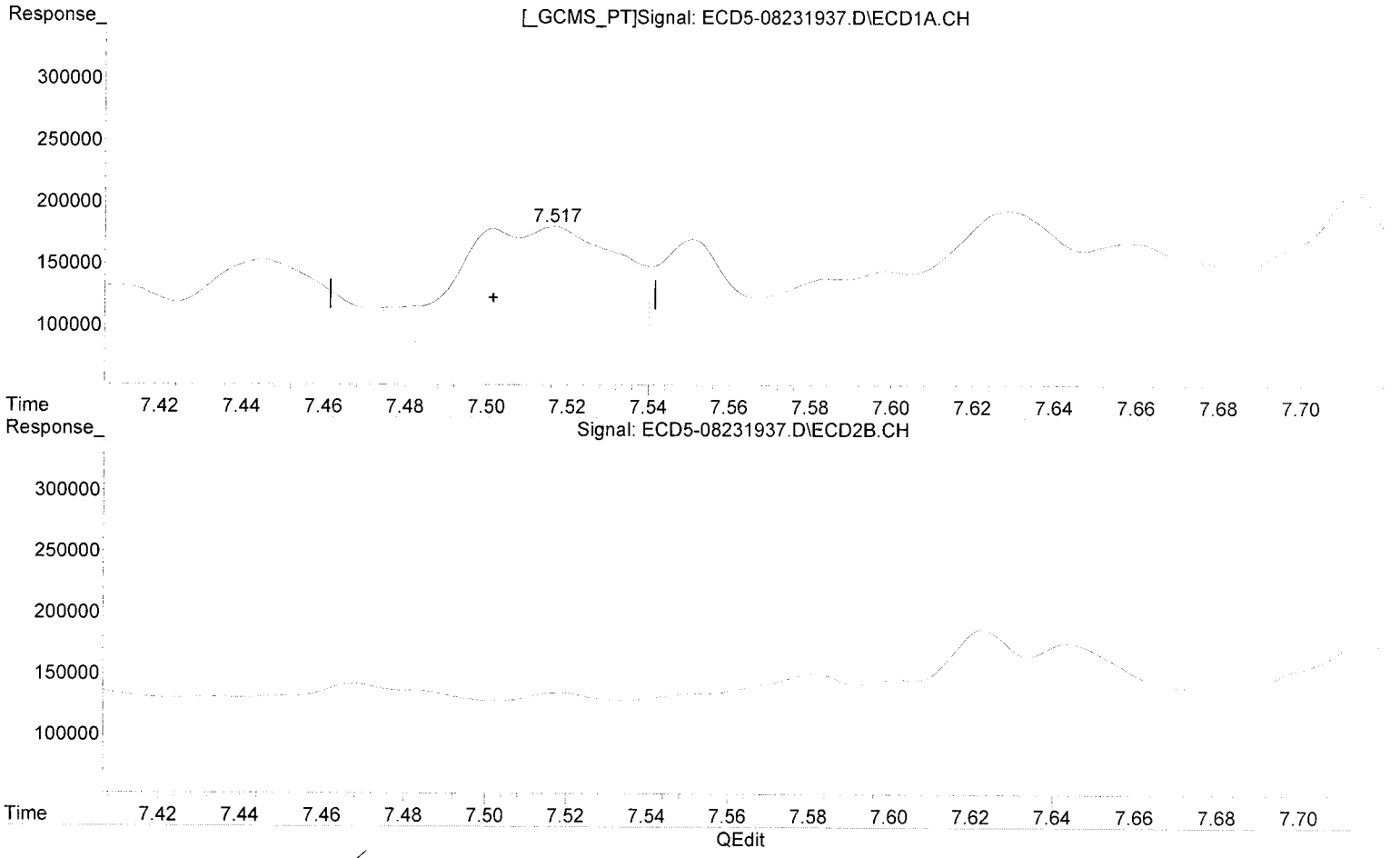
response 267534

(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:38:11 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



(36) Toxaphene (1)

7.517min 130.814 ng/mL

response 93146

MJB 8/26/19

(36) Toxaphene (1) #2

8.466min 128.761 ng/mL

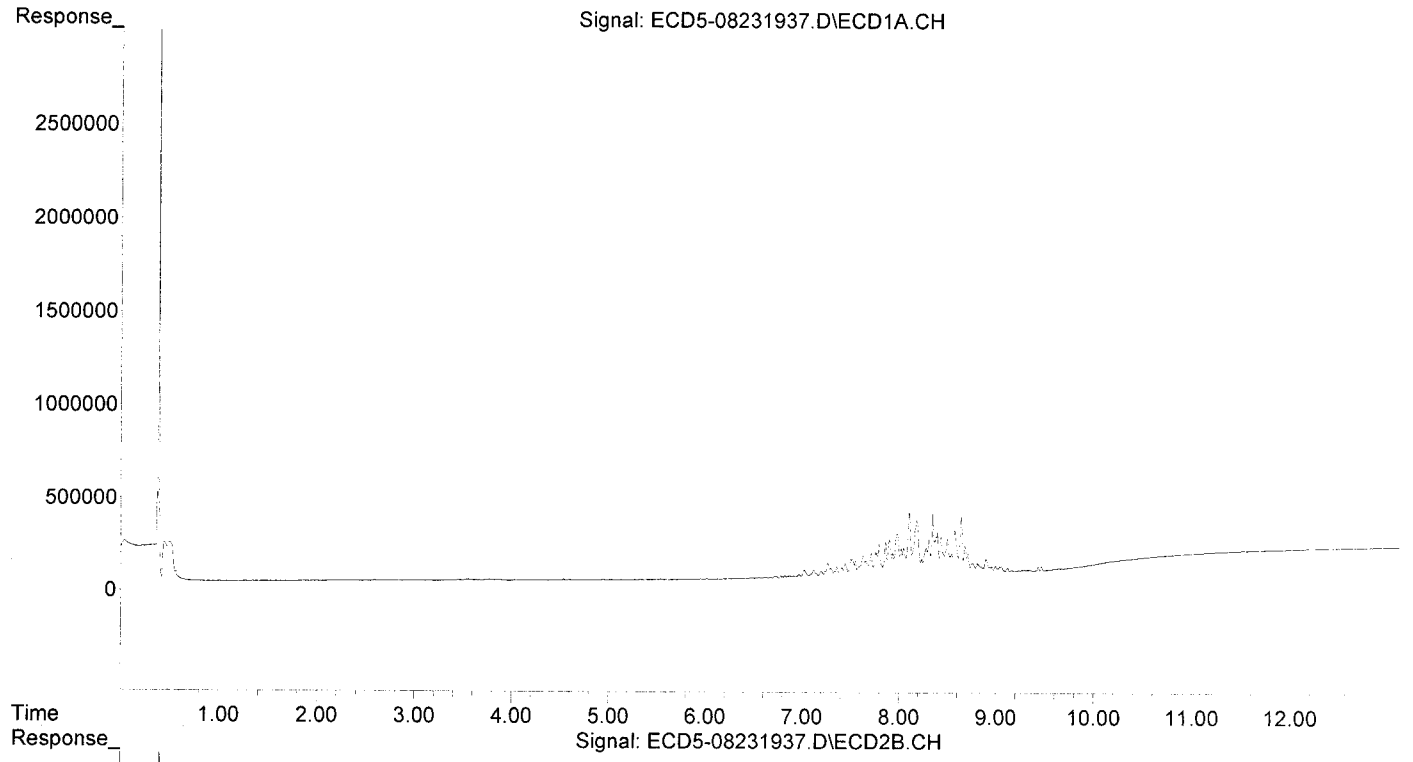
response 267534

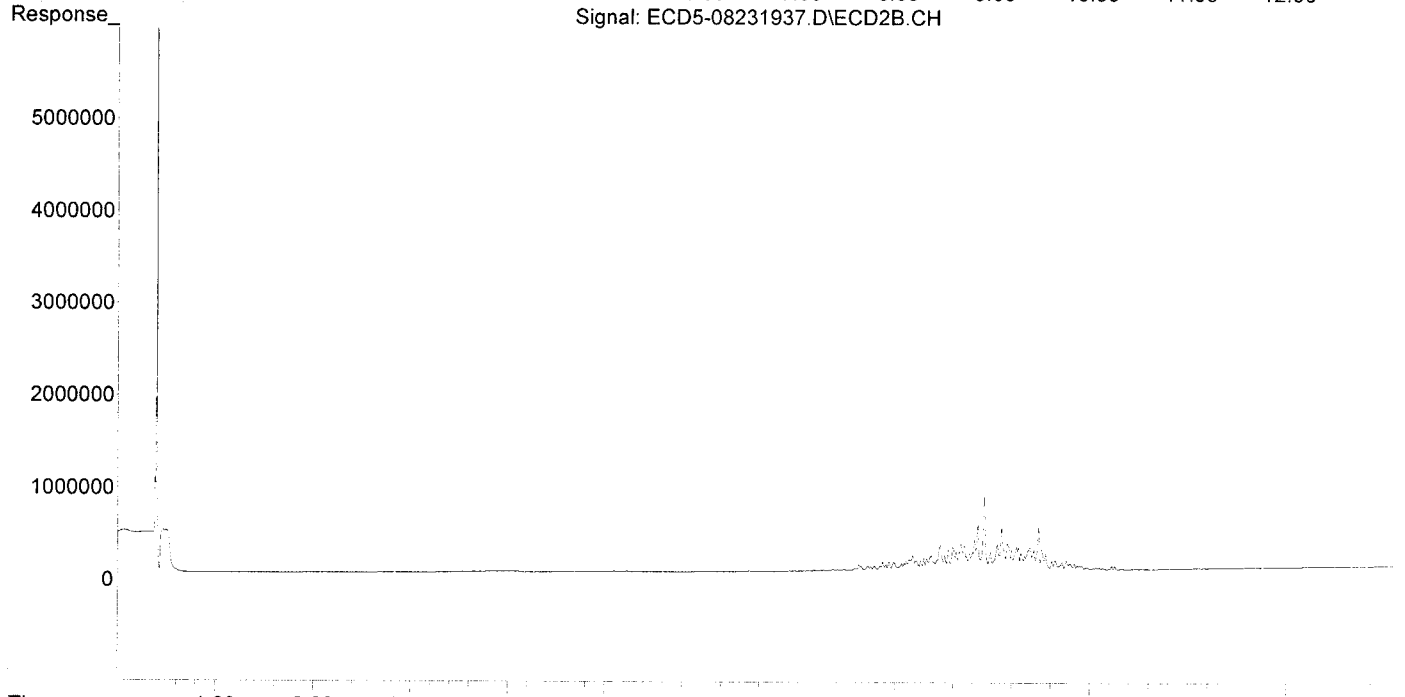
(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231937.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:11
Operator : MJB
Sample : 9H23034-CALO
Misc : A19D123, TOX 100 ppb
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:38:53 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:28
Operator : MJB
Sample : 9H23034-CALP
Misc : A19D124, TOX 200 ppb
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:39:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

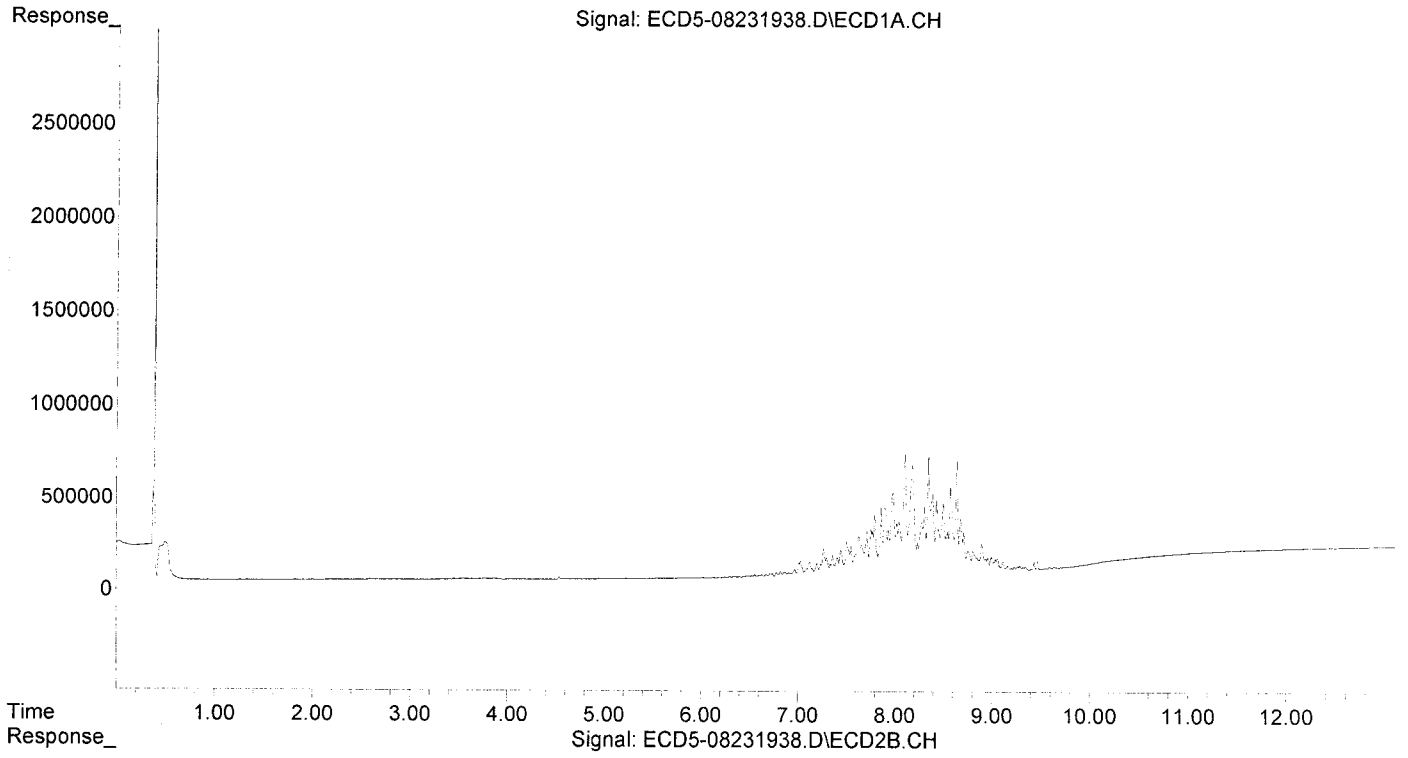
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	7.502	8.466	176047	508983	247.240	244.968
37)		Toxaphene...	7.795	8.812	317587	645322	241.821	263.525
38)		Toxaphene...	8.105	8.847	644464	995555	237.409	261.857
39)		Toxaphene...	8.346	8.914	632351	1580436	249.049	247.779
40)		Toxaphene...	8.574	9.090	454431	895397	239.867	253.371
41)		Toxaphene...	8.640	9.469	597991	905244	223.740	263.952
42)		Toxaphene...	3.451	0.000	3919	0	NoCal	N.D.

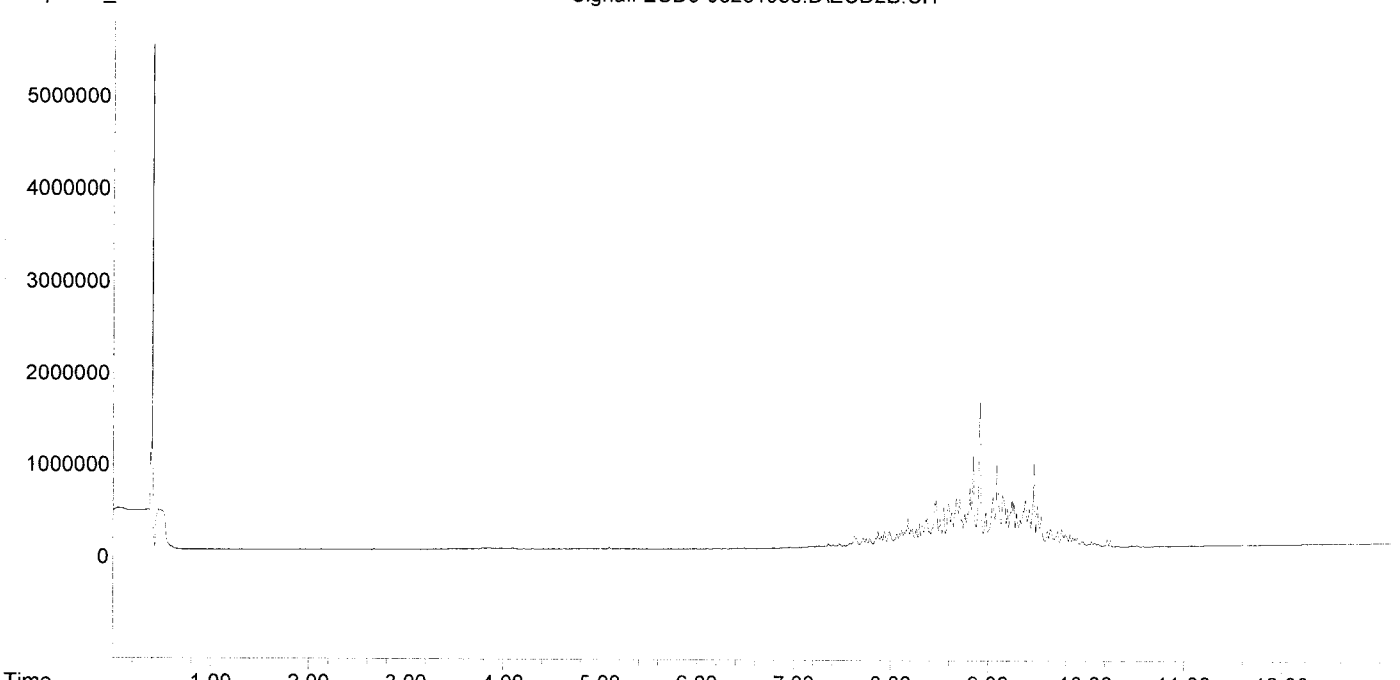
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231938.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:28
Operator : MJB
Sample : 9H23034-CALP
Misc : A19D124, TOX 200 ppb
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:39:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:45
Operator : MJB
Sample : 9H23034-CALQ
Misc : A19D125, TOX 500 ppb
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:36:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

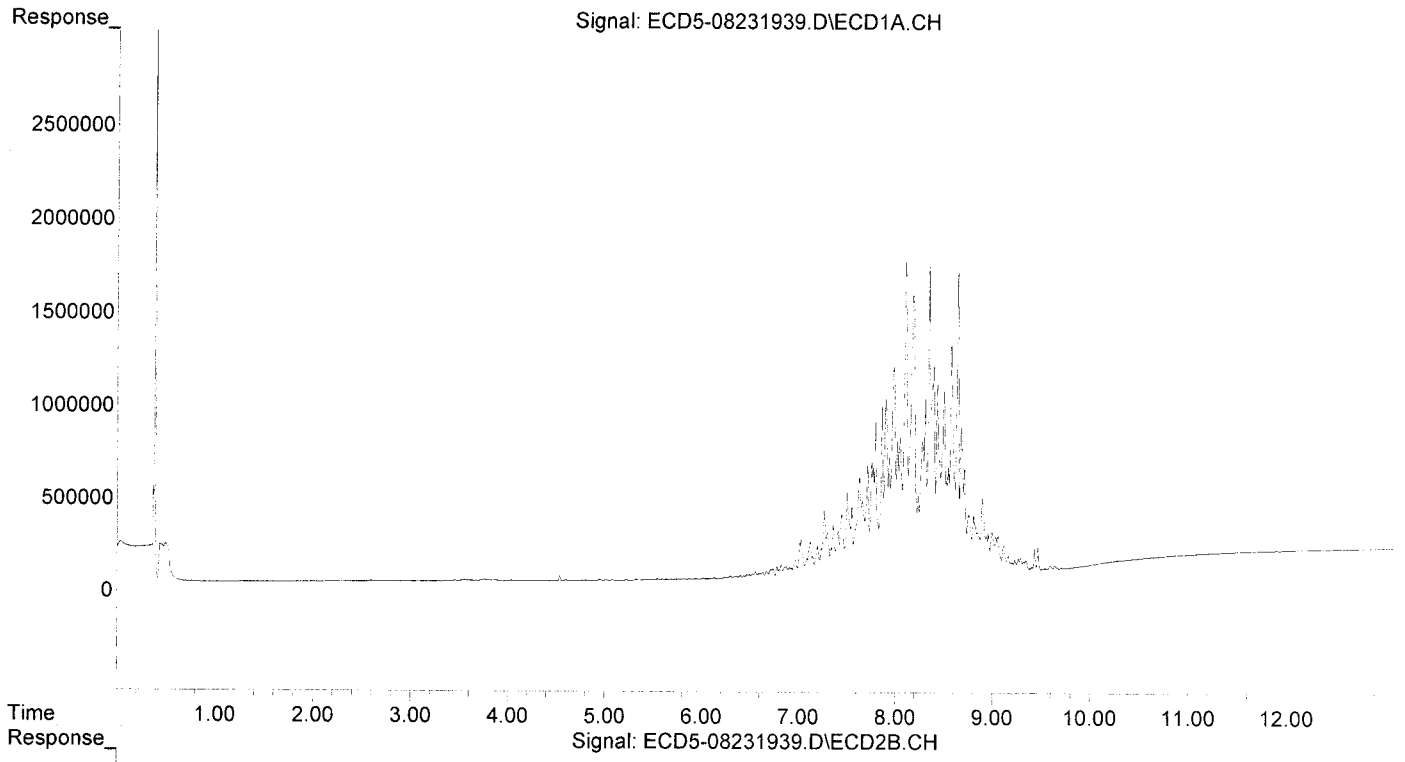
	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
	System Monitoring Compounds						
1) S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22) S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
	Target Compounds						
2)	a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)	g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)	b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)	d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)	Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)	trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)	cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)	Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)	Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)	Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)	Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)	Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)	2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)	trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)	2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)	2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)	cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)	Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)	Toxaphene...	7.502	8.466	441826	1308994	620.497	630.004
37)	Toxaphene...	7.794	8.812	819454	1647741	623.958	672.874
38)	Toxaphene...	8.105	8.848	1677481	2475022	617.954	650.997
39)	Toxaphene...	8.346	8.915	1649569	4252640	649.677	666.725
40)	Toxaphene...	8.574	9.091	1221560	2340668	644.788	662.340
41)	Toxaphene...	8.640	9.470	1623402	2369795	607.400	652.719
42)	Toxaphene...	3.450	0.000	4132	0	NoCal	N.D.

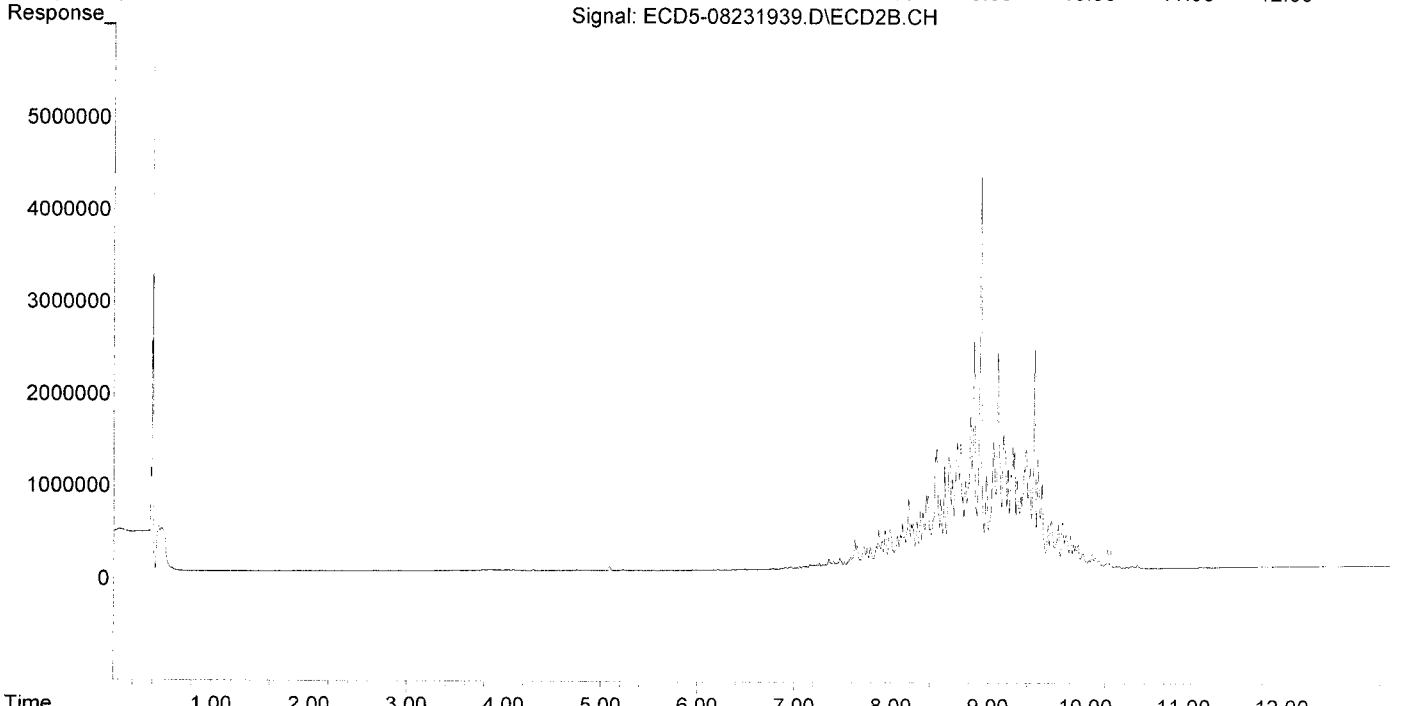
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231939.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 22:45
Operator : MJB
Sample : 9H23034-CALQ
Misc : A19D125, TOX 500 ppb
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:36:29 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:29:20 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:03
Operator : MJB
Sample : 9H23034-CALR
Misc : A19D126, TOX 1000 ppb
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:40:10 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 12/26/19

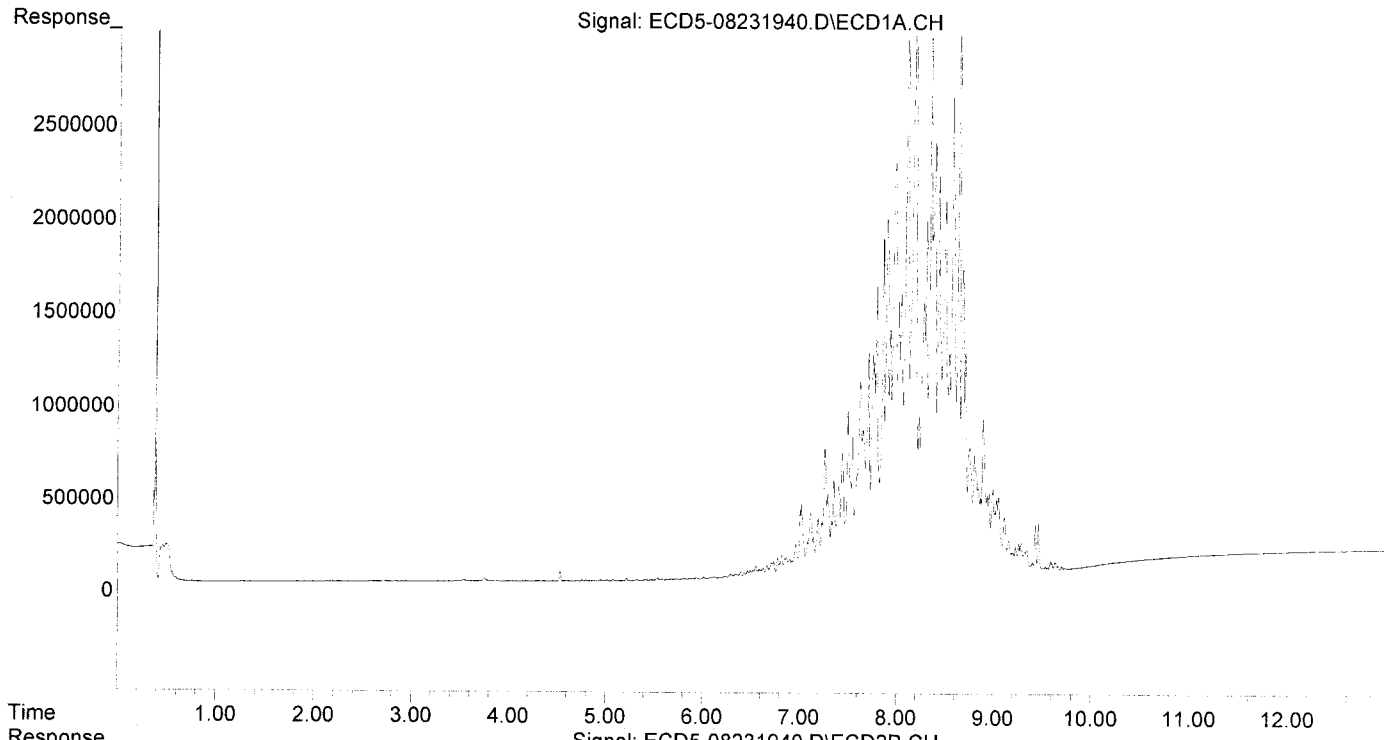
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	7.501	8.467	871889	2654886	1224.474	1277.768
37)		Toxaphene...	7.793	8.813	1556013	3384036	1184.797	1381.910
38)		Toxaphene...	8.105	8.848	3495877	5168269	1287.817	1359.392
39)		Toxaphene...	8.345	8.915	3287014	8650068	1294.579	1356.150
40)		Toxaphene...	8.573	9.091	2546293	4900430	1344.035	1386.677
41)		Toxaphene...	8.640	9.470	3406737	5046645	1274.639	1281.306
42)		Toxaphene...	3.451	0.000	2687	0	NoCal	N.D.

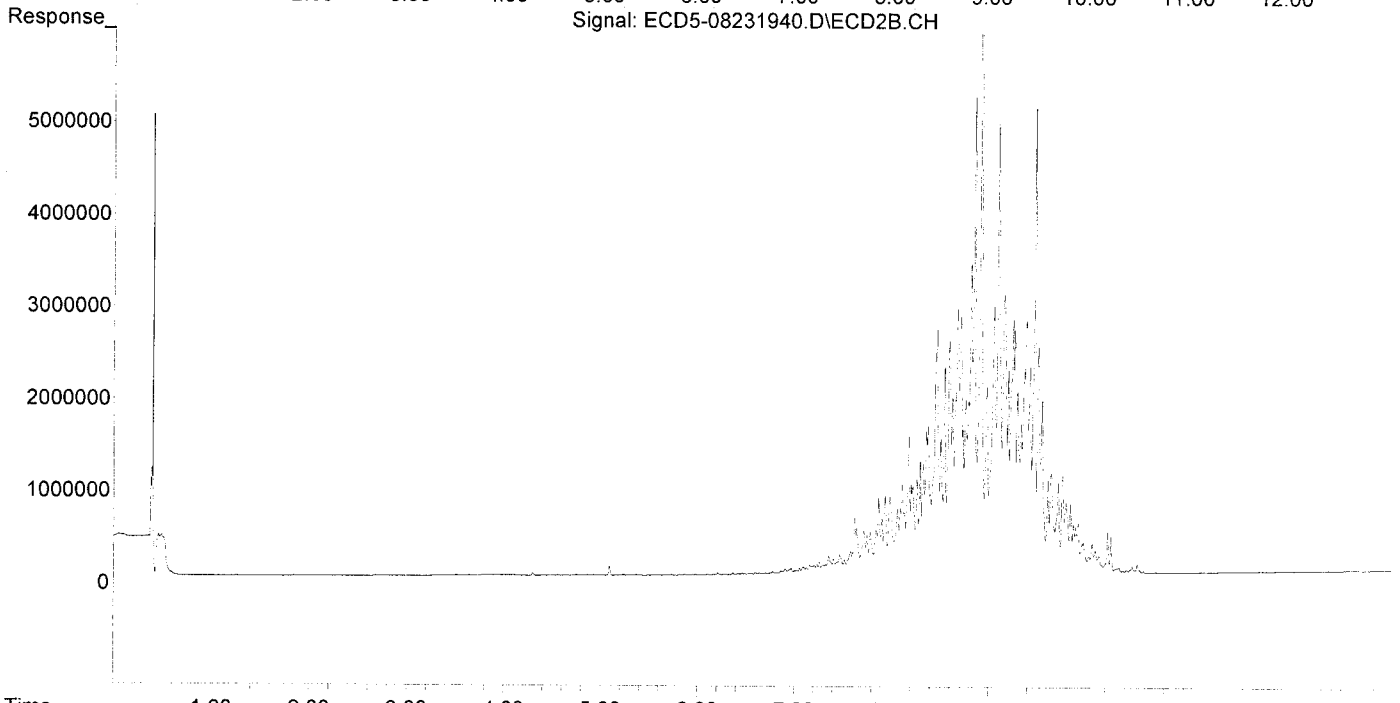
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231940.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:03
Operator : MJB
Sample : 9H23034-CALR
Misc : A19D126, TOX 1000 ppb
ALS Vial : 33 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:40:10 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped





Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:20
Operator : MJB
Sample : 9H23034-CALS
Misc : A19D121, TOX 2000 ppb
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:40:44 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 8/26/19

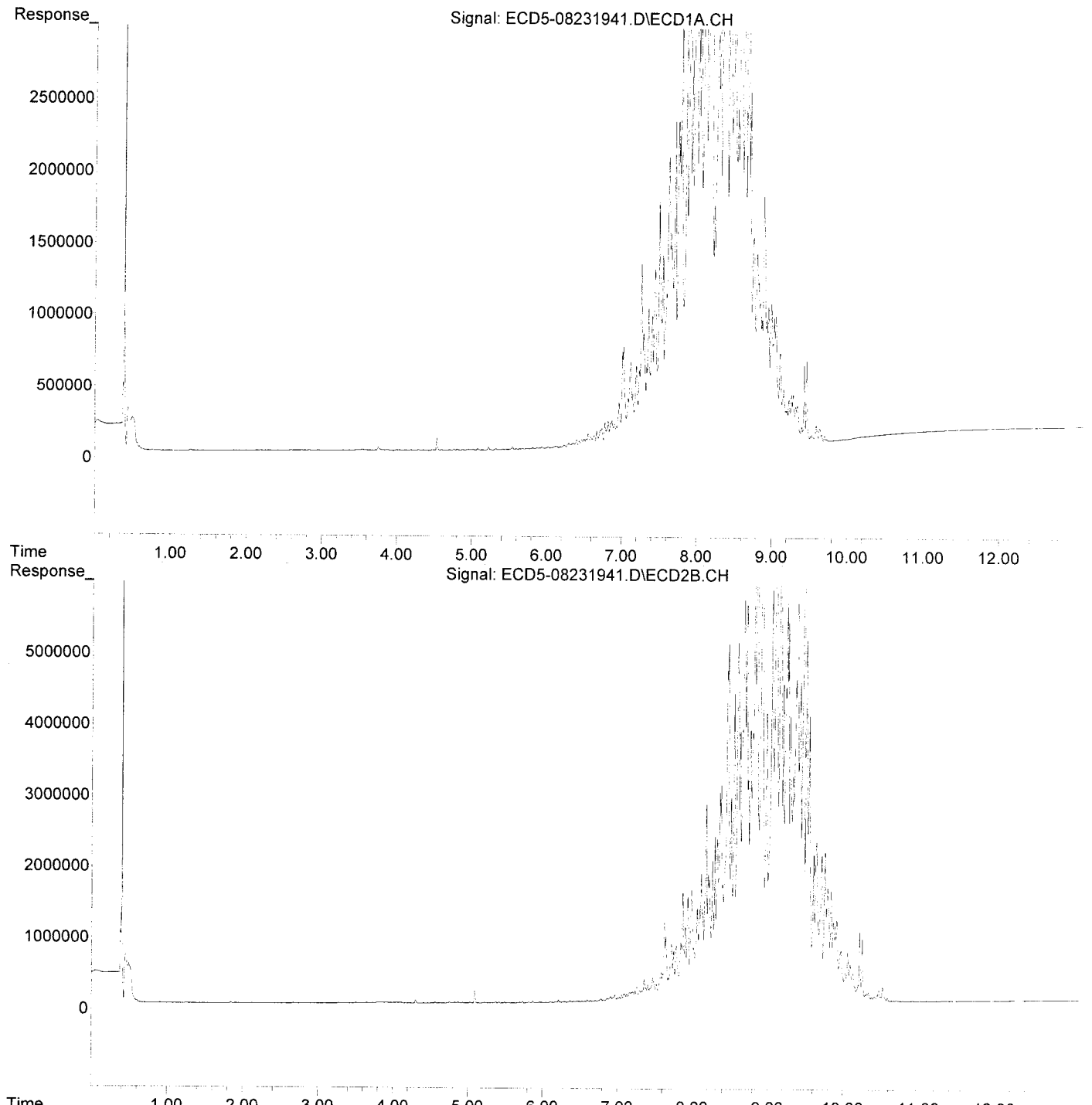
		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/mL	ng/mL
		System Monitoring Compounds						
1)	S	TCMX (S)	0.000	0.000	0	0	N.D. d	N.D. d
22)	S	DCBP (S)	0.000	0.000	0	0	N.D. d	N.D. d
		Target Compounds						
2)		a-BHC	0.000	0.000	0	0	N.D. d	N.D. d
3)		g-BHC	0.000	0.000	0	0	N.D. d	N.D. d
4)		b-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5)		Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
6)		d-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7)		Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
8)		Heptachlo...	0.000	0.000	0	0	N.D. d	N.D. d
9)		trans-Chl...	0.000	0.000	0	0	N.D. d	N.D. d
10)		cis-Chlor...	0.000	0.000	0	0	N.D. d	N.D. d
11)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
12)		4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
13)		Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
14)		Endrin	0.000	0.000	0	0	N.D. d	N.D. d
15)		4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
16)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
17)		4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
18)		Endrin Al...	0.000	0.000	0	0	N.D. d	N.D. d
19)		Endosulfa...	0.000	0.000	0	0	N.D. d	N.D. d
20)		Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
21)		Endrin Ke...	0.000	0.000	0	0	N.D. d	N.D. d
23)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
24)		Hexachlor...	0.000	0.000	0	0	N.D. d	N.D. d
25)		Oxychlordane	0.000	0.000	0	0	N.D. d	N.D. d
26)		2,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
27)		trans-Non...	0.000	0.000	0	0	N.D. d	N.D. d
28)		2,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
29)		2,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
30)		cis-Nonac...	0.000	0.000	0	0	N.D. d	N.D. d
31)		Mirex	0.000	0.000	0	0	N.D. d	N.D. d
32)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
33)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
34)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
35)		Chlordane...	0.000	0.000	0	0	N.D. d	N.D. d
36)		Toxaphene...	7.500	8.466	1674674	5030917	2351.899	2421.326
37)		Toxaphene...	7.792	8.813	2958997	6610397	2253.073	2699.433
38)		Toxaphene...	8.104	8.848	6831460	10545708	2516.585	2773.802
39)		Toxaphene...	8.345	8.914	6407070	17190037	2523.403	2695.039
40)		Toxaphene...	8.572	9.091	5074570	9435236	2678.561	2669.893
41)		Toxaphene...	8.640	9.471	6510950	10090951	2436.088	2281.169
42)		Toxaphene...	3.452	0.000	4166	0	NoCal	N.D.

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : R:\data\2019-08\9H23034\
Data File : ECD5-08231941.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 23 Aug 2019 23:20
Operator : MJB
Sample : 9H23034-CALS
Misc : A19D121, TOX 2000 ppb
ALS Vial : 34 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.e
Integration File signal 2: PEST2.e
Quant Time: Aug 26 11:40:44 2019
Quant Method : R:\methods\ECD5_QUANTPEST_190823.M
Quant Title : Instrument: DualECD5
QLast Update : Mon Aug 26 11:36:51 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 9101635
Sequence 9J29025 (A9J0959-01RE2)

APEX LABORATORIES

Apex Laboratories

PREPARATION BENCH SHEET

NOV 1 5 2019

BATCH #: 9101635 (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
	9101635-BLK1		QC	10/28/19 10:04	1100	1				100					
	9101635-BLK2		QC	10/28/19 10:04	1100	1				100		Added 10/29/2019 by ams			
	9101635-BSD1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	9101635-BSD2		QC	10/28/19 10:04	1000	1	A19J144		50	100		Added 10/29/2019 by ams			
	9101635-BS1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	9101635-BS2		QC	10/28/19 10:04	1000	1	A19J144		50	100		Added 10/29/2019 by ams			
	A9J0812-01	J	625 PAH/PCP/HCB (SW)	10/28/19 10:07	880	5				100	1200Z-Trestle 001	no PCP			
	A9J0841-04	E	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1040	1				100	PDI-FB-1910221 313	Waters only PAH Only or PAH+Bis			
	A9J0841-05	E	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	980	1				100	PDI-RB-1910221 91318	Waters only PAH Only or PAH+Bis			
	A9J0858-02	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1020	1				100	B-1-GW	PHTH only			
	A9J0858-02RE1	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1020	1				100	B-1-GW	RR-1 Added 10/29/2019 By ams			
	A9J0858-02RE2	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1020	1				100	B-1-GW	Added 10/30/2019 by ams			
	A9J0858-04	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	980	1				100	B-2-GW	PHTH only			
	A9J0858-04RE1	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	980	1				100	B-2-GW	RR-1 Added 10/29/2019 By ams			
	A9J0858-06	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1000	1				100	B-3-GW	PHTH only			
	A9J0858-06RE1	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1000	1				100	B-3-GW	RR-1 Added 10/29/2019 By ams			
	A9J0865-07	F	8270 PAH - Extract and Hold	10/28/19 10:04	930	2				100	Pit Water	Added due to possible follow ups			
	A9J0865-07	F	8270 SIM PAH	10/28/19 10:04	930	2				100	Pit Water	already extracted added 10-30-19			
	A9J0865-07RE1	F	8270 SIM PAH	10/28/19 10:04	930	2				100	Pit Water	Added 10/31/2019 By DTH			
	A9J0878-02	F	8270 SIM PAH (16)	10/28/19 13:41	500	2				100	SRC-ETE-GW@ 17'BGS	Minus N, Added 10/25, Dx@0.224			
	A9J0912-01	F	8270 SIM PAH	10/28/19 13:41	1070	2				100	Weddle Well				
	A9J0912-02	F	8270 SIM PAH	10/28/19 10:04	1060	2				100	Rodriguez Well				

Prepared By: Date

AMS 11/14/19

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101635 (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
	A9J0913-02	C	8270D LL PAH/PHTH/Phenols	10/28/19 10:04	930	1				100	P89332 / Lift Bottom	PAHs only			
	A9J0918-01	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-01	PAH/HCB only			
	A9J0918-02	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-03	PAH/HCB only			
	A9J0918-03	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-05	PAH/HCB only			
	A9J0918-04	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-07	PAH/HCB only			
	A9J0918-05	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	960	5				100	9296014-09	PAH/HCB only			
	A9J0952-02	F	8270 PAH - Extract and Hold	10/28/19 13:41	1050	2				100	MW-9				
	A9J0952-03	F	8270 PAH - Extract and Hold	10/28/19 13:41	1040	2				100	MW-11				
	A9J0952-04	F	8270 PAH - Extract and Hold	10/28/19 13:41	1060	2				100	MW-7				
	A9J0959-01	G	8270D LL Full List	10/28/19 13:47	1050	1				100	PDI-026SW-34-0 0-191024	Acid extraction only, custom			
	A9J0959-01RE1	G	8270D LL Full List	10/28/19 13:47	1050	1				100	PDI-026SW-34-0 0-191024	RR-1 Added 10/29/2019 By ams			
	A9J0959-01RE2	G	8270D LL Full List	10/28/19 13:47	1050	1				100	PDI-026SW-34-0 0-191024	Added 10/30/2019 by ams			

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
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J144	04/05/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J260	04/14/20	PAH Soil and Water Surr. (50ppm)

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101635 (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

3x rinse

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101635 (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
	9101635-BLK1		QC	10/28/19 10:04	~~1100~~ 1100	1				100					
	9101635-BSD1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	9101635-BS1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	A9J0812-01	J	625 PAH/PCP/HCB (SW)	10/28/19 10:07	880	5				100	1200Z-Trestle 001	no PCP			
	A9J0841-04	E	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	~~1000~~ 1040	1				100	PDI-FB-1910221 313	Waters only PAH Only or PAH+Bis			
	A9J0841-05	E	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	~~1000~~ 980	1				100	PDI-RB-1910221 91318	Waters only PAH Only or PAH+Bis			
	A9J0858-02	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	~~1000~~ 1020	1				100	B-1-GW	PHTH only D E			
	A9J0858-04	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	~~1000~~ 980	1				100	B-2-GW	PHTH only D E			
	A9J0858-06	D	8270D LL PAH/PHTH/Phenols	10/28/19 13:41	1000	1				100	B-3-GW	PHTH only E			
	A9J0865-07	F	8270 PAH - Extract and Hold	10/28/19 10:04	930	2				100	Pit Water	Added due to possible follow ups			
	A9J0878-02	F	8270 SIM PAH (16)	10/28/19 13:41	~~1000~~ 500	2				100	SRC-ETE-GW@ 17'BGS	Minus N. Added 10/25, Dx@0.224 D E			
	A9J0912-01	F	8270 SIM PAH	10/28/19 13:41	~~1000~~ 1070	2				100	Weddle Well				
	A9J0912-02	F	8270 SIM PAH	10/28/19 10:04	1060	2				100	Rodriguez Well				
	A9J0913-02	C	8270D LL PAH/PHTH/Phenols	10/28/19 10:04	930	1				100	P89332 / Lift Bottom	PAHs only			
	A9J0918-01	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-01	PAH/HCB only			
	A9J0918-02	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-03	PAH/HCB only			
	A9J0918-03	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-05	PAH/HCB only			
	A9J0918-04	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1060	5				100	9296014-07	PAH/HCB only			
	A9J0918-05	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	960	5				100	9296014-09	PAH/HCB only			
	A9J0952-02	F	8270 PAH - Extract and Hold	10/28/19 13:41	~~1000~~ 1050	2				100	MW-9	E			

Prepared By: [signature] Date: 10/28/19

Reviewed By: [signature] Date: 10/28/19

Printed: 10/28/2019 1:48:14PM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101635 (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
	A9J0952-03	F	8270 PAH - Extract and Hold	10/28/19 13:41	~~1000~~ 1040	2				100	MW-11	E			
	A9J0952-04	F	8270 PAH - Extract and Hold	10/28/19 13:41	~~1000~~ 1060	2				100	MW-7	E			
	A9J0959-01	G	8270D LL Full List	10/28/19 13:47	~~1000~~ 1050	1				100	PDI-026SW-34-0-191024	Acid extraction only, custom			

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
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J144	04/05/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J260	04/14/20	PAH Soil and Water Surr. (50ppm)

3x rinse

D = Decanted,
~~X~~ = DI water added to volume
E = Emulsion

Witness: _____

Bottle Check: um 10.28.19

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9101635 (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
	9101635-BLK1		QC	10/28/19 10:04	~~1000~~ 1100	1				100					
	9101635-BSD1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	9101635-BS1		QC	10/28/19 10:04	1000	1	A19J144		50	100					
	A9J0812-01	J K	625 PAH/PCP/HCB (SW)	10/28/19 10:07	~~1000~~ 880	5				100	1200Z-Trestle 001	no PCP			
	A9J0865-07	F	8270 PAH - Extract and Hold	10/28/19 10:04	1000 930	2				100	Pit Water	Added due to possible follow ups D E			
	A9J0912-02	F	8270 SIM PAH	10/28/19 10:04	~~1000~~ 1060	2				100	Rodriguez Well				
	A9J0913-02	C	8270D LL PAH/PHTH/Phenols	10/28/19 10:04	~~1000~~ 930	1				100	P89332 / Lift Bottom	PAHs only E			
	A9J0918-01	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1000 1060	5				100	9296014-01	PAH/HCB only E			
	A9J0918-02	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1000 1060	5				100	9296014-03	PAH/HCB only E			
	A9J0918-03	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1000 1060	5				100	9296014-05	PAH/HCB only E			
	A9J0918-04	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1000 1060	5				100	9296014-07	PAH/HCB only E			
	A9J0918-05	A	625 PAH/PCP/HCB (SW)	10/28/19 10:04	1000 960	5				100	9296014-09	PAH/HCB only E			

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
A19J048	03/31/20	Sodium Sulfate Lot # 191177

Analyte Spike(s)

Std ID	Exp. Date	Description
A19J144	04/05/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19J260	04/14/20	PAH Soil and Water Surr. (50ppm)

D=Decanted.

E=Emulsion

3x rinse ✓

Witness: JC 10/28/19

Bottle Check: JC 10/28/19

Prepared By: [signature] Date: 10/28/19

Reviewed By: [signature] Date: 10/28/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J29025**	Instrument:	**SV-GCMS5**
Date:	**10/29/19 08:15**	Calibration:	**A9J0804**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J29025-TUN1	Water	QC	QC			A19G233	A19J292
2	9J29025-IBL1	Water	QC	QC			A19G233	
3	9J29025-CCV1	Water	QC	QC			A19G233	A19G243
4	9J29025-CCB1	Water	QC	QC			A19G233	
5	A9J0312-02RE2	Soil	8270D LL Full List		10/21/19	9101257	A19G233	
6	A9J0312-01RE1	Soil	8270D LL Full List		10/21/19	9101257	A19G233	
7	A9J0312-04RE2	Soil	8270D LL Full List		10/21/19	9101257	A19G233	
8	A9J0858-02RE1	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
9	A9J0959-01RE1	Water	8270D LL Full List	Anchor QEA, LLC	11/07/19	9101635	A19G233	
10	A9J0858-01RE1	Soil	8270D LL PAH/PHTH/Phenols		11/05/19	9101644	A19G233	
11	A9J0858-03RE1	Soil	8270D LL PAH/PHTH/Phenols		11/05/19	9101644	A19G233	
12	A9J0858-05RE1	Soil	8270D LL PAH/PHTH/Phenols		11/05/19	9101644	A19G233	
13	A9J0858-02RE2	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
14	A9J0858-04RE1	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
15	A9J0858-06RE1	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
16	A9J0959-01RE2	Water	8270D LL Full List	Anchor QEA, LLC	11/07/19	9101635	A19G233	
17	A9J0858-01RE2	Soil	8270D LL PAH/PHTH/Phenols		11/05/19	9101644	A19G233	
18	A9J0858-03RE2	Soil	8270D LL PAH/PHTH/Phenols		11/05/19	9101644	A19G233	
19	9J29025-IBL2	Water	QC	QC			A19G233	

Data Entered By: TMS 10/30/19

Data Reviewed By: JR 10/30/19

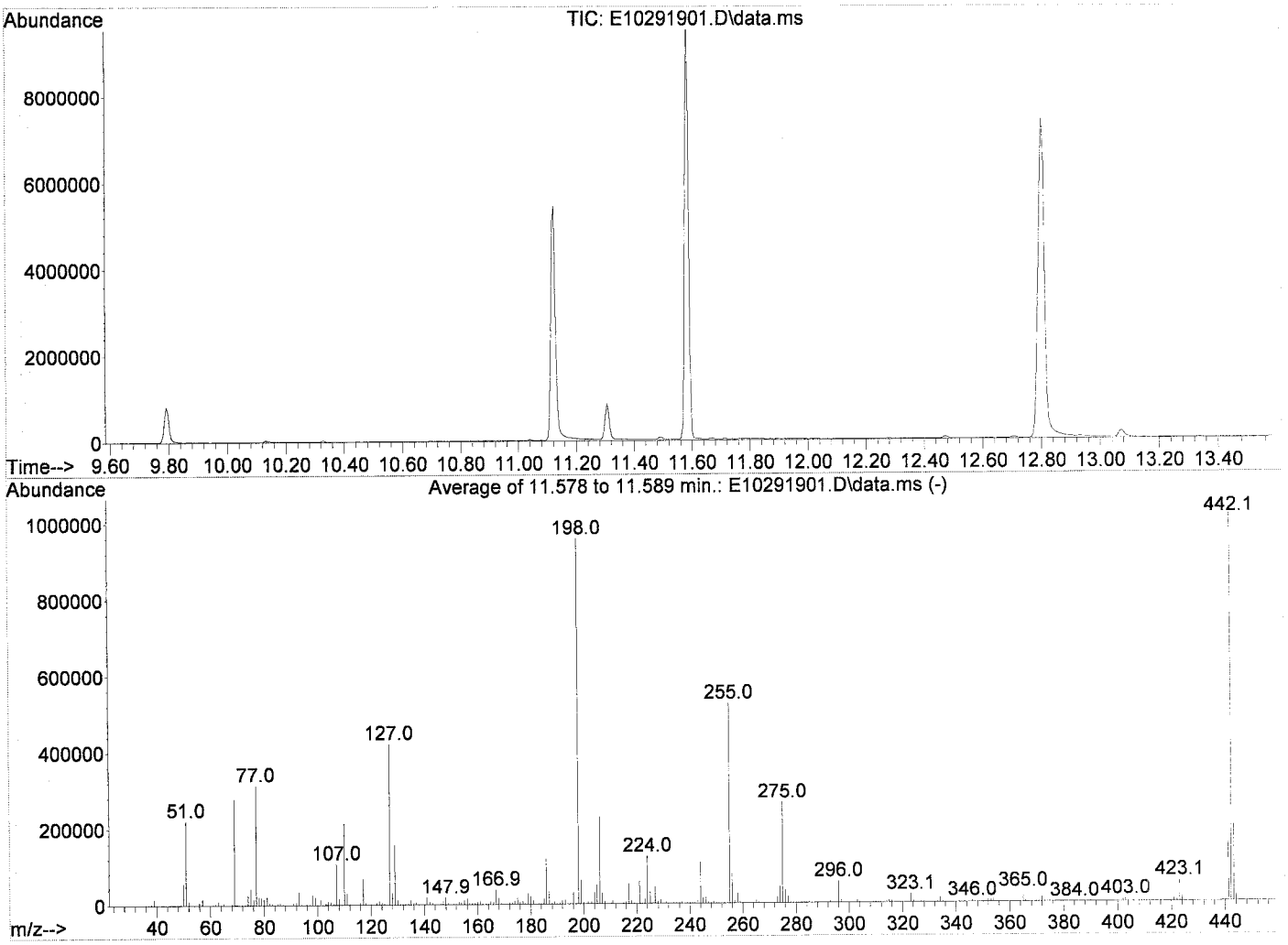
Comments:

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291901.D
Acq On : 29 Oct 2019 8:34 am
Operator : JK/ AMS /DTH
Sample : 9J29025-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

AMS 10/29/19

Integration File: rteint.p

Method : W:\METHODS\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Oct 10 09:06:57 2019



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	3301	PASS
69	198	0.01	100	29.0	277496	PASS
70	69	0.00	2	0.5	1392	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	956907	PASS
199	198	5	9	6.7	64416	PASS
365	198	1	100	3.0	28976	PASS
441	443	0.01	150	76.3	152133	PASS
442	198	0.10	200	106.0	1014315	PASS
443	442	15	24	19.7	199413	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291901.D
Acq On : 29 Oct 2019 8:34 am
Operator : JK/ AMS /DTH
Sample : 9J29025-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 29 14:30:06 2019
Quant Method : W:\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

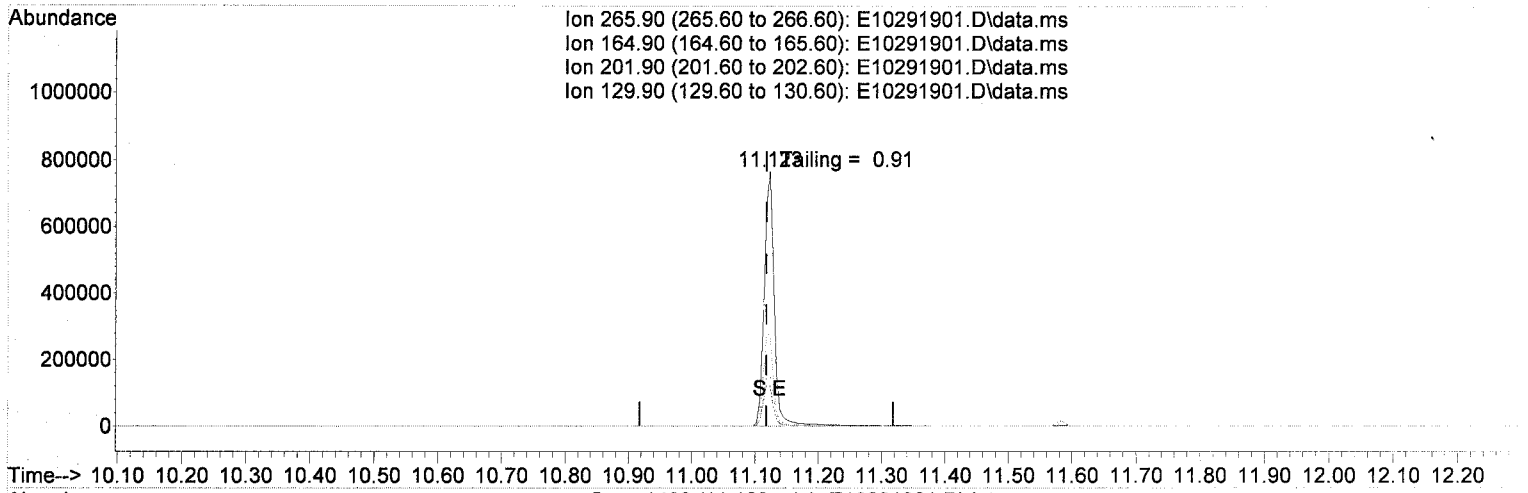
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.759	150	180781	2.00	ug/mL	0.00
2) Naphthalene-d8	8.016	136	402659	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.791	162	211409	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.305	188	351733	2.00	ug/mL	0.00
11) Chrysene-d12	15.092	240	307039	2.00	ug/mL	0.00
12) Perylene-d12	17.140	264	255443	2.00	ug/mL	-0.03
13) Dibenz(a,h)anthracene-...	18.462	292	169604	2.00	ug/mL	#-0.03
Target Compounds						Qvalue
4) Pentachlorophenol	11.123	266	843775	42.27	ug/mL	85
6) DFTPP	11.589	442	1182952	41.66	ug/mL	69
7) Benzidine	12.803	184	4936615	39.45	ug/mL	97
8) 4,4-DDE	13.070	TIC	237792	No Calib		
9) 4,4-DDD	13.616	TIC	612424	No Calib		
10) 4,4-DDT	14.204	TIC	11696373	32.43	ug/mL	94

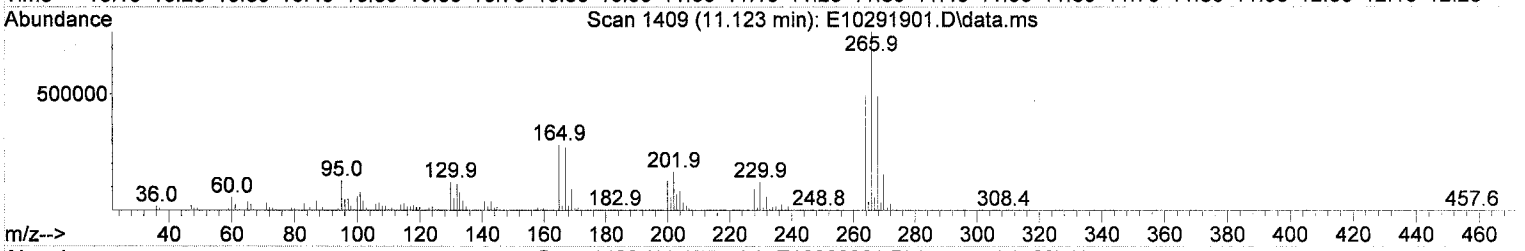
(#) = qualifier out of range (m) = manual integration (+) = signals summed

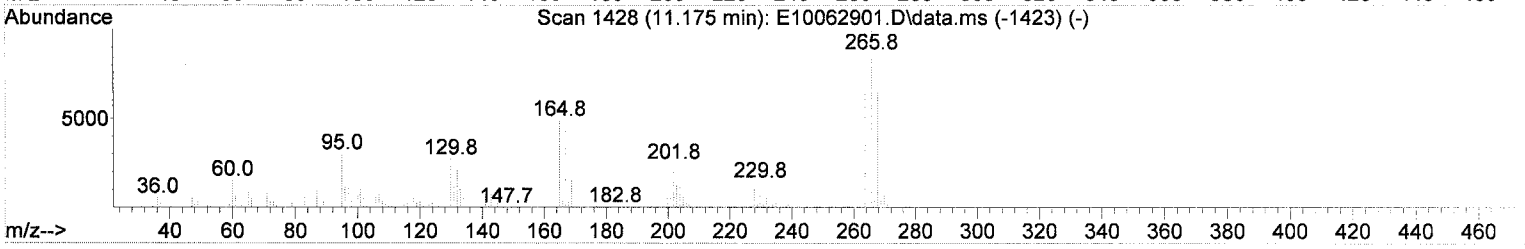
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291901.D
Acq On : 29 Oct 2019 8:34 am
Operator : JK/ AMS /DTH
Sample : 9J29025-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 29 14:30:06 2019
Quant Method : W:\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: E10291901.D\data.ms

(4) Pentachlorophenol

11.123min (+ 0.005) 42.27 ug/mL

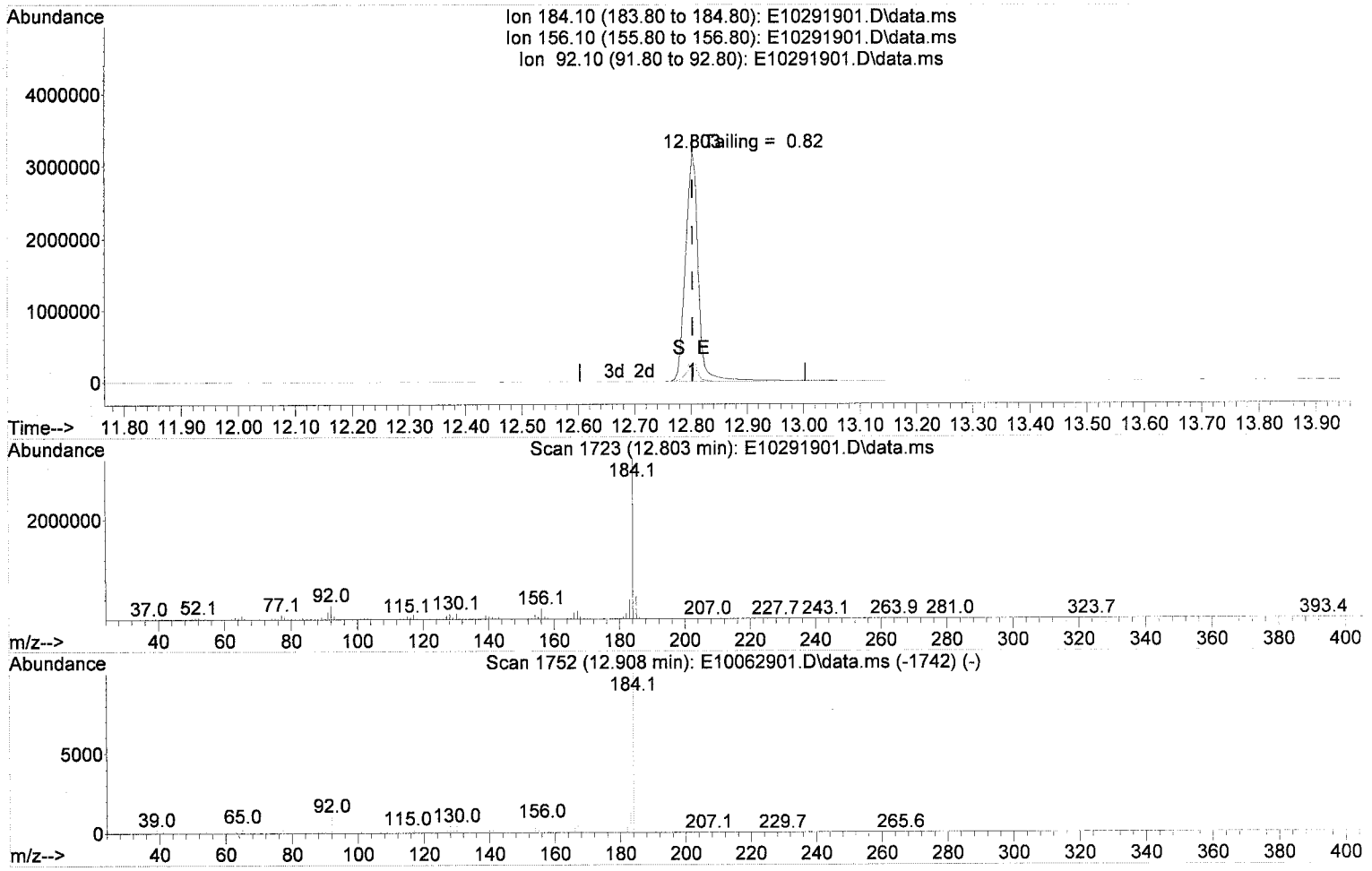
response 843775

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	36.47
201.90	23.20	21.53
129.90	27.10	15.77

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291901.D
Acq On : 29 Oct 2019 8:34 am
Operator : JK/ AMS /DTH
Sample : 9J29025-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 29 14:30:06 2019
Quant Method : W:\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: E10291901.D\data.ms

(7) Benzidine

12.803min (+ 0.000) 39.45 ug/mL

response 4936615

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	6.67
92.10	8.20	8.74
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

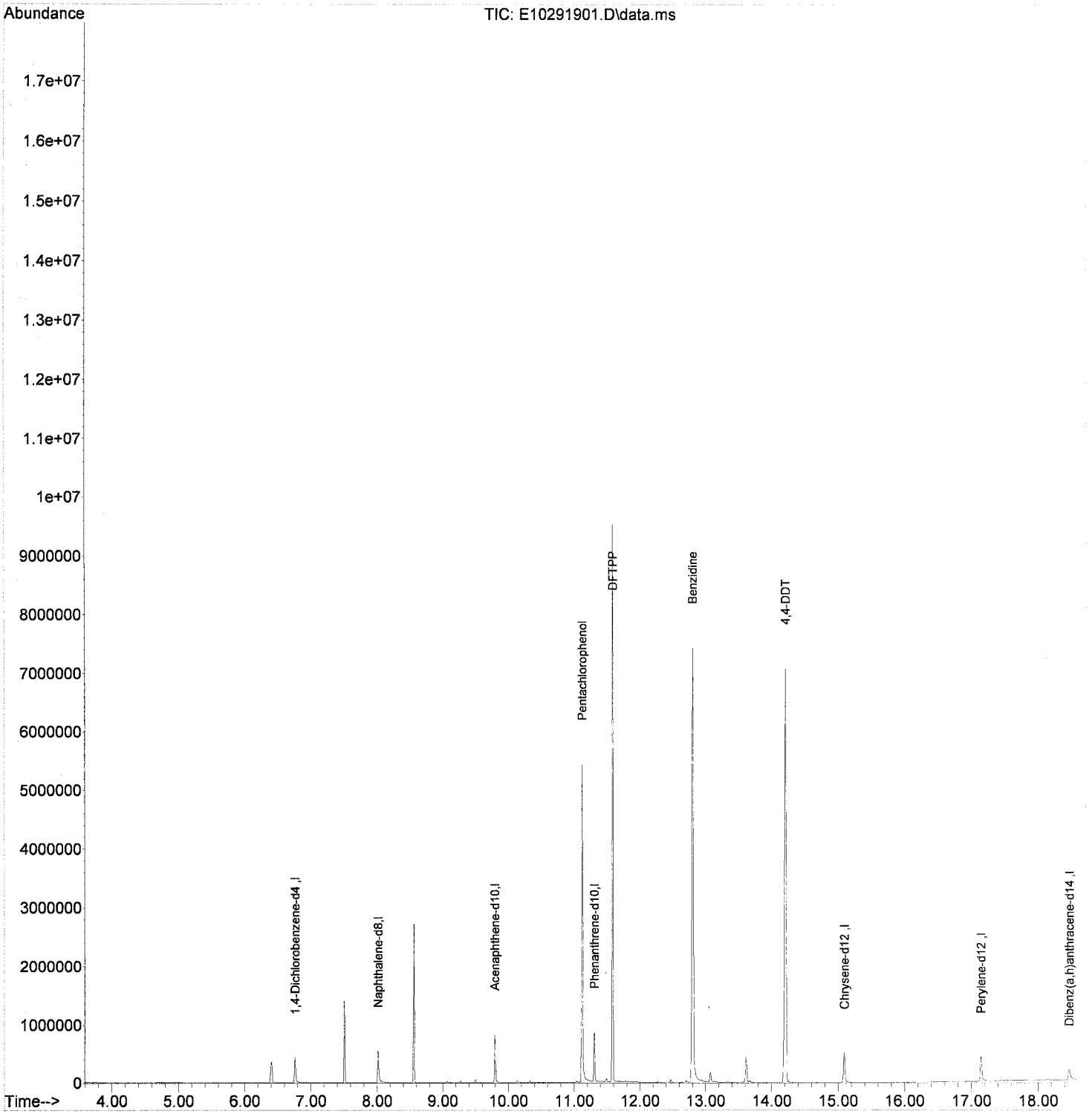
From:
9J29025-TUN1
SV-GCMS5

First Column Area Counts		Percent Breakdown	
DDE	237792		
DDD	612424		
DDT	11696373	**6.78**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291901.D
Acq On : 29 Oct 2019 8:34 am
Operator : JK/ AMS /DTH
Sample : 9J29025-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 29 14:30:06 2019
Quant Method : W:\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 : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 10/29/19

Quant Time: Oct 29 14:31:28 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

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	85	-0.02
2	T	N-Nitrosodimethylamine	1000.000	972.869	2.7	81	-0.01
3	T	Pyridine	1000.000	932.616	6.7	78	-0.02
4	S	2-Fluorophenol (Surr)	1000.000	1049.091	-4.9	86	0.00
5	S	Phenol-d6(Surr)	1000.000	994.457	0.6	80	0.01
6	T	Phenol	1000.000	1072.477	-7.2	86	0.00
7	T	Aniline	1000.000	951.866	4.8	81	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	999.962	0.0	84	-0.02
9	T	2-Chlorophenol	1000.000	1061.444	-6.1	86	0.00
10	T	1,3-Dichlorobenzene	1000.000	995.153	0.5	85	-0.02
11	T	1,4-Dichlorobenzene	1000.000	988.843	1.1	84	-0.02
12	T	Benzyl alcohol	1000.000	1104.827	-10.5	89	0.00
13	T	1,2-Dichlorobenzene	1000.000	1013.282	-1.3	87	-0.01
14	T	2-Methylphenol	1000.000	1051.159	-5.1	84	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	923.792	7.6	78	-0.01
16	T	N-Nitrosodi-n-propylamine	1000.000	1038.774	-3.9	82	-0.01
17	T	3+4-Methylphenol	1000.000	1060.496	-6.0	81	0.00
18	T	Hexachloroethane	1000.000	982.022	1.8	83	-0.02
19	S	Nitrobenzene-d5 (Surr)	1000.000	1063.037	-6.3	85	-0.01
20	T	Nitrobenzene	1000.000	1012.661	-1.3	81	-0.01
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	90	-0.02
22	T	Isophorone	1000.000	987.781	1.2	84	-0.01
23	T	2-Nitrophenol	1000.000	1182.984	-18.3	101	0.00
24	T	2,4-Dimethylphenol	1000.000	972.374	2.8	83	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	974.065	2.6	85	-0.01
26	T	Benzoic acid	2000.000	1800.774	10.0	82	0.00
27	T	2,4-Dichlorophenol	1000.000	1121.376	-12.1	95	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	993.412	0.7	89	-0.02
29	T	Naphthalene	1000.000	1000.217	-0.0	89	-0.01
30	T	4-Chloroaniline	1000.000	765.205	23.5#	71	0.00
31	T	Hexachlorobutadiene	1000.000	1015.389	-1.5	91	-0.01
32	T	4-Chloro-3-methylphenol	1000.000	1054.889	-5.5	97	0.00
33	T	2-Methylnaphthalene	1000.000	1042.118	-4.2	90	-0.01
34	T	1-Methylnaphthalene	1000.000	1039.225	-3.9	91	-0.01
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	93	-0.01
36	T	Hexachlorocyclopentadiene	1000.000	775.437	22.5#	69	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1048.026	-4.8	91	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1045.834	-4.6	94	0.01
39	T	1,1'-Biphenyl	1000.000	1019.190	-1.9	92	-0.01
40	S	2-Fluorobiphenyl (Surr)	1000.000	1022.826	-2.3	93	0.00
41	T	2-Chloronaphthalene	1000.000	995.309	0.5	91	0.00
42	T	2-Nitroaniline	1000.000	1118.233	-11.8	100	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1043.427	-4.3	92	-0.01
44	T	1,4-Dinitrobenzene	1000.000	1186.884	-18.7	114	0.00
45	T	Dimethyl phthalate	1000.000	1043.294	-4.3	93	-0.01
46	T	1,3-Dinitrobenzene	1000.000	1127.921	-12.8	106	0.00
47	T	2,6-Dinitrotoluene	1000.000	1092.077	-9.2	100	0.00
48	T	1,2-Dinitrobenzene	1000.000	1181.064	-18.1	109	0.00

Evaluate Continuing Calibration Report

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:31:28 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

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	1057.094	-5.7	92	0.00
50	T	3-Nitroaniline	1000.000	1063.049	-6.3	103	0.00
51	T	Acenaphthene	1000.000	1020.779	-2.1	93	-0.01
52	T	2,4-Dinitrophenol	1000.000	1028.899	-2.9	105	0.00
53	T	4-Nitrophenol	1000.000	979.407	2.1	92	0.03
54	T	2,4-Dinitrotoluene	1000.000	1153.782	-15.4	110	0.00
55	T	Dibenzofuran	1000.000	1040.993	-4.1	95	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1106.778	-10.7	100	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1091.521	-9.2	97	0.00
58	T	Diethyl phthalate	1000.000	1072.990	-7.3	93	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1079.422	-7.9	95	0.00
60	T	Fluorene	1000.000	1090.191	-9.0	97	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1084.465	-8.4	99	-0.01
62	T	4-Nitroaniline	1000.000	1163.766	-16.4	115	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1198.278	-19.8	124	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	103	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1072.595	-7.3	103	-0.01
66	T	Azobenzene (1,2-DPH)	1000.000	954.938	4.5	90	-0.01
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1096.989	-9.7	110	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1040.444	-4.0	105	0.00
69	T	Hexachlorobenzene	1000.000	986.620	1.3	100	0.00
70	T	Pentachlorophenol (PCP)	1000.000	902.238	9.8	89	0.00
71	T	Phenanthrene	1000.000	1018.047	-1.8	102	-0.01
72	T	Anthracene	1000.000	1103.357	-10.3	107	0.00
73	T	Carbazole	1000.000	1205.282	-20.5#	116	0.00
74	T	Di-n-butyl phthalate	1000.000	1146.989	-14.7	108	0.00
75	T	Fluoranthene	1000.000	1196.698	-19.7	115	0.00
76	T	Benzidine	2000.000	2337.391	-16.9	122	0.00
77	T	Pyrene	1000.000	1206.028	-20.6#	116	-0.01
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	124	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1059.075	-5.9	129	0.00
80	T	Butyl benzyl phthalate	1000.000	1031.272	-3.1	125	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1040.725	-4.1	134	-0.02
82	T	3,3-Dichlorobenzidine	2000.000	2634.699	-31.7#	180	0.00
83	T	Benz(a)anthracene	1000.000	1029.559	-3.0	125	-0.01
84	T	Chrysene	1000.000	1007.691	-0.8	124	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	917.269	8.3	115	-0.02
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	112	-0.01
87	T	Di-n-octyl phthalate	1000.000	1132.123	-13.2	131	-0.02
88	T	Benzo(b)fluoranthene	1000.000	1055.130	-5.5	113	-0.02
89	T	Benzo(k)fluoranthene	1000.000	1093.312	-9.3	118	-0.01
90	T	Benzo(b+k)fluoranthene	2000.000	2161.056	-8.1	117	-0.01
91	T	Benzo(e)pyrene	1000.000	1017.504	-1.8	111	0.00
92	T	Benzo(a)pyrene	1000.000	1071.381	-7.1	111	-0.02
93	T	Perylene	1000.000	1026.119	-2.6	111	-0.01
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	102	-0.01

Evaluate Continuing Calibration Report

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:31:28 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

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	888.108	11.2	92	-0.01
96 T	Dibenz(a,h)anthracene	1000.000	991.346	0.9	100	-0.01
97 T	Benzo(g,h,i)perylene	1000.000	834.065	16.6	80	-0.01

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:31:28 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	431591	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	8.012	136	1777566	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.793	162	940479	2000.00	ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.307	188	1884325	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.243	240	2066385	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.747	264	1730033	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.137	292	1177238	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.557	112	264719	1049.09	ng/ml	0.00
5) Phenol-d6(Surr)	6.418	99	311326	994.46	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.295	82	265230	1063.04	ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	720595	1022.83	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	93620	1096.99	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	987751	1059.08	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.295	74	164555	972.87	ng/ml	91
3) Pyridine	4.316	79	258679	932.62	ng/ml	96
6) Phenol	6.429	94	348762	1072.48	ng/ml	97
7) Aniline	6.450	93	394078	951.87	ng/ml	98
8) Bis(2-chloroethyl) ether	6.498	93	288885	999.96	ng/ml	97
9) 2-Chlorophenol	6.573	128	297067	1061.44	ng/ml	97
10) 1,3-Dichlorobenzene	6.712	146	335479	995.15	ng/ml	99
11) 1,4-Dichlorobenzene	6.776	146	337154	988.84	ng/ml	99
12) Benzyl alcohol	6.894	108	164137	1104.83	ng/ml	97
13) 1,2-Dichlorobenzene	6.931	146	328811	1013.28	ng/ml	98
14) 2-Methylphenol	7.001	107	223454	1051.16	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.017	45	303755	923.79	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.140	70	192309	1038.77	ng/ml	96
17) 3+4-Methylphenol	7.151	107	278036	1060.50	ng/ml	97
18) Hexachloroethane	7.258	117	113973	982.02	ng/ml	97
20) Nitrobenzene	7.316	77	258911	1012.66	ng/ml	95
22) Isophorone	7.546	82	520180	987.78	ng/ml	99
23) 2-Nitrophenol	7.632	139	165001	1182.98	ng/ml	97
24) 2,4-Dimethylphenol	7.670	122	232331	972.37	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.750	93	343923	974.07	ng/ml	99
26) Benzoic acid	7.750	105	112008	1800.77	ng/ml	97
27) 2,4-Dichlorophenol	7.878	162	221762	1121.38	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.953	180	282116	993.41	ng/ml	99
29) Naphthalene	8.033	128	945299	1000.22	ng/ml	99
30) 4-Chloroaniline	8.087	127	268208	765.20	ng/ml	98
31) Hexachlorobutadiene	8.162	225	147256	1015.39	ng/ml	99
32) 4-Chloro-3-methylphenol	8.573	107	215567	1054.89	ng/ml	99
33) 2-Methylnaphthalene	8.729	142	663723	1042.12	ng/ml	99
34) 1-Methylnaphthalene	8.830	142	628163	1039.22	ng/ml	99
36) Hexachlorocyclopentadiene	8.900	237	107845	775.44	ng/ml	96
37) 2,4,6-Trichlorophenol	9.017	196	161152	1048.03	ng/ml	99
38) 2,4,5-Trichlorophenol	9.066	196	164093	1045.83	ng/ml	100
39) 1,1'-Biphenyl	9.199	154	811923	1019.19	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	598136	995.31	ng/ml	98
42) 2-Nitroaniline	9.322	138	185516	1118.23	ng/ml	96
43) 2,6-Dimethylnaphthalene	9.360	156	601092	1043.43	ng/ml	99

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

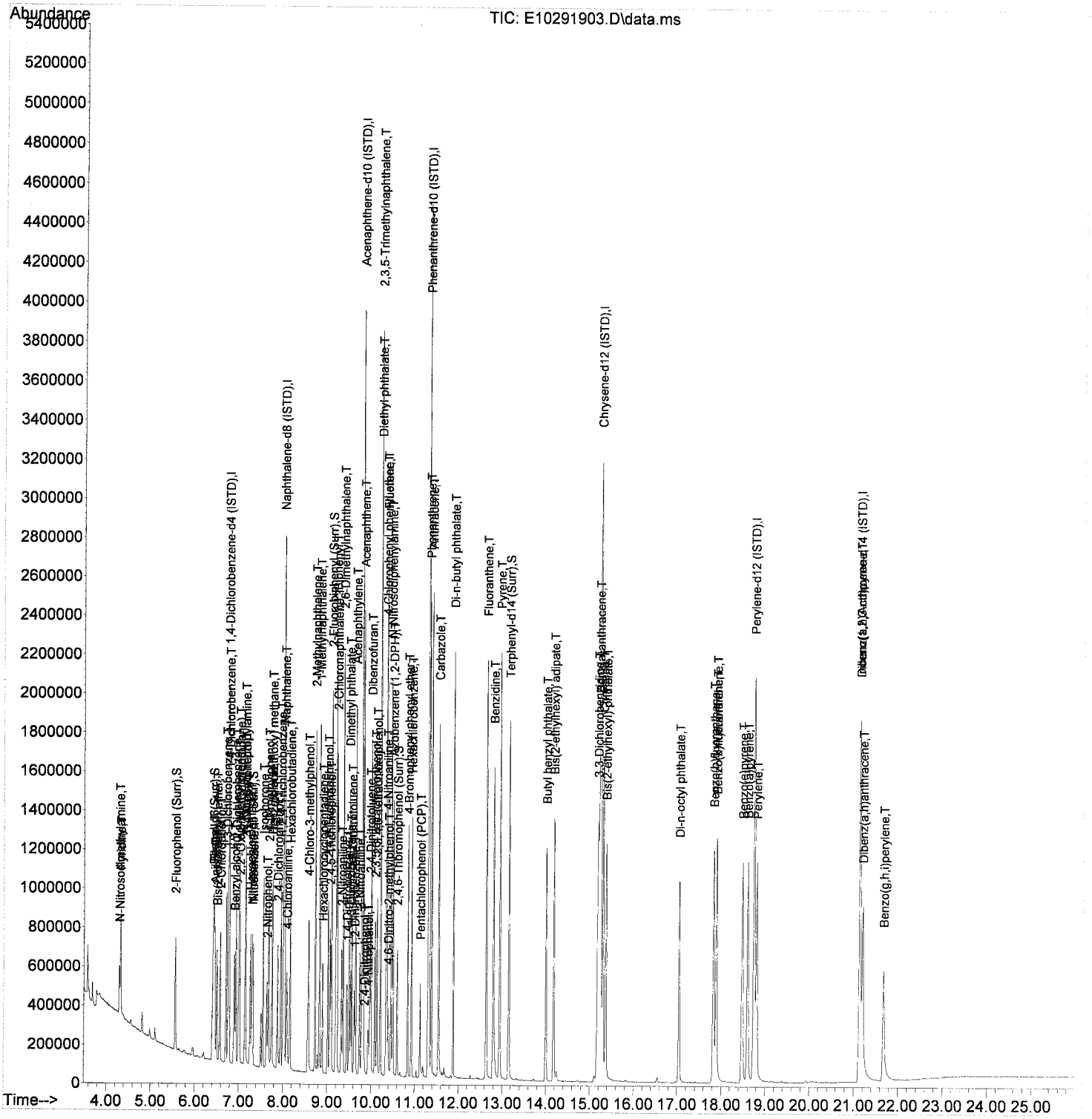
Quant Time: Oct 29 14:31:28 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.451	168	86212	1186.88	ng/ml	92
45)	Dimethyl phthalate	9.499	163	671640	1043.29	ng/ml	99
46)	1,3-Dinitrobenzene	9.531	168	104106	1127.92	ng/ml	96
47)	2,6-Dinitrotoluene	9.563	165	154818	1092.08	ng/ml	92
48)	1,2-Dinitrobenzene	9.622	168	74521	1181.06	ng/ml	83
49)	Acenaphthylene	9.649	152	961024	1057.09	ng/ml	99
50)	3-Nitroaniline	9.739	138	159167	1063.05	ng/ml	95
51)	Acenaphthene	9.825	153	638247	1020.78	ng/ml	98
52)	2,4-Dinitrophenol	9.846	184	26183	1028.90	ng/ml	96
53)	4-Nitrophenol	9.932	139	92975	979.41	ng/ml	92
54)	2,4-Dinitrotoluene	9.975	165	202232	1153.78	ng/ml	92
55)	Dibenzofuran	10.002	168	869072	1040.99	ng/ml	97
56)	2,3,5,6-Tetrachlorophenol	10.087	232	135267	1106.78	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.130	232	149252	1091.52	ng/ml	97
58)	Diethyl phthalate	10.215	149	664115	1072.99	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.210	170	572502	1079.42	ng/ml	97
60)	Fluorene	10.349	166	723034	1090.19	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.338	204	342421	1084.46	ng/ml	100
62)	4-Nitroaniline	10.360	138	176724	1163.77	ng/ml	97
63)	4,6-Dinitro-2-methylph...	10.392	198	65616	1198.28	ng/ml	91
65)	N-Nitrosodiphenylamine	10.456	169	632011	1072.59	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.499	77	585341	954.94	ng/ml	99
68)	4-Bromophenyl phenyl e...	10.841	248	202267	1040.44	ng/ml	94
69)	Hexachlorobenzene	10.921	284	215775	986.62	ng/ml	97
70)	Pentachlorophenol (PCP)	11.119	266	76793	902.24	ng/ml	98
71)	Phenanthrene	11.328	178	1091292	1018.05	ng/ml	100
72)	Anthracene	11.381	178	1130188	1103.36	ng/ml	100
73)	Carbazole	11.542	167	1018104	1205.28	ng/ml	100
74)	Di-n-butyl phthalate	11.879	149	1216849	1146.99	ng/ml	99
75)	Fluoranthene	12.633	202	1232334	1196.70	ng/ml	99
76)	Benzidine	12.794	184	1065501	2337.39	ng/ml	99
77)	Pyrene	12.938	202	1277947	1206.03	ng/ml	99
80)	Butyl benzyl phthalate	14.002	149	499573	1031.27	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	14.173	129	458788	1040.72	ng/ml	99
82)	3,3-Dichlorobenzidine	15.179	252	705498	2634.70	ng/ml	97
83)	Benz(a)anthracene	15.211	228	1144424	1029.56	ng/ml	100
84)	Chrysene	15.297	228	1118769	1007.69	ng/ml	100
85)	Bis(2-ethylhexyl) phth...	15.366	149	678215	917.27	ng/ml	97
87)	Di-n-octyl phthalate	17.040	149	1023805	1132.12	ng/ml	98
88)	Benzo(b)fluoranthene	17.821	252	983928	1055.13	ng/ml	99
89)	Benzo(k)fluoranthene	17.891	252	1032185	1093.31	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.891	252	2095699	2161.06	ng/ml	98
91)	Benzo(e)pyrene	18.479	252	951404	1017.50	ng/ml	99
92)	Benzo(a)pyrene	18.597	252	892594	1071.38	ng/ml	100
93)	Perylene	18.800	252	846355	1026.12	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.137	276	636189	888.11	ng/ml	99
96)	Dibenz(a,h)anthracene	21.202	278	654071	991.35	ng/ml	99
97)	Benzo(g,h,i)perylene	21.678	276	573895	834.06	ng/ml	96

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

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291903.D
Acq On : 29 Oct 2019 9:37 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:31:28 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



Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291904.D
Acq On : 29 Oct 2019 10:13 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 10/29/19

Quant Time: Oct 29 14:31:53 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...	6.765	152	396446	2000.00 ng/ml	-0.01
21) Naphthalene-d8 (ISTD)	8.017	136	1555435	2000.00 ng/ml	-0.01
35) Acenaphthene-d10 (ISTD)	9.793	162	858026	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.306	188	1942221	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1879356	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.741	264	1545372	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1054122	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)	6.402	99	58	0.20 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.327	82	60	0.26 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)	13.173	244	62	0.07 ng/ml	0.02
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.284	74	150	N.D.	
3) Pyridine	4.310	79	80	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	6.589	128	71	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	6.947	107	64	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	7.140	70	63	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.252	117	137	N.D.	
20) Nitrobenzene	7.284	77	155	N.D.	
22) Isophorone	7.546	82	512	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	7.835	105	62	820.10 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	94	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.557	107	57	65.17 ng/ml#	1
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.	

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291904.D
Acq On : 29 Oct 2019 10:13 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

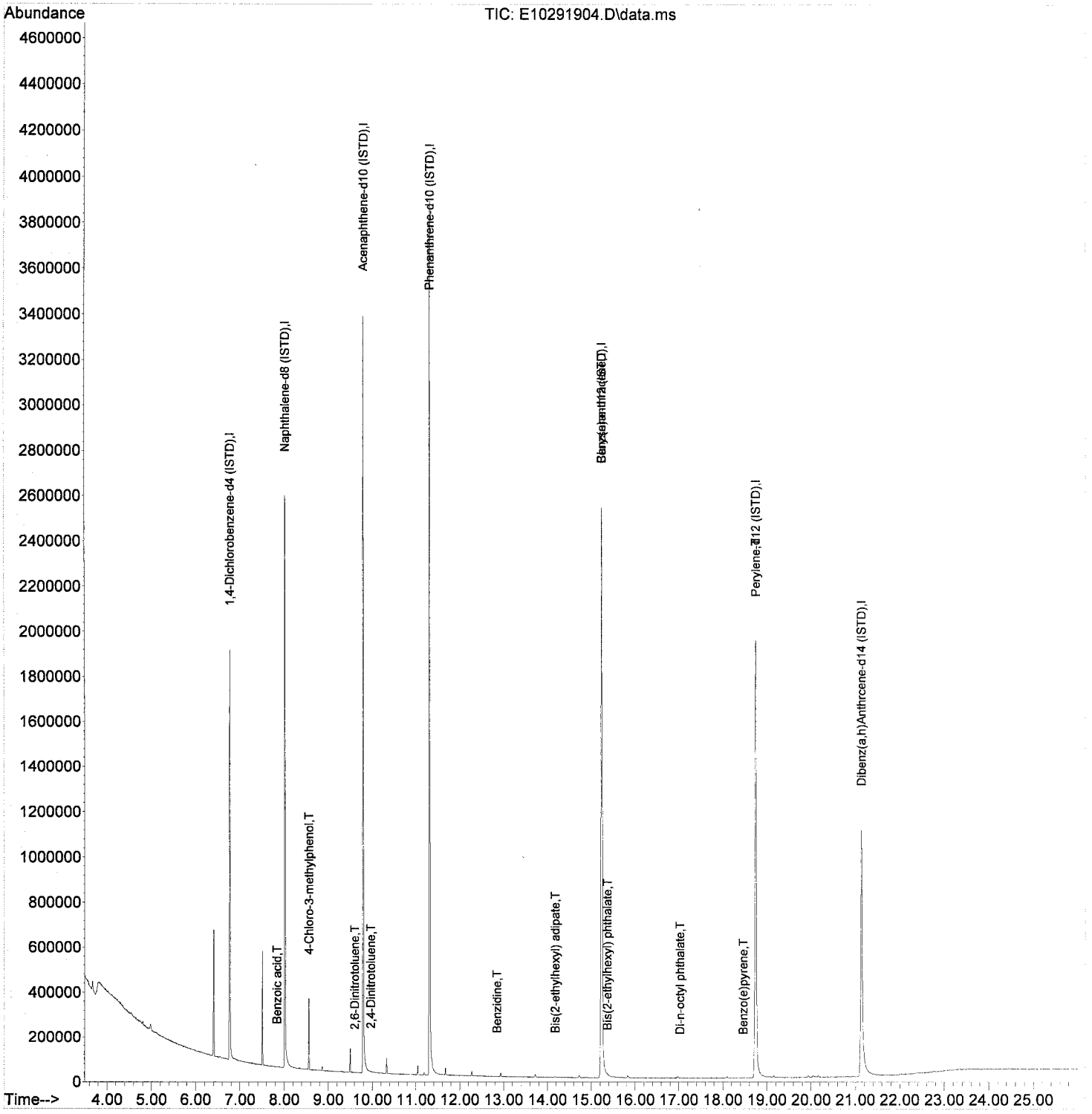
Quant Time: Oct 29 14:31:53 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.509	163	151	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.600	165	60	30.98 ng/ml#	67
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.648	152	485	N.D.	
50) 3-Nitroaniline	9.793	138	112	N.D.	
51) Acenaphthene	9.793	153	142	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	70	61.12 ng/ml#	36
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	181	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.333	170	207	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	52	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	818	N.D.	
72) Anthracene	11.397	178	50	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.884	149	603	N.D.	
75) Fluoranthene	12.633	202	176	N.D.	
76) Benzidine	12.842	184	138	152.61 ng/ml	68
77) Pyrene	12.959	202	85	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.173	129	1227	56.16 ng/ml	92
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.232	228	4345	4.30 ng/ml	77
84) Chrysene	15.345	228	55	N.D.	
85) Bis(2-ethylhexyl) phth...	15.361	149	2201	61.60 ng/ml	83
87) Di-n-octyl phthalate	17.019	149	659	74.93 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	18.458	252	61	8.46 ng/ml	89
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.741	252	5110	6.94 ng/ml	74
95) Indeno(1,2,3-cd)pyrene	21.127	276	582	N.D.	
96) Dibenz(a,h)anthracene	21.159	278	95	N.D.	
97) Benzo(g,h,i)perylene	21.672	276	625	N.D.	

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

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291904.D
Acq On : 29 Oct 2019 10:13 am
Operator : JK/ AMS /DTH
Sample : 9J29025-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:31:53 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\2019-10\9J29025\
Data File : E10291909.D
Acq On : 29 Oct 2019 1:12 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE1@4
Misc : 4x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

RR1 AMS 10/29/19

Quant Time: Oct 29 14:32:18 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...	6.766	152	519429	2000.00 ng/ml	-0.01
21) Naphthalene-d8 (ISTD)	8.017	136	2101079	2000.00 ng/ml	-0.01
35) Acenaphthene-d10 (ISTD)	9.793	162	1064716	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.307	188	1916609	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	1677773	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.741	264	1458951	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.127	292	1058782	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.562	112	139681	459.95 ng/ml	0.00
5) Phenol-d6(Surr)	6.423	99	86533	229.67 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.300	82	271894	905.46 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	707225	886.71 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.595	330	90153	1041.85 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	720200	951.07 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.305	74	121	N.D.	
3) Pyridine	4.332	79	112	N.D.	
6) Phenol	6.439	94	953	N.D.	
7) Aniline	6.439	93	385	N.D.	
8) Bis(2-chloroethyl) ether	6.498	93	819	N.D.	
9) 2-Chlorophenol	6.573	128	92	N.D.	
10) 1,3-Dichlorobenzene	6.782	146	373	N.D.	
11) 1,4-Dichlorobenzene	6.782	146	381	N.D.	
12) Benzyl alcohol	6.921	108	227	36.04 ng/ml#	52
13) 1,2-Dichlorobenzene	6.937	146	307	N.D.	
14) 2-Methylphenol	6.995	107	102	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.028	45	121	N.D.	
16) N-Nitrosodi-n-propylamine	7.129	70	301	N.D.	
17) 3+4-Methylphenol	7.145	107	221	N.D.	
18) Hexachloroethane	7.274	117	824	5.90 ng/ml#	12
20) Nitrobenzene	7.274	77	3562	11.58 ng/ml#	37
22) Isophorone	7.541	82	471	N.D.	
23) 2-Nitrophenol	7.637	139	105	28.27 ng/ml#	1
24) 2,4-Dimethylphenol	7.685	122	128	10.77 ng/ml	92
25) Bis(2-chloroethoxy) me...	7.755	93	292	N.D.	
26) Benzoic acid	7.734	105	3146	843.99 ng/ml	78
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.038	128	13412	12.01 ng/ml	99
30) 4-Chloroaniline	8.108	127	86	10.89 ng/ml	62
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.541	107	381	66.37 ng/ml#	1
33) 2-Methylnaphthalene	8.728	142	1636	N.D.	
34) 1-Methylnaphthalene	8.835	142	1039	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.028	196	61	11.85 ng/ml#	12
38) 2,4,5-Trichlorophenol	9.028	196	61	29.01 ng/ml#	12
39) 1,1'-Biphenyl	9.199	154	1609	N.D.	
41) 2-Chloronaphthalene	9.178	162	62	N.D.	
42) 2-Nitroaniline	9.322	138	96	30.38 ng/ml#	41
43) 2,6-Dimethylnaphthalene	9.370	156	384	N.D.	

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291909.D
Acq On : 29 Oct 2019 1:12 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE1@4
Misc : 4x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

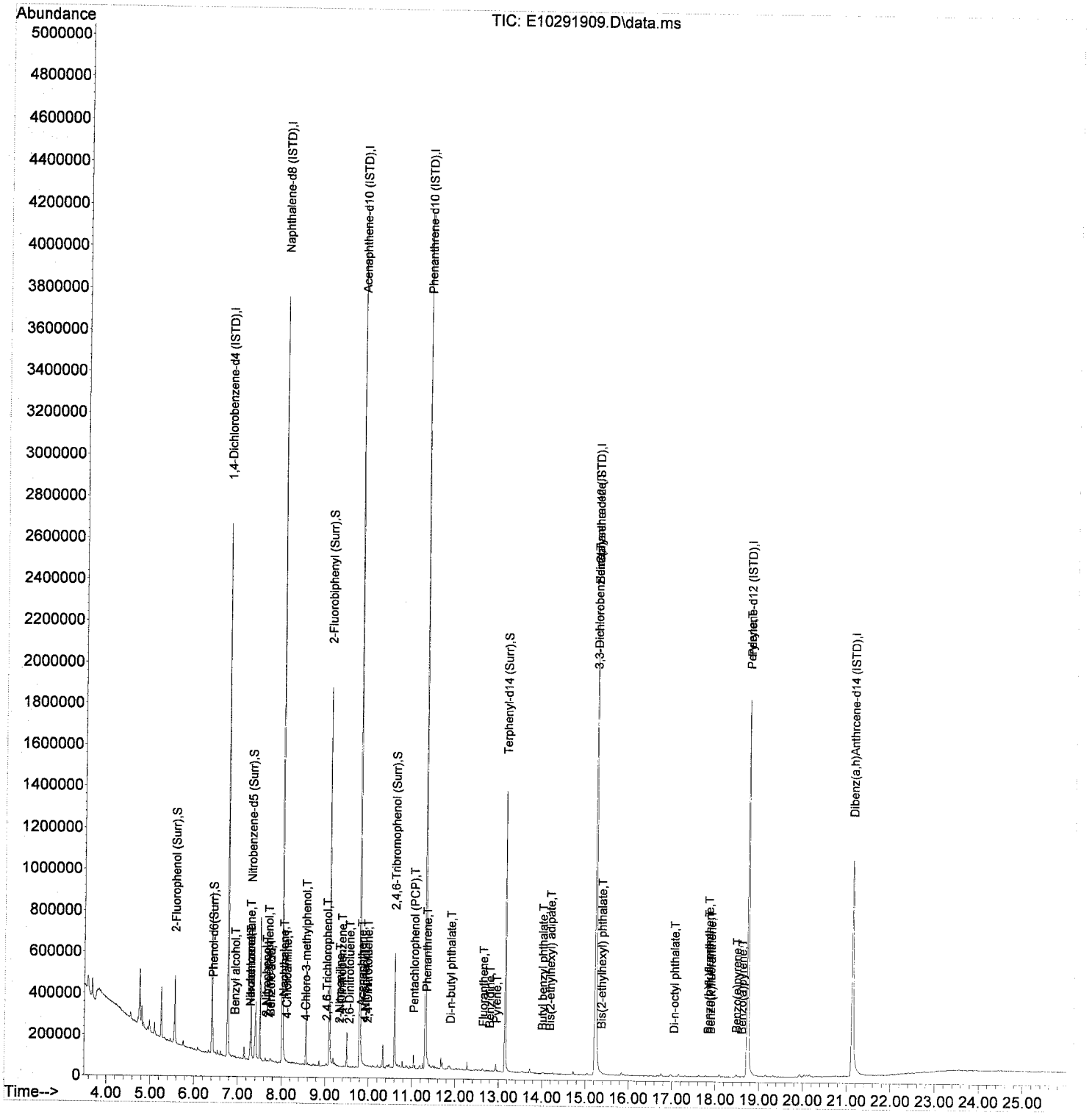
Quant Time: Oct 29 14:32:18 2019
Quant Method : W:\METHODS\SV5_100419.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Oct 07 13:03:04 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.365	168	65	64.70 ng/ml#	50
45) Dimethyl phthalate	9.499	163	372	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.547	165	405	33.02 ng/ml	86
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.648	152	775	N.D.	
50) 3-Nitroaniline	9.750	138	53	N.D.	
51) Acenaphthene	9.825	153	2722	3.85 ng/ml	82
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.905	139	148	84.70 ng/ml#	1
54) 2,4-Dinitrotoluene	9.964	165	94	61.16 ng/ml#	65
55) Dibenzofuran	9.996	168	471	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	935	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	226	N.D.	
60) Fluorene	10.349	166	893	N.D.	
61) 4-Chlorophenyl phenyl ...	10.328	204	71	N.D.	
62) 4-Nitroaniline	10.354	138	52	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.451	169	223	N.D.	
66) Azobenzene (1,2-DPH)	10.504	77	356	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	72	61.56 ng/ml#	1
71) Phenanthrene	11.328	178	4564	4.19 ng/ml	95
72) Anthracene	11.381	178	843	N.D.	
73) Carbazole	11.553	167	505	N.D.	
74) Di-n-butyl phthalate	11.879	149	8492	7.87 ng/ml	98
75) Fluoranthene	12.633	202	5173	4.94 ng/ml	95
76) Benzidine	12.783	184	100	152.54 ng/ml#	1
77) Pyrene	12.938	202	4577	4.25 ng/ml	98
80) Butyl benzyl phthalate	14.002	149	344	33.44 ng/ml#	24
81) Bis(2-ethylhexyl) adipate	14.179	129	961	55.80 ng/ml	78
82) 3,3-Dichlorobenzidine	15.222	252	53	24.93 ng/ml#	1
83) Benz(a)anthracene	15.227	228	5460	6.05 ng/ml	81
84) Chrysene	15.286	228	1189	N.D.	
85) Bis(2-ethylhexyl) phth...	15.361	149	2018	61.68 ng/ml	95
87) Di-n-octyl phthalate	17.040	149	161	74.33 ng/ml#	1
88) Benzo(b)fluoranthene	17.826	252	1076	11.46 ng/ml	85
89) Benzo(k)fluoranthene	17.880	252	532	11.35 ng/ml	74
90) Benzo(b+k)fluoranthene	17.826	252	1608	21.09 ng/ml	87
91) Benzo(e)pyrene	18.474	252	895	9.52 ng/ml	81
92) Benzo(a)pyrene	18.597	252	696	14.21 ng/ml	94
93) Perylene	18.736	252	5007	7.20 ng/ml	69
95) Indeno(1,2,3-cd)pyrene	21.127	276	971	N.D.	
96) Dibenz(a,h)anthracene	21.191	278	120	N.D.	
97) Benzo(g,h,i)perylene	21.661	276	267	N.D.	

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

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291909.D
Acq On : 29 Oct 2019 1:12 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE1@4
Misc : 4x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 29 14:32:18 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



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 10/30/19

Quant Time: Oct 30 07:22:55 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)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.765	152	437935	2000.00 ng/ml	-0.01
21) Naphthalene-d8 (ISTD)	8.017	136	1750097	2000.00 ng/ml	-0.01
35) Acenaphthene-d10 (ISTD)	9.793	162	935336	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.306	188	1920028	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	2028061	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.746	264	1795322	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.132	292	1351208	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	483046	1886.60 ng/ml	0.00
5) Phenol-d6(Surr)	6.423	99	325092	1023.39 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.300	82	891227	3520.28 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	2304792	3289.45 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.600	330	412723	4234.64 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.157	244	3222157	3520.11 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.316	74	255	N.D.	
3) Pyridine	4.316	79	311	N.D.	
6) Phenol	6.434	94	2465	7.47 ng/ml#	1
7) Aniline	6.439	93	658	N.D.	
8) Bis(2-chloroethyl) ether	6.493	93	1796	6.13 ng/ml#	54
9) 2-Chlorophenol	6.573	128	450	N.D.	
10) 1,3-Dichlorobenzene	6.707	146	95	N.D.	
11) 1,4-Dichlorobenzene	6.782	146	1167	3.37 ng/ml	78
12) Benzyl alcohol	6.905	108	949	41.08 ng/ml#	68
13) 1,2-Dichlorobenzene	6.931	146	907	2.75 ng/ml	73
14) 2-Methylphenol	6.990	107	294	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.006	45	109	N.D.	
16) N-Nitrosodi-n-propylamine	7.135	70	411	N.D.	
17) 3+4-Methylphenol	7.151	107	1176	4.42 ng/ml#	1
18) Hexachloroethane	7.274	117	2293	19.47 ng/ml#	12
20) Nitrobenzene	7.274	77	11698	45.09 ng/ml#	38
22) Isophorone	7.546	82	1736	3.35 ng/ml	56
23) 2-Nitrophenol	7.632	139	350	30.21 ng/ml#	5
24) 2,4-Dimethylphenol	7.680	122	879	14.02 ng/ml	79
25) Bis(2-chloroethoxy) me...	7.739	93	217	N.D.	
26) Benzoic acid	7.734	105	26017	1060.34 ng/ml	97
27) 2,4-Dichlorophenol	7.878	162	113	7.78 ng/ml#	1
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.038	128	41597	44.70 ng/ml	97
30) 4-Chloroaniline	8.081	127	113	11.01 ng/ml#	49
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.547	107	688	68.12 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	5233	8.35 ng/ml	93
34) 1-Methylnaphthalene	8.830	142	3828	6.43 ng/ml	95
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.023	196	396	14.15 ng/ml	77
38) 2,4,5-Trichlorophenol	9.023	196	396	31.20 ng/ml	77
39) 1,1'-Biphenyl	9.199	154	5282	6.67 ng/ml	91
41) 2-Chloronaphthalene	9.199	162	189	N.D.	
42) 2-Nitroaniline	9.295	138	204	31.11 ng/ml#	21

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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

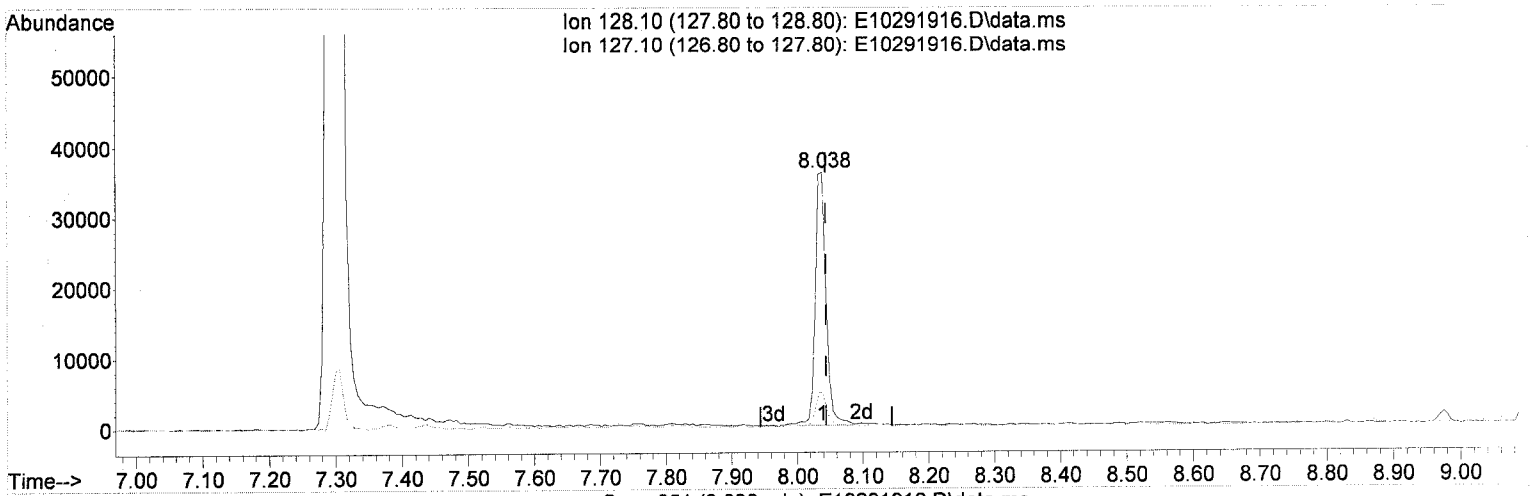
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.365	156	1252	N.D.	
44) 1,4-Dinitrobenzene	9.418	168	300	68.11 ng/ml#	34
45) Dimethyl phthalate	9.493	163	900	N.D.	
46) 1,3-Dinitrobenzene	9.536	168	269	62.24 ng/ml#	1
47) 2,6-Dinitrotoluene	9.547	165	1179	38.80 ng/ml	70
48) 1,2-Dinitrobenzene	9.627	168	55	33.70 ng/ml#	1
49) Acenaphthylene	9.648	152	1924	N.D.	
50) 3-Nitroaniline	9.718	138	71	N.D.	
51) Acenaphthene	9.825	153	7158	11.51 ng/ml	95
52) 2,4-Dinitrophenol	9.852	184	117	180.27 ng/ml#	1
53) 4-Nitrophenol	9.889	139	151	84.91 ng/ml#	1
54) 2,4-Dinitrotoluene	9.969	165	88	61.19 ng/ml#	55
55) Dibenzofuran	9.996	168	1896	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.135	232	161	40.60 ng/ml#	1
57) 2,3,4,6-Tetrachlorophenol	10.135	232	161	29.30 ng/ml#	1
58) Diethyl phthalate	10.210	149	3368	5.47 ng/ml	81
59) 2,3,5-Trimethylnaphtha...	10.205	170	397	N.D.	
60) Fluorene	10.349	166	3062	4.64 ng/ml	90
61) 4-Chlorophenyl phenyl ...	10.333	204	289	N.D.	
62) 4-Nitroaniline	10.354	138	196	N.D.	
63) 4,6-Dinitro-2-methylph...	10.424	198	77	158.64 ng/ml#	1
65) N-Nitrosodiphenylamine	10.461	169	659	N.D.	
66) Azobenzene (1,2-DPH)	10.515	77	1599	2.56 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.868	248	109	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	528	66.85 ng/ml	73
71) Phenanthrene	11.328	178	16227	14.86 ng/ml	94
72) Anthracene	11.381	178	3138	3.01 ng/ml	50
73) Carbazole	11.542	167	3386	3.93 ng/ml	60
74) Di-n-butyl phthalate	11.879	149	43142	39.91 ng/ml	98
75) Fluoranthene	12.633	202	23041	21.96 ng/ml	99
76) Benzidine	12.793	184	90	152.51 ng/ml#	1
77) Pyrene	12.938	202	20598	19.08 ng/ml	91
80) Butyl benzyl phthalate	14.002	149	2104	37.00 ng/ml#	56
81) Bis(2-ethylhexyl) adipate	14.179	129	5408	65.31 ng/ml	86
82) 3,3-Dichlorobenzidine	15.163	252	107	25.11 ng/ml#	1
83) Benz(a)anthracene	15.216	228	11617	10.65 ng/ml	89
84) Chrysene	15.291	228	6605	6.06 ng/ml	88
85) Bis(2-ethylhexyl) phth...	15.361	149	13871	76.56 ng/ml	97
87) Di-n-octyl phthalate	17.051	149	160	74.29 ng/ml#	1
88) Benzo(b)fluoranthene	17.821	252	6922	17.35 ng/ml	95
89) Benzo(k)fluoranthene	17.885	252	1977	12.69 ng/ml	71
90) Benzo(b+k)fluoranthene	17.821	252	10068	29.17 ng/ml	98
91) Benzo(e)pyrene	18.479	252	4574	13.11 ng/ml#	79
92) Benzo(a)pyrene	18.597	252	3696	17.55 ng/ml	68
93) Perylene	18.795	252	1699	N.D.	
95) Indeno(1,2,3-cd)pyrene	21.137	276	3987	4.85 ng/ml	46
96) Dibenz(a,h)anthracene	21.191	278	387	N.D.	
97) Benzo(g,h,i)perylene	21.672	276	2524	3.20 ng/ml	83

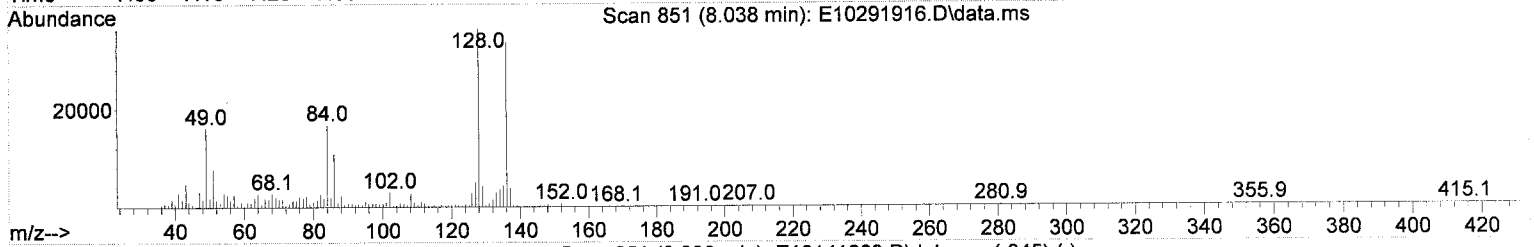
(#) = qualifier out of range (m) = manual integration (+) = signals summed

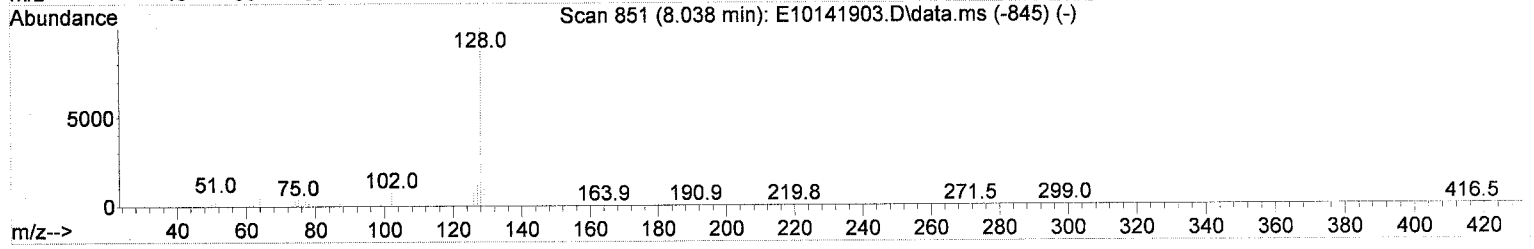
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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: E10291916.D\data.ms

(29) Naphthalene (T)

8.038min (-0.005) 44.70 ng/ml

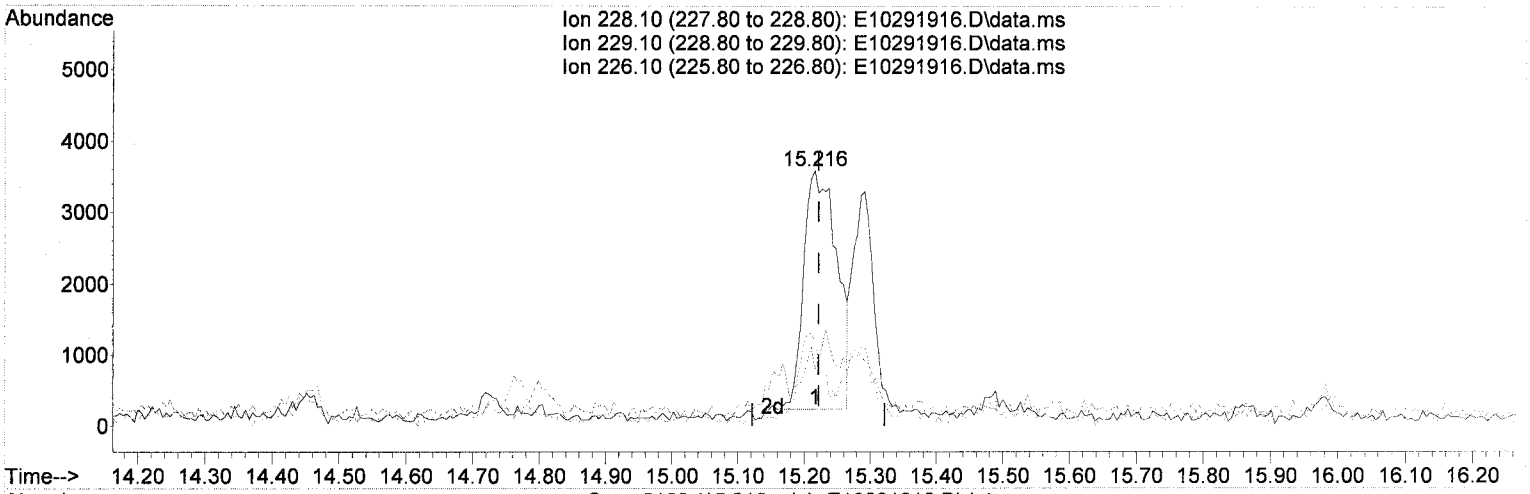
response 41597

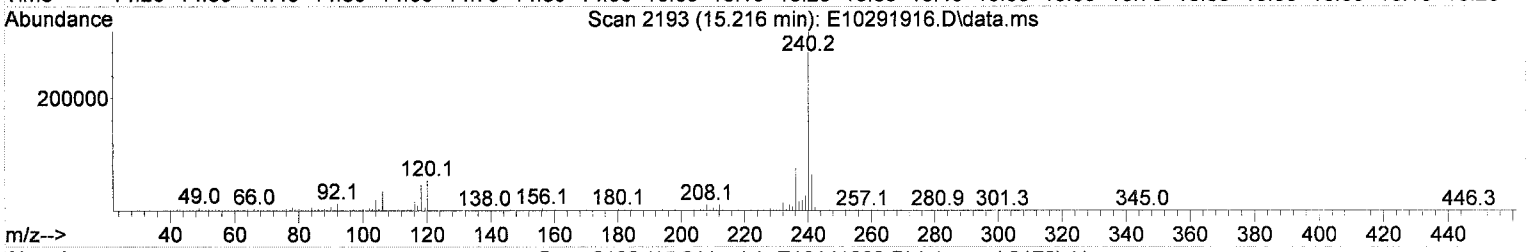
Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.50	13.68
0.00	0.00	0.00
0.00	0.00	0.00

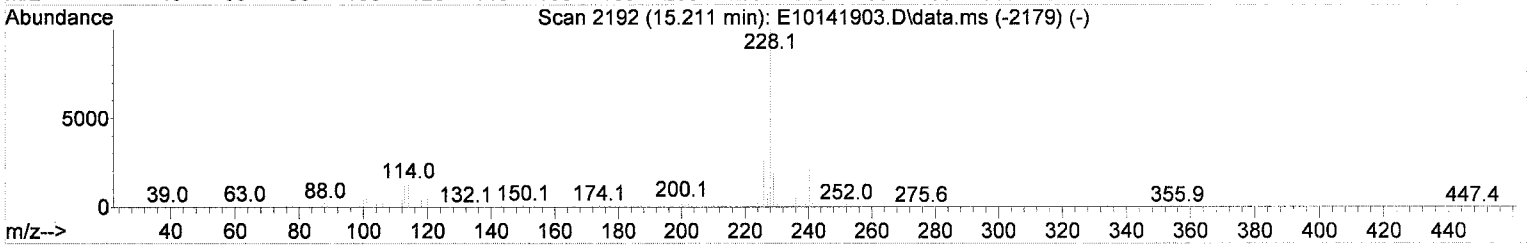
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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: E10291916.D\data.ms

(83) Benz(a)anthracene (T)

15.216min (-0.005) 10.65 ng/ml

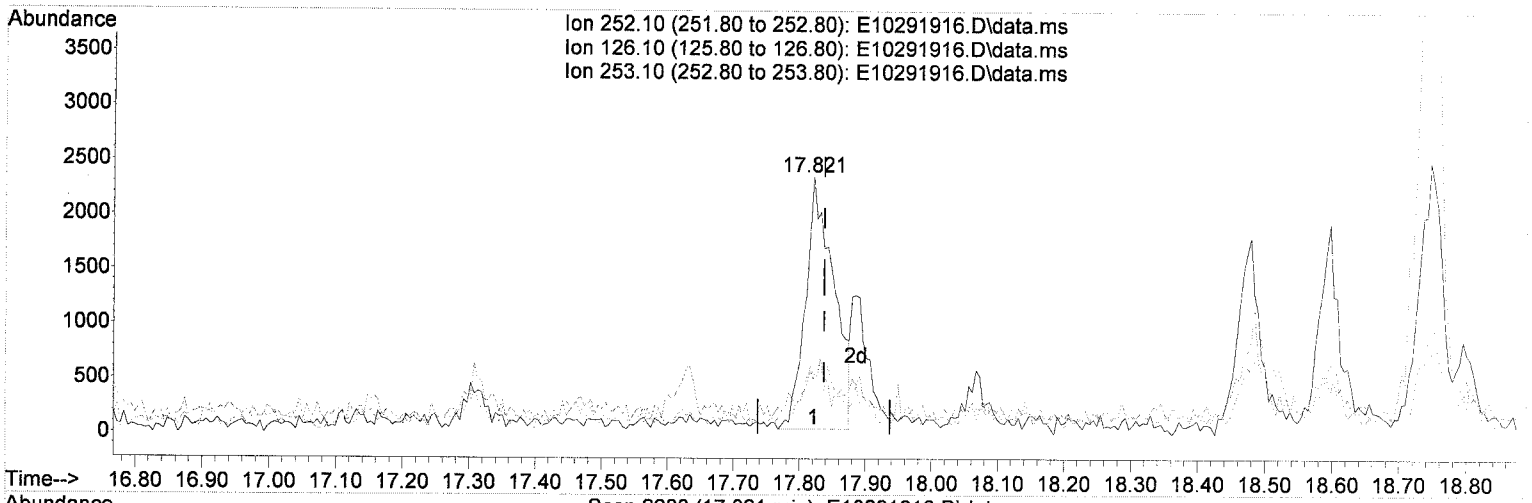
response 11617

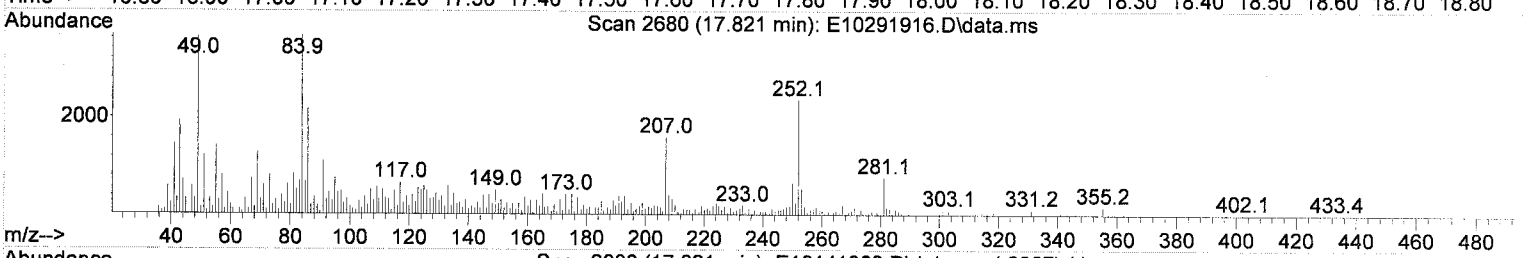
Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	22.32
226.10	25.90	33.24
0.00	0.00	0.00

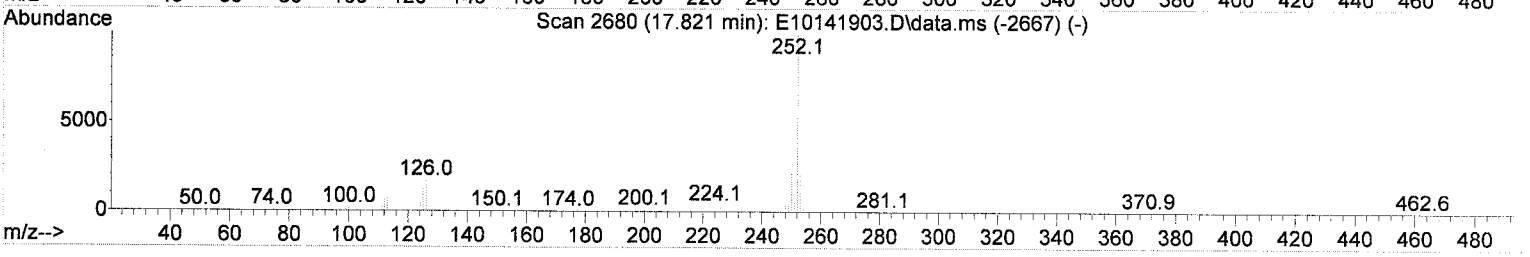
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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: E10291916.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.821min (-0.016) 17.35 ng/ml

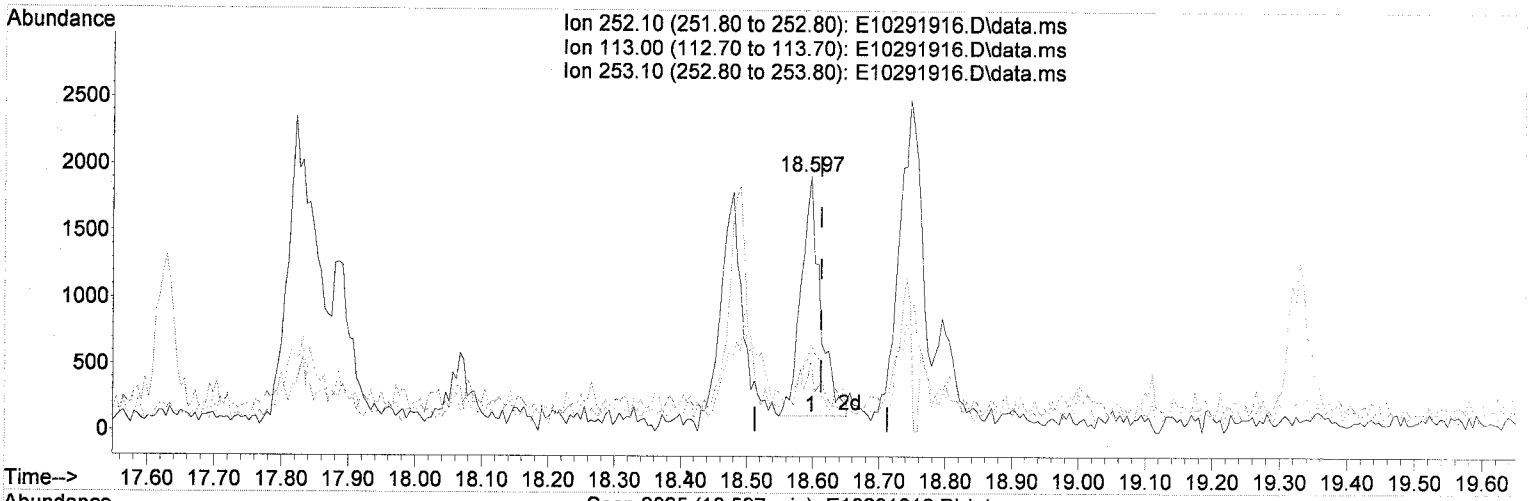
response 6922

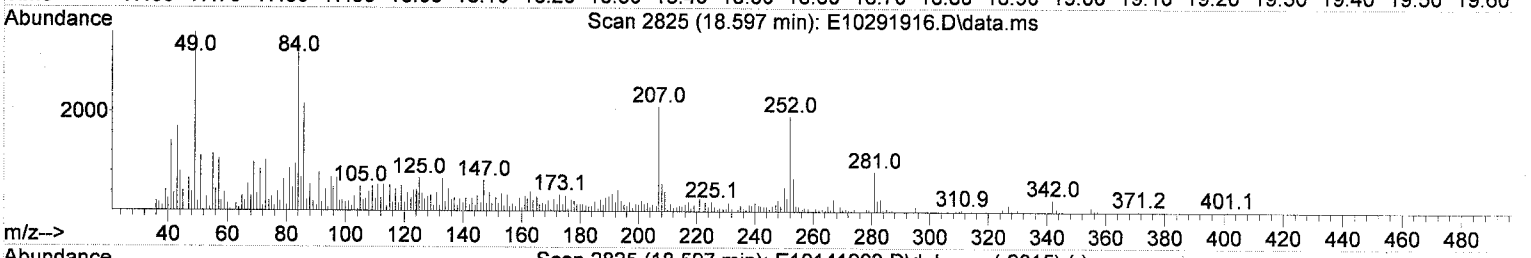
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	18.20	21.33
253.10	21.80	23.16
0.00	0.00	0.00

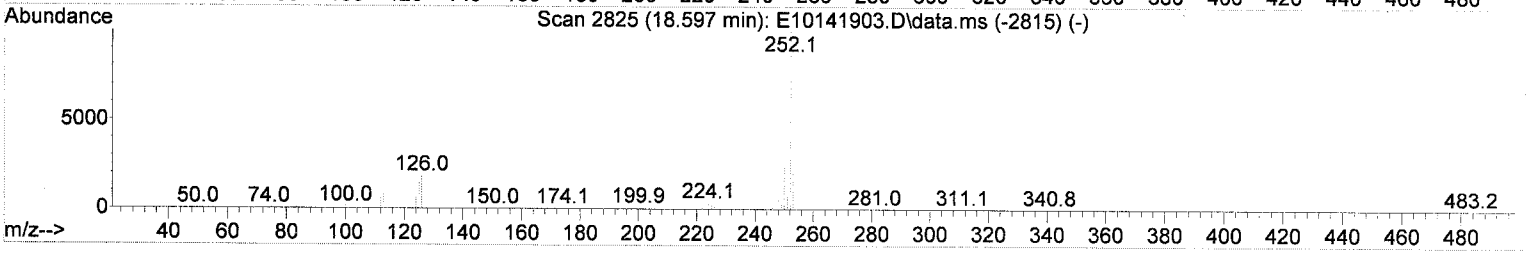
Quantitation Report (Qedit)

Data Path : W:\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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: E10291916.D\data.ms

(92) Benzo(a)pyrene (T)

18.597min (-0.015) 17.55 ng/ml

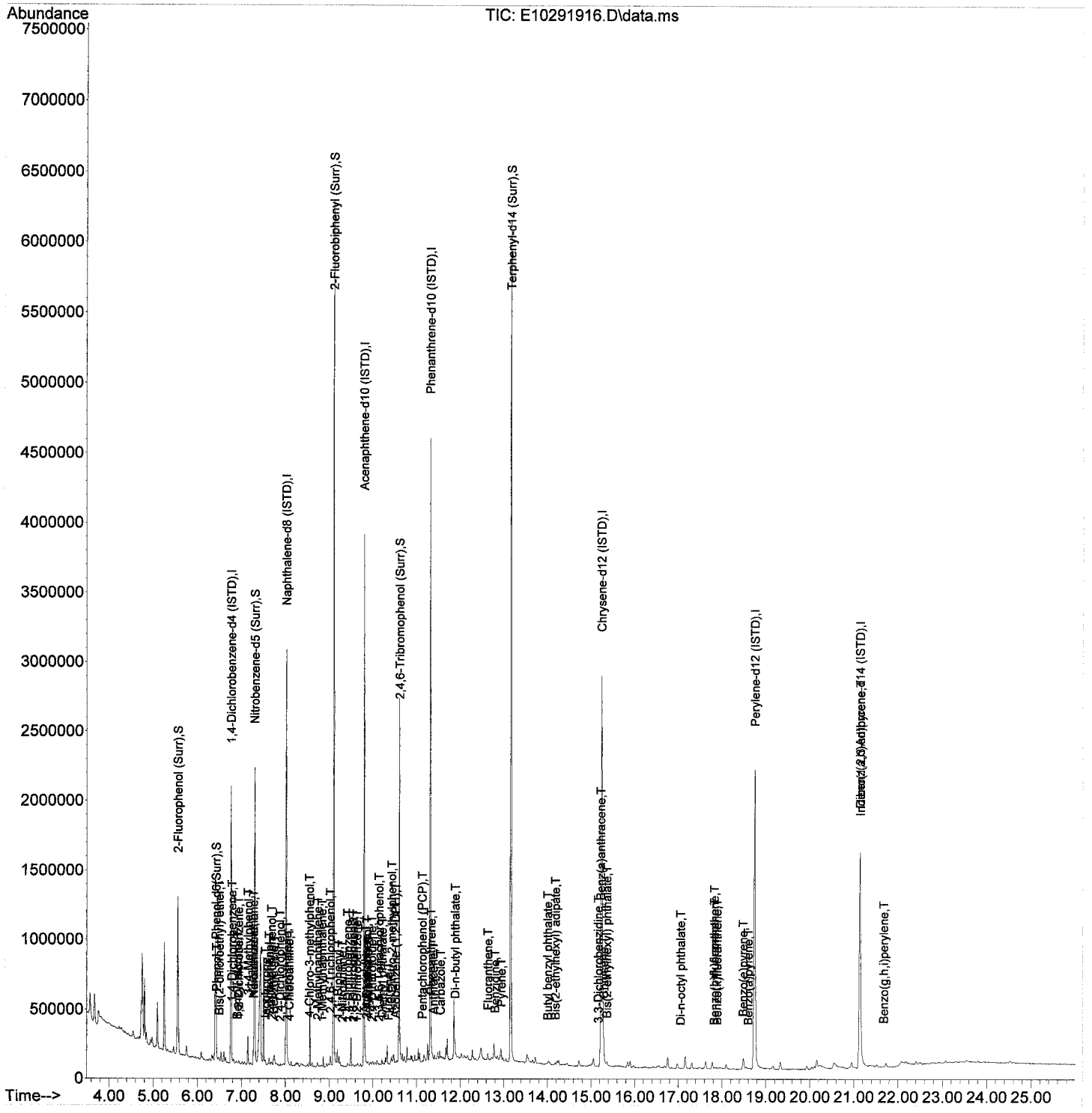
response 3696

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	11.30	27.55
253.10	21.70	34.51
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-10\9J29025\
Data File : E10291916.D
Acq On : 29 Oct 2019 5:20 pm
Operator : JK/ AMS /DTH
Sample : A9J0959-01RE2
Misc : 1x, 8270D LL FULL CUSTOM ACID EXT.
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Oct 30 07:22:55 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



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 9J28055 (QC Only)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J28055**	Instrument:	**SV-GCMS9**
Date:	**10/28/19 13:33**	Calibration:	**A9J1803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J28055-TUN1	Water	QC	QC			A19G233	A19J292
2	9J28055-CCV1	Water	QC	QC			A19G233	A19G243
3	9J28055-CCB1	Water	QC	QC			A19G233	
4	9101635-BLK2	Water	QC	QC		9101635	A19G233	
5	9101635-BS2	Water	QC	QC		9101635	A19G233	
6	9101635-BSD2	Water	QC	QC		9101635	A19G233	
7	A9J0812-01	Water	625 PAH/PCP/HCB (SW)		11/04/19	9101635	A19G233	
8	A9J0913-02	Water	8270D LL PAH/PHTH/Phenols		10/29/19	9101635	A19G233	
9	A9J0918-01	Water	625 PAH/PCP/HCB (SW)		11/01/19	9101635	A19G233	
10	A9J0918-02	Water	625 PAH/PCP/HCB (SW)		11/01/19	9101635	A19G233	
11	A9J0918-03	Water	625 PAH/PCP/HCB (SW)		11/01/19	9101635	A19G233	
12	A9J0918-04	Water	625 PAH/PCP/HCB (SW)		11/01/19	9101635	A19G233	
13	A9J0918-05	Water	625 PAH/PCP/HCB (SW)		11/01/19	9101635	A19G233	
14	A9J0841-04	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/05/19	9101635	A19G233	
15	A9J0841-05	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	11/05/19	9101635	A19G233	
16	A9J0858-02	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
17	A9J0858-04	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
18	A9J0858-06	Water	8270D LL PAH/PHTH/Phenols		11/05/19	9101635	A19G233	
19	A9J0959-01	Water	8270D LL Full List	Anchor QEA, LLC	11/07/19	9101635	A19G233	
20	9J28055-IBL1	Water	QC	QC			A19G233	

Data Entered By: AMS 10/29/19

Data Reviewed By: JJL 10/29/19

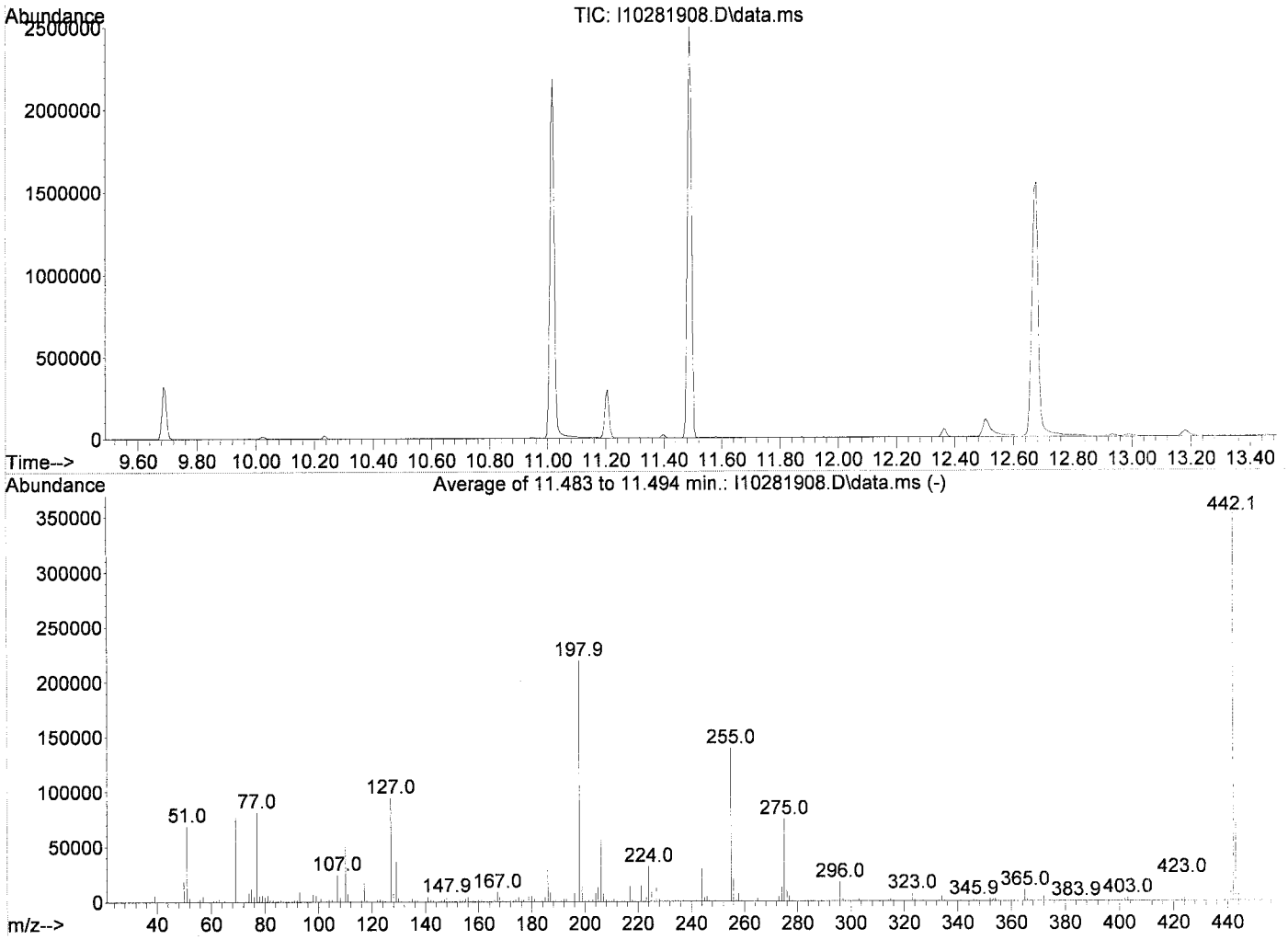
Comments:

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281908.D
Acq On : 28 Oct 2019 1:39 pm
Operator : JK /AMS /DTH
Sample : 9J28055-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP.M
Title : DFTPP Tune Methodug/mL
Last Update : Thu Oct 17 09:26:26 2019

AMS 10/28/19



AutoFind: Scans 1495, 1496, 1497; 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	0.0	0	PASS
69	69	100	100	100.0	76960	PASS
70	69	0.00	2	0.5	391	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	219221	PASS
199	198	5	9	7.0	15365	PASS
365	198	1	100	4.6	9979	PASS
441	443	0.01	150	14.1	10424	PASS
442	198	0.10	200	160.6	352149	PASS
443	442	15	24	21.0	73861	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281908.D
Acq On : 28 Oct 2019 1:39 pm
Operator : JK /AMS /DTH
Sample : 9J28055-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 28 15:46:29 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9

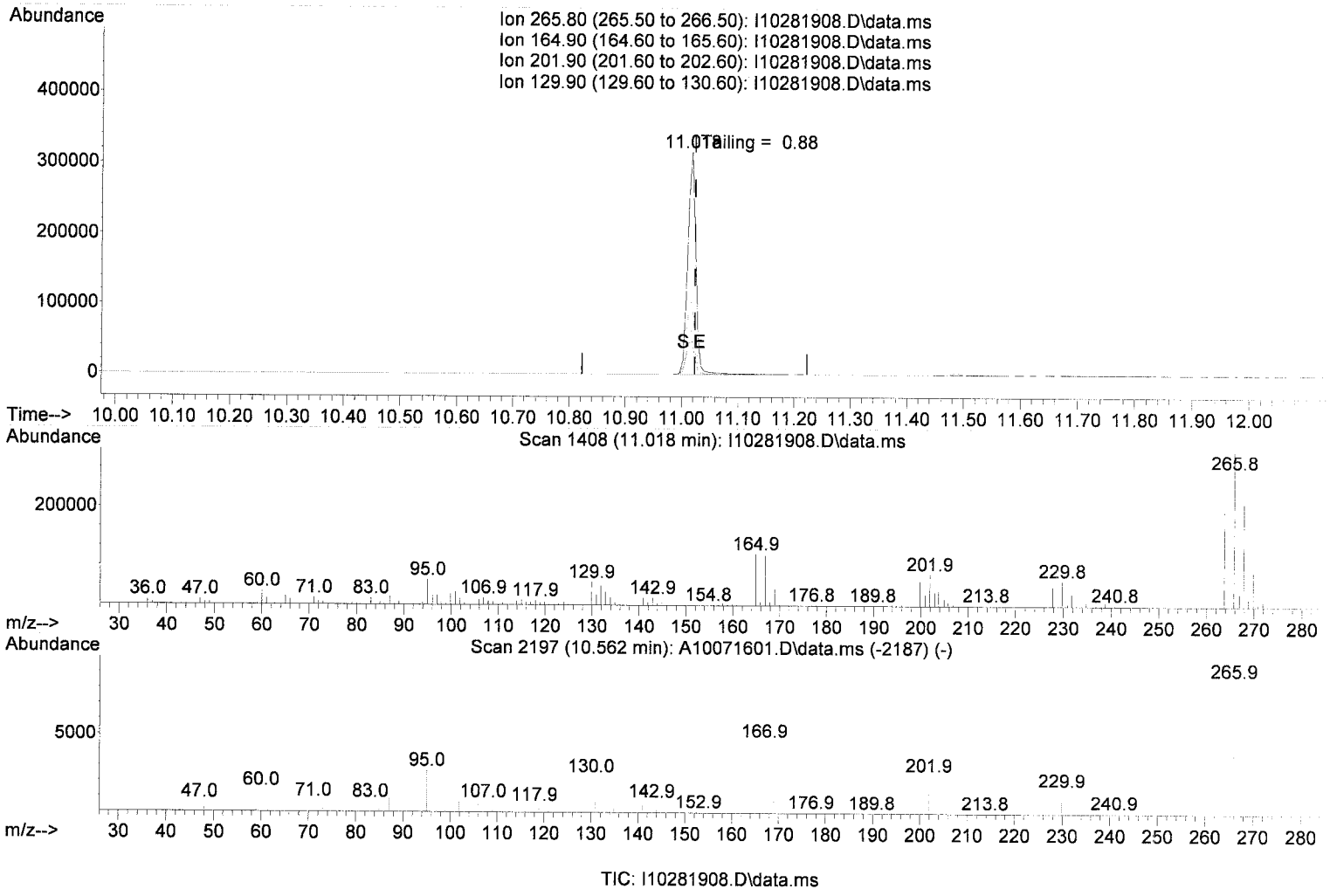
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.910	136	144810	2.00	ug/mL	-0.01
2) Acenaphthene-d10	9.686	162	72909	2.00	ug/mL	-0.01
4) Phenanthrene-d10	11.205	188	112851	2.00	ug/mL	0.00
10) Chrysene-d12	14.938	240	89935	2.00	ug/mL	-0.01
11) Perylene-d12	17.035	264	80753	2.00	ug/mL	0.00
Target Compounds						Qvalue
3) Pentachlorophenol	11.018	266	315209	38.54	ug/mL#	82
5) DFTPP	11.494	442	420706	44.34	ug/mL#	56
6) Benzidine	12.676	184	946838	27.87	ug/mL	89
7) 4,4-DDE	12.933	TIC	12640	No Calib	#	
8) 4,4-DDD	13.457	TIC	8146	1.74	ug/mL#	1
9) 4,4-DDT	14.029	TIC	3537580	37.20	ug/mL#	1

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281908.D
Acq On : 28 Oct 2019 1:39 pm
Operator : JK /AMS /DTH
Sample : 9J28055-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 28 15:46:29 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10281908.D\data.ms

(3) Pentachlorophenol

11.018min (-0.005) 38.54 ug/mL

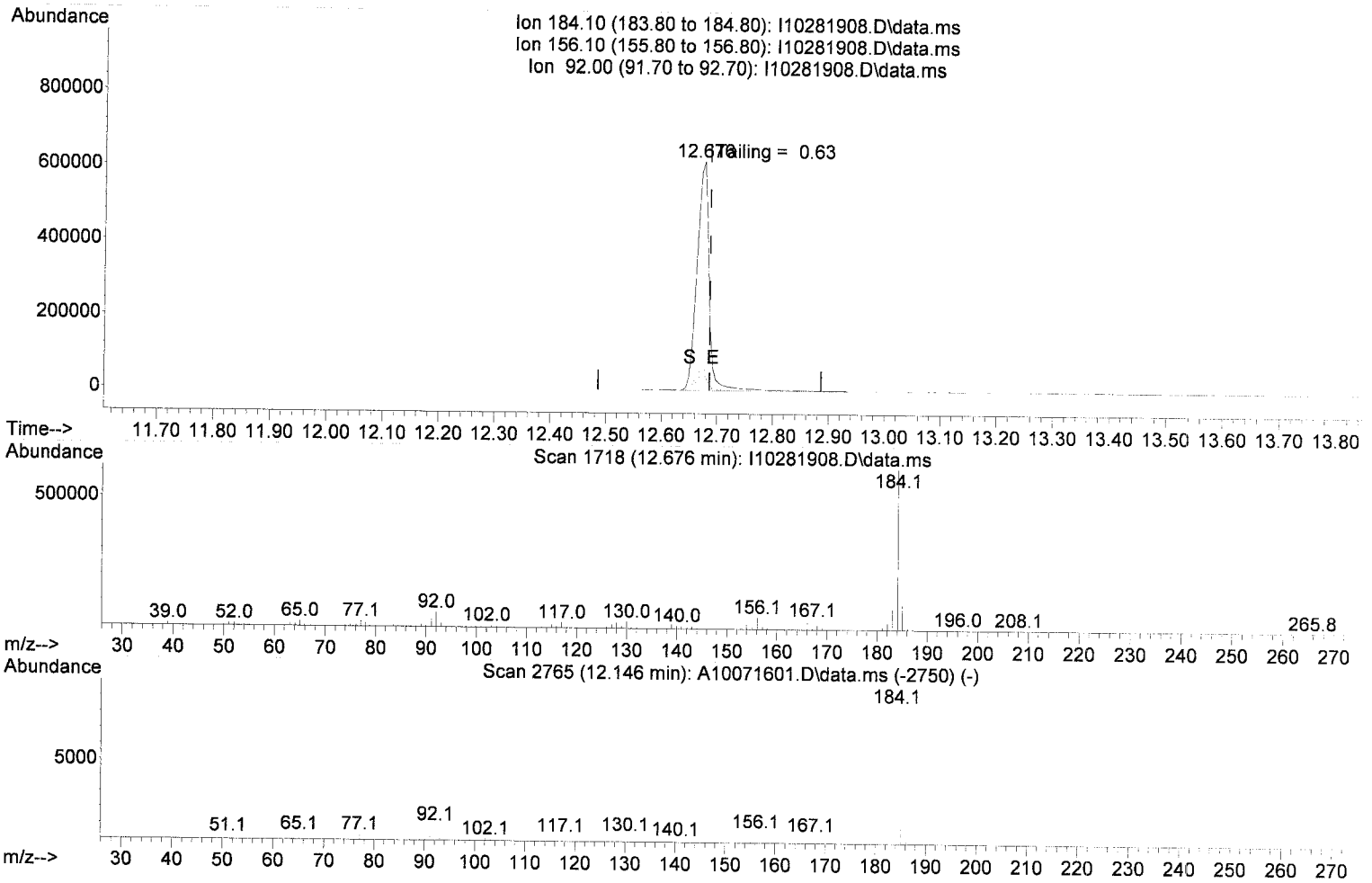
response 315209

Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	33.05#
201.90	26.10	20.21
129.90	22.80	14.69#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281908.D
Acq On : 28 Oct 2019 1:39 pm
Operator : JK /AMS /DTH
Sample : 9J28055-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 28 15:46:29 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10281908.D\data.ms

(6) Benzidine

12.676min (-0.011) 27.87 ug/mL

response 946838

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.22
92.00	15.50	9.31
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

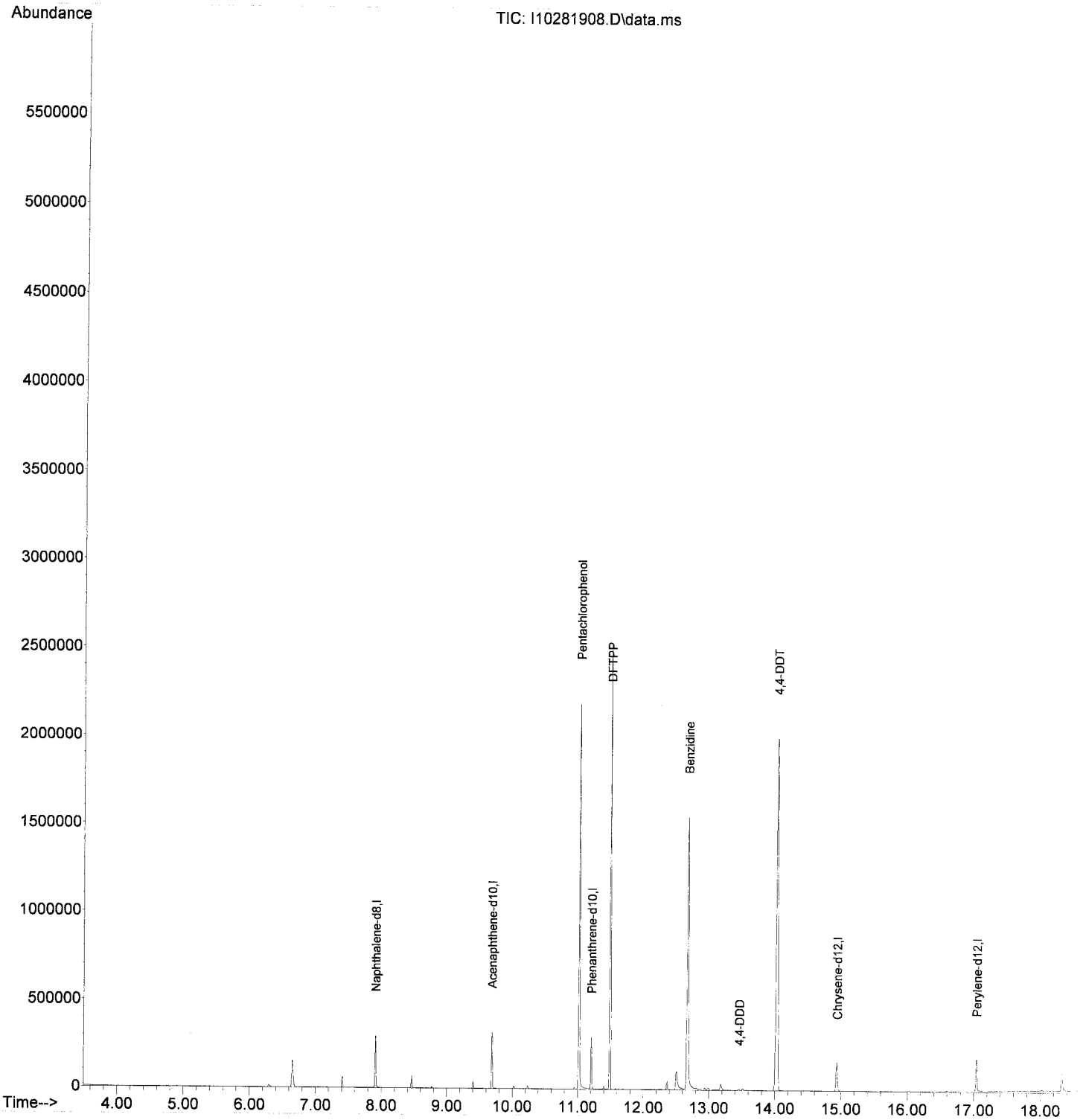
From:
9J28055-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	12640		
DDD	8146		
DDT	3537580	**0.58**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281908.D
Acq On : 28 Oct 2019 1:39 pm
Operator : JK /AMS /DTH
Sample : 9J28055-TUN1
Misc : 1x, A19J292 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 28 15:46:29 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS
10/28/19

Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 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	100	0.00
2	T	N-Nitrosodimethylamine	1000.000	820.139	18.0	83	0.00
3	T	Pyridine	1000.000	852.780	14.7	85	0.00
4	S	2-Fluorophenol (Surr)	1000.000	949.535	5.0	93	0.00
5	S	Phenol-d6 (Surr)	1000.000	941.241	5.9	89	0.00
6	T	Phenol	1000.000	978.476	2.2	95	0.00
7	T	Aniline	1000.000	630.613	36.9#	64	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1091.334	-9.1	104	0.00
9	T	2-Chlorophenol	1000.000	1014.433	-1.4	96	0.00
10	T	1,3-Dichlorobenzene	1000.000	1000.569	-0.1	99	-0.01
11	T	1,4-Dichlorobenzene	1000.000	1010.680	-1.1	100	-0.01
12	T	Benzyl alcohol	1000.000	852.265	14.8	80	0.00
13	T	1,2-Dichlorobenzene	1000.000	1030.542	-3.1	101	0.00
14	T	2-Methylphenol	1000.000	965.507	3.4	90	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	842.184	15.8	84	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	938.354	6.2	89	0.00
17	T	3+4-Methylphenol	1000.000	1004.930	-0.5	91	0.00
18	T	Hexachloroethane	1000.000	1014.137	-1.4	100	-0.01
19	S	Nitrobenzene-d5 (Surr)	1000.000	1037.434	-3.7	97	0.00
20	T	Nitrobenzene	1000.000	1018.853	-1.9	94	-0.01
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	100	0.00
22	T	Isophorone	1000.000	953.582	4.6	91	-0.01
23	T	2-Nitrophenol	1000.000	990.952	0.9	93	0.00
24	T	2,4-Dimethylphenol	1000.000	933.466	6.7	86	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1006.176	-0.6	94	-0.01
26	T	Benzoic acid	2000.000	1939.300	3.0	100	0.00
27	T	2,4-Dichlorophenol	1000.000	1076.378	-7.6	100	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1059.930	-6.0	103	0.00
29	T	Naphthalene	1000.000	1026.919	-2.7	99	0.00
30	T	4-Chloroaniline	1000.000	761.932	23.8#	75	0.00
31	T	Hexachlorobutadiene	1000.000	1064.351	-6.4	106	0.00
32	T	4-Chloro-3-methylphenol	1000.000	967.971	3.2	93	0.00
33	T	2-Methylnaphthalene	1000.000	1064.711	-6.5	99	0.00
34	T	1-Methylnaphthalene	1000.000	1047.689	-4.8	99	-0.01
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	101	-0.01
36	T	Hexachlorocyclopentadiene	1000.000	1012.345	-1.2	94	-0.01
37	T	2,4,6-Trichlorophenol	1000.000	1036.965	-3.7	102	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1060.218	-6.0	101	0.00
39	T	1,1'-Biphenyl	1000.000	1099.870	-10.0	101	-0.01
40	S	2-Fluorobiphenyl (Surr)	1000.000	1095.398	-9.5	103	-0.01
41	T	2-Chloronaphthalene	1000.000	1091.277	-9.1	101	0.00
42	T	2-Nitroaniline	1000.000	1067.108	-6.7	106	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1072.589	-7.3	100	0.00
44	T	1,4-Dinitrobenzene	1000.000	1234.275	-23.4#	141	0.00
45	T	Dimethyl phthalate	1000.000	1015.813	-1.6	98	0.00
46	T	1,3-Dinitrobenzene	1000.000	1115.830	-11.6	121	0.00
47	T	2,6-Dinitrotoluene	1000.000	1114.375	-11.4	108	0.00
48	T	1,2-Dinitrobenzene	1000.000	1090.626	-9.1	110	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1044.750	-4.5	100	0.00
50	T	3-Nitroaniline	1000.000	965.133	3.5	97	0.00
51	T	Acenaphthene	1000.000	1029.511	-3.0	101	-0.01
52	T	2,4-Dinitrophenol	1000.000	1285.437	-28.5#	152	0.00
53	T	4-Nitrophenol	1000.000	959.807	4.0	93	0.00
54	T	2,4-Dinitrotoluene	1000.000	1151.044	-15.1	117	0.00
55	T	Dibenzofuran	1000.000	1062.867	-6.3	103	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1032.722	-3.3	101	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1058.926	-5.9	99	0.00
58	T	Diethyl phthalate	1000.000	974.414	2.6	95	-0.01
59	T	2,3,5-Trimethylnaphthalene	1000.000	1071.720	-7.2	101	-0.01
60	T	Fluorene	1000.000	1032.163	-3.2	102	-0.01
61	T	4-Chlorophenyl phenyl ether	1000.000	1087.150	-8.7	106	0.00
62	T	4-Nitroaniline	1000.000	1006.124	-0.6	98	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1180.292	-18.0	134	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	103	-0.01
65	T	N-Nitrosodiphenylamine	1000.000	1007.097	-0.7	101	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	877.933	12.2	92	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1055.567	-5.6	108	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1058.555	-5.9	107	-0.01
69	T	Hexachlorobenzene	1000.000	1078.315	-7.8	110	0.00
70	T	Pentachlorophenol (PCP)	1000.000	975.870	2.4	101	0.00
71	T	Phenanthrene	1000.000	1015.519	-1.6	101	0.00
72	T	Anthracene	1000.000	1024.639	-2.5	99	-0.01
73	T	Carbazole	1000.000	934.418	6.6	103	0.00
74	T	Di-n-butyl phthalate	1000.000	939.803	6.0	89	-0.01
75	T	Fluoranthene	1000.000	1015.303	-1.5	96	-0.02
76	T	Benzidine	2000.000	377.231	81.1#	15	0.00
77	T	Pyrene	1000.000	1045.448	-4.5	98	-0.01
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	94	-0.02
79	S	Terphenyl-d14 (Surr)	1000.000	1065.148	-6.5	98	-0.01
80	T	Butyl benzyl phthalate	1000.000	911.984	8.8	84	-0.02
81	T	Bis(2-ethylhexyl) adipate	1000.000	866.537	13.3	80	-0.02
82	T	3,3-Dichlorobenzidine	2000.000	1704.642	14.8	85	0.00
83	T	Benz(a)anthracene	1000.000	997.256	0.3	94	-0.02
84	T	Chrysene	1000.000	991.225	0.9	93	-0.02
85	T	Bis(2-ethylhexyl) phthalate	1000.000	871.584	12.8	79	-0.03
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	90	-0.02
87	T	Di-n-octyl phthalate	1000.000	813.482	18.7	72	-0.03
88	T	Benzo(b)fluoranthene	1000.000	1075.739	-7.6	90	-0.03
89	T	Benzo(k)fluoranthene	1000.000	1108.946	-10.9	88	-0.02
90	T	Benzo(b+k)fluoranthene	2000.000	2192.575	-9.6	89	-0.02
91	T	Benzo(e)pyrene	1000.000	1066.887	-6.7	89	-0.02
92	T	Benzo(a)pyrene	1000.000	1004.379	-0.4	87	-0.02
93	T	Perylene	1000.000	1029.865	-3.0	89	-0.03
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	89	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	955.417	4.5	86	-0.02
96 T	Dibenz(a,h)anthracene	1000.000	1010.392	-1.0	87	-0.03
97 T	Benzo(g,h,i)perylene	1000.000	1050.423	-5.0	86	-0.02

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.653	152	108911	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.916	136	416091	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	213634	2000.00	ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	406610	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.035	240	382244	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.533	264	369041	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.929	292	325094	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.407	112	76149	949.54	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	91343	941.24	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.194	82	73480	1037.43	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.996	172	171943	1095.40	ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.494	330	25958	1055.57	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.013	244	197549	1065.15	ng/ml	-0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.070	74	52756	820.14	ng/ml	95
3) Pyridine	4.091	79	85289	852.78	ng/ml	96
6) Phenol	6.306	94	100573	978.48	ng/ml	98
7) Aniline	6.338	93	67468	630.61	ng/ml	96
8) Bis(2-chloroethyl) ether	6.391	93	100961	1091.33	ng/ml	94
9) 2-Chlorophenol	6.455	128	79648	1014.43	ng/ml	96
10) 1,3-Dichlorobenzene	6.600	146	87166	1000.57	ng/ml	98
11) 1,4-Dichlorobenzene	6.669	146	83860	1010.68	ng/ml	98
12) Benzyl alcohol	6.787	108	38525	852.26	ng/ml	96
13) 1,2-Dichlorobenzene	6.824	146	83333	1030.54	ng/ml	96
14) 2-Methylphenol	6.889	107	57791	965.51	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.915	45	107825	842.18	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.044	70	59159	938.35	ng/ml	93
17) 3+4-Methylphenol	7.038	107	73419	1004.93	ng/ml	98
18) Hexachloroethane	7.156	201	27037	1014.14	ng/ml	97
20) Nitrobenzene	7.210	77	76411	1018.85	ng/ml	100
22) Isophorone	7.445	82	156894	953.58	ng/ml	99
23) 2-Nitrophenol	7.530	139	36157	990.95	ng/ml	97
24) 2,4-Dimethylphenol	7.563	122	54851	933.47	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.654	93	91645	1006.18	ng/ml	99
26) Benzoic acid	7.654	105	42956	1939.30	ng/ml	94
27) 2,4-Dichlorophenol	7.771	162	58116	1076.38	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.857	180	74332	1059.93	ng/ml	98
29) Naphthalene	7.937	128	219480	1026.92	ng/ml	100
30) 4-Chloroaniline	7.990	127	55903	761.93	ng/ml	98
31) Hexachlorobutadiene	8.065	225	41175	1064.35	ng/ml	99
32) 4-Chloro-3-methylphenol	8.466	107	62143	967.97	ng/ml	95
33) 2-Methylnaphthalene	8.632	142	163665	1064.71	ng/ml	100
34) 1-Methylnaphthalene	8.729	142	153324	1047.69	ng/ml	99
36) Hexachlorocyclopentadiene	8.798	237	37741	1012.35	ng/ml	99
37) 2,4,6-Trichlorophenol	8.916	196	43301	1036.96	ng/ml	98
38) 2,4,5-Trichlorophenol	8.953	198	42808	1060.22	ng/ml	98
39) 1,1'-Biphenyl	9.098	154	190139	1099.87	ng/ml	100
41) 2-Chloronaphthalene	9.124	162	139414	1091.28	ng/ml	98
42) 2-Nitroaniline	9.221	138	41818	1067.11	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.263	156	140136	1072.59	ng/ml	98

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

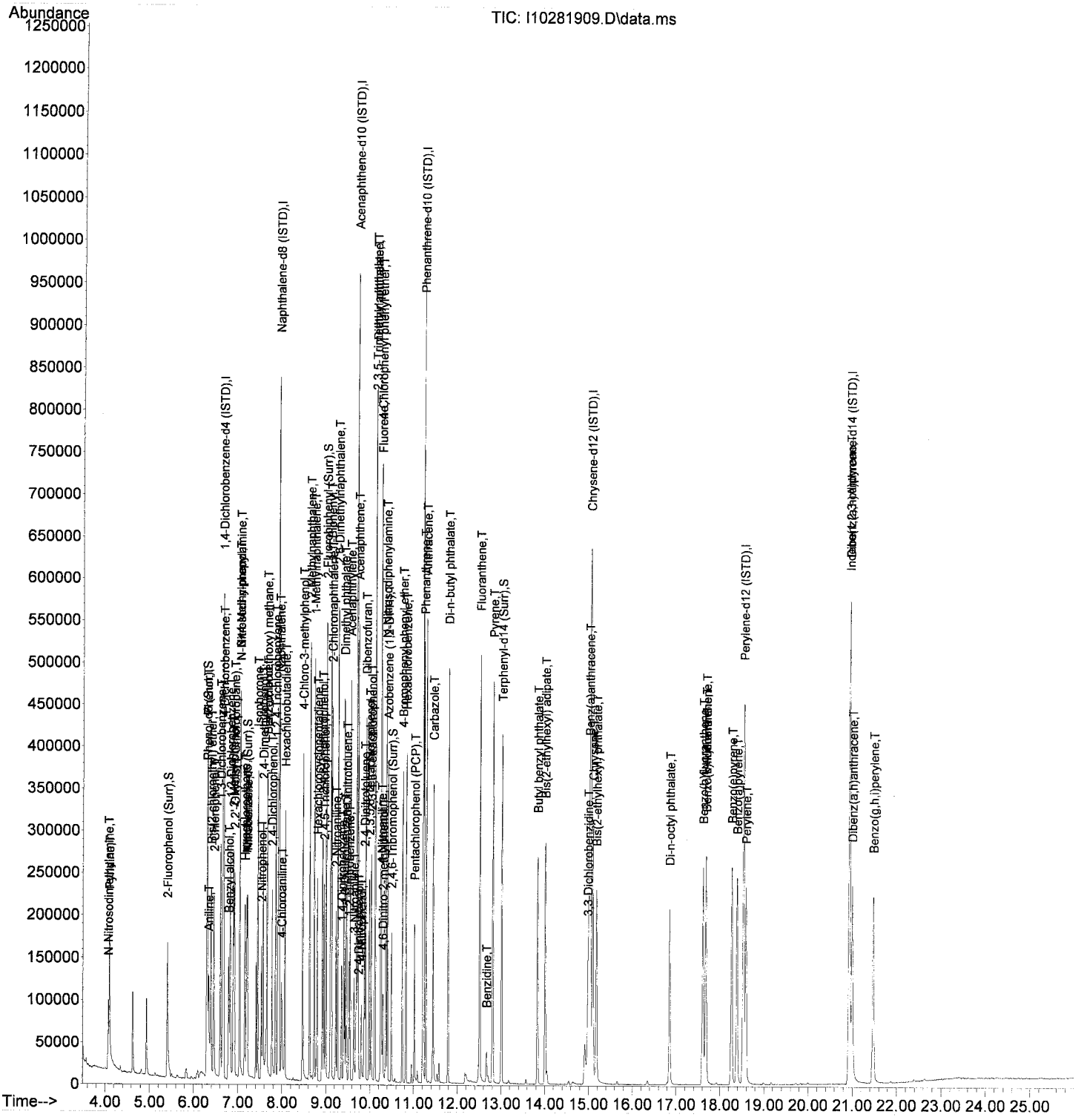
Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.349	168	17647	1234.27 ng/ml	84
45) Dimethyl phthalate	9.402	163	158356	1015.81 ng/ml	99
46) 1,3-Dinitrobenzene	9.429	168	21740	1115.83 ng/ml	95
47) 2,6-Dinitrotoluene	9.461	165	35657	1114.37 ng/ml	93
48) 1,2-Dinitrobenzene	9.520	168	16584	1090.63 ng/ml	81
49) Acenaphthylene	9.547	152	223489	1044.75 ng/ml	100
50) 3-Nitroaniline	9.638	138	27980	965.13 ng/ml	94
51) Acenaphthene	9.723	153	138477	1029.51 ng/ml	99
52) 2,4-Dinitrophenol	9.739	184	7748	1285.44 ng/ml	86
53) 4-Nitrophenol	9.804	139	21016	959.81 ng/ml	90
54) 2,4-Dinitrotoluene	9.873	165	44564	1151.04 ng/ml	87
55) Dibenzofuran	9.900	168	195750	1062.87 ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.980	232	33483	1032.72 ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.023	232	36675	1058.93 ng/ml	96
58) Diethyl phthalate	10.114	149	143958	974.41 ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.109	170	130712	1071.72 ng/ml	100
60) Fluorene	10.248	166	152919	1032.16 ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.242	204	79789	1087.15 ng/ml	96
62) 4-Nitroaniline	10.258	138	25402	1006.12 ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.290	198	14955	1180.29 ng/ml	88
65) N-Nitrosodiphenylamine	10.360	169	128534	1007.10 ng/ml	98
66) Azobenzene (1,2-DPH)	10.403	77	146535	877.93 ng/ml	94
68) 4-Bromophenyl phenyl e...	10.740	248	50478	1058.56 ng/ml	97
69) Hexachlorobenzene	10.820	284	60791	1078.31 ng/ml	96
70) Pentachlorophenol (PCP)	11.012	266	25105	975.87 ng/ml	99
71) Phenanthrene	11.232	178	215376	1015.52 ng/ml	99
72) Anthracene	11.280	178	214326	1024.64 ng/ml	100
73) Carbazole	11.440	167	173732	934.42 ng/ml	99
74) Di-n-butyl phthalate	11.783	149	238429	939.80 ng/ml	100
75) Fluoranthene	12.505	202	253815	1015.30 ng/ml	98
76) Benzidine	12.665	184	25405	377.23 ng/ml	98
77) Pyrene	12.804	202	254874	1045.45 ng/ml	99
80) Butyl benzyl phthalate	13.831	149	98965	911.98 ng/ml	93
81) Bis(2-ethylhexyl) adipate	14.002	129	83514	866.54 ng/ml	99
82) 3,3-Dichlorobenzidine	14.981	252	61772	1704.64 ng/ml	98
83) Benz(a)anthracene	15.008	228	220738	997.26 ng/ml	98
84) Chrysene	15.093	228	198432	991.22 ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.174	149	122440	871.58 ng/ml	100
87) Di-n-octyl phthalate	16.848	149	188502	813.48 ng/ml	98
88) Benzo(b)fluoranthene	17.607	252	221683	1075.74 ng/ml	99
89) Benzo(k)fluoranthene	17.677	252	212476	1108.95 ng/ml	99
90) Benzo(b+k)fluoranthene	17.677	252	446405	2192.57 ng/ml	99
91) Benzo(e)pyrene	18.265	252	213503	1066.89 ng/ml	99
92) Benzo(a)pyrene	18.383	252	194739	1004.38 ng/ml	98
93) Perylene	18.586	252	172460	1029.87 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.923	276	183456	955.42 ng/ml	97
96) Dibenz(a,h)anthracene	20.993	278	169627	1010.39 ng/ml	99
97) Benzo(g,h,i)perylene	21.469	276	192284	1050.42 ng/ml	96

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

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281909.D
Acq On : 28 Oct 2019 2:07 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:28 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281910.D
Acq On : 28 Oct 2019 2:42 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:48 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 10/28/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.659	152	107049	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.916	136	433420	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	228413	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	419985	2000.00 ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.035	240	438972	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.533	264	434278	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.929	292	361661	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00 ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00 ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00 ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00 ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00 ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00 ng/ml	
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	0.000		0	N.D.	
8) Bis(2-chloroethyl) ether	0.000		0	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	0.000		0	N.D.	
22) Isophorone	0.000		0	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	0.000		0	N.D.	
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	0.000		0	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	0.000		0	N.D.	
34) 1-Methylnaphthalene	0.000		0	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	0.000		0	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	

J

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281910.D
Acq On : 28 Oct 2019 2:42 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:48 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

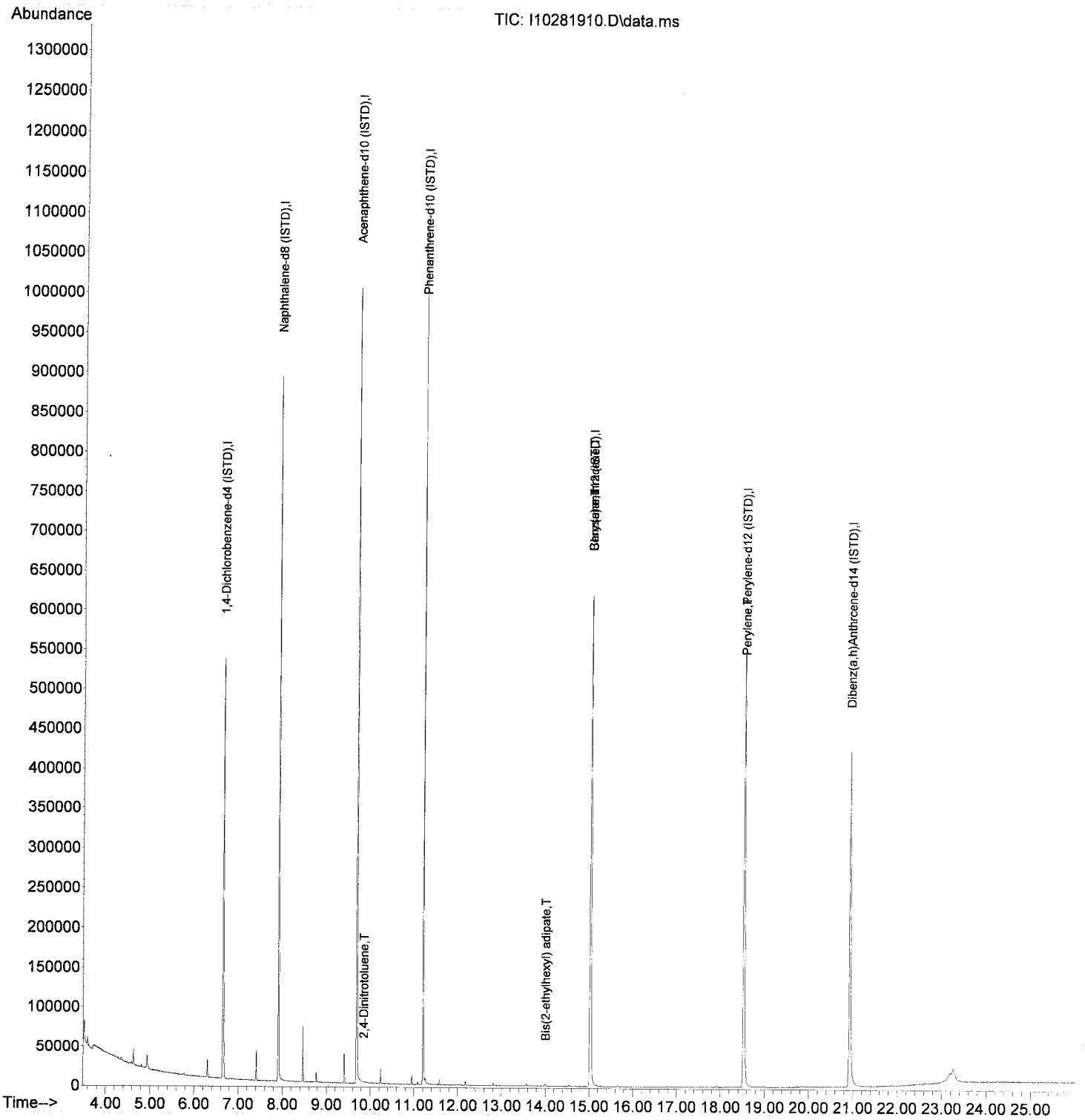
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.691	153	64	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.846	165	208	71.69 ng/ml#	20
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.205	178	164	N.D.	
72) Anthracene	11.205	178	164	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.783	149	188	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.002	129	690	6.23 ng/ml	89
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.035	228	1115	4.39 ng/ml	61
84) Chrysene	15.035	228	1097	4.77 ng/ml	58
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.538	252	1421	7.21 ng/ml#	61
95) Indeno(1,2,3-cd)pyrene	20.923	276	162	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281910.D
Acq On : 28 Oct 2019 2:42 pm
Operator : JK /AMS /DTH
Sample : 9J28055-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:48 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281911.D
Acq On : 28 Oct 2019 3:16 pm
Operator : JK /AMS /DTH
Sample : 9101635-BLK2
Misc : 1x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:59 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

AMS 10/28/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.653	152	113545	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.916	136	431077	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	224942	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	393865	2000.00 ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.035	240	390753	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.527	264	370461	2000.00 ng/ml	-0.03
94) Dibenz(a,h)Anthrcene-d...	20.929	292	319013	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.412	112	158313	1893.51 ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	115539	1141.98 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	299169	4051.46 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.001	172	607064	3673.01 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.494	330	111344	4379.63 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.018	244	797397	4205.79 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	6.311	94	784	7.32 ng/ml#	1
7) Aniline	6.386	93	575	5.16 ng/ml	73
8) Bis(2-chloroethyl) ether	6.386	93	575	5.96 ng/ml#	34
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	6.675	146	146	N.D.	
11) 1,4-Dichlorobenzene	6.675	146	146	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.894	107	92	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.926	45	106	N.D.	
16) N-Nitrosodi-n-propylamine	7.028	70	66	N.D.	
17) 3+4-Methylphenol	7.049	107	95	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.199	77	1187	15.18 ng/ml#	36
22) Isophorone	7.445	82	353	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.616	122	2484	40.80 ng/ml#	5
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.616	105	4216	873.58 ng/ml	90
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.937	128	2733	12.34 ng/ml	97
30) 4-Chloroaniline	7.937	127	342	17.44 ng/ml#	20
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.472	107	96	27.16 ng/ml#	1
33) 2-Methylnaphthalene	8.632	142	1001	6.29 ng/ml	83
34) 1-Methylnaphthalene	8.734	142	682	4.50 ng/ml	90
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	9.098	154	1136	6.24 ng/ml	82
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	9.263	156	231	N.D.	

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281911.D
Acq On : 28 Oct 2019 3:16 pm
Operator : JK /AMS /DTH
Sample : 9101635-BLK2
Misc : 1x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

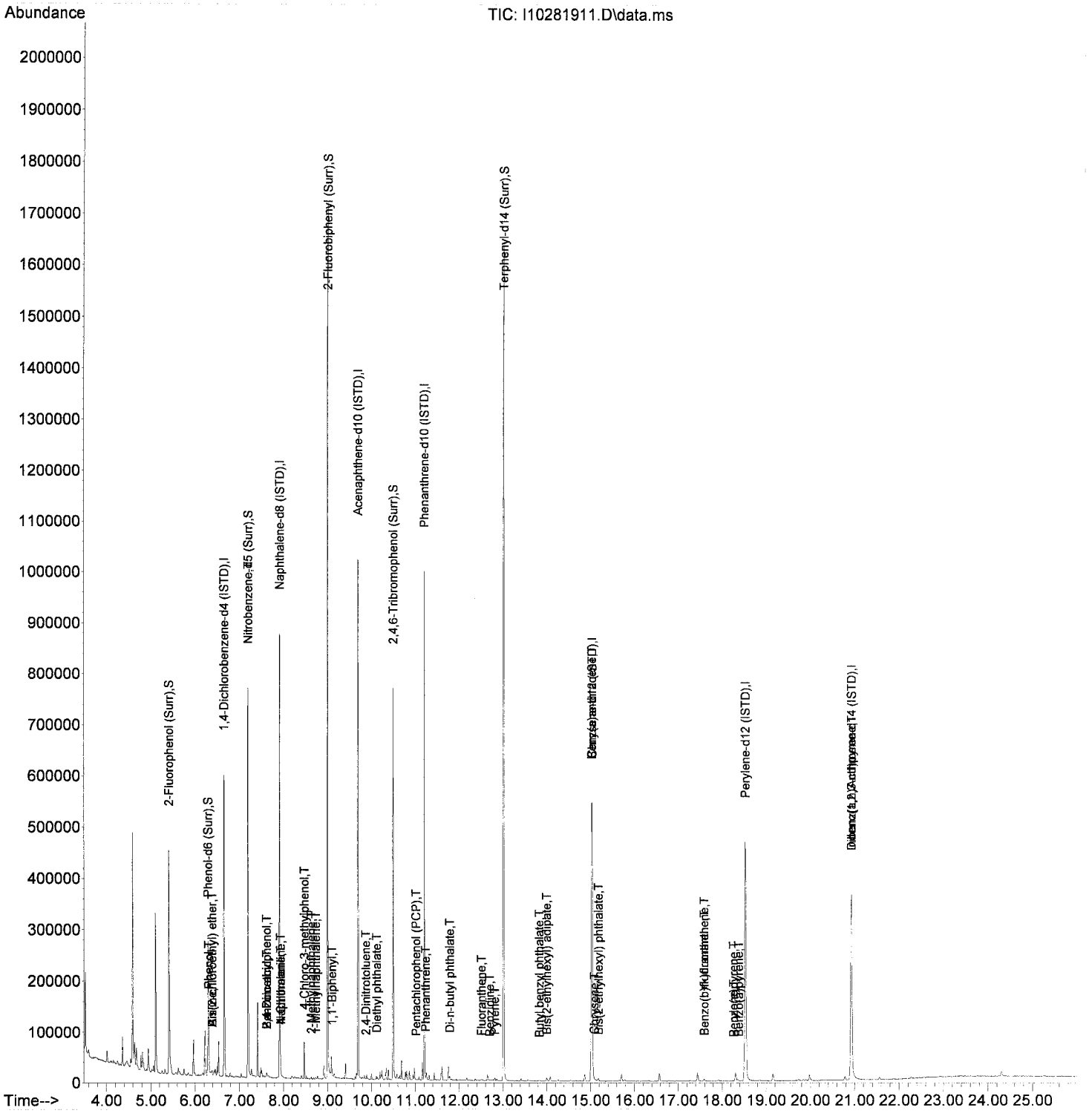
Quant Time: Oct 28 15:47:59 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.397	163	146	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	9.547	152	175	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.723	153	324	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.868	165	85	68.89 ng/ml#	20
55) Dibenzofuran	9.900	168	244	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	10.114	149	619	3.98 ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.108	170	250	N.D.	
60) Fluorene	10.248	166	247	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	10.355	169	90	N.D.	
66) Azobenzene (1,2-DPH)	10.381	77	268	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.012	266	126	50.76 ng/ml#	49
71) Phenanthrene	11.232	178	1359	6.62 ng/ml	97
72) Anthracene	11.280	178	227	N.D.	
73) Carbazole	11.440	167	106	N.D.	
74) Di-n-butyl phthalate	11.783	149	2889	11.76 ng/ml	99
75) Fluoranthene	12.505	202	792	3.27 ng/ml	83
76) Benzidine	12.692	184	67	109.90 ng/ml	68
77) Pyrene	12.804	202	977	4.14 ng/ml	93
80) Butyl benzyl phthalate	13.831	149	259	27.83 ng/ml	78
81) Bis(2-ethylhexyl) adipate	13.997	129	1743	17.69 ng/ml	93
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.029	228	1575	6.96 ng/ml	67
84) Chrysene	15.083	228	703	3.44 ng/ml	84
85) Bis(2-ethylhexyl) phth...	15.179	149	2304	16.04 ng/ml	96
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	17.591	252	658	3.18 ng/ml	69
89) Benzo(k)fluoranthene	17.666	252	307	N.D.	
90) Benzo(b+k)fluoranthene	17.591	252	965	4.72 ng/ml	69
91) Benzo(e)pyrene	18.260	252	516	2.57 ng/ml	95
92) Benzo(a)pyrene	18.377	252	401	10.60 ng/ml	75
93) Perylene	18.260	252	516	3.07 ng/ml	75
95) Indeno(1,2,3-cd)pyrene	20.929	276	562	2.98 ng/ml	52
96) Dibenz(a,h)anthracene	20.923	278	87	N.D.	
97) Benzo(g,h,i)perylene	21.453	276	440	N.D.	

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

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281911.D
Acq On : 28 Oct 2019 3:16 pm
Operator : JK /AMS /DTH
Sample : 9101635-BLK2
Misc : 1x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 15:47:59 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281912.D
Acq On : 28 Oct 2019 3:52 pm
Operator : JK /AMS /DTH
Sample : 9101635-BS2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D L1 P/P/P
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 17:01:53 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JMT 10/28/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	104608	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.916	136	389540	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	200526	2000.00	ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	366892	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.035	240	352423	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.538	264	344847	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.929	292	299719	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.412	112	43130	559.93	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	31130	333.97	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.194	82	74489	1094.94	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.001	172	172864	1173.25	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.494	330	28093	1257.78	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.013	244	217313	1270.86	ng/ml	-0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.086	74	17003	275.20	ng/ml	98
3) Pyridine	0.000		0	N.D.		
6) Phenol	6.306	94	29421	298.01	ng/ml	98
7) Aniline	6.343	93	443	4.31	ng/ml#	1
8) Bis(2-chloroethyl) ether	6.391	93	73246	824.32	ng/ml	99
9) 2-Chlorophenol	6.455	128	64213	851.49	ng/ml	100
10) 1,3-Dichlorobenzene	6.605	146	71775	857.79	ng/ml	98
11) 1,4-Dichlorobenzene	6.675	146	67732	849.88	ng/ml	98
12) Benzyl alcohol	6.787	108	17991	414.38	ng/ml	99
13) 1,2-Dichlorobenzene	6.825	146	67813	873.11	ng/ml	98
14) 2-Methylphenol	6.894	107	40635	706.81	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.915	45	91818	746.66	ng/ml	93
16) N-Nitrosodi-n-propylamine	7.044	70	52323	864.06	ng/ml	95
17) 3+4-Methylphenol	7.044	107	45975	655.17	ng/ml	99
18) Hexachloroethane	7.161	201	22452	876.80	ng/ml	95
20) Nitrobenzene	7.215	77	64382	893.77	ng/ml	95
22) Isophorone	7.445	82	140974	915.22	ng/ml	99
23) 2-Nitrophenol	7.531	139	29600	873.62	ng/ml	96
24) 2,4-Dimethylphenol	7.568	122	41224	749.38	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.654	93	80063	938.93	ng/ml	99
26) Benzoic acid	7.627	105	10572	1075.74	ng/ml	92
27) 2,4-Dichlorophenol	7.771	162	48046	952.75	ng/ml	96
28) 1,2,4-Trichlorobenzene	7.857	180	60779	925.74	ng/ml	99
29) Naphthalene	7.937	128	188982	944.49	ng/ml	100
30) 4-Chloroaniline	7.991	127	2722	52.00	ng/ml	94
31) Hexachlorobutadiene	8.065	225	33201	916.72	ng/ml	99
32) 4-Chloro-3-methylphenol	8.467	107	51721	863.49	ng/ml	95
33) 2-Methylnaphthalene	8.632	142	141103	980.50	ng/ml	98
34) 1-Methylnaphthalene	8.734	142	131527	960.01	ng/ml	99
36) Hexachlorocyclopentadiene	8.798	237	31517	900.66	ng/ml	97
37) 2,4,6-Trichlorophenol	8.916	196	37384	956.32	ng/ml	97
38) 2,4,5-Trichlorophenol	8.953	198	36912	975.83	ng/ml	96
39) 1,1'-Biphenyl	9.103	154	162201	999.59	ng/ml	99
41) 2-Chloronaphthalene	9.124	162	118909	991.61	ng/ml	98
42) 2-Nitroaniline	9.221	138	36398	994.66	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.263	156	120314	981.07	ng/ml	99

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281912.D
Acq On : 28 Oct 2019 3:52 pm
Operator : JK /AMS /DTH
Sample : 9101635-BS2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

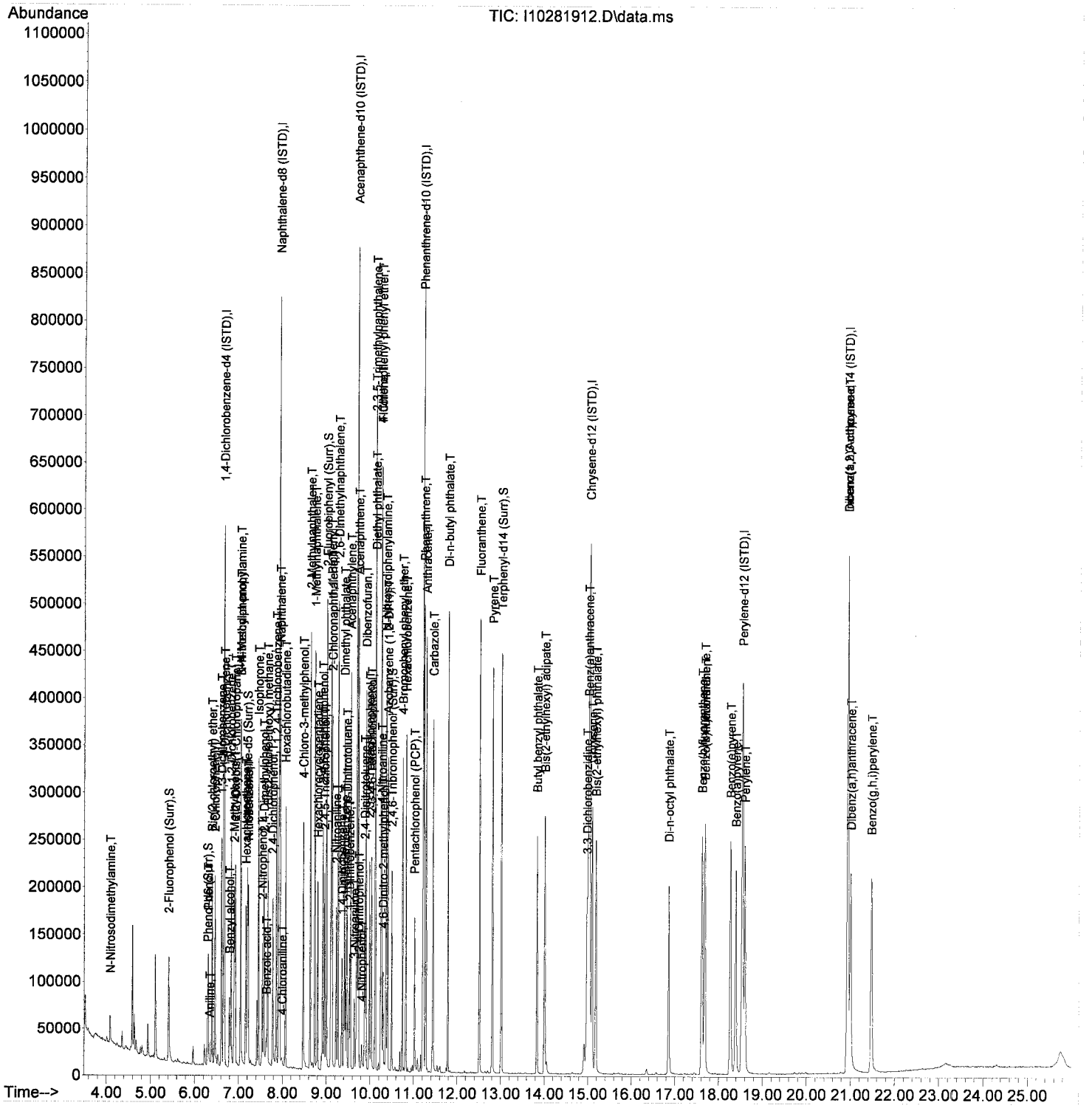
Quant Time: Oct 28 17:01:53 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.349	168	15247	1151.42	ng/ml	87
45)	Dimethyl phthalate	9.403	163	147395	1007.31	ng/ml	99
46)	1,3-Dinitrobenzene	9.429	168	19747	1084.14	ng/ml	97
47)	2,6-Dinitrotoluene	9.461	165	32466	1082.02	ng/ml	89
48)	1,2-Dinitrobenzene	9.520	168	14263	1004.12	ng/ml	79
49)	Acenaphthylene	9.547	152	197119	981.71	ng/ml	100
50)	3-Nitroaniline	9.638	138	15436	548.56	ng/ml	89
51)	Acenaphthene	9.723	153	122301	968.69	ng/ml	98
52)	2,4-Dinitrophenol	9.740	184	7196	1276.08	ng/ml	92
53)	4-Nitrophenol	9.804	139	6784	387.27	ng/ml	92
54)	2,4-Dinitrotoluene	9.873	165	39345	1087.31	ng/ml	89
55)	Dibenzofuran	9.900	168	174006	1006.56	ng/ml	95
56)	2,3,5,6-Tetrachlorophenol	9.980	232	30458	1002.43	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.023	232	32590	1004.16	ng/ml	96
58)	Diethyl phthalate	10.119	149	134660	971.06	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.109	170	114542	1000.53	ng/ml	99
60)	Fluorene	10.248	166	137801	990.92	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.242	204	69793	1013.11	ng/ml	97
62)	4-Nitroaniline	10.258	138	23681	999.27	ng/ml	96
63)	4,6-Dinitro-2-methylph...	10.290	198	15763	1296.76	ng/ml	92
65)	N-Nitrosodiphenylamine	10.360	169	114316	992.66	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.403	77	130796	868.47	ng/ml	95
68)	4-Bromophenyl phenyl e...	10.740	248	44808	1041.37	ng/ml	99
69)	Hexachlorobenzene	10.820	284	54515	1071.67	ng/ml	96
70)	Pentachlorophenol (PCP)	11.012	266	23632	1014.88	ng/ml	96
71)	Phenanthrene	11.232	178	196046	1024.44	ng/ml	100
72)	Anthracene	11.280	178	195585	1036.27	ng/ml	99
73)	Carbazole	11.440	167	167179	996.51	ng/ml	98
74)	Di-n-butyl phthalate	11.783	149	231951	1013.24	ng/ml	100
75)	Fluoranthene	12.510	202	236497	1048.44	ng/ml	99
76)	Benzidine	0.000		0	N.D.		
77)	Pyrene	12.804	202	239548	1088.95	ng/ml	100
80)	Butyl benzyl phthalate	13.831	149	92208	921.21	ng/ml	94
81)	Bis(2-ethylhexyl) adipate	14.008	129	82383	927.13	ng/ml	100
82)	3,3-Dichlorobenzidine	14.976	252	86963	2809.49	ng/ml	99
83)	Benz(a)anthracene	15.008	228	215997	1058.41	ng/ml	97
84)	Chrysene	15.094	228	189560	1027.03	ng/ml	98
85)	Bis(2-ethylhexyl) phth...	15.179	149	119258	920.77	ng/ml	98
87)	Di-n-octyl phthalate	16.853	149	184864	850.79	ng/ml	98
88)	Benzo(b)fluoranthene	17.613	252	208365	1082.05	ng/ml	96
89)	Benzo(k)fluoranthene	17.677	252	207445	1158.65	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.677	252	428191	2250.67	ng/ml	99
91)	Benzo(e)pyrene	18.265	252	200743	1073.50	ng/ml	100
92)	Benzo(a)pyrene	18.388	252	172845	954.04	ng/ml	97
93)	Perylene	18.592	252	190106	1214.89	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	20.929	276	178443	1007.99	ng/ml	98
96)	Dibenz(a,h)anthracene	20.998	278	162639	1050.79	ng/ml	99
97)	Benzo(g,h,i)perylene	21.464	276	186852	1107.17	ng/ml	98

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

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281912.D
Acq On : 28 Oct 2019 3:52 pm
Operator : JK /AMS /DTH
Sample : 9101635-BS2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 17:01:53 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281913.D
Acq On : 28 Oct 2019 4:27 pm
Operator : JK /AMS /DTH
Sample : 9101635-BSD2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 17:01:56 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DH 10/28/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.659	152	109680	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.915	136	421320	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	219799	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	414099	2000.00 ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.040	240	422970	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.533	264	433003	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.934	292	398525	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.418	112	40934	506.85 ng/ml	0.01
5) Phenol-d6 (Surr)	6.300	99	30328	310.32 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	75119	1053.14 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.001	172	176143	1090.68 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.494	330	31364	1244.63 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.013	244	244519	1191.46 ng/ml	-0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.097	74	15722	242.70 ng/ml	97
3) Pyridine	0.000		0	N.D.	
6) Phenol	6.311	94	28404	274.41 ng/ml	96
7) Aniline	6.343	93	322	2.99 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.396	93	71571	768.22 ng/ml	97
9) 2-Chlorophenol	6.461	128	62197	786.62 ng/ml	97
10) 1,3-Dichlorobenzene	6.605	146	65779	749.78 ng/ml	99
11) 1,4-Dichlorobenzene	6.675	146	63069	754.78 ng/ml	98
12) Benzyl alcohol	6.787	108	17756	390.05 ng/ml	93
13) 1,2-Dichlorobenzene	6.824	146	64362	790.36 ng/ml	97
14) 2-Methylphenol	6.894	107	41111	682.02 ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	6.915	45	89366	693.11 ng/ml	93
16) N-Nitrosodi-n-propylamine	7.044	70	52450	826.11 ng/ml	95
17) 3+4-Methylphenol	7.044	107	45748	621.79 ng/ml	97
18) Hexachloroethane	7.161	201	20501	763.58 ng/ml	98
20) Nitrobenzene	7.215	77	65305	864.66 ng/ml	96
22) Isophorone	7.445	82	140414	842.83 ng/ml	100
23) 2-Nitrophenol	7.530	139	30882	844.66 ng/ml	98
24) 2,4-Dimethylphenol	7.568	122	42989	722.52 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.653	93	79283	859.65 ng/ml	99
26) Benzoic acid	7.632	105	14957	1172.39 ng/ml	95
27) 2,4-Dichlorophenol	7.771	162	47732	876.57 ng/ml	96
28) 1,2,4-Trichlorobenzene	7.857	180	58185	819.39 ng/ml	97
29) Naphthalene	7.937	128	181889	840.47 ng/ml	99
30) 4-Chloroaniline	7.990	127	2892	51.31 ng/ml	98
31) Hexachlorobutadiene	8.065	225	31643	807.80 ng/ml	98
32) 4-Chloro-3-methylphenol	8.466	107	52710	815.14 ng/ml	97
33) 2-Methylnaphthalene	8.632	142	135330	869.45 ng/ml	98
34) 1-Methylnaphthalene	8.734	142	128281	865.69 ng/ml	97
36) Hexachlorocyclopentadiene	8.798	237	31456	820.09 ng/ml	99
37) 2,4,6-Trichlorophenol	8.916	196	39411	920.95 ng/ml	96
38) 2,4,5-Trichlorophenol	8.953	198	38522	930.19 ng/ml	99
39) 1,1'-Biphenyl	9.103	154	160600	902.94 ng/ml	99
41) 2-Chloronaphthalene	9.124	162	118225	899.46 ng/ml	98
42) 2-Nitroaniline	9.221	138	40623	1011.50 ng/ml	93
43) 2,6-Dimethylnaphthalene	9.263	156	117614	874.96 ng/ml	99

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281913.D
Acq On : 28 Oct 2019 4:27 pm
Operator : JK /AMS /DTH
Sample : 9101635-BSD2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

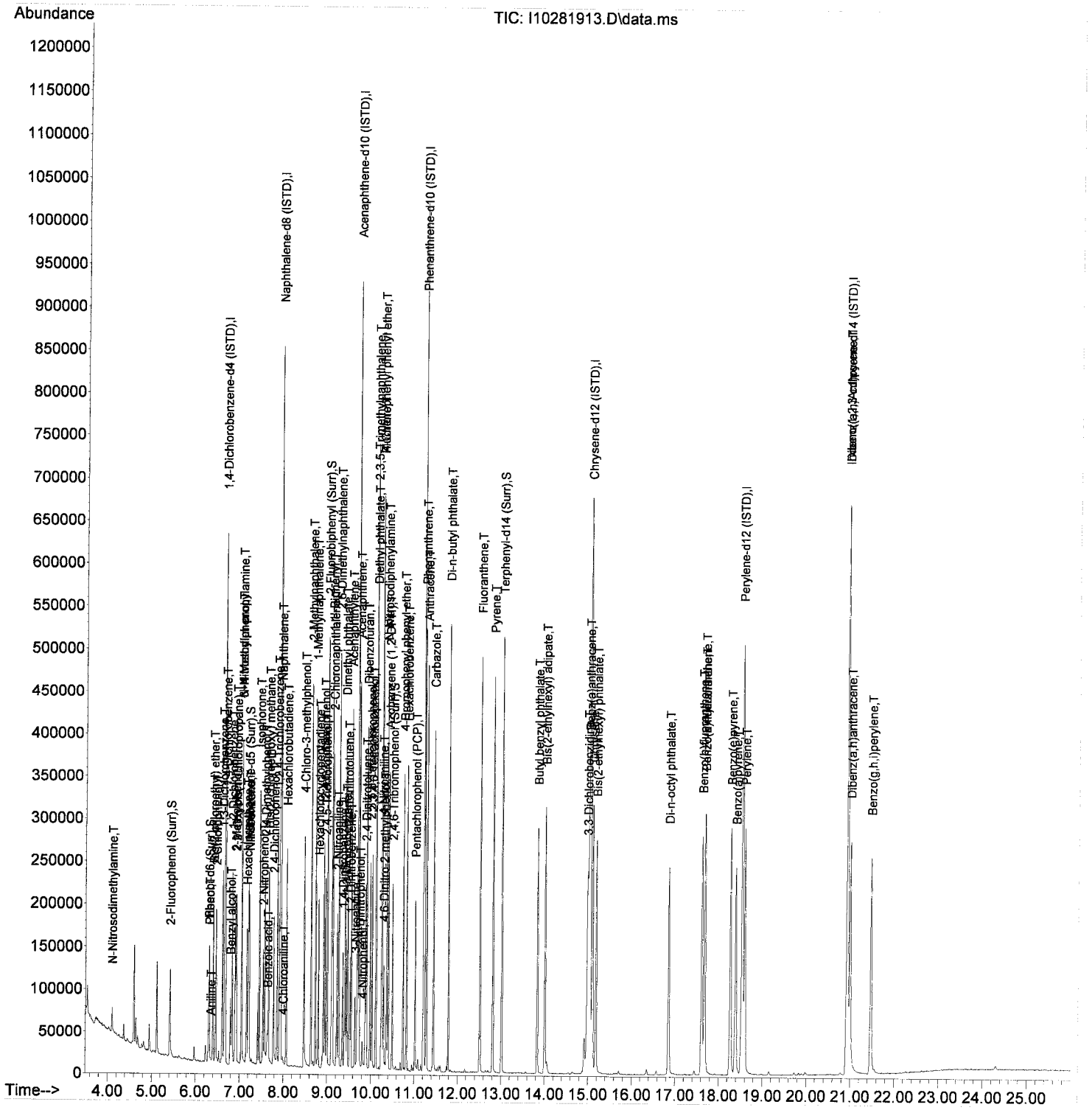
Quant Time: Oct 28 17:01:56 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.349	168	17302	1185.34 ng/ml	92
45) Dimethyl phthalate	9.402	163	149209	930.29 ng/ml	99
46) 1,3-Dinitrobenzene	9.429	168	21242	1066.46 ng/ml	96
47) 2,6-Dinitrotoluene	9.461	165	33511	1020.93 ng/ml	90
48) 1,2-Dinitrobenzene	9.520	168	15443	992.57 ng/ml	80
49) Acenaphthylene	9.547	152	195423	887.93 ng/ml	99
50) 3-Nitroaniline	9.638	138	17436	565.54 ng/ml	95
51) Acenaphthene	9.723	153	121300	876.51 ng/ml	99
52) 2,4-Dinitrophenol	9.739	184	9077	1405.63 ng/ml	91
53) 4-Nitrophenol	9.804	139	7729	399.50 ng/ml	91
54) 2,4-Dinitrotoluene	9.873	165	41975	1060.33 ng/ml	89
55) Dibenzofuran	9.900	168	176090	929.30 ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.980	232	33412	1003.19 ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.023	232	35465	997.14 ng/ml	95
58) Diethyl phthalate	10.119	149	138580	911.70 ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.108	170	114991	916.38 ng/ml	100
60) Fluorene	10.247	166	139899	917.80 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.242	204	71779	950.58 ng/ml	95
62) 4-Nitroaniline	10.258	138	27202	1047.20 ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.290	198	19191	1412.63 ng/ml	90
65) N-Nitrosodiphenylamine	10.360	169	120170	924.53 ng/ml	98
66) Azobenzene (1,2-DPH)	10.403	77	135703	798.33 ng/ml	94
68) 4-Bromophenyl phenyl e...	10.740	248	47348	974.96 ng/ml	98
69) Hexachlorobenzene	10.820	284	55394	964.81 ng/ml	96
70) Pentachlorophenol (PCP)	11.012	266	27844	1056.11 ng/ml	98
71) Phenanthrene	11.232	178	203619	942.72 ng/ml	99
72) Anthracene	11.280	178	205000	962.33 ng/ml	100
73) Carbazole	11.440	167	185571	980.04 ng/ml	99
74) Di-n-butyl phthalate	11.783	149	251041	971.62 ng/ml	100
75) Fluoranthene	12.510	202	252767	992.82 ng/ml	99
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.804	202	258751	1042.16 ng/ml	99
80) Butyl benzyl phthalate	13.831	149	106472	887.75 ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.008	129	93409	875.89 ng/ml	99
82) 3,3-Dichlorobenzidine	14.976	252	104590	2816.54 ng/ml	96
83) Benz(a)anthracene	15.008	228	243297	993.34 ng/ml	100
84) Chrysene	15.099	228	211454	954.57 ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.179	149	136523	878.26 ng/ml	100
87) Di-n-octyl phthalate	16.853	149	229295	841.16 ng/ml	97
88) Benzo(b)fluoranthene	17.613	252	245167	1013.96 ng/ml	99
89) Benzo(k)fluoranthene	17.677	252	244117	1085.88 ng/ml	99
90) Benzo(b+k)fluoranthene	17.677	252	503110	2106.07 ng/ml	99
91) Benzo(e)pyrene	18.270	252	236559	1007.48 ng/ml	99
92) Benzo(a)pyrene	18.388	252	205308	902.60 ng/ml	97
93) Perylene	18.591	252	220947	1124.51 ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.929	276	215742	916.54 ng/ml	97
96) Dibenz(a,h)anthracene	20.998	278	197018	957.31 ng/ml	98
97) Benzo(g,h,i)perylene	21.469	276	223611	996.48 ng/ml	95

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

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281913.D
Acq On : 28 Oct 2019 4:27 pm
Operator : JK /AMS /DTH
Sample : 9101635-BSD2@4
Misc : 4x, 8270D LL Full List, 625 PAH/PCP/HCB, 8270D Ll P/P/P
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 28 17:01:56 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281926.D
Acq On : 29 Oct 2019 12:04 am
Operator : JK /AMS /DTH
Sample : A9J0959-01@40
Misc : 40x, 8270D LL FULL LIST ACID EXT. ONLY CUSTOM
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

R·R1
AMS
10/29/19

Quant Time: Oct 29 08:15:16 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.653	152	111933	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.915	136	442736	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.691	162	233925	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.205	188	422921	2000.00 ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.040	240	445010	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.538	264	434998	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.939	292	359185	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.412	112	2308	28.00 ng/ml	0.00
5) Phenol-d6 (Surr)	6.311	99	1108	11.11 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.193	82	5031	69.11 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.996	172	13274	77.23 ng/ml	-0.01
67) 2,4,6-Tribromophenol (...	10.493	330	1625	85.86 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.013	244	17907	82.93 ng/ml	-0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	0.000		0	N.D.	
8) Bis(2-chloroethyl) ether	0.000		0	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.177	77	113	N.D.	
22) Isophorone	7.461	82	57	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	0.000		0	N.D.	
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.931	128	349	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	8.632	142	56	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.	

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281926.D
Acq On : 29 Oct 2019 12:04 am
Operator : JK /AMS /DTH
Sample : A9J0959-01@40
Misc : 40x, 8270D LL FULL LIST ACID EXT. ONLY CUSTOM
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

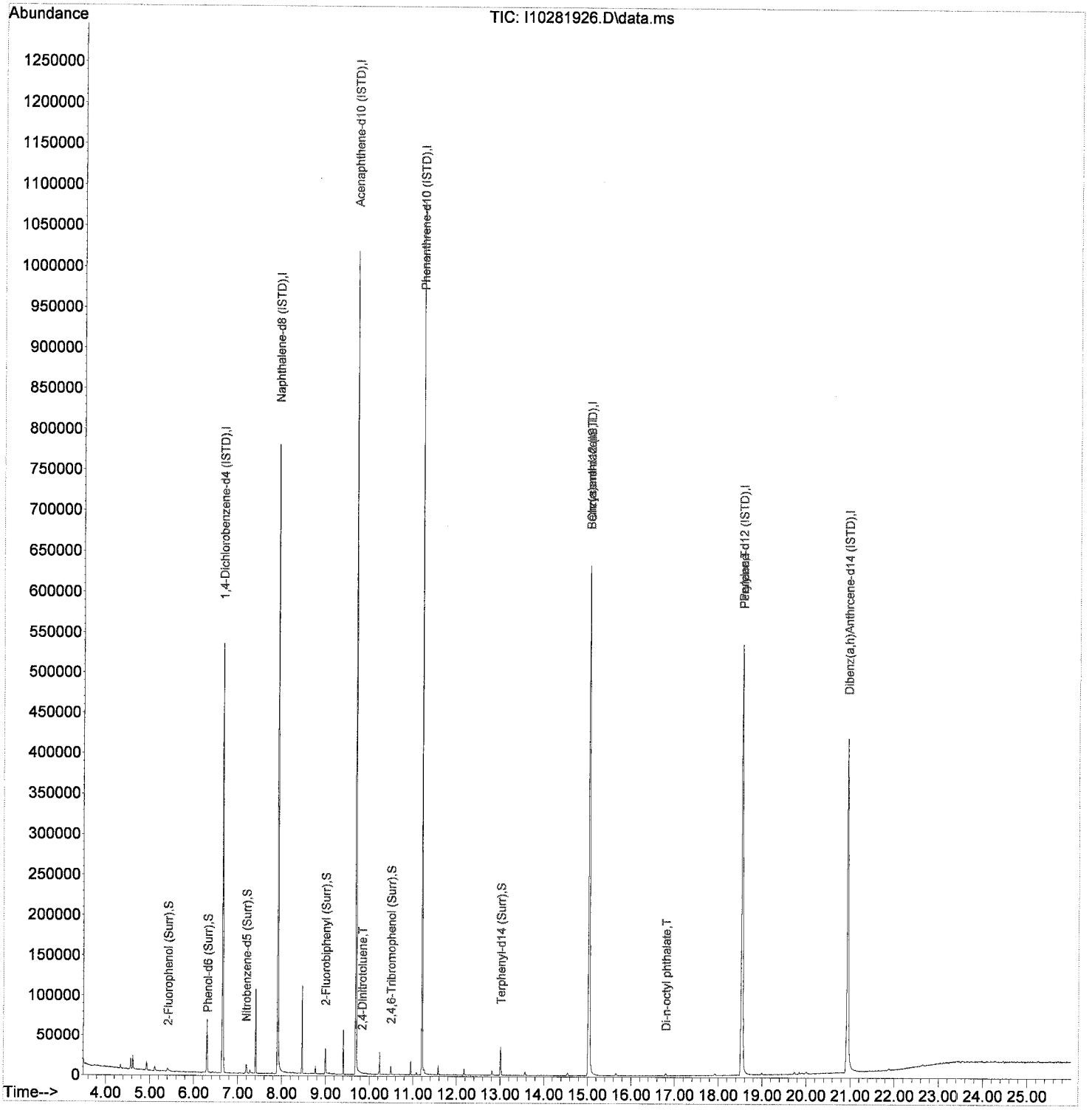
Quant Time: Oct 29 08:15:16 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.830	165	85	68.81 ng/ml#	20
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.226	178	132	N.D.	
72) Anthracene	11.226	178	132	N.D.	
73) Carbazole	11.446	167	56	N.D.	
74) Di-n-butyl phthalate	11.783	149	192	N.D.	
75) Fluoranthene	12.515	202	158	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.804	202	102	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.002	129	99	N.D.	
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.034	228	1122	4.35 ng/ml	69
84) Chrysene	15.099	228	85	N.D.	
85) Bis(2-ethylhexyl) phth...	15.184	149	60	N.D.	
87) Di-n-octyl phthalate	16.800	149	50	58.16 ng/ml#	19
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.543	252	1415	7.17 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.939	276	140	N.D.	
96) Dibenz(a,h)anthracene	20.923	278	74	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : C:\msdchem\1\data\2019-10\9J28055\
Data File : I10281926.D
Acq On : 29 Oct 2019 12:04 am
Operator : JK /AMS /DTH
Sample : A9J0959-01@40
Misc : 40x, 8270D LL FULL LIST ACID EXT. ONLY CUSTOM
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 29 08:15:16 2019
Quant Method : C:\msdchem\1\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



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.

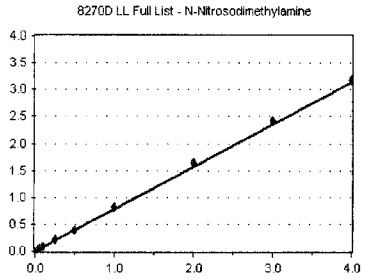
Element Calibration Review Sheet

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**

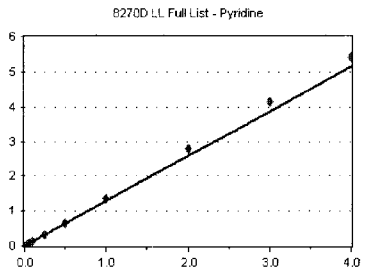


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3228	0.643	4.32
9J04044-CAL2	50	9166	0.742	4.32
9J04044-CAL3	100	20557	0.804	4.31
9J04044-CAL4	200	40134	0.790	4.31
9J04044-CAL5	500	108412	0.822	4.31
9J04044-CAL6	1000	202035	0.798	4.31
9J04044-CAL7	2000	420896	0.812	4.31
9J04044-CAL8	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**

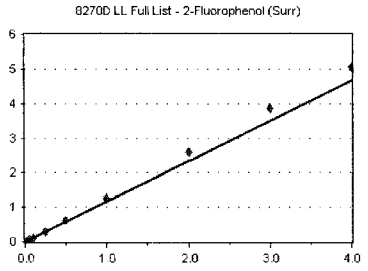


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~62~~	~~1.235~~	~~0.00~~
9J04044-CAL2	50	12754	1.032	4.35
9J04044-CAL3	100	30832	1.206	4.34
9J04044-CAL4	200	62267	1.226	4.34
9J04044-CAL5	500	172844	1.310	4.34
9J04044-CAL6	1000	329582	1.301	4.33
9J04044-CAL7	2000	706761	1.364	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**

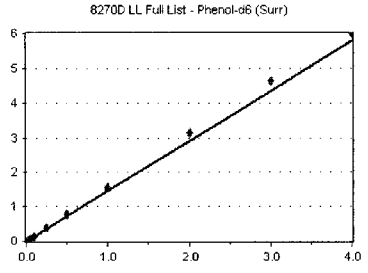


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4573	0.911	5.56
9J04044-CAL2	50	12531	1.014	5.56
9J04044-CAL3	100	28046	1.097	5.56
9J04044-CAL4	200	57278	1.128	5.56
9J04044-CAL5	500	160123	1.214	5.56
9J04044-CAL6	1000	307497	1.214	5.56
9J04044-CAL7	2000	657142	1.268	5.56
9J04044-CAL8	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**

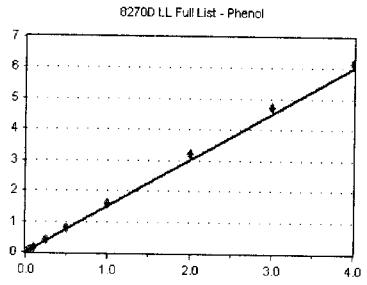
Element Calibration Review Sheet

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**

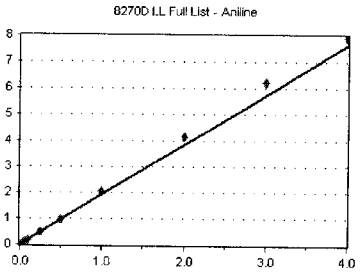


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5992	1.194	6.42
9J04044-CAL2	50	16493	1.334	6.42
9J04044-CAL3	100	37238	1.456	6.42
9J04044-CAL4	200	78450	1.545	6.42
9J04044-CAL5	500	213183	1.616	6.42
9J04044-CAL6	1000	405185	1.599	6.42
9J04044-CAL7	2000	826348	1.595	6.43
9J04044-CAL8	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**

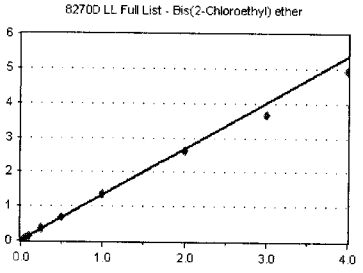


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3294~~	~~0.656~~	~~6.46~~
9J04044-CAL2	50	20125	1.628	6.46
9J04044-CAL3	100	45946	1.797	6.46
9J04044-CAL4	200	91522	1.802	6.46
9J04044-CAL5	500	255241	1.935	6.46
9J04044-CAL6	1000	488538	1.928	6.46
9J04044-CAL7	2000	1062311	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**

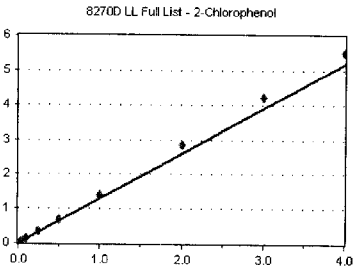


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	6412	1.278	6.51
9J04044-CAL2	50	16981	1.374	6.51
9J04044-CAL3	100	35827	1.401	6.51
9J04044-CAL4	200	72477	1.427	6.51
9J04044-CAL5	500	186531	1.414	6.51
9J04044-CAL6	1000	345648	1.364	6.51
9J04044-CAL7	2000	699689	1.350	6.51
9J04044-CAL8	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**

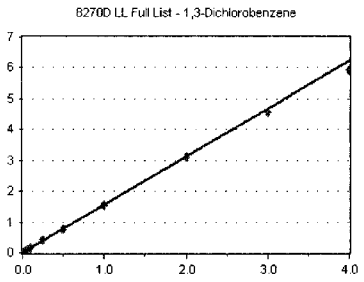
Element Calibration Review Sheet

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**

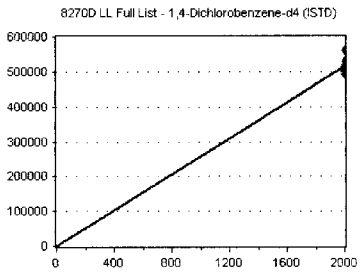


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7719	1.538	6.73
9J04044-CAL2	50	19165	1.550	6.73
9J04044-CAL3	100	41378	1.618	6.73
9J04044-CAL4	200	81926	1.613	6.73
9J04044-CAL5	500	213975	1.622	6.73
9J04044-CAL6	1000	392859	1.551	6.73
9J04044-CAL7	2000	809136	1.562	6.73
9J04044-CAL8	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**

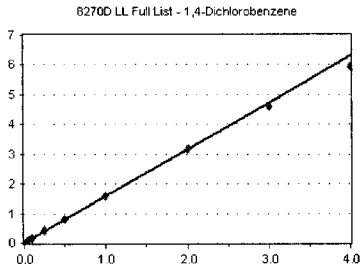


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	501898	250.949	6.78
9J04044-CAL2	2000	494451	247.225	6.78
9J04044-CAL3	2000	511444	255.722	6.78
9J04044-CAL4	2000	507831	253.915	6.78
9J04044-CAL5	2000	527723	263.862	6.78
9J04044-CAL6	2000	506660	253.330	6.78
9J04044-CAL7	2000	518143	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**

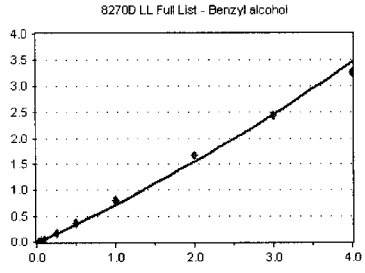


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7740	1.542	6.79
9J04044-CAL2	50	19639	1.589	6.79
9J04044-CAL3	100	41829	1.636	6.79
9J04044-CAL4	200	82460	1.624	6.79
9J04044-CAL5	500	215257	1.632	6.79
9J04044-CAL6	1000	399413	1.577	6.79
9J04044-CAL7	2000	824470	1.591	6.79
9J04044-CAL8	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**

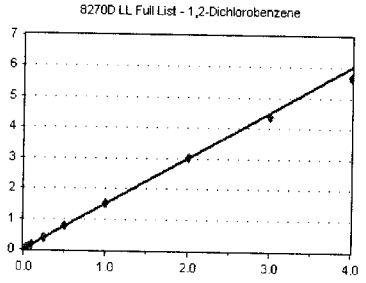
Element Calibration Review Sheet

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**

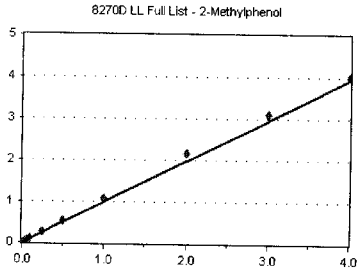


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	6999	1.395	6.94
9J04044-CAL2	50	18970	1.535	6.94
9J04044-CAL3	100	40421	1.581	6.94
9J04044-CAL4	200	79466	1.565	6.94
9J04044-CAL5	500	205542	1.558	6.94
9J04044-CAL6	1000	379862	1.499	6.94
9J04044-CAL7	2000	787423	1.520	6.95
9J04044-CAL8	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**

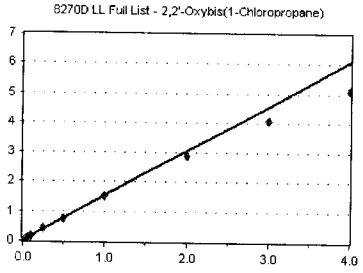


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4057	0.808	7.00
9J04044-CAL2	50	10413	0.842	7.00
9J04044-CAL3	100	23055	0.902	7.00
9J04044-CAL4	200	50332	0.991	7.00
9J04044-CAL5	500	139535	1.058	7.00
9J04044-CAL6	1000	267181	1.055	7.00
9J04044-CAL7	2000	556507	1.074	7.00
9J04044-CAL8	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**

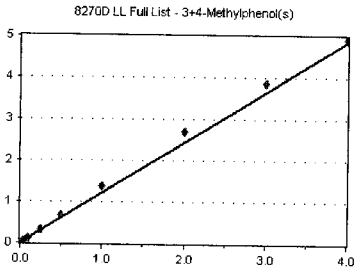


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	7822	1.558	7.03
9J04044-CAL2	50	19732	1.596	7.03
9J04044-CAL3	100	43026	1.683	7.03
9J04044-CAL4	200	83852	1.651	7.03
9J04044-CAL5	500	212748	1.613	7.03
9J04044-CAL6	1000	391014	1.543	7.03
9J04044-CAL7	2000	785609	1.516	7.03
9J04044-CAL8	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**

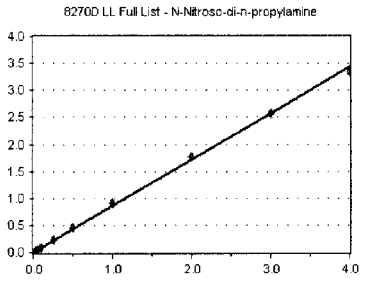
Element Calibration Review Sheet

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**

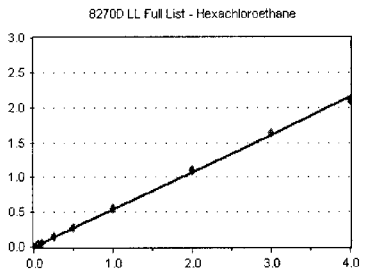


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3426	0.683	7.16
9J04044-CAL2	50	9766	0.790	7.15
9J04044-CAL3	100	21912	0.857	7.15
9J04044-CAL4	200	44762	0.881	7.15
9J04044-CAL5	500	124566	0.944	7.15
9J04044-CAL6	1000	234779	0.927	7.15
9J04044-CAL7	2000	474593	0.916	7.16
9J04044-CAL8	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**

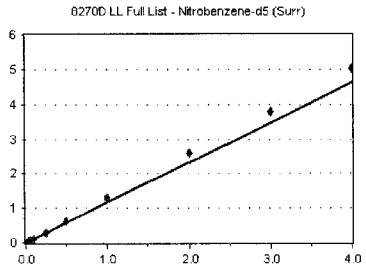


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2518	0.502	7.27
9J04044-CAL2	50	6360	0.515	7.27
9J04044-CAL3	100	13649	0.534	7.27
9J04044-CAL4	200	27779	0.547	7.27
9J04044-CAL5	500	72991	0.553	7.27
9J04044-CAL6	1000	137591	0.543	7.27
9J04044-CAL7	2000	288591	0.557	7.27
9J04044-CAL8	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**

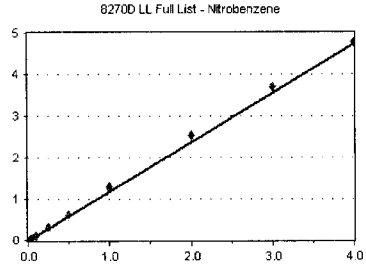


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	4429	0.882	7.31
9J04044-CAL2	50	11673	0.944	7.31
9J04044-CAL3	100	26887	1.051	7.31
9J04044-CAL4	200	56736	1.117	7.31
9J04044-CAL5	500	162122	1.229	7.31
9J04044-CAL6	1000	311795	1.231	7.31
9J04044-CAL7	2000	664083	1.282	7.31
9J04044-CAL8	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**

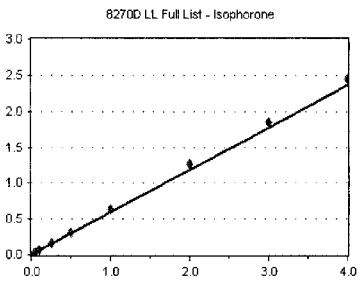
Element Calibration Review Sheet

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**

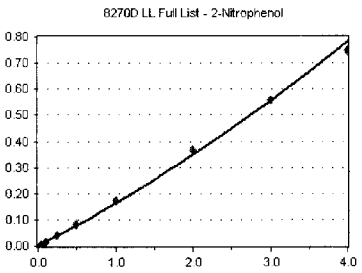


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9174	0.469	7.56
9J04044-CAL2	50	25333	0.524	7.55
9J04044-CAL3	100	57116	0.566	7.55
9J04044-CAL4	200	120026	0.604	7.55
9J04044-CAL5	500	324343	0.635	7.55
9J04044-CAL6	1000	621683	0.632	7.56
9J04044-CAL7	2000	1271667	0.632	7.56
9J04044-CAL8	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**

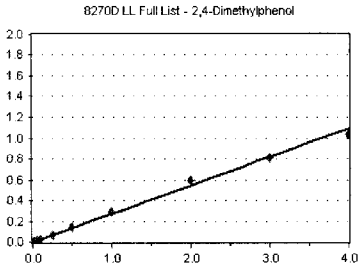


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1264~~	~~6.468~~	~~7.64~~
9J04044-CAL2	50	3866	7.993	7.64
9J04044-CAL3	100	9941	9.857	7.64
9J04044-CAL4	200	22940	0.115	7.64
9J04044-CAL5	500	75675	0.148	7.64
9J04044-CAL6	1000	162997	0.166	7.64
9J04044-CAL7	2000	346048	0.172	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**

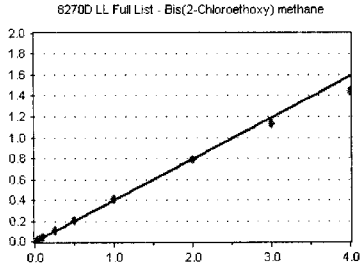


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2975	0.152	7.67
9J04044-CAL2	50	8310	0.172	7.67
9J04044-CAL3	100	22605	0.224	7.67
9J04044-CAL4	200	50095	0.252	7.67
9J04044-CAL5	500	138525	0.271	7.67
9J04044-CAL6	1000	280775	0.285	7.67
9J04044-CAL7	2000	589089	0.293	7.68
9J04044-CAL8	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**

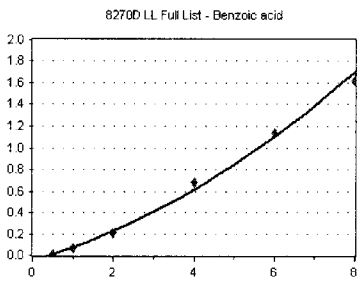
Element Calibration Review Sheet

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**

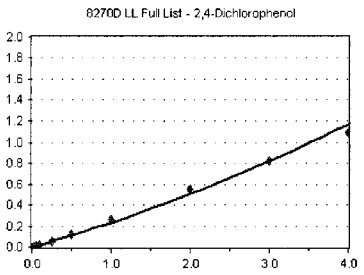


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~40~~	~~65~~	~~1.663~~	~~7.83~~
~~9J04044-CAL2~~	~~100~~	~~99~~	~~1.023~~	~~7.74~~
~~9J04044-CAL3~~	~~200~~	~~152~~	~~7.536~~	~~7.73~~
~~9J04044-CAL4~~	~~400~~	~~549~~	~~1.382~~	~~7.72~~
9J04044-CAL5	1000	26893	2.633	7.73
9J04044-CAL6	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**

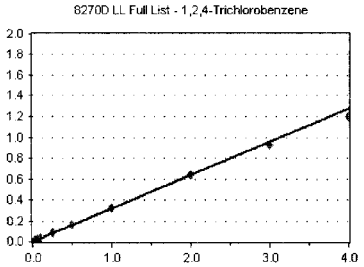


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2874	0.147	7.87
9J04044-CAL2	50	8546	0.177	7.88
9J04044-CAL3	100	16620	0.165	7.87
9J04044-CAL4	200	36691	0.185	7.88
9J04044-CAL5	500	111455	0.218	7.88
9J04044-CAL6	1000	233887	0.238	7.88
9J04044-CAL7	2000	520983	0.259	7.88
9J04044-CAL8	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**

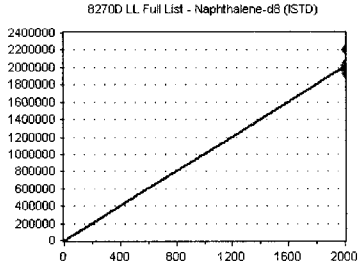


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	5608	0.287	7.96
9J04044-CAL2	50	15837	0.327	7.96
9J04044-CAL3	100	33988	0.337	7.96
9J04044-CAL4	200	65463	0.330	7.96
9J04044-CAL5	500	171276	0.335	7.96
9J04044-CAL6	1000	318153	0.323	7.97
9J04044-CAL7	2000	653096	0.325	7.97
9J04044-CAL8	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**

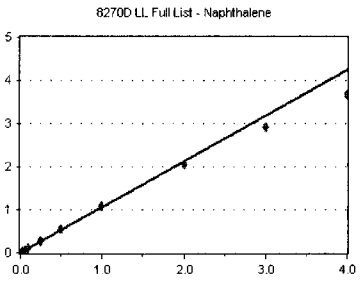
Element Calibration Review Sheet

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**

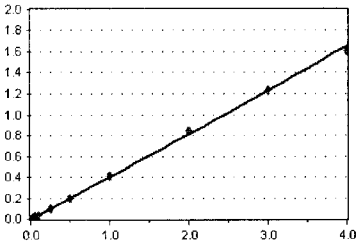


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	21175	1.084	8.04
9J04044-CAL2	50	53705	1.110	8.04
9J04044-CAL3	100	113965	1.130	8.04
9J04044-CAL4	200	222558	1.120	8.04
9J04044-CAL5	500	572938	1.122	8.04
9J04044-CAL6	1000	1059258	1.077	8.04
9J04044-CAL7	2000	2160367	1.074	8.05
9J04044-CAL8	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**

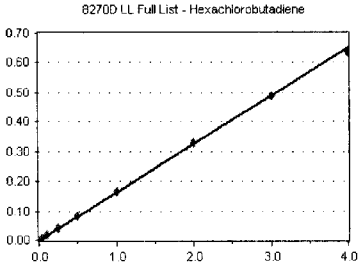


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3531	0.181	8.09
9J04044-CAL2	50	16115	0.333	8.09
9J04044-CAL3	100	35162	0.349	8.09
9J04044-CAL4	200	72252	0.364	8.09
9J04044-CAL5	500	197823	0.387	8.09
9J04044-CAL6	1000	378701	0.385	8.09
9J04044-CAL7	2000	832115	0.414	8.09
9J04044-CAL8	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**

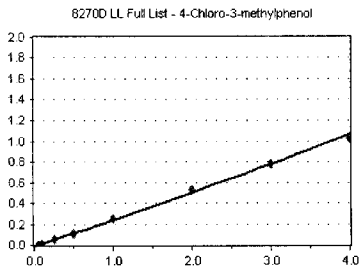


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	2770	0.142	8.17
9J04044-CAL2	50	8020	0.166	8.17
9J04044-CAL3	100	17073	0.169	8.17
9J04044-CAL4	200	33835	0.170	8.17
9J04044-CAL5	500	85940	0.168	8.17
9J04044-CAL6	1000	161397	0.164	8.17
9J04044-CAL7	2000	332394	0.165	8.17
9J04044-CAL8	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**

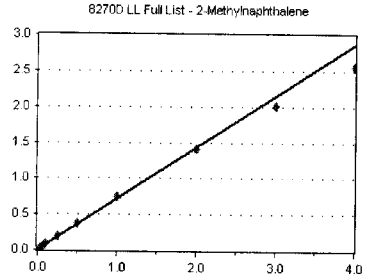
Element Calibration Review Sheet

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**

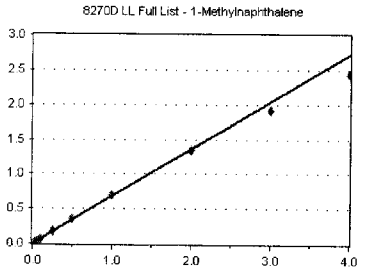


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	13253	0.678	8.74
9J04044-CAL2	50	35116	0.726	8.74
9J04044-CAL3	100	74750	0.741	8.74
9J04044-CAL4	200	149509	0.753	8.74
9J04044-CAL5	500	387564	0.759	8.74
9J04044-CAL6	1000	735677	0.748	8.74
9J04044-CAL7	2000	1488788	0.740	8.74
9J04044-CAL8	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**

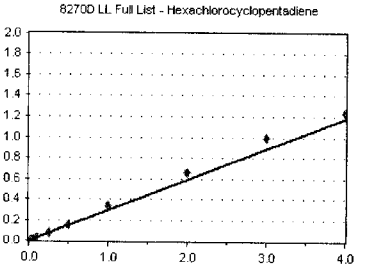


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12582	0.644	8.84
9J04044-CAL2	50	33386	0.690	8.84
9J04044-CAL3	100	71626	0.710	8.84
9J04044-CAL4	200	140701	0.708	8.84
9J04044-CAL5	500	369273	0.723	8.84
9J04044-CAL6	1000	691132	0.703	8.84
9J04044-CAL7	2000	1413991	0.703	8.84
9J04044-CAL8	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**

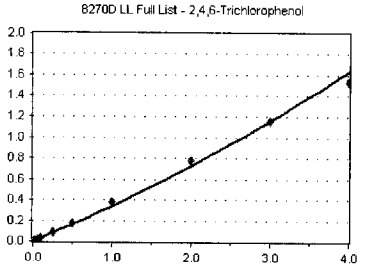


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~2011~~	~~0.205~~	~~8.91~~
9J04044-CAL2	50	5522	0.226	8.91
9J04044-CAL3	100	12791	0.250	8.91
9J04044-CAL4	200	27324	0.274	8.91
9J04044-CAL5	500	78041	0.301	8.91
9J04044-CAL6	1000	155746	0.307	8.91
9J04044-CAL7	2000	341473	0.334	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**

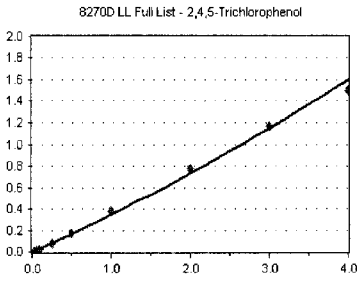
Element Calibration Review Sheet

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**

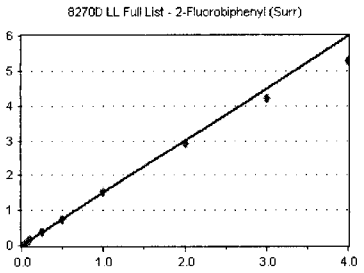


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1472~~	~~0.150~~	~~9.06~~
9J04044-CAL2	50	4145	0.169	9.06
9J04044-CAL3	100	10362	0.202	9.06
9J04044-CAL4	200	24777	0.249	9.06
9J04044-CAL5	500	82320	0.317	9.06
9J04044-CAL6	1000	174463	0.344	9.06
9J04044-CAL7	2000	388199	0.380	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**

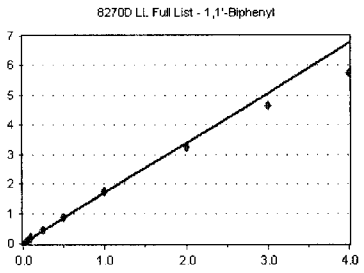


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	14167	1.443	9.10
9J04044-CAL2	50	37314	1.524	9.10
9J04044-CAL3	100	81066	1.584	9.10
9J04044-CAL4	200	159069	1.596	9.10
9J04044-CAL5	500	410324	1.581	9.10
9J04044-CAL6	1000	773027	1.524	9.10
9J04044-CAL7	2000	1571214	1.537	9.11
9J04044-CAL8	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**

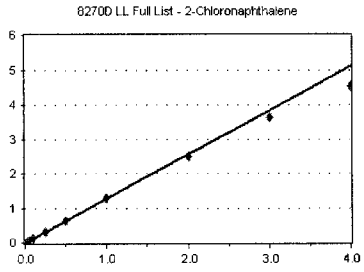


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16246	1.655	9.21
9J04044-CAL2	50	43676	1.784	9.21
9J04044-CAL3	100	91733	1.792	9.21
9J04044-CAL4	200	179867	1.805	9.20
9J04044-CAL5	500	470721	1.813	9.20
9J04044-CAL6	1000	883007	1.741	9.21
9J04044-CAL7	2000	1781512	1.743	9.21
9J04044-CAL8	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**

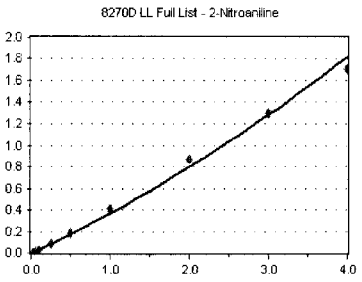
Element Calibration Review Sheet

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**

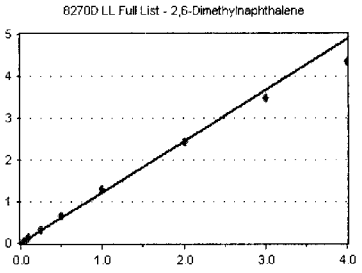


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1432~~	~~0.146~~	~~9.32~~
9J04044-CAL2	50	4227	0.173	9.32
9J04044-CAL3	100	10341	0.202	9.32
9J04044-CAL4	200	24260	0.243	9.33
9J04044-CAL5	500	87140	0.336	9.32
9J04044-CAL6	1000	185496	0.366	9.33
9J04044-CAL7	2000	417290	0.408	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**

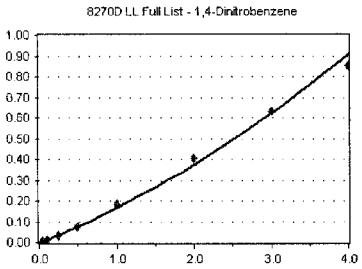


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	10754	1.096	9.37
9J04044-CAL2	50	29943	1.223	9.37
9J04044-CAL3	100	64761	1.265	9.37
9J04044-CAL4	200	129936	1.304	9.37
9J04044-CAL5	500	345848	1.332	9.37
9J04044-CAL6	1000	651717	1.285	9.37
9J04044-CAL7	2000	1313186	1.285	9.37
9J04044-CAL8	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**

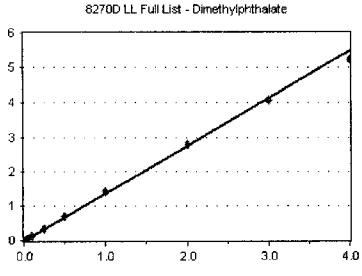


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~488~~	~~0.050~~	~~9.45~~
~~9J04044-CAL2~~	~~50~~	~~1321~~	~~0.054~~	~~9.45~~
9J04044-CAL3	100	3408	6.659	9.45
9J04044-CAL4	200	8401	0.084	9.45
9J04044-CAL5	500	32734	0.126	9.45
9J04044-CAL6	1000	75456	0.149	9.46
9J04044-CAL7	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**

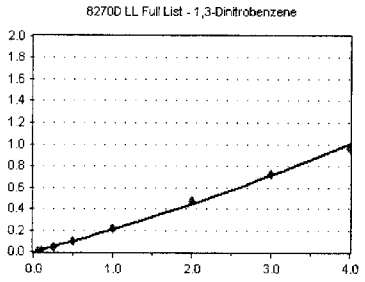
Element Calibration Review Sheet

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**

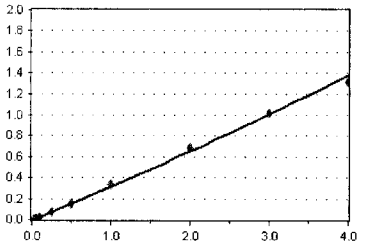


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~515~~	~~5.246~~	~~9.54~~
~~9J04044-CAL2~~	~~50~~	~~1725~~	~~7.046~~	~~9.53~~
9J04044-CAL3	100	4662	9.109	9.53
9J04044-CAL4	200	12358	0.124	9.53
9J04044-CAL5	500	43939	0.169	9.53
9J04044-CAL6	1000	98229	0.194	9.54
9J04044-CAL7	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**

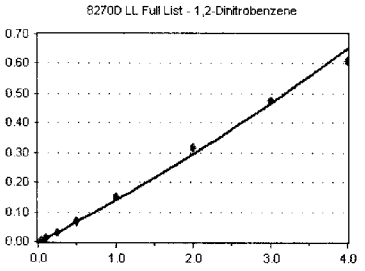


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1050~~	~~0.107~~	~~9.56~~
9J04044-CAL2	50	3393	0.139	9.56
9J04044-CAL3	100	9221	0.180	9.56
9J04044-CAL4	200	23552	0.236	9.56
9J04044-CAL5	500	75915	0.292	9.56
9J04044-CAL6	1000	155373	0.306	9.57
9J04044-CAL7	2000	337376	0.330	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**

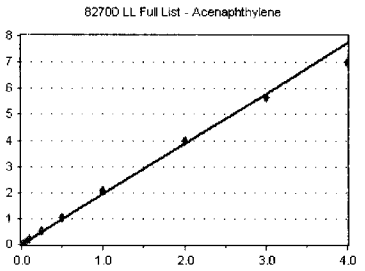


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~402~~	~~4.095~~	~~9.62~~
9J04044-CAL2	50	1367	5.584	9.62
9J04044-CAL3	100	3909	7.638	9.62
9J04044-CAL4	200	9733	9.766	9.62
9J04044-CAL5	500	33137	0.128	9.62
9J04044-CAL6	1000	68481	0.135	9.63
9J04044-CAL7	2000	153669	0.150	9.63
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**

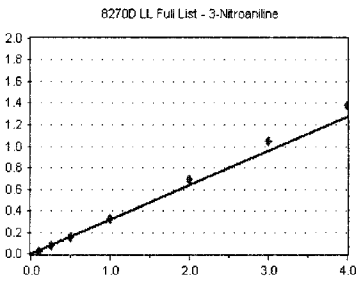
Element Calibration Review Sheet

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**

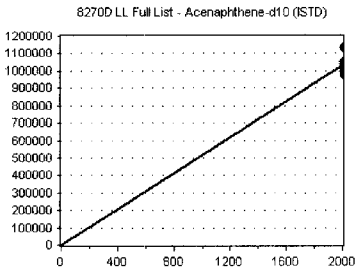


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1265~~	~~0.129~~	~~9.74~~
~~9J04044-CAL2~~	~~50~~	~~4069~~	~~0.166~~	~~9.74~~
~~9J04044-CAL3~~	~~100~~	~~10432~~	~~0.204~~	~~9.74~~
9J04044-CAL4	200	25298	0.254	9.74
9J04044-CAL5	500	78931	0.304	9.74
9J04044-CAL6	1000	154242	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**

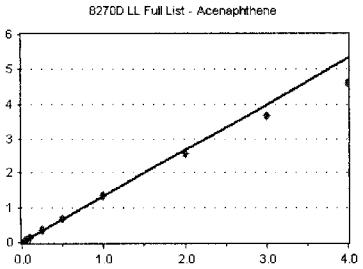


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	981607	490.803	9.80
9J04044-CAL2	2000	979273	489.637	9.80
9J04044-CAL3	2000	1023584	511.792	9.80
9J04044-CAL4	2000	996658	498.329	9.80
9J04044-CAL5	2000	1038444	519.222	9.80
9J04044-CAL6	2000	1014623	507.312	9.80
9J04044-CAL7	2000	1021934	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**

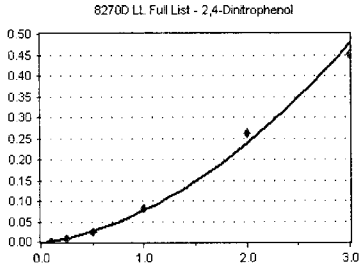


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12853	1.309	9.83
9J04044-CAL2	50	34473	1.408	9.83
9J04044-CAL3	100	71175	1.391	9.83
9J04044-CAL4	200	140818	1.413	9.83
9J04044-CAL5	500	365966	1.410	9.83
9J04044-CAL6	1000	685015	1.350	9.84
9J04044-CAL7	2000	1387214	1.357	9.84
9J04044-CAL8	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~~

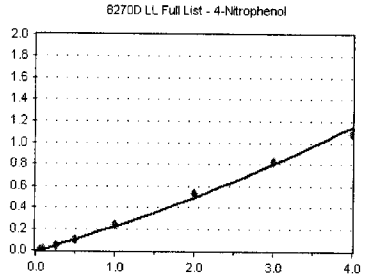
AVE RF **7.510** RF RSD **75.80** AVE RT **9.85**

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

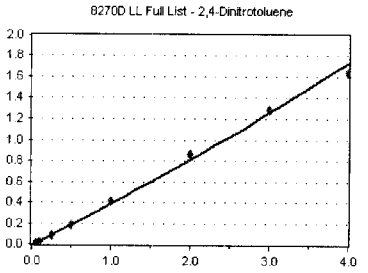


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

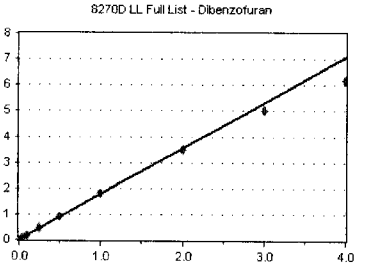


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

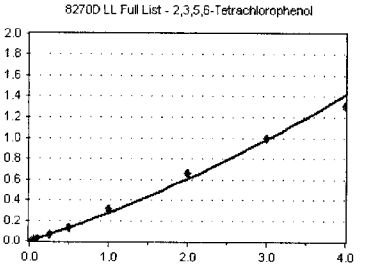


Curve Fit: **AVERAGE RF**

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**

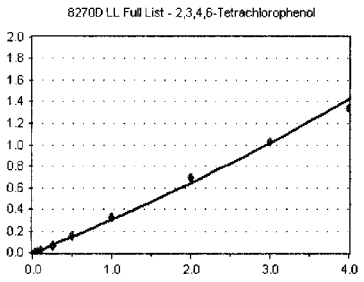
Element Calibration Review Sheet

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**

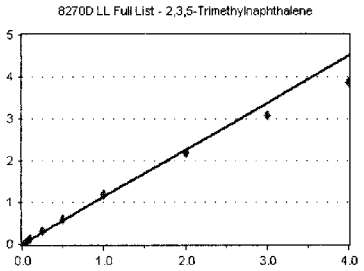


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1127~~	~~0.115~~	~~10.13~~
9J04044-CAL2	50	3800	0.155	10.13
9J04044-CAL3	100	8268	0.162	10.13
9J04044-CAL4	200	22228	0.223	10.13
9J04044-CAL5	500	72617	0.280	10.13
9J04044-CAL6	1000	153454	0.302	10.13
9J04044-CAL7	2000	331265	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**

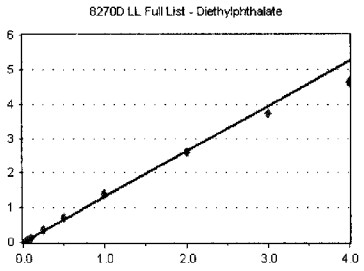


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9938	1.012	10.22
9J04044-CAL2	50	27785	1.135	10.22
9J04044-CAL3	100	60949	1.191	10.22
9J04044-CAL4	200	122364	1.228	10.22
9J04044-CAL5	500	323191	1.245	10.22
9J04044-CAL6	1000	602745	1.188	10.22
9J04044-CAL7	2000	1225454	1.199	10.22
9J04044-CAL8	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**

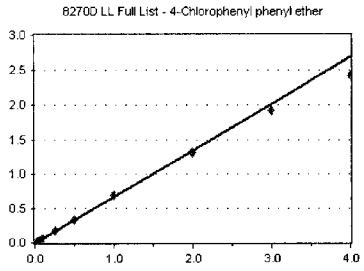


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11322	1.153	10.22
9J04044-CAL2	50	30343	1.239	10.22
9J04044-CAL3	100	69029	1.349	10.22
9J04044-CAL4	200	142210	1.427	10.22
9J04044-CAL5	500	382550	1.474	10.22
9J04044-CAL6	1000	713712	1.407	10.22
9J04044-CAL7	2000	1439136	1.408	10.23
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**

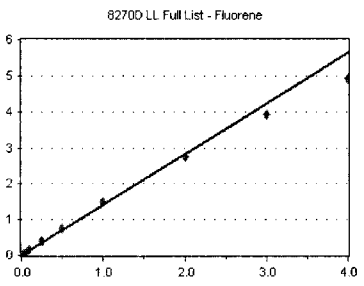
Element Calibration Review Sheet

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**

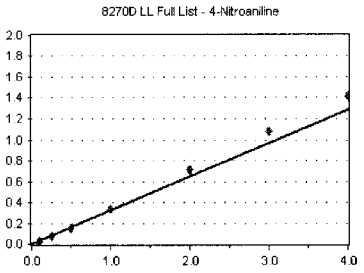


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12708	1.295	10.36
9J04044-CAL2	50	34375	1.404	10.36
9J04044-CAL3	100	74915	1.464	10.36
9J04044-CAL4	200	151801	1.523	10.35
9J04044-CAL5	500	400731	1.544	10.35
9J04044-CAL6	1000	747764	1.474	10.35
9J04044-CAL7	2000	1513373	1.481	10.36
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**

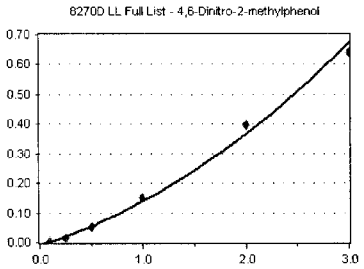


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1342~~	~~0.137~~	~~10.36~~
~~9J04044-CAL2~~	~~50~~	~~3879~~	~~0.158~~	~~10.36~~
~~9J04044-CAL3~~	~~100~~	~~9948~~	~~0.194~~	~~10.36~~
9J04044-CAL4	200	24143	0.242	10.35
9J04044-CAL5	500	80498	0.310	10.36
9J04044-CAL6	1000	153635	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**

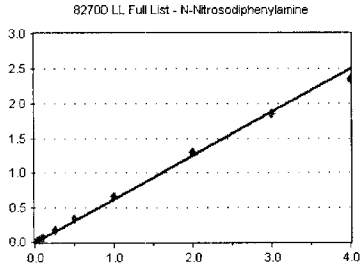


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J04044-CAL2~~	~~50~~	~~89~~	~~3.635~~	~~10.41~~
~~9J04044-CAL3~~	~~100~~	~~789~~	~~1.542~~	~~10.40~~
9J04044-CAL4	200	2993	3.003	10.39
9J04044-CAL5	500	17343	6.680	10.39
9J04044-CAL6	1000	52986	0.104	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**

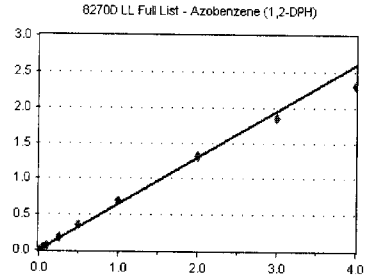
Element Calibration Review Sheet

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**

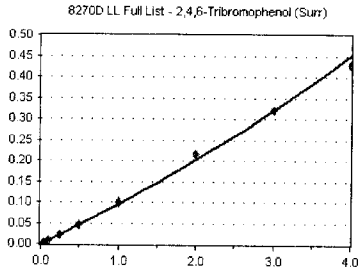


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	9652	0.538	10.50
9J04044-CAL2	50	26865	0.607	10.50
9J04044-CAL3	100	61372	0.674	10.50
9J04044-CAL4	200	130219	0.714	10.50
9J04044-CAL5	500	350688	0.727	10.50
9J04044-CAL6	1000	647486	0.705	10.51
9J04044-CAL7	2000	1314353	0.695	10.51
9J04044-CAL8	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**

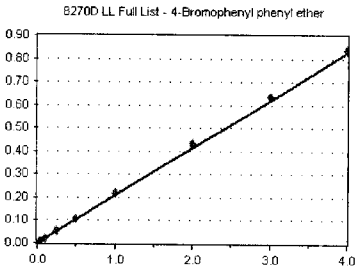


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~583~~	~~3.248~~	~~10.61~~
9J04044-CAL2	50	1964	4.438	10.60
9J04044-CAL3	100	5164	5.669	10.60
9J04044-CAL4	200	12498	0.068	10.60
9J04044-CAL5	500	41284	8.553	10.60
9J04044-CAL6	1000	85478	9.304	10.60
9J04044-CAL7	2000	190604	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**

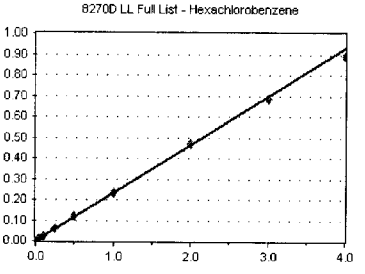


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	3151	0.176	10.85
9J04044-CAL2	50	8668	0.196	10.85
9J04044-CAL3	100	18461	0.203	10.84
9J04044-CAL4	200	38061	0.209	10.85
9J04044-CAL5	500	103922	0.215	10.85
9J04044-CAL6	1000	193354	0.210	10.85
9J04044-CAL7	2000	410206	0.217	10.85
9J04044-CAL8	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**

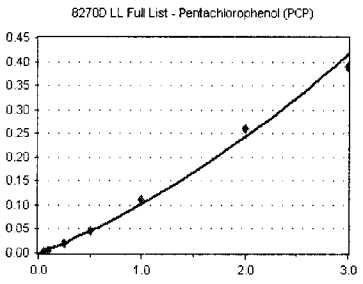
Element Calibration Review Sheet

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**

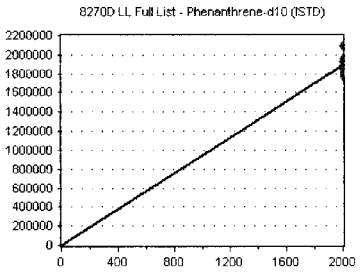


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~1514~~	~~8.435~~	~~11.12~~
~~9J04044-CAL2~~	~~50~~	~~1860~~	~~0.042~~	~~11.12~~
9J04044-CAL3	100	3837	0.042	11.12
9J04044-CAL4	200	9274	5.082	11.12
9J04044-CAL5	500	36572	7.577	11.12
9J04044-CAL6	1000	86348	9.399	11.12
9J04044-CAL7	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**

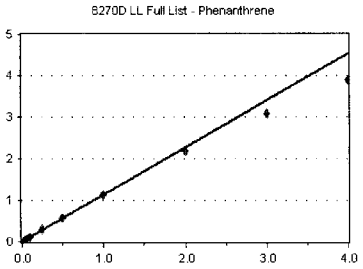


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1794978	897.489	11.31
9J04044-CAL2	2000	1770046	885.023	11.31
9J04044-CAL3	2000	1821812	910.906	11.31
9J04044-CAL4	2000	1825037	912.519	11.31
9J04044-CAL5	2000	1930632	965.316	11.31
9J04044-CAL6	2000	1837465	918.733	11.31
9J04044-CAL7	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**

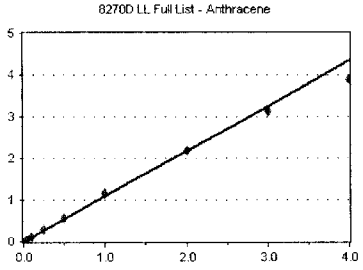


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	20603	1.148	11.33
9J04044-CAL2	50	53303	1.205	11.33
9J04044-CAL3	100	109865	1.206	11.33
9J04044-CAL4	200	220411	1.208	11.33
9J04044-CAL5	500	584015	1.210	11.33
9J04044-CAL6	1000	1066036	1.160	11.34
9J04044-CAL7	2000	2170899	1.148	11.34
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**

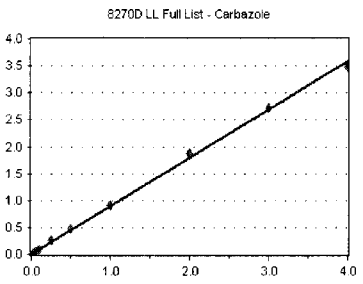
Element Calibration Review Sheet

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**

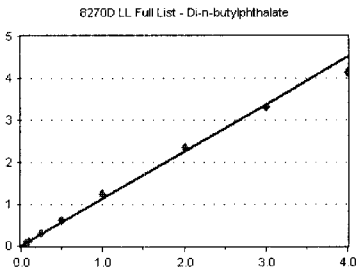


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	12904	0.719	11.54
9J04044-CAL2	50	35904	0.811	11.54
9J04044-CAL3	100	80889	0.888	11.54
9J04044-CAL4	200	172186	0.943	11.54
9J04044-CAL5	500	489778	1.015	11.54
9J04044-CAL6	1000	875757	0.953	11.55
9J04044-CAL7	2000	1730389	0.915	11.55
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**

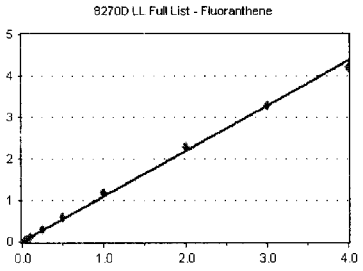


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~13938~~	~~0.776~~	~~11.88~~
~~9J04044-CAL2~~	~~50~~	~~36535~~	~~0.826~~	~~11.88~~
9J04044-CAL3	100	86172	0.946	11.88
9J04044-CAL4	200	195518	1.071	11.88
9J04044-CAL5	500	583123	1.208	11.88
9J04044-CAL6	1000	1122901	1.222	11.88
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**

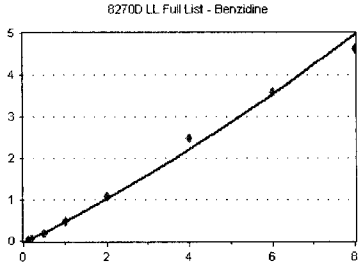


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16250	0.905	12.63
9J04044-CAL2	50	44081	0.996	12.63
9J04044-CAL3	100	95757	1.051	12.63
9J04044-CAL4	200	202844	1.111	12.63
9J04044-CAL5	500	583303	1.209	12.63
9J04044-CAL6	1000	1075278	1.170	12.64
9J04044-CAL7	2000	2238787	1.184	12.64
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**

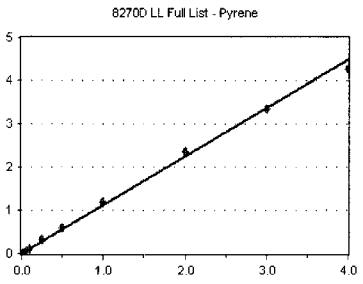
Element Calibration Review Sheet

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**

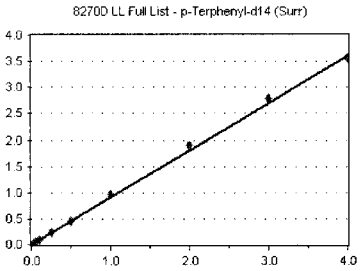


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	16894	0.941	12.94
9J04044-CAL2	50	46022	1.040	12.94
9J04044-CAL3	100	99921	1.097	12.94
9J04044-CAL4	200	213905	1.172	12.94
9J04044-CAL5	500	601284	1.246	12.94
9J04044-CAL6	1000	1098375	1.196	12.95
9J04044-CAL7	2000	2264877	1.198	12.95
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**

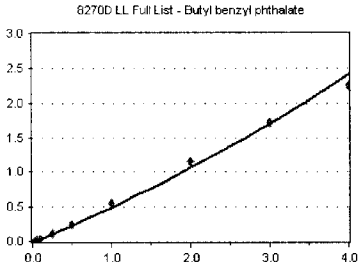


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11670	0.761	13.15
9J04044-CAL2	50	31469	0.841	13.15
9J04044-CAL3	100	71091	0.900	13.15
9J04044-CAL4	200	142922	0.916	13.15
9J04044-CAL5	500	404342	0.952	13.15
9J04044-CAL6	1000	764312	0.920	13.16
9J04044-CAL7	2000	1603082	0.964	13.16
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**

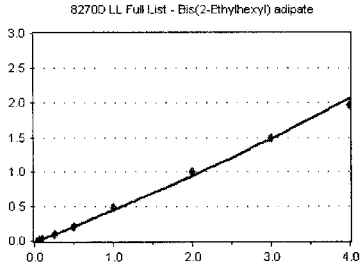


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~2870~~	~~0.187~~	~~14.01~~
9J04044-CAL2	50	7702	0.206	14.00
9J04044-CAL3	100	20406	0.258	14.01
9J04044-CAL4	200	50677	0.325	14.01
9J04044-CAL5	500	189612	0.446	14.01
9J04044-CAL6	1000	400707	0.482	14.01
9J04044-CAL7	2000	916105	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**

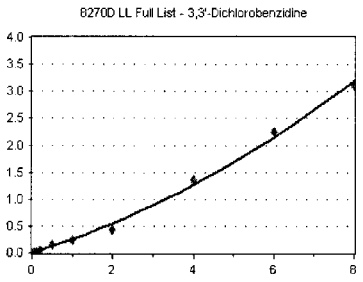
Element Calibration Review Sheet

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**

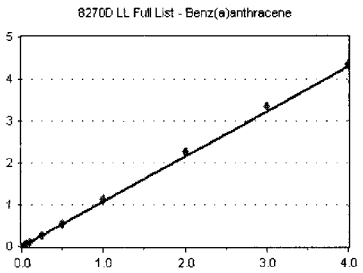


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	40	3305	0.108	15.17
9J04044-CAL2	100	10982	0.147	15.17
9J04044-CAL3	200	29882	0.189	15.17
9J04044-CAL4	400	74543	0.239	15.18
9J04044-CAL5	1000	254873	0.300	15.18
9J04044-CAL6	2000	391978	0.236	15.18
9J04044-CAL7	4000	711403	0.214	15.19
9J04044-CAL8	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**

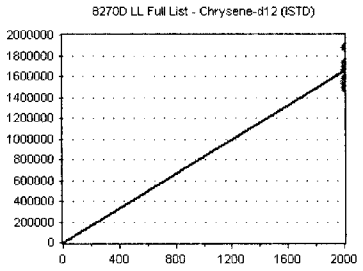


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	15725	1.025	15.22
9J04044-CAL2	50	36791	0.983	15.22
9J04044-CAL3	100	78626	0.996	15.22
9J04044-CAL4	200	164883	1.057	15.22
9J04044-CAL5	500	478454	1.126	15.22
9J04044-CAL6	1000	913488	1.099	15.22
9J04044-CAL7	2000	1882167	1.132	15.23
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**

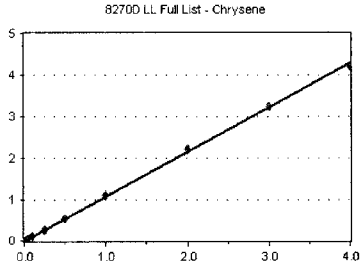


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	1533726	766.863	15.24
9J04044-CAL2	2000	1496661	748.331	15.24
9J04044-CAL3	2000	1579497	789.749	15.24
9J04044-CAL4	2000	1560035	780.018	15.24
9J04044-CAL5	2000	1699410	849.705	15.24
9J04044-CAL6	2000	1661969	830.984	15.25
9J04044-CAL7	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**

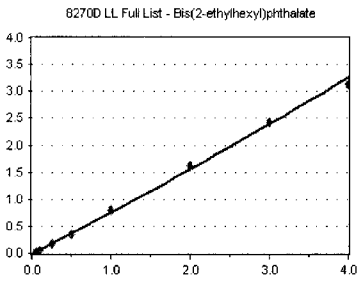
Element Calibration Review Sheet

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**

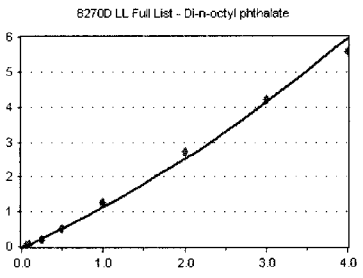


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3234~~	~~0.211~~	~~15.38~~
~~9J04044-CAL2~~	~~50~~	~~9886~~	~~0.264~~	~~15.38~~
9J04044-CAL3	100	27310	0.346	15.38
9J04044-CAL4	200	74532	0.478	15.38
9J04044-CAL5	500	277740	0.654	15.38
9J04044-CAL6	1000	587540	0.707	15.39
9J04044-CAL7	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**

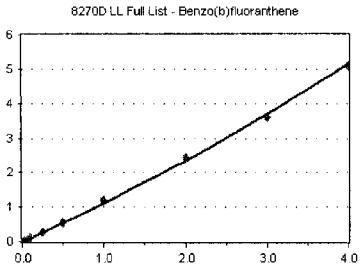


Standard	Concentration	Response	Response Factor	RT
~~9J04044-CAL1~~	~~20~~	~~3685~~	~~0.264~~	~~17.05~~
~~9J04044-CAL2~~	~~50~~	~~9292~~	~~0.271~~	~~17.05~~
9J04044-CAL3	100	25712	0.358	17.06
9J04044-CAL4	200	76592	0.535	17.06
9J04044-CAL5	500	317229	0.806	17.06
9J04044-CAL6	1000	783965	1.018	17.06
9J04044-CAL7	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**

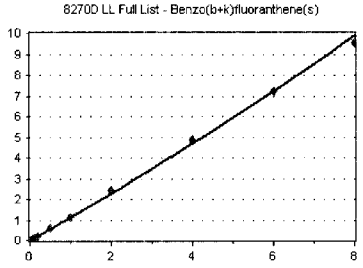


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	8200	0.588	17.82
9J04044-CAL2	50	25289	0.737	17.82
9J04044-CAL3	100	60853	0.846	17.82
9J04044-CAL4	200	143516	1.002	17.82
9J04044-CAL5	500	431745	1.097	17.83
9J04044-CAL6	1000	869229	1.128	17.84
9J04044-CAL7	2000	1820276	1.189	17.84
9J04044-CAL8	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

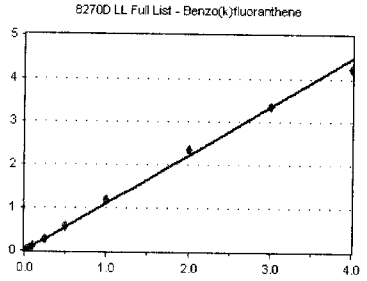
AVE RF **1.053** RF RSD **19.14** AVE RT **17.90**

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

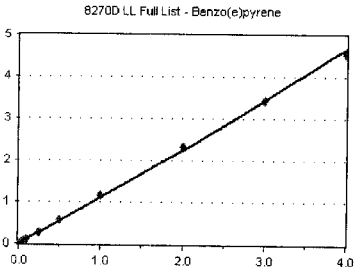


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

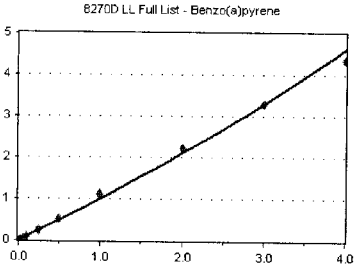


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

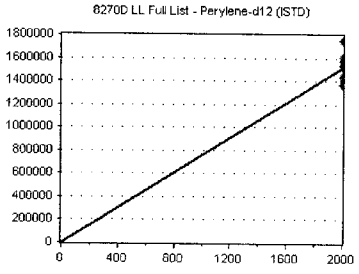


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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**

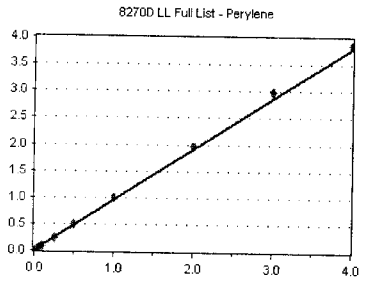
Element Calibration Review Sheet

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**

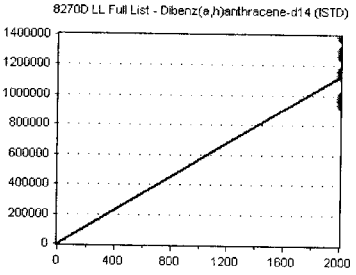


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11719	0.840	18.80
9J04044-CAL2	50	30740	0.896	18.80
9J04044-CAL3	100	67790	0.943	18.80
9J04044-CAL4	200	136499	0.953	18.81
9J04044-CAL5	500	381970	0.970	18.81
9J04044-CAL6	1000	763348	0.991	18.81
9J04044-CAL7	2000	1526620	0.997	18.82
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**

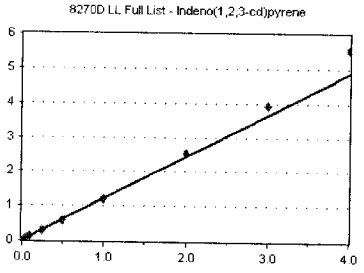


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	2000	965193	482.597	21.14
9J04044-CAL2	2000	939849	469.924	21.14
9J04044-CAL3	2000	1002236	501.118	21.14
9J04044-CAL4	2000	986187	493.093	21.14
9J04044-CAL5	2000	1136524	568.262	21.15
9J04044-CAL6	2000	1155569	577.784	21.15
9J04044-CAL7	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**

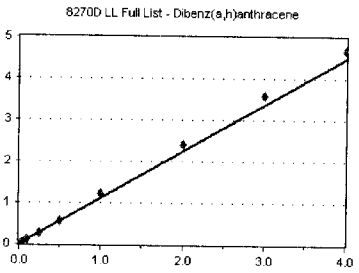


Standard	Concentration	Response	Response Factor	RT
9J04044-CAL1	20	11018	1.142	21.13
9J04044-CAL2	50	26678	1.135	21.14
9J04044-CAL3	100	57510	1.148	21.13
9J04044-CAL4	200	117055	1.187	21.14
9J04044-CAL5	500	341703	1.203	21.15
9J04044-CAL6	1000	688131	1.191	21.15
9J04044-CAL7	2000	1413571	1.212	21.16
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**

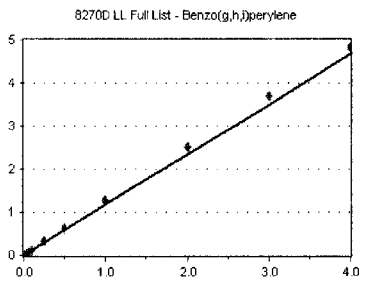
Element Calibration Review Sheet

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
1	20	20	2000	Z:\DATA\2019-10\9J04044\E10041908.D
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

Response Factor 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

JK 10/7/19

Calibration Files
20 =E10041908.D 50 =E10041909.D 100 =E10041910.D 200 =E10041911.D 500 =E10041912.D 1000=E10041913.D 2000=E10041914.D
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

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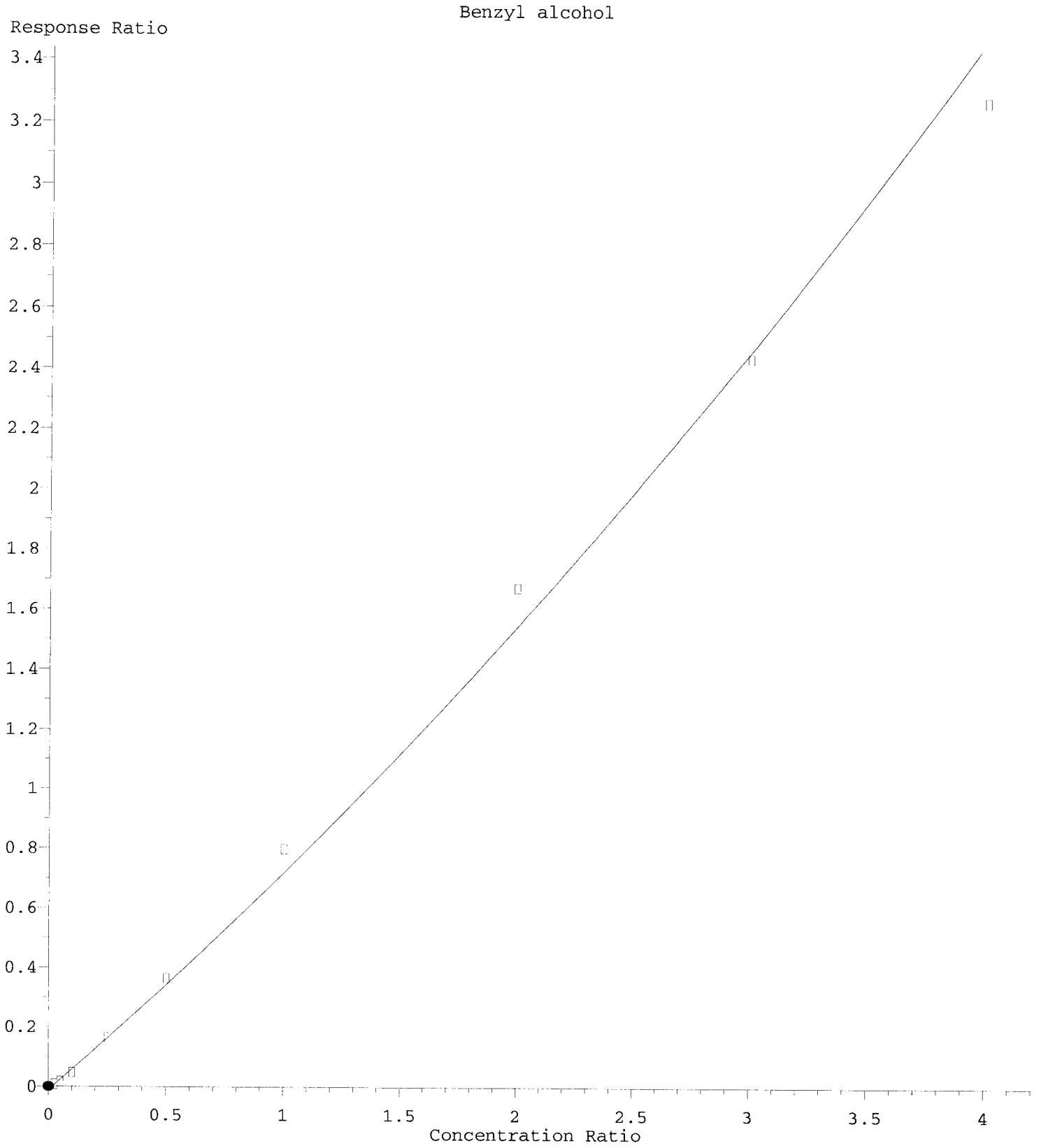
40)	S	2-Fluorobiphen...	1.443	1.524	1.584	1.596	1.581	1.524	1.537	1.463	1.410	1.319	1.498	5.91
41)	T	2-Chloronaphth...	1.253	1.299	1.335	1.359	1.339	1.295	1.308	1.249	1.209	1.133	1.278	5.38
42)	T	2-Nitroaniline		0.173	0.202	0.243	0.336	0.366	0.408	0.431	0.431	0.426	0.335	30.82
43)	T	2,6-Dimethylna...	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

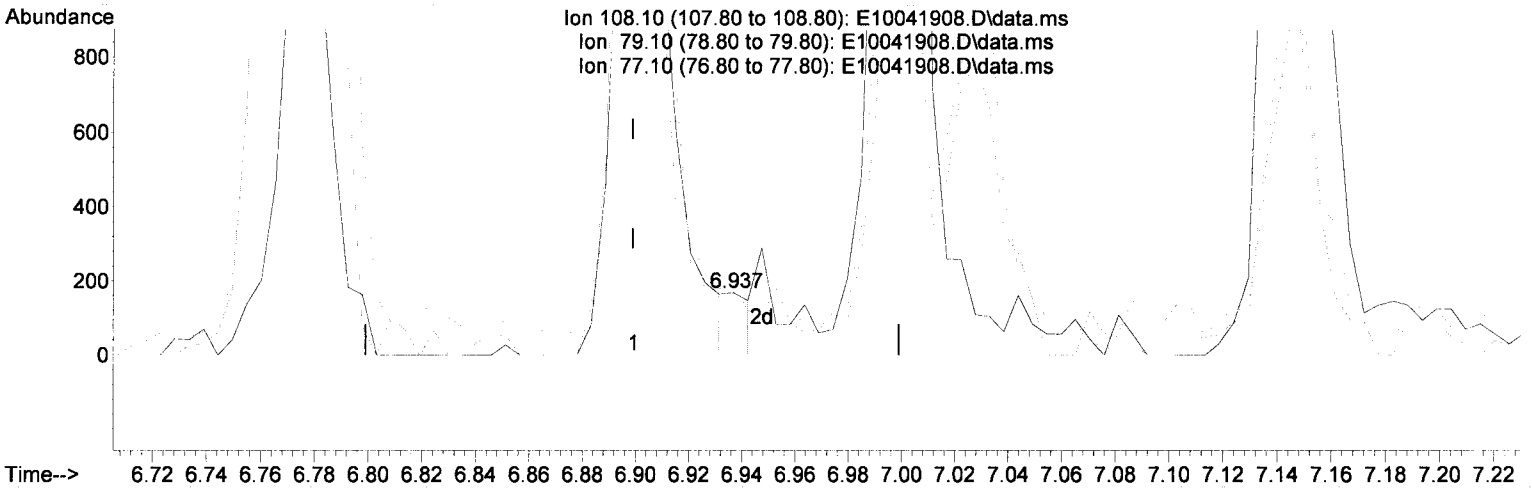


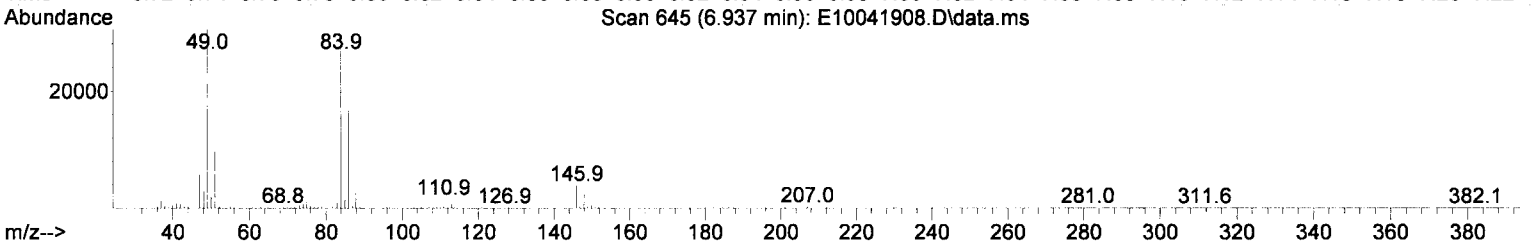
R = 4.64e-002 A*A + 6.84e-001 A - 1.19e-002
Coef of Det (r^2) = 0.987 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

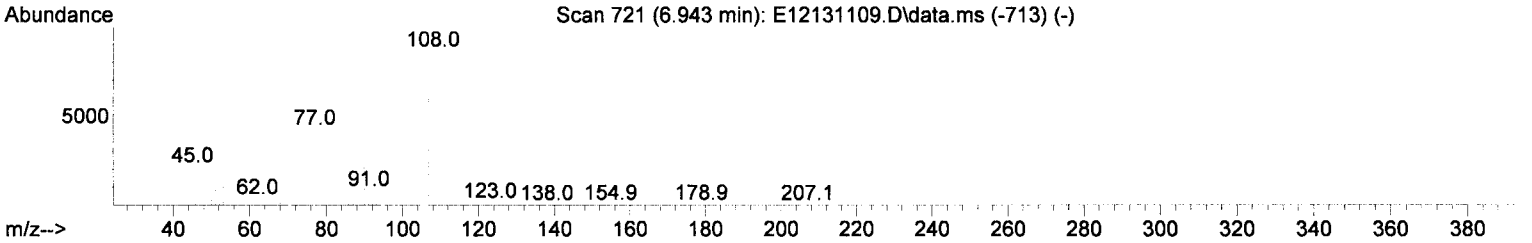
Quantitation Report (Qedit)

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







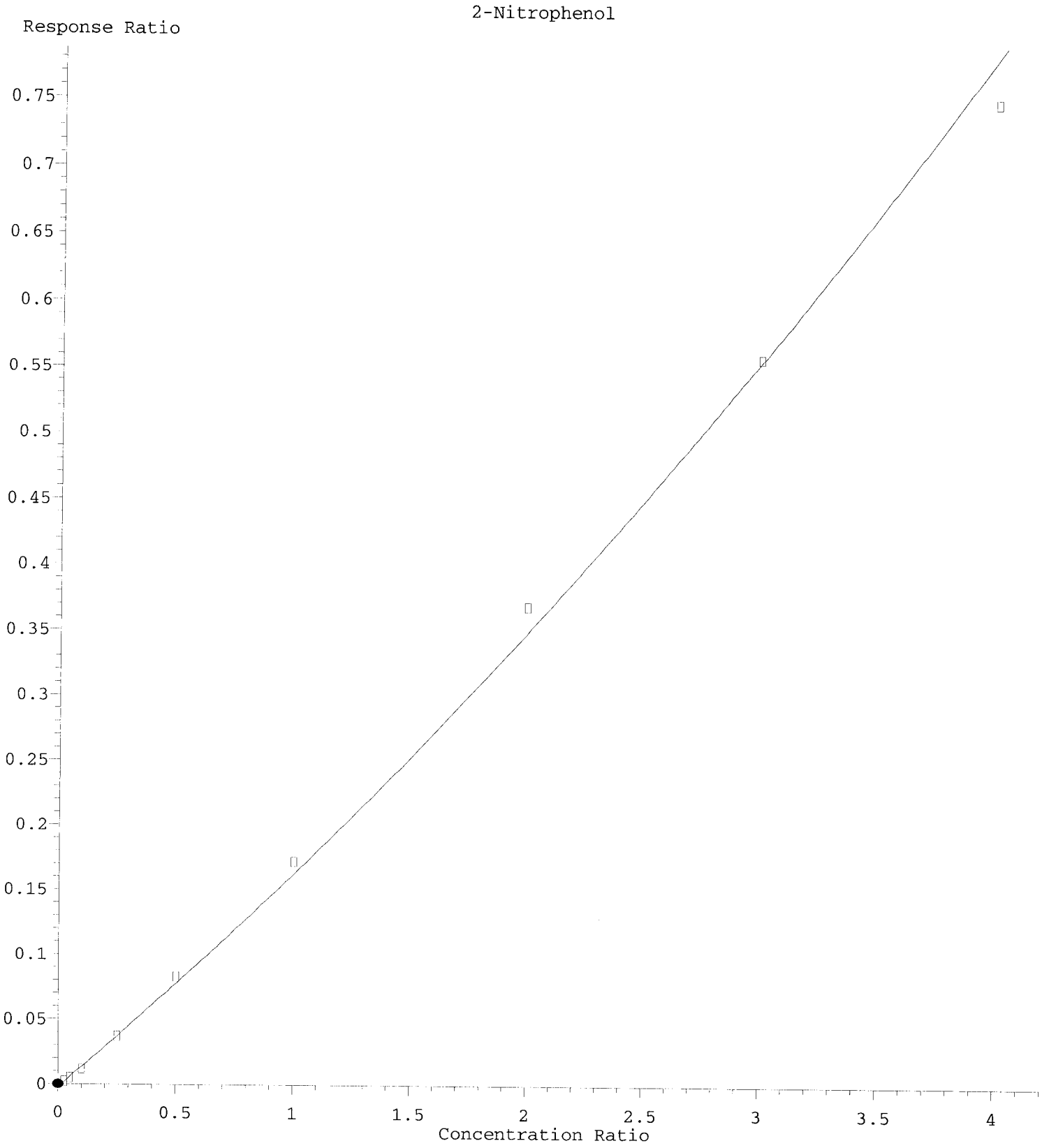
TIC: E10041908.D\data.ms

(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

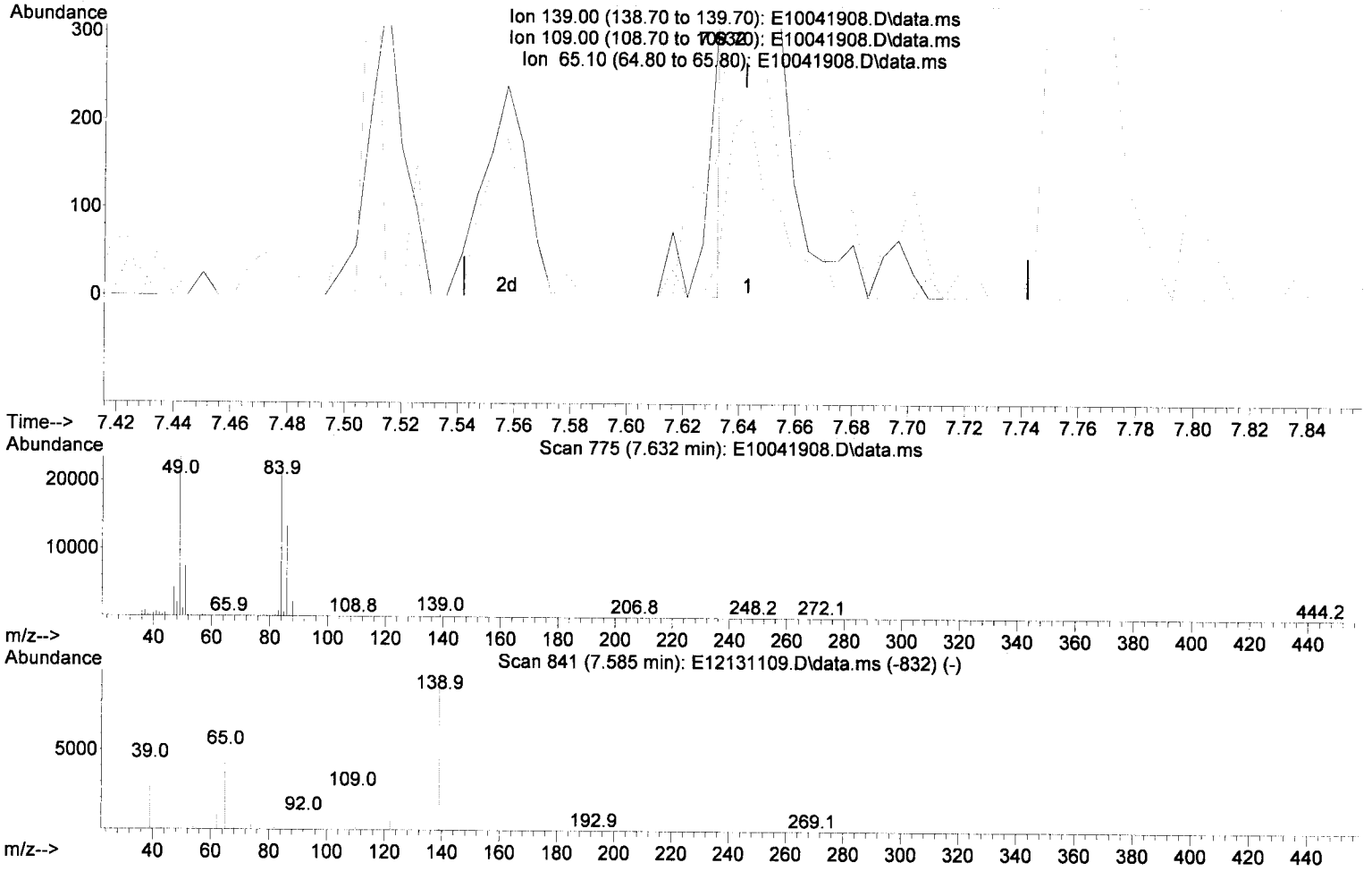


R = 1.05e-002 A*A + 1.54e-001 A - 2.13e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/1/(a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



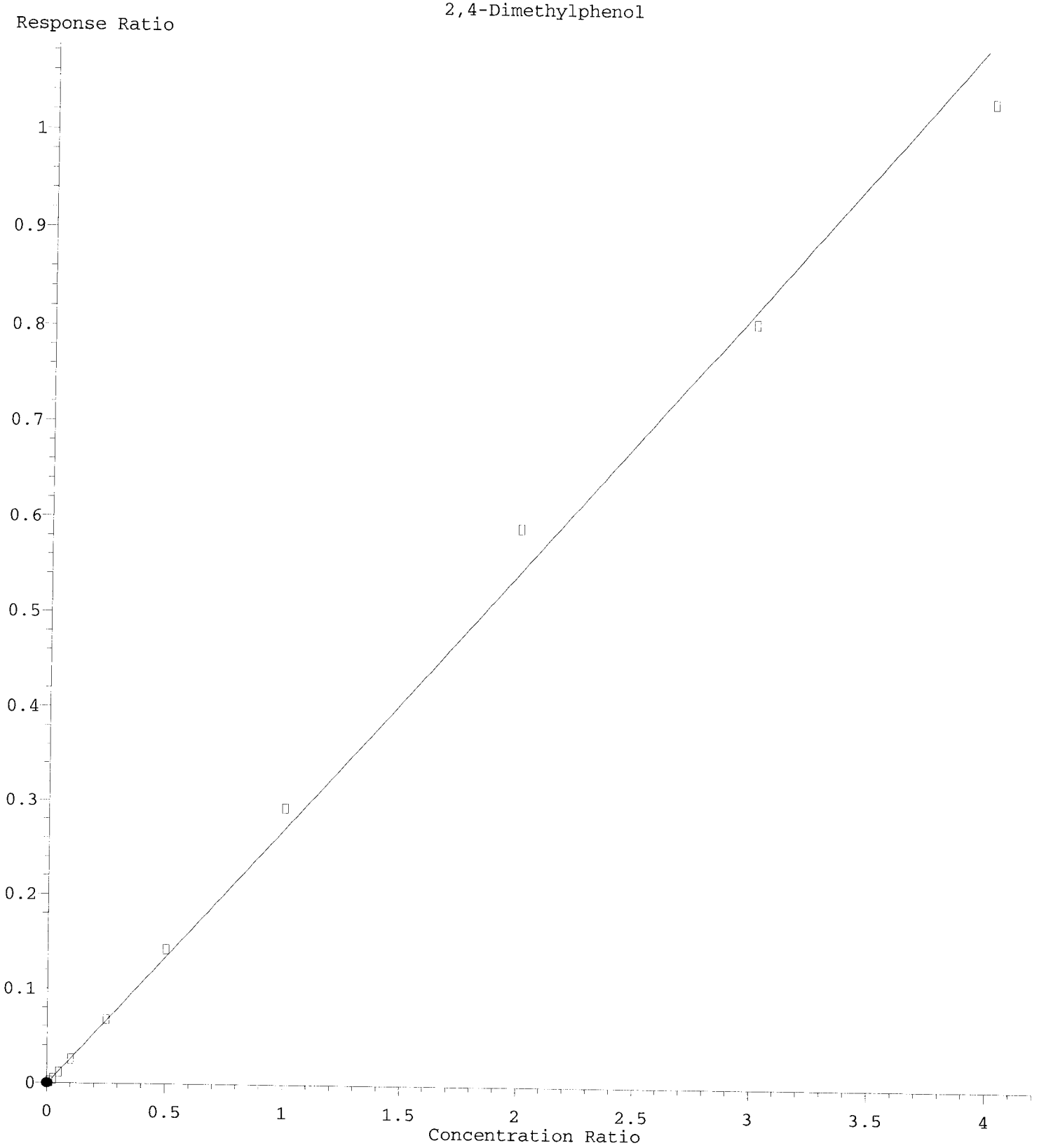
TIC: E10041908.D\data.ms

(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

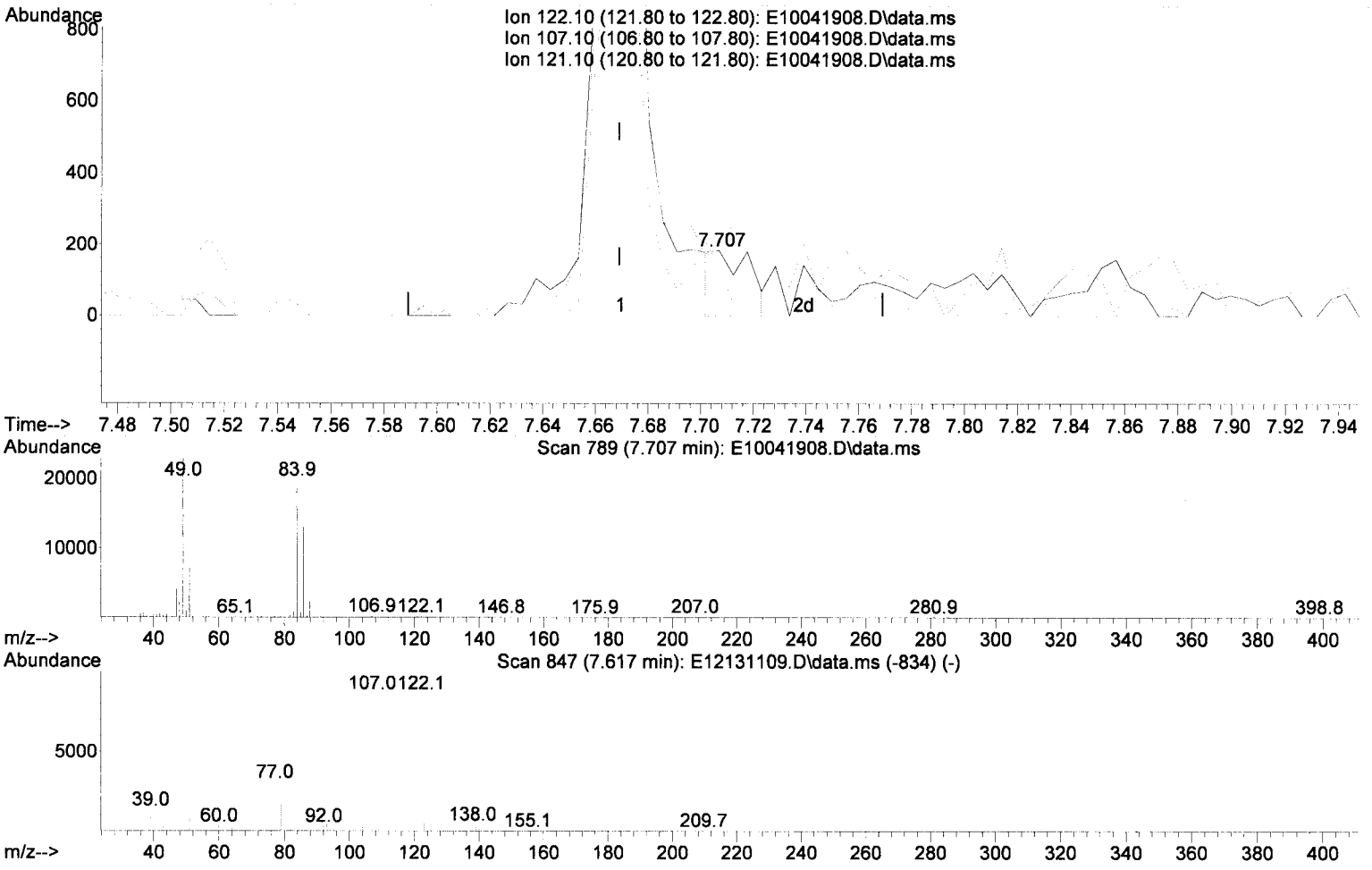


R = 8.35e-004 A*A + 2.71e-001 A - 1.40e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



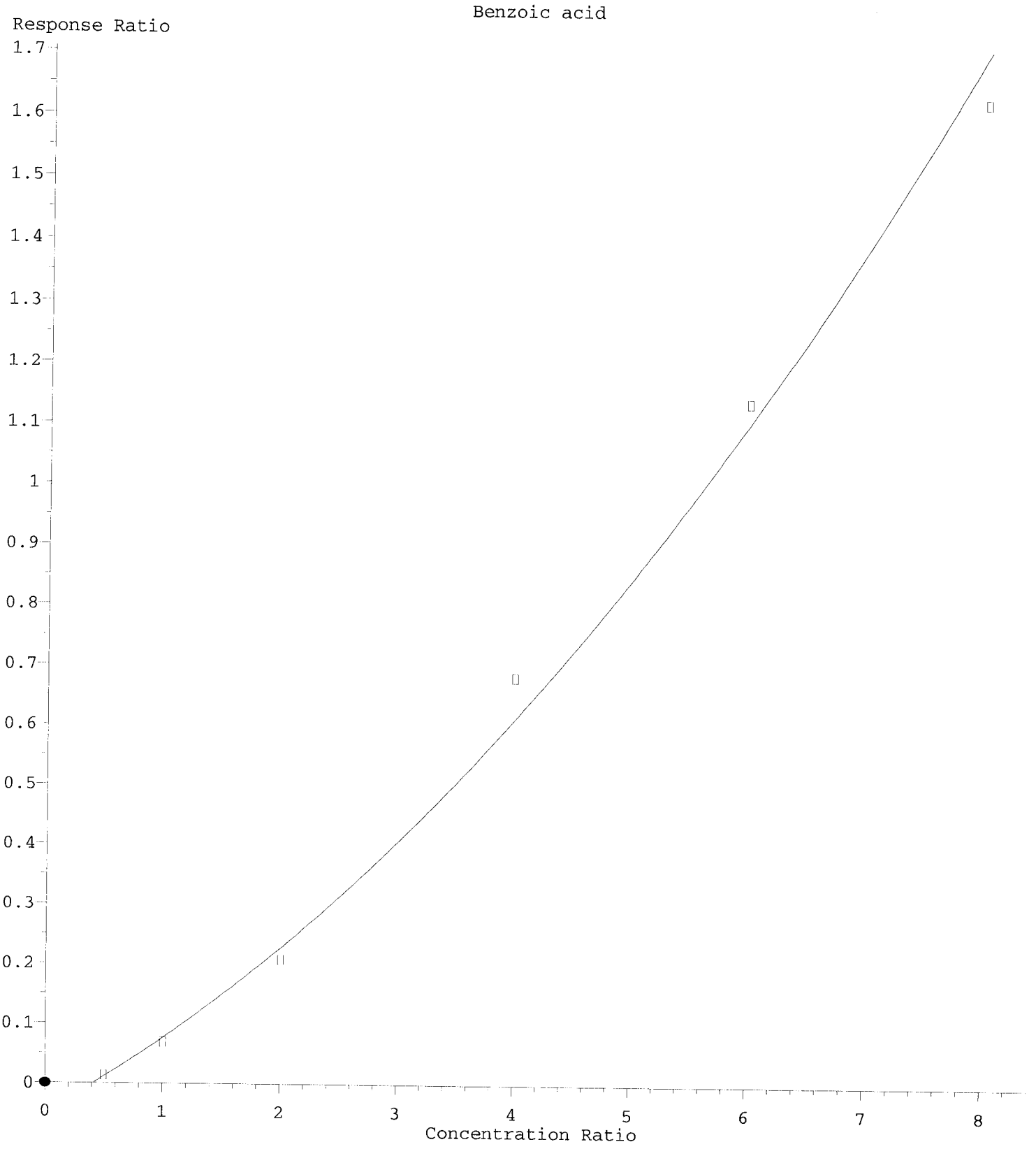
TIC: E10041908.D\data.ms

(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

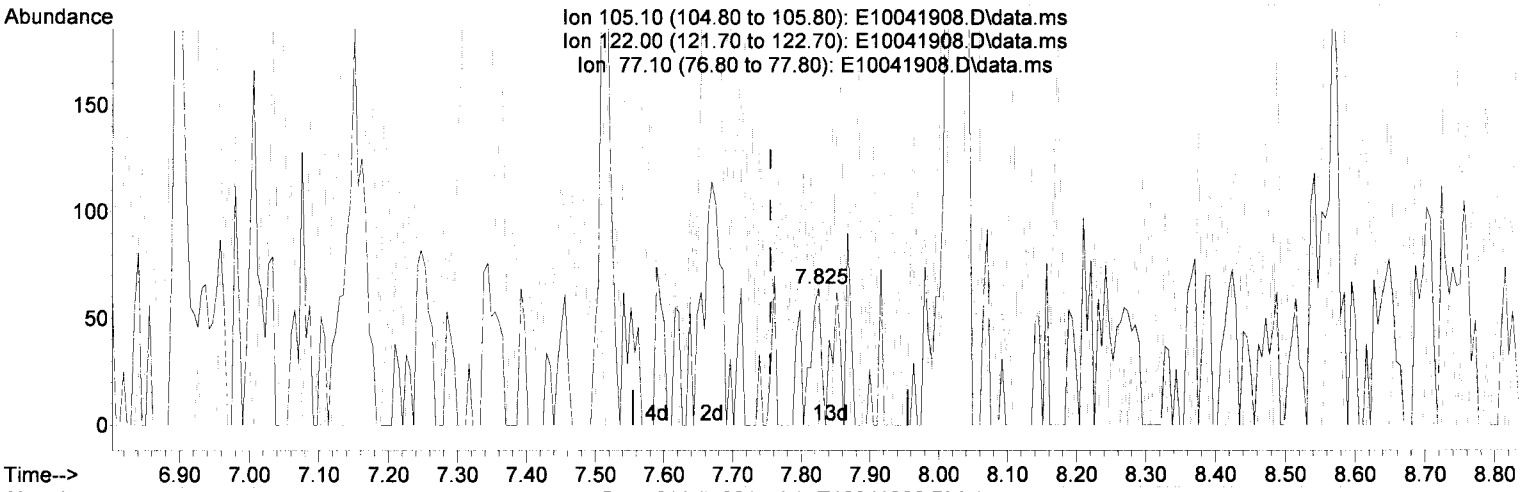


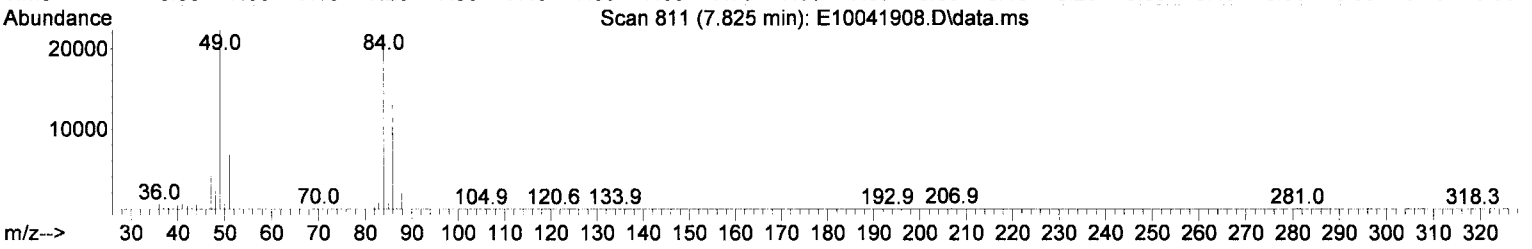
R = 1.35e-002 A*A + 1.11e-001 A - 4.76e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

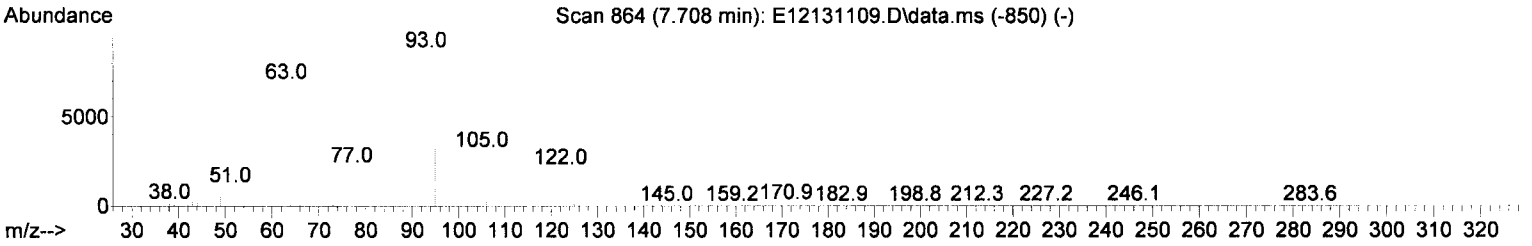
Quantitation Report (Qedit)

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







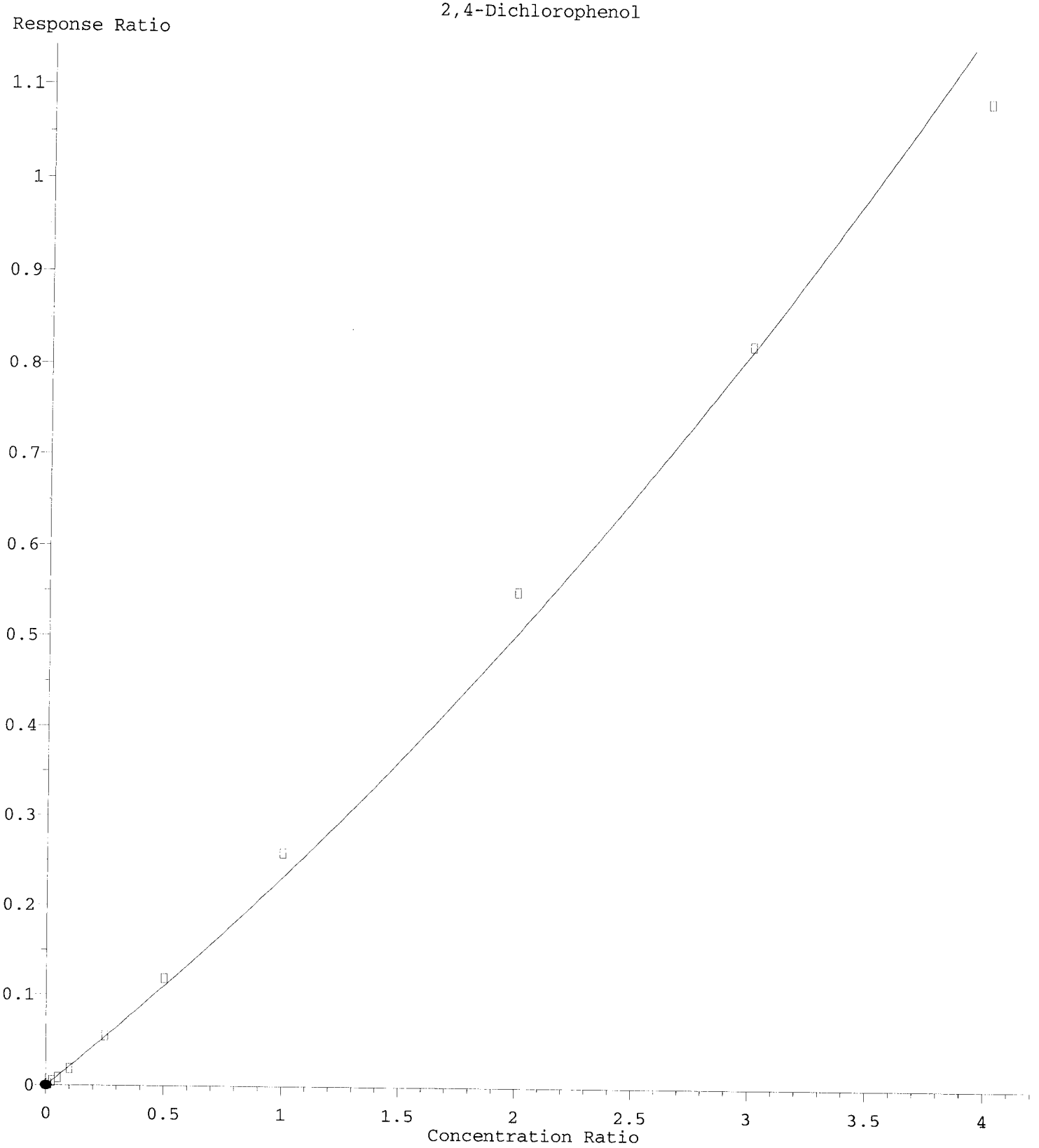
TIC: E10041908.D\data.ms

(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

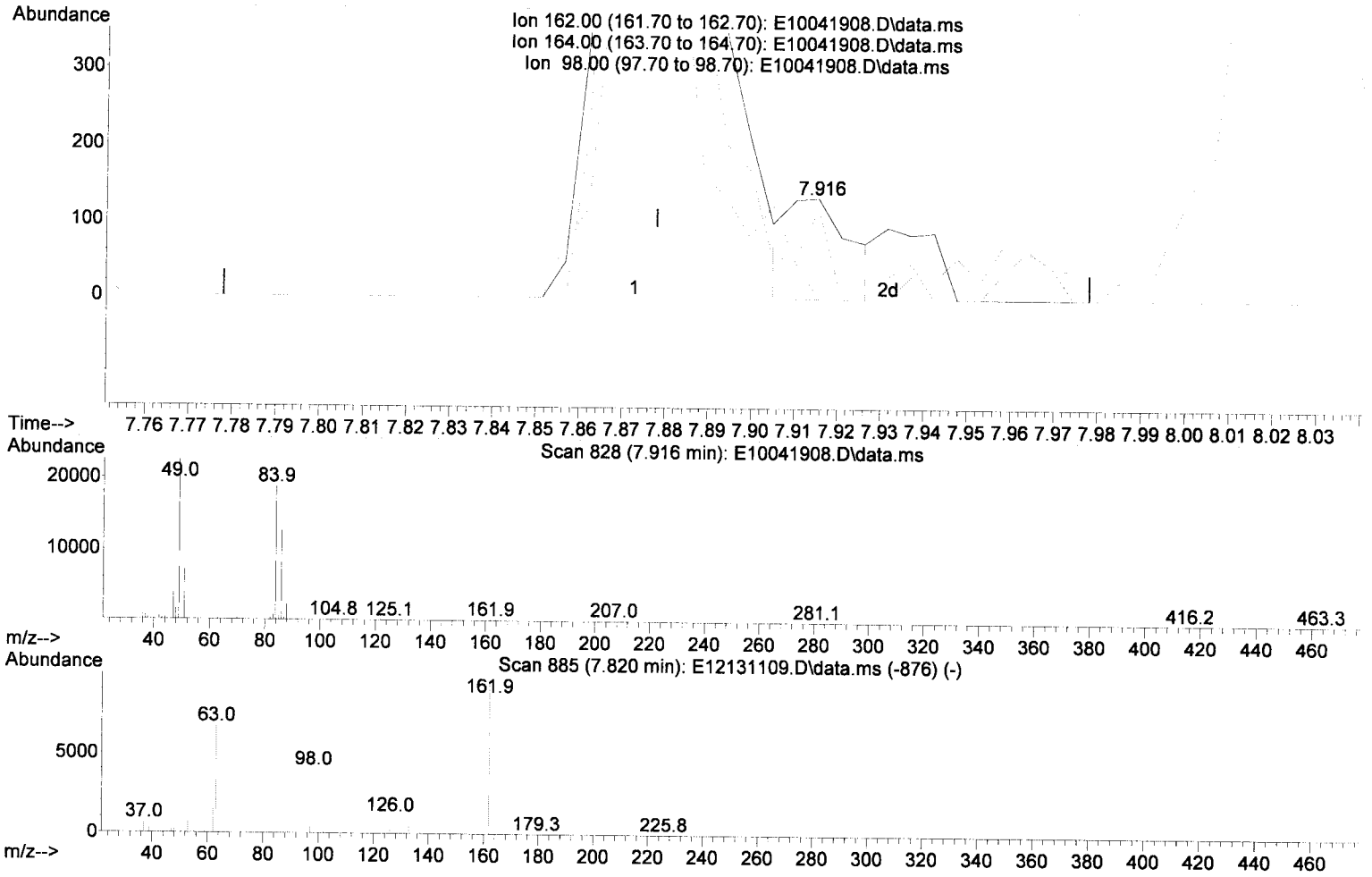


R = 2.01e-002 A*A + 2.13e-001 A - 7.62e-004
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



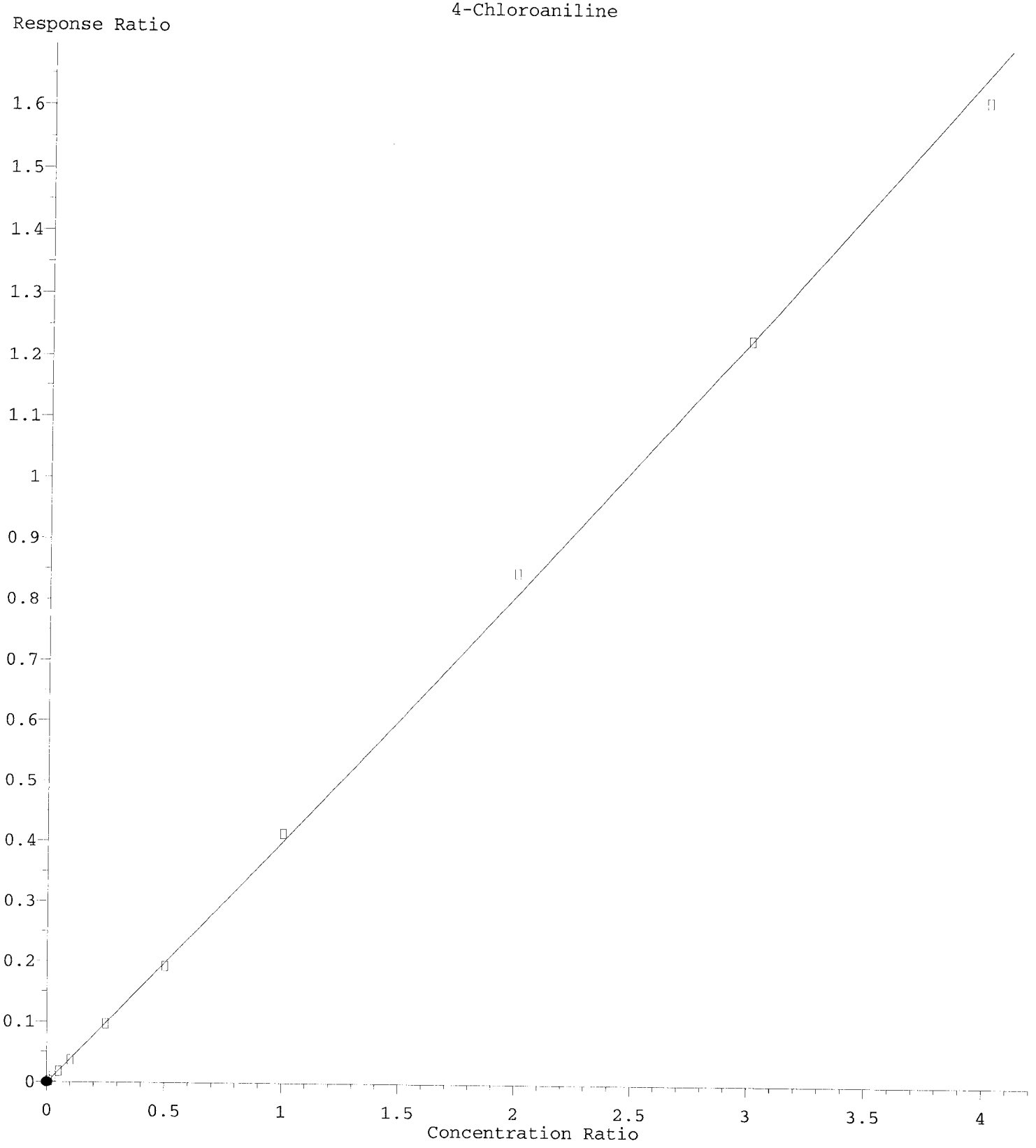
TIC: E10041908.D\data.ms

(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

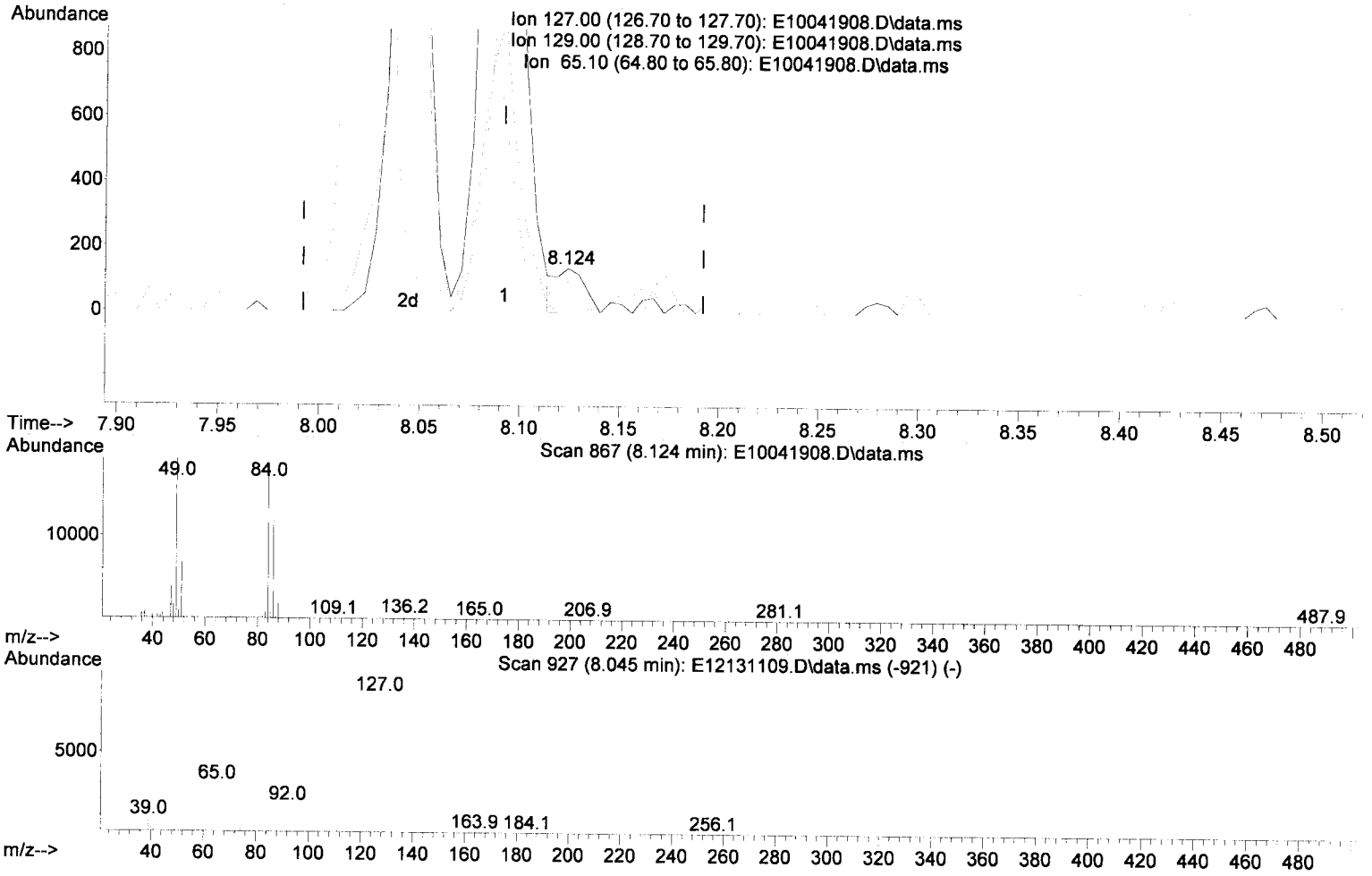


R = 4.06e-003 A*A + 3.98e-001 A - 2.13e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w/1/a^2
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



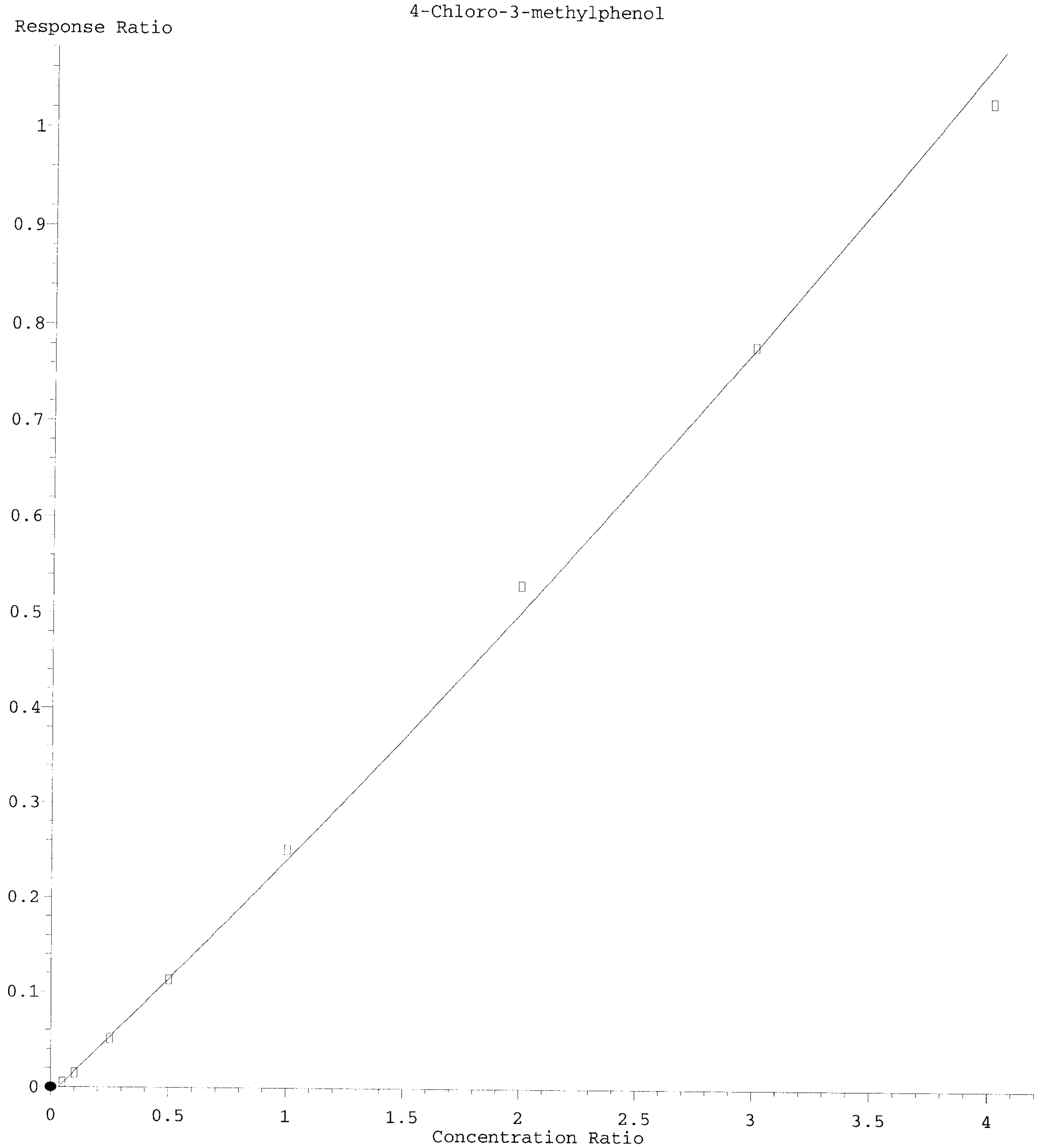
TIC: E10041908.D\data.ms

(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

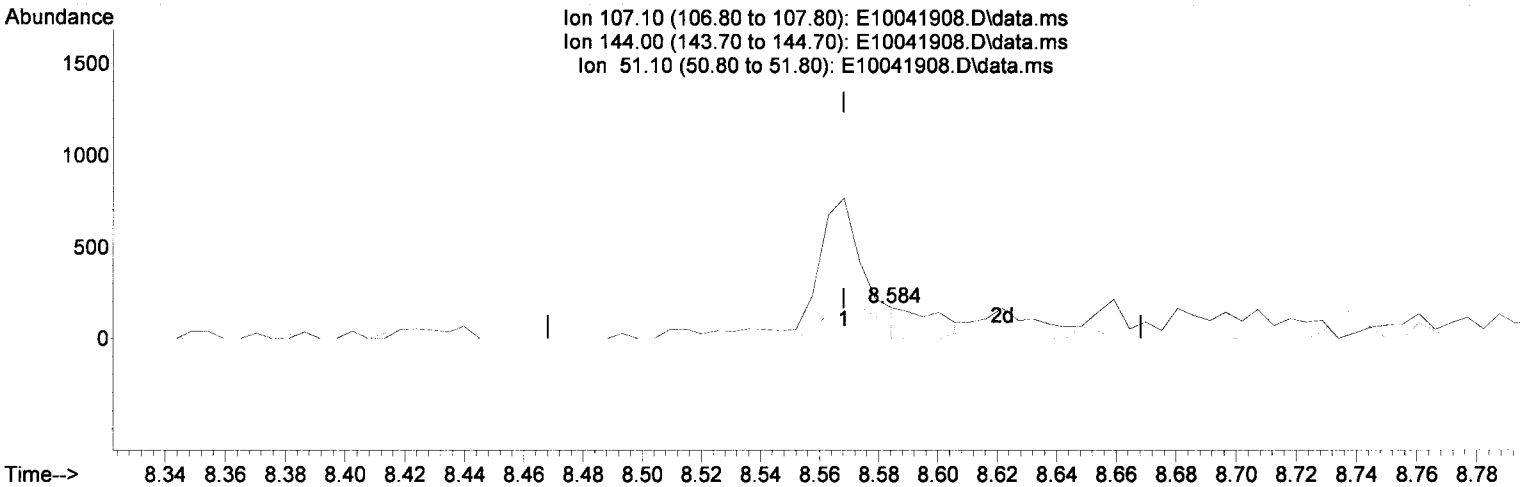


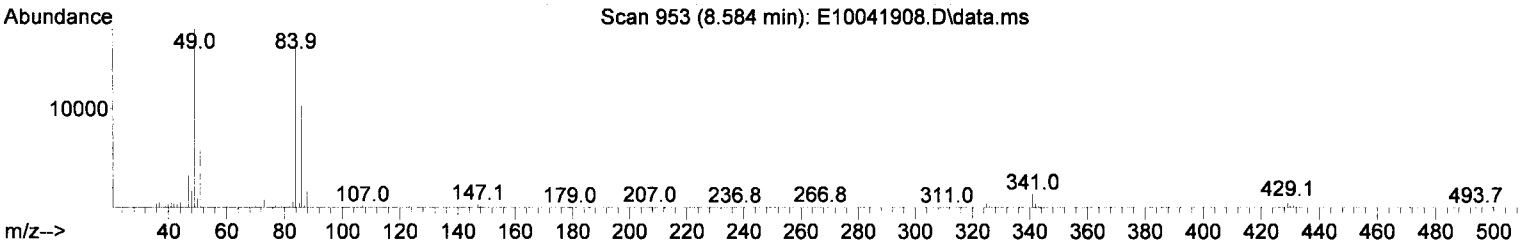
R = 6.84e-003 A*A + 2.41e-001 A - 7.83e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:30:11 2019

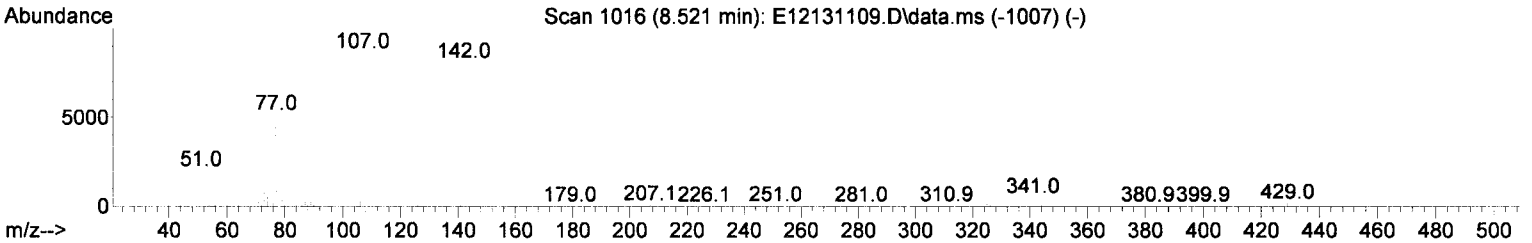
Quantitation Report (Qedit)

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







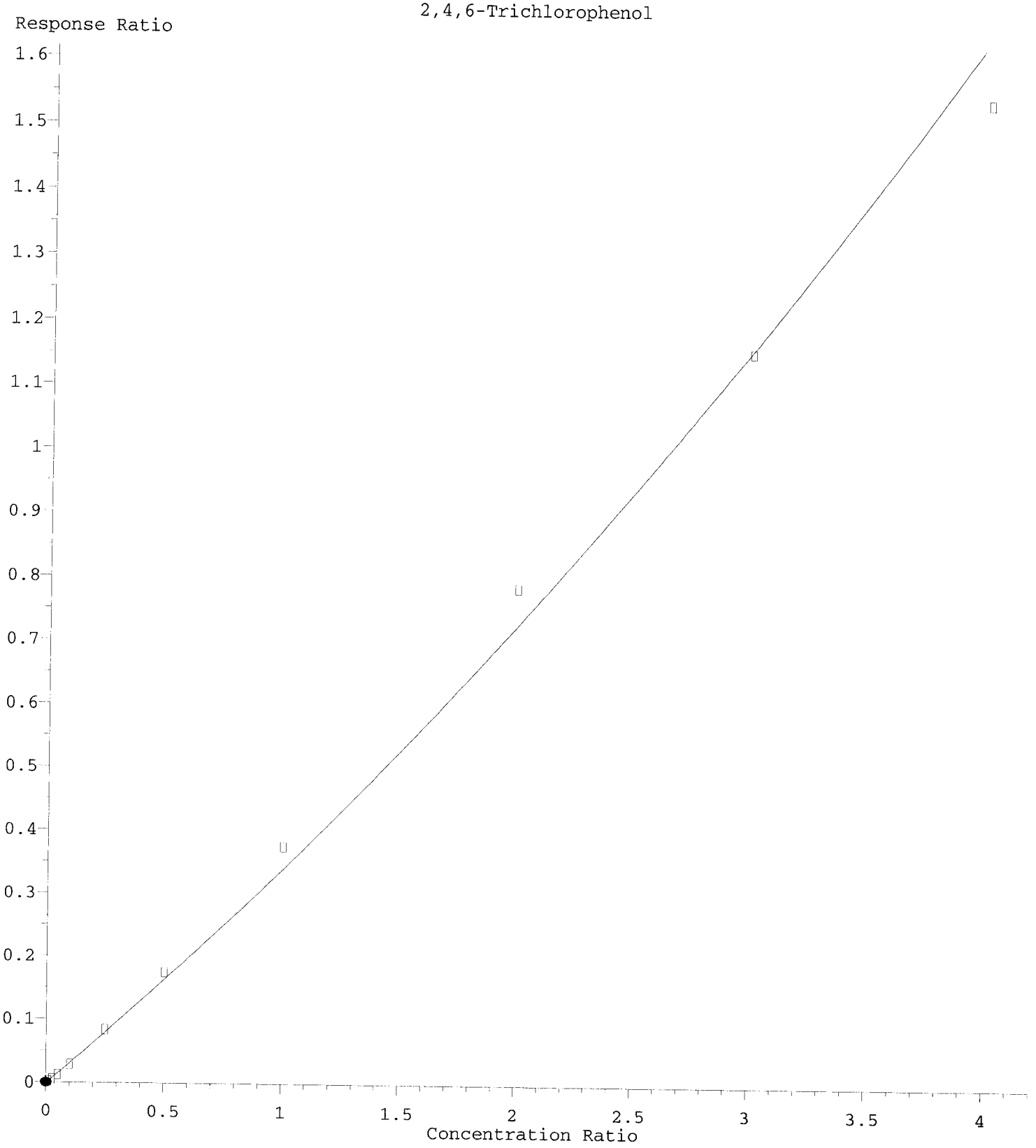
TIC: E10041908.D\data.ms

(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

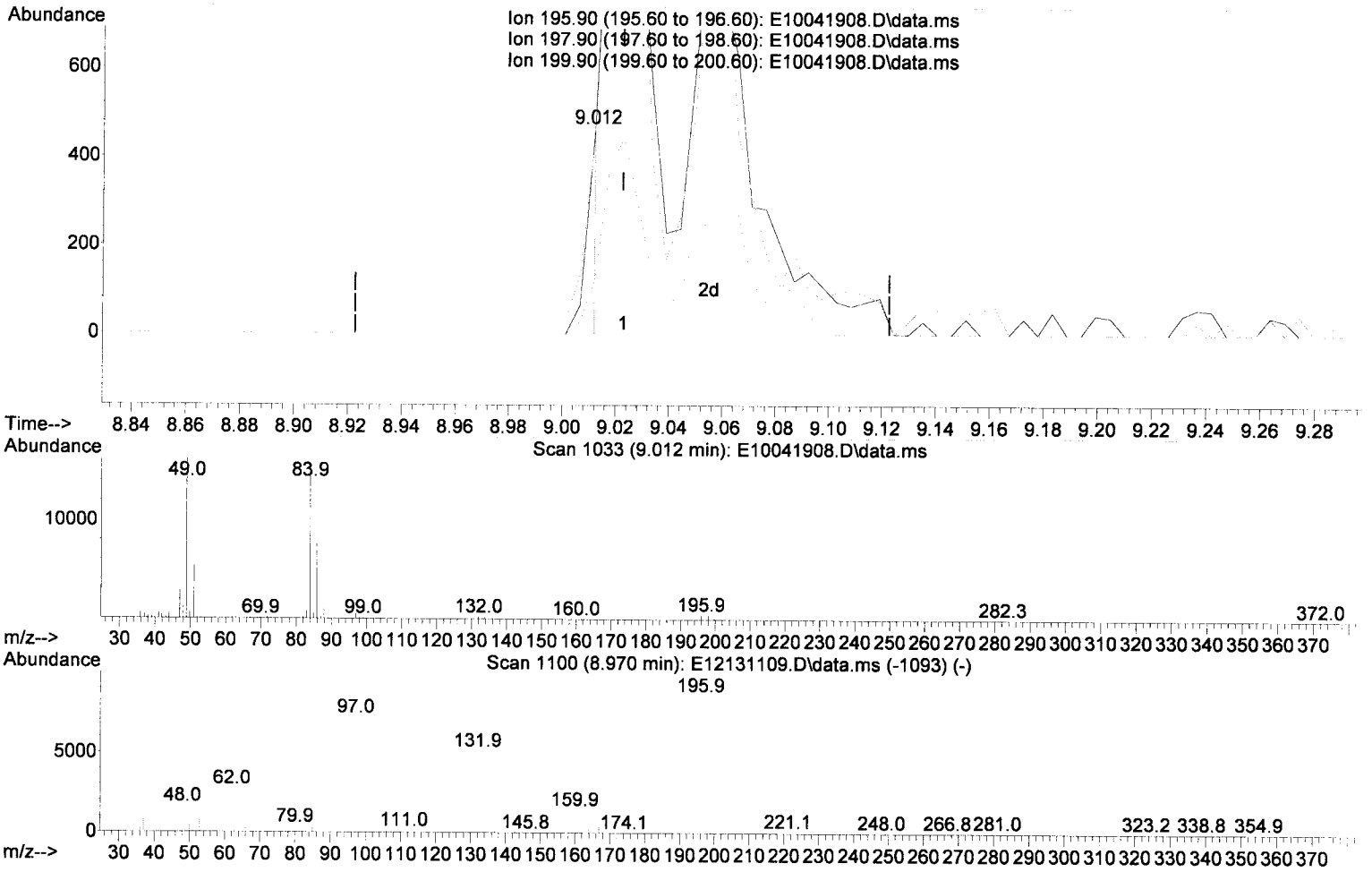


R = 2.28e-002 A*A + 3.19e-001 A - 1.83e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



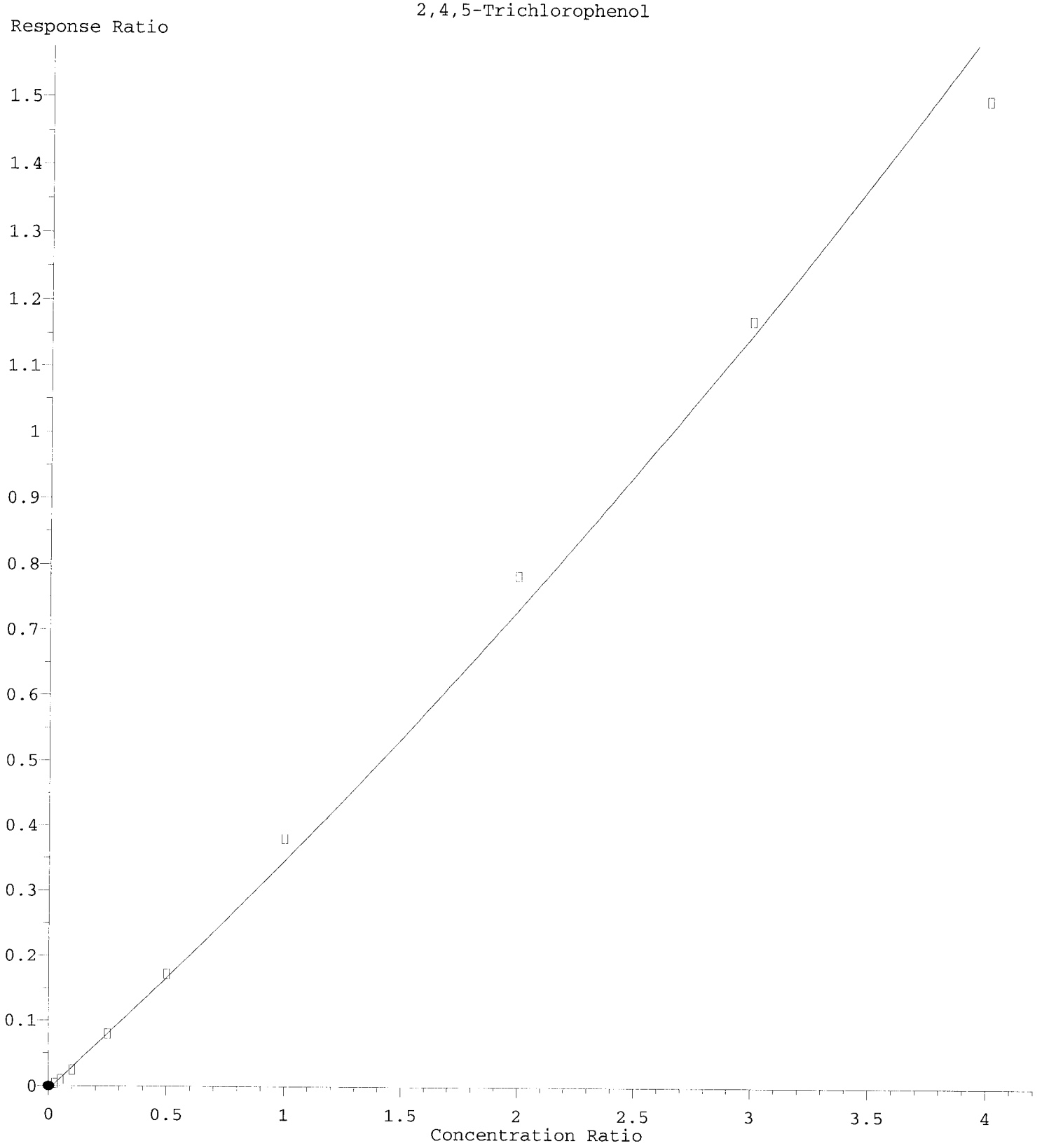
TIC: E10041908.D\data.ms

(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

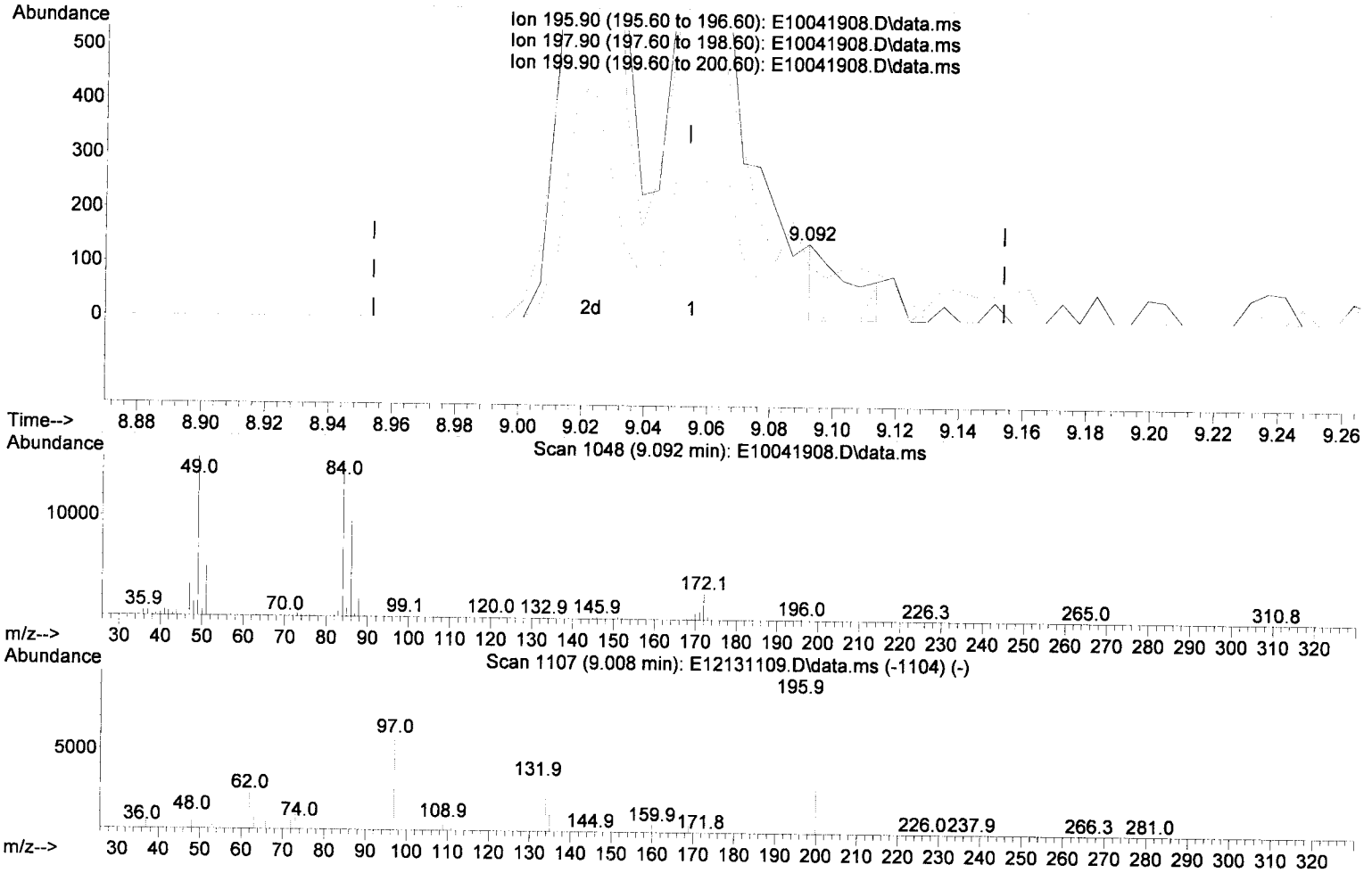


R = 1.71e-002 A*A + 3.34e-001 A - 4.79e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



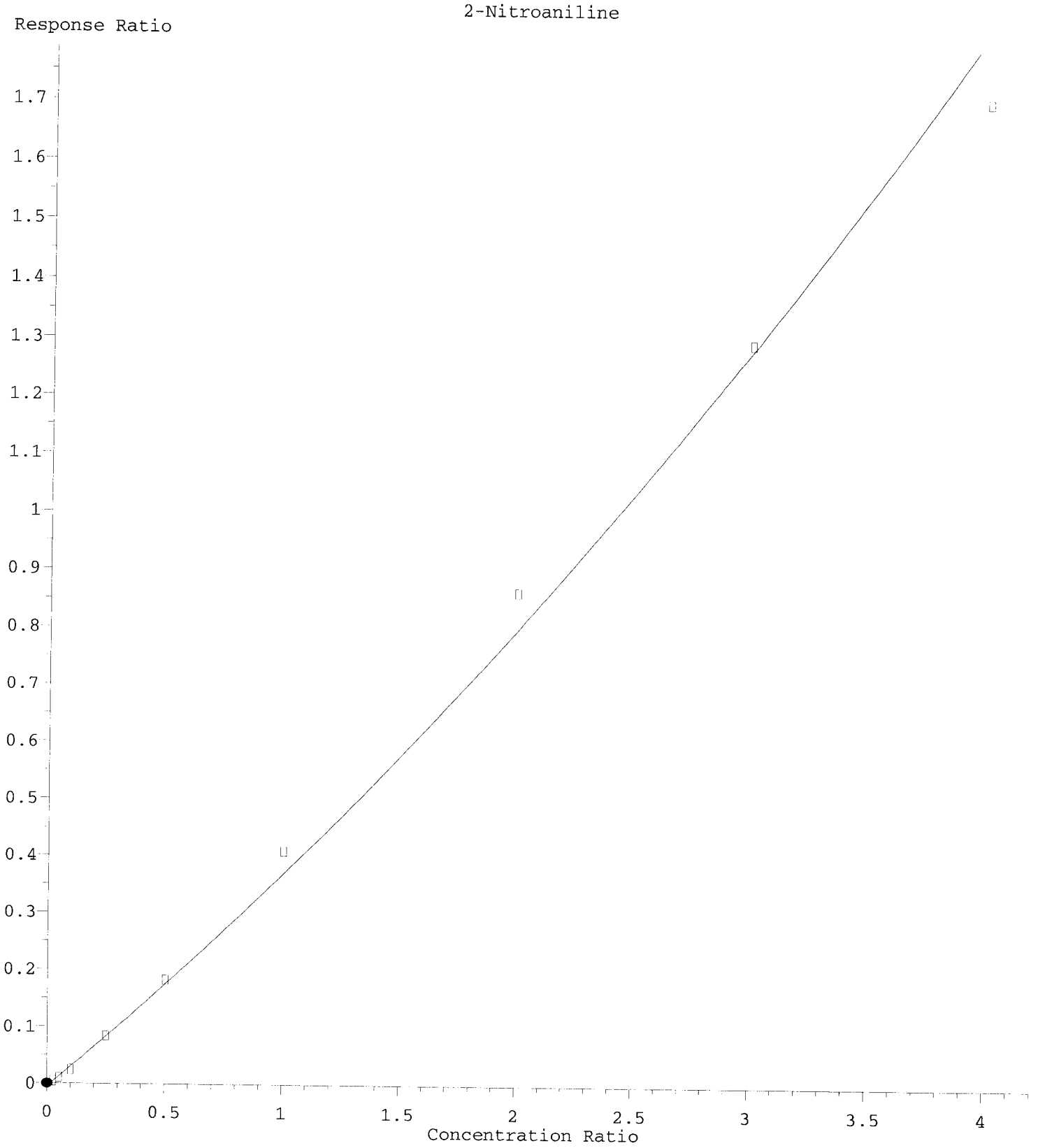
TIC: E10041908.D\data.ms

(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

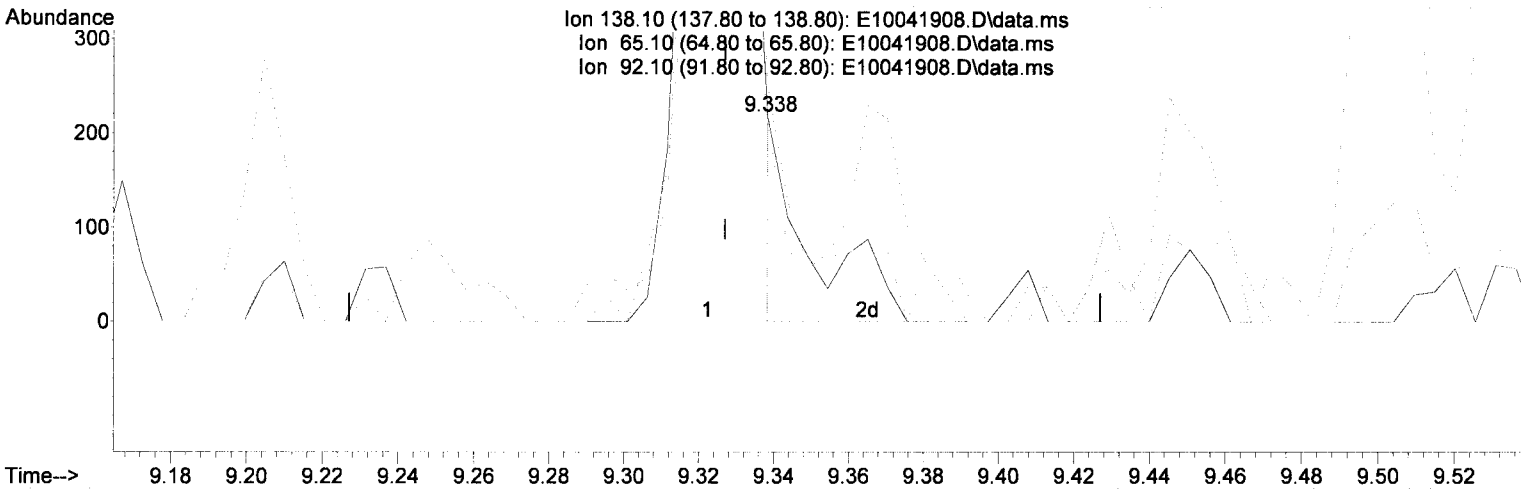


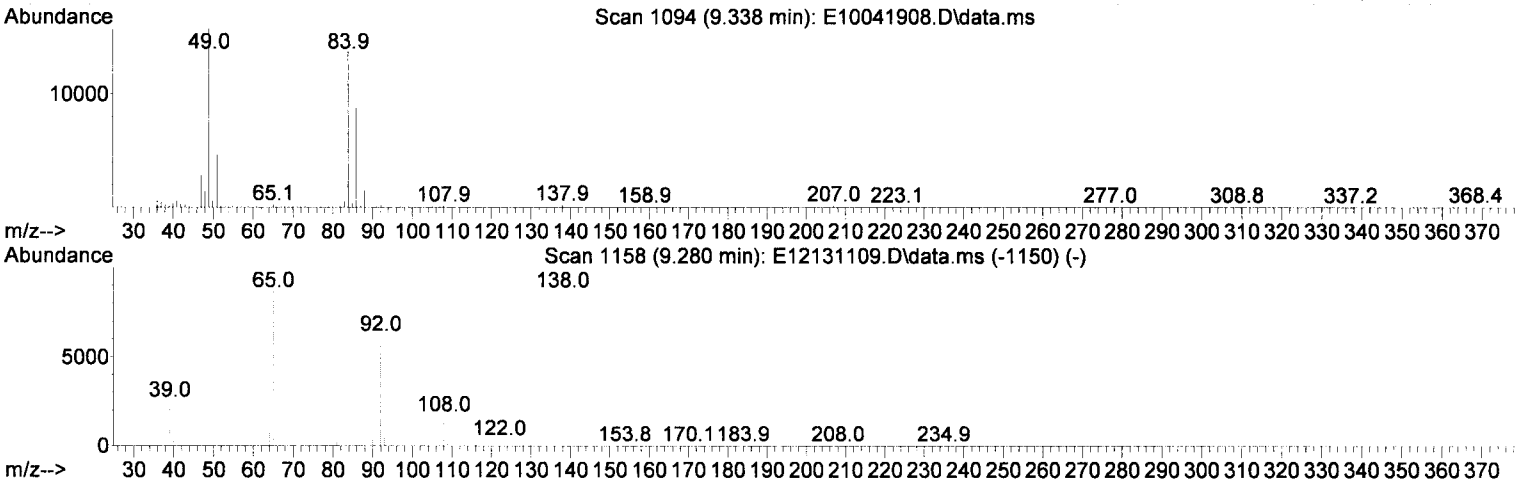
R = 2.73e-002 A*A + 3.47e-001 A - 5.18e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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





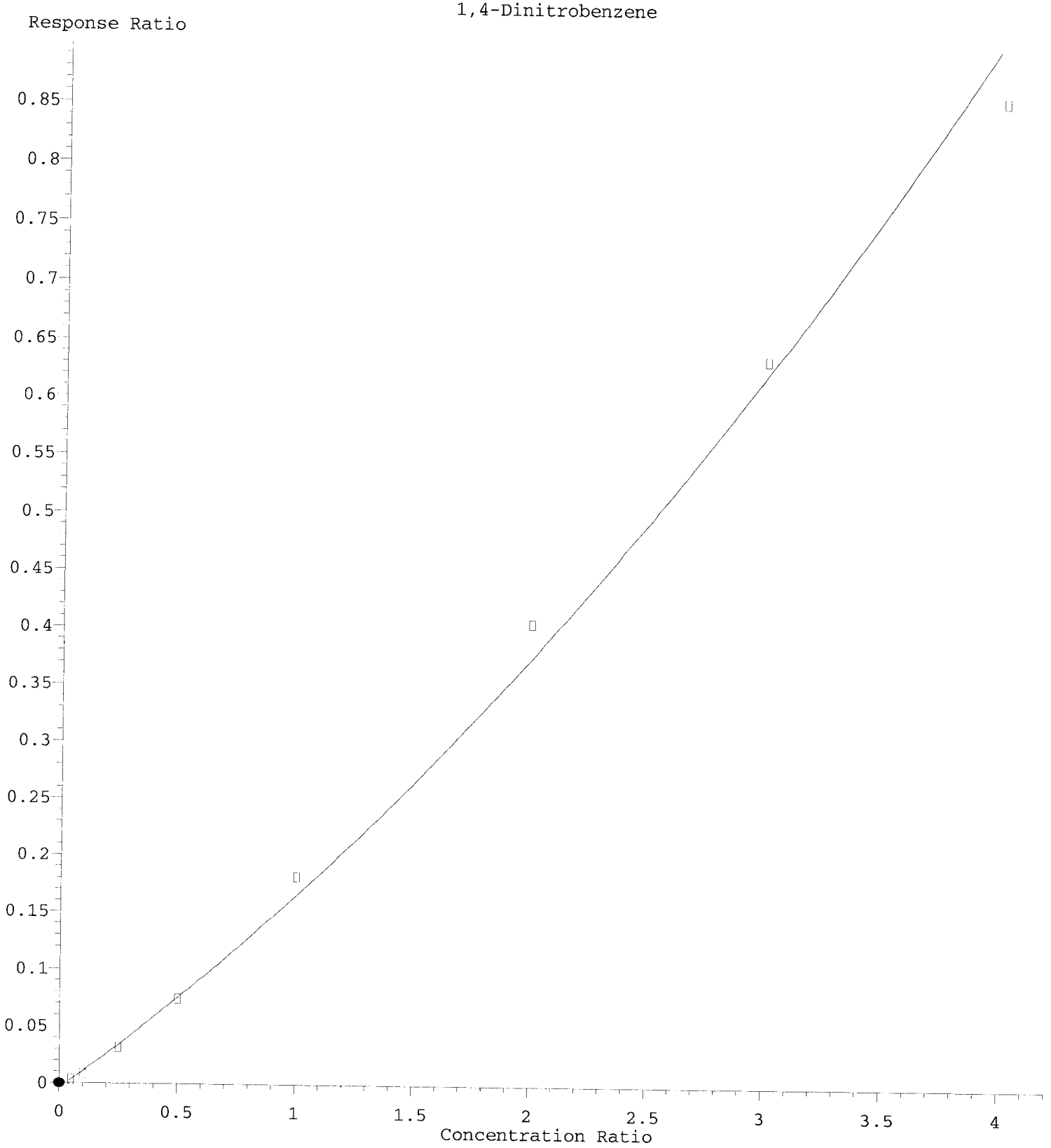
TIC: E10041908.D\data.ms

(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

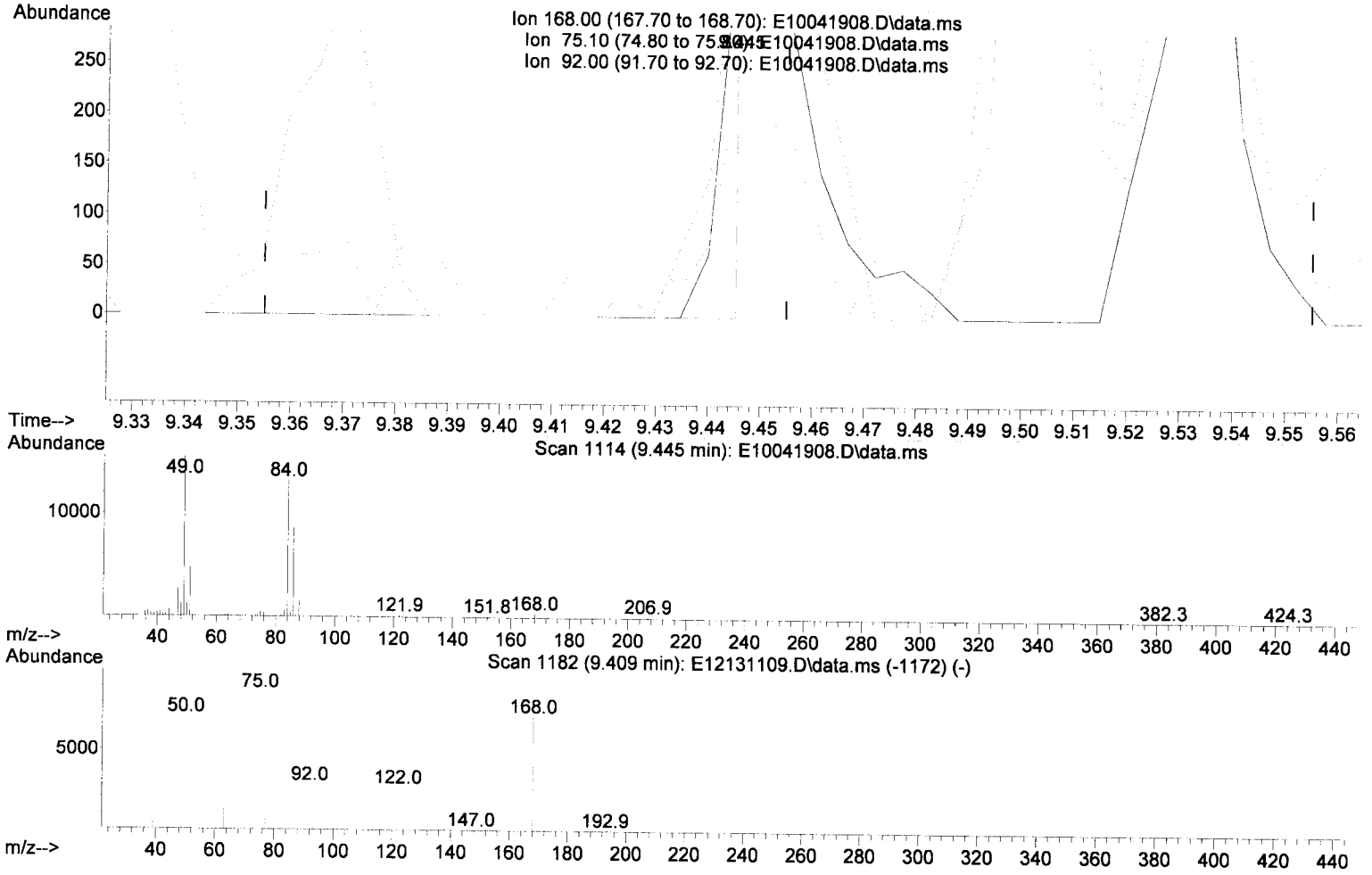


R = 1.93e-002 A*A + 1.51e-001 A - 4.85e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



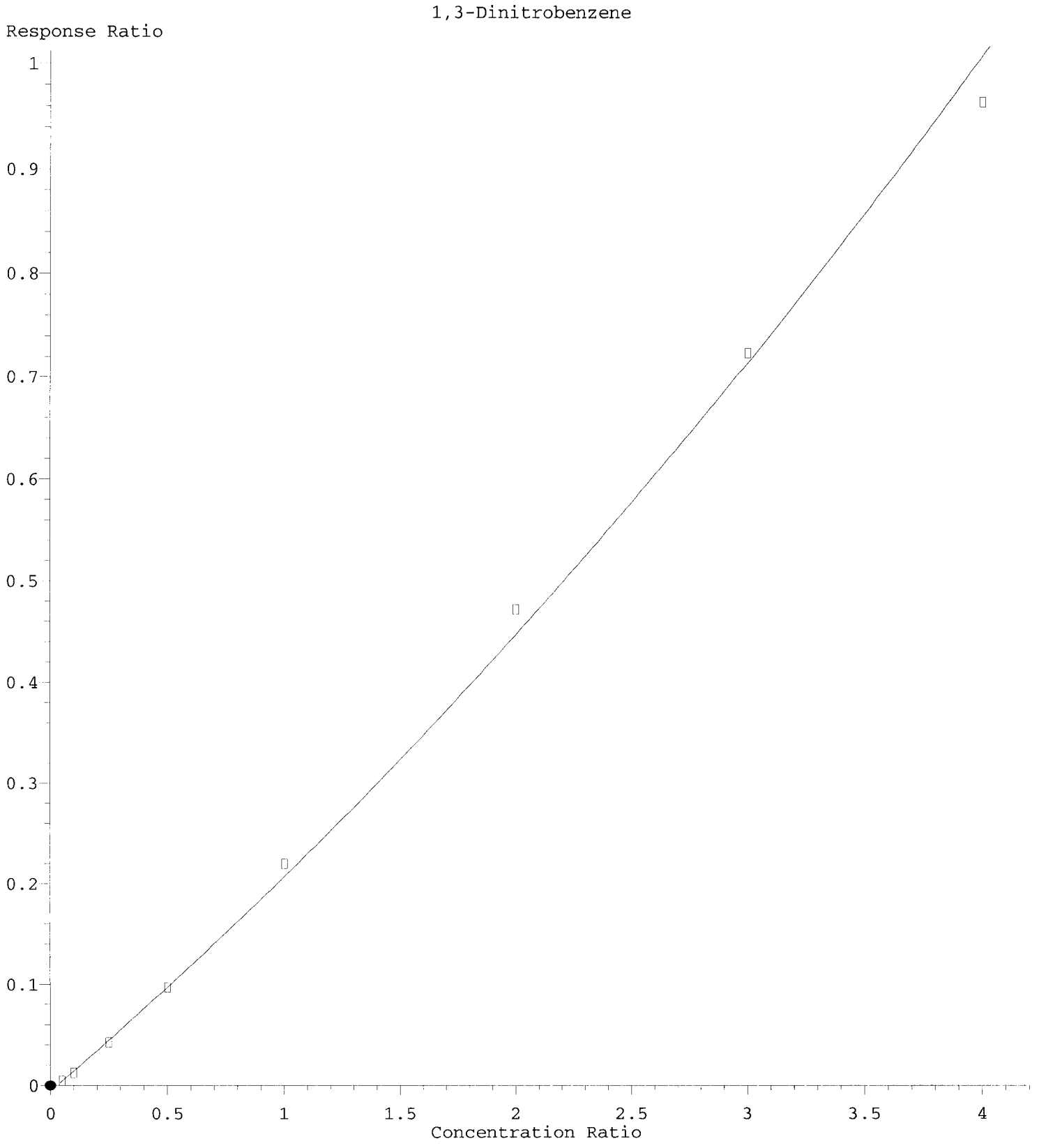
TIC: E10041908.D\data.ms

(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

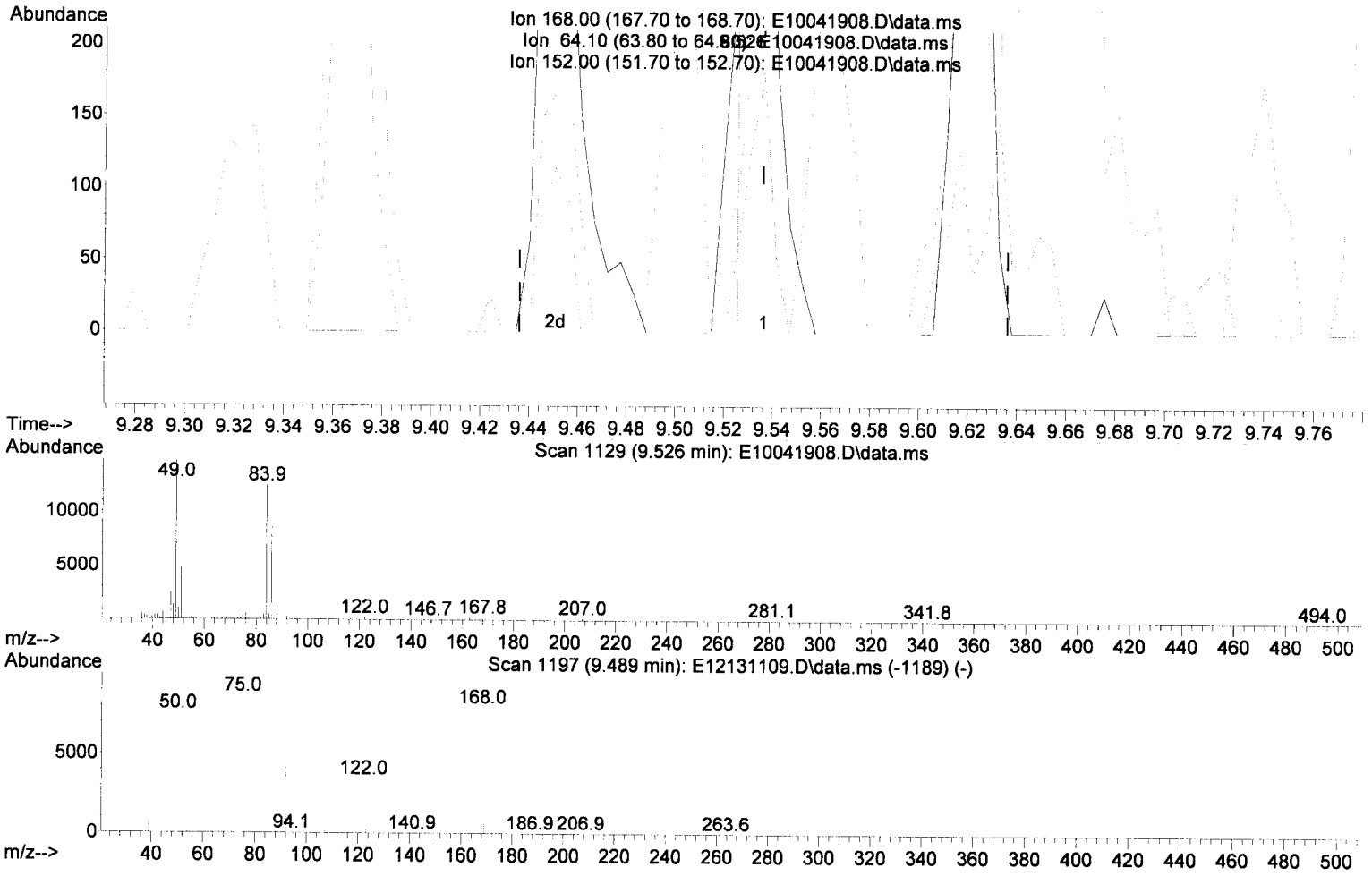


R = 1.36e-002 A*A + 1.99e-001 A - 5.92e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



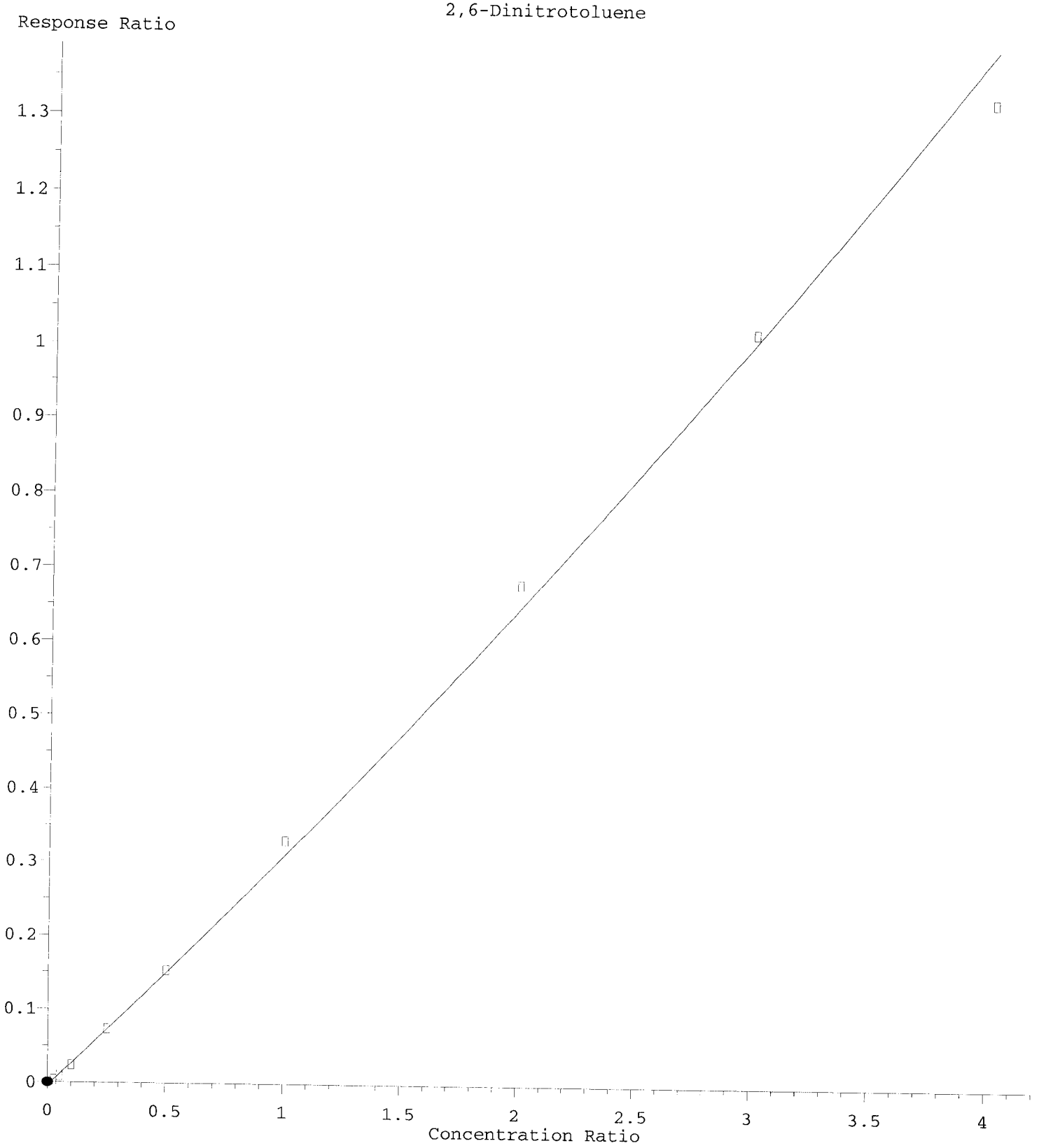
TIC: E10041908.D\data.ms

(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

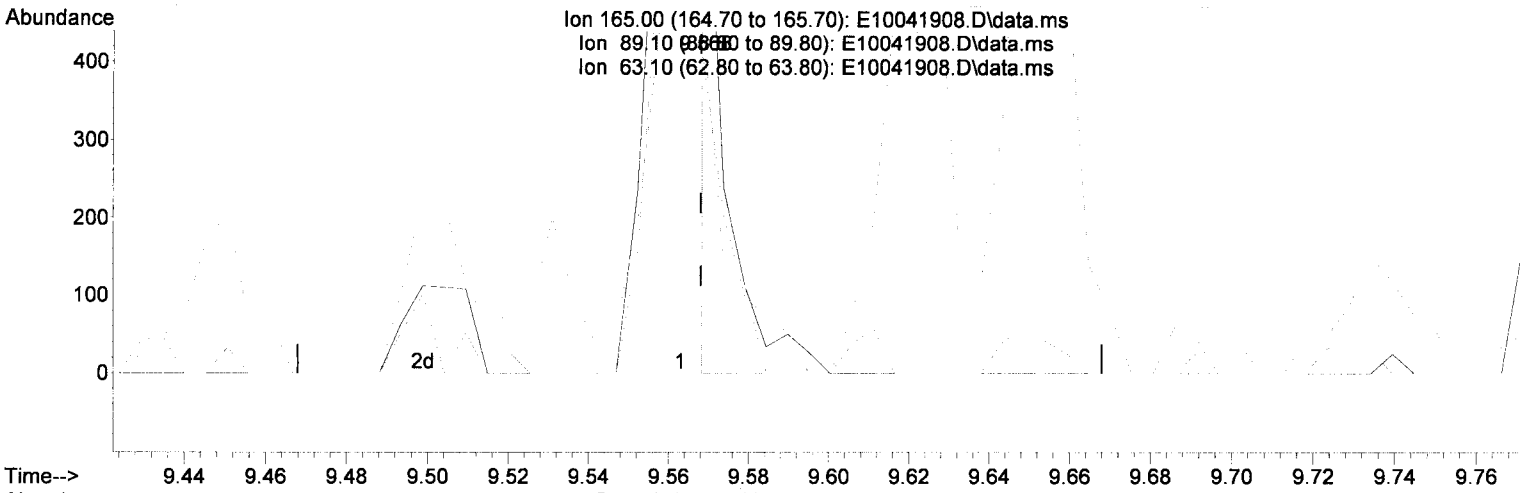


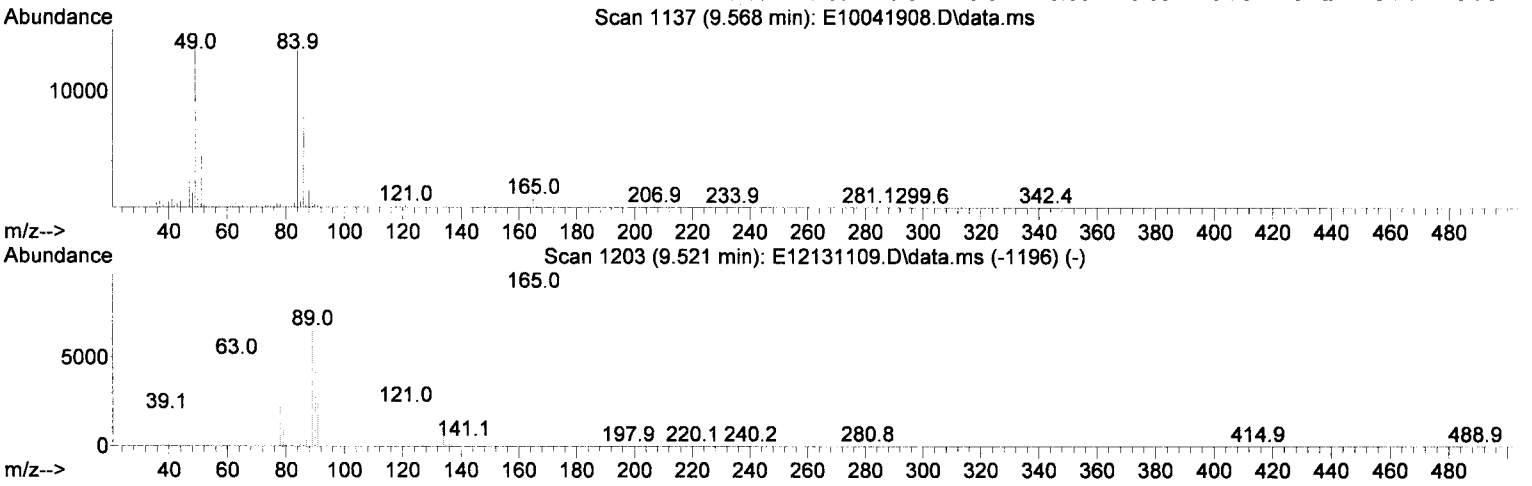
R = 1.11e-002 A*A + 3.04e-001 A - 4.64e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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





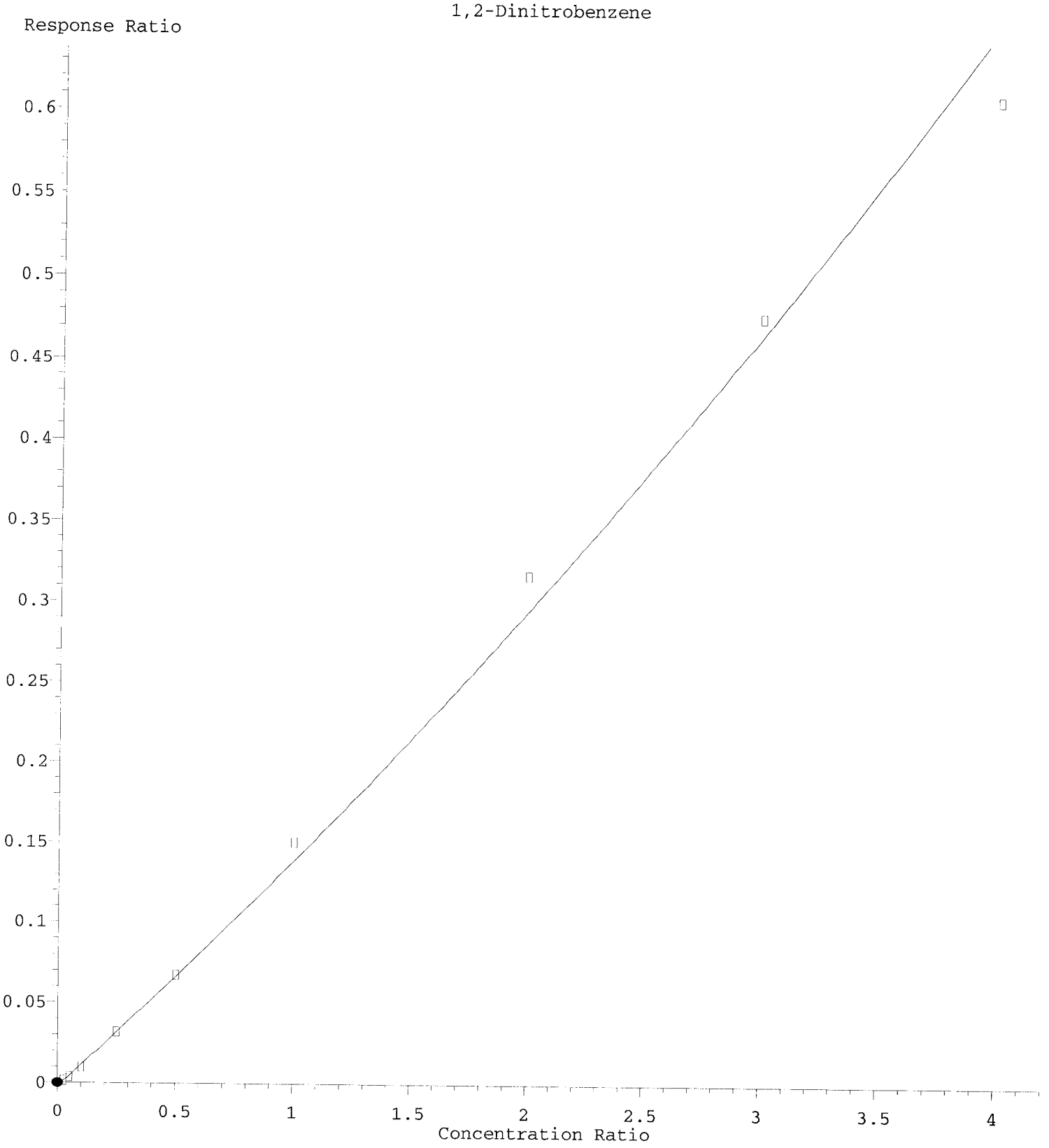
TIC: E10041908.D\data.ms

(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

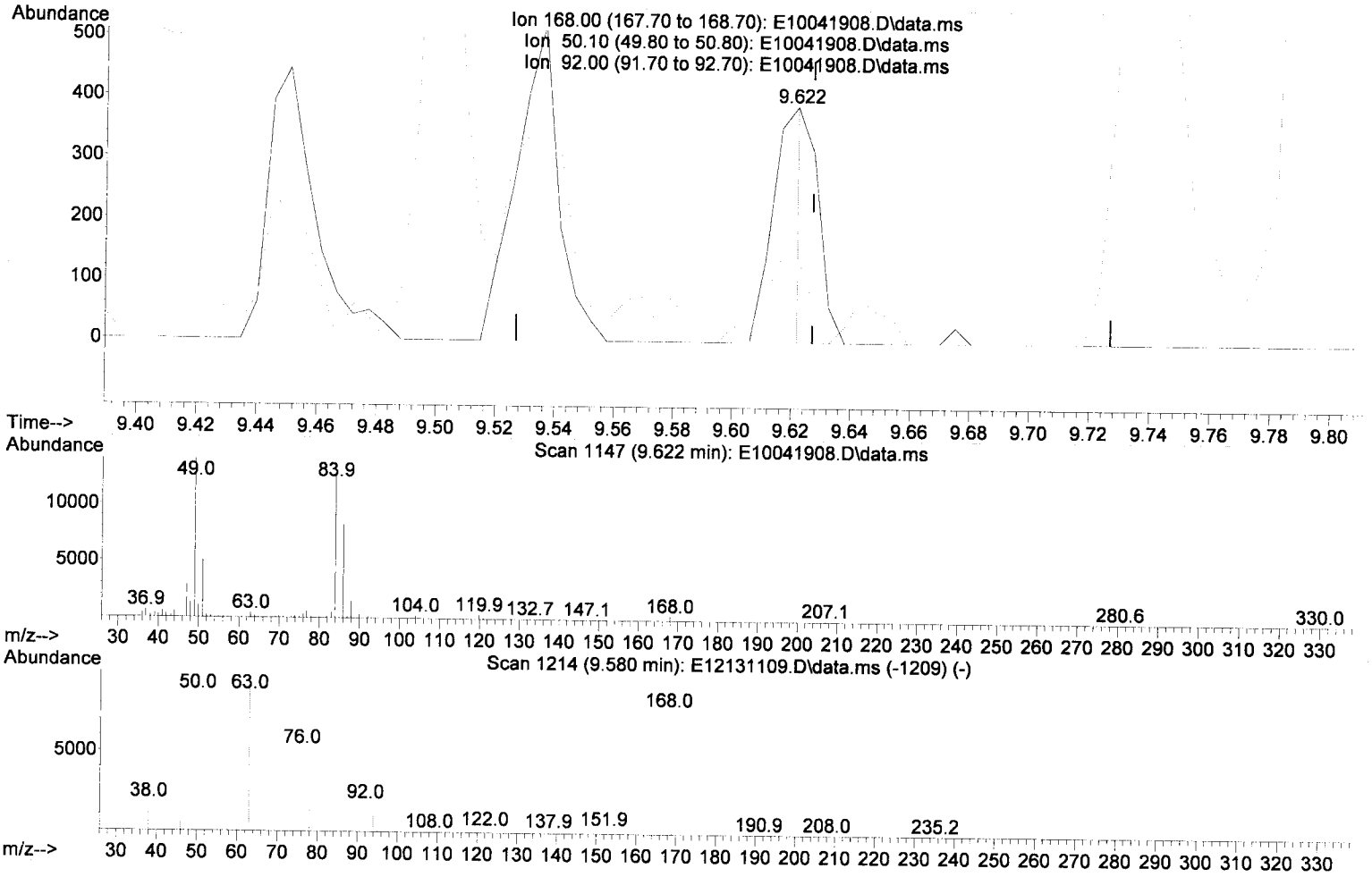


R = 7.45e-003 A*A + 1.33e-001 A - 2.19e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic (1/x^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



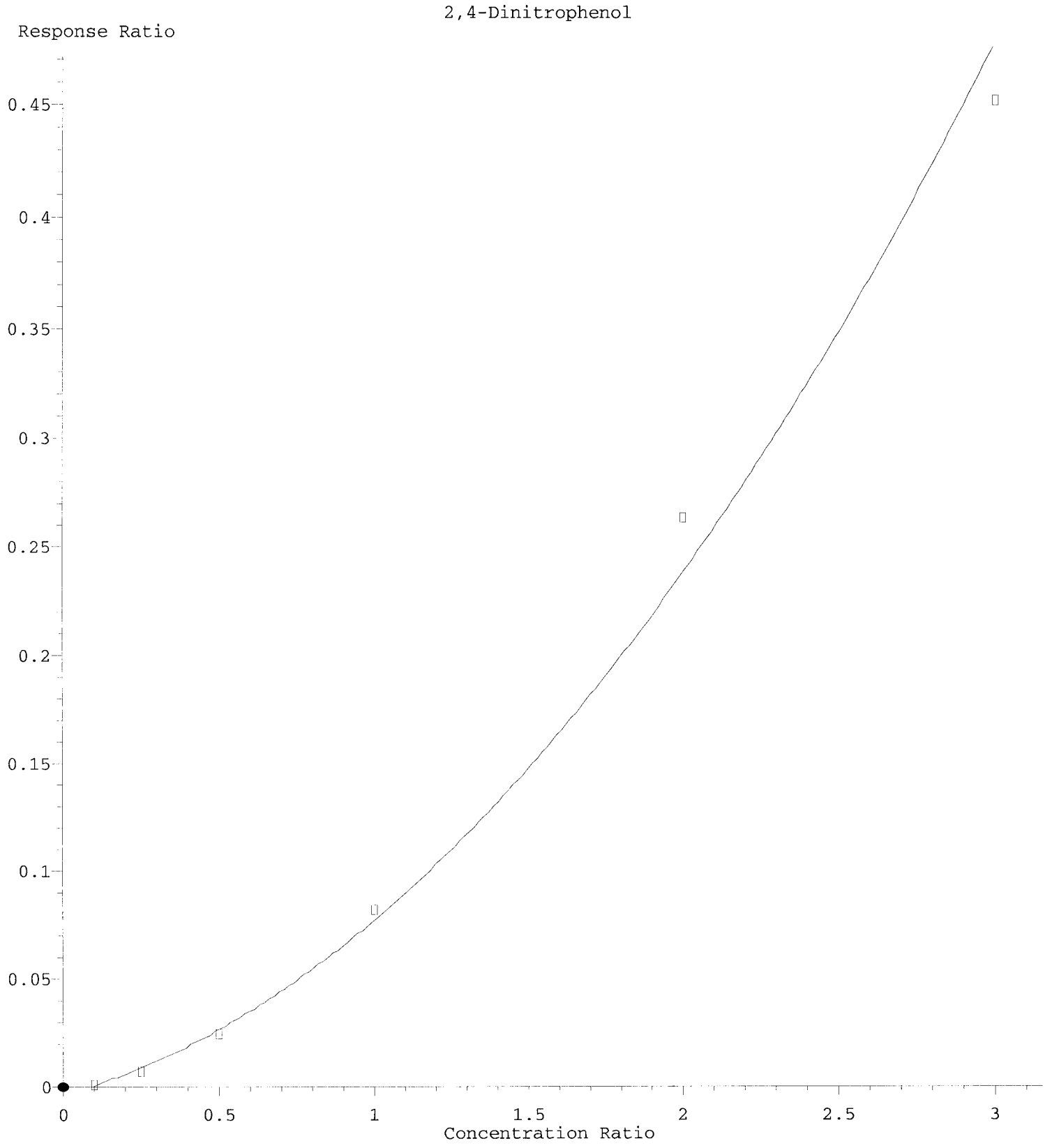
TIC: E10041908.D\data.ms

(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

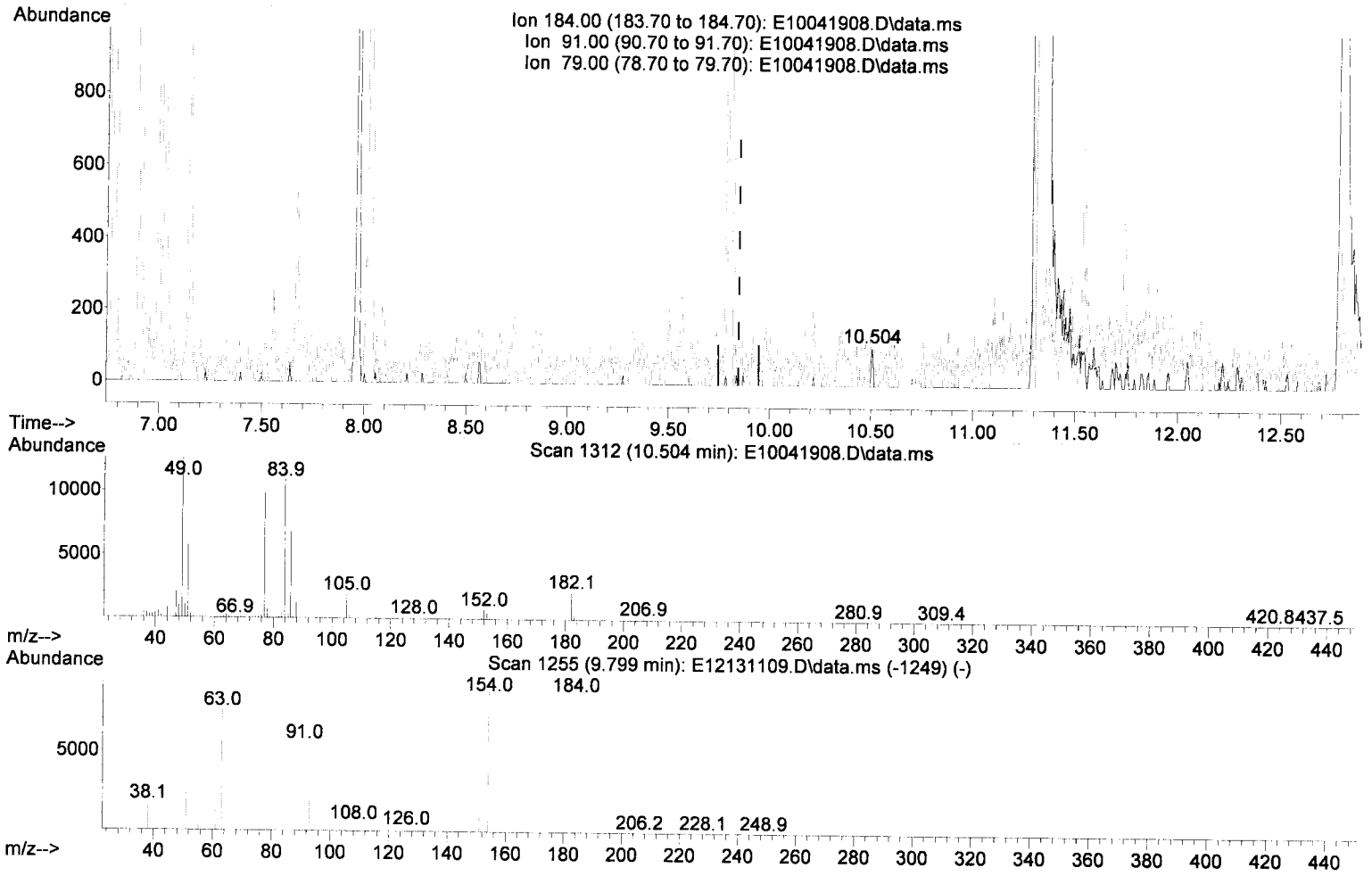


R = 3.99e-002 A*A + 4.12e-002 A - 3.91e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M

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



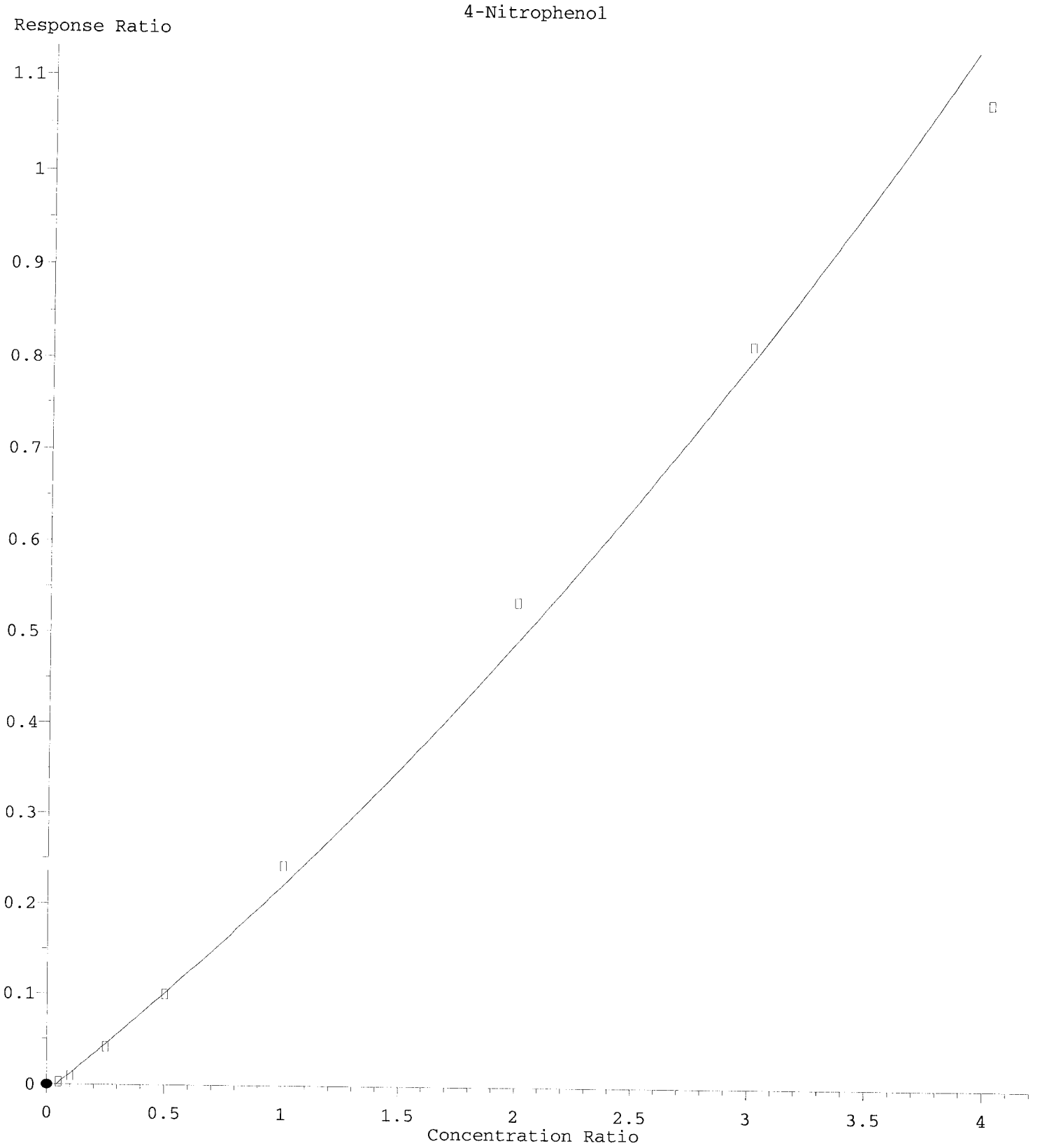
TIC: E10041908.D\data.ms

(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

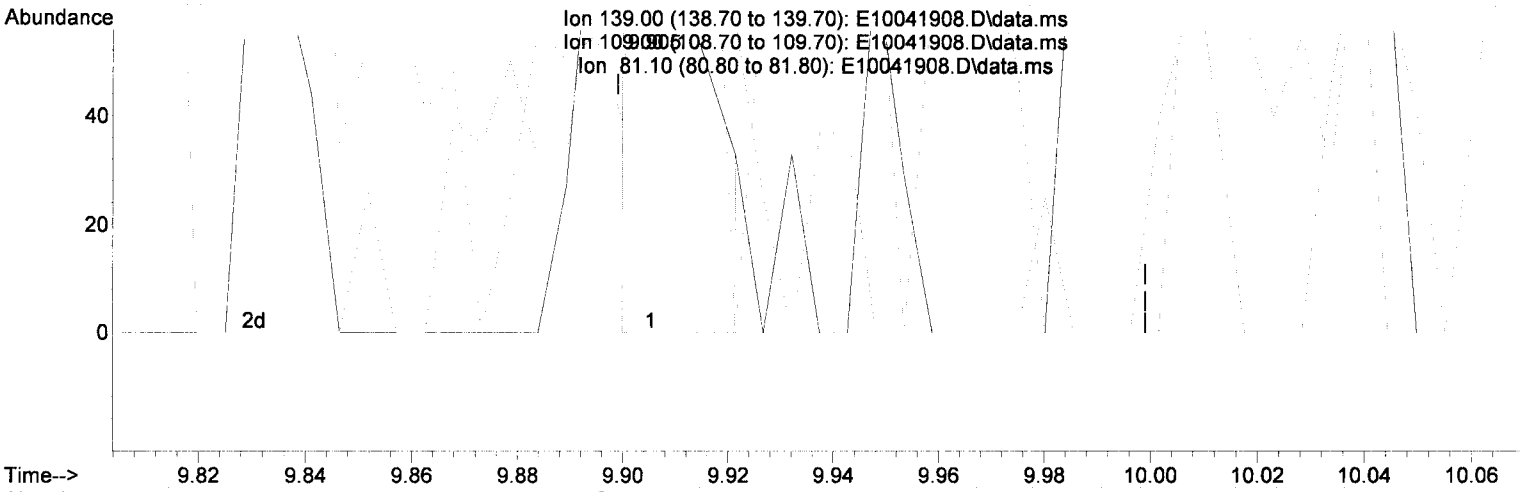


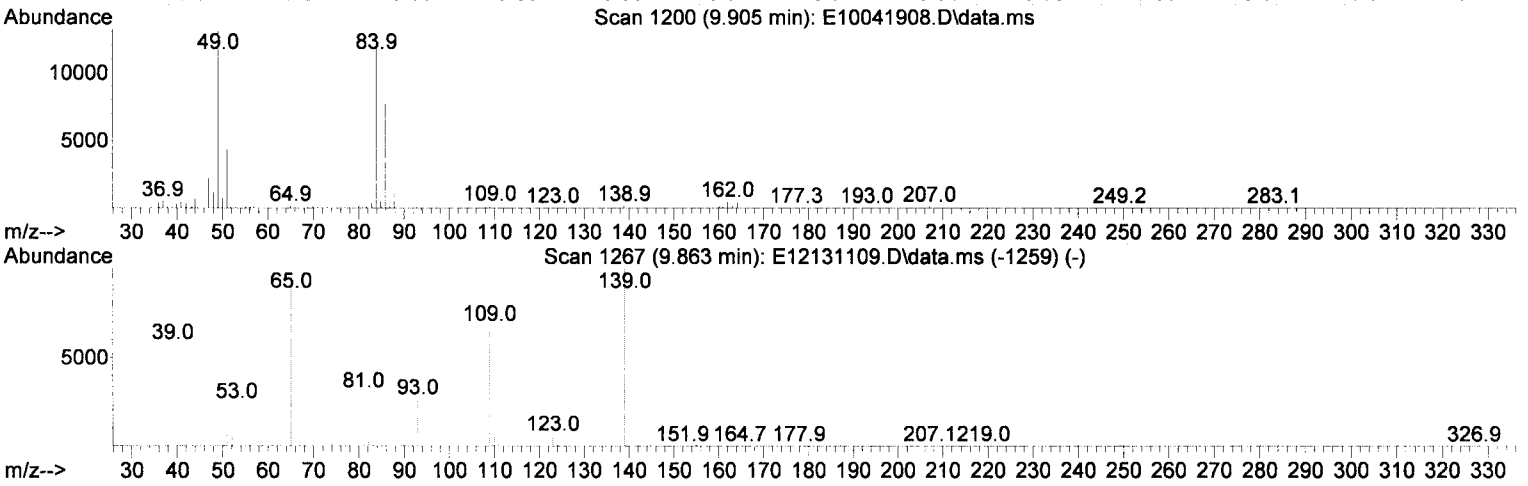
R = 2.00e-002 A*A + 2.10e-001 A - 8.79e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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





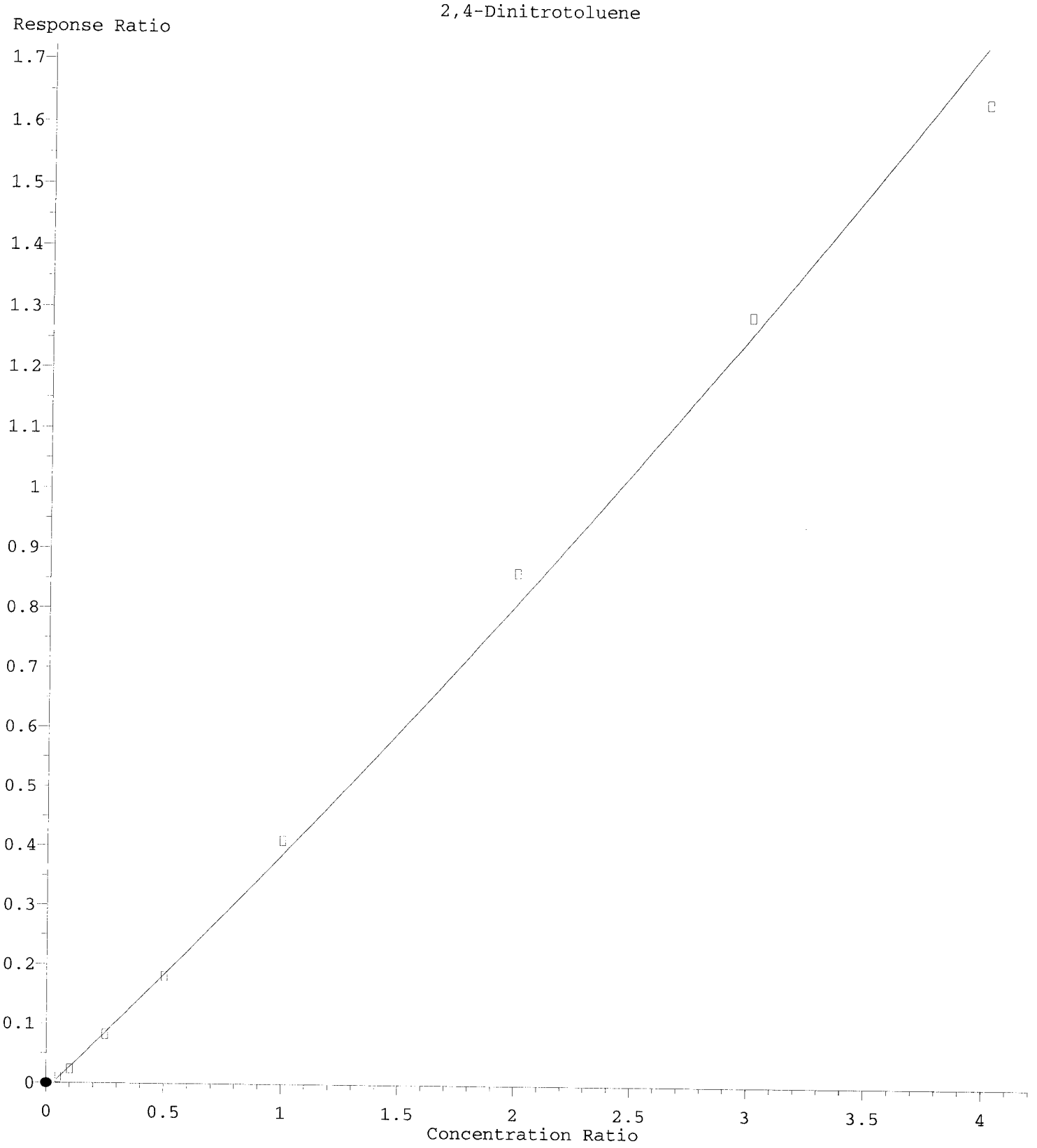
TIC: E10041908.D\data.ms

(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

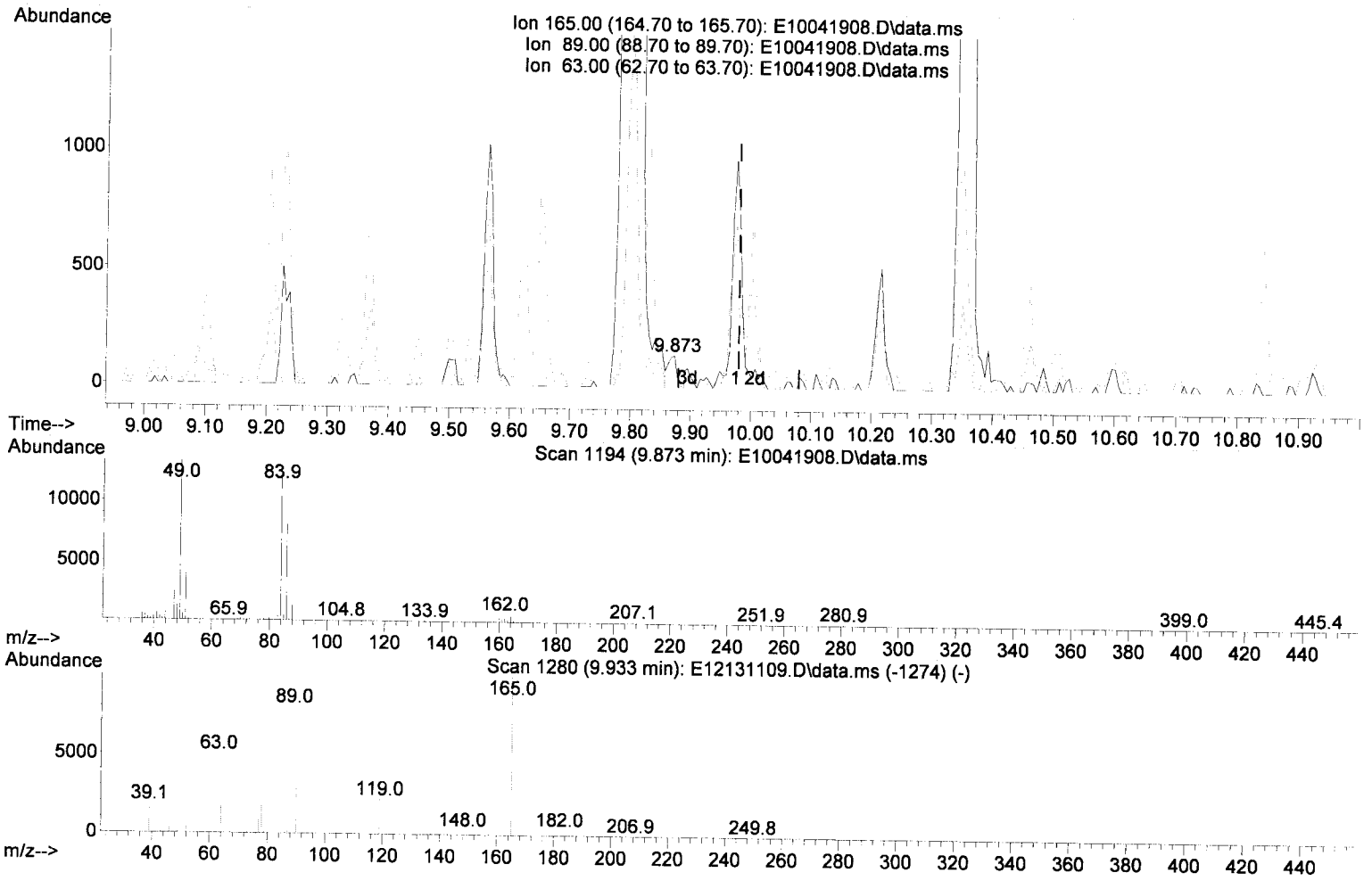


R = 1.28e-002 A*A + 3.86e-001 A - 1.17e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



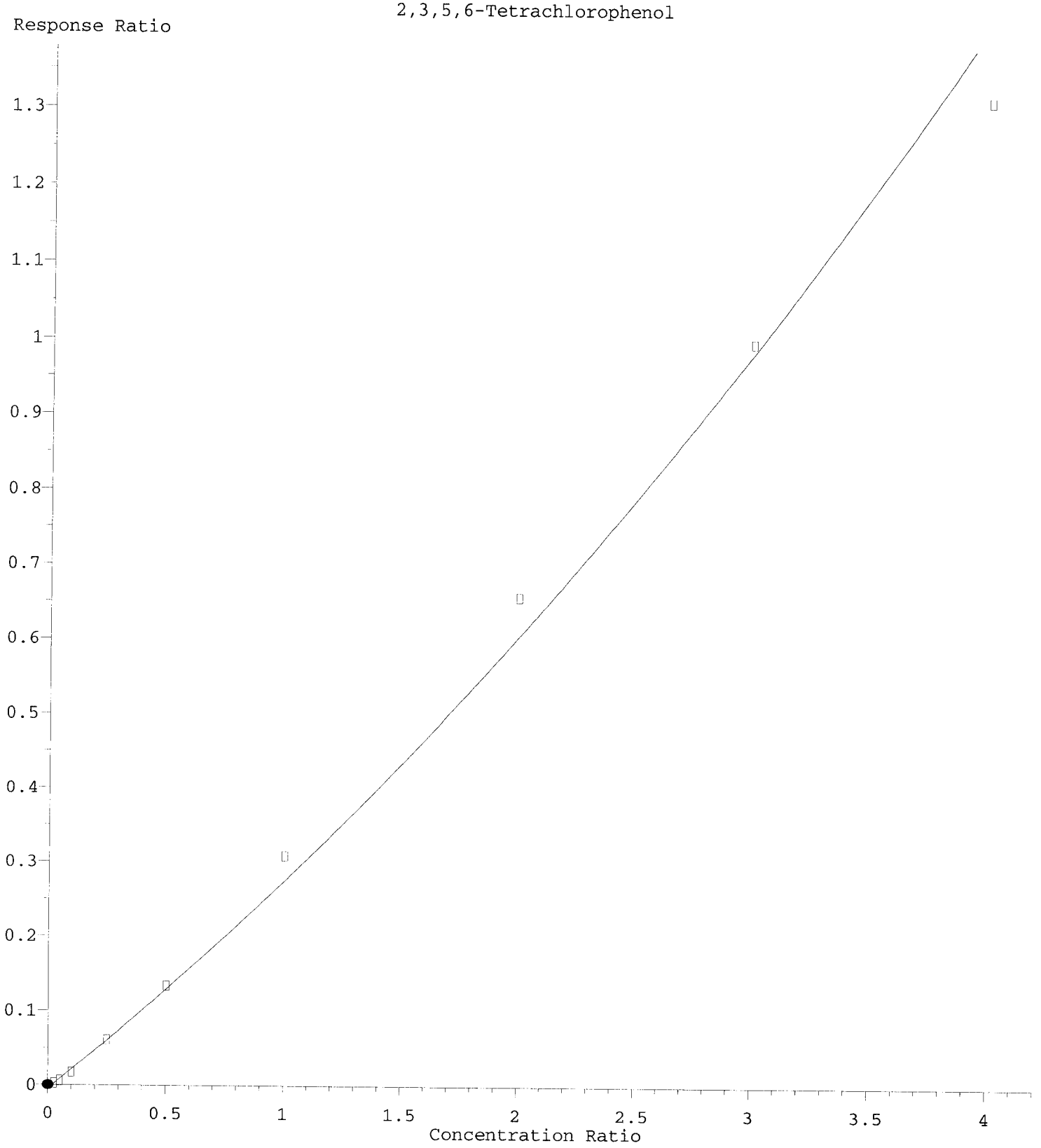
TIC: E10041908.D\data.ms

(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

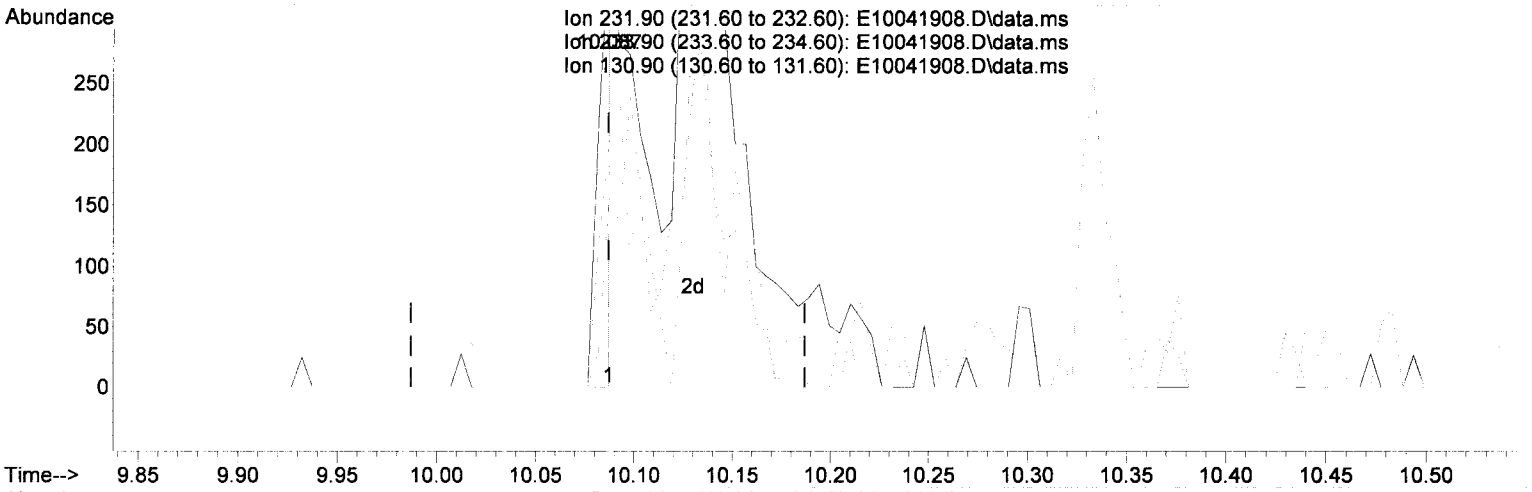


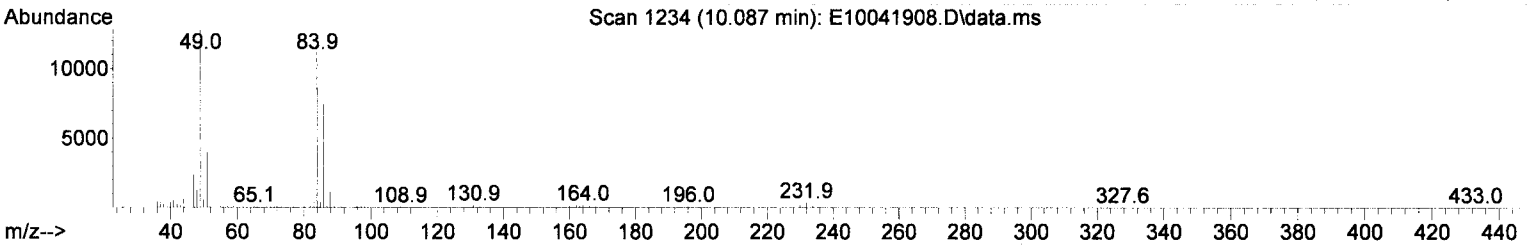
R = 2.47e-002 A*A + 2.55e-001 A - 5.02e-003
Coef of Det (r^2) = 0.988 Curve Fit: Quadratic w/1/a^2
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

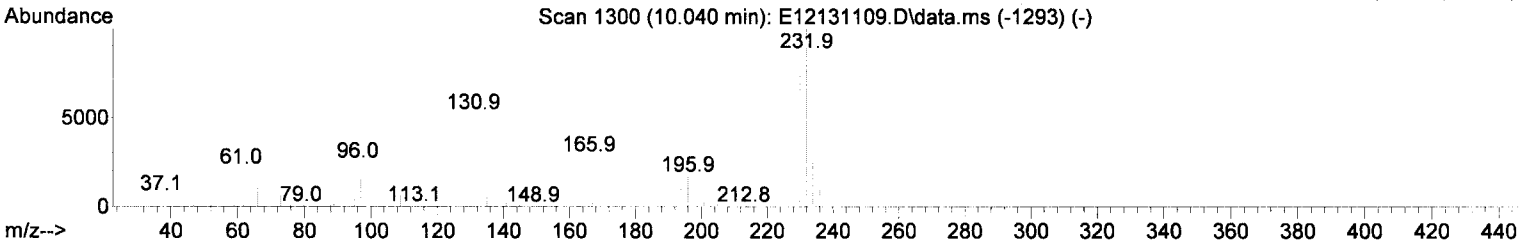
Quantitation Report (Qedit)

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







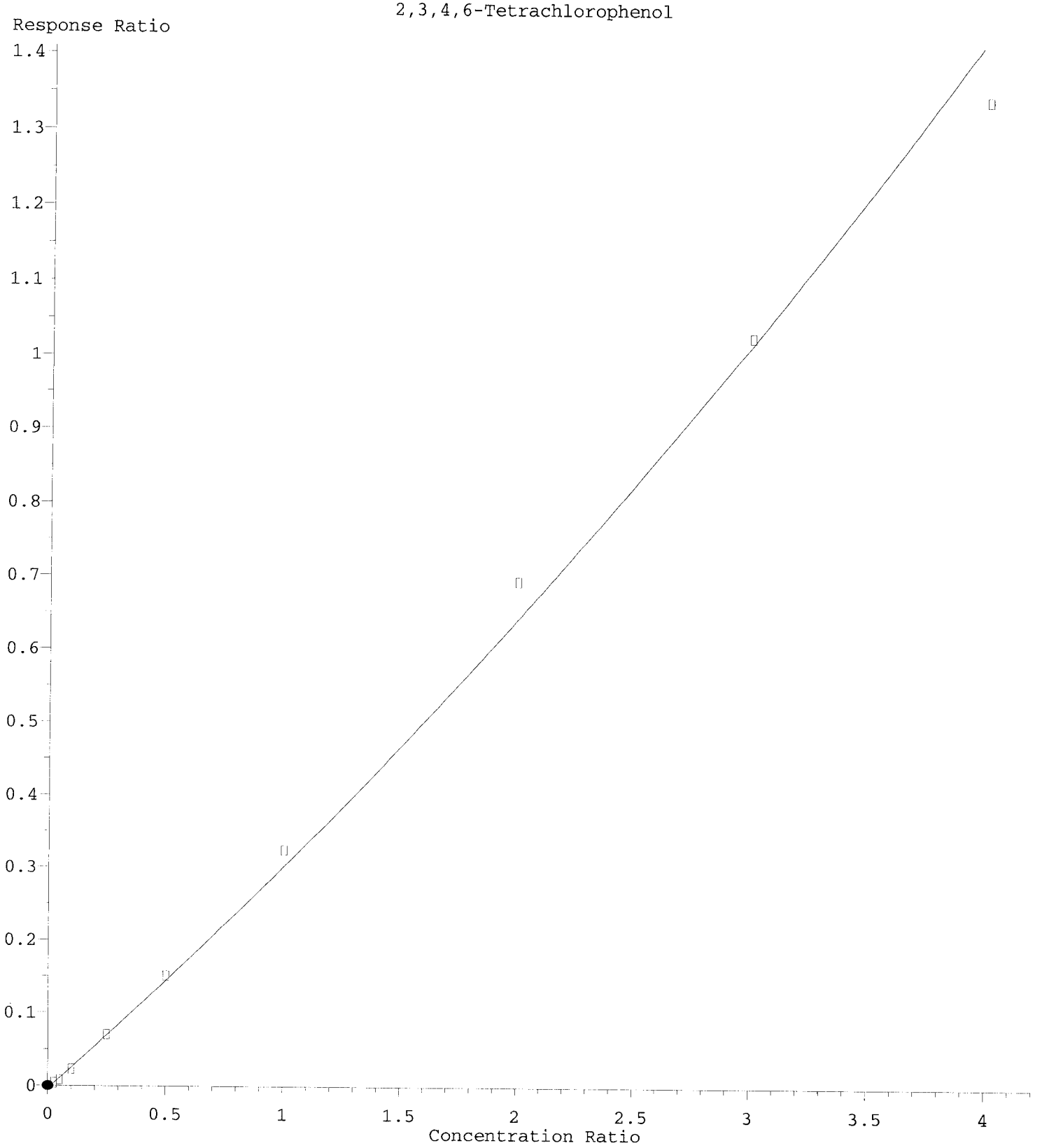
TIC: E10041908.D\data.ms

(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

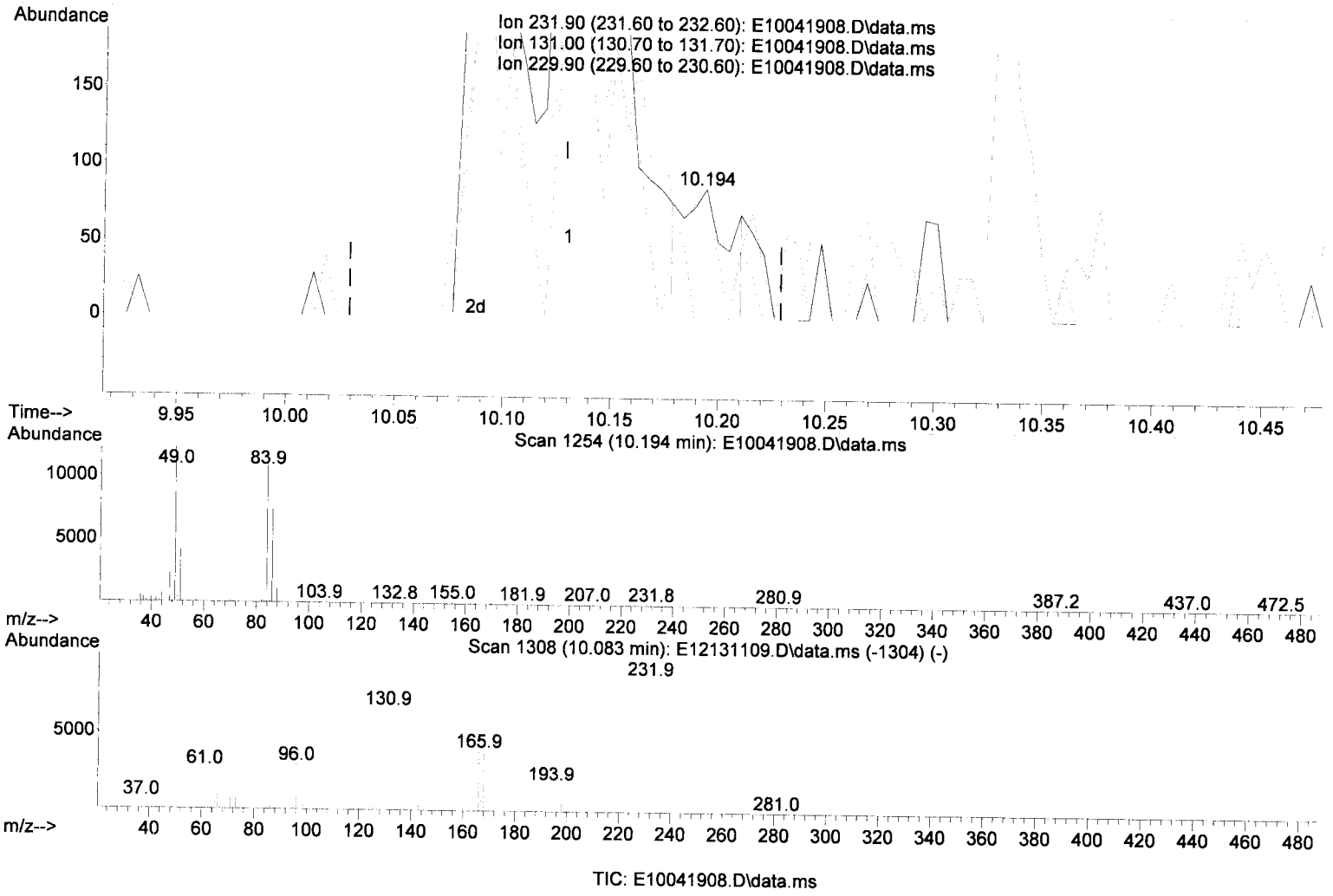


R = 1.72e-002 A*A + 2.89e-001 A - 4.06e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/1/a^2
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



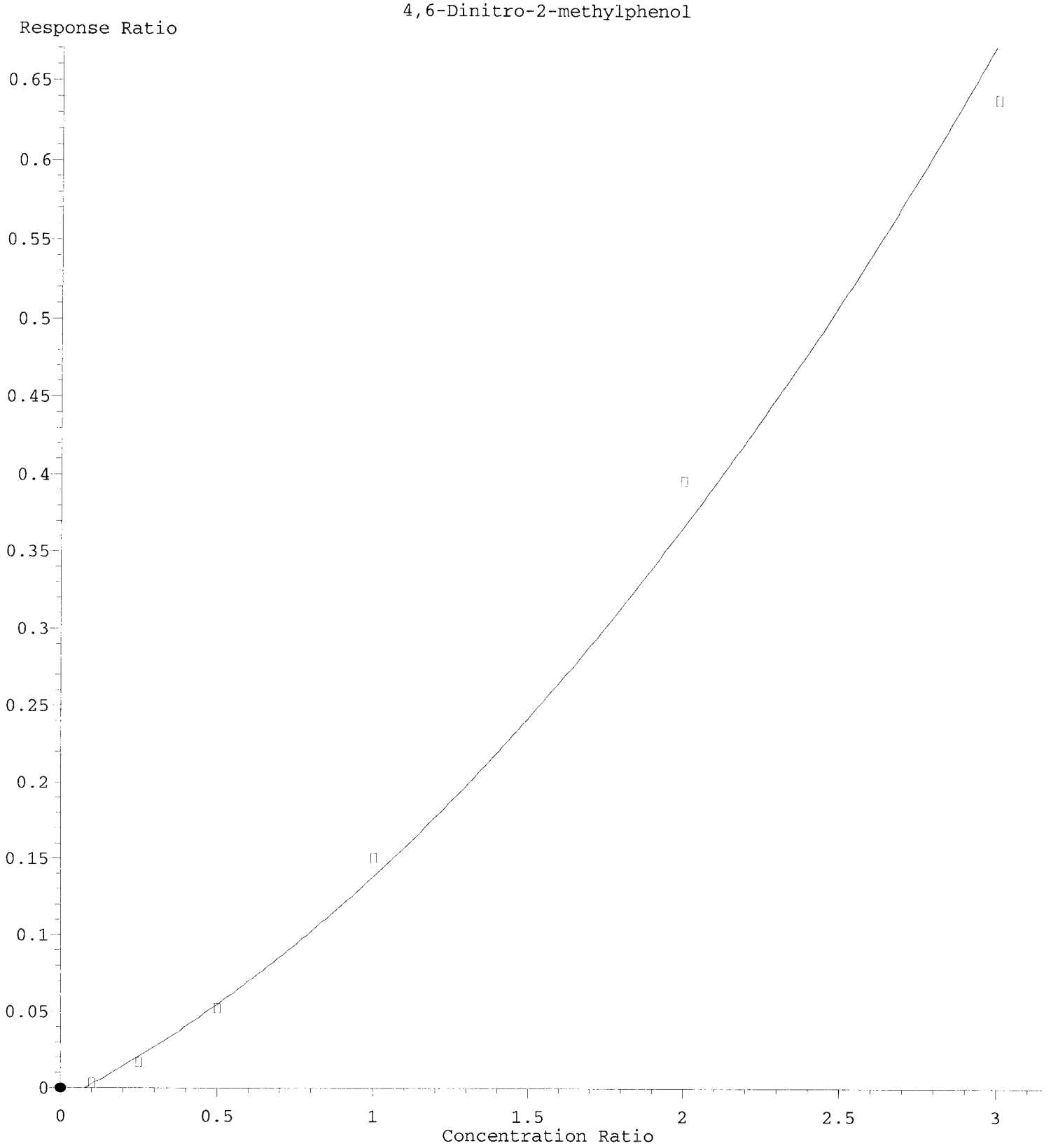
TIC: E10041908.D\data.ms

(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

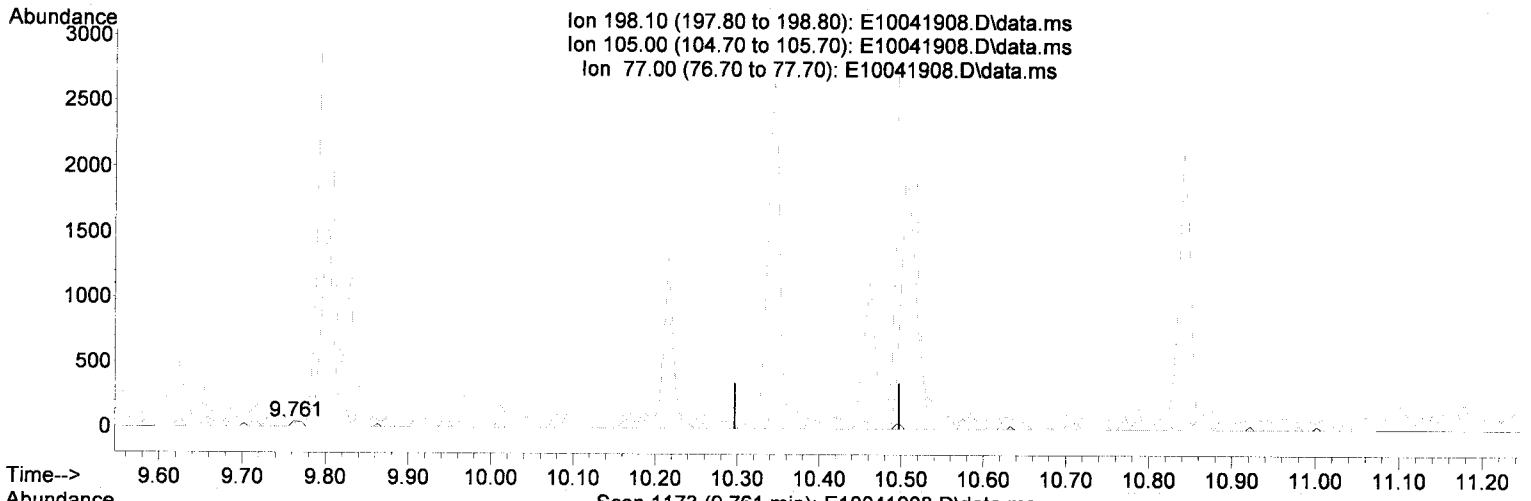


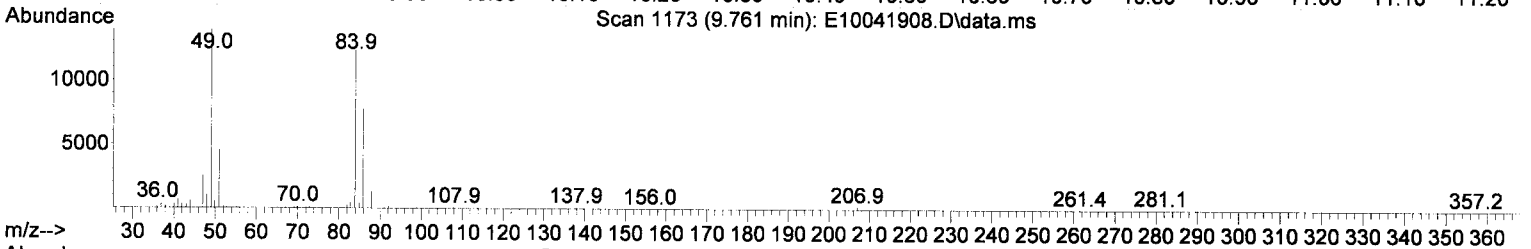
R = 4.04e-002 A*A + 1.07e-001 A - 8.63e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

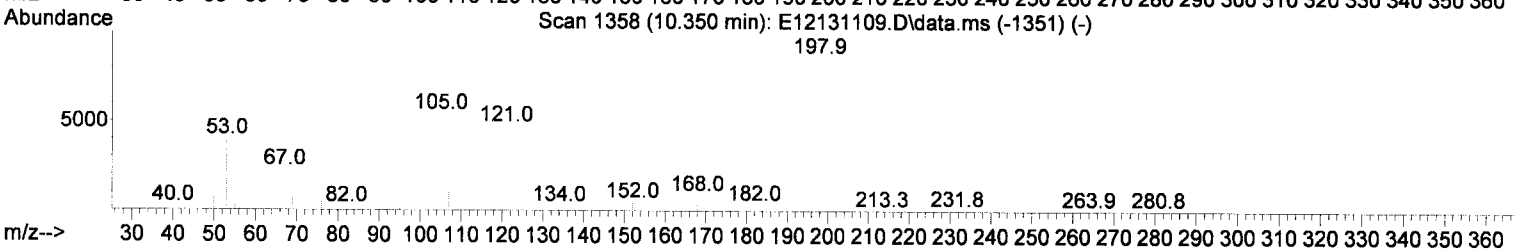
Quantitation Report (Qedit)

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







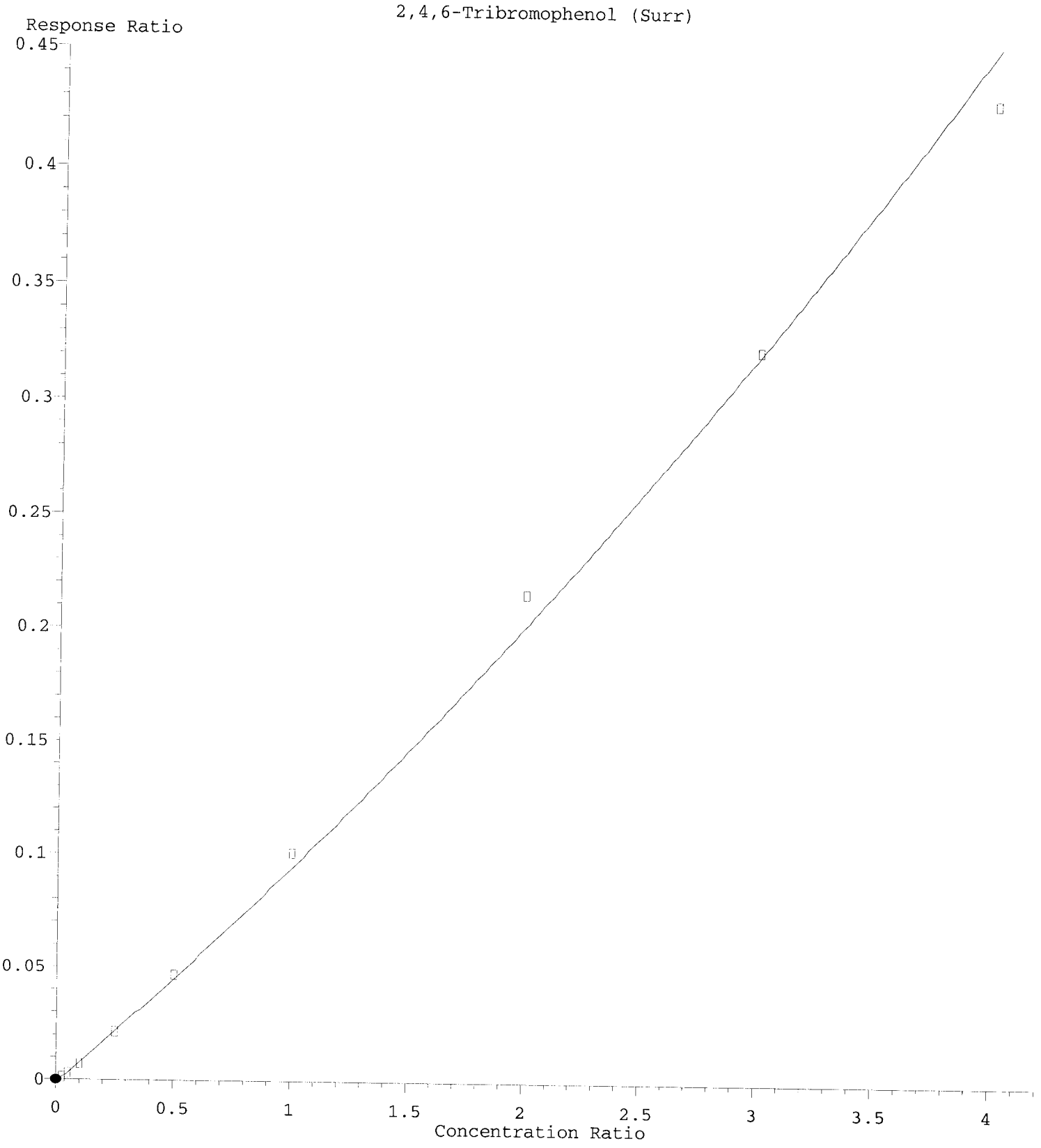
TIC: E10041908.D\data.ms

(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

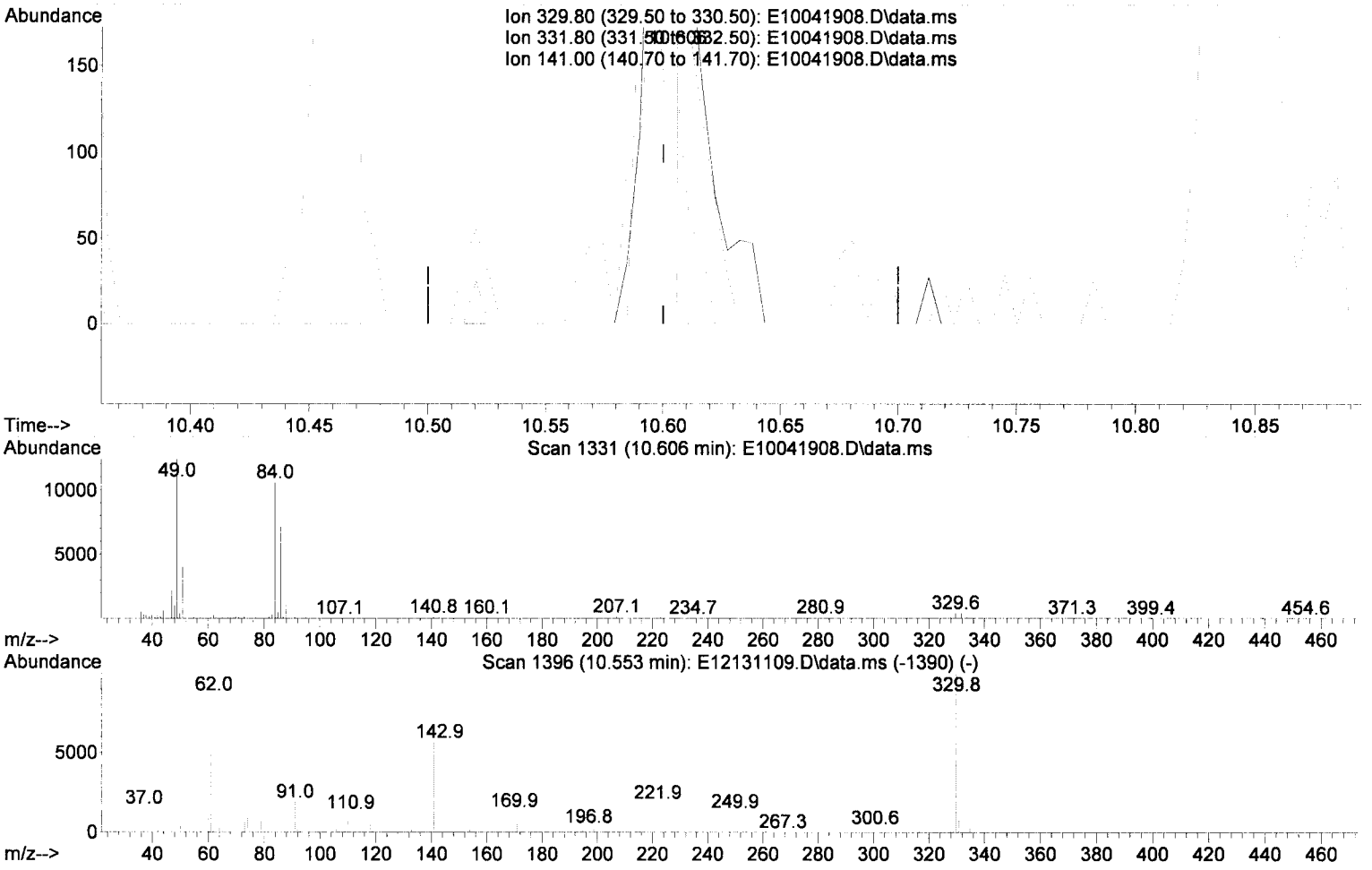


R = 5.87e-003 A*A + 8.97e-002 A - 1.28e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



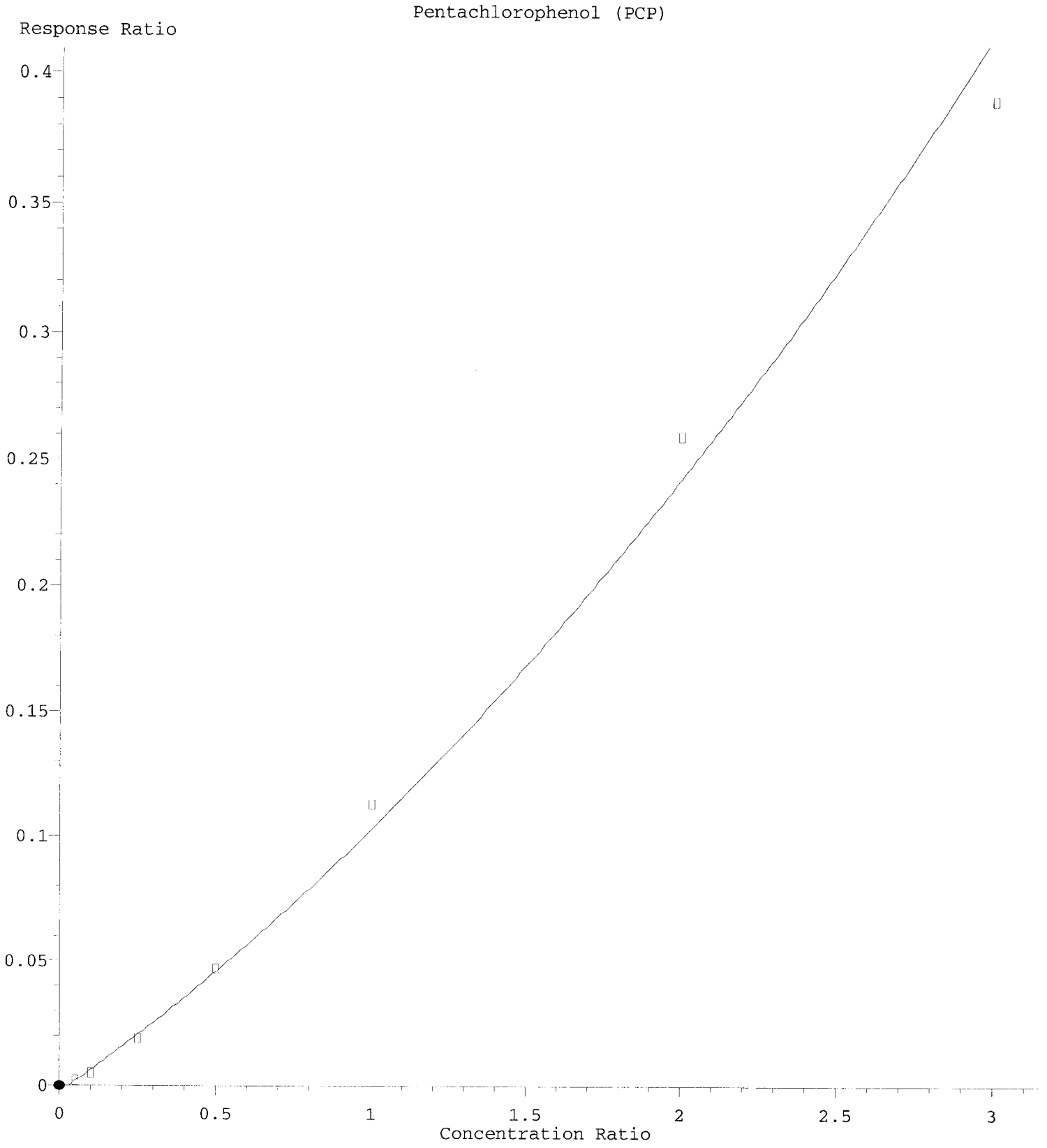
TIC: E10041908.D\data.ms

(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

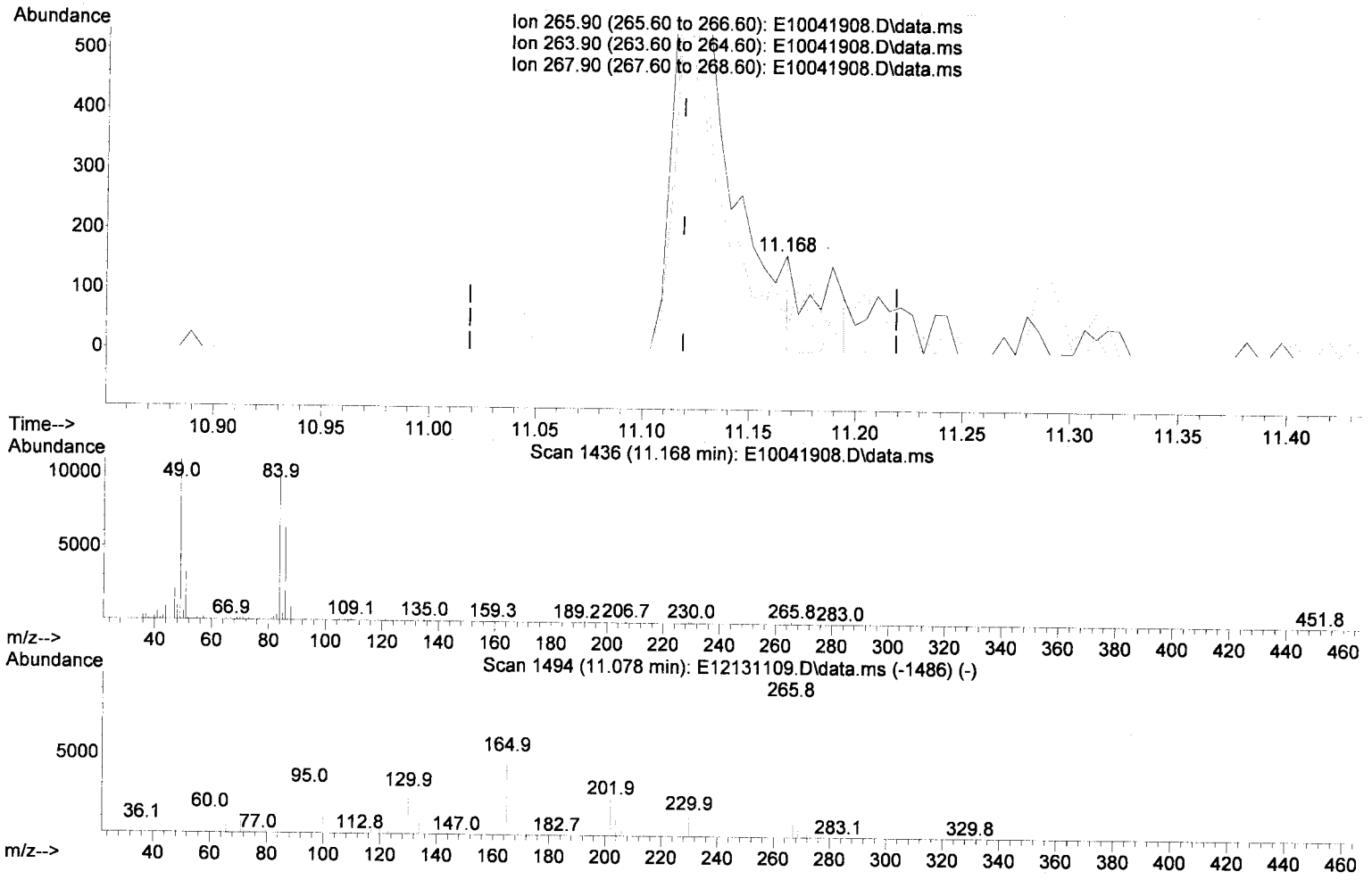


R = 1.69e-002 A*A + 8.87e-002 A - 2.71e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



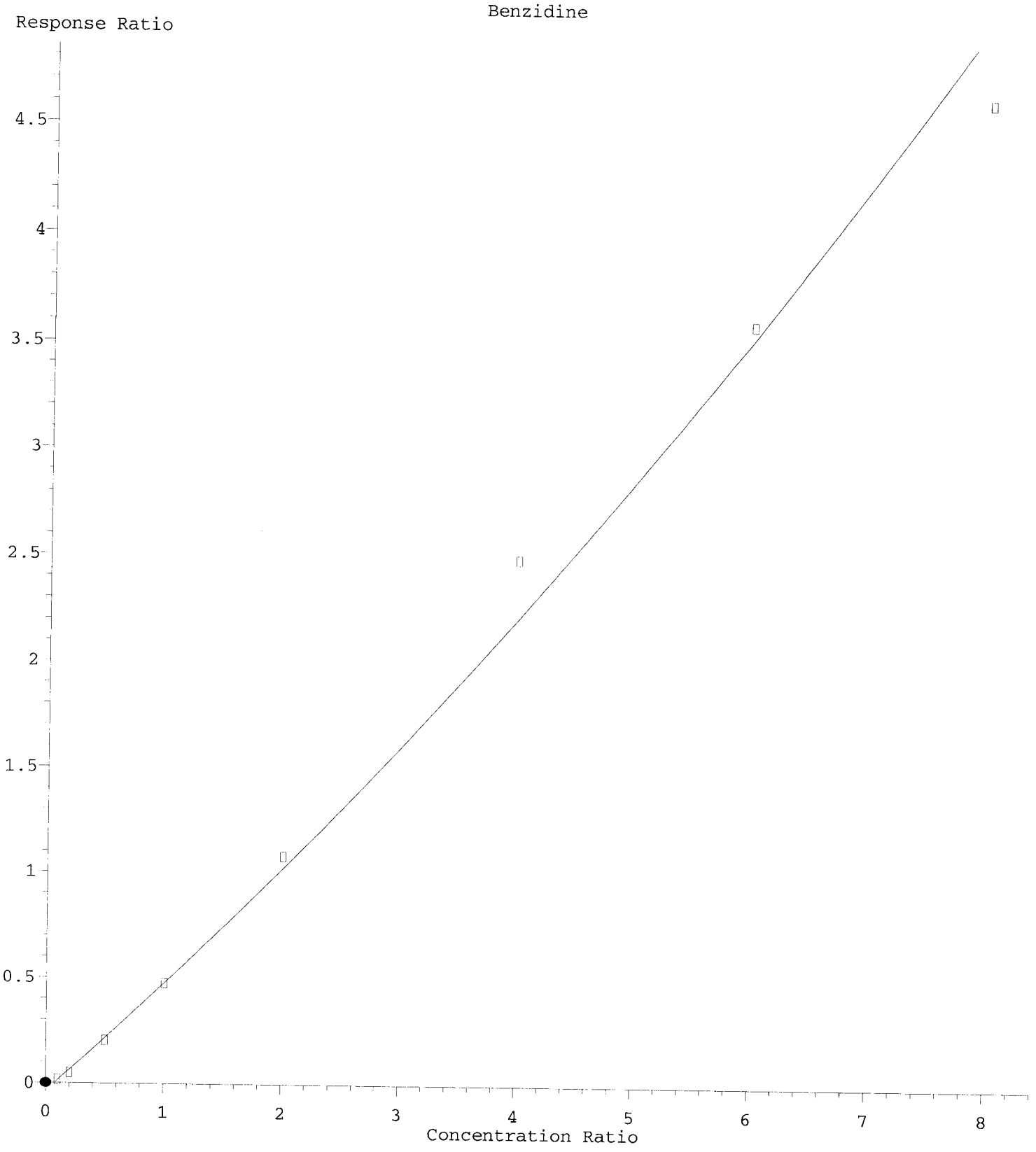
TIC: E10041908.D\data.ms

(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

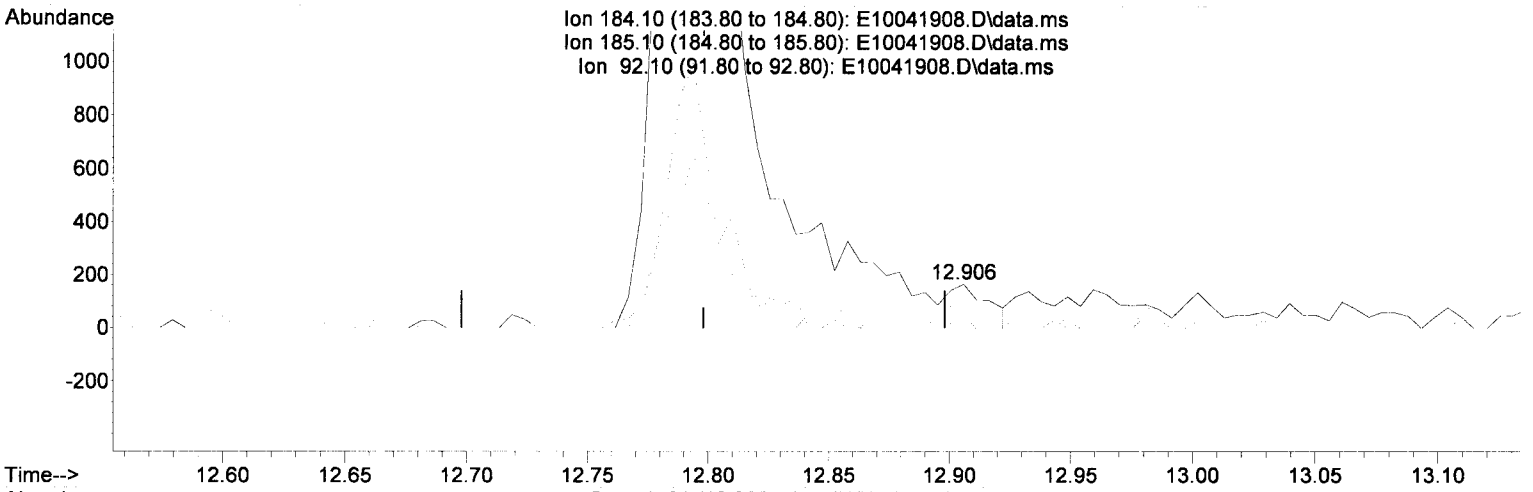


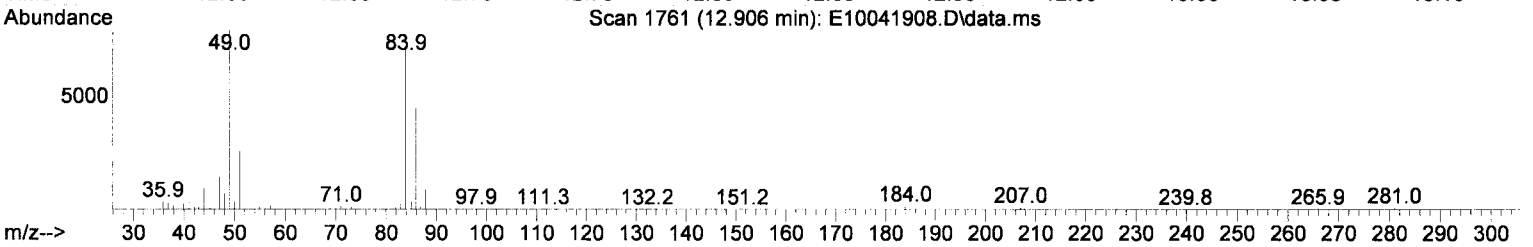
R = 1.62e-002 A*A + 4.97e-001 A - 3.80e-002
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

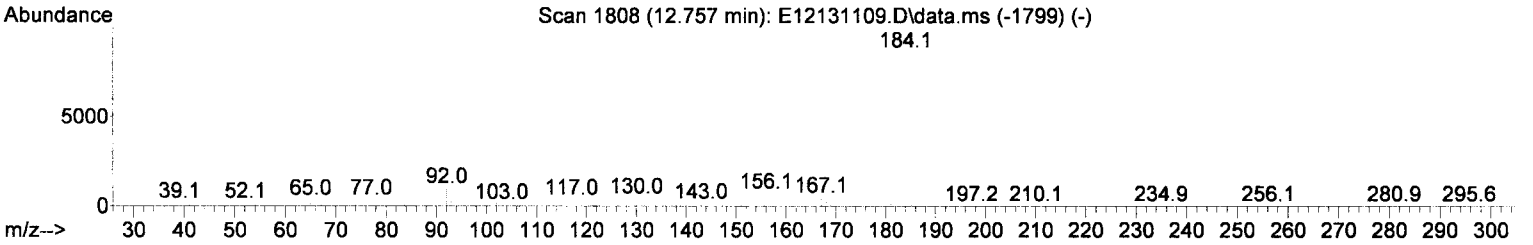
Quantitation Report (Qedit)

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







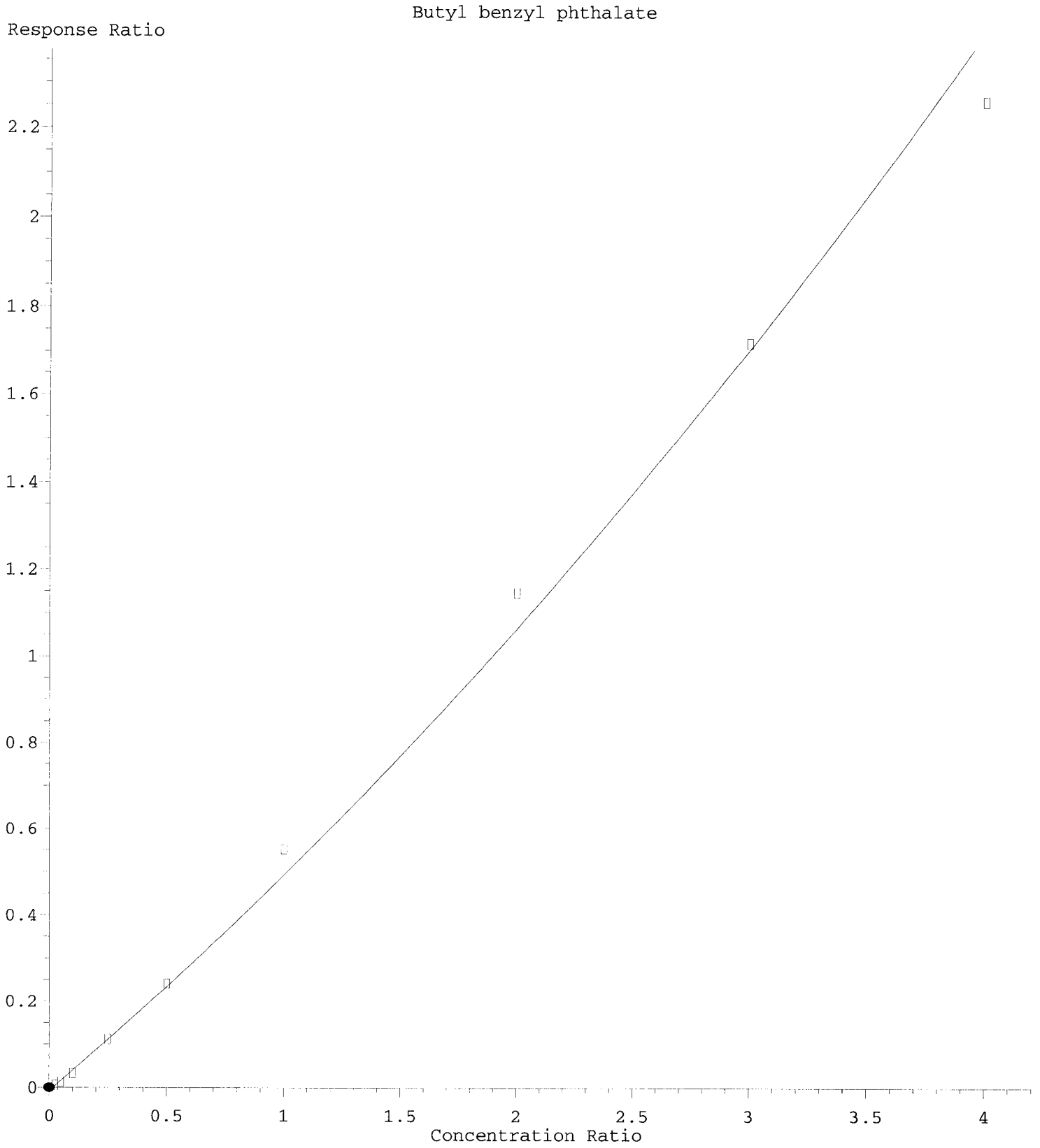
TIC: E10041908.D\data.ms

(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

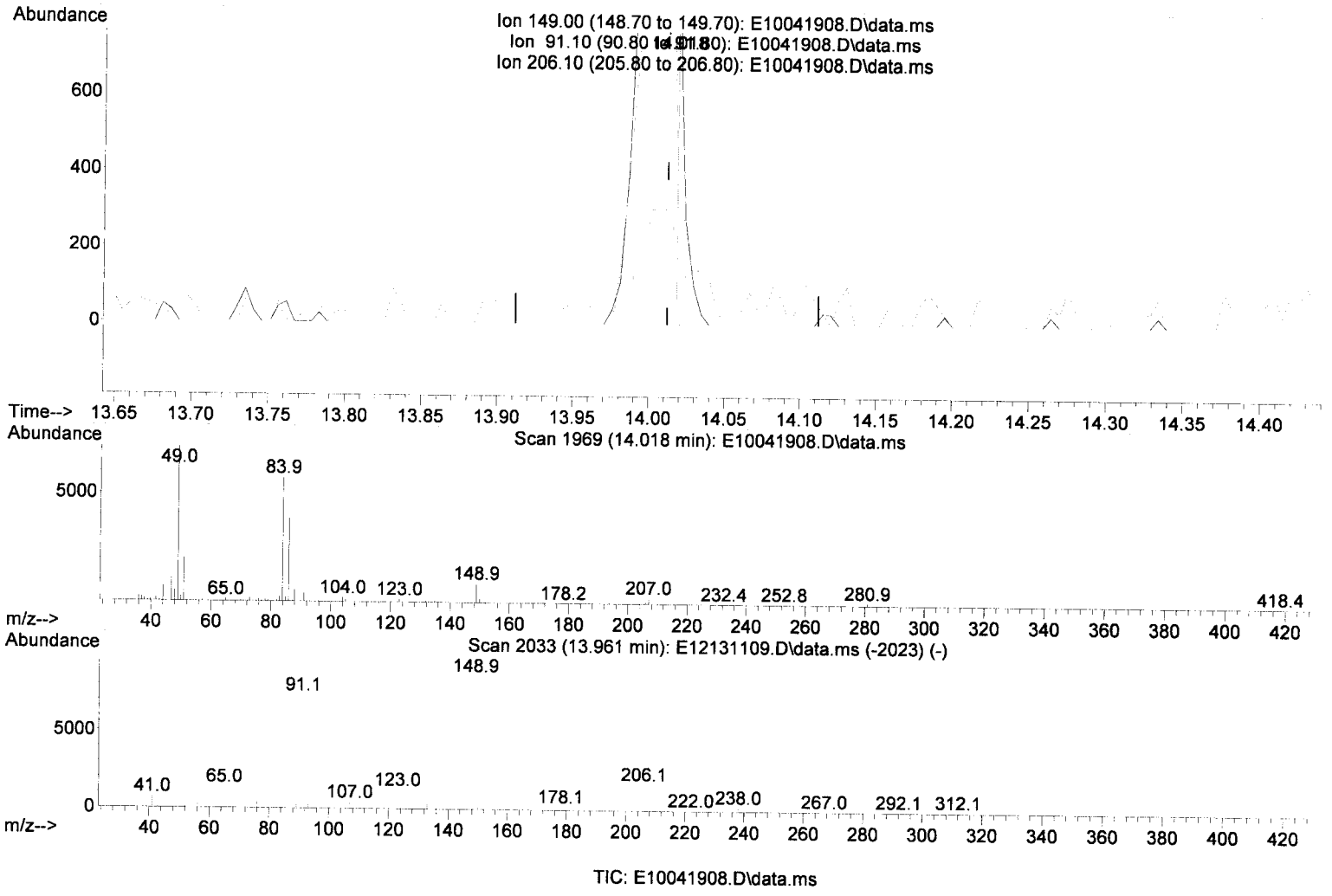


R = 3.50e-002 A*A + 4.66e-001 A - 7.59e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



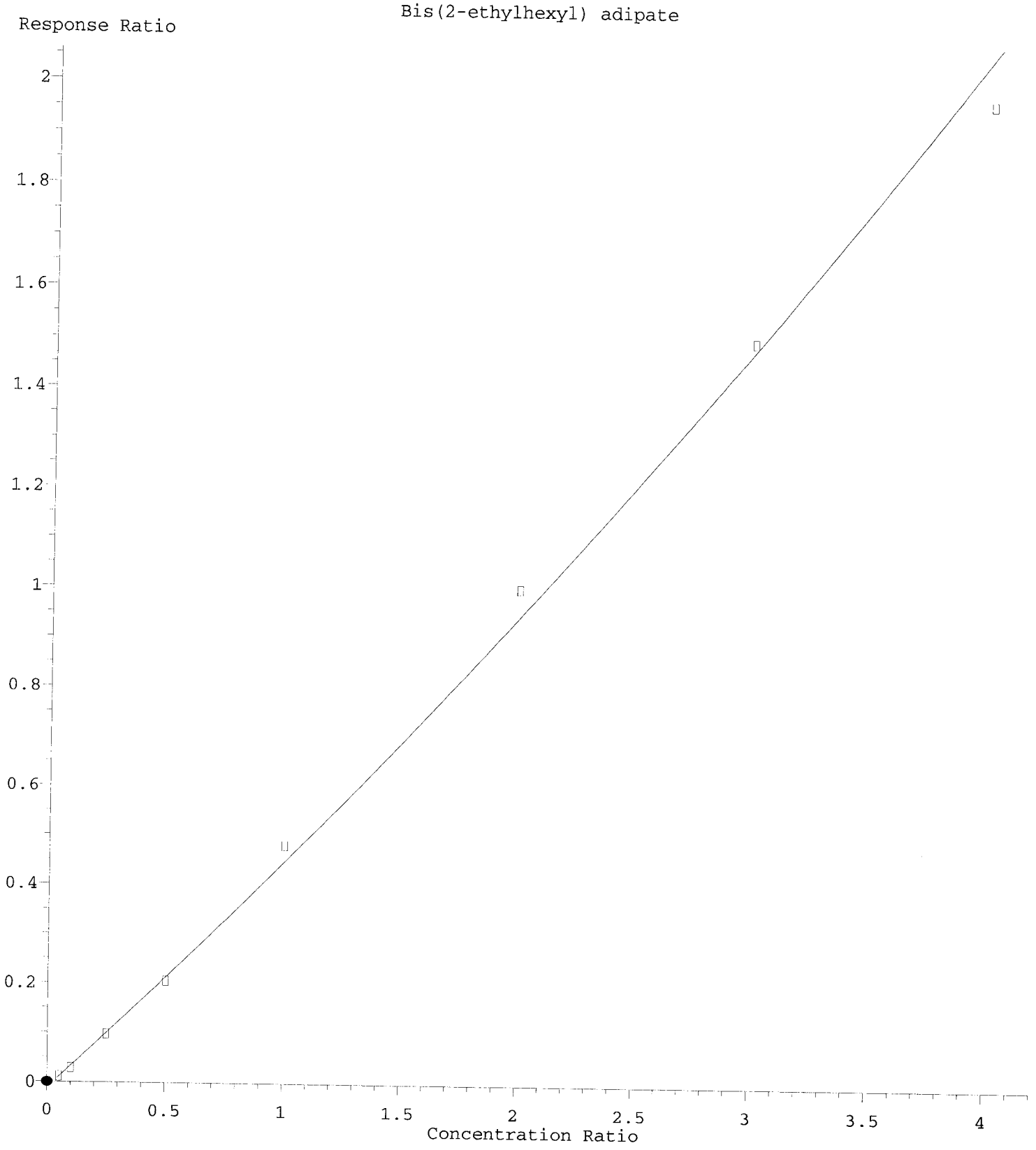
TIC: E10041908.D\data.ms

(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

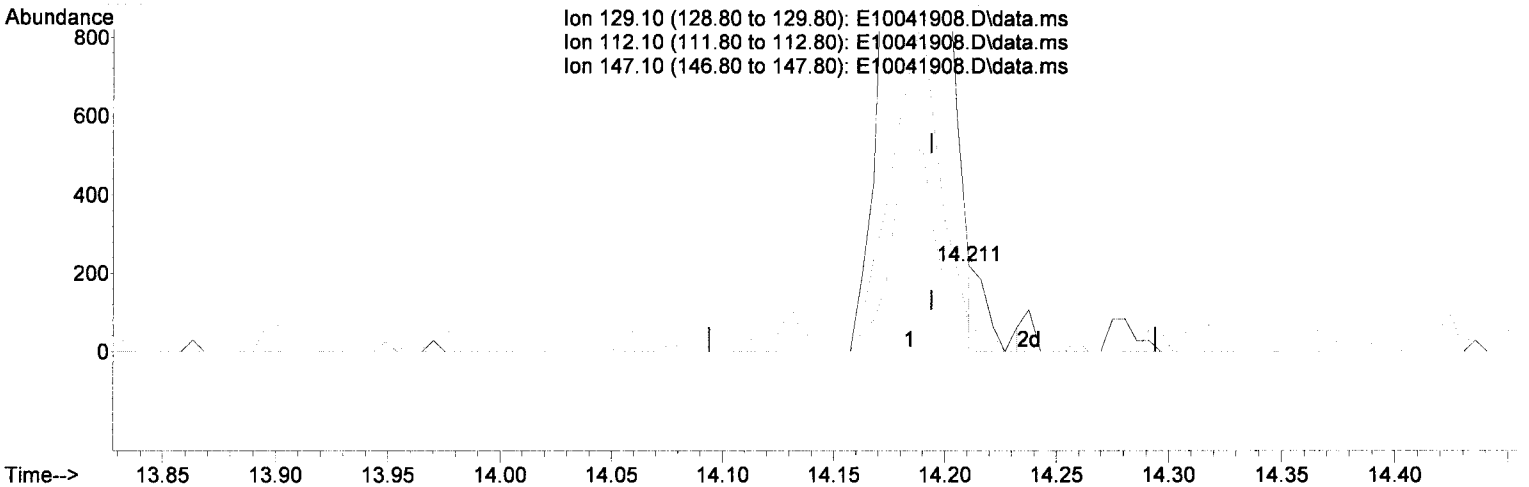


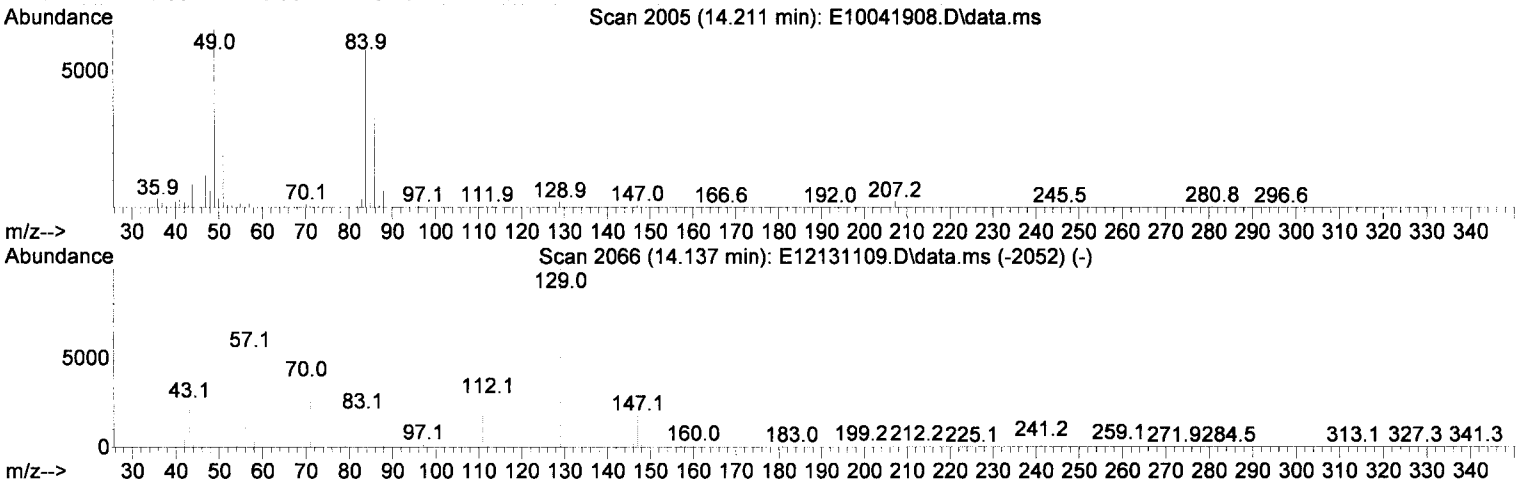
R = 1.96e-002 A*A + 4.39e-001 A - 1.17e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic rc(1/a2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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





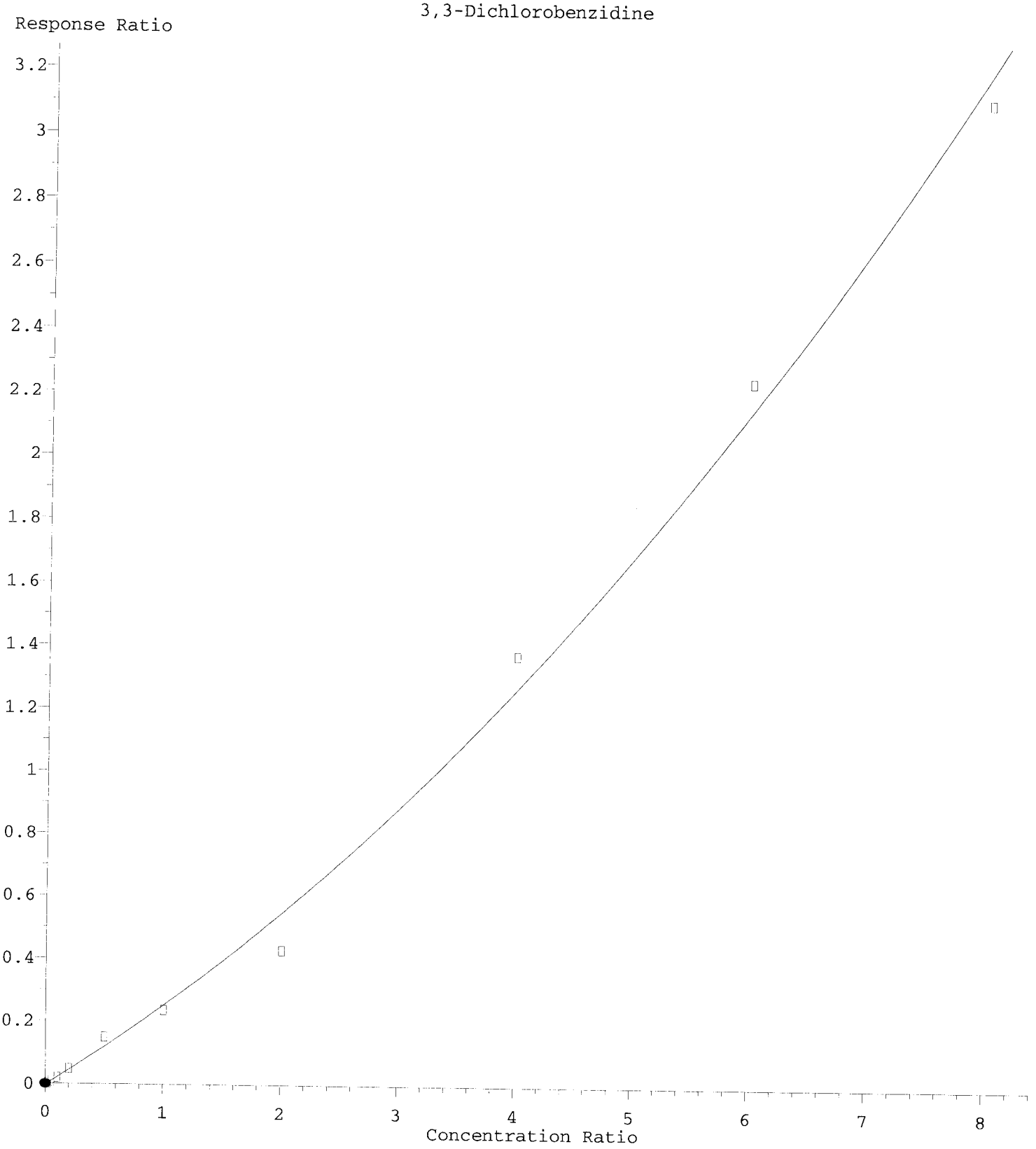
TIC: E10041908.D\data.ms

(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

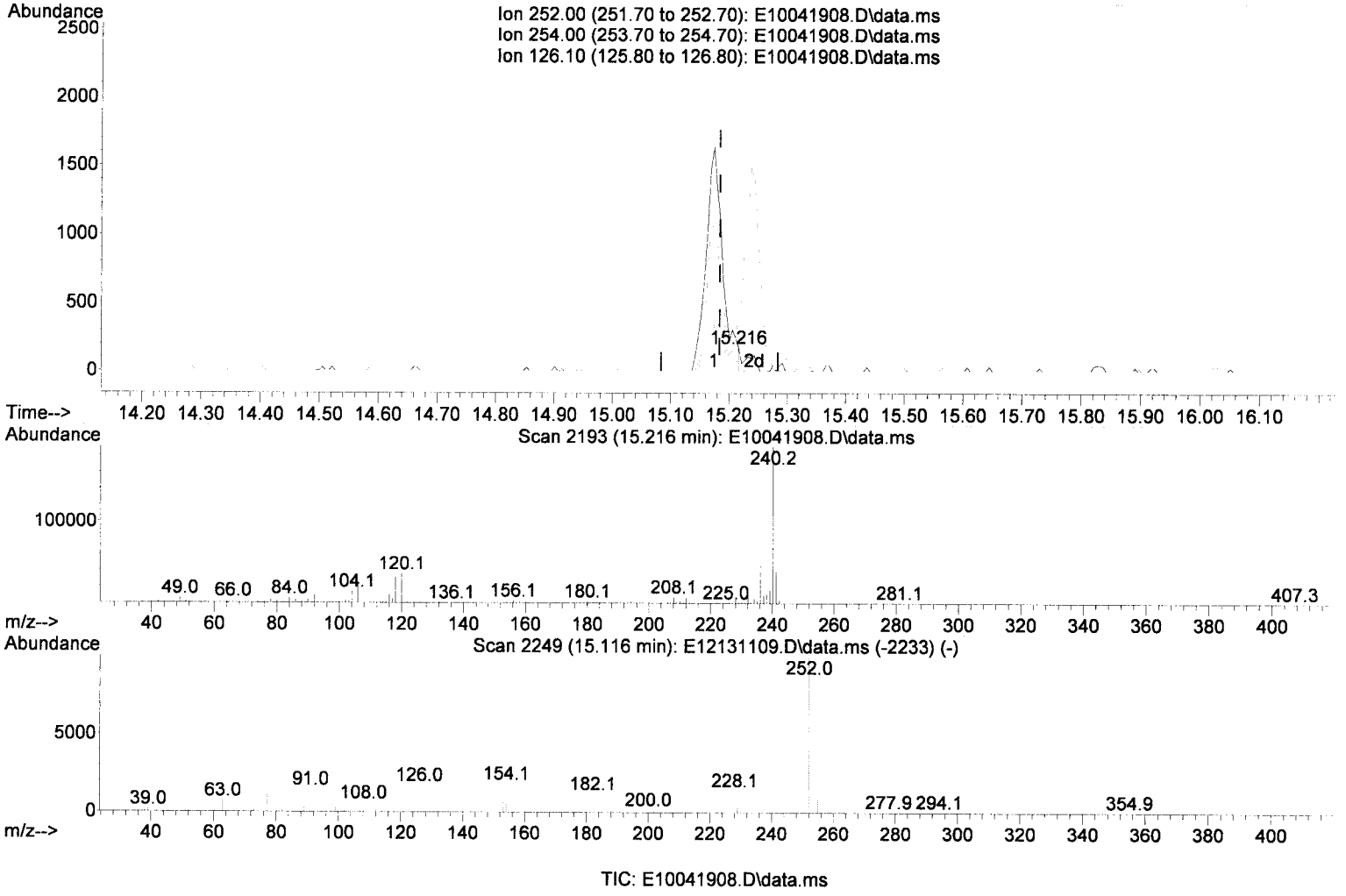


R = 2.08e-002 A*A + 2.34e-001 A - 2.89e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



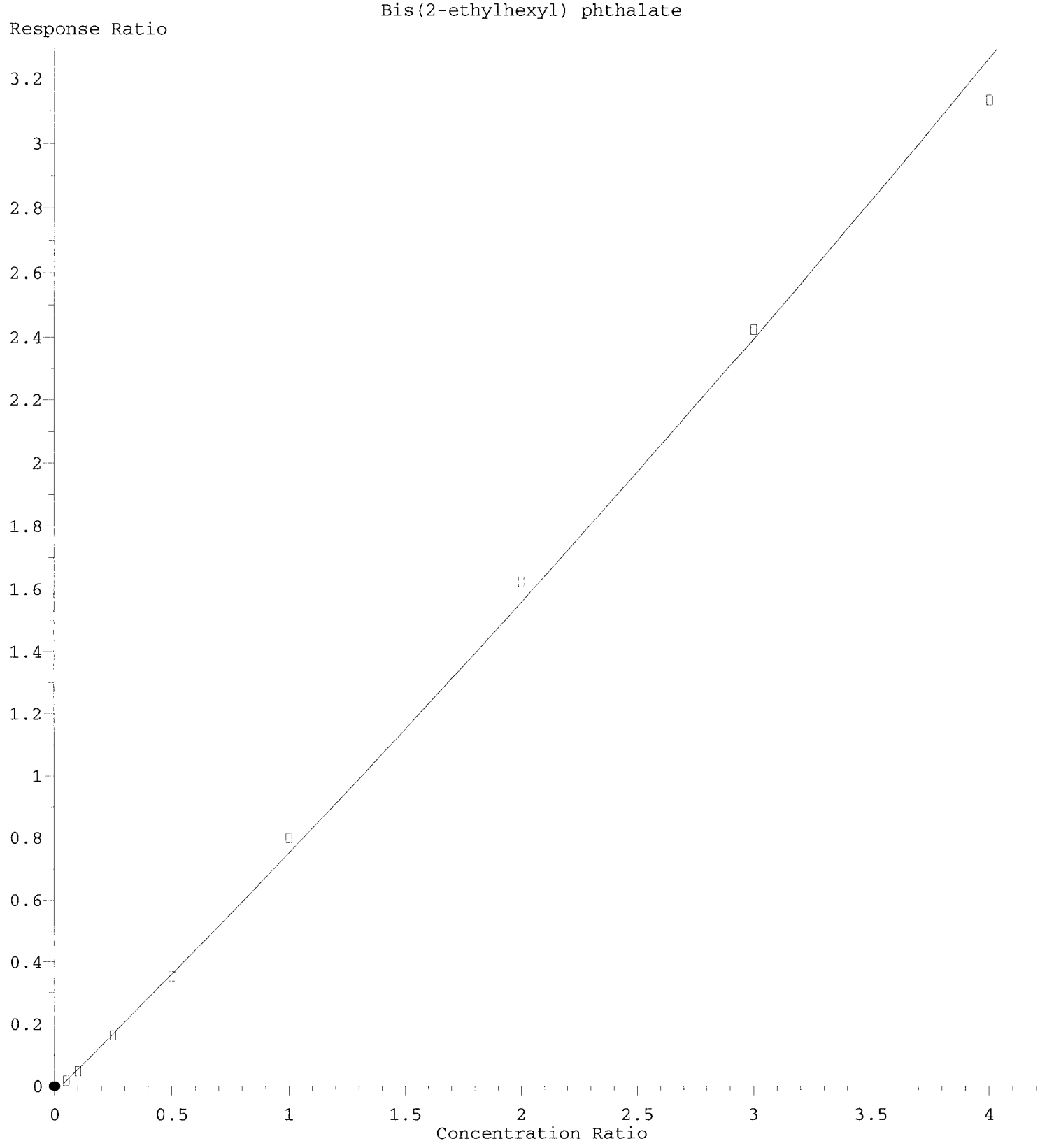
TIC: E10041908.D\data.ms

(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

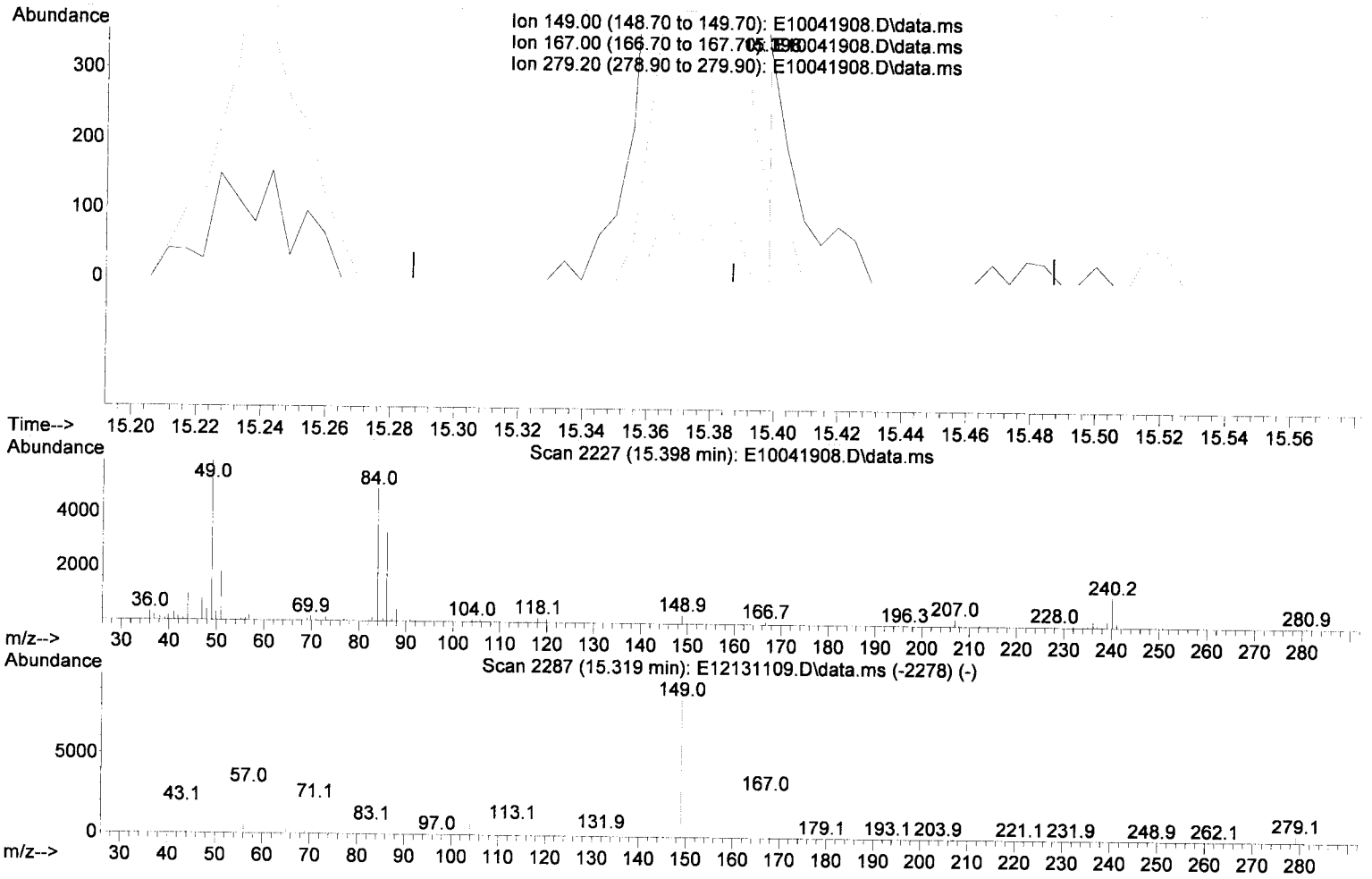


R = 1.64e-002 A*A + 7.56e-001 A - 2.21e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



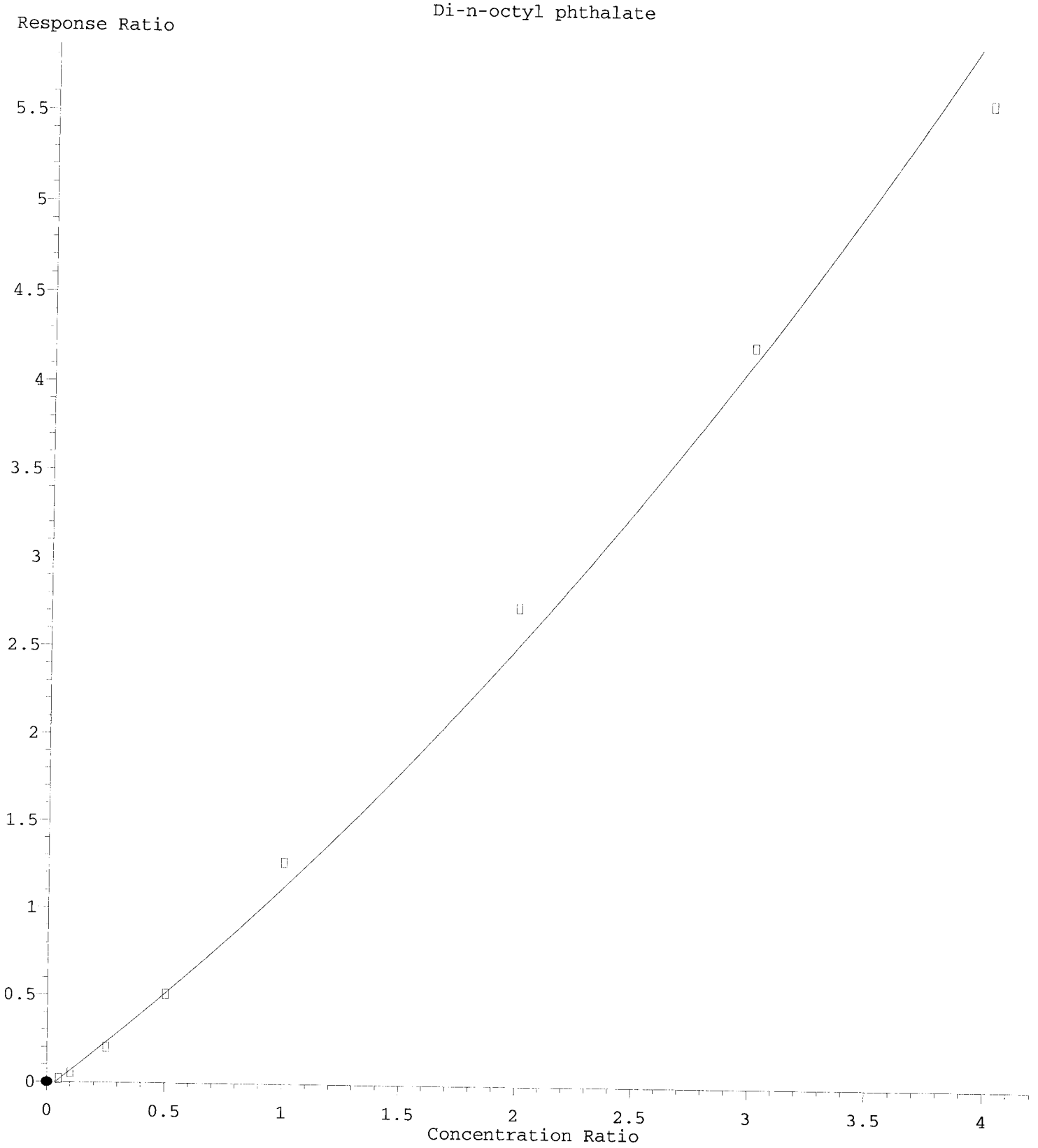
TIC: E10041908.D\data.ms

(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

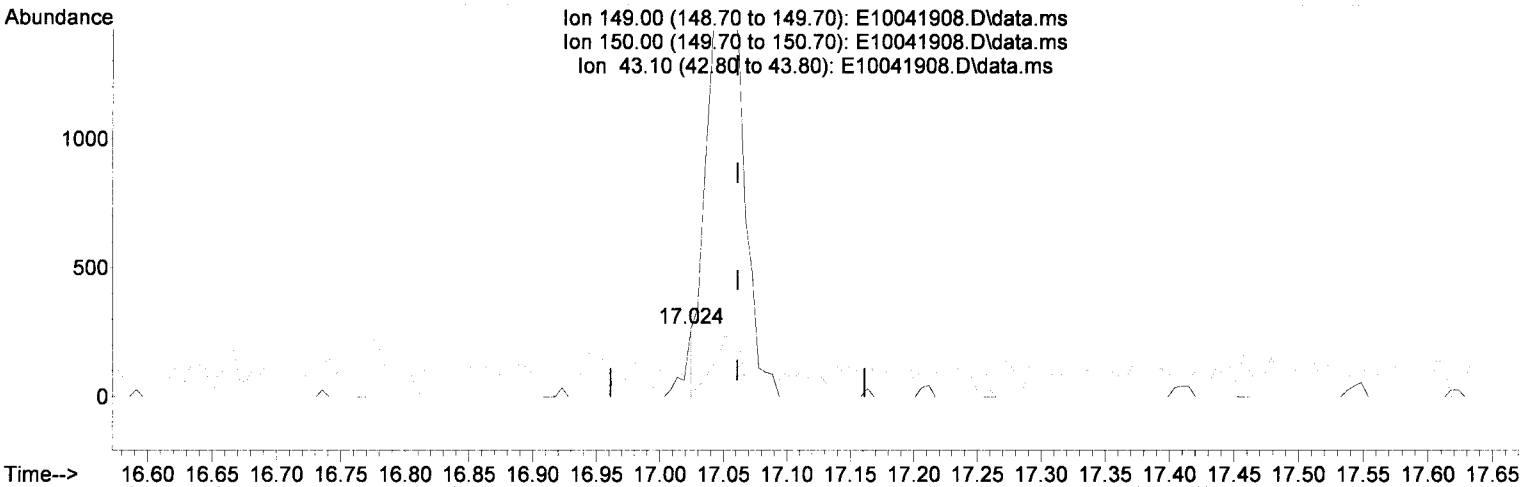


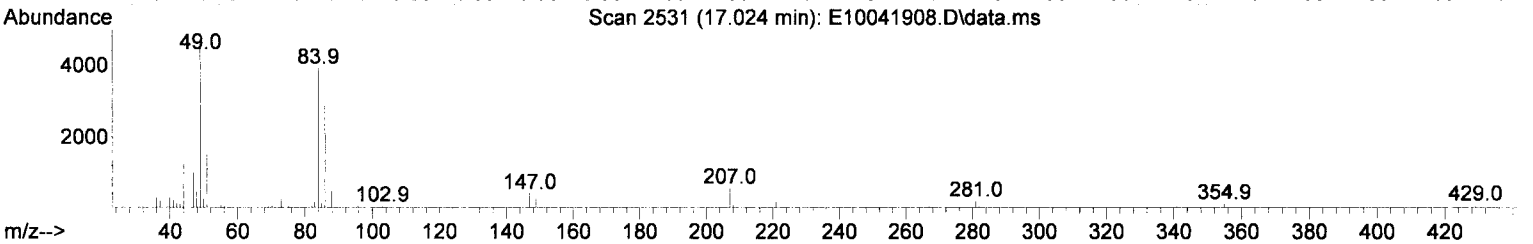
R = 1.14e-001 A*A + 1.05e+000 A - 3.91e-002
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_1004I9.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

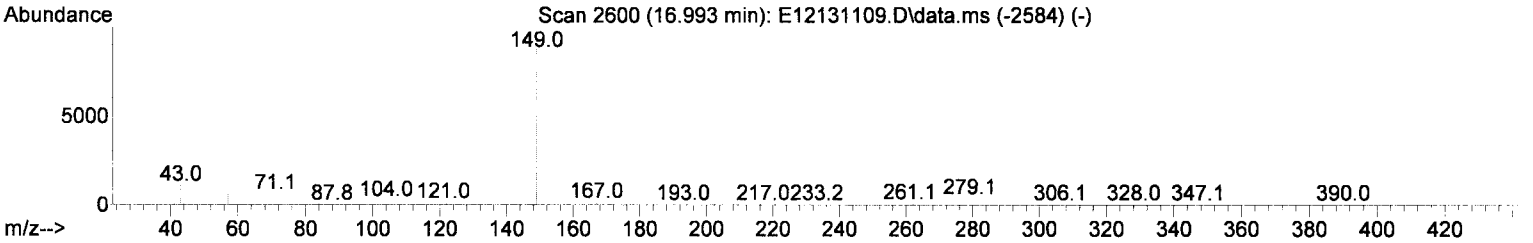
Quantitation Report (Qedit)

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







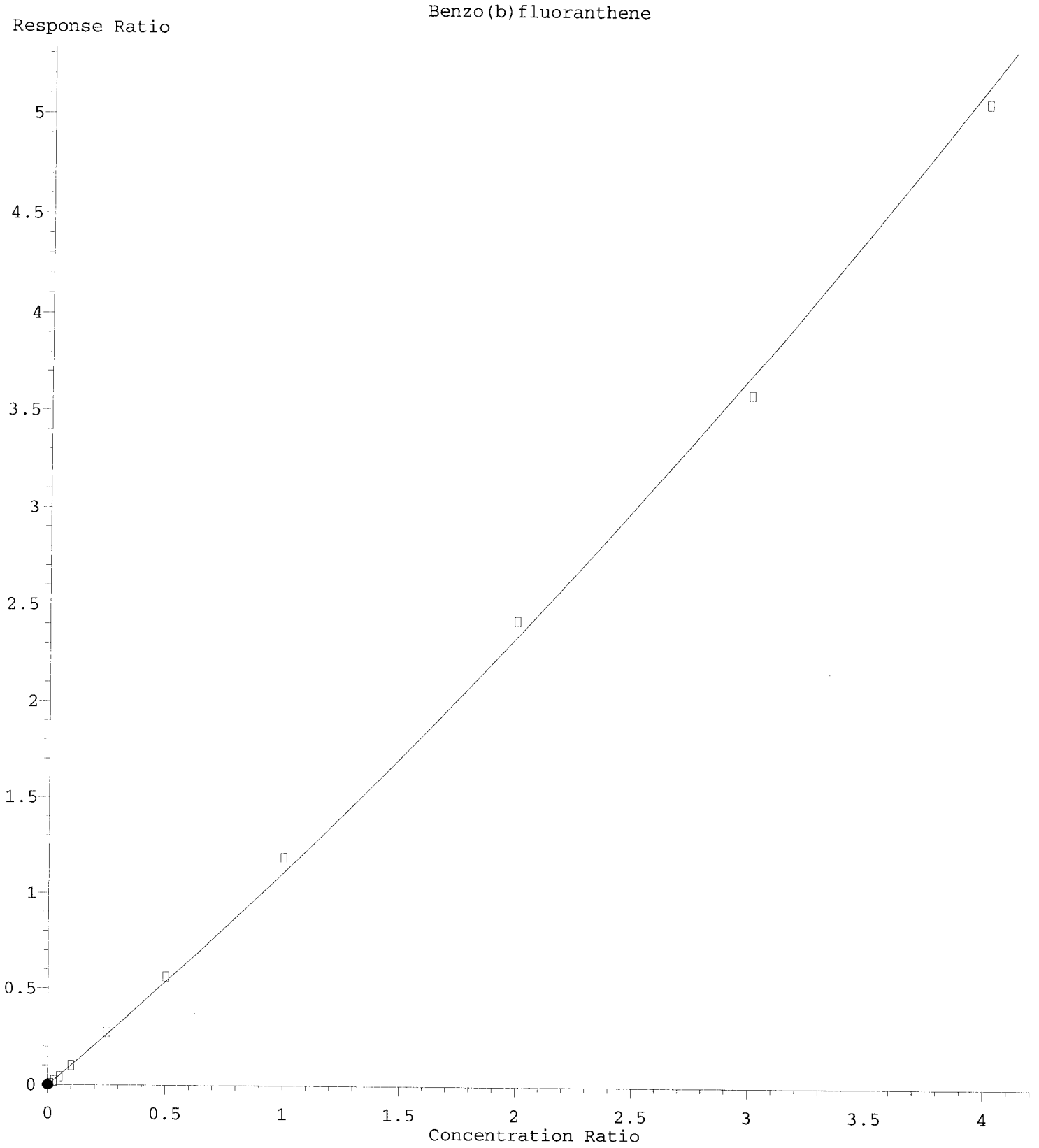
TIC: E10041908.D\data.ms

(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

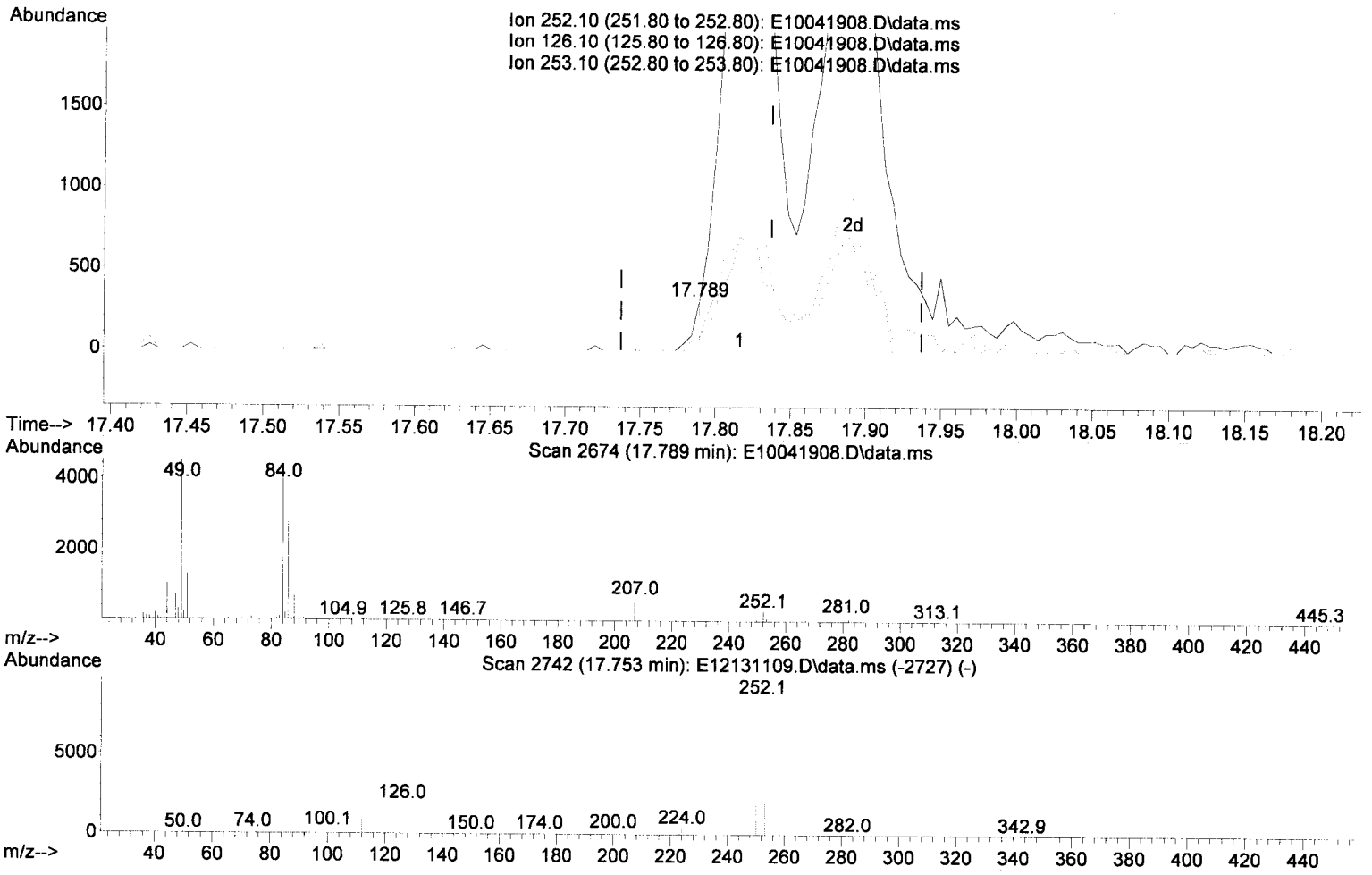


R = 5.89e-002 A*A + 1.06e+000 A - 5.32e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



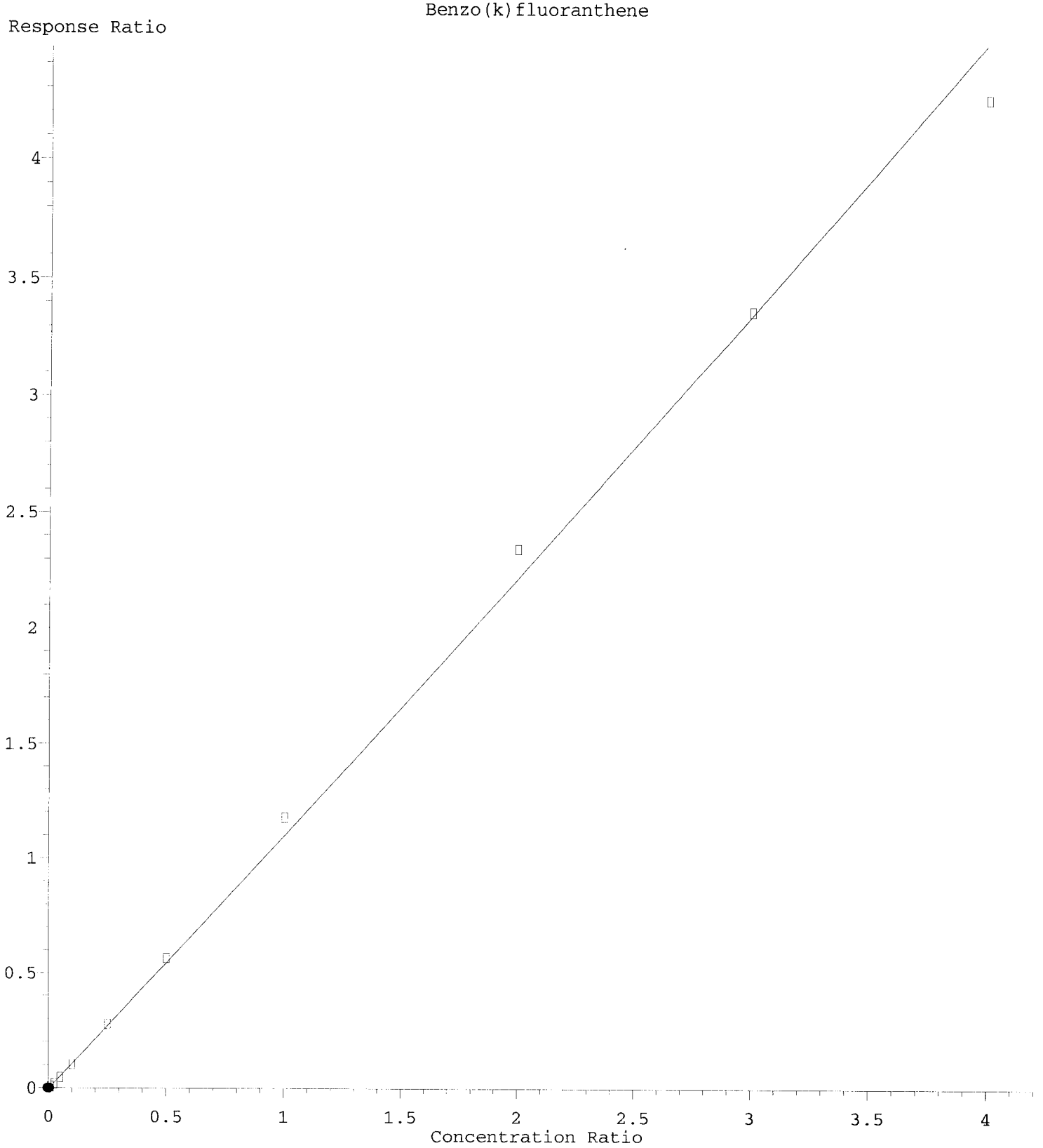
TIC: E10041908.D\data.ms

(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

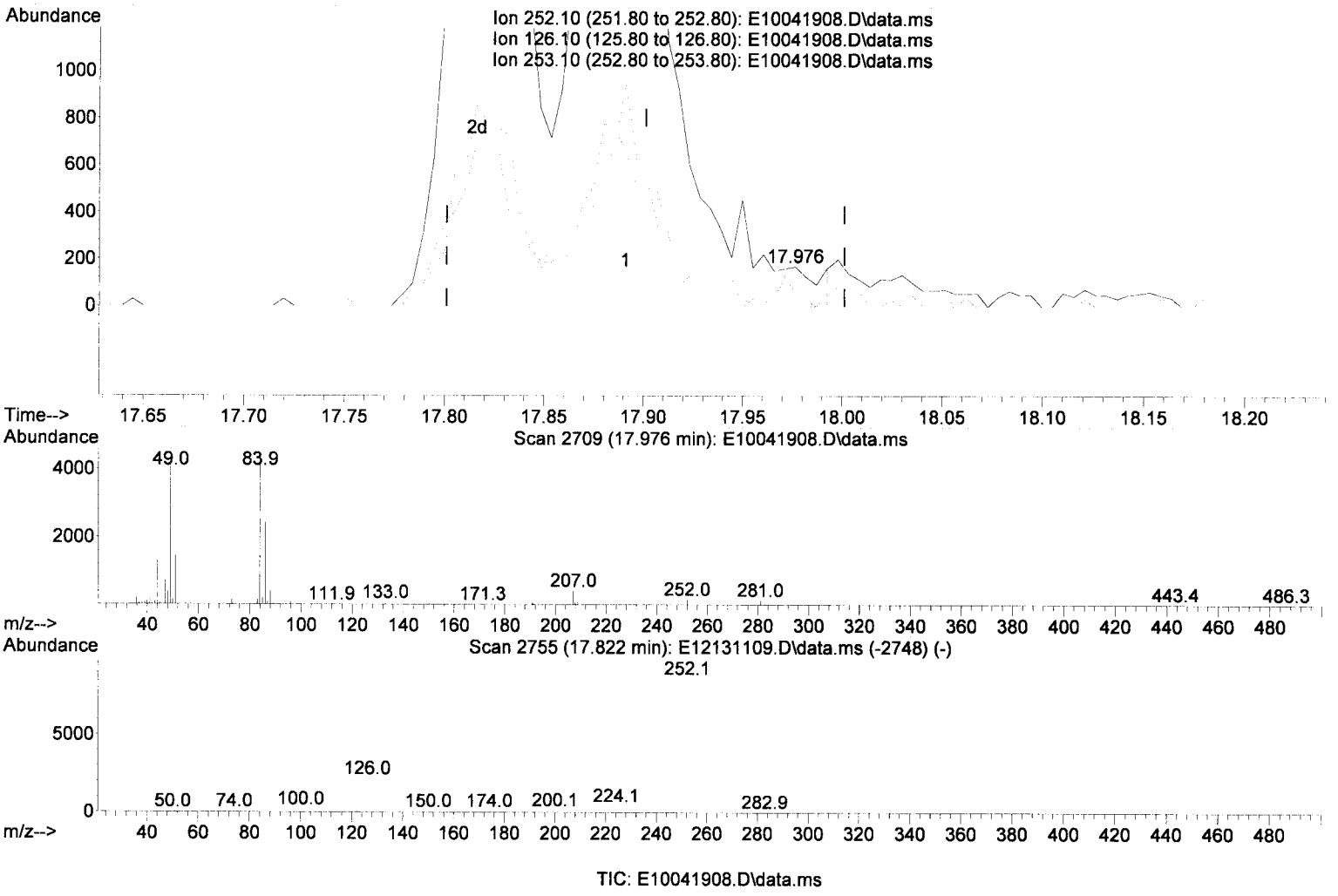


R = 6.35e-003 A*A + 1.10e+000 A - 5.87e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/1/(a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



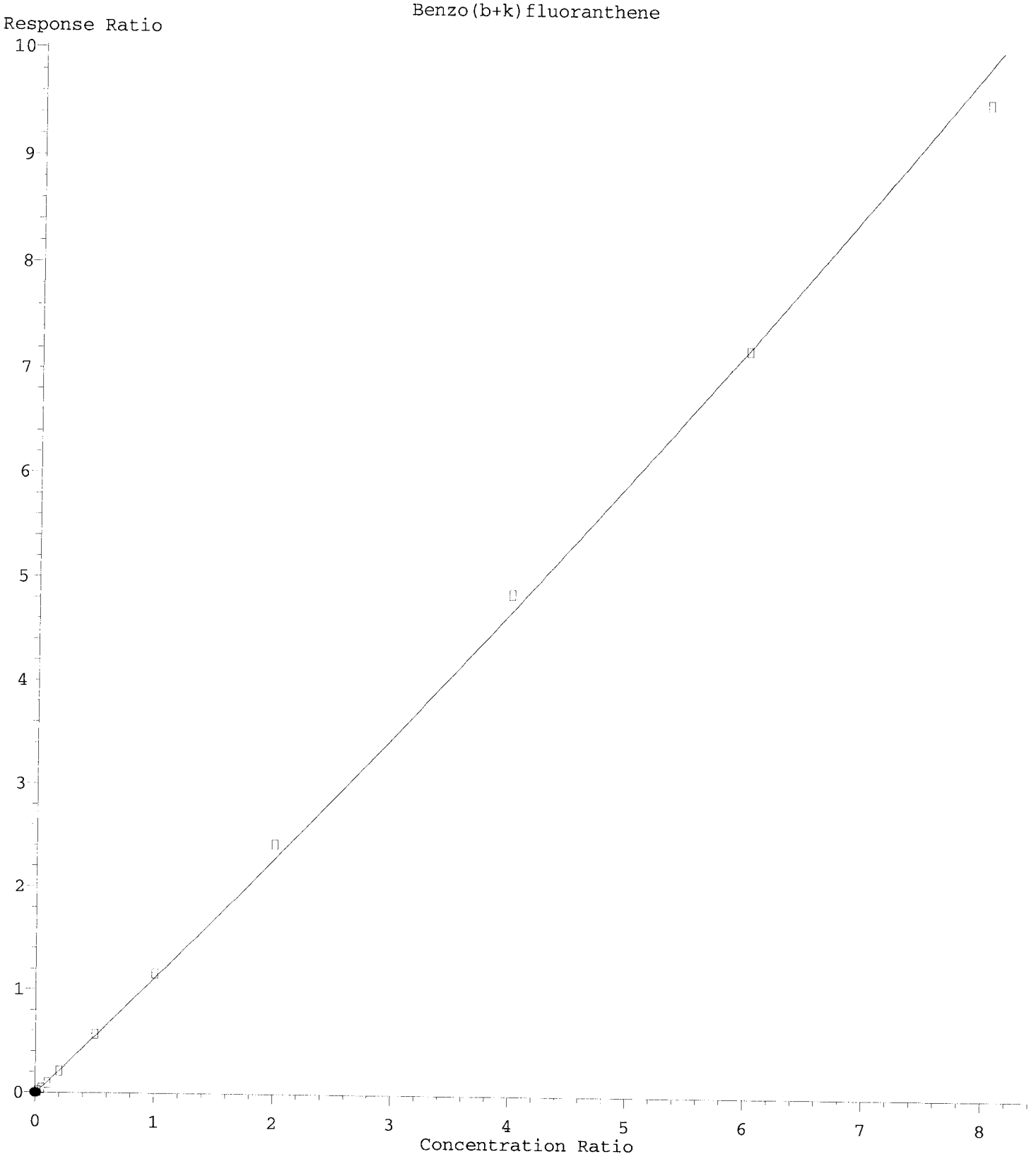
TIC: E10041908.D\data.ms

(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

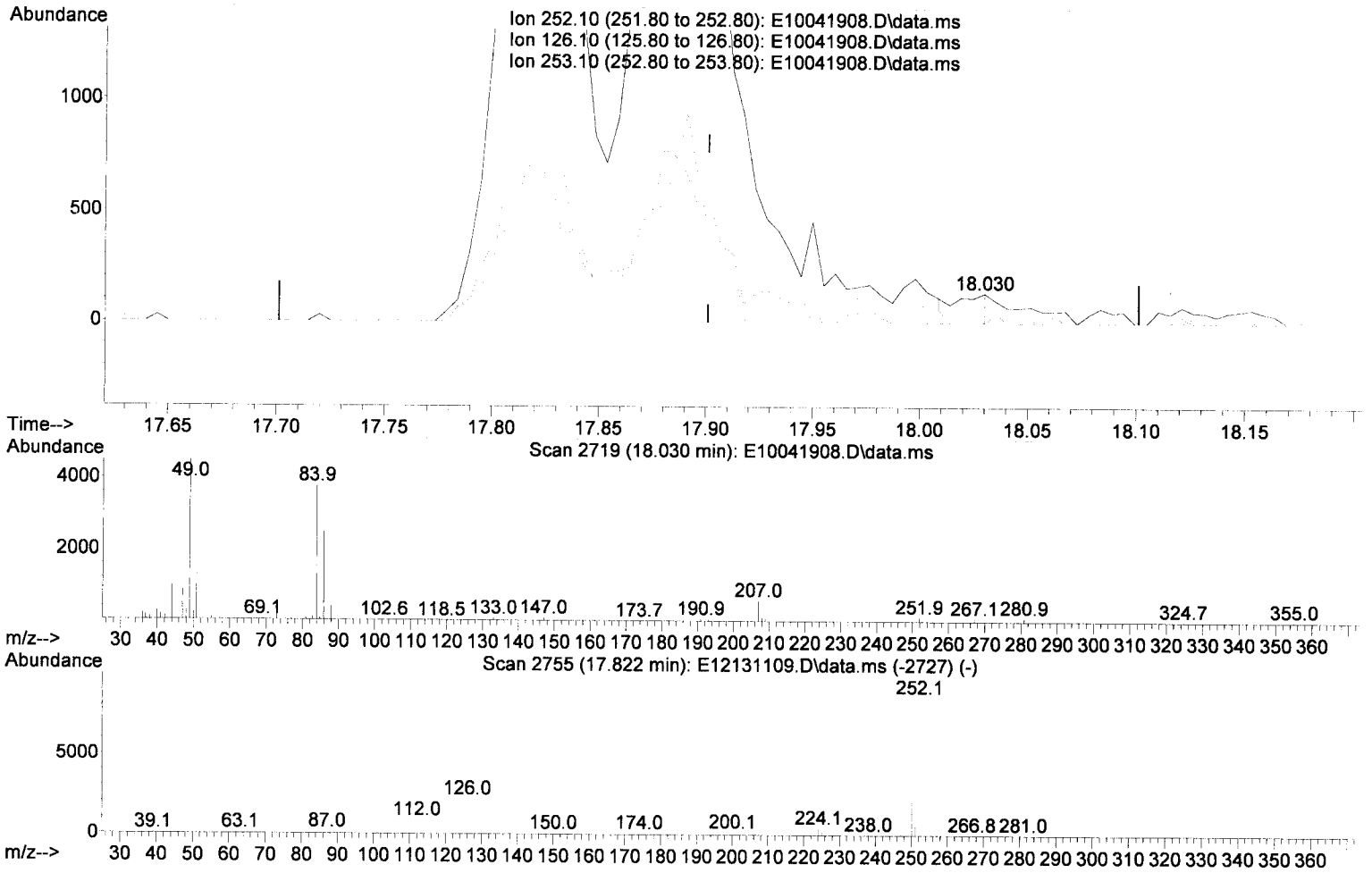


R = 1.54e-002 A*A + 1.11e+000 A - 1.06e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/(1/a^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



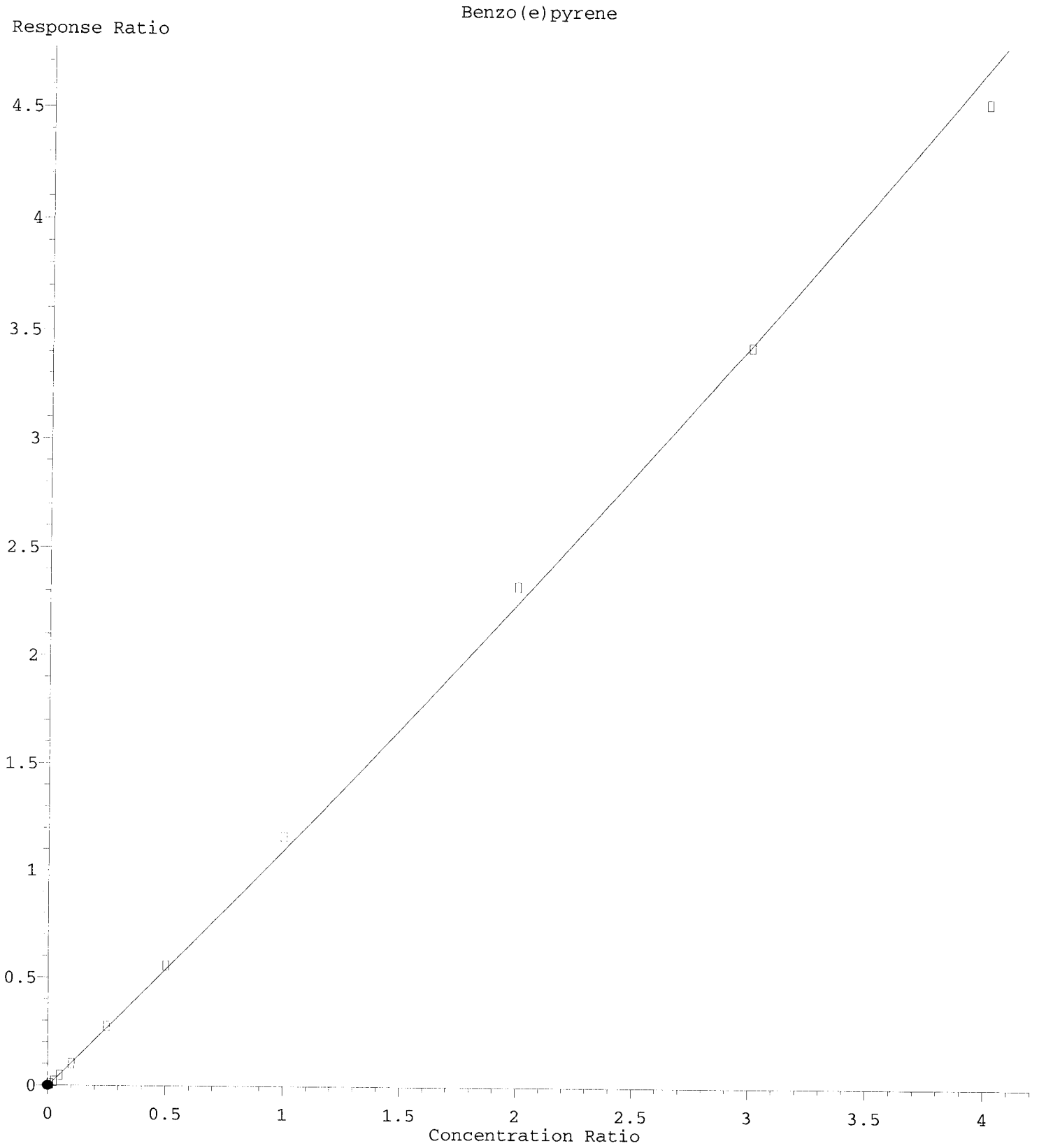
TIC: E10041908.D\data.ms

(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

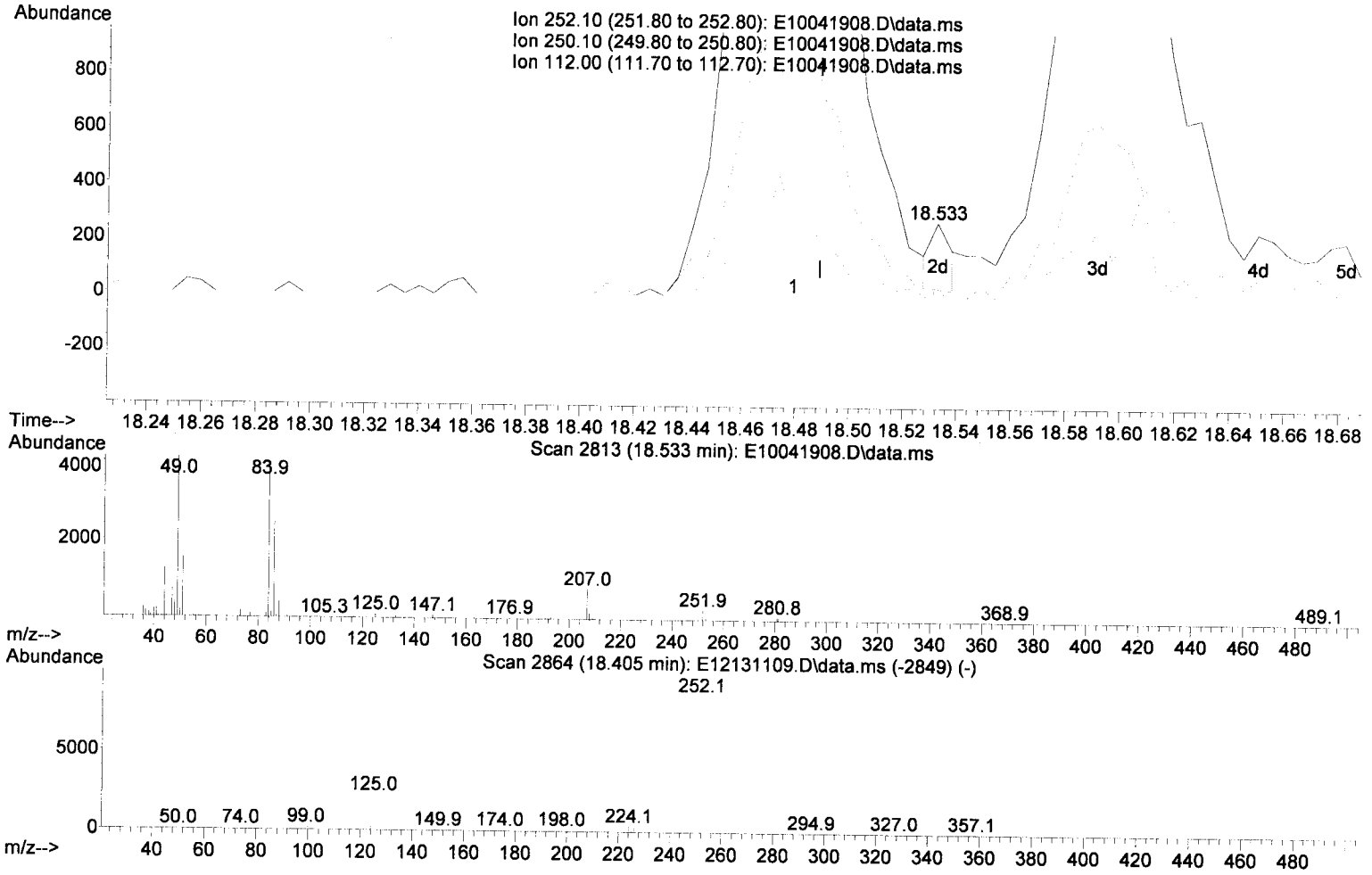


R = 2.39e-002 A*A + 1.08e+000 A - 4.52e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/1/a^2
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:39:11 2019

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



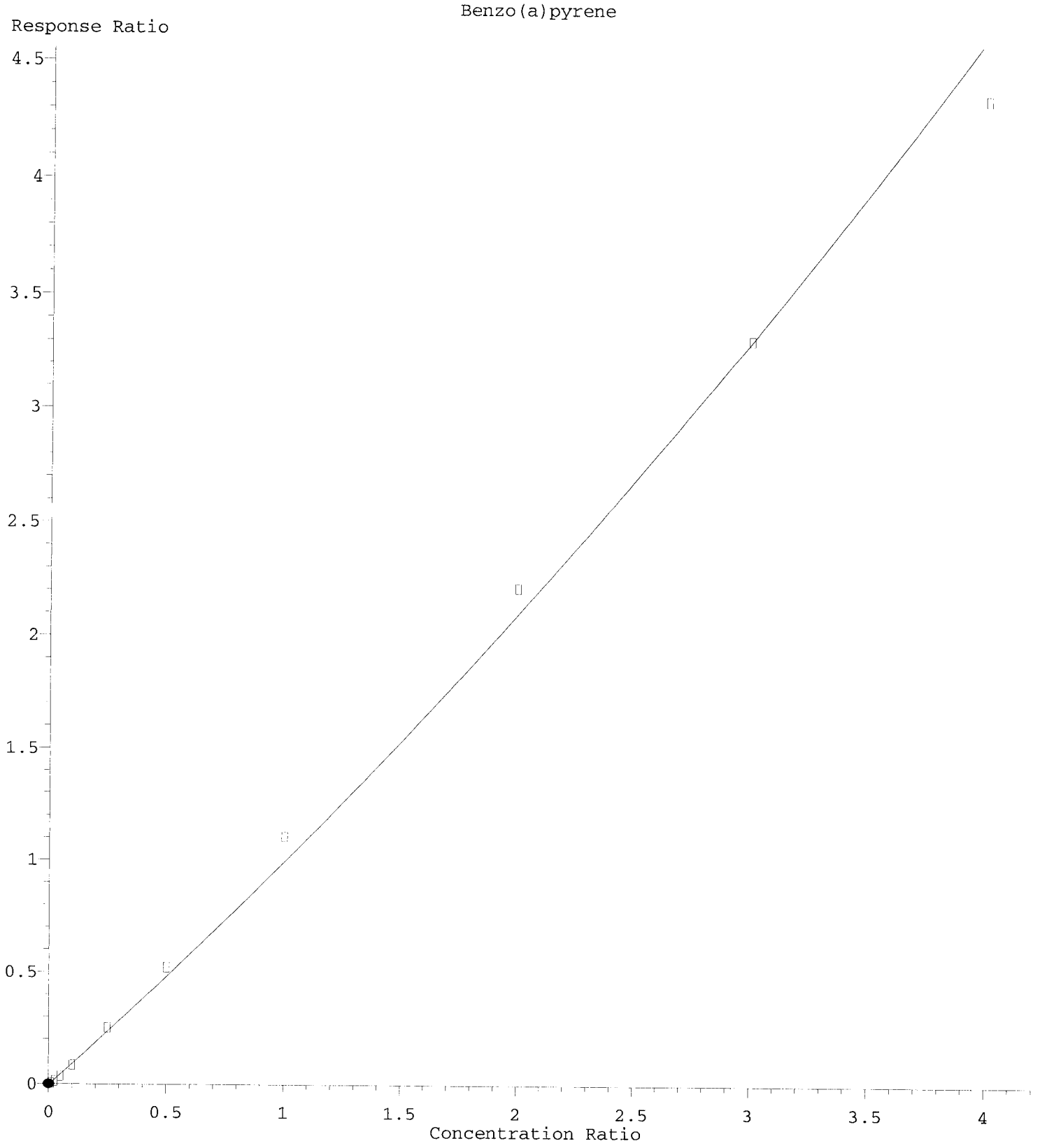
TIC: E10041908.D\data.ms

(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

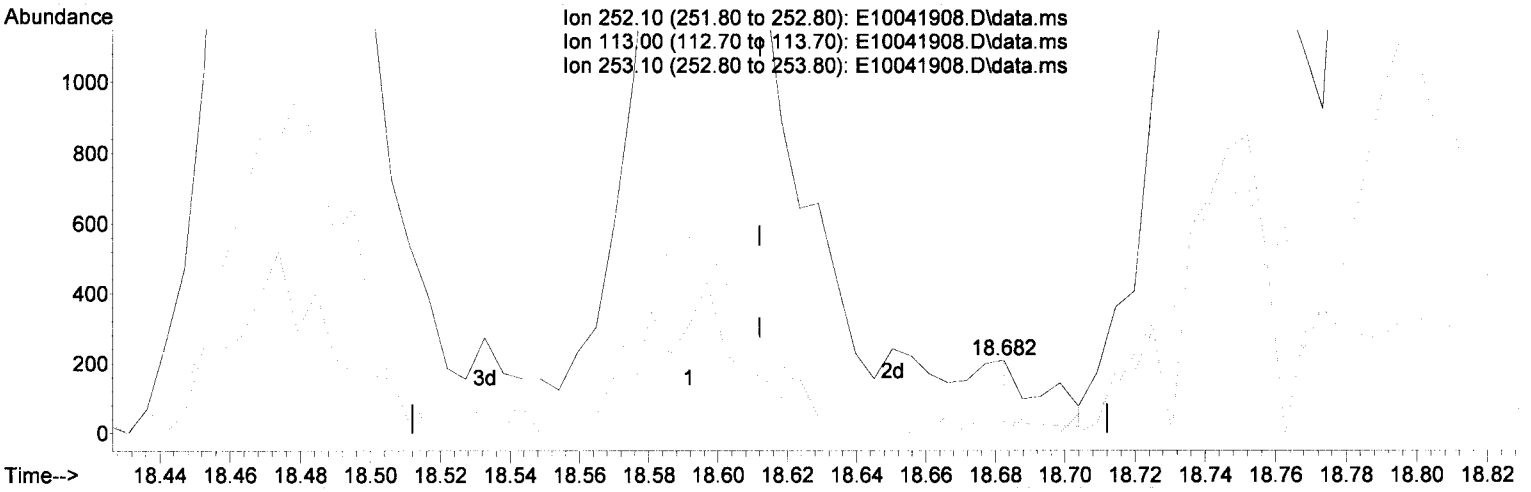


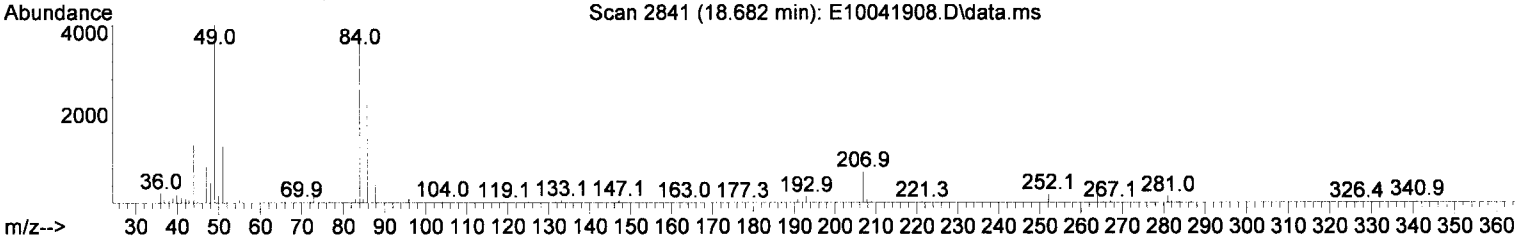
R = 5.17e-002 A*A + 9.47e-001 A - 6.25e-003
Coef of Det (r^2) = 0.989 Curve Fit: Quadratic ov(1/x^2)
Method Name: Z:\METHODS\SV5_100419.M
Calibration Table Last Updated: Mon Oct 07 13:30:11 2019

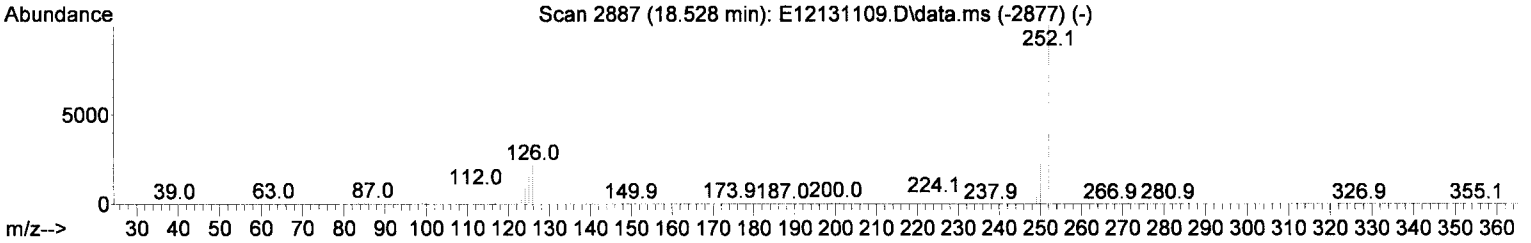
Quantitation Report (Qedit)

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

JJK 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

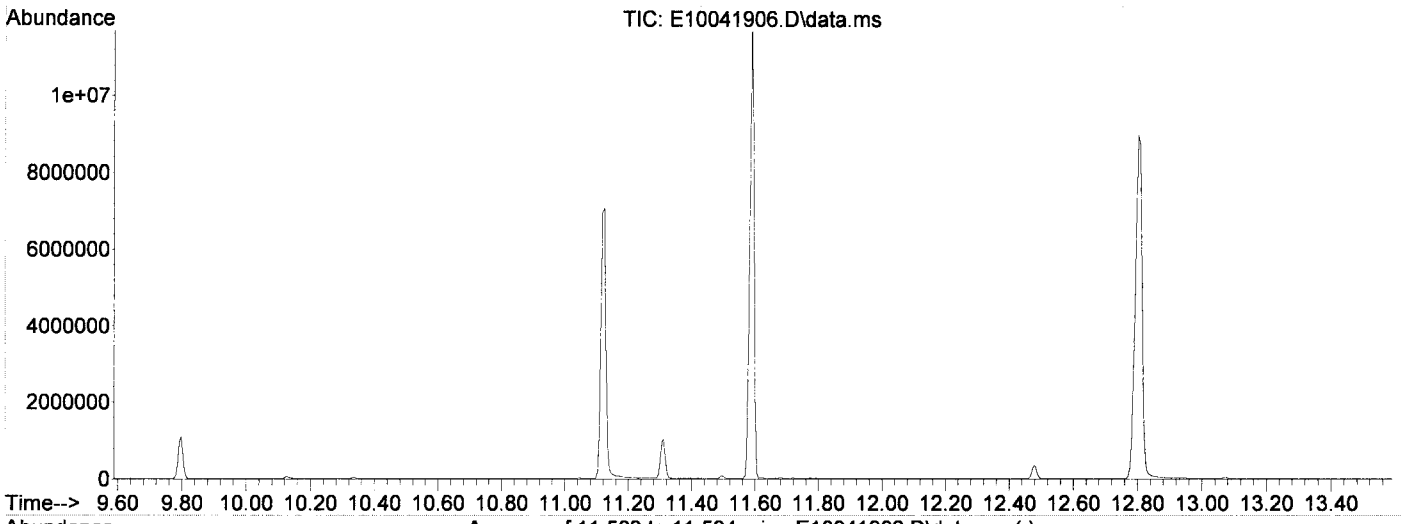
(#) = qualifier out of range (m) = manual integration (+) = signals summed

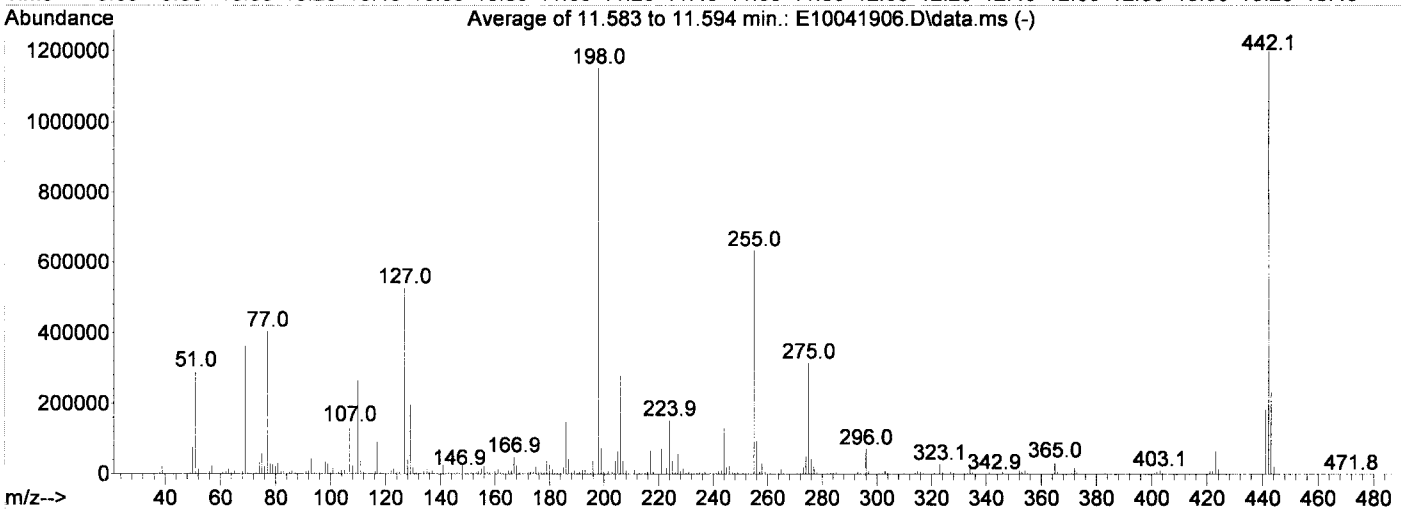
Data Path : Z:\DATA\2019-10\9J04044\
Data File : E10041906.D
Acq On : 4 Oct 2019 4:46 pm
Operator : JK/ AMS /DTH
Sample : 9J04044-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

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





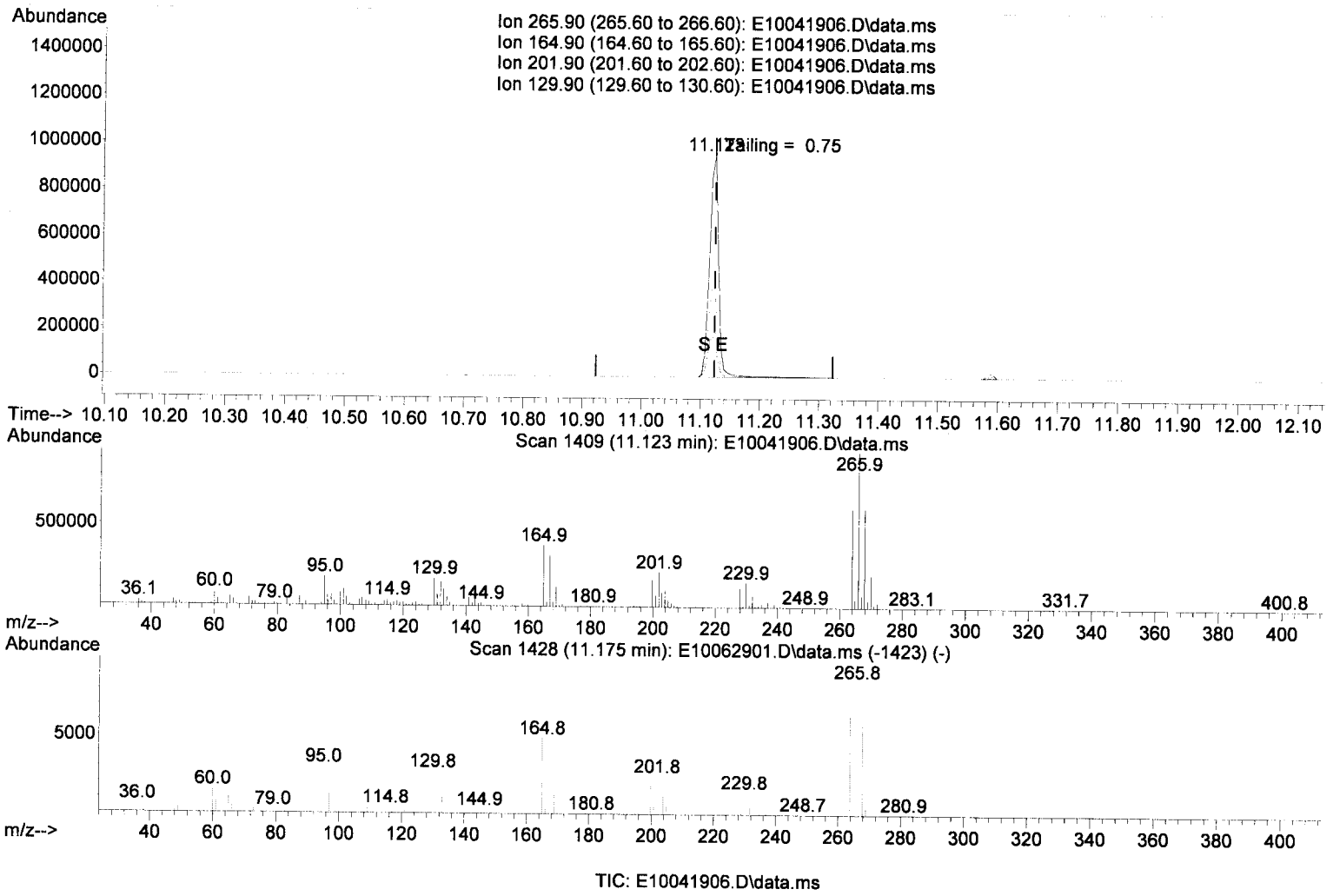
AutoFind: Scans 1495, 1496, 1497; Background Corrected with Scan 1490

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

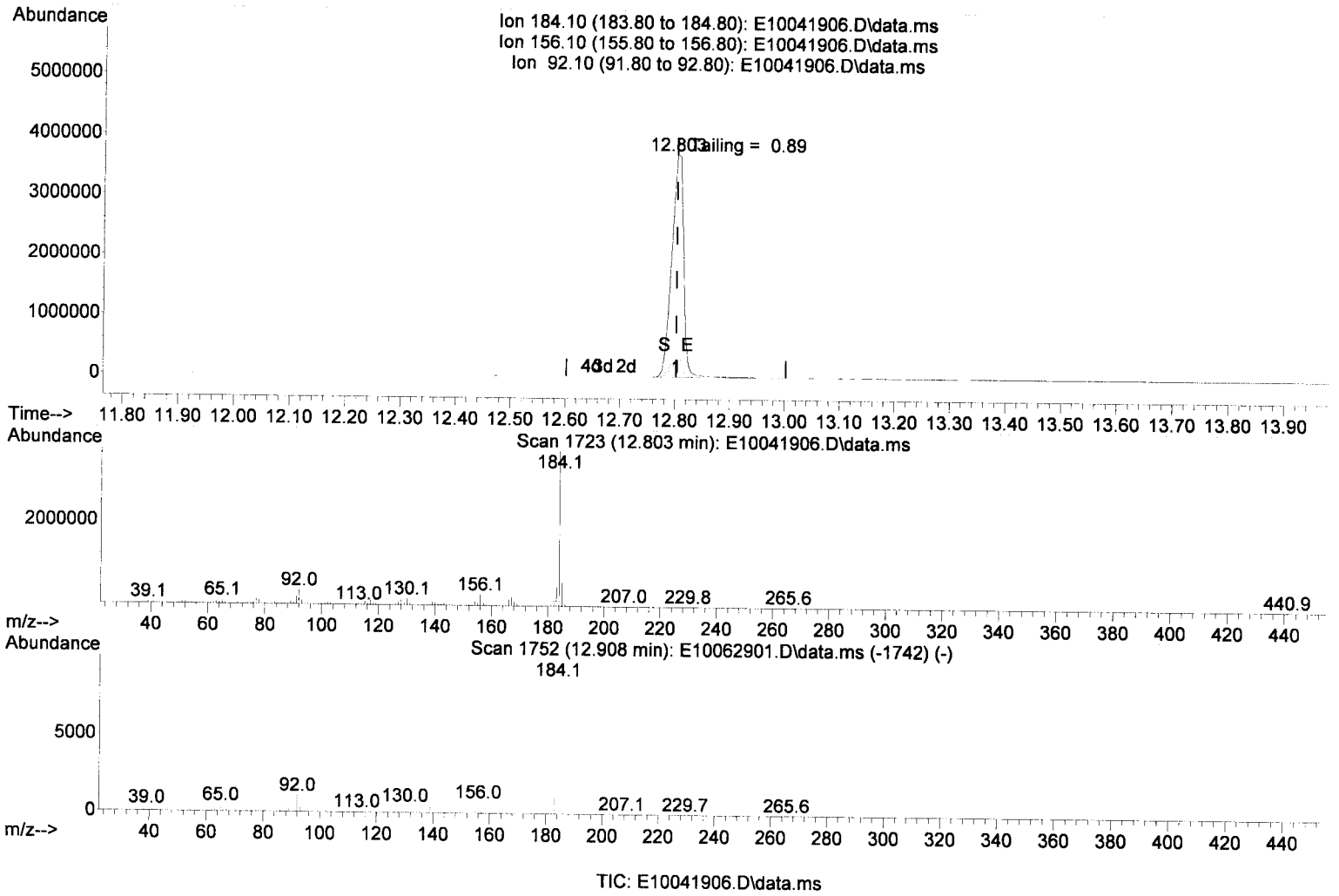
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	39.23
201.90	23.20	22.17
129.90	27.10	17.48

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**

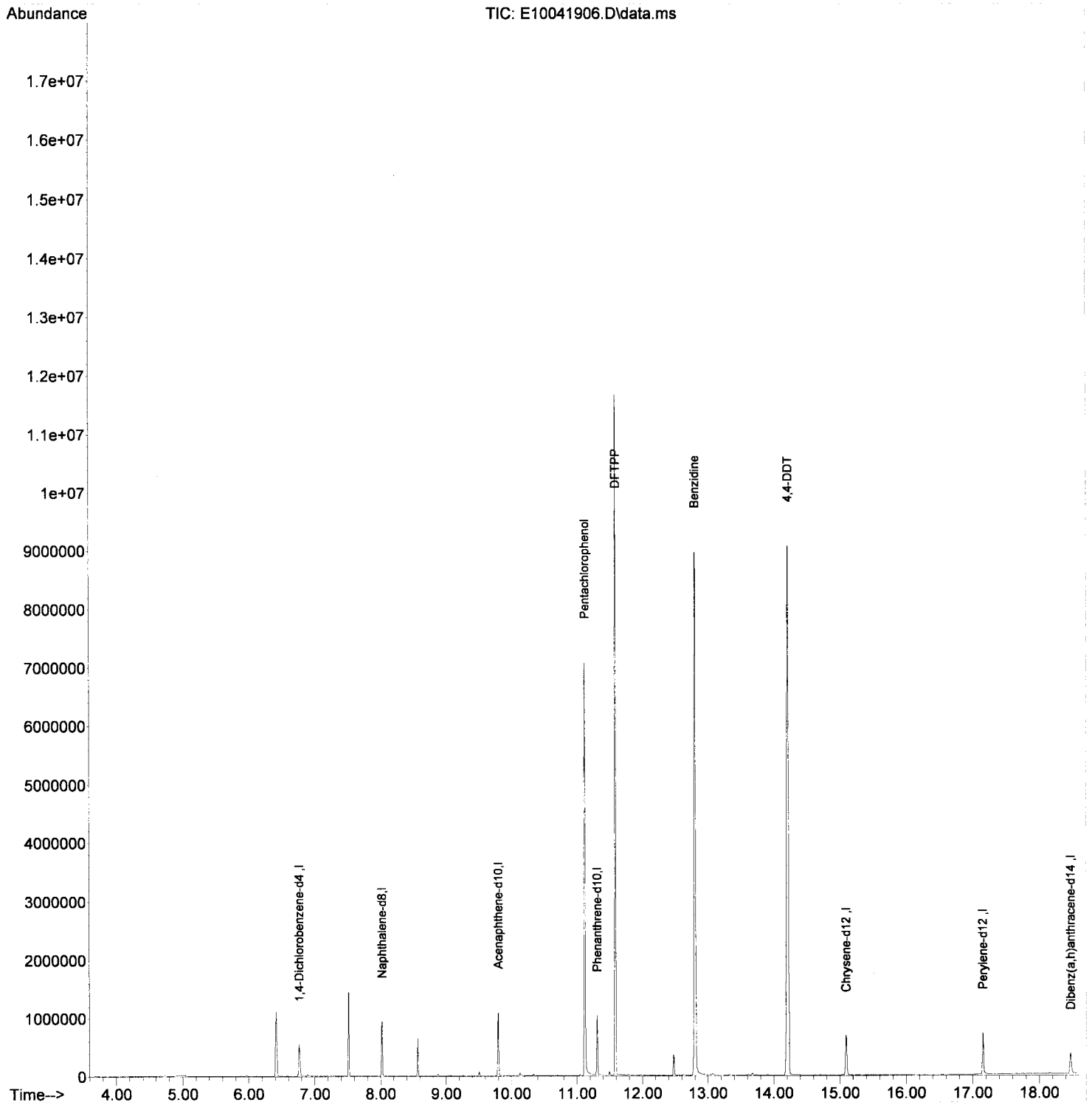
10/7/19

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

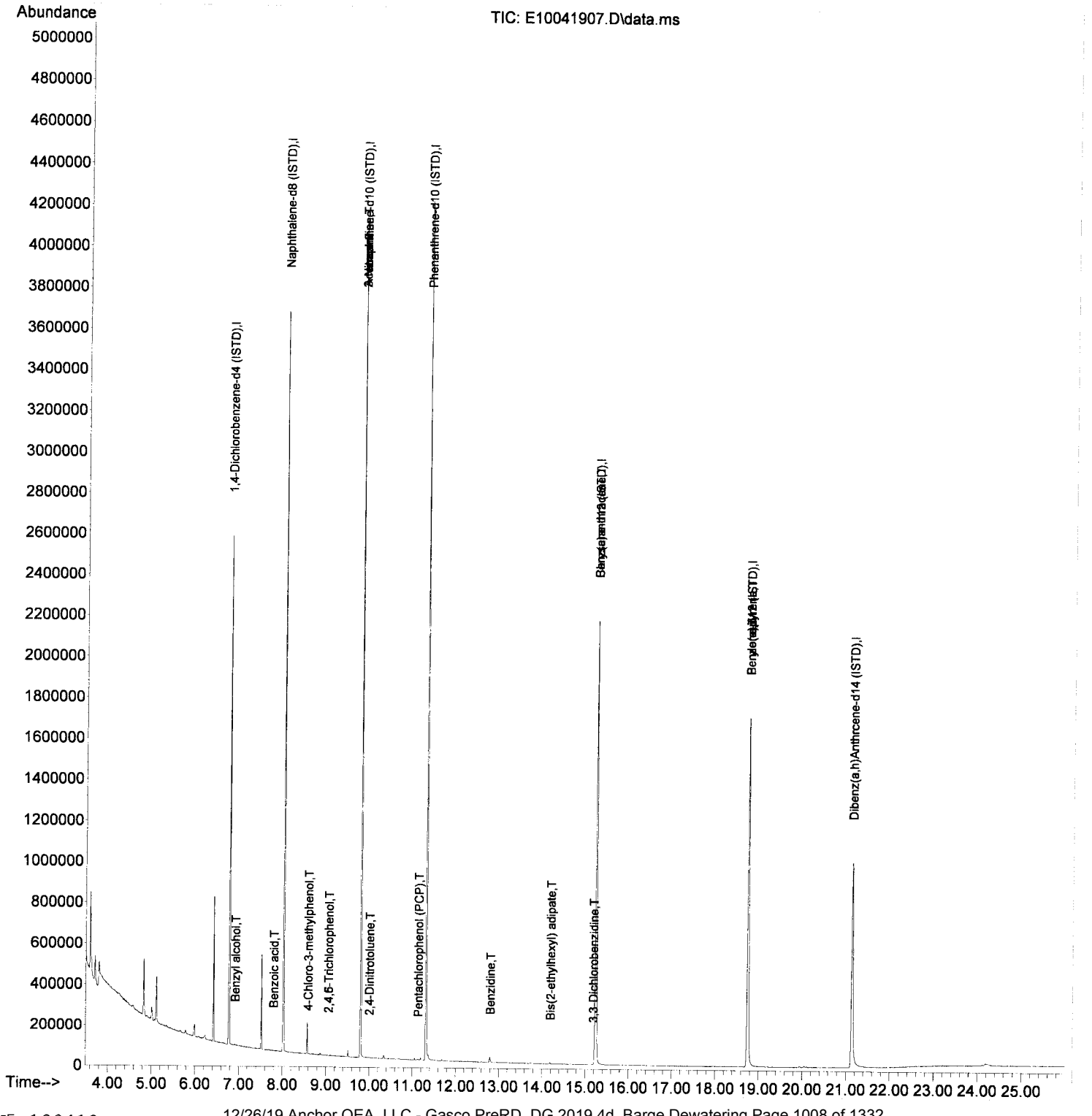
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.798	138	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

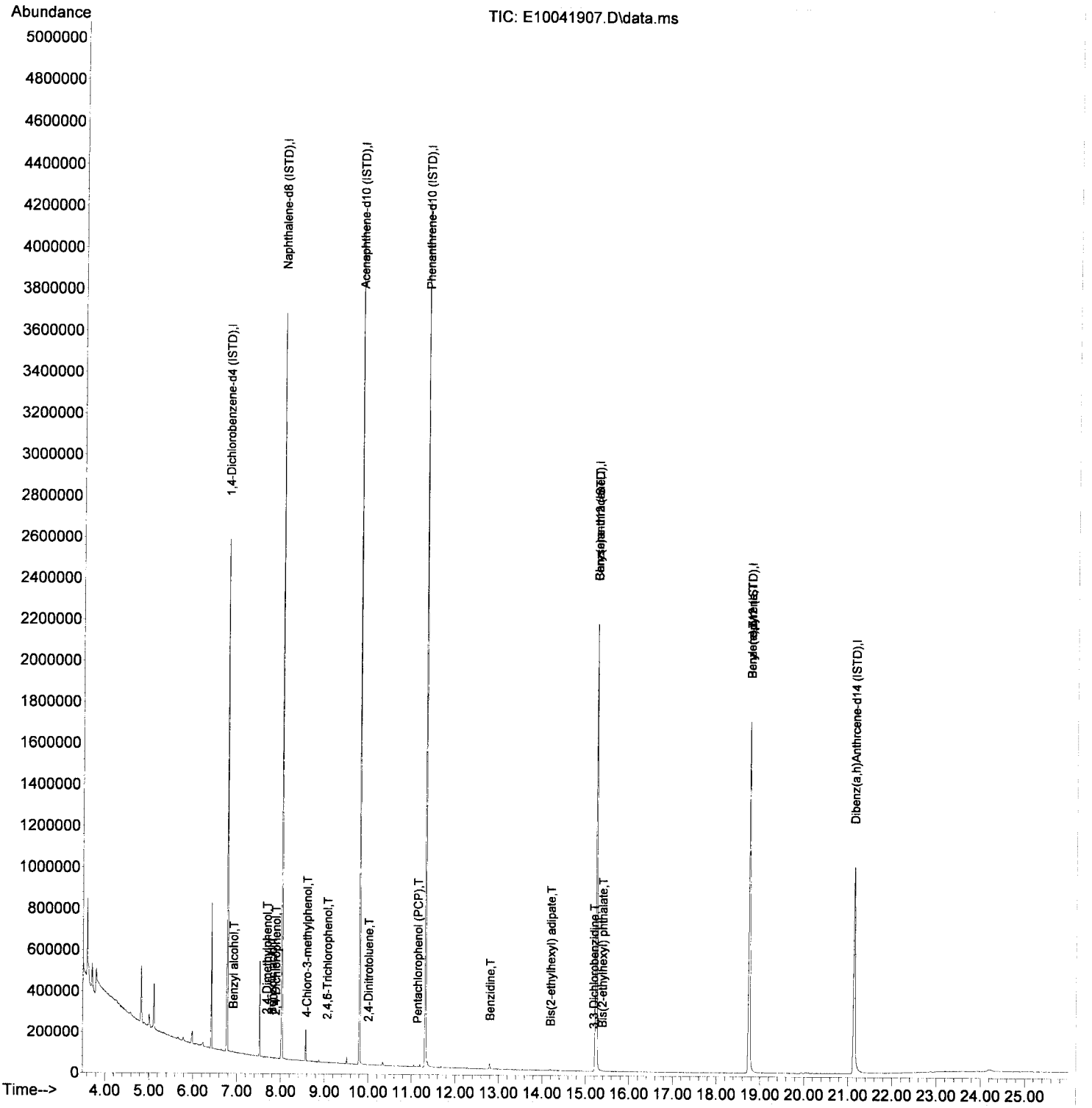
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.798	138	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

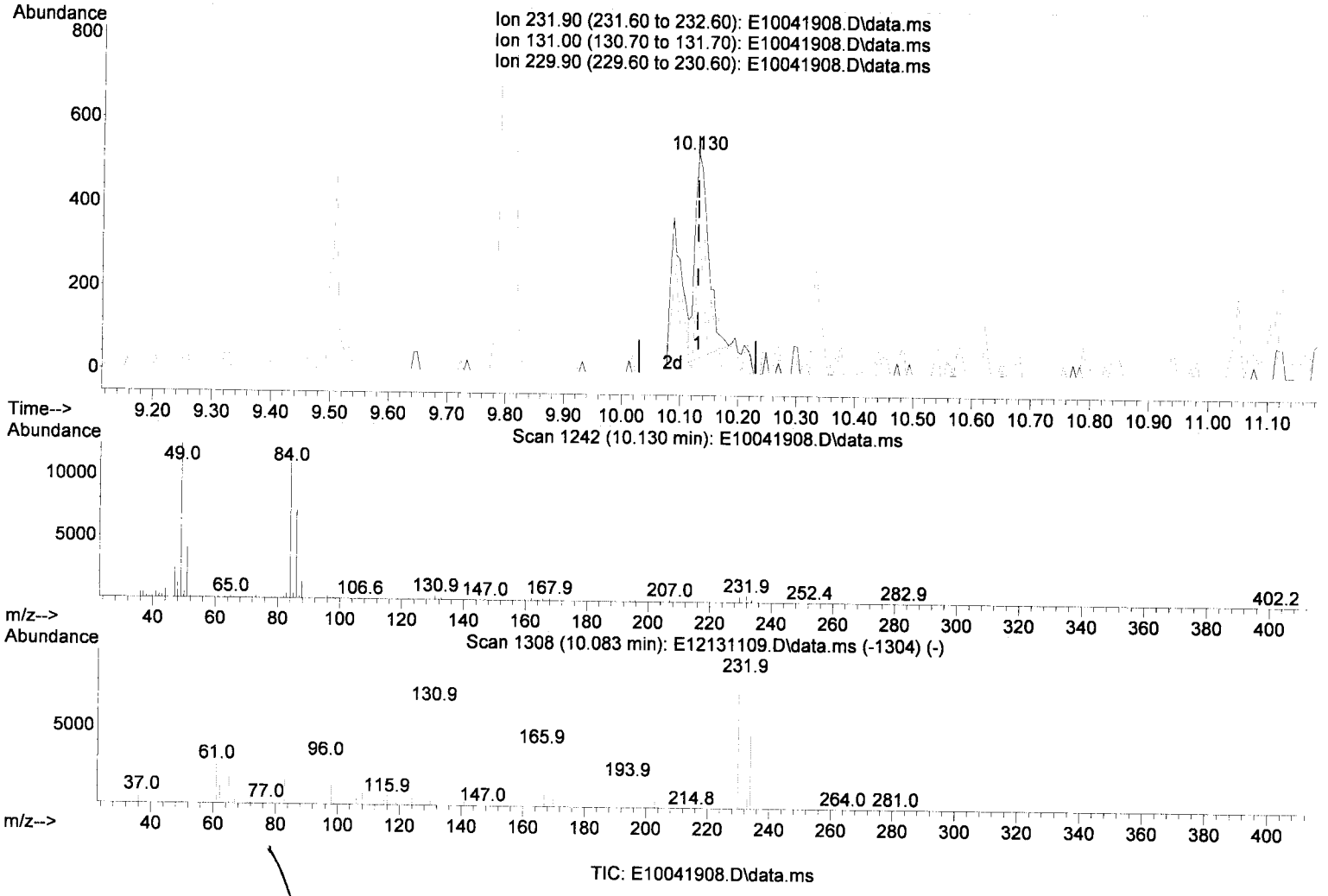
See MS

(#) = 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



(57) 2,3,4,6-Tetrachlorophenol (T)

10.130min (+ 0.000) 29.60 ng/ml

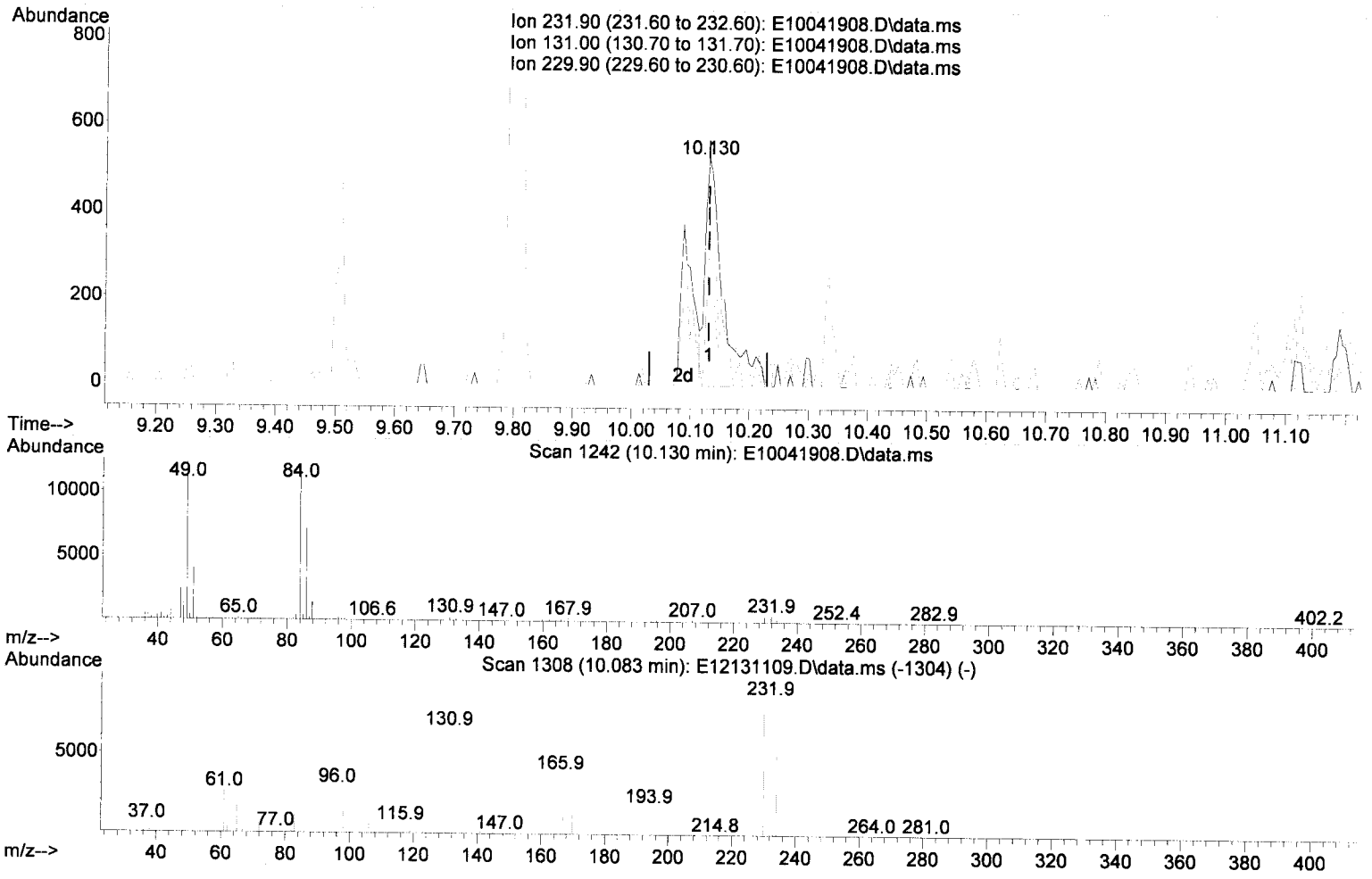
response 796

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

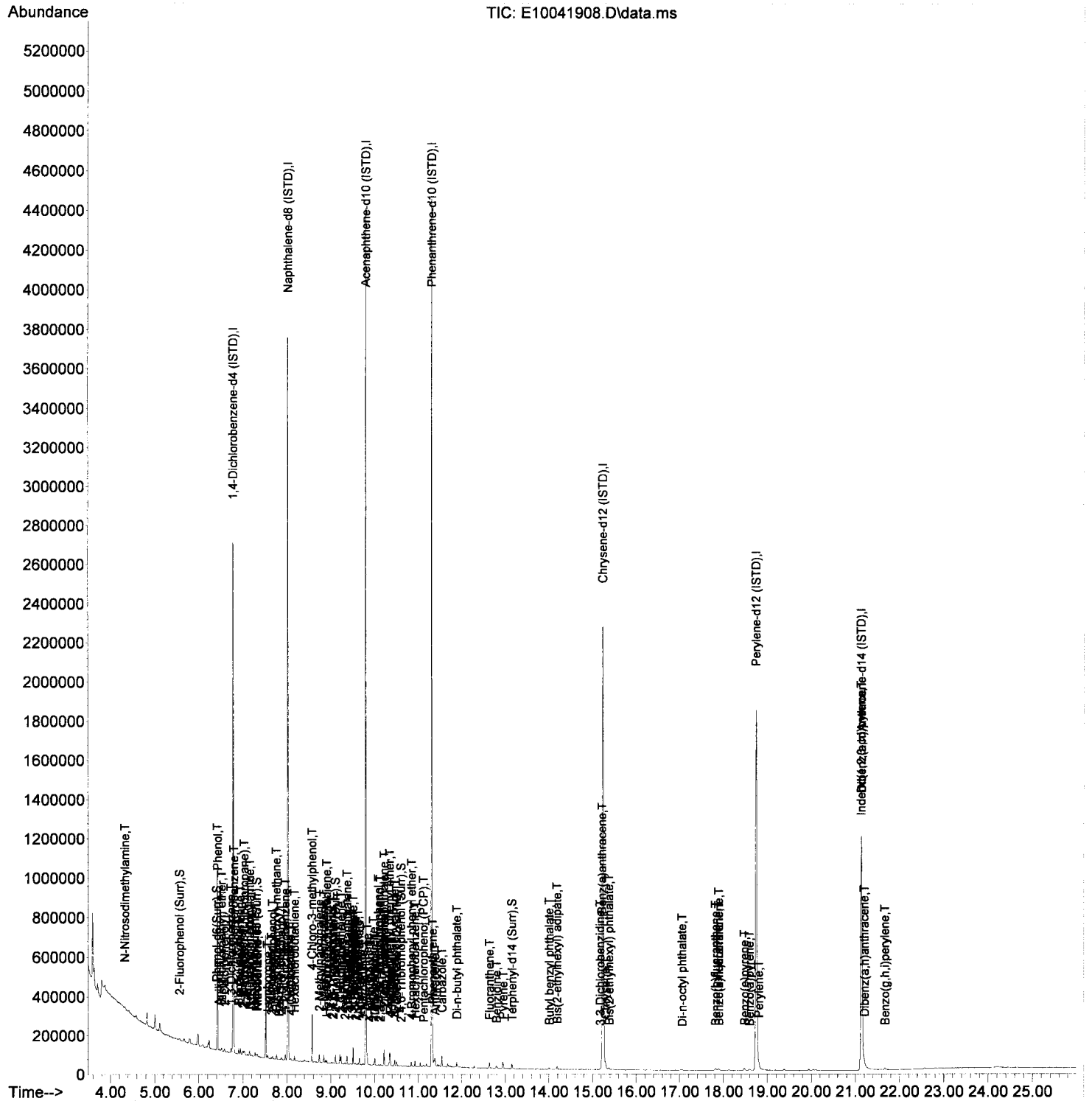
response 1127

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

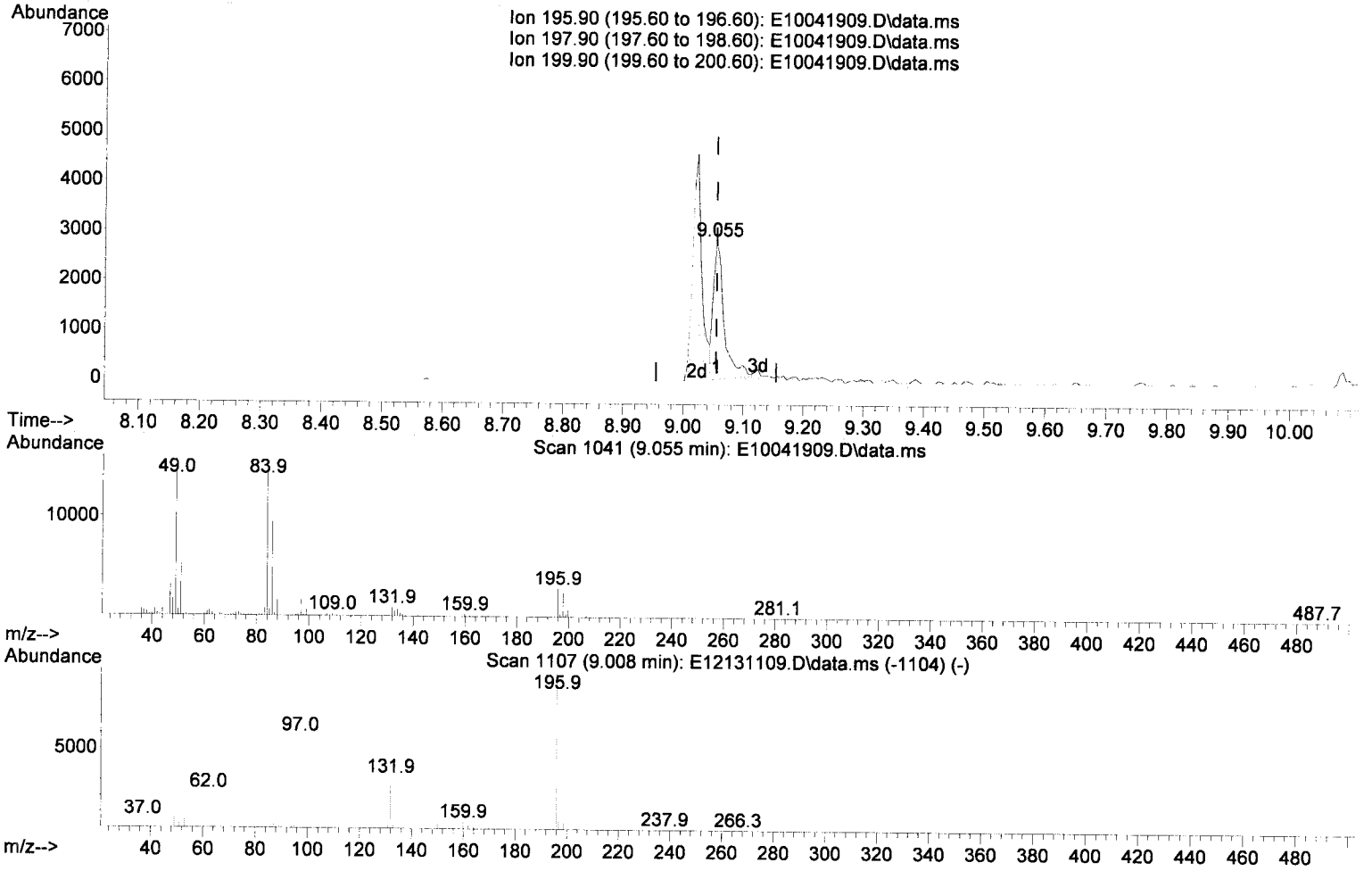
See MS

(#) = 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

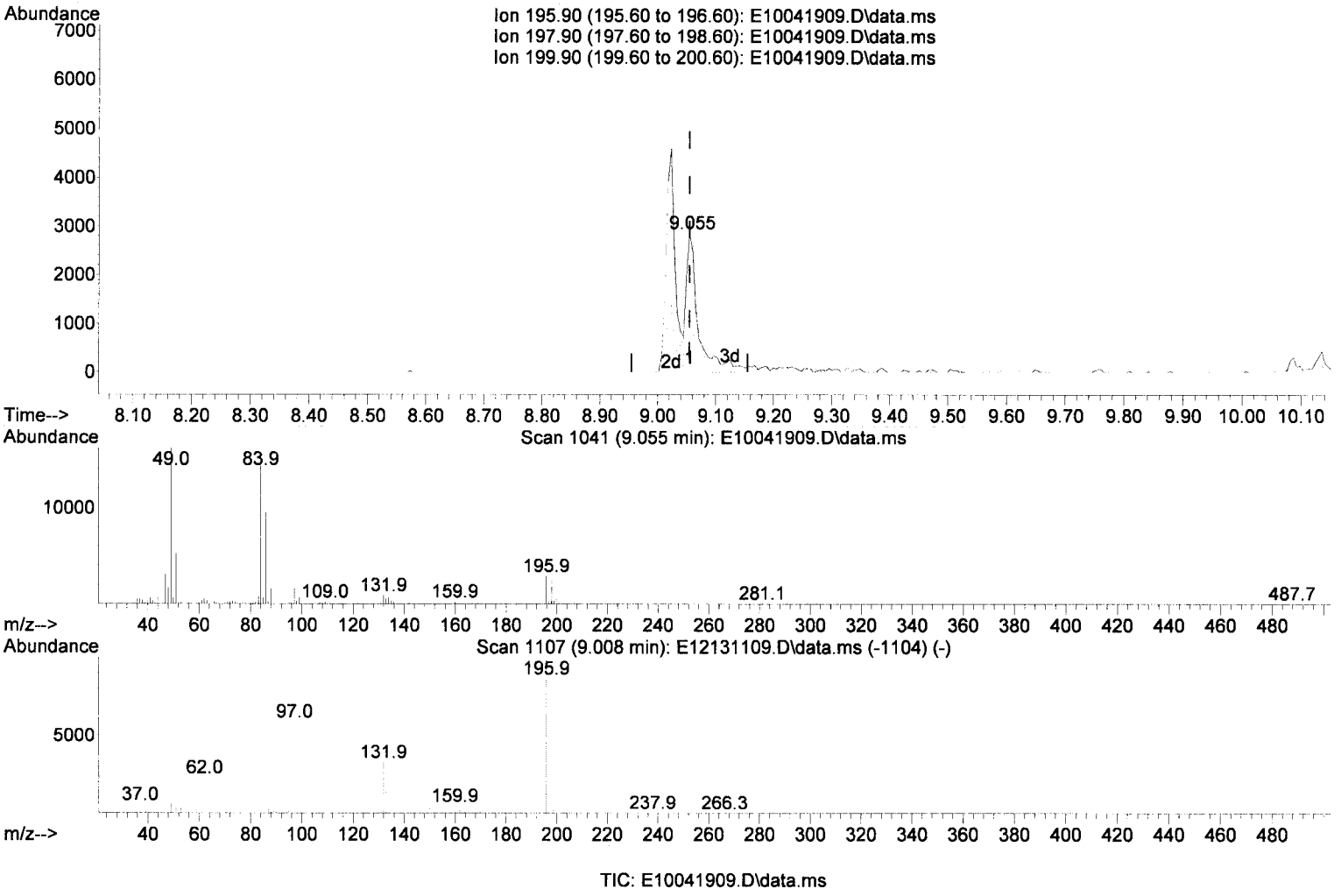
response 3461

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

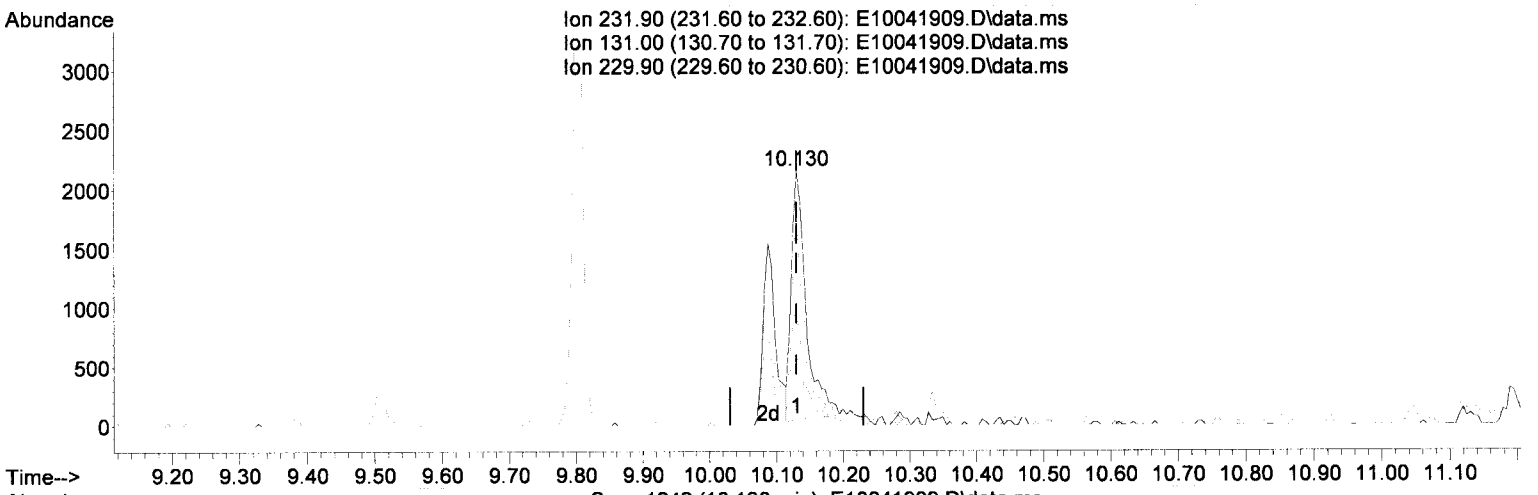
response 4145

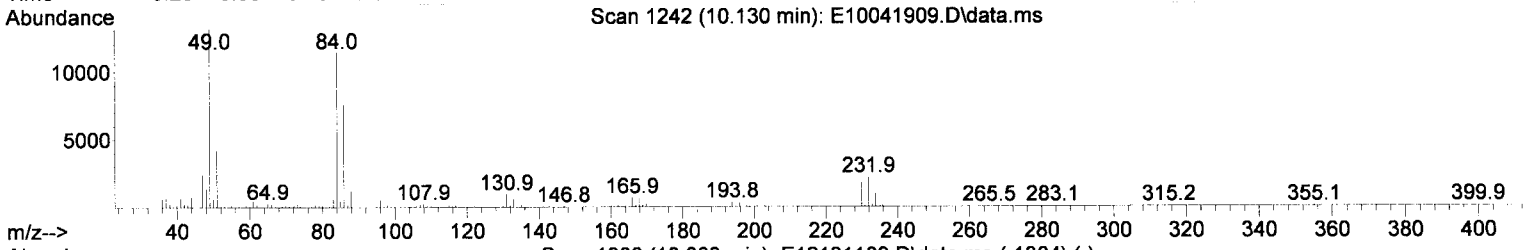
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	84.97
199.90	32.40	25.43
0.00	0.00	0.00

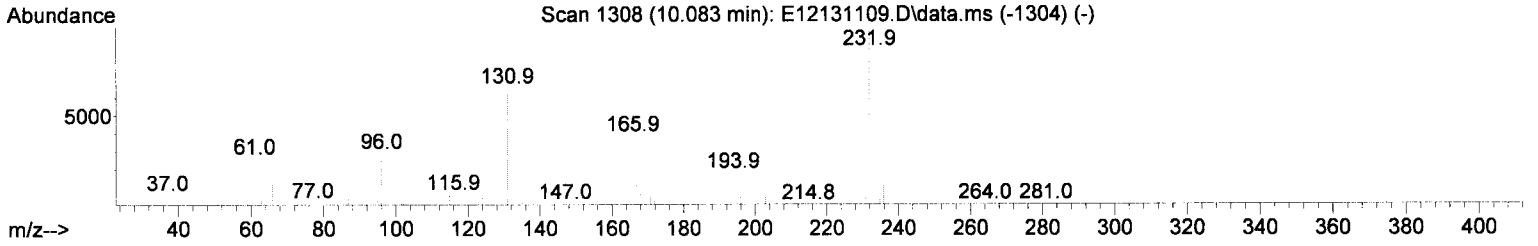
Quantitation Report (Qedit)

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

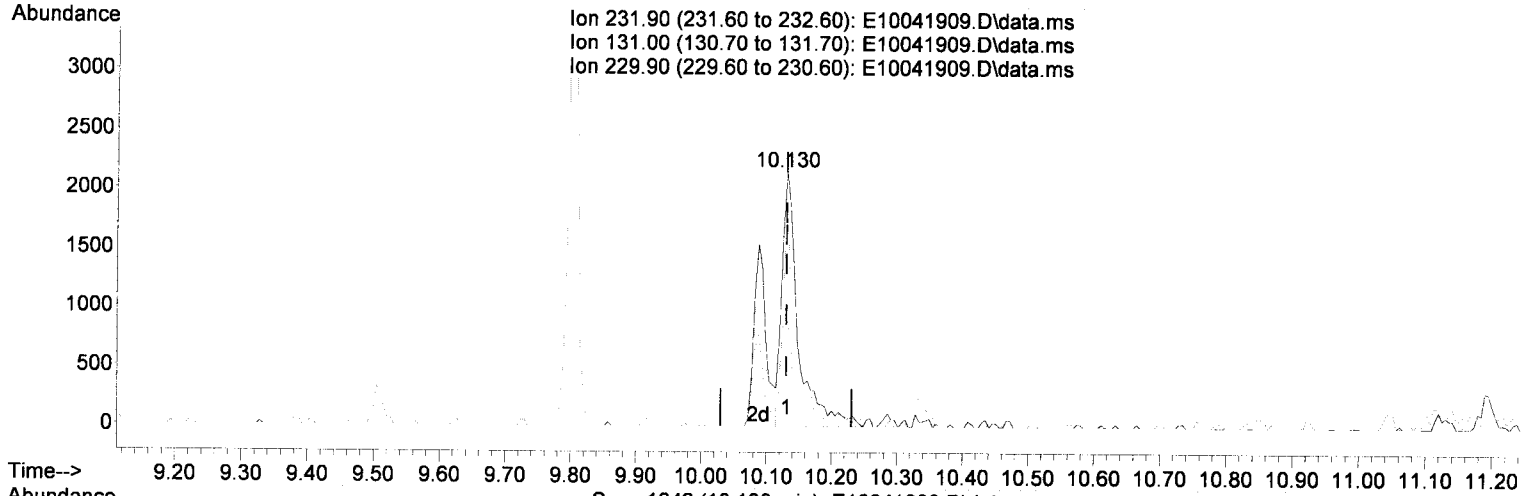
response 3279

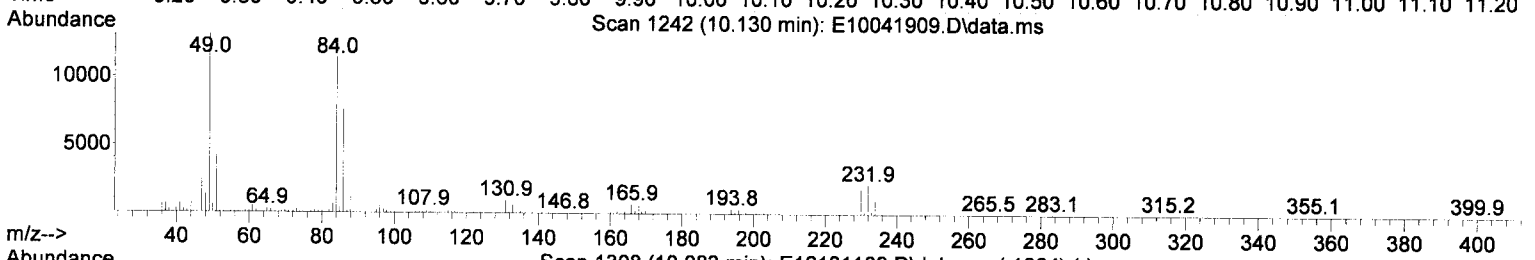
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	42.82
229.90	79.80	84.34
0.00	0.00	0.00

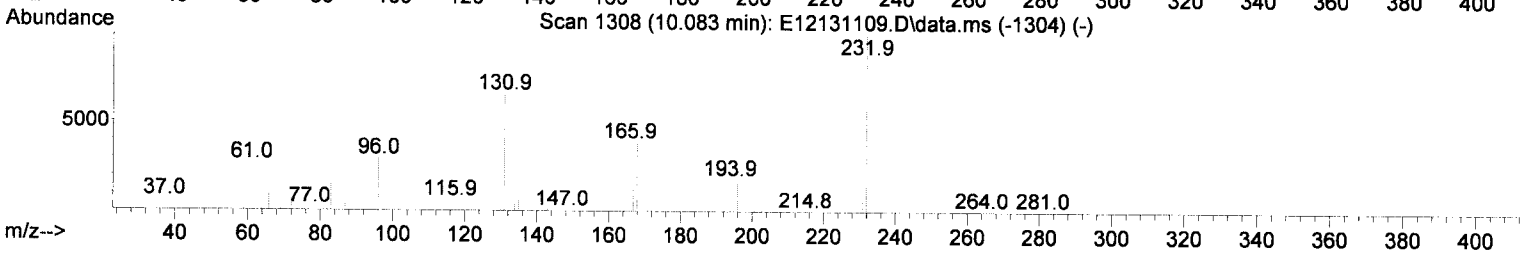
Quantitation Report (Qedit)

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
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) 53.21 ng/ml m 10/7/19

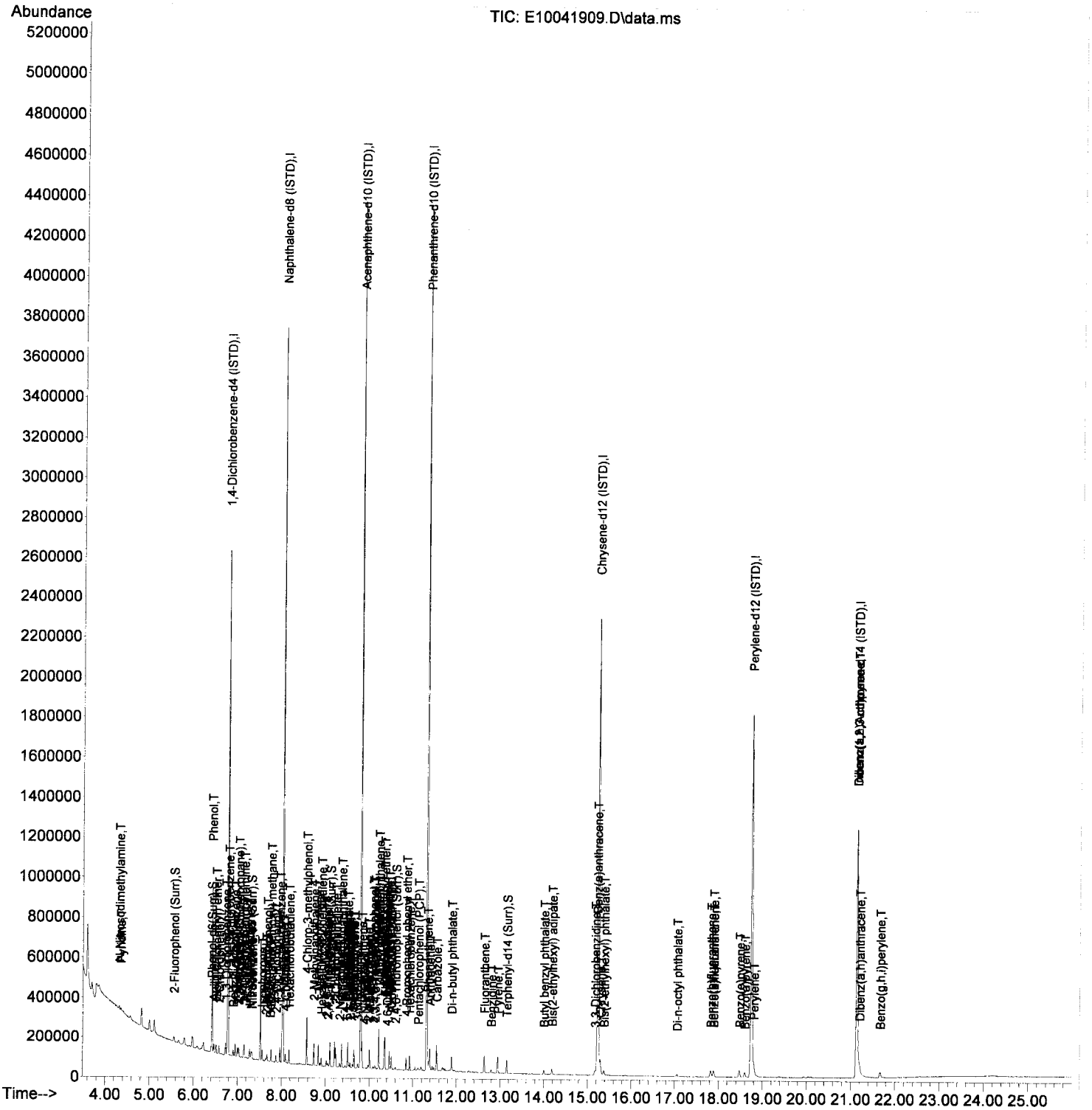
response 3800

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

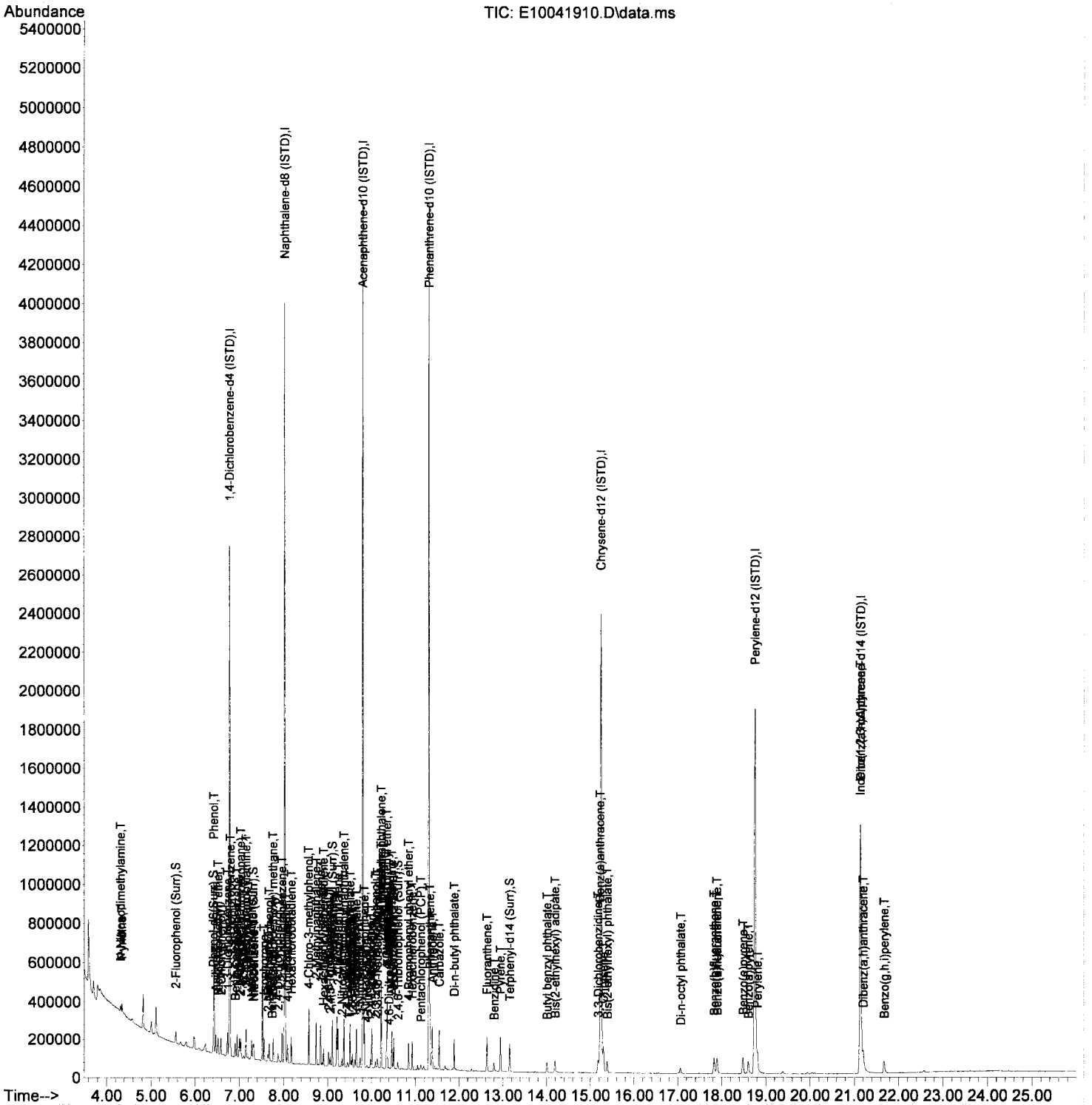
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.451	168	3408	117.10	ng/ml	95
45) Dimethyl phthalate	9.504	163	71145	108.30	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	4662	114.91	ng/ml	87
47) 2,6-Dinitrotoluene	9.563	165	9221	95.89	ng/ml	72
48) 1,2-Dinitrobenzene	9.622	168	3909	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

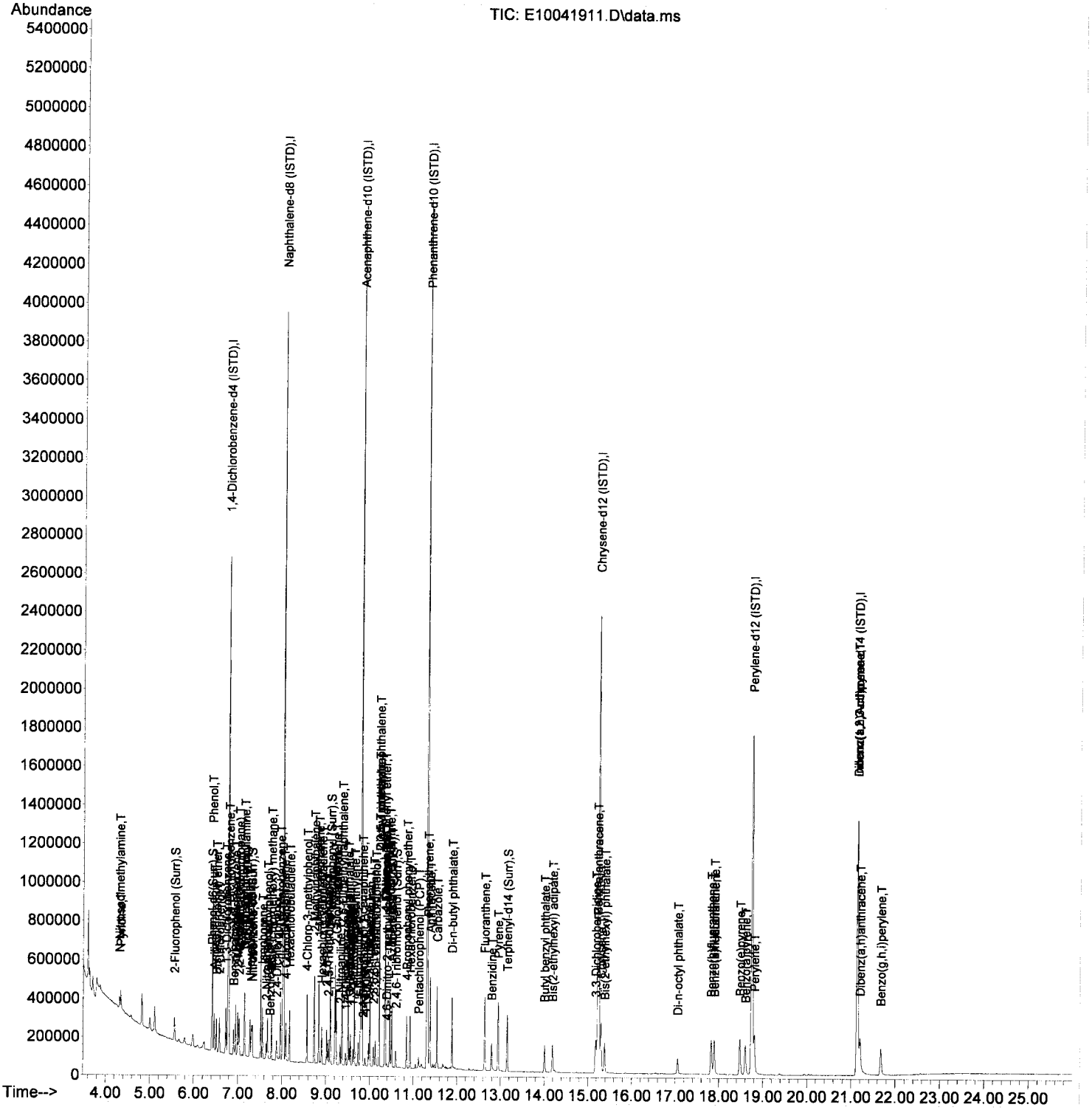
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.450	168	8401	187.65	ng/ml#	78
45) Dimethyl phthalate	9.504	163	143218	223.90	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	12358	196.76	ng/ml	82
47) 2,6-Dinitrotoluene	9.563	165	23552	199.62	ng/ml	72
48) 1,2-Dinitrobenzene	9.622	168	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

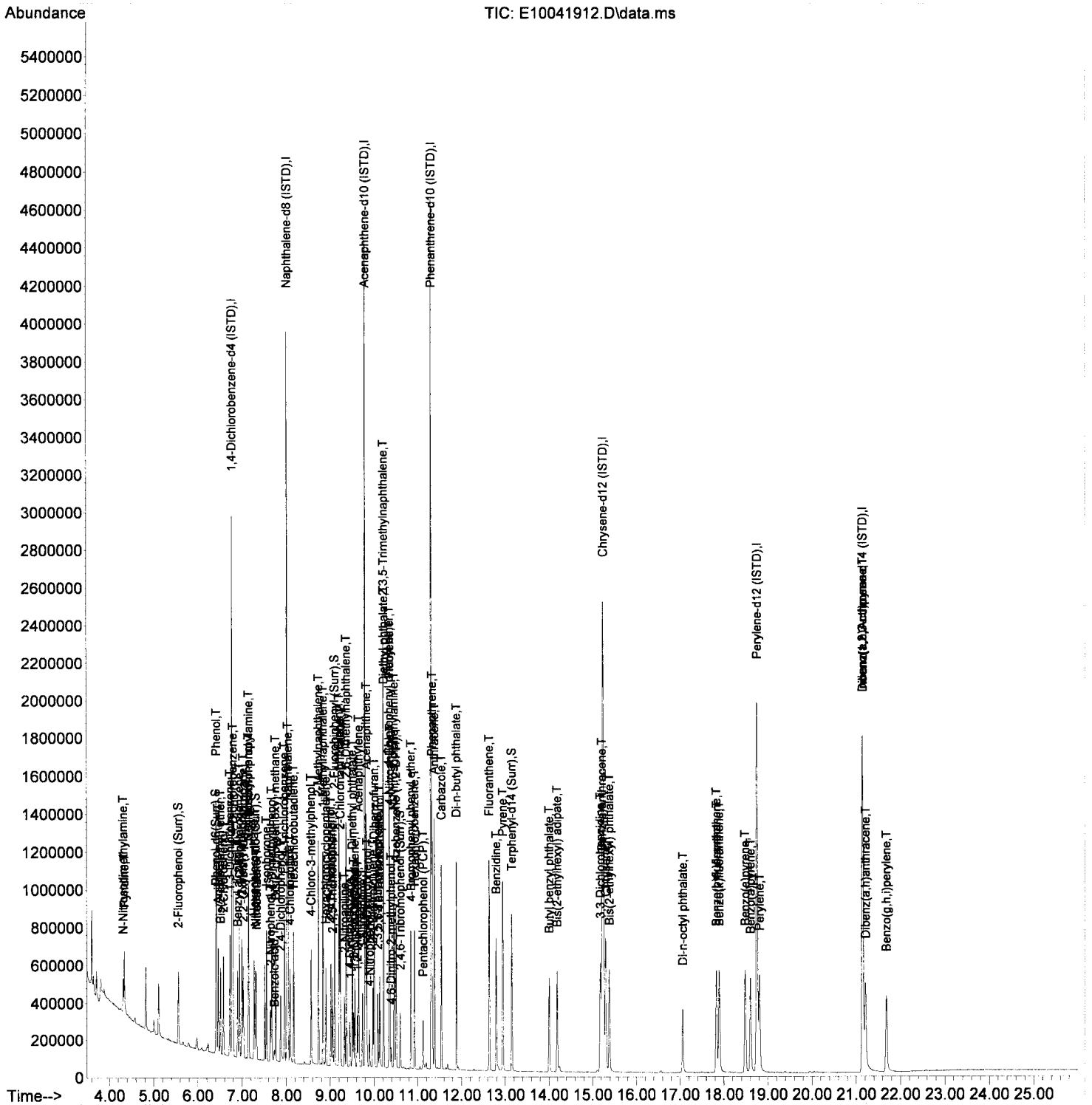
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.450	168	32734	497.87	ng/ml#	73
45) Dimethyl phthalate	9.504	163	380642	571.13	ng/ml	99
46) 1,3-Dinitrobenzene	9.531	168	43939	503.72	ng/ml	83
47) 2,6-Dinitrotoluene	9.563	165	75915	545.54	ng/ml	75
48) 1,2-Dinitrobenzene	9.622	168	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

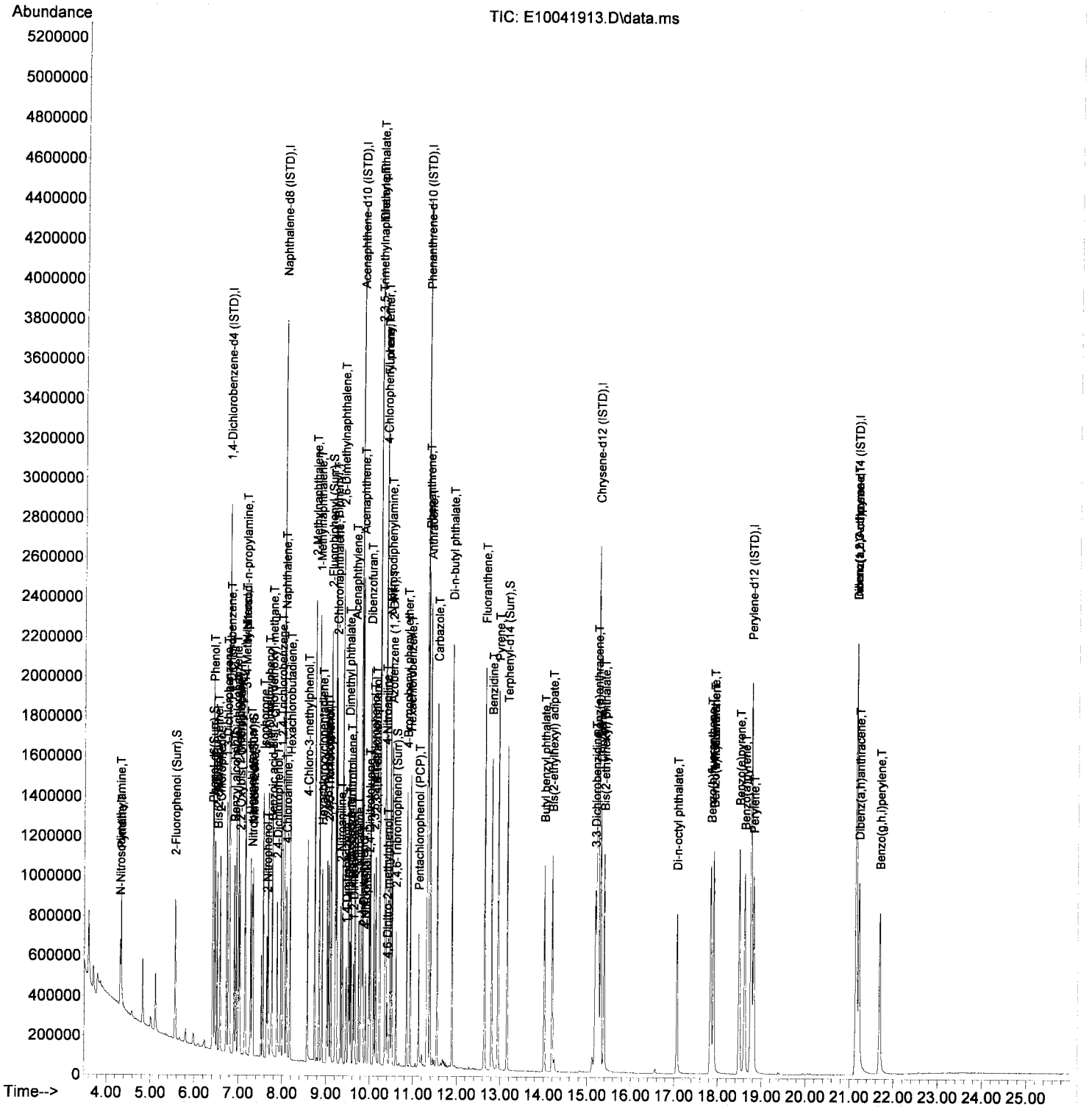
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	75456	1038.46	ng/ml#	66
45) Dimethyl phthalate	9.509	163	721638	1108.20	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	98229	1043.66	ng/ml	80
47) 2,6-Dinitrotoluene	9.568	165	155373	1091.03	ng/ml	68
48) 1,2-Dinitrobenzene	9.627	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

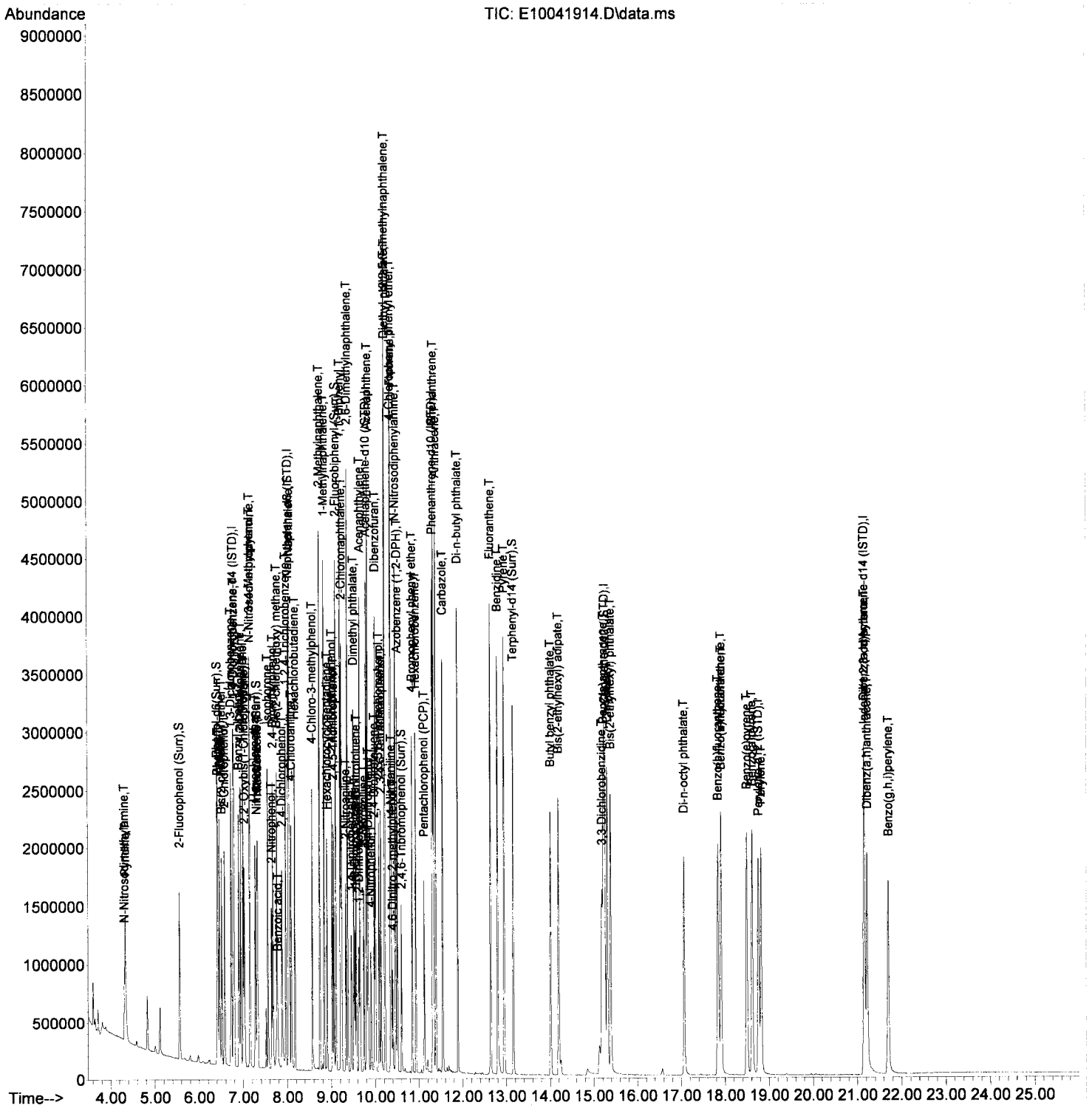
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	185665	2242.36	ng/ml#	71
45) Dimethyl phthalate	9.509	163	1472377	2244.91	ng/ml	99
46) 1,3-Dinitrobenzene	9.542	168	224382	2181.78	ng/ml	78
47) 2,6-Dinitrotoluene	9.574	165	337376	2241.83	ng/ml	65
48) 1,2-Dinitrobenzene	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

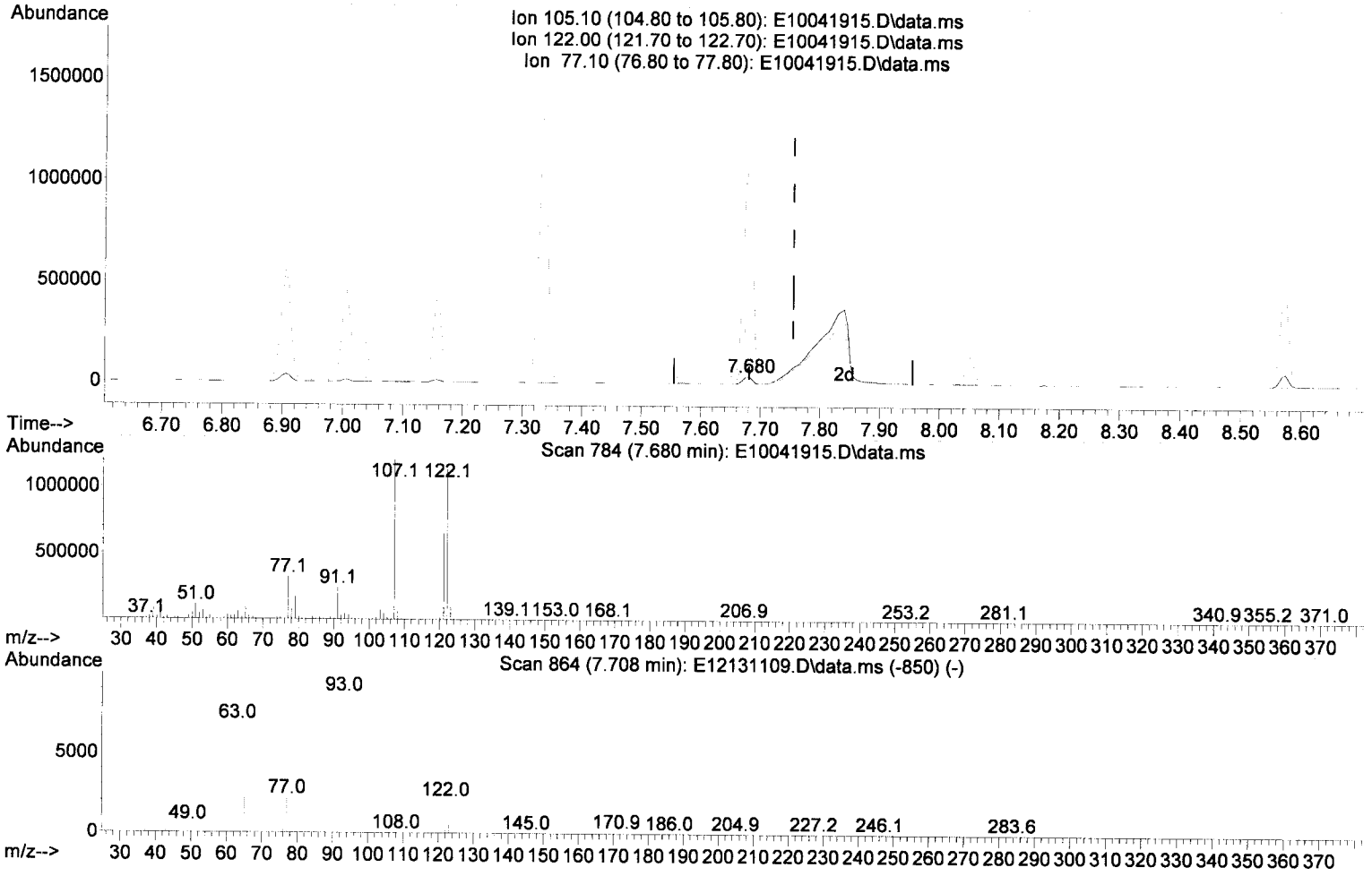
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.467	168	460062	4312.81	ng/ml#	62
45) Dimethyl phthalate	9.525	163	3162539	4333.76	ng/ml	100
46) 1,3-Dinitrobenzene	9.552	168	535847	4260.07	ng/ml	78
47) 2,6-Dinitrotoluene	9.579	165	771915	4325.93	ng/ml	68
48) 1,2-Dinitrobenzene	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

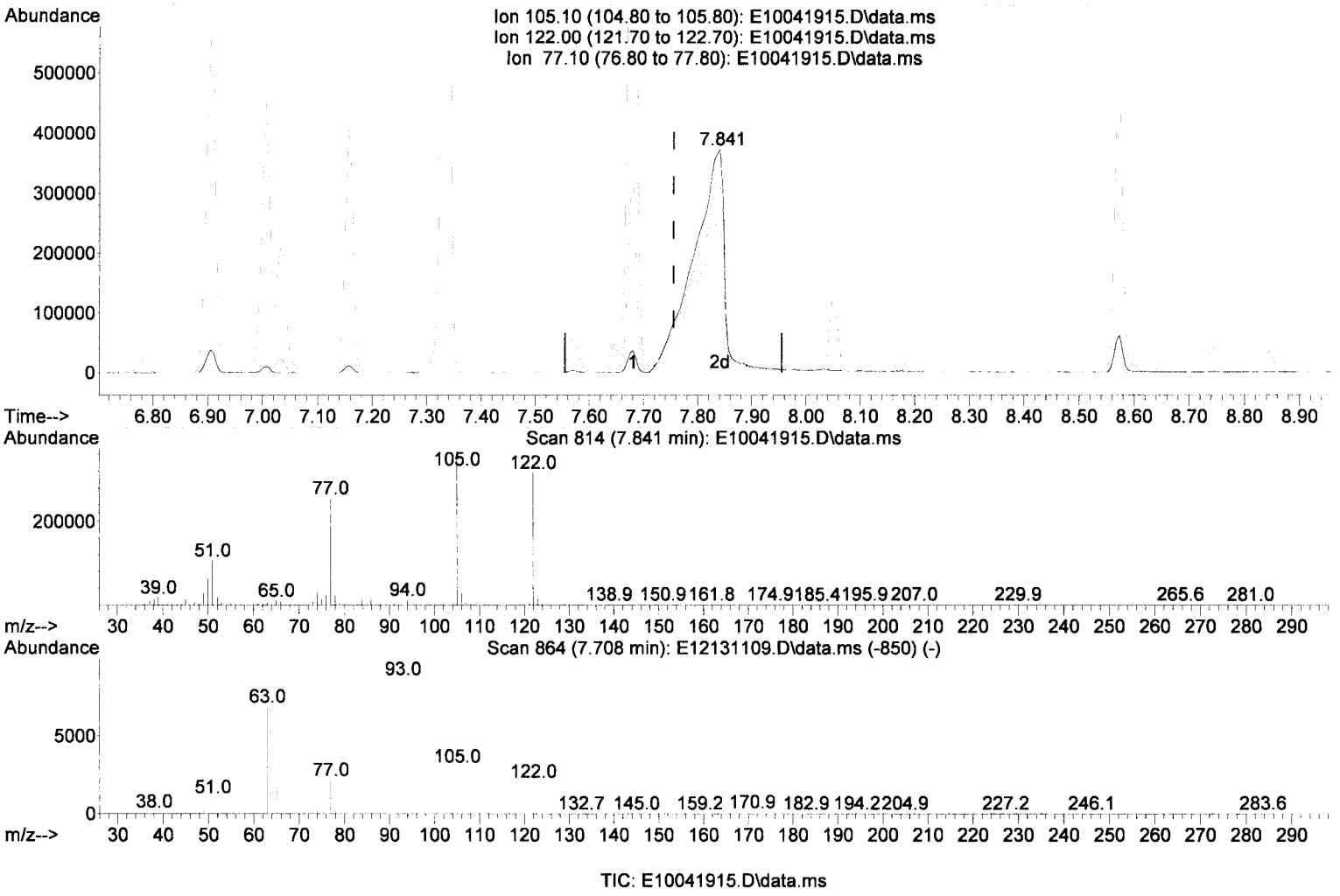
response 42864

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

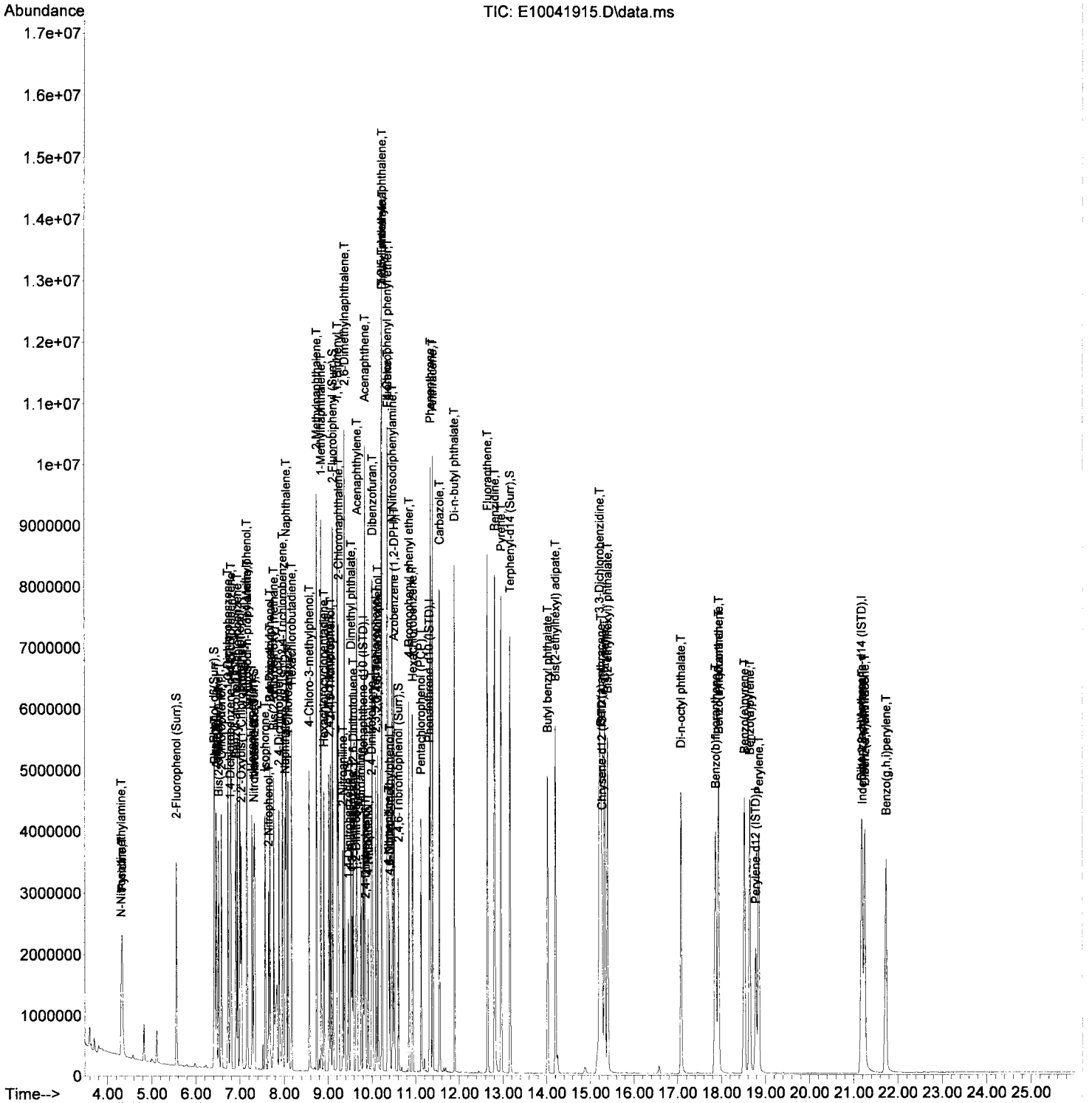
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	84.22
77.10	85.50	68.09
0.00	0.00	0.00

JK 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

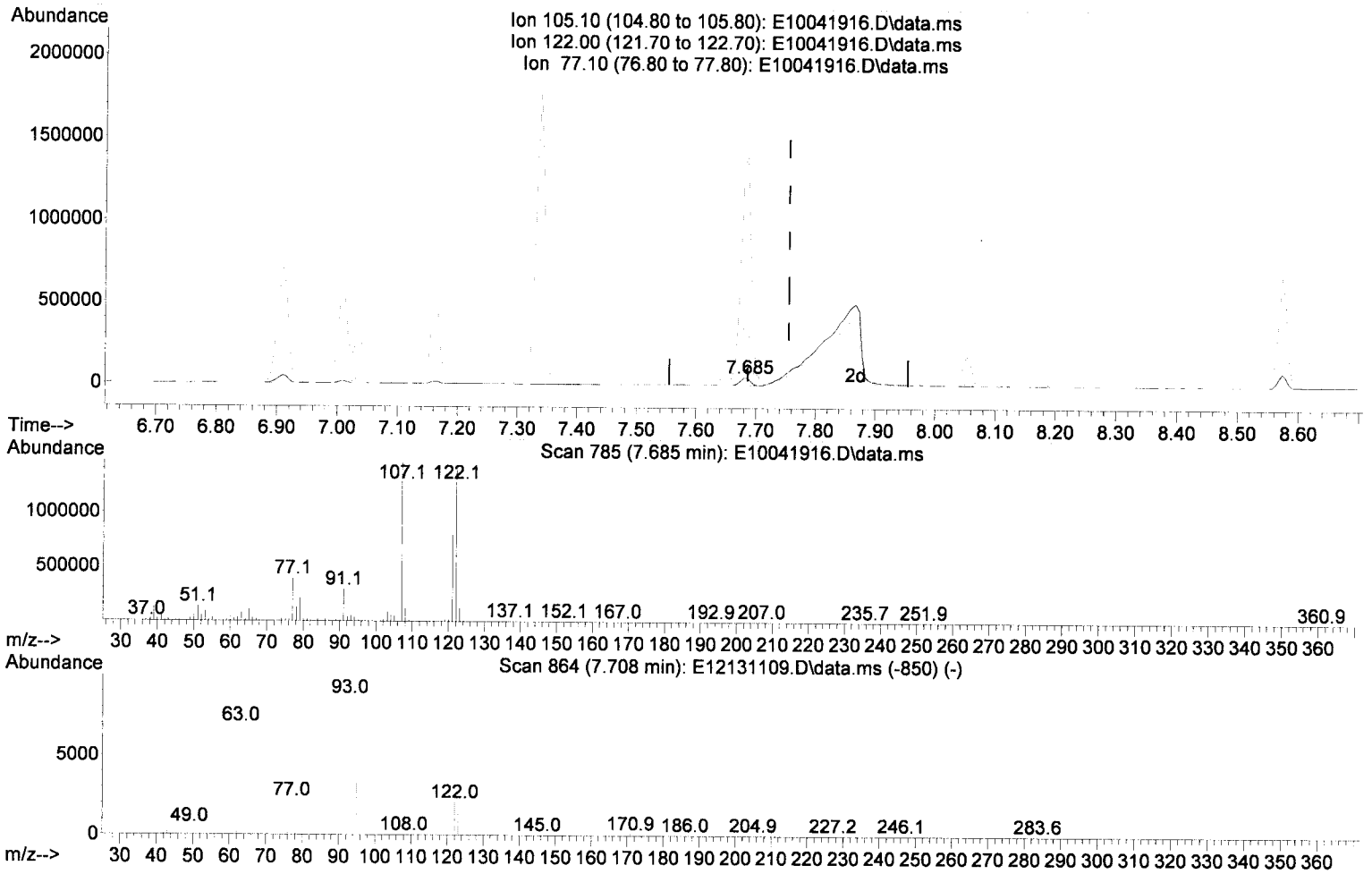
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.467	168	659408	6083.08 ng/ml#	66
45) Dimethyl phthalate	9.531	163	4213811	6309.96 ng/ml	99
46) 1,3-Dinitrobenzene	9.558	168	752865	6098.16 ng/ml	78
47) 2,6-Dinitrotoluene	9.584	165	1059908	6174.49 ng/ml	66
48) 1,2-Dinitrobenzene	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

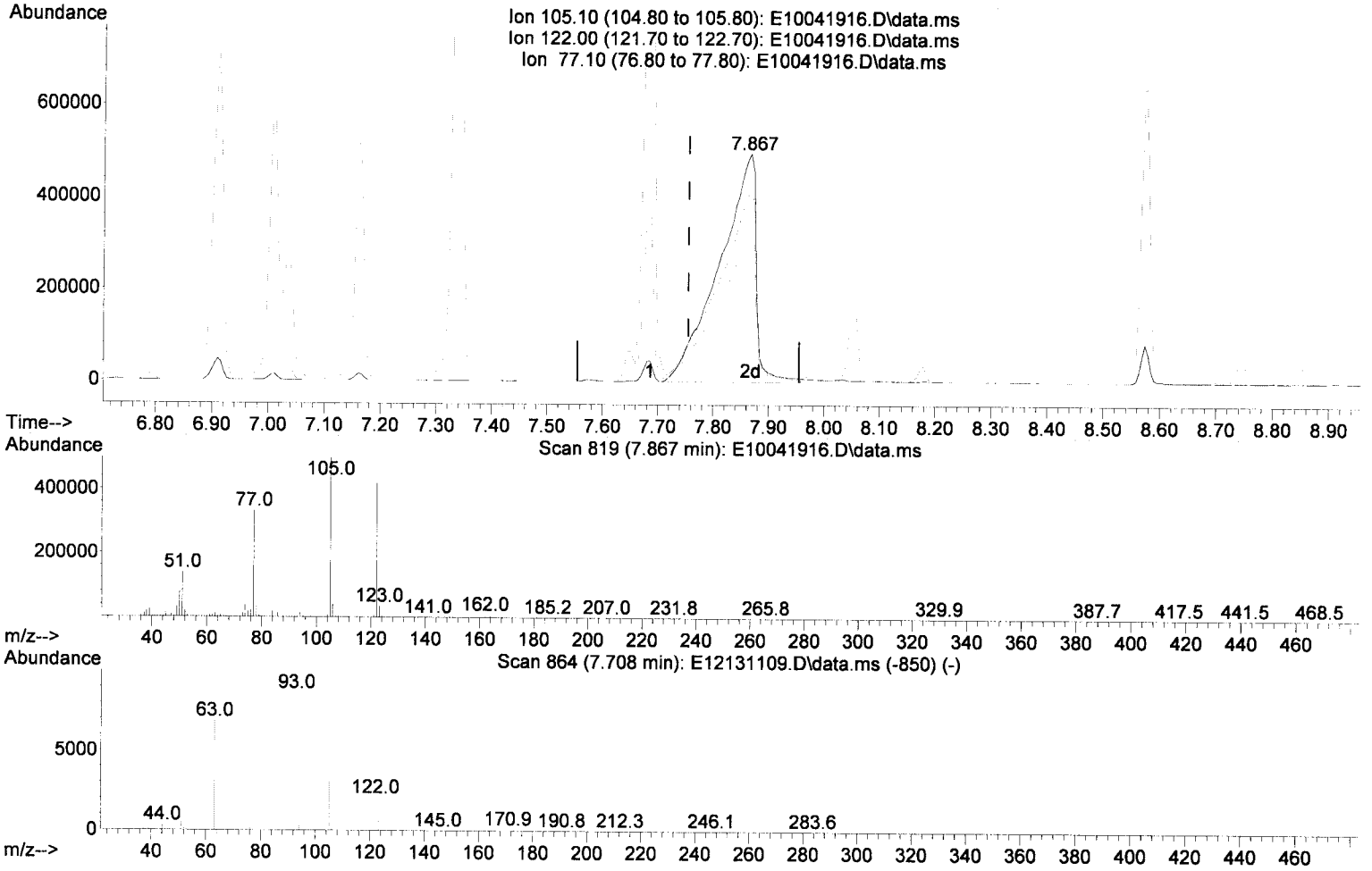
response 57021

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

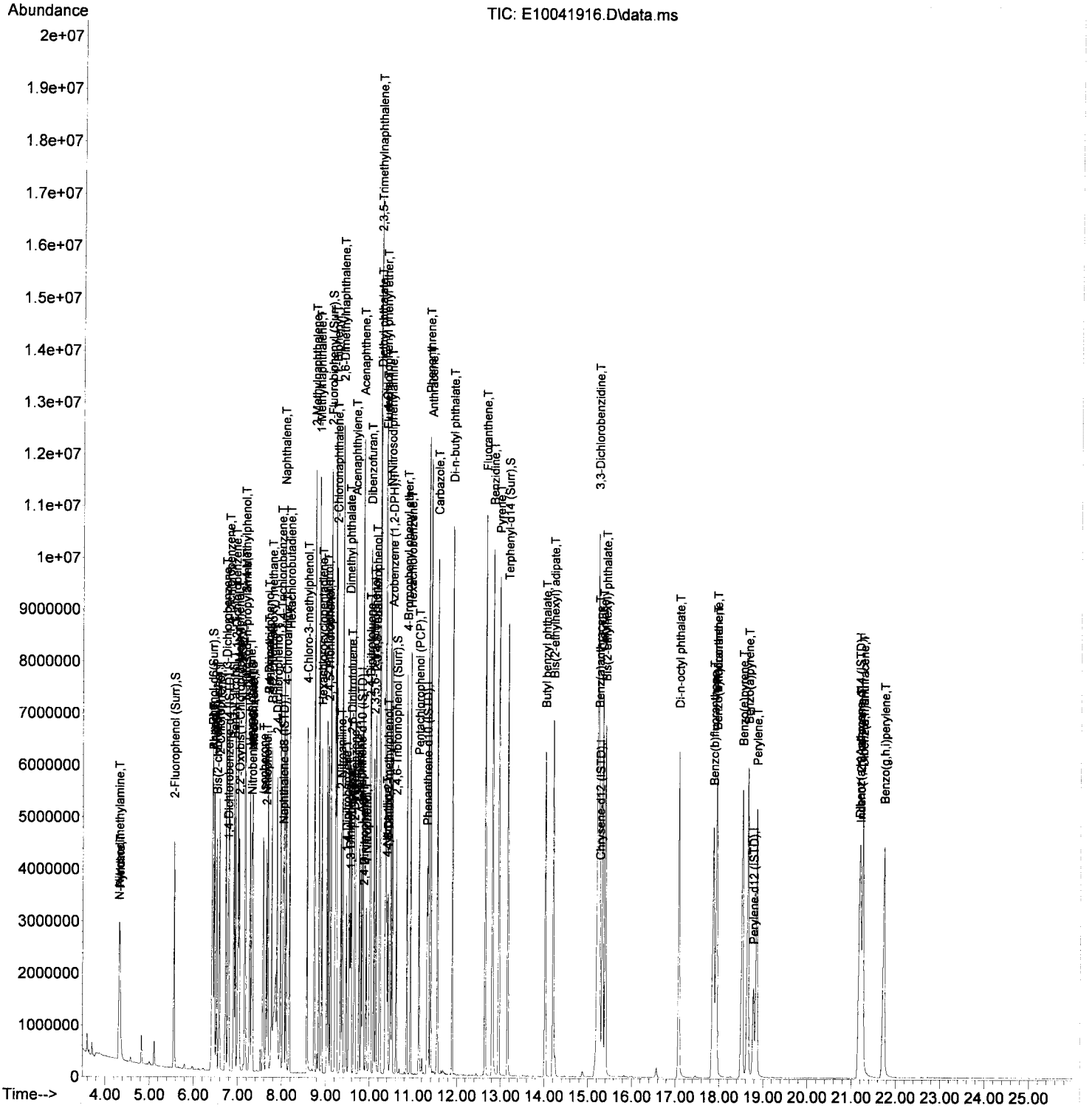
response 2296852

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

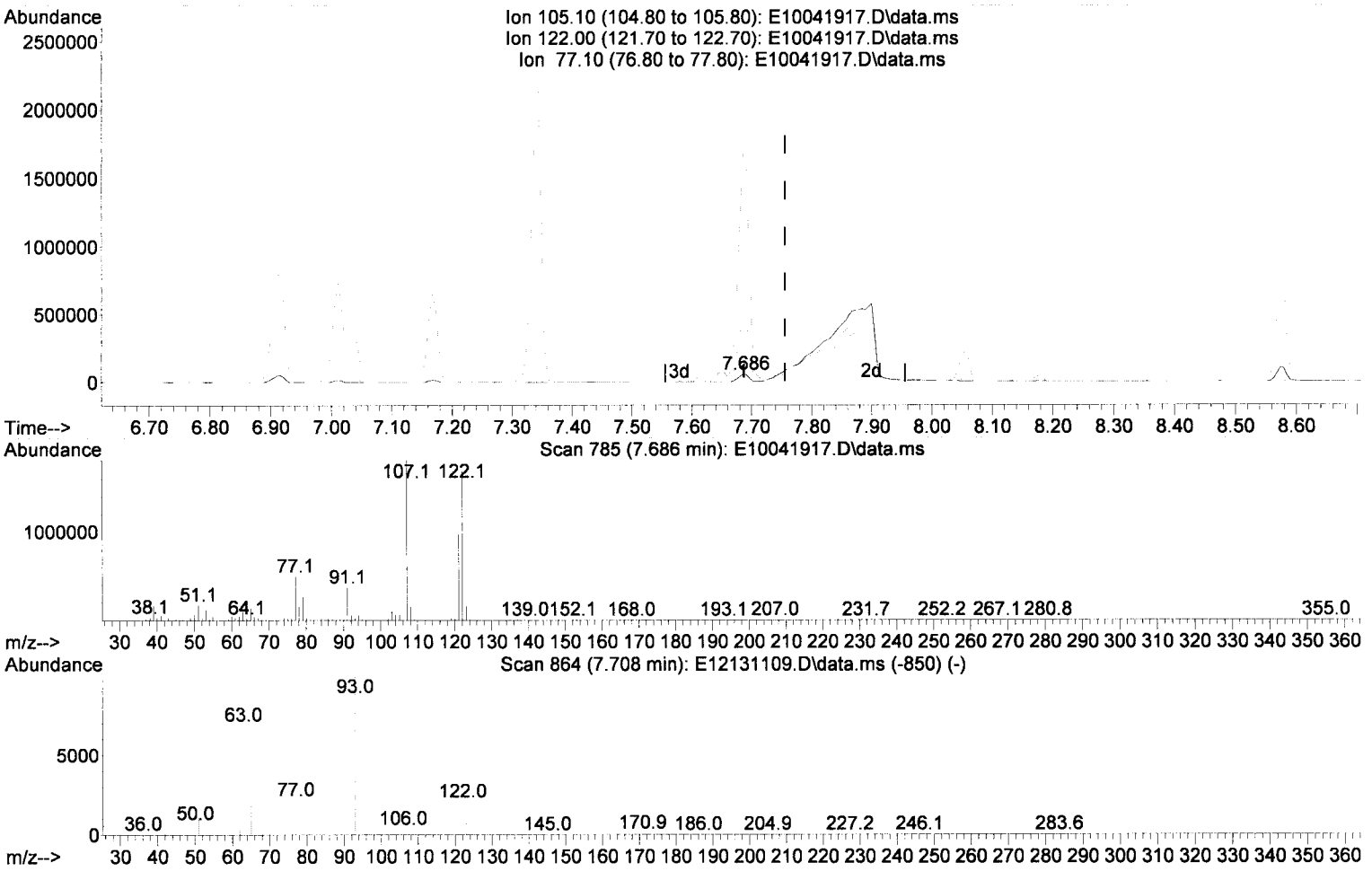
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.472	168	901550	7583.58	ng/ml#	62
45) Dimethyl phthalate	9.536	163	5499423	8133.14	ng/ml	99
46) 1,3-Dinitrobenzene	9.563	168	1015449	7685.54	ng/ml	79
47) 2,6-Dinitrotoluene	9.590	165	1394857	7716.65	ng/ml	66
48) 1,2-Dinitrobenzene	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

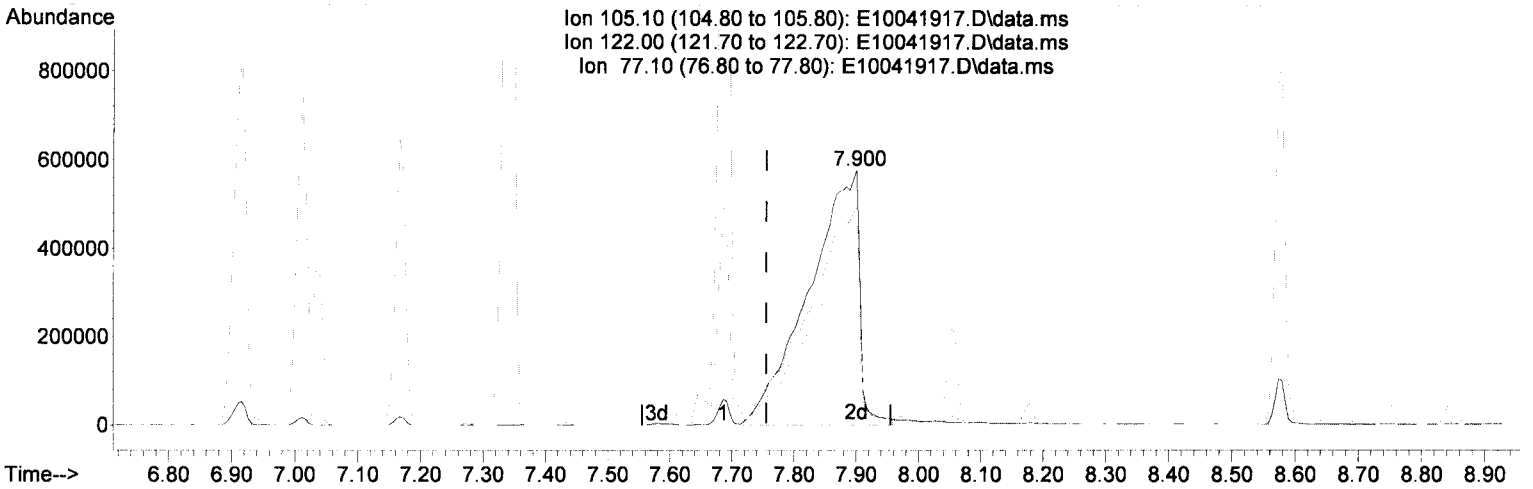
response 73902

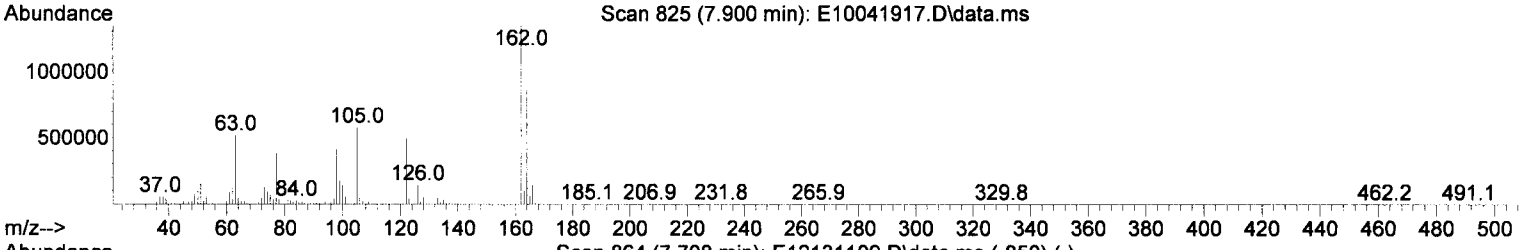
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2869.36#
77.10	85.50	843.73#
0.00	0.00	0.00

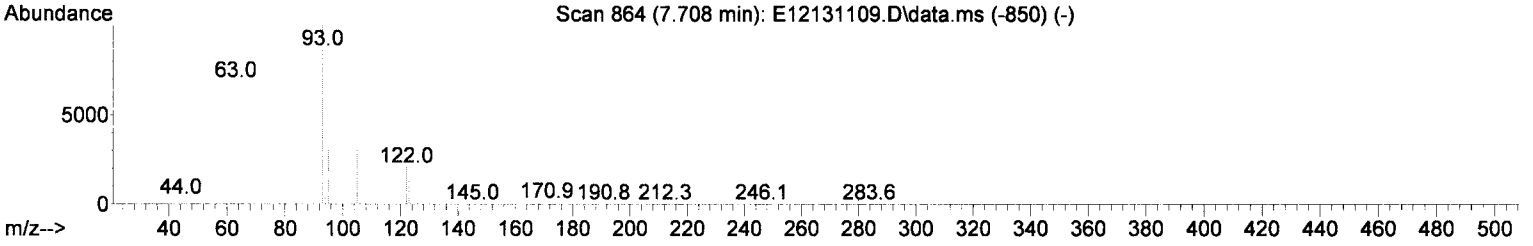
Quantitation Report (Qedit)

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

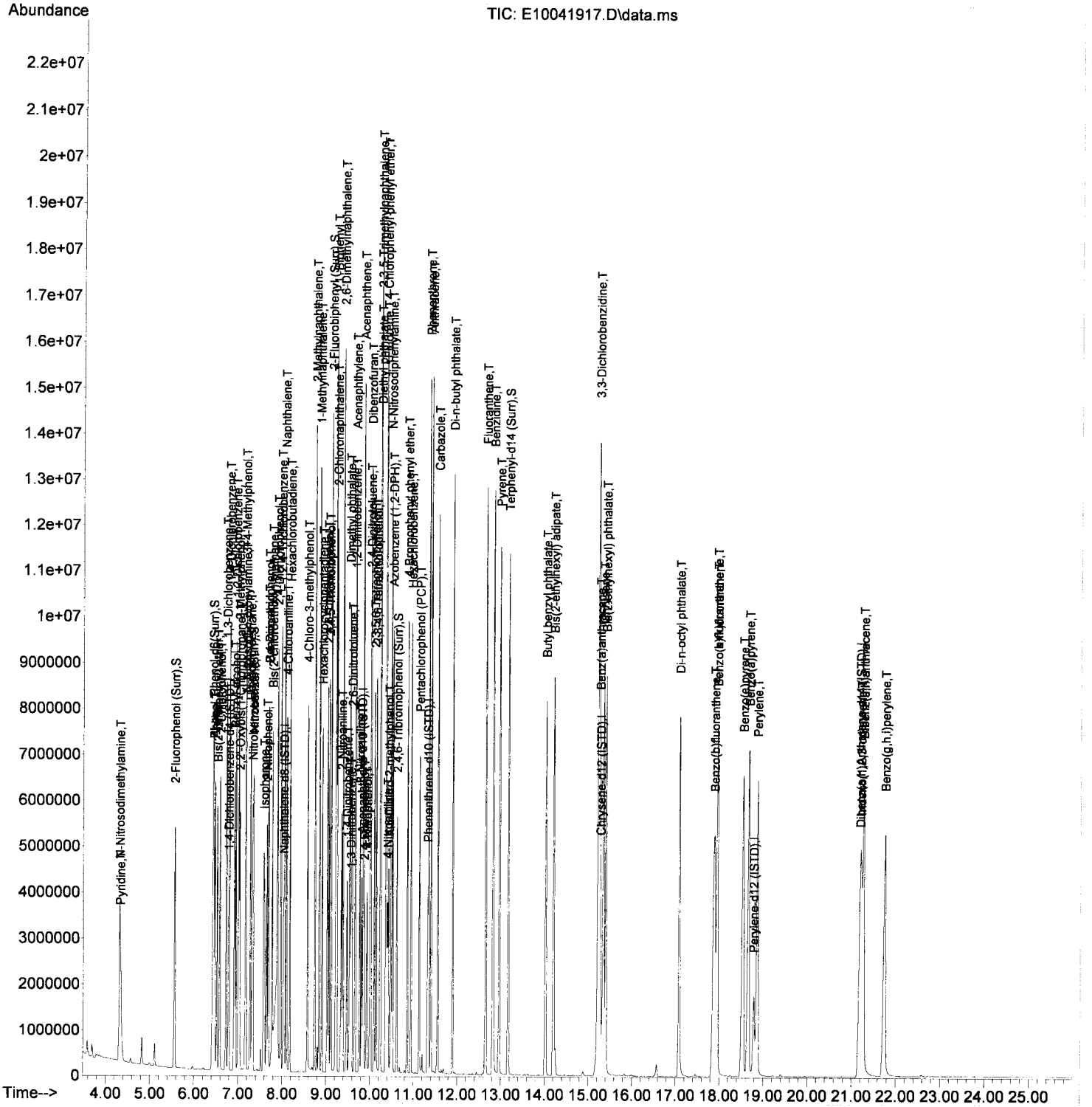
response 3255088

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

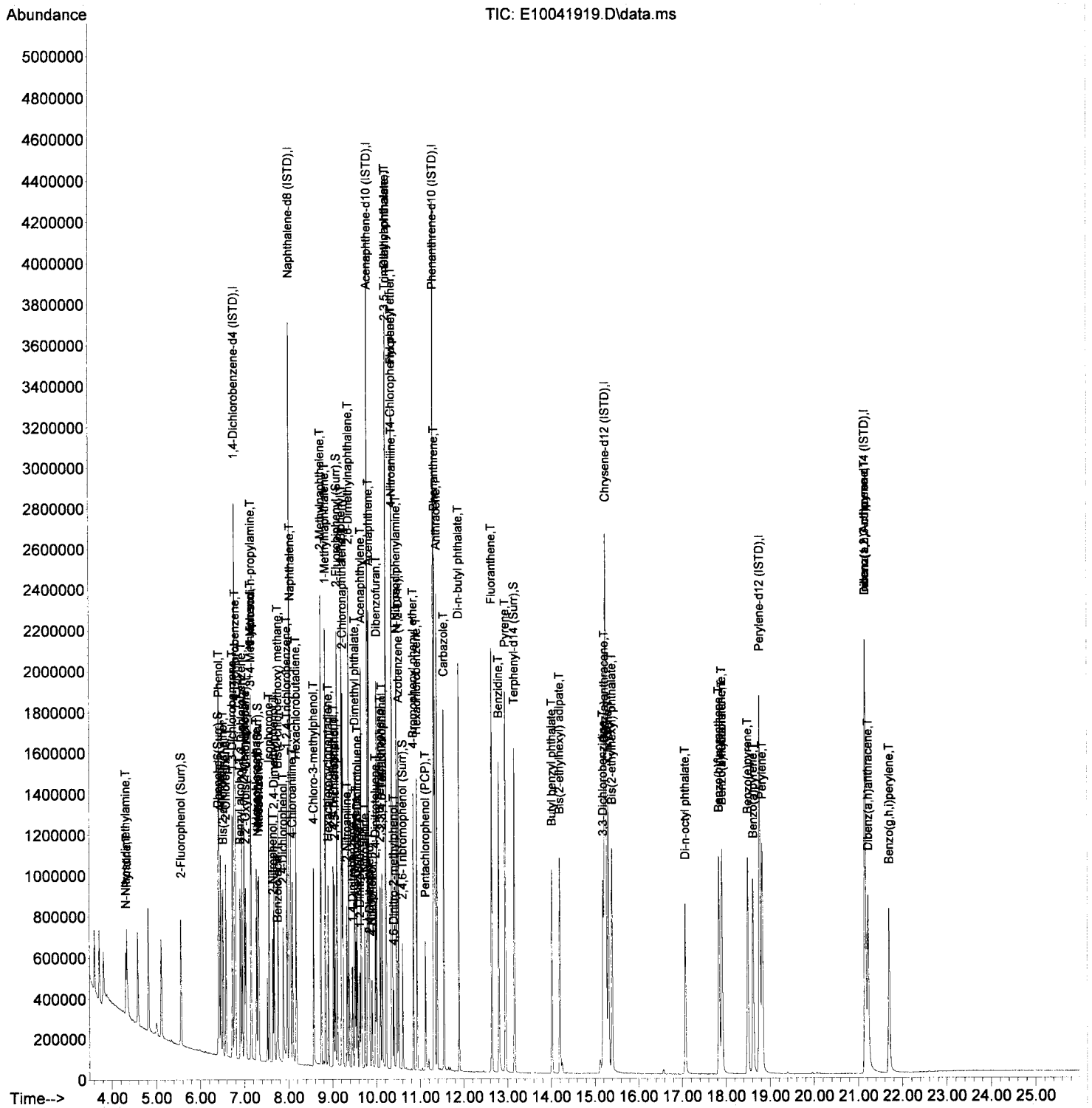
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	81682	1140.17	ng/ml#	64
45) Dimethyl phthalate	9.509	163	693670	1095.61	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	101455	1101.97	ng/ml	79
47) 2,6-Dinitrotoluene	9.568	165	156414	1127.37	ng/ml	67
48) 1,2-Dinitrobenzene	9.627	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

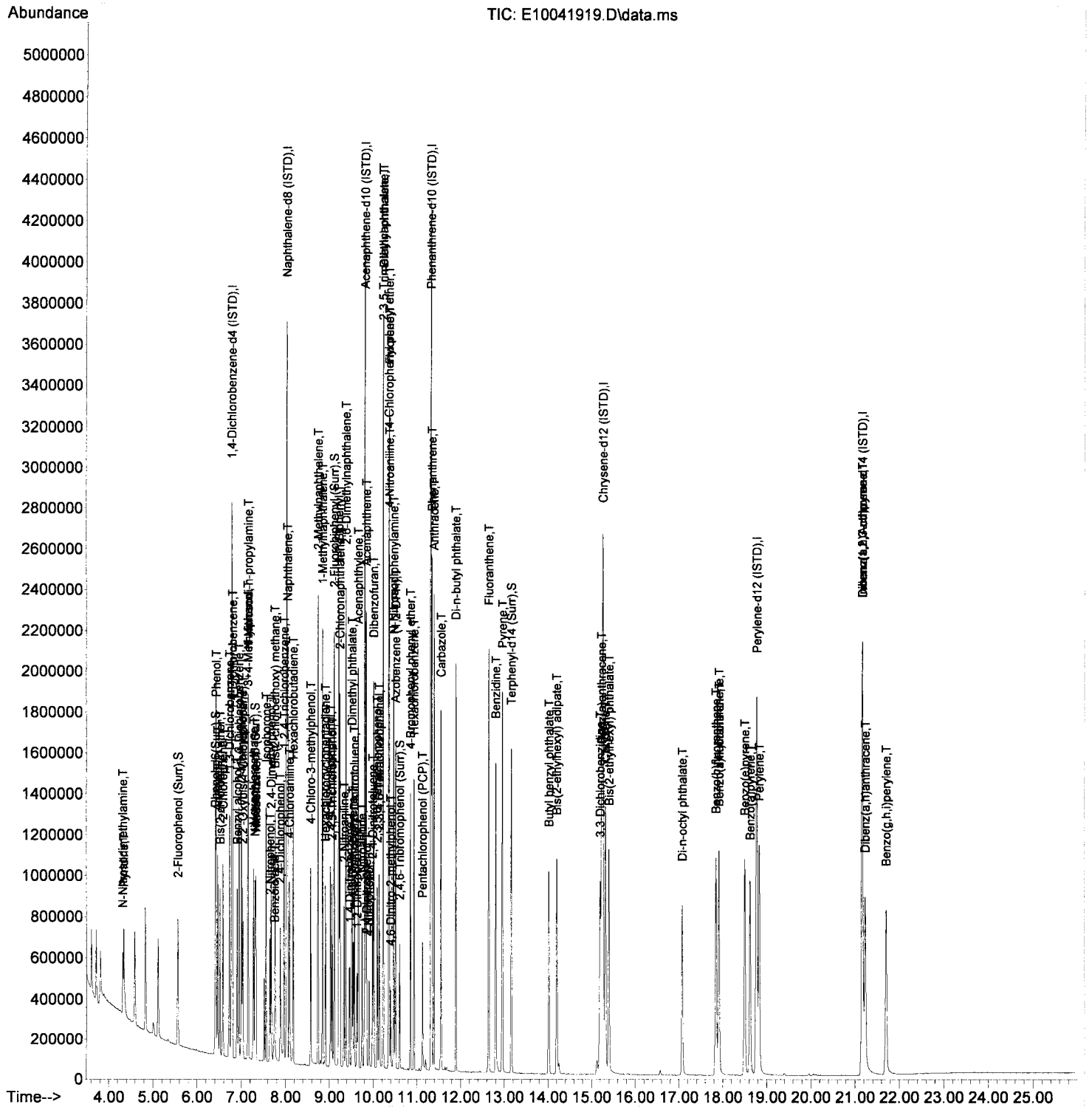
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	81682	1084.41	ng/ml	98
45) Dimethyl phthalate	9.509	163	693670	1027.24	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	101455	1054.52	ng/ml	99
47) 2,6-Dinitrotoluene	9.568	165	156414	1053.68	ng/ml	98
48) 1,2-Dinitrobenzene	9.627	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

Semivolatile Organic Compounds by EPA 8270D
Calibration Data

Sequence 9J16053 (Cal ID A9J1803) SV-GCMS9

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J16053**	Instrument:	**SV-GCMS9**
Date:	**10/16/19 15:59**	Calibration:	**A9J1803**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J16053-TUN1	Water	QC	QC			A19G233	A19J016
2	9J16053-ICB1	Water	QC	QC			A19G233	
3	9J16053-CAL1	Water	QC	QC			A19G233	A19G238
4	9J16053-CAL2	Water	QC	QC			A19G233	A19G239
5	9J16053-CAL3	Water	QC	QC			A19G233	A19G240
6	9J16053-CAL4	Water	QC	QC			A19G233	A19G241
7	9J16053-CAL5	Water	QC	QC			A19G233	A19G242
8	9J16053-CAL6	Water	QC	QC			A19G233	A19G243
9	9J16053-CAL7	Water	QC	QC			A19G233	A19G244
10	9J16053-CAL8	Water	QC	QC			A19G233	A19G245
11	9J16053-CAL9	Water	QC	QC			A19G233	A19G246
12	9J16053-CALA	Water	QC	QC			A19G233	A19G247
13	9J16053-IBL1	Water	QC	QC			A19G233	
14	9J16053-ICV1	Water	QC	QC			A19G233	A19I254
15	9J16053-IBL2	Water	QC	QC			A19G233	

Data Entered By: 10/18/19

Data Reviewed By: 10/22/19

Comments:

Calibration Status Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_101619.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Oct 17 11:59:00 2019
Response Via : Initial Calibration

A93803

JK 10/17/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	T:\data\2019-10\9J16053\I10161912.D
2	50	50	2000	T:\data\2019-10\9J16053\I10161913.D
3	100	100	2000	T:\data\2019-10\9J16053\I10161914.D
4	200	200	2000	T:\data\2019-10\9J16053\I10161915.D
5	500	500	2000	T:\data\2019-10\9J16053\I10161916.D
6	1000	1000	2000	T:\data\2019-10\9J16053\I10161917.D
7	2000	2000	2000	T:\data\2019-10\9J16053\I10161918.D
8	4000	4000	2000	T:\data\2019-10\9J16053\I10161919.D
9	6000	6000	2000	T:\data\2019-10\9J16053\I10161920.D
10	8000	8000	2000	T:\data\2019-10\9J16053\I10161921.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Oct 17 11:57 2019	Oct 17 10:12 2019	16 Oct 2019 5:09 pm
2	50	Oct 17 11:57 2019	Oct 17 11:01 2019	16 Oct 2019 5:44 pm
3	100	Oct 17 11:58 2019	Oct 17 11:05 2019	16 Oct 2019 6:19 pm
4	200	Oct 17 11:58 2019	Oct 17 11:06 2019	16 Oct 2019 6:54 pm
5	500	Oct 17 11:58 2019	Oct 17 10:13 2019	16 Oct 2019 7:30 pm
6	1000	Oct 17 11:58 2019	Oct 17 10:13 2019	16 Oct 2019 8:05 pm
7	2000	Oct 17 11:58 2019	Oct 17 10:13 2019	16 Oct 2019 8:40 pm
8	4000	Oct 17 11:58 2019	Oct 17 11:43 2019	16 Oct 2019 9:14 pm
9	6000	Oct 17 11:58 2019	Oct 17 11:45 2019	16 Oct 2019 9:49 pm
10	8000	Oct 17 11:59 2019	Oct 17 11:46 2019	16 Oct 2019 10:24 pm

SV9_101619.M Thu Oct 17 13:02:14 2019

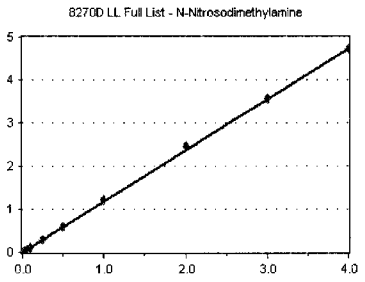
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

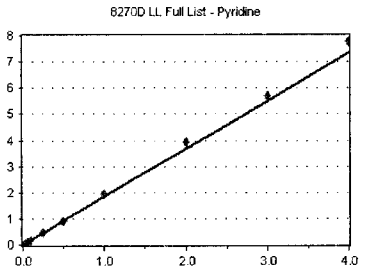


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1227	1.106	4.13
9J16053-CAL2	50	3526	1.227	4.08
9J16053-CAL3	100	6638	1.169	4.09
9J16053-CAL4	200	13447	1.119	4.06
9J16053-CAL5	500	32984	1.196	4.09
9J16053-CAL6	1000	63705	1.172	4.08
9J16053-CAL7	2000	130513	1.226	4.06
9J16053-CAL8	4000	258805	1.224	4.08
9J16053-CAL9	6000	322758	1.192	4.11
9J16053-CALA	8000	425740	1.181	4.07

AVE RF **1.181** RF RSD **3.56** AVE RT **4.08**

Pyridine

Curve Fit: **AVERAGE RF**

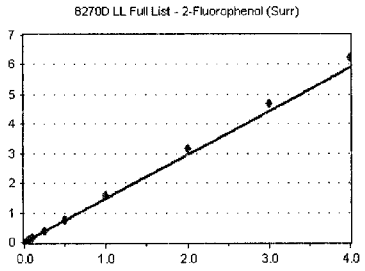


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~855~~	~~0.771~~	~~4.19~~
9J16053-CAL2	50	4710	1.639	4.12
9J16053-CAL3	100	9792	1.725	4.12
9J16053-CAL4	200	20595	1.714	4.09
9J16053-CAL5	500	50729	1.839	4.11
9J16053-CAL6	1000	100642	1.852	4.09
9J16053-CAL7	2000	206511	1.940	4.08
9J16053-CAL8	4000	416575	1.970	4.09
9J16053-CAL9	6000	514636	1.900	4.12
9J16053-CALA	8000	702998	1.950	4.08

AVE RF **1.837** RF RSD **6.45** AVE RT **4.10**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

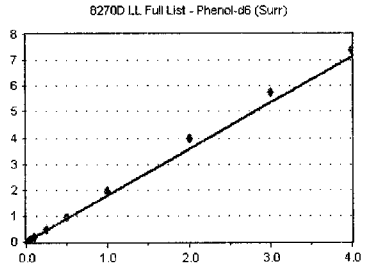


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1500	1.352	5.42
9J16053-CAL2	50	3881	1.350	5.41
9J16053-CAL3	100	7618	1.342	5.41
9J16053-CAL4	200	16598	1.381	5.40
9J16053-CAL5	500	41291	1.497	5.41
9J16053-CAL6	1000	81539	1.500	5.41
9J16053-CAL7	2000	168171	1.579	5.40
9J16053-CAL8	4000	336987	1.594	5.41
9J16053-CAL9	6000	424427	1.567	5.42
9J16053-CALA	8000	563281	1.563	5.41

AVE RF **1.473** RF RSD **7.14** AVE RT **5.41**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1618	1.459	6.30
9J16053-CAL2	50	4604	1.602	6.29
9J16053-CAL3	100	9393	1.654	6.29
9J16053-CAL4	200	19537	1.626	6.29
9J16053-CAL5	500	51731	1.876	6.30
9J16053-CAL6	1000	102248	1.881	6.30
9J16053-CAL7	2000	209429	1.967	6.30
9J16053-CAL8	4000	419864	1.986	6.31
9J16053-CAL9	6000	520284	1.921	6.31
9J16053-CALA	8000	666322	1.849	6.31

AVE RF **1.782** RF RSD **10.17** AVE RT **6.30**

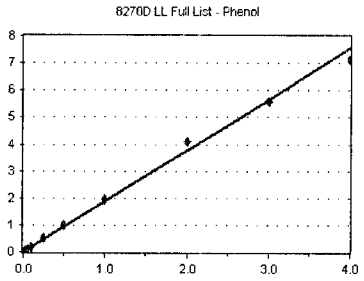
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Phenol

Curve Fit: **AVERAGE RF**

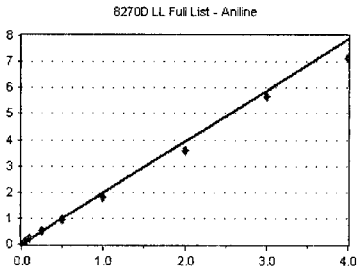


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2030	1.830	6.31
9J16053-CAL2	50	5478	1.906	6.31
9J16053-CAL3	100	10339	1.821	6.31
9J16053-CAL4	200	20713	1.724	6.30
9J16053-CAL5	500	55173	2.001	6.31
9J16053-CAL6	1000	105930	1.949	6.31
9J16053-CAL7	2000	208278	1.956	6.31
9J16053-CAL8	4000	432772	2.047	6.32
9J16053-CAL9	6000	502219	1.854	6.33
9J16053-CALA	8000	643943	1.787	6.33

AVE RF **1.888** RF RSD **5.38** AVE RT **6.31**

Aniline

Curve Fit: **AVERAGE RF**

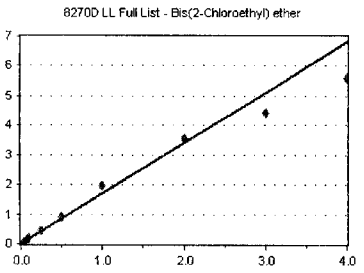


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~1021~~	~~0.921~~	~~6.35~~
9J16053-CAL2	50	5932	2.064	6.34
9J16053-CAL3	100	12340	2.173	6.34
9J16053-CAL4	200	25093	2.088	6.34
9J16053-CAL5	500	59550	2.159	6.34
9J16053-CAL6	1000	104698	1.927	6.34
9J16053-CAL7	2000	193255	1.815	6.34
9J16053-CAL8	4000	377305	1.785	6.35
9J16053-CAL9	6000	510928	1.887	6.35
9J16053-CALA	8000	643142	1.784	6.35

AVE RF **1.965** RF RSD **8.08** AVE RT **6.35**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

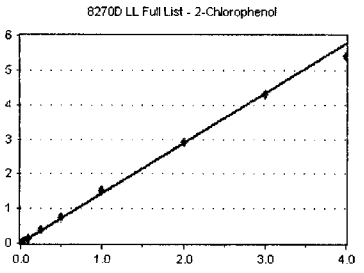


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1698	1.531	6.40
9J16053-CAL2	50	4855	1.689	6.40
9J16053-CAL3	100	10234	1.803	6.40
9J16053-CAL4	200	20574	1.712	6.39
9J16053-CAL5	500	50835	1.843	6.40
9J16053-CAL6	1000	97200	1.789	6.40
9J16053-CAL7	2000	209890	1.971	6.40
9J16053-CAL8	4000	375165	1.774	6.40
9J16053-CAL9	6000	400306	1.478	6.41
9J16053-CALA	8000	503778	1.398	6.41

AVE RF **1.699** RF RSD **10.52** AVE RT **6.40**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1413	1.274	6.46
9J16053-CAL2	50	4117	1.432	6.46
9J16053-CAL3	100	8126	1.431	6.46
9J16053-CAL4	200	17444	1.452	6.46
9J16053-CAL5	500	42644	1.546	6.46
9J16053-CAL6	1000	82633	1.520	6.46
9J16053-CAL7	2000	161665	1.518	6.46
9J16053-CAL8	4000	308174	1.458	6.46
9J16053-CAL9	6000	388854	1.436	6.47
9J16053-CALA	8000	486600	1.350	6.47

AVE RF **1.442** RF RSD **5.67** AVE RT **6.46**

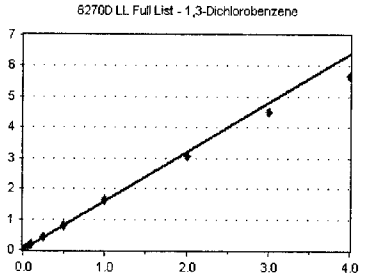
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

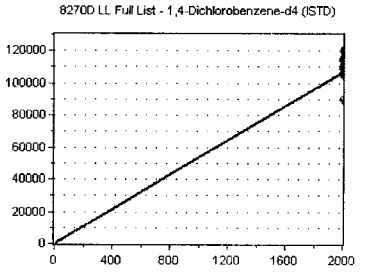


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1762	1.589	6.61
9J16053-CAL2	50	4787	1.666	6.61
9J16053-CAL3	100	9504	1.674	6.61
9J16053-CAL4	200	20472	1.704	6.61
9J16053-CAL5	500	46500	1.686	6.61
9J16053-CAL6	1000	87984	1.619	6.61
9J16053-CAL7	2000	171908	1.615	6.61
9J16053-CAL8	4000	323172	1.529	6.61
9J16053-CAL9	6000	406773	1.502	6.62
9J16053-CALA	8000	510201	1.416	6.61

AVE RF **1.600** RF RSD **5.80** AVE RT **6.61**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

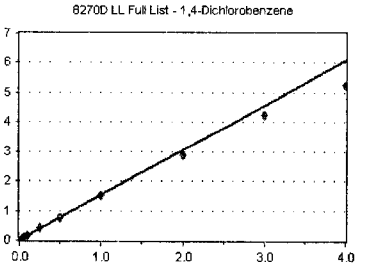


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	110906	55.453	6.66
9J16053-CAL2	2000	114962	57.481	6.66
9J16053-CAL3	2000	113552	56.776	6.66
9J16053-CAL4	2000	120155	60.078	6.66
9J16053-CAL5	2000	110317	55.159	6.66
9J16053-CAL6	2000	108692	54.346	6.66
9J16053-CAL7	2000	106472	53.236	6.66
9J16053-CAL8	2000	105713	52.856	6.66
9J16053-CAL9	2000	90276	45.138	6.66
9J16053-CALA	2000	90105	45.053	6.66

AVE RF **53.558** RF RSD **9.21** AVE RT **6.66**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

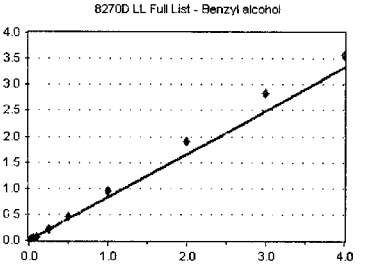


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1753	1.581	6.68
9J16053-CAL2	50	4602	1.601	6.68
9J16053-CAL3	100	9126	1.607	6.68
9J16053-CAL4	200	19398	1.614	6.68
9J16053-CAL5	500	44891	1.628	6.68
9J16053-CAL6	1000	83649	1.539	6.68
9J16053-CAL7	2000	161488	1.517	6.68
9J16053-CAL8	4000	302701	1.432	6.68
9J16053-CAL9	6000	381139	1.407	6.69
9J16053-CALA	8000	472412	1.311	6.68

AVE RF **1.524** RF RSD **7.02** AVE RT **6.68**

Benzyl alcohol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	950	0.857	6.79
9J16053-CAL2	50	1820	0.633	6.79
9J16053-CAL3	100	3764	0.663	6.79
9J16053-CAL4	200	8208	0.683	6.79
9J16053-CAL5	500	22926	0.831	6.79
9J16053-CAL6	1000	48394	0.890	6.79
9J16053-CAL7	2000	101019	0.949	6.79
9J16053-CAL8	4000	202180	0.956	6.80
9J16053-CAL9	6000	256004	0.945	6.80
9J16053-CALA	8000	321834	0.893	6.81

AVE RF **0.830** RF RSD **15.02** AVE RT **6.79**

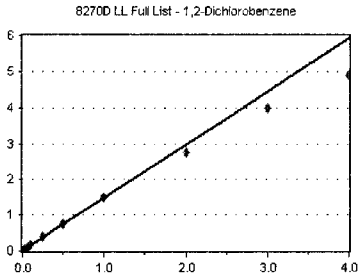
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

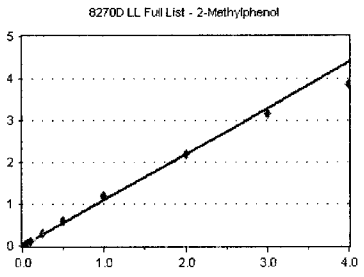


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1751	1.579	6.84
9J16053-CAL2	50	4537	1.579	6.83
9J16053-CAL3	100	8939	1.574	6.83
9J16053-CAL4	200	19037	1.584	6.82
9J16053-CAL5	500	44501	1.614	6.83
9J16053-CAL6	1000	82317	1.515	6.83
9J16053-CAL7	2000	158155	1.485	6.83
9J16053-CAL8	4000	289895	1.371	6.83
9J16053-CAL9	6000	358825	1.325	6.84
9J16053-CALA	8000	440964	1.223	6.84

AVE RF **1.485** RF RSD **8.97** AVE RT **6.83**

2-Methylphenol

Curve Fit: **AVERAGE RF**

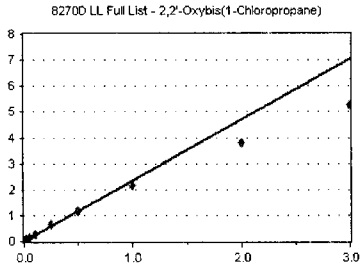


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1222	1.102	6.89
9J16053-CAL2	50	2790	0.971	6.89
9J16053-CAL3	100	6433	1.133	6.89
9J16053-CAL4	200	13130	1.093	6.89
9J16053-CAL5	500	33736	1.223	6.89
9J16053-CAL6	1000	64002	1.178	6.89
9J16053-CAL7	2000	125482	1.179	6.89
9J16053-CAL8	4000	231464	1.095	6.90
9J16053-CAL9	6000	286008	1.056	6.90
9J16053-CALA	8000	347076	0.963	6.91

AVE RF **1.099** RF RSD **7.79** AVE RT **6.90**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

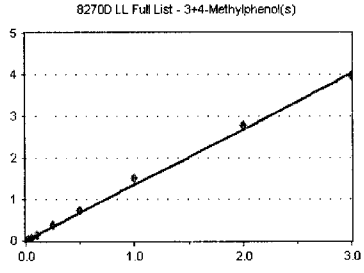


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2838	2.559	6.92
9J16053-CAL2	50	7664	2.667	6.92
9J16053-CAL3	100	14918	2.628	6.92
9J16053-CAL4	200	30514	2.540	6.92
9J16053-CAL5	500	70737	2.565	6.92
9J16053-CAL6	1000	128835	2.371	6.92
9J16053-CAL7	2000	232038	2.179	6.92
9J16053-CAL8	4000	401443	1.899	6.93
9J16053-CAL9	6000	474944	1.754	6.93
~~9J16053-CALA~~	~~8000~~	~~544410~~	~~1.610~~	~~6.93~~

AVE RF **2.351** RF RSD **14.20** AVE RT **6.92**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1259	1.135	7.04
9J16053-CAL2	50	3323	1.156	7.04
9J16053-CAL3	100	7443	1.311	7.04
9J16053-CAL4	200	15070	1.254	7.04
9J16053-CAL5	500	41942	1.521	7.04
9J16053-CAL6	1000	80497	1.481	7.04
9J16053-CAL7	2000	160363	1.506	7.04
9J16053-CAL8	4000	292865	1.385	7.05
9J16053-CAL9	6000	358777	1.325	7.06
~~9J16053-CALA~~	~~8000~~	~~435039~~	~~1.207~~	~~7.07~~

AVE RF **1.342** RF RSD **10.75** AVE RT **7.04**

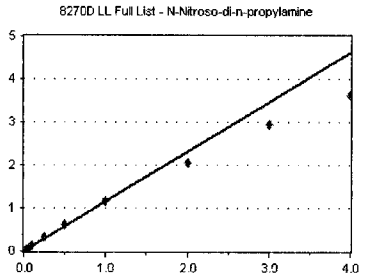
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

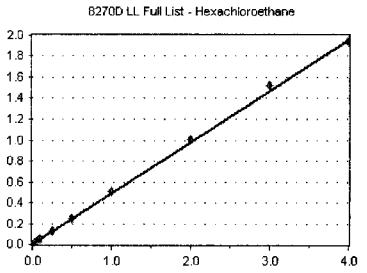


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1362	1.228	7.05
9J16053-CAL2	50	3574	1.244	7.05
9J16053-CAL3	100	7214	1.271	7.05
9J16053-CAL4	200	14701	1.224	7.04
9J16053-CAL5	500	36526	1.324	7.05
9J16053-CAL6	1000	66569	1.225	7.05
9J16053-CAL7	2000	122433	1.150	7.05
9J16053-CAL8	4000	216758	1.025	7.07
9J16053-CAL9	6000	265552	0.981	7.07
9J16053-CALA	8000	326816	0.907	7.08

AVE RF **1.158** RF RSD **12.00** AVE RT **7.06**

Hexachloroethane

Curve Fit: **AVERAGE RF**

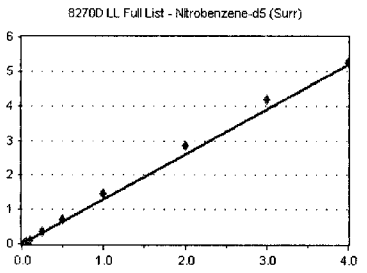


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	507	0.457	7.17
9J16053-CAL2	50	1316	0.458	7.16
9J16053-CAL3	100	2749	0.484	7.17
9J16053-CAL4	200	5953	0.495	7.16
9J16053-CAL5	500	13814	0.501	7.17
9J16053-CAL6	1000	26988	0.497	7.17
9J16053-CAL7	2000	54131	0.508	7.16
9J16053-CAL8	4000	106200	0.502	7.17
9J16053-CAL9	6000	137256	0.507	7.17
9J16053-CALA	8000	175204	0.486	7.17

AVE RF **0.490** RF RSD **3.80** AVE RT **7.17**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

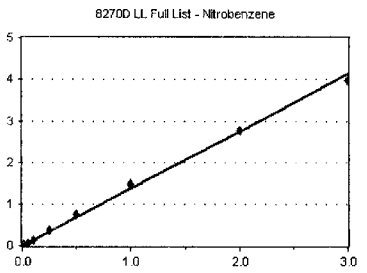


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1331	1.200	7.20
9J16053-CAL2	50	3185	1.108	7.20
9J16053-CAL3	100	6659	1.173	7.20
9J16053-CAL4	200	13464	1.121	7.20
9J16053-CAL5	500	38734	1.404	7.20
9J16053-CAL6	1000	76069	1.400	7.20
9J16053-CAL7	2000	154925	1.455	7.20
9J16053-CAL8	4000	303165	1.434	7.20
9J16053-CAL9	6000	379122	1.400	7.22
9J16053-CALA	8000	472853	1.312	7.22

AVE RF **1.301** RF RSD **10.51** AVE RT **7.20**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1500	1.352	7.22
9J16053-CAL2	50	3574	1.244	7.22
9J16053-CAL3	100	7135	1.257	7.22
9J16053-CAL4	200	15667	1.304	7.22
9J16053-CAL5	500	42464	1.540	7.22
9J16053-CAL6	1000	81675	1.503	7.22
9J16053-CAL7	2000	158273	1.487	7.22
9J16053-CAL8	4000	293208	1.387	7.23
9J16053-CAL9	6000	358149	1.322	7.23
~~9J16053-CALA~~	~~8000~~	~~431713~~	~~1.198~~	~~7.24~~

AVE RF **1.377** RF RSD **7.94** AVE RT **7.22**

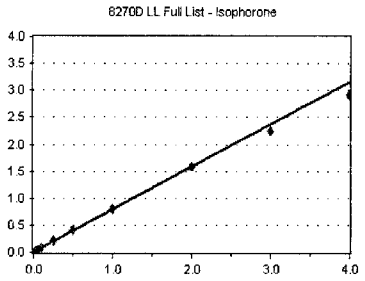
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Isophorone

Curve Fit: **AVERAGE RF**

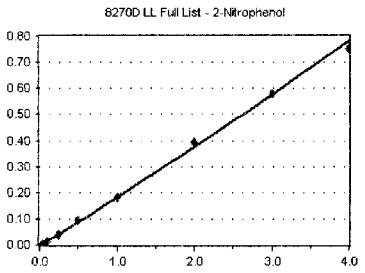


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3161	0.711	7.46
9J16053-CAL2	50	8579	0.770	7.45
9J16053-CAL3	100	18112	0.807	7.45
9J16053-CAL4	200	38056	0.850	7.45
9J16053-CAL5	500	94466	0.861	7.45
9J16053-CAL6	1000	172965	0.832	7.46
9J16053-CAL7	2000	326670	0.811	7.46
9J16053-CAL8	4000	624906	0.785	7.47
9J16053-CAL9	6000	786908	0.750	7.47
9J16053-CALA	8000	1001015	0.732	7.48

AVE RF **0.791** RF RSD **6.35** AVE RT **7.46**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

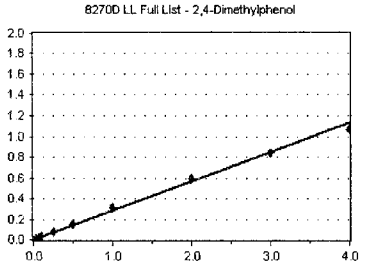


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~369~~	~~8.306~~	~~7.54~~
~~9J16053-CAL2~~	~~50~~	~~925~~	~~8.297~~	~~7.54~~
9J16053-CAL3	100	2310	0.103	7.54
9J16053-CAL4	200	5298	0.118	7.54
9J16053-CAL5	500	17473	0.159	7.54
9J16053-CAL6	1000	38840	0.187	7.54
9J16053-CAL7	2000	73325	0.182	7.54
9J16053-CAL8	4000	157209	0.198	7.54
9J16053-CAL9	6000	202850	0.193	7.55
9J16053-CALA	8000	257722	0.188	7.55

AVE RF **0.166** RF RSD **21.87** AVE RT **7.54**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

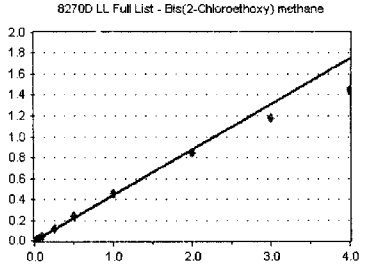


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1082	0.244	7.57
9J16053-CAL2	50	2761	0.248	7.57
9J16053-CAL3	100	6096	0.272	7.57
9J16053-CAL4	200	13189	0.294	7.57
9J16053-CAL5	500	32732	0.298	7.57
9J16053-CAL6	1000	64041	0.308	7.57
9J16053-CAL7	2000	126582	0.314	7.57
9J16053-CAL8	4000	238097	0.299	7.58
9J16053-CAL9	6000	294594	0.281	7.58
9J16053-CALA	8000	364751	0.267	7.59

AVE RF **0.282** RF RSD **8.69** AVE RT **7.57**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1914	0.431	7.66
9J16053-CAL2	50	4937	0.443	7.66
9J16053-CAL3	100	10224	0.456	7.66
9J16053-CAL4	200	20646	0.461	7.66
9J16053-CAL5	500	53184	0.485	7.66
9J16053-CAL6	1000	97637	0.470	7.66
9J16053-CAL7	2000	183878	0.456	7.66
9J16053-CAL8	4000	336452	0.423	7.67
9J16053-CAL9	6000	411142	0.392	7.68
9J16053-CALA	8000	495856	0.363	7.68

AVE RF **0.438** RF RSD **8.51** AVE RT **7.66**

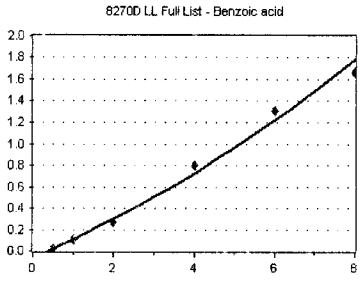
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

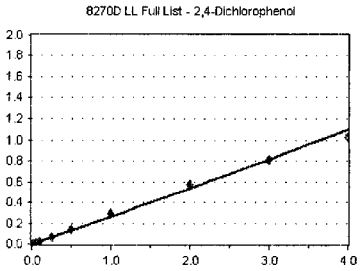


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~40~~	~~64~~	~~7.203~~	~~7.57~~
~~9J16053-CAL2~~	~~100~~	~~134~~	~~6.010~~	~~7.66~~
~~9J16053-CAL3~~	~~200~~	~~519~~	~~1.156~~	~~7.61~~
~~9J16053-CAL4~~	~~400~~	~~1889~~	~~2.109~~	~~7.61~~
9J16053-CAL5	1000	9988	4.553	7.63
9J16053-CAL6	2000	42834	0.103	7.65
9J16053-CAL7	4000	106896	0.133	7.69
9J16053-CAL8	8000	319266	0.201	7.74
9J16053-CAL9	12000	456773	0.218	7.77
9J16053-CALA	16000	567530	0.208	7.77

AVE RF **0.151** RF RSD **45.70** AVE RT **7.71**

2,4-Dichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

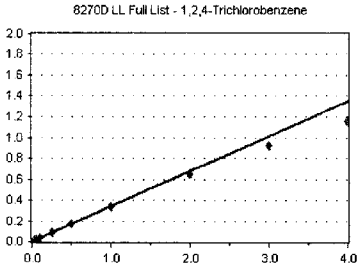


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	574	0.129	7.77
9J16053-CAL2	50	1890	0.170	7.77
9J16053-CAL3	100	4404	0.196	7.77
9J16053-CAL4	200	10420	0.233	7.77
9J16053-CAL5	500	28760	0.262	7.77
9J16053-CAL6	1000	57918	0.279	7.77
9J16053-CAL7	2000	119237	0.296	7.78
9J16053-CAL8	4000	227693	0.286	7.78
9J16053-CAL9	6000	282981	0.270	7.79
9J16053-CALA	8000	351999	0.257	7.79

AVE RF **0.238** RF RSD **23.28** AVE RT **7.78**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

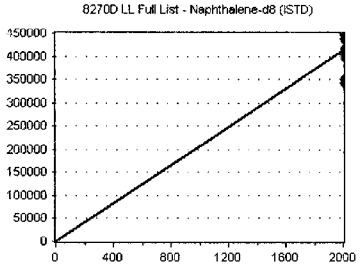


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1518	0.342	7.86
9J16053-CAL2	50	3937	0.353	7.86
9J16053-CAL3	100	7993	0.356	7.86
9J16053-CAL4	200	16256	0.363	7.86
9J16053-CAL5	500	38996	0.356	7.86
9J16053-CAL6	1000	71920	0.346	7.86
9J16053-CAL7	2000	136516	0.339	7.86
9J16053-CAL8	4000	256919	0.323	7.87
9J16053-CAL9	6000	321077	0.306	7.87
9J16053-CALA	8000	393859	0.288	7.87

AVE RF **0.337** RF RSD **7.21** AVE RT **7.86**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	444279	222.140	7.92
9J16053-CAL2	2000	445939	222.970	7.92
9J16053-CAL3	2000	448868	224.434	7.92
9J16053-CAL4	2000	447887	223.943	7.92
9J16053-CAL5	2000	438764	219.382	7.92
9J16053-CAL6	2000	415784	207.892	7.92
9J16053-CAL7	2000	403006	201.503	7.92
9J16053-CAL8	2000	397960	198.980	7.93
9J16053-CAL9	2000	349868	174.934	7.93
9J16053-CALA	2000	341834	170.917	7.93

AVE RF **206.710** RF RSD **9.75** AVE RT **7.92**

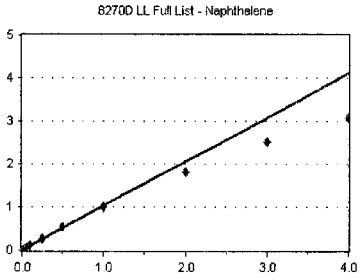
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Naphthalene

Curve Fit: **AVERAGE RF**

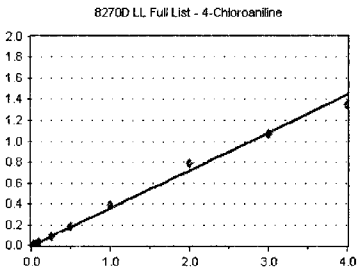


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	5043	1.135	7.94
9J16053-CAL2	50	12520	1.123	7.94
9J16053-CAL3	100	25776	1.148	7.94
9J16053-CAL4	200	50856	1.135	7.94
9J16053-CAL5	500	123871	1.129	7.94
9J16053-CAL6	1000	222697	1.071	7.94
9J16053-CAL7	2000	407227	1.010	7.94
9J16053-CAL8	4000	725187	0.911	7.95
9J16053-CAL9	6000	881153	0.840	7.95
9J16053-CALA	8000	1052026	0.769	7.95

AVE RF **1.027** RF RSD **13.58** AVE RT **7.94**

4-Chloroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

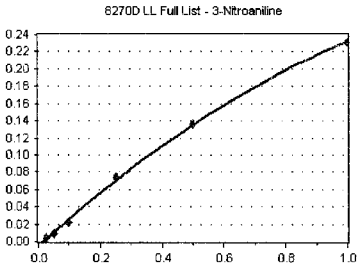


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	610	0.137	7.99
9J16053-CAL2	50	2877	0.258	7.99
9J16053-CAL3	100	6058	0.270	7.99
9J16053-CAL4	200	14311	0.320	7.99
9J16053-CAL5	500	38672	0.353	7.99
9J16053-CAL6	1000	74988	0.361	7.99
9J16053-CAL7	2000	158495	0.393	7.99
9J16053-CAL8	4000	312189	0.392	8.00
9J16053-CAL9	6000	375558	0.358	8.00
9J16053-CALA	8000	462446	0.338	8.00

AVE RF **0.318** RF RSD **24.53** AVE RT **7.99**

3-Nitroaniline

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

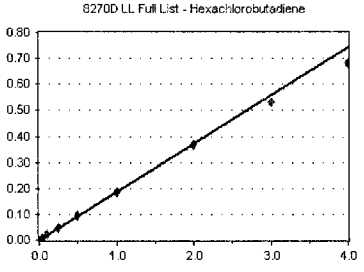


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~203~~	~~8.879~~	~~9.64~~
9J16053-CAL2	50	817	0.142	9.64
9J16053-CAL3	100	2092	0.180	9.64
9J16053-CAL4	200	5115	0.223	9.64
9J16053-CAL5	500	16475	0.294	9.64
9J16053-CAL6	1000	28849	0.274	9.64
9J16053-CAL7	2000	47185	0.231	0.00
~~9J16053-CAL8~~	~~4000~~	~~72076~~	~~0.172~~	~~0.00~~
~~9J16053-CAL9~~	~~6000~~	~~78267~~	~~0.140~~	~~0.00~~
~~9J16053-CALA~~	~~8000~~	~~117221~~	~~0.160~~	~~0.00~~

AVE RF **0.224** RF RSD **25.34** AVE RT **8.03**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	770	0.173	8.08
9J16053-CAL2	50	2120	0.190	8.07
9J16053-CAL3	100	4343	0.194	8.07
9J16053-CAL4	200	9011	0.201	8.07
9J16053-CAL5	500	21118	0.193	8.07
9J16053-CAL6	1000	38923	0.187	8.07
9J16053-CAL7	2000	75680	0.188	8.07
9J16053-CAL8	4000	146937	0.185	8.08
9J16053-CAL9	6000	186782	0.178	8.08
9J16053-CALA	8000	234083	0.171	8.08

AVE RF **0.186** RF RSD **5.07** AVE RT **8.07**

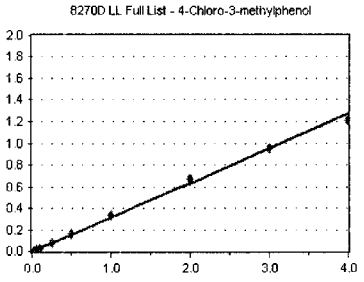
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

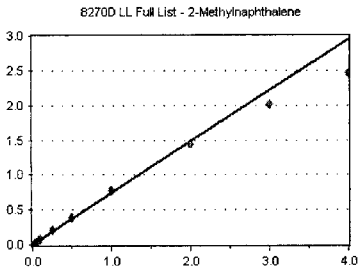


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~522~~	~~0.117~~	~~8.47~~
9J16053-CAL2	50	1947	0.175	8.47
9J16053-CAL3	100	4647	0.207	8.47
9J16053-CAL4	200	10782	0.241	8.47
9J16053-CAL5	500	33546	0.306	8.47
9J16053-CAL6	1000	66824	0.321	8.47
9J16053-CAL7	2000	134732	0.334	8.47
9J16053-CAL8	4000	266335	0.335	8.47
9J16053-CAL9	6000	333390	0.318	8.48
9J16053-CALA	8000	413423	0.302	8.48

AVE RF **0.282** RF RSD **21.03** AVE RT **8.47**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

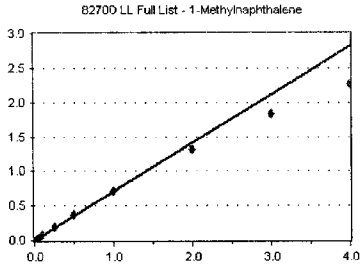


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3026	0.681	8.64
9J16053-CAL2	50	8077	0.724	8.64
9J16053-CAL3	100	17540	0.782	8.64
9J16053-CAL4	200	36226	0.809	8.64
9J16053-CAL5	500	90190	0.822	8.64
9J16053-CAL6	1000	164653	0.792	8.64
9J16053-CAL7	2000	312402	0.775	8.64
9J16053-CAL8	4000	571940	0.719	8.64
9J16053-CAL9	6000	700865	0.668	8.64
9J16053-CALA	8000	843623	0.617	8.64

AVE RF **0.739** RF RSD **9.21** AVE RT **8.64**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

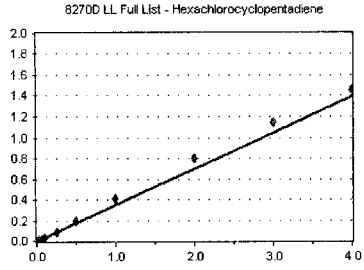


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3010	0.678	8.74
9J16053-CAL2	50	8217	0.737	8.74
9J16053-CAL3	100	17357	0.773	8.74
9J16053-CAL4	200	34216	0.764	8.74
9J16053-CAL5	500	85675	0.781	8.74
9J16053-CAL6	1000	154845	0.745	8.74
9J16053-CAL7	2000	289054	0.717	8.74
9J16053-CAL8	4000	525478	0.660	8.75
9J16053-CAL9	6000	643393	0.613	8.74
9J16053-CALA	8000	774012	0.566	8.75

AVE RF **0.703** RF RSD **10.30** AVE RT **8.74**

Hexachlorocyclopentadiene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	631	0.276	8.80
9J16053-CAL2	50	1631	0.283	8.80
9J16053-CAL3	100	3517	0.303	8.80
9J16053-CAL4	200	7790	0.340	8.80
9J16053-CAL5	500	19912	0.356	8.81
9J16053-CAL6	1000	40001	0.379	8.81
9J16053-CAL7	2000	83207	0.407	8.81
9J16053-CAL8	4000	167259	0.399	8.81
9J16053-CAL9	6000	214657	0.383	8.81
9J16053-CALA	8000	265581	0.364	8.81

AVE RF **0.349** RF RSD **13.53** AVE RT **8.81**

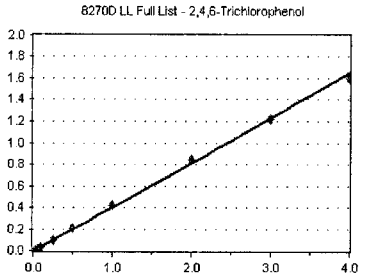
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

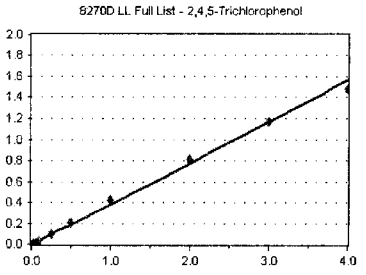


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~357~~	~~0.156~~	~~8.92~~
9J16053-CAL2	50	1180	0.205	8.92
9J16053-CAL3	100	3024	0.260	8.92
9J16053-CAL4	200	7170	0.313	8.92
9J16053-CAL5	500	21567	0.385	8.92
9J16053-CAL6	1000	42283	0.401	8.92
9J16053-CAL7	2000	86005	0.421	8.92
9J16053-CAL8	4000	176954	0.422	8.93
9J16053-CAL9	6000	227216	0.406	8.93
9J16053-CALA	8000	292625	0.401	8.93

AVE RF **0.357** RF RSD **22.07** AVE RT **8.92**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

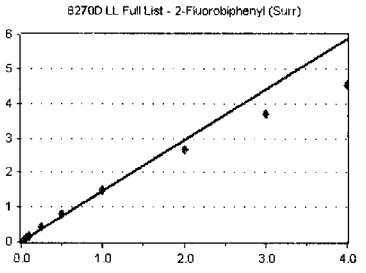


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~333~~	~~0.146~~	~~8.96~~
9J16053-CAL2	50	1507	0.262	8.95
9J16053-CAL3	100	2923	0.252	8.95
9J16053-CAL4	200	6873	0.300	8.95
9J16053-CAL5	500	21096	0.377	8.95
9J16053-CAL6	1000	42231	0.401	8.95
9J16053-CAL7	2000	85045	0.416	8.95
9J16053-CAL8	4000	169331	0.404	8.96
9J16053-CAL9	6000	218856	0.391	8.96
9J16053-CALA	8000	271144	0.371	8.96

AVE RF **0.353** RF RSD **18.09** AVE RT **8.96**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

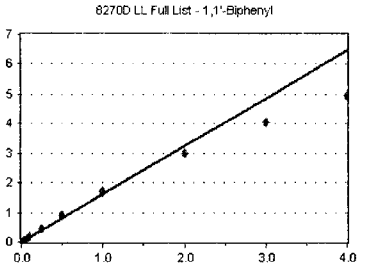


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3186	1.394	9.01
9J16053-CAL2	50	8607	1.494	9.01
9J16053-CAL3	100	19336	1.665	9.00
9J16053-CAL4	200	37977	1.659	9.00
9J16053-CAL5	500	94649	1.690	9.01
9J16053-CAL6	1000	167583	1.590	9.01
9J16053-CAL7	2000	307320	1.504	9.01
9J16053-CAL8	4000	561154	1.337	9.01
9J16053-CAL9	6000	687674	1.228	9.01
9J16053-CALA	8000	827961	1.133	9.02

AVE RF **1.470** RF RSD **13.11** AVE RT **9.01**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3294	1.441	9.11
9J16053-CAL2	50	9466	1.643	9.11
9J16053-CAL3	100	21153	1.822	9.11
9J16053-CAL4	200	42580	1.860	9.11
9J16053-CAL5	500	104830	1.872	9.11
9J16053-CAL6	1000	187524	1.779	9.11
9J16053-CAL7	2000	345569	1.691	9.11
9J16053-CAL8	4000	623340	1.486	9.11
9J16053-CAL9	6000	756255	1.350	9.12
9J16053-CALA	8000	905572	1.240	9.12

AVE RF **1.618** RF RSD **13.98** AVE RT **9.11**

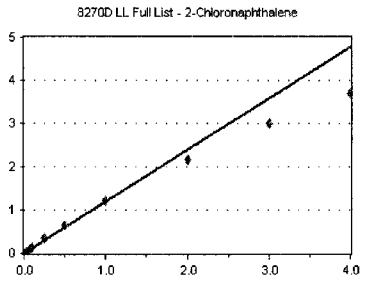
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**

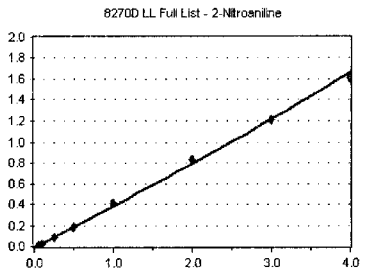


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2408	1.053	9.13
9J16053-CAL2	50	7301	1.267	9.13
9J16053-CAL3	100	15573	1.341	9.13
9J16053-CAL4	200	31240	1.365	9.13
9J16053-CAL5	500	77553	1.385	9.13
9J16053-CAL6	1000	138289	1.312	9.13
9J16053-CAL7	2000	250807	1.227	9.14
9J16053-CAL8	4000	453639	1.081	9.14
9J16053-CAL9	6000	562503	1.004	9.14
9J16053-CALA	8000	674470	0.923	9.15

AVE RF **1.196** RF RSD **13.92** AVE RT **9.13**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

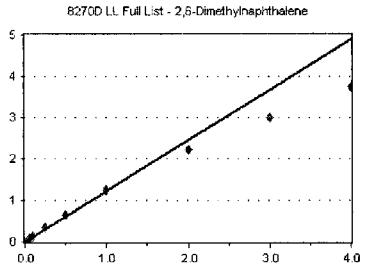


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~265~~	~~0.116~~	~~9.23~~
~~9J16053-CAL2~~	~~50~~	~~803~~	~~0.139~~	~~9.23~~
9J16053-CAL3	100	2029	0.175	9.23
9J16053-CAL4	200	5088	0.222	9.23
9J16053-CAL5	500	18180	0.325	9.23
9J16053-CAL6	1000	39518	0.375	9.23
9J16053-CAL7	2000	82868	0.406	9.23
9J16053-CAL8	4000	173545	0.414	9.24
9J16053-CAL9	6000	226292	0.404	9.24
9J16053-CALA	8000	293332	0.402	9.25

AVE RF **0.340** RF RSD **27.27** AVE RT **9.23**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

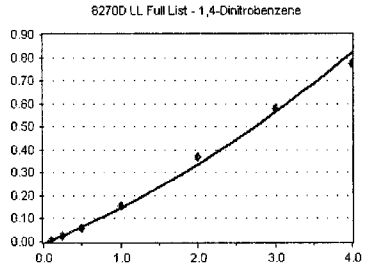


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2691	1.177	9.27
9J16053-CAL2	50	7521	1.306	9.27
9J16053-CAL3	100	15902	1.370	9.27
9J16053-CAL4	200	31242	1.365	9.27
9J16053-CAL5	500	77752	1.389	9.27
9J16053-CAL6	1000	139567	1.324	9.27
9J16053-CAL7	2000	255391	1.250	9.27
9J16053-CAL8	4000	464700	1.107	9.27
9J16053-CAL9	6000	562178	1.004	9.28
9J16053-CALA	8000	686967	0.940	9.28

AVE RF **1.223** RF RSD **13.07** AVE RT **9.27**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J16053-CAL2~~	~~50~~	~~260~~	~~4.514~~	~~9.35~~
~~9J16053-CAL3~~	~~100~~	~~548~~	~~4.720~~	~~9.35~~
9J16053-CAL4	200	1277	5.580	9.35
9J16053-CAL5	500	5080	9.072	9.35
9J16053-CAL6	1000	12494	0.119	9.35
9J16053-CAL7	2000	31930	0.156	9.36
9J16053-CAL8	4000	77125	0.184	9.37
9J16053-CAL9	6000	107910	0.193	9.37
9J16053-CALA	8000	141310	0.193	9.38

AVE RF **0.142** RF RSD **38.44** AVE RT **9.36**

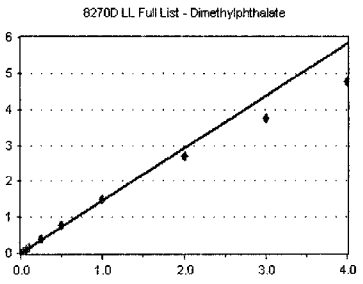
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Dimethylphthalate

Curve Fit: **AVERAGE RF**

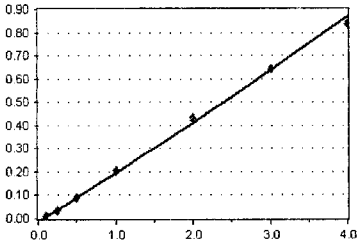


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3253	1.423	9.40
9J16053-CAL2	50	8884	1.542	9.41
9J16053-CAL3	100	18685	1.609	9.41
9J16053-CAL4	200	36622	1.600	9.41
9J16053-CAL5	500	89795	1.604	9.41
9J16053-CAL6	1000	161978	1.536	9.41
9J16053-CAL7	2000	303831	1.487	9.41
9J16053-CAL8	4000	566035	1.349	9.42
9J16053-CAL9	6000	703220	1.256	9.43
9J16053-CALA	8000	867794	1.188	9.44

AVE RF **1.459** RF RSD **10.35** AVE RT **9.42**

1,3-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

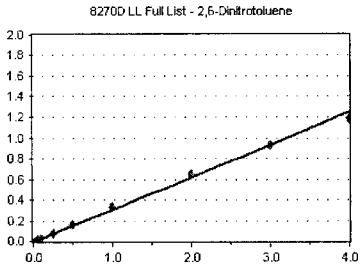


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~52~~	~~2.274~~	~~0.00~~
~~9J16053-CAL2~~	~~50~~	~~351~~	~~6.093~~	~~9.43~~
~~9J16053-CAL3~~	~~100~~	~~771~~	~~6.641~~	~~9.43~~
9J16053-CAL4	200	1889	8.254	9.44
9J16053-CAL5	500	7846	0.140	9.43
9J16053-CAL6	1000	18022	0.171	9.43
9J16053-CAL7	2000	41890	0.205	9.44
9J16053-CAL8	4000	91162	0.217	9.45
9J16053-CAL9	6000	120068	0.214	9.46
9J16053-CALA	8000	152836	0.209	9.47

AVE RF **0.177** RF RSD **28.39** AVE RT **9.45**

2,6-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

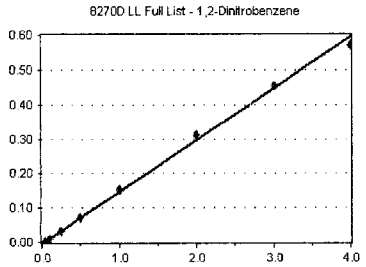


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~213~~	~~9.316~~	~~9.47~~
9J16053-CAL2	50	792	0.137	9.47
9J16053-CAL3	100	1977	0.170	9.47
9J16053-CAL4	200	5062	0.221	9.47
9J16053-CAL5	500	16561	0.296	9.47
9J16053-CAL6	1000	33104	0.314	9.47
9J16053-CAL7	2000	67679	0.331	9.47
9J16053-CAL8	4000	135556	0.323	9.48
9J16053-CAL9	6000	174146	0.311	9.49
9J16053-CALA	8000	216715	0.297	9.49

AVE RF **0.267** RF RSD **26.95** AVE RT **9.47**

1,2-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J16053-CAL2~~	~~50~~	~~309~~	~~5.364~~	~~9.52~~
9J16053-CAL3	100	825	7.106	9.52
9J16053-CAL4	200	2119	9.259	9.52
9J16053-CAL5	500	7179	0.128	9.53
9J16053-CAL6	1000	15130	0.144	9.53
9J16053-CAL7	2000	31248	0.153	9.53
9J16053-CAL8	4000	65220	0.155	9.54
9J16053-CAL9	6000	84556	0.151	9.55
9J16053-CALA	8000	103981	0.142	9.56

AVE RF **0.130** RF RSD **24.09** AVE RT **9.53**

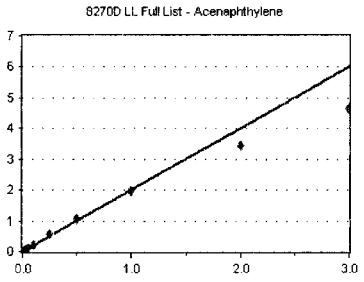
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Acenaphthylene

Curve Fit: **AVERAGE RF**

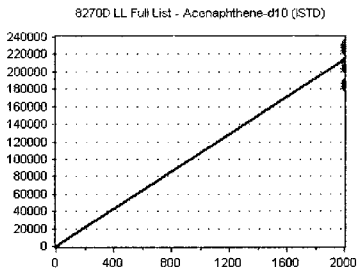


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4331	1.894	9.55
9J16053-CAL2	50	12047	2.091	9.55
9J16053-CAL3	100	25781	2.220	9.55
9J16053-CAL4	200	50685	2.215	9.55
9J16053-CAL5	500	125650	2.244	9.55
9J16053-CAL6	1000	223232	2.117	9.55
9J16053-CAL7	2000	401818	1.967	9.56
9J16053-CAL8	4000	722393	1.722	9.56
9J16053-CAL9	6000	869974	1.554	9.56
~~9J16053-CALA~~	~~8000~~	~~1014724~~	~~1.389~~	~~9.57~~

AVE RF **2.003** RF RSD **12.04** AVE RT **9.56**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

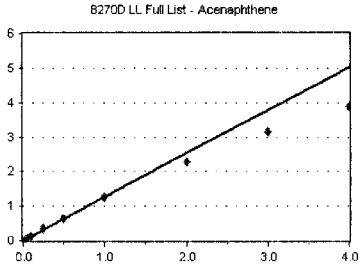


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	228631	114.315	9.70
9J16053-CAL2	2000	230418	115.209	9.70
9J16053-CAL3	2000	232211	116.105	9.70
9J16053-CAL4	2000	228870	114.435	9.70
9J16053-CAL5	2000	223981	111.990	9.70
9J16053-CAL6	2000	210848	105.424	9.70
9J16053-CAL7	2000	204324	102.162	9.70
9J16053-CAL8	2000	209804	104.902	9.70
9J16053-CAL9	2000	186669	93.335	9.71
9J16053-CALA	2000	182625	91.313	9.71

AVE RF **106.919** RF RSD **8.52** AVE RT **9.70**

Acenaphthene

Curve Fit: **AVERAGE RF**

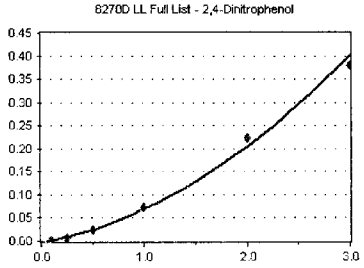


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3082	1.348	9.73
9J16053-CAL2	50	7881	1.368	9.73
9J16053-CAL3	100	16496	1.421	9.73
9J16053-CAL4	200	31461	1.375	9.73
9J16053-CAL5	500	76410	1.365	9.73
9J16053-CAL6	1000	137686	1.306	9.73
9J16053-CAL7	2000	257901	1.262	9.73
9J16053-CAL8	4000	473473	1.128	9.74
9J16053-CAL9	6000	584734	1.044	9.75
9J16053-CALA	8000	712568	0.975	9.75

AVE RF **1.259** RF RSD **12.31** AVE RT **9.73**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J16053-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9J16053-CAL3~~	~~100~~	~~103~~	~~8.871~~	~~9.74~~
9J16053-CAL4	200	310	1.354	9.74
9J16053-CAL5	500	1553	0.028	9.75
9J16053-CAL6	1000	5088	4.826	9.75
9J16053-CAL7	2000	15123	0.074	9.75
9J16053-CAL8	4000	47179	0.112	9.76
9J16053-CAL9	6000	71059	0.127	9.76
~~9J16053-CALA~~	~~8000~~	~~97114~~	~~0.133~~	~~9.77~~

AVE RF **6.715** RF RSD **68.09** AVE RT **9.75**

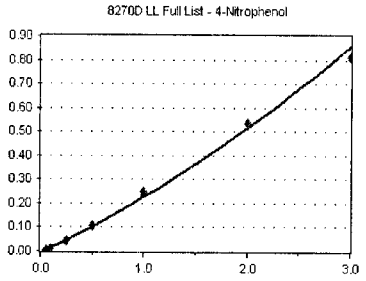
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

4-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

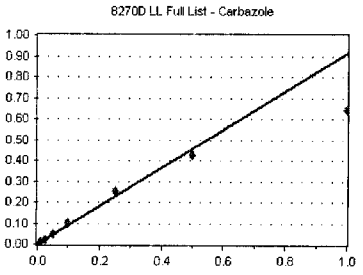


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~149~~	~~6.517~~	~~9.80~~
~~9J16053-CAL2~~	~~50~~	~~379~~	~~6.579~~	~~9.80~~
9J16053-CAL3	100	907	7.812	9.80
9J16053-CAL4	200	2397	0.105	9.80
9J16053-CAL5	500	9787	0.175	9.80
9J16053-CAL6	1000	22603	0.214	9.80
9J16053-CAL7	2000	50566	0.247	9.80
9J16053-CAL8	4000	112553	0.268	9.81
9J16053-CAL9	6000	152030	0.271	9.83
~~9J16053-CALA~~	~~8000~~	~~187194~~	~~0.256~~	~~9.83~~

AVE RF **0.194** RF RSD **40.20** AVE RT **9.80**

Carbazole

Curve Fit: **AVERAGE RF**

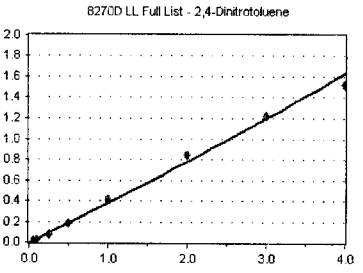


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3762	0.896	11.45
9J16053-CAL2	50	10074	0.970	11.45
9J16053-CAL3	100	21180	1.005	11.45
9J16053-CAL4	200	41597	1.024	11.45
9J16053-CAL5	500	104447	1.007	11.45
9J16053-CAL6	1000	168399	0.854	11.45
9J16053-CAL7	2000	254192	0.644	0.00
~~9J16053-CAL8~~	~~4000~~	~~377741~~	~~0.452~~	~~0.00~~
~~9J16053-CAL9~~	~~6000~~	~~424787~~	~~0.376~~	~~0.00~~
~~9J16053-CALA~~	~~8000~~	~~578961~~	~~0.385~~	~~0.00~~

AVE RF **0.915** RF RSD **14.72** AVE RT **9.81**

2,4-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

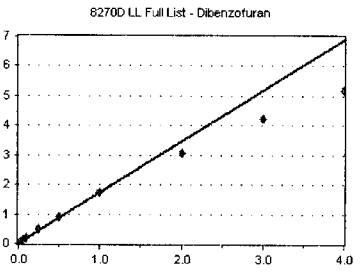


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~307~~	~~0.134~~	~~9.87~~
~~9J16053-CAL2~~	~~50~~	~~711~~	~~0.123~~	~~9.88~~
9J16053-CAL3	100	1827	0.157	9.88
9J16053-CAL4	200	4451	0.194	9.88
9J16053-CAL5	500	17286	0.309	9.88
9J16053-CAL6	1000	38193	0.362	9.88
9J16053-CAL7	2000	83801	0.410	9.88
9J16053-CAL8	4000	177218	0.422	9.90
9J16053-CAL9	6000	227357	0.406	9.90
9J16053-CALA	8000	277426	0.380	9.91

AVE RF **0.330** RF RSD **30.91** AVE RT **9.89**

Dibenzofuran

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3969	1.736	9.91
9J16053-CAL2	50	10908	1.894	9.91
9J16053-CAL3	100	22990	1.980	9.91
9J16053-CAL4	200	43819	1.915	9.91
9J16053-CAL5	500	107652	1.923	9.91
9J16053-CAL6	1000	190719	1.809	9.91
9J16053-CAL7	2000	356546	1.745	9.91
9J16053-CAL8	4000	645432	1.538	9.91
9J16053-CAL9	6000	787795	1.407	9.92
9J16053-CALA	8000	946729	1.296	9.92

AVE RF **1.724** RF RSD **13.62** AVE RT **9.91**

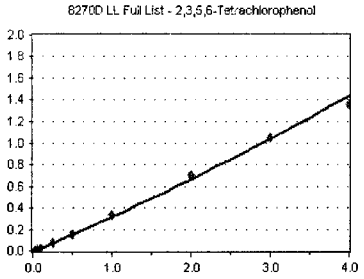
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

2,3,5,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

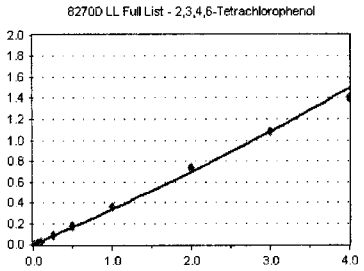


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~254~~	~~0.111~~	~~9.99~~
9J16053-CAL2	50	786	0.136	9.99
9J16053-CAL3	100	2308	0.199	9.99
9J16053-CAL4	200	5028	0.220	9.99
9J16053-CAL5	500	16246	0.290	9.99
9J16053-CAL6	1000	32998	0.313	9.99
9J16053-CAL7	2000	69287	0.339	9.99
9J16053-CAL8	4000	147371	0.351	9.99
9J16053-CAL9	6000	195876	0.350	10.00
9J16053-CALA	8000	249690	0.342	10.00

AVE RF **0.282** RF RSD **27.80** AVE RT **9.99**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

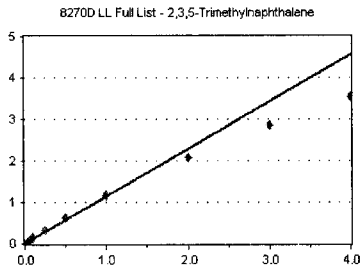


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	405	0.177	10.03
9J16053-CAL2	50	1166	0.202	10.03
9J16053-CAL3	100	3124	0.269	10.03
9J16053-CAL4	200	6167	0.269	10.03
9J16053-CAL5	500	19007	0.339	10.03
9J16053-CAL6	1000	37050	0.351	10.03
9J16053-CAL7	2000	73600	0.360	10.03
9J16053-CAL8	4000	154291	0.368	10.04
9J16053-CAL9	6000	201184	0.359	10.04
9J16053-CALA	8000	257264	0.352	10.04

AVE RF **0.305** RF RSD **23.18** AVE RT **10.03**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

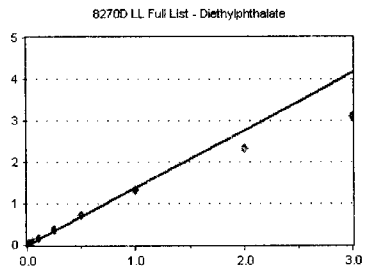


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2603	1.139	10.11
9J16053-CAL2	50	6964	1.209	10.11
9J16053-CAL3	100	14732	1.269	10.11
9J16053-CAL4	200	28442	1.243	10.11
9J16053-CAL5	500	72192	1.289	10.11
9J16053-CAL6	1000	129295	1.226	10.12
9J16053-CAL7	2000	238990	1.170	10.12
9J16053-CAL8	4000	434174	1.035	10.13
9J16053-CAL9	6000	535500	0.956	10.13
9J16053-CALA	8000	644885	0.883	10.13

AVE RF **1.142** RF RSD **12.16** AVE RT **10.12**

Diethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3227	1.411	10.12
9J16053-CAL2	50	8435	1.464	10.12
9J16053-CAL3	100	17844	1.537	10.12
9J16053-CAL4	200	35198	1.538	10.12
9J16053-CAL5	500	85721	1.531	10.12
9J16053-CAL6	1000	152181	1.444	10.12
9J16053-CAL7	2000	272344	1.333	10.13
9J16053-CAL8	4000	484945	1.156	10.14
9J16053-CAL9	6000	579238	1.034	10.14
~~9J16053-CALA~~	~~8000~~	~~698054~~	~~0.956~~	~~10.15~~

AVE RF **1.383** RF RSD **12.94** AVE RT **10.13**

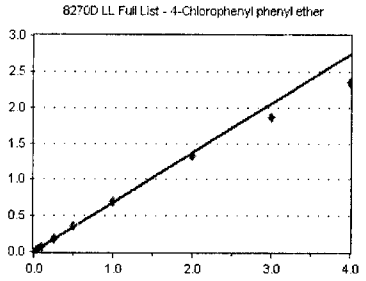
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**

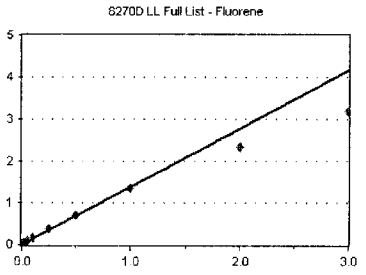


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1518	0.664	10.25
9J16053-CAL2	50	4054	0.704	10.25
9J16053-CAL3	100	8661	0.746	10.25
9J16053-CAL4	200	16535	0.722	10.25
9J16053-CAL5	500	41485	0.741	10.25
9J16053-CAL6	1000	75441	0.716	10.25
9J16053-CAL7	2000	144104	0.705	10.25
9J16053-CAL8	4000	278225	0.663	10.25
9J16053-CAL9	6000	348928	0.623	10.26
9J16053-CALA	8000	428718	0.587	10.26

AVE RF **0.687** RF RSD **7.56** AVE RT **10.25**

Fluorene

Curve Fit: **AVERAGE RF**

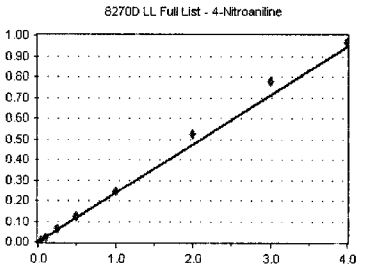


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3175	1.389	10.25
9J16053-CAL2	50	8492	1.474	10.25
9J16053-CAL3	100	18324	1.578	10.25
9J16053-CAL4	200	34530	1.509	10.25
9J16053-CAL5	500	85310	1.524	10.25
9J16053-CAL6	1000	150523	1.428	10.26
9J16053-CAL7	2000	274932	1.346	10.26
9J16053-CAL8	4000	491882	1.172	10.26
9J16053-CAL9	6000	595819	1.064	10.27
~~9J16053-CALA~~	~~8000~~	~~721314~~	~~0.987~~	~~10.27~~

AVE RF **1.387** RF RSD **12.26** AVE RT **10.26**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

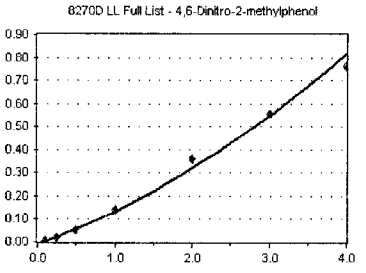


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~246~~	~~0.108~~	~~10.26~~
~~9J16053-CAL2~~	~~50~~	~~819~~	~~0.142~~	~~10.26~~
9J16053-CAL3	100	2067	0.178	10.26
9J16053-CAL4	200	4513	0.197	10.26
9J16053-CAL5	500	14782	0.264	10.26
9J16053-CAL6	1000	25826	0.245	10.26
9J16053-CAL7	2000	49921	0.244	10.27
9J16053-CAL8	4000	109557	0.261	10.28
9J16053-CAL9	6000	145167	0.259	10.29
9J16053-CALA	8000	176836	0.242	10.30

AVE RF **0.236** RF RSD **13.38** AVE RT **10.27**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9J16053-CAL2~~	~~50~~	~~104~~	~~1.805~~	~~10.30~~
~~9J16053-CAL3~~	~~100~~	~~341~~	~~2.937~~	~~10.29~~
9J16053-CAL4	200	920	4.020	10.29
9J16053-CAL5	500	3988	7.122	10.30
9J16053-CAL6	1000	11200	0.106	10.30
9J16053-CAL7	2000	29002	0.142	10.30
9J16053-CAL8	4000	75505	0.180	10.31
9J16053-CAL9	6000	103747	0.185	10.32
9J16053-CALA	8000	139599	0.191	10.33

AVE RF **0.131** RF RSD **45.75** AVE RT **10.31**

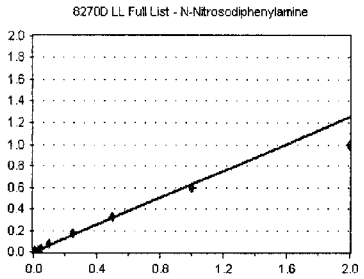
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**

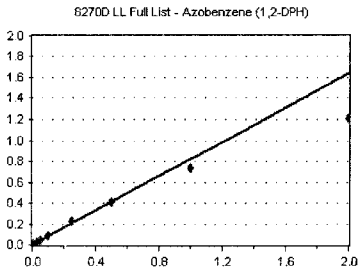


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2298	0.548	10.37
9J16053-CAL2	50	6622	0.638	10.37
9J16053-CAL3	100	14732	0.699	10.37
9J16053-CAL4	200	28901	0.711	10.37
9J16053-CAL5	500	72014	0.694	10.37
9J16053-CAL6	1000	126925	0.644	10.37
9J16053-CAL7	2000	232578	0.590	10.37
9J16053-CAL8	4000	416136	0.498	10.38
~~9J16053-CAL9~~	~~6000~~	~~498648~~	~~0.442~~	~~10.38~~
~~9J16053-CALA~~	~~8000~~	~~622397~~	~~0.414~~	~~10.39~~

AVE RF **0.628** RF RSD **12.27** AVE RT **10.37**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

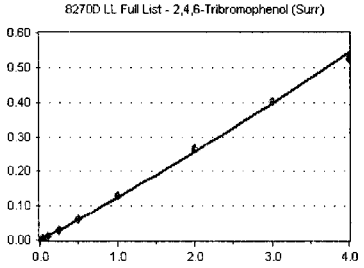


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3383	0.806	10.41
9J16053-CAL2	50	9368	0.902	10.41
9J16053-CAL3	100	18843	0.894	10.41
9J16053-CAL4	200	37095	0.913	10.41
9J16053-CAL5	500	92532	0.892	10.41
9J16053-CAL6	1000	160071	0.812	10.41
9J16053-CAL7	2000	291944	0.740	10.41
9J16053-CAL8	4000	507476	0.608	10.42
~~9J16053-CAL9~~	~~6000~~	~~608650~~	~~0.539~~	~~10.42~~
~~9J16053-CALA~~	~~8000~~	~~730839~~	~~0.486~~	~~10.42~~

AVE RF **0.821** RF RSD **12.85** AVE RT **10.41**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

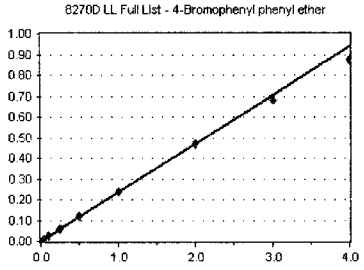


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~334~~	~~7.959~~	~~10.50~~
9J16053-CAL2	50	730	7.031	10.50
9J16053-CAL3	100	1877	8.906	10.50
9J16053-CAL4	200	4109	0.101	10.50
9J16053-CAL5	500	12089	0.117	10.50
9J16053-CAL6	1000	24117	0.122	10.50
9J16053-CAL7	2000	50890	0.129	10.50
9J16053-CAL8	4000	111317	0.133	10.51
9J16053-CAL9	6000	151399	0.134	10.51
9J16053-CALA	8000	197030	0.131	10.52

AVE RF **0.114** RF RSD **19.75** AVE RT **10.50**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	987	0.235	10.75
9J16053-CAL2	50	2354	0.227	10.75
9J16053-CAL3	100	4920	0.233	10.75
9J16053-CAL4	200	9944	0.245	10.75
9J16053-CAL5	500	25602	0.247	10.75
9J16053-CAL6	1000	46996	0.238	10.75
9J16053-CAL7	2000	94009	0.238	10.75
9J16053-CAL8	4000	197154	0.236	10.76
9J16053-CAL9	6000	256100	0.227	10.76
9J16053-CALA	8000	329177	0.219	10.76

AVE RF **0.235** RF RSD **3.64** AVE RT **10.75**

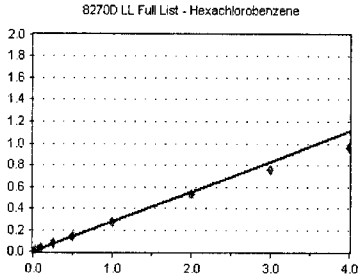
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**

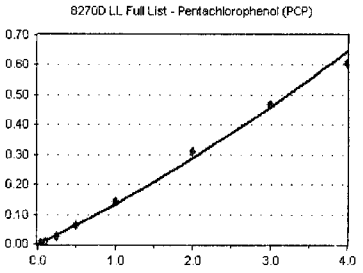


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	1216	0.290	10.83
9J16053-CAL2	50	2891	0.278	10.83
9J16053-CAL3	100	6222	0.295	10.83
9J16053-CAL4	200	12268	0.302	10.83
9J16053-CAL5	500	30369	0.293	10.83
9J16053-CAL6	1000	55109	0.280	10.83
9J16053-CAL7	2000	108673	0.275	10.83
9J16053-CAL8	4000	222237	0.266	10.84
9J16053-CAL9	6000	285495	0.253	10.84
9J16053-CALA	8000	361957	0.241	10.84

AVE RF **0.277** RF RSD **7.02** AVE RT **10.83**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

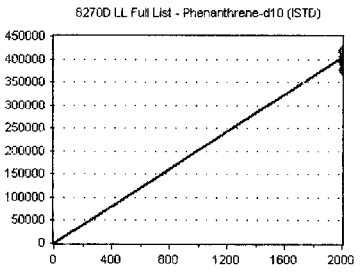


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~898~~	~~0.214~~	~~11.02~~
~~9J16053-CAL2~~	~~50~~	~~808~~	~~7.783~~	~~11.02~~
9J16053-CAL3	100	1663	7.891	11.02
9J16053-CAL4	200	3400	8.370	11.02
9J16053-CAL5	500	11494	0.111	11.02
9J16053-CAL6	1000	24901	0.126	11.02
9J16053-CAL7	2000	57124	0.145	11.02
9J16053-CAL8	4000	129749	0.155	11.02
9J16053-CAL9	6000	176453	0.156	11.03
9J16053-CALA	8000	227516	0.151	11.03

AVE RF **0.126** RF RSD **25.12** AVE RT **11.02**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

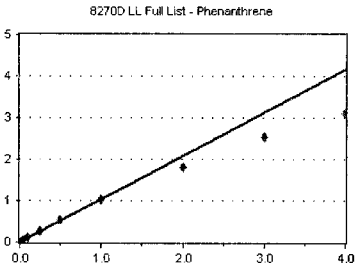


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	419652	209.826	11.22
9J16053-CAL2	2000	415279	207.640	11.21
9J16053-CAL3	2000	421494	210.747	11.21
9J16053-CAL4	2000	406200	203.100	11.21
9J16053-CAL5	2000	414839	207.420	11.22
9J16053-CAL6	2000	394261	197.130	11.22
9J16053-CAL7	2000	394462	197.231	11.22
9J16053-CAL8	2000	417540	208.770	11.22
9J16053-CAL9	2000	376380	188.190	11.22
9J16053-CALA	2000	376032	188.016	11.22

AVE RF **201.807** RF RSD **4.30** AVE RT **11.22**

Phenanthrene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4821	1.149	11.24
9J16053-CAL2	50	12134	1.169	11.24
9J16053-CAL3	100	24650	1.170	11.24
9J16053-CAL4	200	47219	1.162	11.24
9J16053-CAL5	500	117198	1.130	11.24
9J16053-CAL6	1000	213306	1.082	11.24
9J16053-CAL7	2000	408903	1.037	11.24
9J16053-CAL8	4000	758865	0.909	11.24
9J16053-CAL9	6000	956105	0.847	11.25
9J16053-CALA	8000	1170165	0.778	11.25

AVE RF **1.043** RF RSD **14.05** AVE RT **11.24**

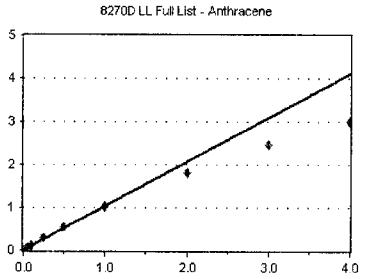
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Anthracene

Curve Fit: **AVERAGE RF**

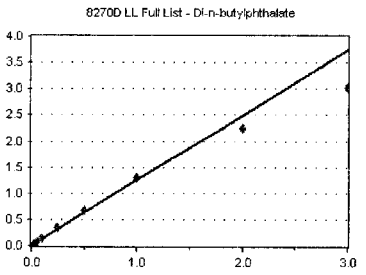


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4322	1.030	11.29
9J16053-CAL2	50	11800	1.137	11.29
9J16053-CAL3	100	24793	1.176	11.29
9J16053-CAL4	200	47420	1.167	11.29
9J16053-CAL5	500	120664	1.163	11.29
9J16053-CAL6	1000	215829	1.095	11.29
9J16053-CAL7	2000	409728	1.039	11.29
9J16053-CAL8	4000	757506	0.907	11.30
9J16053-CAL9	6000	928594	0.822	11.30
9J16053-CALA	8000	1130706	0.752	11.31

AVE RF **1.029** RF RSD **14.83** AVE RT **11.29**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

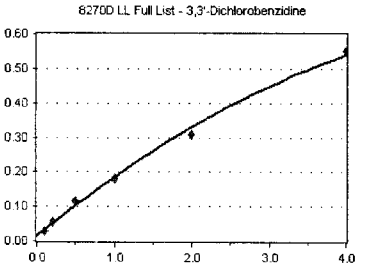


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~4261~~	~~1.015~~	~~11.79~~
9J16053-CAL2	50	12651	1.219	11.79
9J16053-CAL3	100	26455	1.255	11.79
9J16053-CAL4	200	54476	1.341	11.79
9J16053-CAL5	500	143903	1.388	11.79
9J16053-CAL6	1000	267688	1.358	11.79
9J16053-CAL7	2000	509487	1.292	11.79
9J16053-CAL8	4000	936406	1.121	11.79
9J16053-CAL9	6000	1140087	1.010	11.80
~~9J16053-CALA~~	~~8000~~	~~1371594~~	~~0.912~~	~~11.80~~

AVE RF **1.248** RF RSD **10.31** AVE RT **11.79**

3,3'-Dichlorobenzidine

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

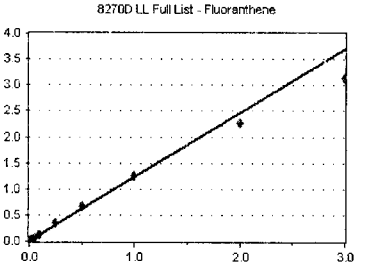


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~40~~	~~1592~~	~~0.184~~	~~0.00~~
~~9J16053-CAL2~~	~~100~~	~~5122~~	~~0.244~~	~~0.00~~
9J16053-CAL3	200	12358	0.284	0.00
9J16053-CAL4	400	23382	0.281	14.99
9J16053-CAL5	1000	50303	0.237	14.99
9J16053-CAL6	2000	72934	0.180	14.99
9J16053-CAL7	4000	117183	0.154	15.00
9J16053-CAL8	8000	209588	0.137	15.01
~~9J16053-CAL9~~	~~12000~~	~~276349~~	~~0.138~~	~~15.02~~
~~9J16053-CALA~~	~~16000~~	~~336424~~	~~0.132~~	~~15.02~~

AVE RF **0.212** RF RSD **30.11** AVE RT **12.50**

Fluoranthene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4669	1.113	12.52
9J16053-CAL2	50	12524	1.206	12.52
9J16053-CAL3	100	27171	1.289	12.52
9J16053-CAL4	200	53527	1.318	12.52
9J16053-CAL5	500	141254	1.362	12.52
9J16053-CAL6	1000	263203	1.335	12.52
9J16053-CAL7	2000	497259	1.261	12.52
9J16053-CAL8	4000	949333	1.137	12.53
9J16053-CAL9	6000	1181210	1.046	12.53
~~9J16053-CALA~~	~~8000~~	~~1449379~~	~~0.964~~	~~12.54~~

AVE RF **1.230** RF RSD **8.98** AVE RT **12.52**

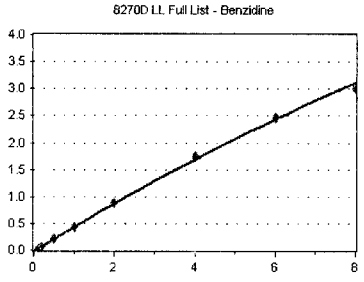
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

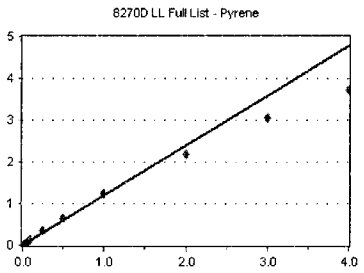


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~40~~	~~3612~~	~~0.430~~	~~12.67~~
~~9J16053-CAL2~~	~~100~~	~~3389~~	~~0.163~~	~~12.67~~
9J16053-CAL3	200	10054	0.239	12.67
9J16053-CAL4	400	22390	0.276	12.67
9J16053-CAL5	1000	90422	0.436	12.67
9J16053-CAL6	2000	169900	0.431	12.68
9J16053-CAL7	4000	351632	0.446	12.68
9J16053-CAL8	8000	735075	0.440	12.69
9J16053-CAL9	12000	924428	0.409	12.69
9J16053-CALA	16000	1130941	0.376	12.70

AVE RF **0.382** RF RSD **21.12** AVE RT **12.68**

Pyrene

Curve Fit: **AVERAGE RF**

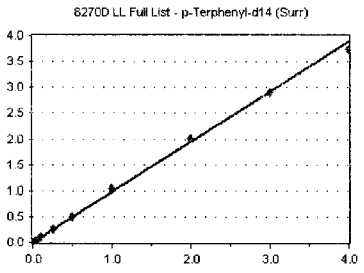


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4626	1.102	12.81
9J16053-CAL2	50	12834	1.236	12.81
9J16053-CAL3	100	27657	1.312	12.81
9J16053-CAL4	200	55550	1.368	12.81
9J16053-CAL5	500	142947	1.378	12.82
9J16053-CAL6	1000	259464	1.316	12.82
9J16053-CAL7	2000	487359	1.236	12.82
9J16053-CAL8	4000	913548	1.094	12.83
9J16053-CAL9	6000	1149431	1.018	12.83
9J16053-CALA	8000	1400570	0.931	12.84

AVE RF **1.199** RF RSD **12.88** AVE RT **12.82**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

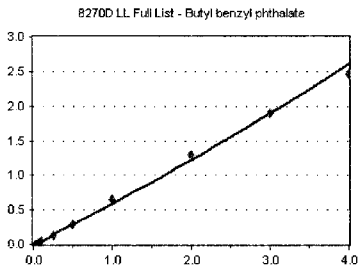


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3719	0.862	13.02
9J16053-CAL2	50	9501	0.904	13.02
9J16053-CAL3	100	20875	0.960	13.02
9J16053-CAL4	200	41737	1.002	13.02
9J16053-CAL5	500	110622	1.041	13.02
9J16053-CAL6	1000	202564	1.001	13.02
9J16053-CAL7	2000	390228	1.029	13.02
9J16053-CAL8	4000	763944	1.002	13.03
9J16053-CAL9	6000	969928	0.968	13.03
9J16053-CALA	8000	1194810	0.936	13.04

AVE RF **0.970** RF RSD **5.84** AVE RT **13.02**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~1220~~	~~0.283~~	~~13.84~~
9J16053-CAL2	50	3359	0.320	13.85
9J16053-CAL3	100	8298	0.382	13.85
9J16053-CAL4	200	18256	0.438	13.85
9J16053-CAL5	500	58303	0.549	13.85
9J16053-CAL6	1000	118464	0.585	13.85
9J16053-CAL7	2000	243686	0.642	13.85
9J16053-CAL8	4000	495582	0.650	13.86
9J16053-CAL9	6000	631913	0.631	13.87
9J16053-CALA	8000	788952	0.618	13.87

AVE RF **0.535** RF RSD **23.15** AVE RT **13.85**

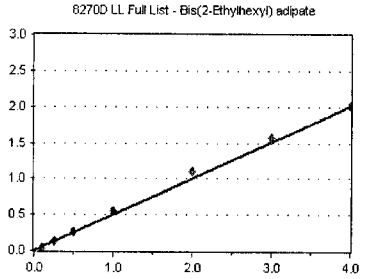
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**

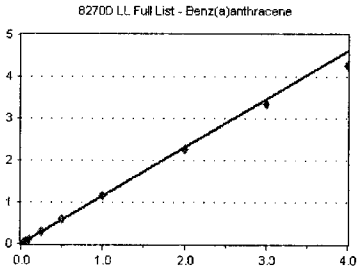


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~1272~~	~~0.295~~	~~14.03~~
~~9J16053-CAL2~~	~~50~~	~~3024~~	~~0.288~~	~~14.02~~
~~9J16053-CAL3~~	~~100~~	~~7171~~	~~0.330~~	~~14.02~~
9J16053-CAL4	200	16213	0.389	14.02
9J16053-CAL5	500	52124	0.491	14.02
9J16053-CAL6	1000	104759	0.517	14.02
9J16053-CAL7	2000	211290	0.557	14.03
9J16053-CAL8	4000	417409	0.547	14.03
9J16053-CAL9	6000	525912	0.525	14.05
9J16053-CALA	8000	642531	0.503	14.05

AVE RF **0.504** RF RSD **11.05** AVE RT **14.03**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

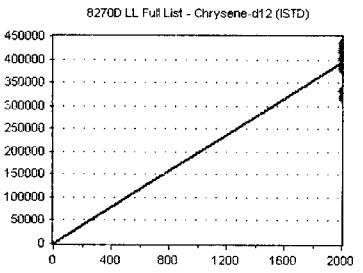


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	5352	1.240	15.02
9J16053-CAL2	50	11999	1.142	15.02
9J16053-CAL3	100	25078	1.153	15.02
9J16053-CAL4	200	48775	1.171	15.02
9J16053-CAL5	500	128384	1.208	15.02
9J16053-CAL6	1000	235737	1.164	15.03
9J16053-CAL7	2000	445654	1.175	15.03
9J16053-CAL8	4000	866011	1.136	15.05
9J16053-CAL9	6000	1123403	1.121	15.06
9J16053-CALA	8000	1366845	1.070	15.06

AVE RF **1.158** RF RSD **4.04** AVE RT **15.03**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

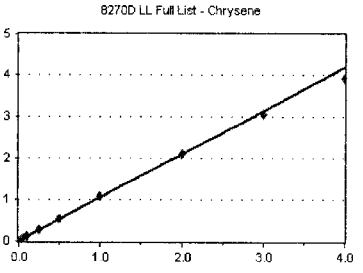


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	431513	215.757	15.05
9J16053-CAL2	2000	420433	210.217	15.05
9J16053-CAL3	2000	434926	217.463	15.05
9J16053-CAL4	2000	416387	208.193	15.05
9J16053-CAL5	2000	424974	212.487	15.05
9J16053-CAL6	2000	404897	202.448	15.05
9J16053-CAL7	2000	379303	189.652	15.06
9J16053-CAL8	2000	381197	190.598	15.07
9J16053-CAL9	2000	334077	167.038	15.08
9J16053-CALA	2000	319256	159.628	15.09

AVE RF **197.348** RF RSD **10.31** AVE RT **15.06**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4336	1.005	15.10
9J16053-CAL2	50	11098	1.056	15.10
9J16053-CAL3	100	23115	1.063	15.10
9J16053-CAL4	200	44508	1.069	15.10
9J16053-CAL5	500	116526	1.097	15.10
9J16053-CAL6	1000	213742	1.056	15.11
9J16053-CAL7	2000	410860	1.083	15.12
9J16053-CAL8	4000	798796	1.048	15.14
9J16053-CAL9	6000	1022308	1.020	15.15
9J16053-CALA	8000	1249315	0.978	15.16

AVE RF **1.047** RF RSD **3.47** AVE RT **15.12**

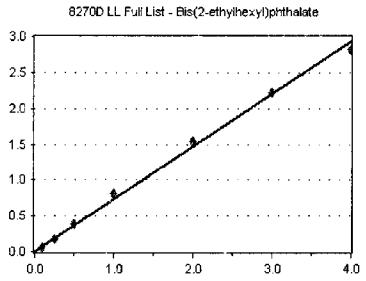
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

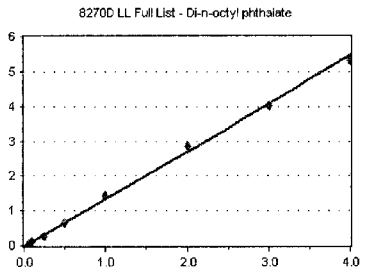


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~1364~~	~~0.316~~	~~15.19~~
~~9J16053-CAL2~~	~~50~~	~~3999~~	~~0.380~~	~~15.20~~
~~9J16053-CAL3~~	~~100~~	~~10525~~	~~0.484~~	~~15.20~~
9J16053-CAL4	200	25222	0.606	15.20
9J16053-CAL5	500	78522	0.739	15.20
9J16053-CAL6	1000	155751	0.769	15.20
9J16053-CAL7	2000	308465	0.813	15.20
9J16053-CAL8	4000	590135	0.774	15.21
9J16053-CAL9	6000	739674	0.738	15.22
9J16053-CALA	8000	901223	0.706	15.22

AVE RF **0.735** RF RSD **9.03** AVE RT **15.21**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

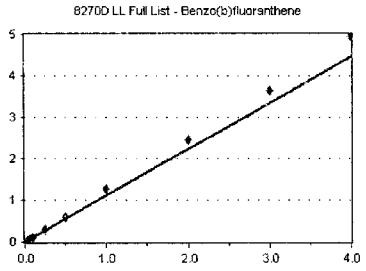


Standard	Concentration	Response	Response Factor	RT
~~9J16053-CAL1~~	~~20~~	~~1789~~	~~0.415~~	~~16.87~~
~~9J16053-CAL2~~	~~50~~	~~4878~~	~~0.461~~	~~16.87~~
9J16053-CAL3	100	13641	0.631	16.87
9J16053-CAL4	200	35211	0.851	16.87
9J16053-CAL5	500	120881	1.102	16.87
9J16053-CAL6	1000	261927	1.278	16.87
9J16053-CAL7	2000	571058	1.433	16.88
9J16053-CAL8	4000	1176050	1.434	16.89
9J16053-CAL9	6000	1499067	1.335	16.90
9J16053-CALA	8000	1811511	1.328	16.91

AVE RF **1.174** RF RSD **24.91** AVE RT **16.88**

Benzo(b)fluoranthene

Curve Fit: **AVERAGE RF**

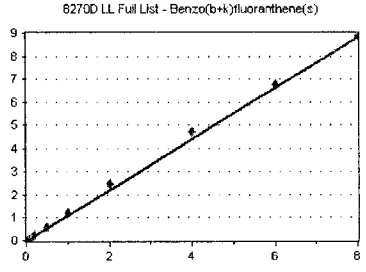


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3489	0.809	17.62
9J16053-CAL2	50	9380	0.887	17.62
9J16053-CAL3	100	21892	1.013	17.62
9J16053-CAL4	200	47123	1.139	17.62
9J16053-CAL5	500	128872	1.175	17.62
9J16053-CAL6	1000	246144	1.201	17.63
9J16053-CAL7	2000	501132	1.258	17.63
9J16053-CAL8	4000	1011072	1.233	17.66
9J16053-CAL9	6000	1366285	1.217	17.68
9J16053-CALA	8000	1686661	1.236	17.69

AVE RF **1.117** RF RSD **14.22** AVE RT **17.64**

Benzo(b+k)fluoranthene(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	40	6917	0.802	17.62
9J16053-CAL2	100	19673	0.930	17.68
9J16053-CAL3	200	45830	1.061	17.62
9J16053-CAL4	400	96090	1.161	17.69
9J16053-CAL5	1000	264478	1.206	17.69
9J16053-CAL6	2000	498931	1.217	17.70
9J16053-CAL7	4000	980351	1.230	17.71
9J16053-CAL8	8000	1939096	1.182	17.74
9J16053-CAL9	12000	2538483	1.130	17.75
9J16053-CALA	16000	3039542	1.114	17.76

AVE RF **1.103** RF RSD **12.56** AVE RT **17.70**

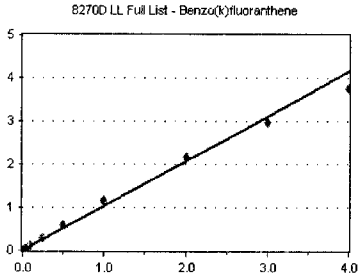
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Benzo(k)fluoranthene

Curve Fit: **AVERAGE RF**

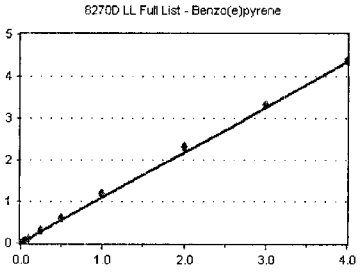


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3429	0.795	17.69
9J16053-CAL2	50	9507	0.899	17.68
9J16053-CAL3	100	22282	1.031	17.69
9J16053-CAL4	200	46458	1.123	17.69
9J16053-CAL5	500	130011	1.186	17.69
9J16053-CAL6	1000	241628	1.179	17.70
9J16053-CAL7	2000	460821	1.157	17.71
9J16053-CAL8	4000	889038	1.084	17.74
9J16053-CAL9	6000	1115022	0.993	17.75
9J16053-CALA	8000	1278627	0.937	17.76

AVE RF **1.038** RF RSD **12.67** AVE RT **17.71**

Benzo(e)pyrene

Curve Fit: **AVERAGE RF**

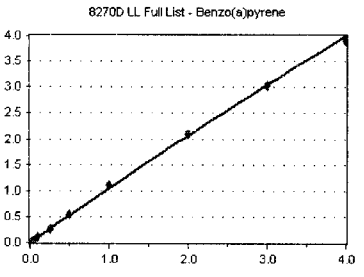


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3566	0.826	18.27
9J16053-CAL2	50	10258	0.970	18.27
9J16053-CAL3	100	22306	1.032	18.27
9J16053-CAL4	200	46317	1.120	18.28
9J16053-CAL5	500	127706	1.165	18.28
9J16053-CAL6	1000	240269	1.172	18.29
9J16053-CAL7	2000	475633	1.194	18.30
9J16053-CAL8	4000	952442	1.161	18.32
9J16053-CAL9	6000	1247052	1.111	18.34
9J16053-CALA	8000	1492293	1.094	18.34

AVE RF **1.085** RF RSD **10.48** AVE RT **18.30**

Benzo(a)pyrene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

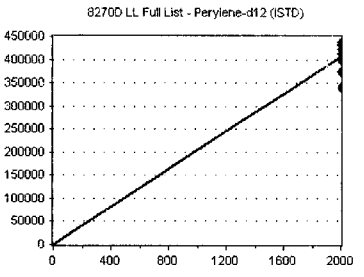


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	2850	0.661	18.39
9J16053-CAL2	50	8352	0.790	18.39
9J16053-CAL3	100	19477	0.901	18.39
9J16053-CAL4	200	42344	1.024	18.39
9J16053-CAL5	500	117701	1.073	18.40
9J16053-CAL6	1000	223821	1.092	18.40
9J16053-CAL7	2000	440842	1.106	18.42
9J16053-CAL8	4000	863983	1.053	18.44
9J16053-CAL9	6000	1130687	1.007	18.47
9J16053-CALA	8000	1326605	0.972	18.47

AVE RF **0.968** RF RSD **14.94** AVE RT **18.42**

Perylene-d12 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	431467	215.733	18.55
9J16053-CAL2	2000	422859	211.430	18.55
9J16053-CAL3	2000	432129	216.065	18.54
9J16053-CAL4	2000	413647	206.823	18.55
9J16053-CAL5	2000	438576	219.288	18.55
9J16053-CAL6	2000	409934	204.967	18.55
9J16053-CAL7	2000	398414	199.207	18.56
9J16053-CAL8	2000	410166	205.083	18.57
9J16053-CAL9	2000	374258	187.129	18.59
9J16053-CALA	2000	341068	170.534	18.58

AVE RF **203.626** RF RSD **7.34** AVE RT **18.56**

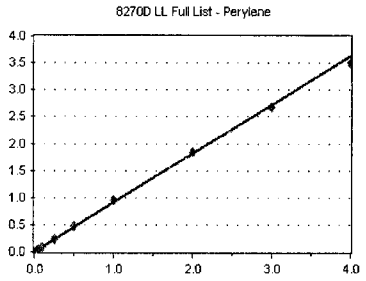
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Perylene

Curve Fit: **AVERAGE RF**

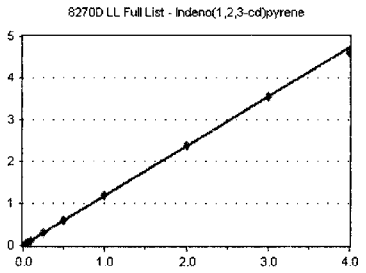


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3674	0.852	18.60
9J16053-CAL2	50	9122	0.863	18.60
9J16053-CAL3	100	19207	0.889	18.60
9J16053-CAL4	200	38182	0.923	18.60
9J16053-CAL5	500	104561	0.954	18.61
9J16053-CAL6	1000	194782	0.950	18.61
9J16053-CAL7	2000	380066	0.954	18.62
9J16053-CAL8	4000	755087	0.920	18.65
9J16053-CAL9	6000	1004144	0.894	18.67
9J16053-CALA	8000	1195430	0.876	18.67

AVE RF **0.908** RF RSD **4.21** AVE RT **18.62**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

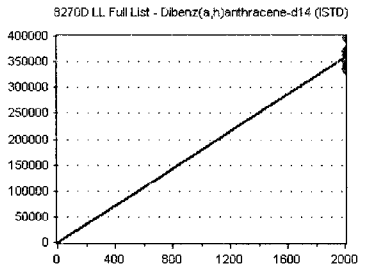


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	4048	1.156	20.93
9J16053-CAL2	50	9841	1.176	20.93
9J16053-CAL3	100	20486	1.170	20.93
9J16053-CAL4	200	40566	1.201	20.94
9J16053-CAL5	500	114261	1.227	20.95
9J16053-CAL6	1000	213608	1.175	20.95
9J16053-CAL7	2000	439827	1.183	20.96
9J16053-CAL8	4000	948237	1.192	20.99
9J16053-CAL9	6000	1311636	1.183	21.02
9J16053-CALA	8000	1567885	1.150	21.02

AVE RF **1.181** RF RSD **1.88** AVE RT **20.96**

Dibenz(a,h)anthracene-d14 (ISTD

Curve Fit: **AVERAGE RF**

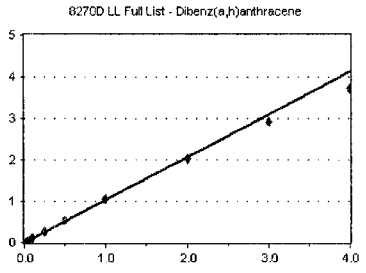


Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	2000	350266	175.133	20.95
9J16053-CAL2	2000	334828	167.414	20.95
9J16053-CAL3	2000	350177	175.088	20.95
9J16053-CAL4	2000	337729	168.865	20.95
9J16053-CAL5	2000	372459	186.230	20.95
9J16053-CAL6	2000	363670	181.835	20.95
9J16053-CAL7	2000	371696	185.848	20.96
9J16053-CAL8	2000	397776	198.888	20.98
9J16053-CAL9	2000	369437	184.718	21.00
9J16053-CALA	2000	340856	170.428	21.00

AVE RF **179.445** RF RSD **5.49** AVE RT **20.96**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3500	0.999	21.00
9J16053-CAL2	50	8473	1.012	21.00
9J16053-CAL3	100	18545	1.059	21.00
9J16053-CAL4	200	37109	1.099	21.00
9J16053-CAL5	500	103626	1.113	21.01
9J16053-CAL6	1000	194682	1.071	21.02
9J16053-CAL7	2000	396150	1.066	21.03
9J16053-CAL8	4000	801452	1.007	21.06
9J16053-CAL9	6000	1076200	0.971	21.08
9J16053-CALA	8000	1269410	0.931	21.08

AVE RF **1.033** RF RSD **5.62** AVE RT **21.03**

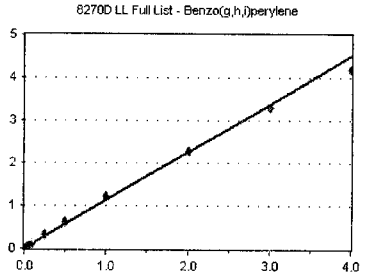
Element Calibration Review Sheet

Calibration ID: **A9J1803** Instrument: **SV-GCMS9** Calibration Date: **10/18/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9J1803**

Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9J16053-CAL1	20	3150	0.899	21.47
9J16053-CAL2	50	8620	1.030	21.47
9J16053-CAL3	100	19859	1.134	21.47
9J16053-CAL4	200	40711	1.205	21.47
9J16053-CAL5	500	117149	1.258	21.49
9J16053-CAL6	1000	223060	1.227	21.49
9J16053-CAL7	2000	452012	1.216	21.50
9J16053-CAL8	4000	907373	1.141	21.54
9J16053-CAL9	6000	1221971	1.103	21.57
9J16053-CALA	8000	1429981	1.049	21.57

AVE RF **1.126** RF RSD **9.79** AVE RT **21.50**

Compound List Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_101619.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Oct 17 11:59:00 2019
Response Via : Initial Calibration

Total Cpnds : 97

10/17/19

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.659	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	4.075	0.612	A	2	A	R
3	T	Pyridine	79	4.091	0.614	A	2	A	R
4	S	2-Fluorophenol (Surr)	112	5.407	0.812	A	1	A	R
5	S	Phenol-d6 (Surr)	99	6.295	0.945	A	2	A	R
6	T	Phenol	94	6.306	0.947	A	2	A	R
7	T	Aniline	93	6.342	0.952	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.396	0.961	A	2	A	R
9	T	2-Chlorophenol	128	6.461	0.970	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.610	0.993	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.680	1.003	A	2	A	R
12	T	Benzyl alcohol	108	6.786	1.019	A	2	A	R
13	T	1,2-Dichlorobenzene	146	6.830	1.026	A	2	A	R
14	T	2-Methylphenol	107	6.894	1.035	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	6.920	1.039	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.049	1.059	A	2	A	R
17	T	3+4-Methylphenol	107	7.043	1.058	A	3	A	R
18	T	Hexachloroethane	201	7.167	1.076	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.199	1.081	A	2	A	R
20	T	Nitrobenzene	77	7.220	1.084	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	7.921	1.000	A	1	A	R
22	T	Isophorone	82	7.455	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.535	0.951	Q	2	A	R
24	T	2,4-Dimethylphenol	122	7.568	0.955	A	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.664	0.968	A	2	A	R
26	T	Benzoic acid	105	7.653	0.966	Q	2	A	R
27	T	2,4-Dichlorophenol	162	7.771	0.981	Q	2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.862	0.993	A	2	A	R
29	T	Naphthalene	128	7.942	1.003	A	1	A	R
30	T	4-Chloroaniline	127	7.990	1.009	Q	2	A	R
31	T	Hexachlorobutadiene	225	8.071	1.019	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.466	1.069	Q	2	A	R
33	T	2-Methylnaphthalene	142	8.637	1.090	A	2	A	R
34	T	1-Methylnaphthalene	142	8.739	1.103	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.702	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.809	0.908	A	2	A	R
37	T	2,4,6-Trichlorophenol	196	8.920	0.919	Q	2	A	R
38	T	2,4,5-Trichlorophenol	198	8.953	0.923	Q	2	A	R
39	T	1,1'-Biphenyl	154	9.108	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	9.007	0.928	A	2	A	R
41	T	2-Chloronaphthalene	162	9.130	0.941	A	2	A	R
42	T	2-Nitroaniline	138	9.225	0.951	Q	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.269	0.955	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.354	0.964	Q	2	A	R
45	T	Dimethyl phthalate	163	9.408	0.970	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.434	0.972	Q	2	A	R
47	T	2,6-Dinitrotoluene	165	9.466	0.976	Q	2	A	R
48	T	1,2-Dinitrobenzene	168	9.525	0.982	Q	2	A	R
49	T	Acenaphthylene	152	9.552	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.643	0.994	Q	2	A	R
51	T	Acenaphthene	153	9.734	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.744	1.004	Q	2	A	R
53	T	4-Nitrophenol	139	9.798	1.010	Q	2	A	R
54	T	2,4-Dinitrotoluene	165	9.878	1.018	Q	2	A	R

55	T	Dibenzofuran	168	9.905	1.021	A	1/a2	2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	9.985	1.029	Q	1/a2	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.028	1.034	Q	1/a2	2	A	R
58	T	Diethyl phthalate	149	10.124	1.044	A		2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.119	1.043	A		2	A	R
60	T	Fluorene	166	10.258	1.057	A		2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.247	1.056	A		2	A	R
62	T	4-Nitroaniline	138	10.263	1.058	A		2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.295	1.061	Q	1/a2	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.216	1.000	A		2	A	R
65	T	N-Nitrosodiphenylamine	169	10.365	0.924	A		2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.407	0.928	A		2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.498	0.936	Q	1/a2	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.750	0.959	A		2	A	R
69	T	Hexachlorobenzene	284	10.825	0.965	A		2	A	R
70	T	Pentachlorophenol (PCP)	266	11.022	0.983	Q	1/a2	2	A	R
71	T	Phenanthrene	178	11.237	1.002	A		2	A	R
72	T	Anthracene	178	11.290	1.007	A		2	A	R
73	T	Carbazole	167	11.445	1.020	A		2	A	R
74	T	Di-n-butyl phthalate	149	11.793	1.051	A		2	A	R
75	T	Fluoranthene	202	12.520	1.116	A		2	A	R
76	T	Benzidine	184	12.675	1.130	Q	1/a2	2	A	R
77	T	Pyrene	202	12.815	1.143	A		2	A	R
78	I	Chrysene-d12 (ISTD)	240	15.051	1.000	A		2	A	R
79	S	Terphenyl-d14 (Surr)	244	13.023	0.865	A		2	A	R
80	T	Butyl benzyl phthalate	149	13.847	0.920	Q	1/a2	2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	14.023	0.932	A		2	A	R
82	T	3,3-Dichlorobenzidine	252	14.991	0.996	Q	1/a	2	A	R
83	T	Benz(a)anthracene	228	15.029	0.999	A		2	A	R
84	T	Chrysene	228	15.109	1.004	A		2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.200	1.010	A		2	A	R
86	I	Perylene-d12 (ISTD)	264	18.554	1.000	A		2	A	R
87	T	Di-n-octyl phthalate	149	16.874	0.909	Q	1/a2	2	A	R
88	T	Benzo(b)fluoranthene	252	17.634	0.950	A		2	A	R
89	T	Benzo(k)fluoranthene	252	17.698	0.954	A		2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.698	0.954	A		2	A	R
91	T	Benzo(e)pyrene	252	18.286	0.986	A		2	A	R
92	T	Benzo(a)pyrene	252	18.404	0.992	Q	1/a2	2	A	R
93	T	Perylene	252	18.613	1.003	A		2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	20.950	1.000	A		1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	20.945	1.000	A		1	A	R
96	T	Dibenz(a,h)anthracene	278	21.020	1.003	A		2	A	R
97	T	Benzo(g,h,i)perylene	276	21.490	1.026	A		2	A	R

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

SV9_101619.M Thu Oct 17 12:36:38 2019

Response Factor Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_101619.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Oct 17 11:59:00 2019
Response Via : Initial Calibration

10/17/19

Calibration Files
20 =I10161912.D 50 =I10161913.D 100 =I10161914.D 200 =I10161915.D 500 =I10161916.D 1000=I10161917.D 2000=I10161918.D
4000=I10161919.D 6000=I10161920.D 8000=I10161921.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------											9.21
2)	T	N-Nitrosodimet...	1.106	1.227	1.169	1.119	1.196	1.172	1.226	1.224	1.192	1.181	1.181	3.56
3)	T	Pyridine		1.639	1.725	1.714	1.839	1.852	1.940	1.970	1.900	1.950	1.837	6.45
4)	S	2-Fluorophenol...	1.352	1.350	1.342	1.381	1.497	1.500	1.579	1.594	1.567	1.563	1.473	7.14
5)	S	Phenol-d6 (Surr)	1.459	1.602	1.654	1.626	1.876	1.881	1.967	1.986	1.921	1.849	1.782	10.17
6)	T	Phenol	1.830	1.906	1.821	1.724	2.001	1.949	1.956	2.047	1.854	1.787	1.888	5.38
7)	T	Aniline		2.064	2.173	2.088	2.159	1.927	1.815	1.785	1.887	1.784	1.965	8.08
8)	T	Bis(2-chloroet...	1.531	1.689	1.803	1.712	1.843	1.789	1.971	1.774	1.478	1.398	1.699	10.52
9)	T	2-Chlorophenol	1.274	1.432	1.431	1.452	1.546	1.520	1.518	1.458	1.436	1.350	1.442	5.67
10)	T	1,3-Dichlorobe...	1.589	1.666	1.674	1.704	1.686	1.619	1.615	1.529	1.502	1.416	1.600	5.80
11)	T	1,4-Dichlorobe...	1.581	1.601	1.607	1.614	1.628	1.539	1.517	1.432	1.407	1.311	1.524	7.02
12)	T	Benzyl alcohol	0.857	0.633	0.663	0.683	0.831	0.890	0.949	0.956	0.945	0.893	0.830	15.02
13)	T	1,2-Dichlorobe...	1.579	1.579	1.574	1.584	1.614	1.515	1.485	1.371	1.325	1.223	1.485	8.97
14)	T	2-Methylphenol	1.102	0.971	1.133	1.093	1.223	1.178	1.179	1.095	1.056	0.963	1.099	7.79
15)	T	2,2'-Oxybis(1-...	2.559	2.667	2.628	2.540	2.565	2.371	2.179	1.899	1.754		2.351	14.20
16)	T	N-Nitrosodi-n-...	1.228	1.244	1.271	1.224	1.324	1.225	1.150	1.025	0.981	0.907	1.158	12.00
17)	T	3+4-Methylphenol	1.135	1.156	1.311	1.254	1.521	1.481	1.506	1.385	1.325		1.342	10.75
18)	T	Hexachloroethane	0.457	0.458	0.484	0.495	0.501	0.497	0.508	0.502	0.507	0.486	0.490	3.80
19)	S	Nitrobenzene-d...	1.200	1.108	1.173	1.121	1.404	1.400	1.455	1.434	1.400	1.312	1.301	10.51
20)	T	Nitrobenzene	1.352	1.244	1.257	1.304	1.540	1.503	1.487	1.387	1.322		1.377	7.94
21)	I	Naphthalene-d8 (ISTD)	----------ISTD----------											9.75
22)	T	Isophorone	0.711	0.770	0.807	0.850	0.861	0.832	0.811	0.785	0.750	0.732	0.791	6.35
23)	T	2-Nitrophenol			0.103	0.118	0.159	0.187	0.182	0.198	0.193	0.188	0.166	21.87
24)	T	2,4-Dimethylph...	0.244	0.248	0.272	0.294	0.298	0.308	0.314	0.299	0.281	0.267	0.282	8.69
25)	T	Bis(2-chloroet...	0.431	0.443	0.456	0.461	0.485	0.470	0.456	0.423	0.392	0.363	0.438	8.51
26)	T	Benzoic acid					0.046	0.103	0.133	0.201	0.218	0.208	0.151	45.70
27)	T	2,4-Dichloroph...	0.129	0.170	0.196	0.233	0.262	0.279	0.296	0.286	0.270	0.257	0.238	23.28
28)	T	1,2,4-Trichlor...	0.342	0.353	0.356	0.363	0.356	0.346	0.339	0.323	0.306	0.288	0.337	7.21
29)	T	Naphthalene	1.135	1.123	1.148	1.135	1.129	1.071	1.010	0.911	0.840	0.769	1.027	13.58
30)	T	4-Chloroaniline	0.137	0.258	0.270	0.320	0.353	0.361	0.393	0.392	0.358	0.338	0.318	24.53
31)	T	Hexachlorobuta...	0.173	0.190	0.194	0.201	0.193	0.187	0.188	0.185	0.178	0.171	0.186	5.07
32)	T	4-Chloro-3-met...		0.175	0.207	0.241	0.306	0.321	0.334	0.335	0.318	0.302	0.282	21.03
33)	T	2-Methylnaphth...	0.681	0.724	0.782	0.809	0.822	0.792	0.775	0.719	0.668	0.617	0.739	9.21
34)	T	1-Methylnaphth...	0.678	0.737	0.773	0.764	0.781	0.745	0.717	0.660	0.613	0.566	0.703	10.30
35)	I	Acenaphthene-d10 (...	----------ISTD----------											8.52
36)	T	Hexachlorocycl...	0.276	0.283	0.303	0.340	0.356	0.379	0.407	0.399	0.383	0.364	0.349	13.53
37)	T	2,4,6-Trichlor...		0.205	0.260	0.313	0.385	0.401	0.421	0.422	0.406	0.401	0.357	22.07
38)	T	2,4,5-Trichlor...		0.262	0.252	0.300	0.377	0.401	0.416	0.404	0.391	0.371	0.353	18.09
39)	T	1,1'-Biphenyl	1.441	1.643	1.822	1.860	1.872	1.779	1.691	1.486	1.350	1.240	1.618	13.98

Method Path : T:\methods\
Method File : SV9_101619.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.394	1.494	1.665	1.659	1.690	1.590	1.504	1.337	1.228	1.133	1.470	13.11
41)	T	2-Chloronaphth...	1.053	1.267	1.341	1.365	1.385	1.312	1.227	1.081	1.004	0.923	1.196	13.92
42)	T	2-Nitroaniline			0.175	0.222	0.325	0.375	0.406	0.414	0.404	0.402	0.340	27.27
43)	T	2,6-Dimethylna...	1.177	1.306	1.370	1.365	1.389	1.324	1.250	1.107	1.004	0.940	1.223	13.07
44)	T	1,4-Dinitroben...				0.056	0.091	0.119	0.156	0.184	0.193	0.193	0.142	38.44
45)	T	Dimethyl phtha...	1.423	1.542	1.609	1.600	1.604	1.536	1.487	1.349	1.256	1.188	1.459	10.35
46)	T	1,3-Dinitroben...				0.083	0.140	0.171	0.205	0.217	0.214	0.209	0.177	28.39
47)	T	2,6-Dinitrotol...		0.137	0.170	0.221	0.296	0.314	0.331	0.323	0.311	0.297	0.267	26.95
48)	T	1,2-Dinitroben...			0.071	0.093	0.128	0.144	0.153	0.155	0.151	0.142	0.130	24.09
49)	T	Acenaphthylene	1.894	2.091	2.220	2.215	2.244	2.117	1.967	1.722	1.554		2.003	12.04
50)	T	3-Nitroaniline		0.142	0.180	0.223	0.294	0.274	0.231				0.224	25.34
51)	T	Acenaphthene	1.348	1.368	1.421	1.375	1.365	1.306	1.262	1.128	1.044	0.975	1.259	12.31
52)	T	2,4-Dinitrophenol				0.014	0.028	0.048	0.074	0.112	0.127		0.067	68.09
53)	T	4-Nitrophenol			0.078	0.105	0.175	0.214	0.247	0.268	0.271		0.194	40.20
54)	T	2,4-Dinitrotol...			0.157	0.194	0.309	0.362	0.410	0.422	0.406	0.380	0.330	30.91
55)	T	Dibenzofuran	1.736	1.894	1.980	1.915	1.923	1.809	1.745	1.538	1.407	1.296	1.724	13.62
56)	T	2,3,5,6-Tetrac...		0.136	0.199	0.220	0.290	0.313	0.339	0.351	0.350	0.342	0.282	27.80
57)	T	2,3,4,6-Tetrac...	0.177	0.202	0.269	0.269	0.339	0.351	0.360	0.368	0.359	0.352	0.305	23.18
58)	T	Diethyl phthalate	1.411	1.464	1.537	1.538	1.531	1.444	1.333	1.156	1.034		1.383	12.94
59)	T	2,3,5-Trimethy...	1.139	1.209	1.269	1.243	1.289	1.226	1.170	1.035	0.956	0.883	1.142	12.16
60)	T	Fluorene	1.389	1.474	1.578	1.509	1.524	1.428	1.346	1.172	1.064		1.387	12.26
61)	T	4-Chlorophenyl...	0.664	0.704	0.746	0.722	0.741	0.716	0.705	0.663	0.623	0.587	0.687	7.56
62)	T	4-Nitroaniline			0.178	0.197	0.264	0.245	0.244	0.261	0.259	0.242	0.236	13.38
63)	T	4,6-Dinitro-2-...				0.040	0.071	0.106	0.142	0.180	0.185	0.191	0.131	45.75
64)	I	Phenanthrene-d10 (...	----------	ISTD	----------									4.30
65)	T	N-Nitrosodiphe...	0.548	0.638	0.699	0.711	0.694	0.644	0.590	0.498			0.628	12.27
66)	T	Azobenzene (1,...	0.806	0.902	0.894	0.913	0.892	0.812	0.740	0.608			0.821	12.85
67)	S	2,4,6-Tribromo...		0.070	0.089	0.101	0.117	0.122	0.129	0.133	0.134	0.131	0.114	19.75
68)	T	4-Bromophenyl ...	0.235	0.227	0.233	0.245	0.247	0.238	0.238	0.236	0.227	0.219	0.235	3.64
69)	T	Hexachlorobenzene	0.290	0.278	0.295	0.302	0.293	0.280	0.275	0.266	0.253	0.241	0.277	7.02
70)	T	Pentachlorophe...			0.079	0.084	0.111	0.126	0.145	0.155	0.156	0.151	0.126	25.12
71)	T	Phenanthrene	1.149	1.169	1.170	1.162	1.130	1.082	1.037	0.909	0.847	0.778	1.043	14.05
72)	T	Anthracene	1.030	1.137	1.176	1.167	1.163	1.095	1.039	0.907	0.822	0.752	1.029	14.83
73)	T	Carbazole	0.896	0.970	1.005	1.024	1.007	0.854	0.644				0.915	14.72
74)	T	Di-n-butyl pht...		1.219	1.255	1.341	1.388	1.358	1.292	1.121	1.010		1.248	10.31
75)	T	Fluoranthene	1.113	1.206	1.289	1.318	1.362	1.335	1.261	1.137	1.046		1.230	8.98
76)	T	Benzidine			0.239	0.276	0.436	0.431	0.446	0.440	0.409	0.376	0.382	21.12
77)	T	Pyrene	1.102	1.236	1.312	1.368	1.378	1.316	1.236	1.094	1.018	0.931	1.199	12.88
78)	I	Chrysene-d12 (ISTD)	----------	ISTD	----------									10.31
79)	S	Terphenyl-d14 ...	0.862	0.904	0.960	1.002	1.041	1.001	1.029	1.002	0.968	0.936	0.970	5.84
80)	T	Butyl benzyl p...		0.320	0.382	0.438	0.549	0.585	0.642	0.650	0.631	0.618	0.535	23.15
81)	T	Bis(2-ethylhex...				0.389	0.491	0.517	0.557	0.547	0.525	0.503	0.504	11.05
82)	T	3,3-Dichlorobe...			0.284	0.281	0.237	0.180	0.154	0.137			0.212	30.11
83)	T	Benz(a)anthracene	1.240	1.142	1.153	1.171	1.208	1.164	1.175	1.136	1.121	1.070	1.158	4.04
84)	T	Chrysene	1.005	1.056	1.063	1.069	1.097	1.056	1.083	1.048	1.020	0.978	1.047	3.47
85)	T	Bis(2-ethylhex...				0.606	0.739	0.769	0.813	0.774	0.738	0.706	0.735	9.03
86)	I	Perylene-d12 (ISTD)	----------	ISTD	----------									7.34
87)	T	Di-n-octyl pht...			0.631	0.851	1.102	1.278	1.433	1.434	1.335	1.328	1.174	24.91

Method Path : T:\methods\
Method File : SV9_101619.M
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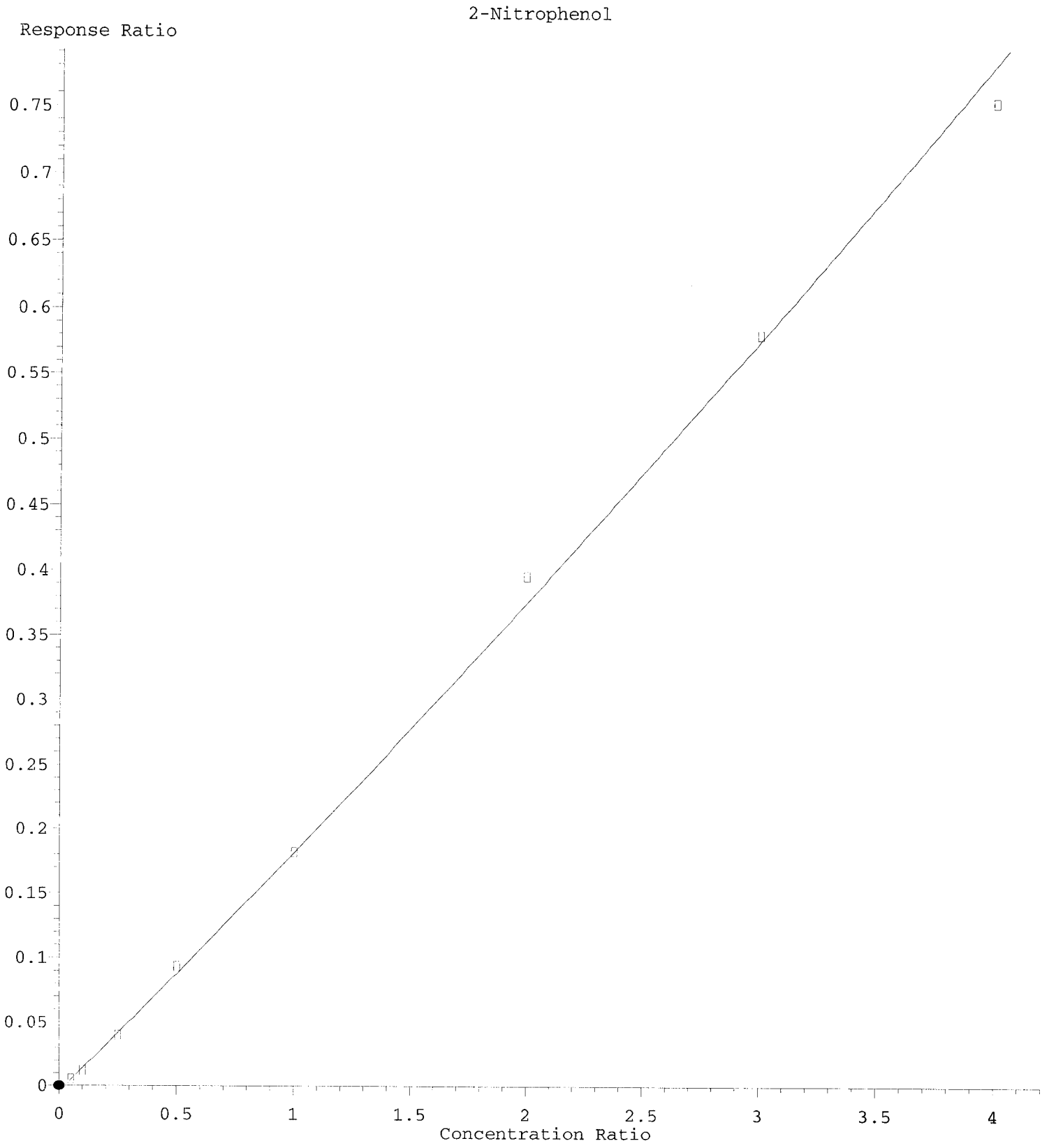
88)	T	Benzo(b)fluora...	0.809	0.887	1.013	1.139	1.175	1.201	1.258	1.233	1.217	1.236	1.117	14.22
89)	T	Benzo(k)fluora...	0.795	0.899	1.031	1.123	1.186	1.179	1.157	1.084	0.993	0.937	1.038	12.67
90)	T	Benzo(b+k)fluo...	0.802	0.930	1.061	1.161	1.206	1.217	1.230	1.182	1.130	1.114	1.103	12.56
91)	T	Benzo(e)pyrene	0.826	0.970	1.032	1.120	1.165	1.172	1.194	1.161	1.111	1.094	1.085	10.48
92)	T	Benzo(a)pyrene	0.661	0.790	0.901	1.024	1.073	1.092	1.106	1.053	1.007	0.972	0.968	14.94
93)	T	Perylene	0.852	0.863	0.889	0.923	0.954	0.950	0.954	0.920	0.894	0.876	0.908	4.21
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											5.49
95)	T	Indeno(1,2,3-c...	1.156	1.176	1.170	1.201	1.227	1.175	1.183	1.192	1.183	1.150	1.181	1.88
96)	T	Dibenz(a,h)ant...	0.999	1.012	1.059	1.099	1.113	1.071	1.066	1.007	0.971	0.931	1.033	5.62
97)	T	Benzo(g,h,i)pe...	0.899	1.030	1.134	1.205	1.258	1.227	1.216	1.141	1.103	1.049	1.126	9.79

(#) = Out of Range

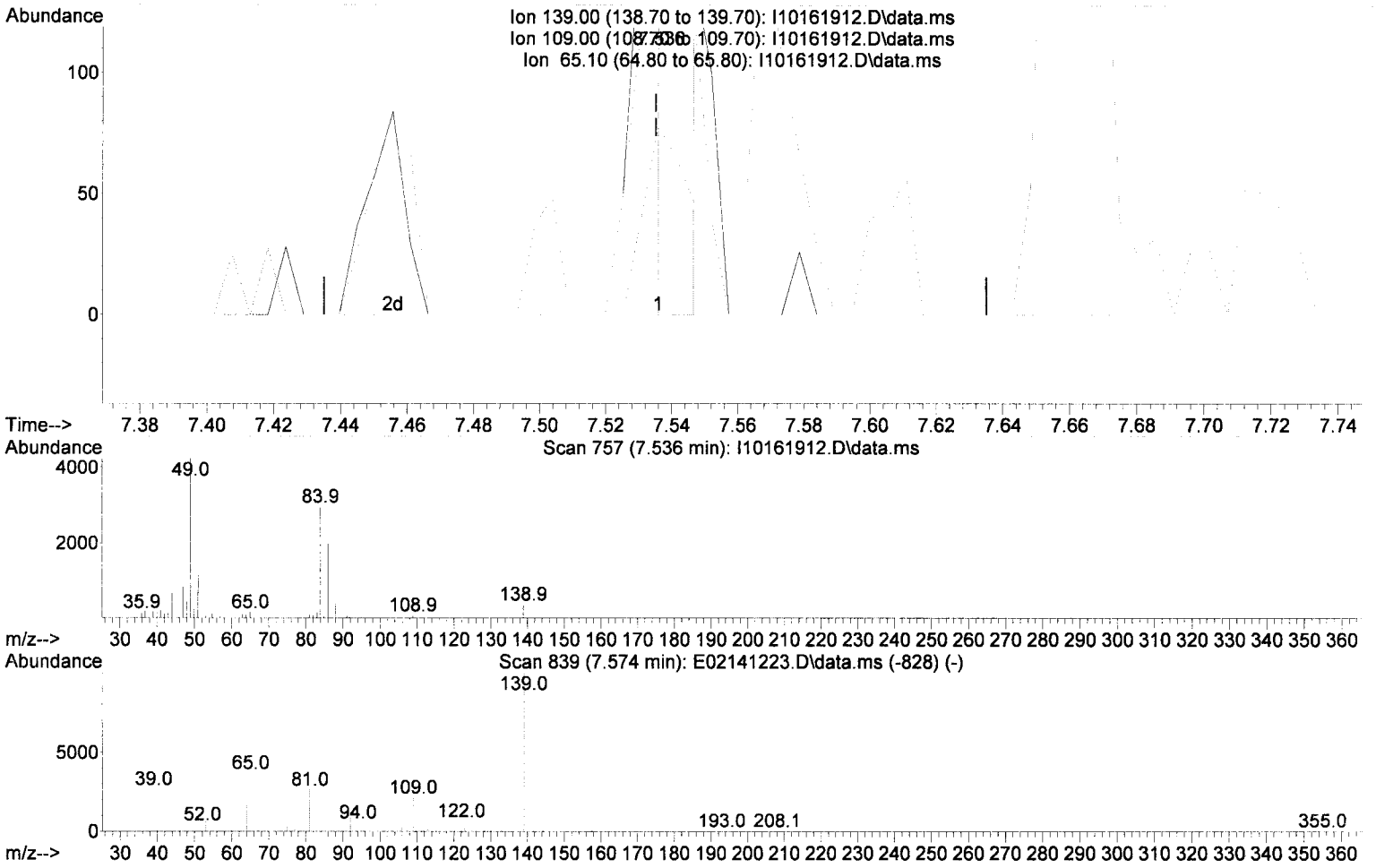


R = 3.47e-003 A*A + 1.83e-001 A - 4.49e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



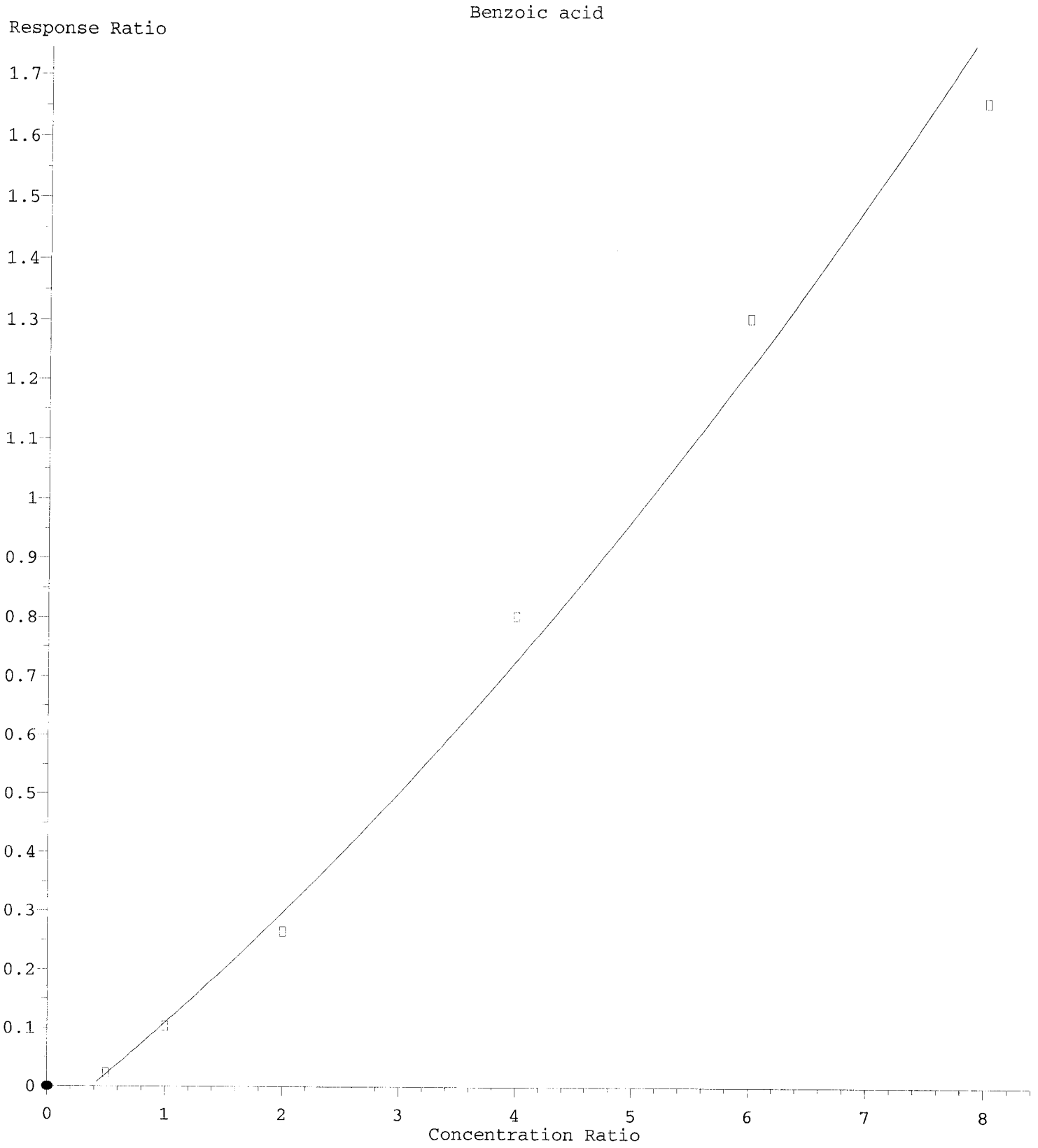
TIC: I10161912.D\data.ms

(23) 2-Nitrophenol (T)

7.536min (+ 0.001) 52.76 ng/ml m ✓

response 147

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	23.30	21.14
65.10	47.80	44.17
0.00	0.00	0.00

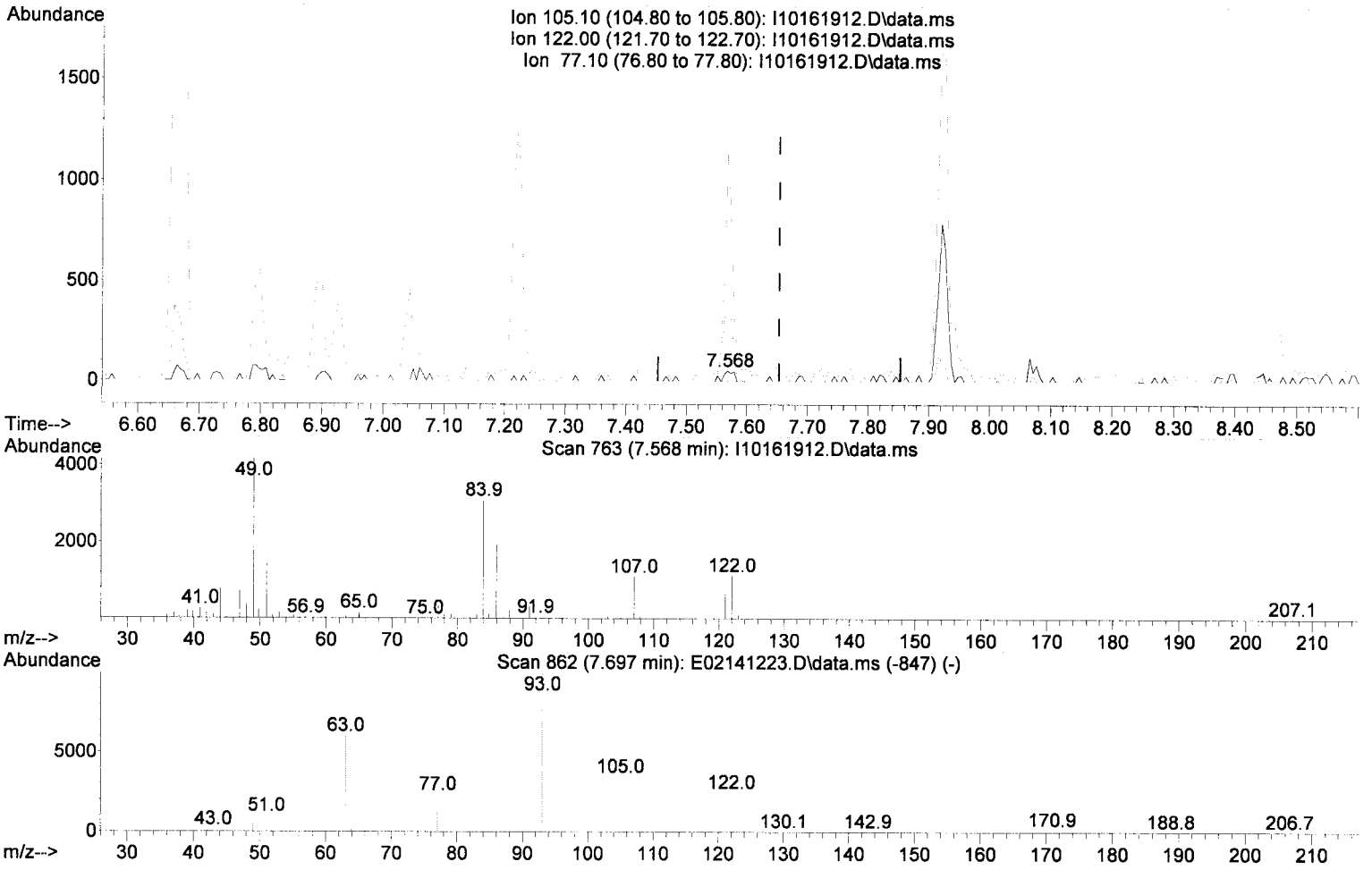


R = 8.44e-003 A*A + 1.64e-001 A - 6.33e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



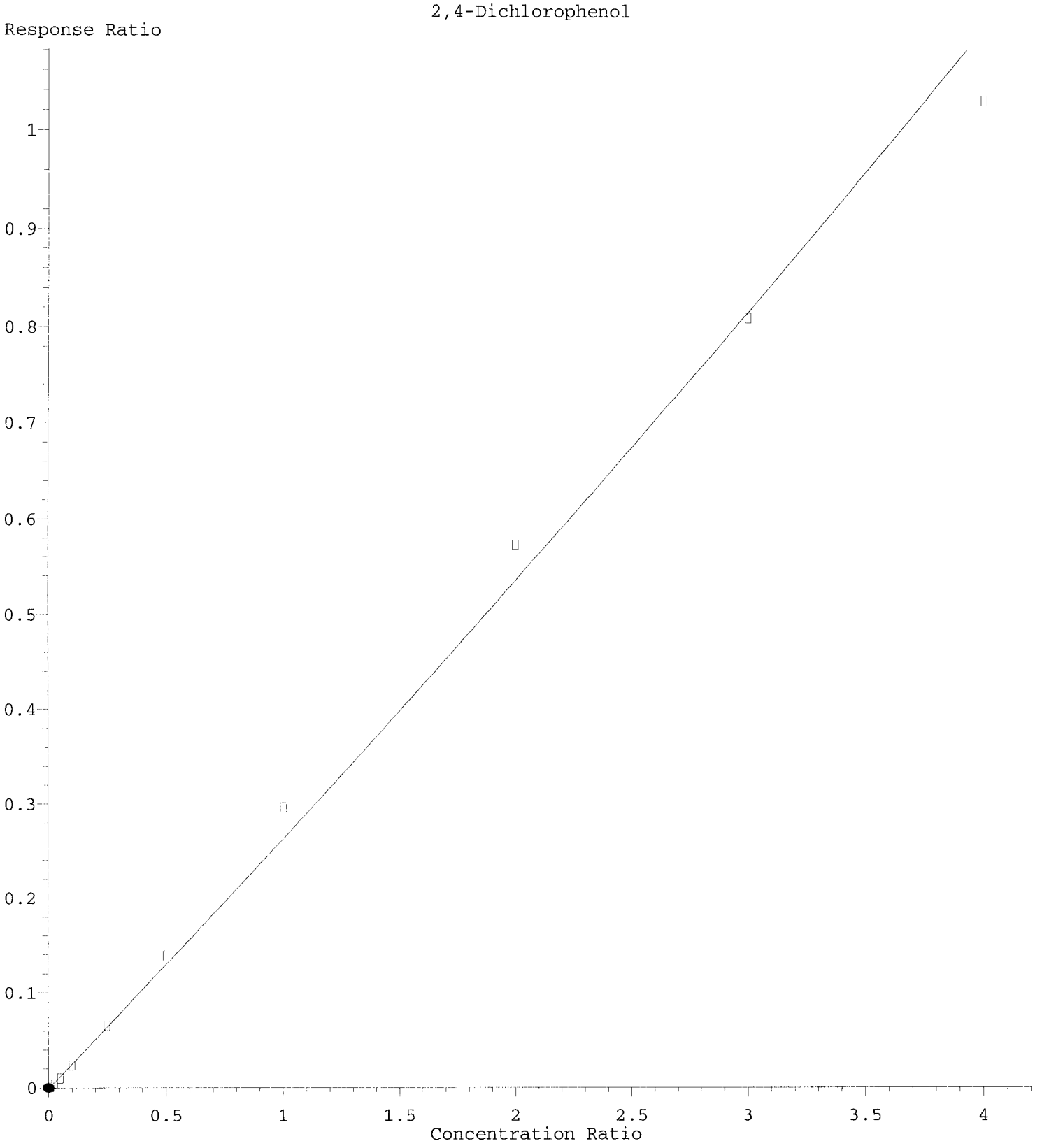
TIC: I10161912.D\data.ms

(26) Benzoic acid (T)

7.568min (-0.085) 762.03 ng/ml m

response 122

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2182.69#
77.10	77.80	640.38#
0.00	0.00	0.00

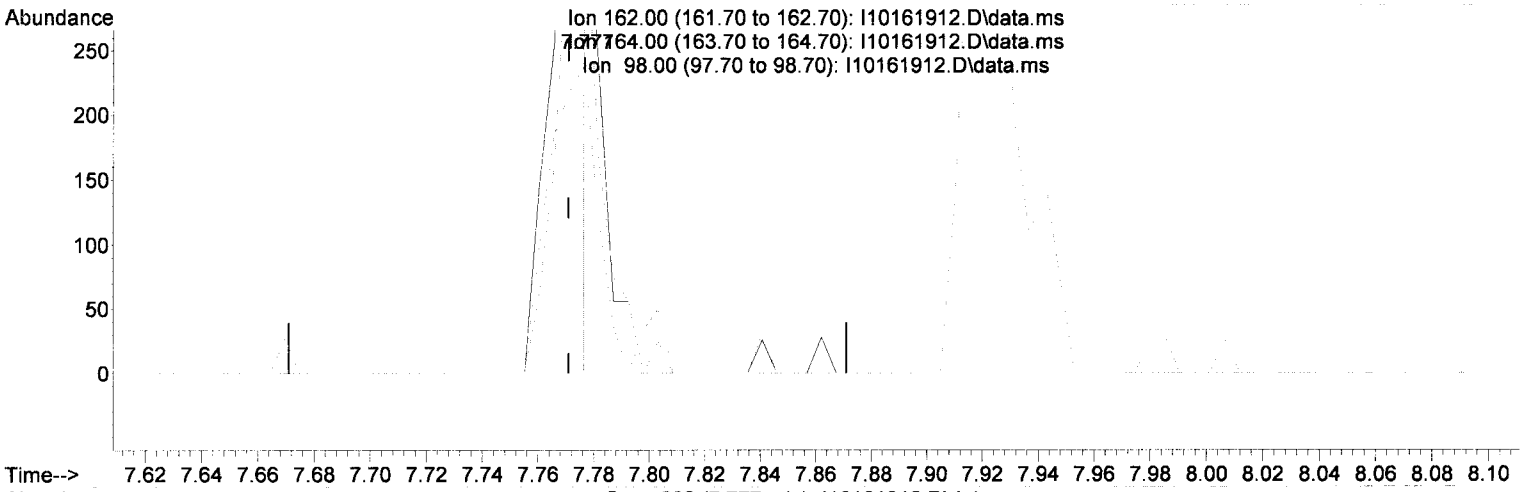


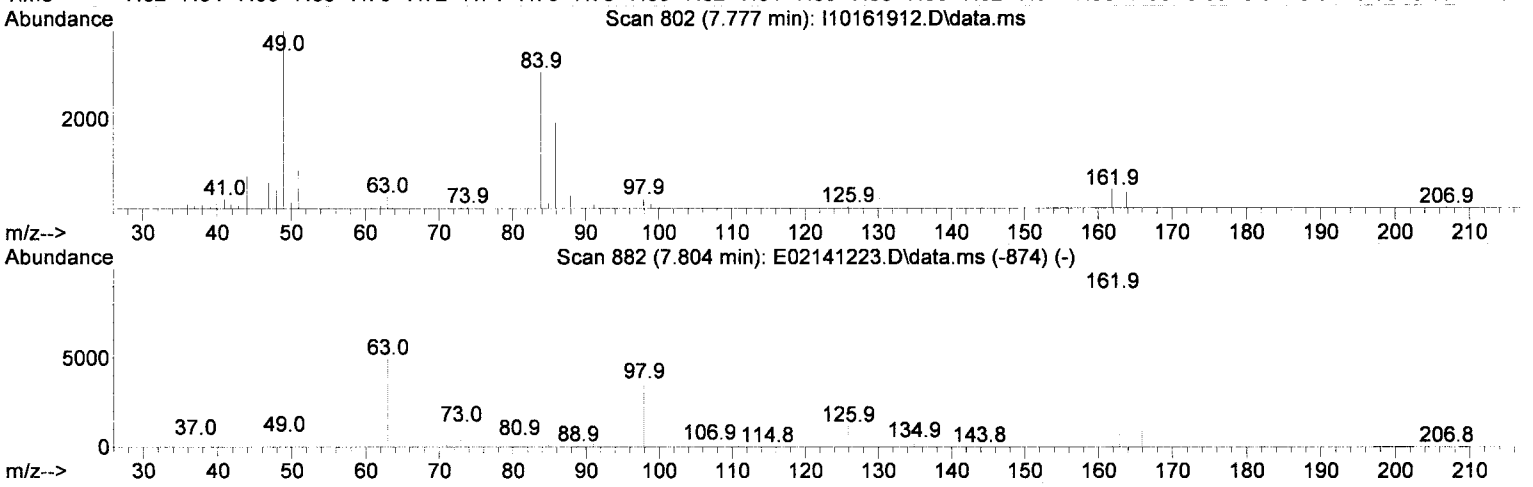
R = 3.95e-003 A*A + 2.60e-001 A - 1.50e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





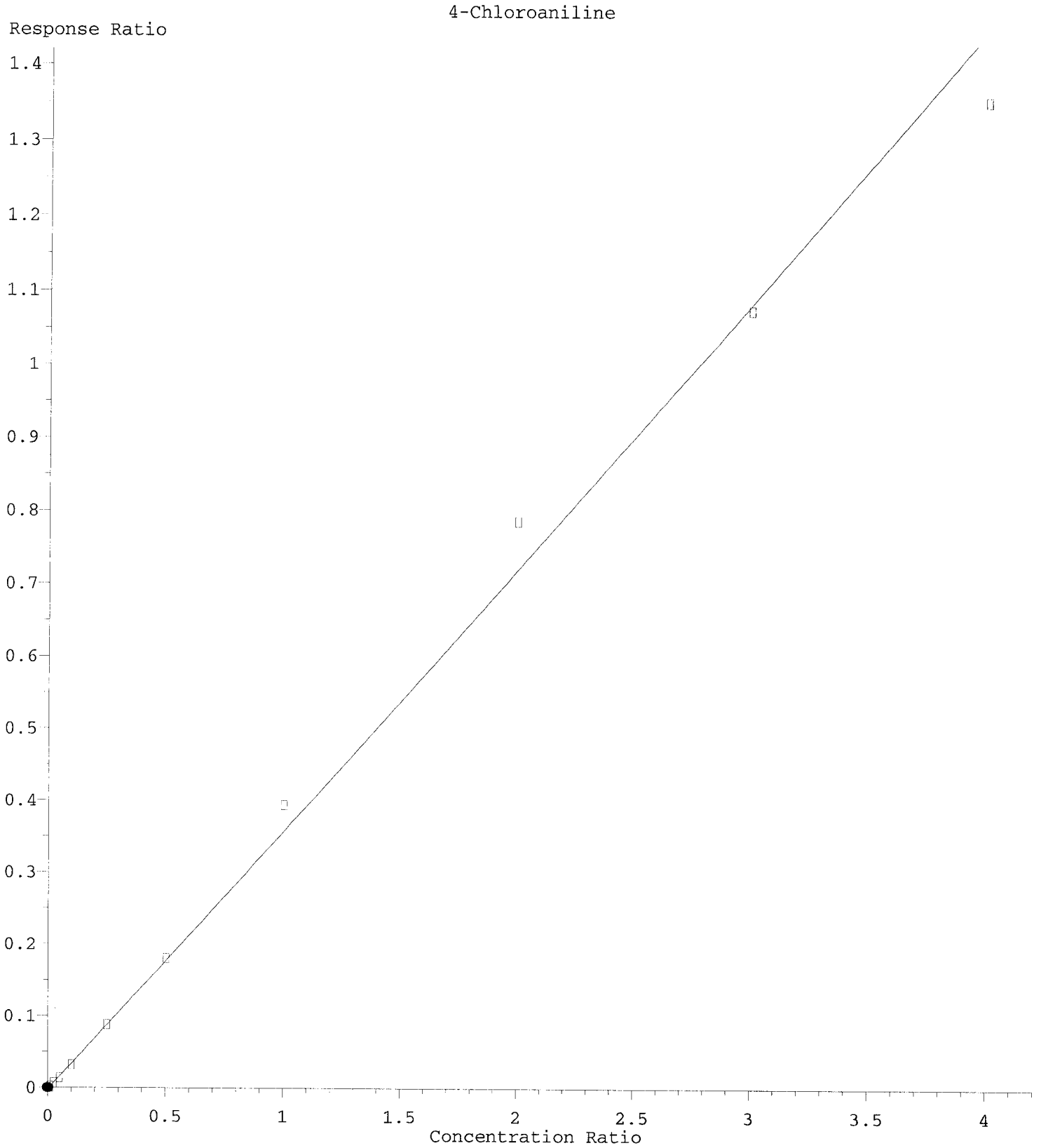
TIC: I10161912.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.777min (+ 0.005) 13.48 ng/ml m

response 111

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	63.40	86.79
98.00	39.00	54.21
0.00	0.00	0.00

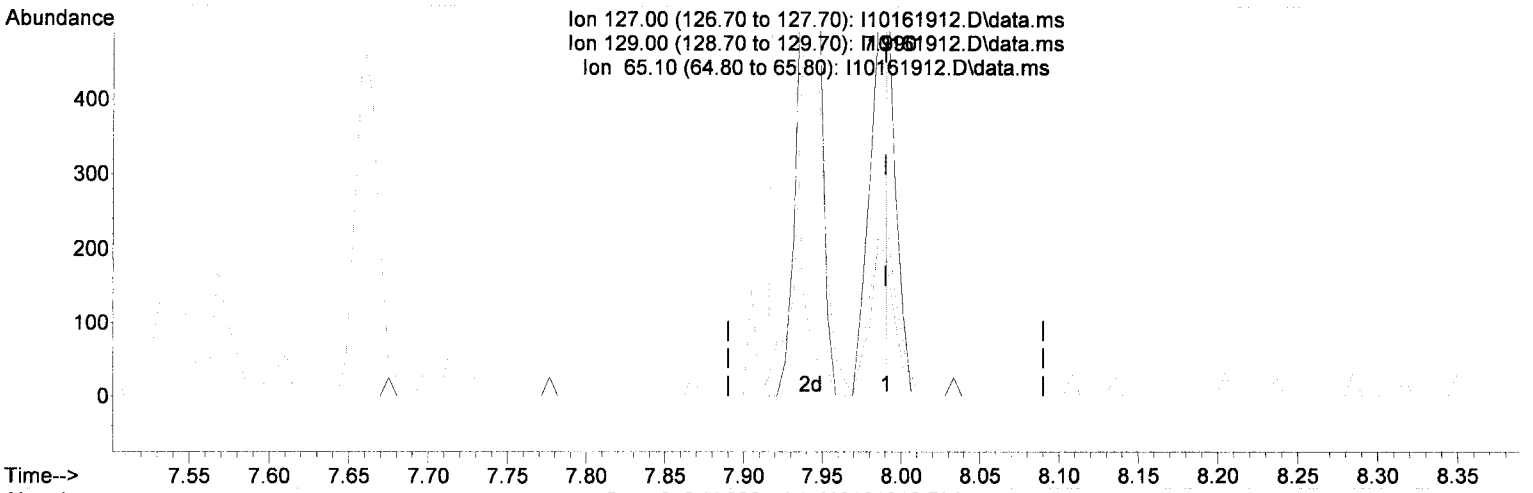


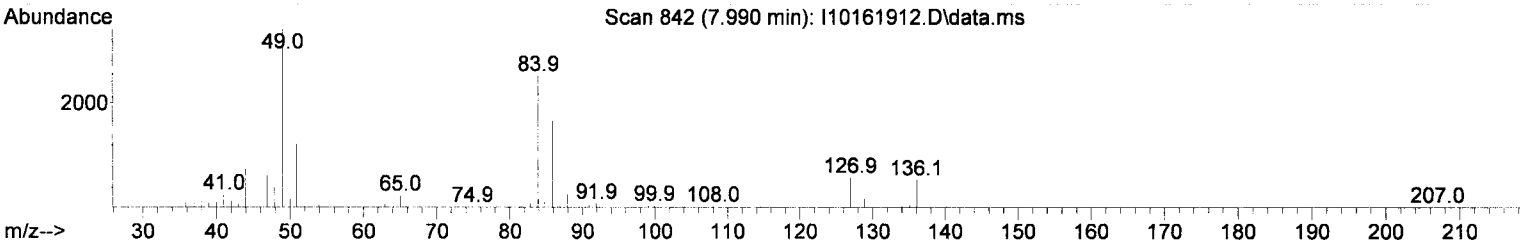
R = 9.86e-004 A*A + 3.58e-001 A - 2.33e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

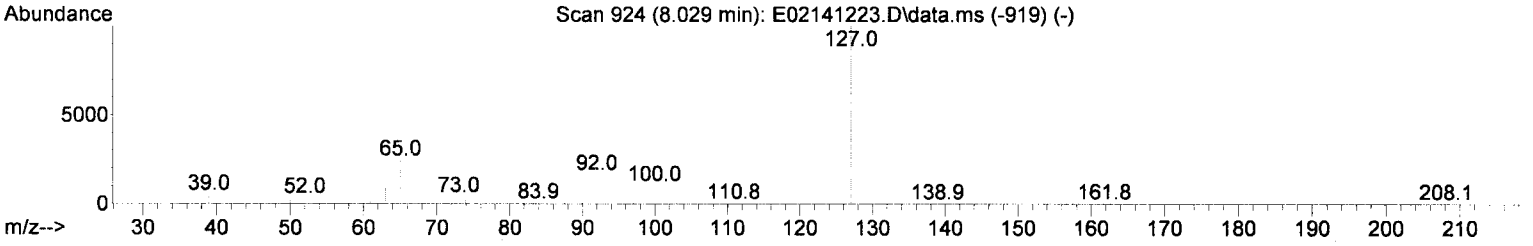
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







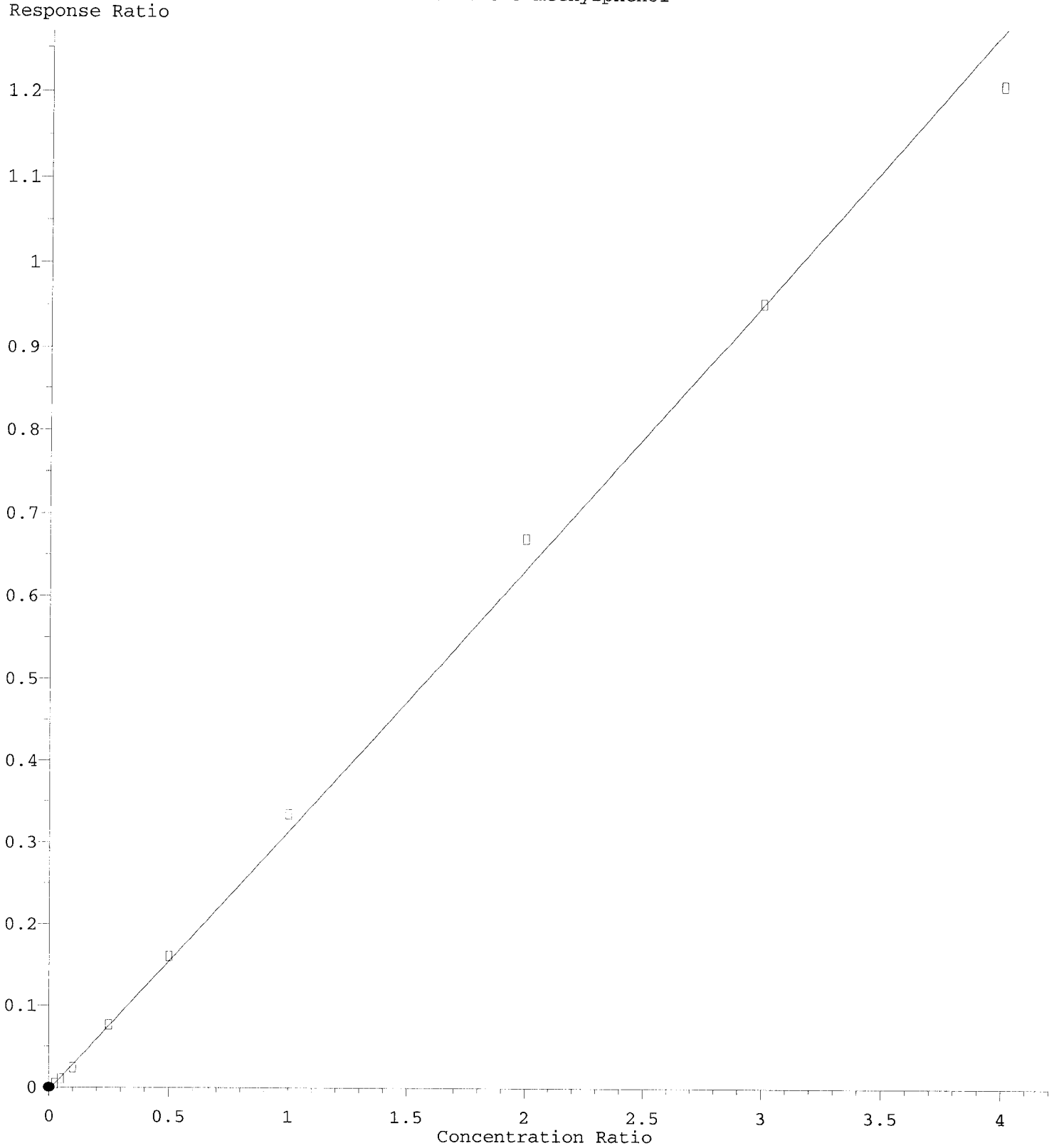
TIC: I10161912.D\data.ms

(30) 4-Chloroaniline (T)

7.990min (+ 0.000) 14.62 ng/ml m

response 128

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	32.60	32.25
65.10	30.90	41.68
0.00	0.00	0.00

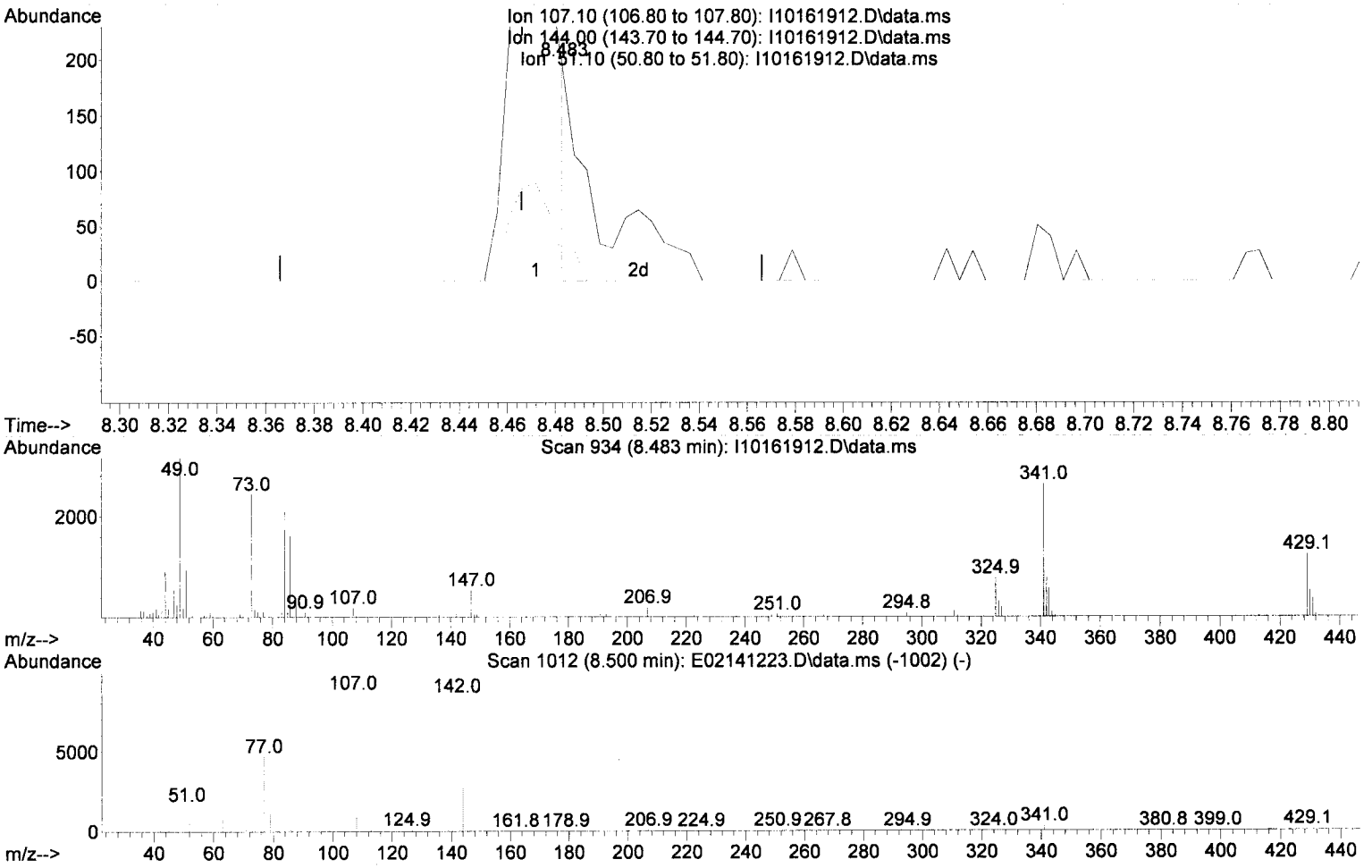


R = 6.09e-004 A*A + 3.17e-001 A - 4.08e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



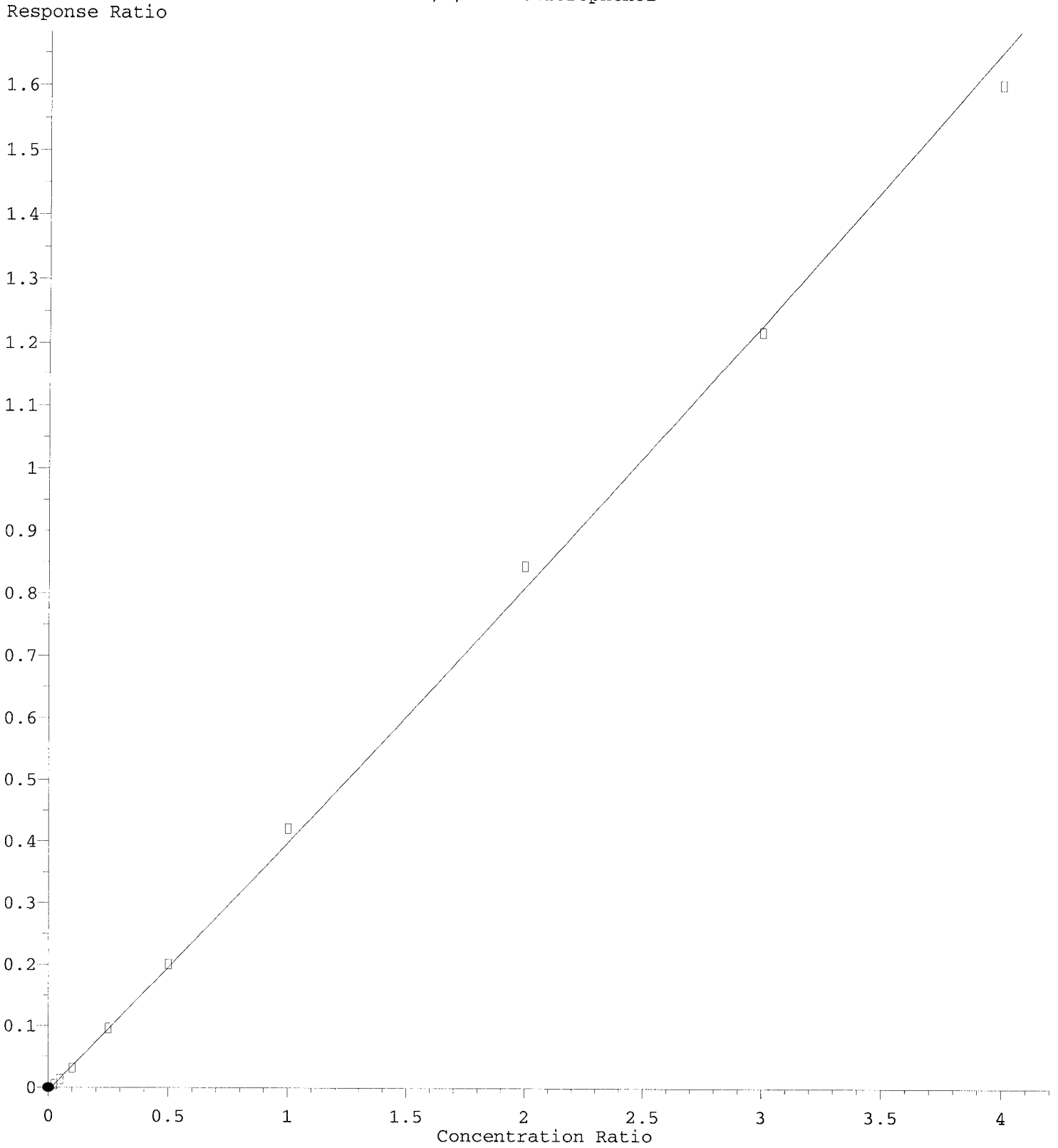
TIC: I10161912.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.483min (+ 0.017) 28.26 ng/ml m

response 176

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	26.80	12.50
51.10	22.20	477.00#
0.00	0.00	0.00

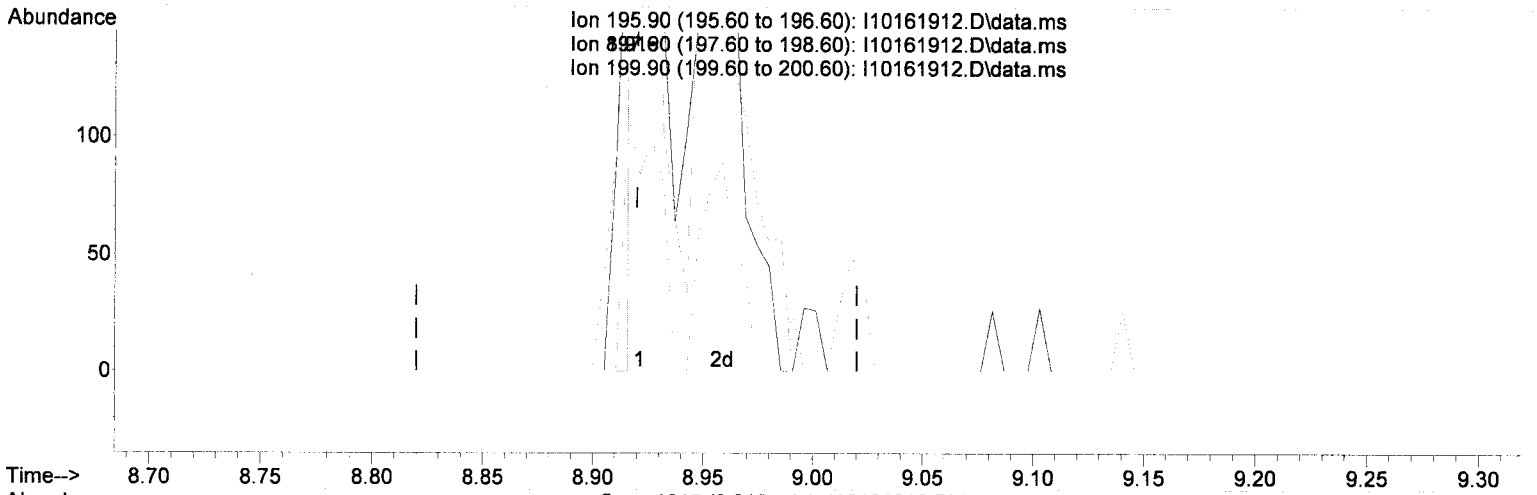


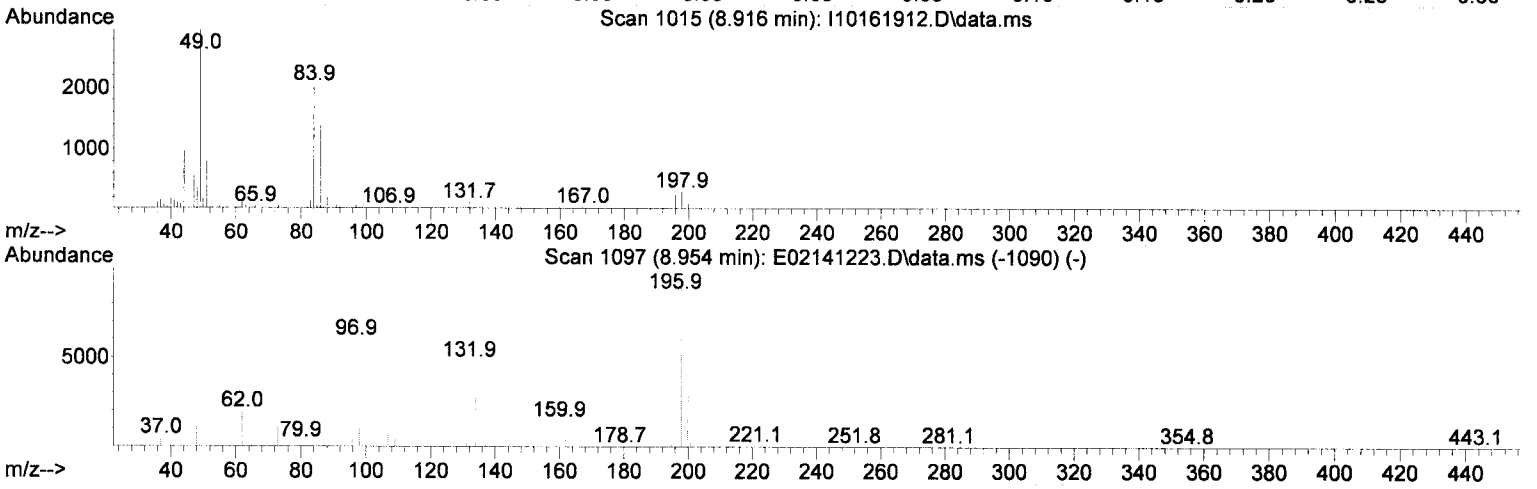
R = 3.81e-003 A*A + 3.99e-001 A - 5.41e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





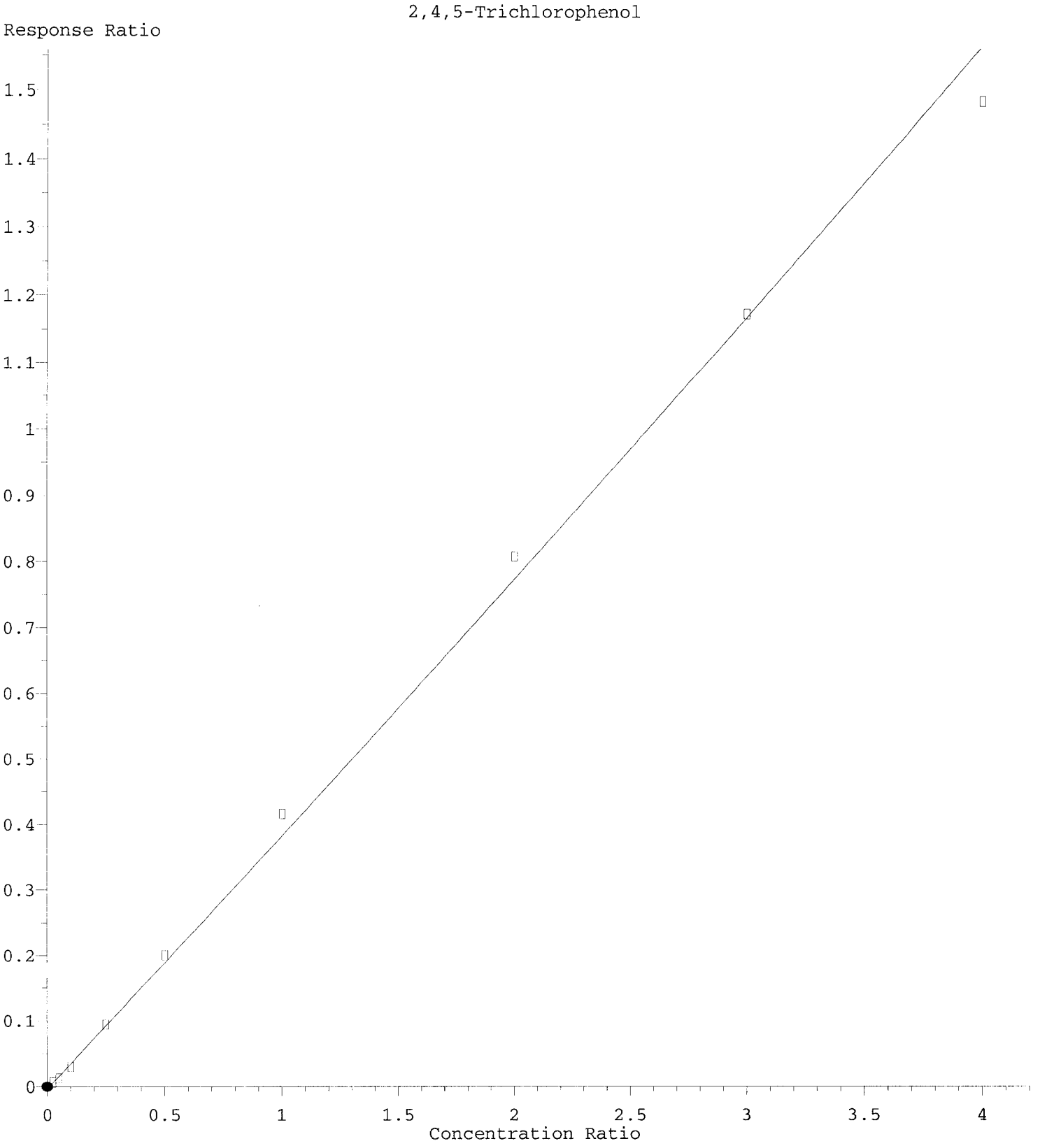
TIC: I10161912.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

8.916min (-0.004) 29.38 ng/ml m

response 105

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	98.10	125.21
199.90	32.40	45.80
0.00	0.00	0.00

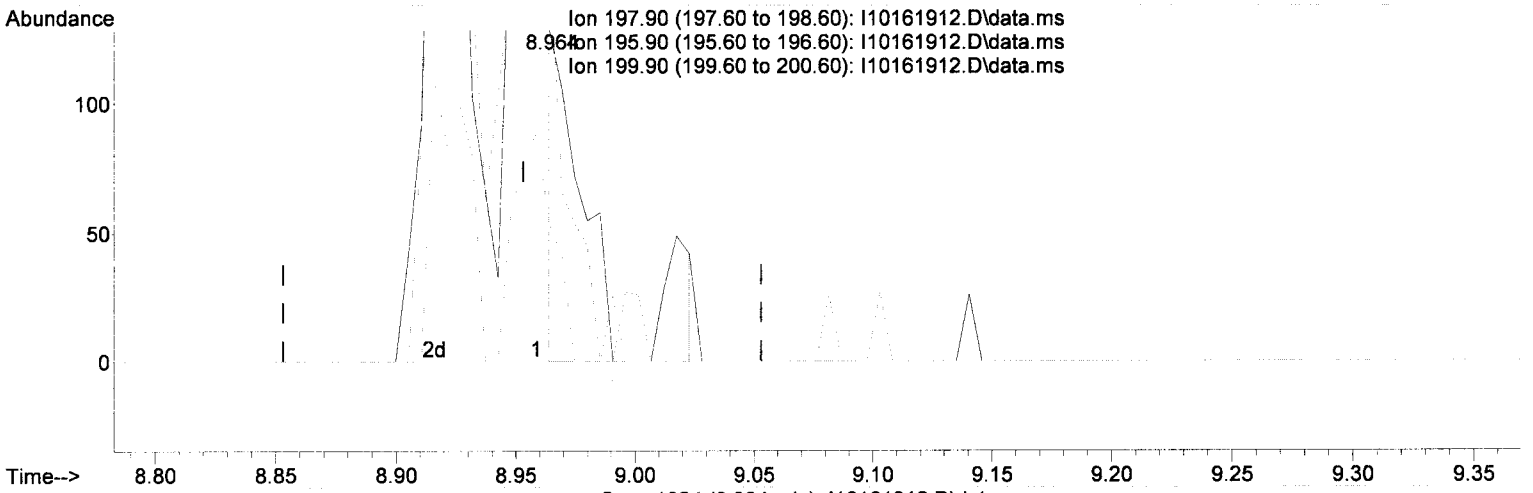


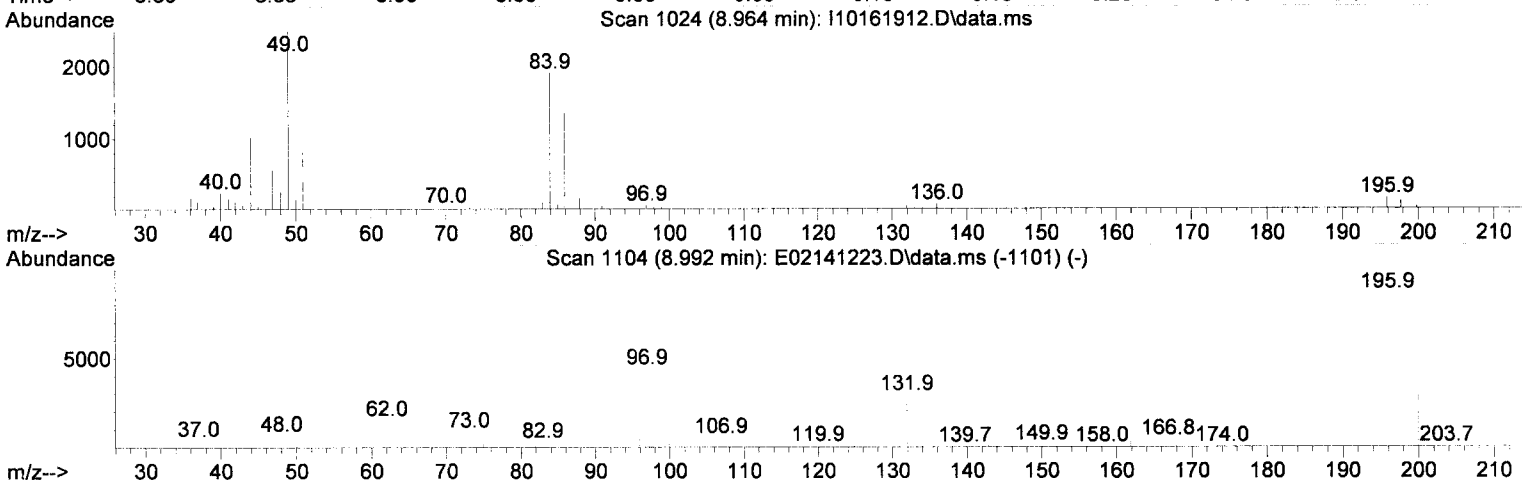
R = 1.98e-003 A*A + 3.84e-001 A - 3.95e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





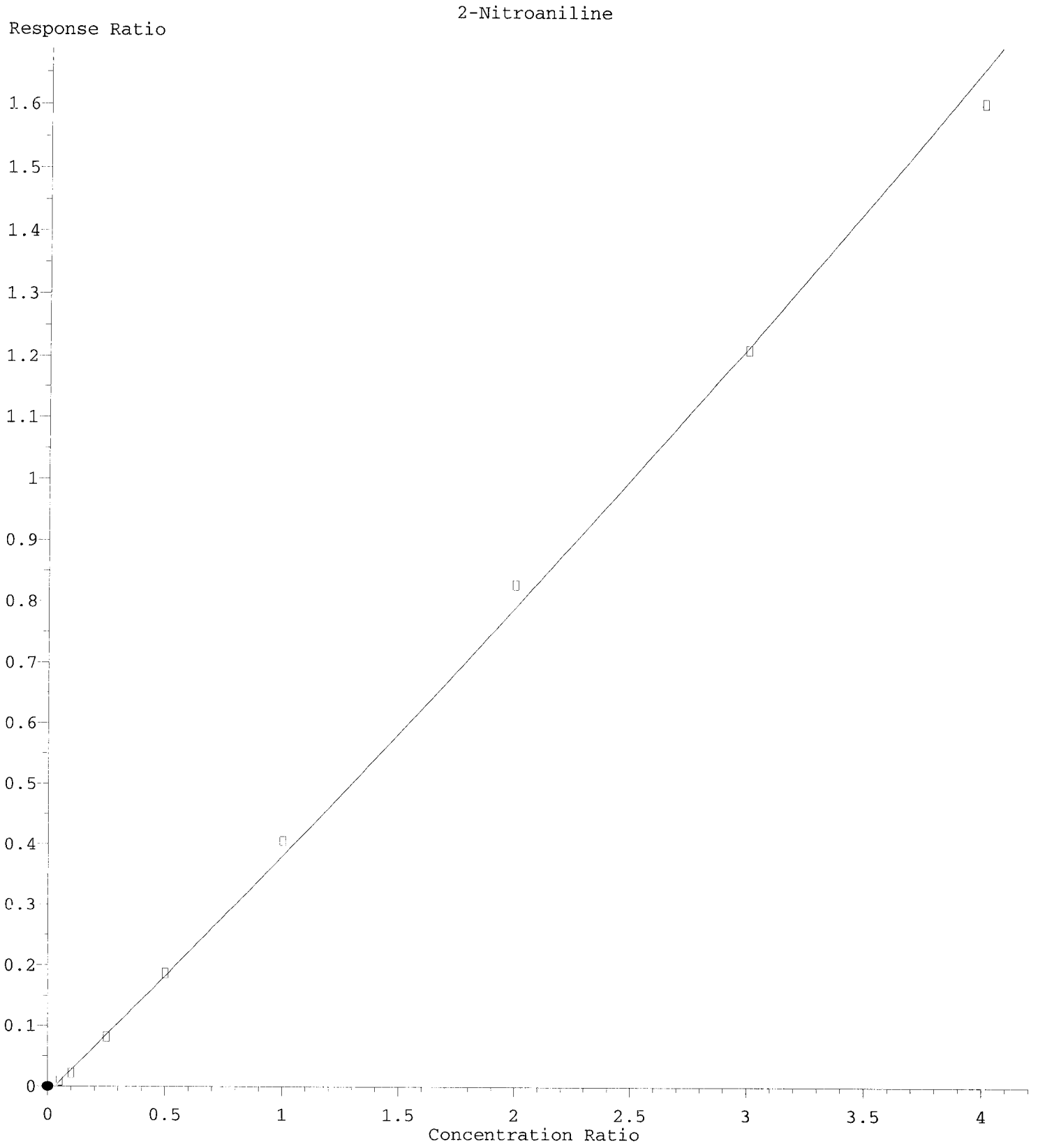
TIC: I10161912.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.964min (+ 0.011) 23.56 ng/ml m

response 132

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	130.00
199.90	30.90	41.54
0.00	0.00	0.00

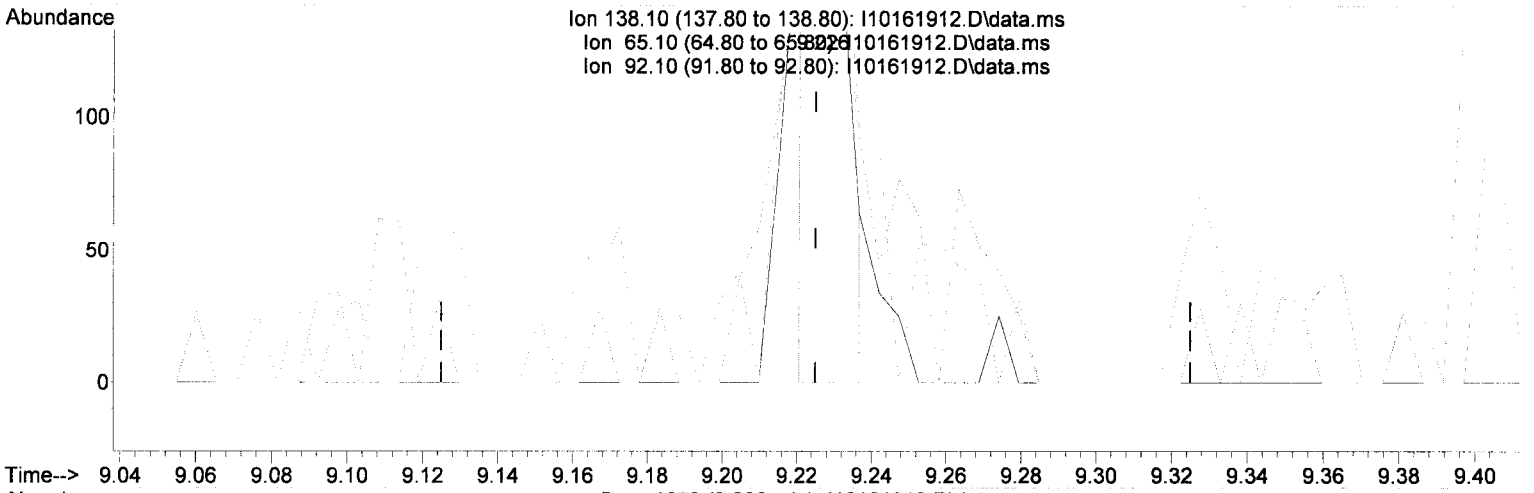


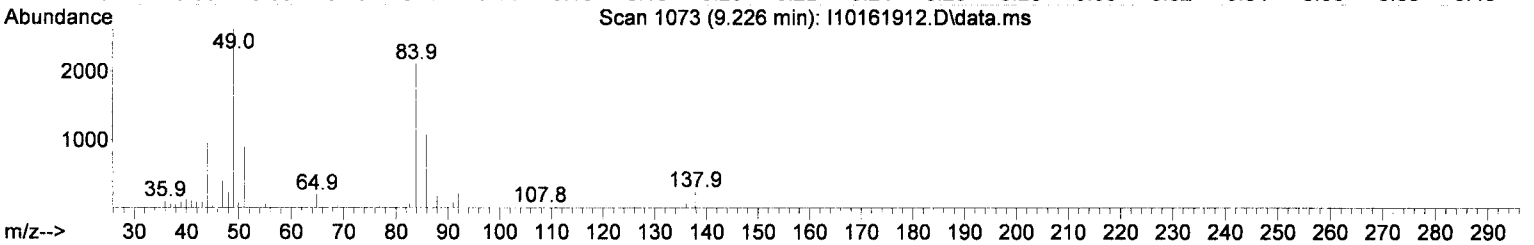
R = 8.44e-003 A*A + 3.84e-001 A - 1.17e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

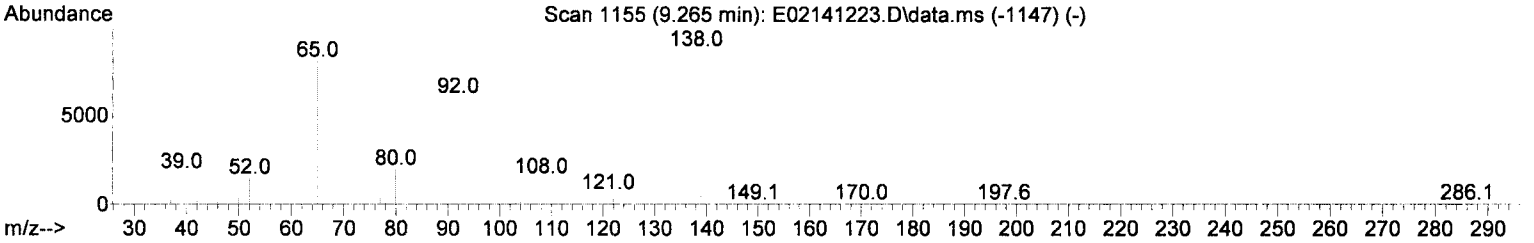
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







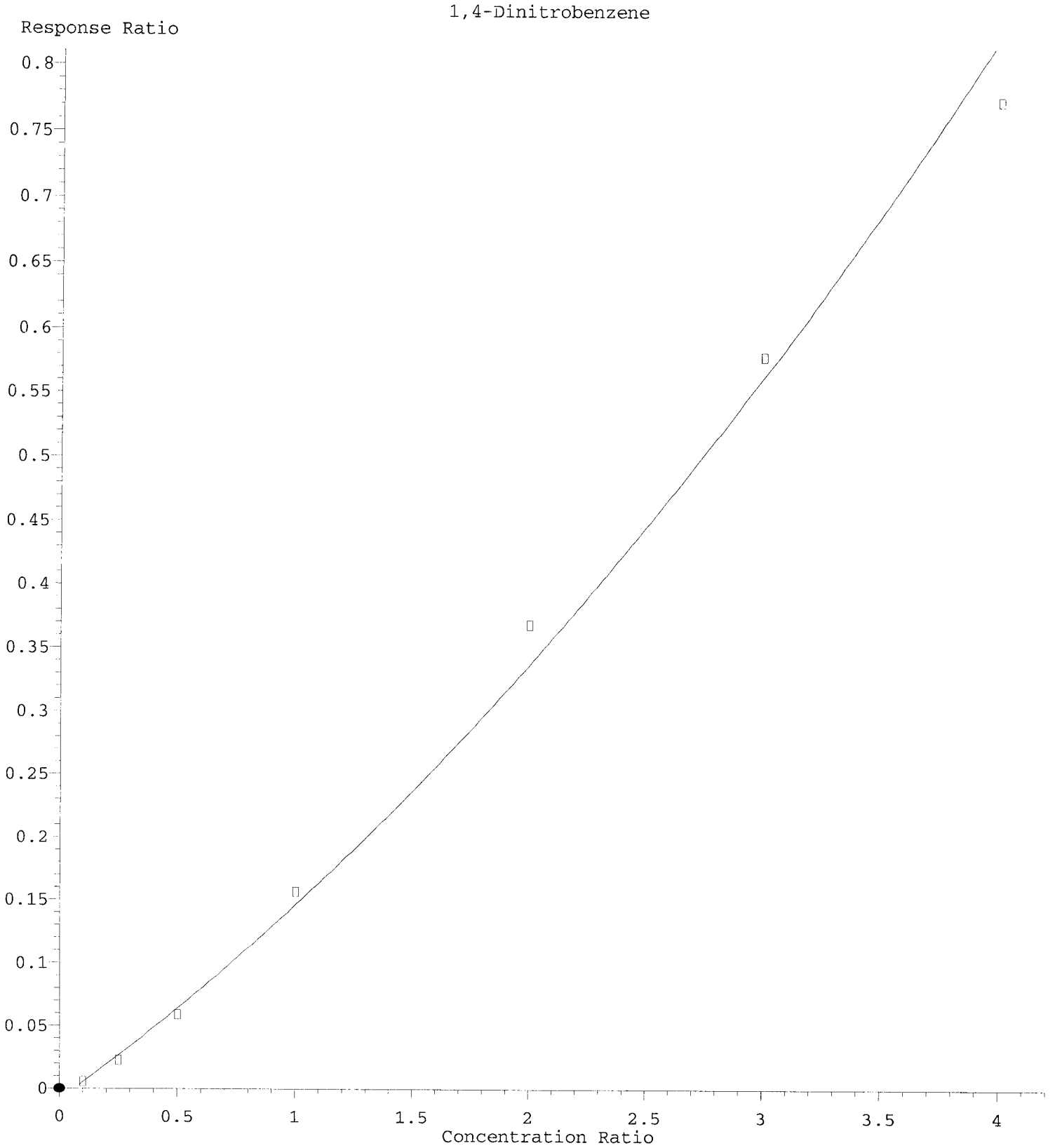
TIC: I10161912.D\data.ms

(42) 2-Nitroaniline (T)

9.226min (+ 0.001) 64.29 ng/ml m

response 157

Ion	Exp%	Act%
138.10	100.00	100.00
65.10	95.80	83.20
92.10	63.00	89.84
0.00	0.00	0.00

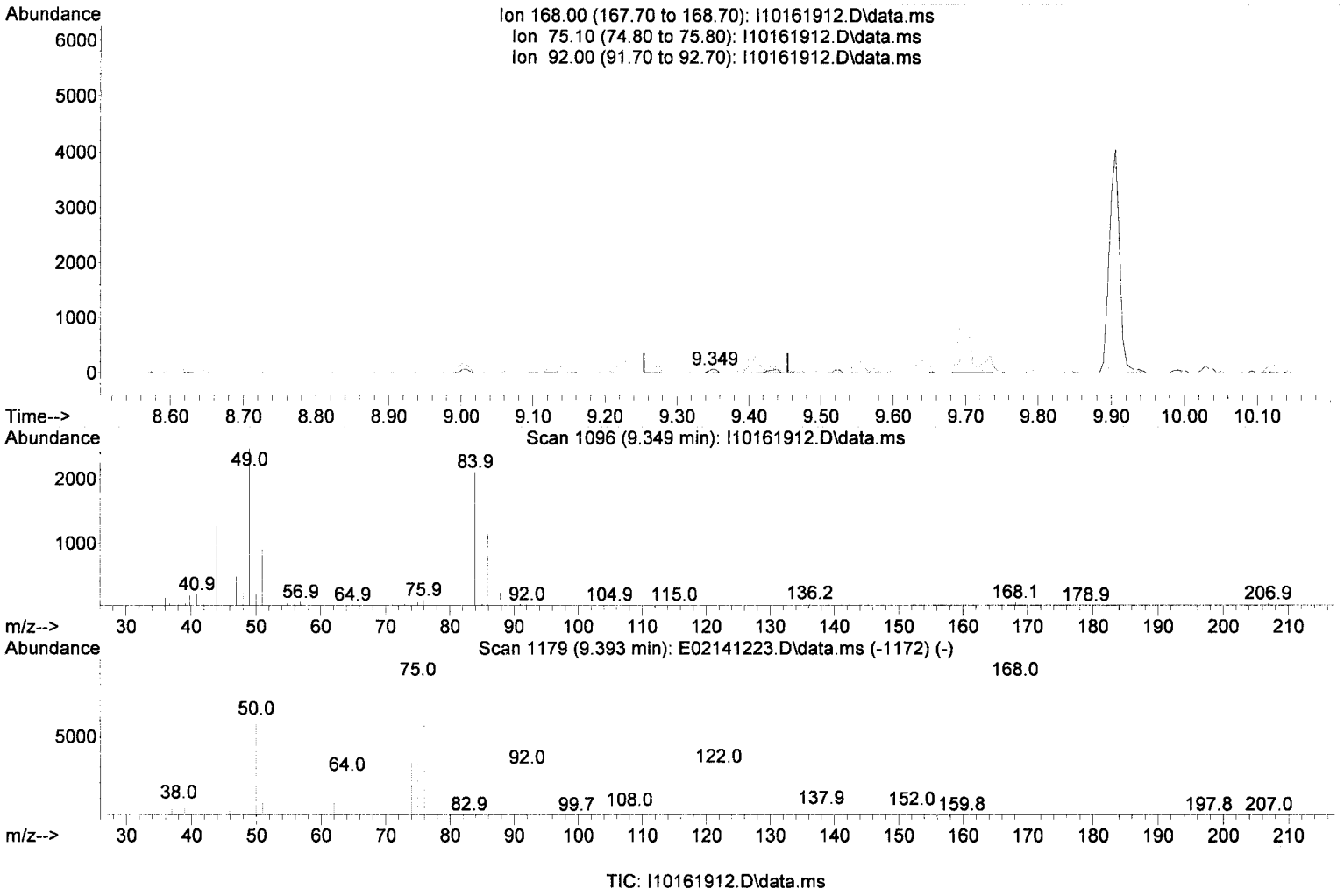


R = 1.76e-002 A*A + 1.38e-001 A - 8.99e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



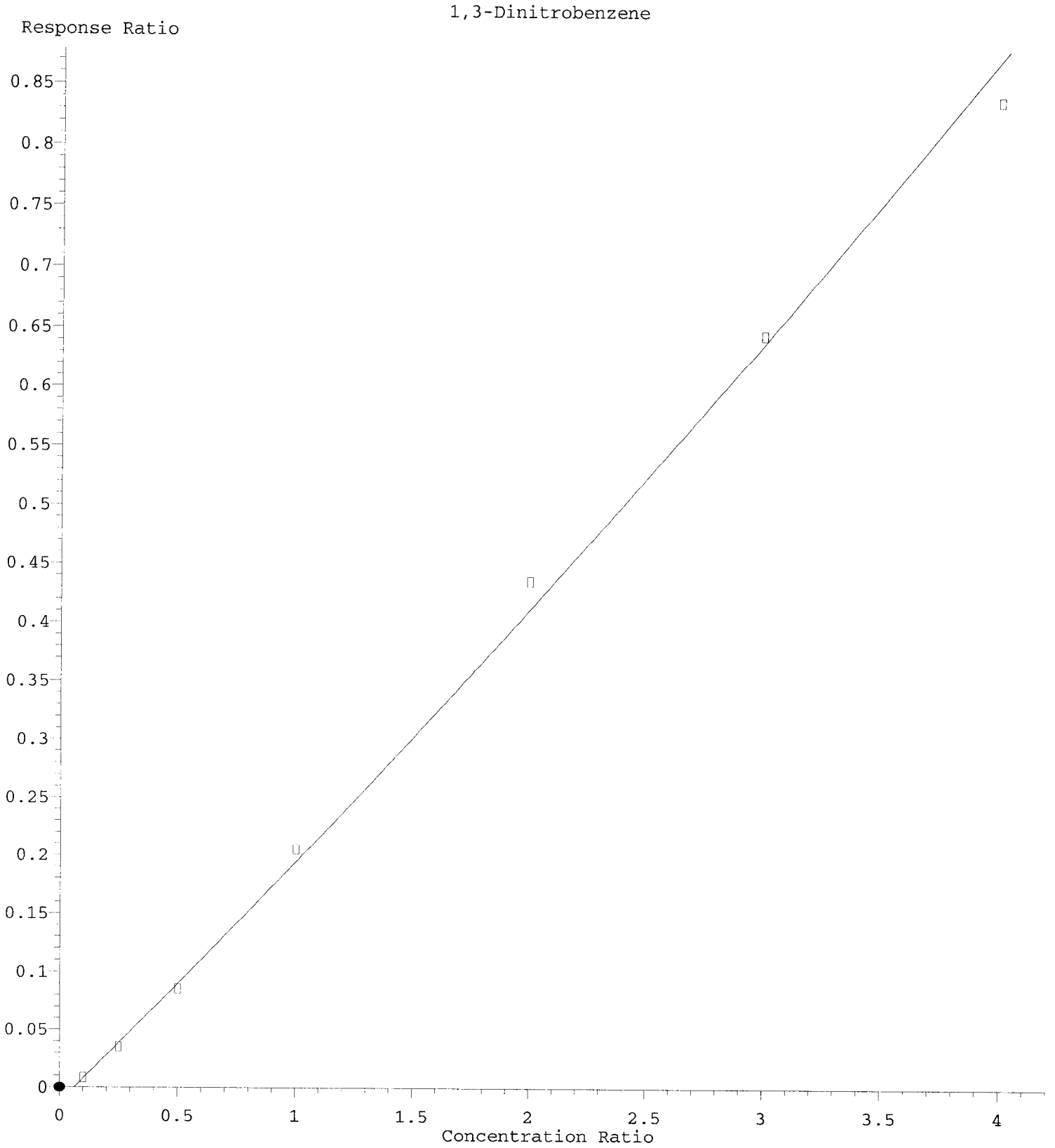
TIC: I10161912.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.349min (-0.005) 137.95 ng/ml m

response 132

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	130.80	107.58
92.00	42.80	57.58
0.00	0.00	0.00

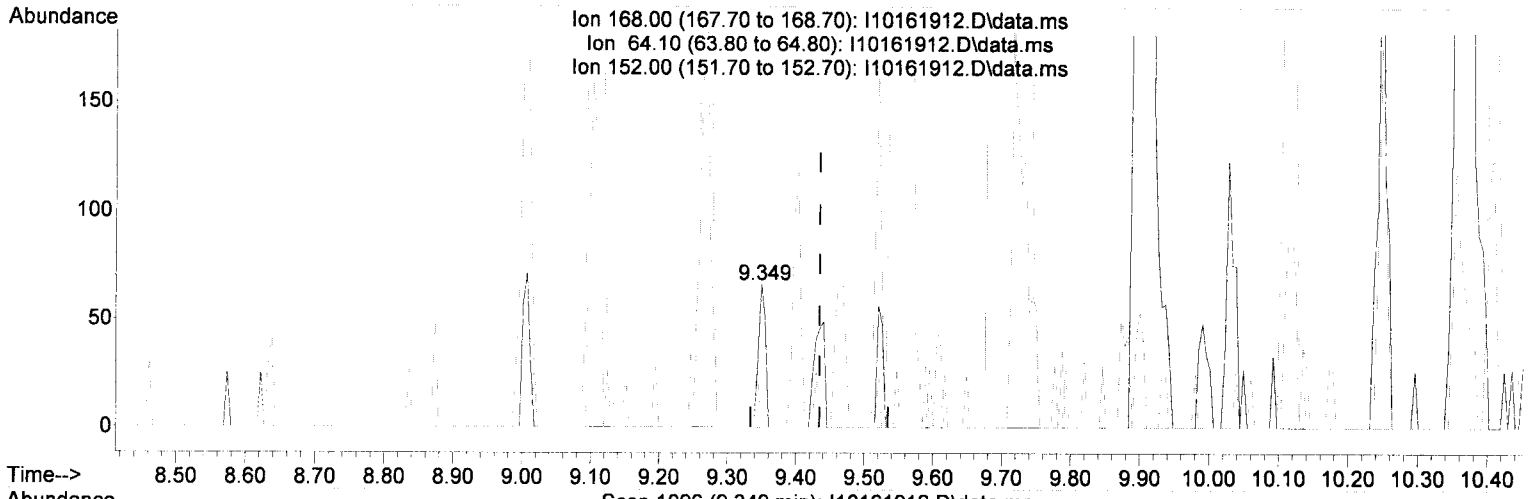


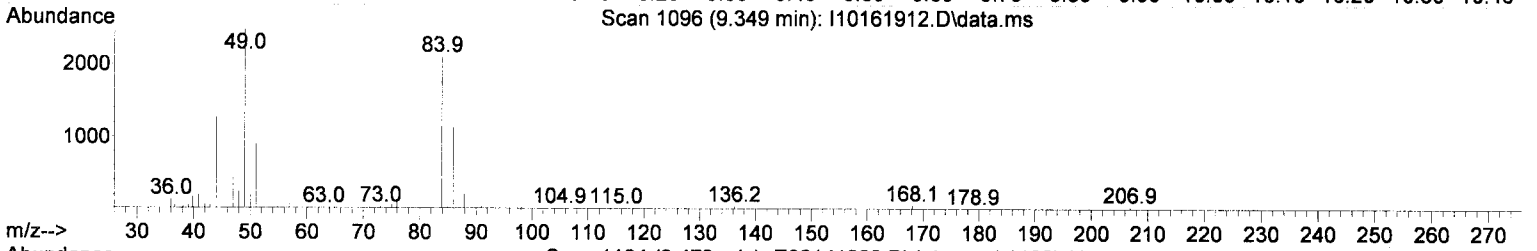
R = 4.65e-003 A*A + 2.02e-001 A - 1.26e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

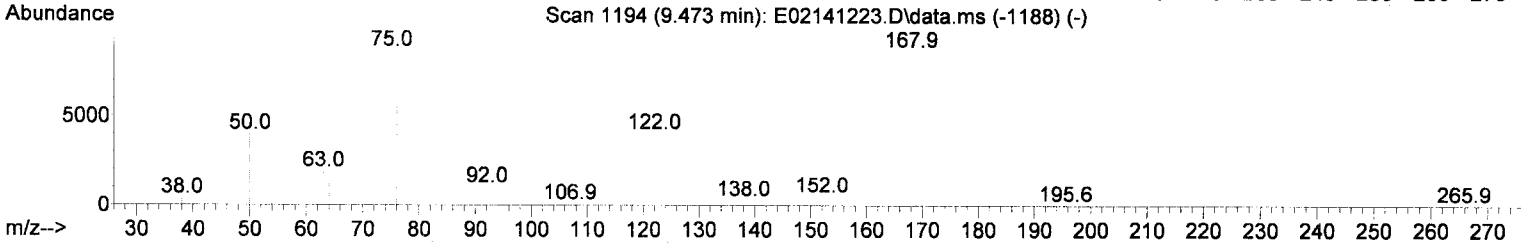
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







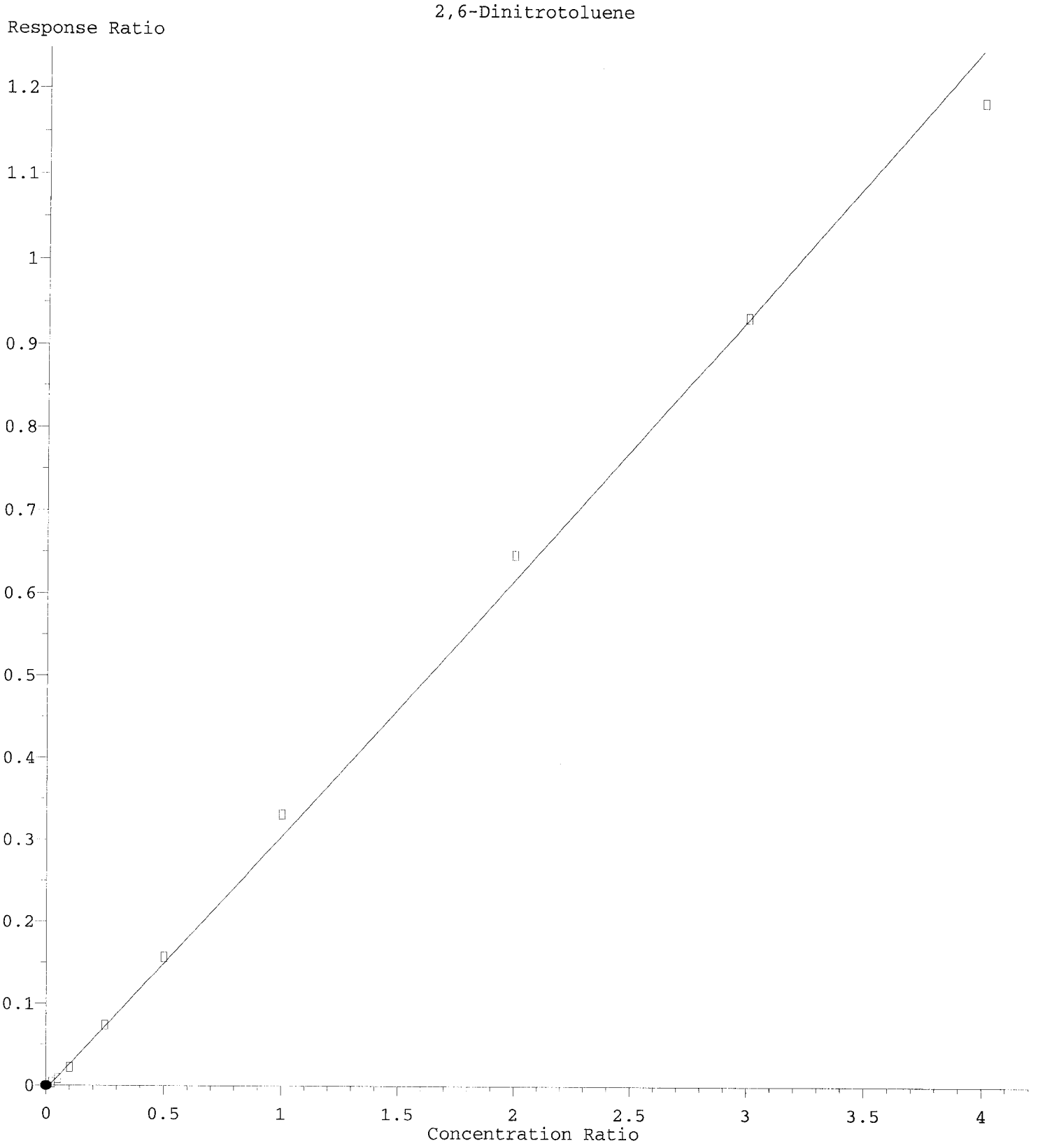
TIC: I10161912.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.349min (-0.085) 129.76 ng/ml m

response 132

Ion	Exp%	Act%
168.00	100.00	100.00
64.10	30.80	0.00#
152.00	7.90	0.00
0.00	0.00	0.00

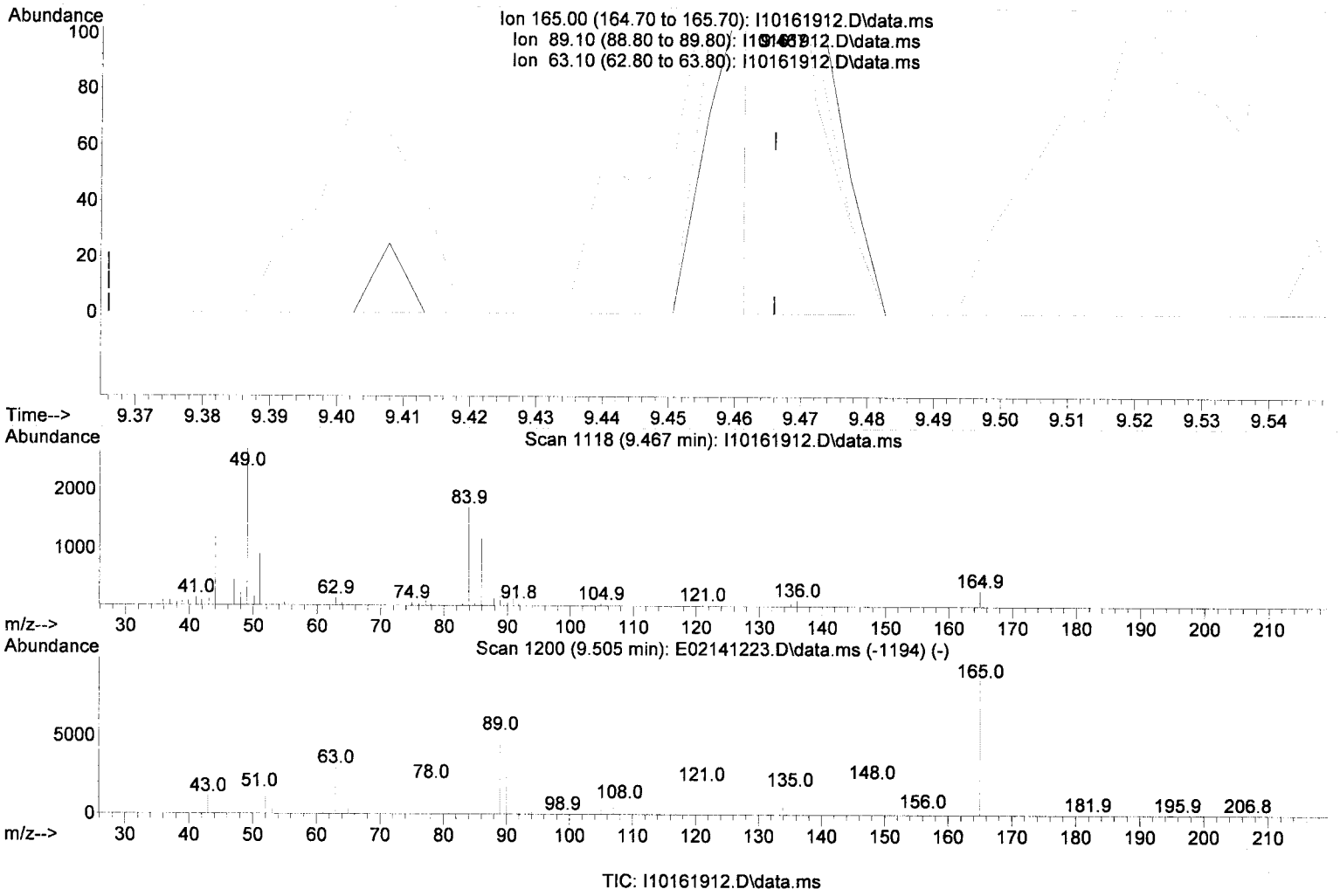


R = 1.53e-003 A*A + 3.08e-001 A - 4.92e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



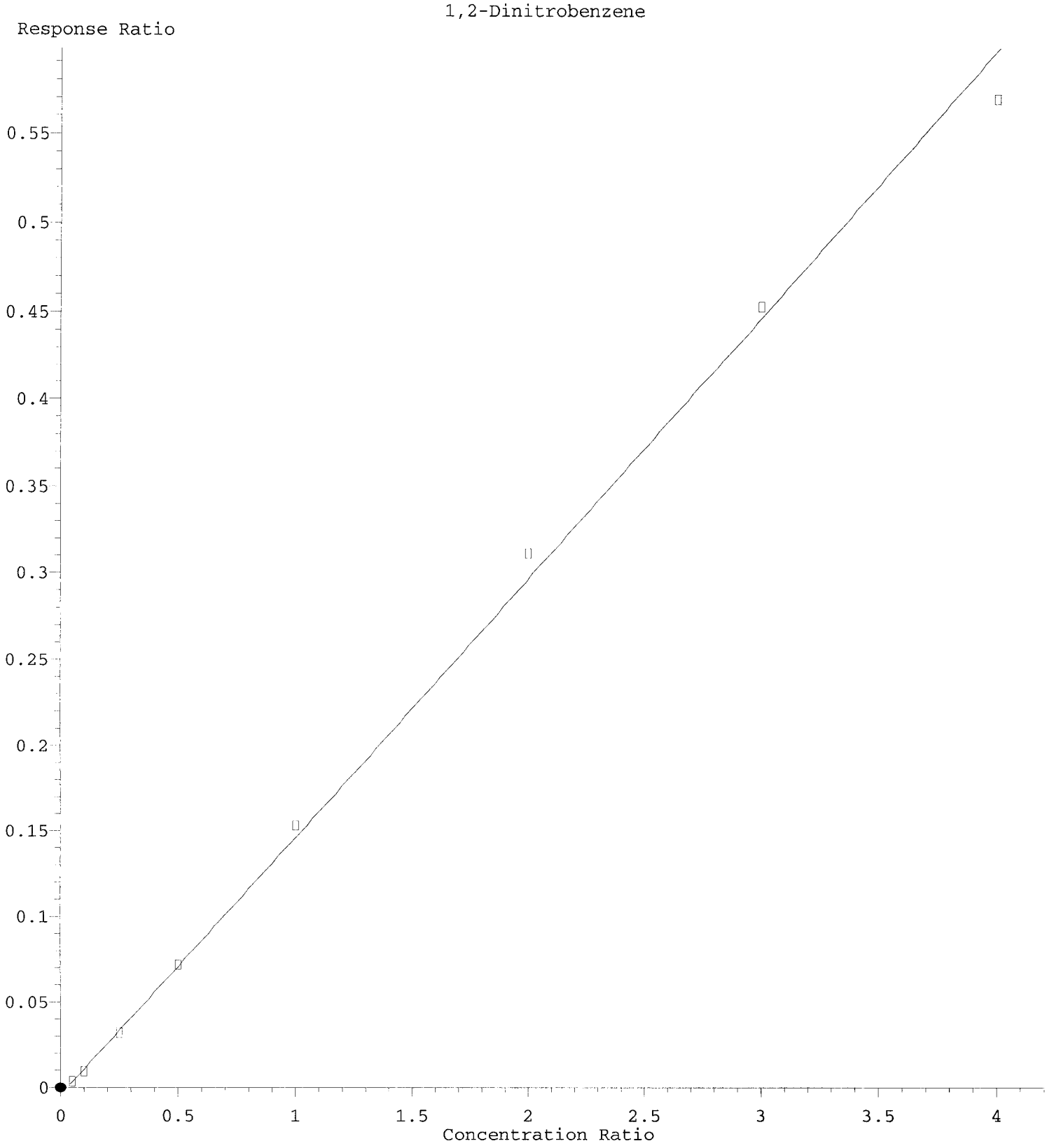
TIC: I10161912.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.467min (+ 0.001) 36.20 ng/ml m

response 149

Ion	Exp%	Act%
165.00	100.00	100.00
89.10	57.40	73.56
63.10	60.10	51.53
0.00	0.00	0.00

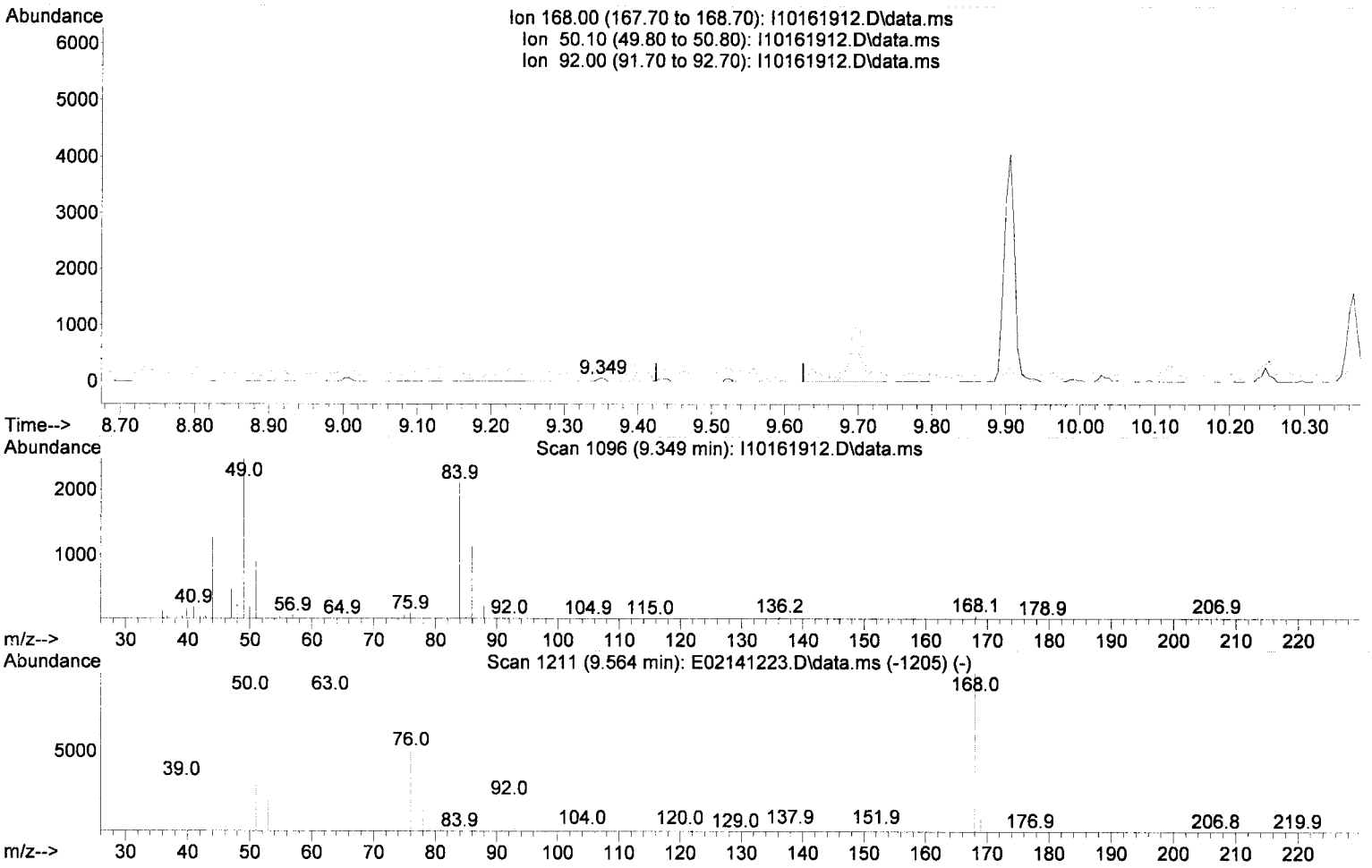


R = -3.71e-005 A*A + 1.50e-001 A - 4.34e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



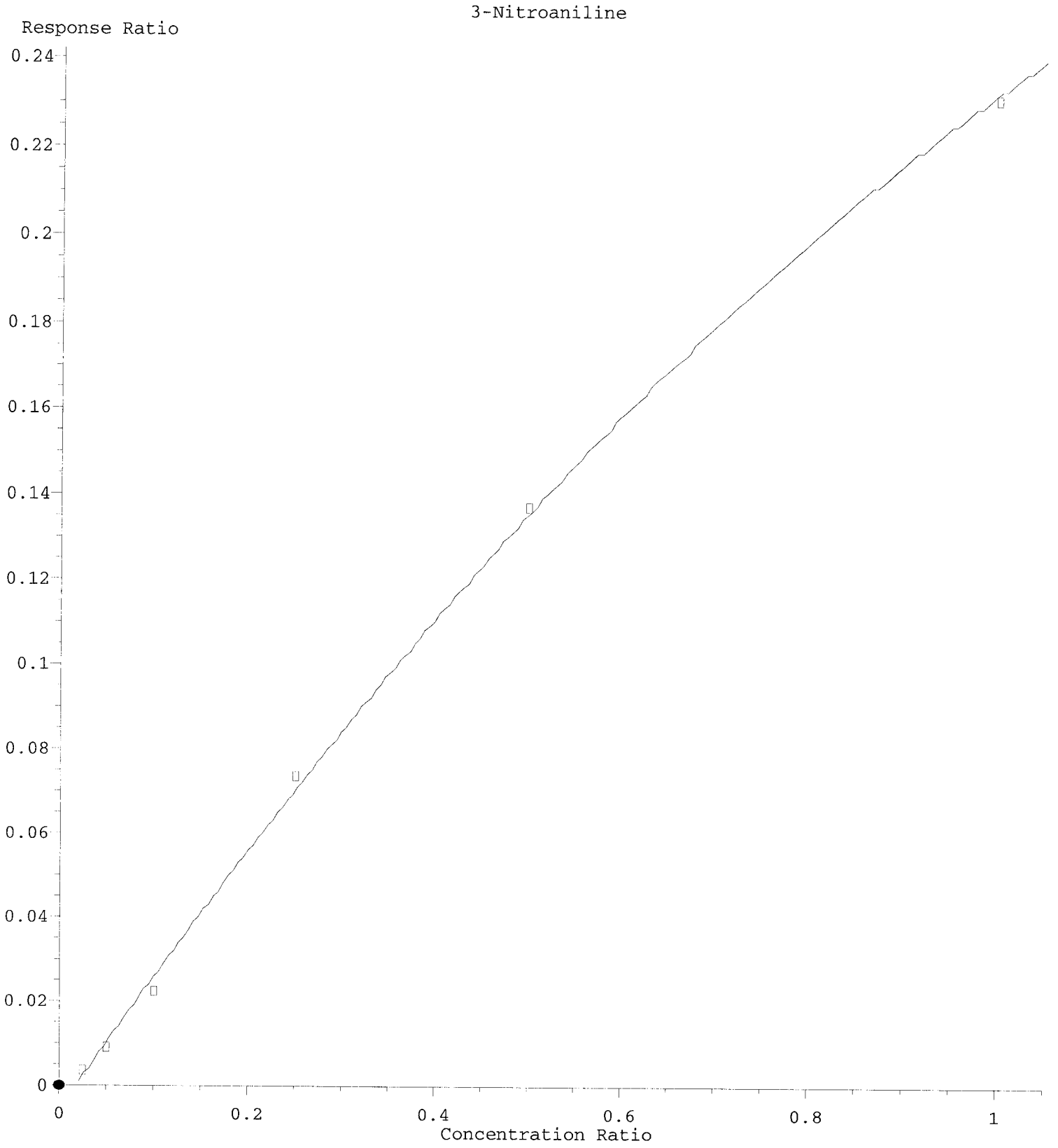
TIC: I10161912.D\data.ms

(48) 1,2-Dinitrobenzene (T)

9.349min (-0.176) 65.38 ng/ml m

response 132

Ion	Exp%	Act%
168.00	100.00	100.00
50.10	125.70	304.55#
92.00	20.70	57.58#
0.00	0.00	0.00

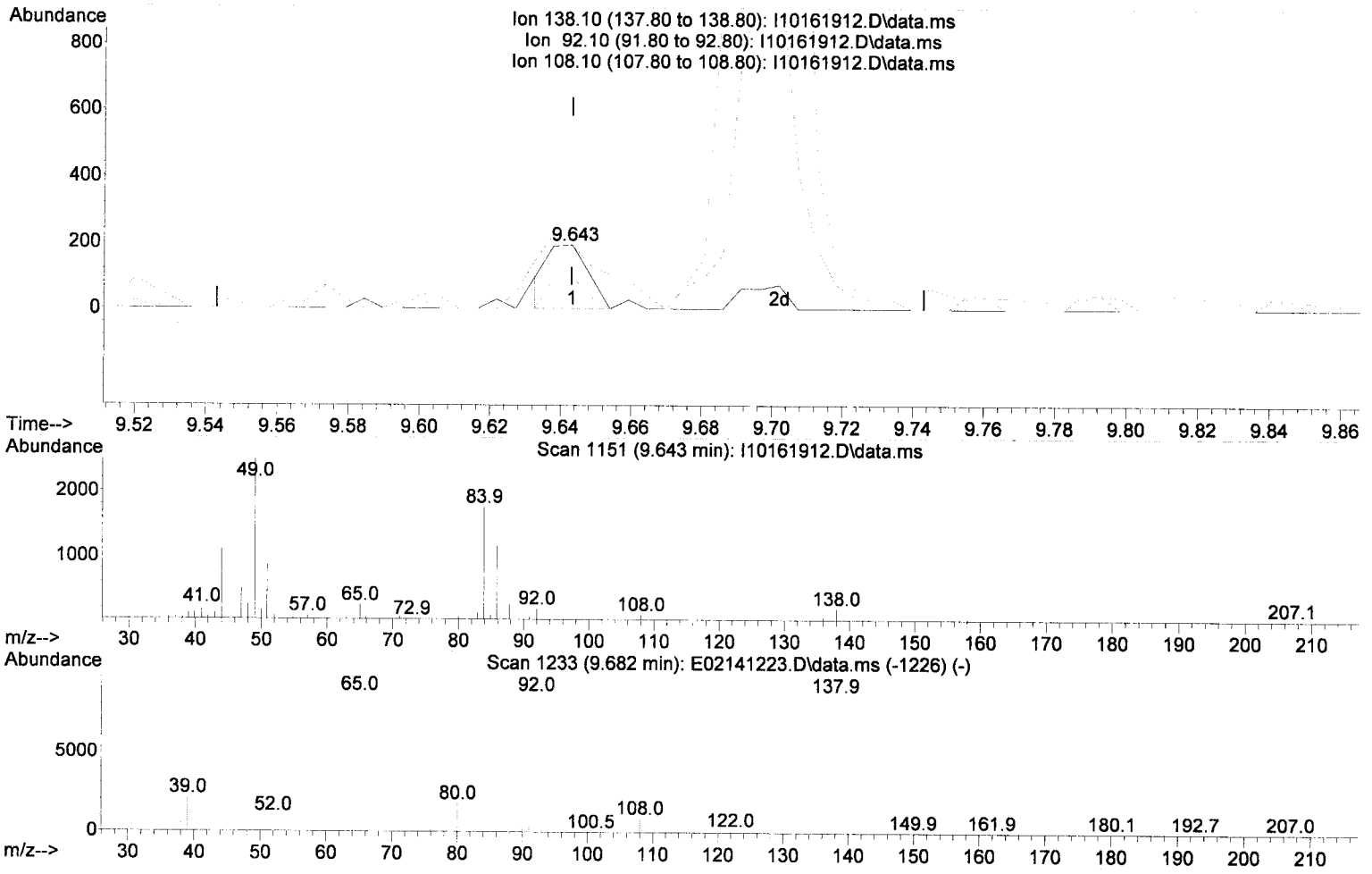


R = -8.76e-002 A*A + 3.26e-001 A - 5.72e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w/(1/a)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



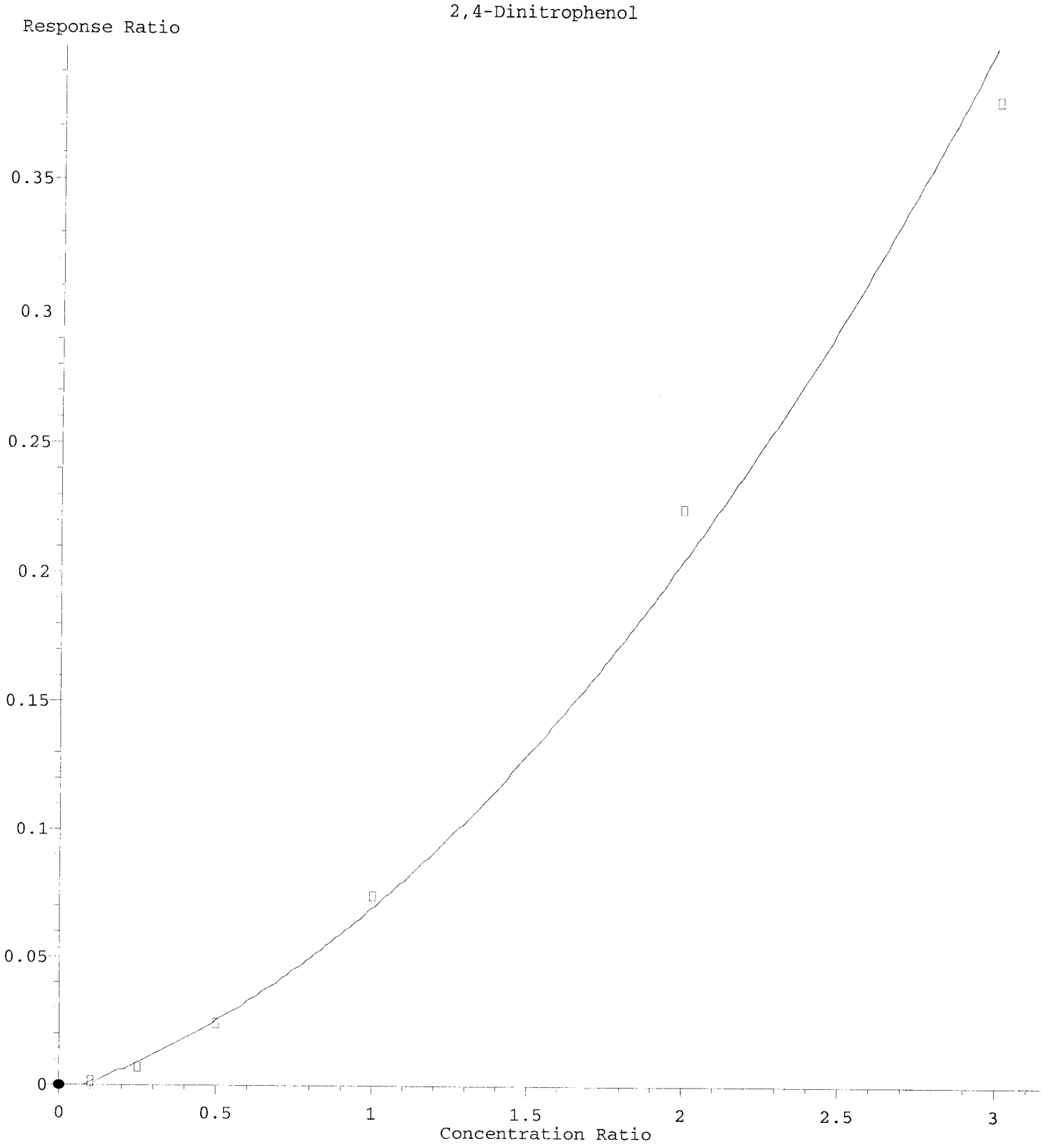
TIC: I10161912.D\data.ms

(50) 3-Nitroaniline (T)

9.643min (+ 0.000) 39.50 ng/ml m

response 155

Ion	Exp%	Act%
138.10	100.00	100.00
92.10	112.80	98.97
108.10	12.60	50.00#
0.00	0.00	0.00

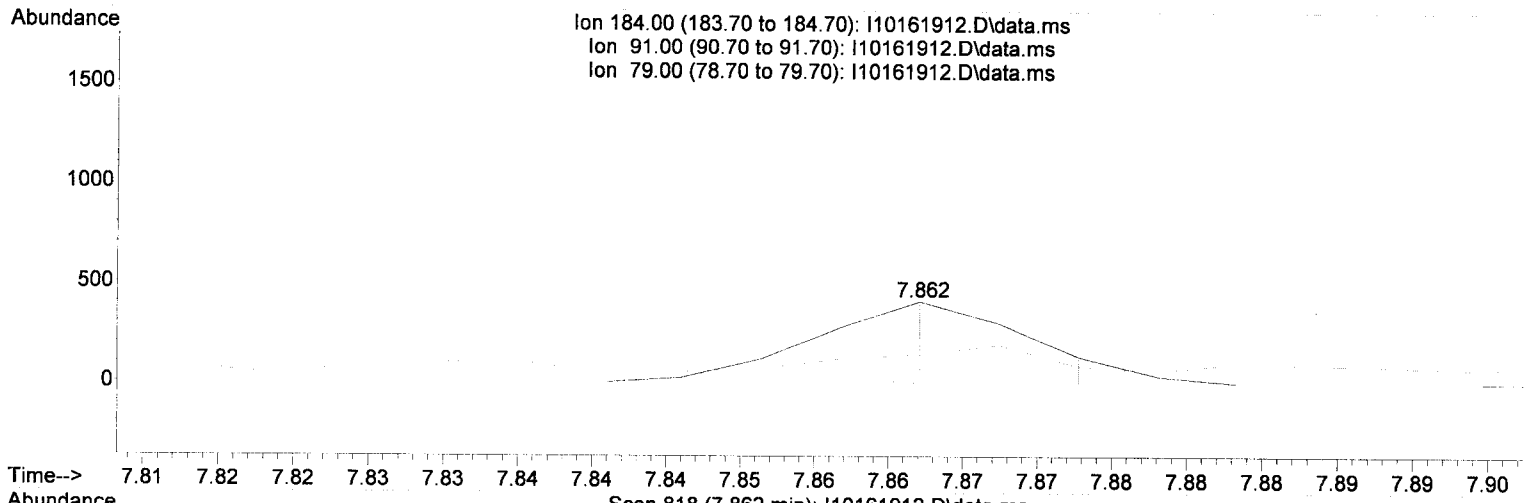


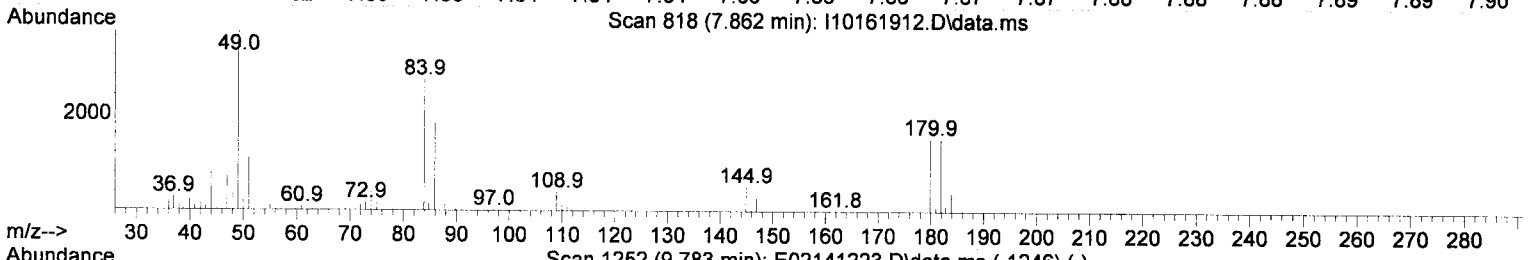
R = 3.12e-002 A*A + 4.17e-002 A - 3.42e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w/1/(a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

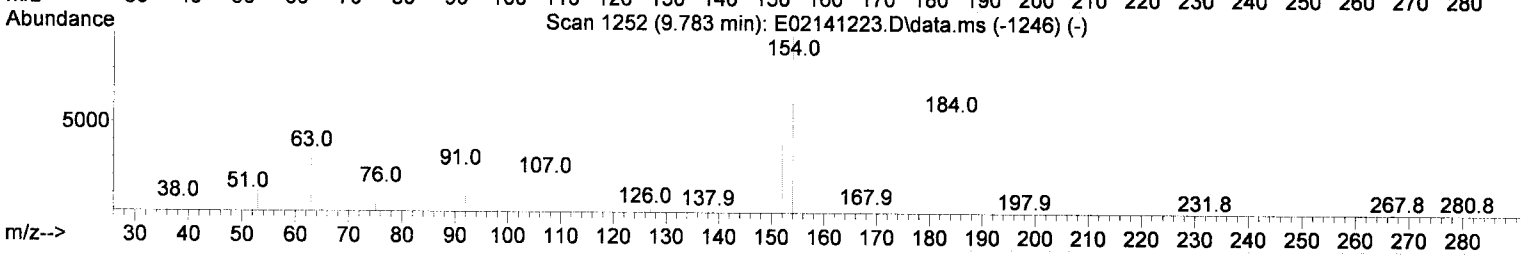
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







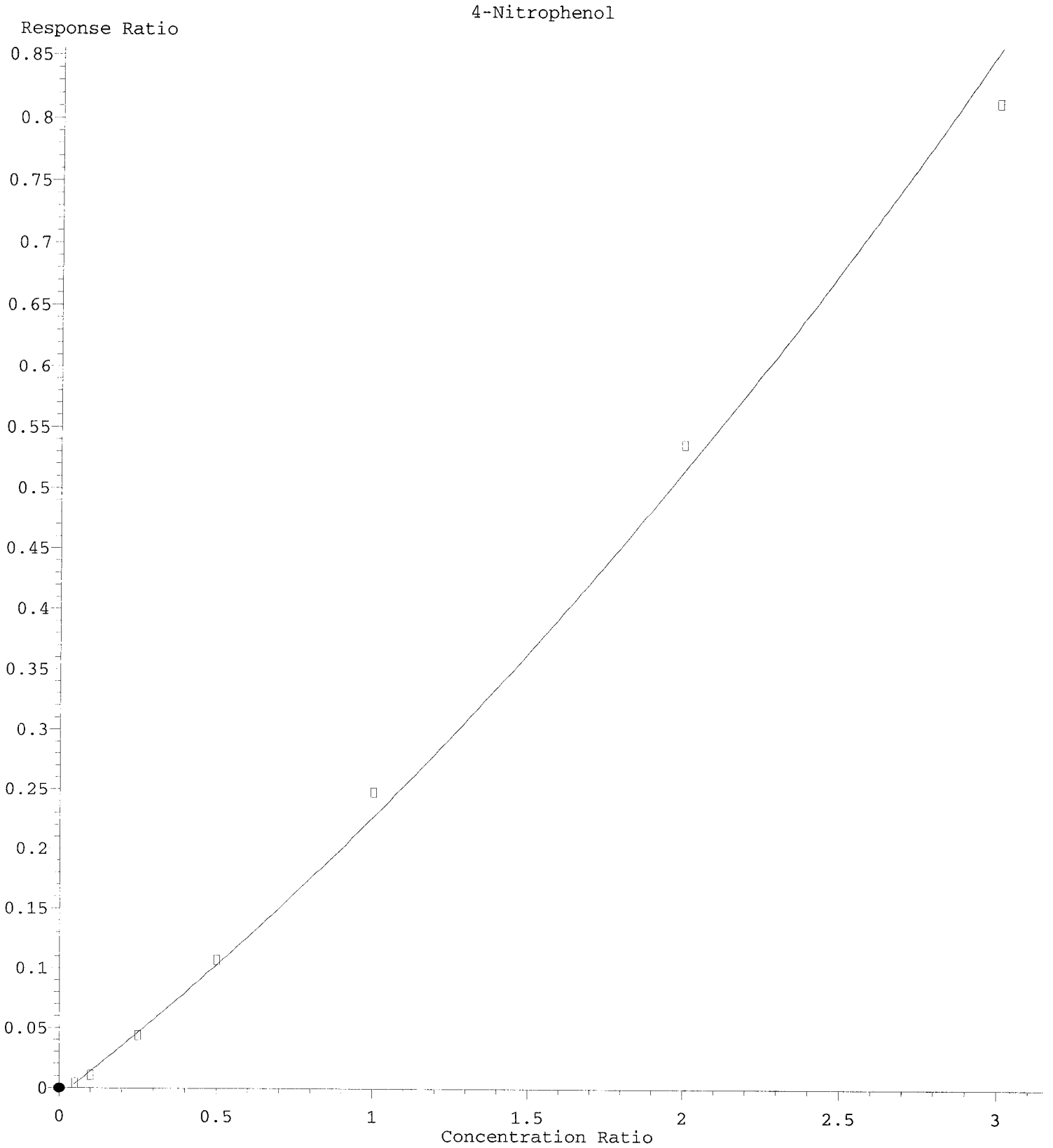
TIC: I10161912.D\data.ms

(52) 2,4-Dinitrophenol (T)

7.862min (-1.882) 181.07 ng/ml m

response 139

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	48.80	35.12
79.00	36.60	0.00#
0.00	0.00	0.00

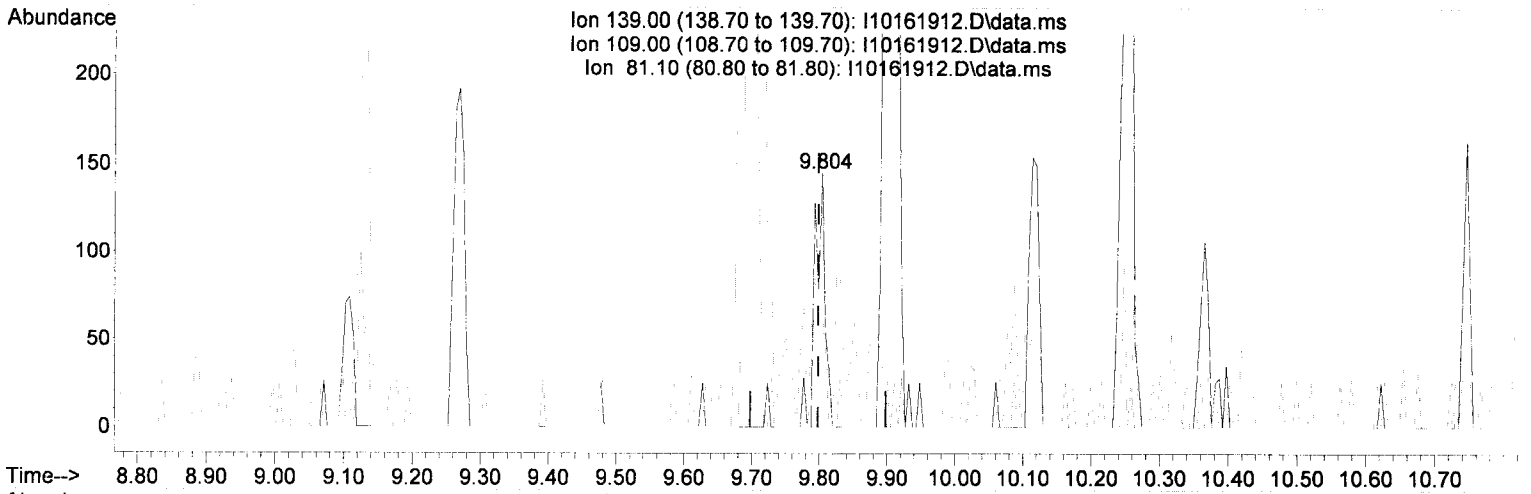


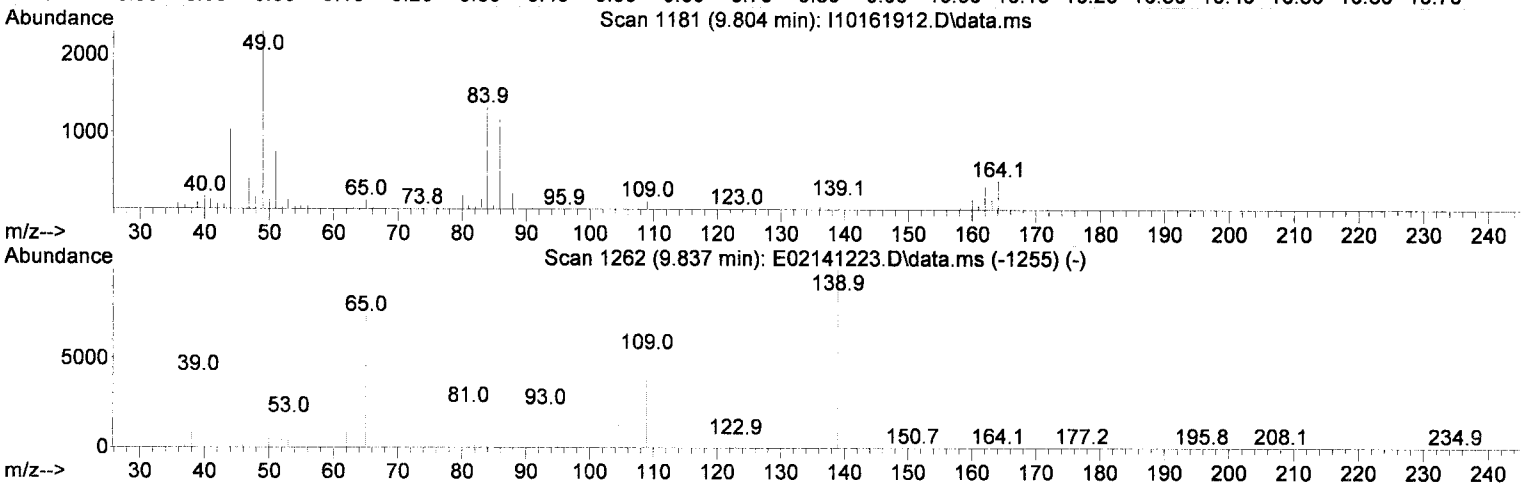
R = 2.68e-002 A*A + 2.07e-001 A - 7.34e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





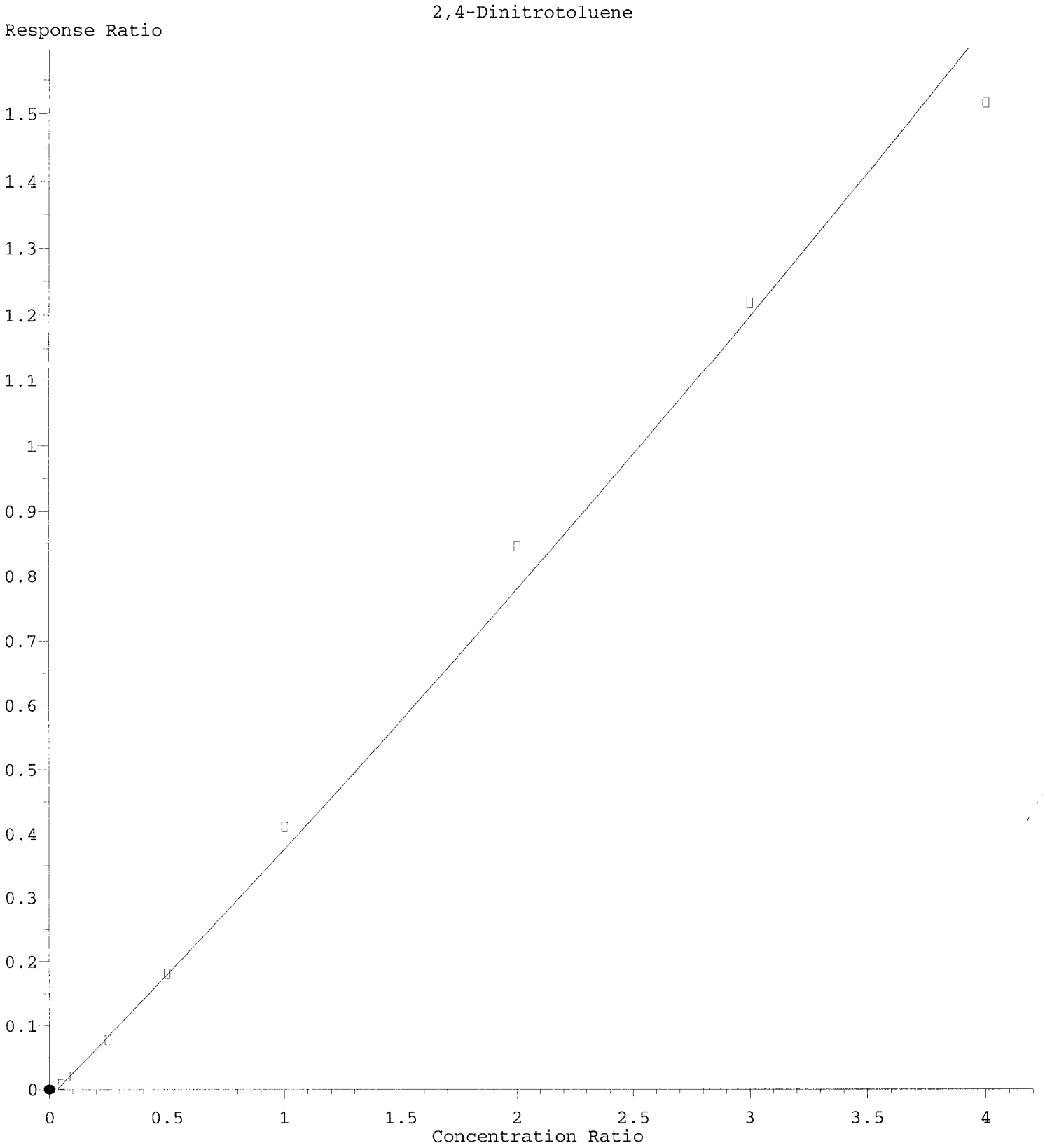
TIC: I10161912.D\data.ms

(53) 4-Nitrophenol (T)

9.804min (+ 0.006) 76.65 ng/ml

response 149

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	61.50	86.90
81.10	31.00	44.14
0.00	0.00	0.00

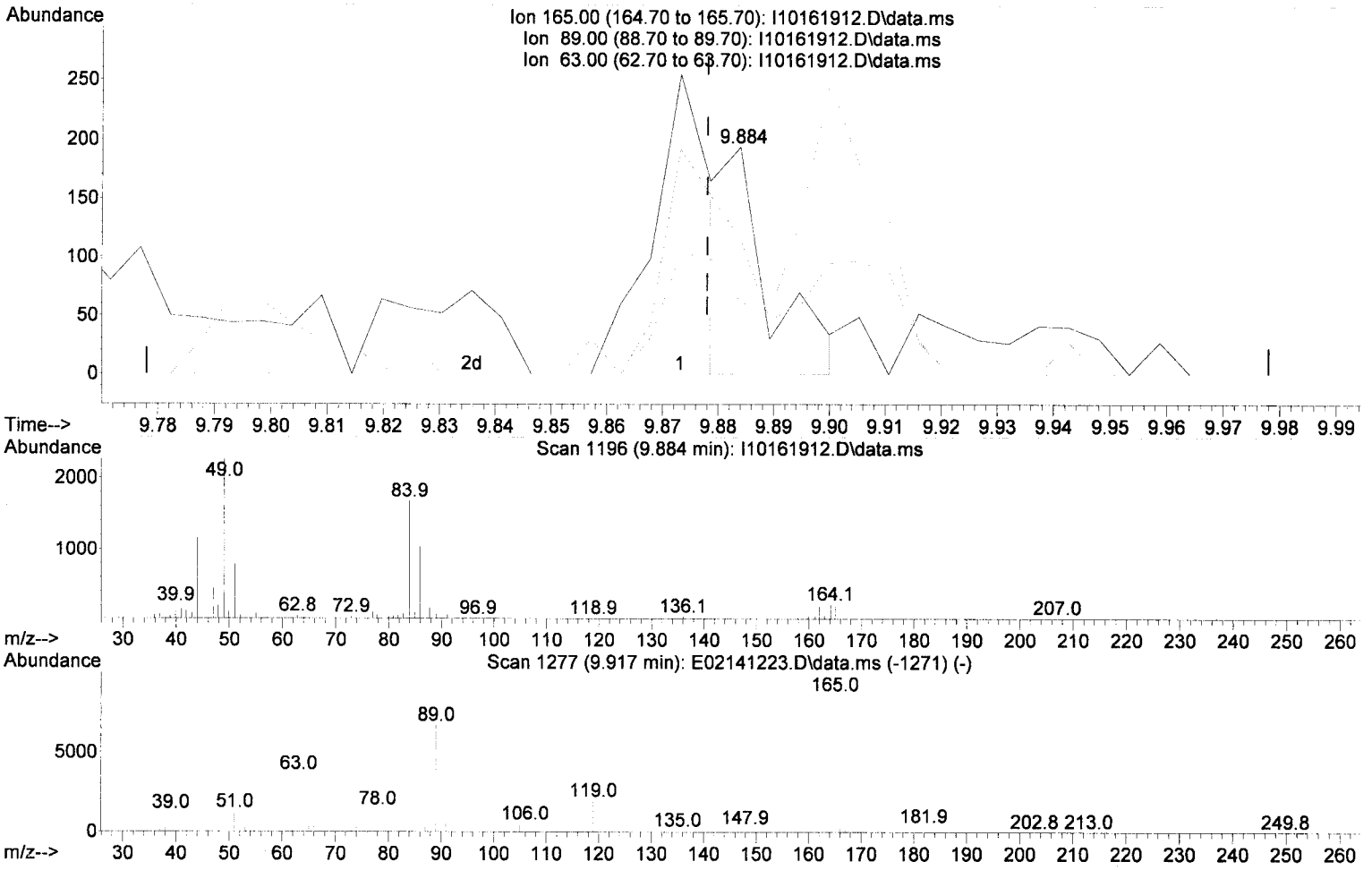


R = 7.80e-003 A*A + 3.80e-001 A - 1.27e-002
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



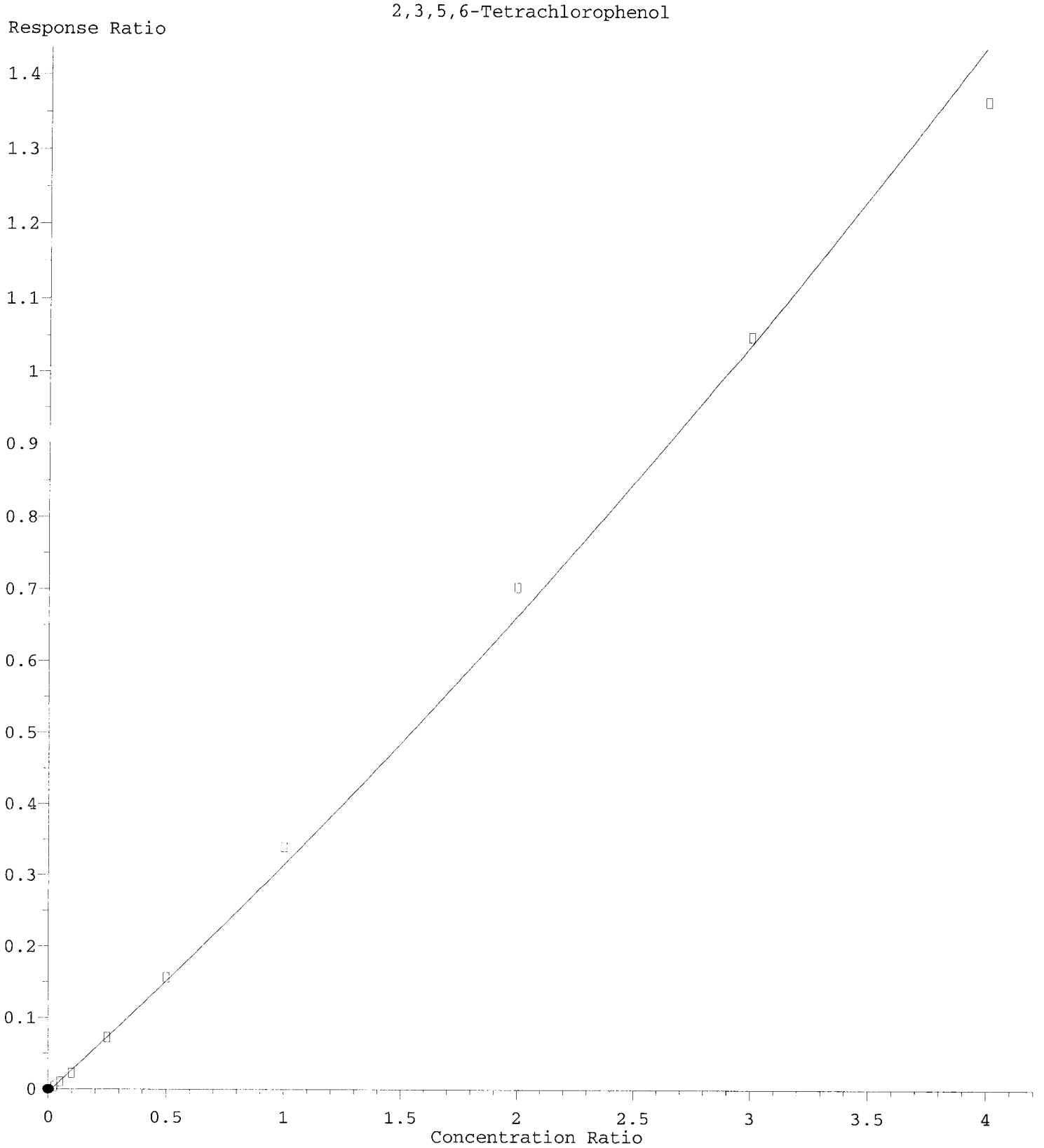
TIC: I10161912.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.884min (+ 0.006) 69.32 ng/ml m

response 105

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	72.30	59.79
63.00	45.90	31.96
0.00	0.00	0.00

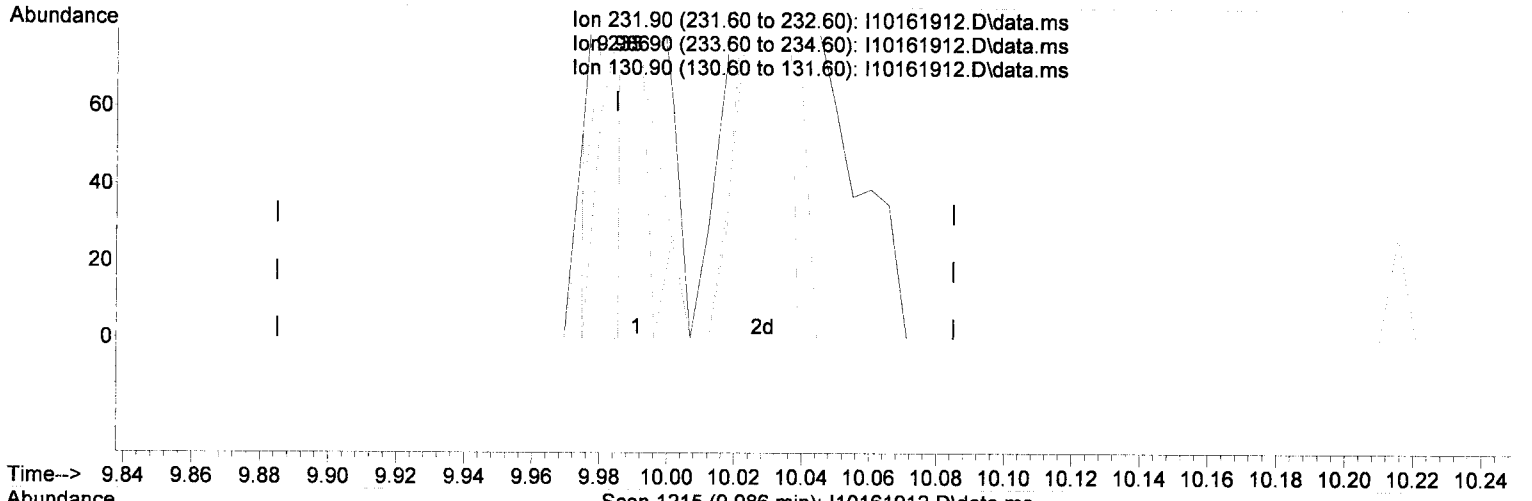


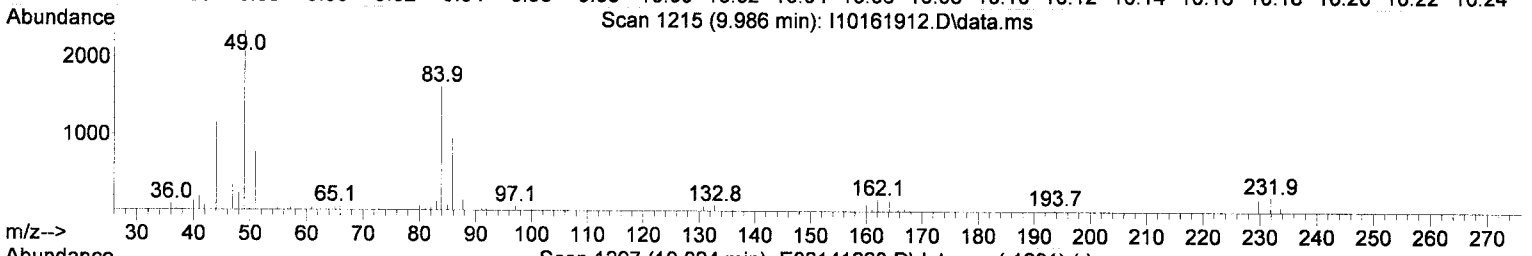
R = 1.42e-002 A*A + 3.05e-001 A - 4.63e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

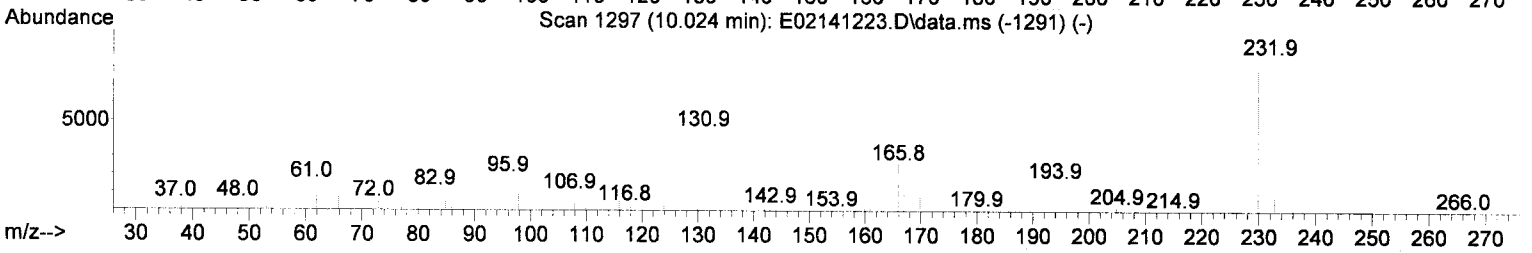
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







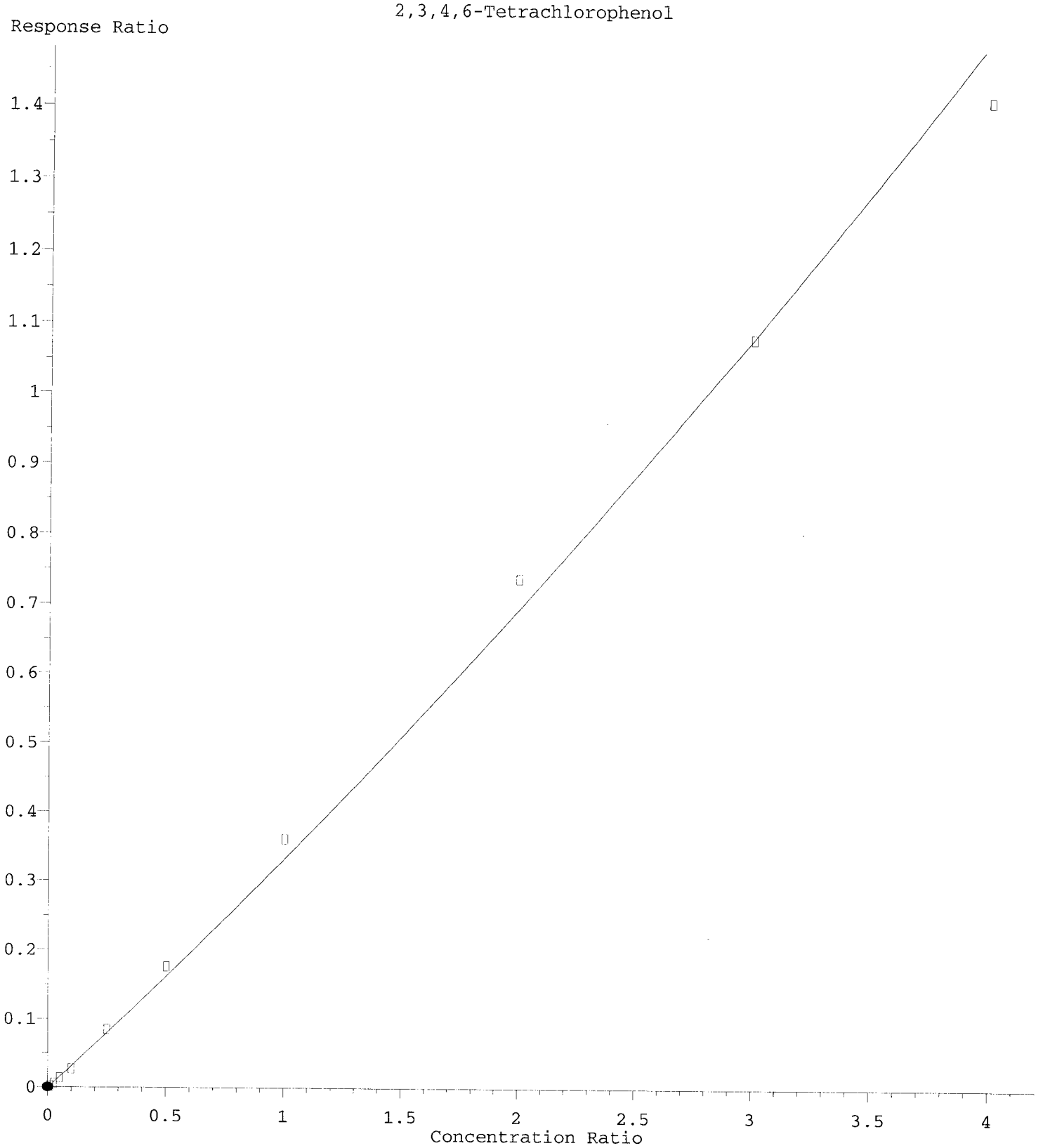
TIC: I10161912.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

9.986min (+ 0.001) 33.47 ng/ml m

response 110

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	49.20	39.53
130.90	41.10	41.86
0.00	0.00	0.00

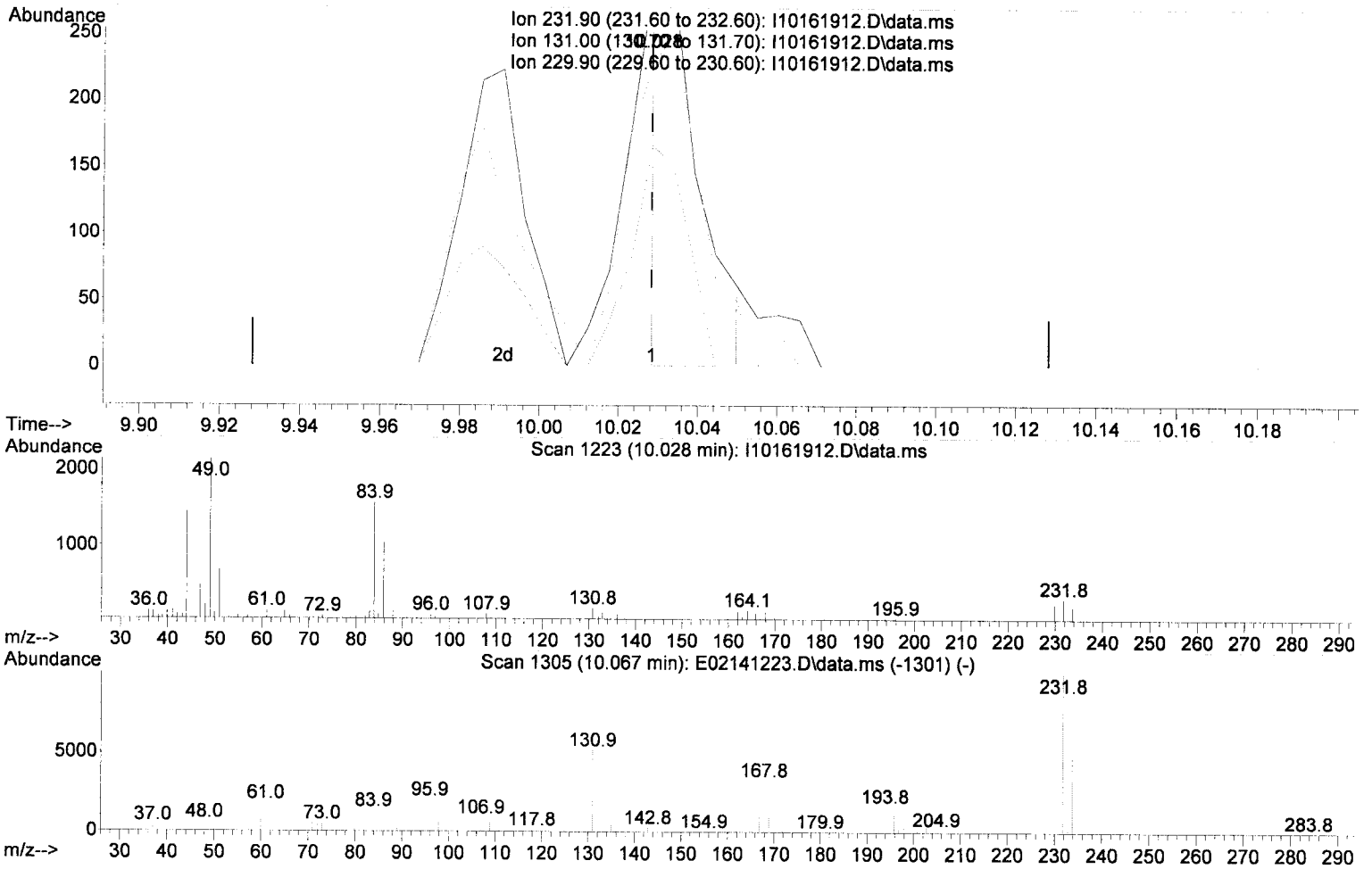


R = 1.33e-002 A*A + 3.20e-001 A - 1.69e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



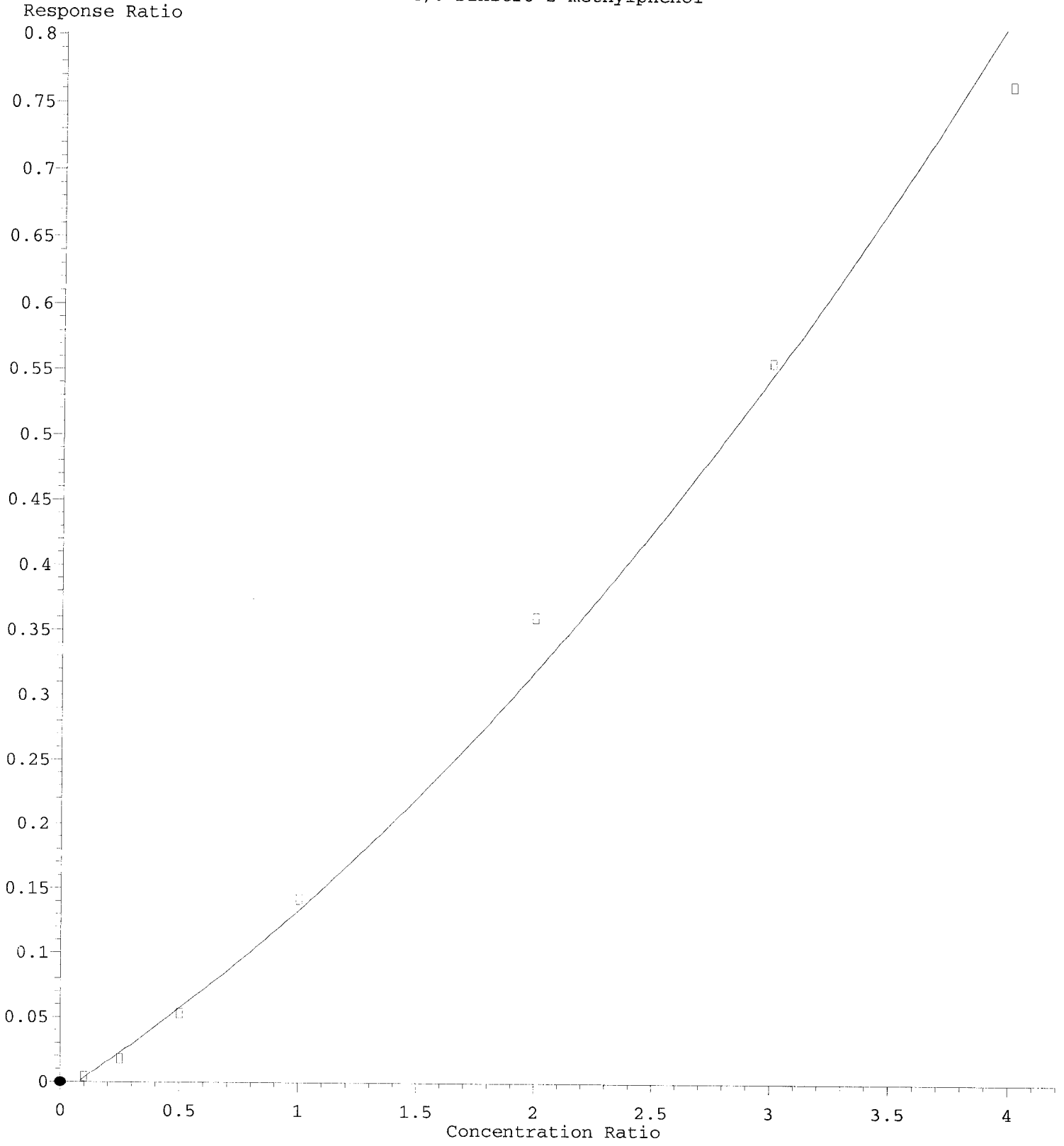
TIC: I10161912.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.028min (+ 0.000) 15.60 ng/ml m

response 185

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	47.70	56.27
229.90	78.50	76.95
0.00	0.00	0.00

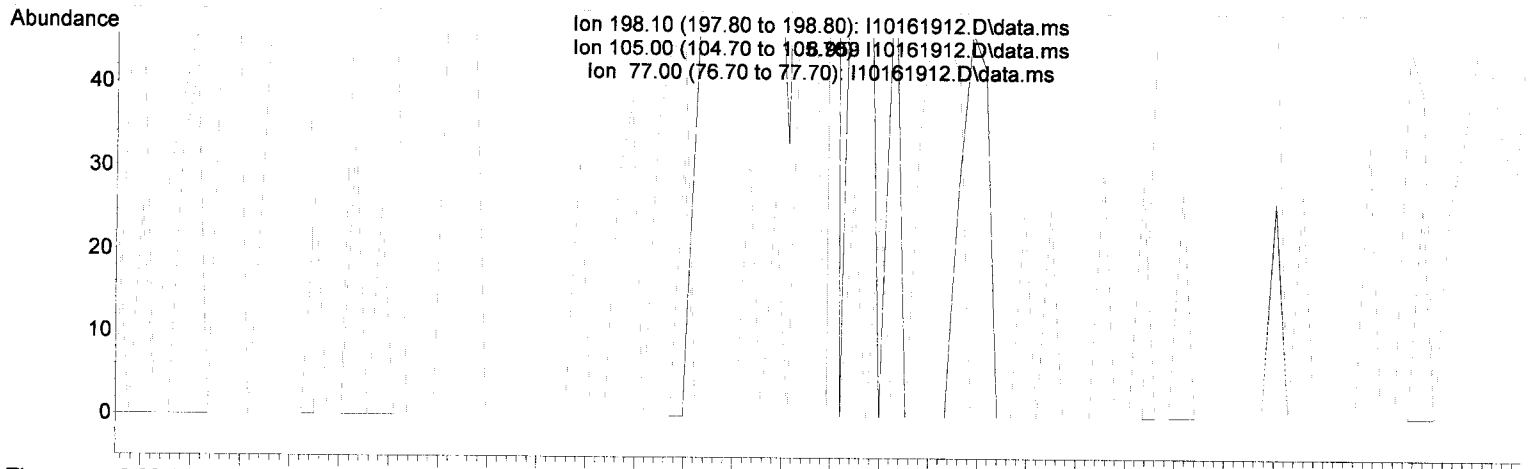


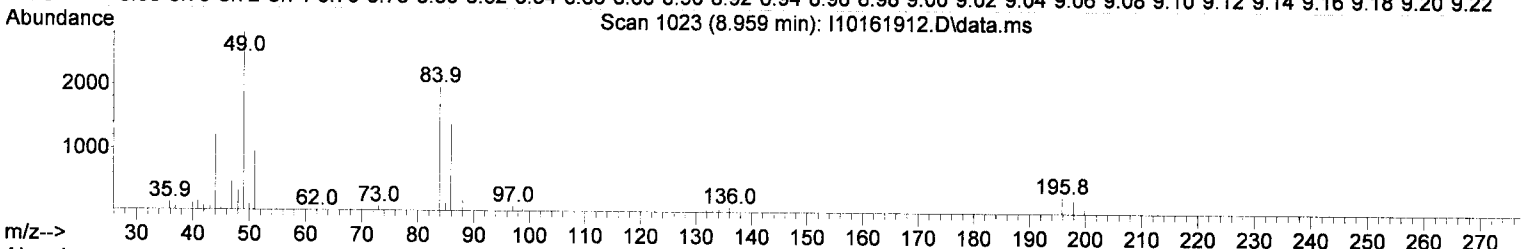
R = 2.12e-002 A*A + 1.22e-001 A - 9.10e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

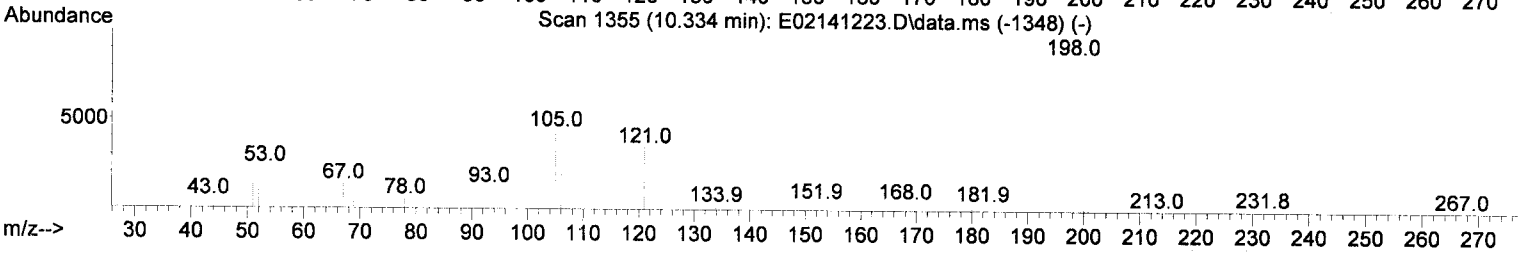
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







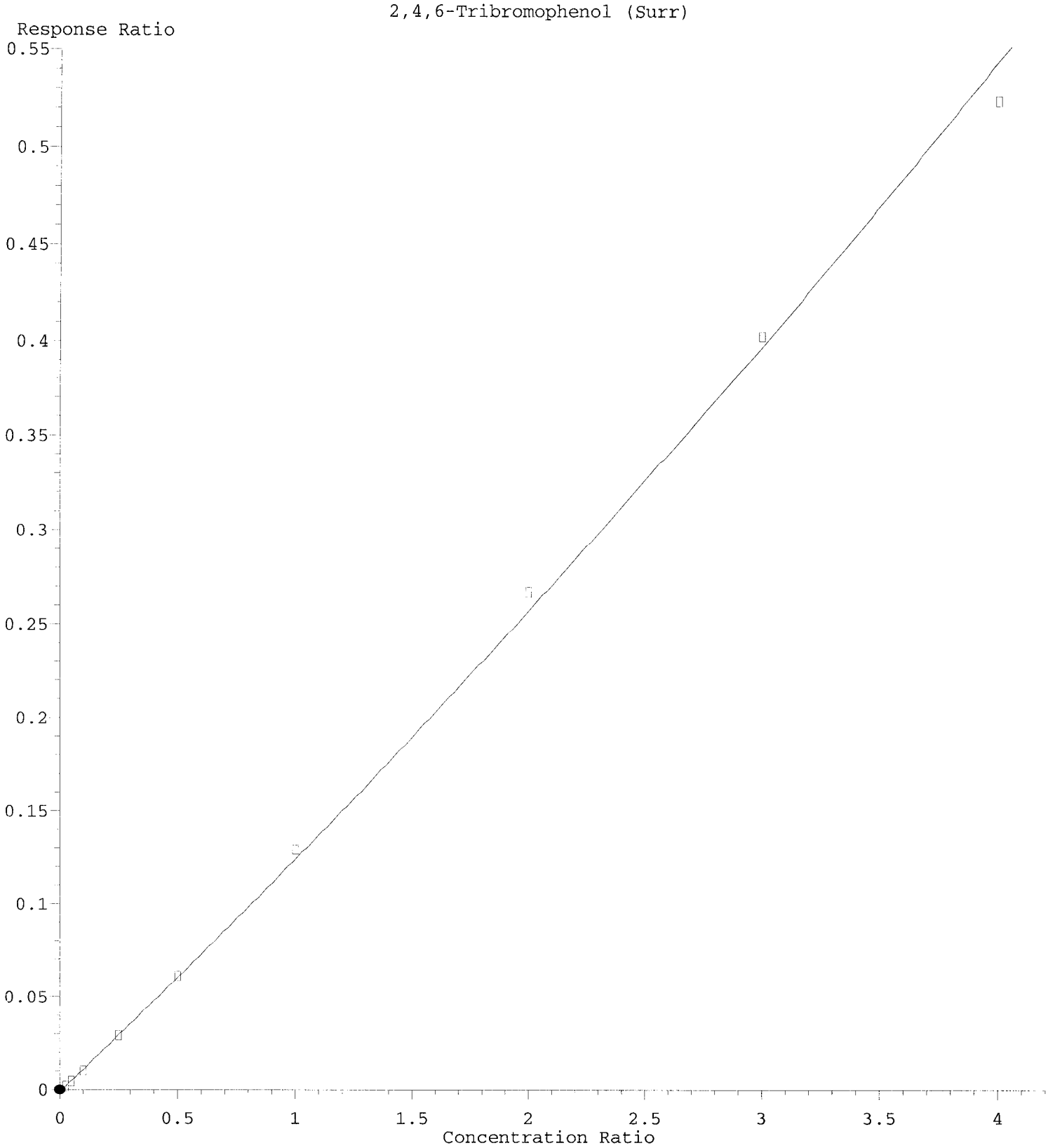
TIC: I10161912.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

8.959min (-1.336) 155.89 ng/ml m

response 114

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	46.50	0.00#
77.00	25.30	0.00
0.00	0.00	0.00

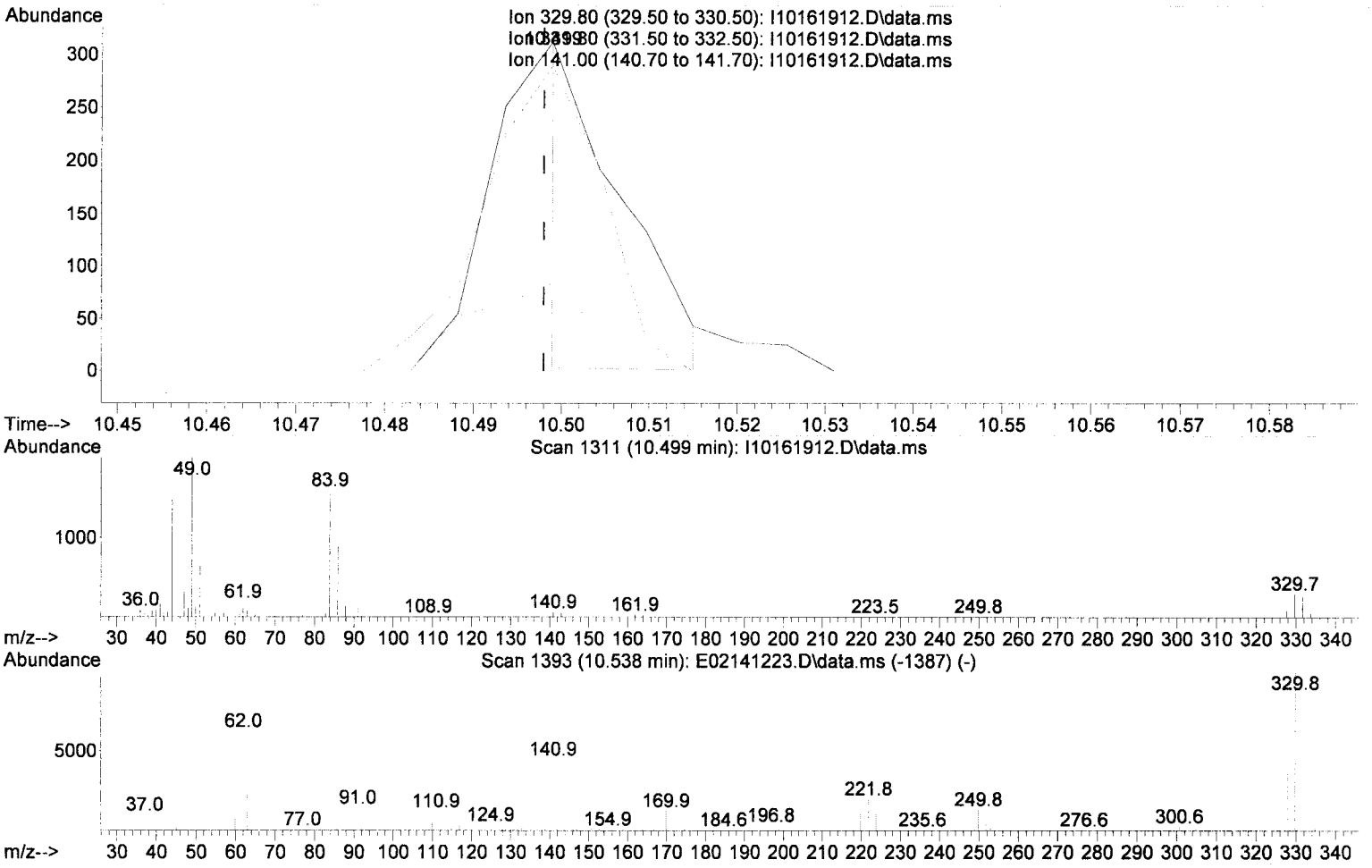


R = 3.70e-003 A*A + 1.22e-001 A - 1.39e-003
Coef of Det (r^2) = 0.998 , Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



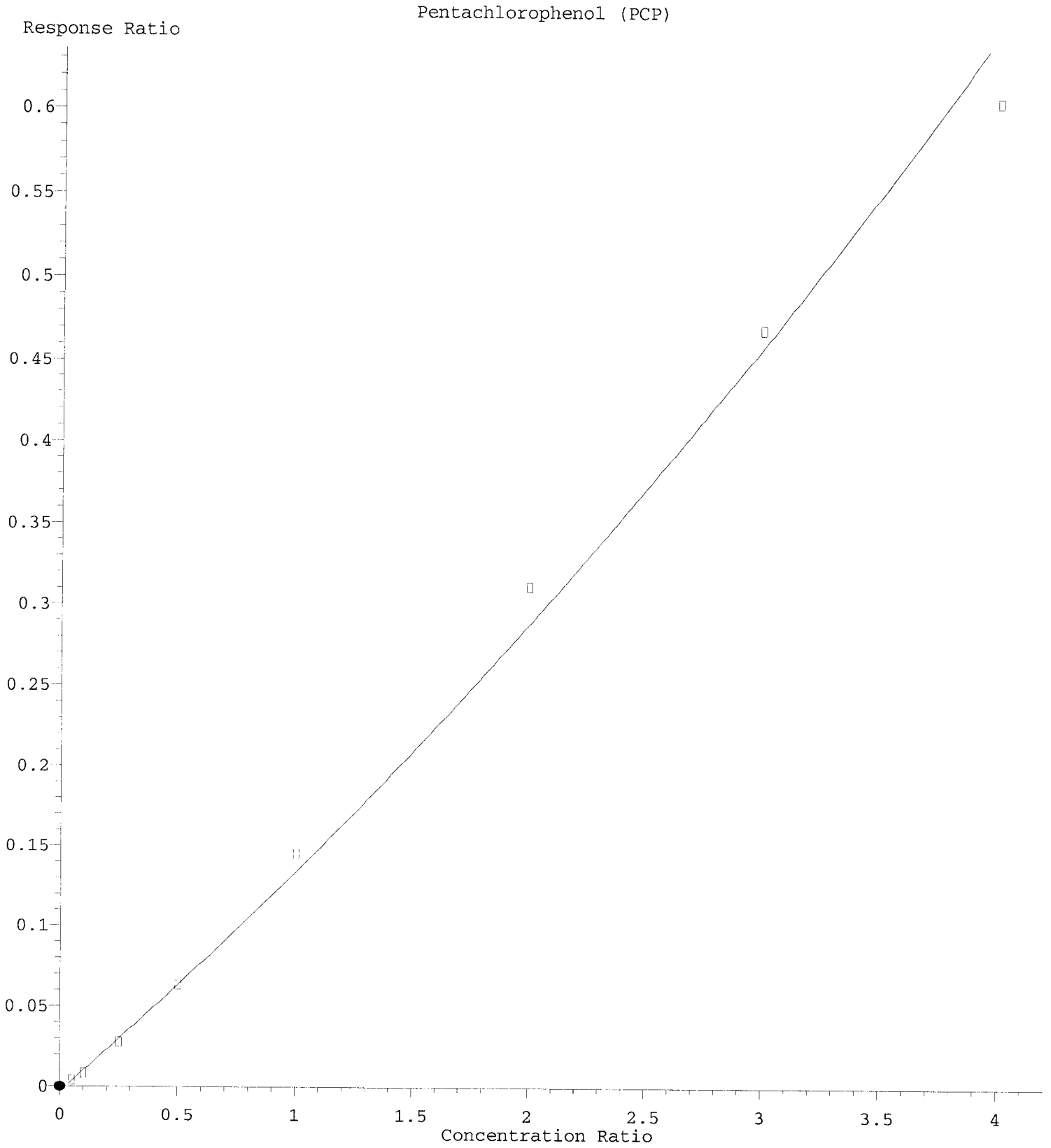
TIC: I10161912.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.499min (+ 0.001) 27.33 ng/ml m

response 116

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	99.50	92.65
141.00	32.90	26.84
0.00	0.00	0.00

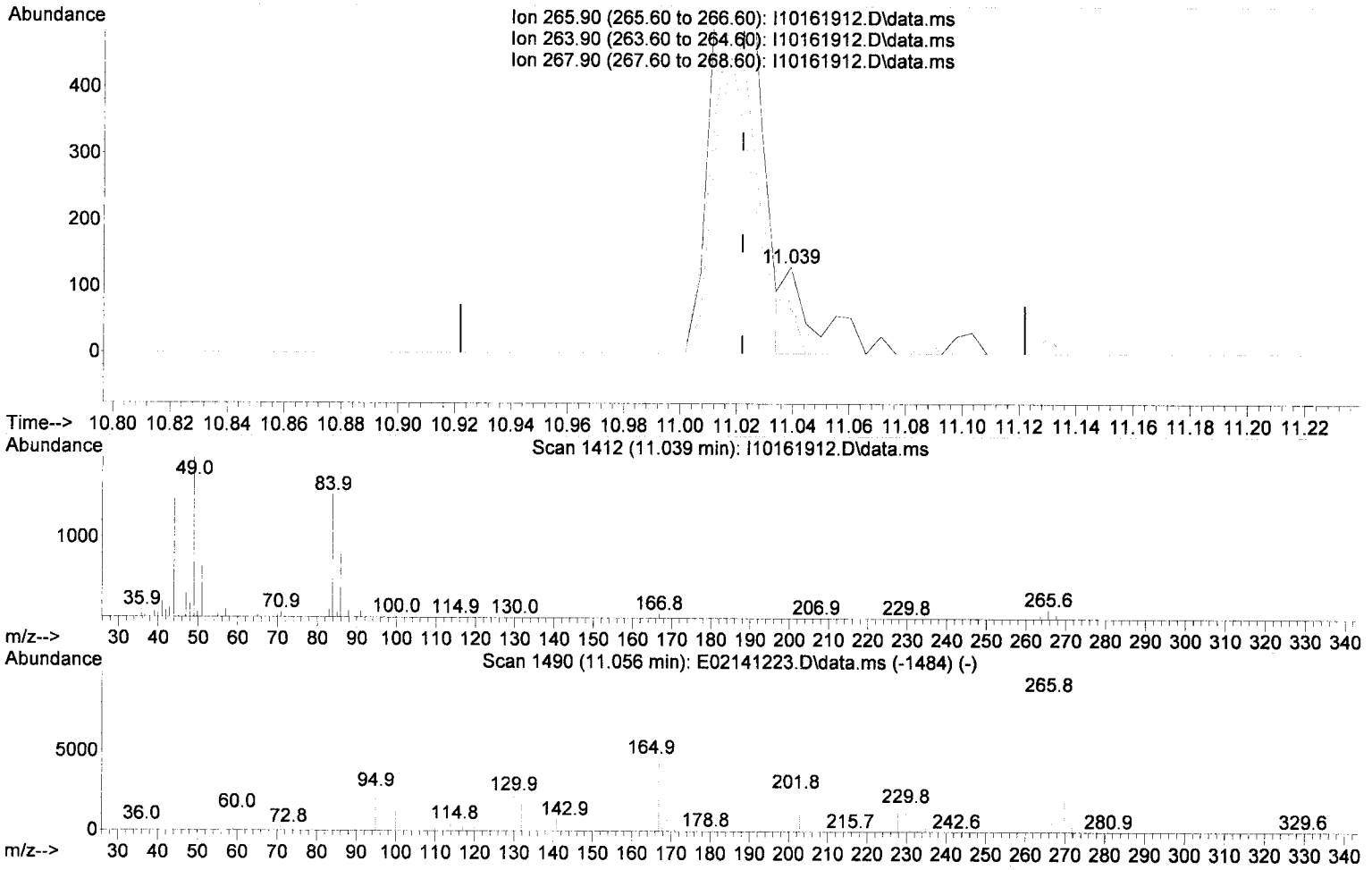


R = 8.44e-003 A*A + 1.28e-001 A - 2.95e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



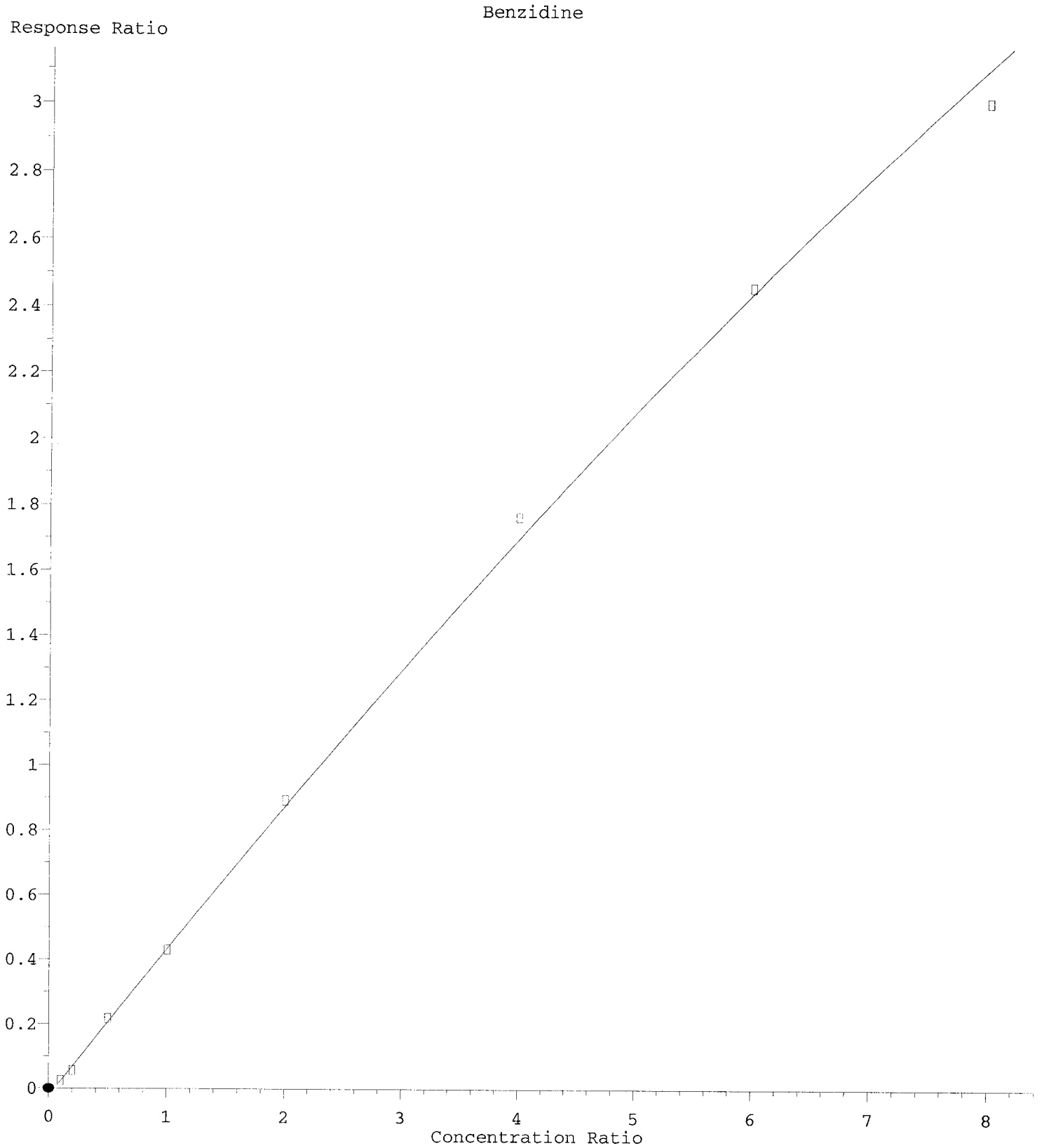
TIC: I10161912.D\data.ms

(70) Pentachlorophenol (PCP) (T)

11.039min (+ 0.017) 49.49 ng/ml m

response 100

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	62.10	55.73
267.90	66.50	51.15
0.00	0.00	0.00

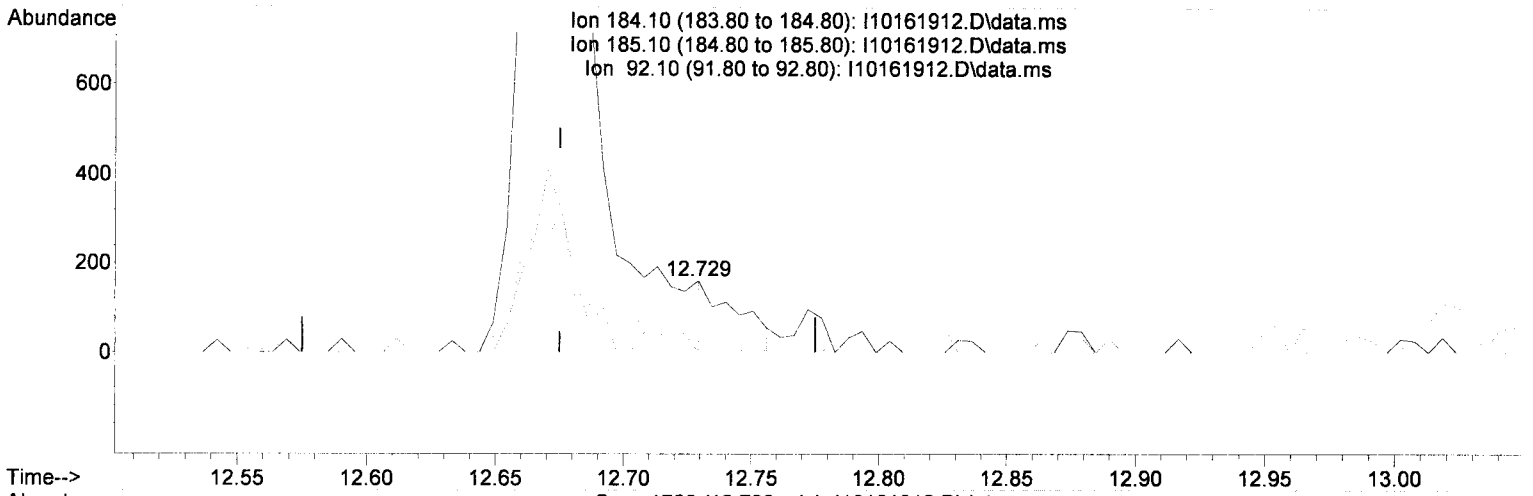


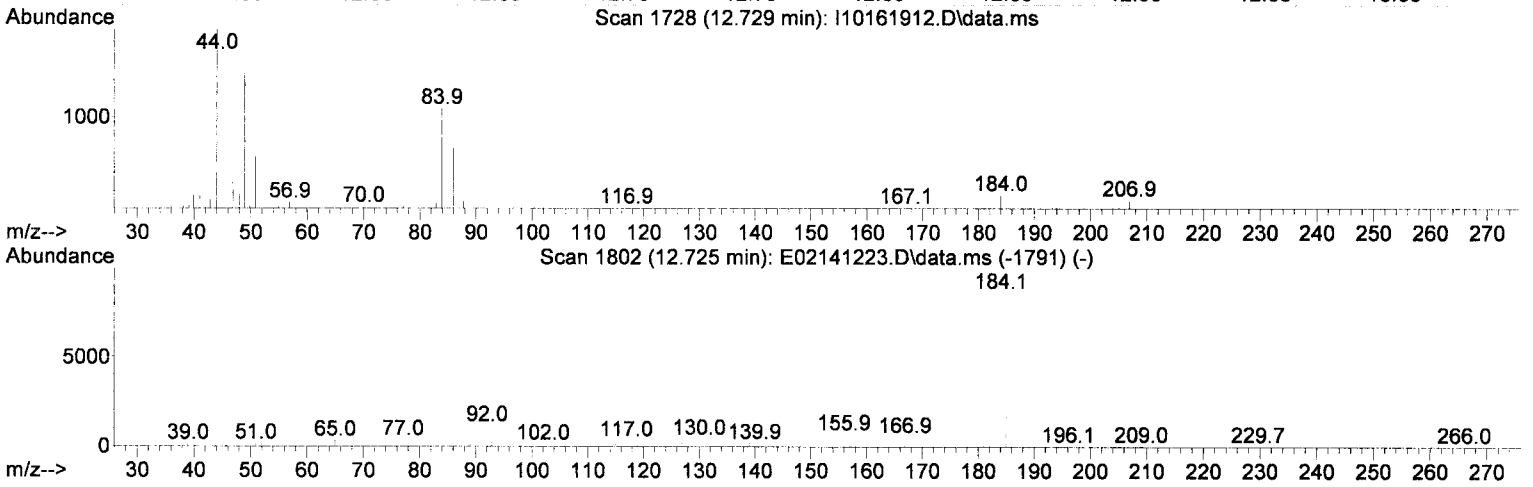
R = -9.61e-003 A*A + 4.69e-001 A - 2.55e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





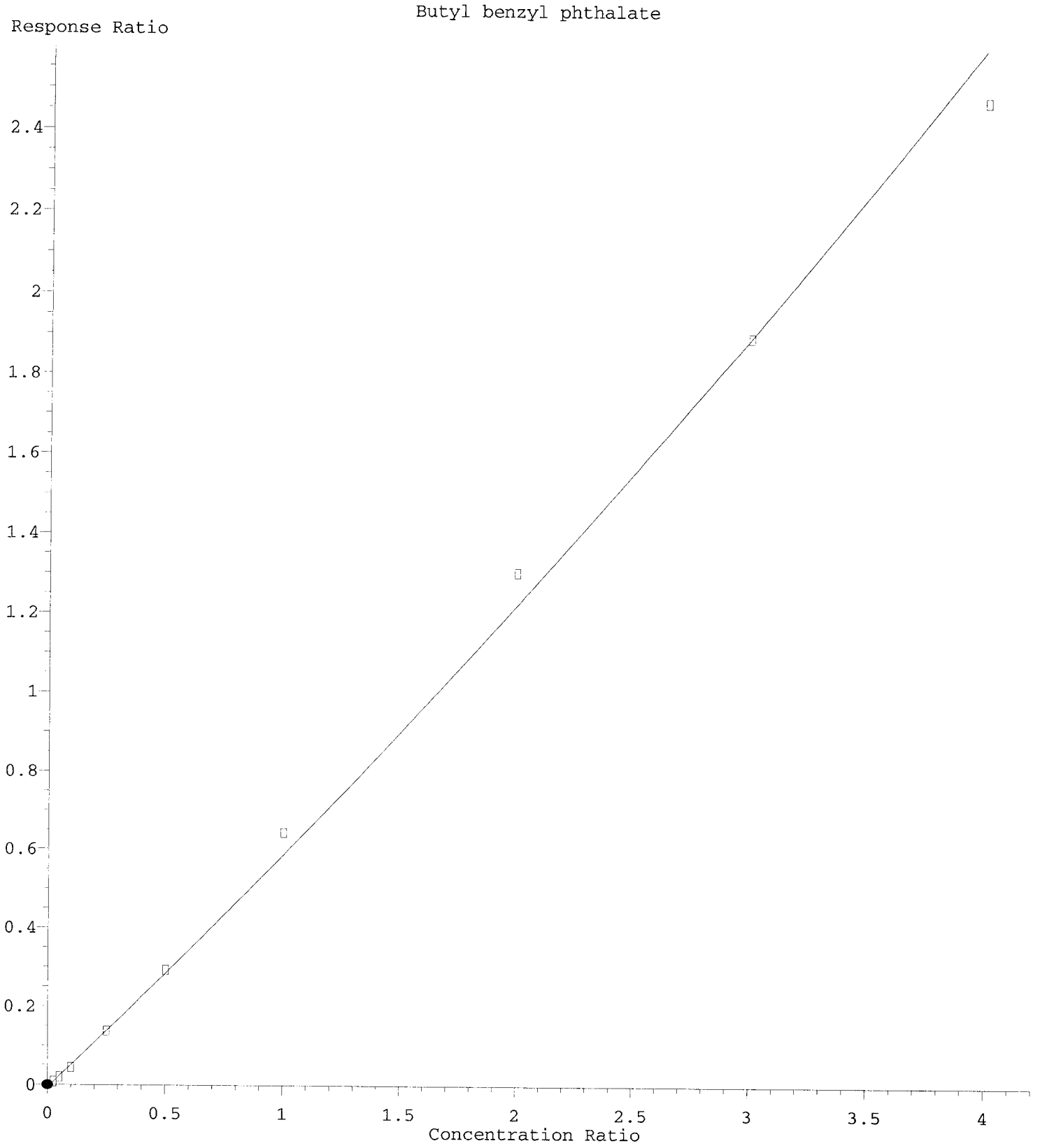
TIC: I10161912.D\data.ms

(76) Benzidine (T)

12.729min (+ 0.054) 110.62 ng/ml m

response 142

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.70	0.00
92.10	9.90	15.63
0.00	0.00	0.00

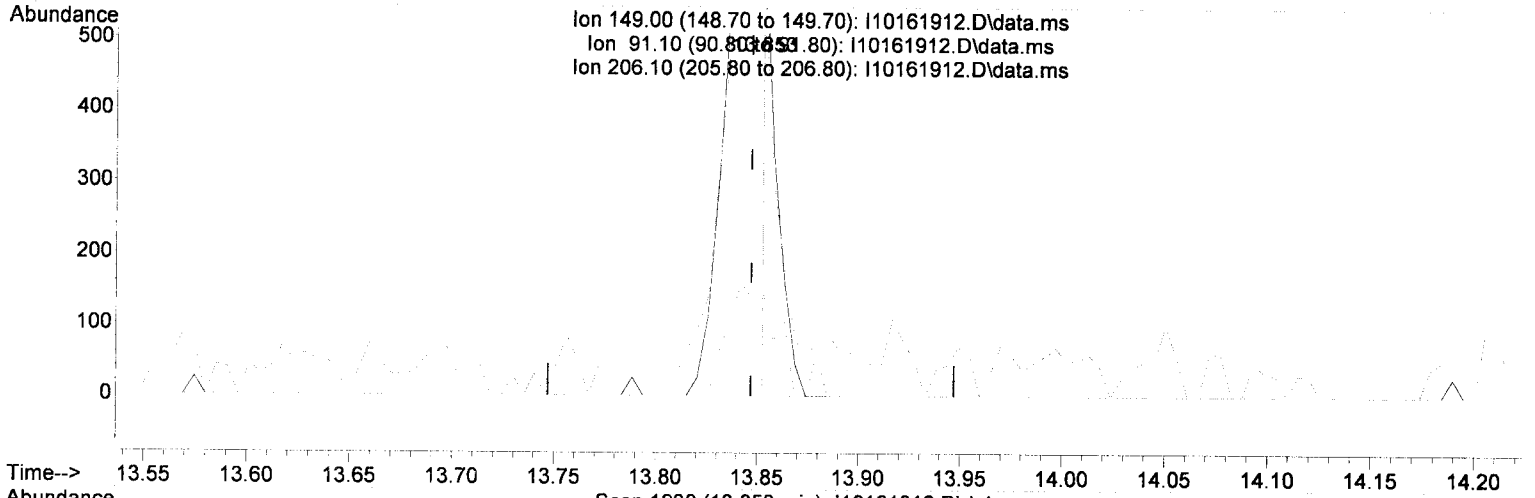


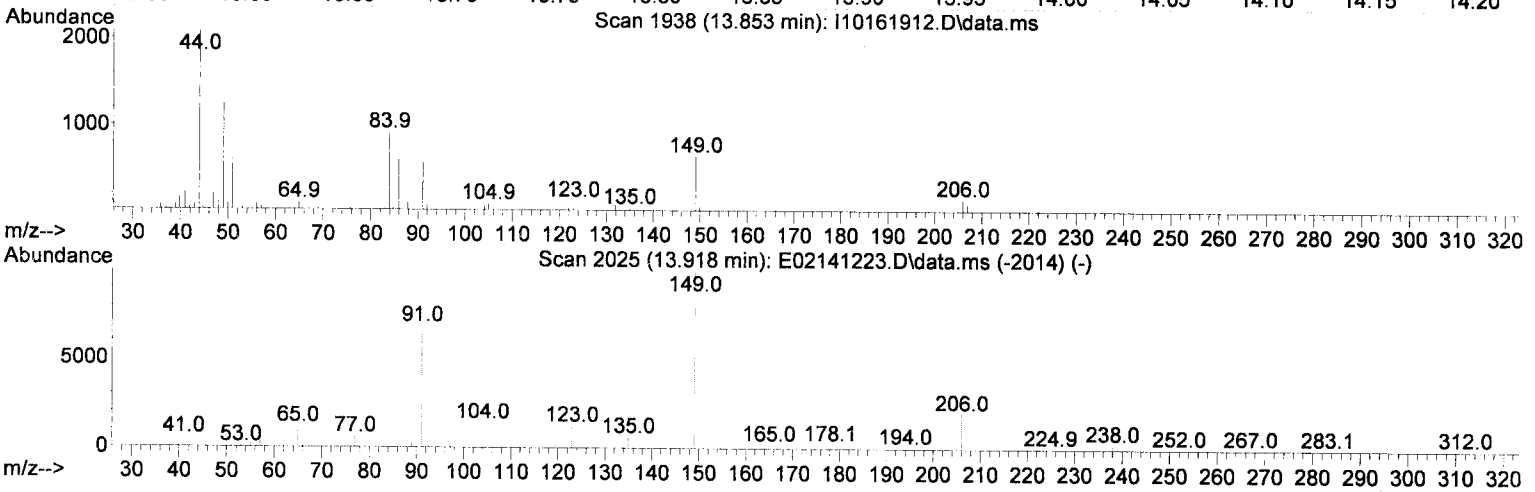
R = 1.95e-002 A*A + 5.75e-001 A - 7.34e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w/(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





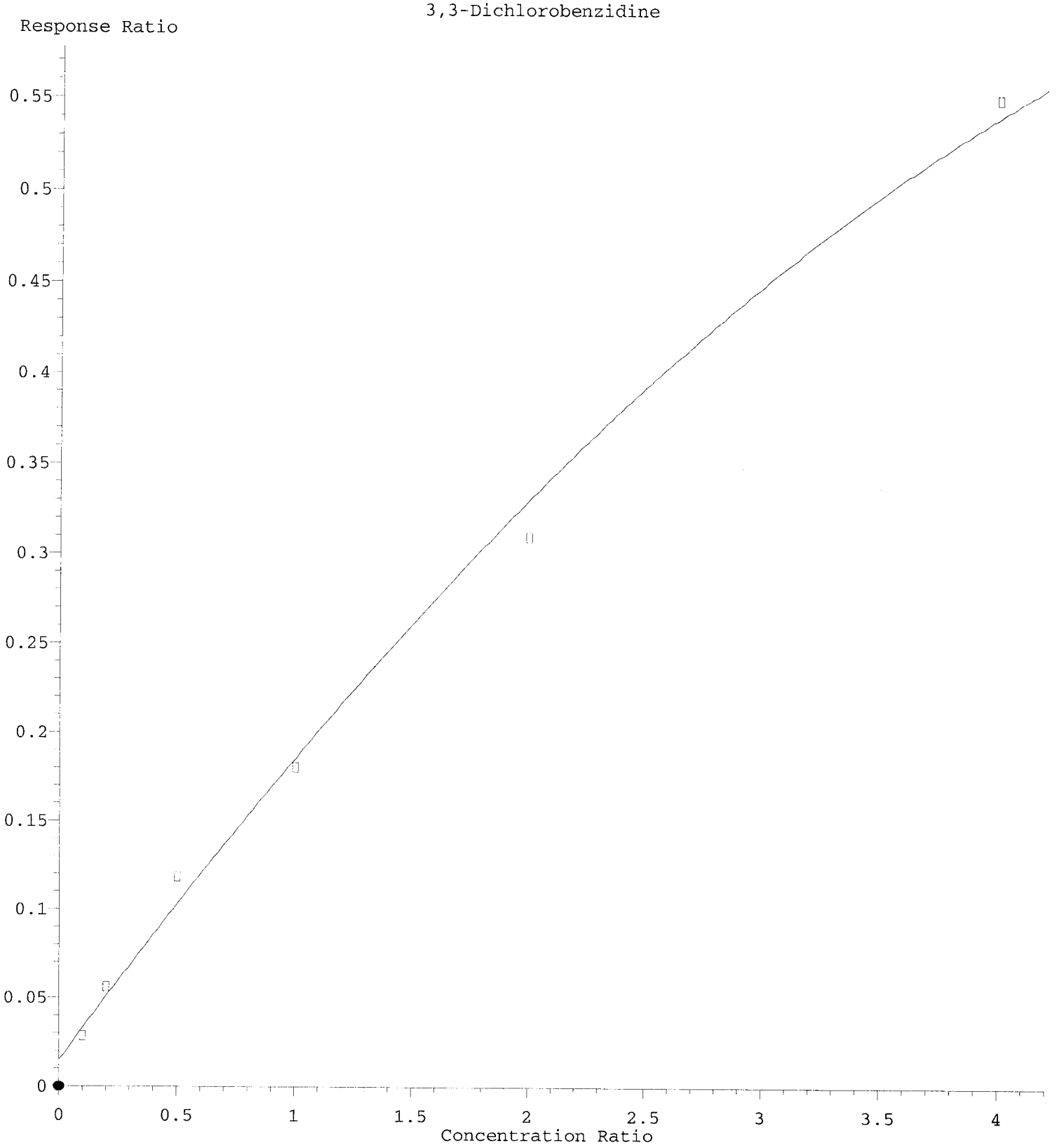
TIC: I10161912.D\data.ms

(80) Butyl benzyl phthalate (T)

13.853min (+ 0.006) 26.93 ng/ml m

response 174

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	73.80	87.93
206.10	20.40	22.91
0.00	0.00	0.00

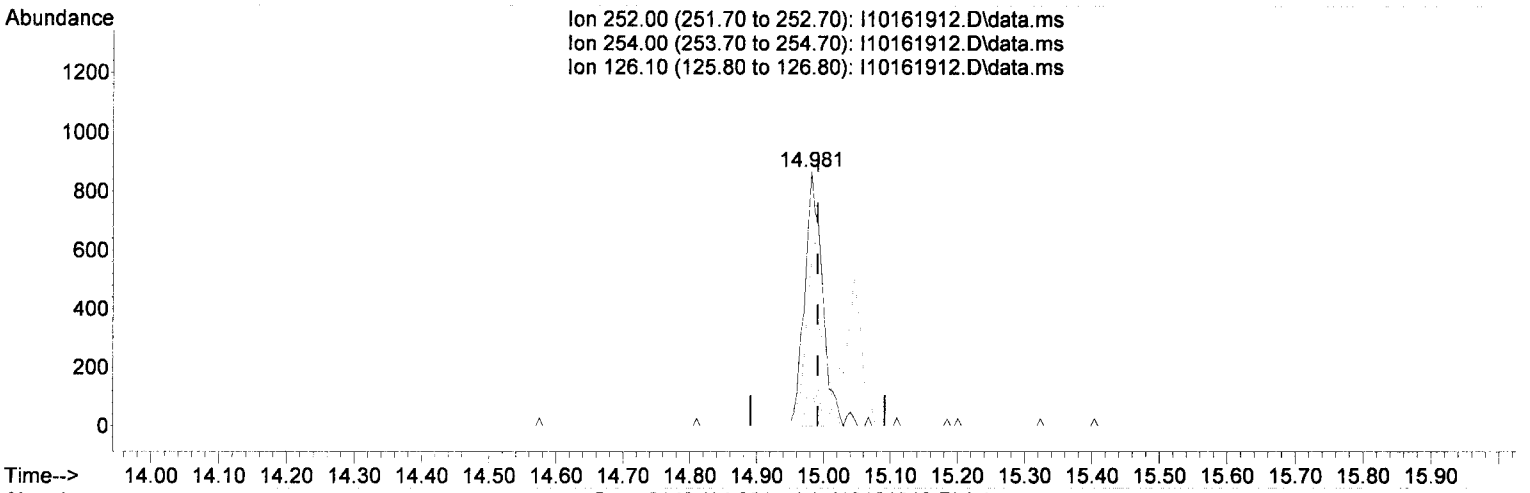


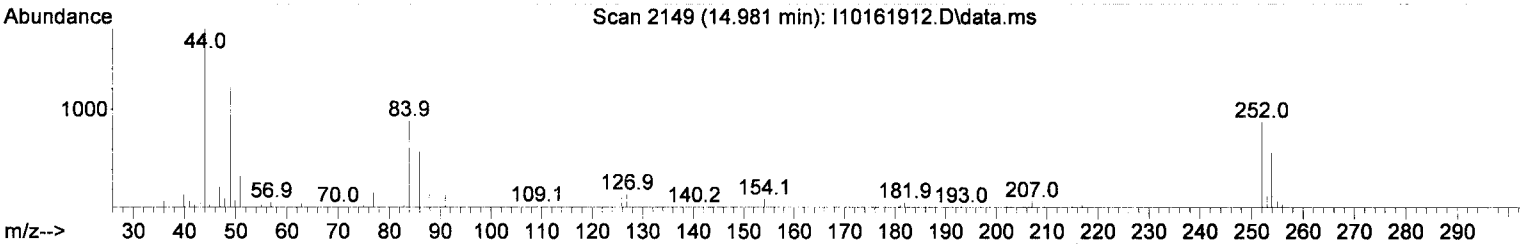
R = -1.30e-002 A*A + 1.84e-001 A + 1.46e-002
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

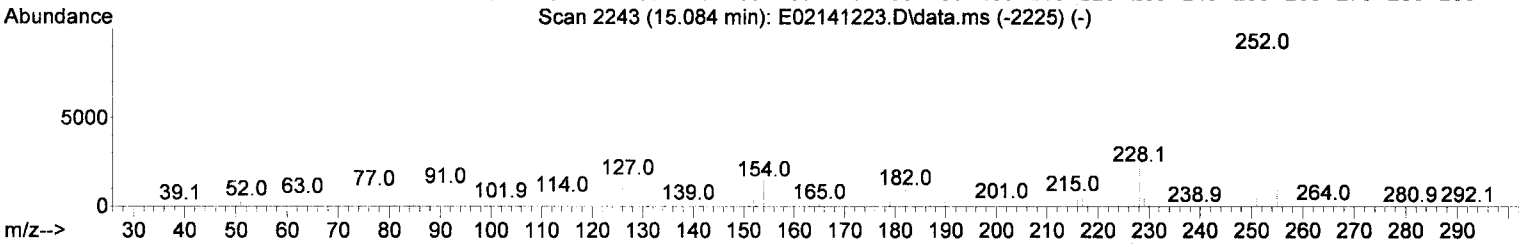
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9







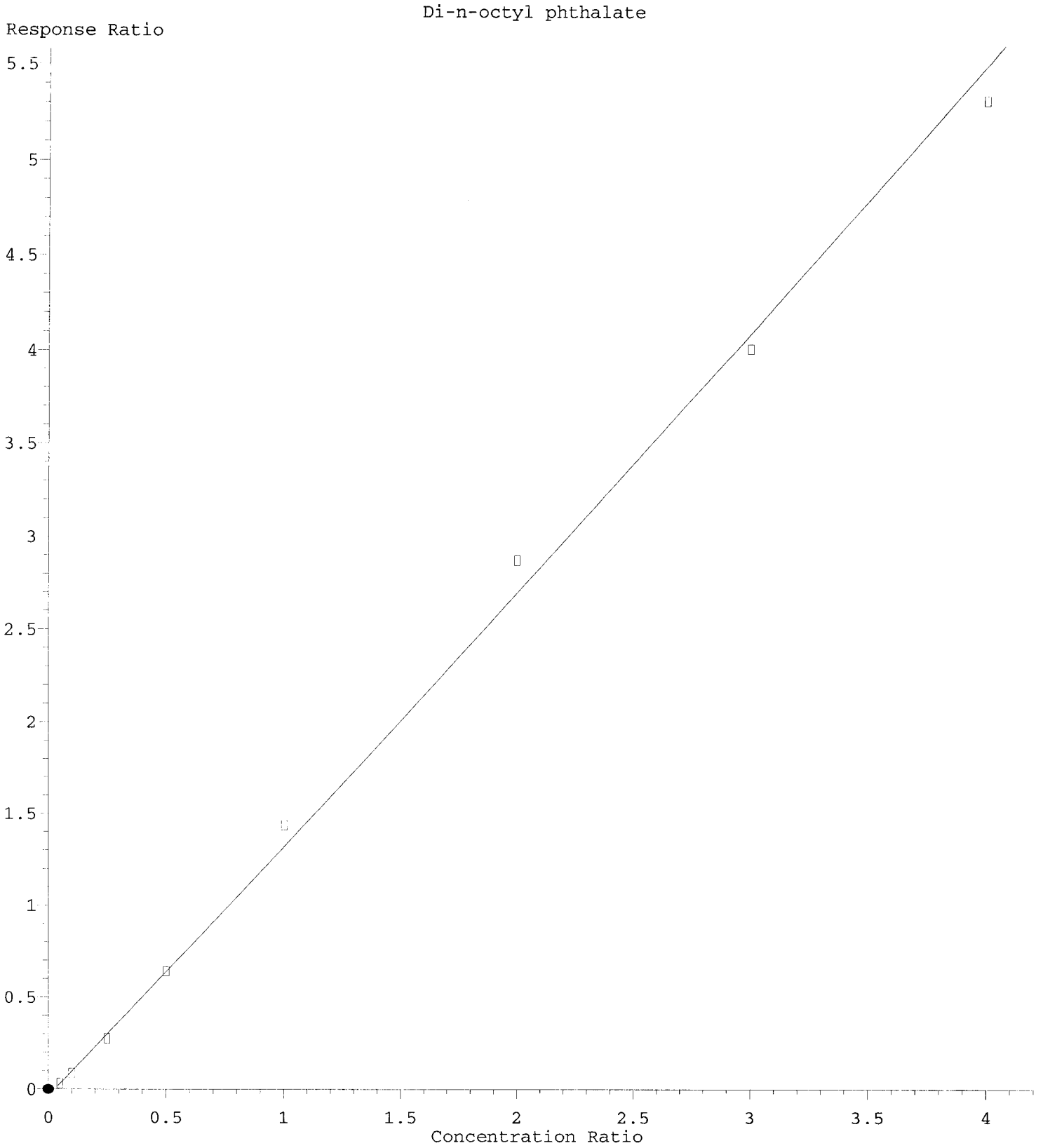
TIC: I10161912.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.981min (-0.010) -1.00 ng/ml

response 1592

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	65.28
126.10	14.00	14.07
0.00	0.00	0.00

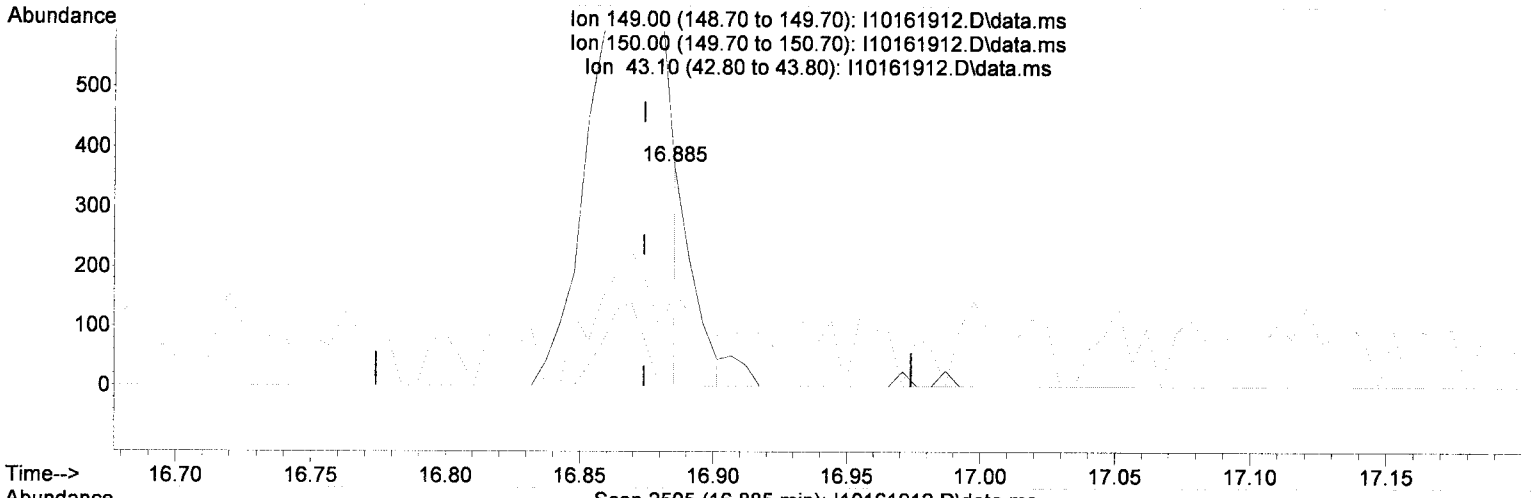


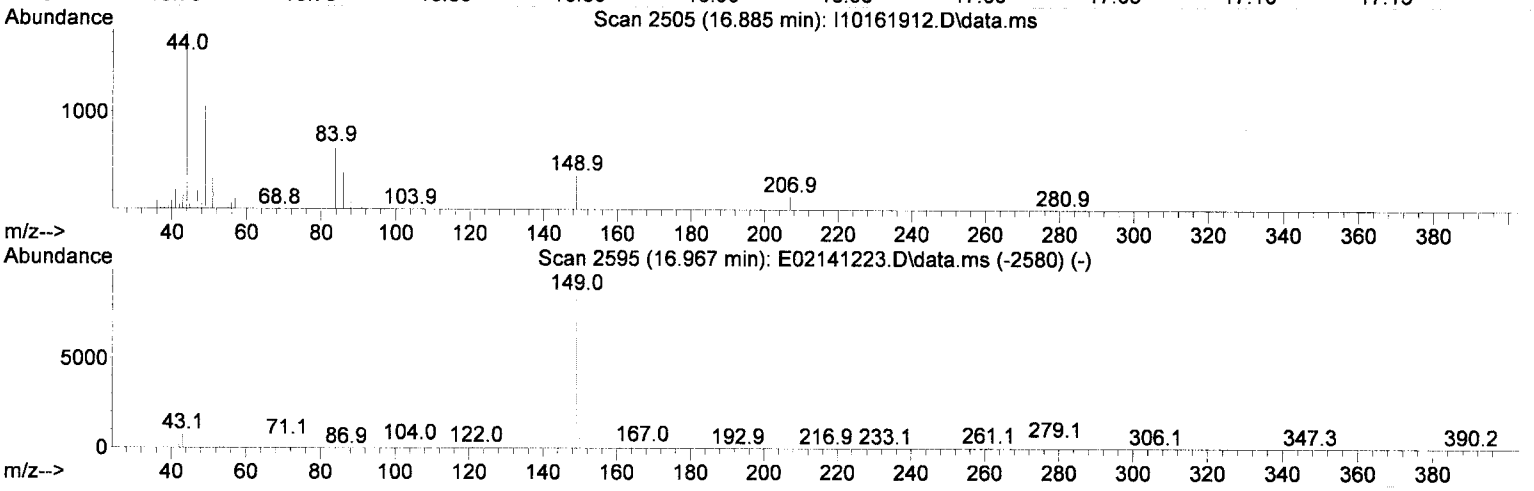
R = 8.70e-003 A*A + 1.35e+000 A - 3.91e-002
Coef of Det (r^2) = 0.995 , Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





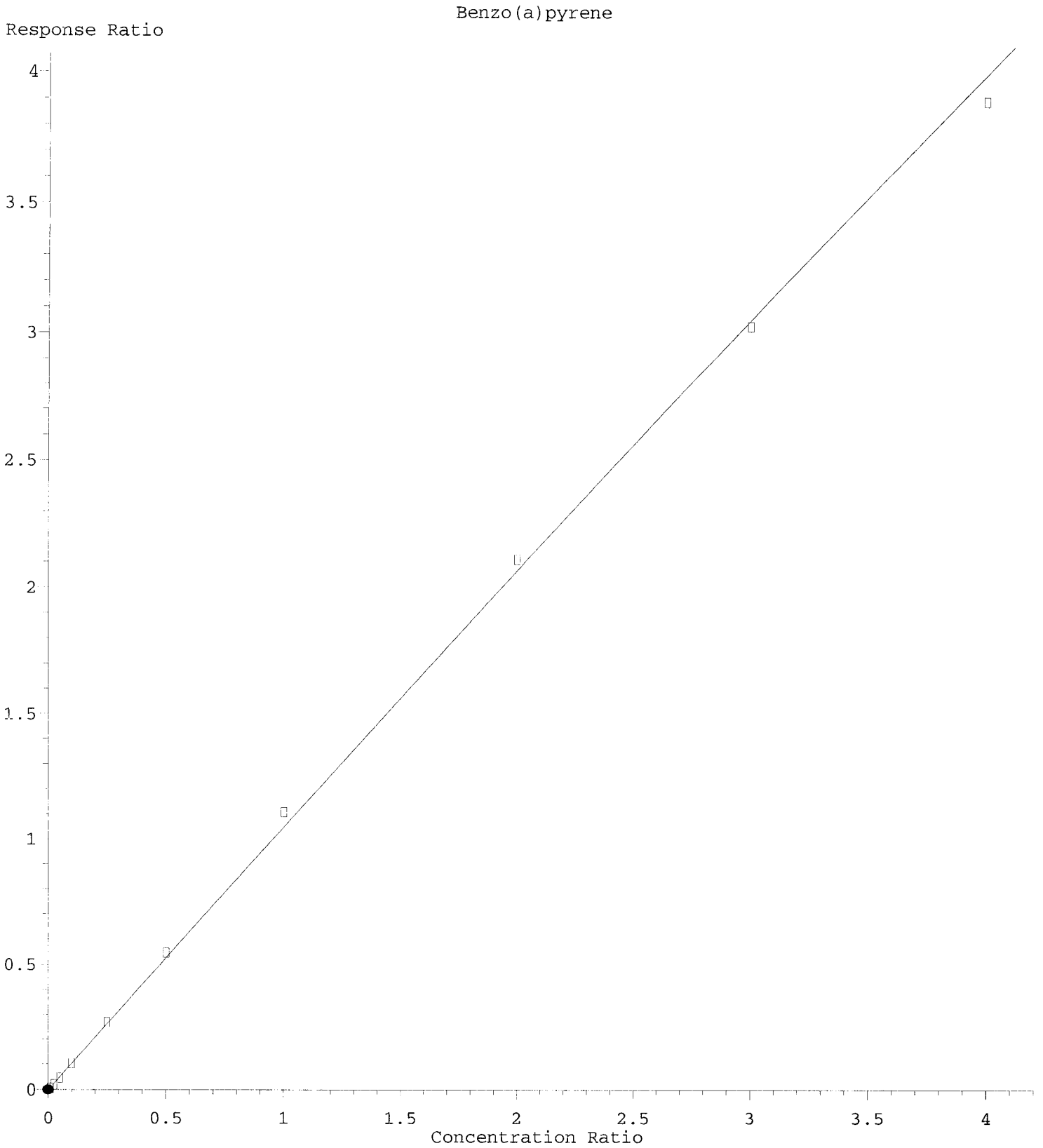
TIC: I10161912.D\data.ms

(87) Di-n-octyl phthalate (T)

16.885min (+ 0.011) 58.40 ng/ml m

response 119

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.20	0.00
43.10	10.80	43.36#
0.00	0.00	0.00

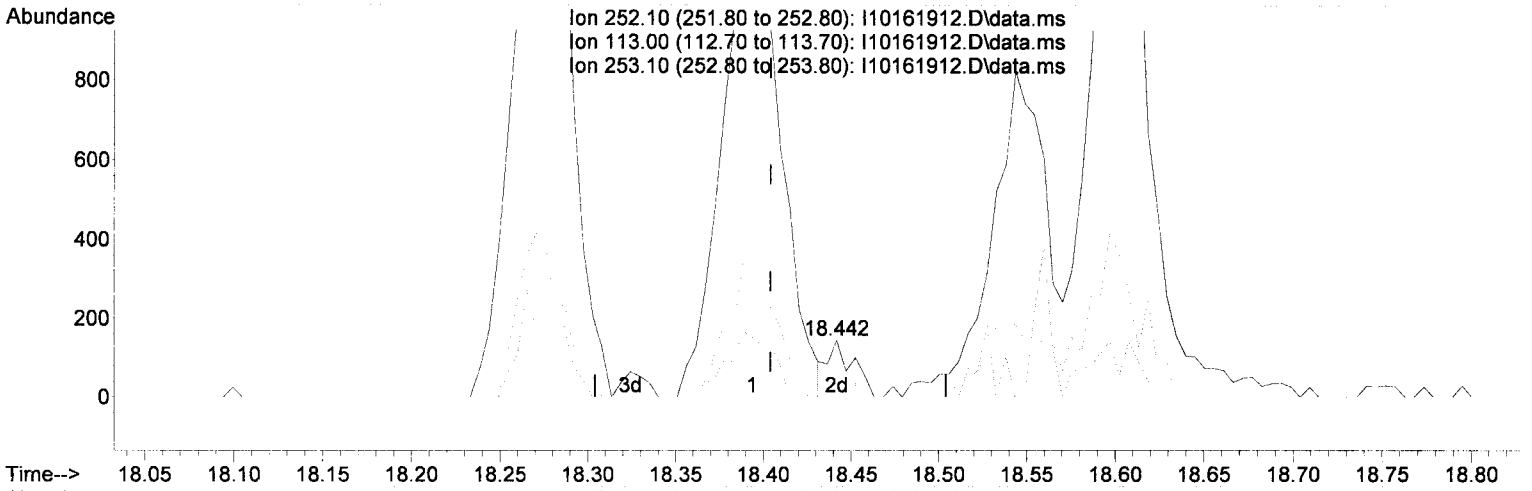


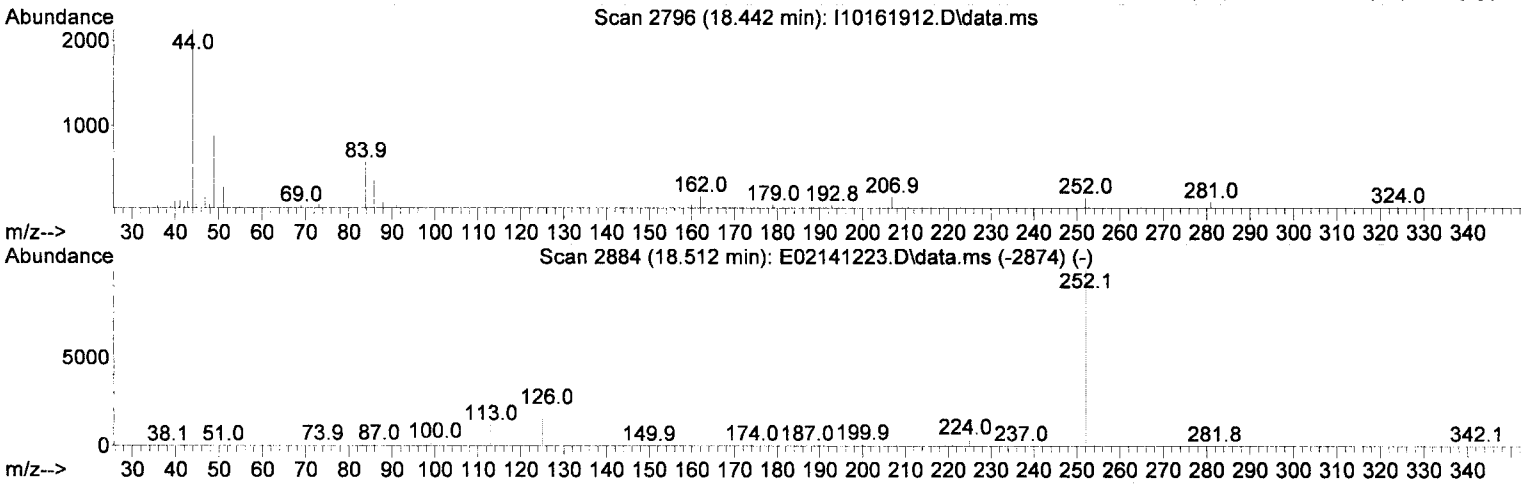
R = -1.74e-002 A*A + 1.07e+000 A - 4.58e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_101619.M
Calibration Table Last Updated: Thu Oct 17 12:32:32 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\REQUANT\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 12:57:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161912.D\data.ms

(92) Benzo(a)pyrene (T)

18.442min (+ 0.038) 9.13 ng/ml m

response 128

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	10.80	0.00
253.10	22.90	19.31
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9J16053

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed	
9J16053-TUN1	MS Tune	Soil	A19J016	A19G233	10/16/2019	4:07:00PM
9J16053-ICB1	Initial Cal Blank	Soil		A19G233	10/16/2019	4:34:00PM
9J16053-CAL1	Cal Standard	Soil	A19G238	"	10/16/2019	5:09:00PM
9J16053-CAL2	Cal Standard	Soil	A19G239	"	10/16/2019	5:44:00PM
9J16053-CAL3	Cal Standard	Soil	A19G240	"	10/16/2019	6:19:00PM
9J16053-CAL4	Cal Standard	Soil	A19G241	"	10/16/2019	6:54:00PM
9J16053-CAL5	Cal Standard	Soil	A19G242	"	10/16/2019	7:30:00PM
9J16053-CAL6	Cal Standard	Soil	A19G243	"	10/16/2019	8:05:00PM
9J16053-CAL7	Cal Standard	Soil	A19G244	"	10/16/2019	8:40:00PM
9J16053-CAL8	Cal Standard	Soil	A19G245	"	10/16/2019	9:14:00PM
9J16053-CAL9	Cal Standard	Soil	A19G246	"	10/16/2019	9:49:00PM
9J16053-CALA	Cal Standard	Soil	A19G247	"	10/16/2019	10:24:00PM
9J16053-ICV1	Initial Cal Check	Soil	A19I254	"	10/16/2019	11:33:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J1803** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9J16053** Matrix: **Soil**

9J16053-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-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: 9J16053

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: **A9J1803** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9J16053** Matrix: **Soil**

9J16053-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: 9J16053

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9J16053-TUN1	MS Tune	Water	A19J016	A19G233	10/16/2019 4:07:00PM
9J16053-ICB1	Initial Cal Blank	Water		A19G233	10/16/2019 4:34:00PM
9J16053-CAL1	Cal Standard	Water	A19G238	"	10/16/2019 5:09:00PM
9J16053-CAL2	Cal Standard	Water	A19G239	"	10/16/2019 5:44:00PM
9J16053-CAL3	Cal Standard	Water	A19G240	"	10/16/2019 6:19:00PM
9J16053-CAL4	Cal Standard	Water	A19G241	"	10/16/2019 6:54:00PM
9J16053-CAL5	Cal Standard	Water	A19G242	"	10/16/2019 7:30:00PM
9J16053-CAL6	Cal Standard	Water	A19G243	"	10/16/2019 8:05:00PM
9J16053-CAL7	Cal Standard	Water	A19G244	"	10/16/2019 8:40:00PM
9J16053-CAL8	Cal Standard	Water	A19G245	"	10/16/2019 9:14:00PM
9J16053-CAL9	Cal Standard	Water	A19G246	"	10/16/2019 9:49:00PM
9J16053-CALA	Cal Standard	Water	A19G247	"	10/16/2019 10:24:00PM
9J16053-ICV1	Initial Cal Check	Water	A19I254	"	10/16/2019 11:33:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9J1803** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9J16053** Matrix: **Water**

9J16053-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9J16053-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: 9J16053

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: **A9J1803** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9J16053** Matrix: **Water**

9J16053-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

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

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	98	0.00
2	T	N-Nitrosodimethylamine	1000.000	962.446	3.8	95	0.00
3	T	Pyridine	1000.000	870.093	13.0	85	0.01
4	S	2-Fluorophenol (Surr)	1000.000	979.880	2.0	94	0.00
5	S	Phenol-d6 (Surr)	1000.000	1034.035	-3.4	96	0.00
6	T	Phenol	1000.000	1017.510	-1.8	97	0.00
7	T	Aniline	1000.000	919.514	8.0	92	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1054.557	-5.5	98	0.00
9	T	2-Chlorophenol	1000.000	1063.881	-6.4	99	0.00
10	T	1,3-Dichlorobenzene	1000.000	1008.128	-0.8	98	0.00
11	T	1,4-Dichlorobenzene	1000.000	997.215	0.3	97	0.00
12	T	Benzyl alcohol	1000.000	972.384	2.8	89	0.00
13	T	1,2-Dichlorobenzene	1000.000	1014.944	-1.5	97	0.00
14	T	2-Methylphenol	1000.000	1103.297	-10.3	101	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	942.252	5.8	92	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1022.292	-2.2	95	0.00
17	T	3+4-Methylphenol	1000.000	1061.213	-6.1	94	0.00
18	T	Hexachloroethane	1000.000	1021.570	-2.2	99	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1123.585	-12.4	102	0.00
20	T	Nitrobenzene	1000.000	1086.148	-8.6	97	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	99	0.00
22	T	Isophorone	1000.000	1027.168	-2.7	97	0.00
23	T	2-Nitrophenol	1000.000	1122.187	-12.2	105	0.00
24	T	2,4-Dimethylphenol	1000.000	1039.762	-4.0	94	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1041.105	-4.1	96	0.00
26	T	Benzoic acid	2000.000	1748.344	12.6	83	0.00
27	T	2,4-Dichlorophenol	1000.000	1054.418	-5.4	97	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1029.385	-2.9	99	0.00
29	T	Naphthalene	1000.000	1028.989	-2.9	98	0.00
30	T	4-Chloroaniline	1000.000	927.481	7.3	90	0.00
31	T	Hexachlorobutadiene	1000.000	1016.945	-1.7	100	0.00
32	T	4-Chloro-3-methylphenol	1000.000	994.599	0.5	95	0.00
33	T	2-Methylnaphthalene	1000.000	1066.214	-6.6	98	0.00
34	T	1-Methylnaphthalene	1000.000	1059.020	-5.9	99	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	99	0.00
36	T	Hexachlorocyclopentadiene	1000.000	994.036	0.6	91	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1015.450	-1.5	98	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1032.606	-3.3	97	0.00
39	T	1,1'-Biphenyl	1000.000	1063.192	-6.3	96	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1073.638	-7.4	99	0.00
41	T	2-Chloronaphthalene	1000.000	1066.440	-6.6	97	0.00
42	T	2-Nitroaniline	1000.000	1029.228	-2.9	100	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1040.044	-4.0	95	0.00
44	T	1,4-Dinitrobenzene	1000.000	1003.651	-0.4	108	0.00
45	T	Dimethyl phthalate	1000.000	1036.771	-3.7	98	0.00
46	T	1,3-Dinitrobenzene	1000.000	998.654	0.1	104	0.00
47	T	2,6-Dinitrotoluene	1000.000	1046.423	-4.6	99	0.00
48	T	1,2-Dinitrobenzene	1000.000	991.160	0.9	97	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1039.761	-4.0	98	0.00
50	T	3-Nitroaniline	1000.000	869.325	13.1	87	0.00
51	T	Acenaphthene	1000.000	1024.424	-2.4	98	0.00
52	T	2,4-Dinitrophenol	1000.000	966.046	3.4	99	0.00
53	T	4-Nitrophenol	1000.000	979.868	2.0	93	0.00
54	T	2,4-Dinitrotoluene	1000.000	993.559	0.6	98	0.00
55	T	Dibenzofuran	1000.000	1028.254	-2.8	97	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1002.754	-0.3	96	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1003.972	-0.4	92	0.00
58	T	Diethyl phthalate	1000.000	1019.702	-2.0	97	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1039.964	-4.0	96	0.00
60	T	Fluorene	1000.000	1004.883	-0.5	97	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1027.798	-2.8	98	0.00
62	T	4-Nitroaniline	1000.000	933.765	6.6	89	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1015.341	-1.5	109	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	98	0.00
65	T	N-Nitrosodiphenylamine	1000.000	983.980	1.6	94	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	949.430	5.1	94	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	991.893	0.8	96	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1008.027	-0.8	97	0.00
69	T	Hexachlorobenzene	1000.000	1061.983	-6.2	103	0.00
70	T	Pentachlorophenol (PCP)	1000.000	976.185	2.4	96	0.00
71	T	Phenanthrene	1000.000	1020.754	-2.1	96	0.00
72	T	Anthracene	1000.000	1026.292	-2.6	94	0.00
73	T	Carbazole	1000.000	832.589	16.7	87	0.00
74	T	Di-n-butyl phthalate	1000.000	1062.496	-6.2	96	0.00
75	T	Fluoranthene	1000.000	1051.634	-5.2	95	0.00
76	T	Benzidine	2000.000	1525.647	23.7	74	0.00
77	T	Pyrene	1000.000	1066.742	-6.7	95	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	94	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1042.443	-4.2	95	0.00
80	T	Butyl benzyl phthalate	1000.000	996.013	0.4	91	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1010.502	-1.1	93	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1766.404	11.7	87	0.00
83	T	Benz(a)anthracene	1000.000	1026.777	-2.7	96	0.00
84	T	Chrysene	1000.000	999.031	0.1	93	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1028.727	-2.9	93	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	94	0.00
87	T	Di-n-octyl phthalate	1000.000	966.334	3.4	90	0.00
88	T	Benzo(b)fluoranthene	1000.000	1047.954	-4.8	91	0.00
89	T	Benzo(k)fluoranthene	1000.000	1120.667	-12.1	92	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2155.044	-7.8	91	0.00
91	T	Benzo(e)pyrene	1000.000	1038.228	-3.8	90	0.00
92	T	Benzo(a)pyrene	1000.000	951.211	4.9	86	0.00
93	T	Perylene	1000.000	1199.802	-20.0	107	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	92	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	981.169	1.9	91	0.01
96 T	Dibenz(a,h)anthracene	1000.000	1003.353	-0.3	89	0.00
97 T	Benzo(g,h,i)perylene	1000.000	1065.457	-6.5	90	0.00

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161910.D
Acq On : 16 Oct 2019 4:07 pm
Operator : JK /AMS /DTH
Sample : 9J16053-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 17 09:26:38 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9

9/2 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.921	136	133481	2.00	ug/mL	0.00
2) Acenaphthene-d10	9.697	162	65336	2.00	ug/mL	0.00
4) Phenanthrene-d10	11.210	188	97755	2.00	ug/mL	0.00
10) Chrysene-d12	14.949	240	85323	2.00	ug/mL	0.00
11) Perylene-d12	17.035	264	78474	2.00	ug/mL	0.00
Target Compounds						Qvalue
3) Pentachlorophenol	11.023	266	276241	37.69	ug/mL	87
5) DFTPP	11.504	442	395830	48.17	ug/mL#	55
6) Benzidine	12.686	184	1012337	34.40	ug/mL	91
7) 4,4-DDE	12.949	TIC	12045	No Calib	#	
8) 4,4-DDD	13.467	TIC	8168	2.02	ug/mL#	1
9) 4,4-DDT	14.045	TIC	3561767	43.23	ug/mL#	1

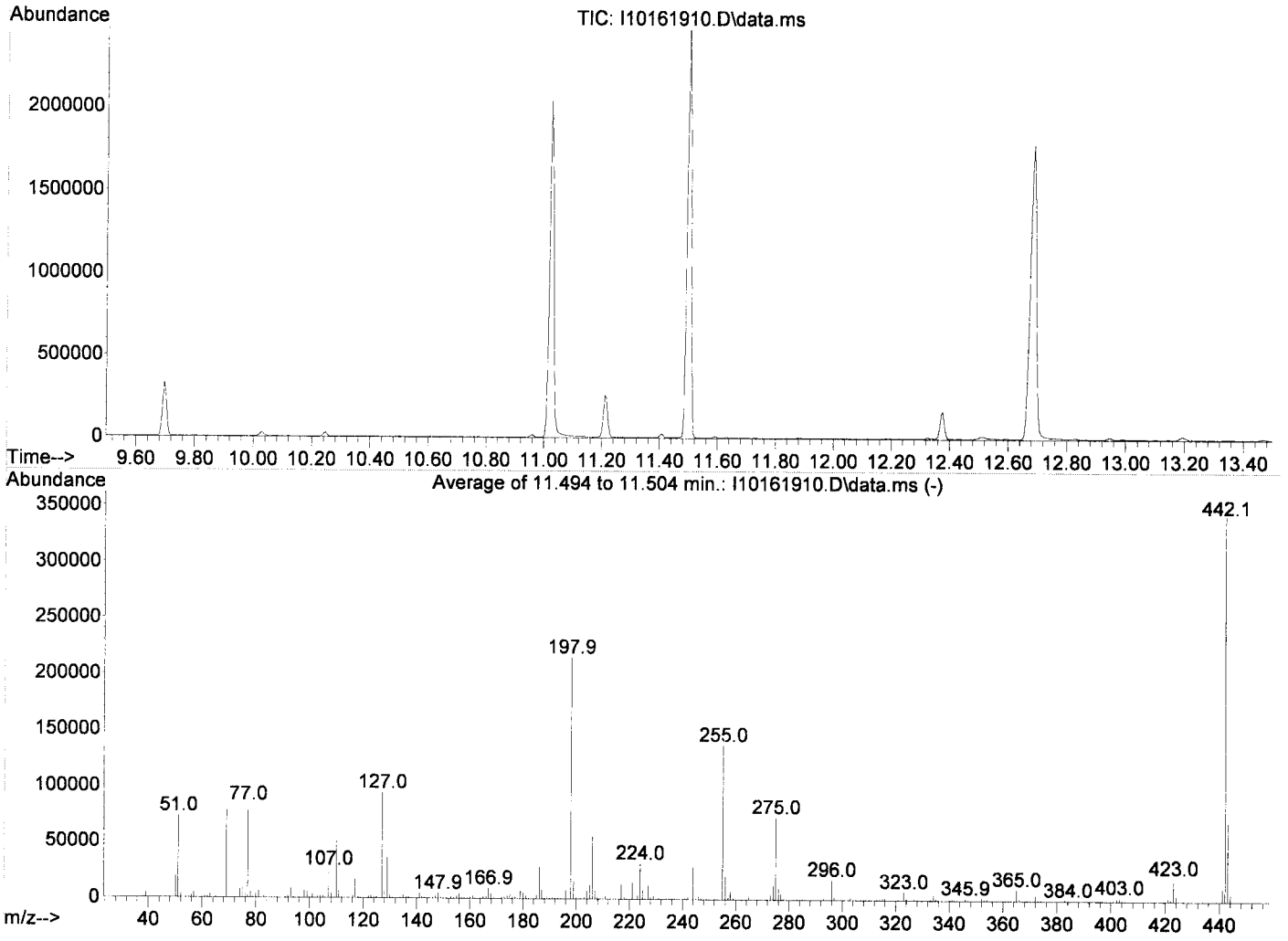
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : T:\data\2019-10\9J16053\
Data File : I10161910.D
Acq On : 16 Oct 2019 4:07 pm
Operator : JK /AMS /DTH
Sample : 9J16053-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : DFTPP Tune Methodug/mL
Last Update : Thu Oct 17 09:26:26 2019

10/17/19



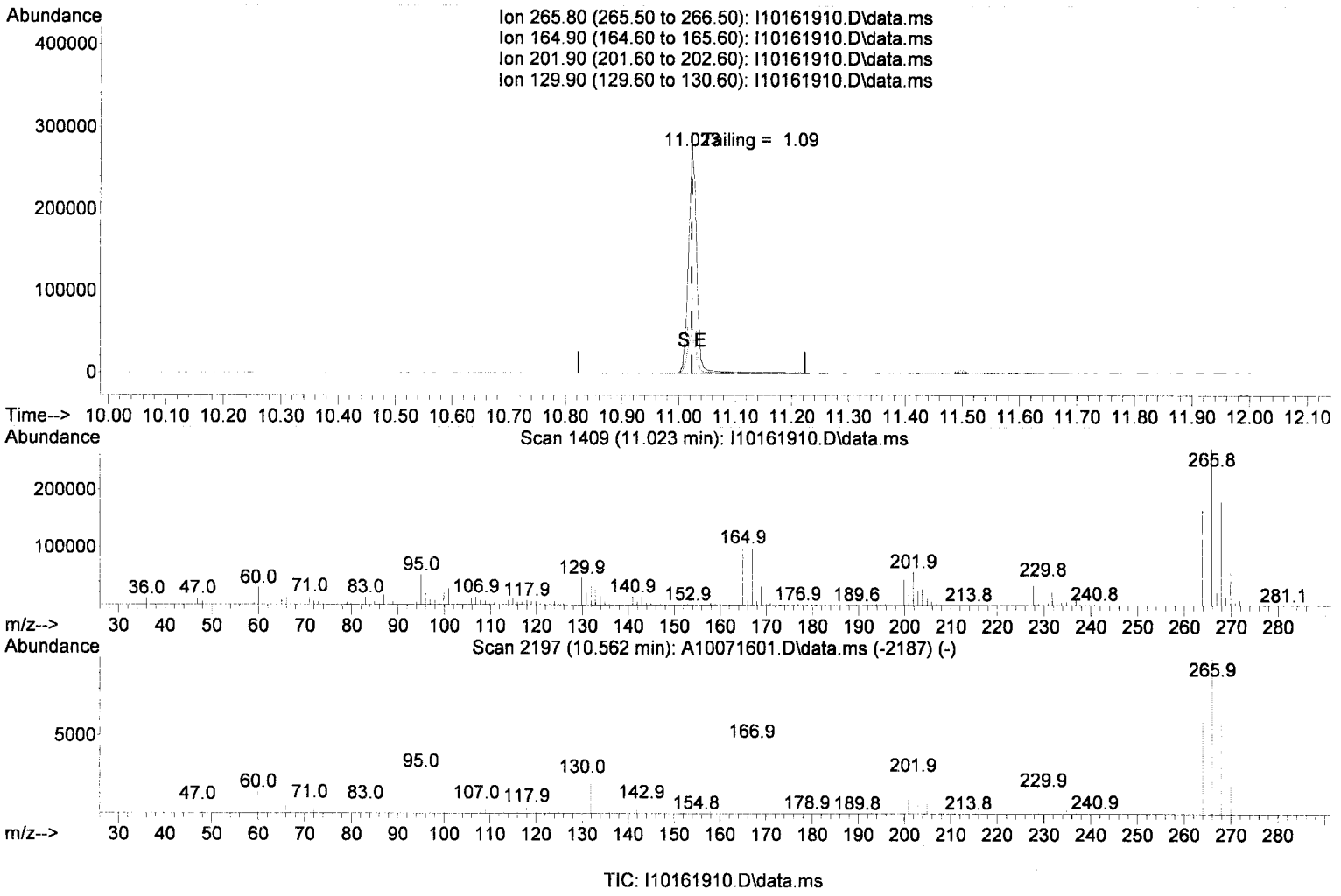
AutoFind: Scans 1497, 1498, 1499; Background Corrected with Scan 1490

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	77934	PASS
70	69	0.00	2	0.5	381	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	214955	PASS
199	198	5	9	7.2	15571	PASS
365	198	1	100	4.5	9699	PASS
441	443	0.01	150	16.4	11437	PASS
442	198	0.10	200	159.9	343659	PASS
443	442	15	24	20.4	69936	PASS

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161910.D
Acq On : 16 Oct 2019 4:07 pm
Operator : JK /AMS /DTH
Sample : 9J16053-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 17 09:26:38 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161910.D\data.ms

(3) Pentachlorophenol

11.023min (0.000) 37.69 ug/mL

response 276241

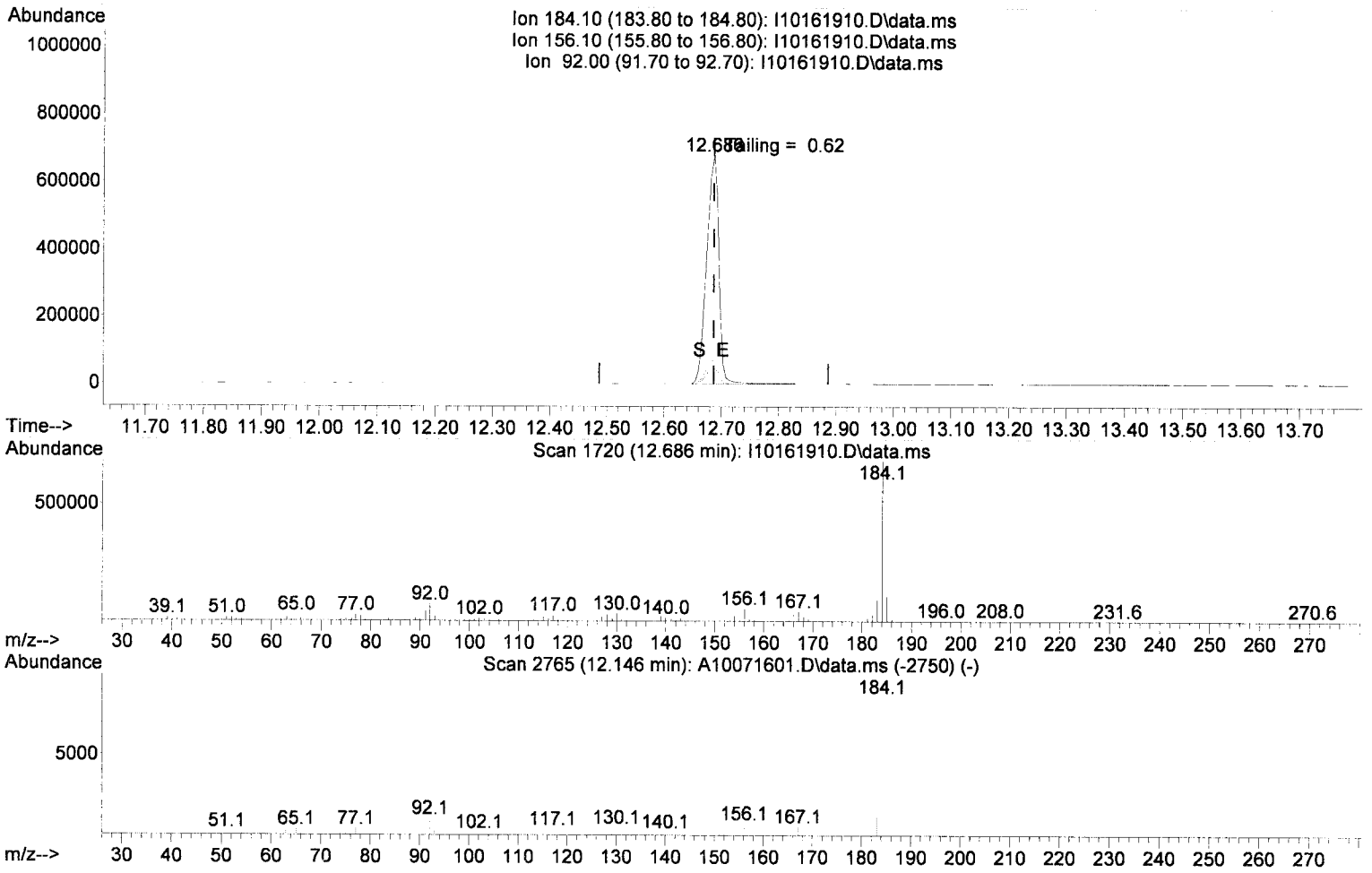
Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	36.72
201.90	26.10	21.28
129.90	22.80	17.33

JK 10/17/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161910.D
Acq On : 16 Oct 2019 4:07 pm
Operator : JK /AMS /DTH
Sample : 9J16053-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 17 09:26:38 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161910.D\data.ms

(6) Benzidine

12.686min (0.000) 34.40 ug/mL

response 1012337

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.62
92.00	15.50	10.38
0.00	0.00	0.00

10/17/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9J16053-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	12045		
DDD	8168		
DDT	3561767	**0.56**	**PASS**

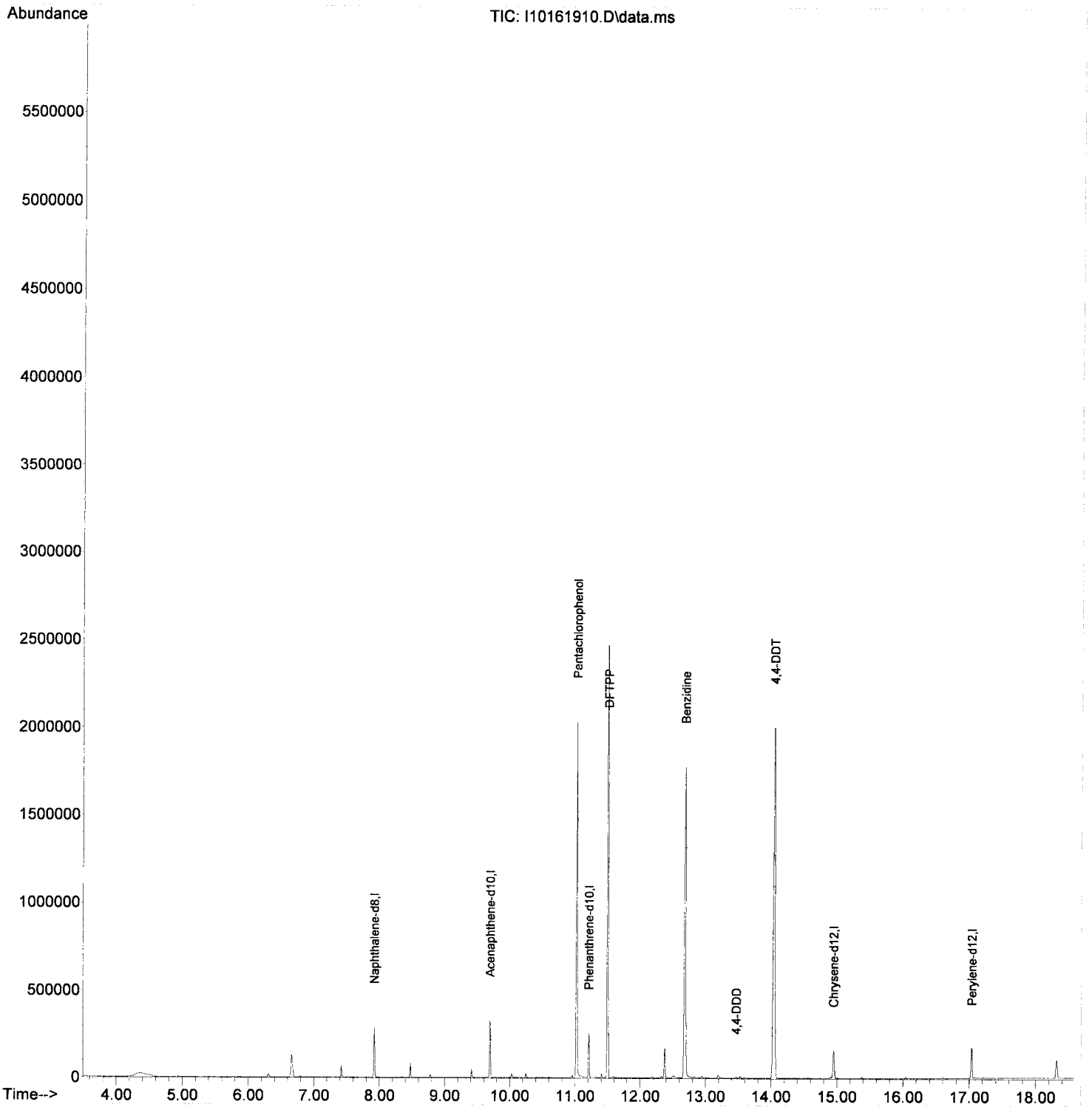
10/17/19

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161910.D
Acq On : 16 Oct 2019 4:07 pm
Operator : JK /AMS /DTH
Sample : 9J16053-TUN1
Misc : 1x, A19J016 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 17 09:26:38 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu Oct 17 09:26:26 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	111120	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	441084	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	229361	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.210	188	410587	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	414594	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.543	264	407095	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.939	292	322955	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	6.803	108	127	33.63	ng/ml#	45
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	7.177	77	61	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	7.578	122	81	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

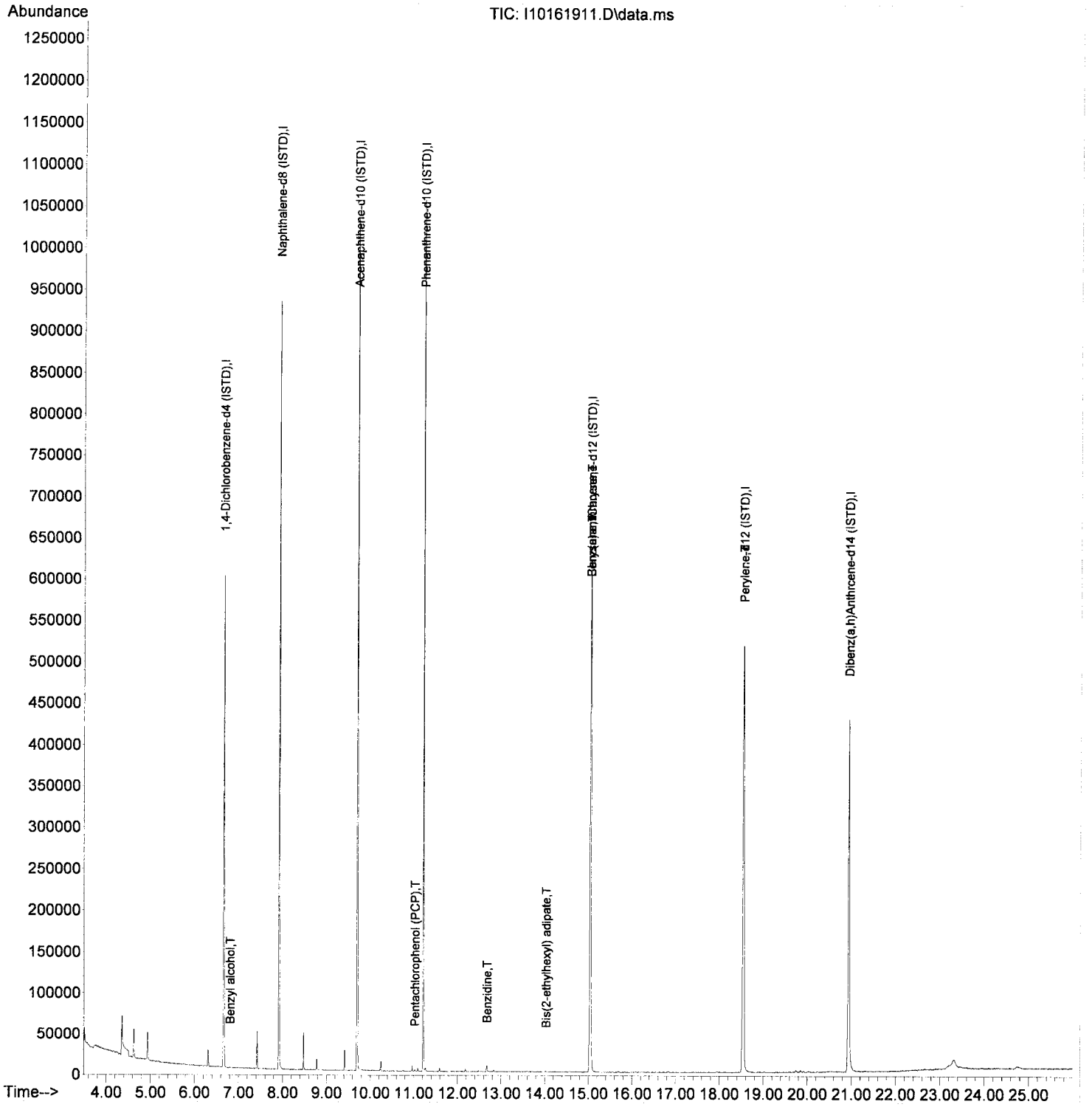
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.328	77	82	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.018	266	377	33.68 ng/ml	88
71) Phenanthrene	11.210	178	142	N.D.	
72) Anthracene	11.210	178	142	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	12.670	184	4346	66.79 ng/ml	95
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.029	129	284	2.93 ng/ml	80
82) 3,3-Dichlorobenzidine	14.981	252	134	Below Cal	88
83) Benz(a)anthracene	15.040	228	1055	4.44 ng/ml	69
84) Chrysene	15.040	228	1056	4.86 ng/ml	65
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.543	252	1547	8.22 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	20.934	276	59	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Final Reagent

JK 10/17/19

Quant Time: Oct 17 13:16:02 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	111120	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	441084	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	229361	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.210	188	410587	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	414594	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.543	264	407095	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.939	292	322955	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	6.803	108	127	2.75	ng/ml#	45
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	7.177	77	61	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	7.578	122	81	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:02 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

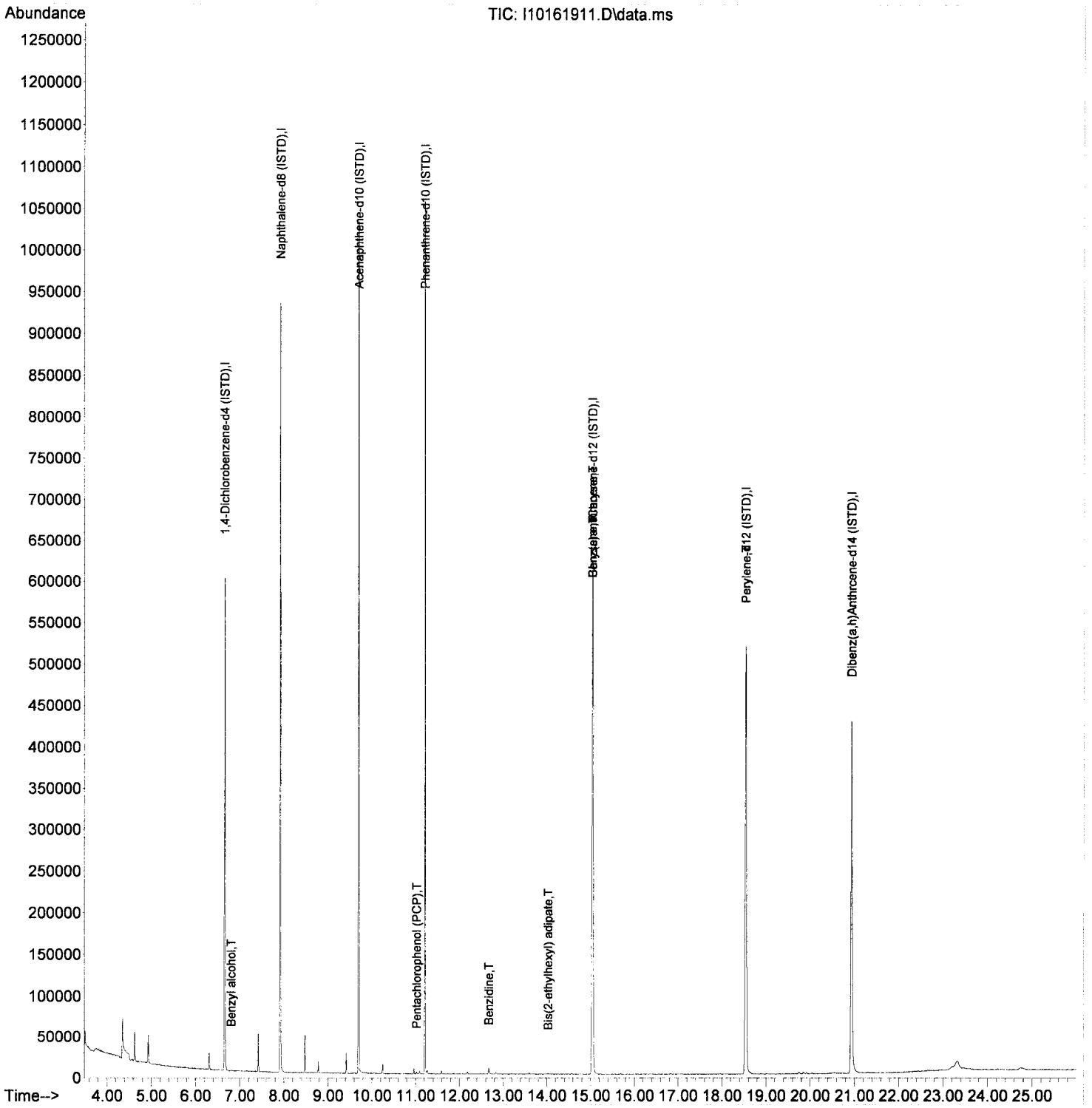
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.328	77	82	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.018	266	377	60.04 ng/ml	88
71) Phenanthrene	11.210	178	142	N.D.	
72) Anthracene	11.210	178	142	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	12.670	184	4346	154.48 ng/ml	95
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.029	129	284	2.72 ng/ml	80
82) 3,3-Dichlorobenzidine	14.981	252	134	Below Cal	88
83) Benz(a)anthracene	15.040	228	1055	4.39 ng/ml	69
84) Chrysene	15.040	228	1056	4.86 ng/ml	65
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.543	252	1547	8.37 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	20.934	276	59	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161911.D
Acq On : 16 Oct 2019 4:34 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:02 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.664	152	110906	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	444279	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	228631	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	419652	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	431513	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.549	264	431467	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.945	292	350266	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.418	112	1500	20.64	ng/ml	0.01
5) Phenol-d6 (Surr)	6.295	99	1618	18.62	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	1331	19.02	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	3186	19.06	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	334	26.40	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.018	244	3719	17.99	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.129	74	1227	24.23	ng/ml	69
3) Pyridine	4.193	79	855	21.35	ng/ml#	7
6) Phenol	6.311	94	2030	22.76	ng/ml	94
7) Aniline	6.348	93	1021	12.34	ng/ml	86
8) Bis(2-chloroethyl) ether	6.402	93	1698	20.58	ng/ml	92
9) 2-Chlorophenol	6.461	128	1413	18.40	ng/ml	97
10) 1,3-Dichlorobenzene	6.611	146	1762	20.10	ng/ml	91
11) 1,4-Dichlorobenzene	6.680	146	1753	20.55	ng/ml	88
12) Benzyl alcohol	6.792	108	950	53.34	ng/ml	82
13) 1,2-Dichlorobenzene	6.835	146	1751	21.20	ng/ml	99
14) 2-Methylphenol	6.894	107	1222	22.56	ng/ml	91
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	2838	33.30	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.049	70	1362	27.29	ng/ml	94
17) 3+4-Methylphenol	7.044	107	1259	26.81	ng/ml	88
18) Hexachloroethane	7.167	201	507	18.65	ng/ml	90
20) Nitrobenzene	7.220	77	1500	21.48	ng/ml	90
22) Isophorone	7.456	82	3161	21.19	ng/ml	99
23) 2-Nitrophenol	7.536	139	369	8.33	ng/ml	95
24) 2,4-Dimethylphenol	7.568	122	1082	16.73	ng/ml	89
25) Bis(2-chloroethoxy) me...	7.664	93	1914	21.31	ng/ml	97
26) Benzoic acid	7.568	105	64	689.17	ng/ml#	1
27) 2,4-Dichlorophenol	7.771	162	574	32.97	ng/ml	93
28) 1,2,4-Trichlorobenzene	7.862	180	1518	19.84	ng/ml	97
29) Naphthalene	7.942	128	5043	22.08	ng/ml	97
30) 4-Chloroaniline	7.990	127	610	23.52	ng/ml	83
31) Hexachlorobutadiene	8.076	225	770	18.86	ng/ml	90
32) 4-Chloro-3-methylphenol	8.472	107	522	49.09	ng/ml#	1
33) 2-Methylnaphthalene	8.638	142	3026	18.47	ng/ml	96
34) 1-Methylnaphthalene	8.739	142	3010	19.27	ng/ml	93
36) Hexachlorocyclopentadiene	8.803	237	631	14.46	ng/ml	85
37) 2,4,6-Trichlorophenol	8.921	196	357	40.14	ng/ml	80
38) 2,4,5-Trichlorophenol	8.959	198	333	33.56	ng/ml	80
39) 1,1'-Biphenyl	9.108	154	3294	17.48	ng/ml	93
41) 2-Chloronaphthalene	9.130	162	2408	17.54	ng/ml	91
42) 2-Nitroaniline	9.226	138	265	5.68	ng/ml	78
43) 2,6-Dimethylnaphthalene	9.269	156	2691	19.11	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

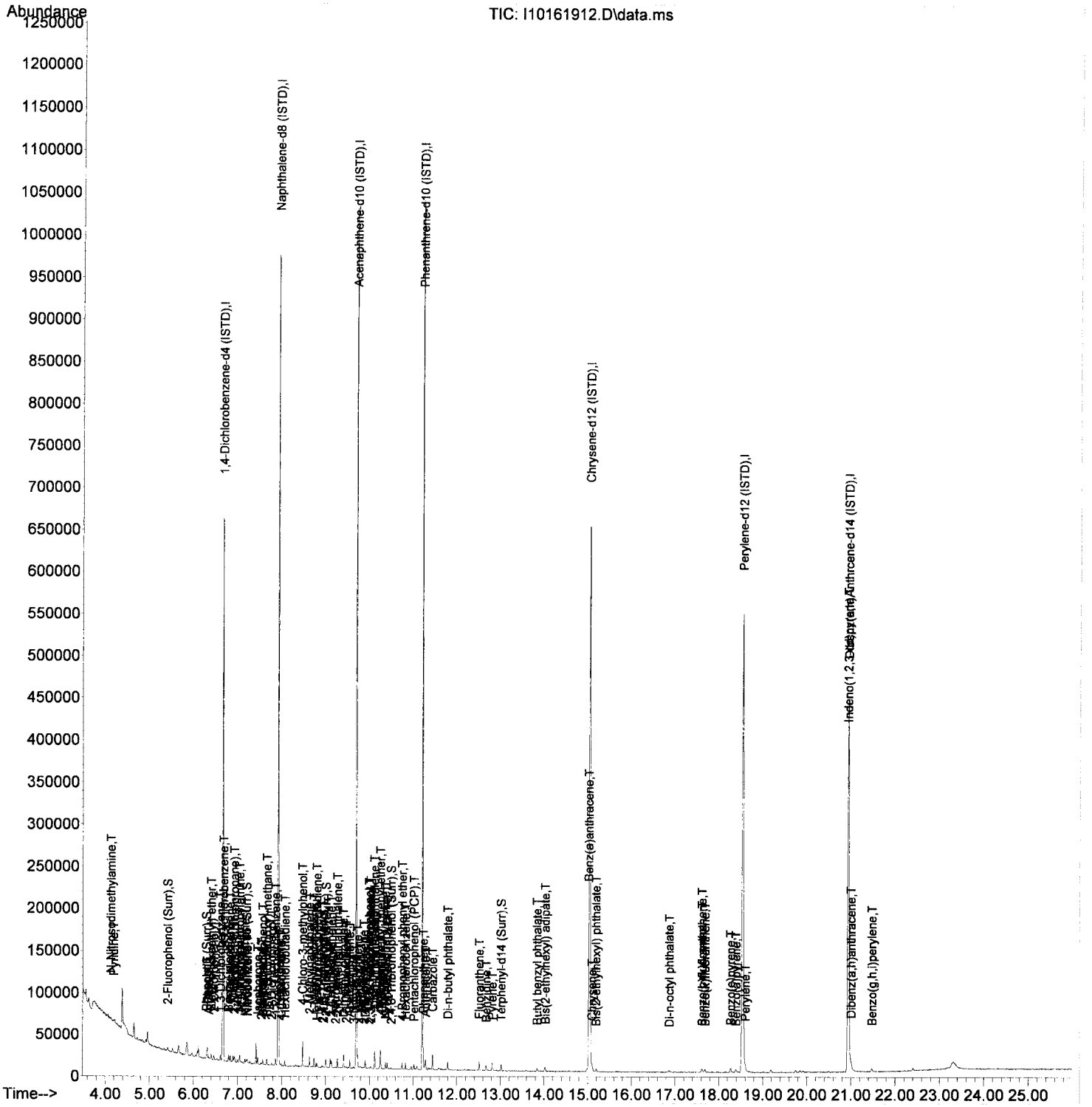
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	0.000		0	N.D.		
45)	Dimethyl phthalate	9.402	163	3253	19.56	ng/ml	97
46)	1,3-Dinitrobenzene	9.440	168	52	N.D.		
47)	2,6-Dinitrotoluene	9.467	165	213	5.54	ng/ml	84
48)	1,2-Dinitrobenzene	0.000		0	N.D.		
49)	Acenaphthylene	9.552	152	4331	19.41	ng/ml	97
50)	3-Nitroaniline	9.643	138	203	27.60	ng/ml#	79
51)	Acenaphthene	9.729	153	3082	21.45	ng/ml	91
52)	2,4-Dinitrophenol	0.000		0	N.D.		
53)	4-Nitrophenol	9.804	139	149	66.50	ng/ml	70
54)	2,4-Dinitrotoluene	9.873	165	307	6.39	ng/ml	95
55)	Dibenzofuran	9.905	168	3969	19.87	ng/ml#	72
56)	2,3,5,6-Tetrachlorophenol	9.991	232	254	36.72	ng/ml	91
57)	2,3,4,6-Tetrachlorophenol	10.028	232	405	22.64	ng/ml	94
58)	Diethyl phthalate	10.119	149	3227	20.84	ng/ml	95
59)	2,3,5-Trimethylnaphtha...	10.114	170	2603	19.20	ng/ml	98
60)	Fluorene	10.253	166	3175	19.83	ng/ml	98
61)	4-Chlorophenyl phenyl ...	10.248	204	1518	18.63	ng/ml	95
62)	4-Nitroaniline	10.258	138	246	7.30	ng/ml#	61
63)	4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65)	N-Nitrosodiphenylamine	10.365	169	2298	17.80	ng/ml	97
66)	Azobenzene (1,2-DPH)	10.408	77	3383	26.10	ng/ml	99
68)	4-Bromophenyl phenyl e...	10.750	248	987	20.33	ng/ml	98
69)	Hexachlorobenzene	10.825	284	1216	21.86	ng/ml	94
70)	Pentachlorophenol (PCP)	11.018	266	898	52.21	ng/ml	91
71)	Phenanthrene	11.237	178	4821	21.73	ng/ml	97
72)	Anthracene	11.285	178	4322	20.04	ng/ml	97
73)	Carbazole	11.446	167	3762	21.24	ng/ml	97
74)	Di-n-butyl phthalate	11.793	149	4261	17.18	ng/ml	96
75)	Fluoranthene	12.515	202	4669	18.59	ng/ml	97
76)	Benzidine	12.671	184	3612	54.31	ng/ml	94
77)	Pyrene	12.810	202	4626	18.31	ng/ml	99
80)	Butyl benzyl phthalate	13.842	149	1220	35.17	ng/ml	88
81)	Bis(2-ethylhexyl) adipate	14.029	129	1272	12.61	ng/ml	95
82)	3,3-Dichlorobenzidine	14.981	252	1592	Below Cal		99
83)	Benz(a)anthracene	15.024	228	5352	21.62	ng/ml	95
84)	Chrysene	15.099	228	4336	19.18	ng/ml	93
85)	Bis(2-ethylhexyl) phth...	15.190	149	1364	9.24	ng/ml	92
87)	Di-n-octyl phthalate	16.869	149	1789	63.80	ng/ml	82
88)	Benzo(b)fluoranthene	17.618	252	3489	14.40	ng/ml	91
89)	Benzo(k)fluoranthene	17.688	252	3429	15.01	ng/ml	97
90)	Benzo(b+k)fluoranthene	17.618	252	6917	28.71	ng/ml	91
91)	Benzo(e)pyrene	18.271	252	3566	15.08	ng/ml	94
92)	Benzo(a)pyrene	18.394	252	2850	21.60	ng/ml	99
93)	Perylene	18.602	252	3674	18.41	ng/ml	98
95)	Indeno(1,2,3-cd)pyrene	20.934	276	4048	19.13	ng/ml	52
96)	Dibenz(a,h)anthracene	21.004	278	3500	18.99	ng/ml	88
97)	Benzo(g,h,i)perylene	21.474	276	3150	15.56	ng/ml	96

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161912.D
Acq On : 16 Oct 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL1
Misc : 1x, A19G238 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161913.D
Acq On : 16 Oct 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL2
Misc : 1x, A19G239 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:50 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	114962	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	445939	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	230418	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.210	188	415279	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	420433	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.549	264	422859	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.945	292	334828	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.407	112	3881	51.53	ng/ml	0.00
5) Phenol-d6 (Surr)	6.289	99	4604	51.10	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	3185	43.91	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	8607	51.08	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	730	43.22	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.018	244	9501	47.17	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.080	74	3526	67.17	ng/ml	90
3) Pyridine	4.123	79	4710	70.91	ng/ml	83
6) Phenol	6.306	94	5478	59.26	ng/ml	93
7) Aniline	6.343	93	5932	69.17	ng/ml	98
8) Bis(2-chloroethyl) ether	6.396	93	4855	56.77	ng/ml	92
9) 2-Chlorophenol	6.455	128	4117	51.73	ng/ml	96
10) 1,3-Dichlorobenzene	6.605	146	4787	52.68	ng/ml	91
11) 1,4-Dichlorobenzene	6.675	146	4602	52.04	ng/ml	96
12) Benzyl alcohol	6.792	108	1820	72.61	ng/ml	91
13) 1,2-Dichlorobenzene	6.830	146	4537	53.00	ng/ml	94
14) 2-Methylphenol	6.894	107	2790	49.68	ng/ml	91
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	7664	86.75	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.049	70	3574	69.09	ng/ml	98
17) 3+4-Methylphenol	7.038	107	3323	53.48	ng/ml	97
18) Hexachloroethane	7.161	201	1316	46.69	ng/ml	90
20) Nitrobenzene	7.215	77	3574	49.37	ng/ml	90
22) Isophorone	7.450	82	8579	57.29	ng/ml	98
23) 2-Nitrophenol	7.536	139	925	20.81	ng/ml	85
24) 2,4-Dimethylphenol	7.568	122	2761	42.54	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.659	93	4937	54.77	ng/ml	98
26) Benzoic acid	7.659	105	134	690.78	ng/ml#	64
27) 2,4-Dichlorophenol	7.771	162	1890	54.39	ng/ml	93
28) 1,2,4-Trichlorobenzene	7.862	180	3937	51.27	ng/ml	97
29) Naphthalene	7.942	128	12520	54.62	ng/ml	97
30) 4-Chloroaniline	7.990	127	2877	62.07	ng/ml	96
31) Hexachlorobutadiene	8.071	225	2120	51.74	ng/ml	92
32) 4-Chloro-3-methylphenol	8.466	107	1947	71.54	ng/ml#	63
33) 2-Methylnaphthalene	8.638	142	8077	49.12	ng/ml	96
34) 1-Methylnaphthalene	8.739	142	8217	52.41	ng/ml	93
36) Hexachlorocyclopentadiene	8.803	237	1631	37.10	ng/ml	92
37) 2,4,6-Trichlorophenol	8.921	196	1180	57.50	ng/ml	85
38) 2,4,5-Trichlorophenol	8.953	198	1380	56.28	ng/ml	91
39) 1,1'-Biphenyl	9.108	154	9466	49.85	ng/ml	99
41) 2-Chloronaphthalene	9.130	162	7301	52.77	ng/ml	97
42) 2-Nitroaniline	9.226	138	803	17.08	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.269	156	7521	53.01	ng/ml	96

See MJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161913.D
Acq On : 16 Oct 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL2
Misc : 1x, A19G239 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:50 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

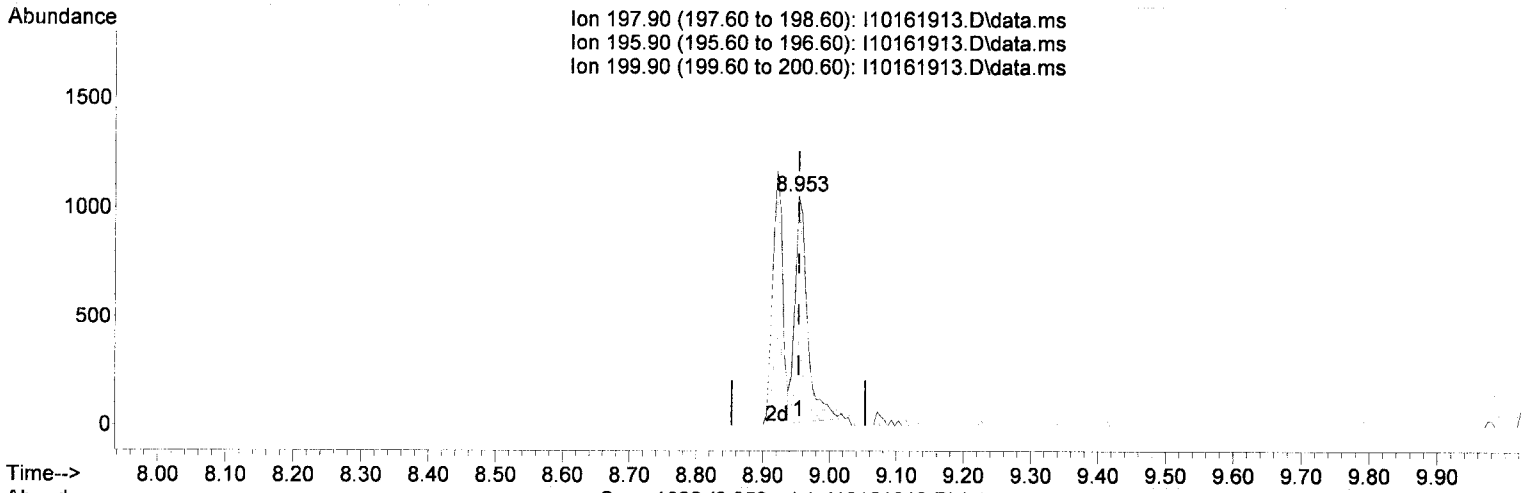
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.349	168	260	73.59	ng/ml	80
45) Dimethyl phthalate	9.408	163	8884	53.00	ng/ml	97
46) 1,3-Dinitrobenzene	9.434	168	351	12.68	ng/ml	55
47) 2,6-Dinitrotoluene	9.467	165	792	20.42	ng/ml	90
48) 1,2-Dinitrobenzene	9.520	168	309	16.43	ng/ml	87
49) Acenaphthylene	9.552	152	12047	53.56	ng/ml	98
50) 3-Nitroaniline	9.638	138	817	42.51	ng/ml	92
51) Acenaphthene	9.729	153	7881	54.42	ng/ml	97
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.804	139	379	74.08	ng/ml	80
54) 2,4-Dinitrotoluene	9.878	165	711	14.67	ng/ml	93
55) Dibenzofuran	9.905	168	10908	54.20	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.985	232	786	50.55	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.028	232	1166	42.00	ng/ml	95
58) Diethyl phthalate	10.119	149	8435	54.05	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.114	170	6964	50.96	ng/ml	97
60) Fluorene	10.253	166	8492	52.63	ng/ml	94
61) 4-Chlorophenyl phenyl ...	10.247	204	4054	49.87	ng/ml	95
62) 4-Nitroaniline	10.258	138	819	24.11	ng/ml	84
63) 4,6-Dinitro-2-methylph...	10.296	198	104	79.94	ng/ml#	54
65) N-Nitrosodiphenylamine	10.365	169	6622	51.83	ng/ml	98
66) Azobenzene (1,2-DPH)	10.408	77	9368	73.03	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.745	248	2354	49.00	ng/ml	91
69) Hexachlorobenzene	10.825	284	2891	52.51	ng/ml	93
70) Pentachlorophenol (PCP)	11.023	266	808	49.26	ng/ml	90
71) Phenanthrene	11.237	178	12134	55.27	ng/ml	99
72) Anthracene	11.285	178	11800	55.30	ng/ml	99
73) Carbazole	11.446	167	10074	49.84	ng/ml	98
74) Di-n-butyl phthalate	11.793	149	12651	51.56	ng/ml	99
75) Fluoranthene	12.515	202	12524	50.39	ng/ml	99
76) Benzidine	12.670	184	3389	51.49	ng/ml	89
77) Pyrene	12.809	202	12834	51.32	ng/ml	98
80) Butyl benzyl phthalate	13.847	149	3359	54.50	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.018	129	3024	30.76	ng/ml	89
82) 3,3-Dichlorobenzidine	14.981	252	5122	Below Cal		89
83) Benz(a)anthracene	15.024	228	11999	49.74	ng/ml	100
84) Chrysene	15.104	228	11098	50.38	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.195	149	3999	27.80	ng/ml	97
87) Di-n-octyl phthalate	16.869	149	4878	75.82	ng/ml	90
88) Benzo(b)fluoranthene	17.618	252	9380	39.51	ng/ml	97
89) Benzo(k)fluoranthene	17.682	252	9507	42.47	ng/ml	95
90) Benzo(b+k)fluoranthene	17.682	252	19673	83.31	ng/ml	95
91) Benzo(e)pyrene	18.270	252	10258	44.28	ng/ml	99
92) Benzo(a)pyrene	18.393	252	8352	46.78	ng/ml	94
93) Perylene	18.597	252	9122	46.65	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.934	276	9841	48.66	ng/ml	87
96) Dibenz(a,h)anthracene	21.004	278	8473	48.08	ng/ml	98
97) Benzo(g,h,i)perylene	21.469	276	8620	44.58	ng/ml	92

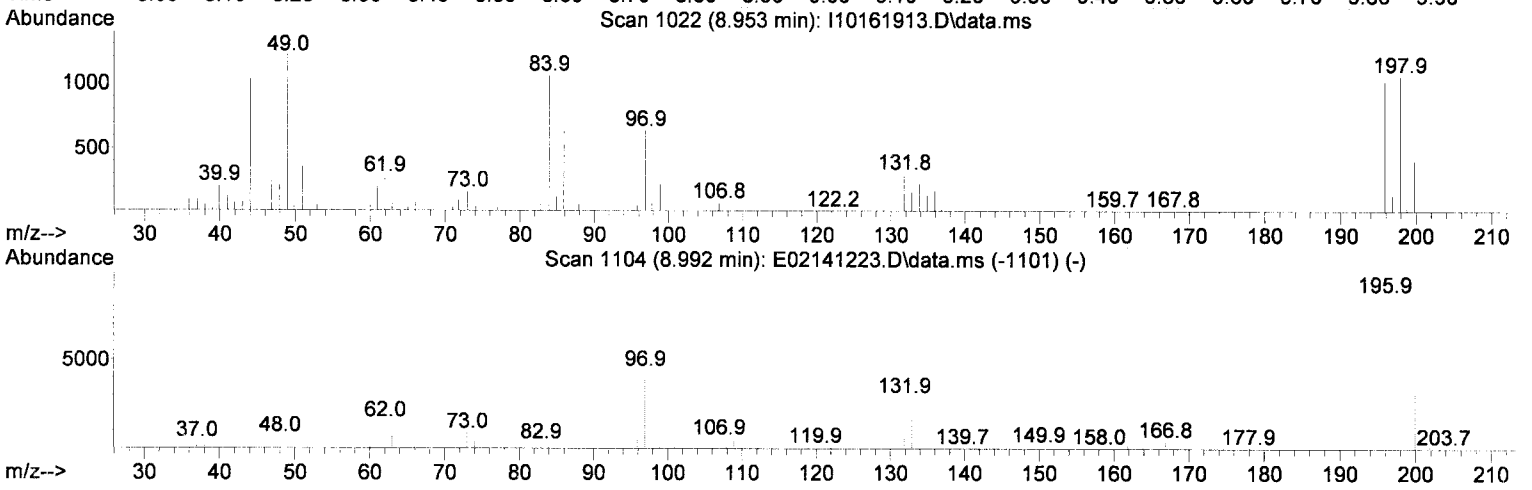
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161913.D
Acq On : 16 Oct 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL2
Misc : 1x, A19G239 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:50 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161913.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.953min (+ 0.000) 56.28 ng/ml

response 1380

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	96.21
199.90	30.90	38.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161913.D
Acq On : 16 Oct 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL2
Misc : 1x, A19G239 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:50 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
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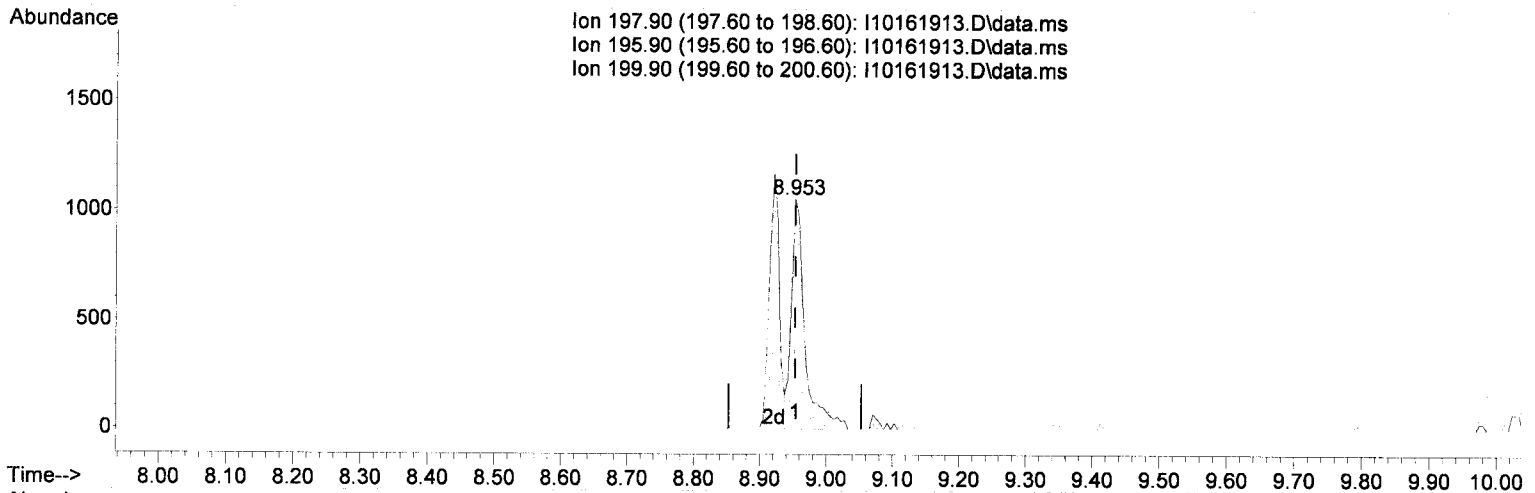
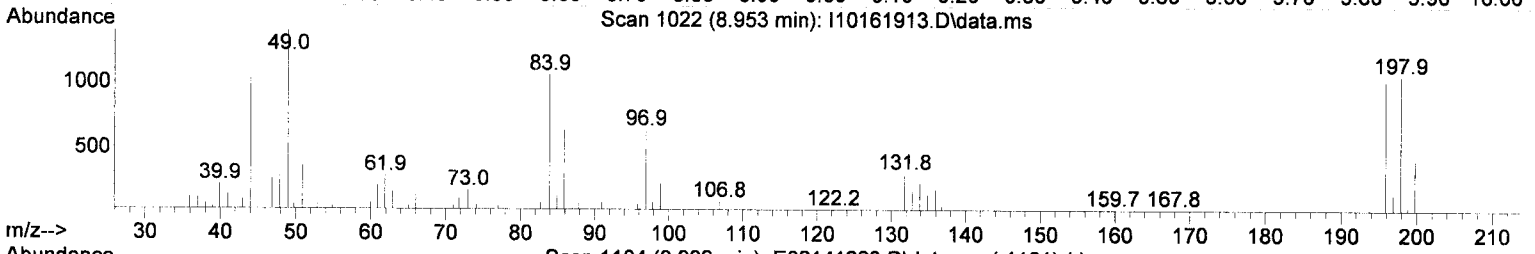
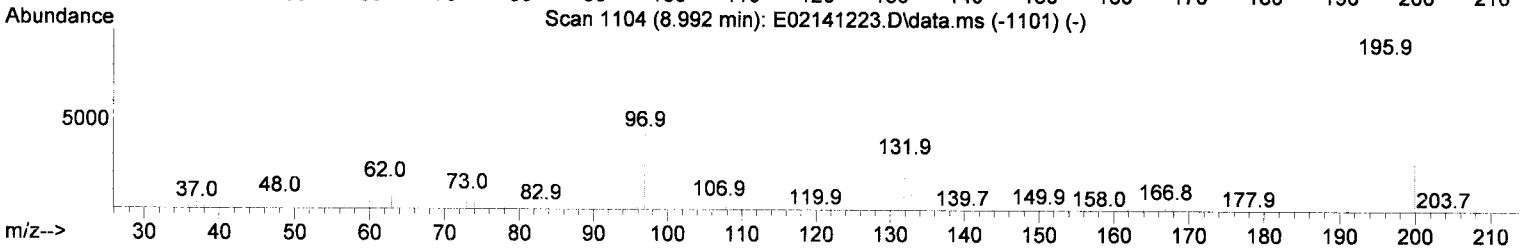
InstName : SV-GCMS9







TIC: I10161913.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.953min (+ 0.000) 59.05 ng/ml m

response 1507

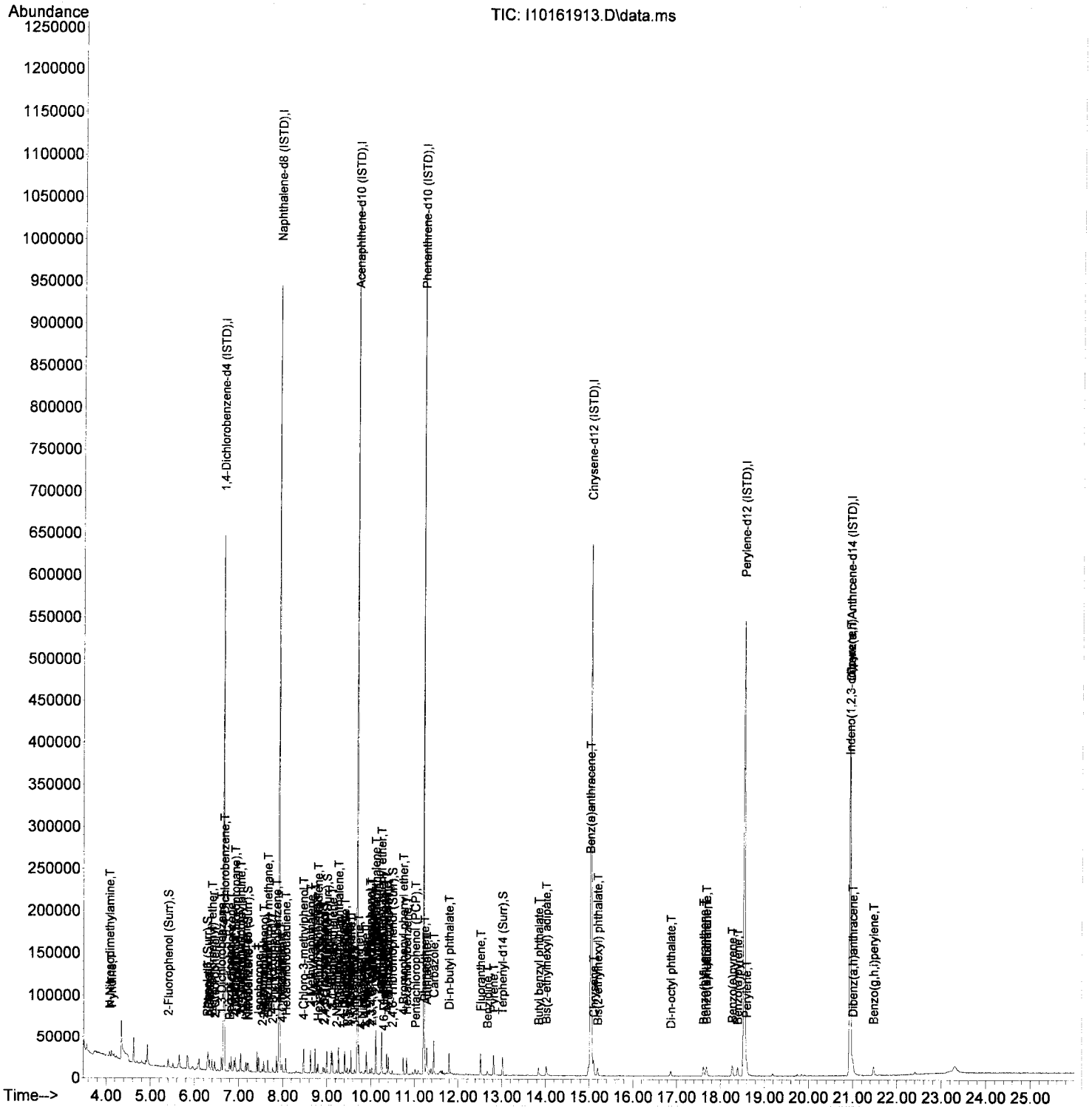
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.70	96.21
199.90	30.90	38.67
0.00	0.00	0.00

10/17/19

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161913.D
Acq On : 16 Oct 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL2
Misc : 1x, A19G239 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:50 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161914.D
Acq On : 16 Oct 2019 6:19 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL3
Misc : 1x, A19G240 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	113552	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	448868	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	232211	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.210	188	421494	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	434926	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.543	264	432129	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.945	292	350177	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.412	112	7618	102.40	ng/ml	0.00
5) Phenol-d6 (Surr)	6.289	99	9393	105.55	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	6659	92.95	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.001	172	19336	113.88	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	1877	90.32	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.018	244	20875	100.19	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.091	74	6638	128.02	ng/ml	94
3) Pyridine	4.123	79	9792	138.13	ng/ml	92
6) Phenol	6.306	94	10339	113.24	ng/ml	95
7) Aniline	6.343	93	12340	145.68	ng/ml	94
8) Bis(2-chloroethyl) ether	6.396	93	10234	121.15	ng/ml	95
9) 2-Chlorophenol	6.461	128	8126	103.37	ng/ml	98
10) 1,3-Dichlorobenzene	6.610	146	9504	105.89	ng/ml	96
11) 1,4-Dichlorobenzene	6.680	146	9126	104.49	ng/ml	96
12) Benzyl alcohol	6.787	108	3764	118.45	ng/ml	94
13) 1,2-Dichlorobenzene	6.830	146	8939	105.72	ng/ml	98
14) 2-Methylphenol	6.894	107	6433	115.98	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	14918	170.96	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.049	70	7214	141.18	ng/ml	96
17) 3+4-Methylphenol	7.038	107	7443	109.18	ng/ml	99
18) Hexachloroethane	7.167	201	2749	98.74	ng/ml	96
20) Nitrobenzene	7.220	77	7135	99.79	ng/ml	99
22) Isophorone	7.450	82	18112	120.16	ng/ml	99
23) 2-Nitrophenol	7.536	139	2310	51.62	ng/ml	91
24) 2,4-Dimethylphenol	7.568	122	6096	93.32	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.659	93	10224	112.68	ng/ml	97
26) Benzoic acid	~~7.685~~	~~105~~	~~73~~	~~689.36~~	~~ng/ml#~~	~~52~~
27) 2,4-Dichlorophenol	7.771	162	4404	94.88	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.862	180	7993	103.40	ng/ml	99
29) Naphthalene	7.942	128	25776	111.72	ng/ml	99
30) 4-Chloroaniline	7.985	127	6058	115.49	ng/ml	94
31) Hexachlorobutadiene	8.071	225	4343	105.31	ng/ml	96
32) 4-Chloro-3-methylphenol	8.466	107	4647	113.63	ng/ml	82
33) 2-Methylnaphthalene	8.638	142	17540	105.97	ng/ml	97
34) 1-Methylnaphthalene	8.739	142	17357	109.97	ng/ml	99
36) Hexachlorocyclopentadiene	8.803	237	3517	79.37	ng/ml	96
37) 2,4,6-Trichlorophenol	8.921	196	3024	96.02	ng/ml	94
38) 2,4,5-Trichlorophenol	8.953	198	2923	89.37	ng/ml	94
39) 1,1'-Biphenyl	9.108	154	21153	110.53	ng/ml	98
41) 2-Chloronaphthalene	9.130	162	15573	111.68	ng/ml	99
42) 2-Nitroaniline	9.226	138	2029	42.84	ng/ml	79
43) 2,6-Dimethylnaphthalene	9.269	156	15902	111.21	ng/ml	98

See NI

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161914.D
Acq On : 16 Oct 2019 6:19 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL3
Misc : 1x, A19G240 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

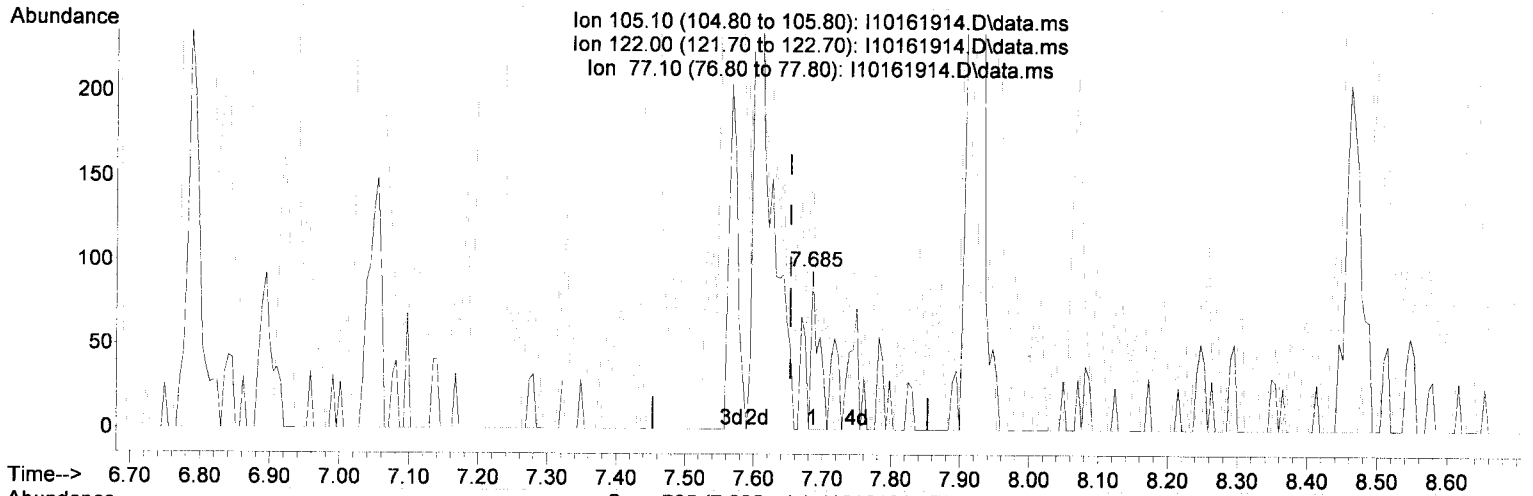
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.354	168	548	84.88	ng/ml	94
45)	Dimethyl phthalate	9.408	163	18685	110.60	ng/ml	98
46)	1,3-Dinitrobenzene	9.434	168	771	27.65	ng/ml	74
47)	2,6-Dinitrotoluene	9.467	165	1977	50.59	ng/ml	94
48)	1,2-Dinitrobenzene	9.520	168	825	43.54	ng/ml	74
49)	Acenaphthylene	9.552	152	25781	113.74	ng/ml	99
50)	3-Nitroaniline	9.638	138	2092	73.69	ng/ml	90
51)	Acenaphthene	9.729	153	16496	113.02	ng/ml	96
52)	2,4-Dinitrophenol	9.739	184	103	164.16	ng/ml#	37
53)	4-Nitrophenol	9.798	139	907	91.33	ng/ml	78
54)	2,4-Dinitrotoluene	9.878	165	1827	37.42	ng/ml	92
55)	Dibenzofuran	9.905	168	22990	113.35	ng/ml	95
56)	2,3,5,6-Tetrachlorophenol	9.985	232	2308	89.78	ng/ml	95
57)	2,3,4,6-Tetrachlorophenol	10.028	232	3124	91.39	ng/ml	92
58)	Diethyl phthalate	10.119	149	17844	113.46	ng/ml	96
59)	2,3,5-Trimethylnaphtha...	10.114	170	14732	106.97	ng/ml	100
60)	Fluorene	10.253	166	18324	112.69	ng/ml	97
61)	4-Chlorophenyl phenyl ...	10.247	204	8661	104.66	ng/ml	99
62)	4-Nitroaniline	10.258	138	2067	60.39	ng/ml	92
63)	4,6-Dinitro-2-methylph...	10.290	198	341	89.81	ng/ml	90
65)	N-Nitrosodiphenylamine	10.365	169	14732	113.61	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.408	77	18843	144.73	ng/ml	98
68)	4-Bromophenyl phenyl e...	10.745	248	4920	100.90	ng/ml	91
69)	Hexachlorobenzene	10.825	284	6222	111.34	ng/ml	94
70)	Pentachlorophenol (PCP)	11.018	266	1663	79.57	ng/ml	91
71)	Phenanthrene	11.237	178	24650	110.63	ng/ml	99
72)	Anthracene	11.285	178	24793	114.47	ng/ml	98
73)	Carbazole	11.446	167	21180	99.27	ng/ml	99
74)	Di-n-butyl phthalate	11.788	149	26455	106.22	ng/ml	100
75)	Fluoranthene	12.515	202	27171	107.72	ng/ml	98
76)	Benzidine	12.670	184	10054	150.51	ng/ml	94
77)	Pyrene	12.809	202	27657	108.96	ng/ml	98
80)	Butyl benzyl phthalate	13.847	149	8298	95.98	ng/ml	93
81)	Bis(2-ethylhexyl) adipate	14.024	129	7171	70.51	ng/ml	98
82)	3,3-Dichlorobenzidine	14.986	252	12358	Below Cal		96
83)	Benz(a)anthracene	15.018	228	25078	100.49	ng/ml	98
84)	Chrysene	15.104	228	23115	101.44	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.200	149	10525	70.73	ng/ml	95
87)	Di-n-octyl phthalate	16.869	149	13641	108.39	ng/ml	96
88)	Benzo(b)fluoranthene	17.618	252	21892	90.23	ng/ml	99
89)	Benzo(k)fluoranthene	17.687	252	22282	97.40	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.618	252	45830	189.93	ng/ml	99
91)	Benzo(e)pyrene	18.270	252	22306	94.21	ng/ml	98
92)	Benzo(a)pyrene	18.393	252	19477	95.30	ng/ml	97
93)	Perylene	18.602	252	19207	96.12	ng/ml	98
95)	Indeno(1,2,3-cd)pyrene	20.934	276	20486	96.85	ng/ml	97
96)	Dibenz(a,h)anthracene	21.004	278	18545	100.62	ng/ml	96
97)	Benzo(g,h,i)perylene	21.474	276	19859	98.10	ng/ml	96

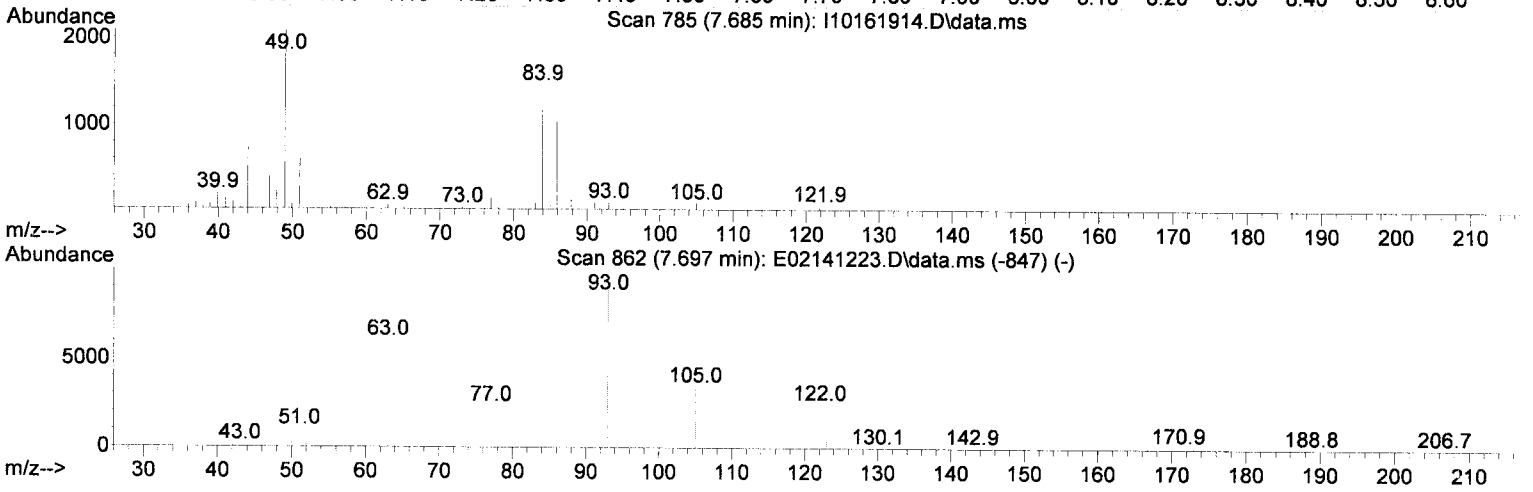
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161914.D
Acq On : 16 Oct 2019 6:19 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL3
Misc : 1x, A19G240 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161914.D\data.ms

(26) Benzoic acid (T)

7.685min (+ 0.032) 689.36 ng/ml

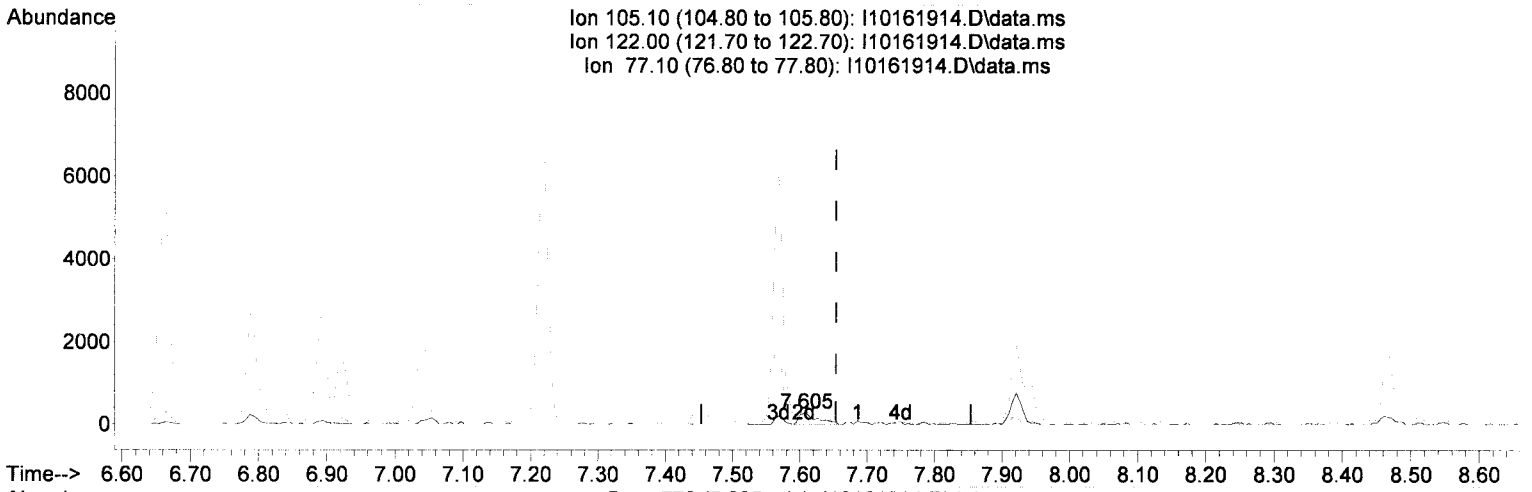
response 73

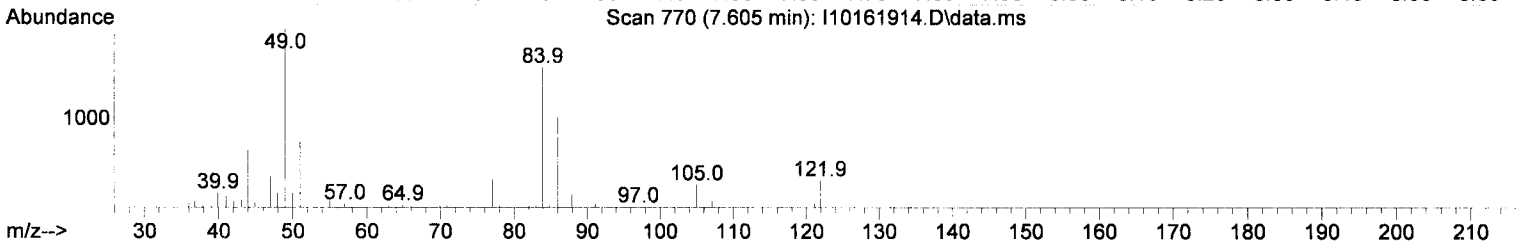
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	76.60
77.10	77.80	158.51#
0.00	0.00	0.00

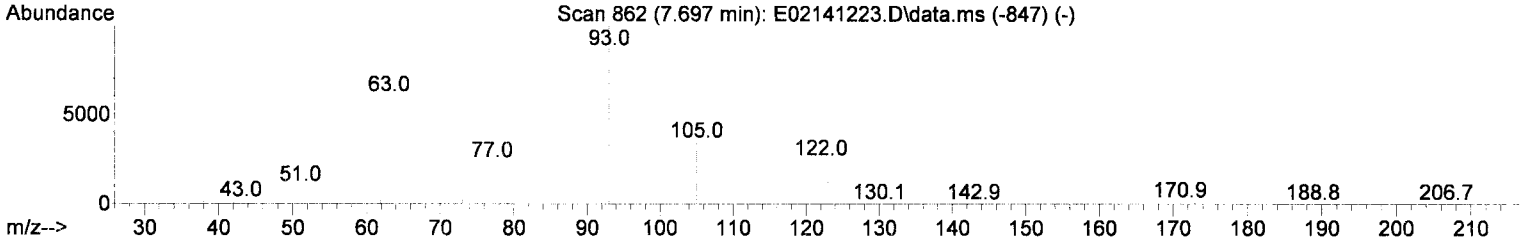
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161914.D
Acq On : 16 Oct 2019 6:19 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL3
Misc : 1x, A19G240 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I10161914.D\data.ms

(26) Benzoic acid (T)

7.605min (-0.048) 699.54 ng/ml m

10/17/19

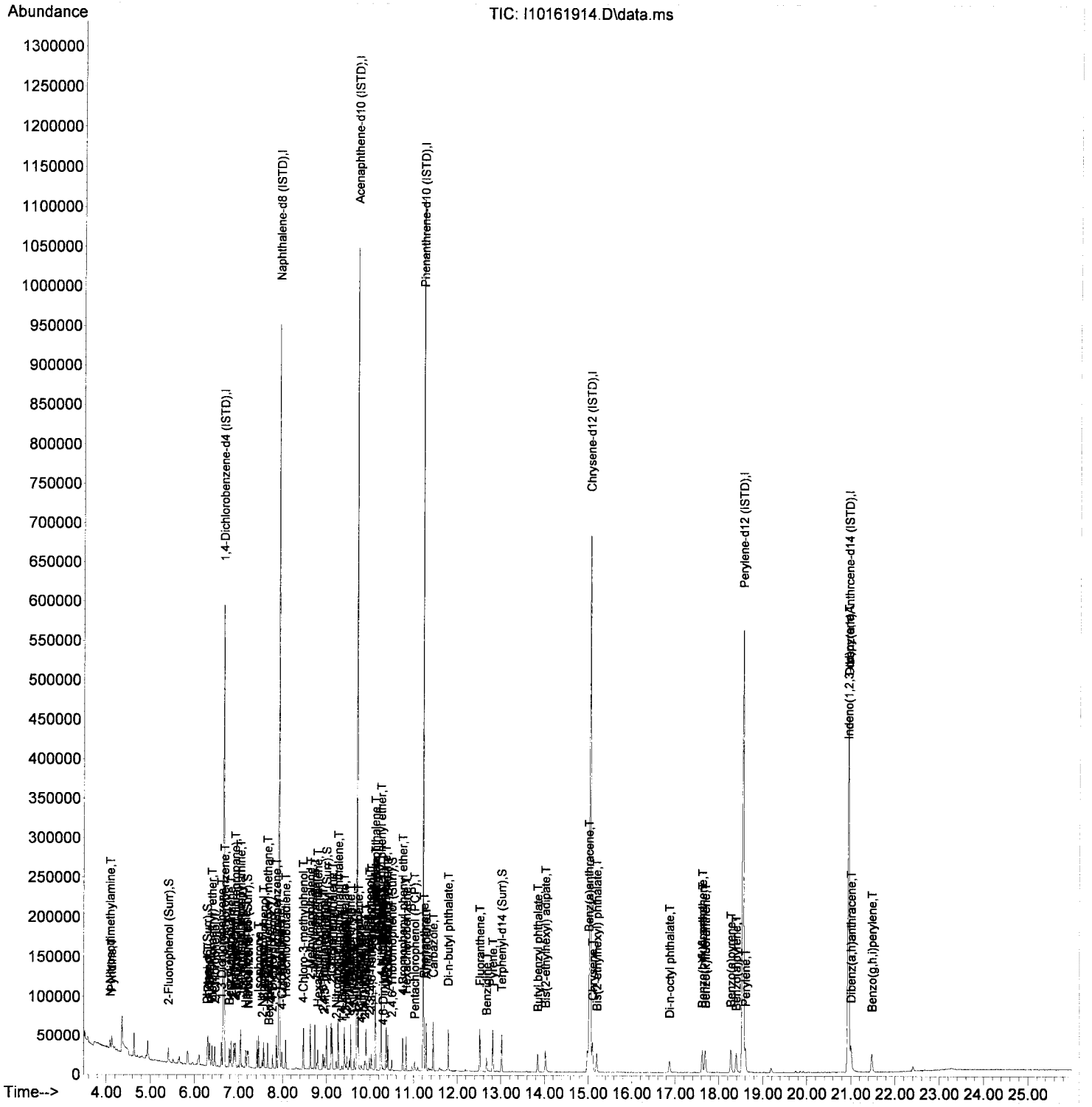
response 519

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	116.92#
77.10	77.80	121.80#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161914.D
Acq On : 16 Oct 2019 6:19 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL3
Misc : 1x, A19G240 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:12:58 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161915.D
Acq On : 16 Oct 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL4
Misc : 1x, A19G241 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:05 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	120155	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	447887	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.697	162	228870	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.210	188	406200	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.045	240	416387	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.549	264	413647	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.945	292	337729	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	16598	210.85	ng/ml	0.00
5) Phenol-d6 (Surr)	6.290	99	19537	207.48	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	13464	177.60	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.001	172	37977	226.93	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	4109	189.13	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.018	244	41737	209.23	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.059	74	13447	245.08	ng/ml	98
3) Pyridine	4.091	79	20595	263.90	ng/ml	97
6) Phenol	6.300	94	20713	214.40	ng/ml	99
7) Aniline	6.338	93	25093	279.96	ng/ml	95
8) Bis(2-chloroethyl) ether	6.391	93	20574	230.17	ng/ml	96
9) 2-Chlorophenol	6.455	128	17444	209.70	ng/ml	97
10) 1,3-Dichlorobenzene	6.605	146	20472	215.55	ng/ml	99
11) 1,4-Dichlorobenzene	6.675	146	19398	209.89	ng/ml	96
12) Benzyl alcohol	6.787	108	8208	211.19	ng/ml	93
13) 1,2-Dichlorobenzene	6.824	146	19037	212.77	ng/ml	99
14) 2-Methylphenol	6.889	107	13130	223.71	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	30514	330.48	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.044	70	14701	271.89	ng/ml	98
17) 3+4-Methylphenol	7.038	107	15070	200.27	ng/ml	97
18) Hexachloroethane	7.161	201	5953	202.07	ng/ml	95
20) Nitrobenzene	7.215	77	15667	207.08	ng/ml	96
22) Isophorone	7.450	82	38056	253.02	ng/ml	96
23) 2-Nitrophenol	7.536	139	5298	118.66	ng/ml	91
24) 2,4-Dimethylphenol	7.568	122	13189	202.34	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.659	93	20646	228.05	ng/ml	99
26) Benzoic acid	7.691	105	160	691.36	ng/ml	87
27) 2,4-Dichlorophenol	7.771	162	10420	192.56	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.862	180	16256	210.76	ng/ml	98
29) Naphthalene	7.942	128	50856	220.91	ng/ml	99
30) 4-Chloroaniline	7.985	127	14311	255.23	ng/ml	97
31) Hexachlorobutadiene	8.071	225	9011	218.98	ng/ml	95
32) 4-Chloro-3-methylphenol	8.467	107	10782	209.92	ng/ml	96
33) 2-Methylnaphthalene	8.638	142	36226	219.35	ng/ml	98
34) 1-Methylnaphthalene	8.739	142	34216	217.27	ng/ml	99
36) Hexachlorocyclopentadiene	8.803	237	7790	178.37	ng/ml	94
37) 2,4,6-Trichlorophenol	8.921	196	7170	185.24	ng/ml	98
38) 2,4,5-Trichlorophenol	8.953	198	6873	176.84	ng/ml	91
39) 1,1'-Biphenyl	9.108	154	42580	225.74	ng/ml	99
41) 2-Chloronaphthalene	9.130	162	31240	227.31	ng/ml	99
42) 2-Nitroaniline	9.226	138	5088	108.98	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.269	156	31242	221.68	ng/ml	99

See MI

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161915.D
Acq On : 16 Oct 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL4
Misc : 1x, A19G241 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:05 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

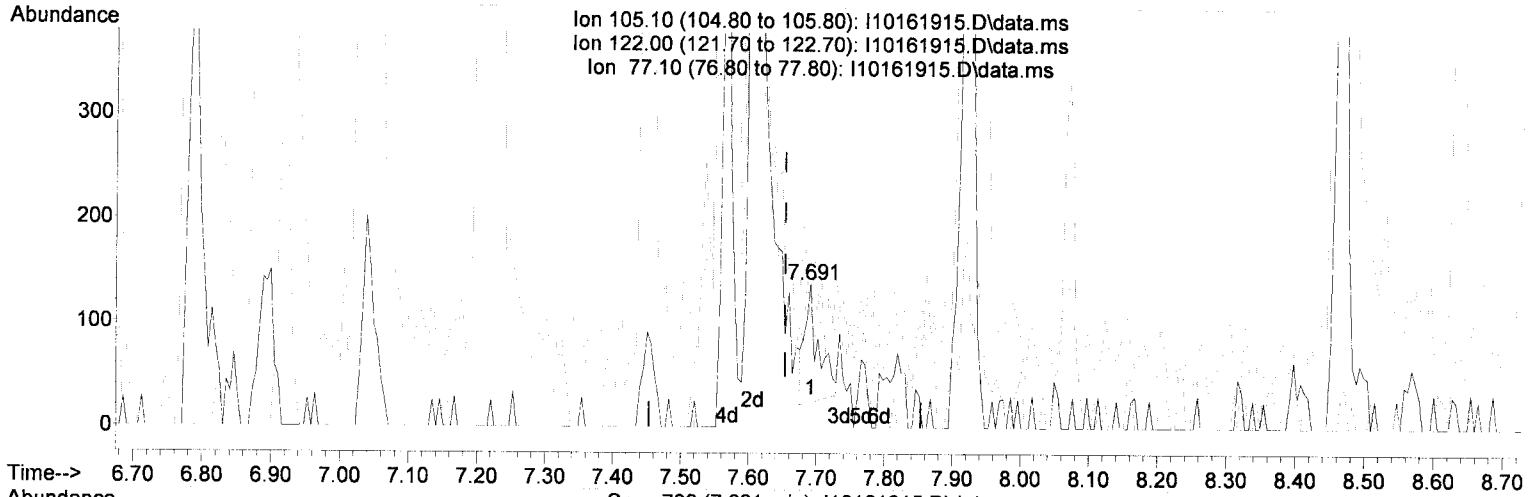
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.354	168	1277	114.39	ng/ml	92
45) Dimethyl phthalate	9.408	163	36622	219.94	ng/ml	98
46) 1,3-Dinitrobenzene	9.435	168	1889	68.72	ng/ml	91
47) 2,6-Dinitrotoluene	9.467	165	5062	131.41	ng/ml	97
48) 1,2-Dinitrobenzene	9.520	168	2119	113.46	ng/ml	88
49) Acenaphthylene	9.552	152	50685	226.88	ng/ml	98
50) 3-Nitroaniline	9.638	138	5115	151.93	ng/ml	91
51) Acenaphthene	9.729	153	31461	218.69	ng/ml	99
52) 2,4-Dinitrophenol	9.739	184	310	176.90	ng/ml	65
53) 4-Nitrophenol	9.798	139	2397	141.39	ng/ml	93
54) 2,4-Dinitrotoluene	9.879	165	4451	92.48	ng/ml	95
55) Dibenzofuran	9.905	168	43819	219.19	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.986	232	5028	162.01	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.028	232	6167	170.70	ng/ml	96
58) Diethyl phthalate	10.119	149	35198	227.07	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.114	170	28442	209.54	ng/ml	98
60) Fluorene	10.253	166	34530	215.45	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.248	204	16535	202.72	ng/ml	99
62) 4-Nitroaniline	10.258	138	4513	133.78	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.290	198	920	114.54	ng/ml	82
65) N-Nitrosodiphenylamine	10.365	169	28901	231.26	ng/ml	98
66) Azobenzene (1,2-DPH)	10.408	77	37095	295.66	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.745	248	9944	211.60	ng/ml	95
69) Hexachlorobenzene	10.825	284	12268	227.81	ng/ml	97
70) Pentachlorophenol (PCP)	11.018	266	3400	146.52	ng/ml	97
71) Phenanthrene	11.237	178	47219	219.90	ng/ml	99
72) Anthracene	11.285	178	47420	227.19	ng/ml	99
73) Carbazole	11.446	167	41597	201.89	ng/ml	99
74) Di-n-butyl phthalate	11.793	149	54476	226.97	ng/ml	99
75) Fluoranthene	12.515	202	53527	220.19	ng/ml	99
76) Benzidine	12.671	184	22390	347.80	ng/ml	94
77) Pyrene	12.810	202	55550	227.10	ng/ml	100
80) Butyl benzyl phthalate	13.847	149	18256	188.31	ng/ml	99
81) Bis(2-ethylhexyl) adipate	14.024	129	16213	166.51	ng/ml	98
82) 3,3-Dichlorobenzidine	14.987	252	23382	373.54	ng/ml	98
83) Benz(a)anthracene	15.019	228	48775	204.16	ng/ml	99
84) Chrysene	15.104	228	44508	204.03	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.195	149	25222	177.04	ng/ml	98
87) Di-n-octyl phthalate	16.869	149	35211	195.29	ng/ml	97
88) Benzo(b)fluoranthene	17.618	252	47123	202.90	ng/ml	99
89) Benzo(k)fluoranthene	17.688	252	46458	212.15	ng/ml	96
90) Benzo(b+k)fluoranthene	17.688	252	96090	416.00	ng/ml	96
91) Benzo(e)pyrene	18.276	252	46317	204.36	ng/ml	97
92) Benzo(a)pyrene	18.394	252	42344	205.19	ng/ml	99
93) Perylene	18.602	252	38182	199.61	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.940	276	40566	198.85	ng/ml	96
96) Dibenz(a,h)anthracene	21.004	278	37109	208.76	ng/ml	96
97) Benzo(g,h,i)perylene	21.469	276	40711	208.51	ng/ml	99

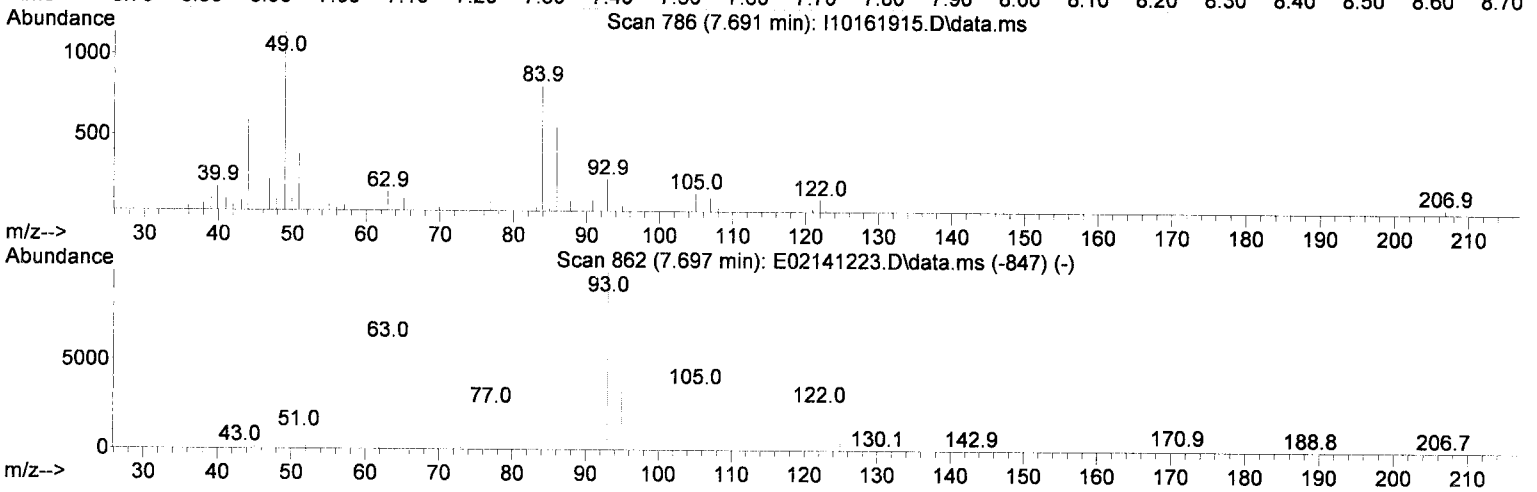
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161915.D
Acq On : 16 Oct 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL4
Misc : 1x, A19G241 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:05 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161915.D\data.ms

(26) Benzoic acid (T)

7.691min (+ 0.038) 691.36 ng/ml

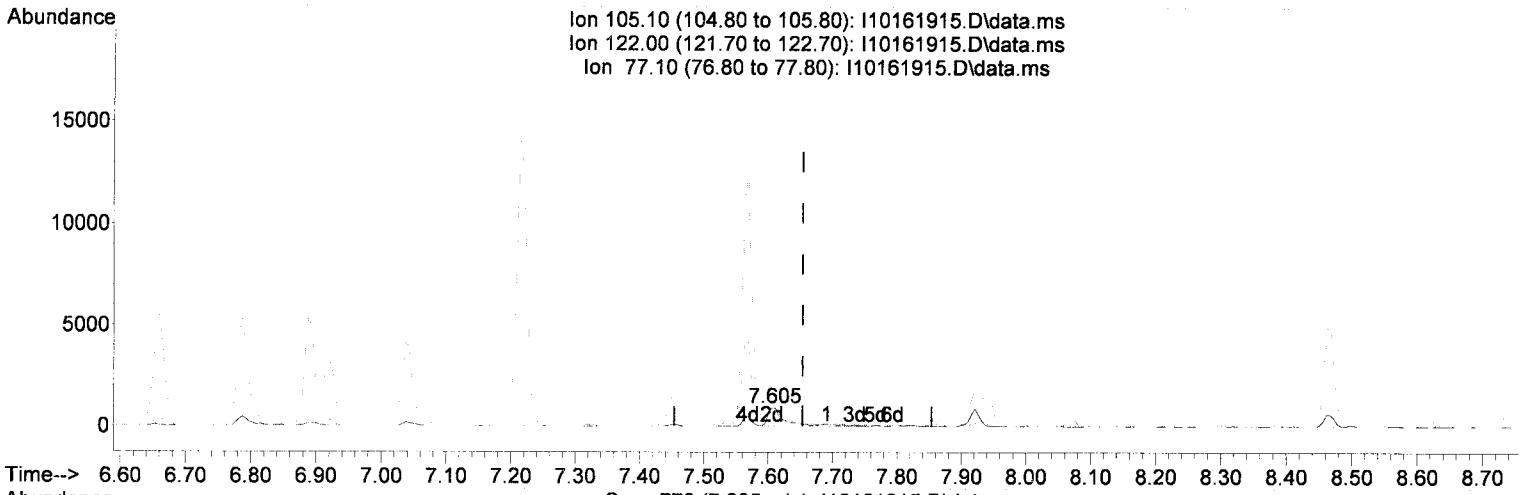
response 160

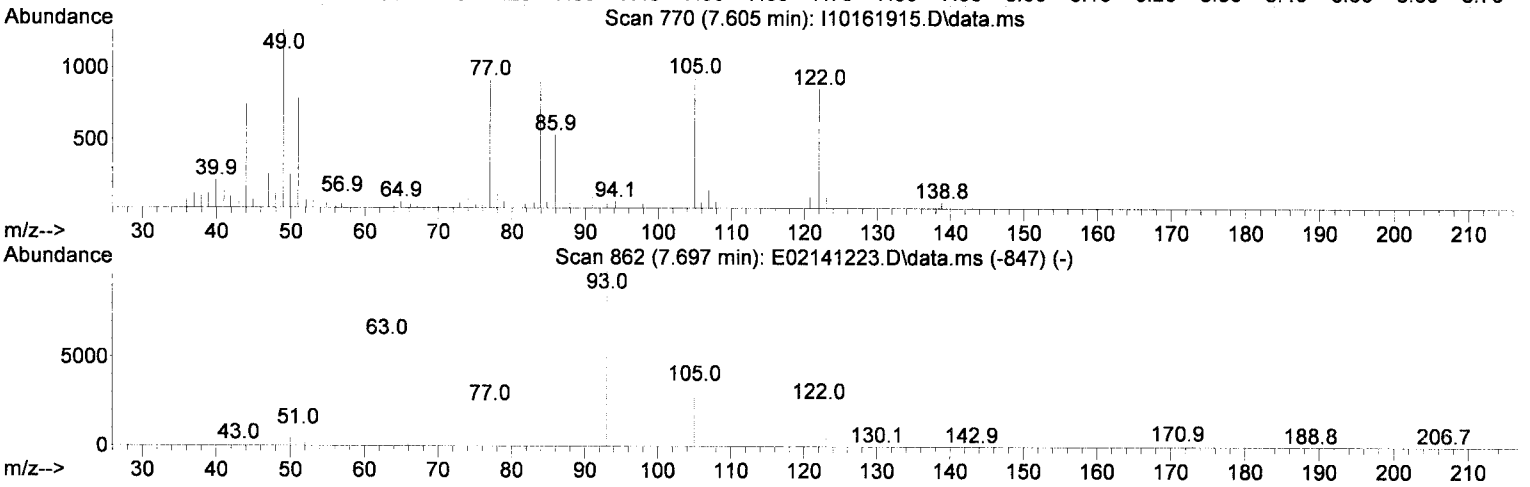
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	71.74
77.10	77.80	63.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161915.D
Acq On : 16 Oct 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL4
Misc : 1x, A19G241 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:05 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161915.D\data.ms

(26) Benzoic acid (T)

7.605min (-0.048) 730.87 ng/ml m 10/17/19

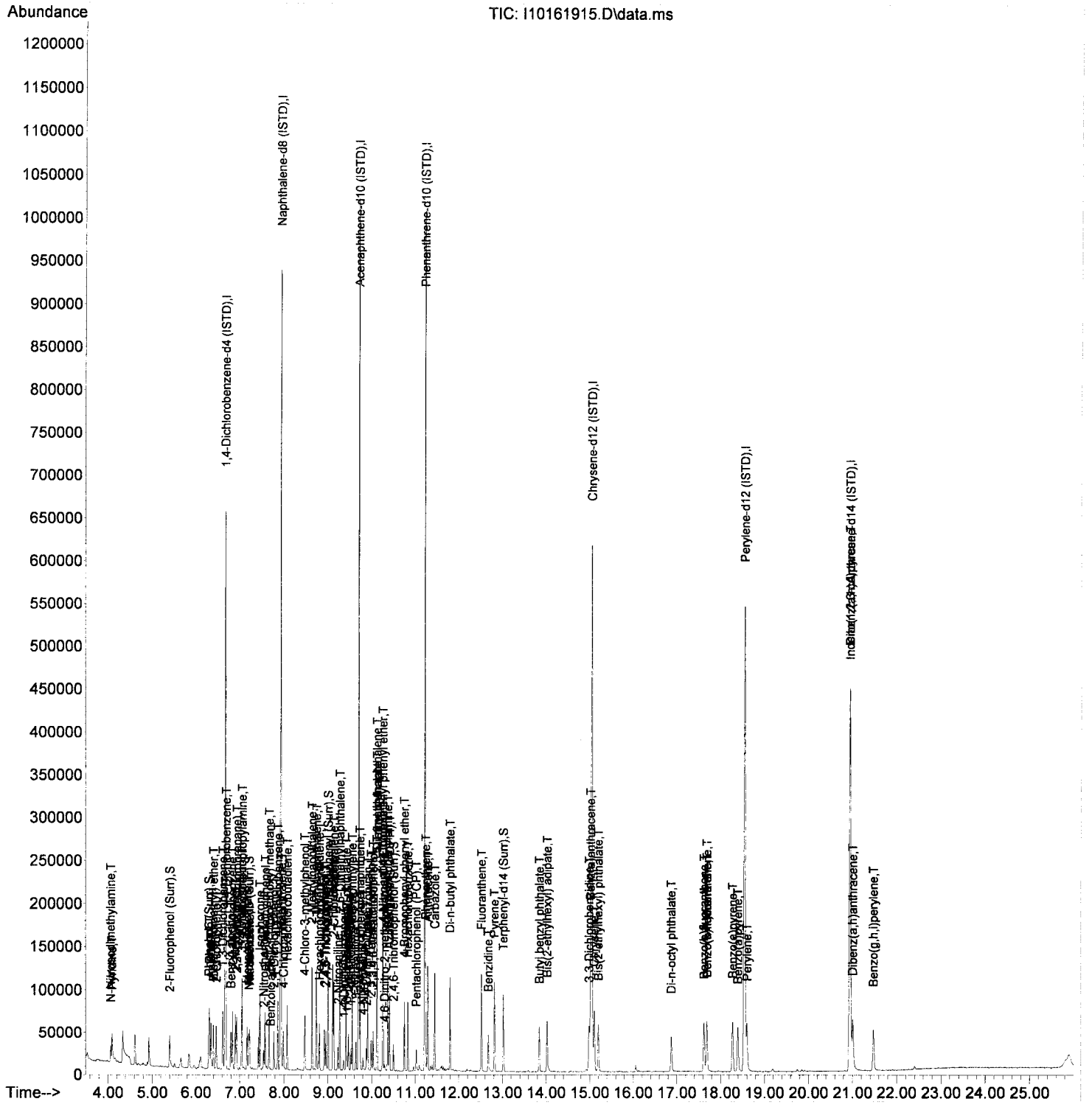
response 1889

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	91.60
77.10	77.80	98.28
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161915.D
Acq On : 16 Oct 2019 6:54 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL4
Misc : 1x, A19G241 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:05 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161916.D
Acq On : 16 Oct 2019 7:30 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL5
Misc : 1x, A19G242 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:14 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JR 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.664	152	110317	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	438764	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	223981	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	414839	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	424974	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.554	264	438576	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.950	292	372459	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.412	112	41291	571.31	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	51731	598.36	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	38734	556.51	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	94649	577.90	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	12089	519.69	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.023	244	110622	543.35	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.086	74	32984	654.77	ng/ml	99
3) Pyridine	4.107	79	50729	683.06	ng/ml	96
6) Phenol	6.306	94	55173	622.03	ng/ml	97
7) Aniline	6.343	93	59550	723.63	ng/ml	96
8) Bis(2-chloroethyl) ether	6.396	93	50835	619.43	ng/ml	97
9) 2-Chlorophenol	6.461	128	42644	558.35	ng/ml	97
10) 1,3-Dichlorobenzene	6.610	146	46500	533.26	ng/ml	99
11) 1,4-Dichlorobenzene	6.680	146	44891	529.06	ng/ml	99
12) Benzyl alcohol	6.787	108	22926	574.58	ng/ml	97
13) 1,2-Dichlorobenzene	6.830	146	44501	541.74	ng/ml	99
14) 2-Methylphenol	6.894	107	33736	626.04	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	70737	834.43	ng/ml	100
16) N-Nitrosodi-n-propylamine	7.049	70	36526	735.78	ng/ml	99
17) 3+4-Methylphenol	7.044	107	41942	589.01	ng/ml	98
18) Hexachloroethane	7.167	201	13814	510.73	ng/ml	97
20) Nitrobenzene	7.220	77	42464	611.33	ng/ml	97
22) Isophorone	7.450	82	94466	641.14	ng/ml	95
23) 2-Nitrophenol	7.536	139	17473	399.47	ng/ml	99
24) 2,4-Dimethylphenol	7.568	122	32732	512.60	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.659	93	53184	599.67	ng/ml	98
26) Benzoic acid	7.627	105	9988	920.18	ng/ml	95
27) 2,4-Dichlorophenol	7.771	162	28760	498.98	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.862	180	38996	516.10	ng/ml	97
29) Naphthalene	7.942	128	123871	549.27	ng/ml	100
30) 4-Chloroaniline	7.990	127	38672	678.60	ng/ml	97
31) Hexachlorobutadiene	8.071	225	21118	523.87	ng/ml	99
32) 4-Chloro-3-methylphenol	8.466	107	33546	575.28	ng/ml	98
33) 2-Methylnaphthalene	8.638	142	90190	557.45	ng/ml	99
34) 1-Methylnaphthalene	8.739	142	85675	555.34	ng/ml	98
36) Hexachlorocyclopentadiene	8.809	237	19912	465.89	ng/ml	95
37) 2,4,6-Trichlorophenol	8.921	196	21567	501.50	ng/ml	99
38) 2,4,5-Trichlorophenol	8.953	198	21096	498.53	ng/ml	99
39) 1,1'-Biphenyl	9.108	154	104830	567.88	ng/ml	100
41) 2-Chloronaphthalene	9.130	162	77553	576.62	ng/ml	99
42) 2-Nitroaniline	9.226	138	18180	397.91	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.269	156	77752	563.73	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161916.D
Acq On : 16 Oct 2019 7:30 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL5
Misc : 1x, A19G242 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:14 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

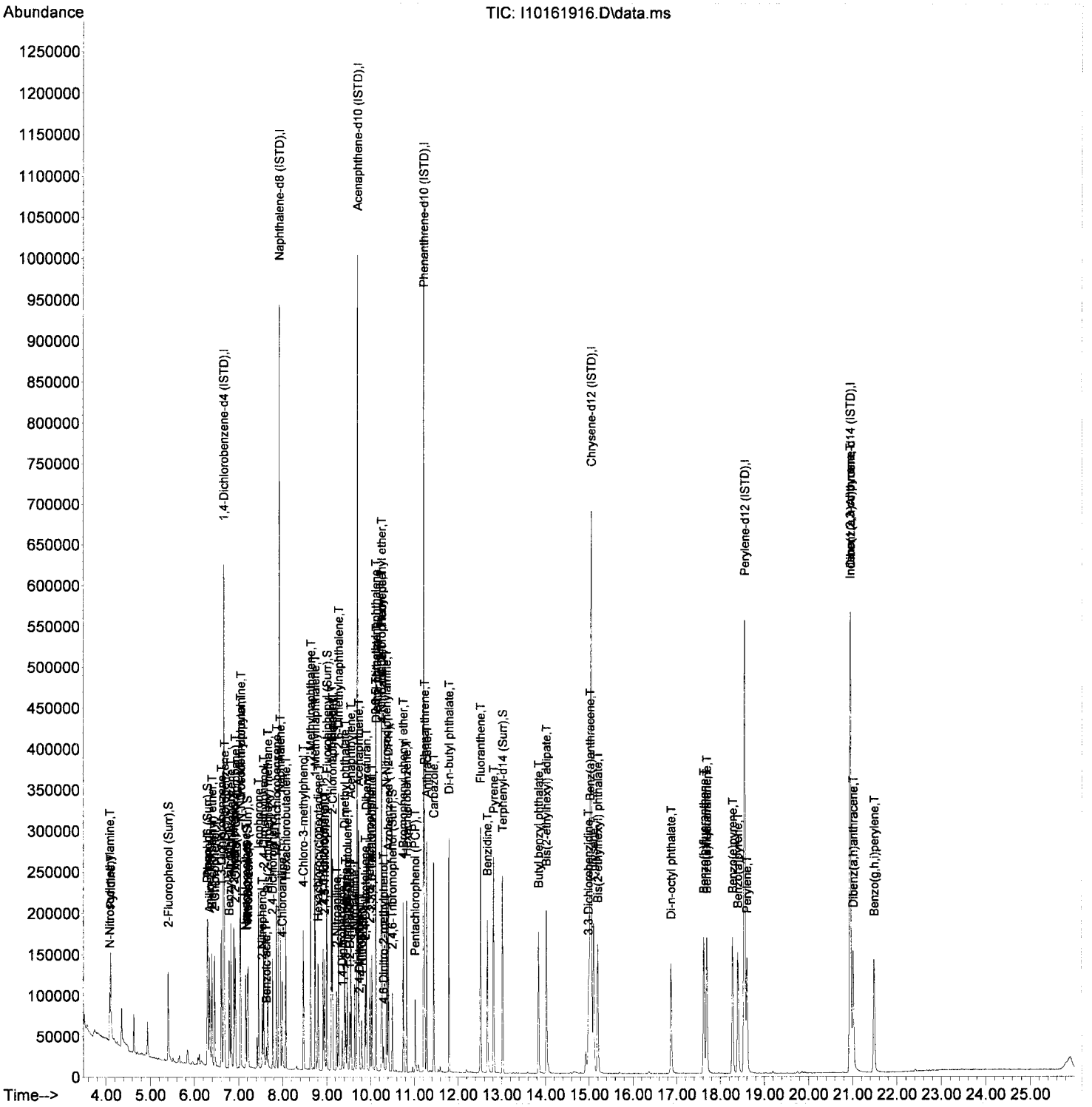
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.354	168	5080	270.73	ng/ml	99
45)	Dimethyl phthalate	9.408	163	89795	551.05	ng/ml	99
46)	1,3-Dinitrobenzene	9.434	168	7846	291.68	ng/ml	95
47)	2,6-Dinitrotoluene	9.467	165	16561	439.32	ng/ml	96
48)	1,2-Dinitrobenzene	9.525	168	7179	392.78	ng/ml	93
49)	Acenaphthylene	9.552	152	125650	574.71	ng/ml	99
50)	3-Nitroaniline	9.638	138	16475	486.95	ng/ml	90
51)	Acenaphthene	9.729	153	76410	542.74	ng/ml	99
52)	2,4-Dinitrophenol	9.745	184	1553	254.53	ng/ml	93
53)	4-Nitrophenol	9.798	139	9787	393.46	ng/ml	98
54)	2,4-Dinitrotoluene	9.878	165	17286	367.01	ng/ml	99
55)	Dibenzofuran	9.905	168	107652	550.26	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	9.985	232	16246	464.74	ng/ml	98
57)	2,3,4,6-Tetrachlorophenol	10.028	232	19007	510.11	ng/ml	97
58)	Diethyl phthalate	10.124	149	85721	565.07	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.114	170	72192	543.46	ng/ml	100
60)	Fluorene	10.253	166	85310	543.90	ng/ml	97
61)	4-Chlorophenyl phenyl ...	10.247	204	41485	519.71	ng/ml	98
62)	4-Nitroaniline	10.258	138	14782	447.75	ng/ml	96
63)	4,6-Dinitro-2-methylph...	10.296	198	3988	247.54	ng/ml	93
65)	N-Nitrosodiphenylamine	10.365	169	72014	564.24	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.408	77	92532	722.14	ng/ml	99
68)	4-Bromophenyl phenyl e...	10.745	248	25602	533.45	ng/ml	94
69)	Hexachlorobenzene	10.825	284	30369	552.18	ng/ml	99
70)	Pentachlorophenol (PCP)	11.018	266	11494	437.29	ng/ml	94
71)	Phenanthrene	11.237	178	117198	534.44	ng/ml	99
72)	Anthracene	11.290	178	120664	566.06	ng/ml	99
73)	Carbazole	11.446	167	104447	527.45	ng/ml	99
74)	Di-n-butyl phthalate	11.793	149	143903	587.08	ng/ml	99
75)	Fluoranthene	12.515	202	141254	568.97	ng/ml	99
76)	Benzidine	12.670	184	90422	1375.35	ng/ml	98
77)	Pyrene	12.815	202	142947	572.23	ng/ml	99
80)	Butyl benzyl phthalate	13.847	149	58303	532.64	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	14.024	129	52124	524.49	ng/ml	98
82)	3,3-Dichlorobenzidine	14.986	252	50303	1440.52	ng/ml	97
83)	Benz(a)anthracene	15.024	228	128384	526.52	ng/ml	97
84)	Chrysene	15.104	228	116526	523.37	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.200	149	78522	540.04	ng/ml	99
87)	Di-n-octyl phthalate	16.874	149	120881	502.40	ng/ml	99
88)	Benzo(b)fluoranthene	17.623	252	128872	523.34	ng/ml	100
89)	Benzo(k)fluoranthene	17.693	252	130011	559.94	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.693	252	264478	1079.92	ng/ml	99
91)	Benzo(e)pyrene	18.281	252	127706	531.45	ng/ml	98
92)	Benzo(a)pyrene	18.399	252	117701	524.26	ng/ml	97
93)	Perylene	18.607	252	104561	515.56	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.945	276	114261	507.87	ng/ml	99
96)	Dibenz(a,h)anthracene	21.014	278	103626	528.61	ng/ml	99
97)	Benzo(g,h,i)perylene	21.485	276	117149	544.05	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161916.D
Acq On : 16 Oct 2019 7:30 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL5
Misc : 1x, A19G242 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:14 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161917.D
Acq On : 16 Oct 2019 8:05 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL6
Misc : 1x, A19G243 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:21 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	108692	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	415784	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	210848	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	394261	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	404897	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.554	264	409934	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.950	292	363670	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.407	112	81539	1145.06	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	102248	1200.35	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	76069	1109.26	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	167583	1086.96	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	24117	1071.37	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.023	244	202564	1044.29	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.075	74	63705	1283.53	ng/ml	100
3) Pyridine	4.091	79	100642	1339.80	ng/ml	100
6) Phenol	6.306	94	105930	1212.12	ng/ml	100
7) Aniline	6.343	93	104698	1291.28	ng/ml	100
8) Bis(2-chloroethyl) ether	6.396	93	97200	1202.09	ng/ml	100
9) 2-Chlorophenol	6.461	128	82633	1098.12	ng/ml	100
10) 1,3-Dichlorobenzene	6.610	146	87984	1024.08	ng/ml	100
11) 1,4-Dichlorobenzene	6.680	146	83649	1000.58	ng/ml	100
12) Benzyl alcohol	6.787	108	48394	1177.28	ng/ml	100
13) 1,2-Dichlorobenzene	6.830	146	82317	1017.07	ng/ml	100
14) 2-Methylphenol	6.894	107	64002	1205.45	ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	128835	1542.49	ng/ml	100
16) N-Nitrosodi-n-propylamine	7.049	70	66569	1361.02	ng/ml	100
17) 3+4-Methylphenol	7.044	107	80497	1142.08	ng/ml	100
18) Hexachloroethane	7.167	201	26988	1012.72	ng/ml	100
20) Nitrobenzene	7.220	77	81675	1193.41	ng/ml	100
22) Isophorone	7.455	82	172965	1238.79	ng/ml	100
23) 2-Nitrophenol	7.536	139	38840	937.04	ng/ml	100
24) 2,4-Dimethylphenol	7.568	122	64041	1058.36	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.664	93	97637	1161.74	ng/ml	100
26) Benzoic acid	7.653	105	42834	1729.87	ng/ml	100
27) 2,4-Dichlorophenol	7.771	162	57918	1031.32	ng/ml	100
28) 1,2,4-Trichlorobenzene	7.862	180	71920	1004.45	ng/ml	100
29) Naphthalene	7.942	128	222697	1042.06	ng/ml	100
30) 4-Chloroaniline	7.990	127	74988	1366.94	ng/ml	100
31) Hexachlorobutadiene	8.071	225	38923	1018.91	ng/ml	100
32) 4-Chloro-3-methylphenol	8.466	107	66824	1155.77	ng/ml	100
33) 2-Methylnaphthalene	8.637	142	164653	1073.94	ng/ml	100
34) 1-Methylnaphthalene	8.739	142	154845	1059.17	ng/ml	100
36) Hexachlorocyclopentadiene	8.809	237	40001	994.21	ng/ml	100
37) 2,4,6-Trichlorophenol	8.921	196	42283	1007.90	ng/ml	100
38) 2,4,5-Trichlorophenol	8.953	198	42231	1030.52	ng/ml	100
39) 1,1'-Biphenyl	9.108	154	187524	1079.13	ng/ml	100
41) 2-Chloronaphthalene	9.130	162	138289	1092.25	ng/ml	100
42) 2-Nitroaniline	9.226	138	39518	918.81	ng/ml	100
43) 2,6-Dimethylnaphthalene	9.269	156	139567	1074.94	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161917.D
Acq On : 16 Oct 2019 8:05 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL6
Misc : 1x, A19G243 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:21 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

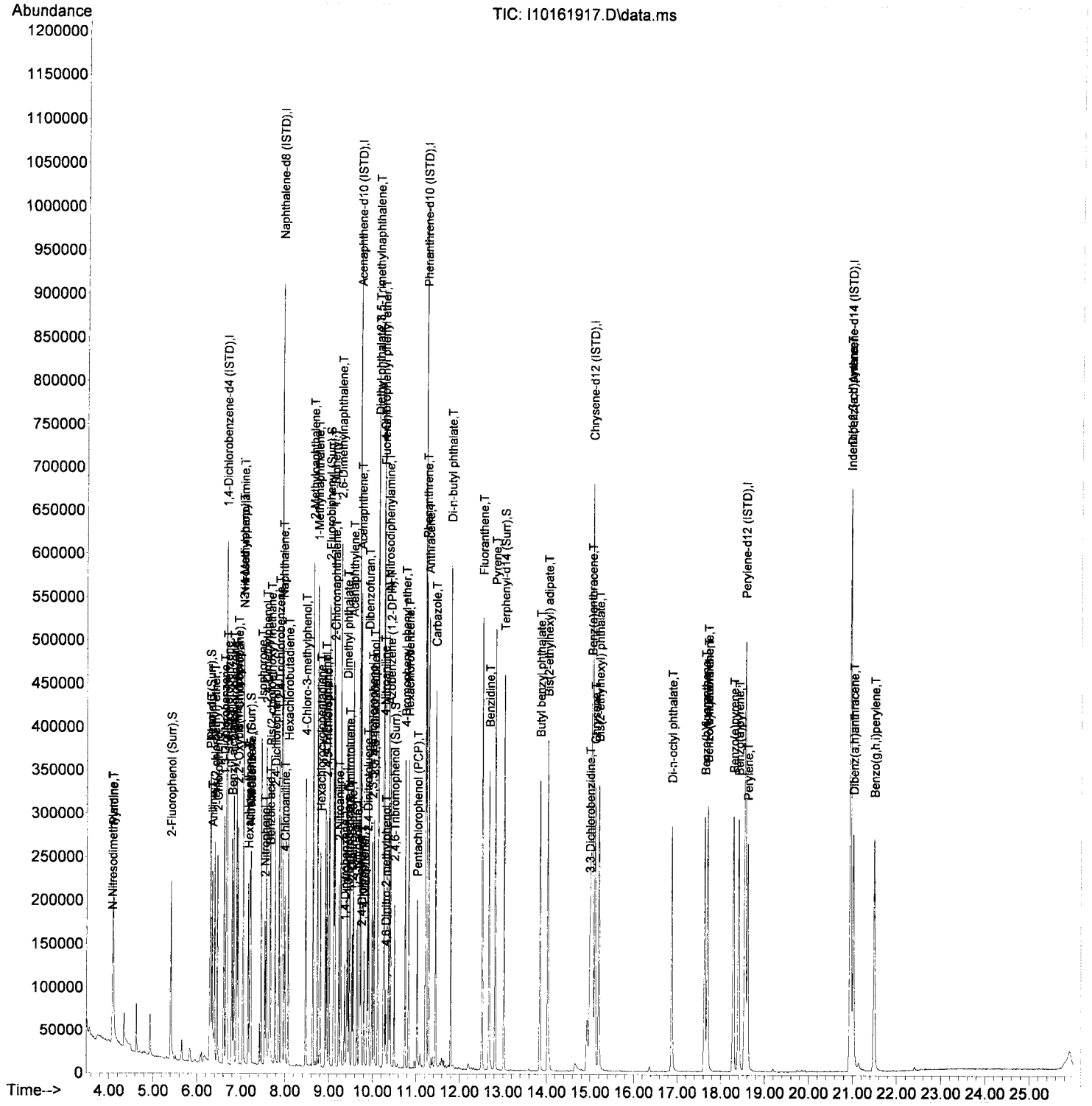
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.354	168	12494	603.08	ng/ml	100
45) Dimethyl phthalate	9.408	163	161978	1055.98	ng/ml	100
46) 1,3-Dinitrobenzene	9.434	168	18022	711.71	ng/ml	100
47) 2,6-Dinitrotoluene	9.467	165	33104	932.85	ng/ml	100
48) 1,2-Dinitrobenzene	9.525	168	15130	879.35	ng/ml	100
49) Acenaphthylene	9.552	152	223232	1084.65	ng/ml	100
50) 3-Nitroaniline	9.643	138	28849	1036.99	ng/ml	100
51) Acenaphthene	9.734	153	137686	1038.90	ng/ml	100
52) 2,4-Dinitrophenol	9.745	184	5088	489.75	ng/ml	100
53) 4-Nitrophenol	9.798	139	22603	869.99	ng/ml	100
54) 2,4-Dinitrotoluene	9.878	165	38193	861.41	ng/ml	100
55) Dibenzofuran	9.905	168	190719	1035.57	ng/ml	100
56) 2,3,5,6-Tetrachlorophenol	9.985	232	32998	964.43	ng/ml	100
57) 2,3,4,6-Tetrachlorophenol	10.028	232	37050	1039.19	ng/ml	100
58) Diethyl phthalate	10.124	149	152181	1065.65	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	10.119	170	129295	1033.95	ng/ml	100
60) Fluorene	10.258	166	150523	1019.45	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.247	204	75441	1003.96	ng/ml	100
62) 4-Nitroaniline	10.263	138	25826	831.00	ng/ml	100
63) 4,6-Dinitro-2-methylph...	10.296	198	11200	583.51	ng/ml	100
65) N-Nitrosodiphenylamine	10.365	169	126925	1046.39	ng/ml	100
66) Azobenzene (1,2-DPH)	10.408	77	160071	1314.43	ng/ml	100
68) 4-Bromophenyl phenyl e...	10.750	248	46996	1030.33	ng/ml	100
69) Hexachlorobenzene	10.825	284	55109	1054.31	ng/ml	100
70) Pentachlorophenol (PCP)	11.023	266	24901	962.91	ng/ml	100
71) Phenanthrene	11.237	178	213306	1023.47	ng/ml	100
72) Anthracene	11.290	178	215829	1065.34	ng/ml	100
73) Carbazole	11.446	167	168399	1006.71	ng/ml	100
74) Di-n-butyl phthalate	11.793	149	267688	1149.08	ng/ml	100
75) Fluoranthene	12.521	202	263203	1115.51	ng/ml	100
76) Benzidine	12.676	184	169900	2719.13	ng/ml	100
77) Pyrene	12.815	202	259464	1092.86	ng/ml	100
80) Butyl benzyl phthalate	13.847	149	118464	1093.51	ng/ml	100
81) Bis(2-ethylhexyl) adipate	14.024	129	104759	1106.39	ng/ml	100
82) 3,3-Dichlorobenzidine	14.992	252	72934	2501.65	ng/ml	100
83) Benz(a)anthracene	15.029	228	235737	1014.72	ng/ml	100
84) Chrysene	15.109	228	213742	1007.62	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.200	149	155751	1124.30	ng/ml	100
87) Di-n-octyl phthalate	16.874	149	261927	1079.83	ng/ml	100
88) Benzo(b)fluoranthene	17.634	252	246144	1069.42	ng/ml	100
89) Benzo(k)fluoranthene	17.698	252	241628	1113.37	ng/ml	100
90) Benzo(b+k)fluoranthene	17.698	252	498931	2179.58	ng/ml	100
91) Benzo(e)pyrene	18.286	252	240269	1069.74	ng/ml	100
92) Benzo(a)pyrene	18.404	252	223821	1060.23	ng/ml	100
93) Perylene	18.613	252	194782	1027.52	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.945	276	213608	972.39	ng/ml	100
96) Dibenz(a,h)anthracene	21.020	278	194682	1017.09	ng/ml	100
97) Benzo(g,h,i)perylene	21.490	276	223060	1060.95	ng/ml	100

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161917.D
Acq On : 16 Oct 2019 8:05 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL6
Misc : 1x, A19G243 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:21 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161918.D
Acq On : 16 Oct 2019 8:40 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL7
Misc : 1x, A19G244 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:28 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	106472	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	403006	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	204324	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	394462	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.056	240	379303	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.559	264	398414	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.961	292	371696	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	168171	2410.88	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	209429	2509.88	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.204	82	154925	2306.26	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	307320	2056.94	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.504	330	50890	2220.74	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.023	244	390228	2147.52	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.059	74	130513	2684.40	ng/ml	99
3) Pyridine	4.075	79	206511	2691.42	ng/ml	98
6) Phenol	6.305	94	208278	2432.94	ng/ml	98
7) Aniline	6.343	93	193255	2438.18	ng/ml	96
8) Bis(2-chloroethyl) ether	6.396	93	209890	2649.88	ng/ml	98
9) 2-Chlorophenol	6.455	128	161665	2193.18	ng/ml	98
10) 1,3-Dichlorobenzene	6.605	146	171908	2042.62	ng/ml	99
11) 1,4-Dichlorobenzene	6.675	146	161488	1971.93	ng/ml	98
12) Benzyl alcohol	6.792	108	101019	2397.02	ng/ml	98
13) 1,2-Dichlorobenzene	6.830	146	158155	1994.84	ng/ml	98
14) 2-Methylphenol	6.894	107	125482	2412.68	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	232038	2836.02	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.054	70	122433	2555.37	ng/ml	97
17) 3+4-Methylphenol	7.044	107	160363	2329.50	ng/ml	99
18) Hexachloroethane	7.161	201	54131	2073.61	ng/ml	94
20) Nitrobenzene	7.220	77	158273	2360.86	ng/ml	98
22) Isophorone	7.455	82	326670	2413.82	ng/ml	99
23) 2-Nitrophenol	7.536	139	73325	1825.10	ng/ml	98
24) 2,4-Dimethylphenol	7.573	122	126582	2158.25	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.664	93	183878	2257.26	ng/ml	99
26) Benzoic acid	7.685	105	106896	3322.04	ng/ml	99
27) 2,4-Dichlorophenol	7.776	162	119237	2152.69	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.862	180	136516	1967.06	ng/ml	99
29) Naphthalene	7.942	128	407227	1965.94	ng/ml	99
30) 4-Chloroaniline	7.990	127	158495	2926.81	ng/ml	100
31) Hexachlorobutadiene	8.071	225	75680	2043.94	ng/ml	99
32) 4-Chloro-3-methylphenol	8.466	107	134732	2325.11	ng/ml	99
33) 2-Methylnaphthalene	8.637	142	312402	2102.28	ng/ml	99
34) 1-Methylnaphthalene	8.739	142	289054	2039.88	ng/ml	100
36) Hexachlorocyclopentadiene	8.809	237	83207	2134.12	ng/ml	98
37) 2,4,6-Trichlorophenol	8.921	196	86005	2073.95	ng/ml	98
38) 2,4,5-Trichlorophenol	8.953	198	85045	2113.03	ng/ml	99
39) 1,1'-Biphenyl	9.108	154	345569	2052.11	ng/ml	100
41) 2-Chloronaphthalene	9.135	162	250807	2044.20	ng/ml	100
42) 2-Nitroaniline	9.231	138	82868	1988.24	ng/ml	96
43) 2,6-Dimethylnaphthalene	9.269	156	255391	2029.81	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161918.D
Acq On : 16 Oct 2019 8:40 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL7
Misc : 1x, A19G244 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:28 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

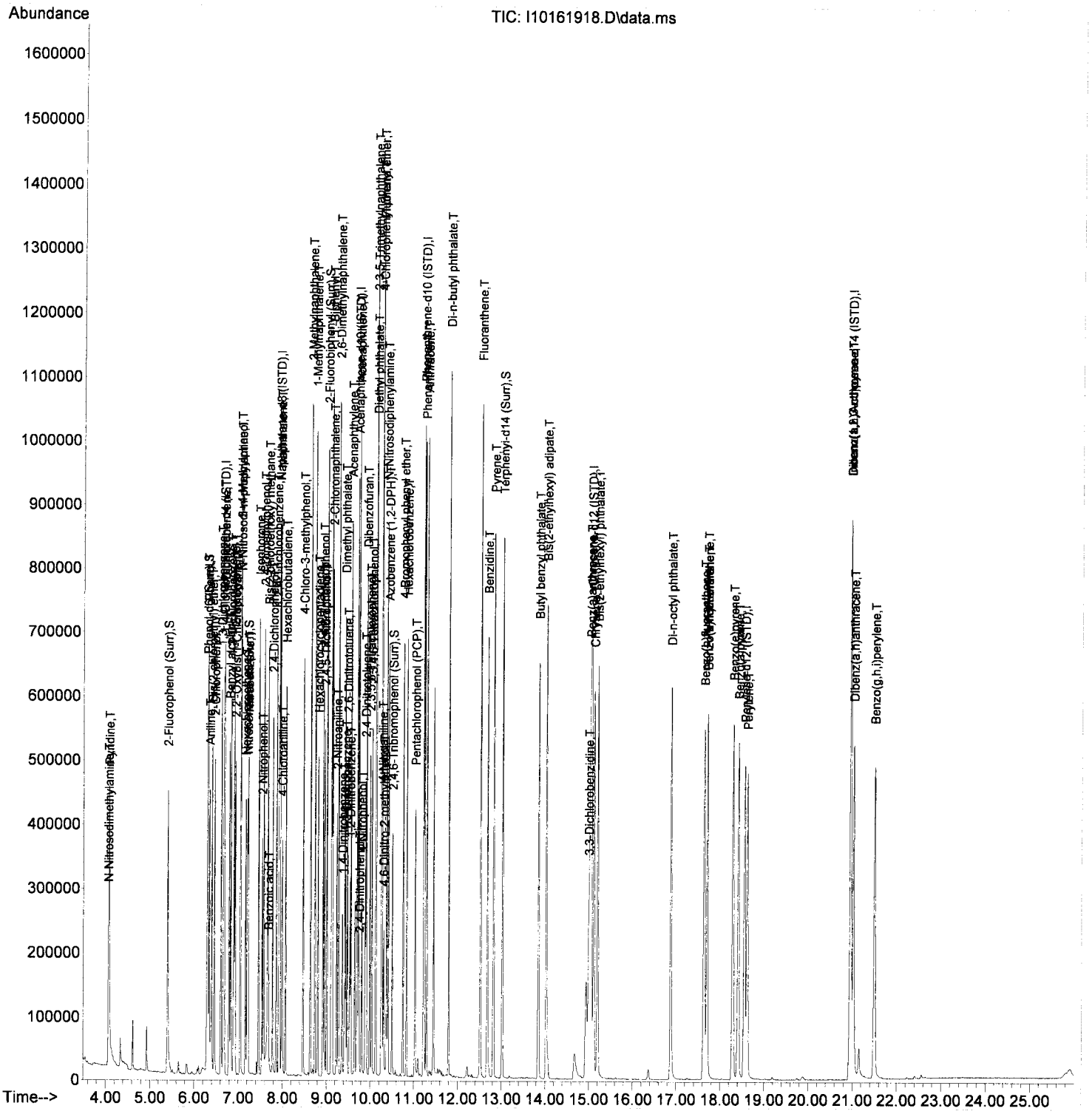
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.360	168	31930	1471.63	ng/ml	91
45)	Dimethyl phthalate	9.413	163	303831	2043.92	ng/ml	99
46)	1,3-Dinitrobenzene	9.440	168	41890	1707.10	ng/ml	97
47)	2,6-Dinitrotoluene	9.472	165	67679	1968.05	ng/ml	96
48)	1,2-Dinitrobenzene	9.531	168	31248	1874.11	ng/ml	94
49)	Acenaphthylene	9.557	152	401818	2014.70	ng/ml	100
50)	3-Nitroaniline	9.643	138	47185	Below Cal		97
51)	Acenaphthene	9.734	153	257901	2008.11	ng/ml	99
52)	2,4-Dinitrophenol	9.750	184	15123	1140.61	ng/ml	95
53)	4-Nitrophenol	9.803	139	50566	1899.28	ng/ml	96
54)	2,4-Dinitrotoluene	9.884	165	83801	1950.41	ng/ml	98
55)	Dibenzofuran	9.910	168	356546	1997.79	ng/ml	97
56)	2,3,5,6-Tetrachlorophenol	9.985	232	69287	2038.37	ng/ml	99
57)	2,3,4,6-Tetrachlorophenol	10.033	232	73600	2101.07	ng/ml	96
58)	Diethyl phthalate	10.130	149	272344	1967.98	ng/ml	97
59)	2,3,5-Trimethylnaphtha...	10.119	170	238990	1972.18	ng/ml	97
60)	Fluorene	10.258	166	274932	1921.50	ng/ml	98
61)	4-Chlorophenyl phenyl ...	10.253	204	144104	1978.96	ng/ml	96
62)	4-Nitroaniline	10.269	138	49921	1657.59	ng/ml	98
63)	4,6-Dinitro-2-methylph...	10.301	198	29002	1400.61	ng/ml	96
65)	N-Nitrosodiphenylamine	10.370	169	232578	1916.43	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.413	77	291944	2396.10	ng/ml	95
68)	4-Bromophenyl phenyl e...	10.750	248	94009	2059.99	ng/ml	99
69)	Hexachlorobenzene	10.830	284	108673	2078.00	ng/ml	97
70)	Pentachlorophenol (PCP)	11.023	266	57124	2139.27	ng/ml	98
71)	Phenanthrene	11.242	178	408903	1960.97	ng/ml	99
72)	Anthracene	11.290	178	409728	2021.40	ng/ml	99
73)	Carbazole	11.446	167	254192	Below Cal		99
74)	Di-n-butyl phthalate	11.793	149	509487	2185.92	ng/ml	99
75)	Fluoranthene	12.521	202	497259	2106.42	ng/ml	99
76)	Benzidine	12.676	184	351632	5624.75	ng/ml	97
77)	Pyrene	12.820	202	487359	2051.71	ng/ml	99
80)	Butyl benzyl phthalate	13.852	149	243686	2305.47	ng/ml	98
81)	Bis(2-ethylhexyl) adipate	14.029	129	211290	2382.07	ng/ml	99
82)	3,3-Dichlorobenzidine	14.997	252	117183	4720.80	ng/ml	99
83)	Benz(a)anthracene	15.029	228	445654	2047.75	ng/ml	98
84)	Chrysene	15.115	228	410860	2067.56	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.200	149	308465	2376.93	ng/ml	99
87)	Di-n-octyl phthalate	16.880	149	571058	2306.81	ng/ml	98
88)	Benzo(b)fluoranthene	17.634	252	501132	2240.22	ng/ml	99
89)	Benzo(k)fluoranthene	17.709	252	460821	2184.77	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.709	252	980351	4406.49	ng/ml	98
91)	Benzo(e)pyrene	18.297	252	475633	2178.87	ng/ml	99
92)	Benzo(a)pyrene	18.415	252	440842	2151.48	ng/ml	99
93)	Perylene	18.618	252	380066	2062.91	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	20.961	276	439827	1958.96	ng/ml	100
96)	Dibenz(a,h)anthracene	21.030	278	396150	2024.95	ng/ml	99
97)	Benzo(g,h,i)perylene	21.501	276	452012	2103.49	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161918.D
Acq On : 16 Oct 2019 8:40 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL7
Misc : 1x, A19G244 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:28 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161919.D
Acq On : 16 Oct 2019 9:14 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL8
Misc : 1x, A19G245 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.664	152	105713	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.926	136	397960	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	209804	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	417540	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.072	240	381197	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.570	264	410166	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.982	292	397776	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.407	112	336987	4865.69	ng/ml	0.00
5) Phenol-d6 (Surr)	6.306	99	419864	5067.94	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.204	82	303165	4545.41	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.012	172	561154	3657.80	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	111317	4477.71	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.029	244	763944	4183.27	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.075	74	258805	5361.35	ng/ml	99
3) Pyridine	4.086	79	416575	5115.18	ng/ml	98
6) Phenol	6.316	94	432772	5091.61	ng/ml	97
7) Aniline	6.348	93	377305	4784.58	ng/ml	96
8) Bis(2-chloroethyl) ether	6.402	93	375165	4770.50	ng/ml	98
9) 2-Chlorophenol	6.461	128	308174	4210.77	ng/ml	98
10) 1,3-Dichlorobenzene	6.611	146	323172	3867.52	ng/ml	98
11) 1,4-Dichlorobenzene	6.680	146	302701	3722.82	ng/ml	100
12) Benzyl alcohol	6.798	108	202180	4549.20	ng/ml	99
13) 1,2-Dichlorobenzene	6.830	146	289895	3682.75	ng/ml	99
14) 2-Methylphenol	6.899	107	231464	4482.38	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.926	45	401443	4941.76	ng/ml	93
16) N-Nitrosodi-n-propylamine	7.065	70	216758	4556.56	ng/ml	94
17) 3+4-Methylphenol	7.054	107	292865	4329.71	ng/ml	98
18) Hexachloroethane	7.167	201	106200	4097.43	ng/ml	97
20) Nitrobenzene	7.226	77	293208	4405.01	ng/ml	96
22) Isophorone	7.466	82	624906	4676.08	ng/ml	98
23) 2-Nitrophenol	7.541	139	157209	3962.63	ng/ml	98
24) 2,4-Dimethylphenol	7.579	122	238097	4111.08	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.670	93	336452	4182.61	ng/ml	98
26) Benzoic acid	~~7.579~~	~~105~~	~~8424~~	~~903.92~~	~~ng/ml#~~	~~1~~
27) 2,4-Dichlorophenol	7.782	162	227693	4103.34	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.867	180	256919	3748.89	ng/ml	100
29) Naphthalene	7.948	128	725187	3545.32	ng/ml	97
30) 4-Chloroaniline	7.996	127	312189	5693.61	ng/ml	99
31) Hexachlorobutadiene	8.076	225	146937	4018.74	ng/ml	99
32) 4-Chloro-3-methylphenol	8.472	107	266335	4489.42	ng/ml	97
33) 2-Methylnaphthalene	8.643	142	571940	3897.52	ng/ml	98
34) 1-Methylnaphthalene	8.745	142	525478	3755.36	ng/ml	99
36) Hexachlorocyclopentadiene	8.809	237	167259	4177.86	ng/ml	98
37) 2,4,6-Trichlorophenol	8.926	196	176954	4100.87	ng/ml	98
38) 2,4,5-Trichlorophenol	8.959	198	169331	4071.96	ng/ml	99
39) 1,1'-Biphenyl	9.114	154	623340	3604.93	ng/ml	97
41) 2-Chloronaphthalene	9.135	162	453639	3600.81	ng/ml	98
42) 2-Nitroaniline	9.237	138	173545	4055.08	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.274	156	464700	3596.90	ng/ml	97

See MJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161919.D
Acq On : 16 Oct 2019 9:14 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL8
Misc : 1x, A19G245 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

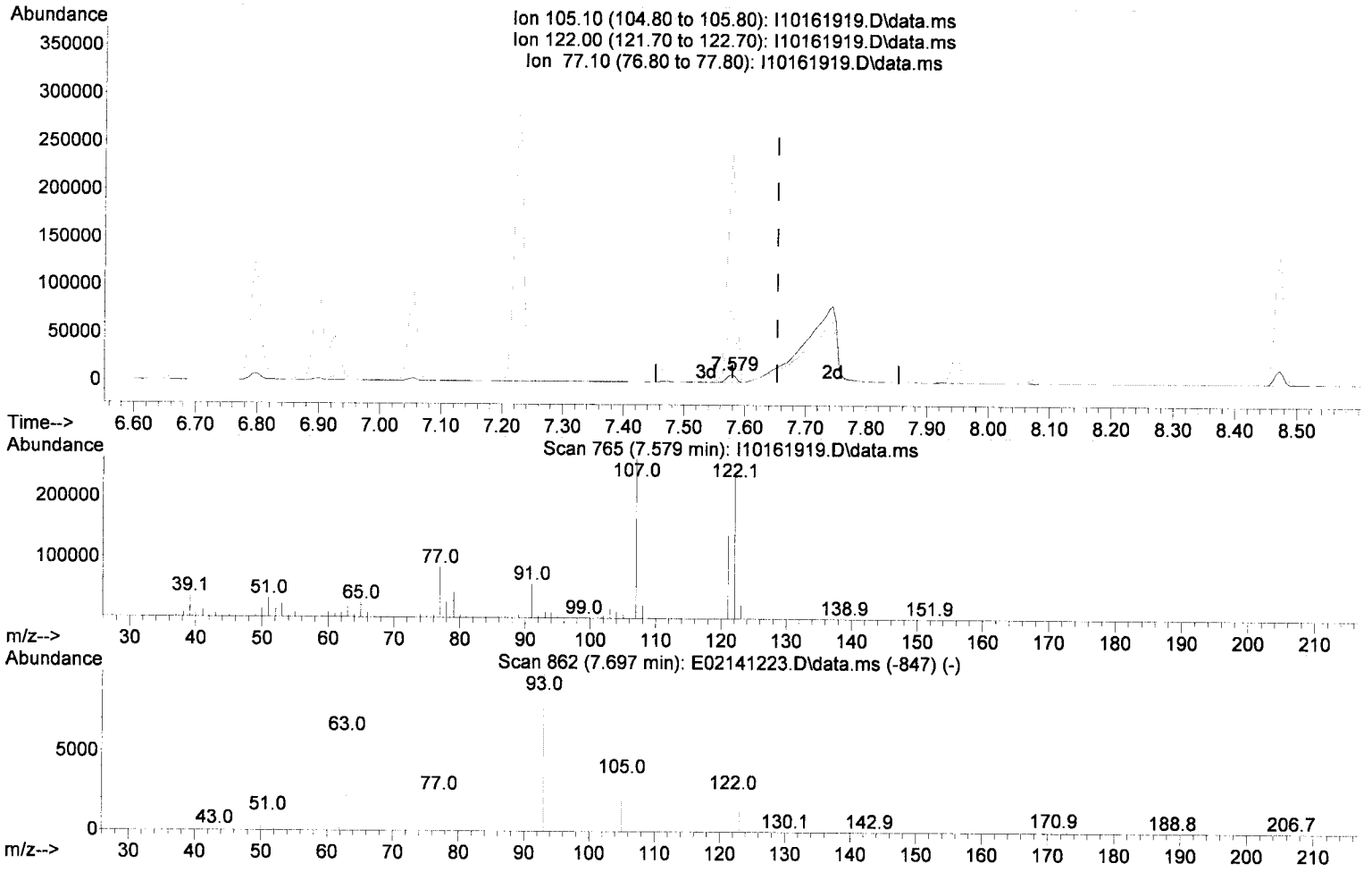
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.365	168	77125	3303.00	ng/ml	90
45) Dimethyl phthalate	9.424	163	566035	3708.34	ng/ml	99
46) 1,3-Dinitrobenzene	9.451	168	91162	3618.00	ng/ml	95
47) 2,6-Dinitrotoluene	9.483	165	135556	3838.90	ng/ml	87
48) 1,2-Dinitrobenzene	9.542	168	65220	3809.43	ng/ml	95
49) Acenaphthylene	9.563	152	722393	3527.45	ng/ml	97
50) 3-Nitroaniline	9.654	138	72076	Below Cal		97
51) Acenaphthene	9.739	153	473473	3590.34	ng/ml	99
52) 2,4-Dinitrophenol	9.756	184	47179	2890.39	ng/ml	96
53) 4-Nitrophenol	9.814	139	112553	3928.24	ng/ml	96
54) 2,4-Dinitrotoluene	9.895	165	177218	4016.90	ng/ml	94
55) Dibenzofuran	9.911	168	645432	3522.01	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.991	232	147371	4126.12	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.039	232	154291	4211.84	ng/ml	94
58) Diethyl phthalate	10.135	149	484945	3412.73	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.125	170	434174	3489.29	ng/ml	98
60) Fluorene	10.264	166	491882	3347.97	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.253	204	278225	3721.02	ng/ml	97
62) 4-Nitroaniline	10.280	138	109557	3542.74	ng/ml	98
63) 4,6-Dinitro-2-methylph...	10.312	198	75505	3262.41	ng/ml	91
65) N-Nitrosodiphenylamine	10.376	169	416136	3239.42	ng/ml	100
66) Azobenzene (1,2-DPH)	10.419	77	507476	3934.84	ng/ml	88
68) 4-Bromophenyl phenyl e...	10.756	248	197154	4081.39	ng/ml	97
69) Hexachlorobenzene	10.836	284	222237	4014.65	ng/ml	95
70) Pentachlorophenol (PCP)	11.023	266	129749	4400.30	ng/ml	99
71) Phenanthrene	11.242	178	758865	3438.13	ng/ml	97
72) Anthracene	11.296	178	757506	3530.61	ng/ml	97
73) Carbazole	11.451	167	377741	Below Cal		99
74) Di-n-butyl phthalate	11.793	149	936406	3795.53	ng/ml	97
75) Fluoranthene	12.526	202	949333	3799.17	ng/ml	98
76) Benzidine	12.687	184	735075	11108.44	ng/ml	99
77) Pyrene	12.826	202	913548	3633.34	ng/ml	97
80) Butyl benzyl phthalate	13.858	149	495582	4422.98	ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.034	129	417409	4682.46	ng/ml	98
82) 3,3-Dichlorobenzidine	15.008	252	209588	8892.65	ng/ml	98
83) Benz(a)anthracene	15.045	228	866011	3959.49	ng/ml	97
84) Chrysene	15.136	228	798796	3999.79	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.211	149	590135	4524.80	ng/ml	97
87) Di-n-octyl phthalate	16.891	149	1176050	4412.22	ng/ml	98
88) Benzo(b)fluoranthene	17.661	252	1011072	4390.31	ng/ml	99
89) Benzo(k)fluoranthene	17.736	252	889038	4094.20	ng/ml	98
90) Benzo(b+k)fluoranthene	17.736	252	1939096	8466.14	ng/ml	98
91) Benzo(e)pyrene	18.319	252	952442	4238.12	ng/ml	99
92) Benzo(a)pyrene	18.442	252	863983	4129.87	ng/ml	100
93) Perylene	18.645	252	755087	3981.01	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.993	276	948237	3946.49	ng/ml	98
96) Dibenz(a,h)anthracene	21.057	278	801452	3828.08	ng/ml	99
97) Benzo(g,h,i)perylene	21.539	276	907373	3945.72	ng/ml	99

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161919.D
Acq On : 16 Oct 2019 9:14 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL8
Misc : 1x, A19G245 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161919.D\data.ms

(26) Benzoic acid (T)

7.579min (-0.075) 903.92 ng/ml

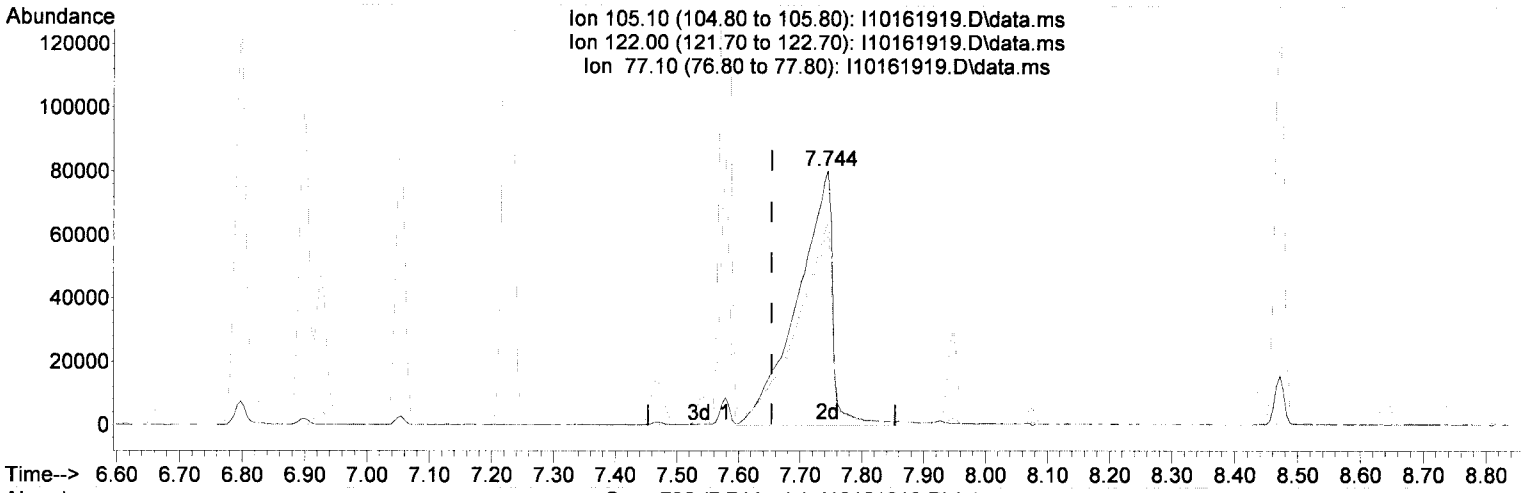
response 8424

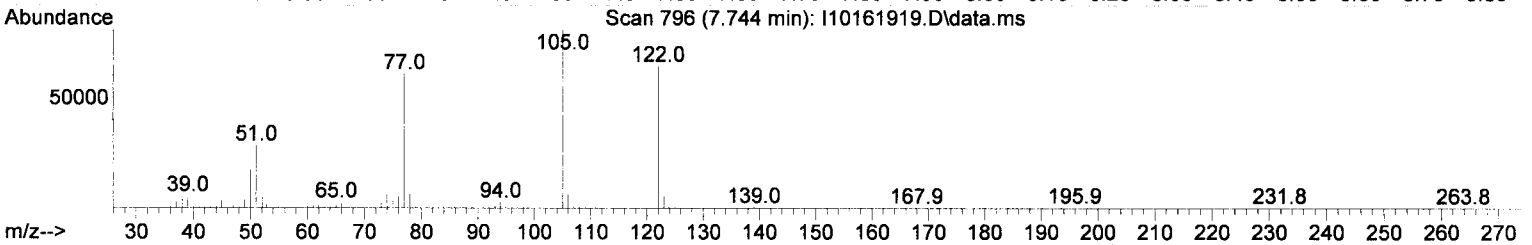
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2779.75#
77.10	77.80	979.43#
0.00	0.00	0.00

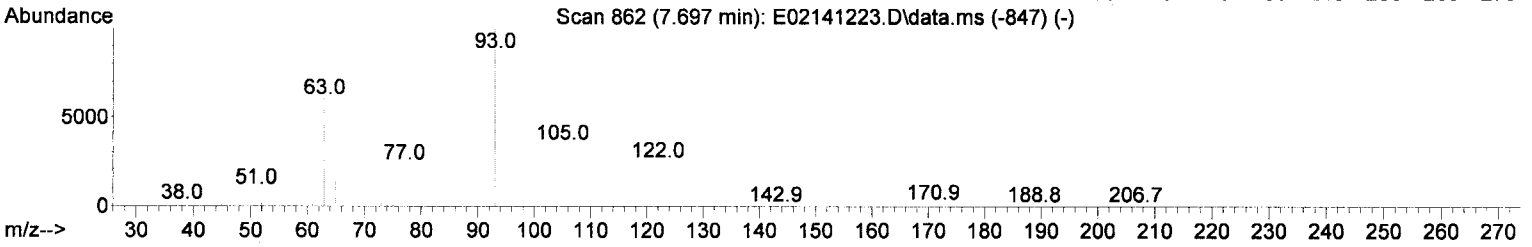
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161919.D
Acq On : 16 Oct 2019 9:14 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL8
Misc : 1x, A19G245 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I10161919.D\data.ms

(26) Benzoic acid (T)

7.744min (+ 0.091) 8231.04 ng/ml m

10/17/19

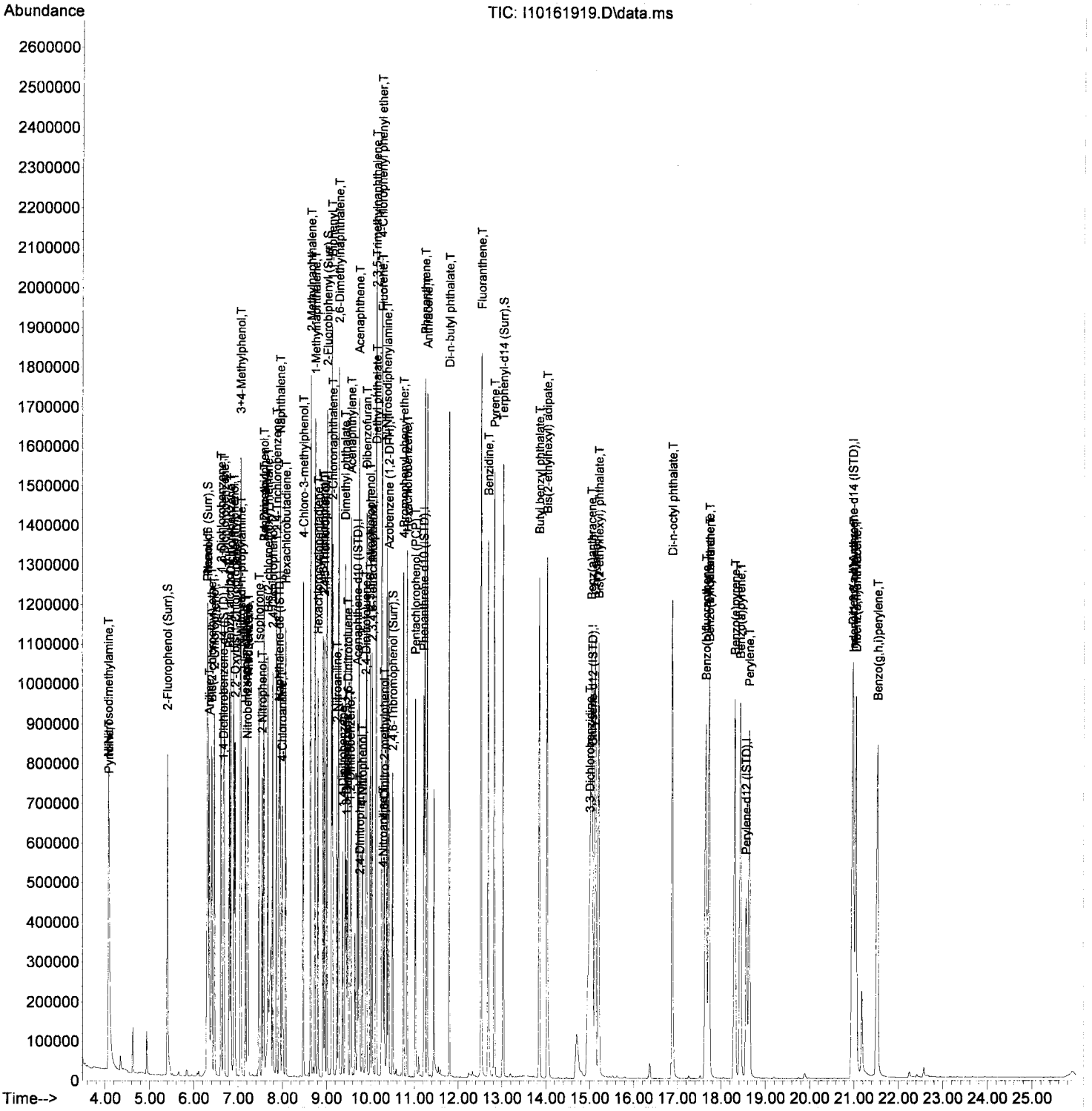
response 319266

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	79.64
77.10	77.80	75.24
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161919.D
Acq On : 16 Oct 2019 9:14 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL8
Misc : 1x, A19G245 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:35 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.664	152	90276	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.926	136	349868	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.707	162	186669	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.221	188	376380	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.083	240	334077	2000.00 ng/ml	0.03
86) Perylene-d12 (ISTD)	18.586	264	374258	2000.00 ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	21.004	292	369437	2000.00 ng/ml	0.05
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.423	112	424427	7176.13 ng/ml	0.02
5) Phenol-d6 (Surr)	6.311	99	520284	7353.93 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.215	82	379122	6656.24 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.012	172	687674	5038.04 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.509	330	151399	6615.18 ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.034	244	969928	6060.34 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~4.059~~	~~74~~	72	N.D.	
3) Pyridine	~~4.075~~	~~79~~	~~352~~	~~15.66 ng/ml#~~	~~1~~
6) Phenol	6.327	94	502219	6919.03 ng/ml	98
7) Aniline	6.354	93	510928	7586.94 ng/ml	96
8) Bis(2-chloroethyl) ether	6.412	93	400306	5960.59 ng/ml	98
9) 2-Chlorophenol	6.466	128	388854	6221.68 ng/ml	99
10) 1,3-Dichlorobenzene	6.616	146	406773	5700.42 ng/ml	97
11) 1,4-Dichlorobenzene	6.685	146	381139	5489.06 ng/ml	99
12) Benzyl alcohol	6.803	108	256004	6434.60 ng/ml	100
13) 1,2-Dichlorobenzene	6.835	146	358825	5337.90 ng/ml	98
14) 2-Methylphenol	6.904	107	286008	6485.75 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.931	45	474944	6846.30 ng/ml	90
16) N-Nitrosodi-n-propylamine	7.070	70	265552	6536.84 ng/ml	94
17) 3+4-Methylphenol	7.060	107	358777	6282.94 ng/ml	97
18) Hexachloroethane	7.167	201	137256	6201.19 ng/ml	98
20) Nitrobenzene	7.231	77	358149	6300.73 ng/ml	94
22) Isophorone	7.471	82	786908	6697.71 ng/ml	97
23) 2-Nitrophenol	7.546	139	202850	5815.89 ng/ml	96
24) 2,4-Dimethylphenol	7.584	122	294594	5785.76 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.675	93	411142	5813.68 ng/ml	97
26) Benzoic acid	~~7.584~~	~~105~~	10798	1002.59 ng/ml#	1
27) 2,4-Dichlorophenol	7.787	162	282981	5746.99 ng/ml	96
28) 1,2,4-Trichlorobenzene	7.867	180	321077	5329.06 ng/ml	99
29) Naphthalene	7.953	128	881153	4899.95 ng/ml	96
30) 4-Chloroaniline	8.001	127	375558	7662.85 ng/ml	99
31) Hexachlorobutadiene	8.076	225	186782	5810.71 ng/ml	98
32) 4-Chloro-3-methylphenol	8.477	107	333390	6238.84 ng/ml	96
33) 2-Methylnaphthalene	8.643	142	700865	5432.59 ng/ml	98
34) 1-Methylnaphthalene	8.744	142	643393	5230.09 ng/ml	98
36) Hexachlorocyclopentadiene	8.809	237	214657	6026.30 ng/ml	98
37) 2,4,6-Trichlorophenol	8.926	196	227216	5876.17 ng/ml	98
38) 2,4,5-Trichlorophenol	8.964	198	218856	5902.35 ng/ml	98
39) 1,1'-Biphenyl	9.119	154	756255	4915.66 ng/ml	97
41) 2-Chloronaphthalene	9.140	162	562503	5018.29 ng/ml	98
42) 2-Nitroaniline	9.242	138	226292	5942.90 ng/ml	91
43) 2,6-Dimethylnaphthalene	9.279	156	562178	4890.70 ng/ml	96

See MJ

See MJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.370	168	107910	5052.56	ng/ml	85
45) Dimethyl phthalate	9.434	163	703220	5178.09	ng/ml	98
46) 1,3-Dinitrobenzene	9.456	168	120068	5355.80	ng/ml	95
47) 2,6-Dinitrotoluene	9.488	165	174146	5542.98	ng/ml	87
48) 1,2-Dinitrobenzene	9.552	168	84556	5550.92	ng/ml	86
49) Acenaphthylene	9.563	152	869974	4774.58	ng/ml	97
50) 3-Nitroaniline	9.659	138	78267	Below Cal		96
51) Acenaphthene	9.745	153	584734	4983.57	ng/ml	98
52) 2,4-Dinitrophenol	9.761	184	71059	4457.18	ng/ml	94
53) 4-Nitrophenol	9.825	139	152030	5778.61	ng/ml	95
54) 2,4-Dinitrotoluene	9.900	165	227357	5792.06	ng/ml	95
55) Dibenzofuran	9.916	168	787795	4831.64	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.996	232	195876	6062.93	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.039	232	201184	6084.80	ng/ml	97
58) Diethyl phthalate	10.140	149	579238	4581.50	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.130	170	535500	4836.98	ng/ml	99
60) Fluorene	10.269	166	595819	4558.02	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.258	204	348928	5244.97	ng/ml	95
62) 4-Nitroaniline	10.290	138	145167	5276.04	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.317	198	103747	4797.03	ng/ml	94
65) N-Nitrosodiphenylamine	10.381	169	498648	4306.23	ng/ml	100
66) Azobenzene (1,2-DPH)	10.419	77	608650	5235.41	ng/ml	89
68) 4-Bromophenyl phenyl e...	10.756	248	256100	5881.44	ng/ml	98
69) Hexachlorobenzene	10.836	284	285495	5721.39	ng/ml	97
70) Pentachlorophenol (PCP)	11.028	266	176453	6418.22	ng/ml	98
71) Phenanthrene	11.248	178	956105	4805.46	ng/ml	96
72) Anthracene	11.301	178	928594	4801.32	ng/ml	96
73) Carbazole	11.451	167	424787	Below Cal		98
74) Di-n-butyl phthalate	11.799	149	1140087	5126.46	ng/ml	96
75) Fluoranthene	12.531	202	1181210	5244.08	ng/ml	98
76) Benzidine	12.692	184	924428	15497.66	ng/ml	98
77) Pyrene	12.831	202	1149431	5071.42	ng/ml	97
80) Butyl benzyl phthalate	13.868	149	631913	6183.11	ng/ml	93
81) Bis(2-ethylhexyl) adipate	14.045	129	525912	6731.75	ng/ml	98
82) 3,3-Dichlorobenzidine	15.024	252	197737	9624.37	ng/ml	98
83) Benz(a)anthracene	15.056	228	1123403	5860.76	ng/ml	96
84) Chrysene	15.152	228	1022308	5840.98	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.222	149	739674	6471.29	ng/ml	95
87) Di-n-octyl phthalate	16.901	149	1499067	5996.73	ng/ml	98
88) Benzo(b)fluoranthene	17.677	252	1366285	6501.94	ng/ml	98
89) Benzo(k)fluoranthene	17.752	252	1115022	5627.56	ng/ml	97
90) Benzo(b+k)fluoranthene	17.752	252	2538483	12146.44	ng/ml	97
91) Benzo(e)pyrene	18.340	252	1247052	6081.46	ng/ml	97
92) Benzo(a)pyrene	18.468	252	1130687	5977.03	ng/ml	100
93) Perylene	18.666	252	1004144	5802.05	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.020	276	1311636	5877.67	ng/ml	99
96) Dibenz(a,h)anthracene	21.078	278	1076200	5534.71	ng/ml	99
97) Benzo(g,h,i)perylene	21.565	276	1221971	5721.36	ng/ml	98

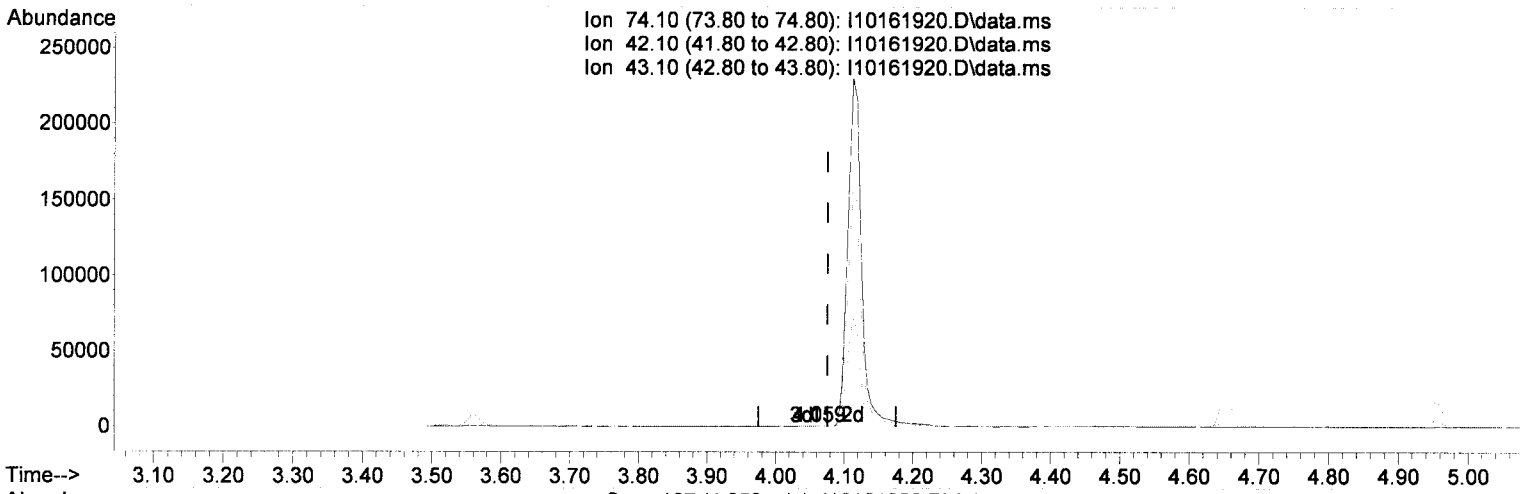
See NJ

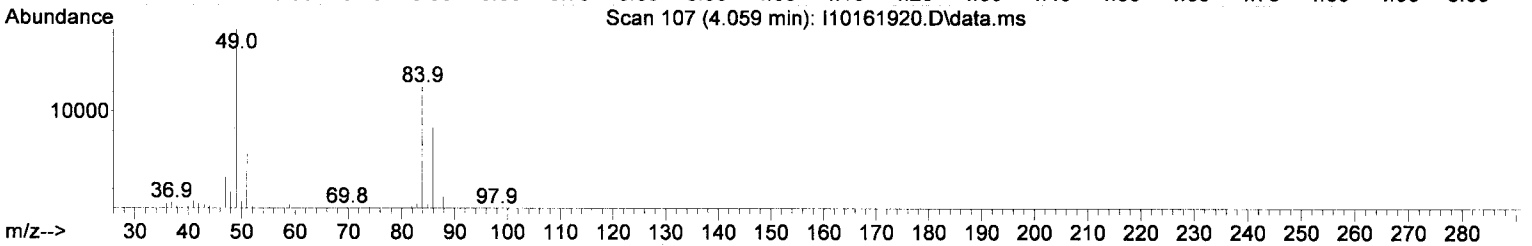
(#) = qualifier out of range (m) = manual integration (+) = signals summed

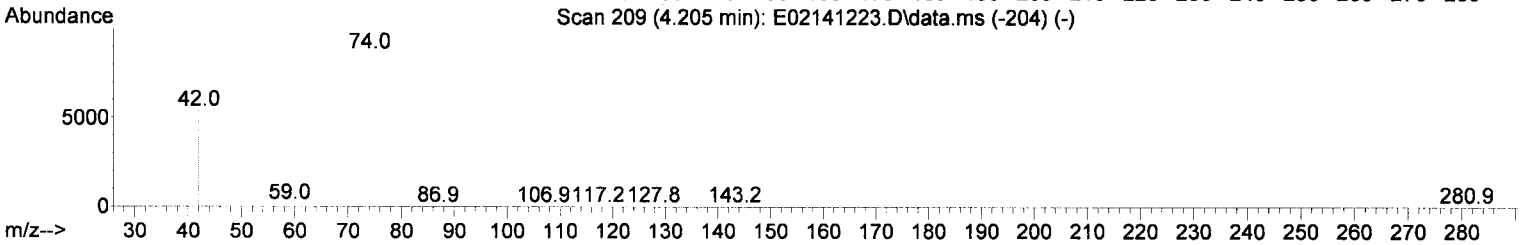
Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I10161920.D\data.ms

(2) N-Nitrosodimethylamine (T)

4.059min (-0.016) 1.75 ng/ml

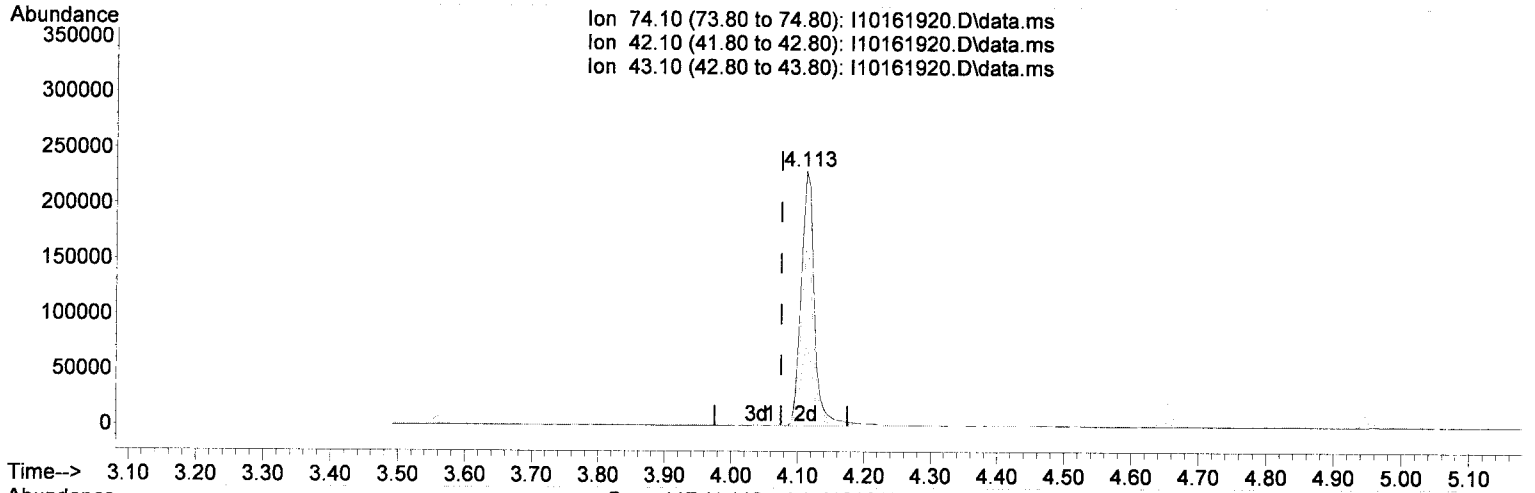
response 72

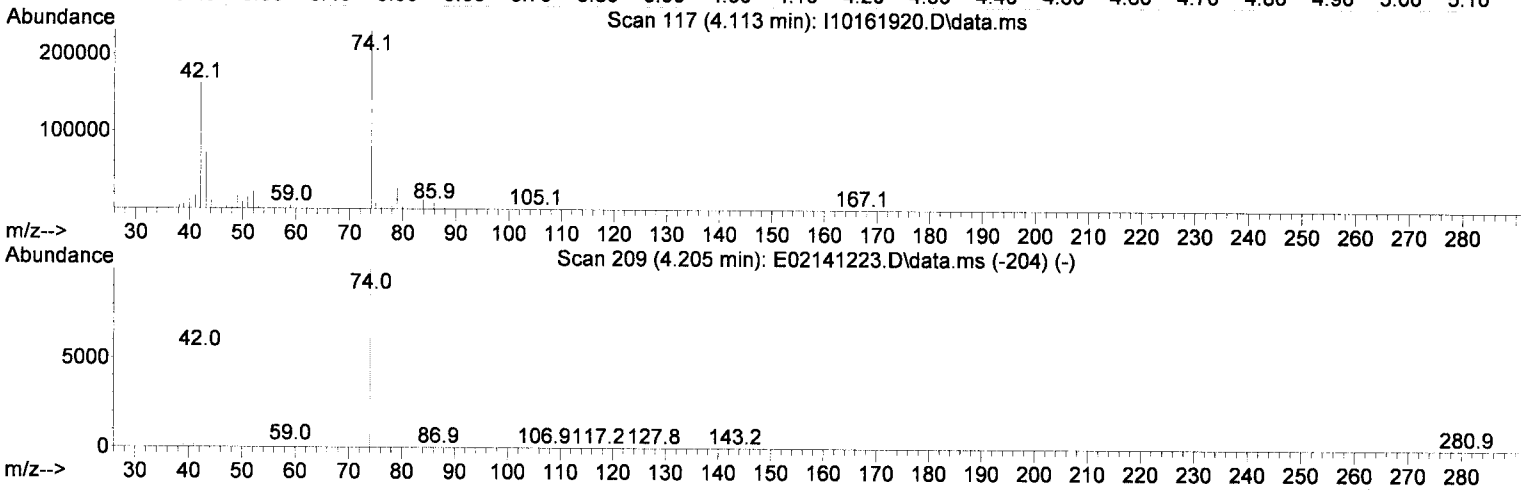
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	71.00	422.14#
43.10	31.00	293.13#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I10161920.D\data.ms

(2) N-Nitrosodimethylamine (T)

4.113min (+ 0.037) 7829.50 ng/ml m

10/17/19

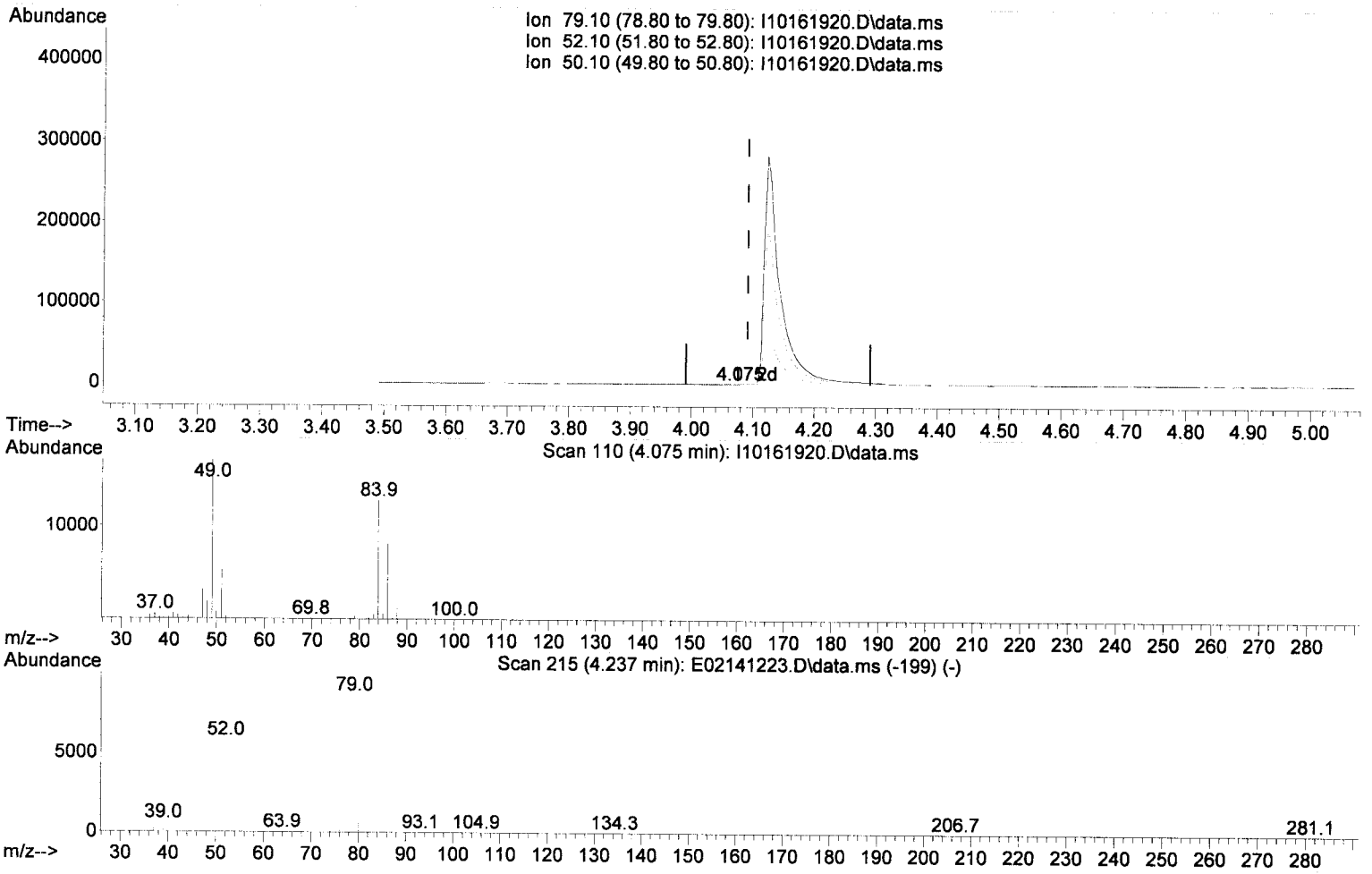
response 322758

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	71.00	70.54
43.10	31.00	31.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(3) Pyridine (T)

4.075min (-0.016) 15.66 ng/ml

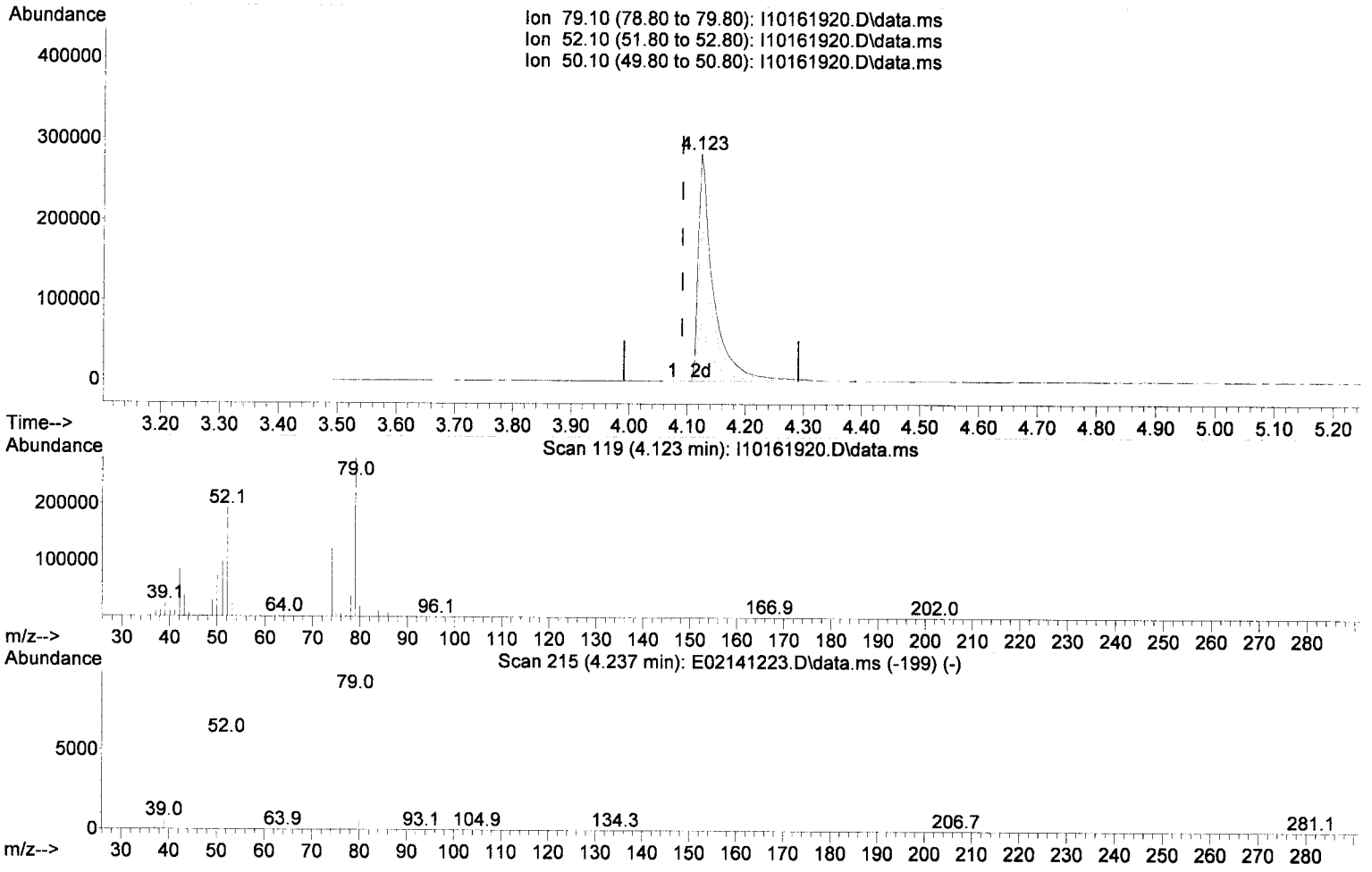
response 352

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	69.90	86.15
50.10	25.60	236.62#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(3) Pyridine (T)

4.123min (+ 0.032) 7043.41 ng/ml m

response 514636

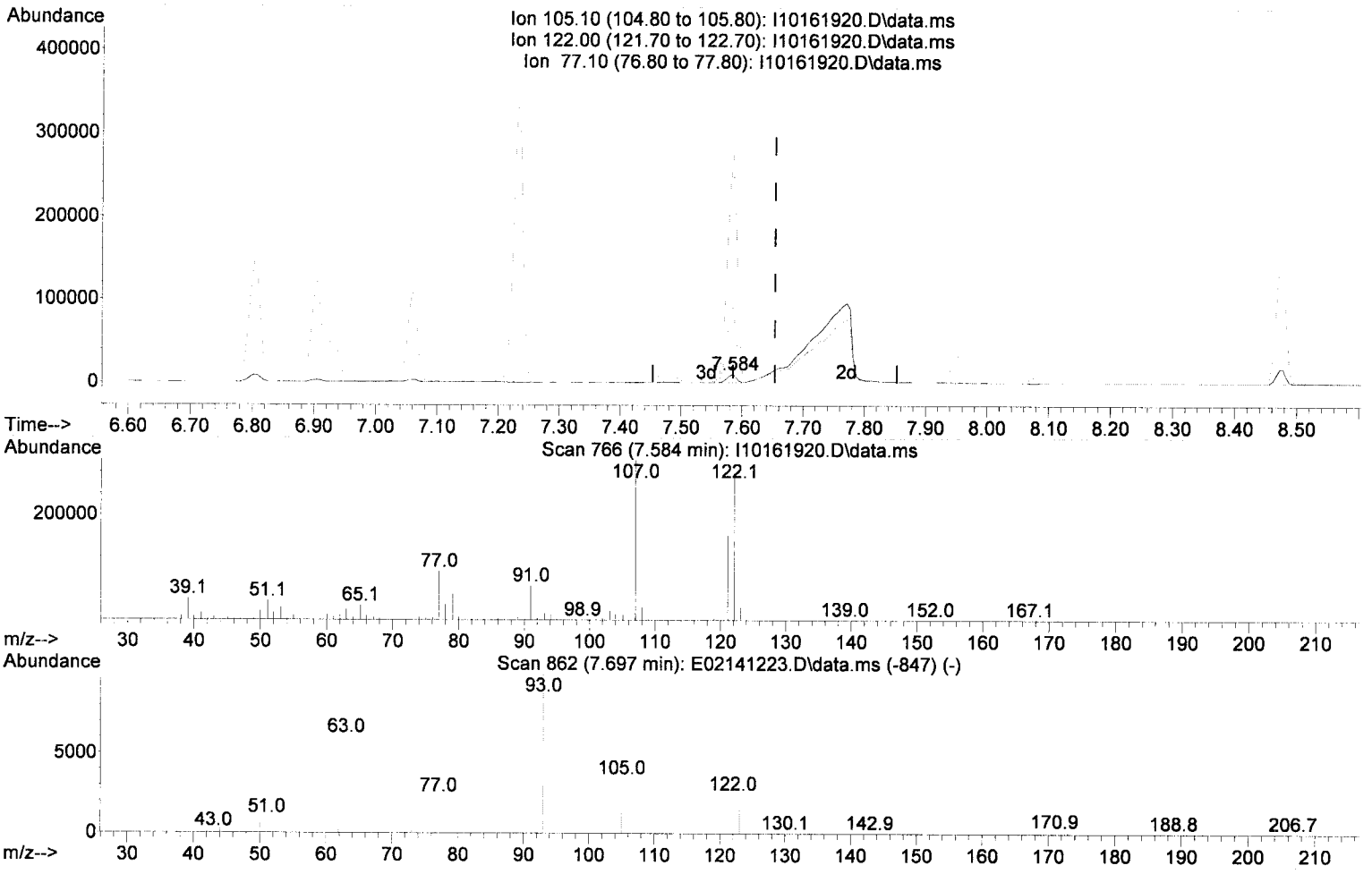
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	69.90	68.21
50.10	25.60	25.59
0.00	0.00	0.00

JK 10/17/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(26) Benzoic acid (T)

7.584min (-0.070) 1002.59 ng/ml

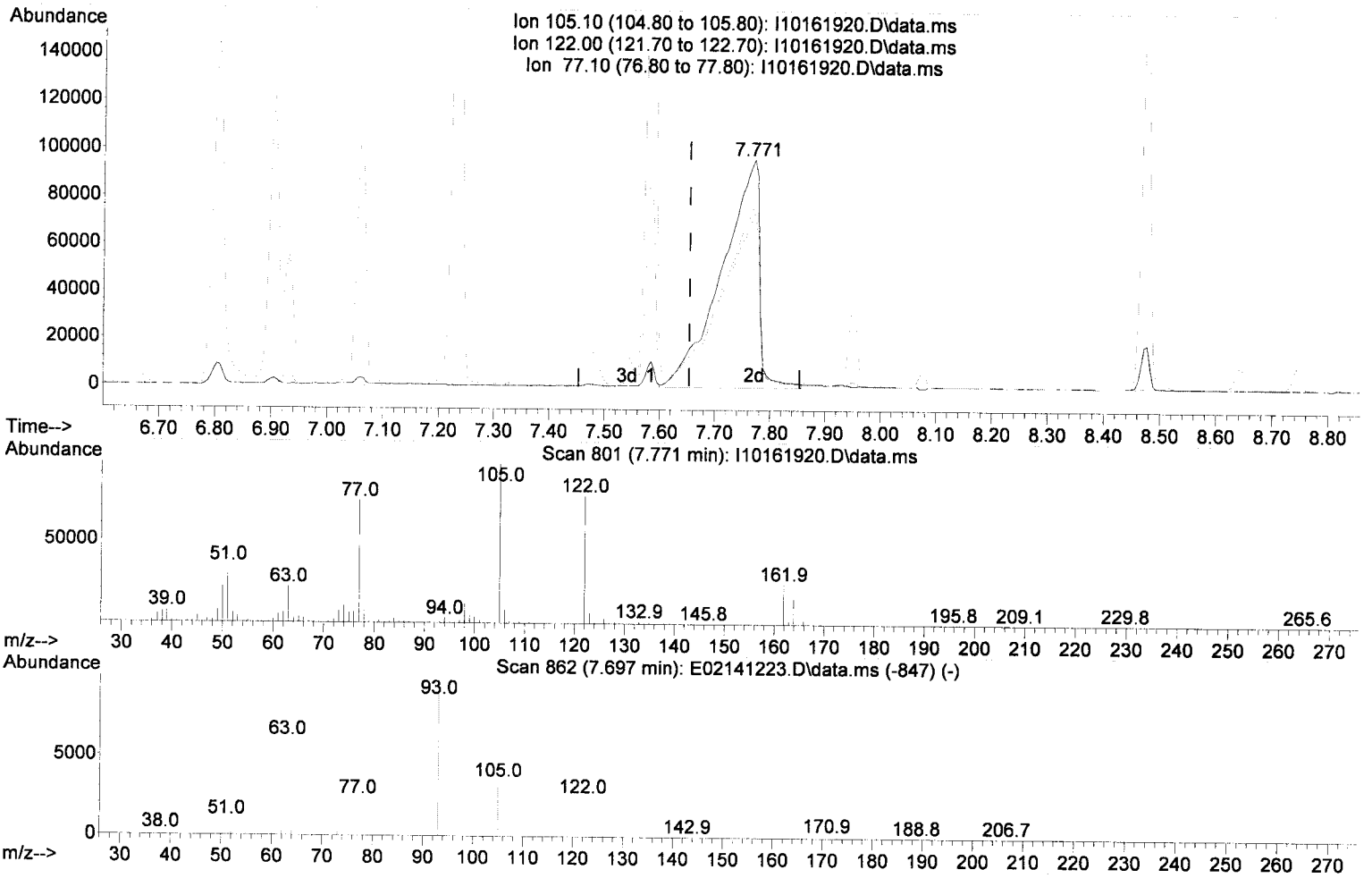
response 10798

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2567.77#
77.10	77.80	861.21#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(26) Benzoic acid (T)

7.771min (+ 0.118) 12428.66 ng/ml m

response 456773

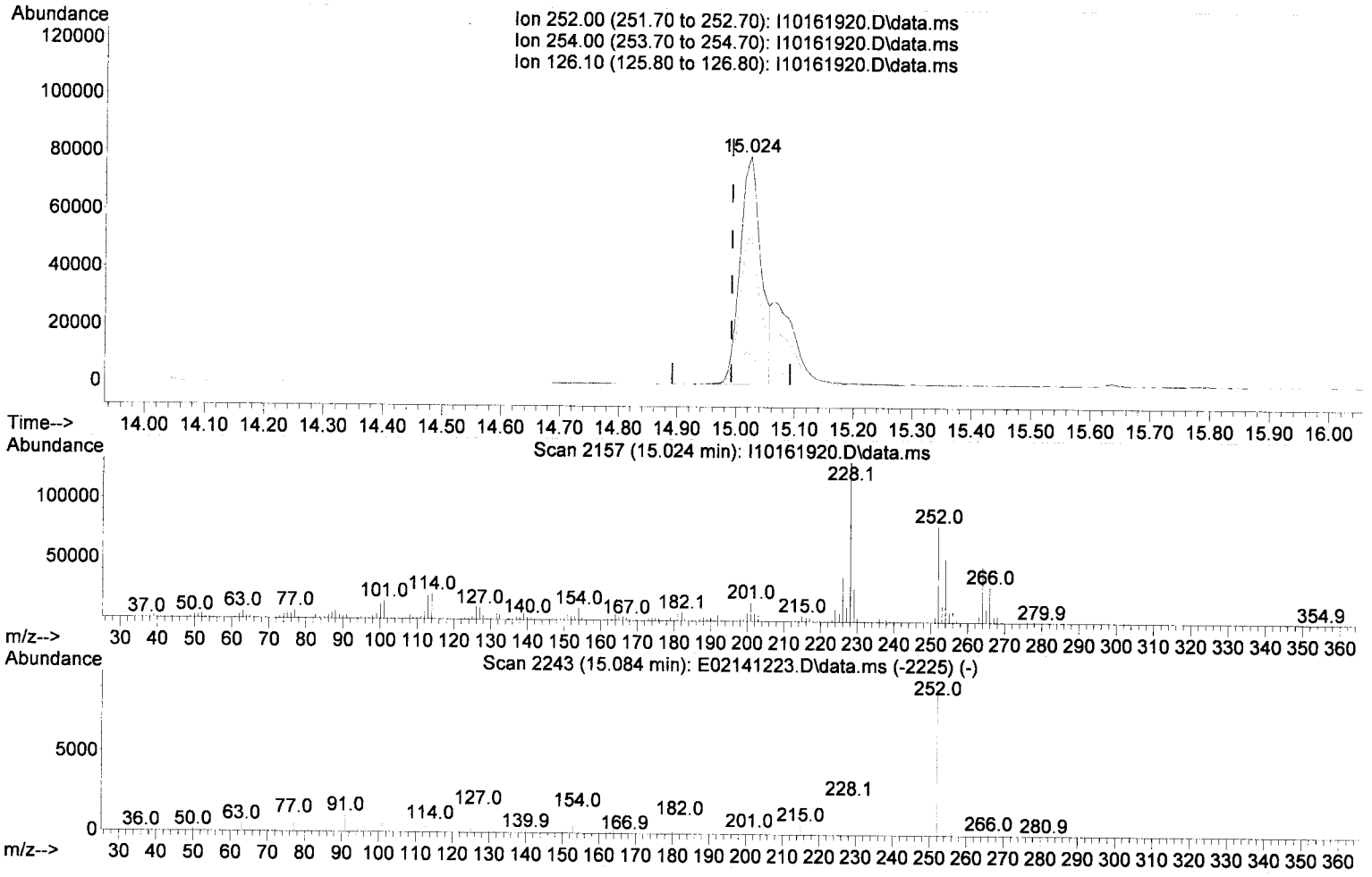
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	79.95
77.10	77.80	76.64
0.00	0.00	0.00

10/17/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.024min (+ 0.032) 9624.37 ng/ml

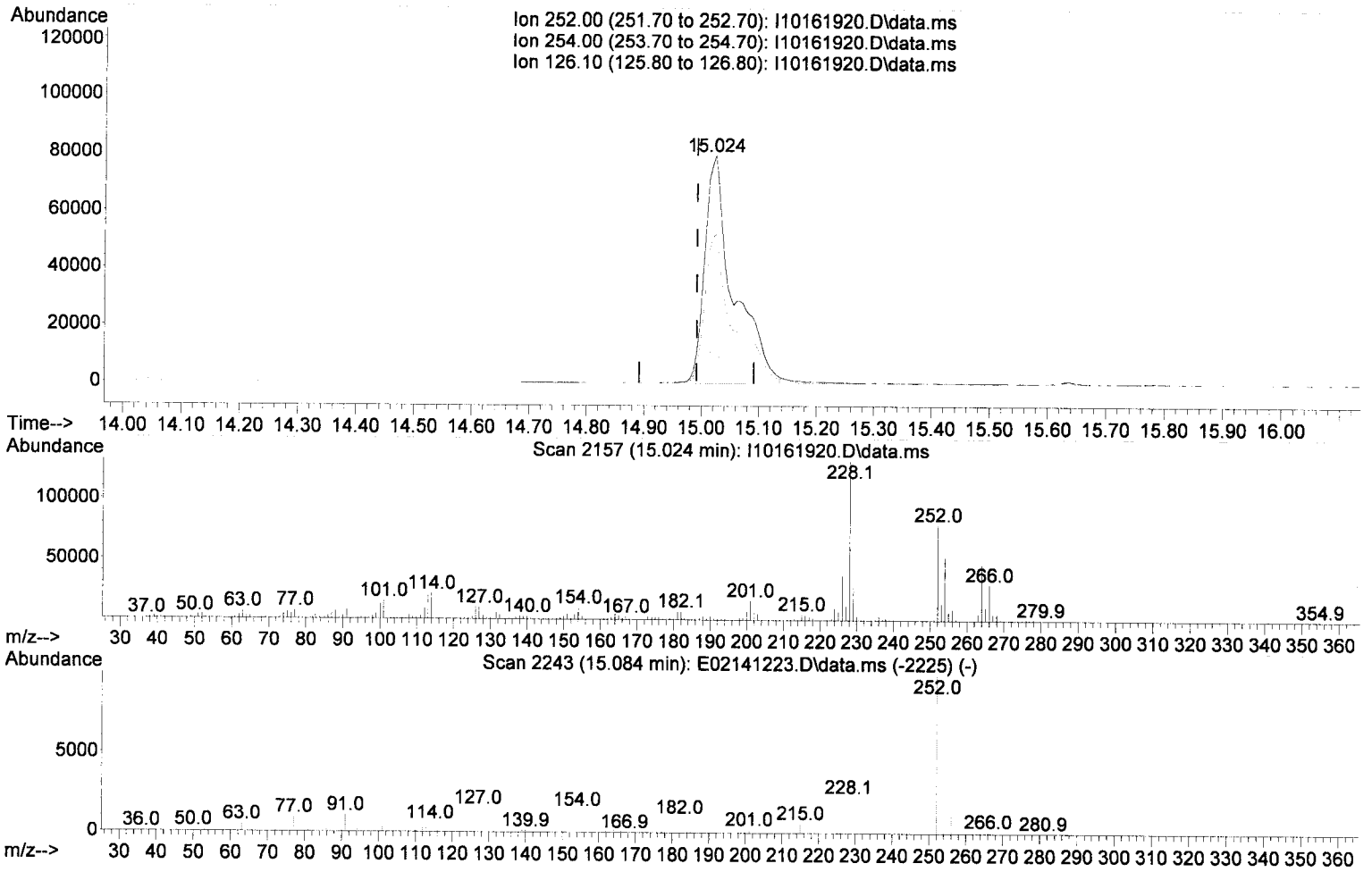
response 197737

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	65.76
126.10	14.00	13.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161920.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.024min (+ 0.032) 13733.38 ng/ml m OJK 10/17/19

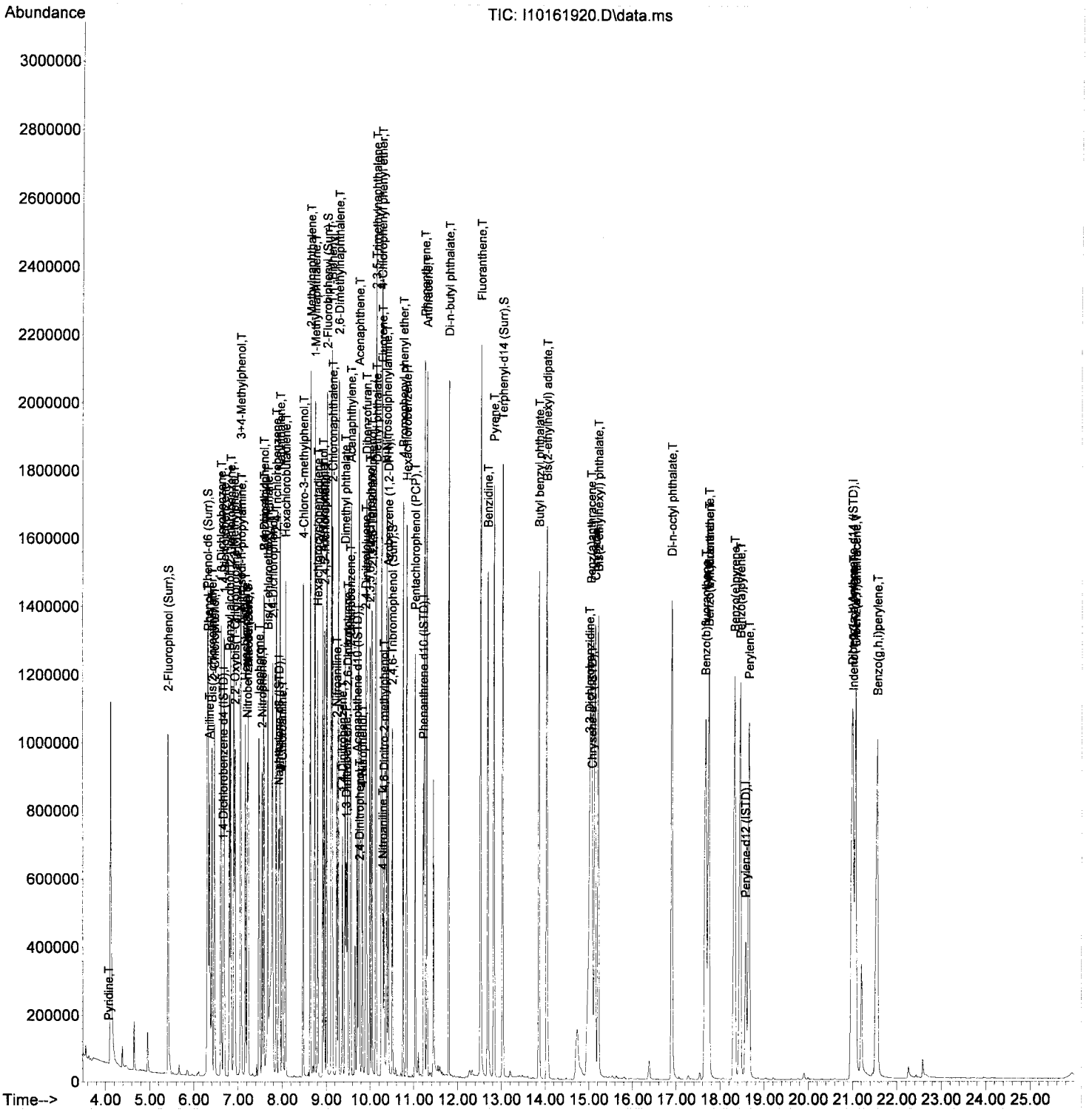
response 276349

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	65.76
126.10	14.00	13.46
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161920.D
Acq On : 16 Oct 2019 9:49 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CAL9
Misc : 1x, A19G246 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:43 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.664	152	90105	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.926	136	341834	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.707	162	182625	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.221	188	376032	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.088	240	319256	2000.00	ng/ml	0.04
86) Perylene-d12 (ISTD)	18.581	264	341068	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	21.004	292	340856	2000.00	ng/ml	0.05
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.412	112	563281	9541.92	ng/ml	0.00
5) Phenol-d6 (Surr)	6.311	99	666322	9435.97	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.215	82	472853	8317.63	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.017	172	827961	6200.13	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.515	330	197030	8466.97	ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.039	244	1194810	7812.03	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.070	74	425740	10347.25	ng/ml	100
3) Pyridine	4.075	79	702998	9157.82	ng/ml	97
6) Phenol	6.327	94	643943	8888.38	ng/ml	94
7) Aniline	6.354	93	643142	9568.35	ng/ml	96
8) Bis(2-chloroethyl) ether	6.407	93	503778	7515.54	ng/ml	98
9) 2-Chlorophenol	6.466	128	486600	7800.40	ng/ml	96
10) 1,3-Dichlorobenzene	6.610	146	510201	7163.40	ng/ml	98
11) 1,4-Dichlorobenzene	6.680	146	472412	6816.45	ng/ml	98
12) Benzyl alcohol	6.808	108	321834	7839.63	ng/ml	97
13) 1,2-Dichlorobenzene	6.835	146	440964	6572.25	ng/ml	99
14) 2-Methylphenol	6.905	107	347076	7885.51	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.931	45	544410	7862.54	ng/ml	85
16) N-Nitrosodi-n-propylamine	7.076	70	326816	8060.19	ng/ml	92
17) 3+4-Methylphenol	7.065	107	435039	7699.18	ng/ml	97
18) Hexachloroethane	7.167	201	175204	7930.69	ng/ml	94
20) Nitrobenzene	7.236	77	431713	7609.32	ng/ml	89
22) Isophorone	7.482	82	1001015	8720.31	ng/ml	96
23) 2-Nitrophenol	7.546	139	257722	7562.78	ng/ml	96
24) 2,4-Dimethylphenol	7.589	122	364751	7332.00	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.675	93	495856	7176.36	ng/ml	96
26) Benzoic acid	7.589	105	12763	1068.35	ng/ml#	1
27) 2,4-Dichlorophenol	7.787	162	351999	7259.50	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.873	180	393859	6690.69	ng/ml	100
29) Naphthalene	7.953	128	1052026	5987.65	ng/ml	95
30) 4-Chloroaniline	8.001	127	462446	9512.71	ng/ml	98
31) Hexachlorobutadiene	8.076	225	234083	7453.37	ng/ml	99
32) 4-Chloro-3-methylphenol	8.477	107	413423	7762.86	ng/ml	96
33) 2-Methylnaphthalene	8.643	142	843623	6692.84	ng/ml	98
34) 1-Methylnaphthalene	8.750	142	774012	6439.75	ng/ml	99
36) Hexachlorocyclopentadiene	8.809	237	265581	7621.05	ng/ml	99
37) 2,4,6-Trichlorophenol	8.932	196	292625	7688.16	ng/ml	99
38) 2,4,5-Trichlorophenol	8.964	198	271144	7466.42	ng/ml	99
39) 1,1'-Biphenyl	9.119	154	905572	6016.56	ng/ml	96
41) 2-Chloronaphthalene	9.146	162	674470	6150.43	ng/ml	97
42) 2-Nitroaniline	9.247	138	293332	7874.09	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.279	156	686967	6108.64	ng/ml	95

See NJ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.376	168	141310	6619.98	ng/ml	82
45)	Dimethyl phthalate	9.440	163	867794	6531.41	ng/ml	97
46)	1,3-Dinitrobenzene	9.467	168	152836	6968.42	ng/ml	95
47)	2,6-Dinitrotoluene	9.493	165	216715	7050.68	ng/ml	86
48)	1,2-Dinitrobenzene	9.557	168	103981	6977.29	ng/ml	91
49)	Acenaphthylene	9.568	152	1014724	5692.31	ng/ml	95
50)	3-Nitroaniline	9.664	138	117221	Below Cal		94
51)	Acenaphthene	9.745	153	712568	6207.56	ng/ml	97
52)	2,4-Dinitrophenol	9.766	184	97114	5817.14	ng/ml	92
53)	4-Nitrophenol	9.830	139	187194	7122.97	ng/ml	97
54)	2,4-Dinitrotoluene	9.905	165	277426	7224.10	ng/ml	96
55)	Dibenzofuran	9.921	168	946729	5934.98	ng/ml	97
56)	2,3,5,6-Tetrachlorophenol	9.996	232	249690	7793.09	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.044	232	257264	7850.89	ng/ml	95
58)	Diethyl phthalate	10.146	149	698054	5643.54	ng/ml	93
59)	2,3,5-Trimethylnaphtha...	10.130	170	644885	5954.01	ng/ml	98
60)	Fluorene	10.274	166	721314	5640.25	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.258	204	428718	6587.05	ng/ml	98
62)	4-Nitroaniline	10.296	138	176836	6569.36	ng/ml	97
63)	4,6-Dinitro-2-methylph...	10.328	198	139599	6317.83	ng/ml	86
65)	N-Nitrosodiphenylamine	10.387	169	622397	5379.88	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.424	77	730839	6292.26	ng/ml	83
68)	4-Bromophenyl phenyl e...	10.761	248	329177	7566.68	ng/ml	96
69)	Hexachlorobenzene	10.841	284	361957	7260.42	ng/ml	96
70)	Pentachlorophenol (PCP)	11.028	266	227516	8068.03	ng/ml	98
71)	Phenanthrene	11.253	178	1170165	5886.79	ng/ml	95
72)	Anthracene	11.306	178	1130706	5851.76	ng/ml	95
73)	Carbazole	11.456	167	578961	Below Cal		98
74)	Di-n-butyl phthalate	11.804	149	1371594	6173.15	ng/ml	95
75)	Fluoranthene	12.537	202	1449379	6440.59	ng/ml	96
76)	Benzidine	12.697	184	1130941	18977.32	ng/ml	97
77)	Pyrene	12.836	202	1400570	6185.19	ng/ml	96
80)	Butyl benzyl phthalate	13.868	149	788952	7801.41	ng/ml	92
81)	Bis(2-ethylhexyl) adipate	14.045	129	642531	8606.30	ng/ml	97
82)	3,3-Dichlorobenzidine	15.024	252	309217	16215.48	ng/ml	98
83)	Benz(a)anthracene	15.061	228	1366845	7461.83	ng/ml	96
84)	Chrysene	15.157	228	1249315	7469.36	ng/ml	97
85)	Bis(2-ethylhexyl) phth...	15.222	149	901223	8250.69	ng/ml	95
87)	Di-n-octyl phthalate	16.906	149	1811511	7733.59	ng/ml	98
88)	Benzo(b)fluoranthene	17.687	252	1686661	8807.64	ng/ml	97
89)	Benzo(k)fluoranthene	17.757	252	1278627	7081.27	ng/ml	98
90)	Benzo(b+k)fluoranthene	17.757	252	3039542	15959.27	ng/ml	98
91)	Benzo(e)pyrene	18.340	252	1492293	7985.60	ng/ml	97
92)	Benzo(a)pyrene	18.474	252	1326605	7765.80	ng/ml	99
93)	Perylene	18.672	252	1195430	7579.48	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.020	276	1567885	7615.10	ng/ml	98
96)	Dibenz(a,h)anthracene	21.084	278	1269410	7075.76	ng/ml	100
97)	Benzo(g,h,i)perylene	21.570	276	1429981	7256.69	ng/ml	98

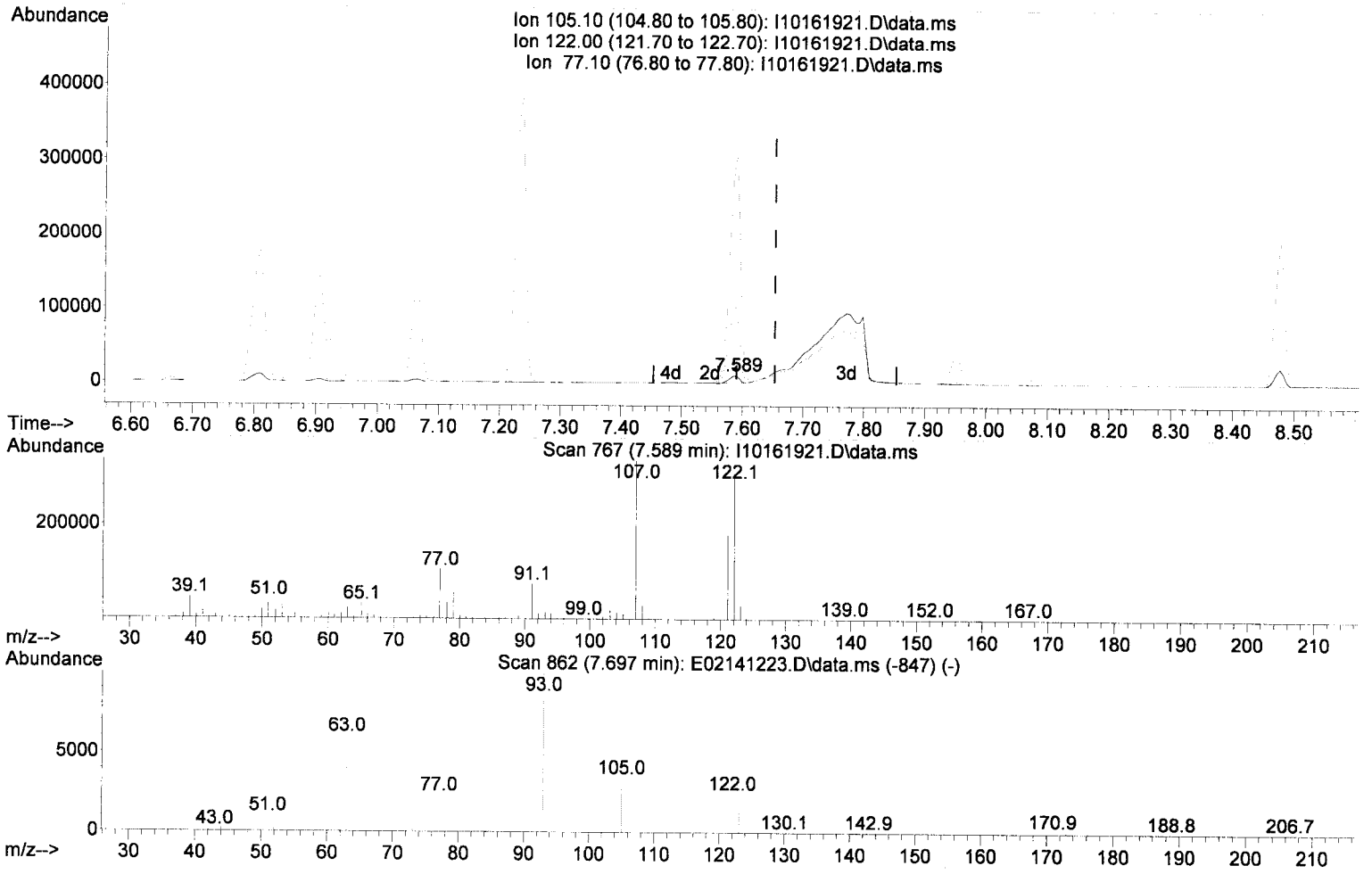
See ML

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161921.D\data.ms

(26) Benzoic acid (T)

7.589min (-0.064) 1068.35 ng/ml

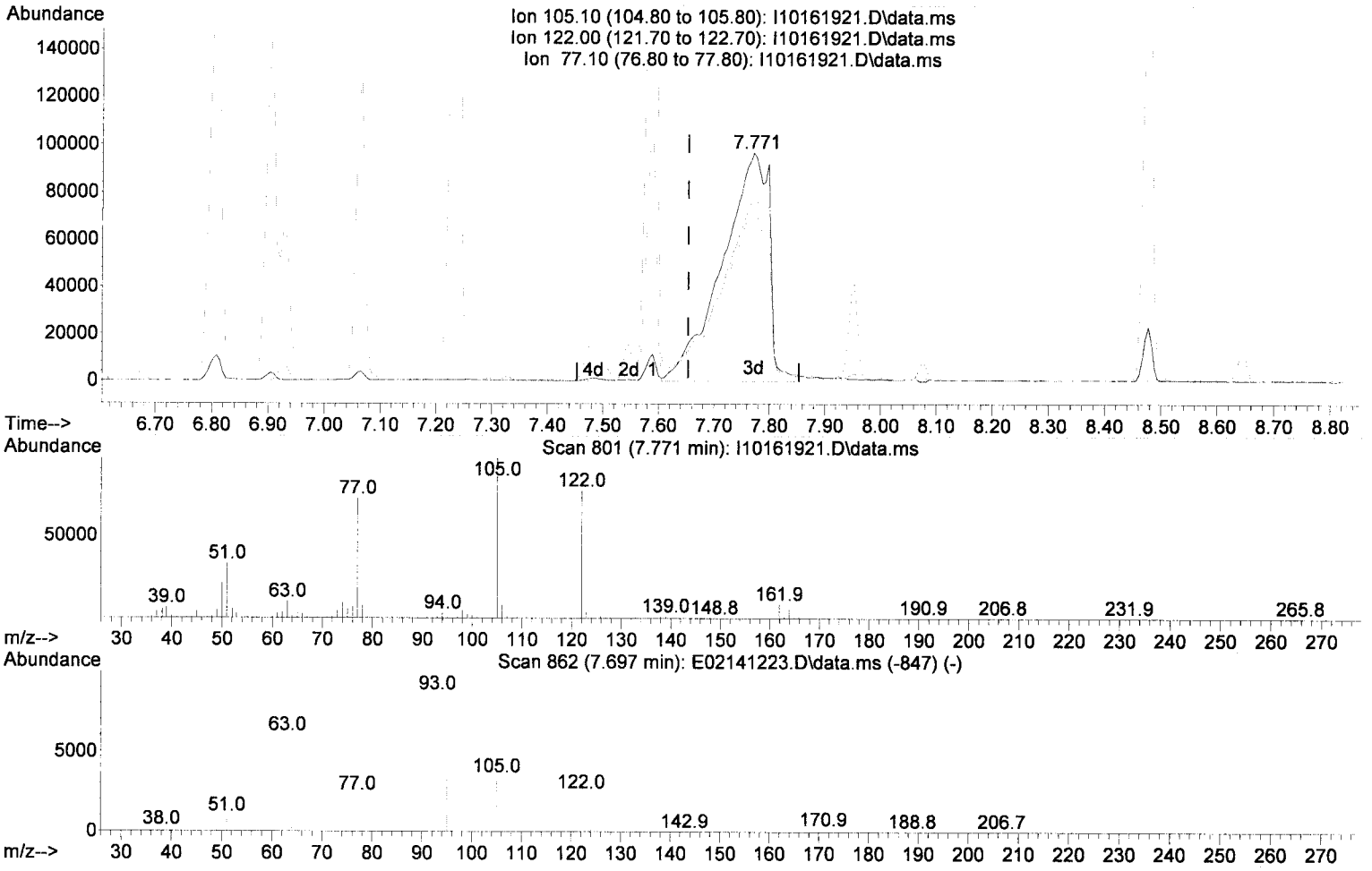
response 12763

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	2695.39#
77.10	77.80	917.94#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161921.D\data.ms

(26) Benzoic acid (T)

7.771min (+ 0.118) 15200.89 ng/ml m

response 567530

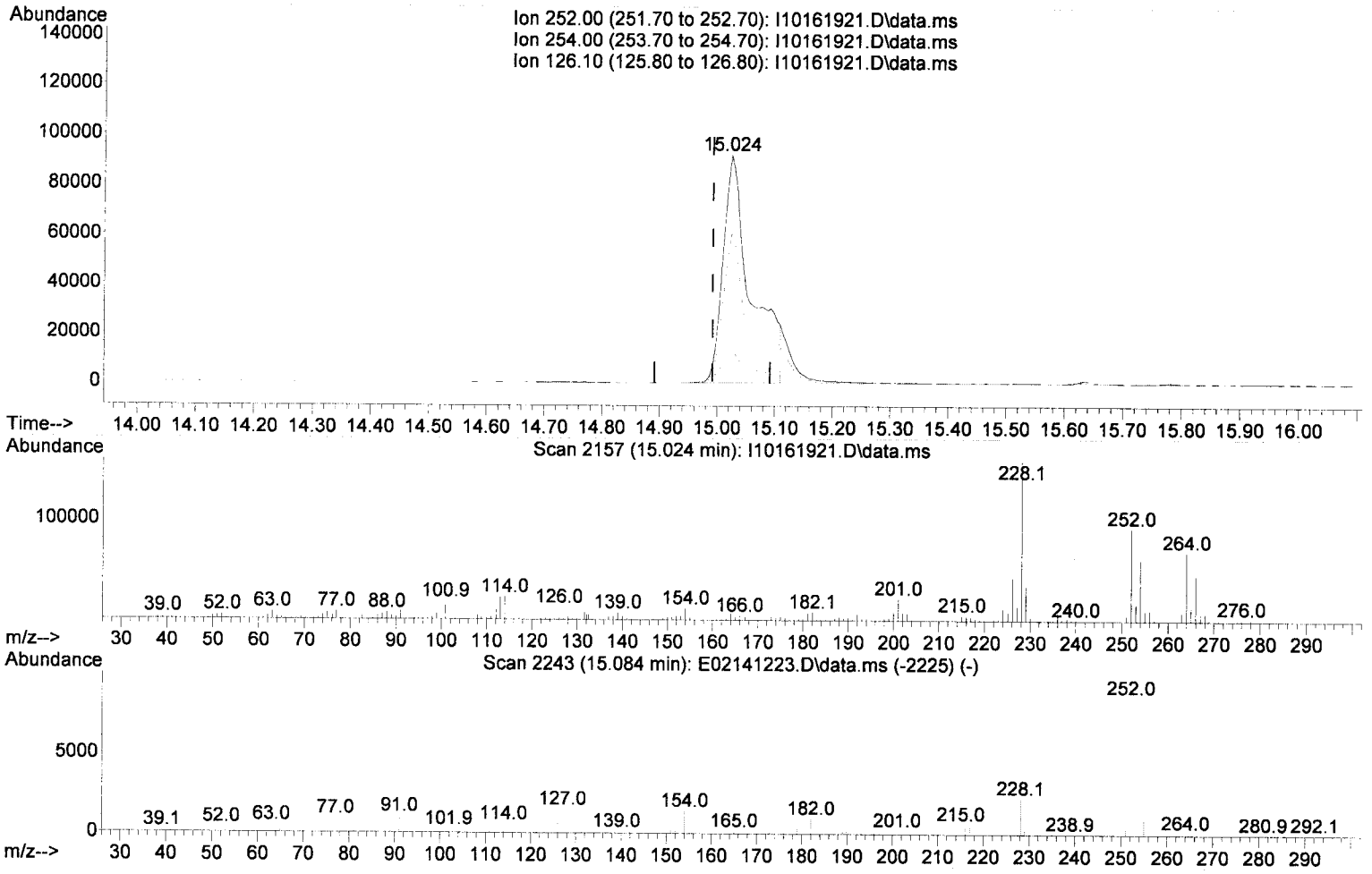
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.10	79.63
77.10	77.80	74.83
0.00	0.00	0.00

10/17/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161921.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.024min (+ 0.032) 16215.48 ng/ml

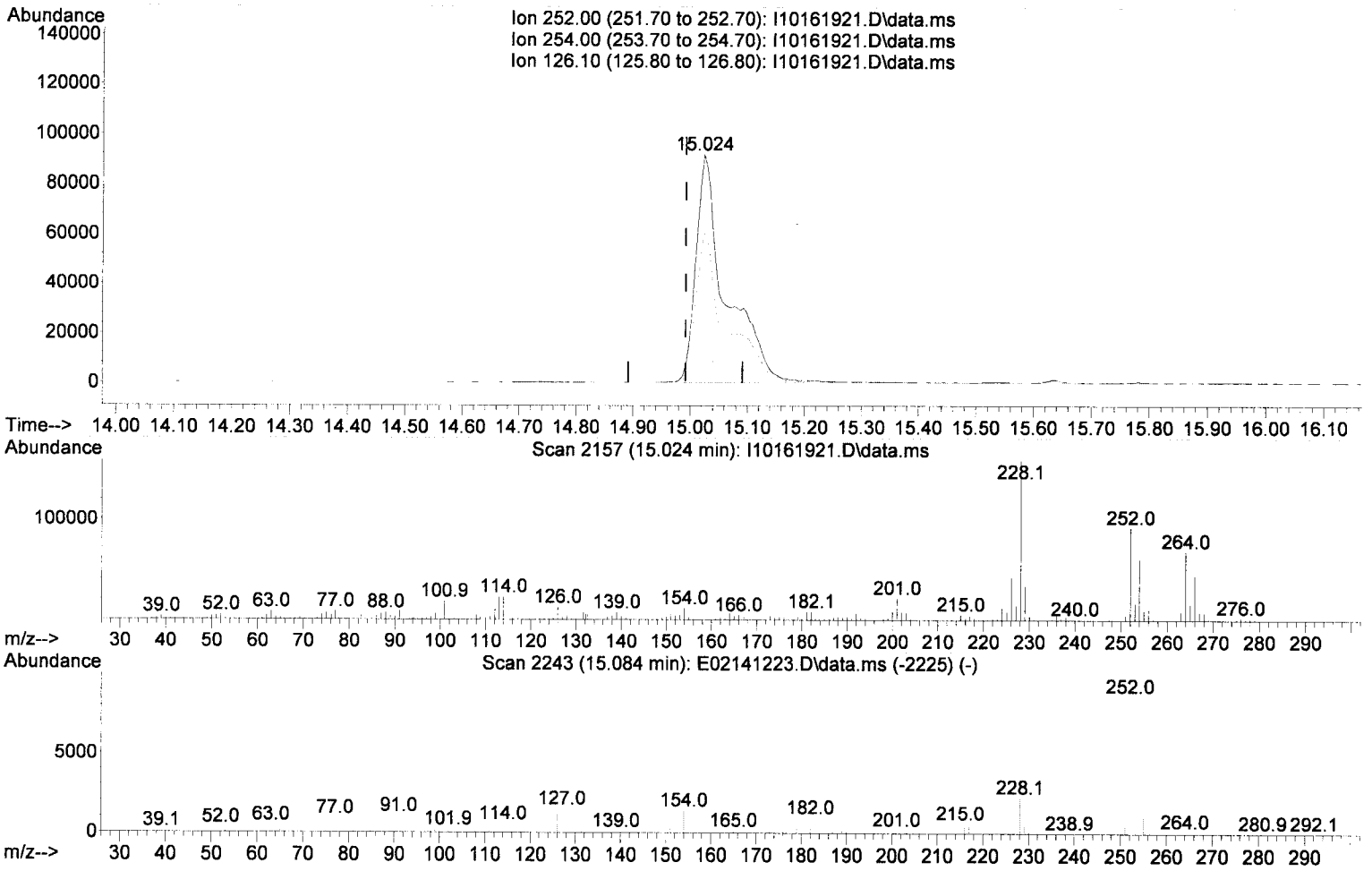
response 309217

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	65.81
126.10	14.00	13.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I10161921.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.024min (+ 0.032) 17716.98 ng/ml m

response 336424

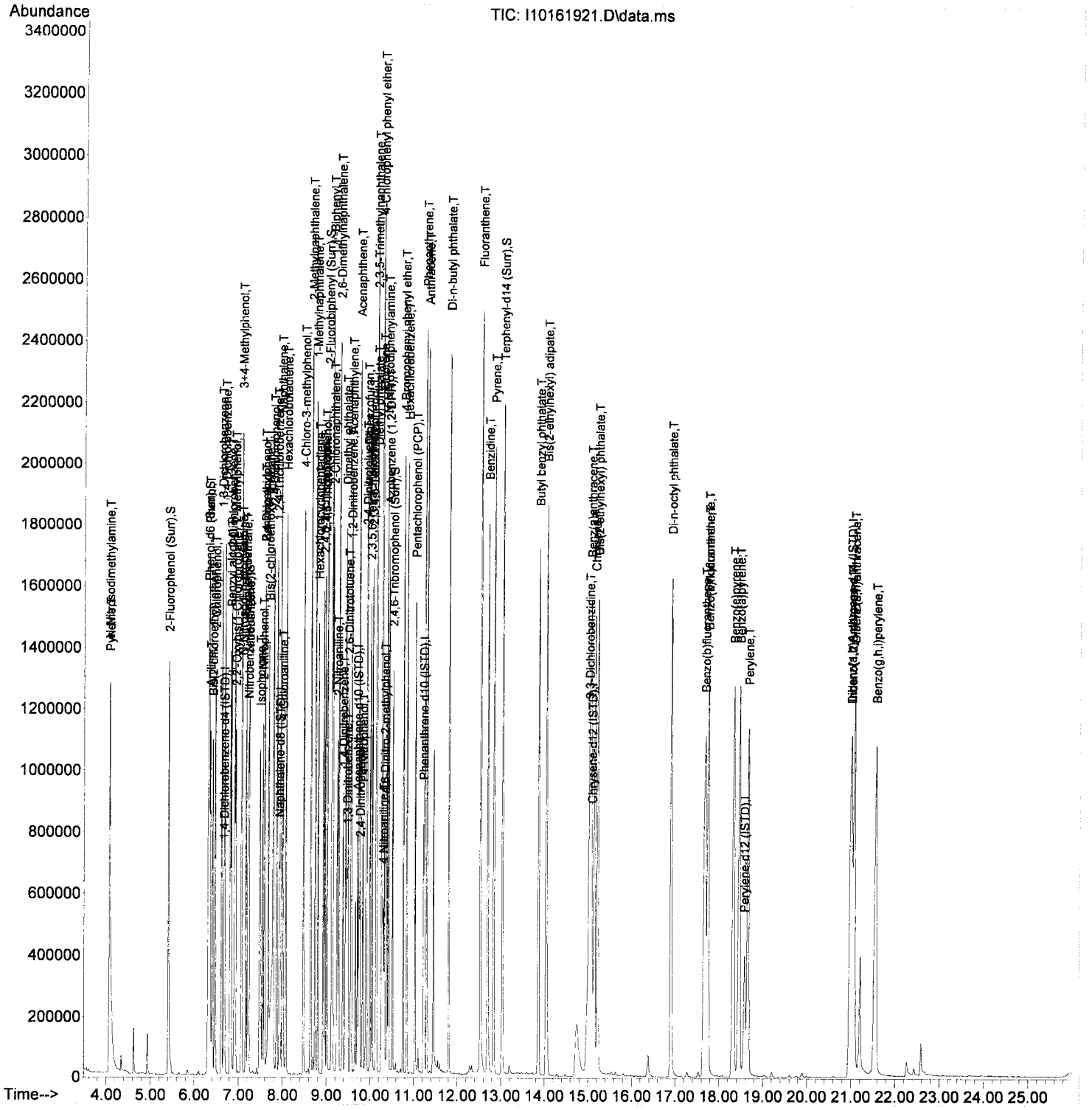
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	64.00	65.81
126.10	14.00	13.07
0.00	0.00	0.00

10/17/19

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161921.D
Acq On : 16 Oct 2019 10:24 pm
Operator : JK /AMS /DTH
Sample : 9J16053-CALA
Misc : 1x, A19G247 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:13:51 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:14:17 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 10/17/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.659	152	106471	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	411521	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	209383	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	386084	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.056	240	381801	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.559	264	383841	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.955	292	334585	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.407	112	76822	1101.32	ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	98100	1175.68	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	77799	1158.15	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	165174	1078.83	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	23106	1048.70	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.023	244	193114	1055.80	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.080	74	60523	1244.85	ng/ml	99
3) Pyridine	4.102	79	85071	1163.34	ng/ml	98
6) Phenol	6.306	94	102242	1194.32	ng/ml	99
7) Aniline	6.343	93	96704	1217.57	ng/ml	98
8) Bis(2-chloroethyl) ether	6.396	93	95373	1204.10	ng/ml	98
9) 2-Chlorophenol	6.461	128	81659	1107.81	ng/ml	99
10) 1,3-Dichlorobenzene	6.610	146	85857	1020.17	ng/ml	100
11) 1,4-Dichlorobenzene	6.680	146	80889	987.74	ng/ml	99
12) Benzyl alcohol	6.787	108	42970	1072.91	ng/ml	99
13) 1,2-Dichlorobenzene	6.830	146	80233	1012.00	ng/ml	98
14) 2-Methylphenol	6.894	107	64559	1241.31	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	117934	1441.43	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.049	70	63007	1315.07	ng/ml	99
17) 3+4-Methylphenol	7.044	107	75794	1097.87	ng/ml	99
18) Hexachloroethane	7.167	201	26625	1019.94	ng/ml	98
20) Nitrobenzene	7.220	77	79633	1187.85	ng/ml	98
22) Isophorone	7.450	82	167145	1209.51	ng/ml	97
23) 2-Nitrophenol	7.536	139	40793	994.35	ng/ml	99
24) 2,4-Dimethylphenol	7.568	122	60426	1008.96	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.659	93	93785	1127.47	ng/ml	99
26) Benzoic acid	7.648	105	35448	1560.83	ng/ml	96
27) 2,4-Dichlorophenol	7.771	162	56283	1013.10	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.862	180	71397	1007.47	ng/ml	98
29) Naphthalene	7.942	128	217507	1028.31	ng/ml	100
30) 4-Chloroaniline	7.990	127	67526	1246.11	ng/ml	100
31) Hexachlorobutadiene	8.071	225	38909	1029.10	ng/ml	99
32) 4-Chloro-3-methylphenol	8.466	107	63199	1106.90	ng/ml	99
33) 2-Methylnaphthalene	8.637	142	162096	1068.21	ng/ml	99
34) 1-Methylnaphthalene	8.739	142	153280	1059.33	ng/ml	99
36) Hexachlorocyclopentadiene	8.809	237	36321	909.06	ng/ml	98
37) 2,4,6-Trichlorophenol	8.921	196	41531	997.28	ng/ml	95
38) 2,4,5-Trichlorophenol	8.953	198	40839	1004.22	ng/ml	100
39) 1,1'-Biphenyl	9.108	154	180141	1043.90	ng/ml	99
41) 2-Chloronaphthalene	9.130	162	133530	1062.04	ng/ml	99
42) 2-Nitroaniline	9.226	138	39427	923.11	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.269	156	133180	1032.92	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:14:17 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9

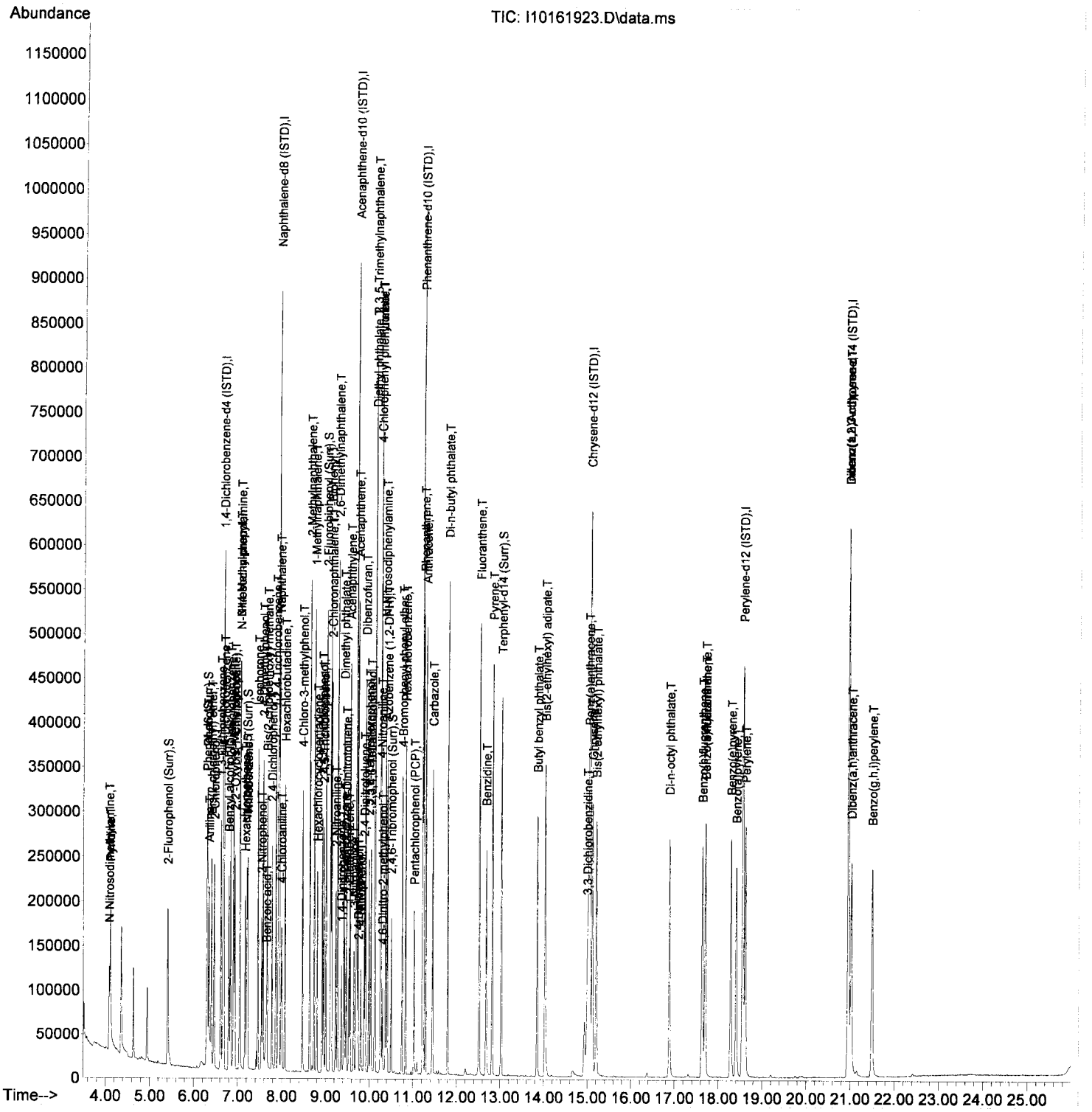
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.354	168	13499	650.23	ng/ml	95
45) Dimethyl phthalate	9.408	163	158407	1039.88	ng/ml	100
46) 1,3-Dinitrobenzene	9.434	168	18765	746.24	ng/ml	99
47) 2,6-Dinitrotoluene	9.467	165	32748	929.28	ng/ml	97
48) 1,2-Dinitrobenzene	9.525	168	14689	859.69	ng/ml	91
49) Acenaphthylene	9.552	152	217996	1066.62	ng/ml	100
50) 3-Nitroaniline	9.643	138	24964	859.43	ng/ml	98
51) Acenaphthene	9.734	153	135051	1026.15	ng/ml	99
52) 2,4-Dinitrophenol	9.745	184	5025	487.97	ng/ml	96
53) 4-Nitrophenol	9.798	139	21088	821.64	ng/ml	98
54) 2,4-Dinitrotoluene	9.878	165	37273	846.54	ng/ml	99
55) Dibenzofuran	9.905	168	185607	1014.86	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.985	232	31814	937.39	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.028	232	34023	962.42	ng/ml	99
58) Diethyl phthalate	10.124	149	147651	1041.16	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	10.119	170	124315	1001.08	ng/ml	99
60) Fluorene	10.253	166	145915	995.16	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.247	204	73932	990.77	ng/ml	99
62) 4-Nitroaniline	10.263	138	23106	748.68	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.296	198	12157	630.01	ng/ml	99
65) N-Nitrosodiphenylamine	10.365	169	119244	1003.89	ng/ml	100
66) Azobenzene (1,2-DPH)	10.408	77	150469	1261.76	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.750	248	45642	1021.84	ng/ml	97
69) Hexachlorobenzene	10.825	284	56848	1110.61	ng/ml	97
70) Pentachlorophenol (PCP)	11.023	266	23846	942.40	ng/ml	99
71) Phenanthrene	11.237	178	205558	1007.18	ng/ml	99
72) Anthracene	11.290	178	203835	1027.45	ng/ml	99
73) Carbazole	11.446	167	146985	864.73	ng/ml	99
74) Di-n-butyl phthalate	11.793	149	255949	1121.96	ng/ml	100
75) Fluoranthene	12.521	202	249626	1080.38	ng/ml	98
76) Benzidine	12.676	184	125960	2058.59	ng/ml	99
77) Pyrene	12.815	202	246937	1062.13	ng/ml	99
80) Butyl benzyl phthalate	13.852	149	108372	1062.38	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.029	129	97276	1089.51	ng/ml	99
82) 3,3-Dichlorobenzidine	14.997	252	63598	2268.59	ng/ml	99
83) Benz(a)anthracene	15.029	228	227009	1036.27	ng/ml	99
84) Chrysene	15.115	228	199763	998.68	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.200	149	144348	1105.02	ng/ml	99
87) Di-n-octyl phthalate	16.880	149	235845	1041.21	ng/ml	98
88) Benzo(b)fluoranthene	17.634	252	224618	1042.24	ng/ml	99
89) Benzo(k)fluoranthene	17.703	252	223333	1099.03	ng/ml	99
90) Benzo(b+k)fluoranthene	17.703	252	456360	2129.13	ng/ml	99
91) Benzo(e)pyrene	18.292	252	216100	1027.54	ng/ml	99
92) Benzo(a)pyrene	18.409	252	191818	970.72	ng/ml	97
93) Perylene	18.618	252	208975	1177.33	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.955	276	193901	959.41	ng/ml	98
96) Dibenz(a,h)anthracene	21.025	278	173363	984.45	ng/ml	99
97) Benzo(g,h,i)perylene	21.496	276	200730	1037.73	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 10:14:17 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 10:12:15 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Final Reqmnt

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

10/17/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.659	152	106471	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.921	136	411521	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.702	162	209383	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	386084	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.056	240	381801	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.559	264	383841	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.955	292	334585	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.407	112	76822	979.88 ng/ml	0.00
5) Phenol-d6 (Surr)	6.295	99	98100	1034.03 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.199	82	77799	1123.58 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.007	172	165174	1073.64 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.499	330	23106	991.89 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.023	244	193114	1042.44 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.080	74	60523	962.45 ng/ml	99
3) Pyridine	4.102	79	85071	870.09 ng/ml	98
6) Phenol	6.306	94	102242	1017.51 ng/ml	99
7) Aniline	6.343	93	96173	919.51 ng/ml	98
8) Bis(2-chloroethyl) ether	6.396	93	95373	1054.56 ng/ml	98
9) 2-Chlorophenol	6.461	128	81659	1063.88 ng/ml	99
10) 1,3-Dichlorobenzene	6.610	146	85857	1008.13 ng/ml	100
11) 1,4-Dichlorobenzene	6.680	146	80889	997.22 ng/ml	99
12) Benzyl alcohol	6.787	108	42970	972.38 ng/ml	99
13) 1,2-Dichlorobenzene	6.830	146	80233	1014.94 ng/ml	98
14) 2-Methylphenol	6.894	107	64559	1103.30 ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.921	45	117934	942.25 ng/ml	98
16) N-Nitrosodi-n-propylamine	7.049	70	63007	1022.29 ng/ml	99
17) 3+4-Methylphenol	7.044	107	75794	1061.21 ng/ml	99
18) Hexachloroethane	7.167	201	26625	1021.57 ng/ml	98
20) Nitrobenzene	7.220	77	79633	1086.15 ng/ml	98
22) Isophorone	7.450	82	167145	1027.17 ng/ml	97
23) 2-Nitrophenol	7.536	139	40793	1122.19 ng/ml	99
24) 2,4-Dimethylphenol	7.568	122	60426	1039.76 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.659	93	93785	1041.11 ng/ml	99
26) Benzoic acid	7.648	105	35448	1748.34 ng/ml	96
27) 2,4-Dichlorophenol	7.771	162	56283	1054.42 ng/ml	98
28) 1,2,4-Trichlorobenzene	7.862	180	71397	1029.38 ng/ml	98
29) Naphthalene	7.942	128	217507	1028.99 ng/ml	100
30) 4-Chloroaniline	7.990	127	67526	927.48 ng/ml	100
31) Hexachlorobutadiene	8.071	225	38909	1016.95 ng/ml	99
32) 4-Chloro-3-methylphenol	8.466	107	63199	994.60 ng/ml	99
33) 2-Methylnaphthalene	8.637	142	162096	1066.21 ng/ml	99
34) 1-Methylnaphthalene	8.739	142	153280	1059.02 ng/ml	99
36) Hexachlorocyclopentadiene	8.809	237	36321	994.04 ng/ml	98
37) 2,4,6-Trichlorophenol	8.921	196	41531	1015.45 ng/ml	95
38) 2,4,5-Trichlorophenol	8.953	198	40839	1032.61 ng/ml	100
39) 1,1'-Biphenyl	9.108	154	180141	1063.19 ng/ml	99
41) 2-Chloronaphthalene	9.130	162	133530	1066.44 ng/ml	99
42) 2-Nitroaniline	9.226	138	39427	1029.23 ng/ml	98
43) 2,6-Dimethylnaphthalene	9.269	156	133180	1040.04 ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9

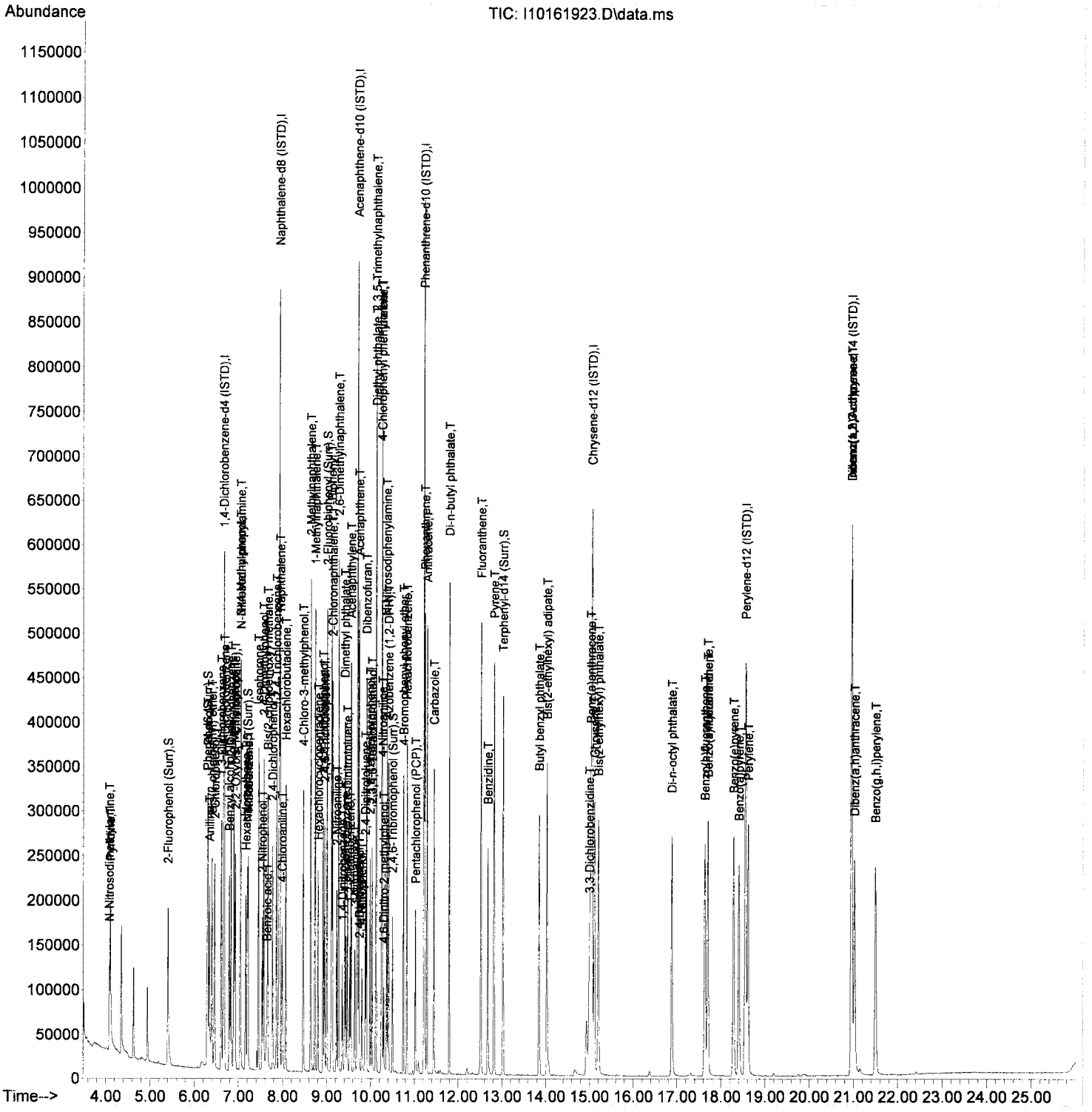
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.354	168	13499	1003.65	ng/ml	95
45)	Dimethyl phthalate	9.408	163	158407	1036.77	ng/ml	100
46)	1,3-Dinitrobenzene	9.434	168	18765	998.65	ng/ml	99
47)	2,6-Dinitrotoluene	9.467	165	32748	1046.42	ng/ml	97
48)	1,2-Dinitrobenzene	9.525	168	14689	991.16	ng/ml	91
49)	Acenaphthylene	9.552	152	217996	1039.76	ng/ml	100
50)	3-Nitroaniline	9.643	138	24964	869.33	ng/ml	98
51)	Acenaphthene	9.734	153	135051	1024.42	ng/ml	99
52)	2,4-Dinitrophenol	9.745	184	5025	966.05	ng/ml	96
53)	4-Nitrophenol	9.798	139	21088	979.87	ng/ml	98
54)	2,4-Dinitrotoluene	9.878	165	37273	993.56	ng/ml	99
55)	Dibenzofuran	9.905	168	185607	1028.25	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	9.985	232	31814	1002.75	ng/ml	98
57)	2,3,4,6-Tetrachlorophenol	10.028	232	34023	1003.97	ng/ml	99
58)	Diethyl phthalate	10.124	149	147651	1019.70	ng/ml	100
59)	2,3,5-Trimethylnaphtha...	10.119	170	124315	1039.96	ng/ml	99
60)	Fluorene	10.253	166	145915	1004.88	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.247	204	73932	1027.80	ng/ml	99
62)	4-Nitroaniline	10.263	138	23106	933.76	ng/ml	99
63)	4,6-Dinitro-2-methylph...	10.296	198	12157	1015.34	ng/ml	99
65)	N-Nitrosodiphenylamine	10.365	169	119244	983.98	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.408	77	150469	949.43	ng/ml	99
68)	4-Bromophenyl phenyl e...	10.750	248	45642	1008.03	ng/ml	97
69)	Hexachlorobenzene	10.825	284	56848	1061.98	ng/ml	97
70)	Pentachlorophenol (PCP)	11.023	266	23846	976.19	ng/ml	99
71)	Phenanthrene	11.237	178	205558	1020.75	ng/ml	99
72)	Anthracene	11.290	178	203835	1026.29	ng/ml	99
73)	Carbazole	11.446	167	146985	832.59	ng/ml	99
74)	Di-n-butyl phthalate	11.793	149	255949	1062.50	ng/ml	100
75)	Fluoranthene	12.521	202	249626	1051.63	ng/ml	98
76)	Benzidine	12.676	184	125960	1525.65	ng/ml	99
77)	Pyrene	12.815	202	246937	1066.74	ng/ml	99
80)	Butyl benzyl phthalate	13.852	149	108372	996.01	ng/ml	97
81)	Bis(2-ethylhexyl) adipate	14.029	129	97276	1010.50	ng/ml	99
82)	3,3-Dichlorobenzidine	14.997	252	63598	1766.40	ng/ml	99
83)	Benz(a)anthracene	15.029	228	227009	1026.78	ng/ml	99
84)	Chrysene	15.115	228	199763	999.03	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.200	149	144348	1028.73	ng/ml	99
87)	Di-n-octyl phthalate	16.880	149	235845	966.33	ng/ml	98
88)	Benzo(b)fluoranthene	17.634	252	224618	1047.95	ng/ml	99
89)	Benzo(k)fluoranthene	17.703	252	223333	1120.67	ng/ml	99
90)	Benzo(b+k)fluoranthene	17.703	252	456360	2155.04	ng/ml	99
91)	Benzo(e)pyrene	18.292	252	216100	1038.23	ng/ml	99
92)	Benzo(a)pyrene	18.409	252	191818	951.21	ng/ml	97
93)	Perylene	18.618	252	208975	1199.80	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	20.955	276	193901	981.17	ng/ml	98
96)	Dibenz(a,h)anthracene	21.025	278	173363	1003.35	ng/ml	99
97)	Benzo(g,h,i)perylene	21.496	276	200730	1065.46	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J16053\
Data File : I10161923.D
Acq On : 16 Oct 2019 11:33 pm
Operator : JK /AMS /DTH
Sample : 9J16053-ICV1
Misc : 1x, A19I254 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Oct 17 13:16:10 2019
Quant Method : T:\methods\SV9_101619.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Oct 17 11:59:00 2019
Response via : Initial Calibration
InstName : SV-GCMS9



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

Total Metals by EPA 6020A (ICPMS)
Benchsheet Data and Analysis (Including Calibration)

Batch 9101684
Sequence 9J29041

APEX LABORATORIES

Ag (Silver) - 6020 - Total
As (Arsenic) - 6020 - Total
As (Arsenic) - 200.8 - Total
Ca (Calcium) - 200.8 - Total
Cd (Cadmium) - 6020 - Total
Cr (Chromium) - 6020 - Total
Cu (Copper) - 6020 - Total
Cu (Copper) - 200.8 - Total

PREPARATION BENCH SHEET

9101684

Apex Laboratories
BATCH #: 9101684 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments
9101684-BLK1	---	10/29/19 08:43	45	50	*QC Sample*		
9101684-BS1	---	10/29/19 08:43	45	50	*QC Sample*		
Spike 1: 500 uL of A19J430 Spike 2: 50 uL of A19I359							
A9J0946-03	*11/07/19*	10/29/19 08:43	45	50	GSI Water Solutions	GW-PW-69A-1019	
☐ As (Arsenic) - 200.8 - Total							
A9J0946-07	*11/07/19*	10/29/19 08:43	45	50	GSI Water Solutions	GW-PW-93A-1019	
☐ As (Arsenic) - 200.8 - Total							
A9J0946-08	*11/07/19*	10/29/19 08:43	45	50	GSI Water Solutions	GW-PW-94A-1019	
☐ As (Arsenic) - 200.8 - Total							
A9J0957-04	*11/07/19*	10/29/19 08:43	45	50	Contech Engineered Solutions, LI	DJF-EB-A4	Added for BatchQC in 9101684
☐ Ca (Calcium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mg (Magnesium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
Batch QC:							
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total							
☐ Ni (Nickel) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
9101684-DUP1	---	10/29/19 08:43	45	50	*QC Sample*		
Source: A9J0957-04							
9101684-MS1	---	10/29/19 08:43	45	50	*QC Sample*		
Source: A9J0957-04 Spike 1: 500 uL of A19J430 Spike 2: 50 uL of A19I359							
A9J0957-09	*11/07/19*	10/29/19 08:43	45	50	Contech Engineered Solutions, LI	DJF-EB-B4	
☐ Ca (Calcium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mg (Magnesium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9J0959-01	*11/07/19*	10/29/19 08:43	45	50	Anchor QEA, LLC	PDI-026SW-34-00-191024	
☐ As (Arsenic) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9J0993-01	*11/08/19*	10/29/19 08:43	45	50	Bridgewater Group	B3-191026	Total+Dissolved
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Ni (Nickel) - 6020 - Total							
☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9J0993-02	*11/08/19*	10/29/19 08:43	45	50	Bridgewater Group	FB-191026	Total+Dissolved
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Ni (Nickel) - 6020 - Total							
☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							

CEL 10/29/19
Prepared By: Date

James S. Johnson 10/30/19
Reviewed By: Date

APEX LABORATORIES

Apex Laboratories
BATCH #: 9101684 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A15E001	05/01/20	Mars-1 Microwave
A19I314	03/22/20	Conc. HCl - Omnitrace
A19J277	04/15/20	Conc. HNO3 - Omnitrace

Analyte Spike(s)

Std ID	Exp. Date	Description
A19I359	03/08/20	Hg Spiking Standard
A19J430	12/11/19	**Combo Spike** A+B+C

CRL 10/29/19

A) A19J351 - 250 µL
B) A19J308 - 125 µL
C) A19J309 - 125 µL

CRL 10/29/19

Digestion time and temperature achieved? Yes
Initials: CRL

CRL 10/29/19
Prepared By: Date

Reviewed By: Date

Batch #: 9101684

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: 10/29/19 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	W62	9101684-BLK1	207.65	207.63	n/a
2	W36	9101684-BS1	210.67	210.64	n/a
3	W24	A9J0946-03	209.48	209.45	n/a
4	W85	A9J0946-07	212.57	212.55	n/a
5	W92	A9J0946-08	210.26	210.23	n/a
6	W104	A9J0957-04	206.48	206.45	n/a
7	W73	9101684-DUP1	210.16	210.15	n/a
8	W75	9101684-MS1	208.16	208.14	n/a
9	W101	A9J0957-09	207.40	207.36	n/a
10	W96	A9J0959-01	207.33	207.31	n/a
11	W81	A9J0993-01	208.92	208.90	n/a
12	W64	A9J0993-02	212.87	212.84	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.

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9J29041** Instrument: **ICPMS6**

Date: **10/29/19 11:57** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J29041-CAL1	Water	QC	QC			A19J003	A19J368
2	9J29041-CAL2	Water	QC	QC			A19J003	A19J369
3	9J29041-CAL3	Water	QC	QC			A19J003	A19J370
4	9J29041-CAL4	Water	QC	QC			A19J003	A19J371
5	9J29041-CAL5	Water	QC	QC			A19J003	A19J035
6	9J29041-CAL6	Water	QC	QC			A19J003	A19J372
7	9J29041-CAL7	Water	QC	QC			A19J003	A19J036
8	9J29041-CAL8	Water	QC	QC			A19J003	A19J188
9	9J29041-CAL9	Water	QC	QC			A19J003	A19J189
10	9J29041-ICV1	Water	QC	QC			A19J003	A19J138
11	9J29041-ICB1	Water	QC	QC			A19J003	
12	9J29041-CRL1	Water	QC	QC			A19J003	A19J368
13	9J29041-CRL2	Water	QC	QC			A19J003	A19J369
14	9J29041-CRL3	Water	QC	QC			A19J003	A19J370
15	9J29041-IFA1	Water	QC	QC			A19J003	A19J282
16	9J29041-IFB1	Water	QC	QC			A19J003	A19J283
17	A9J0948-01RE2	Soil	Be (Beryllium) - 6020 - Total		10/30/19	9101604	A19J003	
18	A9J0951-04RE2	Soil	Be (Beryllium) - 6020 - Total		10/29/19	9101604	A19J003	
19	A9J0951-05RE2	Soil	Be (Beryllium) - 6020 - Total		10/29/19	9101604	A19J003	
20	A9J0951-06RE2	Soil	Be (Beryllium) - 6020 - Total		10/29/19	9101604	A19J003	
21	A9J0989-01RE1	Solid	Pb (Lead) - 6020 - Total		10/30/19	9101649	A19J003	
22	9101692-BLK1	Soil	QC	QC		9101692	A19J003	
23	9101692-BS1	Soil	QC	QC		9101692	A19J003	
24	A9J0991-02	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	
25	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
26	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
27	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
28	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
29	"	Soil	Cu (Copper) - 6020 - Total	(QC Source)		9101692	A19J003	
30	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
31	"	Soil	Ni (Nickel) - 6020 - Total	(QC Source)		9101692	A19J003	
32	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
33	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
34	"	Soil	Zn (Zinc) - 6020 - Total	(QC Source)		9101692	A19J003	
35	9101692-DUP1	Soil	QC	QC		9101692	A19J003	
36	9101692-MS1	Soil	QC	QC		9101692	A19J003	
37	9J29041-CCV1	Water	QC	QC			A19J003	A19J138
38	9J29041-CCB1	Water	QC	QC			A19J003	
39	A9J1012-01	Soil	Ag (Silver) - 6020 - Total	PSI	10/30/19	9101692	A19J003	
40	"	Soil	As (Arsenic) - 6020 - Total	"	10/30/19	9101692	A19J003	
41	"	Soil	Ba (Barium) - 6020 - Total	"	10/30/19	9101692	A19J003	
42	"	Soil	Cd (Cadmium) - 6020 - Total	"	10/30/19	9101692	A19J003	
43	"	Soil	Cr (Chromium) - 6020 - Total	"	10/30/19	9101692	A19J003	
44	"	Soil	Hg (Mercury) - 6020 - Total	"	10/30/19	9101692	A19J003	
45	"	Soil	Pb (Lead) - 6020 - Total	"	10/30/19	9101692	A19J003	
46	"	Soil	Se (Selenium) - 6020 - Total	"	10/30/19	9101692	A19J003	
47	9101692-MSD1	Soil	QC	QC		9101692	A19J003	
48	9101660-BLK1	Water	QC	QC		9101660	A19J003	
49	9101660-BS1	Water	QC	QC		9101660	A19J003	
50	9J29041-CCV2	Water	QC	QC			A19J003	A19J138
51	9J29041-CCB2	Water	QC	QC			A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	9J29041-CRL4	Water	QC	QC			A19J003	A19J368
53	9J29041-CRL5	Water	QC	QC			A19J003	A19J369
54	9J29041-CRL6	Water	QC	QC			A19J003	A19J370
55	9J29041-CRL7	Water	QC	QC			A19J003	A19J371
56	A9J0911-02	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
57	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
58	A9J0911-06	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
59	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
60	A9J0943-02	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
61	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
62	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
63	A9J0943-04	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
64	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
65	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
66	A9J0943-06	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
67	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
68	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
69	A9J0943-08	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
70	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
71	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
72	A9J0943-10	Water	Cu (Copper) - 200.8 - Dissolved		11/06/19	9101660	A19J003	
73	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
74	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/06/19	9101660	A19J003	
75	A9J0957-05	Water	Cu (Copper) - 200.8 - Dissolved		11/07/19	9101660	A19J003	
76	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/07/19	9101660	A19J003	
77	A9J0957-10	Water	Cu (Copper) - 200.8 - Dissolved		11/07/19	9101660	A19J003	
78	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/07/19	9101660	A19J003	
79	A9J0984-01	Water	Cu (Copper) - 200.8 - Dissolved	(QC Source)		9101660	A19J003	
80	"	Water	Pb (Lead) - 200.8 - Dissolved	"	11/01/19	9101660	A19J003	
81	"	Water	Zn (Zinc) - 200.8 - Dissolved	(QC Source)		9101660	A19J003	
82	9J29041-CCV3	Water	QC	QC			A19J003	A19J138
83	9J29041-CCB3	Water	QC	QC			A19J003	
84	9101660-DUP1	Water	QC	QC		9101660	A19J003	
85	9101660-MS1	Water	QC	QC		9101660	A19J003	
86	A9J0285-01	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	
87	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
88	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
89	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
90	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
91	"	Soil	Cu (Copper) - 6020 - Total	"	11/08/19	9101692	A19J003	
92	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
93	"	Soil	Ni (Nickel) - 6020 - Total	"	11/08/19	9101692	A19J003	
94	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
95	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
96	"	Soil	Zn (Zinc) - 6020 - Total	"	11/08/19	9101692	A19J003	
97	A9J0949-01	Soil	Hg (Mercury) - 6020 - Total		11/07/19	9101692	A19J003	
98	A9J0991-01	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	
99	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
100	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
101	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
102	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
103	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
104	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
105	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
106	A9J0991-03	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
107	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
108	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
109	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
110	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
111	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
112	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
113	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
114	A9J0991-04	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	
115	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
116	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
117	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
118	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
119	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
120	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
121	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
122	A9J0991-05	Soil	Ag (Silver) - 6020 - Total		11/08/19	9101692	A19J003	
123	"	Soil	As (Arsenic) - 6020 - Total	"	11/08/19	9101692	A19J003	
124	"	Soil	Ba (Barium) - 6020 - Total	"	11/08/19	9101692	A19J003	
125	"	Soil	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101692	A19J003	
126	"	Soil	Cr (Chromium) - 6020 - Total	"	11/08/19	9101692	A19J003	
127	"	Soil	Hg (Mercury) - 6020 - Total	"	11/08/19	9101692	A19J003	
128	"	Soil	Pb (Lead) - 6020 - Total	"	11/08/19	9101692	A19J003	
129	"	Soil	Se (Selenium) - 6020 - Total	"	11/08/19	9101692	A19J003	
130	A9J0996-01	Soil	Pb (Lead) - 6020 - Total		11/01/19	9101692	A19J003	
131	9101693-BLK1	Water	QC	QC		9101693	A19J003	
132	9J29041-CCV4	Water	QC	QC			A19J003	A19J138
133	9J29041-CCB4	Water	QC	QC			A19J003	
134	9101693-BSD1	Water	QC	QC		9101693	A19J003	
135	9101693-BS1	Water	QC	QC		9101693	A19J003	
136	A9J0993-02	Water	Ag (Silver) - 6020 - Dissolved		11/08/19	9101693	A19J003	
137	"	Water	As (Arsenic) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
138	"	Water	Cd (Cadmium) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
139	"	Water	Cr (Chromium) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
140	"	Water	Cu (Copper) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
141	"	Water	Cu (Copper) - 200.8 - Dissolved	(QC Source)		9101693	A19J003	
142	"	Water	Hg (Mercury) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
143	"	Water	Ni (Nickel) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
144	"	Water	Pb (Lead) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
145	"	Water	Se (Selenium) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
146	"	Water	Zn (Zinc) - 6020 - Dissolved	"	11/08/19	9101693	A19J003	
147	"	Water	Zn (Zinc) - 200.8 - Dissolved	(QC Source)		9101693	A19J003	
148	9101693-DUP1	Water	QC	QC		9101693	A19J003	
149	9101693-MS1	Water	QC	QC		9101693	A19J003	
150	A9J0998-02	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
151	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
152	A9J0998-04	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
153	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
154	A9J0999-02	Water	Ag (Silver) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
155	"	Water	As (Arsenic) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
156	"	Water	Cd (Cadmium) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
157	"	Water	Cr (Chromium) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
158	"	Water	Cu (Copper) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
159	"	Water	Cu (Copper) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
160	"	Water	Hg (Mercury) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
161	"	Water	Ni (Nickel) - 6020 - Dissolved	(QC Source)		9101693	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
162	"	Water	Pb (Lead) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
163	"	Water	Se (Selenium) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
164	"	Water	Zn (Zinc) - 6020 - Dissolved	(QC Source)		9101693	A19J003	
165	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
166	9101693-MS2	Water	QC	QC		9101693	A19J003	
167	A9J0999-04	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
168	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
169	9J29041-CCV5	Water	QC	QC			A19J003	A19J138
170	9J29041-CCB5	Water	QC	QC			A19J003	
171	A9J1000-02	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
172	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
173	A9J1000-04	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
174	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
175	A9J1001-02	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
176	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
177	A9J1001-04	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
178	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
179	A9J1002-02	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
180	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
181	A9J1002-04	Water	Cu (Copper) - 200.8 - Dissolved		11/08/19	9101693	A19J003	
182	"	Water	Zn (Zinc) - 200.8 - Dissolved	"	11/08/19	9101693	A19J003	
183	9101700-BLK1	Water	QC	QC		9101700	A19J003	
184	9101700-BS1	Water	QC	QC		9101700	A19J003	
185	A9J0993-01	Water	Ag (Silver) - 6020 - Dissolved		11/08/19	9101700	A19J003	
186	"	Water	As (Arsenic) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
187	"	Water	Cd (Cadmium) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
188	"	Water	Cr (Chromium) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
189	"	Water	Cu (Copper) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
190	"	Water	Hg (Mercury) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
191	"	Water	Ni (Nickel) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
192	"	Water	Pb (Lead) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
193	"	Water	Se (Selenium) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
194	"	Water	Zn (Zinc) - 6020 - Dissolved	"	11/08/19	9101700	A19J003	
195	9101700-DUP1	Water	QC	QC		9101700	A19J003	
196	9J29041-CCV6	Water	QC	QC			A19J003	A19J138
197	9J29041-CCB6	Water	QC	QC			A19J003	
198	9101700-MS1	Water	QC	QC		9101700	A19J003	
199	9101684-BLK1	Water	QC	QC		9101684	A19J003	
200	9101684-BS1	Water	QC	QC		9101684	A19J003	
201	A9J0957-04	Water	Ag (Silver) - 6020 - Total	(QC Source)		9101684	A19J003	
202	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9101684	A19J003	
203	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9101684	A19J003	
204	"	Water	Ca (Calcium) - 200.8 - Total	"	11/07/19	9101684	A19J003	
205	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9101684	A19J003	
206	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9101684	A19J003	
207	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9101684	A19J003	
208	"	Water	Cu (Copper) - 200.8 - Total	"	11/07/19	9101684	A19J003	
209	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9101684	A19J003	
210	"	Water	Mg (Magnesium) - 200.8 - Total	"	11/07/19	9101684	A19J003	
211	"	Water	Ni (Nickel) - 6020 - Total	(QC Source)		9101684	A19J003	
212	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9101684	A19J003	
213	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9101684	A19J003	
214	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9101684	A19J003	
215	"	Water	Zn (Zinc) - 200.8 - Total	"	11/07/19	9101684	A19J003	
216	9101684-DUP1	Water	QC	QC		9101684	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
217	9101684-MS1	Water	QC	QC		9101684	A19J003	
218	A9J0957-09	Water	Ca (Calcium) - 200.8 - Total		11/07/19	9101684	A19J003	
219	"	Water	Cu (Copper) - 200.8 - Total	"	11/07/19	9101684	A19J003	
220	"	Water	Mg (Magnesium) - 200.8 - Total	"	11/07/19	9101684	A19J003	
221	"	Water	Zn (Zinc) - 200.8 - Total	"	11/07/19	9101684	A19J003	
222	A9J0959-01	Water	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	11/07/19	9101684	A19J003	
223	"	Water	Cr (Chromium) - 6020 - Total	"	11/07/19	9101684	A19J003	
224	"	Water	Cu (Copper) - 6020 - Total	"	11/07/19	9101684	A19J003	
225	"	Water	Zn (Zinc) - 6020 - Total	"	11/07/19	9101684	A19J003	
226	A9J0993-01	Water	Ag (Silver) - 6020 - Total		11/08/19	9101684	A19J003	
227	"	Water	As (Arsenic) - 6020 - Total	"	11/08/19	9101684	A19J003	
228	"	Water	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101684	A19J003	
229	"	Water	Cr (Chromium) - 6020 - Total	"	11/08/19	9101684	A19J003	
230	"	Water	Cu (Copper) - 6020 - Total	"	11/08/19	9101684	A19J003	
231	"	Water	Hg (Mercury) - 6020 - Total	"	11/08/19	9101684	A19J003	
232	"	Water	Ni (Nickel) - 6020 - Total	"	11/08/19	9101684	A19J003	
233	"	Water	Pb (Lead) - 6020 - Total	"	11/08/19	9101684	A19J003	
234	"	Water	Se (Selenium) - 6020 - Total	"	11/08/19	9101684	A19J003	
235	"	Water	Zn (Zinc) - 6020 - Total	"	11/08/19	9101684	A19J003	
236	A9J0993-02	Water	Ag (Silver) - 6020 - Total		11/08/19	9101684	A19J003	
237	"	Water	As (Arsenic) - 6020 - Total	"	11/08/19	9101684	A19J003	
238	"	Water	Cd (Cadmium) - 6020 - Total	"	11/08/19	9101684	A19J003	
239	"	Water	Cr (Chromium) - 6020 - Total	"	11/08/19	9101684	A19J003	
240	"	Water	Cu (Copper) - 6020 - Total	"	11/08/19	9101684	A19J003	
241	"	Water	Hg (Mercury) - 6020 - Total	"	11/08/19	9101684	A19J003	
242	"	Water	Ni (Nickel) - 6020 - Total	"	11/08/19	9101684	A19J003	
243	"	Water	Pb (Lead) - 6020 - Total	"	11/08/19	9101684	A19J003	
244	"	Water	Se (Selenium) - 6020 - Total	"	11/08/19	9101684	A19J003	
245	"	Water	Zn (Zinc) - 6020 - Total	"	11/08/19	9101684	A19J003	
246	9J29041-CCV7	Water	QC	QC			A19J003	A19J138
247	9J29041-CCB7	Water	QC	QC			A19J003	
248	9101658-BLK1	Water	QC	QC		9101658	A19J003	
249	9101658-BS1	Water	QC	QC		9101658	A19J003	
250	A9J0808-01	Water	Zn (Zinc) - 200.8 - Total		11/04/19	9101658	A19J003	
251	A9J0810-01	Water	Mn (Manganese) - 200.8 - Total		11/04/19	9101658	A19J003	
252	A9J0812-01	Water	Cu (Copper) - 200.8 - Total		11/04/19	9101658	A19J003	
253	"	Water	Fe (Iron) - 200.8 - Total	"	11/04/19	9101658	A19J003	
254	"	Water	Pb (Lead) - 200.8 - Total	"	11/04/19	9101658	A19J003	
255	"	Water	Zn (Zinc) - 200.8 - Total	"	11/04/19	9101658	A19J003	
256	A9J0815-01	Water	Ag (Silver) - 6020 - Total	(QC Source)		9101658	A19J003	
257	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9101658	A19J003	
258	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9101658	A19J003	
259	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9101658	A19J003	
260	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9101658	A19J003	
261	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9101658	A19J003	
262	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9101658	A19J003	
263	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9101658	A19J003	
264	"	Water	Cu (Copper) - 200.8 - Total	"	11/04/19	9101658	A19J003	
265	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		9101658	A19J003	
266	"	Water	Fe (Iron) - 6020 - Total	(QC Source)		9101658	A19J003	
267	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9101658	A19J003	
268	"	Water	Mn (Manganese) - 200.8 - Total	(QC Source)		9101658	A19J003	
269	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9101658	A19J003	
270	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9101658	A19J003	
271	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9101658	A19J003	

Sequence: **9J29041** Instrument: **ICPMS6**

Date: **10/29/19 11:57** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
272	"	Water	Pb (Lead) - 200.8 - Total	"	11/04/19	9101658	A19J003	
273	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9101658	A19J003	
274	"	Water	Zn (Zinc) - 200.8 - Total	"	11/04/19	9101658	A19J003	
275	9101658-DUP1	Water	QC	QC		9101658	A19J003	
276	9101658-MS1	Water	QC	QC		9101658	A19J003	
277	A9J0822-01	Water	Fe (Iron) - 200.8 - Total		11/04/19	9101658	A19J003	
278	"	Water	Zn (Zinc) - 200.8 - Total	"	11/04/19	9101658	A19J003	
279	A9J0825-01	Water	Fe (Iron) - 200.8 - Total		11/04/19	9101658	A19J003	
280	9J29041-CCV8	Water	QC	QC			A19J003	A19J138
281	9J29041-CCB8	Water	QC	QC			A19J003	
282	A9J0825-02	Water	Fe (Iron) - 200.8 - Total		11/04/19	9101658	A19J003	
283	A9J0841-04	Water	Ag (Silver) - 6020 - Total		11/05/19	9101658	A19J003	
284	"	Water	As (Arsenic) - 6020 - Total	"	11/05/19	9101658	A19J003	
285	"	Water	Ba (Barium) - 6020 - Total	"	11/05/19	9101658	A19J003	
286	"	Water	Cd (Cadmium) - 6020 - Total	"	11/05/19	9101658	A19J003	
287	"	Water	Cr (Chromium) - 6020 - Total	"	11/05/19	9101658	A19J003	
288	"	Water	Hg (Mercury) - 6020 - Total	"	11/05/19	9101658	A19J003	
289	"	Water	Pb (Lead) - 6020 - Total	"	11/05/19	9101658	A19J003	
290	"	Water	Se (Selenium) - 6020 - Total	"	11/05/19	9101658	A19J003	
291	A9J0841-05	Water	Ag (Silver) - 6020 - Total	Anchor QEA, LLC	11/05/19	9101658	A19J003	
292	"	Water	As (Arsenic) - 6020 - Total	"	11/05/19	9101658	A19J003	
293	"	Water	Ba (Barium) - 6020 - Total	"	11/05/19	9101658	A19J003	
294	"	Water	Cd (Cadmium) - 6020 - Total	"	11/05/19	9101658	A19J003	
295	"	Water	Cr (Chromium) - 6020 - Total	"	11/05/19	9101658	A19J003	
296	"	Water	Hg (Mercury) - 6020 - Total	"	11/05/19	9101658	A19J003	
297	"	Water	Pb (Lead) - 6020 - Total	"	11/05/19	9101658	A19J003	
298	"	Water	Se (Selenium) - 6020 - Total	"	11/05/19	9101658	A19J003	
299	A9J0864-01	Water	Cu (Copper) - 200.8 - Total		11/05/19	9101658	A19J003	
300	"	Water	Pb (Lead) - 200.8 - Total	"	11/05/19	9101658	A19J003	
301	"	Water	Zn (Zinc) - 200.8 - Total	"	11/05/19	9101658	A19J003	
302	A9J0888-01	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
303	"	Water	Mo (Molybdenum) - 200.8 - Total	"	11/06/19	9101658	A19J003	
304	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
305	A9J0916-13	Water	Pb (Lead) - 6020 - Total		11/06/19	9101658	A19J003	
306	A9J0943-01	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
307	"	Water	Pb (Lead) - 200.8 - Total	"	11/06/19	9101658	A19J003	
308	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
309	A9J0943-03	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
310	"	Water	Pb (Lead) - 200.8 - Total	"	11/06/19	9101658	A19J003	
311	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
312	A9J0943-05	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
313	"	Water	Pb (Lead) - 200.8 - Total	"	11/06/19	9101658	A19J003	
314	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
315	A9J0943-07	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
316	"	Water	Pb (Lead) - 200.8 - Total	"	11/06/19	9101658	A19J003	
317	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
318	9J29041-CCV9	Water	QC	QC			A19J003	A19J138
319	9J29041-CCB9	Water	QC	QC			A19J003	
320	A9J0943-09	Water	Cu (Copper) - 200.8 - Total		11/06/19	9101658	A19J003	
321	"	Water	Pb (Lead) - 200.8 - Total	"	11/06/19	9101658	A19J003	
322	"	Water	Zn (Zinc) - 200.8 - Total	"	11/06/19	9101658	A19J003	
323	9J29041-CCVA	Water	QC	QC			A19J003	A19J138
324	9J29041-CCBA	Water	QC	QC			A19J003	
325	9J29041-CRL8	Water	QC	QC			A19J003	A19J368
326	9J29041-CRL9	Water	QC	QC			A19J003	A19J369

Sequence: **9J29041** Instrument: **ICPMS6**

Date: **10/29/19 11:57** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
327	9J29041-CRLA	Water	QC	QC			A19J003	A19J370
328	9J29041-CRLB	Water	QC	QC			A19J003	A19J371
329	A9J0946-03	Water	As (Arsenic) - 200.8 - Total		11/07/19	9101684	A19J003	
330	A9J0946-07	Water	As (Arsenic) - 200.8 - Total		11/07/19	9101684	A19J003	
331	A9J0946-08	Water	As (Arsenic) - 200.8 - Total		11/07/19	9101684	A19J003	
332	A9J0852-02	Water	As (Arsenic) - 200.8 - Total		11/05/19	9101658	A19J003	
333	"	Water	Cr (Chromium) - 200.8 - Total	"	11/05/19	9101658	A19J003	
334	"	Water	Cu (Copper) - 200.8 - Total	"	11/05/19	9101658	A19J003	
335	"	Water	Fe (Iron) - 200.8 - Total	"	11/05/19	9101658	A19J003	
336	"	Water	Ni (Nickel) - 200.8 - Total	"	11/05/19	9101658	A19J003	
337	"	Water	Pb (Lead) - 200.8 - Total	"	11/05/19	9101658	A19J003	
338	"	Water	Zn (Zinc) - 200.8 - Total	"	11/05/19	9101658	A19J003	
339	A9J0976-01	Water	Ag (Silver) - 6020 - Total	(QC Source)		9101658	A19J003	
340	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9101658	A19J003	
341	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9101658	A19J003	
342	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9101658	A19J003	
343	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9101658	A19J003	
344	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9101658	A19J003	
345	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9101658	A19J003	
346	"	Water	Cu (Copper) - 6020 - Total	"	11/01/19	9101658	A19J003	
347	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9101658	A19J003	
348	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		9101658	A19J003	
349	"	Water	Fe (Iron) - 6020 - Total	"	11/01/19	9101658	A19J003	
350	"	Water	Hg (Mercury) - 6020 - Total	"	11/01/19	9101658	A19J003	
351	"	Water	Mn (Manganese) - 200.8 - Total	(QC Source)		9101658	A19J003	
352	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9101658	A19J003	
353	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9101658	A19J003	
354	"	Water	Pb (Lead) - 6020 - Total	"	11/01/19	9101658	A19J003	
355	"	Water	Pb (Lead) - 200.8 - Total	(QC Source)		9101658	A19J003	
356	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9101658	A19J003	
357	"	Water	Zn (Zinc) - 200.8 - Total	(QC Source)		9101658	A19J003	
358	9101658-MS2	Water	QC	QC		9101658	A19J003	
359	9J29041-CCVB	Water	QC	QC			A19J003	A19J138
360	9J29041-CCBB	Water	QC	QC			A19J003	
361	9J29041-CRLC	Water	QC	QC			A19J003	A19J368
362	9J29041-CRLD	Water	QC	QC			A19J003	A19J369
363	9J29041-CRLE	Water	QC	QC			A19J003	A19J370
364	9J29041-CRLF	Water	QC	QC			A19J003	A19J371

Data Entered By: JPD 10/30/19 Comments:

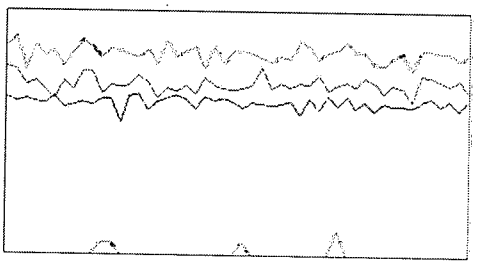
Data Reviewed By: YJ 10/30/19

Standard Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9J29041.b
Acq. Date-Time	10/29/2019 12:57:22
Report Comment	9J29041 General Multi-Mode Tune Report Std ID A19I052
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	1413	14133.23	5000.00	
89	5000	4151	41509.51	10000.00	
205	10000	6310	63102.22	10000.00	
102	20	0			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
7	0.34	0.20 - 1.00	
89	1.00	1.00 - 1.00	
205	1.52	0.50 - 1.50	Fail
102		-	

Guideline only

Mass	RSD%	RSD% (Required)	RSD% (Flag)
7	4.377	5.000	
89	3.750	5.000	
205	3.533	5.000	
102	364.216		

Mass	Background	Background (Required)	Background (Flag)
7	0.000	6.900	
89	0.100	4.600	
205	0.200	11.500	
102	0.500		

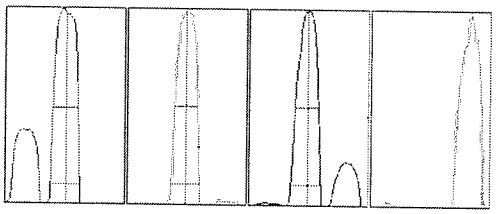
Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.666 %
Doubly Charged	69 / 138 0.913 %

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	1411.48	7.05	6.90 - 7.10	
89	4158.44	89.00	88.90 - 89.10	
205	6265.00	205.00	204.90 - 205.10	
102			-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
7	0.64	0.731	0.900	
89	0.60	0.715	0.900	
205	0.59	0.756	0.900	
102				

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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	13.8 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-40 V
Omega Bias	-80 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	140 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	-0.5 mm	Torch V	1.1 mm		

EM

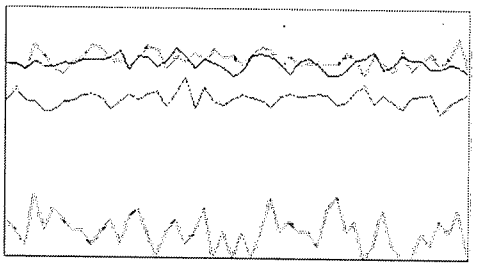
Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 V

[He]

Sensitivity

Sampling Period [sec]	0.412

Standard Tune Check Report ICPMS6



Integration Time [sec] 0.1

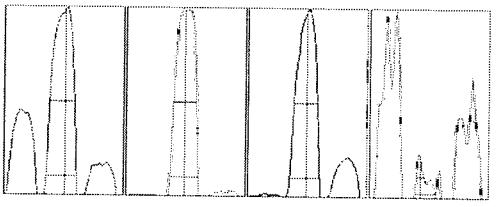
Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
59	1000	645	6449.27	1000.00	
89	1000	802	8016.32	2000.00	
205	5000	3932	39322.46	1000.00	
75	20	2			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
205		-	
75		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	4.479	5.000	
89	4.238	5.000	
205	3.422	5.000	
75	67.515		

Mass	Background	Background (Required)	Background (Flag)
59			
89			
205			
75			

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 29.92
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	646.67	59.05	58.90 - 59.10	
89	802.77	89.00	88.90 - 89.10	
205	3936.42	205.00	204.90 - 205.10	
75	3.25	74.80	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.64	0.757	0.900	
89	0.59	0.711	0.900	

Standard Tune Check Report ICPMS6

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
205	0.60	0.756	0.900	
75	0.22	0.519		

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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	2.0 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-80 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	140 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

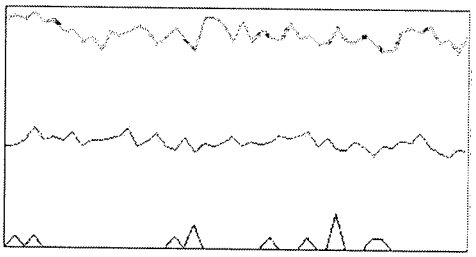
Torch H	-0.5 mm	Torch V	1.1 mm		

EM

Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 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	444	4435.30	1000.00	
89	1000	899	8992.92	2000.00	
78	20	0			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
59		-	
89		-	
78		-	

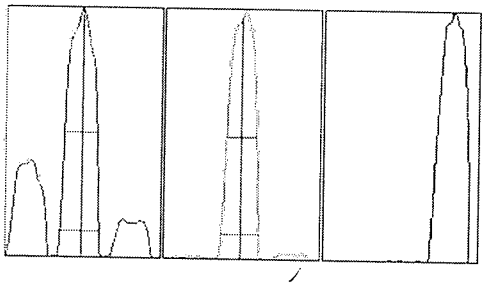
Standard Tune Check Report ICPMS6

Mass	RSD%	RSD% (Required)	RSD% (Flag)
59	6.161	5.000	Fail
89	4.503	5.000	
78	246.288		

See EPA Tune for RSD
AR 10/30/19

Mass	Background	Background (Required)	Background (Flag)
59			
89			
78			

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.14
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
59	475.10	59.00	58.90 - 59.10	
89	885.07	89.00	88.90 - 89.10	
78	0.00	77.90	-	

Mass	W-50%	W-10%	W-10% (Required)	W-10% (Flag)
59	0.64	0.760	0.900	
89	0.60	0.719	0.900	
78	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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	-78.0 V
Extract 2	-110.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-80 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	140 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	-0.5 mm	Torch V	1.1 mm		
EM					
Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 V

EPA Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9J29041.b
Acq. Date-Time	10/29/2019 13:37:28
Report Comment	9J29041 EPA Multi-Mode Tune Report Std ID A19I052
Instrument Name	ICPMS6 JP17412047

[No Gas]

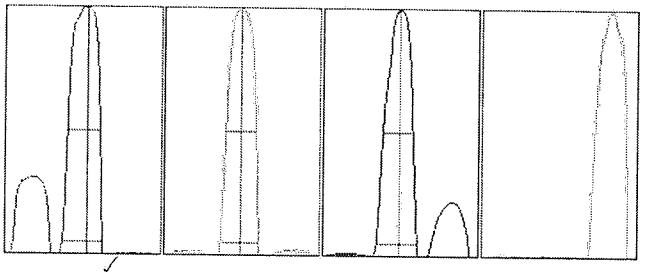
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
7	1.00	917	9172.92	5000.00	0.763		5.000	
89	1.00	2495	24954.12	10000.00	0.708		5.000	
205	1.00	3580	35797.03	10000.00	0.420		5.000	
102		0	0.80		71.261			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	907	914	923	920	923
89	2482	2471	2508	2507	2509
205	3558	3593	3595	3580	3573
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	1476.98	7.10	6.90 - 7.10		0.64	0.775	0.900	
89	4308.45	89.00	88.90 - 89.10		0.60	0.735	0.900	
205	6460.49	205.00	204.90 - 205.10		0.59	0.782	0.900	
102	0.20	101.70	-		0.15	0.195		

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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	13.8 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-40 V
Omega Bias	-80 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	140 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	-0.5 mm	Torch V	1.1 mm		

EM

Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 V

[He]

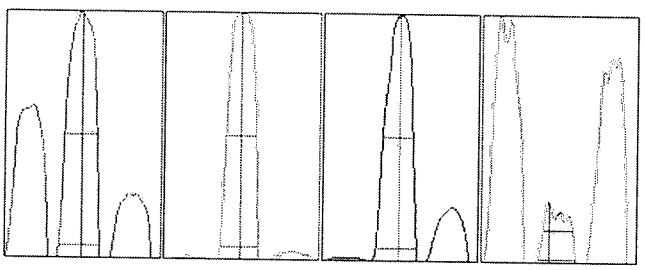
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	404	4037.02	1000.00	0.930		5.000	
89	1.00	482	4816.40	2000.00	2.272		5.000	
205	1.00	2233	22329.35	1000.00	0.669		5.000	
75		1	12.00		17.922			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	403	405	400	410	401
89	473	471	497	478	489
205	2234	2225	2254	2238	2214
75	2	1	1	1	1

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	670.52	59.00	58.90 - 59.10		0.63	0.779	0.900	
89	824.46	89.00	88.90 - 89.10		0.60	0.733	0.900	
205	3969.32	205.00	204.90 - 205.10		0.59	0.783	0.900	
75	2.35	74.85	-		0.59	0.732		

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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	2.0 V
Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-80 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	140 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	-0.5 mm	Torch V	1.1 mm

EM

Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 V

[HEHe]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	286	2860.27	1000.00	0.980		5.000	
89	1.00	539	5391.13	2000.00	0.490		5.000	
78		0	1.30		64.358			

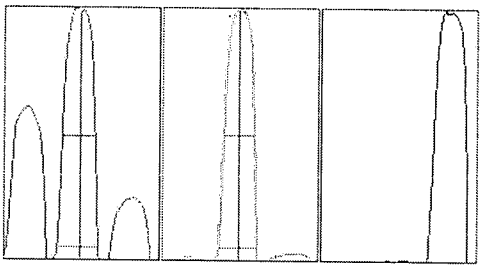
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	291	285	285	283	286
89	540	537	544	538	538

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	456.53	59.00	58.90 - 59.10		0.64	0.786	0.900	
89	925.73	89.00	88.90 - 89.10		0.60	0.737	0.900	
78	0.60	78.15	-		0.06	0.194		

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	0.09 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	5.1 V	Deflect	-78.0 V
Extract 2	-110.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-80 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	140 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	-0.5 mm	Torch V	1.1 mm		

EM

Discriminator	5.0 mV	Analog HV	2263 V	Pulse HV	1868 V

Sample Report ICPMS6

Sample Name	rinse	**Sample Type**	Rinse
File Name	001RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 15:59:01	**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	514455	2.0	0		70	120	
Sc	45	He	106776	0.8	0		70	120	
Ge	74	No Gas	511119	1.7	0		70	120	
Ge	74	He	102650	1.7	0		70	120	
Ge	74	HEHe	84798	3.0	0		70	120	
Rh	103	No Gas	594873	1.8	0		70	120	
Rh	103	He	362304	0.2	0		70	120	
Tb	159	No Gas	1845672	1.3	0		70	120	
Tb	159	He	950446	0.5	0		70	120	
Bi	209	No Gas	1420877	3.1	0		70	120	

Sample Report ICPMS6

Sample Name	**rinse**	**Sample Type**	Rinse
File Name	002RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:03:44	**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	508050	0.9	0		70	120	
Sc	45	He	104686	1.4	0		70	120	
Ge	74	No Gas	513201	0.7	0		70	120	
Ge	74	He	102023	1.7	0		70	120	
Ge	74	HEHe	86323	1.3	0		70	120	
Rh	103	No Gas	602537	0.7	0		70	120	
Rh	103	He	351892	1.5	0		70	120	
Tb	159	No Gas	1890224	3.2	0		70	120	
Tb	159	He	933227	1.3	0		70	120	
Bi	209	No Gas	1370854	2.9	0		70	120	

Sample Report ICPMS6

Sample Name	rinse	**Sample Type**	Rinse
File Name	003RINS.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:08:28	**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	516070	0.4	0		70	120	
Sc	45	He	101640	5.6	0		70	120	
Ge	74	No Gas	514564	0.2	0		70	120	
Ge	74	He	98060	6.4	0		70	120	
Ge	74	HEHe	84389	2.9	0		70	120	
Rh	103	No Gas	599637	0.7	0		70	120	
Rh	103	He	343927	6.5	0		70	120	
Tb	159	No Gas	1875206	0.5	0		70	120	
Tb	159	He	905998	7.2	0		70	120	
Bi	209	No Gas	1426493	0.4	0		70	120	

Calibration Blank Report ICPMS6

Sample Name	**9J29041-CAL0**	**Sample Type**	CalBlk
File Name	004CALB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:13:10	**Sample QC Pass/Fail**	Fail
Comment	Cal Blank	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Be	9	6	No Gas	40	22.0
Na	23	45	He	4027	3.2
Mg	24	45	He	1916	2.4
Al	27	45	He	167	30.0
K	39	45	He	13682	0.6
Ca	44	45	He	85	23.5
Ti	47	45	He	6	34.7
V	51	74	He	410	5.9
Cr	52	74	He	202	18.5
Mn	55	74	He	236	8.5
Fe	56	74	He	11100	2.0
Co	59	74	He	77	11.5
Ni	60	74	He	853	8.5
Cu	65	74	He	200	13.3
Cu	65	74	No Gas	536	8.5
Zn	66	74	He	131	12.8
As	75	74	He	14	30.7
Se	78	74	HEHe	1	25.1
Mo	95	103	He	34	27.9
[Cd]	106	103	No Gas	8	65.5
[Cd]	108	103	No Gas	9	78.1
Ag	109	103	No Gas	17	40.0
Cd	111	103	He	11	62.5
Cd	111	103	No Gas	24	43.5
Sb	123	103	No Gas	196	8.1
Ba	138	159	He	383	17.1
W	186	159	No Gas	130	27.7
Hg	201	159	No Gas	16	14.1
Tl	205	159	No Gas	268	5.0
Pb	208	159	No Gas	4208	2.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	508670	1.9
Ge	74	No Gas	503858	2.1
Rh	103	No Gas	594084	2.2
Tb	159	No Gas	1836863	0.9
Bi	209	No Gas	1406666	1.6
Sc	45	He	105523	1.4
Ge	74	He	101536	0.7
Rh	103	He	351523	0.2
Tb	159	He	934681	0.3
Ge	74	HEHe	86470	3.0

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL1**	**Sample Type**	CalStd
File Name	005CALS.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:18:08	**Sample QC Pass/Fail**	Fail
Comment	A19J368 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.18	ug/l	468	3.7	3	0.3000	
Na	23	45	He		ug/l	8862	3.8	3	0.2001	
Mg	24	45	He		ug/l	5198	1.1	3	0.2001	
Al	27	45	He		ug/l	1626	0.8	3	0.2001	
K	39	45	He		ug/l	15716	2.1	3	0.2001	
Ca	44	45	He		ug/l	188	9.3	3	0.2001	
Ti	47	45	He		ug/l	17	52.9	3	0.3000	RSD Warning
V	51	74	He	0.18	ug/l	892	9.4	3	0.3000	
Cr	52	74	He	0.18	ug/l	807	11.0	3	0.3000	
Mn	55	74	He	0.18	ug/l	564	8.1	3	0.3000	
Fe	56	74	He	9	ug/l	37442	2.3	3	0.3000	
Co	59	74	He	0.18	ug/l	948	7.5	3	0.3000	
Ni	60	74	He	0.18	ug/l	1058	5.1	3	0.3000	
Cu	65	74	He	0.18	ug/l	536	10.7	3	0.3000	
Cu	65	74	No Gas	0.18	ug/l	1071	5.4	3	0.3000	
Zn	66	74	He		ug/l	209	12.4	3	0.3000	
As	75	74	He	0.18	ug/l	93	2.9	3	2.0001	
Se	78	74	HEHe	0.18	ug/l	14	7.3	3	3.0000	
Mo	95	103	He	0.18	ug/l	419	16.1	3	0.3000	RSD Warning
[Cd]	106	103	No Gas	0.18	ug/l	54	12.7	3	0.3000	
[Cd]	108	103	No Gas	0.18	ug/l	53	10.8	3	0.3000	
Ag	109	103	No Gas	0.18	ug/l	2527	1.2	3	0.3000	
Cd	111	103	He	0.18	ug/l	279	6.9	3	0.3000	
Cd	111	103	No Gas	0.18	ug/l	658	9.5	3	0.3000	
Sb	123	103	No Gas	0.18	ug/l	2071	1.4	3	0.3000	
Ba	138	159	He	0.18	ug/l	2020	4.7	3	0.3000	
W	186	159	No Gas		ug/l	113	35.7	3	0.0999	RSD Warning
Hg	201	159	No Gas		ng/l	38	8.6	3	2.0001	
Tl	205	159	No Gas	0.18	ug/l	10100	1.0	3	0.3000	
Pb	208	159	No Gas	0.18	ug/l	15953	1.7	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	513382	0.1	3	508670.23	100.93	70	120	
Sc	45	He	104271	2.4	3	105522.87	98.81	70	120	
Ge	74	No Gas	509531	0.8	3	503857.82	101.13	70	120	
Ge	74	He	100434	2.2	3	101536.29	98.91	70	120	
Ge	74	HEHe	84964	6.1	3	86469.84	98.26	70	120	
Rh	103	No Gas	598370	0.2	3	594084.11	100.72	70	120	
Rh	103	He	351255	1.3	3	351523.24	99.92	70	120	
Tb	159	No Gas	1851150	1.5	3	1836863.17	100.78	70	120	
Tb	159	He	933176	2.8	3	934681.29	99.84	70	120	
Bi	209	No Gas	1416289	0.5	3	1406665.51	100.68	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL2**	**Sample Type**	CalStd
File Name	006CALS.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:23:05	**Sample QC Pass/Fail**	Fail
Comment	A19J369 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.9	ug/l	2179	2.3	3	0.3000	
Na	23	45	He	45	ug/l	33425	2.4	3	0.2001	
Mg	24	45	He	45	ug/l	18939	2.0	3	0.2001	
Al	27	45	He	45	ug/l	8304	2.6	3	0.2001	
K	39	45	He	45	ug/l	26188	0.7	3	0.2001	
Ca	44	45	He	45	ug/l	776	6.3	3	0.2001	
Ti	47	45	He		ug/l	80	28.9	3	0.3000	RSD Warning
V	51	74	He	0.898	ug/l	2770	2.7	3	0.3000	
Cr	52	74	He	0.899	ug/l	3207	4.9	3	0.3000	
Mn	55	74	He	0.907	ug/l	2392	3.1	3	0.3000	
Fe	56	74	He	45.069	ug/l	152242	0.9	3	0.3000	
Co	59	74	He	0.901	ug/l	4618	3.3	3	0.3000	
Ni	60	74	He	0.904	ug/l	2110	3.9	3	0.3000	
Cu	65	74	He	0.897	ug/l	1805	0.8	3	0.3000	
Cu	65	74	No Gas	0.904	ug/l	3556	3.2	3	0.3000	
Zn	66	74	He	0.9	ug/l	716	5.6	3	0.3000	
As	75	74	He	0.898	ug/l	394	5.0	3	2.0001	
Se	78	74	HEHe	0.895	ug/l	56	8.9	3	3.0000	
Mo	95	103	He	0.901	ug/l	2040	4.7	3	0.3000	
[Cd]	106	103	No Gas	0.908	ug/l	310	9.9	3	0.3000	
[Cd]	108	103	No Gas	0.902	ug/l	244	12.2	3	0.3000	
Ag	109	103	No Gas	0.898	ug/l	12046	1.2	3	0.3000	
Cd	111	103	He	0.901	ug/l	1406	6.8	3	0.3000	
Cd	111	103	No Gas	0.901	ug/l	3329	3.2	3	0.3000	
Sb	123	103	No Gas	0.901	ug/l	9897	2.1	3	0.3000	
Ba	138	159	He	0.903	ug/l	9441	0.8	3	0.3000	
W	186	159	No Gas		ug/l	63	36.5	3	0.0999	RSD Warning
Hg	201	159	No Gas	36	ng/l	134	8.4	3	2.0001	
Tl	205	159	No Gas	0.9	ug/l	49177	1.7	3	0.3000	
Pb	208	159	No Gas	0.905	ug/l	72133	0.2	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	519584	0.3	3	508670.23	102.15	70	120	
Sc	45	He	107072	1.3	3	105522.87	101.47	70	120	
Ge	74	No Gas	511587	0.7	3	503857.82	101.53	70	120	
Ge	74	He	102694	1.1	3	101536.29	101.14	70	120	
Ge	74	HEHe	85976	2.3	3	86469.84	99.43	70	120	
Rh	103	No Gas	600351	0.3	3	594084.11	101.05	70	120	
Rh	103	He	356256	0.5	3	351523.24	101.35	70	120	
Tb	159	No Gas	1866696	0.7	3	1836863.17	101.62	70	120	
Tb	159	He	941934	1.3	3	934681.29	100.78	70	120	
Bi	209	No Gas	1439639	0.5	3	1406665.51	102.34	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL3**	**Sample Type**	CalStd
File Name	007CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:28:02	**Sample QC Pass/Fail**	Fail
Comment	A19J370 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.801	ug/l	4365	3.3	3	0.3000	
Na	23	45	He	89.941	ug/l	62590	1.0	3	0.2001	
Mg	24	45	He	90.142	ug/l	36217	2.6	3	0.2001	
Al	27	45	He	89.067	ug/l	15638	1.3	3	0.2001	
K	39	45	He	90.608	ug/l	39362	2.4	3	0.2001	
Ca	44	45	He	89.595	ug/l	1436	6.7	3	0.2001	
Ti	47	45	He	1.8	ug/l	156	12.9	3	0.3000	
V	51	74	He	1.798	ug/l	5147	3.9	3	0.3000	
Cr	52	74	He	1.785	ug/l	6025	0.9	3	0.3000	
Mn	55	74	He	1.774	ug/l	4255	0.6	3	0.3000	
Fe	56	74	He	89.881	ug/l	292951	1.5	3	0.3000	
Co	59	74	He	1.8	ug/l	9215	1.3	3	0.3000	
Ni	60	74	He	1.772	ug/l	3187	4.5	3	0.3000	
Cu	65	74	He	1.8	ug/l	3444	5.3	3	0.3000	
Cu	65	74	No Gas	1.801	ug/l	6648	4.5	3	0.3000	
Zn	66	74	He	1.821	ug/l	1379	5.0	3	0.3000	
As	75	74	He	1.798	ug/l	777	2.5	3	2.0001	
Se	78	74	HEHe	1.791	ug/l	112	4.8	3	3.0000	
Mo	95	103	He	1.811	ug/l	4153	0.6	3	0.3000	
[Cd]	106	103	No Gas	1.755	ug/l	544	3.7	3	0.3000	
[Cd]	108	103	No Gas	1.76	ug/l	436	3.8	3	0.3000	
Ag	109	103	No Gas	1.803	ug/l	24493	1.0	3	0.3000	
Cd	111	103	He	1.764	ug/l	2541	3.7	3	0.3000	
Cd	111	103	No Gas	1.804	ug/l	6742	2.1	3	0.3000	
Sb	123	103	No Gas	1.807	ug/l	20076	0.8	3	0.3000	
Ba	138	159	He	1.803	ug/l	18629	1.7	3	0.3000	
W	186	159	No Gas		ug/l	100	26.5	3	0.0999	RSD Warning
Hg	201	159	No Gas	71.853	ng/l	254	1.8	3	2.0001	
Tl	205	159	No Gas	1.801	ug/l	99780	0.6	3	0.3000	
Pb	208	159	No Gas	1.799	ug/l	140935	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	523906	0.3	3	508670.23	103	70	120	
Sc	45	He	107127	1.4	3	105522.87	101.52	70	120	
Ge	74	No Gas	519038	0.3	3	503857.82	103.01	70	120	
Ge	74	He	103375	0.9	3	101536.29	101.81	70	120	
Ge	74	HEHe	87630	2.8	3	86469.84	101.34	70	120	
Rh	103	No Gas	604419	0.9	3	594084.11	101.74	70	120	
Rh	103	He	355266	1.3	3	351523.24	101.06	70	120	
Tb	159	No Gas	1895634	2.3	3	1836863.17	103.2	70	120	
Tb	159	He	945059	0.5	3	934681.29	101.11	70	120	
Bi	209	No Gas	1425890	1.0	3	1406665.51	101.37	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL4**	**Sample Type**	CalStd
File Name	008CALS.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:32:58	**Sample QC Pass/Fail**	Fail
Comment	A19J371 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	3.631	ug/l	9091	1.8	3	0.3000	
Na	23	45	He	181.779	ug/l	129815	0.7	3	0.2001	
Mg	24	45	He	180.381	ug/l	73031	0.5	3	0.2001	
Al	27	45	He	180.178	ug/l	32468	2.1	3	0.2001	
K	39	45	He	180.848	ug/l	67404	1.0	3	0.2001	
Ca	44	45	He	180.389	ug/l	2904	4.6	3	0.2001	
Ti	47	45	He	3.643	ug/l	333	10.1	3	0.3000	
V	51	74	He	3.596	ug/l	10056	1.6	3	0.3000	
Cr	52	74	He	3.618	ug/l	12447	2.1	3	0.3000	
Mn	55	74	He	3.645	ug/l	9022	2.2	3	0.3000	
Fe	56	74	He	180.73	ug/l	597498	0.6	3	0.3000	
Co	59	74	He	3.594	ug/l	18607	1.5	3	0.3000	
Ni	60	74	He	3.571	ug/l	5541	0.3	3	0.3000	
Cu	65	74	He	3.607	ug/l	6880	1.1	3	0.3000	
Cu	65	74	No Gas	3.625	ug/l	13175	0.3	3	0.3000	
Zn	66	74	He	3.608	ug/l	2676	1.3	3	0.3000	
As	75	74	He	3.608	ug/l	1591	1.7	3	2.0001	
Se	78	74	HEHe	3.624	ug/l	227	6.8	3	3.0000	
Mo	95	103	He	3.616	ug/l	8641	3.8	3	0.3000	
[Cd]	106	103	No Gas	3.646	ug/l	1182	0.9	3	0.3000	
[Cd]	108	103	No Gas	3.66	ug/l	956	3.6	3	0.3000	
Ag	109	103	No Gas	3.61	ug/l	49949	1.2	3	0.3000	
Cd	111	103	He	3.621	ug/l	5469	0.3	3	0.3000	
Cd	111	103	No Gas	3.596	ug/l	13509	3.0	3	0.3000	
Sb	123	103	No Gas	3.603	ug/l	40342	0.5	3	0.3000	
Ba	138	159	He	3.615	ug/l	38450	1.1	3	0.3000	
W	186	159	No Gas		ug/l	83	55.4	3	0.0999	RSD Warning
Hg	201	159	No Gas	144.274	ng/l	498	5.2	3	2.0001	
Tl	205	159	No Gas	3.608	ug/l	201835	0.4	3	0.3000	
Pb	208	159	No Gas	3.617	ug/l	284285	0.8	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	528899	1.2	3	508670.23	103.98	70	120	
Sc	45	He	110201	1.6	3	105522.87	104.43	70	120	
Ge	74	No Gas	522143	1.1	3	503857.82	103.63	70	120	
Ge	74	He	105620	2.3	3	101536.29	104.02	70	120	
Ge	74	HEHe	86734	1.9	3	86469.84	100.31	70	120	
Rh	103	No Gas	610865	0.7	3	594084.11	102.82	70	120	
Rh	103	He	366550	1.1	3	351523.24	104.27	70	120	
Tb	159	No Gas	1902616	1.7	3	1836863.17	103.58	70	120	
Tb	159	He	970562	0.8	3	934681.29	103.84	70	120	
Bi	209	No Gas	1450139	0.4	3	1406665.51	103.09	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL5**	**Sample Type**	CalStd
File Name	009CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:37:54	**Sample QC Pass/Fail**	Fail
Comment	A19J035 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	10.036	ug/l	25603	1.7	3	0.3000	
Na	23	45	He	402.051	ug/l	287302	0.2	3	0.2001	
Mg	24	45	He	400.85	ug/l	161013	0.5	3	0.2001	
Al	27	45	He	402.013	ug/l	73560	0.2	3	0.2001	
K	39	45	He	402.095	ug/l	134685	0.5	3	0.2001	
Ca	44	45	He	408.026	ug/l	6977	2.7	3	0.2001	
Ti	47	45	He	20.027	ug/l	1867	3.6	3	0.3000	
V	51	74	He	20.01	ug/l	54756	0.8	3	0.3000	
Cr	52	74	He	20.005	ug/l	68493	0.6	3	0.3000	
Mn	55	74	He	20.005	ug/l	48821	0.9	3	0.3000	
Fe	56	74	He	403.007	ug/l	1359833	1.5	3	0.3000	
Co	59	74	He	20.011	ug/l	104856	0.5	3	0.3000	
Ni	60	74	He	20.031	ug/l	28040	0.5	3	0.3000	
Cu	65	74	He	20.017	ug/l	38090	1.8	3	0.3000	
Cu	65	74	No Gas	20.021	ug/l	73939	2.3	3	0.3000	
Zn	66	74	He	20.029	ug/l	14768	0.5	3	0.3000	
As	75	74	He	20.004	ug/l	8812	0.4	3	2.0001	
Se	78	74	HEHe	9.99	ug/l	643	2.9	3	3.0000	
Mo	95	103	He	10.057	ug/l	24901	1.3	3	0.3000	
[Cd]	106	103	No Gas	20.023	ug/l	6708	5.2	3	0.3000	
[Cd]	108	103	No Gas	19.979	ug/l	5109	2.9	3	0.3000	
Ag	109	103	No Gas	10.043	ug/l	144186	1.7	3	0.3000	
Cd	111	103	He	20.039	ug/l	31808	1.7	3	0.3000	
Cd	111	103	No Gas	20.017	ug/l	77490	1.4	3	0.3000	
Sb	123	103	No Gas	10.028	ug/l	115097	0.5	3	0.3000	
Ba	138	159	He	20.013	ug/l	214554	1.2	3	0.3000	
W	186	159	No Gas		ug/l	190	18.2	3	0.0999	RSD Warning
Hg	201	159	No Gas	401.169	ng/l	1407	2.2	3	2.0001	
Tl	205	159	No Gas	10.033	ug/l	584348	0.4	3	0.3000	
Pb	208	159	No Gas	20.019	ug/l	1623056	1.0	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	529122	0.5	3	508670.23	104.02	70	120	
Sc	45	He	110129	1.3	3	105522.87	104.37	70	120	
Ge	74	No Gas	535785	0.6	3	503857.82	106.34	70	120	
Ge	74	He	105864	0.5	3	101536.29	104.26	70	120	
Ge	74	HEHe	90039	1.9	3	86469.84	104.13	70	120	
Rh	103	No Gas	618010	1.9	3	594084.11	104.03	70	120	
Rh	103	He	368148	0.8	3	351523.24	104.73	70	120	
Tb	159	No Gas	1943899	0.3	3	1836863.17	105.83	70	120	
Tb	159	He	971252	0.4	3	934681.29	103.91	70	120	
Bi	209	No Gas	1437288	2.1	3	1406665.51	102.18	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL6**	**Sample Type**	CalStd
File Name	010CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:42:49	**Sample QC Pass/Fail**	Pass
Comment	A19J372	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	49.954	ug/l	126797	1.0	3	0.3000	
Na	23	45	He	2500.463	ug/l	1777955	0.5	3	0.2001	
Mg	24	45	He	2499.225	ug/l	985630	0.1	3	0.2001	
Al	27	45	He	2499.882	ug/l	456572	0.4	3	0.2001	
K	39	45	He	2500.566	ug/l	769550	0.4	3	0.2001	
Ca	44	45	He	2497.487	ug/l	41042	1.0	3	0.2001	
Ti	47	45	He	49.909	ug/l	4602	0.4	3	0.3000	
V	51	74	He	50.002	ug/l	135930	0.8	3	0.3000	
Cr	52	74	He	50.058	ug/l	171904	0.8	3	0.3000	
Mn	55	74	He	49.971	ug/l	120897	0.8	3	0.3000	
Fe	56	74	He	2498.658	ug/l	8216641	1.4	3	0.3000	
Co	59	74	He	50.013	ug/l	261803	0.9	3	0.3000	
Ni	60	74	He	49.93	ug/l	67850	0.5	3	0.3000	
Cu	65	74	He	50.036	ug/l	95108	0.7	3	0.3000	
Cu	65	74	No Gas	49.959	ug/l	183084	1.0	3	0.3000	
Zn	66	74	He	49.862	ug/l	35891	2.1	3	0.3000	
As	75	74	He	50.061	ug/l	22147	0.7	3	2.0001	
Se	78	74	HEHe	49.958	ug/l	3096	0.8	3	3.0000	
Mo	95	103	He	49.98	ug/l	121403	0.6	3	0.3000	
[Cd]	106	103	No Gas	49.814	ug/l	16559	1.0	3	0.3000	
[Cd]	108	103	No Gas	49.84	ug/l	12682	1.9	3	0.3000	
Ag	109	103	No Gas	49.903	ug/l	697919	0.1	3	0.3000	
Cd	111	103	He	49.873	ug/l	77219	0.3	3	0.3000	
Cd	111	103	No Gas	49.696	ug/l	188319	0.4	3	0.3000	
Sb	123	103	No Gas	49.923	ug/l	562262	0.6	3	0.3000	
Ba	138	159	He	49.969	ug/l	530360	1.7	3	0.3000	
W	186	159	No Gas		ug/l	377	12.0	3	0.0999	
Hg	201	159	No Gas	1999.772	ng/l	6867	0.7	3	2.0001	
Tl	205	159	No Gas	50.001	ug/l	2887469	1.5	3	0.3000	
Pb	208	159	No Gas	49.995	ug/l	4009013	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	537455	0.4	3	508670.23	105.66	70	120	
Sc	45	He	110302	1.0	3	105522.87	104.53	70	120	
Ge	74	No Gas	536729	0.8	3	503857.82	106.52	70	120	
Ge	74	He	105635	0.1	3	101536.29	104.04	70	120	
Ge	74	HEHe	88361	0.7	3	86469.84	102.19	70	120	
Rh	103	No Gas	627128	1.0	3	594084.11	105.56	70	120	
Rh	103	He	364666	0.6	3	351523.24	103.74	70	120	
Tb	159	No Gas	1927000	0.2	3	1836863.17	104.91	70	120	
Tb	159	He	966283	1.2	3	934681.29	103.38	70	120	
Bi	209	No Gas	1449840	1.4	3	1406665.51	103.07	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL7**	**Sample Type**	CalStd
File Name	011CALS.d	**Vial #**	2107
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:47:44	**Sample QC Pass/Fail**	Fail
Comment	A19J036	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	100.346	ug/l	254071	0.4	3	0.3000	
Na	23	45	He	4022.05	ug/l	2816235	2.7	3	0.2001	
Mg	24	45	He	4044.152	ug/l	1592839	0.9	3	0.2001	
Al	27	45	He	4019.879	ug/l	722513	0.4	3	0.2001	
K	39	45	He	4019.056	ug/l	1207914	2.9	3	0.2001	
Ca	44	45	He	4021.608	ug/l	65061	0.6	3	0.2001	
Ti	47	45	He	200.318	ug/l	18339	1.1	3	0.3000	
V	51	74	He	200.003	ug/l	532167	0.5	3	0.3000	
Cr	52	74	He	199.905	ug/l	668373	0.7	3	0.3000	
Mn	55	74	He	199.909	ug/l	470757	0.7	3	0.3000	
Fe	56	74	He	4002.604	ug/l	12924724	0.4	3	0.3000	
Co	59	74	He	199.96	ug/l	1023680	0.5	3	0.3000	
Ni	60	74	He	200.059	ug/l	265125	0.6	3	0.3000	
Cu	65	74	He	199.813	ug/l	367240	0.5	3	0.3000	
Cu	65	74	No Gas	199.74	ug/l	714379	0.7	3	0.3000	
Zn	66	74	He	200.212	ug/l	143036	1.0	3	0.3000	
As	75	74	He	199.954	ug/l	86451	0.3	3	2.0001	
Se	78	74	HEHe	101.269	ug/l	6262	0.7	3	3.0000	
Mo	95	103	He	100.441	ug/l	245642	1.1	3	0.3000	
[Cd]	106	103	No Gas	200.318	ug/l	66373	1.2	3	0.3000	
[Cd]	108	103	No Gas	199.947	ug/l	49417	0.4	3	0.3000	
Ag	109	103	No Gas	100.666	ug/l	1409099	1.8	3	0.3000	
Cd	111	103	He	200.009	ug/l	306743	0.7	3	0.3000	
Cd	111	103	No Gas	200.306	ug/l	756193	0.9	3	0.3000	
Sb	123	103	No Gas	100.519	ug/l	1126356	0.4	3	0.3000	
Ba	138	159	He	200.473	ug/l	2184670	0.8	3	0.3000	
W	186	159	No Gas		ug/l	701	19.2	3	0.0999	RSD Warning
Hg	201	159	No Gas	3995.593	ng/l	13684	1.0	3	2.0001	
Tl	205	159	No Gas	100.093	ug/l	5817323	1.6	3	0.3000	
Pb	208	159	No Gas	199.972	ug/l	16036004	1.2	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	529129	1.1	3	508670.23	104.02	70	120	
Sc	45	He	107222	0.7	3	105522.87	101.61	70	120	
Ge	74	No Gas	534420	1.1	3	503857.82	106.07	70	120	
Ge	74	He	103618	0.5	3	101536.29	102.05	70	120	
Ge	74	HEHe	84082	5.5	3	86469.84	97.24	70	120	
Rh	103	No Gas	611666	0.2	3	594084.11	102.96	70	120	
Rh	103	He	361035	0.5	3	351523.24	102.71	70	120	
Tb	159	No Gas	1932693	1.6	3	1836863.17	105.22	70	120	
Tb	159	He	960351	0.5	3	934681.29	102.75	70	120	
Bi	209	No Gas	1443020	1.1	3	1406665.51	102.58	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL8**	**Sample Type**	CalStd
File Name	012CALS.d	**Vial #**	2108
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:52:31	**Sample QC Pass/Fail**	Fail
Comment	A19J188	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.035	ug/l	126	16.0	3	0.3000	RSD Warning
Na	23	45	He	9988.186	ug/l	6674268	0.7	3	0.2001	
Mg	24	45	He	9948.245	ug/l	3674980	0.3	3	0.2001	
Al	27	45	He	9993.108	ug/l	1719213	0.7	3	0.2001	
K	39	45	He	9969.814	ug/l	2820263	0.7	3	0.2001	
Ca	44	45	He	10020.436	ug/l	156976	1.1	3	0.2001	
Ti	47	45	He	500.567	ug/l	44295	1.6	3	0.3000	
V	51	74	He	502.887	ug/l	1321398	2.2	3	0.3000	
Cr	52	74	He	501.846	ug/l	1637013	0.8	3	0.3000	
Mn	55	74	He	500.401	ug/l	1130069	1.1	3	0.3000	
Fe	56	74	He	10026.489	ug/l	31265494	0.6	3	0.3000	
Co	59	74	He	501.301	ug/l	2488022	0.2	3	0.3000	
Ni	60	74	He	499.559	ug/l	627671	0.8	3	0.3000	
Cu	65	74	He	498.772	ug/l	862673	0.7	3	0.3000	
Cu	65	74	No Gas	501.141	ug/l	1712624	0.4	3	0.3000	
Zn	66	74	He	499.55	ug/l	338810	0.5	3	0.3000	
As	75	74	He	500.445	ug/l	207654	0.9	3	2.0001	
Se	78	74	HEHe	0.051	ug/l	4	33.8	3	3.0000	RSD Warning
Mo	95	103	He	0.081	ug/l	220	22.6	3	0.3000	RSD Warning
[Cd]	106	103	No Gas	500.496	ug/l	159432	0.4	3	0.3000	
[Cd]	108	103	No Gas	500.43	ug/l	118809	0.6	3	0.3000	
Ag	109	103	No Gas	0.02	ug/l	290	5.3	3	0.3000	
Cd	111	103	He	500.948	ug/l	735570	0.3	3	0.3000	
Cd	111	103	No Gas	502.634	ug/l	1871665	1.1	3	0.3000	
Sb	123	103	No Gas	0.061	ug/l	844	1.8	3	0.3000	
Ba	138	159	He	498.815	ug/l	5177838	0.7	3	0.3000	
W	186	159	No Gas	100	ug/l	2309553	1.3	3	0.0999	
Hg	201	159	No Gas	119.617	ng/l	421	2.7	3	2.0001	
Tl	205	159	No Gas	0.095	ug/l	5709	6.0	3	0.3000	
Pb	208	159	No Gas	498.935	ug/l	38984806	1.0	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	513665	4.6	3	508670.23	100.98	70	120	
Sc	45	He	102968	1.3	3	105522.87	97.58	70	120	
Ge	74	No Gas	504508	3.5	3	503857.82	100.13	70	120	
Ge	74	He	98936	0.4	3	101536.29	97.44	70	120	
Ge	74	HEHe	83488	0.7	3	86469.84	96.55	70	120	
Rh	103	No Gas	585289	4.1	3	594084.11	98.52	70	120	
Rh	103	He	341853	0.7	3	351523.24	97.25	70	120	
Tb	159	No Gas	1909950	5.7	3	1836863.17	103.98	70	120	
Tb	159	He	927518	1.0	3	934681.29	99.23	70	120	
Bi	209	No Gas	1407593	5.0	3	1406665.51	100.07	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J29041-CAL9**	**Sample Type**	CalStd
File Name	013CALS.d	**Vial #**	2109
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 16:57:12	**Sample QC Pass/Fail**	Fail
Comment	A19J189	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.019	ug/l	80	4.2	3	0.3000	
Na	23	45	He	49988.236	ug/l	31514864	1.2	3	0.2001	
Mg	24	45	He	49984.785	ug/l	17395325	1.2	3	0.2001	
Al	27	45	He	49961.107	ug/l	8023719	0.3	3	0.2001	
K	39	45	He	50020.579	ug/l	13486494	1.3	3	0.2001	
Ca	44	45	He	50047.832	ug/l	758011	1.1	3	0.2001	
Ti	47	45	He	2500.107	ug/l	210023	1.0	3	0.3000	
V	51	74	He	0.094	ug/l	590	15.9	3	0.3000	RSD Warning
Cr	52	74	He	1000.038	ug/l	2989212	1.8	3	0.3000	
Mn	55	74	He	2502.915	ug/l	5309358	0.8	3	0.3000	
Fe	56	74	He	50054.593	ug/l	146225663	1.4	3	0.3000	
Co	59	74	He	0.214	ug/l	1041	4.7	3	0.3000	
Ni	60	74	He	998.475	ug/l	1142263	0.7	3	0.3000	
Cu	65	74	He	1003.835	ug/l	1611135	0.7	3	0.3000	
Cu	65	74	No Gas	993.784	ug/l	3077681	0.9	3	0.3000	
Zn	66	74	He	2500.945	ug/l	1565916	1.4	3	0.3000	
As	75	74	He	0.134	ug/l	63	14.3	3	2.0001	
Se	78	74	HEHe	0.092	ug/l	7	37.4	3	3.0000	RSD Warning
Mo	95	103	He	0.416	ug/l	902	2.1	3	0.3000	
[Cd]	106	103	No Gas	1000.566	ug/l	290461	0.3	3	0.3000	
[Cd]	108	103	No Gas	1000.82	ug/l	216712	0.9	3	0.3000	
Ag	109	103	No Gas	0.029	ug/l	363	17.9	3	0.3000	RSD Warning
Cd	111	103	He	1006.35	ug/l	1367018	0.6	3	0.3000	
Cd	111	103	No Gas	996.192	ug/l	3330230	0.8	3	0.3000	
Sb	123	103	No Gas	0.046	ug/l	624	8.4	3	0.3000	
Ba	138	159	He	2495.908	ug/l	23842242	0.7	3	0.3000	
W	186	159	No Gas	0.375	ug/l	8295	5.6	3	0.0999	
Hg	201	159	No Gas	33.573	ng/l	123	3.9	3	2.0001	
Tl	205	159	No Gas	0.028	ug/l	1772	7.0	3	0.3000	
Pb	208	159	No Gas	0.129	ug/l	13649	2.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	474896	0.3	3	508670.23	93.36	70	120	
Sc	45	He	97746	3.8	3	105522.87	92.63	70	120	
Ge	74	No Gas	466583	1.1	3	503857.82	92.6	70	120	
Ge	74	He	90670	2.9	3	101536.29	89.3	70	120	
Ge	74	HEHe	79250	0.5	3	86469.84	91.65	70	120	
Rh	103	No Gas	531871	1.2	3	594084.11	89.53	70	120	
Rh	103	He	309617	3.4	3	351523.24	88.08	70	120	
Tb	159	No Gas	1799886	0.7	3	1836863.17	97.99	70	120	
Tb	159	He	884020	3.1	3	934681.29	94.58	70	120	
Bi	209	No Gas	1320175	0.3	3	1406665.51	93.85	70	120	

P/A Factor Tuning Report

========== Current Sample ==========
Sample Name: 9J29041-ICV1
Data File: 014_ICV.d
Acquired: 10/29/2019 17:08:27

========= Detector Parameters and P/A Factors =========
Discriminator: 5 mV
AnalogHV: 2263 V
PulseHV: 1868 V

Acquired: 10/29/2019 15:15:02

Mass[u]	Element	P/A Factor
23	Na	0.105930
24	Mg	0.110531
27	Al	0.115422
39	K	0.119670
44	Ca	0.122477
47	Ti	0.119707
51	V	0.124683
52	Cr	0.127489
55	Mn	0.131269
56	Fe	0.133584
59	Co	0.138145
60	Ni	0.135979
65	Cu	0.138890
66	Zn	0.143928
95	Mo	0.134058
109	Ag	0.147671
111	Cd	0.152400
123	Sb	0.148024
137	Ba	0.149782
138	Ba	0.147966
186	W	0.149972
205	Tl	0.161325
206	[Pb]	0.162909
207	[Pb]	0.162690
208	Pb	0.162107
6	Li	Signal too low
7	[Li]	Signal too low
9	Be	Signal too low
45	Sc	Signal too low
74	Ge	Signal too low
75	As	Signal too low
78	Se	Signal too low
103	Rh	Signal too low
106	[Cd]	Signal too low
108	[Cd]	Signal too low

159	Tb	Signal too low
201	Hg	Signal too low
209	Bi	Signal too low

=== Independent Detector Parameters and P/A Factors ===

Tune Mode Name: No Gas
Discriminator: 5 mV
AnalogHV: 2263 V
PulseHV: 1868 V

Acquired: 10/29/2019 16:52:33

Mass[u]	Element	P/A Factor
6	Li	0.096516
65	Cu	0.145951
74	Ge	0.144841
103	Rh	0.147247
109	Ag	0.154371
111	Cd	0.151518
123	Sb	0.150856
159	Tb	0.153681
186	W	0.154392
205	Tl	0.163103
206	[Pb]	0.161607
207	[Pb]	0.162939
208	Pb	0.164184
209	Bi	0.163157
7	[Li]	Signal too low
9	Be	Signal too low
106	[Cd]	Signal too low
108	[Cd]	Signal too low
201	Hg	Signal too low

Tune Mode Name: He
Discriminator: 5 mV
AnalogHV: 2263 V
PulseHV: 1868 V

Acquired: 10/29/2019 16:58:10

Mass[u]	Element	P/A Factor
23	Na	0.109617
24	Mg	0.115165
27	Al	0.118674
39	K	0.125307
44	Ca	0.125906
51	V	0.129089
52	Cr	0.131334
55	Mn	0.133797

56	Fe	0.137283
59	Co	0.138820
60	Ni	0.140940
65	Cu	0.144663
66	Zn	0.144068
111	Cd	0.150253
138	Ba	0.150984
159	Tb	0.151053
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
103	Rh	Signal too low

Tune Mode Name: HEHe
Discriminator: 5 mV
AnalogHV: 2263 V
PulseHV: 1868 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

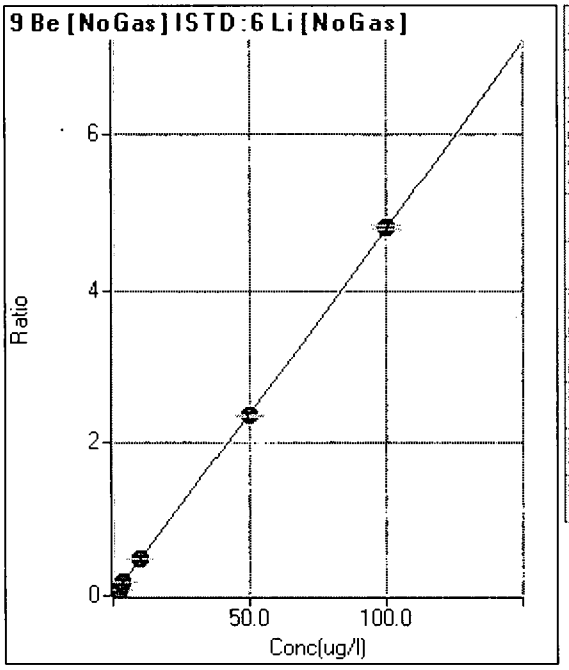
Created: 10/30/2019 12:22:45

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\9J29041A.b\
Analysis File: 9J29041A.batch.bin
DA Date-Time: 10/29/2019 17:17:51
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	9J29041-CAL0	10/29/2019 16:13:10
2	005CALS.d	9J29041-CAL1	10/29/2019 16:18:08
3	006CALS.d	9J29041-CAL2	10/29/2019 16:23:05
4	007CALS.d	9J29041-CAL3	10/29/2019 16:28:02
5	008CALS.d	9J29041-CAL4	10/29/2019 16:32:58
6	009CALS.d	9J29041-CAL5	10/29/2019 16:37:54
7	010CALS.d	9J29041-CAL6	10/29/2019 16:42:49
8	011CALS.d	9J29041-CAL7	10/29/2019 16:47:44
9	012CALS.d	9J29041-CAL8	10/29/2019 16:52:31
10	013CALS.d	9J29041-CAL9	10/29/2019 16:57:12

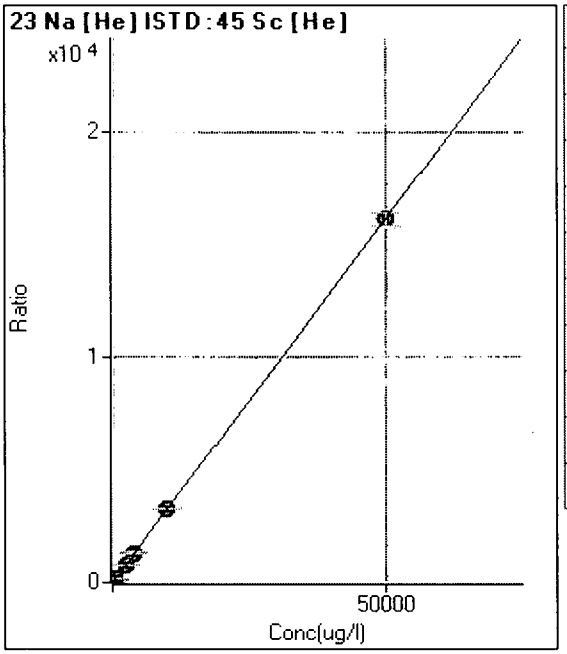
Calibration for 014_ICV.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40	0.001	P	22.7
2	☐	0.180	0.174	468	0.009	P	3.7
3	☐	0.900	0.860	2179	0.042	P	2.5
4	☐	1.800	1.725	4365	0.083	P	3.0
5	☐	3.600	3.576	9091	0.172	P	0.9
6	☐	10.000	10.096	25603	0.484	P	1.3
7	☐	50.000	49.293	126797	2.359	P	1.3
8	☐	100.000	100.346	254071	4.802	P	0.9
9	☐			126	0.002	P	19.6
10	☐			80	0.002	P	4.3

y = 0.0478 * x + 7.8753E-004
R = 1.0000
DL = 0.01122
BEC = 0.01646

Weight: <None>
Min Conc: <None>

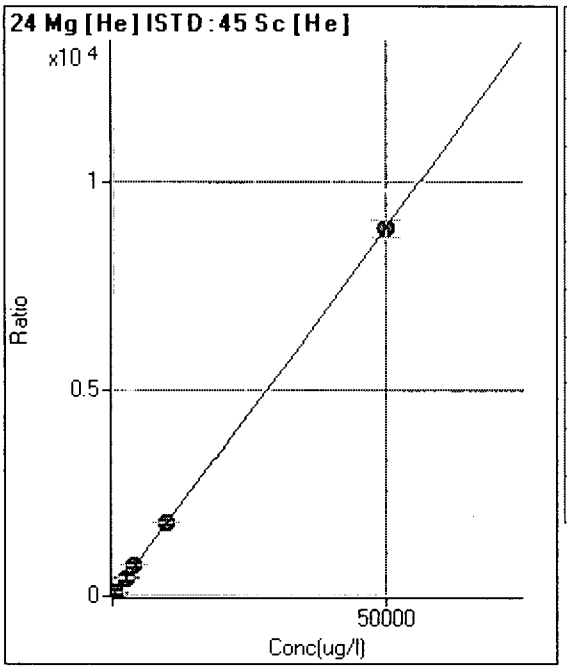


	Rjct	Conc	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4027	1.908	P	2.5
2	☐			8862	4.254	P	6.2
3	☐	45.000	42.445	33425	15.608	P	1.6
4	☐	90.000	84.612	62590	29.218	P	2.0
5	☐	180.000	176.595	129815	58.907	P	1.2
6	☐	400.000	398.269	287302	130.456	P	1.5
7	☐	2500.000	2491.170	1777955	805.973	A	0.4
8	☐	4000.000	4062.633	2816235	1,313.188	A	2.2
9	☐	10000.000	10036.164	6674268	3,241.241	A	1.3
10	☐	50000.000	49988.236	31514864	16,136.414	A	4.0

y = 0.3228 * x + 1.9080
R = 1.0000
DL = 0.4488
BEC = 5.911

Weight: <None>
Min Conc: <None>

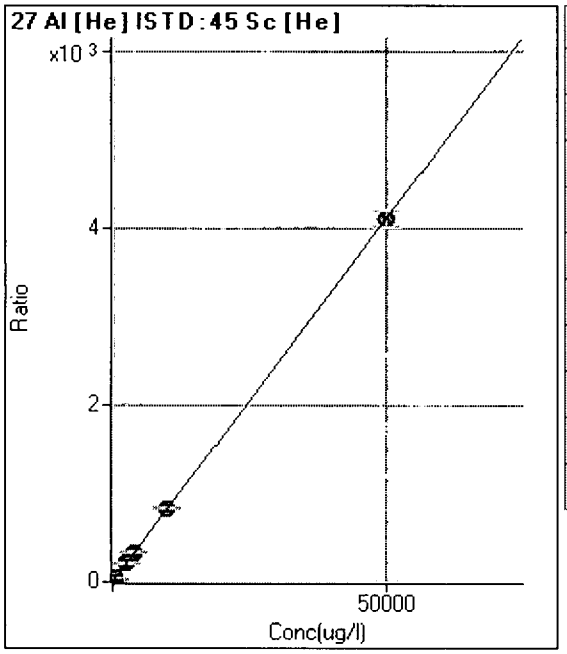
Calibration for 014_ICV.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1916	0.908	P	3.7
2	☐			5198	2.494	P	2.6
3	☐	45.000	44.535	18939	8.844	P	1.9
4	☐	90.000	89.776	36217	16.906	P	3.1
5	☐	180.000	180.873	73031	33.140	P	1.2
6	☐	400.000	405.184	161013	73.112	P	1.6
7	☐	2500.000	2502.303	985630	446.818	P	1.1
8	☐	4000.000	4163.077	1592839	742.768	A	0.4
9	☐	10000.000	10010.049	3674980	1,784.698	A	1.2
10	☐	50000.000	49984.785	17395325	8,908.192	A	4.5

y = 0.1782 * x + 0.9081
R = 1.0000
DL = 0.5666
BEC = 5.096

Weight: <None>
Min Conc: <None>

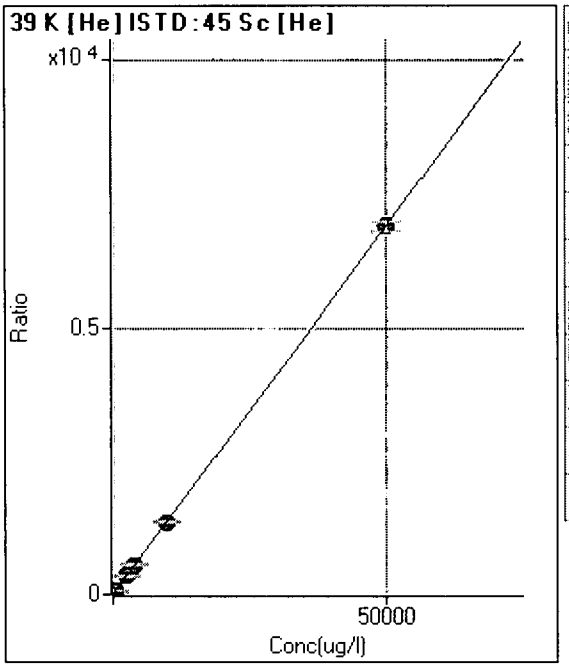


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	167	0.079	P	31.1
2	☐			1626	0.780	P	2.3
3	☐	45.000	46.195	8304	3.878	P	2.9
4	☐	90.000	87.793	15638	7.299	P	0.6
5	☐	180.000	178.164	32468	14.731	P	0.6
6	☐	400.000	405.193	73560	33.401	P	1.2
7	☐	2500.000	2515.986	456572	206.984	P	1.4
8	☐	4000.000	4096.254	722513	336.939	P	1.1
9	☐	10000.000	10151.809	1719213	834.924	A	1.5
10	☐	50000.000	49961.107	8023719	4,108.683	A	4.1

y = 0.0822 * x + 0.0792
R = 1.0000
DL = 0.897
BEC = 0.9625

Weight: <None>
Min Conc: <None>

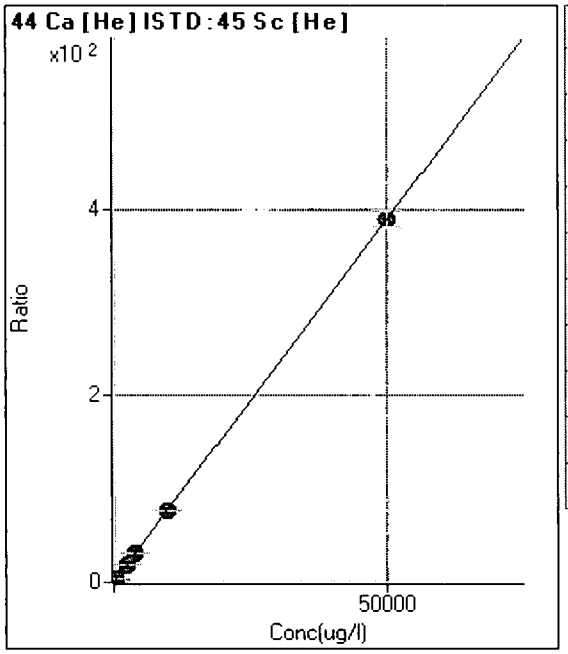
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13682	6.484	P	1.4
2	☐			15716	7.537	P	0.5
3	☐	45.000	41.689	26188	12.232	P	2.0
4	☐	90.000	86.270	39362	18.378	P	3.8
5	☐	180.000	174.825	67404	30.588	P	1.9
6	☐	400.000	396.515	134685	61.154	P	1.1
7	☐	2500.000	2483.205	769550	348.862	P	1.1
8	☐	4000.000	4038.865	1207914	563.353	A	3.5
9	☐	10000.000	9886.039	2820263	1,369.549	A	0.6
10	☐	50000.000	50020.579	13486494	6,903.211	A	2.6

y = 0.1379 * x + 6.4836
R = 1.0000
DL = 1.993
BEC = 47.02

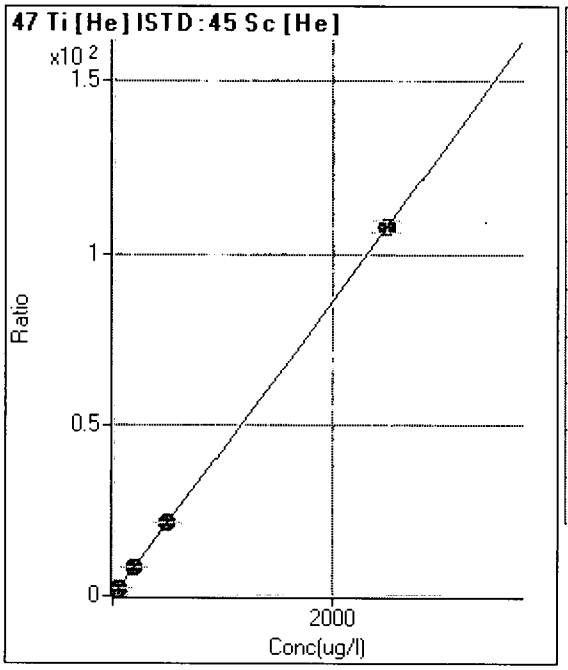
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	85	0.040	P	22.3
2	☐			188	0.090	P	7.0
3	☐	45.000	41.565	776	0.363	P	6.1
4	☐	90.000	81.293	1436	0.671	P	7.6
5	☐	180.000	164.814	2904	1.318	P	5.9
6	☐	400.000	403.240	6977	3.167	P	1.6
7	☐	2500.000	2393.918	41042	18.605	P	0.7
8	☐	4000.000	3907.174	65061	30.340	P	0.6
9	☐	10000.000	9824.726	156976	76.229	P	1.0
10	☐	50000.000	50047.832	758011	388.151	P	4.3

y = 0.0078 * x + 0.0402
R = 1.0000
DL = 3.474
BEC = 5.183

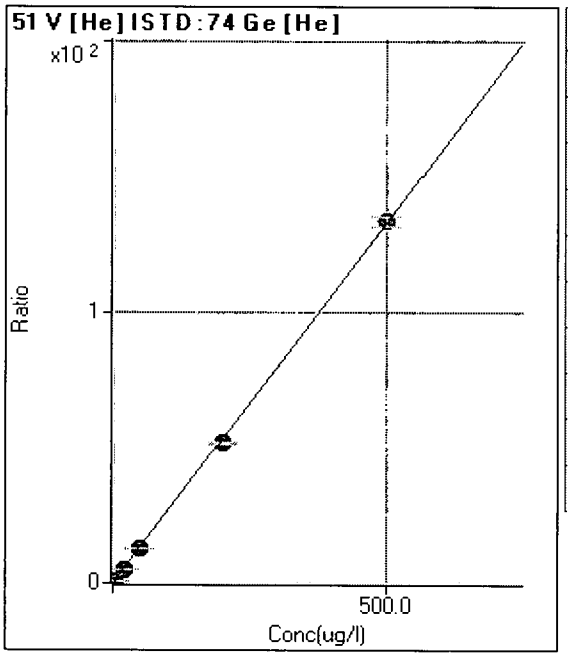
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6	0.003	P	34.3
2	☐			17	0.008	P	51.8
3	☐			80	0.037	P	28.6
4	☐	1.800	1.626	156	0.073	P	11.7
5	☐	3.600	3.457	333	0.151	P	10.3
6	☐	20.000	19.656	1867	0.848	P	4.9
7	☐	50.000	48.452	4602	2.086	P	1.2
8	☐	200.000	198.814	18339	8.552	P	1.5
9	☐	500.000	500.109	44295	21.509	P	0.9
10	☐	2500.000	2500.107	210023	107.515	P	3.1

y = 0.0430 * x + 0.0026
R = 1.0000
DL = 0.0629
BEC = 0.06115

Weight: <None>
Min Conc: <None>

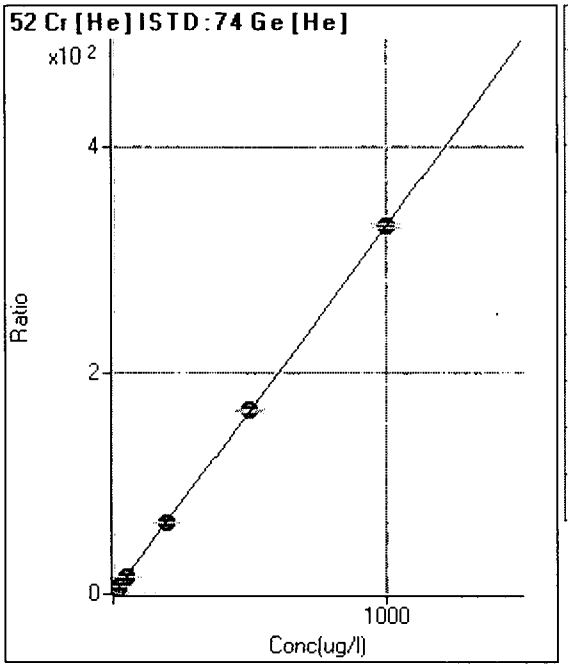


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	410	0.040	P	5.7
2	☐	0.180	0.183	892	0.089	P	11.6
3	☐	0.900	0.864	2770	0.270	P	2.5
4	☐	1.800	1.723	5147	0.498	P	3.6
5	☐	3.600	3.434	10056	0.952	P	0.9
6	☐	20.000	19.327	54756	5.172	P	0.6
7	☐	50.000	48.310	135930	12.868	P	0.9
8	☐	200.000	193.276	532167	51.360	P	0.9
9	☐	500.000	502.887	1321398	133.570	A	2.6
10	☐			590	0.065	P	18.8

y = 0.2655 * x + 0.0404
R = 0.9999
DL = 0.02594
BEC = 0.1521

Weight: <None>
Min Conc: <None>

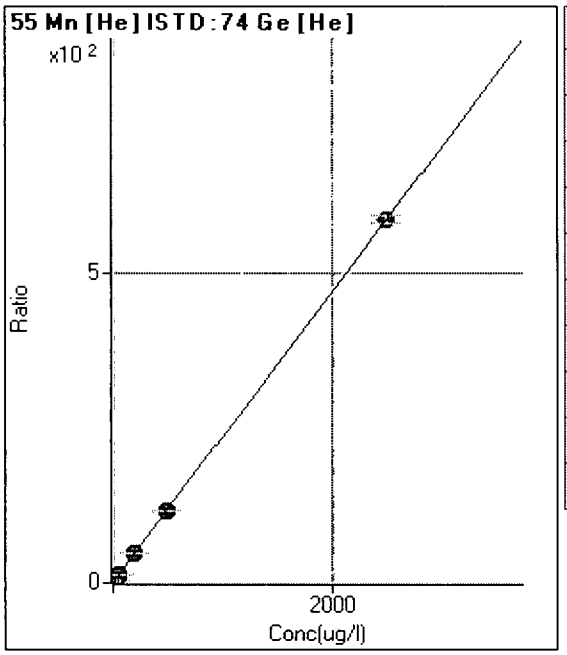
Calibration for 014_ICV.d



	Rjct	Conc	Calc.Conc	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202	0.020	P	17.8
2	☐	0.180	0.183	807	0.080	P	11.1
3	☐	0.900	0.887	3207	0.312	P	5.9
4	☐	1.800	1.707	6025	0.583	P	0.7
5	☐	3.600	3.516	12447	1.179	P	4.4
6	☐	20.000	19.563	68493	6.470	P	0.8
7	☐	50.000	49.295	171904	16.273	P	0.7
8	☐	200.000	195.580	668373	64.506	P	1.1
9	☐	500.000	501.782	1637013	165.466	A	1.1
10	☐	1000.000	1000.038	2989212	329.750	A	1.1

y = 0.3297 * x + 0.0199
R = 1.0000
DL = 0.03222
BEC = 0.06035

Weight: <None>
Min Conc: <None>

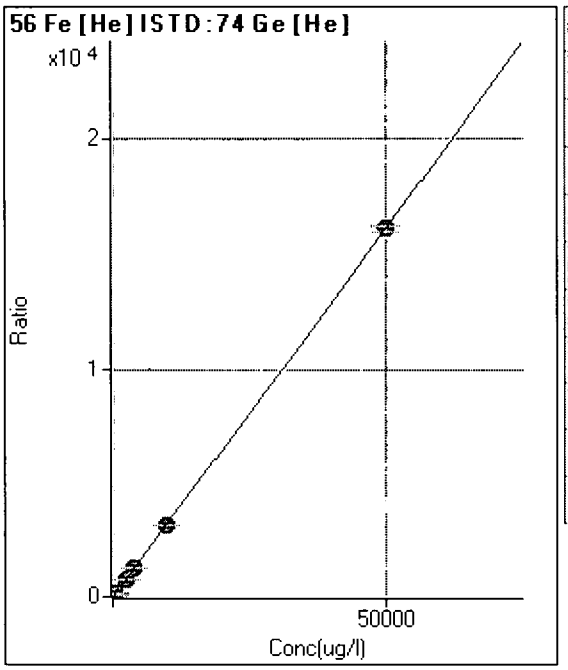


	Rjct	Conc	Calc.Conc	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	236	0.023	P	8.1
2	☐	0.180	0.141	564	0.056	P	7.8
3	☐	0.900	0.896	2392	0.233	P	3.6
4	☐	1.800	1.660	4255	0.412	P	1.3
5	☐	3.600	3.553	9022	0.855	P	4.1
6	☐	20.000	19.605	48821	4.612	P	0.4
7	☐	50.000	48.802	120897	11.445	P	0.7
8	☐	200.000	194.024	470757	45.432	P	0.7
9	☐	500.000	487.952	1130069	114.223	P	1.1
10	☐	2500.000	2502.915	5309358	585.804	A	2.1

y = 0.2340 * x + 0.0232
R = 1.0000
DL = 0.02412
BEC = 0.09911

Weight: <None>
Min Conc: <None>

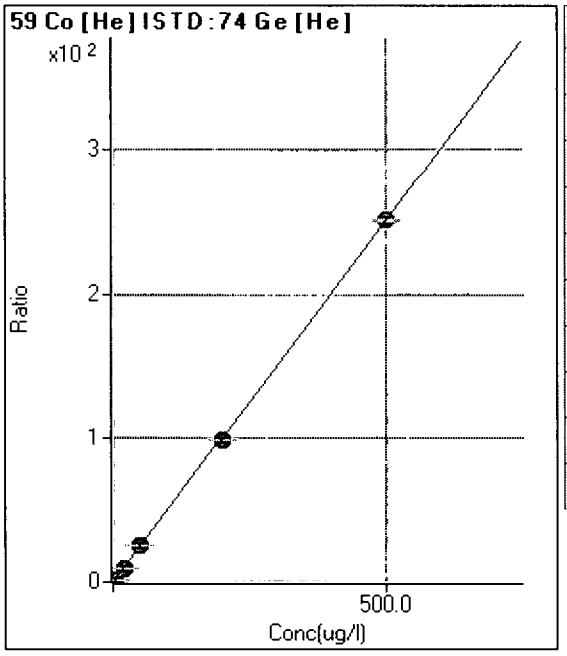
Calibration for 014_ICV.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11100	1.093	P	2.7
2	☐	9.000	8.181	37442	3.730	P	3.9
3	☐	45.000	42.610	152242	14.825	P	0.2
4	☐	90.000	84.545	292951	28.339	P	1.3
5	☐	180.000	172.219	597498	56.594	P	2.8
6	☐	400.000	395.186	1359833	128.448	A	1.1
7	☐	2500.000	2410.241	8216641	777.831	A	1.3
8	☐	4000.000	3867.210	12924724	1,247.363	A	0.5
9	☐	10000.000	9802.984	31265494	3,160.259	A	1.0
10	☐	50000.000	50054.593	146225663	16,131.971	A	1.6

y = 0.3223 * x + 1.0934
R = 1.0000
DL = 0.2779
BEC = 3.393

Weight: <None>
Min Conc: <None>

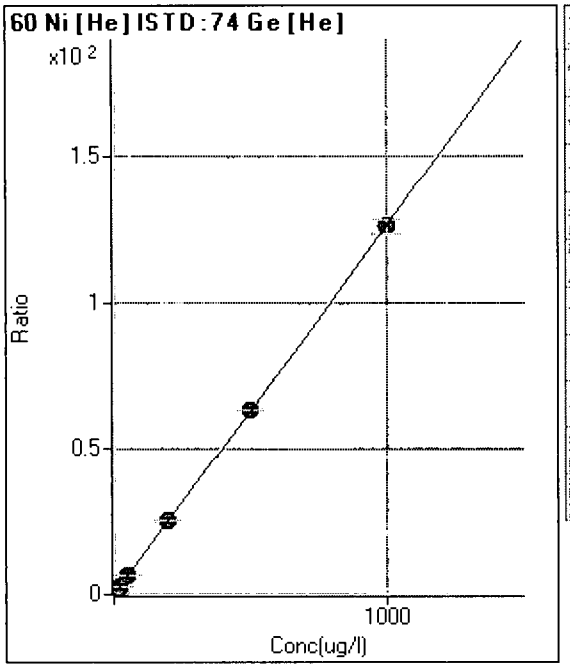


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77	0.008	P	10.9
2	☐	0.180	0.173	948	0.094	P	6.0
3	☐	0.900	0.881	4618	0.450	P	2.3
4	☐	1.800	1.762	9215	0.892	P	1.8
5	☐	3.600	3.498	18607	1.762	P	2.7
6	☐	20.000	19.730	104856	9.905	P	0.6
7	☐	50.000	49.390	261803	24.784	P	0.8
8	☐	200.000	196.928	1023680	98.794	P	0.4
9	☐	500.000	501.301	2488022	251.480	A	0.2
10	☐			1041	0.115	P	6.9

y = 0.5016 * x + 0.0075
R = 1.0000
DL = 0.004934
BEC = 0.01505

Weight: <None>
Min Conc: <None>

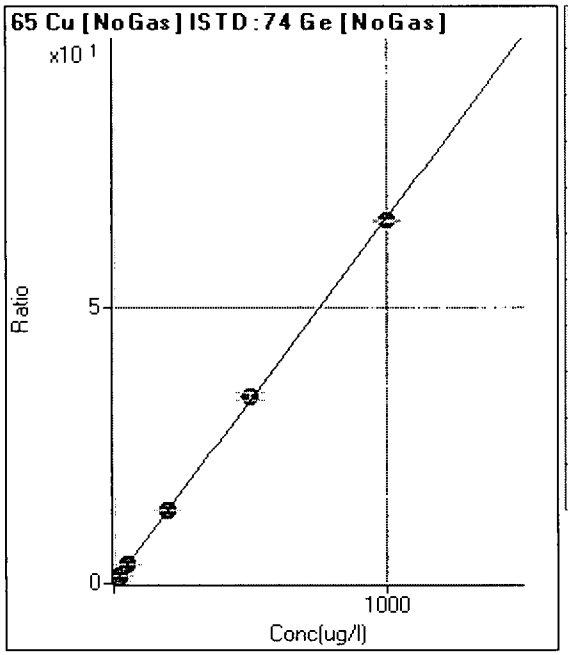
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	853	0.084	P	9.2
2	☐	0.180	0.169	1058	0.105	P	6.0
3	☐	0.900	0.962	2110	0.205	P	3.1
4	☐	1.800	1.777	3187	0.308	P	3.5
5	☐	3.600	3.493	5541	0.525	P	2.3
6	☐	20.000	20.326	28040	2.649	P	0.2
7	☐	50.000	50.242	67850	6.423	P	0.6
8	☐	200.000	202.135	265125	25.587	P	0.8
9	☐	500.000	502.160	627671	63.442	P	0.5
10	☐	1000.000	998.475	1142263	126.062	P	3.4

y = 0.1262 * x + 0.0841
R = 1.0000
DL = 0.1841
BEC = 0.6664

Weight: <None>
Min Conc: <None>

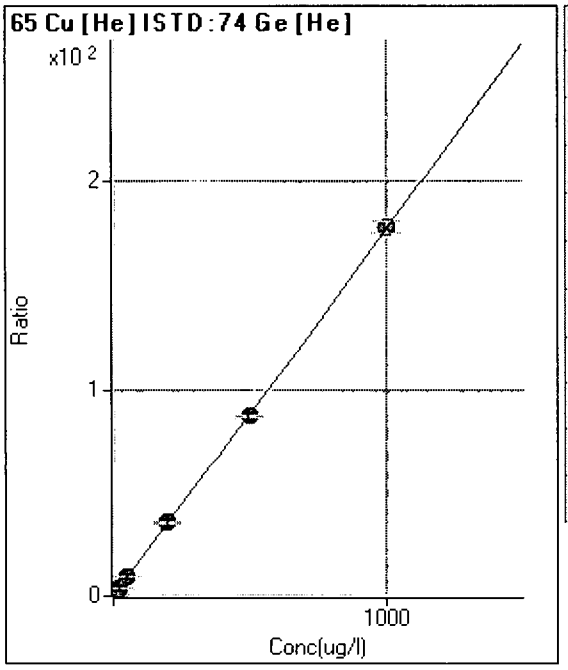


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	536	0.011	P	6.5
2	☐	0.180	0.157	1071	0.021	P	4.7
3	☐	0.900	0.887	3556	0.070	P	3.1
4	☐	1.800	1.770	6648	0.128	P	4.6
5	☐	3.600	3.642	13175	0.252	P	1.3
6	☐	20.000	20.633	73939	1.380	P	2.0
7	☐	50.000	51.238	183084	3.411	P	0.3
8	☐	200.000	201.266	714379	13.368	P	0.8
9	☐	500.000	511.776	1712624	33.975	A	3.6
10	☐	1000.000	993.784	3077681	65.965	A	0.9

y = 0.0664 * x + 0.0106
R = 0.9999
DL = 0.03123
BEC = 0.16

Weight: <None>
Min Conc: <None>

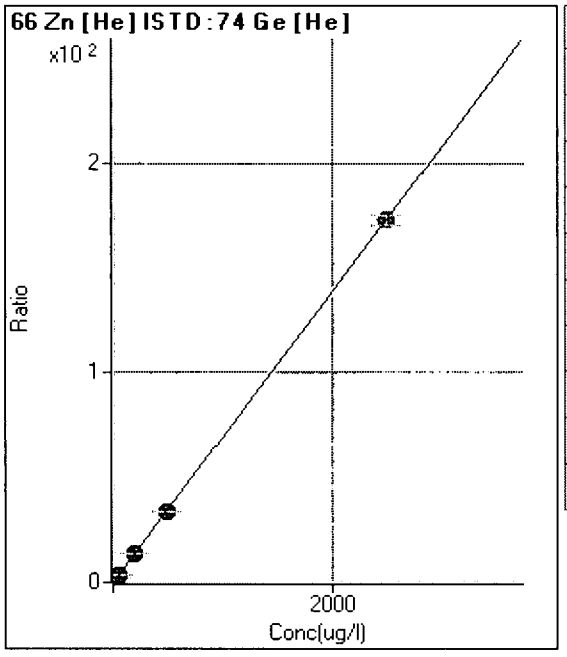
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200	0.020	P	13.0
2	☐	0.180	0.190	536	0.053	P	12.1
3	☐	0.900	0.881	1805	0.176	P	1.9
4	☐	1.800	1.770	3444	0.333	P	5.0
5	☐	3.600	3.568	6880	0.652	P	3.0
6	☐	20.000	20.207	38090	3.598	P	2.3
7	☐	50.000	50.728	95108	9.003	P	0.8
8	☐	200.000	200.018	367240	35.442	P	0.7
9	☐	500.000	492.242	862673	87.195	P	0.3
10	☐	1000.000	1003.835	1611135	177.796	A	3.2

y = 0.1771 * x + 0.0197
R = 1.0000
DL = 0.04338
BEC = 0.1112

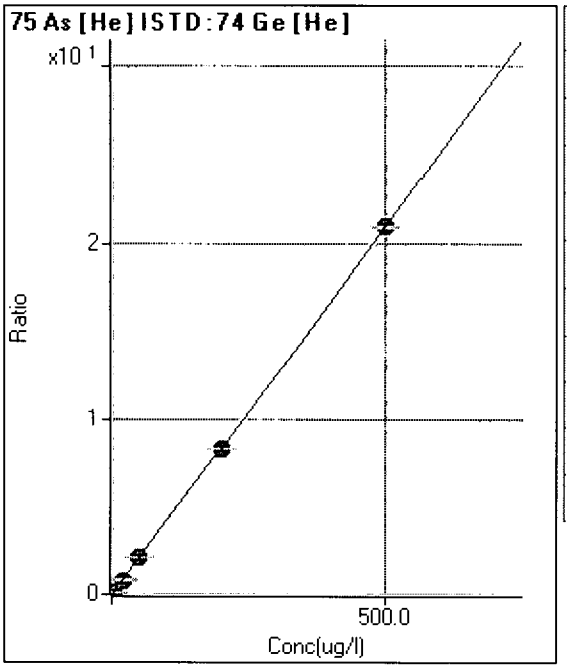
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	131	0.013	P	12.1
2	☐			209	0.021	P	10.5
3	☐	0.900	0.822	716	0.070	P	4.7
4	☐	1.800	1.745	1379	0.133	P	5.9
5	☐	3.600	3.482	2676	0.253	P	3.6
6	☐	20.000	20.006	14768	1.395	P	0.6
7	☐	50.000	48.995	35891	3.398	P	2.1
8	☐	200.000	199.638	143036	13.805	P	1.4
9	☐	500.000	495.521	338810	34.246	P	0.5
10	☐	2500.000	2500.945	1565916	172.789	A	2.9

y = 0.0691 * x + 0.0129
R = 1.0000
DL = 0.06768
BEC = 0.1868

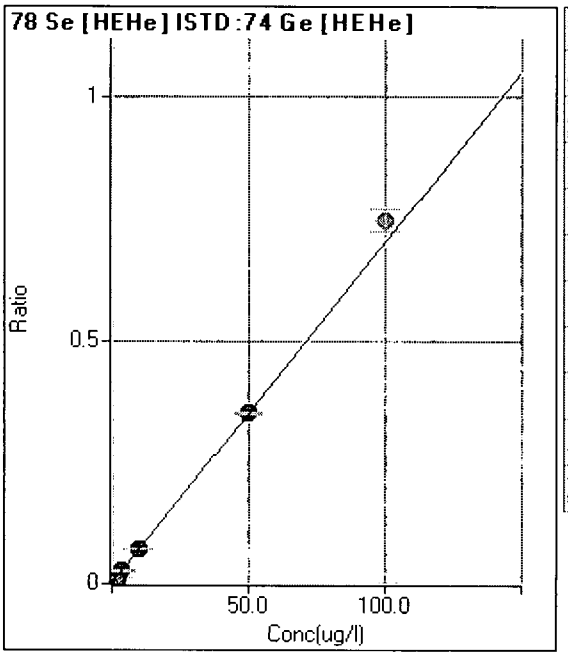
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14	0.001	P	31.0
2	☐	0.180	0.187	93	0.009	P	5.1
3	☐	0.900	0.883	394	0.038	P	4.3
4	☐	1.800	1.760	777	0.075	P	2.6
5	☐	3.600	3.559	1591	0.151	P	0.9
6	☐	20.000	19.817	8812	0.832	P	0.6
7	☐	50.000	49.960	22147	2.097	P	0.6
8	☐	200.000	198.917	86451	8.343	P	0.3
9	☐	500.000	500.445	207654	20.989	P	0.6
10	☐			63	0.007	P	16.2

y = 0.0419 * x + 0.0014
R = 1.0000
DL = 0.03021
BEC = 0.03251

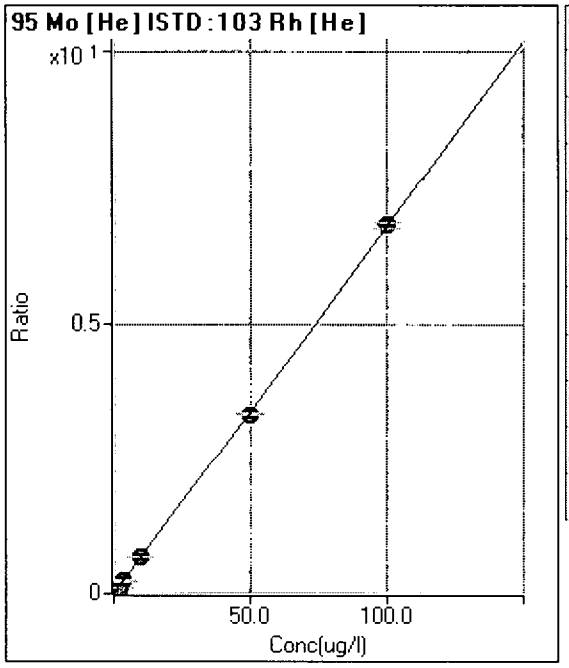
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1	0.000	P	25.0
2	☐	0.180	0.208	14	0.002	P	11.6
3	☐	0.900	0.914	56	0.007	P	8.0
4	☐	1.800	1.796	112	0.013	P	4.5
5	☐	3.600	3.710	227	0.026	P	5.2
6	☐	10.000	10.170	643	0.071	P	4.5
7	☐	50.000	49.958	3096	0.350	P	0.9
8	☑	100.000		6262	0.746	P	6.2
9	☐			4	0.001	P	33.7
10	☐			7	0.001	P	38.0

y = 0.0070 * x + 1.5410E-004
R = 1.0000
DL = 0.01648
BEC = 0.02198

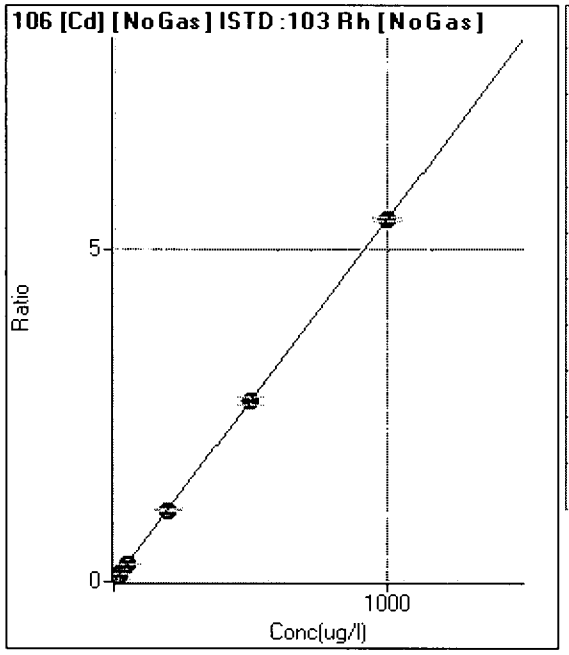
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	34	0.001	P	28.0
2	☐	0.180	0.161	419	0.012	P	15.0
3	☐	0.900	0.831	2040	0.057	P	4.8
4	☐	1.800	1.712	4153	0.117	P	1.8
5	☐	3.600	3.465	8641	0.236	P	3.0
6	☐	10.000	9.972	24901	0.676	P	1.9
7	☐	50.000	49.138	121403	3.329	P	0.9
8	☐	100.000	100.441	245642	6.804	P	1.5
9	☐			220	0.006	P	23.0
10	☐			902	0.029	P	1.9

y = 0.0677 * x + 9.7987E-004
R = 1.0000
DL = 0.01213
BEC = 0.01447

Weight: <None>
Min Conc: <None>

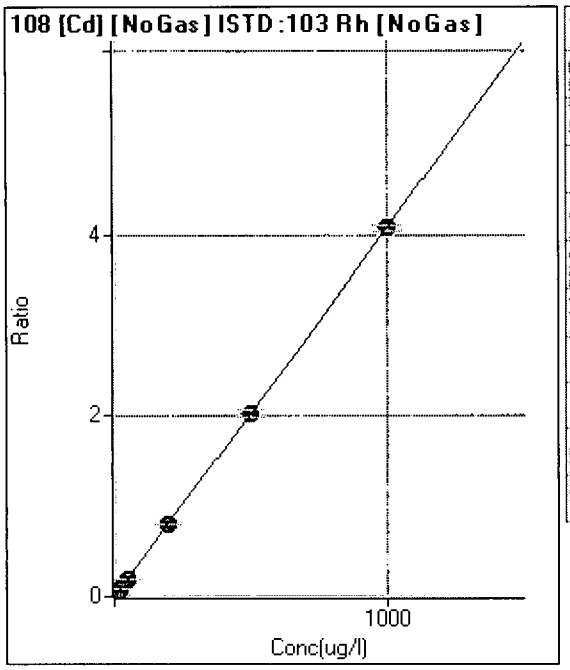


	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8	0.000	P	65.3
2	☐	0.180	0.143	54	0.001	P	12.7
3	☐	0.900	0.922	310	0.005	P	10.0
4	☐	1.800	1.626	544	0.009	P	2.9
5	☐	3.600	3.522	1182	0.019	P	1.4
6	☐	20.000	19.868	6708	0.109	P	5.7
7	☐	50.000	48.351	16559	0.264	P	0.2
8	☐	200.000	198.775	66373	1.085	P	1.1
9	☐	500.000	499.529	159432	2.727	P	3.7
10	☐	1000.000	1000.566	290461	5.462	P	1.0

y = 0.0055 * x + 1.3046E-004
R = 1.0000
DL = 0.04685
BEC = 0.0239

Weight: <None>
Min Conc: <None>

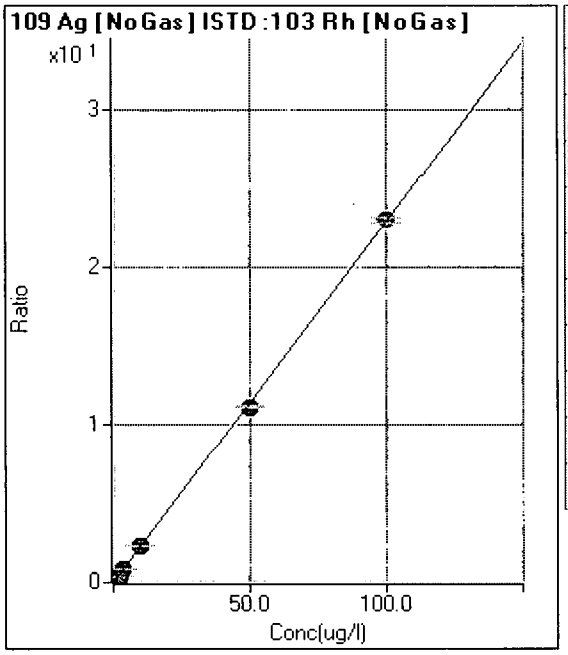
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9	0.000	P	78.1
2	☐	0.180	0.182	53	0.001	P	10.8
3	☐	0.900	0.964	244	0.004	P	12.5
4	☐	1.800	1.733	436	0.007	P	2.9
5	☐	3.600	3.805	956	0.016	P	3.0
6	☐	20.000	20.278	5109	0.083	P	4.7
7	☐	50.000	49.631	12682	0.202	P	2.0
8	☐	200.000	198.389	49417	0.808	P	0.4
9	☐	500.000	499.029	118809	2.032	P	3.8
10	☐	1000.000	1000.820	216712	4.075	P	1.8

y = 0.0041 * x + 1.4917E-004
R = 1.0000
DL = 0.08584
BEC = 0.03664

Weight: <None>
Min Conc: <None>

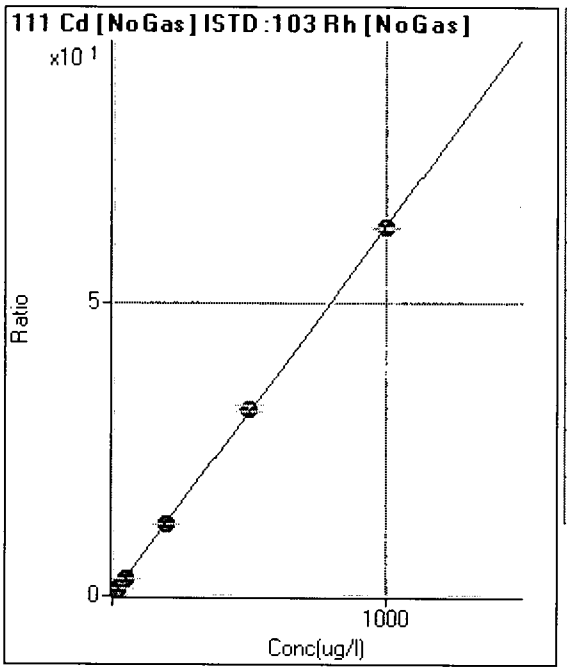


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17	0.000	P	38.1
2	☐	0.180	0.183	2527	0.042	P	1.3
3	☐	0.900	0.876	12046	0.201	P	1.5
4	☐	1.800	1.770	24493	0.405	P	1.0
5	☐	3.600	3.572	49949	0.818	P	1.8
6	☐	10.000	10.194	144186	2.333	P	0.6
7	☐	50.000	48.633	697919	11.130	P	1.1
8	☐	100.000	100.666	1409099	23.037	M	1.7
9	☐			290	0.005	P	7.3
10	☐			363	0.007	P	16.9

y = 0.2288 * x + 2.7900E-004
R = 0.9999
DL = 0.001392
BEC = 0.001219

Weight: <None>
Min Conc: <None>

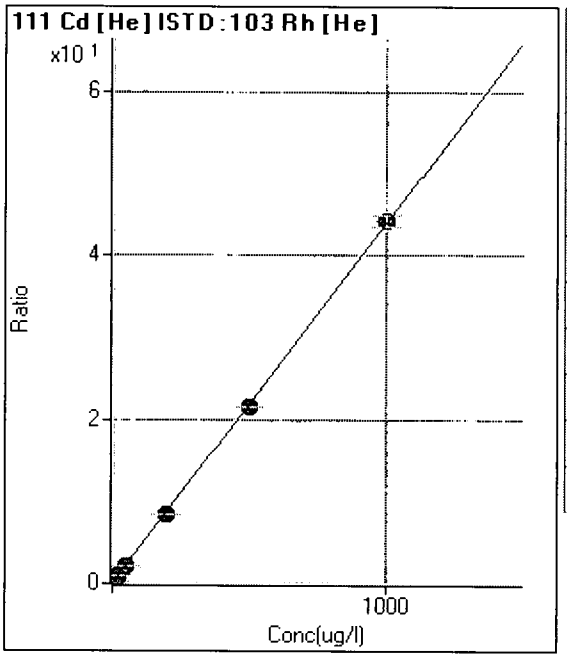
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24	0.000	P	42.6
2	☐	0.180	0.168	658	0.011	P	9.3
3	☐	0.900	0.876	3329	0.055	P	3.0
4	☐	1.800	1.768	6742	0.112	P	1.5
5	☐	3.600	3.512	13509	0.221	P	2.9
6	☐	20.000	19.944	77490	1.254	P	1.2
7	☐	50.000	47.773	188319	3.003	P	1.3
8	☐	200.000	196.684	756193	12.363	P	1.0
9	☐	500.000	509.168	1871665	32.004	A	2.9
10	☐	1000.000	996.192	3330230	62.616	A	0.5

y = 0.0629 * x + 4.0517E-004
R = 0.9999
DL = 0.008232
BEC = 0.006446

Weight: <None>
Min Conc: <None>

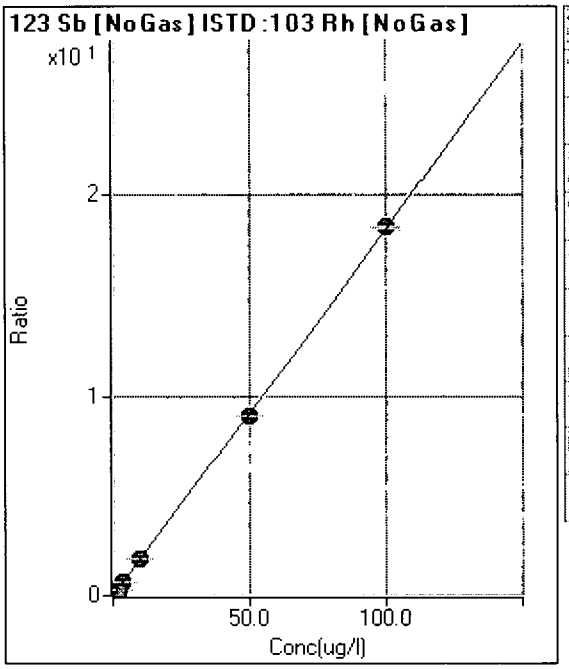


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11	0.000	P	62.4
2	☐	0.180	0.174	279	0.008	P	5.7
3	☐	0.900	0.891	1406	0.039	P	6.7
4	☐	1.800	1.622	2541	0.072	P	3.4
5	☐	3.600	3.391	5469	0.149	P	1.5
6	☐	20.000	19.671	31808	0.864	P	1.3
7	☐	50.000	48.225	77219	2.118	P	0.9
8	☐	200.000	193.512	306743	8.496	P	1.1
9	☐	500.000	490.089	735570	21.518	P	0.5
10	☐	1000.000	1006.350	1367018	44.184	P	3.2

y = 0.0439 * x + 3.1602E-004
R = 0.9999
DL = 0.01348
BEC = 0.007198

Weight: <None>
Min Conc: <None>

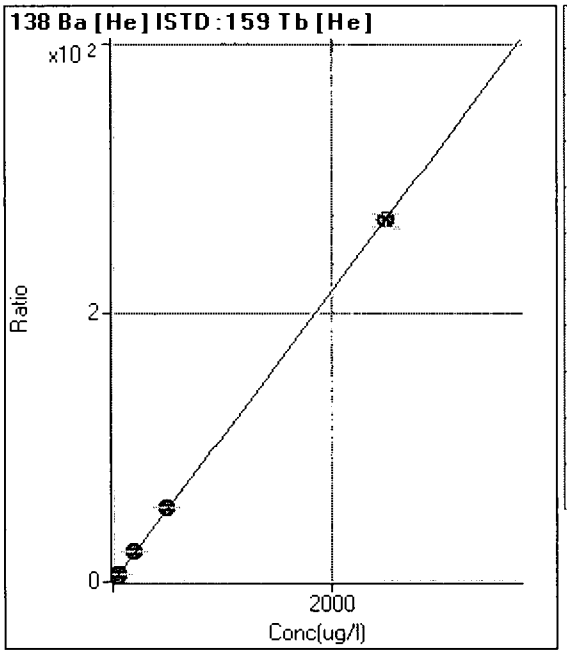
Calibration for 014_ICV.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	196	0.003	P	10.0
2	☐	0.180	0.171	2071	0.035	P	1.2
3	☐	0.900	0.882	9897	0.165	P	2.5
4	☐	1.800	1.796	20076	0.332	P	0.5
5	☐	3.600	3.588	40342	0.660	P	0.5
6	☐	10.000	10.153	115097	1.863	P	2.1
7	☐	50.000	48.932	562262	8.966	P	0.6
8	☐	100.000	100.519	1126356	18.415	P	0.6
9	☐			844	0.014	P	2.5
10	☐			624	0.012	P	9.7

y = 0.1832 * x + 0.0033
R = 0.9999
DL = 0.005373
BEC = 0.01799

Weight: <None>
Min Conc: <None>

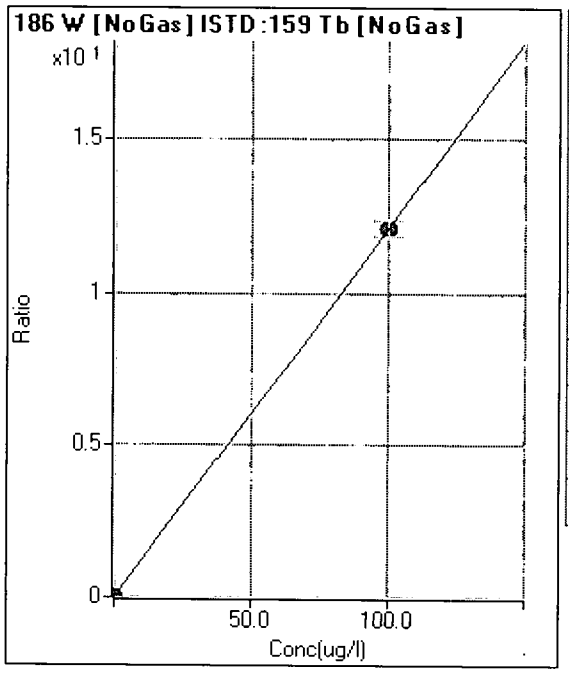


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	383	0.004	P	17.3
2	☐	0.180	0.162	2020	0.022	P	6.5
3	☐	0.900	0.889	9441	0.100	P	2.0
4	☐	1.800	1.785	18629	0.197	P	1.2
5	☐	3.600	3.626	38450	0.396	P	0.3
6	☐	20.000	20.391	214554	2.209	P	1.0
7	☐	50.000	50.727	530360	5.489	P	2.3
8	☐	200.000	210.339	2184670	22.749	A	0.5
9	☐	500.000	516.238	5177838	55.826	A	0.5
10	☐	2500.000	2495.908	23842242	269.893	A	3.5

y = 0.1081 * x + 0.0041
R = 1.0000
DL = 0.01974
BEC = 0.03794

Weight: <None>
Min Conc: <None>

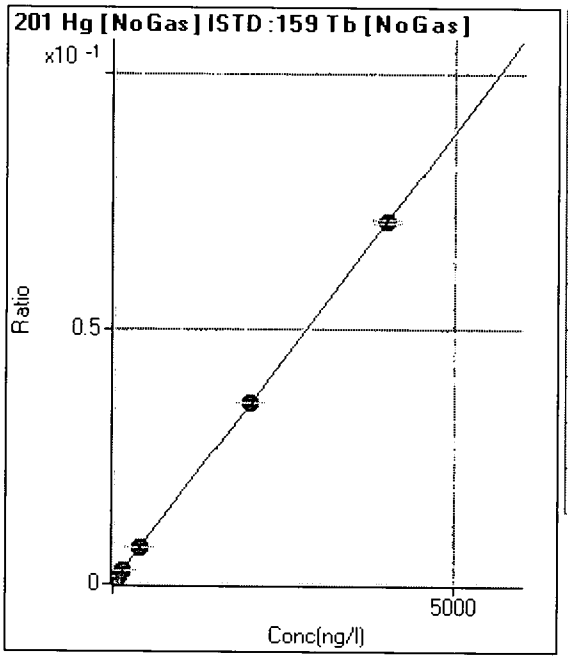
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	130	0.001	P	27.7
2	☐			113	0.001	P	36.5
3	☐			63	0.000	P	35.7
4	☐			100	0.001	P	24.0
5	☐			83	0.000	P	55.9
6	☐			190	0.001	P	18.6
7	☐			377	0.002	P	11.9
8	☐			701	0.004	P	20.9
9	☐	100.000	100.000	2309553	12.112	A	4.4
10	☐			8295	0.046	P	5.6

y = 0.1211 * x + 7.0859E-004
R = 1.0000
DL = 0.004858
BEC = 0.00585

Weight: <None>
Min Conc: <None>

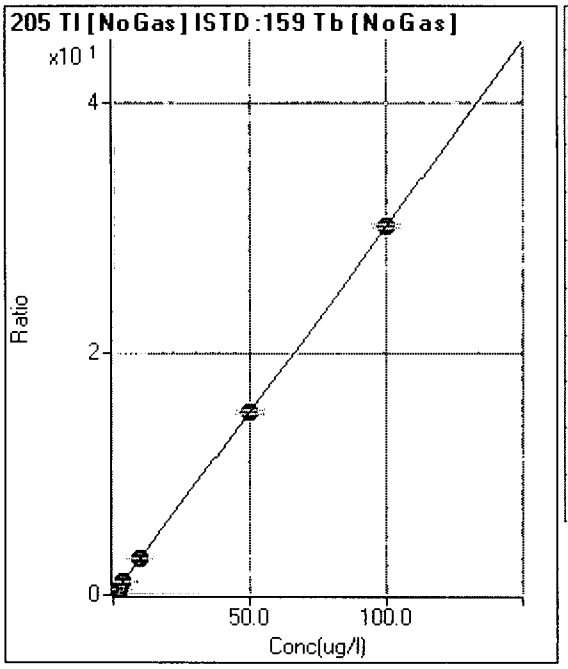


	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16	0.000	P	15.1
2	☐			38	0.000	P	9.2
3	☐	36.000	35.689	134	0.001	P	8.9
4	☐	72.000	70.655	254	0.001	P	3.4
5	☐	144.000	142.738	498	0.003	P	3.5
6	☐	400.000	403.837	1407	0.007	P	1.9
7	☐	2000.000	2008.191	6867	0.036	P	0.6
8	☐	4000.000	3995.593	13684	0.071	P	0.9
9	☐			421	0.002	P	3.8
10	☐			123	0.001	P	3.3

y = 1.7700E-005 * x + 8.9000E-005
R = 1.0000
DL = 2.278
BEC = 5.028

Weight: <None>
Min Conc: <None>

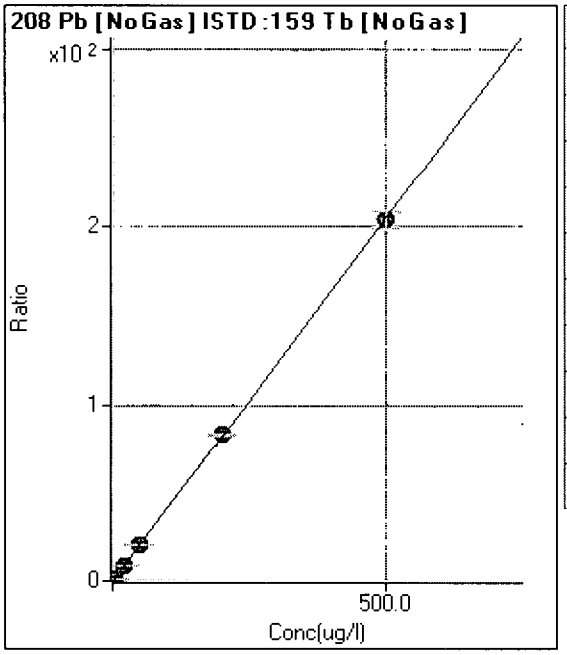
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	268	0.001	P	5.9
2	☐	0.180	0.177	10100	0.055	P	1.0
3	☐	0.900	0.871	49177	0.263	P	2.4
4	☐	1.800	1.746	99780	0.527	P	2.0
5	☐	3.600	3.523	201835	1.061	P	1.5
6	☐	10.000	9.992	584348	3.006	P	0.8
7	☐	50.000	49.824	2887469	14.984	A	1.4
8	☐	100.000	100.093	5817323	30.101	A	1.1
9	☐			5709	0.030	P	1.4
10	☐			1772	0.010	P	7.7

y = 0.3007 * x + 0.0015
R = 1.0000
DL = 0.0008597
BEC = 0.00485

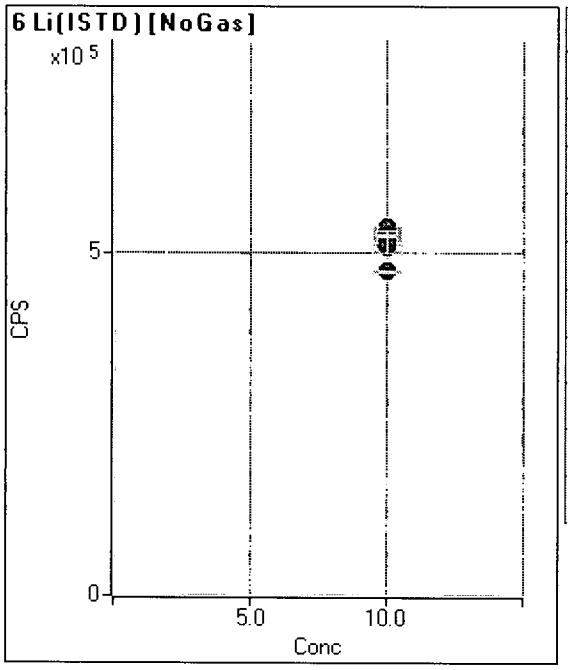
Weight: <None>
Min Conc: <None>



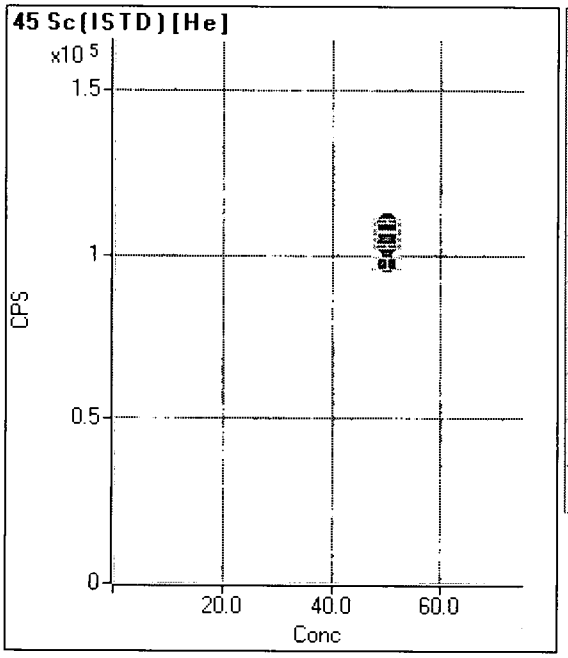
	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4208	0.023	P	1.9
2	☐	0.180	0.154	15953	0.086	P	2.0
3	☐	0.900	0.887	72133	0.386	P	0.9
4	☐	1.800	1.759	140935	0.744	P	3.2
5	☐	3.600	3.591	284285	1.494	P	1.4
6	☐	20.000	20.320	1623056	8.349	P	0.9
7	☐	50.000	50.713	4009013	20.804	A	0.7
8	☐	200.000	202.454	16036004	82.985	A	1.8
9	☐	500.000	498.935	38984806	204.477	A	4.6
10	☐			13649	0.076	P	2.3

y = 0.4098 * x + 0.0229
R = 1.0000
DL = 0.003201
BEC = 0.0559

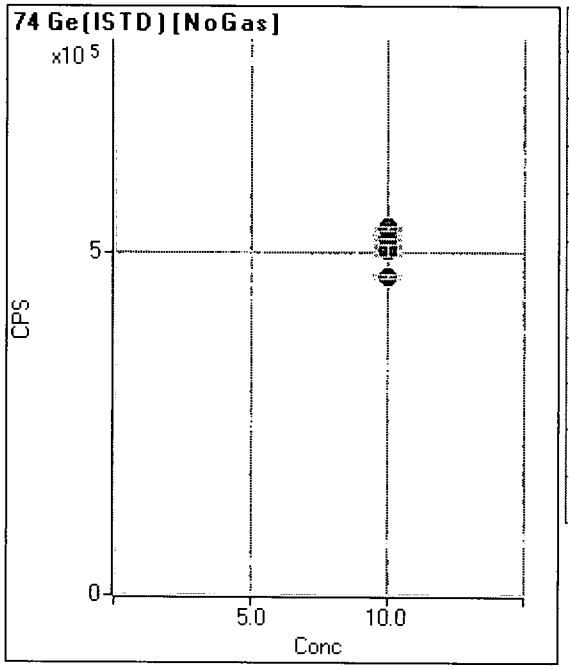
Weight: <None>
Min Conc: <None>



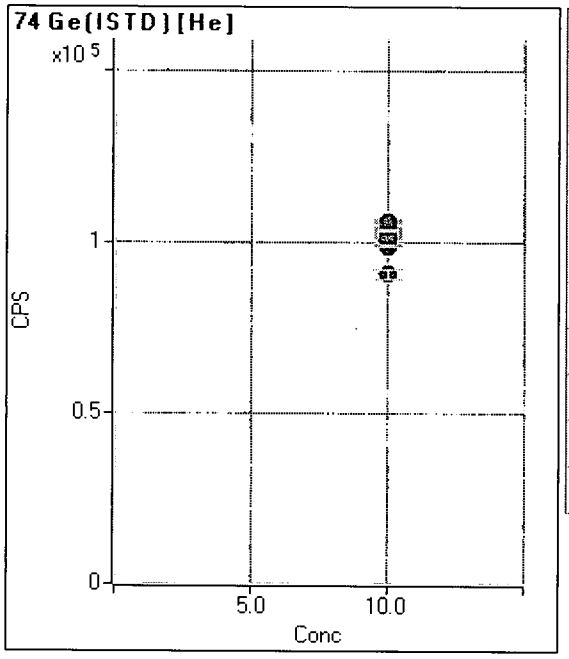
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	10.000		508670		P	1.9
2	☐	10.000		513382		P	0.1
3	☐	10.000		519584		P	0.3
4	☐	10.000		523906		P	0.3
5	☐	10.000		528899		P	1.2
6	☐	10.000		529122		P	0.5
7	☐	10.000		537455		P	0.4
8	☐	10.000		529129		P	1.1
9	☐	10.000		513665		P	4.6
10	☐	10.000		474896		P	0.3



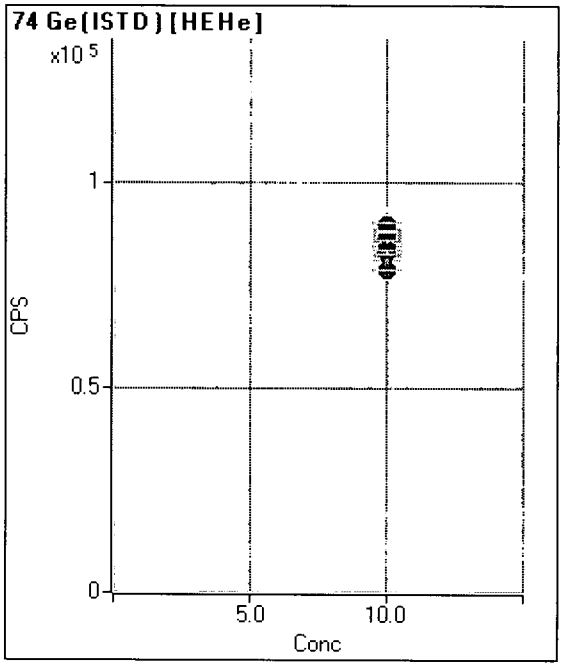
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	50.000		105523		P	1.4
2	☐	50.000		104271		P	2.4
3	☐	50.000		107072		P	1.3
4	☐	50.000		107127		P	1.4
5	☐	50.000		110201		P	1.6
6	☐	50.000		110129		P	1.3
7	☐	50.000		110302		P	1.0
8	☐	50.000		107222		P	0.7
9	☐	50.000		102968		P	1.3
10	☐	50.000		97746		P	3.8



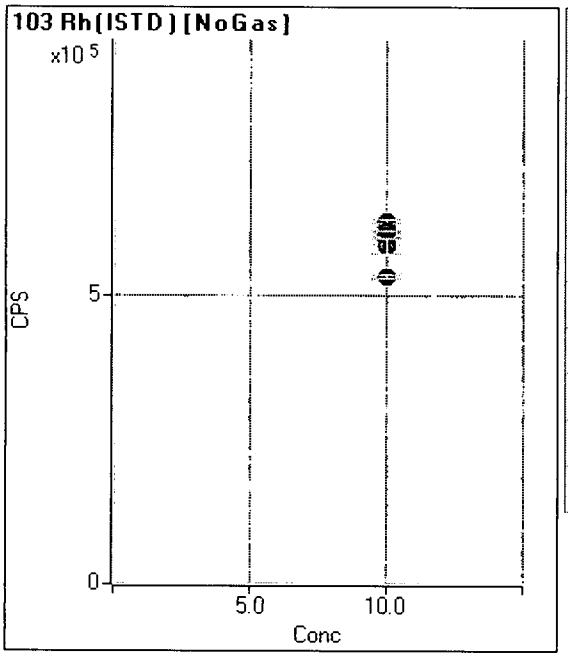
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		503858		P	2.1
2	☐	10.000		509531		P	0.8
3	☐	10.000		511587		P	0.7
4	☐	10.000		519038		P	0.3
5	☐	10.000		522143		P	1.1
6	☐	10.000		535785		P	0.6
7	☐	10.000		536729		P	0.8
8	☐	10.000		534420		P	1.1
9	☐	10.000		504508		P	3.5
10	☐	10.000		466583		P	1.1



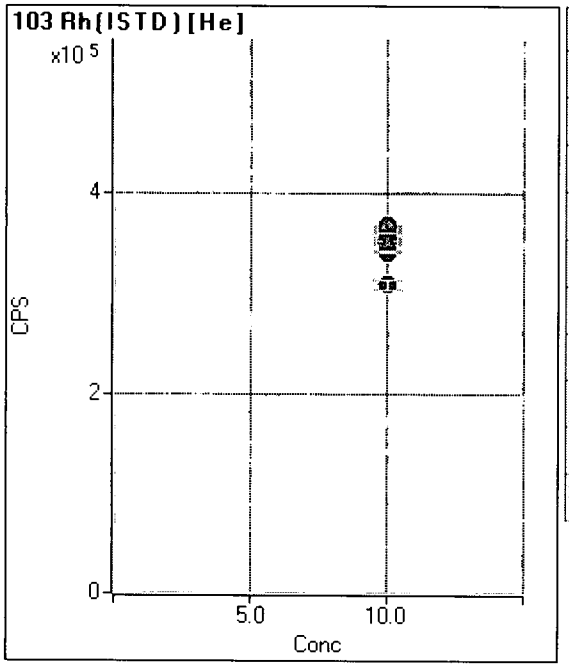
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		101536		P	0.7
2	☐	10.000		100434		P	2.2
3	☐	10.000		102694		P	1.1
4	☐	10.000		103375		P	0.9
5	☐	10.000		105620		P	2.3
6	☐	10.000		105864		P	0.5
7	☐	10.000		105635		P	0.1
8	☐	10.000		103618		P	0.5
9	☐	10.000		98936		P	0.4
10	☐	10.000		90670		P	2.9



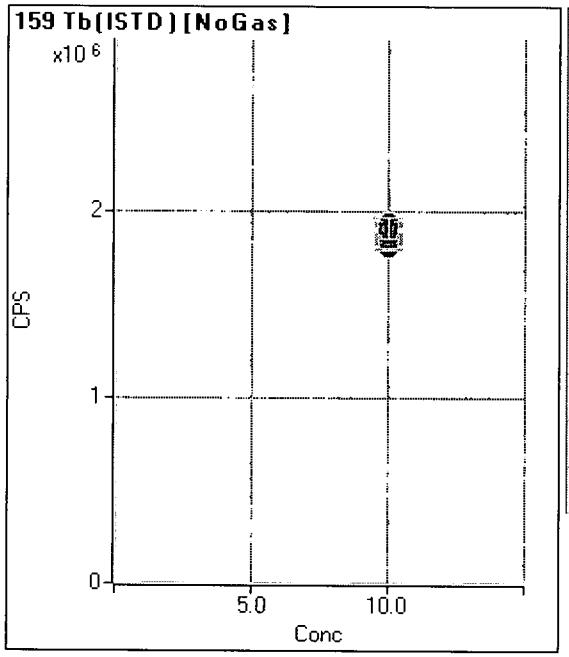
	Rjct	Conc.	Calc.Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		86470		P	3.0
2	☐	10.000		84964		P	6.1
3	☐	10.000		85976		P	2.3
4	☐	10.000		87630		P	2.8
5	☐	10.000		86734		P	1.9
6	☐	10.000		90039		P	1.9
7	☐	10.000		88361		P	0.7
8	☐	10.000		84082		P	5.5
9	☐	10.000		83488		P	0.7
10	☐	10.000		79250		P	0.5



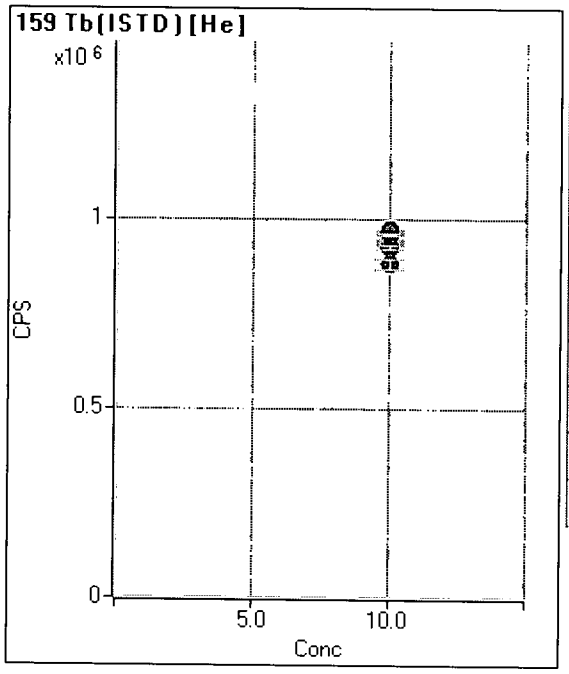
	Rjct	Conc.	Calc.Conc.	CPS	Ratio	Det.	RSD
1	☐	10.000		594084		P	2.2
2	☐	10.000		598370		P	0.2
3	☐	10.000		600351		P	0.3
4	☐	10.000		604419		P	0.9
5	☐	10.000		610865		P	0.7
6	☐	10.000		618010		P	1.9
7	☐	10.000		627128		P	1.0
8	☐	10.000		611666		P	0.2
9	☐	10.000		585289		P	4.1
10	☐	10.000		531871		P	1.2



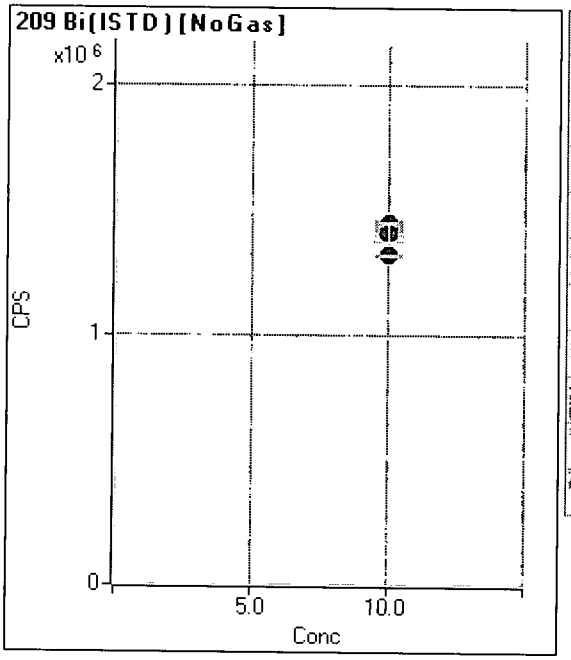
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		351523		P	0.2
2	☐	10.000		351255		P	1.3
3	☐	10.000		356256		P	0.5
4	☐	10.000		355266		P	1.3
5	☐	10.000		366550		P	1.1
6	☐	10.000		368148		P	0.8
7	☐	10.000		364666		P	0.6
8	☐	10.000		361035		P	0.5
9	☐	10.000		341853		P	0.7
10	☐	10.000		309617		P	3.4



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		1836863		A	0.9
2	☐	10.000		1851150		A	1.5
3	☐	10.000		1866696		A	0.7
4	☐	10.000		1895634		A	2.3
5	☐	10.000		1902616		A	1.7
6	☐	10.000		1943899		A	0.3
7	☐	10.000		1927000		A	0.2
8	☐	10.000		1932693		A	1.6
9	☐	10.000		1909950		A	5.7
10	☐	10.000		1799886		A	0.7



	Rjct	Conc	Calc Conc	CPS	Ratio	Det.	RSD
1	☐	10.000		934681		P	0.3
2	☐	10.000		933176		P	2.8
3	☐	10.000		941934		P	1.3
4	☐	10.000		945059		P	0.5
5	☐	10.000		970562		P	0.8
6	☐	10.000		971252		P	0.4
7	☐	10.000		966283		P	1.2
8	☐	10.000		960351		P	0.5
9	☐	10.000		927518		P	1.0
10	☐	10.000		884020		P	3.1



	Rjct	Conc	Calc Conc	CPS	Ratio	Det.	RSD
1	☐	10.000		1406666		P	1.6
2	☐	10.000		1416289		P	0.5
3	☐	10.000		1439639		P	0.5
4	☐	10.000		1425890		P	1.0
5	☐	10.000		1450139		P	0.4
6	☐	10.000		1437288		M	2.1
7	☐	10.000		1449840		M	1.4
8	☐	10.000		1443020		P	1.1
9	☐	10.000		1407593		P	5.0
10	☐	10.000		1320175		P	0.3

Initial Calibration Verification (ICV) Report ICPMS6

Sample Name	**9J29041-ICV1**	**Sample Type**	ICV
File Name	014_ICV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 17:08:27	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpValue	% Rec	%QC Low	%QC High	QC Flag
Be	9	6	No Gas	40.295	ug/l	0.9	97471	40	100.74	90	110	
Na	23	45	He	4042.252	ug/l	2.1	2729207	4000	101.06	90	110	
Mg	24	45	He	4299.170	ug/l	2.4	1602092	4000	107.48	90	110	
Al	27	45	He	4115.902	ug/l	1.2	707207	4000	102.9	90	110	
K	39	45	He	4057.315	ug/l	0.6	1182193	4000	101.43	90	110	
Ca	44	45	He	4039.064	ug/l	0.8	65514	4000	100.98	90	110	
Ti	47	45	He	97.514	ug/l	1.1	8765	100	97.51	90	110	
V	51	74	He	96.672	ug/l	1.5	257442	100	96.67	90	110	
Cr	52	74	He	99.331	ug/l	2.6	328124	100	99.33	90	110	
Mn	55	74	He	100.900	ug/l	2.0	236688	100	100.9	90	110	
Fe	56	74	He	4047.022	ug/l	2.4	13069677	4000	101.18	90	110	
Co	59	74	He	103.473	ug/l	1.0	519888	100	103.47	90	110	
Ni	60	74	He	105.467	ug/l	1.5	134089	100	105.47	90	110	
Cu	65	74	He	101.613	ug/l	2.2	180395	100	101.61	90	110	
Cu	65	74	No Gas	102.637	ug/l	1.0	347951	100	102.64	90	110	
Zn	66	74	He	99.301	ug/l	1.2	68827	100	99.3	90	110	
As	75	74	He	98.484	ug/l	0.6	41375	100	98.48	90	110	
Se	78	74	HEHe	40.995	ug/l	2.2	2456	40	102.49	90	110	
Mo	95	103	He	40.580	ug/l	1.1	95491	40	101.45	90	110	
Ag	109	103	No Gas	41.828	ug/l	1.3	559232	40	104.57	90	110	
Cd	111	103	He	96.727	ug/l	0.7	147500	100	96.73	90	110	
Cd	111	103	No Gas	99.076	ug/l	1.0	363847	100	99.08	90	110	
Sb	123	103	No Gas	40.780	ug/l	1.3	436565	40	101.95	90	110	
Ba	138	159	He	101.798	ug/l	1.2	1034303	100	101.8	90	110	
Hg	201	159	No Gas	818.118	ng/l	1.0	2756	800	102.26	90	110	
Tl	205	159	No Gas	41.166	ug/l	1.8	2341555	40	102.92	90	110	
Pb	208	159	No Gas	101.858	ug/l	2.2	7898282	100	101.86	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	505374	0.7	508670.23	99.35	70	120	
Ge	74	No Gas	510022	0.9	503857.82	101.22	70	120	
Rh	103	No Gas	584246	0.6	594084.11	98.34	70	120	
Tb	159	No Gas	1891385	0.5	1836863.17	102.97	70	120	
Bi	209	No Gas	1393619	0.8	1406665.51	99.07	70	120	
Sc	45	He	104452	1.0	105522.87	98.99	70	120	
Ge	74	He	100150	1.5	101536.29	98.63	70	120	
Rh	103	He	347307	0.8	351523.24	98.8	70	120	
Tb	159	He	939330	1.5	934681.29	100.5	70	120	
Ge	74	HEHe	85404	0.9	86469.84	98.77	70	120	

Initial Calibration Blank (ICB) Report ICPMS6

Sample Name	**9J29041-ICB1**	**Sample Type**	ICB
File Name	015_ICB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 17:13:04	**Sample QC Pass/Fail**	Pass
Comment	ICB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	47.8	63	0.09	
Na	23	45	He	0.450	ug/l	54.6	4284	45	
Mg	24	45	He	-1.044	ug/l	N/A	1506	45	
Al	27	45	He	-0.226	ug/l	N/A	127	22.5	
K	39	45	He	0.751	ug/l	207.9	13745	45	
Ca	44	45	He	-0.133	ug/l	N/A	82	45	
Ti	47	45	He	-0.025	ug/l	N/A	3	1.8	
V	51	74	He	-0.017	ug/l	N/A	363	0.45	
Cr	52	74	He	0.013	ug/l	30.8	246	0.45	
Mn	55	74	He	0.015	ug/l	57.9	271	0.45	
Fe	56	74	He	-0.525	ug/l	N/A	9380	22.5	
Co	59	74	He	-0.001	ug/l	N/A	73	0.09	
Ni	60	74	He	-0.044	ug/l	N/A	797	0.45	
Cu	65	74	He	0.113	ug/l	4.3	402	0.45	
Cu	65	74	No Gas	0.146	ug/l	14.7	1018	0.45	
Zn	66	74	He	0.054	ug/l	59.4	169	1.8	
As	75	74	He	0.017	ug/l	15.9	21	0.45	
Se	78	74	HEHe	0.018	ug/l	84.6	2	0.45	
Mo	95	103	He	0.022	ug/l	14.6	88	0.45	
Ag	109	103	No Gas	0.002	ug/l	76.8	49	0.09	
Cd	111	103	He	-0.001	ug/l	N/A	10	0.09	
Cd	111	103	No Gas	0.003	ug/l	137.3	36	0.09	
Sb	123	103	No Gas	0.156	ug/l	3.6	1873	0.45	
Ba	138	159	He	-0.003	ug/l	N/A	357	0.45	
Hg	201	159	No Gas	3.617	ng/l	28.3	28	36	
Tl	205	159	No Gas	0.017	ug/l	5.5	1211	0.09	
Pb	208	159	No Gas	0.006	ug/l	38.0	4659	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	500287	1.3	508670.23	98.35	70	120	
Ge	74	No Gas	501071	0.4	503857.82	99.45	70	120	
Rh	103	No Gas	588057	0.3	594084.11	98.99	70	120	
Tb	159	No Gas	1829081	0.9	1836863.17	99.58	70	120	
Bi	209	No Gas	1399033	1.2	1406665.51	99.46	70	120	
Sc	45	He	104361	1.7	105522.87	98.9	70	120	
Ge	74	He	101500	1.5	101536.29	99.96	70	120	
Rh	103	He	350949	0.7	351523.24	99.84	70	120	
Tb	159	He	936045	0.4	934681.29	100.15	70	120	
Ge	74	HEHe	83725	0.1	86469.84	96.83	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL1**	**Sample Type**	CRL1
File Name	016CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 17:17:47	**Sample QC Pass/Fail**	Fail
Comment	A19J030 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag	
Be	9	6	No Gas	0.179	ug/l	4.9	469	99.44	70	130		
Na	23	45	He	7.141	ug/l	8.9	8887	79.34	70	130		
Mg	24	45	He	7.829	ug/l	0.9	4860	86.99	70	130		
Al	27	45	He	8.472	ug/l	3.7	1638	94.13	70	130		
K	39	45	He	8.218	ug/l	4.9	16071	91.31	70	130		
Ca	44	45	He	3.869	ug/l	67.0	148	42.99	70	130	CRL1 Failed	< MRL
Ti	47	45	He	0.147	ug/l	99.9	19	81.67	70	130		
V	51	74	He	0.172	ug/l	13.9	862	95.56	70	130		
Cr	52	74	He	0.178	ug/l	6.3	788	98.89	70	130		
Mn	55	74	He	0.163	ug/l	4.2	614	90.56	70	130		
Fe	56	74	He	7.776	ug/l	2.5	36028	86.4	70	130		
Co	59	74	He	0.177	ug/l	9.6	966	98.33	70	130		
Ni	60	74	He	-0.018	ug/l	N/A	819	-10	70	130	CRL1 Failed	< MRL
Cu	65	74	He	0.220	ug/l	18.8	588	122.22	70	130		
Cu	65	74	No Gas	0.250	ug/l	14.3	1362	138.89	70	130	CRL1 Failed	< MRL
Zn	66	74	He	0.159	ug/l	29.2	239	88.33	70	130		JB 10/30/19
As	75	74	He	0.182	ug/l	4.4	90	101.11	70	130		
Se	78	74	HEHe	0.185	ug/l	19.1	12	102.78	70	130		
Mo	95	103	He	0.173	ug/l	1.5	443	96.11	70	130		
Ag	109	103	No Gas	0.186	ug/l	2.9	2509	103.33	70	130		
Cd	111	103	He	0.166	ug/l	11.5	264	92.22	70	130		
Cd	111	103	No Gas	0.191	ug/l	0.9	725	106.11	70	130		
Sb	123	103	No Gas	0.201	ug/l	3.4	2344	111.67	70	130		
Ba	138	159	He	0.164	ug/l	5.9	2029	91.11	70	130		
Hg	201	159	No Gas	8.735	ng/l	10.2	45	121.32	70	130		
Tl	205	159	No Gas	0.181	ug/l	4.1	10368	100.56	70	130		
Pb	208	159	No Gas	0.157	ug/l	2.0	16211	87.22	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	502054	1.3	508670.23	98.7	70	120	
Ge	74	No Gas	501449	0.9	503857.82	99.52	70	120	
Rh	103	No Gas	585358	1.2	594084.11	98.53	70	120	
Tb	159	No Gas	1854627	0.8	1836863.17	100.97	70	120	
Bi	209	No Gas	1396232	1.1	1406665.51	99.26	70	120	
Sc	45	He	105508	1.1	105522.87	99.99	70	120	
Ge	74	He	100094	0.9	101536.29	98.58	70	120	
Rh	103	He	348396	0.7	351523.24	99.11	70	120	
Tb	159	He	930533	0.4	934681.29	99.56	70	120	
Ge	74	HEHe	84198	0.9	86469.84	97.37	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL2**	**Sample Type**	CRL2
File Name	017_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 17:22:30	**Sample QC Pass/Fail**	Pass
Comment	A19J031 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.859	ug/l	3.9	2129	95.44	70	130	
Na	23	45	He	42.563	ug/l	0.6	32672	94.58	70	130	
Mg	24	45	He	43.965	ug/l	1.3	18256	97.7	70	130	
Al	27	45	He	43.664	ug/l	1.1	7663	97.03	70	130	
K	39	45	He	43.580	ug/l	2.6	26086	96.84	70	130	
Ca	44	45	He	37.808	ug/l	14.8	696	84.02	70	130	
Ti	47	45	He	0.743	ug/l	38.9	72	82.56	70	130	
V	51	74	He	0.840	ug/l	4.3	2648	93.33	70	130	
Cr	52	74	He	0.857	ug/l	2.6	3040	95.22	70	130	
Mn	55	74	He	0.834	ug/l	3.0	2195	92.67	70	130	
Fe	56	74	He	41.177	ug/l	0.6	144394	91.5	70	130	
Co	59	74	He	0.877	ug/l	1.5	4499	97.44	70	130	
Ni	60	74	He	0.673	ug/l	8.4	1699	74.78	70	130	
Cu	65	74	He	0.971	ug/l	6.5	1927	107.89	70	130	
Cu	65	74	No Gas	0.912	ug/l	4.3	3583	101.33	70	130	
Zn	66	74	He	0.799	ug/l	21.9	684	88.78	70	130	
As	75	74	He	0.887	ug/l	3.2	388	98.56	70	130	
Se	78	74	HEHe	0.905	ug/l	8.4	54	100.56	70	130	
Mo	95	103	He	0.869	ug/l	7.2	2101	96.56	70	130	
Ag	109	103	No Gas	0.890	ug/l	1.6	12068	98.89	70	130	
Cd	111	103	He	0.836	ug/l	5.3	1301	92.89	70	130	
Cd	111	103	No Gas	0.856	ug/l	2.8	3208	95.11	70	130	
Sb	123	103	No Gas	0.888	ug/l	2.0	9817	98.67	70	130	
Ba	138	159	He	0.884	ug/l	0.2	9189	98.22	70	130	
Hg	201	159	No Gas	38.072	ng/l	7.2	140	105.76	70	130	
Tl	205	159	No Gas	0.869	ug/l	2.3	48275	96.56	70	130	
Pb	208	159	No Gas	0.884	ug/l	2.8	70698	98.22	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	508347	0.6	508670.23	99.94	70	120	
Ge	74	No Gas	503394	0.5	503857.82	99.91	70	120	
Rh	103	No Gas	591570	1.0	594084.11	99.58	70	120	
Tb	159	No Gas	1836943	3.1	1836863.17	100	70	120	
Bi	209	No Gas	1359215	5.5	1406665.51	96.63	70	120	
Sc	45	He	104409	0.3	105522.87	98.94	70	120	
Ge	74	He	100529	0.5	101536.29	99.01	70	120	
Rh	103	He	351321	0.3	351523.24	99.94	70	120	
Tb	159	He	921720	1.1	934681.29	98.61	70	120	
Ge	74	HEHe	82672	1.9	86469.84	95.61	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL3**	**Sample Type**	CRL3
File Name	018CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 17:27:12	**Sample QC Pass/Fail**	Pass
Comment	A19J032 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.740	ug/l	1.4	4268	96.67	70	130	
Na	23	45	He	89.209	ug/l	1.8	63311	99.12	70	130	
Mg	24	45	He	90.995	ug/l	1.4	35308	101.11	70	130	
Al	27	45	He	90.521	ug/l	0.5	15514	100.58	70	130	
K	39	45	He	90.089	ug/l	3.6	38982	100.1	70	130	
Ca	44	45	He	85.956	ug/l	2.7	1458	95.51	70	130	
Ti	47	45	He	2.022	ug/l	17.4	184	112.33	70	130	
V	51	74	He	1.685	ug/l	3.7	4901	93.61	70	130	
Cr	52	74	He	1.717	ug/l	3.3	5888	95.39	70	130	
Mn	55	74	He	1.751	ug/l	2.5	4351	97.28	70	130	
Fe	56	74	He	85.506	ug/l	1.0	287796	95.01	70	130	
Co	59	74	He	1.725	ug/l	5.3	8770	95.83	70	130	
Ni	60	74	He	1.553	ug/l	8.4	2814	86.28	70	130	
Cu	65	74	He	1.816	ug/l	1.4	3428	100.89	70	130	
Cu	65	74	No Gas	1.907	ug/l	0.6	6867	105.94	70	130	
Zn	66	74	He	1.779	ug/l	2.9	1365	98.83	70	130	
As	75	74	He	1.812	ug/l	3.1	777	100.67	70	130	
Se	78	74	HEHe	1.851	ug/l	8.2	112	102.83	70	130	
Mo	95	103	He	1.800	ug/l	3.1	4256	100	70	130	
Ag	109	103	No Gas	1.774	ug/l	0.6	23676	98.56	70	130	
Cd	111	103	He	1.691	ug/l	0.3	2583	93.94	70	130	
Cd	111	103	No Gas	1.845	ug/l	2.9	6782	102.5	70	130	
Sb	123	103	No Gas	1.807	ug/l	2.1	19487	100.39	70	130	
Ba	138	159	He	1.815	ug/l	1.9	18641	100.83	70	130	
Hg	201	159	No Gas	72.363	ng/l	7.6	253	100.5	70	130	
Tl	205	159	No Gas	1.726	ug/l	1.4	96244	95.89	70	130	
Pb	208	159	No Gas	1.768	ug/l	1.8	138237	98.22	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	507853	0.9	508670.23	99.84	70	120	
Ge	74	No Gas	500593	0.4	503857.82	99.35	70	120	
Rh	103	No Gas	582914	0.2	594084.11	98.12	70	120	
Tb	159	No Gas	1849606	1.7	1836863.17	100.69	70	120	
Bi	209	No Gas	1362883	3.7	1406665.51	96.89	70	120	
Sc	45	He	103113	1.4	105522.87	97.72	70	120	
Ge	74	He	100457	0.4	101536.29	98.94	70	120	
Rh	103	He	346332	0.2	351523.24	98.52	70	120	
Tb	159	He	930273	2.1	934681.29	99.53	70	120	
Ge	74	HEHe	85190	0.9	86469.84	98.52	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 1 JPB 10/30/19	**Sample Type**	CCV
File Name	031_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 18:47:33	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.726	ug/l	1.1	93779	40	101.81	90	110	
Na	23	45	He	3919.778	ug/l	1.2	2679672	4000	97.99	90	110	
Mg	24	45	He	4282.865	ug/l	2.5	1615943	4000	107.07	90	110	
Al	27	45	He	4054.302	ug/l	1.5	705260	4000	101.36	90	110	
K	39	45	He	3978.609	ug/l	0.3	1173830	4000	99.47	90	110	
Ca	44	45	He	3975.525	ug/l	1.6	65283	4000	99.39	90	110	
Ti	47	45	He	99.738	ug/l	1.7	9076	100	99.74	90	110	
V	51	74	He	95.217	ug/l	0.6	260861	100	95.22	90	110	
Cr	52	74	He	97.805	ug/l	0.4	332396	100	97.8	90	110	
Mn	55	74	He	98.964	ug/l	0.6	238824	100	98.96	90	110	
Fe	56	74	He	3986.457	ug/l	0.1	13245243	4000	99.66	90	110	
Co	59	74	He	101.067	ug/l	1.5	522308	100	101.07	90	110	
Ni	60	74	He	102.683	ug/l	1.1	134318	100	102.68	90	110	
Cu	65	74	He	99.511	ug/l	1.6	181735	100	99.51	90	110	
Cu	65	74	No Gas	102.615	ug/l	1.3	342994	100	102.62	90	110	
Zn	66	74	He	97.283	ug/l	1.3	69363	100	97.28	90	110	
As	75	74	He	98.290	ug/l	0.2	42475	100	98.29	90	110	
Se	78	74	HEHe	40.742	ug/l	1.9	2486	40	101.85	90	110	
Mo	95	103	He	40.137	ug/l	0.6	97260	40	100.34	90	110	
Ag	109	103	No Gas	40.874	ug/l	1.3	546913	40	102.19	90	110	
Cd	111	103	He	94.913	ug/l	0.6	149038	100	94.91	90	110	
Cd	111	103	No Gas	97.451	ug/l	1.1	358150	100	97.45	90	110	
Sb	123	103	No Gas	41.540	ug/l	1.8	445063	40	103.85	90	110	
Ba	138	159	He	101.567	ug/l	0.4	1056272	100	101.57	90	110	
Hg	201	159	No Gas	810.236	ng/l	1.9	2704	800	101.28	90	110	
Tl	205	159	No Gas	41.392	ug/l	3.4	2332934	40	103.48	90	110	
Pb	208	159	No Gas	104.492	ug/l	2.0	8029280	100	104.49	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	481033	1.0	508670.23	94.57	70	120	
Ge	74	No Gas	502831	1.2	503857.82	99.8	70	120	
Rh	103	No Gas	584690	0.7	594084.11	98.42	70	120	
Tb	159	No Gas	1874305	0.6	1836863.17	102.04	70	120	
Bi	209	No Gas	1408142	0.4	1406665.51	100.1	70	120	
Sc	45	He	105742	0.4	105522.87	100.21	70	120	
Ge	74	He	103012	0.7	101536.29	101.45	70	120	
Rh	103	He	357628	0.3	351523.24	101.74	70	120	
Tb	159	He	961419	0.8	934681.29	102.86	70	120	
Ge	74	HEHe	86977	1.2	86469.84	100.59	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	9J29041-CCB 1 JM 10/30/19	**Sample Type**	CCB
File Name	032_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 18:52:11	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.018	ug/l	26.9	77	0.09	
Na	23	45	He	2.658	ug/l	3.6	5505	45	
Mg	24	45	He	-0.637	ug/l	N/A	1581	45	
Al	27	45	He	1.596	ug/l	28.0	418	22.5	
K	39	45	He	-2.343	ug/l	N/A	12263	45	
Ca	44	45	He	0.004	ug/l	30148.2	80	45	
Ti	47	45	He	0.082	ug/l	110.4	12	1.8	
V	51	74	He	0.032	ug/l	27.8	474	0.45	
Cr	52	74	He	-0.009	ug/l	N/A	166	0.45	
Mn	55	74	He	0.037	ug/l	30.0	309	0.45	
Fe	56	74	He	2.676	ug/l	4.6	19004	22.5	
Co	59	74	He	0.001	ug/l	260.2	80	0.09	
Ni	60	74	He	-0.325	ug/l	N/A	419	0.45	
Cu	65	74	He	0.011	ug/l	79.5	211	0.45	
Cu	65	74	No Gas	0.001	ug/l	706.7	518	0.45	
Zn	66	74	He	0.013	ug/l	367.6	134	1.8	
As	75	74	He	0.027	ug/l	36.4	24	0.45	
Se	78	74	HEHe	0.020	ug/l	99.2	2	0.45	
Mo	95	103	He	0.029	ug/l	54.8	101	0.45	
Ag	109	103	No Gas	0.003	ug/l	52.5	59	0.09	
Cd	111	103	He	0.001	ug/l	819.4	12	0.09	
Cd	111	103	No Gas	0.004	ug/l	149.5	39	0.09	
Sb	123	103	No Gas	0.072	ug/l	11.7	931	0.45	
Ba	138	159	He	0.005	ug/l	29.0	430	0.45	
Hg	201	159	No Gas	2.798	ng/l	42.4	25	36	
Tl	205	159	No Gas	0.032	ug/l	5.9	2019	0.09	
Pb	208	159	No Gas	0.008	ug/l	43.4	4735	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	470061	0.9	508670.23	92.41	70	120	
Ge	74	No Gas	484440	0.7	503857.82	96.15	70	120	
Rh	103	No Gas	567299	0.5	594084.11	95.49	70	120	
Tb	159	No Gas	1814299	1.7	1836863.17	98.77	70	120	
Bi	209	No Gas	1357119	1.5	1406665.51	96.48	70	120	
Sc	45	He	99513	1.3	105522.87	94.3	70	120	
Ge	74	He	97186	1.0	101536.29	95.72	70	120	
Rh	103	He	345989	1.0	351523.24	98.43	70	120	
Tb	159	He	917242	1.2	934681.29	98.13	70	120	
Ge	74	HEHe	82641	1.7	86469.84	95.57	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J29041-CCV2**	**Sample Type**	CCV
File Name	037_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 19:46:15	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.257	ug/l	0.5	102717	40	103.14	90	110	
Na	23	45	He	3989.471	ug/l	1.2	2824923	4000	99.74	90	110	
Mg	24	45	He	4296.649	ug/l	1.2	1679320	4000	107.42	90	110	
Al	27	45	He	4086.914	ug/l	1.0	736421	4000	102.17	90	110	
K	39	45	He	4055.376	ug/l	0.9	1239082	4000	101.38	90	110	
Ca	44	45	He	4011.529	ug/l	0.1	68239	4000	100.29	90	110	
Ti	47	45	He	98.283	ug/l	1.4	9265	100	98.28	90	110	
V	51	74	He	97.781	ug/l	2.0	268277	100	97.78	90	110	
Cr	52	74	He	100.106	ug/l	1.1	340767	100	100.11	90	110	
Mn	55	74	He	100.202	ug/l	1.0	242212	100	100.2	90	110	
Fe	56	74	He	4068.664	ug/l	1.7	13539714	4000	101.72	90	110	
Co	59	74	He	103.062	ug/l	1.6	533494	100	103.06	90	110	
Ni	60	74	He	104.476	ug/l	2.0	136864	100	104.48	90	110	
Cu	65	74	He	101.090	ug/l	1.0	184924	100	101.09	90	110	
Cu	65	74	No Gas	103.326	ug/l	0.4	357444	100	103.33	90	110	
Zn	66	74	He	99.073	ug/l	0.8	70755	100	99.07	90	110	
As	75	74	He	98.407	ug/l	1.5	42594	100	98.41	90	110	
Se	78	74	HEHe	41.804	ug/l	2.4	2503	40	104.51	90	110	
Mo	95	103	He	40.867	ug/l	0.7	98906	40	102.17	90	110	
Ag	109	103	No Gas	41.398	ug/l	0.4	568983	40	103.5	90	110	
Cd	111	103	He	95.705	ug/l	1.9	150095	100	95.7	90	110	
Cd	111	103	No Gas	97.752	ug/l	1.2	369011	100	97.75	90	110	
Sb	123	103	No Gas	40.372	ug/l	1.2	444314	40	100.93	90	110	
Ba	138	159	He	102.991	ug/l	0.9	1068763	100	102.99	90	110	
Hg	201	159	No Gas	809.707	ng/l	4.2	2771	800	101.21	90	110	
Tl	205	159	No Gas	41.608	ug/l	1.3	2405177	40	104.02	90	110	
Pb	208	159	No Gas	104.230	ug/l	1.6	8213823	100	104.23	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	520133	1.1	508670.23	102.25	70	120	
Ge	74	No Gas	520451	1.0	503857.82	103.29	70	120	
Rh	103	No Gas	600606	1.6	594084.11	101.1	70	120	
Tb	159	No Gas	1922414	2.4	1836863.17	104.66	70	120	
Bi	209	No Gas	1424381	1.8	1406665.51	101.26	70	120	
Sc	45	He	109537	0.8	105522.87	103.8	70	120	
Ge	74	He	103193	1.8	101536.29	101.63	70	120	
Rh	103	He	357192	0.8	351523.24	101.61	70	120	
Tb	159	He	959327	0.6	934681.29	102.64	70	120	
Ge	74	HEHe	85370	2.5	86469.84	98.73	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB2**	**Sample Type**	CCB
File Name	038_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 19:54:55	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.008	ug/l	133.9	60	0.09	
Na	23	45	He	-0.088	ug/l	N/A	4055	45	
Mg	24	45	He	-1.105	ug/l	N/A	1534	45	
Al	27	45	He	-0.173	ug/l	N/A	140	22.5	
K	39	45	He	0.129	ug/l	558.6	14029	45	
Ca	44	45	He	-1.993	ug/l	N/A	53	45	
Ti	47	45	He	-0.013	ug/l	N/A	4	1.8	
V	51	74	He	0.025	ug/l	21.3	486	0.45	
Cr	52	74	He	-0.017	ug/l	N/A	148	0.45	
Mn	55	74	He	-0.008	ug/l	N/A	220	0.45	
Fe	56	74	He	-0.360	ug/l	N/A	10109	22.5	
Co	59	74	He	-0.001	ug/l	N/A	72	0.09	
Ni	60	74	He	-0.403	ug/l	N/A	343	0.45	
Cu	65	74	He	-0.002	ug/l	N/A	200	0.45	
Cu	65	74	No Gas	-0.051	ug/l	N/A	377	0.45	
Zn	66	74	He	-0.027	ug/l	N/A	114	1.8	
As	75	74	He	0.010	ug/l	66.6	18	0.45	
Se	78	74	HEHe	0.017	ug/l	184.1	2	0.45	
Mo	95	103	He	0.005	ug/l	106.1	47	0.45	
Ag	109	103	No Gas	0.002	ug/l	62.5	40	0.09	
Cd	111	103	He	-0.004	ug/l	N/A	6	0.09	
Cd	111	103	No Gas	-0.002	ug/l	N/A	18	0.09	
Sb	123	103	No Gas	0.035	ug/l	11.4	586	0.45	
Ba	138	159	He	-0.008	ug/l	N/A	302	0.45	
Hg	201	159	No Gas	3.631	ng/l	24.7	29	36	
Tl	205	159	No Gas	0.005	ug/l	7.2	558	0.09	
Pb	208	159	No Gas	-0.002	ug/l	N/A	4244	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	520234	1.1	508670.23	102.27	70	120	
Ge	74	No Gas	519417	1.2	503857.82	103.09	70	120	
Rh	103	No Gas	601778	1.3	594084.11	101.3	70	120	
Tb	159	No Gas	1915180	1.3	1836863.17	104.26	70	120	
Bi	209	No Gas	1394955	0.9	1406665.51	99.17	70	120	
Sc	45	He	107883	0.7	105522.87	102.24	70	120	
Ge	74	He	103464	1.2	101536.29	101.9	70	120	
Rh	103	He	358694	2.0	351523.24	102.04	70	120	
Tb	159	He	936519	1.6	934681.29	100.2	70	120	
Ge	74	HEHe	86470	1.3	86469.84	100	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL4**	**Sample Type**	CRL1
File Name	039CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 19:59:34	**Sample QC Pass/Fail**	Fail
Comment	A19J368 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag	
Be	9	6	No Gas	0.185	ug/l	4.9	488	102.78	70	130		
Na	23	45	He	7.237	ug/l	5.6	9114	80.41	70	130		
Mg	24	45	He	8.156	ug/l	1.2	5072	90.62	70	130		
Al	27	45	He	8.321	ug/l	3.2	1639	92.46	70	130		
K	39	45	He	8.016	ug/l	16.1	16298	89.07	70	130		
Ca	44	45	He	4.721	ug/l	33.1	165	52.46	70	130	CRL1 Failed	< MRL
Ti	47	45	He	0.179	ug/l	100.7	22	99.44	70	130		
V	51	74	He	0.200	ug/l	2.1	957	111.11	70	130		
Cr	52	74	He	0.150	ug/l	7.6	709	83.33	70	130		
Mn	55	74	He	0.152	ug/l	3.3	600	84.44	70	130		
Fe	56	74	He	7.901	ug/l	0.9	37209	87.79	70	130		
Co	59	74	He	0.178	ug/l	6.6	988	98.89	70	130		
Ni	60	74	He	-0.243	ug/l	N/A	546	-135	70	130	CRL1 Failed	< MRL
Cu	65	74	He	0.161	ug/l	9.7	492	89.44	70	130		
Cu	65	74	No Gas	0.130	ug/l	14.1	952	72.22	70	130		
Zn	66	74	He	0.096	ug/l	17.6	200	53.33	70	130	CRL1 Failed	< MRL
As	75	74	He	0.184	ug/l	7.6	93	102.22	70	130		JB 10/30/19
Se	78	74	HEHe	0.197	ug/l	11.3	13	109.44	70	130		
Mo	95	103	He	0.150	ug/l	3.4	398	83.33	70	130		
Ag	109	103	No Gas	0.181	ug/l	1.2	2434	100.56	70	130		
Cd	111	103	He	0.175	ug/l	10.3	286	97.22	70	130		
Cd	111	103	No Gas	0.184	ug/l	1.1	698	102.22	70	130		
Sb	123	103	No Gas	0.187	ug/l	6.8	2188	103.89	70	130		
Ba	138	159	He	0.162	ug/l	5.9	2050	90	70	130		
Hg	201	159	No Gas	9.146	ng/l	9.1	46	127.03	70	130		
Tl	205	159	No Gas	0.179	ug/l	3.9	10145	99.44	70	130		
Pb	208	159	No Gas	0.152	ug/l	4.5	15633	84.44	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	505859	1.6	508670.23	99.45	70	120	
Ge	74	No Gas	494806	1.1	503857.82	98.2	70	120	
Rh	103	No Gas	582873	1.4	594084.11	98.11	70	120	
Tb	159	No Gas	1831794	2.4	1836863.17	99.72	70	120	
Bi	209	No Gas	1366296	1.9	1406665.51	97.13	70	120	
Sc	45	He	107379	0.6	105522.87	101.76	70	120	
Ge	74	He	102236	0.5	101536.29	100.69	70	120	
Rh	103	He	357616	1.0	351523.24	101.73	70	120	
Tb	159	He	946280	0.8	934681.29	101.24	70	120	
Ge	74	HEHe	84673	1.0	86469.84	97.92	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL5**	**Sample Type**	CRL2
File Name	040_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 20:04:15	**Sample QC Pass/Fail**	Fail
Comment	A19J369 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.875	ug/l	1.5	2244	97.22	70	130	
Na	23	45	He	44.436	ug/l	2.6	34458	98.75	70	130	
Mg	24	45	He	45.824	ug/l	2.4	19242	101.83	70	130	
Al	27	45	He	46.937	ug/l	5.2	8352	104.3	70	130	
K	39	45	He	45.238	ug/l	5.6	26973	100.53	70	130	
Ca	44	45	He	43.695	ug/l	7.7	805	97.1	70	130	
Ti	47	45	He	0.770	ug/l	19.4	76	85.56	70	130	
V	51	74	He	0.881	ug/l	3.1	2774	97.89	70	130	
Cr	52	74	He	0.902	ug/l	8.5	3203	100.22	70	130	
Mn	55	74	He	0.830	ug/l	1.0	2197	92.22	70	130	
Fe	56	74	He	44.743	ug/l	3.1	156684	99.43	70	130	
Co	59	74	He	0.896	ug/l	6.2	4616	99.56	70	130	
Ni	60	74	He	0.452	ug/l	11.6	1426	50.22	70	130	CRL2 Failed
Cu	65	74	He	0.880	ug/l	8.1	1771	97.78	70	130	
Cu	65	74	No Gas	0.905	ug/l	6.2	3645	100.56	70	130	
Zn	66	74	He	0.791	ug/l	4.4	682	87.89	70	130	
As	75	74	He	0.913	ug/l	4.5	401	101.44	70	130	
Se	78	74	HEHe	0.938	ug/l	8.5	57	104.22	70	130	
Mo	95	103	He	0.890	ug/l	5.4	2159	98.89	70	130	
Ag	109	103	No Gas	0.919	ug/l	1.3	12664	102.11	70	130	
Cd	111	103	He	0.842	ug/l	1.6	1315	93.56	70	130	
Cd	111	103	No Gas	0.937	ug/l	3.5	3565	104.11	70	130	
Sb	123	103	No Gas	0.894	ug/l	1.6	10045	99.33	70	130	
Ba	138	159	He	0.891	ug/l	3.6	9372	99	70	130	
Hg	201	159	No Gas	35.626	ng/l	7.5	137	98.96	70	130	
Tl	205	159	No Gas	0.875	ug/l	3.1	50327	97.22	70	130	
Pb	208	159	No Gas	0.889	ug/l	6.3	73652	98.78	70	130	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	525868	0.8	508670.23	103.38	70	120	
Ge	74	No Gas	515635	0.5	503857.82	102.34	70	120	
Rh	103	No Gas	601278	1.7	594084.11	101.21	70	120	
Tb	159	No Gas	1901259	0.2	1836863.17	103.51	70	120	
Bi	209	No Gas	1388941	0.8	1406665.51	98.74	70	120	
Sc	45	He	106064	2.5	105522.87	100.51	70	120	
Ge	74	He	101050	2.4	101536.29	99.52	70	120	
Rh	103	He	352383	1.0	351523.24	100.24	70	120	
Tb	159	He	933352	2.3	934681.29	99.86	70	120	
Ge	74	HEHe	84974	0.6	86469.84	98.27	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL6**	**Sample Type**	CRL3
File Name	041CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 20:08:55	**Sample QC Pass/Fail**	Fail
Comment	A19J370 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.751	ug/l	0.8	4245	97.28	70	130	
Na	23	45	He	84.414	ug/l	7.8	59988	93.79	70	130	
Mg	24	45	He	87.518	ug/l	7.8	33957	97.24	70	130	
Al	27	45	He	85.692	ug/l	8.5	14656	95.21	70	130	
K	39	45	He	81.716	ug/l	11.3	36526	90.8	70	130	
Ca	44	45	He	76.387	ug/l	8.6	1301	84.87	70	130	
Ti	47	45	He	1.769	ug/l	19.1	161	98.28	70	130	
V	51	74	He	1.680	ug/l	10.0	4770	93.33	70	130	
Cr	52	74	He	1.672	ug/l	7.6	5605	92.89	70	130	
Mn	55	74	He	1.695	ug/l	5.7	4124	94.17	70	130	
Fe	56	74	He	83.592	ug/l	8.4	274985	92.88	70	130	
Co	59	74	He	1.732	ug/l	10.1	8589	96.22	70	130	
Ni	60	74	He	1.257	ug/l	2.9	2390	69.83	70	130	CRL3 Failed
Cu	65	74	He	1.722	ug/l	6.9	3188	95.67	70	130	
Cu	65	74	No Gas	1.714	ug/l	1.4	6094	95.22	70	130	
Zn	66	74	He	1.677	ug/l	13.0	1261	93.17	70	130	
As	75	74	He	1.736	ug/l	9.8	727	96.44	70	130	
Se	78	74	HEHe	1.815	ug/l	9.7	104	100.83	70	130	
Mo	95	103	He	1.660	ug/l	10.6	3952	92.22	70	130	
Ag	109	103	No Gas	1.781	ug/l	2.6	23235	98.94	70	130	
Cd	111	103	He	1.625	ug/l	6.9	2502	90.28	70	130	
Cd	111	103	No Gas	1.725	ug/l	0.8	6202	95.83	70	130	
Sb	123	103	No Gas	1.777	ug/l	1.1	18735	98.72	70	130	
Ba	138	159	He	1.692	ug/l	9.8	17347	94	70	130	
Hg	201	159	No Gas	73.072	ng/l	6.8	245	101.49	70	130	
Tl	205	159	No Gas	1.771	ug/l	1.1	94788	98.39	70	130	
Pb	208	159	No Gas	1.801	ug/l	0.7	135090	100.06	70	130	

R-11
JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	502129	0.5	508670.23	98.71	70	120	
Ge	74	No Gas	489862	0.2	503857.82	97.22	70	120	
Rh	103	No Gas	569731	0.3	594084.11	95.9	70	120	
Tb	159	No Gas	1775393	1.0	1836863.17	96.65	70	120	
Bi	209	No Gas	1351770	0.4	1406665.51	96.1	70	120	
Sc	45	He	103248	7.3	105522.87	97.84	70	120	
Ge	74	He	98456	6.8	101536.29	96.97	70	120	
Rh	103	He	350320	7.4	351523.24	99.66	70	120	
Tb	159	He	931919	7.9	934681.29	99.7	70	120	
Ge	74	HEHe	80607	0.8	86469.84	93.22	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL7**	**Sample Type**	CRL4
File Name	042CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 20:14:19	**Sample QC Pass/Fail**	Pass
Comment	A19J371 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.542	ug/l	2.1	8473	98.39	70	130	
Na	23	45	He	175.233	ug/l	1.6	118017	97.35	70	130	
Mg	24	45	He	179.997	ug/l	0.8	66578	100	70	130	
Al	27	45	He	178.245	ug/l	1.1	29747	99.02	70	130	
K	39	45	He	172.837	ug/l	2.3	61186	96.02	70	130	
Ca	44	45	He	161.310	ug/l	4.8	2606	89.62	70	130	
Ti	47	45	He	3.153	ug/l	7.3	279	87.58	70	130	
V	51	74	He	3.544	ug/l	0.5	9613	98.44	70	130	
Cr	52	74	He	3.479	ug/l	0.3	11433	96.64	70	130	
Mn	55	74	He	3.341	ug/l	3.1	7888	92.81	70	130	
Fe	56	74	He	171.868	ug/l	1.3	553353	95.48	70	130	
Co	59	74	He	3.572	ug/l	0.5	17627	99.22	70	130	
Ni	60	74	He	3.133 ✓	ug/l	2.5	4696	87.03	70	130	
Cu	65	74	He	3.588	ug/l	1.8	6418	99.67	70	130	
Cu	65	74	No Gas	3.684	ug/l	2.9	12327	102.33	70	130	
Zn	66	74	He	3.567	ug/l	2.3	2540	99.08	70	130	
As	75	74	He	3.566	ug/l	2.2	1479	99.06	70	130	
Se	78	74	HEHe	3.538	ug/l	1.6	206	98.28	70	130	
Mo	95	103	He	3.460	ug/l	2.2	8000	96.11	70	130	
Ag	109	103	No Gas	3.596	ug/l	3.1	46537	99.89	70	130	
Cd	111	103	He	3.550	ug/l	3.8	5308	98.61	70	130	
Cd	111	103	No Gas	3.581	ug/l	1.1	12753	99.47	70	130	
Sb	123	103	No Gas	3.631	ug/l	2.6	37787	100.86	70	130	
Ba	138	159	He	3.565	ug/l	0.5	35331	99.03	70	130	
Hg	201	159	No Gas	149.992	ng/l	4.6	491	104.16	70	130	
Tl	205	159	No Gas	3.552	ug/l	2.5	191295	98.67	70	130	
Pb	208	159	No Gas	3.643	ug/l	1.1	271155	101.19	70	130	

Ni MRL = 4 ppb

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	497726	1.6	508670.23	97.85	70	120	
Ge	74	No Gas	483324	2.4	503857.82	95.92	70	120	
Rh	103	No Gas	565610	2.4	594084.11	95.21	70	120	
Tb	159	No Gas	1788915	1.5	1836863.17	97.39	70	120	
Bi	209	No Gas	1362684	2.6	1406665.51	96.87	70	120	
Sc	45	He	100928	0.6	105522.87	95.65	70	120	
Ge	74	He	97967	0.9	101536.29	96.48	70	120	
Rh	103	He	339982	1.4	351523.24	96.72	70	120	
Tb	159	He	906917	0.2	934681.29	97.03	70	120	
Ge	74	HEHe	82362	1.4	86469.84	95.25	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 3 JPJ 10/30/19	**Sample Type**	CCV
File Name	053_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 21:09:27	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.692	ug/l	0.9	98109	40	101.73	90	110	
Na	23	45	He	4159.119	ug/l	1.1	2647780	4000	103.98	90	110	
Mg	24	45	He	4438.823	ug/l	1.0	1559742	4000	110.97 ✓	90	110	> +/- 10%
Al	27	45	He	4182.478	ug/l	1.2	677597	4000	104.56	90	110	
K	39	45	He	4109.882	ug/l	1.6	1128900	4000	102.75	90	110	
Ca	44	45	He	4044.874	ug/l	2.0	61863	4000	101.12	90	110	
Ti	47	45	He	103.962	ug/l	2.2	8811	100	103.96	90	110	
V	51	74	He	97.817	ug/l	1.9	247371	100	97.82	90	110	
Cr	52	74	He	100.461	ug/l	2.4	315153	100	100.46	90	110	
Mn	55	74	He	101.460	ug/l	2.3	226012	100	101.46	90	110	
Fe	56	74	He	4058.459	ug/l	1.7	12447808	4000	101.46	90	110	
Co	59	74	He	102.702	ug/l	1.9	489990	100	102.7	90	110	
Ni	60	74	He	104.822	ug/l	2.8	126549	100	104.82	90	110	
Cu	65	74	He	102.187	ug/l	1.8	172278	100	102.19	90	110	
Cu	65	74	No Gas	103.919	ug/l	0.1	328648	100	103.92	90	110	
Zn	66	74	He	99.062	ug/l	1.2	65207	100	99.06	90	110	
As	75	74	He	98.137	ug/l	1.9	39149	100	98.14	90	110	
Se	78	74	HEHe	41.660	ug/l	1.1	2306	40	104.15	90	110	
Mo	95	103	He	40.459	ug/l	0.7	90000	40	101.15	90	110	
Ag	109	103	No Gas	41.589	ug/l	1.9	529548	40	103.97	90	110	
Cd	111	103	He	96.341	ug/l	0.5	138880	100	96.34	90	110	
Cd	111	103	No Gas	98.426	ug/l	1.9	344235	100	98.43	90	110	
Sb	123	103	No Gas	40.356	ug/l	2.1	411444	40	100.89	90	110	
Ba	138	159	He	101.923	ug/l	2.1	984157	100	101.92	90	110	
Hg	201	159	No Gas	822.426	ng/l	1.8	2579	800	102.8	90	110	
Tl	205	159	No Gas	42.226	ug/l	1.2	2236687	40	105.56	90	110	
Pb	208	159	No Gas	107.307	ug/l	0.7	7748569	100	107.31	90	110	

Q-41 JPJ 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	503713	0.4	508670.23	99.03	70	120	
Ge	74	No Gas	475795	0.6	503857.82	94.43	70	120	
Rh	103	No Gas	556442	0.8	594084.11	93.66	70	120	
Tb	159	No Gas	1761238	0.1	1836863.17	95.88	70	120	
Bi	209	No Gas	1328966	0.3	1406665.51	94.48	70	120	
Sc	45	He	98481	0.3	105522.87	93.33	70	120	
Ge	74	He	95119	2.2	101536.29	93.68	70	120	
Rh	103	He	328324	1.2	351523.24	93.4	70	120	
Tb	159	He	892900	2.1	934681.29	95.53	70	120	
Ge	74	HEHe	78905	1.8	86469.84	91.25	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	9J29041-CCB 3 JR 10/31/19	**Sample Type**	CCB
File Name	054_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 21:14:02	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.002	ug/l	153.2	44	0.09	
Na	23	45	He	-0.169	ug/l	N/A	3695	45	
Mg	24	45	He	-0.351	ug/l	N/A	1686	45	
Al	27	45	He	-0.272	ug/l	N/A	113	22.5	
K	39	45	He	-1.334	ug/l	N/A	12561	45	
Ca	44	45	He	-1.735	ug/l	N/A	53	45	
Ti	47	45	He	-0.035	ug/l	N/A	2	1.8	
V	51	74	He	0.108	ug/l	7.5	660	0.45	
Cr	52	74	He	-0.010	ug/l	N/A	158	0.45	
Mn	55	74	He	-0.019	ug/l	N/A	179	0.45	
Fe	56	74	He	-0.850	ug/l	N/A	7823	22.5	
Co	59	74	He	-0.004	ug/l	N/A	53	0.09	
Ni	60	74	He	-0.435	ug/l	N/A	279	0.45	
Cu	65	74	He	-0.010	ug/l	N/A	171	0.45	
Cu	65	74	No Gas	-0.030	ug/l	N/A	417	0.45	
Zn	66	74	He	0.071	ug/l	55.3	170	1.8	
As	75	74	He	0.040	ug/l	26.5	29	0.45	
Se	78	74	HEHe	0.038	ug/l	38.8	3	0.45	
Mo	95	103	He	0.016	ug/l	8.2	70	0.45	
Ag	109	103	No Gas	0.003	ug/l	23.6	56	0.09	
Cd	111	103	He	-0.003	ug/l	N/A	7	0.09	
Cd	111	103	No Gas	0.000	ug/l	1926.1	23	0.09	
Sb	123	103	No Gas	0.154	ug/l	2.4	1757	0.45	
Ba	138	159	He	-0.008	ug/l	N/A	291	0.45	
Hg	201	159	No Gas	1.114	ng/l	143.4	20	36	
Tl	205	159	No Gas	0.007	ug/l	3.3	648	0.09	
Pb	208	159	No Gas	0.001	ug/l	52.4	4273	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	509219	0.9	508670.23	100.11	70	120	
Ge	74	No Gas	483195	1.2	503857.82	95.9	70	120	
Rh	103	No Gas	556779	1.5	594084.11	93.72	70	120	
Tb	159	No Gas	1823901	1.3	1836863.17	99.29	70	120	
Bi	209	No Gas	1347202	1.1	1406665.51	95.77	70	120	
Sc	45	He	99698	0.1	105522.87	94.48	70	120	
Ge	74	He	95480	0.5	101536.29	94.04	70	120	
Rh	103	He	339889	0.5	351523.24	96.69	70	120	
Tb	159	He	899828	0.6	934681.29	96.27	70	120	
Ge	74	HEHe	81841	4.9	86469.84	94.65	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 4 JB 10/30/19	**Sample Type**	CCV
File Name	065_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 22:05:11	**Sample QC Pass/Fail**	Pass
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.133	ug/l	0.8	101795	40	102.83	90	110	
Na	23	45	He	4085.638	ug/l	0.9	2753945	4000	102.14	90	110	
Mg	24	45	He	4372.938	ug/l	0.8	1626942	4000	109.32	90	110	
Al	27	45	He	4106.972	ug/l	1.1	704464	4000	102.67	90	110	
K	39	45	He	4043.085	ug/l	1.8	1175938	4000	101.08	90	110	
Ca	44	45	He	4009.972	ug/l	0.1	64933	4000	100.25	90	110	
Ti	47	45	He	99.549	ug/l	2.0	8934	100	99.55	90	110	
V	51	74	He	99.607	ug/l	1.5	261469	100	99.61	90	110	
Cr	52	74	He	101.441	ug/l	0.8	330363	100	101.44	90	110	
Mn	55	74	He	102.001	ug/l	0.7	235889	100	102	90	110	
Fe	56	74	He	4172.956	ug/l	0.9	13285991	4000	104.32	90	110	
Co	59	74	He	104.871	ug/l	0.5	519385	100	104.87	90	110	
Ni	60	74	He	107.238	ug/l	0.7	134394	100	107.24	90	110	
Cu	65	74	He	102.744	ug/l	1.5	179804	100	102.74	90	110	
Cu	65	74	No Gas	105.331	ug/l	1.4	346881	100	105.33	90	110	
Zn	66	74	He	100.162	ug/l	1.5	68431	100	100.16	90	110	
As	75	74	He	99.512	ug/l	0.6	41210	100	99.51	90	110	
Se	78	74	HEHe	41.802	ug/l	1.9	2426	40	104.51	90	110	
Mo	95	103	He	40.307	ug/l	1.5	94280	40	100.77	90	110	
Ag	109	103	No Gas	42.321	ug/l	1.6	553834	40	105.8	90	110	
Cd	111	103	He	95.507	ug/l	0.8	144764	100	95.51	90	110	
Cd	111	103	No Gas	99.814	ug/l	0.9	358794	100	99.81	90	110	
Sb	123	103	No Gas	41.077	ug/l	2.0	430417	40	102.69	90	110	
Ba	138	159	He	102.916	ug/l	0.8	1020581	100	102.92	90	110	
Hg	201	159	No Gas	822.095	ng/l	0.8	2695	800	102.76	90	110	
Tl	205	159	No Gas	42.022	ug/l	0.4	2326456	40	105.06	90	110	
Pb	208	159	No Gas	105.706	ug/l	0.4	7978127	100	105.71	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	517013	0.6	508670.23	101.64	70	120	
Ge	74	No Gas	495534	1.4	503857.82	98.35	70	120	
Rh	103	No Gas	571889	0.9	594084.11	96.26	70	120	
Tb	159	No Gas	1840844	0.3	1836863.17	100.22	70	120	
Bi	209	No Gas	1349602	0.4	1406665.51	95.94	70	120	
Sc	45	He	104272	1.0	105522.87	98.81	70	120	
Ge	74	He	98717	0.8	101536.29	97.22	70	120	
Rh	103	He	345213	0.3	351523.24	98.2	70	120	
Tb	159	He	916754	0.4	934681.29	98.08	70	120	
Ge	74	HEHe	82724	0.4	86469.84	95.67	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	9J29041-CCB 4 JJ 10/30/19	**Sample Type**	CCB
File Name	066_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 22:09:46	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.008	ug/l	68.2	62	0.09	
Na	23	45	He	-0.732	ug/l	N/A	3470	45	
Mg	24	45	He	-1.278	ug/l	N/A	1411	45	
Al	27	45	He	0.717	ug/l	20.4	287	22.5	
K	39	45	He	-0.281	ug/l	N/A	13378	45	
Ca	44	45	He	-1.557	ug/l	N/A	58	45	
Ti	47	45	He	0.051	ug/l	70.2	10	1.8	
V	51	74	He	0.065	ug/l	10.1	581	0.45	
Cr	52	74	He	-0.014	ug/l	N/A	154	0.45	
Mn	55	74	He	0.012	ug/l	117.4	262	0.45	
Fe	56	74	He	1.022	ug/l	1.3	14351	22.5	
Co	59	74	He	-0.002	ug/l	N/A	68	0.09	
Ni	60	74	He	-0.428	ug/l	N/A	304	0.45	
Cu	65	74	He	0.015	ug/l	97.4	224	0.45	
Cu	65	74	No Gas	-0.027	ug/l	N/A	448	0.45	
Zn	66	74	He	0.033	ug/l	59.2	153	1.8	
As	75	74	He	0.016	ug/l	47.9	21	0.45	
Se	78	74	HEHe	0.012	ug/l	139.4	2	0.45	
Mo	95	103	He	0.017	ug/l	22.7	74	0.45	
Ag	109	103	No Gas	0.003	ug/l	44.6	54	0.09	
Cd	111	103	He	-0.002	ug/l	N/A	8	0.09	
Cd	111	103	No Gas	0.003	ug/l	61.0	34	0.09	
Sb	123	103	No Gas	0.125	ug/l	9.0	1535	0.45	
Ba	138	159	He	0.007	ug/l	79.5	439	0.45	
Hg	201	159	No Gas	4.152	ng/l	40.0	30	36	
Tl	205	159	No Gas	0.010	ug/l	21.1	849	0.09	
Pb	208	159	No Gas	0.006	ug/l	49.4	4726	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	534065	0.5	508670.23	104.99	70	120	
Ge	74	No Gas	505802	1.0	503857.82	100.39	70	120	
Rh	103	No Gas	584765	1.3	594084.11	98.43	70	120	
Tb	159	No Gas	1873096	3.0	1836863.17	101.97	70	120	
Bi	209	No Gas	1389054	1.0	1406665.51	98.75	70	120	
Sc	45	He	103810	1.8	105522.87	98.38	70	120	
Ge	74	He	100864	1.6	101536.29	99.34	70	120	
Rh	103	He	348955	1.4	351523.24	99.27	70	120	
Tb	159	He	912906	1.3	934681.29	97.67	70	120	
Ge	74	HEHe	83595	1.2	86469.84	96.68	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 5	**Sample Type**	CCV
File Name	077_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 23:01:07	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.624	ug/l	2.2	100909	40	101.56	90	110	
Na	23	45	He	4110.488	ug/l	0.8	2680154	4000	102.76	90	110	
Mg	24	45	He	4423.718	ug/l	1.3	1591982	4000	110.59	90	110	> +/- 10%
Al	27	45	He	4154.598	ug/l	1.7	689331	4000	103.86	90	110	
K	39	45	He	4083.778	ug/l	1.1	1148874	4000	102.09	90	110	
Ca	44	45	He	3993.886	ug/l	1.0	62557	4000	99.85	90	110	
Ti	47	45	He	99.242	ug/l	1.4	8615	100	99.24	90	110	
V	51	74	He	98.475	ug/l	1.2	251883	100	98.48	90	110	
Cr	52	74	He	100.785	ug/l	0.8	319808	100	100.78	90	110	
Mn	55	74	He	102.045	ug/l	0.9	229930	100	102.04	90	110	
Fe	56	74	He	4131.644	ug/l	0.9	12818596	4000	103.29	90	110	
Co	59	74	He	103.518	ug/l	0.4	499565	100	103.52	90	110	
Ni	60	74	He	105.518	ug/l	0.9	128857	100	105.52	90	110	
Cu	65	74	He	102.498	ug/l	0.7	174781	100	102.5	90	110	
Cu	65	74	No Gas	103.851	ug/l	1.4	339861	100	103.85	90	110	
Zn	66	74	He	101.046	ug/l	0.8	67268	100	101.05	90	110	
As	75	74	He	98.817	ug/l	1.3	39870	100	98.82	90	110	
Se	78	74	HEHe	41.344	ug/l	0.4	2350	40	103.36	90	110	
Mo	95	103	He	41.348	ug/l	2.0	92739	40	103.37	90	110	
Ag	109	103	No Gas	41.836	ug/l	2.0	540603	40	104.59	90	110	
Cd	111	103	He	96.585	ug/l	0.4	140392	100	96.58	90	110	
Cd	111	103	No Gas	99.010	ug/l	2.1	351391	100	99.01	90	110	
Sb	123	103	No Gas	41.000	ug/l	2.8	424145	40	102.5	90	110	
Ba	138	159	He	103.080	ug/l	1.4	998736	100	103.08	90	110	
Hg	201	159	No Gas	796.889	ng/l	4.1	2637	800	99.61	90	110	
Tl	205	159	No Gas	41.397	ug/l	0.9	2313469	40	103.49	90	110	
Pb	208	159	No Gas	104.609	ug/l	1.2	7969602	100	104.61	90	110	

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JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	518999	0.7	508670.23	102.03	70	120	
Ge	74	No Gas	492423	2.0	503857.82	97.73	70	120	
Rh	103	No Gas	564758	2.2	594084.11	95.06	70	120	
Tb	159	No Gas	1858351	1.5	1836863.17	101.17	70	120	
Bi	209	No Gas	1357899	0.9	1406665.51	96.53	70	120	
Sc	45	He	100863	0.7	105522.87	95.58	70	120	
Ge	74	He	96188	1.1	101536.29	94.73	70	120	
Rh	103	He	331051	1.0	351523.24	94.18	70	120	
Tb	159	He	895736	0.5	934681.29	95.83	70	120	
Ge	74	HEHe	81039	1.6	86469.84	93.72	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB** 5 SB 10/30/19	**Sample Type**	CCB
File Name	078_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 23:05:44	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.008	ug/l	33.8	62	0.09	
Na	23	45	He	-0.679	ug/l	N/A	3392	45	
Mg	24	45	He	-1.391	ug/l	N/A	1326	45	
Al	27	45	He	0.006	ug/l	1838.1	160	22.5	
K	39	45	He	-0.042	ug/l	N/A	13011	45	
Ca	44	45	He	-1.225	ug/l	N/A	62	45	
Ti	47	45	He	-0.023	ug/l	N/A	3	1.8	
V	51	74	He	0.046	ug/l	29.2	507	0.45	
Cr	52	74	He	-0.012	ug/l	N/A	154	0.45	
Mn	55	74	He	-0.008	ug/l	N/A	206	0.45	
Fe	56	74	He	-0.696	ug/l	N/A	8355	22.5	
Co	59	74	He	-0.003	ug/l	N/A	60	0.09	
Ni	60	74	He	-0.482	ug/l	N/A	223	0.45	~~>LOQ~~
Cu	65	74	He	0.002	ug/l	455.8	192	0.45	
Cu	65	74	No Gas	-0.020	ug/l	N/A	460	0.45	
Zn	66	74	He	0.021	ug/l	150.9	138	1.8	
As	75	74	He	0.024	ug/l	27.4	23	0.45	
Se	78	74	HEHe	0.023	ug/l	81.3	3	0.45	
Mo	95	103	He	0.018	ug/l	23.5	76	0.45	
Ag	109	103	No Gas	0.003	ug/l	38.5	53	0.09	
Cd	111	103	He	0.005	ug/l	122.5	18	0.09	
Cd	111	103	No Gas	0.002	ug/l	150.9	30	0.09	
Sb	123	103	No Gas	0.147	ug/l	4.4	1742	0.45	
Ba	138	159	He	-0.007	ug/l	N/A	306	0.45	
Hg	201	159	No Gas	4.574	ng/l	4.7	31	36	
Tl	205	159	No Gas	0.010	ug/l	5.1	827	0.09	
Pb	208	159	No Gas	0.004	ug/l	56.5	4442	0.09	

< 4 ppb MRL for Ni this sequence

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	522041	0.8	508670.23	102.63	70	120	
Ge	74	No Gas	496280	0.8	503857.82	98.5	70	120	
Rh	103	No Gas	576330	1.1	594084.11	97.01	70	120	
Tb	159	No Gas	1814280	1.0	1836863.17	98.77	70	120	
Bi	209	No Gas	1352536	1.1	1406665.51	96.15	70	120	
Sc	45	He	100432	0.2	105522.87	95.18	70	120	
Ge	74	He	96133	1.5	101536.29	94.68	70	120	
Rh	103	He	341452	1.5	351523.24	97.14	70	120	
Tb	159	He	900459	1.5	934681.29	96.34	70	120	
Ge	74	HEHe	81039	0.9	86469.84	93.72	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 6	**Sample Type**	CCV
File Name	089_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/29/2019 23:56:59	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.627	ug/l	1.2	105242	40	101.57	90	110	
Na	23	45	He	4153.027	ug/l	0.3	2878197	4000	103.83	90	110	
Mg	24	45	He	4428.939	ug/l	0.6	1694099	4000	110.72	90	110	> +/- 10%
Al	27	45	He	4185.720	ug/l	0.3	738201	4000	104.64	90	110	
K	39	45	He	4219.041	ug/l	2.7	1261384	4000	105.48	90	110	
Ca	44	45	He	4104.995	ug/l	0.7	68344	4000	102.62	90	110	
Ti	47	45	He	100.344	ug/l	2.7	9258	100	100.34	90	110	
V	51	74	He	99.475	ug/l	0.5	270829	100	99.48	90	110	
Cr	52	74	He	101.645	ug/l	1.0	343320	100	101.64	90	110	
Mn	55	74	He	103.099	ug/l	1.9	247276	100	103.1	90	110	
Fe	56	74	He	4206.507	ug/l	0.8	13889843	4000	105.16	90	110	
Co	59	74	He	105.220	ug/l	0.2	540452	100	105.22	90	110	
Ni	60	74	He	106.308	ug/l	0.9	138177	100	106.31	90	110	
Cu	65	74	He	103.560	ug/l	0.3	187966	100	103.56	90	110	
Cu	65	74	No Gas	104.479	ug/l	0.7	362264	100	104.48	90	110	
Zn	66	74	He	100.417	ug/l	0.7	71154	100	100.42	90	110	
As	75	74	He	100.248	ug/l	0.7	43055	100	100.25	90	110	
Se	78	74	HEHe	41.194	ug/l	0.8	2510	40	102.99	90	110	
Mo	95	103	He	41.699	ug/l	1.1	99070	40	104.25	90	110	
Ag	109	103	No Gas	42.043	ug/l	1.4	573180	40	105.11	90	110	
Cd	111	103	He	97.090	ug/l	1.3	149478	100	97.09	90	110	
Cd	111	103	No Gas	101.108	ug/l	2.0	378595	100	101.11	90	110	
Sb	123	103	No Gas	41.627	ug/l	0.8	454414	40	104.07	90	110	
Ba	138	159	He	104.978	ug/l	1.8	1052012	100	104.98	90	110	
Hg	201	159	No Gas	793.569	ng/l	2.8	2763	800	99.2	90	110	
Tl	205	159	No Gas	41.596	ug/l	1.3	2445844	40	103.99	90	110	
Pb	208	159	No Gas	103.416	ug/l	1.4	8289796	100	103.42	90	110	

Q-41 JS 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	541242	1.6	508670.23	106.4	70	120	
Ge	74	No Gas	521637	0.9	503857.82	103.53	70	120	
Rh	103	No Gas	595764	0.9	594084.11	100.28	70	120	
Tb	159	No Gas	1955321	1.5	1836863.17	106.45	70	120	
Bi	209	No Gas	1415303	1.7	1406665.51	100.61	70	120	
Sc	45	He	107206	1.0	105522.87	101.6	70	120	
Ge	74	He	102378	0.3	101536.29	100.83	70	120	
Rh	103	He	350662	0.9	351523.24	99.76	70	120	
Tb	159	He	926560	1.2	934681.29	99.13	70	120	
Ge	74	HEHe	86847	1.0	86469.84	100.44	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	9J29041-CCB	**Sample Type**	CCB
File Name	090_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:01:34	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.003	ug/l	65.6	51	0.09	
Na	23	45	He	-0.210	ug/l	N/A	4035	45	
Mg	24	45	He	-0.855	ug/l	N/A	1659	45	
Al	27	45	He	0.026	ug/l	282.8	178	22.5	
K	39	45	He	1.564	ug/l	66.3	14702	45	
Ca	44	45	He	1.975	ug/l	65.9	122	45	
Ti	47	45	He	-0.015	ug/l	N/A	4	1.8	
V	51	74	He	0.100	ug/l	7.6	694	0.45	
Cr	52	74	He	-0.021	ug/l	N/A	133	0.45	
Mn	55	74	He	0.091	ug/l	22.3	460	0.45	
Fe	56	74	He	-0.856	ug/l	N/A	8476	22.5	
Co	59	74	He	-0.001	ug/l	N/A	72	0.09	
Ni	60	74	He	-0.468 ✓	ug/l	N/A	260	0.45	>LOD
Cu	65	74	He	-0.015	ug/l	N/A	177	0.45	
Cu	65	74	No Gas	-0.033	ug/l	N/A	442	0.45	
Zn	66	74	He	0.009	ug/l	322.4	140	1.8	
As	75	74	He	0.042	ug/l	8.9	33	0.45	
Se	78	74	HEHe	0.009	ug/l	200.4	2	0.45	
Mo	95	103	He	0.012	ug/l	67.7	66	0.45	
Ag	109	103	No Gas	0.004	ug/l	17.5	78	0.09	
Cd	111	103	He	-0.002	ug/l	N/A	8	0.09	
Cd	111	103	No Gas	0.004	ug/l	89.5	40	0.09	
Sb	123	103	No Gas	0.148	ug/l	3.0	1849	0.45	
Ba	138	159	He	0.001	ug/l	1028.7	399	0.45	
Hg	201	159	No Gas	1.734	ng/l	42.7	23	36	
Tl	205	159	No Gas	0.010	ug/l	5.4	870	0.09	
Pb	208	159	No Gas	0.002	ug/l	96.5	4585	0.09	

Ni: MRL = 4.46 JS 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	547302	0.4	508670.23	107.59	70	120	
Ge	74	No Gas	525761	1.6	503857.82	104.35	70	120	
Rh	103	No Gas	609390	0.1	594084.11	102.58	70	120	
Tb	159	No Gas	1920562	2.3	1836863.17	104.56	70	120	
Bi	209	No Gas	1407777	1.6	1406665.51	100.08	70	120	
Sc	45	He	109737	1.5	105522.87	103.99	70	120	
Ge	74	He	103697	0.6	101536.29	102.13	70	120	
Rh	103	He	361378	0.1	351523.24	102.8	70	120	
Tb	159	He	944495	1.0	934681.29	101.05	70	120	
Ge	74	HEHe	87991	0.5	86469.84	101.76	70	120	

Sample Report ICPMS6

Sample Name	**9101684-BLK1**	**Sample Type**	Sample
File Name	092SMPL.d	**Vial #**	3515
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:10:49	**Sample QC Pass/Fail**	Pass
Comment	9101684 Water AgAsCaCdCrCuHgMgNiPbSeZn	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.014	66.0	81	31.4	100	
Na	23	45	He	ug/l	6.154	2.9	8685	0.4	50000	
Mg	24	45	He	ug/l	24.403	1.0	11724	0.7	50000	
Al	27	45	He	ug/l	1.709	11.6	490	6.4	50000	
K	39	45	He	ug/l	1.879	116.3	15034	3.4	50000	
Ca	44	45	He	ug/l	128.813	1.5	2317	0.3	50000	
Ti	47	45	He	ug/l	0.031	169.4	9	57.3	2500	
V	51	74	He	ug/l	0.188	13.0	961	7.1	500	
Cr	52	74	He	ug/l	0.002	1017.9	218	28.4	1000	
Mn	55	74	He	ug/l	0.127	5.4	563	3.1	2500	
Fe	56	74	He	ug/l	0.167	22.4	12208	1.1	50000	
Co	59	74	He	ug/l	-0.003	N/A	67	15.0	500	
Ni	60	74	He	ug/l	-0.5	N/A	223	7.9	500	
Cu	65	74	He	ug/l	0.104	6.7	406	3.1	1000	
Cu	65	74	No Gas	ug/l	0.084	26.8	860	8.9	1000	
Zn	66	74	He	ug/l	-0.06	N/A	93	12.9	2500	
As	75	74	He	ug/l	0.041	22.1	33	12.5	500	
Se	78	74	HEHe	ug/l	0.026	40.3	3	22.3	100	
Mo	95	103	He	ug/l	0.013	129.9	69	60.9	100	
Ag	109	103	No Gas	ug/l	0.002	86.6	39	47.2	100	
Cd	111	103	He	ug/l	-0.004	N/A	4	43.4	1000	
Cd	111	103	No Gas	ug/l	-0.004	N/A	10	137.7	1000	
Sb	123	103	No Gas	ug/l	0.023	10.1	469	5.7	100	
Ba	138	159	He	ug/l	0.143	4.3	1876	4.2	2500	
W	186	159	No Gas	ug/l	0	N/A	137	29.6	40	
Hg	201	159	No Gas	ng/l	4.267	34.7	32	14.4	4000	
Tl	205	159	No Gas	ug/l	0.035	4.3	2356	3.8	100	
Pb	208	159	No Gas	ug/l	-0.024	N/A	2557	1.1	500	

Ca possible carryover ? RR3 JDS 12/26/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	555997	1.4	508670.23	109.3	70	120	
Sc	45	He	111523	1.1	105522.87	105.69	70	120	
Ge	74	No Gas	530964	0.8	503857.82	105.38	70	120	
Ge	74	He	106411	0.2	101536.29	104.8	70	120	
Ge	74	HEHe	88688	1.5	86469.84	102.57	70	120	
Rh	103	No Gas	619376	1.6	594084.11	104.26	70	120	
Rh	103	He	371112	0.9	351523.24	105.57	70	120	
Tb	159	No Gas	1958346	1.6	1836863.17	106.61	70	120	
Tb	159	He	958280	0.8	934681.29	102.52	70	120	
Bi	209	No Gas	1438014	1.9	1406665.51	102.23	70	120	

Sample Report ICPMS6

Sample Name	**9101684-BS1**	**Sample Type**	Sample
File Name	093SMPL.d	**Vial #**	3601
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:15:30	**Sample QC Pass/Fail**	Pass
Comment	9101684 Water AgAsCaCdCrCuHgMgNiPbSeZn	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	24.462	1.2	63607	1.0	100	
Na	23	45	He	ug/l	2596.654	4.5	1838032	2.6	50000	
Mg	24	45	He	ug/l	2601.97	3.4	1016711	1.7	50000	
Al	27	45	He	ug/l	2550.947	2.0	459366	1.3	50000	
K	39	45	He	ug/l	2530.781	2.5	777925	1.0	50000	
Ca	44	45	He	ug/l	2516.472	2.4	42810	2.6	50000	
Ti	47	45	He	ug/l	49.094	4.5	4625	2.7	2500	
V	51	74	He	ug/l	49.313	3.2	134493	1.1	500	
Cr	52	74	He	ug/l	49.691	3.0	167977	0.9	1000	
Mn	55	74	He	ug/l	49.38	3.9	118571	2.1	2500	
Fe	56	74	He	ug/l	2531.271	3.1	8364329	1.1	50000	
Co	59	74	He	ug/l	50.53	2.8	259648	0.8	500	
Ni	60	74	He	ug/l	49.912	2.6	65351	0.7	500	
Cu	65	74	He	ug/l	50.108	2.1	91082	0.1	1000	
Cu	65	74	No Gas	ug/l	50.301	0.8	176692	1.5	1000	
Zn	66	74	He	ug/l	48.375	2.0	34358	0.3	2500	
As	75	74	He	ug/l	48.767	3.0	20956	1.1	500	
Se	78	74	HEHe	ug/l	25.013	1.5	1502	0.2	100	
Mo	95	103	He	ug/l	25.104	1.6	60441	0.6	100	
Ag	109	103	No Gas	ug/l	25.973	3.4	358764	1.2	100	
Cd	111	103	He	ug/l	47.803	0.9	74579	1.1	1000	
Cd	111	103	No Gas	ug/l	48.547	3.7	184187	1.3	1000	
Sb	123	103	No Gas	ug/l	24.67	3.5	272927	1.1	100	
Ba	138	159	He	ug/l	50.683	1.4	515478	1.2	2500	
W	186	159	No Gas	ug/l	0.008	70.9	327	42.5	40	
Hg	201	159	No Gas	ng/l	957.859	0.8	3261	0.4	4000	
Tl	205	159	No Gas	ug/l	24.423	1.4	1405565	0.5	100	
Pb	208	159	No Gas	ug/l	51.09	2.5	4010393	2.2	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	543098	0.5	508670.23	106.77	70	120	
Sc	45	He	109471	2.1	105522.87	103.74	70	120	
Ge	74	No Gas	527594	0.8	503857.82	104.71	70	120	
Ge	74	He	102443	2.1	101536.29	100.89	70	120	
Ge	74	HEHe	85587	1.3	86469.84	98.98	70	120	
Rh	103	No Gas	603876	2.3	594084.11	101.65	70	120	
Rh	103	He	355311	1.6	351523.24	101.08	70	120	
Tb	159	No Gas	1913655	1.2	1836863.17	104.18	70	120	
Tb	159	He	939914	1.0	934681.29	100.56	70	120	
Bi	209	No Gas	1406789	2.0	1406665.51	100.01	70	120	

Sample Report ICPMS6

Sample Name	**A9J0959-01**	**Sample Type**	Sample
File Name	098SMPL.d	**Vial #**	3609
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:38:49	**Sample QC Pass/Fail**	Pass
Comment	9101684 Water AsCrCuZn	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.012	6.5	68	2.8	100	
Na	23	45	He	ug/l	6067.196	0.3	3814150	0.6	50000	
Mg	24	45	He	ug/l	2205.266	0.5	766419	0.5	50000	
Al	27	45	He	ug/l	294.516	1.1	47280	0.7	50000	
K	39	45	He	ug/l	1028.287	0.6	288483	0.3	50000	
Ca	44	45	He	ug/l	6668.319	0.1	100698	0.4	50000	
Ti	47	45	He	ug/l	12.477	9.0	1049	8.6	2500	
V	51	74	He	ug/l	2.735	3.7	7044	3.3	500	
Cr	52	74	He	ug/l	0.446	3.7	1533	3.7	1000	
Mn	55	74	He	ug/l	14.197	0.4	30745	0.2	2500	
Fe	56	74	He	ug/l	375.046	1.0	1120673	1.1	50000	
Co	59	74	He	ug/l	0.163	9.4	822	8.5	500	
Ni	60	74	He	ug/l	-0.061	N/A	702	3.6	500	
Cu	65	74	He	ug/l	1.187	3.3	2114	3.5	1000	
Cu	65	74	No Gas	ug/l	1.313	1.1	4544	0.6	1000	
Zn	66	74	He	ug/l	1.759	5.5	1236	5.4	2500	
As	75	74	He	ug/l	0.529	7.8	216	7.0	500	
Se	78	74	HEHe	ug/l	0.043	42.2	4	27.2	100	
Mo	95	103	He	ug/l	0.186	4.6	439	4.4	100	
Ag	109	103	No Gas	ug/l	0.004	47.4	61	35.5	100	
Cd	111	103	He	ug/l	-0.002	N/A	8	65.5	1000	
Cd	111	103	No Gas	ug/l	0.009	94.5	51	54.6	1000	
Sb	123	103	No Gas	ug/l	0.034	20.6	511	13.7	100	
Ba	138	159	He	ug/l	7.43	0.2	69945	0.7	2500	
W	186	159	No Gas	ug/l	0.156	10.5	3528	8.5	40	
Hg	201	159	No Gas	ng/l	4.14	45.0	29	18.9	4000	
Tl	205	159	No Gas	ug/l	0.008	9.4	688	4.2	100	
Pb	208	159	No Gas	ug/l	0.115	4.3	12608	1.5	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	499907	1.1	508670.23	98.28	70	120	
Sc	45	He	97290	0.4	105522.87	92.2	70	120	
Ge	74	No Gas	464782	1.5	503857.82	92.24	70	120	
Ge	74	He	91890	0.4	101536.29	90.5	70	120	
Ge	74	HEHe	80319	1.5	86469.84	92.89	70	120	
Rh	103	No Gas	536057	0.8	594084.11	90.23	70	120	
Rh	103	He	322735	0.7	351523.24	91.81	70	120	
Tb	159	No Gas	1801202	1.7	1836863.17	98.06	70	120	
Tb	159	He	866124	0.8	934681.29	92.67	70	120	
Bi	209	No Gas	1370512	1.0	1406665.51	97.43	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J29041-CCV** 7	**Sample Type**	CCV
File Name	101_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:52:48	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.451	ug/l	0.5	109996	40	101.13	90	110	
Na	23	45	He	4207.533	ug/l	1.8	3021817	4000	105.19	90	110	
Mg	24	45	He	4517.172	ug/l	3.0	1790270	4000	112.93	90	110	> +/- 10%
Al	27	45	He	4253.660	ug/l	3.2	777260	4000	106.34	90	110	
K	39	45	He	4253.340	ug/l	2.6	1317372	4000	106.33	90	110	
Ca	44	45	He	4098.490	ug/l	2.5	70704	4000	102.46	90	110	
Ti	47	45	He	102.356	ug/l	3.4	9784	100	102.36	90	110	
V	51	74	He	100.773	ug/l	0.1	284446	100	100.77	90	110	
Cr	52	74	He	102.419	ug/l	0.2	358645	100	102.42	90	110	
Mn	55	74	He	103.229	ug/l	1.3	256675	100	103.23	90	110	
Fe	56	74	He	4206.650	ug/l	1.7	14399363	4000	105.17	90	110	
Co	59	74	He	105.096	ug/l	0.6	559643	100	105.1	90	110	
Ni	60	74	He	105.875	ug/l	1.0	142675	100	105.88	90	110	
Cu	65	74	He	103.535	ug/l	1.1	194813	100	103.54	90	110	
Cu	65	74	No Gas	105.772	ug/l	1.1	377391	100	105.77	90	110	
Zn	66	74	He	100.170	ug/l	1.1	73592	100	100.17	90	110	
As	75	74	He	100.417	ug/l	1.1	44710	100	100.42	90	110	
Se	78	74	HEHe	42.021	ug/l	2.1	2643	40	105.05	90	110	
Mo	95	103	He	41.195	ug/l	2.1	101715	40	102.99	90	110	
Ag	109	103	No Gas	42.157	ug/l	0.5	591664	40	105.39	90	110	
Cd	111	103	He	96.606	ug/l	2.2	154572	100	96.61	90	110	
Cd	111	103	No Gas	100.007	ug/l	1.3	385491	100	100.01	90	110	
Sb	123	103	No Gas	41.124	ug/l	0.6	462147	40	102.81	90	110	
Ba	138	159	He	106.196	ug/l	1.4	1097406	100	106.2	90	110	
Hg	201	159	No Gas	801.557	ng/l	3.0	2802	800	100.19	90	110	
Tl	205	159	No Gas	41.994	ug/l	0.7	2479501	40	104.98	90	110	
Pb	208	159	No Gas	105.614	ug/l	2.2	8499764	100	105.61	90	110	

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JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	568100	0.4	508670.23	111.68	70	120	
Ge	74	No Gas	536832	0.8	503857.82	106.54	70	120	
Rh	103	No Gas	613308	1.6	594084.11	103.24	70	120	
Tb	159	No Gas	1963385	1.6	1836863.17	106.89	70	120	
Bi	209	No Gas	1419508	2.4	1406665.51	100.91	70	120	
Sc	45	He	111132	2.5	105522.87	105.32	70	120	
Ge	74	He	106143	1.2	101536.29	104.54	70	120	
Rh	103	He	364515	2.2	351523.24	103.7	70	120	
Tb	159	He	955404	1.5	934681.29	102.22	70	120	
Ge	74	HEHe	89654	0.6	86469.84	103.68	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	9J29041-CCB 7	**Sample Type**	CCB
File Name	102_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 00:57:23	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	122.4	62	0.09	
Na	23	45	He	-0.134	ug/l	N/A	4109	45	
Mg	24	45	He	-0.615	ug/l	N/A	1758	45	
Al	27	45	He	0.521	ug/l	40.0	270	22.5	
K	39	45	He	1.045	ug/l	363.6	14617	45	
Ca	44	45	He	0.388	ug/l	226.1	95	45	
Ti	47	45	He	-0.025	ug/l	N/A	3	1.8	
V	51	74	He	0.077	ug/l	11.3	639	0.45	
Cr	52	74	He	-0.014	ug/l	N/A	160	0.45	
Mn	55	74	He	0.132	ug/l	18.0	569	0.45	
Fe	56	74	He	-0.079	ug/l	N/A	11225	22.5	
Co	59	74	He	0.000	ug/l	20454.2	79	0.09	
Ni	60	74	He	-0.520	ug/l	N/A	194	0.45	>LOD
Cu	65	74	He	0.001	ug/l	165.5	209	0.45	
Cu	65	74	No Gas	-0.025	ug/l	N/A	482	0.45	
Zn	66	74	He	0.006	ug/l	1026.9	141	1.8	
As	75	74	He	0.039	ug/l	6.3	32	0.45	
Se	78	74	HEHe	0.020	ug/l	45.2	3	0.45	
Mo	95	103	He	0.016	ug/l	60.7	76	0.45	
Ag	109	103	No Gas	0.004	ug/l	10.3	71	0.09	
Cd	111	103	He	0.007	ug/l	37.7	23	0.09	
Cd	111	103	No Gas	0.003	ug/l	108.5	37	0.09	
Sb	123	103	No Gas	0.155	ug/l	6.5	1956	0.45	
Ba	138	159	He	0.004	ug/l	140.7	426	0.45	
Hg	201	159	No Gas	2.901	ng/l	17.9	27	36	
Tl	205	159	No Gas	0.010	ug/l	3.2	848	0.09	
Pb	208	159	No Gas	0.001	ug/l	161.4	4544	0.09	

Ni
J 10/30/19 MRL = 4 µg/L

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	565209	0.1	508670.23	111.12	70	120	
Ge	74	No Gas	538813	0.6	503857.82	106.94	70	120	
Rh	103	No Gas	618349	1.1	594084.11	104.08	70	120	
Tb	159	No Gas	1936115	0.7	1836863.17	105.4	70	120	
Bi	209	No Gas	1425511	1.5	1406665.51	101.34	70	120	
Sc	45	He	110641	6.4	105522.87	104.85	70	120	
Ge	74	He	105254	4.8	101536.29	103.66	70	120	
Rh	103	He	366295	5.1	351523.24	104.2	70	120	
Tb	159	He	946265	4.9	934681.29	101.24	70	120	
Ge	74	HEHe	90332	0.4	86469.84	104.47	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J29041-CCV**	**Sample Type**	CCV
File Name	113_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 01:48:44	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	42.448	ug/l	11.2	103519	40	106.12	90	110	
Na	23	45	He	4179.870	ug/l	1.9	2921781	4000	104.5	90	110	
Mg	24	45	He	4516.558	ug/l	0.7	1742653	4000	112.91	90	110	> +/- 10%
Al	27	45	He	4171.707	ug/l	1.6	742109	4000	104.29	90	110	
K	39	45	He	4255.313	ug/l	1.0	1282951	4000	106.38	90	110	
Ca	44	45	He	4077.287	ug/l	0.1	68472	4000	101.93	90	110	
Ti	47	45	He	100.492	ug/l	2.7	9351	100	100.49	90	110	
V	51	74	He	99.175	ug/l	1.2	274761	100	99.18	90	110	
Cr	52	74	He	100.375	ug/l	1.7	344974	100	100.37	90	110	
Mn	55	74	He	101.555	ug/l	0.8	247858	100	101.56	90	110	
Fe	56	74	He	4105.683	ug/l	1.5	13795783	4000	102.64	90	110	
Co	59	74	He	102.958	ug/l	1.5	538121	100	102.96	90	110	
Ni	60	74	He	104.388	ug/l	1.7	138079	100	104.39	90	110	
Cu	65	74	He	101.752	ug/l	2.9	187907	100	101.75	90	110	
Cu	65	74	No Gas	108.478	ug/l	8.7	357421	100	108.48	90	110	
Zn	66	74	He	99.558	ug/l	2.9	71776	100	99.56	90	110	
As	75	74	He	98.851	ug/l	1.6	43201	100	98.85	90	110	
Se	78	74	HEHe	41.936	ug/l	0.6	2565	40	104.84	90	110	
Mo	95	103	He	41.386	ug/l	0.5	99472	40	103.46	90	110	
Ag	109	103	No Gas	43.898	ug/l	10.9	571605	40	109.74	90	110	
Cd	111	103	He	97.245	ug/l	1.3	151464	100	97.24	90	110	
Cd	111	103	No Gas	103.939	ug/l	11.9	371479	100	103.94	90	110	
Sb	123	103	No Gas	42.705	ug/l	11.9	444922	40	106.76	90	110	
Ba	138	159	He	104.909	ug/l	1.3	1074659	100	104.91	90	110	
Hg	201	159	No Gas	821.368	ng/l	9.7	2739	800	102.67	90	110	
Tl	205	159	No Gas	43.292	ug/l	10.3	2436823	40	108.23	90	110	
Pb	208	159	No Gas	108.590	ug/l	9.6	8336311	100	108.59	90	110	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	513177	9.6	508670.23	100.89	70	120	
Ge	74	No Gas	498206	8.6	503857.82	98.88	70	120	
Rh	103	No Gas	573142	10.0	594084.11	96.47	70	120	
Tb	159	No Gas	1882901	8.8	1836863.17	102.51	70	120	
Bi	209	No Gas	1334122	8.2	1406665.51	94.84	70	120	
Sc	45	He	108141	0.7	105522.87	102.48	70	120	
Ge	74	He	104189	1.4	101536.29	102.61	70	120	
Rh	103	He	354730	0.6	351523.24	100.91	70	120	
Tb	159	He	947053	1.0	934681.29	101.32	70	120	
Ge	74	HEHe	87209	1.7	86469.84	100.85	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB**	**Sample Type**	CCB
File Name	114_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 01:53:20	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.004	ug/l	215.1	53	0.09	
Na	23	45	He	-0.758	ug/l	N/A	3647	45	
Mg	24	45	He	-1.799	ug/l	N/A	1288	45	
Al	27	45	He	-0.169	ug/l	N/A	143	22.5	
K	39	45	He	-0.300	ug/l	N/A	14125	45	
Ca	44	45	He	-1.659	ug/l	N/A	60	45	
Ti	47	45	He	0.010	ug/l	626.8	7	1.8	
V	51	74	He	0.096	ug/l	15.0	684	0.45	
Cr	52	74	He	-0.014	ug/l	N/A	160	0.45	
Mn	55	74	He	-0.007	ug/l	N/A	223	0.45	
Fe	56	74	He	-1.097	ug/l	N/A	7673	22.5	
Co	59	74	He	-0.004	ug/l	N/A	57	0.09	
Ni	60	74	He	-0.520	ug/l	N/A	192	0.45	>LOD
Cu	65	74	He	-0.018	ug/l	N/A	171	0.45	
Cu	65	74	No Gas	-0.040	ug/l	N/A	420	0.45	
Zn	66	74	He	0.165	ug/l	25.2	252	1.8	
As	75	74	He	0.030	ug/l	3.3	27	0.45	
Se	78	74	HEHe	0.010	ug/l	180.9	2	0.45	
Mo	95	103	He	0.017	ug/l	49.7	77	0.45	
Ag	109	103	No Gas	0.002	ug/l	53.0	47	0.09	
Cd	111	103	He	-0.004	ug/l	N/A	6	0.09	
Cd	111	103	No Gas	-0.004	ug/l	N/A	10	0.09	
Sb	123	103	No Gas	0.160	ug/l	4.7	1977	0.45	
Ba	138	159	He	-0.008	ug/l	N/A	311	0.45	
Hg	201	159	No Gas	2.207	ng/l	8.3	25	36	
Tl	205	159	No Gas	0.008	ug/l	6.8	761	0.09	
Pb	208	159	No Gas	-0.003	ug/l	N/A	4236	0.09	

N: MRL = 4.06 JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	539544	1.2	508670.23	106.07	70	120	
Ge	74	No Gas	527004	1.9	503857.82	104.59	70	120	
Rh	103	No Gas	607295	1.3	594084.11	102.22	70	120	
Tb	159	No Gas	1965281	1.7	1836863.17	106.99	70	120	
Bi	209	No Gas	1395784	1.0	1406665.51	99.23	70	120	
Sc	45	He	109659	1.4	105522.87	103.92	70	120	
Ge	74	He	103721	0.7	101536.29	102.15	70	120	
Rh	103	He	360685	0.5	351523.24	102.61	70	120	
Tb	159	He	946825	1.1	934681.29	101.3	70	120	
Ge	74	HEHe	88013	0.3	86469.84	101.78	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV 9	**Sample Type**	CCV
File Name	125_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 02:44:41	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.846	ug/l	0.9	105283	40	102.12	90	110	
Na	23	45	He	4258.752	ug/l	3.1	2982568	4000	106.47	90	110	
Mg	24	45	He	4531.366	ug/l	3.0	1751676	4000	113.28	90	110	> +/- 10%
Al	27	45	He	4211.219	ug/l	3.2	750541	4000	105.28	90	110	
K	39	45	He	4251.951	ug/l	1.5	1284715	4000	106.3	90	110	
Ca	44	45	He	4032.910	ug/l	3.6	67854	4000	100.82	90	110	
Ti	47	45	He	100.724	ug/l	4.5	9390	100	100.72	90	110	
V	51	74	He	98.071	ug/l	1.0	273667	100	98.07	90	110	
Cr	52	74	He	100.470	ug/l	2.0	347783	100	100.47	90	110	
Mn	55	74	He	101.541	ug/l	0.7	249611	100	101.54	90	110	
Fe	56	74	He	4154.355	ug/l	1.9	14058630	4000	103.86	90	110	
Co	59	74	He	103.408	ug/l	0.5	544408	100	103.41	90	110	
Ni	60	74	He	103.776	ug/l	0.8	138274	100	103.78	90	110	
Cu	65	74	He	101.898	ug/l	0.6	189570	100	101.9	90	110	
Cu	65	74	No Gas	103.876	ug/l	0.4	357419	100	103.88	90	110	
Zn	66	74	He	99.740	ug/l	0.6	72439	100	99.74	90	110	
As	75	74	He	99.249	ug/l	1.1	43688	100	99.25	90	110	
Se	78	74	HEHe	41.612	ug/l	3.5	2556	40	104.03	90	110	
Mo	95	103	He	40.892	ug/l	2.1	99696	40	102.23	90	110	
Ag	109	103	No Gas	42.144	ug/l	2.7	571056	40	105.36	90	110	
Cd	111	103	He	97.517	ug/l	1.6	154076	100	97.52	90	110	
Cd	111	103	No Gas	100.740	ug/l	3.1	374906	100	100.74	90	110	
Sb	123	103	No Gas	41.180	ug/l	1.6	446909	40	102.95	90	110	
Ba	138	159	He	105.637	ug/l	2.6	1078263	100	105.64	90	110	
Hg	201	159	No Gas	788.260	ng/l	1.7	2718	800	98.53	90	110	
Tl	205	159	No Gas	41.740	ug/l	1.6	2430245	40	104.35	90	110	
Pb	208	159	No Gas	105.212	ug/l	1.5	8351073	100	105.21	90	110	

Q-41
JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	538531	1.8	508670.23	105.87	70	120	
Ge	74	No Gas	517691	2.0	503857.82	102.75	70	120	
Rh	103	No Gas	592389	2.8	594084.11	99.71	70	120	
Tb	159	No Gas	1936238	1.5	1836863.17	105.41	70	120	
Bi	209	No Gas	1399975	0.7	1406665.51	99.52	70	120	
Sc	45	He	108403	2.8	105522.87	102.73	70	120	
Ge	74	He	104937	1.1	101536.29	103.35	70	120	
Rh	103	He	359908	1.7	351523.24	102.39	70	120	
Tb	159	He	943973	2.2	934681.29	100.99	70	120	
Ge	74	HEHe	87640	4.6	86469.84	101.35	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB** 9	**Sample Type**	CCB
File Name	126_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 02:49:15	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.006	ug/l	48.2	58	0.09	
Na	23	45	He	-0.305	ug/l	N/A	3957	45	
Mg	24	45	He	-1.890	ug/l	N/A	1249	45	
Al	27	45	He	0.934	ug/l	146.7	343	22.5	
K	39	45	He	0.876	ug/l	17.6	14447	45	
Ca	44	45	He	-0.959	ug/l	N/A	72	45	
Ti	47	45	He	-0.014	ug/l	N/A	4	1.8	
V	51	74	He	0.155	ug/l	0.7	852	0.45	
Cr	52	74	He	-0.011	ug/l	N/A	171	0.45	
Mn	55	74	He	-0.001	ug/l	N/A	239	0.45	
Fe	56	74	He	-0.962	ug/l	N/A	8194	22.5	
Co	59	74	He	0.000	ug/l	N/A	78	0.09	
Ni	60	74	He	-0.547	ug/l	N/A	158	0.45	>LOD
Cu	65	74	He	-0.017	ug/l	N/A	174	0.45	
Cu	65	74	No Gas	-0.048	ug/l	N/A	388	0.45	
Zn	66	74	He	0.006	ug/l	420.2	139	1.8	
As	75	74	He	0.056	ug/l	5.5	39	0.45	
Se	78	74	HEHe	0.024	ug/l	104.4	3	0.45	
Mo	95	103	He	0.017	ug/l	53.9	77	0.45	
Ag	109	103	No Gas	0.003	ug/l	49.9	63	0.09	
Cd	111	103	He	-0.004	ug/l	N/A	6	0.09	
Cd	111	103	No Gas	0.000	ug/l	3996.7	24	0.09	
Sb	123	103	No Gas	0.161	ug/l	3.4	1975	0.45	
Ba	138	159	He	-0.003	ug/l	N/A	356	0.45	
Hg	201	159	No Gas	1.438	ng/l	86.4	22	36	
Tl	205	159	No Gas	0.007	ug/l	4.2	676	0.09	
Pb	208	159	No Gas	0.000	ug/l	N/A	4431	0.09	

N: MRL 4 ppb
JAS 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	546596	0.9	508670.23	107.46	70	120	
Ge	74	No Gas	523217	0.3	503857.82	103.84	70	120	
Rh	103	No Gas	600871	0.7	594084.11	101.14	70	120	
Tb	159	No Gas	1950344	1.1	1836863.17	106.18	70	120	
Bi	209	No Gas	1397748	0.9	1406665.51	99.37	70	120	
Sc	45	He	109379	1.3	105522.87	103.65	70	120	
Ge	74	He	104605	1.2	101536.29	103.02	70	120	
Rh	103	He	362640	2.5	351523.24	103.16	70	120	
Tb	159	He	938246	1.3	934681.29	100.38	70	120	
Ge	74	HEHe	86873	0.2	86469.84	100.47	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J29041-CCV A JB 10/30/19	**Sample Type**	CCV
File Name	128_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 02:58:37	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.636	ug/l	3.0	105489	40	101.59	90	110	
Na	23	45	He	4225.622	ug/l	4.0	2878520	4000	105.64	90	110	
Mg	24	45	He	4436.350	ug/l	5.2	1667796	4000	110.91	90	110	> +/- 10%
Al	27	45	He	4231.475	ug/l	3.5	733639	4000	105.79	90	110	
K	39	45	He	4247.833	ug/l	3.2	1248191	4000	106.2	90	110	
Ca	44	45	He	4112.607	ug/l	4.6	67293	4000	102.82	90	110	
Ti	47	45	He	101.814	ug/l	5.5	9231	100	101.81	90	110	
V	51	74	He	99.617	ug/l	4.8	266200	100	99.62	90	110	
Cr	52	74	He	101.631	ug/l	3.3	337012	100	101.63	90	110	
Mn	55	74	He	102.292	ug/l	3.3	240869	100	102.29	90	110	
Fe	56	74	He	4149.715	ug/l	3.5	13452049	4000	103.74	90	110	
Co	59	74	He	104.173	ug/l	3.1	525337	100	104.17	90	110	
Ni	60	74	He	105.172	ug/l	2.7	134235	100	105.17	90	110	
Cu	65	74	He	101.842	ug/l	2.9	181495	100	101.84	90	110	
Cu	65	74	No Gas	104.134	ug/l	1.9	350525	100	104.13	90	110	
Zn	66	74	He	100.036	ug/l	3.6	69594	100	100.04	90	110	
As	75	74	He	99.758	ug/l	3.9	42060	100	99.76	90	110	
Se	78	74	HEHe	41.720	ug/l	1.0	2482	40	104.3	90	110	
Mo	95	103	He	41.385	ug/l	5.1	95684	40	103.46	90	110	
Ag	109	103	No Gas	42.084	ug/l	2.4	560791	40	105.21	90	110	
Cd	111	103	He	98.397	ug/l	2.9	147493	100	98.4	90	110	
Cd	111	103	No Gas	99.618	ug/l	2.0	364630	100	99.62	90	110	
Sb	123	103	No Gas	41.286	ug/l	1.2	440547	40	103.22	90	110	
Ba	138	159	He	105.577	ug/l	4.6	1033280	100	105.58	90	110	
Hg	201	159	No Gas	798.247	ng/l	2.1	2709	800	99.78	90	110	
Tl	205	159	No Gas	41.971	ug/l	1.7	2405014	40	104.93	90	110	
Pb	208	159	No Gas	106.308	ug/l	2.4	8303655	100	106.31	90	110	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	542535	1.9	508670.23	106.66	70	120	
Ge	74	No Gas	506470	1.4	503857.82	100.52	70	120	
Rh	103	No Gas	582374	1.1	594084.11	98.03	70	120	
Tb	159	No Gas	1905799	2.2	1836863.17	103.75	70	120	
Bi	209	No Gas	1347823	1.4	1406665.51	95.82	70	120	
Sc	45	He	105444	2.4	105522.87	99.93	70	120	
Ge	74	He	100572	2.7	101536.29	99.05	70	120	
Rh	103	He	341571	3.0	351523.24	97.17	70	120	
Tb	159	He	905546	3.2	934681.29	96.88	70	120	
Ge	74	HEHe	84800	0.7	86469.84	98.07	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB** A	**Sample Type**	CCB
File Name	129_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:03:12	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	52.8	68	0.09	
Na	23	45	He	-0.840	ug/l	N/A	3470	45	
Mg	24	45	He	-2.372	ug/l	N/A	1030	45	
Al	27	45	He	-0.180	ug/l	N/A	137	22.5	
K	39	45	He	1.358	ug/l	12.2	14145	45	
Ca	44	45	He	-1.227	ug/l	N/A	65	45	
Ti	47	45	He	-0.025	ug/l	N/A	3	1.8	
V	51	74	He	0.131	ug/l	22.0	757	0.45	
Cr	52	74	He	-0.014	ug/l	N/A	153	0.45	
Mn	55	74	He	-0.004	ug/l	N/A	224	0.45	
Fe	56	74	He	-1.199	ug/l	N/A	7114	22.5	
Co	59	74	He	-0.006	ug/l	N/A	44	0.09	
Ni	60	74	He	-0.551	ug/l	N/A	147	0.45	>LOD
Cu	65	74	He	-0.014	ug/l	N/A	173	0.45	
Cu	65	74	No Gas	-0.040	ug/l	N/A	402	0.45	
Zn	66	74	He	0.003	ug/l	120.4	132	1.8	
As	75	74	He	0.050	ug/l	9.8	35	0.45	
Se	78	74	HEHe	0.028	ug/l	88.3	3	0.45	
Mo	95	103	He	0.021	ug/l	20.9	83	0.45	
Ag	109	103	No Gas	0.002	ug/l	52.5	41	0.09	
Cd	111	103	He	-0.005	ug/l	N/A	3	0.09	
Cd	111	103	No Gas	-0.001	ug/l	N/A	21	0.09	
Sb	123	103	No Gas	0.170	ug/l	5.1	2025	0.45	
Ba	138	159	He	-0.010	ug/l	N/A	281	0.45	
Hg	201	159	No Gas	1.947	ng/l	28.8	24	36	
Tl	205	159	No Gas	0.008	ug/l	7.6	726	0.09	
Pb	208	159	No Gas	-0.003	ug/l	N/A	4160	0.09	

N: MRL = 4 ppb JB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	540924	0.6	508670.23	106.34	70	120	
Ge	74	No Gas	505642	1.4	503857.82	100.35	70	120	
Rh	103	No Gas	587675	1.5	594084.11	98.92	70	120	
Tb	159	No Gas	1903770	0.6	1836863.17	103.64	70	120	
Bi	209	No Gas	1367692	0.5	1406665.51	97.23	70	120	
Sc	45	He	106023	0.8	105522.87	100.47	70	120	
Ge	74	He	100686	2.6	101536.29	99.16	70	120	
Rh	103	He	349110	2.1	351523.24	99.31	70	120	
Tb	159	He	920739	0.5	934681.29	98.51	70	120	
Ge	74	HEHe	86452	2.6	86469.84	99.98	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL8**	**Sample Type**	CRL1
File Name	130CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:07:53	**Sample QC Pass/Fail**	Fail
Comment	A19J368 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.173	ug/l	7.1	496	96.11	70	130	
Na	23	45	He	6.847	ug/l	8.0	8770	76.08	70	130	
Mg	24	45	He	6.594	ug/l	3.5	4439	73.27	70	130	
Al	27	45	He	8.723	ug/l	6.6	1698	96.92	70	130	
K	39	45	He	10.758	ug/l	15.0	16972	119.53	70	130	
Ca	44	45	He	4.895	ug/l	12.4	167	54.39	70	130	CRL1 Failed
Ti	47	45	He	0.133	ug/l	57.3	18	73.89	70	130	
V	51	74	He	0.275	ug/l	6.1	1153	152.78	70	130	CRL1 Failed
Cr	52	74	He	0.160	ug/l	1.8	739	88.89	70	130	
Mn	55	74	He	0.154	ug/l	17.4	602	85.56	70	130	
Fe	56	74	He	7.012	ug/l	1.2	34122	77.91	70	130	
Co	59	74	He	0.162	ug/l	4.5	901	90	70	130	
Ni	60	74	He	-0.390	ug/l	N/A	356	-216.67	70	130	CRL1 Failed
Cu	65	74	He	0.132	ug/l	9.0	438	73.33	70	130	
Cu	65	74	No Gas	0.086	ug/l	11.0	844	47.78	70	130	CRL1 Failed
Zn	66	74	He	0.143	ug/l	34.6	232	79.44	70	130	
As	75	74	He	0.218	ug/l	11.1	107	121.11	70	130	
Se	78	74	HEHe	0.175	ug/l	16.9	12	97.22	70	130	
Mo	95	103	He	0.173	ug/l	18.8	448	96.11	70	130	
Ag	109	103	No Gas	0.181	ug/l	2.8	2515	100.56	70	130	
Cd	111	103	He	0.175	ug/l	3.7	283	97.22	70	130	
Cd	111	103	No Gas	0.172	ug/l	11.0	676	95.56	70	130	
Sb	123	103	No Gas	0.214	ug/l	2.3	2565	118.89	70	130	
Ba	138	159	He	0.160	ug/l	1.4	1974	88.89	70	130	
Hg	201	159	No Gas	7.062	ng/l	25.5	42	98.08	70	130	
Tl	205	159	No Gas	0.165	ug/l	1.1	9972	91.67	70	130	
Pb	208	159	No Gas	0.144	ug/l	2.7	15979	80	70	130	

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JPB 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	547143	0.4	508670.23	107.56	70	120	
Ge	74	No Gas	517715	1.0	503857.82	102.75	70	120	
Rh	103	No Gas	603370	0.9	594084.11	101.56	70	120	
Tb	159	No Gas	1946918	0.8	1836863.17	105.99	70	120	
Bi	209	No Gas	1396782	0.4	1406665.51	99.3	70	120	
Sc	45	He	106578	3.2	105522.87	101	70	120	
Ge	74	He	101763	1.0	101536.29	100.22	70	120	
Rh	103	He	353392	0.6	351523.24	100.53	70	120	
Tb	159	He	921960	0.7	934681.29	98.64	70	120	
Ge	74	HEHe	85439	1.5	86469.84	98.81	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRL9**	**Sample Type**	CRL2
File Name	131_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:12:33	**Sample QC Pass/Fail**	Fail
Comment	A19J369 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.856	ug/l	5.1	2280	95.11	70	130	
Na	23	45	He	42.600	ug/l	1.9	33101	94.67	70	130	
Mg	24	45	He	42.986	ug/l	0.3	18113	95.52	70	130	
Al	27	45	He	46.006	ug/l	5.5	8160	102.24	70	130	
K	39	45	He	44.425	ug/l	5.5	26652	98.72	70	130	
Ca	44	45	He	39.982	ug/l	10.6	741	88.85	70	130	
Ti	47	45	He	1.026	ug/l	13.3	99	114	70	130	
V	51	74	He	1.008	ug/l	2.4	3109	112	70	130	
Cr	52	74	He	0.837	ug/l	1.5	2984	93	70	130	
Mn	55	74	He	0.838	ug/l	1.9	2214	93.11	70	130	
Fe	56	74	He	41.176	ug/l	1.2	144923	91.5	70	130	
Co	59	74	He	0.841	ug/l	1.9	4333	93.44	70	130	
Ni	60	74	He	0.309	ug/l	13.9	1242	34.33	70	130	CRL2 Failed
Cu	65	74	He	0.825	ug/l	4.9	1672	91.67	70	130	
Cu	65	74	No Gas	0.834	ug/l	3.8	3394	92.67	70	130	
Zn	66	74	He	0.773	ug/l	7.3	669	85.89	70	130	
As	75	74	He	0.927	ug/l	2.0	406	103	70	130	
Se	78	74	HEHe	0.808	ug/l	13.1	50	89.78	70	130	
Mo	95	103	He	0.889	ug/l	4.3	2148	98.78	70	130	
Ag	109	103	No Gas	0.866	ug/l	3.1	11911	96.22	70	130	
Cd	111	103	He	0.857	ug/l	6.1	1332	95.22	70	130	
Cd	111	103	No Gas	0.837	ug/l	1.4	3183	93	70	130	
Sb	123	103	No Gas	0.906	ug/l	3.5	10152	100.67	70	130	
Ba	138	159	He	0.873	ug/l	3.6	9024	97	70	130	
Hg	201	159	No Gas	31.936	ng/l	6.8	127	88.71	70	130	
Tl	205	159	No Gas	0.820	ug/l	2.6	48007	91.11	70	130	
Pb	208	159	No Gas	0.822	ug/l	0.2	69663	91.33	70	130	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	545986	0.1	508670.23	107.34	70	120	
Ge	74	No Gas	514279	1.8	503857.82	102.07	70	120	
Rh	103	No Gas	600334	2.1	594084.11	101.05	70	120	
Tb	159	No Gas	1936520	0.9	1836863.17	105.43	70	120	
Bi	209	No Gas	1388761	0.5	1406665.51	98.73	70	120	
Sc	45	He	105699	2.1	105522.87	100.17	70	120	
Ge	74	He	100907	2.0	101536.29	99.38	70	120	
Rh	103	He	350998	0.9	351523.24	99.85	70	120	
Tb	159	He	916549	1.4	934681.29	98.06	70	120	
Ge	74	HEHe	86755	2.3	86469.84	100.33	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLA**	**Sample Type**	CRL3
File Name	132CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:17:13	**Sample QC Pass/Fail**	Fail
Comment	A19J370 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.757	ug/l	4.1	4584	97.61	70	130	
Na	23	45	He	88.377	ug/l	2.0	64074	98.2	70	130	
Mg	24	45	He	91.560	ug/l	4.2	36259	101.73	70	130	
Al	27	45	He	91.544	ug/l	2.4	16015	101.72	70	130	
K	39	45	He	90.780	ug/l	6.0	39992	100.87	70	130	
Ca	44	45	He	87.685	ug/l	9.6	1514	97.43	70	130	
Ti	47	45	He	1.572	ug/l	19.6	148	87.33	70	130	
V	51	74	He	1.867	ug/l	4.2	5288	103.72	70	130	
Cr	52	74	He	1.775	ug/l	1.3	5969	98.61	70	130	
Mn	55	74	He	1.805	ug/l	3.1	4394	100.28	70	130	
Fe	56	74	He	85.162	ug/l	0.2	281477	94.62	70	130	
Co	59	74	He	1.811	ug/l	2.8	9033	100.61	70	130	
Ni	60	74	He	1.197	ug/l	1.3	2319	66.5	70	130	CRL3 Failed
Cu	65	74	He	1.745	ug/l	3.2	3243	96.94	70	130	
Cu	65	74	No Gas	1.727	ug/l	3.5	6354	95.94	70	130	
Zn	66	74	He	1.692	ug/l	6.6	1280	94	70	130	
As	75	74	He	1.837	ug/l	3.2	773	102.06	70	130	
Se	78	74	HEHe	1.865	ug/l	2.5	107	103.61	70	130	
Mo	95	103	He	1.759	ug/l	1.0	4165	97.72	70	130	
Ag	109	103	No Gas	1.773	ug/l	2.8	23805	98.5	70	130	
Cd	111	103	He	1.625	ug/l	2.5	2486	90.28	70	130	
Cd	111	103	No Gas	1.764	ug/l	0.5	6529	98	70	130	
Sb	123	103	No Gas	1.794	ug/l	2.1	19471	99.67	70	130	
Ba	138	159	He	1.795	ug/l	1.9	17965	99.72	70	130	
Hg	201	159	No Gas	73.425	ng/l	8.5	262	101.98	70	130	
Tl	205	159	No Gas	1.670	ug/l	4.8	95224	92.78	70	130	
Pb	208	159	No Gas	1.698	ug/l	3.7	135870	94.33	70	130	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	540285	0.8	508670.23	106.22	70	120	
Ge	74	No Gas	507586	2.2	503857.82	100.74	70	120	
Rh	103	No Gas	586705	2.4	594084.11	98.76	70	120	
Tb	159	No Gas	1892171	3.3	1836863.17	103.01	70	120	
Bi	209	No Gas	1373124	2.2	1406665.51	97.62	70	120	
Sc	45	He	105304	2.7	105522.87	99.79	70	120	
Ge	74	He	98632	0.7	101536.29	97.14	70	120	
Rh	103	He	346746	1.2	351523.24	98.64	70	120	
Tb	159	He	906284	0.8	934681.29	96.96	70	120	
Ge	74	HEHe	80559	3.7	86469.84	93.16	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLB**	**Sample Type**	CRL4
File Name	133CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:21:54	**Sample QC Pass/Fail**	Pass
Comment	A19J371 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.439	ug/l	1.5	8968	95.53	70	130	
Na	23	45	He	174.721	ug/l	3.3	124672	97.07	70	130	
Mg	24	45	He	178.273	ug/l	2.9	69880	99.04	70	130	
Al	27	45	He	180.420	ug/l	3.1	31900	100.23	70	130	
K	39	45	He	176.128	ug/l	3.4	65799	97.85	70	130	
Ca	44	45	He	164.410	ug/l	3.4	2812	91.34	70	130	
Ti	47	45	He	3.690	ug/l	15.2	344	102.5	70	130	
V	51	74	He	3.538	ug/l	3.5	9966	98.28	70	130	
Cr	52	74	He	3.424	ug/l	1.4	11688	95.11	70	130	
Mn	55	74	He	3.439	ug/l	4.0	8423	95.53	70	130	
Fe	56	74	He	168.868	ug/l	1.3	564792	93.82	70	130	
Co	59	74	He	3.470	ug/l	2.8	17785	96.39	70	130	
Ni	60	74	He	3.022	ug/l	3.0	4734	83.94	70	130	
Cu	65	74	He	3.474	ug/l	1.7	6460	96.5	70	130	
Cu	65	74	No Gas	3.521	ug/l	2.4	12331	97.81	70	130	
Zn	66	74	He	3.321	ug/l	0.7	2466	92.25	70	130	
As	75	74	He	3.576	ug/l	1.7	1540	99.33	70	130	
Se	78	74	HEHe	3.786	ug/l	2.3	225	105.17	70	130	
Mo	95	103	He	3.455	ug/l	3.5	8299	95.97	70	130	
Ag	109	103	No Gas	3.561	ug/l	0.6	47682	98.92	70	130	
Cd	111	103	He	3.303	ug/l	1.8	5131	91.75	70	130	
Cd	111	103	No Gas	3.543	ug/l	3.1	13047	98.42	70	130	
Sb	123	103	No Gas	3.603	ug/l	0.8	38790	100.08	70	130	
Ba	138	159	He	3.581	ug/l	1.5	36142	99.47	70	130	
Hg	201	159	No Gas	134.849	ng/l	4.8	471	93.65	70	130	
Tl	205	159	No Gas	3.324	ug/l	0.8	190445	92.33	70	130	
Pb	208	159	No Gas	3.421	ug/l	1.9	271075	95.03	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	542382	0.3	508670.23	106.63	70	120	
Ge	74	No Gas	504878	1.0	503857.82	100.2	70	120	
Rh	103	No Gas	584928	1.9	594084.11	98.46	70	120	
Tb	159	No Gas	1902738	1.5	1836863.17	103.59	70	120	
Bi	209	No Gas	1378158	1.1	1406665.51	97.97	70	120	
Sc	45	He	106962	1.9	105522.87	101.36	70	120	
Ge	74	He	101744	0.8	101536.29	100.2	70	120	
Rh	103	He	353061	1.2	351523.24	100.44	70	120	
Tb	159	He	923718	0.5	934681.29	98.83	70	120	
Ge	74	HEHe	84102	0.5	86469.84	97.26	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J29041-CCV** B	**Sample Type**	CCV
File Name	140_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:54:39	**Sample QC Pass/Fail**	Fail
Comment	A19J138 - JPB 10/29	**ISTD Ref FileName**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.402	ug/l	2.1	96133	40	103.5	90	110	
Na	23	45	He	4319.571	ug/l	0.8	2802265	4000	107.99	90	110	
Mg	24	45	He	4549.722	ug/l	0.1	1629151	4000	113.74	90	110	> +/- 10%
Al	27	45	He	4264.315	ug/l	0.3	704030	4000	106.61	90	110	
K	39	45	He	4277.944	ug/l	2.2	1196854	4000	106.95	90	110	
Ca	44	45	He	4158.053	ug/l	1.1	64799	4000	103.95	90	110	
Ti	47	45	He	102.841	ug/l	0.5	8882	100	102.84	90	110	
V	51	74	He	99.341	ug/l	1.7	254432	100	99.34	90	110	
Cr	52	74	He	101.665	ug/l	2.0	323029	100	101.66	90	110	
Mn	55	74	He	103.706	ug/l	2.2	233972	100	103.71	90	110	
Fe	56	74	He	4298.540	ug/l	3.1	13350444	4000	107.46	90	110	
Co	59	74	He	104.470	ug/l	2.7	504751	100	104.47	90	110	
Ni	60	74	He	105.204	ug/l	1.5	128651	100	105.2	90	110	
Cu	65	74	He	101.578	ug/l	2.4	173435	100	101.58	90	110	
Cu	65	74	No Gas	105.078	ug/l	2.5	327154	100	105.08	90	110	
Zn	66	74	He	101.391	ug/l	1.3	67587	100	101.39	90	110	
As	75	74	He	100.088	ug/l	1.1	40440	100	100.09	90	110	
Se	78	74	HEHe	42.571	ug/l	0.7	2472	40	106.43	90	110	
Mo	95	103	He	42.189	ug/l	2.8	93299	40	105.47	90	110	
Ag	109	103	No Gas	42.561	ug/l	2.0	522846	40	106.4	90	110	
Cd	111	103	He	99.611	ug/l	2.5	142762	100	99.61	90	110	
Cd	111	103	No Gas	102.522	ug/l	2.4	345919	100	102.52	90	110	
Sb	123	103	No Gas	41.958	ug/l	2.8	412677	40	104.9	90	110	
Ba	138	159	He	105.734	ug/l	2.5	1018613	100	105.73	90	110	
Hg	201	159	No Gas	816.905	ng/l	4.4	2635	800	102.11	90	110	
Tl	205	159	No Gas	42.981	ug/l	2.6	2342332	40	107.45	90	110	
Pb	208	159	No Gas	107.208	ug/l	3.3	7963532	100	107.21	90	110	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	485169	1.1	508670.23	95.38	70	120	
Ge	74	No Gas	468552	1.8	503857.82	92.99	70	120	
Rh	103	No Gas	536951	2.0	594084.11	90.38	70	120	
Tb	159	No Gas	1812848	2.7	1836863.17	98.69	70	120	
Bi	209	No Gas	1312422	2.5	1406665.51	93.3	70	120	
Sc	45	He	100358	0.4	105522.87	95.11	70	120	
Ge	74	He	96324	1.3	101536.29	94.87	70	120	
Rh	103	He	326492	1.8	351523.24	92.88	70	120	
Tb	159	He	890997	2.8	934681.29	95.33	70	120	
Ge	74	HEHe	82776	0.3	86469.84	95.73	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J29041-CCB** B	**Sample Type**	CCB
File Name	141_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 03:59:14	**Sample QC Pass/Fail**	Fail
Comment	CCB	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.023	ug/l	29.0	96	0.09	
Na	23	45	He	41.960	ug/l	6.3	31518	45	
Mg	24	45	He	-1.088	ug/l	N/A	1456	45	
Al	27	45	He	-0.026	ug/l	N/A	157	22.5	
K	39	45	He	2.174	ug/l	6.7	13850	45	
Ca	44	45	He	0.204	ug/l	843.8	85	45	
Ti	47	45	He	-0.010	ug/l	N/A	4	1.8	
V	51	74	He	0.081	ug/l	33.8	596	0.45	
Cr	52	74	He	-0.020	ug/l	N/A	128	0.45	
Mn	55	74	He	0.288	ug/l	9.8	869	0.45	
Fe	56	74	He	-0.150	ug/l	N/A	10020	22.5	
Co	59	74	He	0.001	ug/l	891.0	74	0.09	
Ni	60	74	He	-0.524	ug/l	N/A	172	0.45	>LOD
Cu	65	74	He	-0.010	ug/l	N/A	171	0.45	
Cu	65	74	No Gas	0.015	ug/l	70.3	572	0.45	
Zn	66	74	He	0.054	ug/l	51.5	159	1.8	
As	75	74	He	0.042	ug/l	44.9	30	0.45	
Se	78	74	HEHe	0.014	ug/l	99.5	2	0.45	
Mo	95	103	He	0.020	ug/l	13.8	77	0.45	
Ag	109	103	No Gas	0.005	ug/l	36.7	86	0.09	
Cd	111	103	He	0.002	ug/l	312.1	13	0.09	
Cd	111	103	No Gas	0.000	ug/l	N/A	23	0.09	
Sb	123	103	No Gas	0.171	ug/l	6.6	1981	0.45	
Ba	138	159	He	-0.001	ug/l	N/A	357	0.45	
Hg	201	159	No Gas	2.523	ng/l	43.6	25	36	
Tl	205	159	No Gas	0.018	ug/l	15.7	1269	0.09	
Pb	208	159	No Gas	0.000	ug/l	N/A	4293	0.09	

Ni: MRL = 4 ppb

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	510908	8.8	508670.23	100.44	70	120	
Ge	74	No Gas	494773	8.1	503857.82	98.2	70	120	
Rh	103	No Gas	575901	10.2	594084.11	96.94	70	120	
Tb	159	No Gas	1881178	10.8	1836863.17	102.41	70	120	
Bi	209	No Gas	1361744	8.3	1406665.51	96.81	70	120	
Sc	45	He	102087	2.5	105522.87	96.74	70	120	
Ge	74	He	95929	3.5	101536.29	94.48	70	120	
Rh	103	He	332804	1.7	351523.24	94.67	70	120	
Tb	159	He	888877	2.1	934681.29	95.1	70	120	
Ge	74	HEHe	83768	1.7	86469.84	96.88	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLC**	**Sample Type**	CRL1
File Name	142CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 04:03:54	**Sample QC Pass/Fail**	Fail
Comment	A19J368 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag	
Be	9	6	No Gas	0.179	ug/l	6.1	467	99.44	70	130		
Na	23	45	He	34.791	ug/l	1.1	27250	386.57	70	130	CRL1 Failed	< MRL
Mg	24	45	He	7.463	ug/l	6.0	4644	82.92	70	130		
Al	27	45	He	8.809	ug/l	9.6	1668	97.88	70	130		
K	39	45	He	8.356	ug/l	13.6	15840	92.84	70	130		
Ca	44	45	He	8.412	ug/l	49.3	218	93.47	70	130		
Ti	47	45	He	0.038	ug/l	147.2	9	21.11	70	130	CRL1 Failed	< MRL
V	51	74	He	0.235	ug/l	23.7	1006	130.56	70	130	CRL1 Failed	< MRL
Cr	52	74	He	0.158	ug/l	17.5	704	87.78	70	130		
Mn	55	74	He	0.365	ug/l	4.1	1061	202.78	70	130	CRL1 Failed	< MRL
Fe	56	74	He	7.617	ug/l	1.8	34688	84.63	70	130		
Co	59	74	He	0.184	ug/l	6.3	978	102.22	70	130		
Ni	60	74	He	-0.399	ug/l	N/A	330	-221.67	70	130	CRL1 Failed	< MRL
Cu	65	74	He	0.148	ug/l	7.7	448	82.22	70	130		
Cu	65	74	No Gas	0.158	ug/l	13.5	1023	87.78	70	130		
Zn	66	74	He	0.098	ug/l	16.7	192	54.44	70	130	CRL1 Failed	< MRL
As	75	74	He	0.214	ug/l	9.3	101	118.89	70	130		
Se	78	74	HEHe	0.205	ug/l	14.1	13	113.89	70	130		
Mo	95	103	He	0.176	ug/l	14.2	436	97.78	70	130		
Ag	109	103	No Gas	0.185	ug/l	2.2	2389	102.78	70	130		
Cd	111	103	He	0.174	ug/l	7.5	269	96.67	70	130		
Cd	111	103	No Gas	0.173	ug/l	3.4	633	96.11	70	130		
Sb	123	103	No Gas	0.220	ug/l	4.9	2438	122.22	70	130		
Ba	138	159	He	0.156	ug/l	1.1	1911	86.67	70	130		
Hg	201	159	No Gas	7.690	ng/l	6.9	42	106.81	70	130		
Tl	205	159	No Gas	0.175	ug/l	3.8	10021	97.22	70	130		
Pb	208	159	No Gas	0.145	ug/l	4.0	15187	80.56	70	130		

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QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	500252	1.2	508670.23	98.34	70	120	
Ge	74	No Gas	484751	2.2	503857.82	96.21	70	120	
Rh	103	No Gas	560233	2.3	594084.11	94.3	70	120	
Tb	159	No Gas	1849659	3.0	1836863.17	100.7	70	120	
Bi	209	No Gas	1325929	1.8	1406665.51	94.26	70	120	
Sc	45	He	103710	1.6	105522.87	98.28	70	120	
Ge	74	He	97778	2.5	101536.29	96.3	70	120	
Rh	103	He	337829	1.9	351523.24	96.1	70	120	
Tb	159	He	911750	1.5	934681.29	97.55	70	120	
Ge	74	HEHe	80680	4.0	86469.84	93.3	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLD**	**Sample Type**	CRL2
File Name	143_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 04:08:35	**Sample QC Pass/Fail**	Fail
Comment	A19J369 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.854	ug/l	4.4	2146	94.89	70	130	
Na	23	45	He	63.608	ug/l	3.1	46694	141.35	70	130	CRL2 Failed
Mg	24	45	He	44.641	ug/l	2.6	18447	99.2	70	130	
Al	27	45	He	45.228	ug/l	6.8	7897	100.51	70	130	
K	39	45	He	45.037	ug/l	5.4	26415	100.08	70	130	
Ca	44	45	He	37.615	ug/l	2.5	691	83.59	70	130	
Ti	47	45	He	0.823	ug/l	32.5	79	91.44	70	130	
V	51	74	He	0.925	ug/l	8.7	2845	102.78	70	130	
Cr	52	74	He	0.899	ug/l	6.0	3145	99.89	70	130	
Mn	55	74	He	1.037	ug/l	2.3	2643	115.22	70	130	
Fe	56	74	He	42.256	ug/l	1.1	146256	93.9	70	130	
Co	59	74	He	0.846	ug/l	4.4	4297	94	70	130	
Ni	60	74	He	0.267	ug/l	17.6	1171	29.67	70	130	CRL2 Failed
Cu	65	74	He	0.791	ug/l	4.6	1589	87.89	70	130	
Cu	65	74	No Gas	0.837	ug/l	1.1	3268	93	70	130	
Zn	66	74	He	0.745	ug/l	8.5	640	82.78	70	130	
As	75	74	He	0.914	ug/l	3.4	395	101.56	70	130	
Se	78	74	HEHe	0.917	ug/l	8.0	55	101.89	70	130	
Mo	95	103	He	0.848	ug/l	4.1	2016	94.22	70	130	
Ag	109	103	No Gas	0.870	ug/l	3.1	11577	96.67	70	130	
Cd	111	103	He	0.832	ug/l	5.7	1272	92.44	70	130	
Cd	111	103	No Gas	0.849	ug/l	4.3	3124	94.33	70	130	
Sb	123	103	No Gas	0.894	ug/l	3.3	9698	99.33	70	130	
Ba	138	159	He	0.897	ug/l	0.7	9156	99.67	70	130	
Hg	201	159	No Gas	34.163	ng/l	8.2	130	94.9	70	130	
Tl	205	159	No Gas	0.821	ug/l	2.9	46441	91.22	70	130	
Pb	208	159	No Gas	0.820	ug/l	2.2	67164	91.11	70	130	

< MRL

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JB ~~10/31~~ 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	515331	1.4	508670.23	101.31	70	120	
Ge	74	No Gas	494024	1.7	503857.82	98.05	70	120	
Rh	103	No Gas	580805	1.9	594084.11	97.76	70	120	
Tb	159	No Gas	1871080	2.2	1836863.17	101.86	70	120	
Bi	209	No Gas	1343742	3.0	1406665.51	95.53	70	120	
Sc	45	He	104125	4.0	105522.87	98.68	70	120	
Ge	74	He	99425	1.0	101536.29	97.92	70	120	
Rh	103	He	345208	2.7	351523.24	98.2	70	120	
Tb	159	He	905464	3.0	934681.29	96.87	70	120	
Ge	74	HEHe	83563	0.6	86469.84	96.64	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLE**	**Sample Type**	CRL3
File Name	144CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 04:13:16	**Sample QC Pass/Fail**	Fail
Comment	A19J370 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.761	ug/l	1.8	4354	97.83	70	130	
Na	23	45	He	102.634	ug/l	6.9	73586	114.04	70	130	
Mg	24	45	He	89.534	ug/l	7.4	35414	99.48	70	130	
Al	27	45	He	91.020	ug/l	6.5	15891	101.13	70	130	
K	39	45	He	86.712	ug/l	9.0	38739	96.35	70	130	
Ca	44	45	He	82.973	ug/l	6.6	1436	92.19	70	130	
Ti	47	45	He	1.623	ug/l	27.8	151	90.17	70	130	
V	51	74	He	1.781	ug/l	5.8	5108	98.94	70	130	
Cr	52	74	He	1.703	ug/l	0.9	5789	94.61	70	130	
Mn	55	74	He	1.828	ug/l	4.3	4491	101.56	70	130	
Fe	56	74	He	84.525	ug/l	3.3	281966	93.92	70	130	
Co	59	74	He	1.743	ug/l	0.3	8780	96.83	70	130	
Ni	60	74	He	1.185	ug/l	4.9	2326	65.83	70	130	CRL3 Failed
Cu	65	74	He	1.730	ug/l	4.6	3244	96.11	70	130	
Cu	65	74	No Gas	1.808	ug/l	3.6	6362	100.44	70	130	
Zn	66	74	He	1.703	ug/l	8.4	1299	94.61	70	130	
As	75	74	He	1.759	ug/l	5.8	747	97.72	70	130	
Se	78	74	HEHe	1.885	ug/l	11.6	108	104.72	70	130	
Mo	95	103	He	1.724	ug/l	2.6	4053	95.78	70	130	
Ag	109	103	No Gas	1.824	ug/l	2.1	23473	101.33	70	130	
Cd	111	103	He	1.675	ug/l	3.4	2539	93.06	70	130	
Cd	111	103	No Gas	1.834	ug/l	1.4	6503	101.89	70	130	
Sb	123	103	No Gas	1.798	ug/l	2.9	18688	99.89	70	130	
Ba	138	159	He	1.769	ug/l	1.8	17714	98.28	70	130	
Hg	201	159	No Gas	69.929	ng/l	3.7	237	97.12	70	130	
Tl	205	159	No Gas	1.737	ug/l	0.9	93728	96.5	70	130	
Pb	208	159	No Gas	1.763	ug/l	0.7	133346	97.94	70	130	

N: R-11
JB3 10/30/19

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	511851	0.9	508670.23	100.63	70	120	
Ge	74	No Gas	487240	1.4	503857.82	96.7	70	120	
Rh	103	No Gas	561995	1.9	594084.11	94.6	70	120	
Tb	159	No Gas	1789564	2.0	1836863.17	97.43	70	120	
Bi	209	No Gas	1323632	1.6	1406665.51	94.1	70	120	
Sc	45	He	105267	5.4	105522.87	99.76	70	120	
Ge	74	He	99570	2.4	101536.29	98.06	70	120	
Rh	103	He	344033	2.6	351523.24	97.87	70	120	
Tb	159	He	906990	2.2	934681.29	97.04	70	120	
Ge	74	HEHe	81155	2.7	86469.84	93.85	70	120	

CRL Verification ICPMS6

Sample Name	**9J29041-CRLF**	**Sample Type**	CRL4
File Name	145CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J29041A.b	**Total Dilution**	1.0000
Acq Time	10/30/2019 04:17:56	**Sample QC Pass/Fail**	Pass
Comment	A19J371 - JPB 10/29	**ISTD Ref File**	004CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.574	ug/l	9.1	8946	99.28	70	130	
Na	23	45	He	193.377	ug/l	1.9	133099	107.43	70	130	
Mg	24	45	He	180.189	ug/l	1.7	68323	100.1	70	130	
Al	27	45	He	185.487	ug/l	1.5	31729	103.05	70	130	
K	39	45	He	181.285	ug/l	1.7	65140	100.71	70	130	
Ca	44	45	He	178.858	ug/l	5.1	2952	99.37	70	130	
Ti	47	45	He	3.984	ug/l	2.7	360	110.67	70	130	
V	51	74	He	3.542	ug/l	2.2	9740	98.39	70	130	
Cr	52	74	He	3.437	ug/l	2.7	11450	95.47	70	130	
Mn	55	74	He	3.552	ug/l	2.9	8486	98.67	70	130	
Fe	56	74	He	170.446	ug/l	3.4	556318	94.69	70	130	
Co	59	74	He	3.514	ug/l	4.2	17578	97.61	70	130	
Ni	60	74	He	2.958	ug/l	4.9	4541	82.17	70	130	
Cu	65	74	He	3.484	ug/l	1.5	6326	96.78	70	130	
Cu	65	74	No Gas	3.569	ug/l	6.8	12206	99.14	70	130	
Zn	66	74	He	3.391	ug/l	3.0	2455	94.19	70	130	
As	75	74	He	3.600	ug/l	2.4	1513	100	70	130	
Se	78	74	HEHe	3.483	ug/l	1.1	206	96.75	70	130	
Mo	95	103	He	3.587	ug/l	3.6	8362	99.64	70	130	
Ag	109	103	No Gas	3.562	ug/l	7.8	46452	98.94	70	130	
Cd	111	103	He	3.468	ug/l	2.6	5231	96.33	70	130	
Cd	111	103	No Gas	3.594	ug/l	6.4	12900	99.83	70	130	
Sb	123	103	No Gas	3.595	ug/l	8.0	37690	99.86	70	130	
Ba	138	159	He	3.669	ug/l	2.9	36187	101.92	70	130	
Hg	201	159	No Gas	139.692	ng/l	8.8	480	97.01	70	130	
Tl	205	159	No Gas	3.275	ug/l	7.7	185017	90.97	70	130	
Pb	208	159	No Gas	3.383	ug/l	7.2	264408	93.97	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	522406	5.2	508670.23	102.7	70	120	
Ge	74	No Gas	494224	5.4	503857.82	98.09	70	120	
Rh	103	No Gas	571852	7.5	594084.11	96.26	70	120	
Tb	159	No Gas	1881649	6.0	1836863.17	102.44	70	120	
Bi	209	No Gas	1338576	6.5	1406665.51	95.16	70	120	
Sc	45	He	103479	1.5	105522.87	98.06	70	120	
Ge	74	He	99332	1.5	101536.29	97.83	70	120	
Rh	103	He	342855	1.1	351523.24	97.53	70	120	
Tb	159	He	902933	1.3	934681.29	96.6	70	120	
Ge	74	HEHe	83917	0.4	86469.84	97.05	70	120	

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

Metals IFA/IFB Metals Internal Standards Recovery Summary

A19J465 IFA
A19J466 IFB
A9J0959 (I.S Tables)

Analytical Standard Record

Apex Laboratories

A19J465

Description:	ICSA working std	Expires:	12/03/19
Standard Type:	Calibration Standa	Prepared:	10/30/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Marshall Pattee
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	11/08/19 12:49 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

Analytical Standard Record

Apex Laboratories

A19J466

Description:	ICSA+B working std	Expires:	12/03/19
Standard Type:	Calibration Standa	Prepared:	10/30/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Marshall Pattee
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	11/08/19 12:49 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

A19J466

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
10/29/2019 15:59	rinse										
10/29/2019 16:03	rinse										
10/29/2019 16:08	rinse										
10/29/2019 16:13	9J29041-CAL0	100	100	100	100	100	100	100	100	100	100
10/29/2019 16:18	9J29041-CAL1	100.9261999	98.81380216	101.1258513	98.91430607	98.25849105	100.7214321	99.92375184	100.7778055	99.83892691	100.6841217
10/29/2019 16:23	9J29041-CAL2	102.1455774	101.4680262	101.534028	101.140538	99.42911887	101.0548944	101.3463614	101.6241295	100.7759718	102.3441145
10/29/2019 16:28	9J29041-CAL3	102.9951416	101.5201381	103.0128129	101.8104726	101.3417279	101.7396802	101.0647395	103.1995283	101.1103168	101.3666537
10/29/2019 16:32	9J29041-CAL4	103.9768391	104.4330043	103.6290086	104.0219479	100.3055362	102.8246225	104.2746552	103.5796372	103.8387713	103.0905326
10/29/2019 16:37	9J29041-CAL5	104.0206809	104.3651959	106.3365144	104.26178	104.1275046	104.0272996	104.7293639	105.8271083	103.9126813	102.1769627
10/29/2019 16:42	9J29041-CAL6	105.6588759	104.528816	106.5239615	104.0365502	102.1874602	105.5622287	103.7387504	104.9070908	103.3810188	103.0693025
10/29/2019 16:47	9J29041-CAL7	104.0220262	101.6105008	106.0656675	102.0499436	97.23899493	102.9594968	102.7059311	105.2170623	102.7463172	102.5844128
10/29/2019 16:52	9J29041-CAL8	100.9819328	97.57928937	100.129088	97.43896821	96.55161461	98.51960636	97.24896712	103.9789046	99.23365001	100.0659238
10/29/2019 16:57	9J29041-CAL9	93.36034988	92.6299231	92.60210478	89.29835497	91.65001346	89.52789468	88.07854081	97.98693842	94.57981233	93.85141534
10/29/2019 17:08	9J29041-ICV1	99.35192852	98.98552165	101.2233114	98.63476398	98.76725419	98.34397635	98.80052977	102.9681857	100.4973349	99.07253976
10/29/2019 17:13	9J29041-ICB1	98.35199319	98.89905067	99.44681021	99.96453156	96.82554441	98.98544163	99.8366348	99.57634896	100.1458626	99.45738012
10/29/2019 17:17	9J29041-CRL1	98.69940098	99.9855829	99.52195707	98.57966053	97.37258679	98.53122256	99.1103035	100.9670802	99.55614211	99.25826764
10/29/2019 17:22	9J29041-CRL2	99.93637069	98.94448474	99.90804284	99.00813788	95.60742798	99.57687417	99.94249408	100.0043222	98.61334338	96.62670813
10/29/2019 17:27	9J29041-CRL3	99.83939169	97.71618544	99.35197658	98.93745707	98.52025091	98.11983468	98.5233096	100.6937476	99.52833798	96.88751617
10/29/2019 17:40	9J29041-IFA1	86.18550166	85.40400452	83.06570944	82.48142282	84.29183324	77.54369595	80.0873433	90.31466488	90.33369795	84.98555191
10/29/2019 17:45	9J29041-IFB1	83.44864991	85.63276062	83.09283416	83.05579217	85.032924	77.59496534	81.12918052	89.76549043	90.71496767	86.19610432
10/29/2019 18:00	A9J0948-01RE2	89.19044918	106.9541702	92.56130226	97.8201948	98.39857458	91.82410266	98.47055633	98.73578553	103.0349486	97.46689958
10/29/2019 18:05	A9J0951-04RE2	94.95743437	110.4731104	99.64853842	101.5312358	102.2838753	97.91626586	101.4266615	102.1682675	103.3411742	102.6353275
10/29/2019 18:10	A9J0951-05RE2	97.03458366	113.040497	102.6962864	102.6261481	103.7627493	100.7874946	103.0961405	104.2569221	104.8855712	102.8376765
10/29/2019 18:14	A9J0951-06RE2	97.13085625	108.3487242	102.3657461	102.867799	103.5944826	100.5812808	103.4674606	105.0660085	104.5799423	103.0318975
10/29/2019 18:19	A9J0989-01RE1	91.46143394	97.06354335	95.78327206	97.51417941	101.8825523	95.58893771	99.28893559	97.28820701	100.7026784	98.36771406
10/29/2019 18:24	9101692-BLK1	94.52502325	98.17780417	99.55852757	99.7190397	100.2180606	99.45292314	100.802422	100.6008063	101.0297289	98.90865076
10/29/2019 18:28	9101692-BS1	96.07303535	100.5038307	102.2519455	100.7371584	100.6581601	101.273584	101.7235522	102.6463016	102.4473134	101.6484549
10/29/2019 18:33	A9J0991-02	98.09221453	105.3098	102.2767316	98.2288894	102.0006166	99.41278236	97.80542724	104.8066478	100.8229294	102.4547935
10/29/2019 18:38	9101692-DUP1	96.64595729	112.0865079	100.7497611	102.0178795	103.3317281	98.83461843	102.6681014	101.8333017	103.7775044	101.7004111
10/29/2019 18:42	9101692-MS1	94.32163673	108.5114503	97.71860904	98.93150518	98.17689806	93.68896655	98.36200115	101.4282427	100.3631926	98.19206155
10/29/2019 18:47	9J29041-CCV1	94.56672413	100.2076264	99.7961409	101.4538382	100.5862198	98.41879403	101.7367804	102.0383358	102.8606485	100.1049423
10/29/2019 18:52	9J29041-CCB1	92.40980083	94.30475751	96.14624747	95.71566645	95.57235987	95.49129048	98.42568305	98.77161327	98.13425244	96.477731
10/29/2019 19:00	A9J1012-01	98.97234795	115.1975681	103.0096123	99.74486298	100.9277185	100.6653934	100.9192839	106.2612174	105.3130018	102.8229727
10/29/2019 19:05	9101692-MSD1	97.65570317	95.82652241	101.1437678	94.33643544	92.60489361	98.8789483	96.3601212	101.4621829	97.45504053	101.4707308
10/29/2019 19:36	9101660-BLK1	96.93472329	101.3999887	99.76094976	100.7043229	100.5946736	99.01490884	102.1733963	101.4674238	101.6211462	97.60601794
10/29/2019 19:41	9101660-BS1	99.72320574	103.6838618	103.4425578	101.0300455	101.4772241	102.5200253	102.4442329	104.3508891	102.5284918	100.6614899
10/29/2019 19:46	9J29041-CCV2	102.2534456	103.8036999	103.2931321	101.631896	98.72829262	101.0977379	101.612689	104.6574371	102.6367597	101.2593882
10/29/2019 19:54	9J29041-CCB2	102.273393	102.2364473	103.0880312	101.8985659	99.99985351	101.2951135	102.0400206	104.2636177	100.1965736	99.16750572
10/29/2019 19:59	9J29041-CRL4	99.44727386	101.7590152	98.20358581	100.6893463	97.9217802	98.11295406	101.7331486	99.72401809	101.2408732	97.13013532
10/29/2019 20:04	9J29041-CRL5	103.380937	100.5125303	102.3374947	99.52114986	98.2699941	101.210897	100.2446164	103.5057266	99.8577508	98.73997077
10/29/2019 20:08	9J29041-CRL6	98.71398279	97.84407873	97.22232684	96.96672983	93.22027195	95.90076898	99.65765659	96.6535446	99.70449357	96.09749017
10/29/2019 20:14	9J29041-CRL7	97.84844297	95.64580329	95.92477627	96.48497104	95.24942261	95.20713992	96.71684584	97.38967365	97.02951402	96.87332966
10/29/2019 20:19	A9J0911-02	98.82290011	92.44289255	97.00730256	91.67265221	94.31851614	96.74599161	93.33453654	97.74913482	94.81924939	98.80935234
10/29/2019 20:24	A9J0911-06	95.7819594	92.8525573	94.43064708	93.16670916	91.39392032	93.65839569	94.66596865	96.93705746	96.54012403	99.28453069
10/29/2019 20:29	A9J0943-02	91.08482845	94.61099444	89.80274032	94.02724221	94.35559266	88.77272215	96.24690821	93.06530653	96.85771856	94.43479757
10/29/2019 20:33	A9J0943-04	95.84926103	93.70644171	94.49657044	93.60265182	94.37182568	92.43511659	94.7062666	96.80101648	95.92741429	99.0911694
10/29/2019 20:38	A9J0943-06	96.07400716	95.31431433	93.52738234	93.455207	93.45345537	92.33053039	94.9930594	96.82981503	96.8699509	98.96696621
10/29/2019 20:43	A9J0943-08	97.13305611	95.15470912	94.93151722	94.31617996	95.26109913	92.88694768	94.42894687	96.63117839	96.7868716	98.77875871
10/29/2019 20:48	A9J0943-10	96.98731597	91.27141822	93.83798915	91.51736783	92.25878063	93.47369401	94.89099313	97.5978599	95.57913942	98.07252283
10/29/2019 20:53	A9J0957-05	95.13446131	86.57706776	92.79587439	86.50035043	90.00976911	92.10335942	88.39222419	96.13686685	88.95626408	95.79008825
10/29/2019 21:00	A9J0957-10	94.15889147	90.06879109	91.54760558	89.66077055	88.89646764	91.35617397	92.03728899	96.99965566	92.91685797	94.15893478
10/29/2019 21:04	A9J0984-01	92.52310344	88.7876249	88.14788855	87.05755023	88.00014741	85.88934198	88.76342677	93.1387455	91.70438763	92.81966876
10/29/2019 21:09	9J29041-CCV3	99.025381	93.32626504	94.43049426	93.67973756	91.25100343	93.66390837	93.40030175	95.88293358	95.52992586	94.47635471
10/29/2019 21:14	9J29041-CCB3	100.1078643	94.4799486	95.89913345	94.03515728	94.64654959	93.72064894	96.69036489	99.29435208	96.27106619	95.77274464
10/29/2019 21:18	9101660-DUP1	92.3865179	88.50229023	89.30093672	87.06805879	89.17541654	87.16107549	88.76364107	93.41967352	92.25791963	93.37720902
10/29/2019 21:23	9101660-MS1	87.63354002	88.92993212	84.02080097	87.15212397	87.83576254	82.13466598	88.23792714	88.50387005	92.17951465	87.63317351
10/29/2019 21:28	A9J0285-01	102.0426548	104.894503	99.52138747	98.7461869	97.1081861	97.16794084	99.69089194	103.0737532	102.100128	100.5897097
10/29/2019 21:32	A9J0949-01	106.1833899	103.3067113	102.9977657	99.27736182	97.85327077	101.6060739	99.60473074	104.4871325	100.629442	102.2169371
10/29/2019 21:37	A9J0991-01	105.4593399	108.4329144	102.8471696	96.11663968	97.22776173	100.0300081	95.93987683	103.5546861	97.80374371	100.9387771
10/29/2019 21:41	A9J0991-03	104.9074807	111.4924155	101.3364604	97.61887105	97.32729547	98.15446334	99.00155204	102.0688264	99.83650434	99.83345745
10/29/2019 21:46	A9J0991-04	103.2643834	110.5675607	100.7576873	99.11191358	98.86950178	98.98567056	99.31483715	104.5233137	102.063844	99.72613982
10/29/2019 21:51	A9J0991-05	102.3927316	110.34251	101.6022238	98.75608022	93.80812239	98.93115527	99.82075533	102.5430016	100.7934969	99.53217568
10/29/2019 21:55	A9J0996-01	98.34029667	101.3707487	95.3468672	98.67070187	94.51221374	94.49797266	101.2681238	99.48737535	103.308347	99.02412479
10/29/2019 22:00	9101693-BLK1	96.47264657	94.25790826	93.84271998	92.31630714	94.62637686	92.61806824	94.90283208	96.96529745	93.65086431	92.56124674
10/29/2019 22:05	9J29041-CCV4	101.6401163	98.81446553	98.34804786	97.223354	95.66755299	96.26391621	98.20485934	100.2167097	98.08203678	95.94331729
10/29/2019 22:09	9J29041-CCB4	104.9924395	98.37643094	100.3858079	99.33801993	96.67566171	98.43141178	99.26931527	101.9725381	97.6702597	98.74800893
10/29/2019 22:14	9101693-BSD1	94.6102946	98.92141549	91.40287361	98.14425627	95.58052071	89.56854549	99.56945	93.9560488	98.76826214	89.4647544
10/29/2019 22:19	9101693-BS1	105.0270264	99.58356579	103.2439813	97.6716896	95.25029382	102.2417163	99.84906356	103.8373637	99.26989266	99.20433892
10/29/2019 22:23	A9J0993-02	105.9408123	99.1911706	99.91560781	98.56655849	96.10129189	99.58764537	100.1339067	103.2322417	98.01821075	99.88252052
10/29/2019 22:28	9101693-DUP1	104.5578986	98.48448019	98.77692546	97.07615212	96.38021766	98.068379	99.08593147	101.127217	97.23990481	98.60102208
10/29/2019 22:33	9101693-MS1	105.7976213	99.29570402	101.0098901	96.87347581	84.42384458	100.3758301	97.97291546	103.0721835	99.1389343	98.82409027
10/29/2019 22:37	A9J0998-02	103.0223471	96.70260737	98.81928463	94.82691361	94.94183945	97.25832704	96.45316579	100.0870012	96.52056514	98.72507905
10/29/2019 22:42	A9J0998-04	101.4122155	95.71721909	96.66011136	95.39401134	93.77994686	95.01183985	96.71014453	99.25713864	96.43637209	99.12784526
10/29/2019 22:47	A9J0999-02	100.0215654	95.16903461	96.53667839	93.43580507	94.10013557	95.07609001	96.3771196	97.79545655	96.91527972	97.37878837
10/29/2019 22:51	9101693-MS2	101.8886113	96.81842429	97.9987218	94.76773608	94.06253865	95.77853825	96.91470757	99.76864726	97.20533153	95.90590399
10/29/2019 22:56	A9J0999-04	97.46949084	94.93207807	92.44010074	93.04826547	93.77755296	91.8422387	96.26004627	96.21306595	96.01500172	94.58345907
10/29/2019 23:01	9J29041-CCV5	102.0305946	95.58408523	97.73055686	94.73217572	93.71918964	95.06370063	94.17600958	101.1698206	95.83335834	96.53320356
10/29/2019 23:05	9J29041-CCB5	102.6286068	95.17575669	98.49609161	94.67819502	93.71930529	97.01144449	97.13507517	98.77057273	96.3385637	96.15196177
10/29/2019 23:10	A9J1000-02	100.5635354	95.28052702	95.69979018	94.23299788	90.9626794	94.31888971	97.31733244	98.79477885	97.48955961	97.17935148
10/29/2019 23:15	A9J1000-04	98.90297753	92.54421972	93.72463244	92.1628382	91.69854676	93.15235623	94.16334755	98.8400241	94.07549462	97.24613732
10/29/2019 23:19	A9J1001-02	99.88361091	94.46940744	94.24027592	92.76587711	96.52135357	93.83216121	94.49245902	98.86890613	95.19594	96.64055033
10/29/2019 23:24	A9J1001-04	98.90260663	92.30722528	93.44021027	92.24629933	91.90623382	92.81750185	94.65549803	97.62209542	95.20860991	96.74306913
10/29/2019 23:29	A9J1002-02	98.24983728	89.68021814	94.75798745	89.00060264	93.58581751	93.42732683	90.45982953	97.18122843	92.02121435	95.88717056
10/29/2019 23:33	A9J1002-04	97.11888976	92.82578585	92.58745845	90.75783643	91.93353814	91.50759753	92.47461806	97.91764475	94.32589191	95.58022742
10/29/2019 23:38	9101700-BLK1	98.62162302	92.40425638	93.73637318	92.31591976	98.68361809	92.72031415	93.79854664	97.84374176	93.4803816	95.61304001
10/29/2019 23:43	9101700-BS1	107.1448818	99.40713642	102.9151577	97.17269559	99.98577539	101.5504269	97.03197056	104.1665934	96.33856656	99.13785617
10/29/2019 23:47	A9J0993-01	97.22442244	97.2152419	92.87524533	93.91123443	93.38091755	89.16025033	91.4601996	98.93194276	95.64522541	92.85955884
10/29/2019 23:52	9101700-DUP1	97.41346306	95.92703143	93.69222382	92.65652376	93.8460624	89.9270438	91.44780118	98.78116016	95.07515765	93.05249857
10/29/2019 23:56	9J29041-CCV6	106.4032665	101.5950318	103.5286998	100.8287841	100.4362639	100.2827776	99.75500814	106.4489053	99.13107066	100.6140638
10/30/2019 00:01	9J29041-CCB6	107.5946389	103.9937914	104.3470246	102.1277417	101.759627	102.5764652	102.8033481	104.5566388	101.0499743	100.0790434
10/30/2019 00:06	9101700-MS1	97.0987359	95.97024797	93.67091159	93.33866082	94.3186742	90.18810479	90.90837265	98.56584472	95.09060855	93.30785162
10/30/2019 00:10	9101684-BLK1	109.3039565	105.6862018	105.3797227	104.8010815	102.5658079	104.2573388	105.57243	106.6136148	102.5248382	102.2285473
10/30/2019 00:15	9101684-BS1	106.7681617	103.7411542	104.7108773	100.8930206	98.97915466	101.6482358	101.0776338	104.1805741	100.5598443	100.0087801
10/30/2019 00:20	A9J0957-04	107.6624962	101.7104065	104.5835087	99.80096115	100.8406168	101.5811347	100.9914508	104.1392434	101.2984583	101.0133757
10/30/2019 00:24	9101684-DUP1	106.0481929	101.3680099	101.9848715	100.4938234	99.48813752	100.4245757	101.3690181	104.4263905	99.97711341	100.4150774
10/30/2019 00:29	9101684-MS1	105.8317574	101.144267	100.2955424	98.14661011	97.36506586	98.58950106	98.83145897	102.4874475	99.76750613	98.47419567
10/30/2019 00:34	A9J0957-09	105.1791839	100.0003696	100.3298986	98.57867895	99.50374605	98.9680799	99.41861312	103.7816317	98.74124116	99.16568391
10/30/2019 00:38	A9J0959-01	98.27732267	92.19787142	92.24474404	90.49971197	92.88625182	90.23257212	91.81030163	98.0585656	92.66515399	97.42982349
10/30/2019 00:43	A9J0993-01	98.47687436	119.0062464	95.47054362	94.27305909	96.76316043	90.42352095	92.72830826	105.6580311	101.2864103	96.46531132
10/30/2019 00:48	A9J0993-02	107.6021938	100.5732028	102.175199	98.25827462	102.3585757	100.854324	99.15035111	105.7799132	98.56157208	102.5965936
10/30/2019 00:52	9J29041-CCV7	111.6833625	105.3159187	106.5443204	104.5367786	103.6828872	103.2358695	103.6958988	106.887905	102.2170794	100.9129645
10/30/2019 00:57	9J29041-CCB7	111.1150651	104.8498586	106.9376047	103.6614758	104.4660042	104.0844329	104.2021508	105.4033172	101.2392852	101.3397134
10/30/2019 01:02	9101658-BLK1	109.2038943	105.0545536	105.0308948	103.1078543	102.3632016	102.9482021	104.2368095	106.302427	101.7302176	102.2326409
10/30/2019 01:06	9101658-BS1	109.1560703	107.3482365	105.1267843	103.4929712	102.9348653	102.6855743	104.7493019	106.8475035	102.3984767	98.56782845
10/30/2019 01:11	A9J0808-01	105.0476501	100.5519909	100.5695105	99.1993672	99.64493593	98.90758285	99.88796568	103.3000391	101.1434932	100.5296647
10/30/2019 01:16	A9J0810-01	100.6581022	97.64307017	97.10283347	95.14958642	97.71068926	93.68461083	94.33274839	101.6467102	95.36440491	98.74713618
10/30/2019 01:20	A9J0812-01	100.0520763	97.19719526	96.49529171	95.11290003	97.64777715	95.20393106	97.16996903	102.7455916	96.81030882	99.03199162
10/30/2019 01:25	A9J0815-01	98.71302342	96.41291662	93.8506541	92.83754278	94.73653087	92.27241853	93.67041855	99.39529682	95.9814409	97.8037463
10/30/2019 01:30	9101658-DUP1	98.11121702	93.58958868	93.46575782	91.94038571	94.36007206	90.8126617	92.80355601	99.87315241	94.14553953	96.35056004
10/30/2019 01:34	9101658-MS1	99.06500982	96.41578172	94.76201768	92.89272502	94.48331349	91.69700393	94.1975359	99.75306653	96.27041605	94.71381676
10/30/2019 01:39	A9J0822-01	99.59221059	95.38398327	94.41273396	92.11444828	95.68584838	91.78221465	93.52681401	99.02355528	95.47714423	96.32463514
10/30/2019 01:44	A9J0825-01	98.77082839	95.8641667	94.82730462	94.59879812	94.03947858	92.80466752	95.39045654	99.72064295	96.65576095	96.77868504
10/30/2019 01:48	9J29041-CCV8	100.886041	102.4807798	98.87825828	102.6130296	100.854348	96.47488185	100.9122147	102.5063097	101.3235763	94.84284933
10/30/2019 01:53	9J29041-CCB8	106.0694588	103.9198327	104.5938039	102.1517463	101.784256	102.2236868	102.6062155	106.9911362	101.2992393	99.22645268
10/30/2019 01:58	A9J0825-02	100.7008686	96.06154255	97.32575814	93.81007191	95.27369697	94.87734823	94.75324311	102.2471913	96.77009868	99.03748428
10/30/2019 02:02	A9J0841-04	98.9742195	88.30824383	94.64184754	85.89666808	95.46089519	93.48023629	87.9048055	100.4153492	88.15349776	97.20742615
10/30/2019 02:07	A9J0841-05	100.6066589	98.21386271	95.77756873	95.33203022	95.45213298	94.63863568	96.45510212	100.7814859	95.9289285	96.54996352
10/30/2019 02:12	A9J0864-01	101.1364488	98.92181035	96.87484588	95.35571962	95.81781733	95.40345612	96.0245891	102.0090987	96.61238859	98.75758429
10/30/2019 02:16	A9J0888-01	101.0775619	97.29674082	95.92461683	93.87620919	94.9431771	93.27492193	93.99289035	101.3849415	95.56393174	98.0770925
10/30/2019 02:21	A9J0916-13	100.7914886	96.81059029	95.25073029	94.37284607	94.65390476	93.82423416	95.53099443	102.1098318	96.10061557	95.76453041
10/30/2019 02:26	A9J0943-01	100.5733885	98.93922521	95.65307792	96.25530931	97.5652744	93.63002316	96.26066073	101.6657937	97.63881726	96.63746667
10/30/2019 02:30	A9J0943-03	101.6852837	101.9136831	98.14880249	97.53848928	100.2055245	95.21735564	98.27459679	102.3255187	98.66073065	98.27846518
10/30/2019 02:35	A9J0943-05	102.4428761	102.7325956	100.3559642	99.71689925	100.2577392	97.28503538	99.26012289	103.8309564	99.03724866	98.85451541
10/30/2019 02:40	A9J0943-07	103.6026406	101.298202	100.0907372	98.99810206	99.73333669	97.21987064	98.0291308	104.7261448	98.29609834	99.49199816

10/30/2019 02:44	9J29041-CCV9	105.8702813	102.7293041	102.7455444	103.3495709	101.3528069	99.71462065	102.3853994	105.4100297	100.9940897	99.52437757
10/30/2019 02:49	9J29041-CCB9	107.4559386	103.6539504	103.8422744	103.0225745	100.4660931	101.1423304	103.1623779	106.1779517	100.3814149	99.36603242
10/30/2019 02:53	A9J0943-09	106.9599434	101.3964998	101.3056137	98.7026018	98.04960897	99.58237788	98.74749582	104.350303	97.87785417	99.21888253
10/30/2019 02:58	9J29041-CCVA	106.6574298	99.9252358	100.5184439	99.0505004	98.06851345	98.02890816	97.16889181	103.7529088	96.88284905	95.8168487
10/30/2019 03:03	9J29041-CCBA	106.3408101	100.4739257	100.3541058	99.16246694	99.9798157	98.9212285	99.31354278	103.6424595	98.5082926	97.22933872
10/30/2019 03:07	9J29041-CRL8	107.5633337	101.0003519	102.7501502	100.2236343	98.80823572	101.562988	100.5315884	105.9914537	98.63902094	99.29738331
10/30/2019 03:12	9J29041-CRL9	107.3358674	100.1671296	102.0682085	99.38000164	100.3302693	101.0520951	99.85058551	105.4253978	98.06009134	98.72714611
10/30/2019 03:17	9J29041-CRLA	106.2152042	99.79279057	100.7399283	97.13997495	93.16476126	98.75789305	98.64099646	103.0109851	96.96186565	97.61551913
10/30/2019 03:21	9J29041-CRLB	106.6274117	101.3635306	100.2025055	100.2048332	97.26175431	98.458863	100.4373348	103.5862666	98.82709253	97.97339549
10/30/2019 03:26	A9J0946-03	97.71950023	89.60235192	92.39212888	87.60092574	93.65408409	89.80419506	86.92893736	100.1168962	89.63422459	95.33285944
10/30/2019 03:31	A9J0946-07	96.5268631	97.41310107	92.81581189	93.33250867	93.85861783	89.26267129	90.69556738	100.2797285	97.74179567	91.74133565
10/30/2019 03:35	A9J0946-08	95.66269549	94.69415808	91.97022215	90.73756454	94.15430089	89.10763096	91.32304509	99.92214426	94.41860373	92.9010847
10/30/2019 03:40	A9J0852-02	96.02894522	98.18363229	94.77526282	95.98131203	94.69878746	86.78499911	91.12979471	97.25299353	96.50753146	90.60250699
10/30/2019 03:45	A9J0976-01	88.3288982	87.0032471	86.26643317	84.92610212	88.09201759	80.95504794	82.9015261	93.61318912	89.99597357	87.78595065
10/30/2019 03:50	9101658-MS2	87.18804969	90.50566637	84.22904094	87.41333435	88.92824751	80.18366389	84.32555617	93.30700409	91.52392077	84.9399059
10/30/2019 03:54	9J29041-CCVB	95.37992552	95.10528539	92.99285456	94.86621975	95.72860318	90.38296216	92.87912806	98.69258743	95.32625144	93.3002073
10/30/2019 03:59	9J29041-CCBB	100.4399969	96.74365693	98.19696555	94.47778064	96.87502602	96.93925998	94.67491448	102.4125501	95.09947681	96.80651184
10/30/2019 04:03	9J29041-CRLC	98.34497423	98.2823755	96.20784885	96.29861402	93.30404682	94.30192746	96.10419882	100.6966295	97.54658938	94.26040193
10/30/2019 04:08	9J29041-CRLD	101.3093893	98.67573099	98.04822584	97.92111766	96.63837703	97.76482771	98.20342937	101.8627885	96.87411346	95.5267314
10/30/2019 04:13	9J29041-CRLE	100.6253377	99.75723114	96.70197899	98.06300125	93.85334817	94.59864022	97.86927414	97.42502703	97.03731739	94.09711056
10/30/2019 04:17	9J29041-CRLF	102.7003907	98.06332346	98.0880036	97.8291965	97.0471901	96.2576988	97.5340559	102.4381693	96.60329565	95.15949177

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

Total Solids by SM 2540D
Benchsheet Data

Batch 9101637 (A9J0959-01)

APEX LABORATORIES

PREPARATION BENCH SHEET

OCT 3 1 2019

9101637

Apex Laboratories

BATCH #: 9101637 (Matrix: Water)

Total Suspended Solids (TSS) Worksheet

#	Lab Number	Reference	QC Source ID	Prepared (Time In)	Due Date	Initial Amount (mL)	Tare Wt. (g)	Dry Weight (+Tare) (g)	TSS mg/L (Calc)	Client / Sample
	9101637-BLK1			10/28/19 10:08		100	0.1166	0.1166	0.0	
	9101637-SRM1	A19H082		10/28/19 10:08		100	0.1166	0.1259	93.0	
	A9J0848-01			10/28/19 10:08	10/29/19	50	0.1166	0.1262	192.0	Influent 10/21/19
	9101637-DUP1		A9J0848-01	10/28/19 10:08		50	0.1169	0.1263	188.0	
	A9J0850-01			10/28/19 10:08	10/29/19	50	0.1165	0.1368	406.0	Influent 10/22/19
	A9J0854-01			10/28/19 10:08	11/05/19	50	0.1166	0.1301	270.0	Wastewater Comp
	A9J0866-01			10/28/19 10:08	10/29/19	100	0.1174	0.1177	3.0	CB01
	A9J0881-01			10/28/19 10:08	11/05/19	100	0.116	0.1171	11.0	Service Water
	A9J0901-01			10/28/19 10:08	11/06/19	100	0.1174	0.1214	40.0	MOL-102219
	A9J0908-01			10/28/19 10:08	10/30/19	50	0.1162	0.1269	214.0	Influent 10/23/19
	A9J0925-01			10/28/19 10:08	11/06/19	100	0.1165	0.1193	28.0	MW-109-1019
	A9J0925-02			10/28/19 10:08	11/06/19	100	0.1161	0.1185	24.0	MW-09-1019
	A9J0925-03			10/28/19 10:08	11/06/19	100	0.1172	0.1182	10.0	MW-04-1019
	A9J0925-04			10/28/19 10:08	11/06/19	100	0.1173	0.1205	32.0	MW-01-1019
	A9J0925-05			10/28/19 10:08	11/06/19	100	0.1174	0.1174	0.0	MW-901-1019
	9101637-DUP2		A9J0925-05	10/28/19 10:08		100	0.1168	0.1168	0.0	
	A9J0930-01			10/28/19 10:08	11/07/19	50	0.1164	0.121	92.0	Influent
	A9J0947-01			10/28/19 10:08	11/07/19	100	0.119	0.1191	1.0	INF102419
	A9J0947-02			10/28/19 10:08	11/07/19	100	0.1159	0.1163	4.0	EFF102419
	A9J0959-01			10/28/19 10:08	11/07/19	100	0.1168	0.117	2.0	PDI-026SW-34-00-191024

Prepared By: MLP 10-29-19 Date

Reviewed By: 10/29/19 Date

Printed: 10/29/2019 11:31:14AM

APEX LABORATORIES

Apex Laboratories
BATCH #: 9101637 (Matrix: Water)
Total Suspended Solids (TSS) Worksheet

#	Lab Number	Reference	QC Source ID	Prepared (Time In)	Due Date	Initial Amount (mL)	Tare Wt. (g)	Dry Weight (+Tare) (g)	TSS mg/L (Calc)	Client / Sample

Reagents

Standard ID	Exp. Date	Description
A13L220	11/30/23	Wet Chem Balance 1
A18H345	08/30/20	PRE003V
A19D282	04/19/24	Whatman 934-AH RTU Glass MicroFiber Filter,

Reference

Standard ID	Exp. Date	Description
A19H082	06/30/21	Solids Standard

MPE 10-29-19
Prepared By: Date

Reviewed By: Date

Printed: 10/29/2019 11:31:14AM

Batch #: 9101637 **Solids Worksheet** **Method: TSS** Date: 10/28/19

Analyst: MRF Page : 1 of ____

Sample ID	Sample Vol. (mL)	Vessel ID	Initial Weight (g)	Final Weight (g) 1st weighing	2nd Weighing	3rd Weighing	4th Weighing	Comments
9101637-BLK1	100	37	0.1166	0.1166				
9101637-SRM1	100	38	0.1166	0.1259	0.1260			
A9J0848-01	50	39	0.1166	0.1262	0.1263			
9101637-DUP1	50	40	0.1169	0.1266	0.1263			A9J0848-01
A9J0850-01	50	41	0.1165	0.1411	0.1396	0.1370	0.1368	
A9J0854-01	50	42	0.1166	0.1306	0.1301			
A9J0866-01	100	43	0.1174	0.1177				
A9J0881-01	100	44	0.1160	0.1171	0.1172			
A9J0901-01	100	45	0.1174	0.1217	0.1214			
A9J0908-01	50	46	0.1162	0.1274	0.1269			
A9J0925-01	100	47	0.1165	0.1195	0.1193			
A9J0925-02	100	48	0.1161	0.1185	0.1189			
A9J0925-03	100	49	0.1172	0.1183	0.1182			
A9J0925-04	100	50	0.1173	0.1207	0.1205			
A9J0925-05	100	51	0.1174	0.1174				
9101637-DUP2	100	52	0.1168	0.1168				A9J0925-05
A9J0930-01	50	54	0.1164	0.1213	0.1210			
A9J0947-01	100	57	0.1190	0.1191				
A9J0947-02	100	55	0.1159	0.1163				
A9J0959-01	100	56	0.1168	0.1170				
	100							
	100							
	100							
	100							
Date/time first in oven:		**Oven temp. (°C; in/out):**		**104.9/104.6**	**104.3/104.8**	**104.6/105**	**105/104.4**	
10-28-2019/12:34		**Time of weighing:**		14:50 10/28	17:06 10/28	10:27 10/29	11:28 10/29	

Batch #: 9101637 **Solids Worksheet** **Method: TSS** Date: 10/28/19

Analyst: MRF Page : 1 of ____

Sample ID	Sample Vol. (mL)	Vessel ID	Initial Weight (g)	Final Weight (g) 1st weighing	2nd Weighing	3rd Weighing	4th Weighing	Comments
9101637-BLK1	✓100	✓37	✓ 0.1166					
9101637-SRM1	✓100	✓38	✓ 0.1166					
A9J0848-01	50 ~~400~~	✓39	✓ 0.1166					
9101637-DUP1	50 ~~100~~	✓40	✓ 0.1169					A9J0848-01
A9J0850-01	50 ~~100~~	✓ 41	✓ 0.1165					
A9J0854-01 ✓ 50 100	~~50 100~~	✓ 42	✓ 0.1166					
A9J0866-01 100	~~50 100~~	10/28 ✓ 43	✓ 0.1174					
A9J0881-01	✓ 100	✓ 44	✓ 0.1160					
A9J0901-01	✓ 100	✓ 45	✓ 0.1174					
A9J0908-01	50 ~~100~~	✓ 46	✓ 0.1162					
A9J0925-01	✓ 100	✓ 47	✓ 0.1165					
A9J0925-02	✓ 100	✓ 48	✓ 0.1161					
A9J0925-03	✓ 100	✓ 49	✓ 0.1172					
A9J0925-04	✓100	✓ 50	✓ 0.1173					
A9J0925-05	✓ 100	✓ 51	✓ 0.1174					
9101637-DUP2	✓100	✓ 52	✓ 0.1168					A9J0925-05
A9J0930-01 50	~~50 100~~	54 ✓ ~~53~~	1164 ~~0.1180~~					
A9J0947-01 MRF 10/28	100	57 ~~54~~	1190 ~~0.1164~~					
A9J0947-02	✓ 100	✓ 55	✓ 0.1159					
A9J0959-01	✓ 100	✓ 56	✓ 0.1168					
	100							
	100							
	100							
	100							
Date/time first in oven: 10-28-19/12:34		**Oven temp. (°C; in/out):**		104.9 /	/	/	/	
		Time of weighing:						

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

pH-SM 4500-H+B (Aqueous)
Benchsheet Data

Batch 9101615 (A9J0959-01)

APEX LABORATORIES

OCT 2 9 2019

9101615

pH PREPARATION BENCH SHEET

Apex Laboratories
BATCH #: 9101615 (Water)
Prep Method: Method Prep: Aq

Orde	Lab Number	Std ID / TV (SU)	Analyzed	Source ID	pH (SU)	Temp (deg C)	ClientID / Sample	Comments
	CAL STD 1		__/__/__@					Slope=98.9%
	CAL STD 2		__/__/__@					
	CAL STD 3		__/__/__@					
	9101615-SRM1	A19D020 (6)	10/25/2019@1655		5.99	22.2		
	9101615-SRM2	A19B219 (8)	10/25/2019@ 1705		7.93	22.1		
	A9J0959-01		10/25/2019@ 1700		7.40	21.1	Anchor QEA, LLC / PDI-026S	
	9101615-DUP1		10/25/2019@ 1703	A9J0959-01	7.39	20.4		

Reagent(s)

Std ID	Exp. Date	Description
A19B221	05/17/20	pH 10 Buffer
A19B222	06/24/20	pH 4 Buffer
A19B231	11/13/20	pH 7 Buffer
A19E295	05/23/29	pH Meter 3 (Orion Star A215)

See calibration batch 9101584 10/25/19

MMK 10/25/19
Prepared By: Date

Reviewed By: 10/28/19
Date