Apex Laboratories, LLC
12232 SW Garden Place Tigard, Oregon 97223
503.718.2323

Level IV Data Package for

Anchor QEA, LLC

Port of Portland - T4 - PDI

Apex Laboratories Work Order #:

A9E0766

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

APEX LABORATORIES, LLC
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Analytical Case Narrative

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Analytical Case Narrative

Client: Anchor QEA, LLC
Date: 07/02/2019
Project: Port of Portland - T4 - PDI
Apex Work Order Number: A9E0766

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
12232 SW Garden Place Tigard OR 97223
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Analytical Report

Apex Laboratories, LLC

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

Thursday, June 13, 2019

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

RE: A9E0766 - Port of Portland - T4 - PDI - 050332-01.32

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 A9E0766, which was received by the laboratory on 5/23/2019 at 10:00:00AM.

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

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

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.2 degC	Cooler #2	0.8 degC
Cooler #3	0.6 degC		

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FD-201905220947	A9E0766-01	Sediment	05/22/19 00:00	05/23/19 10:00
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment	05/22/19 09:47	05/23/19 10:00
T4-PDI2019-SC67-190522-01-03	A9E0766-16	Sediment	05/22/19 12:45	05/23/19 10:00

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FD-201905220947 (A9E0766-01)				**Matrix: Sediment**			**Batch: 9051305**	**C-07**
Aroclor 1016	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1221	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1232	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1242	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1248	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1254	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1260	ND	2.56	5.12	ug/kg dry	1	05/30/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 93 %*		*Limits: 60-125 %*	*1*	*05/30/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1016	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1221	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1232	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1242	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1248	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1254	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1260	ND	2.87	5.73	ug/kg dry	1	06/05/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 86 %*		*Limits: 60-125 %*	*1*	*06/05/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)				**Matrix: Sediment**			**Batch: 9051305**	**C-07**
Aroclor 1016	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1221	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1232	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1242	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1248	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1254	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Aroclor 1260	ND	2.76	5.52	ug/kg dry	1	05/30/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 89 %*		*Limits: 60-125 %*	*1*	*05/30/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)				**Matrix: Sediment**			**Batch: 9051305**	**C-07**
Aroclor 1016	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Aroclor 1221	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Aroclor 1232	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	

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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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)				**Matrix: Sediment**			**Batch: 9051305**	**C-07**
Aroclor 1242	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Aroclor 1248	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Aroclor 1254	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Aroclor 1260	ND	2.60	5.20	ug/kg dry	1	05/31/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 98 %*		*Limits: 60-125 %*	*1*	*05/31/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1016	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1221	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1232	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1242	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1248	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1254	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1260	ND	2.89	5.78	ug/kg dry	1	06/05/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 86 %*		*Limits: 60-125 %*	*1*	*06/05/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1016	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1221	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1232	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1242	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1248	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1254	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1260	ND	2.84	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 86 %*		*Limits: 60-125 %*	*1*	*06/05/19*	*EPA 8082A*	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1016	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1221	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1232	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1242	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1248	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1254	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	

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Darwin Thomas, Business Development Director

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Polychlorinated Biphenyls by EPA 8082A

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1260	ND	2.83	5.67	ug/kg dry	1	06/05/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 87 %*		*Limits: 60-125 %*	*1*	*06/05/19*	*EPA 8082A*	
T4-PDI2019-SC67-190522-01-03 (A9E0766-16RE1)				**Matrix: Sediment**			**Batch: 9060524**	**C-07**
Aroclor 1016	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1221	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1232	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1242	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1248	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1254	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Aroclor 1260	ND	2.32	4.65	ug/kg dry	1	06/05/19	EPA 8082A	
Surrogate: Decachlorobiphenyl (Surr)		*Recovery: 96 %*		*Limits: 60-125 %*	*1*	*06/05/19*	*EPA 8082A*	

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FD-201905220947 (A9E0766-01RE2)				**Matrix: Sediment**		**Batch: 9051333**		
Acenaphthene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Acenaphthylene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Anthracene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Benz(a)anthracene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Benzo(a)pyrene	ND	2.69	5.38	ug/kg dry	1	05/31/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.69	5.38	ug/kg dry	1	05/31/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.69	5.38	ug/kg dry	1	05/31/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Chrysene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Fluoranthene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Fluorene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
2-Methylnaphthalene	ND	3.59	7.17	ug/kg dry	1	05/31/19	EPA 8270D	
Naphthalene	ND	3.59	7.17	ug/kg dry	1	05/31/19	EPA 8270D	
Phenanthrene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Pyrene	ND	1.79	3.59	ug/kg dry	1	05/31/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*54 %*	*Limits: 37-122 %*	*1*	*05/31/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*49 %*	*44-115 %*	*1*	*05/31/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*53 %*	*54-127 %*	*1*	*05/31/19*	*EPA 8270D*	*S-06*
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)				**Matrix: Sediment**		**Batch: 9060602**		
Acenaphthene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Acenaphthylene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Benz(a)anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(a)pyrene	ND	2.78	5.57	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.78	5.57	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.78	5.57	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Chrysene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Fluoranthene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Fluorene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Indeno(1,2,3-cd)pyrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
2-Methylnaphthalene	ND	3.72	7.42	ug/kg dry	1	06/05/19	EPA 8270D	
Naphthalene	ND	3.72	7.42	ug/kg dry	1	06/05/19	EPA 8270D	
Phenanthrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Pyrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*82 %*	*Limits: 37-122 %*	*1*	*06/05/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*73 %*	*44-115 %*	*1*	*06/05/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*83 %*	*54-127 %*	*1*	*06/05/19*	*EPA 8270D*	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Acenaphthene	**3.38**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Acenaphthylene	ND	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Anthracene	**4.19**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Benz(a)anthracene	**3.99**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(a)pyrene	**4.61**	2.72	5.43	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Benzo(b)fluoranthene	**4.59**	2.72	5.43	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Benzo(k)fluoranthene	ND	2.72	5.43	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(g,h,i)perylene	**2.67**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Chrysene	**2.58**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Dibenz(a,h)anthracene	ND	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Fluoranthene	**11.5**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Fluorene	**2.82**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Indeno(1,2,3-cd)pyrene	**2.70**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	**J**
2-Methylnaphthalene	**4.06**	3.63	7.24	ug/kg dry	1	06/06/19	EPA 8270D	**J**
Naphthalene	**10.1**	3.63	7.24	ug/kg dry	1	06/06/19	EPA 8270D	
Phenanthrene	**13.6**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Pyrene	**10.2**	1.81	3.63	ug/kg dry	1	06/06/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*62 %*	*Limits: 37-122 %*	*1*	*06/06/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*63 %*	*44-115 %*	*1*	*06/06/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*82 %*	*54-127 %*	*1*	*06/06/19*	*EPA 8270D*	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Acenaphthene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Acenaphthylene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-05-07 (A9E0766-04RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Anthracene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Benz(a)anthracene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(a)pyrene	ND	2.52	5.05	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.52	5.05	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.52	5.05	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Chrysene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Fluoranthene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Fluorene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
2-Methylnaphthalene	ND	3.37	6.72	ug/kg dry	1	06/06/19	EPA 8270D	
Naphthalene	ND	3.37	6.72	ug/kg dry	1	06/06/19	EPA 8270D	
Phenanthrene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Pyrene	ND	1.68	3.37	ug/kg dry	1	06/06/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*76 %*	*Limits: 37-122 %*	*1*	*06/06/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*74 %*	*44-115 %*	*1*	*06/06/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*81 %*	*54-127 %*	*1*	*06/06/19*	*EPA 8270D*	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Acenaphthene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Acenaphthylene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Benz(a)anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(a)pyrene	ND	2.79	5.58	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.79	5.58	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.79	5.58	ug/kg dry	1	06/05/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Chrysene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Fluoranthene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Fluorene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
2-Methylnaphthalene	ND	3.72	7.43	ug/kg dry	1	06/05/19	EPA 8270D	

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Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Naphthalene	ND	3.72	7.43	ug/kg dry	1	06/05/19	EPA 8270D	
Phenanthrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Pyrene	ND	1.85	3.72	ug/kg dry	1	06/05/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*89 %*	*Limits: 37-122 %*	*1*	*06/05/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*68 %*	*44-115 %*	*1*	*06/05/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*77 %*	*54-127 %*	*1*	*06/05/19*	*EPA 8270D*	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Acenaphthene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Acenaphthylene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Anthracene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Benz(a)anthracene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(a)pyrene	ND	2.79	5.57	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.79	5.57	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.79	5.57	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Chrysene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Fluoranthene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Fluorene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
2-Methylnaphthalene	ND	3.72	7.43	ug/kg dry	1	06/06/19	EPA 8270D	
Naphthalene	ND	3.72	7.43	ug/kg dry	1	06/06/19	EPA 8270D	
Phenanthrene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Pyrene	ND	1.85	3.72	ug/kg dry	1	06/06/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*67 %*	*Limits: 37-122 %*	*1*	*06/06/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*68 %*	*44-115 %*	*1*	*06/06/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*79 %*	*54-127 %*	*1*	*06/06/19*	*EPA 8270D*	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Acenaphthene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Acenaphthylene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Anthracene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Benz(a)anthracene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE2)				**Matrix: Sediment**			**Batch: 9060602**	
Benzo(a)pyrene	ND	2.77	5.55	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(b)fluoranthene	ND	2.77	5.55	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(k)fluoranthene	ND	2.77	5.55	ug/kg dry	1	06/06/19	EPA 8270D	
Benzo(g,h,i)perylene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Chrysene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Dibenz(a,h)anthracene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Fluoranthene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Fluorene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
2-Methylnaphthalene	ND	3.70	7.39	ug/kg dry	1	06/06/19	EPA 8270D	
Naphthalene	ND	3.70	7.39	ug/kg dry	1	06/06/19	EPA 8270D	
Phenanthrene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Pyrene	ND	1.84	3.70	ug/kg dry	1	06/06/19	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*80 %*	*Limits: 37-122 %*	*1*	*06/06/19*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*76 %*	*44-115 %*	*1*	*06/06/19*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*76 %*	*54-127 %*	*1*	*06/06/19*	*EPA 8270D*	

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Demand Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FD-201905220947 (A9E0766-01)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.053**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-01-03 (A9E0766-02)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.18**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.25**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.051**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.096**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.12**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.13**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	
T4-PDI2019-SC67-190522-01-03 (A9E0766-16)				**Matrix: Sediment**				
Batch: 9051253								
Total Organic Carbon	**0.060**	---	0.020	% by Weight	1	05/30/19	EPA 9060Amod	

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
FD-201905220947 (A9E0766-01)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**72.3**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-01-03 (A9E0766-02)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**68.8**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**70.4**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**76.0**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**68.9**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**69.6**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**70.5**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	
T4-PDI2019-SC67-190522-01-03 (A9E0766-16)				**Matrix: Sediment**				
Batch: 9051375								
Total Solids	**82.8**	---	1.00	% by Weight	1	05/30/19	PSEP 1986	

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/PSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-01-03 (A9E0766-02)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Sand (0.063mm - 2.00mm)	**47.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 0.425 mm sieve (#40)	**0.03**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**0.20**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**3.86**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**13.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**20.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**9.80**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**42.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**10.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Sand (0.063mm - 2.00mm)	**44.9**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**0.02**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**0.06**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**0.90**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**6.02**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**11.7**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**17.1**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**

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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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/PSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)				**Matrix: Sediment**			**Batch: 9060757**	
Percent Retained 0.063 mm sieve (#230)	**9.08**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**44.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**10.5**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Sand (0.063mm - 2.00mm)	**87.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**0.01**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**0.06**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**11.7**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**45.8**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**17.8**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**9.06**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**2.84**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**10.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**2.30**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC18-190522-07-09 (A9E0766-05)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Sand (0.063mm - 2.00mm)	**70.0**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 0.425 mm sieve (#40)	**0.02**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**1.68**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/PSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-07-09 (A9E0766-05)				**Matrix: Sediment**			**Batch: 9060757**	
Percent Retained 0.150 mm sieve (#100)	**22.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**21.9**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**17.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**6.58**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**23.3**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**6.70**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC18-190522-09-11 (A9E0766-06)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Sand (0.063mm - 2.00mm)	**54.8**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 0.425 mm sieve (#40)	**0.03**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**0.35**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**9.42**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**18.1**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**19.0**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**7.86**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**33.9**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**11.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC18-190522-11-13 (A9E0766-07)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/PSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SC18-190522-11-13 (A9E0766-07)				**Matrix: Sediment**			**Batch: 9060757**	
Sand (0.063mm - 2.00mm)	**68.3**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	ND	0.01	0.01	% of Total	1	06/12/19	D422mod	GS-01
Percent Retained 0.425 mm sieve (#40)	**0.02**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**1.32**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**25.3**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**21.4**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**14.9**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**5.46**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**23.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**8.00**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
T4-PDI2019-SC67-190522-01-03 (A9E0766-16)				**Matrix: Sediment**			**Batch: 9060757**	
Gravel (>2.00mm)	**3.16**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 4.75 mm sieve (#4)	**2.34**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 2.00 mm sieve (#10)	**0.81**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**95.0**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**2.24**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**25.6**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**50.9**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**14.2**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**1.40**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**0.46**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**0.16**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**1.40**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**
Clay (< 0.005 mm)	**0.40**	0.01	0.01	% of Total	1	06/12/19	D422mod	**GS-01**

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Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

ANALYTICAL SAMPLE RESULTS

Grain Size by ASTM D 422m/PSET Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes

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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 9051305 - EPA 3546							**Sediment**					
Blank (9051305-BLK1)			Prepared: 05/28/19 11:07		Analyzed: 05/30/19 17:07							**C-07**
EPA 8082A												
Aroclor 1016	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 85 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (9051305-BS1)			Prepared: 05/28/19 11:07		Analyzed: 05/30/19 17:25							**C-07**
EPA 8082A												
Aroclor 1016	178	2.00	4.00	ug/kg wet	1	250	---	71	47-134%	---	---	
Aroclor 1260	191	2.00	4.00	ug/kg wet	1	250	---	76	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 86 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (9051305-DUP1)			Prepared: 05/28/19 11:07		Analyzed: 05/30/19 18:18							**C-07**
QC Source Sample: Non-SDG (A9E0744-06)												
Aroclor 1016	ND	3.26	6.52	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	3.26	6.52	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	6.52	6.52	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	3.26	6.52	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	3.26	6.52	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	**9.58**	3.26	6.52	ug/kg dry	1	---	5.99	---	---	**46**	**30%**	P-10, Q-05
Aroclor 1260	**7.80**	3.26	6.52	ug/kg dry	1	---	5.42	---	---	**36**	**30%**	P-10, Q-05
Surr: Decachlorobiphenyl (Surr)			*Recovery: 71 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (9051305-MS1)			Prepared: 05/28/19 11:07		Analyzed: 05/30/19 21:53							**C-07**
QC Source Sample: Non-SDG (A9E0744-19)												
EPA 8082A												
Aroclor 1016	244	2.85	5.69	ug/kg dry	1	356	ND	69	47-134%	---	---	
Aroclor 1260	283	2.85	5.69	ug/kg dry	1	356	ND	80	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 87 %*		*Limits: 60-125 %*			*Dilution: 1x*				

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9051305 - EPA 3546							**Sediment**					
Matrix Spike Dup (9051305-MSD1)			Prepared: 05/28/19 11:08		Analyzed: 05/30/19 22:29							**C-07**
QC Source Sample: Non-SDG (A9E0744-19)												
Aroclor 1016	253	2.84	5.68	ug/kg dry	1	355	ND	71	47-134%	4	30%	
Aroclor 1260	291	2.84	5.68	ug/kg dry	1	355	ND	82	53-140%	3	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 88 %*		*Limits: 60-125 %*		*Dilution: 1x*					

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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 9060524 - EPA 3546							**Sediment**					
Blank (9060524-BLK1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 08:42							**C-07**
EPA 8082A												
Aroclor 1016	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1221	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1232	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1242	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1248	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1254	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Aroclor 1260	ND	1.82	3.64	ug/kg wet	1	---	---	---	---	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 92 %*		*Limits: 60-125 %*			*Dilution: 1x*				
LCS (9060524-BS1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 09:00							**C-07**
EPA 8082A												
Aroclor 1016	140	2.00	4.00	ug/kg wet	1	250	---	56	47-134%	---	---	
Aroclor 1260	175	2.00	4.00	ug/kg wet	1	250	---	70	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 94 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Duplicate (9060524-DUP1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 09:54							**C-07**
QC Source Sample: T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE1)												
EPA 8082A												
Aroclor 1016	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1221	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1232	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1242	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1248	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1254	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Aroclor 1260	ND	2.88	5.76	ug/kg dry	1	---	ND	---	---	---	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 77 %*		*Limits: 60-125 %*			*Dilution: 1x*				
Matrix Spike (9060524-MS1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 11:05							**C-07**
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE1)												
EPA 8082A												
Aroclor 1016	256	2.90	5.79	ug/kg dry	1	362	ND	71	47-134%	---	---	
Aroclor 1260	288	2.90	5.79	ug/kg dry	1	362	ND	80	53-140%	---	---	

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Darwin Thomas, Business Development Director

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060524 - EPA 3546							**Sediment**					
Matrix Spike (9060524-MS1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 11:05							**C-07**
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE1)												
Surr: Decachlorobiphenyl (Surr)			*Recovery: 95 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike (9060524-MS2)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 09:24							**C-07**
QC Source Sample: Non-SDG (A9E0838-02RE1)												
EPA 8082A												
Aroclor 1016	327	3.81	7.62	ug/kg dry	1	476	ND	69	47-134%	---	---	
Aroclor 1260	370	3.81	7.62	ug/kg dry	1	476	6.05	77	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 78 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike (9060524-MS3)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 08:48							**C-07**
QC Source Sample: Non-SDG (A9E0838-15RE1)												
EPA 8082A												
Aroclor 1016	291	3.34	6.69	ug/kg dry	1	418	ND	70	47-134%	---	---	
Aroclor 1260	327	3.34	6.69	ug/kg dry	1	418	13.3	75	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 84 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike (9060524-MS4)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 10:53							**C-07**
QC Source Sample: Non-SDG (A9E0927-05RE1)												
EPA 8082A												
Aroclor 1016	392	3.53	7.06	ug/kg dry	1	441	ND	89	47-134%	---	---	
Aroclor 1260	432	3.53	7.06	ug/kg dry	1	441	21.0	93	53-140%	---	---	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 99 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike Dup (9060524-MSD1)			Prepared: 06/04/19 09:49		Analyzed: 06/05/19 11:41							**C-07**
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE1)												
EPA 8082A												
Aroclor 1016	253	2.89	5.78	ug/kg dry	1	361	ND	70	47-134%	0.9	30%	
Aroclor 1260	284	2.89	5.78	ug/kg dry	1	361	ND	79	53-140%	1	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 92 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike Dup (9060524-MSD2)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 10:00							**C-07**

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Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060524 - EPA 3546							**Sediment**					
Matrix Spike Dup (9060524-MSD2)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 10:00							**C-07**
QC Source Sample: Non-SDG (A9E0838-02RE1)												
Aroclor 1016	317	3.79	7.57	ug/kg dry	1	473	ND	67	47-134%	3	30%	
Aroclor 1260	360	3.79	7.57	ug/kg dry	1	473	6.05	75	53-140%	3	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 80 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike Dup (9060524-MSD3)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 09:24							**C-07**
QC Source Sample: Non-SDG (A9E0838-15RE1)												
Aroclor 1016	298	3.35	6.70	ug/kg dry	1	418	ND	71	47-134%	2	30%	
Aroclor 1260	337	3.35	6.70	ug/kg dry	1	418	13.3	77	53-140%	3	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 84 %*		*Limits: 60-125 %*		*Dilution: 1x*					
Matrix Spike Dup (9060524-MSD4)			Prepared: 06/04/19 09:49		Analyzed: 06/06/19 11:28							**C-07**
QC Source Sample: Non-SDG (A9E0927-05RE1)												
Aroclor 1016	398	3.53	7.05	ug/kg dry	1	441	ND	90	47-134%	1	30%	
Aroclor 1260	443	3.53	7.05	ug/kg dry	1	441	21.0	96	53-140%	3	30%	
Surr: Decachlorobiphenyl (Surr)			*Recovery: 94 %*		*Limits: 60-125 %*		*Dilution: 1x*					

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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 9051333 - EPA 3546							**Sediment**					
Blank (9051333-BLK1)			Prepared: 05/29/19 06:59		Analyzed: 05/29/19 12:16							
EPA 8270D												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 77 %*		*Limits: 37-122 %*			*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*77 %*		*44-115 %*			*"*				
p-Terphenyl-d14 (Surr)			*95 %*		*54-127 %*			*"*				
LCS (9051333-BS1)			Prepared: 05/29/19 06:59		Analyzed: 05/29/19 12:52							
EPA 8270D												
Acenaphthene	434	5.32	10.7	ug/kg wet	4	533	---	81	40-122%	---	---	
Acenaphthylene	453	5.32	10.7	ug/kg wet	4	533	---	85	32-132%	---	---	
Anthracene	493	5.32	10.7	ug/kg wet	4	533	---	92	47-123%	---	---	
Benz(a)anthracene	513	5.32	10.7	ug/kg wet	4	533	---	96	49-126%	---	---	
Benzo(a)pyrene	539	8.00	16.0	ug/kg wet	4	533	---	101	45-129%	---	---	
Benzo(b)fluoranthene	521	8.00	16.0	ug/kg wet	4	533	---	98	45-132%	---	---	
Benzo(k)fluoranthene	510	8.00	16.0	ug/kg wet	4	533	---	96	47-132%	---	---	
Benzo(g,h,i)perylene	490	5.32	10.7	ug/kg wet	4	533	---	92	43-134%	---	---	
Chrysene	510	5.32	10.7	ug/kg wet	4	533	---	96	50-124%	---	---	

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Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9051333 - EPA 3546							**Sediment**					
LCS (9051333-BS1)			Prepared: 05/29/19 06:59	Analyzed: 05/29/19 12:52								
Dibenz(a,h)anthracene	505	5.32	10.7	ug/kg wet	4	533	---	95	45-134%	---	---	
Fluoranthene	507	5.32	10.7	ug/kg wet	4	533	---	95	50-127%	---	---	
Fluorene	461	5.32	10.7	ug/kg wet	4	533	---	86	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	456	5.32	10.7	ug/kg wet	4	533	---	85	45-133%	---	---	
1-Methylnaphthalene	429	10.7	21.3	ug/kg wet	4	533	---	80	40-120%	---	---	
2-Methylnaphthalene	446	10.7	21.3	ug/kg wet	4	533	---	84	38-122%	---	---	
Naphthalene	414	10.7	21.3	ug/kg wet	4	533	---	78	35-123%	---	---	
Phenanthrene	472	5.32	10.7	ug/kg wet	4	533	---	89	50-121%	---	---	
Pyrene	505	5.32	10.7	ug/kg wet	4	533	---	95	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 79 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*81 %*	*44-115 %*			*"*					
p-Terphenyl-d14 (Surr)			*97 %*	*54-127 %*			*"*					
Duplicate (9051333-DUP1)			Prepared: 05/29/19 06:59	Analyzed: 05/29/19 15:19								
QC Source Sample: Non-SDG (A9E0744-01)												
Acenaphthene	**710**	86.8	174	ug/kg dry	40	---	460	---	---	**43**	**30%**	Q-17
Acenaphthylene	ND	86.8	174	ug/kg dry	40	---	ND	---	---	---	30%	
Anthracene	**254**	86.8	174	ug/kg dry	40	---	170	---	---	**40**	**30%**	Q-17
Benz(a)anthracene	**585**	86.8	174	ug/kg dry	40	---	504	---	---	15	30%	
Benzo(a)pyrene	**598**	130	261	ug/kg dry	40	---	789	---	---	27	30%	
Benzo(b)fluoranthene	**567**	130	261	ug/kg dry	40	---	681	---	---	18	30%	M-05
Benzo(k)fluoranthene	**250**	130	261	ug/kg dry	40	---	257	---	---	3	30%	J
Benzo(g,h,i)perylene	**348**	86.8	174	ug/kg dry	40	---	512	---	---	**38**	**30%**	Q-17
Chrysene	**652**	86.8	174	ug/kg dry	40	---	552	---	---	17	30%	
Dibenz(a,h)anthracene	ND	86.8	174	ug/kg dry	40	---	ND	---	---	---	30%	
Fluoranthene	**2740**	86.8	174	ug/kg dry	40	---	1170	---	---	**80**	**30%**	Q-17
Fluorene	**438**	86.8	174	ug/kg dry	40	---	306	---	---	**35**	**30%**	Q-17
Indeno(1,2,3-cd)pyrene	**300**	86.8	174	ug/kg dry	40	---	436	---	---	**37**	**30%**	Q-17
1-Methylnaphthalene	**233**	174	348	ug/kg dry	40	---	189	---	---	21	30%	J
2-Methylnaphthalene	**440**	174	348	ug/kg dry	40	---	394	---	---	11	30%	
Naphthalene	**1090**	174	348	ug/kg dry	40	---	863	---	---	23	30%	
Phenanthrene	**2520**	86.8	174	ug/kg dry	40	---	1100	---	---	**78**	**30%**	Q-17
Pyrene	**3180**	86.8	174	ug/kg dry	40	---	1350	---	---	**81**	**30%**	Q-17
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 75 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9051333 - EPA 3546							**Sediment**					
Duplicate (9051333-DUP1)			Prepared: 05/29/19 06:59 Analyzed: 05/29/19 15:19									
QC Source Sample: Non-SDG (A9E0744-01)												
Surr: 2-Fluorobiphenyl (Surr)			*Recovery: 73 %*	*Limits: 44-115 %*			*Dilution: 40x*					S-05
p-Terphenyl-d14 (Surr)			*85 %*	*54-127 %*			*"*					S-05
Matrix Spike (9051333-MS1)			Prepared: 05/29/19 06:59 Analyzed: 05/29/19 14:06									
QC Source Sample: Non-SDG (A9E0744-11)												
EPA 8270D												
Acenaphthene	7450	89.0	179	ug/kg dry	40	892	4390	**343**	**40-122%**	---	---	Q-03
Acenaphthylene	865	89.0	179	ug/kg dry	40	892	ND	97	32-132%	---	---	
Anthracene	6260	89.0	179	ug/kg dry	40	892	3750	**281**	**47-123%**	---	---	Q-03
Benz(a)anthracene	34100	89.0	179	ug/kg dry	40	892	29200	**546**	**49-126%**	---	---	Q-03
Benzo(a)pyrene	44700	134	268	ug/kg dry	40	892	35400	**1050**	**45-129%**	---	---	Q-03
Benzo(b)fluoranthene	52400	134	268	ug/kg dry	40	892	41700	**1200**	**45-132%**	---	---	Q-03
Benzo(k)fluoranthene	17900	134	268	ug/kg dry	40	892	13700	**471**	**47-132%**	---	---	Q-03
Benzo(g,h,i)perylene	31500	89.0	179	ug/kg dry	40	892	23000	**958**	**43-134%**	---	---	Q-03
Chrysene	35400	89.0	179	ug/kg dry	40	892	30200	**581**	**50-124%**	---	---	Q-03
Dibenz(a,h)anthracene	8050	89.0	179	ug/kg dry	40	892	5440	**293**	**45-134%**	---	---	Q-03
Fluoranthene	41900	89.0	179	ug/kg dry	40	892	38000	**440**	**50-127%**	---	---	Q-03
Fluorene	3610	89.0	179	ug/kg dry	40	892	1610	**224**	**43-125%**	---	---	Q-03
Indeno(1,2,3-cd)pyrene	32000	89.0	179	ug/kg dry	40	892	23500	**949**	**45-133%**	---	---	Q-03
1-Methylnaphthalene	1210	179	357	ug/kg dry	40	892	204	113	40-120%	---	---	
2-Methylnaphthalene	1560	179	357	ug/kg dry	40	892	336	**137**	**38-122%**	---	---	Q-03
Naphthalene	2700	179	357	ug/kg dry	40	892	637	**231**	**35-123%**	---	---	Q-03
Phenanthrene	22000	89.0	179	ug/kg dry	40	892	15700	**705**	**50-121%**	---	---	Q-03
Pyrene	38800	89.0	179	ug/kg dry	40	892	36500	**261**	**47-127%**	---	---	Q-03
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 88 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*81 %*	*44-115 %*			*"*					S-05
p-Terphenyl-d14 (Surr)			*101 %*	*54-127 %*			*"*					S-05
Matrix Spike (9051333-MS2)			Prepared: 05/29/19 12:26 Analyzed: 05/29/19 18:22									
QC Source Sample: Non-SDG (A9E0744-19RE2)												
EPA 8270D												
Acenaphthene	568	7.55	15.2	ug/kg dry	4	757	ND	75	40-122%	---	---	

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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 9051333 - EPA 3546							**Sediment**					
Matrix Spike (9051333-MS2)			Prepared: 05/29/19 12:26		Analyzed: 05/29/19 18:22							
QC Source Sample: Non-SDG (A9E0744-19RE2)												
Acenaphthylene	591	7.55	15.2	ug/kg dry	4	757	ND	78	32-132%	---	---	
Anthracene	629	7.55	15.2	ug/kg dry	4	757	ND	83	47-123%	---	---	
Benz(a)anthracene	648	7.55	15.2	ug/kg dry	4	757	ND	86	49-126%	---	---	
Benzo(a)pyrene	673	11.4	22.7	ug/kg dry	4	757	ND	89	45-129%	---	---	
Benzo(b)fluoranthene	676	11.4	22.7	ug/kg dry	4	757	ND	89	45-132%	---	---	
Benzo(k)fluoranthene	635	11.4	22.7	ug/kg dry	4	757	ND	84	47-132%	---	---	
Benzo(g,h,i)perylene	614	7.55	15.2	ug/kg dry	4	757	ND	81	43-134%	---	---	
Chrysene	635	7.55	15.2	ug/kg dry	4	757	ND	84	50-124%	---	---	
Dibenz(a,h)anthracene	643	7.55	15.2	ug/kg dry	4	757	ND	85	45-134%	---	---	
Fluoranthene	645	7.55	15.2	ug/kg dry	4	757	ND	85	50-127%	---	---	
Fluorene	603	7.55	15.2	ug/kg dry	4	757	ND	80	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	597	7.55	15.2	ug/kg dry	4	757	ND	79	45-133%	---	---	
1-Methylnaphthalene	544	15.2	30.3	ug/kg dry	4	757	ND	72	40-120%	---	---	
2-Methylnaphthalene	569	15.2	30.3	ug/kg dry	4	757	ND	75	38-122%	---	---	
Naphthalene	525	15.2	30.3	ug/kg dry	4	757	ND	69	35-123%	---	---	
Phenanthrene	615	7.55	15.2	ug/kg dry	4	757	ND	81	50-121%	---	---	
Pyrene	642	7.55	15.2	ug/kg dry	4	757	ND	85	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 63 %*		*Limits: 37-122 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*67 %*		*44-115 %*				*"*			
p-Terphenyl-d14 (Surr)			*73 %*		*54-127 %*				*"*			
Matrix Spike Dup (9051333-MSD2)			Prepared: 05/29/19 12:27		Analyzed: 05/29/19 18:59							
QC Source Sample: Non-SDG (A9E0744-19RE2)												
Acenaphthene	597	7.49	15.0	ug/kg dry	4	751	ND	79	40-122%	5	30%	
Acenaphthylene	621	7.49	15.0	ug/kg dry	4	751	ND	83	32-132%	5	30%	
Anthracene	667	7.49	15.0	ug/kg dry	4	751	ND	89	47-123%	6	30%	
Benz(a)anthracene	690	7.49	15.0	ug/kg dry	4	751	ND	92	49-126%	6	30%	
Benzo(a)pyrene	729	11.3	22.5	ug/kg dry	4	751	ND	97	45-129%	8	30%	
Benzo(b)fluoranthene	702	11.3	22.5	ug/kg dry	4	751	ND	93	45-132%	4	30%	
Benzo(k)fluoranthene	695	11.3	22.5	ug/kg dry	4	751	ND	93	47-132%	9	30%	
Benzo(g,h,i)perylene	645	7.49	15.0	ug/kg dry	4	751	ND	86	43-134%	5	30%	
Chrysene	678	7.49	15.0	ug/kg dry	4	751	ND	90	50-124%	7	30%	
Dibenz(a,h)anthracene	696	7.49	15.0	ug/kg dry	4	751	ND	93	45-134%	8	30%	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9051333 - EPA 3546							**Sediment**					
Matrix Spike Dup (9051333-MSD2)			Prepared: 05/29/19 12:27		Analyzed: 05/29/19 18:59							
QC Source Sample: Non-SDG (A9E0744-19RE2)												
Fluoranthene	682	7.49	15.0	ug/kg dry	4	751	ND	91	50-127%	6	30%	
Fluorene	642	7.49	15.0	ug/kg dry	4	751	ND	86	43-125%	6	30%	
Indeno(1,2,3-cd)pyrene	596	7.49	15.0	ug/kg dry	4	751	ND	79	45-133%	0.1	30%	
1-Methylnaphthalene	553	15.0	30.0	ug/kg dry	4	751	ND	74	40-120%	2	30%	
2-Methylnaphthalene	561	15.0	30.0	ug/kg dry	4	751	ND	75	38-122%	2	30%	
Naphthalene	521	15.0	30.0	ug/kg dry	4	751	ND	69	35-123%	0.9	30%	
Phenanthrene	644	7.49	15.0	ug/kg dry	4	751	ND	86	50-121%	5	30%	
Pyrene	669	7.49	15.0	ug/kg dry	4	751	ND	89	47-127%	4	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 66 %*		*Limits: 37-122 %*		*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*64 %*		*44-115 %*		*"*					
p-Terphenyl-d14 (Surr)			*74 %*		*54-127 %*		*"*					

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Blank (9060602-BLK1)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 14:34									
EPA 8270D												
Acenaphthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	1.87	3.75	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	2.50	5.00	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	1.25	2.50	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 94 %*	*Limits: 37-122 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*76 %*	*44-115 %*			*"*					
Phenol-d6 (Surr)			*91 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*96 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*75 %*	*35-115 %*			*"*					
2,4,6-Tribromophenol (Surr)			*72 %*	*39-132 %*			*"*					
LCS (9060602-BS1)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 15:11									
EPA 8270D												
Acenaphthene	445	5.32	10.7	ug/kg wet	4	533	---	83	40-122%	---	---	
Acenaphthylene	460	5.32	10.7	ug/kg wet	4	533	---	86	32-132%	---	---	
Anthracene	482	5.32	10.7	ug/kg wet	4	533	---	90	47-123%	---	---	
Benz(a)anthracene	526	5.32	10.7	ug/kg wet	4	533	---	99	49-126%	---	---	
Benzo(a)pyrene	540	8.00	16.0	ug/kg wet	4	533	---	101	45-129%	---	---	
Benzo(b)fluoranthene	534	8.00	16.0	ug/kg wet	4	533	---	100	45-132%	---	---	

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
LCS (9060602-BS1)			Prepared: 06/05/19 11:06	Analyzed: 06/05/19 15:11								
Benzo(k)fluoranthene	533	8.00	16.0	ug/kg wet	4	533	---	100	47-132%	---	---	
Benzo(g,h,i)perylene	471	5.32	10.7	ug/kg wet	4	533	---	88	43-134%	---	---	
Chrysene	518	5.32	10.7	ug/kg wet	4	533	---	97	50-124%	---	---	
Dibenz(a,h)anthracene	524	5.32	10.7	ug/kg wet	4	533	---	98	45-134%	---	---	
Fluoranthene	503	5.32	10.7	ug/kg wet	4	533	---	94	50-127%	---	---	
Fluorene	454	5.32	10.7	ug/kg wet	4	533	---	85	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	458	5.32	10.7	ug/kg wet	4	533	---	86	45-133%	---	---	
1-Methylnaphthalene	428	10.7	21.3	ug/kg wet	4	533	---	80	40-120%	---	---	
2-Methylnaphthalene	439	10.7	21.3	ug/kg wet	4	533	---	82	38-122%	---	---	
Naphthalene	430	10.7	21.3	ug/kg wet	4	533	---	81	35-123%	---	---	
Phenanthrene	469	5.32	10.7	ug/kg wet	4	533	---	88	50-121%	---	---	
Pyrene	497	5.32	10.7	ug/kg wet	4	533	---	93	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 91 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*83 %*	*44-115 %*			*"*					
Phenol-d6 (Surr)			*92 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*95 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*68 %*	*35-115 %*			*"*					
2,4,6-Tribromophenol (Surr)			*83 %*	*39-132 %*			*"*					
Duplicate (9060602-DUP1)			Prepared: 06/05/19 11:06	Analyzed: 06/05/19 17:36								
QC Source Sample: T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)												
EPA 8270D												
Acenaphthene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Anthracene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	2.76	5.52	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(b)fluoranthene	ND	2.76	5.52	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(k)fluoranthene	ND	2.76	5.52	ug/kg dry	1	---	ND	---	---	---	30%	
Benzo(g,h,i)perylene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Chrysene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Fluoranthene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Fluorene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	

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Darwin Thomas, Business Development Director

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503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Duplicate (9060602-DUP1)				Prepared: 06/05/19 11:06		Analyzed: 06/05/19 17:36						
QC Source Sample: T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)												
Indeno(1,2,3-cd)pyrene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	3.69	7.36	ug/kg dry	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	3.69	7.36	ug/kg dry	1	---	ND	---	---	---	30%	
Naphthalene	ND	3.69	7.36	ug/kg dry	1	---	ND	---	---	---	30%	
Phenanthrene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Pyrene	ND	1.84	3.69	ug/kg dry	1	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 81 %*		*Limits: 37-122 %*		*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*68 %*		*44-115 %*		*"*					
Phenol-d6 (Surr)			*83 %*		*33-122 %*		*"*					
p-Terphenyl-d14 (Surr)			*83 %*		*54-127 %*		*"*					
2-Fluorophenol (Surr)			*74 %*		*35-115 %*		*"*					
2,4,6-Tribromophenol (Surr)			*71 %*		*39-132 %*		*"*					
Matrix Spike (9060602-MS1)				Prepared: 06/05/19 11:06		Analyzed: 06/05/19 18:49						
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)												
EPA 8270D												
Acenaphthene	554	7.43	14.9	ug/kg dry	4	745	ND	74	40-122%	---	---	
Acenaphthylene	573	7.43	14.9	ug/kg dry	4	745	ND	77	32-132%	---	---	
Anthracene	595	7.43	14.9	ug/kg dry	4	745	ND	80	47-123%	---	---	
Benz(a)anthracene	611	7.43	14.9	ug/kg dry	4	745	ND	82	49-126%	---	---	
Benzo(a)pyrene	639	11.2	22.4	ug/kg dry	4	745	ND	86	45-129%	---	---	
Benzo(b)fluoranthene	628	11.2	22.4	ug/kg dry	4	745	ND	84	45-132%	---	---	
Benzo(k)fluoranthene	620	11.2	22.4	ug/kg dry	4	745	ND	83	47-132%	---	---	
Benzo(g,h,i)perylene	572	7.43	14.9	ug/kg dry	4	745	ND	77	43-134%	---	---	
Chrysene	604	7.43	14.9	ug/kg dry	4	745	ND	81	50-124%	---	---	
Dibenz(a,h)anthracene	589	7.43	14.9	ug/kg dry	4	745	ND	79	45-134%	---	---	
Fluoranthene	608	7.43	14.9	ug/kg dry	4	745	ND	82	50-127%	---	---	
Fluorene	573	7.43	14.9	ug/kg dry	4	745	ND	77	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	542	7.43	14.9	ug/kg dry	4	745	ND	73	45-133%	---	---	
1-Methylnaphthalene	569	14.9	29.8	ug/kg dry	4	745	ND	76	40-120%	---	---	
2-Methylnaphthalene	572	14.9	29.8	ug/kg dry	4	745	ND	77	38-122%	---	---	
Naphthalene	553	14.9	29.8	ug/kg dry	4	745	ND	74	35-123%	---	---	
Phenanthrene	584	7.43	14.9	ug/kg dry	4	745	ND	78	50-121%	---	---	

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike (9060602-MS1)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 18:49									
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)												
Pyrene	602	7.43	14.9	ug/kg dry	4	745	ND	81	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 89 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*72 %*	*44-115 %*			*"*					
Phenol-d6 (Surr)			*89 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*73 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*68 %*	*35-115 %*			*"*					
2,4,6-Tribromophenol (Surr)			*77 %*	*39-132 %*			*"*					
Matrix Spike (9060602-MS2)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 18:15									
QC Source Sample: Non-SDG (A9E0838-02)												
EPA 8270D												
Acenaphthene	618	98.6	198	ug/kg dry	40	988	ND	63	40-122%	---	---	
Acenaphthylene	531	98.6	198	ug/kg dry	40	988	ND	54	32-132%	---	---	
Anthracene	734	98.6	198	ug/kg dry	40	988	ND	74	47-123%	---	---	
Benz(a)anthracene	1090	98.6	198	ug/kg dry	40	988	452	64	49-126%	---	---	
Benzo(a)pyrene	1220	148	296	ug/kg dry	40	988	674	56	45-129%	---	---	
Benzo(b)fluoranthene	1330	148	296	ug/kg dry	40	988	756	58	45-132%	---	---	
Benzo(k)fluoranthene	1070	148	296	ug/kg dry	40	988	363	72	47-132%	---	---	
Benzo(g,h,i)perylene	1060	98.6	198	ug/kg dry	40	988	438	63	43-134%	---	---	
Chrysene	1170	98.6	198	ug/kg dry	40	988	562	61	50-124%	---	---	
Dibenz(a,h)anthracene	839	98.6	198	ug/kg dry	40	988	102	75	45-134%	---	---	
Fluoranthene	1290	98.6	198	ug/kg dry	40	988	695	60	50-127%	---	---	
Fluorene	658	98.6	198	ug/kg dry	40	988	ND	67	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	1150	98.6	198	ug/kg dry	40	988	526	63	45-133%	---	---	
2-Methylnaphthalene	535	198	395	ug/kg dry	40	988	ND	54	38-122%	---	---	
Naphthalene	541	198	395	ug/kg dry	40	988	ND	55	35-123%	---	---	
Phenanthrene	1010	98.6	198	ug/kg dry	40	988	310	71	50-121%	---	---	
Pyrene	1300	98.6	198	ug/kg dry	40	988	676	63	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 46 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*49 %*	*44-115 %*			*"*					S-05
p-Terphenyl-d14 (Surr)			*70 %*	*54-127 %*			*"*					S-05

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EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike (9060602-MS3)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 19:29									
QC Source Sample: Non-SDG (A9E0838-15)												
EPA 8270D												
Acenaphthene	761	87.4	176	ug/kg dry	40	877	92.1	76	40-122%	---	---	
Acenaphthylene	573	87.4	176	ug/kg dry	40	877	ND	65	32-132%	---	---	
Anthracene	726	87.4	176	ug/kg dry	40	877	ND	83	47-123%	---	---	
Benz(a)anthracene	1320	87.4	176	ug/kg dry	40	877	475	96	49-126%	---	---	
Benzo(a)pyrene	1550	131	263	ug/kg dry	40	877	614	107	45-129%	---	---	
Benzo(b)fluoranthene	1700	131	263	ug/kg dry	40	877	803	102	45-132%	---	---	
Benzo(k)fluoranthene	1150	131	263	ug/kg dry	40	877	321	94	47-132%	---	---	
Benzo(g,h,i)perylene	1170	87.4	176	ug/kg dry	40	877	386	90	43-134%	---	---	
Chrysene	1400	87.4	176	ug/kg dry	40	877	572	94	50-124%	---	---	
Dibenz(a,h)anthracene	743	87.4	176	ug/kg dry	40	877	99.2	73	45-134%	---	---	
Fluoranthene	1660	87.4	176	ug/kg dry	40	877	792	99	50-127%	---	---	
Fluorene	668	87.4	176	ug/kg dry	40	877	ND	76	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	1230	87.4	176	ug/kg dry	40	877	452	89	45-133%	---	---	
2-Methylnaphthalene	562	176	350	ug/kg dry	40	877	ND	64	38-122%	---	---	
Naphthalene	560	176	350	ug/kg dry	40	877	ND	64	35-123%	---	---	
Phenanthrene	1250	87.4	176	ug/kg dry	40	877	404	97	50-121%	---	---	
Pyrene	1640	87.4	176	ug/kg dry	40	877	751	102	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 57 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*59 %*	*44-115 %*			*"*					S-05
p-Terphenyl-d14 (Surr)			*65 %*	*54-127 %*			*"*					S-05
Matrix Spike (9060602-MS4)			Prepared: 06/05/19 16:08 Analyzed: 06/06/19 12:42									
QC Source Sample: Non-SDG (A9E0927-05)												
EPA 8270D												
Acenaphthene	502	91.6	184	ug/kg dry	40	918	ND	55	40-122%	---	---	
Acenaphthylene	444	91.6	184	ug/kg dry	40	918	ND	48	32-132%	---	---	
Anthracene	650	91.6	184	ug/kg dry	40	918	ND	71	47-123%	---	---	
Benz(a)anthracene	910	91.6	184	ug/kg dry	40	918	311	65	49-126%	---	---	
Benzo(a)pyrene	1010	138	275	ug/kg dry	40	918	372	70	45-129%	---	---	
Benzo(b)fluoranthene	1090	138	275	ug/kg dry	40	918	531	61	45-132%	---	---	
Benzo(k)fluoranthene	871	138	275	ug/kg dry	40	918	187	75	47-132%	---	---	
Benzo(g,h,i)perylene	845	91.6	184	ug/kg dry	40	918	282	61	43-134%	---	---	

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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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike (9060602-MS4)			Prepared: 06/05/19 16:08 Analyzed: 06/06/19 12:42									
QC Source Sample: Non-SDG (A9E0927-05)												
Chrysene	936	91.6	184	ug/kg dry	40	918	400	58	50-124%	---	---	
Dibenz(a,h)anthracene	679	91.6	184	ug/kg dry	40	918	ND	74	45-134%	---	---	
Fluoranthene	1120	91.6	184	ug/kg dry	40	918	600	57	50-127%	---	---	
Fluorene	597	91.6	184	ug/kg dry	40	918	ND	65	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	842	91.6	184	ug/kg dry	40	918	279	61	45-133%	---	---	
2-Methylnaphthalene	359	184	367	ug/kg dry	40	918	ND	39	38-122%	---	---	J
Naphthalene	344	184	367	ug/kg dry	40	918	ND	38	35-123%	---	---	J
Phenanthrene	861	91.6	184	ug/kg dry	40	918	296	62	50-121%	---	---	
Pyrene	1110	91.6	184	ug/kg dry	40	918	563	60	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 29 %*		*Limits: 37-122 %*		*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*41 %*		*44-115 %*		*"*					S-05
Phenol-d6 (Surr)			*31 %*		*33-122 %*		*"*					S-05
p-Terphenyl-d14 (Surr)			*66 %*		*54-127 %*		*"*					S-05
2-Fluorophenol (Surr)			*28 %*		*35-115 %*		*"*					S-05
2,4,6-Tribromophenol (Surr)			*85 %*		*39-132 %*		*"*					S-05
Matrix Spike Dup (9060602-MSD1)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 19:26									
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)												
EPA 8270D												
Acenaphthene	452	7.40	14.9	ug/kg dry	4	742	ND	61	40-122%	20	30%	
Acenaphthylene	467	7.40	14.9	ug/kg dry	4	742	ND	63	32-132%	20	30%	
Anthracene	593	7.40	14.9	ug/kg dry	4	742	ND	80	47-123%	0.2	30%	
Benz(a)anthracene	648	7.40	14.9	ug/kg dry	4	742	ND	87	49-126%	6	30%	
Benzo(a)pyrene	661	11.1	22.3	ug/kg dry	4	742	ND	89	45-129%	3	30%	
Benzo(b)fluoranthene	647	11.1	22.3	ug/kg dry	4	742	ND	87	45-132%	3	30%	
Benzo(k)fluoranthene	640	11.1	22.3	ug/kg dry	4	742	ND	86	47-132%	3	30%	
Benzo(g,h,i)perylene	594	7.40	14.9	ug/kg dry	4	742	ND	80	43-134%	4	30%	
Chrysene	640	7.40	14.9	ug/kg dry	4	742	ND	86	50-124%	6	30%	
Dibenz(a,h)anthracene	649	7.40	14.9	ug/kg dry	4	742	ND	88	45-134%	10	30%	
Fluoranthene	628	7.40	14.9	ug/kg dry	4	742	ND	85	50-127%	3	30%	
Fluorene	517	7.40	14.9	ug/kg dry	4	742	ND	70	43-125%	10	30%	
Indeno(1,2,3-cd)pyrene	691	7.40	14.9	ug/kg dry	4	742	ND	93	45-133%	24	30%	
1-Methylnaphthalene	398	14.9	29.6	ug/kg dry	4	742	ND	54	40-120%	**35**	**30%**	Q-24

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike Dup (9060602-MSD1)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 19:26									
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)												
2-Methylnaphthalene	405	14.9	29.6	ug/kg dry	4	742	ND	55	38-122%	**34**	**30%**	Q-24
Naphthalene	389	14.9	29.6	ug/kg dry	4	742	ND	52	35-123%	**35**	**30%**	Q-24
Phenanthrene	578	7.40	14.9	ug/kg dry	4	742	ND	78	50-121%	0.9	30%	
Pyrene	627	7.40	14.9	ug/kg dry	4	742	ND	85	47-127%	4	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 60 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*56 %*	*44-115 %*			*"*					
Phenol-d6 (Surr)			*59 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*84 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*43 %*	*35-115 %*			*"*					
2,4,6-Tribromophenol (Surr)			*69 %*	*39-132 %*			*"*					
Matrix Spike Dup (9060602-MSD2)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 18:52									
QC Source Sample: Non-SDG (A9E0838-02)												
Acenaphthene	725	98.4	198	ug/kg dry	40	987	ND	74	40-122%	16	30%	
Acenaphthylene	566	98.4	198	ug/kg dry	40	987	ND	57	32-132%	6	30%	
Anthracene	839	98.4	198	ug/kg dry	40	987	ND	85	47-123%	13	30%	
Benz(a)anthracene	1710	98.4	198	ug/kg dry	40	987	452	**128**	**49-126%**	**45**	**30%**	Q-01
Benzo(a)pyrene	2250	148	296	ug/kg dry	40	987	674	**160**	**45-129%**	**59**	**30%**	Q-01
Benzo(b)fluoranthene	2690	148	296	ug/kg dry	40	987	756	**197**	**45-132%**	**68**	**30%**	Q-01
Benzo(k)fluoranthene	1570	148	296	ug/kg dry	40	987	363	123	47-132%	**38**	**30%**	Q-24
Benzo(g,h,i)perylene	1710	98.4	198	ug/kg dry	40	987	438	129	43-134%	**47**	**30%**	Q-24
Chrysene	1930	98.4	198	ug/kg dry	40	987	562	**139**	**50-124%**	**49**	**30%**	Q-01
Dibenz(a,h)anthracene	979	98.4	198	ug/kg dry	40	987	102	89	45-134%	15	30%	
Fluoranthene	2320	98.4	198	ug/kg dry	40	987	695	**164**	**50-127%**	**57**	**30%**	Q-01
Fluorene	701	98.4	198	ug/kg dry	40	987	ND	71	43-125%	6	30%	
Indeno(1,2,3-cd)pyrene	1740	98.4	198	ug/kg dry	40	987	526	123	45-133%	**41**	**30%**	Q-24
2-Methylnaphthalene	561	198	394	ug/kg dry	40	987	ND	57	38-122%	5	30%	
Naphthalene	553	198	394	ug/kg dry	40	987	ND	56	35-123%	2	30%	
Phenanthrene	1410	98.4	198	ug/kg dry	40	987	310	112	50-121%	**33**	**30%**	Q-24
Pyrene	2330	98.4	198	ug/kg dry	40	987	676	**168**	**47-127%**	**57**	**30%**	Q-01
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 43 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*52 %*	*44-115 %*			*"*					S-05

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EPA ID: OR01039

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike Dup (9060602-MSD2)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 18:52									
QC Source Sample: Non-SDG (A9E0838-02)												
Surr: p-Terphenyl-d14 (Surr)			*Recovery: 81 %*	*Limits: 54-127 %*			*Dilution: 40x*					S-05
Matrix Spike Dup (9060602-MSD3)			Prepared: 06/05/19 11:06 Analyzed: 06/05/19 20:07									
QC Source Sample: Non-SDG (A9E0838-15)												
Acenaphthene	655	87.5	176	ug/kg dry	40	877	92.1	64	40-122%	15	30%	
Acenaphthylene	528	87.5	176	ug/kg dry	40	877	ND	60	32-132%	8	30%	
Anthracene	700	87.5	176	ug/kg dry	40	877	ND	80	47-123%	4	30%	
Benz(a)anthracene	1140	87.5	176	ug/kg dry	40	877	475	76	49-126%	15	30%	
Benzo(a)pyrene	1300	132	263	ug/kg dry	40	877	614	78	45-129%	18	30%	
Benzo(b)fluoranthene	1460	132	263	ug/kg dry	40	877	803	75	45-132%	15	30%	
Benzo(k)fluoranthene	1100	132	263	ug/kg dry	40	877	321	89	47-132%	4	30%	
Benzo(g,h,i)perylene	1070	87.5	176	ug/kg dry	40	877	386	78	43-134%	9	30%	
Chrysene	1210	87.5	176	ug/kg dry	40	877	572	73	50-124%	14	30%	
Dibenz(a,h)anthracene	741	87.5	176	ug/kg dry	40	877	99.2	73	45-134%	0.3	30%	
Fluoranthene	1400	87.5	176	ug/kg dry	40	877	792	69	50-127%	17	30%	
Fluorene	678	87.5	176	ug/kg dry	40	877	ND	77	43-125%	2	30%	
Indeno(1,2,3-cd)pyrene	1060	87.5	176	ug/kg dry	40	877	452	69	45-133%	15	30%	
2-Methylnaphthalene	478	176	351	ug/kg dry	40	877	ND	55	38-122%	16	30%	
Naphthalene	462	176	351	ug/kg dry	40	877	ND	53	35-123%	19	30%	
Phenanthrene	1090	87.5	176	ug/kg dry	40	877	404	78	50-121%	14	30%	
Pyrene	1360	87.5	176	ug/kg dry	40	877	751	70	47-127%	19	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 41 %*	*Limits: 37-122 %*			*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*53 %*	*44-115 %*			*"*					S-05
p-Terphenyl-d14 (Surr)			*76 %*	*54-127 %*			*"*					S-05
Matrix Spike Dup (9060602-MSD4)			Prepared: 06/05/19 16:08 Analyzed: 06/06/19 13:19									
QC Source Sample: Non-SDG (A9E0927-05)												
Acenaphthene	424	89.3	179	ug/kg dry	40	896	ND	47	40-122%	17	30%	
Acenaphthylene	361	89.3	179	ug/kg dry	40	896	ND	40	32-132%	21	30%	
Anthracene	592	89.3	179	ug/kg dry	40	896	ND	66	47-123%	9	30%	
Benz(a)anthracene	856	89.3	179	ug/kg dry	40	896	311	61	49-126%	6	30%	
Benzo(a)pyrene	945	134	269	ug/kg dry	40	896	372	64	45-129%	7	30%	

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9060602 - EPA 3546							**Sediment**					
Matrix Spike Dup (9060602-MSD4)			Prepared: 06/05/19 16:08		Analyzed: 06/06/19 13:19							
QC Source Sample: Non-SDG (A9E0927-05)												
Benzo(b)fluoranthene	1050	134	269	ug/kg dry	40	896	531	58	45-132%	3	30%	
Benzo(k)fluoranthene	786	134	269	ug/kg dry	40	896	187	67	47-132%	10	30%	
Benzo(g,h,i)perylene	777	89.3	179	ug/kg dry	40	896	282	55	43-134%	8	30%	
Chrysene	891	89.3	179	ug/kg dry	40	896	400	55	50-124%	5	30%	
Dibenz(a,h)anthracene	623	89.3	179	ug/kg dry	40	896	ND	70	45-134%	9	30%	
Fluoranthene	1080	89.3	179	ug/kg dry	40	896	600	54	50-127%	4	30%	
Fluorene	517	89.3	179	ug/kg dry	40	896	ND	58	43-125%	14	30%	
Indeno(1,2,3-cd)pyrene	774	89.3	179	ug/kg dry	40	896	279	55	45-133%	8	30%	
2-Methylnaphthalene	333	179	358	ug/kg dry	40	896	ND	**37**	**38-122%**	7	30%	J, Q-01
Naphthalene	320	179	358	ug/kg dry	40	896	ND	36	35-123%	7	30%	J
Phenanthrene	825	89.3	179	ug/kg dry	40	896	296	59	50-121%	4	30%	
Pyrene	1070	89.3	179	ug/kg dry	40	896	563	56	47-127%	4	30%	
Carbazole	613	134	269	ug/kg dry	40	896	ND	68	50-122%	8	30%	
Dibenzofuran	441	89.3	179	ug/kg dry	40	896	ND	49	44-120%	16	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 28 %*		*Limits: 37-122 %*		*Dilution: 40x*					S-05
2-Fluorobiphenyl (Surr)			*33 %*		*44-115 %*		*"*					S-05
Phenol-d6 (Surr)			*31 %*		*33-122 %*		*"*					S-05
p-Terphenyl-d14 (Surr)			*64 %*		*54-127 %*		*"*					S-05
2-Fluorophenol (Surr)			*26 %*		*35-115 %*		*"*					S-05
2,4,6-Tribromophenol (Surr)			*88 %*		*39-132 %*		*"*					S-05

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

QUALITY CONTROL (QC) SAMPLE RESULTS

Demand Parameters

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9051253 - PSEP TOC							**Sediment**					
Blank (9051253-BLK1)			Prepared: 05/24/19 10:20		Analyzed: 05/30/19 16:16							
EPA 9060Amod												
Total Organic Carbon	ND	---	0.020	% by Weight	1	---	---	---	---	---	---	
LCS (9051253-BS1)			Prepared: 05/24/19 10:20		Analyzed: 05/30/19 16:16							
EPA 9060Amod												
Total Organic Carbon	10000	---		mg/kg	1	10000	---	102	90-110%	---	---	
Duplicate (9051253-DUP1)			Prepared: 05/24/19 10:20		Analyzed: 05/30/19 16:16							
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05)												
EPA 9060Amod												
Total Organic Carbon	**0.091**	---	0.020	% by Weight	1	---	0.096	---	---	6	20%	

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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 9051375 - Total Solids (SM2540G/PSEP)							**Soil**					
Duplicate (9051375-DUP1)			Prepared: 05/29/19 15:51		Analyzed: 05/30/19 15:22							
QC Source Sample: Non-SDG (A9E0744-19)												
Total Solids	**66.7**	---	1.00	% by Weight	1	---	67.1	---	---	0.6	20%	
Duplicate (9051375-DUP2)			Prepared: 05/29/19 15:51		Analyzed: 05/30/19 15:22							
QC Source Sample: T4-PDI2019-SC18-190522-07-09 (A9E0766-05)												
PSEP 1986												
Total Solids	**68.8**	---	1.00	% by Weight	1	---	68.9	---	---	0.1	20%	

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SAMPLE PREPARATION INFORMATION

Polychlorinated Biphenyls by EPA 8082A

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9051305							
A9E0766-01	Sediment	EPA 8082A	05/22/19 00:00	05/28/19 11:08	10.8g/2mL	10g/2mL	0.93
A9E0766-03	Sediment	EPA 8082A	05/22/19 09:47	05/28/19 11:08	10.29g/2mL	10g/2mL	0.97
A9E0766-04	Sediment	EPA 8082A	05/22/19 09:47	05/28/19 11:08	10.11g/2mL	10g/2mL	0.99
Batch: 9060524							
A9E0766-02RE1	Sediment	EPA 8082A	05/22/19 09:47	06/04/19 09:49	10.14g/2mL	10g/2mL	0.99
A9E0766-05RE1	Sediment	EPA 8082A	05/22/19 09:47	06/04/19 09:49	10.05g/2mL	10g/2mL	1.00
A9E0766-06RE1	Sediment	EPA 8082A	05/22/19 09:47	06/04/19 09:49	10.13g/2mL	10g/2mL	0.99
A9E0766-07RE1	Sediment	EPA 8082A	05/22/19 09:47	06/04/19 09:49	10.01g/2mL	10g/2mL	1.00
A9E0766-16RE1	Sediment	EPA 8082A	05/22/19 12:45	06/04/19 09:49	10.4g/2mL	10g/2mL	0.96

Semivolatile Organic Compounds by EPA 8270D

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9051333							
A9E0766-01RE2	Sediment	EPA 8270D	05/22/19 00:00	05/29/19 12:26	15.41g/2mL	15g/2mL	0.97
Batch: 9060602							
A9E0766-02RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.66g/2mL	15g/2mL	0.96
A9E0766-03RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.68g/2mL	15g/2mL	0.96
A9E0766-04RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.64g/2mL	15g/2mL	0.96
A9E0766-05RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.62g/2mL	15g/2mL	0.96
A9E0766-06RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.47g/2mL	15g/2mL	0.97
A9E0766-07RE2	Sediment	EPA 8270D	05/22/19 09:47	06/05/19 11:06	15.34g/2mL	15g/2mL	0.98

Demand Parameters

Prep: PSEP TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9051253							
A9E0766-01	Sediment	EPA 9060Amod	05/22/19 00:00	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-02	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-03	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-04	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-05	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-06	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

SAMPLE PREPARATION INFORMATION

Demand Parameters

Prep: PSEP TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A9E0766-07	Sediment	EPA 9060Amod	05/22/19 09:47	05/24/19 10:20	5g/5g	5g/5g	NA
A9E0766-16	Sediment	EPA 9060Amod	05/22/19 12:45	05/24/19 10:20	5g/5g	5g/5g	NA

Solid and Moisture Determinations

Prep: Total Solids (SM2540G/PSEP)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9051375							
A9E0766-01	Sediment	PSEP 1986	05/22/19 00:00	05/29/19 15:51			NA
A9E0766-02	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-03	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-04	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-05	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-06	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-07	Sediment	PSEP 1986	05/22/19 09:47	05/29/19 15:51			NA
A9E0766-16	Sediment	PSEP 1986	05/22/19 12:45	05/29/19 15:51			NA

Grain Size by ASTM D 422m/PSET Parameters

Prep: ASTM D 421

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9060757							
A9E0766-02	Sediment	D422mod	05/22/19 09:47	06/10/19 08:13			NA
A9E0766-03	Sediment	D422mod	05/22/19 09:47	06/10/19 08:28			NA
A9E0766-04	Sediment	D422mod	05/22/19 09:47	06/10/19 08:46			NA
A9E0766-05	Sediment	D422mod	05/22/19 09:47	06/10/19 08:06			NA
A9E0766-06	Sediment	D422mod	05/22/19 09:47	06/10/19 08:19			NA
A9E0766-07	Sediment	D422mod	05/22/19 09:47	06/10/19 08:38			NA
A9E0766-16	Sediment	D422mod	05/22/19 12:45	06/10/19 08:54			NA

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EPA ID: OR01039

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

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.
GS-01	See detailed Particle Size Analysis results, accumulation curves, and Case Narratives at the end of this report.
J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
M-05	Estimated results. Peak separation for structural isomers is insufficient for accurate quantification.
P-10	Result estimated due to the presence of multiple PCB Aroclors and/or matrix interference.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-03	Spike recovery and/or RPD is outside control limits due to the high concentration of analyte present in the sample.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-17	RPD between original and duplicate sample is outside of established control limits.
Q-24	The RPD for this spike and spike duplicate is above established control limits. Recoveries for both the spike and spike duplicate are within control limits.
S-05	Surrogate recovery is estimated due to sample dilution required for high analyte concentration and/or matrix interference.
S-06	Surrogate recovery is outside of established control limits.

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REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

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

NR Result Not Reported

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

Blanks:

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

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REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

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LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

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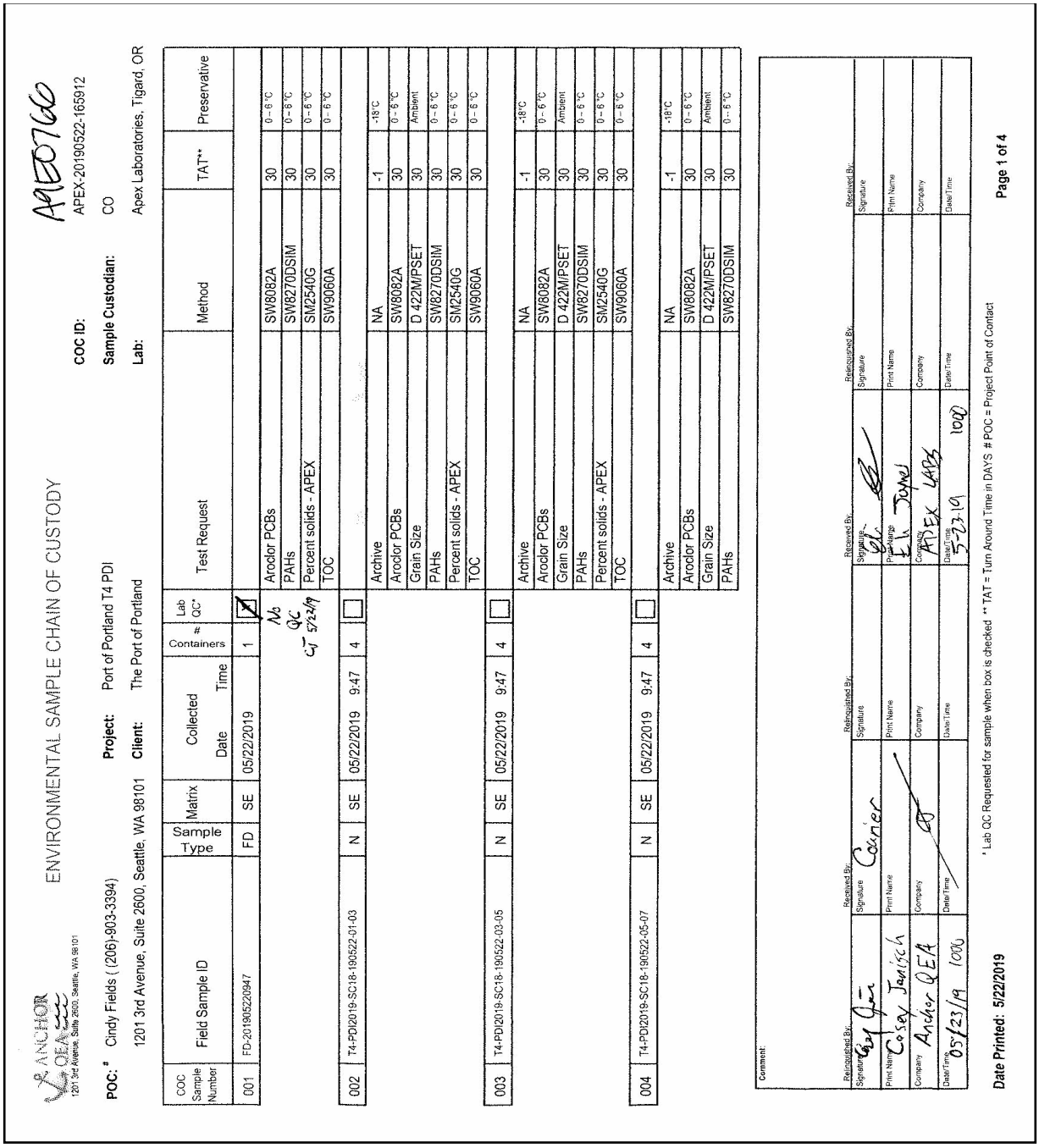
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**



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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9E0766

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394) Project: Port of Portland T4 PDI Sample Custodian: CO

1201 3rd Avenue, Suite 2600, Seattle, WA 98101 Client: The Port of Portland Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	FD-20190522094?	FD	SE	05/22/2019		1	☒				
							No QC 5/24/19	Aroclor PCBs	SW8082A	30	0 - 6 °C
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
002	T4-PDI2019-SC18-190522-01-03	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
003	T4-PDI2019-SC18-190522-03-05	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature:	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Jarosch	Print Name:	Print Name:	Print Name: Erik Joyce	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

Page 1 of 4

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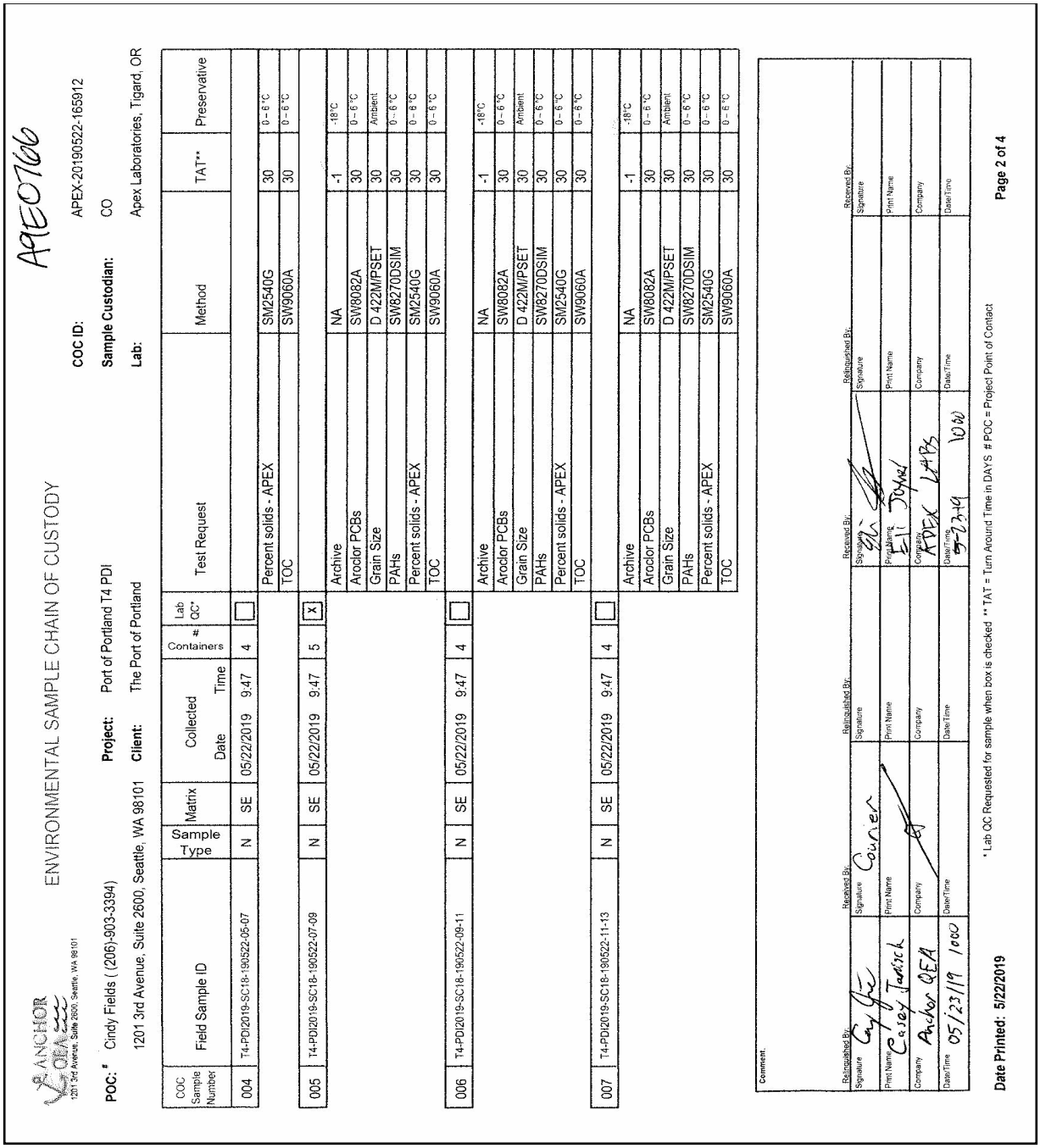
503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**



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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9E0766

COC ID: APEX-20190522-165912

POC: * Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI

Client: The Port of Portland

Sample Custodian: CO

Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐	Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
005	T4-PDI2019-SC18-190522-07-09	N	SE	05/22/2019	9:47	5	X	Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
006	T4-PDI2019-SC18-190522-09-11	N	SE	05/22/2019	9:47	4	☐	Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
007	T4-PDI2019-SC18-190522-11-13	N	SE	05/22/2019	9:47	4	☐	Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Cay Glo	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Tadrick	Print Name:	Print Name:	Print Name: Eli Joyce	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX Labs	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1040	Date/Time:	Date/Time:

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

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Page 2 of 4

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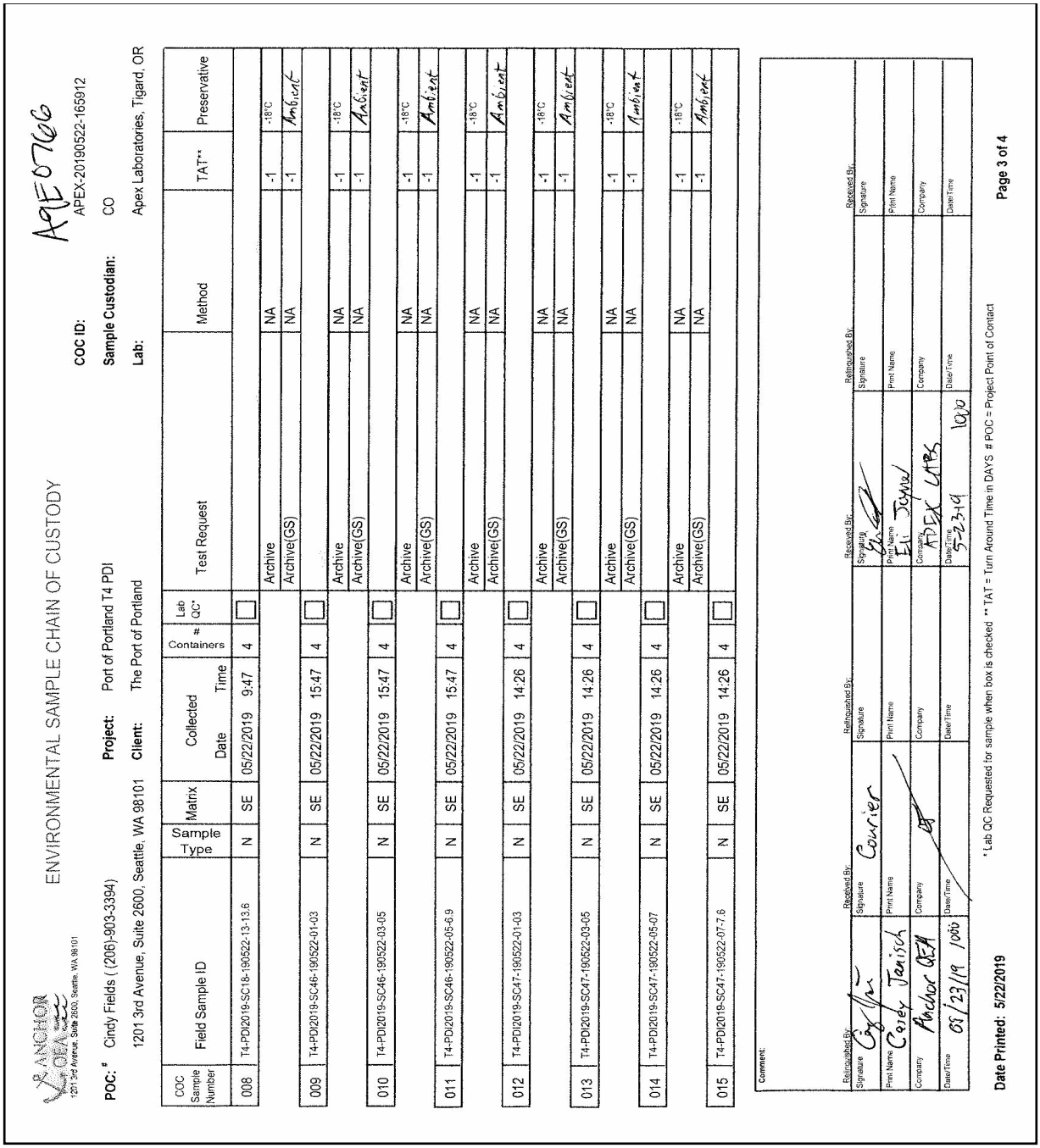
503-718-2323
EPA ID: OR01039

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**



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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9E0766

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI

Client: The Port of Portland

Sample Custodian: CO

Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
008	T4-PDI2019-SC18-190522-13-13.6	N	SE	05/22/2019	9:47	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
009	T4-PDI2019-SC46-190522-01-03	N	SE	05/22/2019	15:47	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
010	T4-PDI2019-SC46-190522-03-05	N	SE	05/22/2019	15:47	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
011	T4-PDI2019-SC46-190522-05-6.9	N	SE	05/22/2019	15:47	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
012	T4-PDI2019-SC47-190522-01-03	N	SE	05/22/2019	14:26	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
013	T4-PDI2019-SC47-190522-03-05	N	SE	05/22/2019	14:26	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
014	T4-PDI2019-SC47-190522-05-07	N	SE	05/22/2019	14:26	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐	Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Courier	Signature:	Signature:	Signature:	Signature:	Signature:
Print Name: Cindy Tanisch	Print Name:	Print Name:	Print Name: Eli Joyce	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1010	Date/Time:	Date/Time:	Date/Time: 5-23-19 1010	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

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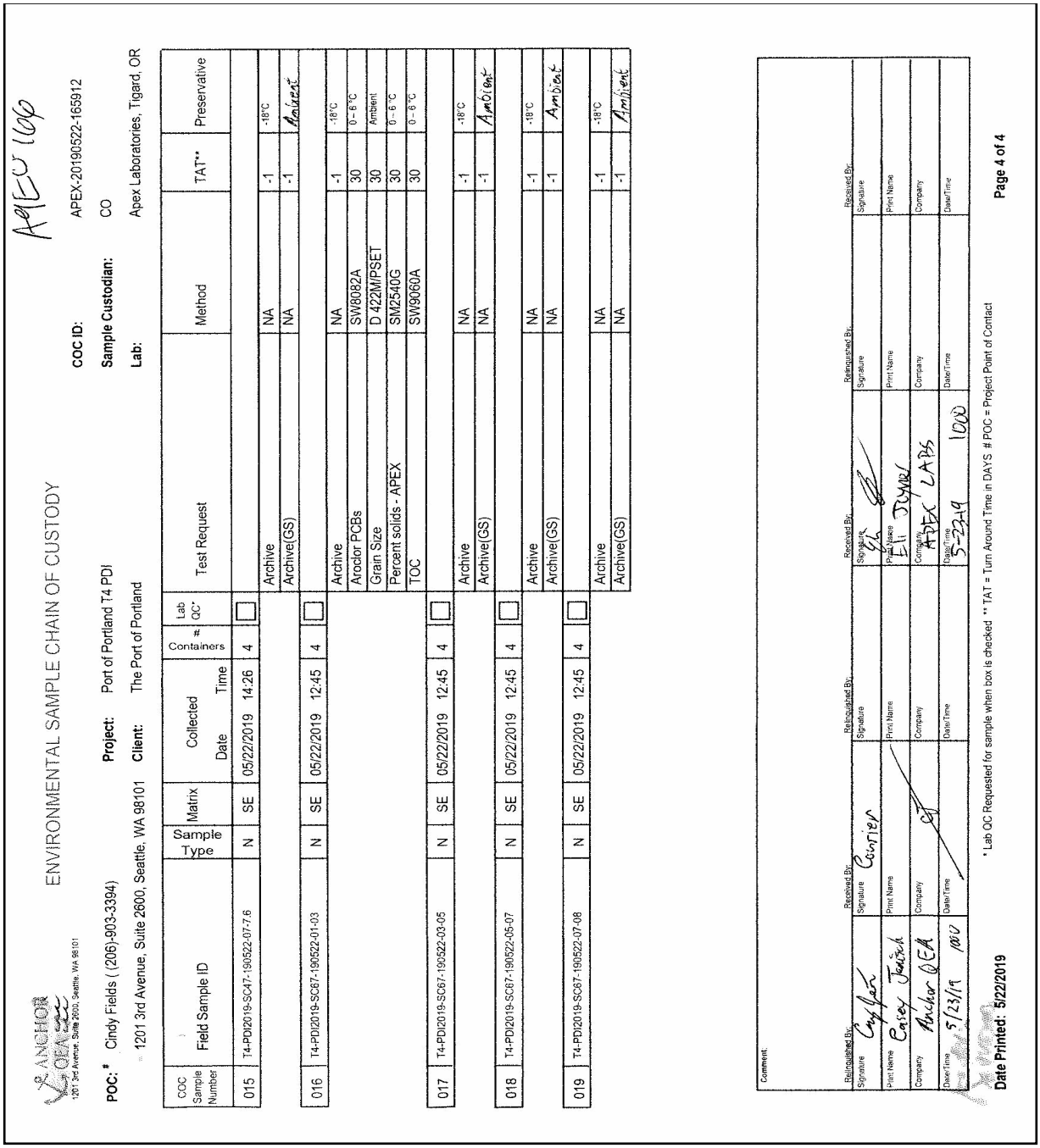
Apex Laboratories

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

APEX LOG

COC ID: APEX-20190522-165912

POC: * Cindy Fields ((206)-903-3394) Project: Port of Portland T4 PDI Sample Custodian: CO

1201 3rd Avenue, Suite 2600, Seattle, WA 98101 Client: The Port of Portland Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
016	T4-PDI2019-SC67-190522-01-03	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6°C
								Grain Size	D 422M/PSET	30	Ambient
								Percent solids - APEX	SM2540G	30	0 - 6°C
								TOC	SW9060A	30	0 - 6°C
017	T4-PDI2019-SC67-190522-03-05	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
018	T4-PDI2019-SC67-190522-05-07	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
019	T4-PDI2019-SC67-190522-07-08	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient

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

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

Relinquished By: Signature, Print Name: Anchor QEA, Company, Date/Time: 5/23/19 1000 — Received By: Signature, Print Name: ELI TYLER, Company: APEX LABS, Date/Time: 5-22-19 1000

Comment

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

Page 4 of 4

Date Printed: 5/22/2019

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

Anchor QEA, LLC	Project: **Port of Portland - T4 - PDI**	
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9E0766 - 06 13 19 1356**

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A9 E0766

Project/Project #: Port of Portland T4 PDI

Delivery Info:

Date/time received: 5-23-19 @ 1000 By: EJ

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

Cooler Inspection Date/time inspected: 5-23-19 @ 1103 By: EJ

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

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.2	0.8	0.6				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	Y	Y	Y				
Ice type: (Gel/Real/Other)	Real	Real	Real				
Condition:	good	good	good				

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

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

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

Samples Inspection: Date/time inspected: 5-22-19 @ 12:15 By: TAM

All samples intact? Yes Y No ___ Comments: ___

Bottle labels/COCs agree? Yes Y No ___ Comments: FD-20190522 0947 no time on COC. Time on cont. reads 09:47 (Field Dup).

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

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

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

Comments ___

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

Comments: ___

Additional information: ___

Labeled by: CD Witness: CFH Cooler Inspected by: TAM See Project Contact Form: Y

Apex Laboratories

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-02		Client Sample ID:	T4-PDI2019-SC18-190522-01-03		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	17.864	556.046	538.18	3.90	518.0

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		17.878	555.840	537.96	537.96	99.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9624		766-2	1.299	16.425	15.857	3.90

Hydrometer Analysis

Start Date/Time	6/10/2019	8:13	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	51.990		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	50.04		Corrected Dry Weight of Soil Tested (g) (W)	50.04

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	27	20.6	20.98	41.9	11.7	0.01348	0.046	41.93
2	22.5	20.6	16.48	32.9	12.4	0.01348	0.034	32.94
4	18	20.6	11.98	23.9	13.2	0.01348	0.024	23.94
8	16.5	20.7	10.51	21.0	13.3	0.01348	0.017	21.01
15	15	20.7	9.01	18.0	13.7	0.01348	0.013	18.01
30	14	20.8	8.05	16.1	13.8	0.01348	0.009	16.08
60	12	20.8	6.05	12.1	14.2	0.01348	0.007	12.09
90	11	20.9	5.08	10.2	14.3	0.01348	0.005	10.15
120	11	21	5.11	10.2	14.3	0.01348	0.005	10.22
240	10	21.1	4.15	8.3	14.5	0.01348	0.003	8.29
360	9	21	3.11	6.2	14.7	0.01348	0.003	6.22
1440	8	20.5	1.95	3.9	14.8	0.01348	0.001	3.89

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.302	0.00	0.00	0.0	100.0
40	0.425	1.306	1.321	0.01	0.16	0.0	100.0
60	0.250	1.295	1.396	0.10	1.20	0.2	99.8
100	0.150	1.298	3.230	1.93	21.19	3.9	95.9
140	0.105	1.286	7.879	6.59	89.41	13.2	82.7
200	0.075	1.295	11.386	10.09	193.83	20.2	62.6
230	0.063	1.298	6.202	4.90	244.57	9.8	52.8
Sum		23.64	234 Minus	26.40			

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-01-03 (A9E0766-02)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*0*
Retained on No. 4 sieve	4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	100	0
Sand			*47.24*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	99.97	0.03
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	99.77	0.2
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	95.91	3.86
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	82.73	13.18
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	62.56	20.17
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	52.76	9.8
Silt and Clay (Measurements in the Clay fraction are noted)			*52.76*
Hydrometer Test	0.0461	41.93	10.83
Hydrometer Test	0.0336	32.94	8.99
Hydrometer Test	0.0245	23.94	8.99
Hydrometer Test	0.0174	21.01	2.93
Hydrometer Test	0.0129	18.01	3
Hydrometer Test	0.0091	16.08	1.93
Hydrometer Test	0.0066	12.09	4
Hydrometer Test	0.0054	10.15	1.93
Hydrometer Test Clay	0.0047	10.22	0
Hydrometer Test Clay	0.0033	8.29	1.86
Hydrometer Test Clay	0.0027	6.22	2.07
Hydrometer Test Clay	0.0014	3.89	2.33

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	47.2
Coarse sand	0.0
Medium sand	4.1
Fine sand	43.1
Silt	42.6
Clay	10.2

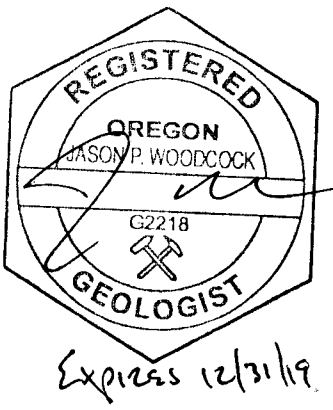
Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-01-03 (A9E0766-02)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



Report is complete only if it includes additional Grain Size Data from Apex Labs.
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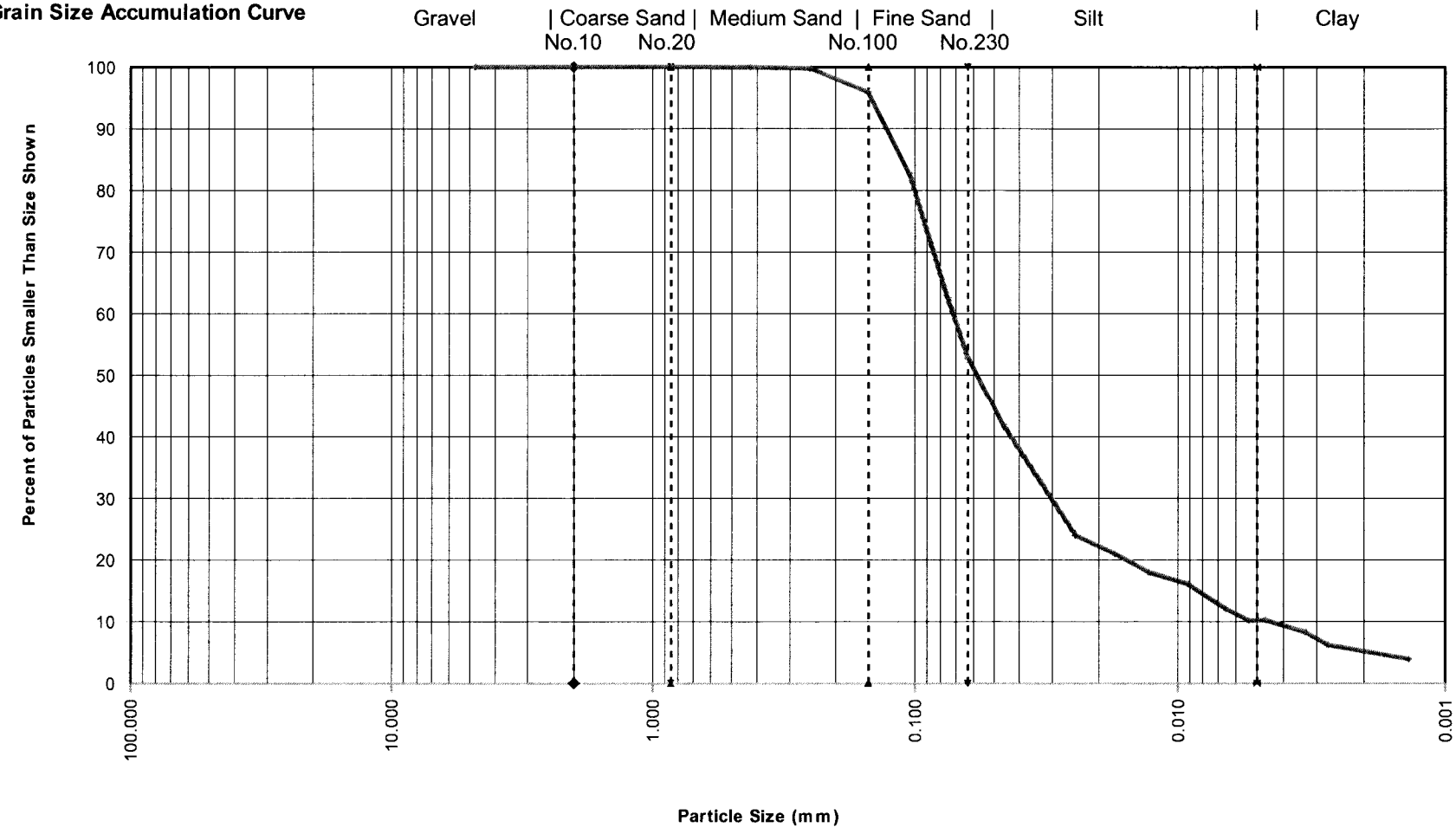
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-01-03 (A9E0766-02)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-03		Client Sample ID:	T4-PDI2019-SC18-190522-03-05		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Coarse Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.854	556.376	544.52	4.34	521.9

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.862	555.728	543.87	543.87	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9584		E76603	1.288	21.112	20.287	4.34

Hydrometer Analysis

Start Date/Time	6/19/2019	8:28	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.408		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	48.31		Corrected Dry Weight of Soil Tested (g) (W)	48.31

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	28	20.6	21.98	45.5	11.5	0.01348	0.046	45.50
2	24	20.7	18.01	37.3	12.2	0.01348	0.033	37.29
4	22	20.7	16.01	33.1	12.5	0.01348	0.024	33.15
8	18	20.8	12.05	24.9	13.2	0.01348	0.017	24.94
15	16	20.9	10.08	20.9	13.5	0.01348	0.013	20.87
30	14	20.8	8.05	16.7	13.8	0.01348	0.009	16.66
60	12.5	20.8	6.55	13.6	14	0.01348	0.007	13.55
90	11	20.9	5.08	10.5	14.3	0.01348	0.005	10.52
120	11	21	5.11	10.6	14.3	0.01348	0.005	10.59
240	10	21.1	4.15	8.6	14.5	0.01348	0.003	8.59
360	9	21.2	3.18	6.6	14.7	0.01348	0.003	6.58
1440	8	20.6	1.98	4.1	14.8	0.01348	0.001	4.10

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.284	1.293	0.01	0.10	0.0	100.0
40	0.425	1.307	1.334	0.03	0.39	0.1	99.9
60	0.250	1.287	1.720	0.43	5.06	0.9	99.0
100	0.150	1.298	4.207	2.91	36.45	6.0	93.0
140	0.105	1.305	6.970	5.67	97.57	11.7	81.3
200	0.075	1.312	9.575	8.26	186.72	17.1	64.2
230	0.063	1.305	5.693	4.39	234.06	9.1	55.1

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-03-05 (A9E0766-03)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				*44.91*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.98	0.02
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.93	0.06
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	99.03	0.9
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	93.01	6.02
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	81.28	11.73
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	64.18	17.1
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	55.09	9.08
Silt and Clay (Measurements in the Clay fraction are noted)				*55.09*
Hydrometer Test		0.0457	45.5	9.6
Hydrometer Test		0.0333	37.29	8.21
Hydrometer Test		0.0238	33.15	4.14
Hydrometer Test		0.0173	24.94	8.21
Hydrometer Test		0.0128	20.87	4.07
Hydrometer Test		0.0091	16.66	4.21
Hydrometer Test		0.0065	13.55	3.1
Hydrometer Test		0.0054	10.52	3.04
Hydrometer Test	Clay	0.0047	10.59	0
Hydrometer Test	Clay	0.0033	8.59	1.93
Hydrometer Test	Clay	0.0027	6.58	2
Hydrometer Test	Clay	0.0014	4.1	2.48

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	44.9
Coarse sand	0.0
Medium sand	7.0
Fine sand	37.9
Silt	44.6
Clay	10.5

Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-03-05 (A9E0766-03)**

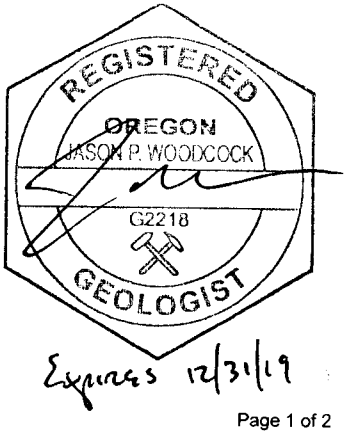
This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

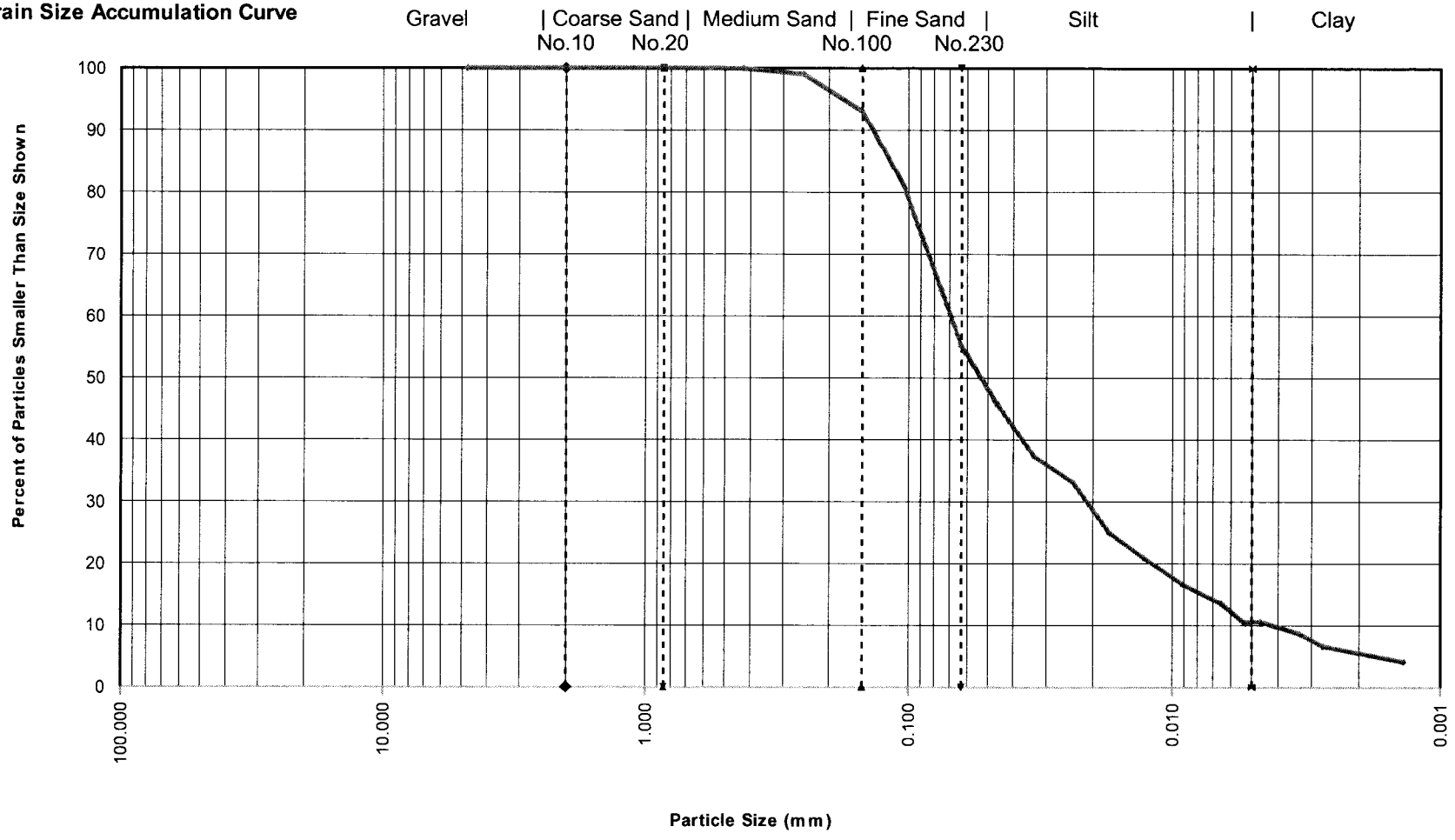
The assumed specific gravity used in the calculations was 2.65.

+20 and +40 fractions contain abundant organic material.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-03-05 (A9E0766-03)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Coarse Sand	N/A	N/A	Silty SAND with some Clay

Report is complete only if it includes additional Grain Size Data from Apex Labs.
07/03/19 Anchor Port of Portland - T4 - PDI Page 61 of 1399
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Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-04		Client Sample ID:	T4-PDI2019-SC18-190522-05-07		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	SAND with some Silt and trace Clay			Max Particle Size:	Coarse Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	18.017	544.670	526.65	2.51	513.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		18.037	544.460	526.42	526.42	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9755		E76604	1.300	16.140	15.776	2.51

Hydrometer Analysis

Start Date/Time	6/10/2019	8:46	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.480		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	49.24		Corrected Dry Weight of Soil Tested (g) (W)	49.24

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	11	20.7	5.01	10.2	14.3	0.01348	0.051	10.18
2	10.5	20.7	4.51	9.2	14.3	0.01348	0.036	9.17
4	10	20.8	4.05	8.2	14.5	0.01348	0.026	8.22
8	10	20.7	4.01	8.2	14.5	0.01348	0.018	8.15
15	10	20.9	4.08	8.3	14.5	0.01348	0.013	8.29
30	8	20.9	2.08	4.2	14.8	0.01348	0.009	4.23
60	7	20.9	1.08	2.2	15	0.01348	0.007	2.19
90	7	21	1.11	2.3	15	0.01348	0.006	2.26
120	6	21	0.11	0.2	15.2	0.01348	0.005	0.23
240	6	21.1	0.15	0.3	15.2	0.01348	0.003	0.30
360	6	21.1	0.15	0.3	15.2	0.01348	0.003	0.30
1440	5.5	20.7		0.0	15.2	0.01348	0.001	0.00

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.307	0.00	0.05	0.0	100.0
40	0.425	1.307	1.338	0.03	0.38	0.1	99.9
60	0.250	1.311	7.074	5.76	60.47	11.7	88.2
100	0.150	1.290	23.817	22.53	295.39	45.7	42.5
140	0.105	1.302	10.044	8.74	386.56	17.8	24.7
200	0.075	1.296	5.756	4.46	433.07	9.1	15.7
230	0.063	1.300	2.700	1.40	447.67	2.8	12.8
			4.93	230 Minus	6.91		

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-05-07 (A9E0766-04)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				***0***
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				***87.18***
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.99	0.01
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.93	0.06
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	88.22	11.7
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	42.48	45.75
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	24.72	17.75
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	15.67	9.06
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	12.82	2.84
Silt and Clay (Measurements in the Clay fraction are noted)				***12.89***
Hydrometer Test		0.0510	10.18	2.64
Hydrometer Test		0.0360	9.17	1.02
Hydrometer Test		0.0257	8.22	0.95
Hydrometer Test		0.0181	8.15	0.07
Hydrometer Test		0.0133	8.29	0
Hydrometer Test		0.0095	4.23	3.93
Hydrometer Test		0.0067	2.19	2.03
Hydrometer Test		0.0055	2.26	0
Hydrometer Test	Clay	0.0048	0.23	1.96
Hydrometer Test	Clay	0.0034	0.3	0
Hydrometer Test	Clay	0.0028	0.3	0
Hydrometer Test	Clay	0.0014	0.3	0

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	87.2
Coarse sand	0.0
Medium sand	57.5
Fine sand	29.7
Silt	10.6
Clay	2.3

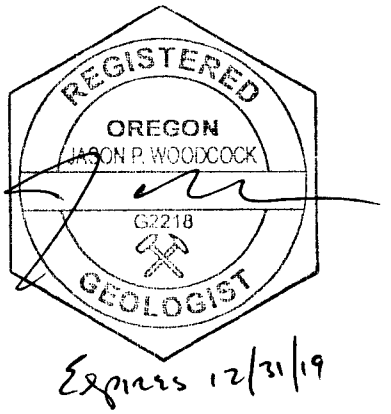
Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-05-07 (A9E0766-04)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



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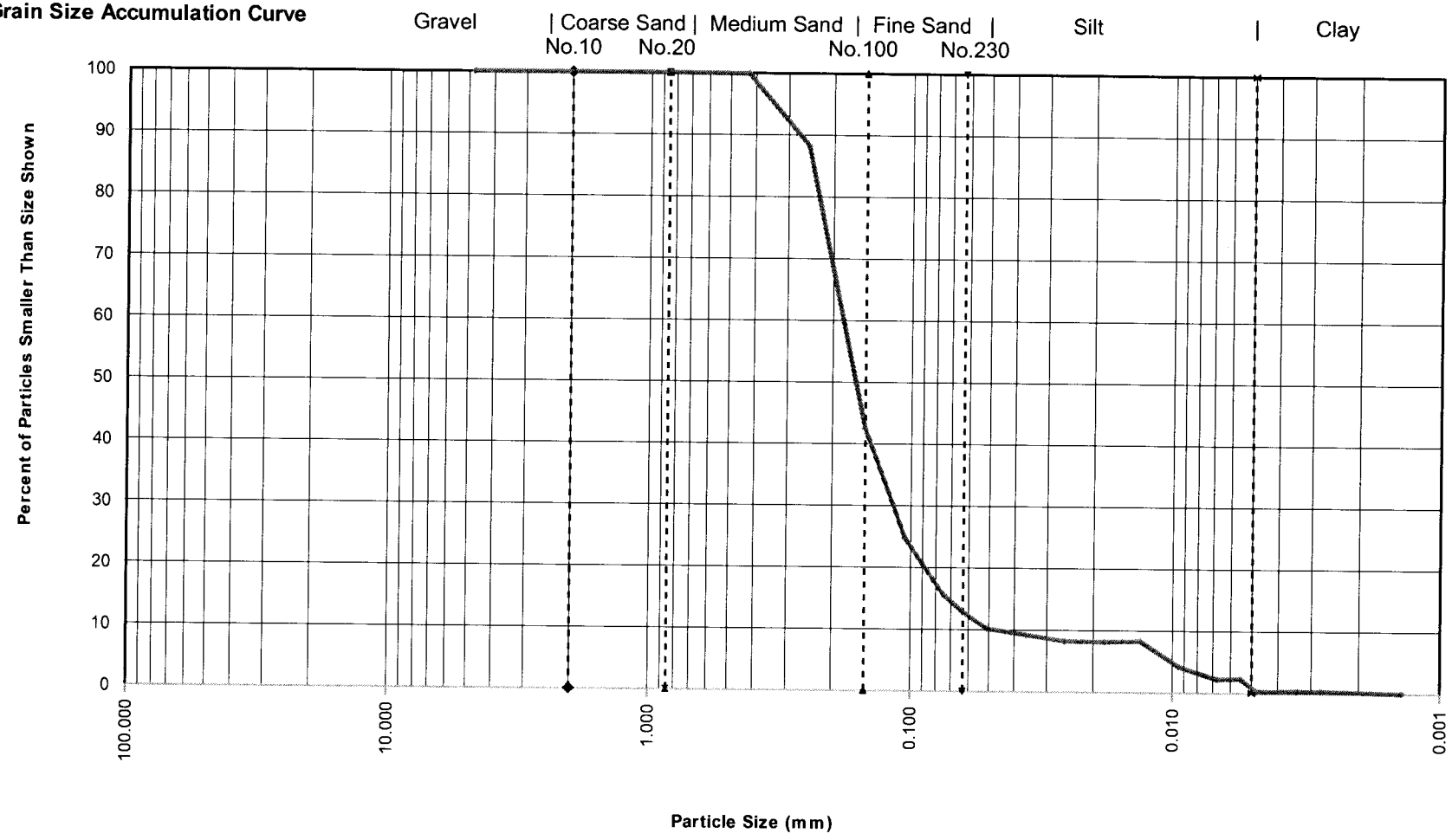
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-05-07 (A9E0766-04)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Coarse Sand	N/A	N/A	SAND with some Silt and trace Clay

Report is complete only if it includes additional Grain Size Data from Apex Labs. 07/03/19 Anchor Port of Portland - T4 - PDI Page 64 of 1399 Page 58 of 70 06/13/2019

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-05		Client Sample ID:	T4-PDI2019-SC18-190522-07-09		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.818	509.791	497.97	3.35	481.8

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.831	509.762	497.93	497.93	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9676		766.05C	1.282	15.516	15.055	3.35

Hydrometer Analysis

Start Date/Time	6/10/2019	8:06	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	52.169		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	50.48		Corrected Dry Weight of Soil Tested (g) (W)	50.48

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	18	20.4	13.31	26.4	13.2	0.01365	0.050	26.36
2	15	20.5	10.33	20.5	13.7	0.01348	0.035	20.47
4	13	20.5	8.33	16.5	14	0.01348	0.025	16.51
8	12	20.5	7.33	14.5	14.2	0.01348	0.018	14.53
15	10	20.6	5.36	10.6	14.5	0.01348	0.013	10.61
30	10	20.7	5.38	10.7	14.5	0.01348	0.009	10.66
60	8	20.7	3.38	6.7	14.8	0.01348	0.007	6.70
90	8	20.8	3.41	6.8	14.8	0.01348	0.005	6.75
120	7.5	20.9	2.93	5.8	14.8	0.01348	0.005	5.81
240	7	21.1	2.48	4.9	15	0.01348	0.003	4.92
360	6	21.1	1.48	2.9	15.2	0.01348	0.003	2.94
1440	5.5	20.4	0.81	1.6	15.2	0.01365	0.001	1.60

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.294	1.294	0.00	0.00	0.0	100.0
40	0.425	1.278	1.289	0.01	0.10	0.0	100.0
60	0.250	1.294	2.144	0.85	8.22	1.7	98.3
100	0.150	1.301	12.710	11.41	117.11	22.6	75.7
140	0.105	1.298	12.361	11.06	222.70	21.9	53.8
200	0.075	1.272	9.962	8.69	305.65	17.2	36.6
230	0.063	1.302	4.625	3.32	337.36	6.6	30.0
			5.9	35.15	2.74	15.13	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-07-09 (A9E0766-05)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				*70.02*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.98	0.02
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	98.29	1.68
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	75.69	22.6
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	53.78	21.92
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	36.56	17.21
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	29.98	6.58
Silt and Clay (Measurements in the Clay fraction are noted)				*29.98*
Hydrometer Test		0.0496	26.36	3.62
Hydrometer Test		0.0353	20.47	5.89
Hydrometer Test		0.0252	16.51	3.96
Hydrometer Test		0.0180	14.53	1.98
Hydrometer Test		0.0133	10.61	3.91
Hydrometer Test		0.0094	10.66	0
Hydrometer Test		0.0067	6.7	3.91
Hydrometer Test		0.0055	6.75	0
Hydrometer Test	Clay	0.0047	5.81	0.89
Hydrometer Test	Clay	0.0034	4.92	0.89
Hydrometer Test	Clay	0.0028	2.94	1.98
Hydrometer Test	Clay	0.0014	1.6	1.34

Grain Size Summary		Percent of Total Sample
Gravel		0.0
Sand		70.0
Coarse sand		0.0
Medium sand		24.3
Fine sand		45.7
Silt		23.3
Clay		6.7

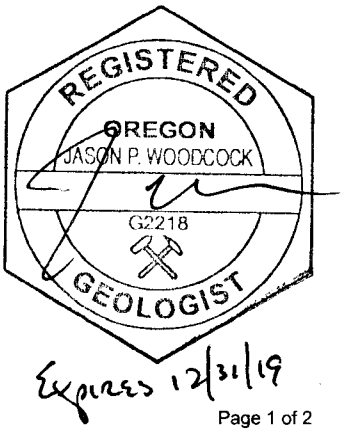
Case Narrative for Sample ID: T4-PDI2019-SC18-190522-07-09 (A9E0766-05)

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



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Report is complete only if it includes additional Grain Size Data from Apex Labs. 07/03/19 Anchor Port of Portland - T4 - PDI Page 67 of 1399
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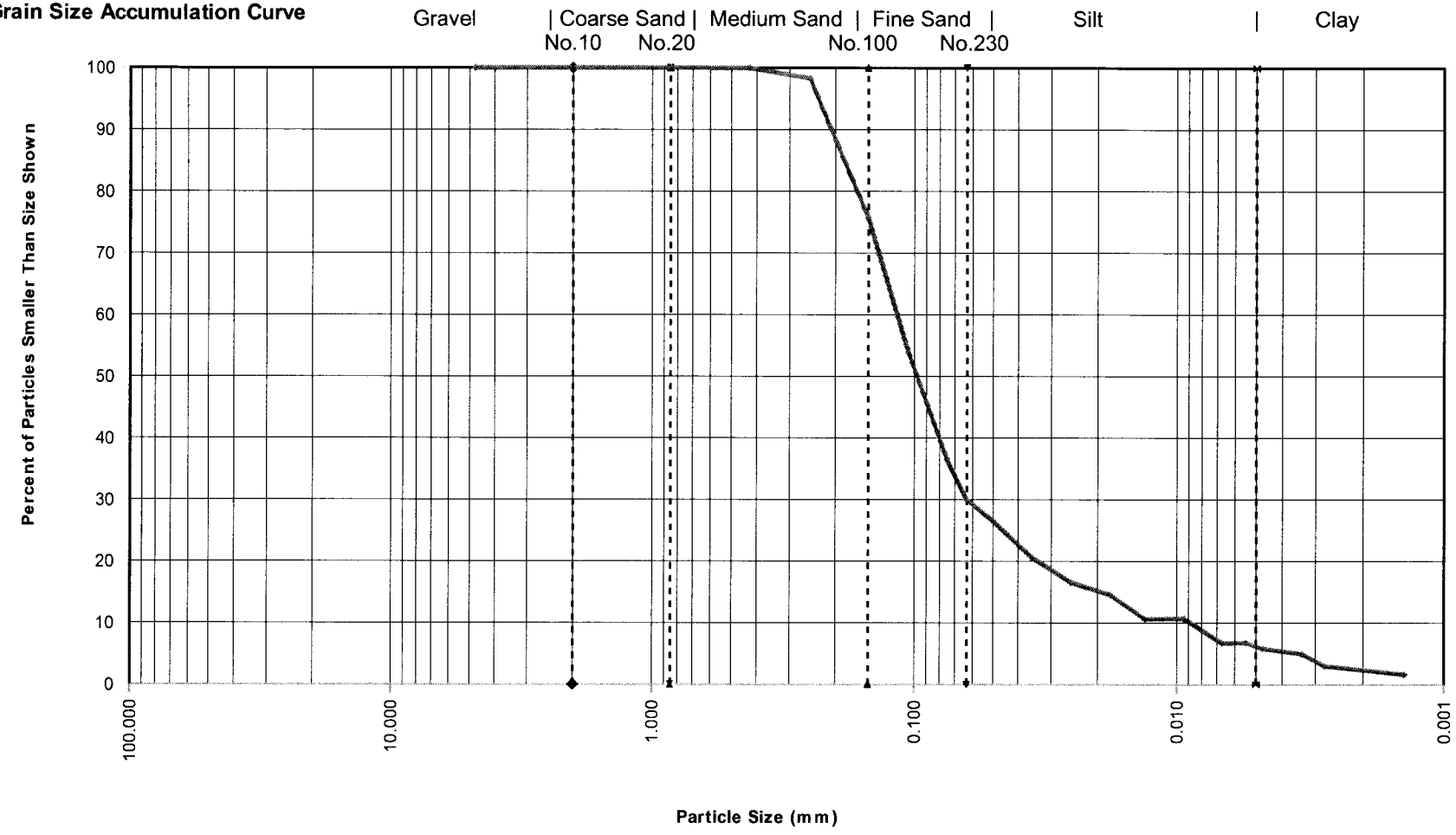
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-07-09 (A9E0766-05)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-06		Client Sample ID:	T4-PDI2019-SC18-190522-09-11		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.658	505.457	493.80	3.85	475.5

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.691	504.952	493.26	493.26	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9629		E76606	1.293	20.804	20.081	3.85

Hydrometer Analysis

Start Date/Time	6/10/2019	8:19	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.222		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	48.36		Corrected Dry Weight of Soil Tested (g) (W)	48.36

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	24	20.5	19.33	40.0	12.2	0.01348	0.047	39.98
2	20	20.6	15.36	31.8	12.9	0.01348	0.034	31.76
4	17.5	20.6	12.86	26.6	13.2	0.01348	0.024	26.59
8	15	20.7	10.38	21.5	13.7	0.01348	0.018	21.47
15	14	20.7	9.38	19.4	13.8	0.01348	0.013	19.40
30	12.5	20.8	7.91	16.4	14	0.01348	0.009	16.35
60	11	20.9	6.43	13.3	14.3	0.01348	0.007	13.30
90	10	20.9	5.43	11.2	14.5	0.01348	0.005	11.24
120	9	21	4.46	9.2	14.7	0.01348	0.005	9.22
240	8.5	21.1	3.98	8.2	14.7	0.01348	0.003	8.24
360	8	21	3.46	7.2	14.8	0.01348	0.003	7.15
1440	7	20.5	2.33	4.8	15	0.01348	0.001	4.82

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.304	0.00	0.02	0.0	100.0
40	0.425	1.300	1.316	0.02	0.18	0.0	100.0
60	0.250	1.297	1.467	0.17	1.85	0.4	99.6
100	0.150	1.295	5.849	4.55	46.57	9.4	90.2
140	0.105	1.300	10.072	8.77	132.73	18.1	72.1
200	0.075	1.304	10.512	9.21	223.17	19.0	53.0
230	0.063	1.300	5.099	3.80	260.48	7.9	45.2

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-09-11 (A9E0766-06)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				*54.84*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.96	0.03
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	99.61	0.35
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	90.19	9.42
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	72.06	18.14
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	53.02	19.04
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	45.16	7.86
Silt and Clay (Measurements in the Clay fraction are noted)				*45.16*
Hydrometer Test		0.0471	39.98	5.18
Hydrometer Test		0.0342	31.76	8.22
Hydrometer Test		0.0245	26.59	5.17
Hydrometer Test		0.0176	21.47	5.12
Hydrometer Test		0.0129	19.4	2.07
Hydrometer Test		0.0092	16.35	3.05
Hydrometer Test		0.0066	13.3	3.05
Hydrometer Test		0.0054	11.24	2.07
Hydrometer Test	Clay	0.0047	9.22	2.02
Hydrometer Test	Clay	0.0033	8.24	0.98
Hydrometer Test	Clay	0.0027	7.15	1.09
Hydrometer Test	Clay	0.0014	4.82	2.33

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	54.8
Coarse sand	0.0
Medium sand	9.8
Fine sand	45.0
Silt	33.9
Clay	11.2

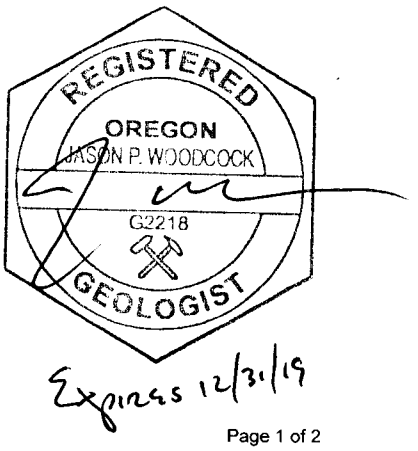
Case Narrative for Sample ID: T4-PDI2019-SC18-190522-09-11 (A9E0766-06)

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



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Report is complete only if it includes additional Grain Size Data from Apex Labs.
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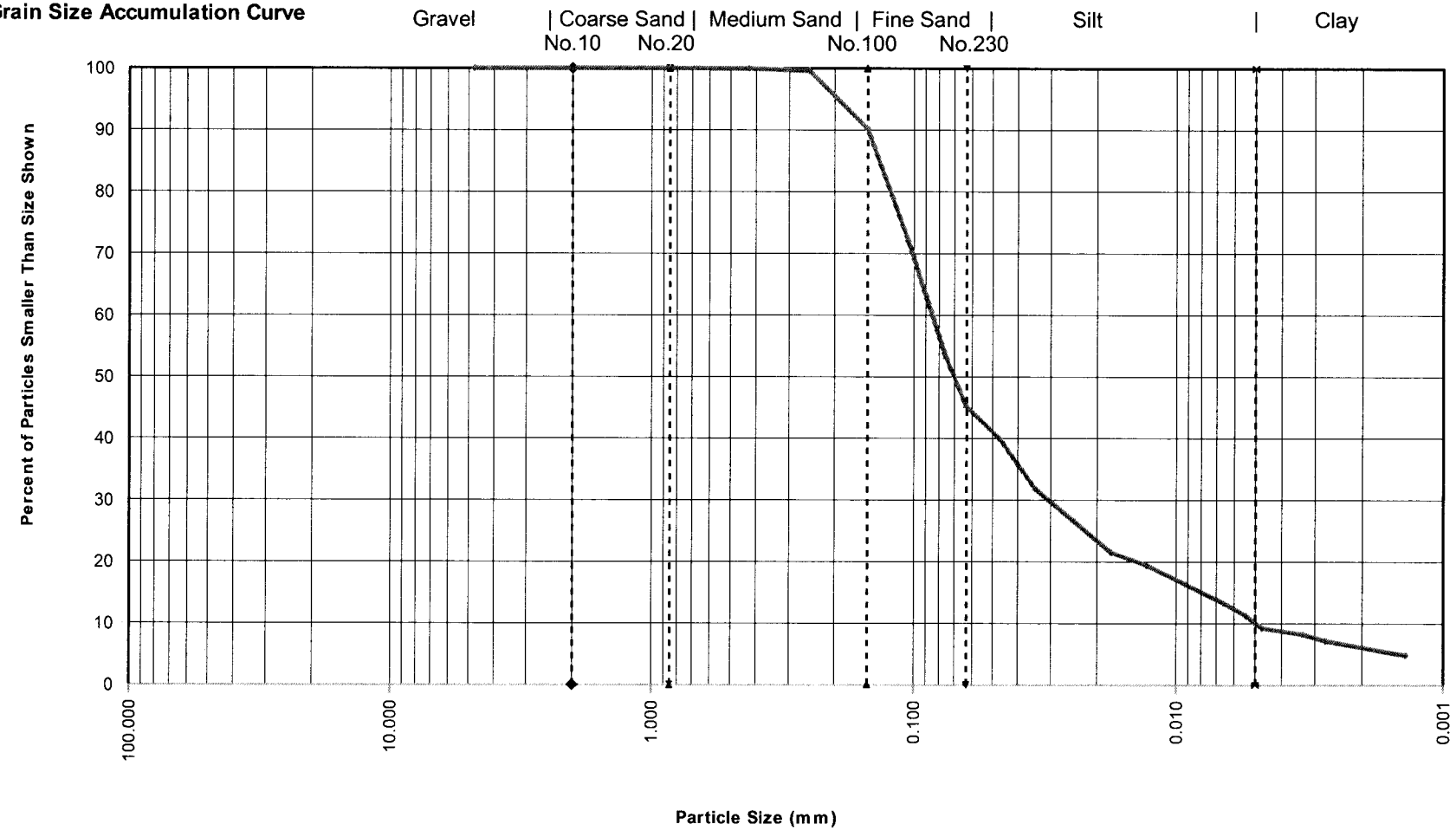
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-09-11 (A9E0766-06)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-07		Client Sample ID:	T4-PDI2019-SC18-190522-11-13		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.852	462.999	451.15	3.20	437.2

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.878	462.785	450.91	450.91	99.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9690		E76607	1.295	23.893	23.193	3.20

Hydrometer Analysis

Start Date/Time	6/10/2019	8:38	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	57.259		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	55.49		Corrected Dry Weight of Soil Tested (g) (W)	55.49

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	19	20.7	14.38	25.9	13	0.01348	0.049	25.92
2	17	20.7	12.38	22.3	13.3	0.01348	0.035	22.32
4	15.5	20.8	10.91	19.7	13.5	0.01348	0.025	19.66
8	15	20.7	10.38	18.7	13.7	0.01348	0.018	18.71
15	12	20.8	7.41	13.4	14.2	0.01348	0.013	13.35
30	11	20.8	6.41	11.6	14.3	0.01348	0.009	11.55
60	10	20.9	5.43	9.8	14.5	0.01348	0.007	9.79
90	9	21	4.46	8.0	14.7	0.01348	0.005	8.04
120	8.5	21	3.96	7.1	14.7	0.01348	0.005	7.14
240	8	21	3.46	6.2	14.8	0.01348	0.003	6.23
360	7	21.1	2.48	4.5	15	0.01348	0.003	4.48
1440	6	20.6	1.36	2.4	15.2	0.01348	0.001	2.45

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.298	1.300	0.00	0.02	0.0	100.0
40	0.425	1.298	1.308	0.01	0.09	0.0	100.0
60	0.250	1.292	2.023	0.73	5.85	1.3	98.7
100	0.150	1.294	15.338	14.04	116.45	25.3	73.3
140	0.105	1.297	13.148	11.85	209.77	21.4	52.0
200	0.075	1.292	9.536	8.24	274.69	14.9	37.1
230	0.063	1.306	4.334	3.03	298.54	5.5	31.7

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-11-13 (A9E0766-07)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*0*
Retained on No. 4 sieve	4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	100	0
Sand			*68.32*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	99.98	0.02
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	98.66	1.32
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	73.35	25.31
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	51.99	21.36
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	37.13	14.86
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	31.68	5.46
Silt and Clay (Measurements in the Clay fraction are noted)			*31.68*
Hydrometer Test	0.0486	25.92	5.75
Hydrometer Test	0.0348	22.32	3.6
Hydrometer Test	0.0248	19.66	2.66
Hydrometer Test	0.0176	18.71	0.95
Hydrometer Test	0.0131	13.35	5.36
Hydrometer Test	0.0093	11.55	1.8
Hydrometer Test	0.0066	9.79	1.76
Hydrometer Test	0.0054	8.04	1.76
Hydrometer Test Clay	0.0047	7.14	0.9
Hydrometer Test Clay	0.0033	6.23	0.9
Hydrometer Test Clay	0.0028	4.48	1.76
Hydrometer Test Clay	0.0014	2.45	2.03

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	68.3
Coarse sand	0.0
Medium sand	26.6
Fine sand	41.7
Silt	23.6
Clay	8.0

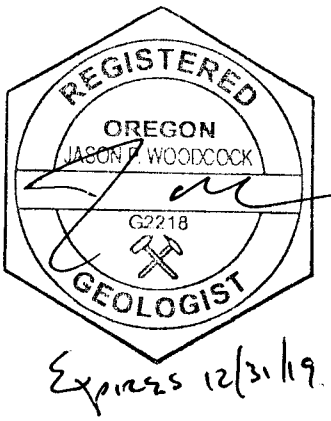
Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-11-13 (A9E0766-07)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



Expires 12/31/19.

Report is complete only if it includes additional Grain Size Data from Apex Labs.
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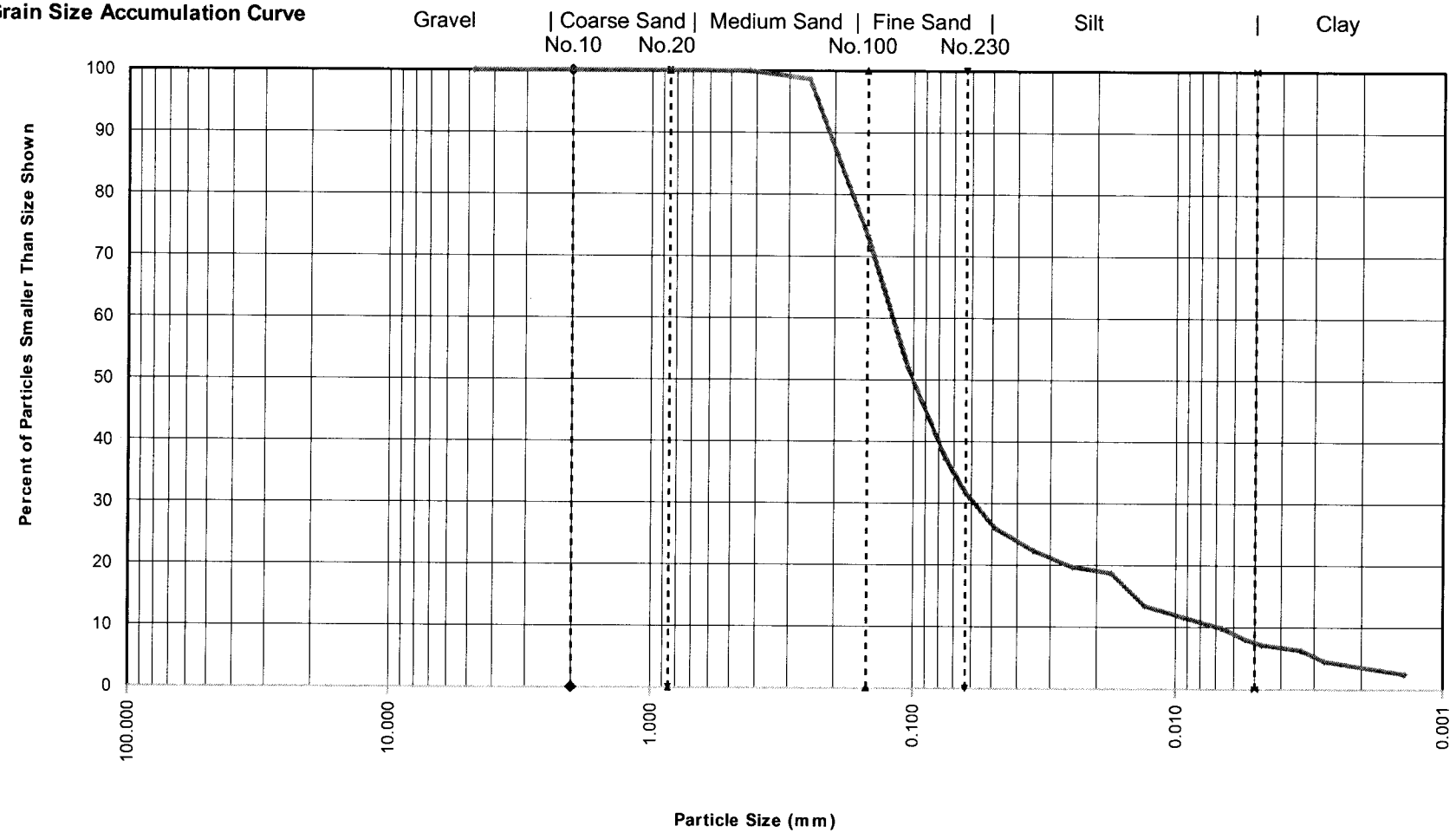
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-11-13 (A9E0766-07)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-16		Client Sample ID:	T4-PDI2019-SC67-190522-01-03		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	SAND with trace Silt			Max Particle Size:	Gravel		
Particle Shape:	Sub-angular to Rounded			Hardness	Hard and Durable		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.254	407.424	396.17	1.65	389.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.298	10.430	9.13	9.13	2.3	97.7
10	2.00	1.303	4.473	3.17	12.30	0.8	96.8
Pan		11.266	394.818	383.55	395.85	96.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9837		E76616	1.288	24.656	24.276	1.65

Hydrometer Analysis

Start Date/Time	6/10/2019	8:54	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	109.167		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	96.8		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	107.39		Corrected Dry Weight of Soil Tested (g) (W)	110.89

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8	20.7	3.38	3.1	14.8	0.01348	0.052	2.95
2	8	20.7	3.38	3.1	14.8	0.01348	0.037	2.95
4	7.5	20.7	2.88	2.6	14.8	0.01348	0.026	2.52
8	7	20.7	2.38	2.1	15	0.01348	0.018	2.08
15	7	20.7	2.38	2.1	15	0.01348	0.013	2.08
30	7	20.8	2.41	2.2	15	0.01348	0.010	2.10
60	5	20.9	0.43	0.4	15.3	0.01348	0.007	0.38
90	5	20.9	0.43	0.4	15.3	0.01348	0.006	0.38
120	4.5	21		0.0	15.3	0.01348	0.005	0.00
240	5	21	0.46	0.4	15.3	0.01348	0.003	0.40
360	5	21.1	0.48	0.4	15.3	0.01348	0.003	0.42
1440	4	20.7		0.0	15.5	0.01348	0.001	0.00

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.293	3.774	2.48	21.02	2.2	94.6
40	0.425	1.311	29.757	28.45	120.96	25.7	69.0
60	0.250	1.308	57.787	56.48	319.40	50.9	18.0
100	0.150	1.300	17.054	15.75	374.75	14.2	3.8
140	0.105	1.297	2.855	1.56	380.22	1.4	2.4
200	0.075	1.295	1.801	0.51	382.00	0.5	2.0
230	0.063	1.280	1.459	0.18	382.63	0.2	1.8
			Sum	123.40	230 Minus	1.99	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC67-190522-01-03 (A9E0766-16)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*3.16*
Retained on No. 4 sieve	4.75	97.66	2.34
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	96.84	0.81
Sand			*95.05*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	94.61	2.24
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	68.95	25.65
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	18.02	50.93
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	3.82	14.21
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	2.41	1.4
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	1.95	0.46
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	1.79	0.16
Silt and Clay (Measurements in the Clay fraction are noted)			*1.84*
Hydrometer Test	0.0519	2.95	0
Hydrometer Test	0.0367	2.95	0
Hydrometer Test	0.0259	2.52	0
Hydrometer Test	0.0185	2.08	0
Hydrometer Test	0.0135	2.08	0
Hydrometer Test	0.0095	2.1	0
Hydrometer Test	0.0068	0.38	1.41
Hydrometer Test	0.0056	0.38	0
Hydrometer Test Clay	0.0048	0.38	0
Hydrometer Test Clay	0.0034	0.4	0
Hydrometer Test Clay	0.0028	0.42	0
Hydrometer Test Clay	0.0014	0.42	0

Grain Size Summary	Percent of Total Sample
Gravel	3.2
Sand	95.1
Coarse sand	2.2
Medium sand	90.8
Fine sand	2.0
Silt	1.4
Clay	0.4

Case Narrative for Sample ID: **T4-PDI2019-SC67-190522-01-03 (A9E0766-16)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.

Organic and possible anthropogenic material present in +4 and +10 fractions.



Expires 12/31/19

Report is complete only if it includes additional Grain Size Data from Apex Labs.
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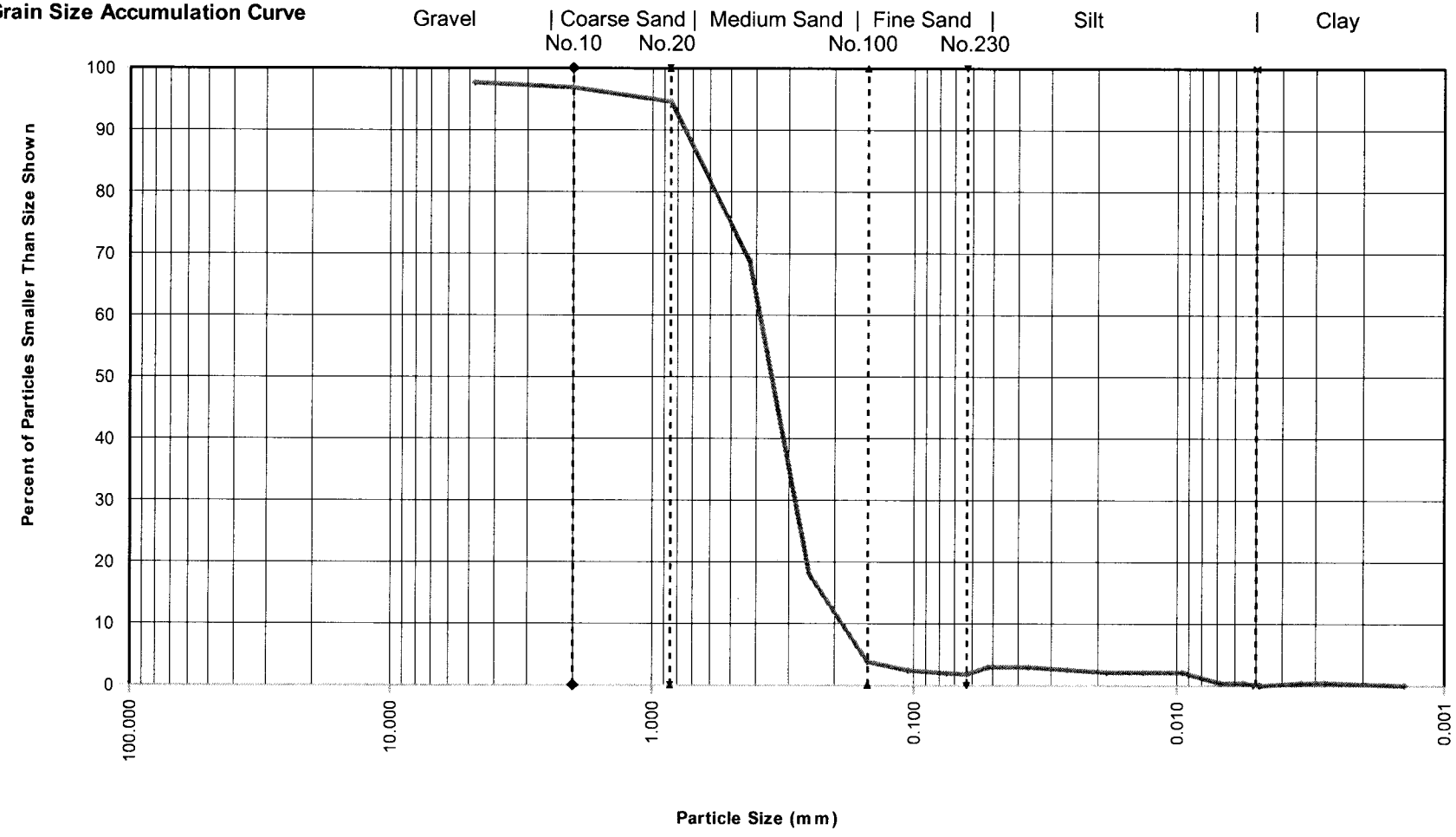
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC67-190522-01-03 (A9E0766-16)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Sub-angular to Rounded	Hard and Durable	SAND with trace Silt

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

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

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

Report To:

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

Invoice To:

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

Date Due:	06/07/19 17:00 (10 day TAT)		
Received By:	Eli S. Joyner	Date Received:	05/23/19 10:00
Logged In By:	Cameron L O'Brien	Date Logged In:	05/23/19 11:39

Cooler #1 received at 2.2°C

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

Cooler #2 received at 0.8°C

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

Cooler #3 received at 0.6°C

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

Analysis	Due	TAT	Expires	Comments
A9E0766-01 FD-201905220947 [Sediment] Sampled 05/22/19 00:00 (GMT-08:00) Pacific Time (US & Canada) 1 Containers				**No time on COC. Time on cont. reads 15:56. (Field Duplicate)**
Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 00:00	**USE SOLIDS DATA** Make Not Reportable.
Project Mgmt				
Data Package	07/05/19 17:00	10	08/29/19 00:00	
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 00:00	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 00:00	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 00:00	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 00:00	Units=%

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

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

A9E0766-02 T4-PDI2019-SC18-190522-01-03 [Sediment] Sampled
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers

Dry Weight

Dry Weight	05/29/19 17:00	3	11/18/19 09:47	**USE SOLIDS DATA** Make Not Reportable.

Geotechnical

Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	

Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter

Semivols (ECD)

8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	

Semivols (Scan)

8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	PAHs Only

Wet Chem

Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	Units=%

A9E0766-03 T4-PDI2019-SC18-190522-03-05 [Sediment] Sampled
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers

Dry Weight

Dry Weight	05/29/19 17:00	3	11/18/19 09:47	**USE SOLIDS DATA** Make Not Reportable.

Geotechnical

Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	

Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter

Semivols (ECD)

8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	

Semivols (Scan)

8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	PAHs Only

Wet Chem

Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	Units=%

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

Analysis	Due	TAT	Expires	Comments

Analysis	Due	TAT	Expires	Comments

A9E0766-04 T4-PDI2019-SC18-190522-05-07 [Sediment] Sampled
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers

Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 09:47	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	Units=%

A9E0766-05 T4-PDI2019-SC18-190522-07-09 [Sediment] Sampled
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 5 Containers

Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 09:47	MS/MSD this sample, **USE SOLIDS DATA** Make Not Repo
Geotechnical				
Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	MS/MSD this sample
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	MS/MSD this sample, PAHs Only
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	MS/MSD this sample, Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	MS/MSD this sample, Units=%

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9E0766-06 T4-PDI2019-SC18-190522-09-11 [Sediment] Sampled				
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 09:47	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	Units=%
A9E0766-07 T4-PDI2019-SC18-190522-11-13 [Sediment] Sampled				
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 09:47	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 09:47	
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 09:47	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/06/19 17:00	10	06/05/19 09:47	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 09:47	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 09:47	Units=%
A9E0766-08 T4-PDI2019-SC18-190522-13-13.6 [Sediment] Sampled				**HOLD**
05/22/19 09:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 09:47	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 09:47	

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

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

A9E0766-09 T4-PDI2019-SC46-190522-01-03 [Sediment] Sampled **HOLD**
05/22/19 15:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 15:47	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 15:47	

A9E0766-10 T4-PDI2019-SC46-190522-03-05 [Sediment] Sampled **HOLD**
05/22/19 15:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 15:47	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 15:47	

A9E0766-11 T4-PDI2019-SC46-190522-05-6.9 [Sediment] Sampled **HOLD**
05/22/19 15:47 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 15:47	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 15:47	

A9E0766-12 T4-PDI2019-SC47-190522-01-03 [Sediment] Sampled **HOLD**
05/22/19 14:26 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 14:26	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 14:26	

A9E0766-13 T4-PDI2019-SC47-190522-03-05 [Sediment] Sampled **HOLD**
05/22/19 14:26 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 14:26	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 14:26	

A9E0766-14 T4-PDI2019-SC47-190522-05-07 [Sediment] Sampled **HOLD**
05/22/19 14:26 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 14:26	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 14:26	

A9E0766-15 T4-PDI2019-SC47-190522-07-7.6 [Sediment] Sampled **HOLD**
05/22/19 14:26 (GMT-08:00) Pacific Time (US & Canada) 4 Containers
Sample Control

Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 14:26	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 14:26	

A9E0766

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Port of Portland - T4 - PDI**	**Project Number:**	**050332-01.32**

Analysis	Due	TAT	Expires	Comments
Analysis	**Due**	**TAT**	**Expires**	**Comments**
A9E0766-16 T4-PDI2019-SC67-190522-01-03 [Sediment] Sampled				
05/22/19 12:45 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Dry Weight				
Dry Weight	05/29/19 17:00	3	11/18/19 12:45	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/06/19 17:00	10	11/18/19 12:45	
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 12:45	$2/sample/quarter
Semivols (ECD)				
8082 PCBs - Low Level (2mL FV)	06/06/19 17:00	10	05/21/20 12:45	
Wet Chem				
Solids, PSEP 1986	06/06/19 17:00	10	11/18/19 12:45	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/06/19 17:00	10	06/19/19 12:45	Units=%
A9E0766-17 T4-PDI2019-SC67-190522-03-05 [Sediment] Sampled				**HOLD**
05/22/19 12:45 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 12:45	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 12:45	
A9E0766-18 T4-PDI2019-SC67-190522-05-07 [Sediment] Sampled				**HOLD**
05/22/19 12:45 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 12:45	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 12:45	
A9E0766-19 T4-PDI2019-SC67-190522-07-08 [Sediment] Sampled				**HOLD**
05/22/19 12:45 (GMT-08:00) Pacific Time (US & Canada) 4 Containers				
Sample Control				
Archive Samples - Frozen	05/24/20 17:00	1	05/23/19 12:45	$2/sample/quarter
Hold Sample	06/06/19 17:00	10	02/14/22 12:45	

Reviewed By

Date

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9E0760

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	FD-201905220947	FD	SE	05/22/2019		1	☒				
							No QC CJ 5/22/19	Aroclor PCBs	SW8082A	30	0 - 6 °C
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
002	T4-PDI2019-SC18-190522-01-03	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
003	T4-PDI2019-SC18-190522-03-05	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Jan	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Janisch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

Date Printed: 5/22/2019

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

A9E0766

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐				
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
005	T4-PDI2019-SC18-190522-07-09	N	SE	05/22/2019	9:47	5	☒				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
006	T4-PDI2019-SC18-190522-09-11	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
007	T4-PDI2019-SC18-190522-11-13	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 – 6 °C
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Jarosch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Jarosch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

APE07666

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
008	T4-PDI2019-SC18-190522-13-13.6	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
009	T4-PDI2019-SC46-190522-01-03	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
010	T4-PDI2019-SC46-190522-03-05	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
011	T4-PDI2019-SC46-190522-05-6.9	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
012	T4-PDI2019-SC47-190522-01-03	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
013	T4-PDI2019-SC47-190522-03-05	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
014	T4-PDI2019-SC47-190522-05-07	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐				

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Janisch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Janisch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

Date Printed: 5/22/2019

* 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

APEX 1660

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI

Client: The Port of Portland

Sample Custodian: CO

Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
016	T4-PDI2019-SC67-190522-01-03	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 – 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								Percent solids - APEX	SM2540G	30	0 – 6 °C
								TOC	SW9060A	30	0 – 6 °C
017	T4-PDI2019-SC67-190522-03-05	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
018	T4-PDI2019-SC67-190522-05-07	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
019	T4-PDI2019-SC67-190522-07-08	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Jarisch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Jarisch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 5/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A9 E0766

Project/Project #: Port of Portland T4 PDI

Delivery Info:

Date/time received: 5-23-19 @ 1000 By: EJ

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

Cooler Inspection Date/time inspected: 5-23-19 @ 1103 By: EJ

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

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.2	0.8	0.6				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	Y	Y	Y				
Ice type: (Gel/Real/Other)	Real	Real	Real				
Condition:	Good	Good	Good				

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

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

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

Samples Inspection: Date/time inspected: 5-22-19 @ 12:15 By: TAM

All samples intact? Yes Y No ___ Comments: ___

Bottle labels/COCs agree? Yes Y No ___ Comments: FD-20190522-0947 no time on COC. Time on cont. reads 09:47 (Field Dup).

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

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

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

Comments ___

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

Comments: ___

Additional information: ___

Labeled by: CD Witness: CFH Cooler Inspected by: TAM See Project Contact Form: Y

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

CLP-Like Forms

Apex Laboratories

SDG: A9E0766

CLASS: GC

METHOD: EPA 8082A

ANALYSES DATA PACKAGE COVER PAGE

EPA 8082A

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
FD-201905220947	A9E0766-01	Sediment
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment
T4-PDI2019-SC67-190522-01-03	A9E0766-16	Sediment

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

Signature: 
Name: David G. Jack

Forms Created: 6/27/2019 12:51PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Apex Laboratories **SDG:** A9E0766

Client: Anchor QEA, LLC **Project:** Port of Portland - T4 - PDI

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Aroclor 1016	2.00	4.00	ug/kg
Aroclor 1221	2.00	4.00	ug/kg
Aroclor 1232	2.00	4.00	ug/kg
Aroclor 1242	2.00	4.00	ug/kg
Aroclor 1248	2.00	4.00	ug/kg
Aroclor 1254	2.00	4.00	ug/kg
Aroclor 1260	2.00	4.00	ug/kg

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

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

FD-201905220947

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-01	File ID:	ECD2F024.D
Sampled:	05/22/19 00:00	Prepared:	05/28/19 11:08	Analyzed:	05/30/19 23:05
Solids:	72.32	Preparation:	EPA 3546	Initial/Final:	10.8 g / 2 mL
Batch:	9051305	Sequence:	9E30034	Calibration:	A9A3104
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.56	U
11104-28-2	Aroclor 1221	1	2.56	U
11141-16-5	Aroclor 1232	1	2.56	U
53469-21-9	Aroclor 1242	1	2.56	U
12672-29-6	Aroclor 1248	1	2.56	U
11097-69-1	Aroclor 1254	1	2.56	U
11096-82-5	Aroclor 1260	1	2.56	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	64.0	59.8	93	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-01-03

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-02RE1	File ID:	ECD2F007.D
Sampled:	05/22/19 09:47	Prepared:	06/04/19 09:49	Analyzed:	06/05/19 09:18
Solids:	68.82	Preparation:	EPA 3546	Initial/Final:	10.14 g / 2 mL
Batch:	9060524	Sequence:	9F05018	Calibration:	A9A3104
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.87	U
11104-28-2	Aroclor 1221	1	2.87	U
11141-16-5	Aroclor 1232	1	2.87	U
53469-21-9	Aroclor 1242	1	2.87	U
12672-29-6	Aroclor 1248	1	2.87	U
11097-69-1	Aroclor 1254	1	2.87	U
11096-82-5	Aroclor 1260	1	2.87	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	71.6	61.3	86	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-03-05

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-03	File ID:	ECD2R026.D
Sampled:	05/22/19 09:47	Prepared:	05/28/19 11:08	Analyzed:	05/30/19 23:40
Solids:	70.43	Preparation:	EPA 3546	Initial/Final:	10.29 g / 2 mL
Batch:	9051305	Sequence:	9E30035	Calibration:	A9E1302
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.76	U
11104-28-2	Aroclor 1221	1	2.76	U
11141-16-5	Aroclor 1232	1	2.76	U
53469-21-9	Aroclor 1242	1	2.76	U
12672-29-6	Aroclor 1248	1	2.76	U
11097-69-1	Aroclor 1254	1	2.76	U
11096-82-5	Aroclor 1260	1	2.76	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	69.0	61.7	89	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-05-07

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-04	File ID:	ECD2R028.D
Sampled:	05/22/19 09:47	Prepared:	05/28/19 11:08	Analyzed:	05/31/19 00:16
Solids:	76.04	Preparation:	EPA 3546	Initial/Final:	10.11 g / 2 mL
Batch:	9051305	Sequence:	9E30035	Calibration:	A9E1302
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.60	U
11104-28-2	Aroclor 1221	1	2.60	U
11141-16-5	Aroclor 1232	1	2.60	U
53469-21-9	Aroclor 1242	1	2.60	U
12672-29-6	Aroclor 1248	1	2.60	U
11097-69-1	Aroclor 1254	1	2.60	U
11096-82-5	Aroclor 1260	1	2.60	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	65.0	63.8	98	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-05RE1	File ID:	ECD2F011.D
Sampled:	05/22/19 09:47	Prepared:	06/04/19 09:49	Analyzed:	06/05/19 10:29
Solids:	68.88	Preparation:	EPA 3546	Initial/Final:	10.05 g / 2 mL
Batch:	9060524	Sequence:	9F05018	Calibration:	A9A3104
Instrument:	DUALECD2F				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.89	U
11104-28-2	Aroclor 1221	1	2.89	U
11141-16-5	Aroclor 1232	1	2.89	U
53469-21-9	Aroclor 1242	1	2.89	U
12672-29-6	Aroclor 1248	1	2.89	U
11097-69-1	Aroclor 1254	1	2.89	U
11096-82-5	Aroclor 1260	1	2.89	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	72.2	62.3	86	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-09-11

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-06RE1	File ID:	ECD2R011.D
Sampled:	05/22/19 09:47	Prepared:	06/04/19 09:49	Analyzed:	06/05/19 10:29
Solids:	69.60	Preparation:	EPA 3546	Initial/Final:	10.13 g / 2 mL
Batch:	9060524	Sequence:	9F05019	Calibration:	A9E1302
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.84	U
11104-28-2	Aroclor 1221	1	2.84	U
11141-16-5	Aroclor 1232	1	2.84	U
53469-21-9	Aroclor 1242	1	2.84	U
12672-29-6	Aroclor 1248	1	2.84	U
11097-69-1	Aroclor 1254	1	2.84	U
11096-82-5	Aroclor 1260	1	2.84	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	70.9	61.3	86	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC18-190522-11-13

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-07RE1	File ID:	ECD2R013.D
Sampled:	05/22/19 09:47	Prepared:	06/04/19 09:49	Analyzed:	06/05/19 11:05
Solids:	70.50	Preparation:	EPA 3546	Initial/Final:	10.01 g / 2 mL
Batch:	9060524	Sequence:	9F05019	Calibration:	A9E1302
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.83	U
11104-28-2	Aroclor 1221	1	2.83	U
11141-16-5	Aroclor 1232	1	2.83	U
53469-21-9	Aroclor 1242	1	2.83	U
12672-29-6	Aroclor 1248	1	2.83	U
11097-69-1	Aroclor 1254	1	2.83	U
11096-82-5	Aroclor 1260	1	2.83	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	70.9	61.6	87	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

T4-PDI2019-SC67-190522-01-03

Laboratory:	Apex Laboratories		SDG:	A9E0766	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9E0766-16RE1	File ID:	ECD2R015.D
Sampled:	05/22/19 12:45	Prepared:	06/04/19 09:49	Analyzed:	06/05/19 11:41
Solids:	82.80	Preparation:	EPA 3546	Initial/Final:	10.4 g / 2 mL
Batch:	9060524	Sequence:	9F05019	Calibration:	A9E1302
Instrument:	DUALECD2R				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
12674-11-2	Aroclor 1016	1	2.32	U
11104-28-2	Aroclor 1221	1	2.32	U
11141-16-5	Aroclor 1232	1	2.32	U
53469-21-9	Aroclor 1242	1	2.32	U
12672-29-6	Aroclor 1248	1	2.32	U
11097-69-1	Aroclor 1254	1	2.32	U
11096-82-5	Aroclor 1260	1	2.32	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	58.1	56.0	96	60 - 125	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Batch: 9051305 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9051305-BLK1	ECD2F004.D	05/28/19 11:07	
LCS	9051305-BS1	ECD2F005.D	05/28/19 11:07	
FD-201905220947	A9E0766-01	ECD2F024.D	05/28/19 11:08	
T4-PDI2019-SC18-190522-03-05	A9E0766-03	ECD2R026.D	05/28/19 11:08	
T4-PDI2019-SC18-190522-05-07	A9E0766-04	ECD2R028.D	05/28/19 11:08	

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.

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Batch: 9060524 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9060524-BLK1	ECD2F005.D	06/04/19 09:49	
LCS	9060524-BS1	ECD2F006.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-01-03 (D	9060524-DUP1	ECD2F009.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-07-09 (M	9060524-MS1	ECD2F013.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-07-09 (M	9060524-MSD1	ECD2F015.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-01-03	A9E0766-02RE1	ECD2F007.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-07-09	A9E0766-05RE1	ECD2F011.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-09-11	A9E0766-06RE1	ECD2R011.D	06/04/19 09:49	
T4-PDI2019-SC18-190522-11-13	A9E0766-07RE1	ECD2R013.D	06/04/19 09:49	
T4-PDI2019-SC67-190522-01-03	A9E0766-16RE1	ECD2R015.D	06/04/19 09:49	

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:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9051305-BLK1	File ID:	ECD2F004.D
Prepared:	05/28/19 11:07	Preparation:	EPA 3546	Initial/Final:	11 g / 2 mL
Analyzed:	05/30/19 17:07	Instrument:	DUALECD2F		
Batch:	9051305	Sequence:	9E30034	Calibration:	A9A3104

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
12674-11-2	Aroclor 1016	1.82	U
11104-28-2	Aroclor 1221	1.82	U
11141-16-5	Aroclor 1232	1.82	U
53469-21-9	Aroclor 1242	1.82	U
12672-29-6	Aroclor 1248	1.82	U
11097-69-1	Aroclor 1254	1.82	U
11096-82-5	Aroclor 1260	1.82	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	45.5	38.8	85	60 - 125	

METHOD BLANK DATA SHEET

EPA 8082A

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9060524-BLK1	File ID:	ECD2F005.D
Prepared:	06/04/19 09:49	Preparation:	EPA 3546	Initial/Final:	11 g / 2 mL
Analyzed:	06/05/19 08:42	Instrument:	DUALECD2F		
Batch:	9060524	Sequence:	9F05018	Calibration:	A9A3104

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
12674-11-2	Aroclor 1016	1.82	U
11104-28-2	Aroclor 1221	1.82	U
11141-16-5	Aroclor 1232	1.82	U
53469-21-9	Aroclor 1242	1.82	U
12672-29-6	Aroclor 1248	1.82	U
11097-69-1	Aroclor 1254	1.82	U
11096-82-5	Aroclor 1260	1.82	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl (Surr)	45.5	41.9	92	60 - 125	

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9051305	Laboratory ID:	9051305-BS1
Preparation:	EPA 3546	Initial/Final:	10 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	250	178	71	47 - 134
Aroclor 1260	250	191	76	53 - 140

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060524	Laboratory ID:	9060524-BS1
Preparation:	EPA 3546	Initial/Final:	10 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	250	140	56	47 - 134
Aroclor 1260	250	175	70	53 - 140

* = Values outside of QC limits

DUPLICATES

EPA 8082A

T4-PDI2019-SC18-190522-01-03

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 9060524
Preparation: EPA 3546
Source Sample Name: T4-PDI2019-SC18-190522-01-03

SDG: A9E0766
Project: Port of Portland - T4 - PDI
Laboratory ID: 9060524-DUP1
Lab Source ID: A9E0766-02RE1
Initial/Final: 10.09 g / 2 mL
% Solids: 68.82

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
Aroclor 1016	30	0.00		ND				EPA 8082A
Aroclor 1221	30	0.00		ND				EPA 8082A
Aroclor 1232	30	0.00		ND				EPA 8082A
Aroclor 1242	30	0.00		ND				EPA 8082A
Aroclor 1248	30	0.00		ND				EPA 8082A
Aroclor 1254	30	0.00		ND				EPA 8082A
Aroclor 1260	30	0.00		ND				EPA 8082A

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8082A

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060524	Laboratory ID:	9060524-MS1
Preparation:	EPA 3546	Initial/Final:	10.03 g / 2 mL

Source Sample Name: T4-PDI2019-SC18-190522-07-09

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. (*=Out)	QC LIMITS REC.
Aroclor 1016	362	ND	256	71	47 - 134
Aroclor 1260	362	ND	288	80	53 - 140

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8082A

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060524	Laboratory ID:	9060524-MSD1
Preparation:	EPA 3546	Initial/Final:	10.05 g / 2 mL

Source Sample Name: T4-PDI2019-SC18-190522-07-09

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % RECOVERY	% RPD	QC LIMITS RPD	QC LIMITS REC.
Aroclor 1016	361	253	70	0.9	30	47 - 134
Aroclor 1260	361	284	79	1	30	53 - 140

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9A30022	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9A30022-ICB1	ECD2F005.D	01/30/19 09:21
Cal Standard	9A30022-CAL1	ECD2F006.D	01/30/19 09:39
Cal Standard	9A30022-CAL2	ECD2F007.D	01/30/19 09:57
Cal Standard	9A30022-CAL3	ECD2F008.D	01/30/19 10:15
Cal Standard	9A30022-CAL4	ECD2F009.D	01/30/19 10:33
Cal Standard	9A30022-CAL5	ECD2F010.D	01/30/19 10:51
Cal Standard	9A30022-CAL6	ECD2F011.D	01/30/19 11:09
Cal Standard	9A30022-CAL7	ECD2F012.D	01/30/19 11:27
Initial Cal Check	9A30022-ICV1	ECD2F013.D	01/30/19 11:45
Cal Standard	9A30022-CAL8	ECD2F014.D	01/30/19 12:03
Cal Standard	9A30022-CAL9	ECD2F017.D	01/30/19 12:43
Cal Standard	9A30022-CALA	ECD2F018.D	01/30/19 13:01
Cal Standard	9A30022-CALB	ECD2F019.D	01/30/19 13:19
Cal Standard	9A30022-CALC	ECD2F020.D	01/30/19 13:37
Cal Standard	9A30022-CALD	ECD2F021.D	01/30/19 13:55
Cal Standard	9A30022-CALE	ECD2F022.D	01/30/19 14:13
Initial Cal Check	9A30022-ICV2	ECD2F023.D	01/30/19 14:31
Initial Cal Check	9A30022-ICV3	ECD2F024.D	01/30/19 14:49
Initial Cal Check	9A30022-ICV4	ECD2F025.D	01/30/19 15:07
Initial Cal Check	9A30022-ICV5	ECD2F026.D	01/30/19 15:25

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E10007	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Blank	9E10007-ICB1	ECD2R005.D	05/10/19 09:03
Cal Standard	9E10007-CAL1	ECD2R006.D	05/10/19 09:21
Cal Standard	9E10007-CAL2	ECD2R007.D	05/10/19 09:39
Cal Standard	9E10007-CAL3	ECD2R008.D	05/10/19 09:57
Cal Standard	9E10007-CAL4	ECD2R009.D	05/10/19 10:15
Cal Standard	9E10007-CAL5	ECD2R010.D	05/10/19 10:33
Cal Standard	9E10007-CAL6	ECD2R011.D	05/10/19 10:51
Cal Standard	9E10007-CAL7	ECD2R012.D	05/10/19 11:09
Initial Cal Check	9E10007-ICV1	ECD2R014.D	05/10/19 11:45
Cal Standard	9E10007-CAL8	ECD2R015.D	05/10/19 12:03
Cal Standard	9E10007-CAL9	ECD2R016.D	05/10/19 12:21
Cal Standard	9E10007-CALA	ECD2R017.D	05/10/19 12:39
Cal Standard	9E10007-CALB	ECD2R018.D	05/10/19 12:57
Cal Standard	9E10007-CALC	ECD2R019.D	05/10/19 13:15
Cal Standard	9E10007-CALD	ECD2R020.D	05/10/19 13:33
Cal Standard	9E10007-CALE	ECD2R021.D	05/10/19 13:52
Initial Cal Check	9E10007-ICV2	ECD2R022.D	05/10/19 14:10
Initial Cal Check	9E10007-ICV3	ECD2R023.D	05/10/19 14:28
Initial Cal Check	9E10007-ICV4	ECD2R024.D	05/10/19 14:46
Initial Cal Check	9E10007-ICV5	ECD2R025.D	05/10/19 15:04

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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E30034	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9E30034-CCV1	ECD2F002.D	05/30/19 16:31
Calibration Blank	9E30034-CCB1	ECD2F003.D	05/30/19 16:49
Blank	9051305-BLK1	ECD2F004.D	05/30/19 17:07
LCS	9051305-BS1	ECD2F005.D	05/30/19 17:25
Calibration Check	9E30034-CCV2	ECD2F014.D	05/30/19 20:06
Calibration Blank	9E30034-CCB2	ECD2F015.D	05/30/19 20:24
FD-201905220947	A9E0766-01	ECD2F024.D	05/30/19 23:05
Calibration Check	9E30034-CCV3	ECD2F030.D	05/31/19 00:52
Calibration Blank	9E30034-CCB3	ECD2F031.D	05/31/19 01:10

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E30035	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9E30035-CCV1	ECD2R002.D	05/30/19 16:31
Calibration Blank	9E30035-CCB1	ECD2R003.D	05/30/19 16:49
Calibration Check	9E30035-CCV2	ECD2R016.D	05/30/19 20:42
Calibration Blank	9E30035-CCB2	ECD2R017.D	05/30/19 21:00
T4-PDI2019-SC18-190522-03-05	A9E0766-03	ECD2R026.D	05/30/19 23:40
T4-PDI2019-SC18-190522-05-07	A9E0766-04	ECD2R028.D	05/31/19 00:16
Calibration Check	9E30035-CCV3	ECD2R030.D	05/31/19 00:52
Calibration Blank	9E30035-CCB3	ECD2R031.D	05/31/19 01:10

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05018	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9F05018-CCV1	ECD2F002.D	06/05/19 07:48
Calibration Blank	9F05018-CCB1	ECD2F003.D	06/05/19 08:06
Blank	9060524-BLK1	ECD2F005.D	06/05/19 08:42
LCS	9060524-BS1	ECD2F006.D	06/05/19 09:00
T4-PDI2019-SC18-190522-01-03	A9E0766-02RE1	ECD2F007.D	06/05/19 09:18
T4-PDI2019-SC18-190522-01-03 (D	9060524-DUP1	ECD2F009.D	06/05/19 09:54
T4-PDI2019-SC18-190522-07-09	A9E0766-05RE1	ECD2F011.D	06/05/19 10:29
T4-PDI2019-SC18-190522-07-09 (M	9060524-MS1	ECD2F013.D	06/05/19 11:05
T4-PDI2019-SC18-190522-07-09 (M	9060524-MSD1	ECD2F015.D	06/05/19 11:41
Calibration Check	9F05018-CCV2	ECD2F017.D	06/05/19 12:17
Calibration Blank	9F05018-CCB2	ECD2F018.D	06/05/19 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.

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05019	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9F05019-CCV2	ECD2R009.D	06/05/19 09:54
Calibration Blank	9F05019-CCB2	ECD2R010.D	06/05/19 10:11
T4-PDI2019-SC18-190522-09-11	A9E0766-06RE1	ECD2R011.D	06/05/19 10:29
T4-PDI2019-SC18-190522-11-13	A9E0766-07RE1	ECD2R013.D	06/05/19 11:05
T4-PDI2019-SC67-190522-01-03	A9E0766-16RE1	ECD2R015.D	06/05/19 11:41
Calibration Blank	9F05019-CCB3	ECD2R018.D	06/05/19 12:35
Calibration Check	9F05019-CCV4	ECD2R019.D	06/05/19 13:36

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: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A9A3104 Date: 01/31/19 13:04 Instrument: DUALECD2F

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aroclor 1016		Ave						20	
Aroclor 1221		Ave						20	
Aroclor 1232		Ave						20	
Aroclor 1242		Ave						20	
Aroclor 1248		Ave						20	
Aroclor 1254		Ave						20	
Aroclor 1260		Ave						20	
Decachlorobiphenyl (Surr)	72813.86	Ave	1.509141	9.454429	1.307832E-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: A9A3104

SDG: A9E0766

Project: Port of Portland - T4 - PDI

Instrument: DUALECD2F

Calibration Date: 01/31/19 13:04

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1016 (1)	20	3079.1	50	2909.98	100	2686	200	2528.85	500	2508.978	1000	2471.749
1016 (2)	20	5742.6	50	5545.34	100	5380.76	200	5141.655	500	5016.278	1000	5040.502
1016 (3)	20	3476.3	50	3163.54	100	2940.73	200	2704.53	500	2693.07	1000	2672.741
1016 (4)	20	3002.15	50	2627.48	100	2501.88	200	2252.11	500	2103.372	1000	2153.93
1016 (5)	20	3422.95	50	3287.16	100	3034.27	200	2729.885	500	2685.106	1000	2670.551
1016 (6)	20	2620.4	50	2219.28	100	2141.66	200	1980.625	500	1866.576	1000	1887.258
Aroclor 1016	20	0	50	0	100	0	200	0	500	0	1000	0
1260 (1)	20	6220.8	50	5794.08	100	5728.61	200	5255.615	500	5071.312	1000	5135.331
1260 (2)	20	7495.6	50	7372.68	100	7191.76	200	6591.38	500	6392.862	1000	6639.782
1260 (3)	20	5473	50	5396.74	100	5357.01	200	5073.335	500	4845.09	1000	4916.194
1260 (4)	20	12682.3	50	12744.32	100	13229.35	200	12161.5	500	12439.1	1000	12084.82
1260 (5)	20	8472.6	50	8716.98	100	8400.59	200	8169.445	500	8118.006	1000	8021.252
1260 (6)	20	3798.55	50	3548.38	100	3535	200	3321.68	500	3292.446	1000	3223.988
Aroclor 1260	20	0	50	0	100	0	200	0	500	0	1000	0
Decachlorobiphenyl (Surr)	10	74663.3	25	73536.6	50	72050.96	100	72253.61	250	72824.56	500	73081.98

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3104
Instrument: DUALECD2F
Matrix:
Calibration Date: 01/31/19 13:04

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
1016 (1)	1500	2530.735										
1016 (2)	1500	5178.703										
1016 (3)	1500	2677.599										
1016 (4)	1500	2096.683										
1016 (5)	1500	2691.336										
1016 (6)	1500	1855.039										
Aroclor 1016	1500	0										
1254 (1)											500	4283.478
1254 (2)											500	5396.896
1254 (3)											500	7922.304
1254 (4)											500	5278.678
1254 (5)											500	5337.04
1254 (6)											500	1801.944
Aroclor 1254											500	0
1260 (1)	1500	5224.664										
1260 (2)	1500	6530.673										
1260 (3)	1500	4875.408										
1260 (4)	1500	11857.92										
1260 (5)	1500	7837.347										
1260 (6)	1500	3164.499										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	71286.01	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3104
Instrument: DUALECD2F
Matrix:
Calibration Date: 01/31/19 13:04

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	5516.974										
1262 (2)	500	7520.636										
1262 (3)	500	6451.304										
1262 (4)	500	14198.94										
1262 (5)	500	8566.436										
1262 (6)	500	4760.692										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

INITIAL CALIBRATION DATA (Summary)

EPA 8082A

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A9E1302 Date: 05/13/19 13:15 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)	136682	Ave	5.219369	10.38186	1.468708E-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: A9E1302

SDG: A9E0766

Project: Port of Portland - T4 - PDI

Instrument: DUALECD2R

Calibration Date: 05/13/19 13:15

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	5802.7	50	5702.48	100	5788.87	200	5582.155	500	5381.304	1000	5606.678
1016 (2)	20	11279.1	50	11375.98	100	11866.4	200	11556.34	500	11285.86	1000	11401.01
1016 (3)	20	5024.45	50	5021.66	100	5349.1	200	5024.5	500	4826.134	1000	5045.944
1016 (4)	20	6494.4	50	6042.9	100	5864.77	200	5528.465	500	5138.464	1000	5201.537
1016 (5)	20	8042.25	50	7044.36	100	6954.54	200	6485	500	5914.002	1000	5643.242
1016 (6)	20	8155.05	50	7303.12	100	6942.52	200	6470.285	500	6118.634	1000	6039.685
Aroclor 1016	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
1260 (1)	20	15224.2	50	14285.38	100	13940.24	200	12985.8	500	12225.66	1000	11962.12
1260 (2)	20	18546.4	50	17425.48	100	17546.18	200	15583.28	500	14887.11	1000	15248.79
1260 (3)	20	17901.7	50	17233.7	100	16859.6	200	16261.14	500	15223.48	1000	15232.3
1260 (4)	20	28943.4	50	27044.72	100	28863.63	200	27174.99	500	26556.54	1000	27775.73
1260 (5)	20	17076.55	50	15935.44	100	16260.89	200	14971.57	500	14576.55	1000	15079.62
1260 (6)	20	7197.4	50	6663.08	100	6705.33	200	6311.01	500	5981.984	1000	5822.993
Aroclor 1260	20	~~0~~	50	~~0~~	100	~~0~~	200	~~0~~	500	~~0~~	1000	~~0~~
Decachlorobiphenyl (Surr)	10	129223.7	25	132898.5	50	133354.8	100	134971.3	250	133075.6	500	144313.9

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1302
Instrument: DUALECD2R
Matrix:
Calibration Date: 05/13/19 13:15

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	5617.911										
1016 (2)	1500	11762.43										
1016 (3)	1500	5092.478										
1016 (4)	1500	4962.139										
1016 (5)	1500	5890.984										
1016 (6)	1500	5896.931										
Aroclor 1016	1500	0										
1254 (1)											500	10955.33
1254 (2)											500	17976.73
1254 (3)											500	19563.62
1254 (4)											500	14611.85
1254 (5)											500	14780.21
1254 (6)											500	4388.108
Aroclor 1254											500	0
1260 (1)	1500	12212.78										
1260 (2)	1500	15329.96										
1260 (3)	1500	15071.12										
1260 (4)	1500	27293.93										
1260 (5)	1500	15974.26										
1260 (6)	1500	6147.833										
Aroclor 1260	1500	0										
Decachlorobiphenyl (Surr)	800	148936.4	200	0	200	0	200	0	200	0	200	0

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1302
Instrument: DUALECD2R
Matrix:
Calibration Date: 05/13/19 13:15

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	13237.74										
1262 (2)	500	18017.88										
1262 (3)	500	14818.61										
1262 (4)	500	33301.76										
1262 (5)	500	18897.92										
1262 (6)	500	8782.638										
Aroclor 1262	500	~~0~~										
Decachlorobiphenyl (Surr)	200	~~0~~	200	~~0~~								

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F013.D		
Sequence:	9A30022	Inject Date:	01/30/19
Lab Sample ID:	9A30022-ICV1	Inject Time:	11:45

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	447	-10.5	70 - 130
Aroclor 1260	500	465	-7.0	70 - 130
Decachlorobiphenyl (Surr)	200	215	7.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F023.D		
Sequence:	9A30022	Inject Date:	01/30/19
Lab Sample ID:	9A30022-ICV2	Inject Time:	14:31

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	934	-6.6	70 - 130
Aroclor 1254	500	488	-2.4	70 - 130
Decachlorobiphenyl (Surr)	80.0	87.0	8.8	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F024.D		
Sequence:	9A30022	Inject Date:	01/30/19
Lab Sample ID:	9A30022-ICV3	Inject Time:	14:49

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	530	5.9	70 - 130
Aroclor 1262	500	494	-1.3	70 - 130
Decachlorobiphenyl (Surr)	80.0	84.2	5.2	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F025.D		
Sequence:	9A30022	Inject Date:	01/30/19
Lab Sample ID:	9A30022-ICV4	Inject Time:	15:07

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	507	1.4	70 - 130
Aroclor 1268	500	502	0.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F026.D		
Sequence:	9A30022	Inject Date:	01/30/19
Lab Sample ID:	9A30022-ICV5	Inject Time:	15:25

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	501	0.2	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R014.D		
Sequence:	9E10007	Inject Date:	05/10/19
Lab Sample ID:	9E10007-ICV1	Inject Time:	11:45

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1016	500	504	0.8	70 - 130
Aroclor 1260	500	494	-1.3	70 - 130
Decachlorobiphenyl (Surr)	200	179	-10.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R022.D		
Sequence:	9E10007	Inject Date:	05/10/19
Lab Sample ID:	9E10007-ICV2	Inject Time:	14:10

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1221	1000	866	-13.4	70 - 130
Aroclor 1254	500	453	-9.4	70 - 130
Decachlorobiphenyl (Surr)	80.0	81.7	2.2	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R023.D		
Sequence:	9E10007	Inject Date:	05/10/19
Lab Sample ID:	9E10007-ICV3	Inject Time:	14:28

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1232	500	502	0.3	70 - 130
Aroclor 1262	500	473	-5.5	70 - 130
Decachlorobiphenyl (Surr)	80.0	79.8	-0.2	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R024.D		
Sequence:	9E10007	Inject Date:	05/10/19
Lab Sample ID:	9E10007-ICV4	Inject Time:	14:46

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1242	500	561	12.2	70 - 130
Aroclor 1268	500	549	9.7	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R025.D		
Sequence:	9E10007	Inject Date:	05/10/19
Lab Sample ID:	9E10007-ICV5	Inject Time:	15:04

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Aroclor 1248	500	532	6.4	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F002.D	Calibration Date:	01/31/19 13:04
Sequence:	9E30034	Injection Date:	05/30/19
Lab Sample ID:	9E30034-CCV1	Injection Time:	16:31

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	500				0.008	20
Aroclor 1260	Ave	500	486				-2.8	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F014.D	Calibration Date:	01/31/19 13:04
Sequence:	9E30034	Injection Date:	05/30/19
Lab Sample ID:	9E30034-CCV2	Injection Time:	20:06

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	513				2.7	20
Aroclor 1260	Ave	500	502				0.3	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F030.D	Calibration Date:	01/31/19 13:04
Sequence:	9E30034	Injection Date:	05/31/19
Lab Sample ID:	9E30034-CCV3	Injection Time:	00:52

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	546				9.3	20
Aroclor 1260	Ave	500	525				5.0	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R002.D	Calibration Date:	05/13/19 13:15
Sequence:	9E30035	Injection Date:	05/30/19
Lab Sample ID:	9E30035-CCV1	Injection Time:	16:31

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	519				3.8	20
Aroclor 1260	Ave	500	519				3.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R016.D	Calibration Date:	05/13/19 13:15
Sequence:	9E30035	Injection Date:	05/30/19
Lab Sample ID:	9E30035-CCV2	Injection Time:	20:42

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	546				9.1	20
Aroclor 1260	Ave	500	543				8.6	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R030.D	Calibration Date:	05/13/19 13:15
Sequence:	9E30035	Injection Date:	05/31/19
Lab Sample ID:	9E30035-CCV3	Injection Time:	00:52

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Aroclor 1016	Ave	500	565				13.0	20
Aroclor 1260	Ave	500	573				14.7	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F002.D	Calibration Date:	01/31/19 13:04
Sequence:	9F05018	Injection Date:	06/05/19
Lab Sample ID:	9F05018-CCV1	Injection Time:	07:48

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	506				1.1	20
Aroclor 1260	Ave	500	490				-1.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2F	Calibration:	A9A3104
Lab File ID:	ECD2F017.D	Calibration Date:	01/31/19 13:04
Sequence:	9F05018	Injection Date:	06/05/19
Lab Sample ID:	9F05018-CCV2	Injection Time:	12:17

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	521				4.1	20
Aroclor 1260	Ave	500	514				2.8	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R009.D	Calibration Date:	05/13/19 13:15
Sequence:	9F05019	Injection Date:	06/05/19
Lab Sample ID:	9F05019-CCV2	Injection Time:	09:54

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	567				13.5	20
Aroclor 1260	Ave	500	579				15.9	20

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

* = Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	DUALECD2R	Calibration:	A9E1302
Lab File ID:	ECD2R019.D	Calibration Date:	05/13/19 13:15
Sequence:	9F05019	Injection Date:	06/05/19
Lab Sample ID:	9F05019-CCV4	Injection Time:	13:36

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	518				3.7	20
Aroclor 1260	Ave	500	537				7.4	20

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

* = Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9A30022	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9A30022-ICV1)			Lab File ID: ECD2F013.D		Analyzed: 01/30/19 11:45			
Decachlorobiphenyl (Surr)	200	107	70 - 130	9.456	9.454429	0.0016	+/-1.0	
Initial Cal Check (9A30022-ICV2)			Lab File ID: ECD2F023.D		Analyzed: 01/30/19 14:31			
Decachlorobiphenyl (Surr)	80.0	109	70 - 130	9.456	9.454429	0.0016	+/-1.0	
Initial Cal Check (9A30022-ICV3)			Lab File ID: ECD2F024.D		Analyzed: 01/30/19 14:49			
Decachlorobiphenyl (Surr)	80.0	105	70 - 130	9.459	9.454429	0.0046	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E10007	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9E10007-ICV1)			Lab File ID: ECD2R014.D		Analyzed: 05/10/19 11:45			
Decachlorobiphenyl (Surr)	200	89	70 - 130	10.38	10.38186	-0.0019	+/-1.0	
Initial Cal Check (9E10007-ICV2)			Lab File ID: ECD2R022.D		Analyzed: 05/10/19 14:10			
Decachlorobiphenyl (Surr)	80.0	102	70 - 130	10.381	10.38186	-0.0009	+/-1.0	
Initial Cal Check (9E10007-ICV3)			Lab File ID: ECD2R023.D		Analyzed: 05/10/19 14:28			
Decachlorobiphenyl (Surr)	80.0	100	70 - 130	10.381	10.38186	-0.0009	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E30034	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9E30034-CCV1)			Lab File ID: ECD2F002.D		Analyzed: 05/30/19 16:31			
Decachlorobiphenyl (Surr)	250	101	80 - 120	9.297	9.454429	-0.1574	+/-1.0	
Calibration Blank (9E30034-CCB1)			Lab File ID: ECD2F003.D		Analyzed: 05/30/19 16:49			
Decachlorobiphenyl (Surr)	100	102	60 - 125	9.295	9.454429	-0.1594	+/-1.0	
Blank (9051305-BLK1)			Lab File ID: ECD2F004.D		Analyzed: 05/30/19 17:07			
Decachlorobiphenyl (Surr)	45.5	85	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
LCS (9051305-BS1)			Lab File ID: ECD2F005.D		Analyzed: 05/30/19 17:25			
Decachlorobiphenyl (Surr)	50.0	86	60 - 125	9.295	9.454429	-0.1594	+/-1.0	
Calibration Check (9E30034-CCV2)			Lab File ID: ECD2F014.D		Analyzed: 05/30/19 20:06			
Decachlorobiphenyl (Surr)	250	108	80 - 120	9.295	9.454429	-0.1594	+/-1.0	
Calibration Blank (9E30034-CCB2)			Lab File ID: ECD2F015.D		Analyzed: 05/30/19 20:24			
Decachlorobiphenyl (Surr)	100	101	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
FD-201905220947 (A9E0766-01)			Lab File ID: ECD2F024.D		Analyzed: 05/30/19 23:05			
Decachlorobiphenyl (Surr)	64.0	93	60 - 125	9.293	9.454429	-0.1614	+/-1.0	
Calibration Check (9E30034-CCV3)			Lab File ID: ECD2F030.D		Analyzed: 05/31/19 00:52			
Decachlorobiphenyl (Surr)	250	113	80 - 120	9.293	9.454429	-0.1614	+/-1.0	
Calibration Blank (9E30034-CCB3)			Lab File ID: ECD2F031.D		Analyzed: 05/31/19 01:10			
Decachlorobiphenyl (Surr)	100	113	60 - 125	9.292	9.454429	-0.1624	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E30035	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9E30035-CCV1)			Lab File ID: ECD2R002.D		Analyzed: 05/30/19 16:31			
Decachlorobiphenyl (Surr)	250	108	80 - 120	10.379	10.38186	-0.0029	+/-1.0	
Calibration Blank (9E30035-CCB1)			Lab File ID: ECD2R003.D		Analyzed: 05/30/19 16:49			
Decachlorobiphenyl (Surr)	100	103	60 - 125	10.377	10.38186	-0.0049	+/-1.0	
Calibration Check (9E30035-CCV2)			Lab File ID: ECD2R016.D		Analyzed: 05/30/19 20:42			
Decachlorobiphenyl (Surr)	250	115	80 - 120	10.376	10.38186	-0.0059	+/-1.0	
Calibration Blank (9E30035-CCB2)			Lab File ID: ECD2R017.D		Analyzed: 05/30/19 21:00			
Decachlorobiphenyl (Surr)	100	110	60 - 125	10.373	10.38186	-0.0089	+/-1.0	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03)			Lab File ID: ECD2R026.D		Analyzed: 05/30/19 23:40			
Decachlorobiphenyl (Surr)	69.0	89	60 - 125	10.375	10.38186	-0.0069	+/-1.0	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04)			Lab File ID: ECD2R028.D		Analyzed: 05/31/19 00:16			
Decachlorobiphenyl (Surr)	65.0	98	60 - 125	10.373	10.38186	-0.0089	+/-1.0	
Calibration Check (9E30035-CCV3)			Lab File ID: ECD2R030.D		Analyzed: 05/31/19 00:52			
Decachlorobiphenyl (Surr)	250	124	80 - 120	10.375	10.38186	-0.0069	+/-1.0	*
Calibration Blank (9E30035-CCB3)			Lab File ID: ECD2R031.D		Analyzed: 05/31/19 01:10			
Decachlorobiphenyl (Surr)	100	106	60 - 125	10.374	10.38186	-0.0079	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05018	Instrument:	DUALECD2F
Matrix:	Sediment	Calibration:	A9A3104

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9F05018-CCV1)			Lab File ID: ECD2F002.D		Analyzed: 06/05/19 07:48			
Decachlorobiphenyl (Surr)	250	107	80 - 120	9.295	9.454429	-0.1594	+/-1.0	
Calibration Blank (9F05018-CCB1)			Lab File ID: ECD2F003.D		Analyzed: 06/05/19 08:06			
Decachlorobiphenyl (Surr)	100	108	60 - 125	9.295	9.454429	-0.1594	+/-1.0	
Blank (9060524-BLK1)			Lab File ID: ECD2F005.D		Analyzed: 06/05/19 08:42			
Decachlorobiphenyl (Surr)	45.5	92	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
LCS (9060524-BS1)			Lab File ID: ECD2F006.D		Analyzed: 06/05/19 09:00			
Decachlorobiphenyl (Surr)	50.0	94	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE1)			Lab File ID: ECD2F007.D		Analyzed: 06/05/19 09:18			
Decachlorobiphenyl (Surr)	71.6	86	60 - 125	9.293	9.454429	-0.1614	+/-1.0	
Duplicate (9060524-DUP1)			Lab File ID: ECD2F009.D		Analyzed: 06/05/19 09:54			
Decachlorobiphenyl (Surr)	72.0	77	60 - 125	9.293	9.454429	-0.1614	+/-1.0	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE1)			Lab File ID: ECD2F011.D		Analyzed: 06/05/19 10:29			
Decachlorobiphenyl (Surr)	72.2	86	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
Matrix Spike (9060524-MS1)			Lab File ID: ECD2F013.D		Analyzed: 06/05/19 11:05			
Decachlorobiphenyl (Surr)	72.4	95	60 - 125	9.294	9.454429	-0.1604	+/-1.0	
Matrix Spike Dup (9060524-MSD1)			Lab File ID: ECD2F015.D		Analyzed: 06/05/19 11:41			
Decachlorobiphenyl (Surr)	72.2	92	60 - 125	9.293	9.454429	-0.1614	+/-1.0	
Calibration Check (9F05018-CCV2)			Lab File ID: ECD2F017.D		Analyzed: 06/05/19 12:17			
Decachlorobiphenyl (Surr)	250	107	80 - 120	9.293	9.454429	-0.1614	+/-1.0	
Calibration Blank (9F05018-CCB2)			Lab File ID: ECD2F018.D		Analyzed: 06/05/19 12:35			
Decachlorobiphenyl (Surr)	100	111	60 - 125	9.292	9.454429	-0.1624	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05019	Instrument:	DUALECD2R
Matrix:	Sediment	Calibration:	A9E1302

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9F05019-CCV2)			Lab File ID: ECD2R009.D		Analyzed: 06/05/19 09:54			
Decachlorobiphenyl (Surr)	250	121	80 - 120	10.377	10.38186	-0.0049	+/-1.0	*
Calibration Blank (9F05019-CCB2)			Lab File ID: ECD2R010.D		Analyzed: 06/05/19 10:11			
Decachlorobiphenyl (Surr)	100	107	40 - 135	10.376	10.38186	-0.0059	+/-1.0	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06RE1)			Lab File ID: ECD2R011.D		Analyzed: 06/05/19 10:29			
Decachlorobiphenyl (Surr)	70.9	86	60 - 125	10.377	10.38186	-0.0049	+/-1.0	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE1)			Lab File ID: ECD2R013.D		Analyzed: 06/05/19 11:05			
Decachlorobiphenyl (Surr)	70.9	87	60 - 125	10.376	10.38186	-0.0059	+/-1.0	
T4-PDI2019-SC67-190522-01-03 (A9E0766-16RE1)			Lab File ID: ECD2R015.D		Analyzed: 06/05/19 11:41			
Decachlorobiphenyl (Surr)	58.1	96	60 - 125	10.376	10.38186	-0.0059	+/-1.0	
Calibration Blank (9F05019-CCB3)			Lab File ID: ECD2R018.D		Analyzed: 06/05/19 12:35			
Decachlorobiphenyl (Surr)	100	110	40 - 135	10.377	10.38186	-0.0049	+/-1.0	
Calibration Check (9F05019-CCV4)			Lab File ID: ECD2R019.D		Analyzed: 06/05/19 13:36			
Decachlorobiphenyl (Surr)	250	104	80 - 120	10.382	10.38186	0.0001	+/-1.0	

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

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
FD-201905220947	05/22/19 00:00	05/23/19 10:00	05/28/19 11:08	6.46	365.00	05/30/19 23:05	2.50	40.00	
T4-PDI2019-SC18-190522-01-03	05/22/19 09:47	05/23/19 10:00	06/04/19 09:49	13.00	365.00	06/05/19 09:18	0.98	40.00	
T4-PDI2019-SC18-190522-03-05	05/22/19 09:47	05/23/19 10:00	05/28/19 11:08	6.06	365.00	05/30/19 23:40	2.52	40.00	
T4-PDI2019-SC18-190522-05-07	05/22/19 09:47	05/23/19 10:00	05/28/19 11:08	6.06	365.00	05/31/19 00:16	2.55	40.00	
T4-PDI2019-SC18-190522-07-09	05/22/19 09:47	05/23/19 10:00	06/04/19 09:49	13.00	365.00	06/05/19 10:29	1.03	40.00	
T4-PDI2019-SC18-190522-09-11	05/22/19 09:47	05/23/19 10:00	06/04/19 09:49	13.00	365.00	06/05/19 10:29	1.03	40.00	
T4-PDI2019-SC18-190522-11-13	05/22/19 09:47	05/23/19 10:00	06/04/19 09:49	13.00	365.00	06/05/19 11:05	1.05	40.00	
T4-PDI2019-SC67-190522-01-03	05/22/19 12:45	05/23/19 10:00	06/04/19 09:49	12.88	365.00	06/05/19 11:41	1.08	40.00	

Apex Laboratories

SDG: A9E0766

CLASS: GCMS

METHOD: EPA 8270D

ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
FD-201905220947	A9E0766-01	Sediment
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment

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

Signature: 
Name: David G. Jack

Forms Created: 6/27/2019 12:51PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories **SDG:** A9E0766

Client: Anchor QEA, LLC **Project:** Port of Portland - T4 - PDI

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Acenaphthene	1.33	2.67	ug/kg
Acenaphthylene	1.33	2.67	ug/kg
Anthracene	1.33	2.67	ug/kg
Benz(a)anthracene	1.33	2.67	ug/kg
Benzo(a)pyrene	2.00	4.00	ug/kg
Benzo(b)fluoranthene	2.00	4.00	ug/kg
Benzo(k)fluoranthene	2.00	4.00	ug/kg
Benzo(g,h,i)perylene	1.33	2.67	ug/kg
Chrysene	1.33	2.67	ug/kg
Dibenz(a,h)anthracene	1.33	2.67	ug/kg
Fluoranthene	1.33	2.67	ug/kg
Fluorene	1.33	2.67	ug/kg
Indeno(1,2,3-cd)pyrene	1.33	2.67	ug/kg
1-Methylnaphthalene	2.67	5.33	ug/kg
2-Methylnaphthalene	2.67	5.33	ug/kg
Naphthalene	2.67	5.33	ug/kg
Phenanthrene	1.33	2.67	ug/kg
Pyrene	1.33	2.67	ug/kg

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

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

FD-201905220947

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-01RE2	File ID:	E05311922.D
Sampled:	05/22/19 00:00	Prepared:	05/29/19 12:26	Analyzed:	05/31/19 22:27
Solids:	72.32	Preparation:	EPA 3546	Initial/Final:	15.41 g / 2 mL
Batch:	9051333	Sequence:	9E31017	Calibration:	A9A3103
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.79	U
208-96-8	Acenaphthylene	1	1.79	U
120-12-7	Anthracene	1	1.79	U
56-55-3	Benz(a)anthracene	1	1.79	U
50-32-8	Benzo(a)pyrene	1	2.69	U
205-99-2	Benzo(b)fluoranthene	1	2.69	U
207-08-9	Benzo(k)fluoranthene	1	2.69	U
191-24-2	Benzo(g,h,i)perylene	1	1.79	U
218-01-9	Chrysene	1	1.79	U
53-70-3	Dibenz(a,h)anthracene	1	1.79	U
206-44-0	Fluoranthene	1	1.79	U
86-73-7	Fluorene	1	1.79	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.79	U
91-57-6	2-Methylnaphthalene	1	3.59	U
91-20-3	Naphthalene	1	3.59	U
85-01-8	Phenanthrene	1	1.79	U
129-00-0	Pyrene	1	1.79	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	449	243	54	37 - 122	
2-Fluorobiphenyl (Surr)	449	222	49	44 - 115	
p-Terphenyl-d14 (Surr)	449	239	53	54 - 127	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	284727	6.746	284376	6.762	
Naphthalene-d8 (ISTD)	1081008	7.981	1107818	8.003	
Acenaphthene-d10 (ISTD)	521290	9.779	509890	9.784	
Phenanthrene-d10 (ISTD)	1004318	11.298	1009578	11.298	
Chrysene-d12 (ISTD)	1060028	15.207	998154	15.213	
Perylene-d12 (ISTD)	960632	18.727	893517	18.727	
Dibenz(a,h)anthracene-d14 (ISTD)	887086	21.118	831396	21.118	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-01-03

Laboratory:	Apex Laboratories		SDG:	A9E0766	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9E0766-02RE2	File ID:	J06051916.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/05/19 17:00
Solids:	68.82	Preparation:	EPA 3546	Initial/Final:	15.66 g / 2 mL
Batch:	9060602	Sequence:	9F05024	Calibration:	A9D1505
Instrument:	SV-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.85	U
208-96-8	Acenaphthylene	1	1.85	U
120-12-7	Anthracene	1	1.85	U
56-55-3	Benz(a)anthracene	1	1.85	U
50-32-8	Benzo(a)pyrene	1	2.78	U
205-99-2	Benzo(b)fluoranthene	1	2.78	U
207-08-9	Benzo(k)fluoranthene	1	2.78	U
191-24-2	Benzo(g,h,i)perylene	1	1.85	U
218-01-9	Chrysene	1	1.85	U
53-70-3	Dibenz(a,h)anthracene	1	1.85	U
206-44-0	Fluoranthene	1	1.85	U
86-73-7	Fluorene	1	1.85	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.85	U
91-57-6	2-Methylnaphthalene	1	3.72	U
91-20-3	Naphthalene	1	3.72	U
85-01-8	Phenanthrene	1	1.85	U
129-00-0	Pyrene	1	1.85	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	464	381	82	37 - 122	
2-Fluorobiphenyl (Surr)	464	341	73	44 - 115	
p-Terphenyl-d14 (Surr)	464	387	83	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	203236	6.803	206400	6.798	
Naphthalene-d8 (ISTD)	955764	8.076	844504	8.071	
Acenaphthene-d10 (ISTD)	441186	9.857	383862	9.857	
Phenanthrene-d10 (ISTD)	708720	11.371	643192	11.371	
Chrysene-d12 (ISTD)	576995	15.34	517740	15.339	
Perylene-d12 (ISTD)	501754	18.859	447263	18.859	
Dibenz(a,h)anthracene-d14 (ISTD)	432419	21.25	403143	21.25	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-03-05

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-03RE2	File ID:	I06061910.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/06/19 16:33
Solids:	70.43	Preparation:	EPA 3546	Initial/Final:	15.68 g / 2 mL
Batch:	9060602	Sequence:	9F06040	Calibration:	A9E1009 Instrument: SV-GCMS9

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	3.38	J
208-96-8	Acenaphthylene	1	1.81	U
120-12-7	Anthracene	1	4.19	
56-55-3	Benz(a)anthracene	1	3.99	
50-32-8	Benzo(a)pyrene	1	4.61	J
205-99-2	Benzo(b)fluoranthene	1	4.59	J
207-08-9	Benzo(k)fluoranthene	1	2.72	U
191-24-2	Benzo(g,h,i)perylene	1	2.67	J
218-01-9	Chrysene	1	2.58	J
53-70-3	Dibenz(a,h)anthracene	1	1.81	U
206-44-0	Fluoranthene	1	11.5	
86-73-7	Fluorene	1	2.82	J
193-39-5	Indeno(1,2,3-cd)pyrene	1	2.70	J
91-57-6	2-Methylnaphthalene	1	4.06	J
91-20-3	Naphthalene	1	10.1	
85-01-8	Phenanthrene	1	13.6	
129-00-0	Pyrene	1	10.2	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	453	280	62	37 - 122	
2-Fluorobiphenyl (Surr)	453	285	63	44 - 115	
p-Terphenyl-d14 (Surr)	453	371	82	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	99842	6.691	96971	6.681	
Naphthalene-d8 (ISTD)	410980	7.943	397749	7.932	
Acenaphthene-d10 (ISTD)	204655	9.713	198625	9.703	
Phenanthrene-d10 (ISTD)	364559	11.216	382580	11.211	
Chrysene-d12 (ISTD)	376853	15.046	368701	15.035	
Perylene-d12 (ISTD)	347097	18.533	349757	18.517	
Dibenz(a,h)anthracene-d14 (ISTD)	337618	20.913	347999	20.903	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-05-07

Laboratory:	Apex Laboratories		SDG:	A9E0766	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9E0766-04RE2	File ID:	I06061911.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/06/19 17:09
Solids:	76.04	Preparation:	EPA 3546	Initial/Final:	15.64 g / 2 mL
Batch:	9060602	Sequence:	9F06040	Calibration:	A9E1009
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.68	U
208-96-8	Acenaphthylene	1	1.68	U
120-12-7	Anthracene	1	1.68	U
56-55-3	Benz(a)anthracene	1	1.68	U
50-32-8	Benzo(a)pyrene	1	2.52	U
205-99-2	Benzo(b)fluoranthene	1	2.52	U
207-08-9	Benzo(k)fluoranthene	1	2.52	U
191-24-2	Benzo(g,h,i)perylene	1	1.68	U
218-01-9	Chrysene	1	1.68	U
53-70-3	Dibenz(a,h)anthracene	1	1.68	U
206-44-0	Fluoranthene	1	1.68	U
86-73-7	Fluorene	1	1.68	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.68	U
91-57-6	2-Methylnaphthalene	1	3.37	U
91-20-3	Naphthalene	1	3.37	U
85-01-8	Phenanthrene	1	1.68	U
129-00-0	Pyrene	1	1.68	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	420	319	76	37 - 122	
2-Fluorobiphenyl (Surr)	420	311	74	44 - 115	
p-Terphenyl-d14 (Surr)	420	341	81	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	98905	6.691	96971	6.681	
Naphthalene-d8 (ISTD)	419930	7.943	397749	7.932	
Acenaphthene-d10 (ISTD)	210862	9.713	198625	9.703	
Phenanthrene-d10 (ISTD)	388345	11.216	382580	11.211	
Chrysene-d12 (ISTD)	383272	15.046	368701	15.035	
Perylene-d12 (ISTD)	352527	18.528	349757	18.517	
Dibenz(a,h)anthracene-d14 (ISTD)	336099	20.908	347999	20.903	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	A9E0766-05RE2	File ID:	J06051918.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/05/19 18:13
Solids:	68.88	Preparation:	EPA 3546	Initial/Final:	15.62 g / 2 mL
Batch:	9060602	Sequence:	9F05024	Calibration:	A9D1505
Instrument:	SV-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.85	U
208-96-8	Acenaphthylene	1	1.85	U
120-12-7	Anthracene	1	1.85	U
56-55-3	Benz(a)anthracene	1	1.85	U
50-32-8	Benzo(a)pyrene	1	2.79	U
205-99-2	Benzo(b)fluoranthene	1	2.79	U
207-08-9	Benzo(k)fluoranthene	1	2.79	U
191-24-2	Benzo(g,h,i)perylene	1	1.85	U
218-01-9	Chrysene	1	1.85	U
53-70-3	Dibenz(a,h)anthracene	1	1.85	U
206-44-0	Fluoranthene	1	1.85	U
86-73-7	Fluorene	1	1.85	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.85	U
91-57-6	2-Methylnaphthalene	1	3.72	U
91-20-3	Naphthalene	1	3.72	U
85-01-8	Phenanthrene	1	1.85	U
129-00-0	Pyrene	1	1.85	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	465	414	89	37 - 122	
2-Fluorobiphenyl (Surr)	465	316	68	44 - 115	
p-Terphenyl-d14 (Surr)	465	357	77	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	167176	6.803	206400	6.798	
Naphthalene-d8 (ISTD)	933018	8.076	844504	8.071	
Acenaphthene-d10 (ISTD)	474282	9.857	383862	9.857	
Phenanthrene-d10 (ISTD)	782104	11.371	643192	11.371	
Chrysene-d12 (ISTD)	640628	15.339	517740	15.339	
Perylene-d12 (ISTD)	547948	18.859	447263	18.859	
Dibenz(a,h)anthracene-d14 (ISTD)	488596	21.244	403143	21.25	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-09-11

Laboratory:	Apex Laboratories		SDG:	A9E0766	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9E0766-06RE2	File ID:	I06061916.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/06/19 20:06
Solids:	69.60	Preparation:	EPA 3546	Initial/Final:	15.47 g / 2 mL
Batch:	9060602	Sequence:	9F06040	Calibration:	A9E1009
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.85	U
208-96-8	Acenaphthylene	1	1.85	U
120-12-7	Anthracene	1	1.85	U
56-55-3	Benz(a)anthracene	1	1.85	U
50-32-8	Benzo(a)pyrene	1	2.79	U
205-99-2	Benzo(b)fluoranthene	1	2.79	U
207-08-9	Benzo(k)fluoranthene	1	2.79	U
191-24-2	Benzo(g,h,i)perylene	1	1.85	U
218-01-9	Chrysene	1	1.85	U
53-70-3	Dibenz(a,h)anthracene	1	1.85	U
206-44-0	Fluoranthene	1	1.85	U
86-73-7	Fluorene	1	1.85	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.85	U
91-57-6	2-Methylnaphthalene	1	3.72	U
91-20-3	Naphthalene	1	3.72	U
85-01-8	Phenanthrene	1	1.85	U
129-00-0	Pyrene	1	1.85	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	464	312	67	37 - 122	
2-Fluorobiphenyl (Surr)	464	317	68	44 - 115	
p-Terphenyl-d14 (Surr)	464	369	79	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	102455	6.697	96971	6.681	
Naphthalene-d8 (ISTD)	420829	7.943	397749	7.932	
Acenaphthene-d10 (ISTD)	209185	9.713	198625	9.703	
Phenanthrene-d10 (ISTD)	387732	11.222	382580	11.211	
Chrysene-d12 (ISTD)	393994	15.046	368701	15.035	
Perylene-d12 (ISTD)	361520	18.533	349757	18.517	
Dibenz(a,h)anthracene-d14 (ISTD)	337400	20.913	347999	20.903	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SC18-190522-11-13

Laboratory:	Apex Laboratories		SDG:	A9E0766	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9E0766-07RE2	File ID:	I06061912.D
Sampled:	05/22/19 09:47	Prepared:	06/05/19 11:06	Analyzed:	06/06/19 17:44
Solids:	70.50	Preparation:	EPA 3546	Initial/Final:	15.34 g / 2 mL
Batch:	9060602	Sequence:	9F06040	Calibration:	A9E1009
Instrument:	SV-GCMS9				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	1.84	U
208-96-8	Acenaphthylene	1	1.84	U
120-12-7	Anthracene	1	1.84	U
56-55-3	Benz(a)anthracene	1	1.84	U
50-32-8	Benzo(a)pyrene	1	2.77	U
205-99-2	Benzo(b)fluoranthene	1	2.77	U
207-08-9	Benzo(k)fluoranthene	1	2.77	U
191-24-2	Benzo(g,h,i)perylene	1	1.84	U
218-01-9	Chrysene	1	1.84	U
53-70-3	Dibenz(a,h)anthracene	1	1.84	U
206-44-0	Fluoranthene	1	1.84	U
86-73-7	Fluorene	1	1.84	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.84	U
91-57-6	2-Methylnaphthalene	1	3.70	U
91-20-3	Naphthalene	1	3.70	U
85-01-8	Phenanthrene	1	1.84	U
129-00-0	Pyrene	1	1.84	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	462	368	80	37 - 122	
2-Fluorobiphenyl (Surr)	462	350	76	44 - 115	
p-Terphenyl-d14 (Surr)	462	354	76	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	100120	6.691	96971	6.681	
Naphthalene-d8 (ISTD)	419446	7.943	397749	7.932	
Acenaphthene-d10 (ISTD)	210298	9.713	198625	9.703	
Phenanthrene-d10 (ISTD)	387201	11.216	382580	11.211	
Chrysene-d12 (ISTD)	396015	15.041	368701	15.035	
Perylene-d12 (ISTD)	374065	18.528	349757	18.517	
Dibenz(a,h)anthracene-d14 (ISTD)	359796	20.908	347999	20.903	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Batch: 9051333 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9051333-BLK1	J05291908.D	05/29/19 06:59	
LCS	9051333-BS1	J05291909.D	05/29/19 06:59	
FD-201905220947	A9E0766-01RE2	E05311922.D	05/29/19 12:26	

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

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Batch: 9060602 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9060602-BLK1	J06051912.D	06/05/19 11:06	
LCS	9060602-BS1	J06051913.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-01-03 (D	9060602-DUP1	J06051917.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-07-09 (M	9060602-MS1	J06051919.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-07-09 (M	9060602-MSD1	J06051920.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-01-03	A9E0766-02RE2	J06051916.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-03-05	A9E0766-03RE2	I06061910.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-05-07	A9E0766-04RE2	I06061911.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-07-09	A9E0766-05RE2	J06051918.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-09-11	A9E0766-06RE2	I06061916.D	06/05/19 11:06	
T4-PDI2019-SC18-190522-11-13	A9E0766-07RE2	I06061912.D	06/05/19 11:06	

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

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9051333-BLK1	File ID:	J05291908.D
Prepared:	05/29/19 06:59	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	05/29/19 12:16	Instrument:	SV-GCMS10		
Batch:	9051333	Sequence:	9E29030	Calibration:	A9D1505

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
83-32-9	Acenaphthene	1.25	U
208-96-8	Acenaphthylene	1.25	U
120-12-7	Anthracene	1.25	U
56-55-3	Benz(a)anthracene	1.25	U
50-32-8	Benzo(a)pyrene	1.87	U
205-99-2	Benzo(b)fluoranthene	1.87	U
207-08-9	Benzo(k)fluoranthene	1.87	U
191-24-2	Benzo(g,h,i)perylene	1.25	U
218-01-9	Chrysene	1.25	U
53-70-3	Dibenz(a,h)anthracene	1.25	U
206-44-0	Fluoranthene	1.25	U
86-73-7	Fluorene	1.25	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.25	U
90-12-0	1-Methylnaphthalene	2.50	U
91-57-6	2-Methylnaphthalene	2.50	U
91-20-3	Naphthalene	2.50	U
85-01-8	Phenanthrene	1.25	U
129-00-0	Pyrene	1.25	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	312	241	77	37 - 122	
2-Fluorobiphenyl (Surr)	312	240	77	44 - 115	
p-Terphenyl-d14 (Surr)	312	297	95	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	177969	6.803	167034	6.803	
Naphthalene-d8 (ISTD)	736766	8.076	750734	8.076	
Acenaphthene-d10 (ISTD)	354138	9.857	361547	9.857	
Phenanthrene-d10 (ISTD)	589415	11.371	604920	11.371	
Chrysene-d12 (ISTD)	494396	15.345	489847	15.35	
Perylene-d12 (ISTD)	440487	18.864	427331	18.864	
Dibenz(a,h)anthracene-d14 (ISTD)	408090	21.25	406909	21.255	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9060602-BLK1	File ID:	J06051912.D
Prepared:	06/05/19 11:06	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	06/05/19 14:34	Instrument:	SV-GCMS10		
Batch:	9060602	Sequence:	9F05024	Calibration:	A9D1505

CAS NO.	COMPOUND	CONC. (ug/kg wet)	Q
83-32-9	Acenaphthene	1.25	U
208-96-8	Acenaphthylene	1.25	U
120-12-7	Anthracene	1.25	U
56-55-3	Benz(a)anthracene	1.25	U
50-32-8	Benzo(a)pyrene	1.87	U
205-99-2	Benzo(b)fluoranthene	1.87	U
207-08-9	Benzo(k)fluoranthene	1.87	U
191-24-2	Benzo(g,h,i)perylene	1.25	U
218-01-9	Chrysene	1.25	U
53-70-3	Dibenz(a,h)anthracene	1.25	U
206-44-0	Fluoranthene	1.25	U
86-73-7	Fluorene	1.25	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.25	U
90-12-0	1-Methylnaphthalene	2.50	U
91-57-6	2-Methylnaphthalene	2.50	U
91-20-3	Naphthalene	2.50	U
85-01-8	Phenanthrene	1.25	U
129-00-0	Pyrene	1.25	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	312	293	94	37 - 122	
2-Fluorobiphenyl (Surr)	312	238	76	44 - 115	
Phenol-d6 (Surr)	312	284	91	33 - 122	
p-Terphenyl-d14 (Surr)	312	300	96	54 - 127	
2-Fluorophenol (Surr)	312	233	75	35 - 115	
2,4,6-Tribromophenol (Surr)	312	223	72	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	167873	6.803	206400	6.798	
Naphthalene-d8 (ISTD)	905272	8.076	844504	8.071	
Acenaphthene-d10 (ISTD)	434527	9.857	383862	9.857	
Phenanthrene-d10 (ISTD)	701002	11.371	643192	11.371	
Chrysene-d12 (ISTD)	569762	15.34	517740	15.339	
Perylene-d12 (ISTD)	474522	18.859	447263	18.859	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9060602-BLK1	File ID:	J06051912.D
Prepared:	06/05/19 11:06	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	06/05/19 14:34	Instrument:	SV-GCMS10		
Batch:	9060602	Sequence:	9F05024	Calibration:	A9D1505

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Dibenz(a,h)anthracene-d14 (ISTD)	421107	21.25	403143	21.25	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9051333	Laboratory ID:	9051333-BS1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	533	434	81	40 - 122
Acenaphthylene	533	453	85	32 - 132
Anthracene	533	493	92	47 - 123
Benz(a)anthracene	533	513	96	49 - 126
Benzo(a)pyrene	533	539	101	45 - 129
Benzo(b)fluoranthene	533	521	98	45 - 132
Benzo(k)fluoranthene	533	510	96	47 - 132
Benzo(g,h,i)perylene	533	490	92	43 - 134
Chrysene	533	510	96	50 - 124
Dibenz(a,h)anthracene	533	505	95	45 - 134
Fluoranthene	533	507	95	50 - 127
Fluorene	533	461	86	43 - 125
Indeno(1,2,3-cd)pyrene	533	456	85	45 - 133
1-Methylnaphthalene	533	429	80	40 - 120
2-Methylnaphthalene	533	446	84	38 - 122
Naphthalene	533	414	78	35 - 123
Phenanthrene	533	472	89	50 - 121
Pyrene	533	505	95	47 - 127

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060602	Laboratory ID:	9060602-BS1
Preparation:	EPA 3546	Initial/Final:	15 g / 2 mL

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	533	445	83	40 - 122
Acenaphthylene	533	460	86	32 - 132
Anthracene	533	482	90	47 - 123
Benz(a)anthracene	533	526	99	49 - 126
Benzo(a)pyrene	533	540	101	45 - 129
Benzo(b)fluoranthene	533	534	100	45 - 132
Benzo(k)fluoranthene	533	533	100	47 - 132
Benzo(g,h,i)perylene	533	471	88	43 - 134
Chrysene	533	518	97	50 - 124
Dibenz(a,h)anthracene	533	524	98	45 - 134
Fluoranthene	533	503	94	50 - 127
Fluorene	533	454	85	43 - 125
Indeno(1,2,3-cd)pyrene	533	458	86	45 - 133
1-Methylnaphthalene	533	428	80	40 - 120
2-Methylnaphthalene	533	439	82	38 - 122
Naphthalene	533	430	81	35 - 123
Phenanthrene	533	469	88	50 - 121
Pyrene	533	497	93	47 - 127

* = Values outside of QC limits

T4-PDI2019-SC18-190522-01-03

DUPLICATES

EPA 8270D

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 9060602
Preparation: EPA 3546
Source Sample Name: T4-PDI2019-SC18-190522-01-03

SDG: A9E0766
Project: Port of Portland - T4 - PDI
Laboratory ID: 9060602-DUP1
Lab Source ID: A9E0766-02RE2
Initial/Final: 15.78 g / 2 mL
% Solids: 68.82

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (ug/kg dry)	C	DUPLICATE CONCENTRATION (ug/kg dry)	C	RPD %	Q	METHOD
Acenaphthene	30	0.00		ND				EPA 8270D
Acenaphthylene	30	0.00		ND				EPA 8270D
Anthracene	30	0.00		ND				EPA 8270D
Benz(a)anthracene	30	0.820		ND				EPA 8270D
Benzo(a)pyrene	30	1.99		ND				EPA 8270D
Benzo(b)fluoranthene	30	1.76		ND				EPA 8270D
Benzo(k)fluoranthene	30	2.05		ND				EPA 8270D
Benzo(g,h,i)perylene	30	0.00		ND				EPA 8270D
Chrysene	30	0.00		ND				EPA 8270D
Dibenz(a,h)anthracene	30	0.00		ND				EPA 8270D
Fluoranthene	30	0.00		ND				EPA 8270D
Fluorene	30	0.00		ND				EPA 8270D
Indeno(1,2,3-cd)pyrene	30	0.00		ND				EPA 8270D
1-Methylnaphthalene	30	0.00		ND				EPA 8270D
2-Methylnaphthalene	30	0.00		ND				EPA 8270D
Naphthalene	30	0.00		ND				EPA 8270D
Phenanthrene	30	0.00		ND				EPA 8270D
Pyrene	30	0.00		ND				EPA 8270D
1,4-Dichlorobenzene-d4 (ISTD)		2000		2000				EPA 8270D

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060602	Laboratory ID:	9060602-MS1
Preparation:	EPA 3546	Initial/Final:	15.59 g / 2 mL

Source Sample Name: T4-PDI2019-SC18-190522-07-09

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	745	ND	554	74	40 - 122
Acenaphthylene	745	ND	573	77	32 - 132
Anthracene	745	ND	595	80	47 - 123
Benz(a)anthracene	745	ND	611	82	49 - 126
Benzo(a)pyrene	745	ND	639	86	45 - 129
Benzo(b)fluoranthene	745	ND	628	84	45 - 132
Benzo(k)fluoranthene	745	ND	620	83	47 - 132
Benzo(g,h,i)perylene	745	ND	572	77	43 - 134
Chrysene	745	ND	604	81	50 - 124
Dibenz(a,h)anthracene	745	ND	589	79	45 - 134
Fluoranthene	745	ND	608	82	50 - 127
Fluorene	745	ND	573	77	43 - 125
Indeno(1,2,3-cd)pyrene	745	ND	542	73	45 - 133
1-Methylnaphthalene	745	ND	569	76	40 - 120
2-Methylnaphthalene	745	ND	572	77	38 - 122
Naphthalene	745	ND	553	74	35 - 123
Phenanthrene	745	ND	584	78	50 - 121
Pyrene	745	ND	602	81	47 - 127

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

T4-PDI2019-SC18-190522-07-09

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060602	Laboratory ID:	9060602-MSD1
Preparation:	EPA 3546	Initial/Final:	15.66 g / 2 mL

Source Sample Name: T4-PDI2019-SC18-190522-07-09

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % RECOVERY	% RPD		QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	742	452	61	20		30	40 - 122
Acenaphthylene	742	467	63	20		30	32 - 132
Anthracene	742	593	80	0.2		30	47 - 123
Benz(a)anthracene	742	648	87	6		30	49 - 126
Benzo(a)pyrene	742	661	89	3		30	45 - 129
Benzo(b)fluoranthene	742	647	87	3		30	45 - 132
Benzo(k)fluoranthene	742	640	86	3		30	47 - 132
Benzo(g,h,i)perylene	742	594	80	4		30	43 - 134
Chrysene	742	640	86	6		30	50 - 124
Dibenz(a,h)anthracene	742	649	88	10		30	45 - 134
Fluoranthene	742	628	85	3		30	50 - 127
Fluorene	742	517	70	10		30	43 - 125
Indeno(1,2,3-cd)pyrene	742	691	93	24		30	45 - 133
1-Methylnaphthalene	742	398	54	35	*	30	40 - 120
2-Methylnaphthalene	742	405	55	34	*	30	38 - 122
Naphthalene	742	389	52	35	*	30	35 - 123
Phenanthrene	742	578	78	0.9		30	50 - 121
Pyrene	742	627	85	4		30	47 - 127

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9A30046	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9A30046-TUN2	E01301912.D	01/30/19 17:18
Initial Cal Blank	9A30046-ICB1	E01301913.D	01/30/19 18:24
Cal Standard	9A30046-CAL1	E01301914.D	01/30/19 19:00
Cal Standard	9A30046-CAL2	E01301915.D	01/30/19 19:37
Cal Standard	9A30046-CAL3	E01301916.D	01/30/19 20:13
Cal Standard	9A30046-CAL4	E01301917.D	01/30/19 20:50
Cal Standard	9A30046-CAL5	E01301918.D	01/30/19 21:26
Cal Standard	9A30046-CAL6	E01301919.D	01/30/19 22:02
Cal Standard	9A30046-CAL7	E01301920.D	01/30/19 22:39
Cal Standard	9A30046-CAL8	E01301921.D	01/30/19 23:15
Cal Standard	9A30046-CAL9	E01301922.D	01/30/19 23:51
Cal Standard	9A30046-CALA	E01301923.D	01/31/19 00:28
Initial Cal Check	9A30046-ICV1	E01301925.D	01/31/19 01:40

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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9D12042	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9D12042-TUN2	J04121913.D	04/12/19 17:47
Initial Cal Blank	9D12042-ICB1	J04121914.D	04/12/19 18:15
Cal Standard	9D12042-CAL1	J04121915.D	04/12/19 18:51
Cal Standard	9D12042-CAL2	J04121916.D	04/12/19 19:27
Cal Standard	9D12042-CAL3	J04121917.D	04/12/19 20:03
Cal Standard	9D12042-CAL4	J04121918.D	04/12/19 20:39
Cal Standard	9D12042-CAL5	J04121919.D	04/12/19 21:16
Cal Standard	9D12042-CAL6	J04121920.D	04/12/19 21:52
Cal Standard	9D12042-CAL7	J04121921.D	04/12/19 22:28
Cal Standard	9D12042-CAL8	J04121922.D	04/12/19 23:04
Cal Standard	9D12042-CAL9	J04121923.D	04/12/19 23:40
Cal Standard	9D12042-CALA	J04121924.D	04/13/19 00:15
Initial Cal Check	9D12042-ICV1	J04121926.D	04/13/19 01:26

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E08056	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9E08056-TUN1	I05081917.D	05/08/19 19:08
Initial Cal Blank	9E08056-ICB1	I05081918.D	05/08/19 19:35
Cal Standard	9E08056-CAL1	I05081919.D	05/08/19 20:12
Cal Standard	9E08056-CAL2	I05081920.D	05/08/19 20:48
Cal Standard	9E08056-CAL3	I05081921.D	05/08/19 21:25
Cal Standard	9E08056-CAL4	I05081922.D	05/08/19 22:01
Cal Standard	9E08056-CAL5	I05081923.D	05/08/19 22:38
Cal Standard	9E08056-CAL6	I05081924.D	05/08/19 23:14
Cal Standard	9E08056-CAL7	I05081925.D	05/08/19 23:50
Cal Standard	9E08056-CAL8	I05081926.D	05/09/19 00:26
Cal Standard	9E08056-CAL9	I05081927.D	05/09/19 01:01
Cal Standard	9E08056-CALA	I05081928.D	05/09/19 01:37
Initial Cal Check	9E08056-ICV1	I05081930.D	05/09/19 02:48

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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E29030	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9E29030-TUN2	J05291904.D	05/29/19 09:58
Calibration Check	9E29030-CCV2	J05291905.D	05/29/19 10:27
Calibration Blank	9E29030-CCB1	J05291907.D	05/29/19 11:39
Blank	9051333-BLK1	J05291908.D	05/29/19 12:16
LCS	9051333-BS1	J05291909.D	05/29/19 12:52

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E31017	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9E31017-TUN2	E05311905.D	05/31/19 12:02
Calibration Check	9E31017-CCV2	E05311907.D	05/31/19 13:08
Calibration Blank	9E31017-CCB1	E05311908.D	05/31/19 13:45
FD-201905220947	A9E0766-01RE2	E05311922.D	05/31/19 22:27

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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9F05024-TUN1	J06051901.D	06/05/19 08:03
Calibration Check	9F05024-CCV1	J06051902.D	06/05/19 08:31
Calibration Blank	9F05024-CCB1	J06051904.D	06/05/19 09:43
Blank	9060602-BLK1	J06051912.D	06/05/19 14:34
LCS	9060602-BS1	J06051913.D	06/05/19 15:11
T4-PDI2019-SC18-190522-01-03	A9E0766-02RE2	J06051916.D	06/05/19 17:00
T4-PDI2019-SC18-190522-01-03 (D	9060602-DUP1	J06051917.D	06/05/19 17:36
T4-PDI2019-SC18-190522-07-09	A9E0766-05RE2	J06051918.D	06/05/19 18:13
T4-PDI2019-SC18-190522-07-09 (M	9060602-MS1	J06051919.D	06/05/19 18:49
T4-PDI2019-SC18-190522-07-09 (M	9060602-MSD1	J06051920.D	06/05/19 19:26

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F06040	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9F06040-TUN1	I06061907.D	06/06/19 14:54
Calibration Check	9F06040-CCV1	I06061908.D	06/06/19 15:21
Calibration Blank	9F06040-CCB1	I06061909.D	06/06/19 15:57
T4-PDI2019-SC18-190522-03-05	A9E0766-03RE2	I06061910.D	06/06/19 16:33
T4-PDI2019-SC18-190522-05-07	A9E0766-04RE2	I06061911.D	06/06/19 17:09
T4-PDI2019-SC18-190522-11-13	A9E0766-07RE2	I06061912.D	06/06/19 17:44
T4-PDI2019-SC18-190522-09-11	A9E0766-06RE2	I06061916.D	06/06/19 20:06

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

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	E01301912.D	Injection Date:	01/30/19
Instrument ID:	SV-GCMS5	Injection Time:	17:18
Sequence:	9A30046	Lab Sample ID:	9A30046-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	36.78	PASS
m/z 68	Less than 2% of m/z 69	1.15	PASS
m/z 69	Less than 100% of m/z 198	40.75	PASS
m/z 70	Less than 2% of m/z 69	0.51	PASS
m/z 127	10 - 80% of m/z 198	50.85	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.83	PASS
m/z 275	10 - 60% of m/z 198	25.85	PASS
m/z 365	1 - 100% of m/z 198	2.92	PASS
m/z 441	Less than 24% of m/z 442	15.56	PASS
m/z 442	50 - 200% of m/z 198	93.97	PASS
m/z 443	15 - 24% of m/z 442	19.37	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	J04121913.D	Injection Date:	04/12/19
Instrument ID:	SV-GCMS10	Injection Time:	17:47
Sequence:	9D12042	Lab Sample ID:	9D12042-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	29.89	PASS
m/z 68	Less than 2% of m/z 69	1.40	PASS
m/z 69	Less than 100% of m/z 198	34.77	PASS
m/z 70	Less than 2% of m/z 69	0.51	PASS
m/z 127	10 - 80% of m/z 198	53.48	PASS
m/z 197	Less than 2% of m/z 198	0.34	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.90	PASS
m/z 275	10 - 60% of m/z 198	26.49	PASS
m/z 365	1 - 100% of m/z 198	3.44	PASS
m/z 441	Less than 24% of m/z 442	14.91	PASS
m/z 442	50 - 200% of m/z 198	97.22	PASS
m/z 443	15 - 24% of m/z 442	20.19	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	I05081917.D	Injection Date:	05/08/19
Instrument ID:	SV-GCMS9	Injection Time:	19:08
Sequence:	9E08056	Lab Sample ID:	9E08056-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	39.07	PASS
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Less than 100% of m/z 198	43.46	PASS
m/z 70	Less than 2% of m/z 69	0.47	PASS
m/z 127	10 - 80% of m/z 198	52.48	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	7.11	PASS
m/z 275	10 - 60% of m/z 198	26.98	PASS
m/z 365	1 - 100% of m/z 198	2.92	PASS
m/z 441	Less than 24% of m/z 442	8.73	PASS
m/z 442	50 - 200% of m/z 198	91.72	PASS
m/z 443	15 - 24% of m/z 442	20.20	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	J05291904.D	Injection Date:	05/29/19
Instrument ID:	SV-GCMS10	Injection Time:	09:58
Sequence:	9E29030	Lab Sample ID:	9E29030-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	33.26	PASS
m/z 68	Less than 2% of m/z 69	1.62	PASS
m/z 69	Less than 100% of m/z 198	39.00	PASS
m/z 70	Less than 2% of m/z 69	0.55	PASS
m/z 127	10 - 80% of m/z 198	57.27	PASS
m/z 197	Less than 2% of m/z 198	0.40	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.88	PASS
m/z 275	10 - 60% of m/z 198	25.90	PASS
m/z 365	1 - 100% of m/z 198	3.65	PASS
m/z 441	Less than 24% of m/z 442	15.32	PASS
m/z 442	50 - 200% of m/z 198	94.50	PASS
m/z 443	15 - 24% of m/z 442	19.75	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	E05311905.D	Injection Date:	05/31/19
Instrument ID:	SV-GCMS5	Injection Time:	12:02
Sequence:	9E31017	Lab Sample ID:	9E31017-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	46.75	PASS
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Less than 100% of m/z 198	50.13	PASS
m/z 70	Less than 2% of m/z 69	0.49	PASS
m/z 127	10 - 80% of m/z 198	55.05	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	6.81	PASS
m/z 275	10 - 60% of m/z 198	25.66	PASS
m/z 365	1 - 100% of m/z 198	2.97	PASS
m/z 441	Less than 24% of m/z 442	15.33	PASS
m/z 442	50 - 200% of m/z 198	86.30	PASS
m/z 443	15 - 24% of m/z 442	19.43	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	J06051901.D	Injection Date:	06/05/19
Instrument ID:	SV-GCMS10	Injection Time:	08:03
Sequence:	9F05024	Lab Sample ID:	9F05024-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	29.89	PASS
m/z 68	Less than 2% of m/z 69	1.43	PASS
m/z 69	Less than 100% of m/z 198	35.52	PASS
m/z 70	Less than 2% of m/z 69	0.44	PASS
m/z 127	10 - 80% of m/z 198	55.11	PASS
m/z 197	Less than 2% of m/z 198	0.42	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.86	PASS
m/z 275	10 - 60% of m/z 198	27.49	PASS
m/z 365	1 - 100% of m/z 198	3.91	PASS
m/z 441	Less than 24% of m/z 442	15.19	PASS
m/z 442	50 - 200% of m/z 198	107.57	PASS
m/z 443	15 - 24% of m/z 442	19.39	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	I06061907.D	Injection Date:	06/06/19
Instrument ID:	SV-GCMS9	Injection Time:	14:54
Sequence:	9F06040	Lab Sample ID:	9F06040-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	42.59	PASS
m/z 68	Less than 2% of m/z 69	0.70	PASS
m/z 69	Less than 100% of m/z 198	47.44	PASS
m/z 70	Less than 2% of m/z 69	0.46	PASS
m/z 127	10 - 80% of m/z 198	53.31	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	6.82	PASS
m/z 275	10 - 60% of m/z 198	26.74	PASS
m/z 365	1 - 100% of m/z 198	3.07	PASS
m/z 441	Less than 24% of m/z 442	16.12	PASS
m/z 442	50 - 200% of m/z 198	89.32	PASS
m/z 443	15 - 24% of m/z 442	19.72	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A9A3103 Date: 01/31/19 12:46 Instrument: SV-GCMS5

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.320947	Ave	5.949628	9.9147	6.536659E-02			20	
Acenaphthylene	1.948127	Ave	6.974163	9.7362	6.674685E-02			20	
Anthracene	1.126296	Ave	6.714884	11.4772	5.207044E-02			20	
Benz(a)anthracene	1.128129	Ave	5.074536	15.3977	0.106993			20	
Benzo(a)pyrene	0.9593879	Ave	12.80263	18.8171	0.1495143			20	
Benzo(b)fluoranthene	1.056647	Ave	9.9883	18.0323	0.1288222			20	
Benzo(k)fluoranthene	1.038438	Ave	7.494547	18.1019	0.1396707			20	
Benzo(g,h,i)perylene	1.079251	Ave	6.879347	21.9071	0.1403967			20	
Chrysene	1.074697	Ave	1.516659	15.4833	0.1326285			20	
Dibenz(a,h)anthracene	1.003913	Ave	7.04009	21.4274	0.1198169			20	
Fluoranthene	1.138647	Ave	4.232687	12.7482	5.695524E-02			20	
Fluorene	1.375044	Ave	4.743735	10.4394	5.936047E-02			20	
Indeno(1,2,3-cd)pyrene	1.096233	Ave	4.600052	21.3646	0.1368844			20	
1-Methylnaphthalene	0.6426808	Ave	3.816017	8.9162	4.677698E-02			20	
2-Methylnaphthalene	0.6711103	Ave	3.334761	8.8152	0.0447606			20	
Naphthalene	1.066921	Ave	5.537751	8.1214	5.854596E-02			20	
Phenanthrene	1.097729	Ave	6.04717	11.4244	4.696862E-02			20	
Pyrene	1.156671	Ave	3.589047	13.0652	7.633489E-02			20	
Carbazole	1.054571	Ave	7.607666	11.6322	4.463845E-02			20	
Dibenzofuran	1.717298	Ave	3.286899	10.087	5.995257E-02			20	
Nitrobenzene-d5 (Surr)	1.495363	Ave	14.62468	7.381	0.0786081			20	
2-Fluorobiphenyl (Surr)	1.487403	Ave	4.929551	9.1815	4.062064E-02			20	
Phenol-d6 (Surr)	1.667801	Ave	8.616792	6.4784	0.1138408			20	
p-Terphenyl-d14 (Surr)	0.9344531	Ave	2.672287	13.2814	5.360748E-02			20	
2-Fluorophenol (Surr)	1.246855	Ave	9.113913	5.631	4.598658E-02			20	
2,4,6-Tribromophenol (Surr)	6.982892E-02	XXX	35.86959	10.6855	5.493493E-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
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3103
Instrument: SV-GCMS5
Calibration Date: 01/31/19 12:46

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	1.414492	50	1.362869	100	1.367935	200	1.36516	500	1.381346	1000	1.33102
Acenaphthylene	20	1.642755	50	1.912026	100	1.983877	200	2.012928	500	2.105963	1000	2.031948
Anthracene	20	1.175119	50	1.189458	100	1.174634	200	1.168763	500	1.198241	1000	1.146571
Benz(a)anthracene	20	1.279933	50	1.159563	100	1.088704	200	1.102521	500	1.128764	1000	1.095893
Benzo(a)pyrene	20	0.7536824	50	0.8065926	100	0.8270754	200	0.9173605	500	1.016943	1000	1.015634
Benzo(b)fluoranthene	20	0.8736277	50	0.9317524	100	0.951542	200	1.030242	500	1.101928	1000	1.091363
Benzo(k)fluoranthene	20	0.9120518	50	0.9495578	100	0.967133	200	1.056704	500	1.105624	1000	1.108982
Benzo(b+k)fluoranthene(s)	40	1.017523	100	1.042987	200	1.041493	400	1.10316	1000	1.149849	2000	1.138413
Benzo(g,h,i)perylene	20	0.908517	50	1.020405	100	1.040625	200	1.089586	500	1.141035	1000	1.137596
Chrysene	20	1.075992	50	1.060422	100	1.069355	200	1.079554	500	1.107315	1000	1.079312
Dibenz(a,h)anthracene	20	0.8707706	50	0.9471764	100	0.9421022	200	0.9757685	500	1.019029	1000	0.9970825
Fluoranthene	20	1.178727	50	1.16041	100	1.159178	200	1.153889	500	1.204801	1000	1.137653
Fluorene	20	1.314987	50	1.327464	100	1.361314	200	1.393022	500	1.482833	1000	1.395764
Indeno(1,2,3-cd)pyrene	20	1.064709	50	1.040185	100	1.0502	200	1.054242	500	1.081652	1000	1.077653
1-Methylnaphthalene	20	0.6469142	50	0.6578996	100	0.6490979	200	0.6458848	500	0.6744765	1000	0.6442177
2-Methylnaphthalene	20	0.6573315	50	0.6810389	100	0.6725812	200	0.6759831	500	0.6999201	1000	0.6731325
Naphthalene	20	1.128572	50	1.152438	100	1.09352	200	1.084438	500	1.10054	1000	1.063222
Phenanthrene	20	1.135759	50	1.132074	100	1.15556	200	1.139531	500	1.161203	1000	1.114081
Pyrene	20	1.178289	50	1.172874	100	1.166489	200	1.175202	500	1.221973	1000	1.156787
Carbazole	20	1.208794	50	1.101245	100	1.089104	200	1.074805	500	1.100527	1000	1.037638
Dibenzofuran	20	1.741848	50	1.701815	100	1.712239	200	1.71099	500	1.81217	1000	1.697298
4-Chloro-3-methylphenol	20	~~8.475892E-02~~	50	0.1323962	100	0.1712205	200	0.1971278	500	0.2490133	1000	0.2503017
2-Chlorophenol	20	0.9978333	50	1.188985	100	1.259653	200	1.303138	500	1.378372	1000	1.346751
2,4-Dichlorophenol	20	~~0.1474521~~	50	0.1781507	100	0.1892775	200	0.2063044	500	0.2375979	1000	0.2361719
2,4-Dimethylphenol	20	~~0.1974552~~	50	0.2747145	100	0.2782608	200	0.2875913	500	0.3112944	1000	0.3065676
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~0~~	200	1.378016E-02	500	0.0376782	1000	5.775572E-02
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~6.313131E-03~~	100	~~1.442329E-02~~	200	3.302418E-02	500	8.015737E-02	1000	0.1036798
2-Methylphenol	20	0.887627	50	0.9740345	100	1.079546	200	1.073927	500	1.156063	1000	1.106977
3+4-Methylphenol(s)	20	1.044904	50	1.257126	100	1.317308	200	1.32772	500	1.48438	1000	1.407121
2-Nitrophenol	20	~~0.0733946~~	50	0.0856681	100	9.913922E-02	200	0.1148399	500	0.1452879	1000	0.1532318
4-Nitrophenol	20	~~6.901468E-02~~	50	~~8.548321E-02~~	100	0.1015113	200	0.1361143	500	0.2174086	1000	0.2233945

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3103
Instrument: SV-GCMS5
Calibration Date: 01/31/19 12:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Pentachlorophenol (PCP)	20	~~3.444012E-02~~	50	~~0.0290484~~	100	3.392382E-02	200	5.019257E-02	500	7.777878E-02	1000	9.059143E-02
Phenol	20	1.353482	50	1.674651	100	1.793049	200	1.752244	500	1.819105	1000	1.763968
2,3,4,6-Tetrachlorophenol	20	~~0.1089814~~	50	0.1545864	100	0.1821046	200	0.1938463	500	0.2650104	1000	0.2619132
2,3,5,6-Tetrachlorophenol	20	~~7.004475E-02~~	50	8.625102E-02	100	0.1144585	200	0.1540526	500	0.224108	1000	0.2309256
2,4,5-Trichlorophenol	20	0.1446218	50	0.2225805	100	0.255191	200	0.260417	500	0.3175779	1000	0.3237182
2,4,6-Trichlorophenol	20	0.1553345	50	0.1821424	100	0.2282422	200	0.2543505	500	0.3104392	1000	0.3144928
Bis(2-ethylhexyl)phthalate	20	~~0.4644027~~	50	~~0.4958776~~	100	~~0.556937~~	200	0.7015704	500	0.8034163	1000	0.8181979
Butyl benzyl phthalate	20	~~0.3659644~~	50	~~0.4131545~~	100	0.4278984	200	0.5331004	500	0.5924328	1000	0.5999635
Diethylphthalate	20	1.136991	50	1.159398	100	1.179378	200	1.289209	500	1.43014	1000	1.336958
Dimethylphthalate	20	1.116596	50	1.112476	100	1.178661	200	1.266369	500	1.373305	1000	1.311957
Di-n-butylphthalate	20	1.680787	50	1.371939	100	1.30274	200	1.315452	500	1.361928	1000	1.289098
Di-n-octyl phthalate	20	~~0.5037963~~	50	0.6357778	100	0.6993076	200	0.9907836	500	1.291859	1000	1.337716
2,3,5-Trimethylnaphthalene	20	1.043461	50	1.069734	100	1.087567	200	1.102353	500	1.16764	1000	1.097233
2,6-Dimethylnaphthalene	20	1.142141	50	1.216216	100	1.238083	200	1.239612	500	1.268868	1000	1.234045
Benzo(e)pyrene	20	0.9927942	50	1.009888	100	1.02247	200	1.066479	500	1.112179	1000	1.101393
1,1'-Biphenyl	20	1.734432	50	1.799157	100	1.803839	200	1.777983	500	1.808703	1000	1.73437
Perylene	20	1.007593	50	1.107328	100	1.095424	200	1.092474	500	1.139745	1000	1.113997
Nitrobenzene-d5 (Surr)	20	~~1.121862~~	50	1.108041	100	1.261548	200	1.338825	500	1.655095	1000	1.4705
2-Fluorobiphenyl (Surr)	20	1.465171	50	1.543219	100	1.555522	200	1.550489	500	1.558785	1000	1.507404
Phenol-d6 (Surr)	20	1.308652	50	1.562268	100	1.660538	200	1.649723	500	1.76703	1000	1.705784
p-Terphenyl-d14 (Surr)	20	0.8913611	50	0.9262564	100	0.9345524	200	0.9673796	500	0.9632891	1000	0.9637374
2-Fluorophenol (Surr)	20	1.009788	50	1.105053	100	1.193471	200	1.229187	500	1.313395	1000	1.299271
2,4,6-Tribromophenol (Surr)	20	2.503742E-02	50	0.0391721	100	5.130313E-02	200	6.037912E-02	500	7.400232E-02	1000	7.888365E-02

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3103
Instrument: SV-GCMS5
Matrix:
Calibration Date: 01/31/19 12:46

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	1.314814	4000	1.293512	6000	1.217835	8000	1.160489				
Acenaphthylene	2000	2.041211	4000	2.028944	6000	1.903932	8000	1.817687				
Anthracene	2000	1.123437	4000	1.09019	6000	1.023647	8000	0.9729037				
Benz(a)anthracene	2000	1.104395	4000	1.120195	6000	1.106883	8000	1.094434				
Benzo(a)pyrene	2000	1.054769	4000	1.08259	6000	1.059411	8000	1.059821				
Benzo(b)fluoranthene	2000	1.116478	4000	1.136151	6000	1.1348	8000	1.198588				
Benzo(k)fluoranthene	2000	1.121339	4000	1.111683	6000	1.065441	8000	0.9858626				
Benzo(b+k)fluoranthene(s)	4000	1.14801	8000	1.165644	12000	1.146068	16000	1.143721				
Benzo(g,h,i)perylene	2000	1.131652	4000	1.141517	6000	1.116176	8000	1.065396				
Chrysene	2000	1.078768	4000	1.087363	6000	1.059509	8000	1.049385				
Dibenz(a,h)anthracene	2000	1.049774	4000	1.083182	6000	1.079948	8000	1.074301				
Fluoranthene	2000	1.150733	4000	1.12397	6000	1.075914	8000	1.041194				
Fluorene	2000	1.449961	4000	1.420573	6000	1.330397	8000	1.27413				
Indeno(1,2,3-cd)pyrene	2000	1.104696	4000	1.139298	6000	1.171385	8000	1.178312				
1-Methylnaphthalene	2000	0.6491472	4000	0.6554182	6000	0.6186805	8000	0.5850715				
2-Methylnaphthalene	2000	0.6850245	4000	0.6903095	6000	0.6550667	8000	0.6207151				
Naphthalene	2000	1.048774	4000	1.043041	6000	1.001759	8000	0.9529047				
Phenanthrene	2000	1.096232	4000	1.076913	6000	1.003821	8000	0.9621179				
Pyrene	2000	1.170984	4000	1.147648	6000	1.102756	8000	1.073706				
Carbazole	2000	1.03536	4000	1.015231	6000	0.9569949	8000	0.926012				
Dibenzofuran	2000	1.764425	4000	1.753937	6000	1.675065	8000	1.603195				
4-Chloro-3-methylphenol	2000	0.2822323	4000	0.3010981	6000	0.2980379	8000	0.2906565				
2-Chlorophenol	2000	1.380778	4000	1.424305	6000	1.415544	8000	1.390938				
2,4-Dichlorophenol	2000	0.2519616	4000	0.2628338	6000	0.2648526	8000	0.2600543				
2,4-Dimethylphenol	2000	0.3130697	4000	0.3117453	6000	0.3140256	8000	0.2962869				
2,4-Dinitrophenol	2000	0.1042387	4000	0.1445553	6000	0.1714022	8000	0.1843774				
4,6-Dinitro-2-methylphenol	2000	0.1600869	4000	0.1971057	6000	0.2171684	8000	0.2275118				
2-Methylphenol	2000	1.154267	4000	1.181838	6000	1.155456	8000	1.113556				
3+4-Methylphenol(s)	2000	1.494615	4000	1.526709	6000	1.471656	8000	1.415713				
2-Nitrophenol	2000	0.1637897	4000	0.1777603	6000	0.1797984	8000	0.1798254				
4-Nitrophenol	2000	0.290204	4000	0.3085269	6000	0.320978	8000	0.320162				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9A3103
Instrument: SV-GCMS5
Matrix:
Calibration Date: 01/31/19 12:46

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	0.1068869	4000	0.1198472	6000	0.1262877	8000	0.1279752				
Phenol	2000	1.808085	4000	1.86865	6000	1.843413	8000	1.799074				
2,3,4,6-Tetrachlorophenol	2000	0.2965316	4000	0.3149755	6000	0.3178729	8000	0.3189439				
2,3,5,6-Tetrachlorophenol	2000	0.2752351	4000	0.2992908	6000	0.3080004	8000	0.3080888				
2,4,5-Trichlorophenol	2000	0.3474458	4000	0.3697569	6000	0.3665615	8000	0.3715641				
2,4,6-Trichlorophenol	2000	0.3514142	4000	0.358158	6000	0.3698613	8000	0.3567184				
Bis(2-ethylhexyl)phthalate	2000	0.867756	4000	0.8945474	6000	0.8858992	8000	0.8807067				
Butyl benzyl phthalate	2000	0.6248856	4000	0.6408075	6000	0.6343325	8000	0.6265528				
Diethylphthalate	2000	1.429074	4000	1.377548	6000	1.280995	8000	1.208511				
Dimethylphthalate	2000	1.368051	4000	1.406023	6000	1.362104	8000	1.340413				
Di-n-butylphthalate	2000	1.300973	4000	1.269109	6000	1.181391	8000	1.121755				
Di-n-octyl phthalate	2000	1.503973	4000	1.58944	6000	1.584655	8000	1.585199				
2,3,5-Trimethylnaphthalene	2000	1.118484	4000	1.06989	6000	0.9759315	8000	0.9233451				
2,6-Dimethylnaphthalene	2000	1.22374	4000	1.200066	6000	1.122438	8000	1.068758				
Benzo(e)pyrene	2000	1.098888	4000	1.124704	6000	1.100066	8000	1.099064				
1,1'-Biphenyl	2000	1.722088	4000	1.683444	6000	1.57332	8000	1.472836				
Perylene	2000	1.106588	4000	1.119207	6000	1.096078	8000	1.08676				
Nitrobenzene-d5 (Surr)	2000	1.717295	4000	1.629928	6000	1.735825	8000	1.541207				
2-Fluorobiphenyl (Surr)	2000	1.489536	4000	1.464818	6000	1.403919	8000	1.335166				
Phenol-d6 (Surr)	2000	1.760804	4000	1.793978	6000	1.751682	8000	1.717552				
p-Terphenyl-d14 (Surr)	2000	0.9322996	4000	0.9379354	6000	0.9188462	8000	0.9088737				
2-Fluorophenol (Surr)	2000	1.291093	4000	1.352435	6000	1.343054	8000	1.331807				
2,4,6-Tribromophenol (Surr)	2000	8.301903E-02	4000	9.248324E-02	6000	0.0955793	8000	9.842992E-02				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A9D1505 Date: 04/15/19 14:53 Instrument: SV-GCMS10

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.28667	Ave	10.97154	9.8995	5.839588E-02			20	
Acenaphthylene	2.000623	Ave	8.590469	9.720334	3.731059E-02			20	
Anthracene	1.056941	Ave	11.97015	11.4568	5.906968E-02			20	
Benz(a)anthracene	1.091349	Ave	3.455393	15.3374	7.238036E-02			20	
Benzo(a)pyrene	0.9699381	XXX	20.03122	18.74	0.124951				
Benzo(b)fluoranthene	1.087957	XXX	17.55607	17.9581	0.1164495				
Benzo(k)fluoranthene	1.045719	XXX	17.74867	18.0284	0.1148608				
Benzo(g,h,i)perylene	1.081412	Ave	8.424744	21.8226	0.1318572			20	
Chrysene	1.058934	Ave	2.949131	15.4228	0.1140267			20	
Dibenz(a,h)anthracene	1.00084	Ave	4.355	21.3401	0.1066938			20	
Fluoranthene	1.082262	Ave	10.69782	12.722	0.0484217			20	
Fluorene	1.316347	Ave	12.04043	10.4231	5.859306E-02			20	
Indeno(1,2,3-cd)pyrene	1.118845	Ave	5.308681	21.2786	0.1250806			20	
1-Methylnaphthalene	0.6584879	Ave	9.581506	8.903	4.608219E-02			20	
2-Methylnaphthalene	0.6788702	Ave	10.52969	8.800334	4.353128E-02			20	
Naphthalene	1.035252	Ave	10.71752	8.1056	5.874788E-02			20	
Phenanthrene	1.085248	Ave	12.23274	11.4067	5.409496E-02			20	
Pyrene	1.115312	Ave	10.02968	13.0343	6.155216E-02			20	
Carbazole	0.8944781	Ave	13.01088	8.705125	61.72134			20	
Dibenzofuran	1.680969	Ave	10.47771	10.0727	5.557058E-02			20	
Nitrobenzene-d5 (Surr)	1.406617	XXX	14.43767	7.358778	8.594122E-02				
2-Fluorobiphenyl (Surr)	1.411121	Ave	11.24503	9.169333	3.813388E-02			20	
Phenol-d6 (Surr)	1.672419	Ave	14.32085	6.441556	0.1105596			20	
p-Terphenyl-d14 (Surr)	0.9414444	Ave	5.989346	13.2467	3.941845E-02			20	
2-Fluorophenol (Surr)	1.300156	Ave	12.27825	5.5363	6.470345E-02			20	
2,4,6-Tribromophenol (Surr)	0.0888545	XXX	20.57089	10.669	5.382367E-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
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9D1505
Instrument: SV-GCMS10
Calibration Date: 04/15/19 14:53

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	1.407537	50	1.318607	100	1.402616	200	1.408561	500	1.407188	1000	1.341761
Acenaphthylene	20	1.903158	50	1.943127	100	2.138559	200	2.108565	500	2.208351	1000	2.145042
Anthracene	20	0.9981684	50	1.082171	100	1.183458	200	1.181237	500	1.196563	1000	1.12605
Benz(a)anthracene	20	1.100877	50	1.023224	100	1.075788	200	1.127988	500	1.153062	1000	1.113308
Benzo(a)pyrene	20	0.5833412	50	0.6986363	100	0.8488289	200	0.9976045	500	1.096103	1000	1.108181
Benzo(b)fluoranthene	20	0.6991584	50	0.8330036	100	0.9840151	200	1.068095	500	1.197558	1000	1.192055
Benzo(k)fluoranthene	20	0.6268189	50	0.8533243	100	1.029425	200	1.118996	500	1.211419	1000	1.21117
Benzo(b+k)fluoranthene(s)	40	0.741341	100	0.8721357	200	1.038054	400	1.118338	1000	1.230479	2000	1.225398
Benzo(g,h,i)perylene	20	0.9036528	50	0.982206	100	1.005877	200	1.09576	500	1.174822	1000	1.179351
Chrysene	20	1.032687	50	1.014982	100	1.087538	200	1.089147	500	1.096461	1000	1.083692
Dibenz(a,h)anthracene	20	0.962609	50	0.9142935	100	1.001866	200	0.9987687	500	1.042878	1000	1.02648
Fluoranthene	20	0.9416683	50	0.9624752	100	1.129078	200	1.207544	500	1.237955	1000	1.175948
Fluorene	20	1.306897	50	1.353905	100	1.471751	200	1.488122	500	1.483045	1000	1.384838
Indeno(1,2,3-cd)pyrene	20	1.200077	50	1.053246	100	1.089032	200	1.086355	500	1.104676	1000	1.089045
1-Methylnaphthalene	20	0.6307203	50	0.6423631	100	0.684546	200	0.7320903	500	0.7481156	1000	0.6981849
2-Methylnaphthalene	20	0.5777526	50	0.5959154	100	0.6434083	200	0.7476714	500	0.7731555	1000	0.7399508
Naphthalene	20	1.039191	50	1.087569	100	1.129825	200	1.131105	500	1.147102	1000	1.091938
Phenanthrene	20	1.156024	50	1.17608	100	1.215486	200	1.197343	500	1.177029	1000	1.131256
Pyrene	20	1.015133	50	1.041664	100	1.181284	200	1.233764	500	1.27795	1000	1.200352
Carbazole	20	0.754341	50	0.8329661	100	0.9747962	200	1.00912	500	1.014369	1000	0.9724756
Dibenzofuran	20	1.700221	50	1.773831	100	1.78623	200	1.855744	500	1.87307	1000	1.746939
4-Chloro-3-methylphenol	20	~~7.229364E-02~~	50	~~0.1235332~~	100	0.1244964	200	0.1889564	500	0.2754519	1000	0.2897448
2-Chlorophenol	20	1.075855	50	1.143408	100	1.289471	200	1.343778	500	1.445379	1000	1.485893
2,4-Dichlorophenol	20	~~5.070098E-02~~	50	0.1018295	100	0.1183661	200	0.1561193	500	0.2240723	1000	0.244696
2,4-Dimethylphenol	20	~~0.1587836~~	50	0.1721793	100	0.2144464	200	0.2572861	500	0.3075341	1000	0.3154132
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~4.301114E-03~~	200	1.376921E-02	500	2.934789E-02	1000	4.648092E-02
4,6-Dinitro-2-methylphenol	20	~~1.562877E-02~~	50	~~0.0134466~~	100	2.177722E-02	200	0.0454973	500	7.163797E-02	1000	8.957786E-02
2-Methylphenol	20	0.8385051	50	0.8133916	100	0.9166993	200	1.02536	500	1.127542	1000	1.185934
3+4-Methylphenol(s)	20	0.7387989	50	0.8172113	100	1.026387	200	1.178178	500	1.420886	1000	1.488649
2-Nitrophenol	20	~~5.750088E-02~~	50	~~7.530798E-02~~	100	7.517723E-02	200	0.1103898	500	0.1378061	1000	0.1613617
4-Nitrophenol	20	~~1.918077E-02~~	50	~~4.472863E-02~~	100	6.297737E-02	200	0.1114629	500	0.1535283	1000	0.1890583

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9D1505
Instrument: SV-GCMS10
Calibration Date: 04/15/19 14:53

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	~~0.1388781~~	50	6.789244E-02	100	7.413181E-02	200	9.638542E-02	500	0.1006502	1000	0.1045785
Phenol	20	1.023813	50	1.450316	100	1.505073	200	1.808779	500	1.940786	1000	1.767056
2,3,4,6-Tetrachlorophenol	20	0.1103486	50	0.170417	100	0.2155537	200	0.2622695	500	0.2752862	1000	0.2835067
2,3,5,6-Tetrachlorophenol	20	~~8.643185E-02~~	50	0.0964607	100	0.1340137	200	0.2016283	500	0.2417931	1000	0.2592075
2,4,5-Trichlorophenol	20	~~0.1349758~~	50	0.1808755	100	0.1904714	200	0.25221	500	0.3147115	1000	0.337543
2,4,6-Trichlorophenol	20	~~0.1508414~~	50	0.1537955	100	0.1608164	200	0.2474311	500	0.3273405	1000	0.3413524
Bis(2-ethylhexyl)phthalate	20	~~0.3214443~~	50	~~0.3816077~~	100	~~0.5155443~~	200	0.6508178	500	0.8078548	1000	0.8624217
Butyl benzyl phthalate	20	~~0.235551~~	50	0.2757728	100	0.3691949	200	0.4448589	500	0.5615709	1000	0.5991685
Diethylphthalate	20	1.299793	50	1.326265	100	1.516845	200	1.497898	500	1.521107	1000	1.419226
Dimethylphthalate	20	1.353547	50	1.382385	100	1.47981	200	1.488143	500	1.532492	1000	1.43415
Di-n-butylphthalate	20	~~0.9169406~~	50	~~0.9832994~~	100	1.117678	200	1.286755	500	1.376791	1000	1.33187
Di-n-octyl phthalate	20	~~0.354852~~	50	~~0.3994942~~	100	0.5663861	200	0.8329586	500	1.176041	1000	1.379003
2,3,5-Trimethylnaphthalene	20	1.053048	50	1.123819	100	1.202184	200	1.210774	500	1.203973	1000	1.115924
2,6-Dimethylnaphthalene	20	1.058731	50	1.207393	100	1.24841	200	1.32252	500	1.360596	1000	1.306092
Benzo(e)pyrene	20	0.8443924	50	0.8957328	100	1.052391	200	1.110091	500	1.217014	1000	1.203153
1,1'-Biphenyl	20	1.28819	50	1.494814	100	1.510053	200	1.783276	500	1.864254	1000	1.789293
Perylene	20	0.9707552	50	0.9544863	100	1.028055	200	1.104627	500	1.074625	1000	1.051602
Nitrobenzene-d5 (Surr)	20	~~1.037917~~	50	0.9478428	100	1.284594	200	1.307222	500	1.423927	1000	1.482348
2-Fluorobiphenyl (Surr)	20	~~1.174052~~	50	1.365204	100	1.35132	200	1.570824	500	1.630604	1000	1.556624
Phenol-d6 (Surr)	20	~~1.098714~~	50	1.196119	100	1.39741	200	1.567644	500	1.711503	1000	1.761661
p-Terphenyl-d14 (Surr)	20	0.8168062	50	0.8999245	100	0.9597296	200	0.9685109	500	1.012126	1000	0.9930516
2-Fluorophenol (Surr)	20	1.086068	50	1.024618	100	1.155766	200	1.272371	500	1.350448	1000	1.359638
2,4,6-Tribromophenol (Surr)	20	~~0.0552062~~	50	4.929333E-02	100	6.845792E-02	200	8.799316E-02	500	9.356845E-02	1000	9.755618E-02

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9D1505
Instrument: SV-GCMS10
Matrix:
Calibration Date: 04/15/19 14:53

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	1.275831	4000	1.193488	6000	1.089011	8000	1.022103				
Acenaphthylene	2000	2.003643	4000	1.898611	6000	1.656547	8000	~~1.494399~~				
Anthracene	2000	1.088237	4000	0.9914895	6000	0.8942322	8000	0.8278006				
Benz(a)anthracene	2000	1.10212	4000	1.097957	6000	1.062166	8000	1.056996				
Benzo(a)pyrene	2000	1.137055	4000	1.126645	6000	1.066126	8000	1.03686				
Benzo(b)fluoranthene	2000	1.221197	4000	1.257976	6000	1.207525	8000	1.218987				
Benzo(k)fluoranthene	2000	1.181608	4000	1.162057	6000	1.079397	8000	0.9829712				
Benzo(b+k)fluoranthene(s)	4000	1.222411	8000	1.228643	12000	1.162137	16000	1.142006				
Benzo(g,h,i)perylene	2000	1.157191	4000	1.137309	6000	1.094109	8000	1.083844				
Chrysene	2000	1.07383	4000	1.058982	6000	1.028745	8000	1.023281				
Dibenz(a,h)anthracene	2000	1.06317	4000	1.032341	6000	0.9930483	8000	0.9729436				
Fluoranthene	2000	1.158537	4000	1.08301	6000	0.990162	8000	0.9362458				
Fluorene	2000	1.329145	4000	1.216133	6000	1.094041	8000	1.035598				
Indeno(1,2,3-cd)pyrene	2000	1.089734	4000	1.120479	6000	1.107223	8000	1.248578				
1-Methylnaphthalene	2000	0.6795904	4000	0.6409036	6000	0.580747	8000	0.5476182				
2-Methylnaphthalene	2000	0.7255449	4000	0.6820757	6000	0.624357	8000	~~0.5897244~~				
Naphthalene	2000	1.052378	4000	0.9717272	6000	0.8811986	8000	0.8204817				
Phenanthrene	2000	1.077902	4000	0.9840685	6000	0.8927602	8000	0.8445283				
Pyrene	2000	1.167948	4000	1.08811	6000	0.999296	8000	0.9476153				
Carbazole	2000	0.879679	4000	0.7180782	6000	~~0.6522258~~	8000	~~0.5830367~~				
Dibenzofuran	2000	1.698649	4000	1.604292	6000	1.441695	8000	1.329021				
4-Chloro-3-methylphenol	2000	0.3087296	4000	0.3182331	6000	0.3075433	8000	0.2987976				
2-Chlorophenol	2000	1.466096	4000	1.479065	6000	1.467852	8000	1.399867				
2,4-Dichlorophenol	2000	0.2545735	4000	0.2576182	6000	0.2455748	8000	~~0.2355527~~				
2,4-Dimethylphenol	2000	0.3230022	4000	0.306268	6000	0.2889028	8000	0.2812126				
2,4-Dinitrophenol	2000	0.0704893	4000	0.1030754	6000	0.1183872	8000	0.1308858				
4,6-Dinitro-2-methylphenol	2000	0.1239136	4000	0.1593363	6000	0.1693465	8000	0.1762921				
2-Methylphenol	2000	1.179589	4000	1.192219	6000	1.152066	8000	1.100493				
3+4-Methylphenol(s)	2000	1.517967	4000	~~1.515359~~	6000	~~1.425723~~	8000	~~1.349224~~				
2-Nitrophenol	2000	0.1653728	4000	0.1777841	6000	0.1793081	8000	0.1790318				
4-Nitrophenol	2000	0.2262254	4000	0.2533685	6000	0.2571722	8000	0.2598746				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9D1505
Instrument: SV-GCMS10
Matrix:
Calibration Date: 04/15/19 14:53

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	0.1196889	4000	0.1256196	6000	0.1245869	8000	0.1246499				
Phenol	2000	2.012487	4000	2.060627	6000	2.011084	8000	1.953591				
2,3,4,6-Tetrachlorophenol	2000	0.2939887	4000	0.2998435	6000	0.2932934	8000	0.2826404				
2,3,5,6-Tetrachlorophenol	2000	0.2756684	4000	0.2906511	6000	0.2792157	8000	0.277406				
2,4,5-Trichlorophenol	2000	0.3410959	4000	0.3598322	6000	0.3396843	8000	0.3348622				
2,4,6-Trichlorophenol	2000	0.364244	4000	0.367047	6000	0.358843	8000	0.3433958				
Bis(2-ethylhexyl)phthalate	2000	0.8855234	4000	0.9124573	6000	0.8857301	8000	0.8759984				
Butyl benzyl phthalate	2000	0.6418156	4000	0.6853113	6000	0.6757879	8000	0.6863196				
Diethylphthalate	2000	1.346538	4000	1.234029	6000	1.100482	8000	1.024322				
Dimethylphthalate	2000	1.402622	4000	1.355086	6000	1.26105	8000	1.221963				
Di-n-butylphthalate	2000	1.317355	4000	1.228718	6000	1.100526	8000	1.024014				
Di-n-octyl phthalate	2000	1.539104	4000	1.663901	6000	1.602667	8000	1.576793				
2,3,5-Trimethylnaphthalene	2000	1.063082	4000	0.9640403	6000	0.8726082	8000	0.8178874				
2,6-Dimethylnaphthalene	2000	1.237723	4000	1.137262	6000	1.038312	8000	0.9698444				
Benzo(e)pyrene	2000	1.19816	4000	1.193881	6000	1.133891	8000	1.118241				
1,1'-Biphenyl	2000	1.694202	4000	1.546002	6000	~~1.40092~~	8000	~~1.293293~~				
Perylene	2000	1.029392	4000	1.018288	6000	0.96584	8000	0.9546067				
Nitrobenzene-d5 (Surr)	2000	1.566706	4000	1.582496	6000	1.548876	8000	1.515539				
2-Fluorobiphenyl (Surr)	2000	1.472265	4000	1.359615	6000	1.23328	8000	1.160352				
Phenol-d6 (Surr)	2000	1.826101	4000	1.8938	6000	1.872366	8000	1.825167				
p-Terphenyl-d14 (Surr)	2000	0.9702531	4000	0.9625854	6000	0.9196357	8000	0.9118209				
2-Fluorophenol (Surr)	2000	1.389109	4000	1.463186	6000	1.464451	8000	1.435903				
2,4,6-Tribromophenol (Surr)	2000	0.1023306	4000	0.1038946	6000	0.1001372	8000	9.645912E-02				

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A9E1009 Date: 05/10/19 17:06 Instrument: SV-GCMS9

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.246362	Ave	13.87219	9.7507	7.072931E-02			20	
Acenaphthylene	1.978454	Ave	13.33308	9.573111	0.0608599			20	
Anthracene	1.06825	Ave	14.38712	11.30011	5.303121E-02			20	
Benz(a)anthracene	1.161693	Ave	5.391775	15.0358	9.314707E-02			20	
Benzo(a)pyrene	1.052651	XXX	11.81329	18.4065	0.1593326				
Benzo(b)fluoranthene	1.222586	XXX	9.234768	17.6298	0.1366649				
Benzo(k)fluoranthene	1.138397	XXX	12.73071	17.6977	0.1499183				
Benzo(g,h,i)perylene	1.073878	Ave	6.075218	21.4733	0.1473093			20	
Chrysene	1.071717	Ave	4.434002	15.121	0.1256095			20	
Dibenz(a,h)anthracene	0.9695725	Ave	6.841868	21.0005	0.1397927			20	
Fluoranthene	1.248412	Ave	12.71245	12.52533	4.516384E-02			20	
Fluorene	1.461705	Ave	10.98918	10.27013	5.132872E-02			20	
Indeno(1,2,3-cd)pyrene	1.098245	Ave	1.815585	20.9369	0.1565769			20	
1-Methylnaphthalene	0.7088084	Ave	10.96283	8.7613	6.246145E-02			20	
2-Methylnaphthalene	0.7525787	Ave	7.980811	8.661	0.0255116			20	
Naphthalene	0.9975462	Ave	12.5204	7.9701	8.103341E-02			20	
Phenanthrene	1.068375	Ave	13.94355	11.24767	5.196918E-02			20	
Pyrene	1.270483	Ave	14.04786	12.82278	5.314098E-02			20	
Carbazole	0.9362039	Ave	13.91313	10.18222	37.50003			20	
Dibenzofuran	1.696097	Ave	12.81337	9.922555	0.0510292			20	
Nitrobenzene-d5 (Surr)	1.414255	Ave	4.398612	7.2342	8.875683E-02			20	
2-Fluorobiphenyl (Surr)	1.499573	Ave	12.95656	9.024889	4.749493E-02			20	
Phenol-d6 (Surr)	1.700623	Ave	9.466828	6.344	0.1309956			20	
p-Terphenyl-d14 (Surr)	0.9800873	Ave	6.065597	13.0273	5.271297E-02			20	
2-Fluorophenol (Surr)	1.306892	Ave	11.05673	5.469	4.502382E-02			20	
2,4,6-Tribromophenol (Surr)	9.203934E-02	Ave	11.41246	10.518	6.801967E-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 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1009
Instrument: SV-GCMS9
Calibration Date: 05/10/19 17:06

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	1.288501	50	1.419587	100	1.406563	200	1.39259	500	1.371812	1000	1.306586
Acenaphthylene	20	1.863144	50	2.010742	100	2.189345	200	2.231277	500	2.22154	1000	2.159684
Anthracene	20	1.127751	50	1.14128	100	1.199078	200	1.200488	500	1.187601	1000	1.107107
Benz(a)anthracene	20	1.238278	50	1.146912	100	1.156658	200	1.2101	500	1.232807	1000	1.201567
Benzo(a)pyrene	20	0.831374	50	0.9495318	100	1.011327	200	1.09916	500	1.217697	1000	1.226816
Benzo(b)fluoranthene	20	1.040836	50	1.069929	100	1.095045	200	1.220618	500	1.317848	1000	1.340094
Benzo(k)fluoranthene	20	1.017948	50	1.107924	100	1.153141	200	1.268315	500	1.343987	1000	1.310869
Benzo(b+k)fluoranthene(s)	40	1.029392	100	1.129669	200	1.170828	400	1.277505	1000	1.367083	2000	1.355767
Benzo(g,h,i)perylene	20	1.007868	50	1.040986	100	1.074444	200	1.126319	500	1.174934	1000	1.133316
Chrysene	20	1.103678	50	1.076118	100	1.102162	200	1.124544	500	1.126938	1000	1.0793
Dibenz(a,h)anthracene	20	0.9716498	50	0.9790812	100	1.003394	200	1.034606	500	1.04517	1000	0.998845
Fluoranthene	20	1.230029	50	1.262474	100	1.342926	200	1.395811	500	1.432339	1000	1.352739
Fluorene	20	1.519659	50	1.512221	100	1.603912	200	1.583846	500	1.575582	1000	1.45017
Indeno(1,2,3-cd)pyrene	20	1.127763	50	1.08833	100	1.108311	200	1.085168	500	1.136381	1000	1.091439
1-Methylnaphthalene	20	0.7161269	50	0.7230382	100	0.7606168	200	0.7740158	500	0.8013938	1000	0.7657356
2-Methylnaphthalene	20	0.6944655	50	0.7202952	100	0.7636913	200	0.7871127	500	0.8385005	1000	0.8146151
Naphthalene	20	1.068125	50	1.095144	100	1.106694	200	1.09884	500	1.083677	1000	1.048114
Phenanthrene	20	1.134929	50	1.183318	100	1.186359	200	1.183071	500	1.169809	1000	1.091993
Pyrene	20	1.317504	50	1.337785	100	1.404394	200	1.440178	500	1.421049	1000	1.349333
Carbazole	20	0.8810276	50	0.9494272	100	1.015353	200	1.061283	500	1.074229	1000	1.02904
Dibenzofuran	20	1.47976	50	1.738961	100	1.834585	200	1.920675	500	1.943877	1000	1.835112
4-Chloro-3-methylphenol	20	~~0.1122062~~	50	~~0.1230065~~	100	0.1262715	200	0.1919174	500	0.2659416	1000	0.3083995
2-Chlorophenol	20	1.314571	50	1.287184	100	1.360969	200	1.367597	500	1.432557	1000	1.399386
2,4-Dichlorophenol	20	~~0.1483808~~	50	0.1514651	100	0.1950366	200	0.2221574	500	0.2530891	1000	0.2715491
2,4-Dimethylphenol	20	~~0.2241958~~	50	0.2187544	100	0.2603808	200	0.2803587	500	0.3010278	1000	0.3104036
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~1.038239E-02~~	200	2.957144E-02	500	6.577932E-02	1000	0.1079237
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~3.688344E-02~~	100	0.063634	200	0.1025415	500	0.1526732	1000	0.1872498
2-Methylphenol	20	1.00711	50	0.9144437	100	1.105322	200	1.011356	500	1.117853	1000	1.061494
3+4-Methylphenol(s)	20	1.187918	50	1.142116	100	1.289658	200	1.31547	500	1.405096	1000	1.34953
2-Nitrophenol	20	0.1412325	50	0.1586655	100	0.1719994	200	0.1975182	500	0.2268856	1000	0.2034607
4-Nitrophenol	20	~~7.502884E-02~~	50	~~6.883775E-02~~	100	0.1087639	200	0.1442678	500	0.1998079	1000	0.2380584

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1009
Instrument: SV-GCMS9
Calibration Date: 05/10/19 17:06

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	~~0.1155115~~	50	~~6.994367E-02~~	100	5.531214E-02	200	6.709891E-02	500	9.704437E-02	1000	0.1095413
Phenol	20	1.607183	50	1.682112	100	1.785201	200	1.828256	500	1.90949	1000	1.842957
2,3,4,6-Tetrachlorophenol	20	0.1526598	50	0.1844172	100	0.2538662	200	0.2928592	500	0.32725	1000	0.3393464
2,3,5,6-Tetrachlorophenol	20	~~9.237655E-02~~	50	0.1223782	100	0.1637738	200	0.2411398	500	0.2918818	1000	0.3153475
2,4,5-Trichlorophenol	20	~~0.1799825~~	50	0.1840772	100	0.2253983	200	0.259576	500	0.3397883	1000	0.3769458
2,4,6-Trichlorophenol	20	~~0.1491903~~	50	0.1677601	100	0.2172766	200	0.2906159	500	0.3703367	1000	0.3945046
Bis(2-ethylhexyl)phthalate	20	~~0.3788428~~	50	~~0.4304644~~	100	0.502371	200	0.6149371	500	0.7295725	1000	0.7456653
Butyl benzyl phthalate	20	0.3139959	50	0.3724338	100	0.395015	200	0.4909578	500	0.561584	1000	0.6001846
Diethylphthalate	20	1.340544	50	1.40208	100	1.484431	200	1.508918	500	1.456733	1000	1.378609
Dimethylphthalate	20	1.304548	50	1.473468	100	1.54212	200	1.564146	500	1.574707	1000	1.490367
Di-n-butylphthalate	20	~~1.054631~~	50	1.069906	100	1.202292	200	1.27455	500	1.355582	1000	1.325249
Di-n-octyl phthalate	20	~~0.5162564~~	50	~~0.5928279~~	100	0.6860704	200	0.9387831	500	1.249867	1000	1.418885
2,3,5-Trimethylnaphthalene	20	1.268551	50	1.270524	100	1.338324	200	1.303468	500	1.307919	1000	1.207273
2,6-Dimethylnaphthalene	20	1.11459	50	1.215284	100	1.31354	200	1.402747	500	1.409564	1000	1.340618
Benzo(e)pyrene	20	1.085456	50	1.132828	100	1.183546	200	1.245102	500	1.321292	1000	1.297193
1,1'-Biphenyl	20	1.43162	50	1.544515	100	1.686134	200	1.811608	500	1.920156	1000	1.818692
Perylene	20	1.029276	50	0.9863375	100	1.041456	200	1.03607	500	1.098192	1000	1.079829
Nitrobenzene-d5 (Surr)	20	1.553028	50	1.376274	100	1.414972	200	1.465448	500	1.447388	1000	1.395719
2-Fluorobiphenyl (Surr)	20	1.342713	50	1.501853	100	1.633133	200	1.702499	500	1.728598	1000	1.620679
Phenol-d6 (Surr)	20	1.463061	50	1.475944	100	1.583384	200	1.633634	500	1.720105	1000	1.694929
p-Terphenyl-d14 (Surr)	20	0.975051	50	0.9304463	100	1.015495	200	1.036821	500	1.060335	1000	1.023652
2-Fluorophenol (Surr)	20	1.132016	50	1.060195	100	1.213847	200	1.246799	500	1.324304	1000	1.304523
2,4,6-Tribromophenol (Surr)	20	~~6.639108E-02~~	50	7.065921E-02	100	8.120293E-02	200	9.200568E-02	500	0.1017594	1000	0.1038965

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1009
Instrument: SV-GCMS9
Matrix:
Calibration Date: 05/10/19 17:06

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	1.222855	4000	1.106924	6000	1.010154	8000	0.9380463				
Acenaphthylene	2000	1.960702	4000	1.71094	6000	1.458714	8000	~~1.265118~~				
Anthracene	2000	1.003325	4000	0.8786621	6000	0.7689579	8000	~~0.7009088~~				
Benz(a)anthracene	2000	1.160517	4000	1.142753	6000	1.081444	8000	1.045892				
Benzo(a)pyrene	2000	1.147208	4000	1.065859	6000	1.009417	8000	0.9681162				
Benzo(b)fluoranthene	2000	1.329545	4000	1.268328	6000	1.25114	8000	1.292479				
Benzo(k)fluoranthene	2000	1.20272	4000	1.090877	6000	0.9800293	8000	0.9081583				
Benzo(b+k)fluoranthene(s)	4000	1.294432	8000	1.210313	12000	1.145537	16000	1.109431				
Benzo(g,h,i)perylene	2000	1.118641	4000	1.079451	6000	1.010582	8000	0.9722367				
Chrysene	2000	1.062123	4000	1.050158	6000	1.011204	8000	0.9809463				
Dibenz(a,h)anthracene	2000	1.007409	4000	0.9374441	6000	0.8774625	8000	0.8406638				
Fluoranthene	2000	1.198634	4000	1.08033	6000	0.9404231	8000	~~0.8869122~~				
Fluorene	2000	1.306492	4000	1.141754	6000	~~1.005022~~	8000	~~0.9276221~~				
Indeno(1,2,3-cd)pyrene	2000	1.081306	4000	1.100069	6000	1.079962	8000	1.083719				
1-Methylnaphthalene	2000	0.7168087	4000	0.6691839	6000	0.6008326	8000	0.5603313				
2-Methylnaphthalene	2000	0.7727834	4000	0.7348567	6000	0.6468876	8000	~~0.6157905~~				
Naphthalene	2000	0.982297	4000	0.9083996	6000	0.8158451	8000	0.7683261				
Phenanthrene	2000	1.004201	4000	0.8809291	6000	0.7807684	8000	~~0.7273861~~				
Pyrene	2000	1.182555	4000	1.055062	6000	0.9264856	8000	~~0.8683642~~				
Carbazole	2000	0.9197705	4000	0.8243731	6000	0.6713318	8000	~~0.5631641~~				
Dibenzofuran	2000	1.689888	4000	1.501242	6000	1.320772	8000	~~1.198853~~				
4-Chloro-3-methylphenol	2000	0.3181131	4000	0.3406578	6000	0.3199417	8000	0.3134429				
2-Chlorophenol	2000	1.423161	4000	1.393311	6000	1.364312	8000	1.315164				
2,4-Dichlorophenol	2000	0.2770721	4000	0.2777324	6000	0.2482813	8000	0.2435223				
2,4-Dimethylphenol	2000	0.3111687	4000	0.306541	6000	0.2855238	8000	0.2795605				
2,4-Dinitrophenol	2000	0.1240746	4000	0.1643289	6000	0.1747016	8000	0.1783903				
4,6-Dinitro-2-methylphenol	2000	0.1923731	4000	0.2155312	6000	0.2141173	8000	0.2129201				
2-Methylphenol	2000	1.063794	4000	1.078184	6000	1.035697	8000	0.9646772				
3+4-Methylphenol(s)	2000	1.354181	4000	1.357124	6000	1.282245	8000	1.198168				
2-Nitrophenol	2000	0.2014452	4000	0.2030443	6000	0.1945933	8000	0.1923049				
4-Nitrophenol	2000	0.2340118	4000	0.272251	6000	0.2740057	8000	0.2725831				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Calibration: A9E1009
Instrument: SV-GCMS9
Matrix:
Calibration Date: 05/10/19 17:06

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	0.1143396	4000	0.1277543	6000	0.1252676	8000	0.1221115				
Phenol	2000	1.896969	4000	1.899182	6000	1.877133	8000	1.758094				
2,3,4,6-Tetrachlorophenol	2000	0.3279991	4000	0.3252399	6000	0.3048896	8000	0.290577				
2,3,5,6-Tetrachlorophenol	2000	0.3109245	4000	0.3167555	6000	0.3048764	8000	0.2919889				
2,4,5-Trichlorophenol	2000	0.3792326	4000	0.3753727	6000	0.3481242	8000	0.3336824				
2,4,6-Trichlorophenol	2000	0.3934518	4000	0.3887167	6000	0.371188	8000	0.3536381				
Bis(2-ethylhexyl)phthalate	2000	0.7515566	4000	0.7829898	6000	0.7668836	8000	0.7471264				
Butyl benzyl phthalate	2000	0.6211495	4000	0.673607	6000	0.675999	8000	0.681001				
Diethylphthalate	2000	1.215101	4000	1.059783	6000	~~0.9303606~~	8000	~~0.8566059~~				
Dimethylphthalate	2000	1.401869	4000	1.296864	6000	1.192857	8000	1.150796				
Di-n-butylphthalate	2000	1.189422	4000	1.074511	6000	~~0.9489944~~	8000	~~0.8745828~~				
Di-n-octyl phthalate	2000	1.467974	4000	1.530108	6000	1.46188	8000	1.443103				
2,3,5-Trimethylnaphthalene	2000	1.087459	4000	0.9300448	6000	~~0.816687~~	8000	~~0.7644802~~				
2,6-Dimethylnaphthalene	2000	1.236377	4000	1.084785	6000	0.9655195	8000	~~0.890492~~				
Benzo(e)pyrene	2000	1.261601	4000	1.194903	6000	1.135328	8000	1.100916				
1,1'-Biphenyl	2000	1.679269	4000	1.477851	6000	~~1.309359~~	8000	~~1.20655~~				
Perylene	2000	1.033019	4000	0.976321	6000	0.9367363	8000	0.9079865				
Nitrobenzene-d5 (Surr)	2000	1.393371	4000	1.394111	6000	1.376127	8000	1.326111				
2-Fluorobiphenyl (Surr)	2000	1.495217	4000	1.313224	6000	1.158242	8000	~~1.073407~~				
Phenol-d6 (Surr)	2000	1.792311	4000	1.893767	6000	1.901965	8000	1.847127				
p-Terphenyl-d14 (Surr)	2000	1.00833	4000	0.9646131	6000	0.9057975	8000	0.880332				
2-Fluorophenol (Surr)	2000	1.390615	4000	1.440466	6000	1.492937	8000	1.463219				
2,4,6-Tribromophenol (Surr)	2000	9.822309E-02	4000	9.740403E-02	6000	9.328247E-02	8000	8.992075E-02				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS5	Calibration:	A9A3103
Lab File ID:	E01301925.D		
Sequence:	9A30046	Inject Date:	01/31/19
Lab Sample ID:	9A30046-ICV1	Inject Time:	01:40

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1030	3.3	70 - 130
Acenaphthylene	1000	1070	6.9	70 - 130
Anthracene	1000	1030	3.4	70 - 130
Benz(a)anthracene	1000	1060	5.6	70 - 130
Benzo(a)pyrene	1000	1090	9.4	70 - 130
Benzo(b)fluoranthene	1000	1080	8.1	70 - 130
Benzo(k)fluoranthene	1000	1080	8.3	70 - 130
Benzo(g,h,i)perylene	1000	1050	5.4	70 - 130
Chrysene	1000	1030	3.1	70 - 130
Dibenz(a,h)anthracene	1000	1030	2.6	70 - 130
Fluoranthene	1000	1040	4.0	70 - 130
Fluorene	1000	1110	10.5	70 - 130
Indeno(1,2,3-cd)pyrene	1000	995	-0.5	70 - 130
1-Methylnaphthalene	1000	1060	5.9	70 - 130
2-Methylnaphthalene	1000	1080	7.8	70 - 130
Naphthalene	1000	1020	1.7	70 - 130
Phenanthrene	1000	1040	3.7	70 - 130
Pyrene	1000	1050	4.8	70 - 130
Carbazole	1000	1000	0.2	70 - 130
Dibenzofuran	1000	1060	6.5	70 - 130
4-Chloro-3-methylphenol	1000	1060	6.0	70 - 130
2-Chlorophenol	1000	1050	5.2	70 - 130
2,4-Dichlorophenol	1000	1080	7.5	70 - 130
2,4-Dimethylphenol	1000	1010	0.9	70 - 130
2,4-Dinitrophenol	1000	1090	9.0	70 - 130
4,6-Dinitro-2-methylphenol	1000	1210	21.0	70 - 130
2-Methylphenol	1000	1050	4.7	70 - 130
3+4-Methylphenol(s)	1000	1080	8.0	70 - 130
2-Nitrophenol	1000	1120	12.0	70 - 130
4-Nitrophenol	1000	1090	8.8	70 - 130
Pentachlorophenol (PCP)	1000	1000	-0.04	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS5	Calibration:	A9A3103
Lab File ID:	E01301925.D		
Sequence:	9A30046	Inject Date:	01/31/19
Lab Sample ID:	9A30046-ICV1	Inject Time:	01:40

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1020	2.1	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1110	10.7	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1150	15.1	70 - 130
2,4,5-Trichlorophenol	1000	1100	9.8	70 - 130
2,4,6-Trichlorophenol	1000	1100	10.2	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1010	1.0	70 - 130
Butyl benzyl phthalate	1000	1060	5.5	70 - 130
Diethylphthalate	1000	1150	14.6	70 - 130
Dimethylphthalate	1000	1120	12.1	70 - 130
Di-n-butylphthalate	1000	1020	1.8	70 - 130
Di-n-octyl phthalate	1000	1060	6.3	70 - 130
Nitrobenzene-d5 (Surr)	1000	1060	6.1	70 - 130
2-Fluorobiphenyl (Surr)	1000	1020	1.9	70 - 130
Phenol-d6 (Surr)	1000	1040	3.9	70 - 130
p-Terphenyl-d14 (Surr)	1000	1050	5.0	70 - 130
2-Fluorophenol (Surr)	1000	1030	2.6	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1140	13.8	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS10	Calibration:	A9D1505
Lab File ID:	J04121926.D		
Sequence:	9D12042	Inject Date:	04/13/19
Lab Sample ID:	9D12042-ICV1	Inject Time:	01:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1030	3.0	70 - 130
Acenaphthylene	1000	1080	7.7	70 - 130
Anthracene	1000	1050	5.4	70 - 130
Benz(a)anthracene	1000	1040	4.0	70 - 130
Benzo(a)pyrene	1000	1040	3.5	70 - 130
Benzo(b)fluoranthene	1000	1030	3.0	70 - 130
Benzo(k)fluoranthene	1000	1020	1.6	70 - 130
Benzo(g,h,i)perylene	1000	1060	6.4	70 - 130
Chrysene	1000	1020	2.1	70 - 130
Dibenz(a,h)anthracene	1000	1020	1.9	70 - 130
Fluoranthene	1000	1100	9.9	70 - 130
Fluorene	1000	1070	7.1	70 - 130
Indeno(1,2,3-cd)pyrene	1000	957	-4.3	70 - 130
1-Methylnaphthalene	1000	1050	5.0	70 - 130
2-Methylnaphthalene	1000	1090	8.5	70 - 130
Naphthalene	1000	1050	4.9	70 - 130
Phenanthrene	1000	1040	3.7	70 - 130
Pyrene	1000	1090	9.3	70 - 130
Carbazole	1000	1060	6.5	70 - 130
Dibenzofuran	1000	1060	5.8	70 - 130
4-Chloro-3-methylphenol	1000	993	-0.7	70 - 130
2-Chlorophenol	1000	1070	7.4	70 - 130
2,4-Dichlorophenol	1000	1020	2.1	70 - 130
2,4-Dimethylphenol	1000	987	-1.3	70 - 130
2,4-Dinitrophenol	1000	962	-3.8	70 - 130
4,6-Dinitro-2-methylphenol	1000	1190	18.6	70 - 130
2-Methylphenol	1000	1080	7.8	70 - 130
3+4-Methylphenol(s)	1000	1050	5.3	70 - 130
2-Nitrophenol	1000	1120	12.2	70 - 130
4-Nitrophenol	1000	1080	7.7	70 - 130
Pentachlorophenol (PCP)	1000	1050	5.0	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS10	Calibration:	A9D1505
Lab File ID:	J04121926.D		
Sequence:	9D12042	Inject Date:	04/13/19
Lab Sample ID:	9D12042-ICV1	Inject Time:	01:26

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1050	5.1	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1040	4.3	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1030	3.5	70 - 130
2,4,5-Trichlorophenol	1000	1080	8.2	70 - 130
2,4,6-Trichlorophenol	1000	964	-3.6	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1010	0.7	70 - 130
Butyl benzyl phthalate	1000	1010	1.2	70 - 130
Diethylphthalate	1000	1070	6.9	70 - 130
Dimethylphthalate	1000	1050	4.8	70 - 130
Di-n-butylphthalate	1000	1090	8.9	70 - 130
Di-n-octyl phthalate	1000	993	-0.7	70 - 130
Nitrobenzene-d5 (Surr)	1000	1010	1.0	70 - 130
2-Fluorobiphenyl (Surr)	1000	1100	9.5	70 - 130
Phenol-d6 (Surr)	1000	1020	1.8	70 - 130
p-Terphenyl-d14 (Surr)	1000	1050	4.6	70 - 130
2-Fluorophenol (Surr)	1000	1030	2.5	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1000	0.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS9	Calibration:	A9E1009
Lab File ID:	I05081930.D		
Sequence:	9E08056	Inject Date:	05/09/19
Lab Sample ID:	9E08056-ICV1	Inject Time:	02:48

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1040	3.9	70 - 130
Acenaphthylene	1000	1090	8.9	70 - 130
Anthracene	1000	1030	2.7	70 - 130
Benz(a)anthracene	1000	1040	4.5	70 - 130
Benzo(a)pyrene	1000	1030	2.6	70 - 130
Benzo(b)fluoranthene	1000	1040	3.5	70 - 130
Benzo(k)fluoranthene	1000	1010	0.9	70 - 130
Benzo(g,h,i)perylene	1000	1060	5.6	70 - 130
Chrysene	1000	1000	0.005	70 - 130
Dibenz(a,h)anthracene	1000	1030	2.8	70 - 130
Fluoranthene	1000	1070	6.8	70 - 130
Fluorene	1000	981	-1.9	70 - 130
Indeno(1,2,3-cd)pyrene	1000	987	-1.3	70 - 130
1-Methylnaphthalene	1000	1040	4.2	70 - 130
2-Methylnaphthalene	1000	1060	6.2	70 - 130
Naphthalene	1000	1010	1.0	70 - 130
Phenanthrene	1000	1010	0.7	70 - 130
Pyrene	1000	1040	4.1	70 - 130
Carbazole	1000	1080	8.4	70 - 130
Dibenzofuran	1000	1070	7.4	70 - 130
4-Chloro-3-methylphenol	1000	1010	0.7	70 - 130
2-Chlorophenol	1000	1030	2.8	70 - 130
2,4-Dichlorophenol	1000	1030	3.5	70 - 130
2,4-Dimethylphenol	1000	1030	2.9	70 - 130
2,4-Dinitrophenol	1000	947	-5.3	70 - 130
4,6-Dinitro-2-methylphenol	1000	1160	16.4	70 - 130
2-Methylphenol	1000	1040	4.3	70 - 130
3+4-Methylphenol(s)	1000	1050	5.3	70 - 130
2-Nitrophenol	1000	1110	11.2	70 - 130
4-Nitrophenol	1000	1030	3.5	70 - 130
Pentachlorophenol (PCP)	1000	1040	3.8	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS9	Calibration:	A9E1009
Lab File ID:	I05081930.D		
Sequence:	9E08056	Inject Date:	05/09/19
Lab Sample ID:	9E08056-ICV1	Inject Time:	02:48

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	1060	5.5	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1060	5.8	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1040	3.6	70 - 130
2,4,5-Trichlorophenol	1000	1090	8.7	70 - 130
2,4,6-Trichlorophenol	1000	1040	4.3	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1060	6.0	70 - 130
Butyl benzyl phthalate	1000	1060	6.2	70 - 130
Diethylphthalate	1000	1010	0.9	70 - 130
Dimethylphthalate	1000	1060	6.2	70 - 130
Di-n-butylphthalate	1000	1080	7.6	70 - 130
Di-n-octyl phthalate	1000	1010	1.3	70 - 130
Nitrobenzene-d5 (Surr)	1000	983	-1.7	70 - 130
2-Fluorobiphenyl (Surr)	1000	1080	8.0	70 - 130
Phenol-d6 (Surr)	1000	1000	0.3	70 - 130
p-Terphenyl-d14 (Surr)	1000	1040	4.3	70 - 130
2-Fluorophenol (Surr)	1000	1020	1.5	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1090	8.6	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS10	Calibration:	A9D1505
Lab File ID:	J05291905.D	Calibration Date:	04/15/19 14:53
Sequence:	9E29030	Injection Date:	05/29/19
Lab Sample ID:	9E29030-CCV2	Injection Time:	10:27

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		1.28667	1.316117	2.3	20
Acenaphthylene	Ave	1000	1060		2.000623	2.118214	5.9	20
Anthracene	Ave	1000	1080		1.056941	1.137026	7.6	20
Benz(a)anthracene	Ave	1000	1050		1.091349	1.148734	5.3	20
Benzo(a)pyrene	XXX	1000	1130	13.0				20
Benzo(b)fluoranthene	XXX	1000	1110	10.7				20
Benzo(k)fluoranthene	XXX	1000	1120	11.9				20
Benzo(g,h,i)perylene	Ave	1000	1050		1.081412	1.133153	4.8	20
Chrysene	Ave	1000	1070		1.058934	1.131419	6.8	20
Dibenz(a,h)anthracene	Ave	1000	1110		1.00084	1.115478	11.5	20
Fluoranthene	Ave	1000	1060		1.082262	1.148403	6.1	20
Fluorene	Ave	1000	1040		1.316347	1.371351	4.2	20
Indeno(1,2,3-cd)pyrene	Ave	1000	1010		1.118845	1.130385	1.0	20
1-Methylnaphthalene	Ave	1000	1040		0.6584879	0.6824921	3.6	20
2-Methylnaphthalene	Ave	1000	1080		0.6788702	0.7321768	7.9	20
Naphthalene	Ave	1000	1040		1.035252	1.079938	4.3	20
Phenanthrene	Ave	1000	1030		1.085248	1.114187	2.7	20
Pyrene	Ave	1000	1040		1.115312	1.156331	3.7	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS5	Calibration:	A9A3103
Lab File ID:	E05311907.D	Calibration Date:	01/31/19 12:46
Sequence:	9E31017	Injection Date:	05/31/19
Lab Sample ID:	9E31017-CCV2	Injection Time:	13:08

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		1.320947	1.349099	2.1	20
Acenaphthylene	Ave	1000	1040		1.948127	2.034282	4.4	20
Anthracene	Ave	1000	1030		1.126296	1.161539	3.1	20
Benz(a)anthracene	Ave	1000	987		1.128129	1.112963	-1.3	20
Benzo(a)pyrene	Ave	1000	1150		0.9593879	1.107319	15.4	20
Benzo(b)fluoranthene	Ave	1000	1100		1.056647	1.163615	10.1	20
Benzo(k)fluoranthene	Ave	1000	1160		1.038438	1.208673	16.4	20
Benzo(g,h,i)perylene	Ave	1000	1040		1.079251	1.125957	4.3	20
Chrysene	Ave	1000	1030		1.074697	1.11168	3.4	20
Dibenz(a,h)anthracene	Ave	1000	1040		1.003913	1.043707	4.0	20
Fluoranthene	Ave	1000	1080		1.138647	1.225552	7.6	20
Fluorene	Ave	1000	1080		1.375044	1.486352	8.1	20
Indeno(1,2,3-cd)pyrene	Ave	1000	1000		1.096233	1.098114	0.2	20
1-Methylnaphthalene	Ave	1000	1030		0.6426808	0.6587851	2.5	20
2-Methylnaphthalene	Ave	1000	1040		0.6711103	0.6986111	4.1	20
Naphthalene	Ave	1000	1000		1.066921	1.070284	0.3	20
Phenanthrene	Ave	1000	1040		1.097729	1.13924	3.8	20
Pyrene	Ave	1000	1100		1.156671	1.270608	9.9	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS10	Calibration:	A9D1505
Lab File ID:	J06051902.D	Calibration Date:	04/15/19 14:53
Sequence:	9F05024	Injection Date:	06/05/19
Lab Sample ID:	9F05024-CCV1	Injection Time:	08:31

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1050		1.28667	1.348188	4.8	20
Acenaphthylene	Ave	1000	1060		2.000623	2.114635	5.7	20
Anthracene	Ave	1000	1070		1.056941	1.126205	6.6	20
Benz(a)anthracene	Ave	1000	1060		1.091349	1.153328	5.7	20
Benzo(a)pyrene	XXX	1000	1100	10.0				20
Benzo(b)fluoranthene	XXX	1000	1090	9.1				20
Benzo(k)fluoranthene	XXX	1000	1070	6.9				20
Benzo(g,h,i)perylene	Ave	1000	981		1.081412	1.061271	-1.9	20
Chrysene	Ave	1000	1060		1.058934	1.124955	6.2	20
Dibenz(a,h)anthracene	Ave	1000	1090		1.00084	1.093448	9.3	20
Fluoranthene	Ave	1000	1050		1.082262	1.133351	4.7	20
Fluorene	Ave	1000	1060		1.316347	1.389426	5.6	20
Indeno(1,2,3-cd)pyrene	Ave	1000	933		1.118845	1.043734	-6.7	20
1-Methylnaphthalene	Ave	1000	1010		0.6584879	0.6677624	1.4	20
2-Methylnaphthalene	Ave	1000	1030		0.6788702	0.696693	2.6	20
Naphthalene	Ave	1000	1020		1.035252	1.058889	2.3	20
Phenanthrene	Ave	1000	1020		1.085248	1.107066	2.0	20
Pyrene	Ave	1000	1030		1.115312	1.147194	2.9	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS9	Calibration:	A9E1009
Lab File ID:	I06061908.D	Calibration Date:	05/10/19 17:06
Sequence:	9F06040	Injection Date:	06/06/19
Lab Sample ID:	9F06040-CCV1	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	
Acenaphthene	Ave	1000	1050		1.246362	1.307559	4.9	20
Acenaphthylene	Ave	1000	1060		1.978454	2.09167	5.7	20
Anthracene	Ave	1000	1030		1.06825	1.097825	2.8	20
Benz(a)anthracene	Ave	1000	1010		1.161693	1.171914	0.9	20
Benzo(a)pyrene	XXX	1000	1030	3.2				20
Benzo(b)fluoranthene	XXX	1000	1030	3.0				20
Benzo(k)fluoranthene	XXX	1000	998	-0.2				20
Benzo(g,h,i)perylene	Ave	1000	1080		1.073878	1.164584	8.4	20
Chrysene	Ave	1000	992		1.071717	1.063512	-0.8	20
Dibenz(a,h)anthracene	Ave	1000	1040		0.9695725	1.005262	3.7	20
Fluoranthene	Ave	1000	1020		1.248412	1.27119	1.8	20
Fluorene	Ave	1000	1010		1.461705	1.471013	0.6	20
Indeno(1,2,3-cd)pyrene	Ave	1000	979		1.098245	1.075158	-2.1	20
2-Methylnaphthalene	Ave	1000	1040		0.7525787	0.7805676	3.7	20
Naphthalene	Ave	1000	1040		0.9975462	1.041778	4.4	20
Phenanthrene	Ave	1000	1020		1.068375	1.088975	1.9	20
Pyrene	Ave	1000	1000		1.270483	1.271812	0.1	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:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9A30046	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9A30046-ICV1)				Lab File ID: E01301925.D		Analyzed: 01/31/19 01:40		
Nitrobenzene-d5 (Surr)	1000	106	70 - 130	7.377	7.381	-0.0040	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	102	70 - 130	9.179	9.1815	-0.0025	+/-1.0	
Phenol-d6 (Surr)	1000	104	70 - 130	6.473	6.4784	-0.0054	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	105	70 - 130	13.277	13.2814	-0.0044	+/-1.0	
2-Fluorophenol (Surr)	1000	103	70 - 130	5.628	5.631	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	114	70 - 130	10.682	10.6855	-0.0035	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9D12042	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9D12042-ICV1)				Lab File ID: J04121926.D		Analyzed: 04/13/19 01:26		
Nitrobenzene-d5 (Surr)	1000	101	70 - 130	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	110	70 - 130	9.167	9.169333	-0.0023	+/-1.0	
Phenol-d6 (Surr)	1000	102	70 - 130	6.434	6.441556	-0.0076	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	105	70 - 130	13.243	13.2467	-0.0037	+/-1.0	
2-Fluorophenol (Surr)	1000	103	70 - 130	5.535	5.5363	-0.0013	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	100	70 - 130	10.665	10.669	-0.0040	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E08056	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9E08056-ICV1)				Lab File ID: I05081930.D		Analyzed: 05/09/19 02:48		
Nitrobenzene-d5 (Surr)	1000	98	70 - 130	7.231	7.2342	-0.0032	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	108	70 - 130	9.023	9.024889	-0.0019	+/-1.0	
Phenol-d6 (Surr)	1000	100	70 - 130	6.338	6.344	-0.0060	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	104	70 - 130	13.024	13.0273	-0.0033	+/-1.0	
2-Fluorophenol (Surr)	1000	102	70 - 130	5.466	5.469	-0.0030	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	109	70 - 130	10.516	10.518	-0.0020	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E29030	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9E29030-CCV2)			Lab File ID: J05291905.D		Analyzed: 05/29/19 10:27			
Nitrobenzene-d5 (Surr)	1000	118	80 - 120	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	109	80 - 120	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	1000	116	80 - 120	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	110	80 - 120	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	1000	100	80 - 120	5.541	5.5363	0.0047	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	105	80 - 120	10.659	10.669	-0.0100	+/-1.0	
Calibration Blank (9E29030-CCB1)			Lab File ID: J05291907.D		Analyzed: 05/29/19 11:39			
Nitrobenzene-d5 (Surr)			37 - 122	0	7.358778	-7.3588	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	9.169333	-9.1693	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.441556	-6.4416	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	13.2467	-13.2467	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.5363	-5.5363	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.669	-10.6690	+/-1.0	
Blank (9051333-BLK1)			Lab File ID: J05291908.D		Analyzed: 05/29/19 12:16			
Nitrobenzene-d5 (Surr)	312	77	37 - 122	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	312	77	44 - 115	9.162	9.169333	-0.0073	+/-1.0	
p-Terphenyl-d14 (Surr)	312	95	54 - 127	13.237	13.2467	-0.0097	+/-1.0	
LCS (9051333-BS1)			Lab File ID: J05291909.D		Analyzed: 05/29/19 12:52			
Nitrobenzene-d5 (Surr)	333	79	37 - 122	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	333	81	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
p-Terphenyl-d14 (Surr)	333	97	54 - 127	13.232	13.2467	-0.0147	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E31017	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9E31017-CCV2)			Lab File ID: E05311907.D		Analyzed: 05/31/19 13:08			
Nitrobenzene-d5 (Surr)	1000	106	80 - 120	7.291	7.381	-0.0900	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	107	80 - 120	9.083	9.1815	-0.0985	+/-1.0	
Phenol-d6 (Surr)	1000	104	80 - 120	6.409	6.4784	-0.0694	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	99	80 - 120	13.127	13.2814	-0.1544	+/-1.0	
2-Fluorophenol (Surr)	1000	104	80 - 120	5.564	5.631	-0.0670	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	119	80 - 120	10.586	10.6855	-0.0995	+/-1.0	
Calibration Blank (9E31017-CCB1)			Lab File ID: E05311908.D		Analyzed: 05/31/19 13:45			
Nitrobenzene-d5 (Surr)			44 - 120	7.318	7.381	-0.0630	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	9.1815	-9.1815	+/-1.0	
Phenol-d6 (Surr)			10 - 120	0	6.4784	-6.4784	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	0	13.2814	-13.2814	+/-1.0	
2-Fluorophenol (Surr)			19 - 120	0	5.631	-5.6310	+/-1.0	
2,4,6-Tribromophenol (Surr)			43 - 140	0	10.6855	-10.6855	+/-1.0	
FD-201905220947 (A9E0766-01RE2)			Lab File ID: E05311922.D		Analyzed: 05/31/19 22:27			
Nitrobenzene-d5 (Surr)	449	54	37 - 122	7.27	7.381	-0.1110	+/-1.0	
2-Fluorobiphenyl (Surr)	449	49	44 - 115	9.083	9.1815	-0.0985	+/-1.0	
p-Terphenyl-d14 (Surr)	449	53	54 - 127	13.127	13.2814	-0.1544	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9F05024-CCV1)			Lab File ID: J06051902.D		Analyzed: 06/05/19 08:31			
Nitrobenzene-d5 (Surr)	1000	107	80 - 120	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	106	80 - 120	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	1000	111	80 - 120	6.45	6.441556	0.0084	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	109	80 - 120	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	1000	106	80 - 120	5.535	5.5363	-0.0013	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	98	80 - 120	10.659	10.669	-0.0100	+/-1.0	
Calibration Blank (9F05024-CCB1)			Lab File ID: J06051904.D		Analyzed: 06/05/19 09:43			
Nitrobenzene-d5 (Surr)			44 - 120	0	7.358778	-7.3588	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	9.169333	-9.1693	+/-1.0	
Phenol-d6 (Surr)			10 - 120	0	6.441556	-6.4416	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	0	13.2467	-13.2467	+/-1.0	
2-Fluorophenol (Surr)			19 - 120	0	5.5363	-5.5363	+/-1.0	
2,4,6-Tribromophenol (Surr)			43 - 140	0	10.669	-10.6690	+/-1.0	
Blank (9060602-BLK1)			Lab File ID: J06051912.D		Analyzed: 06/05/19 14:34			
Nitrobenzene-d5 (Surr)	312	94	37 - 122	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	312	76	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	312	91	33 - 122	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	312	96	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	312	75	35 - 115	5.541	5.5363	0.0047	+/-1.0	
2,4,6-Tribromophenol (Surr)	312	72	39 - 132	10.659	10.669	-0.0100	+/-1.0	
LCS (9060602-BS1)			Lab File ID: J06051913.D		Analyzed: 06/05/19 15:11			
Nitrobenzene-d5 (Surr)	333	91	37 - 122	7.348	7.358778	-0.0108	+/-1.0	
2-Fluorobiphenyl (Surr)	333	83	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	333	92	33 - 122	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	333	95	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	333	68	35 - 115	5.546	5.5363	0.0097	+/-1.0	
2,4,6-Tribromophenol (Surr)	333	83	39 - 132	10.659	10.669	-0.0100	+/-1.0	
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)			Lab File ID: J06051916.D		Analyzed: 06/05/19 17:00			
Nitrobenzene-d5 (Surr)	464	82	37 - 122	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	464	73	44 - 115	9.157	9.169333	-0.0123	+/-1.0	
p-Terphenyl-d14 (Surr)	464	83	54 - 127	13.232	13.2467	-0.0147	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Duplicate (9060602-DUP1)			Lab File ID: J06051917.D		Analyzed: 06/05/19 17:36			
Nitrobenzene-d5 (Surr)	460	81	37 - 122	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	460	68	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	460	83	33 - 122	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	460	83	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	460	74	35 - 115	5.546	5.5363	0.0097	+/-1.0	
2,4,6-Tribromophenol (Surr)	460	71	39 - 132	10.659	10.669	-0.0100	+/-1.0	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)			Lab File ID: J06051918.D		Analyzed: 06/05/19 18:13			
Nitrobenzene-d5 (Surr)	465	89	37 - 122	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	465	68	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
p-Terphenyl-d14 (Surr)	465	77	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
Matrix Spike (9060602-MS1)			Lab File ID: J06051919.D		Analyzed: 06/05/19 18:49			
Nitrobenzene-d5 (Surr)	466	89	37 - 122	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	466	72	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	466	89	33 - 122	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	466	73	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	466	68	35 - 115	5.546	5.5363	0.0097	+/-1.0	
2,4,6-Tribromophenol (Surr)	466	77	39 - 132	10.659	10.669	-0.0100	+/-1.0	
Matrix Spike Dup (9060602-MSD1)			Lab File ID: J06051920.D		Analyzed: 06/05/19 19:26			
Nitrobenzene-d5 (Surr)	464	60	37 - 122	7.348	7.358778	-0.0108	+/-1.0	
2-Fluorobiphenyl (Surr)	464	56	44 - 115	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	464	59	33 - 122	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	464	84	54 - 127	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	464	43	35 - 115	5.546	5.5363	0.0097	+/-1.0	
2,4,6-Tribromophenol (Surr)	464	69	39 - 132	10.659	10.669	-0.0100	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F06040	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9F06040-CCV1)			Lab File ID: I06061908.D		Analyzed: 06/06/19 15:21			
Nitrobenzene-d5 (Surr)	1000	108	80 - 120	7.216	7.2342	-0.0182	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	109	80 - 120	9.007	9.024889	-0.0179	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	105	80 - 120	13.008	13.0273	-0.0193	+/-1.0	
Calibration Blank (9F06040-CCB1)			Lab File ID: I06061909.D		Analyzed: 06/06/19 15:57			
Nitrobenzene-d5 (Surr)			37 - 122	7.221	7.2342	-0.0132	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	9.024889	-9.0249	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	13.0273	-13.0273	+/-1.0	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03RE2)			Lab File ID: I06061910.D		Analyzed: 06/06/19 16:33			
Nitrobenzene-d5 (Surr)	453	62	37 - 122	7.226	7.2342	-0.0082	+/-1.0	
2-Fluorobiphenyl (Surr)	453	63	44 - 115	9.018	9.024889	-0.0069	+/-1.0	
p-Terphenyl-d14 (Surr)	453	82	54 - 127	13.019	13.0273	-0.0083	+/-1.0	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04RE2)			Lab File ID: I06061911.D		Analyzed: 06/06/19 17:09			
Nitrobenzene-d5 (Surr)	420	76	37 - 122	7.232	7.2342	-0.0022	+/-1.0	
2-Fluorobiphenyl (Surr)	420	74	44 - 115	9.023	9.024889	-0.0019	+/-1.0	
p-Terphenyl-d14 (Surr)	420	81	54 - 127	13.024	13.0273	-0.0033	+/-1.0	
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE2)			Lab File ID: I06061912.D		Analyzed: 06/06/19 17:44			
Nitrobenzene-d5 (Surr)	462	80	37 - 122	7.232	7.2342	-0.0022	+/-1.0	
2-Fluorobiphenyl (Surr)	462	76	44 - 115	9.023	9.024889	-0.0019	+/-1.0	
p-Terphenyl-d14 (Surr)	462	76	54 - 127	13.024	13.0273	-0.0033	+/-1.0	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06RE2)			Lab File ID: I06061916.D		Analyzed: 06/06/19 20:06			
Nitrobenzene-d5 (Surr)	464	67	37 - 122	7.232	7.2342	-0.0022	+/-1.0	
2-Fluorobiphenyl (Surr)	464	68	44 - 115	9.023	9.024889	-0.0019	+/-1.0	
p-Terphenyl-d14 (Surr)	464	79	54 - 127	13.024	13.0273	-0.0033	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E31017	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9E31017-CCV2)			Lab File ID: E05311907.D			Analyzed: 05/31/19 13:08			
1,4-Dichlorobenzene-d4 (ISTD)	284376	6.762	286436	6.848	99	50 - 200	-0.0860	+/-0.50	
Naphthalene-d8 (ISTD)	1107818	8.003	1096117	8.099	101	50 - 200	-0.0960	+/-0.50	
Acenaphthene-d10 (ISTD)	509890	9.784	493423	9.88	103	50 - 200	-0.0960	+/-0.50	
Phenanthrene-d10 (ISTD)	1009578	11.298	840808	11.399	120	50 - 200	-0.1010	+/-0.50	
Chrysene-d12 (ISTD)	998154	15.213	707423	15.416	141	50 - 200	-0.2030	+/-0.50	
Perylene-d12 (ISTD)	893517	18.727	630113	18.951	142	50 - 200	-0.2240	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	831396	21.118	502143	21.348	166	50 - 200	-0.2300	+/-0.50	
Calibration Blank (9E31017-CCB1)			Lab File ID: E05311908.D			Analyzed: 05/31/19 13:45			
1,4-Dichlorobenzene-d4 (ISTD)	274749	6.762	284376	6.762	97	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1079833	8.003	1107818	8.003	97	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	517966	9.779	509890	9.784	102	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	987608	11.292	1009578	11.298	98	50 - 200	-0.0060	+/-0.50	
Chrysene-d12 (ISTD)	918142	15.207	998154	15.213	92	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	806779	18.722	893517	18.727	90	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	753712	21.112	831396	21.118	91	50 - 200	-0.0060	+/-0.50	
FD-201905220947 (A9E0766-01RE2)			Lab File ID: E05311922.D			Analyzed: 05/31/19 22:27			
1,4-Dichlorobenzene-d4 (ISTD)	284727	6.746	284376	6.762	100	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	1081008	7.981	1107818	8.003	98	50 - 200	-0.0220	+/-0.50	
Acenaphthene-d10 (ISTD)	521290	9.779	509890	9.784	102	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	1004318	11.298	1009578	11.298	99	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1060028	15.207	998154	15.213	106	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	960632	18.727	893517	18.727	108	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	887086	21.118	831396	21.118	107	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9F05024-CCV1)			Lab File ID: J06051902.D			Analyzed: 06/05/19 08:31			
1,4-Dichlorobenzene-d4 (ISTD)	206400	6.798	207595	6.808	99	50 - 200	-0.0100	+/-0.50	
Naphthalene-d8 (ISTD)	844504	8.071	870566	8.081	97	50 - 200	-0.0100	+/-0.50	
Acenaphthene-d10 (ISTD)	383862	9.857	408985	9.868	94	50 - 200	-0.0110	+/-0.50	
Phenanthrene-d10 (ISTD)	643192	11.371	701196	11.381	92	50 - 200	-0.0100	+/-0.50	
Chrysene-d12 (ISTD)	517740	15.339	609064	15.355	85	50 - 200	-0.0160	+/-0.50	
Perylene-d12 (ISTD)	447263	18.859	550560	18.875	81	50 - 200	-0.0160	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	403143	21.25	510954	21.266	79	50 - 200	-0.0160	+/-0.50	
Calibration Blank (9F05024-CCB1)			Lab File ID: J06051904.D			Analyzed: 06/05/19 09:43			
1,4-Dichlorobenzene-d4 (ISTD)	235356	6.803	206400	6.798	114	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	1052723	8.076	844504	8.071	125	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	488102	9.857	383862	9.857	127	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	773720	11.371	643192	11.371	120	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	599145	15.345	517740	15.339	116	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	503372	18.864	447263	18.859	113	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	429038	21.255	403143	21.25	106	50 - 200	0.0050	+/-0.50	
Blank (9060602-BLK1)			Lab File ID: J06051912.D			Analyzed: 06/05/19 14:34			
1,4-Dichlorobenzene-d4 (ISTD)	167873	6.803	206400	6.798	81	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	905272	8.076	844504	8.071	107	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	434527	9.857	383862	9.857	113	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	701002	11.371	643192	11.371	109	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	569762	15.34	517740	15.339	110	50 - 200	0.0010	+/-0.50	
Perylene-d12 (ISTD)	474522	18.859	447263	18.859	106	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	421107	21.25	403143	21.25	104	50 - 200	0.0000	+/-0.50	
LCS (9060602-BS1)			Lab File ID: J06051913.D			Analyzed: 06/05/19 15:11			
1,4-Dichlorobenzene-d4 (ISTD)	187789	6.803	206400	6.798	91	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	918197	8.076	844504	8.071	109	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	435604	9.857	383862	9.857	113	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	720595	11.371	643192	11.371	112	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	567014	15.345	517740	15.339	110	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	486642	18.859	447263	18.859	109	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	439368	21.25	403143	21.25	109	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
T4-PDI2019-SC18-190522-01-03 (A9E0766-02RE2)			Lab File ID: J06051916.D			Analyzed: 06/05/19 17:00			
1,4-Dichlorobenzene-d4 (ISTD)	203236	6.803	206400	6.798	98	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	955764	8.076	844504	8.071	113	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	441186	9.857	383862	9.857	115	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	708720	11.371	643192	11.371	110	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	576995	15.34	517740	15.339	111	50 - 200	0.0010	+/-0.50	
Perylene-d12 (ISTD)	501754	18.859	447263	18.859	112	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	432419	21.25	403143	21.25	107	50 - 200	0.0000	+/-0.50	
Duplicate (9060602-DUP1)			Lab File ID: J06051917.D			Analyzed: 06/05/19 17:36			
1,4-Dichlorobenzene-d4 (ISTD)	160966	6.803	206400	6.798	78	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	825061	8.076	844504	8.071	98	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	421259	9.857	383862	9.857	110	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	669822	11.371	643192	11.371	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	505082	15.339	517740	15.339	98	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	416705	18.859	447263	18.859	93	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	351967	21.244	403143	21.25	87	50 - 200	-0.0060	+/-0.50	
T4-PDI2019-SC18-190522-07-09 (A9E0766-05RE2)			Lab File ID: J06051918.D			Analyzed: 06/05/19 18:13			
1,4-Dichlorobenzene-d4 (ISTD)	167176	6.803	206400	6.798	81	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	933018	8.076	844504	8.071	110	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	474282	9.857	383862	9.857	124	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	782104	11.371	643192	11.371	122	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	640628	15.339	517740	15.339	124	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	547948	18.859	447263	18.859	123	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	488596	21.244	403143	21.25	121	50 - 200	-0.0060	+/-0.50	
Matrix Spike (9060602-MS1)			Lab File ID: J06051919.D			Analyzed: 06/05/19 18:49			
1,4-Dichlorobenzene-d4 (ISTD)	194986	6.803	206400	6.798	94	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	966614	8.071	844504	8.071	114	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	483854	9.857	383862	9.857	126	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	817524	11.371	643192	11.371	127	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	665820	15.345	517740	15.339	129	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	566619	18.859	447263	18.859	127	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	517917	21.25	403143	21.25	128	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike Dup (9060602-MSD1)			Lab File ID: J06051920.D			Analyzed: 06/05/19 19:26			
1,4-Dichlorobenzene-d4 (ISTD)	195088	6.803	206400	6.798	95	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	971291	8.076	844504	8.071	115	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	456992	9.857	383862	9.857	119	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	751014	11.371	643192	11.371	117	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	592618	15.339	517740	15.339	114	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	510094	18.853	447263	18.859	114	50 - 200	-0.0060	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	459797	21.25	403143	21.25	114	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F06040	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9F06040-CCV1)			Lab File ID: I06061908.D			Analyzed: 06/06/19 15:21			
1,4-Dichlorobenzene-d4 (ISTD)	96971	6.681	116694	6.697	83	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	397749	7.932	435111	7.948	91	50 - 200	-0.0160	+/-0.50	
Acenaphthene-d10 (ISTD)	198625	9.703	224844	9.719	88	50 - 200	-0.0160	+/-0.50	
Phenanthrene-d10 (ISTD)	382580	11.211	425173	11.222	90	50 - 200	-0.0110	+/-0.50	
Chrysene-d12 (ISTD)	368701	15.035	428978	15.057	86	50 - 200	-0.0220	+/-0.50	
Perylene-d12 (ISTD)	349757	18.517	400554	18.539	87	50 - 200	-0.0220	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	347999	20.903	399119	20.924	87	50 - 200	-0.0210	+/-0.50	
Calibration Blank (9F06040-CCB1)			Lab File ID: I06061909.D			Analyzed: 06/06/19 15:57			
1,4-Dichlorobenzene-d4 (ISTD)	112434	6.691	96971	6.681	116	50 - 200	0.0100	+/-0.50	
Naphthalene-d8 (ISTD)	476343	7.943	397749	7.932	120	50 - 200	0.0110	+/-0.50	
Acenaphthene-d10 (ISTD)	244083	9.708	198625	9.703	123	50 - 200	0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	452664	11.216	382580	11.211	118	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	468335	15.041	368701	15.035	127	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	434009	18.523	349757	18.517	124	50 - 200	0.0060	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	417178	20.908	347999	20.903	120	50 - 200	0.0050	+/-0.50	
T4-PDI2019-SC18-190522-03-05 (A9E0766-03RE2)			Lab File ID: I06061910.D			Analyzed: 06/06/19 16:33			
1,4-Dichlorobenzene-d4 (ISTD)	99842	6.691	96971	6.681	103	50 - 200	0.0100	+/-0.50	
Naphthalene-d8 (ISTD)	410980	7.943	397749	7.932	103	50 - 200	0.0110	+/-0.50	
Acenaphthene-d10 (ISTD)	204655	9.713	198625	9.703	103	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10 (ISTD)	364559	11.216	382580	11.211	95	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	376853	15.046	368701	15.035	102	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	347097	18.533	349757	18.517	99	50 - 200	0.0160	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	337618	20.913	347999	20.903	97	50 - 200	0.0100	+/-0.50	
T4-PDI2019-SC18-190522-05-07 (A9E0766-04RE2)			Lab File ID: I06061911.D			Analyzed: 06/06/19 17:09			
1,4-Dichlorobenzene-d4 (ISTD)	98905	6.691	96971	6.681	102	50 - 200	0.0100	+/-0.50	
Naphthalene-d8 (ISTD)	419930	7.943	397749	7.932	106	50 - 200	0.0110	+/-0.50	
Acenaphthene-d10 (ISTD)	210862	9.713	198625	9.703	106	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10 (ISTD)	388345	11.216	382580	11.211	102	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	383272	15.046	368701	15.035	104	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	352527	18.528	349757	18.517	101	50 - 200	0.0110	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	336099	20.908	347999	20.903	97	50 - 200	0.0050	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F06040	Instrument:	SV-GCMS9
Matrix:	Sediment	Calibration:	A9E1009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
T4-PDI2019-SC18-190522-11-13 (A9E0766-07RE2)			Lab File ID: I06061912.D			Analyzed: 06/06/19 17:44			
1,4-Dichlorobenzene-d4 (ISTD)	100120	6.691	96971	6.681	103	50 - 200	0.0100	+/-0.50	
Naphthalene-d8 (ISTD)	419446	7.943	397749	7.932	105	50 - 200	0.0110	+/-0.50	
Acenaphthene-d10 (ISTD)	210298	9.713	198625	9.703	106	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10 (ISTD)	387201	11.216	382580	11.211	101	50 - 200	0.0050	+/-0.50	
Chrysene-d12 (ISTD)	396015	15.041	368701	15.035	107	50 - 200	0.0060	+/-0.50	
Perylene-d12 (ISTD)	374065	18.528	349757	18.517	107	50 - 200	0.0110	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	359796	20.908	347999	20.903	103	50 - 200	0.0050	+/-0.50	
T4-PDI2019-SC18-190522-09-11 (A9E0766-06RE2)			Lab File ID: I06061916.D			Analyzed: 06/06/19 20:06			
1,4-Dichlorobenzene-d4 (ISTD)	102455	6.697	96971	6.681	106	50 - 200	0.0160	+/-0.50	
Naphthalene-d8 (ISTD)	420829	7.943	397749	7.932	106	50 - 200	0.0110	+/-0.50	
Acenaphthene-d10 (ISTD)	209185	9.713	198625	9.703	105	50 - 200	0.0100	+/-0.50	
Phenanthrene-d10 (ISTD)	387732	11.222	382580	11.211	101	50 - 200	0.0110	+/-0.50	
Chrysene-d12 (ISTD)	393994	15.046	368701	15.035	107	50 - 200	0.0110	+/-0.50	
Perylene-d12 (ISTD)	361520	18.533	349757	18.517	103	50 - 200	0.0160	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	337400	20.913	347999	20.903	97	50 - 200	0.0100	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

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
FD-201905220947	05/22/19 00:00	05/23/19 10:00	05/29/19 12:26	7.52	14.00	05/31/19 22:27	2.42	40.00	
T4-PDI2019-SC18-190522-01-03	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/05/19 17:00	0.25	40.00	*
T4-PDI2019-SC18-190522-03-05	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/06/19 16:33	1.23	40.00	*
T4-PDI2019-SC18-190522-05-07	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/06/19 17:09	1.25	40.00	*
T4-PDI2019-SC18-190522-07-09	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/05/19 18:13	0.30	40.00	*
T4-PDI2019-SC18-190522-09-11	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/06/19 20:06	1.37	40.00	*
T4-PDI2019-SC18-190522-11-13	05/22/19 09:47	05/23/19 10:00	06/05/19 11:06	14.05	14.00	06/06/19 17:44	1.28	40.00	*

Apex Laboratories

SDG: A9E0766

CLASS: WET

METHOD: EPA 9060Amod

ANALYSES DATA PACKAGE COVER PAGE

EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
FD-201905220947	A9E0766-01	Sediment
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment
T4-PDI2019-SC67-190522-01-03	A9E0766-16	Sediment

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

Signature: 
Name: David G. Jack

Forms Created: 6/27/2019 12:51PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 9060Amod

Laboratory: Apex Laboratories **SDG:** A9E0766

Client: Anchor QEA, LLC **Project:** Port of Portland - T4 - PDI

Batch Matrix: Sediment

Analyte	MDL	MRL	Units
Total Organic Carbon	0.020	0.020	% by Weight

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

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

FD-201905220947

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-01

Sampled: 05/22/19 00:00 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 72.32 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.053	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-01-03

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-02

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 68.82 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.18	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-03-05

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-03

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 70.43 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.25	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-05-07

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-04

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 76.04 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.051	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-07-09

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-05

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 68.88 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.096	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-09-11

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-06

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 69.60 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.12	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC18-190522-11-13

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-07

Sampled: 05/22/19 09:47 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 70.50 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.13	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SC67-190522-01-03

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Matrix: Sediment Laboratory ID: A9E0766-16

Sampled: 05/22/19 12:45 Prepared: 05/24/19 10:20 Analyzed: 05/30/19 16:16

Solids: 82.80 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9051253 Sequence: 9E30017 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.060	1		EPA 9060Amod

PREPARATION BATCH SUMMARY

EPA 9060Amod

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Batch: 9051253 Batch Matrix: Sediment Preparation: PSEP TOC

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9051253-BLK1		05/24/19 10:20	
LCS	9051253-BS1		05/24/19 10:20	
T4-PDI2019-SC18-190522-07-09 (D	9051253-DUP1		05/24/19 10:20	
FD-201905220947	A9E0766-01		05/24/19 10:20	
T4-PDI2019-SC18-190522-01-03	A9E0766-02		05/24/19 10:20	
T4-PDI2019-SC18-190522-03-05	A9E0766-03		05/24/19 10:20	
T4-PDI2019-SC18-190522-05-07	A9E0766-04		05/24/19 10:20	
T4-PDI2019-SC18-190522-07-09	A9E0766-05		05/24/19 10:20	
T4-PDI2019-SC18-190522-09-11	A9E0766-06		05/24/19 10:20	
T4-PDI2019-SC18-190522-11-13	A9E0766-07		05/24/19 10:20	
T4-PDI2019-SC67-190522-01-03	A9E0766-16		05/24/19 10:20	

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.

METHOD BLANK DATA SHEET

EPA 9060Amod

Laboratory:	Apex Laboratories			SDG:	A9E0766
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9051253-BLK1	File ID:	
Prepared:	05/24/19 10:20	Preparation:	PSEP TOC	Initial/Final:	5 g / 5 g
Analyzed:	05/30/19 16:16	Instrument:	TOC		
Batch:	9051253	Sequence:	9E30017	Calibration:	A8B0203

CAS NO.	COMPOUND	CONC. (% by Weight)	Q
TOC	Total Organic Carbon	0.020	U

LCS / LCS DUPLICATE RECOVERY

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9051253	Laboratory ID:	9051253-BS1
Preparation:	PSEP TOC	Initial/Final:	5 g / 5 g

COMPOUND	SPIKE ADDED (mg/kg)	LCS CONCENTRATION (mg/kg)	LCS % REC. (*=Out)	QC LIMITS REC.
Total Organic Carbon	10000	10000	102	90 - 110

* = Values outside of QC limits

DUPLICATES

T4-PDI2019-SC18-190522-07-09

EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: 9051253-DUP1
Batch: 9051253
Lab Source ID: A9E0766-05
Preparation: PSEP TOC
Initial/Final: 5 g / 5 g
Source Sample Name: T4-PDI2019-SC18-190522-07-09
% Solids: 68.88

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Organic Carbon	20	0.096		0.091		6		EPA 9060Amod

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	8B02022	Instrument:	TOC
Matrix:	Sediment	Calibration:	A8B0203

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	8B02022-CAL2		02/02/18 17:35
Cal Standard	8B02022-CAL3		02/02/18 17:35
Cal Standard	8B02022-CAL4		02/02/18 17:35
Cal Standard	8B02022-CAL5		02/02/18 17:35
Cal Standard	8B02022-CAL6		02/02/18 17:35
Cal Standard	8B02022-CAL7		02/02/18 17:35
Cal Standard	8B02022-CAL8		02/02/18 17:35
Cal Standard	8B02022-CAL9		02/02/18 17:35
Cal Standard	8B02022-CALA		02/02/18 17:35
Cal Standard	8B02022-CALB		02/02/18 17:35
Initial Cal Check	8B02022-ICV2		02/02/18 17:35
Initial Cal Blank	8B02022-ICB2		02/02/18 17:35

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9E30017	Instrument:	TOC
Matrix:	Sediment	Calibration:	A8B0203

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9E30017-CCV1		05/30/19 16:16
Calibration Blank	9E30017-CCB1		05/30/19 16:16
Blank	9051253-BLK1		05/30/19 16:16
LCS	9051253-BS1		05/30/19 16:16
FD-201905220947	A9E0766-01		05/30/19 16:16
T4-PDI2019-SC18-190522-01-03	A9E0766-02		05/30/19 16:16
T4-PDI2019-SC18-190522-03-05	A9E0766-03		05/30/19 16:16
T4-PDI2019-SC18-190522-05-07	A9E0766-04		05/30/19 16:16
T4-PDI2019-SC18-190522-07-09	A9E0766-05		05/30/19 16:16
T4-PDI2019-SC18-190522-07-09 (D	9051253-DUP1		05/30/19 16:16
T4-PDI2019-SC18-190522-09-11	A9E0766-06		05/30/19 16:16
T4-PDI2019-SC18-190522-11-13	A9E0766-07		05/30/19 16:16
Calibration Check	9E30017-CCV2		05/30/19 16:16
Calibration Blank	9E30017-CCB2		05/30/19 16:16
T4-PDI2019-SC67-190522-01-03	A9E0766-16		05/30/19 16:16
Calibration Check	9E30017-CCV3		05/30/19 16:16
Calibration Blank	9E30017-CCB3		05/30/19 16:16

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

INITIAL CALIBRATION DATA (Summary)

EPA 9060Amod

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

Calibration: A8B0203 Date: 02/02/18 15:56 Instrument: TOC

Compound	Mean RF	FIT	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Total Organic Carbon		Lin				0.00000			

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

INITIAL CALIBRATION DATA

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Calibration:	A8B0203	Instrument:	TOC
		Calibration Date:	02/02/18 15:56

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF
Total Organic Carbon	1000		2500		5000		10000		15000		20000	

INITIAL CALIBRATION DATA (Continued)

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9E0766
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Calibration:	A8B0203	Instrument:	TOC
Matrix:		Calibration Date:	02/02/18 15:56

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF	mg/kg	RF
Total Organic Carbon	25000		30000		35000		40000					

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Instrument ID: TOC
Calibration: A8B0203
Control Limt: +/- 10.00%
Sequence: 8B02022

Lab Sample ID	Analyte	True	Found	%R	Units	Method
8B02022-ICV2	Total Organic Carbon	10000	10000	104	mg/kg	EPA 9060Amod

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Instrument ID: TOC
Calibration: A8B0203
Control Limt: +/- 10.00%
Sequence: 9E30017

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9E30017-CCV1	Total Organic Carbon	10000	11000	105	mg/kg	EPA 9060Amod
9E30017-CCV2	Total Organic Carbon	10000	11000	105	mg/kg	EPA 9060Amod
9E30017-CCV3	Total Organic Carbon	10000	9900	99	mg/kg	EPA 9060Amod

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Instrument ID: TOC
Project: Port of Portland - T4 - PDI
Sequence: 8B02022
Calibration: A8B0203

Lab Sample ID	Analyte	Found	RL	Units	C	Method
8B02022-ICB2	Total Organic Carbon	260	200 (Inst)	mg/kg	*	EPA 9060Amod

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

INSTRUMENT BLANKS
EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Instrument ID: TOC
Project: Port of Portland - T4 - PDI
Sequence: 9E30017
Calibration: A8B0203

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9E30017-CCB1	Total Organic Carbon	ND	200 (Inst)	mg/kg		EPA 9060Amod
9E30017-CCB2	Total Organic Carbon	ND	200 (Inst)	mg/kg		EPA 9060Amod
9E30017-CCB3	Total Organic Carbon	ND	200 (Inst)	mg/kg		EPA 9060Amod

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

HOLDING TIME SUMMARY

EPA 9060Amod

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

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
FD-201905220947	05/22/19 00:00	05/23/19 10:00	05/24/19 10:20	2.43	28.00	05/30/19 16:16	8.68	28.00	
T4-PDI2019-SC18-190522-01-03	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC18-190522-03-05	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC18-190522-05-07	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC18-190522-07-09	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC18-190522-09-11	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC18-190522-11-13	05/22/19 09:47	05/23/19 10:00	05/24/19 10:20	2.02	28.00	05/30/19 16:16	8.27	28.00	
T4-PDI2019-SC67-190522-01-03	05/22/19 12:45	05/23/19 10:00	05/24/19 10:20	1.90	28.00	05/30/19 16:16	8.15	28.00	

Apex Laboratories

SDG: A9E0766

CLASS: WET

METHOD: PSEP 1986

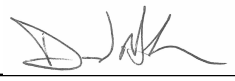
ANALYSES DATA PACKAGE COVER PAGE

PSEP 1986

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
FD-201905220947	A9E0766-01	Sediment
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment
T4-PDI2019-SC67-190522-01-03	A9E0766-16	Sediment

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

Signature: 
Name: David G. Jack

Forms Created: 6/27/2019 12:51PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

PSEP 1986

Laboratory: Apex Laboratories **SDG:** A9E0766

Client: Anchor QEA, LLC **Project:** Port of Portland - T4 - PDI

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Total Solids	1.00	1.00	% by Weight

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

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

FD-201905220947

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-01
Sampled: 05/22/19 00:00
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 72.32
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	72.3	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-01-03

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-02
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 68.82
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	68.8	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-03-05

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-03
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 70.43
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	70.4	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-05-07

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-04
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 76.04
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	76.0	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-07-09

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-05
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 68.88
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	68.9	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-09-11

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-06
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 69.60
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	69.6	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC18-190522-11-13

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-07
Sampled: 05/22/19 09:47
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 70.50
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	70.5	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SC67-190522-01-03

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-16
Sampled: 05/22/19 12:45
Prepared: 05/29/19 15:51
Analyzed: 05/30/19 15:22
Solids: 82.80
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Batch: 9051375
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	82.8	1		PSEP 1986

PREPARATION BATCH SUMMARY

PSEP 1986

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Batch: 9051375 Batch Matrix: Soil
Preparation: Total Solids (SM2540G/PSEP)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
T4-PDI2019-SC18-190522-07-09 (D	9051375-DUP2		05/29/19 15:51	
FD-201905220947	A9E0766-01		05/29/19 15:51	
T4-PDI2019-SC18-190522-01-03	A9E0766-02		05/29/19 15:51	
T4-PDI2019-SC18-190522-03-05	A9E0766-03		05/29/19 15:51	
T4-PDI2019-SC18-190522-05-07	A9E0766-04		05/29/19 15:51	
T4-PDI2019-SC18-190522-07-09	A9E0766-05		05/29/19 15:51	
T4-PDI2019-SC18-190522-09-11	A9E0766-06		05/29/19 15:51	
T4-PDI2019-SC18-190522-11-13	A9E0766-07		05/29/19 15:51	
T4-PDI2019-SC67-190522-01-03	A9E0766-16		05/29/19 15:51	

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

DUPLICATES

PSEP 1986

T4-PDI2019-SC18-190522-07-09

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Soil
Laboratory ID: 9051375-DUP2
Batch: 9051375
Lab Source ID: A9E0766-05
Preparation: Total Solids (SM2540G/PSEP)
Initial/Final: 1 N/A / 1 N/A
Source Sample Name: T4-PDI2019-SC18-190522-07-09
% Solids: 68.88

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Solids	20	68.9		68.8		0.1		PSEP 1986

* Values outside of QC limits

HOLDING TIME SUMMARY

PSEP 1986

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

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
FD-201905220947	05/22/19 00:00	05/23/19 10:00	05/29/19 15:51	7.66	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-01-03	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-03-05	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-05-07	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-07-09	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-09-11	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC18-190522-11-13	05/22/19 09:47	05/23/19 10:00	05/29/19 15:51	7.25	180.00	05/30/19 15:22	0.98		
T4-PDI2019-SC67-190522-01-03	05/22/19 12:45	05/23/19 10:00	05/29/19 15:51	7.13	180.00	05/30/19 15:22	0.98		

Apex Laboratories

SDG: A9E0766

CLASS: WET

METHOD: D422mod

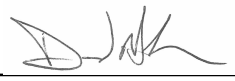
ANALYSES DATA PACKAGE COVER PAGE

D422mod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
T4-PDI2019-SC18-190522-01-03	A9E0766-02	Sediment
T4-PDI2019-SC18-190522-03-05	A9E0766-03	Sediment
T4-PDI2019-SC18-190522-05-07	A9E0766-04	Sediment
T4-PDI2019-SC18-190522-07-09	A9E0766-05	Sediment
T4-PDI2019-SC18-190522-09-11	A9E0766-06	Sediment
T4-PDI2019-SC18-190522-11-13	A9E0766-07	Sediment
T4-PDI2019-SC67-190522-01-03	A9E0766-16	Sediment

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

Signature: 
Name: David G. Jack

Forms Created: 6/27/2019 12:51PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

D422mod

Laboratory: Apex Laboratories **SDG:** A9E0766

Client: Anchor QEA, LLC **Project:** Port of Portland - T4 - PDI

Batch Matrix: Soil

Analyte	MDL	MRL	Units
Gravel (>2.00mm)	0.01	0.01	% of Total
Percent Retained 4.75 mm sieve (#4)	0.01	0.01	% of Total
Percent Retained 2.00 mm sieve (#10)	0.01	0.01	% of Total
Sand (0.063mm - 2.00mm)	0.01	0.01	% of Total
Percent Retained 0.85 mm sieve (#20)	0.01	0.01	% of Total
Percent Retained 0.425 mm sieve (#40)	0.01	0.01	% of Total
Percent Retained 0.250 mm sieve (#60)	0.01	0.01	% of Total
Percent Retained 0.150 mm sieve (#100)	0.01	0.01	% of Total
Percent Retained 0.106 mm sieve (#140)	0.01	0.01	% of Total
Percent Retained 0.075 mm sieve (#200)	0.01	0.01	% of Total
Percent Retained 0.063 mm sieve (#230)	0.01	0.01	% of Total
Silt (0.005mm < 0.063mm)	0.01	0.01	% of Total
Clay (< 0.005 mm)	0.01	0.01	% of Total

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

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-01-03

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-02

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:13 | Analyzed: 06/12/19 19:07

Solids: 68.82 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	47.2	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.01	1	U	D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.03	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	0.20	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	3.86	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	13.2	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	20.2	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	9.80	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	42.6	1		D422mod
GS-Clay	Clay (< 0.005 mm)	10.2	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-03-05

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-03

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:28 | Analyzed: 06/12/19 19:07

Solids: 70.43 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	44.9	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.02	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.06	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	0.90	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	6.02	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	11.7	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	17.1	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	9.08	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	44.6	1		D422mod
GS-Clay	Clay (< 0.005 mm)	10.5	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-05-07

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-04

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:46 | Analyzed: 06/12/19 19:07

Solids: 76.04 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	87.2	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.01	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.06	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	11.7	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	45.8	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	17.8	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	9.06	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	2.84	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	10.6	1		D422mod
GS-Clay	Clay (< 0.005 mm)	2.30	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-07-09

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-05

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:06 | Analyzed: 06/12/19 19:07

Solids: 68.88 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	70.0	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.01	1	U	D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.02	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	1.68	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	22.6	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	21.9	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	17.2	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	6.58	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	23.3	1		D422mod
GS-Clay	Clay (< 0.005 mm)	6.70	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-09-11

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-06

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:19 | Analyzed: 06/12/19 19:07

Solids: 69.60 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	54.8	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.01	1	U	D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.03	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	0.35	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	9.42	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	18.1	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	19.0	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	7.86	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	33.9	1		D422mod
GS-Clay	Clay (< 0.005 mm)	11.2	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC18-190522-11-13

Laboratory: Apex Laboratories | SDG: A9E0766

Client: Anchor QEA, LLC | Project: Port of Portland - T4 - PDI

Matrix: Sediment | Laboratory ID: A9E0766-07

Sampled: 05/22/19 09:47 | Prepared: 06/10/19 08:38 | Analyzed: 06/12/19 19:07

Solids: 70.50 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060757 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.01	1	U	D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.01	1	U	D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.01	1	U	D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	68.3	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.01	1	U	D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	0.02	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	1.32	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	25.3	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	21.4	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	14.9	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	5.46	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	23.6	1		D422mod
GS-Clay	Clay (< 0.005 mm)	8.00	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SC67-190522-01-03

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9E0766-16
Sampled: 05/22/19 12:45
Prepared: 06/10/19 08:54
Analyzed: 06/12/19 19:07
Solids: 82.80
Preparation: ASTM D 421
Initial/Final: 1 N/A / 1 N/A
Batch: 9060757
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	3.16	1		D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	2.34	1		D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.81	1		D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	95.0	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	2.24	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	25.6	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	50.9	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	14.2	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	1.40	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	0.46	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	0.16	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	1.40	1		D422mod
GS-Clay	Clay (< 0.005 mm)	0.40	1		D422mod

PREPARATION BATCH SUMMARY

D422mod

Laboratory: Apex Laboratories
SDG: A9E0766
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Batch: 9060757 Batch Matrix: Soil Preparation: ASTM D 421

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
T4-PDI2019-SC18-190522-01-03	A9E0766-02		06/10/19 08:13	
T4-PDI2019-SC18-190522-03-05	A9E0766-03		06/10/19 08:28	
T4-PDI2019-SC18-190522-05-07	A9E0766-04		06/10/19 08:46	
T4-PDI2019-SC18-190522-07-09	A9E0766-05		06/10/19 08:06	
T4-PDI2019-SC18-190522-09-11	A9E0766-06		06/10/19 08:19	
T4-PDI2019-SC18-190522-11-13	A9E0766-07		06/10/19 08:38	
T4-PDI2019-SC67-190522-01-03	A9E0766-16		06/10/19 08:54	

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.

HOLDING TIME SUMMARY

D422mod

Laboratory: Apex Laboratories SDG: A9E0766

Client: Anchor QEA, LLC Project: Port of Portland - T4 - PDI

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
T4-PDI2019-SC18-190522-01-03	05/22/19 09:47	05/23/19 10:00	06/10/19 08:13	18.93	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC18-190522-03-05	05/22/19 09:47	05/23/19 10:00	06/10/19 08:28	18.95	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC18-190522-05-07	05/22/19 09:47	05/23/19 10:00	06/10/19 08:46	18.96	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC18-190522-07-09	05/22/19 09:47	05/23/19 10:00	06/10/19 08:06	18.93	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC18-190522-09-11	05/22/19 09:47	05/23/19 10:00	06/10/19 08:19	18.94	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC18-190522-11-13	05/22/19 09:47	05/23/19 10:00	06/10/19 08:38	18.95	180.00	06/12/19 19:07	21.39	180.00	
T4-PDI2019-SC67-190522-01-03	05/22/19 12:45	05/23/19 10:00	06/10/19 08:54	18.84	180.00	06/12/19 19:07	21.27	180.00	

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Raw Data

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Batch 9051305
Sequence 9E30034 (A9E0766-01)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051305 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9051305-BLK1		QC	05/28/19 11:07	11	2				100					
	9051305-BS1		QC	05/28/19 11:07	10	2	A19E232		100	100					
	A9E0744-06	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.25	2				100	T4-PDI2019-SC12-190521-01-03				
	9051305-DUP1		QC	05/28/19 11:07	10.2	2		A9E0744-06		100					
	A9E0744-06RE1	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.25	2				100	T4-PDI2019-SC12-190521-01-03	Surrogate confirmation. Added 5/31/2019 By MJB			
	A9E0744-07	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.53	2				100	T4-PDI2019-SC12-190521-03-05				
	A9E0744-08	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.84	2				100	T4-PDI2019-SC12-190521-05-07				
	A9E0744-09	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.21	2				100	T4-PDI2019-SC12-190521-07-8.3				
	A9E0744-10	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.92	2				100	FD-201905211556				
	A9E0744-11	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.34	2				100	T4-PDI2019-SC13-190521-01-03				
	A9E0744-11RE1	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.34	2				100	T4-PDI2019-SC13-190521-01-03	Surrogate confirmation. Added 5/31/2019 By MJB			
	A9E0744-12	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.86	2				100	T4-PDI2019-SC13-190521-03-05				
	A9E0744-12RE1	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.86	2				100	T4-PDI2019-SC13-190521-03-05	Surrogate confirmation. Added 5/31/2019 By MJB			
	A9E0744-13	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.46	2				100	T4-PDI2019-SC13-190521-05-07				
	A9E0744-14	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.54	2				100	T4-PDI2019-SC13-190521-07-09				
	A9E0744-15	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.5	2				100	T4-PDI2019-SC13-190521-09-11.1				
	A9E0744-16	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.75	2				100	FD-201905211730				
	A9E0744-17	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.28	2				100	T4-PDI2019-SC19-190521-01-03				
	A9E0744-18	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	10.27	2				100	T4-PDI2019-SC19-190521-03-05				

Prepared By: Date

Reviewed By: 6/7/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051305 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0744-19	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.4	2				100	T4-PDI2019-SC19-190521-05-07	MS/MSD this sample			
	9051305-MS1		QC	05/28/19 11:07	10.47	2	A19E232	A9E0744-19	100	100					
	9051305-MSD1		QC	05/28/19 11:08	10.49	2	A19E232	A9E0744-19	100	100					
	A9E0744-20	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.14	2				100	T4-PDI2019-SC19-190521-07-09				
	A9E0744-21	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	10.85	2				100	T4-PDI2019-SC19-190521-09-11				
	A9E0744-22	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	10.08	2				100	T4-PDI2019-SC19-190521-11-11.8				
	A9E0766-01	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	10.8	2				100	FD-20190522094 7				
	A9E0766-03	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	10.29	2				100	T4-PDI2019-SC18-190522-03-05				
	A9E0766-04	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	10.11	2				100	T4-PDI2019-SC18-190522-05-07				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18H290	01/01/21	Copper, Granular Lot# J260003
A18K137	11/08/23	Sulfuric Acid
A18K311	12/31/20	Glass Wool
A19C104	09/03/19	Florisil Lot 817211-CM
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D008	09/28/19	n-Hexane Lot# 186950
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E232	11/20/19	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19E001	10/01/19	8082 PCB Surrogate Spike

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051305 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9051305-BLK1		QC	05/28/19 11:07	~~10~~ 11	2 ✓				100					
4	9051305-DUP1		QC	05/28/19 11:07	~~10~~ 10.70	2 ✓		A9E0744-06		100		mud #			
2	9051305-BS1		QC	05/28/19 11:07	10	2 ✓	A19E232		100	100					
3	A9E0744-06	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.25	2 ✓				100	T4-PDI2019-SC12-190521-01-03	mud ★ #			
5	A9E0744-07	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.53	2 ✓				100	T4-PDI2019-SC12-190521-03-05	mud #			
6	A9E0744-08	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.54	2 ✓				100	T4-PDI2019-SC12-190521-05-07	mud #			
7	A9E0744-09	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.31	2 ✓				100	T4-PDI2019-SC12-190521-07-8.3	sand ★			
8	A9E0744-10	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.92	2 ✓				100	FD-201905211556	mud ★			
9	A9E0744-11	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.34	2 ✓				100	T4-PDI2019-SC13-190521-01-03	mud ★ # ← ignore JAG 5/28/19			
10	A9E0744-12	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.86	2 ✓				100	T4-PDI2019-SC13-190521-03-05	mud ★ # ← ignore JAG 5/28/19			
11	A9E0744-13	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.46	2 ✓				100	T4-PDI2019-SC13-190521-05-07	mud			
12	A9E0744-14	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.54	2 ✓				100	T4-PDI2019-SC13-190521-07-09	mud			
13	A9E0744-15	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.50	2 ✓				100	T4-PDI2019-SC13-190521-09-11.1	mud			
14	A9E0744-16	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.75	2 ✓				100	FD-201905211730	mud #			
15	A9E0744-17	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.78	2 ✓				100	T4-PDI2019-SC19-190521-01-03	mud			
16	A9E0744-18	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	~~10~~ 10.37	2 ✓				100	T4-PDI2019-SC19-190521-03-05	mud			
17	A9E0744-19	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.40	2 ✓				100	T4-PDI2019-SC19-190521-05-07	MS/MSD this sample mud			
18	9051305-MS1		QC	05/28/19 11:07	~~10~~ 10.47	2 ✓	A19E232	A9E0744-19	100	100		mud			
19	9051305-MSD1		QC	05/28/19 11:08	~~10~~ 10.49	2 ✓	A19E232	A9E0744-19	100	100		mud			
20	A9E0744-20	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.14	2 ✓				100	T4-PDI2019-SC19-190521-07-09	mud			

JAG 5/28/19
Prepared By: 5/28/19 Date
5-28-19

CAS 5/28/19
Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051305 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
21	A9E0744-21	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:07	~~10~~ 10.55	2 ✓				100	T4-PDI2019-SC1 9-190521-09-11	mud			
22	A9E0744-22	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	~~10~~ 10.05	2 ✓				100	T4-PDI2019-SC1 9-190521-11-11.8	mud			
23	A9E0766-01	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	~~10~~ 10.80	2 ✓				100	FD-20190522094 7	sand			
24	A9E0766-03	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	~~10~~ 10.29	2 ✓				100	T4-PDI2019-SC1 8-190522-03-05	mud			
25	A9E0766-04	A	8082 PCBs - Low Level (2mL FV)	05/28/19 11:08	~~10~~ 10.11	2 ✓				100	T4-PDI2019-SC1 8-190522-05-07	sand			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18H290	01/01/21	Copper, Granular Lot# J260003
A18K137	11/08/23	Sulfuric Acid
A18K311	12/31/20	Glass Wool
A19C104	09/03/19	Florisil Lot 817211-CM
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D008	09/28/19	n-Hexane Lot# 186950
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E232	11/20/19	8082 PCB Matrix Spike

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19E001	10/01/19	8082 PCB Surrogate Spike

JAG

☆ - Partial Dry-out

= staining on Turbo Vap after solvent exchange.

Method 3546 digestion time and temperture achieved.
Initial: JC

Witness NRA 05/28/19

JAG 5/28/19
Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E30034**	Instrument:	**DUALECD2F**
Date:	**05/30/19 16:10**	Calibration:	**A9A3104**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E30034-CCV1	Sediment	QC	QC				A19E079
2	9E30034-CCB1	Sediment	QC	QC				A19E080
3	9051305-BLK1	Sediment	QC	QC		9051305		
4	9051305-BS1	Sediment	QC	QC		9051305		
5	A9E0744-06	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
6	9E30034-IBL1	Sediment	QC	QC				
7	9051305-DUP1	Sediment	QC	QC		9051305		
8	9E30034-IBL2	Sediment	QC	QC				
9	A9E0744-07	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
10	9E30034-IBL3	Sediment	QC	QC				
11	A9E0744-08	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
12	9E30034-IBL4	Sediment	QC	QC				
13	9E30034-CCV2	Sediment	QC	QC				A19E079
14	9E30034-CCB2	Sediment	QC	QC				A19E080
15	A9E0744-09	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
16	9E30034-IBL5	Sediment	QC	QC				
17	A9E0744-10	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
18	9E30034-IBL6	Sediment	QC	QC				
19	A9E0744-21	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
20	9E30034-IBL7	Sediment	QC	QC				
21	A9E0744-22	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
22	9E30034-IBL8	Sediment	QC	QC				
23	A9E0766-01	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9051305		
24	9E30034-IBL9	Sediment	QC	QC				
25	A9E0744-11	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
26	9E30034-IBLA	Sediment	QC	QC				
27	A9E0744-12	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
28	9E30034-IBLB	Sediment	QC	QC				
29	9E30034-CCV3	Sediment	QC	QC				A19E079
30	9E30034-CCB3	Sediment	QC	QC				A19E080

Comments:

Data Entered By: MJB 5/31/19

Data Reviewed By: [illegible] 6/3/19 MJB 6/3/19

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.

9E30034-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	508.74
1016 (2)	537.34
1016 (3)	499.19
1016 (4)	470.79
1016 (5)	494.16
1016 (6)	490.03
Average:	**500.04**

Aroclor 1260

Peak	Initial Res
1260 (1)	463.84
1260 (2)	491.92
1260 (3)	494.41
1260 (4)	468.30
1260 (5)	482.39
1260 (6)	515.30
Average:	**486.03**

MTB 5/31/19

9051305-BS1

Aroclor 1016

Peak	Initial Res
1016 (1)	878.71
1016 (2)	1,006.90
1016 (3)	892.27
1016 (4)	870.11
1016 (5)	861.86
1016 (6)	823.06
Average:	**888.82**

Aroclor 1260

Peak	Initial Res
1260 (1)	927.92
1260 (2)	954.59
1260 (3)	938.17
1260 (4)	960.92
1260 (5)	919.73
1260 (6)	1,015.57
Average:	**952.82**

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.

9E30034-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	526.29
1016 (2)	559.79
1016 (3)	515.41
1016 (4)	476.62
1016 (5)	494.43
1016 (6)	507.04
Average:	**513.26**

Aroclor 1260

Peak	Initial Res
1260 (1)	503.84
1260 (2)	498.64
1260 (3)	485.39
1260 (4)	512.46
1260 (5)	503.04
1260 (6)	505.76
Average:	**501.52**

MB 5/31/19

9E30034-CCV3

Aroclor 1016

Peak	Initial Res
1016 (1)	561.23
1016 (2)	605.74
1016 (3)	548.13
1016 (4)	500.57
1016 (5)	522.81
1016 (6)	539.93
Average:	**546.40**

Aroclor 1260

Peak	Initial Res
1260 (1)	524.89
1260 (2)	527.99
1260 (3)	526.46
1260 (4)	519.09
1260 (5)	522.58
1260 (6)	529.69
Average:	**525.12**

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30034-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.581	15482253	267.807	ng/ml	
62) S	DCBP (S)	9.297	18453314	253.431	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.506	1360167	508.735	ng/ml	
3)	Aroclor 1016 (2)	5.914	2843764	537.344	ng/ml	
4)	Aroclor 1016 (3)	5.999	1449689	499.192	ng/ml	500.04
5)	Aroclor 1016 (4)	6.159	1125708	470.794	ng/ml	
6)	Aroclor 1016 (5)	6.379	1448669	494.155	ng/ml	
7)	Aroclor 1016 (6)	6.503	1020019	490.028	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	4.942	144120	173.970	ng/ml	
10)	Aroclor 1221 (2)	5.062	152083	279.959	ng/ml	
11)	Aroclor 1221 (3)	5.142	687311	387.715	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.142	687311	490.662	ng/ml	
14)	Aroclor 1232 (2)	5.914	2843764	1332.003	ng/ml	
15)	Aroclor 1232 (3)	5.999	1449689	1309.218	ng/ml	
16)	Aroclor 1232 (4)	6.159	1125708	1488.626	ng/ml	
17)	Aroclor 1232 (5)	6.379	1448669	1393.833	ng/ml	
18)	Aroclor 1232 (6)	6.503	1020019	1198.905	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.506	1360167	688.569	ng/ml	
21)	Aroclor 1242 (2)	5.914	2843764	703.028	ng/ml	
22)	Aroclor 1242 (3)	5.999	1449689	675.972	ng/ml	
23)	Aroclor 1242 (4)	6.159	1125708	699.357	ng/ml	
24)	Aroclor 1242 (5)	6.379	1448669	655.121	ng/ml	
25)	Aroclor 1242 (6)	6.503	1020019	547.056	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	5.914	2843764	1214.496	ng/ml	
28)	Aroclor 1248 (2)	6.159	1125708	392.949	ng/ml	
29)	Aroclor 1248 (3)	6.379	1448669	422.101	ng/ml	
30)	Aroclor 1248 (4)	6.673	285602	73.589	ng/ml	
31)	Aroclor 1248 (5)	6.706	998625	236.925	ng/ml	
32)	Aroclor 1248 (6)	7.194	1891291	838.155	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.706	998625	233.134	ng/ml	
35)	Aroclor 1254 (2)	6.819	985101	182.531	ng/ml	
36)	Aroclor 1254 (3)	7.194	1891291	238.730	ng/ml	
37)	Aroclor 1254 (4)	7.353	310764	58.872	ng/ml	
38)	Aroclor 1254 (5)	7.733	2710480	507.862	ng/ml	
39)	Aroclor 1254 (6)	8.020	318911	176.982	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.307	2546514	463.841	ng/ml	
42)	Aroclor 1260 (2)	7.443	3388244	491.918	ng/ml	
43)	Aroclor 1260 (3)	7.994	2538198	494.407	ng/ml	486.03
44)	Aroclor 1260 (4)	8.167	5833644	468.301	ng/ml	
45)	Aroclor 1260 (5)	8.462	3978738	482.386	ng/ml	
46)	Aroclor 1260 (6)	8.849	1758235	515.298	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30034-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

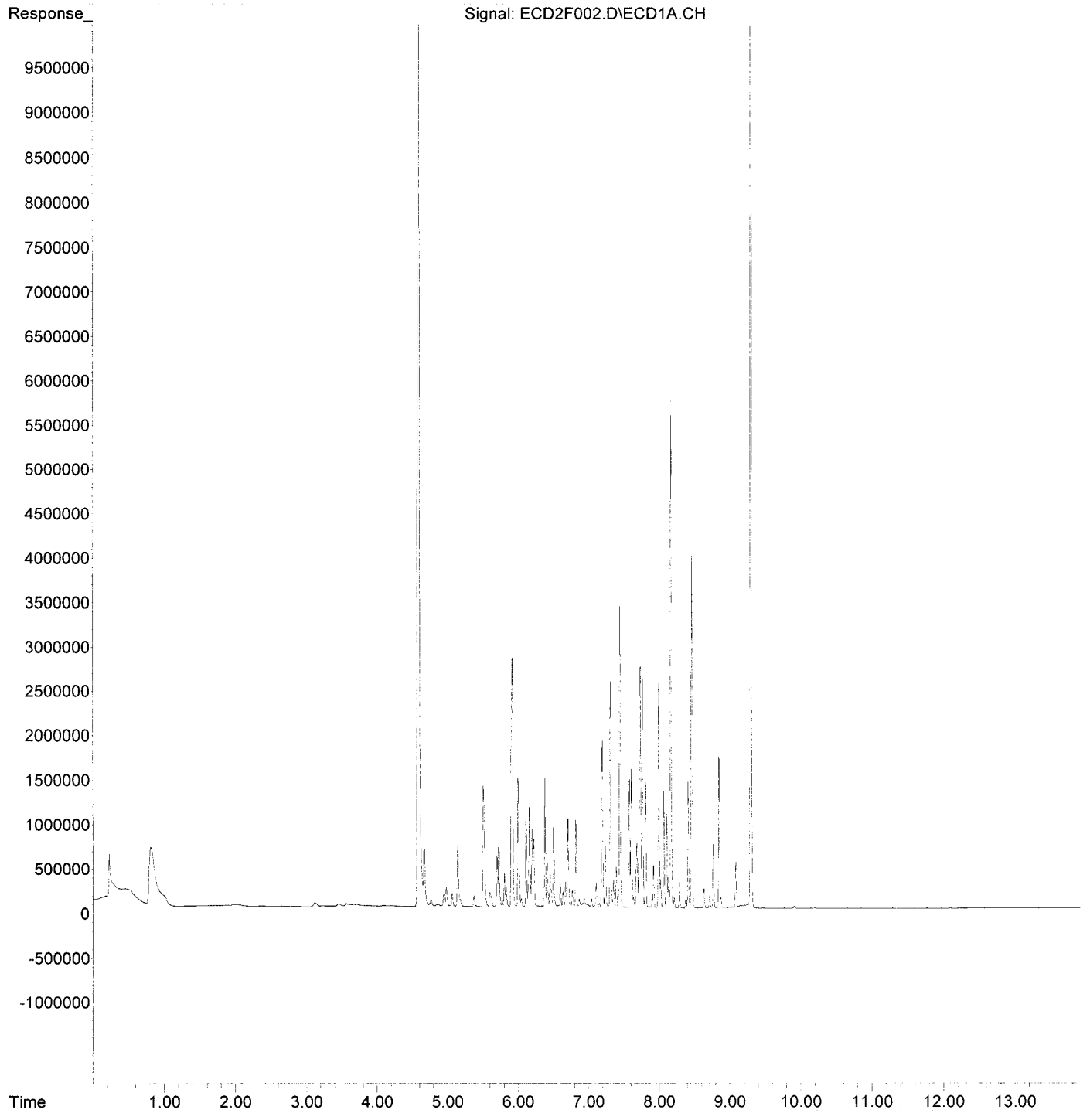
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.443	3388244	614.149	ng/ml
49)	Aroclor 1262 (2)	7.764	2579201	342.950	ng/ml
50)	Aroclor 1262 (3)	7.994	2538198	393.440	ng/ml
51)	Aroclor 1262 (4)	8.167	5833644	410.851	ng/ml
52)	Aroclor 1262 (5)	8.462	3978738	464.457	ng/ml
53)	Aroclor 1262 (6)	8.849	1758235	369.323	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	7.994	2538198	761.299	ng/ml
56)	Aroclor 1268 (2)	8.411	1414664	89.353	ng/ml
57)	Aroclor 1268 (3)	8.462	3978738	295.371	ng/ml
58)	Aroclor 1268 (4)	8.635	213672	17.987	ng/ml
59)	Aroclor 1268 (5)	8.849	1758235	353.135	ng/ml
60)	Aroclor 1268 (6)	9.084	517322	15.013	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\9E30034\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30034-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:39 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30034-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.579	6392227	110.571 ng/ml
62) S	DCBP (S)	9.295	7430085	102.042 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.501	4704	1.759 ng/ml
3)	Aroclor 1016 (2)	5.914	7782	1.470 ng/ml
4)	Aroclor 1016 (3)	5.997	7888	2.716 ng/ml
5)	Aroclor 1016 (4)	6.165	6634	2.775 ng/ml
6)	Aroclor 1016 (5)	6.381	8158	2.783 ng/ml
7)	Aroclor 1016 (6)	6.507	8466	4.067 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.946	11256	13.588 ng/ml
10)	Aroclor 1221 (2)	5.072	2954	5.439 ng/ml
11)	Aroclor 1221 (3)	5.144	7887	4.449 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.144	7887	5.631 ng/ml
14)	Aroclor 1232 (2)	5.914	7782	3.645 ng/ml
15)	Aroclor 1232 (3)	5.997	7888	7.124 ng/ml
16)	Aroclor 1232 (4)	6.165	6634	8.773 ng/ml
17)	Aroclor 1232 (5)	6.381	8158	7.849 ng/ml
18)	Aroclor 1232 (6)	6.507	8466	9.951 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.501	4704	2.381 ng/ml
21)	Aroclor 1242 (2)	5.914	7782	1.924 ng/ml
22)	Aroclor 1242 (3)	5.997	7888	3.678 ng/ml
23)	Aroclor 1242 (4)	6.165	6634	4.122 ng/ml
24)	Aroclor 1242 (5)	6.381	8158	3.689 ng/ml
25)	Aroclor 1242 (6)	6.507	8466	4.541 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.914	7782	3.324 ng/ml
28)	Aroclor 1248 (2)	6.165	6634	2.316 ng/ml
29)	Aroclor 1248 (3)	6.381	8158	2.377 ng/ml
30)	Aroclor 1248 (4)	6.693	86218	22.215 ng/ml
31)	Aroclor 1248 (5)	6.693	86218	20.455 ng/ml
32)	Aroclor 1248 (6)	7.191	11644	5.160 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.693	86218	20.128 ng/ml
35)	Aroclor 1254 (2)	6.818	15675	2.904 ng/ml
36)	Aroclor 1254 (3)	7.191	11644	1.470 ng/ml
37)	Aroclor 1254 (4)	7.349	8604	1.630 ng/ml
38)	Aroclor 1254 (5)	7.739	12259	2.297 ng/ml
39)	Aroclor 1254 (6)	8.019	2199	1.220 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.303	8671	1.579 ng/ml
42)	Aroclor 1260 (2)	7.458	12240	1.777 ng/ml
43)	Aroclor 1260 (3)	7.989	3039	0.592 ng/ml
44)	Aroclor 1260 (4)	8.155	10612	0.852 ng/ml
45)	Aroclor 1260 (5)	8.462	4046	0.491 ng/ml
46)	Aroclor 1260 (6)	8.848	2539	0.744 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30034-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

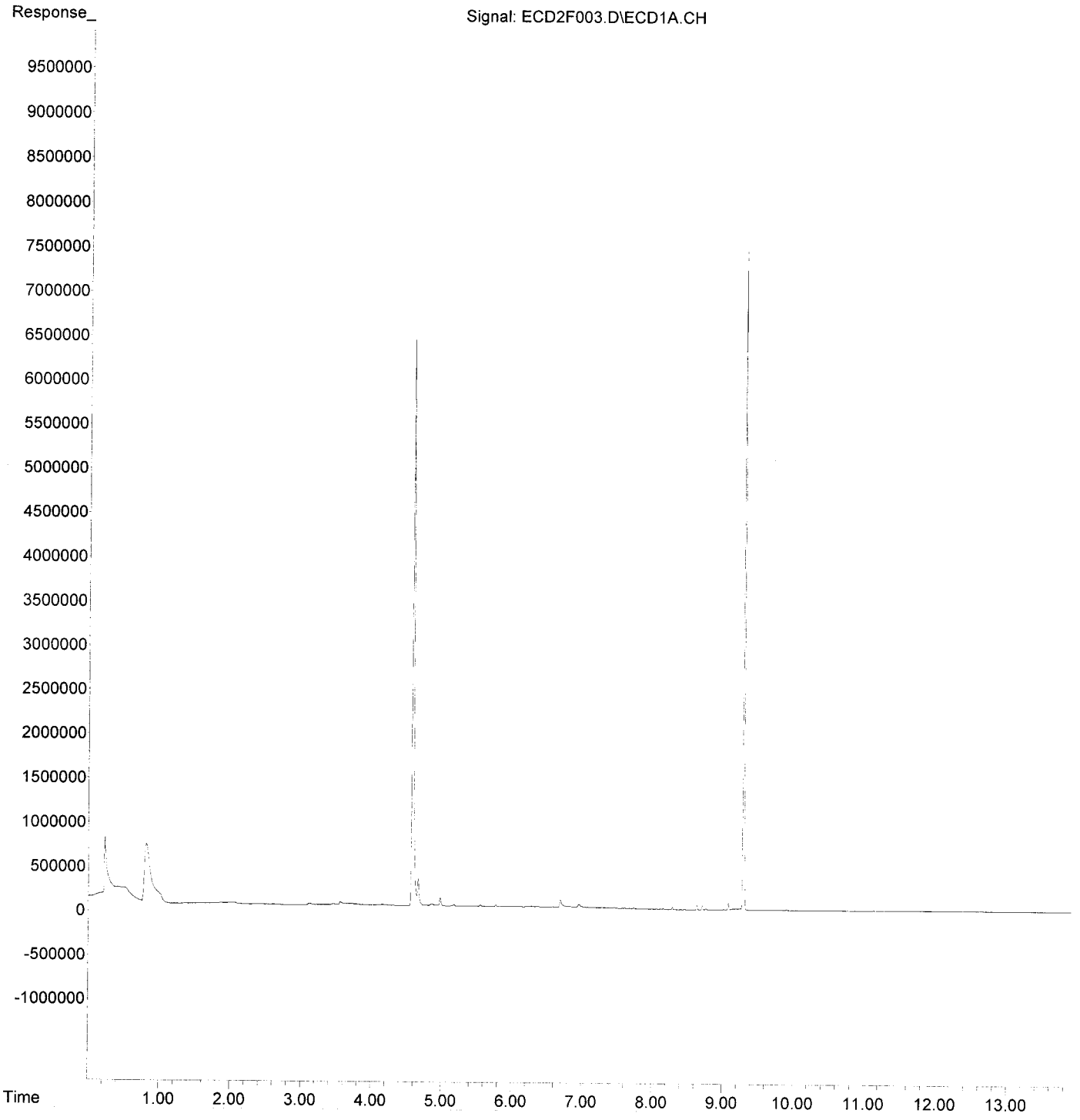
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.458	12240	2.219 ng/ml
49)	Aroclor 1262 (2)	7.784	2607	0.347 ng/ml
50)	Aroclor 1262 (3)	7.989	3039	0.471 ng/ml
51)	Aroclor 1262 (4)	8.155	10612	0.747 ng/ml
52)	Aroclor 1262 (5)	8.462	4046	0.472 ng/ml
53)	Aroclor 1262 (6)	8.848	2539	0.533 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.989	3039	0.912 ng/ml
56)	Aroclor 1268 (2)	8.410	1470	0.093 ng/ml
57)	Aroclor 1268 (3)	8.462	4046	0.300 ng/ml
58)	Aroclor 1268 (4)	8.636	51584	4.342 ng/ml
59)	Aroclor 1268 (5)	8.848	2539	0.510 ng/ml
60)	Aroclor 1268 (6)	9.082	77655	2.254 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\9E30034\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30034-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:04:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 5:07 pm
Operator : MJB / KAK
Sample : 9051305-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:05:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.578	10709839	185.255 ng/ml
62) S	DCBP (S)	9.294	15551272	213.576 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.507	5294	1.980 ng/ml
3)	Aroclor 1016 (2)	5.911	8061	1.523 ng/ml
4)	Aroclor 1016 (3)	6.013	8182	2.817 ng/ml
5)	Aroclor 1016 (4)	6.157	11836	4.950 ng/ml
6)	Aroclor 1016 (5)	6.376	11224	3.829 ng/ml
7)	Aroclor 1016 (6)	6.501	10169	4.885 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.946	10045	12.126 ng/ml
10)	Aroclor 1221 (2)	0.000	0	N.D. ng/ml
11)	Aroclor 1221 (3)	5.148	8553	4.825 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.148	8553	6.106 ng/ml
14)	Aroclor 1232 (2)	5.911	8061	3.776 ng/ml
15)	Aroclor 1232 (3)	6.013	8182	7.389 ng/ml
16)	Aroclor 1232 (4)	6.157	11836	15.652 ng/ml
17)	Aroclor 1232 (5)	6.376	11224	10.799 ng/ml
18)	Aroclor 1232 (6)	6.501	10169	11.952 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.507	5294	2.680 ng/ml
21)	Aroclor 1242 (2)	5.911	8061	1.993 ng/ml
22)	Aroclor 1242 (3)	6.013	8182	3.815 ng/ml
23)	Aroclor 1242 (4)	6.157	11836	7.353 ng/ml
24)	Aroclor 1242 (5)	6.376	11224	5.076 ng/ml
25)	Aroclor 1242 (6)	6.501	10169	5.454 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.911	8061	3.443 ng/ml
28)	Aroclor 1248 (2)	6.157	11836	4.132 ng/ml
29)	Aroclor 1248 (3)	6.376	11224	3.270 ng/ml
30)	Aroclor 1248 (4)	6.692	78867	20.321 ng/ml
31)	Aroclor 1248 (5)	6.692	78867	18.711 ng/ml
32)	Aroclor 1248 (6)	7.184	44320	19.641 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.692	78867	18.412 ng/ml
35)	Aroclor 1254 (2)	6.817	33748	6.253 ng/ml
36)	Aroclor 1254 (3)	7.184	44320	5.594 ng/ml
37)	Aroclor 1254 (4)	7.350	40941	7.756 ng/ml
38)	Aroclor 1254 (5)	7.732	40601	7.607 ng/ml
39)	Aroclor 1254 (6)	8.018	12897	7.157 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.306	22011	4.009 ng/ml
42)	Aroclor 1260 (2)	7.440	23550	3.419 ng/ml
43)	Aroclor 1260 (3)	7.991	4722	0.920 ng/ml
44)	Aroclor 1260 (4)	8.185	2284	0.183 ng/ml
45)	Aroclor 1260 (5)	8.460	10784	1.307 ng/ml
46)	Aroclor 1260 (6)	8.873	5919	1.735 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Data Path : K:\DATA\9E30034\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 5:07 pm
Operator : MJB / KAK
Sample : 9051305-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:05:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

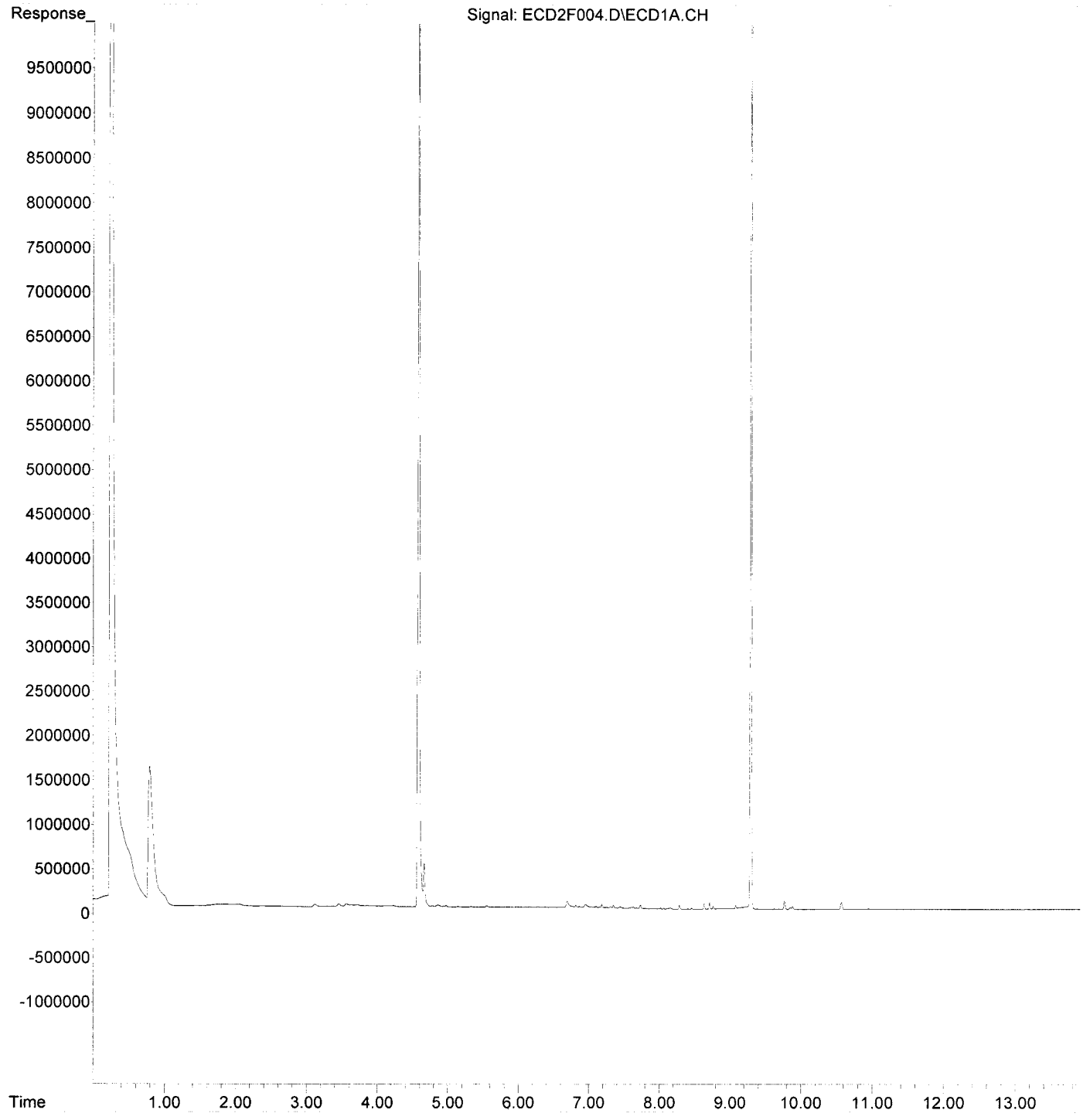
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.440	23550	4.269 ng/ml
49)	Aroclor 1262 (2)	7.732	40601	5.399 ng/ml
50)	Aroclor 1262 (3)	7.991	4722	0.732 ng/ml
51)	Aroclor 1262 (4)	8.185	2284	0.161 ng/ml
52)	Aroclor 1262 (5)	8.460	10784	1.259 ng/ml
53)	Aroclor 1262 (6)	8.873	5919	1.243 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.991	4722	1.416 ng/ml
56)	Aroclor 1268 (2)	8.409	2727	0.172 ng/ml
57)	Aroclor 1268 (3)	8.460	10784	0.801 ng/ml
58)	Aroclor 1268 (4)	8.635	64077	5.394 ng/ml
59)	Aroclor 1268 (5)	8.873	5919	1.189 ng/ml
60)	Aroclor 1268 (6)	9.081	41585	1.207 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\9E30034\
Data File : ECD2F004.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 5:07 pm
Operator : MJB / KAK
Sample : 9051305-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:05:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 5:25 pm
Operator : MJB / KAK
Sample : 9051305-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:05:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.579	12154243	210.240	ng/ml
62) S	DCBP (S)	9.295	15621582	214.541	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.504	2349347	878.711	ng/ml
3)	Aroclor 1016 (2)	5.913	5328798	1006.903	ng/ml
4)	Aroclor 1016 (3)	5.997	2591208	892.267	ng/ml
5)	Aroclor 1016 (4)	6.158	2080497	870.106	ng/ml
6)	Aroclor 1016 (5)	6.377	2526636	861.860	ng/ml
7)	Aroclor 1016 (6)	6.501	1713245	823.061	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	4.941	238770	288.224	ng/ml
10)	Aroclor 1221 (2)	5.060	246730	454.189	ng/ml
11)	Aroclor 1221 (3)	5.140	1224833	690.934	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.140	1224833	874.392	ng/ml
14)	Aroclor 1232 (2)	5.913	5328798	2495.980	ng/ml
15)	Aroclor 1232 (3)	5.997	2591208	2340.128	ng/ml
16)	Aroclor 1232 (4)	6.158	2080497	2751.232	ng/ml
17)	Aroclor 1232 (5)	6.377	2526636	2430.997	ng/ml
18)	Aroclor 1232 (6)	6.501	1713245	2013.704	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.504	2349347	1189.330	ng/ml
21)	Aroclor 1242 (2)	5.913	5328798	1317.372	ng/ml
22)	Aroclor 1242 (3)	5.997	2591208	1208.249	ng/ml
23)	Aroclor 1242 (4)	6.158	2080497	1292.530	ng/ml
24)	Aroclor 1242 (5)	6.377	2526636	1142.601	ng/ml
25)	Aroclor 1242 (6)	6.501	1713245	918.847	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	5.913	5328798	2275.787	ng/ml
28)	Aroclor 1248 (2)	6.158	2080497	726.237	ng/ml
29)	Aroclor 1248 (3)	6.377	2526636	736.190	ng/ml
30)	Aroclor 1248 (4)	6.670	551861	142.195	ng/ml
31)	Aroclor 1248 (5)	6.705	1851295	439.223	ng/ml
32)	Aroclor 1248 (6)	7.192	3593984	1592.729	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.705	1851295	432.194	ng/ml
35)	Aroclor 1254 (2)	6.817	1944423	360.285	ng/ml
36)	Aroclor 1254 (3)	7.192	3593984	453.654	ng/ml
37)	Aroclor 1254 (4)	7.351	728435	137.996	ng/ml
38)	Aroclor 1254 (5)	7.731	5356927	1003.726	ng/ml
39)	Aroclor 1254 (6)	8.018	559839	310.686	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.305	5094314	927.916	ng/ml
42)	Aroclor 1260 (2)	7.441	6575068	954.594	ng/ml
43)	Aroclor 1260 (3)	7.993	4816402	938.171	ng/ml
44)	Aroclor 1260 (4)	8.165	11970219	960.919	ng/ml
45)	Aroclor 1260 (5)	8.460	7585992	919.734	ng/ml
46)	Aroclor 1260 (6)	8.847	3465199	1015.569	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

888.82

952.62

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 5:25 pm
Operator : MJB / KAK
Sample : 9051305-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:05:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.441	6575068	1191.789	ng/ml
49)	Aroclor 1262 (2)	7.763	4997222	664.468	ng/ml
50)	Aroclor 1262 (3)	7.993	4816402	746.578	ng/ml
51)	Aroclor 1262 (4)	8.165	11970219	843.036	ng/ml
52)	Aroclor 1262 (5)	8.460	7585992	885.548	ng/ml
53)	Aroclor 1262 (6)	8.847	3465199	727.877	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	7.993	4816402	1444.615	ng/ml
56)	Aroclor 1268 (2)	8.409	2736001	172.811	ng/ml
57)	Aroclor 1268 (3)	8.460	7585992	563.164	ng/ml
58)	Aroclor 1268 (4)	8.632	302561	25.470	ng/ml
59)	Aroclor 1268 (5)	8.847	3465199	695.972	ng/ml
60)	Aroclor 1268 (6)	9.081	785670	22.800	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\9E30034\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:06 pm
Operator : MJB / KAK
Sample : 9E30034-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:06:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.580	16348541	282.792	ng/ml	
62) S	DCBP (S)	9.295	19584933	268.973	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.504	1407114	526.294	ng/ml	
3)	Aroclor 1016 (2)	5.913	2962553	559.789	ng/ml	
4)	Aroclor 1016 (3)	5.997	1496782	515.408	ng/ml	513.26
5)	Aroclor 1016 (4)	6.159	1139639	476.620	ng/ml	
6)	Aroclor 1016 (5)	6.378	1449480	494.431	ng/ml	
7)	Aroclor 1016 (6)	6.502	1055434	507.042	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	4.942	149881	180.924	ng/ml	
10)	Aroclor 1221 (2)	5.061	154747	284.863	ng/ml	
11)	Aroclor 1221 (3)	5.139	755965	426.443	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.139	755965	539.673	ng/ml	
14)	Aroclor 1232 (2)	5.913	2962553	1387.643	ng/ml	
15)	Aroclor 1232 (3)	5.997	1496782	1351.748	ng/ml	
16)	Aroclor 1232 (4)	6.159	1139639	1507.049	ng/ml	
17)	Aroclor 1232 (5)	6.378	1449480	1394.614	ng/ml	
18)	Aroclor 1232 (6)	6.502	1055434	1240.530	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.504	1407114	712.336	ng/ml	
21)	Aroclor 1242 (2)	5.913	2962553	732.395	ng/ml	
22)	Aroclor 1242 (3)	5.997	1496782	697.931	ng/ml	
23)	Aroclor 1242 (4)	6.159	1139639	708.012	ng/ml	
24)	Aroclor 1242 (5)	6.378	1449480	655.487	ng/ml	
25)	Aroclor 1242 (6)	6.502	1055434	566.050	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	5.913	2962553	1265.227	ng/ml	
28)	Aroclor 1248 (2)	6.159	1139639	397.812	ng/ml	
29)	Aroclor 1248 (3)	6.378	1449480	422.338	ng/ml	
30)	Aroclor 1248 (4)	6.672	305167	78.631	ng/ml	
31)	Aroclor 1248 (5)	6.705	1046604	248.309	ng/ml	
32)	Aroclor 1248 (6)	7.193	1902037	842.917	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.705	1046604	244.335	ng/ml	
35)	Aroclor 1254 (2)	6.818	1044852	193.602	ng/ml	
36)	Aroclor 1254 (3)	7.193	1902037	240.086	ng/ml	
37)	Aroclor 1254 (4)	7.351	322660	61.125	ng/ml	
38)	Aroclor 1254 (5)	7.732	2744523	514.241	ng/ml	
39)	Aroclor 1254 (6)	8.018	314396	174.476	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.306	2766135	503.844	ng/ml	
42)	Aroclor 1260 (2)	7.441	3434555	498.642	ng/ml	
43)	Aroclor 1260 (3)	7.992	2491925	485.394	ng/ml	501.52
44)	Aroclor 1260 (4)	8.165	6383675	512.455	ng/ml	
45)	Aroclor 1260 (5)	8.460	4149056	503.036	ng/ml	
46)	Aroclor 1260 (6)	8.847	1725696	505.761	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:06 pm
Operator : MJB / KAK
Sample : 9E30034-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:06:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

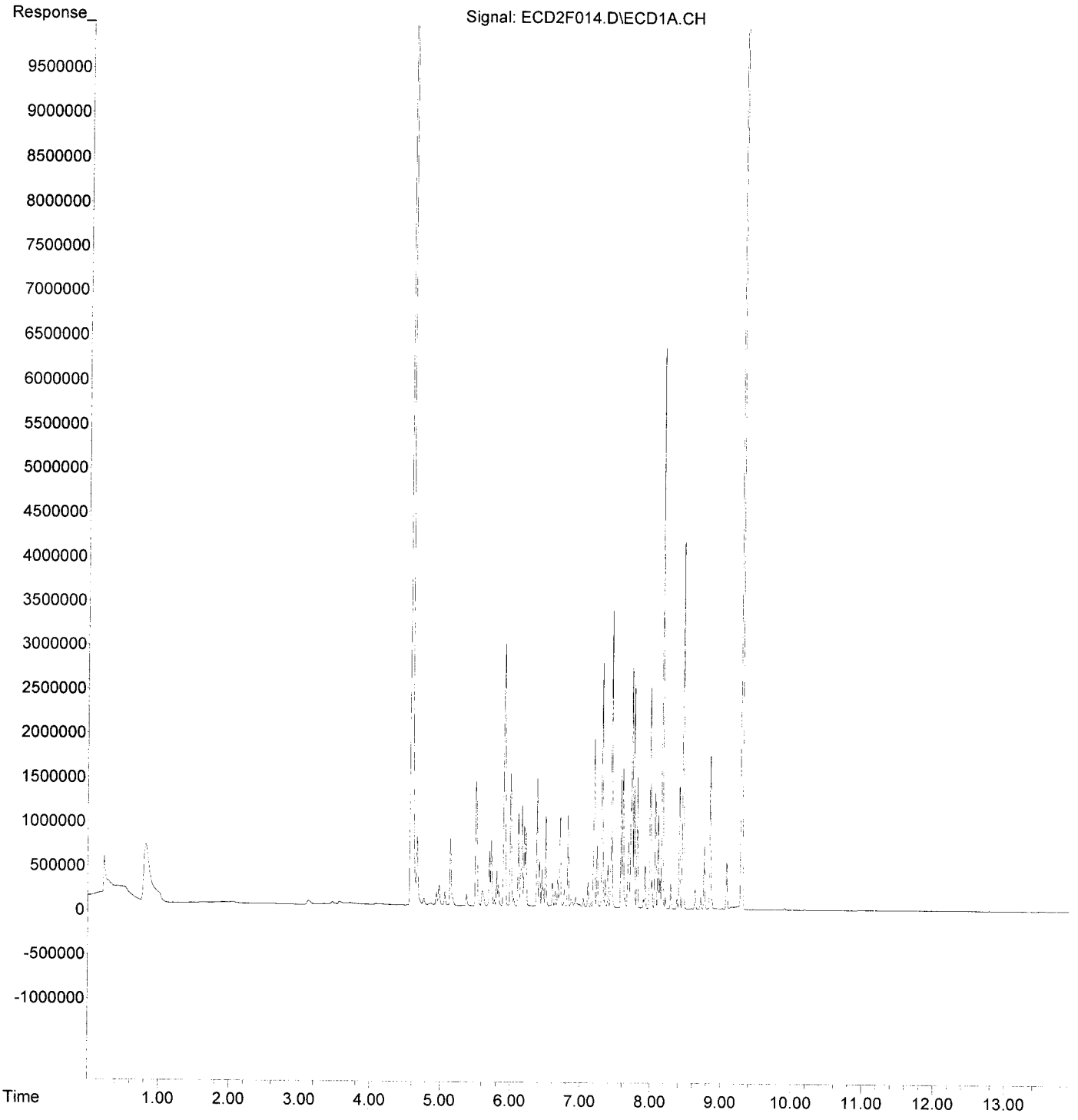
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.441	3434555	622.543	ng/ml
49)	Aroclor 1262 (2)	7.763	2546230	338.566	ng/ml
50)	Aroclor 1262 (3)	7.992	2491925	386.267	ng/ml
51)	Aroclor 1262 (4)	8.165	6383675	449.588	ng/ml
52)	Aroclor 1262 (5)	8.460	4149056	484.339	ng/ml
53)	Aroclor 1262 (6)	8.847	1725696	362.488	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	7.992	2491925	747.420	ng/ml
56)	Aroclor 1268 (2)	8.409	1419527	89.660	ng/ml
57)	Aroclor 1268 (3)	8.460	4149056	308.015	ng/ml
58)	Aroclor 1268 (4)	8.634	213978	18.013	ng/ml
59)	Aroclor 1268 (5)	8.847	1725696	346.599	ng/ml
60)	Aroclor 1268 (6)	9.082	522726	15.169	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\9E30034\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:06 pm
Operator : MJB / KAK
Sample : 9E30034-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:06:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:24 pm
Operator : MJB / KAK
Sample : 9E30034-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:07:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	4.579	6455927	111.673	ng/ml
62)	S	DCBP (S)	9.294	7387413	101.456	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	5.506	5016	1.876	ng/ml
3)		Aroclor 1016 (2)	5.928	8645	1.634	ng/ml
4)		Aroclor 1016 (3)	6.002	7842	2.700	ng/ml
5)		Aroclor 1016 (4)	6.163	6999	2.927	ng/ml
6)		Aroclor 1016 (5)	6.380	8071	2.753	ng/ml
7)		Aroclor 1016 (6)	6.505	8133	3.907	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	4.940	11465	13.840	ng/ml
10)		Aroclor 1221 (2)	5.066	3215	5.918	ng/ml
11)		Aroclor 1221 (3)	5.142	7707	4.347	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.142	7707	5.502	ng/ml
14)		Aroclor 1232 (2)	5.928	8645	4.049	ng/ml
15)		Aroclor 1232 (3)	6.002	7842	7.083	ng/ml
16)		Aroclor 1232 (4)	6.163	6999	9.255	ng/ml
17)		Aroclor 1232 (5)	6.380	8071	7.765	ng/ml
18)		Aroclor 1232 (6)	6.505	8133	9.559	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	5.506	5016	2.539	ng/ml
21)		Aroclor 1242 (2)	5.928	8645	2.137	ng/ml
22)		Aroclor 1242 (3)	6.002	7842	3.657	ng/ml
23)		Aroclor 1242 (4)	6.163	6999	4.348	ng/ml
24)		Aroclor 1242 (5)	6.380	8071	3.650	ng/ml
25)		Aroclor 1242 (6)	6.505	8133	4.362	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	5.928	8645	3.692	ng/ml
28)		Aroclor 1248 (2)	6.163	6999	2.443	ng/ml
29)		Aroclor 1248 (3)	6.380	8071	2.352	ng/ml
30)		Aroclor 1248 (4)	6.692	73177	18.855	ng/ml
31)		Aroclor 1248 (5)	6.692	73177	17.361	ng/ml
32)		Aroclor 1248 (6)	7.186	13380	5.930	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	6.692	73177	17.084	ng/ml
35)		Aroclor 1254 (2)	6.820	16303	3.021	ng/ml
36)		Aroclor 1254 (3)	7.186	13380	1.689	ng/ml
37)		Aroclor 1254 (4)	7.351	11602	2.198	ng/ml
38)		Aroclor 1254 (5)	7.736	12552	2.352	ng/ml
39)		Aroclor 1254 (6)	8.018	3130	1.737	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	7.306	10475	1.908	ng/ml
42)		Aroclor 1260 (2)	7.442	9366	1.360	ng/ml
43)		Aroclor 1260 (3)	7.989	3134	0.610	ng/ml
44)		Aroclor 1260 (4)	8.154	9661	0.776	ng/ml
45)		Aroclor 1260 (5)	8.461	4195	0.509	ng/ml
46)		Aroclor 1260 (6)	8.844	2525	0.740	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:24 pm
Operator : MJB / KAK
Sample : 9E30034-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:07:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

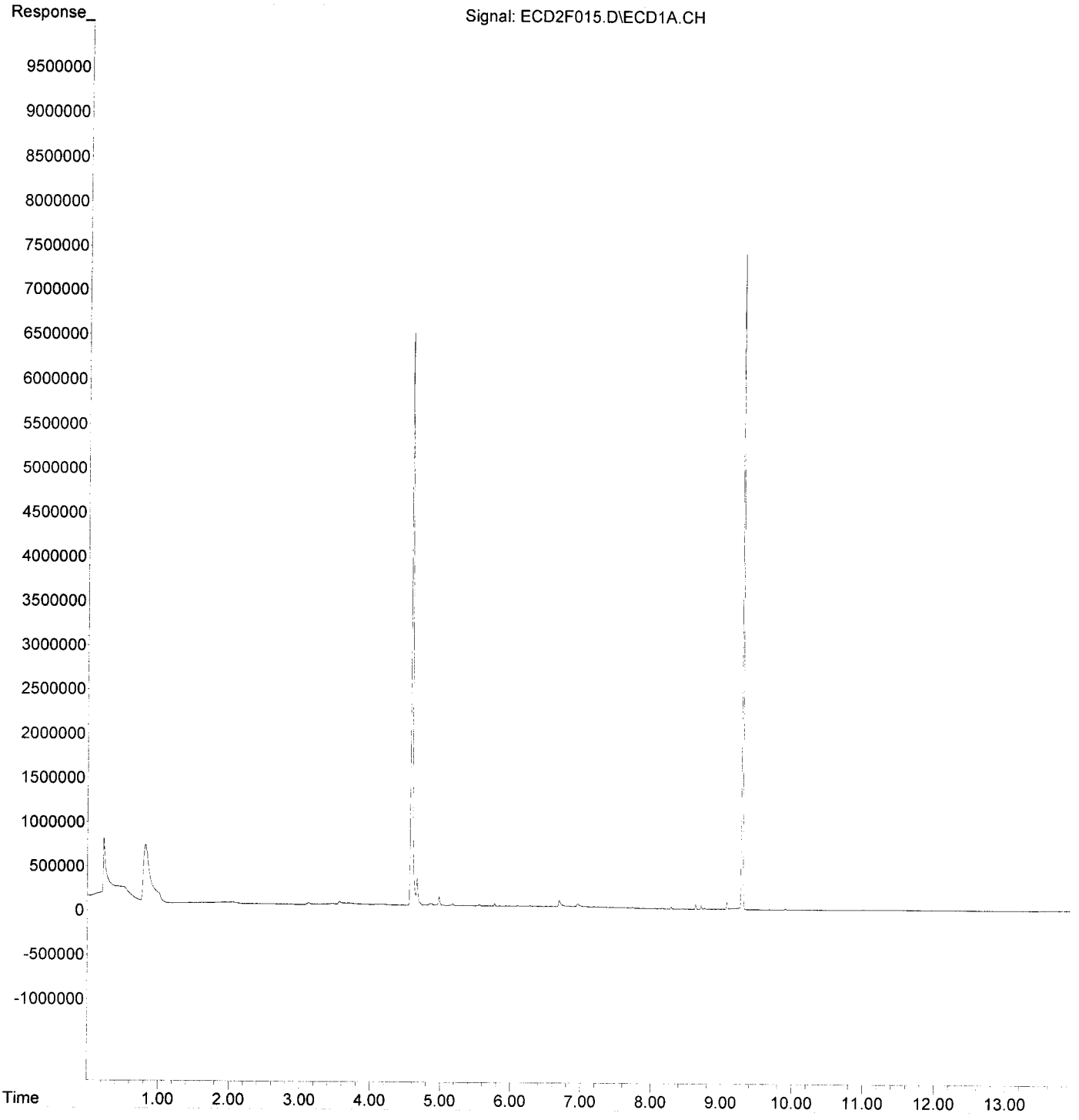
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.442	9366	1.698 ng/ml
49)	Aroclor 1262 (2)	7.736	12552	1.669 ng/ml
50)	Aroclor 1262 (3)	7.989	3134	0.486 ng/ml
51)	Aroclor 1262 (4)	8.154	9661	0.680 ng/ml
52)	Aroclor 1262 (5)	8.461	4195	0.490 ng/ml
53)	Aroclor 1262 (6)	8.844	2525	0.530 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.989	3134	0.940 ng/ml
56)	Aroclor 1268 (2)	8.410	1249	0.079 ng/ml
57)	Aroclor 1268 (3)	8.461	4195	0.311 ng/ml
58)	Aroclor 1268 (4)	8.635	50217	4.227 ng/ml
59)	Aroclor 1268 (5)	8.844	2525	0.507 ng/ml
60)	Aroclor 1268 (6)	9.081	79344	2.303 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\9E30034\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 8:24 pm
Operator : MJB / KAK
Sample : 9E30034-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:07:05 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 11:05 pm
Operator : MJB / KAK
Sample : A9E0766-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:08:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.579	12070130	208.785 ng/ml
62) S	DCBP (S)	9.293	17004281	233.531 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.513	3267	1.222 ng/ml
3)	Aroclor 1016 (2)	5.928	4588	0.867 ng/ml
4)	Aroclor 1016 (3)	5.981	5888	2.027 ng/ml
5)	Aroclor 1016 (4)	6.157	7347	3.073 ng/ml
6)	Aroclor 1016 (5)	6.375	5460	1.862 ng/ml
7)	Aroclor 1016 (6)	6.499	5801	2.787 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.942	8548	10.318 ng/ml
10)	Aroclor 1221 (2)	5.060	1398	2.574 ng/ml
11)	Aroclor 1221 (3)	5.151	8932	5.039 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.151	8932	6.377 ng/ml
14)	Aroclor 1232 (2)	5.928	4588	2.149 ng/ml
15)	Aroclor 1232 (3)	5.981	5888	5.317 ng/ml
16)	Aroclor 1232 (4)	6.157	7347	9.715 ng/ml
17)	Aroclor 1232 (5)	6.375	5460	5.253 ng/ml
18)	Aroclor 1232 (6)	6.499	5801	6.819 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.513	3267	1.654 ng/ml
21)	Aroclor 1242 (2)	5.928	4588	1.134 ng/ml
22)	Aroclor 1242 (3)	5.981	5888	2.745 ng/ml
23)	Aroclor 1242 (4)	6.157	7347	4.564 ng/ml
24)	Aroclor 1242 (5)	6.375	5460	2.469 ng/ml
25)	Aroclor 1242 (6)	6.499	5801	3.111 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.928	4588	1.959 ng/ml
28)	Aroclor 1248 (2)	6.157	7347	2.564 ng/ml
29)	Aroclor 1248 (3)	6.375	5460	1.591 ng/ml
30)	Aroclor 1248 (4)	6.692	60697	15.639 ng/ml
31)	Aroclor 1248 (5)	6.692	60697	14.400 ng/ml
32)	Aroclor 1248 (6)	7.185	26176	11.600 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.692	60697	14.170 ng/ml
35)	Aroclor 1254 (2)	6.817	22111	4.097 ng/ml
36)	Aroclor 1254 (3)	7.185	26176	3.304 ng/ml
37)	Aroclor 1254 (4)	7.350	32295	6.118 ng/ml
38)	Aroclor 1254 (5)	7.734	28847	5.405 ng/ml
39)	Aroclor 1254 (6)	8.017	8306	4.609 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.306	14891	2.712 ng/ml
42)	Aroclor 1260 (2)	7.440	16511	2.397 ng/ml
43)	Aroclor 1260 (3)	7.989	4523	0.881 ng/ml
44)	Aroclor 1260 (4)	8.189	5174	0.415 ng/ml
45)	Aroclor 1260 (5)	8.459	8855	1.074 ng/ml
46)	Aroclor 1260 (6)	8.871	7002	2.052 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 11:05 pm
Operator : MJB / KAK
Sample : A9E0766-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:08:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

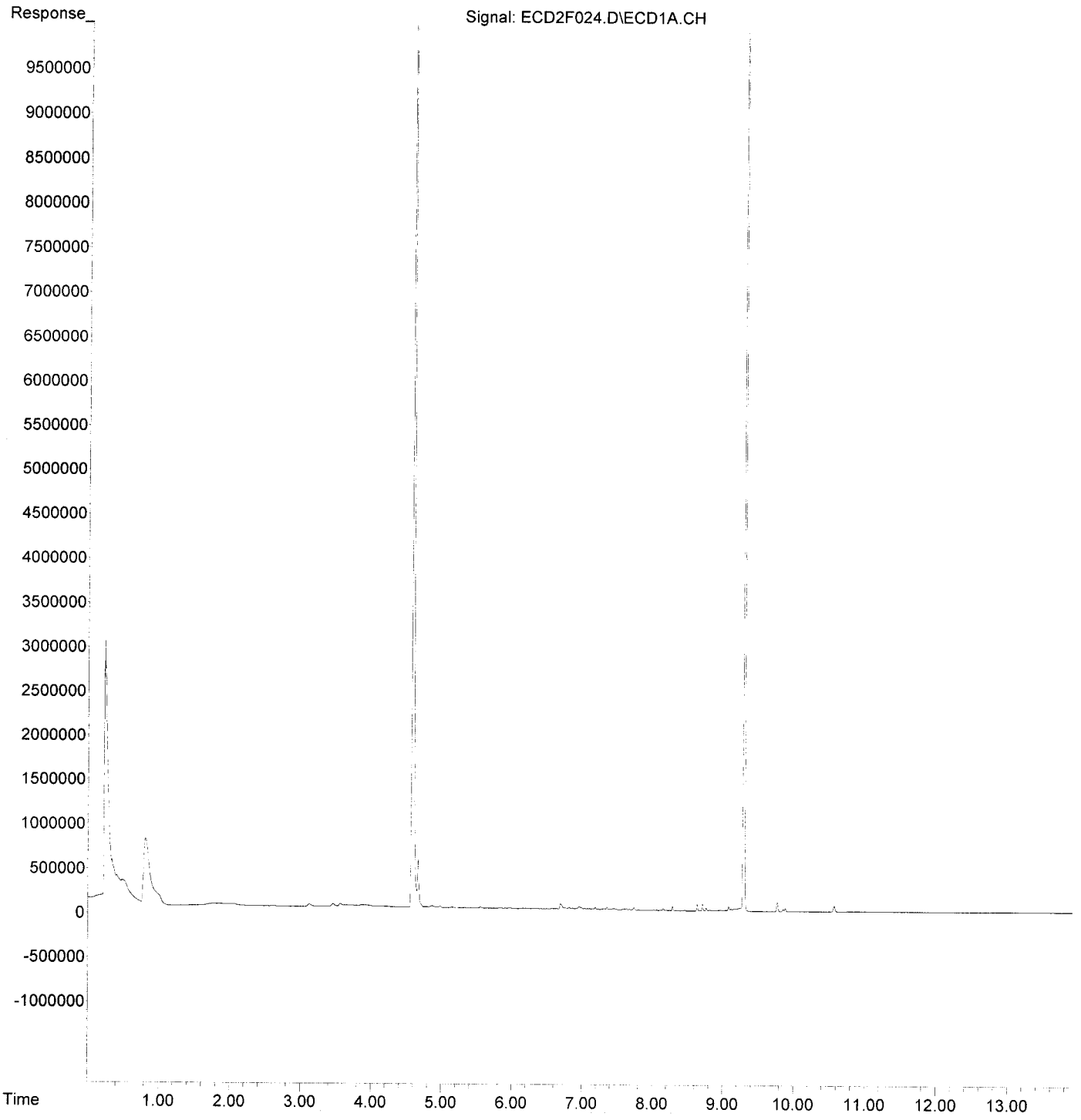
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.440	16511	2.993 ng/ml
49)	Aroclor 1262 (2)	7.734	28847	3.836 ng/ml
50)	Aroclor 1262 (3)	7.989	4523	0.701 ng/ml
51)	Aroclor 1262 (4)	8.189	5174	0.364 ng/ml
52)	Aroclor 1262 (5)	8.459	8855	1.034 ng/ml
53)	Aroclor 1262 (6)	8.871	7002	1.471 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.989	4523	1.357 ng/ml
56)	Aroclor 1268 (2)	8.409	2645	0.167 ng/ml
57)	Aroclor 1268 (3)	8.459	8855	0.657 ng/ml
58)	Aroclor 1268 (4)	8.634	73853	6.217 ng/ml
59)	Aroclor 1268 (5)	8.871	7002	1.406 ng/ml
60)	Aroclor 1268 (6)	9.081	52193	1.515 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\9E30034\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 May 2019 11:05 pm
Operator : MJB / KAK
Sample : A9E0766-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:08:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F030.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30034-CCV3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
1) S	TCMX (S)	4.577	16537664	286.063 ng/ml	
62) S	DCBP (S)	9.293	20596656	282.867 ng/ml	
	Target Compounds				
2)	Aroclor 1016 (1)	5.503	1500510	R#1 561.226 ng/ml	
3)	Aroclor 1016 (2)	5.911	3205724	605.738 ng/ml	
4)	Aroclor 1016 (3)	5.996	1591807	548.129 ng/ml	546.40
5)	Aroclor 1016 (4)	6.158	1196896	500.566 ng/ml	
6)	Aroclor 1016 (5)	6.377	1532663	522.806 ng/ml	
7)	Aroclor 1016 (6)	6.501	1123884	539.926 ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml	
9)	Aroclor 1221 (1)	4.940	151035	182.318 ng/ml	
10)	Aroclor 1221 (2)	5.059	164507	302.830 ng/ml	
11)	Aroclor 1221 (3)	5.139	783281	441.852 ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml	
13)	Aroclor 1232 (1)	5.139	783281	559.174 ng/ml	
14)	Aroclor 1232 (2)	5.911	3205724	1501.544 ng/ml	
15)	Aroclor 1232 (3)	5.996	1591807	1437.566 ng/ml	
16)	Aroclor 1232 (4)	6.158	1196896	1582.766 ng/ml	
17)	Aroclor 1232 (5)	6.377	1532663	1474.648 ng/ml	
18)	Aroclor 1232 (6)	6.501	1123884	1320.985 ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml	
20)	Aroclor 1242 (1)	5.503	1500510	759.616 ng/ml	
21)	Aroclor 1242 (2)	5.911	3205724	792.511 ng/ml	
22)	Aroclor 1242 (3)	5.996	1591807	742.240 ng/ml	
23)	Aroclor 1242 (4)	6.158	1196896	743.584 ng/ml	
24)	Aroclor 1242 (5)	6.377	1532663	693.105 ng/ml	
25)	Aroclor 1242 (6)	6.501	1123884	602.761 ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml	
27)	Aroclor 1248 (1)	5.911	3205724	1369.079 ng/ml	
28)	Aroclor 1248 (2)	6.158	1196896	417.799 ng/ml	
29)	Aroclor 1248 (3)	6.377	1532663	446.575 ng/ml	
30)	Aroclor 1248 (4)	6.670	295635	76.174 ng/ml	
31)	Aroclor 1248 (5)	6.704	1059055	251.263 ng/ml	
32)	Aroclor 1248 (6)	7.191	1994594	883.935 ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml	
34)	Aroclor 1254 (1)	6.704	1059055	247.242 ng/ml	
35)	Aroclor 1254 (2)	6.817	1075527	199.286 ng/ml	
36)	Aroclor 1254 (3)	7.191	1994594	251.769 ng/ml	
37)	Aroclor 1254 (4)	7.350	334252	63.321 ng/ml	
38)	Aroclor 1254 (5)	7.730	2905687	544.438 ng/ml	
39)	Aroclor 1254 (6)	8.018	314547	174.560 ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml	
41)	Aroclor 1260 (1)	7.304	2881679	524.890 ng/ml	
42)	Aroclor 1260 (2)	7.440	3636701	527.990 ng/ml	
43)	Aroclor 1260 (3)	7.992	2702734	526.456 ng/ml	525.12
44)	Aroclor 1260 (4)	8.164	6466277	519.086 ng/ml	
45)	Aroclor 1260 (5)	8.459	4310286	522.584 ng/ml	
46)	Aroclor 1260 (6)	8.847	1807351	529.692 ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F030.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30034-CCV3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

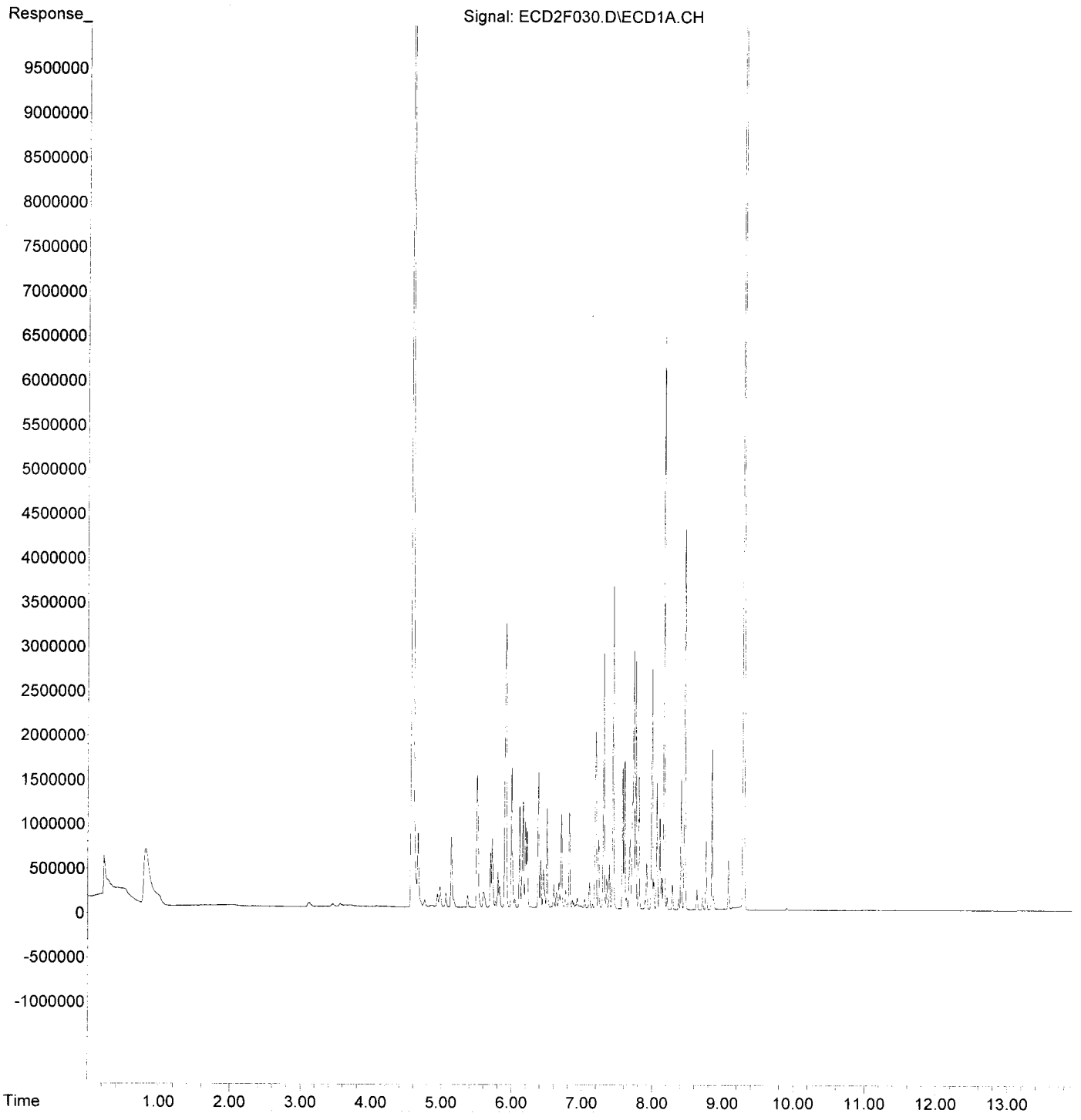
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.440	3636701	659.184 ng/ml
49)	Aroclor 1262 (2)	7.761	2788676	370.803 ng/ml
50)	Aroclor 1262 (3)	7.992	2702734	418.944 ng/ml
51)	Aroclor 1262 (4)	8.164	6466277	455.405 ng/ml
52)	Aroclor 1262 (5)	8.459	4310286	503.160 ng/ml
53)	Aroclor 1262 (6)	8.847	1807351	379.640 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.992	2702734	810.649 ng/ml
56)	Aroclor 1268 (2)	8.408	1482356	93.628 ng/ml
57)	Aroclor 1268 (3)	8.459	4310286	319.984 ng/ml
58)	Aroclor 1268 (4)	8.633	222881	18.762 ng/ml
59)	Aroclor 1268 (5)	8.847	1807351	362.999 ng/ml
60)	Aroclor 1268 (6)	9.081	558177	16.198 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\9E30034\
Data File : ECD2F030.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30034-CCV3
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F031.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30034-CCB3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.579	6758935	116.914 ng/ml
62) S	DCBP (S)	9.292	8229347	113.019 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.504	4269	1.597 ng/ml
3)	Aroclor 1016 (2)	5.927	7672	1.450 ng/ml
4)	Aroclor 1016 (3)	6.002	6729	2.317 ng/ml
5)	Aroclor 1016 (4)	6.162	5459	2.283 ng/ml
6)	Aroclor 1016 (5)	6.381	6750	2.303 ng/ml
7)	Aroclor 1016 (6)	6.504	6573	3.158 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.938	10334	12.474 ng/ml
10)	Aroclor 1221 (2)	5.071	2614	4.812 ng/ml
11)	Aroclor 1221 (3)	5.142	7137	4.026 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.142	7137	5.095 ng/ml
14)	Aroclor 1232 (2)	5.927	7672	3.593 ng/ml
15)	Aroclor 1232 (3)	6.002	6729	6.077 ng/ml
16)	Aroclor 1232 (4)	6.162	5459	7.219 ng/ml
17)	Aroclor 1232 (5)	6.381	6750	6.495 ng/ml
18)	Aroclor 1232 (6)	6.504	6573	7.726 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.504	4269	2.161 ng/ml
21)	Aroclor 1242 (2)	5.927	7672	1.897 ng/ml
22)	Aroclor 1242 (3)	6.002	6729	3.137 ng/ml
23)	Aroclor 1242 (4)	6.162	5459	3.392 ng/ml
24)	Aroclor 1242 (5)	6.381	6750	3.053 ng/ml
25)	Aroclor 1242 (6)	6.504	6573	3.525 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.927	7672	3.276 ng/ml
28)	Aroclor 1248 (2)	6.162	5459	1.906 ng/ml
29)	Aroclor 1248 (3)	6.381	6750	1.967 ng/ml
30)	Aroclor 1248 (4)	6.691	61928	15.957 ng/ml
31)	Aroclor 1248 (5)	6.691	61928	14.692 ng/ml
32)	Aroclor 1248 (6)	7.186	9353	4.145 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.691	61928	14.457 ng/ml
35)	Aroclor 1254 (2)	6.812	14256	2.641 ng/ml
36)	Aroclor 1254 (3)	7.186	9353	1.181 ng/ml
37)	Aroclor 1254 (4)	7.355	7691	1.457 ng/ml
38)	Aroclor 1254 (5)	7.737	9338	1.750 ng/ml
39)	Aroclor 1254 (6)	8.015	1679	0.932 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.300	7746	1.411 ng/ml
42)	Aroclor 1260 (2)	7.436	6456	0.937 ng/ml
43)	Aroclor 1260 (3)	7.991	2349	0.457 ng/ml
44)	Aroclor 1260 (4)	8.153	8167	0.656 ng/ml
45)	Aroclor 1260 (5)	8.459	2951	0.358 ng/ml
46)	Aroclor 1260 (6)	8.848	2121	0.622 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30034\
Data File : ECD2F031.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30034-CCB3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

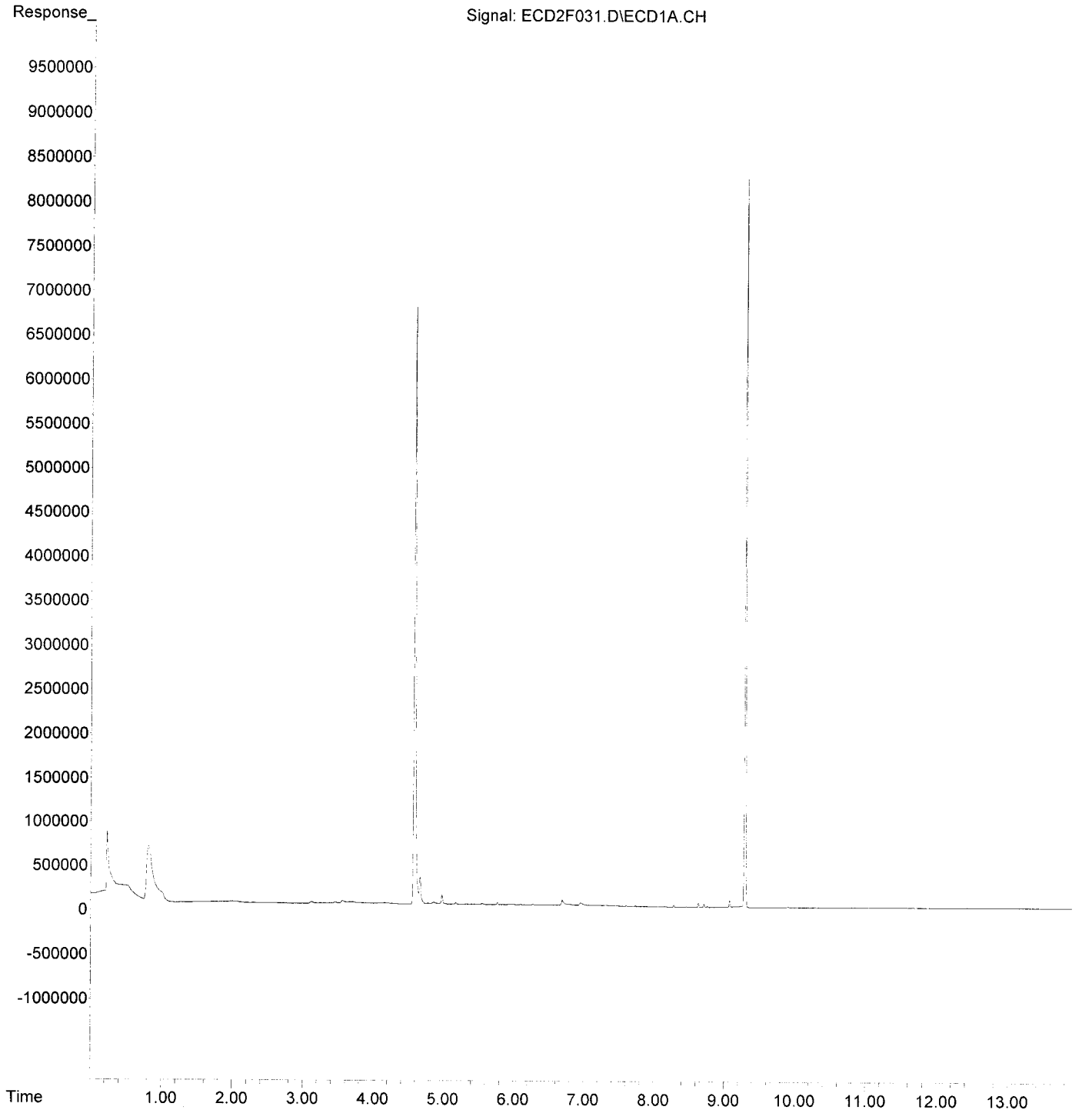
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.436	6456	1.170 ng/ml
49)	Aroclor 1262 (2)	7.757	3299	0.439 ng/ml
50)	Aroclor 1262 (3)	7.991	2349	0.364 ng/ml
51)	Aroclor 1262 (4)	8.153	8167	0.575 ng/ml
52)	Aroclor 1262 (5)	8.459	2951	0.344 ng/ml
53)	Aroclor 1262 (6)	8.848	2121	0.445 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.991	2349	0.704 ng/ml
56)	Aroclor 1268 (2)	8.408	1045	0.066 ng/ml
57)	Aroclor 1268 (3)	8.459	2951	0.219 ng/ml
58)	Aroclor 1268 (4)	8.634	46984	3.955 ng/ml
59)	Aroclor 1268 (5)	8.848	2121	0.426 ng/ml
60)	Aroclor 1268 (6)	9.109	6676	0.194 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\9E30034\
Data File : ECD2F031.D
Signal(s) : ECD1A.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30034-CCB3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: May 31 10:09:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Sequence 9E30035 (A9E0766-03,04)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E30035**	Instrument:	**DUALECD2R**
Date:	**05/30/19 16:10**	Calibration:	**A9E1302**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E30035-CCV1	Sediment	QC	QC				A19E079
2	9E30035-CCB1	Sediment	QC	QC				A19E080
3	A9E0744-13	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
4	9E30035-IBL1	Sediment	QC	QC				
5	A9E0744-14	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
6	9E30035-IBL2	Sediment	QC	QC				
7	A9E0744-15	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
8	9E30035-IBL3	Sediment	QC	QC				
9	A9E0744-16	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
10	9E30035-IBL4	Sediment	QC	QC				
11	A9E0744-17	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
12	9E30035-IBL5	Sediment	QC	QC				
13	A9E0744-18	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
14	9E30035-IBL6	Sediment	QC	QC				
15	9E30035-CCV2	Sediment	QC	QC				A19E079
16	9E30035-CCB2	Sediment	QC	QC				A19E080
17	A9E0744-19	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
18	9E30035-IBL7	Sediment	QC	QC				
19	9051305-MS1	Sediment	QC	QC		9051305		
20	9E30035-IBL8	Sediment	QC	QC				
21	9051305-MSD1	Sediment	QC	QC		9051305		
22	9E30035-IBL9	Sediment	QC	QC				
23	A9E0744-20	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/05/19	9051305		
24	9E30035-IBLA	Sediment	QC	QC				
25	A9E0766-03	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9051305		
26	9E30035-IBLB	Sediment	QC	QC				
27	A9E0766-04	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9051305		
28	9E30035-IBLC	Sediment	QC	QC				
29	9E30035-CCV3	Sediment	QC	QC				A19E079
30	9E30035-CCB3	Sediment	QC	QC				A19E080

Data Entered By: MJB 5/31/19

Comments:

Data Reviewed By: MJ 6/3/19

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.

9E30035-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	560.43
1016 (2)	529.58
1016 (3)	535.20
1016 (4)	515.40
1016 (5)	490.46
1016 (6)	481.54
Average:	**518.77**

Aroclor 1260

Peak	Initial Res
1260 (1)	520.30
1260 (2)	519.76
1260 (3)	497.93
1260 (4)	520.40
1260 (5)	529.71
1260 (6)	528.28
Average:	**519.40**

MB 5/31/19

9E30035-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	589.10
1016 (2)	553.52
1016 (3)	564.26
1016 (4)	540.10
1016 (5)	512.33
1016 (6)	514.40
Average:	**545.62**

Aroclor 1260

Peak	Initial Res
1260 (1)	529.09
1260 (2)	530.01
1260 (3)	537.23
1260 (4)	560.23
1260 (5)	566.00
1260 (6)	536.94
Average:	**543.25**

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.

9051305-MS1

Aroclor 1016

Peak	Initial Res
1016 (1)	891.00
1016 (2)	901.27
1016 (3)	838.47
1016 (4)	898.76
1016 (5)	829.60
1016 (6)	782.44
Average:	**856.92**

Aroclor 1260

Peak	Initial Res
1260 (1)	963.02
1260 (2)	999.38
1260 (3)	956.10
1260 (4)	1,066.87
1260 (5)	987.97
1260 (6)	995.30
Average:	**994.77**

MJB 5/31/19

9051305-MSD1

Aroclor 1016

Peak	Initial Res
1016 (1)	904.71
1016 (2)	933.71
1016 (3)	873.41
1016 (4)	930.81
1016 (5)	878.89
1016 (6)	828.52
Average:	**891.67**

Aroclor 1260

Peak	Initial Res
1260 (1)	930.46
1260 (2)	1,020.81
1260 (3)	1,011.22
1260 (4)	1,119.67
1260 (5)	1,040.90
1260 (6)	1,025.77
Average:	**1,024.80**

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.

9E30035-CCV3

Aroclor 1016

Peak	Initial Res
1016 (1)	613.04
1016 (2)	575.67
1016 (3)	592.65
1016 (4)	572.23
1016 (5)	529.36
1016 (6)	508.24
Average:	**565.20**

Aroclor 1260

Peak	Initial Res
1260 (1)	557.36
1260 (2)	571.64
1260 (3)	571.83
1260 (4)	595.59
1260 (5)	596.50
1260 (6)	547.65
Average:	**573.43**

MJB 5/31/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30035-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units	
	System Monitoring Compounds				
1)	S TCMX (S)	5.543	48759581	242.946 ng/ml	
62)	S DCBP (S)	10.379	37033289	270.945 ng/ml	
	Target Compounds				
2)	Aroclor 1016 (1)	6.215	3160963	560.425 ng/ml	516.77
3)	Aroclor 1016 (2)	6.703	6092270	529.584 ng/ml	
4)	Aroclor 1016 (3)	6.829	2705356	535.195 ng/ml	
5)	Aroclor 1016 (4)	6.916	2888643	515.400 ng/ml	
6)	Aroclor 1016 (5)	6.961	3221201	490.456 ng/ml	
7)	Aroclor 1016 (6)	7.085	3228093	481.536 ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml	
9)	Aroclor 1221 (1)	5.707	268242	152.142 ng/ml	
10)	Aroclor 1221 (2)	5.792	394822	237.918 ng/ml	
11)	Aroclor 1221 (3)	5.878	1928379	343.238 ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml	
13)	Aroclor 1232 (1)	5.878	1928379	423.970 ng/ml	
14)	Aroclor 1232 (2)	6.215	3160963	1129.954 ng/ml	
15)	Aroclor 1232 (3)	6.703	6092270	1155.590 ng/ml	
16)	Aroclor 1232 (4)	6.916	2888643	1389.515 ng/ml	
17)	Aroclor 1232 (5)	6.961	3221201	1352.262 ng/ml	
18)	Aroclor 1232 (6)	7.085	3228093	1305.345 ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml	
20)	Aroclor 1242 (1)	6.215	3160963	630.698 ng/ml	
21)	Aroclor 1242 (2)	6.703	6092270	627.372 ng/ml	
22)	Aroclor 1242 (3)	6.829	2705356	613.509 ng/ml	
23)	Aroclor 1242 (4)	6.916	2888643	685.468 ng/ml	
24)	Aroclor 1242 (5)	6.961	3221201	655.811 ng/ml	
25)	Aroclor 1242 (6)	7.085	3228093	627.716 ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml	
27)	Aroclor 1248 (1)	6.676	5204432	887.961 ng/ml	
28)	Aroclor 1248 (2)	6.916	2888643	376.707 ng/ml	
29)	Aroclor 1248 (3)	6.961	3221201	451.554 ng/ml	
30)	Aroclor 1248 (4)	7.085	3228093	380.826 ng/ml	
31)	Aroclor 1248 (5)	7.449	764875	69.460 ng/ml	
32)	Aroclor 1248 (6)	7.607	2747580	284.197 ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml	
34)	Aroclor 1254 (1)	7.426	2273060	207.484 ng/ml	
35)	Aroclor 1254 (2)	7.607	2747580	152.841 ng/ml	
36)	Aroclor 1254 (3)	7.916	1589750	81.261 ng/ml	
37)	Aroclor 1254 (4)	8.154	1102433	75.448 ng/ml	
38)	Aroclor 1254 (5)	8.488	8093641	547.600 ng/ml	
39)	Aroclor 1254 (6)	8.705	1313666	299.370 ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml	
41)	Aroclor 1260 (1)	8.051	6900334	520.296 ng/ml	519.40
42)	Aroclor 1260 (2)	8.257	8506711	519.756 ng/ml	
43)	Aroclor 1260 (3)	8.488	8093641	497.926 ng/ml	
44)	Aroclor 1260 (4)	8.967	14396650	520.398 ng/ml	
45)	Aroclor 1260 (5)	9.214	8314573	529.712 ng/ml	
46)	Aroclor 1260 (6)	9.753	3383256	528.284 ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30035-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

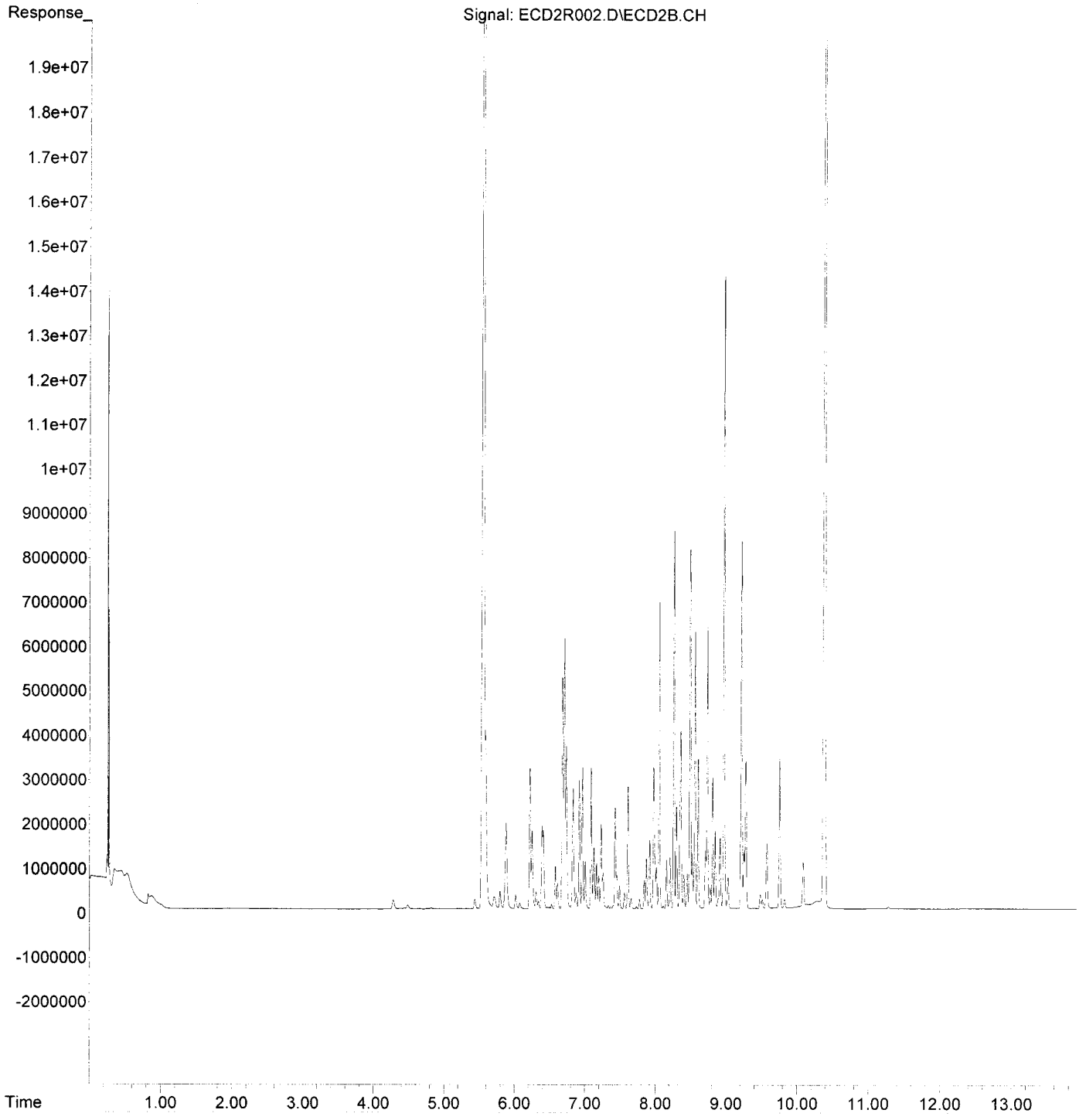
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.257	8506711	642.611	ng/ml
49)	Aroclor 1262 (2)	8.557	6218516	345.130	ng/ml
50)	Aroclor 1262 (3)	8.734	6361288	429.277	ng/ml
51)	Aroclor 1262 (4)	8.967	14396650	432.309	ng/ml
52)	Aroclor 1262 (5)	9.214	8314573	439.973	ng/ml
53)	Aroclor 1262 (6)	9.753	3383256	385.221	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.774	469467	60.289	ng/ml
56)	Aroclor 1268 (2)	9.214	8314573	229.308	ng/ml
57)	Aroclor 1268 (3)	9.275	3355358	114.341	ng/ml
58)	Aroclor 1268 (4)	9.480	324929	12.804	ng/ml
59)	Aroclor 1268 (5)	9.753	3383256	353.906	ng/ml
60)	Aroclor 1268 (6)	10.084	1040603	15.040	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\9E30035\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:31 pm
Operator : MJB / KAK
Sample : 9E30035-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30035-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:17 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.542	17321973	86.307	ng/ml
62) S	DCBP (S)	10.377	14138604	103.442	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.208	4790	0.849	ng/ml
3)	Aroclor 1016 (2)	6.714	4476	0.389	ng/ml
4)	Aroclor 1016 (3)	6.818	4080	0.807	ng/ml
5)	Aroclor 1016 (4)	6.917	6396	1.141	ng/ml
6)	Aroclor 1016 (5)	6.958	4884	0.744	ng/ml
7)	Aroclor 1016 (6)	7.082	3349	0.500	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.722	23541	13.352	ng/ml
10)	Aroclor 1221 (2)	5.791	15925	9.597	ng/ml
11)	Aroclor 1221 (3)	5.863	235913	41.991	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.863	235913	51.867	ng/ml
14)	Aroclor 1232 (2)	6.208	4790	1.712	ng/ml
15)	Aroclor 1232 (3)	6.714	4476	0.849	ng/ml
16)	Aroclor 1232 (4)	6.912	6545	3.148	ng/ml
17)	Aroclor 1232 (5)	6.958	4884	2.050	ng/ml
18)	Aroclor 1232 (6)	7.082	3349	1.354	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.208	4790	0.956	ng/ml
21)	Aroclor 1242 (2)	6.714	4476	0.461	ng/ml
22)	Aroclor 1242 (3)	6.818	4080	0.925	ng/ml
23)	Aroclor 1242 (4)	6.917	6396	1.518	ng/ml
24)	Aroclor 1242 (5)	6.958	4884	0.994	ng/ml
25)	Aroclor 1242 (6)	7.082	3349	0.651	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.680	4556	0.777	ng/ml
28)	Aroclor 1248 (2)	6.917	6396	0.834	ng/ml
29)	Aroclor 1248 (3)	6.958	4884	0.685	ng/ml
30)	Aroclor 1248 (4)	7.082	3349	0.395	ng/ml
31)	Aroclor 1248 (5)	7.444	1816	0.165	ng/ml
32)	Aroclor 1248 (6)	7.606	4196	0.434	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.421	1889	0.172	ng/ml
35)	Aroclor 1254 (2)	7.606	4196	0.233	ng/ml
36)	Aroclor 1254 (3)	7.917	3288	0.168	ng/ml
37)	Aroclor 1254 (4)	8.153	1303	0.089	ng/ml
38)	Aroclor 1254 (5)	8.492	1529	0.103	ng/ml
39)	Aroclor 1254 (6)	8.703	671	0.153	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.050	1589	0.120	ng/ml
42)	Aroclor 1260 (2)	8.259	2734	0.167	ng/ml
43)	Aroclor 1260 (3)	8.492	1529	0.094	ng/ml
44)	Aroclor 1260 (4)	8.960	3075	0.111	ng/ml
45)	Aroclor 1260 (5)	9.213	3169	0.202	ng/ml
46)	Aroclor 1260 (6)	9.758	10818	1.689	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30035-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:17 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

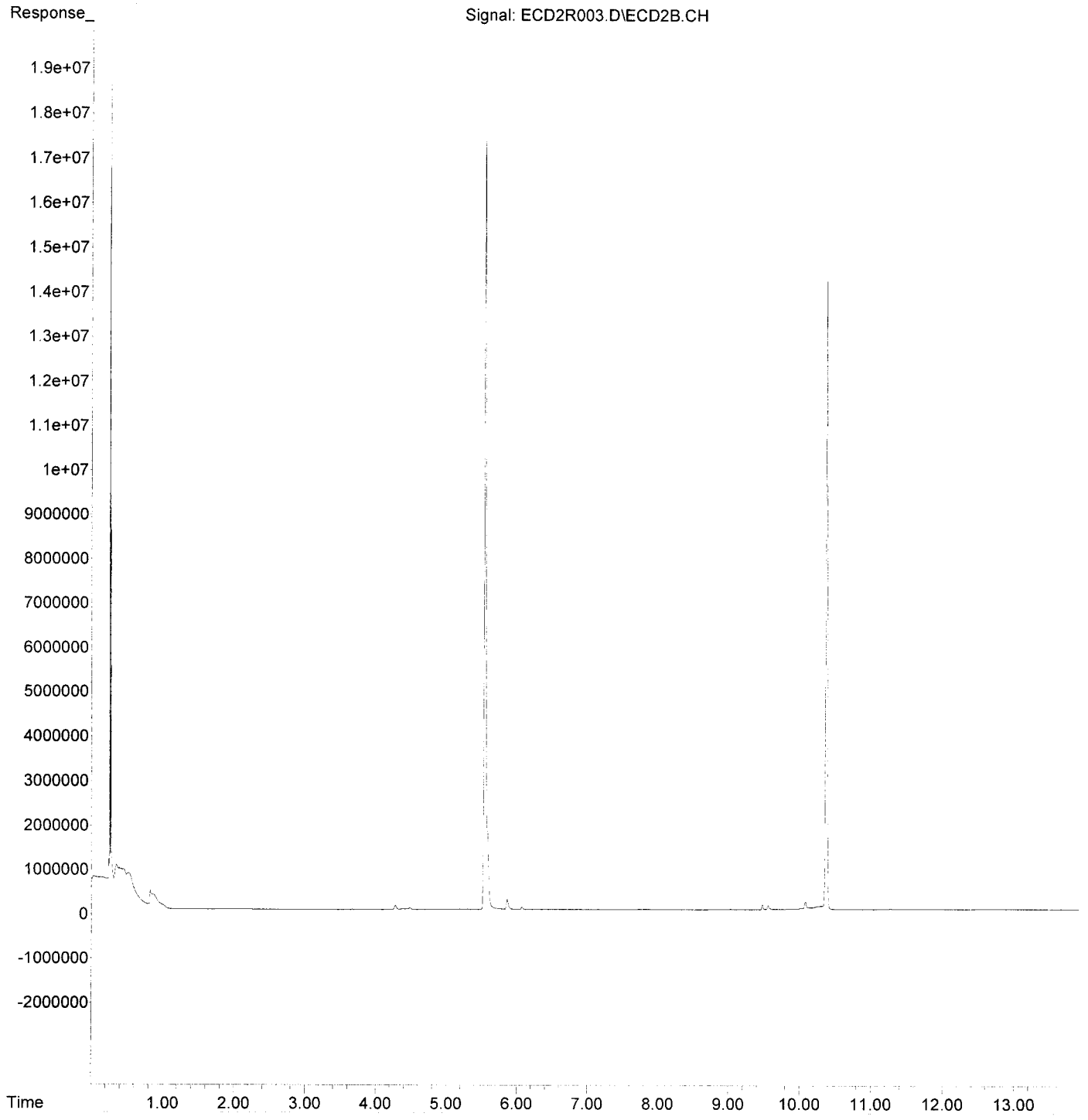
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.259	2734	0.207 ng/ml
49)	Aroclor 1262 (2)	8.562	962	0.053 ng/ml
50)	Aroclor 1262 (3)	8.734	1312	0.089 ng/ml
51)	Aroclor 1262 (4)	8.960	3075	0.092 ng/ml
52)	Aroclor 1262 (5)	9.213	3169	0.168 ng/ml
53)	Aroclor 1262 (6)	9.758	10818	1.232 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.775	1628	0.209 ng/ml
56)	Aroclor 1268 (2)	9.213	3169	0.087 ng/ml
57)	Aroclor 1268 (3)	9.277	3175	0.108 ng/ml
58)	Aroclor 1268 (4)	9.480	104674	4.125 ng/ml
59)	Aroclor 1268 (5)	9.758	10818	1.132 ng/ml
60)	Aroclor 1268 (6)	10.084	177601	2.567 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\9E30035\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 4:49 pm
Operator : MJB / KAK
Sample : 9E30035-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:11:17 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 8:42 pm
Operator : MJB / KAK
Sample : 9E30035-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.542	51172228	254.967 ng/ml
62)	S DCBP (S)	10.376	39359906	287.967 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.212	3322674	589.096 ng/ml
3)	Aroclor 1016 (2)	6.701	6367571	553.515 ng/ml
4)	Aroclor 1016 (3)	6.827	2852269	564.259 ng/ml
5)	Aroclor 1016 (4)	6.914	3027088	540.101 ng/ml
6)	Aroclor 1016 (5)	6.958	3364867	512.330 ng/ml
7)	Aroclor 1016 (6)	7.082	3448415	514.401 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.706	285022	161.660 ng/ml
10)	Aroclor 1221 (2)	5.790	411398	247.906 ng/ml
11)	Aroclor 1221 (3)	5.877	1984787	353.278 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.877	1984787	436.371 ng/ml
14)	Aroclor 1232 (2)	6.212	3322674	1187.761 ng/ml
15)	Aroclor 1232 (3)	6.701	6367571	1207.810 ng/ml
16)	Aroclor 1232 (4)	6.914	3027088	1456.111 ng/ml
17)	Aroclor 1232 (5)	6.958	3364867	1412.573 ng/ml
18)	Aroclor 1232 (6)	7.082	3448415	1394.437 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.212	3322674	662.963 ng/ml
21)	Aroclor 1242 (2)	6.701	6367571	655.722 ng/ml
22)	Aroclor 1242 (3)	6.827	2852269	646.825 ng/ml
23)	Aroclor 1242 (4)	6.914	3027088	718.321 ng/ml
24)	Aroclor 1242 (5)	6.958	3364867	685.060 ng/ml
25)	Aroclor 1242 (6)	7.082	3448415	670.558 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.674	5460239	931.606 ng/ml
28)	Aroclor 1248 (2)	6.914	3027088	394.761 ng/ml
29)	Aroclor 1248 (3)	6.958	3364867	471.693 ng/ml
30)	Aroclor 1248 (4)	7.082	3448415	406.818 ng/ml
31)	Aroclor 1248 (5)	7.446	794237	72.126 ng/ml
32)	Aroclor 1248 (6)	7.605	2945258	304.644 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.424	2349160	214.431 ng/ml
35)	Aroclor 1254 (2)	7.605	2945258	163.837 ng/ml
36)	Aroclor 1254 (3)	7.914	1571641	80.335 ng/ml
37)	Aroclor 1254 (4)	8.152	1127997	77.197 ng/ml
38)	Aroclor 1254 (5)	8.486	8732452	590.821 ng/ml
39)	Aroclor 1254 (6)	8.703	1411240	321.605 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.049	7016980	529.092 ng/ml
42)	Aroclor 1260 (2)	8.256	8674549	530.011 ng/ml
43)	Aroclor 1260 (3)	8.486	8732452	537.226 ng/ml
44)	Aroclor 1260 (4)	8.965	15498459	560.225 ng/ml
45)	Aroclor 1260 (5)	9.212	8884227	566.004 ng/ml
46)	Aroclor 1260 (6)	9.750	3438719	536.944 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

545.62

543.25

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 8:42 pm
Operator : MJB / KAK
Sample : 9E30035-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

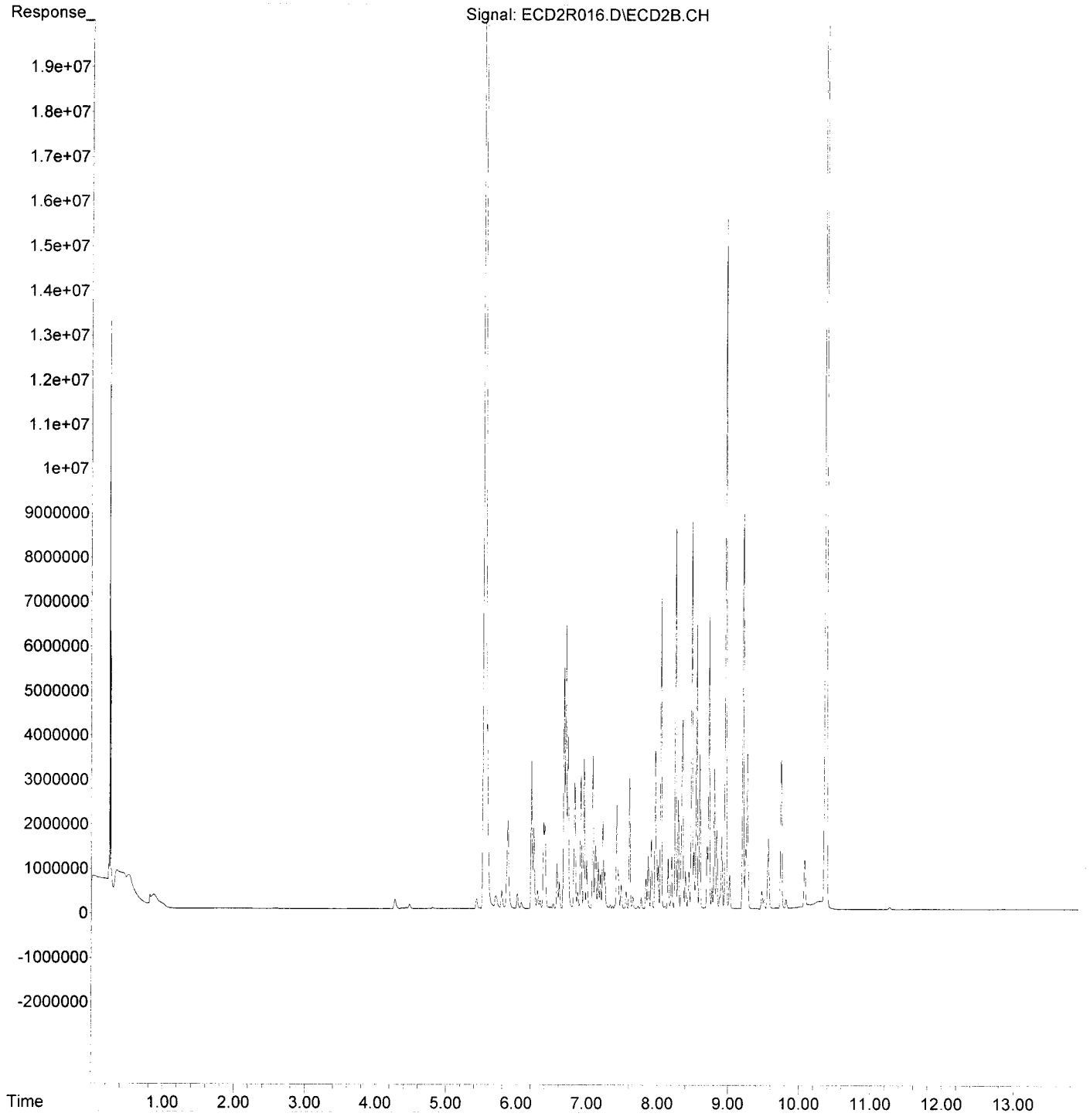
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	8674549	655.289 ng/ml
49)	Aroclor 1262 (2)	8.555	6380870	354.141 ng/ml
50)	Aroclor 1262 (3)	8.731	6626324	447.162 ng/ml
51)	Aroclor 1262 (4)	8.965	15498459	465.395 ng/ml
52)	Aroclor 1262 (5)	9.212	8884227	470.117 ng/ml
53)	Aroclor 1262 (6)	9.750	3438719	391.536 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.772	486727	62.506 ng/ml
56)	Aroclor 1268 (2)	9.212	8884227	245.018 ng/ml
57)	Aroclor 1268 (3)	9.273	3485545	118.777 ng/ml
58)	Aroclor 1268 (4)	9.478	398618	15.707 ng/ml
59)	Aroclor 1268 (5)	9.750	3438719	359.708 ng/ml
60)	Aroclor 1268 (6)	10.081	1091621	15.778 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\9E30035\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 8:42 pm
Operator : MJB / KAK
Sample : 9E30035-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:13 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 9:00 pm
Operator : MJB / KAK
Sample : 9E30035-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:31 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.540	18702791	93.187 ng/ml
62) S	DCBP (S)	10.373	15038506	110.025 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.217	4165	0.739 ng/ml
3)	Aroclor 1016 (2)	6.695	3351	0.291 ng/ml
4)	Aroclor 1016 (3)	6.812	3380	0.669 ng/ml
5)	Aroclor 1016 (4)	6.917	7216	1.288 ng/ml
6)	Aroclor 1016 (5)	6.960	4820	0.734 ng/ml
7)	Aroclor 1016 (6)	7.086	2813	0.420 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.738	21875	12.407 ng/ml
10)	Aroclor 1221 (2)	5.769	18845	11.356 ng/ml
11)	Aroclor 1221 (3)	5.862	241566	42.997 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.862	241566	53.110 ng/ml
14)	Aroclor 1232 (2)	6.217	4165	1.489 ng/ml
15)	Aroclor 1232 (3)	6.695	3351	0.636 ng/ml
16)	Aroclor 1232 (4)	6.917	7216	3.471 ng/ml
17)	Aroclor 1232 (5)	6.960	4820	2.023 ng/ml
18)	Aroclor 1232 (6)	7.086	2813	1.138 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.217	4165	0.831 ng/ml
21)	Aroclor 1242 (2)	6.695	3351	0.345 ng/ml
22)	Aroclor 1242 (3)	6.812	3380	0.766 ng/ml
23)	Aroclor 1242 (4)	6.917	7216	1.712 ng/ml
24)	Aroclor 1242 (5)	6.960	4820	0.981 ng/ml
25)	Aroclor 1242 (6)	7.086	2813	0.547 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.681	3873	0.661 ng/ml
28)	Aroclor 1248 (2)	6.917	7216	0.941 ng/ml
29)	Aroclor 1248 (3)	6.960	4820	0.676 ng/ml
30)	Aroclor 1248 (4)	7.086	2813	0.332 ng/ml
31)	Aroclor 1248 (5)	7.446	1212	0.110 ng/ml
32)	Aroclor 1248 (6)	7.605	3306	0.342 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.422	1438	0.131 ng/ml
35)	Aroclor 1254 (2)	7.605	3306	0.184 ng/ml
36)	Aroclor 1254 (3)	7.914	2929	0.150 ng/ml
37)	Aroclor 1254 (4)	8.153	1120	0.077 ng/ml
38)	Aroclor 1254 (5)	8.491	1550	0.105 ng/ml
39)	Aroclor 1254 (6)	8.715	642	0.146 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.055	1260	0.095 ng/ml
42)	Aroclor 1260 (2)	8.258	2615	0.160 ng/ml
43)	Aroclor 1260 (3)	8.491	1550	0.095 ng/ml
44)	Aroclor 1260 (4)	8.963	3011	0.109 ng/ml
45)	Aroclor 1260 (5)	9.210	2659	0.169 ng/ml
46)	Aroclor 1260 (6)	9.761	8291	1.295 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 9:00 pm
Operator : MJB / KAK
Sample : 9E30035-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:31 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

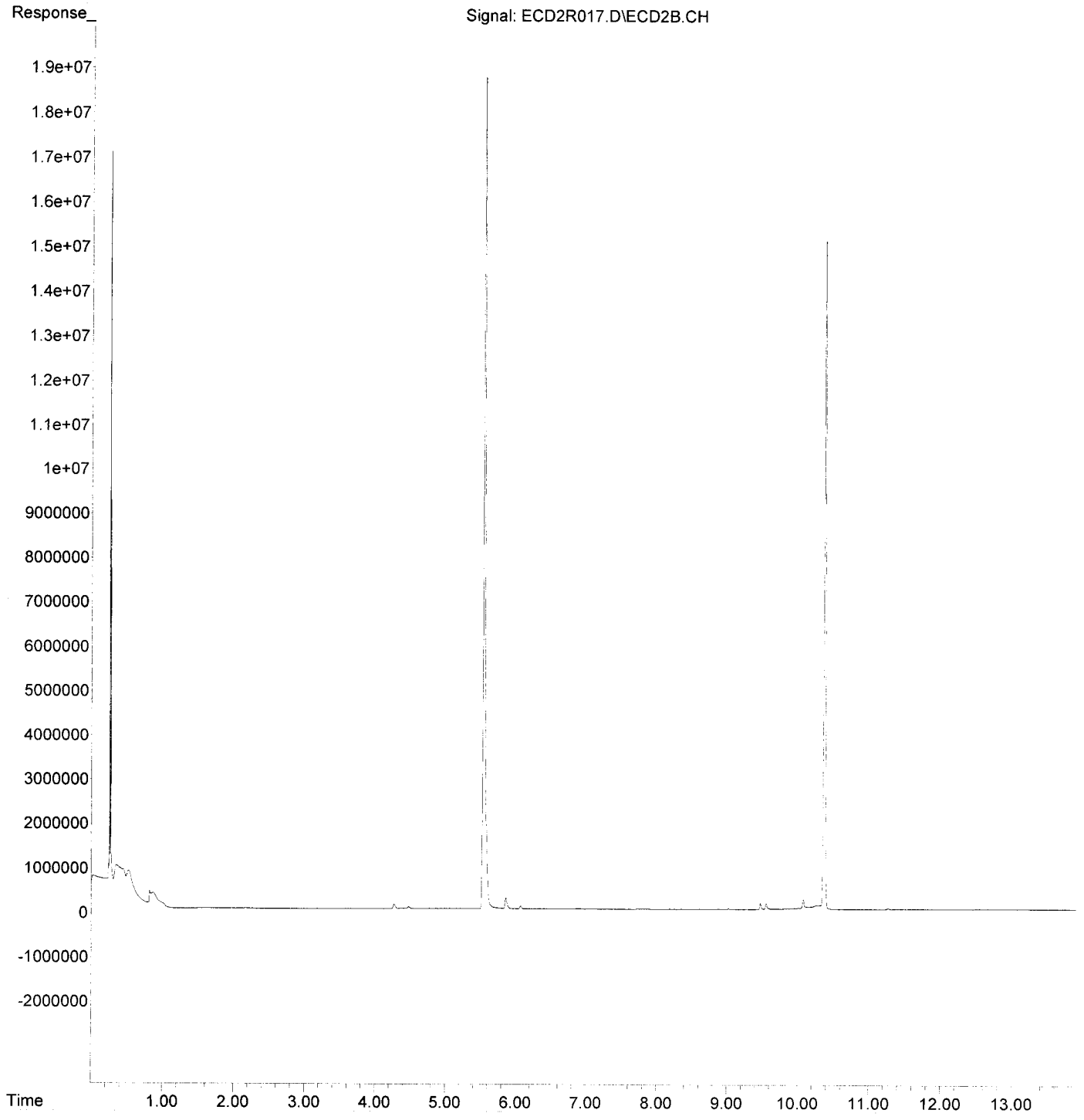
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.258	2615	0.198 ng/ml
49)	Aroclor 1262 (2)	8.559	1080	0.060 ng/ml
50)	Aroclor 1262 (3)	8.730	1311	0.088 ng/ml
51)	Aroclor 1262 (4)	8.963	3011	0.090 ng/ml
52)	Aroclor 1262 (5)	9.210	2659	0.141 ng/ml
53)	Aroclor 1262 (6)	9.761	8291	0.944 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.772	1931	0.248 ng/ml
56)	Aroclor 1268 (2)	9.210	2659	0.073 ng/ml
57)	Aroclor 1268 (3)	9.276	2287	0.078 ng/ml
58)	Aroclor 1268 (4)	9.477	122887	4.842 ng/ml
59)	Aroclor 1268 (5)	9.761	8291	0.867 ng/ml
60)	Aroclor 1268 (6)	10.081	201236	2.909 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\9E30035\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 9:00 pm
Operator : MJB / KAK
Sample : 9E30035-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:13:31 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R026.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 11:40 pm
Operator : MJB / KAK
Sample : A9E0766-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:14:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.541	29398780	146.480 ng/ml
62) S	DCBP (S)	10.375	30569329	223.653 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.210	1954	0.346 ng/ml
3)	Aroclor 1016 (2)	6.697	3416	0.297 ng/ml
4)	Aroclor 1016 (3)	6.827	2386	0.472 ng/ml
5)	Aroclor 1016 (4)	6.914	9512	1.697 ng/ml
6)	Aroclor 1016 (5)	6.958	5285	0.805 ng/ml
7)	Aroclor 1016 (6)	7.083	5732	0.855 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.768f	16925	9.600 ng/ml
10)	Aroclor 1221 (2)	5.768	16925	10.199 ng/ml
11)	Aroclor 1221 (3)	5.860	41276	7.347 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.860	41276	9.075 ng/ml
14)	Aroclor 1232 (2)	6.210	1954	0.699 ng/ml
15)	Aroclor 1232 (3)	6.697	3416	0.648 ng/ml
16)	Aroclor 1232 (4)	6.914	9512	4.576 ng/ml
17)	Aroclor 1232 (5)	6.958	5285	2.219 ng/ml
18)	Aroclor 1232 (6)	7.083	5732	2.318 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.210	1954	0.390 ng/ml
21)	Aroclor 1242 (2)	6.697	3416	0.352 ng/ml
22)	Aroclor 1242 (3)	6.827	2386	0.541 ng/ml
23)	Aroclor 1242 (4)	6.914	9512	2.257 ng/ml
24)	Aroclor 1242 (5)	6.958	5285	1.076 ng/ml
25)	Aroclor 1242 (6)	7.083	5732	1.115 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.679	3241	0.553 ng/ml
28)	Aroclor 1248 (2)	6.914	9512	1.240 ng/ml
29)	Aroclor 1248 (3)	6.958	5285	0.741 ng/ml
30)	Aroclor 1248 (4)	7.083	5732	0.676 ng/ml
31)	Aroclor 1248 (5)	7.447	14627	1.328 ng/ml
32)	Aroclor 1248 (6)	7.605	27356	2.830 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.425	12917	1.179 ng/ml
35)	Aroclor 1254 (2)	7.605	27356	1.522 ng/ml
36)	Aroclor 1254 (3)	7.914	35452	1.812 ng/ml
37)	Aroclor 1254 (4)	8.152	40641	2.781 ng/ml
38)	Aroclor 1254 (5)	8.484	37906	2.565 ng/ml
39)	Aroclor 1254 (6)	8.713	12965	2.955 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.048	13847	1.044 ng/ml
42)	Aroclor 1260 (2)	8.256	27800	1.699 ng/ml
43)	Aroclor 1260 (3)	8.484	37906	2.332 ng/ml
44)	Aroclor 1260 (4)	8.958	20660	0.747 ng/ml
45)	Aroclor 1260 (5)	9.211	9443	0.602 ng/ml
46)	Aroclor 1260 (6)	9.758	14620	2.283 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Data Path : K:\DATA\9E30035\
Data File : ECD2R026.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 11:40 pm
Operator : MJB / KAK
Sample : A9E0766-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:14:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

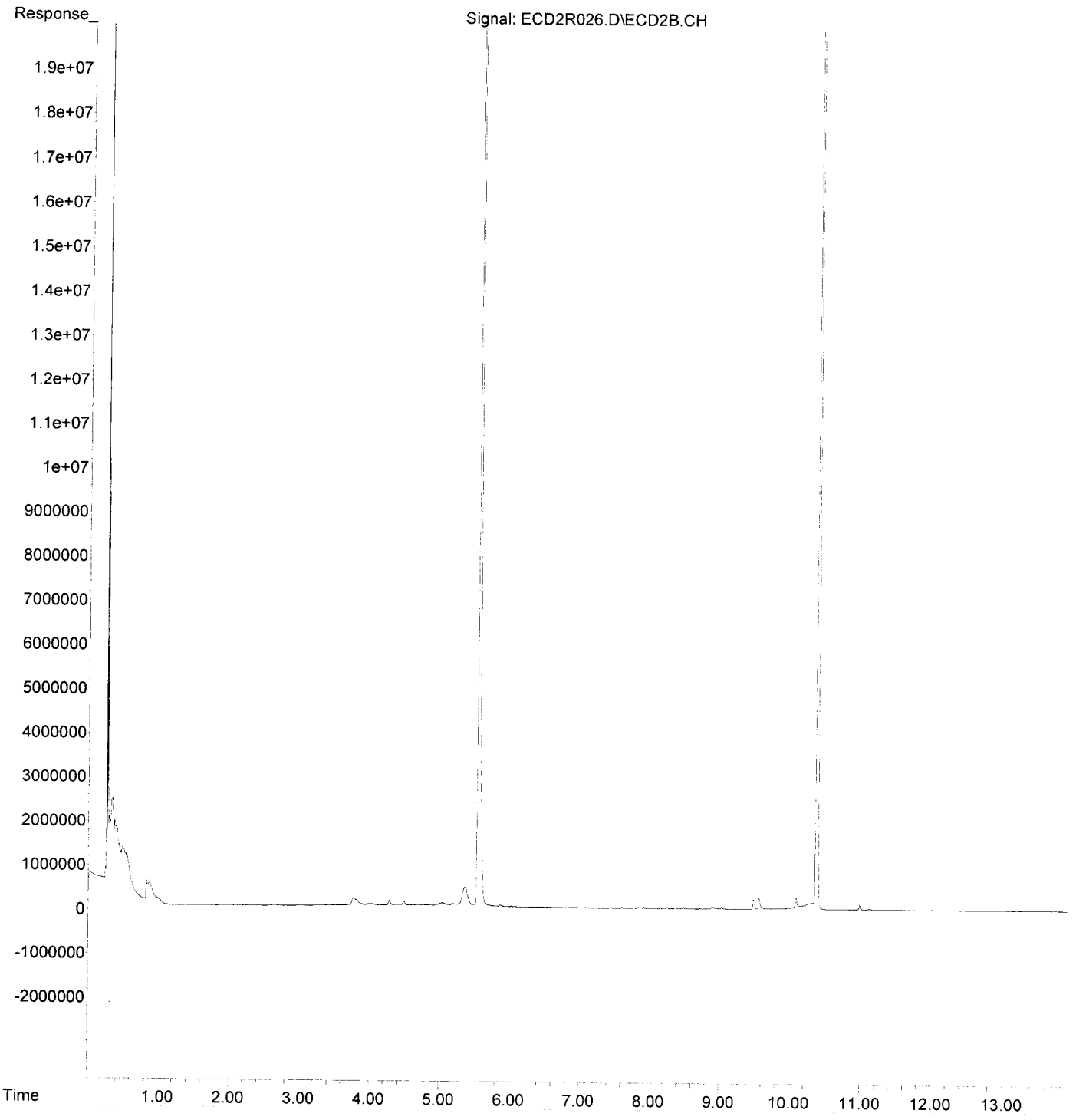
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	27800	2.100 ng/ml
49)	Aroclor 1262 (2)	8.558	3727	0.207 ng/ml
50)	Aroclor 1262 (3)	8.729	6785	0.458 ng/ml
51)	Aroclor 1262 (4)	8.958	20660	0.620 ng/ml
52)	Aroclor 1262 (5)	9.211	9443	0.500 ng/ml
53)	Aroclor 1262 (6)	9.758	14620	1.665 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.772	2782	0.357 ng/ml
56)	Aroclor 1268 (2)	9.211	9443	0.260 ng/ml
57)	Aroclor 1268 (3)	9.275	4604	0.157 ng/ml
58)	Aroclor 1268 (4)	9.479	217556	8.573 ng/ml
59)	Aroclor 1268 (5)	9.758	14620	1.529 ng/ml
60)	Aroclor 1268 (6)	10.084	250816	3.625 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\9E30035\
Data File : ECD2R026.D
Signal(s) : ECD2B.CH
Acq On : 30 May 2019 11:40 pm
Operator : MJB / KAK
Sample : A9E0766-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:14:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:16 am
Operator : MJB / KAK
Sample : A9E0766-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.541	34498860	171.891 ng/ml
62) S	DCBP (S)	10.373	33501199	245.103 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.213	6446	1.143 ng/ml
3)	Aroclor 1016 (2)	6.702	7431	0.646 ng/ml
4)	Aroclor 1016 (3)	6.827	5898	1.167 ng/ml
5)	Aroclor 1016 (4)	6.913	10664	1.903 ng/ml
6)	Aroclor 1016 (5)	6.960	7390	1.125 ng/ml
7)	Aroclor 1016 (6)	7.084	6941	1.035 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.772f	19791	11.225 ng/ml
10)	Aroclor 1221 (2)	5.797	17306	10.428 ng/ml
11)	Aroclor 1221 (3)	5.861	50246	8.943 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.861	50246	11.047 ng/ml
14)	Aroclor 1232 (2)	6.213	6446	2.304 ng/ml
15)	Aroclor 1232 (3)	6.702	7431	1.410 ng/ml
16)	Aroclor 1232 (4)	6.913	10664	5.130 ng/ml
17)	Aroclor 1232 (5)	6.960	7390	3.102 ng/ml
18)	Aroclor 1232 (6)	7.084	6941	2.807 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.213	6446	1.286 ng/ml
21)	Aroclor 1242 (2)	6.702	7431	0.765 ng/ml
22)	Aroclor 1242 (3)	6.827	5898	1.337 ng/ml
23)	Aroclor 1242 (4)	6.913	10664	2.531 ng/ml
24)	Aroclor 1242 (5)	6.960	7390	1.504 ng/ml
25)	Aroclor 1242 (6)	7.084	6941	1.350 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.679	7287	1.243 ng/ml
28)	Aroclor 1248 (2)	6.913	10664	1.391 ng/ml
29)	Aroclor 1248 (3)	6.960	7390	1.036 ng/ml
30)	Aroclor 1248 (4)	7.084	6941	0.819 ng/ml
31)	Aroclor 1248 (5)	7.447	12929	1.174 ng/ml
32)	Aroclor 1248 (6)	7.605	27629	2.858 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.424	12373	1.129 ng/ml
35)	Aroclor 1254 (2)	7.605	27629	1.537 ng/ml
36)	Aroclor 1254 (3)	7.914	40432	2.067 ng/ml
37)	Aroclor 1254 (4)	8.153	47703	3.265 ng/ml
38)	Aroclor 1254 (5)	8.484	46315	3.134 ng/ml
39)	Aroclor 1254 (6)	8.712	15252	3.476 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.049	16221	1.223 ng/ml
42)	Aroclor 1260 (2)	8.255	32608	1.992 ng/ml
43)	Aroclor 1260 (3)	8.484	46315	2.849 ng/ml
44)	Aroclor 1260 (4)	8.958	24420	0.883 ng/ml
45)	Aroclor 1260 (5)	9.210	9750	0.621 ng/ml
46)	Aroclor 1260 (6)	9.757	15400	2.405 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:16 am
Operator : MJB / KAK
Sample : A9E0766-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

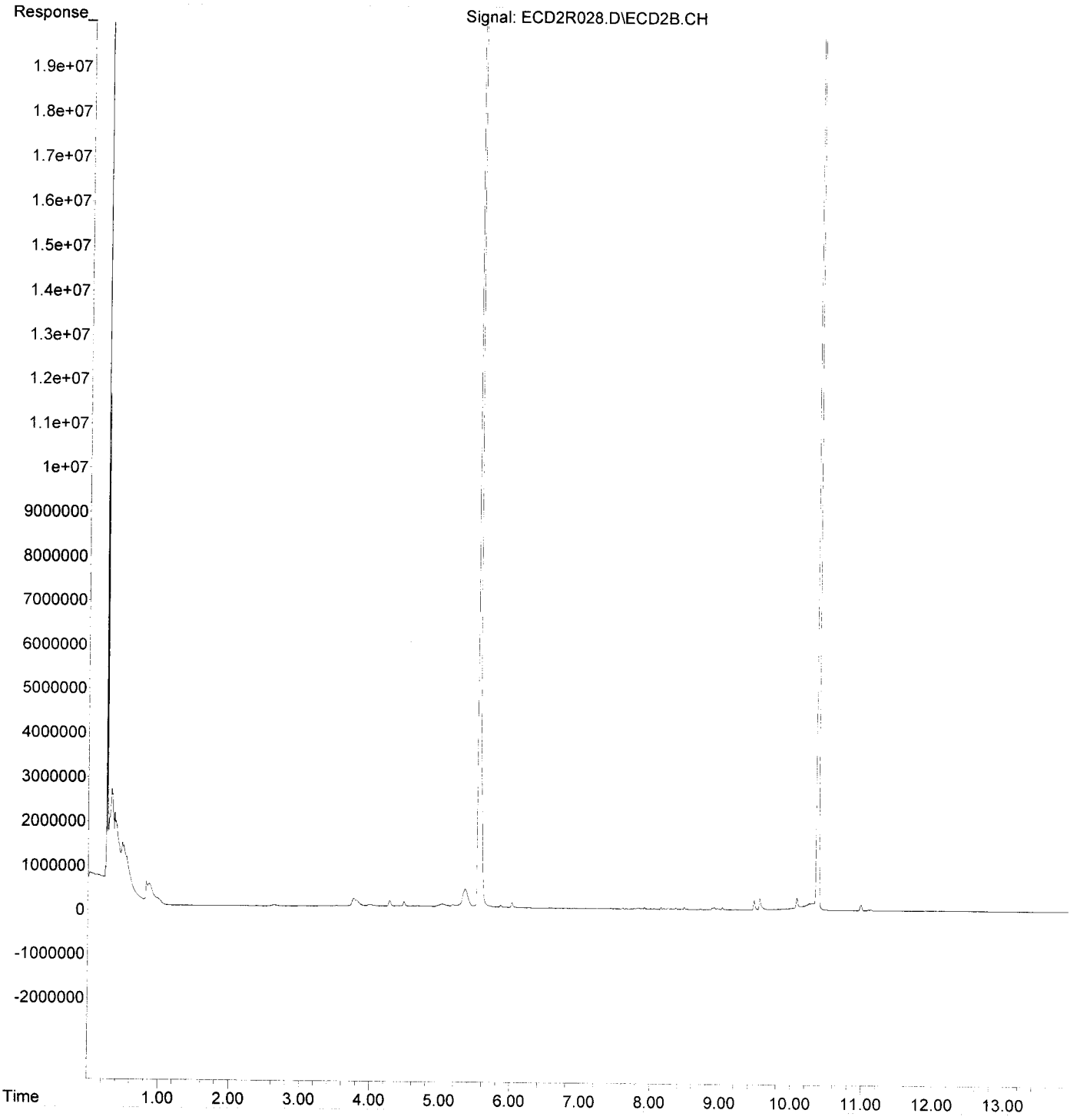
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.255	32608	2.463 ng/ml
49)	Aroclor 1262 (2)	8.553	4411	0.245 ng/ml
50)	Aroclor 1262 (3)	8.712	15252	1.029 ng/ml
51)	Aroclor 1262 (4)	8.958	24420	0.733 ng/ml
52)	Aroclor 1262 (5)	9.210	9750	0.516 ng/ml
53)	Aroclor 1262 (6)	9.757	15400	1.753 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.771	2740	0.352 ng/ml
56)	Aroclor 1268 (2)	9.210	9750	0.269 ng/ml
57)	Aroclor 1268 (3)	9.270	4455	0.152 ng/ml
58)	Aroclor 1268 (4)	9.477	209808	8.267 ng/ml
59)	Aroclor 1268 (5)	9.757	15400	1.611 ng/ml
60)	Aroclor 1268 (6)	10.083	266543	3.852 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\9E30035\
Data File : ECD2R028.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:16 am
Operator : MJB / KAK
Sample : A9E0766-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:07 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R030.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30035-CCV3
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.540	53899517	268.556	ng/ml	
62) S	DCBP (S)	10.375	42381943	~~310.077~~	ng/ml	Q-41
	Target Compounds					
2)	Aroclor 1016 (1)	6.212	3457713	613.037	ng/ml	Q-41
3)	Aroclor 1016 (2)	6.701	6622422	575.669	ng/ml	
4)	Aroclor 1016 (3)	6.826	2995783	592.650	ng/ml	
5)	Aroclor 1016 (4)	6.913	3207172	572.233	ng/ml	
6)	Aroclor 1016 (5)	6.958	3476729	529.362	ng/ml	
7)	Aroclor 1016 (6)	7.082	3407135	508.243	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.704	301336	170.913	ng/ml	
10)	Aroclor 1221 (2)	5.789	417940	251.849	ng/ml	
11)	Aroclor 1221 (3)	5.875	2120281	377.395	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.875	2120281	466.161	ng/ml	
14)	Aroclor 1232 (2)	6.212	3457713	1236.034	ng/ml	
15)	Aroclor 1232 (3)	6.701	6622422	1256.150	ng/ml	
16)	Aroclor 1232 (4)	6.913	3207172	1542.736	ng/ml	
17)	Aroclor 1232 (5)	6.958	3476729	1459.533	ng/ml	
18)	Aroclor 1232 (6)	7.082	3407135	1377.745	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.212	3457713	689.907	ng/ml	
21)	Aroclor 1242 (2)	6.701	6622422	681.966	ng/ml	
22)	Aroclor 1242 (3)	6.826	2995783	679.371	ng/ml	
23)	Aroclor 1242 (4)	6.913	3207172	761.055	ng/ml	
24)	Aroclor 1242 (5)	6.958	3476729	707.834	ng/ml	
25)	Aroclor 1242 (6)	7.082	3407135	662.531	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.673	5605409	956.374	ng/ml	
28)	Aroclor 1248 (2)	6.913	3207172	418.246	ng/ml	
29)	Aroclor 1248 (3)	6.958	3476729	487.374	ng/ml	
30)	Aroclor 1248 (4)	7.082	3407135	401.948	ng/ml	
31)	Aroclor 1248 (5)	7.445	832800	75.628	ng/ml	
32)	Aroclor 1248 (6)	7.605	3044793	314.940	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.423	2483151	226.661	ng/ml	
35)	Aroclor 1254 (2)	7.605	3044793	169.374	ng/ml	
36)	Aroclor 1254 (3)	7.913	1705163	87.160	ng/ml	
37)	Aroclor 1254 (4)	8.152	1174801	80.401	ng/ml	
38)	Aroclor 1254 (5)	8.486	9294985	628.881	ng/ml	
39)	Aroclor 1254 (6)	8.703	1475348	336.215	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.049	7391886	557.360	ng/ml	
42)	Aroclor 1260 (2)	8.256	9355870	571.639	ng/ml	
43)	Aroclor 1260 (3)	8.486	9294985	571.833	ng/ml	
44)	Aroclor 1260 (4)	8.964	16476763	595.588	ng/ml	
45)	Aroclor 1260 (5)	9.211	9362971	596.504	ng/ml	
46)	Aroclor 1260 (6)	9.750	3507300	547.653	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

565.20

573.43

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R030.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30035-CCV3
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

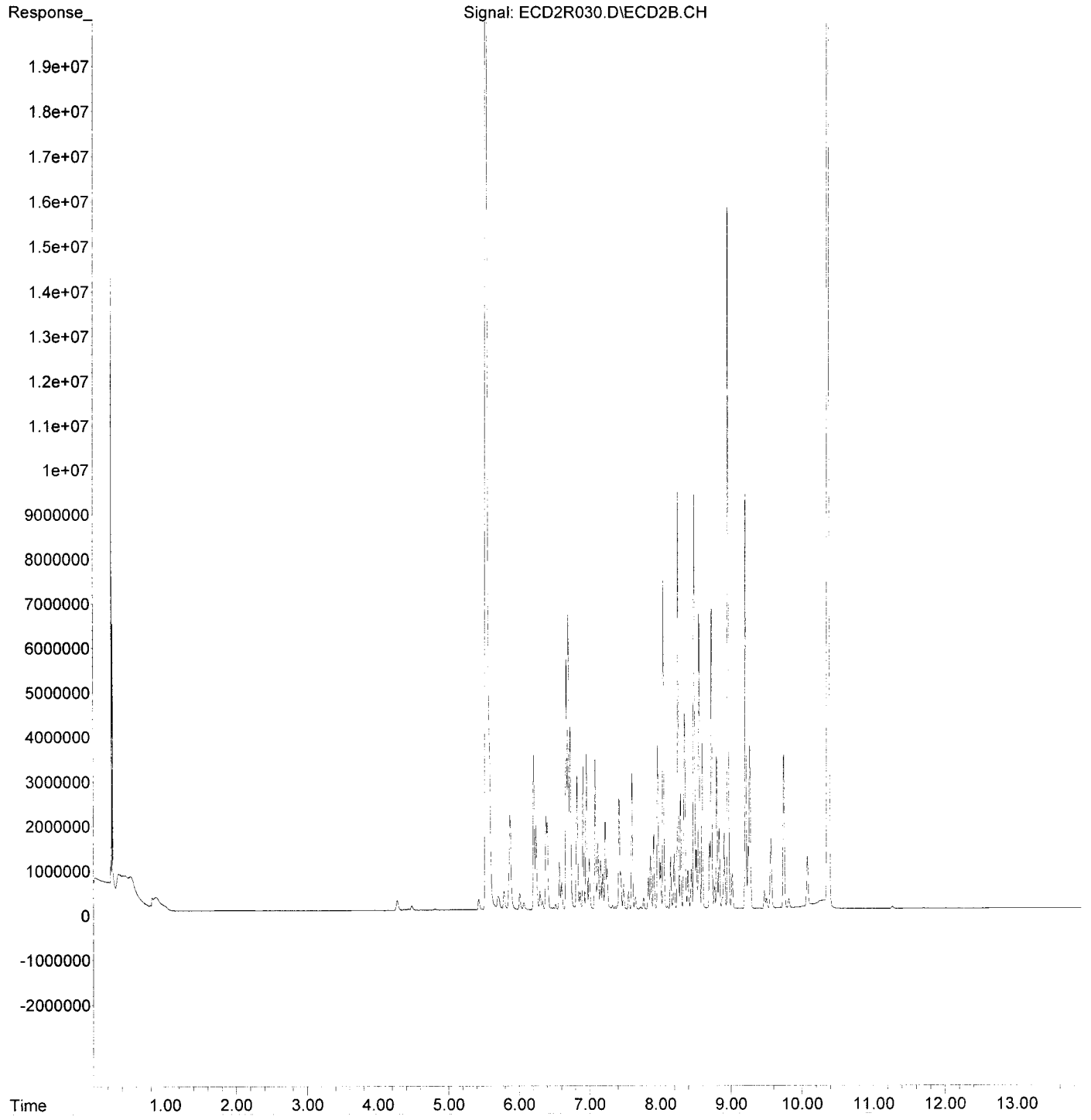
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.256	9355870	706.757	ng/ml
49)	Aroclor 1262 (2)	8.555	6715727	372.726	ng/ml
50)	Aroclor 1262 (3)	8.731	6798485	458.780	ng/ml
51)	Aroclor 1262 (4)	8.964	16476763	494.772	ng/ml
52)	Aroclor 1262 (5)	9.211	9362971	495.450	ng/ml
53)	Aroclor 1262 (6)	9.750	3507300	399.345	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.771	509805	65.470	ng/ml
56)	Aroclor 1268 (2)	9.211	9362971	258.221	ng/ml
57)	Aroclor 1268 (3)	9.273	3643304	124.153	ng/ml
58)	Aroclor 1268 (4)	9.477	402770	15.871	ng/ml
59)	Aroclor 1268 (5)	9.750	3507300	366.882	ng/ml
60)	Aroclor 1268 (6)	10.081	1175784	16.994	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\9E30035\
Data File : ECD2R030.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 12:52 am
Operator : MJB / KAK
Sample : 9E30035-CCV3
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R031.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30035-CCB3
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:41 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 5/31/19

		Compound	R.T.	Response	Conc	Units
		System Monitoring Compounds				
1)	S	TCMX (S)	5.540	17242275	85.910	ng/ml
62)	S	DCBP (S)	10.374	14526343	106.278	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.235	6581	1.167	ng/ml
3)		Aroclor 1016 (2)	6.712	8646	0.752	ng/ml
4)		Aroclor 1016 (3)	6.798f	8004	1.583	ng/ml
5)		Aroclor 1016 (4)	6.880	16722	2.984	ng/ml
6)		Aroclor 1016 (5)	6.965	12023	1.831	ng/ml
7)		Aroclor 1016 (6)	7.085	10140	1.513	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/ml
10)		Aroclor 1221 (2)	5.793	17158	10.339	ng/ml
11)		Aroclor 1221 (3)	5.863	233408	41.545	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.863	233408	51.317	ng/ml
14)		Aroclor 1232 (2)	6.235	6581	2.353	ng/ml
15)		Aroclor 1232 (3)	6.712	8646	1.640	ng/ml
16)		Aroclor 1232 (4)	6.880	16722	8.044	ng/ml
17)		Aroclor 1232 (5)	6.965	12023	5.047	ng/ml
18)		Aroclor 1232 (6)	7.085	10140	4.100	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.235	6581	1.313	ng/ml
21)		Aroclor 1242 (2)	6.712	8646	0.890	ng/ml
22)		Aroclor 1242 (3)	6.798	8004	1.815	ng/ml
23)		Aroclor 1242 (4)	6.880	16722	3.968	ng/ml
24)		Aroclor 1242 (5)	6.965	12023	2.448	ng/ml
25)		Aroclor 1242 (6)	7.085	10140	1.972	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.686	8425	1.438	ng/ml
28)		Aroclor 1248 (2)	6.880	16722	2.181	ng/ml
29)		Aroclor 1248 (3)	6.965	12023	1.685	ng/ml
30)		Aroclor 1248 (4)	7.085	10140	1.196	ng/ml
31)		Aroclor 1248 (5)	7.450	10438	0.948	ng/ml
32)		Aroclor 1248 (6)	7.608	12021	1.243	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.423	10377	0.947	ng/ml
35)		Aroclor 1254 (2)	7.608	12021	0.669	ng/ml
36)		Aroclor 1254 (3)	7.908	11551	0.590	ng/ml
37)		Aroclor 1254 (4)	8.154	9003	0.616	ng/ml
38)		Aroclor 1254 (5)	8.485	6956	0.471	ng/ml
39)		Aroclor 1254 (6)	8.709	4007	0.913	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.054	9629	0.726	ng/ml
42)		Aroclor 1260 (2)	8.256	9922	0.606	ng/ml
43)		Aroclor 1260 (3)	8.485	6956	0.428	ng/ml
44)		Aroclor 1260 (4)	8.957	4726	0.171	ng/ml
45)		Aroclor 1260 (5)	9.210	3386	0.216	ng/ml
46)		Aroclor 1260 (6)	9.757	7479	1.168	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E30035\
Data File : ECD2R031.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30035-CCB3
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:41 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

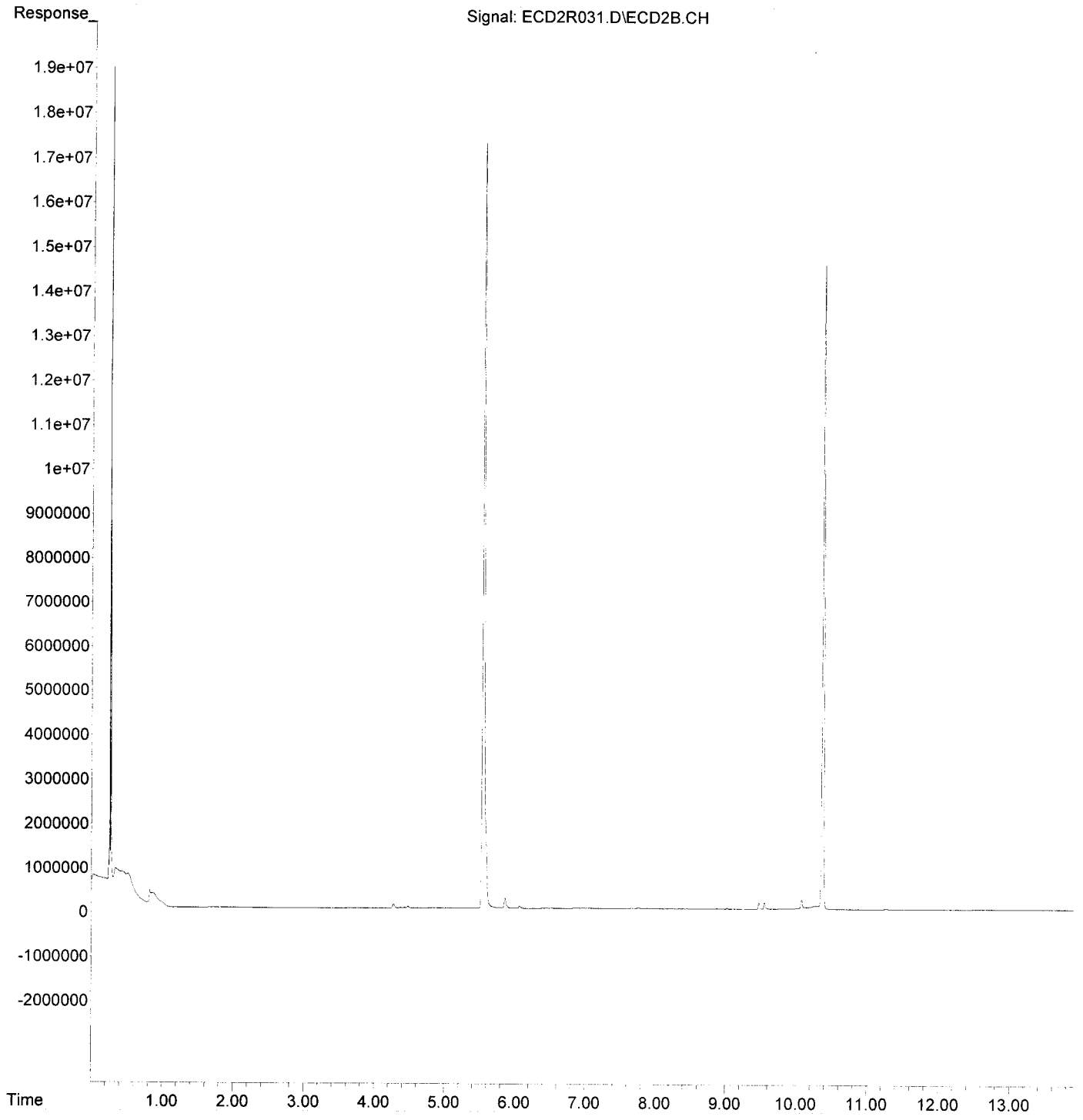
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	9922	0.750 ng/ml
49)	Aroclor 1262 (2)	8.559	5576	0.309 ng/ml
50)	Aroclor 1262 (3)	8.729	4245	0.286 ng/ml
51)	Aroclor 1262 (4)	8.978	4397	0.132 ng/ml
52)	Aroclor 1262 (5)	9.210	3386	0.179 ng/ml
53)	Aroclor 1262 (6)	9.757	7479	0.852 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.776	5146	0.661 ng/ml
56)	Aroclor 1268 (2)	9.210	3386	0.093 ng/ml
57)	Aroclor 1268 (3)	9.270	2996	0.102 ng/ml
58)	Aroclor 1268 (4)	9.477	142218	5.604 ng/ml
59)	Aroclor 1268 (5)	9.757	7479	0.782 ng/ml
60)	Aroclor 1268 (6)	10.081	216775	3.133 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\9E30035\
Data File : ECD2R031.D
Signal(s) : ECD2B.CH
Acq On : 31 May 2019 1:10 am
Operator : MJB / KAK
Sample : 9E30035-CCB3
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 31 10:15:41 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
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fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Batch 9060524
Sequence 9F05018 (A9E0766-02RE1,05RE1)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060524 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060524-BLK1		QC	06/04/19 09:49	11	2				100					
	9060524-BS1		QC	06/04/19 09:49	10	2	A19E232		100	100					
	A9E0766-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.14	2				100	T4-PDI2019-SC18-190522-01-03	Re-extract added 6/4/2019 by KAK			
	9060524-DUP1		QC	06/04/19 09:49	10.09	2		A9E0766-02RE1		100					
	A9E0766-05RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.05	2				100	T4-PDI2019-SC18-190522-07-09	MS/MSD this sample			
	9060524-MS1		QC	06/04/19 09:49	10.03	2	A19E232	A9E0766-05RE1	100	100					
	9060524-MSD1		QC	06/04/19 09:49	10.05	2	A19E232	A9E0766-05RE1	100	100					
	A9E0766-06RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.13	2				100	T4-PDI2019-SC18-190522-09-11	Re-extract added 6/4/2019 by KAK			
	A9E0766-07RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.01	2				100	T4-PDI2019-SC18-190522-11-13	Re-extract added 6/4/2019 by KAK			
	A9E0766-16RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.4	2				100	T4-PDI2019-SC67-190522-01-03	Re-extract added 6/4/2019 by KAK			
	A9E0838-01RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.01	2				100	FD-201905241445	Re-extract added 6/4/2019 by KAK			
	A9E0838-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.16	2				100	T4-PDI2019-SC27-190524-01-03	MS/MSD this sample			
	9060524-MS2		QC	06/04/19 09:49	10.14	2	A19E232	A9E0838-02RE1	100	100					
	9060524-MSD2		QC	06/04/19 09:49	10.2	2	A19E232	A9E0838-02RE1	100	100					
	A9E0838-03RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.13	2				100	T4-PDI2019-SC27-190524-03-05	Re-extract added 6/4/2019 by KAK			
	A9E0838-04RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.02	2				100	T4-PDI2019-SC27-190524-05-07	Re-extract added 6/4/2019 by KAK			
	A9E0838-13RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.02	2				100	FD-201905241300	Re-extract added 6/4/2019 by KAK			
	A9E0838-14RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.08	2				100	T4-PDI2019-SC30-190524-01-03	Re-extract added 6/4/2019 by KAK			
	A9E0838-15RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.1	2				100	T4-PDI2019-SC30-190524-03-05	MS/MSD this sample			
	9060524-MS3		QC	06/04/19 09:49	10.11	2	A19E232	A9E0838-15RE1	100	100					
	9060524-MSD3		QC	06/04/19 09:49	10.1	2	A19E232	A9E0838-15RE1	100	100					
	A9E0838-16RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.05	2				100	T4-PDI2019-SC30-190524-05-07	Re-extract added 6/4/2019 by KAK			

Prepared By: Date

Reviewed By: 6/7/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060524 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0849-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.03	2				100	T4-PDI2019-SC32-190523-01-03	Re-extract added 6/4/2019 by KAK			
	A9E0849-08RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.19	2				100	T4-PDI2019-SC43-190523-01-03	Re-extract added 6/4/2019 by KAK			
	A9E0849-09RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.03	2				100	T4-PDI2019-SC43-190523-03-05	Re-extract added 6/4/2019 by KAK			
	A9E0927-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.14	2				100	FD-20190524164 1	Re-extract added 6/4/2019 by KAK			
	A9E0927-03RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.17	2				100	T4-PDI2019-SC29-190524-01-03	Re-extract added 6/4/2019 by KAK			
	A9E0927-04RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.12	2				100	T4-PDI2019-SC29-190524-03-05	Re-extract added 6/4/2019 by KAK			
	A9E0927-05RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10.03	2				100	T4-PDI2019-SC29-190524-05-07	MS/MSD this sample			
	9060524-MS4		QC	06/04/19 09:49	10	2	A19E232	A9E0927-05RE1	100	100					
	9060524-MSD4		QC	06/04/19 09:49	10.01	2	A19E232	A9E0927-05RE1	100	100					

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18H290	01/01/21	Copper, Granular Lot# J260003
A18K137	11/08/23	Sulfuric Acid
A18K311	12/31/20	Glass Wool
A19C104	09/03/19	Florisil Lot 817211-CM
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D008	09/28/19	n-Hexane Lot# 186950
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E232	11/20/19	8082 PCB Matrix Spike

Surrogate(s)

Std ID	Exp. Date	Description
A19E001	10/01/19	8082 PCB Surrogate Spike

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060524 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9060524-BLK1		QC	06/04/19 09:49	~~10~~ 11	2 ✓				100					
2	9060524-BS1		QC	06/04/19 09:49	10	2 ✓	A19E232		100	100					
3	A9E0766-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.14	2 ✓				100	T4-PDI2019-SC18-190522-01-03	Re-extract added 6/4/2019 by KAK mud			
4	9060524-DUP1		QC	06/04/19 09:49	~~10~~ 10.09	2 ✓		A9E0766-02RE1		100		mud			
5	A9E0766-05RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.05	2 ✓				100	T4-PDI2019-SC18-190522-07-09	MS/MSD this sample mud			
6	9060524-MS1		QC	06/04/19 09:49	~~10~~ 10.03	2 ✓	A19E232	A9E0766-05RE1	100	100		mud			
7	9060524-MSD1		QC	06/04/19 09:49	~~10~~ 10.05	2 ✓	A19E232	A9E0766-05RE1	100	100		mud			
8	A9E0766-06RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.13	2 ✓				100	T4-PDI2019-SC18-190522-09-11	Re-extract added 6/4/2019 by KAK mud			
9	A9E0766-07RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.04	2 ✓				100	T4-PDI2019-SC18-190522-11-13	Re-extract added 6/4/2019 by KAK mud			
10	A9E0766-16RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	10 10.40	2 ✓				100	T4-PDI2019-SC67-190522-01-03	Re-extract added 6/4/2019 by KAK sand			
11	A9E0838-01RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.01	2 ✓				100	FD-20190524144 5	Re-extract added 6/4/2019 by KAK mud (S)			
12	A9E0838-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.16	2 ✓				100	T4-PDI2019-SC27-190524-01-03	MS/MSD this sample sand (S) (P)			
13	9060524-MS2		QC	06/04/19 09:49	~~10~~ 10.14	2 ✓	A19E232	A9E0838-02RE1	100	100		sand (S) (P)			
14	9060524-MSD2		QC	06/04/19 09:49	~~10~~ 10.20	2 ✓	A19E232	A9E0838-02RE1	100	100		mud (S) (P)			
15	A9E0838-03RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.13	2 ✓				100	T4-PDI2019-SC27-190524-03-05	Re-extract added 6/4/2019 by KAK mud (S) (P)			
16	A9E0838-04RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.02	2 ✓				100	T4-PDI2019-SC27-190524-05-07	Re-extract added 6/4/2019 by KAK mud (S) (P)			
17	A9E0838-13RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.02	2 ✓				100	FD-20190524130 0	Re-extract added 6/4/2019 by KAK Mud (S) (P)			
18	A9E0838-14RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.08	2 ✓				100	T4-PDI2019-SC30-190524-01-03	Re-extract added 6/4/2019 by KAK mud (S) (P)			
19	A9E0838-15RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.10	2 ✓				100	T4-PDI2019-SC30-190524-03-05	MS/MSD this sample mud (S) (P)			
20	9060524-MS3		QC	06/04/19 09:49	~~10~~ 10.11	2 ✓	A19E232	A9E0838-15RE1	100	100		mud (S) (P)			
21	9060524-MSD3		QC	06/04/19 09:49	~~10~~ 10.10	2 ✓	A19E232	A9E0838-15RE1	100	100		mud (S) (P)			
22	A9E0838-16RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.05	2 ✓				100	T4-PDI2019-SC30-190524-05-07	Re-extract added 6/4/2019 by KAK mud			

JAB 6/4/19
Prepared By: Date

JRA 06/04/19
Reviewed By: Date

CAH 6/4/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060524 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
23	A9E0849-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.03	2 ✓				100	T4-PDI2019-SC32-190523-01-03	Re-extract added 6/4/2019 by KAK mud			
24	A9E0849-08RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.19	2 ✓				100	T4-PDI2019-SC43-190523-01-03	Re-extract added 6/4/2019 by KAK Sand			
25	A9E0849-09RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.03	2 ✓				100	T4-PDI2019-SC43-190523-03-05	Re-extract added 6/4/2019 by KAK Sand			
26	A9E0927-02RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.14	2 ✓				100	FD-20190524164 1	Re-extract added 6/4/2019 by KAK mud			
27	A9E0927-03RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.17	2 ✓				100	T4-PDI2019-SC29-190524-01-03	Re-extract added 6/4/2019 by KAK mud			
28	A9E0927-04RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.17	2 ✓				100	T4-PDI2019-SC29-190524-03-05	Re-extract added 6/4/2019 by KAK mud			
29	A9E0927-05RE1	A	8082 PCBs - Low Level (2mL FV)	06/04/19 09:49	~~10~~ 10.03	2 ✓				100	T4-PDI2019-SC29-190524-05-07	MS/MSD this sample mud			
30	9060524-MS4		QC	06/04/19 09:49	10	2 ✓	A19E232	A9E0927-05RE1	100	100		mud			
31	9060524-MSD4		QC	06/04/19 09:49	~~10~~ 10.01	2 ✓	A19E232	A9E0927-05RE1	100	100		mud			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18H290	01/01/21	Copper, Granular Lot# J260003
A18K137	11/08/23	Sulfuric Acid
A18K311	12/31/20	Glass Wool
A19C104	09/03/19	Florisil Lot 817211-CM
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D008	09/28/19	n-Hexane Lot# 186950
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19E232	11/20/19	8082 PCB Matrix Spike

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19E001	10/01/19	8082 PCB Surrogate Spike

JAG

(S) = staining
(P) = precipitate

Method 3546 digestion time and temperture achieved.
Initial: JAG

Witness: JE 6-4-19

JAG 6/4/19
Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9F05018**	Instrument:	**DUALECD2F**
Date:	**06/05/19 07:19**	Calibration:	**A9A3104**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F05018-CCV1	Sediment	QC	QC				A19E079
2	9F05018-CCB1	Sediment	QC	QC				A19E080
3	9060524-BLK1	Sediment	QC	QC		9060524		
4	9060524-BS1	Sediment	QC	QC		9060524		
5	A9E0766-02RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
6	9F05018-IBL1	Sediment	QC	QC				
7	9060524-DUP1	Sediment	QC	QC		9060524		
8	9F05018-IBL2	Sediment	QC	QC				
9	A9E0766-05RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
10	9F05018-IBL3	Sediment	QC	QC				
11	9060524-MS1	Sediment	QC	QC		9060524		
12	9F05018-IBL4	Sediment	QC	QC				
13	9060524-MSD1	Sediment	QC	QC		9060524		
14	9F05018-IBL5	Sediment	QC	QC				
15	9F05018-CCV2	Sediment	QC	QC				A19E079
16	9F05018-CCB2	Sediment	QC	QC				A19E080

Comments:

Data Entered By: 6/6/19

Data Reviewed By: MJR 6/6/19

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.

9F05018-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	515.75
1016 (2)	562.79
1016 (3)	504.33
1016 (4)	472.70
1016 (5)	497.67
1016 (6)	480.91
Average:	**505.69** ✓

Aroclor 1260

Peak	Initial Res
1260 (1)	507.63
1260 (2)	487.47
1260 (3)	482.98
1260 (4)	476.04
1260 (5)	492.99
1260 (6)	494.54
Average:	**490.28** ✓

9060524-BS1

Aroclor 1016

Peak	Initial Res
1016 (1)	697.45
1016 (2)	809.20
1016 (3)	666.09
1016 (4)	744.96
1016 (5)	660.57
1016 (6)	619.93
Average:	**699.70** ✓

Aroclor 1260

Peak	Initial Res
1260 (1)	805.72
1260 (2)	867.87
1260 (3)	831.06
1260 (4)	915.00
1260 (5)	856.86
1260 (6)	981.56
Average:	**876.35** ✓

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.

9060524-MS1

Aroclor 1016

Peak	Initial Res
1016 (1)	893.93
1016 (2)	982.21
1016 (3)	861.07
1016 (4)	876.95
1016 (5)	853.40
1016 (6)	832.13
Average:	**883.28** ✓

Aroclor 1260

Peak	Initial Res
1260 (1)	955.11
1260 (2)	1,018.56
1260 (3)	978.44
1260 (4)	991.39
1260 (5)	991.86
1260 (6)	1,032.18
Average:	**994.59** ✓

9060524-MSD1

Aroclor 1016

Peak	Initial Res
1016 (1)	872.93
1016 (2)	966.49
1016 (3)	871.08
1016 (4)	884.68
1016 (5)	861.96
1016 (6)	804.95
Average:	**877.02** ✓

Aroclor 1260

Peak	Initial Res
1260 (1)	948.46
1260 (2)	982.83
1260 (3)	972.15
1260 (4)	988.85
1260 (5)	955.52
1260 (6)	1,047.54
Average:	**982.56** ✓

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.

9F05018-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	536.06
1016 (2)	569.15
1016 (3)	523.13
1016 (4)	496.30
1016 (5)	499.88
1016 (6)	498.51
Average:	**520.51** ✓

Aroclor 1260

Peak	Initial Res
1260 (1)	510.32
1260 (2)	496.07
1260 (3)	512.90
1260 (4)	495.41
1260 (5)	523.43
1260 (6)	545.12
Average:	**513.88** ✓

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05018-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 08:12:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.579	15868135	274.482	ng/ml
62) S	DCBP (S)	9.295	19479705	267.527	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.505	1378937	515.755	ng/ml
3)	Aroclor 1016 (2)	5.913	2978414	562.786	ng/ml
4)	Aroclor 1016 (3)	5.998	1464616	504.332	ng/ml
5)	Aroclor 1016 (4)	6.159	1130271	472.702	ng/ml
6)	Aroclor 1016 (5)	6.378	1458977	497.671	ng/ml
7)	Aroclor 1016 (6)	6.502	1001044	480.913	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	4.942	140174	169.206	ng/ml
10)	Aroclor 1221 (2)	5.061	153765	283.056	ng/ml
11)	Aroclor 1221 (3)	5.140	729493	411.510	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.140	729493	520.775	ng/ml
14)	Aroclor 1232 (2)	5.913	2978414	1395.073	ng/ml
15)	Aroclor 1232 (3)	5.998	1464616	1322.699	ng/ml
16)	Aroclor 1232 (4)	6.159	1130271	1494.661	ng/ml
17)	Aroclor 1232 (5)	6.378	1458977	1403.752	ng/ml
18)	Aroclor 1232 (6)	6.502	1001044	1176.602	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.505	1378937	698.071	ng/ml
21)	Aroclor 1242 (2)	5.913	2978414	736.316	ng/ml
22)	Aroclor 1242 (3)	5.998	1464616	682.933	ng/ml
23)	Aroclor 1242 (4)	6.159	1130271	702.192	ng/ml
24)	Aroclor 1242 (5)	6.378	1458977	659.782	ng/ml
25)	Aroclor 1242 (6)	6.502	1001044	536.880	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	5.913	2978414	1272.001	ng/ml
28)	Aroclor 1248 (2)	6.159	1130271	394.542	ng/ml
29)	Aroclor 1248 (3)	6.378	1458977	425.105	ng/ml
30)	Aroclor 1248 (4)	6.672	281699	72.584	ng/ml
31)	Aroclor 1248 (5)	6.706	1010150	239.660	ng/ml
32)	Aroclor 1248 (6)	7.193	1963317	870.074	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.706	1010150	235.825	ng/ml
35)	Aroclor 1254 (2)	6.818	1043076	193.273	ng/ml
36)	Aroclor 1254 (3)	7.193	1963317	247.821	ng/ml
37)	Aroclor 1254 (4)	7.351	302552	57.316	ng/ml
38)	Aroclor 1254 (5)	7.732	2678911	501.947	ng/ml
39)	Aroclor 1254 (6)	8.019	315164	174.902	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.306	2786895	507.626	ng/ml
42)	Aroclor 1260 (2)	7.441	3357609	487.471	ng/ml
43)	Aroclor 1260 (3)	7.993	2479537	482.981	ng/ml
44)	Aroclor 1260 (4)	8.165	5930064	476.041	ng/ml
45)	Aroclor 1260 (5)	8.461	4066209	492.992	ng/ml
46)	Aroclor 1260 (6)	8.848	1687402	494.538	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

505.69

490.268 6/16/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05018-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 08:12:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

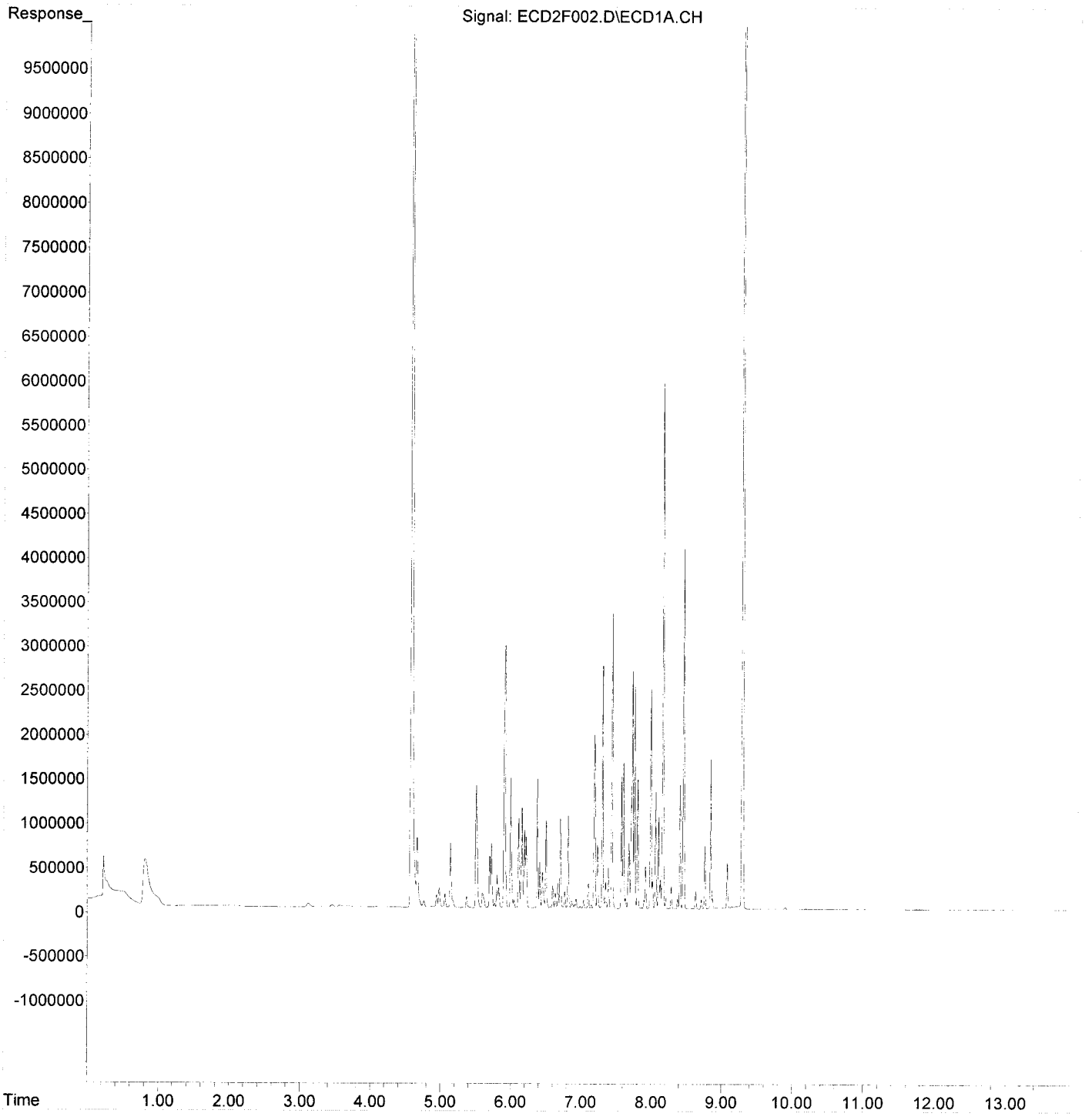
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.441	3357609	608.596 ng/ml
49)	Aroclor 1262 (2)	7.763	2496762	331.988 ng/ml
50)	Aroclor 1262 (3)	7.993	2479537	384.347 ng/ml
51)	Aroclor 1262 (4)	8.165	5930064	417.641 ng/ml
52)	Aroclor 1262 (5)	8.461	4066209	474.668 ng/ml
53)	Aroclor 1262 (6)	8.848	1687402	354.445 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.993	2479537	743.704 ng/ml
56)	Aroclor 1268 (2)	8.410	1407950	88.929 ng/ml
57)	Aroclor 1268 (3)	8.461	4066209	301.865 ng/ml
58)	Aroclor 1268 (4)	8.634	198724	16.729 ng/ml
59)	Aroclor 1268 (5)	8.848	1687402	338.908 ng/ml
60)	Aroclor 1268 (6)	9.082	516924	15.001 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F002.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05018-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 08:12:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05018-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:35 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/6/19
clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.578	6460175	111.746 ng/ml
62) S	DCBP (S)	9.295	7838649	107.653 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.510	1265	0.473 ng/ml
3)	Aroclor 1016 (2)	5.927	3180	0.601 ng/ml
4)	Aroclor 1016 (3)	6.005	2304	0.793 ng/ml
5)	Aroclor 1016 (4)	6.174	1876	0.784 ng/ml
6)	Aroclor 1016 (5)	6.379	1799	0.614 ng/ml
7)	Aroclor 1016 (6)	6.502	1842	0.885 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.938	7194	8.684 ng/ml
10)	Aroclor 1221 (2)	5.087	1146	2.110 ng/ml
11)	Aroclor 1221 (3)	5.111	976	0.550 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.111	976	0.696 ng/ml
14)	Aroclor 1232 (2)	5.927	3180	1.489 ng/ml
15)	Aroclor 1232 (3)	6.005	2304	2.080 ng/ml
16)	Aroclor 1232 (4)	6.174	1876	2.480 ng/ml
17)	Aroclor 1232 (5)	6.379	1799	1.731 ng/ml
18)	Aroclor 1232 (6)	6.502	1842	2.165 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.510	1265	0.640 ng/ml
21)	Aroclor 1242 (2)	5.927	3180	0.786 ng/ml
22)	Aroclor 1242 (3)	6.005	2304	1.074 ng/ml
23)	Aroclor 1242 (4)	6.174	1876	1.165 ng/ml
24)	Aroclor 1242 (5)	6.379	1799	0.814 ng/ml
25)	Aroclor 1242 (6)	6.502	1842	0.988 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.927	3180	1.358 ng/ml
28)	Aroclor 1248 (2)	6.174	1876	0.655 ng/ml
29)	Aroclor 1248 (3)	6.379	1799	0.524 ng/ml
30)	Aroclor 1248 (4)	6.655	1065	0.275 ng/ml
31)	Aroclor 1248 (5)	6.711	20270	4.809 ng/ml
32)	Aroclor 1248 (6)	7.191	3254	1.442 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.711	20270	4.732 ng/ml
35)	Aroclor 1254 (2)	6.827	8535	1.581 ng/ml
36)	Aroclor 1254 (3)	7.191	3254	0.411 ng/ml
37)	Aroclor 1254 (4)	7.358	1633	0.309 ng/ml
38)	Aroclor 1254 (5)	7.739	6384	1.196 ng/ml
39)	Aroclor 1254 (6)	8.021	719	0.399 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.305	1954	0.356 ng/ml
42)	Aroclor 1260 (2)	7.458	6165	0.895 ng/ml
43)	Aroclor 1260 (3)	7.988	1135	0.221 ng/ml
44)	Aroclor 1260 (4)	8.155	7513	0.603 ng/ml
45)	Aroclor 1260 (5)	8.462	2464	0.299 ng/ml
46)	Aroclor 1260 (6)	8.848	2659	0.779 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05018-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:35 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

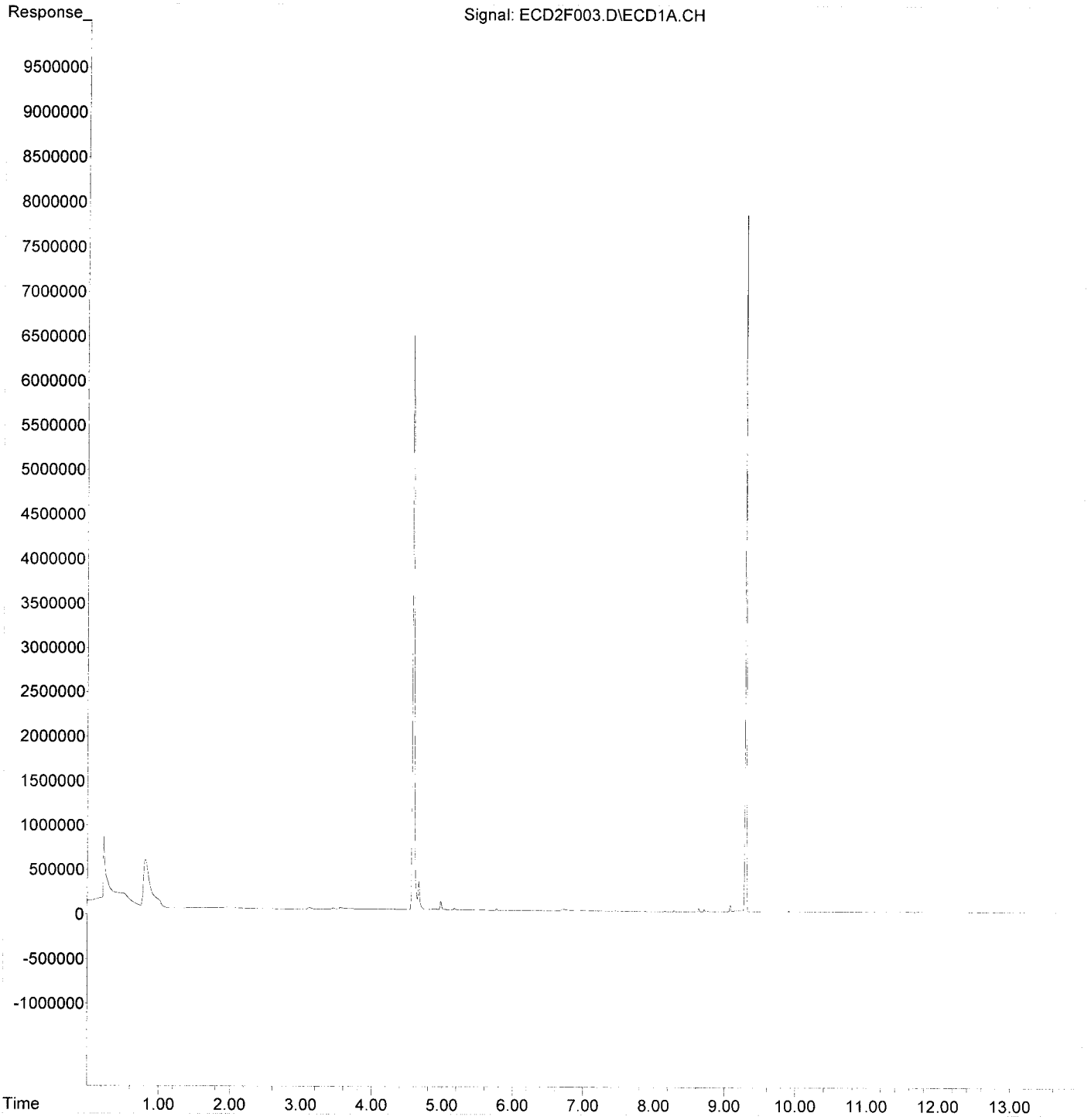
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.458	6165	1.117 ng/ml
49)	Aroclor 1262 (2)	7.762	1311	0.174 ng/ml
50)	Aroclor 1262 (3)	7.988	1135	0.176 ng/ml
51)	Aroclor 1262 (4)	8.155	7513	0.529 ng/ml
52)	Aroclor 1262 (5)	8.462	2464	0.288 ng/ml
53)	Aroclor 1262 (6)	8.848	2659	0.558 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.988	1135	0.340 ng/ml
56)	Aroclor 1268 (2)	8.411	953	0.060 ng/ml
57)	Aroclor 1268 (3)	8.462	2464	0.183 ng/ml
58)	Aroclor 1268 (4)	8.637	40912	3.444 ng/ml
59)	Aroclor 1268 (5)	8.848	2659	0.534 ng/ml
60)	Aroclor 1268 (6)	9.082	74284	2.156 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\9F05018\
Data File : ECD2F003.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05018-CCB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:35 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:42 am
Operator : MJB / KAK
Sample : 9060524-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.578	9501611	164.356 ng/ml
62) S	DCBP (S)	9.294	16774312	230.373 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.512	555	0.208 ng/ml
3)	Aroclor 1016 (2)	5.916	1185	0.224 ng/ml
4)	Aroclor 1016 (3)	5.992	1020	0.351 ng/ml
5)	Aroclor 1016 (4)	6.157	1493	0.624 ng/ml
6)	Aroclor 1016 (5)	6.379	1298	0.443 ng/ml
7)	Aroclor 1016 (6)	6.501	2124	1.020 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.939	5933	7.162 ng/ml
10)	Aroclor 1221 (2)	5.059	1618	2.978 ng/ml
11)	Aroclor 1221 (3)	5.171	8347	4.709 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.171	8347	5.959 ng/ml
14)	Aroclor 1232 (2)	5.916	1185	0.555 ng/ml
15)	Aroclor 1232 (3)	5.992	1020	0.921 ng/ml
16)	Aroclor 1232 (4)	6.157	1493	1.975 ng/ml
17)	Aroclor 1232 (5)	6.379	1298	1.249 ng/ml
18)	Aroclor 1232 (6)	6.501	2124	2.496 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.512	555	0.281 ng/ml
21)	Aroclor 1242 (2)	5.916	1185	0.293 ng/ml
22)	Aroclor 1242 (3)	5.992	1020	0.476 ng/ml
23)	Aroclor 1242 (4)	6.157	1493	0.928 ng/ml
24)	Aroclor 1242 (5)	6.379	1298	0.587 ng/ml
25)	Aroclor 1242 (6)	6.501	2124	1.139 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.916	1185	0.506 ng/ml
28)	Aroclor 1248 (2)	6.157	1493	0.521 ng/ml
29)	Aroclor 1248 (3)	6.379	1298	0.378 ng/ml
30)	Aroclor 1248 (4)	6.654	674	0.174 ng/ml
31)	Aroclor 1248 (5)	6.700	20166	4.784 ng/ml
32)	Aroclor 1248 (6)	7.185	7945	3.521 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.700	20166	4.708 ng/ml
35)	Aroclor 1254 (2)	6.817	10045	1.861 ng/ml
36)	Aroclor 1254 (3)	7.185	7945	1.003 ng/ml
37)	Aroclor 1254 (4)	7.350	8880	1.682 ng/ml
38)	Aroclor 1254 (5)	7.736	15439	2.893 ng/ml
39)	Aroclor 1254 (6)	8.018	3539	1.964 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.307	3823	0.696 ng/ml
42)	Aroclor 1260 (2)	7.455	14482	2.103 ng/ml
43)	Aroclor 1260 (3)	7.990	2587	0.504 ng/ml
44)	Aroclor 1260 (4)	8.153	23631	1.897 ng/ml
45)	Aroclor 1260 (5)	8.459	6426	0.779 ng/ml
46)	Aroclor 1260 (6)	8.870	6185	1.813 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:42 am
Operator : MJB / KAK
Sample : 9060524-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

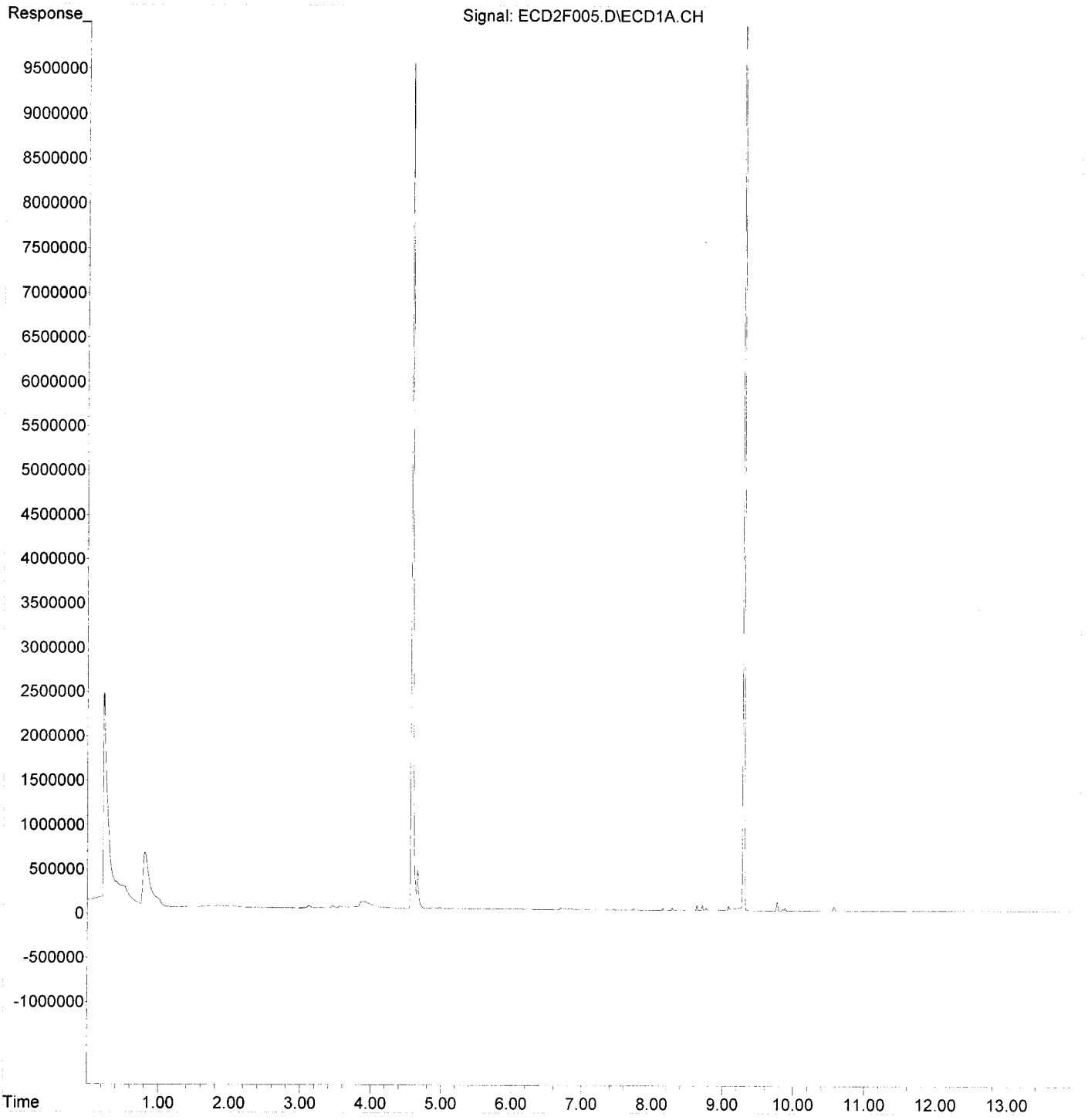
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.455	14482	2.625 ng/ml
49)	Aroclor 1262 (2)	7.736	15439	2.053 ng/ml
50)	Aroclor 1262 (3)	7.990	2587	0.401 ng/ml
51)	Aroclor 1262 (4)	8.153	23631	1.664 ng/ml
52)	Aroclor 1262 (5)	8.459	6426	0.750 ng/ml
53)	Aroclor 1262 (6)	8.870	6185	1.299 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.990	2587	0.776 ng/ml
56)	Aroclor 1268 (2)	8.408	2212	0.140 ng/ml
57)	Aroclor 1268 (3)	8.459	6426	0.477 ng/ml
58)	Aroclor 1268 (4)	8.635	60940	5.130 ng/ml
59)	Aroclor 1268 (5)	8.870	6185	1.242 ng/ml
60)	Aroclor 1268 (6)	9.082	48165	1.398 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\9F05018\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 8:42 am
Operator : MJB / KAK
Sample : 9060524-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:37:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:00 am
Operator : MJB / KAK
Sample : 9060524-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.579	9700445	167.795	ng/ml	
62) S	DCBP (S)	9.294	17047927	234.130	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.503	1864724	697.451	ng/ml	699.70
3)	Aroclor 1016 (2)	5.912	4282473	809.195	ng/ml	
4)	Aroclor 1016 (3)	5.997	1934376	666.091	ng/ml	
5)	Aroclor 1016 (4)	6.157	1781255	744.957	ng/ml	
6)	Aroclor 1016 (5)	6.377	1936522	660.566	ng/ml	
7)	Aroclor 1016 (6)	6.501	1290410	619.927	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	4.941	167062	201.663	ng/ml	
10)	Aroclor 1221 (2)	5.061	193980	357.085	ng/ml	
11)	Aroclor 1221 (3)	5.140	870704	491.168	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.140	870704	621.583	ng/ml	✓
14)	Aroclor 1232 (2)	5.912	4282473	2005.887	ng/ml	
15)	Aroclor 1232 (3)	5.997	1934376	1746.941	ng/ml	
16)	Aroclor 1232 (4)	6.157	1781255	2355.517	ng/ml	
17)	Aroclor 1232 (5)	6.377	1936522	1863.220	ng/ml	
18)	Aroclor 1232 (6)	6.501	1290410	1516.714	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.503	1864724	943.996	ng/ml	
21)	Aroclor 1242 (2)	5.912	4282473	1058.703	ng/ml	
22)	Aroclor 1242 (3)	5.997	1934376	901.976	ng/ml	
23)	Aroclor 1242 (4)	6.157	1781255	1106.623	ng/ml	
24)	Aroclor 1242 (5)	6.377	1936522	875.739	ng/ml	
25)	Aroclor 1242 (6)	6.501	1290410	692.072	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	5.912	4282473	1828.930	ng/ml	
28)	Aroclor 1248 (2)	6.157	1781255	621.781	ng/ml	
29)	Aroclor 1248 (3)	6.377	1936522	564.248	ng/ml	
30)	Aroclor 1248 (4)	6.671	417160	107.487	ng/ml	
31)	Aroclor 1248 (5)	6.705	1486831	352.753	ng/ml	
32)	Aroclor 1248 (6)	7.193	3014623	1335.977	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.705	1486831	347.108	ng/ml	
35)	Aroclor 1254 (2)	6.817	1731612	320.853	ng/ml	
36)	Aroclor 1254 (3)	7.193	3014623	380.524	ng/ml	
37)	Aroclor 1254 (4)	7.350	464822	88.056	ng/ml	
38)	Aroclor 1254 (5)	7.732	4450815	833.948	ng/ml	
39)	Aroclor 1254 (6)	8.018	409185	227.079	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.305	4423427	805.716	ng/ml	876.35
42)	Aroclor 1260 (2)	7.441	5977758	867.874	ng/ml	
43)	Aroclor 1260 (3)	7.992	4266522	831.061	ng/ml	
44)	Aroclor 1260 (4)	8.165	11398222	915.002	ng/ml	
45)	Aroclor 1260 (5)	8.460	7067428	856.862	ng/ml	
46)	Aroclor 1260 (6)	8.846	3349153	981.558	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:00 am
Operator : MJB / KAK
Sample : 9060524-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

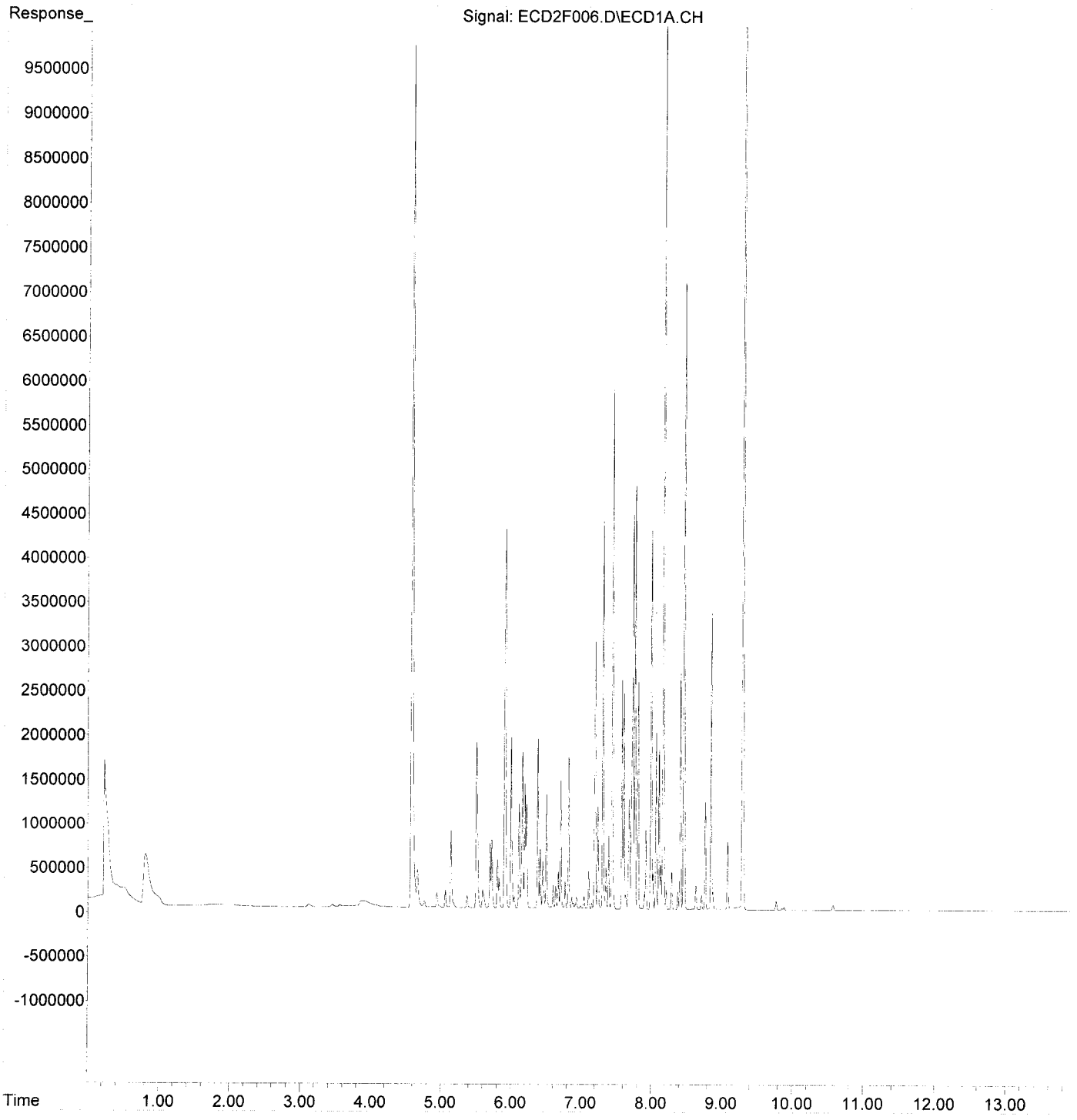
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.441	5977758	1083.521 ng/ml
49)	Aroclor 1262 (2)	7.762	4777981	635.316 ng/ml
50)	Aroclor 1262 (3)	7.992	4266522	661.343 ng/ml
51)	Aroclor 1262 (4)	8.165	11398222	802.751 ng/ml
52)	Aroclor 1262 (5)	8.460	7067428	825.014 ng/ml
53)	Aroclor 1262 (6)	8.846	3349153	703.501 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.992	4266522	1279.686 ng/ml
56)	Aroclor 1268 (2)	8.409	2669482	168.609 ng/ml
57)	Aroclor 1268 (3)	8.460	7067428	524.667 ng/ml
58)	Aroclor 1268 (4)	8.632	274123	23.076 ng/ml
59)	Aroclor 1268 (5)	8.846	3349153	672.664 ng/ml
60)	Aroclor 1268 (6)	9.082	762631	22.131 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\9F05018\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:00 am
Operator : MJB / KAK
Sample : 9060524-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:18 am
Operator : MJB / KAK
Sample : A9E0766-02RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/6/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.578	9270356	160.356 ng/ml
62) S	DCBP (S)	9.293	15567651	213.801 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.502	2510	0.939 ng/ml
3)	Aroclor 1016 (2)	5.914	5221	0.986 ng/ml
4)	Aroclor 1016 (3)	5.997	2789	0.960 ng/ml
5)	Aroclor 1016 (4)	6.159	4630	1.936 ng/ml
6)	Aroclor 1016 (5)	6.378	3913	1.335 ng/ml
7)	Aroclor 1016 (6)	6.501	3725	1.790 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.976	16063	19.390 ng/ml
10)	Aroclor 1221 (2)	5.060	2142	3.943 ng/ml
11)	Aroclor 1221 (3)	5.172	10231	5.772 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.172	10231	7.304 ng/ml
14)	Aroclor 1232 (2)	5.914	5221	2.445 ng/ml
15)	Aroclor 1232 (3)	5.997	2789	2.518 ng/ml
16)	Aroclor 1232 (4)	6.159	4630	6.122 ng/ml
17)	Aroclor 1232 (5)	6.378	3913	3.765 ng/ml
18)	Aroclor 1232 (6)	6.501	3725	4.379 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.502	2510	1.270 ng/ml
21)	Aroclor 1242 (2)	5.914	5221	1.291 ng/ml
22)	Aroclor 1242 (3)	5.997	2789	1.300 ng/ml
23)	Aroclor 1242 (4)	6.159	4630	2.876 ng/ml
24)	Aroclor 1242 (5)	6.378	3913	1.770 ng/ml
25)	Aroclor 1242 (6)	6.501	3725	1.998 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.914	5221	2.230 ng/ml
28)	Aroclor 1248 (2)	6.159	4630	1.616 ng/ml
29)	Aroclor 1248 (3)	6.378	3913	1.140 ng/ml
30)	Aroclor 1248 (4)	6.673	6297	1.623 ng/ml
31)	Aroclor 1248 (5)	6.703	22231	5.274 ng/ml
32)	Aroclor 1248 (6)	7.186	16149	7.156 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.703	22231	5.190 ng/ml
35)	Aroclor 1254 (2)	6.819	16176	2.997 ng/ml
36)	Aroclor 1254 (3)	7.186	16149	2.038 ng/ml
37)	Aroclor 1254 (4)	7.351	20152	3.818 ng/ml
38)	Aroclor 1254 (5)	7.732	27245	5.105 ng/ml
39)	Aroclor 1254 (6)	8.018	7521	4.174 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.306	13177	2.400 ng/ml
42)	Aroclor 1260 (2)	7.441	19429	2.821 ng/ml
43)	Aroclor 1260 (3)	7.991	8390	1.634 ng/ml
44)	Aroclor 1260 (4)	8.158	29195	2.344 ng/ml
45)	Aroclor 1260 (5)	8.459	20965	2.542 ng/ml
46)	Aroclor 1260 (6)	8.847	8836	2.590 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:18 am
Operator : MJB / KAK
Sample : A9E0766-02RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

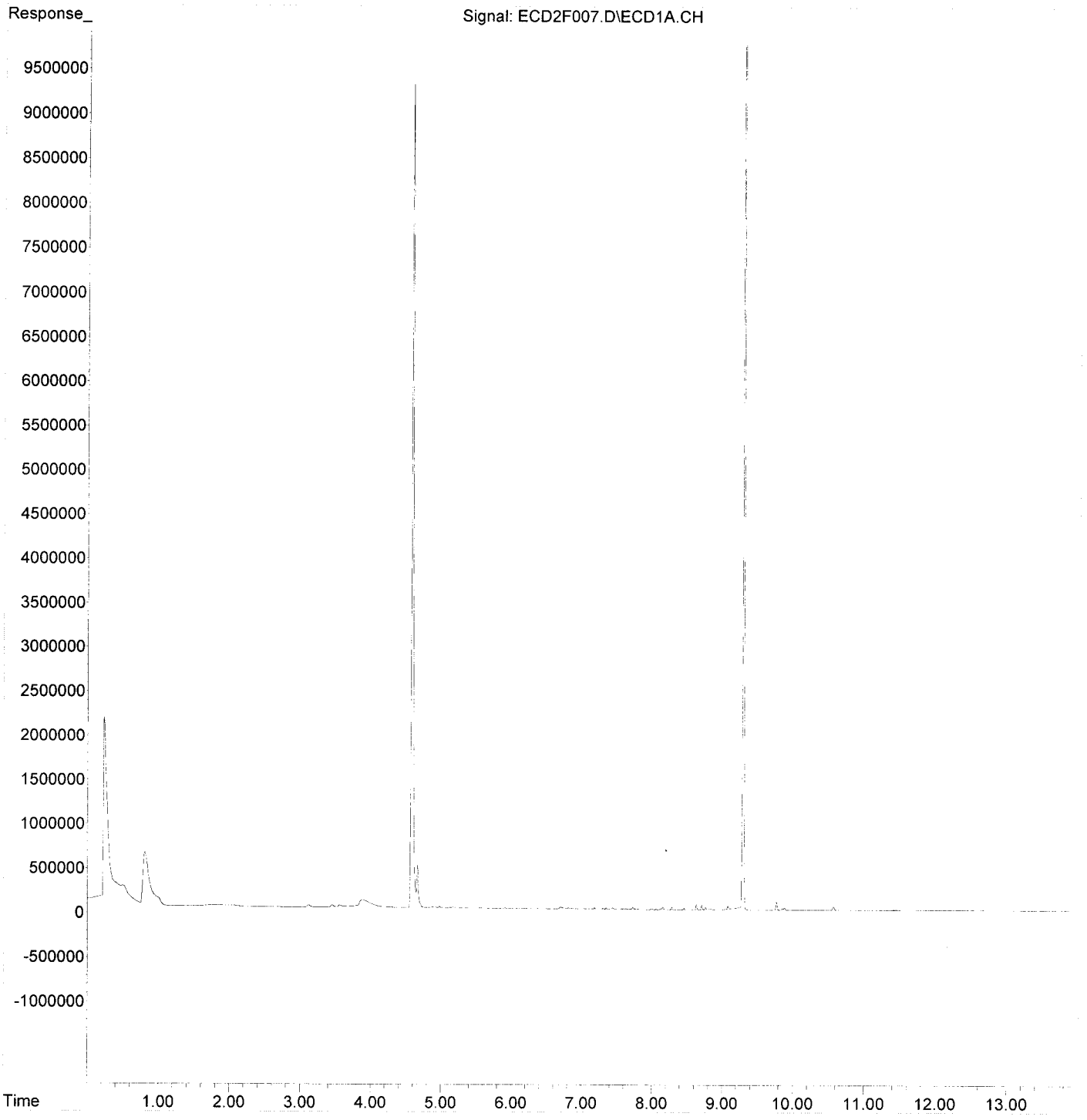
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.441	19429	3.522 ng/ml
49)	Aroclor 1262 (2)	7.761	8874	1.180 ng/ml
50)	Aroclor 1262 (3)	7.991	8390	1.300 ng/ml
51)	Aroclor 1262 (4)	8.158	29195	2.056 ng/ml
52)	Aroclor 1262 (5)	8.459	20965	2.447 ng/ml
53)	Aroclor 1262 (6)	8.847	8836	1.856 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.991	8390	2.516 ng/ml
56)	Aroclor 1268 (2)	8.409	4811	0.304 ng/ml
57)	Aroclor 1268 (3)	8.459	20965	1.556 ng/ml
58)	Aroclor 1268 (4)	8.635	61136	5.146 ng/ml
59)	Aroclor 1268 (5)	8.847	8836	1.775 ng/ml
60)	Aroclor 1268 (6)	9.083	44617	1.295 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\9F05018\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:18 am
Operator : MJB / KAK
Sample : A9E0766-02RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9060524-DUP1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:43 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.579	7495495	129.655 ng/ml
62) S	DCBP (S)	9.293	13963898	191.775 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.507	910	0.340 ng/ml
3)	Aroclor 1016 (2)	5.913	1733	0.327 ng/ml
4)	Aroclor 1016 (3)	5.994	1468	0.506 ng/ml
5)	Aroclor 1016 (4)	6.157	1592	0.666 ng/ml
6)	Aroclor 1016 (5)	6.379	1290	0.440 ng/ml
7)	Aroclor 1016 (6)	6.501	1735	0.833 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.931	6357	7.673 ng/ml
10)	Aroclor 1221 (2)	5.058	2221	4.088 ng/ml
11)	Aroclor 1221 (3)	5.130	12730	7.181 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.130	12730	9.088 ng/ml
14)	Aroclor 1232 (2)	5.913	1733	0.812 ng/ml
15)	Aroclor 1232 (3)	5.994	1468	1.326 ng/ml
16)	Aroclor 1232 (4)	6.157	1592	2.106 ng/ml
17)	Aroclor 1232 (5)	6.379	1290	1.241 ng/ml
18)	Aroclor 1232 (6)	6.501	1735	2.039 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.507	910	0.461 ng/ml
21)	Aroclor 1242 (2)	5.913	1733	0.428 ng/ml
22)	Aroclor 1242 (3)	5.994	1468	0.685 ng/ml
23)	Aroclor 1242 (4)	6.157	1592	0.989 ng/ml
24)	Aroclor 1242 (5)	6.379	1290	0.583 ng/ml
25)	Aroclor 1242 (6)	6.501	1735	0.930 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.913	1733	0.740 ng/ml
28)	Aroclor 1248 (2)	6.157	1592	0.556 ng/ml
29)	Aroclor 1248 (3)	6.379	1290	0.376 ng/ml
30)	Aroclor 1248 (4)	6.653	694	0.179 ng/ml
31)	Aroclor 1248 (5)	6.704	20624	4.893 ng/ml
32)	Aroclor 1248 (6)	7.186	5270	2.336 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.704	20624	4.815 ng/ml
35)	Aroclor 1254 (2)	6.818	9295	1.722 ng/ml
36)	Aroclor 1254 (3)	7.186	5270	0.665 ng/ml
37)	Aroclor 1254 (4)	7.351	4176	0.791 ng/ml
38)	Aroclor 1254 (5)	7.737	11490	2.153 ng/ml
39)	Aroclor 1254 (6)	8.017	1621	0.899 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.304	3222	0.587 ng/ml
42)	Aroclor 1260 (2)	7.456	12469	1.810 ng/ml
43)	Aroclor 1260 (3)	7.990	2425	0.472 ng/ml
44)	Aroclor 1260 (4)	8.153	21853	1.754 ng/ml
45)	Aroclor 1260 (5)	8.458	5065	0.614 ng/ml
46)	Aroclor 1260 (6)	8.845	6115	1.792 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9060524-DUP1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:43 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

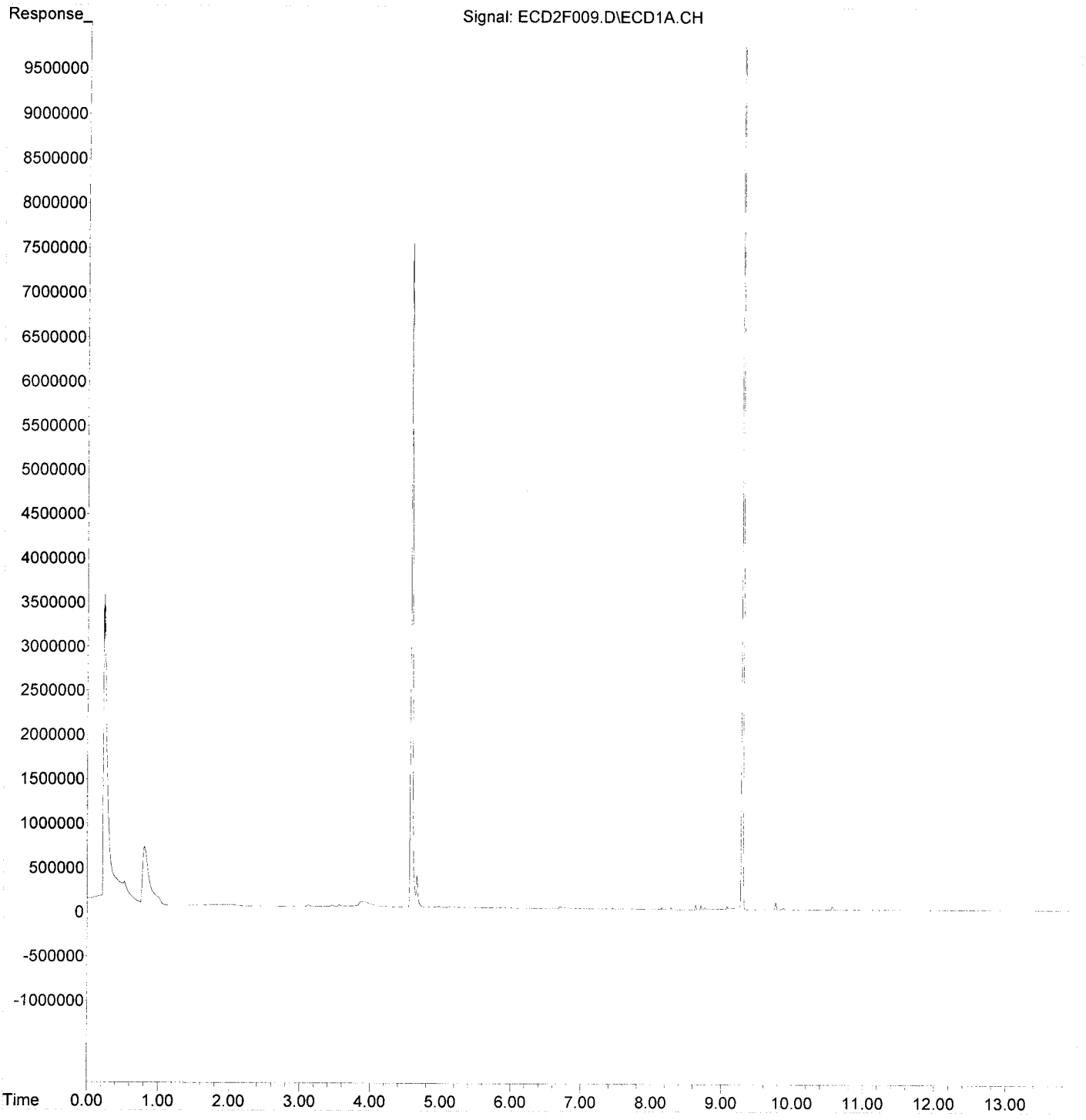
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.456	12469	2.260 ng/ml
49)	Aroclor 1262 (2)	7.761	2213	0.294 ng/ml
50)	Aroclor 1262 (3)	7.990	2425	0.376 ng/ml
51)	Aroclor 1262 (4)	8.153	21853	1.539 ng/ml
52)	Aroclor 1262 (5)	8.458	5065	0.591 ng/ml
53)	Aroclor 1262 (6)	8.845	6115	1.285 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.990	2425	0.727 ng/ml
56)	Aroclor 1268 (2)	8.411	2101	0.133 ng/ml
57)	Aroclor 1268 (3)	8.458	5065	0.376 ng/ml
58)	Aroclor 1268 (4)	8.635	54175	4.560 ng/ml
59)	Aroclor 1268 (5)	8.845	6115	1.228 ng/ml
60)	Aroclor 1268 (6)	9.108	16270	0.472 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\9F05018\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9060524-DUP1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:38:43 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-05RE1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.577	10582480	183.052 ng/ml
62) S	DCBP (S)	9.294	15692300	215.513 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.500	1899	0.710 ng/ml
3)	Aroclor 1016 (2)	5.913	3353	0.634 ng/ml
4)	Aroclor 1016 (3)	5.993	2459	0.847 ng/ml
5)	Aroclor 1016 (4)	6.155	2929	1.225 ng/ml
6)	Aroclor 1016 (5)	6.377	2521	0.860 ng/ml
7)	Aroclor 1016 (6)	6.501	2682	1.288 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.949	6276	7.576 ng/ml
10)	Aroclor 1221 (2)	5.067	2289	4.213 ng/ml
11)	Aroclor 1221 (3)	5.171	14293	8.063 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.171	14293	10.204 ng/ml
14)	Aroclor 1232 (2)	5.913	3353	1.571 ng/ml
15)	Aroclor 1232 (3)	5.993	2459	2.221 ng/ml
16)	Aroclor 1232 (4)	6.155	2929	3.874 ng/ml
17)	Aroclor 1232 (5)	6.377	2521	2.426 ng/ml
18)	Aroclor 1232 (6)	6.501	2682	3.152 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.500	1899	0.962 ng/ml
21)	Aroclor 1242 (2)	5.913	3353	0.829 ng/ml
22)	Aroclor 1242 (3)	5.993	2459	1.147 ng/ml
23)	Aroclor 1242 (4)	6.155	2929	1.820 ng/ml
24)	Aroclor 1242 (5)	6.377	2521	1.140 ng/ml
25)	Aroclor 1242 (6)	6.501	2682	1.438 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.913	3353	1.432 ng/ml
28)	Aroclor 1248 (2)	6.155	2929	1.022 ng/ml
29)	Aroclor 1248 (3)	6.377	2521	0.735 ng/ml
30)	Aroclor 1248 (4)	6.702	22116	5.699 ng/ml
31)	Aroclor 1248 (5)	6.702	22116	5.247 ng/ml
32)	Aroclor 1248 (6)	7.185	8670	3.842 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.702	22116	5.163 ng/ml
35)	Aroclor 1254 (2)	6.817	11766	2.180 ng/ml
36)	Aroclor 1254 (3)	7.185	8670	1.094 ng/ml
37)	Aroclor 1254 (4)	7.350	7115	1.348 ng/ml
38)	Aroclor 1254 (5)	7.737	13587	2.546 ng/ml
39)	Aroclor 1254 (6)	8.018	2263	1.256 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.305	5597	1.019 ng/ml
42)	Aroclor 1260 (2)	7.455	12991	1.886 ng/ml
43)	Aroclor 1260 (3)	7.990	2937	0.572 ng/ml
44)	Aroclor 1260 (4)	8.153	22213	1.783 ng/ml
45)	Aroclor 1260 (5)	8.457	6139	0.744 ng/ml
46)	Aroclor 1260 (6)	8.846	6799	1.993 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-05RE1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

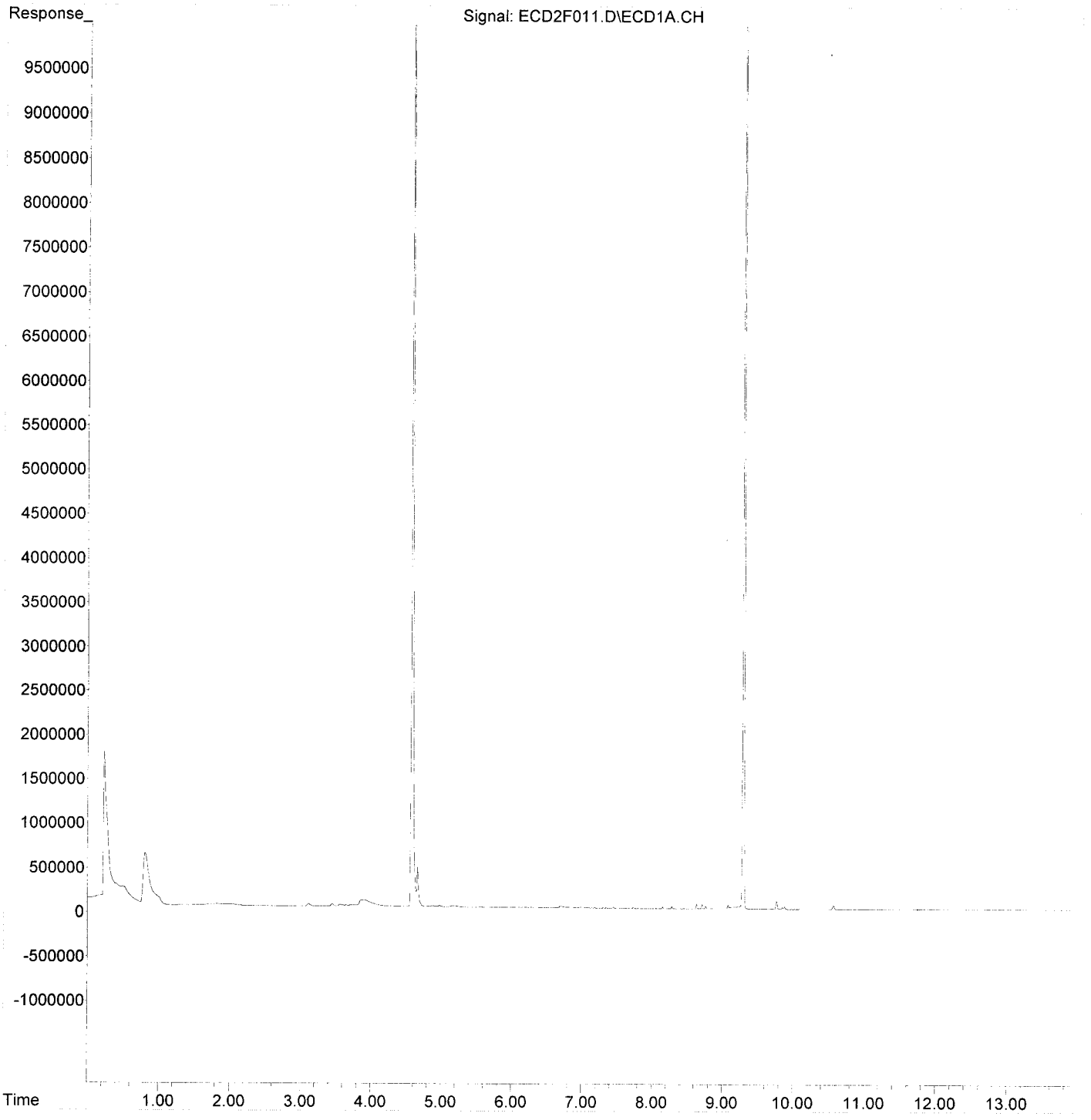
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.455	12991	2.355 ng/ml
49)	Aroclor 1262 (2)	7.759	2966	0.394 ng/ml
50)	Aroclor 1262 (3)	7.990	2937	0.455 ng/ml
51)	Aroclor 1262 (4)	8.153	22213	1.564 ng/ml
52)	Aroclor 1262 (5)	8.457	6139	0.717 ng/ml
53)	Aroclor 1262 (6)	8.846	6799	1.428 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.990	2937	0.881 ng/ml
56)	Aroclor 1268 (2)	8.409	2302	0.145 ng/ml
57)	Aroclor 1268 (3)	8.457	6139	0.456 ng/ml
58)	Aroclor 1268 (4)	8.634	58262	4.904 ng/ml
59)	Aroclor 1268 (5)	8.846	6799	1.366 ng/ml
60)	Aroclor 1268 (6)	9.082	44973	1.305 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\9F05018\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-05RE1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:03 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : 9060524-MS1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.579	11770995	203.611	ng/ml	
62) S	DCBP (S)	9.294	17337886	238.112	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.504	2390045	893.933	ng/ml	883.28
3)	Aroclor 1016 (2)	5.912	5198138	982.215	ng/ml	
4)	Aroclor 1016 (3)	5.997	2500614	861.071	ng/ml	
5)	Aroclor 1016 (4)	6.158	2096873	876.955	ng/ml	
6)	Aroclor 1016 (5)	6.377	2501829	853.398	ng/ml	
7)	Aroclor 1016 (6)	6.501	1732126	832.132	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	4.941	229178	276.645	ng/ml	
10)	Aroclor 1221 (2)	5.060	241798	445.110	ng/ml	
11)	Aroclor 1221 (3)	5.140	1166441	657.994	ng/ml	✓
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.140	1166441	832.706	ng/ml	
14)	Aroclor 1232 (2)	5.912	5198138	2434.779	ng/ml	
15)	Aroclor 1232 (3)	5.997	2500614	2258.312	ng/ml	
16)	Aroclor 1232 (4)	6.158	2096873	2772.888	ng/ml	
17)	Aroclor 1232 (5)	6.377	2501829	2407.129	ng/ml	
18)	Aroclor 1232 (6)	6.501	1732126	2035.897	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.504	2390045	1209.933	ng/ml	
21)	Aroclor 1242 (2)	5.912	5198138	1285.071	ng/ml	
22)	Aroclor 1242 (3)	5.997	2500614	1166.006	ng/ml	
23)	Aroclor 1242 (4)	6.158	2096873	1302.704	ng/ml	
24)	Aroclor 1242 (5)	6.377	2501829	1131.383	ng/ml	
25)	Aroclor 1242 (6)	6.501	1732126	928.974	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	5.912	5198138	2219.986	ng/ml	
28)	Aroclor 1248 (2)	6.158	2096873	731.953	ng/ml	
29)	Aroclor 1248 (3)	6.377	2501829	728.962	ng/ml	
30)	Aroclor 1248 (4)	6.671	481016	123.941	ng/ml	
31)	Aroclor 1248 (5)	6.705	1795789	426.054	ng/ml	
32)	Aroclor 1248 (6)	7.192	3643023	1614.462	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.705	1795789	419.236	ng/ml	
35)	Aroclor 1254 (2)	6.817	1950218	361.359	ng/ml	
36)	Aroclor 1254 (3)	7.192	3643023	459.844	ng/ml	
37)	Aroclor 1254 (4)	7.350	573455	108.636	ng/ml	
38)	Aroclor 1254 (5)	7.731	5012168	939.129	ng/ml	
39)	Aroclor 1254 (6)	8.018	534806	296.794	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.305	5243595	955.107	ng/ml	994.59
42)	Aroclor 1260 (2)	7.441	7015652	1018.559	ng/ml	
43)	Aroclor 1260 (3)	7.992	5023128	978.438	ng/ml	
44)	Aroclor 1260 (4)	8.165	12349759	991.387	ng/ml	
45)	Aroclor 1260 (5)	8.459	8180892	991.860	ng/ml	
46)	Aroclor 1260 (6)	8.846	3521884	1032.182	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : 9060524-MS1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

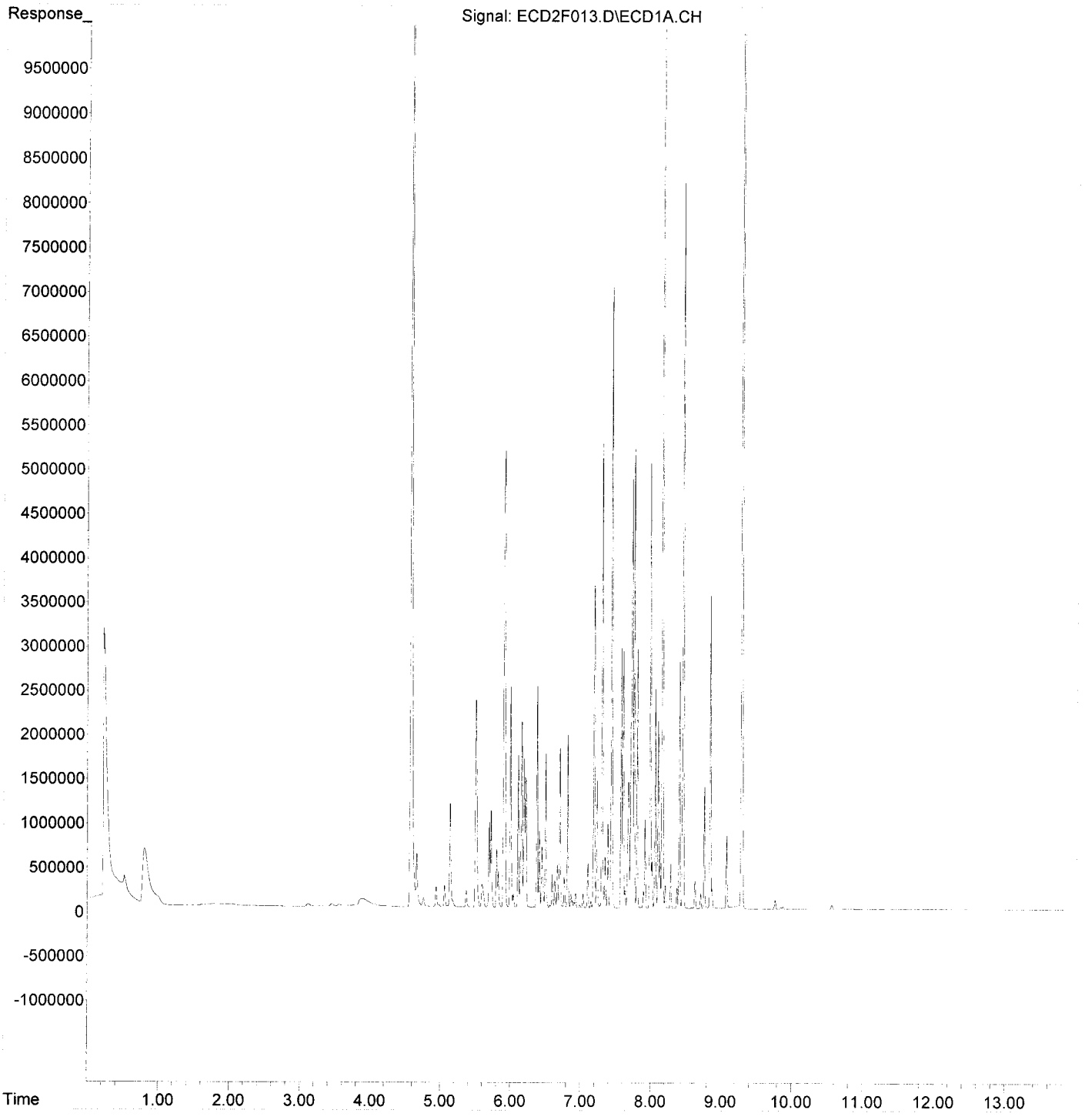
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.441	7015652	1271.648	ng/ml
49)	Aroclor 1262 (2)	7.762	5191588	690.312	ng/ml
50)	Aroclor 1262 (3)	7.992	5023128	778.622	ng/ml
51)	Aroclor 1262 (4)	8.165	12349759	869.766	ng/ml
52)	Aroclor 1262 (5)	8.459	8180892	954.994	ng/ml
53)	Aroclor 1262 (6)	8.846	3521884	739.784	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	7.992	5023128	1506.620	ng/ml
56)	Aroclor 1268 (2)	8.408	2848278	179.902	ng/ml
57)	Aroclor 1268 (3)	8.459	8180892	607.328	ng/ml
58)	Aroclor 1268 (4)	8.631	306750	25.822	ng/ml
59)	Aroclor 1268 (5)	8.846	3521884	707.357	ng/ml
60)	Aroclor 1268 (6)	9.081	823076	23.886	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\9F05018\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : 9060524-MS1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : 9060524-MSD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.578	11805131	204.202	ng/ml	
62) S	DCBP (S)	9.293	16821463	231.020	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.503	2333900	872.934	ng/ml	877.02
3)	Aroclor 1016 (2)	5.910	5114928	966.492	ng/ml	
4)	Aroclor 1016 (3)	5.996	2529684	871.081	ng/ml	
5)	Aroclor 1016 (4)	6.157	2115349	884.682	ng/ml	
6)	Aroclor 1016 (5)	6.377	2526920	861.956	ng/ml	
7)	Aroclor 1016 (6)	6.500	1675539	804.947	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	4.940	230352	278.062	ng/ml	
10)	Aroclor 1221 (2)	5.059	247699	455.973	ng/ml	
11)	Aroclor 1221 (3)	5.139	1204080	679.227	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.139	1204080	859.576	ng/ml	✓
14)	Aroclor 1232 (2)	5.910	5114928	2395.804	ng/ml	
15)	Aroclor 1232 (3)	5.996	2529684	2284.566	ng/ml	
16)	Aroclor 1232 (4)	6.157	2115349	2797.320	ng/ml	
17)	Aroclor 1232 (5)	6.377	2526920	2431.270	ng/ml	
18)	Aroclor 1232 (6)	6.500	1675539	1969.386	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.503	2333900	1181.511	ng/ml	
21)	Aroclor 1242 (2)	5.910	5114928	1264.500	ng/ml	
22)	Aroclor 1242 (3)	5.996	2529684	1179.561	ng/ml	
23)	Aroclor 1242 (4)	6.157	2115349	1314.182	ng/ml	
24)	Aroclor 1242 (5)	6.377	2526920	1142.730	ng/ml	
25)	Aroclor 1242 (6)	6.500	1675539	898.625	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	5.910	5114928	2184.449	ng/ml	
28)	Aroclor 1248 (2)	6.157	2115349	738.402	ng/ml	
29)	Aroclor 1248 (3)	6.377	2526920	736.273	ng/ml	
30)	Aroclor 1248 (4)	6.670	512138	131.960	ng/ml	
31)	Aroclor 1248 (5)	6.704	1856008	440.341	ng/ml	
32)	Aroclor 1248 (6)	7.192	3683772	1632.520	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.704	1856008	433.295	ng/ml	
35)	Aroclor 1254 (2)	6.817	1942660	359.959	ng/ml	
36)	Aroclor 1254 (3)	7.192	3683772	464.988	ng/ml	
37)	Aroclor 1254 (4)	7.350	578450	109.582	ng/ml	
38)	Aroclor 1254 (5)	7.731	5296284	992.364	ng/ml	
39)	Aroclor 1254 (6)	8.017	542698	301.174	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.304	5207083	948.456	ng/ml	982.56
42)	Aroclor 1260 (2)	7.440	6769554	982.830	ng/ml	
43)	Aroclor 1260 (3)	7.992	4990828	972.147	ng/ml	
44)	Aroclor 1260 (4)	8.164	12318092	988.845	ng/ml	
45)	Aroclor 1260 (5)	8.459	7881191	955.524	ng/ml	
46)	Aroclor 1260 (6)	8.846	3574283	1047.539	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : 9060524-MSD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

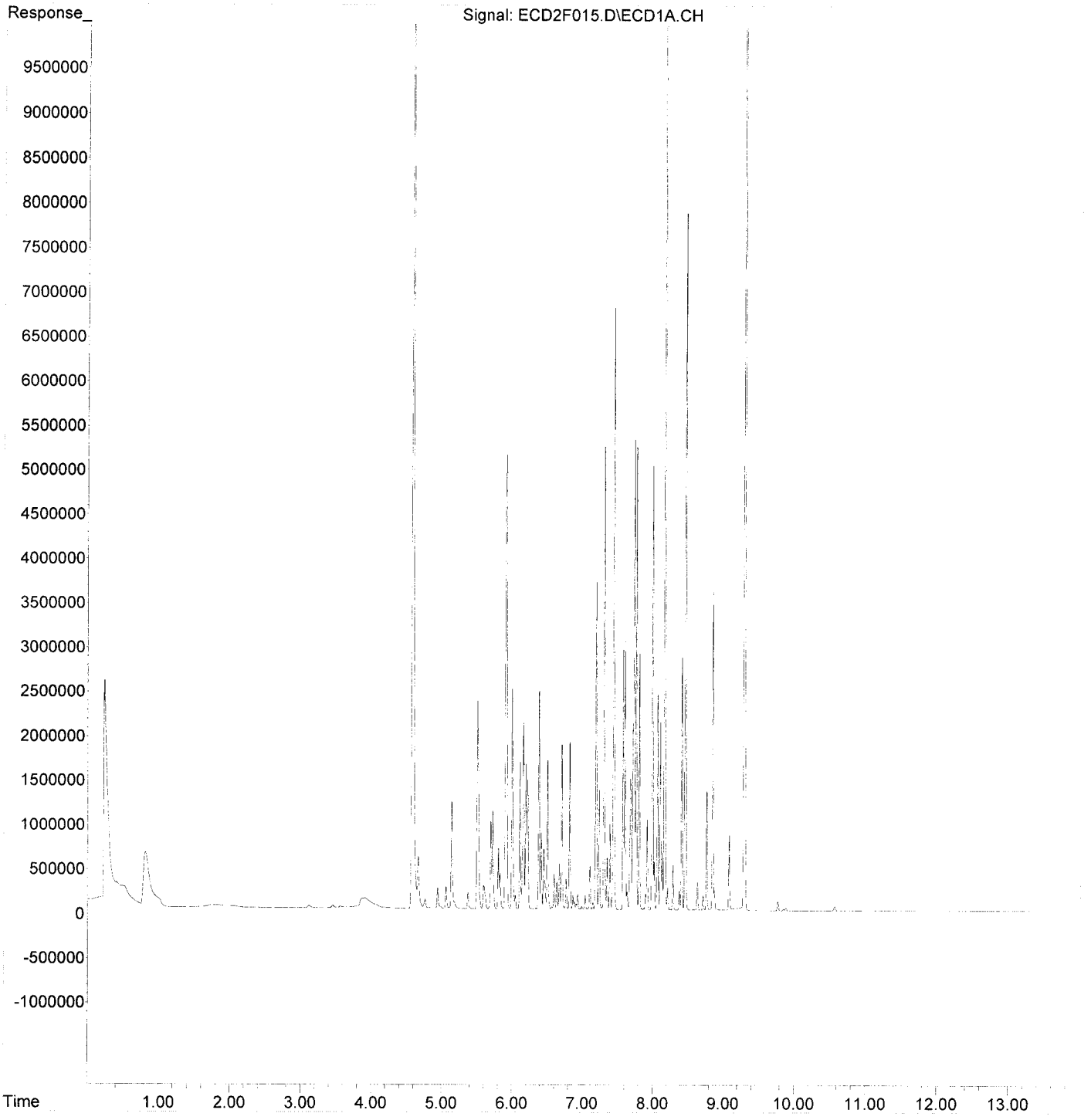
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.440	6769554	1227.041	ng/ml
49)	Aroclor 1262 (2)	7.762	5198930	691.289	ng/ml
50)	Aroclor 1262 (3)	7.992	4990828	773.616	ng/ml
51)	Aroclor 1262 (4)	8.164	12318092	867.536	ng/ml
52)	Aroclor 1262 (5)	8.459	7881191	920.008	ng/ml
53)	Aroclor 1262 (6)	8.846	3574283	750.790	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	7.992	4990828	1496.932	ng/ml
56)	Aroclor 1268 (2)	8.408	2844547	179.667	ng/ml
57)	Aroclor 1268 (3)	8.459	7881191	585.079	ng/ml
58)	Aroclor 1268 (4)	8.631	312932	26.343	ng/ml
59)	Aroclor 1268 (5)	8.846	3574283	717.881	ng/ml
60)	Aroclor 1268 (6)	9.081	842220	24.441	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\9F05018\
Data File : ECD2F015.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : 9060524-MSD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:36 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05018-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.579	16741785	289.594	ng/ml
62) S	DCBP (S)	9.293	19565057	268.700	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.503	1433231	536.062	ng/ml
3)	Aroclor 1016 (2)	5.911	3012114	569.154	ng/ml
4)	Aroclor 1016 (3)	5.996	1519219	523.134	ng/ml
5)	Aroclor 1016 (4)	6.157	1186699	496.301	ng/ml
6)	Aroclor 1016 (5)	6.377	1465442	499.876	ng/ml
7)	Aroclor 1016 (6)	6.500	1037672	498.509	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	4.940	151215	182.534	ng/ml
10)	Aroclor 1221 (2)	5.060	158176	291.175	ng/ml
11)	Aroclor 1221 (3)	5.138	734954	414.591	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.138	734954	524.673	ng/ml
14)	Aroclor 1232 (2)	5.911	3012114	1410.858	ng/ml
15)	Aroclor 1232 (3)	5.996	1519219	1372.012	ng/ml
16)	Aroclor 1232 (4)	6.157	1186699	1569.280	ng/ml
17)	Aroclor 1232 (5)	6.377	1465442	1409.972	ng/ml
18)	Aroclor 1232 (6)	6.500	1037672	1219.653	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.503	1433231	725.557	ng/ml
21)	Aroclor 1242 (2)	5.911	3012114	744.648	ng/ml
22)	Aroclor 1242 (3)	5.996	1519219	708.393	ng/ml
23)	Aroclor 1242 (4)	6.157	1186699	737.248	ng/ml
24)	Aroclor 1242 (5)	6.377	1465442	662.706	ng/ml
25)	Aroclor 1242 (6)	6.500	1037672	556.524	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	5.911	3012114	1286.394	ng/ml
28)	Aroclor 1248 (2)	6.157	1186699	414.239	ng/ml
29)	Aroclor 1248 (3)	6.377	1465442	426.989	ng/ml
30)	Aroclor 1248 (4)	6.670	300702	77.480	ng/ml
31)	Aroclor 1248 (5)	6.704	1054120	250.092	ng/ml
32)	Aroclor 1248 (6)	7.191	2041392	904.674	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.704	1054120	246.090	ng/ml
35)	Aroclor 1254 (2)	6.817	1063709	197.096	ng/ml
36)	Aroclor 1254 (3)	7.191	2041392	257.677	ng/ml
37)	Aroclor 1254 (4)	7.350	322265	61.050	ng/ml
38)	Aroclor 1254 (5)	7.730	2962869	555.152	ng/ml
39)	Aroclor 1254 (6)	8.018	325588	180.687	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.304	2801696	510.321	ng/ml
42)	Aroclor 1260 (2)	7.441	3416820	496.067	ng/ml
43)	Aroclor 1260 (3)	7.992	2633147	512.902	ng/ml
44)	Aroclor 1260 (4)	8.164	6171288	495.405	ng/ml
45)	Aroclor 1260 (5)	8.459	4317255	523.429	ng/ml
46)	Aroclor 1260 (6)	8.846	1860004	545.124	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

520.51

513.818 6/16/19

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05018-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

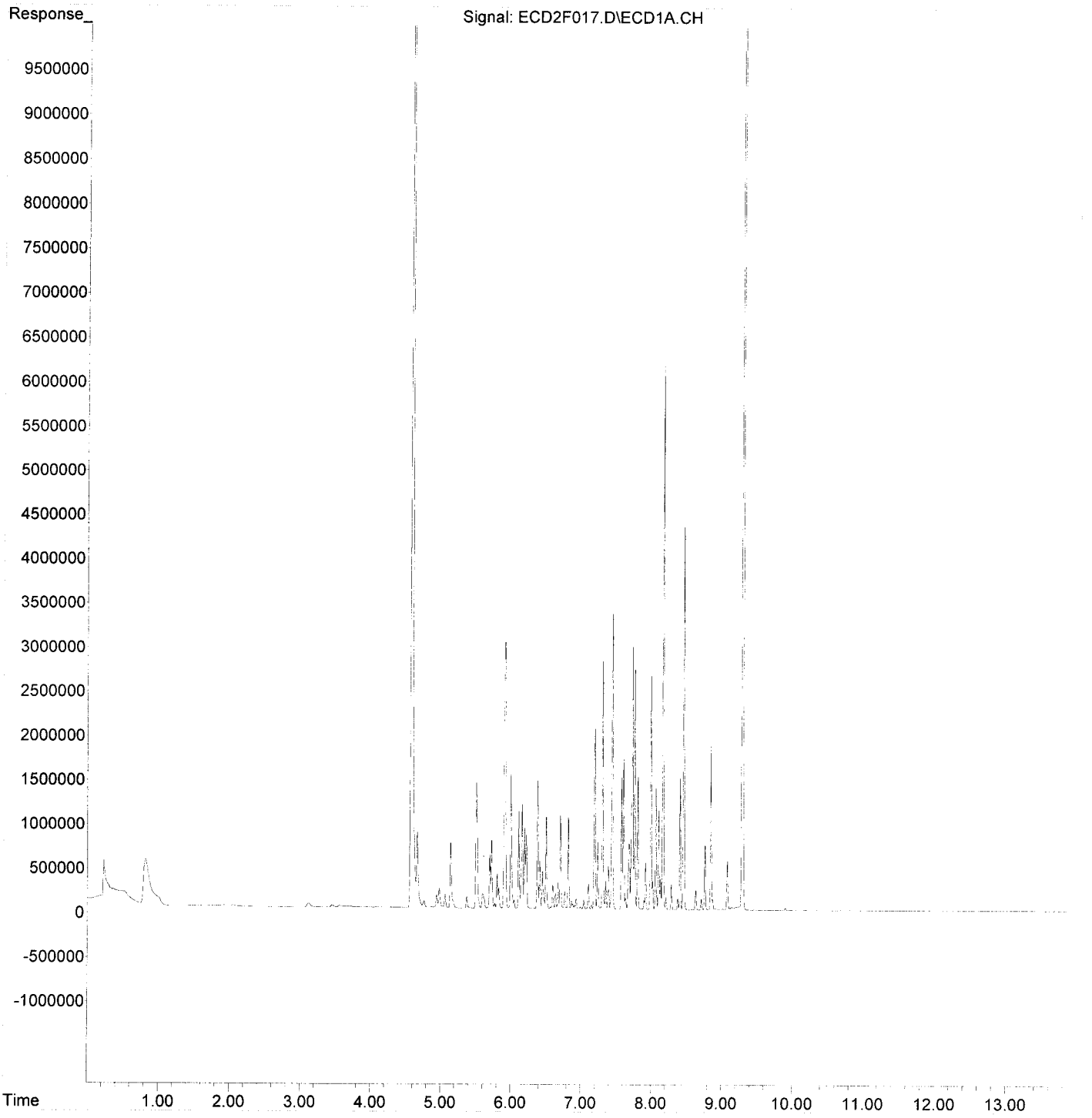
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.441	3416820	619.329 ng/ml
49)	Aroclor 1262 (2)	7.761	2716372	361.189 ng/ml
50)	Aroclor 1262 (3)	7.992	2633147	408.157 ng/ml
51)	Aroclor 1262 (4)	8.164	6171288	434.630 ng/ml
52)	Aroclor 1262 (5)	8.459	4317255	503.973 ng/ml
53)	Aroclor 1262 (6)	8.846	1860004	390.700 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.992	2633147	789.777 ng/ml
56)	Aroclor 1268 (2)	8.408	1483303	93.688 ng/ml
57)	Aroclor 1268 (3)	8.459	4317255	320.502 ng/ml
58)	Aroclor 1268 (4)	8.632	223224	18.791 ng/ml
59)	Aroclor 1268 (5)	8.846	1860004	373.575 ng/ml
60)	Aroclor 1268 (6)	9.080	554947	16.104 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\9F05018\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05018-CCV2
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:39:56 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05018-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:40:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/16/19
clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.577	6444740	111.479 ng/ml
62) S	DCBP (S)	9.292	8062931	110.733 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.501	1160	0.434 ng/ml
3)	Aroclor 1016 (2)	5.928	3368	0.636 ng/ml
4)	Aroclor 1016 (3)	5.990	1843	0.635 ng/ml
5)	Aroclor 1016 (4)	6.149	2036	0.852 ng/ml
6)	Aroclor 1016 (5)	6.381	1540	0.525 ng/ml
7)	Aroclor 1016 (6)	6.501	1569	0.754 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	4.945	7666	9.254 ng/ml
10)	Aroclor 1221 (2)	5.090	1066	1.963 ng/ml
11)	Aroclor 1221 (3)	5.173	20638	11.642 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.173	20638	14.733 ng/ml
14)	Aroclor 1232 (2)	5.928	3368	1.578 ng/ml
15)	Aroclor 1232 (3)	5.990	1843	1.665 ng/ml
16)	Aroclor 1232 (4)	6.149	2036	2.692 ng/ml
17)	Aroclor 1232 (5)	6.381	1540	1.482 ng/ml
18)	Aroclor 1232 (6)	6.501	1569	1.844 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.501	1160	0.587 ng/ml
21)	Aroclor 1242 (2)	5.928	3368	0.833 ng/ml
22)	Aroclor 1242 (3)	5.990	1843	0.859 ng/ml
23)	Aroclor 1242 (4)	6.149	2036	1.265 ng/ml
24)	Aroclor 1242 (5)	6.381	1540	0.697 ng/ml
25)	Aroclor 1242 (6)	6.501	1569	0.841 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	5.928	3368	1.439 ng/ml
28)	Aroclor 1248 (2)	6.149	2036	0.711 ng/ml
29)	Aroclor 1248 (3)	6.381	1540	0.449 ng/ml
30)	Aroclor 1248 (4)	6.660	956	0.246 ng/ml
31)	Aroclor 1248 (5)	6.698	21200	5.030 ng/ml
32)	Aroclor 1248 (6)	7.187	3392	1.503 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.698	21200	4.949 ng/ml
35)	Aroclor 1254 (2)	6.821	8837	1.638 ng/ml
36)	Aroclor 1254 (3)	7.187	3392	0.428 ng/ml
37)	Aroclor 1254 (4)	7.362	1621	0.307 ng/ml
38)	Aroclor 1254 (5)	7.737	6420	1.203 ng/ml
39)	Aroclor 1254 (6)	8.014	817	0.454 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.302	2448	0.446 ng/ml
42)	Aroclor 1260 (2)	7.455	5538	0.804 ng/ml
43)	Aroclor 1260 (3)	7.988	1294	0.252 ng/ml
44)	Aroclor 1260 (4)	8.154	7570	0.608 ng/ml
45)	Aroclor 1260 (5)	8.459	3100	0.376 ng/ml
46)	Aroclor 1260 (6)	8.847	2955	0.866 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05018\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05018-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:40:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

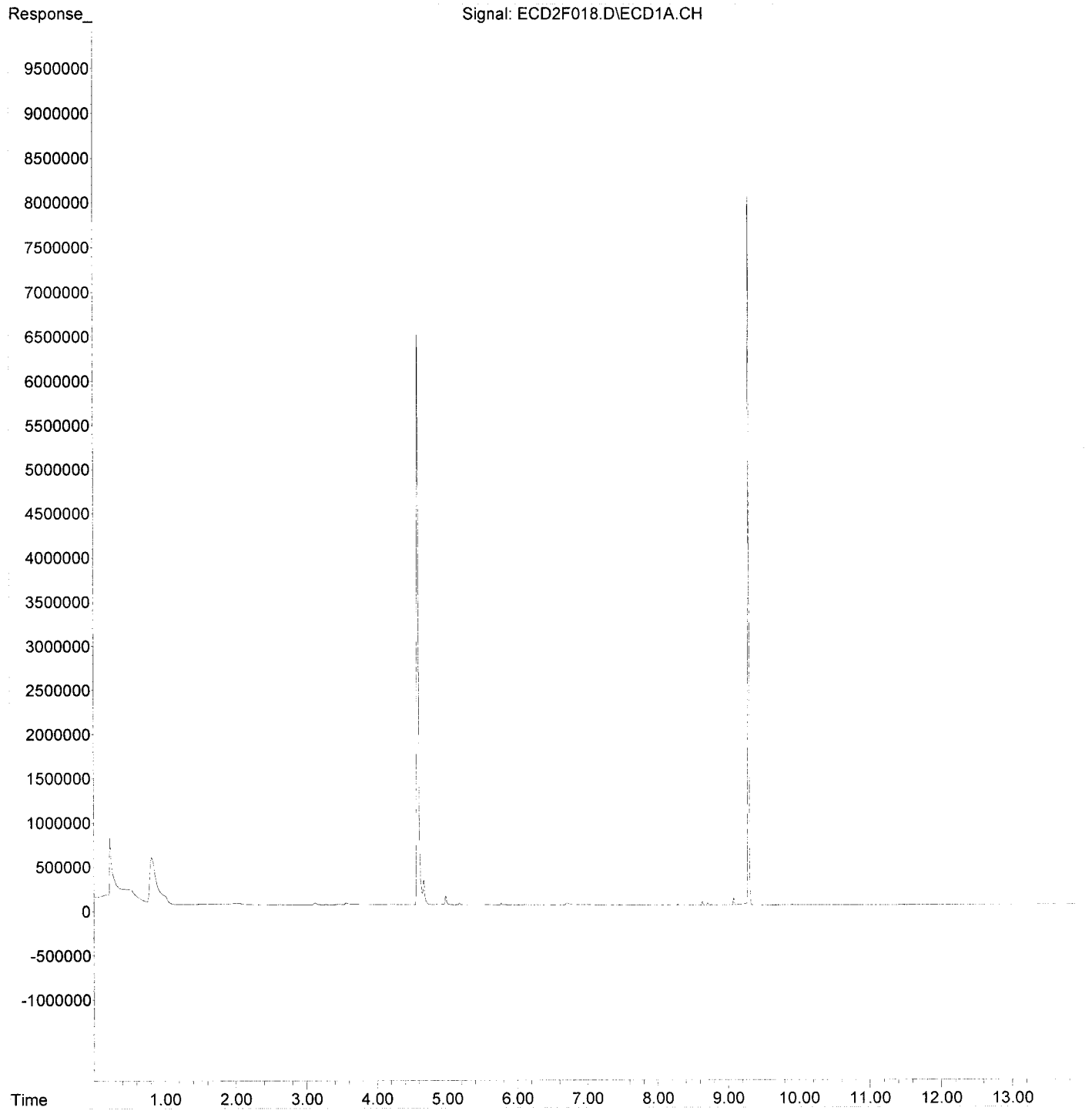
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.455	5538	1.004 ng/ml
49)	Aroclor 1262 (2)	7.760	1719	0.229 ng/ml
50)	Aroclor 1262 (3)	7.988	1294	0.201 ng/ml
51)	Aroclor 1262 (4)	8.154	7570	0.533 ng/ml
52)	Aroclor 1262 (5)	8.459	3100	0.362 ng/ml
53)	Aroclor 1262 (6)	8.847	2955	0.621 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	7.988	1294	0.388 ng/ml
56)	Aroclor 1268 (2)	8.408	1141	0.072 ng/ml
57)	Aroclor 1268 (3)	8.459	3100	0.230 ng/ml
58)	Aroclor 1268 (4)	8.633	43338	3.648 ng/ml
59)	Aroclor 1268 (5)	8.847	2955	0.594 ng/ml
60)	Aroclor 1268 (6)	9.079	79033	2.294 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\9F05018\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05018-CCB2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jun 05 15:40:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130RTD.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Benchsheet & Analysis Sequence Data

Sequence 9F05019 (A9E0766-06RE1,07RE1,16RE1)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9F05019** Instrument: **DUALECD2R**

Date: **06/05/19 07:20** Calibration: **A9E1302**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F05019-CCV1	Water	QC	QC				A19E079
2	9F05019-CCB1	Water	QC	QC				A19E080
3	9060538-BLK1	Water	QC	QC		9060538		
4	9060538-BS1	Water	QC	QC		9060538		
5	9060538-BSD1	Water	QC	QC		9060538		
6	A9E0963-01	Water	8082 PCBs - Low Level (1000/1mL)	Anchor QEA, LLC	06/05/19	9060538		
7	A9E0935-01	Water	608 PCBs		06/12/19	9060538		
8	9F05019-CCV2	Water	QC	QC				A19E079
9	9F05019-CCB2	Water	QC	QC				A19E080
10	A9E0766-06RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
11	9F05019-IBL1	Water	QC	QC				
12	A9E0766-07RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
13	9F05019-IBL2	Water	QC	QC				
14	A9E0766-16RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
15	9F05019-IBL3	Water	QC	QC				
16	9F05019-CCV3	Water	QC	QC				A19E079
17	9F05019-CCB3	Water	QC	QC				A19E080
18	9F05019-CCV4	Water	QC	QC				A19E079

Comments:

Data Entered By: [signature] 6/5/19

Data Reviewed By: MWB 6/5/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9F05019**	Instrument:	**DUALECD2R**
Date:	**06/05/19 07:20**	Calibration:	**A9E1302**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F05019-CCV1	Water	QC	QC				A19E079
2	9F05019-CCB1	Water	QC	QC				A19E080
3	9060538-BLK1	Water	QC	QC		9060538		
4	9060538-BS1	Water	QC	QC		9060538		
5	9060538-BSD1	Water	QC	QC		9060538		
6	A9E0963-01	Water	8082 PCBs - Low Level (1000/1mL)	Anchor QEA, LLC	06/05/19	9060538		
7	A9E0935-01	Water	608 PCBs	Flint Group North America	06/12/19	9060538		
8	9F05019-CCV2	Water	QC	QC				A19E079
9	9F05019-CCB2	Water	QC	QC				A19E080
10	A9E0766-06RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
11	9F05019-IBL1	Water	QC	QC				
12	A9E0766-07RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
13	9F05019-IBL2	Water	QC	QC				
14	A9E0766-16RE1	Sediment	8082 PCBs - Low Level (2mL FV)	Anchor QEA, LLC	06/06/19	9060524		
15	9F05019-IBL3	Water	QC	QC				
16	9F05019-CCV3	Water	QC	QC				A19E079
17	9F05019-CCB3	Water	QC	QC				A19E080

Data Entered By: [signature] 6/5/19

Data Reviewed By: MJB 6/3/19

Comments: CCV3 Failed

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.

9F05019-CCV1

Aroclor 1016

Peak	Initial Res
1016 (1)	569.25
1016 (1)	569.25
1016 (2)	551.44
1016 (2)	551.44
1016 (3)	553.90
1016 (3)	553.90
1016 (4)	536.37
1016 (4)	536.37
1016 (5)	497.79
1016 (5)	497.79
1016 (6)	511.15
1016 (6)	511.15
Average:	**536.65**

Aroclor 1260

Peak	Initial Res
1260 (1)	542.83
1260 (1)	542.83
1260 (2)	529.16
1260 (2)	529.16
1260 (3)	528.18
1260 (3)	528.18
1260 (4)	559.10
1260 (4)	559.10
1260 (5)	547.97
1260 (5)	547.97
1260 (6)	536.29
1260 (6)	536.29
Average:	**540.59**

9060538-BS1

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.

9060538-BS1

Aroclor 1016

Peak	Initial Res
1016 (1)	690.82
1016 (1)	690.82
1016 (2)	733.15
1016 (2)	733.15
1016 (3)	586.04
1016 (3)	586.04
1016 (4)	795.30
1016 (4)	795.30
1016 (5)	744.27
1016 (5)	744.27
1016 (6)	620.73
1016 (6)	620.73
Average:	**695.05**

Aroclor 1260

Peak	Initial Res
1260 (1)	850.52
1260 (1)	850.52
1260 (2)	966.15
1260 (2)	966.15
1260 (3)	855.29
1260 (3)	855.29
1260 (4)	1,053.67
1260 (4)	1,053.67
1260 (5)	918.04
1260 (5)	918.04
1260 (6)	961.23
1260 (6)	961.23
Average:	**934.15**

9060538-BSD1

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.

9060538-BSD1

Aroclor 1016

Peak	Initial Res
1016 (1)	647.90
1016 (1)	647.90
1016 (2)	708.83
1016 (2)	708.83
1016 (3)	552.20
1016 (3)	552.20
1016 (4)	755.07
1016 (4)	755.07
1016 (5)	722.19
1016 (5)	722.19
1016 (6)	613.88
1016 (6)	613.88
Average:	**666.68**

Aroclor 1260

Peak	Initial Res
1260 (1)	816.58
1260 (1)	816.58
1260 (2)	905.02
1260 (2)	905.02
1260 (3)	782.12
1260 (3)	782.12
1260 (4)	1,029.80
1260 (4)	1,029.80
1260 (5)	885.83
1260 (5)	885.83
1260 (6)	968.08
1260 (6)	968.08
Average:	**897.91**

9F05019-CCV2

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.

9F05019-CCV2

Aroclor 1016

Peak	Initial Res
1016 (1)	606.98
1016 (1)	606.98
1016 (1)	606.98
1016 (2)	584.26
1016 (2)	584.26
1016 (2)	584.26
1016 (3)	588.86
1016 (3)	588.86
1016 (3)	588.86
1016 (4)	580.18
1016 (4)	580.18
1016 (4)	580.18
1016 (5)	533.24
1016 (5)	533.24
1016 (5)	533.24
1016 (6)	510.01
1016 (6)	510.01
1016 (6)	510.01
Average:	**567.26**

Aroclor 1260

Peak	Initial Res
1260 (1)	561.18
1260 (1)	561.18
1260 (1)	561.18
1260 (2)	570.66
1260 (2)	570.66
1260 (2)	570.66
1260 (3)	593.60
1260 (3)	593.60
1260 (3)	593.60
1260 (4)	593.10
1260 (4)	593.10
1260 (4)	593.10
1260 (5)	592.41
1260 (5)	592.41
1260 (5)	592.41
1260 (6)	565.46
1260 (6)	565.46
1260 (6)	565.46
Average:	**579.40**

9F05019-CCV3

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.

9F05019-CCV3

Aroclor 1016

Peak	Initial Res
1016 (1)	672.28
1016 (2)	654.19
1016 (3)	652.98
1016 (4)	645.03
1016 (5)	606.67
1016 (6)	600.26
Average:	**638.57**

Aroclor 1260

Peak	Initial Res
1260 (1)	613.65
1260 (2)	665.76
1260 (3)	669.01
1260 (4)	681.66
1260 (5)	663.33
1260 (6)	617.06
Average:	**651.75**

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.

9F05019-CCV3

Aroclor 1016

Peak	Initial Res
1016 (1)	672.28
1016 (2)	654.19
1016 (3)	652.98
1016 (4)	645.03
1016 (5)	606.67
1016 (6)	600.26
Average:	**638.57**

Aroclor 1260

Peak	Initial Res
1260 (1)	613.65
1260 (2)	665.76
1260 (3)	669.01
1260 (4)	681.66
1260 (5)	663.33
1260 (6)	617.06
Average:	**651.75**

9F05019-CCV4

Aroclor 1016

Peak	Initial Res
1016 (1)	546.87
1016 (2)	522.00
1016 (3)	554.10
1016 (4)	516.15
1016 (5)	478.99
1016 (6)	492.42
Average:	**518.42**

Aroclor 1260

Peak	Initial Res
1260 (1)	515.73
1260 (2)	531.41
1260 (3)	523.96
1260 (4)	555.72
1260 (5)	551.33
1260 (6)	545.19
Average:	**537.22**

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05019-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/13/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.544	51088174	254.548	ng/ml	
62)	S DCBP (S)	10.379	39136059	286.329	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.215	3210767	569.255	ng/ml	536.65
3)	Aroclor 1016 (2)	6.704	6343733	551.443	ng/ml	
4)	Aroclor 1016 (3)	6.830	2799929	553.904	ng/ml	
5)	Aroclor 1016 (4)	6.916	3006159	536.367	ng/ml	
6)	Aroclor 1016 (5)	6.960	3269388	497.793	ng/ml	
7)	Aroclor 1016 (6)	7.085	3426611	511.149	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.707	280087	158.860	ng/ml	
10)	Aroclor 1221 (2)	5.792	404862	243.968	ng/ml	
11)	Aroclor 1221 (3)	5.878	1999294	355.860	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.878	1999294	439.561	ng/ml	
14)	Aroclor 1232 (2)	6.215	3210767	1147.757	ng/ml	
15)	Aroclor 1232 (3)	6.704	6343733	1203.288	ng/ml	
16)	Aroclor 1232 (4)	6.916	3006159	1446.043	ng/ml	
17)	Aroclor 1232 (5)	6.960	3269388	1372.491	ng/ml	
18)	Aroclor 1232 (6)	7.085	3426611	1385.620	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.215	3210767	640.635	ng/ml	
21)	Aroclor 1242 (2)	6.704	6343733	653.267	ng/ml	
22)	Aroclor 1242 (3)	6.830	2799929	634.956	ng/ml	
23)	Aroclor 1242 (4)	6.916	3006159	713.354	ng/ml	
24)	Aroclor 1242 (5)	6.960	3269388	665.621	ng/ml	
25)	Aroclor 1242 (6)	7.085	3426611	666.318	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.676	5193599	886.113	ng/ml	
28)	Aroclor 1248 (2)	6.916	3006159	392.032	ng/ml	
29)	Aroclor 1248 (3)	6.960	3269388	458.309	ng/ml	
30)	Aroclor 1248 (4)	7.085	3426611	404.246	ng/ml	
31)	Aroclor 1248 (5)	7.448	742930	67.467	ng/ml	
32)	Aroclor 1248 (6)	7.608	2821177	291.810	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.426	2383769	217.590	ng/ml	
35)	Aroclor 1254 (2)	7.608	2821177	156.935	ng/ml	
36)	Aroclor 1254 (3)	7.916	1623451	82.983	ng/ml	
37)	Aroclor 1254 (4)	8.155	1156582	79.154	ng/ml	
38)	Aroclor 1254 (5)	8.489	8585458	580.875	ng/ml	
39)	Aroclor 1254 (6)	8.705	1353673	308.487	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.052	7199233	542.834	ng/ml	540.59
42)	Aroclor 1260 (2)	8.259	8660638	529.161	ng/ml	
43)	Aroclor 1260 (3)	8.489	8585458	528.182	ng/ml	
44)	Aroclor 1260 (4)	8.968	15467436	559.104	ng/ml	
45)	Aroclor 1260 (5)	9.215	8601180	547.971	ng/ml	
46)	Aroclor 1260 (6)	9.754	3434536	536.291	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05019-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

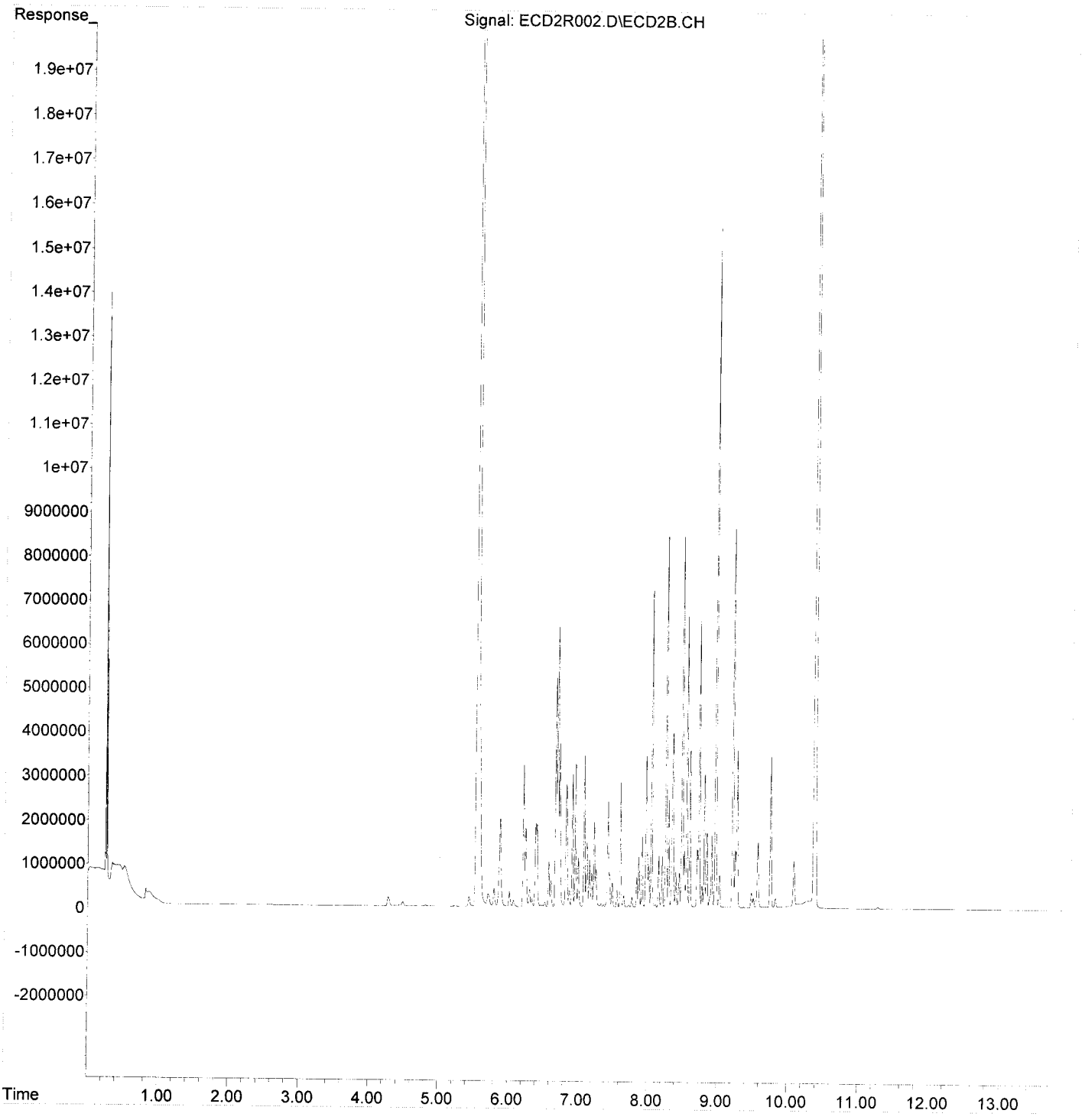
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.259	8660638	654.239	ng/ml
49)	Aroclor 1262 (2)	8.558	6594708	366.009	ng/ml
50)	Aroclor 1262 (3)	8.734	6503163	438.851	ng/ml
51)	Aroclor 1262 (4)	8.968	15467436	464.463	ng/ml
52)	Aroclor 1262 (5)	9.215	8601180	455.139	ng/ml
53)	Aroclor 1262 (6)	9.754	3434536	391.060	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.775	480382	61.691	ng/ml
56)	Aroclor 1268 (2)	9.215	8601180	237.212	ng/ml
57)	Aroclor 1268 (3)	9.277	3564734	121.476	ng/ml
58)	Aroclor 1268 (4)	9.481	336517	13.260	ng/ml
59)	Aroclor 1268 (5)	9.754	3434536	359.270	ng/ml
60)	Aroclor 1268 (6)	10.086	1061928	15.349	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\9F05019\
Data File : ECD2R002.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 7:48 am
Operator : MJB / KAK
Sample : 9F05019-CCV1
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:01 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05019-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.542	18583148	92.591 ng/ml
62)	S DCBP (S)	10.379	13872663	101.496 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.213	3382	0.600 ng/ml
3)	Aroclor 1016 (2)	6.704	2203	0.191 ng/ml
4)	Aroclor 1016 (3)	6.828	1961	0.388 ng/ml
5)	Aroclor 1016 (4)	6.921	3820	0.681 ng/ml
6)	Aroclor 1016 (5)	6.966	3075	0.468 ng/ml
7)	Aroclor 1016 (6)	7.084	1855	0.277 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	5.791	15364	9.258 ng/ml
11)	Aroclor 1221 (3)	5.864	242027	43.079 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.864	242027	53.212 ng/ml
14)	Aroclor 1232 (2)	6.213	3382	1.209 ng/ml
15)	Aroclor 1232 (3)	6.704	2203	0.418 ng/ml
16)	Aroclor 1232 (4)	6.907	3378	1.625 ng/ml
17)	Aroclor 1232 (5)	6.966	3075	1.291 ng/ml
18)	Aroclor 1232 (6)	7.084	1855	0.750 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.213	3382	0.675 ng/ml
21)	Aroclor 1242 (2)	6.704	2203	0.227 ng/ml
22)	Aroclor 1242 (3)	6.828	1961	0.445 ng/ml
23)	Aroclor 1242 (4)	6.921	3820	0.906 ng/ml
24)	Aroclor 1242 (5)	6.966	3075	0.626 ng/ml
25)	Aroclor 1242 (6)	7.084	1855	0.361 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.684	2624	0.448 ng/ml
28)	Aroclor 1248 (2)	6.921	3820	0.498 ng/ml
29)	Aroclor 1248 (3)	6.966	3075	0.431 ng/ml
30)	Aroclor 1248 (4)	7.084	1855	0.219 ng/ml
31)	Aroclor 1248 (5)	7.450	1202	0.109 ng/ml
32)	Aroclor 1248 (6)	7.611	2498	0.258 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.425	993	0.091 ng/ml
35)	Aroclor 1254 (2)	7.611	2498	0.139 ng/ml
36)	Aroclor 1254 (3)	7.927	2200	0.112 ng/ml
37)	Aroclor 1254 (4)	8.154	1496	0.102 ng/ml
38)	Aroclor 1254 (5)	8.492	1374	0.093 ng/ml
39)	Aroclor 1254 (6)	8.714	1371	0.312 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.048	1674	0.126 ng/ml
42)	Aroclor 1260 (2)	8.259	2874	0.176 ng/ml
43)	Aroclor 1260 (3)	8.492	1374	0.085 ng/ml
44)	Aroclor 1260 (4)	8.960	5833	0.211 ng/ml
45)	Aroclor 1260 (5)	9.218	5808	0.370 ng/ml
46)	Aroclor 1260 (6)	9.757	14158	2.211 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05019-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

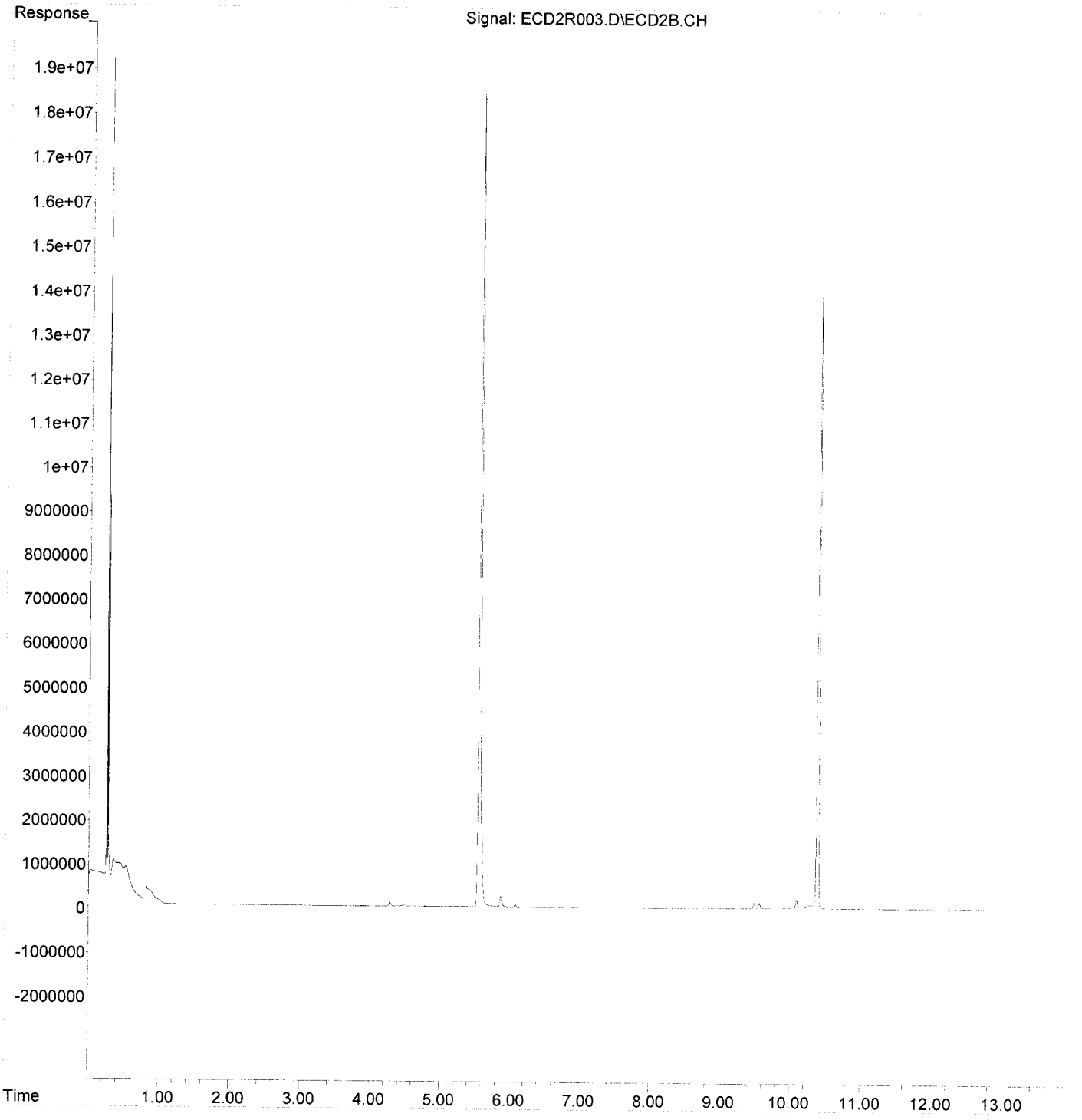
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.259	2874	0.217 ng/ml
49)	Aroclor 1262 (2)	8.558	1192	0.066 ng/ml
50)	Aroclor 1262 (3)	8.735	2456	0.166 ng/ml
51)	Aroclor 1262 (4)	8.960	5833	0.175 ng/ml
52)	Aroclor 1262 (5)	9.218	5808	0.307 ng/ml
53)	Aroclor 1262 (6)	9.757	14158	1.612 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.777	2933	0.377 ng/ml
56)	Aroclor 1268 (2)	9.218	5808	0.160 ng/ml
57)	Aroclor 1268 (3)	9.278	5703	0.194 ng/ml
58)	Aroclor 1268 (4)	9.481	122797	4.839 ng/ml
59)	Aroclor 1268 (5)	9.757	14158	1.481 ng/ml
60)	Aroclor 1268 (6)	10.087	202354	2.925 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\9F05019\
Data File : ECD2R003.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 8:06 am
Operator : MJB / KAK
Sample : 9F05019-CCB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 09:26:21 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9F05019-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:30:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/5/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.542	53216581 Q-41	265.153	ng/ml	
62)	S DCBP (S)	10.377	41259109	301.862	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.213	3423565 Q-41	606.983	ng/ml	567.26
3)	Aroclor 1016 (2)	6.702	6721285	584.263	ng/ml	
4)	Aroclor 1016 (3)	6.829	2976629	588.861	ng/ml	
5)	Aroclor 1016 (4)	6.915	3251731	580.183	ng/ml	
6)	Aroclor 1016 (5)	6.959	3502185	533.238	ng/ml	
7)	Aroclor 1016 (6)	7.084	3418946	510.005	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.710	289344	164.111	ng/ml	
10)	Aroclor 1221 (2)	5.791	427341	257.514	ng/ml	
11)	Aroclor 1221 (3)	5.877	2093679	372.660	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.877	2093679	460.312	ng/ml	
14)	Aroclor 1232 (2)	6.213	3423565	1223.827	ng/ml	
15)	Aroclor 1232 (3)	6.702	6721285	1274.903	ng/ml	
16)	Aroclor 1232 (4)	6.915	3251731	1564.170	ng/ml	
17)	Aroclor 1232 (5)	6.959	3502185	1470.219	ng/ml	
18)	Aroclor 1232 (6)	7.084	3418946	1382.521	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.213	3423565	683.094	ng/ml	
21)	Aroclor 1242 (2)	6.702	6721285	692.146	ng/ml	
22)	Aroclor 1242 (3)	6.829	2976629	675.027	ng/ml	
23)	Aroclor 1242 (4)	6.915	3251731	771.628	ng/ml	
24)	Aroclor 1242 (5)	6.959	3502185	713.017	ng/ml	
25)	Aroclor 1242 (6)	7.084	3418946	664.828	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.674	5863302	1000.375	ng/ml	
28)	Aroclor 1248 (2)	6.915	3251731	424.057	ng/ml	
29)	Aroclor 1248 (3)	6.959	3502185	490.943	ng/ml	
30)	Aroclor 1248 (4)	7.084	3418946	403.342	ng/ml	
31)	Aroclor 1248 (5)	7.448	800711	72.714	ng/ml	
32)	Aroclor 1248 (6)	7.606	3040617	314.508	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.425	2556674	233.373	ng/ml	
35)	Aroclor 1254 (2)	7.606	3040617	169.142	ng/ml	
36)	Aroclor 1254 (3)	7.914	1732537	88.559	ng/ml	
37)	Aroclor 1254 (4)	8.154	1193356	81.670	ng/ml	
38)	Aroclor 1254 (5)	8.487	9648859	652.823	ng/ml	
39)	Aroclor 1254 (6)	8.703	1490858	339.750	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.050	7442535	561.179	ng/ml	579.40
42)	Aroclor 1260 (2)	8.257	9339869	570.661	ng/ml	
43)	Aroclor 1260 (3)	8.487	9648859	593.603	ng/ml	
44)	Aroclor 1260 (4)	8.965	16407883	593.098	ng/ml	
45)	Aroclor 1260 (5)	9.212	9298750	592.413	ng/ml	
46)	Aroclor 1260 (6)	9.752	3621348	565.461	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9F05019-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:30:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

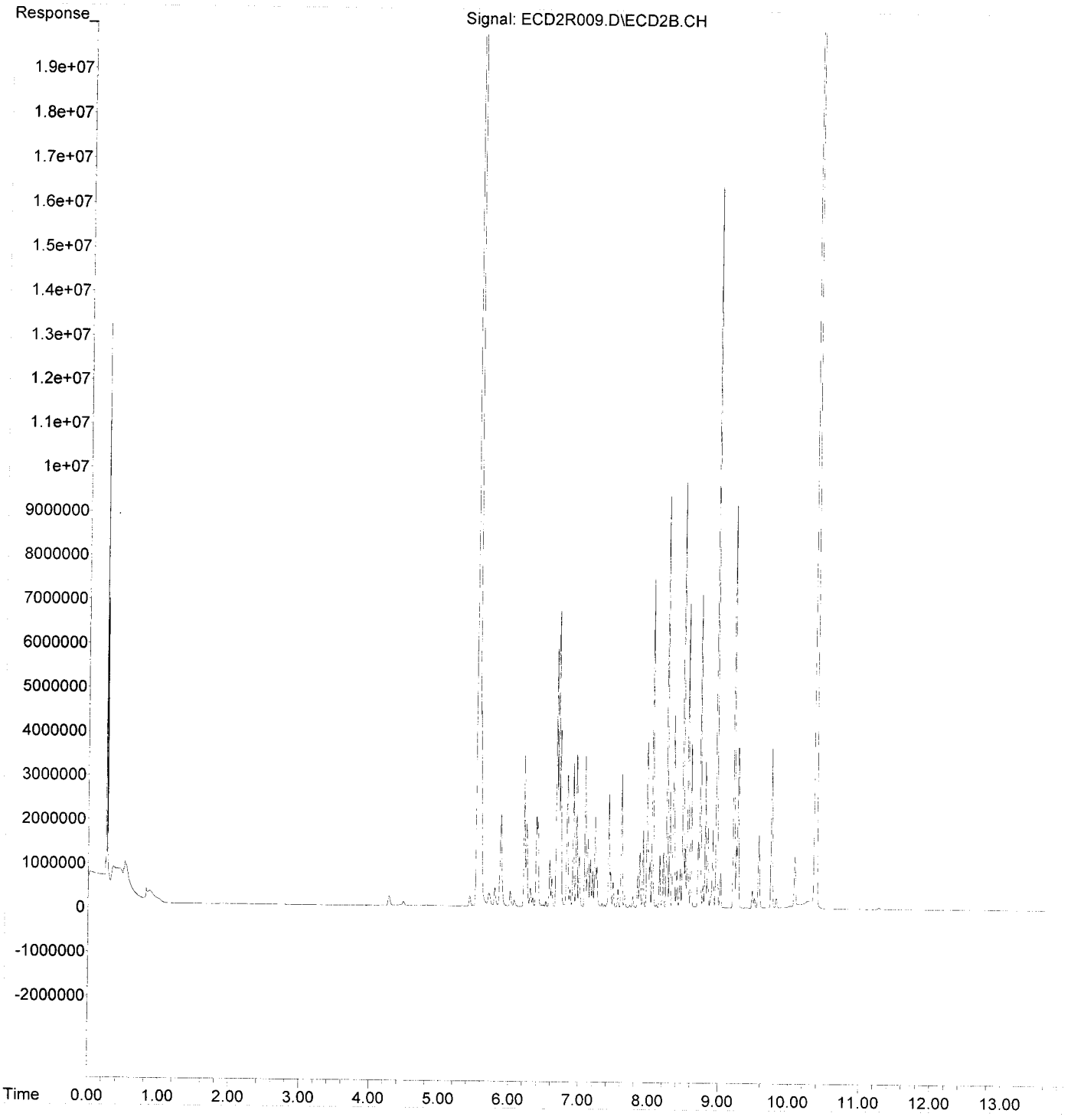
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.257	9339869	705.549 ng/ml
49)	Aroclor 1262 (2)	8.556	6900446	382.978 ng/ml
50)	Aroclor 1262 (3)	8.732	7099459	479.091 ng/ml
51)	Aroclor 1262 (4)	8.965	16407883	492.703 ng/ml
52)	Aroclor 1262 (5)	9.212	9298750	492.052 ng/ml
53)	Aroclor 1262 (6)	9.752	3621348	412.330 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.772	512227	65.781 ng/ml
56)	Aroclor 1268 (2)	9.212	9298750	256.450 ng/ml
57)	Aroclor 1268 (3)	9.274	3639934	124.039 ng/ml
58)	Aroclor 1268 (4)	9.478	396351	15.618 ng/ml
59)	Aroclor 1268 (5)	9.752	3621348	378.812 ng/ml
60)	Aroclor 1268 (6)	10.083	1165184	16.841 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\9F05019\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 9:54 am
Operator : MJB / KAK
Sample : 9F05019-CCV2
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:30:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:11 am
Operator : MJB / KAK
Sample : 9F05019-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:31:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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clean

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	5.541	18209976	90.732	ng/ml
62)	S DCBP (S)	10.376	14603584	106.843	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	4267	0.756	ng/ml
3)	Aroclor 1016 (2)	6.709	4306	0.374	ng/ml
4)	Aroclor 1016 (3)	6.814	2742	0.542	ng/ml
5)	Aroclor 1016 (4)	6.920	5373	0.959	ng/ml
6)	Aroclor 1016 (5)	6.966	4596	0.700	ng/ml
7)	Aroclor 1016 (6)	7.087	2885	0.430	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/ml
10)	Aroclor 1221 (2)	5.797	15928	9.598	ng/ml
11)	Aroclor 1221 (3)	5.863	234007	41.651	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.863	234007	51.448	ng/ml
14)	Aroclor 1232 (2)	6.213	4267	1.525	ng/ml
15)	Aroclor 1232 (3)	6.709	4306	0.817	ng/ml
16)	Aroclor 1232 (4)	6.908	5115	2.461	ng/ml
17)	Aroclor 1232 (5)	6.966	4596	1.930	ng/ml
18)	Aroclor 1232 (6)	7.087	2885	1.167	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.213	4267	0.851	ng/ml
21)	Aroclor 1242 (2)	6.709	4306	0.443	ng/ml
22)	Aroclor 1242 (3)	6.814	2742	0.622	ng/ml
23)	Aroclor 1242 (4)	6.920	5373	1.275	ng/ml
24)	Aroclor 1242 (5)	6.966	4596	0.936	ng/ml
25)	Aroclor 1242 (6)	7.087	2885	0.561	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.686	4432	0.756	ng/ml
28)	Aroclor 1248 (2)	6.920	5373	0.701	ng/ml
29)	Aroclor 1248 (3)	6.966	4596	0.644	ng/ml
30)	Aroclor 1248 (4)	7.087	2885	0.340	ng/ml
31)	Aroclor 1248 (5)	7.448	1311	0.119	ng/ml
32)	Aroclor 1248 (6)	7.609	2258	0.234	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.427	1599	0.146	ng/ml
35)	Aroclor 1254 (2)	7.609	2258	0.126	ng/ml
36)	Aroclor 1254 (3)	7.918	2795	0.143	ng/ml
37)	Aroclor 1254 (4)	8.151	1375	0.094	ng/ml
38)	Aroclor 1254 (5)	8.489	1592	0.108	ng/ml
39)	Aroclor 1254 (6)	8.718	695	0.158	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.050	1868	0.141	ng/ml
42)	Aroclor 1260 (2)	8.259	3618	0.221	ng/ml
43)	Aroclor 1260 (3)	8.489	1592	0.098	ng/ml
44)	Aroclor 1260 (4)	8.961	4701	0.170	ng/ml
45)	Aroclor 1260 (5)	9.213	2743	0.175	ng/ml
46)	Aroclor 1260 (6)	9.757	7570	1.182	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:11 am
Operator : MJB / KAK
Sample : 9F05019-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:31:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

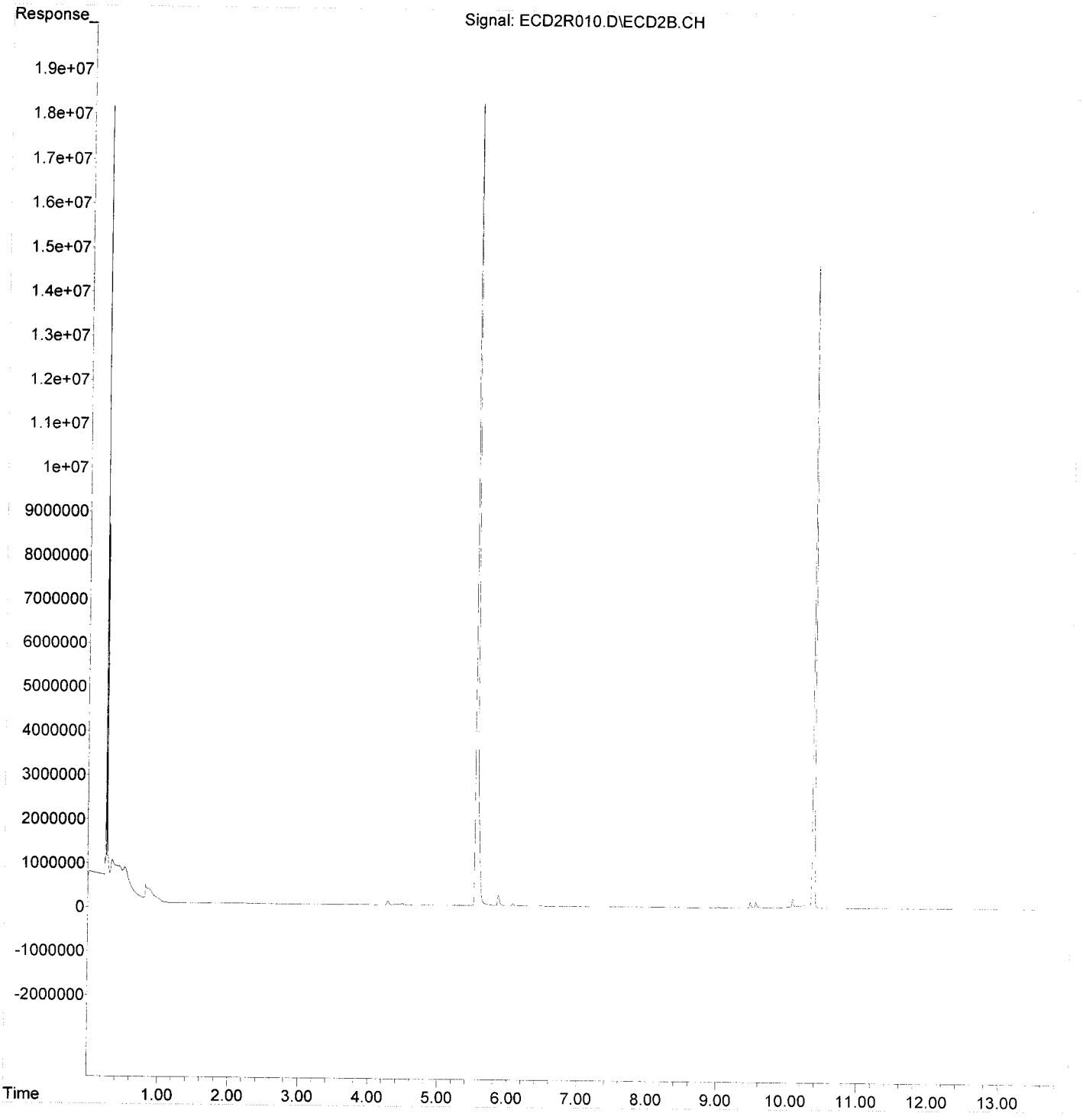
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.259	3618	0.273 ng/ml
49)	Aroclor 1262 (2)	8.558	1251	0.069 ng/ml
50)	Aroclor 1262 (3)	8.733	1294	0.087 ng/ml
51)	Aroclor 1262 (4)	8.961	4701	0.141 ng/ml
52)	Aroclor 1262 (5)	9.213	2743	0.145 ng/ml
53)	Aroclor 1262 (6)	9.757	7570	0.862 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.781	1799	0.231 ng/ml
56)	Aroclor 1268 (2)	9.213	2743	0.076 ng/ml
57)	Aroclor 1268 (3)	9.279	2324	0.079 ng/ml
58)	Aroclor 1268 (4)	9.480	125009	4.926 ng/ml
59)	Aroclor 1268 (5)	9.757	7570	0.792 ng/ml
60)	Aroclor 1268 (6)	10.084	205746	2.974 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\9F05019\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:11 am
Operator : MJB / KAK
Sample : 9F05019-CCB2
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:31:37 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-06RE1
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:51:11 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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MJB 6/5/19

		Compound	R.T.	Response	Conc	Units
System Monitoring Compounds						
1)	S	TCMX (S)	5.543	29812327	148.541	ng/ml
62)	S	DCBP (S)	10.377	29536633	216.097	ng/ml
Target Compounds						
2)		Aroclor 1016 (1)	6.215	6175	1.095	ng/ml
3)		Aroclor 1016 (2)	6.703	6398	0.556	ng/ml
4)		Aroclor 1016 (3)	6.816	6464	1.279	ng/ml
5)		Aroclor 1016 (4)	6.915	7084	1.264	ng/ml
6)		Aroclor 1016 (5)	6.961	6356	0.968	ng/ml
7)		Aroclor 1016 (6)	7.085	6191	0.923	ng/ml
8)		Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)		Aroclor 1221 (1)	0.000	0	N.D.	ng/ml
10)		Aroclor 1221 (2)	5.811	14314	8.626	ng/ml
11)		Aroclor 1221 (3)	5.863	47442	8.444	ng/ml
12)		Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)		Aroclor 1232 (1)	5.863	47442	10.431	ng/ml
14)		Aroclor 1232 (2)	6.215	6175	2.207	ng/ml
15)		Aroclor 1232 (3)	6.703	6398	1.214	ng/ml
16)		Aroclor 1232 (4)	6.915	7084	3.408	ng/ml
17)		Aroclor 1232 (5)	6.961	6356	2.668	ng/ml
18)		Aroclor 1232 (6)	7.085	6191	2.503	ng/ml
19)		Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)		Aroclor 1242 (1)	6.215	6175	1.232	ng/ml
21)		Aroclor 1242 (2)	6.703	6398	0.659	ng/ml
22)		Aroclor 1242 (3)	6.816	6464	1.466	ng/ml
23)		Aroclor 1242 (4)	6.915	7084	1.681	ng/ml
24)		Aroclor 1242 (5)	6.961	6356	1.294	ng/ml
25)		Aroclor 1242 (6)	7.085	6191	1.204	ng/ml
26)		Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)		Aroclor 1248 (1)	6.681	6012	1.026	ng/ml
28)		Aroclor 1248 (2)	6.915	7084	0.924	ng/ml
29)		Aroclor 1248 (3)	6.961	6356	0.891	ng/ml
30)		Aroclor 1248 (4)	7.085	6191	0.730	ng/ml
31)		Aroclor 1248 (5)	7.449	12601	1.144	ng/ml
32)		Aroclor 1248 (6)	7.607	15721	1.626	ng/ml
33)		Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)		Aroclor 1254 (1)	7.424	9948	0.908	ng/ml
35)		Aroclor 1254 (2)	7.607	15721	0.875	ng/ml
36)		Aroclor 1254 (3)	7.916	14161	0.724	ng/ml
37)		Aroclor 1254 (4)	8.155	15367	1.052	ng/ml
38)		Aroclor 1254 (5)	8.486	12552	0.849	ng/ml
39)		Aroclor 1254 (6)	8.715	4598	1.048	ng/ml
40)		Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)		Aroclor 1260 (1)	8.051	8781	0.662	ng/ml
42)		Aroclor 1260 (2)	8.256	17408	1.064	ng/ml
43)		Aroclor 1260 (3)	8.486	12552	0.772	ng/ml
44)		Aroclor 1260 (4)	8.979	13848	0.501	ng/ml
45)		Aroclor 1260 (5)	9.214	9649	0.615	ng/ml
46)		Aroclor 1260 (6)	9.757	14515	2.267	ng/ml
47)		Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-06RE1
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:51:11 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	17408	1.315 ng/ml
49)	Aroclor 1262 (2)	8.557	4394	0.244 ng/ml
50)	Aroclor 1262 (3)	8.732	7073	0.477 ng/ml
51)	Aroclor 1262 (4)	8.979	13848	0.416 ng/ml
52)	Aroclor 1262 (5)	9.214	9649	0.511 ng/ml
53)	Aroclor 1262 (6)	9.757	14515	1.653 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.775	6568	0.844 ng/ml
56)	Aroclor 1268 (2)	9.214	9649	0.266 ng/ml
57)	Aroclor 1268 (3)	9.272	7032	0.240 ng/ml
58)	Aroclor 1268 (4)	9.480	235247	9.270 ng/ml
59)	Aroclor 1268 (5)	9.757	14515	1.518 ng/ml
60)	Aroclor 1268 (6)	10.088	243270	3.516 ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D. ng/ml

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

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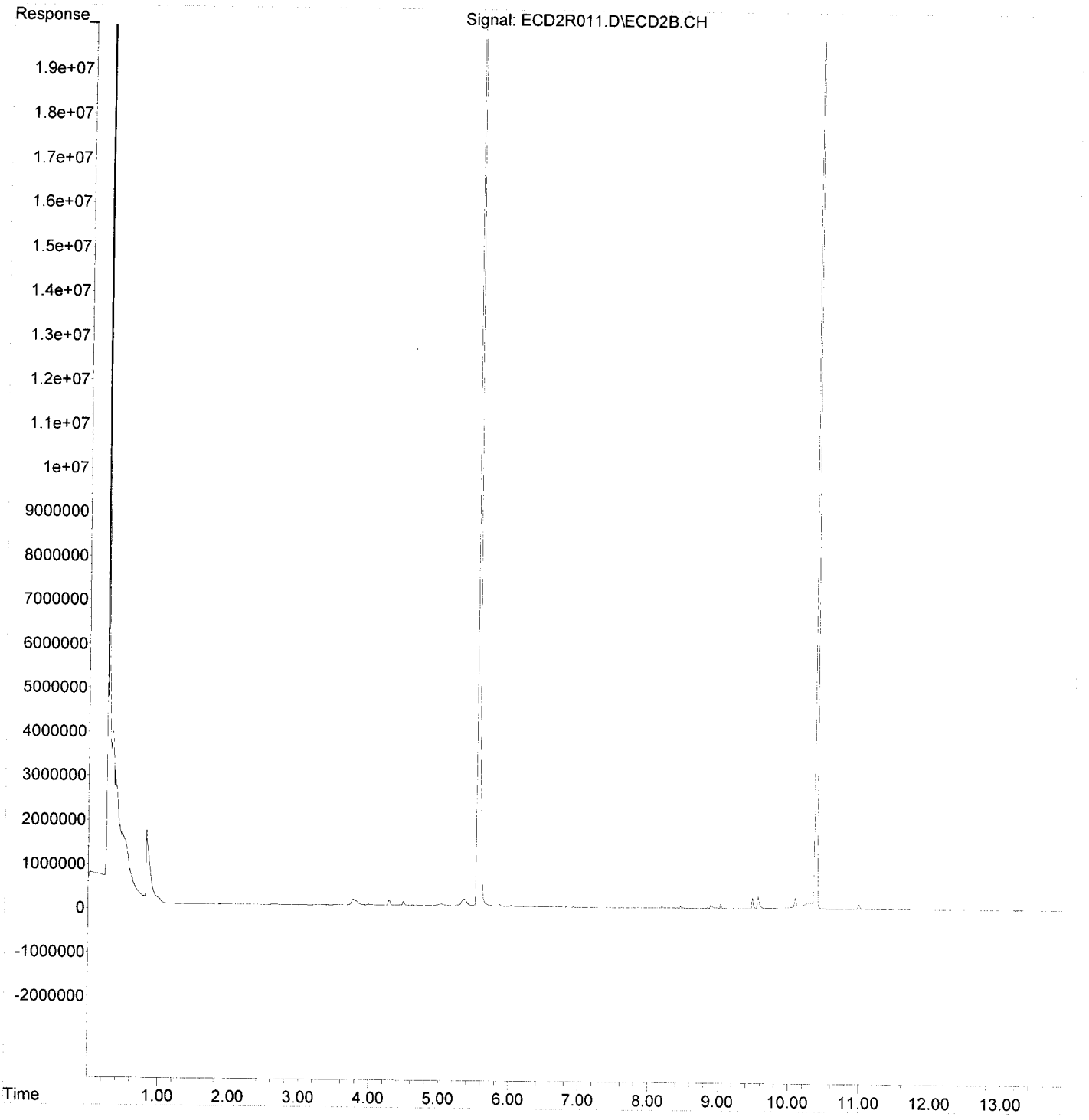
Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 10:29 am
Operator : MJB / KAK
Sample : A9E0766-06RE1
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 10:51:11 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : A9E0766-07RE1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 11:31:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.542	28337033	141.190 ng/ml
62) S	DCBP (S)	10.376	29702259	217.309 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.214	5249	0.931 ng/ml
3)	Aroclor 1016 (2)	6.696	4515	0.392 ng/ml
4)	Aroclor 1016 (3)	6.825	4577	0.905 ng/ml
5)	Aroclor 1016 (4)	6.916	6937	1.238 ng/ml
6)	Aroclor 1016 (5)	6.958	5400	0.822 ng/ml
7)	Aroclor 1016 (6)	7.086	5886	0.878 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	5.815	14113	8.504 ng/ml
11)	Aroclor 1221 (3)	5.863	43368	7.719 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.863	43368	9.535 ng/ml
14)	Aroclor 1232 (2)	6.214	5249	1.876 ng/ml
15)	Aroclor 1232 (3)	6.696	4515	0.856 ng/ml
16)	Aroclor 1232 (4)	6.916	6937	3.337 ng/ml
17)	Aroclor 1232 (5)	6.958	5400	2.267 ng/ml
18)	Aroclor 1232 (6)	7.086	5886	2.380 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.214	5249	1.047 ng/ml
21)	Aroclor 1242 (2)	6.696	4515	0.465 ng/ml
22)	Aroclor 1242 (3)	6.825	4577	1.038 ng/ml
23)	Aroclor 1242 (4)	6.916	6937	1.646 ng/ml
24)	Aroclor 1242 (5)	6.958	5400	1.099 ng/ml
25)	Aroclor 1242 (6)	7.086	5886	1.145 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.677	4886	0.834 ng/ml
28)	Aroclor 1248 (2)	6.916	6937	0.905 ng/ml
29)	Aroclor 1248 (3)	6.958	5400	0.757 ng/ml
30)	Aroclor 1248 (4)	7.086	5886	0.694 ng/ml
31)	Aroclor 1248 (5)	7.449	9284	0.843 ng/ml
32)	Aroclor 1248 (6)	7.607	13164	1.362 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.425	8653	0.790 ng/ml
35)	Aroclor 1254 (2)	7.607	13164	0.732 ng/ml
36)	Aroclor 1254 (3)	7.915	16164	0.826 ng/ml
37)	Aroclor 1254 (4)	8.154	14338	0.981 ng/ml
38)	Aroclor 1254 (5)	8.486	12326	0.834 ng/ml
39)	Aroclor 1254 (6)	8.716	3652	0.832 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.051	8259	0.623 ng/ml
42)	Aroclor 1260 (2)	8.258	17107	1.045 ng/ml
43)	Aroclor 1260 (3)	8.486	12326	0.758 ng/ml
44)	Aroclor 1260 (4)	8.954	19507	0.705 ng/ml
45)	Aroclor 1260 (5)	9.215	5784	0.368 ng/ml
46)	Aroclor 1260 (6)	9.763	13811	2.157 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : A9E0766-07RE1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 11:31:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

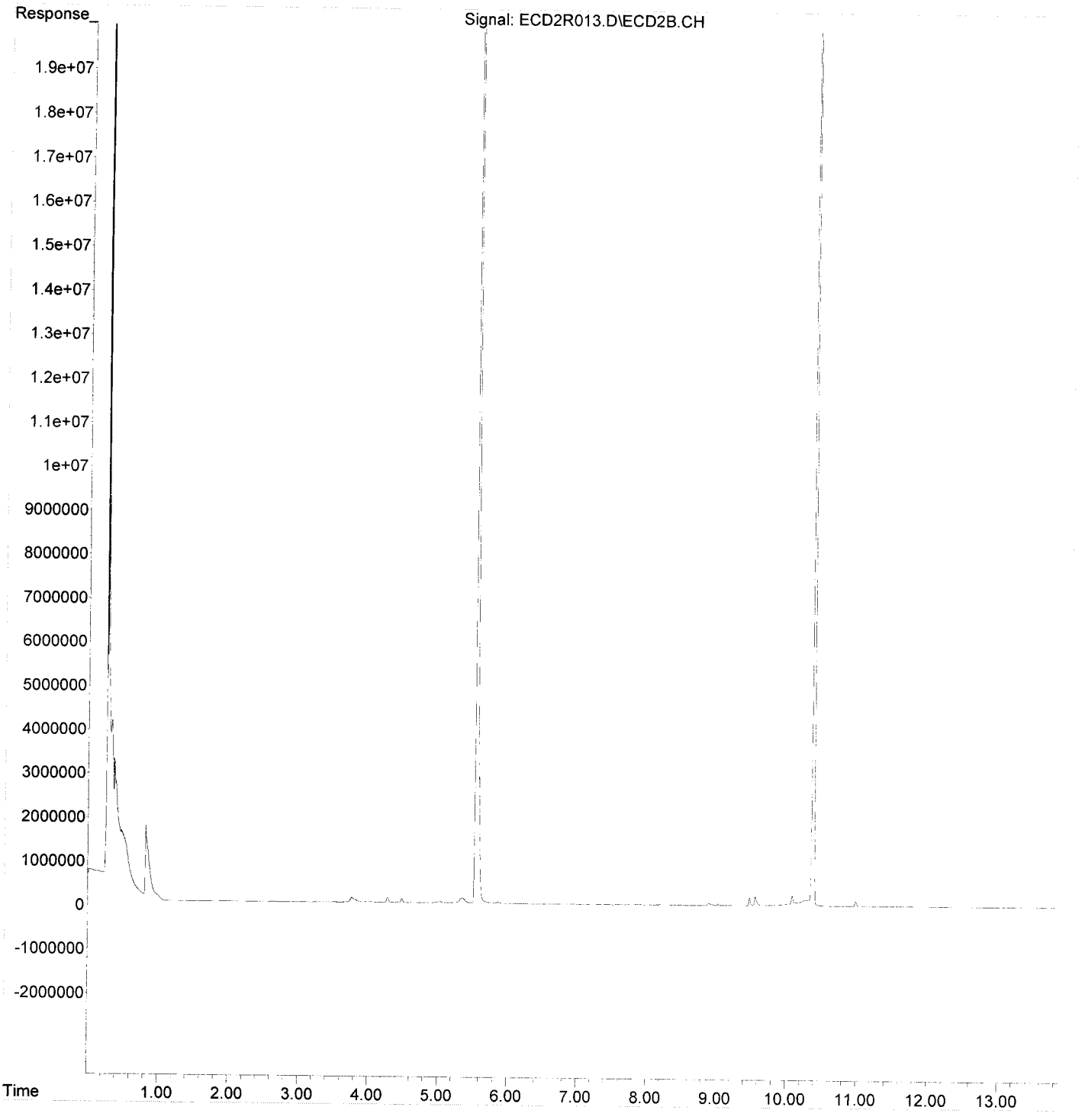
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.258	17107	1.292 ng/ml
49)	Aroclor 1262 (2)	8.556	3635	0.202 ng/ml
50)	Aroclor 1262 (3)	8.733	3572	0.241 ng/ml
51)	Aroclor 1262 (4)	8.982	13618	0.409 ng/ml
52)	Aroclor 1262 (5)	9.215	5784	0.306 ng/ml
53)	Aroclor 1262 (6)	9.763	13811	1.573 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.773	1925	0.247 ng/ml
56)	Aroclor 1268 (2)	9.215	5784	0.160 ng/ml
57)	Aroclor 1268 (3)	9.273	3204	0.109 ng/ml
58)	Aroclor 1268 (4)	9.479	186246	7.339 ng/ml
59)	Aroclor 1268 (5)	9.763	13811	1.445 ng/ml
60)	Aroclor 1268 (6)	10.085	229688	3.320 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\9F05019\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:05 am
Operator : MJB / KAK
Sample : A9E0766-07RE1
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 11:31:14 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : A9E0766-16RE1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:06:40 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/5/19

MJB 6/5/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1)	S TCMX (S)	5.542	40758007	203.078 ng/ml
62)	S DCBP (S)	10.376	32956362	241.117 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.211	8720	1.546 ng/ml
3)	Aroclor 1016 (2)	6.700	11867	1.032 ng/ml
4)	Aroclor 1016 (3)	6.827	3593	0.711 ng/ml
5)	Aroclor 1016 (4)	6.913	22570	4.027 ng/ml
6)	Aroclor 1016 (5)	6.958	11935	1.817 ng/ml
7)	Aroclor 1016 (6)	7.083	13697	2.043 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.785f	14895	8.448 ng/ml
10)	Aroclor 1221 (2)	5.785	14895	8.976 ng/ml
11)	Aroclor 1221 (3)	5.862	53768	9.570 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.862	53768	11.821 ng/ml
14)	Aroclor 1232 (2)	6.211	8720	3.117 ng/ml
15)	Aroclor 1232 (3)	6.700	11867	2.251 ng/ml
16)	Aroclor 1232 (4)	6.913	22570	10.857 ng/ml
17)	Aroclor 1232 (5)	6.958	11935	5.010 ng/ml
18)	Aroclor 1232 (6)	7.083	13697	5.539 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.211	8720	1.740 ng/ml
21)	Aroclor 1242 (2)	6.700	11867	1.222 ng/ml
22)	Aroclor 1242 (3)	6.827	3593	0.815 ng/ml
23)	Aroclor 1242 (4)	6.913	22570	5.356 ng/ml
24)	Aroclor 1242 (5)	6.958	11935	2.430 ng/ml
25)	Aroclor 1242 (6)	7.083	13697	2.664 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.672	7538	1.286 ng/ml
28)	Aroclor 1248 (2)	6.913	22570	2.943 ng/ml
29)	Aroclor 1248 (3)	6.958	11935	1.673 ng/ml
30)	Aroclor 1248 (4)	7.083	13697	1.616 ng/ml
31)	Aroclor 1248 (5)	7.446	25142	2.283 ng/ml
32)	Aroclor 1248 (6)	7.604	92103	9.527 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.423	61136	5.580 ng/ml
35)	Aroclor 1254 (2)	7.604	92103	5.123 ng/ml
36)	Aroclor 1254 (3)	7.913	99872	5.105 ng/ml
37)	Aroclor 1254 (4)	8.152	75600	5.174 ng/ml
38)	Aroclor 1254 (5)	8.485	148899	10.074 ng/ml
39)	Aroclor 1254 (6)	8.711	45000	10.255 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.049	106461	8.027 ng/ml
42)	Aroclor 1260 (2)	8.256	165956	10.140 ng/ml
43)	Aroclor 1260 (3)	8.485	148899	9.160 ng/ml
44)	Aroclor 1260 (4)	8.964	176101	6.366 ng/ml
45)	Aroclor 1260 (5)	9.212	125671	8.006 ng/ml
46)	Aroclor 1260 (6)	9.751	61568	9.614 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

< MDL

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : A9E0766-16RE1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:06:40 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

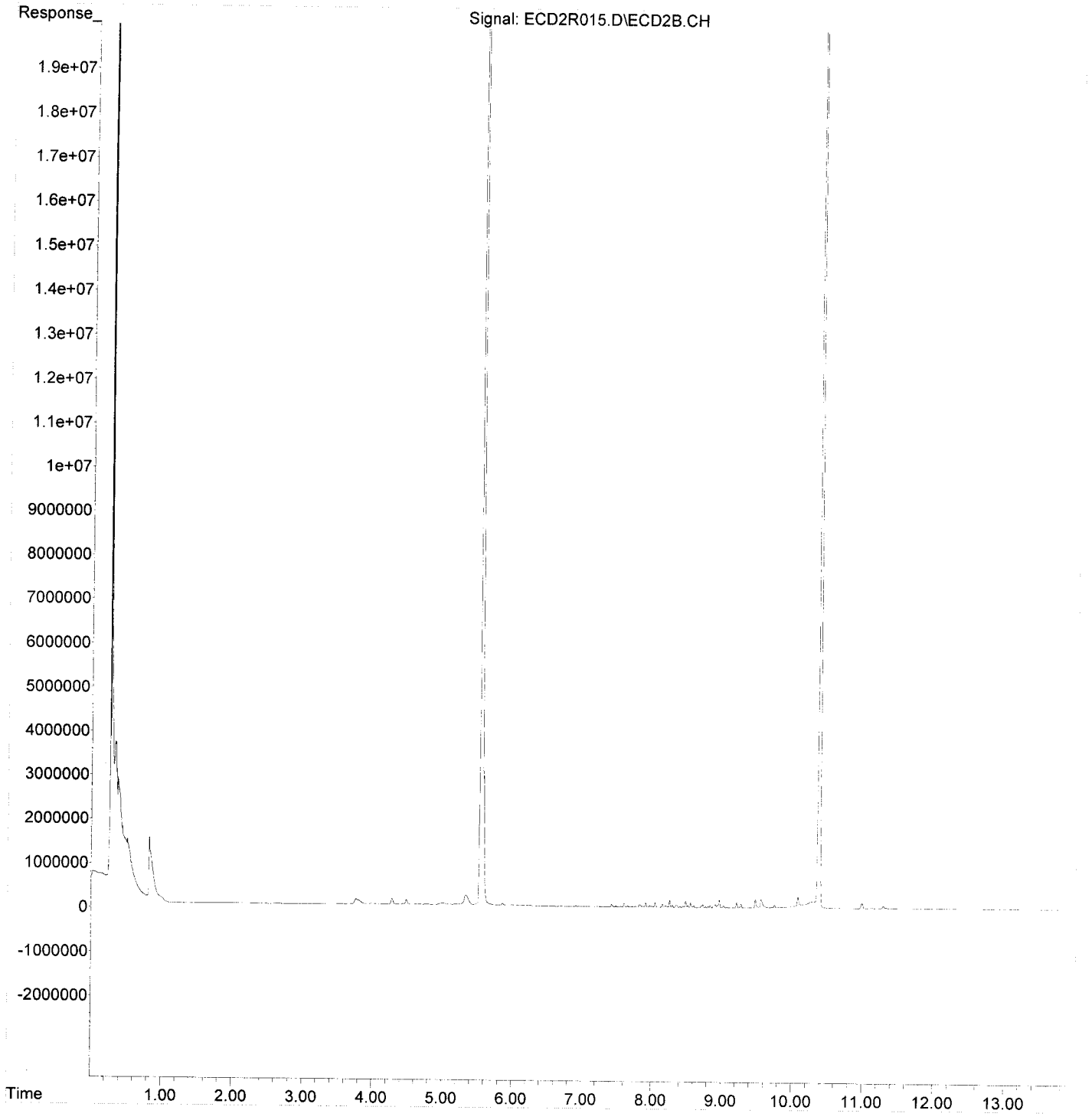
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	165956	12.537 ng/ml
49)	Aroclor 1262 (2)	8.556	109953	6.102 ng/ml
50)	Aroclor 1262 (3)	8.731	75225	5.076 ng/ml
51)	Aroclor 1262 (4)	8.964	176101	5.288 ng/ml
52)	Aroclor 1262 (5)	9.212	125671	6.650 ng/ml
53)	Aroclor 1262 (6)	9.751	61568	7.010 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.772	24804	3.185 ng/ml
56)	Aroclor 1268 (2)	9.212	125671	3.466 ng/ml
57)	Aroclor 1268 (3)	9.275	84689	2.886 ng/ml
58)	Aroclor 1268 (4)	9.479	186843	7.362 ng/ml
59)	Aroclor 1268 (5)	9.751	61568	6.440 ng/ml
60)	Aroclor 1268 (6)	10.085	252688	3.652 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\9F05019\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 11:41 am
Operator : MJB / KAK
Sample : A9E0766-16RE1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:06:40 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05019-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:52:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/5/19

Q-14
MJB 6/5/19

Not Reported. Vial had Concentrated

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.542	60886153	303.367	ng/ml	
62)	S DCBP (S)	10.377	46397290	339.454	ng/ml	Q-91
	Target Compounds					
2)	Aroclor 1016 (1)	6.214	3791851	672.279	ng/ml	638.57 Q-91
3)	Aroclor 1016 (2)	6.702	7525749	654.193	ng/ml	
4)	Aroclor 1016 (3)	6.828	3300747	652.980	ng/ml	
5)	Aroclor 1016 (4)	6.915	3615194	645.033	ng/ml	
6)	Aroclor 1016 (5)	6.959	3984447	606.667	ng/ml	
7)	Aroclor 1016 (6)	7.084	4024002	600.262	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.706	319601	181.272	ng/ml	
10)	Aroclor 1221 (2)	5.791	466797	281.289	ng/ml	
11)	Aroclor 1221 (3)	5.876	2435045	433.420	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.876	2435045	535.364	ng/ml	
14)	Aroclor 1232 (2)	6.214	3791851	1355.479	ng/ml	
15)	Aroclor 1232 (3)	6.702	7525749	1427.495	ng/ml	
16)	Aroclor 1232 (4)	6.915	3615194	1739.006	ng/ml	
17)	Aroclor 1232 (5)	6.959	3984447	1672.673	ng/ml	
18)	Aroclor 1232 (6)	7.084	4024002	1627.187	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.214	3791851	756.577	ng/ml	
21)	Aroclor 1242 (2)	6.702	7525749	774.989	ng/ml	
22)	Aroclor 1242 (3)	6.828	3300747	748.529	ng/ml	
23)	Aroclor 1242 (4)	6.915	3615194	857.877	ng/ml	
24)	Aroclor 1242 (5)	6.959	3984447	811.201	ng/ml	
25)	Aroclor 1242 (6)	7.084	4024002	782.483	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.674	6640481	1132.974	ng/ml	
28)	Aroclor 1248 (2)	6.915	3615194	471.456	ng/ml	
29)	Aroclor 1248 (3)	6.959	3984447	558.547	ng/ml	
30)	Aroclor 1248 (4)	7.084	4024002	474.721	ng/ml	
31)	Aroclor 1248 (5)	7.447	964561	87.593	ng/ml	
32)	Aroclor 1248 (6)	7.606	3406201	352.322	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.425	2830127	258.333	ng/ml	
35)	Aroclor 1254 (2)	7.606	3406201	189.478	ng/ml	
36)	Aroclor 1254 (3)	7.915	1937689	99.046	ng/ml	
37)	Aroclor 1254 (4)	8.153	1335165	91.375	ng/ml	
38)	Aroclor 1254 (5)	8.487	10874583	735.753	ng/ml	
39)	Aroclor 1254 (6)	8.703	1655302	377.225	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.050	8138381	613.647	ng/ml	651.75 Q-91
42)	Aroclor 1260 (2)	8.257	10896395	665.764	ng/ml	
43)	Aroclor 1260 (3)	8.487	10874583	669.011	ng/ml	
44)	Aroclor 1260 (4)	8.966	18858031	681.664	ng/ml	
45)	Aroclor 1260 (5)	9.213	10411948	663.333	ng/ml	
46)	Aroclor 1260 (6)	9.751	3951828	617.065	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05019-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:52:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

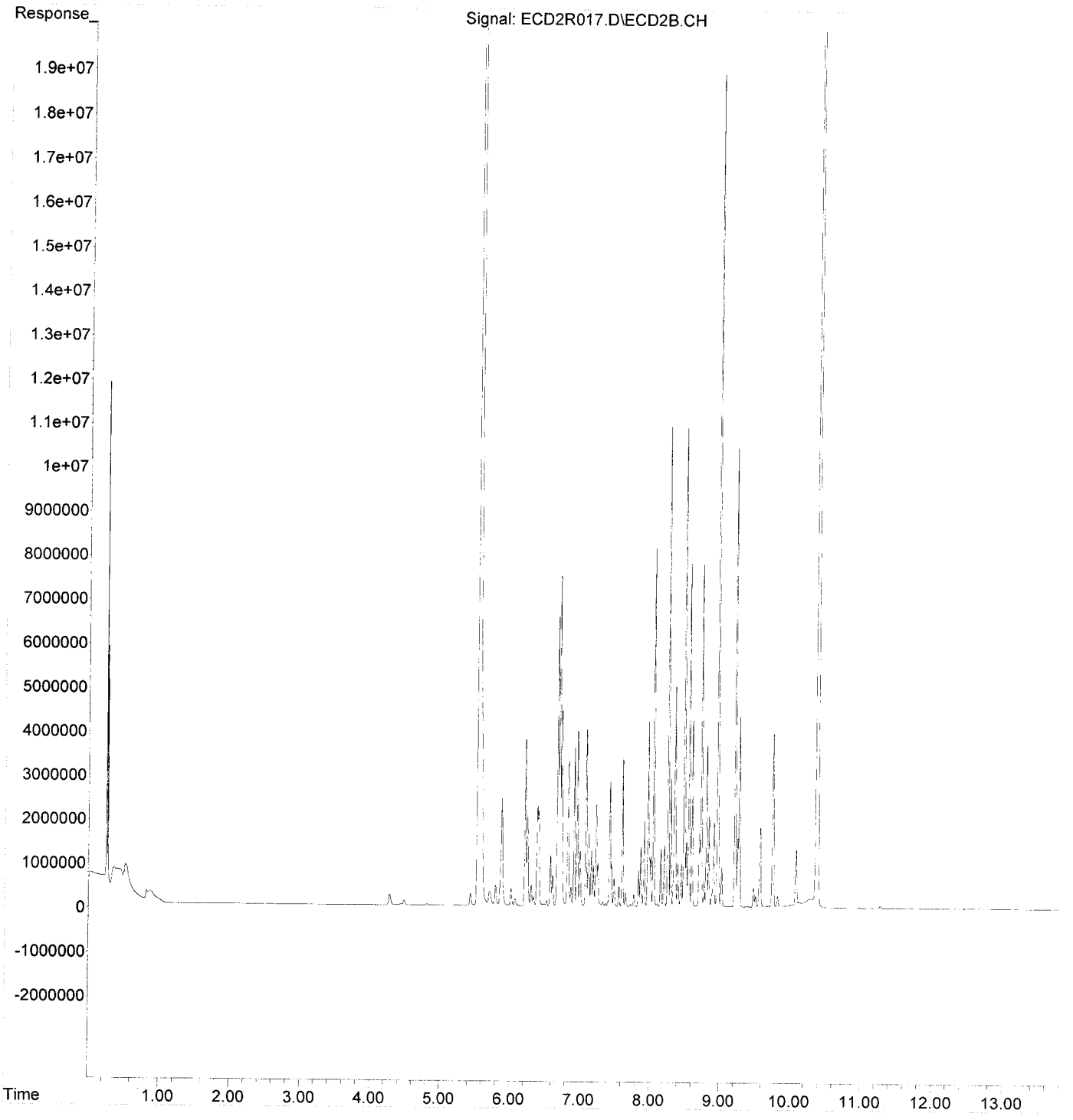
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.257	10896395	823.131 ng/ml
49)	Aroclor 1262 (2)	8.557	7794973	432.624 ng/ml
50)	Aroclor 1262 (3)	8.732	7785555	525.390 ng/ml
51)	Aroclor 1262 (4)	8.966	18858031	566.277 ng/ml
52)	Aroclor 1262 (5)	9.213	10411948	550.958 ng/ml
53)	Aroclor 1262 (6)	9.751	3951828	449.959 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.774	577779	74.199 ng/ml
56)	Aroclor 1268 (2)	9.213	10411948	287.151 ng/ml
57)	Aroclor 1268 (3)	9.274	4326085	147.421 ng/ml
58)	Aroclor 1268 (4)	9.478	435189	17.148 ng/ml
59)	Aroclor 1268 (5)	9.751	3951828	413.381 ng/ml
60)	Aroclor 1268 (6)	10.082	1312971	18.977 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\9F05019\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:17 pm
Operator : MJB / KAK
Sample : 9F05019-CCV3
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:52:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05019-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:54:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/5/19 MJB 6/5/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.543	19091730	95.125 ng/ml
62) S	DCBP (S)	10.377	14973572	109.550 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.209	4298	0.762 ng/ml
3)	Aroclor 1016 (2)	6.698	2792	0.243 ng/ml
4)	Aroclor 1016 (3)	6.823	2133	0.422 ng/ml
5)	Aroclor 1016 (4)	6.918	4345	0.775 ng/ml
6)	Aroclor 1016 (5)	6.966	3577	0.545 ng/ml
7)	Aroclor 1016 (6)	7.080	1669	0.249 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D. ng/ml
10)	Aroclor 1221 (2)	5.809	15851	9.552 ng/ml
11)	Aroclor 1221 (3)	5.865	252472	44.938 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.865	252472	55.508 ng/ml
14)	Aroclor 1232 (2)	6.209	4298	1.536 ng/ml
15)	Aroclor 1232 (3)	6.698	2792	0.530 ng/ml
16)	Aroclor 1232 (4)	6.909	4351	2.093 ng/ml
17)	Aroclor 1232 (5)	6.966	3577	1.502 ng/ml
18)	Aroclor 1232 (6)	7.080	1669	0.675 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.209	4298	0.858 ng/ml
21)	Aroclor 1242 (2)	6.698	2792	0.287 ng/ml
22)	Aroclor 1242 (3)	6.823	2133	0.484 ng/ml
23)	Aroclor 1242 (4)	6.918	4345	1.031 ng/ml
24)	Aroclor 1242 (5)	6.966	3577	0.728 ng/ml
25)	Aroclor 1242 (6)	7.080	1669	0.325 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.681	3193	0.545 ng/ml
28)	Aroclor 1248 (2)	6.918	4345	0.567 ng/ml
29)	Aroclor 1248 (3)	6.966	3577	0.501 ng/ml
30)	Aroclor 1248 (4)	7.080	1669	0.197 ng/ml
31)	Aroclor 1248 (5)	7.451	845	0.077 ng/ml
32)	Aroclor 1248 (6)	7.610	1641	0.170 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.423	936	0.085 ng/ml
35)	Aroclor 1254 (2)	7.610	1641	0.091 ng/ml
36)	Aroclor 1254 (3)	7.910	2914	0.149 ng/ml
37)	Aroclor 1254 (4)	8.157	1196	0.082 ng/ml
38)	Aroclor 1254 (5)	8.487	1642	0.111 ng/ml
39)	Aroclor 1254 (6)	8.715	872	0.199 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.053	1535	0.116 ng/ml
42)	Aroclor 1260 (2)	8.256	3585	0.219 ng/ml
43)	Aroclor 1260 (3)	8.487	1642	0.101 ng/ml
44)	Aroclor 1260 (4)	8.959	5295	0.191 ng/ml
45)	Aroclor 1260 (5)	9.214	3005	0.191 ng/ml
46)	Aroclor 1260 (6)	9.761	8906	1.391 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

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Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05019-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:54:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

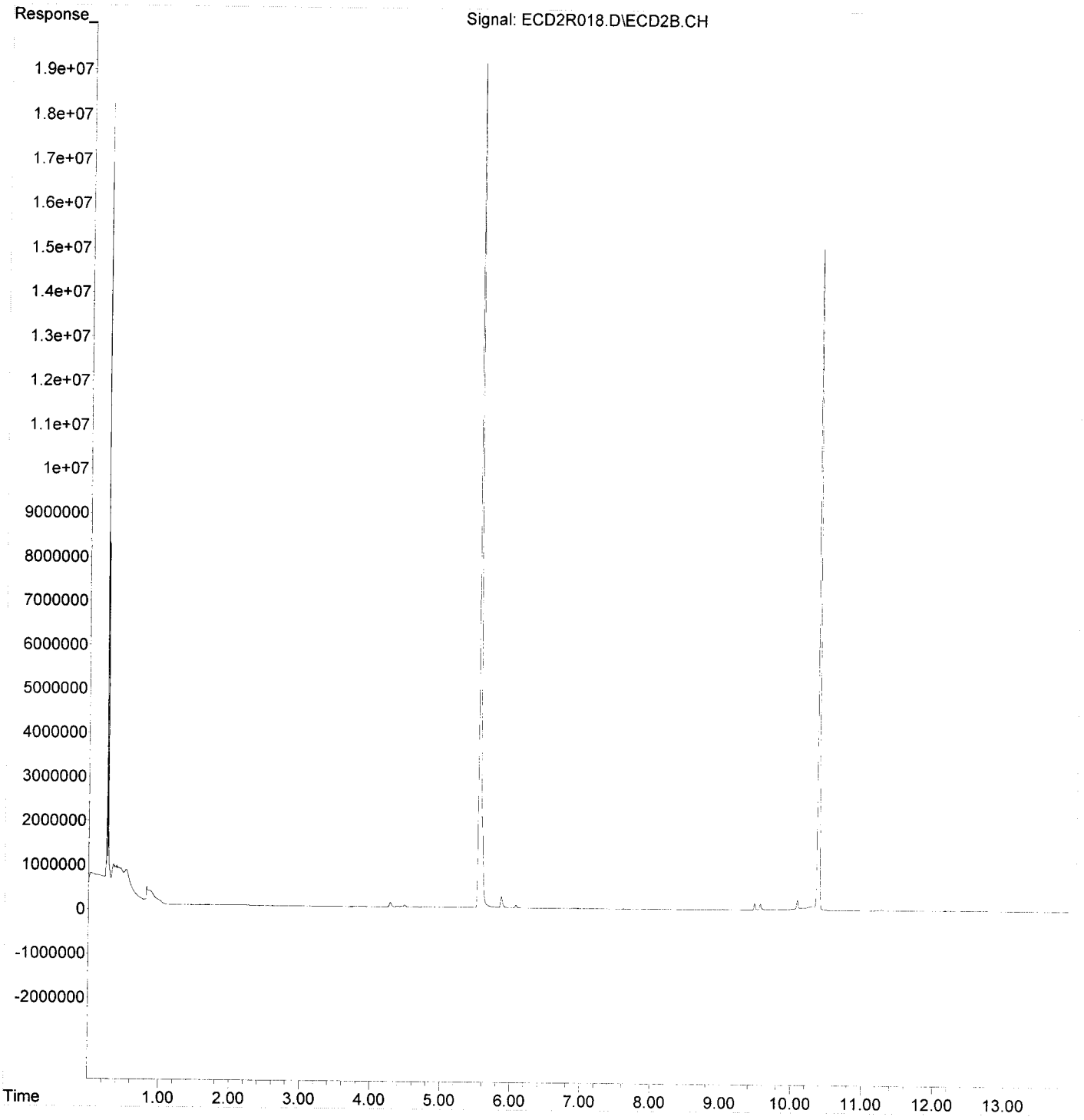
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.256	3585	0.271 ng/ml
49)	Aroclor 1262 (2)	8.556	1060	0.059 ng/ml
50)	Aroclor 1262 (3)	8.731	1415	0.096 ng/ml
51)	Aroclor 1262 (4)	8.959	5295	0.159 ng/ml
52)	Aroclor 1262 (5)	9.214	3005	0.159 ng/ml
53)	Aroclor 1262 (6)	9.761	8906	1.014 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.777	2151	0.276 ng/ml
56)	Aroclor 1268 (2)	9.214	3005	0.083 ng/ml
57)	Aroclor 1268 (3)	9.274	2498	0.085 ng/ml
58)	Aroclor 1268 (4)	9.479	135480	5.339 ng/ml
59)	Aroclor 1268 (5)	9.761	8906	0.932 ng/ml
60)	Aroclor 1268 (6)	10.085	213173	3.081 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\9F05019\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 12:35 pm
Operator : MJB / KAK
Sample : 9F05019-CCB3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 12:54:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 1:36 pm
Operator : MJB / KAK
Sample : 9F05019-CCV4
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 14:10:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

6/5/19

Fresh CCV Standard

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.542	47463707	236.489	ng/ml	
62)	S DCBP (S)	10.382	35446486	259.335	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.215	3084488	546.866	ng/ml	518.42
3)	Aroclor 1016 (2)	6.704	6005009	521.999	ng/ml	
4)	Aroclor 1016 (3)	6.830	2800896	554.096	ng/ml	
5)	Aroclor 1016 (4)	6.917	2892855	516.151	ng/ml	
6)	Aroclor 1016 (5)	6.962	3145866	478.986	ng/ml	
7)	Aroclor 1016 (6)	7.086	3301026	492.415	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.710	271768	154.142	ng/ml	
10)	Aroclor 1221 (2)	5.792	384927	231.955	ng/ml	
11)	Aroclor 1221 (3)	5.877	1911867	340.299	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.877	1911867	420.339	ng/ml	
14)	Aroclor 1232 (2)	6.215	3084488	1102.616	ng/ml	
15)	Aroclor 1232 (3)	6.704	6005009	1139.038	ng/ml	
16)	Aroclor 1232 (4)	6.917	2892855	1391.541	ng/ml	
17)	Aroclor 1232 (5)	6.962	3145866	1320.636	ng/ml	
18)	Aroclor 1232 (6)	7.086	3301026	1334.837	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.215	3084488	615.439	ng/ml	
21)	Aroclor 1242 (2)	6.704	6005009	618.386	ng/ml	
22)	Aroclor 1242 (3)	6.830	2800896	635.175	ng/ml	
23)	Aroclor 1242 (4)	6.917	2892855	686.468	ng/ml	
24)	Aroclor 1242 (5)	6.962	3145866	640.473	ng/ml	
25)	Aroclor 1242 (6)	7.086	3301026	641.898	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.676	5200335	887.262	ng/ml	
28)	Aroclor 1248 (2)	6.917	2892855	377.256	ng/ml	
29)	Aroclor 1248 (3)	6.962	3145866	440.993	ng/ml	
30)	Aroclor 1248 (4)	7.086	3301026	389.430	ng/ml	
31)	Aroclor 1248 (5)	7.449	755604	68.618	ng/ml	
32)	Aroclor 1248 (6)	7.609	2847781	294.562	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.426	2294202	209.414	ng/ml	
35)	Aroclor 1254 (2)	7.609	2847781	158.415	ng/ml	
36)	Aroclor 1254 (3)	7.917	1616185	82.612	ng/ml	
37)	Aroclor 1254 (4)	8.157	1127844	77.187	ng/ml	
38)	Aroclor 1254 (5)	8.490	8516791	576.229	ng/ml	
39)	Aroclor 1254 (6)	8.707	1351230	307.930	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.053	6839766	515.730	ng/ml	537.22
42)	Aroclor 1260 (2)	8.259	8697415	531.408	ng/ml	
43)	Aroclor 1260 (3)	8.490	8516791	523.958	ng/ml	
44)	Aroclor 1260 (4)	8.969	15373721	555.716	ng/ml	
45)	Aroclor 1260 (5)	9.217	8653890	551.329	ng/ml	
46)	Aroclor 1260 (6)	9.756	3491535	545.192	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9F05019\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 1:36 pm
Operator : MJB / KAK
Sample : 9F05019-CCV4
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 14:10:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

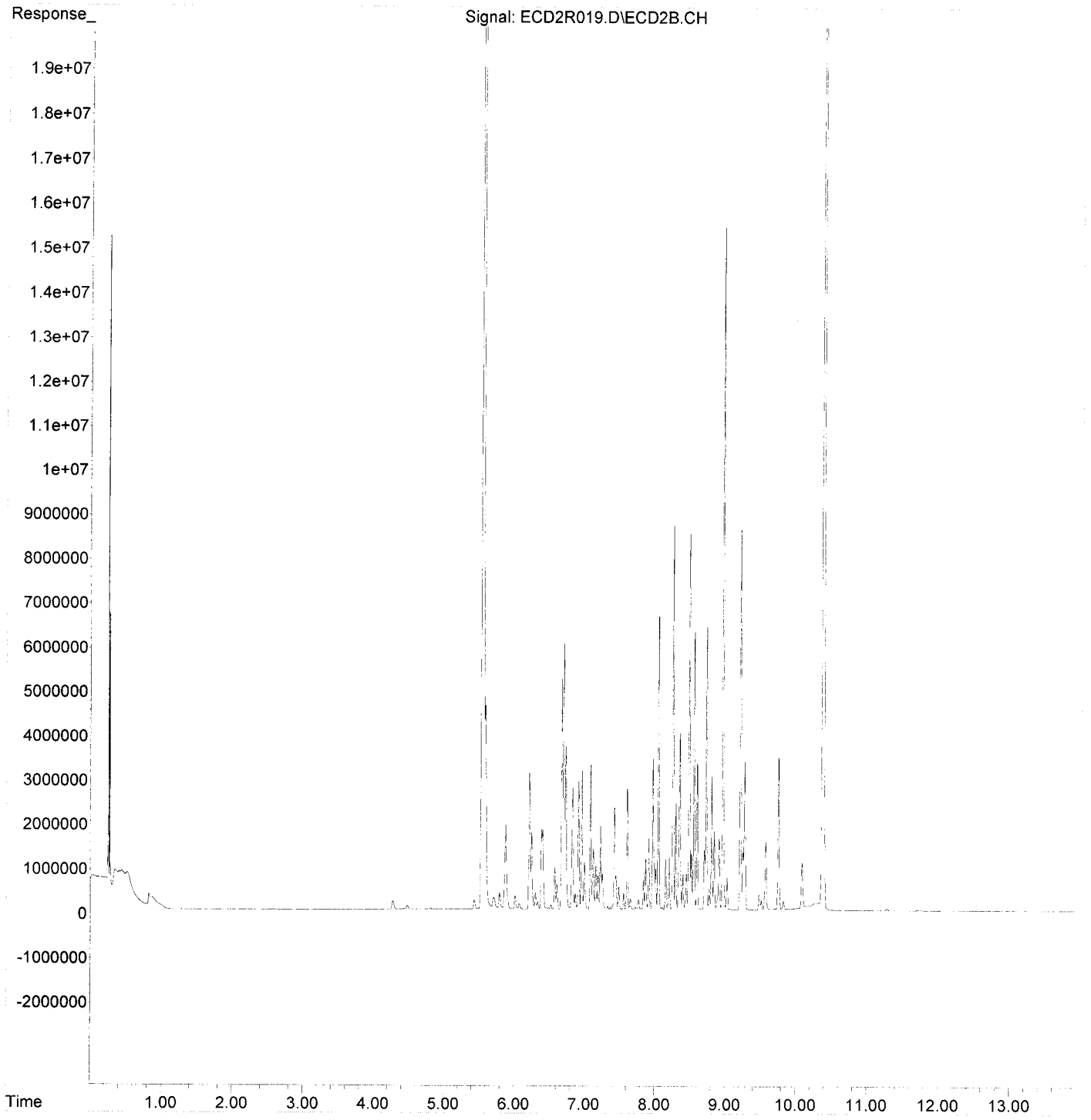
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.259	8697415	657.017	ng/ml
49)	Aroclor 1262 (2)	8.560	6411325	355.831	ng/ml
50)	Aroclor 1262 (3)	8.735	6378909	430.466	ng/ml
51)	Aroclor 1262 (4)	8.969	15373721	461.649	ng/ml
52)	Aroclor 1262 (5)	9.217	8653890	457.928	ng/ml
53)	Aroclor 1262 (6)	9.756	3491535	397.550	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.777	470689	60.446	ng/ml
56)	Aroclor 1268 (2)	9.217	8653890	238.666	ng/ml
57)	Aroclor 1268 (3)	9.277	3371492	114.891	ng/ml
58)	Aroclor 1268 (4)	9.482	346917	13.670	ng/ml
59)	Aroclor 1268 (5)	9.756	3491535	365.232	ng/ml
60)	Aroclor 1268 (6)	10.088	1067854	15.434	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\9F05019\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 05 Jun 2019 1:36 pm
Operator : MJB / KAK
Sample : 9F05019-CCV4
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: Jun 05 14:10:50 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9A30022 (Cal ID A9A3104) DUALECD2F

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9A30022**	Instrument:	**DUALECD2F**
Date:	**01/30/19 09:07**	Calibration:	**A9A3104**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9A30022-ICB1	Water	QC	QC				A19A288
2	9A30022-CAL1	Water	QC	QC				A19A143
3	9A30022-CAL2	Water	QC	QC				A19A144
4	9A30022-CAL3	Water	QC	QC				A19A145
5	9A30022-CAL4	Water	QC	QC				A19A146
6	9A30022-CAL5	Water	QC	QC				A19A140
7	9A30022-CAL6	Water	QC	QC				A19A141
8	9A30022-CAL7	Water	QC	QC				A19A142
9	9A30022-ICV1	Water	QC	QC				A18I051
10	9A30022-CAL8	Water	QC	QC				A18I041
11	9A30022-CAL9	Water	QC	QC				A18I042
12	9A30022-CALA	Water	QC	QC				A18I043
13	9A30022-CALB	Water	QC	QC				A18I044
14	9A30022-CALC	Water	QC	QC				A18I045
15	9A30022-CALD	Water	QC	QC				A18I046
16	9A30022-CALE	Water	QC	QC				A18I047
17	9A30022-ICV2	Water	QC	QC				A18I052
18	9A30022-ICV3	Water	QC	QC				A18J288
19	9A30022-ICV4	Water	QC	QC				A18I053
20	9A30022-ICV5	Water	QC	QC				A19A114

Comments: ICAL

Data Entered By: MJB 1/31/19

Data Reviewed By: MKT 2/1/19

Calibration Status Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_190130.M
Title : PCB Data Analysis
Last Update : Thu Jan 31 10:36:30 2019
Response Via : Initial Calibration

A9A3104

AB 1/31/19

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	K:\DATA\9A30022\ECD2F006.D
2	2	25	0	K:\DATA\9A30022\ECD2F007.D
3	3	50	0	K:\DATA\9A30022\ECD2F008.D
4	4	100	0	K:\DATA\9A30022\ECD2F009.D
5	5	250	0	K:\DATA\9A30022\ECD2F022.D
6	6	500	0	K:\DATA\9A30022\ECD2F011.D
7	7	800	0	K:\DATA\9A30022\ECD2F012.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	Jan 31 10:34 2019	Jan 30 18:24 2019	30 Jan 2019 9:39 am
2	2	Jan 31 10:34 2019	Jan 30 18:25 2019	30 Jan 2019 9:57 am
3	3	Jan 31 10:35 2019	Jan 30 18:26 2019	30 Jan 2019 10:15 am
4	4	Jan 31 10:35 2019	Jan 30 18:26 2019	30 Jan 2019 10:33 am
5	5	Jan 31 10:36 2019	Jan 31 10:34 2019	30 Jan 2019 2:13 pm
6	6	Jan 31 10:35 2019	Jan 30 18:28 2019	30 Jan 2019 11:09 am
7	7	Jan 31 10:35 2019	Jan 30 18:29 2019	30 Jan 2019 11:27 am

FECD2_QUANTPCB_190130.M Thu Jan 31 12:50:39 2019

Response Factor Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_190130.M
Title : PCB Data Analysis
Last Update : Thu Jan 31 10:36:30 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2F006.D 2 =ECD2F007.D 3 =ECD2F008.D
4 =ECD2F009.D 5 =ECD2F022.D 6 =ECD2F011.D

MJB 1/31/19

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	S	TCMX (S)	5.497	5.873	5.780	5.361	5.858	5.953	5.781 E4	4.65
2)		Aroclor 1016 ...	3.079	2.910	2.686	2.529	2.509	2.472	2.674 E3	8.77
3)		Aroclor 1016 ...	5.743	5.545	5.381	5.142	5.016	5.041	5.292 E3	5.17
4)		Aroclor 1016 ...	3.476	3.164	2.941	2.705	2.693	2.673	2.904 E3	10.75
5)		Aroclor 1016 ...	3.002	2.627	2.502	2.252	2.103	2.154	2.391 E3	14.15
6)		Aroclor 1016 ...	3.423	3.287	3.034	2.730	2.685	2.671	2.932 E3	10.84
7)		Aroclor 1016 (6)	2.620	2.219	2.142	1.981	1.867	1.887	2.082 E3	13.28
8)		Aroclor 1016 ...							0.000	-1.00
9)		Aroclor 1221 (1)					8.284		8.284 E2	0.00
10)		Aroclor 1221 (2)					5.432		5.432 E2	0.00
11)		Aroclor 1221 (3)					1.773		1.773 E3	0.00
12)		Aroclor 1221 ...							0.000	-1.00
13)		Aroclor 1232 (1)					1.401		1.401 E3	0.00
14)		Aroclor 1232 (2)					2.135		2.135 E3	0.00
15)		Aroclor 1232 (3)					1.107		1.107 E3	0.00
16)		Aroclor 1232 (4)					7.562		7.562 E2	0.00
17)		Aroclor 1232 (5)					1.039		1.039 E3	0.00
18)		Aroclor 1232 (6)					8.508		8.508 E2	0.00
19)		Aroclor 1232 ...							0.000	-1.00
20)		Aroclor 1242 ...					1.975		1.975 E3	0.00
21)		Aroclor 1242 ...					4.045		4.045 E3	0.00
22)		Aroclor 1242 ...					2.145		2.145 E3	0.00
23)		Aroclor 1242 ...					1.610		1.610 E3	0.00
24)		Aroclor 1242 ...					2.211		2.211 E3	0.00
25)		Aroclor 1242 (6)					1.865		1.865 E3	0.00
26)		Aroclor 1242 ...							0.000	-1.00
27)		Aroclor 1248 ...					2.342		2.342 E3	0.00
28)		Aroclor 1248 ...					2.865		2.865 E3	0.00
29)		Aroclor 1248 ...					3.432		3.432 E3	0.00
30)		Aroclor 1248 ...					3.881		3.881 E3	0.00
31)		Aroclor 1248 ...					4.215		4.215 E3	0.00
32)		Aroclor 1248 (6)					2.256		2.256 E3	0.00
33)		Aroclor 1248 ...							0.000	-1.00
34)		Aroclor 1254 ...					4.283		4.283 E3	0.00
35)		Aroclor 1254 ...					5.397		5.397 E3	0.00
36)		Aroclor 1254 ...					7.922		7.922 E3	0.00
37)		Aroclor 1254 ...					5.279		5.279 E3	0.00
38)		Aroclor 1254 ...					5.337		5.337 E3	0.00
39)		Aroclor 1254 (6)					1.802		1.802 E3	0.00
40)		Aroclor 1254 ...							0.000	-1.00
41)		Aroclor 1260 ...	6.221	5.794	5.729	5.256	5.071	5.135	5.490 E3	7.83
42)		Aroclor 1260 ...	7.496	7.373	7.192	6.591	6.393	6.640	6.888 E3	6.54
43)		Aroclor 1260 (3)	5.473	5.397	5.357	5.073	4.845	4.916	5.134 E3	5.25
44)		Aroclor 1260 (4)	1.268	1.274	1.323	1.216	1.244	1.208	1.246 E4	3.76
45)		Aroclor 1260 (5)	8.473	8.717	8.401	8.169	8.118	8.021	8.248 E3	3.63
46)		Aroclor 1260 (6)	3.799	3.548	3.535	3.322	3.292	3.224	3.412 E3	6.58
47)		Aroclor 1260 ...							0.000	-1.00
48)		Aroclor 1262 (1)					5.517		5.517 E3	0.00
49)		Aroclor 1262 (2)					7.521		7.521 E3	0.00
50)		Aroclor 1262 (3)					6.451		6.451 E3	0.00
51)		Aroclor 1262 (4)					1.420		1.420 E4	0.00
52)		Aroclor 1262 (5)					8.566		8.566 E3	0.00
53)		Aroclor 1262 (6)					4.761		4.761 E3	0.00
54)		Aroclor 1262 ...							0.000	-1.00
55)		Aroclor 1268 (1)					3.334		3.334 E3	0.00
56)		Aroclor 1268 (2)					1.583		1.583 E4	0.00
57)		Aroclor 1268 (3)					1.347		1.347 E4	0.00
58)		Aroclor 1268 (4)					1.188		1.188 E4	0.00
59)		Aroclor 1268 (5)					4.979		4.979 E3	0.00
60)		Aroclor 1268 (6)					3.446		3.446 E4	0.00

Response Factor Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_190130.M
Title : PCB Data Analysis
Last Update : Thu Jan 31 10:36:30 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2F006.D 2 =ECD2F007.D 3 =ECD2F008.D
4 =ECD2F009.D 5 =ECD2F022.D 6 =ECD2F011.D

		Compound	1	2	3	4	5	6	Avg	%RSD
61)		Aroclor 1268 ...							0.000	-1.00
62)	S	DCBP (S)	7.466	7.354	7.205	7.225	7.282	7.308	7.281 E4	1.51

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : K:\METHODS\
Method File : FECD2_QUANTPCB_190130.M
Title : PCB Data Analysis
Last Update : Thu Jan 31 10:36:30 2019
Response Via : Initial Calibration

Total Cpnds : 62

MB 1/31/19

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	4.699	1.000	A	H	L
2		Aroclor 1016 (1)	5.623	1.000	A	H	R
3		Aroclor 1016 (2)	6.036	1.000	A	H	R
4		Aroclor 1016 (3)	6.119	1.000	A	H	R
5		Aroclor 1016 (4)	6.278	1.000	A	H	R
6		Aroclor 1016 (5)	6.499	1.000	A	H	R
7		Aroclor 1016 (6)	6.624	1.000	A	H	R
8		Aroclor 1016 - AVE	0.594	1.000	A	H	R
9		Aroclor 1221 (1)	5.060	1.000	A	H	R
10		Aroclor 1221 (2)	5.180	1.000	A	H	R
11		Aroclor 1221 (3)	5.259	1.000	A	H	R
12		Aroclor 1221 - AVE	0.594	1.000	A	H	R
13		Aroclor 1232 (1)	5.261	1.000	A	H	R
14		Aroclor 1232 (2)	6.037	1.000	A	H	R
15		Aroclor 1232 (3)	6.121	1.000	A	H	R
16		Aroclor 1232 (4)	6.280	1.000	A	H	R
17		Aroclor 1232 (5)	6.501	1.000	A	H	R
18		Aroclor 1232 (6)	6.627	1.000	A	H	R
19		Aroclor 1232 - AVE	0.594	1.000	A	H	R
20		Aroclor 1242 (1)	5.625	1.000	A	H	R
21		Aroclor 1242 (2)	6.037	1.000	A	H	R
22		Aroclor 1242 (3)	6.121	1.000	A	H	R
23		Aroclor 1242 (4)	6.280	1.000	A	H	R
24		Aroclor 1242 (5)	6.502	1.000	A	H	R
25		Aroclor 1242 (6)	6.626	1.000	A	H	R
26		Aroclor 1242 - AVE	0.594	1.000	A	H	R
27		Aroclor 1248 (1)	6.036	1.000	A	H	R
28		Aroclor 1248 (2)	6.280	1.000	A	H	R
29		Aroclor 1248 (3)	6.501	1.000	A	H	R
30		Aroclor 1248 (4)	6.795	1.000	A	H	R
31		Aroclor 1248 (5)	6.832	1.000	A	H	R
32		Aroclor 1248 (6)	7.310	1.000	A	H	R
33		Aroclor 1248 - AVE	0.594	1.000	A	H	R
34		Aroclor 1254 (1)	6.831	1.000	A	H	R
35		Aroclor 1254 (2)	6.943	1.000	A	H	R
36		Aroclor 1254 (3)	7.313	1.000	A	H	R
37		Aroclor 1254 (4)	7.479	1.000	A	H	R
38		Aroclor 1254 (5)	7.860	1.000	A	H	R
39		Aroclor 1254 (6)	8.151	1.000	A	H	R
40		Aroclor 1254 - AVE	0.594	1.000	A	H	R
41		Aroclor 1260 (1)	7.429	1.000	A	H	R
42		Aroclor 1260 (2)	7.565	1.000	A	H	R
43		Aroclor 1260 (3)	8.120	1.000	A	H	R
44		Aroclor 1260 (4)	8.292	1.000	A	H	R
45		Aroclor 1260 (5)	8.590	1.000	A	H	R
46		Aroclor 1260 (6)	8.978	1.000	A	H	R
47		Aroclor 1260 - AVE	0.594	1.000	A	H	R
48		Aroclor 1262 (1)	7.568	1.000	A	H	R
49		Aroclor 1262 (2)	7.891	1.000	A	H	R
50		Aroclor 1262 (3)	8.123	1.000	A	H	R
51		Aroclor 1262 (4)	8.295	1.000	A	H	R
52		Aroclor 1262 (5)	8.592	1.000	A	H	R
53		Aroclor 1262 (6)	8.982	1.000	A	H	R
54		Aroclor 1262 - AVE	0.594	1.000	A	H	R
55		Aroclor 1268 (1)	8.114	1.000	A	H	R
56		Aroclor 1268 (2)	8.541	1.000	A	H	R

57		Aroclor 1268 (3)	8.589	1.000	A	H	R
58		Aroclor 1268 (4)	8.770	1.000	A	H	R
59		Aroclor 1268 (5)	8.981	1.000	A	H	R
60		Aroclor 1268 (6)	9.232	1.000	A	H	R
61		Aroclor 1268 - AVE	0.597	1.000	A	H	R
62	S	DCBP (S)	9.454	1.000	A	H	R

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

FECD2_QUANTPCB_190130.M Thu Jan 31 12:50:58 2019

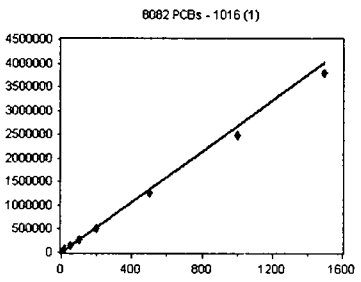
Element Calibration Review Sheet

Calibration ID: **A9A3104** Instrument: **DUALECD2F** Calibration Date: **01/31/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19013**

1016 (1)

Curve Fit: AVERAGE RF

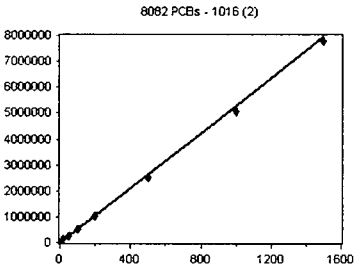


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	61582	3079.100	5.62
9A30022-CAL2	50	145499	2909.980	5.62
9A30022-CAL3	100	268600	2686.000	5.62
9A30022-CAL4	200	505770	2528.850	5.62
9A30022-CAL5	500	1254489	2508.978	5.62
9A30022-CAL6	1000	2471749	2471.749	5.62
9A30022-CAL7	1500	3796102	2530.735	5.62

AVE RF **2673.627** RF RSD **8.77** AVE RT **5.62**

1016 (2)

Curve Fit: AVERAGE RF

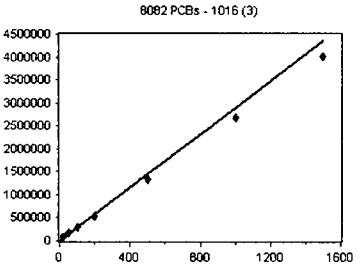


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	114852	5742.600	6.03
9A30022-CAL2	50	277267	5545.340	6.03
9A30022-CAL3	100	538076	5380.760	6.03
9A30022-CAL4	200	1028331	5141.655	6.04
9A30022-CAL5	500	2508139	5016.278	6.04
9A30022-CAL6	1000	5040502	5040.502	6.04
9A30022-CAL7	1500	7768054	5178.703	6.04

AVE RF **5292.263** RF RSD **5.17** AVE RT **6.04**

1016 (3)

Curve Fit: AVERAGE RF

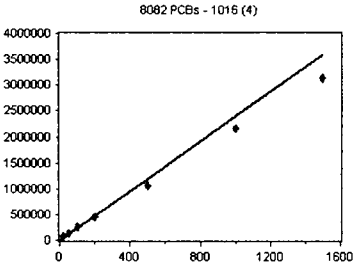


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	69526	3476.300	6.12
9A30022-CAL2	50	158177	3163.540	6.12
9A30022-CAL3	100	294073	2940.730	6.12
9A30022-CAL4	200	540906	2704.530	6.12
9A30022-CAL5	500	1346535	2693.070	6.12
9A30022-CAL6	1000	2672741	2672.741	6.12
9A30022-CAL7	1500	4016399	2677.599	6.12

AVE RF **2904.073** RF RSD **10.75** AVE RT **6.12**

1016 (4)

Curve Fit: AVERAGE RF



Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	60043	3002.150	6.28
9A30022-CAL2	50	131374	2627.480	6.28
9A30022-CAL3	100	250188	2501.880	6.28
9A30022-CAL4	200	450422	2252.110	6.28
9A30022-CAL5	500	1051686	2103.372	6.28
9A30022-CAL6	1000	2153930	2153.930	6.28
9A30022-CAL7	1500	3145024	2096.683	6.28

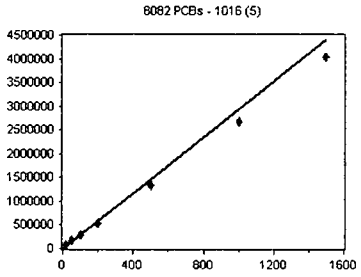
AVE RF **2391.086** RF RSD **14.15** AVE RT **6.28**

Element Calibration Review Sheet

Calibration ID: **A9A3104** Instrument: **DUALECD2F** Calibration Date: **01/31/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19013**

1016 (5)

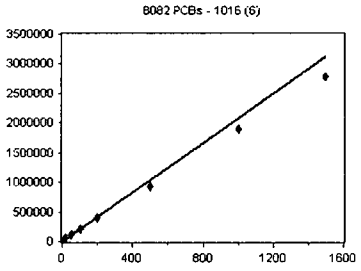


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	68459	3422.950	6.50
9A30022-CAL2	50	164358	3287.160	6.50
9A30022-CAL3	100	303427	3034.270	6.50
9A30022-CAL4	200	545977	2729.885	6.50
9A30022-CAL5	500	1342553	2685.106	6.50
9A30022-CAL6	1000	2670551	2670.551	6.50
9A30022-CAL7	1500	4037004	2691.336	6.50

AVE RF **2931.608** RF RSD **10.84** AVE RT **6.50**

1016 (6)

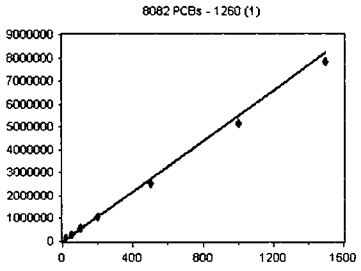


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	52408	2620.400	6.62
9A30022-CAL2	50	110964	2219.280	6.62
9A30022-CAL3	100	214166	2141.660	6.62
9A30022-CAL4	200	396125	1980.625	6.63
9A30022-CAL5	500	933288	1866.576	6.62
9A30022-CAL6	1000	1887258	1887.258	6.62
9A30022-CAL7	1500	2782558	1855.039	6.63

AVE RF **2081.548** RF RSD **13.28** AVE RT **6.62**

1260 (1)

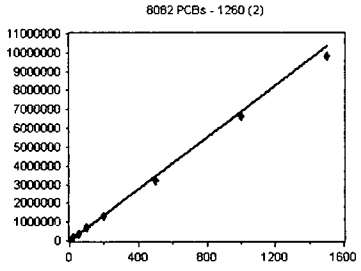


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	124416	6220.800	7.43
9A30022-CAL2	50	289704	5794.080	7.43
9A30022-CAL3	100	572861	5728.610	7.43
9A30022-CAL4	200	1051123	5255.615	7.43
9A30022-CAL5	500	2535656	5071.312	7.43
9A30022-CAL6	1000	5135331	5135.331	7.43
9A30022-CAL7	1500	7836995	5224.664	7.43

AVE RF **5490.059** RF RSD **7.83** AVE RT **7.43**

1260 (2)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	149912	7495.600	7.56
9A30022-CAL2	50	368634	7372.680	7.56
9A30022-CAL3	100	719176	7191.760	7.56
9A30022-CAL4	200	1318276	6591.380	7.57
9A30022-CAL5	500	3196431	6392.862	7.57
9A30022-CAL6	1000	6639782	6639.782	7.56
9A30022-CAL7	1500	9796009	6530.673	7.57

AVE RF **6887.820** RF RSD **6.54** AVE RT **7.56**

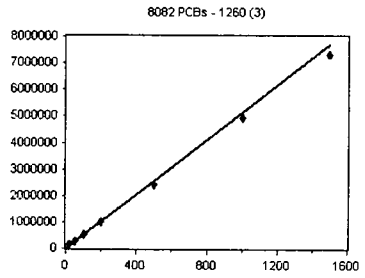
Element Calibration Review Sheet

Calibration ID: **A9A3104** Instrument: **DUALECD2F** Calibration Date: **01/31/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19013**

1260 (3)

Curve Fit: **AVERAGE RF**

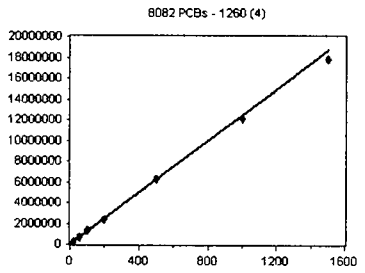


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	109460	5473.000	8.12
9A30022-CAL2	50	269837	5396.740	8.12
9A30022-CAL3	100	535701	5357.010	8.12
9A30022-CAL4	200	1014667	5073.335	8.12
9A30022-CAL5	500	2422545	4845.090	8.12
9A30022-CAL6	1000	4916194	4916.194	8.12
9A30022-CAL7	1500	7313112	4875.408	8.12

AVE RF **5133.825** RF RSD **5.25** AVE RT **8.12**

1260 (4)

Curve Fit: **AVERAGE RF**

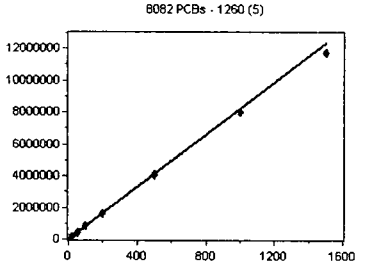


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	253646	12682.300	8.29
9A30022-CAL2	50	637216	12744.320	8.29
9A30022-CAL3	100	1322935	13229.350	8.29
9A30022-CAL4	200	2432300	12161.500	8.29
9A30022-CAL5	500	6219548	12439.100	8.29
9A30022-CAL6	1000	208482E+07	12084.820	8.29
9A30022-CAL7	1500	778688E+07	11857.920	8.29

AVE RF **12457.040** RF RSD **3.76** AVE RT **8.29**

1260 (5)

Curve Fit: **AVERAGE RF**

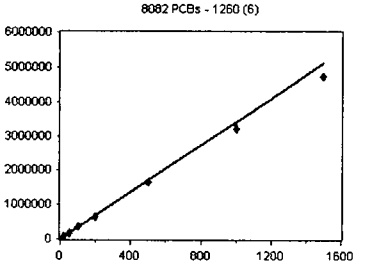


Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	169452	8472.600	8.59
9A30022-CAL2	50	435849	8716.980	8.59
9A30022-CAL3	100	840059	8400.590	8.59
9A30022-CAL4	200	1633889	8169.445	8.59
9A30022-CAL5	500	4059003	8118.006	8.59
9A30022-CAL6	1000	8021252	8021.252	8.59
9A30022-CAL7	1500	175602E+07	7837.347	8.59

AVE RF **8248.031** RF RSD **3.63** AVE RT **8.59**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	20	75971	3798.550	8.98
9A30022-CAL2	50	177419	3548.380	8.98
9A30022-CAL3	100	353500	3535.000	8.98
9A30022-CAL4	200	664336	3321.680	8.98
9A30022-CAL5	500	1646223	3292.446	8.98
9A30022-CAL6	1000	3223988	3223.988	8.98
9A30022-CAL7	1500	4746749	3164.499	8.98

AVE RF **3412.078** RF RSD **6.58** AVE RT **8.98**

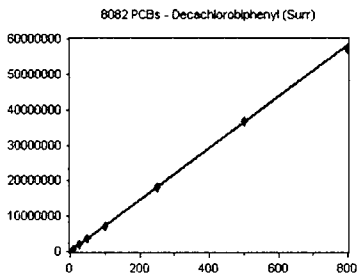
Element Calibration Review Sheet

Calibration ID: **A9A3104** Instrument: **DUALECD2F** Calibration Date: **01/31/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **FECD2_QUANTPCB_19013**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30022-CAL1	10	746633	74663.300	9.45
9A30022-CAL2	25	1838415	73536.600	9.45
9A30022-CAL3	50	3602548	72050.960	9.45
9A30022-CAL4	100	7225361	72253.610	9.46
9A30022-CAL5	250	820614E+07	72824.560	9.45
9A30022-CAL6	500	654099E+07	73081.980	9.46
9A30022-CAL7	800	702881E+07	71286.010	9.46

AVE RF **72813.860** RF RSD **1.51** AVE RT **9.45**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9A30022

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
9A30022-ICB1	Initial Cal Blank	Water	A19A288		1/30/2019 9:21:00AM
9A30022-CAL1	Cal Standard	Water	A19A143	"	1/30/2019 9:39:00AM
9A30022-CAL2	Cal Standard	Water	A19A144	"	1/30/2019 9:57:00AM
9A30022-CAL3	Cal Standard	Water	A19A145	"	1/30/2019 10:15:00AM
9A30022-CAL4	Cal Standard	Water	A19A146	"	1/30/2019 10:33:00AM
9A30022-CAL5	Cal Standard	Water	A19A140	"	1/30/2019 10:51:00AM
9A30022-CAL6	Cal Standard	Water	A19A141	"	1/30/2019 11:09:00AM
9A30022-CAL7	Cal Standard	Water	A19A142	"	1/30/2019 11:27:00AM
9A30022-ICV1	Initial Cal Check	Water	A18I051	"	1/30/2019 11:45:00AM
9A30022-CAL8	Cal Standard	Water	A18I041	"	1/30/2019 12:03:00PM
9A30022-CAL9	Cal Standard	Water	A18I042	"	1/30/2019 12:43:00PM
9A30022-CALA	Cal Standard	Water	A18I043	"	1/30/2019 1:01:00PM
9A30022-CALB	Cal Standard	Water	A18I044	"	1/30/2019 1:19:00PM
9A30022-CALC	Cal Standard	Water	A18I045	"	1/30/2019 1:37:00PM
9A30022-CALD	Cal Standard	Water	A18I046	"	1/30/2019 1:55:00PM
9A30022-CALE	Cal Standard	Water	A18I047	"	1/30/2019 2:13:00PM
9A30022-ICV2	Initial Cal Check	Water	A18I052	"	1/30/2019 2:31:00PM
9A30022-ICV3	Initial Cal Check	Water	A18J288	"	1/30/2019 2:49:00PM
9A30022-ICV4	Initial Cal Check	Water	A18I053	"	1/30/2019 3:07:00PM
9A30022-ICV5	Initial Cal Check	Water	A19A114	"	1/30/2019 3:25:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9A3104** Instrument: **DUALECD2F**

1311/8082 TCLP PCBs Sequence: **9A30022** Matrix: **Water**

9A30022-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	
9A30022-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9A30022

Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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	
9A30022-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: 9A30022

9A30022-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	

9A30022-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: **A9A3104** Instrument: **DUALECD2F**

608 PCBs - LL (1000/1mL) +1 Sequence: **9A30022** Matrix: **Water**

9A30022-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\9A30022\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:21 am
Operator : MJB / KAK
Sample : 9A30022-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	4.697	5445891	94.201 ng/ml
62) S	DCBP (S)	9.453	7056142	96.907 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	5.621	2651	0.992 ng/ml
3)	Aroclor 1016 (2)	6.036	2047	0.387 ng/ml
4)	Aroclor 1016 (3)	6.125	1788	0.616 ng/ml
5)	Aroclor 1016 (4)	6.277	1661	0.695 ng/ml
6)	Aroclor 1016 (5)	6.500	1239	0.423 ng/ml
7)	Aroclor 1016 (6)	6.627	967	0.464 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.057	5158	6.227 ng/ml
10)	Aroclor 1221 (2)	5.207	4043	7.442 ng/ml
11)	Aroclor 1221 (3)	5.259	3622	2.043 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.259	3622	2.585 ng/ml
14)	Aroclor 1232 (2)	6.036	2047	0.959 ng/ml
15)	Aroclor 1232 (3)	6.125	1788	1.614 ng/ml
16)	Aroclor 1232 (4)	6.277	1661	2.197 ng/ml
17)	Aroclor 1232 (5)	6.500	1239	1.192 ng/ml
18)	Aroclor 1232 (6)	6.627	967	1.136 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	5.629	2441	1.236 ng/ml
21)	Aroclor 1242 (2)	6.036	2047	0.506 ng/ml
22)	Aroclor 1242 (3)	6.125	1788	0.834 ng/ml
23)	Aroclor 1242 (4)	6.277	1661	1.032 ng/ml
24)	Aroclor 1242 (5)	6.500	1239	0.560 ng/ml
25)	Aroclor 1242 (6)	6.627	967	0.518 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.036	2047	0.874 ng/ml
28)	Aroclor 1248 (2)	6.277	1661	0.580 ng/ml
29)	Aroclor 1248 (3)	6.500	1239	0.361 ng/ml
30)	Aroclor 1248 (4)	6.793	564	0.145 ng/ml
31)	Aroclor 1248 (5)	6.833	453	0.108 ng/ml
32)	Aroclor 1248 (6)	7.314	886	0.393 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	6.833	453	0.106 ng/ml
35)	Aroclor 1254 (2)	6.942	344	0.064 ng/ml
36)	Aroclor 1254 (3)	7.314	886	0.112 ng/ml
37)	Aroclor 1254 (4)	7.481	188	0.036 ng/ml
38)	Aroclor 1254 (5)	7.868	1795	0.336 ng/ml
39)	Aroclor 1254 (6)	8.150	349	0.194 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	7.430	445	0.081 ng/ml
42)	Aroclor 1260 (2)	7.563	285	0.041 ng/ml
43)	Aroclor 1260 (3)	8.119	438	0.085 ng/ml
44)	Aroclor 1260 (4)	8.287	2858	0.229 ng/ml
45)	Aroclor 1260 (5)	8.595	1194	0.145 ng/ml
46)	Aroclor 1260 (6)	8.979	2977	0.872 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:21 am
Operator : MJB / KAK
Sample : 9A30022-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

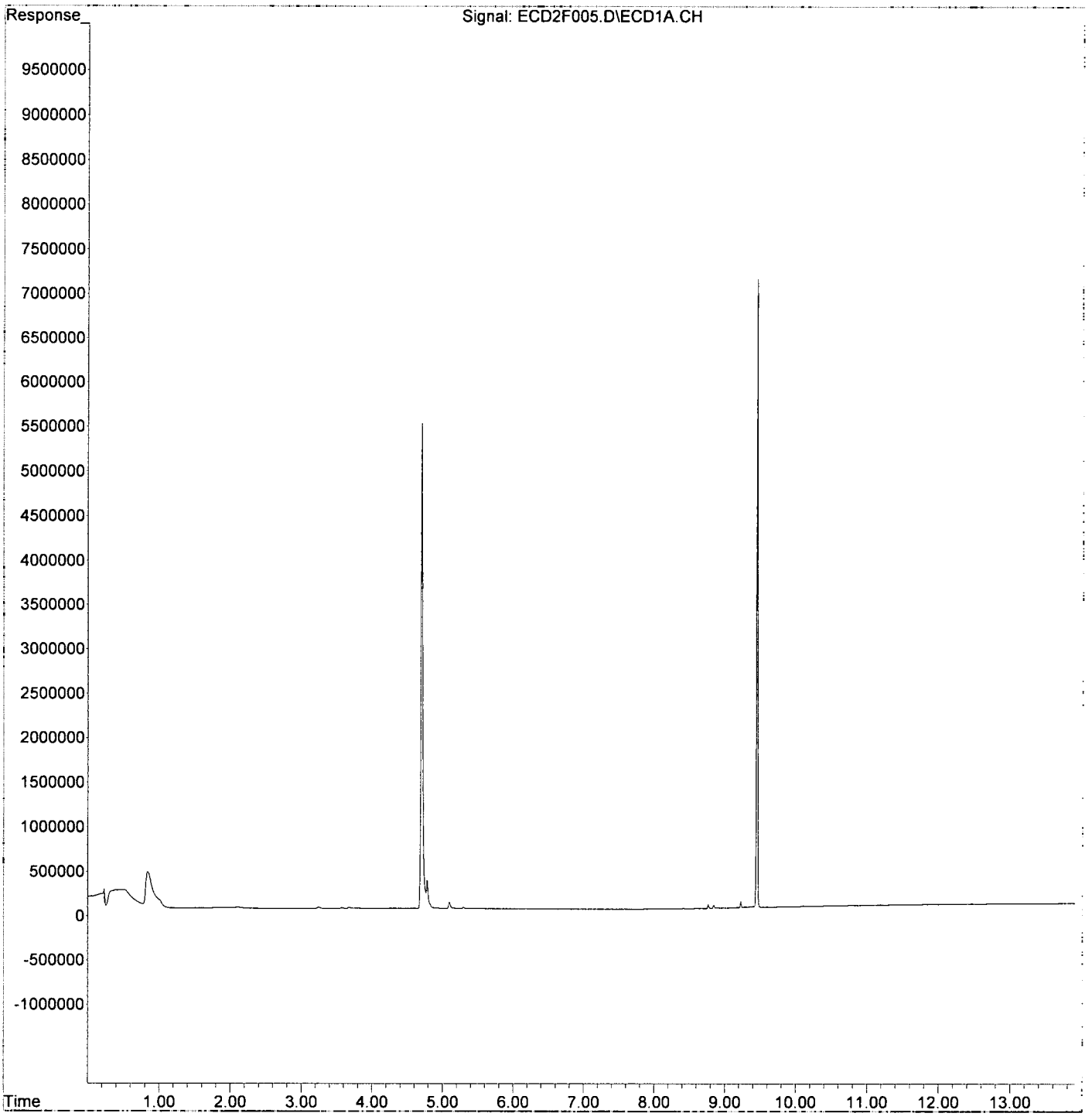
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.563	285	0.052 ng/ml
49)	Aroclor 1262 (2)	7.899	381	0.051 ng/ml
50)	Aroclor 1262 (3)	8.119	438	0.068 ng/ml
51)	Aroclor 1262 (4)	8.287	2858	0.201 ng/ml
52)	Aroclor 1262 (5)	8.595	1194	0.139 ng/ml
53)	Aroclor 1262 (6)	8.979	2977	0.625 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.113	488	0.146 ng/ml
56)	Aroclor 1268 (2)	8.541	449	0.028 ng/ml
57)	Aroclor 1268 (3)	8.595	1194	0.089 ng/ml
58)	Aroclor 1268 (4)	8.767	42575	3.584 ng/ml
59)	Aroclor 1268 (5)	8.979	2977	0.598 ng/ml
60)	Aroclor 1268 (6)	9.228	69718	2.023 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\9A30022\
Data File : ECD2F005.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:21 am
Operator : MJB / KAK
Sample : 9A30022-ICB1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:29 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:45 am
Operator : MJB / KAK
Sample : 9A30022-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:44 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MW 1/31/19

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	4.701	12551675	217.115	ng/ml	
62) S	DCBP (S)	9.456	15644358	214.854	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	5.625	1187484	444.147	ng/ml	
3)	Aroclor 1016 (2)	6.037	2570699	485.747	ng/ml	
4)	Aroclor 1016 (3)	6.121	1250179	430.491	ng/ml	447.31
5)	Aroclor 1016 (4)	6.280	1062240	444.250	ng/ml	
6)	Aroclor 1016 (5)	6.502	1292336	440.828	ng/ml	
7)	Aroclor 1016 (6)	6.627	912510	438.380	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.061	115829	139.819	ng/ml	
10)	Aroclor 1221 (2)	5.181	128451	236.456	ng/ml	
11)	Aroclor 1221 (3)	5.261	607299	342.580	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.261	607299	433.542	ng/ml	
14)	Aroclor 1232 (2)	6.037	2570699	1204.101	ng/ml	
15)	Aroclor 1232 (3)	6.121	1250179	1129.040	ng/ml	
16)	Aroclor 1232 (4)	6.280	1062240	1404.697	ng/ml	
17)	Aroclor 1232 (5)	6.502	1292336	1243.418	ng/ml	
18)	Aroclor 1232 (6)	6.627	912510	1072.540	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	5.625	1187484	601.150	ng/ml	
21)	Aroclor 1242 (2)	6.037	2570699	635.522	ng/ml	
22)	Aroclor 1242 (3)	6.121	1250179	582.943	ng/ml	
23)	Aroclor 1242 (4)	6.280	1062240	659.927	ng/ml	
24)	Aroclor 1242 (5)	6.502	1292336	584.423	ng/ml	
25)	Aroclor 1242 (6)	6.627	912510	489.397	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.037	2570699	1097.877	ng/ml	
28)	Aroclor 1248 (2)	6.280	1062240	370.795	ng/ml	
29)	Aroclor 1248 (3)	6.502	1292336	376.550	ng/ml	
30)	Aroclor 1248 (4)	6.796	219805	56.636	ng/ml	
31)	Aroclor 1248 (5)	6.829	1044271	247.755	ng/ml	
32)	Aroclor 1248 (6)	7.318	2033367	901.118	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	6.829	1044271	243.790	ng/ml	
35)	Aroclor 1254 (2)	6.941	1051258	194.789	ng/ml	
36)	Aroclor 1254 (3)	7.318	2033367	256.664	ng/ml	
37)	Aroclor 1254 (4)	7.477	229166	43.414	ng/ml	
38)	Aroclor 1254 (5)	7.859	3079053	576.922	ng/ml	
39)	Aroclor 1254 (6)	8.149	332093	184.297	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	7.432	2914952	530.951	ng/ml	
42)	Aroclor 1260 (2)	7.566	3612929	524.539	ng/ml	
43)	Aroclor 1260 (3)	8.122	2336803	455.178	ng/ml	464.79
44)	Aroclor 1260 (4)	8.294	5635294	452.378	ng/ml	
45)	Aroclor 1260 (5)	8.592	3663636	444.183	ng/ml	
46)	Aroclor 1260 (6)	8.979	1301664	381.487	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:45 am
Operator : MJB / KAK
Sample : 9A30022-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:44 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

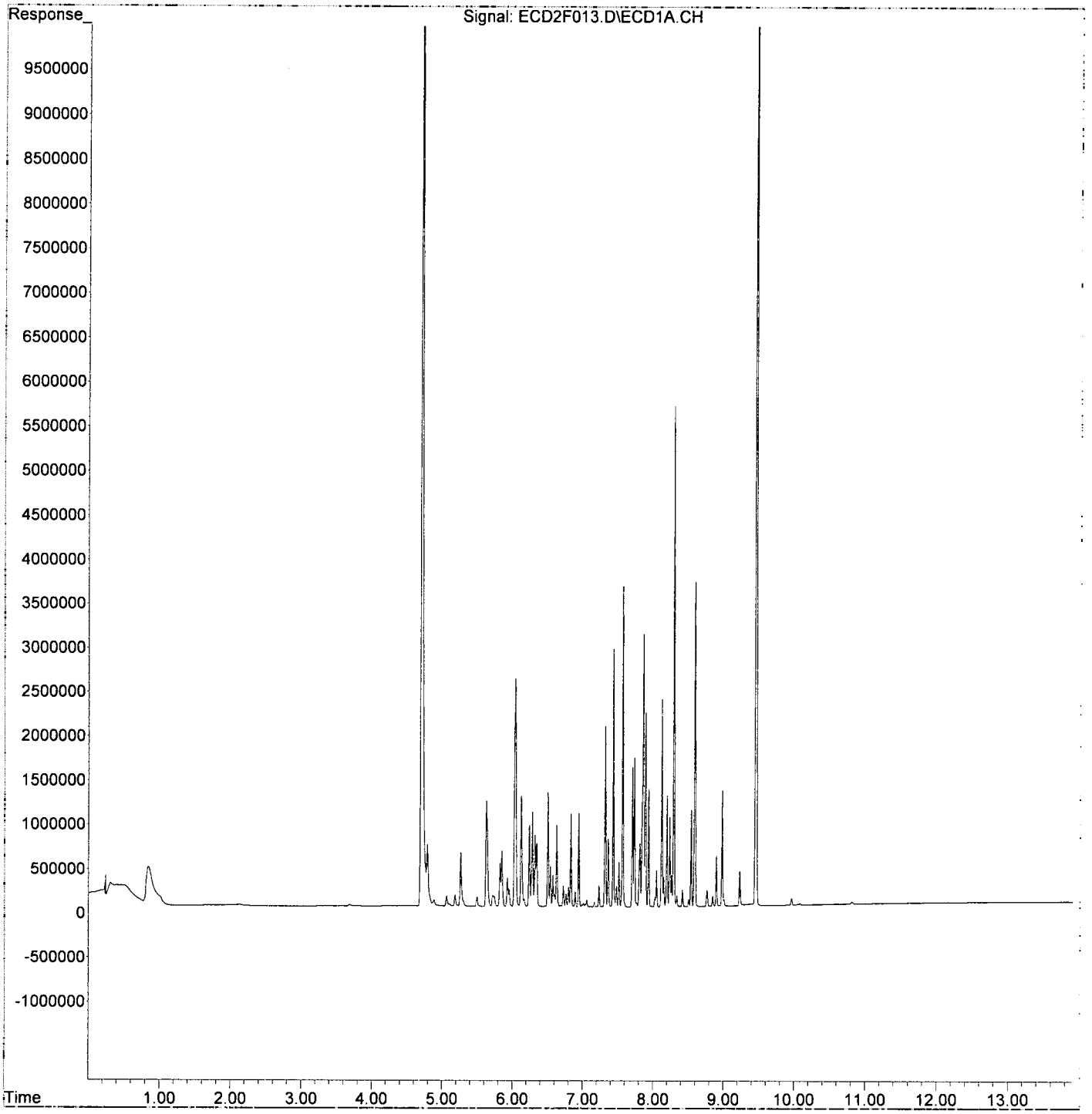
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.566	3612929	654.875	ng/ml
49)	Aroclor 1262 (2)	7.890	2185341	290.579	ng/ml
50)	Aroclor 1262 (3)	8.122	2336803	362.222	ng/ml
51)	Aroclor 1262 (4)	8.294	5635294	396.881	ng/ml
52)	Aroclor 1262 (5)	8.592	3663636	427.673	ng/ml
53)	Aroclor 1262 (6)	8.979	1301664	273.419	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.122	2336803	700.893	ng/ml
56)	Aroclor 1268 (2)	8.540	1083082	68.409	ng/ml
57)	Aroclor 1268 (3)	8.592	3663636	271.979	ng/ml
58)	Aroclor 1268 (4)	8.766	178897	15.060	ng/ml
59)	Aroclor 1268 (5)	8.979	1301664	261.434	ng/ml
60)	Aroclor 1268 (6)	9.229	390269	11.326	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\9A30022\
Data File : ECD2F013.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:45 am
Operator : MJB / KAK
Sample : 9A30022-ICV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:39:44 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:31 pm
Operator : MJB / KAK
Sample : 9A30022-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.704	2191755	37.912	ng/ml
62) S	DCBP (S)	9.456	6335997	87.016	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.628	250317	93.625	ng/ml
3)	Aroclor 1016 (2)	6.040	330605	62.469	ng/ml
4)	Aroclor 1016 (3)	6.123	192964	66.446	ng/ml
5)	Aroclor 1016 (4)	6.282	1111139	464.701	ng/ml
6)	Aroclor 1016 (5)	6.503	612052	208.777	ng/ml
7)	Aroclor 1016 (6)	6.629	210403	101.080	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.064	768174	927.276	ng/ml
10)	Aroclor 1221 (2)	5.183	498116	916.949	ng/ml
11)	Aroclor 1221 (3)	5.264	1696710	957.121	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.264	1696710	1211.258	ng/ml
14)	Aroclor 1232 (2)	6.040	330605	154.853	ng/ml
15)	Aroclor 1232 (3)	6.123	192964	174.266	ng/ml
16)	Aroclor 1232 (4)	6.282	1111139	1469.361	ng/ml
17)	Aroclor 1232 (5)	6.503	612052	588.884	ng/ml
18)	Aroclor 1232 (6)	6.629	210403	247.303	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.628	250317	126.720	ng/ml
21)	Aroclor 1242 (2)	6.040	330605	81.731	ng/ml
22)	Aroclor 1242 (3)	6.123	192964	89.977	ng/ml
23)	Aroclor 1242 (4)	6.282	1111139	690.306	ng/ml
24)	Aroclor 1242 (5)	6.503	612052	276.783	ng/ml
25)	Aroclor 1242 (6)	6.629	210403	112.844	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.040	330605	141.192	ng/ml
28)	Aroclor 1248 (2)	6.282	1111139	387.864	ng/ml
29)	Aroclor 1248 (3)	6.503	612052	178.335	ng/ml
30)	Aroclor 1248 (4)	6.797	953685	245.730	ng/ml
31)	Aroclor 1248 (5)	6.831	2093336	496.647	ng/ml
32)	Aroclor 1248 (6)	7.312	3837410	1700.607	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.831	2093336	488.700	ng/ml
35)	Aroclor 1254 (2)	6.943	2578360	477.749	ng/ml
36)	Aroclor 1254 (3)	7.312	3837410	484.381	ng/ml
37)	Aroclor 1254 (4)	7.479	2457790	465.607	ng/ml
38)	Aroclor 1254 (5)	7.860	2815226	527.488	ng/ml
39)	Aroclor 1254 (6)	8.150	869724	482.659	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.433	1536429	279.856	ng/ml
42)	Aroclor 1260 (2)	7.567	1760576	255.607	ng/ml
43)	Aroclor 1260 (3)	8.122	280154	54.570	ng/ml
44)	Aroclor 1260 (4)	8.294	660936	53.057	ng/ml
45)	Aroclor 1260 (5)	8.592	529348	64.179	ng/ml
46)	Aroclor 1260 (6)	8.980	96643	28.324	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

933.78

467.74

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:31 pm
Operator : MJB / KAK
Sample : 9A30022-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

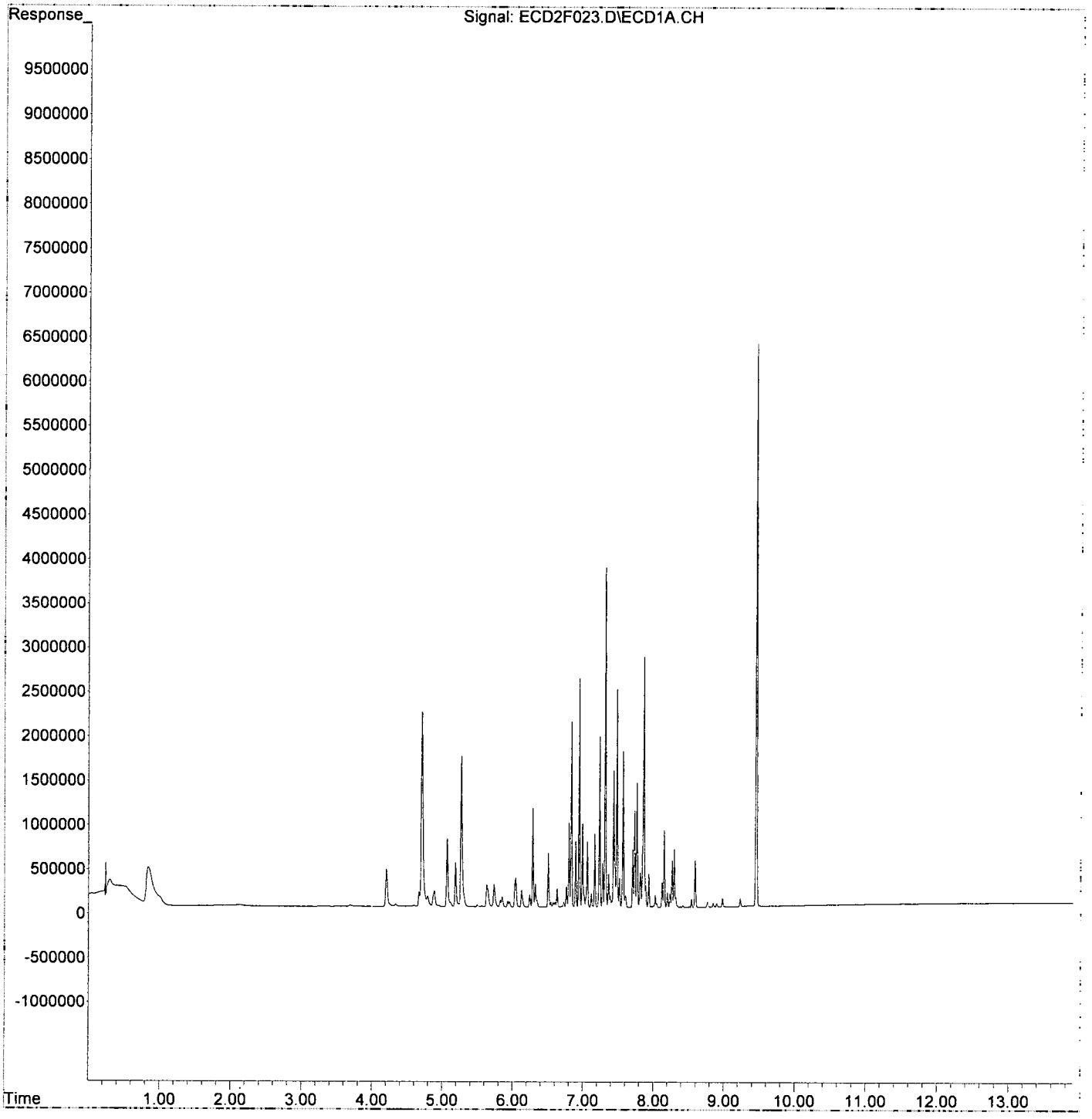
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.567	1760576	319.120	ng/ml
49)	Aroclor 1262 (2)	7.890	249177	33.132	ng/ml
50)	Aroclor 1262 (3)	8.122	280154	43.426	ng/ml
51)	Aroclor 1262 (4)	8.294	660936	46.548	ng/ml
52)	Aroclor 1262 (5)	8.592	529348	61.793	ng/ml
53)	Aroclor 1262 (6)	8.980	96643	20.300	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.122	280154	84.028	ng/ml
56)	Aroclor 1268 (2)	8.540	91779	5.797	ng/ml
57)	Aroclor 1268 (3)	8.592	529348	39.297	ng/ml
58)	Aroclor 1268 (4)	8.768	54963	4.627	ng/ml
59)	Aroclor 1268 (5)	8.980	96643	19.410	ng/ml
60)	Aroclor 1268 (6)	9.230	87553	2.541	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\9A30022\
Data File : ECD2F023.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:31 pm
Operator : MJB / KAK
Sample : 9A30022-ICV2
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:49 pm
Operator : MJB / KAK
Sample : 9A30022-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.705	2187948	37.846	ng/ml
62) S	DCBP (S)	9.459	6127505	84.153	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.629	566463	211.871	ng/ml
3)	Aroclor 1016 (2)	6.041	1087026	205.399	ng/ml
4)	Aroclor 1016 (3)	6.124	592999	204.196	ng/ml
5)	Aroclor 1016 (4)	6.283	426084	178.197	ng/ml
6)	Aroclor 1016 (5)	6.505	554671	189.204	ng/ml
7)	Aroclor 1016 (6)	6.629	444685	213.632	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.065	254581	307.309	ng/ml
10)	Aroclor 1221 (2)	5.185	195096	359.138	ng/ml
11)	Aroclor 1221 (3)	5.265	718852	405.508	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.265	718852	513.179	ng/ml
14)	Aroclor 1232 (2)	6.041	1087026	509.157	ng/ml
15)	Aroclor 1232 (3)	6.124	592999	535.540	ng/ml
16)	Aroclor 1232 (4)	6.283	426084	563.450	ng/ml
17)	Aroclor 1232 (5)	6.505	554671	533.676	ng/ml
18)	Aroclor 1232 (6)	6.629	444685	522.672	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.629	566463	286.766	ng/ml
21)	Aroclor 1242 (2)	6.041	1087026	268.732	ng/ml
22)	Aroclor 1242 (3)	6.124	592999	276.508	ng/ml
23)	Aroclor 1242 (4)	6.283	426084	264.709	ng/ml
24)	Aroclor 1242 (5)	6.505	554671	250.835	ng/ml
25)	Aroclor 1242 (6)	6.629	444685	238.494	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.041	1087026	464.240	ng/ml
28)	Aroclor 1248 (2)	6.283	426084	148.733	ng/ml
29)	Aroclor 1248 (3)	6.505	554671	161.616	ng/ml
30)	Aroclor 1248 (4)	6.799	579188	149.236	ng/ml
31)	Aroclor 1248 (5)	6.836	828096	196.467	ng/ml
32)	Aroclor 1248 (6)	7.321	1801496	798.361	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.836	828096	193.323	ng/ml
35)	Aroclor 1254 (2)	6.944	489532	90.706	ng/ml
36)	Aroclor 1254 (3)	7.321	1801496	227.395	ng/ml
37)	Aroclor 1254 (4)	7.480	202862	38.430	ng/ml
38)	Aroclor 1254 (5)	7.862	1332306	249.634	ng/ml
39)	Aroclor 1254 (6)	8.152	84259	46.760	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.434	2232340	406.615	ng/ml
42)	Aroclor 1260 (2)	7.569	2741525	398.025	ng/ml
43)	Aroclor 1260 (3)	8.124	3044962	593.118	ng/ml
44)	Aroclor 1260 (4)	8.296	7105805	570.424	ng/ml
45)	Aroclor 1260 (5)	8.594	4339667	526.146	ng/ml
46)	Aroclor 1260 (6)	8.982	2311006	677.302	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

529.61

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:49 pm
Operator : MJB / KAK
Sample : 9A30022-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

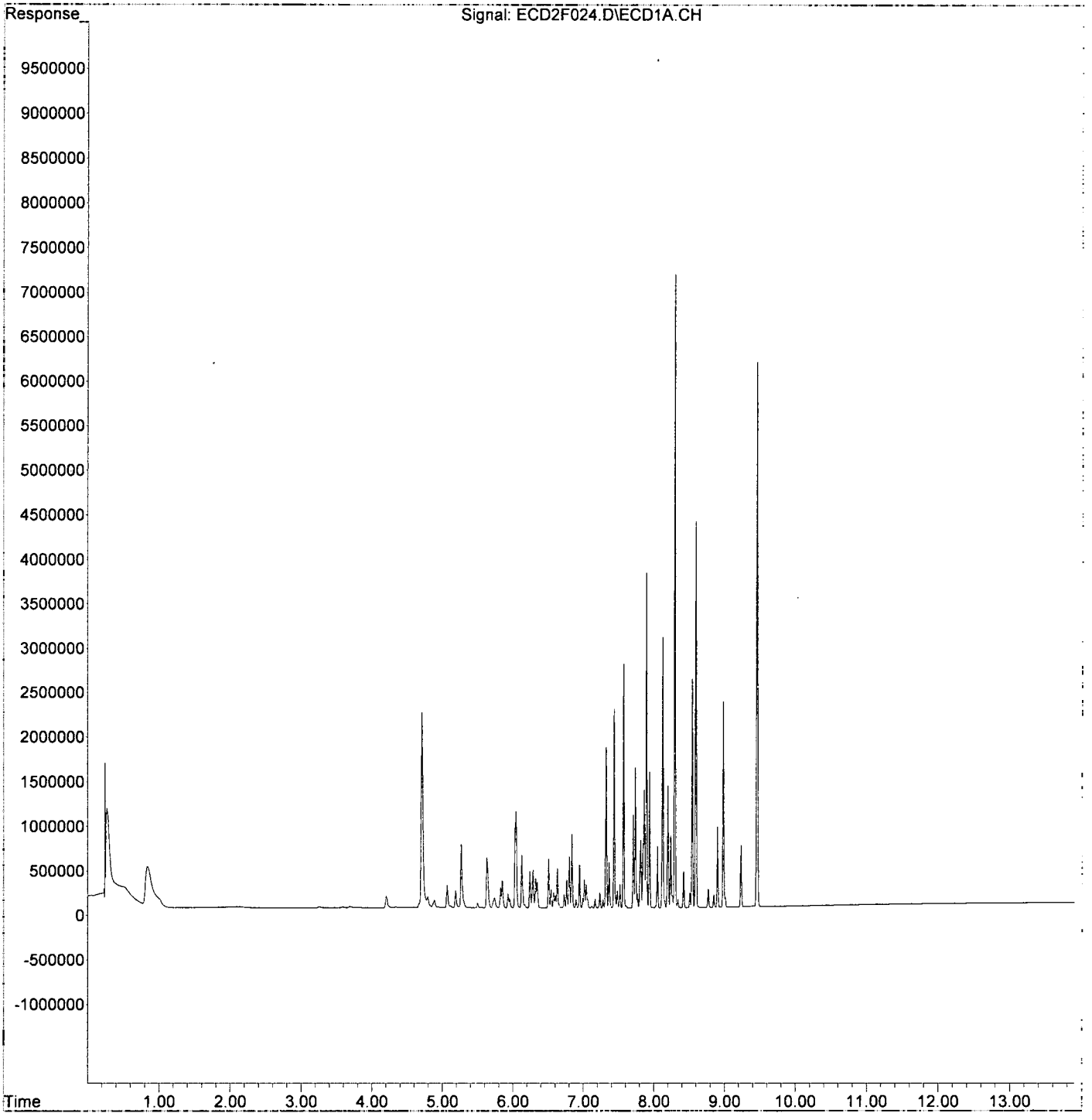
	Compound	R.T.	Response	Conc	Units	
48)	Aroclor 1262 (1)	7.569	2741525	496.925	ng/ml	
49)	Aroclor 1262 (2)	7.892	3762363	500.272	ng/ml	
50)	Aroclor 1262 (3)	8.124	3044962	471.992	ng/ml	498.61
51)	Aroclor 1262 (4)	8.296	7105805	500.446	ng/ml	
52)	Aroclor 1262 (5)	8.594	4339667	506.590	ng/ml	
53)	Aroclor 1262 (6)	8.982	2311006	485.435	ng/ml	
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml	
55)	Aroclor 1268 (1)	8.124	3044962	913.296	ng/ml	
56)	Aroclor 1268 (2)	8.543	2563010	161.884	ng/ml	
57)	Aroclor 1268 (3)	8.594	4339667	322.166	ng/ml	
58)	Aroclor 1268 (4)	8.771	205392	17.290	ng/ml	
59)	Aroclor 1268 (5)	8.982	2311006	464.157	ng/ml	
60)	Aroclor 1268 (6)	9.233	695013	20.169	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\9A30022\
Data File : ECD2F024.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:49 pm
Operator : MJB / KAK
Sample : 9A30022-ICV3
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:07 pm
Operator : MJB / KAK
Sample : 9A30022-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.706	2288693	39.589	ng/ml
62) S	DCBP (S)	9.458	2885921	39.634	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.628	1032593	386.214	ng/ml
3)	Aroclor 1016 (2)	6.040	2066288	390.436	ng/ml
4)	Aroclor 1016 (3)	6.124	1090831	375.621	ng/ml
5)	Aroclor 1016 (4)	6.283	818349	342.250	ng/ml
6)	Aroclor 1016 (5)	6.504	1109230	378.369	ng/ml
7)	Aroclor 1016 (6)	6.629	915736	439.930	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.066	104176	125.752	ng/ml
10)	Aroclor 1221 (2)	5.185	116078	213.681	ng/ml
11)	Aroclor 1221 (3)	5.265	536229	302.489	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.265	536229	382.806	ng/ml
14)	Aroclor 1232 (2)	6.040	2066288	967.838	ng/ml
15)	Aroclor 1232 (3)	6.124	1090831	985.133	ng/ml
16)	Aroclor 1232 (4)	6.283	818349	1082.178	ng/ml
17)	Aroclor 1232 (5)	6.504	1109230	1067.244	ng/ml
18)	Aroclor 1232 (6)	6.629	915736	1076.333	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.628	1032593	522.738	ng/ml
21)	Aroclor 1242 (2)	6.040	2066288	510.823	ng/ml
22)	Aroclor 1242 (3)	6.124	1090831	508.641	ng/ml
23)	Aroclor 1242 (4)	6.283	818349	508.408	ng/ml
24)	Aroclor 1242 (5)	6.504	1109230	501.619	ng/ml
25)	Aroclor 1242 (6)	6.629	915736	491.127	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.040	2066288	882.457	ng/ml
28)	Aroclor 1248 (2)	6.283	818349	285.660	ng/ml
29)	Aroclor 1248 (3)	6.504	1109230	323.198	ng/ml
30)	Aroclor 1248 (4)	6.798	1116359	287.646	ng/ml
31)	Aroclor 1248 (5)	6.836	1183343	280.750	ng/ml
32)	Aroclor 1248 (6)	7.313	364868	161.697	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.836	1183343	276.257	ng/ml
35)	Aroclor 1254 (2)	6.943	254012	47.066	ng/ml
36)	Aroclor 1254 (3)	7.313	364868	46.056	ng/ml
37)	Aroclor 1254 (4)	7.480	254088	48.135	ng/ml
38)	Aroclor 1254 (5)	7.861	45725	8.567	ng/ml
39)	Aroclor 1254 (6)	8.151	20666	11.469	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.454	127427	23.211	ng/ml
42)	Aroclor 1260 (2)	7.568	47491	6.895	ng/ml
43)	Aroclor 1260 (3)	8.114	1717689	334.583	ng/ml
44)	Aroclor 1260 (4)	8.295	821084	65.913	ng/ml
45)	Aroclor 1260 (5)	8.589	6635865	804.539	ng/ml
46)	Aroclor 1260 (6)	8.982	2599260	761.782	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

507.23

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:07 pm
Operator : MJB / KAK
Sample : 9A30022-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.568	47491	8.608	ng/ml
49)	Aroclor 1262 (2)	7.892	1404326	186.730	ng/ml
50)	Aroclor 1262 (3)	8.114	1717689	266.255	ng/ml
51)	Aroclor 1262 (4)	8.295	821084	57.827	ng/ml
52)	Aroclor 1262 (5)	8.589	6635865	774.635	ng/ml
53)	Aroclor 1262 (6)	8.982	2599260	545.983	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.114	1717689	515.198	ng/ml
56)	Aroclor 1268 (2)	8.542	7982519	504.190	ng/ml
57)	Aroclor 1268 (3)	8.589	6635865	492.629	ng/ml
58)	Aroclor 1268 (4)	8.771	5965077	502.140	ng/ml
59)	Aroclor 1268 (5)	8.982	2599260	522.051	ng/ml
60)	Aroclor 1268 (6)	9.232	16432221	476.861	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

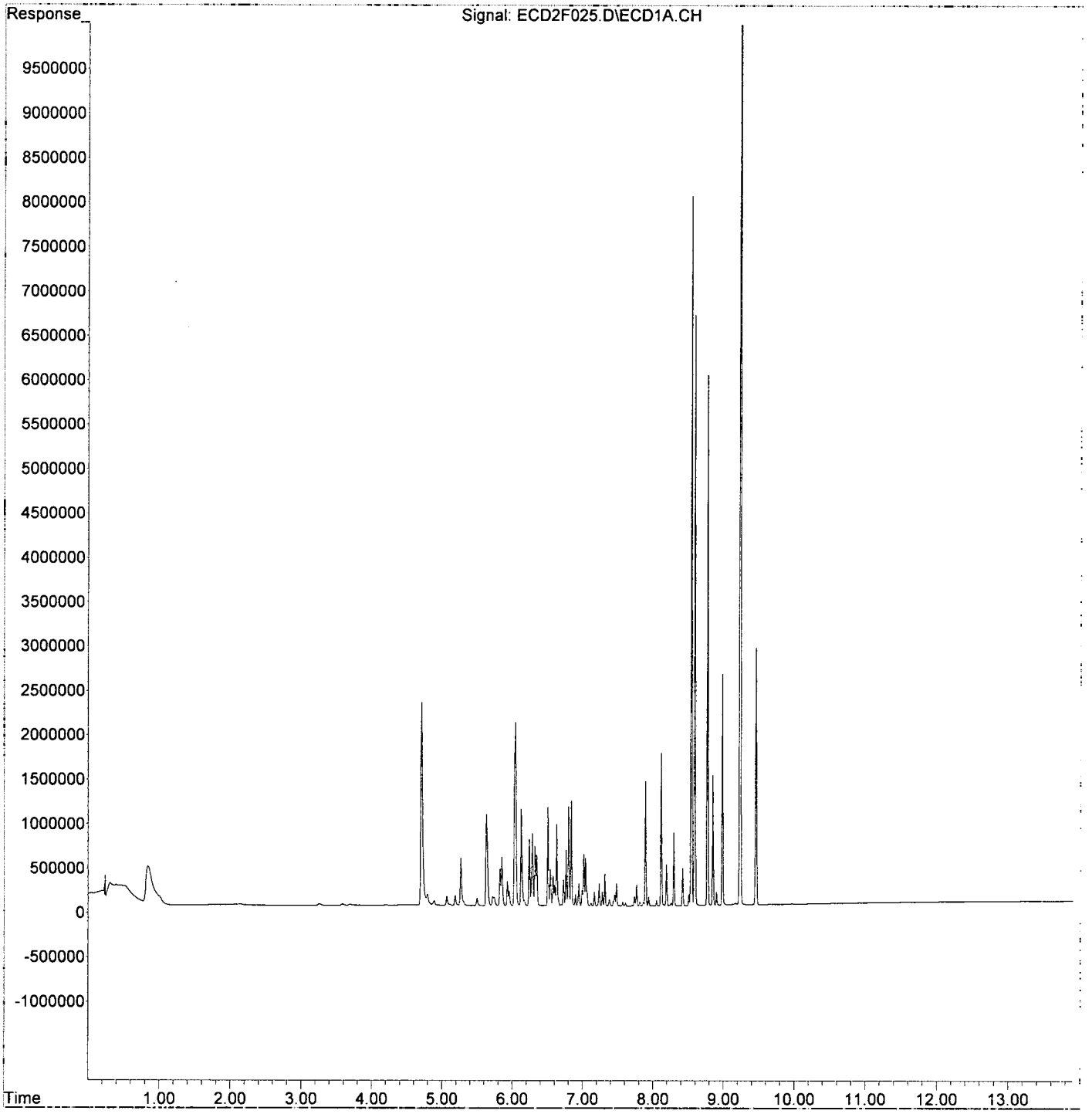
502.18

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F025.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:07 pm
Operator : MJB / KAK
Sample : 9A30022-ICV4
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:33 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:25 pm
Operator : MJB / KAK
Sample : 9A30022-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MP 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.704	11883	0.206	ng/ml
62) S	DCBP (S)	9.457	2698	0.037	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.627	498790	186.559	ng/ml
3)	Aroclor 1016 (2)	6.035	1107705	209.306	ng/ml
4)	Aroclor 1016 (3)	6.123	605534	208.512	ng/ml
5)	Aroclor 1016 (4)	6.282	1423148	595.189	ng/ml
6)	Aroclor 1016 (5)	6.504	1731250	590.546	ng/ml
7)	Aroclor 1016 (6)	6.628	1346980	647.104	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.065	16671	20.124	ng/ml
10)	Aroclor 1221 (2)	5.184	16210	29.840	ng/ml
11)	Aroclor 1221 (3)	5.264	50722	28.613	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.264	50722	36.210	ng/ml
14)	Aroclor 1232 (2)	6.035	1107705	518.843	ng/ml
15)	Aroclor 1232 (3)	6.123	605534	546.860	ng/ml
16)	Aroclor 1232 (4)	6.282	1423148	1881.958	ng/ml
17)	Aroclor 1232 (5)	6.504	1731250	1665.718	ng/ml
18)	Aroclor 1232 (6)	6.628	1346980	1583.206	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.627	498790	252.507	ng/ml
21)	Aroclor 1242 (2)	6.035	1107705	273.844	ng/ml
22)	Aroclor 1242 (3)	6.123	605534	282.353	ng/ml
23)	Aroclor 1242 (4)	6.282	1423148	884.145	ng/ml
24)	Aroclor 1242 (5)	6.504	1731250	782.910	ng/ml
25)	Aroclor 1242 (6)	6.628	1346980	722.412	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.035	1107705	473.071	ng/ml
28)	Aroclor 1248 (2)	6.282	1423148	496.776	ng/ml
29)	Aroclor 1248 (3)	6.504	1731250	504.437	ng/ml
30)	Aroclor 1248 (4)	6.798	2029710	522.983	ng/ml
31)	Aroclor 1248 (5)	6.834	2168807	514.553	ng/ml
32)	Aroclor 1248 (6)	7.313	1113188	493.326	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.834	2168807	506.319	ng/ml
35)	Aroclor 1254 (2)	6.943	686013	127.112	ng/ml
36)	Aroclor 1254 (3)	7.313	1113188	140.513	ng/ml
37)	Aroclor 1254 (4)	7.478	801335	151.806	ng/ml
38)	Aroclor 1254 (5)	7.861	164622	30.845	ng/ml
39)	Aroclor 1254 (6)	8.151	67004	37.184	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.436	170179	30.998	ng/ml
42)	Aroclor 1260 (2)	7.567	101907	14.795	ng/ml
43)	Aroclor 1260 (3)	8.123	15269	2.974	ng/ml
44)	Aroclor 1260 (4)	8.295	38018	3.052	ng/ml
45)	Aroclor 1260 (5)	8.593	30022	3.640	ng/ml
46)	Aroclor 1260 (6)	8.980	9509	2.787	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

500.86

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:25 pm
Operator : MJB / KAK
Sample : 9A30022-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

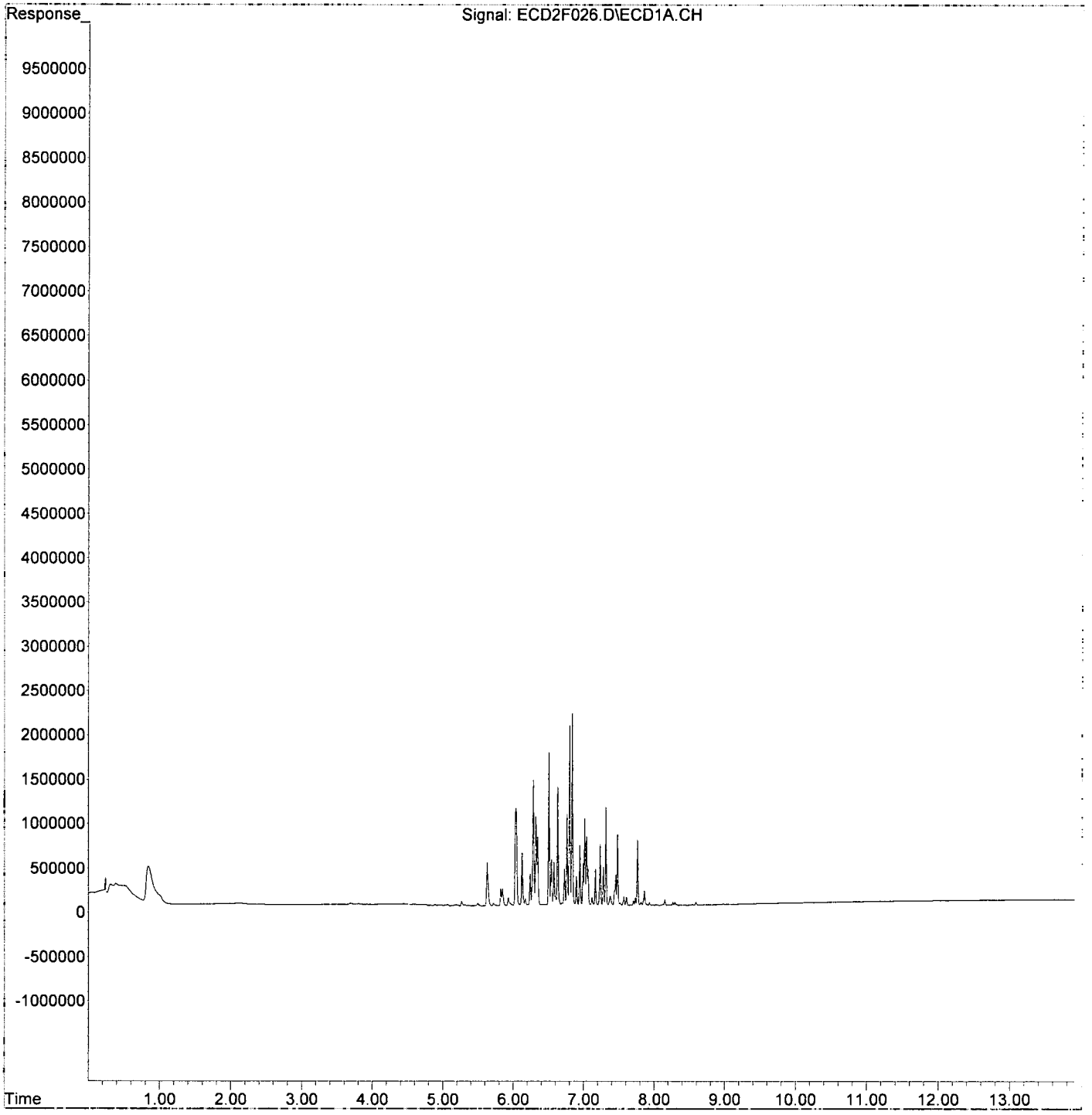
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.567	101907	18.472 ng/ml
49)	Aroclor 1262 (2)	7.891	16046	2.134 ng/ml
50)	Aroclor 1262 (3)	8.123	15269	2.367 ng/ml
51)	Aroclor 1262 (4)	8.295	38018	2.678 ng/ml
52)	Aroclor 1262 (5)	8.593	30022	3.505 ng/ml
53)	Aroclor 1262 (6)	8.980	9509	1.997 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.123	15269	4.580 ng/ml
56)	Aroclor 1268 (2)	8.541	7799	0.493 ng/ml
57)	Aroclor 1268 (3)	8.593	30022	2.229 ng/ml
58)	Aroclor 1268 (4)	8.767	2013	0.169 ng/ml
59)	Aroclor 1268 (5)	8.980	9509	1.910 ng/ml
60)	Aroclor 1268 (6)	9.231	4226	0.123 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\9A30022\
Data File : ECD2F026.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 3:25 pm
Operator : MJB / KAK
Sample : 9A30022-ICV5
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 12:40:50 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.697	549748	9.509	ng/ml
62) S	DCBP (S)	9.453	746633	10.254	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.621	61582	23.033	ng/ml
3)	Aroclor 1016 (2)	6.034	114852	21.702	ng/ml
4)	Aroclor 1016 (3)	6.117	69526	23.941	ng/ml
5)	Aroclor 1016 (4)	6.277	60043	25.111	ng/ml
6)	Aroclor 1016 (5)	6.498	68459	23.352	ng/ml
7)	Aroclor 1016 (6)	6.623	52408	25.178	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.058	14323	17.290	ng/ml
10)	Aroclor 1221 (2)	5.177	13848	25.492	ng/ml
11)	Aroclor 1221 (3)	5.258	27808	15.687	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.258	27808	19.852	ng/ml
14)	Aroclor 1232 (2)	6.034	114852	53.796	ng/ml
15)	Aroclor 1232 (3)	6.117	69526	62.789	ng/ml
16)	Aroclor 1232 (4)	6.277	60043	79.400	ng/ml
17)	Aroclor 1232 (5)	6.498	68459	65.868	ng/ml
18)	Aroclor 1232 (6)	6.623	52408	61.599	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.621	61582	31.175	ng/ml
21)	Aroclor 1242 (2)	6.034	114852	28.393	ng/ml
22)	Aroclor 1242 (3)	6.117	69526	32.419	ng/ml
23)	Aroclor 1242 (4)	6.277	60043	37.302	ng/ml
24)	Aroclor 1242 (5)	6.498	68459	30.959	ng/ml
25)	Aroclor 1242 (6)	6.623	52408	28.108	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.034	114852	49.050	ng/ml
28)	Aroclor 1248 (2)	6.277	60043	20.959	ng/ml
29)	Aroclor 1248 (3)	6.498	68459	19.947	ng/ml
30)	Aroclor 1248 (4)	6.792	18371	4.734	ng/ml
31)	Aroclor 1248 (5)	6.826	50698	12.028	ng/ml
32)	Aroclor 1248 (6)	7.315	90393	40.059	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.826	50698	11.836	ng/ml
35)	Aroclor 1254 (2)	6.938	51506	9.544	ng/ml
36)	Aroclor 1254 (3)	7.315	90393	11.410	ng/ml
37)	Aroclor 1254 (4)	7.474	16893	3.200	ng/ml
38)	Aroclor 1254 (5)	7.857	118066	22.122	ng/ml
39)	Aroclor 1254 (6)	8.147	14020	7.781	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.428	124416	22.662	ng/ml
42)	Aroclor 1260 (2)	7.563	149912	21.765	ng/ml
43)	Aroclor 1260 (3)	8.119	109460	21.321	ng/ml
44)	Aroclor 1260 (4)	8.291	253646	20.362	ng/ml
45)	Aroclor 1260 (5)	8.589	169452	20.545	ng/ml
46)	Aroclor 1260 (6)	8.977	75971	22.265	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

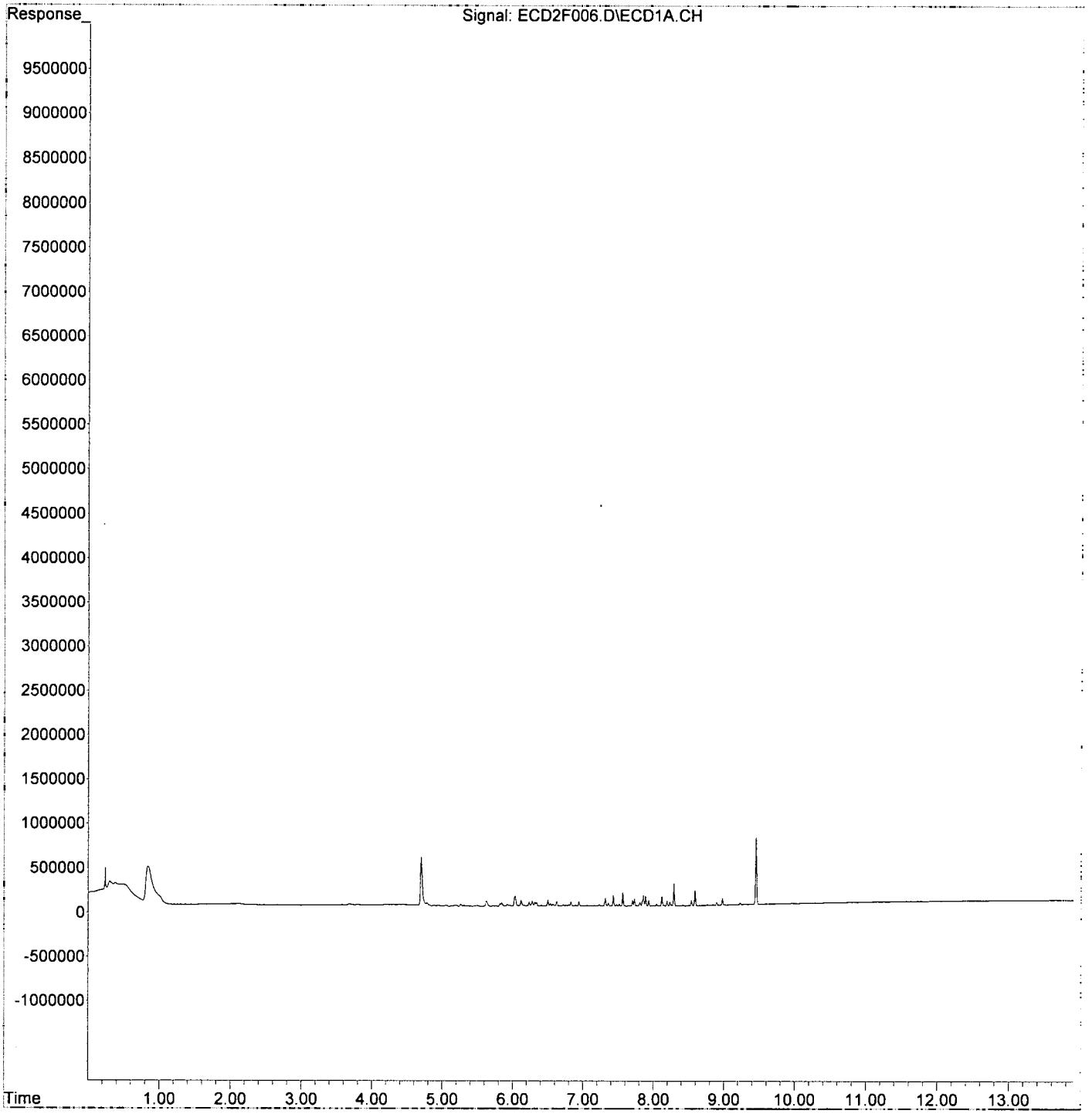
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.563	149912	27.173 ng/ml
49)	Aroclor 1262 (2)	7.887	114516	15.227 ng/ml
50)	Aroclor 1262 (3)	8.119	109460	16.967 ng/ml
51)	Aroclor 1262 (4)	8.291	253646	17.864 ng/ml
52)	Aroclor 1262 (5)	8.589	169452	19.781 ng/ml
53)	Aroclor 1262 (6)	8.977	75971	15.958 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.119	109460	32.831 ng/ml
56)	Aroclor 1268 (2)	8.537	63582	4.016 ng/ml
57)	Aroclor 1268 (3)	8.589	169452	12.580 ng/ml
58)	Aroclor 1268 (4)	8.765	7982	0.672 ng/ml
59)	Aroclor 1268 (5)	8.977	75971	15.258 ng/ml
60)	Aroclor 1268 (6)	9.227	20497	0.595 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\9A30022\REQUANT\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.697	1468375	25.399	ng/ml
62)	S DCBP (S)	9.453	1838415	25.248	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.622	145499	54.420	ng/ml
3)	Aroclor 1016 (2)	6.034	277267	52.391	ng/ml
4)	Aroclor 1016 (3)	6.117	158177	54.467	ng/ml
5)	Aroclor 1016 (4)	6.277	131374	54.943	ng/ml
6)	Aroclor 1016 (5)	6.498	164358	56.064	ng/ml
7)	Aroclor 1016 (6)	6.623	110964	53.308	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.058	21448	25.890	ng/ml
10)	Aroclor 1221 (2)	5.178	21812	40.152	ng/ml
11)	Aroclor 1221 (3)	5.258	65959	37.208	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.258	65959	47.088	ng/ml
14)	Aroclor 1232 (2)	6.034	277267	129.871	ng/ml
15)	Aroclor 1232 (3)	6.117	158177	142.851	ng/ml
16)	Aroclor 1232 (4)	6.277	131374	173.728	ng/ml
17)	Aroclor 1232 (5)	6.498	164358	158.137	ng/ml
18)	Aroclor 1232 (6)	6.623	110964	130.424	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.622	145499	73.657	ng/ml
21)	Aroclor 1242 (2)	6.034	277267	68.545	ng/ml
22)	Aroclor 1242 (3)	6.117	158177	73.756	ng/ml
23)	Aroclor 1242 (4)	6.277	131374	81.617	ng/ml
24)	Aroclor 1242 (5)	6.498	164358	74.327	ng/ml
25)	Aroclor 1242 (6)	6.623	110964	59.512	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.034	277267	118.414	ng/ml
28)	Aroclor 1248 (2)	6.277	131374	45.859	ng/ml
29)	Aroclor 1248 (3)	6.498	164358	47.889	ng/ml
30)	Aroclor 1248 (4)	6.793	36290	9.351	ng/ml
31)	Aroclor 1248 (5)	6.827	109993	26.096	ng/ml
32)	Aroclor 1248 (6)	7.316	214260	94.953	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.827	109993	25.678	ng/ml
35)	Aroclor 1254 (2)	6.938	114622	21.238	ng/ml
36)	Aroclor 1254 (3)	7.316	214260	27.045	ng/ml
37)	Aroclor 1254 (4)	7.474	35726	6.768	ng/ml
38)	Aroclor 1254 (5)	7.857	276790	51.862	ng/ml
39)	Aroclor 1254 (6)	8.147	34329	19.051	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.429	289704	52.769	ng/ml
42)	Aroclor 1260 (2)	7.564	368634	53.520	ng/ml
43)	Aroclor 1260 (3)	8.119	269837	52.561	ng/ml
44)	Aroclor 1260 (4)	8.291	637216	51.153	ng/ml
45)	Aroclor 1260 (5)	8.589	435849	52.843	ng/ml
46)	Aroclor 1260 (6)	8.978	177419	51.997	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

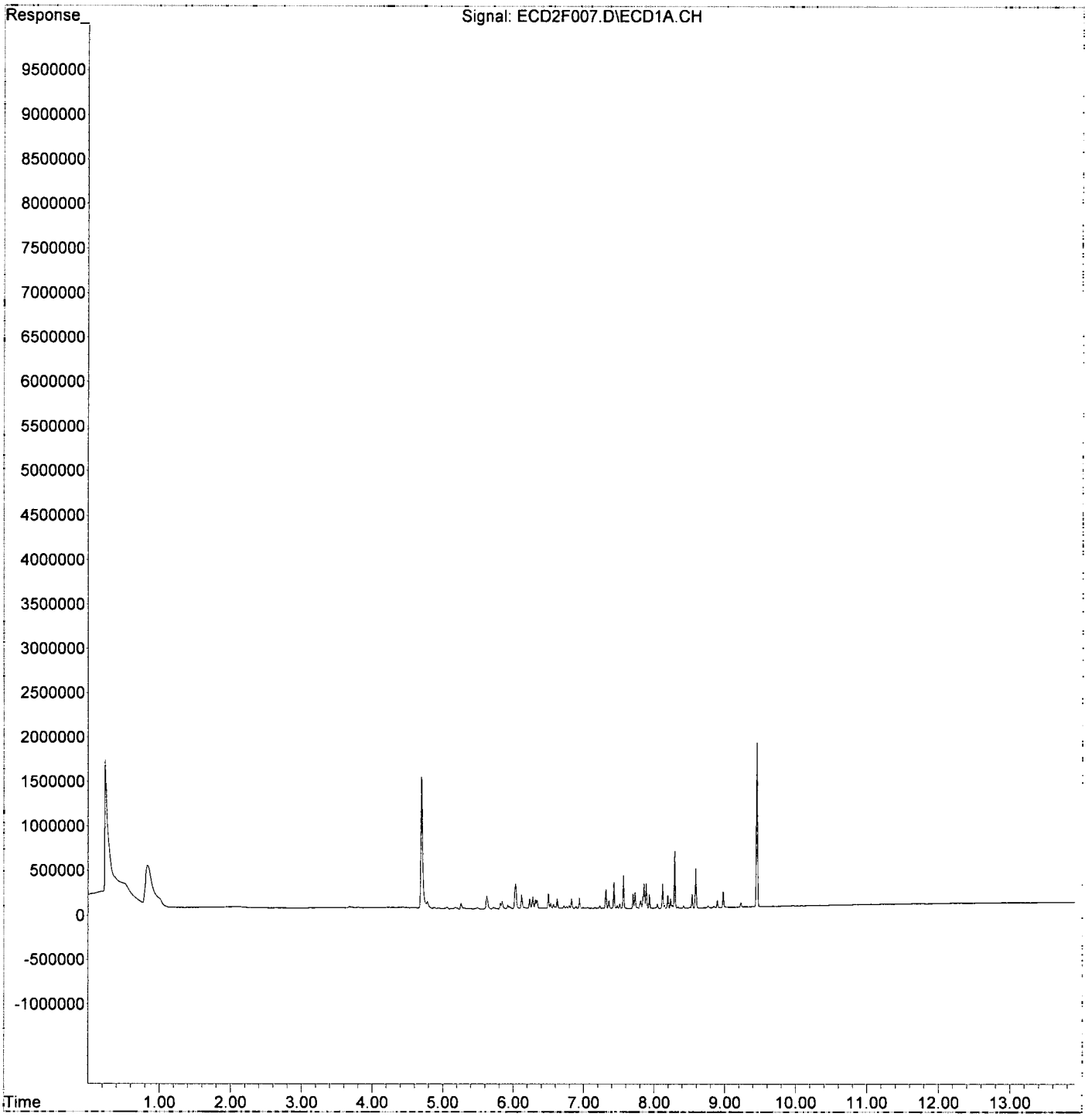
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	7.564	368634	66.818 ng/ml
49)	Aroclor 1262 (2)	7.887	271797	36.140 ng/ml
50)	Aroclor 1262 (3)	8.119	269837	41.827 ng/ml
51)	Aroclor 1262 (4)	8.291	637216	44.878 ng/ml
52)	Aroclor 1262 (5)	8.589	435849	50.879 ng/ml
53)	Aroclor 1262 (6)	8.978	177419	37.267 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.119	269837	80.934 ng/ml
56)	Aroclor 1268 (2)	8.538	154559	9.762 ng/ml
57)	Aroclor 1268 (3)	8.589	435849	32.356 ng/ml
58)	Aroclor 1268 (4)	8.765	18994	1.599 ng/ml
59)	Aroclor 1268 (5)	8.978	177419	35.634 ng/ml
60)	Aroclor 1268 (6)	9.228	49773	1.444 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\9A30022\REQUANT\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:40:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.698	2890066	49.991	ng/ml
62) S	DCBP (S)	9.453	3602548	49.476	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.621	268600	100.463	ng/ml
3)	Aroclor 1016 (2)	6.034	538076	101.672	ng/ml
4)	Aroclor 1016 (3)	6.118	294073	101.262	ng/ml
5)	Aroclor 1016 (4)	6.277	250188	104.634	ng/ml
6)	Aroclor 1016 (5)	6.499	303427	103.502	ng/ml
7)	Aroclor 1016 (6)	6.623	214166	102.887	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.059	32496	39.227	ng/ml
10)	Aroclor 1221 (2)	5.179	34784	64.031	ng/ml
11)	Aroclor 1221 (3)	5.258	126240	71.212	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.258	126240	90.121	ng/ml
14)	Aroclor 1232 (2)	6.034	538076	252.032	ng/ml
15)	Aroclor 1232 (3)	6.118	294073	265.579	ng/ml
16)	Aroclor 1232 (4)	6.277	250188	330.846	ng/ml
17)	Aroclor 1232 (5)	6.499	303427	291.942	ng/ml
18)	Aroclor 1232 (6)	6.623	214166	251.725	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.621	268600	135.976	ng/ml
21)	Aroclor 1242 (2)	6.034	538076	133.022	ng/ml
22)	Aroclor 1242 (3)	6.118	294073	137.123	ng/ml
23)	Aroclor 1242 (4)	6.277	250188	155.432	ng/ml
24)	Aroclor 1242 (5)	6.499	303427	137.217	ng/ml
25)	Aroclor 1242 (6)	6.623	214166	114.861	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.034	538076	229.798	ng/ml
28)	Aroclor 1248 (2)	6.277	250188	87.333	ng/ml
29)	Aroclor 1248 (3)	6.499	303427	88.410	ng/ml
30)	Aroclor 1248 (4)	6.793	64124	16.523	ng/ml
31)	Aroclor 1248 (5)	6.826	205919	48.855	ng/ml
32)	Aroclor 1248 (6)	7.315	414371	183.635	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.826	205919	48.073	ng/ml
35)	Aroclor 1254 (2)	6.938	220948	40.940	ng/ml
36)	Aroclor 1254 (3)	7.315	414371	52.304	ng/ml
37)	Aroclor 1254 (4)	7.474	67746	12.834	ng/ml
38)	Aroclor 1254 (5)	7.856	571655	107.111	ng/ml
39)	Aroclor 1254 (6)	8.147	65728	36.476	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.428	572861	104.345	ng/ml
42)	Aroclor 1260 (2)	7.563	719176	104.413	ng/ml
43)	Aroclor 1260 (3)	8.119	535701	104.347	ng/ml
44)	Aroclor 1260 (4)	8.290	1322935	106.200	ng/ml
45)	Aroclor 1260 (5)	8.588	840059	101.850	ng/ml
46)	Aroclor 1260 (6)	8.977	353500	103.603	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

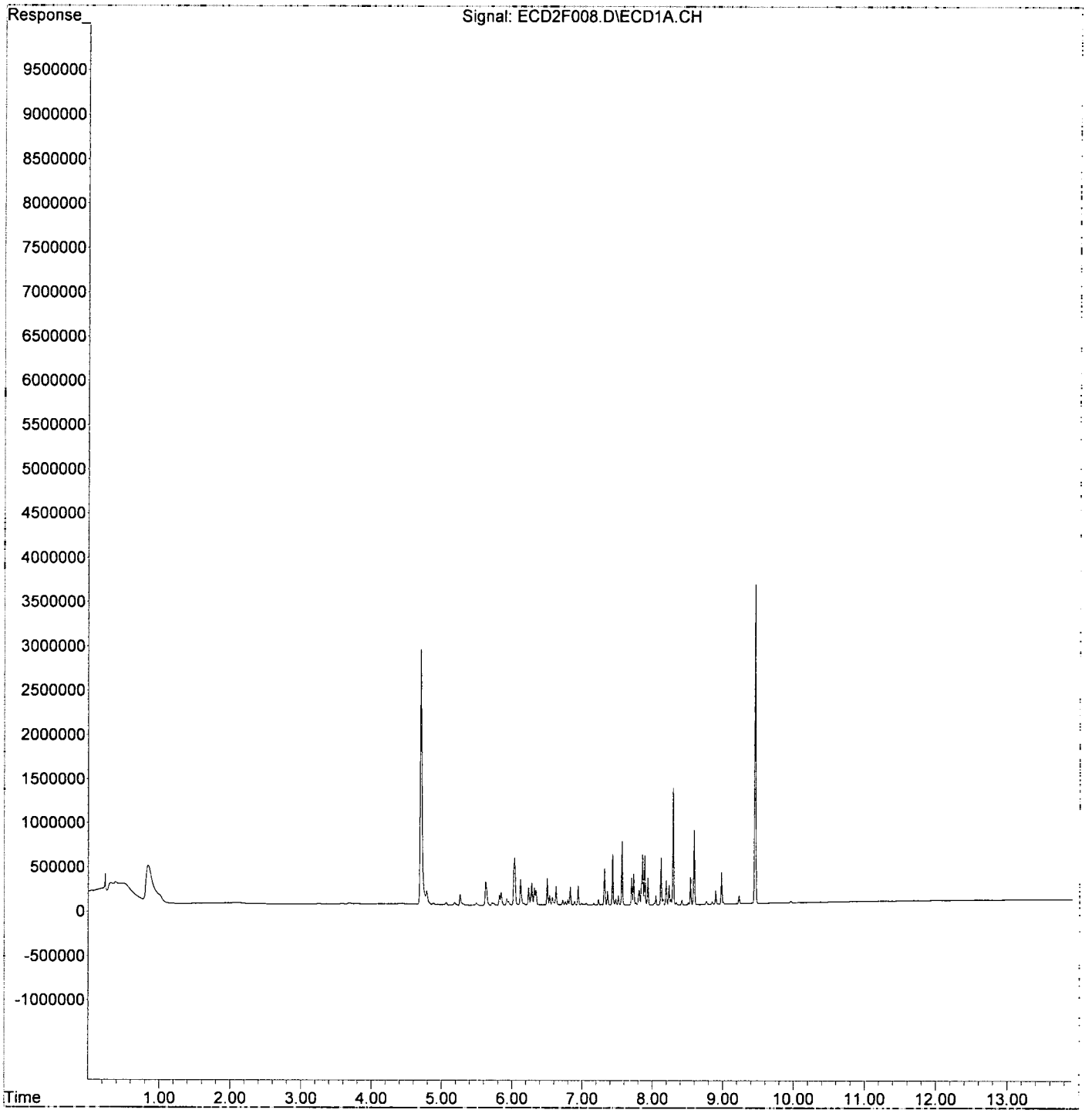
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.563	719176	130.357	ng/ml
49)	Aroclor 1262 (2)	7.886	558690	74.288	ng/ml
50)	Aroclor 1262 (3)	8.119	535701	83.038	ng/ml
51)	Aroclor 1262 (4)	8.290	1322935	93.171	ng/ml
52)	Aroclor 1262 (5)	8.588	840059	98.064	ng/ml
53)	Aroclor 1262 (6)	8.977	353500	74.254	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.119	535701	160.676	ng/ml
56)	Aroclor 1268 (2)	8.537	309776	19.566	ng/ml
57)	Aroclor 1268 (3)	8.588	840059	62.364	ng/ml
58)	Aroclor 1268 (4)	8.764	37089	3.122	ng/ml
59)	Aroclor 1268 (5)	8.977	353500	70.999	ng/ml
60)	Aroclor 1268 (6)	9.226	95471	2.771	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\9A30022\REQUANT\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:12 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.700	5360501	92.724	ng/ml
62)	S DCBP (S)	9.456	7225361	99.231	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.624	505770	189.170	ng/ml
3)	Aroclor 1016 (2)	6.037	1028331	194.308	ng/ml
4)	Aroclor 1016 (3)	6.120	540906	186.258	ng/ml
5)	Aroclor 1016 (4)	6.279	450422	188.375	ng/ml
6)	Aroclor 1016 (5)	6.500	545977	186.238	ng/ml
7)	Aroclor 1016 (6)	6.626	396125	190.303	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.061	53998	65.182	ng/ml
10)	Aroclor 1221 (2)	5.181	56484	103.978	ng/ml
11)	Aroclor 1221 (3)	5.261	229787	129.624	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.261	229787	164.041	ng/ml
14)	Aroclor 1232 (2)	6.037	1028331	481.665	ng/ml
15)	Aroclor 1232 (3)	6.120	540906	488.494	ng/ml
16)	Aroclor 1232 (4)	6.279	450422	595.634	ng/ml
17)	Aroclor 1232 (5)	6.500	545977	525.310	ng/ml
18)	Aroclor 1232 (6)	6.626	396125	465.596	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.624	505770	256.040	ng/ml
21)	Aroclor 1242 (2)	6.037	1028331	254.222	ng/ml
22)	Aroclor 1242 (3)	6.120	540906	252.218	ng/ml
23)	Aroclor 1242 (4)	6.279	450422	279.829	ng/ml
24)	Aroclor 1242 (5)	6.500	545977	246.903	ng/ml
25)	Aroclor 1242 (6)	6.626	396125	212.450	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.037	1028331	439.173	ng/ml
28)	Aroclor 1248 (2)	6.279	450422	157.228	ng/ml
29)	Aroclor 1248 (3)	6.500	545977	159.082	ng/ml
30)	Aroclor 1248 (4)	6.795	111549	28.742	ng/ml
31)	Aroclor 1248 (5)	6.829	378649	89.835	ng/ml
32)	Aroclor 1248 (6)	7.317	772674	342.422	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.829	378649	88.398	ng/ml
35)	Aroclor 1254 (2)	6.941	386678	71.648	ng/ml
36)	Aroclor 1254 (3)	7.317	772674	97.531	ng/ml
37)	Aroclor 1254 (4)	7.476	118342	22.419	ng/ml
38)	Aroclor 1254 (5)	7.858	1061700	198.931	ng/ml
39)	Aroclor 1254 (6)	8.149	121859	67.626	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.431	1051123	191.459	ng/ml
42)	Aroclor 1260 (2)	7.565	1318276	191.392	ng/ml
43)	Aroclor 1260 (3)	8.121	1014667	197.644	ng/ml
44)	Aroclor 1260 (4)	8.293	2432300	195.255	ng/ml
45)	Aroclor 1260 (5)	8.591	1633889	198.094	ng/ml
46)	Aroclor 1260 (6)	8.979	664336	194.701	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

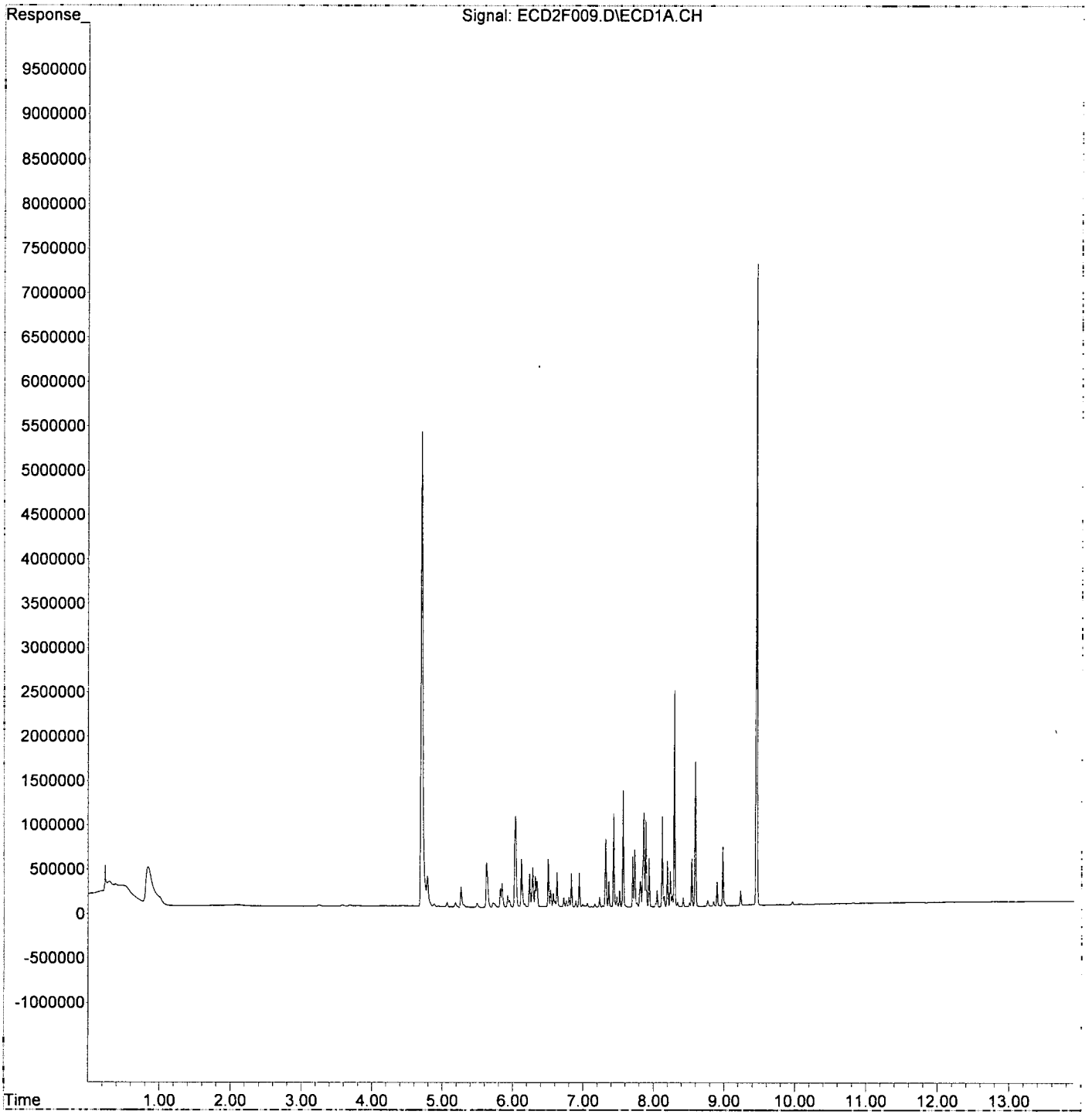
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.565	1318276	238.949	ng/ml
49)	Aroclor 1262 (2)	7.889	979667	130.264	ng/ml
50)	Aroclor 1262 (3)	8.121	1014667	157.281	ng/ml
51)	Aroclor 1262 (4)	8.293	2432300	171.301	ng/ml
52)	Aroclor 1262 (5)	8.591	1633889	190.732	ng/ml
53)	Aroclor 1262 (6)	8.979	664336	139.546	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.121	1014667	304.336	ng/ml
56)	Aroclor 1268 (2)	8.539	542990	34.296	ng/ml
57)	Aroclor 1268 (3)	8.591	1633889	121.296	ng/ml
58)	Aroclor 1268 (4)	8.766	66969	5.637	ng/ml
59)	Aroclor 1268 (5)	8.979	664336	133.429	ng/ml
60)	Aroclor 1268 (6)	9.229	171602	4.980	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\9A30022\REQUANT\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:54 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.699	14645988	253.342	ng/ml
62) S	DCBP (S)	9.454	18206141	250.037	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.623	1254489	469.209	ng/ml
3)	Aroclor 1016 (2)	6.036	2508139	473.926	ng/ml
4)	Aroclor 1016 (3)	6.119	1346535	463.671	ng/ml
5)	Aroclor 1016 (4)	6.278	1051686	439.836	ng/ml
6)	Aroclor 1016 (5)	6.499	1342553	457.958	ng/ml
7)	Aroclor 1016 (6)	6.624	933288	448.362	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.060	117420	141.739	ng/ml
10)	Aroclor 1221 (2)	5.179	125684	231.363	ng/ml
11)	Aroclor 1221 (3)	5.258	585846	330.478	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.258	585846	418.227	ng/ml
14)	Aroclor 1232 (2)	6.036	2508139	1174.799	ng/ml
15)	Aroclor 1232 (3)	6.119	1346535	1216.060	ng/ml
16)	Aroclor 1232 (4)	6.278	1051686	1390.741	ng/ml
17)	Aroclor 1232 (5)	6.499	1342553	1291.735	ng/ml
18)	Aroclor 1232 (6)	6.624	933288	1096.963	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.623	1254489	635.071	ng/ml
21)	Aroclor 1242 (2)	6.036	2508139	620.056	ng/ml
22)	Aroclor 1242 (3)	6.119	1346535	627.873	ng/ml
23)	Aroclor 1242 (4)	6.278	1051686	653.370	ng/ml
24)	Aroclor 1242 (5)	6.499	1342553	607.133	ng/ml
25)	Aroclor 1242 (6)	6.624	933288	500.541	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.036	2508139	1071.159	ng/ml
28)	Aroclor 1248 (2)	6.278	1051686	367.111	ng/ml
29)	Aroclor 1248 (3)	6.499	1342553	391.182	ng/ml
30)	Aroclor 1248 (4)	6.793	252033	64.940	ng/ml
31)	Aroclor 1248 (5)	6.828	901386	213.855	ng/ml
32)	Aroclor 1248 (6)	7.316	1849434	819.605	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.828	901386	210.433	ng/ml
35)	Aroclor 1254 (2)	6.939	916563	169.832	ng/ml
36)	Aroclor 1254 (3)	7.316	1849434	233.446	ng/ml
37)	Aroclor 1254 (4)	7.476	275052	52.106	ng/ml
38)	Aroclor 1254 (5)	7.857	2512973	470.855	ng/ml
39)	Aroclor 1254 (6)	8.148	274868	152.539	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.429	2535656	461.863	ng/ml
42)	Aroclor 1260 (2)	7.565	3196431	464.070	ng/ml
43)	Aroclor 1260 (3)	8.120	2422545	471.879	ng/ml
44)	Aroclor 1260 (4)	8.292	6219548	499.279	ng/ml
45)	Aroclor 1260 (5)	8.590	4059003	492.118	ng/ml
46)	Aroclor 1260 (6)	8.978	1646223	482.470	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:54 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

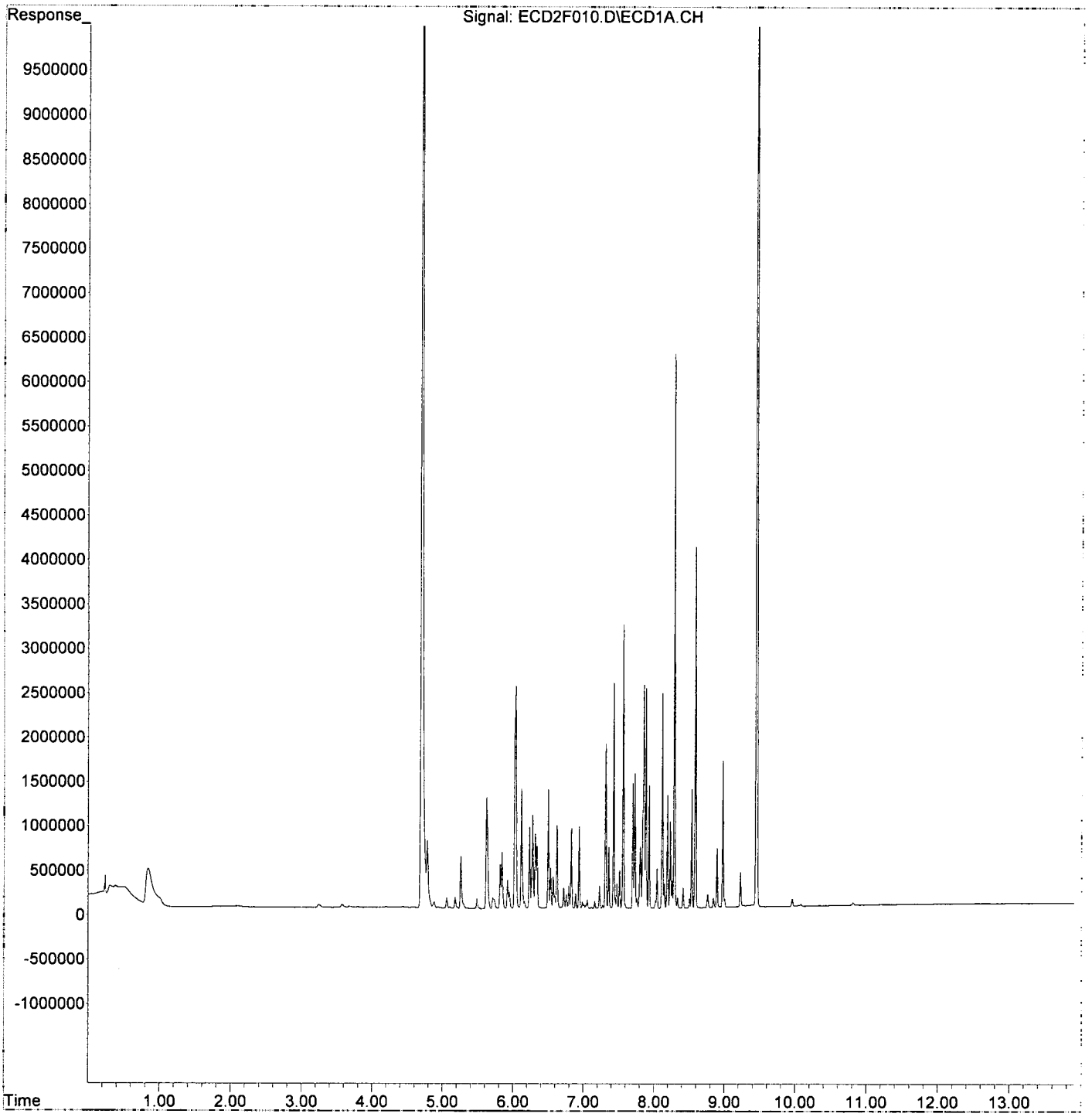
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.565	3196431	579.381	ng/ml
49)	Aroclor 1262 (2)	7.888	2472017	328.698	ng/ml
50)	Aroclor 1262 (3)	8.120	2422545	375.512	ng/ml
51)	Aroclor 1262 (4)	8.292	6219548	438.029	ng/ml
52)	Aroclor 1262 (5)	8.590	4059003	473.826	ng/ml
53)	Aroclor 1262 (6)	8.978	1646223	345.795	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.120	2422545	726.610	ng/ml
56)	Aroclor 1268 (2)	8.538	1329954	84.002	ng/ml
57)	Aroclor 1268 (3)	8.590	4059003	301.330	ng/ml
58)	Aroclor 1268 (4)	8.764	146980	12.373	ng/ml
59)	Aroclor 1268 (5)	8.978	1646223	330.638	ng/ml
60)	Aroclor 1268 (6)	9.227	393209	11.411	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\9A30022\REQUANT\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:41:54 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.699	29763027	514.832	ng/ml
62) S	DCBP (S)	9.455	36540991	501.841	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.623	2471749	924.493	ng/ml
3)	Aroclor 1016 (2)	6.035	5040502	952.428	ng/ml
4)	Aroclor 1016 (3)	6.118	2672741	920.342	ng/ml
5)	Aroclor 1016 (4)	6.278	2153930	900.817	ng/ml
6)	Aroclor 1016 (5)	6.499	2670551	910.951	ng/ml
7)	Aroclor 1016 (6)	6.624	1887258	906.659	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.059	223467	269.751	ng/ml
10)	Aroclor 1221 (2)	5.179	237787	437.725	ng/ml
11)	Aroclor 1221 (3)	5.258	1172893	661.634	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.258	1172893	837.312	ng/ml
14)	Aroclor 1232 (2)	6.035	5040502	2360.943	ng/ml
15)	Aroclor 1232 (3)	6.118	2672741	2413.761	ng/ml
16)	Aroclor 1232 (4)	6.278	2153930	2848.338	ng/ml
17)	Aroclor 1232 (5)	6.499	2670551	2569.465	ng/ml
18)	Aroclor 1232 (6)	6.624	1887258	2218.235	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.623	2471749	1251.295	ng/ml
21)	Aroclor 1242 (2)	6.035	5040502	1246.101	ng/ml
22)	Aroclor 1242 (3)	6.118	2672741	1246.267	ng/ml
23)	Aroclor 1242 (4)	6.278	2153930	1338.150	ng/ml
24)	Aroclor 1242 (5)	6.499	2670551	1207.683	ng/ml
25)	Aroclor 1242 (6)	6.624	1887258	1012.174	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.035	5040502	2152.664	ng/ml
28)	Aroclor 1248 (2)	6.278	2153930	751.870	ng/ml
29)	Aroclor 1248 (3)	6.499	2670551	778.123	ng/ml
30)	Aroclor 1248 (4)	6.793	503380	129.703	ng/ml
31)	Aroclor 1248 (5)	6.827	1755292	416.446	ng/ml
32)	Aroclor 1248 (6)	7.316	3780278	1675.288	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.827	1755292	409.782	ng/ml
35)	Aroclor 1254 (2)	6.940	1902980	352.606	ng/ml
36)	Aroclor 1254 (3)	7.316	3780278	477.169	ng/ml
37)	Aroclor 1254 (4)	7.475	552996	104.760	ng/ml
38)	Aroclor 1254 (5)	7.858	5192374	972.894	ng/ml
39)	Aroclor 1254 (6)	8.147	547672	303.934	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.429	5135331	935.387	ng/ml
42)	Aroclor 1260 (2)	7.564	6639782	963.989	ng/ml
43)	Aroclor 1260 (3)	8.120	4916194	957.609	ng/ml
44)	Aroclor 1260 (4)	8.292	12084817	970.119	ng/ml
45)	Aroclor 1260 (5)	8.589	8021252	972.505	ng/ml
46)	Aroclor 1260 (6)	8.978	3223988	944.876	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

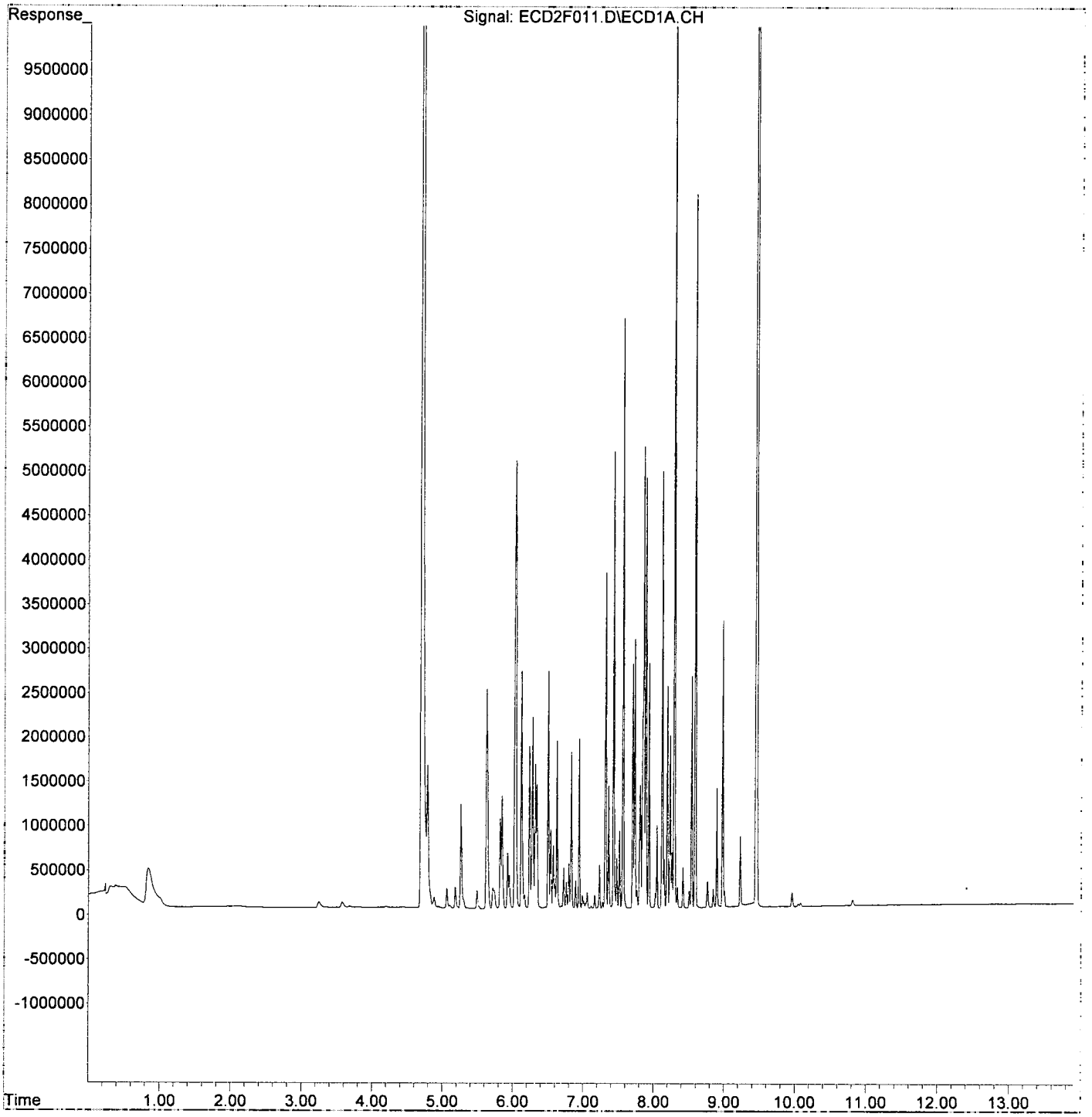
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.564	6639782	1203.519	ng/ml
49)	Aroclor 1262 (2)	7.888	4840267	643.598	ng/ml
50)	Aroclor 1262 (3)	8.120	4916194	762.047	ng/ml
51)	Aroclor 1262 (4)	8.292	12084817	851.107	ng/ml
52)	Aroclor 1262 (5)	8.589	8021252	936.358	ng/ml
53)	Aroclor 1262 (6)	8.978	3223988	677.210	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.120	4916194	1474.547	ng/ml
56)	Aroclor 1268 (2)	8.538	2605476	164.567	ng/ml
57)	Aroclor 1268 (3)	8.589	8021252	595.477	ng/ml
58)	Aroclor 1268 (4)	8.764	290876	24.486	ng/ml
59)	Aroclor 1268 (5)	8.978	3223988	647.526	ng/ml
60)	Aroclor 1268 (6)	9.227	792935	23.011	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\9A30022\REQUANT\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:40 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MM 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1)	S TCMX (S)	4.701	49161732	850.384	ng/ml
62)	S DCBP (S)	9.457	57028813	783.214	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.624	3796102	1419.832	ng/ml
3)	Aroclor 1016 (2)	6.036	7768054	1467.813	ng/ml
4)	Aroclor 1016 (3)	6.120	4016399	1383.023	ng/ml
5)	Aroclor 1016 (4)	6.279	3145024	1315.312	ng/ml
6)	Aroclor 1016 (5)	6.501	4037004	1377.061	ng/ml
7)	Aroclor 1016 (6)	6.626	2782558	1336.771	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.060	327569	395.415	ng/ml
10)	Aroclor 1221 (2)	5.180	348714	641.924	ng/ml
11)	Aroclor 1221 (3)	5.260	1840419	1038.188	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.260	1840419	1313.849	ng/ml
14)	Aroclor 1232 (2)	6.036	7768054	3638.514	ng/ml
15)	Aroclor 1232 (3)	6.120	4016399	3627.222	ng/ml
16)	Aroclor 1232 (4)	6.279	3145024	4158.952	ng/ml
17)	Aroclor 1232 (5)	6.501	4037004	3884.194	ng/ml
18)	Aroclor 1232 (6)	6.626	2782558	3270.548	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	5.624	3796102	1921.734	ng/ml
21)	Aroclor 1242 (2)	6.036	7768054	1920.399	ng/ml
22)	Aroclor 1242 (3)	6.120	4016399	1872.798	ng/ml
23)	Aroclor 1242 (4)	6.279	3145024	1953.877	ng/ml
24)	Aroclor 1242 (5)	6.501	4037004	1825.624	ng/ml
25)	Aroclor 1242 (6)	6.626	2782558	1492.341	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.036	7768054	3317.528	ng/ml
28)	Aroclor 1248 (2)	6.279	3145024	1097.829	ng/ml
29)	Aroclor 1248 (3)	6.501	4037004	1176.269	ng/ml
30)	Aroclor 1248 (4)	6.795	723771	186.490	ng/ml
31)	Aroclor 1248 (5)	6.829	2734947	648.871	ng/ml
32)	Aroclor 1248 (6)	7.317	5512901	2443.127	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	6.829	2734947	638.488	ng/ml
35)	Aroclor 1254 (2)	6.941	2755613	510.592	ng/ml
36)	Aroclor 1254 (3)	7.317	5512901	695.871	ng/ml
37)	Aroclor 1254 (4)	7.477	823749	156.052	ng/ml
38)	Aroclor 1254 (5)	7.858	7994666	1497.959	ng/ml
39)	Aroclor 1254 (6)	8.149	840124	466.232	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	7.431	7836995	1427.488	ng/ml
42)	Aroclor 1260 (2)	7.566	9796009	1422.222	ng/ml
43)	Aroclor 1260 (3)	8.122	7313112	1424.496	ng/ml
44)	Aroclor 1260 (4)	8.294	17786878	1427.857	ng/ml
45)	Aroclor 1260 (5)	8.591	11756020	1425.312	ng/ml
46)	Aroclor 1260 (6)	8.980	4746749	1391.161	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9A30022\REQUANT\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:40 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

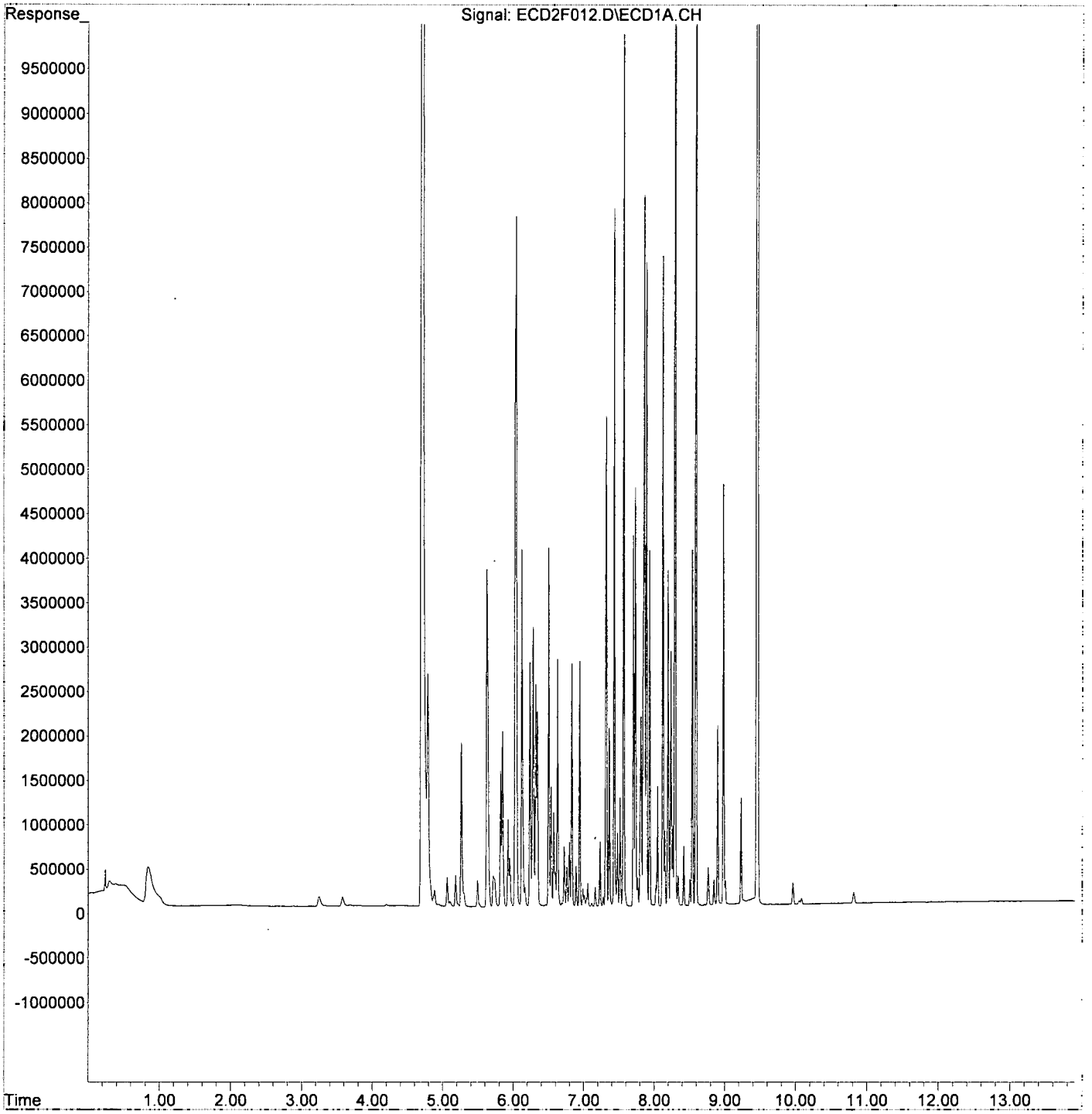
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.566	9796009	1775.613	ng/ml
49)	Aroclor 1262 (2)	7.890	7229175	961.245	ng/ml
50)	Aroclor 1262 (3)	8.122	7313112	1133.587	ng/ml
51)	Aroclor 1262 (4)	8.294	17786878	1252.690	ng/ml
52)	Aroclor 1262 (5)	8.591	11756020	1372.335	ng/ml
53)	Aroclor 1262 (6)	8.980	4746749	997.071	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.122	7313112	2193.470	ng/ml
56)	Aroclor 1268 (2)	8.540	4004332	252.921	ng/ml
57)	Aroclor 1268 (3)	8.591	11756020	872.736	ng/ml
58)	Aroclor 1268 (4)	8.765	425359	35.807	ng/ml
59)	Aroclor 1268 (5)	8.980	4746749	953.366	ng/ml
60)	Aroclor 1268 (6)	9.229	1202439	34.895	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\9A30022\REQUANT\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:42:40 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:36:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\2\SEQUENCE\9A30022.S

MJB 1/30/19

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	CCV CHECK	E2A21015	1	Sample		
4	Vial 1	Hexane	E2A21015	1	Sample		
5	Vial 3	9A30022-ICB1	E2A21015	1	Sample		
6	Vial 4	9A30022-CAL1	E2A21015	1	Sample		
7	Vial 5	9A30022-CAL2	E2A21015	1	Sample		
8	Vial 6	9A30022-CAL3	E2A21015	1	Sample		
9	Vial 7	9A30022-CAL4	E2A21015	1	Sample		
10	Vial 8	9A30022-CAL5	E2A21015	1	Sample		
11	Vial 9	9A30022-CAL6	E2A21015	1	Sample		
12	Vial 10	9A30022-CAL7	E2A21015	1	Sample		
13	Vial 11	9A30022-ICV1	E2A21015	1	Sample		
14	Vial 12	9A30022-CAL8	E2A21015	1	Sample		
15	Vial 13	9A30022-CAL9	E2A21015	1	Sample		
16	Vial 14	9A30022-CALA	E2A21015	1	Sample		
17	Vial 13	9A30022-CAL9	E2A21015	1	Sample		
18	Vial 14	9A30022-CALA	E2A21015	1	Sample		
19	Vial 15	9A30022-CALB	E2A21015	1	Sample		
20	Vial 16	9A30022-CALC	E2A21015	1	Sample		
21	Vial 17	9A30022-CALD	E2A21015	1	Sample		
22	Vial 18	9A30022-CALE	E2A21015	1	Sample		
23	Vial 19	9A30022-ICV2	E2A21015	1	Sample		
24	Vial 20	9A30022-ICV3	E2A21015	1	Sample		
25	Vial 21	9A30022-ICV4	E2A21015	1	Sample		
26	Vial 22	9A30022-ICV5	E2A21015	1	Sample		
27	Vial 1	Isooctane	E2A21015	1	Sample		

MJB 1/30/19

Plunger error on rear, no data collected

Reran to keep cal. Pts. in numerical order.

1/31/19

Sequence Table (Back Injector):

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 51	Hexane	E2A21015	1	Sample		
2	Vial 51	Hexane	E2A21015	1	Sample		
3	Vial 52	CCV CHECK	E2A21015	1	Sample		
4	Vial 51	Hexane	E2A21015	1	Sample		
5	Vial 51	Hexane	E2A21015	1	Sample		
6	Vial 53	9A30023-ICB1	E2A21015	1	Sample		
7	Vial 4	9A30023-CAL1	E2A21015	1	Sample		
8	Vial 5	9A30023-CAL2	E2A21015	1	Sample		
9	Vial 6	9A30023-CAL3	E2A21015	1	Sample		
10	Vial 7	9A30023-CAL4	E2A21015	1	Sample		
11	Vial 8	9A30023-CAL5	E2A21015	1	Sample		
12	Vial 9	9A30023-CAL6	E2A21015	1	Sample		
13	Vial 10	9A30023-CAL7	E2A21015	1	Sample		
14	Vial 11	9A30023-ICV1	E2A21015	1	Sample		
15	Vial 12	9A30023-CAL8	E2A21015	1	Sample		
16	Vial 13	9A30023-CAL9	E2A21015	1	Sample		
17	Vial 12	9A30023-CAL8	E2A21015	1	Sample		
18	Vial 13	9A30023-CAL9	E2A21015	1	Sample		
19	Vial 14	9A30023-CALA	E2A21015	1	Sample		
20	Vial 15	9A30023-CALB	E2A21015	1	Sample		
21	Vial 16	9A30023-CALC	E2A21015	1	Sample		
22	Vial 17	9A30023-CALD	E2A21015	1	Sample		
23	Vial 18	9A30023-CALE	E2A21015	1	Sample		

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:24:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.697	549748	6.911	ng/ml
62) S	DCBP (S)	9.453	746633	10.361	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.621	61582	19.276	ng/ml
3)	Aroclor 1016 (2)	6.034	114852	17.749	ng/ml
4)	Aroclor 1016 (3)	6.117	69526	20.608	ng/ml
5)	Aroclor 1016 (4)	6.277	60043	21.223	ng/ml
6)	Aroclor 1016 (5)	6.498	68459	20.235	ng/ml
7)	Aroclor 1016 (6)	6.623	52408	21.821	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.428	124416	20.355	ng/ml
42)	Aroclor 1260 (2)	7.563	149912	19.888	ng/ml
43)	Aroclor 1260 (3)	8.119	109460	19.945	ng/ml
44)	Aroclor 1260 (4)	8.291	253646	20.594	ng/ml
45)	Aroclor 1260 (5)	8.589	169452	20.458	ng/ml
46)	Aroclor 1260 (6)	8.977	75971	22.053	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:24:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

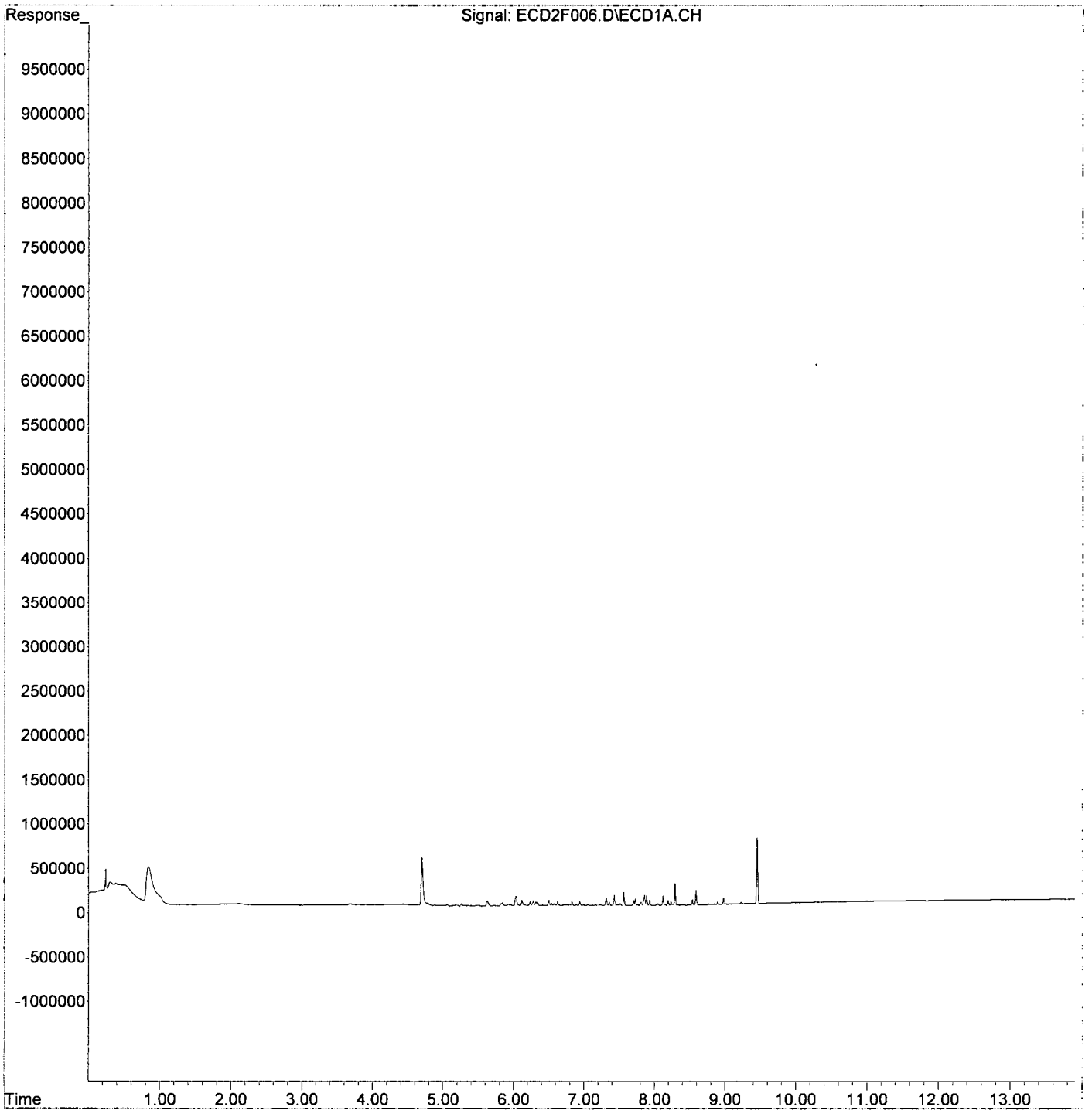
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F006.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:39 am
Operator : MJB / KAK
Sample : 9A30022-CAL1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:24:25 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:25:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.697	1468375	18.458	ng/ml
62) S	DCBP (S)	9.453	1838415	25.512	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.622	145499	45.643	ng/ml
3)	Aroclor 1016 (2)	6.034	277267	42.849	ng/ml
4)	Aroclor 1016 (3)	6.117	158177	46.885	ng/ml
5)	Aroclor 1016 (4)	6.277	131374	46.436	ng/ml
6)	Aroclor 1016 (5)	6.498	164358	48.581	ng/ml
7)	Aroclor 1016 (6)	6.623	110964	46.201	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.429	289704	47.397	ng/ml
42)	Aroclor 1260 (2)	7.564	368634	48.804	ng/ml
43)	Aroclor 1260 (3)	8.119	269837	49.167	ng/ml
44)	Aroclor 1260 (4)	8.291	637216	51.738	ng/ml
45)	Aroclor 1260 (5)	8.589	435849	52.621	ng/ml
46)	Aroclor 1260 (6)	8.978	177419	51.502	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:25:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

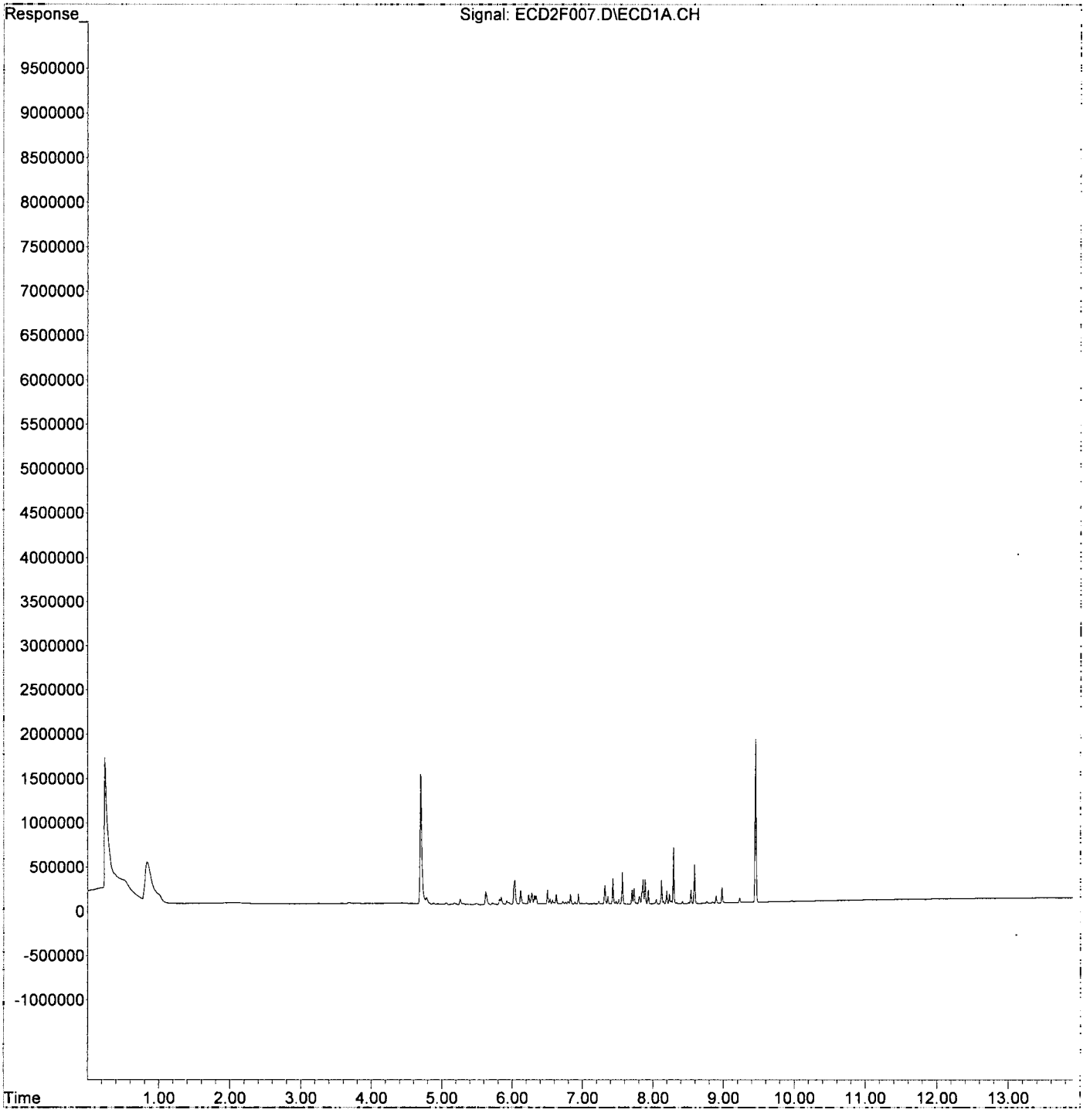
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F007.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 9:57 am
Operator : MJB / KAK
Sample : 9A30022-CAL2
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:25:19 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.698	2890066	36.330	ng/ml
62) S	DCBP (S)	9.453	3602548	49.993	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.621	268600	84.075	ng/ml
3)	Aroclor 1016 (2)	6.034	538076	83.155	ng/ml
4)	Aroclor 1016 (3)	6.118	294073	87.166	ng/ml
5)	Aroclor 1016 (4)	6.277	250188	88.433	ng/ml
6)	Aroclor 1016 (5)	6.499	303427	89.688	ng/ml
7)	Aroclor 1016 (6)	6.623	214166	89.169	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.428	572861	93.724	ng/ml
42)	Aroclor 1260 (2)	7.563	719176	95.408	ng/ml
43)	Aroclor 1260 (3)	8.119	535701	97.611	ng/ml
44)	Aroclor 1260 (4)	8.290	1322935	107.413	ng/ml
45)	Aroclor 1260 (5)	8.588	840059	101.422	ng/ml
46)	Aroclor 1260 (6)	8.977	353500	102.615	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

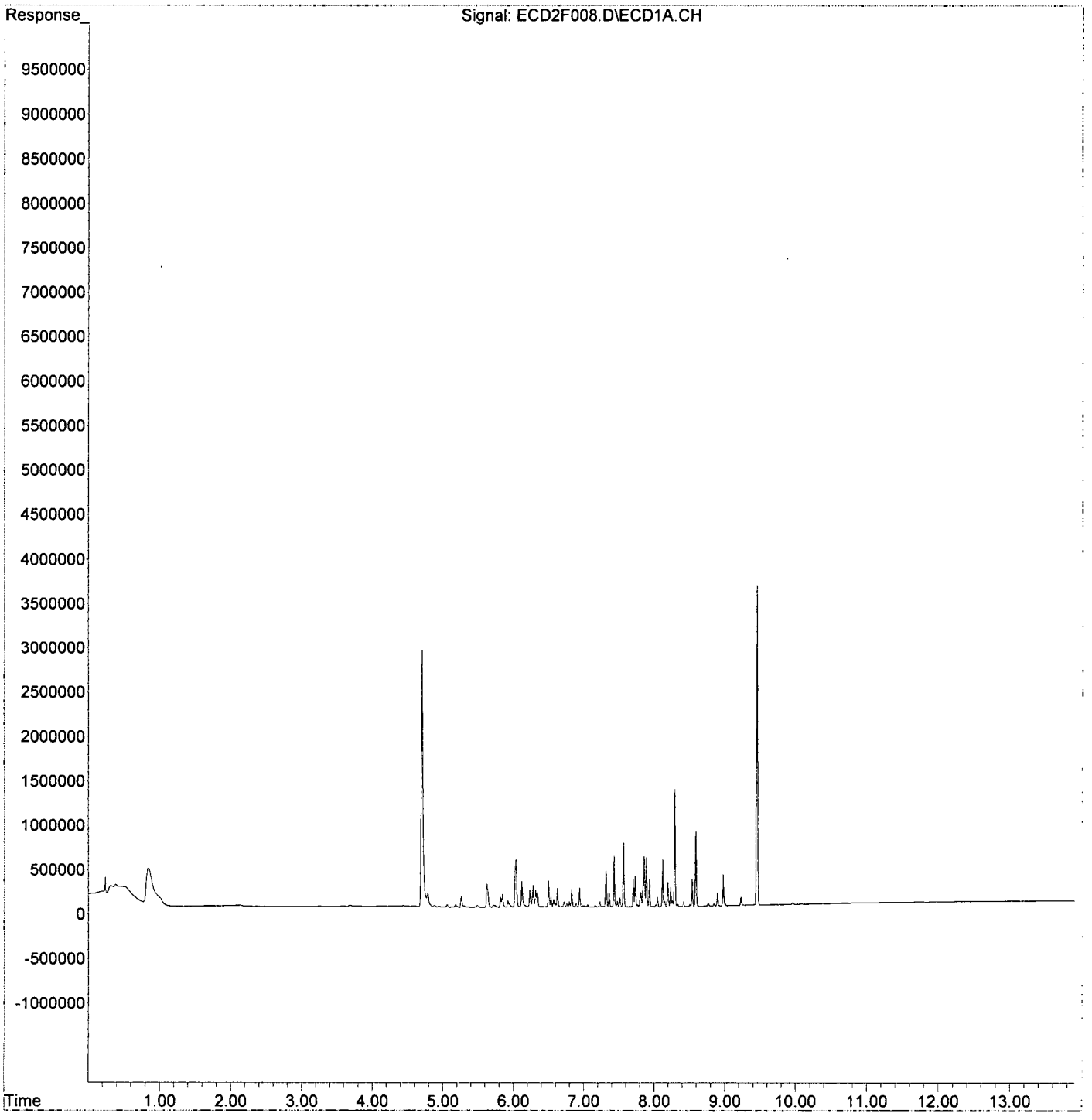
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F008.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:15 am
Operator : MJB / KAK
Sample : 9A30022-CAL3
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.700	5360501	67.385	ng/ml
62) S	DCBP (S)	9.456	7225361	100.266	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.624	505770	158.313	ng/ml
3)	Aroclor 1016 (2)	6.037	1028331	158.919	ng/ml
4)	Aroclor 1016 (3)	6.120	540906	160.329	ng/ml
5)	Aroclor 1016 (4)	6.279	450422	159.209	ng/ml
6)	Aroclor 1016 (5)	6.500	545977	161.381	ng/ml
7)	Aroclor 1016 (6)	6.626	396125	164.930	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.431	1051123	171.970	ng/ml
42)	Aroclor 1260 (2)	7.565	1318276	174.886	ng/ml
43)	Aroclor 1260 (3)	8.121	1014667	184.884	ng/ml
44)	Aroclor 1260 (4)	8.293	2432300	197.486	ng/ml
45)	Aroclor 1260 (5)	8.591	1633889	197.263	ng/ml
46)	Aroclor 1260 (6)	8.979	664336	192.846	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

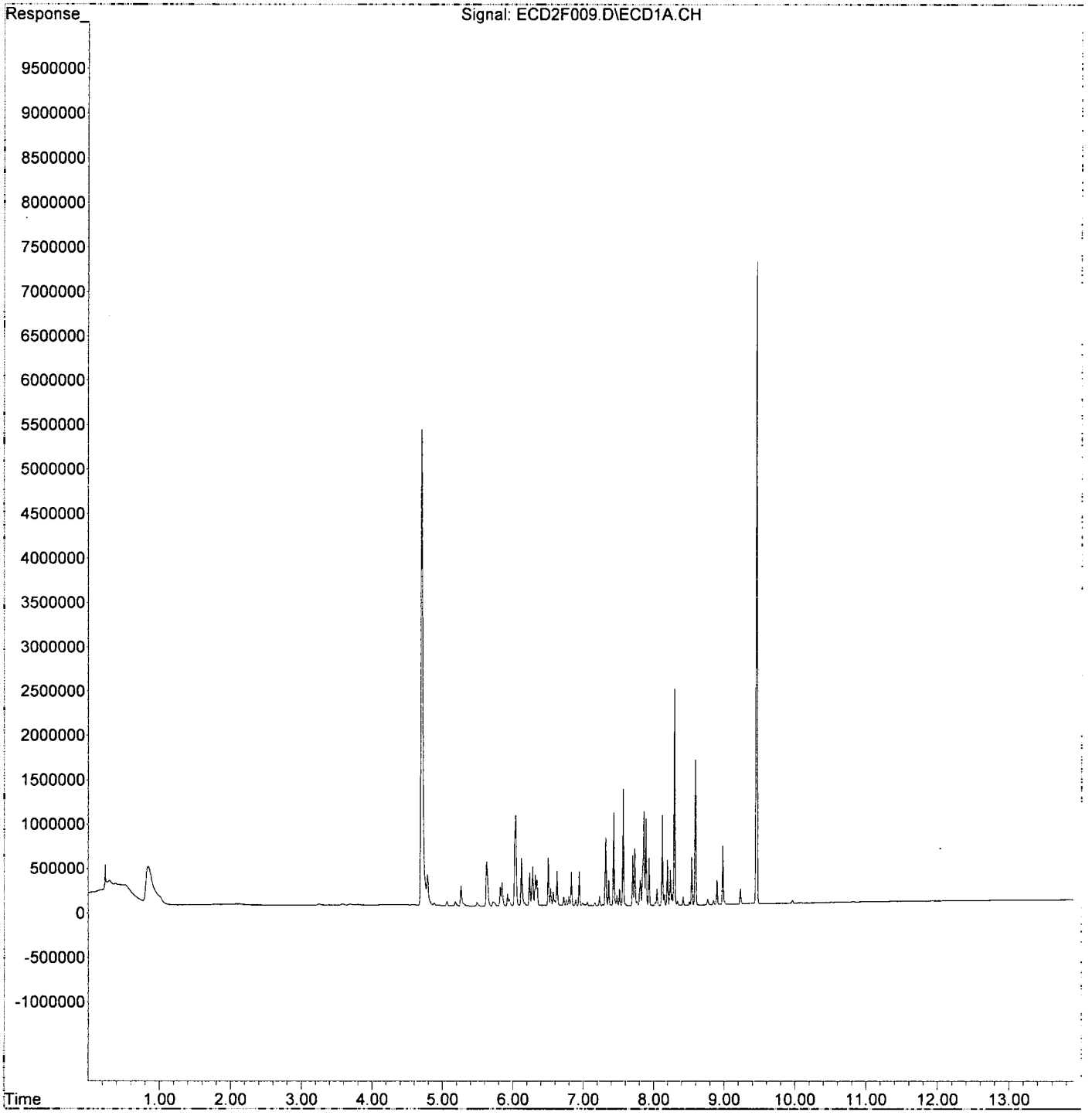
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F009.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:33 am
Operator : MJB / KAK
Sample : 9A30022-CAL4
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:26:48 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:23:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Tue Oct 30 09:02:56 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.699	14645988	184.109	ng/ml
62) S	DCBP (S)	9.454	18206141	252.647	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.623	1254489	392.672	ng/ml
3)	Aroclor 1016 (2)	6.036	2508139	387.610	ng/ml
4)	Aroclor 1016 (3)	6.119	1346535	399.125	ng/ml
5)	Aroclor 1016 (4)	6.278	1051686	371.735	ng/ml
6)	Aroclor 1016 (5)	6.499	1342553	396.835	ng/ml
7)	Aroclor 1016 (6)	6.624	933288	388.581	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.429	2535656	414.849	ng/ml
42)	Aroclor 1260 (2)	7.565	3196431	424.046	ng/ml
43)	Aroclor 1260 (3)	8.120	2422545	441.416	ng/ml
44)	Aroclor 1260 (4)	8.292	6219548	504.985	ng/ml
45)	Aroclor 1260 (5)	8.590	4059003	490.052	ng/ml
46)	Aroclor 1260 (6)	8.978	1646223	477.872	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:23:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Tue Oct 30 09:02:56 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

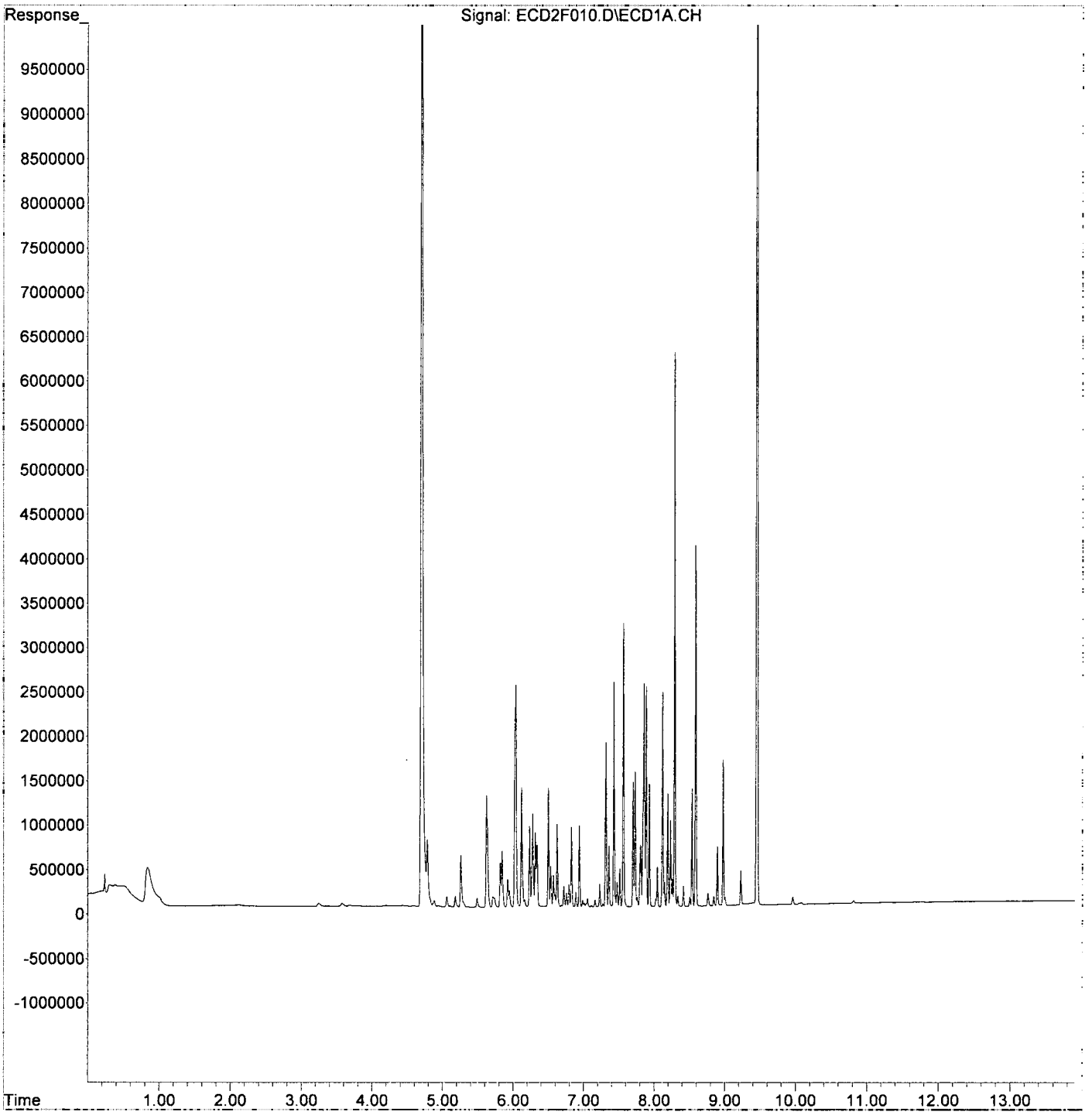
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9A30022\
Data File : ECD2F010.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 10:51 am
Operator : MJB / KAK
Sample : 9A30022-CAL5
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:23:01 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Tue Oct 30 09:02:56 2018
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:28:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.699	29763027	374.138	ng/ml
62) S	DCBP (S)	9.455	36540991	507.079	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.623	2471749	773.692	ng/ml
3)	Aroclor 1016 (2)	6.035	5040502	778.964	ng/ml
4)	Aroclor 1016 (3)	6.118	2672741	792.224	ng/ml
5)	Aroclor 1016 (4)	6.278	2153930	761.340	ng/ml
6)	Aroclor 1016 (5)	6.499	2670551	789.367	ng/ml
7)	Aroclor 1016 (6)	6.624	1887258	785.773	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.429	5135331	840.172	ng/ml
42)	Aroclor 1260 (2)	7.564	6639782	880.849	ng/ml
43)	Aroclor 1260 (3)	8.120	4916194	895.788	ng/ml
44)	Aroclor 1260 (4)	8.292	12084817	981.204	ng/ml
45)	Aroclor 1260 (5)	8.589	8021252	968.423	ng/ml
46)	Aroclor 1260 (6)	8.978	3223988	935.871	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:28:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

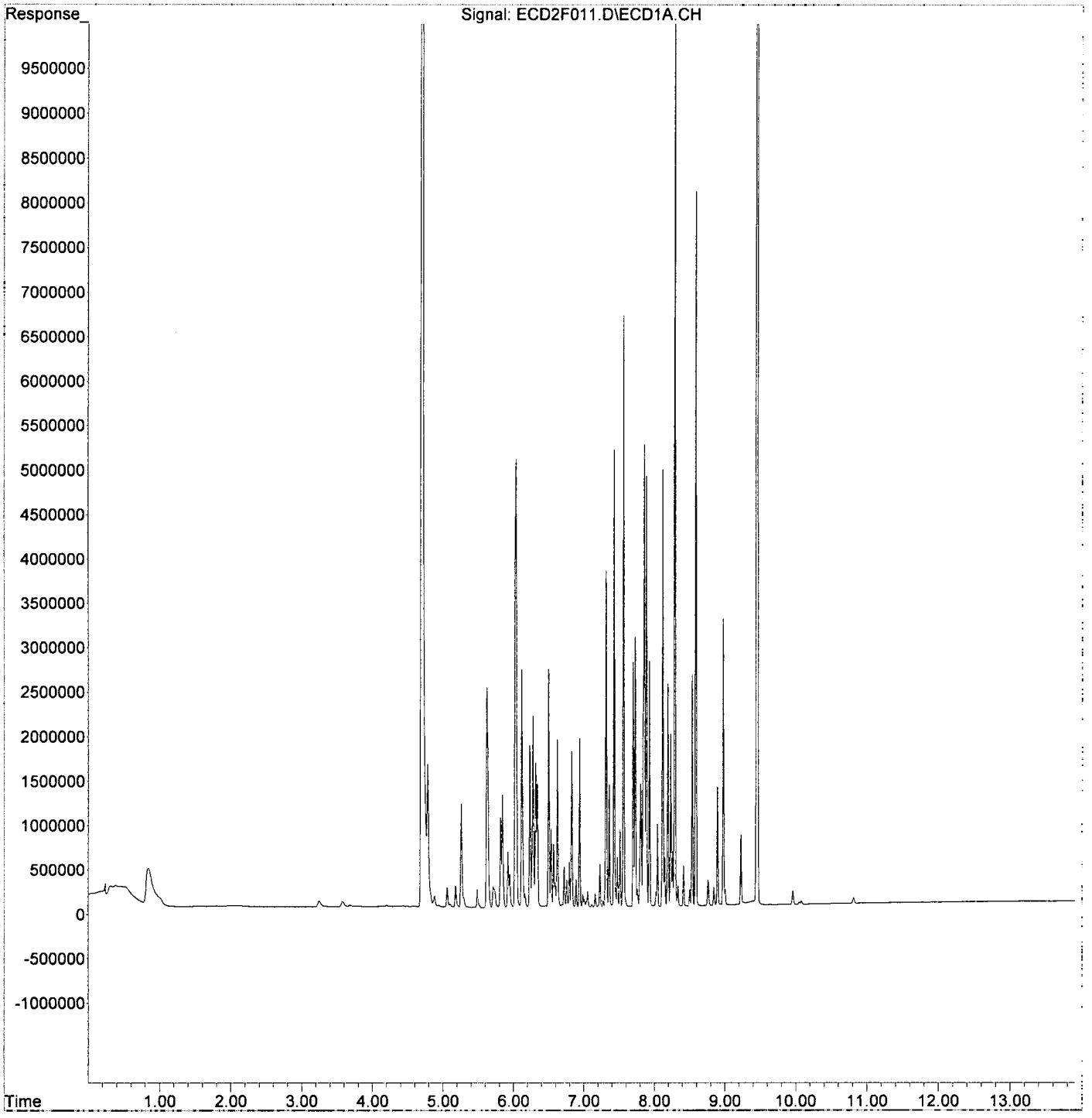
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F011.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:09 am
Operator : MJB / KAK
Sample : 9A30022-CAL6
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:28:13 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:29:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	4.701	49161732	617.991	ng/ml
62) S	DCBP (S)	9.457	57028813	791.389	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	5.624	3796102	1188.232	ng/ml
3)	Aroclor 1016 (2)	6.036	7768054	1200.482	ng/ml
4)	Aroclor 1016 (3)	6.120	4016399	1190.496	ng/ml
5)	Aroclor 1016 (4)	6.279	3145024	1171.658	ng/ml
6)	Aroclor 1016 (5)	6.501	4037004	1193.265	ng/ml
7)	Aroclor 1016 (6)	6.626	2782558	1158.537	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	7.431	7836995	1282.181	ng/ml
42)	Aroclor 1260 (2)	7.566	9796009	1299.561	ng/ml
43)	Aroclor 1260 (3)	8.122	7313112	1332.534	ng/ml
44)	Aroclor 1260 (4)	8.294	17786878	1444.173	ng/ml
45)	Aroclor 1260 (5)	8.591	11756020	1419.330	ng/ml
46)	Aroclor 1260 (6)	8.980	4746749	1377.903	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:29:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

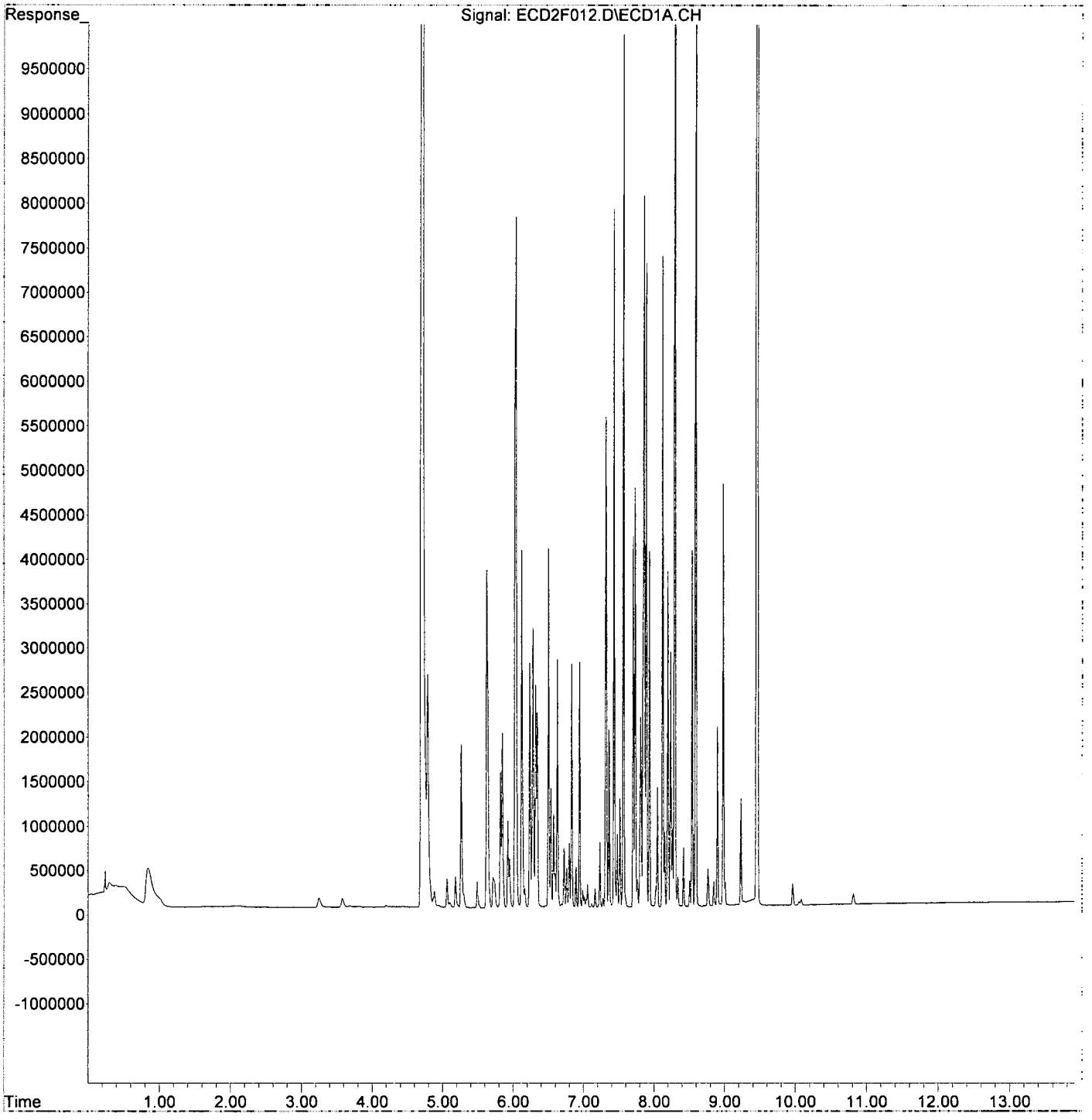
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F012.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 11:27 am
Operator : MJB / KAK
Sample : 9A30022-CAL7
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 30 18:29:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:03 pm
Operator : MJB / KAK
Sample : 9A30022-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:20:37 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	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)	5.060	414210	379.231	ng/ml
10)	Aroclor 1221 (2)	5.180	271616	371.158	ng/ml
11)	Aroclor 1221 (3)	5.259	886361	368.005	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	0.000	0	N.D.	ng/mld
14)	Aroclor 1232 (2)	0.000	0	N.D.	ng/mld
15)	Aroclor 1232 (3)	0.000	0	N.D.	ng/mld
16)	Aroclor 1232 (4)	0.000	0	N.D.	ng/mld
17)	Aroclor 1232 (5)	0.000	0	N.D.	ng/mld
18)	Aroclor 1232 (6)	0.000	0	N.D.	ng/mld
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/mld
20)	Aroclor 1242 (1)	0.000	0	N.D.	ng/mld
21)	Aroclor 1242 (2)	0.000	0	N.D.	ng/mld
22)	Aroclor 1242 (3)	0.000	0	N.D.	ng/mld
23)	Aroclor 1242 (4)	0.000	0	N.D.	ng/mld
24)	Aroclor 1242 (5)	0.000	0	N.D.	ng/mld
25)	Aroclor 1242 (6)	0.000	0	N.D.	ng/mld
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/mld
27)	Aroclor 1248 (1)	0.000	0	N.D.	ng/mld
28)	Aroclor 1248 (2)	0.000	0	N.D.	ng/mld
29)	Aroclor 1248 (3)	0.000	0	N.D.	ng/mld
30)	Aroclor 1248 (4)	0.000	0	N.D.	ng/mld
31)	Aroclor 1248 (5)	0.000	0	N.D.	ng/mld
32)	Aroclor 1248 (6)	0.000	0	N.D.	ng/mld
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/mld
34)	Aroclor 1254 (1)	0.000	0	N.D.	ng/mld
35)	Aroclor 1254 (2)	0.000	0	N.D.	ng/mld
36)	Aroclor 1254 (3)	0.000	0	N.D.	ng/mld
37)	Aroclor 1254 (4)	0.000	0	N.D.	ng/mld
38)	Aroclor 1254 (5)	0.000	0	N.D.	ng/mld
39)	Aroclor 1254 (6)	0.000	0	N.D.	ng/mld
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/mld
41)	Aroclor 1260 (1)	0.000	0	N.D.	ng/mld
42)	Aroclor 1260 (2)	0.000	0	N.D.	ng/mld
43)	Aroclor 1260 (3)	0.000	0	N.D.	ng/mld
44)	Aroclor 1260 (4)	0.000	0	N.D.	ng/mld
45)	Aroclor 1260 (5)	0.000	0	N.D.	ng/mld
46)	Aroclor 1260 (6)	0.000	0	N.D.	ng/mld
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/mld

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:03 pm
Operator : MJB / KAK
Sample : 9A30022-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:20:37 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

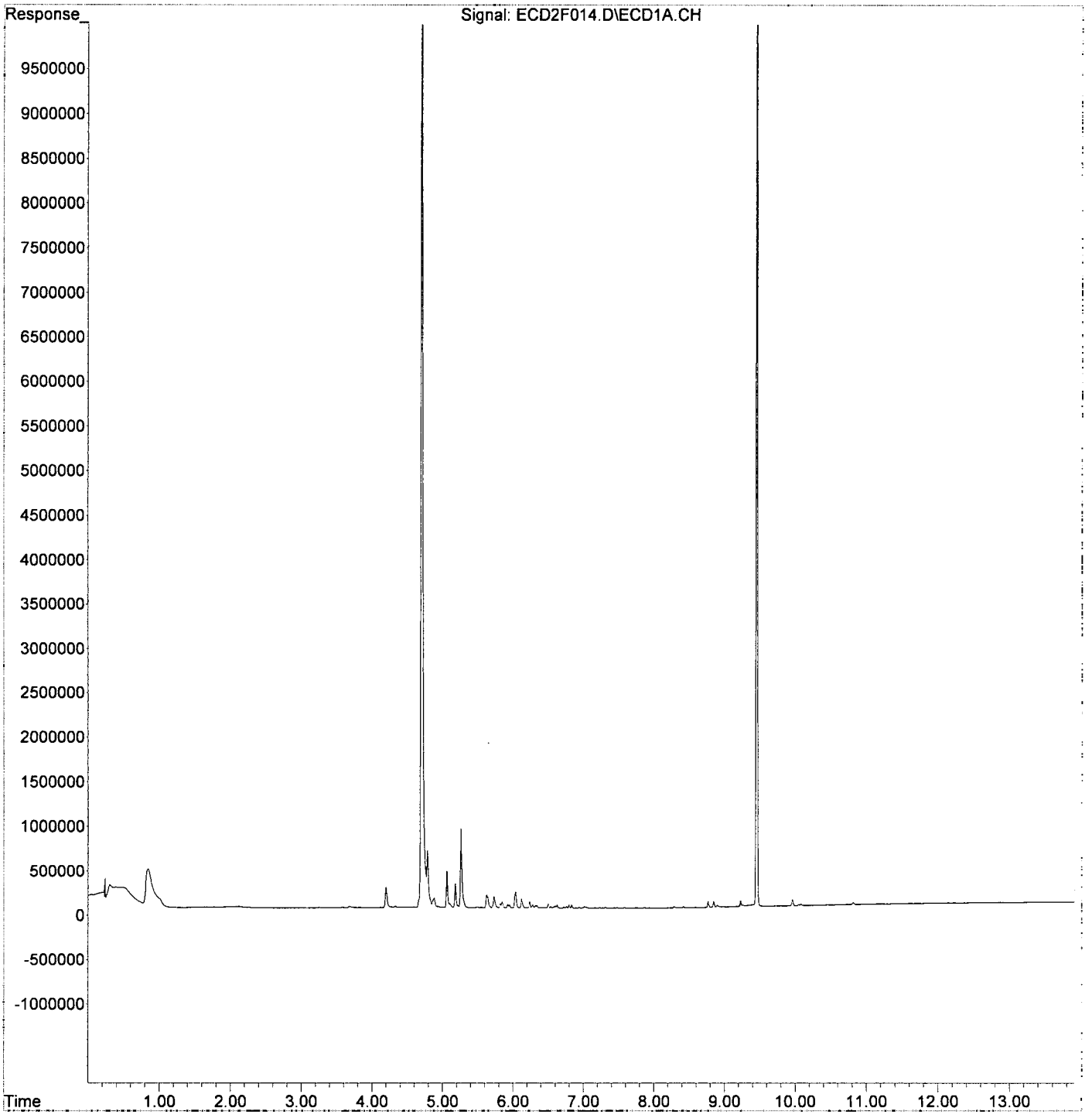
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F014.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:03 pm
Operator : MJB / KAK
Sample : 9A30022-CAL8
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:20:37 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Wed Jan 30 18:23:13 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:43 pm
Operator : MJB / KAK
Sample : 9A30022-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:22:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:20:47 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MD 1/31/19

	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)	5.261	700392	377.219	ng/ml
14)	Aroclor 1232 (2)	6.037	1067476	402.226	ng/ml
15)	Aroclor 1232 (3)	6.121	553647	395.624	ng/ml
16)	Aroclor 1232 (4)	6.280	378103	402.870	ng/ml
17)	Aroclor 1232 (5)	6.501	519671	421.876	ng/ml
18)	Aroclor 1232 (6)	6.627	425396	414.965	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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:43 pm
Operator : MJB / KAK
Sample : 9A30022-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:22:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:20:47 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

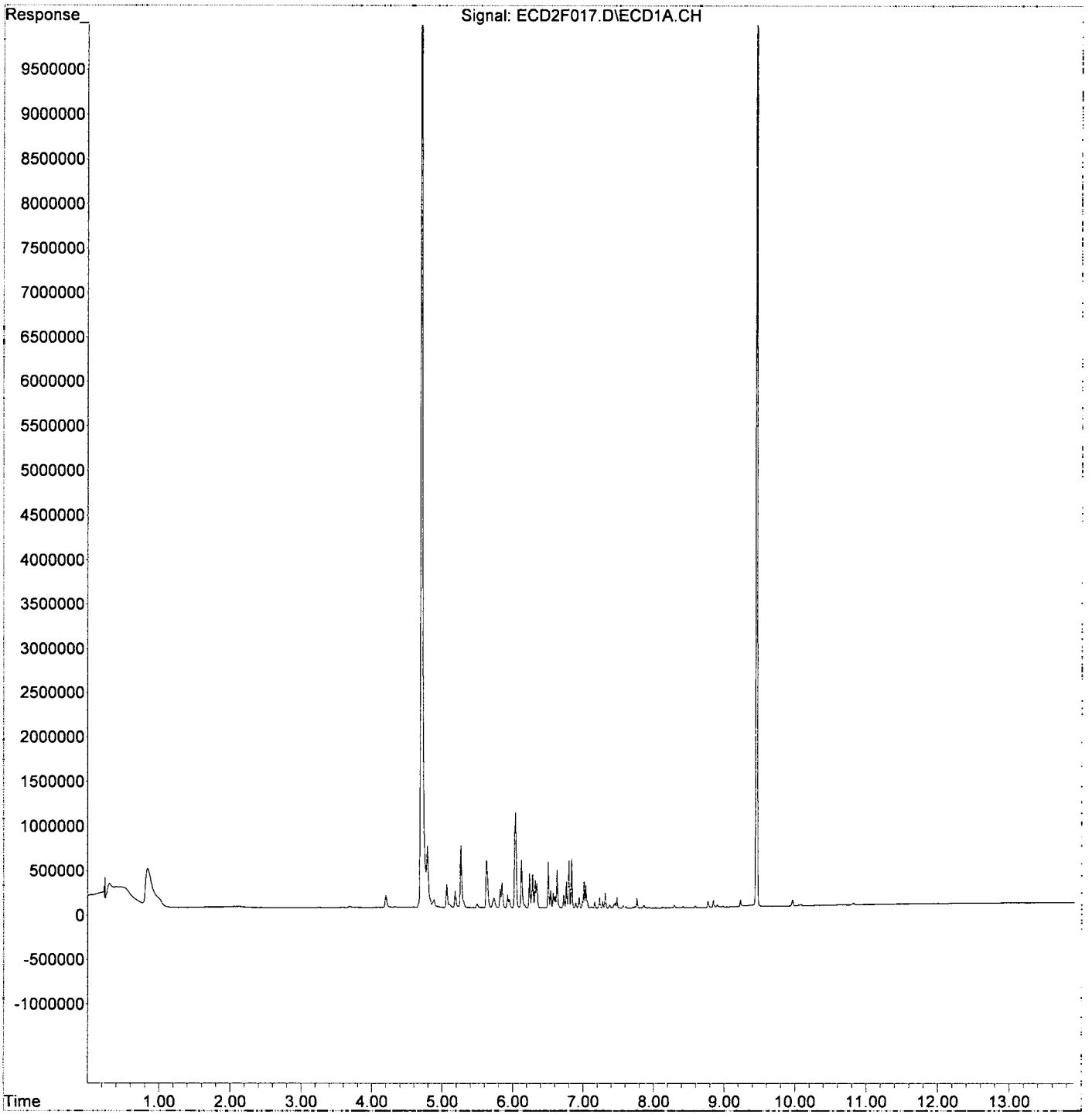
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9A30022\
Data File : ECD2F017.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 12:43 pm
Operator : MJB / KAK
Sample : 9A30022-CAL9
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:22:53 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:20:47 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:01 pm
Operator : MJB / KAK
Sample : 9A30022-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:26:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:23:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 2/31/19

	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)	5.625	987676	409.353	ng/ml
21)	Aroclor 1242 (2)	6.037	2022510	407.520	ng/ml
22)	Aroclor 1242 (3)	6.121	1072299	409.685	ng/ml
23)	Aroclor 1242 (4)	6.280	804816	409.825	ng/ml
24)	Aroclor 1242 (5)	6.502	1105651	416.965	ng/ml
25)	Aroclor 1242 (6)	6.626	932280	433.467	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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:01 pm
Operator : MJB / KAK
Sample : 9A30022-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:26:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:23:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

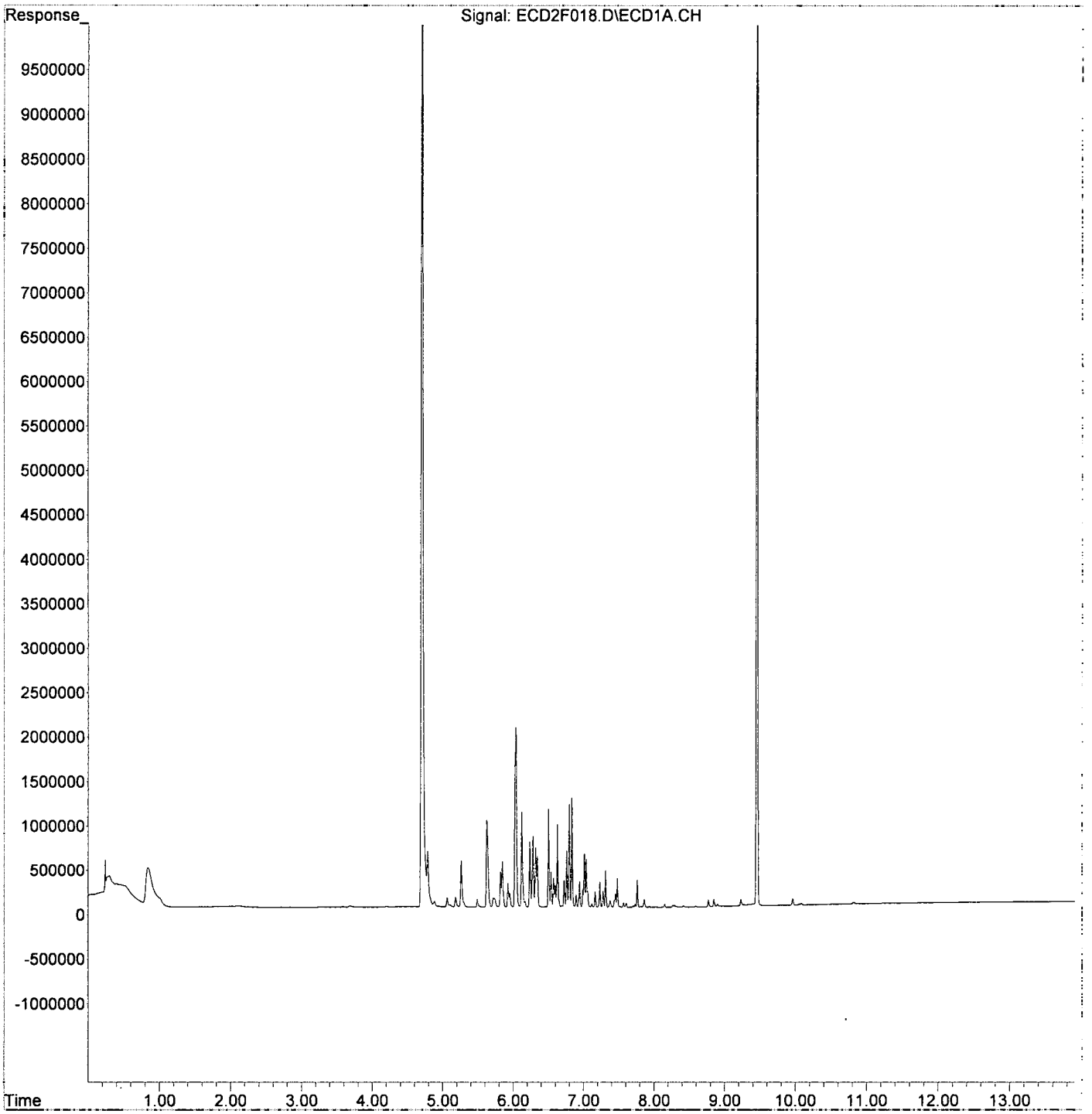
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	0.000	0	N.D.	ng/mld
56)	Aroclor 1268 (2)	0.000	0	N.D.	ng/mld
57)	Aroclor 1268 (3)	0.000	0	N.D.	ng/mld
58)	Aroclor 1268 (4)	0.000	0	N.D.	ng/mld
59)	Aroclor 1268 (5)	0.000	0	N.D.	ng/mld
60)	Aroclor 1268 (6)	0.000	0	N.D.	ng/mld
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/mld

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F018.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:01 pm
Operator : MJB / KAK
Sample : 9A30022-CALA
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:26:10 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:23:00 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:19 pm
Operator : MJB / KAK
Sample : 9A30022-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:28:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:26:17 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 2/11/19

	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)	6.036	1170759	399.526	ng/ml
28)	Aroclor 1248 (2)	6.280	1432383	427.907	ng/ml
29)	Aroclor 1248 (3)	6.501	1716021	426.531	ng/ml
30)	Aroclor 1248 (4)	6.795	1940511	424.512	ng/ml
31)	Aroclor 1248 (5)	6.832	2107467	428.895	ng/ml
32)	Aroclor 1248 (6)	7.310	1128247	441.723	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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:19 pm
Operator : MJB / KAK
Sample : 9A30022-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:28:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:26:17 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

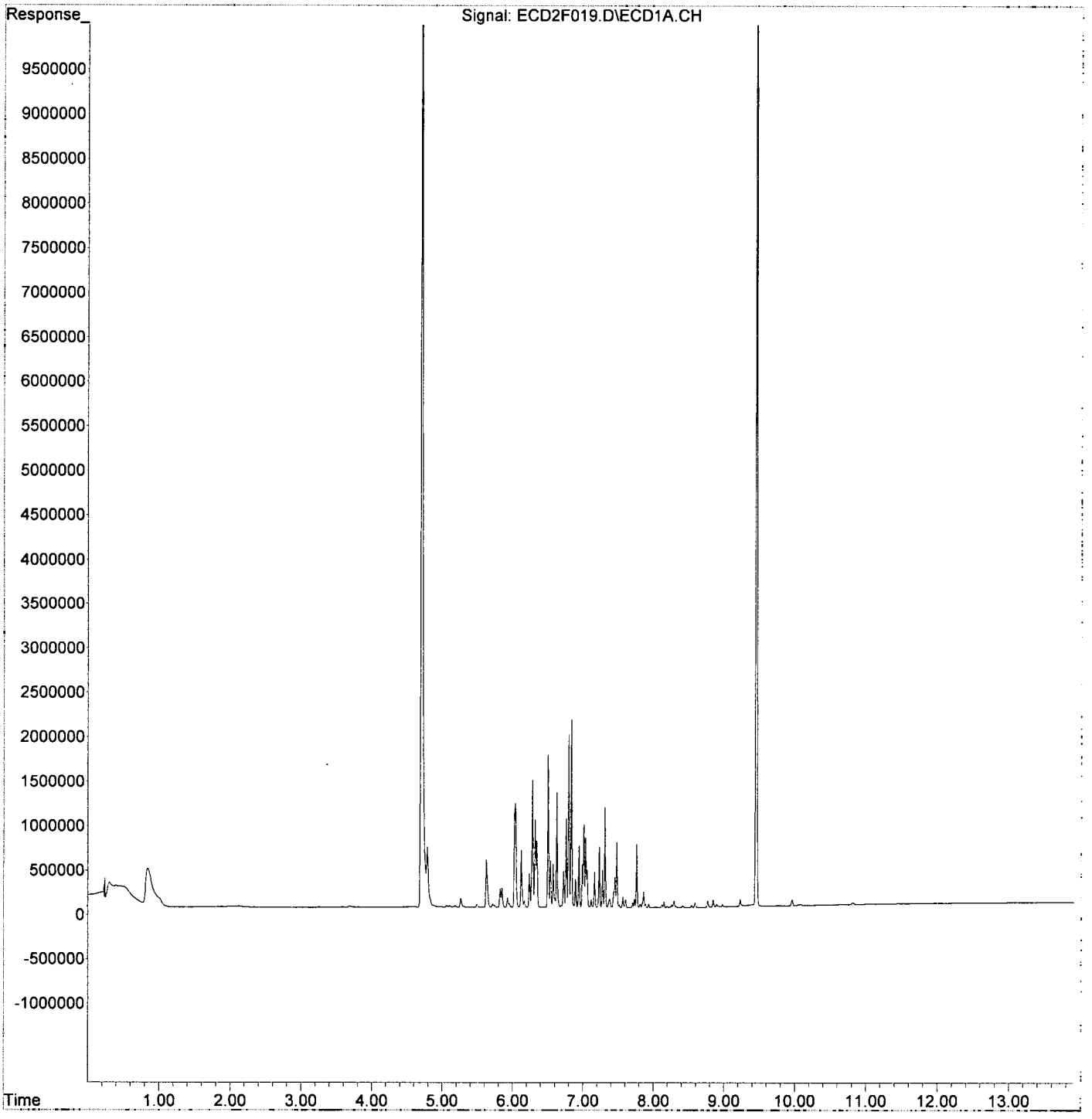
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9A30022\
Data File : ECD2F019.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:19 pm
Operator : MJB / KAK
Sample : 9A30022-CALB
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:28:11 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:26:17 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:37 pm
Operator : MJB / KAK
Sample : 9A30022-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:30:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:28:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	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)	6.831	2141739	426.557	ng/ml
35)	Aroclor 1254 (2)	6.943	2698448	466.581	ng/ml
36)	Aroclor 1254 (3)	7.313	3961152	471.451	ng/ml
37)	Aroclor 1254 (4)	7.479	2639339	454.500	ng/ml
38)	Aroclor 1254 (5)	7.860	2668520	462.794	ng/ml
39)	Aroclor 1254 (6)	8.151	900972	462.327	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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:37 pm
Operator : MJB / KAK
Sample : 9A30022-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:30:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:28:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

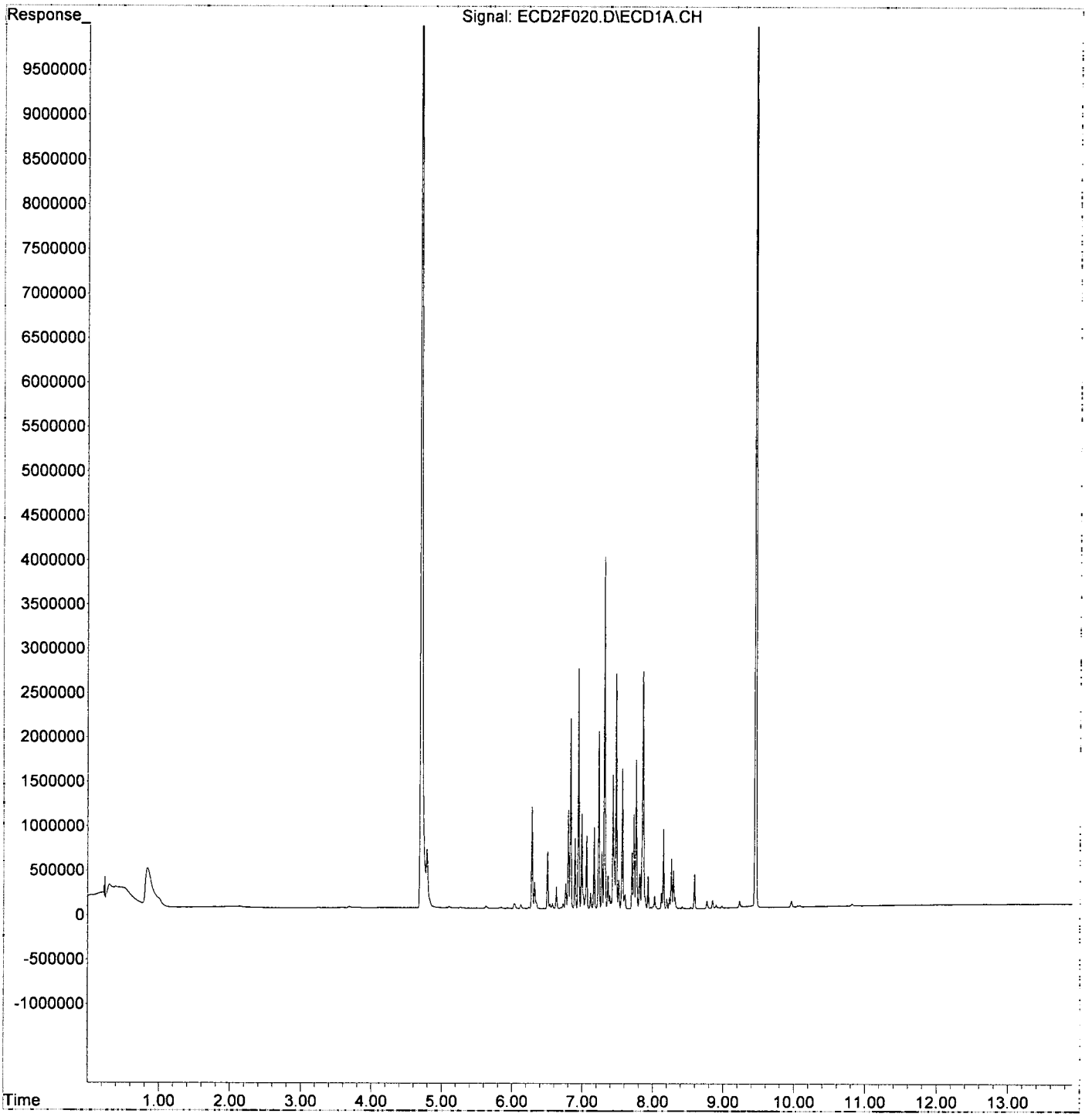
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9A30022\
Data File : ECD2F020.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:37 pm
Operator : MJB / KAK
Sample : 9A30022-CALC
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:30:31 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:28:39 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:55 pm
Operator : MJB / KAK
Sample : 9A30022-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:32:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:30:40 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MB 1/31/19

	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\9A30022\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:55 pm
Operator : MJB / KAK
Sample : 9A30022-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:32:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:30:40 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

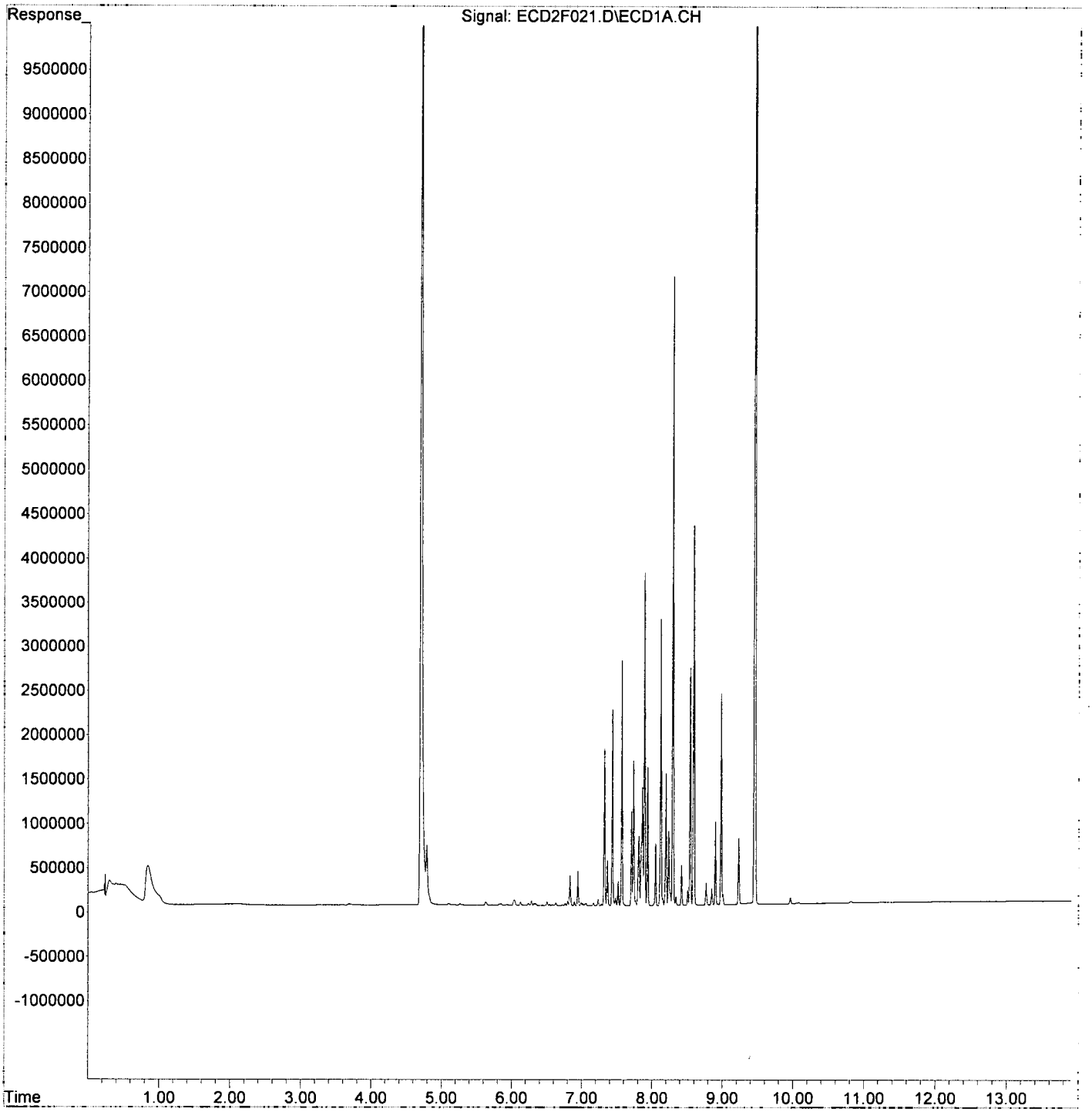
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	7.568	2758487	461.057	ng/ml
49)	Aroclor 1262 (2)	7.891	3760318	467.077	ng/ml
50)	Aroclor 1262 (3)	8.123	3225652	476.116	ng/ml
51)	Aroclor 1262 (4)	8.295	7099472	491.941	ng/ml
52)	Aroclor 1262 (5)	8.592	4283218	478.531	ng/ml
53)	Aroclor 1262 (6)	8.982	2380346	509.146	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.

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F021.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 1:55 pm
Operator : MJB / KAK
Sample : 9A30022-CALD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:32:27 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:30:40 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:13 pm
Operator : MJB / KAK
Sample : 9A30022-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:34:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:32:35 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

MJB 1/31/19

	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\9A30022\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:13 pm
Operator : MJB / KAK
Sample : 9A30022-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:34:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:32:35 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

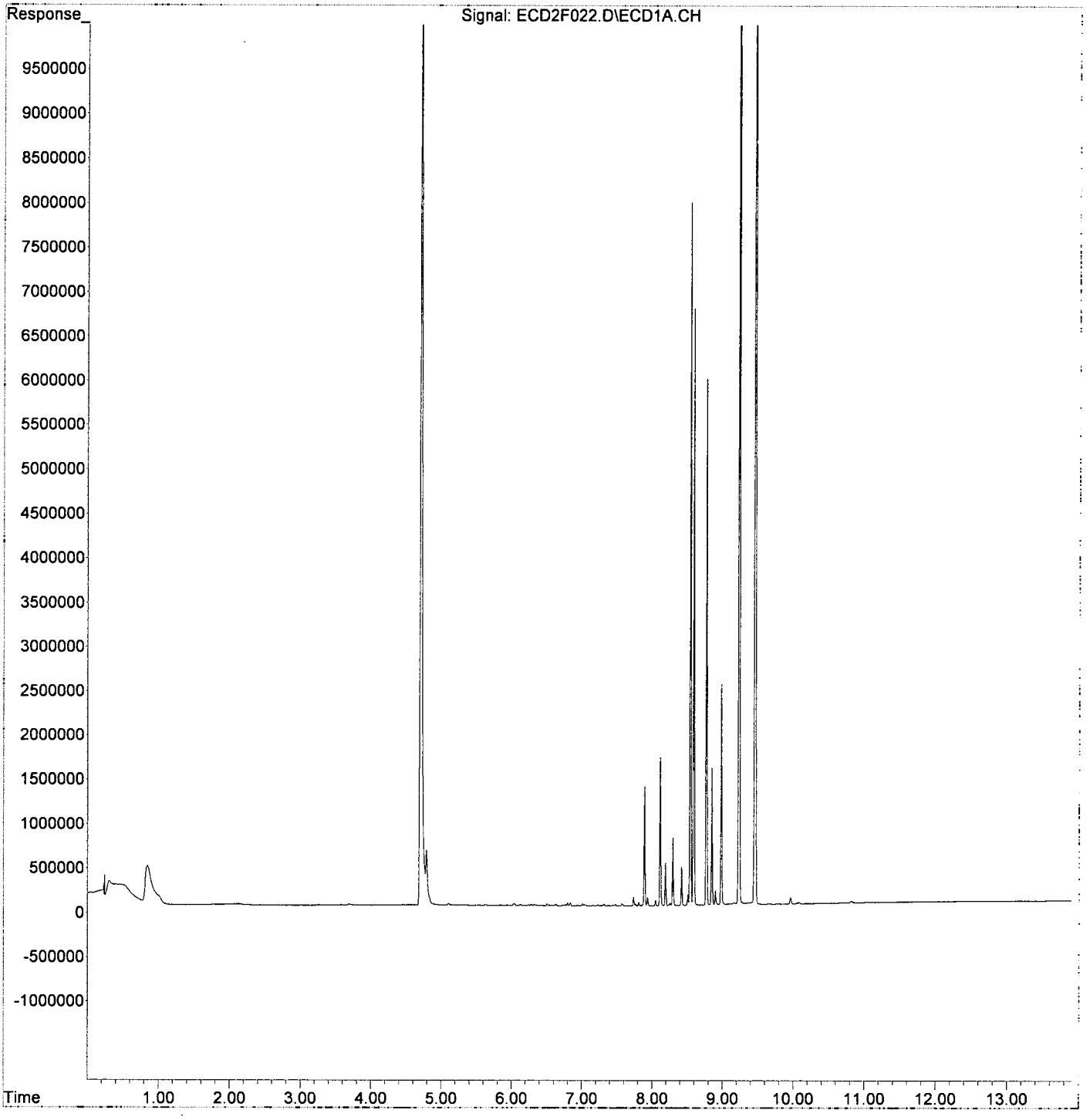
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	8.114	1667019	460.345	ng/ml
56)	Aroclor 1268 (2)	8.541	7916179	510.934	ng/ml
57)	Aroclor 1268 (3)	8.589	6735150	514.533	ng/ml
58)	Aroclor 1268 (4)	8.770	5939659	482.992	ng/ml
59)	Aroclor 1268 (5)	8.981	2489468	480.313	ng/ml
60)	Aroclor 1268 (6)	9.232	17229580	546.243	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9A30022\
Data File : ECD2F022.D
Signal(s) : ECD1A.CH
Acq On : 30 Jan 2019 2:13 pm
Operator : MJB / KAK
Sample : 9A30022-CALE
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: PCB1.e
Quant Time: Jan 31 10:34:17 2019
Quant Method : K:\METHODS\FECD2_QUANTPCB_190130.M
Quant Title : PCB Data Analysis
QLast Update : Thu Jan 31 10:32:35 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Polychlorinated Biphenyls by EPA 8082A
Calibration Data

Sequence 9E10007 (Cal ID A9E1302) DUALECD2R

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E10007**	Instrument:	**DUALECD2R**
Date:	**05/10/19 07:12**	Calibration:	**A9E1302**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E10007-ICB1	Water	QC	QC				A19E080
2	9E10007-CAL1	Water	QC	QC				A19A143
3	9E10007-CAL2	Water	QC	QC				A19A144
4	9E10007-CAL3	Water	QC	QC				A19A145
5	9E10007-CAL4	Water	QC	QC				A19A146
6	9E10007-CAL5	Water	QC	QC				A19A140
7	9E10007-CAL6	Water	QC	QC				A19A141
8	9E10007-CAL7	Water	QC	QC				A19A142
9	9E10007-ICV1	Water	QC	QC				A19B136
10	9E10007-CAL8	Water	QC	QC				A19C090
11	9E10007-CAL9	Water	QC	QC				A19C091
12	9E10007-CALA	Water	QC	QC				A19C092
13	9E10007-CALB	Water	QC	QC				A19C093
14	9E10007-CALC	Water	QC	QC				A19C094
15	9E10007-CALD	Water	QC	QC				A19C095
16	9E10007-CALE	Water	QC	QC				A19C096
17	9E10007-ICV2	Water	QC	QC				A19B137
18	9E10007-ICV3	Water	QC	QC				A19D327
19	9E10007-ICV4	Water	QC	QC				A19B138
20	9E10007-ICV5	Water	QC	QC				A19B057

Data Entered By: 5/13/19

Data Reviewed By: 5/13/19

Comments: Calibration

Calibration Status Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_190510.M
Title : PCB Data Analysis
Last Update : Mon May 13 10:55:30 2019
Response Via : Initial Calibration

A9E1302 5/13/19

#	ID	Conc	ISTD Conc	Path\File
1	1	10	0	K:\DATA\9E10007\ECD2R006.D
2	2	25	0	K:\DATA\9E10007\ECD2R007.D
3	3	50	0	K:\DATA\9E10007\ECD2R008.D
4	4	100	0	K:\DATA\9E10007\ECD2R009.D
5	5	250	0	K:\DATA\9E10007\ECD2R021.D
6	6	500	0	K:\DATA\9E10007\ECD2R011.D
7	7	800	0	K:\DATA\9E10007\ECD2R012.D

#	ID	Update Time	Quant Time	Acquisition Time
1	1	May 13 10:53 2019	May 13 10:26 2019	10 May 2019 9:21
2	2	May 13 10:53 2019	May 13 10:28 2019	10 May 2019 9:39
3	3	May 13 10:53 2019	May 13 10:29 2019	10 May 2019 9:57
4	4	May 13 10:53 2019	May 13 10:30 2019	10 May 2019 10:15
5	5	May 13 10:55 2019	May 13 10:51 2019	10 May 2019 13:52
6	6	May 13 10:53 2019	May 13 10:33 2019	10 May 2019 10:51
7	7	May 13 10:54 2019	May 13 10:35 2019	10 May 2019 11:09

RECD2_QUANTPCB_190510.M Mon May 13 13:00:00 2019

Response Factor Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_190510.M
Title : PCB Data Analysis
Last Update : Mon May 13 10:55:30 2019
Response Via : Initial Calibration

5/13/19

Calibration Files
1 =ECD2R006.D 2 =ECD2R007.D 3 =ECD2R008.D
4 =ECD2R009.D 5 =ECD2R021.D 6 =ECD2R011.D

		Compound	1	2	3	4	5	6	Avg		%RSD	
1)	S	TCMX (S)	1.798	1.890	1.905	1.936	2.051	2.208	2.007	E5	8.63	
2)		Aroclor 1016 ...	5.803	5.702	5.789	5.582	5.381	5.607	5.640	E3	2.55	✓
3)		Aroclor 1016 ...	1.128	1.138	1.187	1.156	1.129	1.140	1.150	E4	2.03	✓
4)		Aroclor 1016 ...	5.024	5.022	5.349	5.024	4.826	5.046	5.055	E3	3.06	✓
5)		Aroclor 1016 ...	6.494	6.043	5.865	5.528	5.138	5.202	5.605	E3	9.91	✓
6)		Aroclor 1016 ...	8.042	7.044	6.955	6.485	5.914	5.643	6.568	E3	12.89	✓
7)		Aroclor 1016 (6)	8.155	7.303	6.943	6.470	6.119	6.040	6.704	E3	12.20	✓
8)		Aroclor 1016 ...							0.000		-1.00	
9)		Aroclor 1221 (1)					1.763		1.763	E3	0.00	
10)		Aroclor 1221 (2)					1.659		1.659	E3	0.00	
11)		Aroclor 1221 (3)					5.618		5.618	E3	0.00	
12)		Aroclor 1221 ...							0.000		-1.00	
13)		Aroclor 1232 (1)					4.548		4.548	E3	0.00	
14)		Aroclor 1232 (2)					2.797		2.797	E3	0.00	
15)		Aroclor 1232 (3)					5.272		5.272	E3	0.00	
16)		Aroclor 1232 (4)					2.079		2.079	E3	0.00	
17)		Aroclor 1232 (5)					2.382		2.382	E3	0.00	
18)		Aroclor 1232 (6)					2.473		2.473	E3	0.00	
19)		Aroclor 1232 ...							0.000		-1.00	
20)		Aroclor 1242 ...					5.012		5.012	E3	0.00	
21)		Aroclor 1242 ...					9.711		9.711	E3	0.00	
22)		Aroclor 1242 ...					4.410		4.410	E3	0.00	
23)		Aroclor 1242 ...					4.214		4.214	E3	0.00	
24)		Aroclor 1242 ...					4.912		4.912	E3	0.00	
25)		Aroclor 1242 (6)					5.143		5.143	E3	0.00	
26)		Aroclor 1242 ...							0.000		-1.00	
27)		Aroclor 1248 ...					5.861		5.861	E3	0.00	
28)		Aroclor 1248 ...					7.668		7.668	E3	0.00	
29)		Aroclor 1248 ...					7.134		7.134	E3	0.00	
30)		Aroclor 1248 ...					8.477		8.477	E3	0.00	
31)		Aroclor 1248 ...					1.101		1.101	E4	0.00	
32)		Aroclor 1248 (6)					9.668		9.668	E3	0.00	
33)		Aroclor 1248 ...							0.000		-1.00	
34)		Aroclor 1254 ...					1.096		1.096	E4	0.00	
35)		Aroclor 1254 ...					1.798		1.798	E4	0.00	
36)		Aroclor 1254 ...					1.956		1.956	E4	0.00	
37)		Aroclor 1254 ...					1.461		1.461	E4	0.00	
38)		Aroclor 1254 ...					1.478		1.478	E4	0.00	
39)		Aroclor 1254 (6)					4.388		4.388	E3	0.00	
40)		Aroclor 1254 ...							0.000		-1.00	
41)		Aroclor 1260 ...	1.522	1.429	1.394	1.299	1.223	1.196	1.326	E4	9.39	✓
42)		Aroclor 1260 ...	1.855	1.743	1.755	1.558	1.489	1.525	1.637	E4	8.78	✓
43)		Aroclor 1260 (3)	1.790	1.723	1.686	1.626	1.522	1.523	1.625	E4	6.90	✓
44)		Aroclor 1260 (4)	2.894	2.704	2.886	2.717	2.656	2.778	2.766	E4	3.32	✓
45)		Aroclor 1260 (5)	1.708	1.594	1.626	1.497	1.458	1.508	1.570	E4	5.53	✓
46)		Aroclor 1260 (6)	7.197	6.663	6.705	6.311	5.982	5.823	6.404	E3	7.48	✓
47)		Aroclor 1260 ...							0.000		-1.00	
48)		Aroclor 1262 (1)					1.324		1.324	E4	0.00	
49)		Aroclor 1262 (2)					1.802		1.802	E4	0.00	
50)		Aroclor 1262 (3)					1.482		1.482	E4	0.00	
51)		Aroclor 1262 (4)					3.330		3.330	E4	0.00	
52)		Aroclor 1262 (5)					1.890		1.890	E4	0.00	
53)		Aroclor 1262 (6)					8.783		8.783	E3	0.00	
54)		Aroclor 1262 ...							0.000		-1.00	
55)		Aroclor 1268 (1)					7.787		7.787	E3	0.00	
56)		Aroclor 1268 (2)					3.626		3.626	E4	0.00	
57)		Aroclor 1268 (3)					2.935		2.935	E4	0.00	
58)		Aroclor 1268 (4)					2.538		2.538	E4	0.00	
59)		Aroclor 1268 (5)					9.560		9.560	E3	0.00	
60)		Aroclor 1268 (6)					6.919		6.919	E4	0.00	

Response Factor Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_190510.M
Title : PCB Data Analysis
Last Update : Mon May 13 10:55:30 2019
Response Via : Initial Calibration

Calibration Files
1 =ECD2R006.D 2 =ECD2R007.D 3 =ECD2R008.D
4 =ECD2R009.D 5 =ECD2R021.D 6 =ECD2R011.D

	Compound	1	2	3	4	5	6	Avg	%RSD
61)	Aroclor 1268 ...							0.000	-1.00
62) S	DCBP (S)	1.292	1.329	1.334	1.350	1.331	1.443	1.367 E5	5.22

(#) = Out of Range ### Number of calibration levels exceeded format ###

Compound List Report HP G1530A

Method Path : L:\Methods\
Method File : RECD2_QUANTPCB_190510.M
Title : PCB Data Analysis
Last Update : Mon May 13 10:55:30 2019
Response Via : Initial Calibration

Total Cpnds : 62

5/13/19

PK#		Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX (S)	5.542	1.000	A	H	R
2		Aroclor 1016 (1)	6.213	1.000	A	H	R
3		Aroclor 1016 (2)	6.701	1.000	A	H	R
4		Aroclor 1016 (3)	6.827	1.000	A	H	R
5		Aroclor 1016 (4)	6.915	1.000	A	H	R
6		Aroclor 1016 (5)	6.960	1.000	A	H	R
7		Aroclor 1016 (6)	7.084	1.000	A	H	R
8		Aroclor 1016 - AVE	1.594	1.000	A	H	R
9		Aroclor 1221 (1)	5.715	1.000	A	H	R
10		Aroclor 1221 (2)	5.789	1.000	A	H	R
11		Aroclor 1221 (3)	5.876	1.000	A	H	R
12		Aroclor 1221 - AVE	1.594	1.000	A	H	R
13		Aroclor 1232 (1)	5.875	1.000	A	H	R
14		Aroclor 1232 (2)	6.212	1.000	A	H	R
15		Aroclor 1232 (3)	6.701	1.000	A	H	R
16		Aroclor 1232 (4)	6.914	1.000	A	H	R
17		Aroclor 1232 (5)	6.959	1.000	A	H	R
18		Aroclor 1232 (6)	7.083	1.000	A	H	R
19		Aroclor 1232 - AVE	1.594	1.000	A	H	R
20		Aroclor 1242 (1)	6.213	1.000	A	H	R
21		Aroclor 1242 (2)	6.701	1.000	A	H	R
22		Aroclor 1242 (3)	6.827	1.000	A	H	R
23		Aroclor 1242 (4)	6.915	1.000	A	H	R
24		Aroclor 1242 (5)	6.959	1.000	A	H	R
25		Aroclor 1242 (6)	7.084	1.000	A	H	R
26		Aroclor 1242 - AVE	1.594	1.000	A	H	R
27		Aroclor 1248 (1)	6.674	1.000	A	H	R
28		Aroclor 1248 (2)	6.915	1.000	A	H	R
29		Aroclor 1248 (3)	6.960	1.000	A	H	R
30		Aroclor 1248 (4)	7.084	1.000	A	H	R
31		Aroclor 1248 (5)	7.447	1.000	A	H	R
32		Aroclor 1248 (6)	7.604	1.000	A	H	R
33		Aroclor 1248 - AVE	1.594	1.000	A	H	R
34		Aroclor 1254 (1)	7.425	1.000	A	H	R
35		Aroclor 1254 (2)	7.607	1.000	A	H	R
36		Aroclor 1254 (3)	7.916	1.000	A	H	R
37		Aroclor 1254 (4)	8.154	1.000	A	H	R
38		Aroclor 1254 (5)	8.487	1.000	A	H	R
39		Aroclor 1254 (6)	8.714	1.000	A	H	R
40		Aroclor 1254 - AVE	1.594	1.000	A	H	R
41		Aroclor 1260 (1)	8.052	1.000	A	H	R
42		Aroclor 1260 (2)	8.258	1.000	A	H	R
43		Aroclor 1260 (3)	8.488	1.000	A	H	R
44		Aroclor 1260 (4)	8.967	1.000	A	H	R
45		Aroclor 1260 (5)	9.215	1.000	A	H	R
46		Aroclor 1260 (6)	9.755	1.000	A	H	R
47		Aroclor 1260 - AVE	1.594	1.000	A	H	R
48		Aroclor 1262 (1)	8.258	1.000	A	H	R
49		Aroclor 1262 (2)	8.558	1.000	A	H	R
50		Aroclor 1262 (3)	8.733	1.000	A	H	R
51		Aroclor 1262 (4)	8.968	1.000	A	H	R
52		Aroclor 1262 (5)	9.215	1.000	A	H	R
53		Aroclor 1262 (6)	9.755	1.000	A	H	R
54		Aroclor 1262 - AVE	1.594	1.000	A	H	R
55		Aroclor 1268 (1)	8.775	1.000	A	H	R
56		Aroclor 1268 (2)	9.217	1.000	A	H	R

57		Aroclor 1268 (3)	9.279	1.000	A	H	R
58		Aroclor 1268 (4)	9.481	1.000	A	H	R
59		Aroclor 1268 (5)	9.754	1.000	A	H	R
60		Aroclor 1268 (6)	10.087	1.000	A	H	R
61		Aroclor 1268 - AVE	1.593	1.000	A	H	R
62	S	DCBP (S)	10.382	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_190510.M Mon May 13 12:59:48 2019

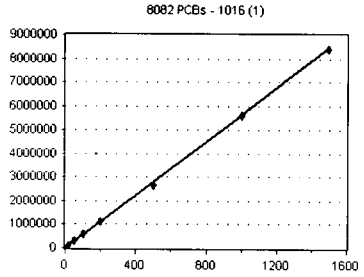
Element Calibration Review Sheet

Calibration ID: **A9E1302** Instrument: **DUALECD2R** Calibration Date: **05/13/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19051**

1016 (1)

Curve Fit: **AVERAGE RF**

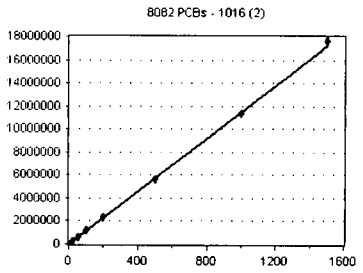


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	116054	5802.700	6.21
9E10007-CAL2	50	285124	5702.480	6.21
9E10007-CAL3	100	578887	5788.870	6.21
9E10007-CAL4	200	1116431	5582.155	6.21
9E10007-CAL5	500	2690652	5381.304	6.21
9E10007-CAL6	1000	5606678	5606.678	6.21
9E10007-CAL7	1500	8426866	5617.911	6.21

AVE RF **5640.300** RF RSD **2.55** AVE RT **6.21**

1016 (2)

Curve Fit: **AVERAGE RF**

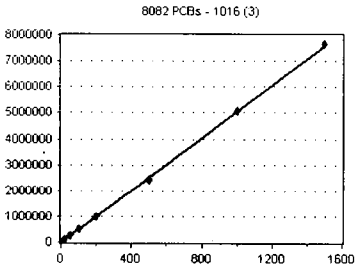


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	225582	11279.100	6.70
9E10007-CAL2	50	568799	11375.980	6.70
9E10007-CAL3	100	1186640	11866.400	6.70
9E10007-CAL4	200	2311269	11556.340	6.70
9E10007-CAL5	500	5642930	11285.860	6.70
9E10007-CAL6	1000	140101E+07	11401.010	6.70
9E10007-CAL7	1500	764364E+07	11762.430	6.70

AVE RF **11503.870** RF RSD **2.03** AVE RT **6.70**

1016 (3)

Curve Fit: **AVERAGE RF**

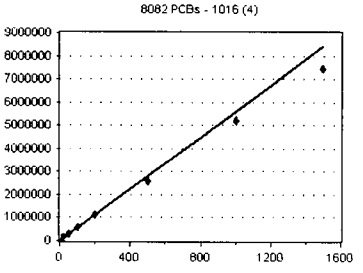


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	100489	5024.450	6.83
9E10007-CAL2	50	251083	5021.660	6.83
9E10007-CAL3	100	534910	5349.100	6.83
9E10007-CAL4	200	1004900	5024.500	6.83
9E10007-CAL5	500	2413067	4826.134	6.83
9E10007-CAL6	1000	5045944	5045.944	6.83
9E10007-CAL7	1500	7638717	5092.478	6.83

AVE RF **5054.895** RF RSD **3.06** AVE RT **6.83**

1016 (4)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	129888	6494.400	6.92
9E10007-CAL2	50	302145	6042.900	6.92
9E10007-CAL3	100	586477	5864.770	6.91
9E10007-CAL4	200	1105693	5528.465	6.92
9E10007-CAL5	500	2569232	5138.464	6.92
9E10007-CAL6	1000	5201537	5201.537	6.92
9E10007-CAL7	1500	7443209	4962.139	6.92

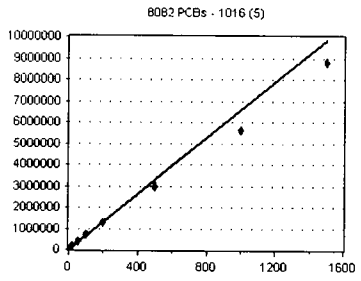
AVE RF **5604.668** RF RSD **9.91** AVE RT **6.92**

Element Calibration Review Sheet

Calibration ID: **A9E1302** Instrument: **DUALECD2R** Calibration Date: **05/13/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19051**

1016 (5)

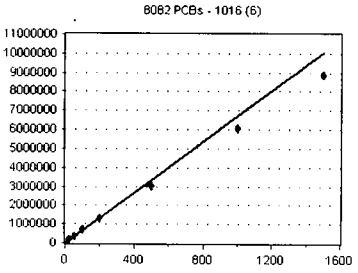


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	160845	8042.250	6.96
9E10007-CAL2	50	352218	7044.360	6.96
9E10007-CAL3	100	695454	6954.540	6.96
9E10007-CAL4	200	1297000	6485.000	6.96
9E10007-CAL5	500	2957001	5914.002	6.96
9E10007-CAL6	1000	5643242	5643.242	6.96
9E10007-CAL7	1500	8836476	5890.984	6.96

AVE RF **6567.768** RF RSD **12.89** AVE RT **6.96**

1016 (6)

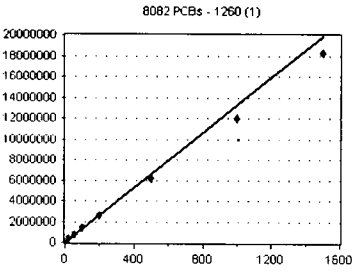


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	163101	8155.050	7.08
9E10007-CAL2	50	365156	7303.120	7.08
9E10007-CAL3	100	694252	6942.520	7.08
9E10007-CAL4	200	1294057	6470.285	7.08
9E10007-CAL5	500	3059317	6118.634	7.08
9E10007-CAL6	1000	6039685	6039.685	7.08
9E10007-CAL7	1500	8845396	5896.931	7.08

AVE RF **6703.746** RF RSD **12.20** AVE RT **7.08**

1260 (1)

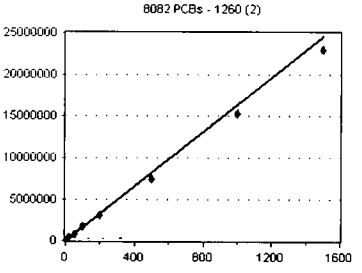


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	304484	15224.200	8.05
9E10007-CAL2	50	714269	14285.380	8.05
9E10007-CAL3	100	1394024	13940.240	8.05
9E10007-CAL4	200	2597161	12985.800	8.05
9E10007-CAL5	500	6112828	12225.660	8.05
9E10007-CAL6	1000	196212E+07	11962.120	8.05
9E10007-CAL7	1500	831917E+07	12212.780	8.05

AVE RF **13262.310** RF RSD **9.39** AVE RT **8.05**

1260 (2)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	370928	18546.400	8.26
9E10007-CAL2	50	871274	17425.480	8.26
9E10007-CAL3	100	1754618	17546.180	8.26
9E10007-CAL4	200	3116655	15583.280	8.26
9E10007-CAL5	500	7443557	14887.110	8.26
9E10007-CAL6	1000	524879E+07	15248.790	8.26
9E10007-CAL7	1500	299494E+07	15329.960	8.26

AVE RF **16366.740** RF RSD **8.78** AVE RT **8.26**

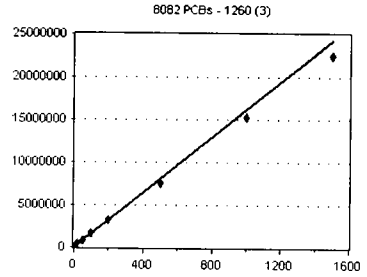
Element Calibration Review Sheet

Calibration ID: **A9E1302** Instrument: **DUALECD2R** Calibration Date: **05/13/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19051**

1260 (3)

Curve Fit: **AVERAGE RF**

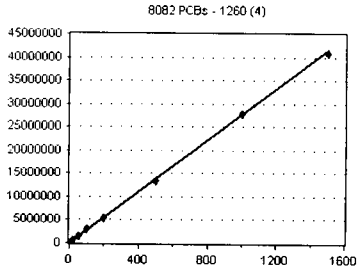


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	358034	17901.700	8.49
9E10007-CAL2	50	861685	17233.700	8.49
9E10007-CAL3	100	1685960	16859.600	8.49
9E10007-CAL4	200	3252229	16261.140	8.49
9E10007-CAL5	500	7611739	15223.480	8.49
9E10007-CAL6	1000	.52323E+07	15232.300	8.49
9E10007-CAL7	1500	260668E+07	15071.120	8.49

AVE RF **16254.720** RF RSD **6.90** AVE RT **8.49**

1260 (4)

Curve Fit: **AVERAGE RF**

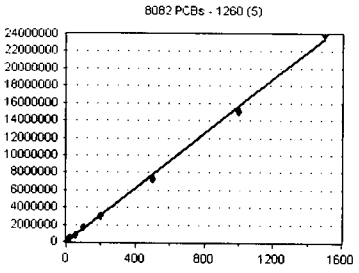


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	578868	28943.400	8.97
9E10007-CAL2	50	1352236	27044.720	8.97
9E10007-CAL3	100	2886363	28863.630	8.97
9E10007-CAL4	200	5434998	27174.990	8.97
9E10007-CAL5	500	327827E+07	26556.540	8.97
9E10007-CAL6	1000	777573E+07	27775.730	8.97
9E10007-CAL7	1500	094089E+07	27293.930	8.97

AVE RF **27664.710** RF RSD **3.32** AVE RT **8.97**

1260 (5)

Curve Fit: **AVERAGE RF**

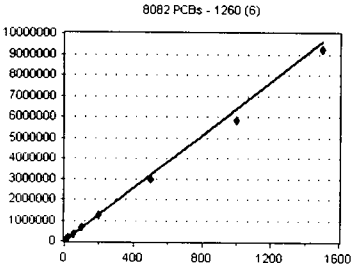


Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	341531	17076.550	9.22
9E10007-CAL2	50	796772	15935.440	9.21
9E10007-CAL3	100	1626089	16260.890	9.21
9E10007-CAL4	200	2994314	14971.570	9.22
9E10007-CAL5	500	7288274	14576.550	9.22
9E10007-CAL6	1000	507962E+07	15079.620	9.22
9E10007-CAL7	1500	396139E+07	15974.260	9.22

AVE RF **15696.410** RF RSD **5.53** AVE RT **9.22**

1260 (6)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	20	143948	7197.400	9.76
9E10007-CAL2	50	333154	6663.080	9.76
9E10007-CAL3	100	670533	6705.330	9.76
9E10007-CAL4	200	1262202	6311.010	9.76
9E10007-CAL5	500	2990992	5981.984	9.76
9E10007-CAL6	1000	5822993	5822.993	9.76
9E10007-CAL7	1500	9221750	6147.833	9.76

AVE RF **6404.233** RF RSD **7.48** AVE RT **9.76**

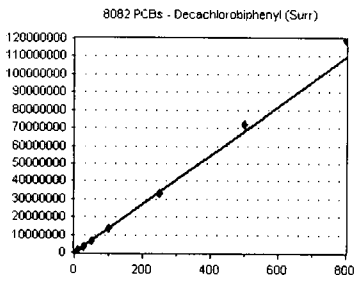
Element Calibration Review Sheet

Calibration ID: **A9E1302** Instrument: **DUALECD2R** Calibration Date: **05/13/2019**

Analysis: **8082 PCBs** Instrument Cal ID: **RECD2_QUANTPCB_19051**

Decachlorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E10007-CAL1	10	1292237	129223.700	10.38
9E10007-CAL2	25	3322463	132898.500	10.38
9E10007-CAL3	50	6667741	133354.800	10.38
9E10007-CAL4	100	349713E+07	134971.300	10.38
9E10007-CAL5	250	326891E+07	133075.600	10.38
9E10007-CAL6	500	215693E+07	144313.900	10.38
9E10007-CAL7	800	191491E+08	148936.400	10.38

AVE RF **136682.000** RF RSD **5.22** AVE RT **10.38**

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9E10007

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
9E10007-ICB1	Initial Cal Blank	Water	A19E080		5/10/2019 9:03:00AM
9E10007-CAL1	Cal Standard	Water	A19A143	"	5/10/2019 9:21:00AM
9E10007-CAL2	Cal Standard	Water	A19A144	"	5/10/2019 9:39:00AM
9E10007-CAL3	Cal Standard	Water	A19A145	"	5/10/2019 9:57:00AM
9E10007-CAL4	Cal Standard	Water	A19A146	"	5/10/2019 10:15:00AM
9E10007-CAL5	Cal Standard	Water	A19A140	"	5/10/2019 10:33:00AM
9E10007-CAL6	Cal Standard	Water	A19A141	"	5/10/2019 10:51:00AM
9E10007-CAL7	Cal Standard	Water	A19A142	"	5/10/2019 11:09:00AM
9E10007-ICV1	Initial Cal Check	Water	A19B136	"	5/10/2019 11:45:00AM
9E10007-CAL8	Cal Standard	Water	A19C090	"	5/10/2019 12:03:00PM
9E10007-CAL9	Cal Standard	Water	A19C091	"	5/10/2019 12:21:00PM
9E10007-CALA	Cal Standard	Water	A19C092	"	5/10/2019 12:39:00PM
9E10007-CALB	Cal Standard	Water	A19C093	"	5/10/2019 12:57:00PM
9E10007-CALC	Cal Standard	Water	A19C094	"	5/10/2019 1:15:00PM
9E10007-CALD	Cal Standard	Water	A19C095	"	5/10/2019 1:33:00PM
9E10007-CALE	Cal Standard	Water	A19C096	"	5/10/2019 1:52:00PM
9E10007-ICV2	Initial Cal Check	Water	A19B137	"	5/10/2019 2:10:00PM
9E10007-ICV3	Initial Cal Check	Water	A19D327	"	5/10/2019 2:28:00PM
9E10007-ICV4	Initial Cal Check	Water	A19B138	"	5/10/2019 2:46:00PM
9E10007-ICV5	Initial Cal Check	Water	A19B057	"	5/10/2019 3:04:00PM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9E1302** Instrument: **DUALECD2R**

1311/8082 TCLP PCBs Sequence: 9E10007 Matrix: Water

9E10007-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	
Aroclor 1016	0.0000	0.00	20.0	0	
Aroclor 1260	0.0000	0.00	20.0	0	

9E10007-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9E10007

Aroclor 1016	0.0000	0.00	50.0	0	
Aroclor 1260	0.0000	0.00	50.0	0	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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	
9E10007-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: 9E10007

9E10007-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	

9E10007-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: **A9E1302** Instrument: **DUALECD2R**

8082 PCBs - Low Level (1000/ Sequence: **9E10007** Matrix: **Water**

9E10007-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\9E10007\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:03
Operator : MJB / KAK
Sample : 9E10007-ICB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:07:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

clear

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.539	18723474	93.290 ng/ml
62) S	DCBP (S)	10.384	12912630	94.472 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.211	2657	0.471 ng/ml
3)	Aroclor 1016 (2)	6.705	2849	0.248 ng/ml
4)	Aroclor 1016 (3)	6.830	4609	0.912 ng/ml
5)	Aroclor 1016 (4)	6.915	2807	0.501 ng/ml
6)	Aroclor 1016 (5)	6.966	2373	0.361 ng/ml
7)	Aroclor 1016 (6)	7.083	1615	0.241 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.713	26149	14.831 ng/ml
10)	Aroclor 1221 (2)	5.802	11585	6.981 ng/ml
11)	Aroclor 1221 (3)	5.860	254430	45.287 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.860	254430	55.939 ng/ml
14)	Aroclor 1232 (2)	6.211	2657	0.950 ng/ml
15)	Aroclor 1232 (3)	6.705	2849	0.540 ng/ml
16)	Aroclor 1232 (4)	6.915	2807	1.350 ng/ml
17)	Aroclor 1232 (5)	6.966	2373	0.996 ng/ml
18)	Aroclor 1232 (6)	7.083	1615	0.653 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.211	2657	0.530 ng/ml
21)	Aroclor 1242 (2)	6.705	2849	0.293 ng/ml
22)	Aroclor 1242 (3)	6.830	4609	1.045 ng/ml
23)	Aroclor 1242 (4)	6.915	2807	0.666 ng/ml
24)	Aroclor 1242 (5)	6.966	2373	0.483 ng/ml
25)	Aroclor 1242 (6)	7.083	1615	0.314 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.667	1892	0.323 ng/ml
28)	Aroclor 1248 (2)	6.915	2807	0.366 ng/ml
29)	Aroclor 1248 (3)	6.966	2373	0.333 ng/ml
30)	Aroclor 1248 (4)	7.083	1615	0.191 ng/ml
31)	Aroclor 1248 (5)	7.451	1352	0.123 ng/ml
32)	Aroclor 1248 (6)	7.586	4679	0.484 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.427	1208	0.110 ng/ml
35)	Aroclor 1254 (2)	7.586	4679	0.260 ng/ml
36)	Aroclor 1254 (3)	7.913	3966	0.203 ng/ml
37)	Aroclor 1254 (4)	8.160	2431	0.166 ng/ml
38)	Aroclor 1254 (5)	8.482	892	0.060 ng/ml
39)	Aroclor 1254 (6)	8.712	899	0.205 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.039	1682	0.127 ng/ml
42)	Aroclor 1260 (2)	8.260	2791	0.171 ng/ml
43)	Aroclor 1260 (3)	8.482	892	0.055 ng/ml
44)	Aroclor 1260 (4)	8.965	2534	0.092 ng/ml
45)	Aroclor 1260 (5)	9.217	5046	0.321 ng/ml
46)	Aroclor 1260 (6)	9.768	15276	2.385 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

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Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:03
Operator : MJB / KAK
Sample : 9E10007-ICB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:07:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30.2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped.

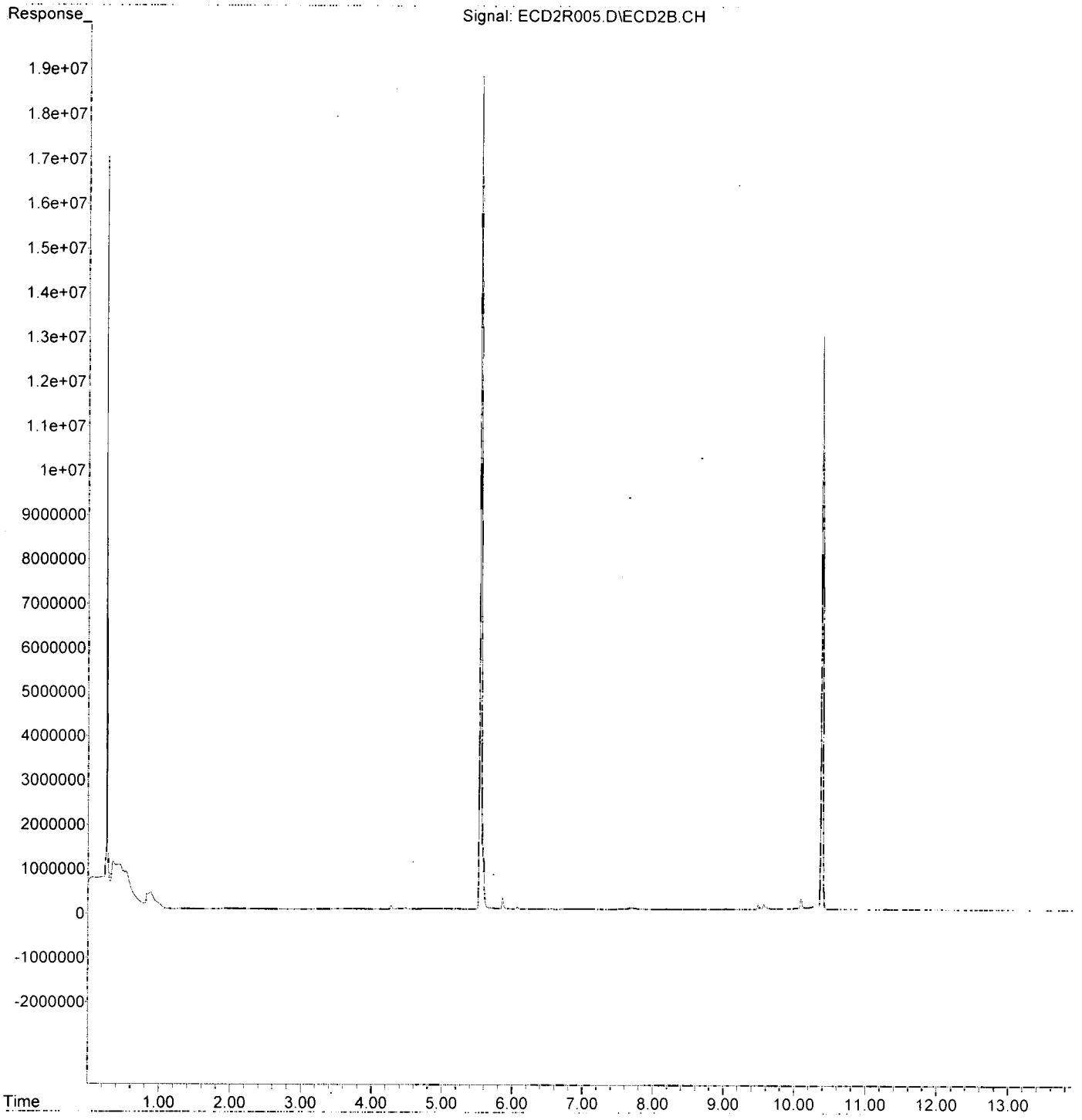
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.260	2791	0.211 ng/ml
49)	Aroclor 1262 (2)	8.556	1179	0.065 ng/ml
50)	Aroclor 1262 (3)	8.731	1027	0.069 ng/ml
51)	Aroclor 1262 (4)	8.970	2457	0.074 ng/ml
52)	Aroclor 1262 (5)	9.217	5046	0.267 ng/ml
53)	Aroclor 1262 (6)	9.768	15276	1.739 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.779	1437	0.184 ng/ml
56)	Aroclor 1268 (2)	9.217	5046	0.139 ng/ml
57)	Aroclor 1268 (3)	9.285	5822	0.198 ng/ml
58)	Aroclor 1268 (4)	9.486	110350	4.348 ng/ml
59)	Aroclor 1268 (5)	9.768	15276	1.598 ng/ml
60)	Aroclor 1268 (6)	10.091	239421	3.460 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\9E10007\
Data File : ECD2R005.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:03
Operator : MJB / KAK
Sample : 9E10007-ICB1
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:07:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:45
Operator : MJB / KAK
Sample : 9E10007-ICV1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

1016, 1260

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.540	35243350	175.601	ng/ml
62) S	DCBP (S)	10.380	24420679	178.668	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.212	3188473	565.302	ng/ml
3)	Aroclor 1016 (2)	6.700	5932603	515.705	ng/ml
4)	Aroclor 1016 (3)	6.827	2719700	538.033	ng/ml
5)	Aroclor 1016 (4)	6.915	2743038	489.420	ng/ml
6)	Aroclor 1016 (5)	6.959	2991730	455.517	ng/ml
7)	Aroclor 1016 (6)	7.083	3080828	459.568	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.703	256208	145.317	ng/ml
10)	Aroclor 1221 (2)	5.789	402294	242.420	ng/ml
11)	Aroclor 1221 (3)	5.876	1776903	316.276	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.876	1776903	390.666	ng/ml
14)	Aroclor 1232 (2)	6.212	3188473	1139.788	ng/ml
15)	Aroclor 1232 (3)	6.700	5932603	1125.304	ng/ml
16)	Aroclor 1232 (4)	6.915	2743038	1319.475	ng/ml
17)	Aroclor 1232 (5)	6.959	2991730	1255.930	ng/ml
18)	Aroclor 1232 (6)	7.083	3080828	1245.796	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.212	3188473	636.186	ng/ml
21)	Aroclor 1242 (2)	6.700	5932603	610.929	ng/ml
22)	Aroclor 1242 (3)	6.827	2719700	616.762	ng/ml
23)	Aroclor 1242 (4)	6.915	2743038	650.916	ng/ml
24)	Aroclor 1242 (5)	6.959	2991730	609.092	ng/ml
25)	Aroclor 1242 (6)	7.083	3080828	599.079	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.674	5183229	884.344	ng/ml
28)	Aroclor 1248 (2)	6.915	2743038	357.719	ng/ml
29)	Aroclor 1248 (3)	6.959	2991730	419.386	ng/ml
30)	Aroclor 1248 (4)	7.083	3080828	363.453	ng/ml
31)	Aroclor 1248 (5)	7.424	2511544	228.078	ng/ml
32)	Aroclor 1248 (6)	7.606	2989868	309.259	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.424	2511544	229.253	ng/ml
35)	Aroclor 1254 (2)	7.606	2989868	166.319	ng/ml
36)	Aroclor 1254 (3)	7.915	1598276	81.696	ng/ml
37)	Aroclor 1254 (4)	8.154	1031098	70.566	ng/ml
38)	Aroclor 1254 (5)	8.488	9184454	621.402	ng/ml
39)	Aroclor 1254 (6)	8.707	1221559	278.379	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.051	7064226	532.654	ng/ml
42)	Aroclor 1260 (2)	8.257	8842772	540.289	ng/ml
43)	Aroclor 1260 (3)	8.488	9184454	565.033	ng/ml
44)	Aroclor 1260 (4)	8.967	13280266	480.044	ng/ml
45)	Aroclor 1260 (5)	9.214	7350533	468.294	ng/ml
46)	Aroclor 1260 (6)	9.754	2400109	374.769	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

503.92

493.51

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Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:45
Operator : MJB / KAK
Sample : 9E10007-ICV1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

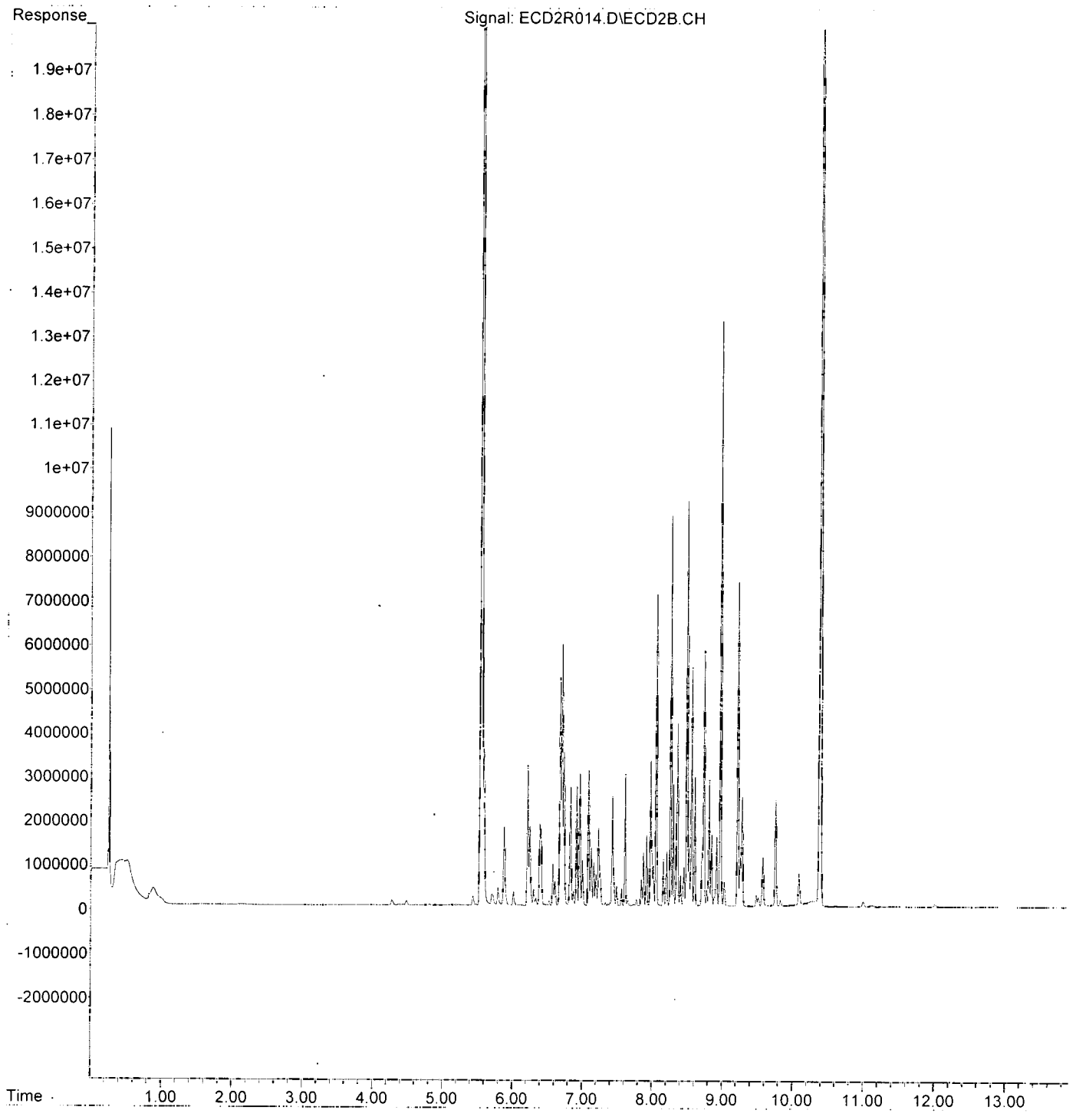
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.257	8842772	667.997 ng/ml
49)	Aroclor 1262 (2)	8.557	5397366	299.556 ng/ml
50)	Aroclor 1262 (3)	8.733	5820798	392.803 ng/ml
51)	Aroclor 1262 (4)	8.967	13280266	398.786 ng/ml
52)	Aroclor 1262 (5)	9.214	7350533	388.960 ng/ml
53)	Aroclor 1262 (6)	9.754	2400109	273.279 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.774	374627	48.110 ng/ml
56)	Aroclor 1268 (2)	9.214	7350533	202.720 ng/ml
57)	Aroclor 1268 (3)	9.276	2476873	84.405 ng/ml
58)	Aroclor 1268 (4)	9.481	259227	10.215 ng/ml
59)	Aroclor 1268 (5)	9.754	2400109	251.064 ng/ml
60)	Aroclor 1268 (6)	10.085	744160	10.756 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\9E10007\
Data File : ECD2R014.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:45
Operator : MJB / KAK
Sample : 9E10007-ICV1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:25 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:10
Operator : MJB / KAK
Sample : 9E10007-ICV2
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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1221, 1254

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.540	7229977	36.024	ng/ml	
62) S	DCBP (S)	10.381	11170779	81.728	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.213	443516	78.633	ng/ml	
3)	Aroclor 1016 (2)	6.701	814330	70.787	ng/ml	
4)	Aroclor 1016 (3)	6.828	384410	76.047	ng/ml	
5)	Aroclor 1016 (4)	6.915	2888957	515.456	ng/ml	
6)	Aroclor 1016 (5)	6.960	730908	111.287	ng/ml	
7)	Aroclor 1016 (6)	7.084	1536922	229.263	ng/ml	
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml	
9)	Aroclor 1221 (1)	5.717	1491348	845.867	ng/ml	866.40
10)	Aroclor 1221 (2)	5.790	1455381	877.005	ng/ml	
11)	Aroclor 1221 (3)	5.876	4923388	876.328	ng/ml	
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml	
13)	Aroclor 1232 (1)	5.876	4923388	1082.447	ng/ml	
14)	Aroclor 1232 (2)	6.213	443516	158.544	ng/ml	
15)	Aroclor 1232 (3)	6.701	814330	154.463	ng/ml	
16)	Aroclor 1232 (4)	6.915	2888957	1389.666	ng/ml	
17)	Aroclor 1232 (5)	6.960	730908	306.836	ng/ml	
18)	Aroclor 1232 (6)	7.084	1536922	621.486	ng/ml	
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml	
20)	Aroclor 1242 (1)	6.213	443516	88.493	ng/ml	
21)	Aroclor 1242 (2)	6.701	814330	83.858	ng/ml	
22)	Aroclor 1242 (3)	6.828	384410	87.175	ng/ml	
23)	Aroclor 1242 (4)	6.915	2888957	685.543	ng/ml	
24)	Aroclor 1242 (5)	6.960	730908	148.807	ng/ml	
25)	Aroclor 1242 (6)	7.084	1536922	298.861	ng/ml	
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml	
27)	Aroclor 1248 (1)	6.674	649106	110.748	ng/ml	
28)	Aroclor 1248 (2)	6.915	2888957	376.748	ng/ml	
29)	Aroclor 1248 (3)	6.960	730908	102.460	ng/ml	
30)	Aroclor 1248 (4)	7.084	1536922	181.314	ng/ml	
31)	Aroclor 1248 (5)	7.448	2556768	232.185	ng/ml	
32)	Aroclor 1248 (6)	7.607	8070141	834.739	ng/ml	
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml	
34)	Aroclor 1254 (1)	7.425	5025462	458.723	ng/ml	452.99
35)	Aroclor 1254 (2)	7.607	8070141	448.922	ng/ml	
36)	Aroclor 1254 (3)	7.915	8670361	443.188	ng/ml	
37)	Aroclor 1254 (4)	8.154	6229893	426.359	ng/ml	
38)	Aroclor 1254 (5)	8.487	7062772	477.853	ng/ml	
39)	Aroclor 1254 (6)	8.714	2031243	462.897	ng/ml	
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml	
41)	Aroclor 1260 (1)	8.051	3317731	250.162	ng/ml	
42)	Aroclor 1260 (2)	8.258	4211650	257.330	ng/ml	
43)	Aroclor 1260 (3)	8.487	7062772	434.506	ng/ml	
44)	Aroclor 1260 (4)	8.966	1463708	52.909	ng/ml	
45)	Aroclor 1260 (5)	9.214	1034786	65.925	ng/ml	
46)	Aroclor 1260 (6)	9.754	187970	29.351	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:10
Operator : MJB / KAK
Sample : 9E10007-ICV2
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

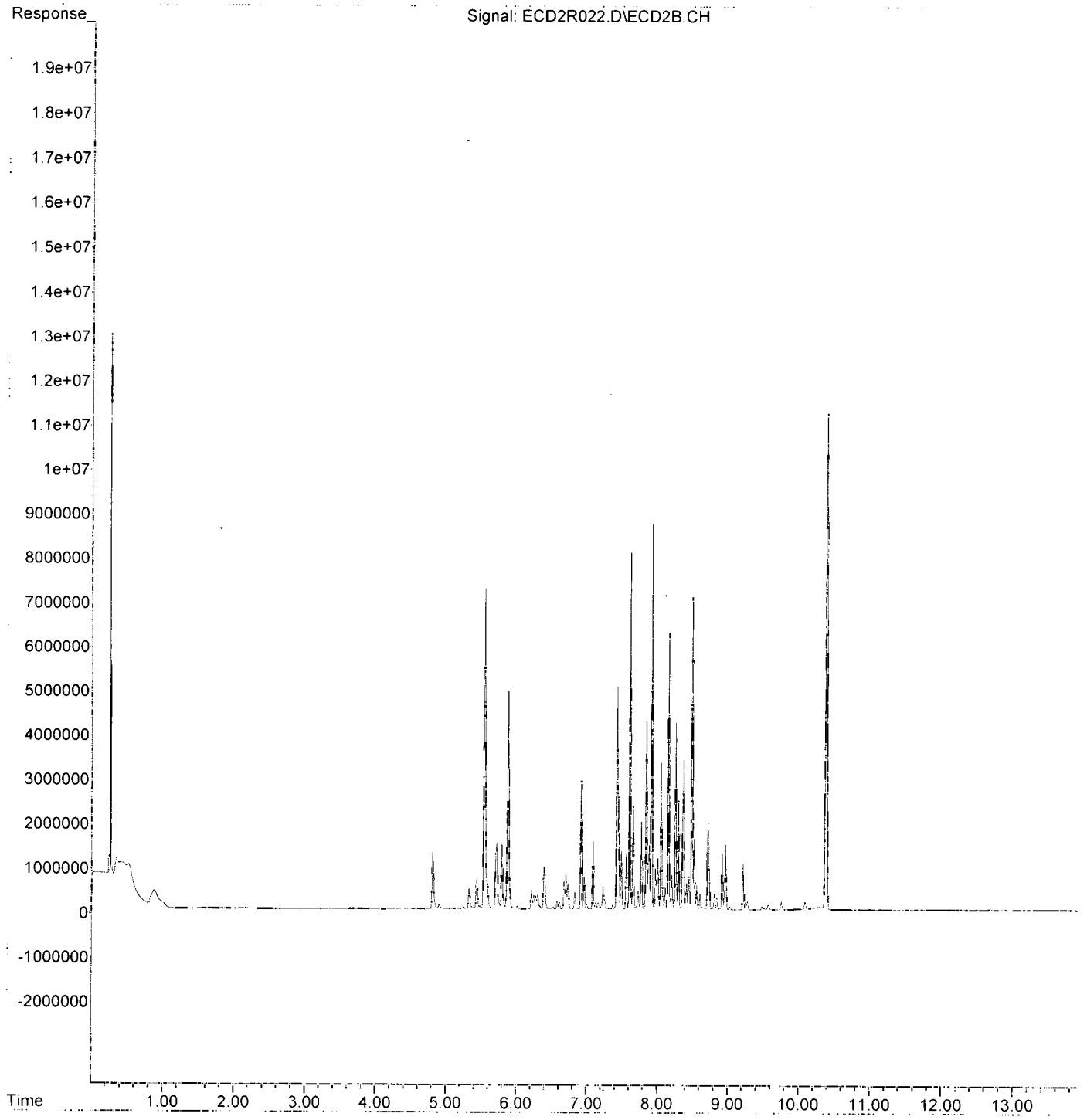
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.258	4211650	318.155	ng/ml
49)	Aroclor 1262 (2)	8.557	550582	30.558	ng/ml
50)	Aroclor 1262 (3)	8.714	2031243	137.074	ng/ml
51)	Aroclor 1262 (4)	8.966	1463708	43.953	ng/ml
52)	Aroclor 1262 (5)	9.214	1034786	54.757	ng/ml
53)	Aroclor 1262 (6)	9.754	187970	21.402	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.776	65221	8.376	ng/ml
56)	Aroclor 1268 (2)	9.214	1034786	28.538	ng/ml
57)	Aroclor 1268 (3)	9.276	191055	6.511	ng/ml
58)	Aroclor 1268 (4)	9.482	79744	3.142	ng/ml
59)	Aroclor 1268 (5)	9.754	187970	19.663	ng/ml
60)	Aroclor 1268 (6)	10.088	182326	2.635	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\9E10007\
Data File : ECD2R022.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:10
Operator : MJB / KAK
Sample : 9E10007-ICV2
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:45 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:28
Operator : MJB / KAK
Sample : 9E10007-ICV3
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.540	7234388	36.046 ng/ml
62) S	DCBP (S)	10.381	10907137	79.799 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.212	1371959	243.242 ng/ml
3)	Aroclor 1016 (2)	6.701	2635075	229.060 ng/ml
4)	Aroclor 1016 (3)	6.827	1210199	239.411 ng/ml
5)	Aroclor 1016 (4)	6.914	1104424	197.054 ng/ml
6)	Aroclor 1016 (5)	6.959	1212784	184.657 ng/ml
7)	Aroclor 1016 (6)	7.083	1285917	191.821 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.715	543778	308.422 ng/ml
10)	Aroclor 1221 (2)	5.790	572890	345.220 ng/ml
11)	Aroclor 1221 (3)	5.876	2090712	372.132 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.876	2090712	459.660 ng/ml
14)	Aroclor 1232 (2)	6.212	1371959	490.436 ng/ml
15)	Aroclor 1232 (3)	6.701	2635075	499.825 ng/ml
16)	Aroclor 1232 (4)	6.914	1104424	531.258 ng/ml
17)	Aroclor 1232 (5)	6.959	1212784	509.127 ng/ml
18)	Aroclor 1232 (6)	7.083	1285917	519.987 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.212	1371959	273.743 ng/ml
21)	Aroclor 1242 (2)	6.701	2635075	271.356 ng/ml
22)	Aroclor 1242 (3)	6.827	1210199	274.444 ng/ml
23)	Aroclor 1242 (4)	6.914	1104424	262.077 ng/ml
24)	Aroclor 1242 (5)	6.959	1212784	246.913 ng/ml
25)	Aroclor 1242 (6)	7.083	1285917	250.052 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.674	2170050	370.246 ng/ml
28)	Aroclor 1248 (2)	6.914	1104424	144.028 ng/ml
29)	Aroclor 1248 (3)	6.959	1212784	170.010 ng/ml
30)	Aroclor 1248 (4)	7.083	1285917	151.703 ng/ml
31)	Aroclor 1248 (5)	7.448	1531316	139.062 ng/ml
32)	Aroclor 1248 (6)	7.605	1997998	206.664 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.427	1498432	136.776 ng/ml
35)	Aroclor 1254 (2)	7.605	1997998	111.144 ng/ml
36)	Aroclor 1254 (3)	7.915	799219	40.852 ng/ml
37)	Aroclor 1254 (4)	8.154	620379	42.457 ng/ml
38)	Aroclor 1254 (5)	8.489	5134317	347.378 ng/ml
39)	Aroclor 1254 (6)	8.704	1559900	355.483 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.051	5103811	384.836 ng/ml
42)	Aroclor 1260 (2)	8.258	6148230	375.654 ng/ml
43)	Aroclor 1260 (3)	8.489	5134317	315.866 ng/ml
44)	Aroclor 1260 (4)	8.967	15775539	570.241 ng/ml
45)	Aroclor 1260 (5)	9.215	9192124	585.620 ng/ml
46)	Aroclor 1260 (6)	9.754	4211599	657.627 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

501.72

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:28
Operator : MJB / KAK
Sample : 9E10007-ICV3
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.258	6148230	464.447	ng/ml
49)	Aroclor 1262 (2)	8.558	8819765	489.501	ng/ml
50)	Aroclor 1262 (3)	8.733	6562433	442.851	ng/ml
51)	Aroclor 1262 (4)	8.967	15775539	473.715	ng/ml
52)	Aroclor 1262 (5)	9.215	9192124	486.409	ng/ml
53)	Aroclor 1262 (6)	9.754	4211599	479.537	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.774	929974	119.428	ng/ml
56)	Aroclor 1268 (2)	9.215	9192124	253.510	ng/ml
57)	Aroclor 1268 (3)	9.277	4852752	165.368	ng/ml
58)	Aroclor 1268 (4)	9.481	361495	14.244	ng/ml
59)	Aroclor 1268 (5)	9.754	4211599	440.555	ng/ml
60)	Aroclor 1268 (6)	10.087	1301400	18.810	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

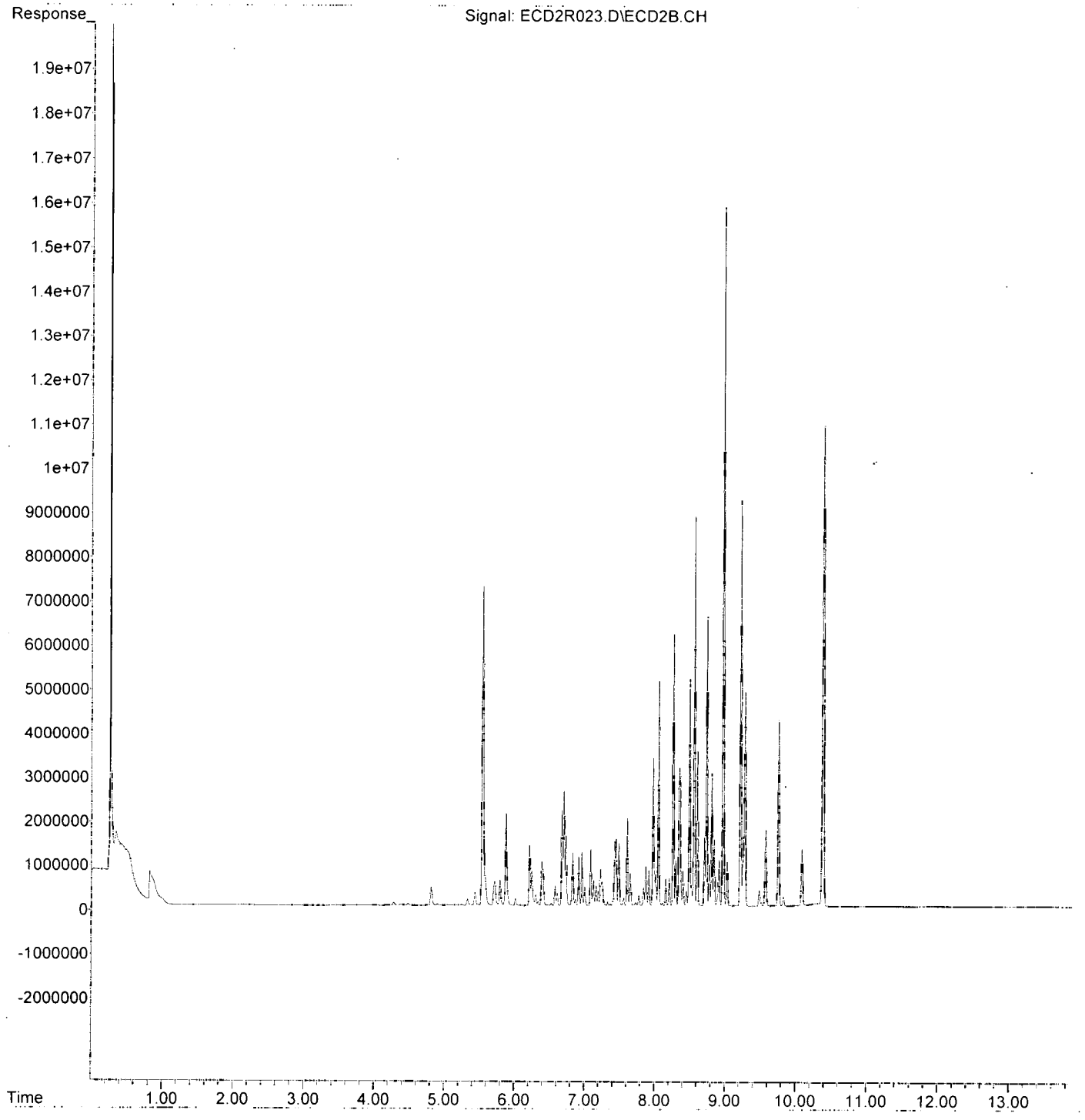
472.7A

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R023.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:28
Operator : MJB / KAK
Sample : 9E10007-ICV3
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R024.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:46
Operator : MJB / KAK
Sample : 9E10007-ICV4
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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1242, 1268

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.540	8734638	43.521	ng/ml
62) S	DCBP (S)	10.380	5955675	43.573	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	2829451	501.649	ng/ml
3)	Aroclor 1016 (2)	6.701	5478531	476.234	ng/ml
4)	Aroclor 1016 (3)	6.827	2537368	501.962	ng/ml
5)	Aroclor 1016 (4)	6.914	2297057	409.847	ng/ml
6)	Aroclor 1016 (5)	6.959	2788410	424.560	ng/ml
7)	Aroclor 1016 (6)	7.083	2817523	420.291	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.704	237902	134.934	ng/ml
10)	Aroclor 1221 (2)	5.790	382881	230.722	ng/ml
11)	Aroclor 1221 (3)	5.876	1690622	300.919	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.876	1690622	371.697	ng/ml
14)	Aroclor 1232 (2)	6.213	2829451	1011.448	ng/ml
15)	Aroclor 1232 (3)	6.701	5478531	1039.175	ng/ml
16)	Aroclor 1232 (4)	6.914	2297057	1104.946	ng/ml
17)	Aroclor 1232 (5)	6.959	2788410	1170.576	ng/ml
18)	Aroclor 1232 (6)	7.083	2817523	1139.323	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.213	2829451	564.552	ng/ml
21)	Aroclor 1242 (2)	6.701	5478531	564.170	ng/ml
22)	Aroclor 1242 (3)	6.827	2537368	575.413	ng/ml
23)	Aroclor 1242 (4)	6.914	2297057	545.086	ng/ml
24)	Aroclor 1242 (5)	6.959	2788410	567.698	ng/ml
25)	Aroclor 1242 (6)	7.083	2817523	547.879	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.674	4616434	787.639	ng/ml
28)	Aroclor 1248 (2)	6.914	2297057	299.558	ng/ml
29)	Aroclor 1248 (3)	6.959	2788410	390.885	ng/ml
30)	Aroclor 1248 (4)	7.083	2817523	332.390	ng/ml
31)	Aroclor 1248 (5)	7.447	3275066	297.414	ng/ml
32)	Aroclor 1248 (6)	7.603	2567600	265.581	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.432	2145756	195.864	ng/ml
35)	Aroclor 1254 (2)	7.603	2567600	142.829	ng/ml
36)	Aroclor 1254 (3)	7.915	956278	48.880	ng/ml
37)	Aroclor 1254 (4)	8.154	682045	46.678	ng/ml
38)	Aroclor 1254 (5)	8.490	204764	13.854	ng/ml
39)	Aroclor 1254 (6)	8.704	176922	40.318	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.051	92504	6.975	ng/ml
42)	Aroclor 1260 (2)	8.255	147391	9.006	ng/ml
43)	Aroclor 1260 (3)	8.490	204764	12.597	ng/ml
44)	Aroclor 1260 (4)	8.967	2102936	76.015	ng/ml
45)	Aroclor 1260 (5)	9.217	20048197	1277.247	ng/ml
46)	Aroclor 1260 (6)	9.755	5502925	859.263	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

560.80

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R024.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:46
Operator : MJB / KAK
Sample : 9E10007-ICV4
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.255	147391	11.134	ng/ml
49)	Aroclor 1262 (2)	8.558	3731869	207.120	ng/ml
50)	Aroclor 1262 (3)	8.733	296389	20.001	ng/ml
51)	Aroclor 1262 (4)	8.967	2102936	63.148	ng/ml
52)	Aroclor 1262 (5)	9.217	20048197	1060.868	ng/ml
53)	Aroclor 1262 (6)	9.755	5502925	626.569	ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/ml
55)	Aroclor 1268 (1)	8.775	4267812	548.077	ng/ml
56)	Aroclor 1268 (2)	9.217	20048197	552.909	ng/ml
57)	Aroclor 1268 (3)	9.279	15964421	544.022	ng/ml
58)	Aroclor 1268 (4)	9.482	13544453	533.710	ng/ml
59)	Aroclor 1268 (5)	9.755	5502925	575.634	ng/ml
60)	Aroclor 1268 (6)	10.088	37139258	536.790	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

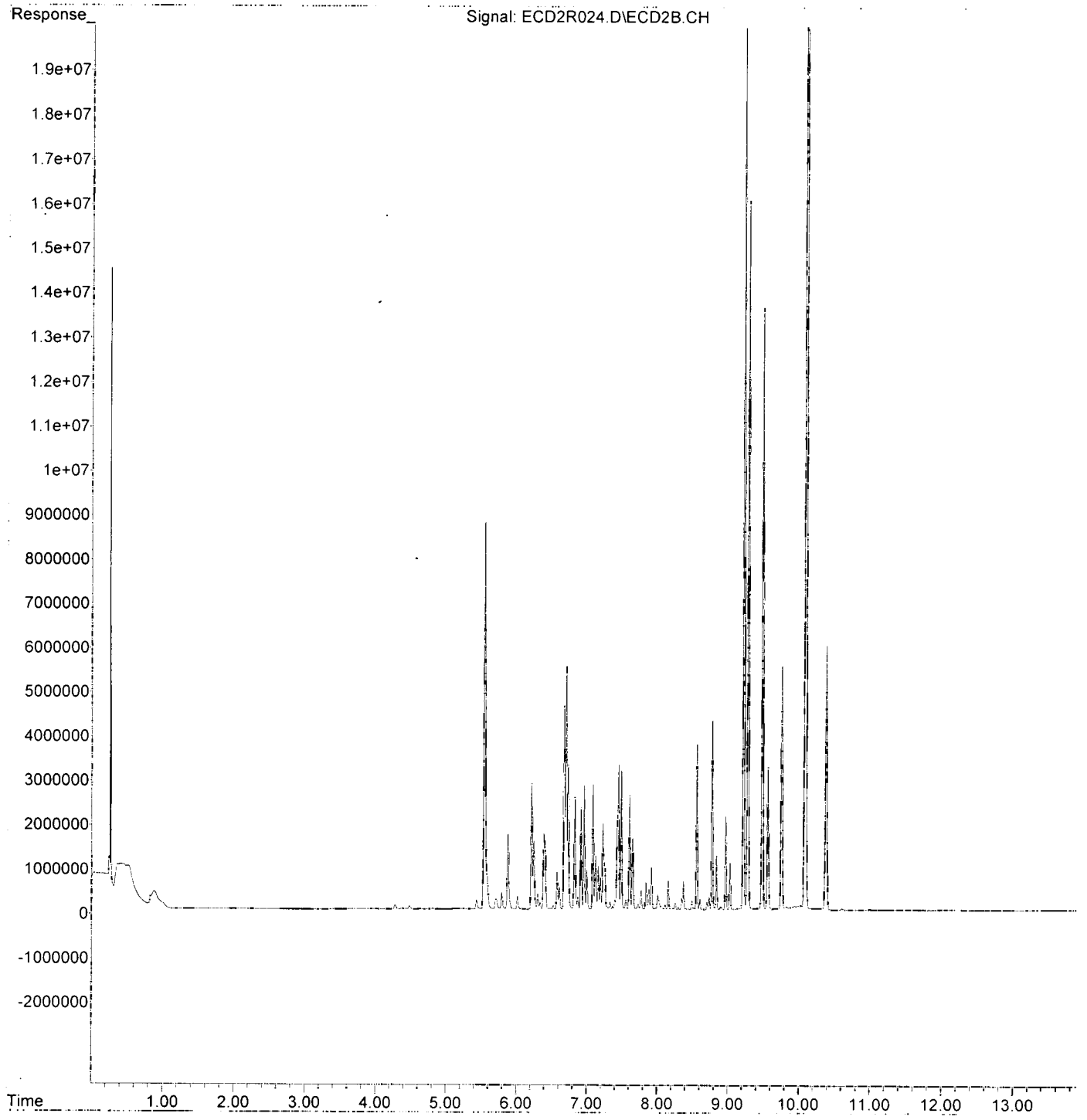
548.52

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

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R024.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 14:46
Operator : MJB / KAK
Sample : 9E10007-ICV4
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:24 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R025.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 15:04
Operator : MJB / KAK
Sample : 9E10007-ICV5
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

1248

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.538	6630	0.033	ng/ml
62) S	DCBP (S)	10.382	1861	0.014	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	1371200	243.108	ng/ml
3)	Aroclor 1016 (2)	6.700	2635783	229.121	ng/ml
4)	Aroclor 1016 (3)	6.825	1276358	252.499	ng/ml
5)	Aroclor 1016 (4)	6.914	4050941	722.780	ng/ml
6)	Aroclor 1016 (5)	6.960	3868853	589.067	ng/ml
7)	Aroclor 1016 (6)	7.084	4638035	691.857	ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/ml
9)	Aroclor 1221 (1)	5.715	29635	16.809	ng/ml
10)	Aroclor 1221 (2)	5.789	41625	25.083	ng/ml
11)	Aroclor 1221 (3)	5.877	187004	33.285	ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/ml
13)	Aroclor 1232 (1)	5.877	187004	41.114	ng/ml
14)	Aroclor 1232 (2)	6.213	1371200	490.165	ng/ml
15)	Aroclor 1232 (3)	6.700	2635783	499.959	ng/ml
16)	Aroclor 1232 (4)	6.914	4050941	1948.612	ng/ml
17)	Aroclor 1232 (5)	6.960	3868853	1624.146	ng/ml
18)	Aroclor 1232 (6)	7.084	4638035	1875.484	ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D.	ng/ml
20)	Aroclor 1242 (1)	6.213	1371200	273.591	ng/ml
21)	Aroclor 1242 (2)	6.700	2635783	271.428	ng/ml
22)	Aroclor 1242 (3)	6.825	1276358	289.447	ng/ml
23)	Aroclor 1242 (4)	6.914	4050941	961.279	ng/ml
24)	Aroclor 1242 (5)	6.960	3868853	787.667	ng/ml
25)	Aroclor 1242 (6)	7.084	4638035	901.884	ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D.	ng/ml
27)	Aroclor 1248 (1)	6.674	3034322	517.705	ng/ml
28)	Aroclor 1248 (2)	6.914	4050941	528.282	ng/ml
29)	Aroclor 1248 (3)	6.960	3868853	542.343	ng/ml
30)	Aroclor 1248 (4)	7.084	4638035	547.160	ng/ml
31)	Aroclor 1248 (5)	7.448	5803795	527.053	ng/ml
32)	Aroclor 1248 (6)	7.605	5130652	530.692	ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D.	ng/ml
34)	Aroclor 1254 (1)	7.430	3816426	348.362	ng/ml
35)	Aroclor 1254 (2)	7.605	5130652	285.405	ng/ml
36)	Aroclor 1254 (3)	7.916	2874613	146.937	ng/ml
37)	Aroclor 1254 (4)	8.154	2052210	140.448	ng/ml
38)	Aroclor 1254 (5)	8.487	475536	32.174	ng/ml
39)	Aroclor 1254 (6)	8.715	180259	41.079	ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D.	ng/ml
41)	Aroclor 1260 (1)	8.051	268459	20.242	ng/ml
42)	Aroclor 1260 (2)	8.254	337916	20.647	ng/ml
43)	Aroclor 1260 (3)	8.487	475536	29.255	ng/ml
44)	Aroclor 1260 (4)	8.966	97568	3.527	ng/ml
45)	Aroclor 1260 (5)	9.214	70281	4.478	ng/ml
46)	Aroclor 1260 (6)	9.755	20852	3.256	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

532.21

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R025.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 15:04
Operator : MJB / KAK
Sample : 9E10007-ICV5
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

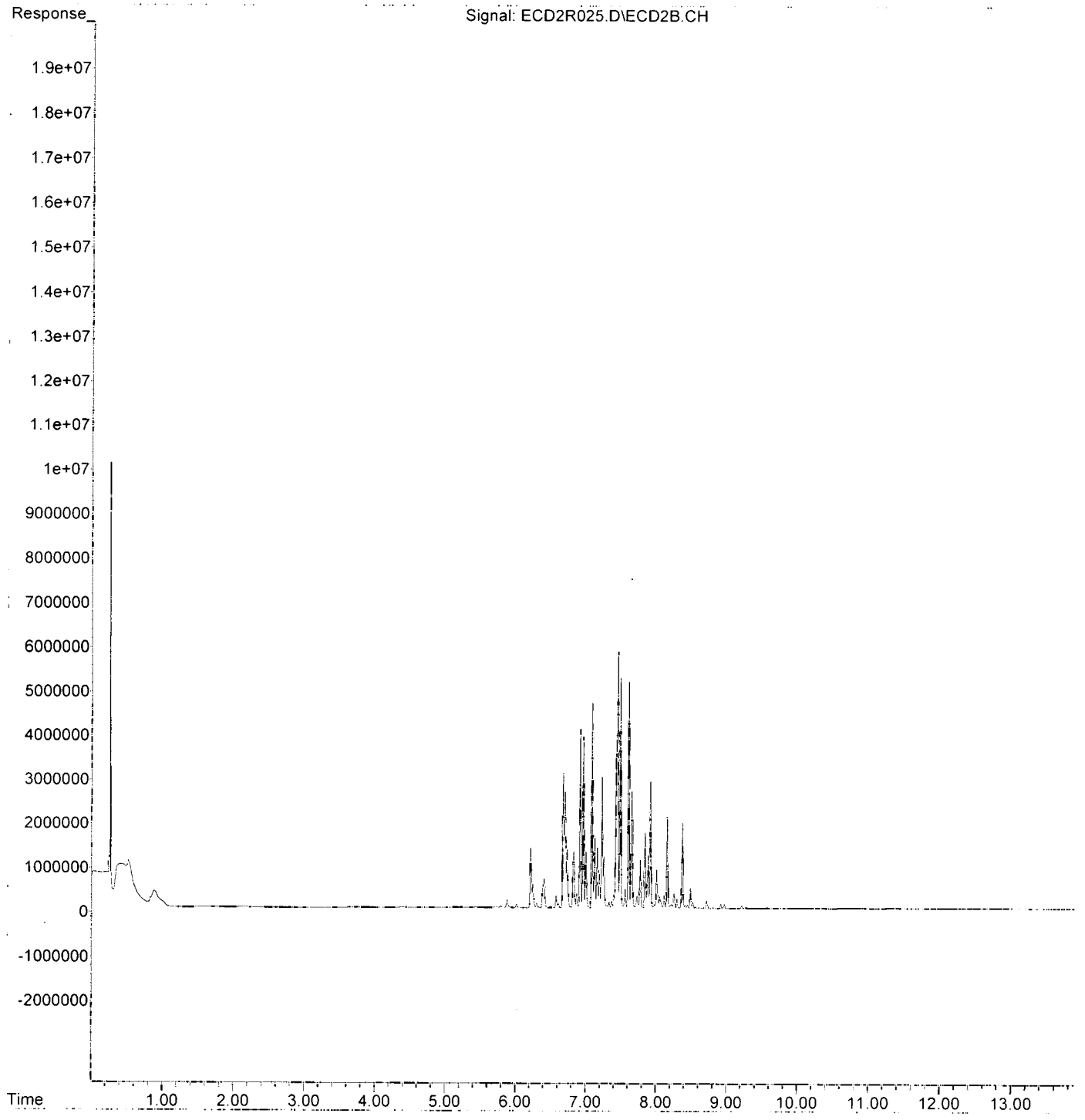
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.254	337916	25.527 ng/ml
49)	Aroclor 1262 (2)	8.557	41417	2.299 ng/ml
50)	Aroclor 1262 (3)	8.715	180259	12.164 ng/ml
51)	Aroclor 1262 (4)	8.966	97568	2.930 ng/ml
52)	Aroclor 1262 (5)	9.214	70281	3.719 ng/ml
53)	Aroclor 1262 (6)	9.755	20852	2.374 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.777	5055	0.649 ng/ml
56)	Aroclor 1268 (2)	9.214	70281	1.938 ng/ml
57)	Aroclor 1268 (3)	9.277	21608	0.736 ng/ml
58)	Aroclor 1268 (4)	9.480	2873	0.113 ng/ml
59)	Aroclor 1268 (5)	9.755	20852	2.181 ng/ml
60)	Aroclor 1268 (6)	10.087	8630	0.125 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\9E10007\
Data File : ECD2R025.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 15:04
Operator : MJB / KAK
Sample : 9E10007-ICV5
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:09:42 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:27
Operator : MJB / KAK
Sample : carryover check
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:06 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

Clean

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
1) S	TCMX (S)	5.538	10838	0.054 ng/ml
62) S	DCBP (S)	10.380	4446	0.033 ng/ml
	Target Compounds			
2)	Aroclor 1016 (1)	6.213	6903	1.224 ng/ml
3)	Aroclor 1016 (2)	6.712	11457	0.996 ng/ml
4)	Aroclor 1016 (3)	6.825	8859	1.753 ng/ml
5)	Aroclor 1016 (4)	6.914	9120	1.627 ng/ml
6)	Aroclor 1016 (5)	6.960	9519	1.449 ng/ml
7)	Aroclor 1016 (6)	7.089	9258	1.381 ng/ml
8)	Aroclor 1016 - AVE	0.000	0	N.D. ng/ml
9)	Aroclor 1221 (1)	5.715	12444	7.058 ng/ml
10)	Aroclor 1221 (2)	5.795	12792	7.708 ng/ml
11)	Aroclor 1221 (3)	5.878	8849	1.575 ng/ml
12)	Aroclor 1221 - AVE	0.000	0	N.D. ng/ml
13)	Aroclor 1232 (1)	5.878	8849	1.946 ng/ml
14)	Aroclor 1232 (2)	6.213	6903	2.468 ng/ml
15)	Aroclor 1232 (3)	6.712	11457	2.173 ng/ml
16)	Aroclor 1232 (4)	6.914	9120	4.387 ng/ml
17)	Aroclor 1232 (5)	6.960	9519	3.996 ng/ml
18)	Aroclor 1232 (6)	7.078	8500	3.437 ng/ml
19)	Aroclor 1232 - AVE	0.000	0	N.D. ng/ml
20)	Aroclor 1242 (1)	6.213	6903	1.377 ng/ml
21)	Aroclor 1242 (2)	6.712	11457	1.180 ng/ml
22)	Aroclor 1242 (3)	6.825	8859	2.009 ng/ml
23)	Aroclor 1242 (4)	6.914	9120	2.164 ng/ml
24)	Aroclor 1242 (5)	6.960	9519	1.938 ng/ml
25)	Aroclor 1242 (6)	7.089	9258	1.800 ng/ml
26)	Aroclor 1242 - AVE	0.000	0	N.D. ng/ml
27)	Aroclor 1248 (1)	6.665	7956	1.358 ng/ml
28)	Aroclor 1248 (2)	6.914	9120	1.189 ng/ml
29)	Aroclor 1248 (3)	6.960	9519	1.334 ng/ml
30)	Aroclor 1248 (4)	7.089	9258	1.092 ng/ml
31)	Aroclor 1248 (5)	7.449	8753	0.795 ng/ml
32)	Aroclor 1248 (6)	7.605	11618	1.202 ng/ml
33)	Aroclor 1248 - AVE	0.000	0	N.D. ng/ml
34)	Aroclor 1254 (1)	7.428	8994	0.821 ng/ml
35)	Aroclor 1254 (2)	7.605	11618	0.646 ng/ml
36)	Aroclor 1254 (3)	7.914	12690	0.649 ng/ml
37)	Aroclor 1254 (4)	8.155	9867	0.675 ng/ml
38)	Aroclor 1254 (5)	8.489	9427	0.638 ng/ml
39)	Aroclor 1254 (6)	8.715	9027	2.057 ng/ml
40)	Aroclor 1254 - AVE	0.000	0	N.D. ng/ml
41)	Aroclor 1260 (1)	8.051	11287	0.851 ng/ml
42)	Aroclor 1260 (2)	8.257	11491	0.702 ng/ml
43)	Aroclor 1260 (3)	8.489	9427	0.580 ng/ml
44)	Aroclor 1260 (4)	8.966	9516	0.344 ng/ml
45)	Aroclor 1260 (5)	9.213	8291	0.528 ng/ml
46)	Aroclor 1260 (6)	9.752	5339	0.834 ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D. ng/ml

Quantitation Report (Not Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:27
Operator : MJB / KAK
Sample : carryover check
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:06 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

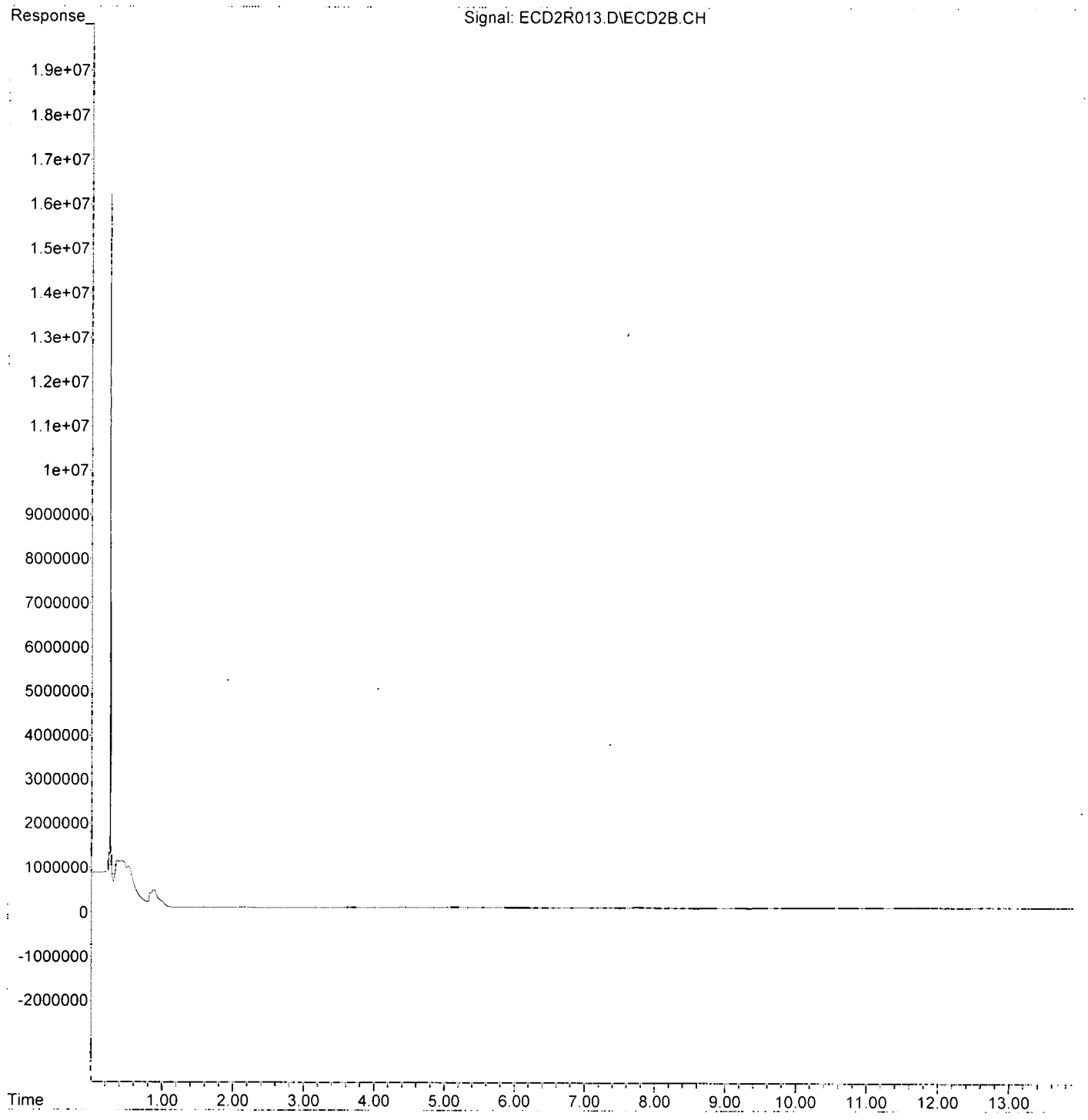
	Compound	R.T.	Response	Conc Units
48)	Aroclor 1262 (1)	8.257	11491	0.868 ng/ml
49)	Aroclor 1262 (2)	8.578	738	0.041 ng/ml
50)	Aroclor 1262 (3)	8.734	9367	0.632 ng/ml
51)	Aroclor 1262 (4)	8.966	9516	0.286 ng/ml
52)	Aroclor 1262 (5)	9.213	8291	0.439 ng/ml
53)	Aroclor 1262 (6)	9.752	5339	0.608 ng/ml
54)	Aroclor 1262 - AVE	0.000	0	N.D. ng/ml
55)	Aroclor 1268 (1)	8.775	8291	1.065 ng/ml
56)	Aroclor 1268 (2)	9.213	8291	0.229 ng/ml
57)	Aroclor 1268 (3)	9.270	6868	0.234 ng/ml
58)	Aroclor 1268 (4)	9.482	6306	0.248 ng/ml
59)	Aroclor 1268 (5)	9.752	5339	0.559 ng/ml
60)	Aroclor 1268 (6)	10.089	2848	0.041 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\9E10007\
Data File : ECD2R013.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:27
Operator : MJB / KAK
Sample : carryover check
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 12:08:06 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:41:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.541	1798220	8.960	ng/ml	✓
62) S	DCBP (S)	10.381	1292237	9.454	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.214	116054	20.576	ng/ml	
3)	Aroclor 1016 (2)	6.701	225582	19.609	ng/ml	
4)	Aroclor 1016 (3)	6.828	100489	19.880	ng/ml	
5)	Aroclor 1016 (4)	6.915	129888	23.175	ng/ml	✓
6)	Aroclor 1016 (5)	6.960	160845	24.490	ng/ml	
7)	Aroclor 1016 (6)	7.084	163101	24.330	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)	8.052	304484	22.959	ng/ml	
42)	Aroclor 1260 (2)	8.259	370928	22.664	ng/ml	
43)	Aroclor 1260 (3)	8.489	358034	22.026	ng/ml	
44)	Aroclor 1260 (4)	8.967	578868	20.924	ng/ml	✓
45)	Aroclor 1260 (5)	9.215	341531	21.759	ng/ml	
46)	Aroclor 1260 (6)	9.756	143948	22.477	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\9E10007\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:41:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

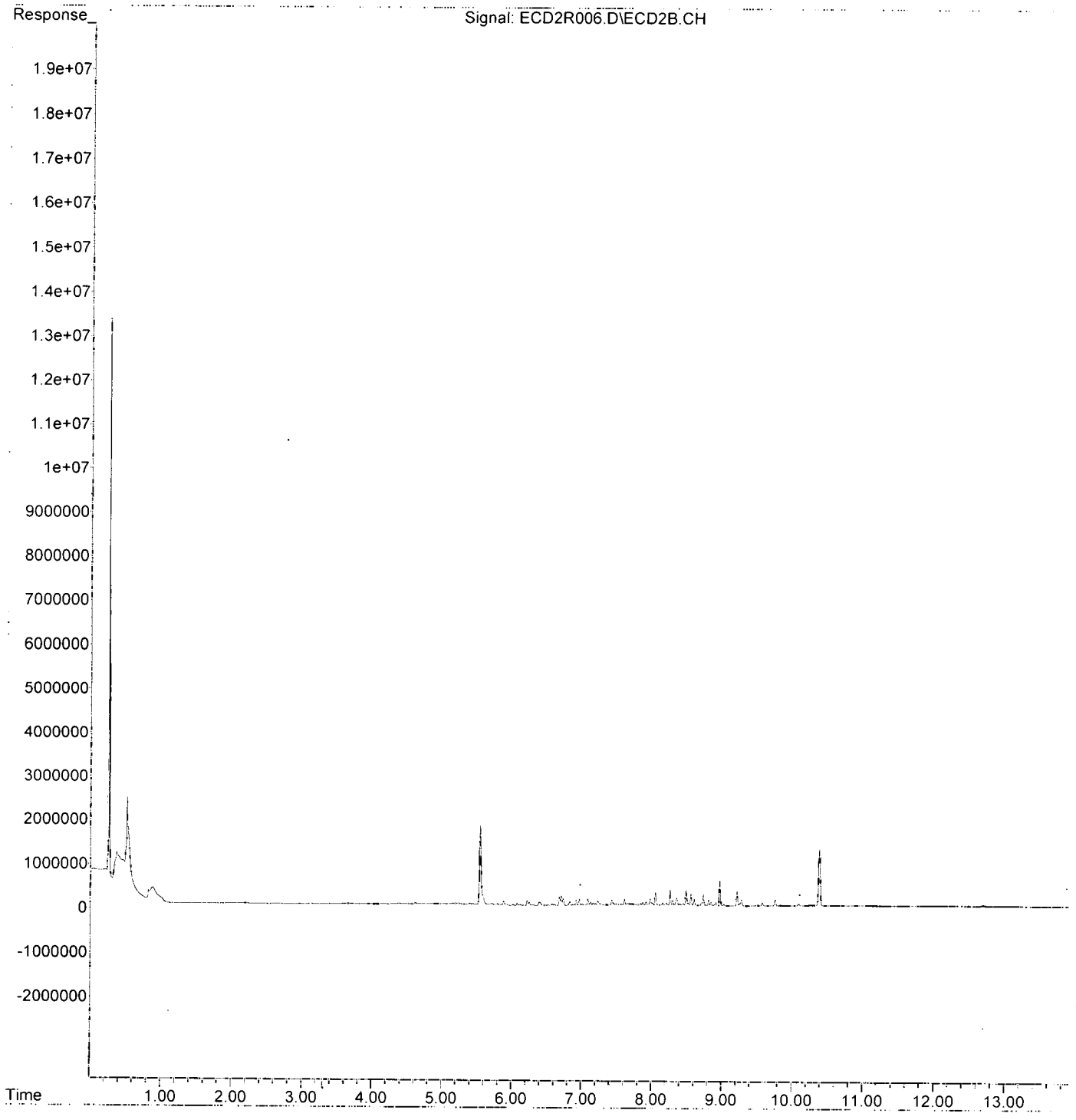
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:41:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:51:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.540	4724657	23.541	ng/ml ✓
62) S	DCBP (S)	10.380	3322463	24.308	ng/ml ✓
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	285124	50.551	ng/ml
3)	Aroclor 1016 (2)	6.700	568799	49.444	ng/ml
4)	Aroclor 1016 (3)	6.827	251083	49.671	ng/ml
5)	Aroclor 1016 (4)	6.915	302145	53.910	ng/ml
6)	Aroclor 1016 (5)	6.959	352218	53.628	ng/ml
7)	Aroclor 1016 (6)	7.083	365156	54.470	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)	8.052	714269	53.857	ng/ml
42)	Aroclor 1260 (2)	8.258	871274	53.234	ng/ml
43)	Aroclor 1260 (3)	8.488	861685	53.011	ng/ml
44)	Aroclor 1260 (4)	8.967	1352236	48.879	ng/ml
45)	Aroclor 1260 (5)	9.214	796772	50.761	ng/ml
46)	Aroclor 1260 (6)	9.755	333154	52.021	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\9E10007\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:51:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

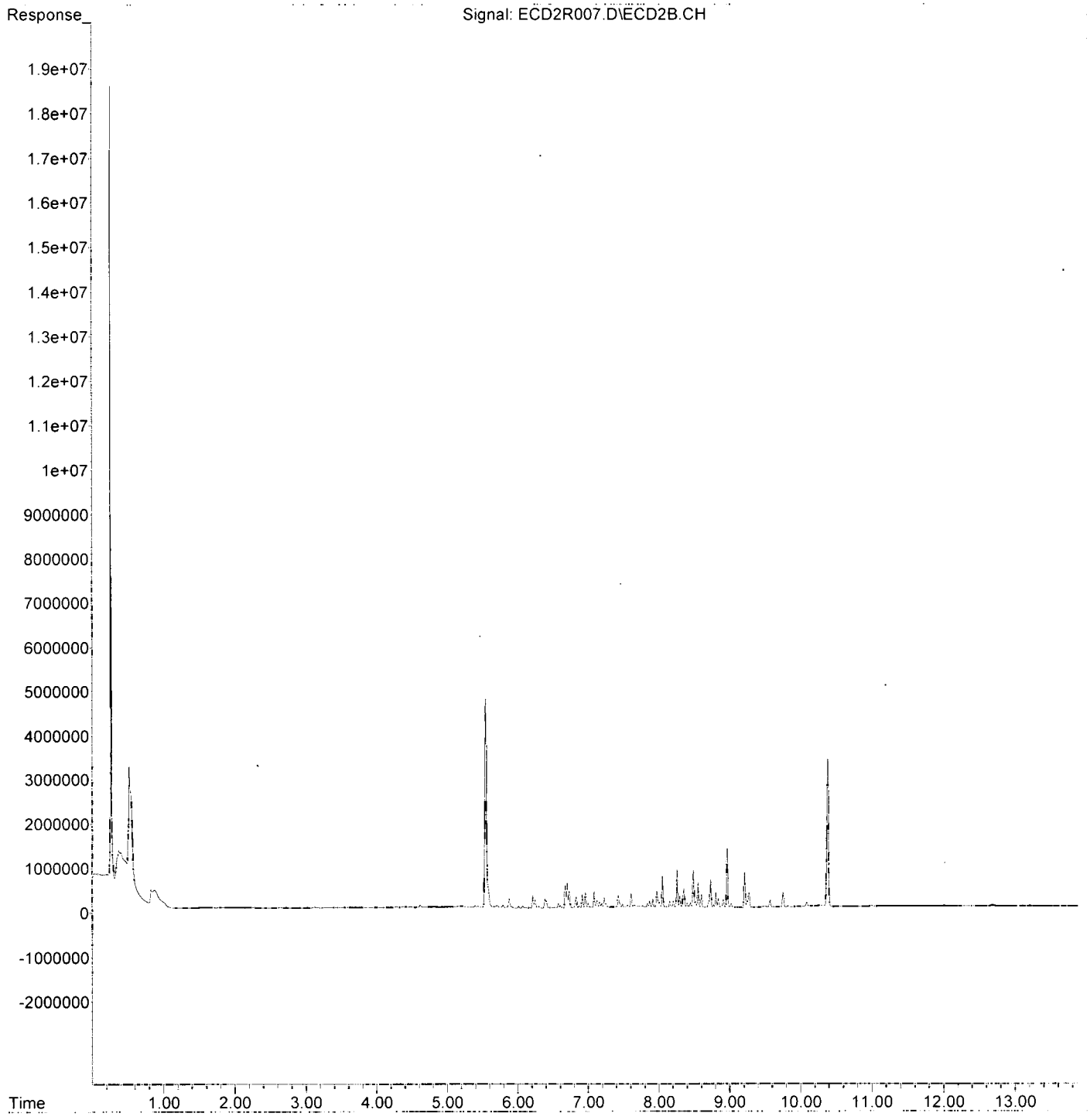
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:51:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:52:19 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.540	9524712	47.457	ng/ml	✓
62) S	DCBP (S)	10.381	6667741	48.783	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.212	578887	102.634	ng/ml	
3)	Aroclor 1016 (2)	6.700	1186640	103.151	ng/ml	
4)	Aroclor 1016 (3)	6.827	534910	105.820	ng/ml	✓
5)	Aroclor 1016 (4)	6.914	586477	104.641	ng/ml	
6)	Aroclor 1016 (5)	6.959	695454	105.889	ng/ml	
7)	Aroclor 1016 (6)	7.083	694252	103.562	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)	8.051	1394024	105.112	ng/ml	
42)	Aroclor 1260 (2)	8.258	1754618	107.206	ng/ml	
43)	Aroclor 1260 (3)	8.489	1685960	103.721	ng/ml	
44)	Aroclor 1260 (4)	8.967	2886363	104.334	ng/ml	✓
45)	Aroclor 1260 (5)	9.214	1626089	103.596	ng/ml	
46)	Aroclor 1260 (6)	9.755	670533	104.702	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\9E10007\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:52:19 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

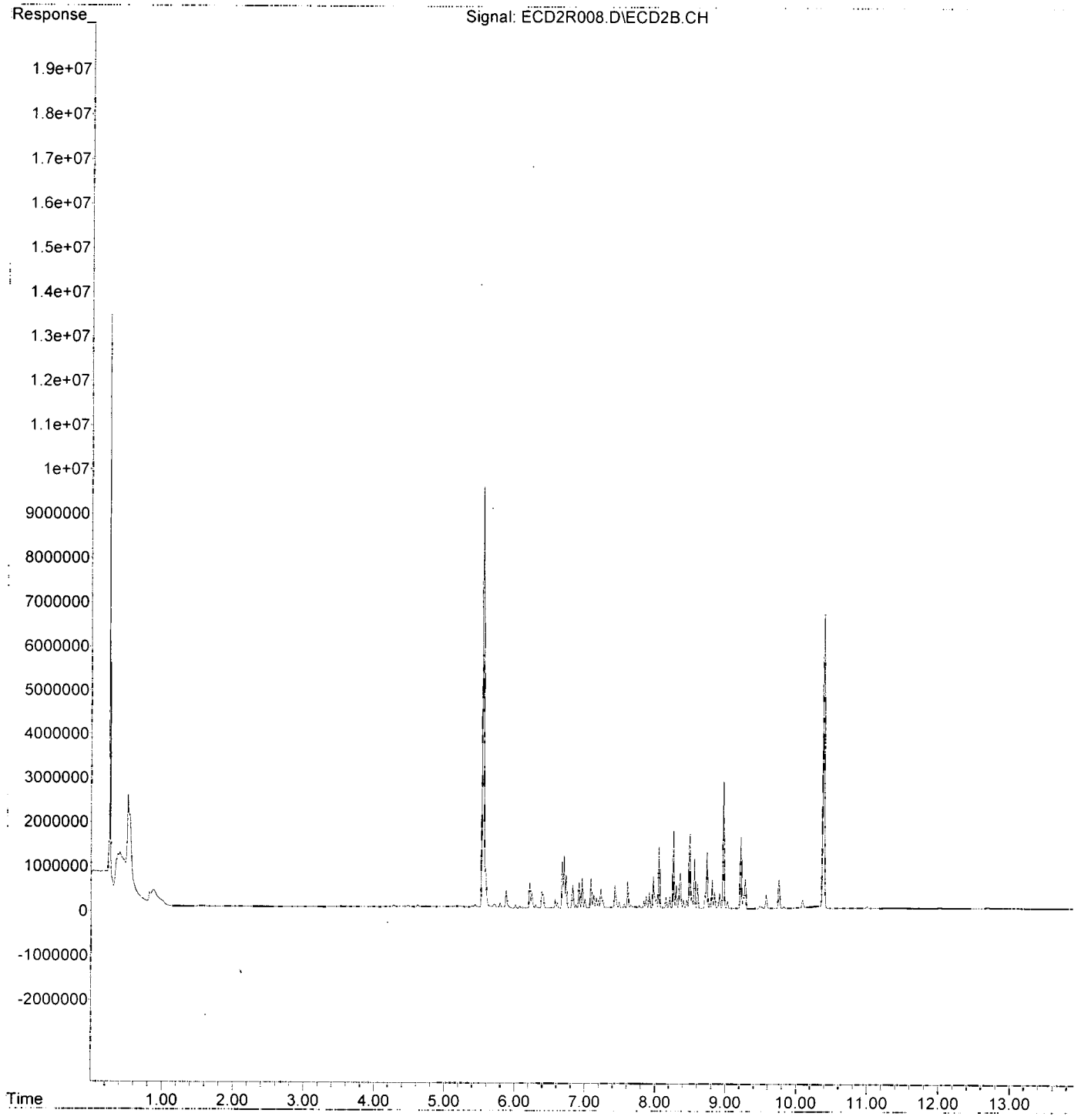
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:52:19 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:53:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.540	19359103	96.457	ng/ml	✓
62) S	DCBP (S)	10.382	13497127	98.748	ng/ml	✓
	Target Compounds					
2)	Aroclor 1016 (1)	6.213	1116431	197.938	ng/ml	
3)	Aroclor 1016 (2)	6.701	2311269	200.912	ng/ml	
4)	Aroclor 1016 (3)	6.826	1004900	198.797	ng/ml	✓
5)	Aroclor 1016 (4)	6.915	1105693	197.281	ng/ml	
6)	Aroclor 1016 (5)	6.960	1297000	197.480	ng/ml	
7)	Aroclor 1016 (6)	7.083	1294057	193.035	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)	8.052	2597161	195.830	ng/ml	
42)	Aroclor 1260 (2)	8.258	3116655	190.426	ng/ml	
43)	Aroclor 1260 (3)	8.488	3252229	200.079	ng/ml	✓
44)	Aroclor 1260 (4)	8.968	5434998	196.460	ng/ml	
45)	Aroclor 1260 (5)	9.215	2994314	190.764	ng/ml	
46)	Aroclor 1260 (6)	9.755	1262202	197.089	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:53:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

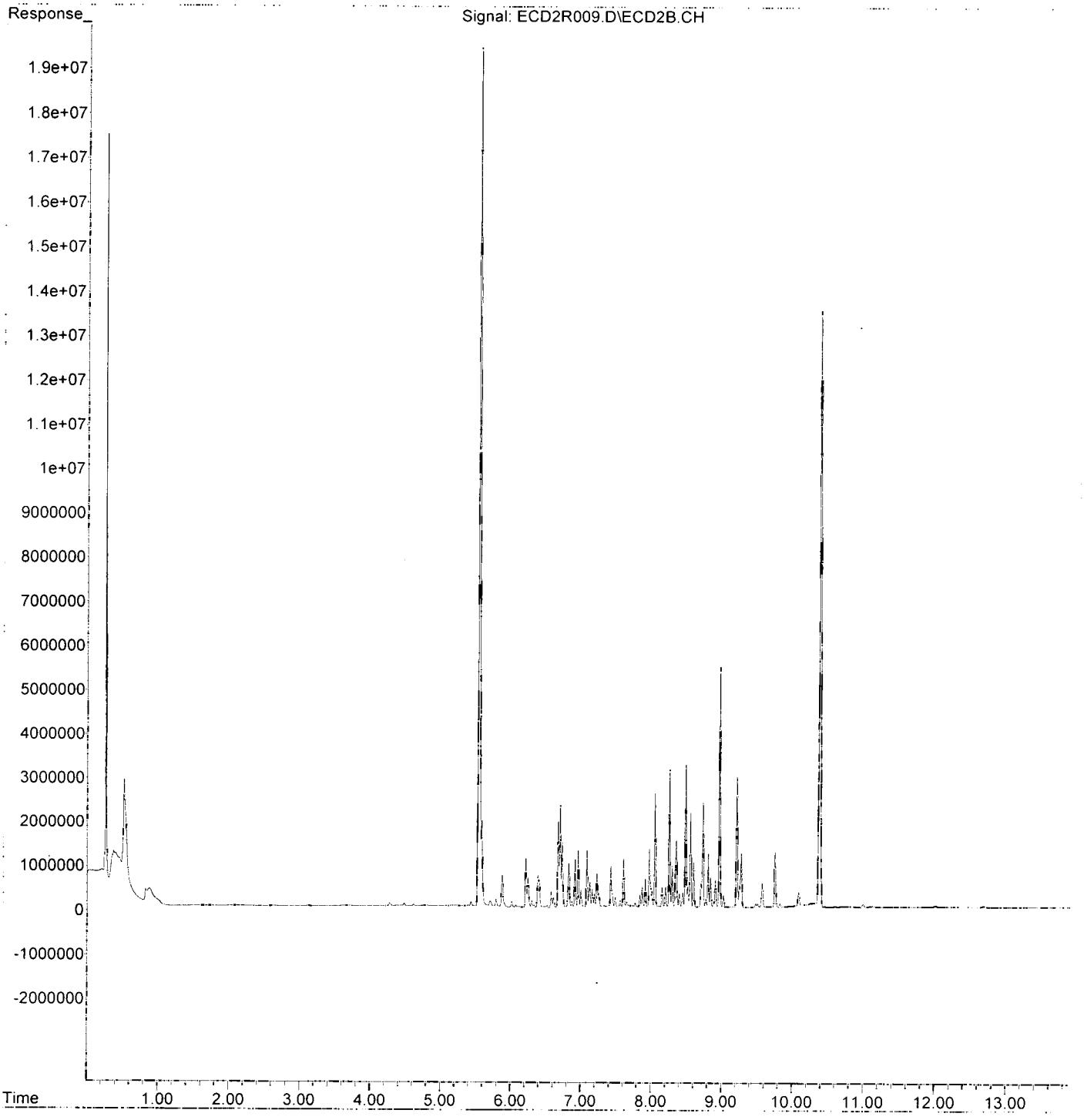
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:53:33 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:55:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	5.542	51265429	255.431	ng/ml ✓
62) S	DCBP (S)	10.382	33268914	243.404	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	2690652	477.041	ng/ml
3)	Aroclor 1016 (2)	6.701	5642930	490.524	ng/ml
4)	Aroclor 1016 (3)	6.827	2413067	477.372	ng/ml ✓
5)	Aroclor 1016 (4)	6.915	2569232	458.410	ng/ml
6)	Aroclor 1016 (5)	6.960	2957001	450.229	ng/ml
7)	Aroclor 1016 (6)	7.084	3059317	456.359	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)	8.052	6112828	460.917	ng/ml
42)	Aroclor 1260 (2)	8.258	7443557	454.798	ng/ml
43)	Aroclor 1260 (3)	8.488	7611739	468.279	ng/ml
44)	Aroclor 1260 (4)	8.967	13278270	479.972	ng/ml ✓
45)	Aroclor 1260 (5)	9.215	7288274	464.328	ng/ml
46)	Aroclor 1260 (6)	9.755	2990992	467.034	ng/ml
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:55:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

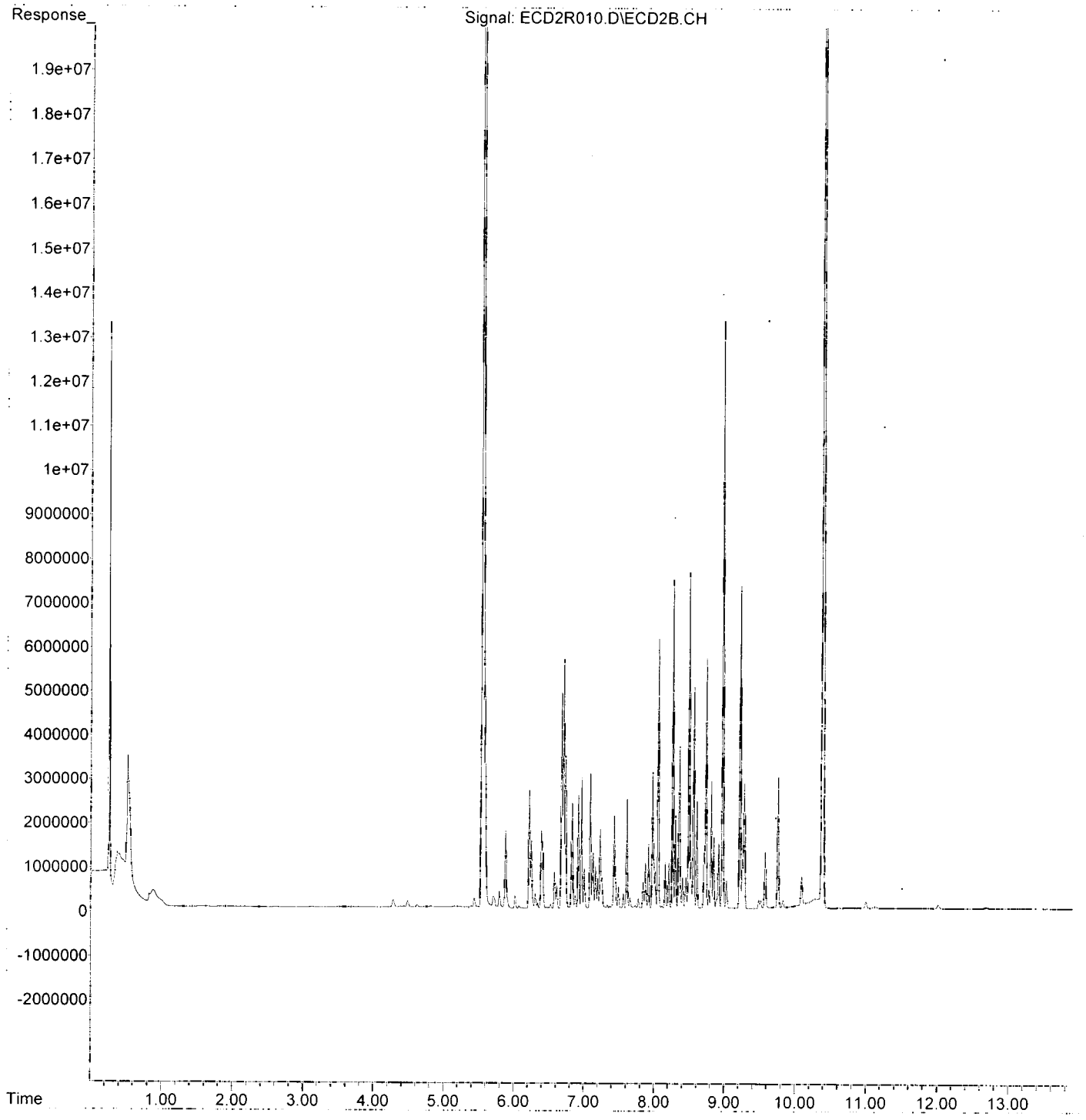
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:55:04 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



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Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\[redacted]
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-[redacted]
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:56:34 2019
Quant Method : L:\Methods\[redacted]
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1)	S TCMX (S)	5.543	110401180	550.077	ng/ml	✓
62)	S DCBP (S)	10.383	72156931	527.918	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.213	5606678	994.040	ng/ml	
3)	Aroclor 1016 (2)	6.701	11401014	991.059	ng/ml	
4)	Aroclor 1016 (3)	6.827	5045944	998.229	ng/ml	✓
5)	Aroclor 1016 (4)	6.916	5201537	928.073	ng/ml	
6)	Aroclor 1016 (5)	6.960	5643242	859.233	ng/ml	
7)	Aroclor 1016 (6)	7.084	6039685	900.942	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	5/13/19
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)	8.052	11962120	901.963	ng/ml	
42)	Aroclor 1260 (2)	8.259	15248788	931.694	ng/ml	
43)	Aroclor 1260 (3)	8.488	15232295	937.100	ng/ml	
44)	Aroclor 1260 (4)	8.968	27775730	1004.013	ng/ml	✓
45)	Aroclor 1260 (5)	9.216	15079620	960.705	ng/ml	
46)	Aroclor 1260 (6)	9.755	5822993	909.241	ng/ml	
47)	Aroclor 1260 - AVE	0.000	0	N.D.	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-CAL6
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:56:34 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

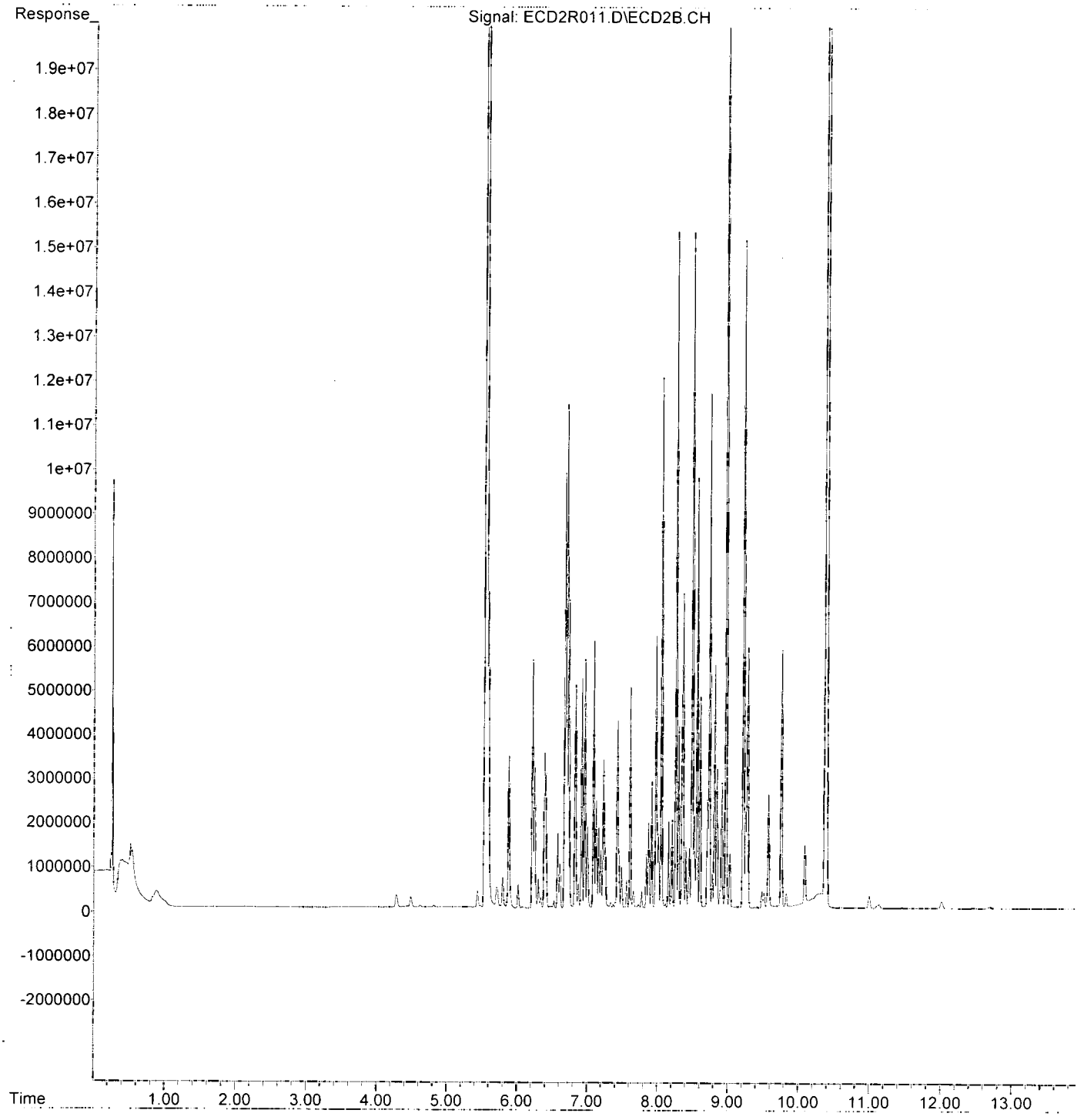
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-CAL6
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:56:34 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\requant\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:57:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units	
	System Monitoring Compounds					
1) S	TCMX (S)	5.544	180921610	901.447	ng/ml	✓
62) S	DCBP (S)	10.384	119149101	871.725	ng/ml	
	Target Compounds					
2)	Aroclor 1016 (1)	6.213	8426866	1494.047	ng/ml	
3)	Aroclor 1016 (2)	6.701	17643640	1533.713	ng/ml	
4)	Aroclor 1016 (3)	6.826	7638717	1511.152	ng/ml	
5)	Aroclor 1016 (4)	6.916	7443209	1328.038	ng/ml	✓
6)	Aroclor 1016 (5)	6.960	8836476	1345.431	ng/ml	
7)	Aroclor 1016 (6)	7.084	8845396	1319.471	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)	8.052	18319166	1381.295	ng/ml	
42)	Aroclor 1260 (2)	8.259	22994944	1404.980	ng/ml	
43)	Aroclor 1260 (3)	8.489	22606684	1390.776	ng/ml	
44)	Aroclor 1260 (4)	8.969	40940887	1479.896	ng/ml	✓
45)	Aroclor 1260 (5)	9.216	23961394	1526.553	ng/ml	
46)	Aroclor 1260 (6)	9.755	9221750	1439.946	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\9E10007\requant\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:57:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

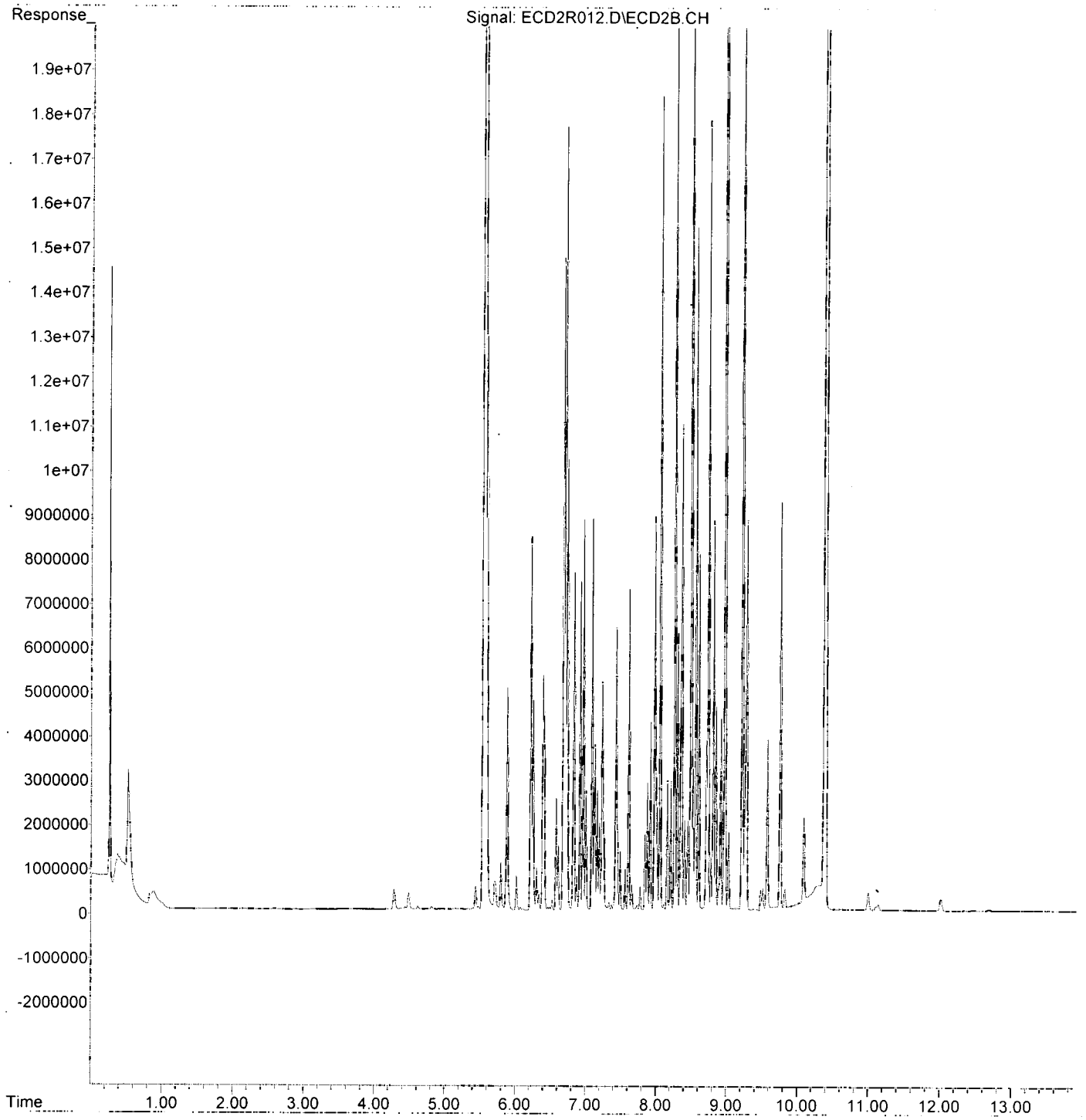
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\requant\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 11:57:55 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:55:30 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Sequence: C:\HPCHEM\2\SEQUENCE\9E10006.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	9E10006-CCV1	E2A21015	1	Sample		
4	Vial 3	9E10006-CCB1	E2A21015	1	Sample		
5	Vial 4	A9E0291-01	E2A21015	1	Sample		
6	Vial 1	9E10006-IBL1	E2A21015	1	Sample		
7	Vial 5	A9E0291-02	E2A21015	1	Sample		
8	Vial 1	9E10006-IBL2	E2A21015	1	Sample		
9	Vial 6	A9E0291-03	E2A21015	1	Sample		
10	Vial 1	9E10006-IBL3	E2A21015	1	Sample		
11	Vial 7	A9E0291-04	E2A21015	1	Sample		
12	Vial 1	9E10006-IBL4	E2A21015	1	Sample		
13	Vial 2	9E10006-CCV2	E2A21015	1	Sample		
14	Vial 3	9E10006-CCB2	E2A21015	1	Sample		
15	Vial 8	A9E0291-05	E2A21015	1	Sample		
16	Vial 1	9E10006-IBL5	E2A21015	1	Sample		
17	Vial 9	A9E0291-06	E2A21015	1	Sample		
18	Vial 1	9E10006-IBL6	E2A21015	1	Sample		
19	Vial 10	A9E0291-07	E2A21015	1	Sample		
20	Vial 1	9E10006-IBL7	E2A21015	1	Sample		
21	Vial 11	A9E0291-08	E2A21015	1	Sample		
22	Vial 1	9E10006-IBL8	E2A21015	1	Sample		
23	Vial 2	9E10006-CCV3	E2A21015	1	Sample		
24	Vial 3	9E10006-CCB3	E2A21015	1	Sample		
25	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	9E10007-CCV1	E2A21015	1	Sample		
4	Vial 53	9E10007-CCB1	E2A21015	1	Sample		
5	Vial 53	9E10007-ICB1	E2A21015	1	Sample		
6	Vial 54	9E10007-CAL1	E2A21015	1	Sample		
7	Vial 55	9E10007-CAL2	E2A21015	1	Sample		
8	Vial 56	9E10007-CAL3	E2A21015	1	Sample		
9	Vial 57	9E10007-CAL4	E2A21015	1	Sample		
10	Vial 58	9E10007-CAL5	E2A21015	1	Sample		
11	Vial 59	9E10007-CAL6	E2A21015	1	Sample		
12	Vial 60	9E10007-CAL7	E2A21015	1	Sample		
13	Vial 51	carryover check	E2A21015	1	Sample		
14	Vial 61	9E10007-ICV1	E2A21015	1	Sample		
15	Vial 62	9E10007-CAL8	E2A21015	1	Sample		
16	Vial 63	9E10007-CAL9	E2A21015	1	Sample		
17	Vial 64	9E10007-CALA	E2A21015	1	Sample		
18	Vial 65	9E10007-CALB	E2A21015	1	Sample		
19	Vial 66	9E10007-CALC	E2A21015	1	Sample		
20	Vial 67	9E10007-CALD	E2A21015	1	Sample		
21	Vial 68	9E10007-CALE	E2A21015	1	Sample		
22	Vial 69	9E10007-ICV2	E2A21015	1	Sample		
23	Vial 70	9E10007-ICV3	E2A21015	1	Sample		
24	Vial 71	9E10007-ICV4	E2A21015	1	Sample		
25	Vial 72	9E10007-ICV5	E2A21015	1	Sample		

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Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:25:53 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.541	1798220	8.769	ng/ml
62) S	DCBP (S)	10.381	1292237	10.221	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.214	116054	21.744	ng/ml
3)	Aroclor 1016 (2)	6.701	225582	20.366	ng/ml
4)	Aroclor 1016 (3)	6.828	100489	19.932	ng/ml
5)	Aroclor 1016 (4)	6.915	129888	25.612	ng/ml
6)	Aroclor 1016 (5)	6.960	160845	26.154	ng/ml
7)	Aroclor 1016 (6)	7.084	163101	26.353	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)	8.052	304484	24.296	ng/ml
42)	Aroclor 1260 (2)	8.259	370928	24.096	ng/ml
43)	Aroclor 1260 (3)	8.489	358034	23.296	ng/ml
44)	Aroclor 1260 (4)	8.967	578868	23.065	ng/ml
45)	Aroclor 1260 (5)	9.215	341531	24.185	ng/ml
46)	Aroclor 1260 (6)	9.756	143948	24.960	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\9E10007\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:25:53 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

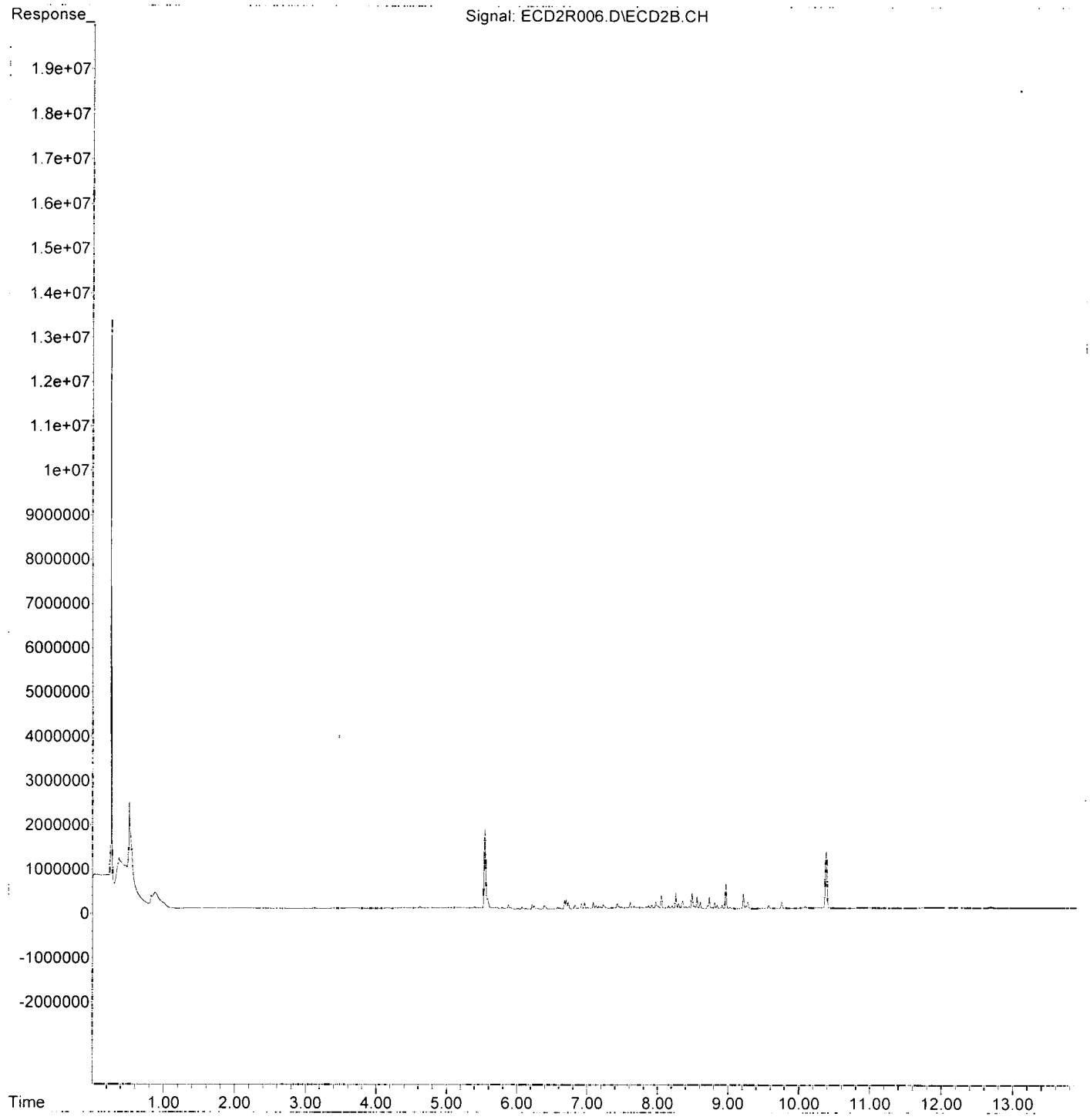
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R006.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:21
Operator : MJB / KAK
Sample : 9E10007-CAL1
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:25:53 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:27:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.540	4724657	23.040	ng/ml
62) S	DCBP (S)	10.380	3322463	26.280	ng/ml
Target Compounds					
2)	Aroclor 1016 (1)	6.213	285124	53.422	ng/ml
3)	Aroclor 1016 (2)	6.700	568799	51.354	ng/ml
4)	Aroclor 1016 (3)	6.827	251083	49.802	ng/ml
5)	Aroclor 1016 (4)	6.915	302145	59.579	ng/ml
6)	Aroclor 1016 (5)	6.959	352218	57.272	ng/ml
7)	Aroclor 1016 (6)	7.083	365156	59.000	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)	8.052	714269	56.994	ng/ml
42)	Aroclor 1260 (2)	8.258	871274	56.600	ng/ml
43)	Aroclor 1260 (3)	8.488	861685	56.068	ng/ml
44)	Aroclor 1260 (4)	8.967	1352236	53.880	ng/ml
45)	Aroclor 1260 (5)	9.214	796772	56.421	ng/ml
46)	Aroclor 1260 (6)	9.755	333154	57.768	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\9E10007\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:27:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

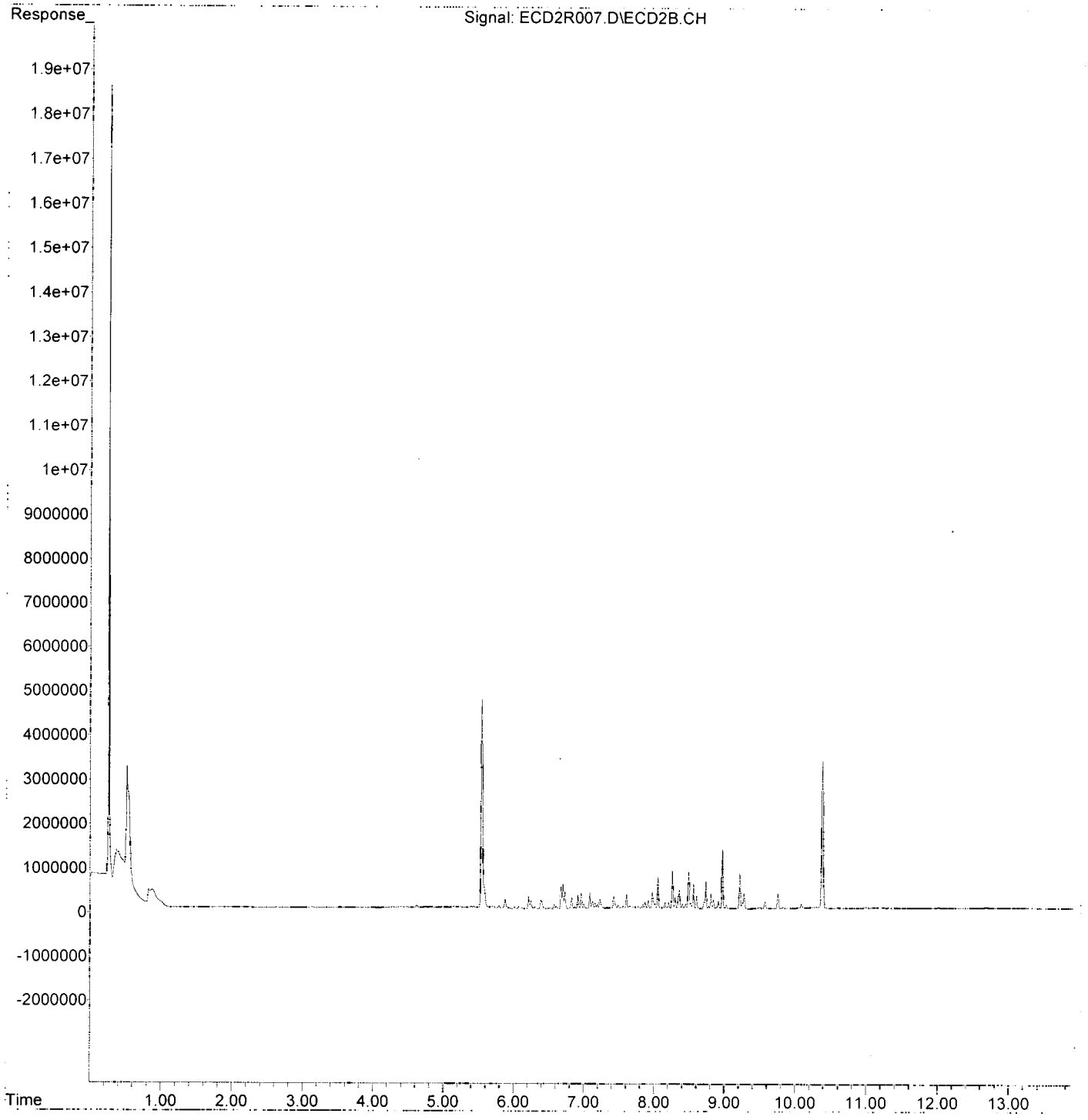
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R007.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:39
Operator : MJB / KAK
Sample : 9E10007-CAL2
Misc :
ALS Vial : 55 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:27:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:28:26 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.540	9524712	46.448	ng/ml
62) S	DCBP (S)	10.381	6667741	52.740	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.212	578887	108.462	ng/ml
3)	Aroclor 1016 (2)	6.700	1186640	107.135	ng/ml
4)	Aroclor 1016 (3)	6.827	534910	106.099	ng/ml
5)	Aroclor 1016 (4)	6.914	586477	115.645	ng/ml
6)	Aroclor 1016 (5)	6.959	695454	113.084	ng/ml
7)	Aroclor 1016 (6)	7.083	694252	112.174	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)	8.051	1394024	111.235	ng/ml
42)	Aroclor 1260 (2)	8.258	1754618	113.984	ng/ml
43)	Aroclor 1260 (3)	8.489	1685960	109.701	ng/ml
44)	Aroclor 1260 (4)	8.967	2886363	115.009	ng/ml
45)	Aroclor 1260 (5)	9.214	1626089	115.147	ng/ml
46)	Aroclor 1260 (6)	9.755	670533	116.270	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\9E10007\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:28:26 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

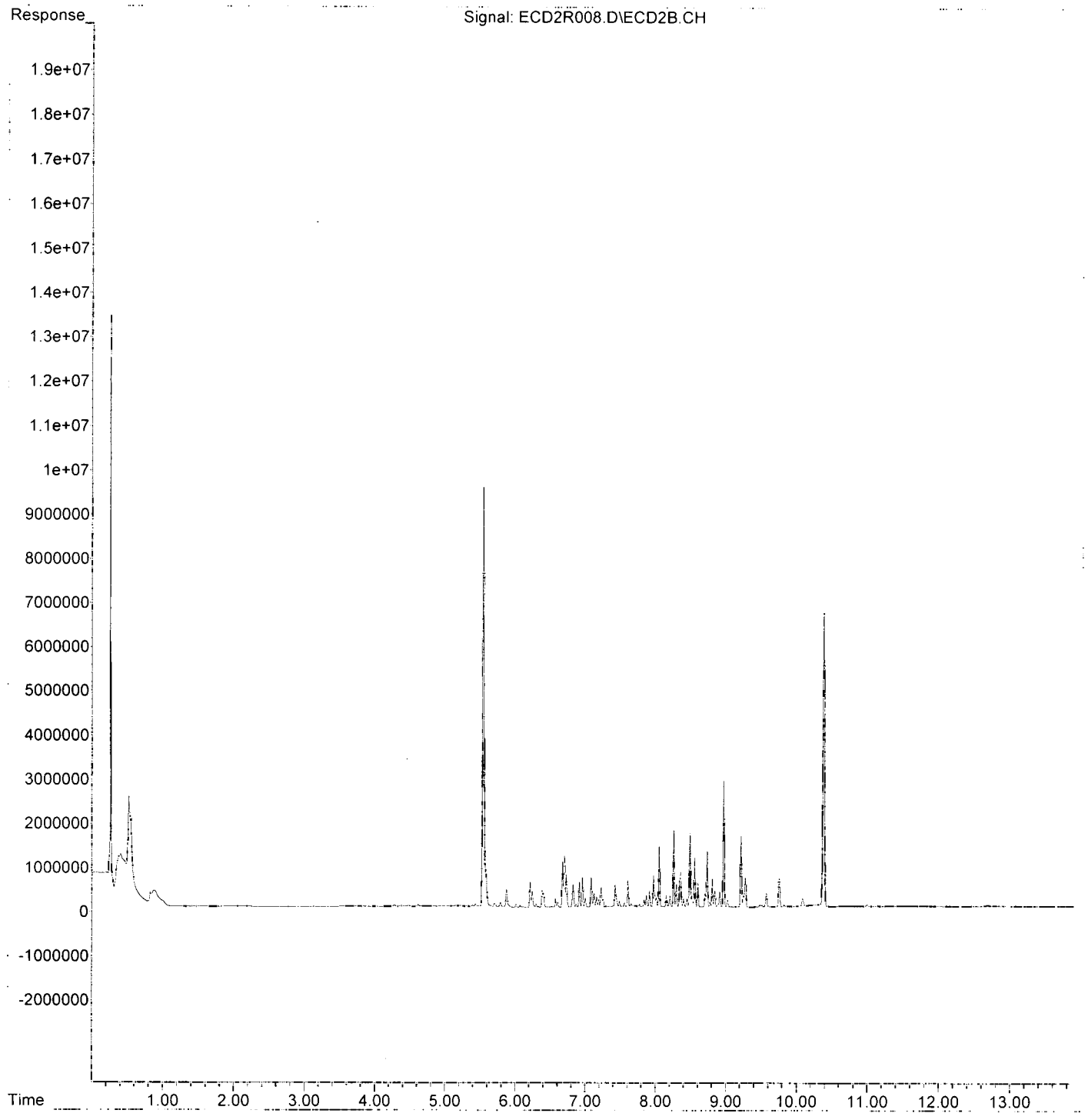
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R008.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 9:57
Operator : MJB / KAK
Sample : 9E10007-CAL3
Misc :
ALS Vial : 56 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:28:26 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:30:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.540	19359103	94.405	ng/ml
62) S	DCBP (S)	10.382	13497127	106.759	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	1116431	209.177	ng/ml
3)	Aroclor 1016 (2)	6.701	2311269	208.671	ng/ml
4)	Aroclor 1016 (3)	6.826	1004900	199.321	ng/ml
5)	Aroclor 1016 (4)	6.915	1105693	218.028	ng/ml
6)	Aroclor 1016 (5)	6.960	1297000	210.898	ng/ml
7)	Aroclor 1016 (6)	7.083	1294057	209.087	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)	8.052	2597161	207.238	ng/ml
42)	Aroclor 1260 (2)	8.258	3116655	202.464	ng/ml
43)	Aroclor 1260 (3)	8.488	3252229	211.615	ng/ml
44)	Aroclor 1260 (4)	8.968	5434998	216.560	ng/ml
45)	Aroclor 1260 (5)	9.215	2994314	212.034	ng/ml
46)	Aroclor 1260 (6)	9.755	1262202	218.864	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\9E10007\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:30:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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.

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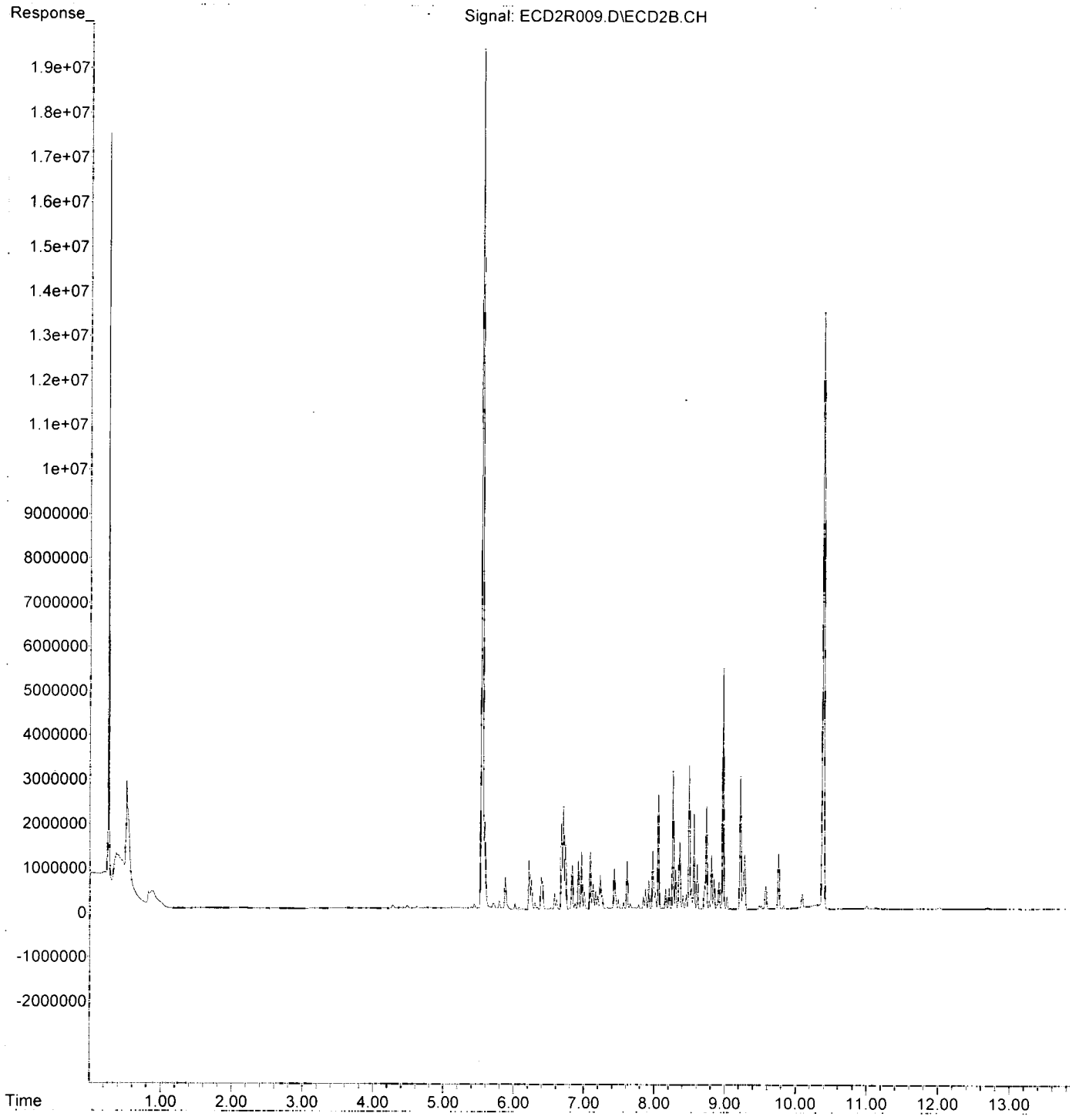
Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R009.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:15
Operator : MJB / KAK
Sample : 9E10007-CAL4
Misc :
ALS Vial : 57 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:30:03 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:31:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.542	51265429	249.997	ng/ml
62)	S DCBP (S)	10.382	33268914	263.148	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	2690652	504.127	ng/ml
3)	Aroclor 1016 (2)	6.701	5642930	509.467	ng/ml
4)	Aroclor 1016 (3)	6.827	2413067	478.630	ng/ml
5)	Aroclor 1016 (4)	6.915	2569232	506.618	ng/ml
6)	Aroclor 1016 (5)	6.960	2957001	480.821	ng/ml
7)	Aroclor 1016 (6)	7.084	3059317	494.309	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)	8.052	6112828	487.766	ng/ml
42)	Aroclor 1260 (2)	8.258	7443557	483.549	ng/ml
43)	Aroclor 1260 (3)	8.488	7611739	495.278	ng/ml
44)	Aroclor 1260 (4)	8.967	13278270	529.079	ng/ml
45)	Aroclor 1260 (5)	9.215	7288274	516.100	ng/ml
46)	Aroclor 1260 (6)	9.755	2990992	518.634	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\9E10007\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:31:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

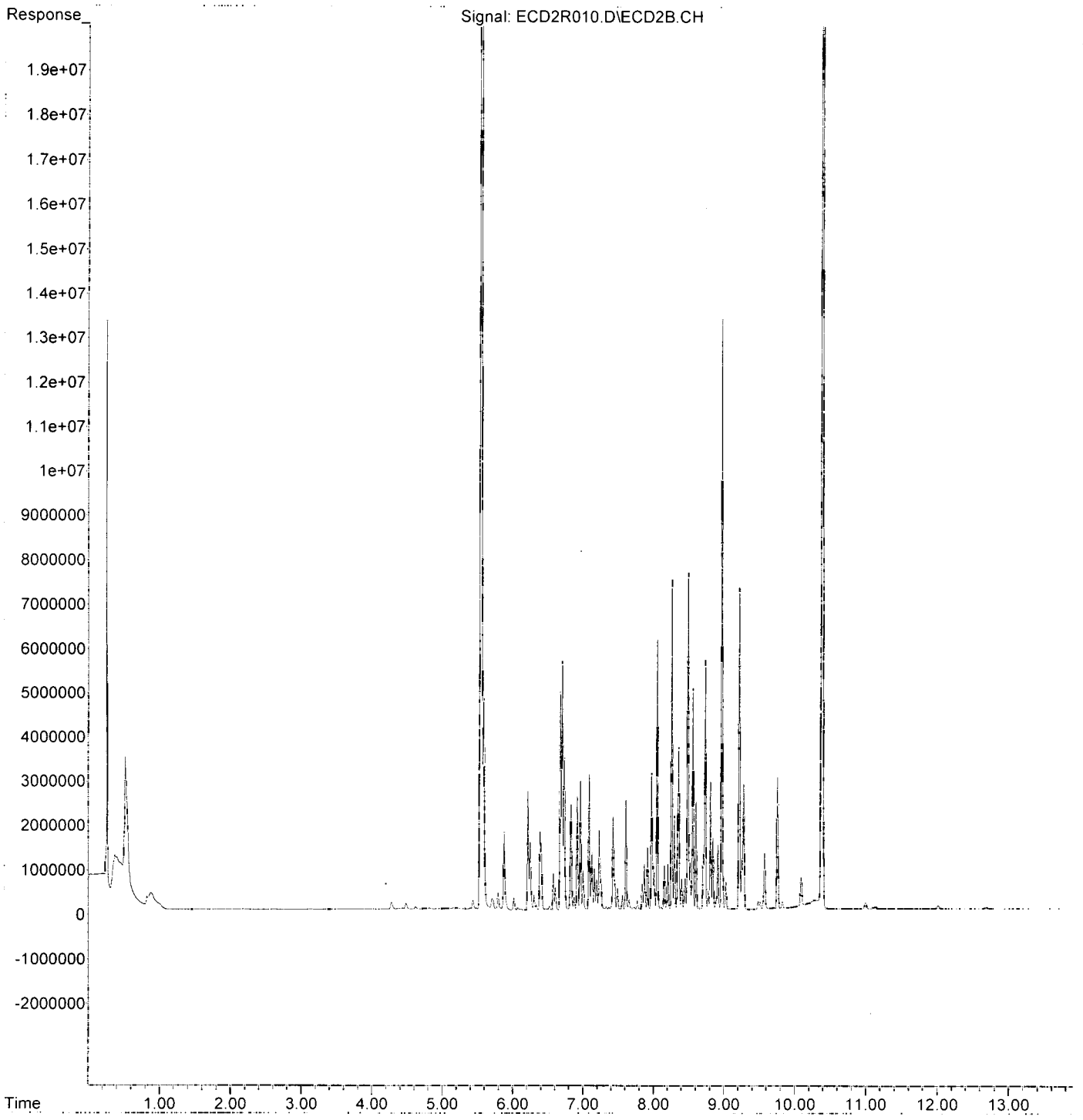
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R010.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:33
Operator : MJB / KAK
Sample : 9E10007-CAL5
Misc :
ALS Vial : 58 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:31:15 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-CAL6
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:32:29 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.543	110401180	538.375	ng/ml
62)	S	DCBP (S)	10.383	72156931	570.742	ng/ml
		Target Compounds				
2)		Aroclor 1016 (1)	6.213	5606678	1050.481	ng/ml
3)		Aroclor 1016 (2)	6.701	11401014	1029.330	ng/ml
4)		Aroclor 1016 (3)	6.827	5045944	1000.860	ng/ml
5)		Aroclor 1016 (4)	6.916	5201537	1025.673	ng/ml
6)		Aroclor 1016 (5)	6.960	5643242	917.616	ng/ml
7)		Aroclor 1016 (6)	7.084	6039685	975.863	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)	8.052	11962120	954.504	ng/ml
42)		Aroclor 1260 (2)	8.259	15248788	990.592	ng/ml
43)		Aroclor 1260 (3)	8.488	15232295	991.129	ng/ml
44)		Aroclor 1260 (4)	8.968	27775730	1106.737	ng/ml
45)		Aroclor 1260 (5)	9.216	15079620	1067.823	ng/ml
46)		Aroclor 1260 (6)	9.755	5822993	1009.699	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\9E10007\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-CAL6
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:32:29 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

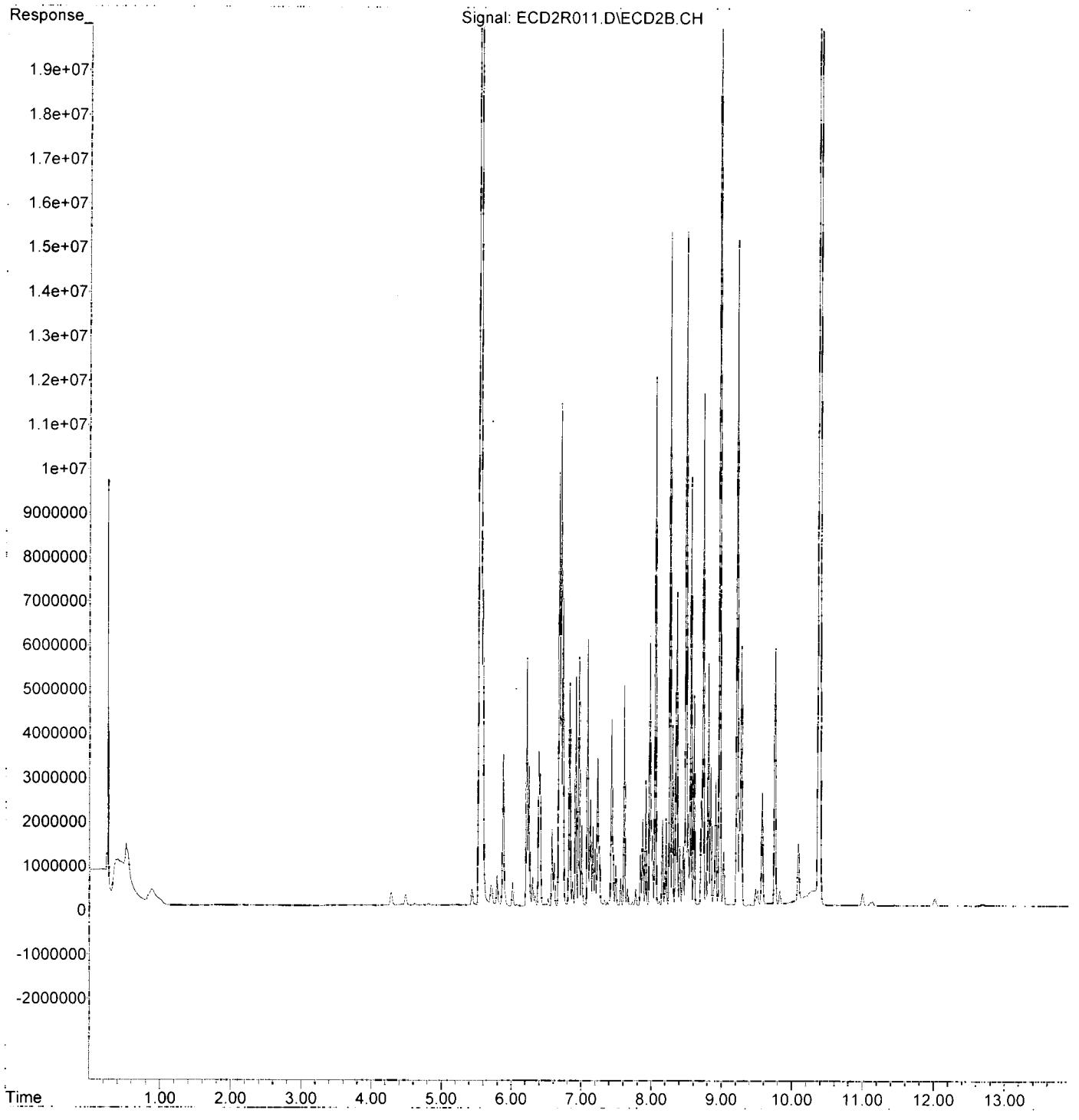
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R011.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 10:51
Operator : MJB / KAK
Sample : 9E10007-CAL6
Misc :
ALS Vial : 59 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:32:29 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:34:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 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)	5.544	180921610	882.270	ng/ml
62) S	DCBP (S)	10.384	119149101	942.438	ng/ml
	Target Compounds				
2)	Aroclor 1016 (1)	6.213	8426866	1578.878	ng/ml
3)	Aroclor 1016 (2)	6.701	17643640	1592.940	ng/ml
4)	Aroclor 1016 (3)	6.826	7638717	1515.135	ng/ml
5)	Aroclor 1016 (4)	6.916	7443209	1467.700	ng/ml
6)	Aroclor 1016 (5)	6.960	8836476	1436.850	ng/ml
7)	Aroclor 1016 (6)	7.084	8845396	1429.196	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)	8.052	18319166	1461.757	ng/ml
42)	Aroclor 1260 (2)	8.259	22994944	1493.798	ng/ml
43)	Aroclor 1260 (3)	8.489	22606684	1470.964	ng/ml
44)	Aroclor 1260 (4)	8.969	40940887	1631.309	ng/ml
45)	Aroclor 1260 (5)	9.216	23961394	1696.762	ng/ml
46)	Aroclor 1260 (6)	9.755	9221750	1599.039	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\9E10007\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:34:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

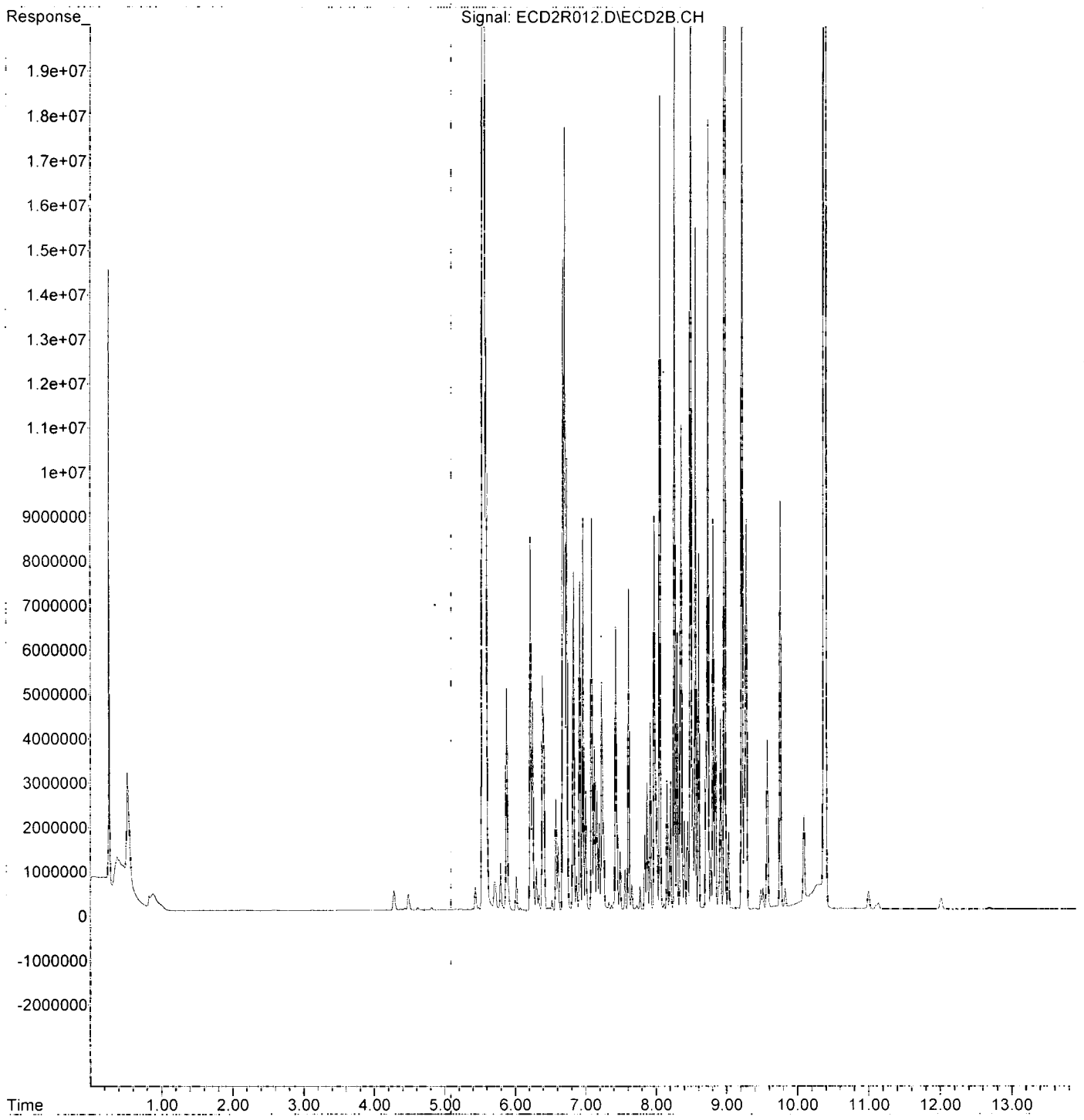
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R012.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 11:09
Operator : MJB / KAK
Sample : 9E10007-CAL7
Misc :
ALS Vial : 60 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:34:32 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Fri May 10 11:24:04 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:03
Operator : MJB / KAK
Sample : 9E10007-CAL8
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:36:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:36:03 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)	5.715	881549	569.824	ng/ml
10)		Aroclor 1221 (2)	5.789	829745	516.463	ng/ml
11)		Aroclor 1221 (3)	5.876	2809102	537.017	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

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07/03/19 Anchor Part of Portland - T4 - PDI Page 595 of 1399

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:03
Operator : MJB / KAK
Sample : 9E10007-CAL8
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:36:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:36:03 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

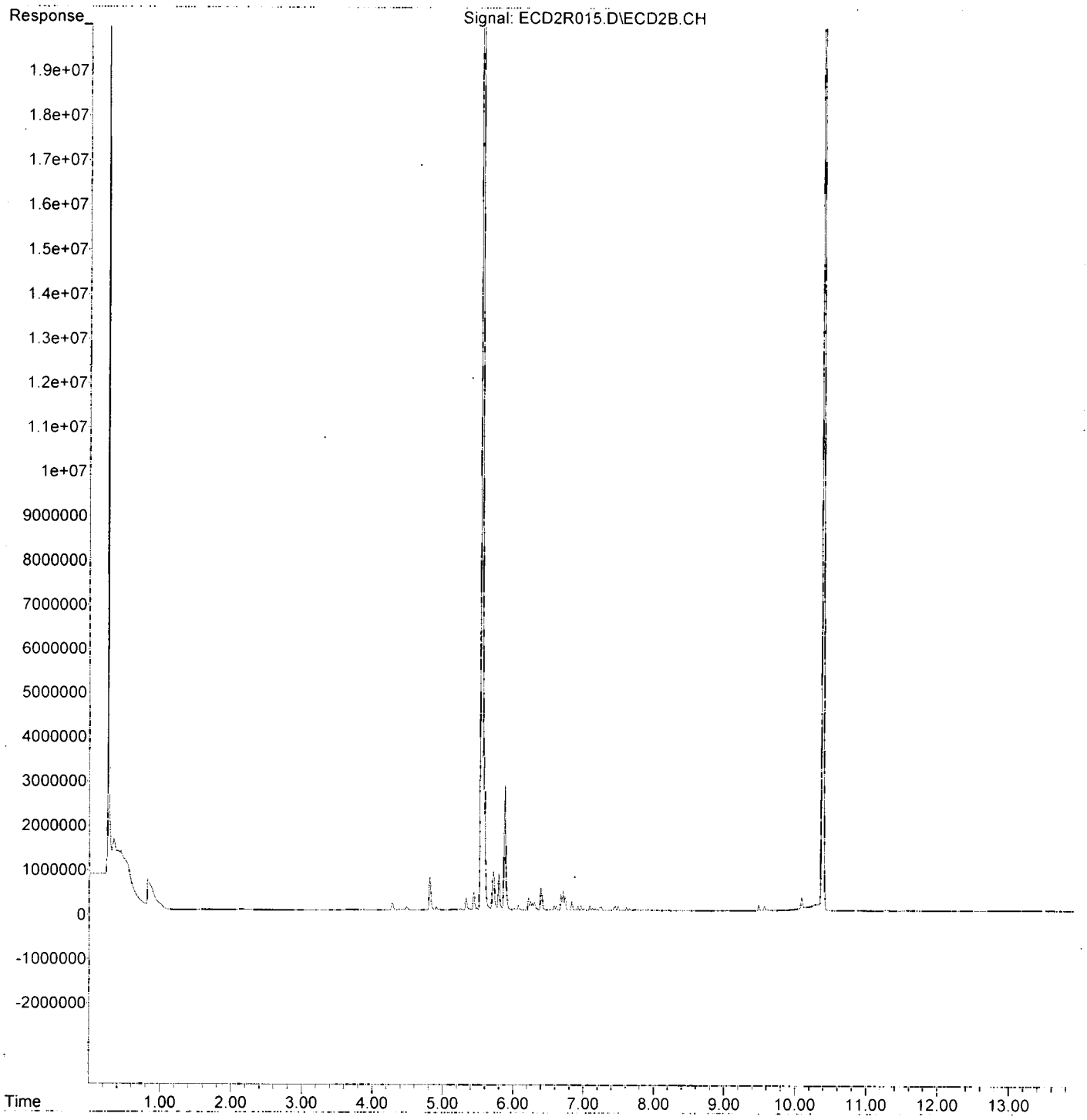
(f)=RT Delta > 1/2 Window (m)=manual int.

07/03/19 Action Part of Portland - T4 - PDI Page 596 of 1399

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R015.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:03
Operator : MJB / KAK
Sample : 9E10007-CAL8
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:36:10 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:36:03 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:21
Operator : MJB / KAK
Sample : 9E10007-CAL9
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:37:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:37:49 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
	System Monitoring Compounds				
1) S	TCMX (S)	0.000	0	N.D.	ng/mld
62) S	DCBP (S)	0.000	0	N.D.	ng/mld
	Target Compounds				
2)	Aroclor 1016 (1)	0.000	0	N.D.	ng/mld
3)	Aroclor 1016 (2)	0.000	0	N.D.	ng/mld
4)	Aroclor 1016 (3)	0.000	0	N.D.	ng/mld
5)	Aroclor 1016 (4)	0.000	0	N.D.	ng/mld
6)	Aroclor 1016 (5)	0.000	0	N.D.	ng/mld
7)	Aroclor 1016 (6)	0.000	0	N.D.	ng/mld
8)	Aroclor 1016 - AVE	0.000	0	N.D.	ng/mld
9)	Aroclor 1221 (1)	0.000	0	N.D.	ng/mld
10)	Aroclor 1221 (2)	0.000	0	N.D.	ng/mld
11)	Aroclor 1221 (3)	0.000	0	N.D.	ng/mld
12)	Aroclor 1221 - AVE	0.000	0	N.D.	ng/mld
13)	Aroclor 1232 (1)	5.875	2274194	519.947	ng/ml
14)	Aroclor 1232 (2)	6.212	1398713	535.645	ng/ml
15)	Aroclor 1232 (3)	6.701	2635999	549.775	ng/ml
16)	Aroclor 1232 (4)	6.914	1039443	546.966	ng/ml
17)	Aroclor 1232 (5)	6.959	1191042	533.069	ng/ml
18)	Aroclor 1232 (6)	7.083	1236490	524.863	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

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:21
Operator : MJB / KAK
Sample : 9E10007-CAL9
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:37:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:37:49 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

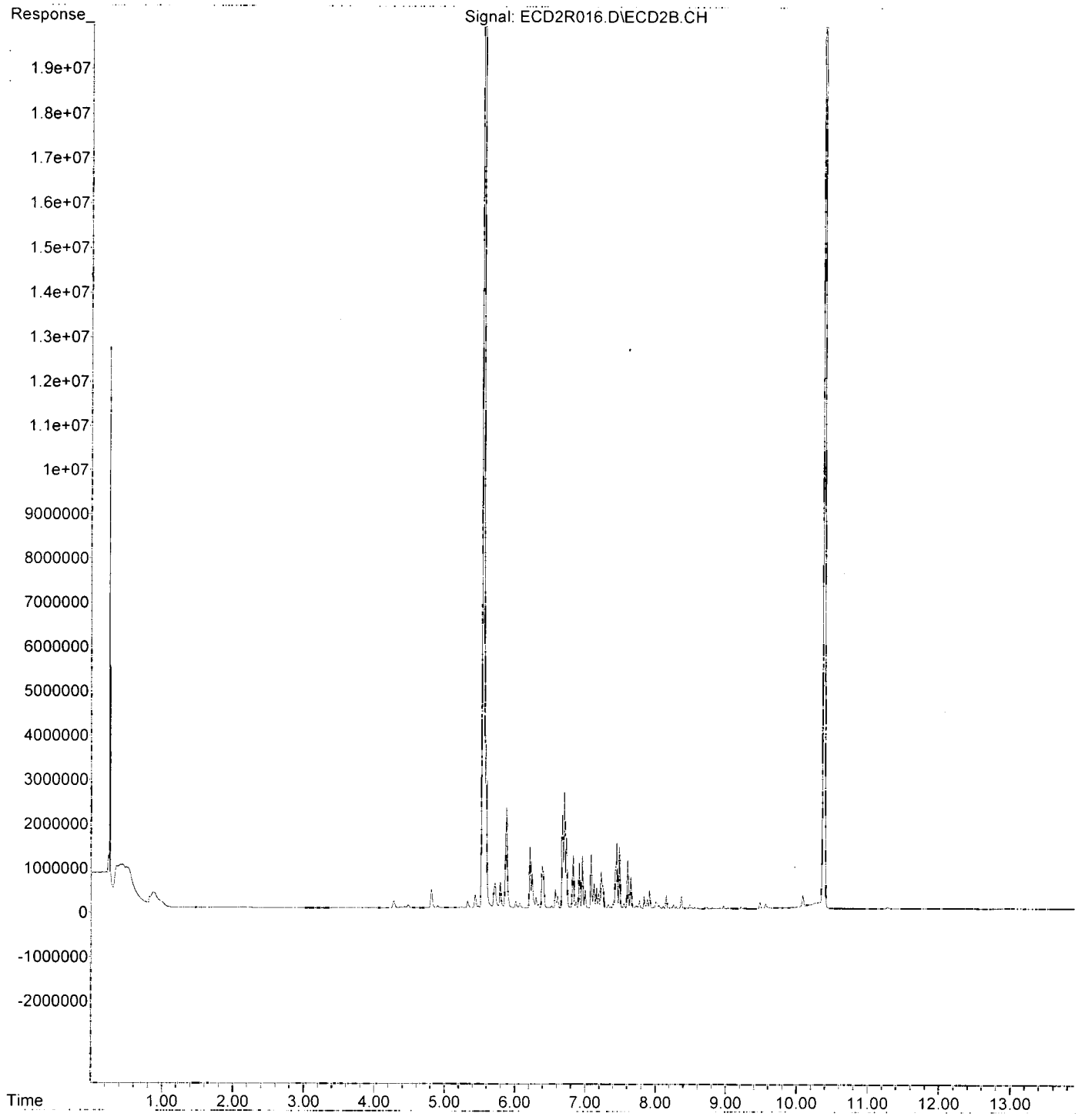
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R016.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:21
Operator : MJB / KAK
Sample : 9E10007-CAL9
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:37:56 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:37:49 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:39
Operator : MJB / KAK
Sample : 9E10007-CALA
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:40:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:39:59 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)	6.213	2505926	567.270	ng/ml
21)	Aroclor 1242 (2)	6.701	4855392	583.983	ng/ml
22)	Aroclor 1242 (3)	6.827	2204822	533.058	ng/ml
23)	Aroclor 1242 (4)	6.915	2107058	578.366	ng/ml
24)	Aroclor 1242 (5)	6.959	2455893	557.042	ng/ml
25)	Aroclor 1242 (6)	7.084	2571302	554.445	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

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:39
Operator : MJB / KAK
Sample : 9E10007-CALA
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:40:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:39:59 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

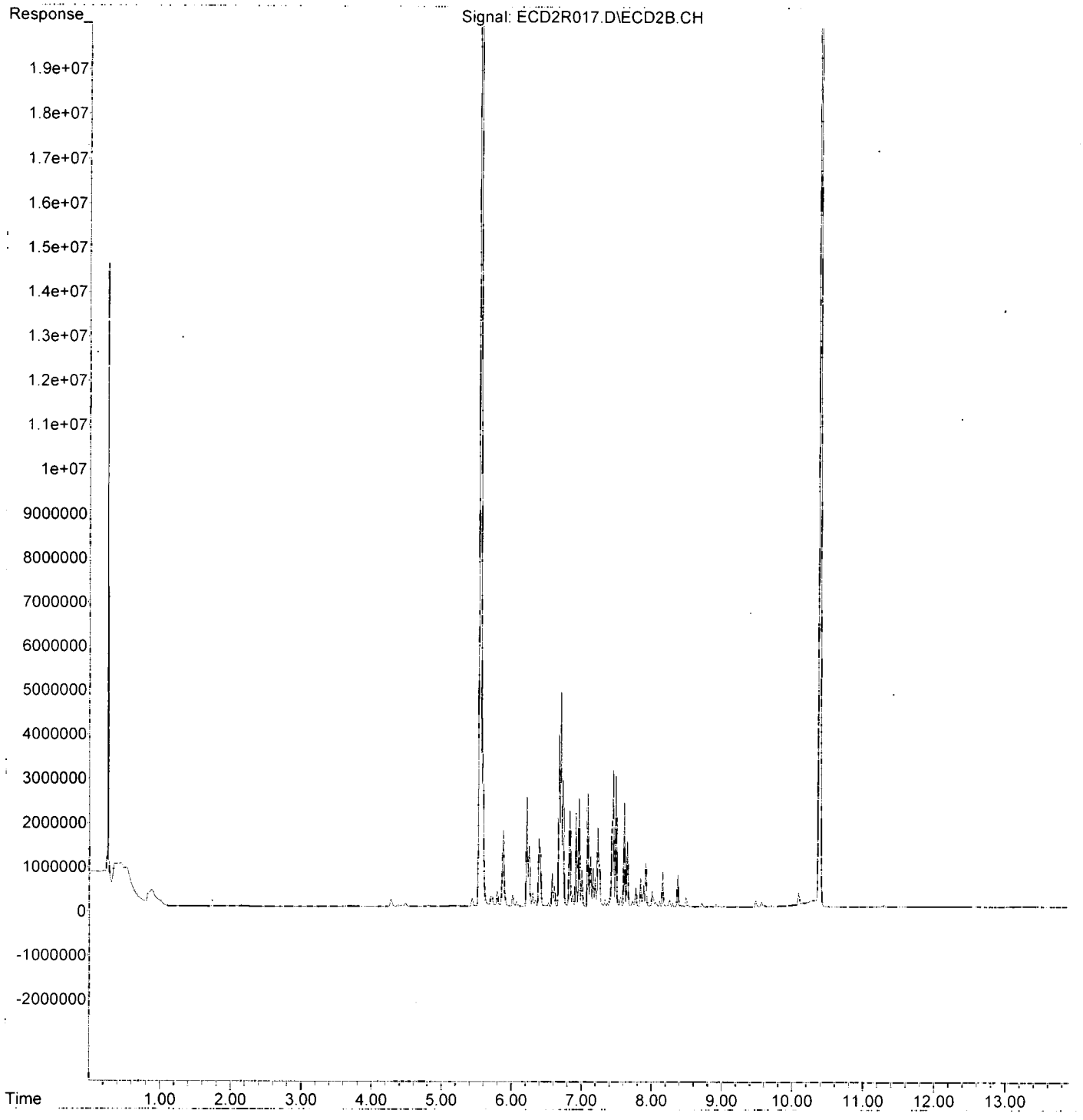
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R017.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:39
Operator : MJB / KAK
Sample : 9E10007-CALA
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:40:08 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:39:59 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:57
Operator : MJB / KAK
Sample : 9E10007-CALB
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:43:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:42:22 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)	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)	6.674	2930552	508.563	ng/ml
28)	Aroclor 1248 (2)	6.915	3834073	512.882	ng/ml
29)	Aroclor 1248 (3)	6.960	3566795	512.871	ng/ml
30)	Aroclor 1248 (4)	7.084	4238277	512.637	ng/ml
31)	Aroclor 1248 (5)	7.447	5505895	515.140	ng/ml
32)	Aroclor 1248 (6)	7.604	4833928	556.295	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

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:57
Operator : MJB / KAK
Sample : 9E10007-CALB
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:43:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:42:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

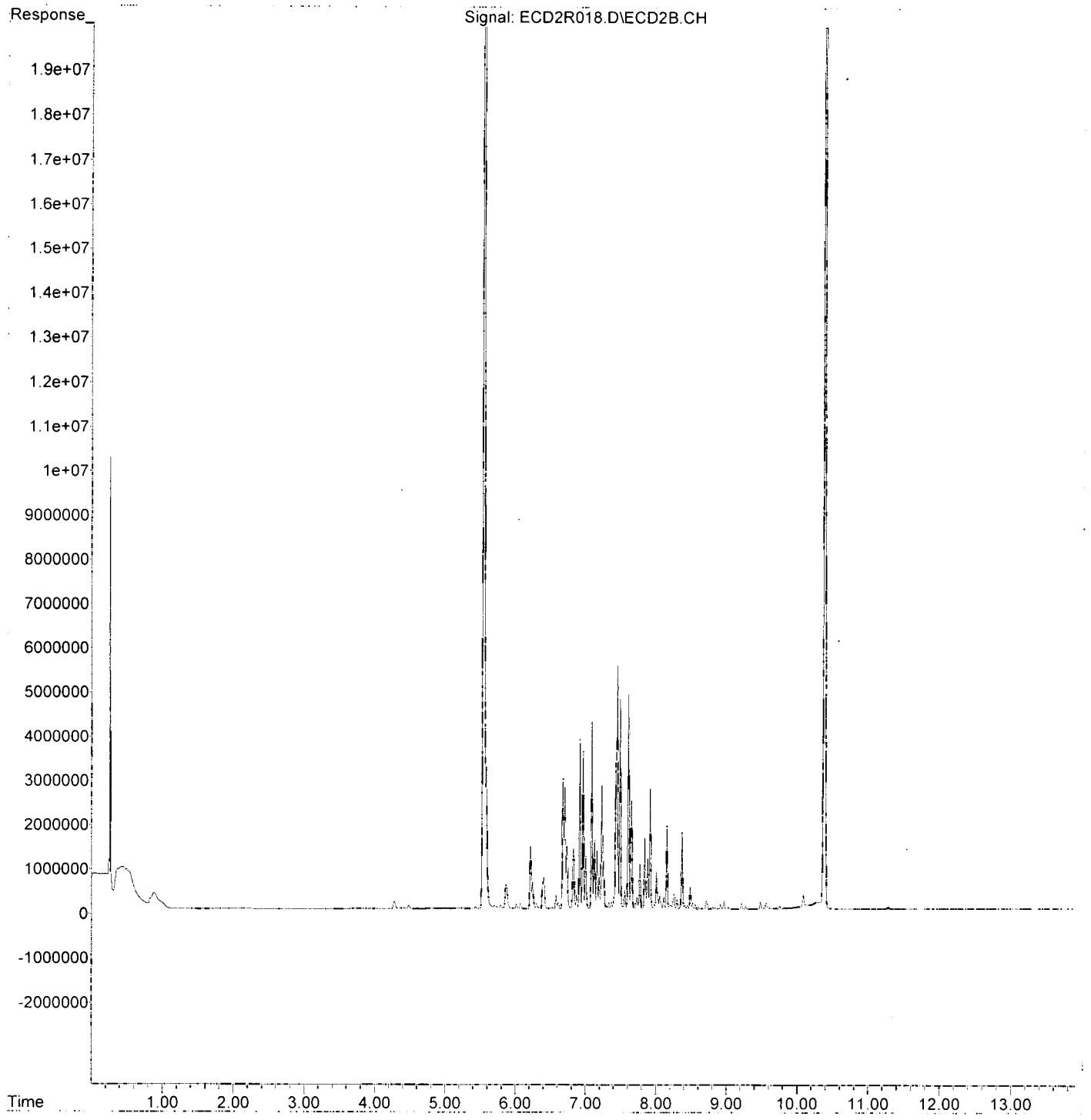
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R018.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 12:57
Operator : MJB / KAK
Sample : 9E10007-CALB
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:43:00 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:42:22 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:15
Operator : MJB / KAK
Sample : 9E10007-CALC
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:45:59 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:45:53 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)	7.425	5477666	579.245	ng/ml
35)	Aroclor 1254 (2)	7.607	8988363	614.677	ng/ml
36)	Aroclor 1254 (3)	7.916	9781808	624.747	ng/ml
37)	Aroclor 1254 (4)	8.154	7305924	607.281	ng/ml
38)	Aroclor 1254 (5)	8.487	7390103	624.372	ng/ml
39)	Aroclor 1254 (6)	8.714	2194054	620.978	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

5/13/19

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:15
Operator : MJB / KAK
Sample : 9E10007-CALC
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:45:59 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:45:53 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

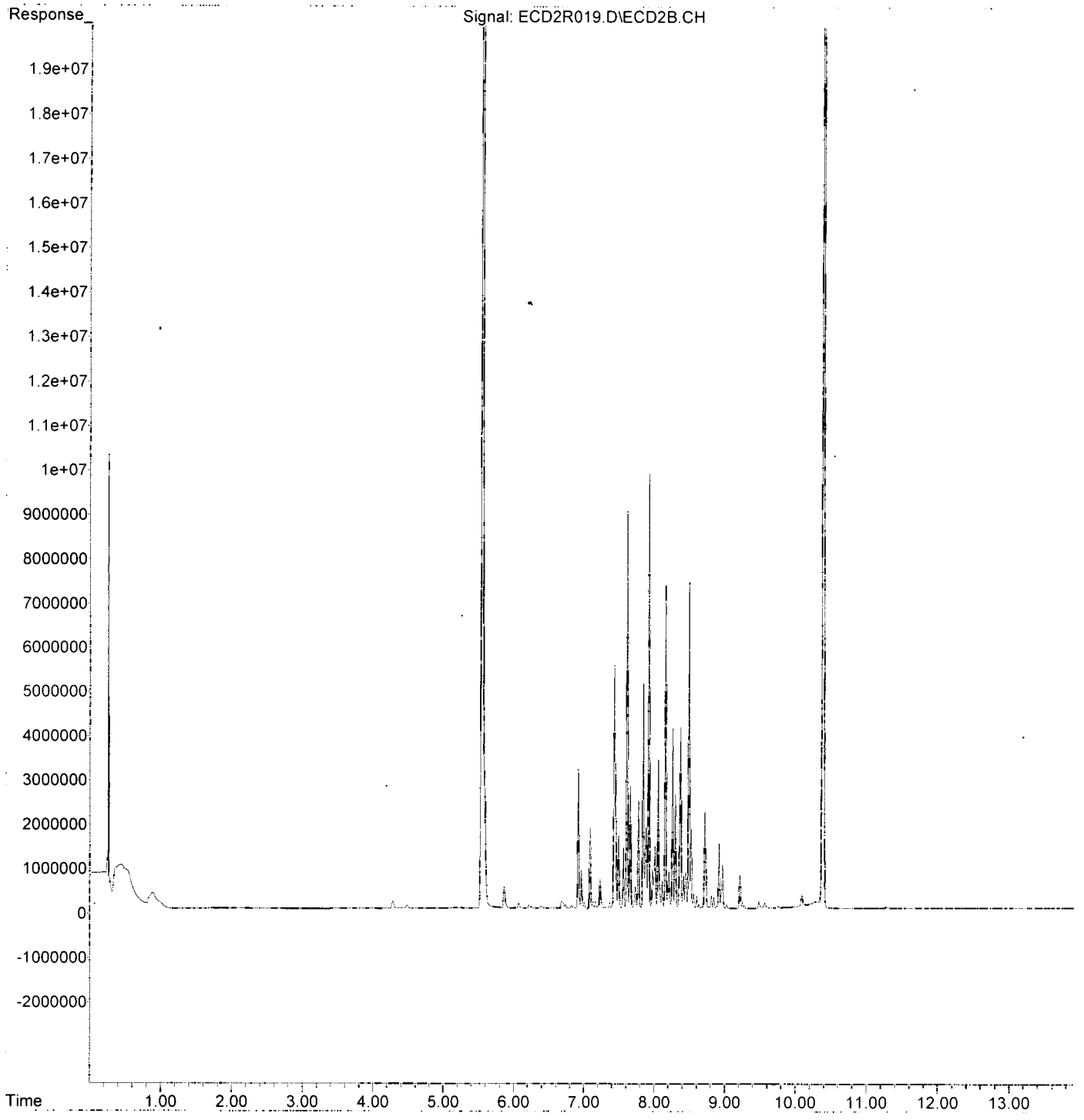
	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	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\9E10007\
Data File : ECD2R019.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:15
Operator : MJB / KAK
Sample : 9E10007-CALC
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:45:59 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:45:53 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:33
Operator : MJB / KAK
Sample : 9E10007-CALD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:47:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:47:41 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

	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\9E10007\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:33
Operator : MJB / KAK
Sample : 9E10007-CALD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:47:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:47:41 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	8.258	6618869	547.617	ng/ml
49)	Aroclor 1262 (2)	8.558	9008942	562.680	ng/ml
50)	Aroclor 1262 (3)	8.733	7409306	572.164	ng/ml
51)	Aroclor 1262 (4)	8.968	16650877	581.346	ng/ml
52)	Aroclor 1262 (5)	9.215	9448958	595.153	ng/ml
53)	Aroclor 1262 (6)	9.755	4391319	584.535	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

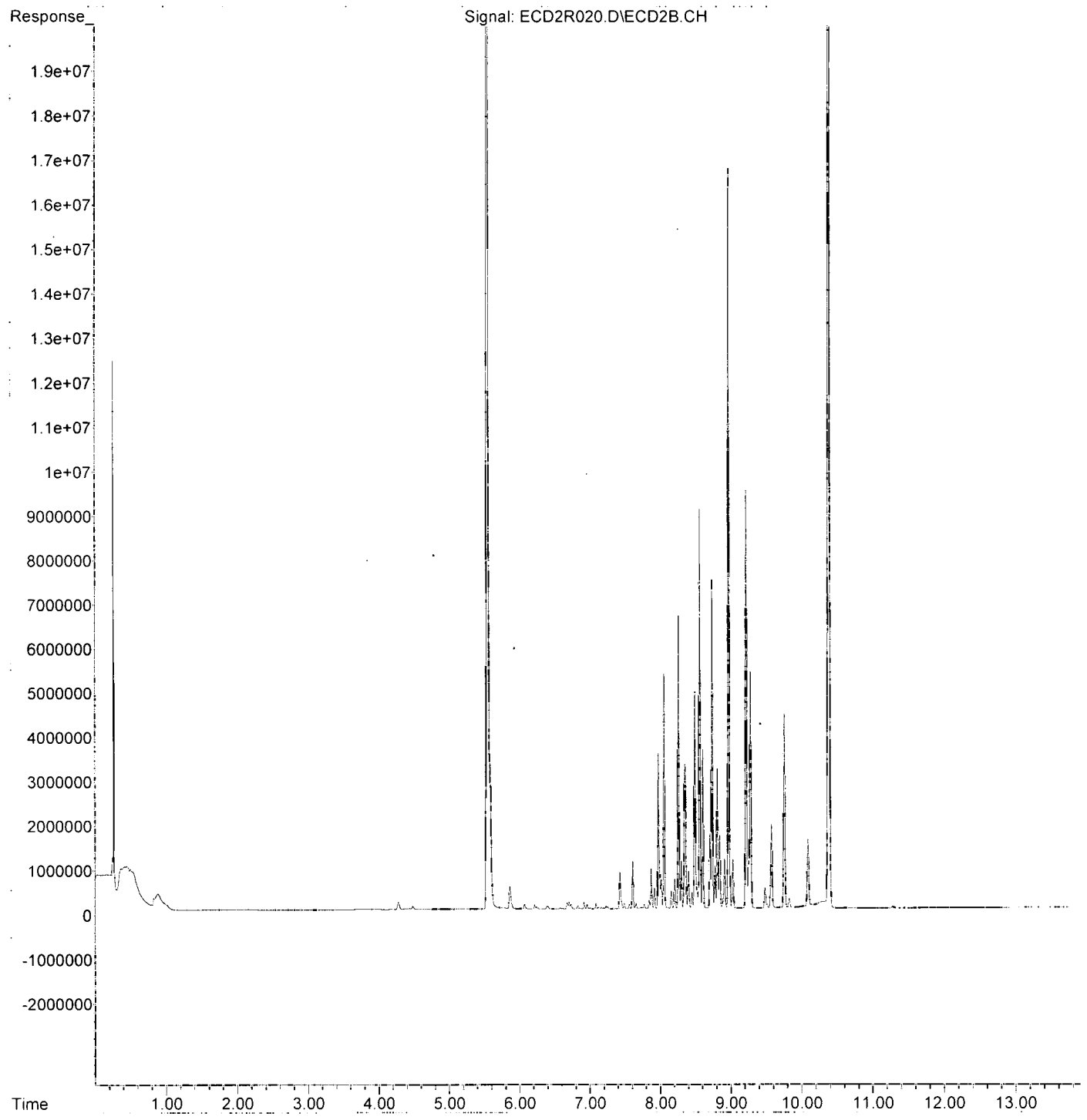
5/13/19

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R020.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:33
Operator : MJB / KAK
Sample : 9E10007-CALD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:47:47 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:47:41 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:52
Operator : MJB / KAK
Sample : 9E10007-CALE
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:49:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:49:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

5/13/19

	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\9E10007\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:52
Operator : MJB / KAK
Sample : 9E10007-CALE
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:49:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:49:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

	Compound	R.T.	Response	Conc	Units
48)	Aroclor 1262 (1)	0.000	0	N.D.	ng/mld
49)	Aroclor 1262 (2)	0.000	0	N.D.	ng/mld
50)	Aroclor 1262 (3)	0.000	0	N.D.	ng/mld
51)	Aroclor 1262 (4)	0.000	0	N.D.	ng/mld
52)	Aroclor 1262 (5)	0.000	0	N.D.	ng/mld
53)	Aroclor 1262 (6)	0.000	0	N.D.	ng/mld
54)	Aroclor 1262 - AVE	0.000	0	N.D.	ng/mld
55)	Aroclor 1268 (1)	8.775	3893442	553.675	ng/ml
56)	Aroclor 1268 (2)	9.217	18129735	567.151	ng/ml
57)	Aroclor 1268 (3)	9.279	14672585	574.351	ng/ml
58)	Aroclor 1268 (4)	9.481	12688955	607.365	ng/ml
59)	Aroclor 1268 (5)	9.754	4779881	580.239	ng/ml
60)	Aroclor 1268 (6)	10.087	34593857	626.884	ng/ml
61)	Aroclor 1268 - AVE	0.000	0	N.D.	ng/ml

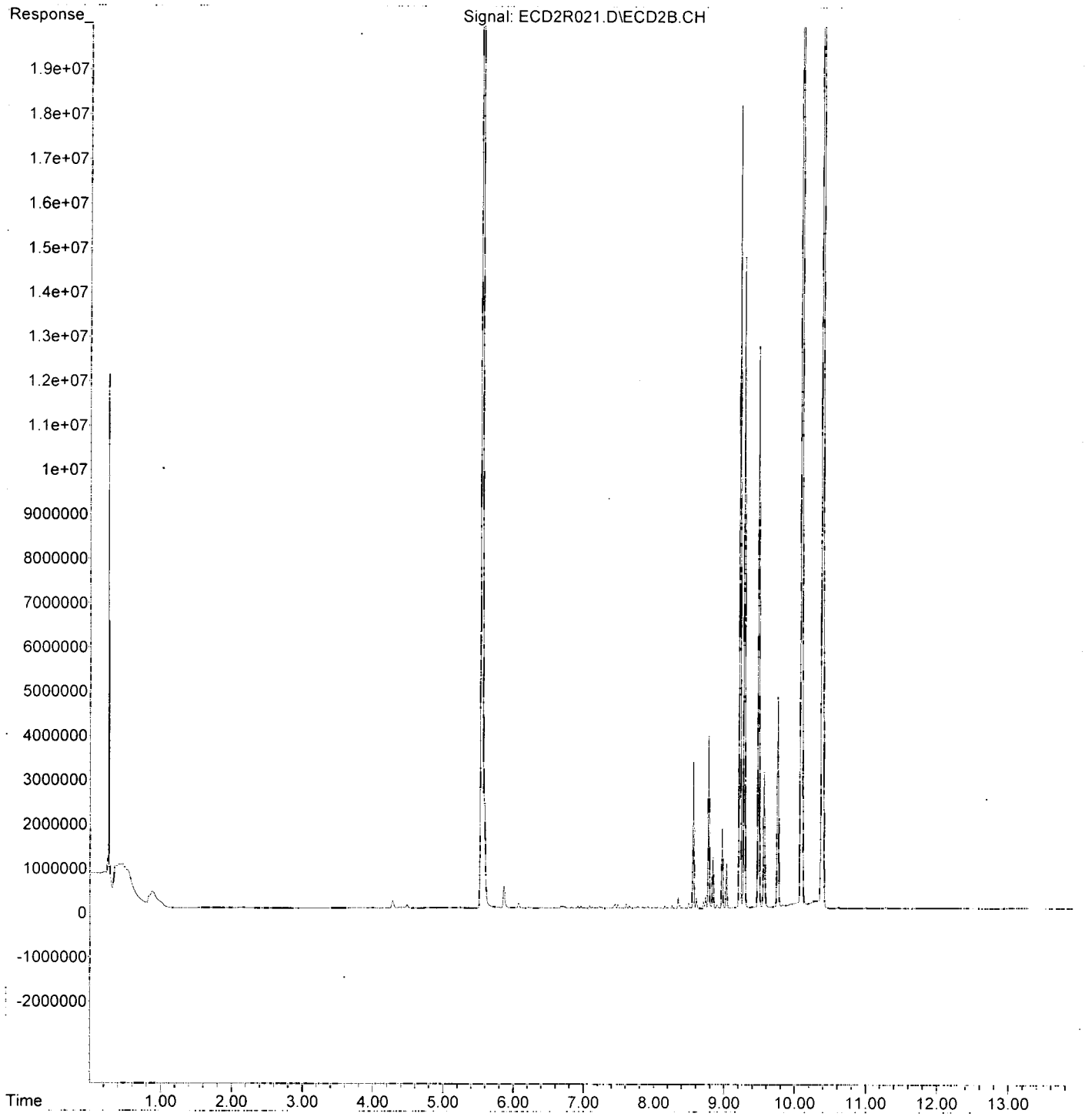
5/13/19

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

Quantitation Report (QT Reviewed)

Data Path : K:\DATA\9E10007\
Data File : ECD2R021.D
Signal(s) : ECD2B.CH
Acq On : 10 May 2019 13:52
Operator : MJB / KAK
Sample : 9E10007-CALE
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: events.e
Quant Time: May 13 10:49:51 2019
Quant Method : L:\Methods\RECD2_QUANTPCB_190510.M
Quant Title : PCB Data Analysis
QLast Update : Mon May 13 10:49:43 2019
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Batch 9051333
Sequence 9E31017 (A9E0766-01RE2)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9051333-BLK1		QC	05/29/19 06:59	16	2				100					
	9051333-BS1		QC	05/29/19 06:59	15	2	A19D326		100	100					
	A9E0744-01	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.12	2				100	T4-PDI2019-SC03-190521-01-03	PAHs Only			
	9051333-DUP1		QC	05/29/19 06:59	15.16	2		A9E0744-01		100					
	A9E0744-02	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.04	2				100	T4-PDI2019-SC03-190521-03-05	PAHs Only			
	A9E0744-06	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.18	2				100	T4-PDI2019-SC12-190521-01-03	PAHs Only			
	A9E0744-07	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.28	2				100	T4-PDI2019-SC12-190521-03-05	PAHs Only			
	A9E0744-08	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.29	2				100	T4-PDI2019-SC12-190521-05-07	PAHs Only			
	A9E0744-09	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.01	2				100	T4-PDI2019-SC12-190521-07-8.3	PAHs Only			
	A9E0744-09RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.01	2				100	T4-PDI2019-SC12-190521-07-8.3	Added 5/30/2019 By ams			
	A9E0744-09RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.01	2				100	T4-PDI2019-SC12-190521-07-8.3	Added 5/31/2019 By hml			
	A9E0744-10	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.02	2				100	FD-20190521155 6	PAHs Only			
	A9E0744-10RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.02	2				100	FD-20190521155 6	Added 5/30/2019 By ams			
	A9E0744-10RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.02	2				100	FD-20190521155 6	Added 5/31/2019 By hml			
	A9E0744-11	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.46	2				100	T4-PDI2019-SC13-190521-01-03	PAHs Only			
	9051333-MS1		QC	05/29/19 06:59	15.45	2	A19D326	A9E0744-11	100	100					
	A9E0744-12	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.15	2				100	T4-PDI2019-SC13-190521-03-05	PAHs Only			
	A9E0744-13	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.1	2				100	T4-PDI2019-SC13-190521-05-07	PAHs Only			
	A9E0744-13RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.1	2				100	T4-PDI2019-SC13-190521-05-07	Added 5/30/2019 By ams			
	A9E0744-13RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.1	2				100	T4-PDI2019-SC13-190521-05-07	Added 5/31/2019 By hml			

Prepared By: Date

DH 6/3/19

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0744-14	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.59	2				100	T4-PDI2019-SC13-190521-07-09	PAHs Only			
	A9E0744-14RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.59	2				100	T4-PDI2019-SC13-190521-07-09	Added 5/30/2019 By ams			
	A9E0744-14RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.59	2				100	T4-PDI2019-SC13-190521-07-09	Added 5/31/2019 By hml			
	A9E0744-15	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.22	2				100	T4-PDI2019-SC13-190521-09-11.1	PAHs Only			
	A9E0744-15RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.22	2				100	T4-PDI2019-SC13-190521-09-11.1	Added 5/30/2019 By ams			
	A9E0744-15RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.22	2				100	T4-PDI2019-SC13-190521-09-11.1	Added 5/31/2019 By hml			
	A9E0744-16	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.31	2				100	FD-201905211730	PAHs Only			
	A9E0744-17	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.27	2				100	T4-PDI2019-SC19-190521-01-03	PAHs Only			
	A9E0744-17RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.27	2				100	T4-PDI2019-SC19-190521-01-03	Added 5/30/2019 By ams			
	A9E0744-18	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.11	2				100	T4-PDI2019-SC19-190521-03-05	PAHs Only			
	A9E0744-18RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.11	2				100	T4-PDI2019-SC19-190521-03-05	Added 5/30/2019 By ams			
	A9E0744-18RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.11	2				100	T4-PDI2019-SC19-190521-03-05	Added 5/31/2019 By hml			
	A9E0744-19	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.7	2				100	T4-PDI2019-SC19-190521-05-07	MS/MSD this sample, PAHs Only			
	A9E0744-19RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.7	2				100	T4-PDI2019-SC19-190521-05-07	Added 5/30/2019 by ams			
	A9E0744-19RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.7	2				100	T4-PDI2019-SC19-190521-05-07	Added 5/30/2019 by ams			
	9051333-MS2		QC	05/29/19 12:26	15.75	2	A19D326	A9E0744-19RE2	100	100					
	9051333-MSD2		QC	05/29/19 12:27	15.88	2	A19D326	A9E0744-19RE2	100	100					

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0744-20	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.2	2				100	T4-PDI2019-SC1 9-190521-07-09	PAHs Only			
	A9E0744-20RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.2	2				100	T4-PDI2019-SC1 9-190521-07-09	Added 5/30/2019 By ams			
	A9E0744-20RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.2	2				100	T4-PDI2019-SC1 9-190521-07-09	Added 6/3/2019 by ams			
	A9E0744-21	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.33	2				100	T4-PDI2019-SC1 9-190521-09-11	PAHs Only			
	A9E0744-21RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.33	2				100	T4-PDI2019-SC1 9-190521-09-11	Added 5/30/2019 By ams			
	A9E0744-21RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.33	2				100	T4-PDI2019-SC1 9-190521-09-11	Added 5/31/2019 By hml			
	A9E0744-22	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.39	2				100	T4-PDI2019-SC1 9-190521-11-11.8	PAHs Only			
	A9E0744-22RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.39	2				100	T4-PDI2019-SC1 9-190521-11-11.8	Added 5/30/2019 By ams			
	A9E0744-22RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.39	2				100	T4-PDI2019-SC1 9-190521-11-11.8	Added 5/31/2019 By hml			
	A9E0744-22RE3	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.39	2				100	T4-PDI2019-SC1 9-190521-11-11.8	Added 6/3/2019 By ams			
	A9E0766-01	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.41	2				100	FD-20190522094 7	PAHs Only			
	A9E0766-01RE1	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.41	2				100	FD-20190522094 7	Added 5/30/2019 By ams			
	A9E0766-01RE2	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15.41	2				100	FD-20190522094 7	Added 5/31/2019 By hml			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19D326	10/21/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19E036	10/30/19	PAH Soil and Water Surr. (50ppm)

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH		
													<2	Other	>11

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9051333-BLK1		QC	05/29/19 06:59	16	2				100					
	9051333-BS1		QC	05/29/19 06:59	15	2	A19D326		100	100					
	A9E0744-01	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.12	2				100	T4-PDI2019-SC03-190521-01-03	PAHs Only			
	9051333-DUP1		QC	05/29/19 06:59	15.16	2		A9E0744-01		100					
	A9E0744-02	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.04	2				100	T4-PDI2019-SC03-190521-03-05	PAHs Only			
	A9E0744-06	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.18	2				100	T4-PDI2019-SC12-190521-01-03	PAHs Only			
	A9E0744-07	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.28	2				100	T4-PDI2019-SC12-190521-03-05	PAHs Only			
	A9E0744-08	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.29	2				100	T4-PDI2019-SC12-190521-05-07	PAHs Only			
	A9E0744-09	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.01	2				100	T4-PDI2019-SC12-190521-07-8.3	PAHs Only			
	A9E0744-10	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.02	2				100	FD-201905211556	PAHs Only			
	A9E0744-11	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	15.46	2				100	T4-PDI2019-SC13-190521-01-03	PAHs Only			
	9051333-MS1		QC	05/29/19 06:59	15.45	2	A19D326	A9E0744-11	100	100					
8	A9E0744-12	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.15	2 ✓				100	T4-PDI2019-SC13-190521-03-05	PAHs Only MMD			
9	A9E0744-13	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.10	2 ✓				100	T4-PDI2019-SC13-190521-05-07	PAHs Only Sand			
10	A9E0744-14	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.59	2 ✓				100	T4-PDI2019-SC13-190521-07-09	PAHs Only MMD			
11	A9E0744-15	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.22	2 ✓				100	T4-PDI2019-SC13-190521-09-11.1	PAHs Only MMD			
12	A9E0744-16	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.31	2 ✓				100	FD-201905211730	PAHs Only MMD ★			
13	A9E0744-17	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.27	2 ✓				100	T4-PDI2019-SC19-190521-01-03	PAHs Only MMD			
14	A9E0744-18	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	~~15~~ 15.11	2 ✓				100	T4-PDI2019-SC19-190521-03-05	PAHs Only MMD			

JC 5-29-19
Prepared By: Date
JAG 5/29/19

JRA 05/29/19
Reviewed By: Date

Printed: 5/29/2019 12:31:52PM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
15	A9E0744-19	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15 15.70	2 ✓				100	T4-PDI2019-SC1 9-190521-05-07	MS/MSD this sample, PAHs Only MWD			
16	9051333-MS2		QC	05/29/19 12:26	15 15.75	2 ✓	A19D326	A9E0744-19	100	100		MWD			
17	9051333-MSD2		QC	05/29/19 12:27	15 15.88	2 ✓	A19D326	A9E0744-19	100	100		MWD			
18	A9E0744-20	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15 15.20	2 ✓				100	T4-PDI2019-SC1 9-190521-07-09	PAHs Only MWD			
19	A9E0744-21	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15 15.33	2 ✓				100	T4-PDI2019-SC1 9-190521-09-11	PAHs Only MWD			
20	A9E0744-22	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15 15.39	2 ✓				100	T4-PDI2019-SC1 9-190521-11-11.8	PAHs Only MWD			
21	A9E0766-01	A	8270D LL PAH/PHTH/Phenols	05/29/19 12:26	15 15.41	2 ✓				100	FD-20190522094 7	PAHs Only wet sand			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19D326	10/21/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19E036	10/30/19	PAH Soil and Water Surr. (50ppm)

Method 3546 digestion time and temperture achieved.
Initial: JC

* = staining on Turbo Vap.

Witness: JAG 5/29/19

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051333 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9051333-BLK1		QC	05/29/19 06:59	~~15~~ 16	2				100					
2	9051333-BS1		QC	05/29/19 06:59	15	2	A19D326		100	100					
3	A9E0744-01	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.12	2				100	T4-PDI2019-SC0 3-190521-01-03	PAHs Only mud			
4	9051333-DUP1		QC	05/29/19 06:59	~~15~~ 15.16	2		A9E0744-01		100		mud			
5	A9E0744-02	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.09	2				100	T4-PDI2019-SC0 3-190521-03-05	PAHs Only Mud			
6	A9E0744-06	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.18	2				100	T4-PDI2019-SC1 2-190521-01-03	PAHs Only Mud			
7	A9E0744-07	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.28	2				100	T4-PDI2019-SC1 2-190521-03-05	PAHs Only Mud			
8	A9E0744-08	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.29	2				100	T4-PDI2019-SC1 2-190521-05-07	PAHs Only mud			
9	A9E0744-09	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.01	2				100	T4-PDI2019-SC1 2-190521-07-8.3	PAHs Only sand			
10	A9E0744-10	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.02	2				100	FD-20190521155 6	PAHs Only mud			
11	A9E0744-11	A	8270D LL PAH/PHTH/Phenols	05/29/19 06:59	~~15~~ 15.46	2				100	T4-PDI2019-SC1 3-190521-01-03	PAHs Only mud			
12	9051333-MS1		QC	05/29/19 06:59	~~15~~ 15.45	2	A19D326	A9E0744-11	100	100		mud			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19D326	10/21/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19E036	10/30/19	PAH Soil and Water Surr. (50ppm)

JAG

Method 3546 digestion time and temperture achieved.
Initial: JAG

Witness: BM 5.29.19

JAG 5/29/19
Prepared By: Date

JAG 05/29/19
Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E31017**	Instrument:	**SV-GCMS5**
Date:	**05/31/19 09:18**	Calibration:	**A9A3103**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E31017-TUN1	Water	QC	QC			A19B027	A19E333
2	9E31017-IBL1	Water	QC	QC			A19B027	
3	9E31017-CCV1	Water	QC	QC			A19B027	A19C237
4	9E31017-IBL2	Water	QC	QC			A19B027	
5	9E31017-TUN2	Water	QC	QC			A19B027	A19E333
6	9E31017-IBL3	Water	QC	QC			A19B027	
7	9E31017-CCV2	Water	QC	QC			A19B027	A19C237
8	9E31017-CCB1	Water	QC	QC			A19B027	
9	A9E0744-09RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
10	A9E0744-10RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
11	A9E0744-13RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
12	A9E0744-14RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
13	A9E0744-15RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
14	9051460-BLK2	Water	QC	QC		9051460	A19B027	
15	9051460-BS2	Water	QC	QC		9051460	A19B027	
16	9051460-BSD2	Water	QC	QC		9051460	A19B027	
17	A9E0935-01	Water	625 PAH/PCP/HCB (SW)		06/12/19	9051460	A19B027	
18	A9E0744-18RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
19	A9E0744-20RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
20	A9E0744-21RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
21	A9E0744-22RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
22	A9E0766-01RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9051333	A19B027	

Data Entered By: AMS 6/3/19

Data Reviewed By: GJ 6/3/19

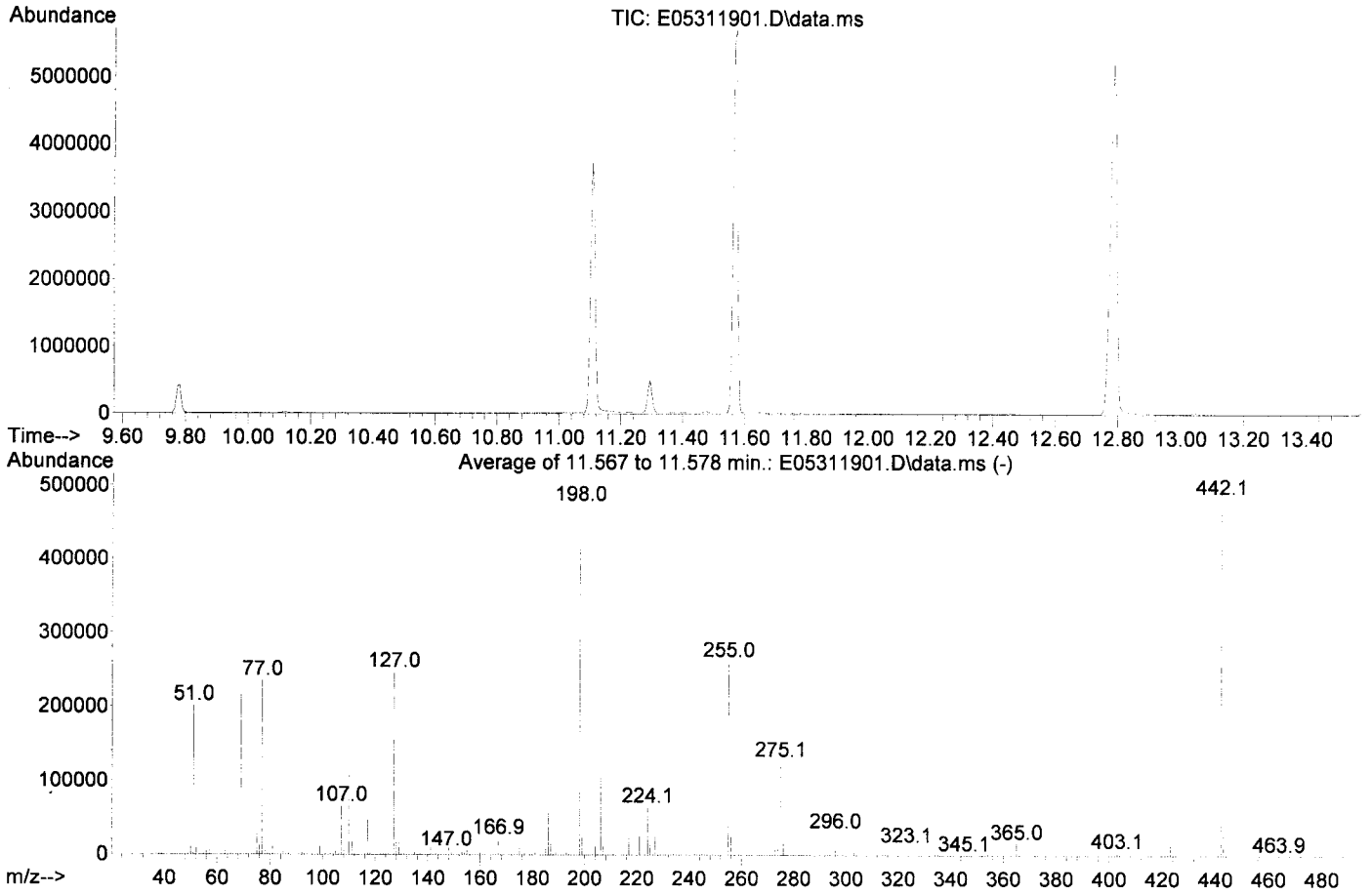
Comments:

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311901.D
Acq On : 31 May 2019 9:25 am
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : W:\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed May 15 13:49:43 2019

AMS 6/3/19 Q-14



AutoFind: Scans 1492, 1493, 1494; Background Corrected with Scan 1487

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.6	201665	PASS
68	69	0.00	2	0.2	408	PASS
69	198	0.00	100	45.8	216536	PASS
70	69	0.00	2	0.4	947	PASS
127	198	10	80	52.2	246991	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	473295	PASS
199	198	5	9	6.7	31754	PASS
275	198	10	60	26.9	127424	PASS
365	198	1	100	3.3	15672	PASS
441	442	0.01	24	15.4	75808	PASS
442	198	50	200	103.9	491819	PASS
443	442	15	24	19.2	94192	PASS

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311901.D
Acq On : 31 May 2019 9:25 am
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

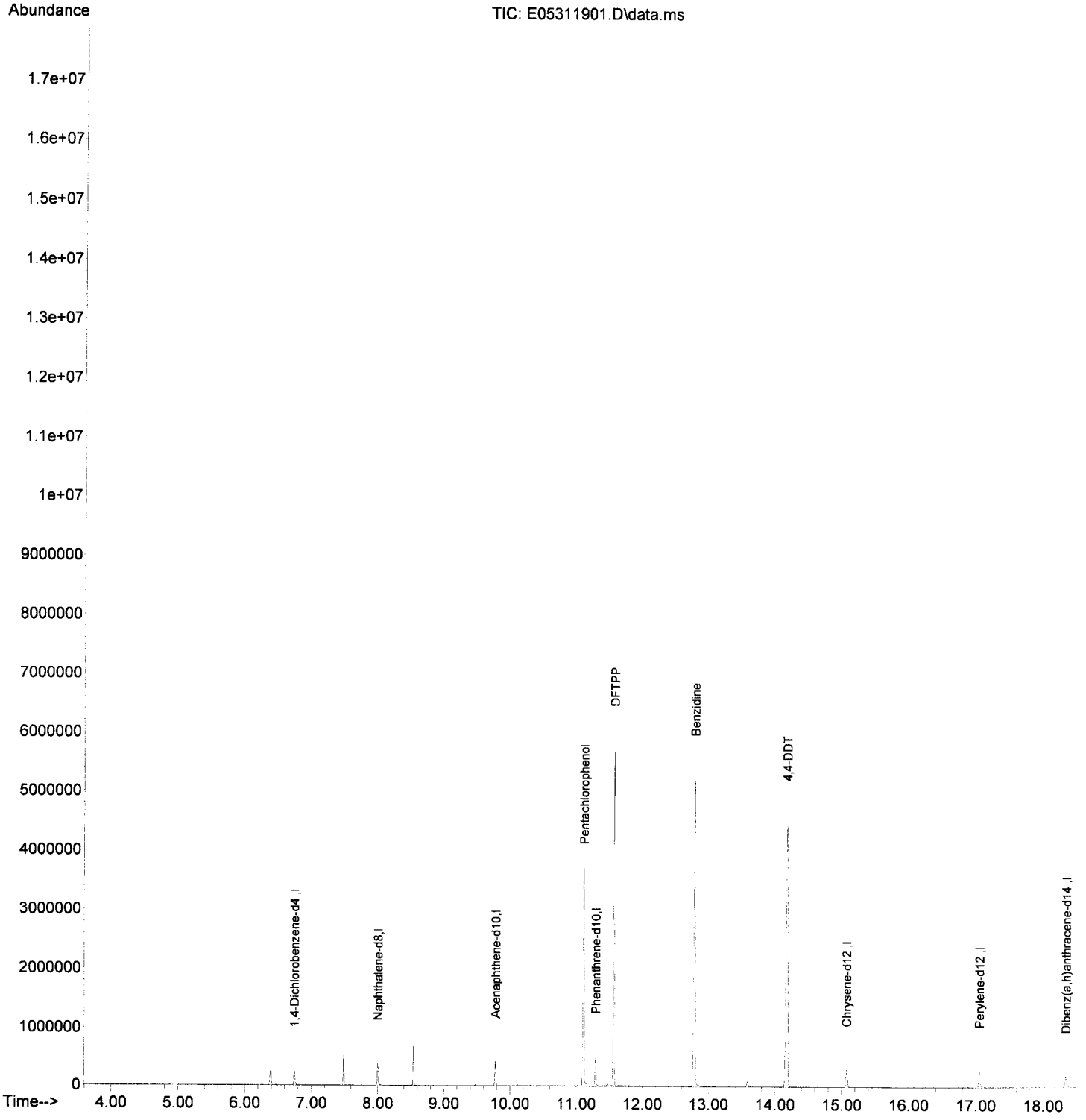
Quant Time: Jun 03 08:51:35 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.743	150	80095	2.00	ug/mL	0.00
2) Naphthalene-d8	7.999	136	182244	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.781	162	93523	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.294	188	174748	2.00	ug/mL	0.00
11) Chrysene-d12	15.070	240	153042	2.00	ug/mL	-0.01
12) Perylene-d12	17.049	264	120249	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.333	292	110755	2.00	ug/mL	-0.01
Target Compounds						Qvalue
4) Pentachlorophenol	11.112	266	432075	48.92	ug/mL	92
6) DFTPP	11.572	442	541721	38.40	ug/mL	92
7) Benzidine	12.787	184	2804671	45.12	ug/mL	93
8) 4,4-DDE	13.049	TIC	30433	No Calib		
9) 4,4-DDD	13.589	TIC	126775	No Calib		
10) 4,4-DDT	14.177	TIC	7519980	41.96	ug/mL	97

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311901.D
Acq On : 31 May 2019 9:25 am
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 03 08:51:35 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311903.D
Acq On : 31 May 2019 10:31 am
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Q-14
AMS
6/13/19

Quant Time: May 31 10:58:55 2019
Quant Method : Z:\METHODS\SV5_013019R3.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 29 09:47:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.762	152	186752	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.008	136	909077	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.784	162	424409	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.298	188	659583	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.207	240	615979	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.721	264	503304	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.112	292	416966	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.564	112	156749	1346.34	ng/ml	-0.01
5) Phenol-d6(Surr)	6.409	99	206858	1328.29	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	183749	1315.96	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	331266	1049.53	ng/ml	-0.02
67) 2,4,6-Tribromophenol (...	10.586	330	32040	1309.90	ng/ml	-0.01
79) Terphenyl-d14 (Surr)	13.127	244	300044	1042.54	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.328	74	114561	1299.97	ng/ml	95
3) Pyridine	4.360	79	179265	1256.03	ng/ml	98
6) Phenol	6.420	94	233062	1428.24	ng/ml	94
7) Aniline	6.452	93	287455	1351.80	ng/ml	99
8) Bis(2-chloroethyl) ether	6.500	93	152466	1143.13	ng/ml	100
9) 2-Chlorophenol	6.569	128	132444	1083.88	ng/ml	99
10) 1,3-Dichlorobenzene	6.714	146	183463	1313.42	ng/ml	97
11) 1,4-Dichlorobenzene	6.778	146	142241	1007.84	ng/ml	99
12) Benzyl alcohol	6.885	108	99475	1285.35	ng/ml	98
13) 1,2-Dichlorobenzene	6.928	146	141084	1055.34	ng/ml	98
14) 2-Methylphenol	6.992	107	127393	1253.57	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.008	45	316720	1497.46	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.136	70	133726	1337.61	ng/ml	99
17) 3+4-Methylphenol	7.142	107	175724	1368.93	ng/ml	96
18) Hexachloroethane	7.254	117	51123	981.23	ng/ml	85
20) Nitrobenzene	7.313	77	193693	1436.29	ng/ml	95
22) Isophorone	7.537	82	337371	1087.42	ng/ml	98
23) 2-Nitrophenol	7.623	139	78548	1152.20	ng/ml	97
24) 2,4-Dimethylphenol	7.660	122	133208	979.21	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.741	93	201051	1029.95	ng/ml	98
26) Benzoic acid	7.746	105	76366	1835.74	ng/ml	97
27) 2,4-Dichlorophenol	7.869	162	114159	1082.97	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.949	180	129701	1027.05	ng/ml	94
29) Naphthalene	8.030	128	483410	996.81	ng/ml	100
30) 4-Chloroaniline	8.078	127	163495	978.92	ng/ml	99
31) Hexachlorobutadiene	8.153	225	65912	1068.57	ng/ml	98
32) 4-Chloro-3-methylphenol	8.559	107	126116	1087.03	ng/ml	96
33) 2-Methylnaphthalene	8.719	142	328106	1075.60	ng/ml	96
34) 1-Methylnaphthalene	8.821	142	306396	1048.86	ng/ml	96
36) Hexachlorocyclopentadiene	8.885	237	66469	1220.92	ng/ml	95
37) 2,4,6-Trichlorophenol	9.008	196	76887	1198.19	ng/ml	100
38) 2,4,5-Trichlorophenol	9.051	196	77473	1158.86	ng/ml	98
39) 1,1'-Biphenyl	9.190	154	376567	1037.13	ng/ml	98
41) 2-Chloronaphthalene	9.212	162	269776	1029.13	ng/ml	100
42) 2-Nitroaniline	9.313	138	78794	989.45	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.351	156	266133	1049.14	ng/ml	97

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311903.D
Acq On : 31 May 2019 10:31 am
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

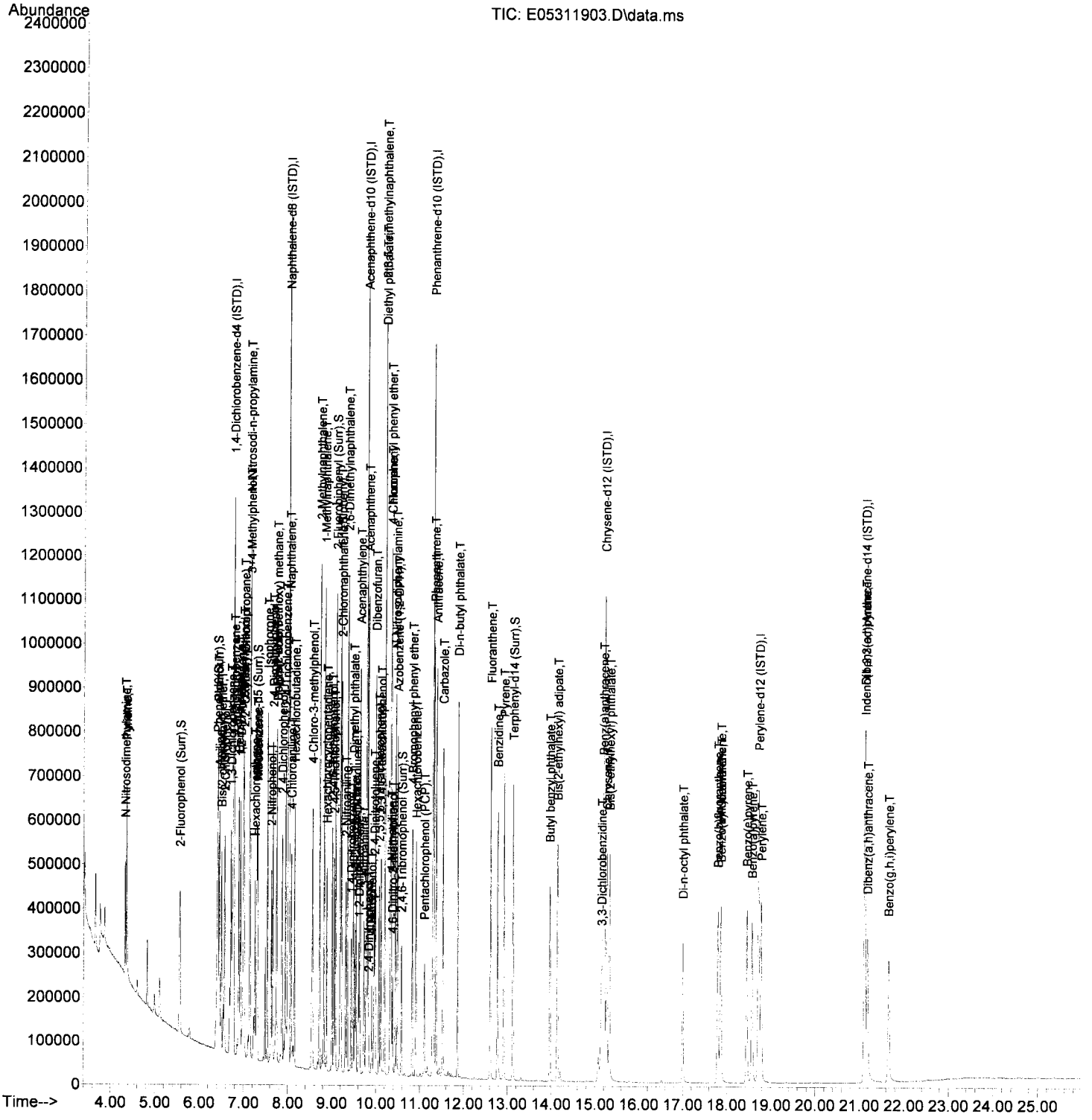
Quant Time: May 31 10:58:55 2019
Quant Method : Z:\METHODS\SV5_013019R3.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 29 09:47:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.442	168	36050	1165.78 ng/ml	96
45) Dimethyl phthalate	9.490	163	271406	996.41 ng/ml	100
46) 1,3-Dinitrobenzene	9.522	168	42535	1076.65 ng/ml	96
47) 2,6-Dinitrotoluene	9.554	165	65357	1096.81 ng/ml	82
48) 1,2-Dinitrobenzene	9.613	168	28258	1058.79 ng/ml#	74
49) Acenaphthylene	9.634	152	432451	1046.08 ng/ml	99
50) 3-Nitroaniline	9.730	138	60039	883.70 ng/ml	99
51) Acenaphthene	9.816	153	288239	1028.28 ng/ml	99
52) 2,4-Dinitrophenol	9.832	184	15346	1015.93 ng/ml	86
53) 4-Nitrophenol	9.907	139	44528	881.30 ng/ml	86
54) 2,4-Dinitrotoluene	9.966	165	76509	1007.99 ng/ml	90
55) Dibenzofuran	9.987	168	367234	1007.73 ng/ml	92
56) 2,3,5,6-Tetrachlorophenol	10.073	232	54143	1097.08 ng/ml	93
57) 2,3,4,6-Tetrachlorophenol	10.115	232	58574	1047.54 ng/ml	94
58) Diethyl phthalate	10.201	149	256233	941.27 ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.196	170	233468	1032.51 ng/ml	97
60) Fluorene	10.335	166	290321	994.96 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.329	204	125864	974.19 ng/ml	88
62) 4-Nitroaniline	10.351	138	61431	797.66 ng/ml	83
63) 4,6-Dinitro-2-methylph...	10.383	198	29166	1105.45 ng/ml	83
65) N-Nitrosodiphenylamine	10.447	169	227433	1091.48 ng/ml	98
66) Azobenzene (1,2-DPH)	10.490	77	315360	1107.70 ng/ml	97
68) 4-Bromophenyl phenyl e...	10.827	248	66994	1097.88 ng/ml	91
69) Hexachlorobenzene	10.912	284	71868	1170.78 ng/ml	92
70) Pentachlorophenol (PCP)	11.105	266	29449	980.08 ng/ml	99
71) Phenanthrene	11.319	178	376424	1039.78 ng/ml	99
72) Anthracene	11.372	178	378267	1018.37 ng/ml	98
73) Carbazole	11.528	167	336810	968.43 ng/ml	99
74) Di-n-butyl phthalate	11.864	149	387246	889.88 ng/ml	99
75) Fluoranthene	12.613	202	387909	1033.00 ng/ml	97
76) Benzidine	12.774	184	298962	2441.83 ng/ml	99
77) Pyrene	12.918	202	404350	1060.01 ng/ml	99
80) Butyl benzyl phthalate	13.967	149	151919	843.18 ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.138	129	133740	745.94 ng/ml	98
82) 3,3-Dichlorobenzidine	15.149	252	106065	1069.44 ng/ml	98
83) Benz(a)anthracene	15.181	228	342210	984.91 ng/ml	98
84) Chrysene	15.266	228	340305	1028.13 ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.325	149	219293	851.68 ng/ml	98
87) Di-n-octyl phthalate	17.005	149	254614	782.26 ng/ml	98
88) Benzo(b)fluoranthene	17.796	252	297724	1119.65 ng/ml	97
89) Benzo(k)fluoranthene	17.860	252	304903	1166.76 ng/ml	99
90) Benzo(b+k)fluoranthene	17.860	252	619585	2218.71 ng/ml	99
91) Benzo(e)pyrene	18.454	252	296216	1097.22 ng/ml	98
92) Benzo(a)pyrene	18.572	252	272348	1128.05 ng/ml	100
93) Perylene	18.780	252	303352	1099.34 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.118	276	229011	1002.03 ng/ml	100
96) Dibenz(a,h)anthracene	21.176	278	218280	1042.91 ng/ml	98
97) Benzo(g,h,i)perylene	21.652	276	230186	1023.02 ng/ml	84

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311903.D
Acq On : 31 May 2019 10:31 am
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: May 31 10:58:55 2019
Quant Method : Z:\METHODS\SV5_013019R3.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 29 09:47:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5

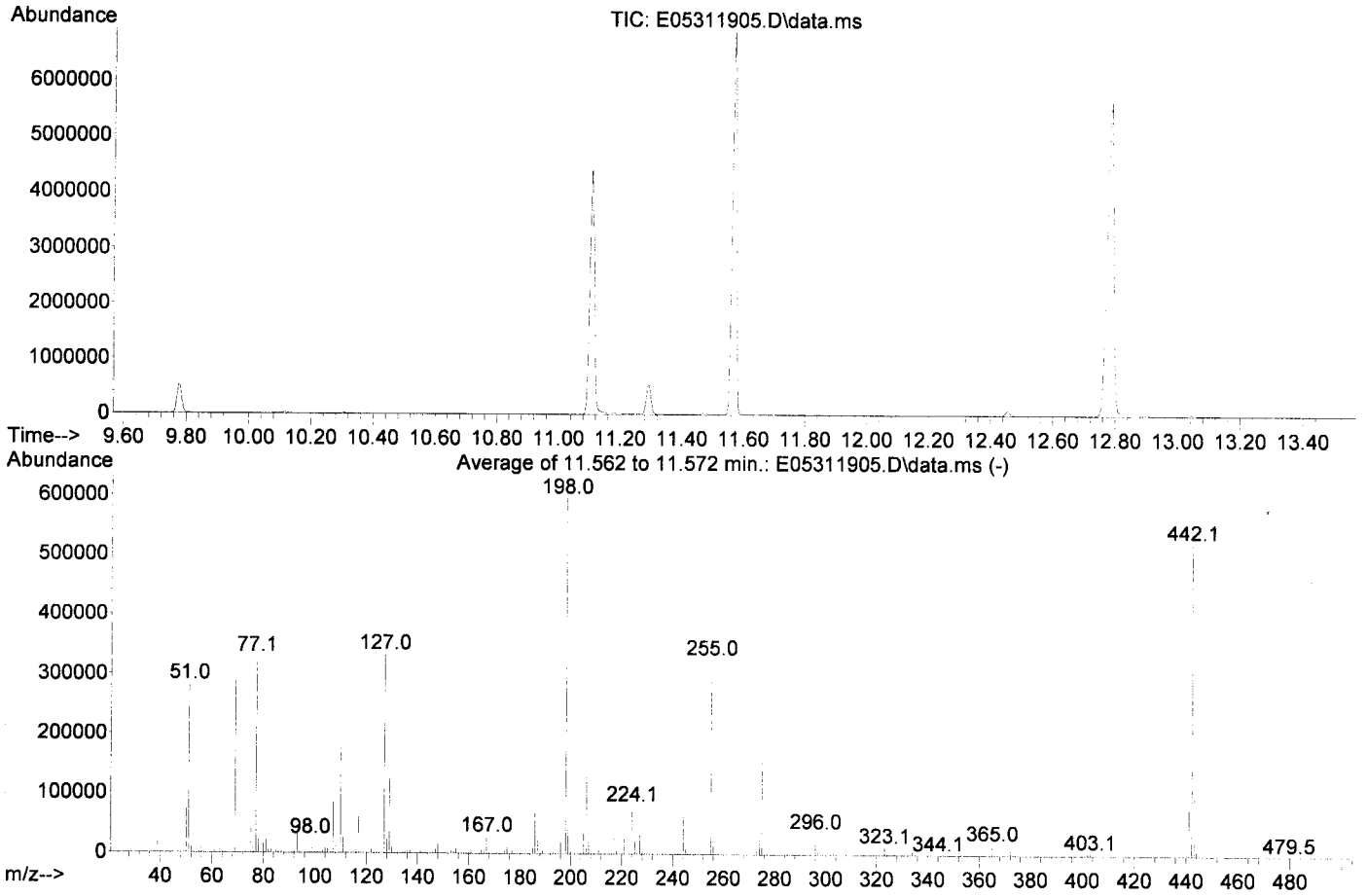


Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : W:\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed May 15 13:49:43 2019

AMS 6/2/19



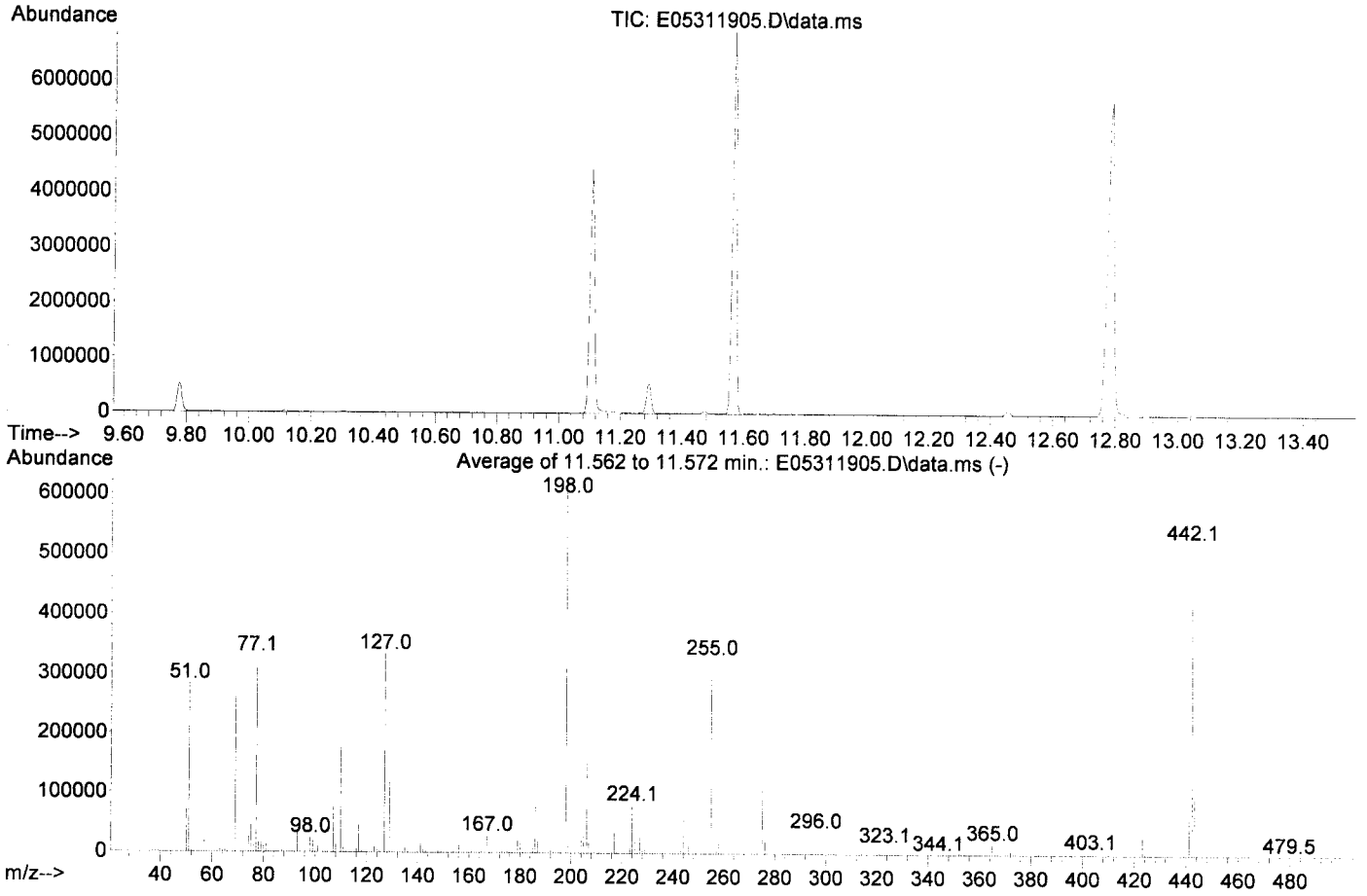
AutoFind: Scans 1491, 1492, 1493; Background Corrected with Scan 1487

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.8	282969	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.1	303371	PASS
70	69	0.00	2	0.5	1484	PASS
127	198	10	80	55.1	333181	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	605227	PASS
199	198	5	9	6.8	41237	PASS
275	198	10	60	25.7	155299	PASS
365	198	1	100	3.0	17994	PASS
441	442	0.01	24	15.3	80072	PASS
442	198	50	200	86.3	522325	PASS
443	442	15	24	19.4	101485	PASS

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : W:\METHODS\DFTPP-625.M
Title : 8270 DFTPP Tune Method
Last Update : Tue May 21 14:24:55 2019



AutoFind: Scans 1491, 1492, 1493; Background Corrected with Scan 1487

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.8	282969	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.1	303371	PASS
70	69	0.00	2	0.5	1484	PASS
127	198	40	60	55.1	333181	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	605227	PASS
199	198	5	9	6.8	41237	PASS
275	198	10	30	25.7	155299	PASS
365	198	1	100	3.0	17994	PASS
441	443	0.01	100	78.9	80072	PASS
442	198	40	100	86.3	522325	PASS
443	442	17	23	19.4	101485	PASS

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 03 08:53:01 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5

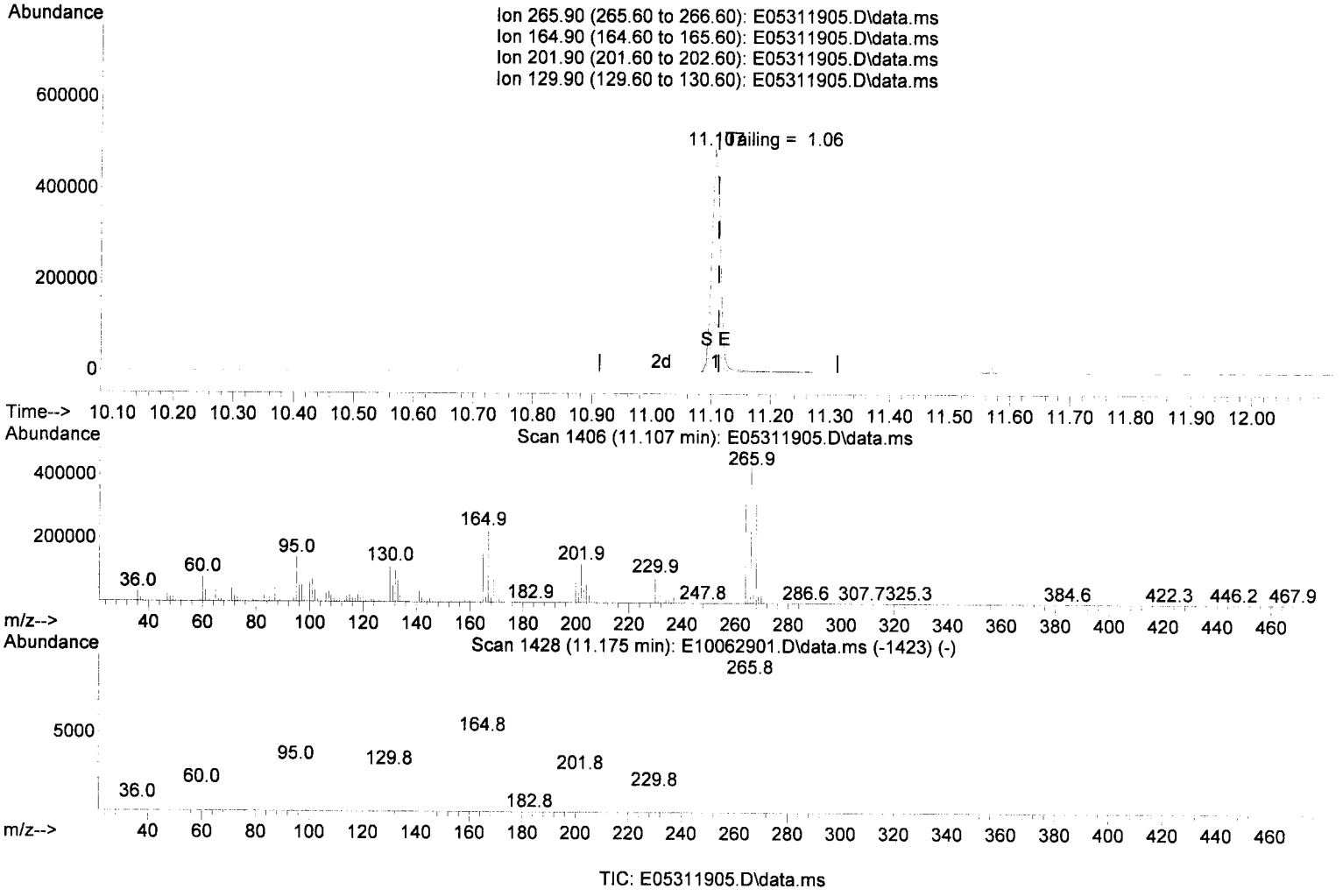
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.742	150	97623	2.00	ug/mL	0.00
2) Naphthalene-d8	8.005	136	229936	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.775	162	112800	2.00	ug/mL	-0.01
5) Phenanthrene-d10	11.294	188	201601	2.00	ug/mL	0.00
11) Chrysene-d12	15.070	240	169809	2.00	ug/mL	-0.01
12) Perylene-d12	17.049	264	138115	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.328	292	129124	2.00	ug/mL	-0.02
Target Compounds						Qvalue
4) Pentachlorophenol	11.107	266	494604	46.43	ug/mL	97
6) DFTPP	11.572	442	626176	38.47	ug/mL	84
7) Benzidine	12.786	184	3034825	42.32	ug/mL	94
8) 4,4-DDE	13.043	TIC	36050	No Calib		
9) 4,4-DDD	13.583	TIC	10540	No Calib		
10) 4,4-DDT	14.172	TIC	8847927	42.80	ug/mL	97

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

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 03 08:53:01 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E05311905.D\data.ms

(4) Pentachlorophenol

11.107min (-0.005) 46.43 ug/mL

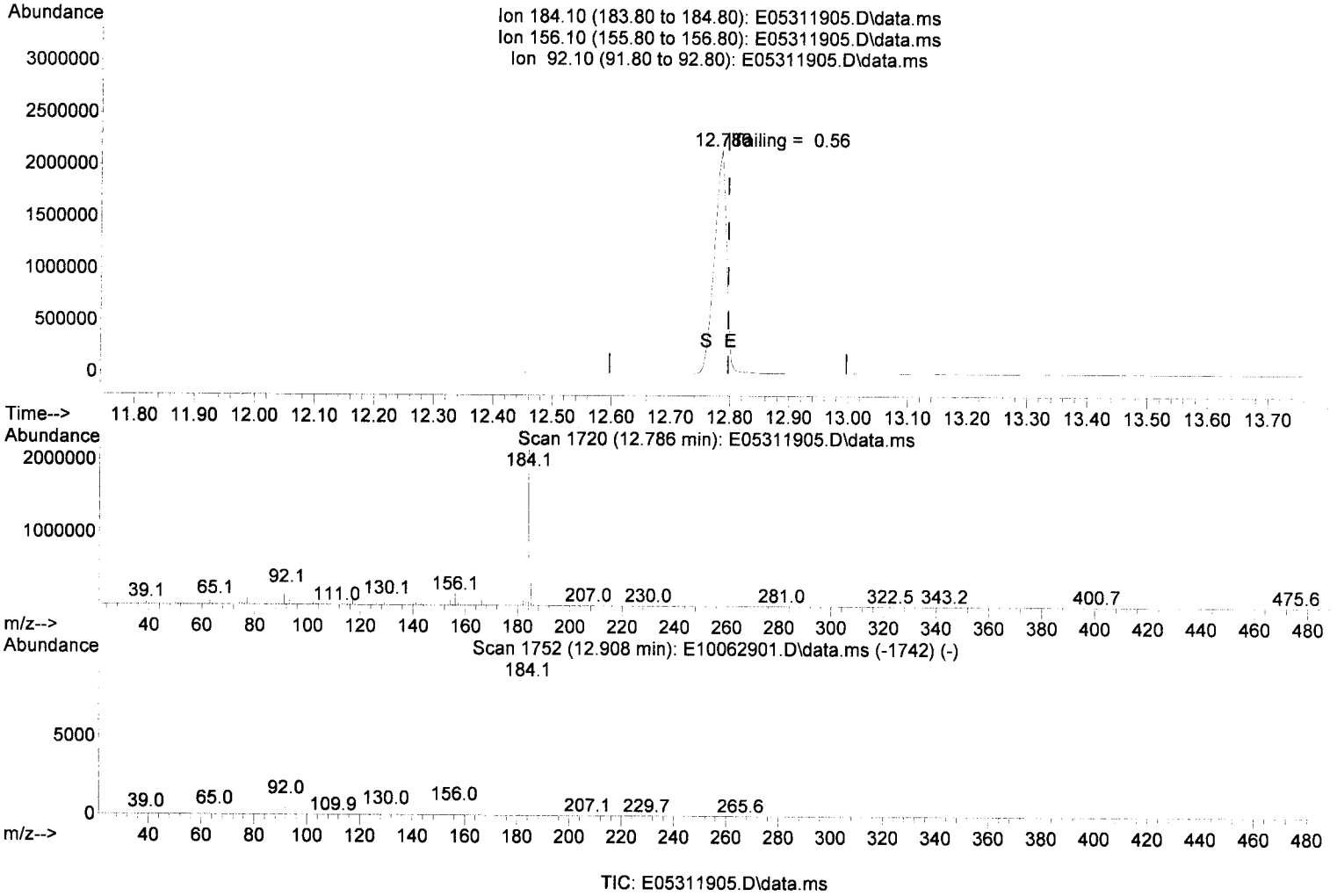
response 494604

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	46.84
201.90	23.20	25.08
129.90	27.10	23.78

Quantitation Report (Qedit)

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 03 08:53:01 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E05311905.D\data.ms

(7) Benzidine

12.786min (-0.011) 42.32 ug/mL

response 3034825

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.32
92.10	8.20	11.45
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

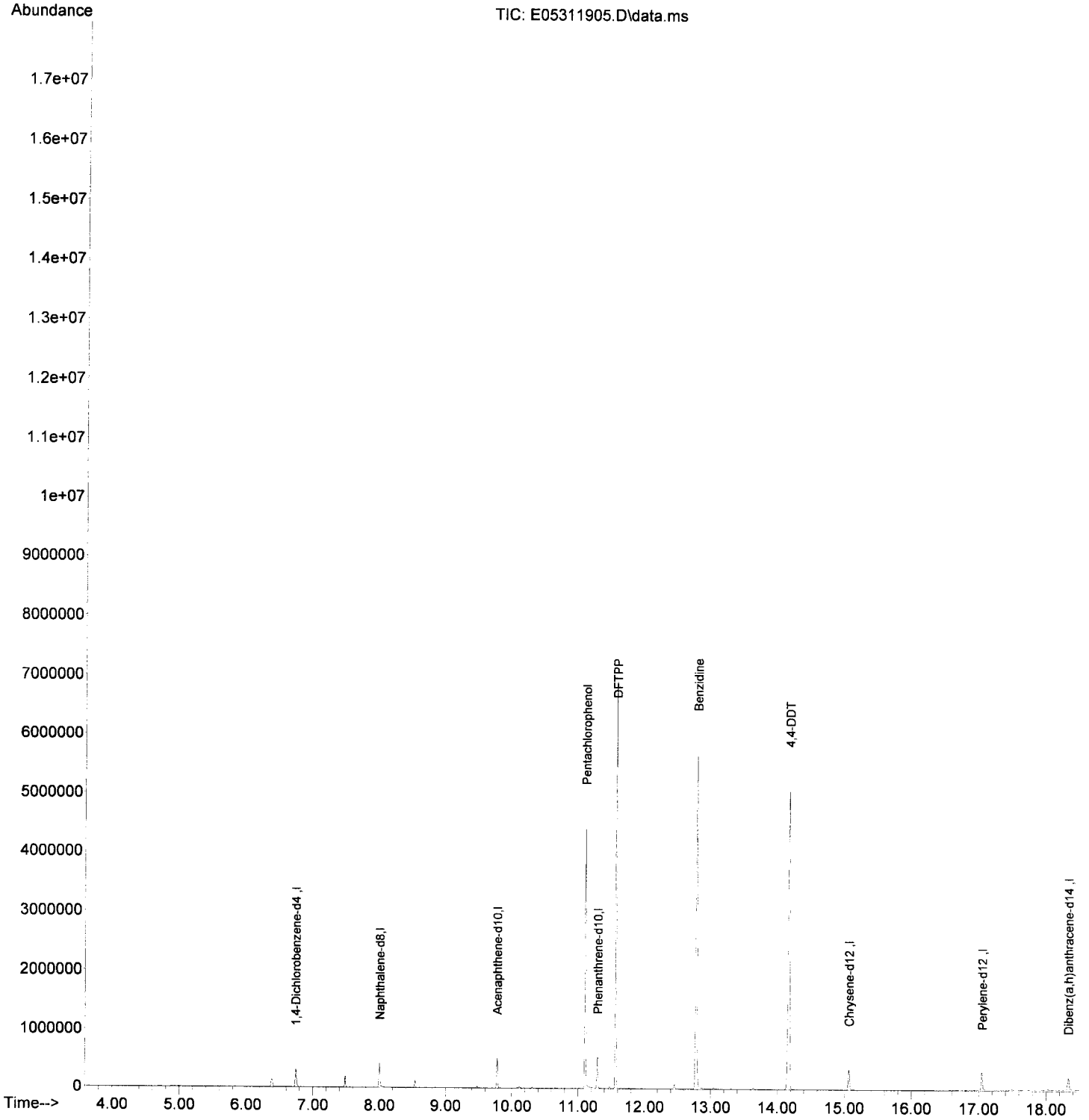
From:
9E31017-TUN2
SV-GCMS5

First Column Area Counts		Percent Breakdown	
DDE	36050		
DDD	10540		
DDT	8847927	**0.52**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311905.D
Acq On : 31 May 2019 12:02 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 03 08:53:01 2019
Quant Method : W:\METHODS\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Wed May 15 13:49:43 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Evaluate Continuing Calibration Report

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 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	99	0.00
2	T	N-Nitrosodimethylamine	1000.000	1025.643	-2.6	101	0.00
3	T	Pyridine	1000.000	1026.640	-2.7	101	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1037.657	-3.8	99	0.00
5	S	Phenol-d6(Surr)	1000.000	1043.846	-4.4	101	0.00
6	T	Phenol	1000.000	1117.393	-11.7	110	0.00
7	T	Aniline	1000.000	1007.211	-0.7	103	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1000.340	-0.0	99	0.00
9	T	2-Chlorophenol	1000.000	1046.824	-4.7	101	0.00
10	T	1,3-Dichlorobenzene	1000.000	1006.024	-0.6	101	0.00
11	T	1,4-Dichlorobenzene	1000.000	1005.880	-0.6	100	0.00
12	T	Benzyl alcohol	1000.000	1046.487	-4.6	103	0.00
13	T	1,2-Dichlorobenzene	1000.000	1013.306	-1.3	101	0.00
14	T	2-Methylphenol	1000.000	1059.450	-5.9	103	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1128.433	-12.8	112	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1057.051	-5.7	103	0.00
17	T	3+4-Methylphenol	1000.000	1081.095	-8.1	105	0.00
18	T	Hexachloroethane	1000.000	1025.699	-2.6	102	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1064.214	-6.4	107	0.00
20	T	Nitrobenzene	1000.000	1107.009	-10.7	106	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	101	0.00
22	T	Isophorone	1000.000	1050.055	-5.0	101	0.00
23	T	2-Nitrophenol	1000.000	1203.933	-20.4#	119	0.00
24	T	2,4-Dimethylphenol	1000.000	1006.924	-0.7	99	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1017.508	-1.8	102	0.00
26	T	Benzoic acid	2000.000	1916.156	4.2	101	0.00
27	T	2,4-Dichlorophenol	1000.000	1124.913	-12.5	112	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1050.608	-5.1	107	0.00
29	T	Naphthalene	1000.000	1003.152	-0.3	102	0.00
30	T	4-Chloroaniline	1000.000	1066.388	-6.6	111	0.00
31	T	Hexachlorobutadiene	1000.000	1107.411	-10.7	109	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1107.917	-10.8	114	0.00
33	T	2-Methylnaphthalene	1000.000	1040.978	-4.1	105	0.00
34	T	1-Methylnaphthalene	1000.000	1025.058	-2.5	103	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	103	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1300.826	-30.1#	124	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1205.151	-20.5#	120	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1208.729	-20.9#	122	0.00
39	T	1,1'-Biphenyl	1000.000	1052.313	-5.2	107	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1067.673	-6.8	109	0.00
41	T	2-Chloronaphthalene	1000.000	1061.564	-6.2	111	0.00
42	T	2-Nitroaniline	1000.000	1083.497	-8.3	117	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1056.768	-5.7	106	0.00
44	T	1,4-Dinitrobenzene	1000.000	1343.223	-34.3#	155	0.00
45	T	Dimethyl phthalate	1000.000	1060.214	-6.0	107	0.00
46	T	1,3-Dinitrobenzene	1000.000	1207.159	-20.7#	134	0.00
47	T	2,6-Dinitrotoluene	1000.000	1123.993	-12.4	116	0.00
48	T	1,2-Dinitrobenzene	1000.000	1193.279	-19.3	126	0.00

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 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	1044.224	-4.4	103	0.00
50	T	3-Nitroaniline	1000.000	1081.805	-8.2	118	0.00
51	T	Acenaphthene	1000.000	1021.312	-2.1	105	0.00
52	T	2,4-Dinitrophenol	1000.000	1438.416	-43.8#	210	0.00
53	T	4-Nitrophenol	1000.000	1132.395	-13.2	128	0.00
54	T	2,4-Dinitrotoluene	1000.000	1185.935	-18.6	132	0.00
55	T	Dibenzofuran	1000.000	1060.104	-6.0	111	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1234.593	-23.5#	130	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1168.261	-16.8	122	0.00
58	T	Diethyl phthalate	1000.000	1164.273	-16.4	115	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1071.898	-7.2	108	0.00
60	T	Fluorene	1000.000	1080.948	-8.1	110	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1101.456	-10.1	116	0.00
62	T	4-Nitroaniline	1000.000	1119.061	-11.9	130	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1488.672	-48.9#	200	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	120	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1033.354	-3.3	118	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1032.996	-3.3	114	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1194.941	-19.5	134	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1046.357	-4.6	125	0.00
69	T	Hexachlorobenzene	1000.000	1066.677	-6.7	126	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1091.203	-9.1	134	0.00
71	T	Phenanthrene	1000.000	1037.816	-3.8	123	0.00
72	T	Anthracene	1000.000	1031.291	-3.1	122	0.00
73	T	Carbazole	1000.000	1006.611	-0.7	123	0.00
74	T	Di-n-butyl phthalate	1000.000	993.334	0.7	122	0.00
75	T	Fluoranthene	1000.000	1076.323	-7.6	129	0.00
76	T	Benzidine	2000.000	3000.251	-50.0#	222	0.00
77	T	Pyrene	1000.000	1098.505	-9.9	132	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	141	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	991.554	0.8	136	0.00
80	T	Butyl benzyl phthalate	1000.000	890.123	11.0	122	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	844.249	15.6	124	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1787.220	10.6	127	0.00
83	T	Benz(a)anthracene	1000.000	986.557	1.3	143	0.00
84	T	Chrysene	1000.000	1034.412	-3.4	145	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	907.666	9.2	131	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	142	0.00
87	T	Di-n-octyl phthalate	1000.000	896.430	10.4	124	0.00
88	T	Benzo(b)fluoranthene	1000.000	1101.233	-10.1	151	0.00
89	T	Benzo(k)fluoranthene	1000.000	1163.934	-16.4	155	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2194.761	-9.7	152	0.00
91	T	Benzo(e)pyrene	1000.000	1089.810	-9.0	151	0.00
92	T	Benzo(a)pyrene	1000.000	1154.193	-15.4	155	0.00
93	T	Perylene	1000.000	1117.073	-11.7	156	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	166	0.00

Evaluate Continuing Calibration Report

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 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	1001.716	-0.2	169	0.00
96	T	Dibenz(a,h)anthracene	1000.000	1039.639	-4.0	173	0.00
97	T	Benzo(g,h,i)perylene	1000.000	1043.277	-4.3	164	0.00

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.762	152	284376	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	1107818	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.784	162	509890	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.298	188	1009578	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.213	240	998154	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.727	264	893517	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.118	292	831396	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.564	112	183964	1037.66	ng/ml	0.00
5) Phenol-d6(Surr)	6.409	99	247539	1043.85	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	226276	1064.21	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	404868	1067.67	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	44391	1194.94	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.127	244	462425	991.55	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.318	74	137635	1025.64	ng/ml	97
3) Pyridine	4.350	79	223121	1026.64	ng/ml	99
6) Phenol	6.420	94	277654	1117.39	ng/ml	100
7) Aniline	6.446	93	326140	1007.21	ng/ml	99
8) Bis(2-chloroethyl) ether	6.495	93	203167	1000.34	ng/ml	99
9) 2-Chlorophenol	6.569	128	194784	1046.82	ng/ml	98
10) 1,3-Dichlorobenzene	6.708	146	213984	1006.02	ng/ml	99
11) 1,4-Dichlorobenzene	6.778	146	216175	1005.88	ng/ml	99
12) Benzyl alcohol	6.885	108	123326	1046.49	ng/ml	97
13) 1,2-Dichlorobenzene	6.928	146	206279	1013.31	ng/ml	98
14) 2-Methylphenol	6.992	107	163947	1059.45	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.008	45	363432	1128.43	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.136	70	160920	1057.05	ng/ml	98
17) 3+4-Methylphenol	7.136	107	211321	1081.09	ng/ml	93
18) Hexachloroethane	7.254	117	81375	1025.70	ng/ml	83
20) Nitrobenzene	7.308	77	227327	1107.01	ng/ml	96
22) Isophorone	7.538	82	397000	1050.06	ng/ml	96
23) 2-Nitrophenol	7.623	139	100288	1203.93	ng/ml	94
24) 2,4-Dimethylphenol	7.655	122	166924	1006.92	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.741	93	242044	1017.51	ng/ml	99
26) Benzoic acid	7.741	105	98956	1916.16	ng/ml	97
27) 2,4-Dichlorophenol	7.864	162	144504	1124.91	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.949	180	161682	1050.61	ng/ml	97
29) Naphthalene	8.024	128	592840	1003.15	ng/ml	100
30) 4-Chloroaniline	8.072	127	217041	1066.39	ng/ml	99
31) Hexachlorobutadiene	8.153	225	83241	1107.41	ng/ml	97
32) 4-Chloro-3-methylphenol	8.559	107	156800	1107.92	ng/ml	95
33) 2-Methylnaphthalene	8.720	142	386967	1040.98	ng/ml	97
34) 1-Methylnaphthalene	8.821	142	364907	1025.06	ng/ml	97
36) Hexachlorocyclopentadiene	8.885	237	85083	1300.83	ng/ml	96
37) 2,4,6-Trichlorophenol	9.003	196	92940	1205.15	ng/ml	98
38) 2,4,5-Trichlorophenol	9.051	196	97280	1208.73	ng/ml	98
39) 1,1'-Biphenyl	9.185	154	459035	1052.31	ng/ml	98
41) 2-Chloronaphthalene	9.212	162	334327	1061.56	ng/ml	99
42) 2-Nitroaniline	9.313	138	104515	1083.50	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.351	156	322061	1056.77	ng/ml	96

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

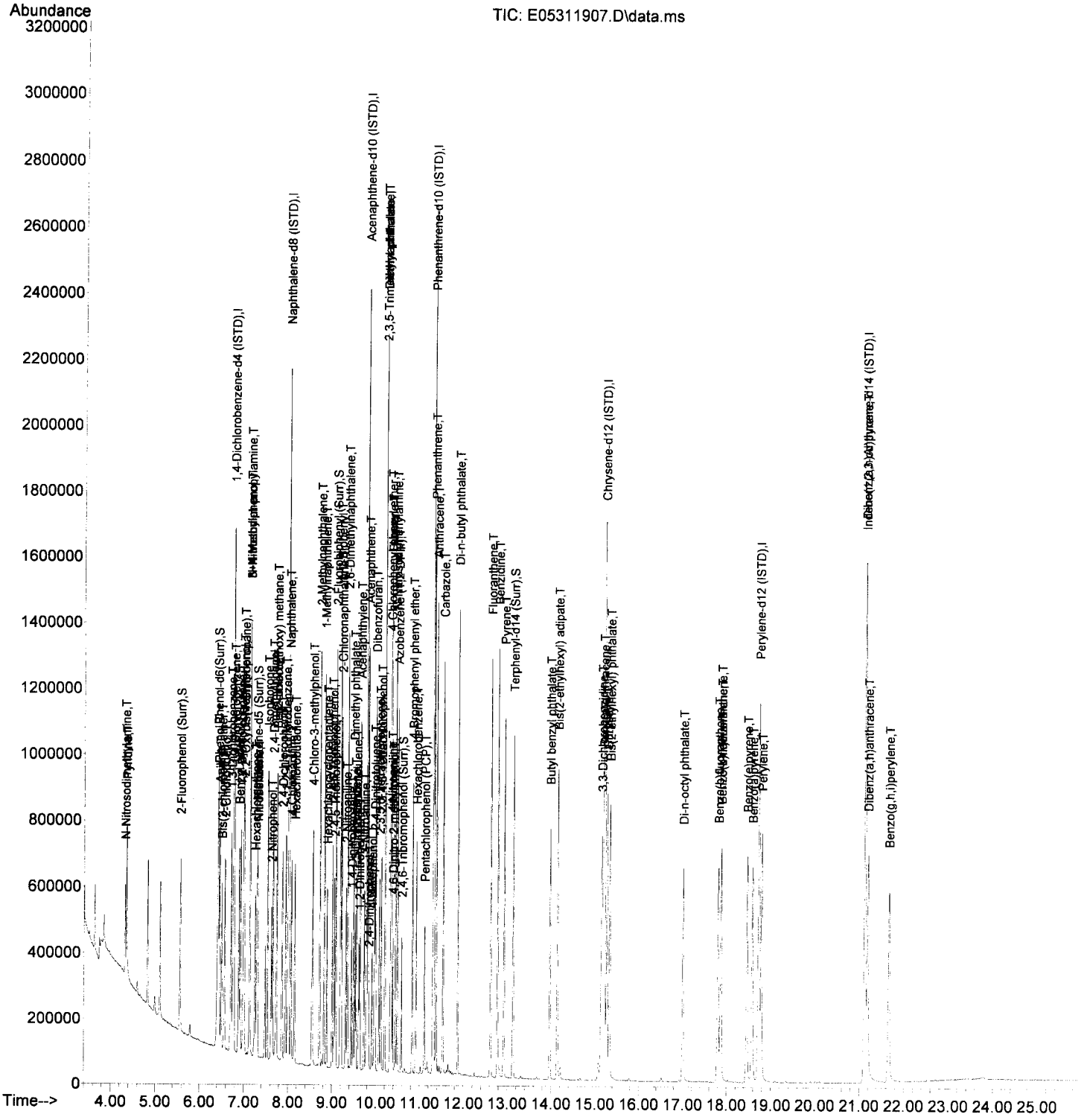
Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.442	168	50980	1343.22	ng/ml	90
45) Dimethyl phthalate	9.490	163	346951	1060.21	ng/ml	100
46) 1,3-Dinitrobenzene	9.522	168	58021	1207.16	ng/ml	95
47) 2,6-Dinitrotoluene	9.554	165	80588	1123.99	ng/ml	85
48) 1,2-Dinitrobenzene	9.613	168	38607	1193.28	ng/ml#	77
49) Acenaphthylene	9.640	152	518630	1044.22	ng/ml	99
50) 3-Nitroaniline	9.730	138	89409	1081.80	ng/ml	99
51) Acenaphthene	9.816	153	343946	1021.31	ng/ml	99
52) 2,4-Dinitrophenol	9.832	184	29987	1438.42	ng/ml	89
53) 4-Nitrophenol	9.907	139	70773	1132.40	ng/ml	87
54) 2,4-Dinitrotoluene	9.966	165	109719	1185.94	ng/ml	91
55) Dibenzofuran	9.987	168	464131	1060.10	ng/ml	91
56) 2,3,5,6-Tetrachlorophenol	10.073	232	74030	1234.59	ng/ml	93
57) 2,3,4,6-Tetrachlorophenol	10.116	232	79003	1168.26	ng/ml	95
58) Diethyl phthalate	10.201	149	380774	1164.27	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.196	170	291192	1071.90	ng/ml	99
60) Fluorene	10.340	166	378938	1080.95	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.324	204	170969	1101.46	ng/ml	92
62) 4-Nitroaniline	10.351	138	103542	1119.06	ng/ml	82
63) 4,6-Dinitro-2-methylph...	10.383	198	51138	1488.67	ng/ml	88
65) N-Nitrosodiphenylamine	10.447	169	329576	1033.35	ng/ml	97
66) Azobenzene (1,2-DPH)	10.490	77	450145	1033.00	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.827	248	97731	1046.36	ng/ml	91
69) Hexachlorobenzene	10.913	284	100222	1066.68	ng/ml	91
70) Pentachlorophenol (PCP)	11.105	266	50888	1091.20	ng/ml	94
71) Phenanthrene	11.319	178	575076	1037.82	ng/ml	99
72) Anthracene	11.372	178	586332	1031.29	ng/ml	98
73) Carbazole	11.528	167	535855	1006.61	ng/ml	99
74) Di-n-butyl phthalate	11.865	149	661638	993.33	ng/ml	99
75) Fluoranthene	12.613	202	618645	1076.32	ng/ml	97
76) Benzidine	12.774	184	602071	3000.25	ng/ml	98
77) Pyrene	12.918	202	641389	1098.50	ng/ml	99
80) Butyl benzyl phthalate	13.967	149	259879	890.12	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.143	129	245279	844.25	ng/ml	99
82) 3,3-Dichlorobenzidine	15.143	252	293844	1787.22	ng/ml	99
83) Benz(a)anthracene	15.181	228	555454	986.56	ng/ml	98
84) Chrysene	15.266	228	554814	1034.41	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.330	149	378710	907.67	ng/ml	97
87) Di-n-octyl phthalate	17.005	149	522722	896.43	ng/ml	97
88) Benzo(b)fluoranthene	17.802	252	519855	1101.23	ng/ml	96
89) Benzo(k)fluoranthene	17.866	252	539985	1163.93	ng/ml	99
90) Benzo(b+k)fluoranthene	17.866	252	1088079	2194.76	ng/ml	99
91) Benzo(e)pyrene	18.454	252	522323	1089.81	ng/ml	99
92) Benzo(a)pyrene	18.577	252	494704	1154.19	ng/ml	100
93) Perylene	18.786	252	547231	1117.07	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.123	276	456484	1001.72	ng/ml	100
96) Dibenz(a,h)anthracene	21.182	278	433867	1039.64	ng/ml	99
97) Benzo(g,h,i)perylene	21.658	276	468058	1043.28	ng/ml	82

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311907.D
Acq On : 31 May 2019 1:08 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:54:41 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311908.D
Acq On : 31 May 2019 1:45 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 6/2/19

Quant Time: Jun 03 08:55:27 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.762	152	274749	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	1079833	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.779	162	517966	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.292	188	987608	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.207	240	918142	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.722	264	806779	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.112	292	753712	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.318	82	75	0.37	ng/ml	0.03
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	4.307	74	67	N.D.		
3) Pyridine	4.334	79	85	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	6.922	108	115	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.922	107	58	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	7.078	45	65	N.D.		
16) N-Nitrosodi-n-propylamine	7.147	70	165	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.281	77	90	N.D.		
22) Isophorone	7.521	82	132	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.003	128	230	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311908.D
Acq On : 31 May 2019 1:45 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:55:27 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

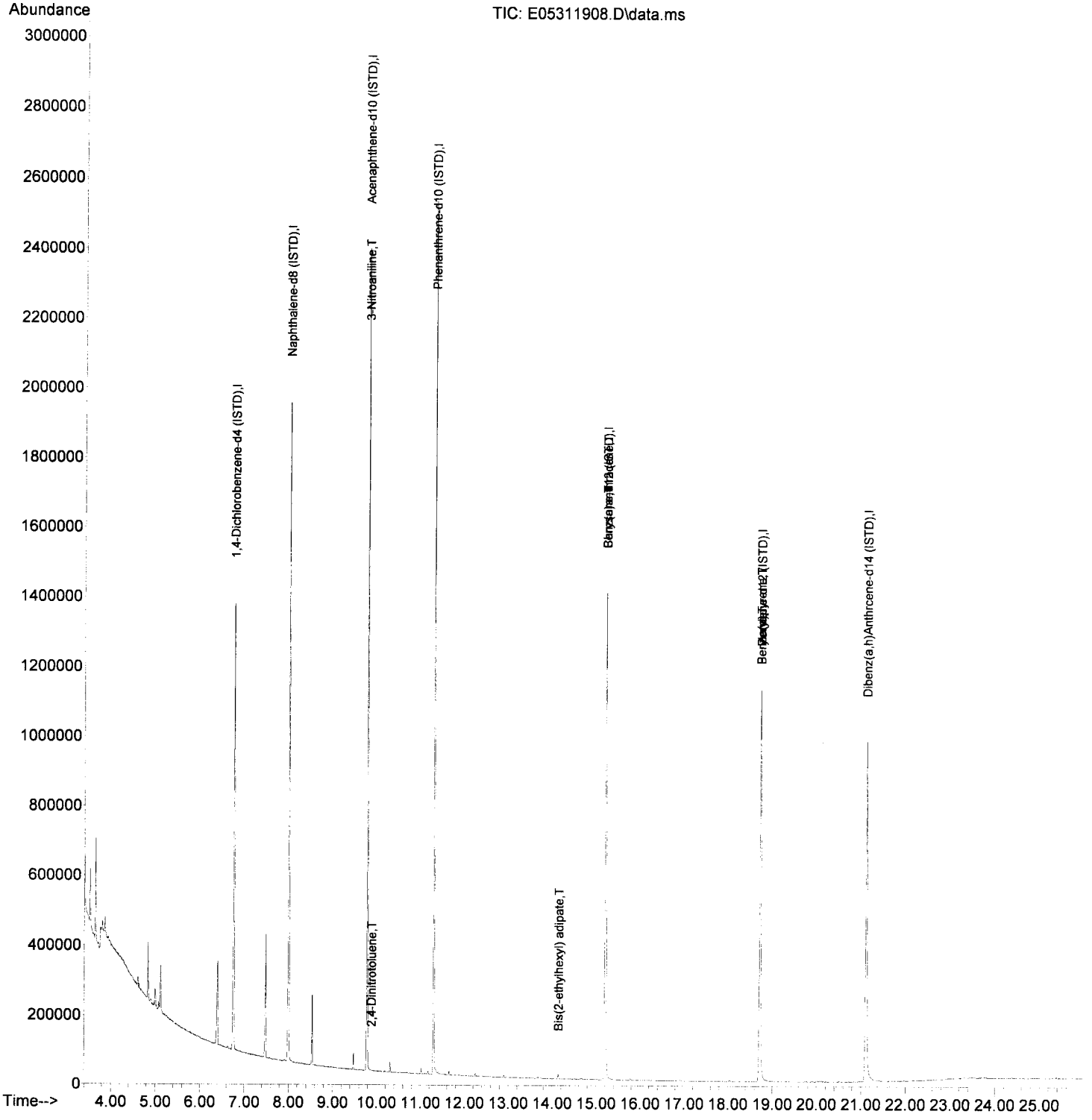
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.784	138	79	30.07 ng/ml#	1
51) Acenaphthene	9.784	153	85	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.875	165	99	62.06 ng/ml#	15
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)	10.517	77	56	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	11.298	178	349	N.D.	
72) Anthracene	11.298	178	349	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.870	149	99	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	14.138	129	3042	11.38 ng/ml	93
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.207	228	2401	4.64 ng/ml	69
84) Chrysene	15.207	228	2401	4.87 ng/ml	67
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	18.716	252	2635	6.09 ng/ml#	1
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.716	252	2635	5.96 ng/ml	66
95) Indeno(1,2,3-cd)pyrene	21.107	276	358	N.D.	
96) Dibenz(a,h)anthracene	21.102	278	133	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311908.D
Acq On : 31 May 2019 1:45 pm
Operator : JK/ AMS /DTH
Sample : 9E31017-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:55:27 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311914.D
Acq On : 31 May 2019 5:29 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BLK2
Misc : 1x, 625 PAH (SW)
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 6/3/19

Quant Time: Jun 03 08:56:08 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.751	152	272093	2000.00 ng/ml	-0.01
21) Naphthalene-d8 (ISTD)	8.003	136	1092957	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.778	162	522519	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.298	188	1070850	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.207	240	1018182	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.721	264	901545	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.112	292	865879	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.558	112	419505	2473.05 ng/ml	0.00
5) Phenol-d6(Surr)	6.398	99	356736	1572.23 ng/ml	-0.01
19) Nitrobenzene-d5 (Surr)	7.281	82	907925	4462.89 ng/ml	-0.01
40) 2-Fluorobiphenyl (Surr)	9.083	172	1509723	3885.05 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	193059	4142.90 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.137	244	2010082	4225.33 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.339	74	542	4.22 ng/ml#	1
3) Pyridine	4.318	79	178	N.D.	
6) Phenol	6.414	94	25012	105.20 ng/ml#	64
7) Aniline	6.425	93	973	3.14 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.489	93	2756	14.18 ng/ml#	44
9) 2-Chlorophenol	6.559	128	489	2.75 ng/ml	90
10) 1,3-Dichlorobenzene	6.703	146	213	N.D.	
11) 1,4-Dichlorobenzene	6.767	146	300	N.D.	
12) Benzyl alcohol	6.869	108	1965	17.43 ng/ml#	1
13) 1,2-Dichlorobenzene	6.922	146	173	N.D.	
14) 2-Methylphenol	6.976	107	425	2.87 ng/ml#	24
15) 2,2'-Oxybis(1-Chloropr...	6.997	45	886	2.88 ng/ml#	1
16) N-Nitrosodi-n-propylamine	7.120	70	1894	13.00 ng/ml	68
17) 3+4-Methylphenol	7.136	107	346	N.D.	
18) Hexachloroethane	7.254	117	626	8.25 ng/ml#	18
20) Nitrobenzene	7.281	77	3918	19.94 ng/ml#	45
22) Isophorone	7.537	82	810	N.D.	
23) 2-Nitrophenol	7.623	139	318	28.11 ng/ml#	8
24) 2,4-Dimethylphenol	7.660	122	163	N.D.	
25) Bis(2-chloroethoxy) me...	7.741	93	477	N.D.	
26) Benzoic acid	7.757	105	766	411.11 ng/ml#	61
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	7.944	180	130	N.D.	
29) Naphthalene	8.019	128	5349	9.17 ng/ml	94
30) 4-Chloroaniline	8.067	127	103	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.580	107	759	32.03 ng/ml#	1
33) 2-Methylnaphthalene	8.719	142	1574	4.29 ng/ml	91
34) 1-Methylnaphthalene	8.816	142	977	2.78 ng/ml	89
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.008	196	167	13.25 ng/ml#	61
38) 2,4,5-Trichlorophenol	9.008	196	167	13.38 ng/ml#	62
39) 1,1'-Biphenyl	9.185	154	2833	6.34 ng/ml	91
41) 2-Chloronaphthalene	9.212	162	229	N.D.	
42) 2-Nitroaniline	9.286	138	82	54.94 ng/ml#	54
43) 2,6-Dimethylnaphthalene	9.356	156	290	N.D.	

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311914.D
Acq On : 31 May 2019 5:29 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BLK2
Misc : 1x, 625 PAH (SW)
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

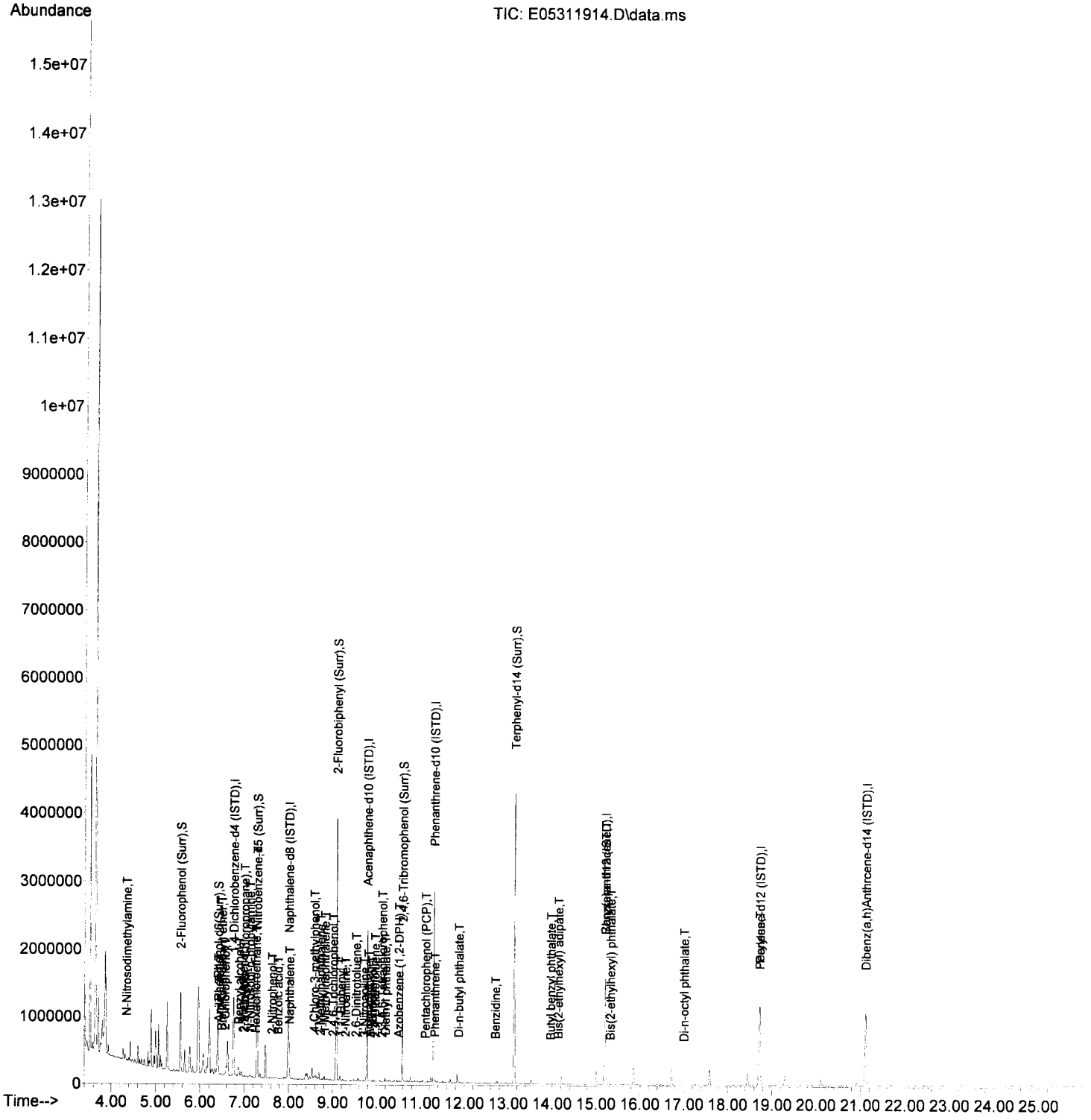
Quant Time: Jun 03 08:56:08 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.484	163	544	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.527	165	306	35.90 ng/ml#	59
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.634	152	514	N.D.	
50) 3-Nitroaniline	9.714	138	77	30.04 ng/ml#	53
51) Acenaphthene	9.811	153	1194	3.46 ng/ml	94
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.902	139	56	66.44 ng/ml#	1
54) 2,4-Dinitrotoluene	9.960	165	67	61.72 ng/ml#	66
55) Dibenzofuran	9.987	168	681	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.121	232	120	37.92 ng/ml#	33
57) 2,3,4,6-Tetrachlorophenol	10.121	232	120	25.12 ng/ml#	25
58) Diethyl phthalate	10.196	149	3136	9.36 ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.190	170	159	N.D.	
60) Fluorene	10.335	166	411	N.D.	
61) 4-Chlorophenyl phenyl ...	10.324	204	140	N.D.	
62) 4-Nitroaniline	10.292	138	155	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.442	169	434	N.D.	
66) Azobenzene (1,2-DPH)	10.501	77	1663	3.60 ng/ml#	1
68) 4-Bromophenyl phenyl e...	10.827	248	58	N.D.	
69) Hexachlorobenzene	10.907	284	120	N.D.	
70) Pentachlorophenol (PCP)	11.110	266	50	70.98 ng/ml#	24
71) Phenanthrene	11.319	178	1742	2.96 ng/ml	80
72) Anthracene	11.372	178	323	N.D.	
73) Carbazole	11.538	167	346	N.D.	
74) Di-n-butyl phthalate	11.864	149	7060	9.99 ng/ml	97
75) Fluoranthene	12.613	202	466	N.D.	
76) Benzidine	12.704	184	79	38.88 ng/ml	57
77) Pyrene	12.918	202	434	N.D.	
80) Butyl benzyl phthalate	13.966	149	2121	7.12 ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.138	129	5651	19.07 ng/ml	95
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.207	228	2730	4.75 ng/ml	71
84) Chrysene	15.272	228	274	N.D.	
85) Bis(2-ethylhexyl) phth...	15.325	149	3557	8.36 ng/ml	92
87) Di-n-octyl phthalate	17.005	149	90	30.82 ng/ml#	1
88) Benzo(b)fluoranthene	17.807	252	51	N.D.	
89) Benzo(k)fluoranthene	17.860	252	88	N.D.	
90) Benzo(b+k)fluoranthene	17.860	252	88	N.D.	
91) Benzo(e)pyrene	18.443	252	205	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.716	252	2995	6.06 ng/ml	67
95) Indeno(1,2,3-cd)pyrene	21.118	276	425	N.D.	
96) Dibenz(a,h)anthracene	21.107	278	201	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311914.D
Acq On : 31 May 2019 5:29 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BLK2
Misc : 1x, 625 PAH (SW)
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:56:08 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311915.D
Acq On : 31 May 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BS2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:56:14 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.757	152	297809	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	1184289	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.784	162	543176	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.298	188	1069587	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.218	240	1054495	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.727	264	952069	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.128	292	916416	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.564	112	222505	1198.44	ng/ml	0.00
5) Phenol-d6(Surr)	6.404	99	184656	743.55	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	523405	2350.63	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	819794	2029.39	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	103482	2436.15	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.132	244	1034392	2099.49	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.318	74	94368	671.50	ng/ml	98
3) Pyridine	4.334	79	193	N.D.		
6) Phenol	6.414	94	188193	723.20	ng/ml	99
7) Aniline	6.414	93	5743	16.94	ng/ml#	1
8) Bis(2-chloroethyl) ether	6.489	93	376692	1771.07	ng/ml	99
9) 2-Chlorophenol	6.564	128	346296	1777.14	ng/ml	98
10) 1,3-Dichlorobenzene	6.708	146	321735	1444.38	ng/ml	96
11) 1,4-Dichlorobenzene	6.773	146	332168	1475.89	ng/ml	100
12) Benzyl alcohol	6.885	108	145109	1175.79	ng/ml	96
13) 1,2-Dichlorobenzene	6.922	146	313984	1472.82	ng/ml	98
14) 2-Methylphenol	6.987	107	255384	1575.89	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.003	45	640804	1899.91	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.136	70	315695	1980.20	ng/ml	98
17) 3+4-Methylphenol	7.136	107	300430	1467.64	ng/ml	95
18) Hexachloroethane	7.249	117	124698	1500.87	ng/ml	83
20) Nitrobenzene	7.307	77	419424	1950.33	ng/ml	95
22) Isophorone	7.537	82	770723	1906.91	ng/ml	98
23) 2-Nitrophenol	7.623	139	191772	2073.30	ng/ml	93
24) 2,4-Dimethylphenol	7.655	122	286219	1615.05	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.741	93	466221	1833.35	ng/ml	99
26) Benzoic acid	7.735	105	109379	1961.55	ng/ml	97
27) 2,4-Dichlorophenol	7.864	162	278680	2029.34	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.944	180	257035	1562.36	ng/ml	97
29) Naphthalene	8.024	128	1001859	1585.79	ng/ml	100
30) 4-Chloroaniline	8.072	127	19515	89.69	ng/ml	96
31) Hexachlorobutadiene	8.153	225	130485	1623.84	ng/ml	96
32) 4-Chloro-3-methylphenol	8.559	107	301635	1931.38	ng/ml	97
33) 2-Methylnaphthalene	8.719	142	658771	1657.73	ng/ml	97
34) 1-Methylnaphthalene	8.821	142	615704	1617.89	ng/ml	97
36) Hexachlorocyclopentadiene	8.885	237	152548	2189.37	ng/ml	98
37) 2,4,6-Trichlorophenol	9.008	196	182726	2138.03	ng/ml	100
38) 2,4,5-Trichlorophenol	9.046	196	194657	2190.59	ng/ml	99
39) 1,1'-Biphenyl	9.190	154	2752	5.92	ng/ml	83
41) 2-Chloronaphthalene	9.212	162	573357	1708.98	ng/ml	100
42) 2-Nitroaniline	9.313	138	216343	1994.46	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.345	156	413	N.D.		

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311915.D
Acq On : 31 May 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BS2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

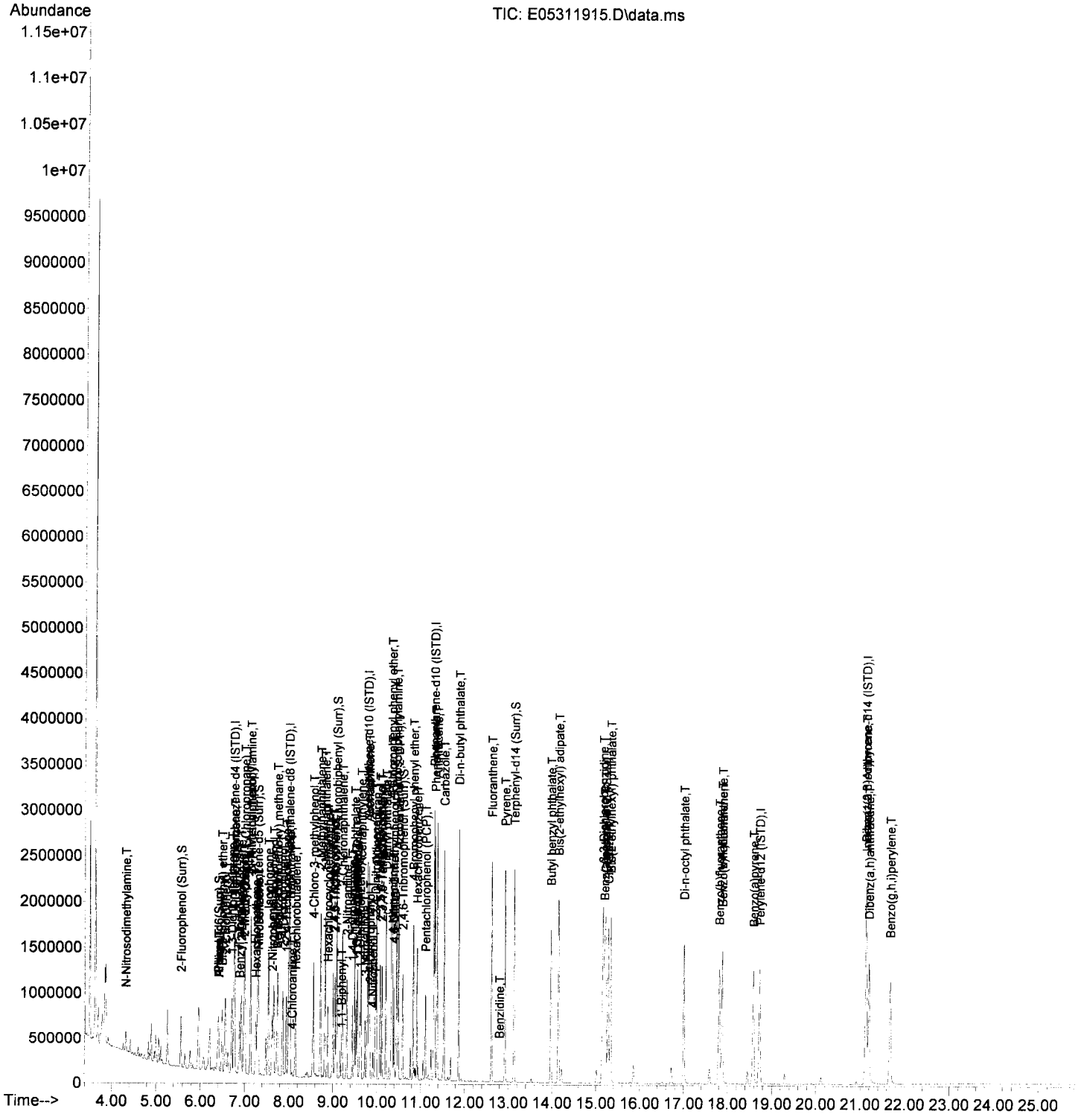
Quant Time: Jun 03 08:56:14 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.442	168	102684	2318.76	ng/ml	97
45) Dimethyl phthalate	9.495	163	684231	1962.75	ng/ml	100
46) 1,3-Dinitrobenzene	9.527	168	118352	2166.87	ng/ml	92
47) 2,6-Dinitrotoluene	9.554	165	162132	2041.26	ng/ml	90
48) 1,2-Dinitrobenzene	9.613	168	75448	2089.60	ng/ml	89
49) Acenaphthylene	9.639	152	954897	1804.80	ng/ml	99
50) 3-Nitroaniline	9.730	138	107133	1208.50	ng/ml	100
51) Acenaphthene	9.816	153	618119	1722.96	ng/ml	99
52) 2,4-Dinitrophenol	9.837	184	82871	2807.45	ng/ml	83
53) 4-Nitrophenol	9.907	139	57677	890.79	ng/ml	85
54) 2,4-Dinitrotoluene	9.966	165	223330	2155.56	ng/ml	97
55) Dibenzofuran	9.987	168	834023	1788.22	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.073	232	148701	2185.22	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	10.115	232	153870	2053.10	ng/ml	95
58) Diethyl phthalate	10.206	149	745989	2141.19	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.196	170	151	N.D.		
60) Fluorene	10.340	166	704657	1886.91	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.329	204	312858	1892.05	ng/ml	88
62) 4-Nitroaniline	10.356	138	204684	2076.62	ng/ml	84
63) 4,6-Dinitro-2-methylph...	10.388	198	129774	2936.07	ng/ml	89
65) N-Nitrosodiphenylamine	10.447	169	639059	1891.29	ng/ml	98
66) Azobenzene (1,2-DPH)	10.490	77	855752	1853.61	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.827	248	187924	1899.12	ng/ml	92
69) Hexachlorobenzene	10.912	284	188795	1896.64	ng/ml	95
70) Pentachlorophenol (PCP)	11.110	266	116201	2150.66	ng/ml	95
71) Phenanthrene	11.324	178	1086536	1850.81	ng/ml	99
72) Anthracene	11.372	178	1110062	1842.93	ng/ml	99
73) Carbazole	11.533	167	1068395	1894.39	ng/ml	99
74) Di-n-butyl phthalate	11.864	149	1358171	1924.66	ng/ml	99
75) Fluoranthene	12.619	202	1201240	1972.67	ng/ml	98
76) Benzidine	12.795	184	70	38.82	ng/ml	52
77) Pyrene	12.924	202	1246232	2014.67	ng/ml	98
80) Butyl benzyl phthalate	13.972	149	583533	1891.90	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.143	129	534881	1742.69	ng/ml	99
82) 3,3-Dichlorobenzidine	15.159	252	694293	3814.34	ng/ml	98
83) Benz(a)anthracene	15.191	228	1131288	1901.95	ng/ml	97
84) Chrysene	15.277	228	1094222	1931.10	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.330	149	832454	1888.57	ng/ml	96
87) Di-n-octyl phthalate	17.010	149	1339511	2034.76	ng/ml	98
88) Benzo(b)fluoranthene	17.807	252	1075346	2137.86	ng/ml	98
89) Benzo(k)fluoranthene	17.876	252	1084642	2194.16	ng/ml	98
90) Benzo(b+k)fluoranthene	17.876	252	2212472	4188.31	ng/ml	98
91) Benzo(e)pyrene	18.454	252	56	N.D.		
92) Benzo(a)pyrene	18.588	252	1031424	2258.42	ng/ml	99
93) Perylene	18.962	252	519	N.D.		
95) Indeno(1,2,3-cd)pyrene	21.134	276	943433	1878.22	ng/ml	99
96) Dibenz(a,h)anthracene	21.192	278	924049	2008.80	ng/ml	98
97) Benzo(g,h,i)perylene	21.674	276	965328	1952.05	ng/ml	83

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311915.D
Acq On : 31 May 2019 6:06 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BS2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:56:14 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



No Name Entered Quantitation Report (Not Reviewed)

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311916.D
Acq On : 31 May 2019 6:43 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BSD2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:56:21 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.756	152	296475	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	1150358	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.784	162	573761	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.297	188	1096313	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.218	240	1084067	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.727	264	965103	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.128	292	901787	2000.00	ng/ml	0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.558	112	215209	1164.36	ng/ml	0.00
5) Phenol-d6(Surr)	6.409	99	184156	744.88	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	484608	2186.18	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	773756	1813.32	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	105539	2425.48	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.132	244	1037982	2049.30	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.317	74	92712	662.69	ng/ml	97
3) Pyridine	4.371	79	72	N.D.		
6) Phenol	6.419	94	185335	715.43	ng/ml	97
7) Aniline	6.419	93	5249	15.55	ng/ml#	1
8) Bis(2-chloroethyl) ether	6.494	93	356269	1682.59	ng/ml	99
9) 2-Chlorophenol	6.564	128	324607	1673.34	ng/ml	99
10) 1,3-Dichlorobenzene	6.708	146	238844	1077.08	ng/ml	97
11) 1,4-Dichlorobenzene	6.772	146	248716	1110.07	ng/ml	99
12) Benzyl alcohol	6.885	108	136601	1111.83	ng/ml	97
13) 1,2-Dichlorobenzene	6.922	146	240558	1133.47	ng/ml	98
14) 2-Methylphenol	6.992	107	241583	1497.44	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.008	45	596804	1777.42	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.136	70	299760	1888.71	ng/ml	98
17) 3+4-Methylphenol	7.136	107	280775	1377.79	ng/ml	95
18) Hexachloroethane	7.248	117	89220	1078.69	ng/ml	84
20) Nitrobenzene	7.307	77	396399	1851.56	ng/ml	97
22) Isophorone	7.537	82	737645	1878.90	ng/ml	98
23) 2-Nitrophenol	7.623	139	175330	1960.17	ng/ml	93
24) 2,4-Dimethylphenol	7.655	122	283609	1647.53	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.741	93	442838	1792.77	ng/ml	98
26) Benzoic acid	7.735	105	102917	1918.26	ng/ml	97
27) 2,4-Dichlorophenol	7.864	162	256873	1925.72	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.944	180	200399	1254.04	ng/ml	95
29) Naphthalene	8.024	128	844123	1375.53	ng/ml	100
30) 4-Chloroaniline	8.072	127	18992	89.86	ng/ml	97
31) Hexachlorobutadiene	8.152	225	92189	1181.10	ng/ml	95
32) 4-Chloro-3-methylphenol	8.559	107	287756	1898.90	ng/ml	97
33) 2-Methylnaphthalene	8.719	142	561194	1453.84	ng/ml	97
34) 1-Methylnaphthalene	8.821	142	530123	1434.10	ng/ml	96
36) Hexachlorocyclopentadiene	8.885	237	108622	1475.84	ng/ml	98
37) 2,4,6-Trichlorophenol	9.008	196	182153	2026.72	ng/ml	99
38) 2,4,5-Trichlorophenol	9.046	196	190916	2044.20	ng/ml	99
39) 1,1'-Biphenyl	9.190	154	2714	5.53	ng/ml	94
41) 2-Chloronaphthalene	9.211	162	518294	1462.50	ng/ml	100
42) 2-Nitroaniline	9.313	138	221898	1941.47	ng/ml	97
43) 2,6-Dimethylnaphthalene	9.356	156	572	N.D.		

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311916.D
Acq On : 31 May 2019 6:43 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BSD2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

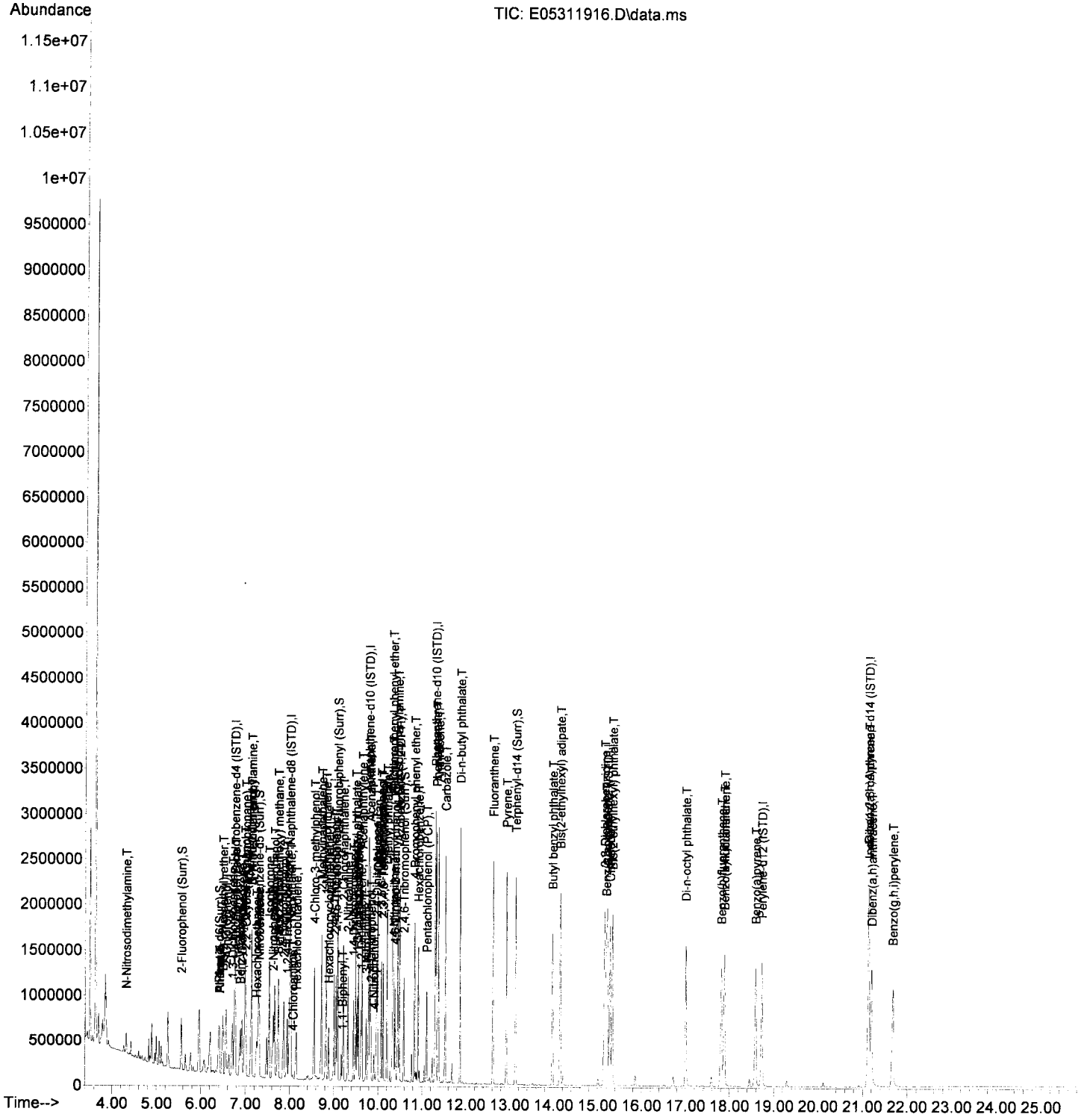
Quant Time: Jun 03 08:56:21 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.441	168	109062	2329.49	ng/ml	99
45) Dimethyl phthalate	9.495	163	730113	1982.72	ng/ml	100
46) 1,3-Dinitrobenzene	9.527	168	123049	2136.34	ng/ml	94
47) 2,6-Dinitrotoluene	9.554	165	174037	2072.06	ng/ml	89
48) 1,2-Dinitrobenzene	9.618	168	78605	2063.42	ng/ml#	77
49) Acenaphthylene	9.639	152	952975	1705.15	ng/ml	99
50) 3-Nitroaniline	9.730	138	112330	1200.10	ng/ml	98
51) Acenaphthene	9.816	153	614467	1621.48	ng/ml	100
52) 2,4-Dinitrophenol	9.837	184	86540	2785.63	ng/ml	84
53) 4-Nitrophenol	9.907	139	56668	835.11	ng/ml	88
54) 2,4-Dinitrotoluene	9.966	165	235758	2154.33	ng/ml	97
55) Dibenzofuran	9.992	168	849342	1723.99	ng/ml	92
56) 2,3,5,6-Tetrachlorophenol	10.073	232	156988	2184.16	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	10.115	232	160523	2029.60	ng/ml	97
58) Diethyl phthalate	10.206	149	770741	2094.31	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.196	170	231	N.D.		
60) Fluorene	10.340	166	727217	1843.51	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.329	204	315125	1804.17	ng/ml	89
62) 4-Nitroaniline	10.356	138	199562	1916.73	ng/ml	84
63) 4,6-Dinitro-2-methylph...	10.388	198	132581	2861.95	ng/ml	89
65) N-Nitrosodiphenylamine	10.447	169	657978	1899.81	ng/ml	97
66) Azobenzene (1,2-DPH)	10.490	77	880662	1861.06	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.827	248	190427	1877.51	ng/ml	91
69) Hexachlorobenzene	10.912	284	196939	1930.22	ng/ml	93
70) Pentachlorophenol (PCP)	11.110	266	119690	2159.90	ng/ml	96
71) Phenanthrene	11.324	178	1111863	1847.79	ng/ml	99
72) Anthracene	11.372	178	1134507	1837.60	ng/ml	98
73) Carbazole	11.533	167	1078463	1865.63	ng/ml	99
74) Di-n-butyl phthalate	11.864	149	1363607	1885.25	ng/ml	99
75) Fluoranthene	12.619	202	1228343	1968.00	ng/ml	98
76) Benzidine	0.000		0	N.D.		
77) Pyrene	12.923	202	1262296	1990.89	ng/ml	99
80) Butyl benzyl phthalate	13.972	149	591831	1866.46	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.143	129	546918	1733.30	ng/ml	98
82) 3,3-Dichlorobenzidine	15.154	252	705493	3773.40	ng/ml	100
83) Benz(a)anthracene	15.191	228	1157643	1893.17	ng/ml	97
84) Chrysene	15.277	228	1124443	1930.30	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.330	149	851879	1879.92	ng/ml	96
87) Di-n-octyl phthalate	17.004	149	1369004	2050.20	ng/ml	97
88) Benzo(b)fluoranthene	17.807	252	1100619	2158.56	ng/ml	97
89) Benzo(k)fluoranthene	17.876	252	1106921	2208.98	ng/ml	99
90) Benzo(b+k)fluoranthene	17.876	252	2262211	4224.63	ng/ml	99
91) Benzo(e)pyrene	18.454	252	460	N.D.		
92) Benzo(a)pyrene	18.588	252	1050676	2269.50	ng/ml	100
93) Perylene	18.828	252	794	N.D.		
95) Indeno(1,2,3-cd)pyrene	21.134	276	946471	1914.83	ng/ml	100
96) Dibenz(a,h)anthracene	21.198	278	929499	2053.42	ng/ml	98
97) Benzo(g,h,i)perylene	21.674	276	964464	1981.94	ng/ml	83

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311916.D
Acq On : 31 May 2019 6:43 pm
Operator : JK/ AMS /DTH
Sample : 9051460-BSD2@2
Misc : 2x, 625 PAH (SW)
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:56:21 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311922.D
Acq On : 31 May 2019 10:27 pm
Operator : JK/ AMS /DTH
Sample : A9E0766-01RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 6/3/19

Quant Time: Jun 03 08:57:03 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.746	152	284727	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	7.981	136	1081008	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.779	162	521290	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.298	188	1004318	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.207	240	1060028	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.727	264	960632	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.118	292	887086	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.553	112	240123	1352.75	ng/ml	-0.01
5) Phenol-d6(Surr)	6.388	99	336565	1417.51	ng/ml	-0.02
19) Nitrobenzene-d5 (Surr)	7.270	82	288722	1356.23	ng/ml	-0.02
40) 2-Fluorobiphenyl (Surr)	9.083	172	478594	1234.49	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.581	330	69987	1819.43	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.127	244	660030	1332.66	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.302	74	203	N.D.		
3) Pyridine	4.323	79	106	N.D.		
6) Phenol	6.404	94	2674	10.75	ng/ml#	1
7) Aniline	6.414	93	203	N.D.		
8) Bis(2-chloroethyl) ether	6.484	93	407	N.D.		
9) 2-Chlorophenol	6.553	128	200	N.D.		
10) 1,3-Dichlorobenzene	6.757	146	73	N.D.		
11) 1,4-Dichlorobenzene	6.757	146	73	N.D.		
12) Benzyl alcohol	6.864	108	302	2.56	ng/ml#	46
13) 1,2-Dichlorobenzene	6.912	146	174	N.D.		
14) 2-Methylphenol	6.971	107	219	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	7.013	45	62	N.D.		
16) N-Nitrosodi-n-propylamine	7.104	70	483	3.17	ng/ml	62
17) 3+4-Methylphenol	7.110	107	190	N.D.		
18) Hexachloroethane	7.243	117	351	4.42	ng/ml#	18
20) Nitrobenzene	7.265	77	1596	7.76	ng/ml	49
22) Isophorone	7.516	82	1511	4.10	ng/ml#	18
23) 2-Nitrophenol	7.607	139	111	25.55	ng/ml#	1
24) 2,4-Dimethylphenol	7.644	122	93	N.D.		
25) Bis(2-chloroethoxy) me...	7.719	93	204	N.D.		
26) Benzoic acid	7.709	105	951	414.61	ng/ml	85
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.003	128	713	N.D.		
30) 4-Chloroaniline	8.024	127	224	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.570	107	227	28.22	ng/ml#	1
33) 2-Methylnaphthalene	8.709	142	619	N.D.		
34) 1-Methylnaphthalene	8.810	142	441	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	9.185	154	915	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	9.228	138	216	56.28	ng/ml#	72
43) 2,6-Dimethylnaphthalene	9.351	156	211	N.D.		

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311922.D
Acq On : 31 May 2019 10:27 pm
Operator : JK/ AMS /DTH
Sample : A9E0766-01RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

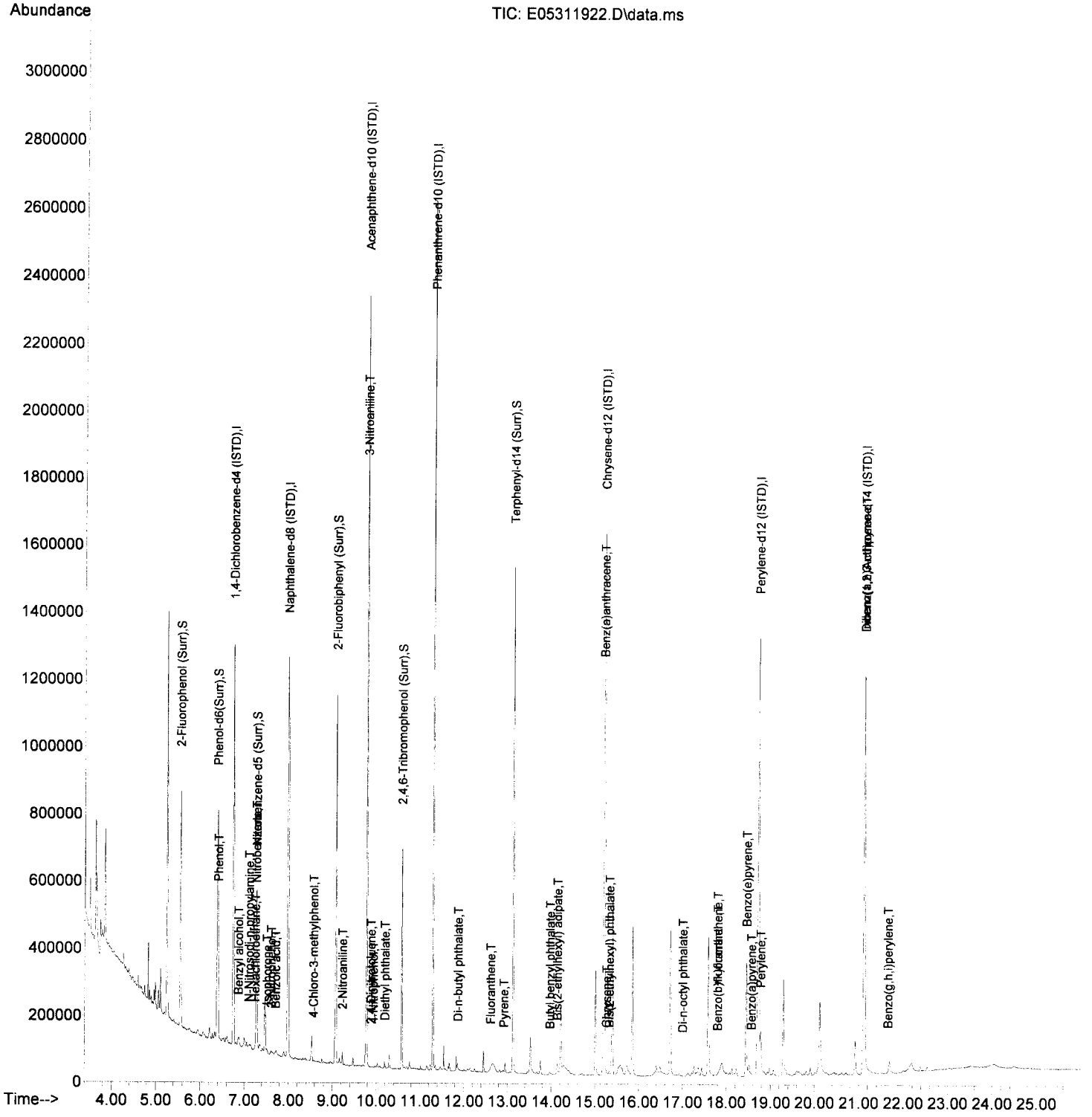
Quant Time: Jun 03 08:57:03 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.484	163	177	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	9.634	152	232	N.D.	
50) 3-Nitroaniline	9.773	138	97	30.28 ng/ml#	1
51) Acenaphthene	9.816	153	115	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.934	139	91	66.99 ng/ml#	1
54) 2,4-Dinitrotoluene	9.875	165	60	61.65 ng/ml#	36
55) Dibenzofuran	9.993	168	151	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	10.196	149	1428	4.27 ng/ml	86
59) 2,3,5-Trimethylnaphtha...	10.132	170	73	N.D.	
60) Fluorene	10.335	166	119	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.297	138	203	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.447	169	80	N.D.	
66) Azobenzene (1,2-DPH)	10.501	77	303	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	11.319	178	563	N.D.	
72) Anthracene	11.367	178	91	N.D.	
73) Carbazole	11.533	167	129	N.D.	
74) Di-n-butyl phthalate	11.865	149	3796	5.73 ng/ml	97
75) Fluoranthene	12.613	202	2009	3.51 ng/ml	86
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.918	202	2476	4.26 ng/ml	95
80) Butyl benzyl phthalate	13.972	149	2213	7.14 ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.138	129	7309	23.69 ng/ml	93
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.197	228	2592	4.33 ng/ml	81
84) Chrysene	15.261	228	1700	2.98 ng/ml	83
85) Bis(2-ethylhexyl) phth...	15.325	149	5110	11.53 ng/ml	91
87) Di-n-octyl phthalate	17.005	149	83	30.80 ng/ml#	1
88) Benzo(b)fluoranthene	17.796	252	2902	5.72 ng/ml	96
89) Benzo(k)fluoranthene	17.855	252	964	N.D.	
90) Benzo(b+k)fluoranthene	17.796	252	4135	7.76 ng/ml	95
91) Benzo(e)pyrene	18.454	252	2381	4.62 ng/ml#	1
92) Benzo(a)pyrene	18.566	252	1867	4.05 ng/ml	90
93) Perylene	18.775	252	79110	150.21 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.118	276	2183	4.49 ng/ml#	44
96) Dibenz(a,h)anthracene	21.177	278	510	N.D.	
97) Benzo(g,h,i)perylene	21.653	276	1888	3.94 ng/ml	92

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

Data Path : W:\DATA\2019-05\9E31017\
Data File : E05311922.D
Acq On : 31 May 2019 10:27 pm
Operator : JK/ AMS /DTH
Sample : A9E0766-01RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 03 08:57:03 2019
Quant Method : W:\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Sequence 9E29030 (QC Only)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E29030**	Instrument:	**SV-GCMS10**
Date:	**05/29/19 08:01**	Calibration:	**A9D1505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E29030-TUN1	Sediment	QC	QC			A19B027	A19E139
2	9E29030-CCV1	Sediment	QC	QC			A19B027	A19C237
3	9E29030-IBL1	Sediment	QC	QC			A19B027	
4	9E29030-TUN2	Sediment	QC	QC			A19B027	A19E139
5	9E29030-CCV2	Sediment	QC	QC			A19B027	A19C237
6	9E29030-CCV3	Sediment	QC	QC			A19B027	A19E064
7	9E29030-CCB1	Sediment	QC	QC			A19B027	
8	9051333-BLK1	Sediment	QC	QC		9051333	A19B027	
9	9051333-BS1	Sediment	QC	QC		9051333	A19B027	
10	A9E0744-11	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
11	9051333-MS1	Sediment	QC	QC		9051333	A19B027	
12	A9E0744-01	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
13	9051333-DUP1	Sediment	QC	QC		9051333	A19B027	
14	A9E0744-02	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
15	A9E0744-19	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
16	A9E0744-19RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
17	A9E0744-19RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
18	9051333-MS2	Sediment	QC	QC		9051333	A19B027	
19	9051333-MSD2	Sediment	QC	QC		9051333	A19B027	
20	A9E0744-06	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
21	A9E0744-07	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
22	A9E0744-08	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
23	A9E0744-12	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/05/19	9051333	A19B027	
24	9E29030-IBL2	Sediment	QC	QC			A19B027	

Data Entered By: AMS 5/30/19

Data Reviewed By: 5/30/19

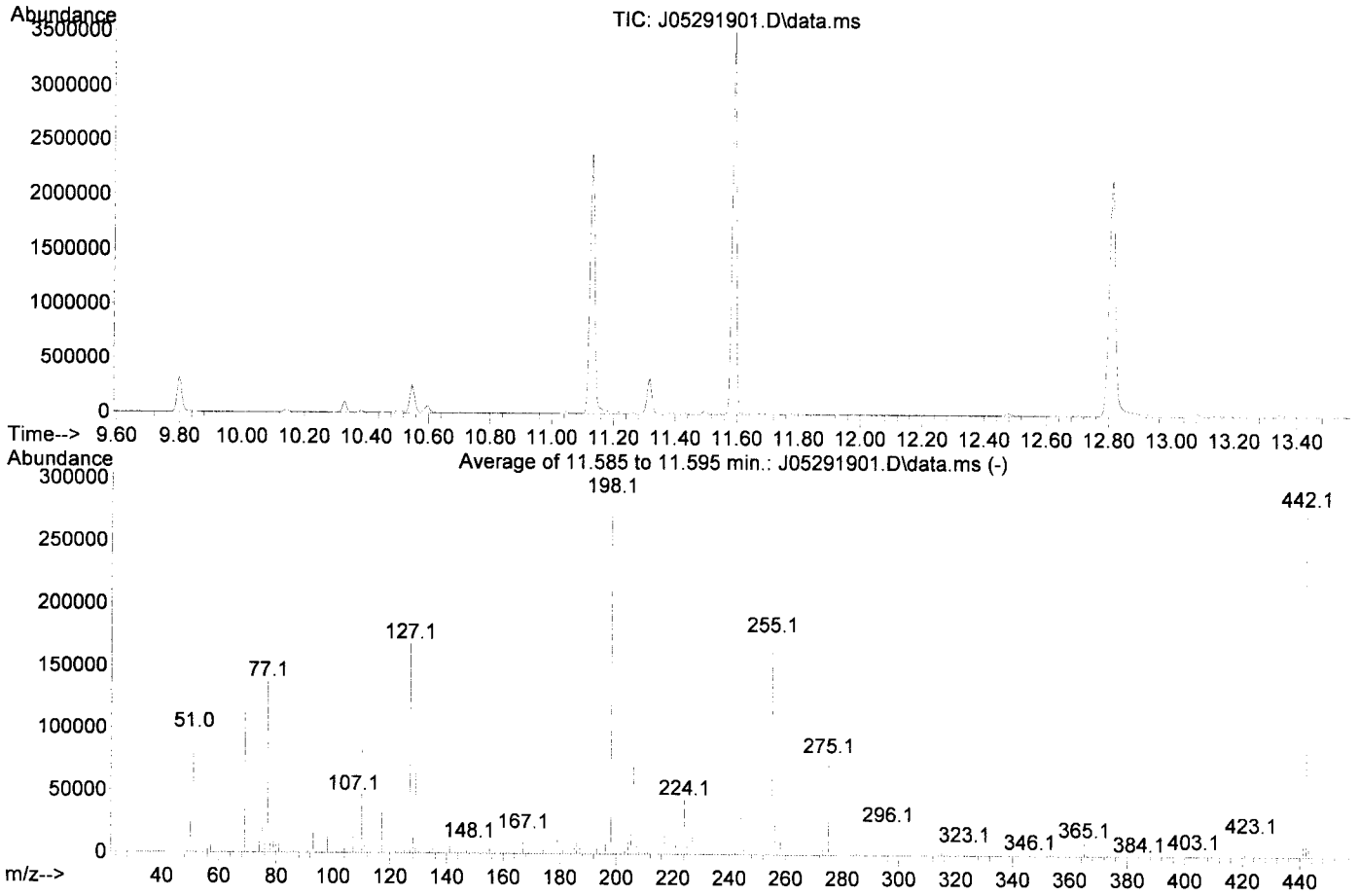
Comments:

Data Path : T:\data\2019-05\9E29030\
Data File : J05291901.D
Acq On : 29 May 2019 8:07 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN1
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Apr 16 11:00:01 2019

Q-14 AMS 5/29/19



AutoFind: Scans 1514, 1515, 1516; Background Corrected with Scan 1509

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.3	96573	PASS
68	69	0.00	2	1.5	1644	PASS
69	198	0.00	100	39.0	113104	PASS
70	69	0.00	2	0.7	750	PASS
127	198	10	80	58.0	168504	PASS
197	198	0.00	2	0.3	824	PASS
198	198	100	100	100.0	290325	PASS
199	198	5	9	7.0	20398	PASS
275	198	10	60	27.0	78301	PASS
365	198	1	100	3.9	11372	PASS
441	442	0.01	24	15.2	42237	PASS
442	198	50	200	95.8	278080	PASS
443	442	15	24	19.6	54579	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291901.D
Acq On : 29 May 2019 8:07 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN1
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

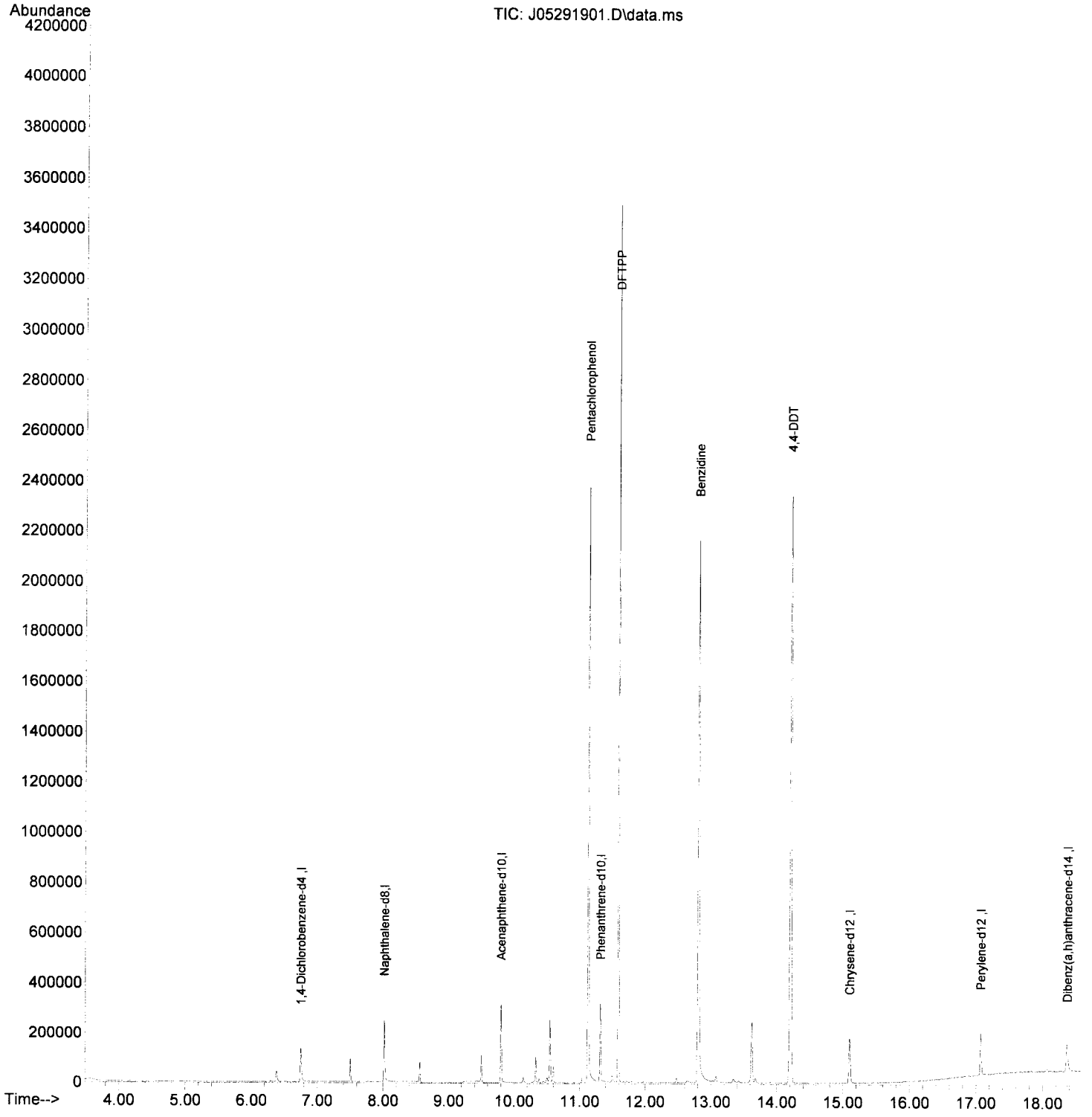
Quant Time: May 29 15:07:28 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.749	150	48088	2.00	ug/mL	0.00
2) Naphthalene-d8	8.017	136	146243	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.798	162	73729	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.317	188	120732	2.00	ug/mL	0.00
11) Chrysene-d12	15.099	240	95370	2.00	ug/mL	0.00
12) Perylene-d12	17.072	264	80258	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.367	292	79415	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.130	266	262580	37.71	ug/mL	96
6) DFTPP	11.590	442	316239	32.45	ug/mL	87
7) Benzidine	12.809	184	1239426	28.86	ug/mL	97
8) 4,4-DDE	13.077	TIC	34691	No Calib		
9) 4,4-DDD	13.622	TIC	355394	No Calib		
10) 4,4-DDT	14.211	TIC	4009564	32.39	ug/mL	99

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291901.D
Acq On : 29 May 2019 8:07 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN1
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 29 15:07:28 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-05\9E29030\
Data File : J05291902.D
Acq On : 29 May 2019 8:34 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Q-LY AMS 5/29/19

Quant Time: May 29 15:07:43 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	143016	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	711975	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	361976	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	641691	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	537790	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	473616	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.255	292	452007	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.546	112	111395	1198.16	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	156315	1307.08	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	140974	1313.06	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.157	172	281540	1102.37	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	32100	1018.80	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	285092	1126.18	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.118	74	43415	616.07	ng/ml	97
3) Pyridine	4.156	79	99157	862.36	ng/ml	96
6) Phenol	6.471	94	169319	1261.50	ng/ml	95
7) Aniline	6.498	93	64210	456.66	ng/ml	86
8) Bis(2-chloroethyl) ether	6.536	93	170049	1404.33	ng/ml	90
9) 2-Chlorophenol	6.611	128	126196	1297.95	ng/ml	96
10) 1,3-Dichlorobenzene	6.750	146	109871	1004.32	ng/ml	100
11) 1,4-Dichlorobenzene	6.819	146	110020	1008.06	ng/ml	99
12) Benzyl alcohol	6.942	108	83518	1416.30	ng/ml	100
13) 1,2-Dichlorobenzene	6.974	146	113515	1068.66	ng/ml	98
14) 2-Methylphenol	7.055	107	107195	1423.37	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.065	45	151322	1104.32	ng/ml	89
16) N-Nitrosodi-n-propylamine	7.194	70	105663	1333.40	ng/ml	97
17) 3+4-Methylphenol	7.204	107	140208	1342.87	ng/ml	99
18) Hexachloroethane	7.311	201	31090	1056.94	ng/ml	91
20) Nitrobenzene	7.370	77	141136	1387.28	ng/ml	99
22) Isophorone	7.605	82	280435	1057.56	ng/ml	97
23) 2-Nitrophenol	7.691	139	69896	1238.88	ng/ml	93
24) 2,4-Dimethylphenol	7.728	122	114660	1049.21	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.809	93	162395	1141.84	ng/ml	99
26) Benzoic acid	7.825	105	119067	2420.17	ng/ml	100
27) 2,4-Dichlorophenol	7.937	162	100128	1135.72	ng/ml	98
28) 1,2,4-Trichlorobenzene	8.017	180	105109	1039.39	ng/ml	96
29) Naphthalene	8.097	128	386256	1048.08	ng/ml	98
30) 4-Chloroaniline	8.156	127	80538	690.40	ng/ml	98
31) Hexachlorobutadiene	8.220	225	54696	995.49	ng/ml	98
32) 4-Chloro-3-methylphenol	8.632	107	123122	1172.51	ng/ml	98
33) 2-Methylnaphthalene	8.793	142	270051	1117.44	ng/ml	96
34) 1-Methylnaphthalene	8.894	142	255325	1089.21	ng/ml	97
36) Hexachlorocyclopentadiene	8.959	237	50969	1020.18	ng/ml	100
37) 2,4,6-Trichlorophenol	9.082	196	70115	1084.04	ng/ml	96
38) 2,4,5-Trichlorophenol	9.124	198	66878	1155.45	ng/ml	100
39) 1,1'-Biphenyl	9.263	154	318728	1086.22	ng/ml	99
41) 2-Chloronaphthalene	9.290	162	234669	1130.90	ng/ml	98
42) 2-Nitroaniline	9.392	138	80168	1177.38	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.424	156	227621	1058.02	ng/ml	98

Data Path : T:\data\2019-05\9E29030\
Data File : J05291902.D
Acq On : 29 May 2019 8:34 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

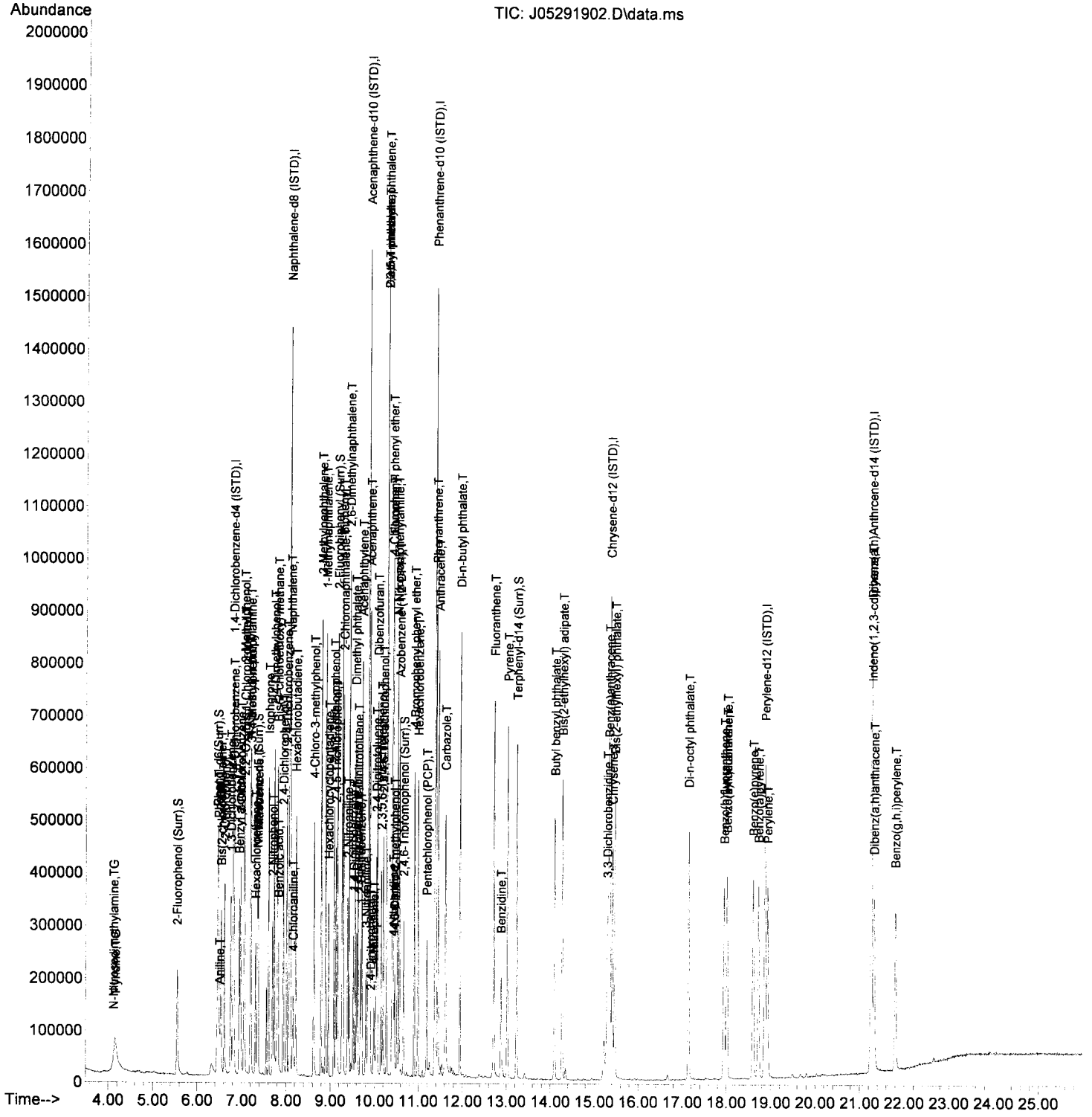
Quant Time: May 29 15:07:43 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	35212	1403.40	ng/ml	98
45) Dimethyl phthalate	9.563	163	275239	1093.19	ng/ml	98
46) 1,3-Dinitrobenzene	9.600	168	40175	1272.86	ng/ml	96
47) 2,6-Dinitrotoluene	9.627	165	60942	1143.68	ng/ml	95
48) 1,2-Dinitrobenzene	9.686	168	26196	1079.85	ng/ml	95
49) Acenaphthylene	9.713	152	382027	1055.06	ng/ml	100
50) 3-Nitroaniline	9.809	138	48383	977.71	ng/ml	95
51) Acenaphthene	9.889	153	241923	1038.87	ng/ml	98
52) 2,4-Dinitrophenol	9.911	184	10386	1080.19	ng/ml	88
53) 4-Nitrophenol	9.986	139	33582	971.80	ng/ml	87
54) 2,4-Dinitrotoluene	10.039	165	79086	1206.00	ng/ml	96
55) Dibenzofuran	10.066	168	320513	1053.50	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.151	232	51625	1122.59	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.194	232	56135	1128.89	ng/ml	97
58) Diethyl phthalate	10.274	149	280007	1164.42	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.274	170	208463	1083.81	ng/ml	98
60) Fluorene	10.413	166	258123	1083.44	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.403	204	117877	1081.21	ng/ml	98
62) 4-Nitroaniline	10.429	138	49912	1096.31	ng/ml	88
63) 4,6-Dinitro-2-methylph...	10.456	198	22696	1240.67	ng/ml	98
65) N-Nitrosodiphenylamine	10.520	169	214758	1087.03	ng/ml	98
66) Azobenzene (1,2-DPH)	10.563	77	294452	1101.20	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.900	248	66746	1056.73	ng/ml	95
69) Hexachlorobenzene	10.986	284	74555	968.07	ng/ml	97
70) Pentachlorophenol (PCP)	11.184	266	30918	902.05	ng/ml	96
71) Phenanthrene	11.398	178	361468	1038.11	ng/ml	99
72) Anthracene	11.451	178	365675	1078.32	ng/ml	99
73) Carbazole	11.612	167	297682	1037.26	ng/ml	98
74) Di-n-butyl phthalate	11.938	149	466329	1188.46	ng/ml	99
75) Fluoranthene	12.713	202	380917	1096.99	ng/ml	97
76) Benzidine	12.874	184	120916	991.14	ng/ml	95
77) Pyrene	13.024	202	381511	1066.14	ng/ml	99
80) Butyl benzyl phthalate	14.099	149	198263	1250.36	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.270	129	178660	1165.87	ng/ml	99
82) 3,3-Dichlorobenzidine	15.291	252	130228	2909.83	ng/ml	95
83) Benz(a)anthracene	15.323	228	312470	1064.79	ng/ml	98
84) Chrysene	15.409	228	298858	1049.57	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.463	149	268607	1189.04	ng/ml	98
87) Di-n-octyl phthalate	17.137	149	450293	1349.72	ng/ml	96
88) Benzo(b)fluoranthene	17.944	252	311553	1137.91	ng/ml	96
89) Benzo(k)fluoranthene	18.009	252	298324	1076.01	ng/ml	94
90) Benzo(b+k)fluoranthene	18.009	252	619789	2212.43	ng/ml	94
91) Benzo(e)pyrene	18.602	252	294926	1135.61	ng/ml	98
92) Benzo(a)pyrene	18.720	252	280624	1122.40	ng/ml	97
93) Perylene	18.923	252	287674	1196.58	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.266	276	245443	970.66	ng/ml	91
96) Dibenz(a,h)anthracene	21.319	278	242499	1072.09	ng/ml	92
97) Benzo(g,h,i)perylene	21.801	276	250162	1023.56	ng/ml	97

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291902.D
Acq On : 29 May 2019 8:34 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:07:43 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

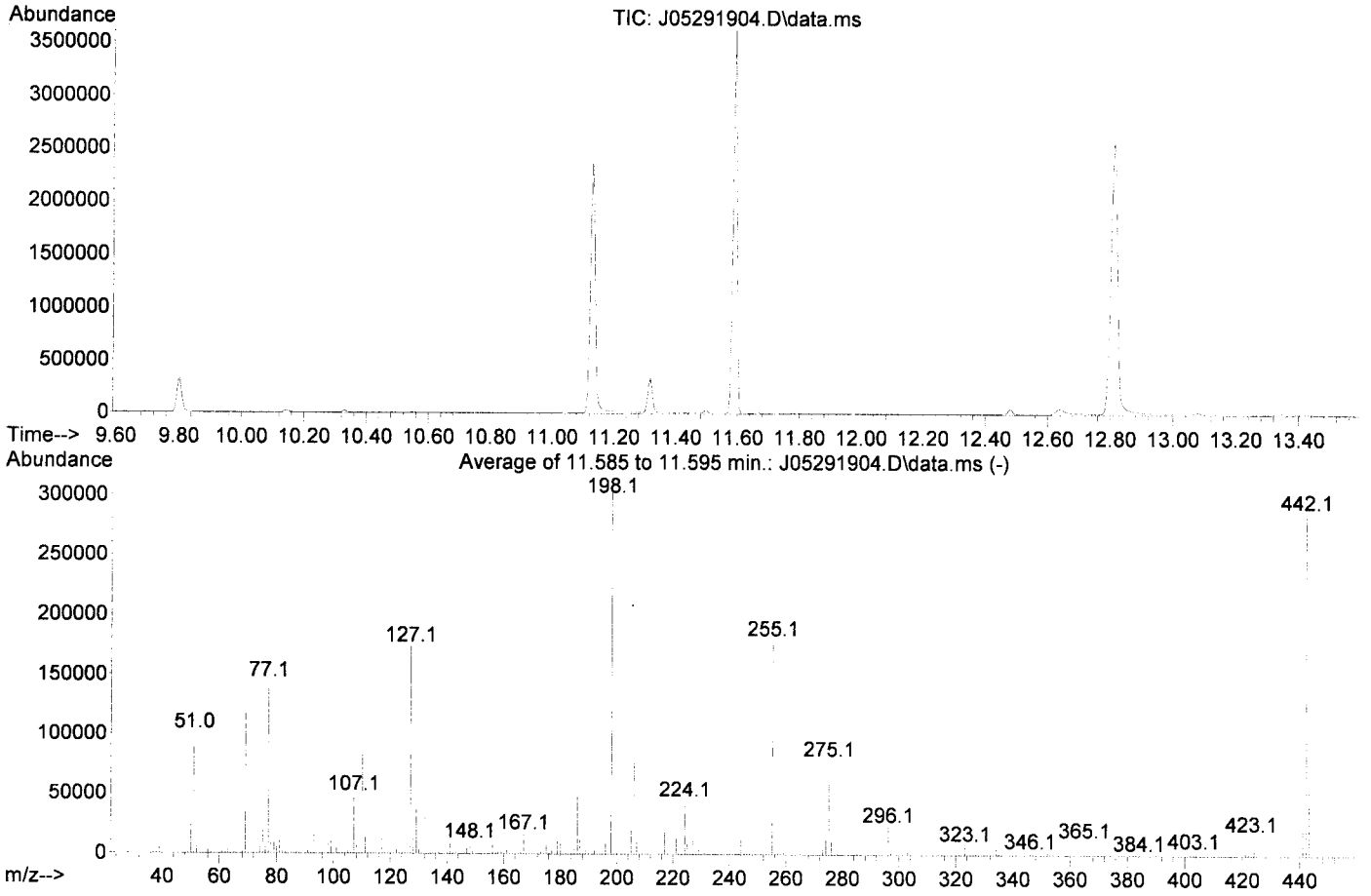


Data Path : T:\data\2019-05\9E29030\
Data File : J05291904.D
Acq On : 29 May 2019 9:58 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN2
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Apr 16 11:00:01 2019

AMS 5/29/19



AutoFind: Scans 1514, 1515, 1516; Background Corrected with Scan 1509

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.3	100836	PASS
68	69	0.00	2	1.6	1910	PASS
69	198	0.00	100	39.0	118258	PASS
70	69	0.00	2	0.6	654	PASS
127	198	10	80	57.3	173647	PASS
197	198	0.00	2	0.4	1198	PASS
198	198	100	100	100.0	303189	PASS
199	198	5	9	6.9	20851	PASS
275	198	10	60	25.9	78536	PASS
365	198	1	100	3.7	11080	PASS
441	442	0.01	24	15.3	43885	PASS
442	198	50	200	94.5	286507	PASS
443	442	15	24	19.8	56595	PASS

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291904.D
Acq On : 29 May 2019 9:58 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN2
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 29 15:17:22 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10

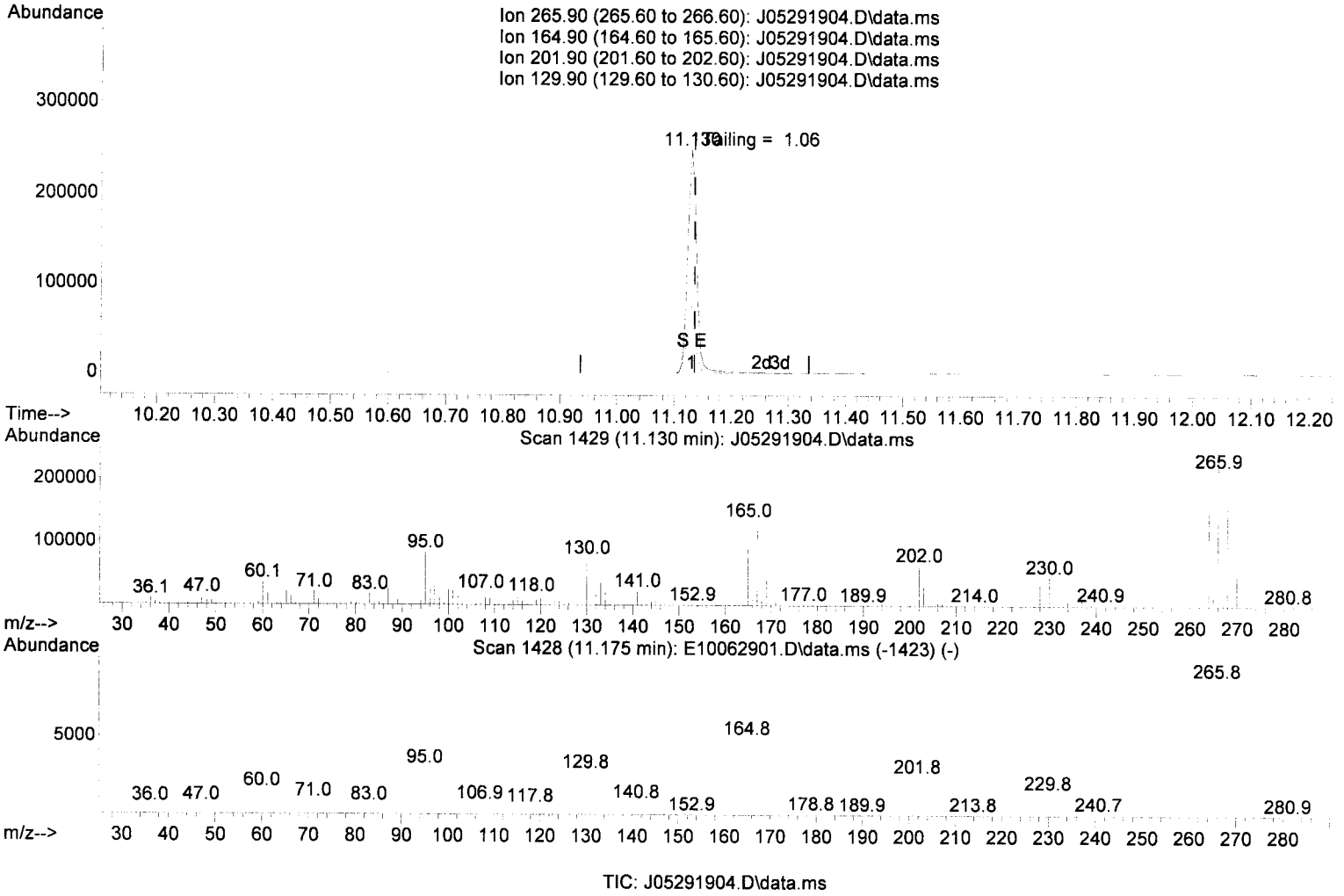
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.755	150	47185	2.00	ug/mL	0.00
2) Naphthalene-d8	8.023	136	147388	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.804	162	75126	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.317	188	124022	2.00	ug/mL	0.00
11) Chrysene-d12	15.099	240	97720	2.00	ug/mL	0.00
12) Perylene-d12	17.072	264	87483	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.372	292	77972	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.130	266	274644	38.71	ug/mL	96
6) DFTPP	11.590	442	328208	32.78	ug/mL	85
7) Benzidine	12.810	184	1475093	33.43	ug/mL	97
8) 4,4-DDE	13.077	TIC	29872	No Calib		
9) 4,4-DDD	13.617	TIC	11416	No Calib		
10) 4,4-DDT	14.211	TIC	5029107	39.54	ug/mL	98

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291904.D
Acq On : 29 May 2019 9:58 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN2
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 29 15:17:22 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J05291904.D\data.ms

(4) Pentachlorophenol

11.130min (-0.005) 38.71 ug/mL

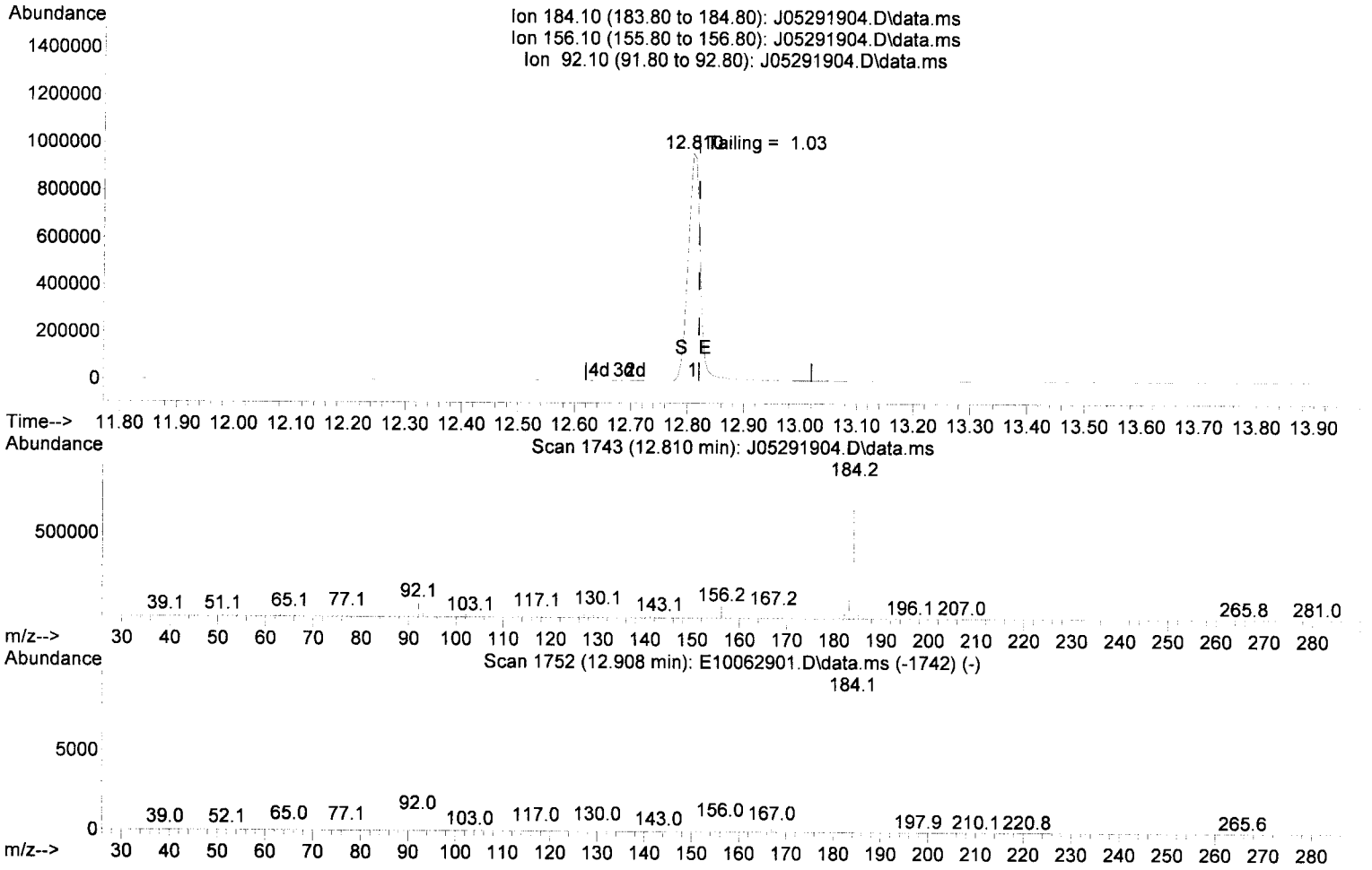
response 274644

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	54.08
201.90	25.80	25.62
129.90	27.30	29.96

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291904.D
Acq On : 29 May 2019 9:58 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN2
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 29 15:17:22 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J05291904.D\data.ms

(7) Benzidine

12.810min (-0.011) 33.43 ug/mL

response 1475093

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	8.07
92.10	8.20	9.81
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

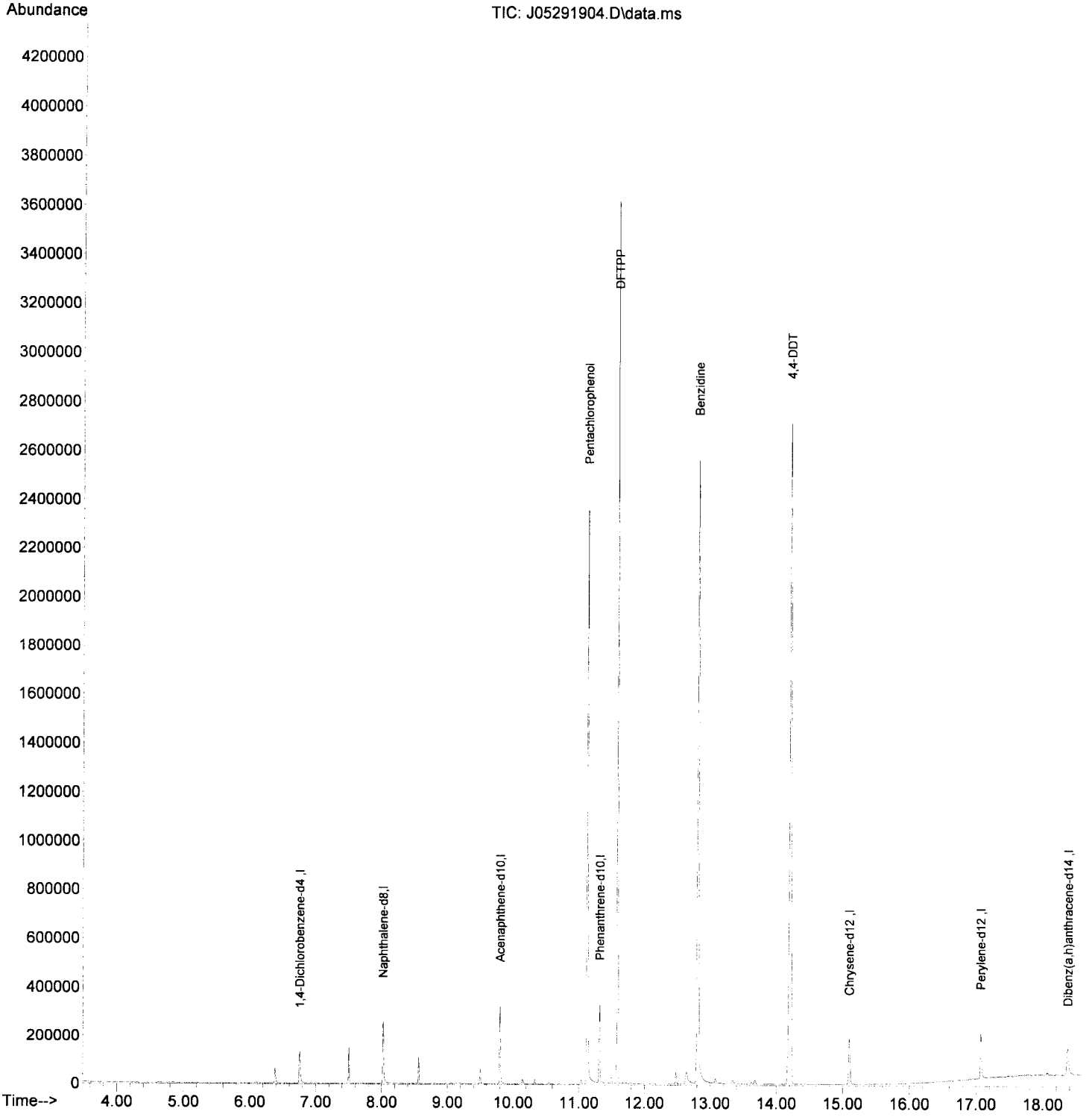
From:
9E29030-TUN2
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	29872		
DDD	11416		
DDT	5029107	**0.81**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : T:\data\2019-05\9E29030\
Data File : J05291904.D
Acq On : 29 May 2019 9:58 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-TUN2
Misc : 1x, A19E139 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 29 15:17:22 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 5/29/19

Quant Time: May 29 15:19:01 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	80	0.00
2	TG	N-Nitrosodimethylamine	1000.000	1028.839	-2.9	81	-0.05
3	TG	Pyridine	1000.000	1010.465	-1.0	77	-0.05
4	S	2-Fluorophenol (Surr)	1000.000	996.601	0.3	77	0.00
5	S	Phenol-d6(Surr)	1000.000	1159.051	-15.9	89	0.00
6	T	Phenol	1000.000	1130.865	-13.1	96	0.00
7	T	Aniline	1000.000	587.590	41.2#	43	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1304.408	-30.4#	104	0.00
9	T	2-Chlorophenol	1000.000	1115.800	-11.6	82	0.00
10	T	1,3-Dichlorobenzene	1000.000	984.142	1.6	77	0.00
11	T	1,4-Dichlorobenzene	1000.000	1001.554	-0.2	80	0.00
12	T	Benzyl alcohol	1000.000	1227.682	-22.8#	97	0.00
13	T	1,2-Dichlorobenzene	1000.000	1024.120	-2.4	80	0.00
14	T	2-Methylphenol	1000.000	1249.352	-24.9#	89	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1029.967	-3.0	79	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1159.090	-15.9	85	0.00
17	T	3+4-Methylphenol	1000.000	1184.813	-18.5	91	0.00
18	T	Hexachloroethane	1000.000	1054.604	-5.5	85	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1178.486	-17.8	96	0.00
20	T	Nitrobenzene	1000.000	1254.811	-25.5#	94	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	86	0.00
22	T	Isophorone	1000.000	1036.848	-3.7	86	0.00
23	T	2-Nitrophenol	1000.000	1271.353	-27.1#	108	0.00
24	T	2,4-Dimethylphenol	1000.000	992.723	0.7	83	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1086.039	-8.6	85	0.00
26	T	Benzoic acid	2000.000	2290.527	-14.5	120	0.00
27	T	2,4-Dichlorophenol	1000.000	1112.154	-11.2	97	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1052.154	-5.2	87	0.00
29	T	Naphthalene	1000.000	1043.165	-4.3	85	0.00
30	T	4-Chloroaniline	1000.000	875.072	12.5	72	0.00
31	T	Hexachlorobutadiene	1000.000	1017.278	-1.7	87	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1088.306	-8.8	95	0.00
33	T	2-Methylnaphthalene	1000.000	1078.523	-7.9	85	0.00
34	T	1-Methylnaphthalene	1000.000	1036.453	-3.6	84	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	88	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1222.019	-22.2#	103	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1064.338	-6.4	98	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1153.718	-15.4	97	0.00
39	T	1,1'-Biphenyl	1000.000	1046.271	-4.6	84	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1088.888	-8.9	87	0.00
41	T	2-Chloronaphthalene	1000.000	1112.137	-11.2	90	0.00
42	T	2-Nitroaniline	1000.000	1137.392	-13.7	103	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1051.585	-5.2	85	0.00
44	T	1,4-Dinitrobenzene	1000.000	1346.054	-34.6#	136	0.00
45	T	Dimethyl phthalate	1000.000	1046.300	-4.6	90	0.00
46	T	1,3-Dinitrobenzene	1000.000	1212.801	-21.3#	112	0.00
47	T	2,6-Dinitrotoluene	1000.000	1115.177	-11.5	96	0.00
48	T	1,2-Dinitrobenzene	1000.000	1077.002	-7.7	95	0.00

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:01 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1058.778	-5.9	87	0.00
50	T	3-Nitroaniline	1000.000	984.694	1.5	79	0.00
51	T	Acenaphthene	1000.000	1022.886	-2.3	87	0.00
52	T	2,4-Dinitrophenol	1000.000	1778.003	-77.8#	216	0.00
53	T	4-Nitrophenol	1000.000	935.063	6.5	83	0.02
54	T	2,4-Dinitrotoluene	1000.000	1167.159	-16.7	106	0.00
55	T	Dibenzofuran	1000.000	1023.475	-2.3	87	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1114.693	-11.5	97	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1078.028	-7.8	92	0.00
58	T	Diethyl phthalate	1000.000	1072.541	-7.3	89	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1061.692	-6.2	89	0.00
60	T	Fluorene	1000.000	1041.785	-4.2	88	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1027.747	-2.8	88	0.00
62	T	4-Nitroaniline	1000.000	971.582	2.8	80	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1674.836	-67.5#	179	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	86	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1081.646	-8.2	86	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1073.037	-7.3	85	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1054.536	-5.5	92	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1040.752	-4.1	84	0.00
69	T	Hexachlorobenzene	1000.000	952.078	4.8	81	0.00
70	T	Pentachlorophenol (PCP)	1000.000	928.305	7.2	82	0.00
71	T	Phenanthrene	1000.000	1026.666	-2.7	85	0.00
72	T	Anthracene	1000.000	1075.771	-7.6	87	0.00
73	T	Carbazole	1000.000	1010.823	-1.1	80	0.00
74	T	Di-n-butyl phthalate	1000.000	1121.413	-12.1	89	0.00
75	T	Fluoranthene	1000.000	1061.113	-6.1	84	0.00
76	T	Benzidine	2000.000	1308.843	34.6#	51	0.00
77	T	Pyrene	1000.000	1036.779	-3.7	83	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	80	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1096.569	-9.7	84	0.00
80	T	Butyl benzyl phthalate	1000.000	1197.919	-19.8	95	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1270.322	-27.0#	103	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2999.334	-50.0#	97	0.00
83	T	Benz(a)anthracene	1000.000	1052.582	-5.3	83	0.00
84	T	Chrysene	1000.000	1068.450	-6.8	84	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1124.211	-12.4	88	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	78	0.00
87	T	Di-n-octyl phthalate	1000.000	1221.325	-22.1#	96	0.00
88	T	Benzo(b)fluoranthene	1000.000	1106.520	-10.7	83	0.00
89	T	Benzo(k)fluoranthene	1000.000	1119.341	-11.9	84	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2217.911	-10.9	83	0.06
91	T	Benzo(e)pyrene	1000.000	1137.975	-13.8	81	0.00
92	T	Benzo(a)pyrene	1000.000	1129.818	-13.0	84	0.00
93	T	Perylene	1000.000	1216.306	-21.6#	91	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	80	0.00

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:01 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95	T	Indeno(1,2,3-cd)pyrene	1000.000	1010.315	-1.0	83	0.00
96	T	Dibenz(a,h)anthracene	1000.000	1114.542	-11.5	87	0.00
97	T	Benzo(g,h,i)perylene	1000.000	1047.845	-4.8	77	0.00

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 5/29/19

Quant Time: May 29 15:18:49 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	167034	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	750734	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	361547	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	604920	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	489847	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	427331	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.255	292	406909	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.541	112	108216	996.60	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	161891	1159.05	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	147463	1178.49	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	277768	1088.89	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	31349	1054.54	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	252849	1096.57	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.107	74	84679m	1028.84	ng/ml	
3) Pyridine	4.139	79	135699m	1010.47	ng/ml	
6) Phenol	6.466	94	176842	1130.87	ng/ml	94
7) Aniline	6.482	93	96495	587.59	ng/ml	66
8) Bis(2-chloroethyl) ether	6.530	93	184476	1304.41	ng/ml	93
9) 2-Chlorophenol	6.611	128	126705	1115.80	ng/ml	94
10) 1,3-Dichlorobenzene	6.750	146	125745	984.14	ng/ml	97
11) 1,4-Dichlorobenzene	6.819	146	127667	1001.55	ng/ml	99
12) Benzyl alcohol	6.942	108	83573	1227.68	ng/ml	98
13) 1,2-Dichlorobenzene	6.974	146	127053	1024.12	ng/ml	99
14) 2-Methylphenol	7.054	107	109891	1249.35	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	164835	1029.97	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.194	70	107275	1159.09	ng/ml	98
17) 3+4-Methylphenol	7.204	107	141127	1184.81	ng/ml	98
18) Hexachloroethane	7.311	201	36231	1054.60	ng/ml	96
20) Nitrobenzene	7.370	77	149098	1254.81	ng/ml	98
22) Isophorone	7.605	82	289909	1036.85	ng/ml	96
23) 2-Nitrophenol	7.691	139	75767	1271.35	ng/ml	91
24) 2,4-Dimethylphenol	7.728	122	114315	992.72	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.809	93	162867	1086.04	ng/ml	98
26) Benzoic acid	7.825	105	115409	2290.53	ng/ml	98
27) 2,4-Dichlorophenol	7.937	162	103312	1112.15	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.017	180	112192	1052.15	ng/ml	95
29) Naphthalene	8.097	128	405373	1043.16	ng/ml	99
30) 4-Chloroaniline	~~8.156~~	~~127~~	~~97864~~	~~789.02~~	~~ng/ml~~	99 MJ
31) Hexachlorobutadiene	8.220	225	58936	1017.28	ng/ml	98
32) 4-Chloro-3-methylphenol	8.632	107	119979	1088.31	ng/ml	98
33) 2-Methylnaphthalene	8.793	142	274835	1078.52	ng/ml	96
34) 1-Methylnaphthalene	8.894	142	256185	1036.45	ng/ml	97
36) Hexachlorocyclopentadiene	8.959	237	61486	1222.02	ng/ml	99
37) 2,4,6-Trichlorophenol	9.082	196	68717	1064.34	ng/ml	97
38) 2,4,5-Trichlorophenol	9.124	198	66695	1153.72	ng/ml	97
39) 1,1'-Biphenyl	9.263	154	306642	1046.27	ng/ml	99
41) 2-Chloronaphthalene	9.290	162	230503	1112.14	ng/ml	98
42) 2-Nitroaniline	9.392	138	77139	1137.39	ng/ml	97
43) 2,6-Dimethylnaphthalene	9.424	156	225968	1051.58	ng/ml	99

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:18:49 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

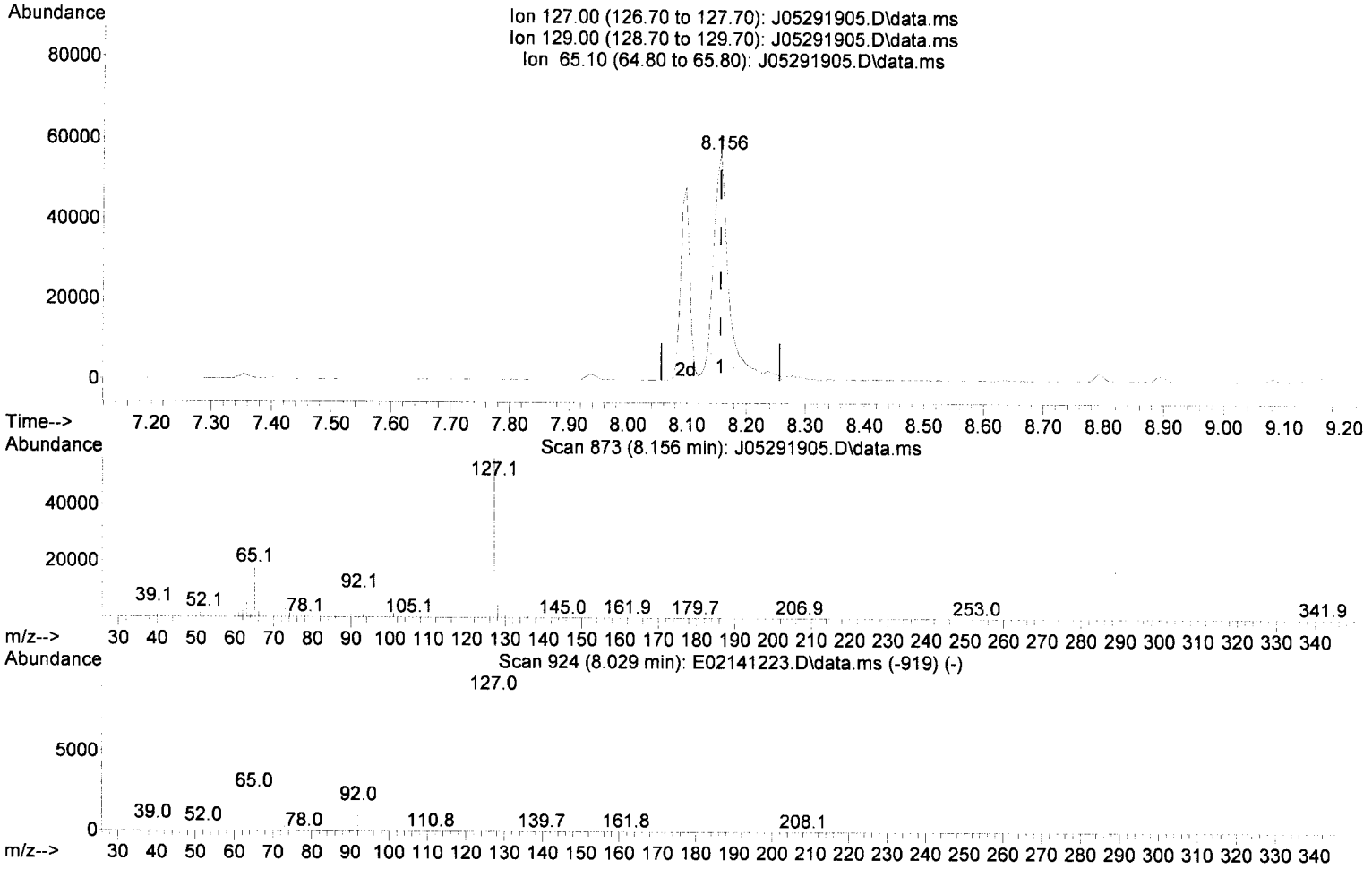
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	33505	1346.05	ng/ml	97
45) Dimethyl phthalate	9.563	163	263122	1046.30	ng/ml	99
46) 1,3-Dinitrobenzene	9.600	168	38069	1212.80	ng/ml	98
47) 2,6-Dinitrotoluene	9.627	165	59312	1115.18	ng/ml	98
48) 1,2-Dinitrobenzene	9.686	168	26096	1077.00	ng/ml	100
49) Acenaphthylene	9.713	152	382917	1058.78	ng/ml	100
50) 3-Nitroaniline	9.809	138	48671	984.69	ng/ml	90
51) Acenaphthene	9.889	153	237919	1022.89	ng/ml	100
52) 2,4-Dinitrophenol	9.905	184	20577	1778.00	ng/ml	93
53) 4-Nitrophenol	9.991	139	32113	935.06	ng/ml	95
54) 2,4-Dinitrotoluene	10.039	165	76293	1167.16	ng/ml	95
55) Dibenzofuran	10.066	168	311008	1023.47	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.151	232	51183	1114.69	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	10.194	232	53485	1078.03	ng/ml	98
58) Diethyl phthalate	10.274	149	257608	1072.54	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.274	170	203966	1061.69	ng/ml	95
60) Fluorene	10.413	166	247904	1041.79	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.403	204	111915	1027.75	ng/ml	98
62) 4-Nitroaniline	10.435	138	44181	971.58	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.456	198	32729	1674.84	ng/ml	93
65) N-Nitrosodiphenylamine	10.520	169	201449	1081.65	ng/ml	99
66) Azobenzene (1,2-DPH)	10.563	77	270480	1073.04	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.900	248	61970	1040.75	ng/ml	93
69) Hexachlorobenzene	10.986	284	69122	952.08	ng/ml	94
70) Pentachlorophenol (PCP)	11.184	266	30036	928.30	ng/ml	96
71) Phenanthrene	11.398	178	336997	1026.67	ng/ml	99
72) Anthracene	11.451	178	343905	1075.77	ng/ml	99
73) Carbazole	11.611	167	273472	1010.82	ng/ml	97
74) Di-n-butyl phthalate	11.938	149	414808	1121.41	ng/ml	99
75) Fluoranthene	12.713	202	347346	1061.11	ng/ml	96
76) Benzidine	12.874	184	154298	1308.84	ng/ml	96
77) Pyrene	13.024	202	349744	1036.78	ng/ml	99
80) Butyl benzyl phthalate	14.093	149	172583	1197.92	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.270	129	177313	1270.32	ng/ml	97
82) 3,3-Dichlorobenzidine	15.291	252	121758	2999.33	ng/ml	99
83) Benz(a)anthracene	15.323	228	281352	1052.58	ng/ml	100
84) Chrysene	15.409	228	277111	1068.45	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.463	149	231322	1124.21	ng/ml	99
87) Di-n-octyl phthalate	17.137	149	364725	1221.33	ng/ml	96
88) Benzo(b)fluoranthene	17.944	252	273194	1106.52	ng/ml	95
89) Benzo(k)fluoranthene	18.003	252	279886	1119.34	ng/ml	95
90) Benzo(b+k)fluoranthene	18.003	252	560612	2217.91	ng/ml	95
91) Benzo(e)pyrene	18.597	252	266657	1137.98	ng/ml	99
92) Benzo(a)pyrene	18.720	252	254894	1129.82	ng/ml	96
93) Perylene	18.923	252	263840	1216.31	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.260	276	229982	1010.31	ng/ml	92
96) Dibenz(a,h)anthracene	21.319	278	226949	1114.54	ng/ml	95
97) Benzo(g,h,i)perylene	21.806	276	230545	1047.85	ng/ml	98

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:18:49 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J05291905.D\data.ms

(30) 4-Chloroaniline (T)

8.156min (0.000) 789.02 ng/ml

response 97864

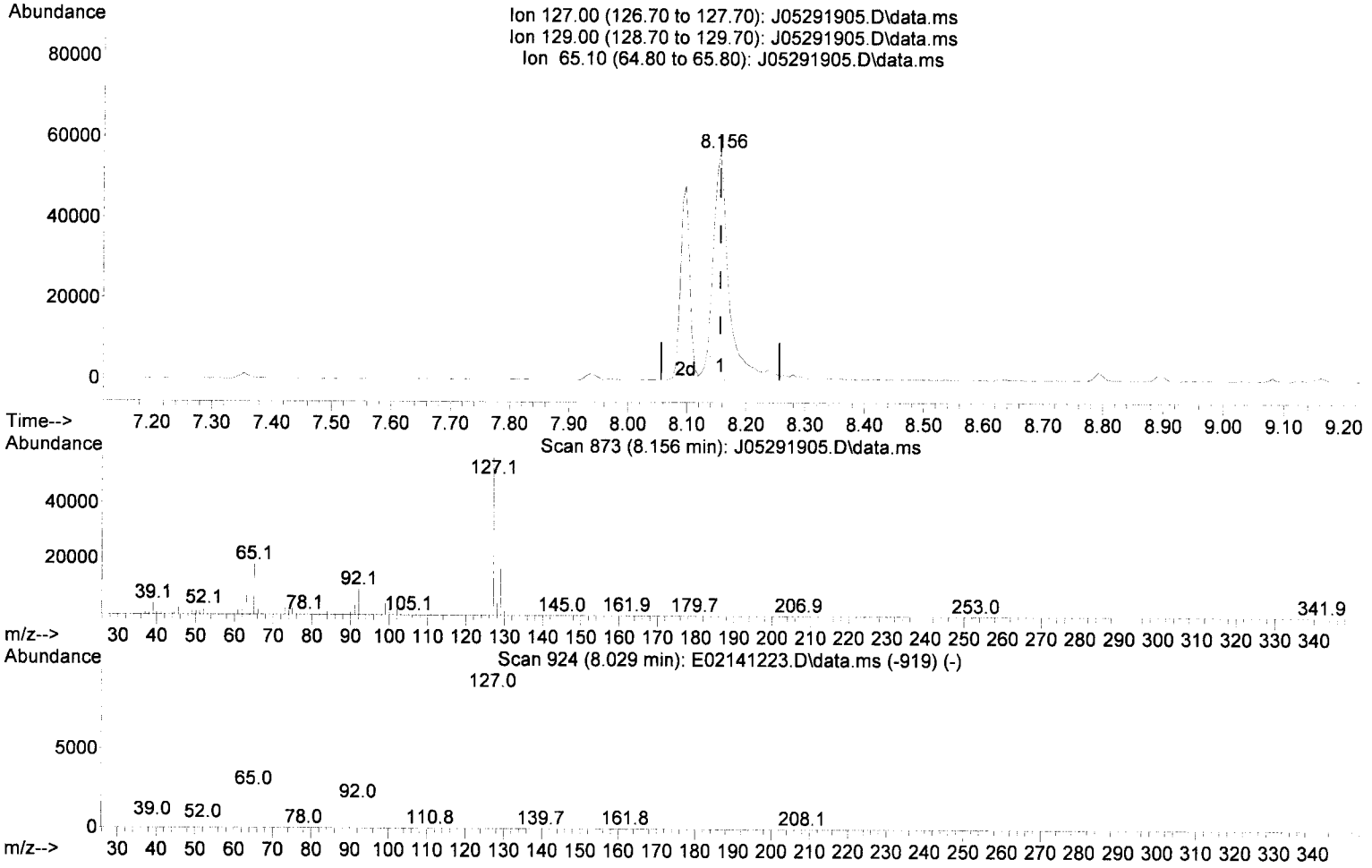
Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	32.01
65.10	31.40	31.88
0.00	0.00	0.00

AMS 5/29/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:18:49 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J05291905.D\data.ms

(30) 4-Chloroaniline (T)

8.156min (0.000) 875.07 ng/ml m

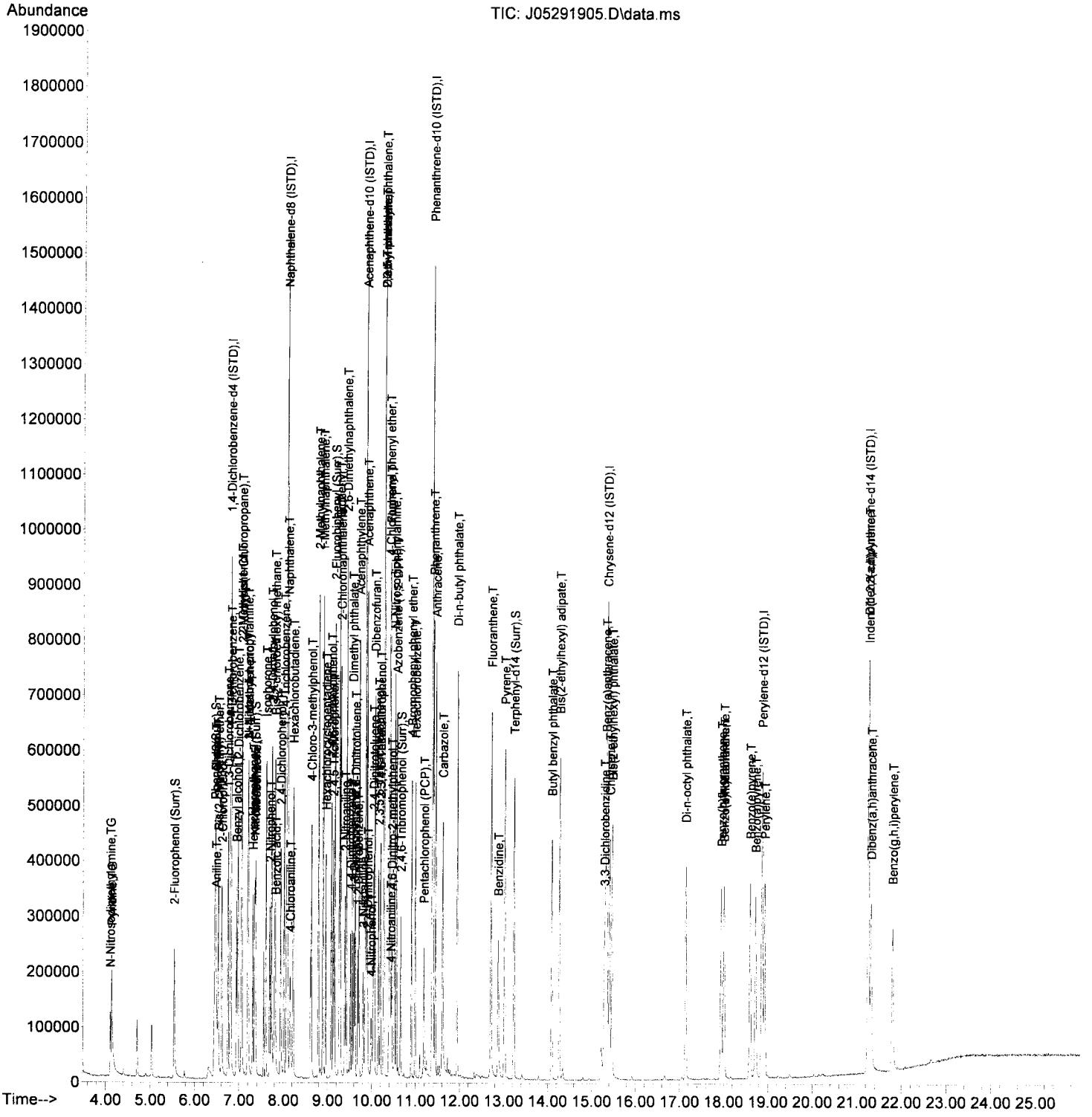
response 109271

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	32.01
65.10	31.40	31.88
0.00	0.00	0.00

AMS 5/29/19

Data Path : T:\data\2019-05\9E29030\
Data File : J05291905.D
Acq On : 29 May 2019 10:27 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:18:49 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-05\9E29030\
Data File : J05291906.D
Acq On : 29 May 2019 11:03 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV3
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

No Homologs run Not needed

AMS 5/29/19

Quant Time: May 29 15:19:30 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	90	0.00
2	S	Nitrobenzene-d5 (Surr)	1000.000	1215.643	-21.6#	101	0.00
3	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	90	0.00
4	T	Decalin	1000.000	1068.625	-6.9	90	-0.01
5	T	C-1 Decalin	1000.000	1.042	99.9#	0	0.04
6	T	C-2 Decalin	1000.000	0.000	100.0#	0	-8.28#
7	T	C-3 Decalin	1000.000	0.000	100.0#	0	-8.98#
8	T	C-4 Decalin	1000.000	0.000	100.0#	0	-9.55#
9	T	Naphthalene	1000.000	1048.360	-4.8	88	0.00
10	T	2-Methylnaphthalene	1000.000	1101.930	-10.2	89	0.00
11	T	C-1 Naphthalenes	1000.000	1026.961	-2.7	83	0.04
12	T	1-Methylnaphthalene	1000.000	1057.117	-5.7	85	0.00
13	T	1,1'-Biphenyl	1000.000	1074.530	-7.5	84	0.00
14	T	2,6-Dimethylnaphthalene	1000.000	1051.585	-5.2	83	0.00
15	T	C-2 Naphthalenes	1000.000	1.432	99.9#	0	0.06
16	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	86	0.00
17	S	2-Fluorobiphenyl (Surr)	1000.000	1173.015	-17.3	89	0.00
18	S	Acenaphthylene d-8 (Surr)	1000.000	1133.288	-13.3	87	0.00
19	T	Acenaphthylene	1000.000	1099.228	-9.9	84	0.00
20	T	Acenaphthene	1000.000	1032.665	-3.3	83	0.00
21	T	Dibenzofuran	1000.000	1031.733	-3.2	81	0.00
22	T	1,6,7-Trimethylnaphthalene	1000.000	1066.310	-6.6	84	0.00
23	T	C-3 Naphthalenes	1000.000	1.418	99.9#	0	-0.05
24	T	C-4 Naphthalenes	1000.000	0.000	100.0#	0	-10.85#
25	T	Fluorene	1000.000	1060.423	-6.0	82	0.00
26	T	C-1 Fluorenes	1000.000	0.795	99.9#	0	-0.11
27	T	C-2 Fluorenes	1000.000	0.000	100.0#	0	-11.58#
28	T	C-3 Fluorenes	1000.000	0.623	99.9#	0	-0.04
29	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	84	-0.01
30	T	Dibenzothiopene	1000.000	1078.626	-7.9	85	0.00
31		C-1 Dibenzothiophene	1000.000	0.000	100.0#	0	-11.85#
32		C-2 Dibenzothiophene	1000.000	0.000	100.0#	0	-12.35#
33		C-3 Dibenzothiophene	1000.000	0.000	100.0#	0	-12.90#
34		C-4 Dibenzothiophene	1000.000	0.000	100.0#	0	-13.68#
35	T	Phenanthrene	1000.000	1029.744	-3.0	82	0.00
36	T	Anthracene	1000.000	1061.050	-6.1	81	0.00
37	T	1-Methylphenanthrene	1000.000	1120.340	-12.0	85	0.00
38	T	C-1 Phenanthrene/anthracene	1000.000	1121.536	-12.2	85	-0.02
39	T	C-2 Phenanthrene/anthracene	1000.000	0.000	100.0#	0	-12.55#
40	T	C-3 Phenanthrene/anthracene	1000.000	0.000	100.0#	0	-13.21#
41	T	C-4 Phenanthrene/anthracene	1000.000	0.000	100.0#	0	-13.87#
42	T	Fluoranthene	1000.000	1116.758	-11.7	83	0.00
43	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	81	-0.01
44	T	Pyrene	1000.000	1113.199	-11.3	82	-0.01
45	T	C-1 Fluoranthene/pyrenes	1000.000	3.026	99.7#	0	-0.02
46	S	Terphenyl-d14 (Surr)	1000.000	1068.199	-6.8	81	-0.01

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-05\9E29030\
Data File : J05291906.D
Acq On : 29 May 2019 11:03 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV3
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:30 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
47	T	Benz(a)anthracene	1000.000	1112.933	-11.3	88	-0.01
48	T	Chrysene	1000.000	1074.206	-7.4	85	-0.02
49	T	C-1 Benz(a)anthracene/Chrys	1000.000	2.040	99.8#	0	0.28
50	T	C-2 Benz(a)anthracene/Chrys	1000.000	0.000	100.0#	0	-17.55#
51	T	C-3 Benz(a)anthracene/Chrys	1000.000	0.000	100.0#	0	-18.42#
52		C-4 Benz(a)anthracene/Chrys	1000.000	0.307	100.0#	0	0.21
53	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	79	-0.02
54	T	Benzo(b)fluoranthene	1000.000	1185.091	-18.5	87	0.00
55	T	Benzo(k)fluoranthene	1000.000	1165.215	-16.5	85	-0.01
56	T	Benzo(b+k)fluoranthene	2000.000	2311.760	-15.6	85	-0.01
57	S	Benzo(a)pyrene d-12 (Surr)	1000.000	1085.743	-8.6	83	-0.02
58	T	Benzo(e)pyrene	1000.000	1134.996	-13.5	85	-0.02
59	T	Benzo(a)pyrene	1000.000	1167.081	-16.7	86	-0.02
60	T	Perylene	1000.000	1101.830	-10.2	82	-0.02
61	I	Dibenz(a,h)Anthrcene-d14(IS	2000.000	2000.000	0.0	83	-0.02
62	T	Indeno(1,2,3-cd)Pyrene	1000.000	1037.791	-3.8	85	-0.01
63	T	Dibenz(a,h)anthracene	1000.000	1104.653	-10.5	86	-0.02
64	T	Benzo(g,h,i)perylene	1000.000	997.843	0.2	79	-0.01

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291906.D
Acq On : 29 May 2019 11:03 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV3
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:30 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	182283	2000.00	ng/ml	0.00
3) Naphthalene-d8 (ISTD)	8.076	136	727423	2000.00	ng/ml	0.00
16) Acenaphthene-d10 (ISTD)	9.857	162	341097	2000.00	ng/ml	0.00
29) Phenanthrene-d10 (ISTD)	11.371	188	562978	2000.00	ng/ml	-0.01
43) Chrysene-d12 (ISTD)	15.350	240	471895	2000.00	ng/ml	-0.01
53) Perylene-d12 (ISTD)	18.864	264	417217	2000.00	ng/ml	-0.02
61) Dibenz(a,h)Anthrcene-d...	21.255	292	400654	2000.00	ng/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5 (Surr)	7.354	82	136107	1215.64	ng/ml	0.00
17) 2-Fluorobiphenyl (Surr)	9.162	172	260902	1173.01	ng/ml	0.00
18) Acenaphthylene d-8 (Surr)	9.697	160	340990	1133.29	ng/ml	0.00
46) Terphenyl-d14 (Surr)	13.232	244	232334	1068.20	ng/ml	-0.01
57) Benzo(a)pyrene d-12 (S...	18.661	264	197564	1085.74	ng/ml	-0.02
Target Compounds						Qvalue
4) Decalin	7.525	138	54366	1068.62	ng/ml	98
5) C-1 Decalin	7.819	152	53	N.D.		
6) C-2 Decalin	0.000		0	N.D.		
7) C-3 Decalin	0.000		0	N.D.		
8) C-4 Decalin	0.000		0	N.D.		
9) Naphthalene	8.097	128	398227	1048.36	ng/ml	98
10) 2-Methylnaphthalene	8.793	142	252388	1101.93	ng/ml	100
11) C-1 Naphthalenes	8.894	142	235217	1026.96	ng/ml	99
12) 1-Methylnaphthalene	8.894	142	240046	1057.12	ng/ml	99
13) 1,1'-Biphenyl	9.263	154	283091	1074.53	ng/ml	99
14) 2,6-Dimethylnaphthalene	9.424	156	211516	1051.59	ng/ml	99
15) C-2 Naphthalenes	9.600	156	288	N.D.		
19) Acenaphthylene	9.713	152	371954	1099.23	ng/ml	100
20) Acenaphthene	9.889	153	240380	1032.66	ng/ml	99
21) Dibenzofuran	10.066	168	290128	1031.73	ng/ml	97
22) 1,6,7-Trimethylnaphtha...	10.274	170	191809	1066.31	ng/ml	96
23) C-3 Naphthalenes	10.178	170	255	N.D.		
24) C-4 Naphthalenes	0.000		0	N.D.		
25) Fluorene	10.413	166	240178	1060.42	ng/ml	99
26) C-1 Fluorenes	10.857	180	180	N.D.		
27) C-2 Fluorenes	0.000		0	N.D.		
28) C-3 Fluorenes	12.403	208	141	N.D.		
30) Dibenzothiopene	11.269	184	306356	1078.63	ng/ml	98
31) C-1 Dibenzothiophene	0.000		0	N.D.		
32) C-2 Dibenzothiophene	0.000		0	N.D.		
33) C-3 Dibenzothiophene	0.000		0	N.D.		
34) C-4 Dibenzothiophene	0.000		0	N.D.		
35) Phenanthrene	11.397	178	323434	1029.74	ng/ml	99
36) Anthracene	11.451	178	309676	1061.05	ng/ml	100
37) 1-Methylphenanthrene	12.029	192	235115	1120.34	ng/ml	98
38) C-1 Phenanthrene/anthr...	12.029	192	235366	1121.54	ng/ml#	100
39) C-2 Phenanthrene/anthr...	0.000		0	N.D.		
40) C-3 Phenanthrene/anthr...	0.000		0	N.D.		
41) C-4 Phenanthrene/anthr...	0.000		0	N.D.		
42) Fluoranthene	12.713	202	336999	1116.76	ng/ml	97
44) Pyrene	13.023	202	344696	1113.20	ng/ml	99
45) C-1 Fluoranthene/pyrenes	13.655	216	937	3.03	ng/ml#	100

Data Path : T:\data\2019-05\9E29030\
Data File : J05291906.D
Acq On : 29 May 2019 11:03 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV3
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:30 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Benz(a)anthracene	15.323	228	285373	1112.93	ng/ml	98
48) Chrysene	15.404	228	269138	1074.21	ng/ml	100
49) C-1 Benz(a)anthracene/...	16.660	242	511	N.D.		
50) C-2 Benz(a)anthracene/...	0.000		0	N.D.		
51) C-3 Benz(a)anthracene/...	0.000		0	N.D.		
52) C-4 Benz(a)anthracene/...	20.223	284	77	N.D.		
54) Benzo(b)fluoranthene	17.944	252	271921	1185.09	ng/ml	99
55) Benzo(k)fluoranthene	18.008	252	276891	1165.21	ng/ml	95
56) Benzo(b+k)fluoranthene	18.008	252	559864	2311.76	ng/ml	95
58) Benzo(e)pyrene	18.597	252	265421	1135.00	ng/ml	97
59) Benzo(a)pyrene	18.720	252	243920	1167.08	ng/ml	99
60) Perylene	18.923	252	271750	1101.83	ng/ml	98
62) Indeno(1,2,3-cd)Pyrene	21.260	276	221605	1037.79	ng/ml	93
63) Dibenz(a,h)anthracene	21.319	278	218550	1104.65	ng/ml	99
64) Benzo(g,h,i)perylene	21.801	276	223002	997.84	ng/ml	98

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

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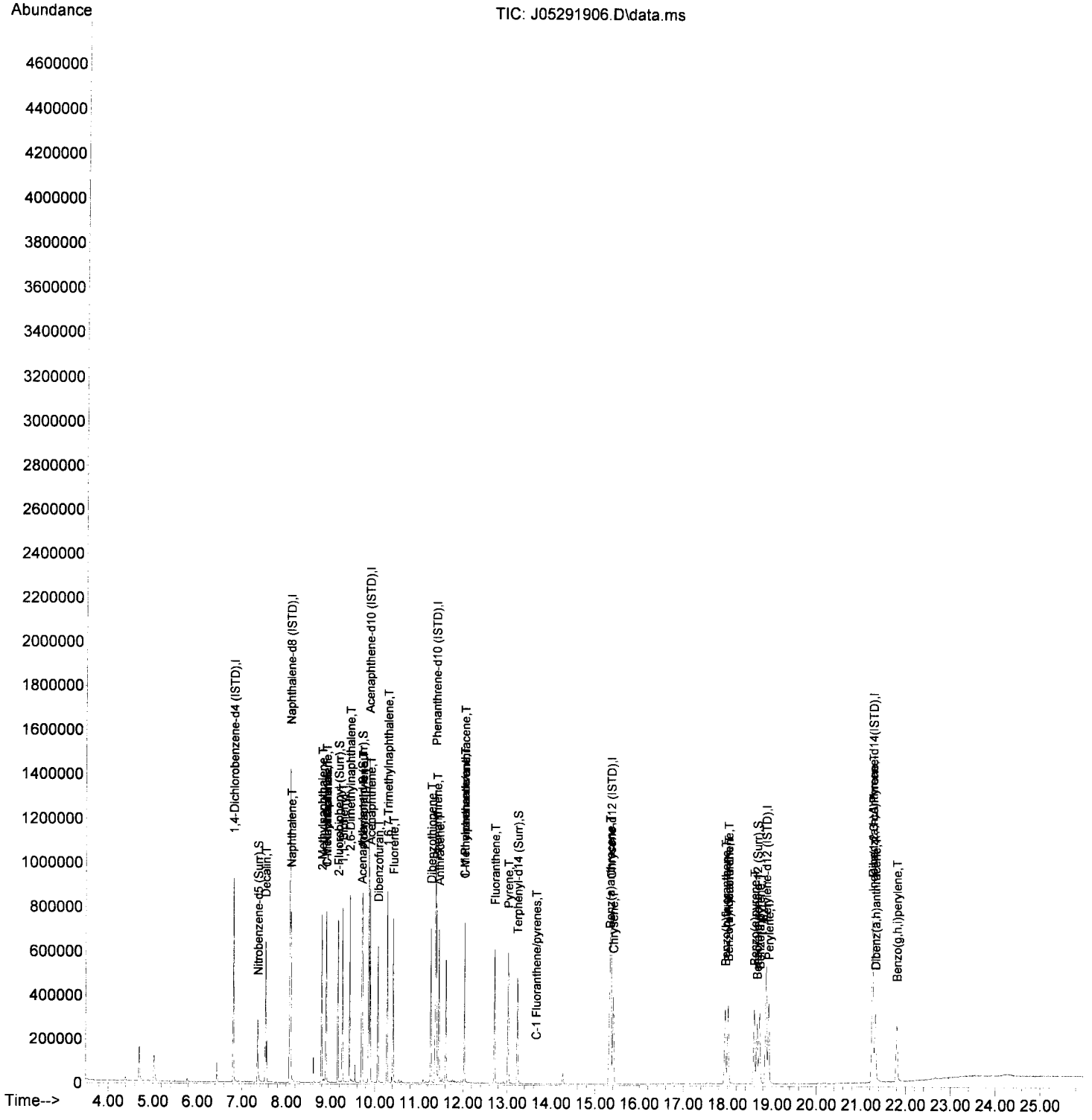
Data Path : T:\data\2019-05\9E29030\
Data File : J05291906.D
Acq On : 29 May 2019 11:03 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCV3
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:19:30 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291907.D
Acq On : 29 May 2019 11:39 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 5/29/19

Quant Time: May 29 15:26:48 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	165618	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	728336	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	352326	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	577225	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.345	240	485136	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	438809	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.255	292	404733	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	0.000		0	N.D.		
8) Bis(2-chloroethyl) ether	0.000		0	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	6.808	146	56	N.D.		
11) 1,4-Dichlorobenzene	6.808	146	56	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	7.370	77	53	N.D.		
22) Isophorone	7.557	82	64	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Data Path : T:\data\2019-05\9E29030\
Data File : J05291907.D
Acq On : 29 May 2019 11:39 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

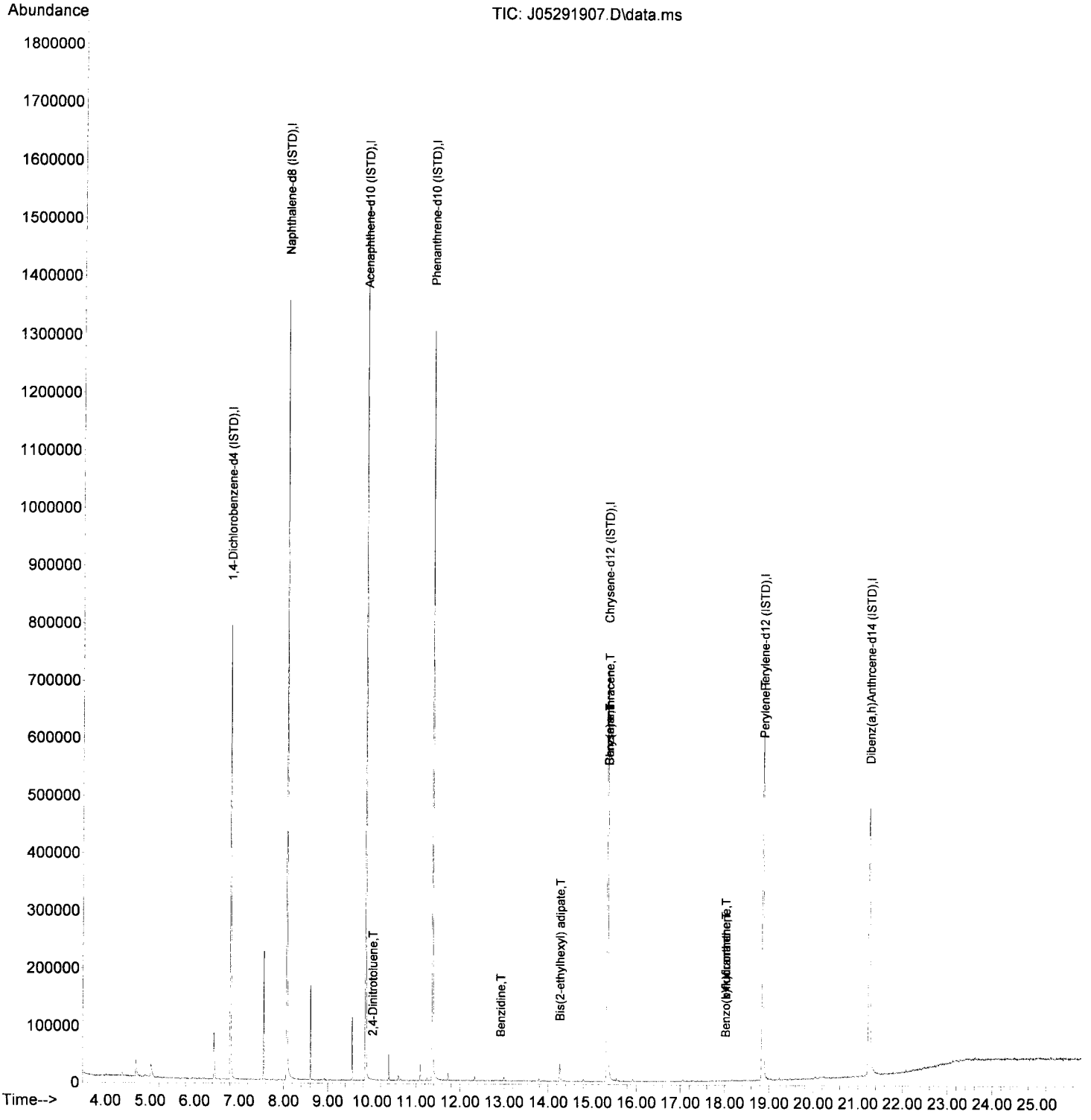
Quant Time: May 29 15:26:48 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	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	9.862	138	90	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	10.012	165	89	61.46 ng/ml#	17
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	10.290	149	122	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)	10.552	77	68	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	11.371	178	252	N.D.	
72) Anthracene	11.371	178	252	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	12.916	184	51	80.81 ng/ml	66
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.264	129	9194	66.51 ng/ml	95
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.355	228	1061	4.01 ng/ml	63
84) Chrysene	15.355	228	1061	4.13 ng/ml	60
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	18.019	252	92	10.77 ng/ml	53
90) Benzo(b+k)fluoranthene	18.019	252	92	17.46 ng/ml	53
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.869	252	1520	6.82 ng/ml	64
95) Indeno(1,2,3-cd)pyrene	21.260	276	70	N.D.	
96) Dibenz(a,h)anthracene	21.255	278	60	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291907.D
Acq On : 29 May 2019 11:39 am
Operator : JK/ AMS/ DTH
Sample : 9E29030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:26:48 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E29030\
Data File : J05291908.D
Acq On : 29 May 2019 12:16 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 5/29/19

Quant Time: May 29 15:26:54 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	177969	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	736766	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	354138	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	589415	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.345	240	494396	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	440487	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.250	292	408090	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.546	112	221000	1910.22 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	284607	1912.43 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	259227	1927.33 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.162	172	480692	1923.80 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	57768	1973.15 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.237	244	553839	2379.82 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.161	74	77	N.D.	
3) Pyridine	4.225	79	177	N.D.	
6) Phenol	6.471	94	1407	18.06 ng/ml#	1
7) Aniline	6.455	93	154	N.D.	
8) Bis(2-chloroethyl) ether	6.514	93	179	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	6.974	108	54	32.92 ng/ml#	57
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.070	107	119	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.044	45	79	N.D.	
16) N-Nitrosodi-n-propylamine	7.188	70	202	N.D.	
17) 3+4-Methylphenol	7.247	107	321	11.93 ng/ml#	29
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.354	77	1329	10.50 ng/ml#	40
22) Isophorone	7.627	82	582	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	7.830	105	197	754.86 ng/ml#	46
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.092	128	997	2.61 ng/ml	94
30) 4-Chloroaniline	8.087	127	166	15.81 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.638	107	255	65.88 ng/ml#	1
33) 2-Methylnaphthalene	8.793	142	325	N.D.	
34) 1-Methylnaphthalene	8.894	142	702	2.89 ng/ml#	65
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	9.263	154	803	2.80 ng/ml	72
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	9.440	156	491	N.D.	

Data Path : T:\data\2019-05\9E29030\
Data File : J05291908.D
Acq On : 29 May 2019 12:16 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

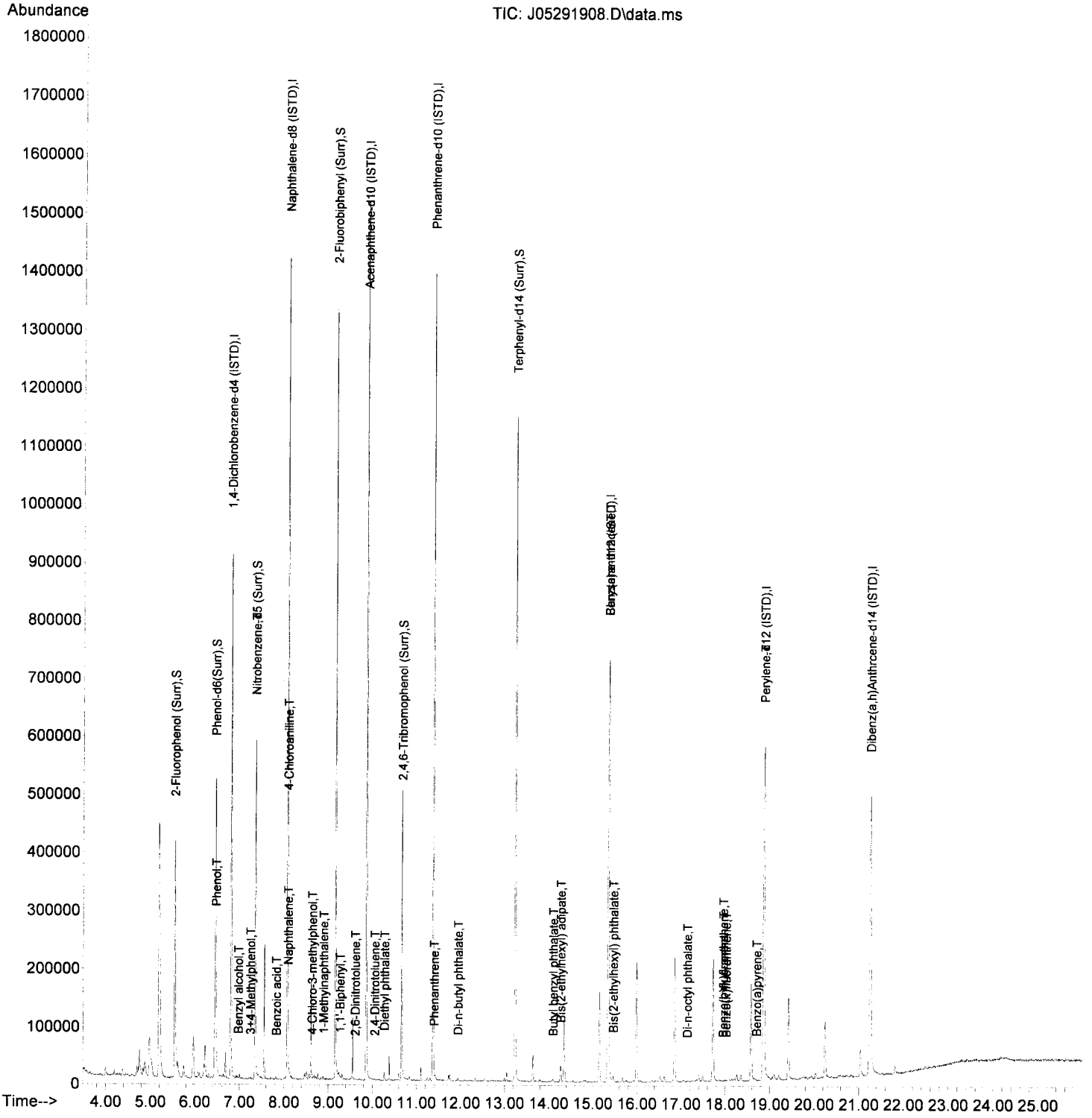
Quant Time: May 29 15:26:54 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.557	163	529	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.611	165	112	34.58 ng/ml#	20
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.713	152	144	N.D.	
50) 3-Nitroaniline	9.852	138	102	N.D.	
51) Acenaphthene	9.889	153	180	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.050	165	116	61.85 ng/ml#	17
55) Dibenzofuran	10.076	168	170	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	10.269	149	754	3.20 ng/ml	61
59) 2,3,5-Trimethylnaphtha...	10.285	170	316	N.D.	
60) Fluorene	10.413	166	67	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	10.590	169	127	N.D.	
66) Azobenzene (1,2-DPH)	10.568	77	279	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	11.397	178	879	2.75 ng/ml	89
72) Anthracene	11.446	178	143	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.938	149	1847	5.12 ng/ml	86
75) Fluoranthene	12.719	202	573	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.023	202	508	N.D.	
80) Butyl benzyl phthalate	14.098	149	1666	40.81 ng/ml	72
81) Bis(2-ethylhexyl) adipate	14.270	129	8947	63.51 ng/ml	97
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.345	228	1294	4.80 ng/ml	61
84) Chrysene	15.404	228	195	N.D.	
85) Bis(2-ethylhexyl) phth...	15.462	149	3644	17.55 ng/ml	89
87) Di-n-octyl phthalate	17.137	149	308	67.19 ng/ml#	30
88) Benzo(b)fluoranthene	17.950	252	182	9.58 ng/ml	75
89) Benzo(k)fluoranthene	18.014	252	54	10.62 ng/ml	66
90) Benzo(b+k)fluoranthene	17.950	252	182	17.80 ng/ml	73
91) Benzo(e)pyrene	18.597	252	132	N.D.	
92) Benzo(a)pyrene	18.704	252	70	10.72 ng/ml	59
93) Perylene	18.864	252	1644	7.35 ng/ml#	67
95) Indeno(1,2,3-cd)pyrene	21.260	276	180	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	201	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291908.D
Acq On : 29 May 2019 12:16 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:26:54 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-05\9E29030\
Data File : J05291909.D
Acq On : 29 May 2019 12:52 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 5/29/19

Quant Time: May 29 15:27:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	183341	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	771760	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	386255	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	650519	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	526955	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	465027	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.255	292	435225	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.546	112	54467	456.99	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	75015	489.30	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	66507	496.31	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	137739	505.42	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	16870	540.74	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	149846	604.10	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.123	74	64139	709.97	ng/ml	96
3) Pyridine	4.155	79	84144m	570.84	ng/ml	
6) Phenol	6.466	94	135076	793.04	ng/ml	96
7) Aniline	6.487	93	82406	457.17	ng/ml	74
8) Bis(2-chloroethyl) ether	6.536	93	129039	831.27	ng/ml	99
9) 2-Chlorophenol	6.610	128	98171	787.63	ng/ml	96
10) 1,3-Dichlorobenzene	6.749	146	99506	709.52	ng/ml	95
11) 1,4-Dichlorobenzene	6.819	146	101402	724.75	ng/ml	99
12) Benzyl alcohol	6.942	108	63257	869.48	ng/ml	97
13) 1,2-Dichlorobenzene	6.974	146	98154	720.81	ng/ml	97
14) 2-Methylphenol	7.054	107	85473	885.31	ng/ml	95
15) 2,2'-Oxybis(1-Chloropr...	7.065	45	124661	709.66	ng/ml	88
16) N-Nitrosodi-n-propylamine	7.193	70	84083	827.70	ng/ml	99
17) 3+4-Methylphenol	7.204	107	108960	874.85	ng/ml	96
18) Hexachloroethane	7.311	201	30806	816.94	ng/ml	98
20) Nitrobenzene	7.370	77	110416	846.61	ng/ml	97
22) Isophorone	7.605	82	235968	820.94	ng/ml	99
23) 2-Nitrophenol	7.691	139	61621	1021.70	ng/ml	90
24) 2,4-Dimethylphenol	7.728	122	92234	782.56	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.809	93	127456	826.75	ng/ml	99
26) Benzoic acid	7.814	105	77400	1769.28	ng/ml	95
27) 2,4-Dichlorophenol	7.942	162	80567	853.32	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.017	180	84368	769.66	ng/ml	97
29) Naphthalene	8.097	128	310003	776.01	ng/ml	100
30) 4-Chloroaniline	8.151	127	77023	613.47	ng/ml	96
31) Hexachlorobutadiene	8.220	225	44562	748.22	ng/ml	96
32) 4-Chloro-3-methylphenol	8.632	107	106259	946.26	ng/ml	94
33) 2-Methylnaphthalene	8.793	142	218910	835.65	ng/ml	97
34) 1-Methylnaphthalene	8.894	142	204505	804.83	ng/ml	96
36) Hexachlorocyclopentadiene	8.958	237	47075	888.86	ng/ml	92
37) 2,4,6-Trichlorophenol	9.081	196	58446	854.89	ng/ml	96
38) 2,4,5-Trichlorophenol	9.124	198	57616	940.09	ng/ml	98
39) 1,1'-Biphenyl	9.258	154	472	N.D.		
41) 2-Chloronaphthalene	9.290	162	191314	864.01	ng/ml	100
42) 2-Nitroaniline	9.392	138	65562	921.46	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.429	156	481	N.D.		

J

Data Path : T:\data\2019-05\9E29030\
Data File : J05291909.D
Acq On : 29 May 2019 12:52 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

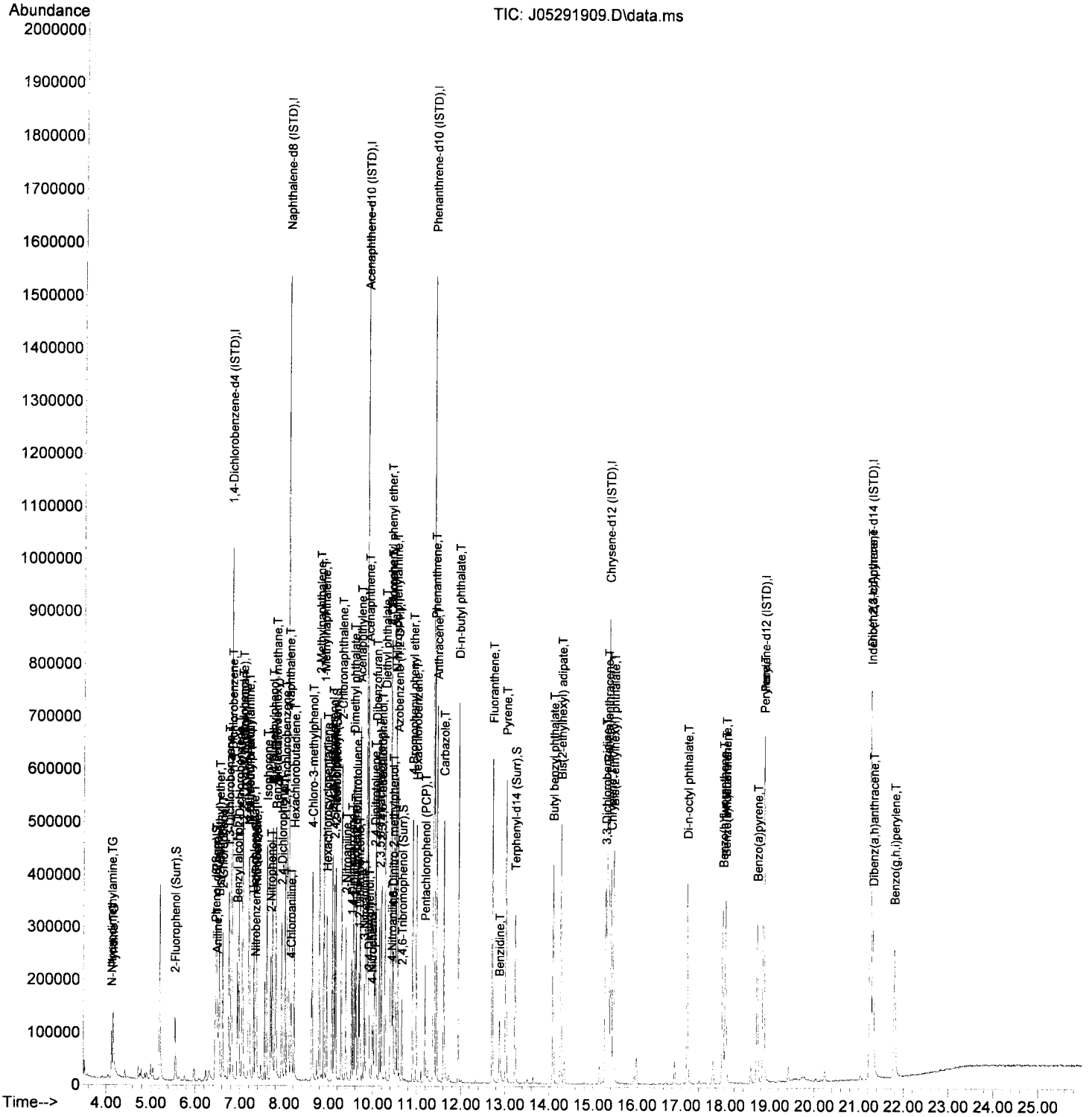
Quant Time: May 29 15:27:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	31114	1193.73	ng/ml	94
45) Dimethyl phthalate	9.563	163	242458	902.46	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	35859	1080.70	ng/ml	95
47) 2,6-Dinitrotoluene	9.627	165	53869	952.58	ng/ml	94
48) 1,2-Dinitrobenzene	9.686	168	24035	928.49	ng/ml	95
49) Acenaphthylene	9.713	152	328308	849.71	ng/ml	99
50) 3-Nitroaniline	9.809	138	43462	823.06	ng/ml	99
51) Acenaphthene	9.889	153	202368	814.39	ng/ml	98
52) 2,4-Dinitrophenol	9.911	184	18302	1557.20	ng/ml	94
53) 4-Nitrophenol	9.985	139	30332	838.80	ng/ml	89
54) 2,4-Dinitrotoluene	10.039	165	70045	1012.57	ng/ml	95
55) Dibenzofuran	10.066	168	266514	820.95	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	10.151	232	44971	925.62	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.194	232	47462	899.27	ng/ml	95
58) Diethyl phthalate	10.274	149	249729	973.23	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.290	170	110	N.D.		
60) Fluorene	10.413	166	219660	864.04	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.403	204	97737	840.13	ng/ml	98
62) 4-Nitroaniline	10.435	138	48716	1002.78	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.456	198	32842	1591.87	ng/ml	98
65) N-Nitrosodiphenylamine	10.520	169	184400	920.70	ng/ml	100
66) Azobenzene (1,2-DPH)	10.563	77	245364	905.17	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.900	248	55585	868.08	ng/ml	91
69) Hexachlorobenzene	10.986	284	63326	811.10	ng/ml	98
70) Pentachlorophenol (PCP)	11.183	266	29055	839.12	ng/ml	96
71) Phenanthrene	11.397	178	312696	885.86	ng/ml	100
72) Anthracene	11.451	178	317653	924.00	ng/ml	98
73) Carbazole	11.606	167	270878	931.05	ng/ml	99
74) Di-n-butyl phthalate	11.938	149	397166	998.46	ng/ml	99
75) Fluoranthene	12.713	202	334306	949.69	ng/ml	97
76) Benzidine	12.874	184	78087	662.71	ng/ml	95
77) Pyrene	13.023	202	343304	946.35	ng/ml	99
80) Butyl benzyl phthalate	14.093	149	164815	1070.38	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.270	129	152528	1015.80	ng/ml	97
82) 3,3-Dichlorobenzidine	15.286	252	161678	3816.29	ng/ml	99
83) Benz(a)anthracene	15.323	228	276702	962.29	ng/ml	99
84) Chrysene	15.409	228	266691	955.86	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.462	149	226921	1025.16	ng/ml	99
87) Di-n-octyl phthalate	17.137	149	347996	1081.78	ng/ml	98
88) Benzo(b)fluoranthene	17.944	252	261903	977.25	ng/ml	96
89) Benzo(k)fluoranthene	18.003	252	260648	956.49	ng/ml	98
90) Benzo(b+k)fluoranthene	18.003	252	531445	1933.64	ng/ml	98
91) Benzo(e)pyrene	18.591	252	249	N.D.		
92) Benzo(a)pyrene	18.720	252	247968	1011.43	ng/ml	97
93) Perylene	18.859	252	4548	19.27	ng/ml	72
95) Indeno(1,2,3-cd)pyrene	21.260	276	208106	854.73	ng/ml	92
96) Dibenz(a,h)anthracene	21.319	278	206070	946.16	ng/ml	90
97) Benzo(g,h,i)perylene	21.801	276	216135	918.44	ng/ml	98

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

Data Path : T:\data\2019-05\9E29030\
Data File : J05291909.D
Acq On : 29 May 2019 12:52 pm
Operator : JK/ AMS/ DTH
Sample : 9051333-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: May 29 15:27:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Batch 9060602
Sequence 9F05024 (A9E0766-02RE2,05RE2)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060602-BLK1		QC	06/05/19 11:06	16	2				100					
	9060602-BS1		QC	06/05/19 11:06	15	2	A19F006		100	100					
	A9E0766-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.66	2				100	T4-PDI2019-SC1 8-190522-01-03	PAHs Only			
	A9E0766-02RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.66	2				100	T4-PDI2019-SC1 8-190522-01-03	Added 6/6/2019 by ams			
	A9E0766-02RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.66	2				100	T4-PDI2019-SC1 8-190522-01-03	Added 6/6/2019 by ams			
	9060602-DUP1		QC	06/05/19 11:06	15.78	2		A9E0766-02RE2		100					
	A9E0766-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC1 8-190522-03-05	PAHs Only			
	A9E0766-03RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC1 8-190522-03-05	Added 6/6/2019 By ams			
	A9E0766-03RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC1 8-190522-03-05	Added 6/7/2019 By ams			
	A9E0766-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.64	2				100	T4-PDI2019-SC1 8-190522-05-07	PAHs Only			
	A9E0766-04RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.64	2				100	T4-PDI2019-SC1 8-190522-05-07	Added 6/6/2019 By ams			
	A9E0766-04RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.64	2				100	T4-PDI2019-SC1 8-190522-05-07	Added 6/7/2019 By ams			
	A9E0766-05	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.62	2				100	T4-PDI2019-SC1 8-190522-07-09	MS/MSD this sample, PAHs Only			
	A9E0766-05RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.62	2				100	T4-PDI2019-SC1 8-190522-07-09	Added 6/6/2019 by ams			
	A9E0766-05RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.62	2				100	T4-PDI2019-SC1 8-190522-07-09	Added 6/6/2019 by ams			
	9060602-MS1		QC	06/05/19 11:06	15.59	2	A19F006	A9E0766-05RE2	100	100					
	9060602-MSD1		QC	06/05/19 11:06	15.66	2	A19F006	A9E0766-05RE2	100	100					
	A9E0766-06	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.47	2				100	T4-PDI2019-SC1 8-190522-09-11	PAHs Only			
	A9E0766-06RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.47	2				100	T4-PDI2019-SC1 8-190522-09-11	Added 6/6/2019 By ams			
	A9E0766-06RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.47	2				100	T4-PDI2019-SC1 8-190522-09-11	Added 6/7/2019 By ams			

Prepared By: Date

AMS 6/7/19

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0766-07	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.34	2				100	T4-PDI2019-SC18-190522-11-13	PAHs Only			
	A9E0766-07RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.34	2				100	T4-PDI2019-SC18-190522-11-13	Added 6/6/2019 By ams			
	A9E0766-07RE2	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.34	2				100	T4-PDI2019-SC18-190522-11-13	Added 6/7/2019 By ams			
	A9E0838-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.81	2				100	FD-20190524144 5	PAHs Only			
	A9E0838-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.45	2				100	T4-PDI2019-SC27-190524-01-03	MS/MSD this sample, PAHs Only			
	9060602-MS2		QC	06/05/19 11:06	15.63	2	A19F006	A9E0838-02	100	100					
	9060602-MSD2		QC	06/05/19 11:06	15.65	2	A19F006	A9E0838-02	100	100					
	A9E0838-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.79	2				100	T4-PDI2019-SC27-190524-03-05	PAHs Only			
	A9E0838-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.12	2				100	T4-PDI2019-SC27-190524-05-07	PAHs Only			
	A9E0838-04RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.12	2				100	T4-PDI2019-SC27-190524-05-07	Added 6/6/2019 By ams			
	A9E0838-13	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.29	2				100	FD-20190524130 0	PAHs Only			
	A9E0838-14	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC30-190524-01-03	PAHs Only			
	A9E0838-15	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.32	2				100	T4-PDI2019-SC30-190524-03-05	MS/MSD this sample, PAHs Only			
	9060602-MS3		QC	06/05/19 11:06	15.43	2	A19F006	A9E0838-15	100	100					
	9060602-MSD3		QC	06/05/19 11:06	15.42	2	A19F006	A9E0838-15	100	100					
	A9E0838-16	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.65	2				100	T4-PDI2019-SC30-190524-05-07	PAHs Only			
	A9E0838-16RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.65	2				100	T4-PDI2019-SC30-190524-05-07	Added 6/6/2019 By ams			
	A9E0922-09	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.3	2				100	T4-PDI2019-SG22-190529	PAHs Only			
	A9E0922-10	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.22	2				100	T4-PDI2019-SG23-190529	PAHs Only			
	A9E0927-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.82	2				100	FD-20190524164 1	PAHs Only			

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0927-02RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.82	2				100	FD-20190524164 1	Added 6/7/2019 By ams			
	A9E0927-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.57	2				100	T4-PDI2019-SC2 9-190524-01-03	PAHs Only			
	A9E0927-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.03	2				100	T4-PDI2019-SC2 9-190524-03-05	PAHs Only			
	A9E0927-04RE1	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.03	2				100	T4-PDI2019-SC2 9-190524-03-05	Added 6/7/2019 By ams			
	A9E0927-05	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	15.57	2				100	T4-PDI2019-SC2 9-190524-05-07	MS/MSD this sample, PAHs Only			
	9060602-MS4		QC	06/05/19 16:08	15.38	2	A19F006	A9E0927-05	100	100					
	9060602-MSD4		QC	06/05/19 16:08	15.76	2	A19F006	A9E0927-05	100	100					

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
A19E280	09/30/20	Sodium Sulfate Lot # Q098006

Analyte Spike(s)

Std ID	Exp. Date	Description
A19F006	11/30/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19E304	11/24/19	PAH Soil and Water Surr. (50ppm)

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060602-BLK1		QC	06/05/19 11:06	16	2				100					
	9060602-BS1		QC	06/05/19 11:06	15	2	A19F006		100	100					
	A9E0766-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.66	2				100	T4-PDI2019-SC18-190522-01-03	PAHs Only			
	9060602-DUP1		QC	06/05/19 11:06	15.78	2		A9E0766-02		100					
	A9E0766-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC18-190522-03-05	PAHs Only			
	A9E0766-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.64	2				100	T4-PDI2019-SC18-190522-05-07	PAHs Only			
	A9E0766-05	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.62	2				100	T4-PDI2019-SC18-190522-07-09	MS/MSD this sample, PAHs Only			
	9060602-MS1		QC	06/05/19 11:06	15.59	2	A19F006	A9E0766-05	100	100					
	9060602-MSD1		QC	06/05/19 11:06	15.66	2	A19F006	A9E0766-05	100	100					
	A9E0766-06	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.47	2				100	T4-PDI2019-SC18-190522-09-11	PAHs Only			
	A9E0766-07	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.34	2				100	T4-PDI2019-SC18-190522-11-13	PAHs Only			
	A9E0838-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.81	2				100	FD-20190524144 5	PAHs Only			
	A9E0838-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.45	2				100	T4-PDI2019-SC27-190524-01-03	MS/MSD this sample, PAHs Only			
	9060602-MS2		QC	06/05/19 11:06	15.63	2	A19F006	A9E0838-02	100	100					
	9060602-MSD2		QC	06/05/19 11:06	15.65	2	A19F006	A9E0838-02	100	100					
	A9E0838-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.79	2				100	T4-PDI2019-SC27-190524-03-05	PAHs Only			
	A9E0838-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.12	2				100	T4-PDI2019-SC27-190524-05-07	PAHs Only			
	A9E0838-13	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.29	2				100	FD-20190524130 0	PAHs Only			
	A9E0838-14	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.68	2				100	T4-PDI2019-SC30-190524-01-03	PAHs Only			
	A9E0838-15	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.32	2				100	T4-PDI2019-SC30-190524-03-05	MS/MSD this sample, PAHs Only			
	9060602-MS3		QC	06/05/19 11:06	15.43	2	A19F006	A9E0838-15	100	100					
	9060602-MSD3		QC	06/05/19 11:06	15.42	2	A19F006	A9E0838-15	100	100					

Prepared By: [signature] Date: 6/5/19

CAH 6.5.19

Reviewed By: VRA Date: 06/05/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9E0838-16	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.65	2				100	T4-PDI2019-SC30-190524-05-07	PAHs Only			
1	A9E0922-09	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.30	2				100	T4-PDI2019-SG22-190529	PAHs Only Soil			
2	A9E0922-10	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.22	2				100	T4-PDI2019-SG23-190529	PAHs Only soil			
3	A9E0927-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.82 CAH 6.5.19	2				100	FD-201905241641	PAHs Only mud			
4	A9E0927-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.57	2				100	T4-PDI2019-SC29-190524-01-03	PAHs Only mud			
5	A9E0927-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.03	2				100	T4-PDI2019-SC29-190524-03-05	PAHs Only mud			
6	A9E0927-05	A	8270D LL PAH/PHTH/Phenols	06/05/19 16:08	~~15~~ 15.57	2				100	T4-PDI2019-SC29-190524-05-07	MS/MSD this sample, PAHs Only mud			
7	9060602-MS4		QC	06/05/19 16:08	~~15~~ 15.38	2	A19F006	A9E0927-05	100	100		mud			
8	9060602-MSD4		QC	06/05/19 16:08	~~15~~ 15.76	2	A19F006	A9E0927-05	100	100		mud			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
A19E280	09/30/20	Sodium Sulfate Lot # Q098006

Analyte Spike(s)

Std ID	Exp. Date	Description
A19F006	11/30/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

CAH

Surrogate(s)

Std ID	Exp. Date	Description
A19E304	11/24/19	PAH Soil and Water Surr. (50ppm)

CAH

Method 3546 digestion time and temperture achieved.
Initial: JC

Witness: JC 6/5/19

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9060602-BLK1		QC	06/05/19 11:06	~~15~~ 16	2 ✓				100					
2	9060602-BS1		QC	06/05/19 11:06	15	2 ✓	A19F006		100	100					
3	A9E0766-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.66	2 ✓				100	T4-PDI2019-SC1 8-190522-01-03	PAHs Only MLD			
4	9060602-DUP1		QC	06/05/19 11:06	~~15~~ 15.78	2 ✓		A9E0766-02		100		MLD			
5	A9E0766-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.68	2 ✓				100	T4-PDI2019-SC1 8-190522-03-05	PAHs Only MLD			
6	A9E0766-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.64	2 ✓				100	T4-PDI2019-SC1 8-190522-05-07	PAHs Only Sand			
7	A9E0766-05	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.62	2 ✓				100	T4-PDI2019-SC1 8-190522-07-09	MS/MSD this sample, PAHs Only MLD			
8	9060602-MS1		QC	06/05/19 11:06	~~15~~ 15.59	2 ✓	A19F006	A9E0766-05	100	100		MLD			
9	9060602-MSD1		QC	06/05/19 11:06	~~15~~ 15.66	2 ✓	A19F006	A9E0766-05	100	100		MLD			
10	A9E0766-06	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.47	2 ✓				100	T4-PDI2019-SC1 8-190522-09-11	PAHs Only MLD			
11	A9E0766-07	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.34	2 ✓				100	T4-PDI2019-SC1 8-190522-11-13	PAHs Only MLD			
12	A9E0838-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.81	2 ✓				100	FD-20190524144 5	PAHs Only MLD			
13	A9E0838-02	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.45	2 ✓				100	T4-PDI2019-SC2 7-190524-01-03	MS/MSD this sample, PAHs Only MLD			
14	9060602-MS2		QC	06/05/19 11:06	~~15~~ 15.63	2 ✓	A19F006	A9E0838-02	100	100		MLD			
15	9060602-MSD2		QC	06/05/19 11:06	~~15~~ 15.65	2 ✓	A19F006	A9E0838-02	100	100		MLD			
16	A9E0838-03	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.79	2 ✓				100	T4-PDI2019-SC2 7-190524-03-05	PAHs Only MLD			
17	A9E0838-04	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.12	2 ✓				100	T4-PDI2019-SC2 7-190524-05-07	PAHs Only MLD			
18	A9E0838-13	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.29	2 ✓				100	FD-20190524130 0	PAHs Only MLD			
19	A9E0838-14	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.68	2 ✓				100	T4-PDI2019-SC3 0-190524-01-03	PAHs Only MLD			
20	A9E0838-15	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	~~15~~ 15.32	2 ✓				100	T4-PDI2019-SC3 0-190524-03-05	MS/MSD this sample, PAHs Only MLD			
21	9060602-MS3		QC	06/05/19 11:06	~~15~~ 15.43	2 ✓	A19F006	A9E0838-15	100	100		MLD			
22	9060602-MSD3		QC	06/05/19 11:06	~~15~~ 15.42	2 ✓	A19F006	A9E0838-15	100	100		MLD			

Prepared By: [signature] 6/5/19 Date

Reviewed By: JRA 06/05/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060602 (Sediment)

Prep Method: EPA 3546

#	Lab Number		Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
23	A9E0838-16	A	8270D LL PAH/PHTH/Phenols	06/05/19 11:06	15.65	2				100	T4-PDI2019-SC3 0-190524-05-07	PAHs Only MLD			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L219	11/30/23	Extractions Balance
A18K311	12/31/20	Glass Wool
A19D007	09/30/20	DCM CHEM PROD. 186806
~~A19D260~~ A19E230	~~10/15/19~~ 9/30/20	~~Sodium~~ Sodium Sulfate Lot # Q098001 Q098006

SC 6/5/19

Analyte Spike(s)

Std ID	Exp. Date	Description
A19F006	11/30/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

SC

Surrogate(s)

Std ID	Exp. Date	Description
A19E304	11/24/19	PAH Soil and Water Surr. (50ppm)

SC

Method 3546 digestion time and temperture achieved.
Initial: SC

Witness: JAG 6/5/19

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9F05024** Instrument: **SV-GCMS10**

Date: **06/05/19 07:57** Calibration: **A9D1505** + A9D1806 (Homologs)

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F05024-TUN1	Water	QC	QC			A19B027	A19E333
2	9F05024-CCV1	Water	QC	QC			A19B027	A19C237
3	9F05024-CCV2	Water	QC	QC			A19B027	A19E064
4	9F05024-CCB1	Water	QC	QC			A19B027	
5	A9E0953-01RE1	Water	8270D LL Full List		06/12/19	9060539	A19B027	
6	"	Water	8270D PAH Homologs (Low Level)		06/12/19	9060539	A19B027	
7	A9E0923-01RE2	Water	8270D LL Full List		06/12/19	9060539	A19B027	
8	"	Water	8270D PAH Homologs (Low Level)		06/12/19	9060539	A19B027	
9	A9E0953-01RE2	Water	8270D LL Full List		06/12/19	9060539	A19B027	
10	"	Water	8270D PAH Homologs (Low Level)		06/12/19	9060539	A19B027	
11	9060576-BLK2	Water	QC	QC		9060576	A19B027	
12	9060576-BS2	Water	QC	QC		9060576	A19B027	
13	9060576-BSD2	Water	QC	QC		9060576	A19B027	
14	A9F0035-01	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060576	A19B027	
15	9060602-BLK1	Sediment	QC	QC		9060602	A19B027	
16	9060602-BS1	Sediment	QC	QC		9060602	A19B027	
17	A9E0766-02	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
18	A9E0766-02RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
19	A9E0766-02RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
20	9060602-DUP1	Sediment	QC	QC		9060602	A19B027	
21	A9E0766-05RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
22	9060602-MS1	Sediment	QC	QC		9060602	A19B027	
23	9060602-MSD1	Sediment	QC	QC		9060602	A19B027	
24	9F05024-IBL1	Water	QC	QC			A19B027	

Data Entered By: AMS 6/6/19

Data Reviewed By: 6/6/19

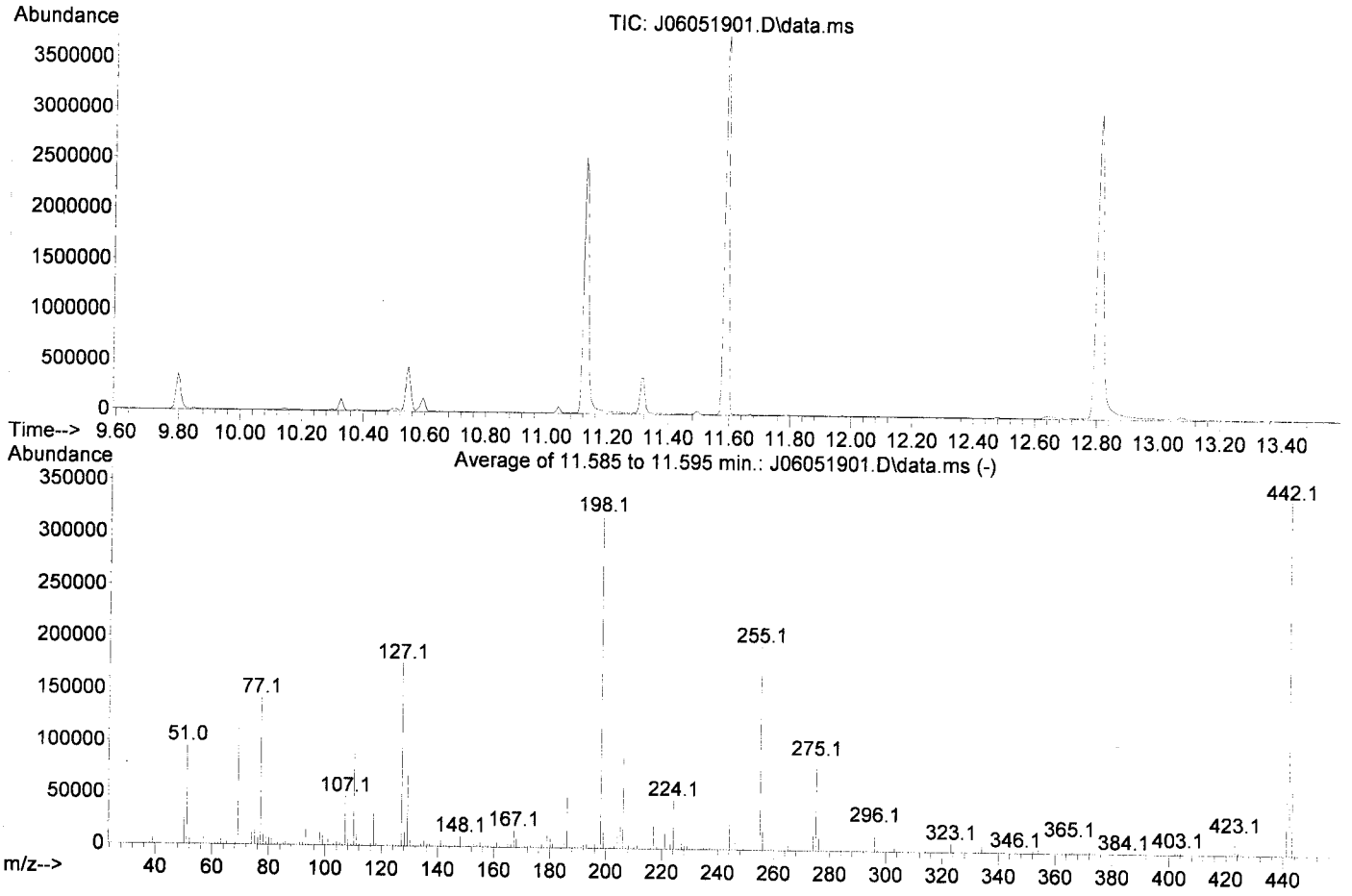
Comments:

Data Path : T:\data\2019-06\9F05024\
Data File : J06051901.D
Acq On : 5 Jun 2019 8:03 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Apr 16 11:00:01 2019

AMS 6/5/19



AutoFind: Scans 1514, 1515, 1516; Background Corrected with Scan 1509

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	29.9	95359	PASS
68	69	0.00	2	1.4	1624	PASS
69	198	0.00	100	35.5	113334	PASS
70	69	0.00	2	0.4	504	PASS
127	198	10	80	55.1	175851	PASS
197	198	0.00	2	0.4	1344	PASS
198	198	100	100	100.0	319083	PASS
199	198	5	9	6.9	21878	PASS
275	198	10	60	27.5	87704	PASS
365	198	1	100	3.9	12467	PASS
441	442	0.01	24	15.2	52152	PASS
442	198	50	200	107.6	343253	PASS
443	442	15	24	19.4	66549	PASS

Data Path : T:\data\2019-06\9F05024\
Data File : J06051901.D
Acq On : 5 Jun 2019 8:03 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 05 10:20:50 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.755	150	59906	2.00	ug/mL	0.00
2) Naphthalene-d8	8.023	136	173343	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.798	162	85847	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.317	188	143500	2.00	ug/mL	0.00
11) Chrysene-d12	15.099	240	109220	2.00	ug/mL	0.00
12) Perylene-d12	17.078	264	91866	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.372	292	75850	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.130	266	319665	39.43	ug/mL	97
6) DFTPP	11.590	442	378505	32.67	ug/mL	93
7) Benzidine	12.810	184	1792875	35.12	ug/mL	98
8) 4,4-DDE	13.072	TIC	34075	No Calib		
9) 4,4-DDD	13.617	TIC	21867	No Calib		
10) 4,4-DDT	14.206	TIC	5252667	35.69	ug/mL	98

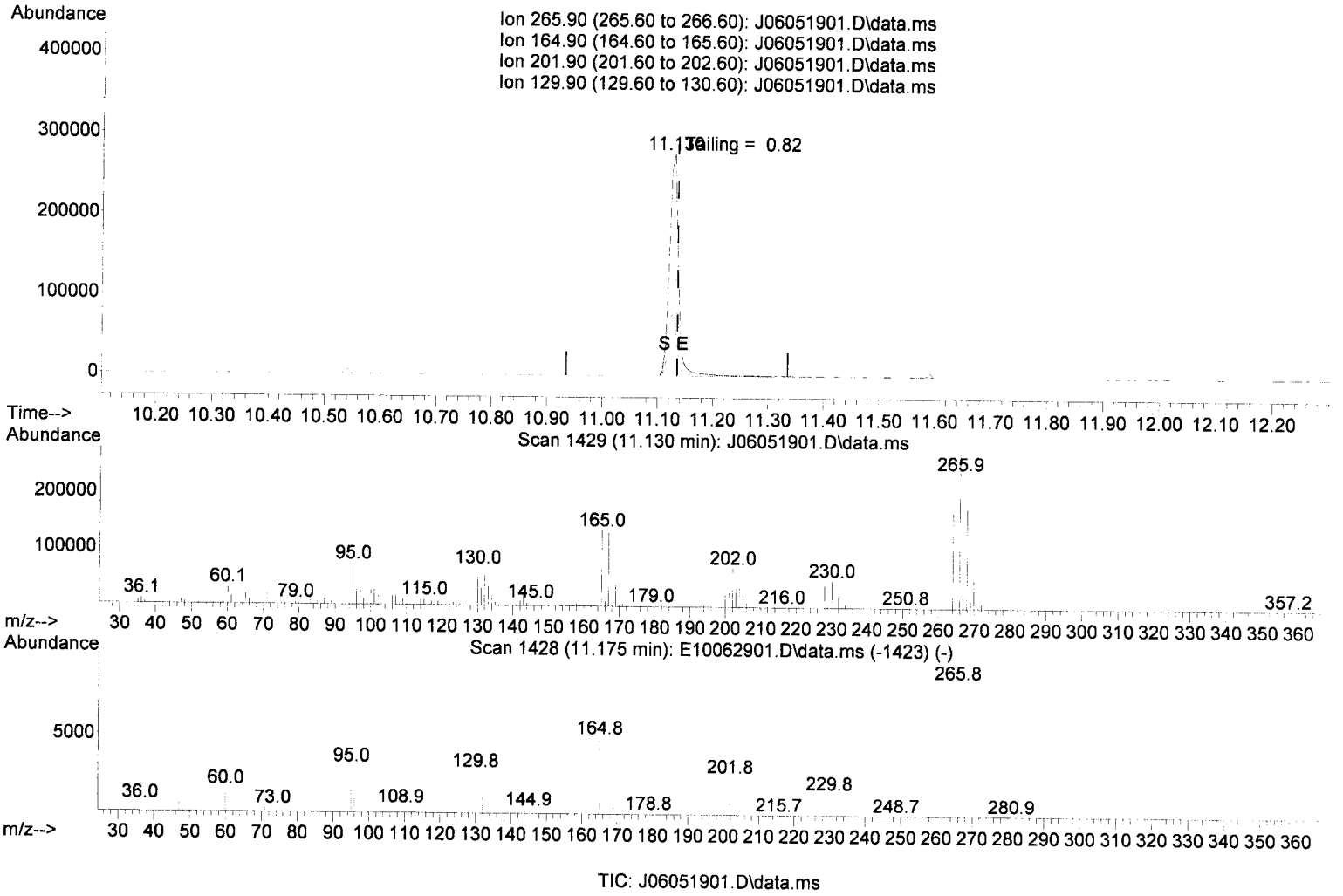
(#) = qualifier out of range (m) = manual integration (+) = signals summed

J

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051901.D
Acq On : 5 Jun 2019 8:03 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 05 10:20:50 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051901.D\data.ms

(4) Pentachlorophenol

11.130min (-0.005) 39.43 ug/mL

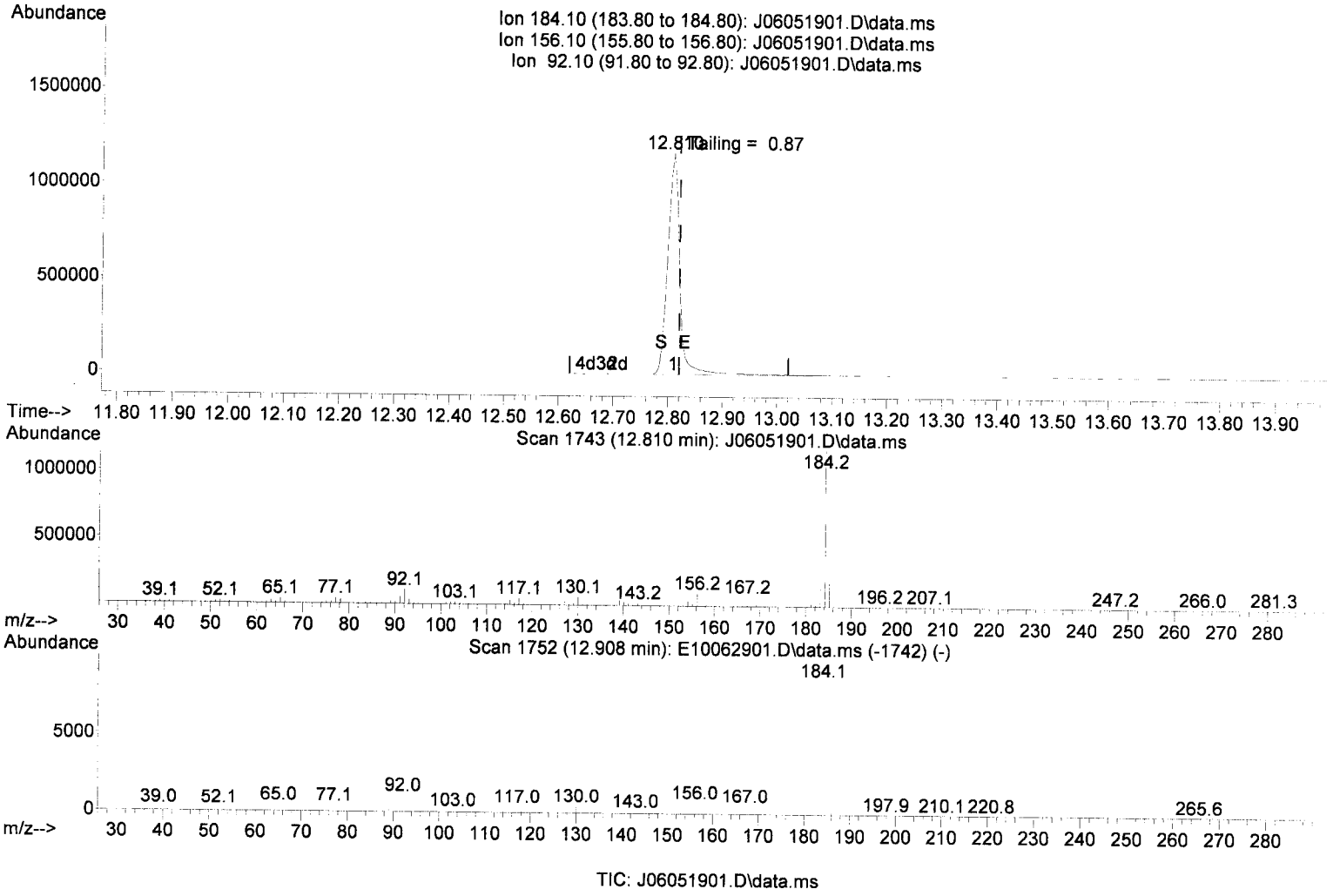
response 319665

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	48.76
201.90	25.80	24.80
129.90	27.30	24.24

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051901.D
Acq On : 5 Jun 2019 8:03 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 05 10:20:50 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051901.D\data.ms

(7) Benzidine

12.810min (-0.011) 35.12 ug/mL

response 1792875

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	8.00
92.10	8.20	9.15
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

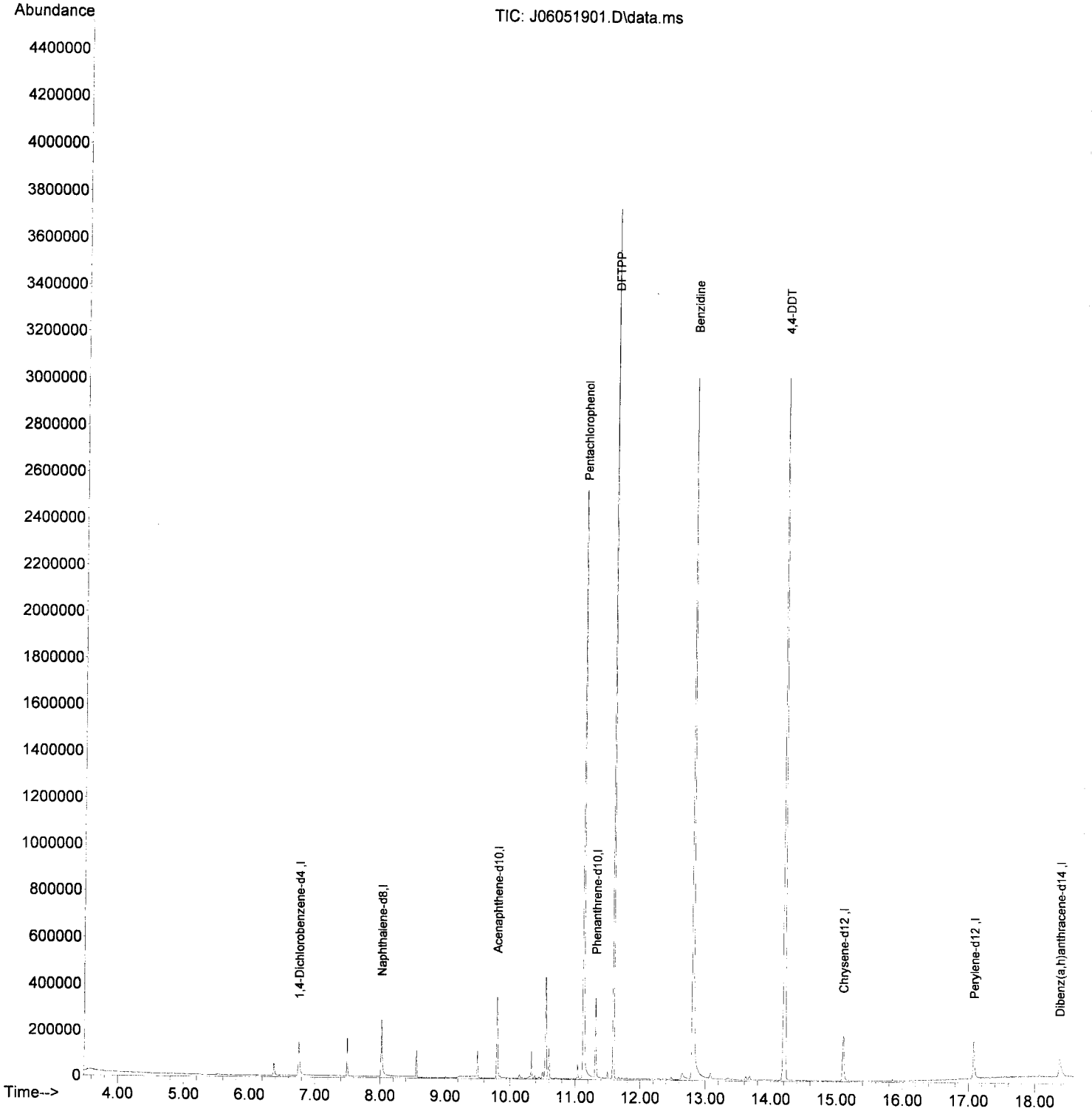
From:
9F05024-TUN1
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	34075		
DDD	21867		
DDT	5252667	**1.05**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : T:\data\2019-06\9F05024\
Data File : J06051901.D
Acq On : 5 Jun 2019 8:03 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 05 10:20:50 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Apr 16 11:00:01 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 10:22:31 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	99	-0.01
2	TG	N-Nitrosodimethylamine	1000.000	930.524	6.9	90	-0.10
3	TG	Pyridine	1000.000	994.086	0.6	93	-0.09
4	S	2-Fluorophenol (Surr)	1000.000	1060.480	-6.0	101	-0.01
5	S	Phenol-d6(Surr)	1000.000	1106.420	-10.6	104	0.00
6	T	Phenol	1000.000	1080.439	-8.0	114	0.00
7	T	Aniline	1000.000	858.657	14.1	78	-0.01
8	T	Bis(2-chloroethyl) ether	1000.000	1038.525	-3.9	103	0.00
9	T	2-Chlorophenol	1000.000	1104.309	-10.4	100	0.00
10	T	1,3-Dichlorobenzene	1000.000	1023.385	-2.3	100	-0.01
11	T	1,4-Dichlorobenzene	1000.000	1004.346	-0.4	100	-0.01
12	T	Benzyl alcohol	1000.000	1067.418	-6.7	103	0.00
13	T	1,2-Dichlorobenzene	1000.000	1015.754	-1.6	98	-0.01
14	T	2-Methylphenol	1000.000	1147.337	-14.7	101	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	937.350	6.3	89	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1003.260	-0.3	91	0.00
17	T	3+4-Methylphenol	1000.000	1076.647	-7.7	101	0.00
18	T	Hexachloroethane	1000.000	1102.546	-10.3	110	-0.01
19	S	Nitrobenzene-d5 (Surr)	1000.000	1067.098	-6.7	107	0.00
20	T	Nitrobenzene	1000.000	1104.585	-10.5	102	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	97	0.00
22	T	Isophorone	1000.000	999.294	0.1	93	0.00
23	T	2-Nitrophenol	1000.000	1262.964	-26.3#	120	0.00
24	T	2,4-Dimethylphenol	1000.000	971.725	2.8	92	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1055.127	-5.5	93	0.00
26	T	Benzoic acid	2000.000	2027.551	-1.4	111	0.00
27	T	2,4-Dichlorophenol	1000.000	1056.586	-5.7	103	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1067.742	-6.8	99	0.00
29	T	Naphthalene	1000.000	1022.833	-2.3	94	0.00
30	T	4-Chloroaniline	1000.000	943.910	5.6	88	0.00
31	T	Hexachlorobutadiene	1000.000	1040.795	-4.1	100	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1032.940	-3.3	101	0.00
33	T	2-Methylnaphthalene	1000.000	1026.254	-2.6	91	0.00
34	T	1-Methylnaphthalene	1000.000	1014.084	-1.4	93	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	94	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1176.591	-17.7	106	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1059.340	-5.9	104	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1100.144	-10.0	98	0.00
39	T	1,1'-Biphenyl	1000.000	1078.741	-7.9	92	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1061.336	-6.1	90	0.00
41	T	2-Chloronaphthalene	1000.000	1128.334	-12.8	97	0.00
42	T	2-Nitroaniline	1000.000	1090.397	-9.0	105	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1026.956	-2.7	88	0.00
44	T	1,4-Dinitrobenzene	1000.000	1361.881	-36.2#	147	0.00
45	T	Dimethyl phthalate	1000.000	1035.487	-3.5	94	0.00
46	T	1,3-Dinitrobenzene	1000.000	1253.177	-25.3#	124	0.00
47	T	2,6-Dinitrotoluene	1000.000	1093.103	-9.3	100	0.00
48	T	1,2-Dinitrobenzene	1000.000	1120.085	-12.0	104	0.00

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:31 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1056.988	-5.7	93	0.00
50	T	3-Nitroaniline	1000.000	1059.849	-6.0	91	0.00
51	T	Acenaphthene	1000.000	1047.811	-4.8	94	0.00
52	T	2,4-Dinitrophenol	1000.000	1522.428	-52.2#	186	0.00
53	T	4-Nitrophenol	1000.000	741.087	25.9#	68	0.01
54	T	2,4-Dinitrotoluene	1000.000	1167.283	-16.7	112	0.00
55	T	Dibenzofuran	1000.000	1033.862	-3.4	93	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1033.947	-3.4	95	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1081.810	-8.2	98	0.00
58	T	Diethyl phthalate	1000.000	1067.158	-6.7	94	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1057.206	-5.7	94	0.00
60	T	Fluorene	1000.000	1055.516	-5.6	94	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	999.519	0.0	91	0.00
62	T	4-Nitroaniline	1000.000	1047.724	-4.8	92	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1588.080	-58.8#	178	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	92	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1076.372	-7.6	91	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1046.055	-4.6	88	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	976.842	2.3	90	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1024.709	-2.5	88	0.00
69	T	Hexachlorobenzene	1000.000	962.465	3.8	87	0.00
70	T	Pentachlorophenol (PCP)	1000.000	842.135	15.8	79	0.00
71	T	Phenanthrene	1000.000	1020.105	-2.0	90	0.00
72	T	Anthracene	1000.000	1065.533	-6.6	92	0.00
73	T	Carbazole	1000.000	1045.117	-4.5	88	0.00
74	T	Di-n-butyl phthalate	1000.000	1049.906	-5.0	88	0.00
75	T	Fluoranthene	1000.000	1047.205	-4.7	88	0.00
76	T	Benzidine	2000.000	1763.861	11.8	75	0.00
77	T	Pyrene	1000.000	1028.586	-2.9	88	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	85	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1091.339	-9.1	88	0.00
80	T	Butyl benzyl phthalate	1000.000	1084.233	-8.4	90	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	940.295	6.0	80	-0.01
82	T	3,3-Dichlorobenzidine	2000.000	3599.600	-80.0#	120	0.00
83	T	Benz(a)anthracene	1000.000	1056.792	-5.7	88	0.00
84	T	Chrysene	1000.000	1062.346	-6.2	88	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1045.749	-4.6	87	-0.01
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	81	-0.01
87	T	Di-n-octyl phthalate	1000.000	1045.077	-4.5	85	-0.01
88	T	Benzo(b)fluoranthene	1000.000	1090.932	-9.1	86	0.00
89	T	Benzo(k)fluoranthene	1000.000	1068.886	-6.9	84	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2174.960	-8.7	85	0.06
91	T	Benzo(e)pyrene	1000.000	1129.328	-12.9	84	0.00
92	T	Benzo(a)pyrene	1000.000	1100.231	-10.0	85	-0.01
93	T	Perylene	1000.000	1205.359	-20.5#	95	-0.01
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	79	-0.01

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:31 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	932.868	6.7	76	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1092.531	-9.3	84	-0.01
97 T	Benzo(g,h,i)perylene	1000.000	981.375	1.9	71	0.00

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

6/5 AMS 19

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.798	152	206400	2000.00 ng/ml	-0.01
21) Naphthalene-d8 (ISTD)	8.071	136	844504	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	383862	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	643192	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	517740	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	447263	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	403143	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.535	112	142291	1060.48 ng/ml	-0.01
5) Phenol-d6(Surr)	6.450	99	190961	1106.42 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	164654	1067.10 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	287450	1061.34 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	30816	976.84 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	265972	1091.34 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~0.000~~		~~0~~	N.D.	MI
3) Pyridine	~~4.102~~	~~79~~	~~124113m~~	~~747.92 ng/ml~~	MI
6) Phenol	6.461	94	208566	1080.44 ng/ml	96
7) Aniline	6.477	93	174243	858.66 ng/ml	81
8) Bis(2-chloroethyl) ether	6.530	93	181488	1038.52 ng/ml	94
9) 2-Chlorophenol	6.605	128	154954	1104.31 ng/ml	94
10) 1,3-Dichlorobenzene	6.744	146	161576	1023.39 ng/ml	99
11) 1,4-Dichlorobenzene	6.814	146	158195	1004.35 ng/ml	99
12) Benzyl alcohol	6.937	108	88809	1067.42 ng/ml	96
13) 1,2-Dichlorobenzene	6.969	146	155714	1015.75 ng/ml	97
14) 2-Methylphenol	7.049	107	124702	1147.34 ng/ml	95
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	185367	937.35 ng/ml	88
16) N-Nitrosodi-n-propylamine	7.188	70	114736	1003.26 ng/ml	98
17) 3+4-Methylphenol	7.199	107	155870	1076.65 ng/ml	98
18) Hexachloroethane	7.306	201	46805	1102.55 ng/ml	99
20) Nitrobenzene	7.365	77	162180	1104.58 ng/ml	98
22) Isophorone	7.600	82	314308	999.29 ng/ml	96
23) 2-Nitrophenol	7.686	139	84630	1262.96 ng/ml	89
24) 2,4-Dimethylphenol	7.723	122	125836	971.72 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.809	93	177995	1055.13 ng/ml	98
26) Benzoic acid	7.819	105	106910	2027.55 ng/ml	96
27) 2,4-Dichlorophenol	7.937	162	110200	1056.59 ng/ml	99
28) 1,2,4-Trichlorobenzene	8.012	180	128075	1067.74 ng/ml	99
29) Naphthalene	8.092	128	447118	1022.83 ng/ml	99
30) 4-Chloroaniline	8.151	127	133271	943.91 ng/ml	97
31) Hexachlorobutadiene	8.220	225	67830	1040.80 ng/ml	95
32) 4-Chloro-3-methylphenol	8.632	107	127681	1032.94 ng/ml	96
33) 2-Methylnaphthalene	8.793	142	294180	1026.25 ng/ml	98
34) 1-Methylnaphthalene	8.894	142	281964	1014.08 ng/ml	98
36) Hexachlorocyclopentadiene	8.959	237	62747	1176.59 ng/ml	97
37) 2,4,6-Trichlorophenol	9.082	196	72604	1059.34 ng/ml	95
38) 2,4,5-Trichlorophenol	9.124	198	67407	1100.14 ng/ml	98
39) 1,1'-Biphenyl	9.258	154	335672	1078.74 ng/ml	100
41) 2-Chloronaphthalene	9.285	162	248294	1128.33 ng/ml	98
42) 2-Nitroaniline	9.386	138	78245	1090.40 ng/ml	96
43) 2,6-Dimethylnaphthalene	9.424	156	234296	1026.96 ng/ml	99

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

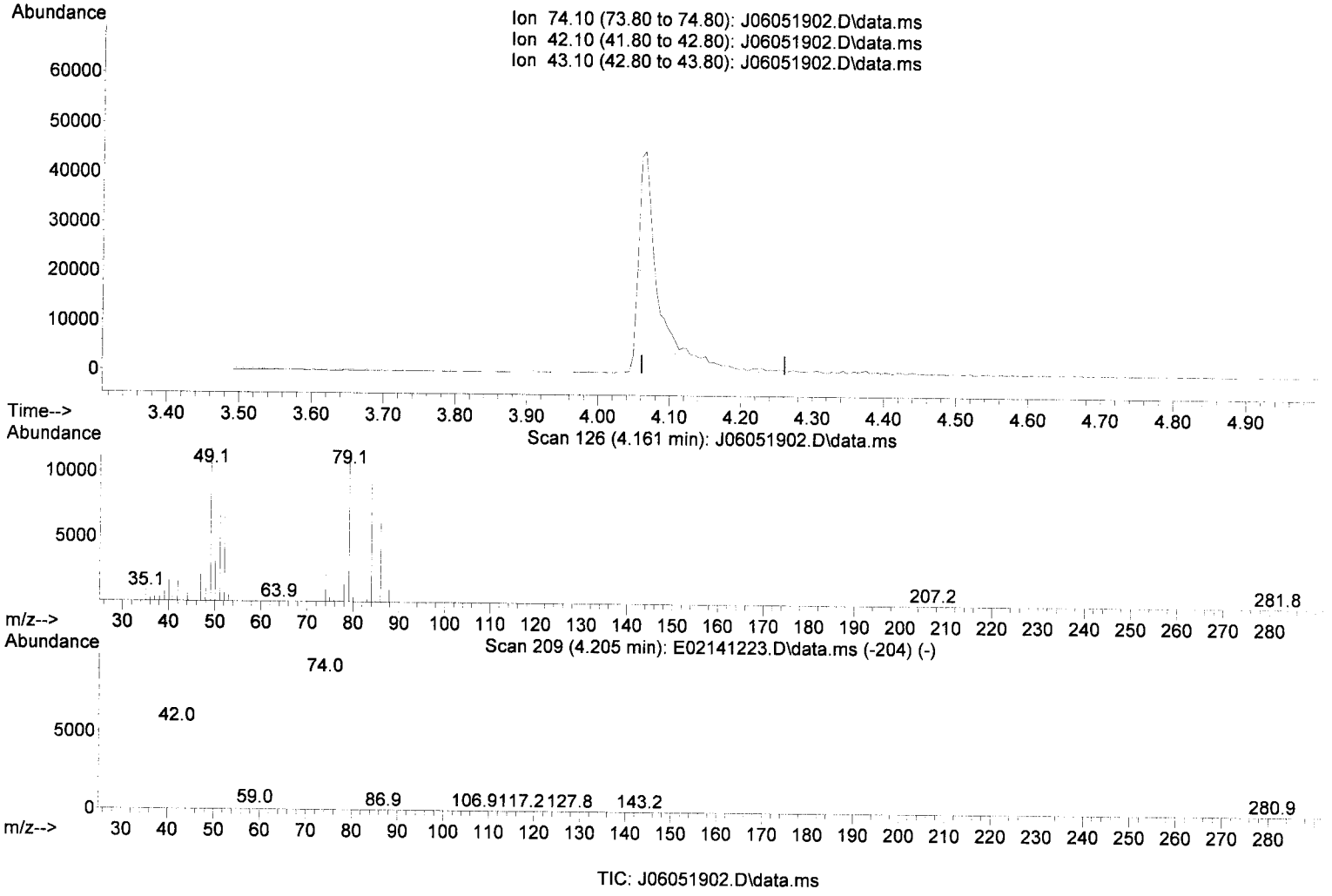
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	36060	1361.88	ng/ml	87
45) Dimethyl phthalate	9.558	163	276475	1035.49	ng/ml	99
46) 1,3-Dinitrobenzene	9.595	168	41887	1253.18	ng/ml	97
47) 2,6-Dinitrotoluene	9.622	165	61692	1093.10	ng/ml	97
48) 1,2-Dinitrobenzene	9.686	168	28815	1120.08	ng/ml	83
49) Acenaphthylene	9.713	152	405864	1056.99	ng/ml	100
50) 3-Nitroaniline	9.804	138	55619	1059.85	ng/ml	98
51) Acenaphthene	9.889	153	258759	1047.81	ng/ml	98
52) 2,4-Dinitrophenol	9.911	184	17632	1522.43	ng/ml	92
53) 4-Nitrophenol	9.985	139	26170	741.09	ng/ml	92
54) 2,4-Dinitrotoluene	10.039	165	81011	1167.28	ng/ml	91
55) Dibenzofuran	10.060	168	333555	1033.86	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.146	232	50214	1033.95	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.189	232	56990	1081.81	ng/ml	97
58) Diethyl phthalate	10.269	149	272135	1067.16	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.269	170	215640	1057.21	ng/ml	94
60) Fluorene	10.413	166	266674	1055.52	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.403	204	115559	999.52	ng/ml	97
62) 4-Nitroaniline	10.429	138	50584	1047.72	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.456	198	32543	1588.08	ng/ml	94
65) N-Nitrosodiphenylamine	10.520	169	213150	1076.37	ng/ml	100
66) Azobenzene (1,2-DPH)	10.563	77	280361	1046.05	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.900	248	64875	1024.71	ng/ml	97
69) Hexachlorobenzene	10.986	284	74297	962.47	ng/ml	99
70) Pentachlorophenol (PCP)	11.184	266	28836	842.13	ng/ml	96
71) Phenanthrene	11.392	178	356028	1020.10	ng/ml	99
72) Anthracene	11.446	178	362183	1065.53	ng/ml	99
73) Carbazole	11.606	167	300639	1045.12	ng/ml	98
74) Di-n-butyl phthalate	11.938	149	412928	1049.91	ng/ml	100
75) Fluoranthene	12.708	202	364481	1047.20	ng/ml	99
76) Benzidine	12.874	184	225973	1763.86	ng/ml	96
77) Pyrene	13.024	202	368933	1028.59	ng/ml	98
80) Butyl benzyl phthalate	14.093	149	164150	1084.23	ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.264	129	138721	940.30	ng/ml	100
82) 3,3-Dichlorobenzidine	15.286	252	150874	3599.60	ng/ml	94
83) Benz(a)anthracene	15.318	228	298562	1056.79	ng/ml	97
84) Chrysene	15.404	228	291217	1062.35	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.457	149	227430	1045.75	ng/ml	99
87) Di-n-octyl phthalate	17.131	149	322372	1045.08	ng/ml	96
88) Benzo(b)fluoranthene	17.939	252	281827	1090.93	ng/ml	96
89) Benzo(k)fluoranthene	18.003	252	279879	1068.89	ng/ml	97
90) Benzo(b+k)fluoranthene	18.003	252	575339	2174.96	ng/ml	97
91) Benzo(e)pyrene	18.597	252	276974	1129.33	ng/ml	99
92) Benzo(a)pyrene	18.714	252	259712	1100.23	ng/ml	97
93) Perylene	18.918	252	273661	1205.36	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.260	276	210387	932.87	ng/ml	89
96) Dibenz(a,h)anthracene	21.314	278	220408	1092.53	ng/ml	95
97) Benzo(g,h,i)perylene	21.801	276	213922	981.38	ng/ml	92

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051902.D\data.ms

(2) N-Nitrosodimethylamine (TG)

4.161min (-4.161) 0.00 ng/ml

response 0

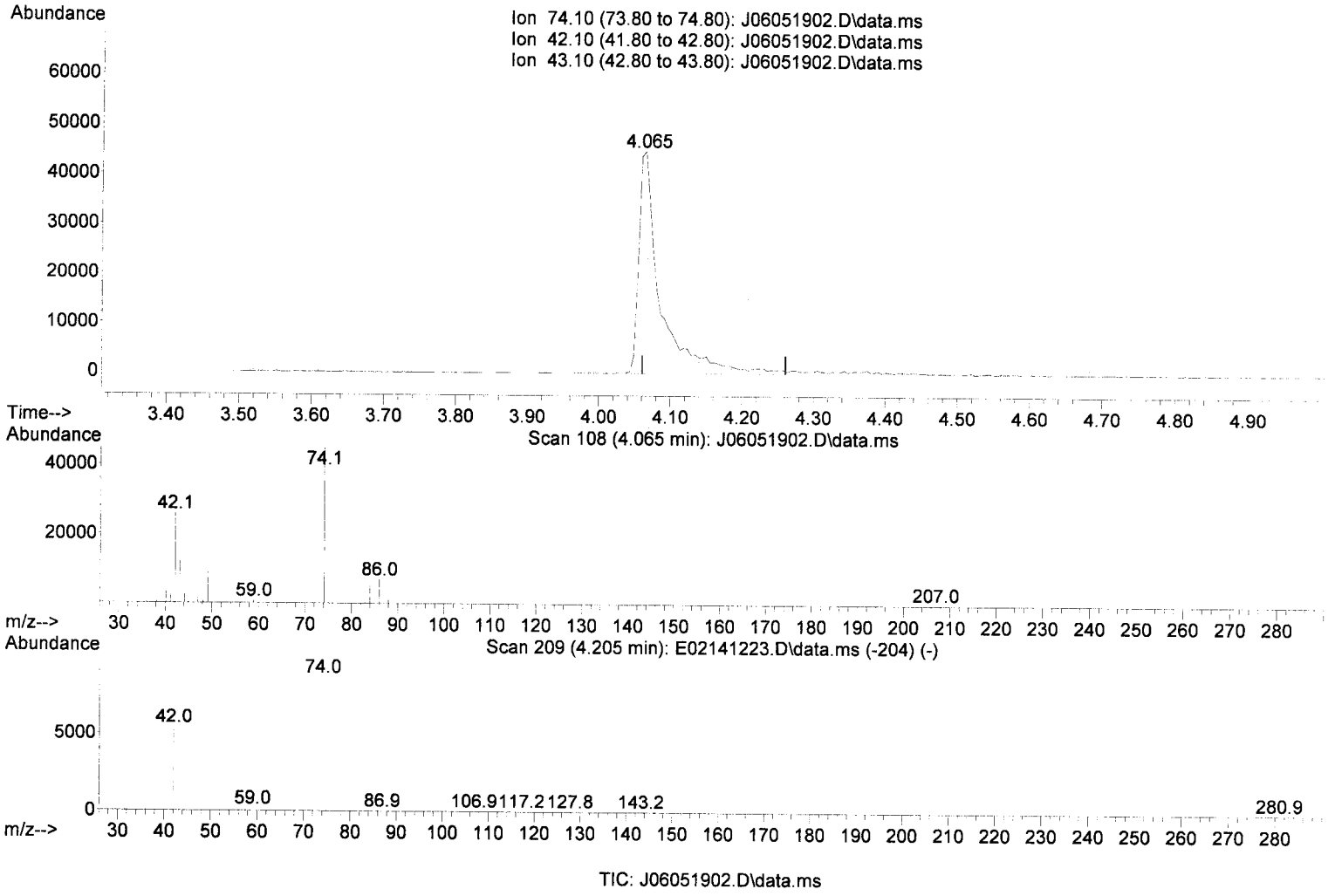
Ion	Exp%	Act%
74.10	100.00	0.00
42.10	62.90	0.00#
43.10	29.40	0.00
0.00	0.00	0.00

AMS 6/5/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051902.D\data.ms

(2) N-Nitrosodimethylamine (TG)

4.065min (-0.096) 930.52 ng/ml m AMS 6/5/19

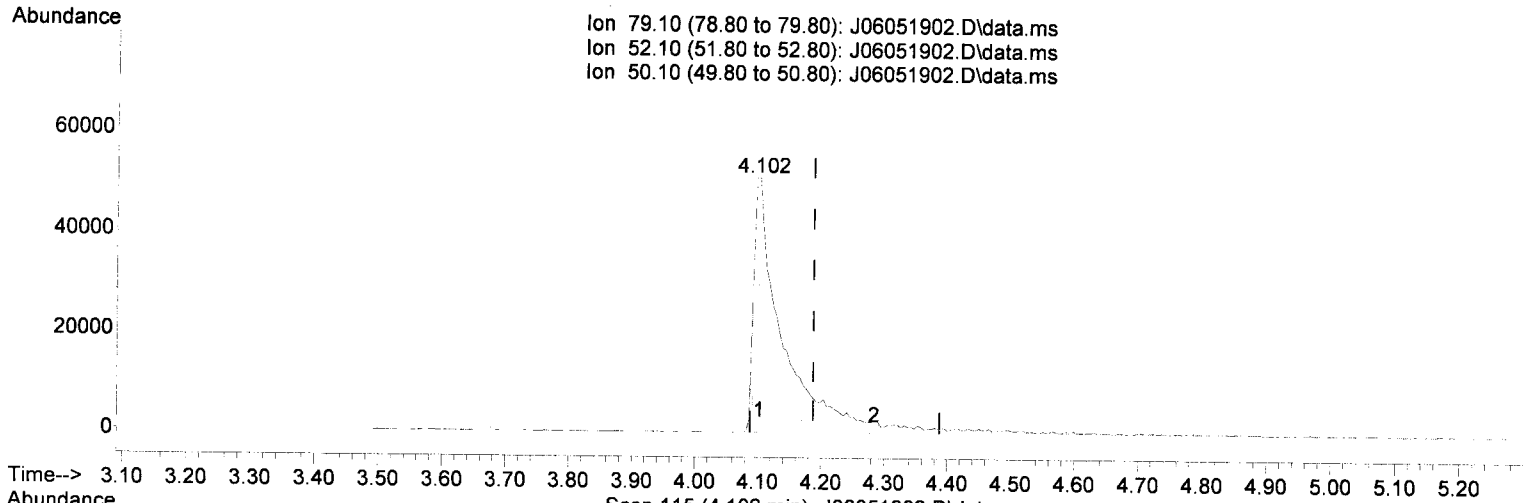
response 94637

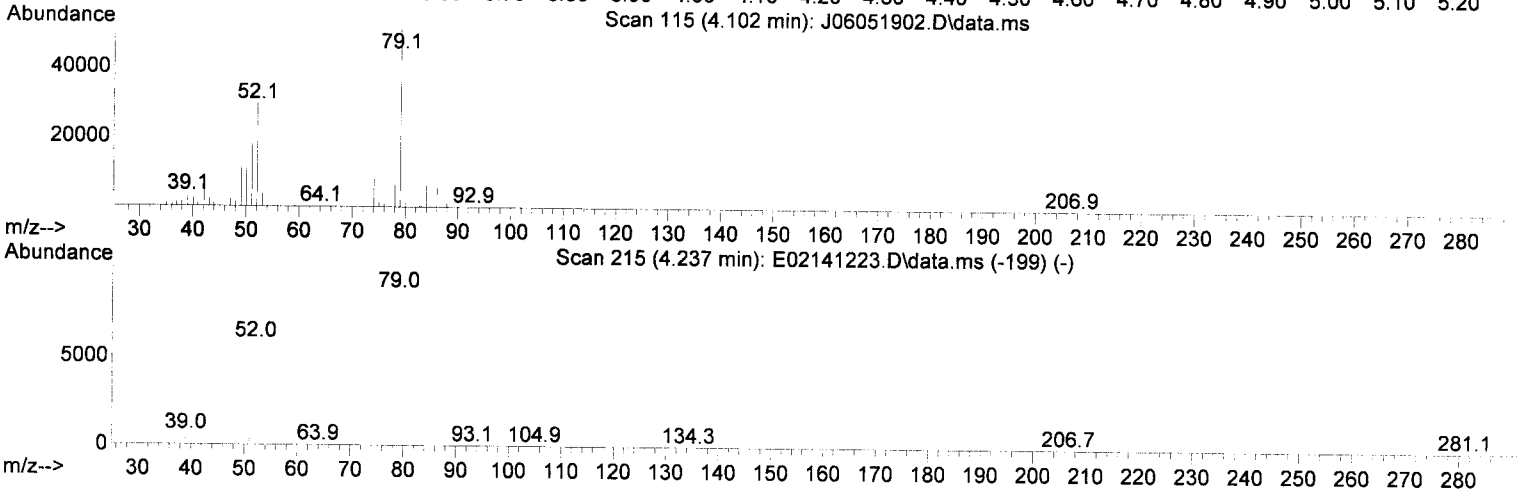
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	62.90	57.70
43.10	29.40	26.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J06051902.D\data.ms

(3) Pyridine (TG)

4.102min (-0.086) 747.92 ng/ml m

response 124113

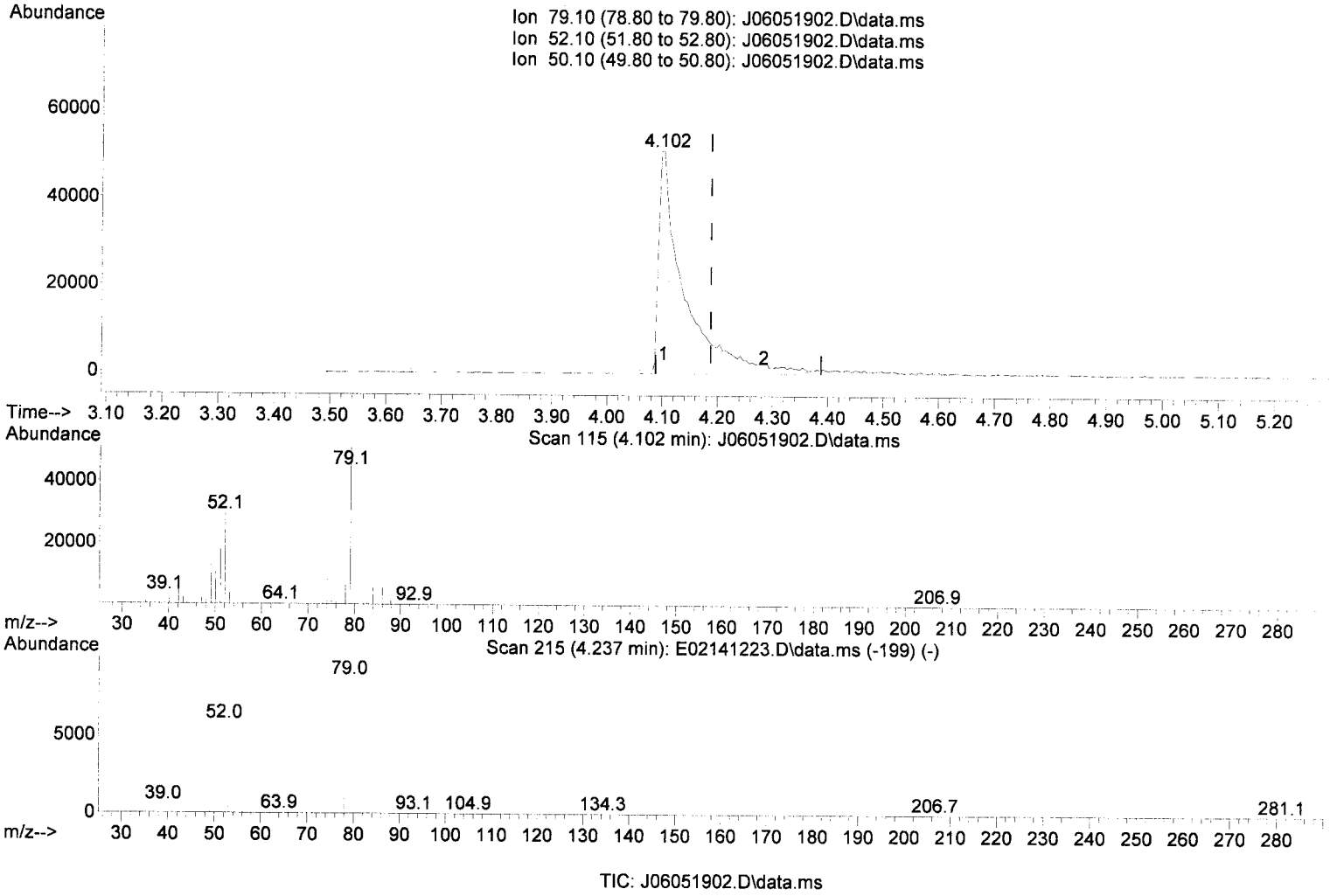
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	65.60	57.66
50.10	23.40	21.51
0.00	0.00	0.00

NOTME
AMS
6/5/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051902.D\data.ms

(3) Pyridine (TG)

4.102min (-0.086) 994.09 ng/ml m

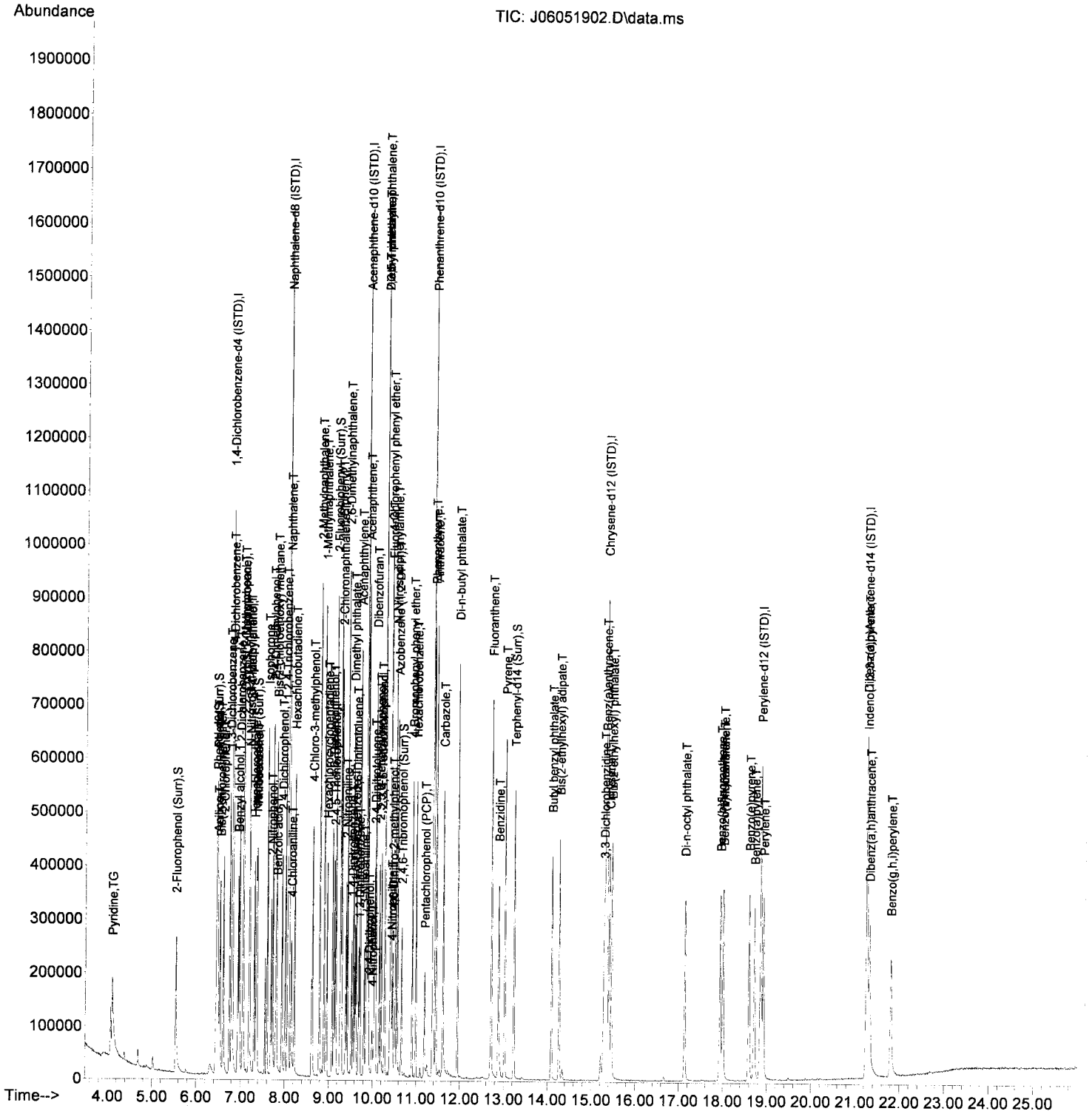
response 164962

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	65.60	57.68
50.10	23.40	21.38
0.00	0.00	0.00

AMS 6/5/19

Data Path : T:\data\2019-06\9F05024\
Data File : J06051902.D
Acq On : 5 Jun 2019 8:31 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:22:07 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F05024\
Data File : J06051903.D
Acq On : 5 Jun 2019 9:07 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV2
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	117	0.00
2	S	Nitrobenzene-d5 (Surr)	1000.000	1173.303	-17.3	126	0.00
3	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	118	0.00
4	T	Decalin	1000.000	1074.671	-7.5	117	-0.01
5	T	C-1 Decalin	1000.000	5.894	99.4#	1	-0.03
6	T	C-2 Decalin	1000.000	0.000	100.0#	0	-8.28#
7	T	C-3 Decalin	1000.000	0.000	100.0#	0	-8.98#
8	T	C-4 Decalin	1000.000	0.000	100.0#	0	-9.55#
9	T	Naphthalene	1000.000	1045.512	-4.6	114	0.00
10	T	2-Methylnaphthalene	1000.000	1068.389	-6.8	113	0.00
11	T	C-1 Naphthalenes	1000.000	987.526	1.2	104	0.04
12	T	1-Methylnaphthalene	1000.000	1021.866	-2.2	108	0.00
13	T	1,1'-Biphenyl	1000.000	1044.887	-4.5	106	0.00
14	T	2,6-Dimethylnaphthalene	1000.000	1014.269	-1.4	104	0.00
15	T	C-2 Naphthalenes	1000.000	160.591	83.9#	17	0.16
16	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	104	0.00
17	S	2-Fluorobiphenyl (Surr)	1000.000	1174.918	-17.5	109	-0.01
18	S	Acenaphthylene d-8 (Surr)	1000.000	1130.912	-13.1	107	0.00
19	T	Acenaphthylene	1000.000	1091.082	-9.1	102	0.00
20	T	Acenaphthene	1000.000	1049.129	-4.9	103	0.00
21	T	Dibenzofuran	1000.000	1040.242	-4.0	99	-0.01
22	T	1,6,7-Trimethylnaphthalene	1000.000	1061.349	-6.1	103	0.00
23	T	C-3 Naphthalenes	1000.000	1068.226	-6.8	103	0.04
24	T	C-4 Naphthalenes	1000.000	0.000	100.0#	0	-10.85#
25	T	Fluorene	1000.000	1055.799	-5.6	100	0.00
26	T	C-1 Fluorenes	1000.000	0.930	99.9#	0	-0.11
27	T	C-2 Fluorenes	1000.000	0.000	100.0#	0	-11.58#
28	T	C-3 Fluorenes	1000.000	0.239	100.0#	0	0.00
29	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	99	-0.01
30	T	Dibenzothiopene	1000.000	1064.994	-6.5	98	0.00
31		C-1 Dibenzothiophene	1000.000	0.000	100.0#	0	-11.85#
32		C-2 Dibenzothiophene	1000.000	0.000	100.0#	0	-12.35#
33		C-3 Dibenzothiophene	1000.000	0.000	100.0#	0	-12.90#
34		C-4 Dibenzothiophene	1000.000	0.000	100.0#	0	-13.68#
35	T	Phenanthrene	1000.000	1035.346	-3.5	97	0.00
36	T	Anthracene	1000.000	1081.732	-8.2	98	-0.01
37	T	1-Methylphenanthrene	1000.000	1096.789	-9.7	98	0.00
38	T	C-1 Phenanthrene/anthracene	1000.000	1097.485	-9.7	98	-0.02
39	T	C-2 Phenanthrene/anthracene	1000.000	0.000	100.0#	0	-12.55#
40	T	C-3 Phenanthrene/anthracene	1000.000	0.202	100.0#	0	0.02
41	T	C-4 Phenanthrene/anthracene	1000.000	0.000	100.0#	0	-13.87#
42	T	Fluoranthene	1000.000	1082.381	-8.2	95	-0.01
43	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	92	-0.02
44	T	Pyrene	1000.000	1133.816	-13.4	94	-0.01
45	T	C-1 Fluoranthene/pyrenes	1000.000	2.126	99.8#	0	0.00
46	S	Terphenyl-d14 (Surr)	1000.000	1096.128	-9.6	94	-0.01

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F05024\
Data File : J06051903.D
Acq On : 5 Jun 2019 9:07 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV2
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
47	T	Benz(a)anthracene	1000.000	1070.771	-7.1	95	-0.02
48	T	Chrysene	1000.000	1062.002	-6.2	95	-0.02
49	T	C-1 Benz(a)anthracene/Chrys	1000.000	1.622	99.8#	0	0.28
50	T	C-2 Benz(a)anthracene/Chrys	1000.000	0.000	100.0#	0	-17.55#
51	T	C-3 Benz(a)anthracene/Chrys	1000.000	0.000	100.0#	0	-18.42#
52		C-4 Benz(a)anthracene/Chrys	1000.000	0.000	100.0#	0	-20.01#
53	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	86	-0.02
54	T	Benzo(b)fluoranthene	1000.000	1152.855	-15.3	92	-0.02
55	T	Benzo(k)fluoranthene	1000.000	1121.107	-12.1	90	-0.02
56	T	Benzo(b+k)fluoranthene	2000.000	2272.060	-13.6	92	-0.02
57	S	Benzo(a)pyrene d-12 (Surr)	1000.000	1055.368	-5.5	88	-0.02
58	T	Benzo(e)pyrene	1000.000	1107.119	-10.7	91	-0.02
59	T	Benzo(a)pyrene	1000.000	1155.948	-15.6	93	-0.02
60	T	Perylene	1000.000	1109.180	-10.9	90	-0.02
61	I	Dibenz(a,h)Anthrcene-d14(IS	2000.000	2000.000	0.0	84	-0.02
62	T	Indeno(1,2,3-cd)Pyrene	1000.000	1005.412	-0.5	83	-0.01
63	T	Dibenz(a,h)anthracene	1000.000	1065.389	-6.5	83	-0.02
64	T	Benzo(g,h,i)perylene	1000.000	958.270	4.2	76	-0.01

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051903.D
Acq On : 5 Jun 2019 9:07 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV2
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	235496	2000.00	ng/ml	0.00
3) Naphthalene-d8 (ISTD)	8.076	136	948541	2000.00	ng/ml	0.00
16) Acenaphthene-d10 (ISTD)	9.857	162	416363	2000.00	ng/ml	0.00
29) Phenanthrene-d10 (ISTD)	11.371	188	663327	2000.00	ng/ml	-0.01
43) Chrysene-d12 (ISTD)	15.339	240	531823	2000.00	ng/ml	-0.02
53) Perylene-d12 (ISTD)	18.859	264	456404	2000.00	ng/ml	-0.02
61) Dibenz(a,h)Anthrcene-d...	21.255	292	402593	2000.00	ng/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5 (Surr)	7.354	82	169497	1173.30	ng/ml	0.00
17) 2-Fluorobiphenyl (Surr)	9.156	172	318989	1174.92	ng/ml	-0.01
18) Acenaphthylene d-8 (Surr)	9.697	160	415360	1130.91	ng/ml	0.00
46) Terphenyl-d14 (Surr)	13.232	244	268685	1096.13	ng/ml	-0.01
57) Benzo(a)pyrene d-12 (S...	18.656	264	209954	1055.37	ng/ml	-0.02
Target Compounds						Qvalue
4) Decalin	7.525	138	71293	1074.67	ng/ml	95
5) C-1 Decalin	7.750	152	391	5.89	ng/ml#	26
6) C-2 Decalin	0.000		0	N.D.		
7) C-3 Decalin	0.000		0	N.D.		
8) C-4 Decalin	0.000		0	N.D.		
9) Naphthalene	8.097	128	517867	1045.51	ng/ml	99
10) 2-Methylnaphthalene	8.793	142	319090	1068.39	ng/ml	99
11) C-1 Naphthalenes	8.894	142	294939	987.53	ng/ml	96
12) 1-Methylnaphthalene	8.894	142	302576	1021.87	ng/ml	96
13) 1,1'-Biphenyl	9.263	154	358960	1044.89	ng/ml	99
14) 2,6-Dimethylnaphthalene	9.424	156	266024	1014.27	ng/ml	96
15) C-2 Naphthalenes	9.697	156	42120	160.59	ng/ml	63
19) Acenaphthylene	9.713	152	450664	1091.08	ng/ml	99
20) Acenaphthene	9.889	153	298100	1049.13	ng/ml	98
21) Dibenzofuran	10.060	168	357068	1040.24	ng/ml	97
22) 1,6,7-Trimethylnaphtha...	10.274	170	233044	1061.35	ng/ml	96
23) C-3 Naphthalenes	10.274	170	234554	1068.23	ng/ml	89
24) C-4 Naphthalenes	0.000		0	N.D.		
25) Fluorene	10.413	166	291897	1055.80	ng/ml	99
26) C-1 Fluorenes	10.857	180	257	N.D.		
27) C-2 Fluorenes	0.000		0	N.D.		
28) C-3 Fluorenes	12.440	208	66	N.D.		
30) Dibenzothiopene	11.269	184	356401	1064.99	ng/ml	98
31) C-1 Dibenzothiophene	0.000		0	N.D.		
32) C-2 Dibenzothiophene	0.000		0	N.D.		
33) C-3 Dibenzothiophene	0.000		0	N.D.		
34) C-4 Dibenzothiophene	0.000		0	N.D.		
35) Phenanthrene	11.397	178	383158	1035.35	ng/ml	97
36) Anthracene	11.446	178	371987	1081.73	ng/ml	99
37) 1-Methylphenanthrene	12.029	192	271200	1096.79	ng/ml	100
38) C-1 Phenanthrene/anthr...	12.029	192	271372	1097.48	ng/ml#	100
39) C-2 Phenanthrene/anthr...	0.000		0	N.D.		
40) C-3 Phenanthrene/anthr...	13.232	220	50	N.D.		
41) C-4 Phenanthrene/anthr...	0.000		0	N.D.		
42) Fluoranthene	12.708	202	384845	1082.38	ng/ml	99
44) Pyrene	13.023	202	395665	1133.82	ng/ml	100
45) C-1 Fluoranthene/pyrenes	13.665	216	742	N.D.		

Data Path : T:\data\2019-06\9F05024\
Data File : J06051903.D
Acq On : 5 Jun 2019 9:07 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV2
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

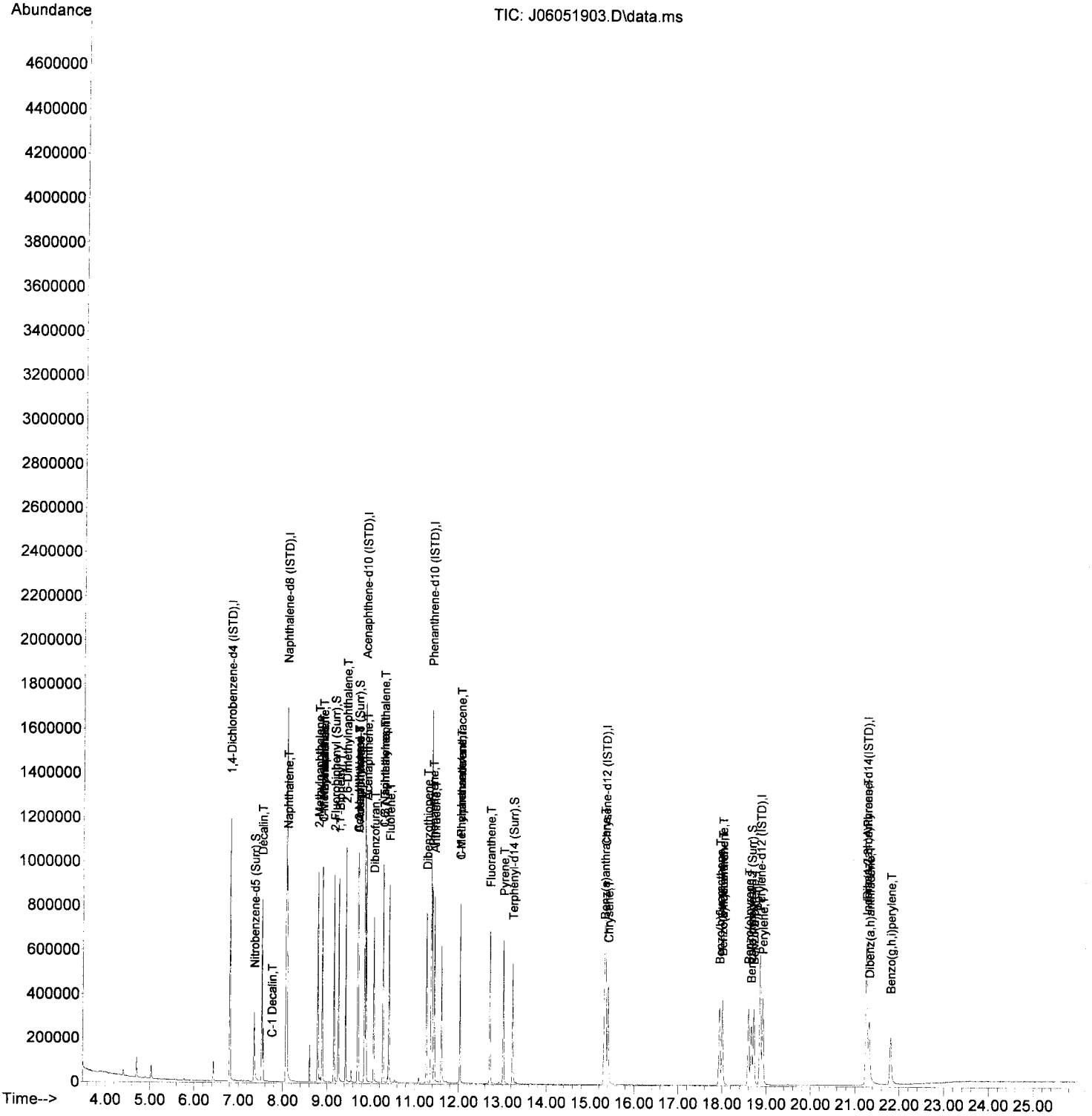
Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) Benz(a)anthracene	15.318	228	309430	1070.77	ng/ml	97
48) Chrysene	15.404	228	299871	1062.00	ng/ml	98
49) C-1 Benz(a)anthracene/...	16.655	242	458	N.D.		
50) C-2 Benz(a)anthracene/...	0.000		0	N.D.		
51) C-3 Benz(a)anthracene/...	0.000		0	N.D.		
52) C-4 Benz(a)anthracene/...	0.000		0	N.D.		
54) Benzo(b)fluoranthene	17.939	252	289107	1152.86	ng/ml	98
55) Benzo(k)fluoranthene	18.003	252	291339	1121.11	ng/ml	96
56) Benzo(b+k)fluoranthene	18.003	252	601762	2272.06	ng/ml	96
58) Benzo(e)pyrene	18.597	252	283120	1107.12	ng/ml	98
59) Benzo(a)pyrene	18.714	252	264259	1155.95	ng/ml	98
60) Perylene	18.918	252	299257	1109.18	ng/ml	99
62) Indeno(1,2,3-cd)Pyrene	21.260	276	215730	1005.41	ng/ml	97
63) Dibenz(a,h)anthracene	21.319	278	211802	1065.39	ng/ml	95
64) Benzo(g,h,i)perylene	21.801	276	215123	958.27	ng/ml	96

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051903.D
Acq On : 5 Jun 2019 9:07 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCV2
Misc : 1x, A19E064@1000
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 10:23:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	235356	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	1052723	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	488102	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	773720	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.345	240	599145	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.864	264	503372	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.255	292	429038	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	4.278	79	59	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	6.808	146	176	N.D.		
11) 1,4-Dichlorobenzene	6.808	146	176	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	7.306	77	75	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Data Path : T:\data\2019-06\9F05024\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

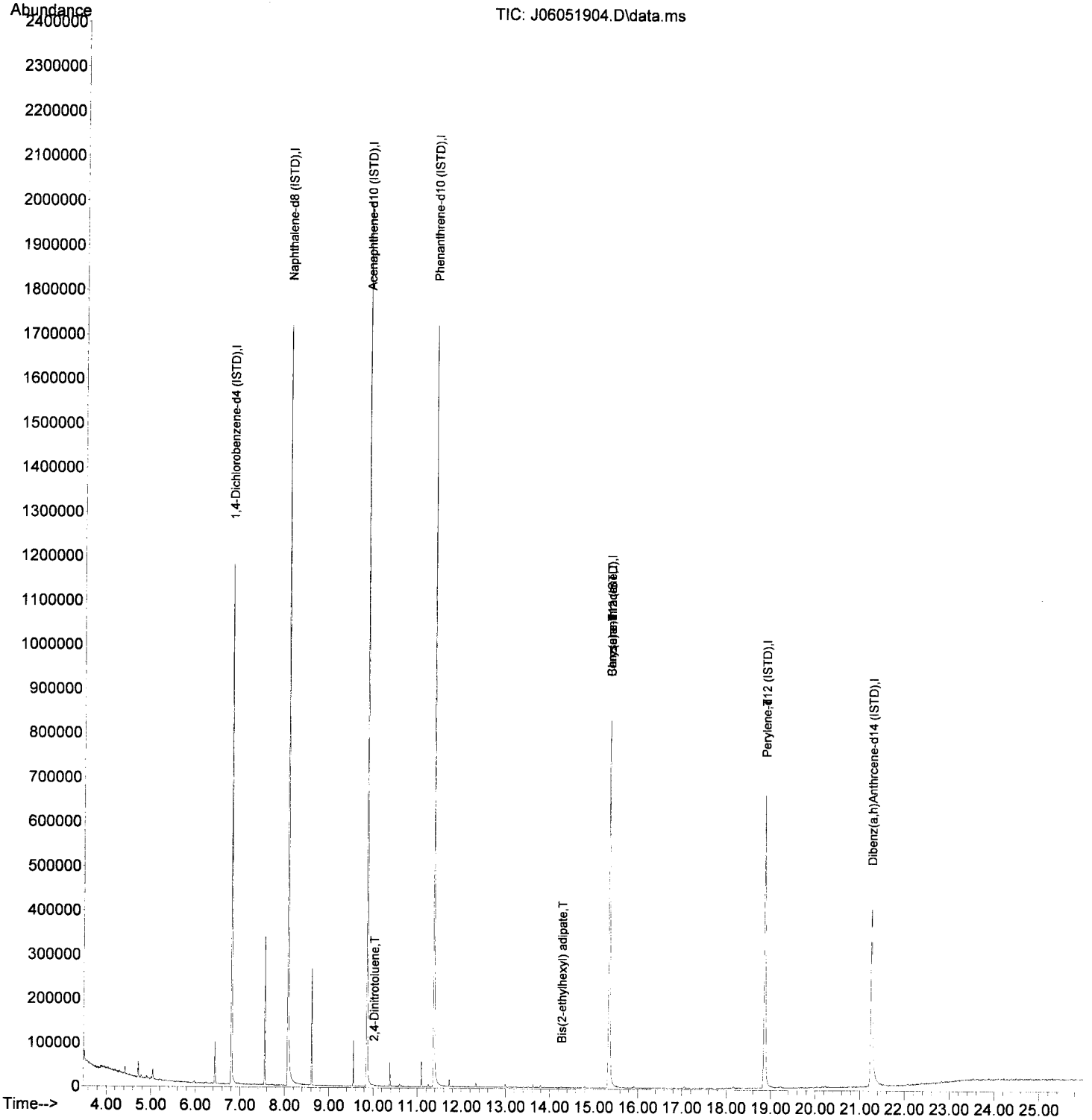
Quant Time: Jun 05 10:23:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	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	9.852	138	129	N.D.	
51) Acenaphthene	9.862	153	138	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.012	165	176	62.03 ng/ml#	50
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.392	170	74	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)	10.531	77	87	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	11.376	178	255	N.D.	
72) Anthracene	11.376	178	255	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.964	149	55	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	14.270	129	795	4.66 ng/ml	85
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.345	228	1456	4.45 ng/ml	63
84) Chrysene	15.345	228	1456	4.59 ng/ml	61
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	18.864	252	1578	6.18 ng/ml	68
95) Indeno(1,2,3-cd)pyrene	21.271	276	129	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	90	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 10:25:20 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	234483	2000.00 ng/ml	0.00
3) Naphthalene-d8 (ISTD)	8.076	136	1052723	2000.00 ng/ml	0.00
16) Acenaphthene-d10 (ISTD)	9.857	162	488102	2000.00 ng/ml	0.00
29) Phenanthrene-d10 (ISTD)	11.371	188	773720	2000.00 ng/ml	-0.01
43) Chrysene-d12 (ISTD)	15.345	240	599145	2000.00 ng/ml	-0.02
53) Perylene-d12 (ISTD)	18.864	264	503372	2000.00 ng/ml	-0.02
61) Dibenz(a,h)Anthrcene-d...	21.255	292	429038	2000.00 ng/ml	-0.02
System Monitoring Compounds					
2) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00 ng/ml	
17) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00 ng/ml	
18) Acenaphthylene d-8 (Surr)	9.702	160	231	0.54 ng/ml	0.00
46) Terphenyl-d14 (Surr)	0.000	244	0	0.00 ng/ml	
57) Benzo(a)pyrene d-12 (S...	0.000	264	0	0.00 ng/ml	
Target Compounds					Qvalue
4) Decalin	0.000		0	N.D.	
5) C-1 Decalin	7.787	152	77	N.D.	
6) C-2 Decalin	0.000		0	N.D.	
7) C-3 Decalin	0.000		0	N.D.	
8) C-4 Decalin	0.000		0	N.D.	
9) Naphthalene	0.000		0	N.D.	
10) 2-Methylnaphthalene	0.000		0	N.D.	
11) C-1 Naphthalenes	0.000		0	N.D.	
12) 1-Methylnaphthalene	0.000		0	N.D.	
13) 1,1'-Biphenyl	0.000		0	N.D.	
14) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
15) C-2 Naphthalenes	9.830	156	43	N.D.	
19) Acenaphthylene	0.000		0	N.D.	
20) Acenaphthene	9.862	153	138	N.D.	
21) Dibenzofuran	0.000		0	N.D.	
22) 1,6,7-Trimethylnaphtha...	0.000		0	N.D.	
23) C-3 Naphthalenes	10.392	170	74	N.D.	
24) C-4 Naphthalenes	11.109	184	59	N.D.	
25) Fluorene	0.000		0	N.D.	
26) C-1 Fluorenes	10.584		0	N.D.	
27) C-2 Fluorenes	11.248	194	154	N.D.	
28) C-3 Fluorenes	12.868	208	1546m	4.77 ng/ml	
30) Dibenzothiopene	0.000		0	N.D.	
31) C-1 Dibenzothiophene	0.000		0	N.D.	
32) C-2 Dibenzothiophene	0.000		0	N.D.	
33) C-3 Dibenzothiophene	0.000		0	N.D.	
34) C-4 Dibenzothiophene	0.000		0	N.D.	
35) Phenanthrene	11.376	178	255	N.D.	
36) Anthracene	11.376	178	255	N.D.	
37) 1-Methylphenanthrene	0.000		0	N.D.	
38) C-1 Phenanthrene/anthr...	11.788		0	N.D.	
39) C-2 Phenanthrene/anthr...	12.916	206	18	N.D.	
40) C-3 Phenanthrene/anthr...	13.499	220	32	N.D.	
41) C-4 Phenanthrene/anthr...	13.227		0	N.D.	
42) Fluoranthene	0.000		0	N.D.	
44) Pyrene	0.000		0	N.D.	
45) C-1 Fluoranthene/pyrenes	13.719	216	31	N.D.	

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:25:20 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

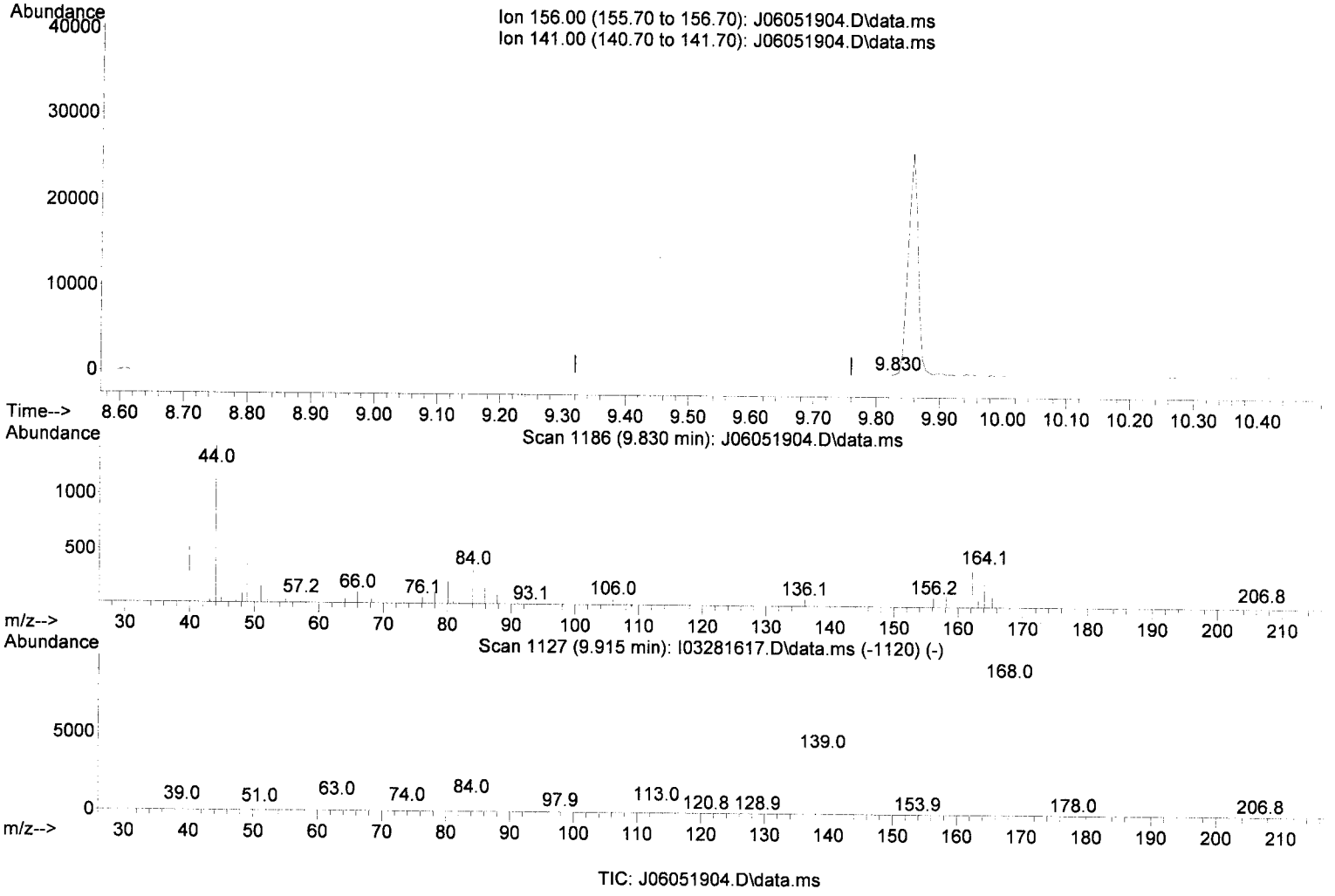
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
47) Benz(a)anthracene	15.345	228	1456	4.47 ng/ml	63
48) Chrysene	15.345	228	1456	4.58 ng/ml	60
49) C-1 Benz(a)anthracene/...	16.003		0	N.D.	
50) C-2 Benz(a)anthracene/...	16.842		0	N.D.	
51) C-3 Benz(a)anthracene/...	18.757	270	17	N.D.	
52) C-4 Benz(a)anthracene/...	18.864	284	371	N.D.	
54) Benzo(b)fluoranthene	0.000		0	N.D.	
55) Benzo(k)fluoranthene	0.000		0	N.D.	
56) Benzo(b+k)fluoranthene	0.000		0	N.D.	
58) Benzo(e)pyrene	18.864	252	1162	12.85 ng/ml#	1
59) Benzo(a)pyrene	0.000		0	N.D.	
60) Perylene	18.864	252	1578	5.30 ng/ml	76
62) Indeno(1,2,3-cd)Pyrene	21.271	276	129	N.D.	
63) Dibenz(a,h)anthracene	21.244	278	90	N.D.	
64) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(15) C-2 Naphthalenes (T)

9.830min (+ 0.290) 0.15 ng/ml m

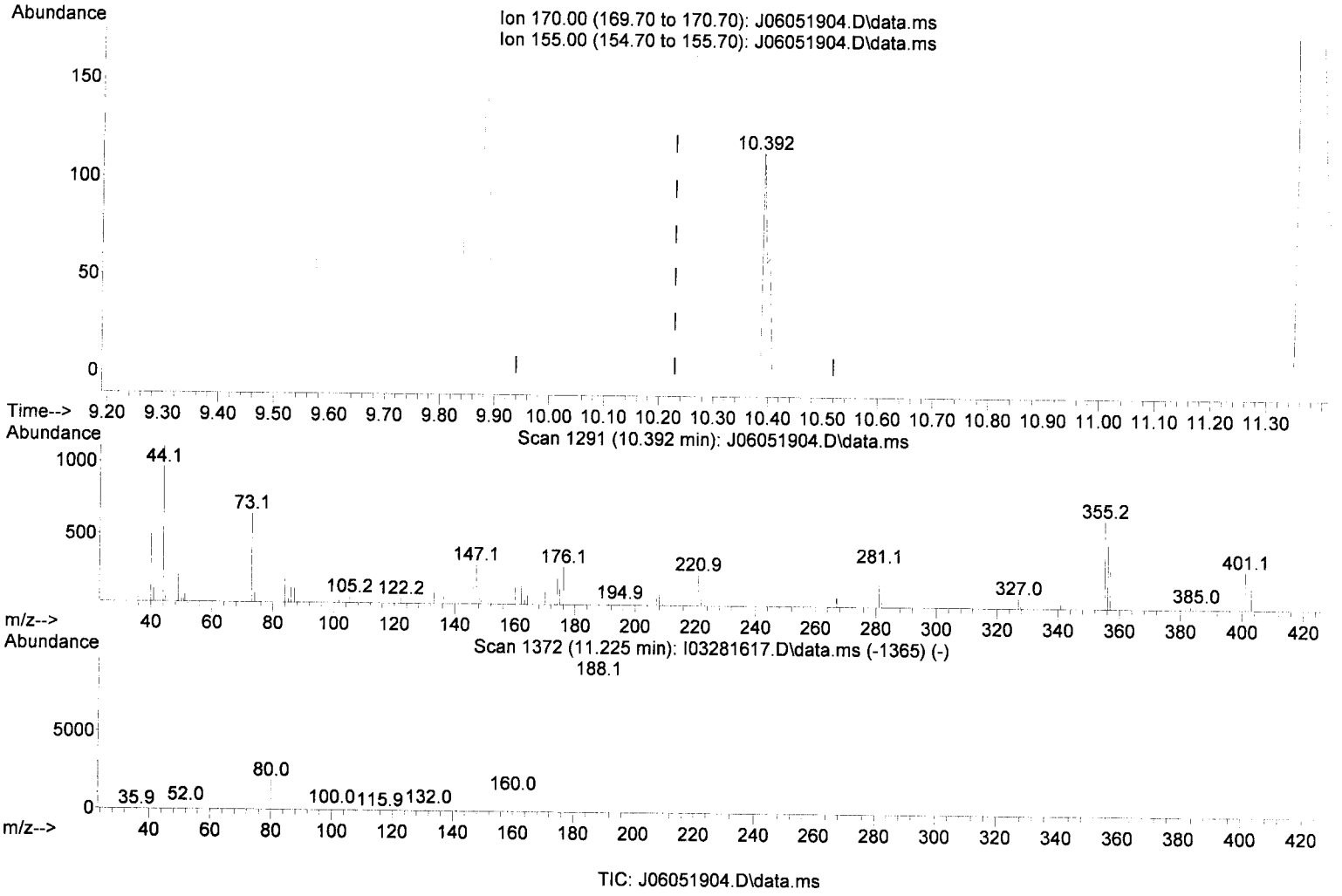
response 43

Ion	Exp%	Act%
156.00	100.00	100.00
141.00	16.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(23) C-3 Naphthalenes (T)

10.392min (+ 0.162) 0.29 ng/ml m

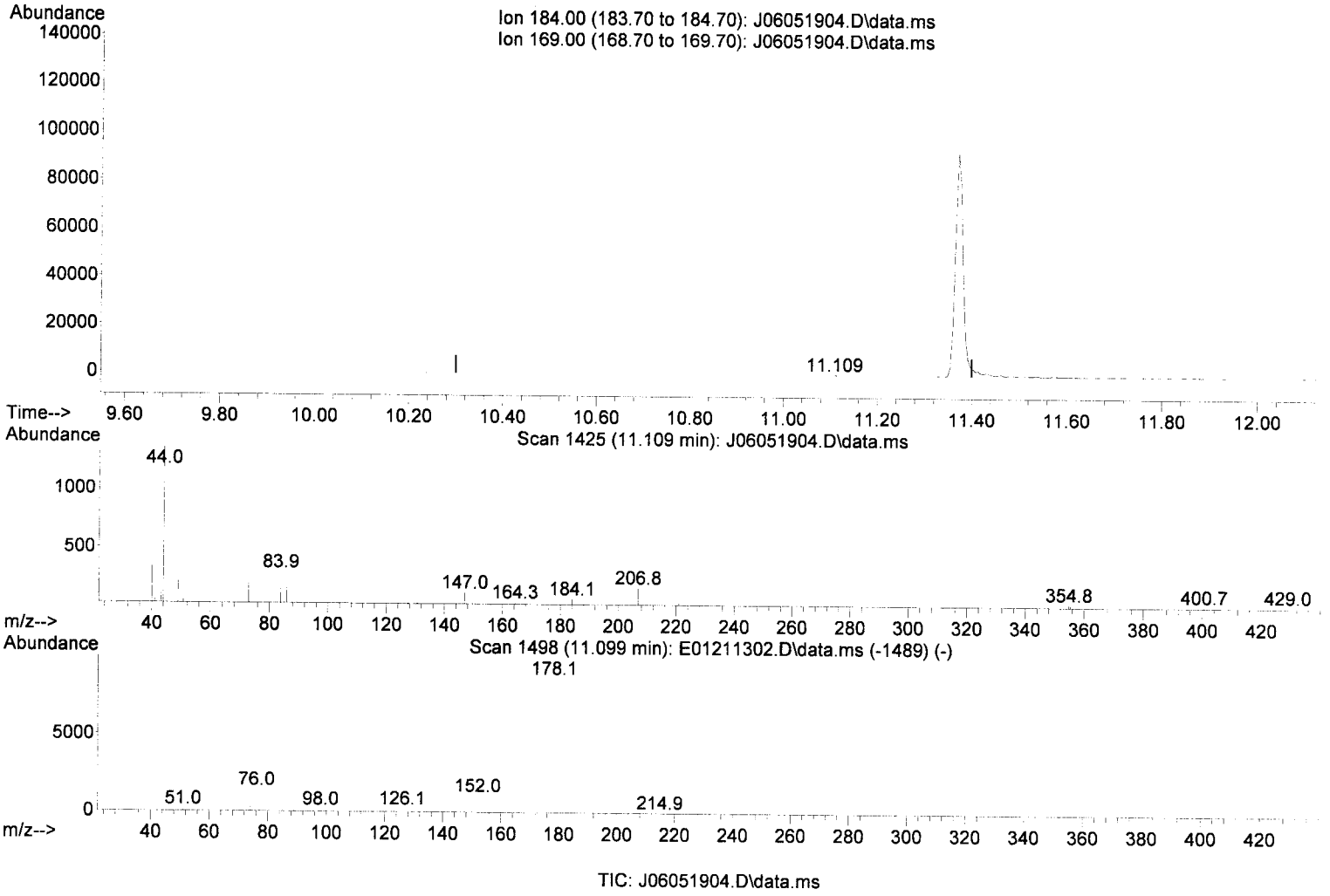
response 74

Ion	Exp%	Act%
170.00	100.00	100.00
155.00	83.80	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(24) C-4 Naphthalenes (T)

11.109min (+ 0.259) 0.23 ng/ml m

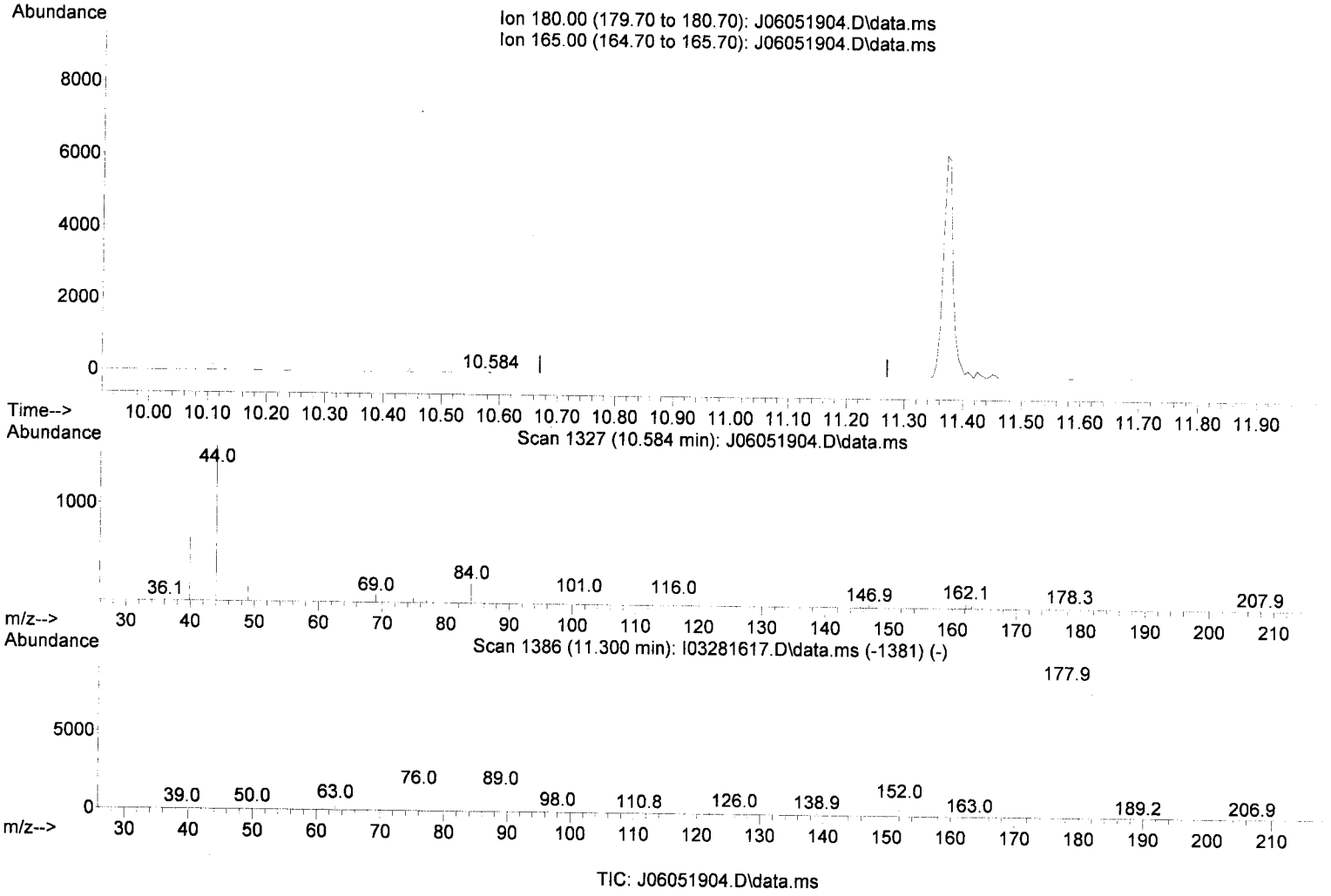
response 59

Ion	Exp%	Act%
184.00	100.00	100.00
169.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(26) C-1 Fluorenes (T)

10.584min (-0.386) 0.00 ng/ml m

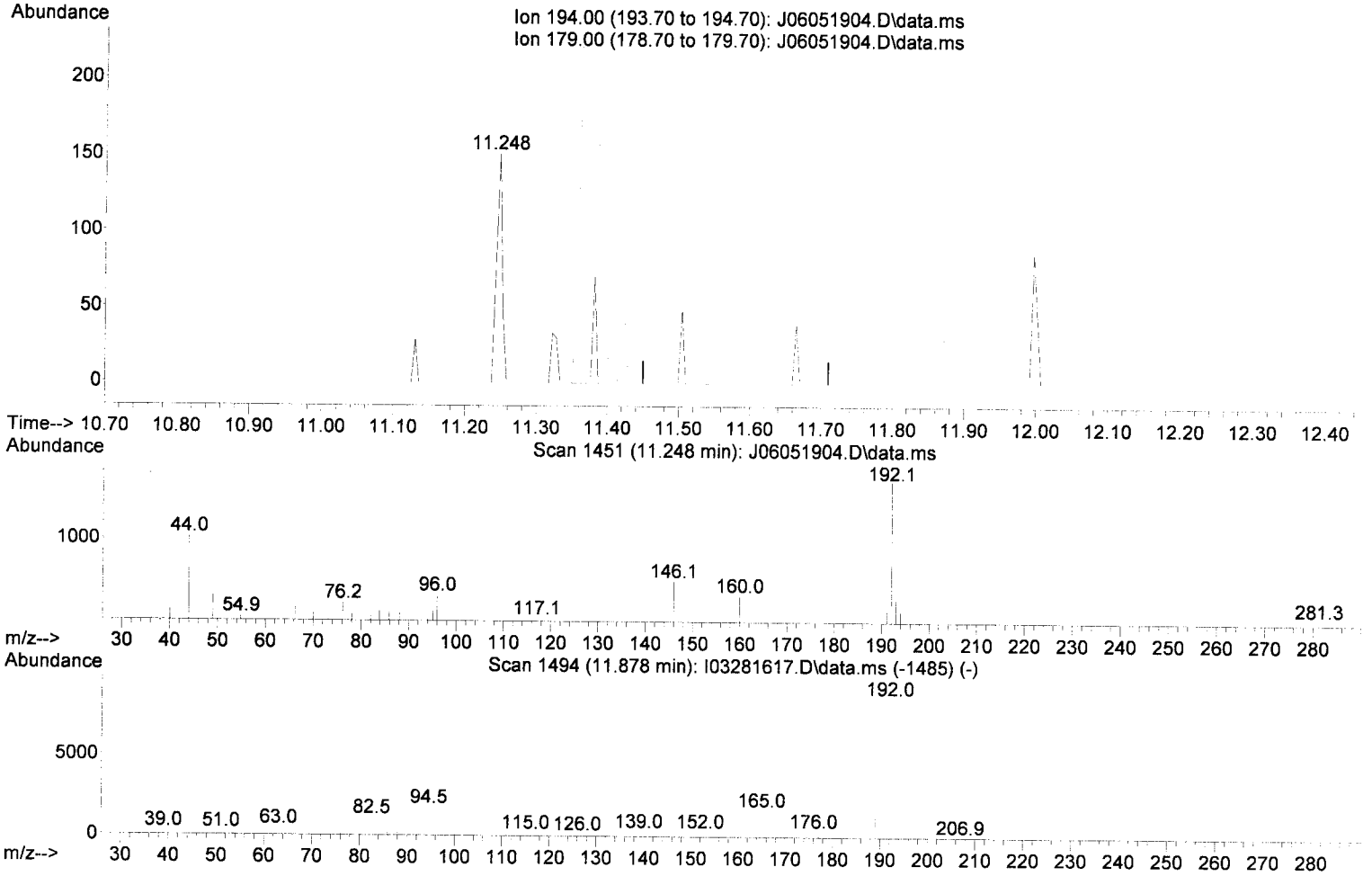
response 0

Ion	Exp%	Act%
180.00	100.00	0.00
165.00	135.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(27) C-2 Fluorenes (T)

11.248min (-0.332) 0.48 ng/ml m

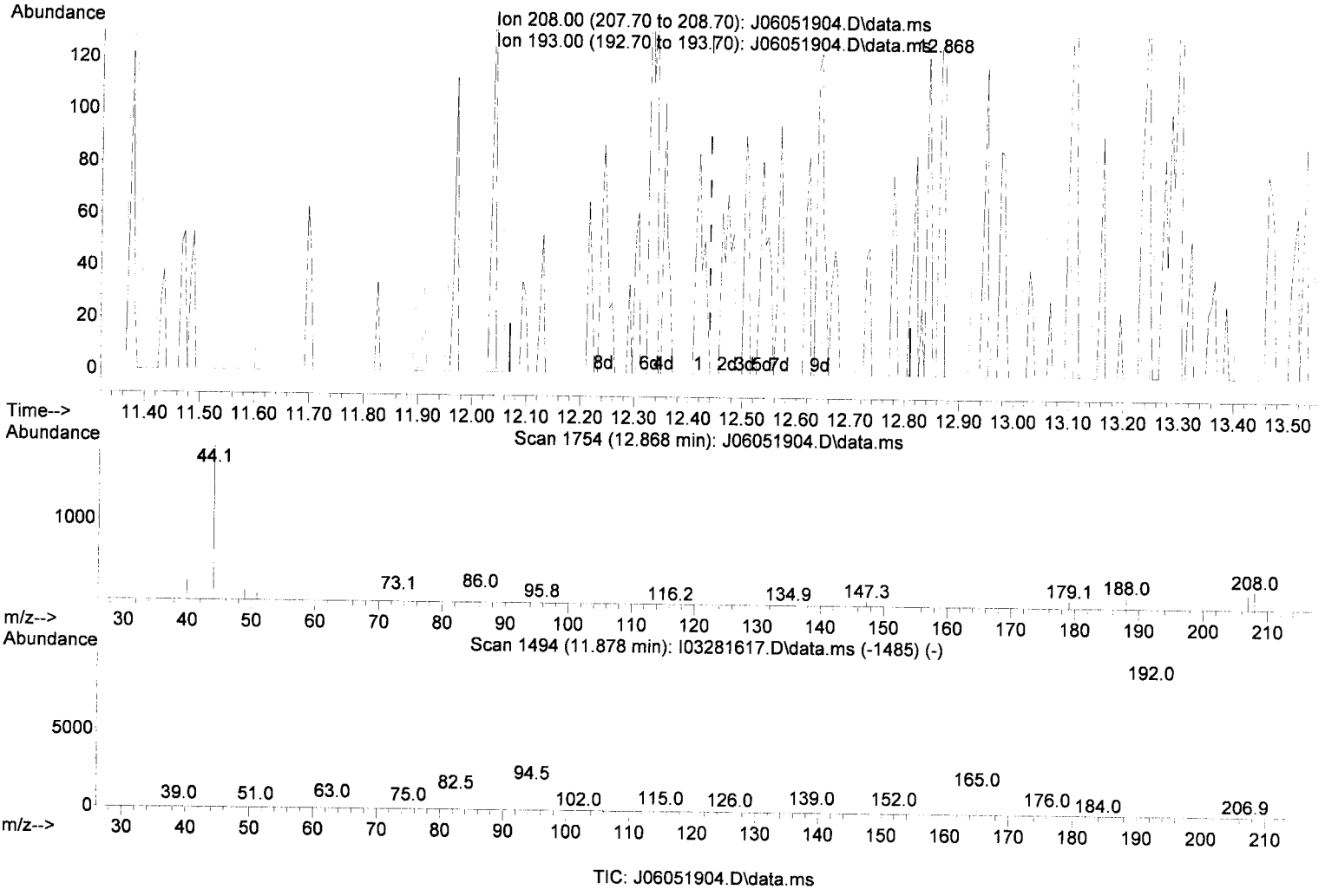
response 154

Ion	Exp%	Act%
194.00	100.00	100.00
179.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(28) C-3 Fluorenes (T)

12.868min (+ 0.428) 4.77 ng/ml m

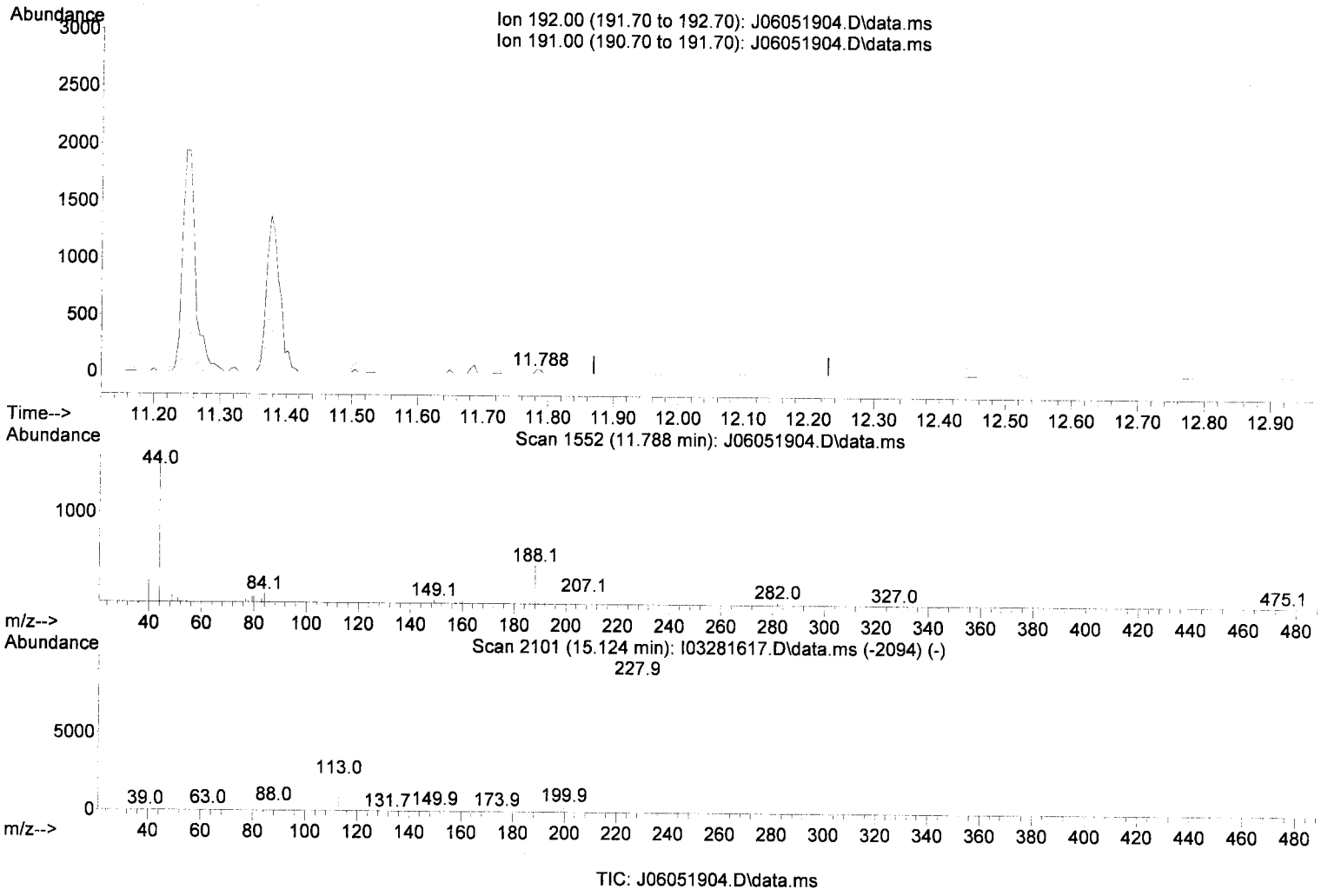
response 1546

Ion	Exp%	Act%
208.00	100.00	100.00
193.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(38) C-1 Phenanthrene/anthracene (T)

11.788min (-0.262) 0.00 ng/ml m

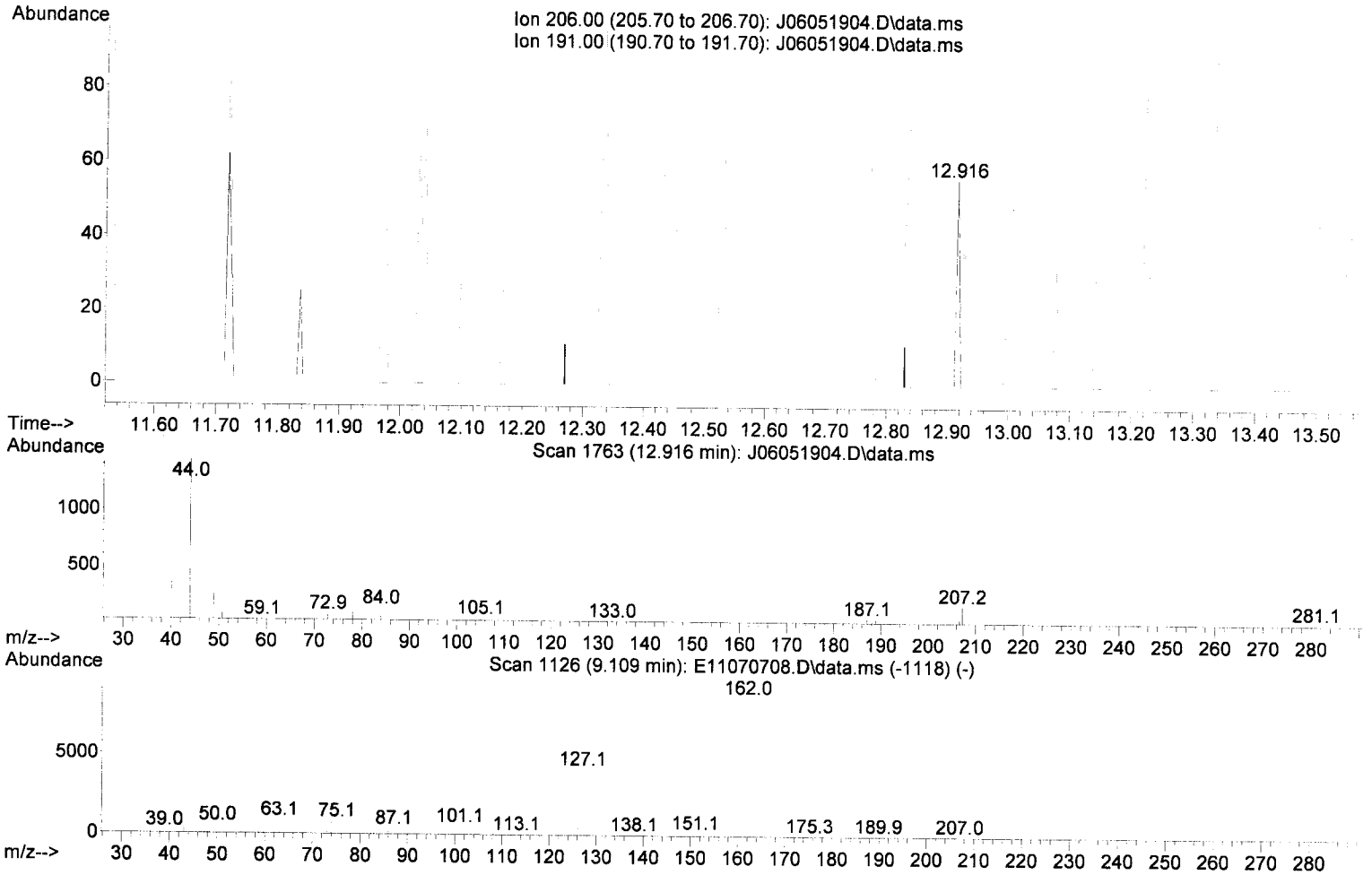
response 0

Ion	Exp%	Act%
192.00	100.00	0.00
191.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(39) C-2 Phenanthrene/anthracene (T)

12.916min (+ 0.366) 0.06 ng/ml m

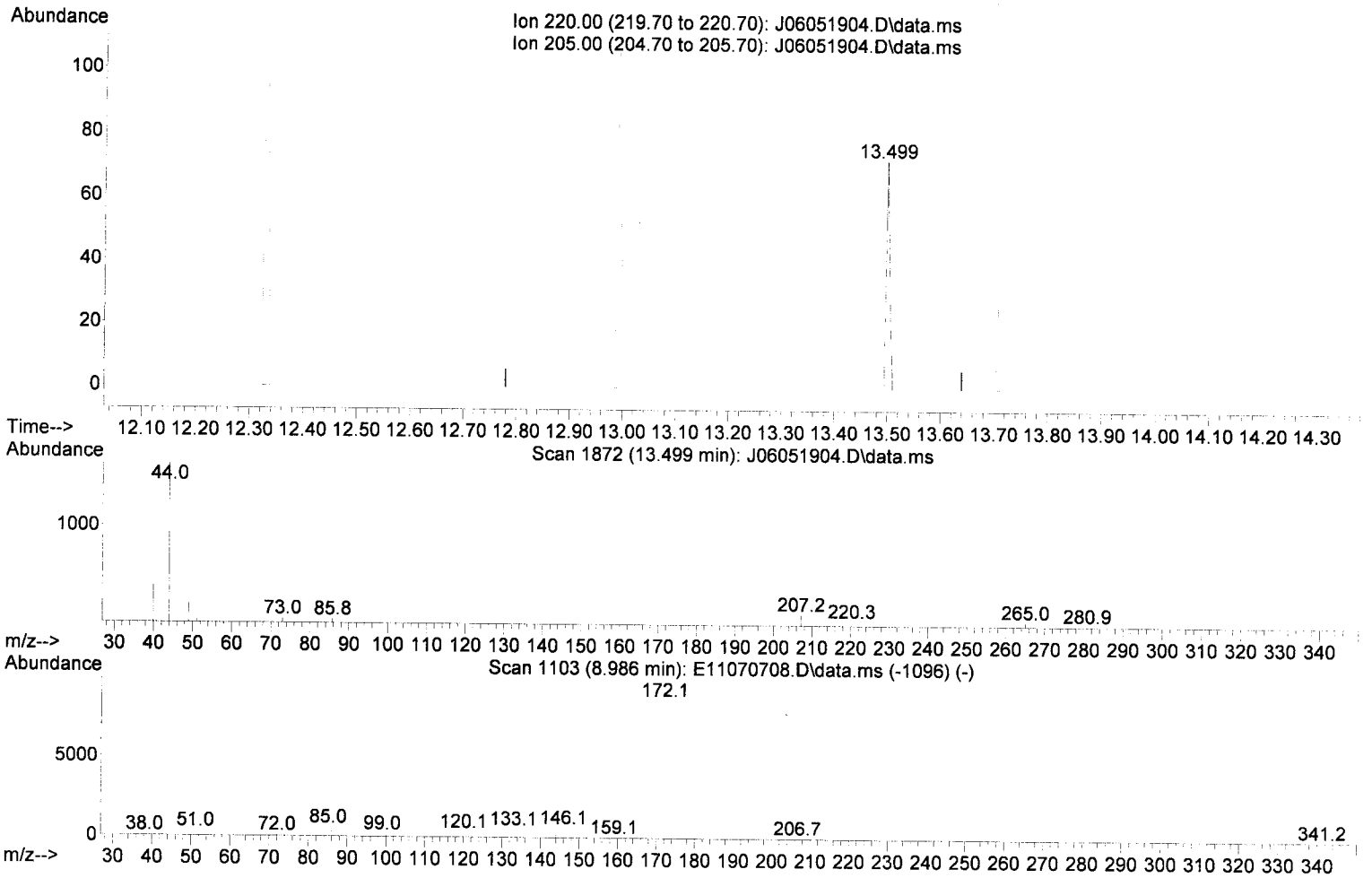
response 18

Ion	Exp%	Act%
206.00	100.00	100.00
191.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(40) C-3 Phenanthrene/anthracene (T)

13.499min (+ 0.289) 0.11 ng/ml m

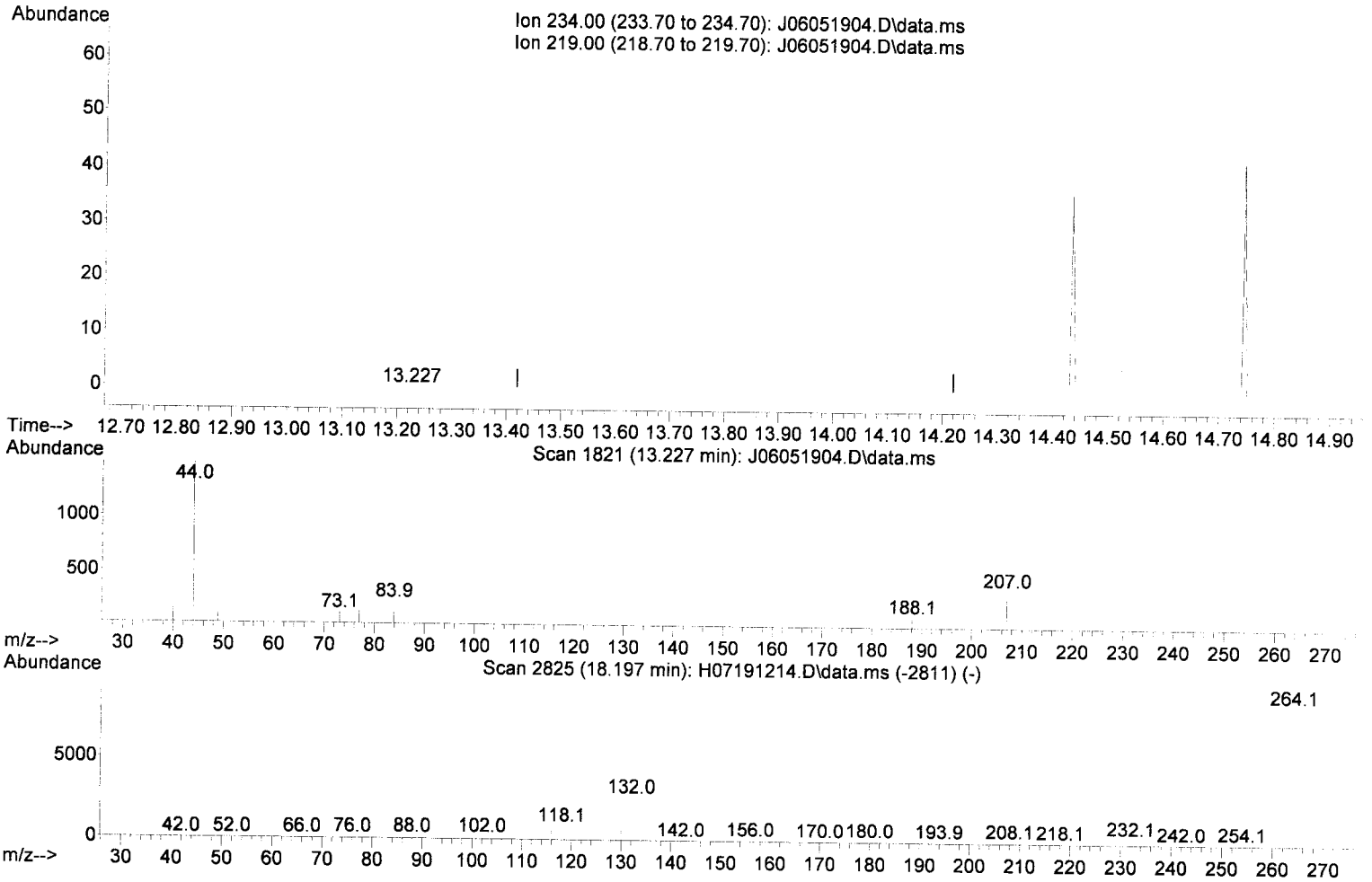
response 32

Ion	Exp%	Act%
220.00	100.00	100.00
205.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(41) C-4 Phenanthrene/anthracene (T)

13.227min (-0.643) 0.00 ng/ml m

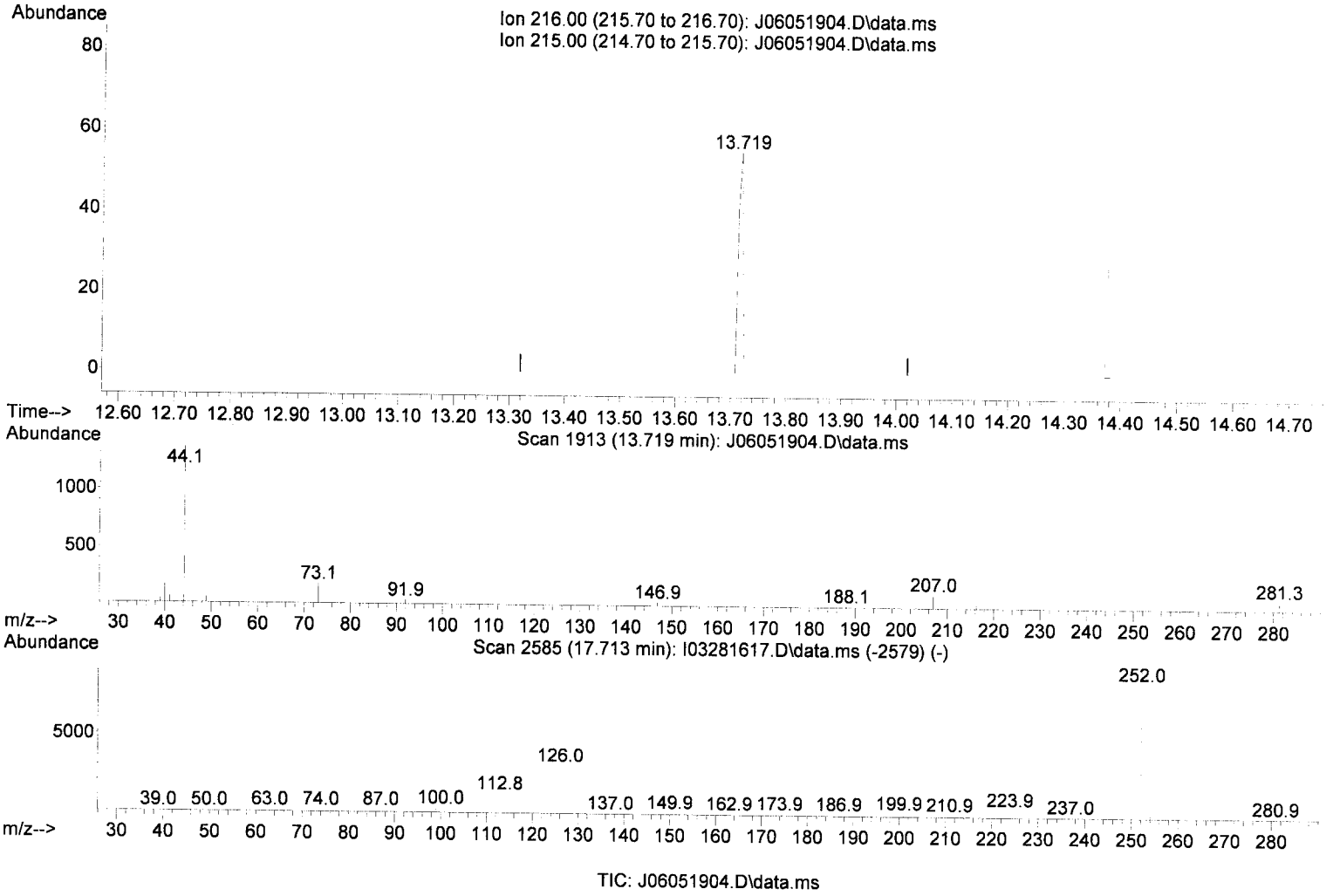
response 0

Ion	Exp%	Act%
234.00	100.00	0.00
219.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(45) C-1 Fluoranthene/pyrenes (T)

13.719min (+ 0.049) 0.08 ng/ml m

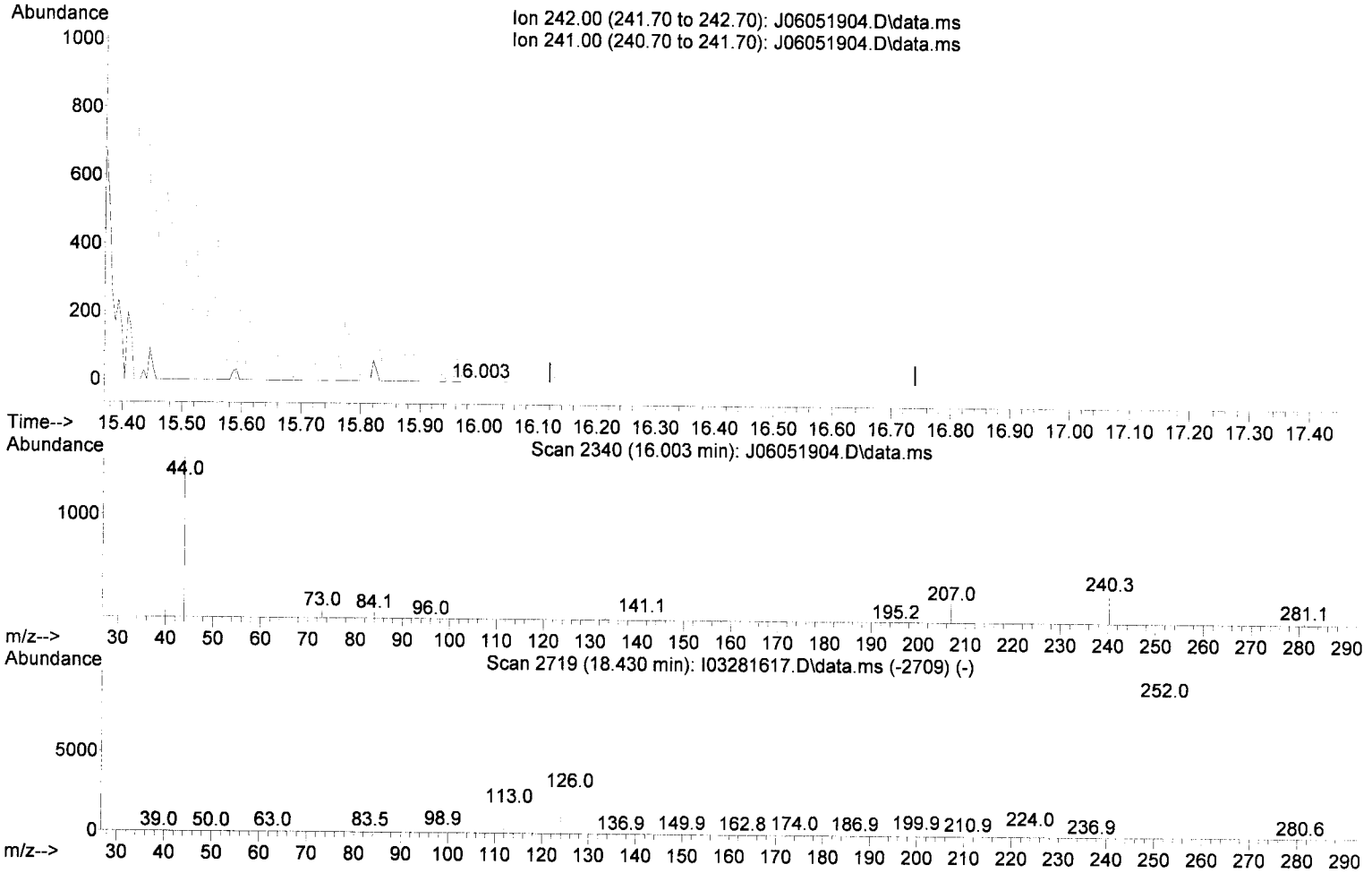
response 31

Ion	Exp%	Act%
216.00	100.00	100.00
215.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(49) C-1 Benz(a)anthracene/Chrysenes (T)

16.003min (-0.377) 0.00 ng/ml m

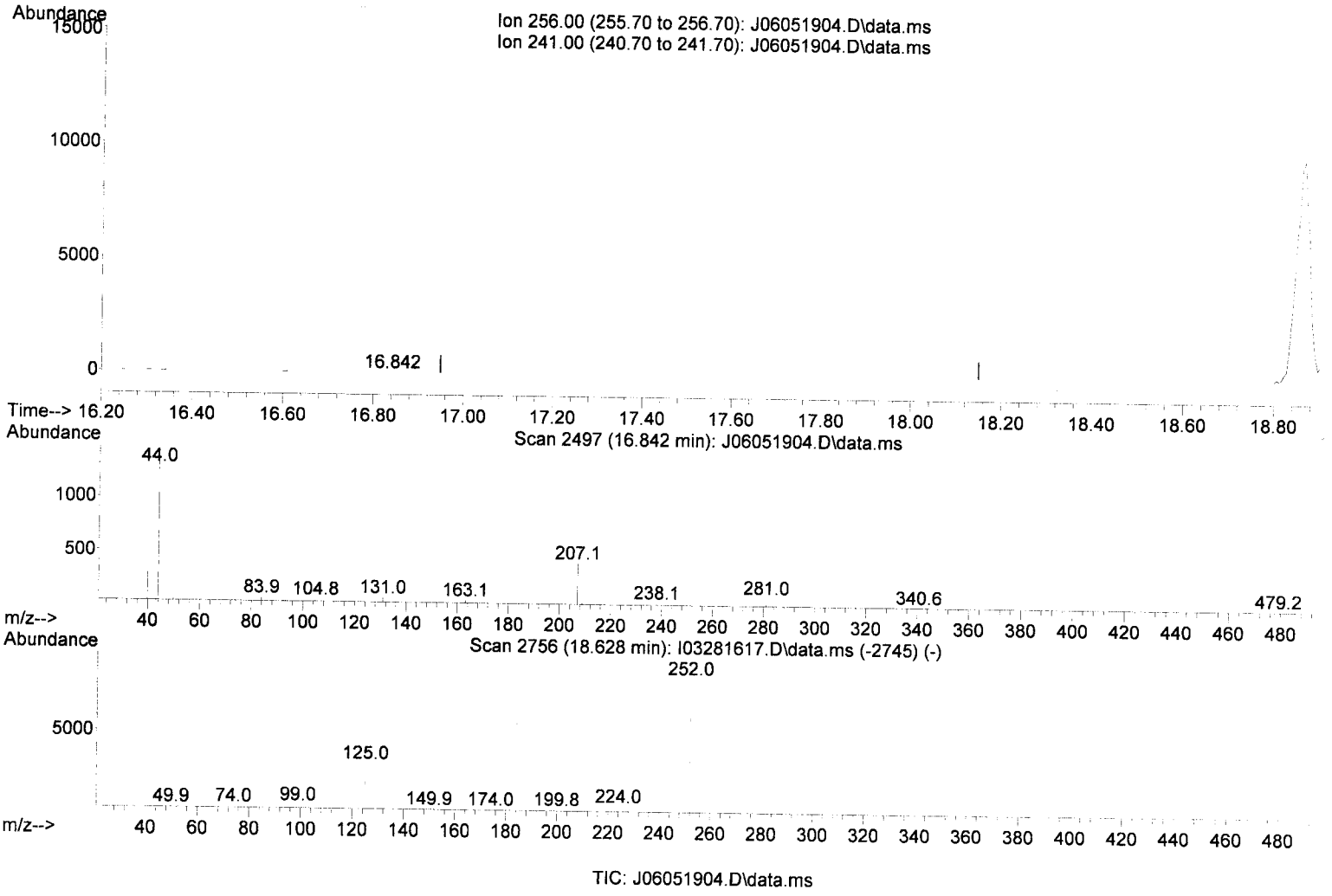
response 0

Ion	Exp%	Act%
242.00	100.00	0.00
241.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(50) C-2 Benz(a)anthracene/Chrysenes (T)

16.842min (-0.708) 0.00 ng/ml m

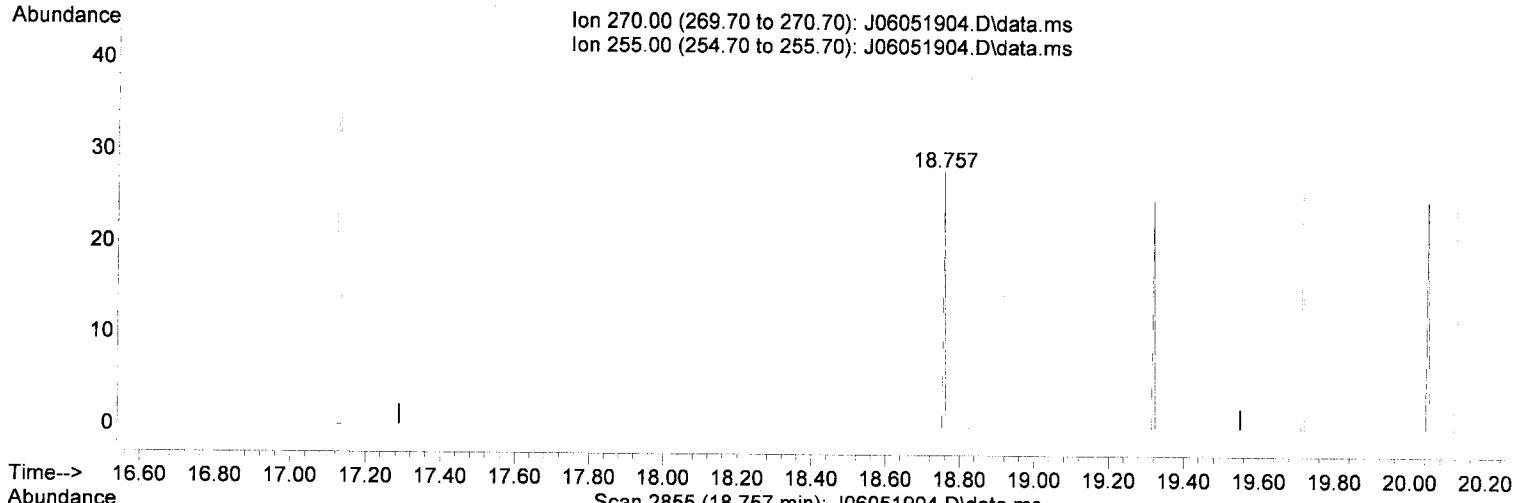
response 0

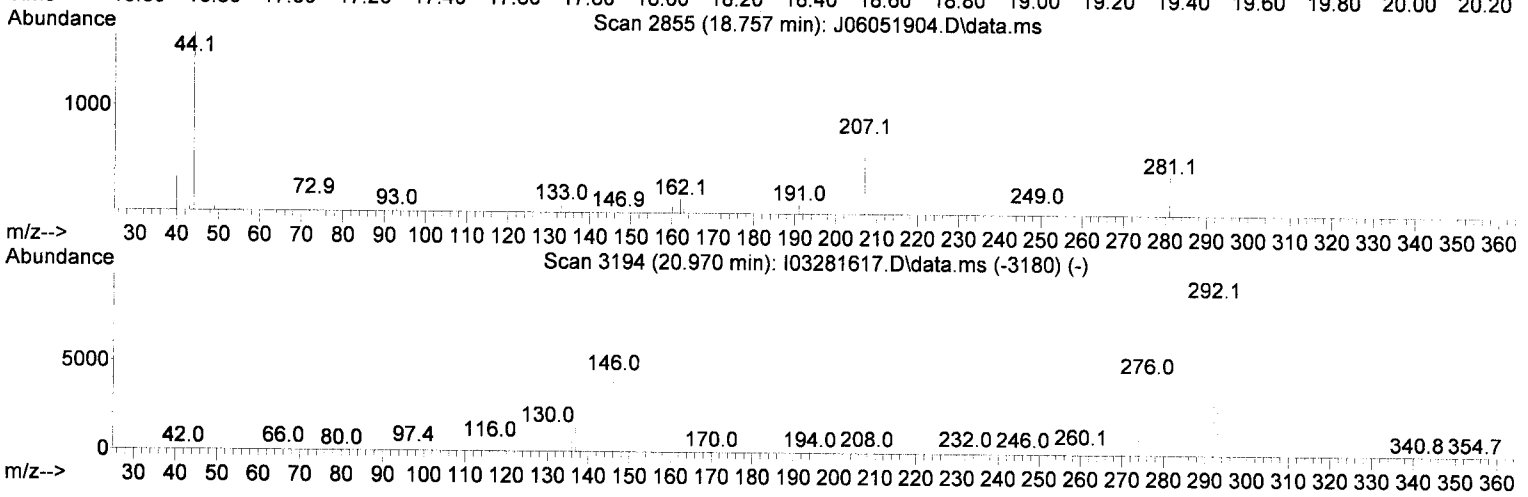
Ion	Exp%	Act%
256.00	100.00	0.00
241.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J06051904.D\data.ms

(51) C-3 Benz(a)anthracene/Chrysenes (T)

18.757min (+ 0.337) 0.05 ng/ml m

response 17

Ion	Exp%	Act%
270.00	100.00	100.00
255.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

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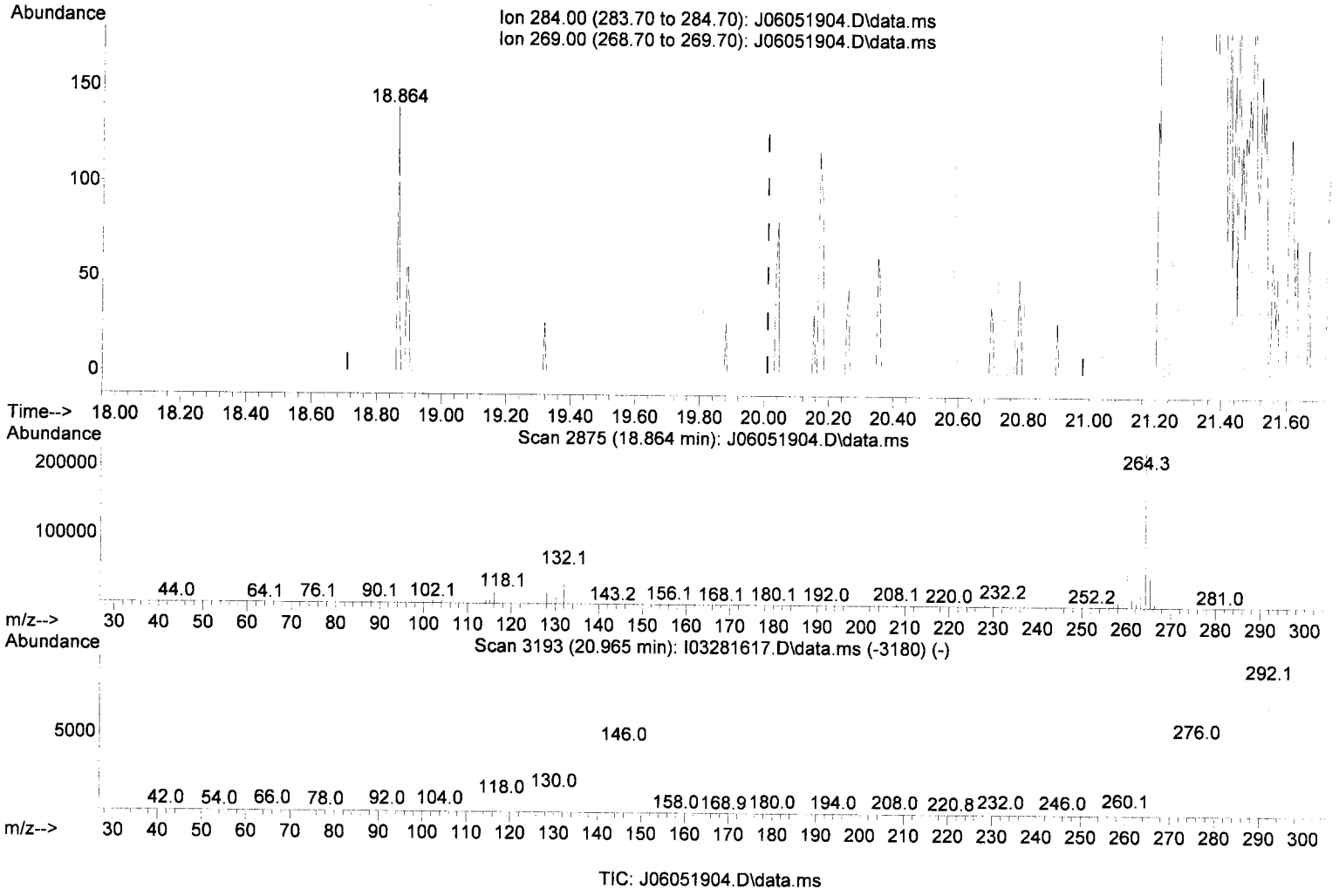
Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:23:52 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06051904.D\data.ms

(52) C-4 Benz(a)anthracene/Chrysenes

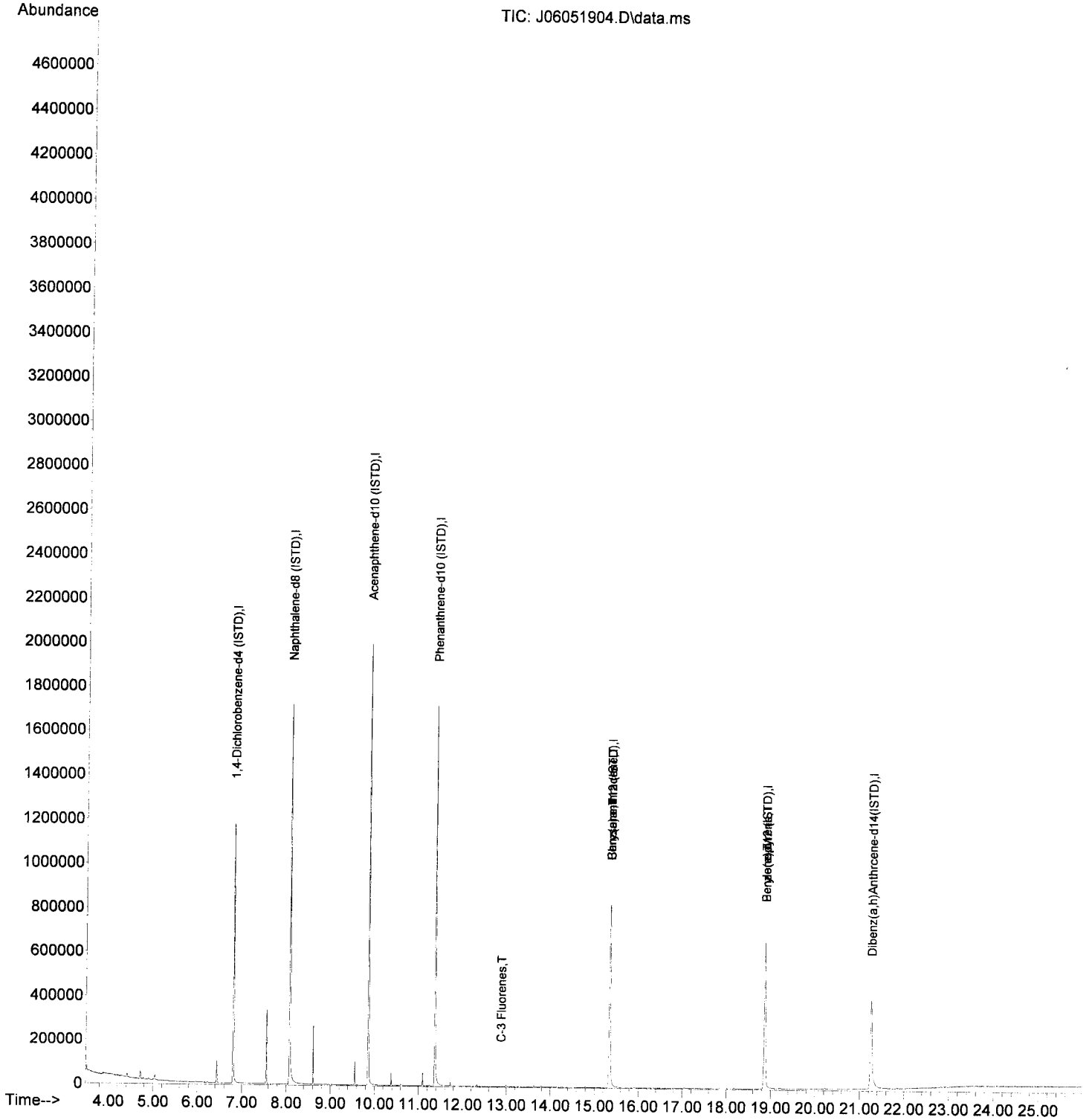
18.864min (-1.146) 1.17 ng/ml m

response 371

Ion	Exp%	Act%
284.00	100.00	100.00
269.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Data Path : T:\data\2019-06\9F05024\homolog\
Data File : J06051904.D
Acq On : 5 Jun 2019 9:43 am
Operator : JK/ AMS/ DTH
Sample : 9F05024-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 10:25:20 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051912.D
Acq On : 5 Jun 2019 2:34 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 15:10:04 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	167873	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	905272	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	434527	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	701002	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.340	240	569762	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	474522	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	421107	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.541	112	203656	1866.17 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	319116	2273.28 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	298488	2345.22 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	582685	1900.57 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	62176	1787.70 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	644376	2402.60 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.086	74	71	N.D.	
3) Pyridine	4.145	79	638m	4.73 ng/ml#	
6) Phenol	6.477	94	1779	20.95 ng/ml#	1
7) Aniline	6.488	93	66	N.D.	
8) Bis(2-chloroethyl) ether	6.525	93	621	4.37 ng/ml#	38
9) 2-Chlorophenol	6.611	128	81	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	7.001	107	82	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.054	45	194	N.D.	
16) N-Nitrosodi-n-propylamine	7.194	70	150	N.D.	
17) 3+4-Methylphenol	7.247	107	509	13.99 ng/ml#	31
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.354	77	1182	9.90 ng/ml#	24
22) Isophorone	7.611	82	212	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.761	122	75	25.89 ng/ml#	4
25) Bis(2-chloroethoxy) me...	7.798	93	137	N.D.	
26) Benzoic acid	7.782	105	135	753.63 ng/ml#	29
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.092	128	964	N.D.	
30) 4-Chloroaniline	8.076	127	84	14.99 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.643	107	226	65.27 ng/ml#	1
33) 2-Methylnaphthalene	8.798	142	327	N.D.	
34) 1-Methylnaphthalene	8.905	142	216	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	9.263	154	1218	3.46 ng/ml	77
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	9.435	156	175	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051912.D
Acq On : 5 Jun 2019 2:34 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

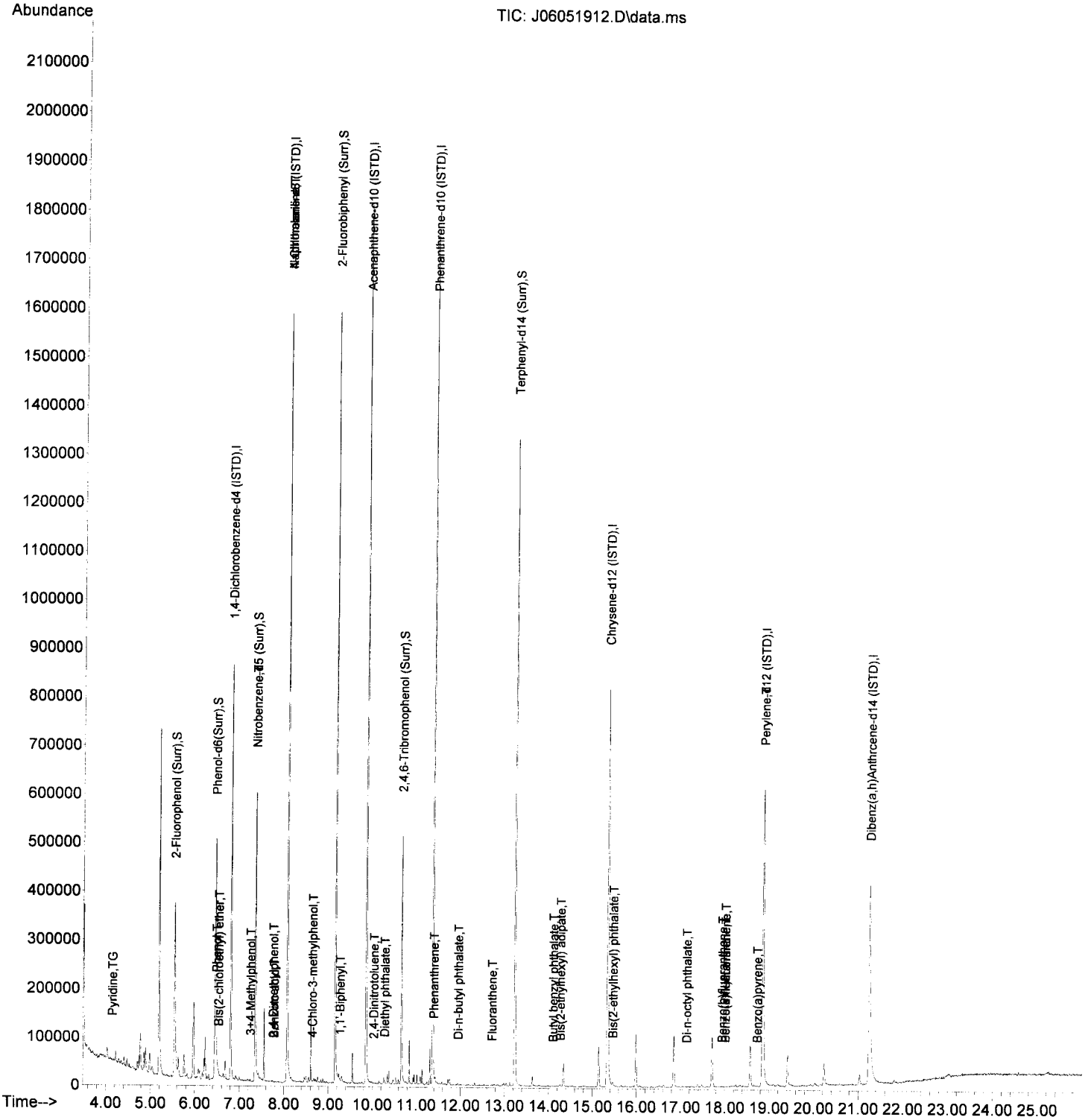
Quant Time: Jun 05 15:10:04 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.568	163	117	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	9.723	152	51	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.889	153	263	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.028	165	344	64.31 ng/ml#	39
55) Dibenzofuran	10.071	168	205	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	10.274	149	832	2.88 ng/ml	71
59) 2,3,5-Trimethylnaphtha...	10.194	170	54	N.D.	
60) Fluorene	10.424	166	161	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	10.569	169	115	N.D.	
66) Azobenzene (1,2-DPH)	10.574	77	473	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	11.392	178	1283	3.37 ng/ml	81
72) Anthracene	11.467	178	316	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.943	149	1727	4.03 ng/ml	88
75) Fluoranthene	12.713	202	1010	2.66 ng/ml	86
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.029	202	845	N.D.	
80) Butyl benzyl phthalate	14.104	149	552	32.58 ng/ml	67
81) Bis(2-ethylhexyl) adipate	14.264	129	1445	8.90 ng/ml	87
82) 3,3-Dichlorobenzidine	15.302	252	134	Below Cal #	52
83) Benz(a)anthracene	15.318	228	702	N.D.	
84) Chrysene	15.393	228	234	N.D.	
85) Bis(2-ethylhexyl) phth...	15.457	149	3004	12.55 ng/ml	86
87) Di-n-octyl phthalate	17.131	149	108	66.54 ng/ml#	1
88) Benzo(b)fluoranthene	17.934	252	463	10.56 ng/ml	54
89) Benzo(k)fluoranthene	18.003	252	80	10.70 ng/ml	53
90) Benzo(b+k)fluoranthene	18.003	252	627	19.32 ng/ml	53
91) Benzo(e)pyrene	18.570	252	210	N.D.	
92) Benzo(a)pyrene	18.725	252	151	11.02 ng/ml	59
93) Perylene	18.859	252	1817	7.54 ng/ml	62
95) Indeno(1,2,3-cd)pyrene	21.250	276	253	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	64	N.D.	
97) Benzo(g,h,i)perylene	21.827	276	57	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051912.D
Acq On : 5 Jun 2019 2:34 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BLK1
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 15:10:04 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051913.D
Acq On : 5 Jun 2019 3:11 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 15:39:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	187789	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	918197	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	435604	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	720595	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.345	240	567014	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.859	264	486642	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	439368	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.546	112	52222	427.78	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	89989	573.07	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.348	82	78682	570.24	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	159349	518.47	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	17982	521.33	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	158495	593.82	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.102	74	64329m	695.21	ng/ml	
3) Pyridine	4.145	79	67565	447.51	ng/ml	91
6) Phenol	6.466	94	167113	954.07	ng/ml	97
7) Aniline	6.482	93	110291	597.37	ng/ml	70
8) Bis(2-chloroethyl) ether	6.530	93	130022	817.76	ng/ml	94
9) 2-Chlorophenol	6.610	128	112032	877.55	ng/ml	95
10) 1,3-Dichlorobenzene	6.749	146	106293	739.96	ng/ml	100
11) 1,4-Dichlorobenzene	6.819	146	107398	749.42	ng/ml	98
12) Benzyl alcohol	6.942	108	67104	898.27	ng/ml	96
13) 1,2-Dichlorobenzene	6.974	146	109019	781.63	ng/ml	97
14) 2-Methylphenol	7.054	107	104632	1058.09	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	147545	820.04	ng/ml	90
16) N-Nitrosodi-n-propylamine	7.193	70	99225	953.62	ng/ml	96
17) 3+4-Methylphenol	7.204	107	132648	1016.52	ng/ml	98
18) Hexachloroethane	7.306	201	30330	785.27	ng/ml	98
20) Nitrobenzene	7.370	77	135526	1014.53	ng/ml	96
22) Isophorone	7.600	82	276242	807.78	ng/ml	99
23) 2-Nitrophenol	7.691	139	71610	999.63	ng/ml	93
24) 2,4-Dimethylphenol	7.728	122	109236	779.08	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.808	93	155102	845.63	ng/ml	100
26) Benzoic acid	7.798	105	39730	1197.53	ng/ml	96
27) 2,4-Dichlorophenol	7.937	162	97065	863.58	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.017	180	104474	801.08	ng/ml	98
29) Naphthalene	8.097	128	383584	807.07	ng/ml	100
30) 4-Chloroaniline	8.151	127	95127	635.49	ng/ml	98
31) Hexachlorobutadiene	8.220	225	52666	743.26	ng/ml	98
32) 4-Chloro-3-methylphenol	8.632	107	115327	868.73	ng/ml	96
33) 2-Methylnaphthalene	8.793	142	256653	823.48	ng/ml	98
34) 1-Methylnaphthalene	8.894	142	242524	802.23	ng/ml	97
36) Hexachlorocyclopentadiene	8.958	237	51248	859.46	ng/ml	98
37) 2,4,6-Trichlorophenol	9.081	196	63619	826.48	ng/ml	96
38) 2,4,5-Trichlorophenol	9.124	198	66825	965.81	ng/ml	90
39) 1,1'-Biphenyl	9.263	154	292977	829.70	ng/ml	99
41) 2-Chloronaphthalene	9.290	162	222690	891.78	ng/ml	99
42) 2-Nitroaniline	9.386	138	78213	970.18	ng/ml	96
43) 2,6-Dimethylnaphthalene	9.424	156	217097	838.54	ng/ml	98

Data Path : T:\data\2019-06\9F05024\
Data File : J06051913.D
Acq On : 5 Jun 2019 3:11 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

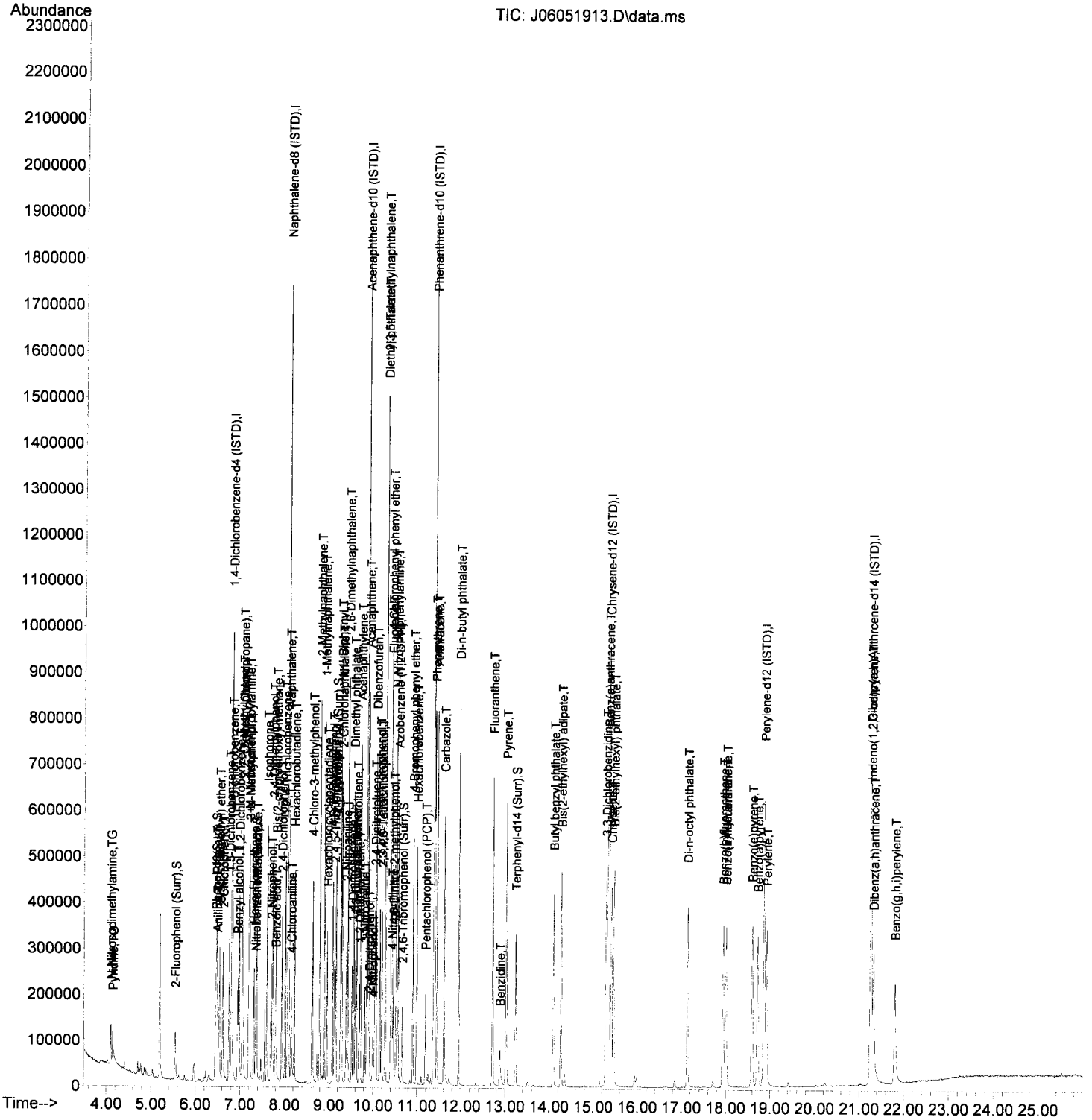
Quant Time: Jun 05 15:39:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	34223	1168.53	ng/ml	96
45) Dimethyl phthalate	9.557	163	267247	882.03	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	39518	1058.15	ng/ml	99
47) 2,6-Dinitrotoluene	9.627	165	59902	939.69	ng/ml	91
48) 1,2-Dinitrobenzene	9.686	168	27499	941.96	ng/ml	88
49) Acenaphthylene	9.713	152	376162	863.27	ng/ml	97
50) 3-Nitroaniline	9.803	138	51528	865.26	ng/ml	99
51) Acenaphthene	9.889	153	233756	834.13	ng/ml	96
52) 2,4-Dinitrophenol	9.910	184	16316	1312.12	ng/ml	91
53) 4-Nitrophenol	9.991	139	27049	683.27	ng/ml	93
54) 2,4-Dinitrotoluene	10.039	165	77370	993.12	ng/ml	92
55) Dibenzofuran	10.060	168	311008	849.47	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	10.146	232	48580	888.60	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.194	232	51901	872.60	ng/ml	94
58) Diethyl phthalate	10.274	149	269460	931.15	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.269	170	200267	865.21	ng/ml	98
60) Fluorene	10.413	166	243850	850.53	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.403	204	108137	824.22	ng/ml	99
62) 4-Nitroaniline	10.429	138	55092	1005.55	ng/ml	91
63) 4,6-Dinitro-2-methylph...	10.456	198	33820	1478.30	ng/ml	92
65) N-Nitrosodiphenylamine	10.520	169	204493	921.73	ng/ml	99
66) Azobenzene (1,2-DPH)	10.563	77	270096	899.51	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.900	248	59310	836.18	ng/ml	91
69) Hexachlorobenzene	10.986	284	71265	824.02	ng/ml	97
70) Pentachlorophenol (PCP)	11.183	266	27904	732.35	ng/ml	94
71) Phenanthrene	11.397	178	343908	879.53	ng/ml	99
72) Anthracene	11.446	178	343872	902.99	ng/ml	98
73) Carbazole	11.606	167	306280	950.36	ng/ml	99
74) Di-n-butyl phthalate	11.938	149	431401	979.05	ng/ml	99
75) Fluoranthene	12.708	202	367664	942.88	ng/ml	99
76) Benzidine	12.879	184	59971	484.93	ng/ml	97
77) Pyrene	13.018	202	374570	932.13	ng/ml	98
80) Butyl benzyl phthalate	14.093	149	168914	1022.21	ng/ml	99
81) Bis(2-ethylhexyl) adipate	14.264	129	148406	918.53	ng/ml	97
82) 3,3-Dichlorobenzidine	15.280	252	197735	4408.09	ng/ml	100
83) Benz(a)anthracene	15.323	228	305017	985.82	ng/ml	97
84) Chrysene	15.403	228	291586	971.26	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.457	149	239987	1007.59	ng/ml	99
87) Di-n-octyl phthalate	17.131	149	347470	1036.08	ng/ml	97
88) Benzo(b)fluoranthene	17.933	252	281203	1002.15	ng/ml	96
89) Benzo(k)fluoranthene	18.003	252	285129	1000.20	ng/ml	95
90) Benzo(b+k)fluoranthene	18.003	252	579408	2013.99	ng/ml	95
91) Benzo(e)pyrene	18.591	252	274038	1026.94	ng/ml	97
92) Benzo(a)pyrene	18.714	252	259771	1012.50	ng/ml	98
93) Perylene	18.918	252	260007	1052.55	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.260	276	210999	858.44	ng/ml	90
96) Dibenz(a,h)anthracene	21.314	278	216063	982.69	ng/ml	98
97) Benzo(g,h,i)perylene	21.800	276	209830	883.24	ng/ml	99

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051913.D
Acq On : 5 Jun 2019 3:11 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-BS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 15:39:00 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051914.D
Acq On : 5 Jun 2019 3:47 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02@40
Misc : 40x, 8270D LL PAH
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

RR1

Quant Time: Jun 05 16:27:18 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 6/5/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	141291	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	842326	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	417814	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	690977	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	554293	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	473719	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	403207	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.578	112	1131	12.31 ng/ml	0.03
5) Phenol-d6(Surr)	6.514	99	2112	17.88 ng/ml	0.06
19) Nitrobenzene-d5 (Surr)	7.375	82	4698	62.43 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.167	172	13249	44.94 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.681	330	721	47.57 ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.237	244	11367	43.57 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.102	79	194	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	6.466	93	59	N.D.	
8) Bis(2-chloroethyl) ether	6.466	93	59	N.D.	
9) 2-Chlorophenol	6.541	128	51	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.135	45	145	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	7.338	77	53	N.D.	
22) Isophorone	7.589	82	138	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	8.718	142	50	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	9.269	154	58	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051914.D
Acq On : 5 Jun 2019 3:47 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02@40
Misc : 40x, 8270D LL PAH
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

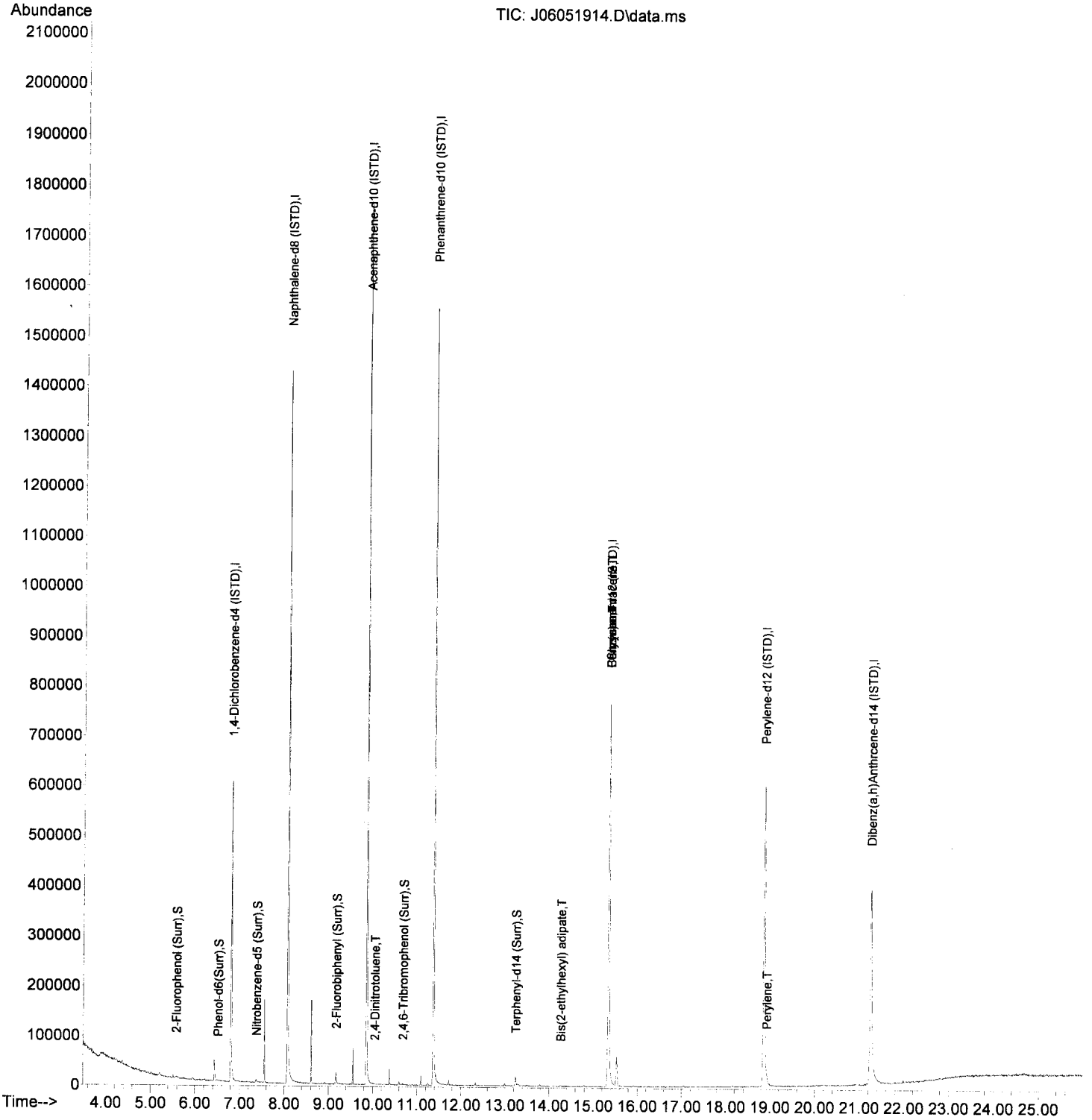
Quant Time: Jun 05 16:27:18 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.547	163	89	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	9.857	138	69	N.D.	
51) Acenaphthene	9.857	153	154	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.039	165	66	60.96 ng/ml#	17
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	10.280	149	90	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	11.371	178	348	N.D.	
72) Anthracene	11.371	178	348	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.954	149	99	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	14.259	129	740	4.69 ng/ml	74
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.345	228	1556	5.14 ng/ml	51
84) Chrysene	15.345	228	1556	5.30 ng/ml	49
85) Bis(2-ethylhexyl) phth...	15.463	149	231	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	18.918	252	11284	46.93 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.255	276	134	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	54	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051914.D
Acq On : 5 Jun 2019 3:47 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02@40
Misc : 40x, 8270D LL PAH
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 16:27:18 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051915.D
Acq On : 5 Jun 2019 4:24 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

RR1

Quant Time: Jun 05 17:32:40 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DNT 6/5/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	195217	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	940637	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	452614	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	728079	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	572680	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	488826	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	419584	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.551	112	50949	401.47 ng/ml	0.00
5) Phenol-d6(Surr)	6.466	99	74853	458.54 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.359	82	73772	516.23 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	151952	475.82 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	13426	392.19 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	142951	530.29 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.214	74	51	N.D.	
3) Pyridine	4.257	79	291	N.D.	
6) Phenol	6.482	94	674	13.28 ng/ml#	1
7) Aniline	6.493	93	107	N.D.	
8) Bis(2-chloroethyl) ether	6.514	93	190	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	6.969	108	61	32.94 ng/ml#	83
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.065	107	135	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.065	45	204	N.D.	
16) N-Nitrosodi-n-propylamine	7.177	70	119	N.D.	
17) 3+4-Methylphenol	7.225	107	77	9.57 ng/ml#	40
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.359	77	610	4.39 ng/ml#	46
22) Isophorone	7.595	82	463	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.766	122	97	26.01 ng/ml#	55
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.841	105	296	755.36 ng/ml#	64
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.108	128	270	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.611	107	84	64.24 ng/ml#	13
33) 2-Methylnaphthalene	8.803	142	193	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	9.258	154	225	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.306	138	54	65.66 ng/ml#	47
43) 2,6-Dimethylnaphthalene	9.440	156	80	N.D.	

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Data Path : T:\data\2019-06\9F05024\
Data File : J06051915.D
Acq On : 5 Jun 2019 4:24 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

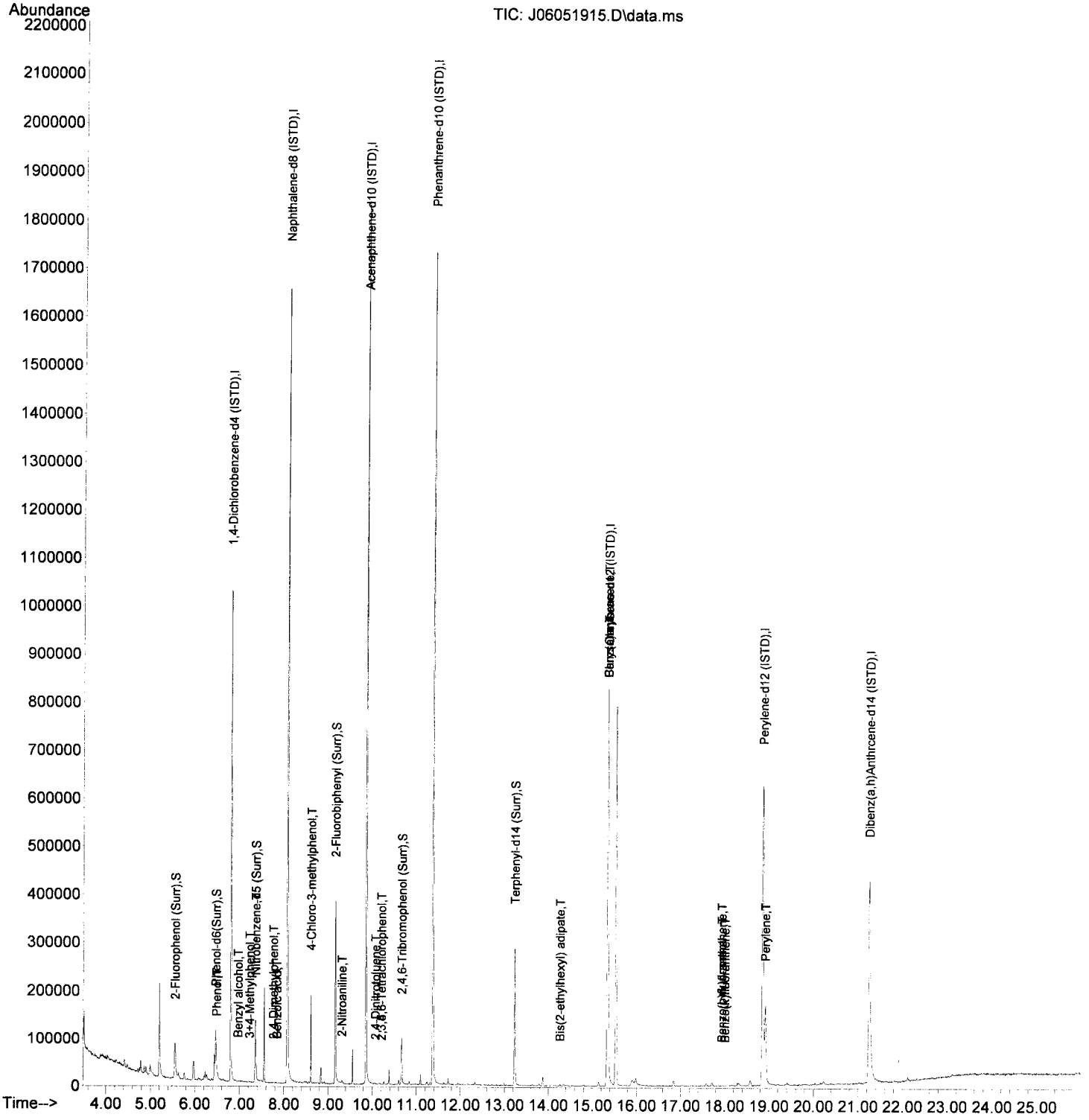
Quant Time: Jun 05 17:32:40 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.697	152	69	N.D.	
50) 3-Nitroaniline	9.857	138	81	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	10.066	165	289	63.50 ng/ml#	17
55) Dibenzofuran	10.071	168	58	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.199	232	51	35.84 ng/ml#	27
57) 2,3,4,6-Tetrachlorophenol	10.199	232	51	13.98 ng/ml#	14
58) Diethyl phthalate	10.274	149	514	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.173	170	79	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)	10.584	77	228	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	11.392	178	323	N.D.	
72) Anthracene	11.451	178	77	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.938	149	836	N.D.	
75) Fluoranthene	12.719	202	81	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.034	202	134	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.259	129	695	4.26 ng/ml	75
82) 3,3-Dichlorobenzidine	15.281	252	50	Below Cal	71
83) Benz(a)anthracene	15.334	228	1568	5.02 ng/ml	76
84) Chrysene	15.334	228	1550	5.11 ng/ml	73
85) Bis(2-ethylhexyl) phth...	15.452	149	336	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	17.928	252	56	9.06 ng/ml	54
89) Benzo(k)fluoranthene	17.998	252	50	10.59 ng/ml	53
90) Benzo(b+k)fluoranthene	17.928	252	56	17.30 ng/ml	53
91) Benzo(e)pyrene	18.602	252	124	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.912	252	124578	502.06 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.239	276	51	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	72	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051915.D
Acq On : 5 Jun 2019 4:24 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 15 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 17:32:40 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051916.D
Acq On : 5 Jun 2019 5:00 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 17:32:56 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DAT 6/5/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	203236	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	955764	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	441186	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	708720	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.340	240	576995	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	501754	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	432419	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.541	112	241147	1825.22 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	353364	2079.25 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	315993	2055.14 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.157	172	571520	1836.01 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	65483	1861.37 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	566519	2085.82 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.204	79	4867m	29.79 ng/ml	
6) Phenol	6.471	94	2425	22.38 ng/ml#	1
7) Aniline	6.488	93	209	N.D.	
8) Bis(2-chloroethyl) ether	6.525	93	716	4.16 ng/ml#	50
9) 2-Chlorophenol	6.621	128	278	N.D.	
10) 1,3-Dichlorobenzene	6.750	146	55	N.D.	
11) 1,4-Dichlorobenzene	6.750	146	55	N.D.	
12) Benzyl alcohol	6.958	108	478	38.08 ng/ml	82
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.033	107	256	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.076	45	423	N.D.	
16) N-Nitrosodi-n-propylamine	7.183	70	158	N.D.	
17) 3+4-Methylphenol	7.194	107	132	10.00 ng/ml#	1
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.354	77	1075	7.44 ng/ml#	39
22) Isophorone	7.595	82	430	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.744	122	271	27.14 ng/ml	90
25) Bis(2-chloroethoxy) me...	7.809	93	139	N.D.	
26) Benzoic acid	7.798	105	2666	781.11 ng/ml#	72
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.097	128	858	N.D.	
30) 4-Chloroaniline	8.135	127	69	14.86 ng/ml#	50
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.632	107	562	67.43 ng/ml	48
33) 2-Methylnaphthalene	8.793	142	601	N.D.	
34) 1-Methylnaphthalene	8.894	142	451	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	9.140	198	72	27.48 ng/ml#	8
39) 1,1'-Biphenyl	9.263	154	1326	3.71 ng/ml	64
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.392	138	50	65.63 ng/ml#	1
43) 2,6-Dimethylnaphthalene	9.429	156	380	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051916.D
Acq On : 5 Jun 2019 5:00 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

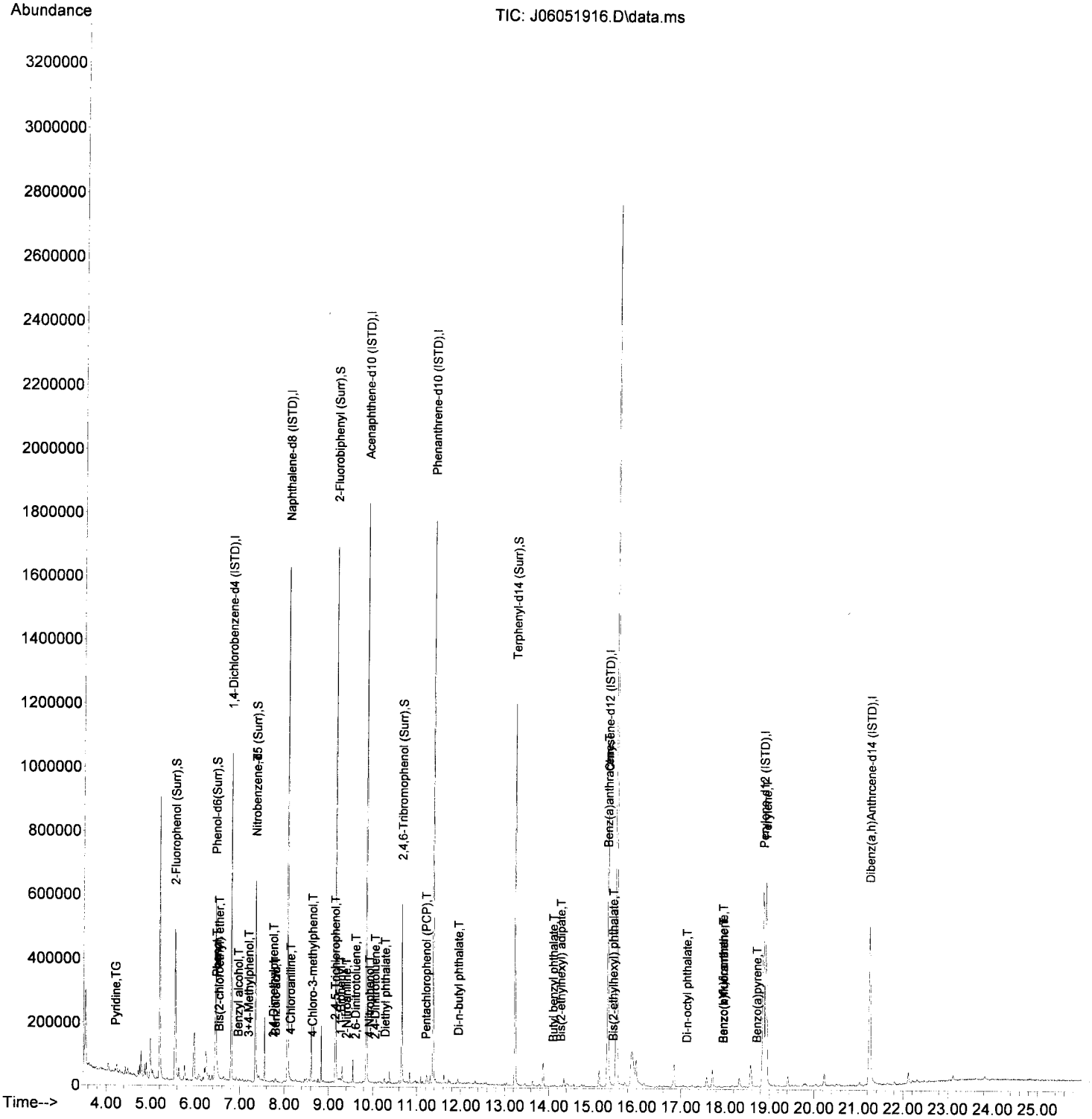
Quant Time: Jun 05 17:32:56 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.558	163	361	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.606	165	92	33.87 ng/ml	83
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.707	152	373	N.D.	
50) 3-Nitroaniline	9.756	138	60	N.D.	
51) Acenaphthene	9.889	153	407	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.916	139	243	78.78 ng/ml#	36
54) 2,4-Dinitrotoluene	10.044	165	195	62.46 ng/ml#	17
55) Dibenzofuran	10.066	168	245	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	10.274	149	1146	3.91 ng/ml	86
59) 2,3,5-Trimethylnaphtha...	10.274	170	401	N.D.	
60) Fluorene	10.408	166	247	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.371	138	55	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.504	169	201	N.D.	
66) Azobenzene (1,2-DPH)	10.542	77	271	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.205	266	60	22.34 ng/ml#	52
71) Phenanthrene	11.392	178	802	N.D.	
72) Anthracene	11.440	178	110	N.D.	
73) Carbazole	11.622	167	251	N.D.	
74) Di-n-butyl phthalate	11.938	149	2291	5.29 ng/ml	89
75) Fluoranthene	12.724	202	655	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.018	202	641	N.D.	
80) Butyl benzyl phthalate	14.093	149	509	32.29 ng/ml#	17
81) Bis(2-ethylhexyl) adipate	14.264	129	1174	7.14 ng/ml	91
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.329	228	1392	4.42 ng/ml	55
84) Chrysene	15.398	228	89	N.D.	
85) Bis(2-ethylhexyl) phth...	15.452	149	1952	8.05 ng/ml	74
87) Di-n-octyl phthalate	17.126	149	61	66.39 ng/ml#	1
88) Benzo(b)fluoranthene	17.944	252	184	9.50 ng/ml	54
89) Benzo(k)fluoranthene	17.955	252	192	11.05 ng/ml	74
90) Benzo(b+k)fluoranthene	17.944	252	376	18.36 ng/ml	53
91) Benzo(e)pyrene	18.586	252	315	N.D.	
92) Benzo(a)pyrene	18.709	252	85	10.74 ng/ml	59
93) Perylene	18.918	252	503191	1975.64 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.250	276	188	N.D.	
96) Dibenz(a,h)anthracene	21.244	278	78	N.D.	
97) Benzo(g,h,i)perylene	21.822	276	78	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051916.D
Acq On : 5 Jun 2019 5:00 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-02RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 17:32:56 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051917.D
Acq On : 5 Jun 2019 5:36 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-DUP1
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 18:28:41 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 6/5/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	160966	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	825061	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	421259	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	669822	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	505082	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	416705	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.244	292	351967	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.546	112	192528	1839.90 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	279249	2074.64 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	245814	2019.12 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	508398	1710.49 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	59316	1784.90 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	491417	2066.92 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.225	74	96	N.D.	
3) Pyridine	4.214	79	3606m	27.86 ng/ml#	
6) Phenol	6.471	94	2208	24.29 ng/ml#	1
7) Aniline	6.455	93	153	N.D.	
8) Bis(2-chloroethyl) ether	6.530	93	589	4.32 ng/ml#	24
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	6.803	146	76	N.D.	
11) 1,4-Dichlorobenzene	6.803	146	76	N.D.	
12) Benzyl alcohol	6.915	108	102	33.75 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.028	107	179	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	54	N.D.	
16) N-Nitrosodi-n-propylamine	7.183	70	93	N.D.	
17) 3+4-Methylphenol	7.204	107	306	12.10 ng/ml#	1
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.354	77	1164	10.17 ng/ml#	42
22) Isophorone	7.595	82	338	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.760	122	109	26.19 ng/ml#	26
25) Bis(2-chloroethoxy) me...	7.819	93	141	N.D.	
26) Benzoic acid	7.798	105	1043	765.24 ng/ml	78
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.092	128	828	N.D.	
30) 4-Chloroaniline	8.103	127	107	15.22 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.643	107	435	67.04 ng/ml#	20
33) 2-Methylnaphthalene	8.798	142	529	N.D.	
34) 1-Methylnaphthalene	8.894	142	489	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	9.263	154	1112	3.26 ng/ml	89
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.354	138	166	67.07 ng/ml#	66
43) 2,6-Dimethylnaphthalene	9.418	156	282	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051917.D
Acq On : 5 Jun 2019 5:36 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-DUP1
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

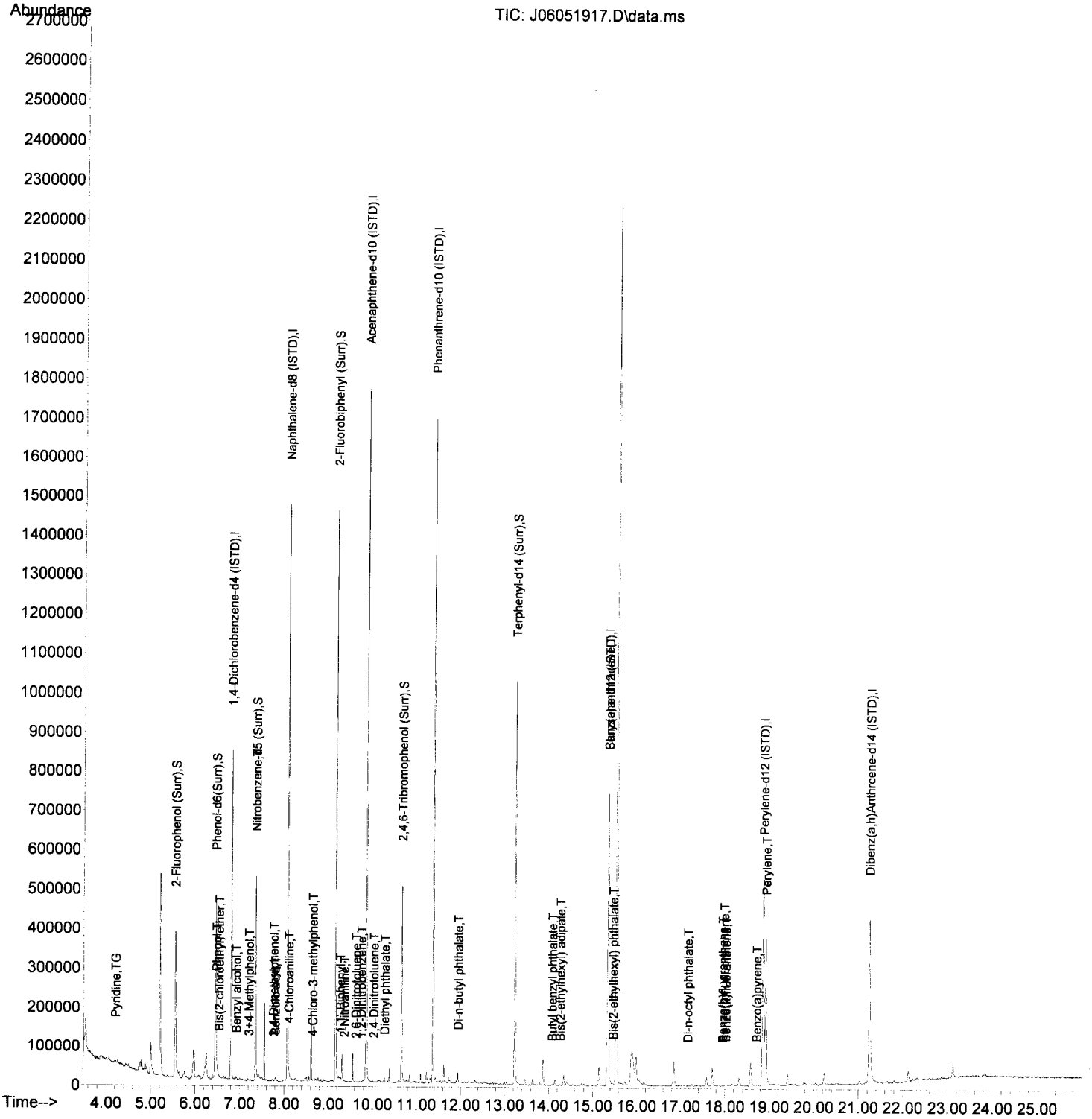
Quant Time: Jun 05 18:28:41 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.563	163	188	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.622	165	173	35.20 ng/ml#	20
48) 1,2-Dinitrobenzene	9.739	168	82	2.90 ng/ml#	65
49) Acenaphthylene	9.713	152	147	N.D.	
50) 3-Nitroaniline	9.846	138	133	N.D.	
51) Acenaphthene	9.889	153	307	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.023	165	202	62.66 ng/ml#	17
55) Dibenzofuran	10.060	168	206	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	10.269	149	1247	4.46 ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.269	170	98	N.D.	
60) Fluorene	10.413	166	82	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.451	138	93	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.531	169	75	N.D.	
66) Azobenzene (1,2-DPH)	10.568	77	691	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	11.397	178	620	N.D.	
72) Anthracene	11.435	178	91	N.D.	
73) Carbazole	11.617	167	111	N.D.	
74) Di-n-butyl phthalate	11.938	149	2671	6.52 ng/ml	98
75) Fluoranthene	12.713	202	511	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.018	202	473	N.D.	
80) Butyl benzyl phthalate	14.077	149	498	32.64 ng/ml	72
81) Bis(2-ethylhexyl) adipate	14.259	129	1236	8.59 ng/ml	92
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.339	228	1530	5.55 ng/ml	67
84) Chrysene	15.387	228	129	N.D.	
85) Bis(2-ethylhexyl) phth...	15.457	149	2121	10.00 ng/ml	95
87) Di-n-octyl phthalate	17.153	149	128	66.65 ng/ml#	35
88) Benzo(b)fluoranthene	17.939	252	193	9.67 ng/ml	54
89) Benzo(k)fluoranthene	18.014	252	79	10.73 ng/ml	53
90) Benzo(b+k)fluoranthene	17.976	252	414	18.77 ng/ml#	1
91) Benzo(e)pyrene	18.581	252	220	N.D.	
92) Benzo(a)pyrene	18.709	252	59	10.69 ng/ml	59
93) Perylene	18.918	252	284582	1345.38 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051917.D
Acq On : 5 Jun 2019 5:36 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-DUP1
Misc : 1x, 8270D LL PAH
ALS Vial : 17 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 18:28:41 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051918.D
Acq On : 5 Jun 2019 6:13 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-05RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/6/19

Quant Time: Jun 06 07:41:10 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.803	152	167176	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	933018	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	474282	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	782104	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	640628	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	547948	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.244	292	488596	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.546	112	197383	1816.23 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	317425	2270.66 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	282068	2227.30 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	568750	1699.61 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	67197	1732.42 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	579185	1920.64 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.113	74	84	N.D.	
3) Pyridine	4.182	79	3653m	27.18 ng/ml#	
6) Phenol	6.466	94	2810	27.61 ng/ml#	1
7) Aniline	6.455	93	190	N.D.	
8) Bis(2-chloroethyl) ether	6.530	93	391	2.76 ng/ml#	47
9) 2-Chlorophenol	6.605	128	122	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	6.953	108	74	33.27 ng/ml#	2
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.038	107	162	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	76	N.D.	
16) N-Nitrosodi-n-propylamine	7.188	70	282	3.04 ng/ml	66
17) 3+4-Methylphenol	7.220	107	241	11.33 ng/ml#	44
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.349	77	1334	11.22 ng/ml#	41
22) Isophorone	7.616	82	1084	3.12 ng/ml	66
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.739	122	207	26.76 ng/ml	72
25) Bis(2-chloroethoxy) me...	7.750	93	146	N.D.	
26) Benzoic acid	7.803	105	2665	781.81 ng/ml	76
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.097	128	1236	2.56 ng/ml	89
30) 4-Chloroaniline	8.162	127	107	15.13 ng/ml#	56
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.643	107	392	66.36 ng/ml#	16
33) 2-Methylnaphthalene	8.793	142	248	N.D.	
34) 1-Methylnaphthalene	8.900	142	311	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	9.263	154	973	2.53 ng/ml	57
41) 2-Chloronaphthalene	9.354	162	56	N.D.	
42) 2-Nitroaniline	9.354	138	62	65.72 ng/ml#	26
43) 2,6-Dimethylnaphthalene	9.365	156	90	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051918.D
Acq On : 5 Jun 2019 6:13 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-05RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

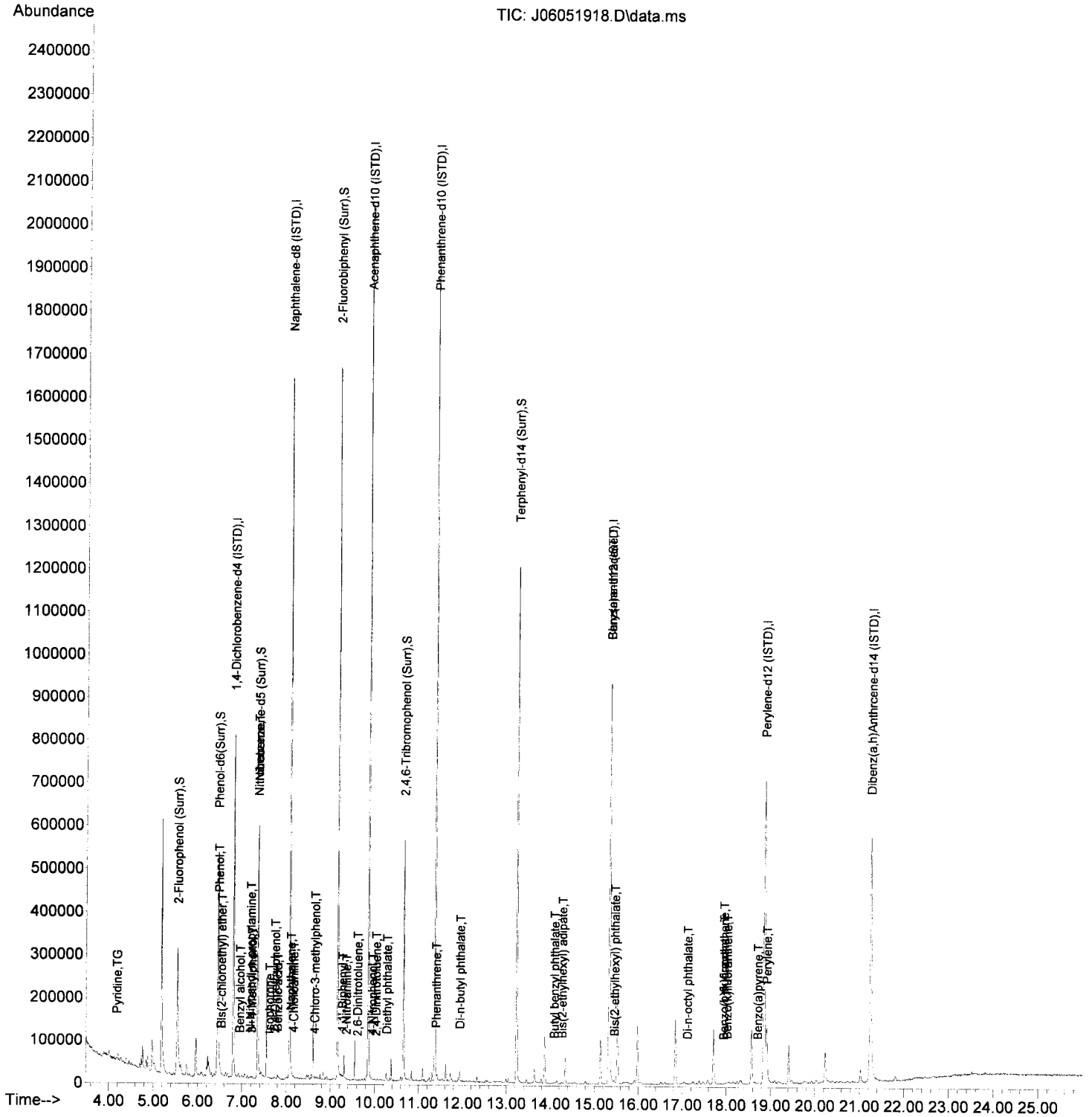
Quant Time: Jun 06 07:41:10 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.568	163	248	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.611	165	76	33.55 ng/ml#	20
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.707	152	126	N.D.	
50) 3-Nitroaniline	9.862	138	127	N.D.	
51) Acenaphthene	9.878	153	169	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.943	139	55	74.37 ng/ml#	1
54) 2,4-Dinitrotoluene	10.028	165	352	64.05 ng/ml#	17
55) Dibenzofuran	10.066	168	306	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	10.274	149	1274	4.04 ng/ml	89
59) 2,3,5-Trimethylnaphtha...	10.274	170	268	N.D.	
60) Fluorene	10.419	166	106	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	10.510	169	144	N.D.	
66) Azobenzene (1,2-DPH)	10.547	77	113	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	11.397	178	1187	2.80 ng/ml	85
72) Anthracene	11.446	178	171	N.D.	
73) Carbazole	11.617	167	254	N.D.	
74) Di-n-butyl phthalate	11.938	149	3979	8.32 ng/ml	94
75) Fluoranthene	12.713	202	882	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	13.018	202	617	N.D.	
80) Butyl benzyl phthalate	14.088	149	636	32.67 ng/ml#	64
81) Bis(2-ethylhexyl) adipate	14.264	129	1156	6.33 ng/ml	77
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.339	228	1761	5.04 ng/ml	78
84) Chrysene	15.388	228	181	N.D.	
85) Bis(2-ethylhexyl) phth...	15.457	149	2192	8.15 ng/ml	100
87) Di-n-octyl phthalate	17.115	149	538	67.58 ng/ml#	1
88) Benzo(b)fluoranthene	17.939	252	296	9.80 ng/ml	54
89) Benzo(k)fluoranthene	18.014	252	184	10.98 ng/ml#	27
90) Benzo(b+k)fluoranthene	17.939	252	296	18.01 ng/ml	53
91) Benzo(e)pyrene	18.581	252	331	N.D.	
92) Benzo(a)pyrene	18.709	252	115	10.82 ng/ml	59
93) Perylene	18.912	252	89889	323.17 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.244	276	264	N.D.	
96) Dibenz(a,h)anthracene	21.287	278	53	N.D.	
97) Benzo(g,h,i)perylene	21.801	276	58	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051918.D
Acq On : 5 Jun 2019 6:13 pm
Operator : JK/ AMS/ DTH
Sample : A9E0766-05RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 18 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 06 07:41:10 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051919.D
Acq On : 5 Jun 2019 6:49 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/6/19

Quant Time: Jun 06 07:41:21 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	194986	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.071	136	966614	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	483854	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	817524	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.345	240	665820	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.859	264	566619	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	517917	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.546	112	53593	422.80	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	90945	557.78	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	79896	558.10	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	152980	448.11	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	18676	479.50	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	143354	457.39	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.075	74	42102m	438.20	ng/ml	#
3) Pyridine	4.113	79	74457	474.95	ng/ml	95
6) Phenol	6.466	94	166434	915.93	ng/ml	97
7) Aniline	6.482	93	118248	616.83	ng/ml	71
8) Bis(2-chloroethyl) ether	6.530	93	136169	824.81	ng/ml	98
9) 2-Chlorophenol	6.610	128	110899	836.61	ng/ml	93
10) 1,3-Dichlorobenzene	6.750	146	102095	684.50	ng/ml	96
11) 1,4-Dichlorobenzene	6.819	146	105466	708.78	ng/ml	99
12) Benzyl alcohol	6.942	108	71676	922.21	ng/ml	95
13) 1,2-Dichlorobenzene	6.974	146	105335	727.34	ng/ml	98
14) 2-Methylphenol	7.049	107	103071	1003.83	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	145995	781.47	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.193	70	100346	928.80	ng/ml	97
17) 3+4-Methylphenol	7.204	107	134646	996.83	ng/ml	99
18) Hexachloroethane	7.311	201	28188	702.87	ng/ml	93
20) Nitrobenzene	7.370	77	131610	948.85	ng/ml	96
22) Isophorone	7.600	82	276589	768.28	ng/ml	99
23) 2-Nitrophenol	7.691	139	69972	932.89	ng/ml	92
24) 2,4-Dimethylphenol	7.728	122	109984	745.93	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.809	93	155778	806.77	ng/ml	97
26) Benzoic acid	7.809	105	67410	1465.01	ng/ml	97
27) 2,4-Dichlorophenol	7.937	162	93993	797.68	ng/ml	98
28) 1,2,4-Trichlorobenzene	8.017	180	100989	735.57	ng/ml	98
29) Naphthalene	8.092	128	371498	742.48	ng/ml	99
30) 4-Chloroaniline	8.151	127	95119	605.36	ng/ml	97
31) Hexachlorobutadiene	8.220	225	52110	698.58	ng/ml	98
32) 4-Chloro-3-methylphenol	8.632	107	117995	846.07	ng/ml	96
33) 2-Methylnaphthalene	8.793	142	252085	768.31	ng/ml	97
34) 1-Methylnaphthalene	8.894	142	243070	763.77	ng/ml	97
36) Hexachlorocyclopentadiene	8.959	237	49034	745.78	ng/ml	99
37) 2,4,6-Trichlorophenol	9.082	196	65857	772.92	ng/ml	98
38) 2,4,5-Trichlorophenol	9.124	198	64726	846.63	ng/ml	92
39) 1,1'-Biphenyl	9.258	154	297541	758.59	ng/ml	99
41) 2-Chloronaphthalene	9.290	162	219820	792.50	ng/ml	99
42) 2-Nitroaniline	9.386	138	78543	884.62	ng/ml	96
43) 2,6-Dimethylnaphthalene	9.424	156	218315	759.16	ng/ml	99

Data Path : T:\data\2019-06\9F05024\
Data File : J06051919.D
Acq On : 5 Jun 2019 6:49 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

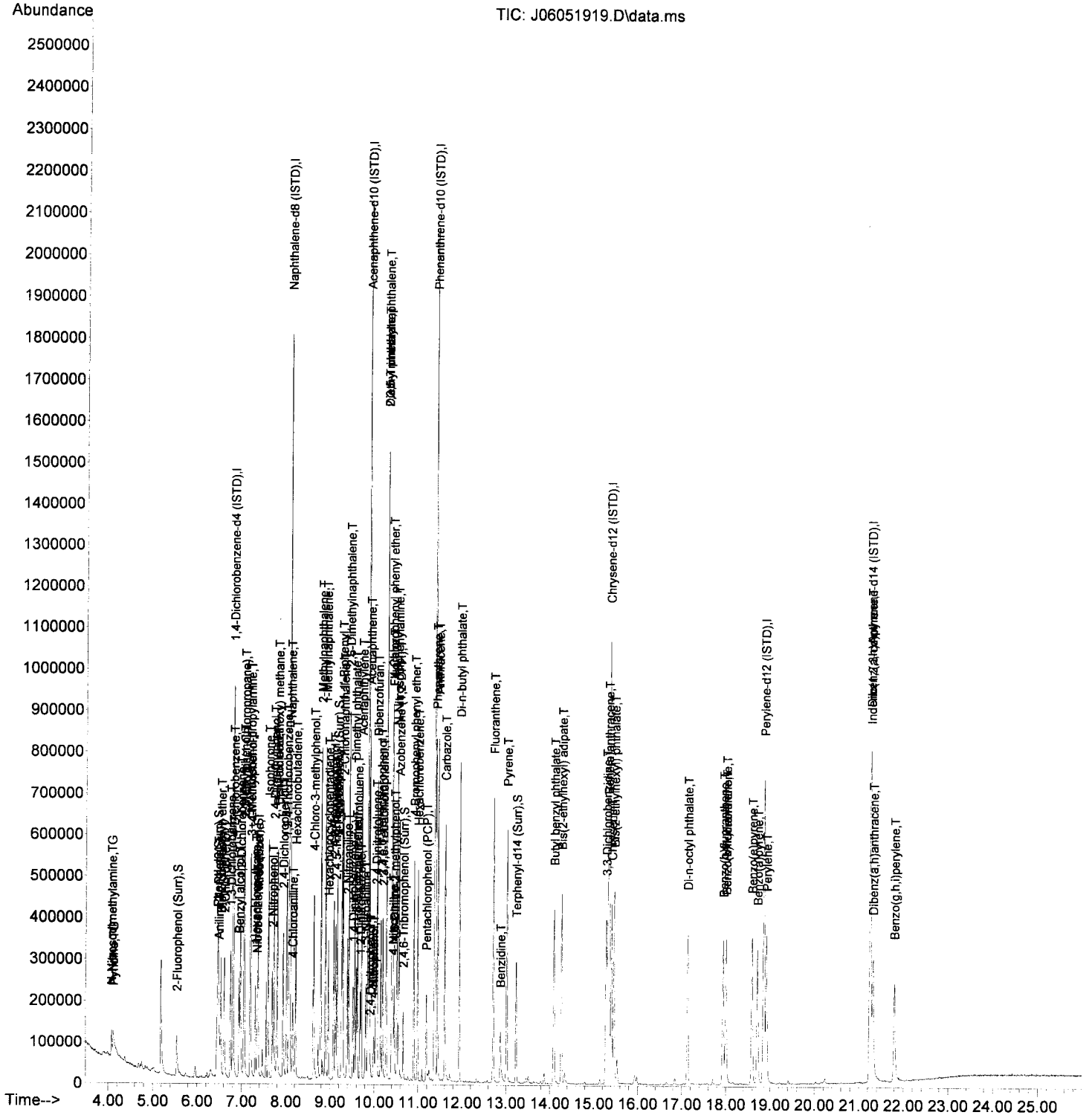
Quant Time: Jun 06 07:41:21 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	31730	1002.50	ng/ml	96
45) Dimethyl phthalate	9.558	163	264928	787.19	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	38364	935.94	ng/ml	99
47) 2,6-Dinitrotoluene	9.622	165	59189	839.32	ng/ml	96
48) 1,2-Dinitrobenzene	9.686	168	25419	783.88	ng/ml	86
49) Acenaphthylene	9.713	152	372484	769.59	ng/ml	98
50) 3-Nitroaniline	9.804	138	50805	768.05	ng/ml	92
51) Acenaphthene	9.889	153	231268	742.96	ng/ml	97
52) 2,4-Dinitrophenol	9.911	184	6565	634.31	ng/ml	95
53) 4-Nitrophenol	9.985	139	28372	650.24	ng/ml	87
54) 2,4-Dinitrotoluene	10.039	165	72555	848.65	ng/ml	93
55) Dibenzofuran	10.060	168	307595	756.37	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	10.146	232	48888	809.32	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.194	232	49907	758.04	ng/ml	95
58) Diethyl phthalate	10.269	149	261913	814.82	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.269	170	198804	773.24	ng/ml	96
60) Fluorene	10.413	166	244958	769.20	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.403	204	106832	733.08	ng/ml	98
62) 4-Nitroaniline	10.429	138	57351	942.40	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.456	198	29051	1197.16	ng/ml	94
65) N-Nitrosodiphenylamine	10.520	169	206963	822.26	ng/ml	98
66) Azobenzene (1,2-DPH)	10.563	77	270793	794.90	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.900	248	61101	759.30	ng/ml	96
69) Hexachlorobenzene	10.986	284	68363	696.75	ng/ml	98
70) Pentachlorophenol (PCP)	11.184	266	27616	643.03	ng/ml	96
71) Phenanthrene	11.398	178	347510	783.37	ng/ml	100
72) Anthracene	11.446	178	344914	798.34	ng/ml	99
73) Carbazole	11.606	167	310485	849.18	ng/ml	99
74) Di-n-butyl phthalate	11.938	149	417181	834.53	ng/ml	99
75) Fluoranthene	12.708	202	360997	816.02	ng/ml	98
76) Benzidine	12.874	184	86197	592.28	ng/ml	97
77) Pyrene	13.018	202	368258	807.77	ng/ml	99
80) Butyl benzyl phthalate	14.093	149	170713	887.08	ng/ml	99
81) Bis(2-ethylhexyl) adipate	14.264	129	145157	765.09	ng/ml	98
82) 3,3-Dichlorobenzidine	15.281	252	172192	3139.87	ng/ml	99
83) Benz(a)anthracene	15.318	228	297780	819.61	ng/ml	99
84) Chrysene	15.398	228	285702	810.43	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.457	149	235171	840.85	ng/ml	100
87) Di-n-octyl phthalate	17.131	149	349207	905.51	ng/ml	96
88) Benzo(b)fluoranthene	17.939	252	274526	843.17	ng/ml	96
89) Benzo(k)fluoranthene	18.003	252	276678	832.70	ng/ml	94
90) Benzo(b+k)fluoranthene	18.003	252	563719	1685.04	ng/ml	94
91) Benzo(e)pyrene	18.591	252	273370	879.84	ng/ml	96
92) Benzo(a)pyrene	18.714	252	255560	857.44	ng/ml	98
93) Perylene	18.918	252	273456	950.74	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.255	276	210947	728.07	ng/ml	95
96) Dibenz(a,h)anthracene	21.314	278	205040	791.12	ng/ml	96
97) Benzo(g,h,i)perylene	21.795	276	215073	768.01	ng/ml	91

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051919.D
Acq On : 5 Jun 2019 6:49 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MS1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 19 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 06 07:41:21 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F05024\
Data File : J06051920.D
Acq On : 5 Jun 2019 7:26 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MSD1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/6/19

Quant Time: Jun 06 07:41:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.803	152	195088	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	971291	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	456992	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	751014	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	592618	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.853	264	510094	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.250	292	459797	2000.00	ng/ml	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.546	112	33711	265.81	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	60532	371.06	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.348	82	52650	374.15	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	112178	347.91	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	15387	432.79	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	146354	524.64	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.102	74	45639m	474.77	ng/ml	
3) Pyridine	4.145	79	63168m	402.73	ng/ml	
6) Phenol	6.466	94	111569	619.01	ng/ml	94
7) Aniline	6.482	93	95878	499.88	ng/ml	70
8) Bis(2-chloroethyl) ether	6.530	93	89675	542.90	ng/ml	95
9) 2-Chlorophenol	6.610	128	74442	561.29	ng/ml	93
10) 1,3-Dichlorobenzene	6.749	146	71243	477.40	ng/ml	97
11) 1,4-Dichlorobenzene	6.819	146	73453	493.38	ng/ml	99
12) Benzyl alcohol	6.942	108	47439	628.57	ng/ml	95
13) 1,2-Dichlorobenzene	6.974	146	74681	515.41	ng/ml	97
14) 2-Methylphenol	7.054	107	73070	711.27	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	94365	504.85	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.193	70	67604	625.41	ng/ml	94
17) 3+4-Methylphenol	7.204	107	94337	729.35	ng/ml	98
18) Hexachloroethane	7.311	201	18670	465.29	ng/ml	98
20) Nitrobenzene	7.370	77	91053	656.11	ng/ml	100
22) Isophorone	7.600	82	193803	535.74	ng/ml	98
23) 2-Nitrophenol	7.691	139	45069	621.24	ng/ml	94
24) 2,4-Dimethylphenol	7.728	122	77265	527.72	ng/ml	92
25) Bis(2-chloroethoxy) me...	7.808	93	105335	542.90	ng/ml	98
26) Benzoic acid	7.798	105	41178	1188.63	ng/ml	99
27) 2,4-Dichlorophenol	7.937	162	68303	588.66	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.017	180	69120	501.02	ng/ml	97
29) Naphthalene	8.092	128	263942	524.98	ng/ml	97
30) 4-Chloroaniline	8.151	127	81935	523.41	ng/ml	96
31) Hexachlorobutadiene	8.220	225	33470	446.53	ng/ml	99
32) 4-Chloro-3-methylphenol	8.632	107	95251	692.10	ng/ml	94
33) 2-Methylnaphthalene	8.793	142	179884	545.62	ng/ml	97
34) 1-Methylnaphthalene	8.894	142	171686	536.87	ng/ml	98
36) Hexachlorocyclopentadiene	8.958	237	27605	458.56	ng/ml	95
37) 2,4,6-Trichlorophenol	9.081	196	50633	636.71	ng/ml	98
38) 2,4,5-Trichlorophenol	9.124	198	53440	744.22	ng/ml	99
39) 1,1'-Biphenyl	9.258	154	216350	584.02	ng/ml	99
41) 2-Chloronaphthalene	9.290	162	159774	609.88	ng/ml	98
42) 2-Nitroaniline	9.386	138	67737	814.35	ng/ml	100
43) 2,6-Dimethylnaphthalene	9.424	156	158757	584.50	ng/ml	99

07/08/19 Anchor Port of Portland - T4 - PDI Page 770 of 1399

Data Path : T:\data\2019-06\9F05024\
Data File : J06051920.D
Acq On : 5 Jun 2019 7:26 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MSD1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

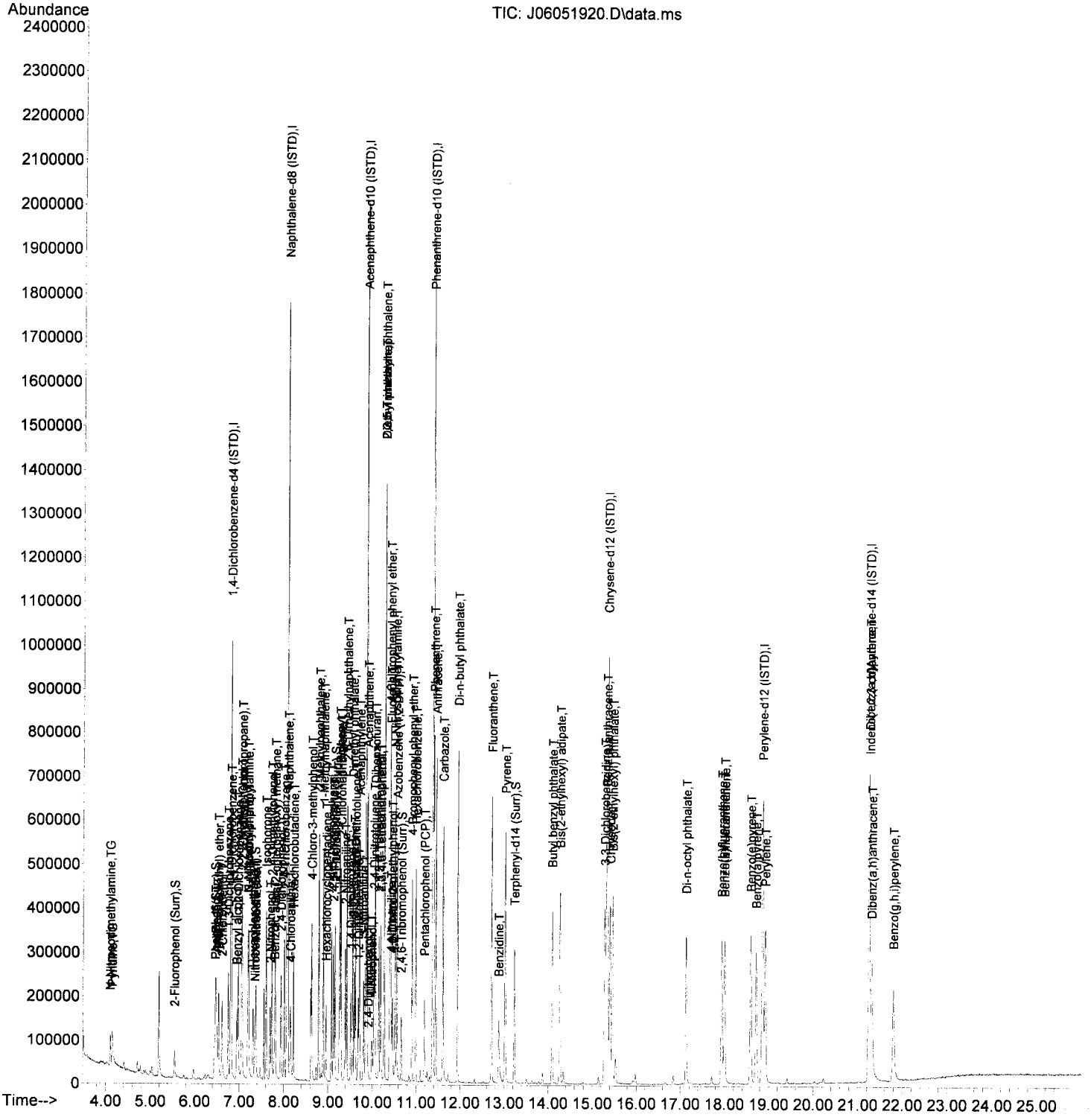
Quant Time: Jun 06 07:41:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	28793	969.31	ng/ml	89
45) Dimethyl phthalate	9.557	163	236706	744.67	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	33248	865.72	ng/ml	99
47) 2,6-Dinitrotoluene	9.622	165	53650	806.74	ng/ml	97
48) 1,2-Dinitrobenzene	9.686	168	23409	764.33	ng/ml	82
49) Acenaphthylene	9.713	152	288019	630.05	ng/ml	99
50) 3-Nitroaniline	9.804	138	49429	791.17	ng/ml	89
51) Acenaphthene	9.889	153	179319	609.93	ng/ml	99
52) 2,4-Dinitrophenol	9.911	184	2998	401.08	ng/ml	76
53) 4-Nitrophenol	9.991	139	26085	635.33	ng/ml	87
54) 2,4-Dinitrotoluene	10.039	165	69728	862.39	ng/ml	96
55) Dibenzofuran	10.060	168	250467	652.10	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	10.146	232	43365	762.76	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	10.194	232	46588	749.44	ng/ml	94
58) Diethyl phthalate	10.269	149	247519	815.30	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.269	170	166604	686.09	ng/ml	95
60) Fluorene	10.413	166	209753	697.36	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.403	204	92310	670.66	ng/ml	98
62) 4-Nitroaniline	10.429	138	55772	970.32	ng/ml	89
63) 4,6-Dinitro-2-methylph...	10.456	198	26564	1165.62	ng/ml	93
65) N-Nitrosodiphenylamine	10.520	169	184159	796.46	ng/ml	99
66) Azobenzene (1,2-DPH)	10.563	77	230864	737.71	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.900	248	54036	730.97	ng/ml	93
69) Hexachlorobenzene	10.986	284	66092	733.26	ng/ml	98
70) Pentachlorophenol (PCP)	11.183	266	26179	662.55	ng/ml	92
71) Phenanthrene	11.392	178	317796	779.83	ng/ml	98
72) Anthracene	11.446	178	317566	800.14	ng/ml	99
73) Carbazole	11.606	167	293110	872.66	ng/ml	99
74) Di-n-butyl phthalate	11.938	149	395842	861.97	ng/ml	99
75) Fluoranthene	12.708	202	344370	847.37	ng/ml	96
76) Benzidine	12.874	184	96119	701.00	ng/ml	95
77) Pyrene	13.023	202	354084	845.46	ng/ml	99
80) Butyl benzyl phthalate	14.088	149	158673	924.14	ng/ml	100
81) Bis(2-ethylhexyl) adipate	14.264	129	134398	795.89	ng/ml	98
82) 3,3-Dichlorobenzidine	15.281	252	166285	3447.76	ng/ml	99
83) Benz(a)anthracene	15.318	228	282349	873.13	ng/ml	98
84) Chrysene	15.404	228	270655	862.59	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.457	149	215769	866.77	ng/ml	98
87) Di-n-octyl phthalate	17.131	149	322177	926.00	ng/ml	96
88) Benzo(b)fluoranthene	17.933	252	255877	872.39	ng/ml	96
89) Benzo(k)fluoranthene	17.998	252	257979	862.57	ng/ml	96
90) Benzo(b+k)fluoranthene	17.998	252	527994	1752.59	ng/ml	96
91) Benzo(e)pyrene	18.591	252	254844	911.10	ng/ml	97
92) Benzo(a)pyrene	18.714	252	239336	891.49	ng/ml	100
93) Perylene	18.918	252	267162	1031.79	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.255	276	239565	931.36	ng/ml	88
96) Dibenz(a,h)anthracene	21.308	278	201442	875.49	ng/ml	95
97) Benzo(g,h,i)perylene	21.801	276	199160	801.08	ng/ml	99

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051920.D
Acq On : 5 Jun 2019 7:26 pm
Operator : JK/ AMS/ DTH
Sample : 9060602-MSD1@4
Misc : 4x, 8270D LL PAH
ALS Vial : 20 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 06 07:41:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data

Sequence 9F06040 (A9E0766-03RE2,04RE2,06RE2,07RE2)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9F06040**	Instrument:	**SV-GCMS9**
Date:	**06/06/19 14:49**	Calibration:	**A9E1009**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F06040-TUN1	Sediment	QC	QC			A19B027	A19E333
2	9F06040-CCV1	Sediment	QC	QC			A19B027	A19C237
3	9F06040-CCB1	Sediment	QC	QC			A19B027	
4	A9E0766-03RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
5	A9E0766-04RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
6	A9E0766-07RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
7	A9E0927-02RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/10/19	9060602	A19B027	
8	A9E0927-04RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/10/19	9060602	A19B027	
9	A9E0838-04RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/07/19	9060602	A19B027	
10	A9E0766-06RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/06/19	9060602	A19B027	
11	9F06040-IBL1	Sediment	QC	QC			A19B027	

Data Entered By: Ams 6/7/19

Data Reviewed By: MK7 6/7/19

Comments:

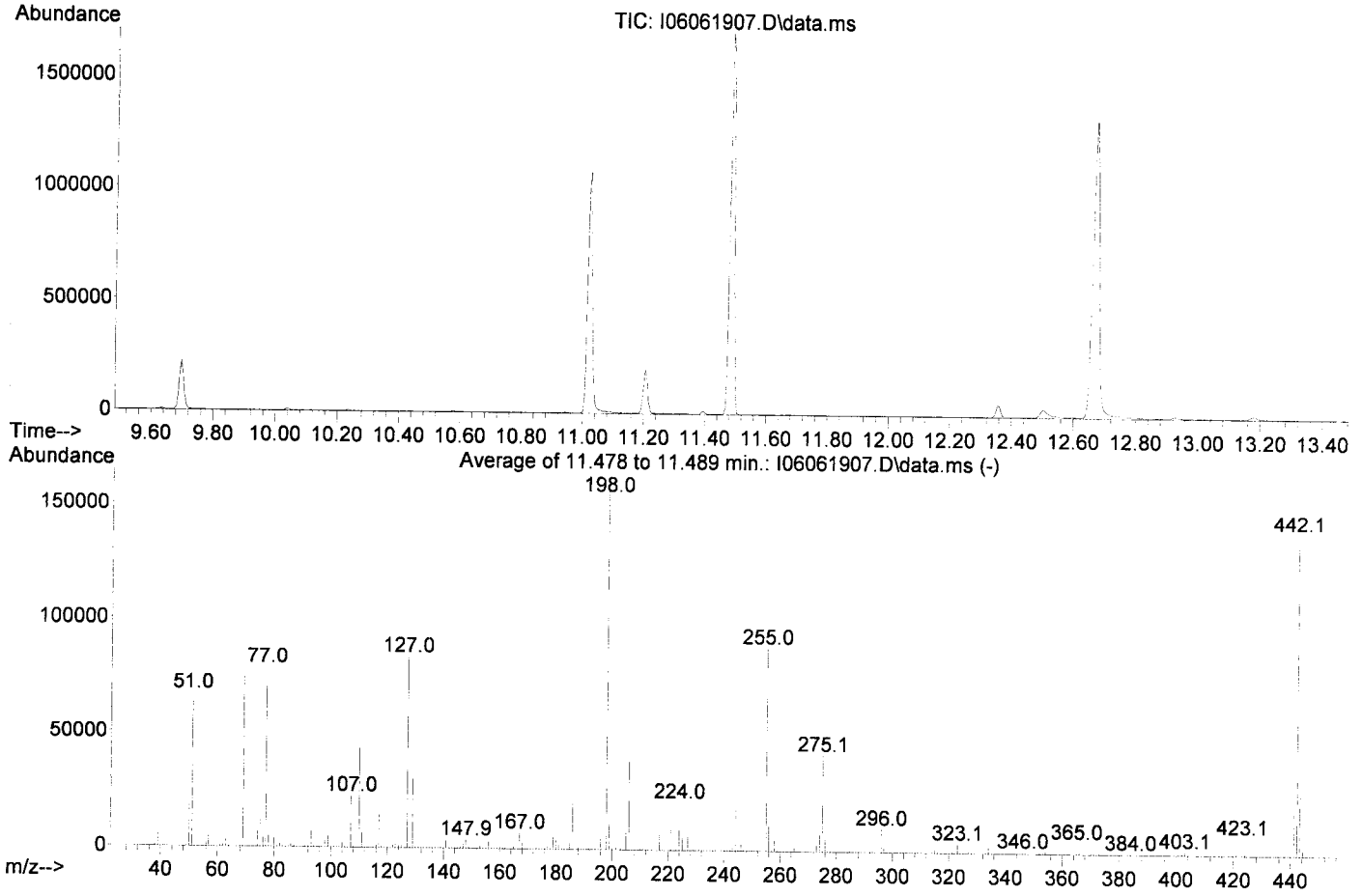
DFTPP

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061907.D
Acq On : 6 Jun 2019 2:54 pm
Operator : JK /AMS /DTH
Sample : 9F06040-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP-8270.M
Title : DFTPP Tune Methodug/mL
Last Update : Wed May 08 19:51:32 2019

DTH 6/6/19



AutoFind: Scans 1494, 1495, 1496; Background Corrected with Scan 1488

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.6	66723	PASS
68	69	0.00	2	0.7	521	PASS
69	198	0.00	100	47.4	74331	PASS
70	69	0.00	2	0.5	344	PASS
127	198	10	80	53.3	83520	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	156680	PASS
199	198	5	9	6.8	10679	PASS
275	198	10	60	26.7	41896	PASS
365	198	1	100	3.1	4812	PASS
441	442	0.01	24	16.1	22565	PASS
442	198	50	200	89.3	139952	PASS
443	442	15	24	19.7	27604	PASS

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061907.D
Acq On : 6 Jun 2019 2:54 pm
Operator : JK /AMS /DTH
Sample : 9F06040-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 06 15:26:24 2019
Quant Method : C:\msdchem\1\methods\DFTPP-8270.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed May 08 19:51:32 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DJH 6/6/19

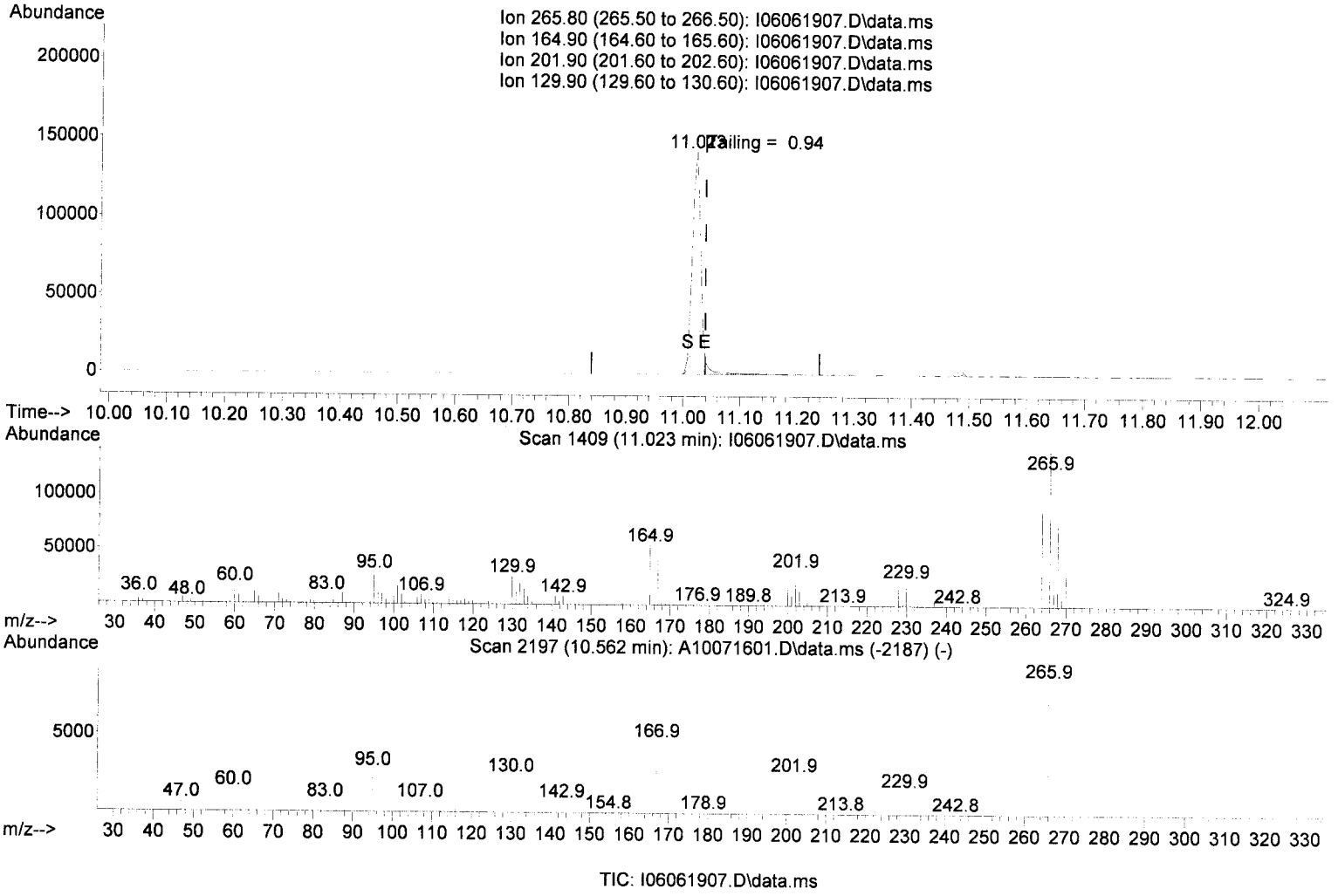
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.926	136	104601	2.00	ug/mL	-0.02
2) Acenaphthene-d10	9.697	162	48772	2.00	ug/mL	-0.02
4) Phenanthrene-d10	11.205	188	77279	2.00	ug/mL	-0.02
10) Chrysene-d12	14.928	240	59277	2.00	ug/mL	-0.02
11) Perylene-d12	16.928	264	52482	2.00	ug/mL	0.00
Target Compounds						Qvalue
3) Pentachlorophenol	11.023	266	150655	27.53	ug/mL	89
5) DFTPP	11.489	442	187094	28.80	ug/mL	91
6) Benzidine	12.671	184	775795	33.34	ug/mL	89
7) 4,4-DDE	12.927	TIC	11441	No Calib	#	
8) 4,4-DDD	13.446	TIC	4605	1.44	ug/mL#	1
9) 4,4-DDT	14.013	TIC	2460219	37.78	ug/mL#	1

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061907.D
Acq On : 6 Jun 2019 2:54 pm
Operator : JK /AMS /DTH
Sample : 9F06040-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 06 15:26:24 2019
Quant Method : C:\msdchem\1\methods\DFTPP-8270.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed May 08 19:51:32 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061907.D\data.ms

(3) Pentachlorophenol

11.023min (-0.016) 27.53 ug/mL

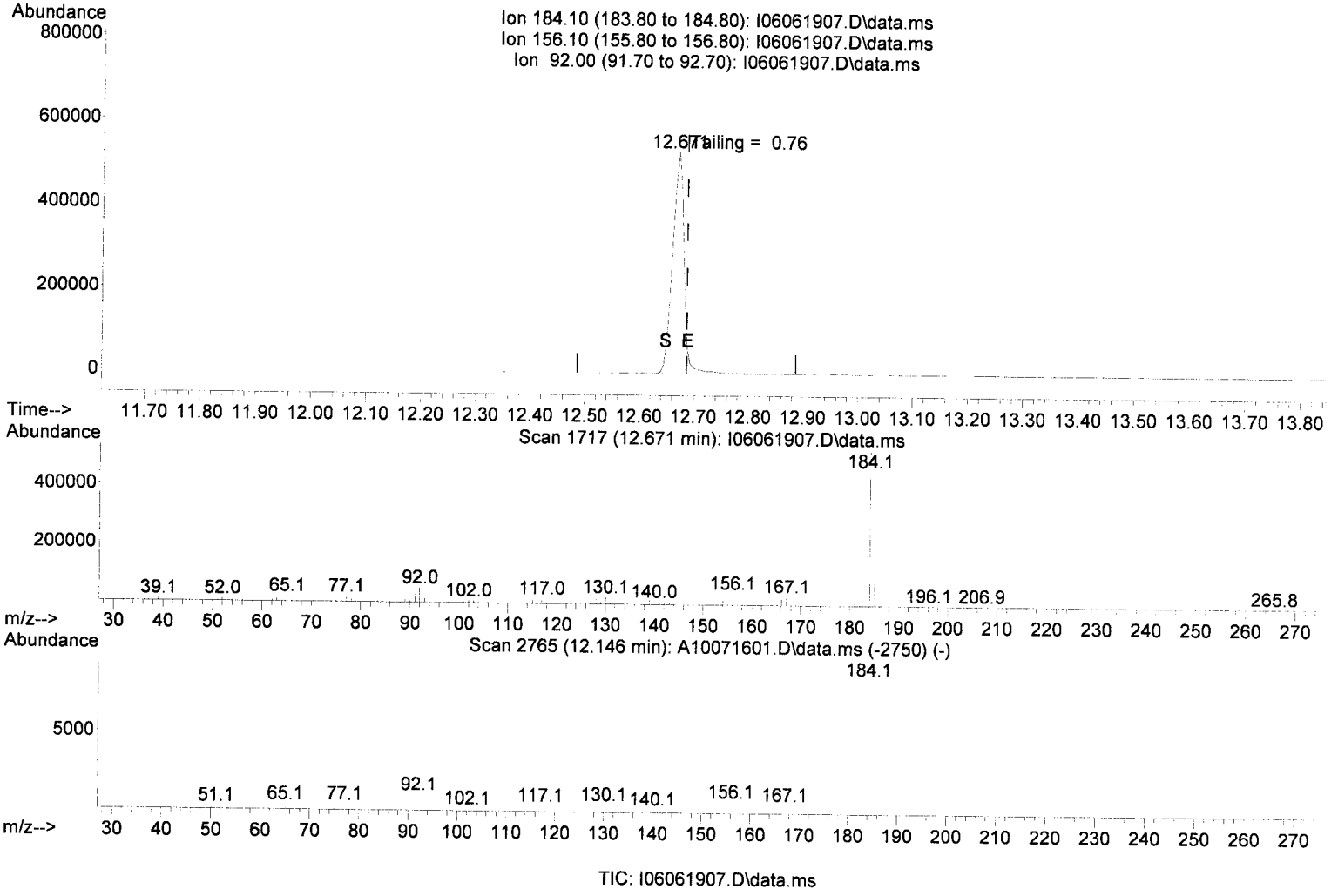
response 150655

Ion	Exp%	Act%
265.80	100.00	100.00
164.90	47.40	38.14
201.90	26.10	22.36
129.90	22.80	17.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061907.D
Acq On : 6 Jun 2019 2:54 pm
Operator : JK /AMS /DTH
Sample : 9F06040-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 06 15:26:24 2019
Quant Method : C:\msdchem\1\methods\DFTPP-8270.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed May 08 19:51:32 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061907.D\data.ms

(6) Benzidine

12.671min (-0.016) 33.34 ug/mL

response 775795

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	9.40	7.20
92.00	15.50	9.50
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

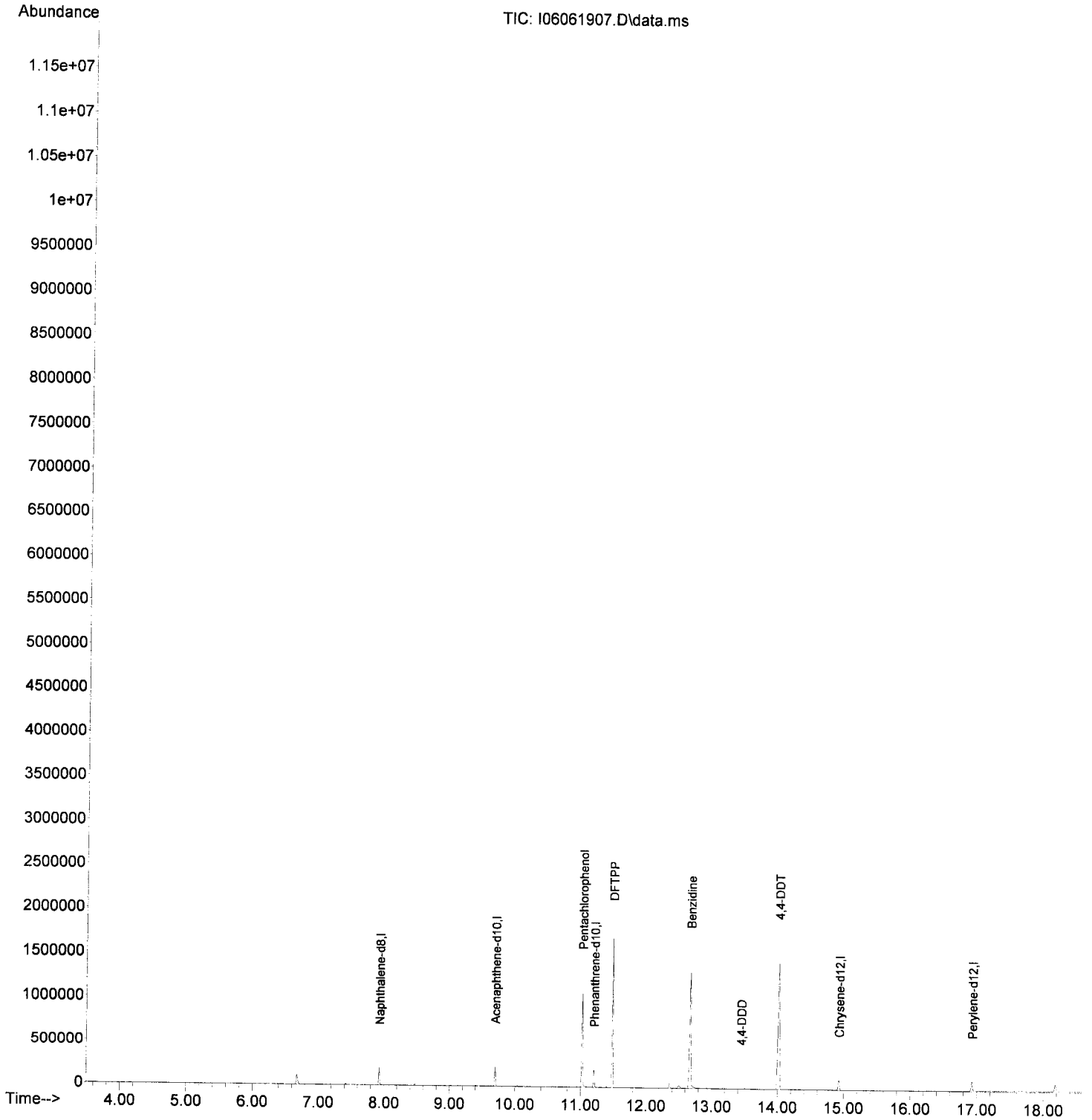
From:
9F06040-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	11441		
DDD	4605		
DDT	2460219	**0.65**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061907.D
Acq On : 6 Jun 2019 2:54 pm
Operator : JK /AMS /DTH
Sample : 9F06040-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 06 15:26:24 2019
Quant Method : C:\msdchem\1\methods\DFTPP-8270.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Wed May 08 19:51:32 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:49 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DTH 6/6/19

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	83	-0.02
2	T	N-Nitrosodimethylamine	1000.000	907.676	9.2	82	-0.03
3	T	Pyridine	1000.000	916.809	8.3	79	-0.03
4	S	2-Fluorophenol (Surr)	1000.000	997.691	0.2	83	-0.02
5	S	Phenol-d6 (Surr)	1000.000	1031.610	-3.2	86	0.00
6	T	Phenol	1000.000	1011.989	-1.2	83	-0.01
7	T	Aniline	1000.000	502.104	49.8#	46	-0.02
8	T	Bis(2-chloroethyl) ether	1000.000	1029.445	-2.9	83	-0.02
9	T	2-Chlorophenol	1000.000	1055.351	-5.5	86	-0.02
10	T	1,3-Dichlorobenzene	1000.000	976.193	2.4	81	-0.02
11	T	1,4-Dichlorobenzene	1000.000	1005.029	-0.5	81	-0.02
12	T	Benzyl alcohol	1000.000	1111.570	-11.2	90	-0.01
13	T	1,2-Dichlorobenzene	1000.000	1042.167	-4.2	85	-0.02
14	T	2-Methylphenol	1000.000	1149.955	-15.0	93	-0.01
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1058.303	-5.8	87	-0.02
16	T	N-Nitrosodi-n-propylamine	1000.000	1087.843	-8.8	88	-0.02
17	T	3+4-Methylphenol	1000.000	1130.048	-13.0	90	0.00
18	T	Hexachloroethane	1000.000	961.506	3.8	80	-0.02
19	S	Nitrobenzene-d5 (Surr)	1000.000	1075.661	-7.6	91	-0.02
20	T	Nitrobenzene	1000.000	1056.648	-5.7	88	-0.01
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	91	-0.02
22	T	Isophorone	1000.000	979.238	2.1	85	-0.02
23	T	2-Nitrophenol	1000.000	1113.317	-11.3	95	-0.01
24	T	2,4-Dimethylphenol	1000.000	1007.125	-0.7	84	-0.01
25	T	Bis(2-chloroethoxy) methane	1000.000	1011.027	-1.1	89	-0.02
26	T	Benzoic acid	2000.000	1589.414	20.5#	59	0.00
27	T	2,4-Dichlorophenol	1000.000	1046.716	-4.7	93	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1000.544	-0.1	87	-0.02
29	T	Naphthalene	1000.000	1044.340	-4.4	91	-0.02
30	T	4-Chloroaniline	1000.000	728.219	27.2#	65	0.00
31	T	Hexachlorobutadiene	1000.000	992.587	0.7	88	-0.02
32	T	4-Chloro-3-methylphenol	1000.000	1010.194	-1.0	90	0.00
33	T	2-Methylnaphthalene	1000.000	1037.191	-3.7	88	-0.02
34	T	1-Methylnaphthalene	1000.000	1048.765	-4.9	89	-0.02
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	88	-0.02
36	T	Hexachlorocyclopentadiene	1000.000	1091.308	-9.1	91	-0.02
37	T	2,4,6-Trichlorophenol	1000.000	1023.944	-2.4	85	-0.01
38	T	2,4,5-Trichlorophenol	1000.000	1089.343	-8.9	89	0.00
39	T	1,1'-Biphenyl	1000.000	1088.965	-8.9	88	-0.02
40	S	2-Fluorobiphenyl (Surr)	1000.000	1090.693	-9.1	89	-0.02
41	T	2-Chloronaphthalene	1000.000	1084.245	-8.4	89	-0.02
42	T	2-Nitroaniline	1000.000	1111.647	-11.2	91	-0.01
43	T	2,6-Dimethylnaphthalene	1000.000	1054.685	-5.5	86	-0.01
44	T	1,4-Dinitrobenzene	1000.000	1112.357	-11.2	95	-0.02
45	T	Dimethyl phthalate	1000.000	1034.259	-3.4	86	-0.01
46	T	1,3-Dinitrobenzene	1000.000	1058.098	-5.8	86	-0.01
47	T	2,6-Dinitrotoluene	1000.000	1097.117	-9.7	87	-0.02
48	T	1,2-Dinitrobenzene	1000.000	1054.973	-5.5	85	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:49 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 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	1057.224	-5.7	86	-0.02
50	T	3-Nitroaniline	1000.000	1141.069	-14.1	91	-0.01
51	T	Acenaphthene	1000.000	1049.101	-4.9	88	-0.02
52	T	2,4-Dinitrophenol	1000.000	1010.954	-1.1	88	0.00
53	T	4-Nitrophenol	1000.000	932.641	6.7	77	0.00
54	T	2,4-Dinitrotoluene	1000.000	1057.224	-5.7	90	-0.01
55	T	Dibenzofuran	1000.000	1080.943	-8.1	88	-0.02
56	T	2,3,5,6-Tetrachlorophenol	1000.000	979.414	2.1	82	-0.02
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1024.483	-2.4	83	-0.01
58	T	Diethyl phthalate	1000.000	1030.811	-3.1	90	-0.02
59	T	2,3,5-Trimethylnaphthalene	1000.000	995.242	0.5	88	-0.02
60	T	Fluorene	1000.000	1006.368	-0.6	90	-0.02
61	T	4-Chlorophenyl phenyl ether	1000.000	1021.487	-2.1	87	0.00
62	T	4-Nitroaniline	1000.000	846.683	15.3	69	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1084.807	-8.5	92	-0.01
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	90	-0.01
65	T	N-Nitrosodiphenylamine	1000.000	1047.425	-4.7	89	-0.01
66	T	Azobenzene (1,2-DPH)	1000.000	1067.331	-6.7	90	-0.01
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1175.722	-17.6	94	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1046.612	-4.7	88	-0.01
69	T	Hexachlorobenzene	1000.000	998.173	0.2	88	-0.02
70	T	Pentachlorophenol (PCP)	1000.000	941.475	5.9	82	-0.01
71	T	Phenanthrene	1000.000	1019.281	-1.9	90	-0.02
72	T	Anthracene	1000.000	1027.686	-2.8	89	-0.01
73	T	Carbazole	1000.000	1017.860	-1.8	83	0.00
74	T	Di-n-butyl phthalate	1000.000	1050.452	-5.0	87	-0.02
75	T	Fluoranthene	1000.000	1018.246	-1.8	85	-0.02
76	T	Benzidine	2000.000	302.589	84.9#	26	-0.01
77	T	Pyrene	1000.000	1001.047	-0.1	85	-0.02
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	86	-0.02
79	S	Terphenyl-d14 (Surr)	1000.000	1046.394	-4.6	86	-0.02
80	T	Butyl benzyl phthalate	1000.000	1064.830	-6.5	84	-0.02
81	T	Bis(2-ethylhexyl) adipate	1000.000	995.675	0.4	84	-0.03
82	T	3,3-Dichlorobenzidine	2000.000	2384.684	-19.2	94	-0.02
83	T	Benz(a)anthracene	1000.000	1008.799	-0.9	84	-0.02
84	T	Chrysene	1000.000	992.344	0.8	85	-0.03
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1074.431	-7.4	87	-0.03
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	87	-0.02
87	T	Di-n-octyl phthalate	1000.000	995.845	0.4	85	-0.03
88	T	Benzo(b)fluoranthene	1000.000	1029.900	-3.0	85	-0.02
89	T	Benzo(k)fluoranthene	1000.000	998.386	0.2	83	-0.03
90	T	Benzo(b+k)fluoranthene	2000.000	2015.050	-0.8	84	-0.03
91	T	Benzo(e)pyrene	1000.000	1044.435	-4.4	84	-0.03
92	T	Benzo(a)pyrene	1000.000	1031.615	-3.2	84	-0.03
93	T	Perylene	1000.000	1152.634	-15.3	94	-0.02
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	87	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:49 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 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	978.979	2.1	86	-0.02
96 T	Dibenz(a,h)anthracene	1000.000	1036.809	-3.7	88	-0.03
97 T	Benzo(g,h,i)perylene	1000.000	1084.466	-8.4	90	-0.03

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:10 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

PMT 6/6/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.681	152	96971	2000.00	ng/ml	-0.02
21) Naphthalene-d8 (ISTD)	7.932	136	397749	2000.00	ng/ml	-0.02
35) Acenaphthene-d10 (ISTD)	9.703	162	198625	2000.00	ng/ml	-0.02
64) Phenanthrene-d10 (ISTD)	11.211	188	382580	2000.00	ng/ml	-0.01
78) Chrysene-d12 (ISTD)	15.035	240	368701	2000.00	ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.517	264	349757	2000.00	ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.903	292	347999	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.451	112	63219	997.69	ng/ml	-0.02
5) Phenol-d6 (Surr)	6.333	99	85062	1031.61	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.216	82	73759	1075.66	ng/ml	-0.02
40) 2-Fluorobiphenyl (Surr)	9.007	172	162433	1090.69	ng/ml	-0.02
67) 2,4,6-Tribromophenol (...	10.505	330	20700	1175.72	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.008	244	189062	1046.39	ng/ml	-0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.145	74	43985	907.68	ng/ml	97
3) Pyridine	4.156	79	67815	916.81	ng/ml	98
6) Phenol	6.344	94	88745	1011.99	ng/ml	96
7) Aniline	6.365	93	37468	502.10	ng/ml	88
8) Bis(2-chloroethyl) ether	6.413	93	75976	1029.44	ng/ml	98
9) 2-Chlorophenol	6.483	128	69888	1055.35	ng/ml	94
10) 1,3-Dichlorobenzene	6.627	146	73940	976.19	ng/ml	97
11) 1,4-Dichlorobenzene	6.697	146	71105	1005.03	ng/ml	96
12) Benzyl alcohol	6.814	108	41409	1111.57	ng/ml	100
13) 1,2-Dichlorobenzene	6.847	146	71140	1042.17	ng/ml	97
14) 2-Methylphenol	6.921	107	57763	1149.96	ng/ml	94
15) 2,2'-Oxybis(1-Chloropr...	6.937	45	95129	1058.30	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.060	70	54767	1087.84	ng/ml	97
17) 3+4-Methylphenol	7.071	107	70579	1130.05	ng/ml	98
18) Hexachloroethane	7.178	201	21916	961.51	ng/ml	89
20) Nitrobenzene	7.237	77	71270	1056.65	ng/ml	90
22) Isophorone	7.467	82	144234	979.24	ng/ml	96
23) 2-Nitrophenol	7.553	139	41872	1113.32	ng/ml	95
24) 2,4-Dimethylphenol	7.590	122	56832	1007.12	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.670	93	87404	1011.03	ng/ml	99
26) Benzoic acid	7.686	105	34017	1589.41	ng/ml	98
27) 2,4-Dichlorophenol	7.793	162	54894	1046.72	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.873	180	63622	1000.54	ng/ml	97
29) Naphthalene	7.954	128	207183	1044.34	ng/ml	100
30) 4-Chloroaniline	8.018	127	37022	728.22	ng/ml	97
31) Hexachlorobutadiene	8.082	225	32772	992.59	ng/ml	97
32) 4-Chloro-3-methylphenol	8.489	107	60333	1010.19	ng/ml	98
33) 2-Methylnaphthalene	8.644	142	155235	1037.19	ng/ml	98
34) 1-Methylnaphthalene	8.745	142	147838	1048.76	ng/ml	98
36) Hexachlorocyclopentadiene	8.809	237	31656	1091.31	ng/ml	98
37) 2,4,6-Trichlorophenol	8.932	196	37836	1023.94	ng/ml	99
38) 2,4,5-Trichlorophenol	8.975	198	37832	1089.34	ng/ml	95
39) 1,1'-Biphenyl	9.109	154	180740	1088.97	ng/ml	98
41) 2-Chloronaphthalene	9.136	162	129665	1084.25	ng/ml	97
42) 2-Nitroaniline	9.237	138	44607	1111.65	ng/ml	88
43) 2,6-Dimethylnaphthalene	9.275	156	128986	1054.69	ng/ml	96

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:10 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

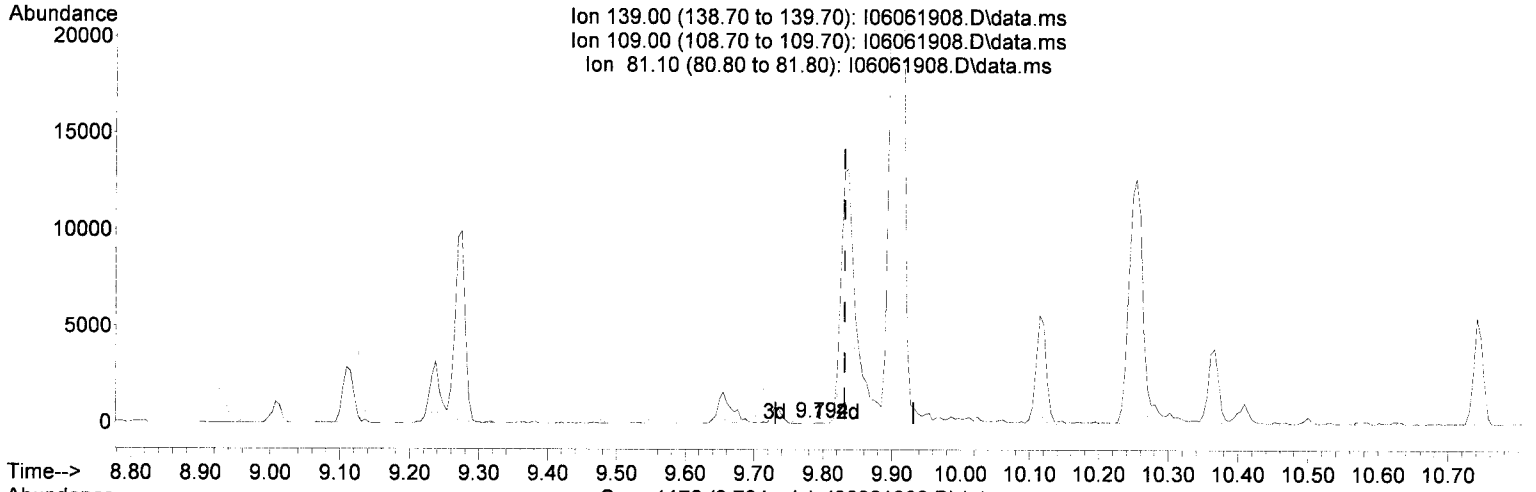
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.360	168	21860	1112.36	ng/ml	85
45) Dimethyl phthalate	9.414	163	143716	1034.26	ng/ml	99
46) 1,3-Dinitrobenzene	9.446	168	23611	1058.10	ng/ml	87
47) 2,6-Dinitrotoluene	9.473	165	34089	1097.12	ng/ml	85
48) 1,2-Dinitrobenzene	9.532	168	16258	1054.97	ng/ml	92
49) Acenaphthylene	9.558	152	207729	1057.22	ng/ml	100
50) 3-Nitroaniline	9.655	138	28022	1141.07	ng/ml	97
51) Acenaphthene	9.735	153	129857	1049.10	ng/ml	99
52) 2,4-Dinitrophenol	9.756	184	10676	1010.95	ng/ml	84
53) 4-Nitrophenol	~~9.794~~	~~139~~	~~55~~	~~60.32~~	~~ng/ml#~~	~~26~~ ML
54) 2,4-Dinitrotoluene	9.885	165	45372	1057.22	ng/ml	85
55) Dibenzofuran	9.906	168	182078	1080.94	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	9.992	232	28938	979.41	ng/ml	92
57) 2,3,4,6-Tetrachlorophenol	10.040	232	31762	1024.48	ng/ml	84
58) Diethyl phthalate	10.120	149	138794	1030.81	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.115	170	120011	995.24	ng/ml	99
60) Fluorene	10.254	166	146090	1006.37	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.248	204	69278	1021.49	ng/ml	88
62) 4-Nitroaniline	10.275	138	25184	846.68	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.302	198	19346	1084.81	ng/ml	74
65) N-Nitrosodiphenylamine	10.366	169	123771	1047.43	ng/ml	98
66) Azobenzene (1,2-DPH)	10.409	77	141553	1067.33	ng/ml	90
68) 4-Bromophenyl phenyl e...	10.746	248	44024	1046.61	ng/ml#	83
69) Hexachlorobenzene	10.826	284	46639	998.17	ng/ml	93
70) Pentachlorophenol (PCP)	11.024	266	19175	941.47	ng/ml	94
71) Phenanthrene	11.232	178	208310	1019.28	ng/ml	99
72) Anthracene	11.286	178	210003	1027.69	ng/ml	99
73) Carbazole	11.452	167	182285	1017.86	ng/ml	97
74) Di-n-butyl phthalate	11.778	149	243756	1050.45	ng/ml	99
75) Fluoranthene	12.511	202	243166	1018.25	ng/ml	97
76) Benzidine	12.666	184	30577	302.59	ng/ml	93
77) Pyrene	12.805	202	243285	1001.05	ng/ml	98
80) Butyl benzyl phthalate	13.821	149	108605	1064.83	ng/ml	94
81) Bis(2-ethylhexyl) adipate	13.987	129	96773	995.67	ng/ml	98
82) 3,3-Dichlorobenzidine	14.976	252	58636	2384.68	ng/ml	90
83) Benz(a)anthracene	15.009	228	216043	1008.80	ng/ml	98
84) Chrysene	15.089	228	196059	992.34	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.153	149	139668	1074.43	ng/ml	95
87) Di-n-octyl phthalate	16.811	149	240890	995.84	ng/ml	99
88) Benzo(b)fluoranthene	17.597	252	227450	1029.90	ng/ml	94
89) Benzo(k)fluoranthene	17.661	252	218534	998.39	ng/ml	94
90) Benzo(b+k)fluoranthene	17.661	252	456495	2015.05	ng/ml	94
91) Benzo(e)pyrene	18.250	252	218415	1044.44	ng/ml	99
92) Benzo(a)pyrene	18.368	252	206467	1031.62	ng/ml	97
93) Perylene	18.576	252	204095	1152.63	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.903	276	187077	978.98	ng/ml	91
96) Dibenz(a,h)anthracene	20.962	278	174915	1036.81	ng/ml	94
97) Benzo(g,h,i)perylene	21.438	276	202637	1084.47	ng/ml	90

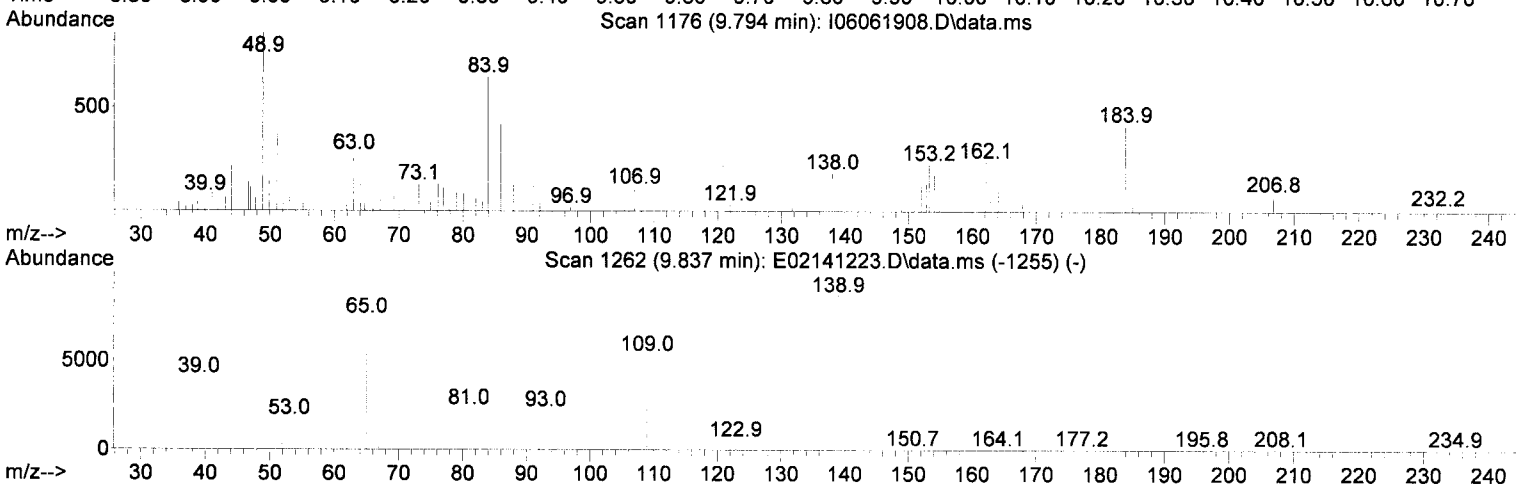
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:10 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I06061908.D\data.ms

(53) 4-Nitrophenol (T)

9.794min (-0.037) 60.32 ng/ml

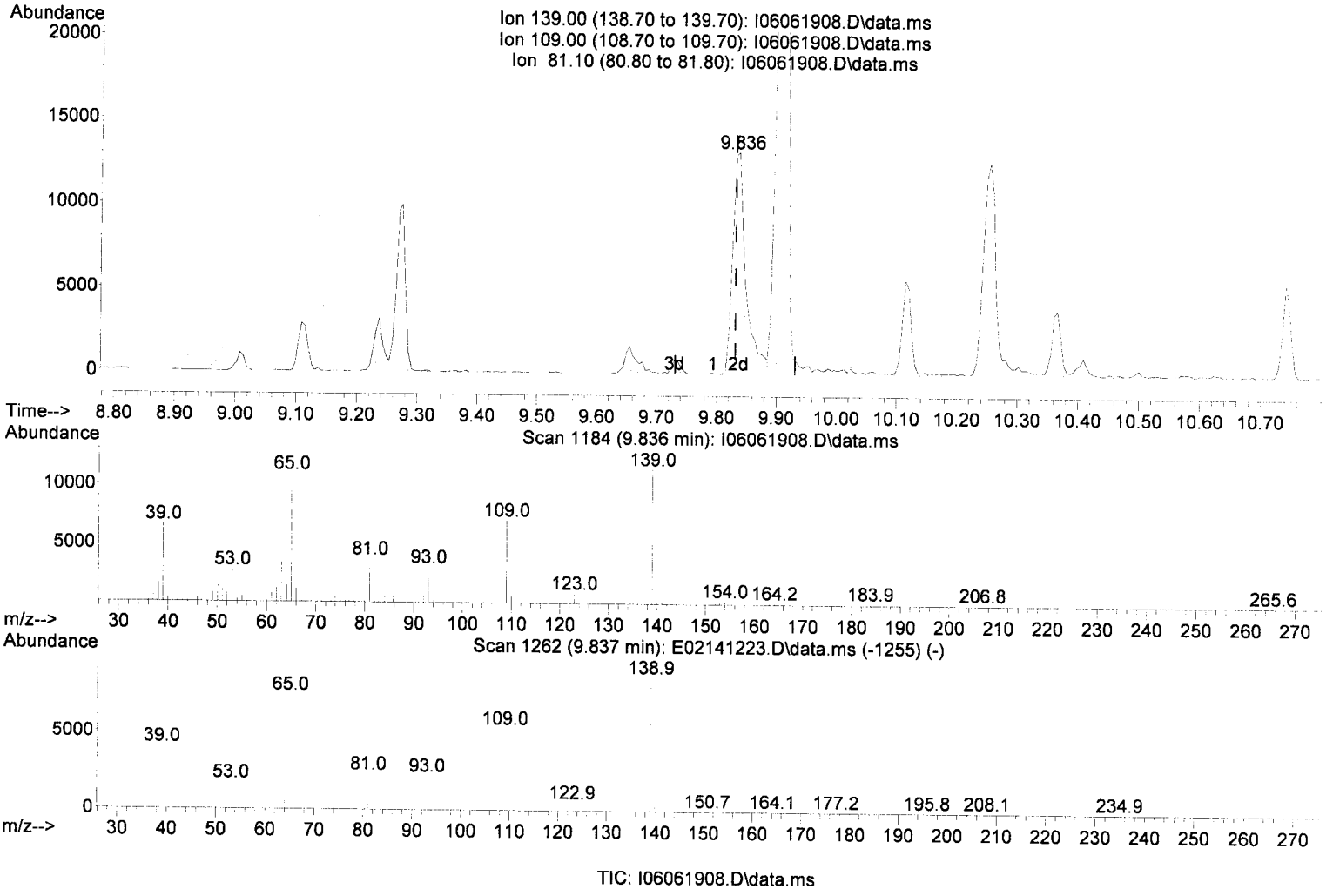
response 55

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	64.20	0.00#
81.10	30.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:10 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061908.D\data.ms

(53) 4-Nitrophenol (T)

9.836min (+ 0.005) 932.64 ng/ml m

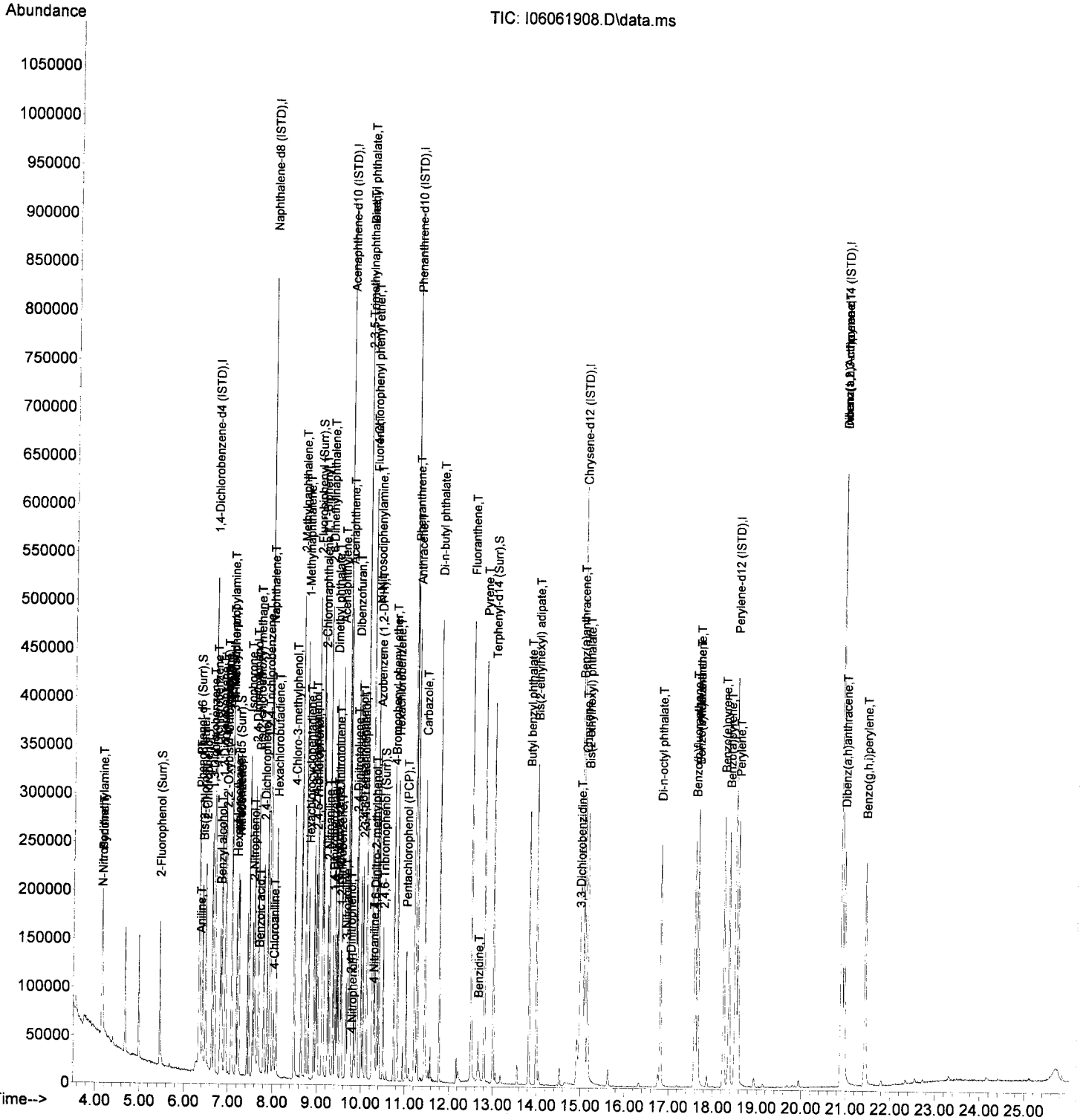
response 20696

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	64.20	53.34
81.10	30.90	28.00
0.00	0.00	0.00

BTH 6/6/19

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061908.D
Acq On : 6 Jun 2019 3:21 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:27:10 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061909.D
Acq On : 6 Jun 2019 3:57 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:46 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DTH 6/6/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.691	152	112434	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	476343	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.708	162	244083	2000.00 ng/ml	-0.01
64) Phenanthrene-d10 (ISTD)	11.216	188	452664	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.041	240	468335	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.523	264	434009	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	20.908	292	417178	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00 ng/ml	
5) Phenol-d6 (Surr)	0.000	99	0	0.00 ng/ml	
19) Nitrobenzene-d5 (Surr)	7.221	82	53	0.67 ng/ml	-0.01
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	6.996	70	51	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	0.000		0	N.D.	
22) Isophorone	0.000		0	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	0.000		0	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	0.000		0	N.D.	
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	0.000		0	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	0.000		0	N.D.	
34) 1-Methylnaphthalene	0.000		0	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	0.000		0	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061909.D
Acq On : 6 Jun 2019 3:57 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

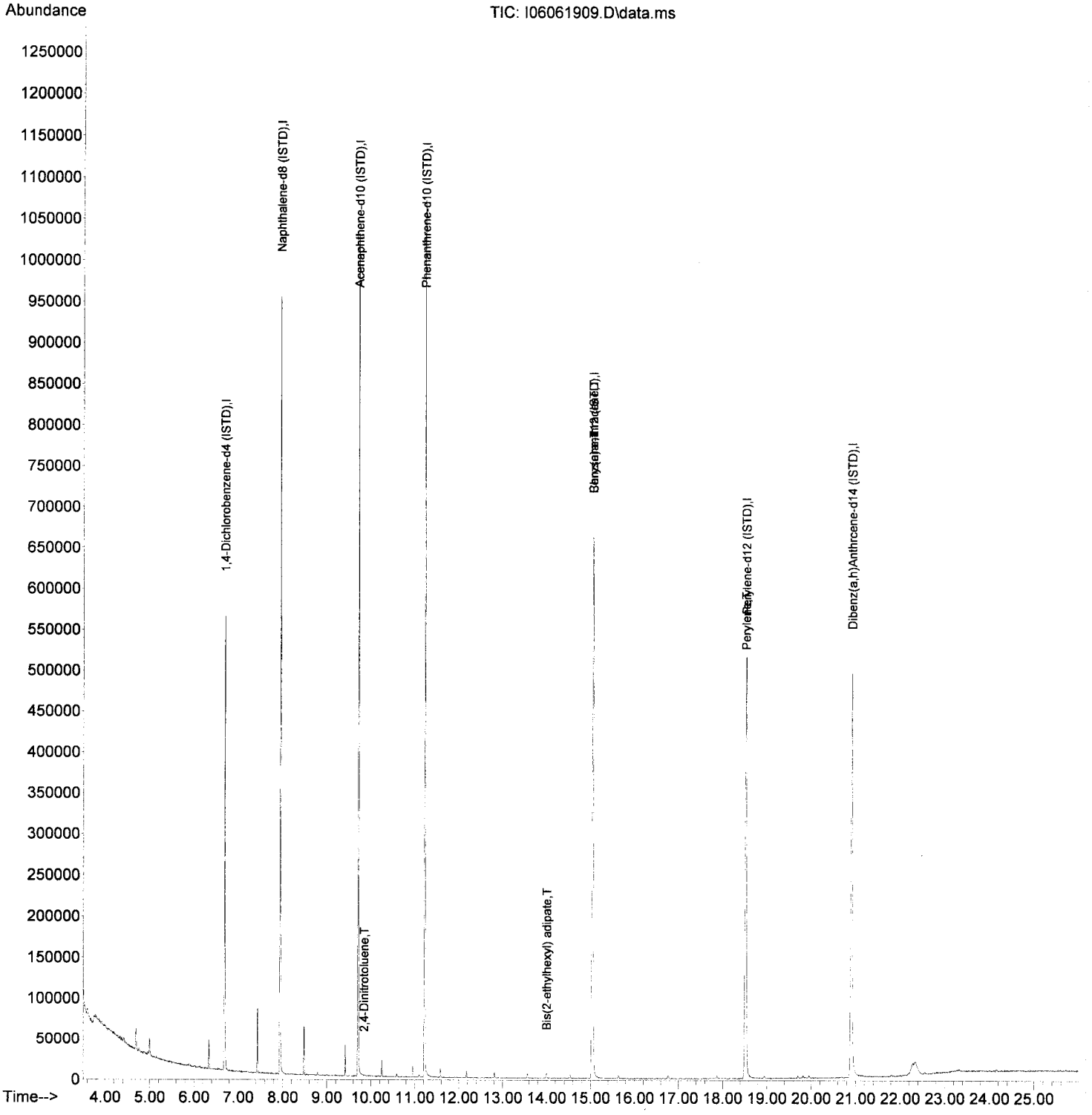
Quant Time: Jun 06 17:28:46 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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	9.719	153	58	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.842	165	110	34.73 ng/ml#	17
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	11.222	178	69	N.D.	
72) Anthracene	11.222	178	69	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.998	129	1764	14.29 ng/ml	96
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.041	228	1079	3.97 ng/ml	73
84) Chrysene	15.041	228	1079	4.30 ng/ml	70
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	18.517	252	1376	6.26 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	20.903	276	143	N.D.	
96) Dibenz(a,h)anthracene	20.913	278	102	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\2019-06\9F06040\
Data File : I06061909.D
Acq On : 6 Jun 2019 3:57 pm
Operator : JK /AMS /DTH
Sample : 9F06040-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:46 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DTH 6/6/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.691	152	99842	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	410980	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	204655	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	364559	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.046	240	376853	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.533	264	347097	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.913	292	337618	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.472	112	91190	1397.73 ng/ml	0.00
5) Phenol-d6 (Surr)	6.344	99	120236	1416.26 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.226	82	109120	1545.59 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.018	172	241274	1572.35 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	39679	2365.10 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.019	244	378307	2048.51 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.220	79	2255	29.61 ng/ml#	57
6) Phenol	6.354	94	1125	12.46 ng/ml#	1
7) Aniline	6.354	93	98	N.D.	
8) Bis(2-chloroethyl) ether	6.424	93	237	3.12 ng/ml#	45
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	6.841	108	174	30.28 ng/ml	82
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.921	107	121	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	59	N.D.	
16) N-Nitrosodi-n-propylamine	7.060	70	162	3.13 ng/ml	59
17) 3+4-Methylphenol	7.092	107	50	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.226	77	623	8.97 ng/ml#	44
22) Isophorone	7.472	82	628	4.13 ng/ml#	1
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.611	122	70	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.670	105	488	717.14 ng/ml#	45
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.964	128	11386	55.55 ng/ml	98
30) 4-Chloroaniline	7.964	127	1469	27.96 ng/ml#	31
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.499	107	195	67.68 ng/ml#	1
33) 2-Methylnaphthalene	8.654	142	3464	22.40 ng/ml	95
34) 1-Methylnaphthalene	8.750	142	1094	7.51 ng/ml	91
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	9.120	154	1798	10.51 ng/ml	88
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.168	138	256	6.19 ng/ml#	56
43) 2,6-Dimethylnaphthalene	9.280	156	414	3.29 ng/ml	83

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

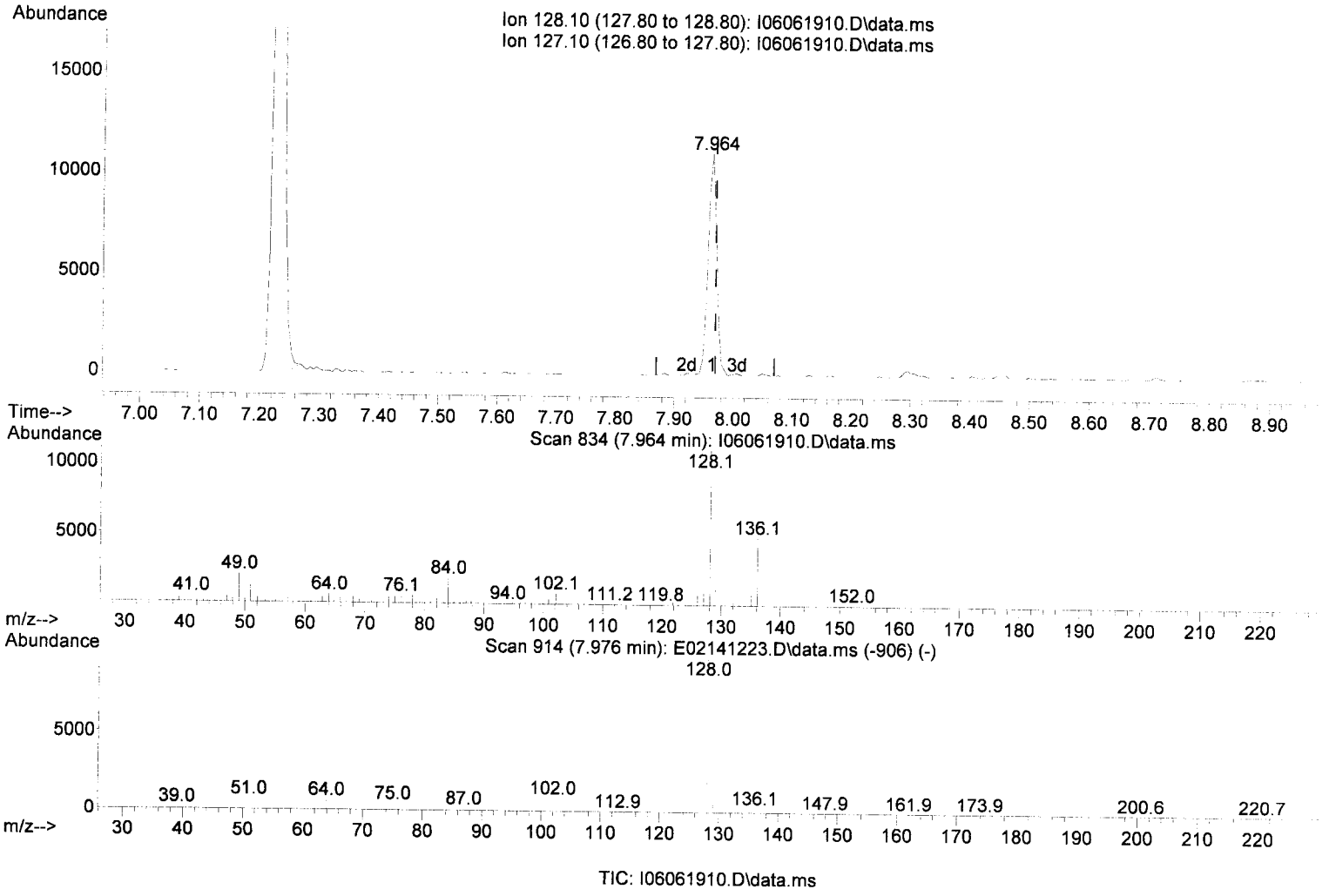
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.419	163	94	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.569	152	1245	6.15 ng/ml	85
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.740	153	2381	18.67 ng/ml	95
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.868	165	148	35.93 ng/ml#	36
55) Dibenzofuran	9.916	168	4694	27.05 ng/ml	86
56) 2,3,5,6-Tetrachlorophenol	10.050	232	110	37.29 ng/ml#	43
57) 2,3,4,6-Tetrachlorophenol	10.050	232	110	15.45 ng/ml#	59
58) Diethyl phthalate	10.130	149	391	2.82 ng/ml	75
59) 2,3,5-Trimethylnaphtha...	10.136	170	87	N.D.	
60) Fluorene	10.264	166	2331	15.58 ng/ml	93
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	10.360	169	77	N.D.	
66) Azobenzene (1,2-DPH)	10.398	77	295	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.045	266	141	63.13 ng/ml	80
71) Phenanthrene	11.243	178	14633	75.14 ng/ml	97
72) Anthracene	11.291	178	4500	23.11 ng/ml	94
73) Carbazole	11.457	167	1272	7.45 ng/ml	90
74) Di-n-butyl phthalate	11.789	149	1943	8.79 ng/ml	94
75) Fluoranthene	12.516	202	14412	63.33 ng/ml	96
76) Benzidine	12.741	184	71	Below Cal	66
77) Pyrene	12.815	202	12990	56.09 ng/ml	98
80) Butyl benzyl phthalate	13.837	149	849	18.18 ng/ml	74
81) Bis(2-ethylhexyl) adipate	14.003	129	3245	32.66 ng/ml	93
82) 3,3-Dichlorobenzidine	14.998	252	56	Below Cal #	26
83) Benz(a)anthracene	15.019	228	4826	22.05 ng/ml m05	95
84) Chrysene	15.094	228	2875	14.24 ng/ml	94
85) Bis(2-ethylhexyl) phth...	15.169	149	8704	65.51 ng/ml	90
87) Di-n-octyl phthalate	16.827	149	174	57.72 ng/ml#	1
88) Benzo(b)fluoranthene	17.608	252	4604	25.36 ng/ml	96
89) Benzo(k)fluoranthene	~~17.731~~	~~252~~	~~84~~	~~5.41 ng/ml#~~	~~32~~ MI NO
90) Benzo(b+k)fluoranthene	17.731	252	84	10.60 ng/ml#	32
91) Benzo(e)pyrene	18.260	252	2898	13.96 ng/ml#	32
92) Benzo(a)pyrene	18.378	252	3849	25.47 ng/ml	95
93) Perylene	18.592	252	244747	1392.81 ng/ml	97
95) Indeno(1,2,3-cd)pyrene	20.913	276	2769	14.94 ng/ml#	2
96) Dibenz(a,h)anthracene	20.967	278	393	N.D.	
97) Benzo(g,h,i)perylene	21.437	276	2673	14.75 ng/ml	70

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(29) Naphthalene (T)

7.964min (-0.005) 55.55 ng/ml

response 11386

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.70	11.74
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
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Quant Title : EPA 8270D: Semivolatile Organics
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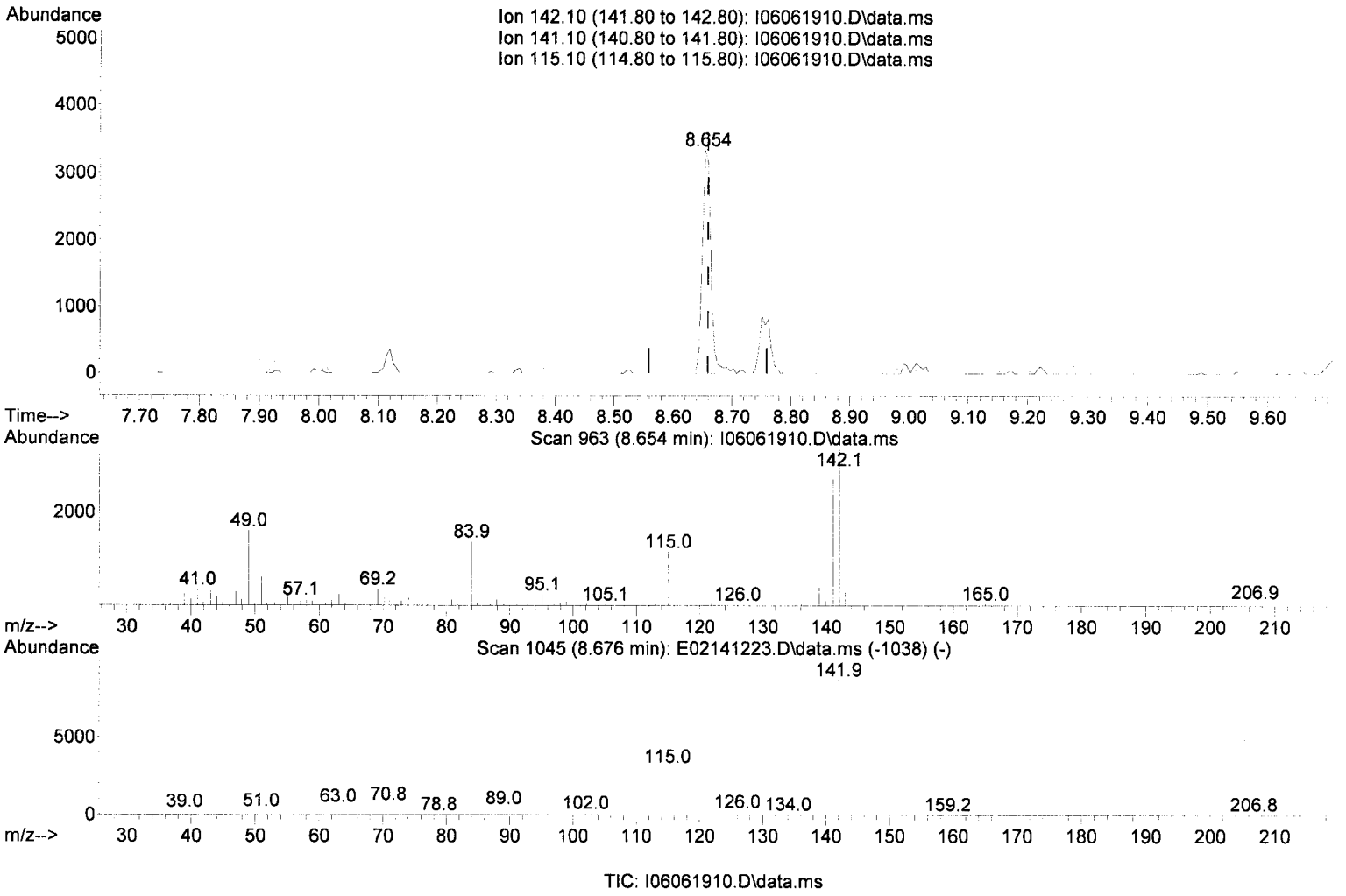
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(33) 2-Methylnaphthalene (T)

8.654min (-0.005) 22.40 ng/ml J

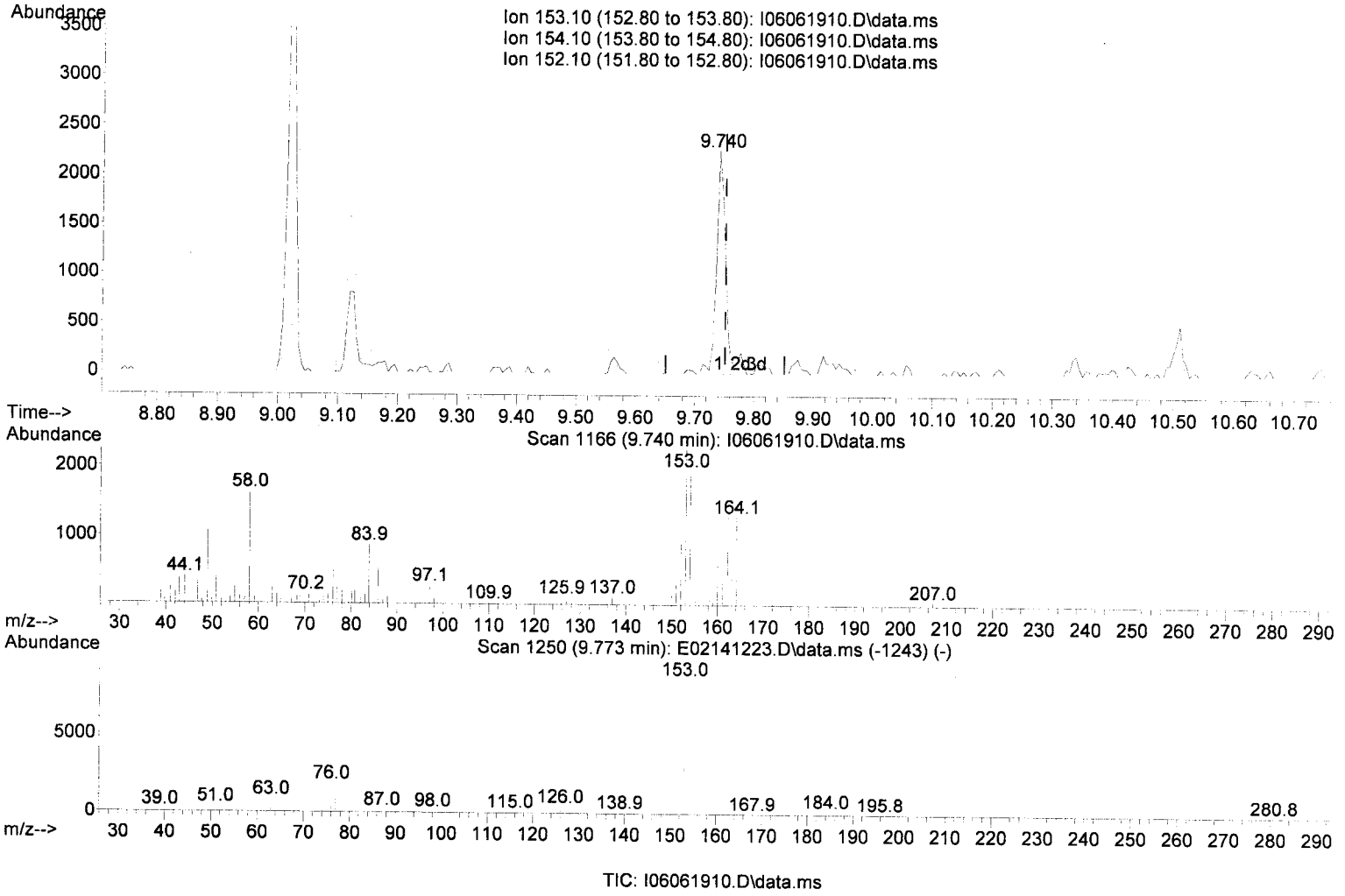
response 3464

Ion	Exp%	Act%
142.10	100.00	100.00
141.10	86.30	80.69
115.10	33.70	34.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(51) Acenaphthene (T)

9.740min (-0.011) 18.67 ng/ml J

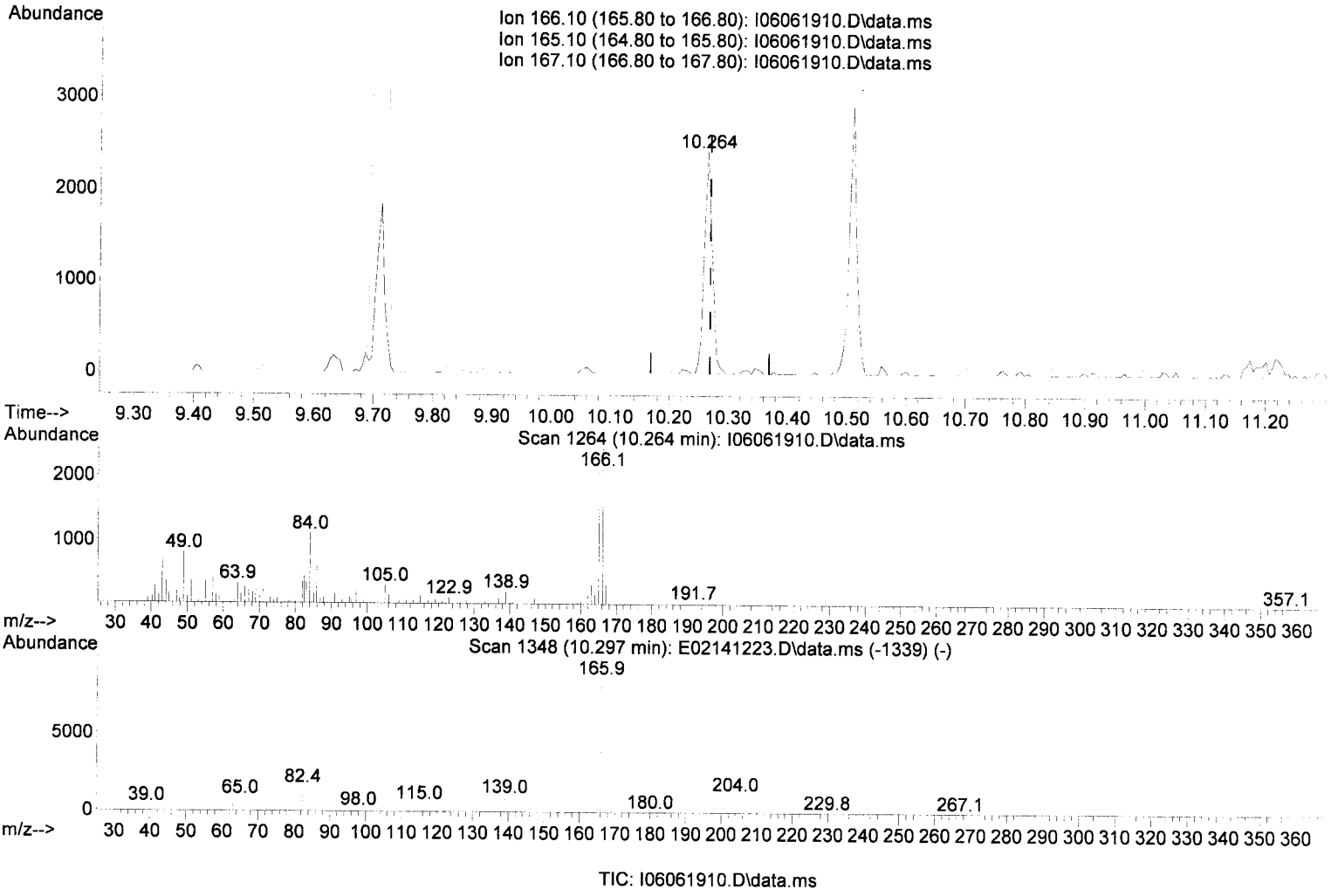
response 2381

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	93.50	91.11
152.10	47.70	40.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(60) Fluorene (T)

10.264min (-0.005) 15.58 ng/ml J

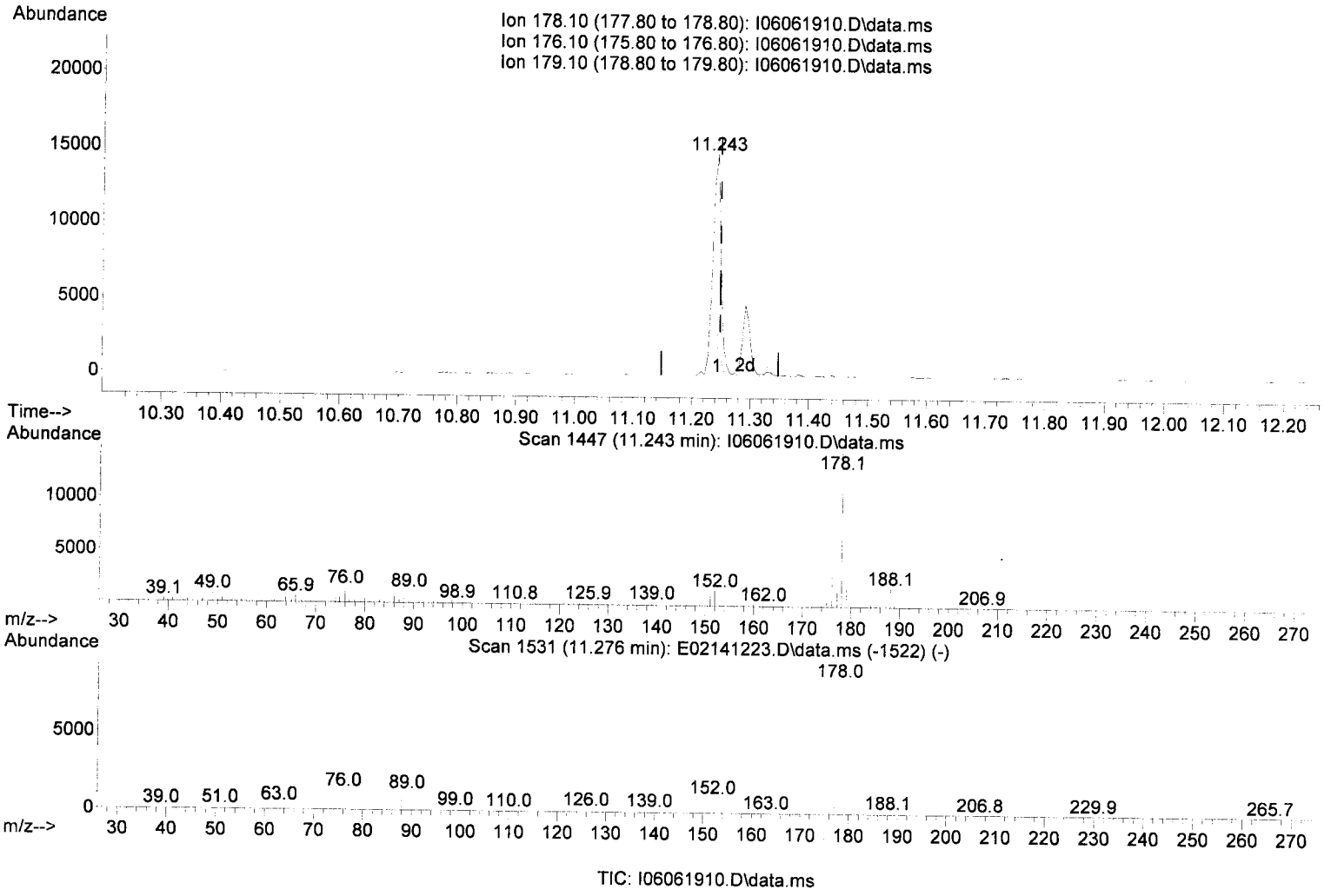
response 2331

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.70	85.87
167.10	13.50	13.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(71) Phenanthrene (T)

11.243min (-0.005) 75.14 ng/ml

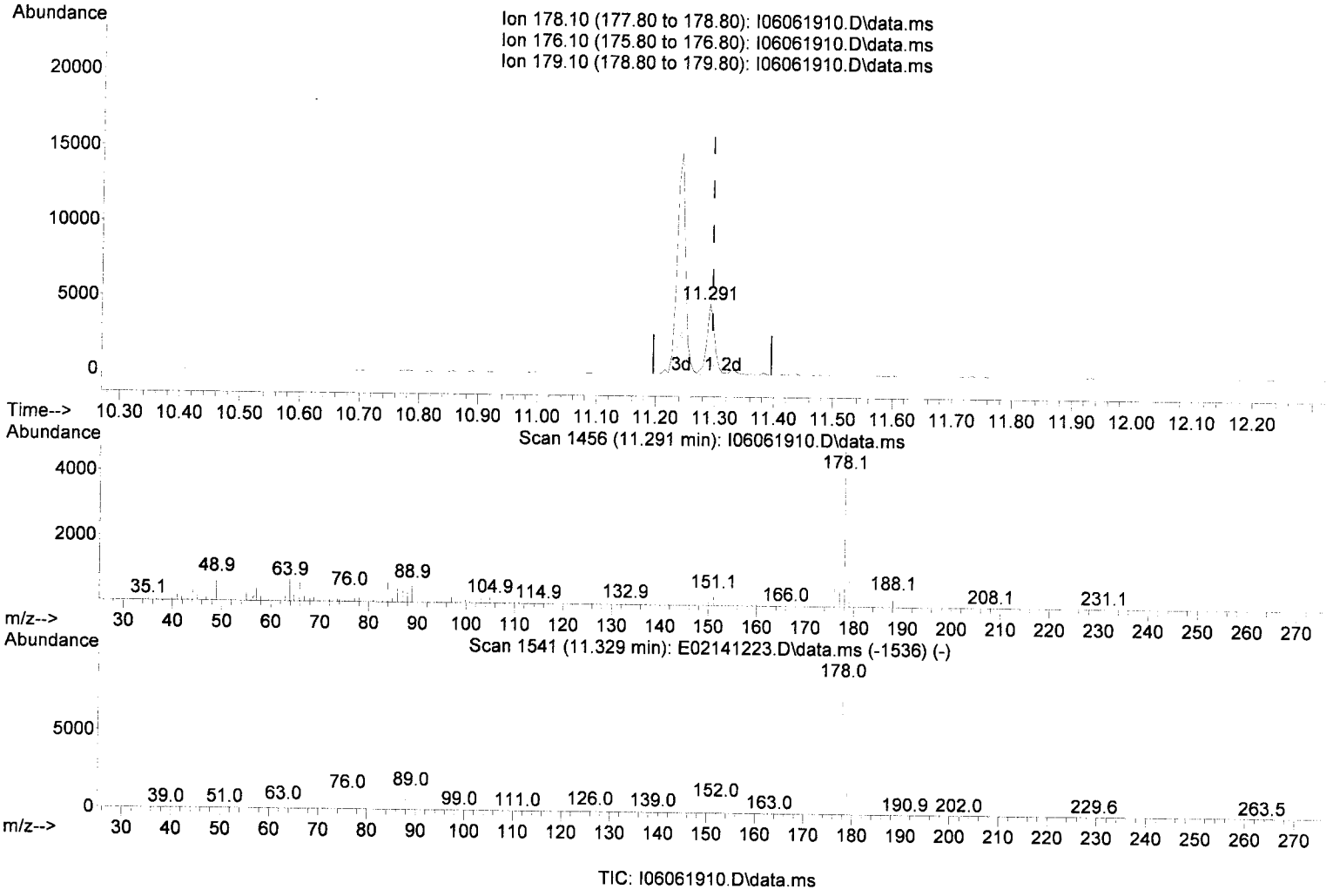
response 14633

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.40	19.01
179.10	15.20	13.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(72) Anthracene (T)

11.291min (-0.005) 23.11 ng/ml

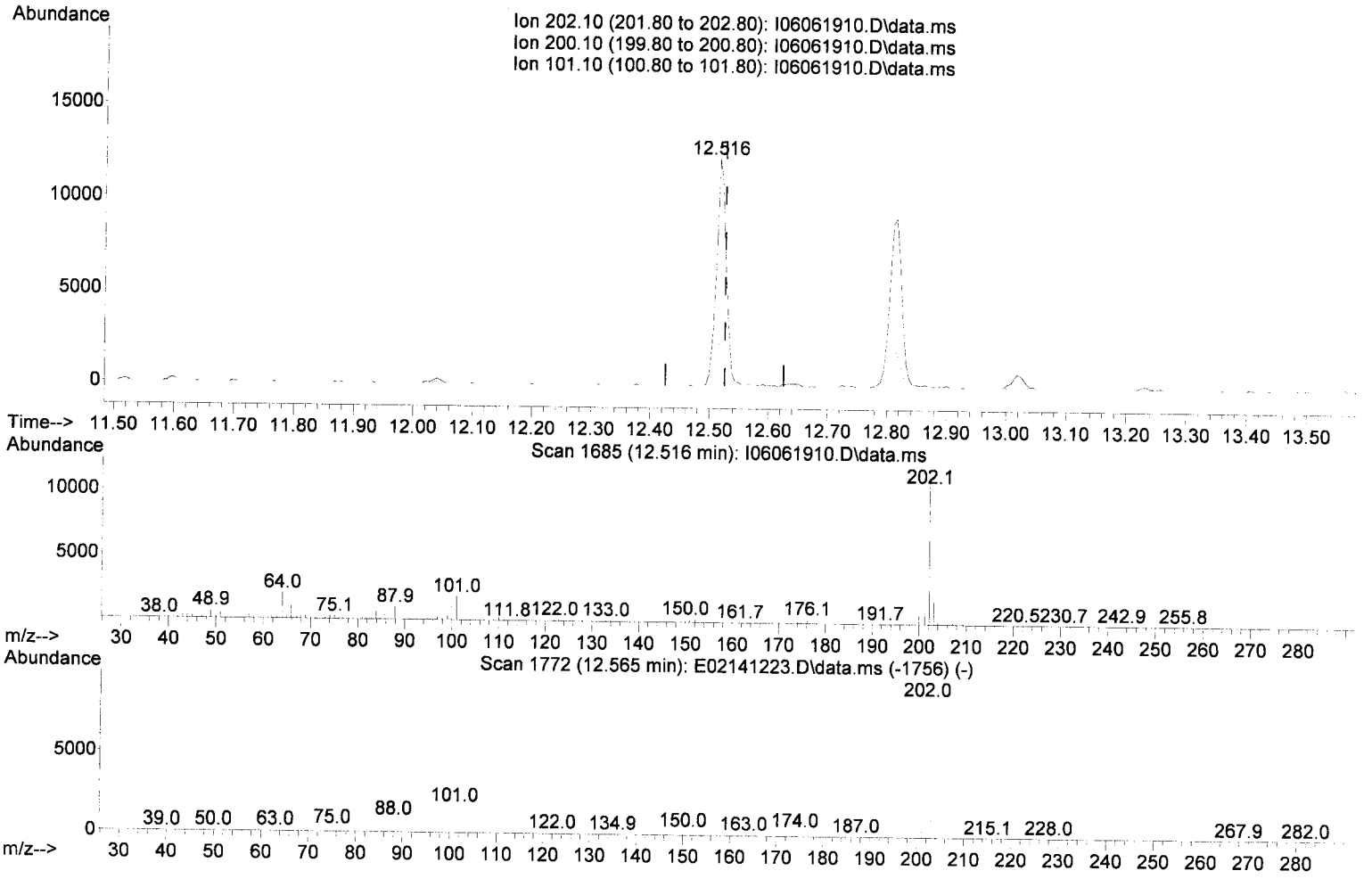
response 4500

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.70	14.76
179.10	15.90	16.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(75) Fluoranthene (T)

12.516min (-0.010) 63.33 ng/ml

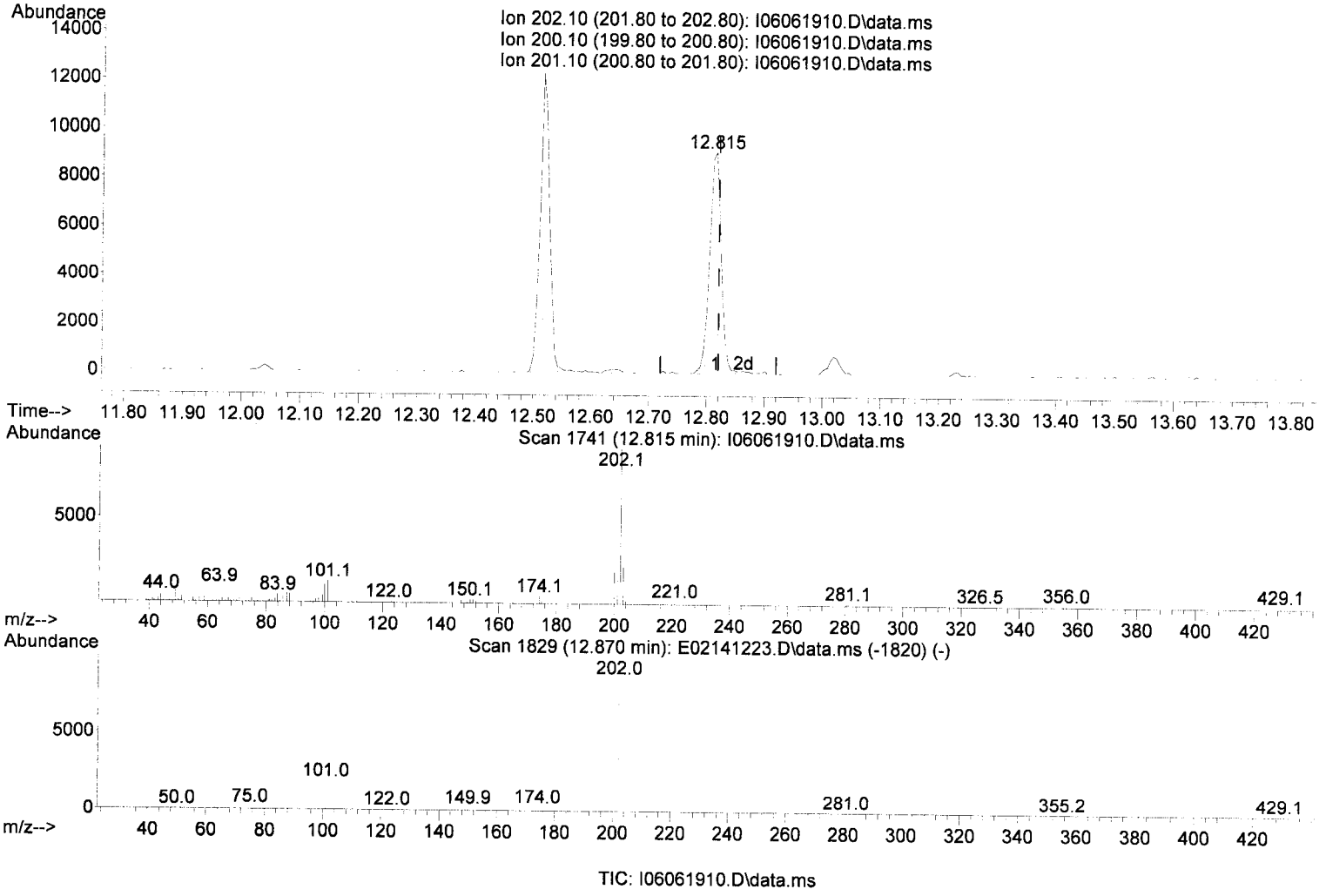
response 14412

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.20	18.67
101.10	17.00	15.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(77) Pyrene (T)

12.815min (-0.005) 56.09 ng/ml

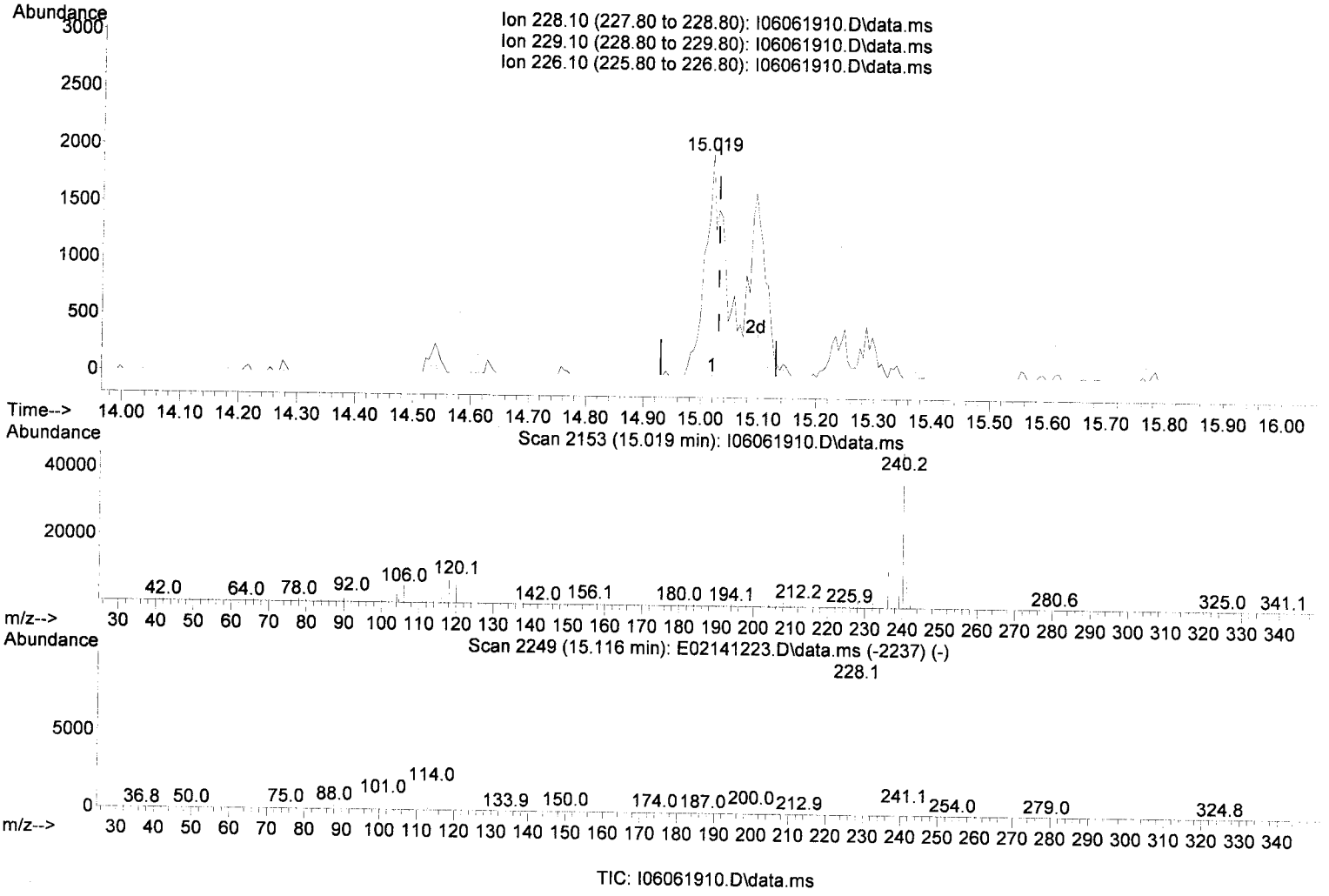
response 12990

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.70	20.81
201.10	17.30	15.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(83) Benz(a)anthracene (T)

15.019min (-0.011) 22.05 ng/ml

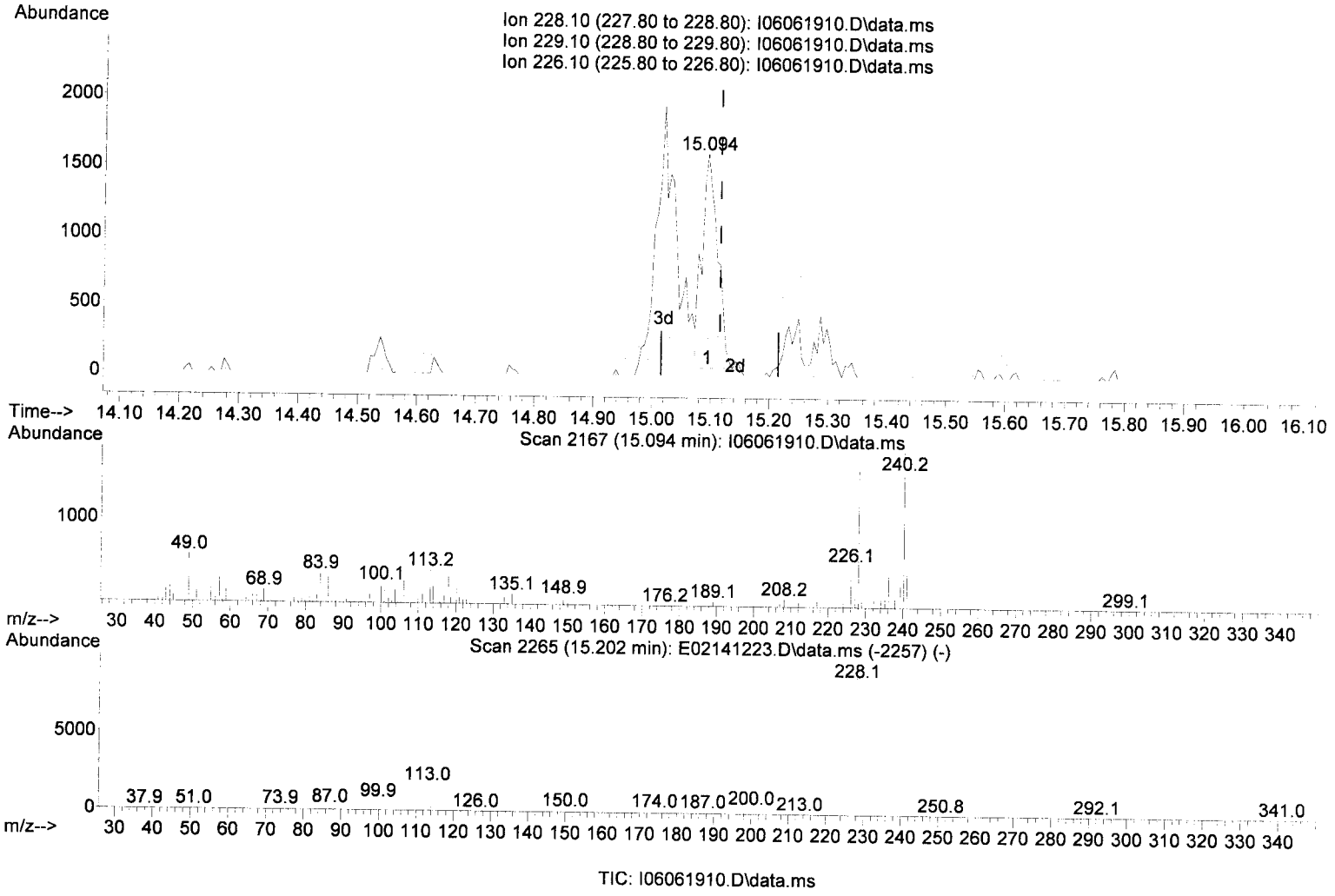
response 4826

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	16.72
226.10	26.50	24.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(84) Chrysene (T)

15.094min (-0.022) 14.24 ng/ml J

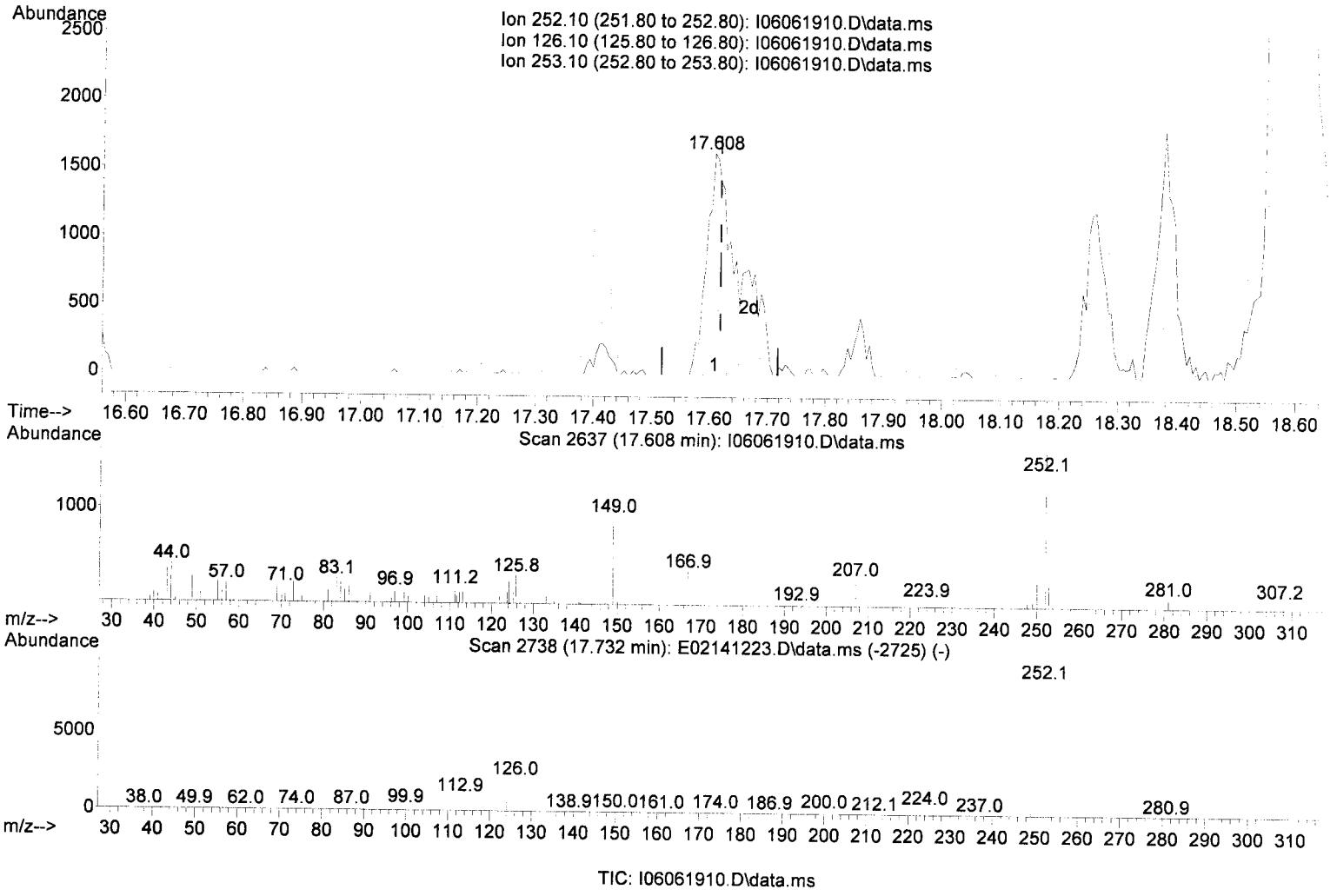
response 2875

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.50	15.53
226.10	29.30	31.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.608min (-0.010) 25.36 ng/ml J

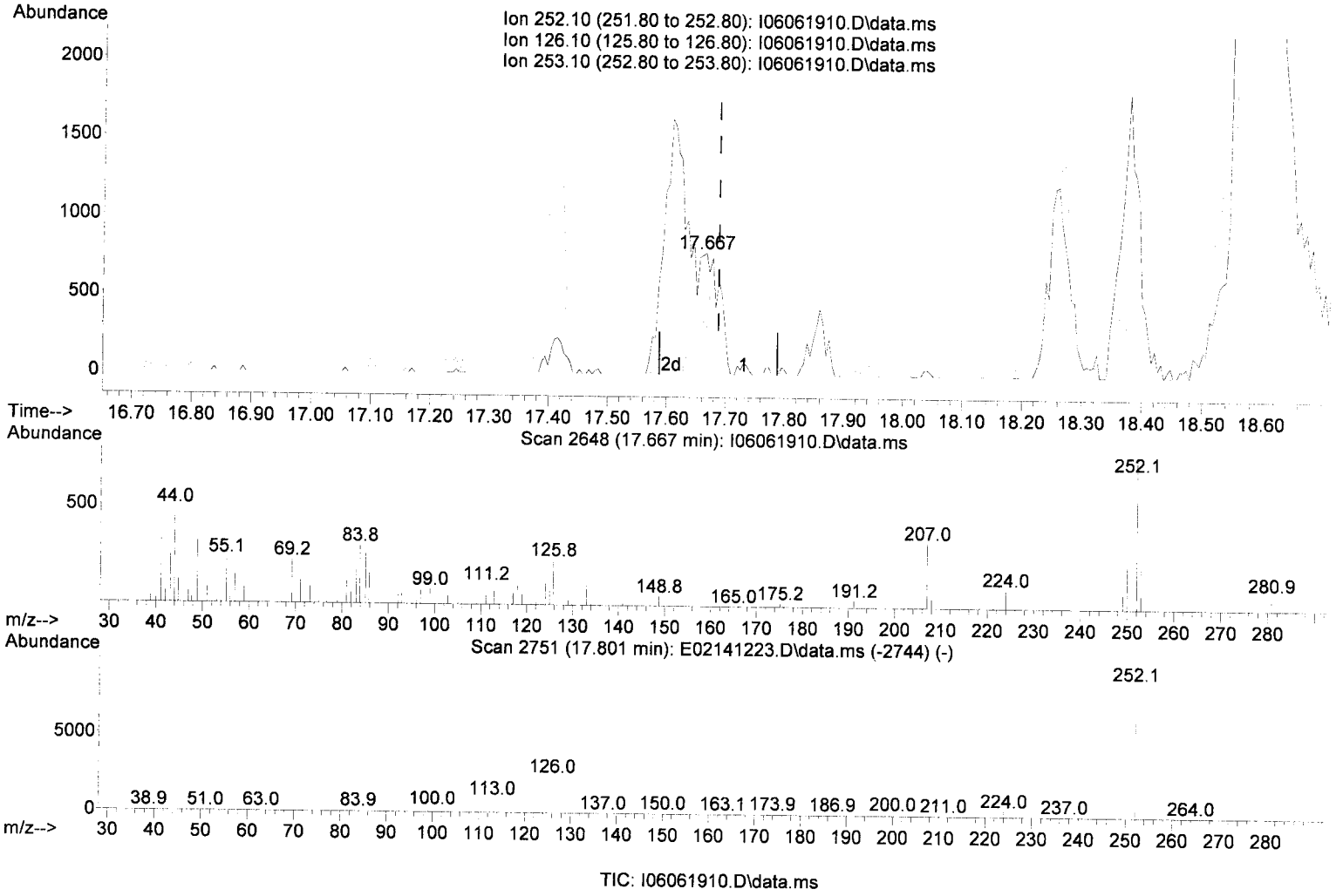
response 4604

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.90	22.47
253.10	22.00	18.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.667min (-0.021) 12.99 ng/ml (m) ND

DTH 6/6/19

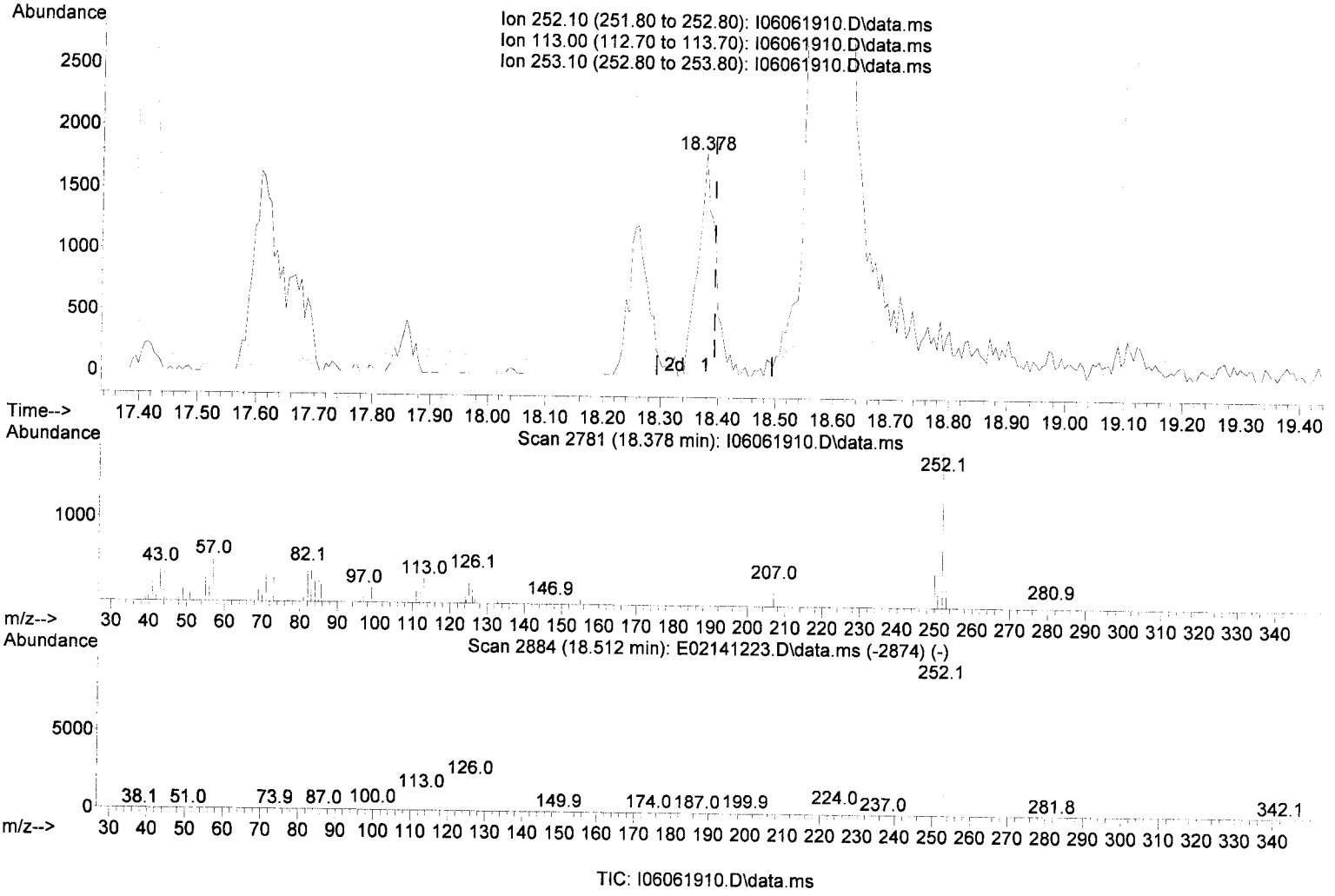
response 1804

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	31.03
253.10	21.70	30.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(92) Benzo(a)pyrene (T)

18.378min (-0.016) 25.47 ng/ml J

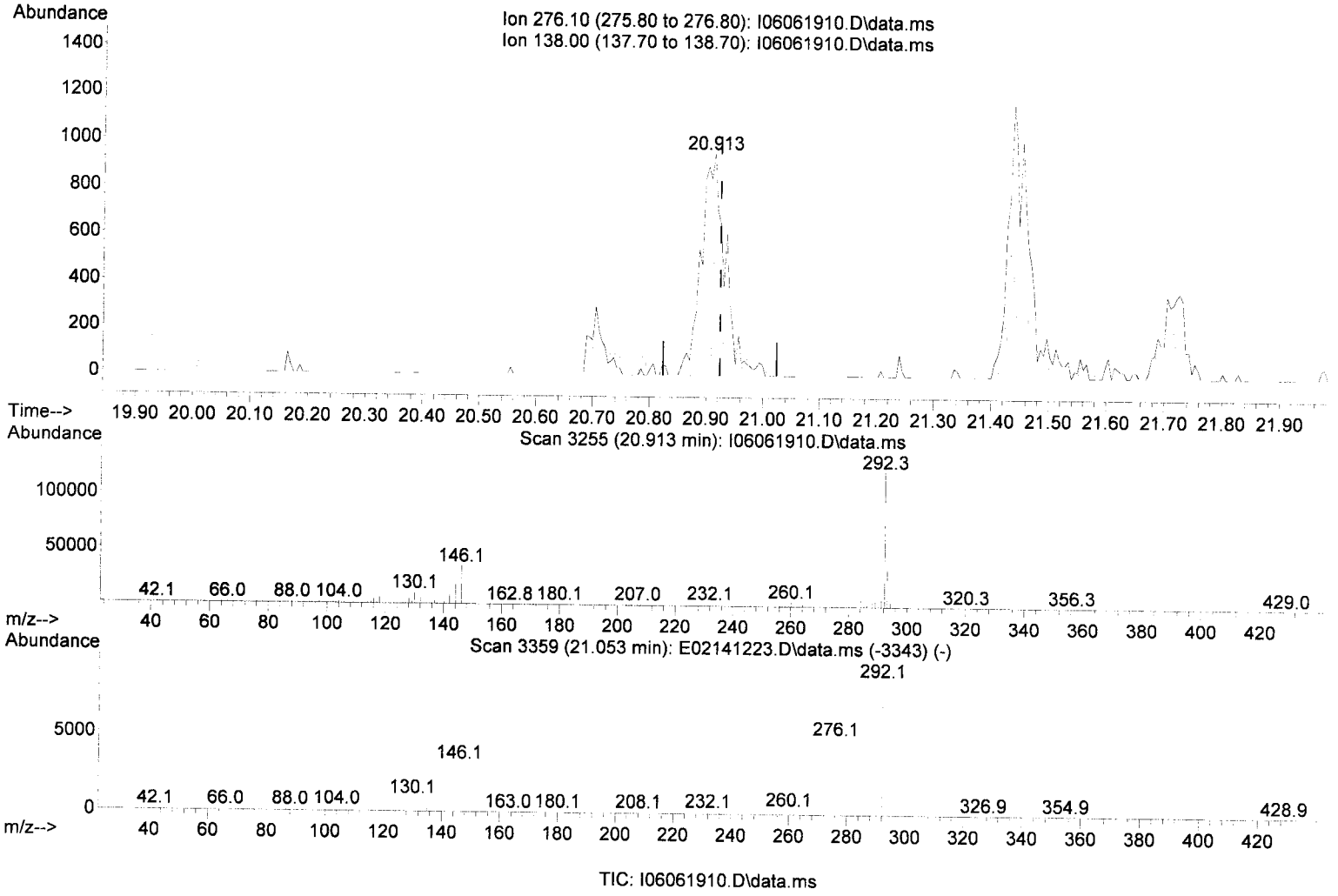
response 3849

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	13.40	17.40
253.10	21.60	22.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

20.913min (-0.011) 14.94 ng/ml J

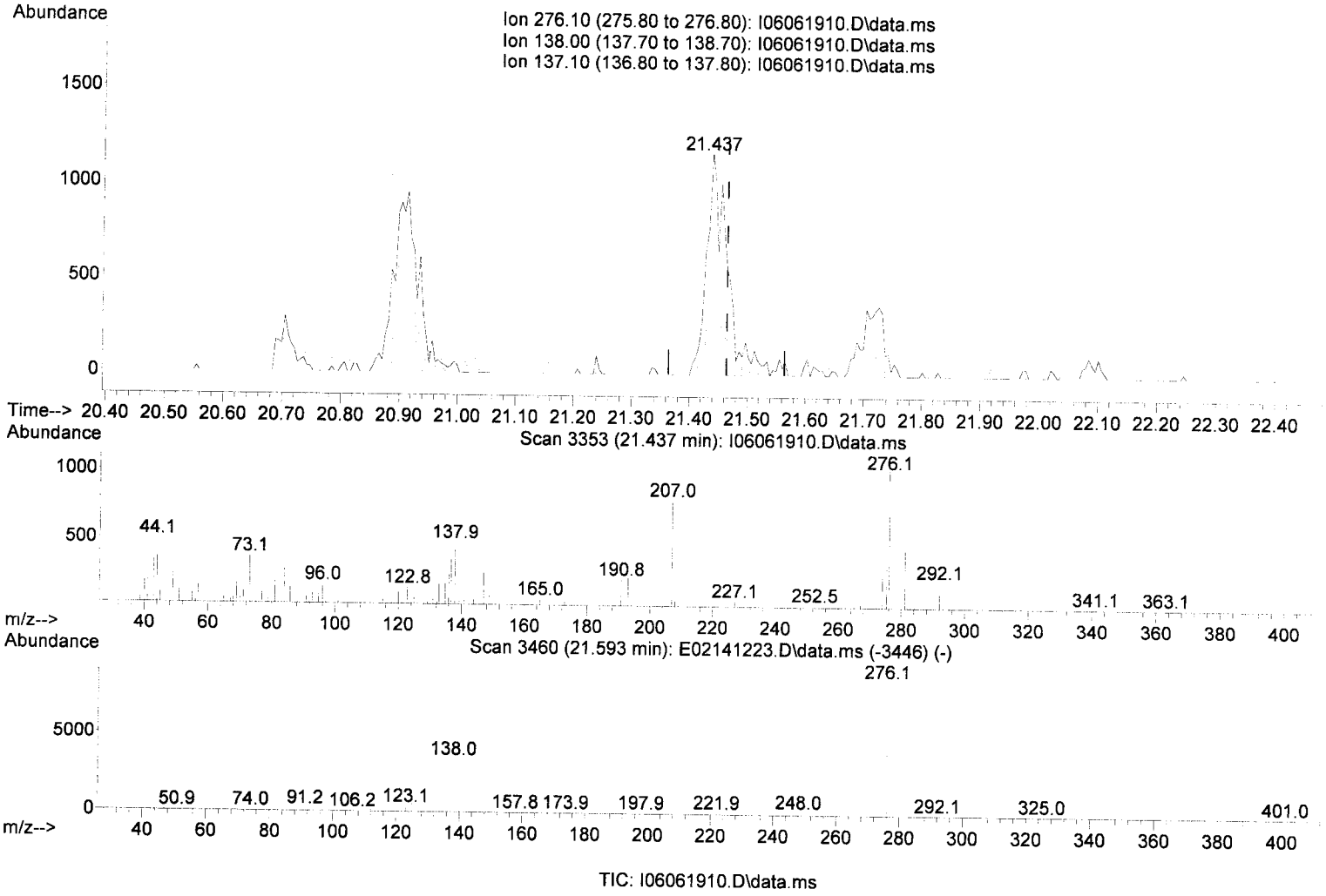
response 2769

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	30.60	83.93#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I06061910.D\data.ms

(97) Benzo(g,h,i)perylene (T)

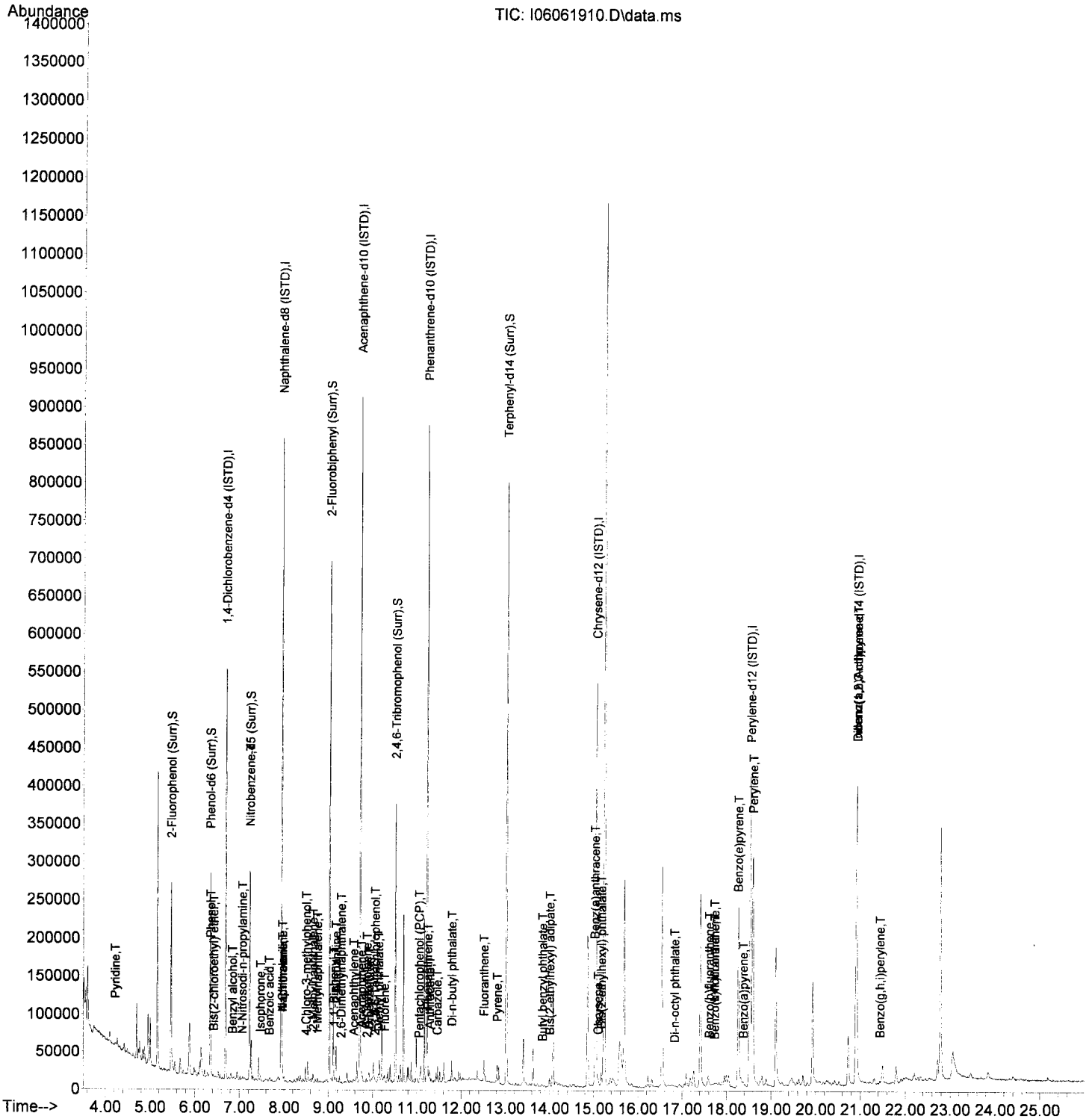
21.437min (-0.027) 14.75 ng/ml J

response 2673

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	36.60	43.49
137.10	27.90	0.00
0.00	0.00	0.00

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061910.D
Acq On : 6 Jun 2019 4:33 pm
Operator : JK /AMS /DTH
Sample : A9E0766-03RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:28:50 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061911.D
Acq On : 6 Jun 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : A9E0766-04RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:42:33 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

DJK 6/6/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.691	152	98905	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	419930	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	210862	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	388345	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.046	240	383272	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.528	264	352527	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.908	292	336099	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.472	112	109453	1693.56 ng/ml	0.00
5) Phenol-d6 (Surr)	6.344	99	148285	1763.20 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.232	82	132728	1897.78 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	292684	1851.24 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	42368	2370.70 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	380892	2027.96 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.210	79	1984	26.30 ng/ml#	67
6) Phenol	6.360	94	1134	12.68 ng/ml#	1
7) Aniline	6.360	93	50	N.D.	
8) Bis(2-chloroethyl) ether	6.419	93	390	5.18 ng/ml#	29
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	6.846	108	86	27.98 ng/ml#	67
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.921	107	103	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.948	45	60	N.D.	
16) N-Nitrosodi-n-propylamine	7.066	70	76	N.D.	
17) 3+4-Methylphenol	7.098	107	64	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.226	77	591	8.59 ng/ml#	36
22) Isophorone	7.472	82	234	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.606	122	56	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.708	105	332	712.96 ng/ml#	55
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.964	128	1273	6.08 ng/ml	61
30) 4-Chloroaniline	7.964	127	158	2.94 ng/ml	74
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.505	107	148	66.92 ng/ml#	1
33) 2-Methylnaphthalene	8.660	142	1520	9.62 ng/ml#	66
34) 1-Methylnaphthalene	8.761	142	570	3.83 ng/ml	91
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	9.120	154	546	3.10 ng/ml	76
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.173	138	181	4.25 ng/ml#	27
43) 2,6-Dimethylnaphthalene	9.296	156	223	N.D.	

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061911.D
Acq On : 6 Jun 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : A9E0766-04RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

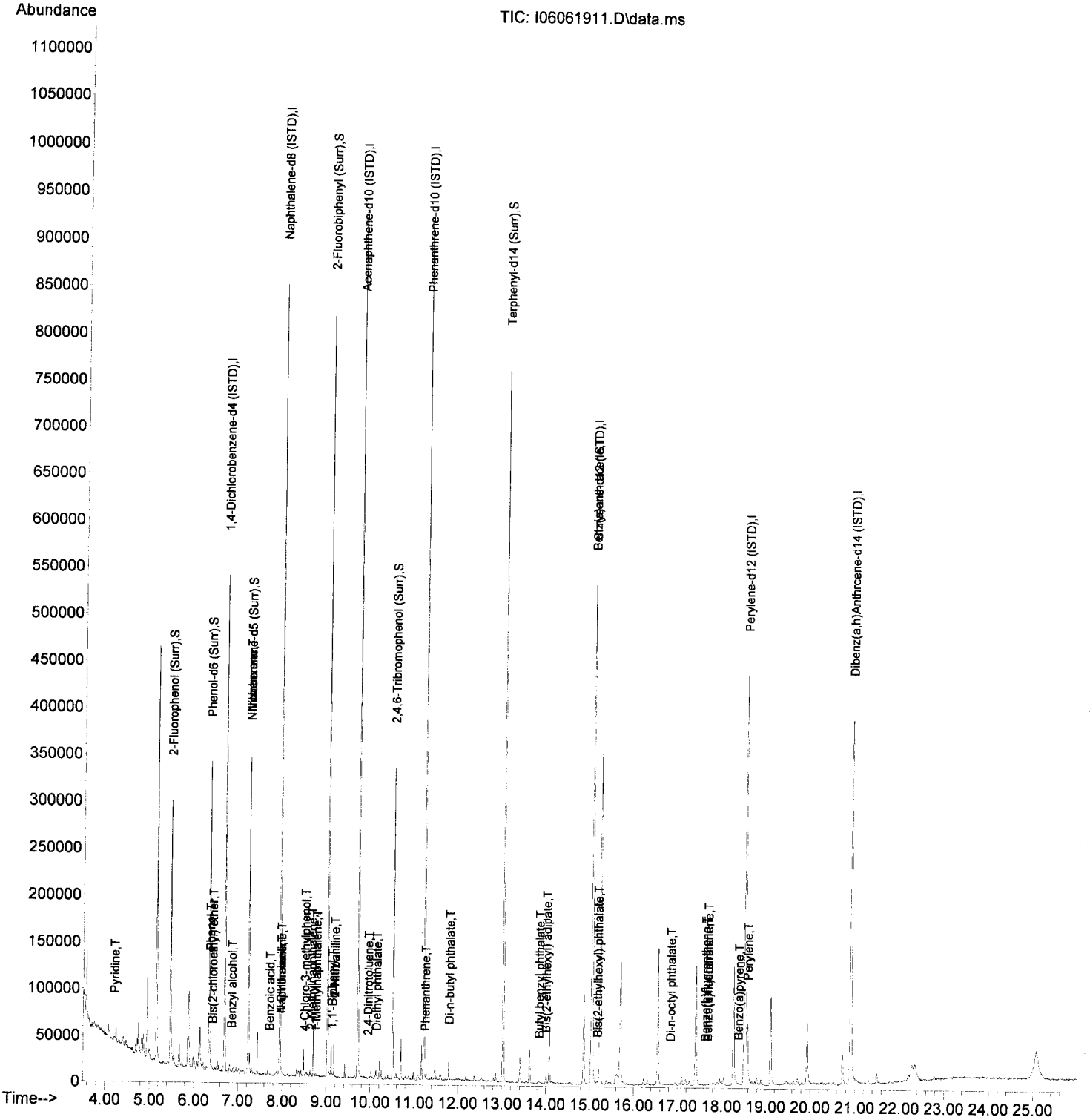
Quant Time: Jun 06 17:42:33 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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	9.564	152	57	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.740	153	119	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.938	165	56	33.92 ng/ml#	17
55) Dibenzofuran	9.922	168	68	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	10.131	149	629	4.40 ng/ml	89
59) 2,3,5-Trimethylnaphtha...	10.243	170	73	N.D.	
60) Fluorene	10.270	166	57	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	10.382	169	67	N.D.	
66) Azobenzene (1,2-DPH)	10.403	77	143	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	11.243	178	651	3.14 ng/ml	86
72) Anthracene	11.297	178	98	N.D.	
73) Carbazole	11.452	167	97	N.D.	
74) Di-n-butyl phthalate	11.789	149	2127	9.03 ng/ml	97
75) Fluoranthene	12.521	202	548	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.816	202	578	N.D.	
80) Butyl benzyl phthalate	13.837	149	407	13.72 ng/ml#	69
81) Bis(2-ethylhexyl) adipate	13.998	129	2201	21.78 ng/ml	96
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.041	228	1132	5.08 ng/ml	63
84) Chrysene	15.105	228	52	N.D.	
85) Bis(2-ethylhexyl) phth...	15.169	149	1316	9.74 ng/ml	82
87) Di-n-octyl phthalate	16.832	149	235	57.94 ng/ml#	16
88) Benzo(b)fluoranthene	17.624	252	296	5.72 ng/ml	54
89) Benzo(k)fluoranthene	17.677	252	103	5.49 ng/ml	53
90) Benzo(b+k)fluoranthene	17.677	252	103	10.67 ng/ml	53
91) Benzo(e)pyrene	18.266	252	419	N.D.	
92) Benzo(a)pyrene	18.378	252	141	7.32 ng/ml#	38
93) Perylene	18.581	252	50137	280.93 ng/ml	96
95) Indeno(1,2,3-cd)pyrene	20.913	276	253	N.D.	
96) Dibenz(a,h)anthracene	0.000		0	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061911.D
Acq On : 6 Jun 2019 5:09 pm
Operator : JK /AMS /DTH
Sample : A9E0766-04RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 06 17:42:33 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061912.D
Acq On : 6 Jun 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : A9E0766-07RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 6/7/19

Quant Time: Jun 07 07:23:21 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.691	152	100120	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	419446	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	210298	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.216	188	387201	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.041	240	396015	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.528	264	374065	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.908	292	359796	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.477	112	114958	1757.15 ng/ml	0.01
5) Phenol-d6 (Surr)	6.349	99	157783	1853.37 ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.232	82	140954	1990.94 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	298523	1893.24 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	40962	2298.80 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	371009	1911.78 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.242	74	56	N.D.	
3) Pyridine	4.236	79	2171	28.43 ng/ml#	60
6) Phenol	6.365	94	1328	14.67 ng/ml#	52
7) Aniline	6.360	93	119	N.D.	
8) Bis(2-chloroethyl) ether	6.424	93	355	4.66 ng/ml#	24
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	6.841	108	198	30.90 ng/ml#	43
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.916	107	53	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.970	45	167	N.D.	
16) N-Nitrosodi-n-propylamine	7.066	70	249	4.79 ng/ml	59
17) 3+4-Methylphenol	7.098	107	170	2.64 ng/ml#	57
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.226	77	798	11.46 ng/ml#	50
22) Isophorone	7.467	82	279	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.617	122	61	N.D.	
25) Bis(2-chloroethoxy) me...	7.686	93	63	N.D.	
26) Benzoic acid	7.681	105	463	716.26 ng/ml	75
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.964	128	1088	5.20 ng/ml	77
30) 4-Chloroaniline	7.964	127	280	5.22 ng/ml	65
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.494	107	149	66.94 ng/ml#	1
33) 2-Methylnaphthalene	8.654	142	2182	13.82 ng/ml	94
34) 1-Methylnaphthalene	8.756	142	1184	7.96 ng/ml	95
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	9.120	154	714	4.06 ng/ml	96
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.168	138	204	4.80 ng/ml#	31
43) 2,6-Dimethylnaphthalene	9.285	156	1807	13.96 ng/ml	93

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061912.D
Acq On : 6 Jun 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : A9E0766-07RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

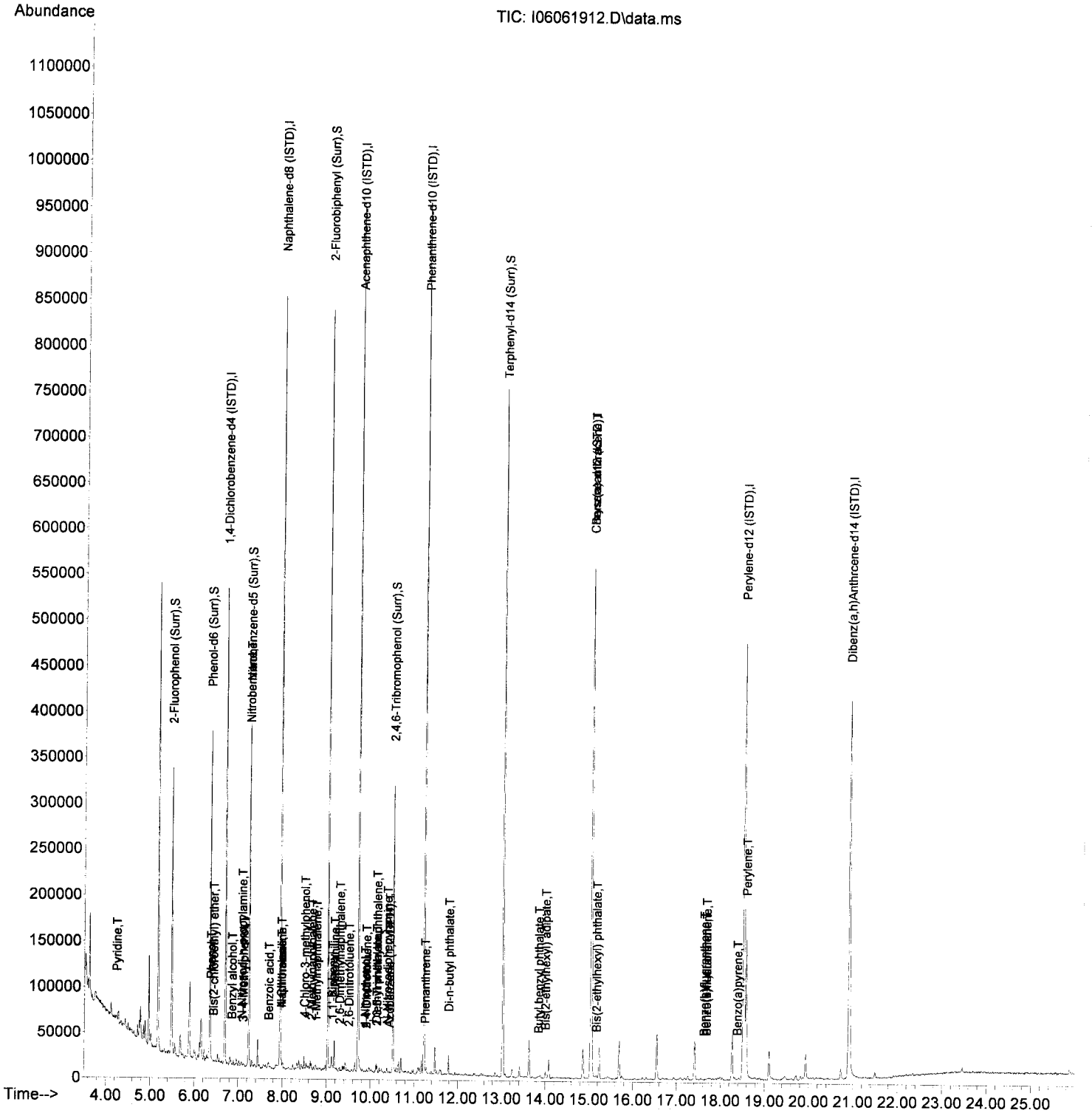
Quant Time: Jun 07 07:23:21 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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	9.499	165	90	2.74 ng/ml#	42
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.569	152	111	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.740	153	150	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.868	139	66	60.64 ng/ml#	79
54) 2,4-Dinitrotoluene	9.895	165	139	35.66 ng/ml#	17
55) Dibenzofuran	9.917	168	243	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	10.131	149	657	4.61 ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.136	170	708	5.55 ng/ml#	51
60) Fluorene	10.275	166	202	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	10.377	169	319	2.67 ng/ml#	32
66) Azobenzene (1,2-DPH)	10.425	77	428	3.19 ng/ml#	1
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.243	178	668	3.23 ng/ml	87
72) Anthracene	11.297	178	107	N.D.	
73) Carbazole	11.452	167	76	N.D.	
74) Di-n-butyl phthalate	11.783	149	1338	5.70 ng/ml	98
75) Fluoranthene	12.516	202	447	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.821	202	386	N.D.	
80) Butyl benzyl phthalate	13.837	149	353	13.08 ng/ml#	50
81) Bis(2-ethylhexyl) adipate	13.992	129	2002	19.18 ng/ml	91
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.046	228	1214	5.28 ng/ml	69
84) Chrysene	15.105	228	105	N.D.	
85) Bis(2-ethylhexyl) phth...	15.158	149	1451	10.39 ng/ml	97
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	17.619	252	323	5.76 ng/ml	54
89) Benzo(k)fluoranthene	17.672	252	87	5.40 ng/ml	53
90) Benzo(b+k)fluoranthene	17.672	252	87	10.58 ng/ml	53
91) Benzo(e)pyrene	18.271	252	105	N.D.	
92) Benzo(a)pyrene	18.378	252	62	6.92 ng/ml	59
93) Perylene	18.581	252	111230	587.35 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.908	276	249	N.D.	
96) Dibenz(a,h)anthracene	20.903	278	96	N.D.	
97) Benzo(g,h,i)perylene	21.443	276	75	N.D.	

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

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061912.D
Acq On : 6 Jun 2019 5:44 pm
Operator : JK /AMS /DTH
Sample : A9E0766-07RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 07 07:23:21 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



No Name Entered Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061916.D
Acq On : 6 Jun 2019 8:06 pm
Operator : JK /AMS /DTH
Sample : A9E0766-06RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

AMS 6/7/19

Quant Time: Jun 07 07:23:34 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.697	152	102455	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	420829	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	209185	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	387732	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.046	240	393994	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.533	264	361520	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.913	292	337400	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.477	112	99391	1484.58 ng/ml	0.01
5) Phenol-d6 (Surr)	6.349	99	134732	1546.53 ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.232	82	121854	1681.93 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	267593	1706.11 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	40050	2244.54 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	383523	1986.40 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.204	74	65	N.D.	
3) Pyridine	4.226	79	1879	24.04 ng/ml#	56
6) Phenol	6.360	94	1048	11.31 ng/ml#	1
7) Aniline	6.371	93	187	N.D.	
8) Bis(2-chloroethyl) ether	6.419	93	379	4.86 ng/ml#	30
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	6.841	108	63	27.31 ng/ml#	74
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.959	107	118	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.975	45	74	N.D.	
16) N-Nitrosodi-n-propylamine	7.039	70	95	N.D.	
17) 3+4-Methylphenol	7.098	107	123	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.226	77	600	8.42 ng/ml#	29
22) Isophorone	7.478	82	175	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.611	122	106	N.D.	
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.681	105	290	711.89 ng/ml#	66
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	7.970	128	448	N.D.	
30) 4-Chloroaniline	0.000		0	N.D.	
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.499	107	96	66.14 ng/ml#	1
33) 2-Methylnaphthalene	8.660	142	392	N.D.	
34) 1-Methylnaphthalene	8.761	142	209	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	9.125	154	461	2.64 ng/ml#	60
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.173	138	308	7.29 ng/ml#	34
43) 2,6-Dimethylnaphthalene	9.286	156	247	N.D.	

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061916.D
Acq On : 6 Jun 2019 8:06 pm
Operator : JK /AMS /DTH
Sample : A9E0766-06RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

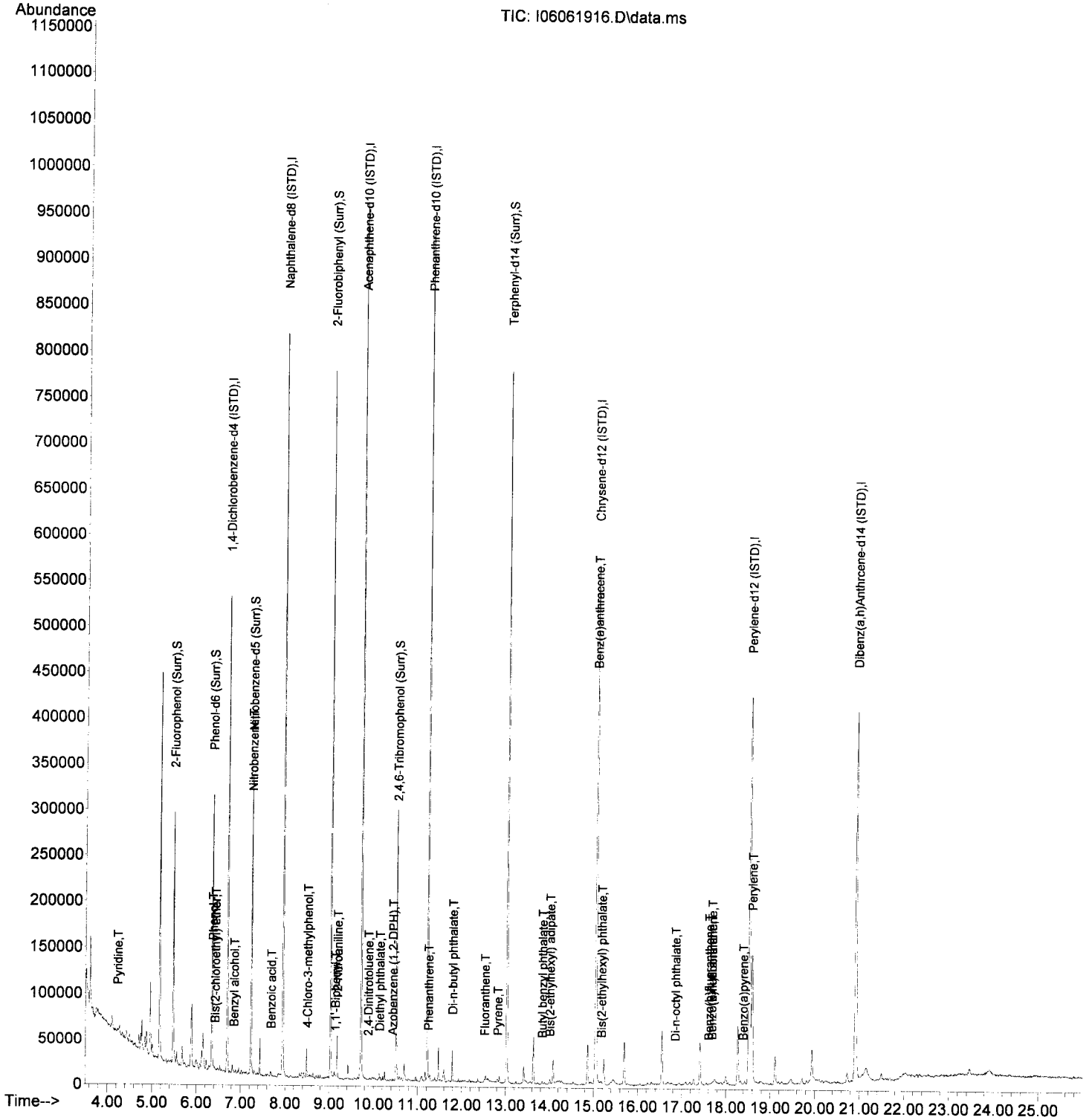
Quant Time: Jun 07 07:23:34 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

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	9.473	165	50	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.564	152	65	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.745	153	182	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.874	165	112	35.11 ng/ml#	17
55) Dibenzofuran	9.922	168	90	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	10.131	149	563	3.97 ng/ml	84
59) 2,3,5-Trimethylnaphtha...	10.147	170	65	N.D.	
60) Fluorene	10.270	166	60	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)	10.430	77	494	3.68 ng/ml#	1
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.243	178	812	3.92 ng/ml	86
72) Anthracene	11.302	178	77	N.D.	
73) Carbazole	11.462	167	116	N.D.	
74) Di-n-butyl phthalate	11.789	149	1892	8.05 ng/ml	96
75) Fluoranthene	12.521	202	1095	4.52 ng/ml	86
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.816	202	887	3.60 ng/ml	94
80) Butyl benzyl phthalate	13.827	149	625	15.68 ng/ml	70
81) Bis(2-ethylhexyl) adipate	13.998	129	1767	17.01 ng/ml	96
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.035	228	721	3.15 ng/ml	52
84) Chrysene	15.100	228	374	N.D.	
85) Bis(2-ethylhexyl) phth...	15.169	149	1477	10.63 ng/ml	96
87) Di-n-octyl phthalate	16.849	149	157	57.63 ng/ml#	1
88) Benzo(b)fluoranthene	17.608	252	625	7.13 ng/ml	58
89) Benzo(k)fluoranthene	17.678	252	230	6.02 ng/ml	76
90) Benzo(b+k)fluoranthene	17.678	252	230	11.19 ng/ml	76
91) Benzo(e)pyrene	18.261	252	369	N.D.	
92) Benzo(a)pyrene	18.384	252	297	8.04 ng/ml	87
93) Perylene	18.581	252	113135	618.14 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.903	276	177	N.D.	
96) Dibenz(a,h)anthracene	20.913	278	50	N.D.	
97) Benzo(g,h,i)perylene	21.454	276	251	N.D.	

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

Data Path : C:\msdchem\1\data\2019-06\9F06040\
Data File : I06061916.D
Acq On : 6 Jun 2019 8:06 pm
Operator : JK /AMS /DTH
Sample : A9E0766-06RE2
Misc : 1x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: Jun 07 07:23:34 2019
Quant Method : C:\msdchem\1\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Calibration Data

Sequence 9A30046 (Cal ID A9A3103) GCMS5

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9A30046**	Instrument:	**SV-GCMS5**
Date:	**01/30/19 16:37**	Calibration:	**A9A3103**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9A30046-TUN1	Water	QC	QC			A18L267	A19A180
2	9A30046-TUN2	Water	QC	QC			A18L267	A19A180
3	9A30046-ICB1	Water	QC	QC			A18L267	
4	9A30046-CAL1	Water	QC	QC			A18L267	A18L327
5	9A30046-CAL2	Water	QC	QC			A18L267	A18L328
6	9A30046-CAL3	Water	QC	QC			A18L267	A18L329
7	9A30046-CAL4	Water	QC	QC			A18L267	A18L330
8	9A30046-CAL5	Water	QC	QC			A18L267	A18L331
9	9A30046-CAL6	Water	QC	QC			A18L267	A18L332
10	9A30046-CAL7	Water	QC	QC			A18L267	A18L333
11	9A30046-CAL8	Water	QC	QC			A18L267	A18L334
12	9A30046-CAL9	Water	QC	QC			A18L267	A18L335
13	9A30046-CALA	Water	QC	QC			A18L267	A18L336
14	9A30046-IBL1	Water	QC	QC			A18L267	
15	9A30046-ICV1	Water	QC	QC			A18L267	A19A013
16	9A30046-IBL2	Water	QC	QC			A18L267	

Data Entered By: 1/31/19

Data Reviewed By: 2/1/19

Comments:

Calibration Status Report SV-GCMS5

Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Jan 31 10:44:49 2019
Response Via : Initial Calibration

A9A3103

1/31/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301914.D
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3	100	100	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301916.D
4	200	200	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301917.D
5	500	500	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301918.D
6	1000	1000	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301919.D
7	2000	2000	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301920.D
8	4000	4000	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301921.D
9	6000	6000	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301922.D
10	8000	8000	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301923.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Jan 31 10:43 2019	Jan 31 09:52 2019	30 Jan 2019 7:00 pm
2	50	Jan 31 10:44 2019	Jan 31 10:31 2019	30 Jan 2019 7:37 pm
3	100	Jan 31 10:44 2019	Jan 31 10:32 2019	30 Jan 2019 8:13 pm
4	200	Jan 31 10:44 2019	Jan 31 10:33 2019	30 Jan 2019 8:50 pm
5	500	Jan 31 10:44 2019	Jan 31 09:53 2019	30 Jan 2019 9:26 pm
6	1000	Jan 31 10:44 2019	Jan 31 09:53 2019	30 Jan 2019 10:02 pm
7	2000	Jan 31 10:44 2019	Jan 31 09:53 2019	30 Jan 2019 10:39 pm
8	4000	Jan 31 10:44 2019	Jan 31 10:36 2019	30 Jan 2019 11:15 pm
9	6000	Jan 31 10:44 2019	Jan 31 10:37 2019	30 Jan 2019 11:51 pm
10	8000	Jan 31 10:44 2019	Jan 31 10:38 2019	31 Jan 2019 12:28 am

SV5_013019.M Thu Jan 31 11:58:46 2019

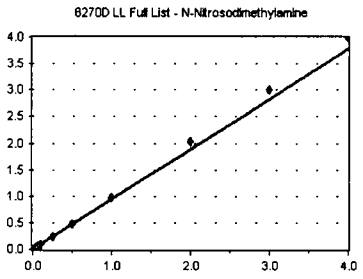
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

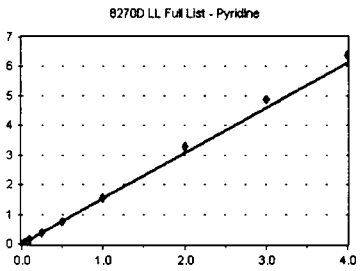


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2349	0.878	4.40
9A30046-CAL2	50	5969	0.849	4.41
9A30046-CAL3	100	12079	0.880	4.40
9A30046-CAL4	200	26607	0.915	4.39
9A30046-CAL5	500	68738	0.975	4.39
9A30046-CAL6	1000	136572	0.954	4.39
9A30046-CAL7	2000	276378	0.976	4.38
9A30046-CAL8	4000	561142	1.013	4.38
9A30046-CAL9	6000	871542	1.000	4.39
9A30046-CALA	8000	1122619	0.999	4.39

AVE RF **0.944** RF RSD **6.24** AVE RT **4.39**

Pyridine

Curve Fit: **AVERAGE RF**

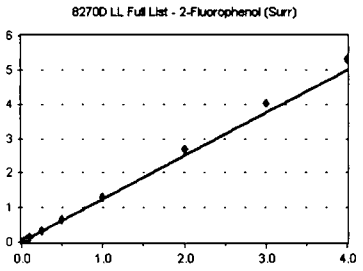


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~2510~~	~~0.938~~	~~4.47~~
9A30046-CAL2	50	9139	1.300	4.46
9A30046-CAL3	100	19576	1.427	4.45
9A30046-CAL4	200	42897	1.475	4.44
9A30046-CAL5	500	111106	1.575	4.43
9A30046-CAL6	1000	220078	1.537	4.43
9A30046-CAL7	2000	442924	1.564	4.42
9A30046-CAL8	4000	916259	1.654	4.41
9A30046-CAL9	6000	1414684	1.623	4.42
9A30046-CALA	8000	1799769	1.602	4.42

AVE RF **1.528** RF RSD **7.27** AVE RT **4.43**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

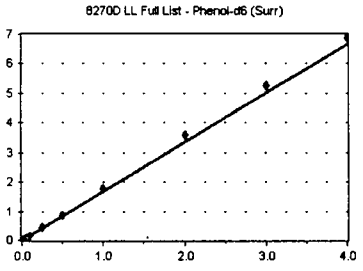


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2703	1.010	5.63
9A30046-CAL2	50	7768	1.105	5.63
9A30046-CAL3	100	16374	1.193	5.63
9A30046-CAL4	200	35753	1.229	5.63
9A30046-CAL5	500	92637	1.313	5.63
9A30046-CAL6	1000	186079	1.299	5.63
9A30046-CAL7	2000	365609	1.291	5.63
9A30046-CAL8	4000	749425	1.352	5.63
9A30046-CAL9	6000	1170363	1.343	5.63
9A30046-CALA	8000	1496600	1.332	5.63

AVE RF **1.247** RF RSD **9.11** AVE RT **5.63**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3503	1.309	6.48
9A30046-CAL2	50	10982	1.562	6.47
9A30046-CAL3	100	22782	1.661	6.47
9A30046-CAL4	200	47985	1.650	6.47
9A30046-CAL5	500	124633	1.767	6.47
9A30046-CAL6	1000	244299	1.706	6.47
9A30046-CAL7	2000	498621	1.761	6.48
9A30046-CAL8	4000	994097	1.794	6.48
9A30046-CAL9	6000	1526449	1.752	6.48
9A30046-CALA	8000	1930075	1.718	6.50

AVE RF **1.668** RF RSD **8.62** AVE RT **6.48**

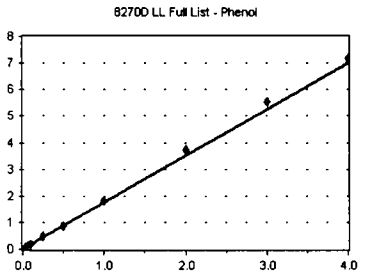
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Phenol

Curve Fit: **AVERAGE RF**

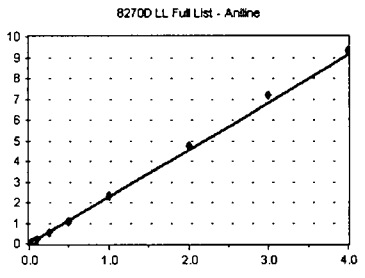


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3623	1.353	6.49
9A30046-CAL2	50	11772	1.675	6.49
9A30046-CAL3	100	24600	1.793	6.48
9A30046-CAL4	200	50967	1.752	6.48
9A30046-CAL5	500	128306	1.819	6.48
9A30046-CAL6	1000	252632	1.764	6.49
9A30046-CAL7	2000	512010	1.808	6.49
9A30046-CAL8	4000	1035475	1.869	6.49
9A30046-CAL9	6000	1606385	1.843	6.50
9A30046-CALA	8000	2021684	1.799	6.51

AVE RF **1.748** RF RSD **8.49** AVE RT **6.49**

Aniline

Curve Fit: **AVERAGE RF**

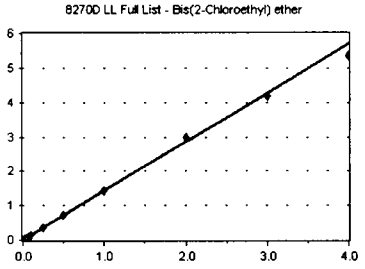


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~4076~~	~~1.523~~	~~6.53~~
9A30046-CAL2	50	15128	2.152	6.53
9A30046-CAL3	100	30756	2.242	6.53
9A30046-CAL4	200	63650	2.188	6.53
9A30046-CAL5	500	159299	2.259	6.53
9A30046-CAL6	1000	316926	2.213	6.53
9A30046-CAL7	2000	658664	2.326	6.53
9A30046-CAL8	4000	1318849	2.380	6.54
9A30046-CAL9	6000	2085810	2.394	6.54
9A30046-CALA	8000	2632489	2.343	6.55

AVE RF **2.277** RF RSD **3.81** AVE RT **6.53**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

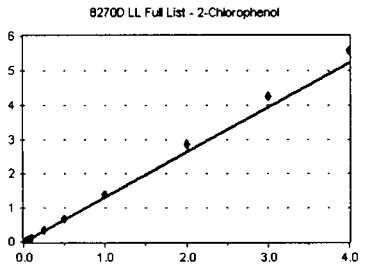


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3961	1.480	6.58
9A30046-CAL2	50	9806	1.395	6.58
9A30046-CAL3	100	18886	1.377	6.58
9A30046-CAL4	200	42294	1.454	6.58
9A30046-CAL5	500	105210	1.492	6.58
9A30046-CAL6	1000	205585	1.435	6.58
9A30046-CAL7	2000	405853	1.433	6.58
9A30046-CAL8	4000	824988	1.489	6.59
9A30046-CAL9	6000	1215843	1.395	6.59
9A30046-CALA	8000	1499102	1.334	6.60

AVE RF **1.428** RF RSD **3.68** AVE RT **6.58**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2671	0.998	6.65
9A30046-CAL2	50	8358	1.189	6.65
9A30046-CAL3	100	17282	1.260	6.65
9A30046-CAL4	200	37904	1.303	6.64
9A30046-CAL5	500	97220	1.378	6.64
9A30046-CAL6	1000	192879	1.347	6.65
9A30046-CAL7	2000	391006	1.381	6.65
9A30046-CAL8	4000	789250	1.424	6.65
9A30046-CAL9	6000	1233532	1.416	6.66
9A30046-CALA	8000	1563047	1.391	6.66

AVE RF **1.309** RF RSD **10.08** AVE RT **6.65**

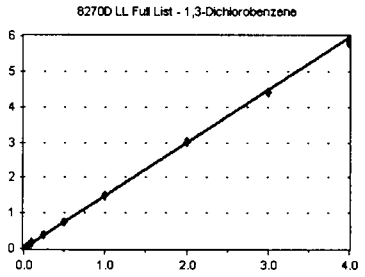
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

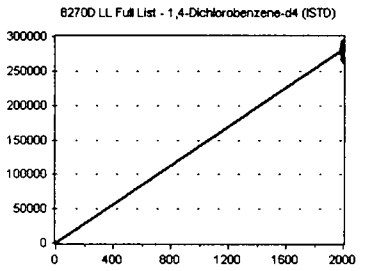


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3951	1.476	6.80
9A30046-CAL2	50	10651	1.515	6.80
9A30046-CAL3	100	20846	1.519	6.80
9A30046-CAL4	200	44104	1.516	6.79
9A30046-CAL5	500	108871	1.544	6.79
9A30046-CAL6	1000	212750	1.485	6.80
9A30046-CAL7	2000	418520	1.478	6.80
9A30046-CAL8	4000	831375	1.500	6.80
9A30046-CAL9	6000	1285655	1.475	6.80
9A30046-CALA	8000	1629041	1.450	6.81

AVE RF **1.496** RF RSD **1.87** AVE RT **6.80**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

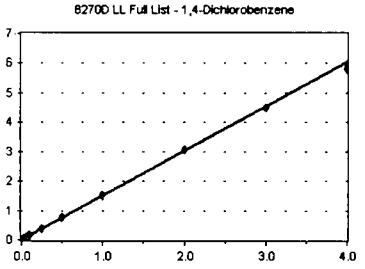


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	267680	133.840	6.85
9A30046-CAL2	2000	281181	140.590	6.85
9A30046-CAL3	2000	274393	137.196	6.85
9A30046-CAL4	2000	290867	145.434	6.85
9A30046-CAL5	2000	282130	141.065	6.85
9A30046-CAL6	2000	286436	143.218	6.85
9A30046-CAL7	2000	283178	141.589	6.85
9A30046-CAL8	2000	277065	138.533	6.85
9A30046-CAL9	2000	290473	145.236	6.85
9A30046-CALA	2000	280934	140.467	6.85

AVE RF **140.717** RF RSD **2.53** AVE RT **6.85**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

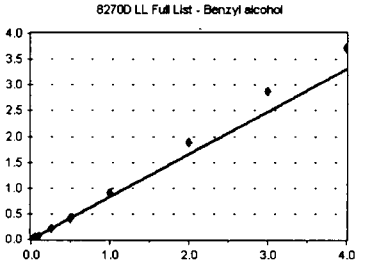


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3880	1.449	6.86
9A30046-CAL2	50	10515	1.496	6.86
9A30046-CAL3	100	21382	1.558	6.86
9A30046-CAL4	200	44829	1.541	6.86
9A30046-CAL5	500	111060	1.575	6.86
9A30046-CAL6	1000	215651	1.506	6.86
9A30046-CAL7	2000	426556	1.506	6.86
9A30046-CAL8	4000	845971	1.527	6.86
9A30046-CAL9	6000	1303668	1.496	6.86
9A30046-CALA	8000	1640871	1.460	6.87

AVE RF **1.511** RF RSD **2.64** AVE RT **6.86**

Benzyl alcohol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~1088~~	~~0.406~~	~~6.97~~
9A30046-CAL2	50	4308	0.613	6.97
9A30046-CAL3	100	9554	0.696	6.97
9A30046-CAL4	200	21731	0.747	6.97
9A30046-CAL5	500	59139	0.838	6.97
9A30046-CAL6	1000	119831	0.837	6.97
9A30046-CAL7	2000	255452	0.902	6.97
9A30046-CAL8	4000	520771	0.940	6.97
9A30046-CAL9	6000	832173	0.955	6.98
9A30046-CALA	8000	1046185	0.931	6.99

AVE RF **0.829** RF RSD **14.47** AVE RT **6.97**

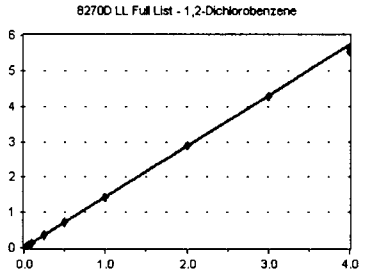
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

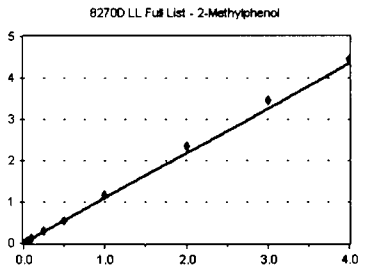


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3694	1.380	7.01
9A30046-CAL2	50	10083	1.434	7.01
9A30046-CAL3	100	20256	1.476	7.01
9A30046-CAL4	200	42117	1.448	7.01
9A30046-CAL5	500	104161	1.477	7.01
9A30046-CAL6	1000	203885	1.424	7.01
9A30046-CAL7	2000	401451	1.418	7.01
9A30046-CAL8	4000	802569	1.448	7.01
9A30046-CAL9	6000	1239034	1.422	7.01
9A30046-CALA	8000	1561940	1.390	7.02

AVE RF **1.432** RF RSD **2.25** AVE RT **7.01**

2-Methylphenol

Curve Fit: **AVERAGE RF**

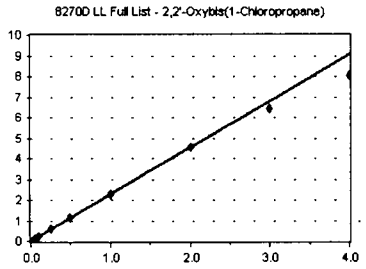


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2376	0.888	7.07
9A30046-CAL2	50	6847	0.974	7.07
9A30046-CAL3	100	14811	1.080	7.07
9A30046-CAL4	200	31237	1.074	7.06
9A30046-CAL5	500	81540	1.156	7.07
9A30046-CAL6	1000	158539	1.107	7.07
9A30046-CAL7	2000	326863	1.154	7.07
9A30046-CAL8	4000	654892	1.182	7.07
9A30046-CAL9	6000	1006886	1.155	7.07
9A30046-CALA	8000	1251343	1.114	7.08

AVE RF **1.088** RF RSD **8.49** AVE RT **7.07**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

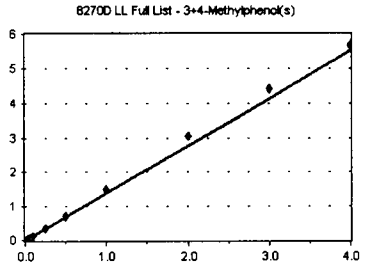


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5888	2.200	7.10
9A30046-CAL2	50	16784	2.388	7.10
9A30046-CAL3	100	32803	2.391	7.09
9A30046-CAL4	200	67804	2.331	7.09
9A30046-CAL5	500	168498	2.389	7.09
9A30046-CAL6	1000	325929	2.276	7.10
9A30046-CAL7	2000	642111	2.268	7.10
9A30046-CAL8	4000	1253005	2.261	7.10
9A30046-CAL9	6000	1862706	2.138	7.10
9A30046-CALA	8000	2259312	2.011	7.10

AVE RF **2.265** RF RSD **5.43** AVE RT **7.10**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2797	1.045	7.21
9A30046-CAL2	50	8837	1.257	7.21
9A30046-CAL3	100	18073	1.317	7.21
9A30046-CAL4	200	38619	1.328	7.21
9A30046-CAL5	500	104697	1.484	7.21
9A30046-CAL6	1000	201525	1.407	7.21
9A30046-CAL7	2000	423242	1.495	7.22
9A30046-CAL8	4000	845995	1.527	7.22
9A30046-CAL9	6000	1282429	1.472	7.23
9A30046-CALA	8000	1590888	1.416	7.24

AVE RF **1.375** RF RSD **10.56** AVE RT **7.22**

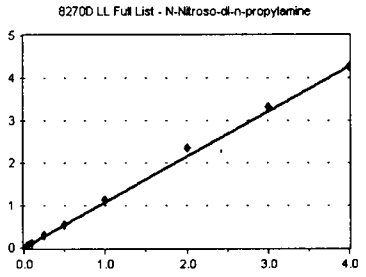
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

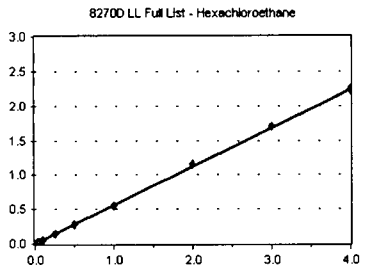


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2415	0.902	7.22
9A30046-CAL2	50	6849	0.974	7.22
9A30046-CAL3	100	14289	1.041	7.22
9A30046-CAL4	200	30932	1.063	7.22
9A30046-CAL5	500	81082	1.150	7.22
9A30046-CAL6	1000	155529	1.086	7.22
9A30046-CAL7	2000	323691	1.143	7.23
9A30046-CAL8	4000	649377	1.172	7.23
9A30046-CAL9	6000	964528	1.107	7.24
9A30046-CALA	8000	1199931	1.068	7.25

AVE RF **1.071** RF RSD **7.74** AVE RT **7.23**

Hexachloroethane

Curve Fit: **AVERAGE RF**

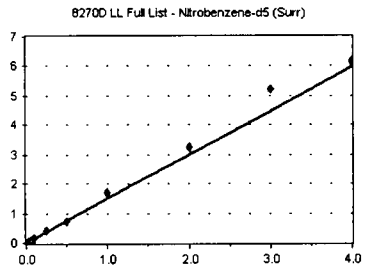


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1366	0.510	7.35
9A30046-CAL2	50	3855	0.548	7.35
9A30046-CAL3	100	7837	0.571	7.35
9A30046-CAL4	200	16252	0.559	7.35
9A30046-CAL5	500	40316	0.572	7.35
9A30046-CAL6	1000	80048	0.559	7.35
9A30046-CAL7	2000	158301	0.559	7.35
9A30046-CAL8	4000	319170	0.576	7.35
9A30046-CAL9	6000	494803	0.568	7.35
9A30046-CALA	8000	626658	0.558	7.35

AVE RF **0.558** RF RSD **3.35** AVE RT **7.35**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

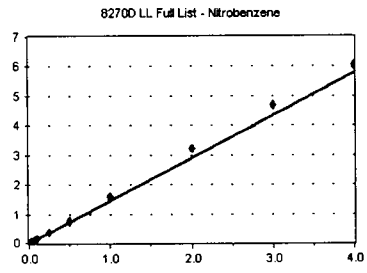


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3003~~	~~1.122~~	~~7.38~~
9A30046-CAL2	50	7789	1.108	7.38
9A30046-CAL3	100	17308	1.262	7.38
9A30046-CAL4	200	38942	1.339	7.38
9A30046-CAL5	500	116738	1.655	7.38
9A30046-CAL6	1000	210602	1.471	7.38
9A30046-CAL7	2000	486300	1.717	7.38
9A30046-CAL8	4000	903192	1.630	7.38
9A30046-CAL9	6000	1512631	1.736	7.39
9A30046-CALA	8000	1731910	1.541	7.39

AVE RF **1.495** RF RSD **14.62** AVE RT **7.38**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3065	1.145	7.40
9A30046-CAL2	50	8550	1.216	7.40
9A30046-CAL3	100	18438	1.344	7.40
9A30046-CAL4	200	41375	1.422	7.39
9A30046-CAL5	500	109635	1.554	7.39
9A30046-CAL6	1000	213695	1.492	7.40
9A30046-CAL7	2000	445401	1.573	7.40
9A30046-CAL8	4000	894143	1.614	7.40
9A30046-CAL9	6000	1366079	1.568	7.41
9A30046-CALA	8000	1701352	1.514	7.42

AVE RF **1.444** RF RSD **11.11** AVE RT **7.40**

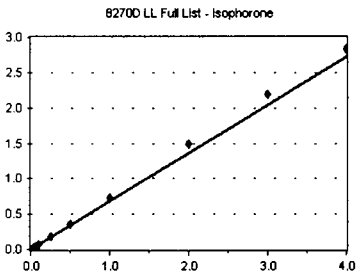
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Isophorone

Curve Fit: **AVERAGE RF**

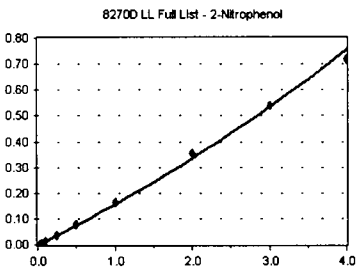


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5446	0.516	7.63
9A30046-CAL2	50	16770	0.628	7.63
9A30046-CAL3	100	35464	0.650	7.62
9A30046-CAL4	200	76306	0.676	7.62
9A30046-CAL5	500	203487	0.727	7.62
9A30046-CAL6	1000	391987	0.715	7.63
9A30046-CAL7	2000	818603	0.727	7.63
9A30046-CAL8	4000	1662743	0.749	7.64
9A30046-CAL9	6000	2507237	0.728	7.64
9A30046-CALA	8000	3162533	0.709	7.66

AVE RF **0.683** RF RSD **10.26** AVE RT **7.63**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

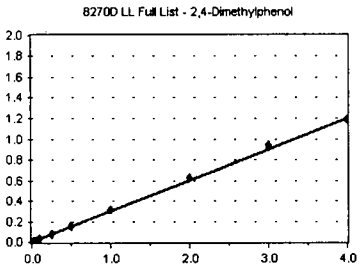


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~775~~	~~0.073~~	~~7.71~~
9A30046-CAL2	50	2288	0.086	7.71
9A30046-CAL3	100	5408	9.914	7.71
9A30046-CAL4	200	12965	0.115	7.71
9A30046-CAL5	500	40651	0.145	7.71
9A30046-CAL6	1000	83980	0.153	7.71
9A30046-CAL7	2000	184428	0.164	7.71
9A30046-CAL8	4000	394481	0.178	7.71
9A30046-CAL9	6000	619284	0.180	7.72
9A30046-CALA	8000	801876	0.180	7.73

AVE RF **0.144** RF RSD **25.03** AVE RT **7.72**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

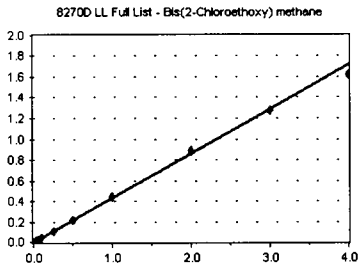


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~2085~~	~~0.197~~	~~7.74~~
9A30046-CAL2	50	7337	0.275	7.74
9A30046-CAL3	100	15179	0.278	7.74
9A30046-CAL4	200	32468	0.288	7.74
9A30046-CAL5	500	87099	0.311	7.74
9A30046-CAL6	1000	168017	0.307	7.74
9A30046-CAL7	2000	352518	0.313	7.74
9A30046-CAL8	4000	691817	0.312	7.75
9A30046-CAL9	6000	1081606	0.314	7.75
9A30046-CALA	8000	1321200	0.296	7.76

AVE RF **0.299** RF RSD **5.22** AVE RT **7.74**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	4242	0.402	7.83
9A30046-CAL2	50	11626	0.435	7.83
9A30046-CAL3	100	23620	0.433	7.83
9A30046-CAL4	200	48550	0.430	7.83
9A30046-CAL5	500	126251	0.451	7.83
9A30046-CAL6	1000	237898	0.434	7.83
9A30046-CAL7	2000	493285	0.438	7.83
9A30046-CAL8	4000	982323	0.443	7.84
9A30046-CAL9	6000	1460686	0.424	7.84
9A30046-CALA	8000	1803114	0.404	7.85

AVE RF **0.429** RF RSD **3.66** AVE RT **7.84**

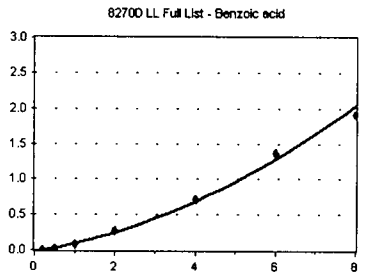
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

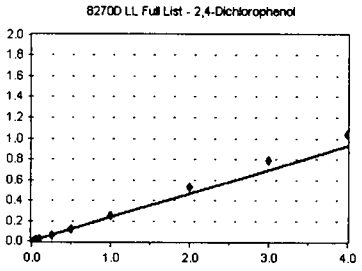


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~40~~	~~69~~	~~3.267~~	~~7.85~~
~~9A30046-CAL2~~	~~100~~	~~56~~	~~1.048~~	~~7.82~~
~~9A30046-CAL3~~	~~200~~	~~308~~	~~2.823~~	~~7.82~~
9A30046-CAL4	400	2001	8.862	7.77
9A30046-CAL5	1000	24058	0.043	7.79
9A30046-CAL6	2000	97527	8.897	7.82
9A30046-CAL7	4000	314631	0.140	7.85
9A30046-CAL8	8000	790966	0.178	7.90
9A30046-CAL9	12000	1567369	0.228	7.94
9A30046-CALA	16000	2134233	0.239	7.97

AVE RF **0.132** RF RSD **67.48** AVE RT **7.86**

2,4-Dichlorophenol

Curve Fit: **AVERAGE RF**

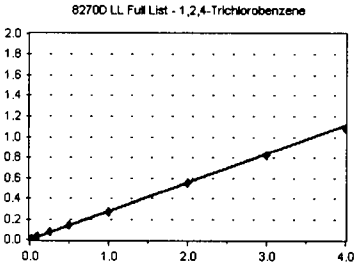


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~1557~~	~~0.147~~	~~7.95~~
9A30046-CAL2	50	4758	0.178	7.95
9A30046-CAL3	100	10325	0.189	7.95
9A30046-CAL4	200	23291	0.206	7.94
9A30046-CAL5	500	66479	0.238	7.95
9A30046-CAL6	1000	129436	0.236	7.95
9A30046-CAL7	2000	283710	0.252	7.95
9A30046-CAL8	4000	583274	0.263	7.96
9A30046-CAL9	6000	912238	0.265	7.96
9A30046-CALA	8000	1159632	0.260	7.97

AVE RF **0.232** RF RSD **14.18** AVE RT **7.95**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

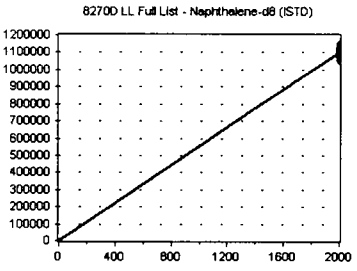


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2751	0.261	8.04
9A30046-CAL2	50	7910	0.296	8.04
9A30046-CAL3	100	15521	0.285	8.04
9A30046-CAL4	200	31882	0.282	8.04
9A30046-CAL5	500	78967	0.282	8.04
9A30046-CAL6	1000	151142	0.276	8.04
9A30046-CAL7	2000	307169	0.273	8.04
9A30046-CAL8	4000	617165	0.278	8.04
9A30046-CAL9	6000	947888	0.275	8.05
9A30046-CALA	8000	1206585	0.271	8.05

AVE RF **0.278** RF RSD **3.41** AVE RT **8.04**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	1055936	527.968	8.10
9A30046-CAL2	2000	1068309	534.154	8.10
9A30046-CAL3	2000	1090991	545.496	8.10
9A30046-CAL4	2000	1128963	564.482	8.10
9A30046-CAL5	2000	1119185	559.593	8.10
9A30046-CAL6	2000	1096117	548.058	8.10
9A30046-CAL7	2000	1126005	563.003	8.10
9A30046-CAL8	2000	1109587	554.793	8.10
9A30046-CAL9	2000	1148108	574.054	8.10
9A30046-CALA	2000	1114798	557.399	8.10

AVE RF **552.900** RF RSD **2.56** AVE RT **8.10**

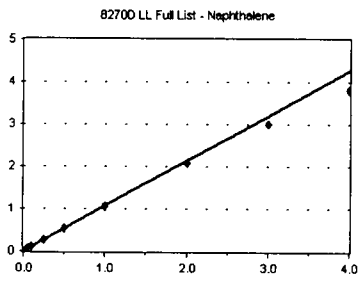
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Naphthalene

Curve Fit: **AVERAGE RF**

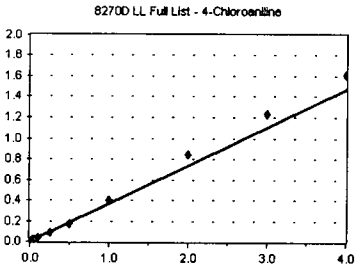


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	11917	1.129	8.12
9A30046-CAL2	50	30779	1.152	8.12
9A30046-CAL3	100	59651	1.094	8.12
9A30046-CAL4	200	122429	1.084	8.12
9A30046-CAL5	500	307927	1.101	8.12
9A30046-CAL6	1000	582708	1.063	8.12
9A30046-CAL7	2000	1180925	1.049	8.12
9A30046-CAL8	4000	2314690	1.043	8.13
9A30046-CAL9	6000	3450382	1.002	8.13
9A30046-CALA	8000	4249185	0.953	8.13

AVE RF **1.067** RF RSD **5.54** AVE RT **8.12**

4-Chloroaniline

Curve Fit: **AVERAGE RF**

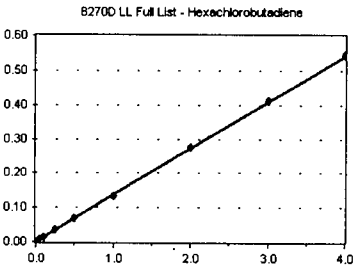


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2975	0.282	8.16
9A30046-CAL2	50	8890	0.333	8.16
9A30046-CAL3	100	19347	0.355	8.16
9A30046-CAL4	200	39584	0.351	8.16
9A30046-CAL5	500	102663	0.367	8.16
9A30046-CAL6	1000	195519	0.357	8.16
9A30046-CAL7	2000	447643	0.398	8.16
9A30046-CAL8	4000	932245	0.420	8.16
9A30046-CAL9	6000	1415802	0.411	8.17
9A30046-CALA	8000	1793320	0.402	8.17

AVE RF **0.367** RF RSD **11.43** AVE RT **8.16**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

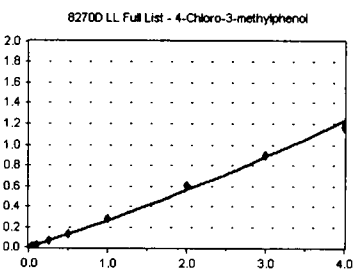


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1290	0.122	8.24
9A30046-CAL2	50	3731	0.140	8.24
9A30046-CAL3	100	7485	0.137	8.24
9A30046-CAL4	200	15189	0.135	8.24
9A30046-CAL5	500	38478	0.138	8.24
9A30046-CAL6	1000	76109	0.139	8.24
9A30046-CAL7	2000	151477	0.135	8.24
9A30046-CAL8	4000	307584	0.139	8.25
9A30046-CAL9	6000	473675	0.138	8.25
9A30046-CALA	8000	608097	0.136	8.25

AVE RF **0.136** RF RSD **3.72** AVE RT **8.24**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~895~~	~~8.476~~	~~8.64~~
9A30046-CAL2	50	3536	0.132	8.64
9A30046-CAL3	100	9340	0.171	8.63
9A30046-CAL4	200	22255	0.197	8.63
9A30046-CAL5	500	69673	0.249	8.63
9A30046-CAL6	1000	137180	0.250	8.63
9A30046-CAL7	2000	317795	0.282	8.63
9A30046-CAL8	4000	668189	0.301	8.64
9A30046-CAL9	6000	1026539	0.298	8.64
9A30046-CALA	8000	1296093	0.291	8.65

AVE RF **0.241** RF RSD **25.28** AVE RT **8.64**

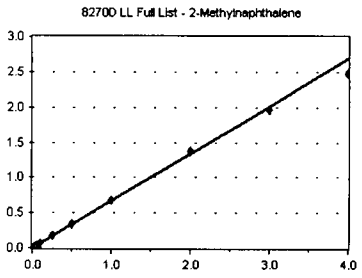
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

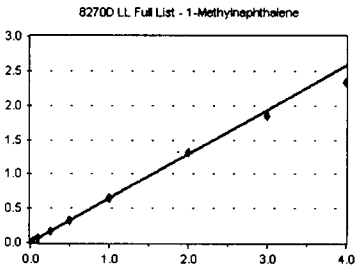


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6941	0.657	8.82
9A30046-CAL2	50	18189	0.681	8.82
9A30046-CAL3	100	36689	0.673	8.81
9A30046-CAL4	200	76316	0.676	8.81
9A30046-CAL5	500	195835	0.700	8.81
9A30046-CAL6	1000	368916	0.673	8.82
9A30046-CAL7	2000	771341	0.685	8.82
9A30046-CAL8	4000	1531917	0.690	8.82
9A30046-CAL9	6000	2256262	0.655	8.82
9A30046-CALA	8000	2767888	0.621	8.82

AVE RF **0.671** RF RSD **3.33** AVE RT **8.82**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

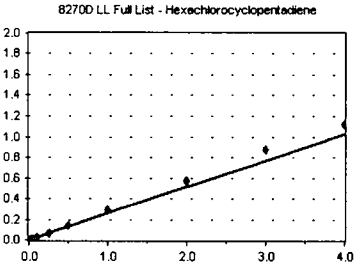


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6831	0.647	8.91
9A30046-CAL2	50	17571	0.658	8.92
9A30046-CAL3	100	35408	0.649	8.91
9A30046-CAL4	200	72918	0.646	8.91
9A30046-CAL5	500	188716	0.674	8.91
9A30046-CAL6	1000	353069	0.644	8.92
9A30046-CAL7	2000	730943	0.649	8.92
9A30046-CAL8	4000	1454487	0.655	8.92
9A30046-CAL9	6000	2130936	0.619	8.92
9A30046-CALA	8000	2608946	0.585	8.92

AVE RF **0.643** RF RSD **3.82** AVE RT **8.92**

Hexachlorocyclopentadiene

Curve Fit: **AVERAGE RF**

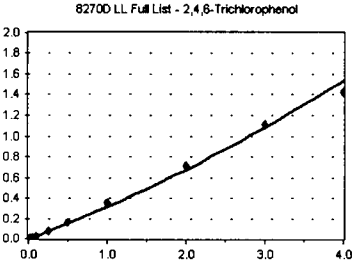


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	899	0.185	8.98
9A30046-CAL2	50	2439	0.208	8.98
9A30046-CAL3	100	5330	0.225	8.98
9A30046-CAL4	200	12226	0.246	8.98
9A30046-CAL5	500	34778	0.273	8.98
9A30046-CAL6	1000	68561	0.278	8.98
9A30046-CAL7	2000	153915	0.291	8.98
9A30046-CAL8	4000	309053	0.287	8.98
9A30046-CAL9	6000	489813	0.293	8.98
9A30046-CALA	8000	607633	0.280	8.99

AVE RF **0.257** RF RSD **14.99** AVE RT **8.98**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	754	0.155	9.09
9A30046-CAL2	50	2135	0.182	9.09
9A30046-CAL3	100	5412	0.228	9.09
9A30046-CAL4	200	12662	0.254	9.09
9A30046-CAL5	500	39573	0.310	9.09
9A30046-CAL6	1000	77589	0.314	9.09
9A30046-CAL7	2000	185604	0.351	9.09
9A30046-CAL8	4000	386229	0.358	9.10
9A30046-CAL9	6000	617479	0.370	9.10
9A30046-CALA	8000	774818	0.357	9.11

AVE RF **0.288** RF RSD **27.15** AVE RT **9.10**

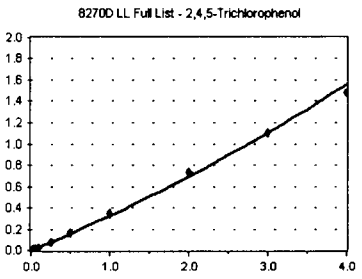
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

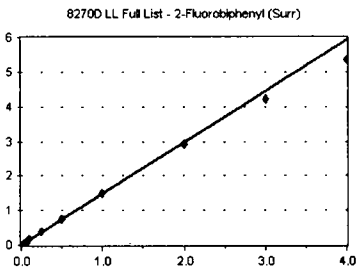


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	702	0.145	9.14
9A30046-CAL2	50	2609	0.223	9.13
9A30046-CAL3	100	6051	0.255	9.13
9A30046-CAL4	200	12964	0.260	9.13
9A30046-CAL5	500	40483	0.318	9.13
9A30046-CAL6	1000	79865	0.324	9.13
9A30046-CAL7	2000	183508	0.347	9.13
9A30046-CAL8	4000	398737	0.370	9.13
9A30046-CAL9	6000	611970	0.367	9.14
9A30046-CALA	8000	807064	0.372	9.14

AVE RF **0.298** RF RSD **25.32** AVE RT **9.13**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

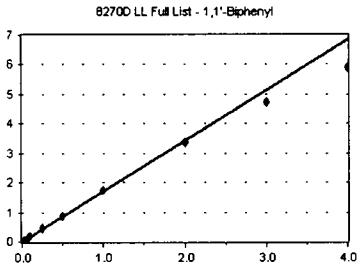


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7112	1.465	9.18
9A30046-CAL2	50	18089	1.543	9.18
9A30046-CAL3	100	36884	1.556	9.18
9A30046-CAL4	200	77186	1.550	9.18
9A30046-CAL5	500	198705	1.559	9.18
9A30046-CAL6	1000	371894	1.507	9.18
9A30046-CAL7	2000	786718	1.490	9.18
9A30046-CAL8	4000	1579625	1.465	9.19
9A30046-CAL9	6000	2343826	1.404	9.19
9A30046-CALA	8000	2900077	1.335	9.19

AVE RF **1.487** RF RSD **4.93** AVE RT **9.18**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

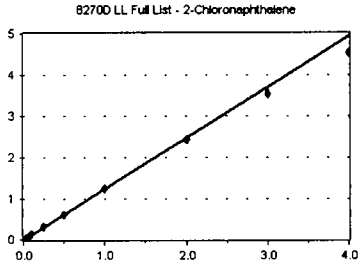


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	8419	1.734	9.28
9A30046-CAL2	50	21089	1.799	9.28
9A30046-CAL3	100	42772	1.804	9.28
9A30046-CAL4	200	88511	1.778	9.28
9A30046-CAL5	500	230563	1.809	9.28
9A30046-CAL6	1000	427889	1.734	9.28
9A30046-CAL7	2000	909543	1.722	9.29
9A30046-CAL8	4000	1815386	1.683	9.29
9A30046-CAL9	6000	2626639	1.573	9.29
9A30046-CALA	8000	3199105	1.473	9.30

AVE RF **1.711** RF RSD **6.40** AVE RT **9.28**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6075	1.252	9.31
9A30046-CAL2	50	14859	1.268	9.31
9A30046-CAL3	100	30467	1.285	9.31
9A30046-CAL4	200	63199	1.270	9.31
9A30046-CAL5	500	163765	1.285	9.31
9A30046-CAL6	1000	302479	1.226	9.31
9A30046-CAL7	2000	650474	1.232	9.31
9A30046-CAL8	4000	1315972	1.220	9.31
9A30046-CAL9	6000	1970530	1.180	9.32
9A30046-CALA	8000	2468792	1.137	9.32

AVE RF **1.235** RF RSD **3.86** AVE RT **9.31**

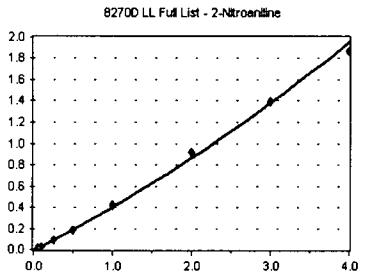
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

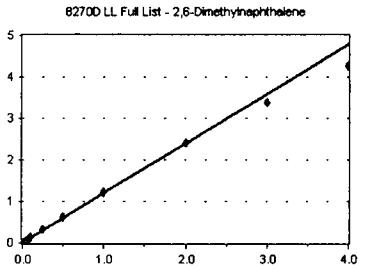


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~663~~	~~0.137~~	~~9.40~~
~~9A30046-CAL2~~	~~50~~	~~2037~~	~~0.174~~	~~9.40~~
9A30046-CAL3	100	4661	0.197	9.40
9A30046-CAL4	200	12071	0.242	9.40
9A30046-CAL5	500	43914	0.344	9.40
9A30046-CAL6	1000	89229	0.362	9.40
9A30046-CAL7	2000	225078	0.426	9.40
9A30046-CAL8	4000	493107	0.457	9.41
9A30046-CAL9	6000	778160	0.466	9.42
9A30046-CALA	8000	1014716	0.467	9.43

AVE RF **0.370** RF RSD **28.24** AVE RT **9.41**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

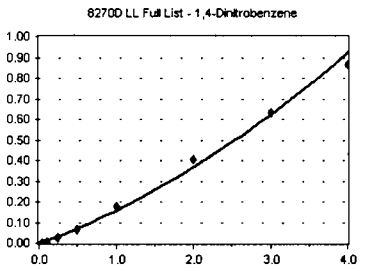


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5544	1.142	9.44
9A30046-CAL2	50	14256	1.216	9.45
9A30046-CAL3	100	29357	1.238	9.44
9A30046-CAL4	200	61710	1.240	9.44
9A30046-CAL5	500	161748	1.269	9.44
9A30046-CAL6	1000	304453	1.234	9.45
9A30046-CAL7	2000	646334	1.224	9.45
9A30046-CAL8	4000	1294122	1.200	9.45
9A30046-CAL9	6000	1873897	1.122	9.45
9A30046-CALA	8000	2321419	1.069	9.46

AVE RF **1.195** RF RSD **5.30** AVE RT **9.45**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

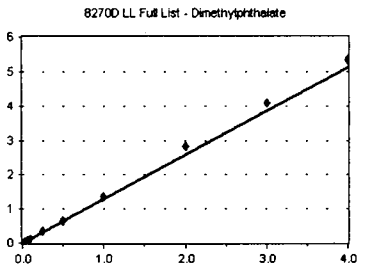


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~197~~	~~4.058~~	~~9.53~~
~~9A30046-CAL2~~	~~50~~	~~523~~	~~4.462~~	~~9.53~~
9A30046-CAL3	100	1254	5.289	9.53
9A30046-CAL4	200	3705	7.442	9.53
9A30046-CAL5	500	15009	0.118	9.53
9A30046-CAL6	1000	32964	0.134	9.53
9A30046-CAL7	2000	93455	0.177	9.53
9A30046-CAL8	4000	217979	0.202	9.54
9A30046-CAL9	6000	353235	0.212	9.54
9A30046-CALA	8000	468426	0.216	9.55

AVE RF **0.148** RF RSD **42.68** AVE RT **9.54**

Dimethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5420	1.117	9.58
9A30046-CAL2	50	13040	1.112	9.58
9A30046-CAL3	100	27948	1.179	9.58
9A30046-CAL4	200	63042	1.266	9.58
9A30046-CAL5	500	175061	1.373	9.58
9A30046-CAL6	1000	323675	1.312	9.58
9A30046-CAL7	2000	722554	1.368	9.59
9A30046-CAL8	4000	1516221	1.406	9.60
9A30046-CAL9	6000	2274017	1.362	9.61
9A30046-CALA	8000	2911473	1.340	9.61

AVE RF **1.284** RF RSD **8.57** AVE RT **9.59**

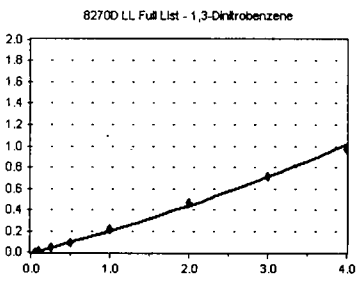
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

1,3-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

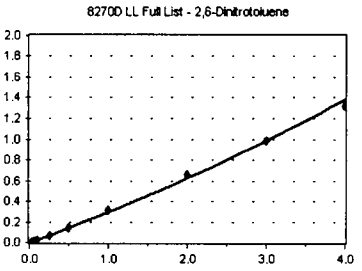


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~245~~	~~5.047~~	~~9.61~~
~~9A30046-CAL2~~	~~50~~	~~748~~	~~6.381~~	~~9.61~~
9A30046-CAL3	100	1734	7.313	9.61
9A30046-CAL4	200	5323	0.107	9.61
9A30046-CAL5	500	21039	0.165	9.61
9A30046-CAL6	1000	43195	0.175	9.61
9A30046-CAL7	2000	113932	0.216	9.62
9A30046-CAL8	4000	251848	0.234	9.62
9A30046-CAL9	6000	398456	0.239	9.63
9A30046-CALA	8000	525895	0.242	9.65

AVE RF **0.181** RF RSD **35.16** AVE RT **9.62**

2,6-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

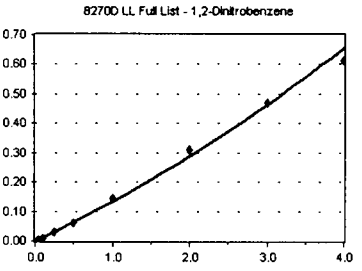


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~434~~	~~8.941~~	~~9.64~~
9A30046-CAL2	50	1439	0.123	9.64
9A30046-CAL3	100	3823	0.161	9.64
9A30046-CAL4	200	10458	0.210	9.64
9A30046-CAL5	500	35146	0.276	9.64
9A30046-CAL6	1000	69388	0.281	9.65
9A30046-CAL7	2000	164544	0.312	9.65
9A30046-CAL8	4000	358077	0.332	9.66
9A30046-CAL9	6000	550344	0.330	9.66
9A30046-CALA	8000	715275	0.329	9.67

AVE RF **0.262** RF RSD **30.01** AVE RT **9.65**

1,2-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

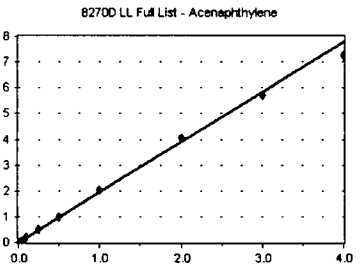


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~203~~	~~4.182~~	~~9.70~~
9A30046-CAL2	50	546	4.658	9.70
9A30046-CAL3	100	1698	7.161	9.70
9A30046-CAL4	200	4275	8.587	9.70
9A30046-CAL5	500	15598	0.122	9.70
9A30046-CAL6	1000	30555	0.124	9.70
9A30046-CAL7	2000	76738	0.145	9.71
9A30046-CAL8	4000	167602	0.155	9.72
9A30046-CAL9	6000	260513	0.156	9.73
9A30046-CALA	8000	333646	0.154	9.74

AVE RF **0.118** RF RSD **34.47** AVE RT **9.71**

Acenaphthylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7974	1.643	9.73
9A30046-CAL2	50	22412	1.912	9.74
9A30046-CAL3	100	47041	1.984	9.73
9A30046-CAL4	200	100207	2.013	9.73
9A30046-CAL5	500	268456	2.106	9.73
9A30046-CAL6	1000	501305	2.032	9.74
9A30046-CAL7	2000	1078092	2.041	9.74
9A30046-CAL8	4000	2187965	2.029	9.74
9A30046-CAL9	6000	3178592	1.904	9.75
9A30046-CALA	8000	3948147	1.818	9.75

AVE RF **1.948** RF RSD **6.97** AVE RT **9.74**

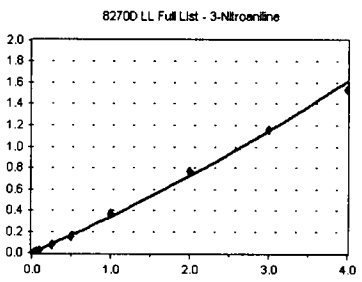
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

3-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

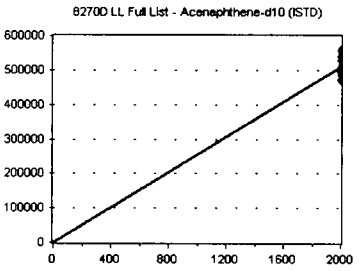


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~572~~	~~0.118~~	~~9.82~~
9A30046-CAL2	50	1785	0.152	9.82
9A30046-CAL3	100	4826	0.204	9.82
9A30046-CAL4	200	12489	0.251	9.82
9A30046-CAL5	500	40839	0.320	9.82
9A30046-CAL6	1000	75940	0.308	9.82
9A30046-CAL7	2000	193626	0.367	9.82
9A30046-CAL8	4000	413792	0.384	9.83
9A30046-CAL9	6000	645615	0.387	9.84
9A30046-CALA	8000	834824	0.384	9.85

AVE RF **0.306** RF RSD **28.22** AVE RT **9.82**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

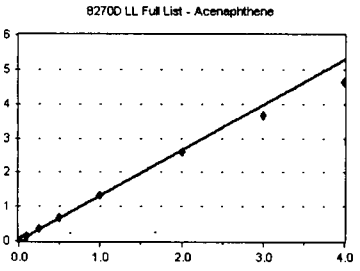


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	485404	242.702	9.88
9A30046-CAL2	2000	468864	234.432	9.88
9A30046-CAL3	2000	474233	237.117	9.88
9A30046-CAL4	2000	497817	248.908	9.88
9A30046-CAL5	2000	509897	254.948	9.88
9A30046-CAL6	2000	493423	246.712	9.88
9A30046-CAL7	2000	528163	264.082	9.88
9A30046-CAL8	2000	539188	269.594	9.89
9A30046-CAL9	2000	556496	278.248	9.89
9A30046-CALA	2000	543018	271.509	9.89

AVE RF **254.825** RF RSD **6.01** AVE RT **9.88**

Acenaphthene

Curve Fit: **AVERAGE RF**

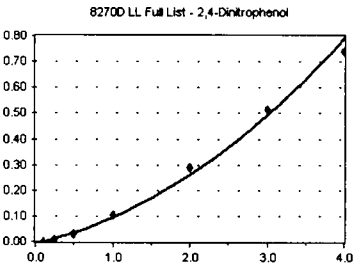


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6866	1.414	9.91
9A30046-CAL2	50	15975	1.363	9.91
9A30046-CAL3	100	32436	1.368	9.91
9A30046-CAL4	200	67960	1.365	9.91
9A30046-CAL5	500	176086	1.381	9.91
9A30046-CAL6	1000	328378	1.331	9.91
9A30046-CAL7	2000	694436	1.315	9.91
9A30046-CAL8	4000	1394892	1.294	9.92
9A30046-CAL9	6000	2033161	1.218	9.92
9A30046-CALA	8000	2520666	1.160	9.93

AVE RF **1.321** RF RSD **5.95** AVE RT **9.91**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9A30046-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9A30046-CAL3~~	~~100~~	~~0~~	~~0.000~~	~~0.00~~
9A30046-CAL4	200	686	1.378	9.92
9A30046-CAL5	500	4803	0.038	9.92
9A30046-CAL6	1000	14249	5.776	9.92
9A30046-CAL7	2000	55055	0.104	9.92
9A30046-CAL8	4000	155885	0.145	9.93
9A30046-CAL9	6000	286154	0.171	9.94
9A30046-CALA	8000	400481	0.184	9.95

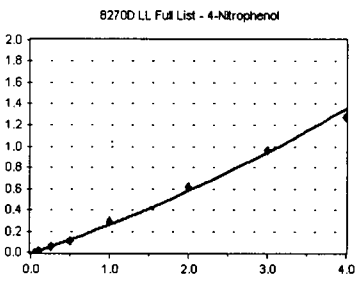
AVE RF **0.102** RF RSD **66.15** AVE RT **9.93**

Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

4-Nitrophenol

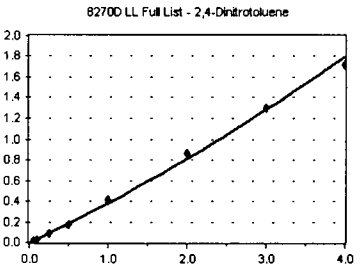


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~335~~	~~6.901~~	~~9.99~~
~~9A30046-CAL2~~	~~50~~	~~1002~~	~~8.548~~	~~9.98~~
9A30046-CAL3	100	2407	0.102	9.97
9A30046-CAL4	200	6776	0.136	9.97
9A30046-CAL5	500	27714	0.217	9.97
9A30046-CAL6	1000	55114	0.223	9.97
9A30046-CAL7	2000	153275	0.290	9.98
9A30046-CAL8	4000	332708	0.309	9.99
9A30046-CAL9	6000	535869	0.321	10.00
9A30046-CALA	8000	695415	0.320	10.01

AVE RF **0.240** RF RSD **35.58** AVE RT **9.98**

2,4-Dinitrotoluene

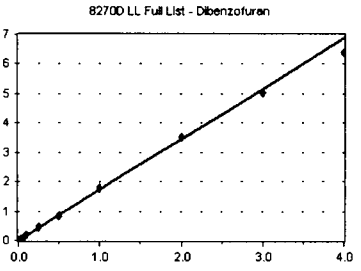


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~575~~	~~0.118~~	~~10.05~~
~~9A30046-CAL2~~	~~50~~	~~1435~~	~~0.122~~	~~10.06~~
9A30046-CAL3	100	3832	0.162	10.05
9A30046-CAL4	200	11280	0.227	10.05
9A30046-CAL5	500	41590	0.326	10.05
9A30046-CAL6	1000	83270	0.338	10.06
9A30046-CAL7	2000	214871	0.407	10.06
9A30046-CAL8	4000	465322	0.432	10.07
9A30046-CAL9	6000	723845	0.434	10.08
9A30046-CALA	8000	930978	0.429	10.08

AVE RF **0.344** RF RSD **29.92** AVE RT **10.06**

Dibenzofuran

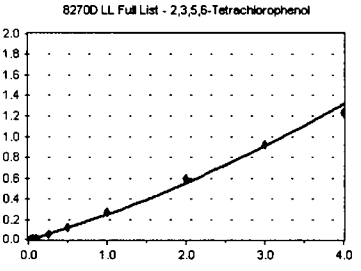


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	8455	1.742	10.08
9A30046-CAL2	50	19948	1.702	10.08
9A30046-CAL3	100	40600	1.712	10.08
9A30046-CAL4	200	85176	1.711	10.08
9A30046-CAL5	500	231005	1.812	10.08
9A30046-CAL6	1000	418743	1.697	10.08
9A30046-CAL7	2000	931904	1.764	10.09
9A30046-CAL8	4000	1891403	1.754	10.09
9A30046-CAL9	6000	2796501	1.675	10.09
9A30046-CALA	8000	3482255	1.603	10.10

AVE RF **1.717** RF RSD **3.29** AVE RT **10.09**

2,3,5,6-Tetrachlorophenol



Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~340~~	~~7.004~~	~~10.16~~
9A30046-CAL2	50	1011	8.625	10.17
9A30046-CAL3	100	2714	0.114	10.16
9A30046-CAL4	200	7669	0.154	10.16
9A30046-CAL5	500	28568	0.224	10.16
9A30046-CAL6	1000	56972	0.231	10.16
9A30046-CAL7	2000	145369	0.275	10.16
9A30046-CAL8	4000	322748	0.299	10.17
9A30046-CAL9	6000	514203	0.308	10.17
9A30046-CALA	8000	669191	0.308	10.17

AVE RF **0.222** RF RSD **38.41** AVE RT **10.17**

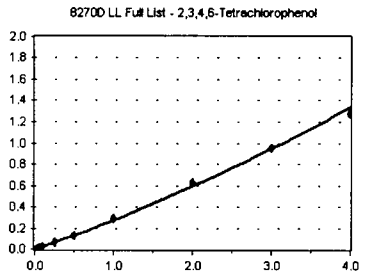
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

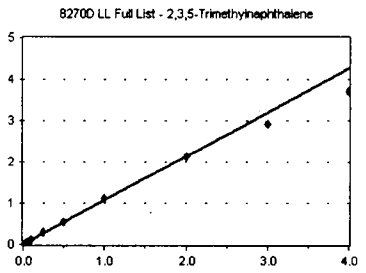


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~529~~	~~0.109~~	~~10.21~~
9A30046-CAL2	50	1812	0.155	10.21
9A30046-CAL3	100	4318	0.182	10.21
9A30046-CAL4	200	9650	0.194	10.21
9A30046-CAL5	500	33782	0.265	10.21
9A30046-CAL6	1000	64617	0.262	10.21
9A30046-CAL7	2000	156617	0.297	10.21
9A30046-CAL8	4000	339662	0.315	10.21
9A30046-CAL9	6000	530685	0.318	10.22
9A30046-CALA	8000	692769	0.319	10.22

AVE RF **0.256** RF RSD **24.93** AVE RT **10.21**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

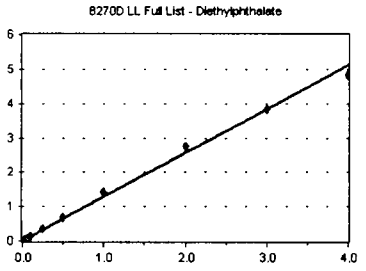


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5065	1.043	10.29
9A30046-CAL2	50	12539	1.070	10.29
9A30046-CAL3	100	25788	1.088	10.29
9A30046-CAL4	200	54877	1.102	10.29
9A30046-CAL5	500	148844	1.168	10.29
9A30046-CAL6	1000	270700	1.097	10.30
9A30046-CAL7	2000	590742	1.118	10.30
9A30046-CAL8	4000	1153744	1.070	10.30
9A30046-CAL9	6000	1629306	0.976	10.31
9A30046-CALA	8000	2005572	0.923	10.31

AVE RF **1.066** RF RSD **6.62** AVE RT **10.30**

Diethylphthalate

Curve Fit: **AVERAGE RF**

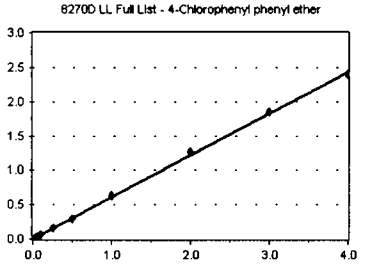


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5519	1.137	10.29
9A30046-CAL2	50	13590	1.159	10.30
9A30046-CAL3	100	27965	1.179	10.29
9A30046-CAL4	200	64179	1.289	10.29
9A30046-CAL5	500	182306	1.430	10.30
9A30046-CAL6	1000	329843	1.337	10.30
9A30046-CAL7	2000	754784	1.429	10.30
9A30046-CAL8	4000	1485515	1.378	10.31
9A30046-CAL9	6000	2138606	1.281	10.31
9A30046-CALA	8000	2624972	1.209	10.32

AVE RF **1.283** RF RSD **8.53** AVE RT **10.30**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3010	0.620	10.43
9A30046-CAL2	50	6698	0.571	10.43
9A30046-CAL3	100	13730	0.579	10.43
9A30046-CAL4	200	29765	0.598	10.43
9A30046-CAL5	500	81475	0.639	10.43
9A30046-CAL6	1000	146848	0.595	10.43
9A30046-CAL7	2000	334037	0.632	10.43
9A30046-CAL8	4000	685667	0.636	10.43
9A30046-CAL9	6000	1030051	0.617	10.44
9A30046-CALA	8000	1303879	0.600	10.44

AVE RF **0.609** RF RSD **3.90** AVE RT **10.43**

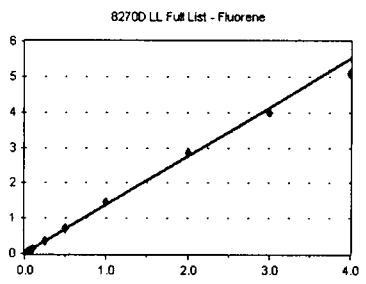
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Fluorene

Curve Fit: **AVERAGE RF**

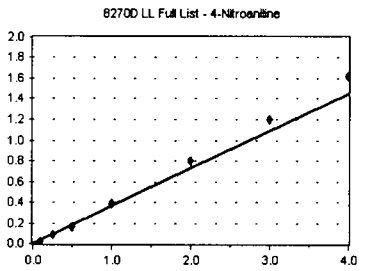


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6383	1.315	10.44
9A30046-CAL2	50	15560	1.327	10.44
9A30046-CAL3	100	32279	1.361	10.44
9A30046-CAL4	200	69347	1.393	10.44
9A30046-CAL5	500	189023	1.483	10.44
9A30046-CAL6	1000	344351	1.396	10.44
9A30046-CAL7	2000	765816	1.450	10.44
9A30046-CAL8	4000	1531912	1.421	10.44
9A30046-CAL9	6000	2221082	1.330	10.45
9A30046-CALA	8000	2767503	1.274	10.45

AVE RF **1.375** RF RSD **4.74** AVE RT **10.44**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

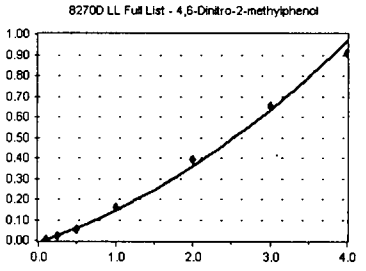


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~713~~	~~0.147~~	~~10.44~~
~~9A30046-CAL2~~	~~50~~	~~2087~~	~~0.178~~	~~10.44~~
~~9A30046-CAL3~~	~~100~~	~~5107~~	~~0.215~~	~~10.44~~
9A30046-CAL4	200	13118	0.264	10.44
9A30046-CAL5	500	45265	0.355	10.44
9A30046-CAL6	1000	79908	0.324	10.44
9A30046-CAL7	2000	207882	0.394	10.45
9A30046-CAL8	4000	430052	0.399	10.46
9A30046-CAL9	6000	669009	0.401	10.47
9A30046-CALA	8000	879385	0.405	10.49

AVE RF **0.363** RF RSD **14.62** AVE RT **10.45**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

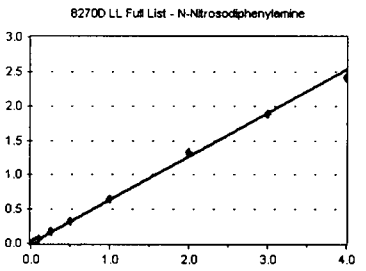


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9A30046-CAL2~~	~~50~~	~~74~~	~~6.313~~	~~10.48~~
~~9A30046-CAL3~~	~~100~~	~~342~~	~~1.442~~	~~10.47~~
9A30046-CAL4	200	1644	3.302	10.47
9A30046-CAL5	500	10218	8.016	10.47
9A30046-CAL6	1000	25579	0.104	10.47
9A30046-CAL7	2000	84552	0.160	10.48
9A30046-CAL8	4000	212554	0.197	10.49
9A30046-CAL9	6000	362560	0.217	10.50
9A30046-CALA	8000	494172	0.228	10.51

AVE RF **0.146** RF RSD **51.27** AVE RT **10.49**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	4930	0.539	10.54
9A30046-CAL2	50	11920	0.606	10.54
9A30046-CAL3	100	24736	0.626	10.54
9A30046-CAL4	200	55485	0.652	10.54
9A30046-CAL5	500	159639	0.683	10.54
9A30046-CAL6	1000	278990	0.664	10.54
9A30046-CAL7	2000	652932	0.655	10.55
9A30046-CAL8	4000	1315096	0.663	10.55
9A30046-CAL9	6000	1960689	0.626	10.56
9A30046-CALA	8000	2473583	0.604	10.57

AVE RF **0.632** RF RSD **6.60** AVE RT **10.55**

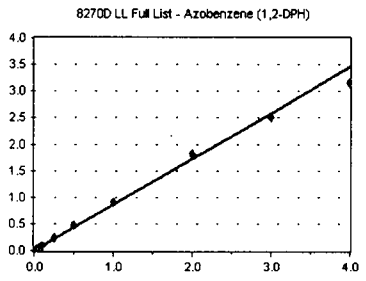
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

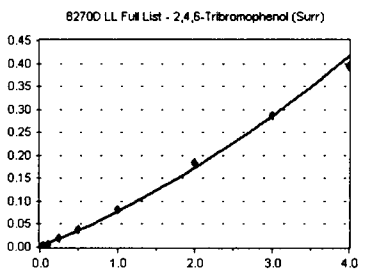


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6350	0.694	10.59
9A30046-CAL2	50	16055	0.817	10.59
9A30046-CAL3	100	34575	0.875	10.59
9A30046-CAL4	200	76986	0.905	10.59
9A30046-CAL5	500	223701	0.957	10.59
9A30046-CAL6	1000	394223	0.938	10.59
9A30046-CAL7	2000	914026	0.917	10.59
9A30046-CAL8	4000	1800004	0.908	10.59
9A30046-CAL9	6000	2612835	0.835	10.60
9A30046-CALA	8000	3228382	0.788	10.60

AVE RF **0.863** RF RSD **9.31** AVE RT **10.59**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

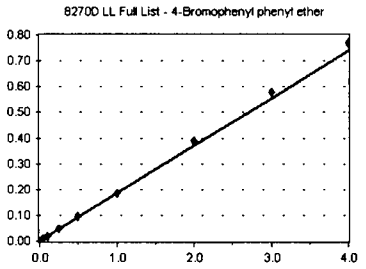


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	229	2.504	10.68
9A30046-CAL2	50	770	0.039	10.68
9A30046-CAL3	100	2028	5.130	10.68
9A30046-CAL4	200	5139	6.038	10.68
9A30046-CAL5	500	17303	7.400	10.68
9A30046-CAL6	1000	33163	7.888	10.68
9A30046-CAL7	2000	82762	8.302	10.68
9A30046-CAL8	4000	183331	9.248	10.69
9A30046-CAL9	6000	299172	0.096	10.69
9A30046-CALA	8000	403091	9.843	10.70

AVE RF **6.983** RF RSD **35.87** AVE RT **10.69**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**

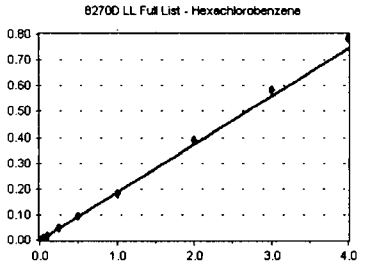


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1566	0.171	10.93
9A30046-CAL2	50	3436	0.175	10.93
9A30046-CAL3	100	7025	0.178	10.93
9A30046-CAL4	200	15771	0.185	10.93
9A30046-CAL5	500	44122	0.189	10.92
9A30046-CAL6	1000	78242	0.186	10.93
9A30046-CAL7	2000	186018	0.187	10.93
9A30046-CAL8	4000	385860	0.195	10.93
9A30046-CAL9	6000	602434	0.192	10.93
9A30046-CALA	8000	789349	0.193	10.94

AVE RF **0.185** RF RSD **4.31** AVE RT **10.93**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1571	0.172	11.01
9A30046-CAL2	50	3548	0.180	11.01
9A30046-CAL3	100	7238	0.183	11.01
9A30046-CAL4	200	15793	0.186	11.01
9A30046-CAL5	500	42972	0.184	11.01
9A30046-CAL6	1000	79296	0.189	11.01
9A30046-CAL7	2000	182419	0.183	11.01
9A30046-CAL8	4000	387180	0.195	11.01
9A30046-CAL9	6000	606966	0.194	11.02
9A30046-CALA	8000	801760	0.196	11.03

AVE RF **0.186** RF RSD **4.03** AVE RT **11.01**

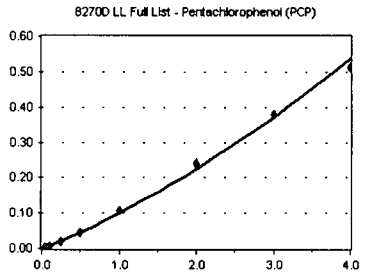
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

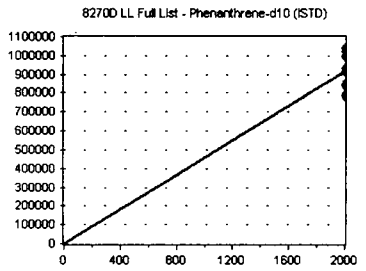


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~315~~	~~3.444~~	~~11.20~~
~~9A30046-CAL2~~	~~50~~	~~571~~	~~0.029~~	~~11.21~~
9A30046-CAL3	100	1341	3.392	11.20
9A30046-CAL4	200	4272	5.019	11.20
9A30046-CAL5	500	18186	7.778	11.20
9A30046-CAL6	1000	38085	9.059	11.20
9A30046-CAL7	2000	106556	0.107	11.20
9A30046-CAL8	4000	237575	0.120	11.21
9A30046-CAL9	6000	395292	0.126	11.21
9A30046-CALA	8000	524085	0.128	11.21

AVE RF **9.169** RF RSD **38.65** AVE RT **11.20**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

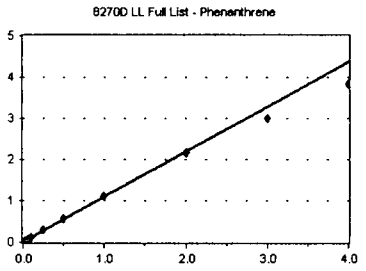


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	914631	457.316	11.40
9A30046-CAL2	2000	786274	393.137	11.40
9A30046-CAL3	2000	790595	395.298	11.40
9A30046-CAL4	2000	851122	425.561	11.40
9A30046-CAL5	2000	935268	467.634	11.40
9A30046-CAL6	2000	840808	420.404	11.40
9A30046-CAL7	2000	996904	498.452	11.40
9A30046-CAL8	2000	991158	495.579	11.40
9A30046-CAL9	2000	1043364	521.682	11.40
9A30046-CALA	2000	1023802	511.901	11.41

AVE RF **458.696** RF RSD **10.46** AVE RT **11.40**

Phenanthrene

Curve Fit: **AVERAGE RF**

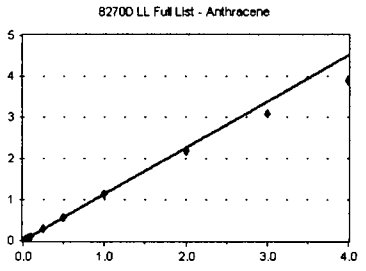


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10388	1.136	11.42
9A30046-CAL2	50	22253	1.132	11.42
9A30046-CAL3	100	45679	1.156	11.42
9A30046-CAL4	200	96988	1.140	11.42
9A30046-CAL5	500	271509	1.161	11.42
9A30046-CAL6	1000	468364	1.114	11.42
9A30046-CAL7	2000	1092838	1.096	11.43
9A30046-CAL8	4000	2134782	1.077	11.43
9A30046-CAL9	6000	3142052	1.004	11.43
9A30046-CALA	8000	3940073	0.962	11.44

AVE RF **1.098** RF RSD **6.05** AVE RT **11.42**

Anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10748	1.175	11.47
9A30046-CAL2	50	23381	1.189	11.47
9A30046-CAL3	100	46433	1.175	11.47
9A30046-CAL4	200	99476	1.169	11.47
9A30046-CAL5	500	280169	1.198	11.47
9A30046-CAL6	1000	482023	1.147	11.47
9A30046-CAL7	2000	1119959	1.123	11.47
9A30046-CAL8	4000	2161101	1.090	11.48
9A30046-CAL9	6000	3204108	1.024	11.49
9A30046-CALA	8000	3984243	0.973	11.49

AVE RF **1.126** RF RSD **6.71** AVE RT **11.48**

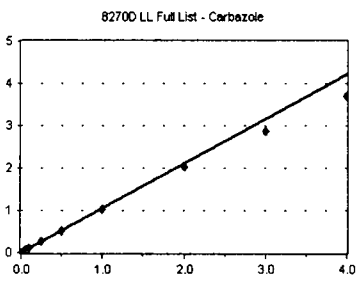
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Carbazole

Curve Fit: **AVERAGE RF**

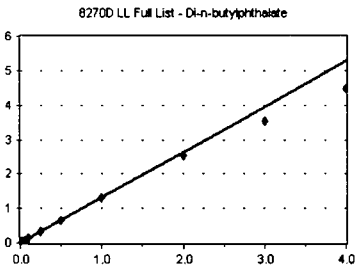


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	11056	1.209	11.63
9A30046-CAL2	50	21647	1.101	11.63
9A30046-CAL3	100	43052	1.089	11.63
9A30046-CAL4	200	91479	1.075	11.63
9A30046-CAL5	500	257322	1.101	11.63
9A30046-CAL6	1000	436227	1.038	11.63
9A30046-CAL7	2000	1032155	1.035	11.63
9A30046-CAL8	4000	2012508	1.015	11.63
9A30046-CAL9	6000	2995482	0.957	11.64
9A30046-CALA	8000	3792212	0.926	11.65

AVE RF **1.055** RF RSD **7.61** AVE RT **11.63**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

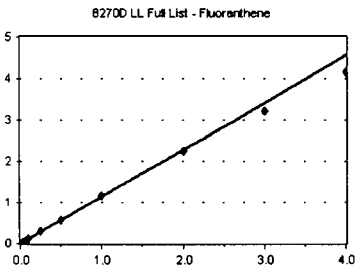


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	15373	1.681	11.97
9A30046-CAL2	50	26968	1.372	11.97
9A30046-CAL3	100	51497	1.303	11.97
9A30046-CAL4	200	111961	1.315	11.97
9A30046-CAL5	500	318442	1.362	11.97
9A30046-CAL6	1000	541942	1.289	11.97
9A30046-CAL7	2000	1296945	1.301	11.97
9A30046-CAL8	4000	2515776	1.269	11.97
9A30046-CAL9	6000	3697863	1.181	11.98
9A30046-CALA	8000	4593818	1.122	11.98

AVE RF **1.320** RF RSD **11.22** AVE RT **11.97**

Fluoranthene

Curve Fit: **AVERAGE RF**

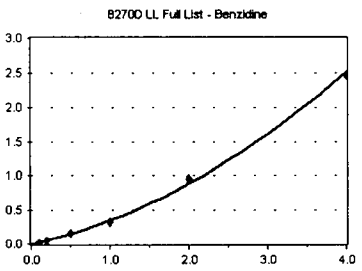


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10781	1.179	12.74
9A30046-CAL2	50	22810	1.160	12.75
9A30046-CAL3	100	45822	1.159	12.74
9A30046-CAL4	200	98210	1.154	12.74
9A30046-CAL5	500	281703	1.205	12.74
9A30046-CAL6	1000	478274	1.138	12.75
9A30046-CAL7	2000	1147170	1.151	12.75
9A30046-CAL8	4000	2228063	1.124	12.75
9A30046-CAL9	6000	3367710	1.076	12.76
9A30046-CALA	8000	4263906	1.041	12.76

AVE RF **1.139** RF RSD **4.23** AVE RT **12.75**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~40~~	~~1323~~	~~7.232~~	~~12.90~~
~~9A30046-CAL2~~	~~100~~	~~6453~~	~~0.164~~	~~12.91~~
9A30046-CAL3	200	18666	0.236	12.90
9A30046-CAL4	400	37500	0.220	12.90
9A30046-CAL5	1000	152834	0.327	12.90
9A30046-CAL6	2000	270903	0.322	12.90
9A30046-CAL7	4000	956344	0.480	12.91
9A30046-CAL8	8000	2439653	0.615	12.92
~~9A30046-CAL9~~	~~12000~~	~~3789861~~	~~0.605~~	~~12.93~~
~~9A30046-CALA~~	~~16000~~	~~4855656~~	~~0.593~~	~~12.93~~

AVE RF **0.367** RF RSD **41.65** AVE RT **12.91**

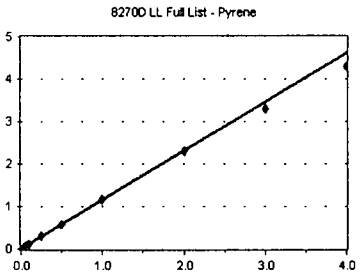
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Pyrene

Curve Fit: **AVERAGE RF**

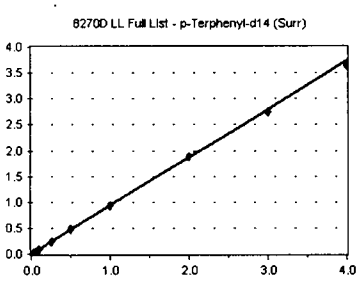


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10777	1.178	13.06
9A30046-CAL2	50	23055	1.173	13.06
9A30046-CAL3	100	46111	1.166	13.06
9A30046-CAL4	200	100024	1.175	13.06
9A30046-CAL5	500	285718	1.222	13.06
9A30046-CAL6	1000	486318	1.157	13.06
9A30046-CAL7	2000	1167359	1.171	13.06
9A30046-CAL8	4000	2275000	1.148	13.07
9A30046-CAL9	6000	3451729	1.103	13.08
9A30046-CALA	8000	4397051	1.074	13.08

AVE RF **1.157** RF RSD **3.59** AVE RT **13.07**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

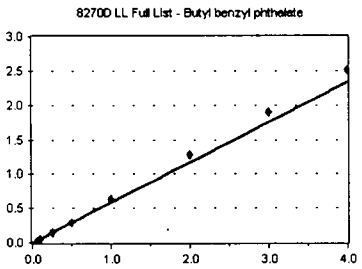


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7570	0.891	13.28
9A30046-CAL2	50	16079	0.926	13.28
9A30046-CAL3	100	32265	0.935	13.28
9A30046-CAL4	200	69836	0.967	13.28
9A30046-CAL5	500	202060	0.963	13.28
9A30046-CAL6	1000	340885	0.964	13.28
9A30046-CAL7	2000	841709	0.932	13.28
9A30046-CAL8	4000	1664387	0.938	13.29
9A30046-CAL9	6000	2557660	0.919	13.29
9A30046-CALA	8000	3299466	0.909	13.29

AVE RF **0.934** RF RSD **2.67** AVE RT **13.28**

Butyl benzyl phthalate

Curve Fit: **AVERAGE RF**

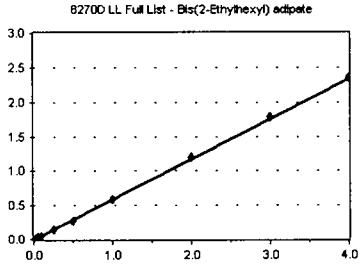


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3108~~	~~0.366~~	~~14.15~~
~~9A30046-CAL2~~	~~50~~	~~7172~~	~~0.413~~	~~14.15~~
9A30046-CAL3	100	14773	0.428	14.16
9A30046-CAL4	200	38485	0.533	14.15
9A30046-CAL5	500	124269	0.592	14.15
9A30046-CAL6	1000	212214	0.600	14.16
9A30046-CAL7	2000	564166	0.625	14.16
9A30046-CAL8	4000	1137127	0.641	14.17
9A30046-CAL9	6000	1765700	0.634	14.18
9A30046-CALA	8000	2274562	0.627	14.18

AVE RF **0.585** RF RSD **12.35** AVE RT **14.16**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~9073~~	~~1.068~~	~~14.34~~
9A30046-CAL2	50	11698	0.674	14.34
9A30046-CAL3	100	18339	0.531	14.34
9A30046-CAL4	200	40129	0.556	14.34
9A30046-CAL5	500	118447	0.565	14.34
9A30046-CAL6	1000	197213	0.558	14.34
9A30046-CAL7	2000	522769	0.579	14.35
9A30046-CAL8	4000	1061254	0.598	14.35
9A30046-CAL9	6000	1647877	0.592	14.36
9A30046-CALA	8000	2130742	0.587	14.36

AVE RF **0.582** RF RSD **6.92** AVE RT **14.35**

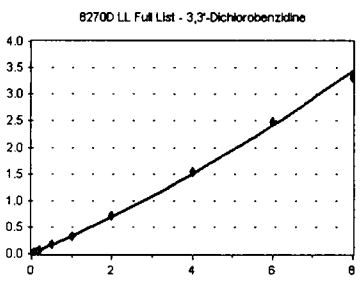
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

3,3'-Dichlorobenzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

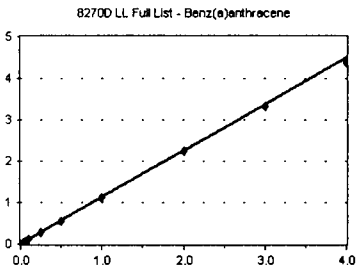


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	40	2805	0.165	15.35
9A30046-CAL2	100	8063	0.232	15.35
9A30046-CAL3	200	18339	0.266	15.34
9A30046-CAL4	400	43713	0.303	15.34
9A30046-CAL5	1000	145270	0.346	15.35
9A30046-CAL6	2000	231650	0.327	15.35
9A30046-CAL7	4000	642844	0.356	15.36
9A30046-CAL8	8000	1371474	0.386	15.38
9A30046-CAL9	12000	2297909	0.413	15.40
9A30046-CALA	16000	2995565	0.413	15.41

AVE RF **0.321** RF RSD **25.15** AVE RT **15.36**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

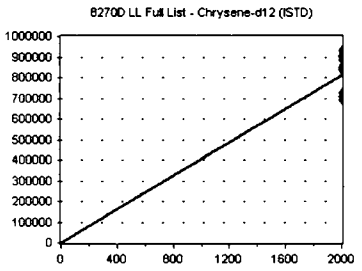


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10870	1.280	15.39
9A30046-CAL2	50	20129	1.160	15.39
9A30046-CAL3	100	37587	1.089	15.38
9A30046-CAL4	200	79592	1.103	15.38
9A30046-CAL5	500	236770	1.129	15.39
9A30046-CAL6	1000	387630	1.096	15.39
9A30046-CAL7	2000	997082	1.104	15.40
9A30046-CAL8	4000	1987811	1.120	15.41
9A30046-CAL9	6000	3081071	1.107	15.42
9A30046-CALA	8000	3973101	1.094	15.43

AVE RF **1.128** RF RSD **5.07** AVE RT **15.40**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

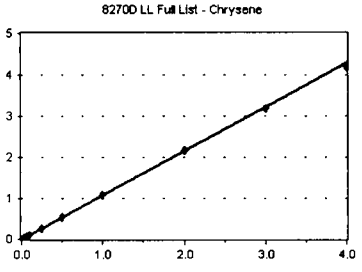


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	849263	424.632	15.42
9A30046-CAL2	2000	694365	347.183	15.41
9A30046-CAL3	2000	690491	345.246	15.41
9A30046-CAL4	2000	721909	360.954	15.41
9A30046-CAL5	2000	839042	419.521	15.42
9A30046-CAL6	2000	707423	353.712	15.42
9A30046-CAL7	2000	902831	451.416	15.42
9A30046-CAL8	2000	887261	443.631	15.43
9A30046-CAL9	2000	927852	463.926	15.44
9A30046-CALA	2000	907570	453.785	15.45

AVE RF **406.400** RF RSD **12.04** AVE RT **15.42**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	9138	1.076	15.47
9A30046-CAL2	50	18408	1.060	15.46
9A30046-CAL3	100	36919	1.069	15.47
9A30046-CAL4	200	77934	1.080	15.47
9A30046-CAL5	500	232271	1.107	15.47
9A30046-CAL6	1000	381765	1.079	15.48
9A30046-CAL7	2000	973945	1.079	15.49
9A30046-CAL8	4000	1929550	1.087	15.50
9A30046-CAL9	6000	2949203	1.060	15.51
9A30046-CALA	8000	3809563	1.049	15.52

AVE RF **1.075** RF RSD **1.52** AVE RT **15.48**

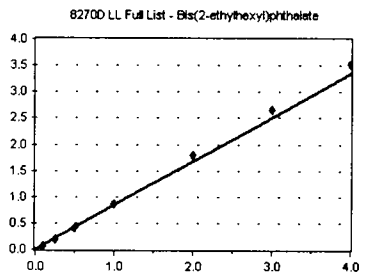
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

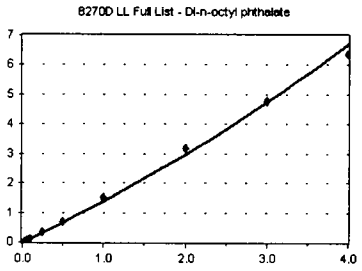


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3944~~	~~0.464~~	~~15.54~~
~~9A30046-CAL2~~	~~50~~	~~8608~~	~~0.496~~	~~15.54~~
~~9A30046-CAL3~~	~~100~~	~~19228~~	~~0.557~~	~~15.55~~
9A30046-CAL4	200	50647	0.702	15.54
9A30046-CAL5	500	168525	0.803	15.54
9A30046-CAL6	1000	289406	0.818	15.54
9A30046-CAL7	2000	783437	0.868	15.55
9A30046-CAL8	4000	1587394	0.895	15.56
9A30046-CAL9	6000	2465950	0.886	15.56
9A30046-CALA	8000	3197212	0.881	15.57

AVE RF **0.836** RF RSD **8.23** AVE RT **15.55**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

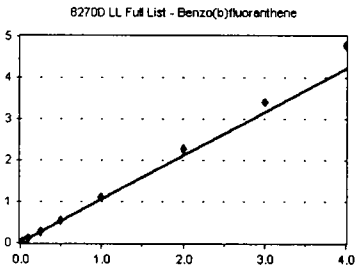


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3881~~	~~0.504~~	~~17.24~~
9A30046-CAL2	50	9748	0.636	17.24
9A30046-CAL3	100	21395	0.699	17.23
9A30046-CAL4	200	63652	0.991	17.23
9A30046-CAL5	500	245753	1.292	17.24
9A30046-CAL6	1000	421456	1.338	17.24
9A30046-CAL7	2000	1248768	1.504	17.24
9A30046-CAL8	4000	2594376	1.589	17.25
9A30046-CAL9	6000	4069870	1.585	17.26
9A30046-CALA	8000	5278776	1.585	17.27

AVE RF **1.247** RF RSD **30.56** AVE RT **17.24**

Benzo(b)fluoranthene

Curve Fit: **AVERAGE RF**

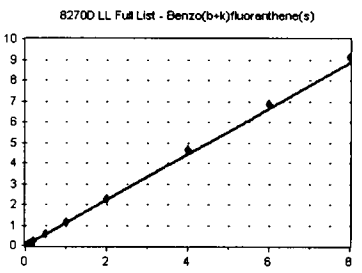


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6730	0.874	18.02
9A30046-CAL2	50	14286	0.932	18.02
9A30046-CAL3	100	29112	0.952	18.02
9A30046-CAL4	200	66187	1.030	18.02
9A30046-CAL5	500	209622	1.102	18.02
9A30046-CAL6	1000	343841	1.091	18.02
9A30046-CAL7	2000	927026	1.116	18.03
9A30046-CAL8	4000	1854491	1.136	18.05
9A30046-CAL9	6000	2914506	1.135	18.06
9A30046-CALA	8000	3991347	1.199	18.08

AVE RF **1.057** RF RSD **9.99** AVE RT **18.03**

Benzo(b+k)fluoranthene(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	40	15677	1.018	18.09
9A30046-CAL2	100	31983	1.043	18.02
9A30046-CAL3	200	63728	1.041	18.08
9A30046-CAL4	400	141743	1.103	18.02
9A30046-CAL5	1000	437476	1.150	18.09
9A30046-CAL6	2000	717329	1.138	18.09
9A30046-CAL7	4000	1906416	1.148	18.10
9A30046-CAL8	8000	3805265	1.166	18.12
9A30046-CAL9	12000	5886892	1.146	18.14
9A30046-CALA	16000	7617275	1.144	18.15

AVE RF **1.110** RF RSD **4.95** AVE RT **18.09**

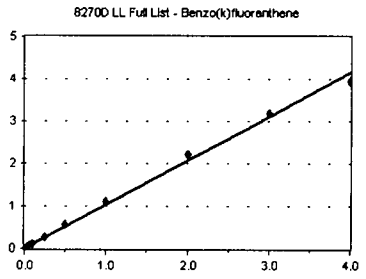
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Benzo(k)fluoranthene

Curve Fit: **AVERAGE RF**

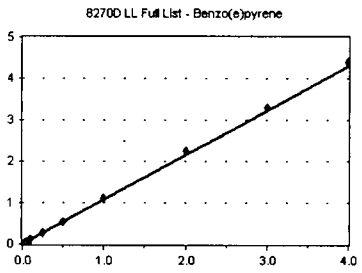


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7026	0.912	18.09
9A30046-CAL2	50	14559	0.950	18.09
9A30046-CAL3	100	29589	0.967	18.08
9A30046-CAL4	200	67887	1.057	18.09
9A30046-CAL5	500	210325	1.106	18.09
9A30046-CAL6	1000	349392	1.109	18.09
9A30046-CAL7	2000	931062	1.121	18.10
9A30046-CAL8	4000	1814554	1.112	18.12
9A30046-CAL9	6000	2736373	1.065	18.14
9A30046-CALA	8000	3282962	0.986	18.15

AVE RF **1.038** RF RSD **7.49** AVE RT **18.10**

Benzo(e)pyrene

Curve Fit: **AVERAGE RF**

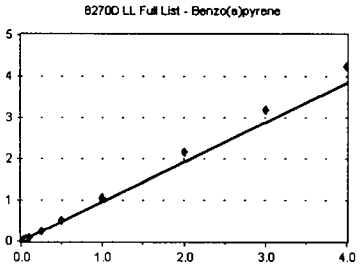


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7648	0.993	18.68
9A30046-CAL2	50	15484	1.010	18.67
9A30046-CAL3	100	31282	1.022	18.67
9A30046-CAL4	200	68515	1.066	18.67
9A30046-CAL5	500	211572	1.112	18.68
9A30046-CAL6	1000	347001	1.101	18.68
9A30046-CAL7	2000	912421	1.099	18.70
9A30046-CAL8	4000	1835807	1.125	18.72
9A30046-CAL9	6000	2825299	1.100	18.73
9A30046-CALA	8000	3659927	1.099	18.74

AVE RF **1.073** RF RSD **4.41** AVE RT **18.69**

Benzo(a)pyrene

Curve Fit: **AVERAGE RF**

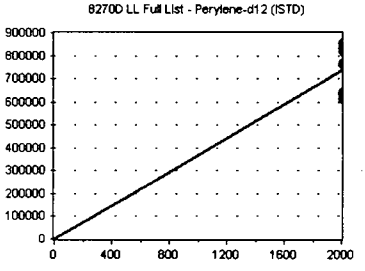


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5806	0.754	18.80
9A30046-CAL2	50	12367	0.807	18.80
9A30046-CAL3	100	25304	0.827	18.80
9A30046-CAL4	200	58935	0.917	18.80
9A30046-CAL5	500	193455	1.017	18.80
9A30046-CAL6	1000	319982	1.016	18.80
9A30046-CAL7	2000	875788	1.055	18.82
9A30046-CAL8	4000	1767067	1.083	18.84
9A30046-CAL9	6000	2720886	1.059	18.86
9A30046-CALA	8000	3529245	1.060	18.87

AVE RF **0.959** RF RSD **12.80** AVE RT **18.82**

Perylene-d12 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	770351	385.176	18.95
9A30046-CAL2	2000	613296	306.648	18.95
9A30046-CAL3	2000	611891	305.945	18.95
9A30046-CAL4	2000	642441	321.220	18.95
9A30046-CAL5	2000	760928	380.464	18.95
9A30046-CAL6	2000	630113	315.057	18.95
9A30046-CAL7	2000	830313	415.157	18.96
9A30046-CAL8	2000	816129	408.064	18.97
9A30046-CAL9	2000	856100	428.050	18.97
9A30046-CALA	2000	832510	416.255	18.98

AVE RF **368.204** RF RSD **13.68** AVE RT **18.96**

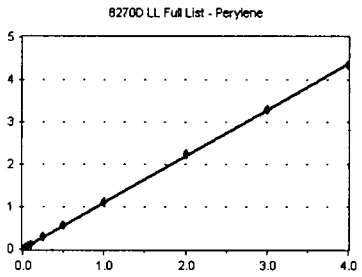
Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Perylene

Curve Fit: **AVERAGE RF**

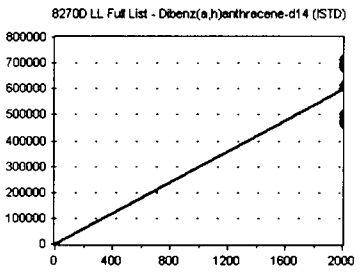


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7762	1.008	19.00
9A30046-CAL2	50	16978	1.107	19.01
9A30046-CAL3	100	33514	1.095	19.01
9A30046-CAL4	200	70185	1.092	19.00
9A30046-CAL5	500	216816	1.140	19.01
9A30046-CAL6	1000	350972	1.114	19.01
9A30046-CAL7	2000	918814	1.107	19.02
9A30046-CAL8	4000	1826834	1.119	19.04
9A30046-CAL9	6000	2815058	1.096	19.06
9A30046-CALA	8000	3618955	1.087	19.08

AVE RF **1.097** RF RSD **3.18** AVE RT **19.02**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

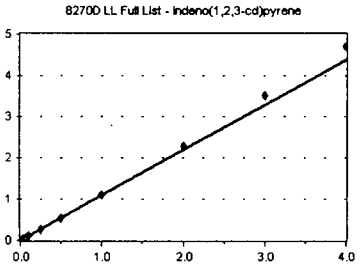


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	614628	307.314	21.35
9A30046-CAL2	2000	475223	237.612	21.35
9A30046-CAL3	2000	467911	233.955	21.35
9A30046-CAL4	2000	493160	246.580	21.35
9A30046-CAL5	2000	615052	307.526	21.35
9A30046-CAL6	2000	502143	251.072	21.35
9A30046-CAL7	2000	698997	349.498	21.36
9A30046-CAL8	2000	692377	346.188	21.37
9A30046-CAL9	2000	715157	357.578	21.39
9A30046-CALA	2000	683312	341.656	21.40

AVE RF **297.898** RF RSD **17.04** AVE RT **21.36**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

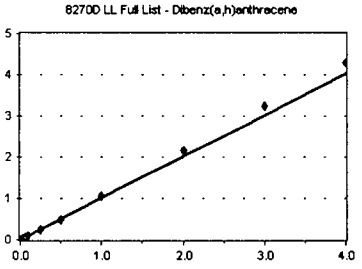


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6544	1.065	21.34
9A30046-CAL2	50	12358	1.040	21.34
9A30046-CAL3	100	24570	1.050	21.34
9A30046-CAL4	200	51991	1.054	21.34
9A30046-CAL5	500	166318	1.082	21.35
9A30046-CAL6	1000	270568	1.078	21.35
9A30046-CAL7	2000	772179	1.105	21.37
9A30046-CAL8	4000	1577648	1.139	21.39
9A30046-CAL9	6000	2513172	1.171	21.41
9A30046-CALA	8000	3220620	1.178	21.42

AVE RF **1.096** RF RSD **4.60** AVE RT **21.36**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5352	0.871	21.41
9A30046-CAL2	50	11253	0.947	21.41
9A30046-CAL3	100	22041	0.942	21.41
9A30046-CAL4	200	48121	0.976	21.41
9A30046-CAL5	500	156689	1.019	21.41
9A30046-CAL6	1000	250339	0.997	21.41
9A30046-CAL7	2000	733789	1.050	21.43
9A30046-CAL8	4000	1499940	1.083	21.44
9A30046-CAL9	6000	2316997	1.080	21.47
9A30046-CALA	8000	2936332	1.074	21.48

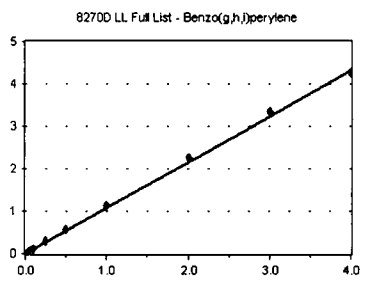
AVE RF **1.004** RF RSD **7.04** AVE RT **21.43**

Element Calibration Review Sheet

Calibration ID: **A9A3103** Instrument: **SV-GCMS5** Calibration Date: **01/31/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9A3103**

Benzo(g,h,i)perylene



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5584	0.909	21.88
9A30046-CAL2	50	12123	1.020	21.88
9A30046-CAL3	100	24346	1.041	21.88
9A30046-CAL4	200	53734	1.090	21.89
9A30046-CAL5	500	175449	1.141	21.89
9A30046-CAL6	1000	285618	1.138	21.89
9A30046-CAL7	2000	791021	1.132	21.91
9A30046-CAL8	4000	1580720	1.142	21.93
9A30046-CAL9	6000	2394723	1.116	21.95
9A30046-CALA	8000	2911992	1.065	21.96

AVE RF **1.079** RF RSD **6.88** AVE RT **21.91**

Compound List Report SV-GCMS5

Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Jan 31 10:44:49 2019
Response Via : Initial Calibration

GK 1/31/19

Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.848	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	4.387	0.641	A	2	A	R
3	T	Pyridine	79	4.424	0.646	A	2	A	R
4	S	2-Fluorophenol (Surr)	112	5.628	0.822	A	1	A	R
5	S	Phenol-d6(Surr)	99	6.473	0.945	A	2	A	R
6	T	Phenol	94	6.489	0.948	A	2	A	R
7	T	Aniline	93	6.531	0.954	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.580	0.961	A	2	A	R
9	T	2-Chlorophenol	128	6.650	0.971	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.799	0.993	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.864	1.002	A	2	A	R
12	T	Benzyl alcohol	108	6.965	1.017	A	2	A	R
13	T	1,2-Dichlorobenzene	146	7.013	1.024	A	2	A	R
14	T	2-Methylphenol	107	7.067	1.032	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	7.099	1.037	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.222	1.055	A	2	A	R
17	T	3+4-Methylphenol	107	7.211	1.053	A	3	A	R
18	T	Hexachloroethane	117	7.345	1.073	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.377	1.077	A	2	A	R
20	T	Nitrobenzene	77	7.398	1.080	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	8.099	1.000	A	1	A	R
22	T	Isophorone	82	7.628	0.942	A	2	A	R
23	T	2-Nitrophenol	139	7.713	0.952	Q 1/a2	2	A	R
24	T	2,4-Dimethylphenol	122	7.740	0.956	A	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.832	0.967	A	2	A	R
26	T	Benzoic acid	105	7.815	0.965	Q 1/a2	2	A	R
27	T	2,4-Dichlorophenol	162	7.949	0.981	A	2	A	R
28	T	1,2,4-Trichlorobenzene	180	8.040	0.993	A	2	A	R
29	T	Naphthalene	128	8.120	1.003	A	1	A	R
30	T	4-Chloroaniline	127	8.163	1.008	A	2	A	R
31	T	Hexachlorobutadiene	225	8.243	1.018	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.633	1.066	Q 1/a2	2	A	R
33	T	2-Methylnaphthalene	142	8.816	1.088	A	2	A	R
34	T	1-Methylnaphthalene	142	8.917	1.101	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.880	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.982	0.909	A	2	A	R
37	T	2,4,6-Trichlorophenol	196	9.094	0.920	Q 1/a2	2	A	R
38	T	2,4,5-Trichlorophenol	196	9.131	0.924	Q 1/a2	2	A	R
39	T	1,1'-Biphenyl	154	9.281	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	9.180	0.929	A	2	A	R
41	T	2-Chloronaphthalene	162	9.308	0.942	A	2	A	R
42	T	2-Nitroaniline	138	9.404	0.952	Q 1/a2	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.447	0.956	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.532	0.965	Q 1/a2	2	A	R
45	T	Dimethyl phthalate	163	9.581	0.970	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.612	0.973	Q 1/a2	2	A	R
47	T	2,6-Dinitrotoluene	165	9.644	0.976	Q 1/a2	2	A	R
48	T	1,2-Dinitrobenzene	168	9.703	0.982	Q 1/a2	2	A	R
49	T	Acenaphthylene	152	9.736	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.816	0.994	Q 1/a2	2	A	R
51	T	Acenaphthene	153	9.912	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.922	1.004	Q 1/a2	2	A	R
53	T	4-Nitrophenol	139	9.947	1.007	Q 1/a2	2	A	R

54	T	2,4-Dinitrotoluene	165	10.056	1.018	Q	1/a2	2	A	R
55	T	Dibenzofuran	168	10.083	1.021	A		2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	10.163	1.029	Q	1/a2	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.206	1.033	Q	1/a2	2	A	R
58	T	Diethyl phthalate	149	10.297	1.042	A		2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.297	1.042	A		2	A	R
60	T	Fluorene	166	10.436	1.056	A		2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.426	1.055	A		2	A	R
62	T	4-Nitroaniline	138	10.441	1.057	A		2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.473	1.060	Q	1/a2	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.399	1.000	A		2	A	R
65	T	N-Nitrosodiphenylamine	169	10.543	0.925	A		2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.586	0.929	A		2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.682	0.937	Q	1/a2	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.929	0.959	A		2	A	R
69	T	Hexachlorobenzene	284	11.009	0.966	A		2	A	R
70	T	Pentachlorophenol (PCP)	266	11.201	0.983	Q	1/a2	2	A	R
71	T	Phenanthrene	178	11.421	1.002	A		2	A	R
72	T	Anthracene	178	11.474	1.007	A		2	A	R
73	T	Carbazole	167	11.629	1.020	A		2	A	R
74	T	Di-n-butyl phthalate	149	11.972	1.050	A		2	A	R
75	T	Fluoranthene	202	12.747	1.118	A	1/a2	2	A	R
76	T	Benzidine	184	12.902	1.132	Q		2	A	R
77	T	Pyrene	202	13.063	1.146	A		2	A	R
78	I	Chrysene-d12 (ISTD)	240	15.416	1.000	A		2	A	R
79	S	Terphenyl-d14 (Surr)	244	13.277	0.861	A		2	A	R
80	T	Butyl benzyl phthalate	149	14.159	0.918	A		2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	14.340	0.930	A	1/a2	2	A	R
82	T	3,3-Dichlorobenzidine	252	15.347	0.995	Q		2	A	R
83	T	Benz(a)anthracene	228	15.389	0.998	A		2	A	R
84	T	Chrysene	228	15.475	1.004	A		2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.544	1.008	A		2	A	R
86	I	Perylene-d12 (ISTD)	264	18.951	1.000	A	1/a2	2	A	R
87	T	Di-n-octyl phthalate	149	17.234	0.909	Q		2	A	R
88	T	Benzo(b)fluoranthene	252	18.020	0.951	A		2	A	R
89	T	Benzo(k)fluoranthene	252	18.090	0.955	A		2	A	R
90	T	Benzo(b+k)fluoranthene	252	18.090	0.955	A		2	A	R
91	T	Benzo(e)pyrene	252	18.679	0.986	A		2	A	R
92	T	Benzo(a)pyrene	252	18.801	0.992	A		2	A	R
93	T	Perylene	252	19.010	1.003	A		2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	21.348	1.000	A		1	A	R
95	T	Indeno(1,2,3-cd)pyrene	276	21.348	1.000	A		1	A	R
96	T	Dibenz(a,h)anthracene	278	21.412	1.003	A		2	A	R
97	T	Benzo(g,h,i)perylene	276	21.893	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_013019.M Thu Jan 31 11:54:33 2019

Response Factor Report SV-GCMS5

Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu Jan 31 10:44:49 2019
Response Via : Initial Calibration

Calibration Files
20 =E01301914.D 50 =E01301915.D 100 =E01301916.D 200 =E01301917.D 500 =E01301918.D 1000=E01301919.D 2000=E01301920.D
4000=E01301921.D 6000=E01301922.D 8000=E01301923.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	ISTD											7.53
2)	T	N-Nitrosodimet...	0.878	0.849	0.880	0.915	0.975	0.954	0.976	1.013	1.000	0.999	0.944	6.24
3)	T	Pyridine			1.300	1.427	1.475	1.575	1.537	1.564	1.654	1.623	1.602	1.528	7.27
4)	S	2-Fluorophenol...	1.010	1.105	1.193	1.229	1.313	1.299	1.291	1.352	1.343	1.332	1.247	9.11
5)	S	Phenol-d6(Surr)	1.309	1.562	1.661	1.650	1.767	1.706	1.761	1.794	1.752	1.718	1.668	8.62
6)	T	Phenol	1.353	1.675	1.793	1.752	1.819	1.764	1.808	1.869	1.843	1.799	1.748	8.49
7)	T	Aniline			2.152	2.242	2.188	2.259	2.213	2.326	2.380	2.394	2.343	2.277	3.81
8)	T	Bis(2-chloroet...	1.480	1.395	1.377	1.454	1.492	1.435	1.433	1.489	1.395	1.334	1.428	3.68
9)	T	2-Chlorophenol	0.998	1.189	1.260	1.303	1.378	1.347	1.381	1.424	1.416	1.391	1.309	10.08
10)	T	1,3-Dichlorobe...	1.476	1.515	1.519	1.516	1.544	1.485	1.478	1.500	1.475	1.450	1.496	1.87
11)	T	1,4-Dichlorobe...	1.449	1.496	1.558	1.541	1.575	1.506	1.506	1.527	1.496	1.460	1.511	2.64
12)	T	Benzyl alcohol			0.613	0.696	0.747	0.838	0.837	0.902	0.940	0.955	0.931	0.829	14.47
13)	T	1,2-Dichlorobe...	1.380	1.434	1.476	1.448	1.477	1.424	1.418	1.448	1.422	1.390	1.432	2.25
14)	T	2-Methylphenol	0.888	0.974	1.080	1.074	1.156	1.107	1.154	1.182	1.155	1.114	1.088	8.49
15)	T	2,2'-Oxybis(1-...	2.200	2.388	2.391	2.331	2.389	2.276	2.268	2.261	2.138	2.011	2.265	5.43
16)	T	N-Nitrosodi-n-...	0.902	0.974	1.041	1.063	1.150	1.086	1.143	1.172	1.107	1.068	1.071	7.74
17)	T	3+4-Methylphenol	1.045	1.257	1.317	1.328	1.484	1.407	1.495	1.527	1.472	1.416	1.375	10.56
18)	T	Hexachloroethane	0.510	0.548	0.571	0.559	0.572	0.559	0.559	0.576	0.568	0.558	0.558	3.35
19)	S	Nitrobenzene-d...			1.108	1.262	1.339	1.655	1.470	1.717	1.630	1.736	1.541	1.495	14.62
20)	T	Nitrobenzene	1.145	1.216	1.344	1.422	1.554	1.492	1.573	1.614	1.568	1.514	1.444	11.11
21)	I	Naphthalene-d8 (ISTD)	ISTD											2.56
22)	T	Isophorone	0.516	0.628	0.650	0.676	0.727	0.715	0.727	0.749	0.728	0.709	0.683	10.26
23)	T	2-Nitrophenol			0.086	0.099	0.115	0.145	0.153	0.164	0.178	0.180	0.180	0.144	25.03
24)	T	2,4-Dimethylph...			0.275	0.278	0.288	0.311	0.307	0.313	0.312	0.314	0.296	0.299	5.22
25)	T	Bis(2-chloroet...	0.402	0.435	0.433	0.430	0.451	0.434	0.438	0.443	0.424	0.404	0.429	3.66
26)	T	Benzoic acid					0.009	0.043	0.089	0.140	0.178	0.228	0.239	0.132	67.48
27)	T	2,4-Dichloroph...			0.178	0.189	0.206	0.238	0.236	0.252	0.263	0.265	0.260	0.232	14.18
28)	T	1,2,4-Trichlor...	0.261	0.296	0.285	0.282	0.282	0.276	0.273	0.278	0.275	0.271	0.278	3.41
29)	T	Naphthalene	1.129	1.152	1.094	1.084	1.101	1.063	1.049	1.043	1.002	0.953	1.067	5.54
30)	T	4-Chloroaniline	0.282	0.333	0.355	0.351	0.367	0.357	0.398	0.420	0.411	0.402	0.367	11.43
31)	T	Hexachlorobuta...	0.122	0.140	0.137	0.135	0.138	0.139	0.135	0.139	0.138	0.136	0.136	3.72
32)	T	4-Chloro-3-met...			0.132	0.171	0.197	0.249	0.250	0.282	0.301	0.298	0.291	0.241	25.28
33)	T	2-Methylnaphth...	0.657	0.681	0.673	0.676	0.700	0.673	0.685	0.690	0.655	0.621	0.671	3.33
34)	T	1-Methylnaphth...	0.647	0.658	0.649	0.646	0.674	0.644	0.649	0.655	0.619	0.585	0.643	3.82
35)	I	Acenaphthene-d10 (...	ISTD											6.01
36)	T	Hexachlorocycl...	0.185	0.208	0.225	0.246	0.273	0.278	0.291	0.287	0.293	0.280	0.257	14.99
37)	T	2,4,6-Trichlor...	0.155	0.182	0.228	0.254	0.310	0.314	0.351	0.358	0.370	0.357	0.288	27.15
38)	T	2,4,5-Trichlor...	0.145	0.223	0.255	0.260	0.318	0.324	0.347	0.370	0.367	0.372	0.298	25.32

Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics

39)	T	1,1'-Biphenyl	1.734	1.799	1.804	1.778	1.809	1.734	1.722	1.683	1.573	1.473	1.711	6.40
40)	S	2-Fluorobiphen...	1.465	1.543	1.556	1.550	1.559	1.507	1.490	1.465	1.404	1.335	1.487	4.93
41)	T	2-Chloronaphth...	1.252	1.268	1.285	1.270	1.285	1.226	1.232	1.220	1.180	1.137	1.235	3.86
42)	T	2-Nitroaniline			0.197	0.242	0.344	0.362	0.426	0.457	0.466	0.467	0.370	28.24
43)	T	2,6-Dimethylna...	1.142	1.216	1.238	1.240	1.269	1.234	1.224	1.200	1.122	1.069	1.195	5.30
44)	T	1,4-Dinitroben...			0.053	0.074	0.118	0.134	0.177	0.202	0.212	0.216	0.148	42.68
45)	T	Dimethyl phtha...	1.117	1.112	1.179	1.266	1.373	1.312	1.368	1.406	1.362	1.340	1.284	8.57
46)	T	1,3-Dinitroben...			0.073	0.107	0.165	0.175	0.216	0.234	0.239	0.242	0.181	35.16
47)	T	2,6-Dinitrotol...		0.123	0.161	0.210	0.276	0.281	0.312	0.332	0.330	0.329	0.262	30.01
48)	T	1,2-Dinitroben...		0.047	0.072	0.086	0.122	0.124	0.145	0.155	0.156	0.154	0.118	34.47
49)	T	Acenaphthylene	1.643	1.912	1.984	2.013	2.106	2.032	2.041	2.029	1.904	1.818	1.948	6.97
50)	T	3-Nitroaniline		0.152	0.204	0.251	0.320	0.308	0.367	0.384	0.387	0.384	0.306	28.22
51)	T	Acenaphthene	1.414	1.363	1.368	1.365	1.381	1.331	1.315	1.294	1.218	1.160	1.321	5.95
52)	T	2,4-Dinitrophenol				0.014	0.038	0.058	0.104	0.145	0.171	0.184	0.102	66.15
53)	T	4-Nitrophenol			0.102	0.136	0.217	0.223	0.290	0.309	0.321	0.320	0.240	35.58
54)	T	2,4-Dinitrotol...			0.162	0.227	0.326	0.338	0.407	0.432	0.434	0.429	0.344	29.92
55)	T	Dibenzofuran	1.742	1.702	1.712	1.711	1.812	1.697	1.764	1.754	1.675	1.603	1.717	3.29
56)	T	2,3,5,6-Tetrac...		0.086	0.114	0.154	0.224	0.231	0.275	0.299	0.308	0.308	0.222	38.41
57)	T	2,3,4,6-Tetrac...		0.155	0.182	0.194	0.265	0.262	0.297	0.315	0.318	0.319	0.256	24.93
58)	T	Diethyl phthalate	1.137	1.159	1.179	1.289	1.430	1.337	1.429	1.378	1.281	1.209	1.283	8.53
59)	T	2,3,5-Trimethy...	1.043	1.070	1.088	1.102	1.168	1.097	1.118	1.070	0.976	0.923	1.066	6.62
60)	T	Fluorene	1.315	1.327	1.361	1.393	1.483	1.396	1.450	1.421	1.330	1.274	1.375	4.74
61)	T	4-Chlorophenyl...	0.620	0.571	0.579	0.598	0.639	0.595	0.632	0.636	0.617	0.600	0.609	3.90
62)	T	4-Nitroaniline				0.264	0.355	0.324	0.394	0.399	0.401	0.405	0.363	14.62
63)	T	4,6-Dinitro-2-...				0.033	0.080	0.104	0.160	0.197	0.217	0.228	0.146	51.27
														10.46
64)	I	Phenanthrene-d10 (...	----------	----------	ISTD	----------	----------							
65)	T	N-Nitrosodiphe...	0.539	0.606	0.626	0.652	0.683	0.664	0.655	0.663	0.626	0.604	0.632	6.60
66)	T	Azobenzene (1,...	0.694	0.817	0.875	0.905	0.957	0.938	0.917	0.908	0.835	0.788	0.863	9.31
67)	S	2,4,6-Tribromo...	0.025	0.039	0.051	0.060	0.074	0.079	0.083	0.092	0.096	0.098	0.070	35.87
68)	T	4-Bromophenyl ...	0.171	0.175	0.178	0.185	0.189	0.186	0.187	0.195	0.192	0.193	0.185	4.31
69)	T	Hexachlorobenzene	0.172	0.180	0.183	0.186	0.184	0.189	0.183	0.195	0.194	0.196	0.186	4.03
70)	T	Pentachlorophe...			0.034	0.050	0.078	0.091	0.107	0.120	0.126	0.128	0.092	38.65
71)	T	Phenanthrene	1.136	1.132	1.156	1.140	1.161	1.114	1.096	1.077	1.004	0.962	1.098	6.05
72)	T	Anthracene	1.175	1.189	1.175	1.169	1.198	1.147	1.123	1.090	1.024	0.973	1.126	6.71
73)	T	Carbazole	1.209	1.101	1.089	1.075	1.101	1.038	1.035	1.015	0.957	0.926	1.055	7.61
74)	T	Di-n-butyl pht...	1.681	1.372	1.303	1.315	1.362	1.289	1.301	1.269	1.181	1.122	1.320	11.22
75)	T	Fluoranthene	1.179	1.160	1.159	1.154	1.205	1.138	1.151	1.124	1.076	1.041	1.139	4.23
76)	T	Benzidine			0.236	0.220	0.327	0.322	0.480	0.615			0.367	41.65
77)	T	Pyrene	1.178	1.173	1.166	1.175	1.222	1.157	1.171	1.148	1.103	1.074	1.157	3.59
														12.04
78)	I	Chrysene-d12 (ISTD)	----------	----------	ISTD	----------	----------							
79)	S	Terphenyl-d14 ...	0.891	0.926	0.935	0.967	0.963	0.964	0.932	0.938	0.919	0.909	0.934	2.67
80)	T	Butyl benzyl p...			0.428	0.533	0.592	0.600	0.625	0.641	0.634	0.627	0.585	12.35
81)	T	Bis(2-ethylhex...		0.674	0.531	0.556	0.565	0.558	0.579	0.598	0.592	0.587	0.582	6.92
82)	T	3,3-Dichlorobe...	0.165	0.232	0.266	0.303	0.346	0.327	0.356	0.386	0.413	0.413	0.321	25.15
83)	T	Benz(a)anthracene	1.280	1.160	1.089	1.103	1.129	1.096	1.104	1.120	1.107	1.094	1.128	5.07
84)	T	Chrysene	1.076	1.060	1.069	1.080	1.107	1.079	1.079	1.087	1.060	1.049	1.075	1.52
85)	T	Bis(2-ethylhex...				0.702	0.803	0.818	0.868	0.895	0.886	0.881	0.836	8.23

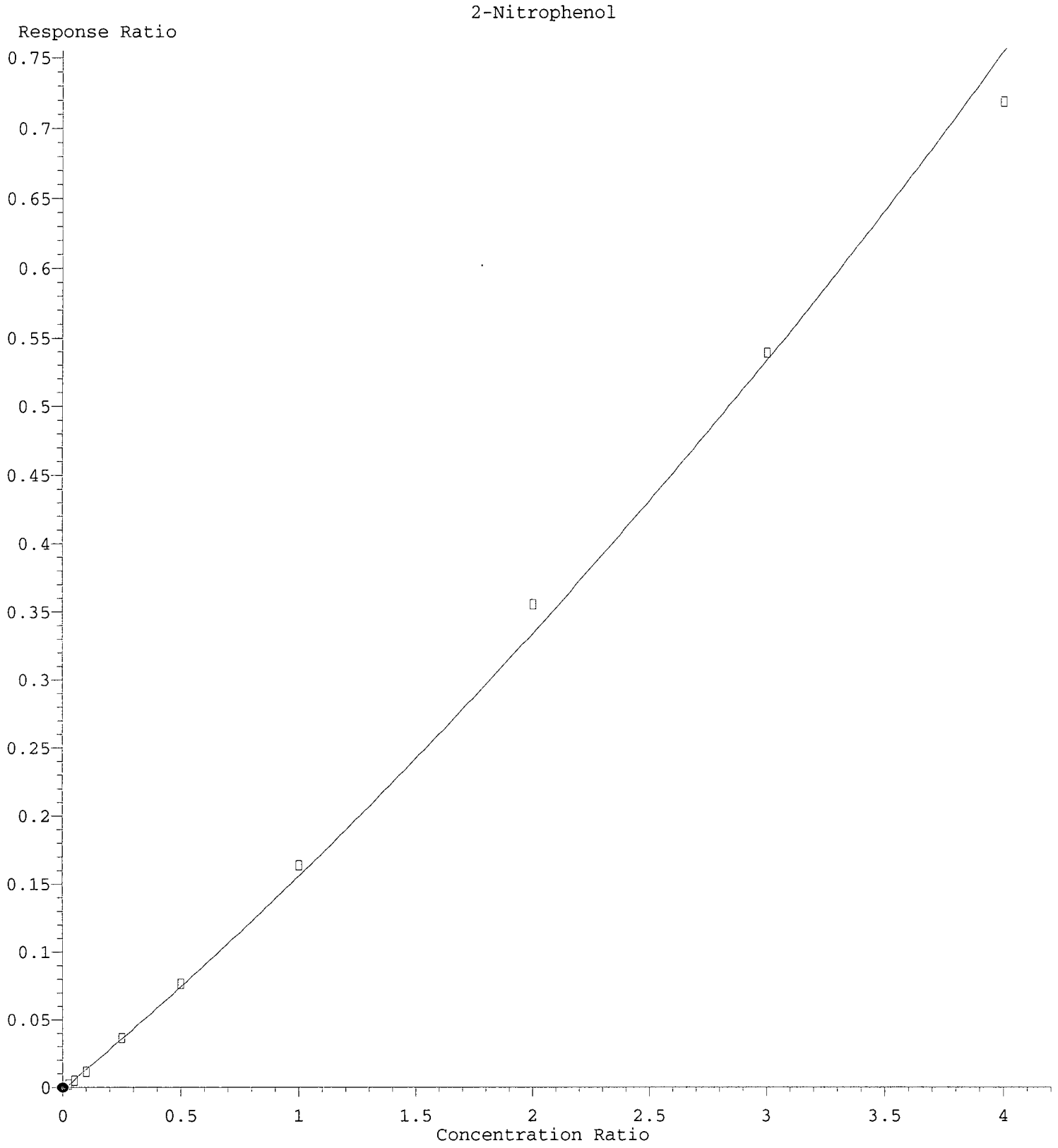
Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics

13.68

86)	I	Perylene-d12 (ISTD)	----------ISTD----------										
87)	T	Di-n-octyl pht...	0.636	0.699	0.991	1.292	1.338	1.504	1.589	1.585	1.585	1.247	30.56
88)	T	Benzo(b)fluora...	0.874	0.932	0.952	1.030	1.102	1.091	1.116	1.136	1.135	1.199	1.057	9.99
89)	T	Benzo(k)fluora...	0.912	0.950	0.967	1.057	1.106	1.109	1.121	1.112	1.065	0.986	1.038	7.49
90)	T	Benzo(b+k)fluo...	1.018	1.043	1.041	1.103	1.150	1.138	1.148	1.166	1.146	1.144	1.110	4.95
91)	T	Benzo(e)pyrene	0.993	1.010	1.022	1.066	1.112	1.101	1.099	1.125	1.100	1.099	1.073	4.41
92)	T	Benzo(a)pyrene	0.754	0.807	0.827	0.917	1.017	1.016	1.055	1.083	1.059	1.060	0.959	12.80
93)	T	Perylene	1.008	1.107	1.095	1.092	1.140	1.114	1.107	1.119	1.096	1.087	1.097	3.18
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------										
95)	T	Indeno(1,2,3-c...	1.065	1.040	1.050	1.054	1.082	1.078	1.105	1.139	1.171	1.178	1.096	4.60
96)	T	Dibenz(a,h)ant...	0.871	0.947	0.942	0.976	1.019	0.997	1.050	1.083	1.080	1.074	1.004	7.04
97)	T	Benzo(g,h,i)pe...	0.909	1.020	1.041	1.090	1.141	1.138	1.132	1.142	1.116	1.065	1.079	6.88

1/31/19 17.04

(#) = Out of Range

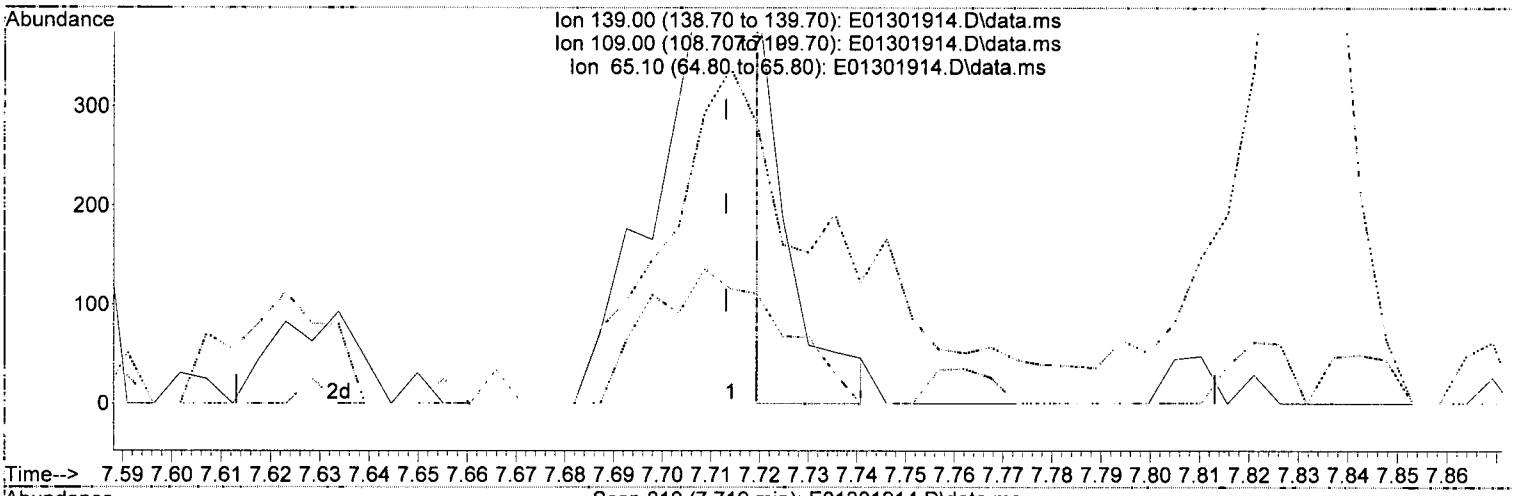


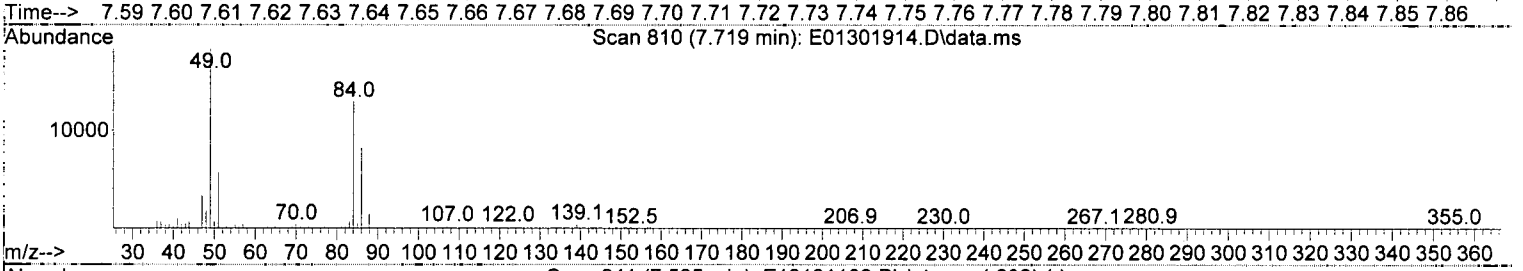
R = 1.05e-002 A*A + 1.47e-001 A - 1.78e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

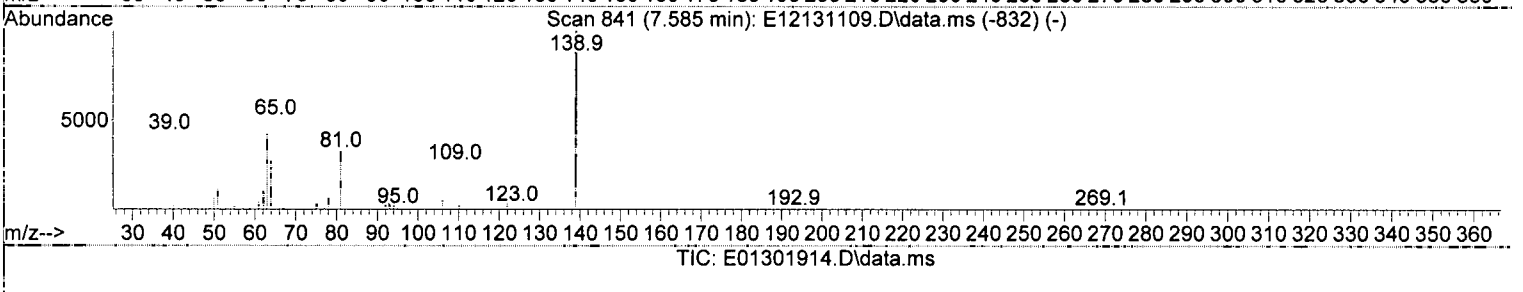
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







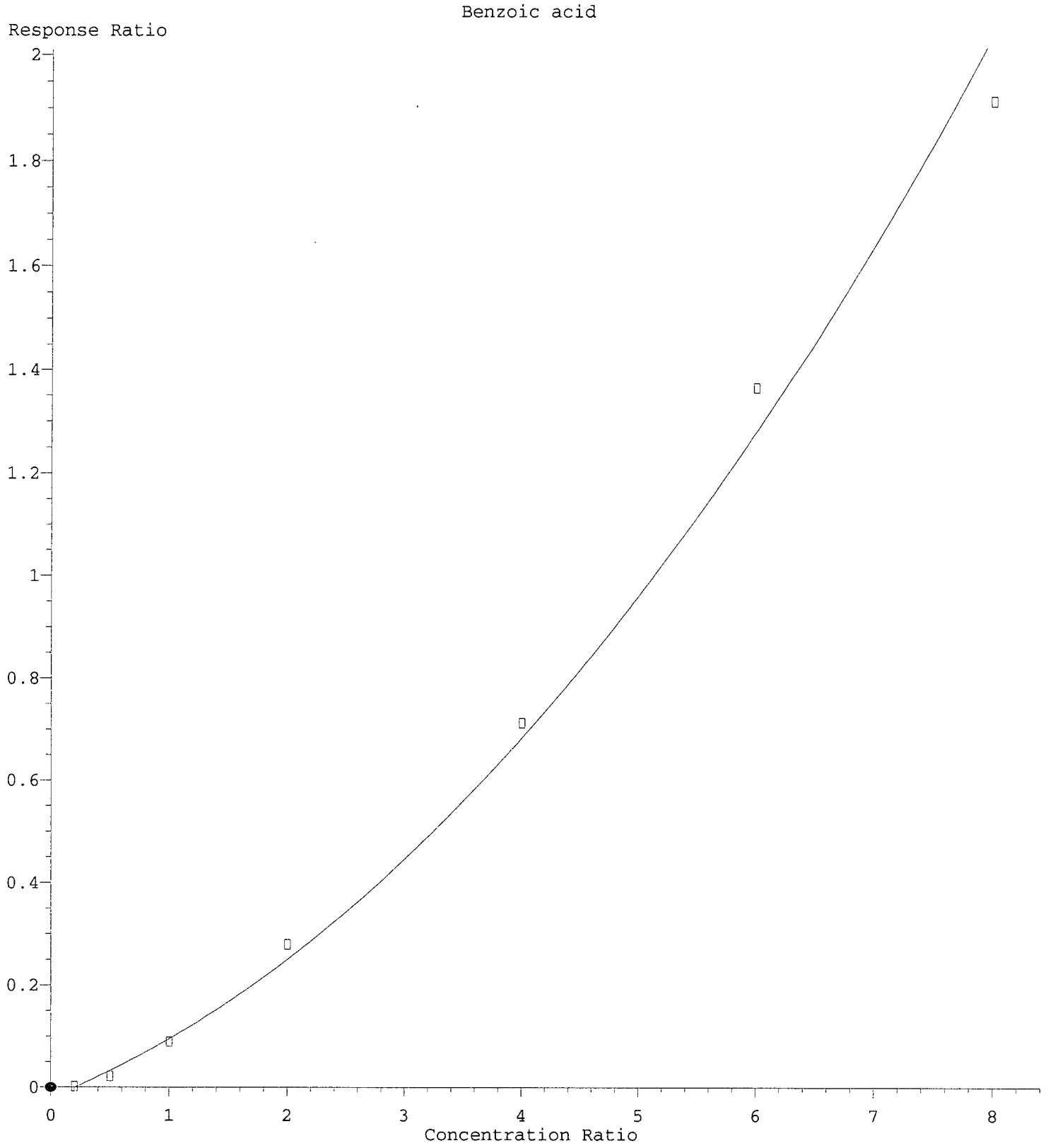
TIC: E01301914.D\data.ms

(23) 2-Nitrophenol (T)

7.719min (+ 0.006) 25.58 ng/ml m

response 111

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	29.10	26.56
65.10	60.80	67.70
0.00	0.00	0.00

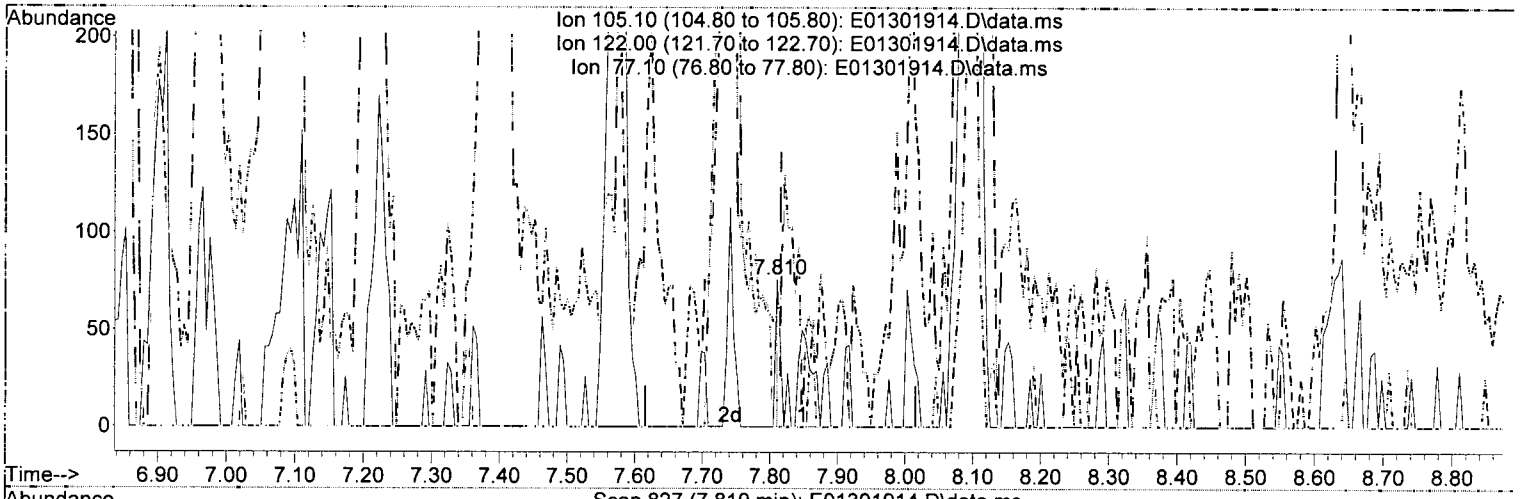


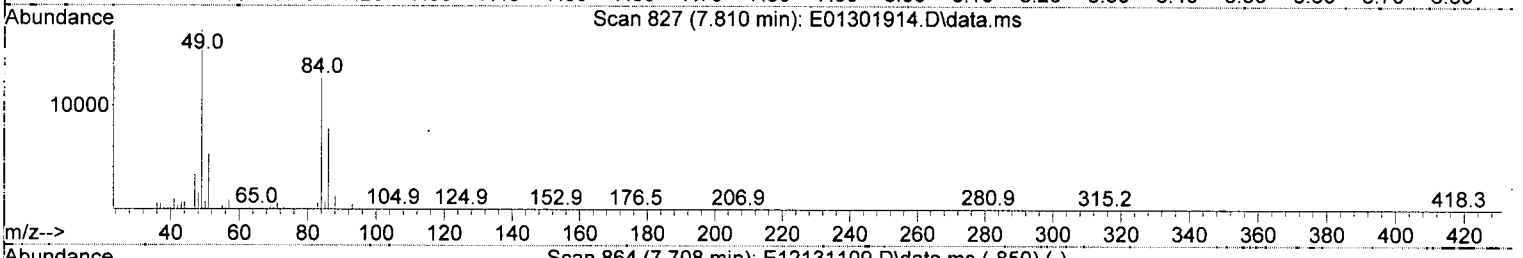
R = 2.05e-002 A*A + 9.40e-002 A - 1.95e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

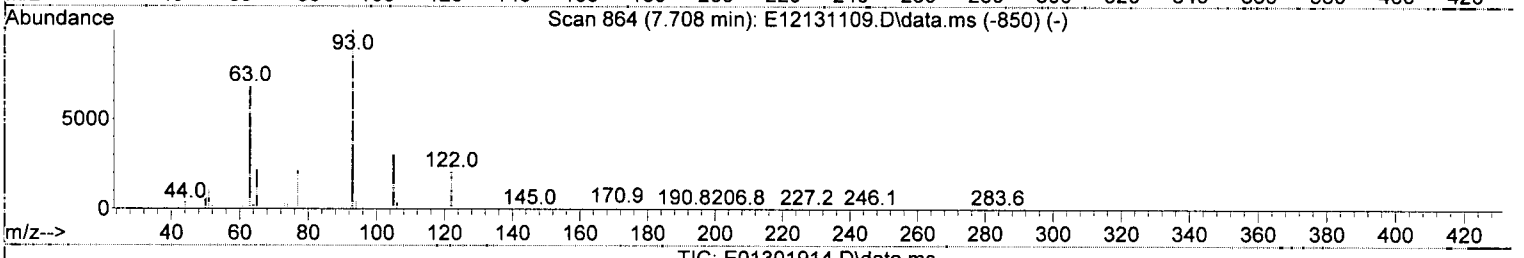
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







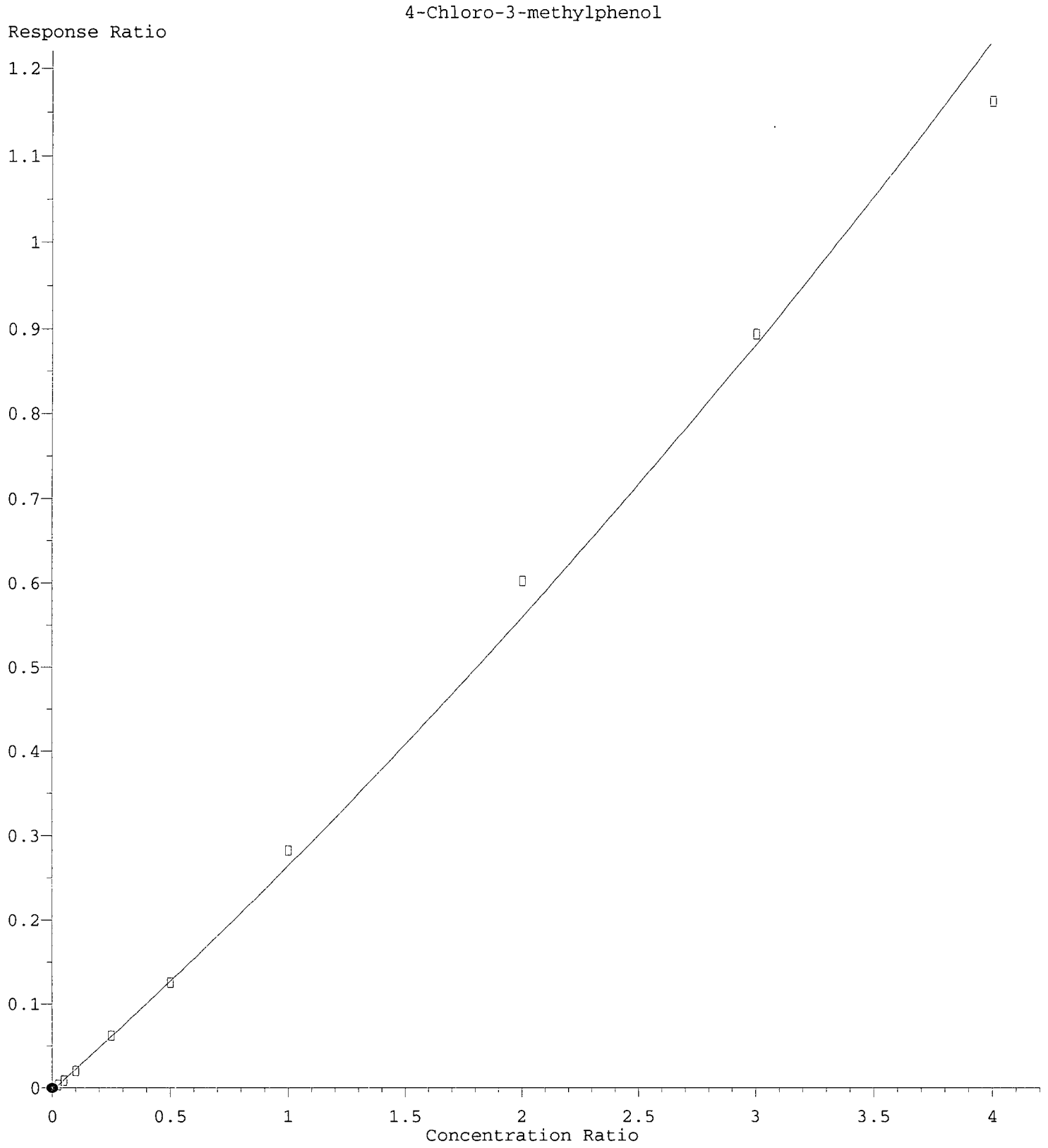
TIC: E01301914.D\data.ms

(26) Benzoic acid (T)

7.810min (-0.005) 399.93 ng/ml m

response 136

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	0.00#
77.10	85.50	77.63
0.00	0.00	0.00

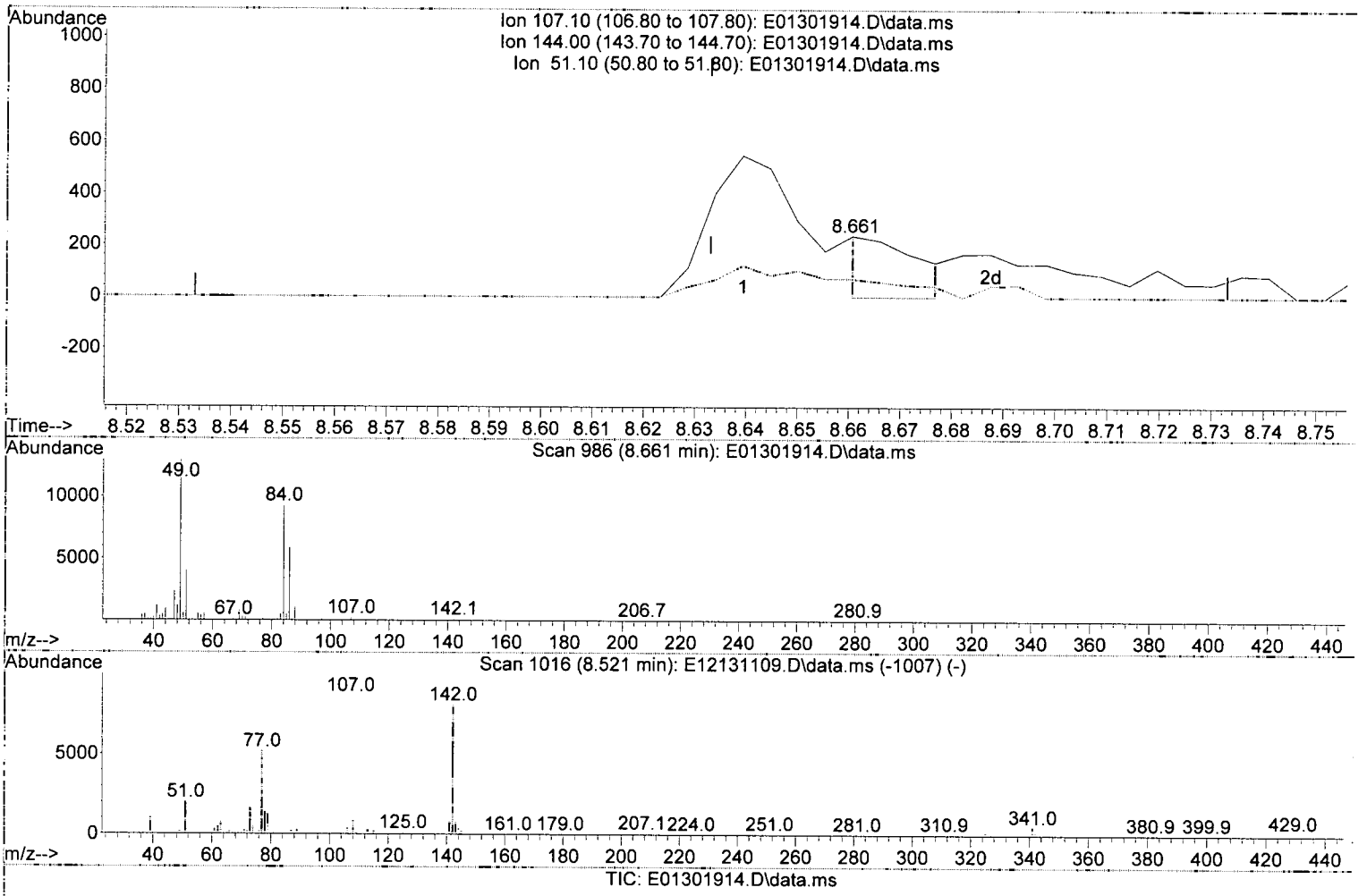


R = 1.37e-002 A*A + 2.54e-001 A - 3.38e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



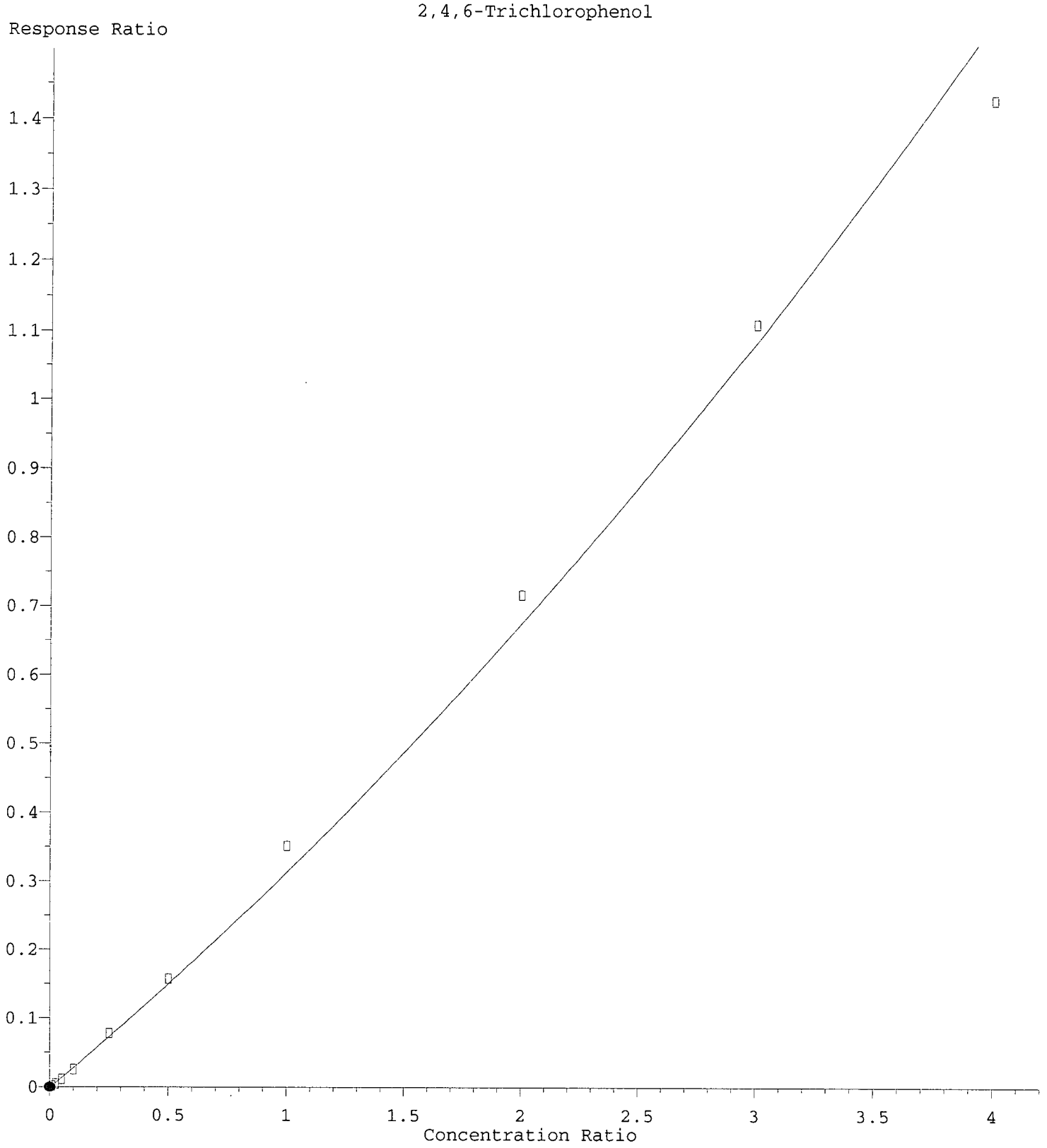
TIC: E01301914.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.661min (+ 0.028) 27.82 ng/ml m ✓

response 167

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	25.60	29.54
51.10	22.90	1701.27#
0.00	0.00	0.00

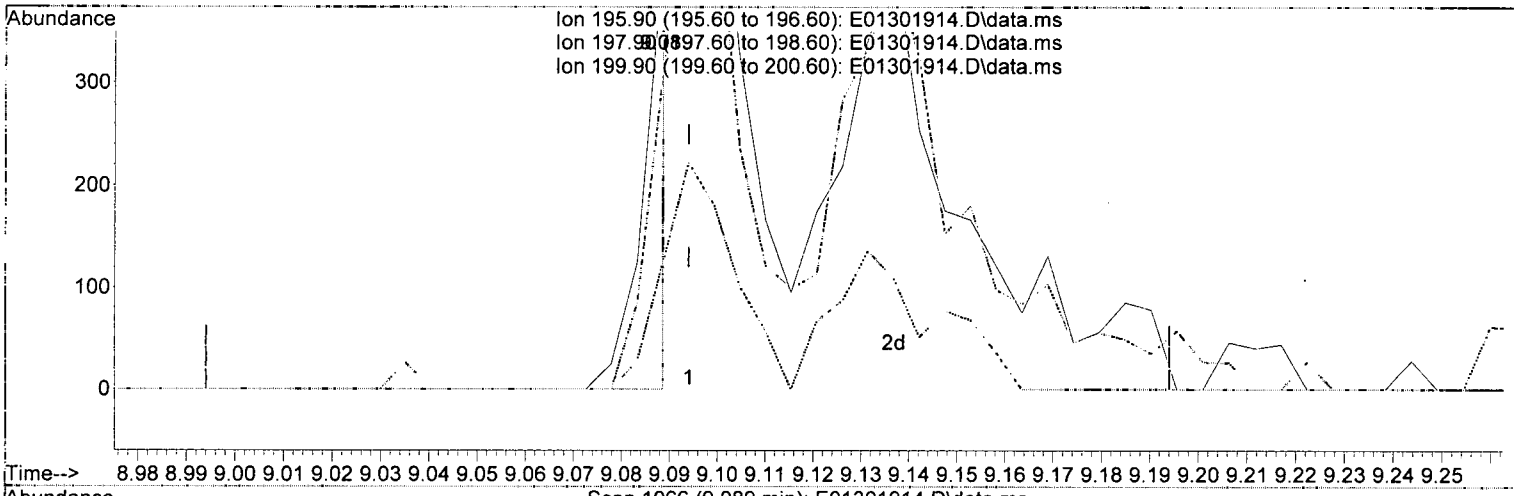


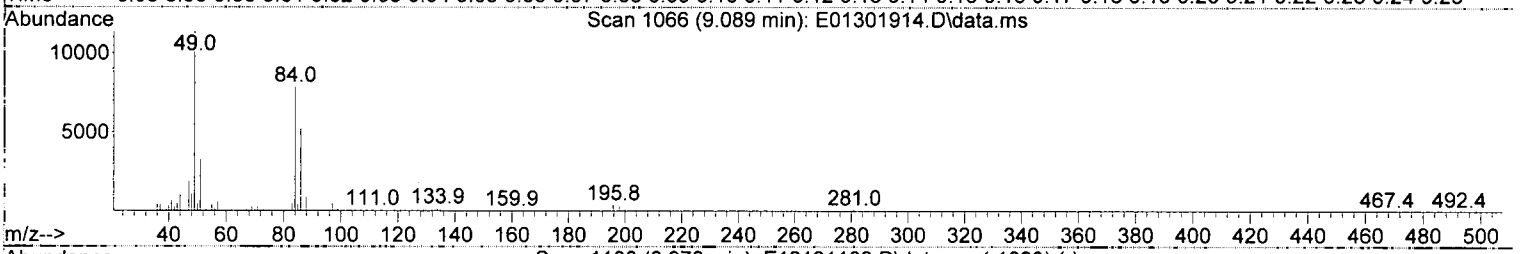
R = 2.36e-002 A*A + 2.91e-001 A - 1.61e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

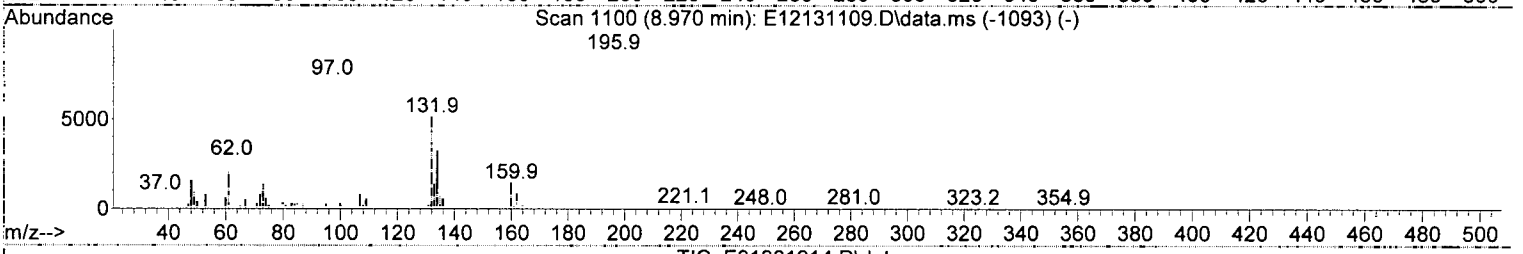
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







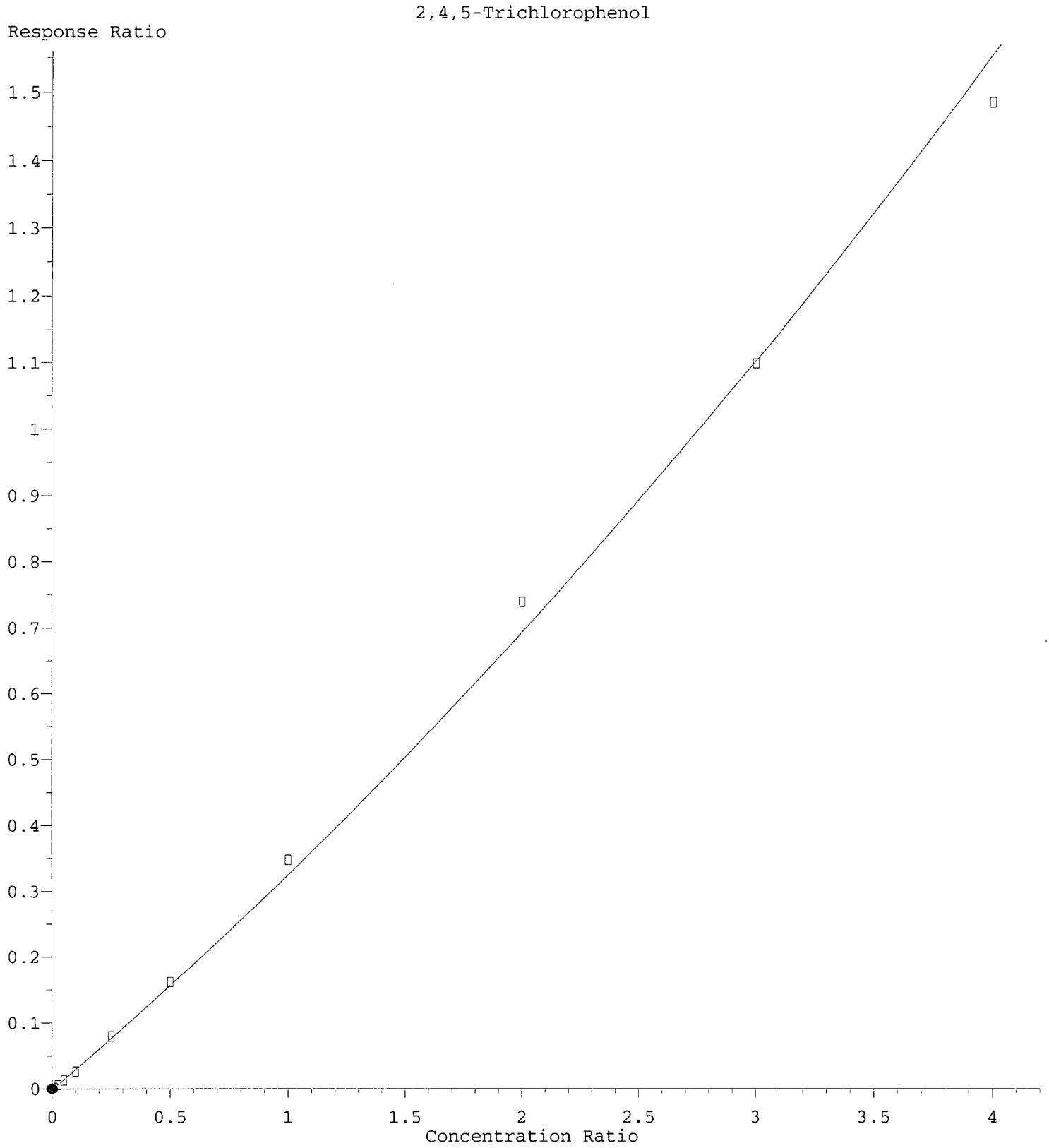
TIC: E01301914.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

9.089min (-0.005) 13.66 ng/ml m

response 184

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	72.64
199.90	30.90	29.48
0.00	0.00	0.00

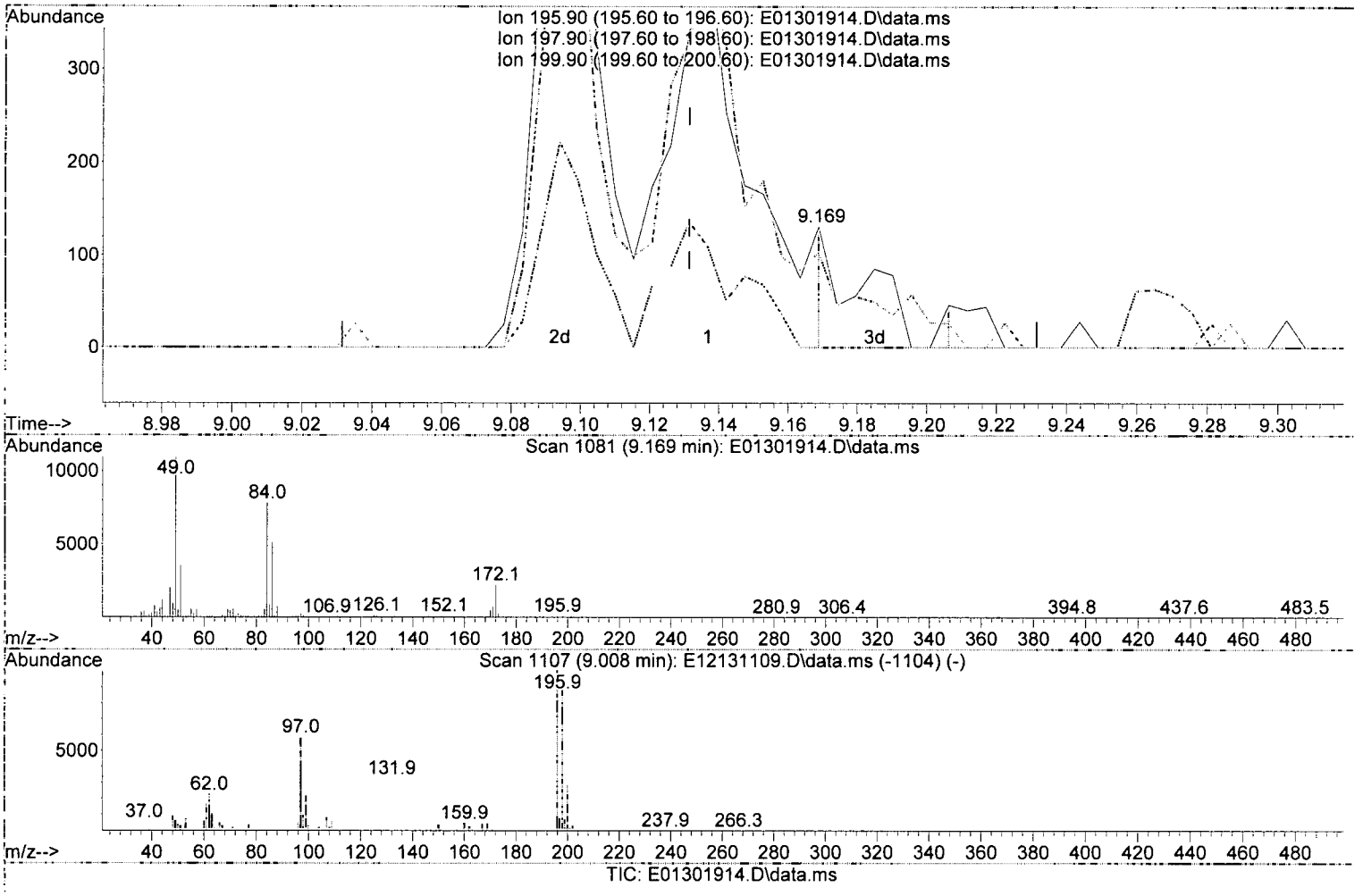


R = 2.08e-002 A*A + 3.06e-001 A - 1.73e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



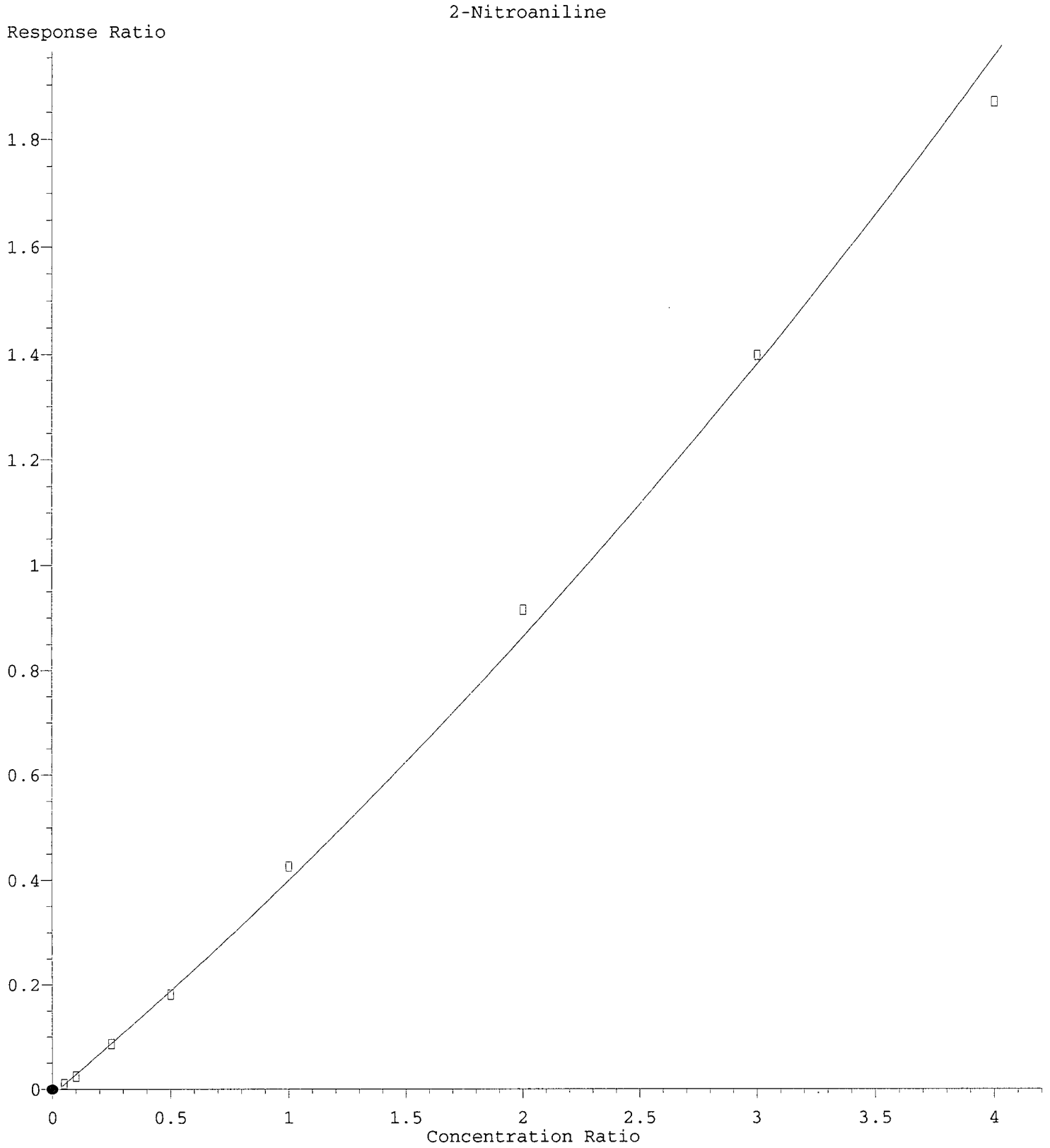
TIC: E01301914.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.169min (+ 0.037) 12.64 ng/ml m ✓

response 100

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	78.63
199.90	32.40	0.00#
0.00	0.00	0.00

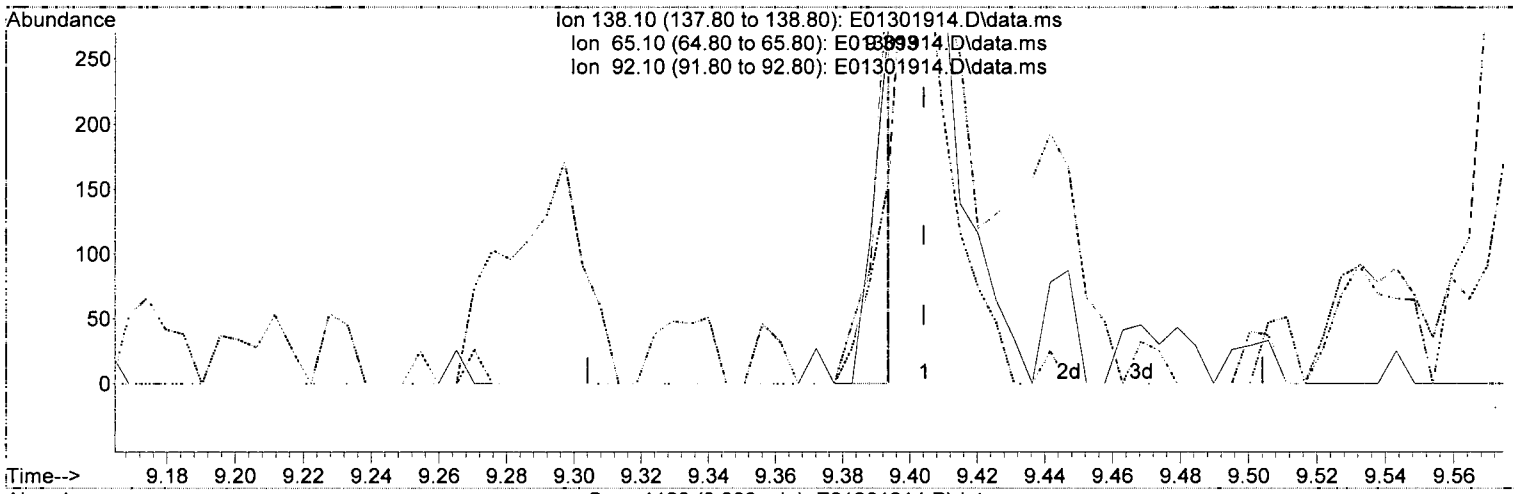


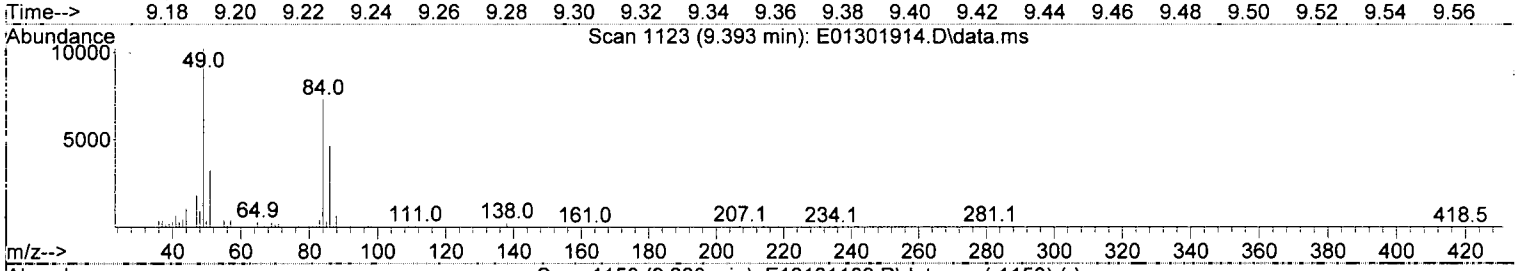
R = 2.70e-002 A*A + 3.83e-001 A - 1.04e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

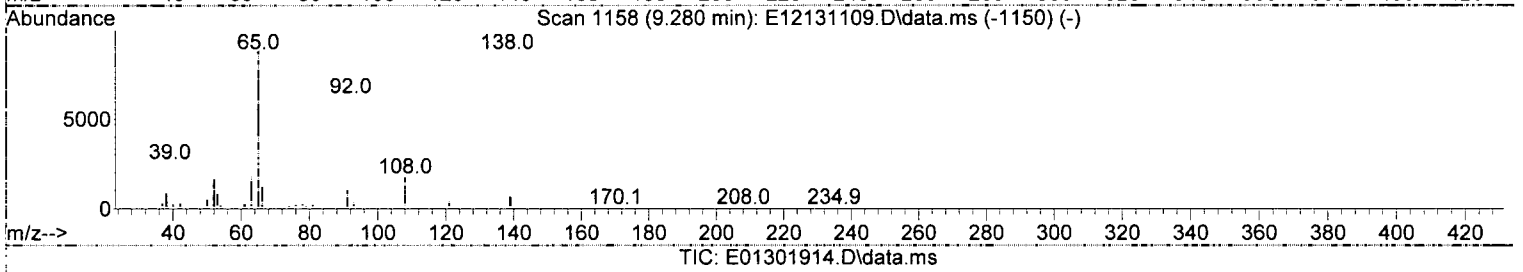
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







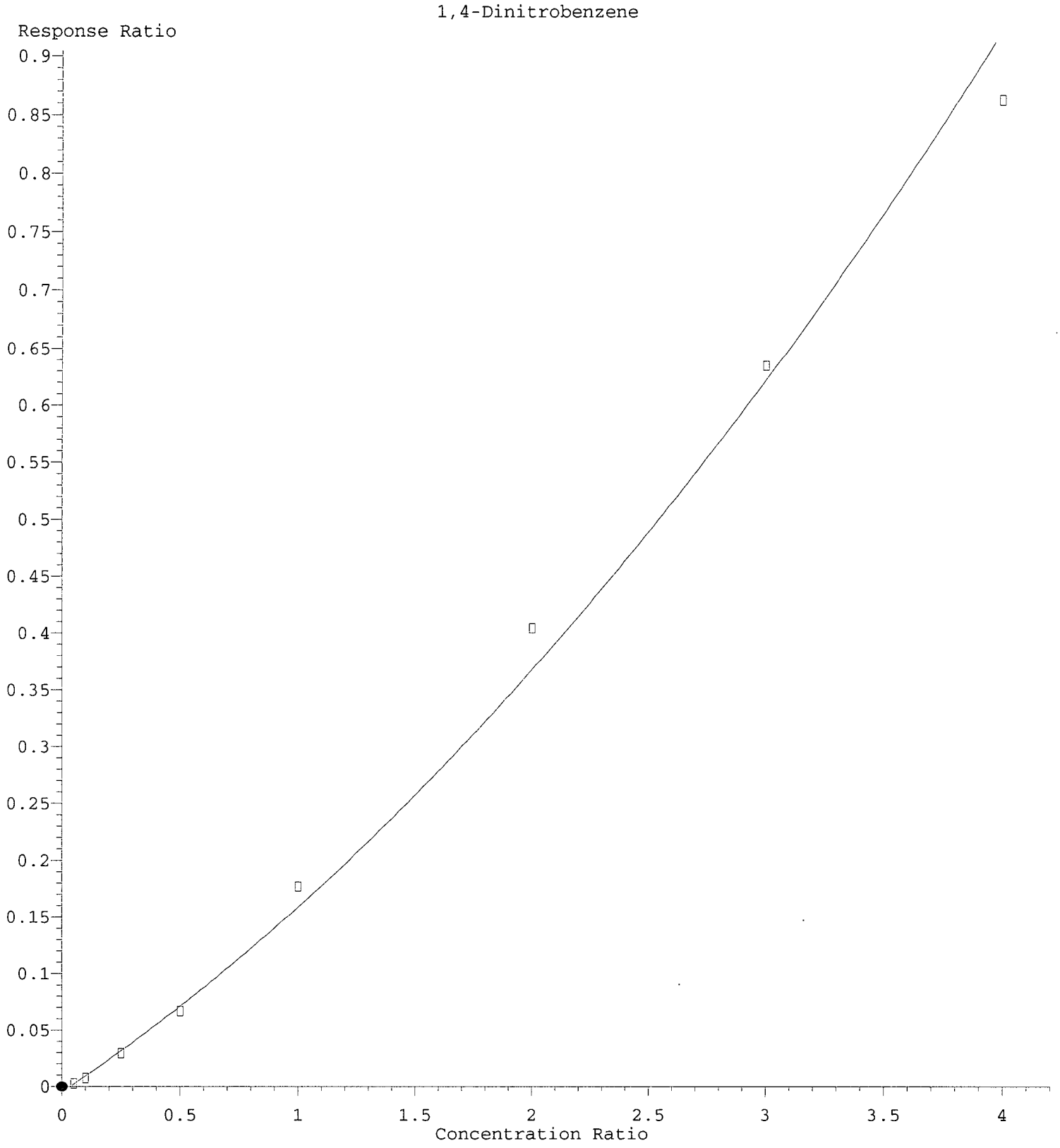
TIC: E01301914.D\data.ms

(42) 2-Nitroaniline (T)

9.393min (-0.011) 55.46 ng/ml m

response 124

Ion	Exp%	Act%
138.10	100.00	100.00
65.10	109.90	120.80
92.10	67.00	56.57
0.00	0.00	0.00

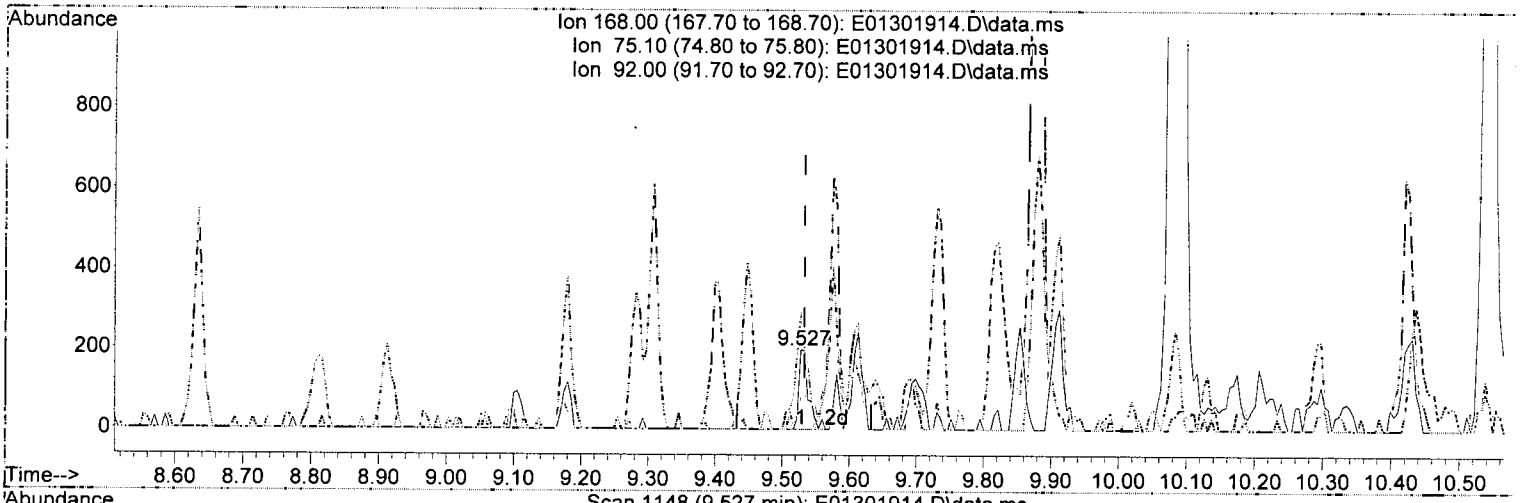


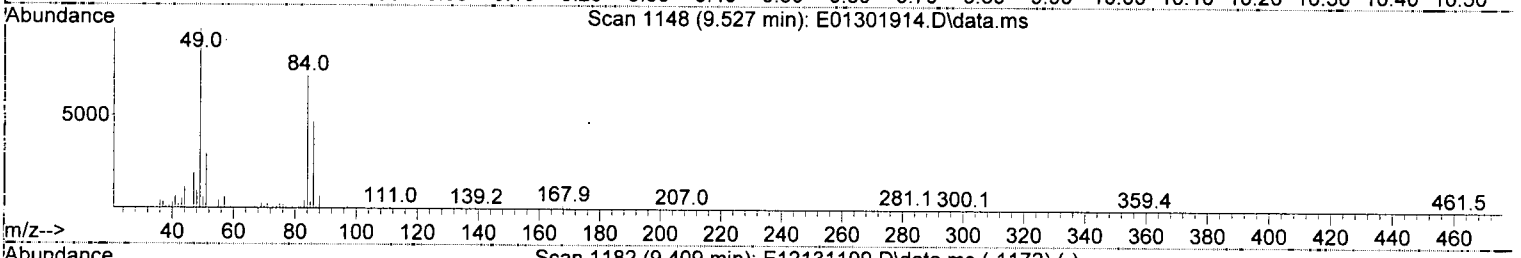
R = 2.26e-002 A*A + 1.41e-001 A - 5.01e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

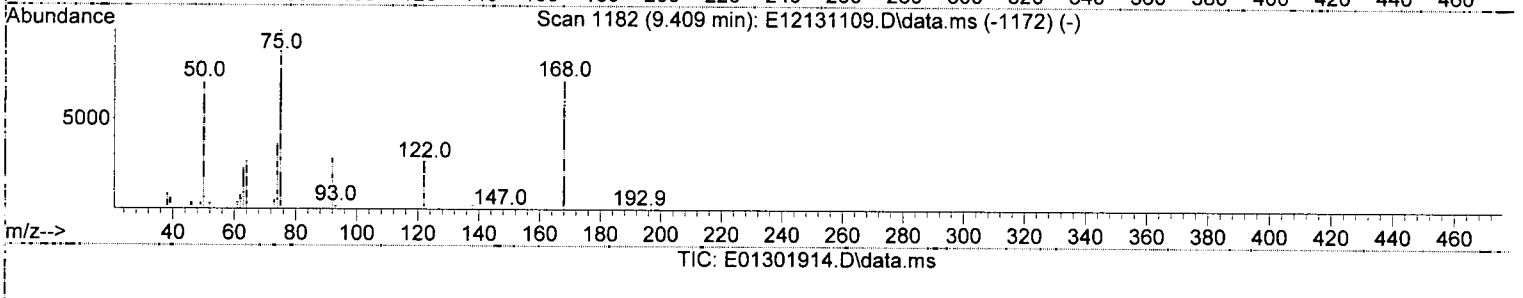
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







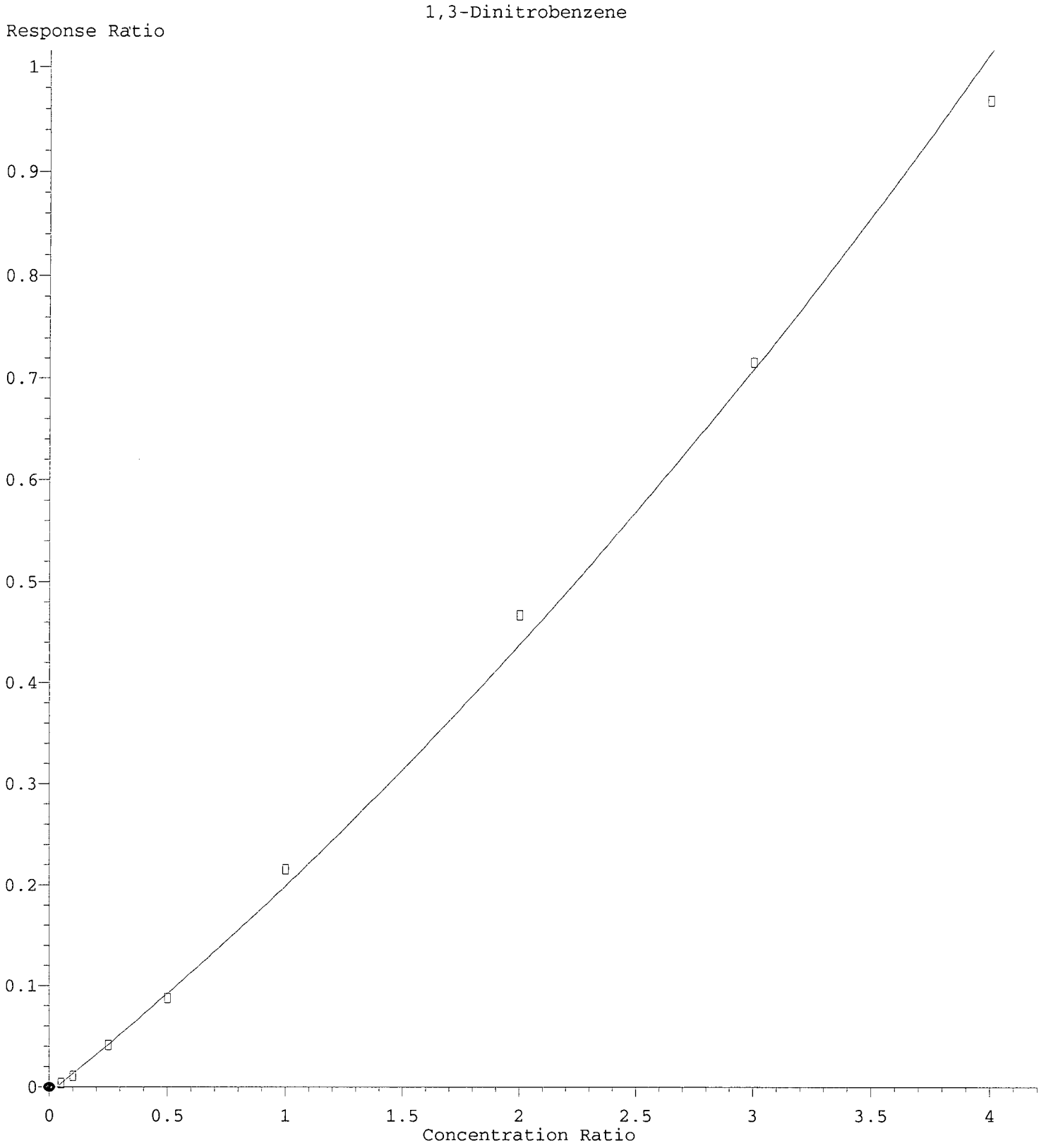
TIC: E01301914.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.527min (-0.005) 76.30 ng/ml

response 197

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	147.50	148.73
92.00	40.30	42.13
0.00	0.00	0.00

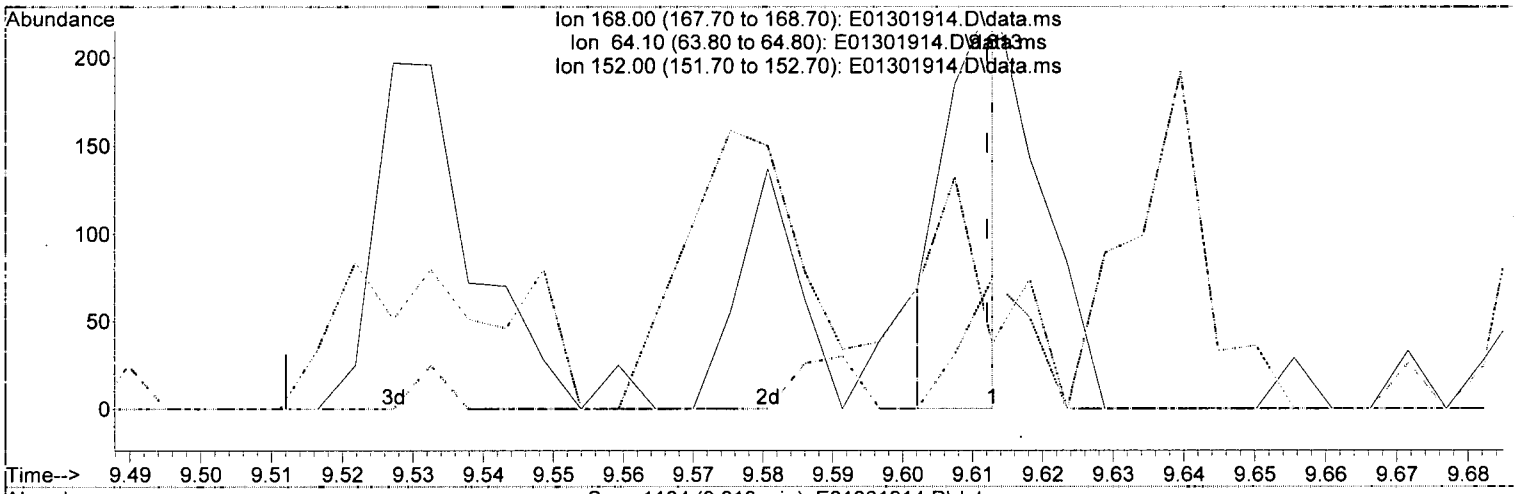


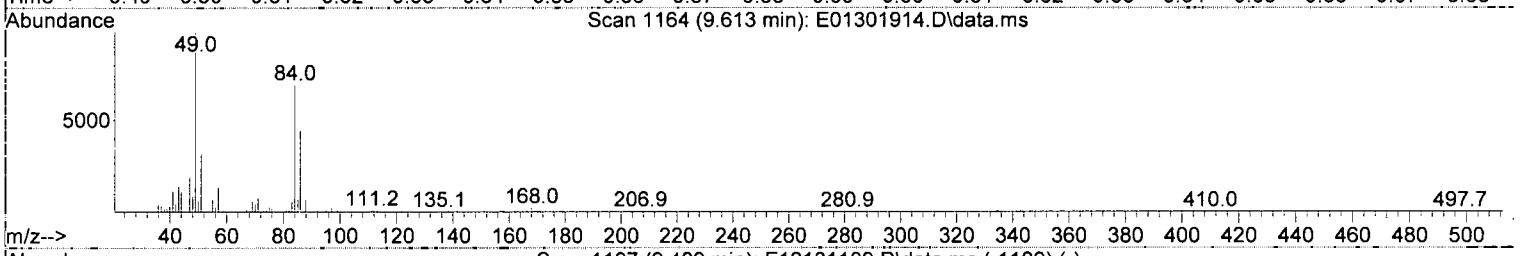
R = 1.65e-002 A*A + 1.89e-001 A - 6.37e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

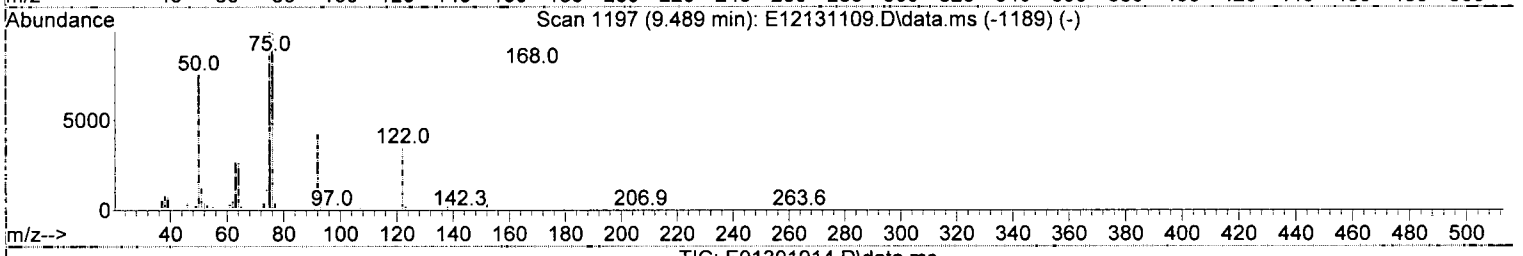
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







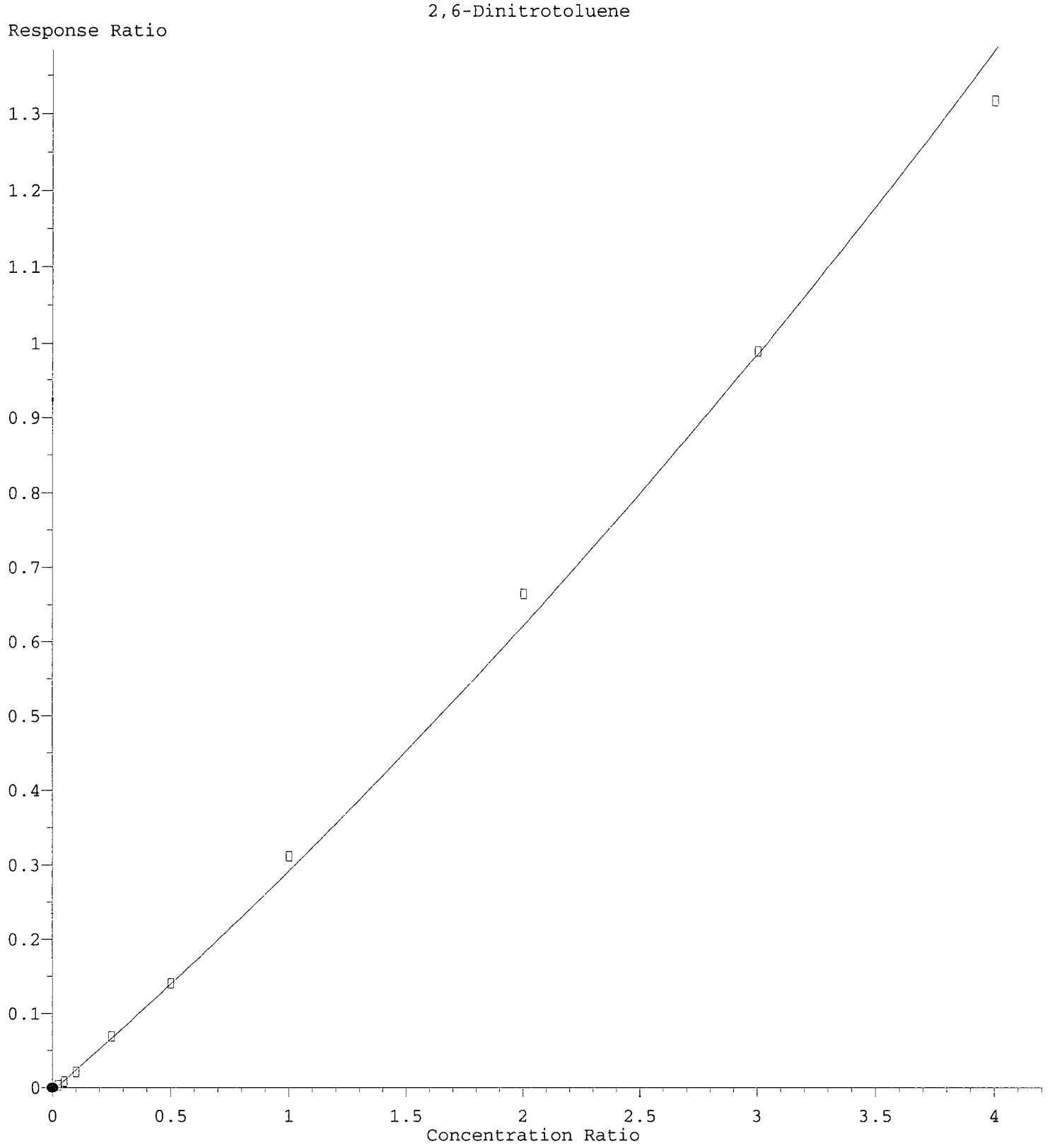
TIC: E01301914.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.613min (+ 0.001) 70.10 ng/ml m

response 137

Ion	Exp%	Act%
168.00	100.00	100.00
64.10	36.10	15.23
152.00	6.10	30.45
0.00	0.00	0.00

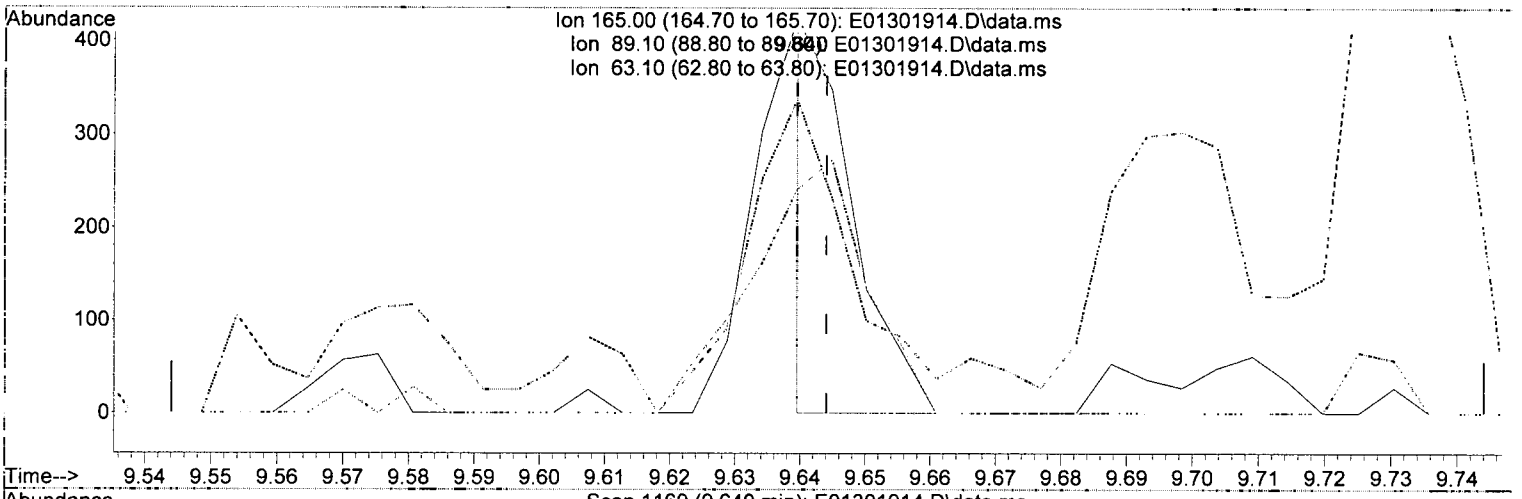


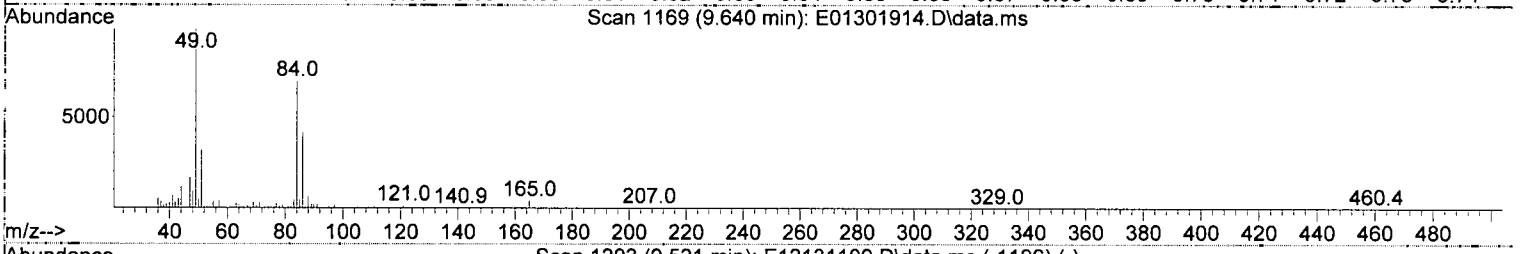
R = 1.67e-002 A*A + 2.80e-001 A - 4.44e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

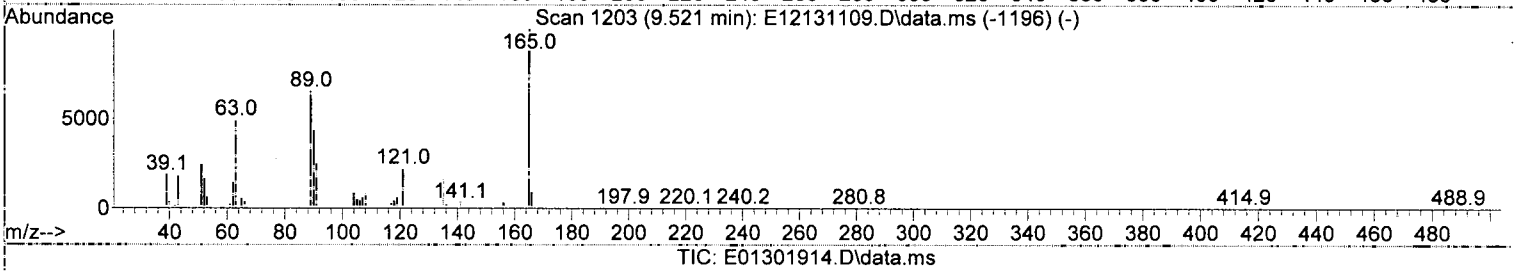
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







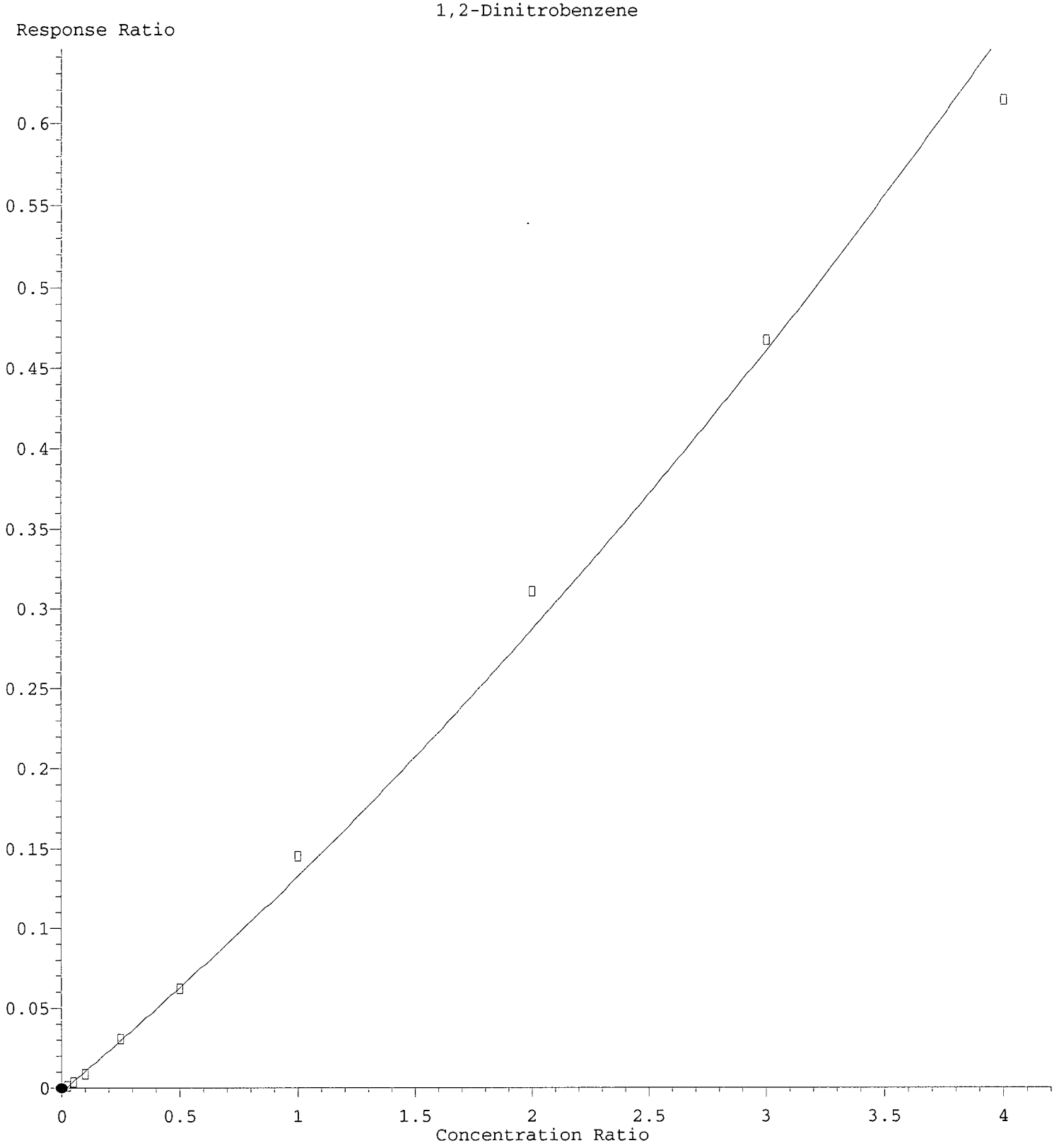
TIC: E01301914.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.640min (-0.004) 34.30 ng/ml m ✓

response 175

Ion	Exp%	Act%
165.00	100.00	100.00
89.10	71.70	56.57
63.10	68.70	79.11
0.00	0.00	0.00

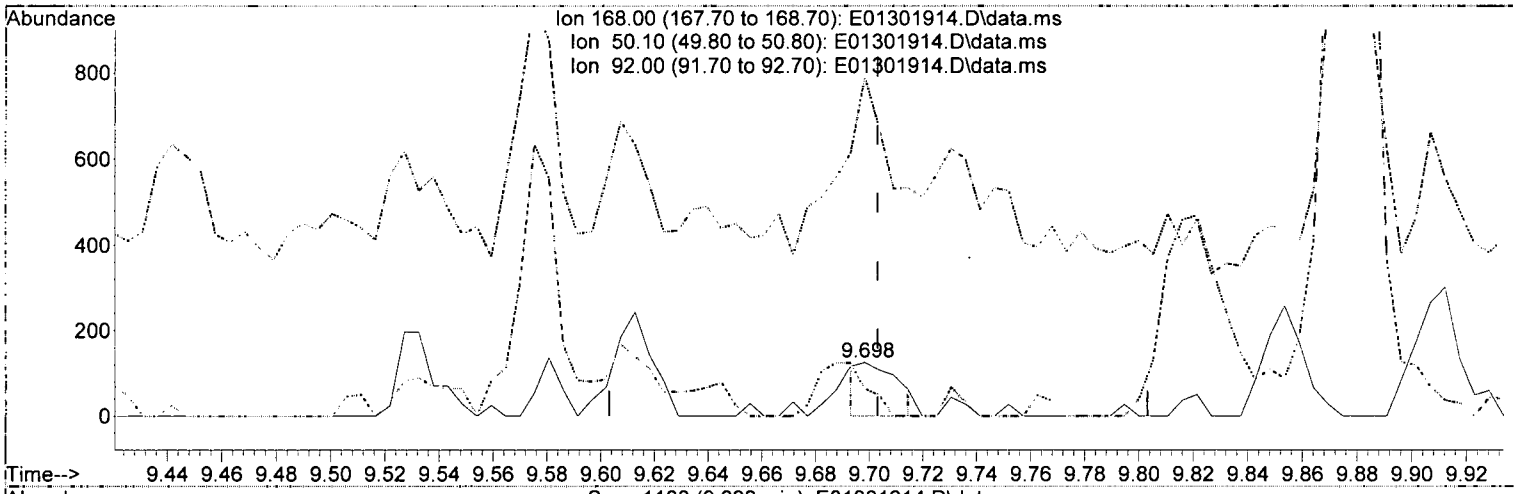


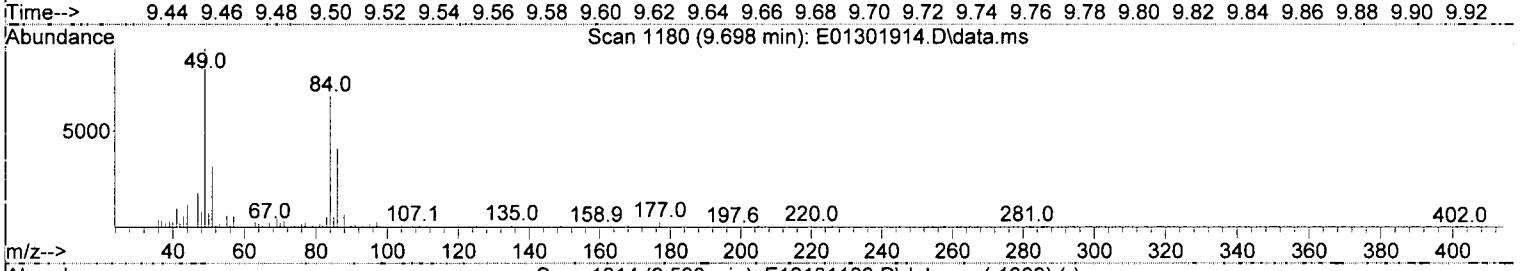
R = 9.99e-003 A*A + 1.25e-001 A - 2.17e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

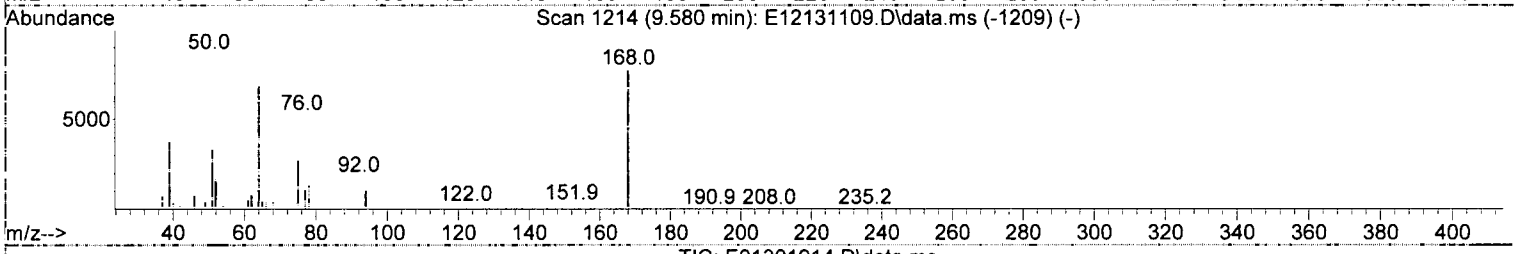
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







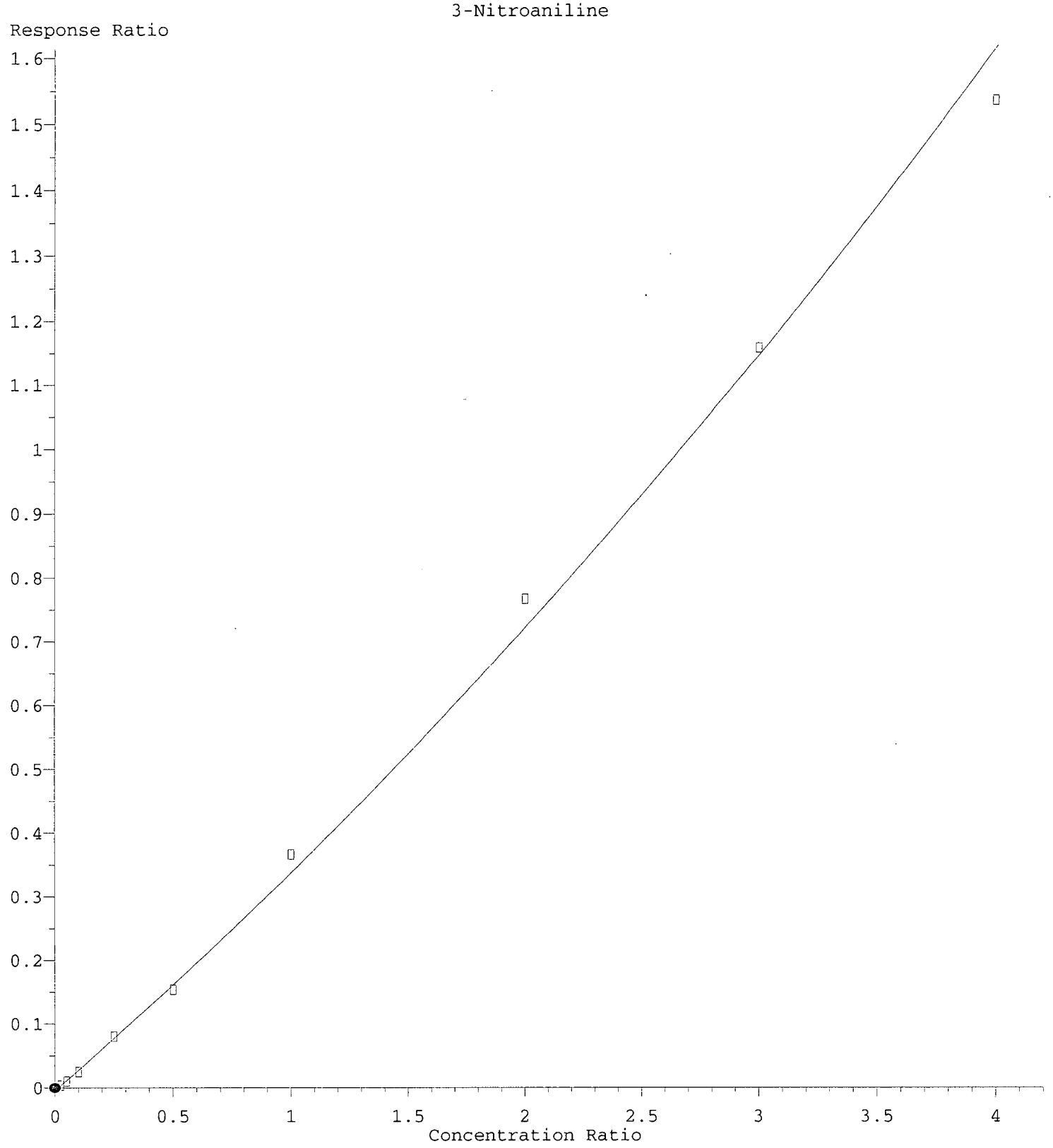
TIC: E01301914.D\data.ms

(48) 1,2-Dinitrobenzene (T)

9.698min (-0.005) 39.02 ng/ml m ✓

response 126

Ion	Exp%	Act%
168.00	100.00	100.00
50.10	166.30	627.78#
92.00	26.00	50.79
0.00	0.00	0.00

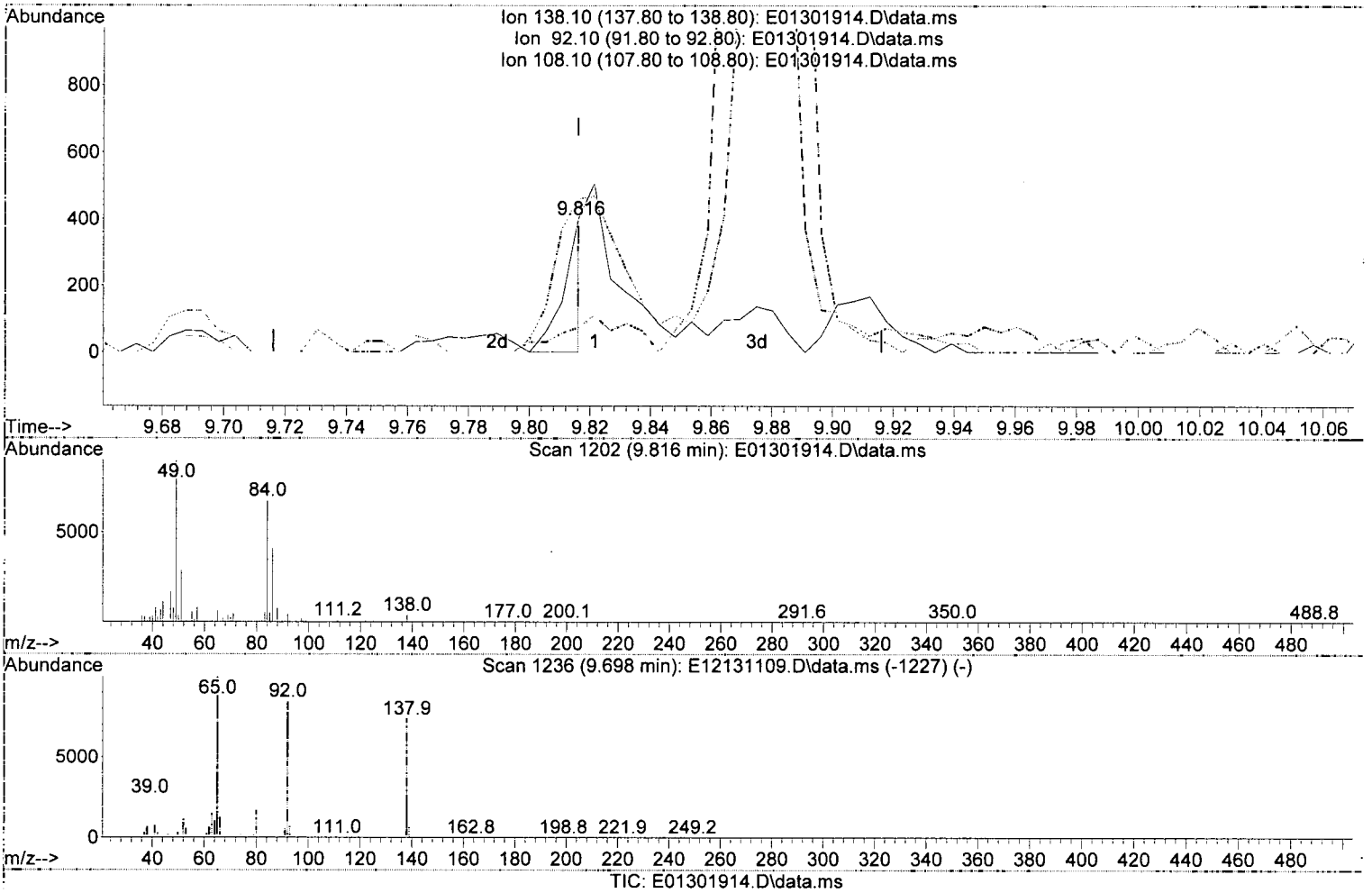


R = 2.09e-002 A*A + 3.22e-001 A - 4.69e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



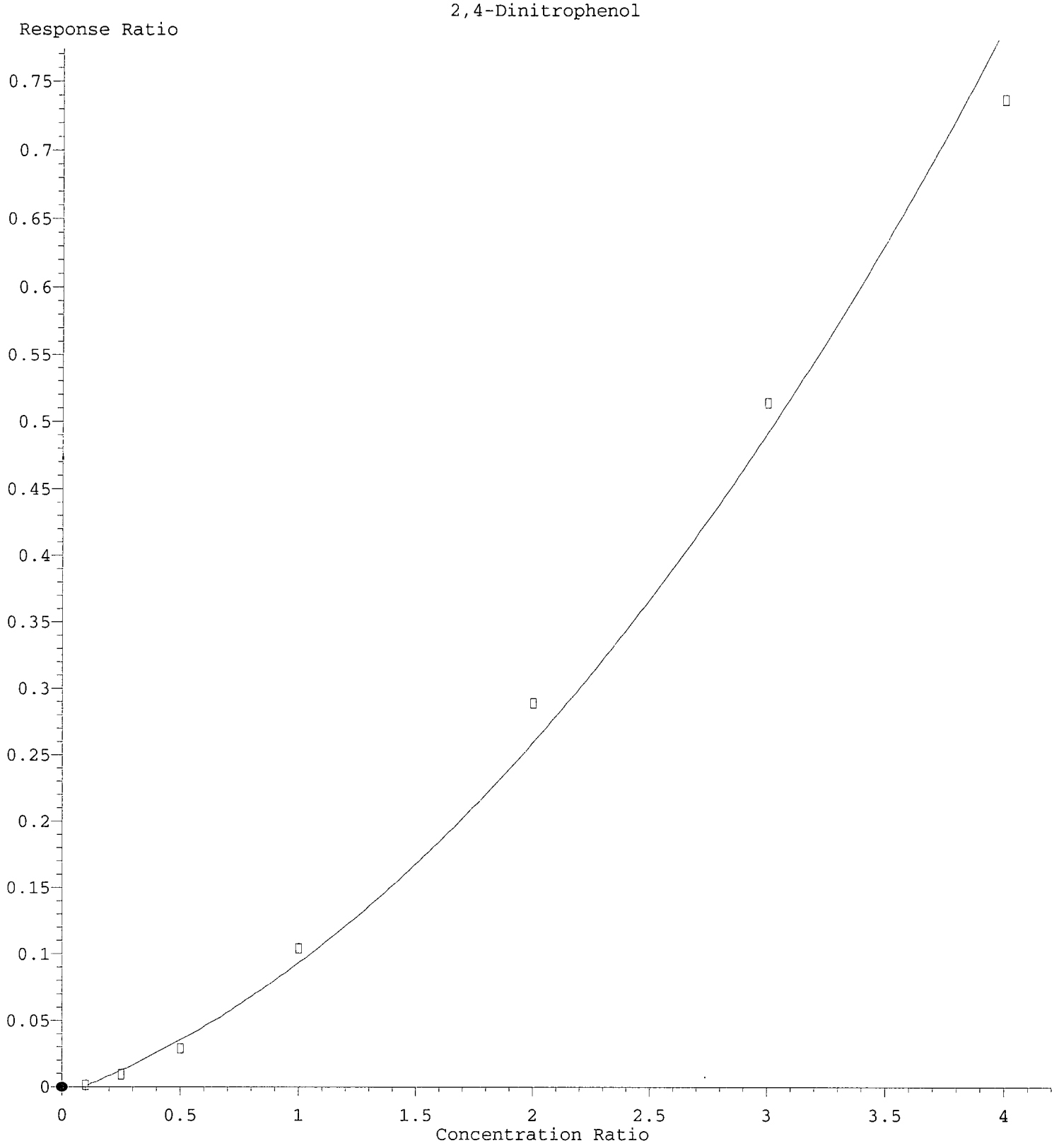
TIC: E01301914.D\data.ms

(50) 3-Nitroaniline (T)

9.816min (+ 0.000) 31.62 ng/ml m

response 195

Ion	Exp%	Act%
138.10	100.00	100.00
92.10	117.60	115.04
108.10	9.90	18.55
0.00	0.00	0.00

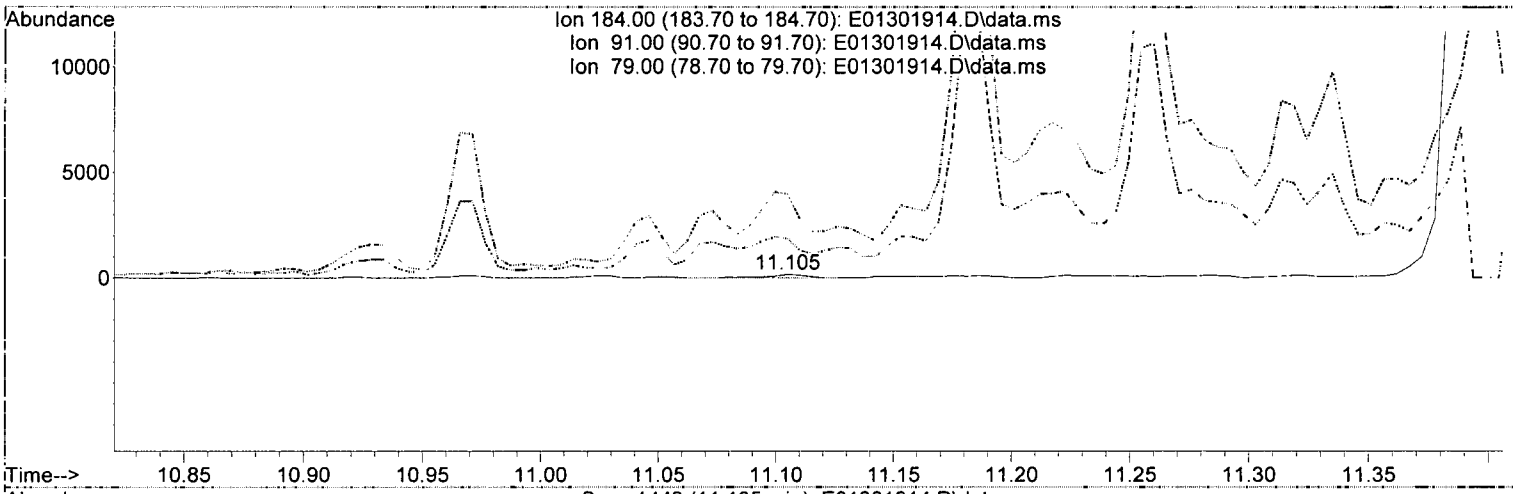


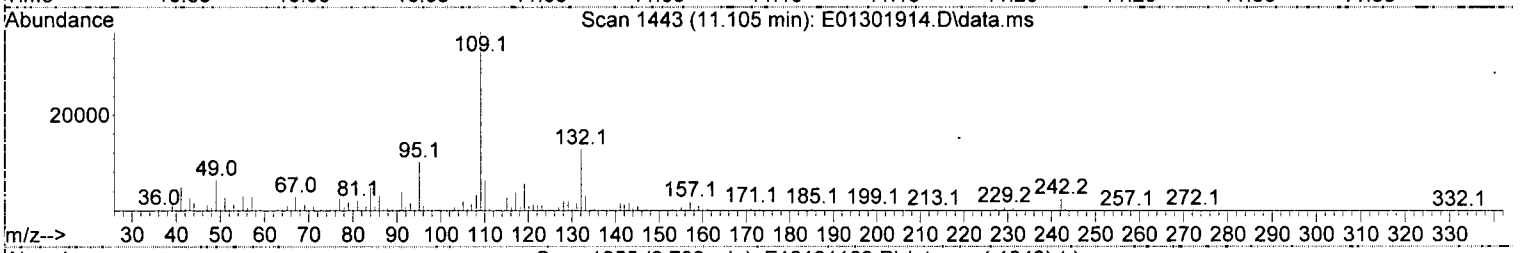
R = 3.32e-002 A*A + 6.65e-002 A - 6.19e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

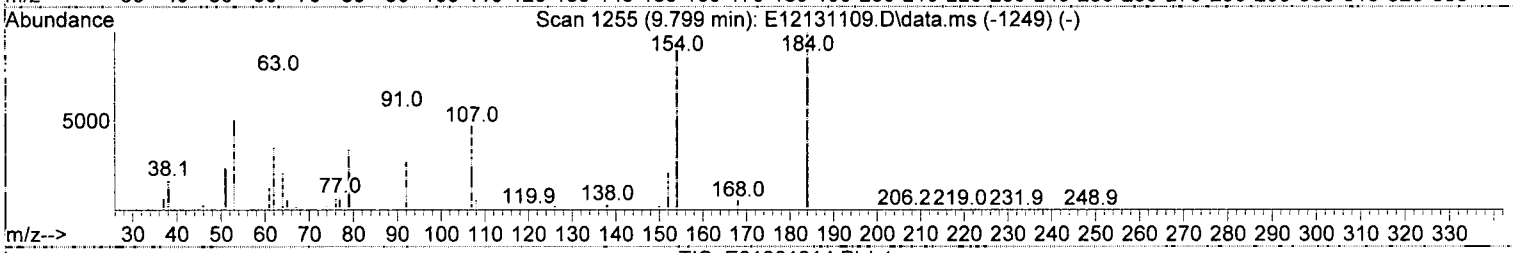
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







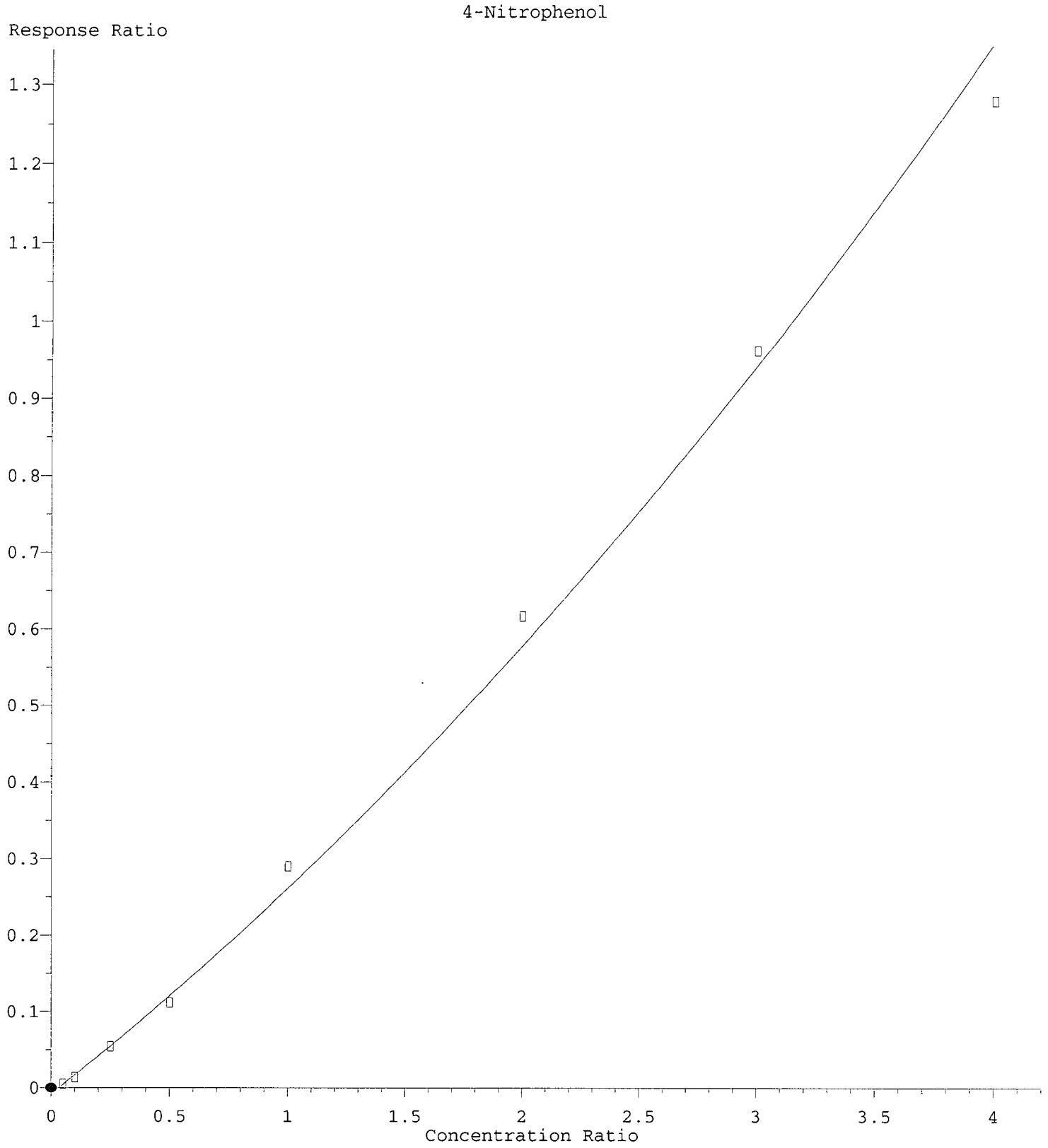
TIC: E01301914.D\data.ms

(52) 2,4-Dinitrophenol (T)

11.105min (+ 1.183) 188.23 ng/ml m

response 178

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	61.90	2521.52#
79.00	44.90	1181.01#
0.00	0.00	0.00

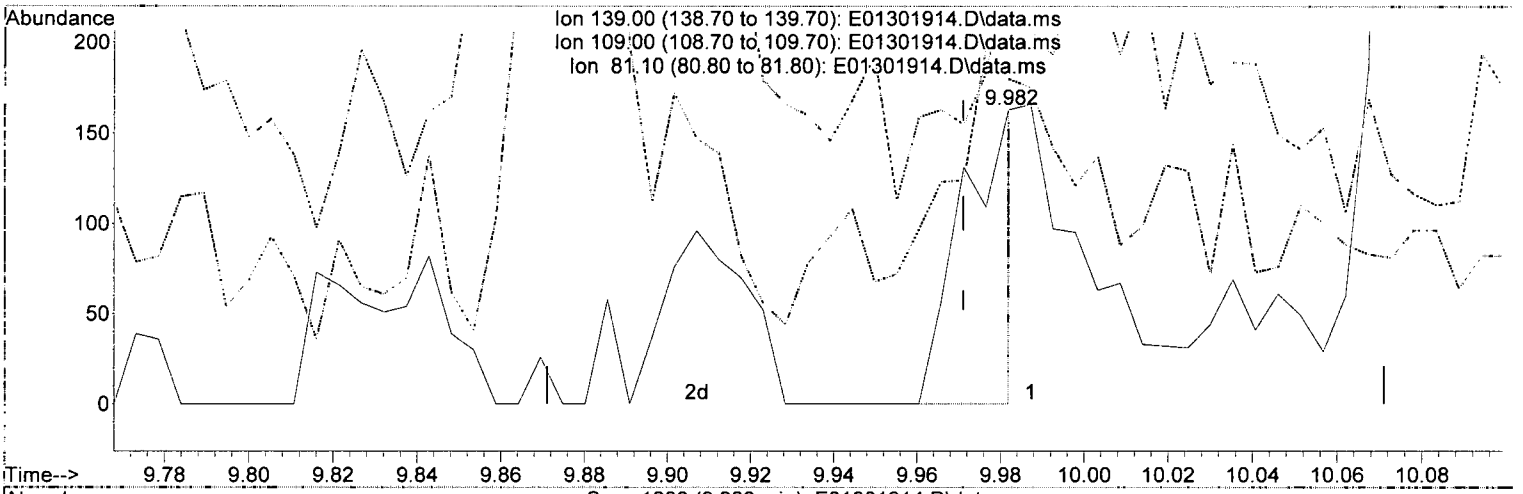


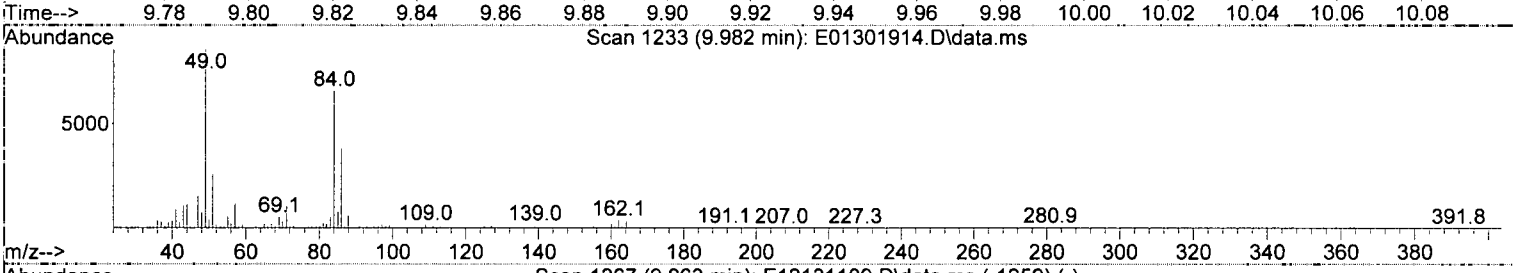
R = 2.37e-002 A*A + 2.46e-001 A - 8.09e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

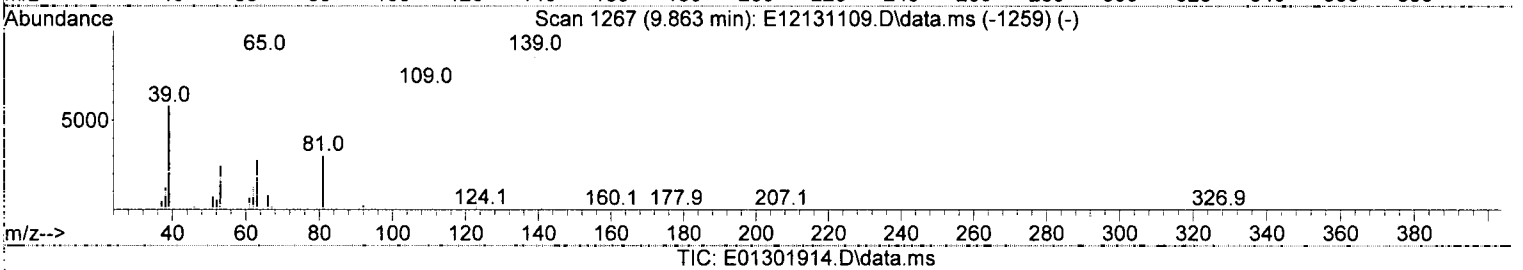
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







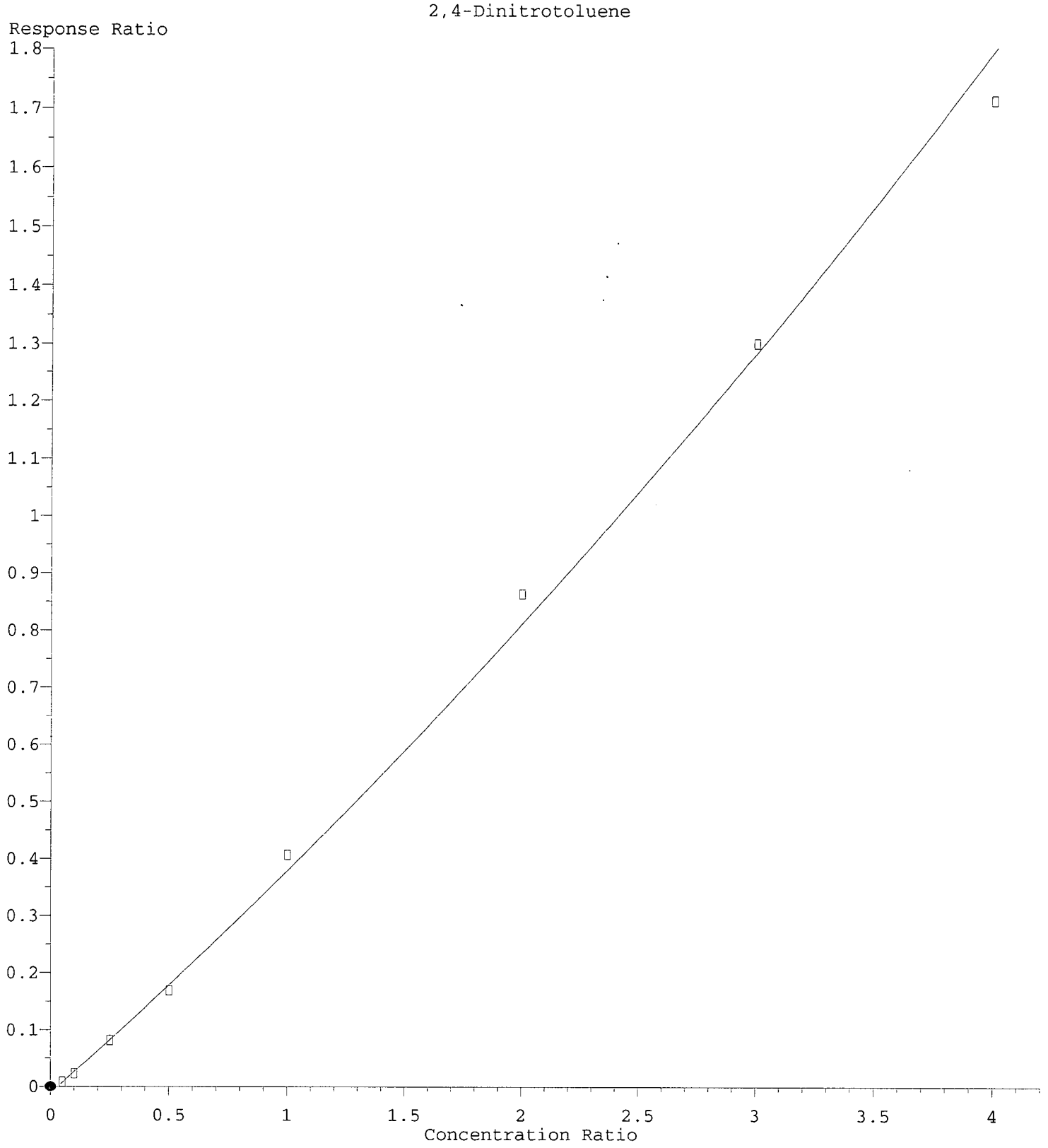
TIC: E01301914.D\data.ms

(53) 4-Nitrophenol (T)

9.982min (+ 0.011) 68.04 ng/ml m

response 148

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	74.20	110.43#
81.10	37.00	152.76#
0.00	0.00	0.00

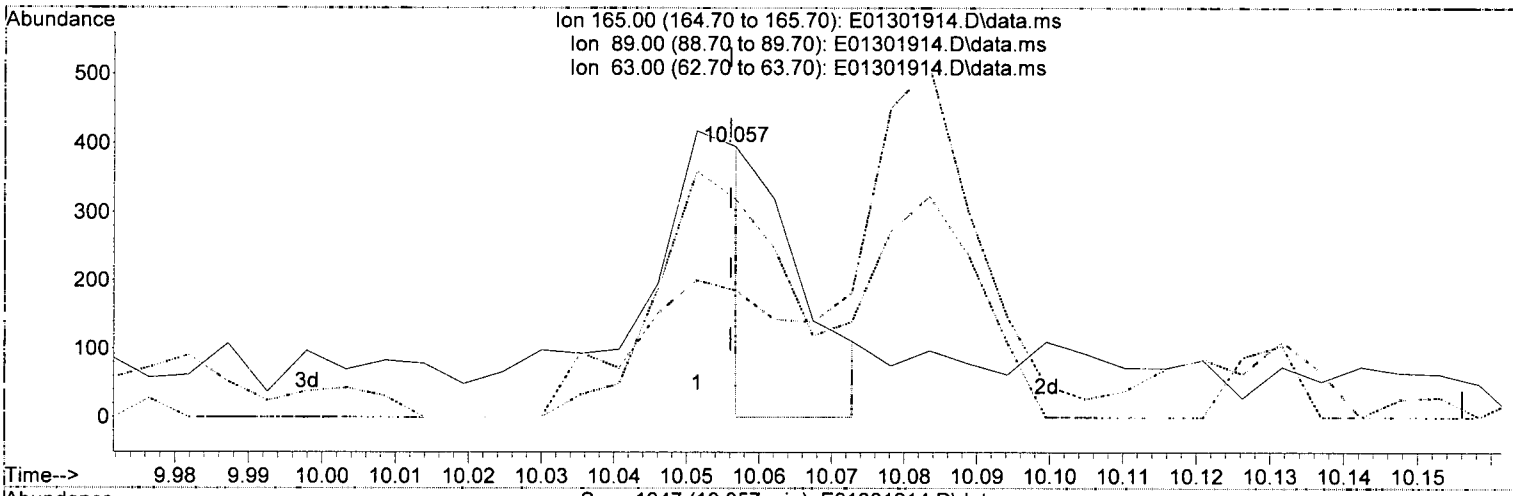


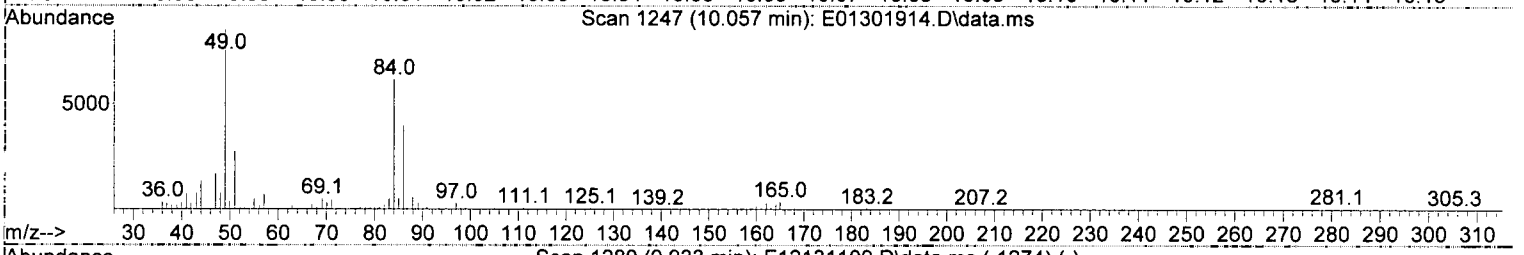
R = 2.07e-002 A*A + 3.70e-001 A - 1.13e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

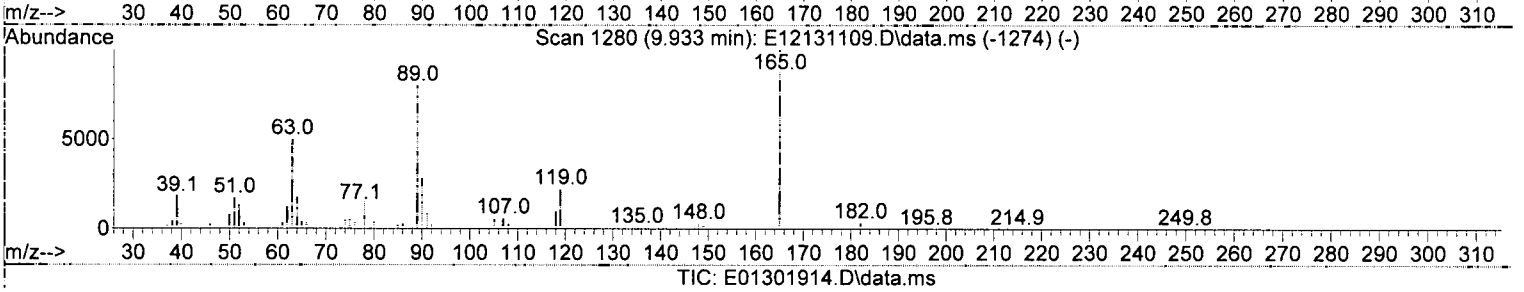
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







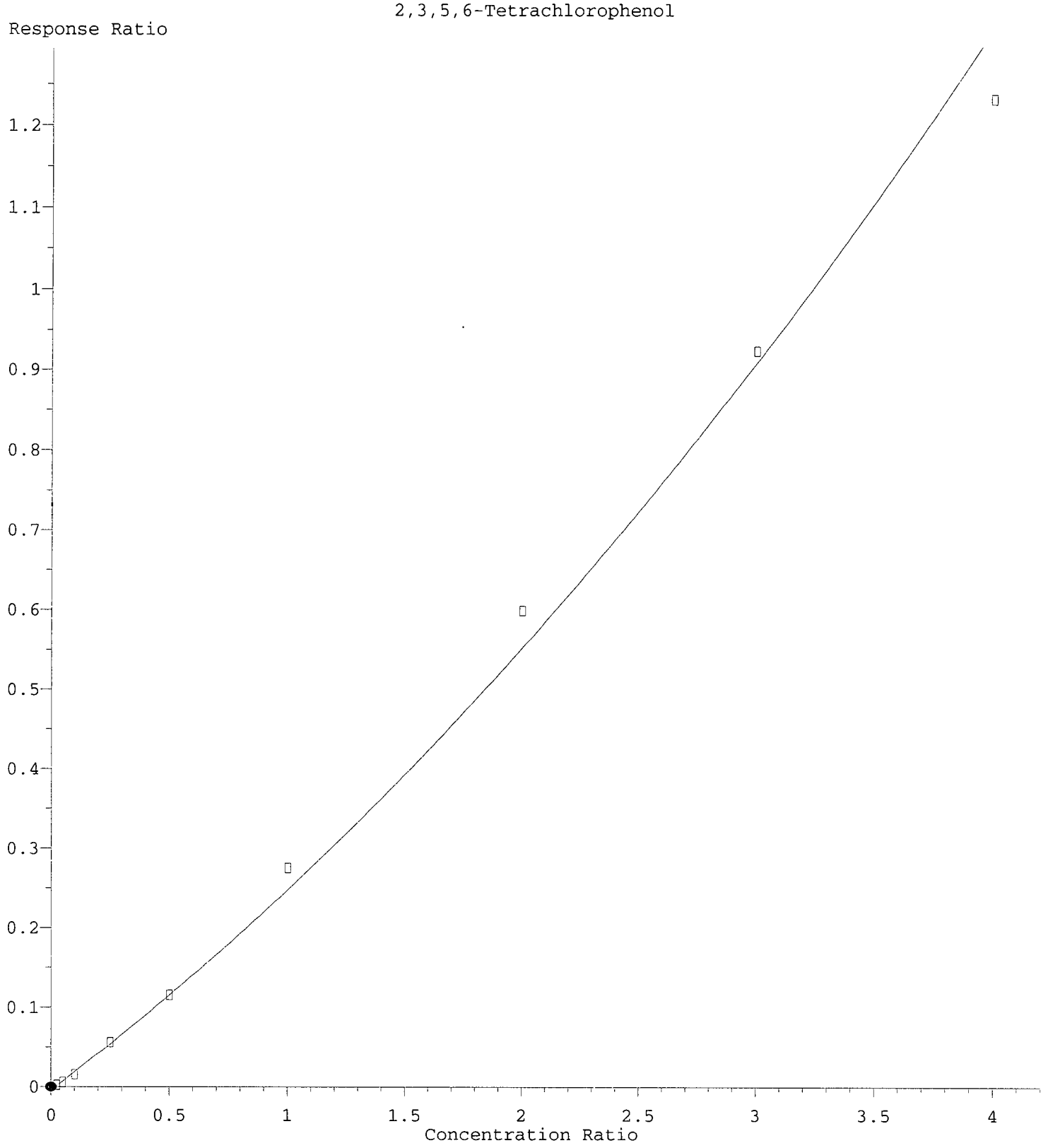
TIC: E01301914.D\data.ms

(54) 2,4-Dinitrotoluene (T)

10.057min (+ 0.001) 63.06 ng/ml m

response 183

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	81.60	80.76
63.00	52.60	46.84
0.00	0.00	0.00

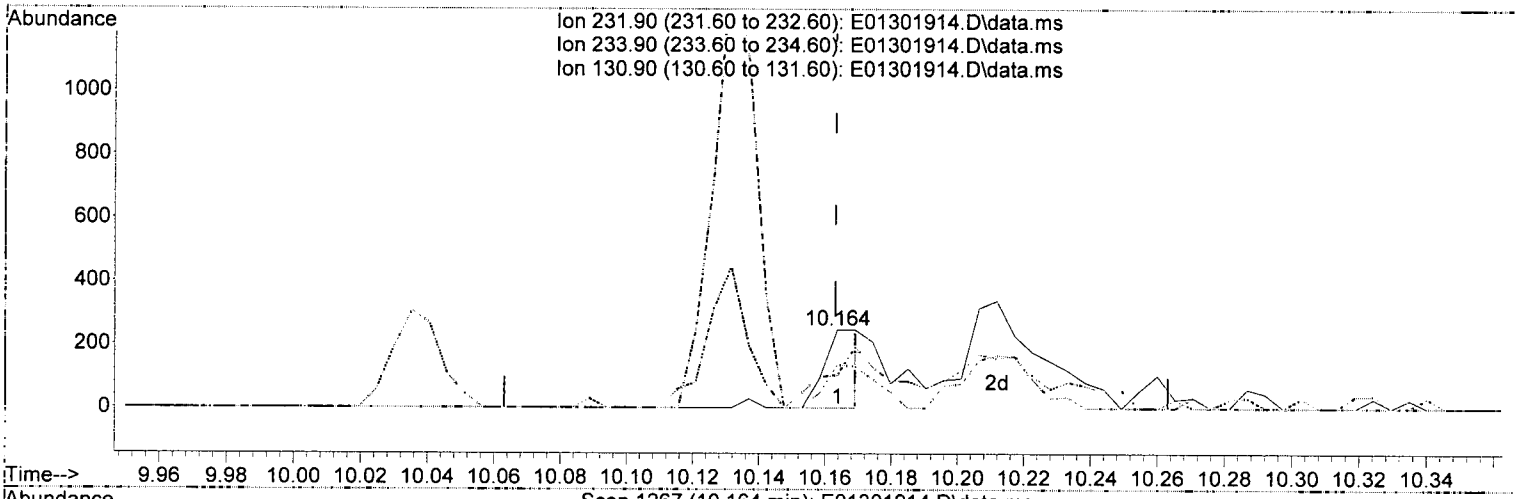


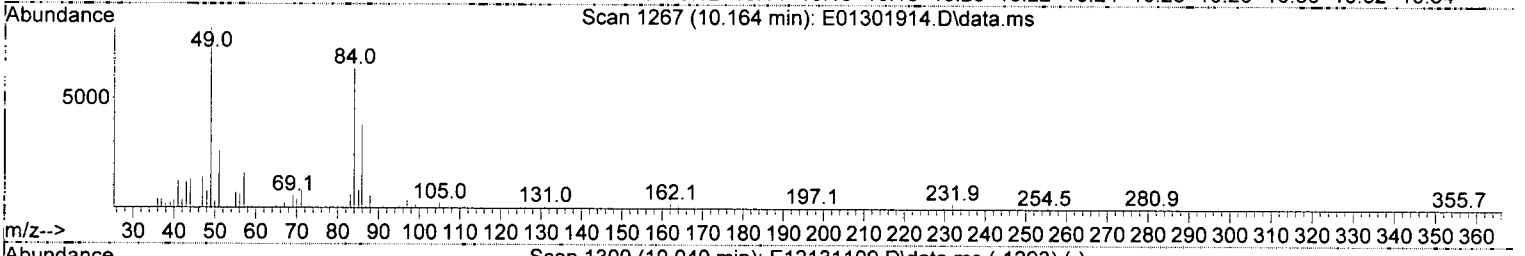
R = 2.63e-002 A*A + 2.26e-001 A - 4.06e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

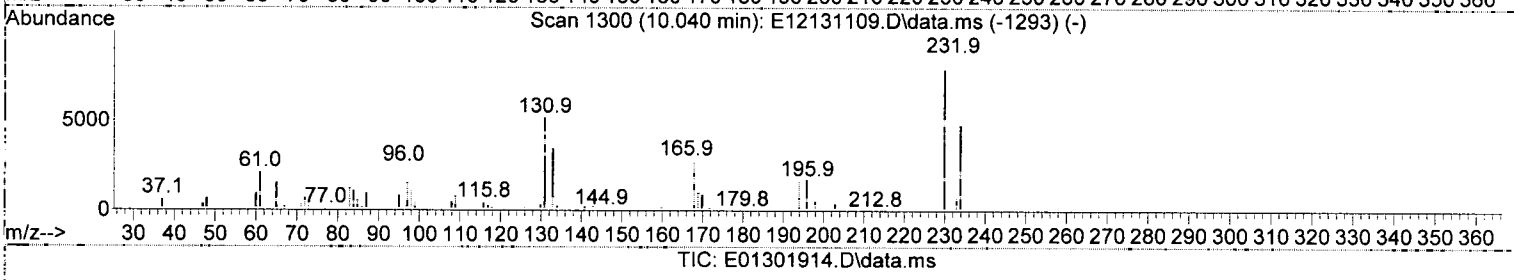
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







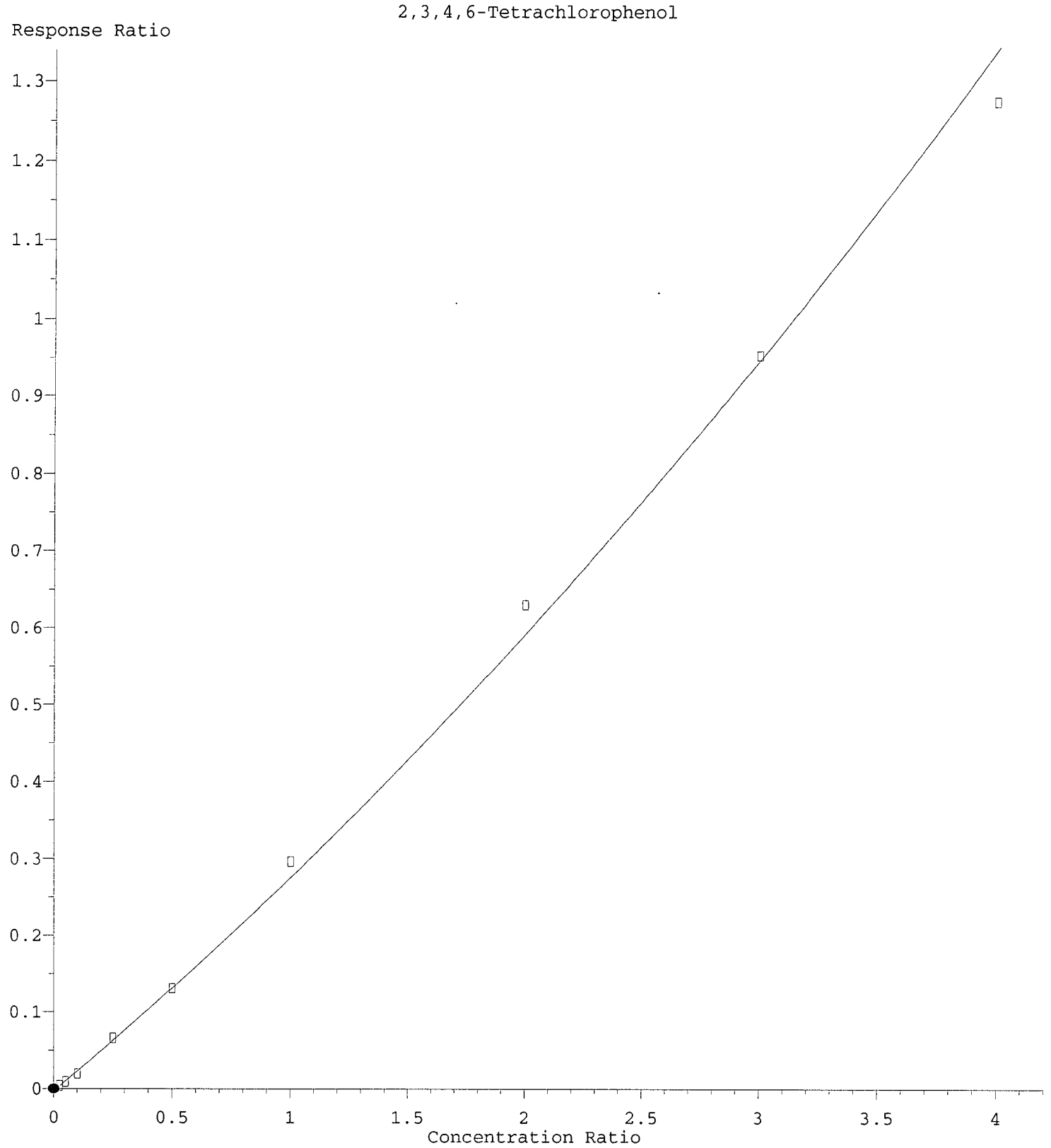
TIC: E01301914.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

10.164min (+ 0.001) 39.31 ng/ml m

response 188

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	46.40	55.28
130.90	52.90	42.28
0.00	0.00	0.00

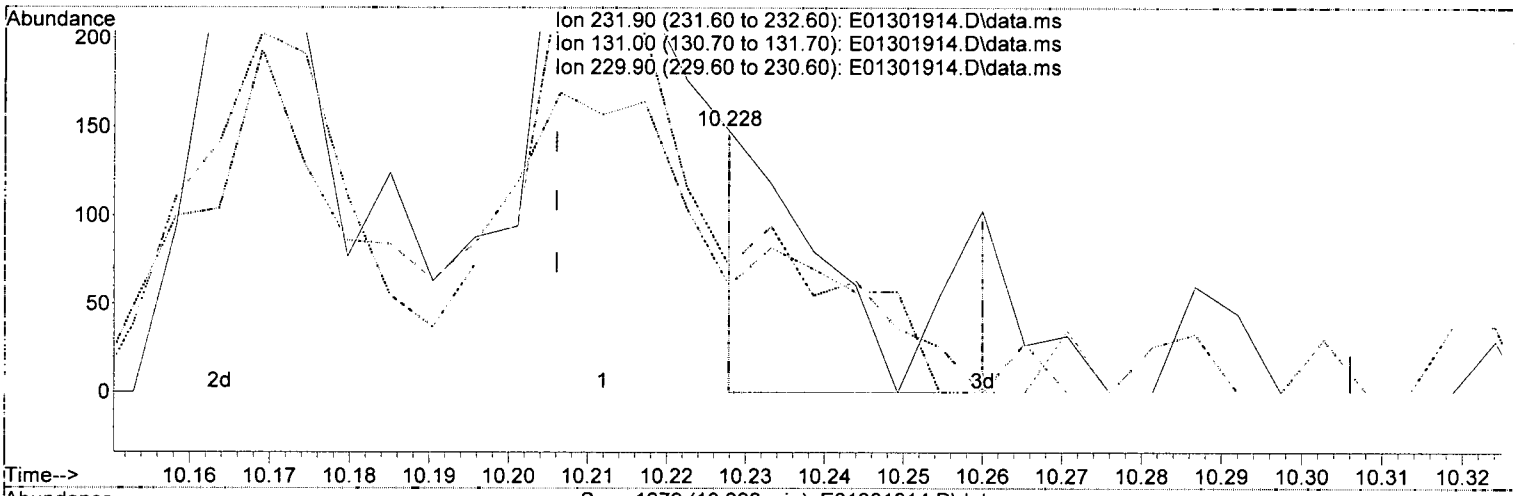


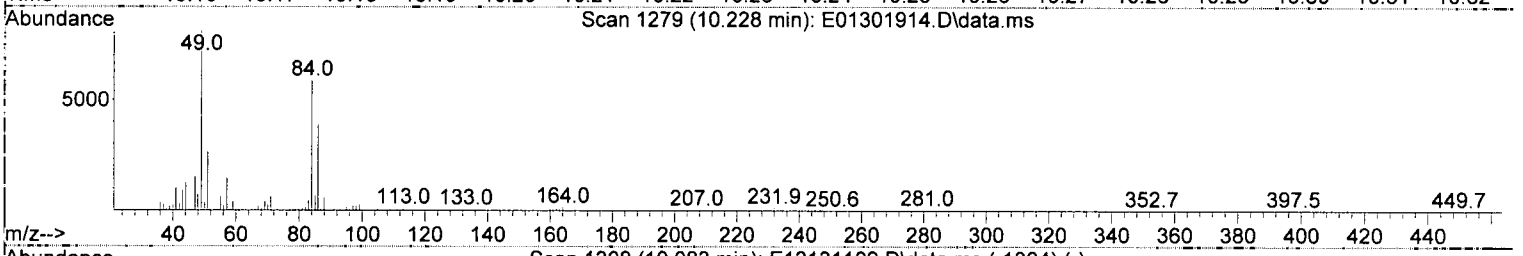
R = 1.91e-002 A*A + 2.59e-001 A - 3.03e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

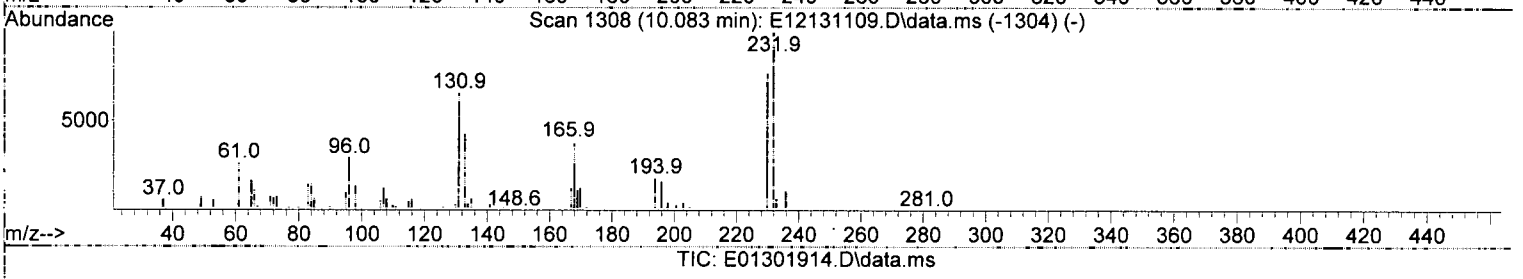
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







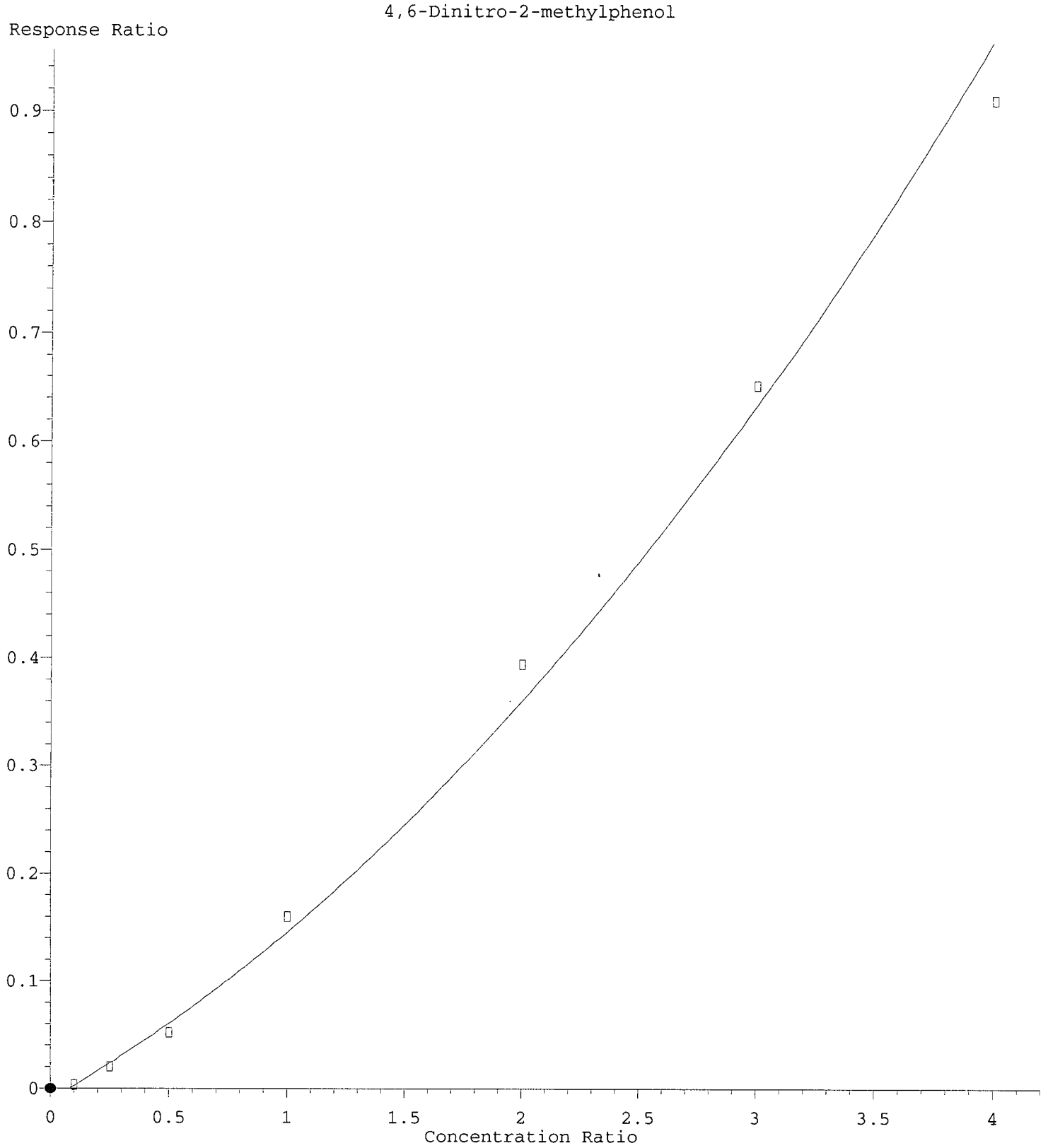
TIC: E01301914.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.228min (+ 0.022) 25.48 ng/ml m

response 134

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	41.22
229.90	79.80	48.65#
0.00	0.00	0.00

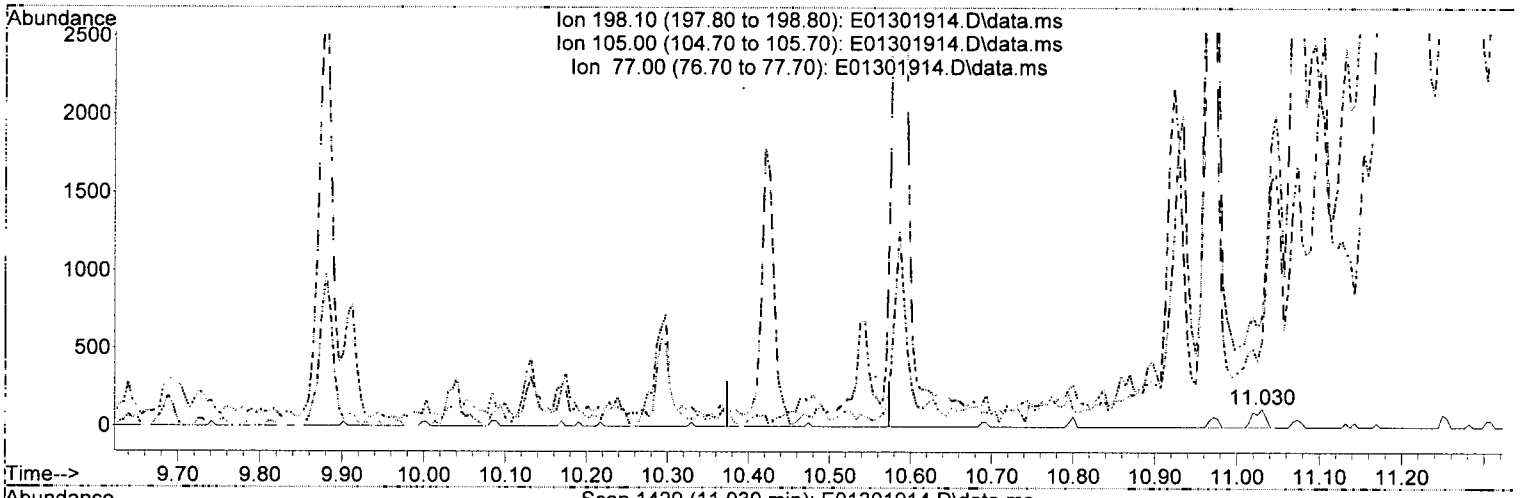


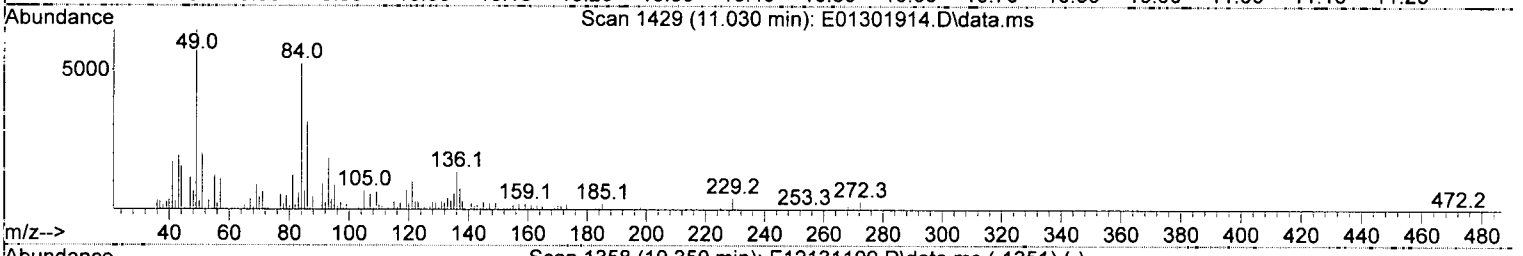
R = 2.93e-002 A*A + 1.27e-001 A - 1.03e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

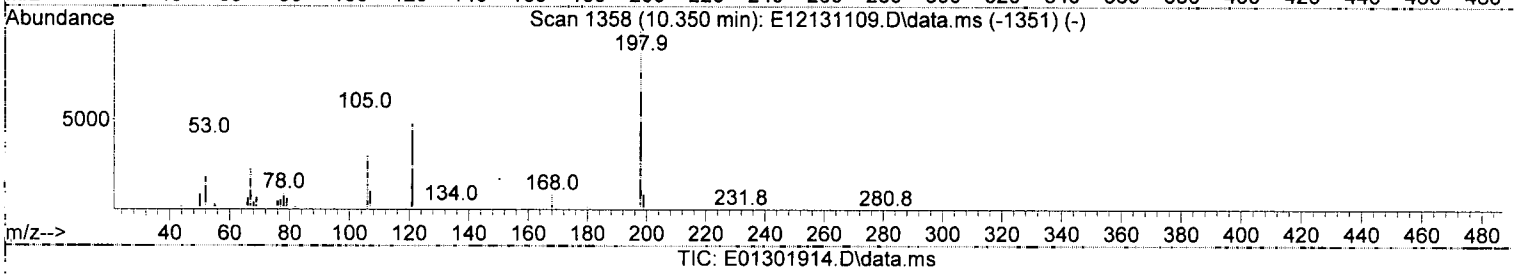
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







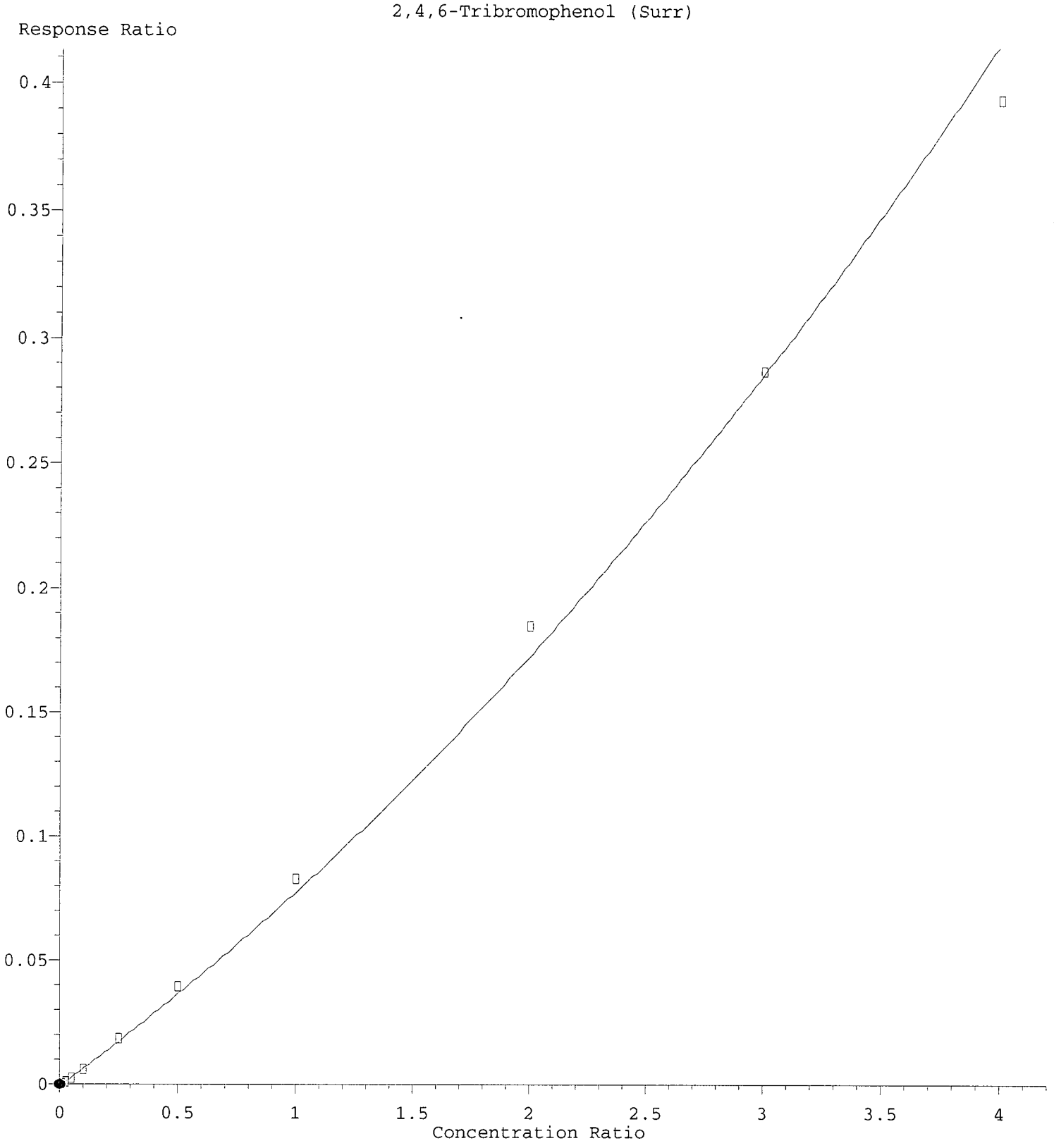
TIC: E01301914.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

11.030min (+ 0.557) 164.67 ng/ml m

response 160

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	58.30	594.92#
77.00	33.50	466.95#
0.00	0.00	0.00

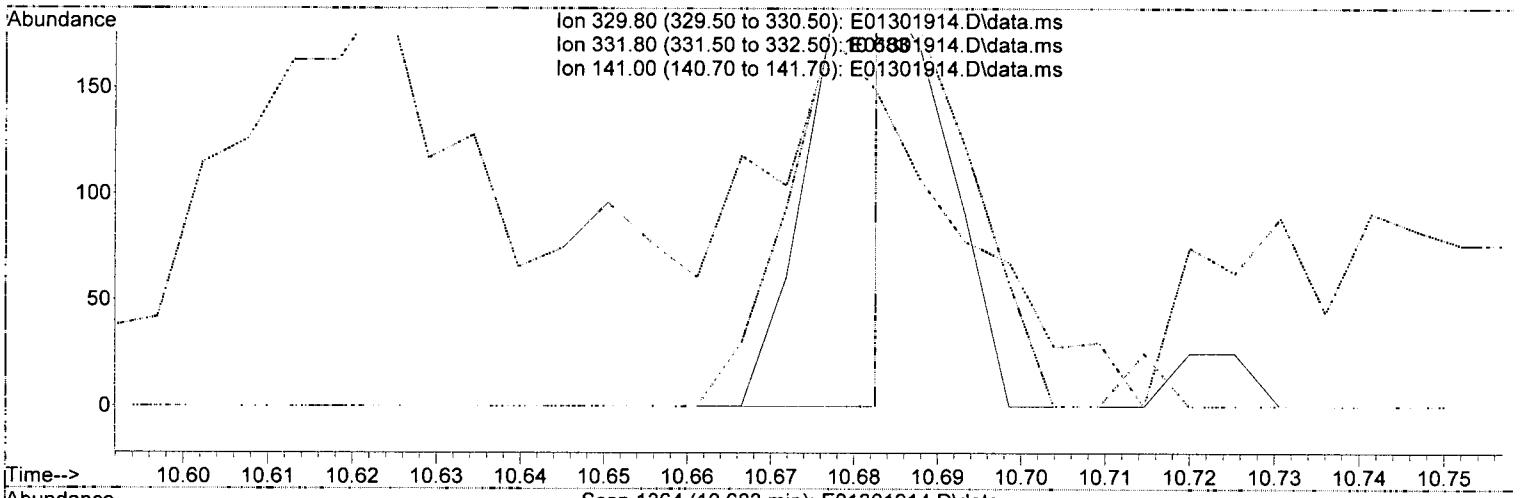


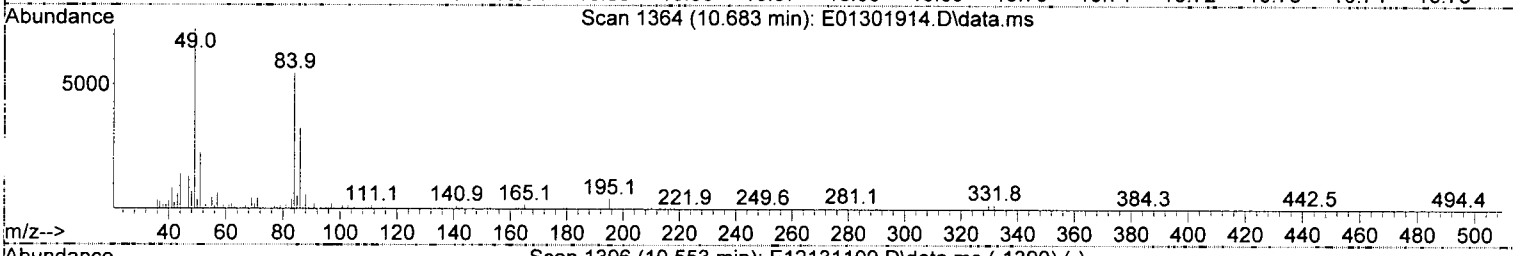
R = 8.71e-003 A*A + 6.92e-002 A - 5.01e-004
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

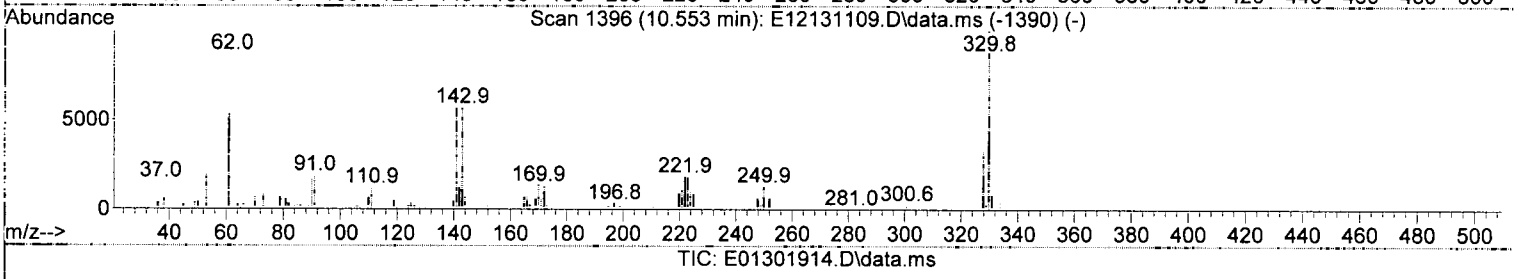
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5





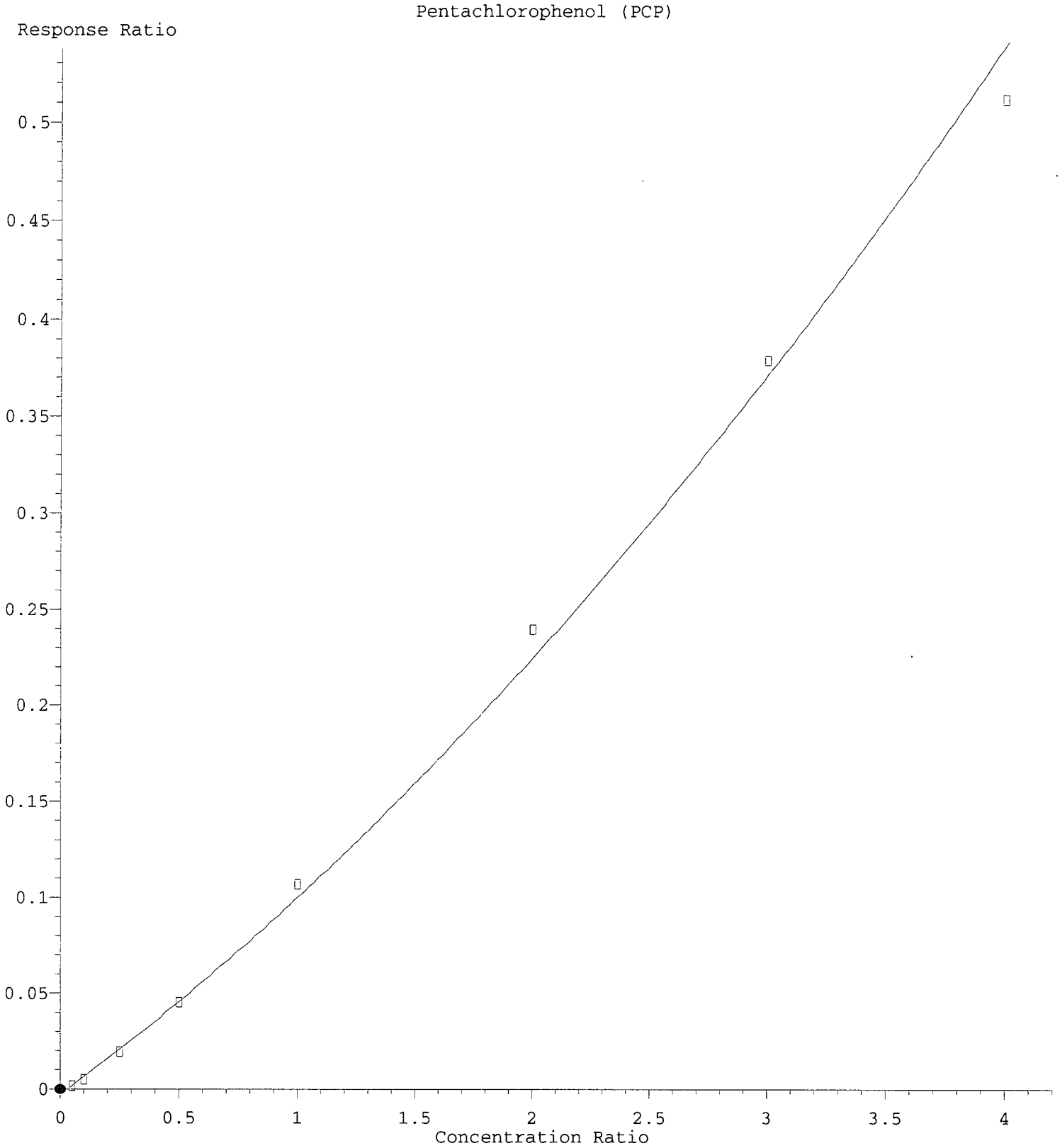


(67) 2,4,6-Tribromophenol (Surr) (S)

10.683min (+ 0.000) 19.07 ng/ml m

response 146

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	93.60	103.32
141.00	55.20	70.62
0.00	0.00	0.00

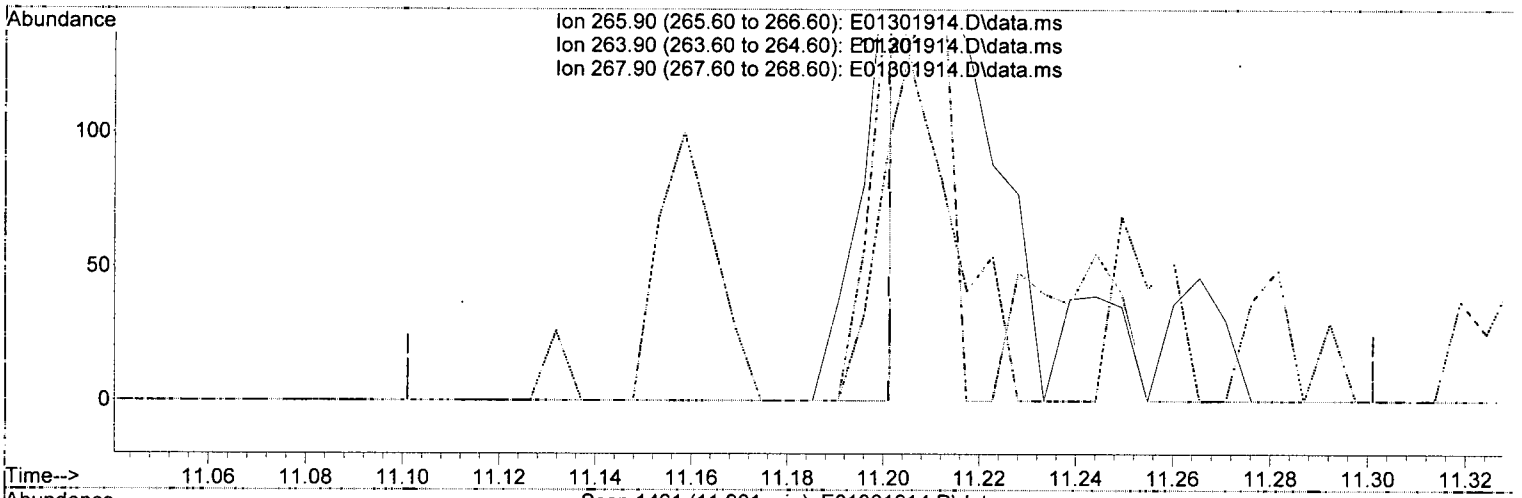


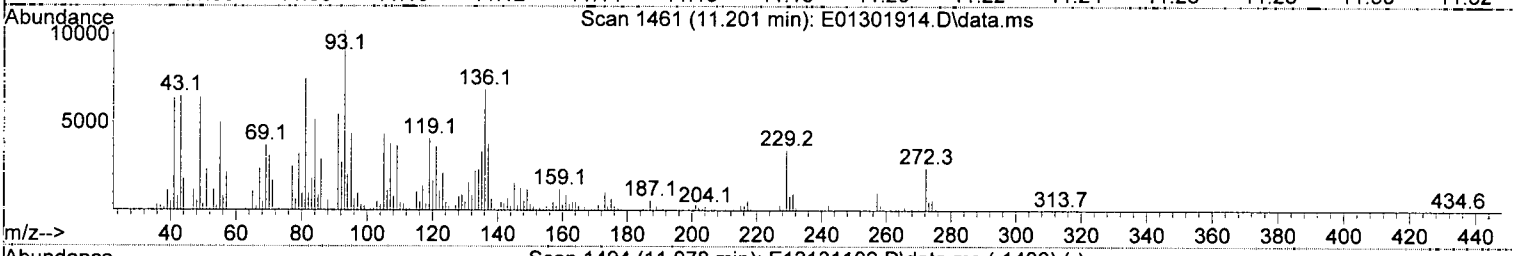
R = 1.08e-002 A*A + 9.25e-002 A - 3.25e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

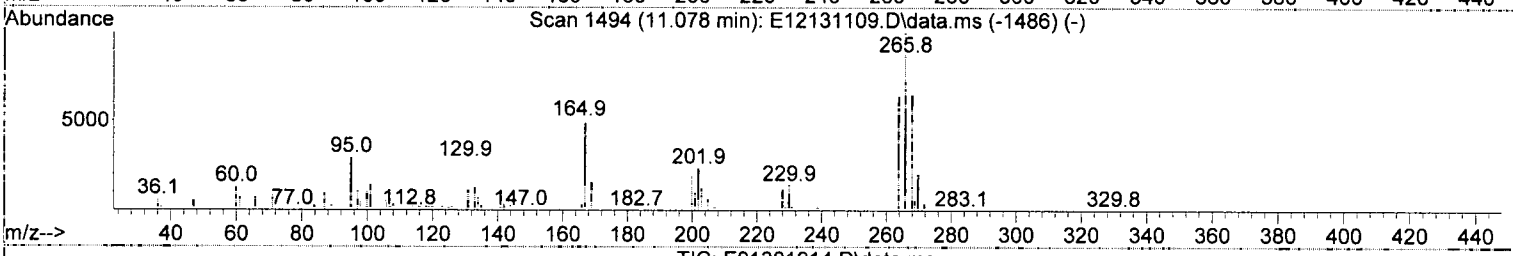
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







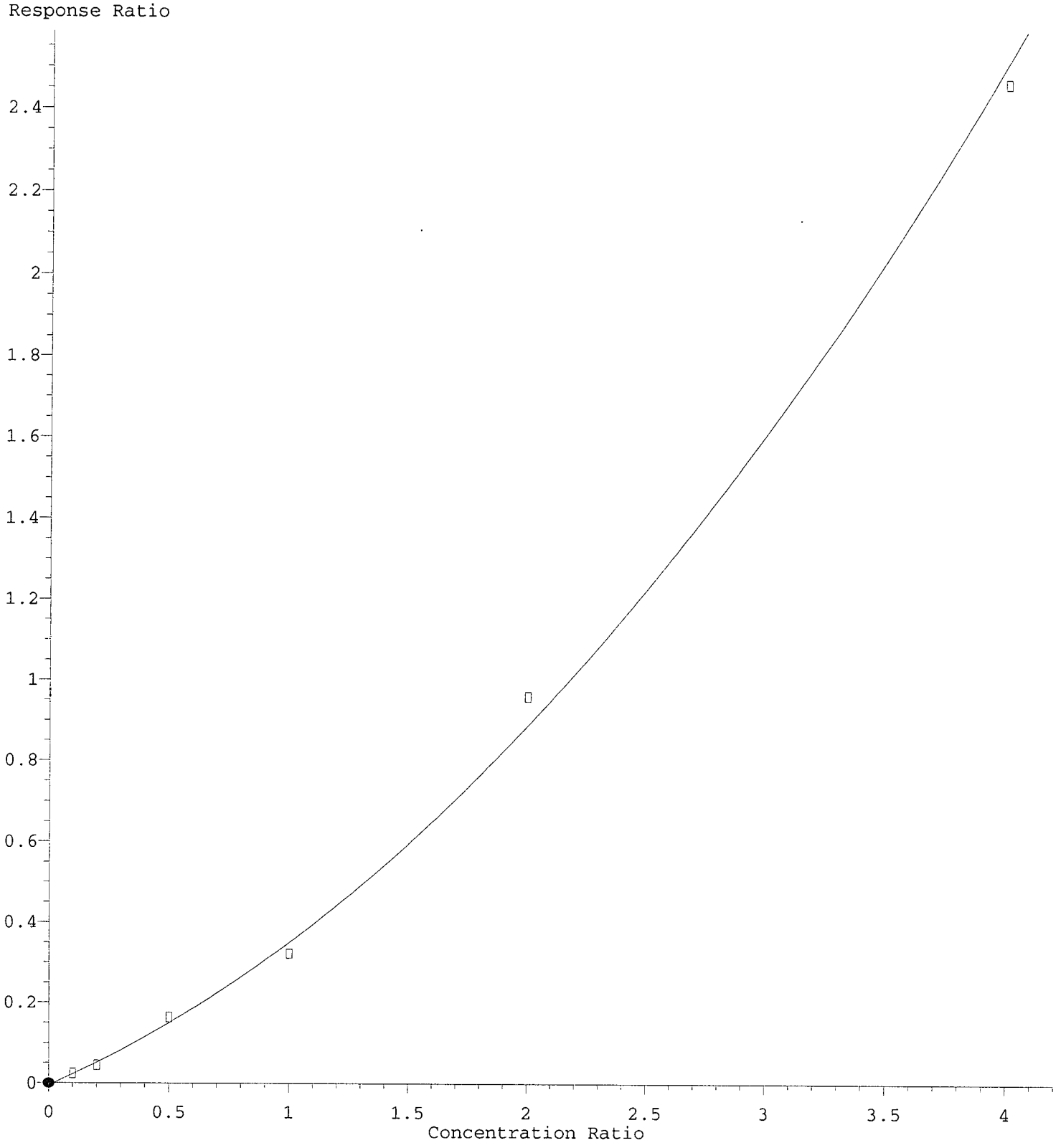
TIC: E01301914.D\data.ms

(70) Pentachlorophenol (PCP) (T)

11.201min (+ 0.000) 72.35 ng/ml m

response 101

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.40	50.25
267.90	67.30	85.28
0.00	0.00	0.00

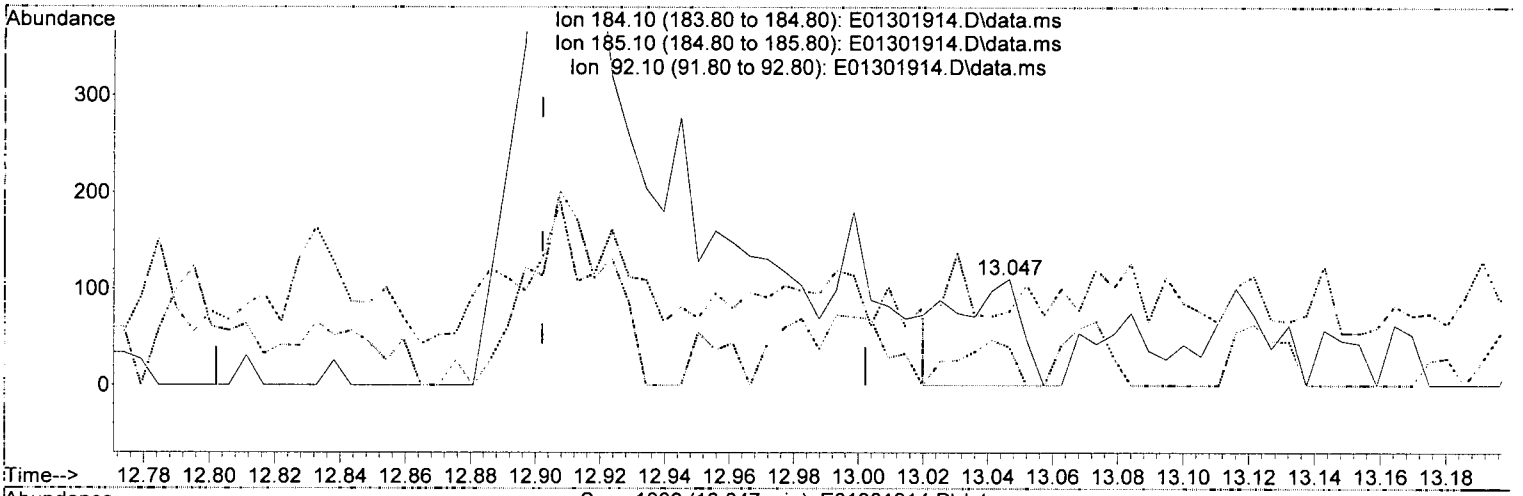


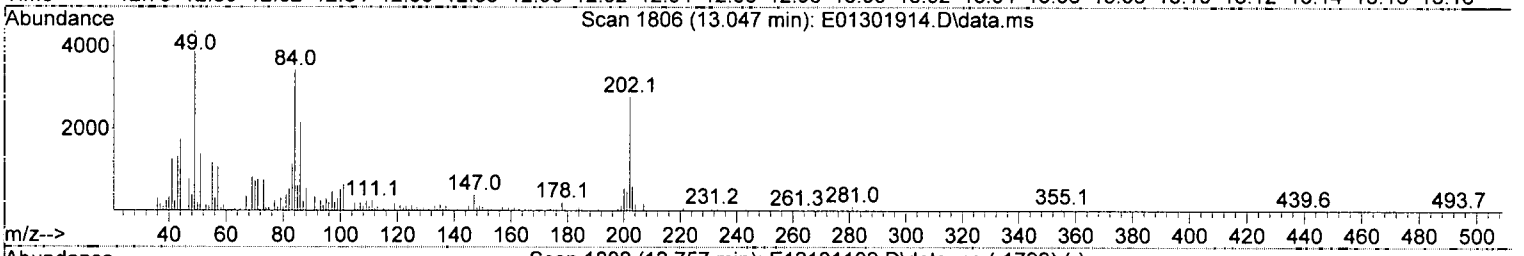
R = 9.14e-002 A*A + 2.64e-001 A - 5.09e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

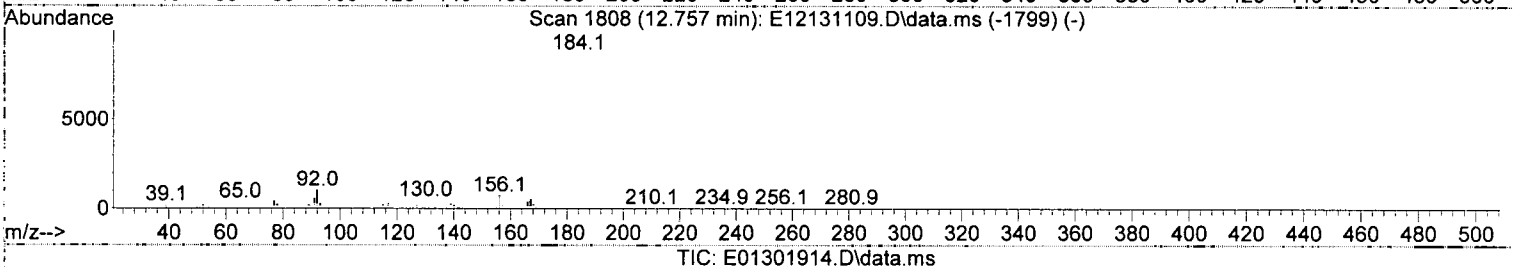
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







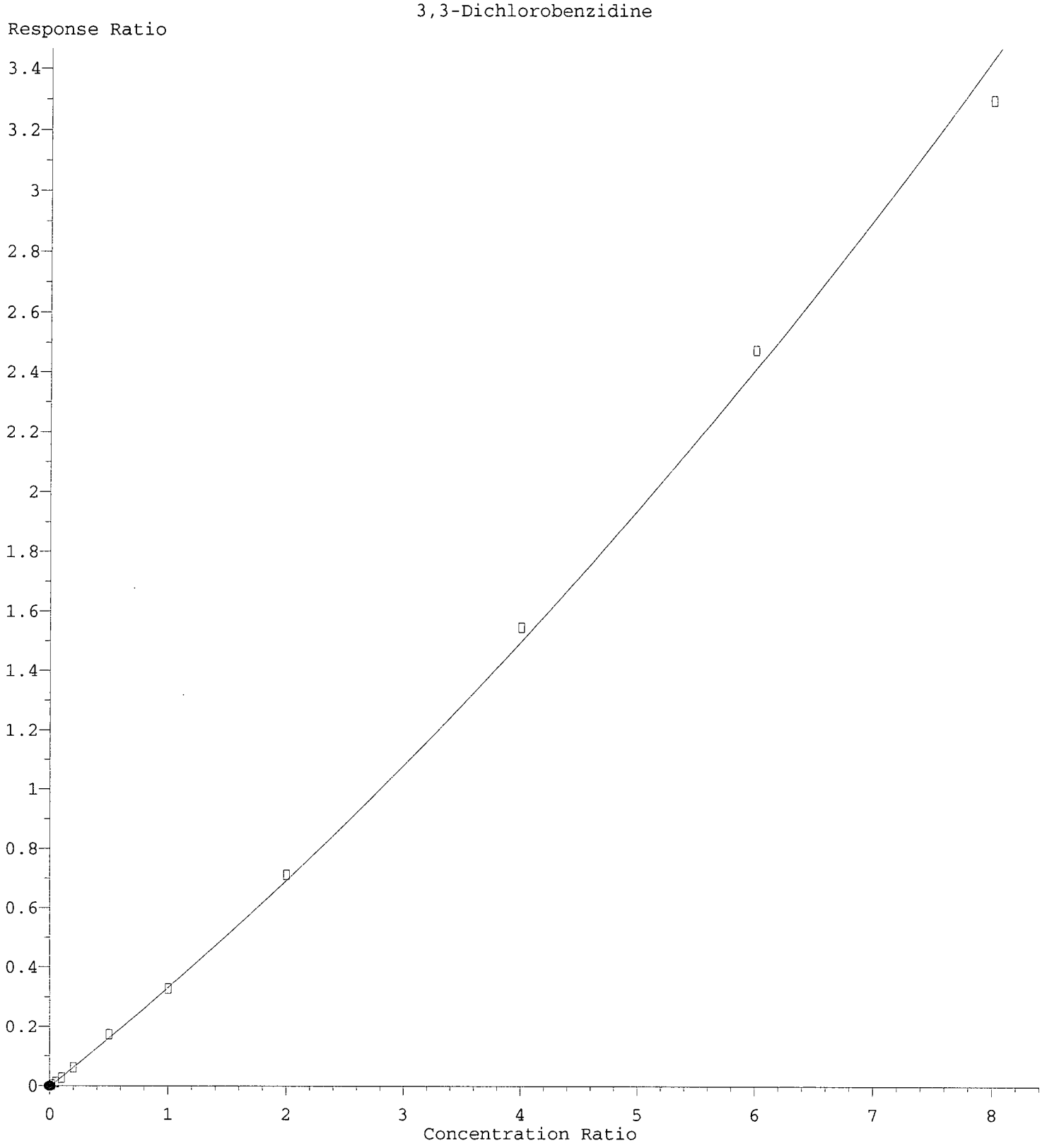
TIC: E01301914.D\data.ms

(76) Benzidine (T)

13.047min (+ 0.145) 39.61 ng/ml m

response 157

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	14.50	36.36
92.10	10.50	70.00#
0.00	0.00	0.00

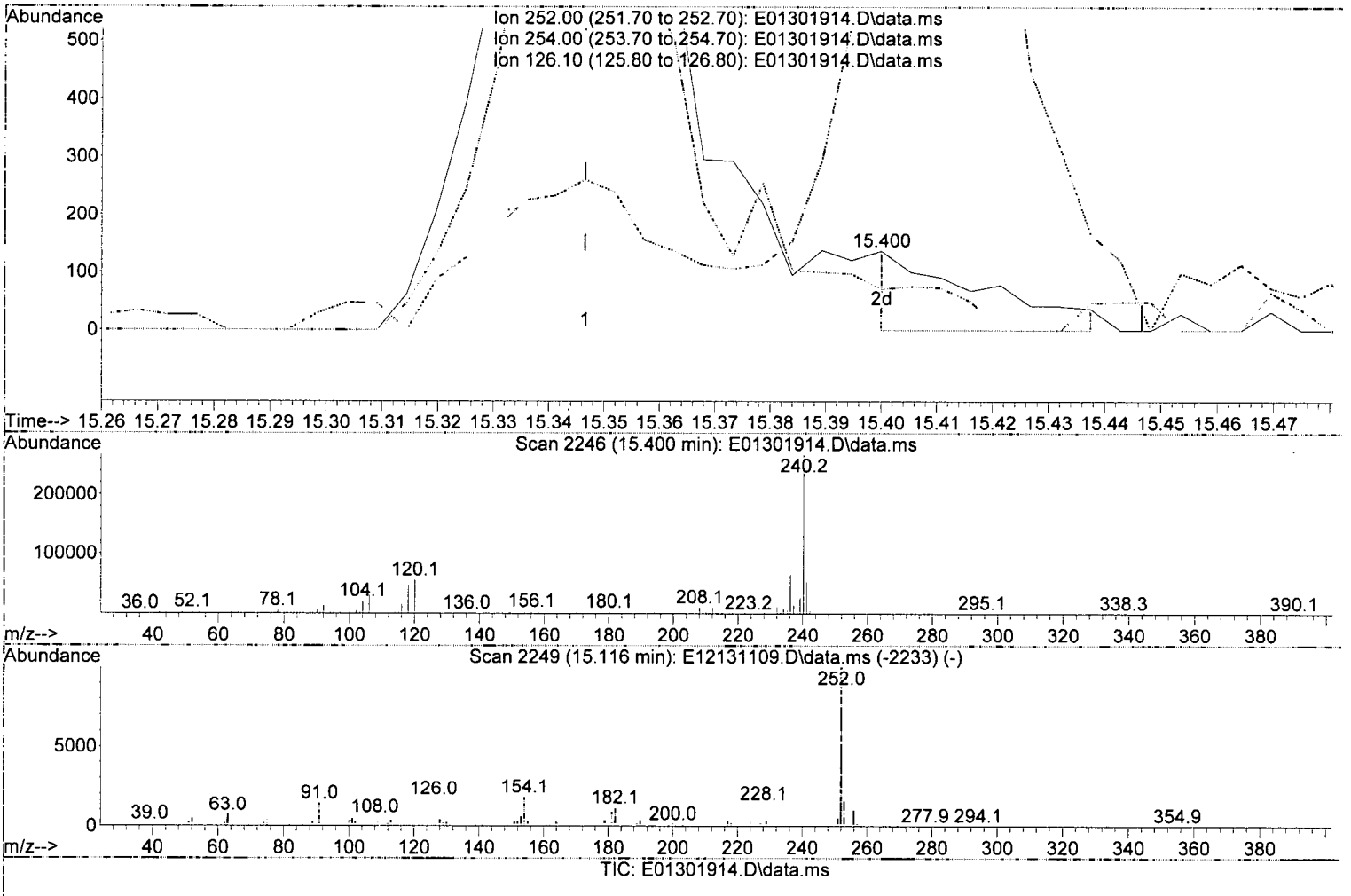


R = 1.36e-002 A*A + 3.21e-001 A - 3.38e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



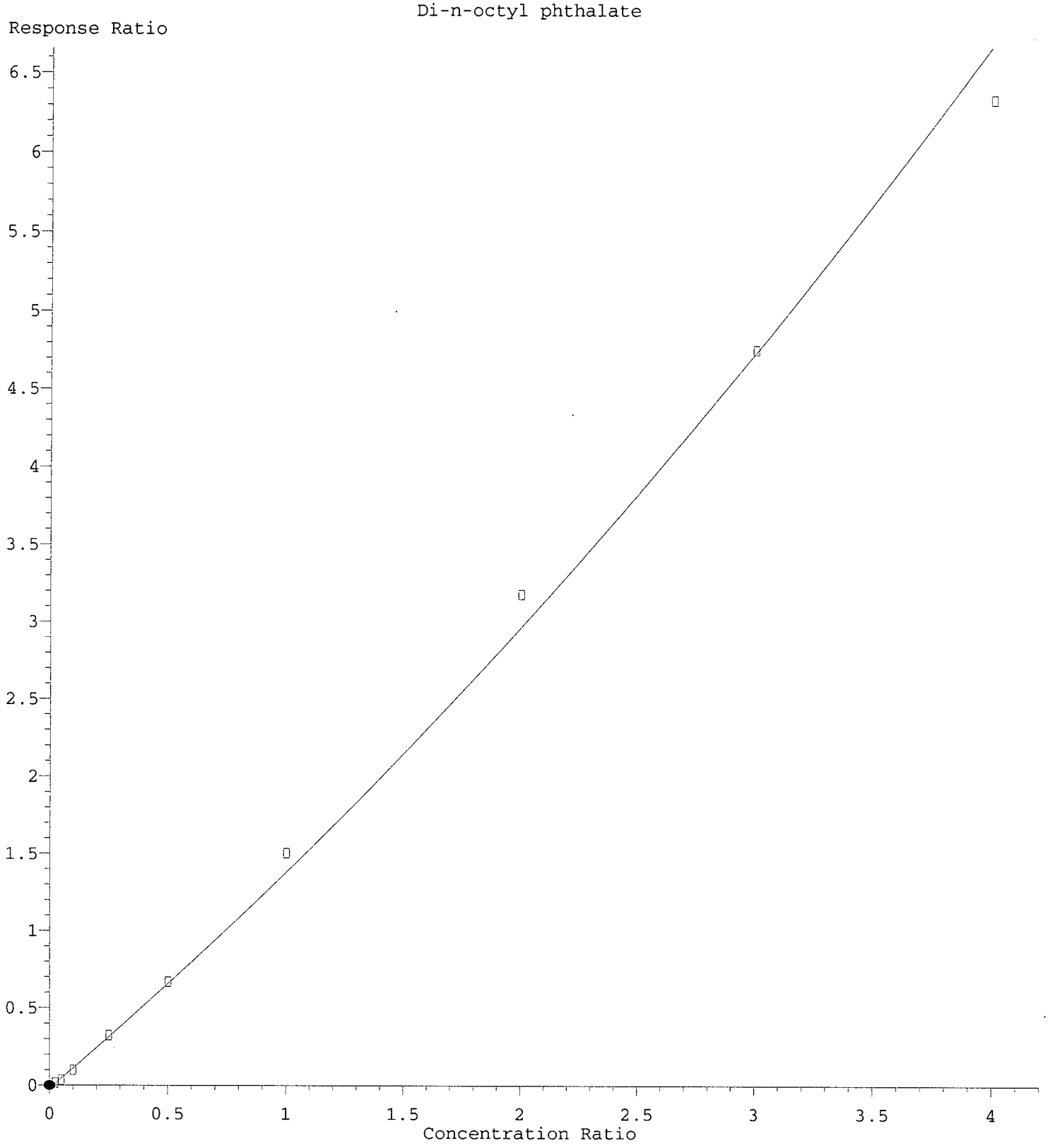
TIC: E01301914.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.400min (+ 0.053) 22.11 ng/ml m

response 147

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	63.30	51.82
126.10	16.90	608.76#
0.00	0.00	0.00

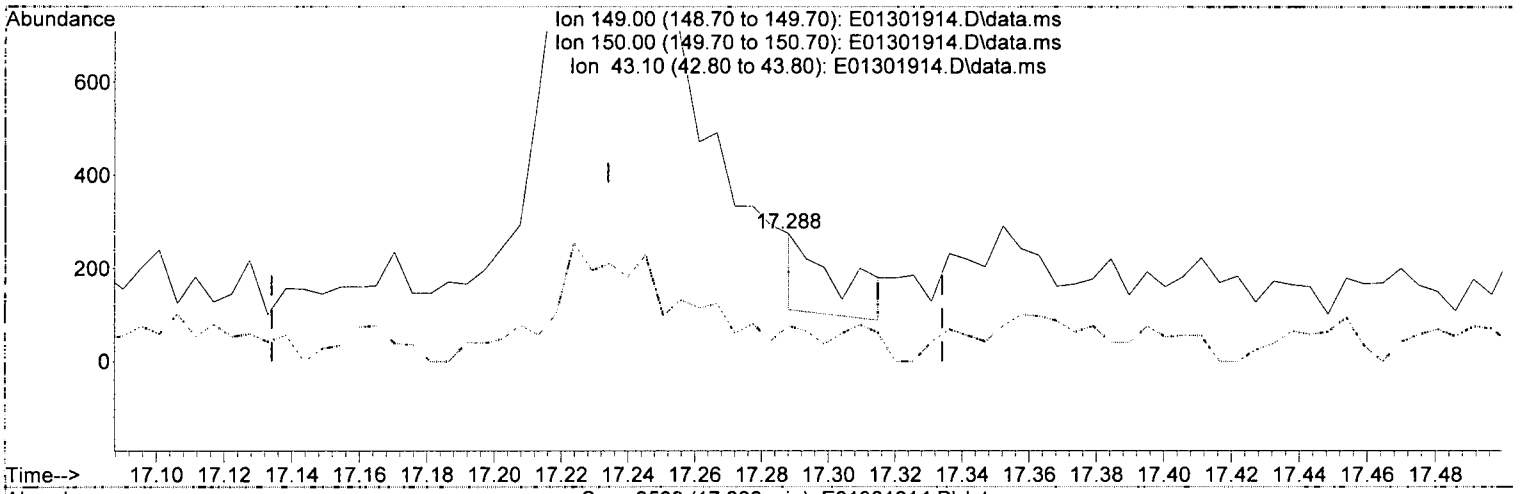


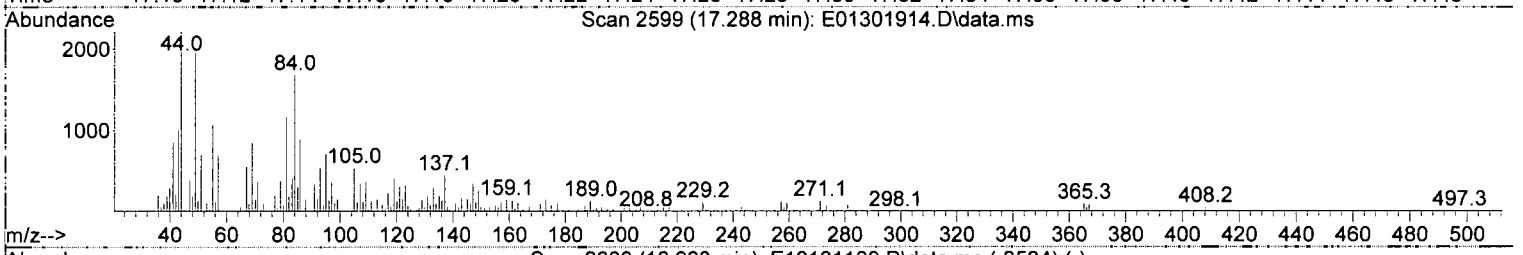
R = 9.25e-002 A*A + 1.31e+000 A - 2.01e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

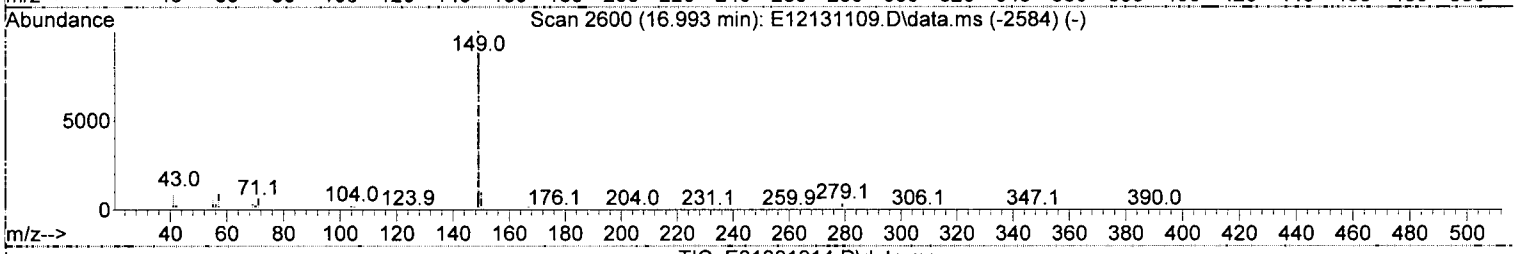
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\REQUANT\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 11:50:38 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301914.D\data.ms

(87) Di-n-octyl phthalate (T)

17.288min (+ 0.054) 30.95 ng/ml m

response 141

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.80	27.54
43.10	11.80	365.94#
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9A30046

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9A30046-TUN1	MS Tune	Soil	A19A180	A18L267	1/30/2019 4:45:00PM
9A30046-TUN2	MS Tune	Soil	A19A180	A18L267	1/30/2019 5:18:00PM
9A30046-ICB1	Initial Cal Blank	Soil		A18L267	1/30/2019 6:24:00PM
9A30046-CAL1	Cal Standard	Soil	A18L327	"	1/30/2019 7:00:00PM
9A30046-CAL2	Cal Standard	Soil	A18L328	"	1/30/2019 7:37:00PM
9A30046-CAL3	Cal Standard	Soil	A18L329	"	1/30/2019 8:13:00PM
9A30046-CAL4	Cal Standard	Soil	A18L330	"	1/30/2019 8:50:00PM
9A30046-CAL5	Cal Standard	Soil	A18L331	"	1/30/2019 9:26:00PM
9A30046-CAL6	Cal Standard	Soil	A18L332	"	1/30/2019 10:02:00PM
9A30046-CAL7	Cal Standard	Soil	A18L333	"	1/30/2019 10:39:00PM
9A30046-CAL8	Cal Standard	Soil	A18L334	"	1/30/2019 11:15:00PM
9A30046-CAL9	Cal Standard	Soil	A18L335	"	1/30/2019 11:51:00PM
9A30046-CALA	Cal Standard	Soil	A18L336	"	1/31/2019 12:28:00AM
9A30046-ICV1	Initial Cal Check	Soil	A19A013	"	1/31/2019 1:40:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9A3103** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9A30046** Matrix: **Soil**

9A30046-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-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: 9A30046

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: **A9A3103** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9A30046** Matrix: **Soil**

9A30046-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: 9A30046

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9A30046-TUN1	MS Tune	Water	A19A180	A18L267	1/30/2019 4:45:00PM
9A30046-TUN2	MS Tune	Water	A19A180	A18L267	1/30/2019 5:18:00PM
9A30046-ICB1	Initial Cal Blank	Water		A18L267	1/30/2019 6:24:00PM
9A30046-CAL1	Cal Standard	Water	A18L327	"	1/30/2019 7:00:00PM
9A30046-CAL2	Cal Standard	Water	A18L328	"	1/30/2019 7:37:00PM
9A30046-CAL3	Cal Standard	Water	A18L329	"	1/30/2019 8:13:00PM
9A30046-CAL4	Cal Standard	Water	A18L330	"	1/30/2019 8:50:00PM
9A30046-CAL5	Cal Standard	Water	A18L331	"	1/30/2019 9:26:00PM
9A30046-CAL6	Cal Standard	Water	A18L332	"	1/30/2019 10:02:00PM
9A30046-CAL7	Cal Standard	Water	A18L333	"	1/30/2019 10:39:00PM
9A30046-CAL8	Cal Standard	Water	A18L334	"	1/30/2019 11:15:00PM
9A30046-CAL9	Cal Standard	Water	A18L335	"	1/30/2019 11:51:00PM
9A30046-CALA	Cal Standard	Water	A18L336	"	1/31/2019 12:28:00AM
9A30046-ICV1	Initial Cal Check	Water	A19A013	"	1/31/2019 1:40:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9A3103** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9A30046** Matrix: **Water**

9A30046-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9A30046-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: 9A30046

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: **A9A3103** Instrument: **SV-GCMS5**

8270D LL Full List Sequence: **9A30046** Matrix: **Water**

9A30046-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

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	97	0.00
2	T	N-Nitrosodimethylamine	1000.000	1034.868	-3.5	99	-0.01
3	T	Pyridine	1000.000	1030.492	-3.0	99	-0.02
4	S	2-Fluorophenol (Surr)	1000.000	1025.738	-2.6	95	0.00
5	S	Phenol-d6(Surr)	1000.000	1038.804	-3.9	98	0.00
6	T	Phenol	1000.000	1020.994	-2.1	98	0.00
7	T	Aniline	1000.000	980.198	2.0	98	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1039.862	-4.0	100	0.00
9	T	2-Chlorophenol	1000.000	1051.713	-5.2	99	0.00
10	T	1,3-Dichlorobenzene	1000.000	1015.201	-1.5	99	0.00
11	T	1,4-Dichlorobenzene	1000.000	1023.842	-2.4	100	0.00
12	T	Benzyl alcohol	1000.000	989.088	1.1	95	0.00
13	T	1,2-Dichlorobenzene	1000.000	1030.249	-3.0	100	0.00
14	T	2-Methylphenol	1000.000	1046.965	-4.7	100	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1009.585	-1.0	97	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1065.529	-6.6	102	0.00
17	T	3+4-Methylphenol	1000.000	1079.894	-8.0	102	0.00
18	T	Hexachloroethane	1000.000	1017.826	-1.8	98	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1061.227	-6.1	105	0.00
20	T	Nitrobenzene	1000.000	1093.502	-9.4	103	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	99	0.00
22	T	Isophorone	1000.000	1076.183	-7.6	102	0.00
23	T	2-Nitrophenol	1000.000	1119.875	-12.0	109	0.00
24	T	2,4-Dimethylphenol	1000.000	1009.117	-0.9	98	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1061.050	-6.1	104	0.00
26	T	Benzoic acid	2000.000	2255.555	-12.8	126	0.00
27	T	2,4-Dichlorophenol	1000.000	1075.182	-7.5	105	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1023.230	-2.3	103	0.00
29	T	Naphthalene	1000.000	1017.093	-1.7	102	0.00
30	T	4-Chloroaniline	1000.000	1108.762	-10.9	114	0.00
31	T	Hexachlorobutadiene	1000.000	1043.111	-4.3	101	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1059.623	-6.0	107	0.00
33	T	2-Methylnaphthalene	1000.000	1077.500	-7.8	107	0.00
34	T	1-Methylnaphthalene	1000.000	1058.801	-5.9	105	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	107	0.00
36	T	Hexachlorocyclopentadiene	1000.000	981.409	1.9	97	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1102.497	-10.2	113	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1098.052	-9.8	114	0.00
39	T	1,1'-Biphenyl	1000.000	1022.172	-2.2	108	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1018.739	-1.9	108	0.00
41	T	2-Chloronaphthalene	1000.000	1017.014	-1.7	110	0.00
42	T	2-Nitroaniline	1000.000	1113.798	-11.4	125	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1069.017	-6.9	111	0.00
44	T	1,4-Dinitrobenzene	1000.000	1158.489	-15.8	135	0.00
45	T	Dimethyl phthalate	1000.000	1121.495	-12.1	118	0.00
46	T	1,3-Dinitrobenzene	1000.000	1152.437	-15.2	132	0.00
47	T	2,6-Dinitrotoluene	1000.000	1134.194	-13.4	122	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 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)
48	T	1,2-Dinitrobenzene	1000.000	1168.425	-16.8	128	0.00
49	T	Acenaphthylene	1000.000	1068.875	-6.9	110	0.00
50	T	3-Nitroaniline	1000.000	1119.893	-12.0	127	0.00
51	T	Acenaphthene	1000.000	1033.180	-3.3	110	0.00
52	T	2,4-Dinitrophenol	1000.000	1090.025	-9.0	148	0.00
53	T	4-Nitrophenol	1000.000	1088.313	-8.8	128	0.00
54	T	2,4-Dinitrotoluene	1000.000	1137.244	-13.7	131	0.00
55	T	Dibenzofuran	1000.000	1064.708	-6.5	116	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1150.756	-15.1	125	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1106.823	-10.7	120	0.00
58	T	Diethyl phthalate	1000.000	1146.401	-14.6	118	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1096.146	-9.6	114	0.00
60	T	Fluorene	1000.000	1105.141	-10.5	117	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1077.167	-7.7	118	0.00
62	T	4-Nitroaniline	1000.000	1078.749	-7.9	130	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1209.638	-21.0	160	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	117	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1073.651	-7.4	120	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1112.477	-11.2	120	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1137.965	-13.8	124	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1058.952	-5.9	124	0.00
69	T	Hexachlorobenzene	1000.000	1046.388	-4.6	121	0.00
70	T	Pentachlorophenol (PCP)	1000.000	999.557	0.0	118	0.00
71	T	Phenanthrene	1000.000	1037.200	-3.7	120	0.00
72	T	Anthracene	1000.000	1033.614	-3.4	119	0.00
73	T	Carbazole	1000.000	1002.379	-0.2	120	0.00
74	T	Di-n-butyl phthalate	1000.000	1017.760	-1.8	122	0.00
75	T	Fluoranthene	1000.000	1039.584	-4.0	122	0.00
76	T	Benzidine	2000.000	2024.852	-1.2	130	0.00
77	T	Pyrene	1000.000	1048.131	-4.8	123	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	126	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1050.253	-5.0	128	0.00
80	T	Butyl benzyl phthalate	1000.000	1055.065	-5.5	130	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	982.141	1.8	129	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2201.800	-10.1	141	0.00
83	T	Benz(a)anthracene	1000.000	1056.356	-5.6	137	0.00
84	T	Chrysene	1000.000	1030.712	-3.1	129	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1009.539	-1.0	130	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	129	0.00
87	T	Di-n-octyl phthalate	1000.000	1063.360	-6.3	136	0.00
88	T	Benzo(b)fluoranthene	1000.000	1081.373	-8.1	135	0.00
89	T	Benzo(k)fluoranthene	1000.000	1082.745	-8.3	131	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2106.989	-5.3	133	0.00
91	T	Benzo(e)pyrene	1000.000	1035.215	-3.5	130	0.00
92	T	Benzo(a)pyrene	1000.000	1093.769	-9.4	133	0.00
93	T	Perylene	1000.000	1064.737	-6.5	135	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 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)
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	133	0.00
95	T	Indeno(1,2,3-cd)pyrene	1000.000	995.259	0.5	134	0.00
96	T	Dibenz(a,h)anthracene	1000.000	1025.848	-2.6	137	0.00
97	T	Benzo(g,h,i)perylene	1000.000	1053.780	-5.4	133	0.00

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

DFTPP

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301911.D
Acq On : 30 Jan 2019 4:45 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN1
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

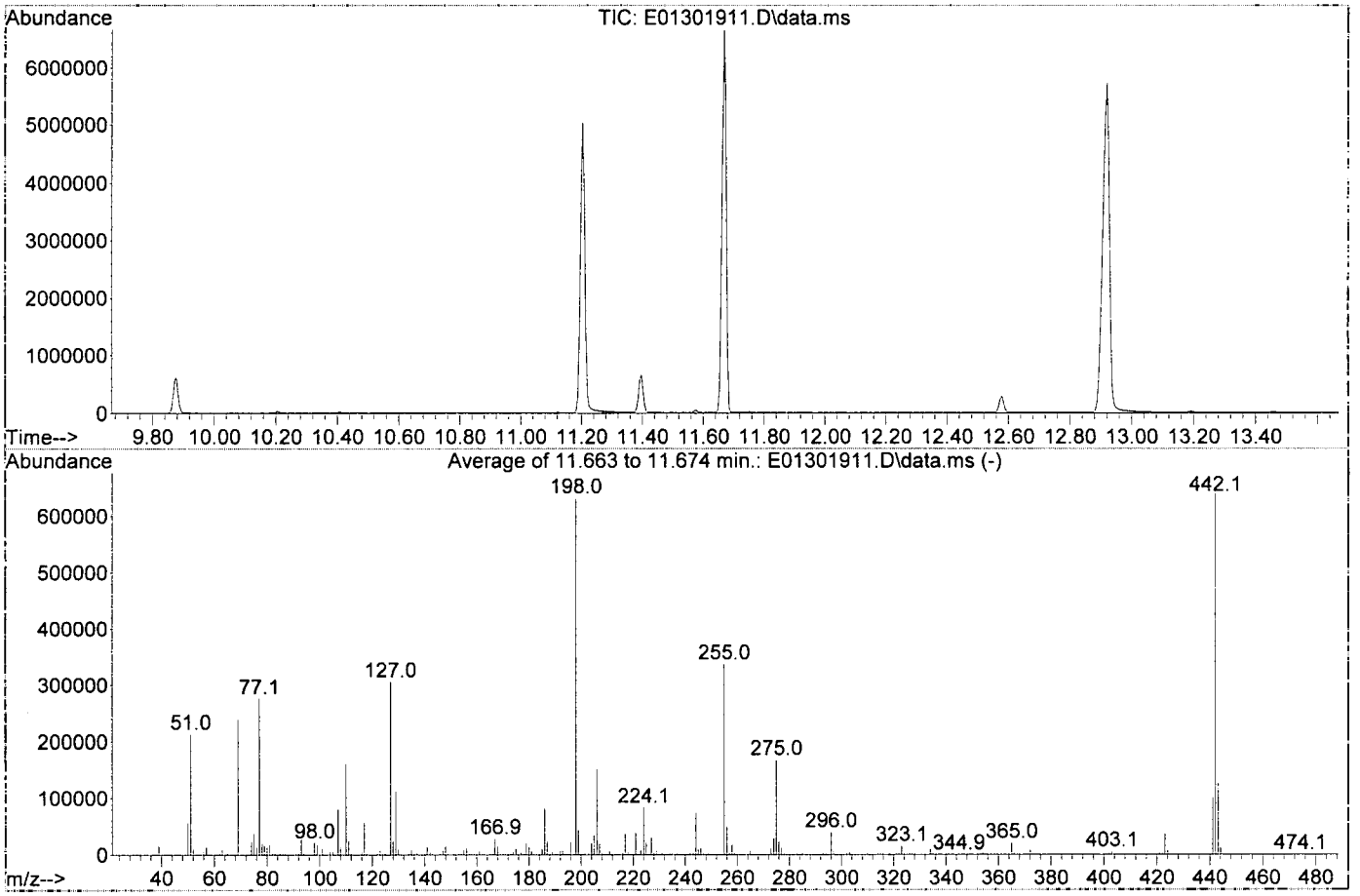
Retuned after this run

T-01

1/31/19

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP-625.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Jan 31 09:49:42 2019



AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.8	213705	PASS
68	69	0.00	2	1.1	2671	PASS
69	198	0.00	100	37.8	239097	PASS
70	69	0.00	2	0.5	1157	PASS
127	198	40	60	48.5	306325	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	632235	PASS
199	198	5	9	6.8	43123	PASS
275	198	10	30	26.6	168075	PASS
365	198	1	100	3.2	19964	PASS
441	443	0.01	100	78.9	100003	PASS
442	198	40	100	102.0	645035	FAIL*
443	442	17	23	19.6	126720	PASS

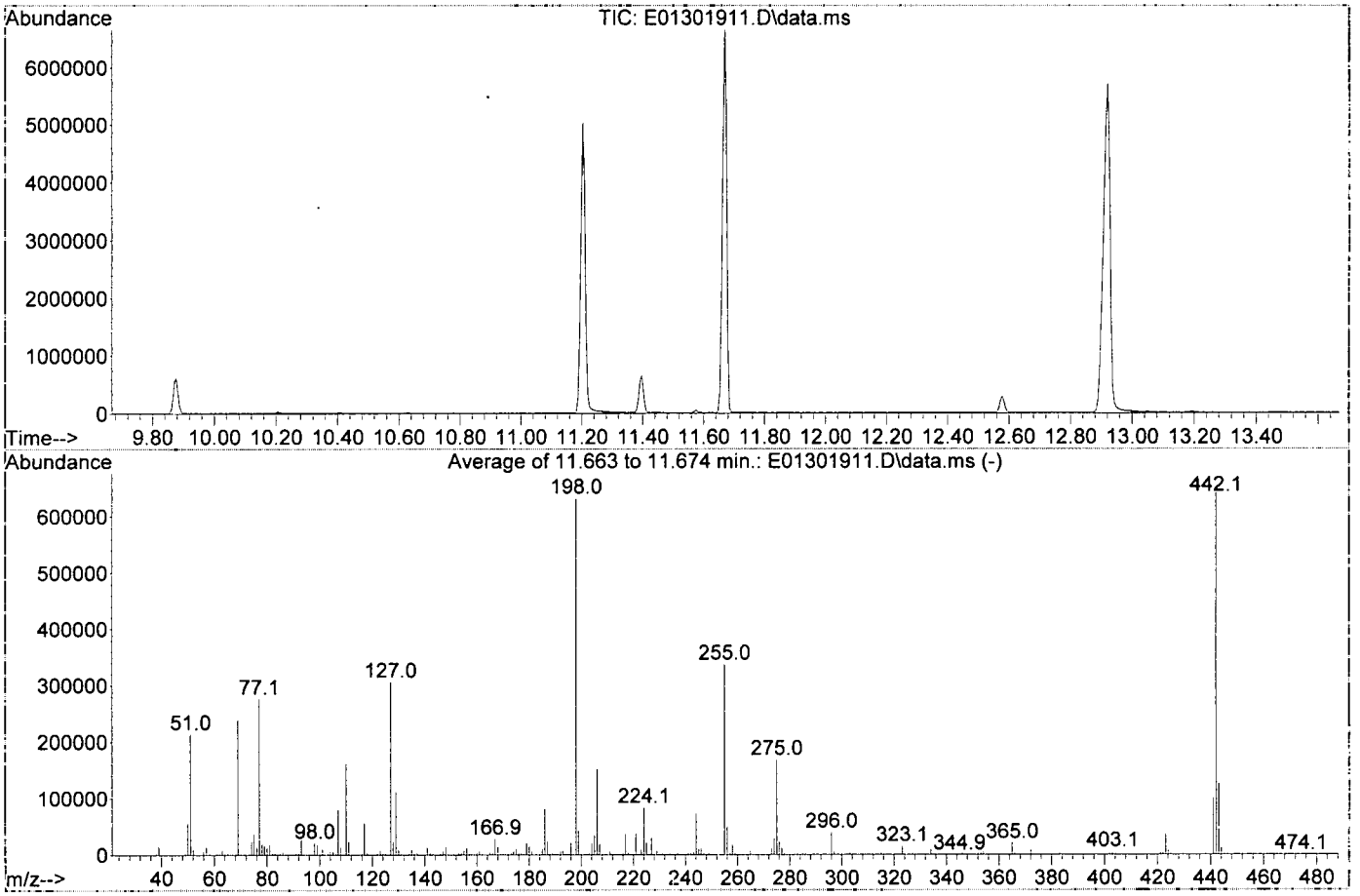
Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301911.D
Acq On : 30 Jan 2019 4:45 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN1
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

T-01

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Jan 29 16:12:28 2019

GL 1/31/19



AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	33.8	213705	PASS
68	69	0.00	2	1.1	2671	PASS
69	198	0.00	100	37.8	239097	PASS
70	69	0.00	2	0.5	1157	PASS
127	198	10	80	48.5	306325	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	632235	PASS
199	198	5	9	6.8	43123	PASS
275	198	10	60	26.6	168075	PASS
365	198	1	100	3.2	19964	PASS
441	442	0.01	24	15.5	100003	PASS
442	198	50	200	102.0	645035	PASS
443	442	15	24	19.6	126720	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301911.D
Acq On : 30 Jan 2019 4:45 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN1
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

T-01

Quant Time: Jan 31 09:49:49 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5

JK 1/31/19

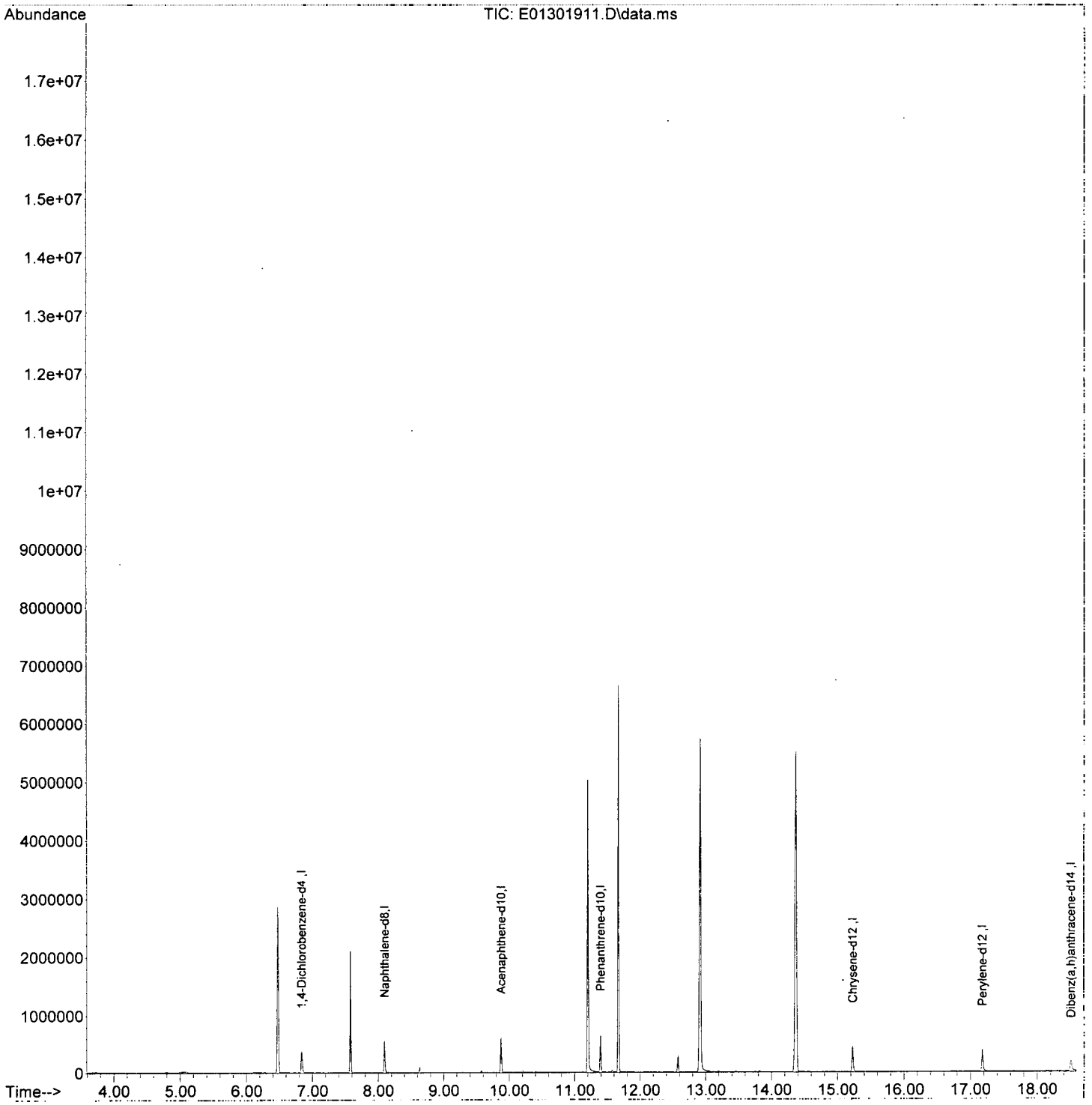
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.834	150	126132	2.00	ug/mL	0.00
2) Naphthalene-d8	8.096	136	289939	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.877	162	134988	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.396	188	238791	2.00	ug/mL	0.00
11) Chrysene-d12	15.226	240	204323	2.00	ug/mL	0.00
12) Perylene-d12	17.178	264	172332	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.504	292	113174	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.203	266	581670	No CC lev		
6) DFTPP	11.674	442	720727	No CC lev		#
7) Benzidine	12.920	184	3259461	No CC lev		
8) 4,4-DDE	13.193	TIC	27535	No CC lev		
9) 4,4-DDD	13.749	TIC	14720	No CC lev		
10) 4,4-DDT	14.375	TIC	9373183	No CC lev		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301911.D
Acq On : 30 Jan 2019 4:45 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN1
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jan 31 09:49:49 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jan 31 09:50:01 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.834	150	117666	2.00	ug/mL	0.00
2) Naphthalene-d8	8.096	136	274635	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.877	162	127812	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.396	188	221921	2.00	ug/mL	0.00
11) Chrysene-d12	15.226	240	182307	2.00	ug/mL	0.00
12) Perylene-d12	17.183	264	149703	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.510	292	99850	2.00	ug/mL	0.00
Target Compounds						Qvalue
4) Pentachlorophenol	11.203	266	527569	No CC lev		
6) DFTPP	11.674	442	615356	No CC lev		#
7) Benzidine	12.920	184	3031599	No CC lev		
8) 4,4-DDE	13.193	TIC	20624	No CC lev		
9) 4,4-DDD	13.755	TIC	11420	No CC lev		
10) 4,4-DDT	14.375	TIC	8660634	No CC lev		

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

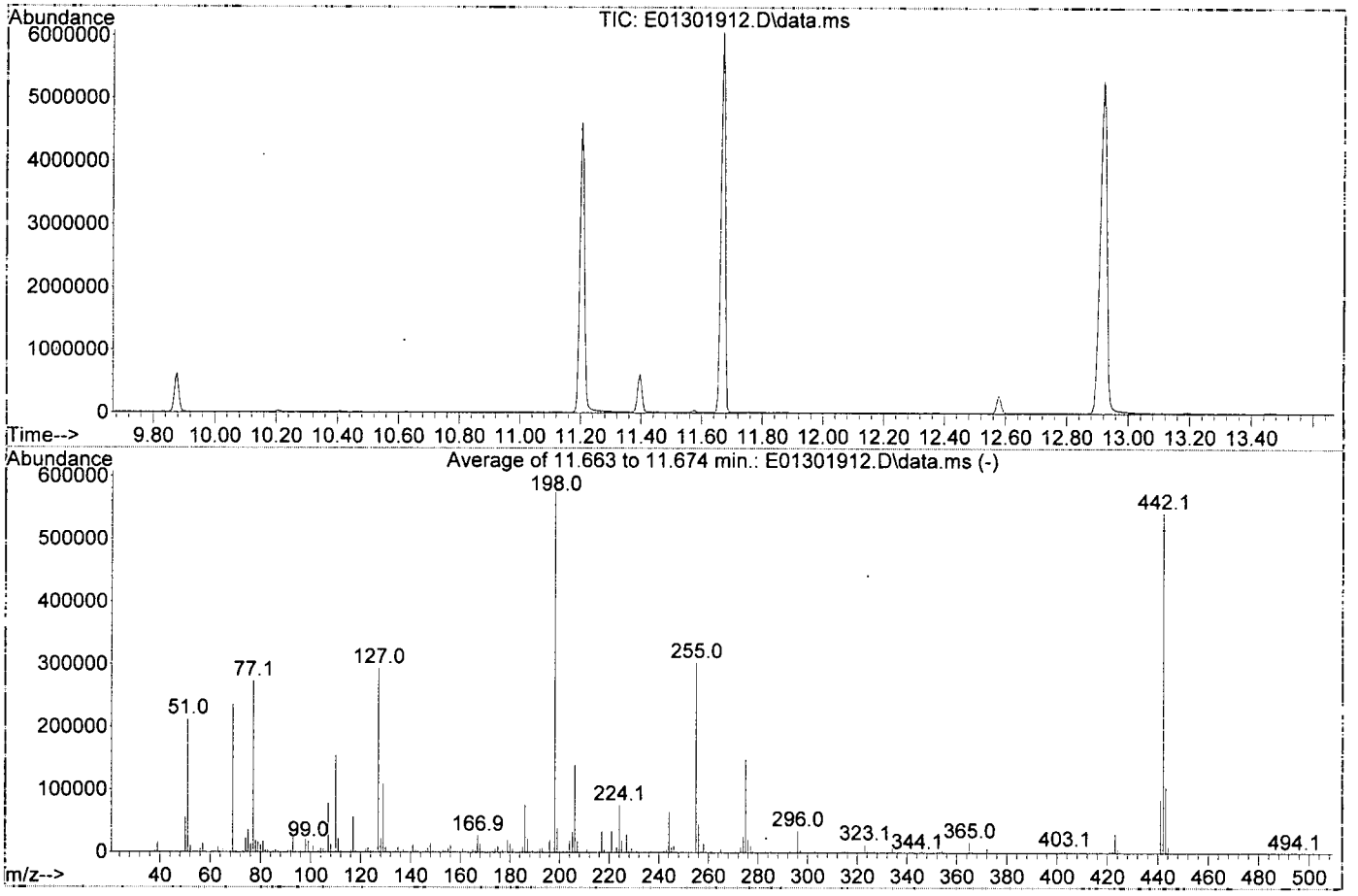
DFTPP

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP-625.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Jan 31 09:49:42 2019

1/31/19



AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

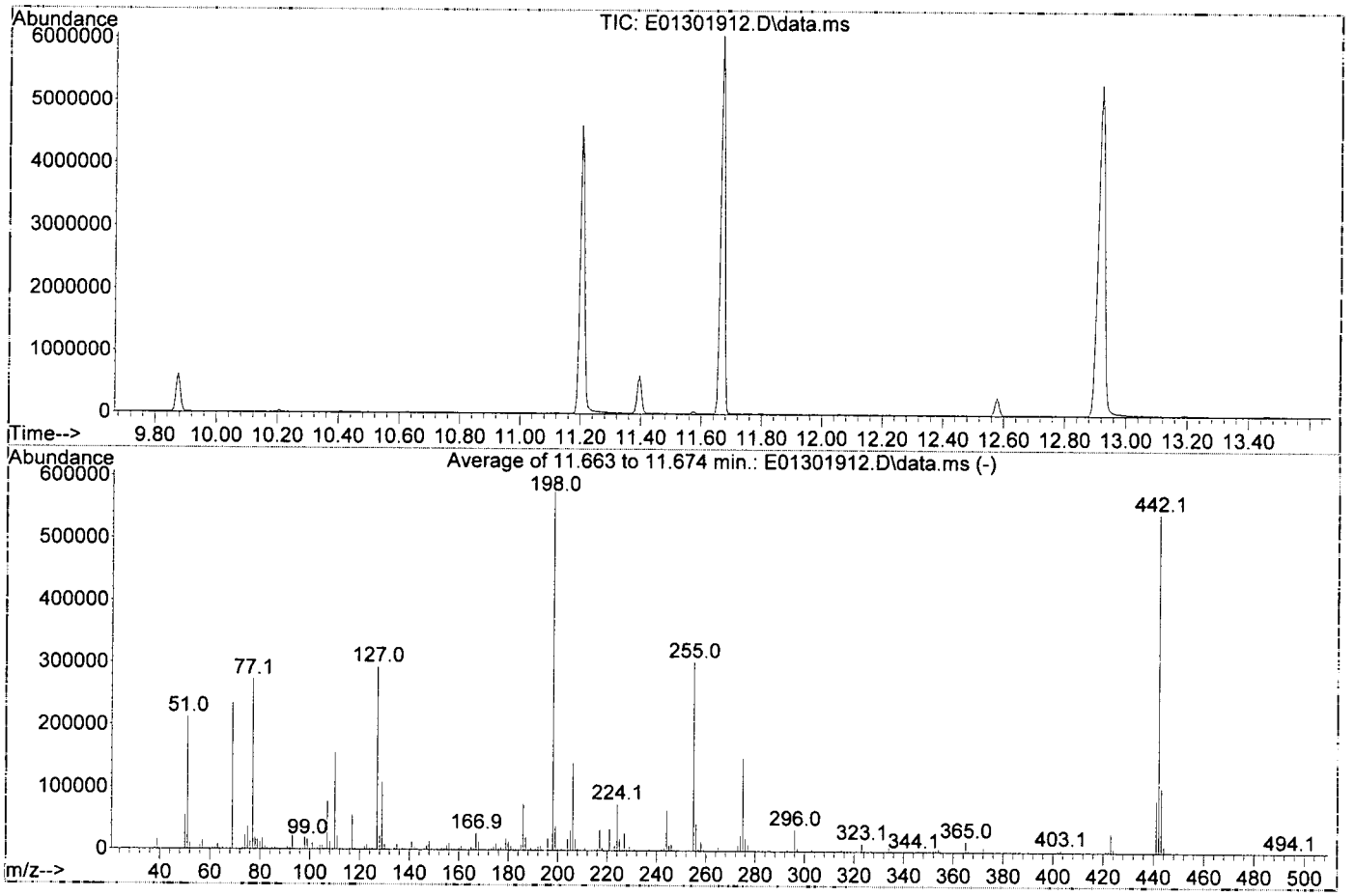
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.8	212856	PASS
68	69	0.00	2	1.2	2720	PASS
69	198	0.00	100	40.7	235823	PASS
70	69	0.00	2	0.5	1200	PASS
127	198	40	60	50.9	294293	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	578709	PASS
199	198	5	9	6.8	39504	PASS
275	198	10	30	25.8	149573	PASS
365	198	1	100	2.9	16879	PASS
441	443	0.01	100	80.3	84597	PASS
442	198	40	100	94.0	543808	PASS
443	442	17	23	19.4	105349	PASS

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Jan 29 16:12:28 2019

JK 1/31/19



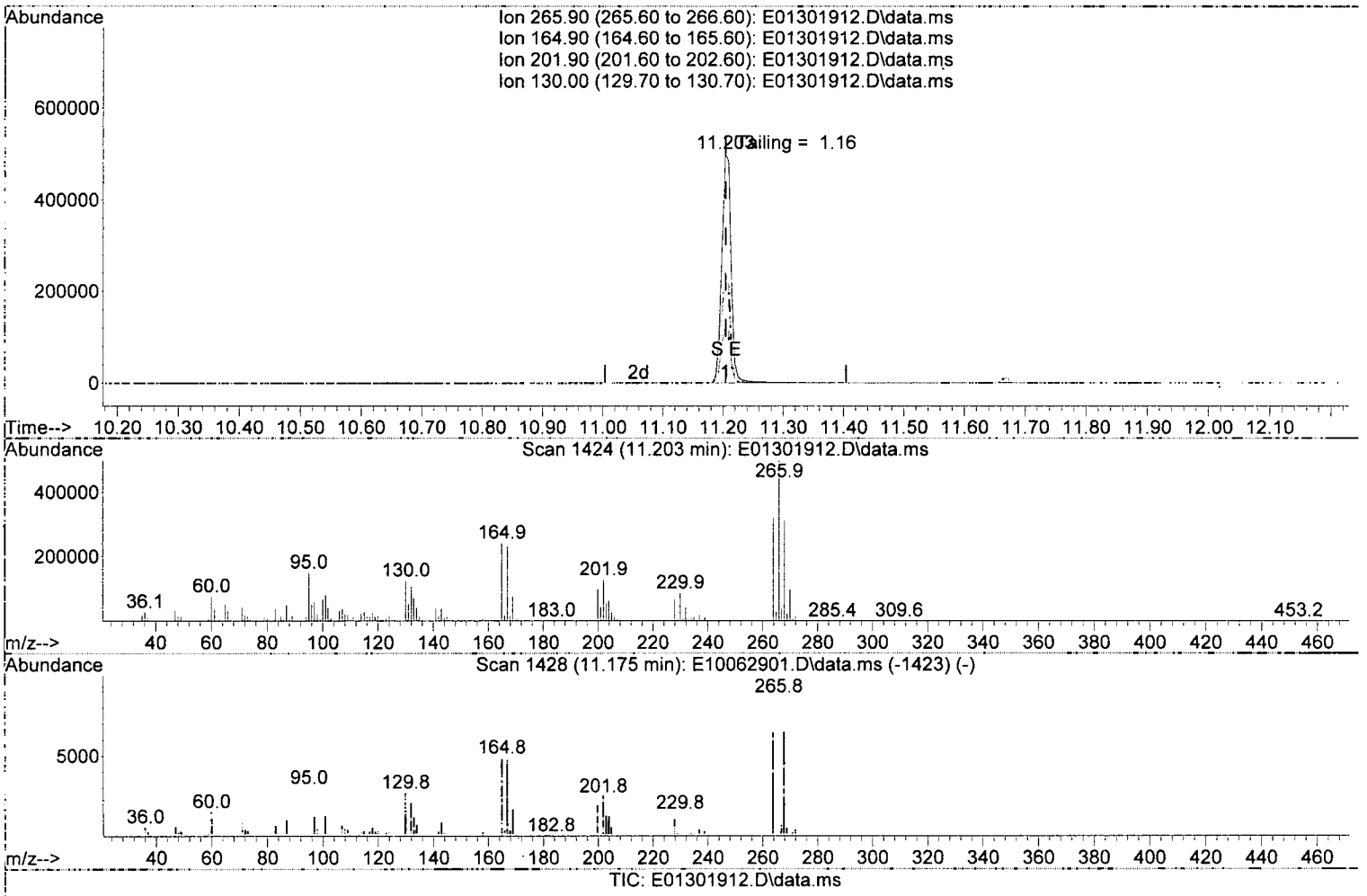
AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.8	212856	PASS
68	69	0.00	2	1.2	2720	PASS
69	198	0.00	100	40.7	235823	PASS
70	69	0.00	2	0.5	1200	PASS
127	198	10	80	50.9	294293	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	578709	PASS
199	198	5	9	6.8	39504	PASS
275	198	10	60	25.8	149573	PASS
365	198	1	100	2.9	16879	PASS
441	442	0.01	24	15.6	84597	PASS
442	198	50	200	94.0	543808	PASS
443	442	15	24	19.4	105349	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jan 31 09:50:01 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5



TIC: E01301912.D\data.ms

(4) Pentachlorophenol

11.203min (0.000) 0.00 ug/mL

response 527569

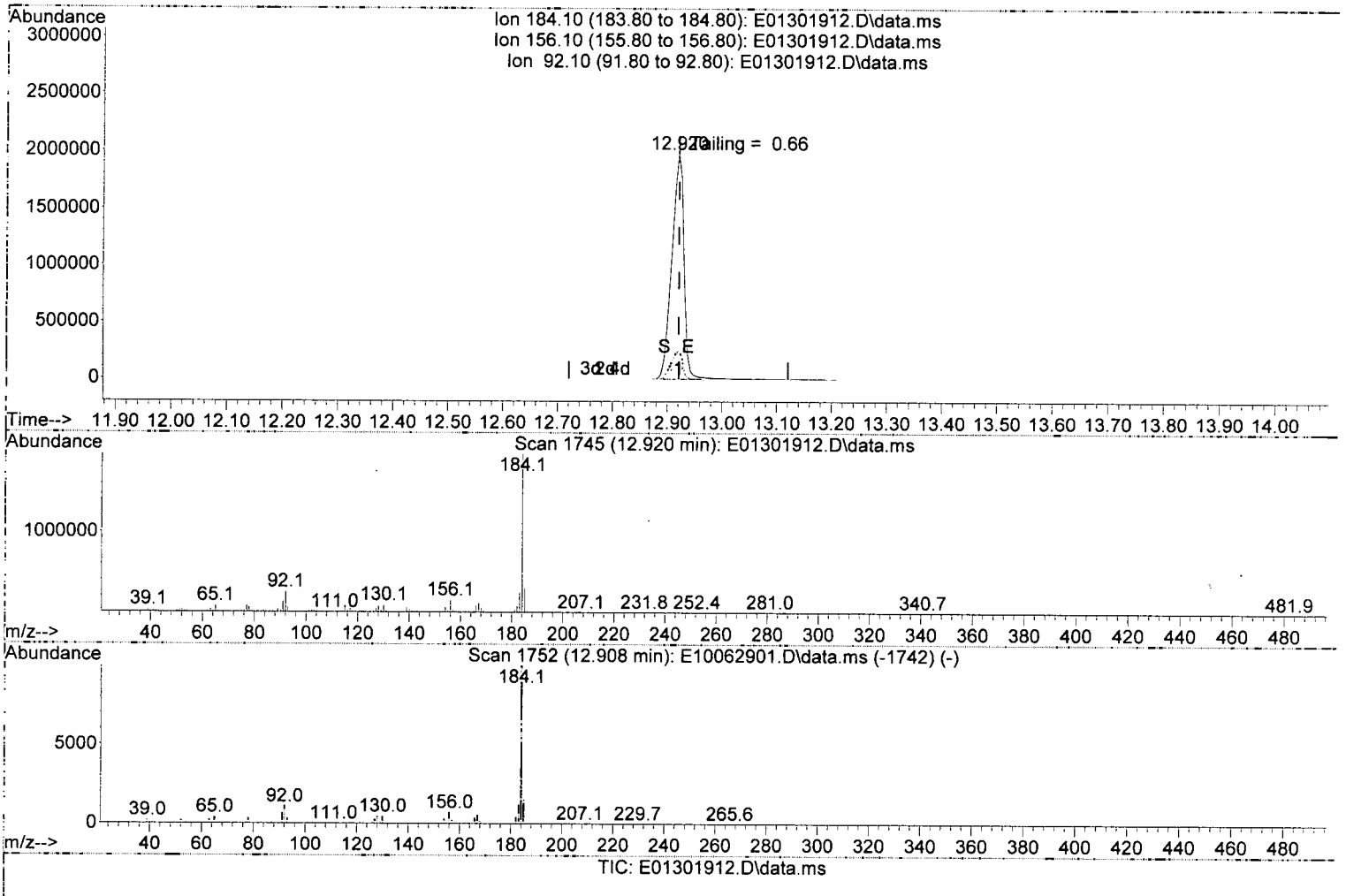
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.80	48.40
201.90	25.10	25.64
130.00	27.20	24.92

JK 1/31/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jan 31 09:50:01 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5



TIC: E01301912.D\data.ms

(7) Benzidine

12.920min (0.000) 0.00 ug/mL

response 3031599

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.40	7.66
92.10	8.40	12.67
0.00	0.00	0.00

1/31/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9A30046-TUN2
SV-GCMS5

First Column Area Counts		Percent Breakdown	
DDE	20624		
DDD	11420		
DDT	8660634	0.37	PASS

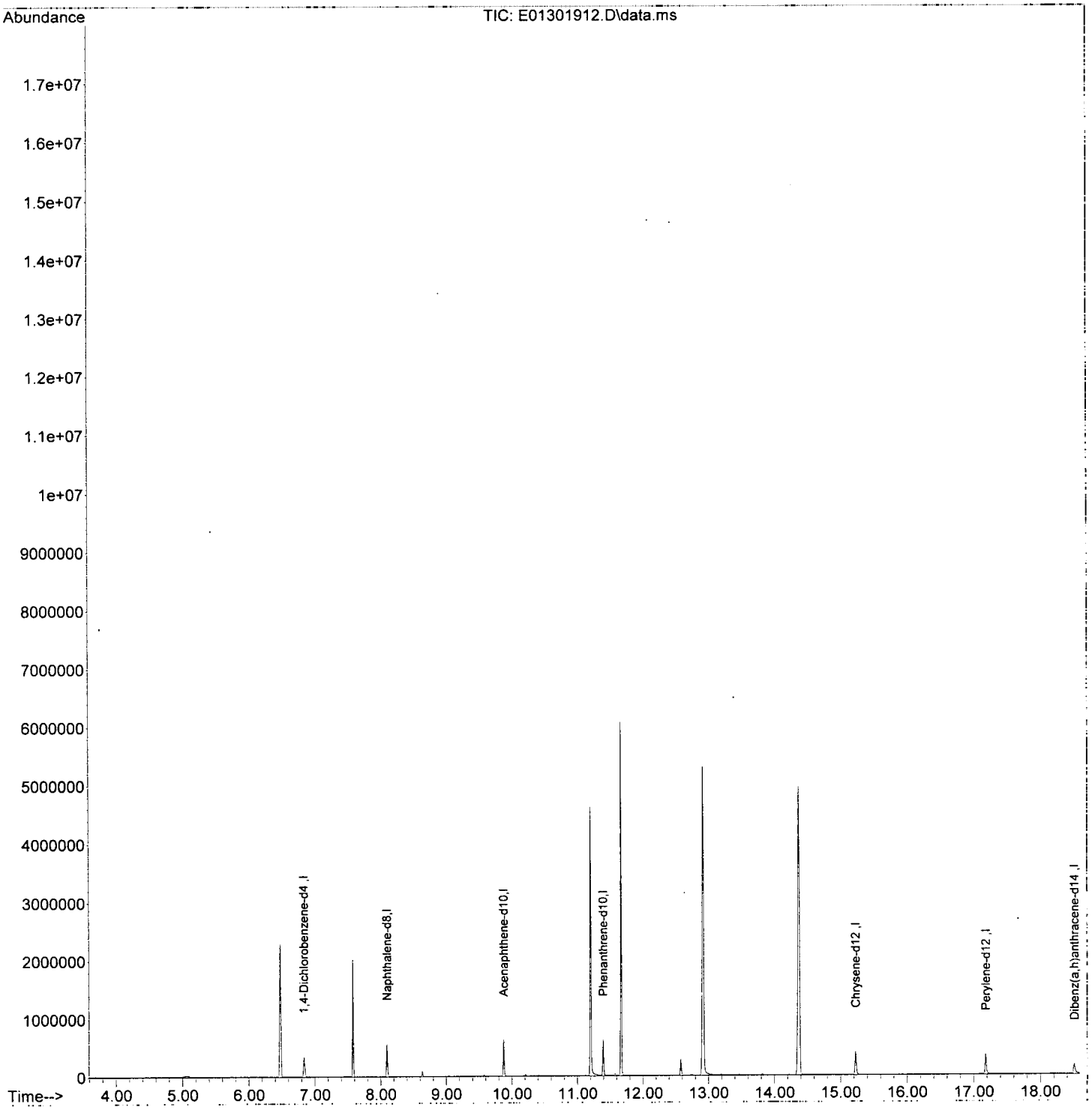
1/31/19

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301912.D
Acq On : 30 Jan 2019 5:18 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN2
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jan 31 09:50:01 2019
Quant Method : C:\msdchem\1\METHODS\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Jan 31 09:49:42 2019
Response via : Continuing Cal File:
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	268380	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1074503	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	493384	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	885116	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	713859	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	636345	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	470342	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6(Surr)	6.478	99	192	0.91	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.372	82	53	0.28	ng/ml	0.00
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	4.398	74	54	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	6.484	94	156	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...	7.088	45	69	N.D.		
16) N-Nitrosodi-n-propylamine	7.238	70	120	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	7.634	82	185	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.115	128	546	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

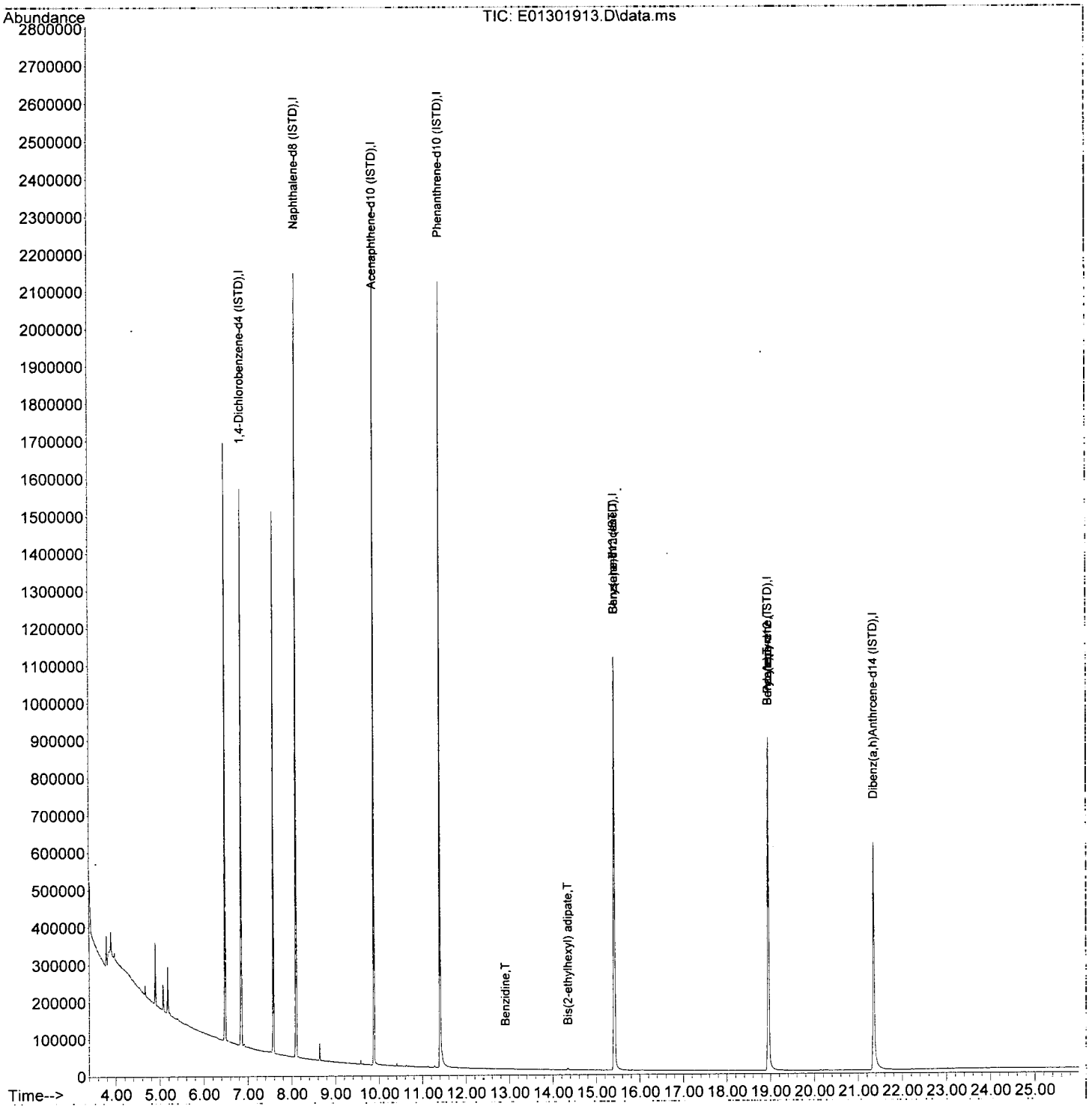
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	0.000		0	N.D.		
50) 3-Nitroaniline	0.000		0	N.D.		
51) Acenaphthene	9.885	153	92	N.D.		
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	0.000		0	N.D.		
54) 2,4-Dinitrotoluene	10.051	165	53	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...	10.410	170	99	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	11.421	178	193	N.D.		
72) Anthracene	11.421	178	193	N.D.		
73) Carbazole	0.000		0	N.D.		
74) Di-n-butyl phthalate	11.971	149	152	N.D.		
75) Fluoranthene	0.000		0	N.D.		
76) Benzidine	12.902	184	114	69.06	ng/ml	68
77) Pyrene	0.000		0	N.D.		
80) Butyl benzyl phthalate	0.000		0	N.D.		
81) Bis(2-ethylhexyl) adipate	14.341	129	1045	5.36	ng/ml	90
82) 3,3-Dichlorobenzidine	0.000		0	N.D.		
83) Benz(a)anthracene	15.416	228	1753	4.26	ng/ml	71
84) Chrysene	15.416	228	1715	4.40	ng/ml	69
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	18.946	252	2036	6.21	ng/ml#	1
92) Benzo(a)pyrene	0.000		0	N.D.		
93) Perylene	18.946	252	2036	5.59	ng/ml	72
95) Indeno(1,2,3-cd)pyrene	21.348	276	162	N.D.		
96) Dibenz(a,h)anthracene	21.342	278	95	N.D.		
97) Benzo(g,h,i)perylene	0.000		0	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:40 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Final Reqnant
1/31/19

Quant Time: Jan 31 12:00:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	268380	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1074503	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	493384	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	885116	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	713859	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	636345	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	470342	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00	ng/ml	
5) Phenol-d6(Surr)	6.478	99	192	0.86	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.372	82	53	0.26	ng/ml	0.00
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	4.398	74	54	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	6.484	94	156	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...	7.088	45	69	N.D.		
16) N-Nitrosodi-n-propylamine	7.238	70	120	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	7.634	82	185	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.115	128	546	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	0.000		0	N.D.		
33) 2-Methylnaphthalene	0.000		0	N.D.		
34) 1-Methylnaphthalene	0.000		0	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5

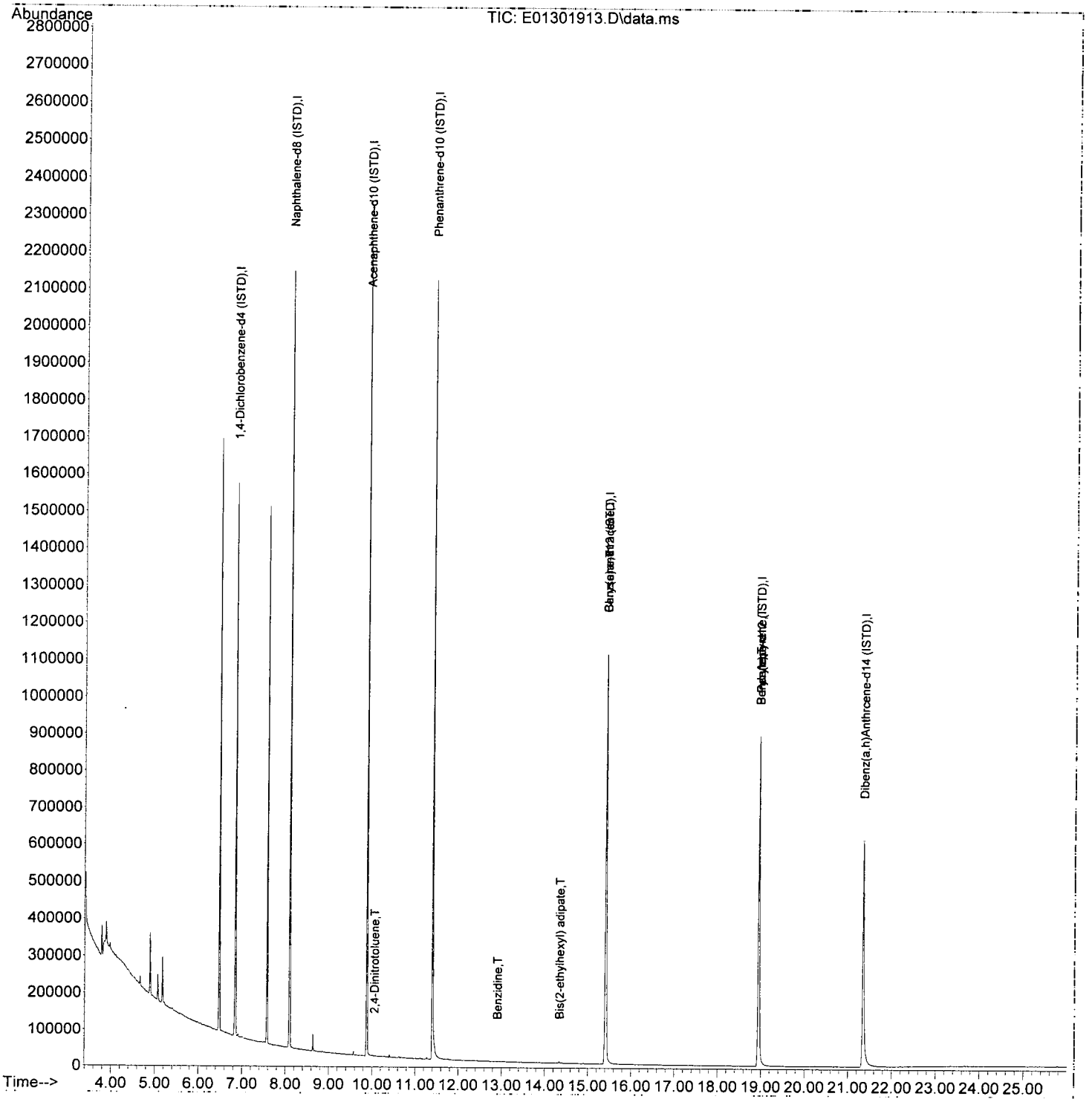
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.885	153	92	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.051	165	53	61.61 ng/ml#	15
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.410	170	99	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	11.421	178	193	N.D.	
72) Anthracene	11.421	178	193	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.971	149	152	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.902	184	114	39.29 ng/ml	68
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.341	129	1045	5.03 ng/ml	90
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.416	228	1753	4.35 ng/ml	71
84) Chrysene	15.416	228	1715	4.47 ng/ml	69
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	18.946	252	2036	5.96 ng/ml#	1
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.946	252	2036	5.84 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	21.348	276	162	N.D.	
96) Dibenz(a,h)anthracene	21.342	278	95	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301913.D
Acq On : 30 Jan 2019 6:24 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:45 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JJK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.848	152	267680	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1055936	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	485404	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	914631	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	849263	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	770351	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	614628	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	2703	16.69	ng/ml	0.00
5) Phenol-d6(Surr)	6.478	99	3503	16.64	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	3003	15.92	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.180	172	7112	19.01	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.683	330	229	20.60	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	7570	19.70	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.403	74	2349	20.25	ng/ml#	17
3) Pyridine	4.473	79	2510	13.44	ng/ml#	1
6) Phenol	6.489	94	3623	16.07	ng/ml	97
7) Aniline	6.532	93	4076	14.74	ng/ml	98
8) Bis(2-chloroethyl) ether	6.580	93	3961	20.93	ng/ml	96
9) 2-Chlorophenol	6.650	128	2671	15.07	ng/ml	99
10) 1,3-Dichlorobenzene	6.799	146	3951	18.62	ng/ml	94
11) 1,4-Dichlorobenzene	6.864	146	3880	17.95	ng/ml	89
12) Benzyl alcohol	6.971	108	1088	35.15	ng/ml	94
13) 1,2-Dichlorobenzene	7.013	146	3694	18.13	ng/ml	95
14) 2-Methylphenol	7.067	107	2376	16.92	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	5888	22.91	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.222	70	2415	18.34	ng/ml	92
17) 3+4-Methylphenol	7.211	107	2797	15.39	ng/ml	96
18) Hexachloroethane	7.345	117	1366	18.01	ng/ml	90
20) Nitrobenzene	7.398	77	3065	16.34	ng/ml	99
22) Isophorone	7.628	82	5446	15.86	ng/ml	100
23) 2-Nitrophenol	7.714	139	775	8.41	ng/ml	88
24) 2,4-Dimethylphenol	7.735	122	2085	13.77	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.832	93	4242	19.32	ng/ml	97
26) Benzoic acid	7.848	105	69	841.66	ng/ml#	8
27) 2,4-Dichlorophenol	7.949	162	1557	11.67	ng/ml	84
28) 1,2,4-Trichlorobenzene	8.040	180	2751	17.58	ng/ml	99
29) Naphthalene	8.121	128	11917	20.68	ng/ml	98
30) 4-Chloroaniline	8.158	127	2975	14.05	ng/ml	95
31) Hexachlorobutadiene	8.244	225	1290	16.78	ng/ml	91
32) 4-Chloro-3-methylphenol	8.639	107	895	33.74	ng/ml#	1
33) 2-Methylnaphthalene	8.816	142	6941	18.47	ng/ml	97
34) 1-Methylnaphthalene	8.912	142	6831	18.66	ng/ml	94
36) Hexachlorocyclopentadiene	8.982	237	899	14.29	ng/ml	92
37) 2,4,6-Trichlorophenol	9.094	196	754	36.37	ng/ml	95
38) 2,4,5-Trichlorophenol	9.137	196	702	20.25	ng/ml	93
39) 1,1'-Biphenyl	9.281	154	8419	19.66	ng/ml	97
41) 2-Chloronaphthalene	9.308	162	6075	19.81	ng/ml	97
42) 2-Nitroaniline	9.404	138	663	6.26	ng/ml	90

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:45 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

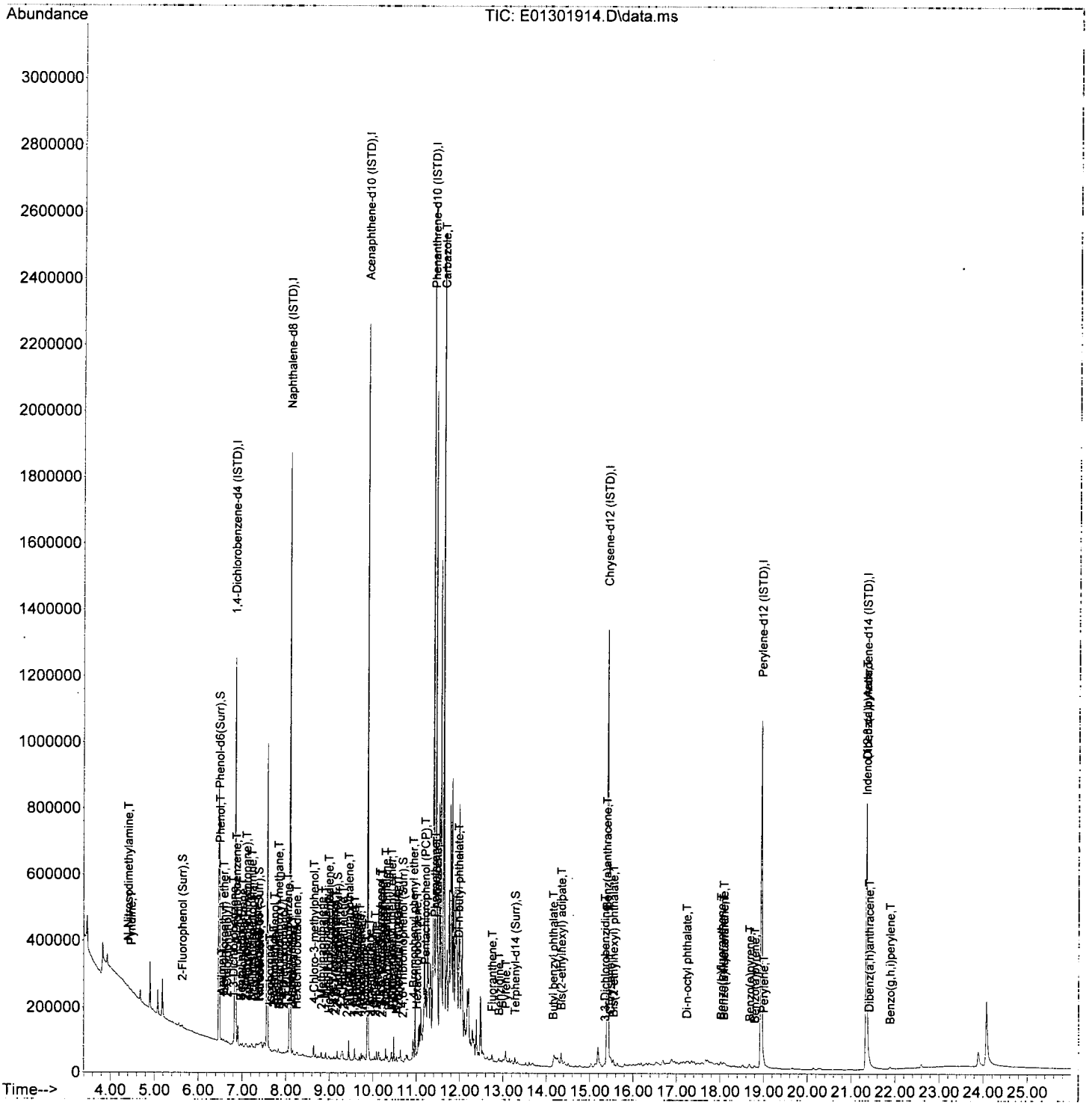
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.442	156	5544	18.54	ng/ml	98
44) 1,4-Dinitrobenzene	9.527	168	197	4.14	ng/ml	99
45) Dimethyl phthalate	9.575	163	5420	15.96	ng/ml	97
46) 1,3-Dinitrobenzene	9.613	168	245	4.61	ng/ml	59
47) 2,6-Dinitrotoluene	9.640	165	434	5.63	ng/ml	84
48) 1,2-Dinitrobenzene	9.698	168	203	6.04	ng/ml#	1
49) Acenaphthylene	9.730	152	7974	16.44	ng/ml	95
50) 3-Nitroaniline	9.821	138	572	6.50	ng/ml	77
51) Acenaphthene	9.912	153	6866	20.47	ng/ml	98
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.987	139	335	74.70	ng/ml#	26
54) 2,4-Dinitrotoluene	10.051	165	575	5.88	ng/ml	94
55) Dibenzofuran	10.083	168	8455	19.23	ng/ml#	55
56) 2,3,5,6-Tetrachlorophenol	10.164	232	340	43.86	ng/ml	86
57) 2,3,4,6-Tetrachlorophenol	10.212	232	529	36.13	ng/ml	85
58) Diethyl phthalate	10.292	149	5519	16.26	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.292	170	5065	18.55	ng/ml	99
60) Fluorene	10.436	166	6383	18.15	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.426	204	3010	19.74	ng/ml	91
62) 4-Nitroaniline	10.436	138	713	7.90	ng/ml	92
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.538	169	4930	16.70	ng/ml	91
66) Azobenzene (1,2-DPH)	10.586	77	6350	17.79	ng/ml	96
68) 4-Bromophenyl phenyl e...	10.929	248	1566	19.85	ng/ml	93
69) Hexachlorobenzene	11.009	284	1571	19.29	ng/ml	96
70) Pentachlorophenol (PCP)	11.201	266	315	75.67	ng/ml	79
71) Phenanthrene	11.421	178	10388	19.59	ng/ml	94
72) Anthracene	11.474	178	10748	20.97	ng/ml	92
73) Carbazole	11.629	167	11056	24.57	ng/ml	70
74) Di-n-butyl phthalate	11.972	149	15373	27.84	ng/ml	86
75) Fluoranthene	12.742	202	10781	21.15	ng/ml	92
76) Benzidine	12.902	184	1323	73.45	ng/ml	88
77) Pyrene	13.057	202	10777	20.51	ng/ml	98
80) Butyl benzyl phthalate	14.154	149	3108	38.84	ng/ml	84
81) Bis(2-ethylhexyl) adipate	14.341	129	9073	39.11	ng/ml	93
82) 3,3-Dichlorobenzidine	15.347	252	2805	47.65	ng/ml	95
83) Benz(a)anthracene	15.389	228	10870	22.19	ng/ml	98
84) Chrysene	15.470	228	9138	19.72	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.544	149	3944	10.93	ng/ml	98
87) Di-n-octyl phthalate	17.235	149	3881	76.75	ng/ml#	14
88) Benzo(b)fluoranthene	18.021	252	6730	25.15	ng/ml	98
89) Benzo(k)fluoranthene	18.085	252	7026	25.66	ng/ml	95
90) Benzo(b+k)fluoranthene	18.085	252	15677	52.15	ng/ml	95
91) Benzo(e)pyrene	18.679	252	7648	19.26	ng/ml	98
92) Benzo(a)pyrene	18.796	252	5806	26.47	ng/ml	96
93) Perylene	19.000	252	7762	17.60	ng/ml	97
95) Indeno(1,2,3-cd)pyrene	21.342	276	6544	17.34	ng/ml#	24
96) Dibenz(a,h)anthracene	21.407	278	5352	14.83	ng/ml	86
97) Benzo(g,h,i)perylene	21.883	276	5584	14.69	ng/ml	92

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301914.D
Acq On : 30 Jan 2019 7:00 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL1
Misc : 1x, A18L327@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:45 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	281181	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1068309	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	468864	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	786274	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.411	240	694365	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	613296	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	475223	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	7768	45.67	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	10982	49.66	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	7789	39.30	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	18089	50.05	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	770	43.72	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	16079	51.18	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.408	74	5969	48.98	ng/ml	84
3) Pyridine	4.462	79	9139	46.59	ng/ml#	72
6) Phenol	6.489	94	11772	49.71	ng/ml	94
7) Aniline	6.532	93	15128	52.07	ng/ml	96
8) Bis(2-chloroethyl) ether	6.580	93	9806	49.33	ng/ml	96
9) 2-Chlorophenol	6.650	128	8358	44.89	ng/ml	96
10) 1,3-Dichlorobenzene	6.799	146	10651	47.79	ng/ml	94
11) 1,4-Dichlorobenzene	6.864	146	10515	46.31	ng/ml	97
12) Benzyl alcohol	6.965	108	4308	63.18	ng/ml	98
13) 1,2-Dichlorobenzene	7.013	146	10083	47.23	ng/ml	98
14) 2-Methylphenol	7.067	107	6847	46.42	ng/ml	93
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	16784	62.17	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.222	70	6849	49.51	ng/ml	96
17) 3+4-Methylphenol	7.211	107	8837	46.28	ng/ml	95
18) Hexachloroethane	7.345	117	3855	48.38	ng/ml	86
20) Nitrobenzene	7.398	77	8550	43.39	ng/ml	99
22) Isophorone	7.628	82	16770	48.27	ng/ml	97
23) 2-Nitrophenol	7.714	139	2288	24.55	ng/ml	96
24) 2,4-Dimethylphenol	7.735	122	7337	47.89	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.832	93	11626	52.34	ng/ml	98
26) Benzoic acid	7.816	105	56	841.51	ng/ml#	55
27) 2,4-Dichlorophenol	7.949	162	4758	35.24	ng/ml	98
28) 1,2,4-Trichlorobenzene	8.035	180	7910	49.96	ng/ml	93
29) Naphthalene	8.120	128	30779	52.80	ng/ml	99
30) 4-Chloroaniline	8.163	127	8890	41.48	ng/ml	95
31) Hexachlorobutadiene	8.243	225	3731	47.97	ng/ml	95
32) 4-Chloro-3-methylphenol	8.639	107	3536	52.52	ng/ml#	1
33) 2-Methylnaphthalene	8.816	142	18189	47.83	ng/ml	96
34) 1-Methylnaphthalene	8.917	142	17571	47.44	ng/ml	98
36) Hexachlorocyclopentadiene	8.982	237	2439	40.14	ng/ml	96
37) 2,4,6-Trichlorophenol	9.094	196	2135	53.91	ng/ml	97
38) 2,4,5-Trichlorophenol	~~9.131~~	~~196~~	~~2141~~	~~40.01~~	~~ng/ml~~	89
39) 1,1'-Biphenyl	9.281	154	21089	50.98	ng/ml	98
41) 2-Chloronaphthalene	9.308	162	14859	50.16	ng/ml	99
42) 2-Nitroaniline	9.404	138	2037	19.91	ng/ml	89

See MS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

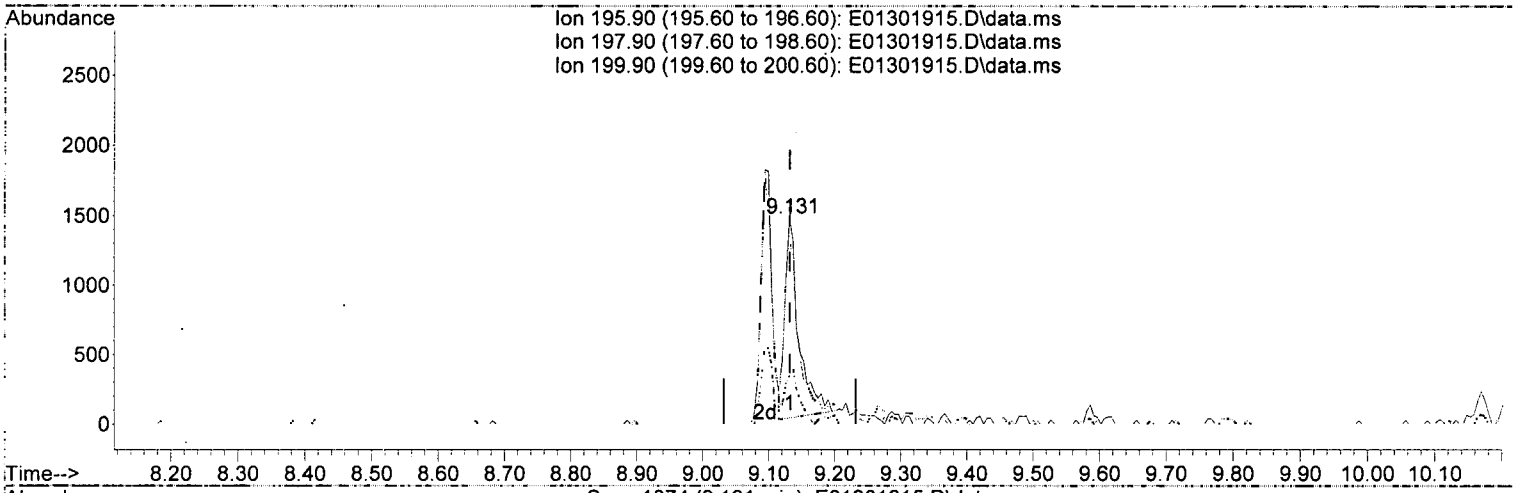
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	14256	49.36	ng/ml	98
44) 1,4-Dinitrobenzene	9.527	168	523	11.39	ng/ml#	65
45) Dimethyl phthalate	9.575	163	13040	39.75	ng/ml	97
46) 1,3-Dinitrobenzene	9.613	168	748	14.56	ng/ml	71
47) 2,6-Dinitrotoluene	9.639	165	1439	19.33	ng/ml	88
48) 1,2-Dinitrobenzene	9.698	168	546	16.81	ng/ml#	18
49) Acenaphthylene	9.736	152	22412	47.82	ng/ml	99
50) 3-Nitroaniline	9.816	138	1785	21.00	ng/ml	83
51) Acenaphthene	9.912	153	15975	49.32	ng/ml	97
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.976	139	1002	85.58	ng/ml#	76
54) 2,4-Dinitrotoluene	10.057	165	1435	15.18	ng/ml	96
55) Dibenzofuran	10.083	168	19948	46.96	ng/ml#	78
56) 2,3,5,6-Tetrachlorophenol	10.169	232	1011	55.13	ng/ml	85
57) 2,3,4,6-Tetrachlorophenol	~~10.212~~	~~232~~	~~1470~~	~~50.67~~	~~ng/ml~~	80 see MS
58) Diethyl phthalate	10.297	149	13590	41.44	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.292	170	12539	47.54	ng/ml	93
60) Fluorene	10.436	166	15560	45.81	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.426	204	6698	45.47	ng/ml	88
62) 4-Nitroaniline	10.436	138	2087	23.93	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.479	198	74	77.83	ng/ml#	1
65) N-Nitrosodiphenylamine	10.543	169	11920	46.96	ng/ml	98
66) Azobenzene (1,2-DPH)	10.586	77	16055	52.33	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.928	248	3436	50.67	ng/ml	93
69) Hexachlorobenzene	11.009	284	3548	50.68	ng/ml	99
70) Pentachlorophenol (PCP)	11.207	266	571	83.26	ng/ml	91
71) Phenanthrene	11.421	178	22253	48.83	ng/ml	99
72) Anthracene	11.474	178	23381	53.07	ng/ml	97
73) Carbazole	11.629	167	21647	55.95	ng/ml	93
74) Di-n-butyl phthalate	11.971	149	26968	56.81	ng/ml	96
75) Fluoranthene	12.747	202	22810	52.04	ng/ml	99
76) Benzidine	12.907	184	6453	95.98	ng/ml	90
77) Pyrene	13.057	202	23055	51.04	ng/ml	97
80) Butyl benzyl phthalate	14.154	149	7172	61.13	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.341	129	11698	61.67	ng/ml	97
82) 3,3-Dichlorobenzidine	15.346	252	8063	100.49	ng/ml	96
83) Benz(a)anthracene	15.389	228	20129	50.25	ng/ml	95
84) Chrysene	15.464	228	18408	48.59	ng/ml	95
85) Bis(2-ethylhexyl) phth...	15.544	149	8608	29.16	ng/ml	99
87) Di-n-octyl phthalate	17.235	149	9748	92.86	ng/ml	83
88) Benzo(b)fluoranthene	18.015	252	14286	52.97	ng/ml	98
89) Benzo(k)fluoranthene	18.085	252	14559	52.66	ng/ml	97
90) Benzo(b+k)fluoranthene	18.015	252	31983	108.94	ng/ml	98
91) Benzo(e)pyrene	18.673	252	15484	48.98	ng/ml	99
92) Benzo(a)pyrene	18.802	252	12367	52.44	ng/ml	97
93) Perylene	19.005	252	16978	48.35	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.342	276	12358	42.35	ng/ml	80
96) Dibenz(a,h)anthracene	21.412	278	11253	40.33	ng/ml	93
97) Benzo(g,h,i)perylene	21.882	276	12123	41.24	ng/ml	87

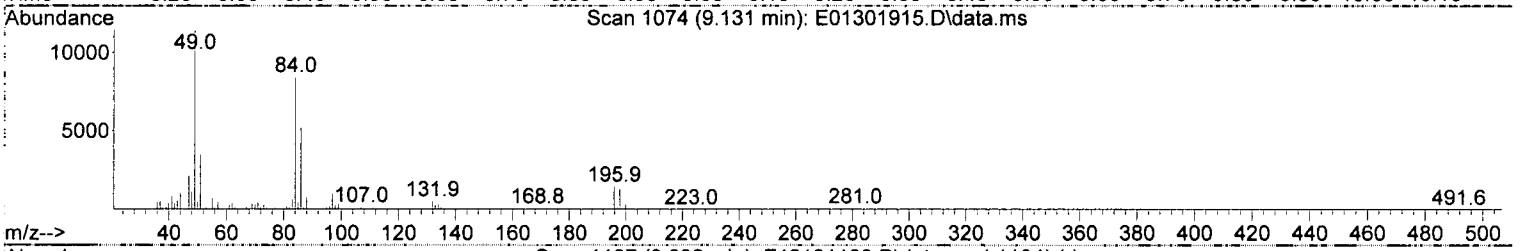
(#) = qualifier out of range (m) = manual integration (+) = signals summed

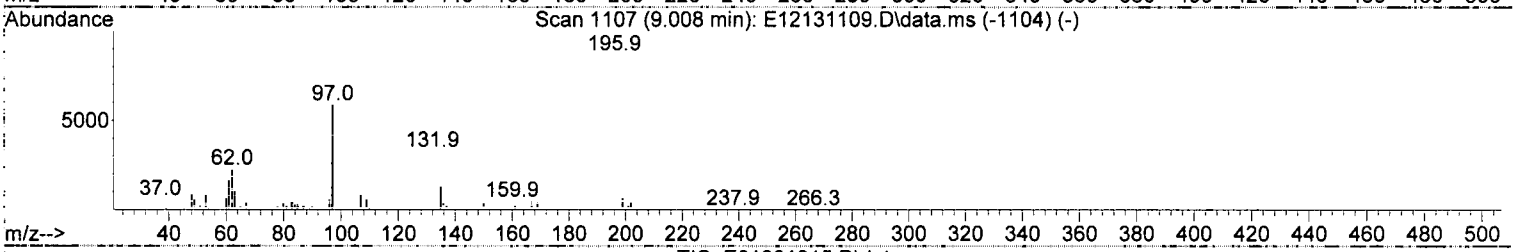
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301915.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.131min (-0.000) 40.01 ng/ml

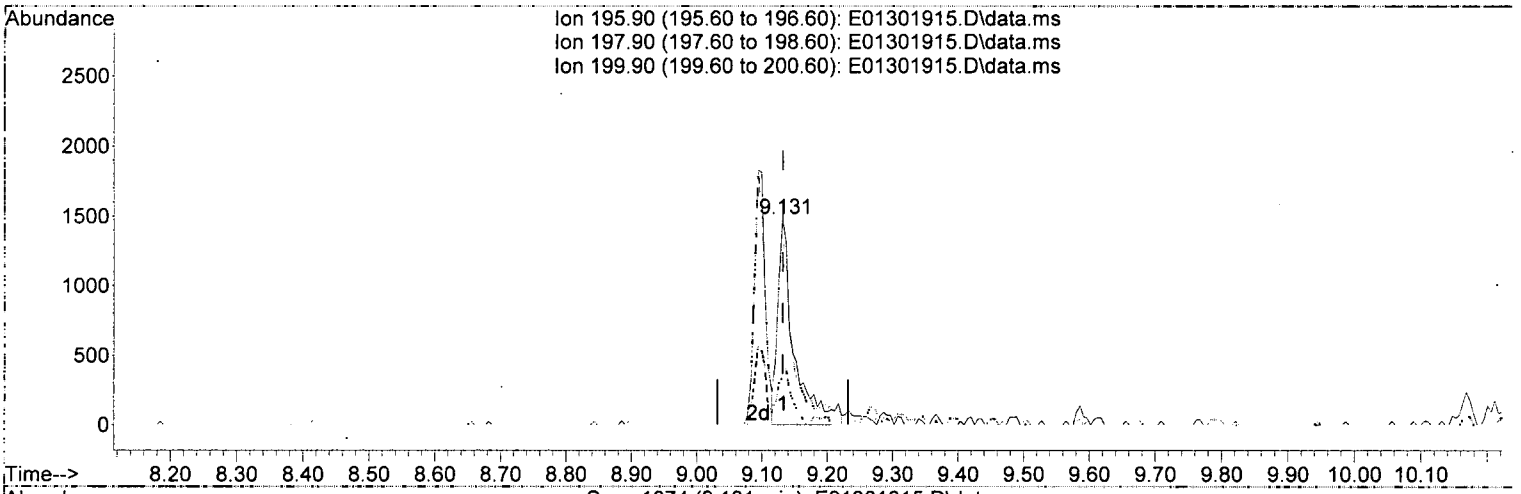
response 2141

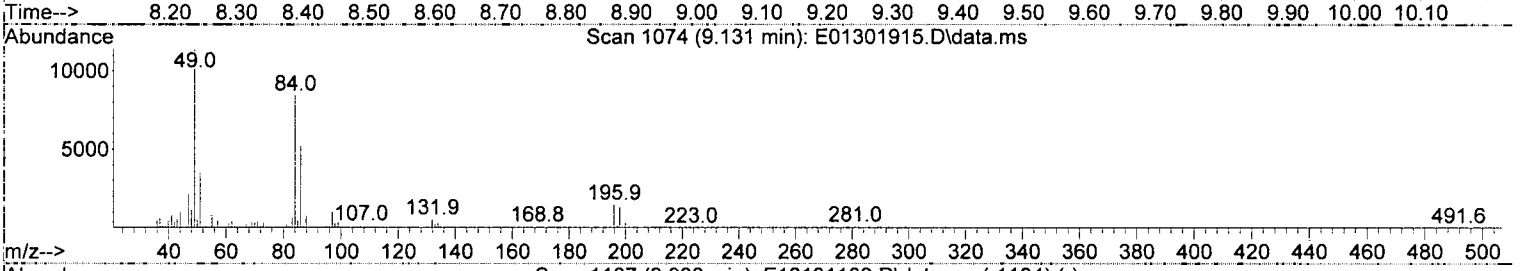
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.77
199.90	32.40	23.38
0.00	0.00	0.00

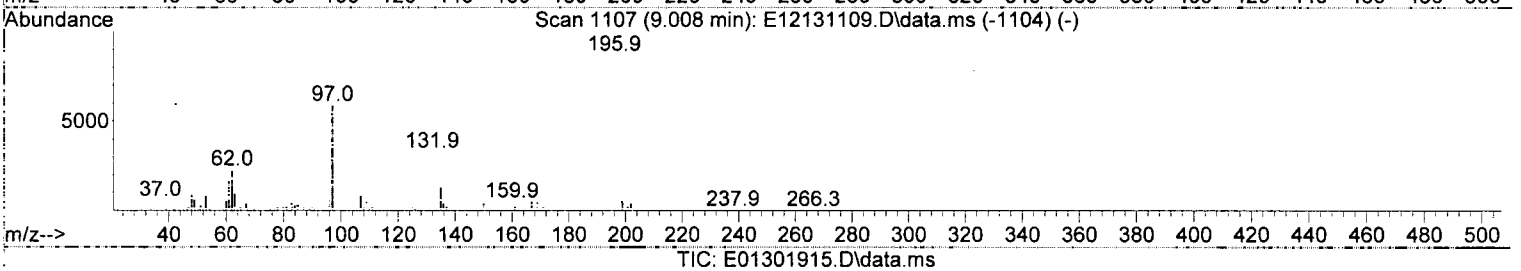
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301915.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.131min (-0.000) 46.32 ng/ml m

response 2609

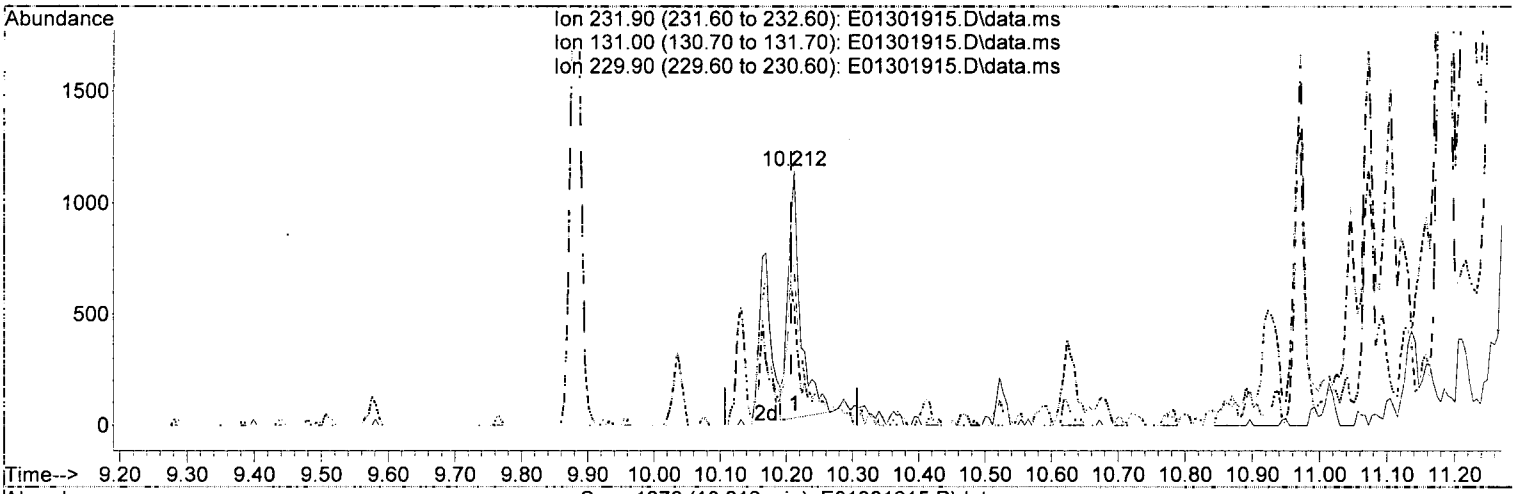
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.77
199.90	32.40	23.38
0.00	0.00	0.00

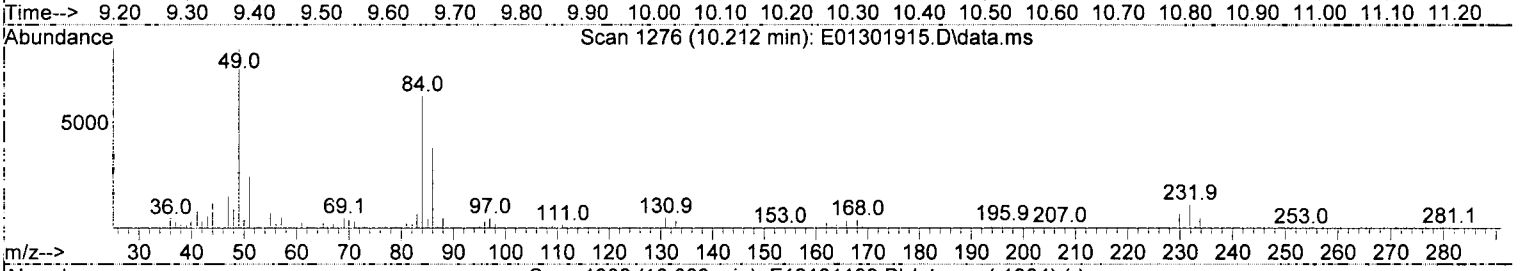
JK 1/31/19

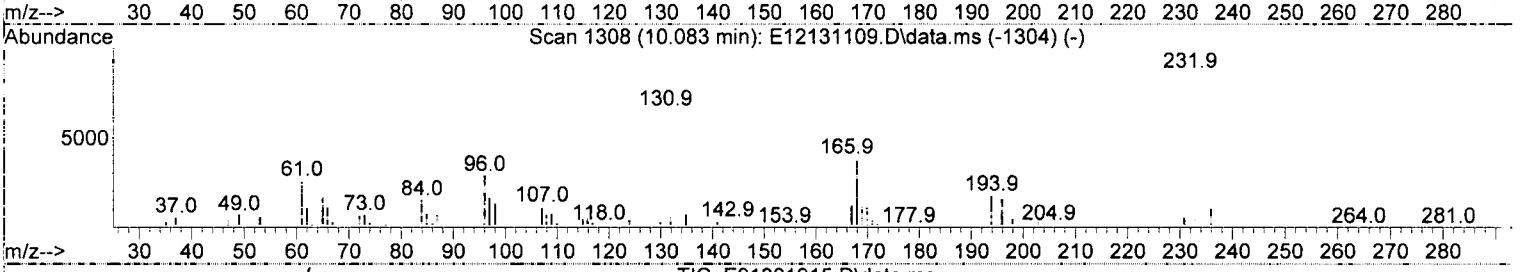
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301915.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.212min (+ 0.005) 50.67 ng/ml

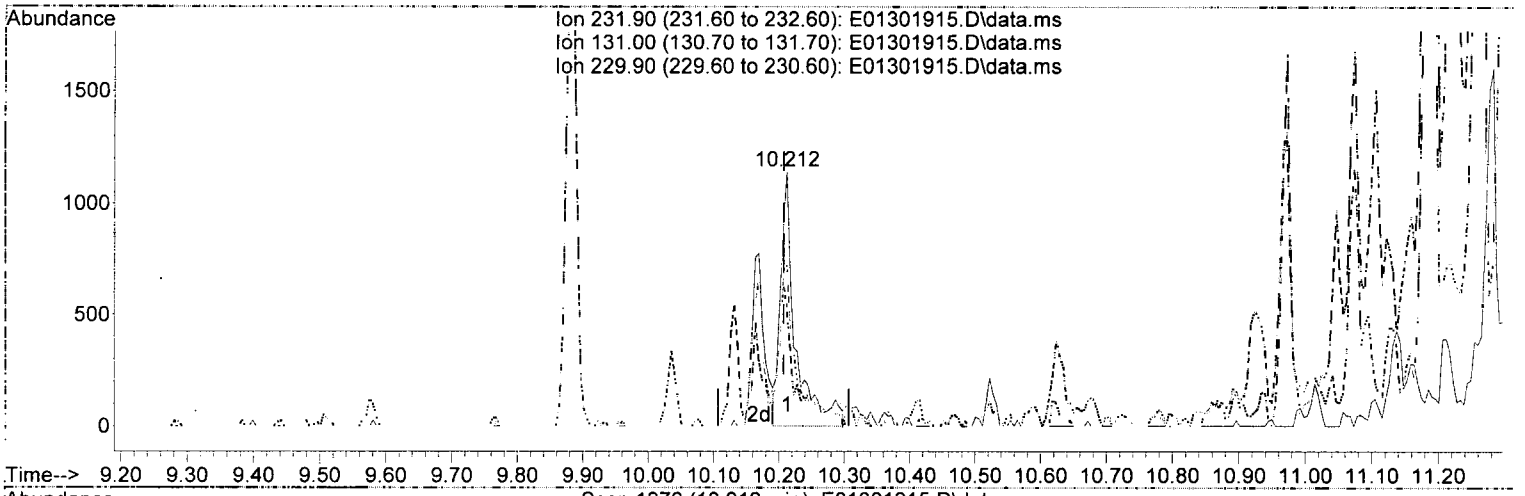
response 1470

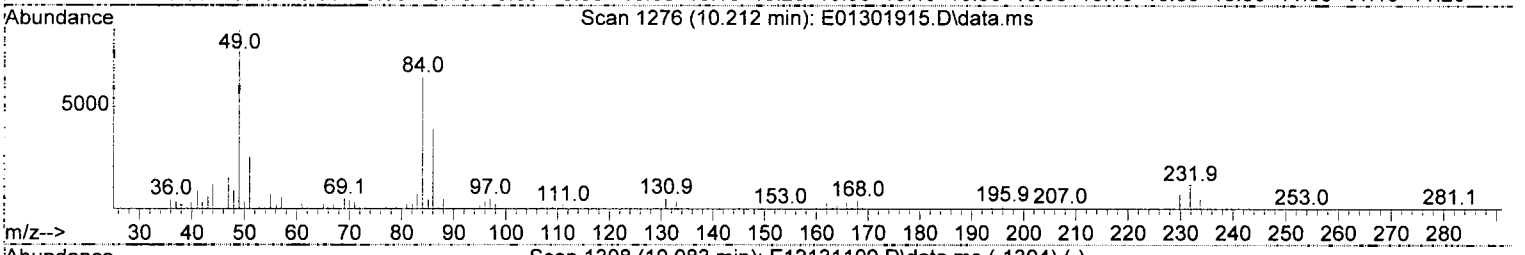
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	45.49
229.90	79.80	62.82
0.00	0.00	0.00

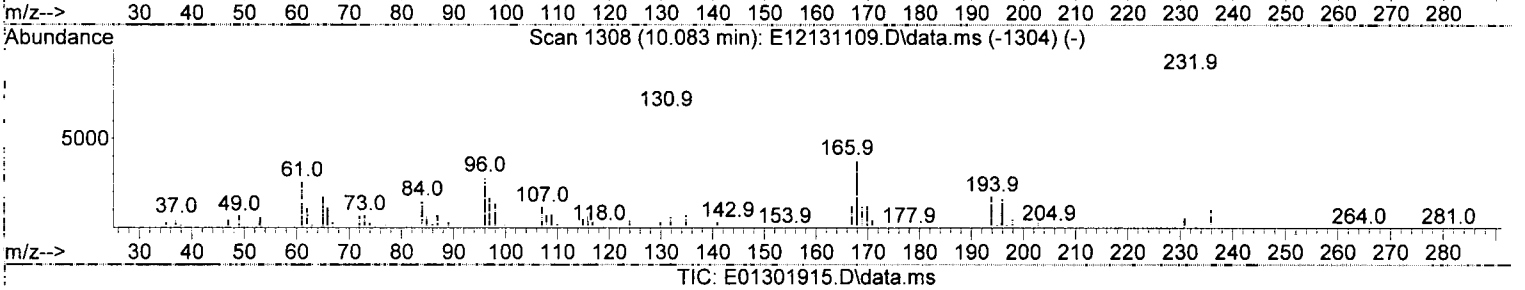
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301915.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.212min (+ 0.005) 55.86 ng/ml m

response 1812

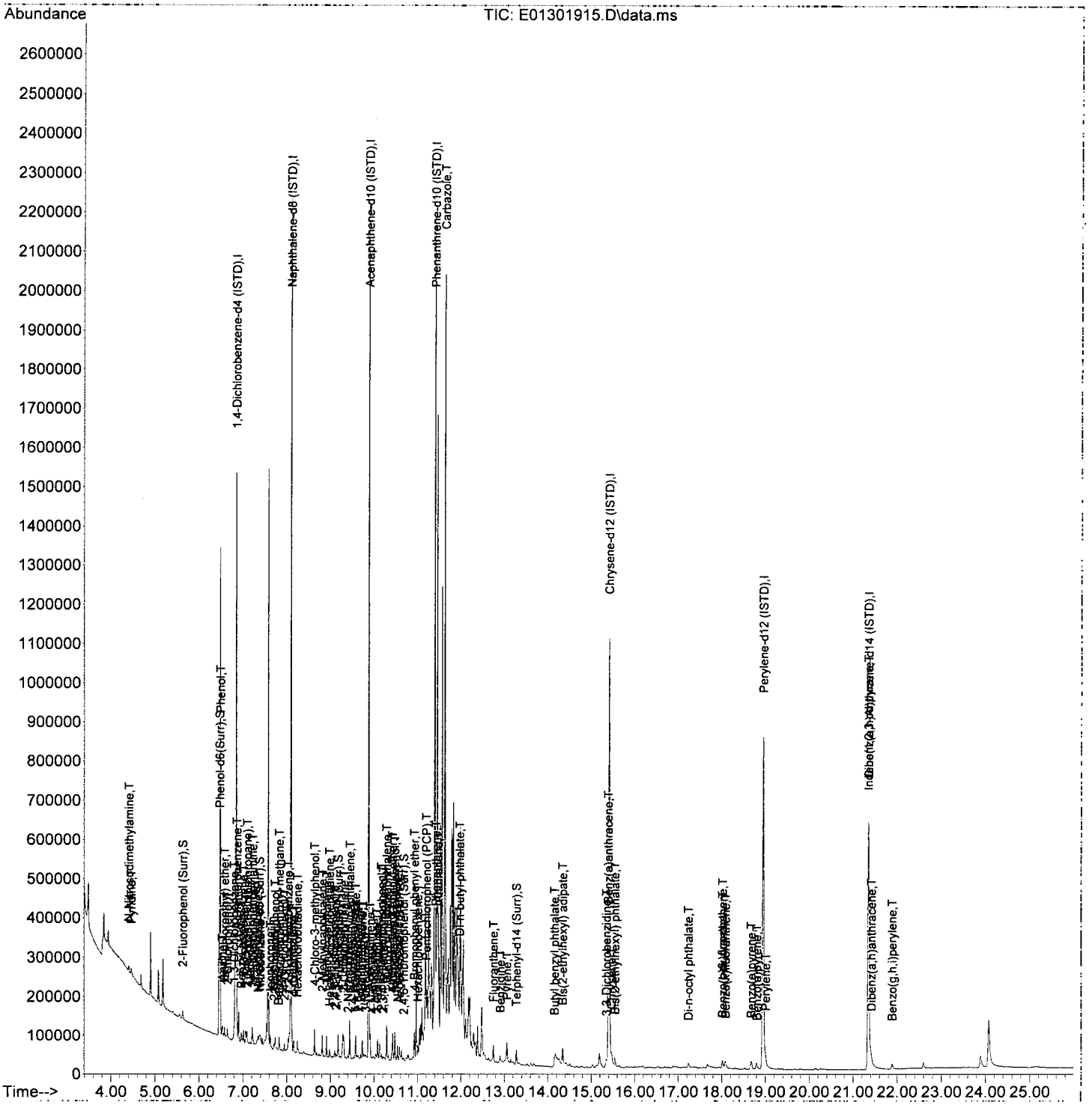
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	45.49
229.90	79.80	62.82
0.00	0.00	0.00

1/31/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301915.D
Acq On : 30 Jan 2019 7:37 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL2
Misc : 1x, A18L328@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:50 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	274393	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1090991	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	474233	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	790595	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.410	240	690491	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.946	264	611891	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.347	292	467911	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	16374	98.64	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	22782	105.57	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	17308	89.48	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	36884	100.90	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	2028	93.89	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.276	244	32265	103.27	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.403	74	12079	101.56	ng/ml	96
3) Pyridine	4.451	79	19576	102.26	ng/ml	85
6) Phenol	6.484	94	24600	106.45	ng/ml	93
7) Aniline	6.532	93	30756	108.47	ng/ml	99
8) Bis(2-chloroethyl) ether	6.580	93	18886	97.36	ng/ml	97
9) 2-Chlorophenol	6.649	128	17282	95.13	ng/ml	98
10) 1,3-Dichlorobenzene	6.799	146	20846	95.85	ng/ml	96
11) 1,4-Dichlorobenzene	6.863	146	21382	96.50	ng/ml	98
12) Benzyl alcohol	6.965	108	9554	111.61	ng/ml	95
13) 1,2-Dichlorobenzene	7.013	146	20256	97.24	ng/ml	97
14) 2-Methylphenol	7.067	107	14811	102.90	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.093	45	32803	124.52	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.222	70	14289	105.84	ng/ml	98
17) 3+4-Methylphenol	7.211	107	18073	96.98	ng/ml	95
18) Hexachloroethane	7.345	117	7837	100.79	ng/ml	90
20) Nitrobenzene	7.398	77	18438	95.89	ng/ml	98
22) Isophorone	7.623	82	35464	99.96	ng/ml	97
23) 2-Nitrophenol	7.714	139	5408	56.82	ng/ml	88
24) 2,4-Dimethylphenol	7.735	122	15179	97.01	ng/ml	92
25) Bis(2-chloroethoxy) me...	7.831	93	23620	104.13	ng/ml	97
26) Benzoic acid	7.821	105	308	844.21	ng/ml#	74
27) 2,4-Dichlorophenol	7.949	162	10325	74.89	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.035	180	15521	95.99	ng/ml	95
29) Naphthalene	8.115	128	59651	100.20	ng/ml	100
30) 4-Chloroaniline	8.158	127	19347	88.40	ng/ml	98
31) Hexachlorobutadiene	8.243	225	7485	94.24	ng/ml	96
32) 4-Chloro-3-methylphenol	8.634	107	9340	92.53	ng/ml#	44
33) 2-Methylnaphthalene	8.810	142	36689	94.47	ng/ml	96
34) 1-Methylnaphthalene	8.912	142	35408	93.61	ng/ml	98
36) Hexachlorocyclopentadiene	8.981	237	5330	86.72	ng/ml	96
37) 2,4,6-Trichlorophenol	9.094	196	5412	94.00	ng/ml	98
38) 2,4,5-Trichlorophenol	9.131	196	5163	79.94	ng/ml	93
39) 1,1'-Biphenyl	9.281	154	42772	102.22	ng/ml	100
41) 2-Chloronaphthalene	9.308	162	30467	101.69	ng/ml	99
42) 2-Nitroaniline	9.399	138	4661	45.04	ng/ml	96

See MS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.441	156	29357	100.49	ng/ml	98
44) 1,4-Dinitrobenzene	9.527	168	1254	26.99	ng/ml	76
45) Dimethyl phthalate	9.575	163	27948	84.22	ng/ml	98
46) 1,3-Dinitrobenzene	9.607	168	1734	33.37	ng/ml	90
47) 2,6-Dinitrotoluene	9.639	165	3823	50.77	ng/ml	95
48) 1,2-Dinitrobenzene	9.698	168	1698	51.70	ng/ml	88
49) Acenaphthylene	9.730	152	47041	99.24	ng/ml	100
50) 3-Nitroaniline	9.816	138	4826	56.15	ng/ml	84
51) Acenaphthene	9.907	153	32436	99.00	ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.971	139	2407	107.66	ng/ml	95
54) 2,4-Dinitrotoluene	10.051	165	3832	40.09	ng/ml	91
55) Dibenzofuran	10.083	168	40600	94.50	ng/ml	86
56) 2,3,5,6-Tetrachlorophenol	10.163	232	2714	82.70	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.206	232	3745	84.51	ng/ml	89
58) Diethyl phthalate	10.292	149	27965	84.31	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.292	170	25788	96.67	ng/ml	95
60) Fluorene	10.436	166	32279	93.97	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.426	204	13730	92.14	ng/ml	92
62) 4-Nitroaniline	10.436	138	5107	57.89	ng/ml	86
63) 4,6-Dinitro-2-methylph...	10.474	198	342	83.78	ng/ml#	1
65) N-Nitrosodiphenylamine	10.543	169	24736	96.92	ng/ml	98
66) Azobenzene (1,2-DPH)	10.586	77	34575	112.09	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.928	248	7025	103.04	ng/ml	99
69) Hexachlorobenzene	11.009	284	7238	102.83	ng/ml	98
70) Pentachlorophenol (PCP)	11.201	266	1341	102.51	ng/ml	91
71) Phenanthrene	11.420	178	45679	99.68	ng/ml	99
72) Anthracene	11.474	178	46433	104.82	ng/ml	99
73) Carbazole	11.629	167	43052	110.66	ng/ml	97
74) Di-n-butyl phthalate	11.966	149	51497	107.89	ng/ml	98
75) Fluoranthene	12.742	202	45822	103.97	ng/ml	97
76) Benzidine	12.902	184	18666	147.24	ng/ml	95
77) Pyrene	13.057	202	46111	101.53	ng/ml	99
80) Butyl benzyl phthalate	14.159	149	14773	98.07	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.341	129	18339	97.22	ng/ml	95
82) 3,3-Dichlorobenzidine	15.341	252	18339	195.28	ng/ml	98
83) Benz(a)anthracene	15.384	228	37587	94.36	ng/ml	100
84) Chrysene	15.469	228	36919	97.99	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.550	149	19228	65.51	ng/ml	97
87) Di-n-octyl phthalate	17.234	149	21395	121.10	ng/ml	92
88) Benzo(b)fluoranthene	18.015	252	29112	99.29	ng/ml	96
89) Benzo(k)fluoranthene	18.079	252	29589	98.12	ng/ml	99
90) Benzo(b+k)fluoranthene	18.079	252	63728	201.74	ng/ml	99
91) Benzo(e)pyrene	18.673	252	31282	99.19	ng/ml	97
92) Benzo(a)pyrene	18.796	252	25304	95.97	ng/ml	97
93) Perylene	19.005	252	33514	95.67	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.342	276	24570	85.51	ng/ml	86
96) Dibenz(a,h)anthracene	21.406	278	22041	80.24	ng/ml	90
97) Benzo(g,h,i)perylene	21.882	276	24346	84.12	ng/ml	85

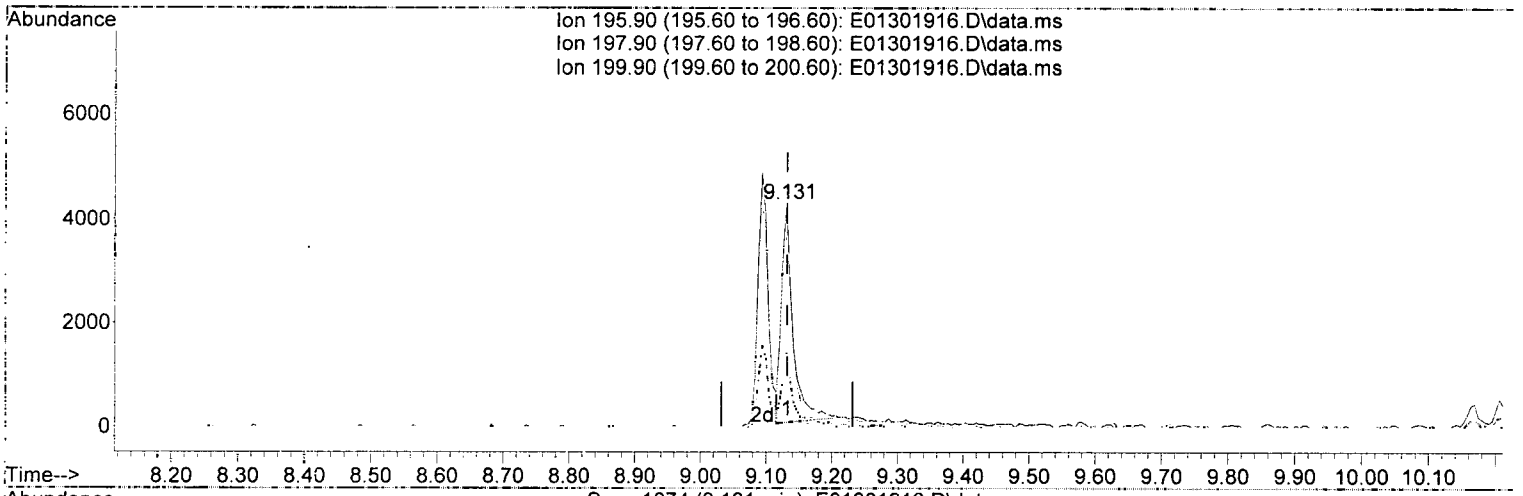
See M.I

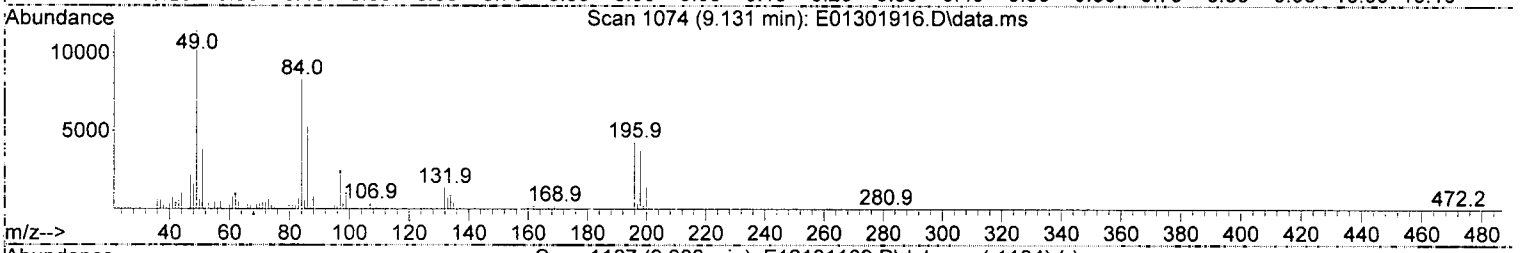
(#) = qualifier out of range (m) = manual integration (+) = signals summed

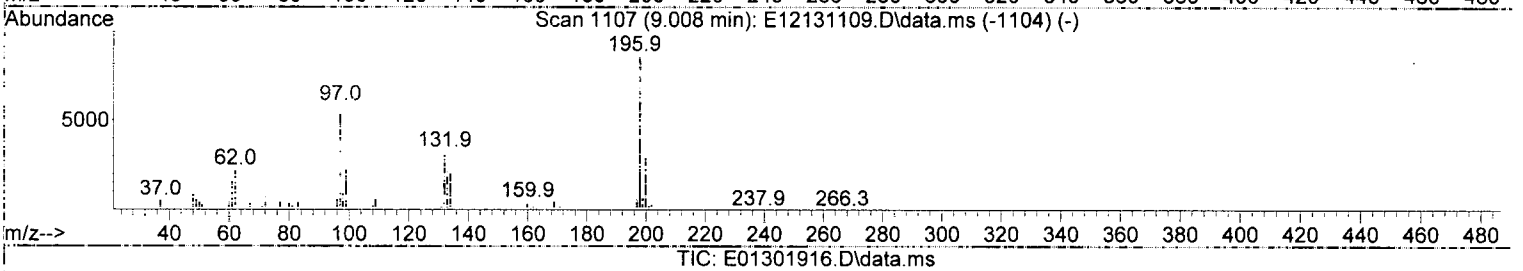
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301916.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.131min (-0.000) 79.94 ng/ml

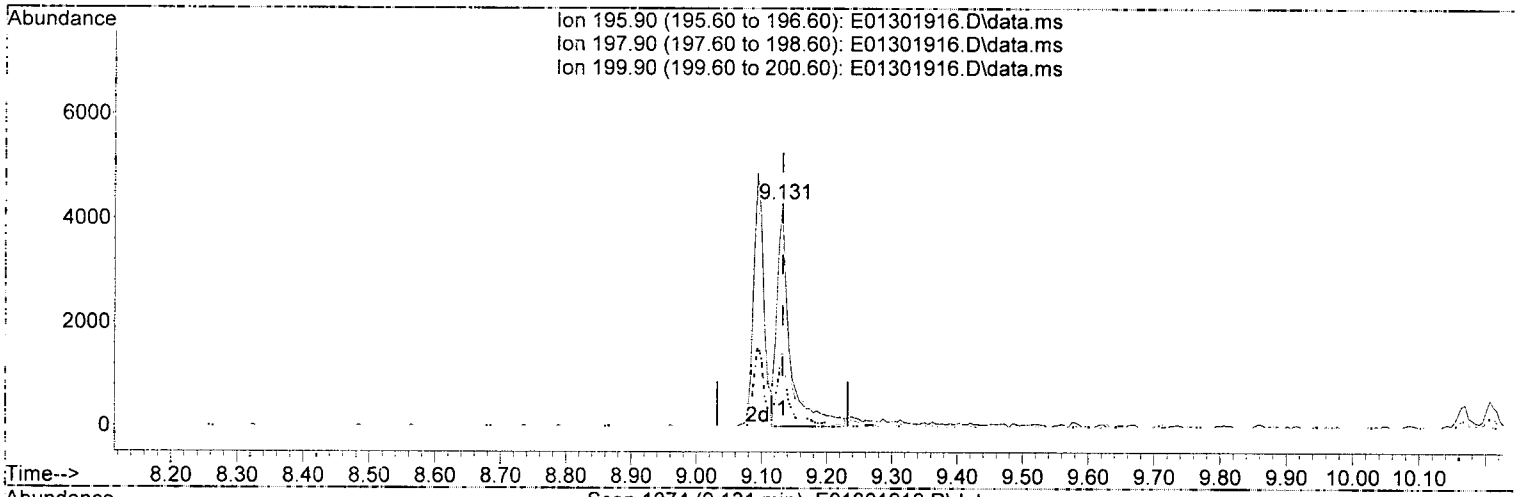
response 5163

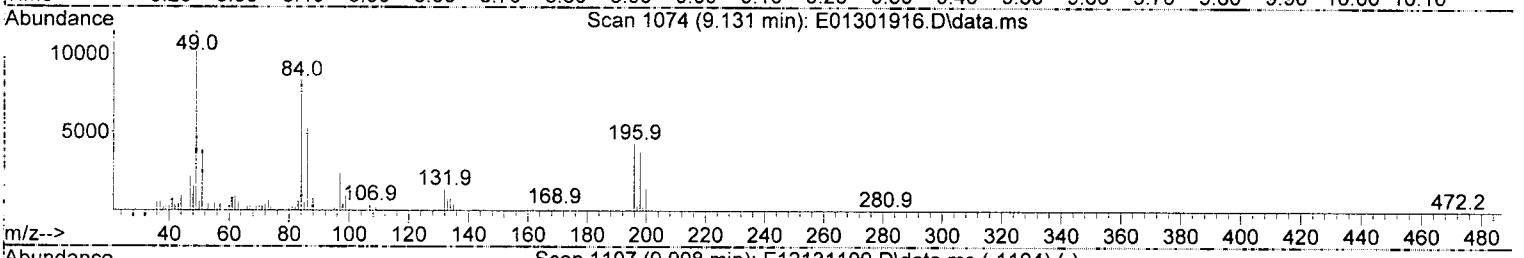
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.47
199.90	32.40	33.06
0.00	0.00	0.00

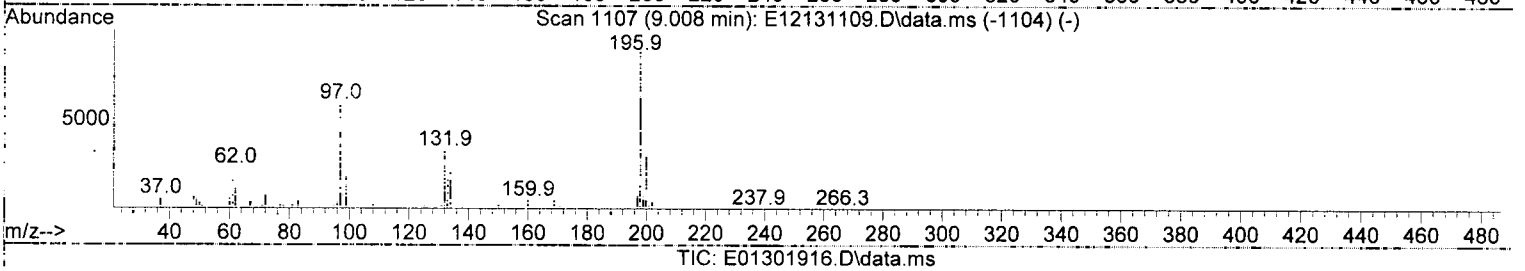
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301916.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.131min (-0.000) 91.76 ng/ml m

response 6051

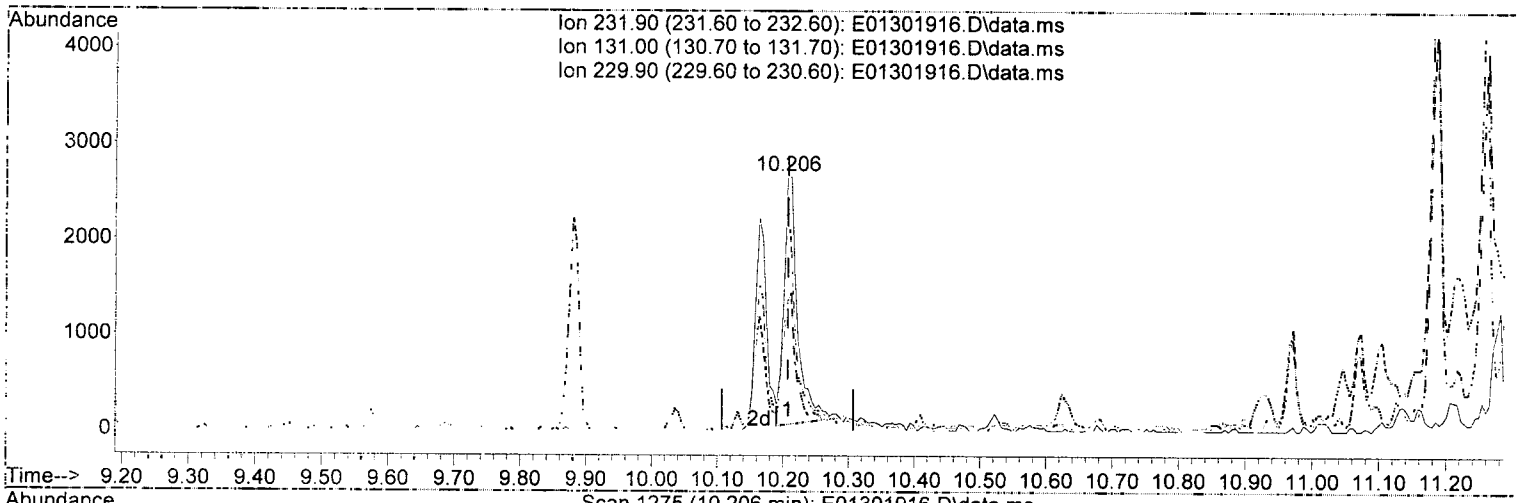
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.47
199.90	32.40	33.06
0.00	0.00	0.00

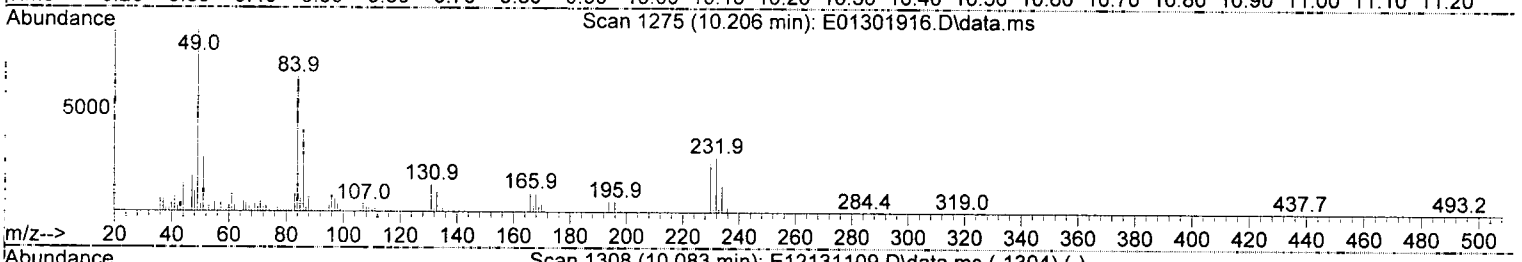
1/31/19

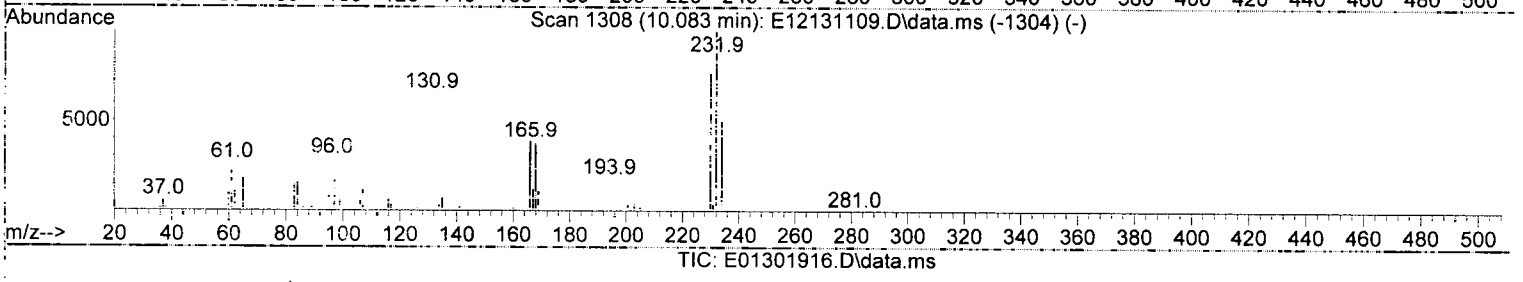
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301916.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.206min (-0.000) 84.51 ng/ml

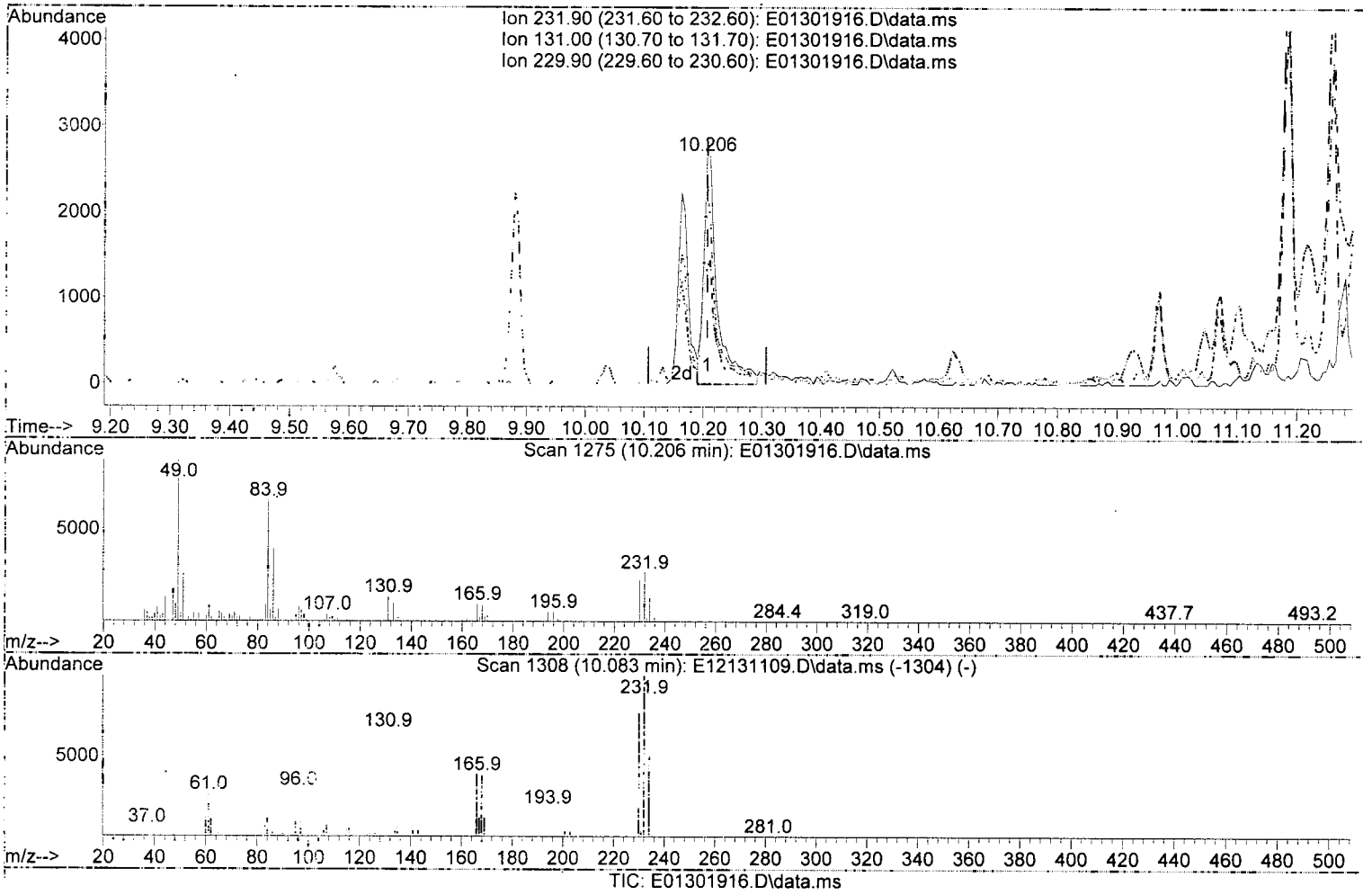
response 3745

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	50.43
229.90	79.80	86.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E01301916.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.206min (-0.000) 93.09 ng/ml m

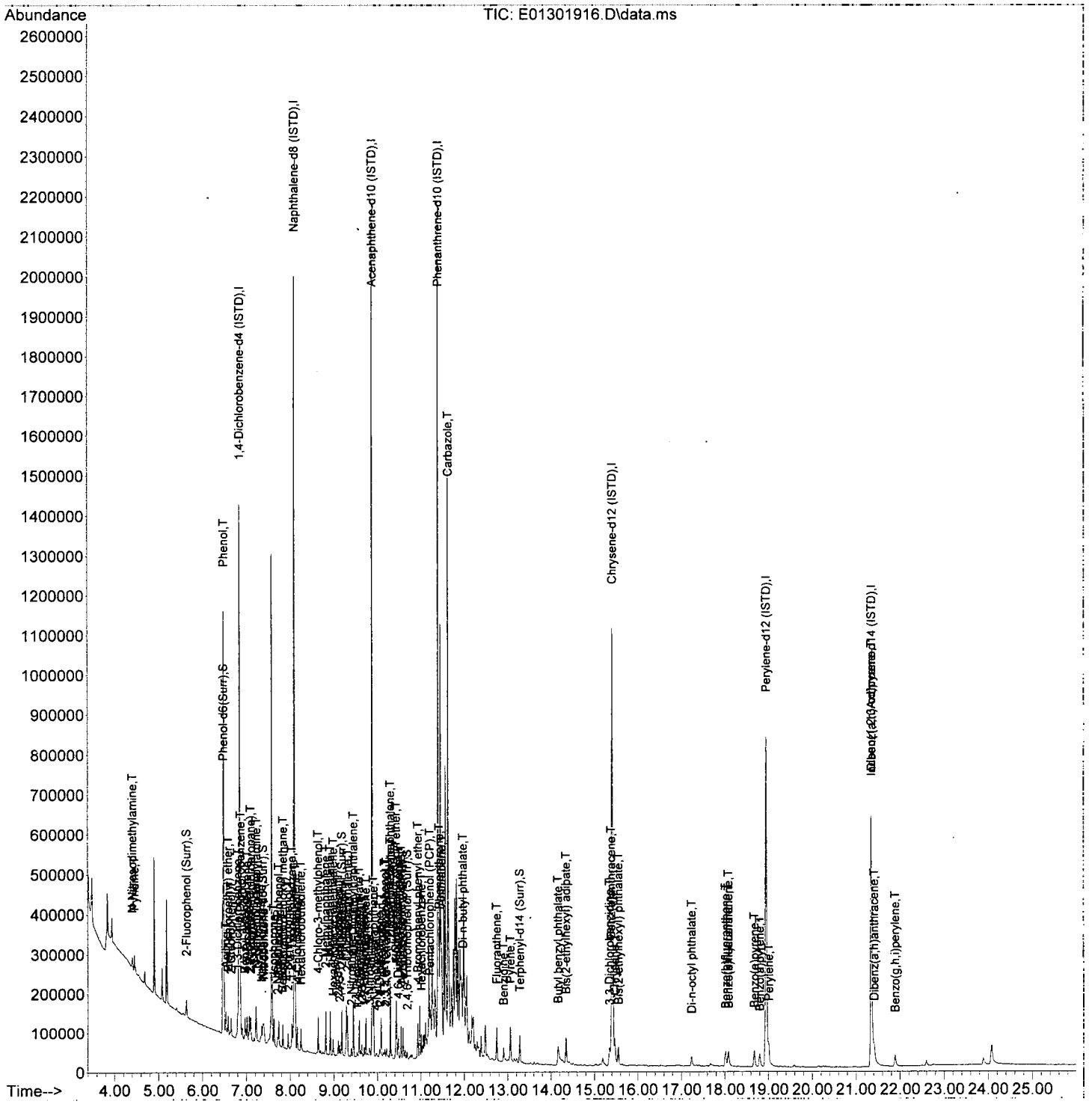
response 4318

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	50.43
229.90	79.80	86.85
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301916.D
Acq On : 30 Jan 2019 8:13 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL3
Misc : 1x, A18L329@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:52:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301917.D
Acq On : 30 Jan 2019 8:50 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL4
Misc : 1x, A18L330@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	290867	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1128963	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	497817	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	851122	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.411	240	721909	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.946	264	642441	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	493160	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	35753	203.19	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	47985	209.76	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	38942	189.93	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	77186	201.16	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	5139	203.22	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.276	244	69836	213.79	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.392	74	26607	211.04	ng/ml	93
3) Pyridine	4.441	79	42897	211.40	ng/ml	93
6) Phenol	6.484	94	50967	208.05	ng/ml	93
7) Aniline	6.526	93	63650	211.77	ng/ml	98
8) Bis(2-chloroethyl) ether	6.580	93	42294	205.69	ng/ml	96
9) 2-Chlorophenol	6.644	128	37904	196.82	ng/ml	97
10) 1,3-Dichlorobenzene	6.794	146	44104	191.30	ng/ml	97
11) 1,4-Dichlorobenzene	6.863	146	44829	190.86	ng/ml	99
12) Benzyl alcohol	6.965	108	21731	210.30	ng/ml	96
13) 1,2-Dichlorobenzene	7.013	146	42117	190.72	ng/ml	98
14) 2-Methylphenol	7.061	107	31237	204.73	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.093	45	67804	242.80	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.222	70	30932	216.14	ng/ml	96
17) 3+4-Methylphenol	7.211	107	38619	195.49	ng/ml	97
18) Hexachloroethane	7.345	117	16252	197.18	ng/ml	84
20) Nitrobenzene	7.393	77	41375	202.98	ng/ml	96
22) Isophorone	7.623	82	76306	207.85	ng/ml	99
23) 2-Nitrophenol	7.714	139	12965	131.64	ng/ml	91
24) 2,4-Dimethylphenol	7.735	122	32468	200.53	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.832	93	48550	206.85	ng/ml	99
26) Benzoic acid	7.810	105	538	846.50	ng/ml	92
27) 2,4-Dichlorophenol	7.944	162	23291	163.25	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.035	180	31882	190.55	ng/ml	95
29) Naphthalene	8.115	128	122429	198.73	ng/ml	99
30) 4-Chloroaniline	8.158	127	39584	174.79	ng/ml	98
31) Hexachlorobutadiene	8.243	225	15189	184.81	ng/ml	99
32) 4-Chloro-3-methylphenol	8.634	107	22255	177.28	ng/ml	78
33) 2-Methylnaphthalene	8.810	142	76316	189.90	ng/ml	97
34) 1-Methylnaphthalene	8.912	142	72918	186.29	ng/ml	97
36) Hexachlorocyclopentadiene	8.982	237	12226	189.50	ng/ml	94
37) 2,4,6-Trichlorophenol	9.094	196	12662	175.88	ng/ml	97
38) 2,4,5-Trichlorophenol	9.131	196	12964	175.26	ng/ml	98
39) 1,1'-Biphenyl	9.281	154	88511	201.52	ng/ml	98
41) 2-Chloronaphthalene	9.308	162	63199	200.94	ng/ml	98
42) 2-Nitroaniline	9.399	138	12071	111.12	ng/ml	98

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301917.D
Acq On : 30 Jan 2019 8:50 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL4
Misc : 1x, A18L330@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

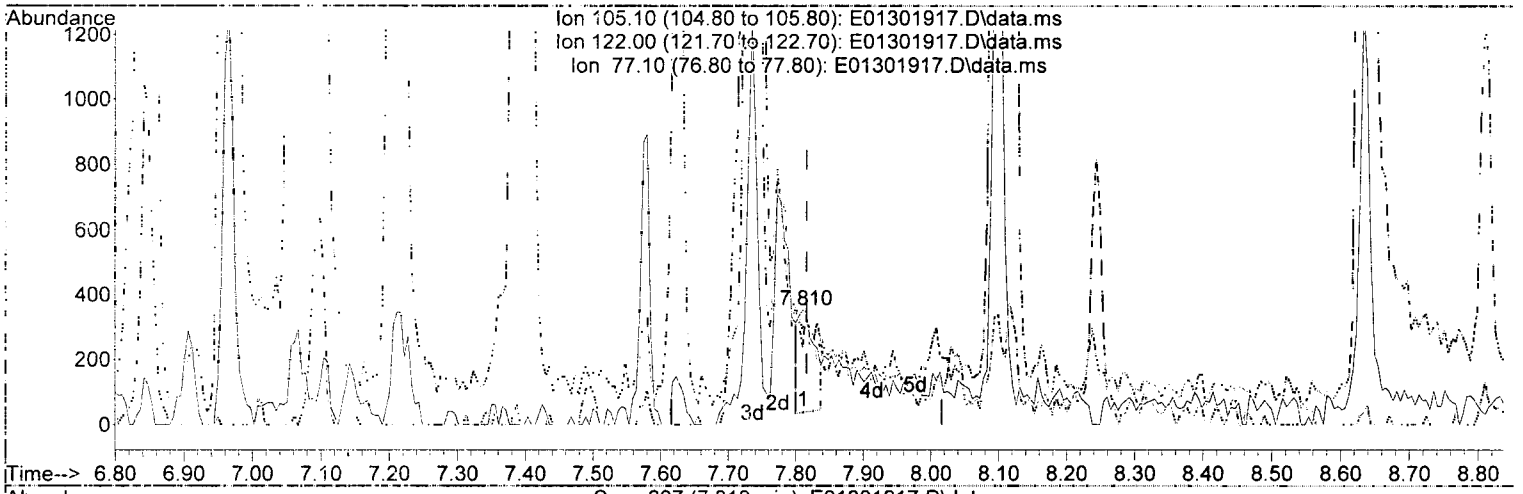
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.441	156	61710	201.24	ng/ml	99
44) 1,4-Dinitrobenzene	9.527	168	3705	75.97	ng/ml	93
45) Dimethyl phthalate	9.575	163	63042	180.98	ng/ml	99
46) 1,3-Dinitrobenzene	9.607	168	5323	97.57	ng/ml	96
47) 2,6-Dinitrotoluene	9.639	165	10458	132.30	ng/ml	97
48) 1,2-Dinitrobenzene	9.698	168	4275	123.99	ng/ml	88
49) Acenaphthylene	9.730	152	100207	201.39	ng/ml	99
50) 3-Nitroaniline	9.816	138	12489	138.41	ng/ml	94
51) Acenaphthene	9.912	153	67960	197.59	ng/ml	99
52) 2,4-Dinitrophenol	9.923	184	686	185.31	ng/ml	69
53) 4-Nitrophenol	9.971	139	6776	171.64	ng/ml	89
54) 2,4-Dinitrotoluene	10.051	165	11280	112.41	ng/ml	95
55) Dibenzofuran	10.083	168	85176	188.87	ng/ml	90
56) 2,3,5,6-Tetrachlorophenol	10.164	232	7669	157.36	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.206	232	9650	166.04	ng/ml	97
58) Diethyl phthalate	10.292	149	64179	184.32	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.292	170	54877	195.96	ng/ml	98
60) Fluorene	10.436	166	69347	192.31	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.426	204	29765	190.29	ng/ml	91
62) 4-Nitroaniline	10.436	138	13118	141.64	ng/ml	82
63) 4,6-Dinitro-2-methylph...	10.474	198	1644	110.99	ng/ml	91
65) N-Nitrosodiphenylamine	10.543	169	55485	201.93	ng/ml	97
66) Azobenzene (1,2-DPH)	10.586	77	76986	231.83	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.928	248	15771	214.87	ng/ml	94
69) Hexachlorobenzene	11.009	284	15793	208.42	ng/ml	98
70) Pentachlorophenol (PCP)	11.201	266	4272	168.33	ng/ml	94
71) Phenanthrene	11.420	178	96988	196.59	ng/ml	100
72) Anthracene	11.474	178	99476	208.60	ng/ml	100
73) Carbazole	11.629	167	91479	218.42	ng/ml	99
74) Di-n-butyl phthalate	11.966	149	111961	217.89	ng/ml	98
75) Fluoranthene	12.742	202	98210	207.00	ng/ml	97
76) Benzidine	12.902	184	37500	215.15	ng/ml	96
77) Pyrene	13.057	202	100024	204.57	ng/ml	99
80) Butyl benzyl phthalate	14.154	149	38485	204.24	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.341	129	40129	203.48	ng/ml	99
82) 3,3-Dichlorobenzidine	15.341	252	43713	409.50	ng/ml	99
83) Benz(a)anthracene	15.384	228	79592	191.12	ng/ml	98
84) Chrysene	15.469	228	77934	197.85	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.544	149	50647	165.05	ng/ml	98
87) Di-n-octyl phthalate	17.234	149	63652	215.44	ng/ml	95
88) Benzo(b)fluoranthene	18.015	252	66187	204.64	ng/ml	98
89) Benzo(k)fluoranthene	18.085	252	67887	203.84	ng/ml	98
90) Benzo(b+k)fluoranthene	18.015	252	141743	409.23	ng/ml	99
91) Benzo(e)pyrene	18.673	252	68515	206.91	ng/ml	99
92) Benzo(a)pyrene	18.796	252	58935	199.15	ng/ml	99
93) Perylene	19.000	252	70185	190.82	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.342	276	51991	171.67	ng/ml	92
96) Dibenz(a,h)anthracene	21.412	278	48121	166.21	ng/ml	98
97) Benzo(g,h,i)perylene	21.888	276	53734	176.15	ng/ml	87

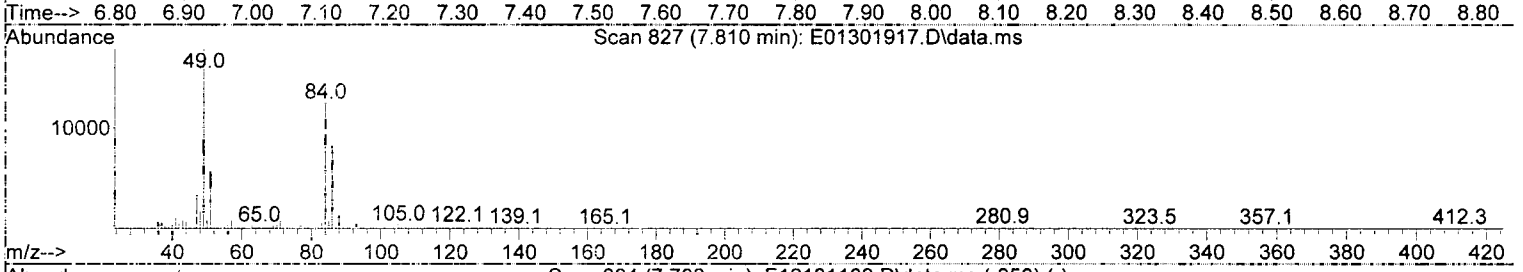
(#) = qualifier out of range (m) = manual integration (+) = signals summed

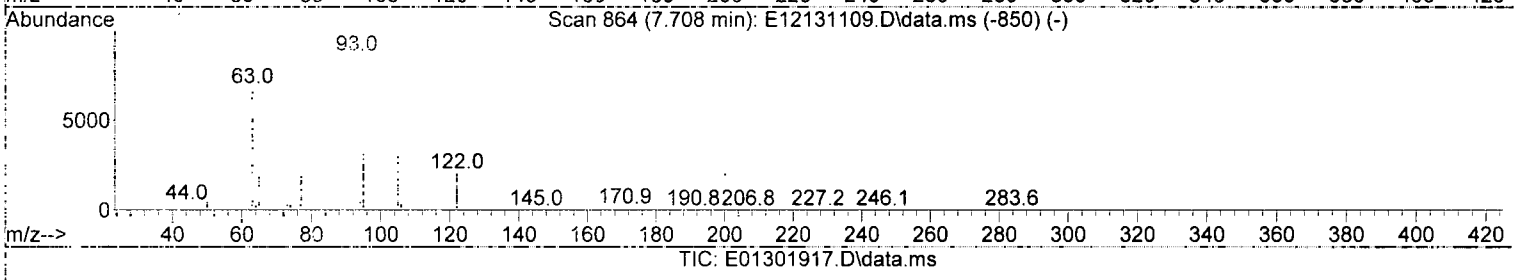
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301917.D
Acq On : 30 Jan 2019 8:50 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL4
Misc : 1x, A18L330@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301917.D\data.ms

(26) Benzoic acid (T)

7.810min (-0.005) 846.50 ng/ml

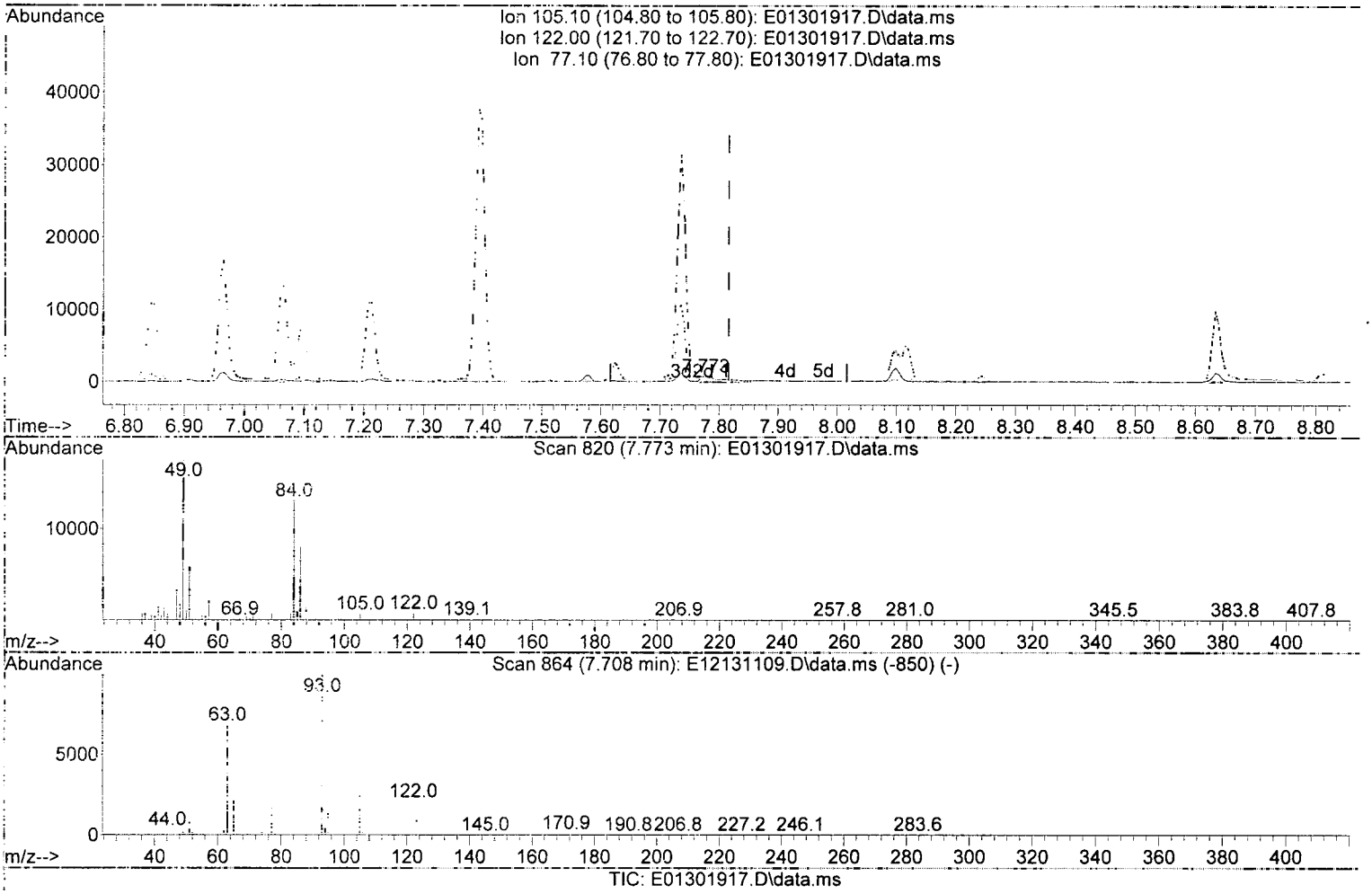
response 538

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	66.76
77.10	85.50	83.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301917.D
Acq On : 30 Jan 2019 8:50 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL4
Misc : 1x, A18L330@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(26) Benzoic acid (T)

7.773min (-0.043) 861.74 ng/ml (m) 1/31/19

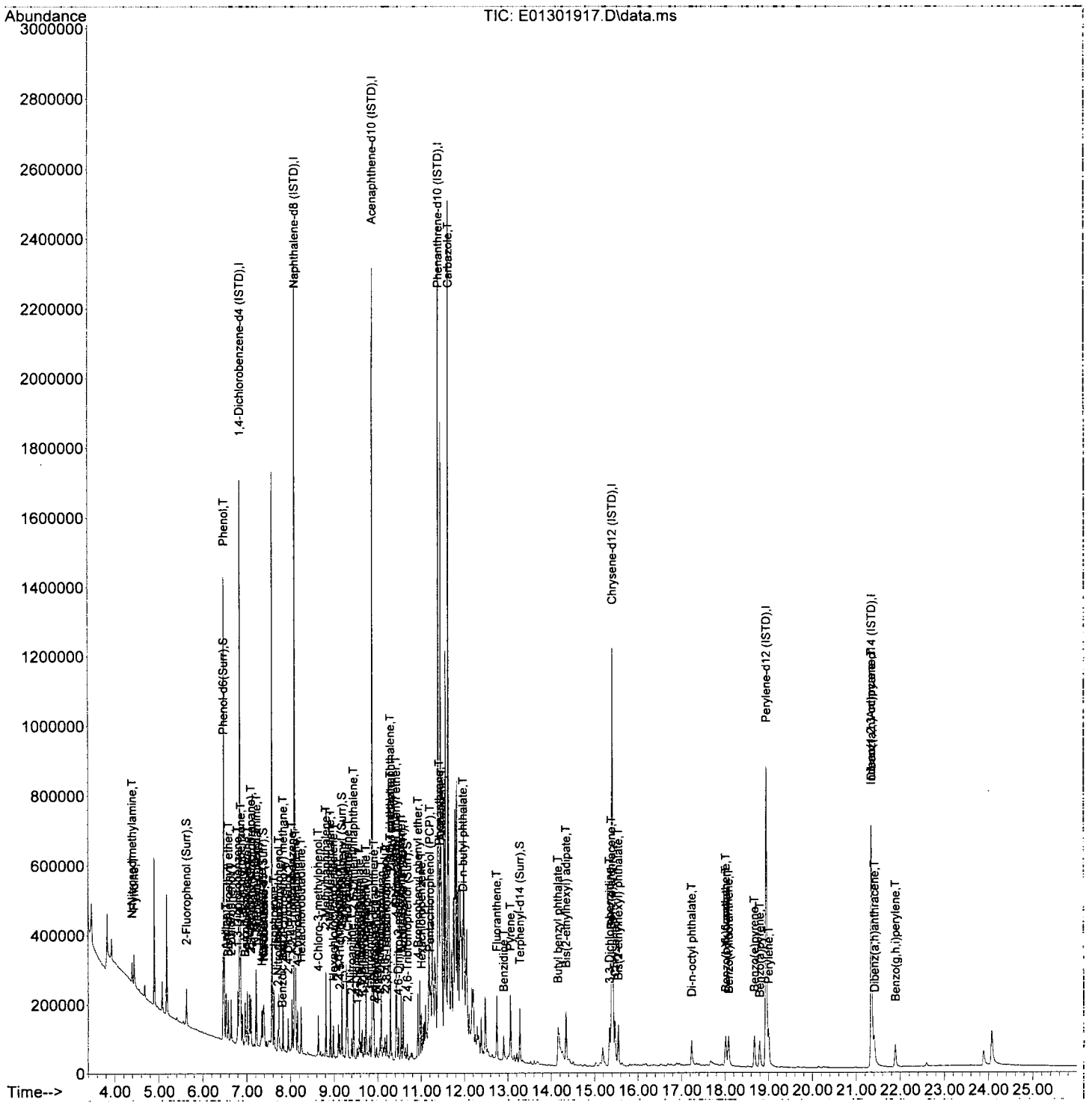
response 2001

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	110.73#
77.10	85.50	106.21
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301917.D
Acq On : 30 Jan 2019 8:50 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL4
Misc : 1x, A18L330@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:02 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301918.D
Acq On : 30 Jan 2019 9:26 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL5
Misc : 1x, A18L331@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:08 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	282130	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1119185	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	509897	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	935268	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	839042	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	760928	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	615052	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	92637	542.77	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	124633	561.68	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	116738	587.00	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	198705	505.58	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	17303	589.77	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	202060	532.22	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.387	74	68738	562.11	ng/ml	89
3) Pyridine	4.430	79	111106	564.50	ng/ml	96
6) Phenol	6.484	94	128306	539.97	ng/ml	93
7) Aniline	6.527	93	159299	546.41	ng/ml	97
8) Bis(2-chloroethyl) ether	6.580	93	105210	527.51	ng/ml	96
9) 2-Chlorophenol	6.644	128	97220	520.45	ng/ml	99
10) 1,3-Dichlorobenzene	6.794	146	108871	486.86	ng/ml	98
11) 1,4-Dichlorobenzene	6.864	146	111060	487.49	ng/ml	99
12) Benzyl alcohol	6.965	108	59139	540.17	ng/ml	93
13) 1,2-Dichlorobenzene	7.013	146	104161	486.29	ng/ml	97
14) 2-Methylphenol	7.067	107	81540	550.97	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.093	45	168498	622.05	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.222	70	81082	584.12	ng/ml	96
17) 3+4-Methylphenol	7.211	107	104697	546.40	ng/ml	94
18) Hexachloroethane	7.345	117	40316	504.28	ng/ml	86
20) Nitrobenzene	7.393	77	109635	554.52	ng/ml	95
22) Isophorone	7.623	82	203487	559.11	ng/ml	99
23) 2-Nitrophenol	7.714	139	40651	416.35	ng/ml	91
24) 2,4-Dimethylphenol	7.735	122	87099	542.65	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.832	93	126251	542.59	ng/ml	98
26) Benzoic acid	7.789	105	24058	1091.25	ng/ml	94
27) 2,4-Dichlorophenol	7.949	162	66479	470.03	ng/ml	100
28) 1,2,4-Trichlorobenzene	8.040	180	78967	476.08	ng/ml	95
29) Naphthalene	8.120	128	307927	504.19	ng/ml	98
30) 4-Chloroaniline	8.158	127	102663	457.29	ng/ml	97
31) Hexachlorobutadiene	8.243	225	38478	472.27	ng/ml	99
32) 4-Chloro-3-methylphenol	8.634	107	69673	497.87	ng/ml	94
33) 2-Methylnaphthalene	8.810	142	195835	491.55	ng/ml	97
34) 1-Methylnaphthalene	8.912	142	188716	486.34	ng/ml	98
36) Hexachlorocyclopentadiene	8.982	237	34778	526.29	ng/ml	96
37) 2,4,6-Trichlorophenol	9.094	196	39573	479.41	ng/ml	99
38) 2,4,5-Trichlorophenol	9.126	196	40483	506.08	ng/ml	97
39) 1,1'-Biphenyl	9.281	154	230563	512.49	ng/ml	99
41) 2-Chloronaphthalene	9.308	162	163765	508.35	ng/ml	100
42) 2-Nitroaniline	9.404	138	43914	394.68	ng/ml	89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301918.D
Acq On : 30 Jan 2019 9:26 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL5
Misc : 1x, A18L331@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:08 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

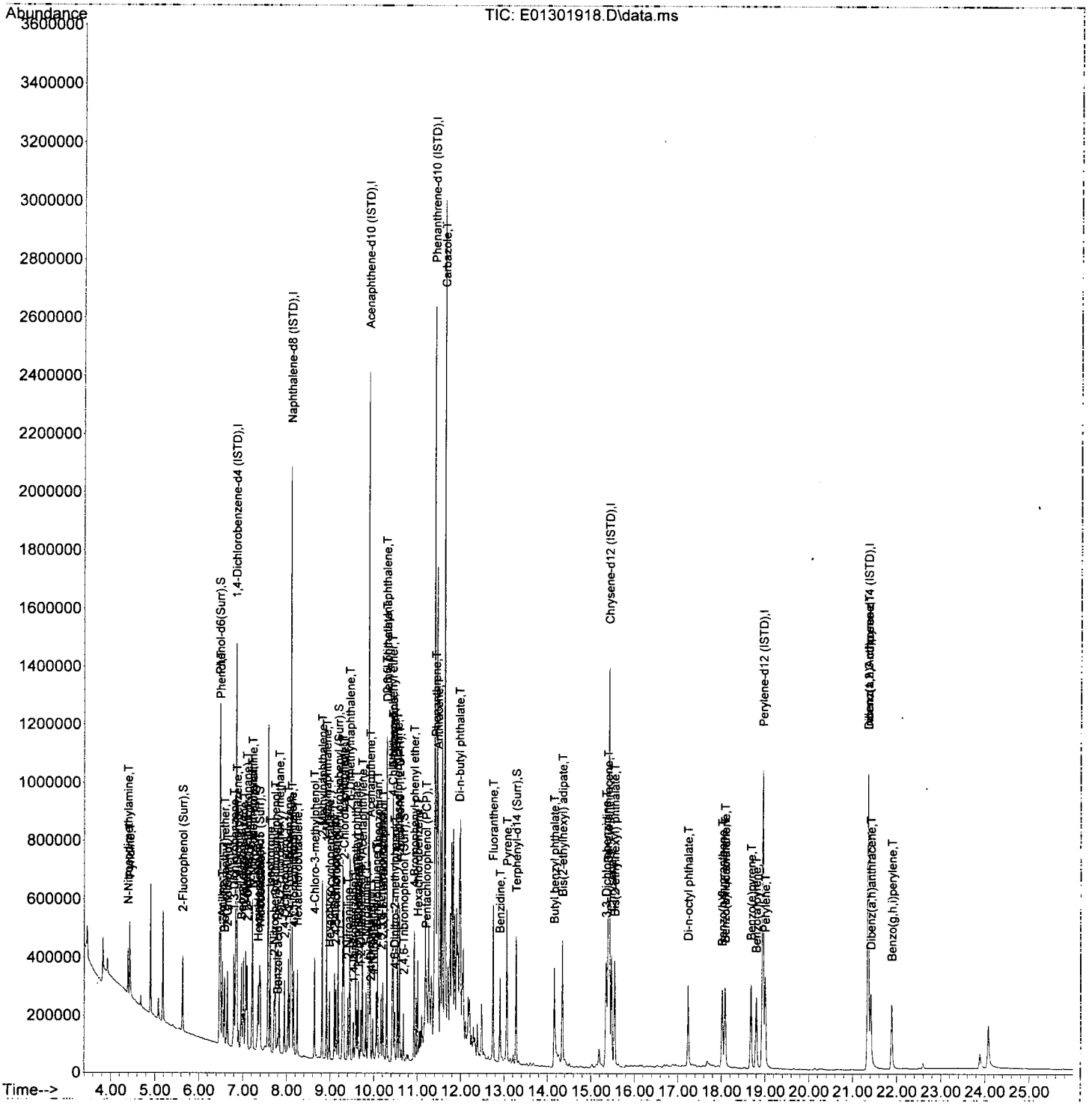
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.442	156	161748	514.96	ng/ml	97
44) 1,4-Dinitrobenzene	9.532	168	15009	300.45	ng/ml	87
45) Dimethyl phthalate	9.581	163	175061	490.67	ng/ml	100
46) 1,3-Dinitrobenzene	9.613	168	21039	376.51	ng/ml	92
47) 2,6-Dinitrotoluene	9.639	165	35146	434.09	ng/ml	95
48) 1,2-Dinitrobenzene	9.698	168	15598	441.67	ng/ml	85
49) Acenaphthylene	9.730	152	268456	526.73	ng/ml	99
50) 3-Nitroaniline	9.816	138	40839	441.89	ng/ml	94
51) Acenaphthene	9.912	153	176086	499.84	ng/ml	99
52) 2,4-Dinitrophenol	9.923	184	4803	303.29	ng/ml	93
53) 4-Nitrophenol	9.971	139	27714	474.08	ng/ml	87
54) 2,4-Dinitrotoluene	10.051	165	41590	404.63	ng/ml	97
55) Dibenzofuran	10.083	168	231005	500.10	ng/ml	92
56) 2,3,5,6-Tetrachlorophenol	10.164	232	28568	467.61	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.206	232	33782	497.12	ng/ml	96
58) Diethyl phthalate	10.297	149	182306	511.19	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.292	170	148844	518.92	ng/ml	97
60) Fluorene	10.436	166	189023	511.77	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.426	204	81475	508.54	ng/ml	91
62) 4-Nitroaniline	10.436	138	45265	477.18	ng/ml	84
63) 4,6-Dinitro-2-methylph...	10.474	198	10218	285.80	ng/ml	91
65) N-Nitrosodiphenylamine	10.543	169	159639	528.72	ng/ml	97
66) Azobenzene (1,2-DPH)	10.586	77	223701	613.02	ng/ml	98
68) 4-Bromophenyl phenyl e...	10.923	248	44122	547.04	ng/ml	95
69) Hexachlorobenzene	11.009	284	42972	516.08	ng/ml	95
70) Pentachlorophenol (PCP)	11.201	266	18186	451.52	ng/ml	97
71) Phenanthrene	11.421	178	271509	500.82	ng/ml	99
72) Anthracene	11.474	178	280169	534.65	ng/ml	99
73) Carbazole	11.629	167	257322	559.12	ng/ml	99
74) Di-n-butyl phthalate	11.966	149	318442	563.97	ng/ml	99
75) Fluoranthene	12.742	202	281703	540.32	ng/ml	97
76) Benzidine	12.902	184	152834	608.56	ng/ml	95
77) Pyrene	13.063	202	285718	531.77	ng/ml	99
80) Butyl benzyl phthalate	14.154	149	124269	516.51	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.341	129	118447	516.75	ng/ml	97
82) 3,3-Dichlorobenzidine	15.346	252	145270	1106.24	ng/ml	99
83) Benz(a)anthracene	15.389	228	236770	489.18	ng/ml	98
84) Chrysene	15.469	228	232271	507.34	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.544	149	168525	472.51	ng/ml	98
87) Di-n-octyl phthalate	17.235	149	245753	538.14	ng/ml	98
88) Benzo(b)fluoranthene	18.015	252	209622	528.78	ng/ml	99
89) Benzo(k)fluoranthene	18.085	252	210325	517.81	ng/ml	97
90) Benzo(b+k)fluoranthene	18.085	252	437476	1037.22	ng/ml	97
91) Benzo(e)pyrene	18.679	252	211572	539.44	ng/ml	100
92) Benzo(a)pyrene	18.796	252	193455	529.09	ng/ml	98
93) Perylene	19.005	252	216816	497.70	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.348	276	166318	440.34	ng/ml	95
96) Dibenz(a,h)anthracene	21.412	278	156689	433.95	ng/ml	97
97) Benzo(g,h,i)perylene	21.888	276	175449	461.18	ng/ml	88

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301918.D
Acq On : 30 Jan 2019 9:26 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL5
Misc : 1x, A18L331@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:08 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301919.D
Acq On : 30 Jan 2019 10:02 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL6
Misc : 1x, A18L332@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JJK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.848	152	286436	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1096117	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	493423	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	840808	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	707423	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	630113	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.348	292	502143	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	186079	1073.87	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	244299	1084.42	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	210602	1043.06	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.180	172	371894	977.83	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	33163	1220.16	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	340885	1064.94	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.387	74	136572	1100.04	ng/ml	88
3) Pyridine	4.425	79	220078	1101.34	ng/ml	95
6) Phenol	6.489	94	252632	1047.20	ng/ml	91
7) Aniline	6.532	93	316926	1070.75	ng/ml	97
8) Bis(2-chloroethyl) ether	6.580	93	205585	1015.27	ng/ml	96
9) 2-Chlorophenol	6.650	128	192879	1017.03	ng/ml	98
10) 1,3-Dichlorobenzene	6.799	146	212750	937.09	ng/ml	97
11) 1,4-Dichlorobenzene	6.864	146	215651	932.36	ng/ml	99
12) Benzyl alcohol	6.965	108	119831	1039.39	ng/ml	95
13) 1,2-Dichlorobenzene	7.013	146	203885	937.56	ng/ml	98
14) 2-Methylphenol	7.067	107	158539	1055.15	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	325929	1185.16	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.222	70	155529	1103.61	ng/ml	96
17) 3+4-Methylphenol	7.211	107	201525	1035.93	ng/ml	94
18) Hexachloroethane	7.345	117	80048	986.21	ng/ml	85
20) Nitrobenzene	7.398	77	213695	1064.59	ng/ml	93
22) Isophorone	7.628	82	391987	1099.71	ng/ml	97
23) 2-Nitrophenol	7.714	139	83980	878.23	ng/ml	89
24) 2,4-Dimethylphenol	7.741	122	168017	1068.32	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.832	93	237898	1043.93	ng/ml	98
26) Benzoic acid	7.816	105	97527	1844.98	ng/ml	97
27) 2,4-Dichlorophenol	7.949	162	129436	934.42	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.040	180	151142	930.38	ng/ml	96
29) Naphthalene	8.120	128	582708	974.20	ng/ml	99
30) 4-Chloroaniline	8.163	127	195519	889.22	ng/ml	97
31) Hexachlorobutadiene	8.243	225	76109	953.81	ng/ml	99
32) 4-Chloro-3-methylphenol	8.634	107	137180	964.28	ng/ml	97
33) 2-Methylnaphthalene	8.816	142	368916	945.47	ng/ml	97
34) 1-Methylnaphthalene	8.917	142	353069	929.05	ng/ml	97
36) Hexachlorocyclopentadiene	8.982	237	68561	1072.15	ng/ml	97
37) 2,4,6-Trichlorophenol	9.094	196	77589	939.42	ng/ml	99
38) 2,4,5-Trichlorophenol	9.131	196	79865	1003.71	ng/ml	98
39) 1,1'-Biphenyl	9.281	154	427889	982.86	ng/ml	99
41) 2-Chloronaphthalene	9.308	162	302479	970.29	ng/ml	99
42) 2-Nitroaniline	9.404	138	89229	828.74	ng/ml	89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301919.D
Acq On : 30 Jan 2019 10:02 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL6
Misc : 1x, A18L332@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

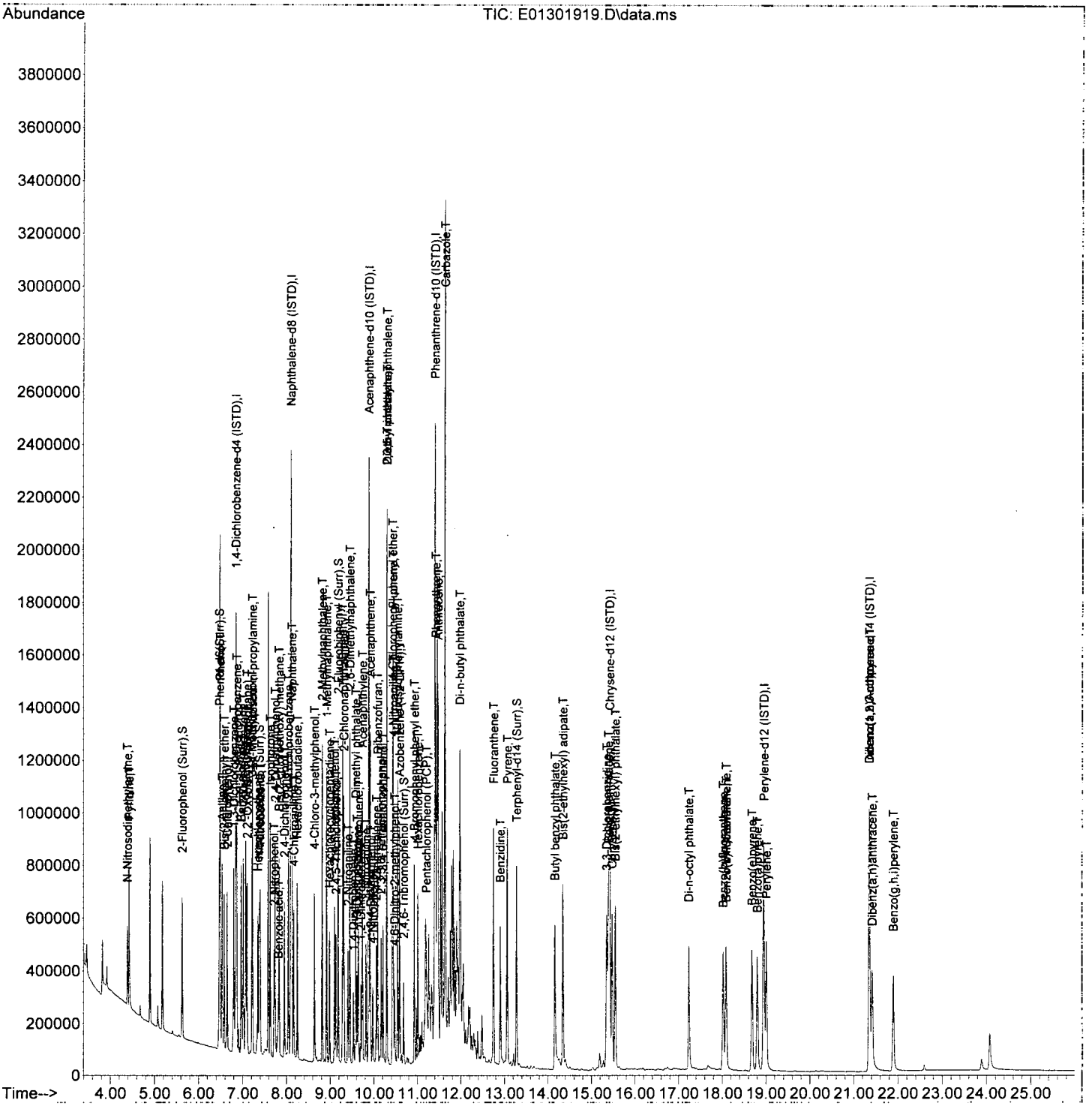
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	304453	1001.66	ng/ml	96
44) 1,4-Dinitrobenzene	9.533	168	32964	681.90	ng/ml	89
45) Dimethyl phthalate	9.581	163	323675	937.49	ng/ml	99
46) 1,3-Dinitrobenzene	9.613	168	43195	798.83	ng/ml	95
47) 2,6-Dinitrotoluene	9.645	165	69388	885.62	ng/ml	87
48) 1,2-Dinitrobenzene	9.704	168	30555	894.08	ng/ml#	73
49) Acenaphthylene	9.736	152	501305	1016.44	ng/ml	99
50) 3-Nitroaniline	9.816	138	75940	849.12	ng/ml	99
51) Acenaphthene	9.912	153	328378	963.27	ng/ml	100
52) 2,4-Dinitrophenol	9.923	184	14249	579.44	ng/ml	87
53) 4-Nitrophenol	9.971	139	55114	891.96	ng/ml	86
54) 2,4-Dinitrotoluene	10.057	165	83270	837.18	ng/ml	93
55) Dibenzofuran	10.083	168	418743	936.80	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.164	232	56972	913.28	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.206	232	64617	950.20	ng/ml	97
58) Diethyl phthalate	10.297	149	329843	955.76	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.297	170	270700	975.26	ng/ml	96
60) Fluorene	10.436	166	344351	963.44	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.426	204	146848	947.17	ng/ml	92
62) 4-Nitroaniline	10.442	138	79908	870.50	ng/ml	80
63) 4,6-Dinitro-2-methylph...	10.474	198	25579	610.47	ng/ml	90
65) N-Nitrosodiphenylamine	10.543	169	278990	1027.82	ng/ml	97
66) Azobenzene (1,2-DPH)	10.586	77	394223	1201.67	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.929	248	78242	1079.06	ng/ml	92
69) Hexachlorobenzene	11.009	284	79296	1059.30	ng/ml	98
70) Pentachlorophenol (PCP)	11.201	266	38085	949.12	ng/ml	98
71) Phenanthrene	11.421	178	468364	960.99	ng/ml	99
72) Anthracene	11.474	178	482023	1023.20	ng/ml	99
73) Carbazole	11.629	167	436227	1054.35	ng/ml	99
74) Di-n-butyl phthalate	11.972	149	541942	1067.62	ng/ml	99
75) Fluoranthene	12.747	202	478274	1020.42	ng/ml	97
76) Benzidine	12.902	184	270903	1124.28	ng/ml	96
77) Pyrene	13.063	202	486318	1006.81	ng/ml	99
80) Butyl benzyl phthalate	14.159	149	212214	1007.60	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.341	129	197213	1020.46	ng/ml	99
82) 3,3-Dichlorobenzidine	15.347	252	231650	2031.62	ng/ml	99
83) Benz(a)anthracene	15.389	228	387630	949.87	ng/ml	98
84) Chrysene	15.475	228	381765	989.01	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.544	149	289406	962.42	ng/ml	96
87) Di-n-octyl phthalate	17.235	149	421456	1017.79	ng/ml	99
88) Benzo(b)fluoranthene	18.021	252	343841	1026.35	ng/ml	99
89) Benzo(k)fluoranthene	18.090	252	349392	1026.13	ng/ml	98
90) Benzo(b+k)fluoranthene	18.090	252	717329	2026.59	ng/ml	98
91) Benzo(e)pyrene	18.679	252	347001	1068.42	ng/ml	99
92) Benzo(a)pyrene	18.802	252	319982	1035.50	ng/ml	99
93) Perylene	19.010	252	350972	972.91	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.348	276	270568	877.43	ng/ml	94
96) Dibenz(a,h)anthracene	21.412	278	250339	849.20	ng/ml	94
97) Benzo(g,h,i)perylene	21.893	276	285618	919.58	ng/ml	86

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301919.D
Acq On : 30 Jan 2019 10:02 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL6
Misc : 1x, A18L332@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:13 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301920.D
Acq On : 30 Jan 2019 10:39 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL7
Misc : 1x, A18L333@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:18 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	283178	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1126005	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	528163	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	996904	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.421	240	902831	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.962	264	830313	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	21.364	292	698997	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	365609	2134.22	ng/ml	0.00
5) Phenol-d6(Surr)	6.478	99	498621	2238.79	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.382	82	486300	2436.22	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	786718	1932.48	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	82762	2464.32	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.282	244	841709	2060.40	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.382	74	276378	2251.74	ng/ml	88
3) Pyridine	4.419	79	442924	2242.04	ng/ml	95
6) Phenol	6.489	94	512010	2146.79	ng/ml	94
7) Aniline	6.532	93	658664	2250.92	ng/ml	97
8) Bis(2-chloroethyl) ether	6.580	93	405853	2027.35	ng/ml	98
9) 2-Chlorophenol	6.650	128	391006	2085.45	ng/ml	99
10) 1,3-Dichlorobenzene	6.799	146	418520	1864.65	ng/ml	97
11) 1,4-Dichlorobenzene	6.864	146	426556	1865.42	ng/ml	99
12) Benzyl alcohol	6.971	108	255452	2149.09	ng/ml	92
13) 1,2-Dichlorobenzene	7.013	146	401451	1867.31	ng/ml	99
14) 2-Methylphenol	7.067	107	326863	2200.45	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	642111	2361.75	ng/ml	96
16) N-Nitrosodi-n-propylamine	7.227	70	323691	2323.28	ng/ml	96
17) 3+4-Methylphenol	7.217	107	423242	2200.69	ng/ml	94
18) Hexachloroethane	7.345	117	158301	1972.74	ng/ml	85
20) Nitrobenzene	7.398	77	445401	2244.44	ng/ml	95
22) Isophorone	7.628	82	818603	2235.62	ng/ml	98
23) 2-Nitrophenol	7.714	139	184428	1877.49	ng/ml	89
24) 2,4-Dimethylphenol	7.741	122	352518	2182.99	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.832	93	493285	2107.14	ng/ml	98
26) Benzoic acid	7.853	105	314631	3763.21	ng/ml	96
27) 2,4-Dichlorophenol	7.949	162	283710	1993.78	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.040	180	307169	1840.64	ng/ml	95
29) Naphthalene	8.120	128	1180925	1921.92	ng/ml	99
30) 4-Chloroaniline	8.163	127	447643	1981.83	ng/ml	97
31) Hexachlorobutadiene	8.243	225	151477	1847.95	ng/ml	97
32) 4-Chloro-3-methylphenol	8.634	107	317795	2092.52	ng/ml	99
33) 2-Methylnaphthalene	8.816	142	771341	1924.35	ng/ml	97
34) 1-Methylnaphthalene	8.917	142	730943	1872.31	ng/ml	97
36) Hexachlorocyclopentadiene	8.982	237	153915	2248.60	ng/ml	97
37) 2,4,6-Trichlorophenol	9.094	196	185604	2044.99	ng/ml	98
38) 2,4,5-Trichlorophenol	9.131	196	183508	2069.74	ng/ml	98
39) 1,1'-Biphenyl	9.286	154	909543	1951.81	ng/ml	99
41) 2-Chloronaphthalene	9.313	162	650474	1949.34	ng/ml	99
42) 2-Nitroaniline	9.404	138	225078	1952.96	ng/ml	94

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301920.D
Acq On : 30 Jan 2019 10:39 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL7
Misc : 1x, A18L333@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:18 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

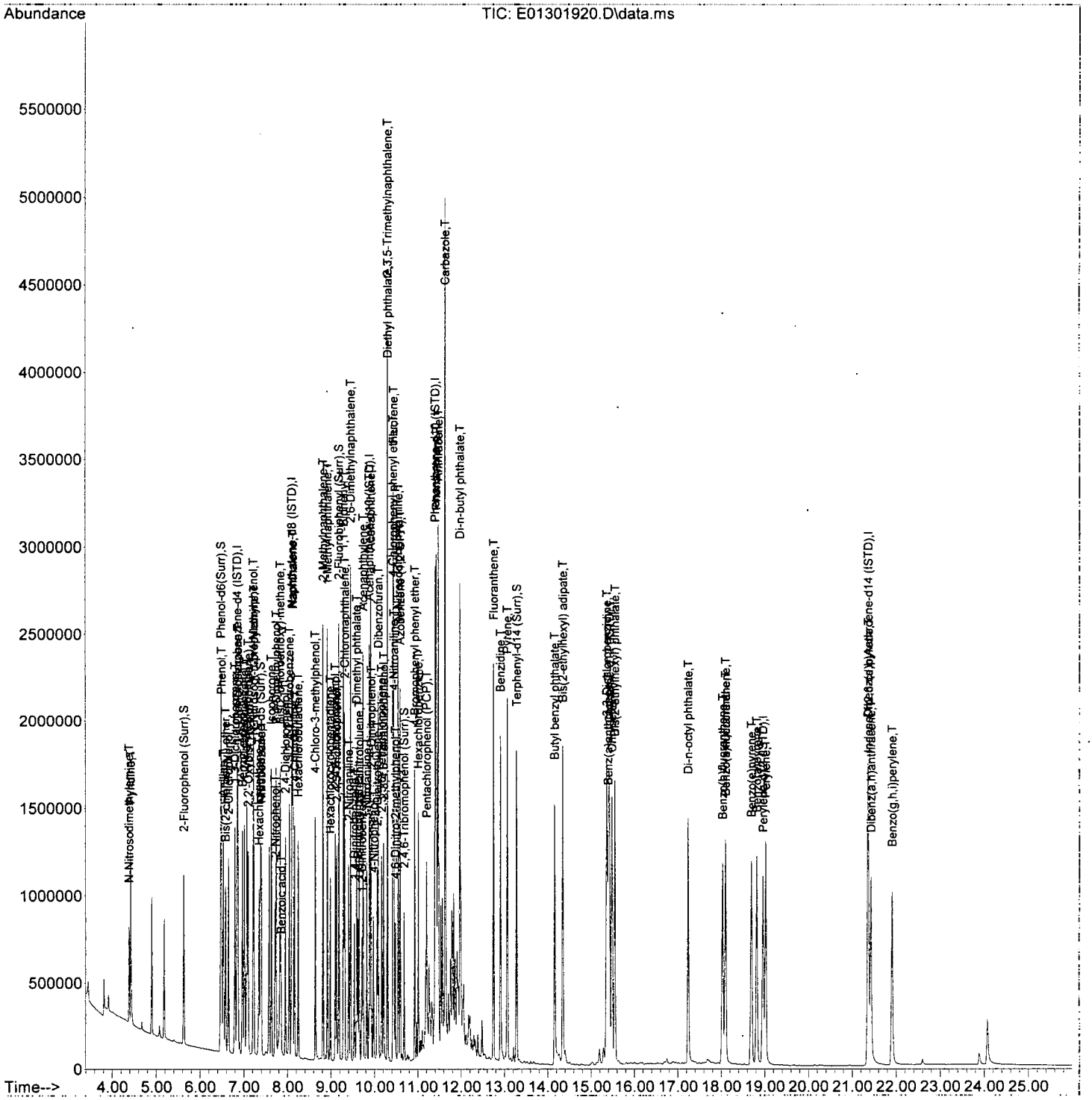
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	646334	1986.59	ng/ml	98
44) 1,4-Dinitrobenzene	9.533	168	93455	1806.07	ng/ml	94
45) Dimethyl phthalate	9.586	163	722554	1955.16	ng/ml	99
46) 1,3-Dinitrobenzene	9.618	168	113932	1968.41	ng/ml	91
47) 2,6-Dinitrotoluene	9.645	165	164544	1961.99	ng/ml	91
48) 1,2-Dinitrobenzene	9.709	168	76738	2097.77	ng/ml#	73
49) Acenaphthylene	9.736	152	1078092	2042.15	ng/ml	99
50) 3-Nitroaniline	9.821	138	193626	2022.62	ng/ml	98
51) Acenaphthene	9.912	153	694436	1903.08	ng/ml	99
52) 2,4-Dinitrophenol	9.923	184	55055	1548.65	ng/ml	93
53) 4-Nitrophenol	9.976	139	153275	2139.66	ng/ml	85
54) 2,4-Dinitrotoluene	10.062	165	214871	2018.19	ng/ml	92
55) Dibenzofuran	10.089	168	931904	1947.71	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.164	232	145369	2066.79	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.212	232	156617	2089.38	ng/ml	94
58) Diethyl phthalate	10.303	149	754784	2043.22	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.297	170	590742	1988.29	ng/ml	98
60) Fluorene	10.436	166	765816	2001.69	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.426	204	334037	2012.83	ng/ml	94
62) 4-Nitroaniline	10.447	138	207882	2115.67	ng/ml	81
63) 4,6-Dinitro-2-methylph...	10.479	198	84552	1651.66	ng/ml	90
65) N-Nitrosodiphenylamine	10.549	169	652932	2028.80	ng/ml	98
66) Azobenzene (1,2-DPH)	10.592	77	914026	2349.88	ng/ml	96
68) 4-Bromophenyl phenyl e...	10.928	248	186018	2163.73	ng/ml	93
69) Hexachlorobenzene	11.009	284	182419	2055.83	ng/ml	99
70) Pentachlorophenol (PCP)	11.201	266	106556	2088.13	ng/ml	96
71) Phenanthrene	11.426	178	1092838	1891.20	ng/ml	99
72) Anthracene	11.474	178	1119959	2005.11	ng/ml	100
73) Carbazole	11.629	167	1032155	2104.07	ng/ml	100
74) Di-n-butyl phthalate	11.971	149	1296945	2154.90	ng/ml	99
75) Fluoranthene	12.747	202	1147170	2064.30	ng/ml	97
76) Benzidine	12.907	184	956344	3113.49	ng/ml	97
77) Pyrene	13.063	202	1167359	2038.33	ng/ml	100
80) Butyl benzyl phthalate	14.159	149	564166	2023.16	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.346	129	522769	2119.55	ng/ml	98
82) 3,3-Dichlorobenzidine	15.363	252	642844	4208.60	ng/ml	99
83) Benz(a)anthracene	15.395	228	997082	1914.49	ng/ml	99
84) Chrysene	15.486	228	973945	1977.02	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.550	149	783437	2041.42	ng/ml	96
87) Di-n-octyl phthalate	17.240	149	1248768	2096.42	ng/ml	100
88) Benzo(b)fluoranthene	18.031	252	927026	2039.75	ng/ml	98
89) Benzo(k)fluoranthene	18.101	252	931062	2050.87	ng/ml	97
90) Benzo(b+k)fluoranthene	18.101	252	1906416	4024.25	ng/ml	97
91) Benzo(e)pyrene	18.695	252	912421	2131.99	ng/ml	99
92) Benzo(a)pyrene	18.818	252	875788	2095.22	ng/ml	99
93) Perylene	19.021	252	918814	1932.87	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.369	276	772179	1798.90	ng/ml	95
96) Dibenz(a,h)anthracene	21.428	278	733789	1788.16	ng/ml	94
97) Benzo(g,h,i)perylene	21.909	276	791021	1829.56	ng/ml	87

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301920.D
Acq On : 30 Jan 2019 10:39 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL7
Misc : 1x, A18L333@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:18 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301921.D
Acq On : 30 Jan 2019 11:15 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL8
Misc : 1x, A18L334@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

DJ 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	277065	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1109587	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.885	162	539188	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	991158	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.432	240	887261	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.967	264	816129	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.374	292	692377	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	749425	4471.24	ng/ml	0.00
5) Phenol-d6(Surr)	6.484	99	994097	4561.94	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.382	82	903192	4624.56	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.185	172	1579625	3800.81	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.688	330	183331	5094.74	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.287	244	1664387	4145.71	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.376	74	561142	4672.66	ng/ml	86
3) Pyridine	4.408	79	916259	4740.35	ng/ml	94
6) Phenol	6.494	94	1035475	4437.40	ng/ml	93
7) Aniline	6.537	93	1318849	4606.48	ng/ml	96
8) Bis(2-chloroethyl) ether	6.585	93	824988	4211.97	ng/ml	97
9) 2-Chlorophenol	6.649	128	789250	4302.39	ng/ml	98
10) 1,3-Dichlorobenzene	6.799	146	831375	3785.78	ng/ml	97
11) 1,4-Dichlorobenzene	6.863	146	845971	3781.24	ng/ml	100
12) Benzyl alcohol	6.970	108	520771	4223.92	ng/ml	94
13) 1,2-Dichlorobenzene	7.013	146	802569	3815.43	ng/ml	99
14) 2-Methylphenol	7.072	107	654892	4506.03	ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	1253005	4710.36	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.232	70	649377	4763.71	ng/ml	95
17) 3+4-Methylphenol	7.222	107	845995	4495.88	ng/ml	95
18) Hexachloroethane	7.345	117	319170	4065.24	ng/ml	85
20) Nitrobenzene	7.404	77	894143	4605.13	ng/ml	93
22) Isophorone	7.639	82	1662743	4608.17	ng/ml	97
23) 2-Nitrophenol	7.714	139	394481	4075.25	ng/ml	90
24) 2,4-Dimethylphenol	7.746	122	691817	4347.50	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.837	93	982323	4258.23	ng/ml	99
26) Benzoic acid	7.746	105	25997	1113.51	ng/ml#	1
27) 2,4-Dichlorophenol	7.955	162	583274	4159.62	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.040	180	617165	3752.95	ng/ml	95
29) Naphthalene	8.126	128	2314690	3822.82	ng/ml	100
30) 4-Chloroaniline	8.163	127	932245	4188.37	ng/ml	97
31) Hexachlorobutadiene	8.249	225	307584	3807.90	ng/ml	97
32) 4-Chloro-3-methylphenol	8.639	107	668189	4250.95	ng/ml	98
33) 2-Methylnaphthalene	8.816	142	1531917	3878.40	ng/ml	97
34) 1-Methylnaphthalene	8.917	142	1454487	3780.80	ng/ml	98
36) Hexachlorocyclopentadiene	8.981	237	309053	4422.75	ng/ml	98
37) 2,4,6-Trichlorophenol	9.099	196	386229	4065.05	ng/ml	99
38) 2,4,5-Trichlorophenol	9.131	196	398737	4124.50	ng/ml	98
39) 1,1'-Biphenyl	9.286	154	1815386	3816.01	ng/ml	99
41) 2-Chloronaphthalene	9.313	162	1315972	3863.07	ng/ml	99
42) 2-Nitroaniline	9.409	138	493107	4191.12	ng/ml	92

see ML

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301921.D
Acq On : 30 Jan 2019 11:15 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL8
Misc : 1x, A18L334@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

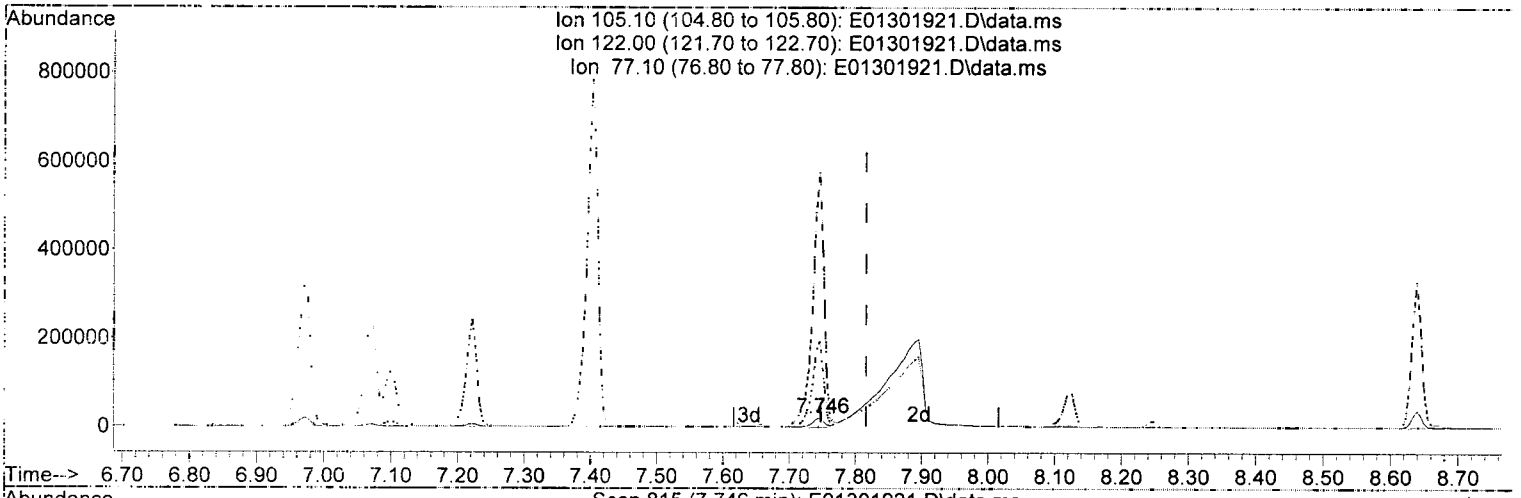
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.452	156	1294122	3896.32	ng/ml	98
44) 1,4-Dinitrobenzene	9.538	168	217979	4126.43	ng/ml	94
45) Dimethyl phthalate	9.597	163	1516221	4018.85	ng/ml	100
46) 1,3-Dinitrobenzene	9.623	168	251848	4262.23	ng/ml	93
47) 2,6-Dinitrotoluene	9.655	165	358077	4182.35	ng/ml	83
48) 1,2-Dinitrobenzene	9.720	168	167602	4488.01	ng/ml#	70
49) Acenaphthylene	9.741	152	2187965	4069.76	ng/ml	98
50) 3-Nitroaniline	9.832	138	413792	4234.09	ng/ml	99
51) Acenaphthene	9.917	153	1394892	3744.49	ng/ml	99
52) 2,4-Dinitrophenol	9.934	184	155885	3497.95	ng/ml	84
53) 4-Nitrophenol	9.987	139	332708	4250.50	ng/ml	84
54) 2,4-Dinitrotoluene	10.067	165	465322	4281.20	ng/ml	96
55) Dibenzofuran	10.089	168	1891403	3872.25	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.169	232	322748	4234.05	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.212	232	339662	4302.14	ng/ml	97
58) Diethyl phthalate	10.308	149	1485515	3939.10	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.303	170	1153744	3803.82	ng/ml	98
60) Fluorene	10.442	166	1531912	3922.25	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.431	204	685667	4047.20	ng/ml	90
62) 4-Nitroaniline	10.463	138	430052	4287.27	ng/ml	80
63) 4,6-Dinitro-2-methylph...	10.490	198	212554	3646.85	ng/ml	88
65) N-Nitrosodiphenylamine	10.554	169	1315096	4109.98	ng/ml	98
66) Azobenzene (1,2-DPH)	10.591	77	1800004	4654.49	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.934	248	385860	4514.28	ng/ml	89
69) Hexachlorobenzene	11.014	284	387180	4387.67	ng/ml	97
70) Pentachlorophenol (PCP)	11.207	266	237575	4358.53	ng/ml	97
71) Phenanthrene	11.426	178	2134782	3715.73	ng/ml	98
72) Anthracene	11.479	178	2161101	3891.54	ng/ml	99
73) Carbazole	11.634	167	2012508	4126.32	ng/ml	99
74) Di-n-butyl phthalate	11.971	149	2515776	4204.25	ng/ml	99
75) Fluoranthene	12.752	202	2228063	4032.58	ng/ml	98
76) Benzidine	12.918	184	2439653	7389.22	ng/ml	97
77) Pyrene	13.073	202	2275000	3995.42	ng/ml	99
80) Butyl benzyl phthalate	14.170	149	1137127	3950.39	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.352	129	1061254	4378.32	ng/ml	98
82) 3,3-Dichlorobenzidine	15.378	252	1371474	8438.71	ng/ml	99
83) Benz(a)anthracene	15.405	228	1987811	3883.75	ng/ml	99
84) Chrysene	15.496	228	1929550	3985.56	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.555	149	1587394	4208.90	ng/ml	96
87) Di-n-octyl phthalate	17.245	149	2594376	4008.11	ng/ml	99
88) Benzo(b)fluoranthene	18.047	252	1854491	3958.20	ng/ml	98
89) Benzo(k)fluoranthene	18.122	252	1814554	4001.36	ng/ml	97
90) Benzo(b+k)fluoranthene	18.122	252	3805265	7973.36	ng/ml	97
91) Benzo(e)pyrene	18.716	252	1835807	4364.14	ng/ml	100
92) Benzo(a)pyrene	18.839	252	1767067	4127.08	ng/ml	99
93) Perylene	19.042	252	1826834	3909.82	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.390	276	1577648	3710.50	ng/ml	95
96) Dibenz(a,h)anthracene	21.444	278	1499940	3690.13	ng/ml	95
97) Benzo(g,h,i)perylene	21.931	276	1580720	3691.01	ng/ml	88

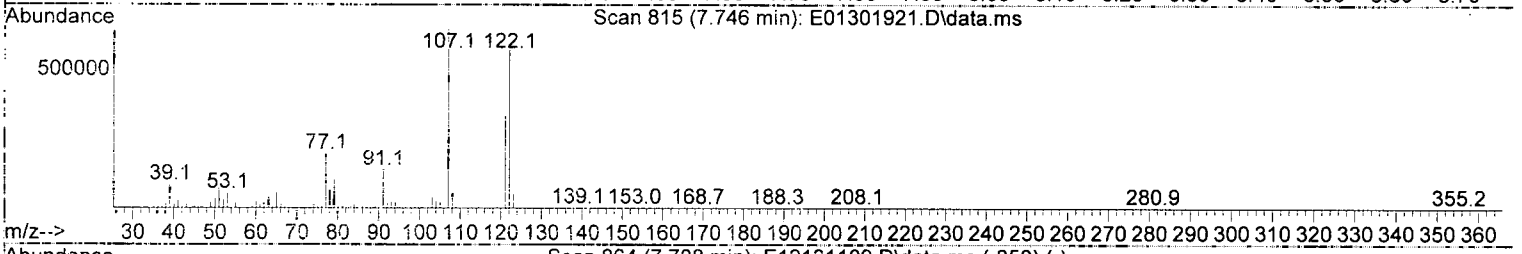
(#) = qualifier out of range (m) = manual integration (+) = signals summed

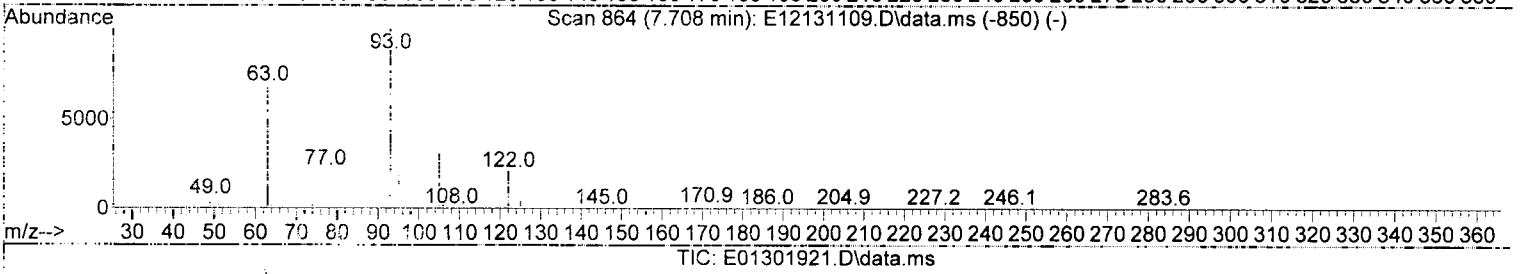
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301921.D
Acq On : 30 Jan 2019 11:15 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL8
Misc : 1x, A18L334@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301921.D\data.ms

(26) Benzoic acid (T)

7.746min (-0.070) 1113.51 ng/ml

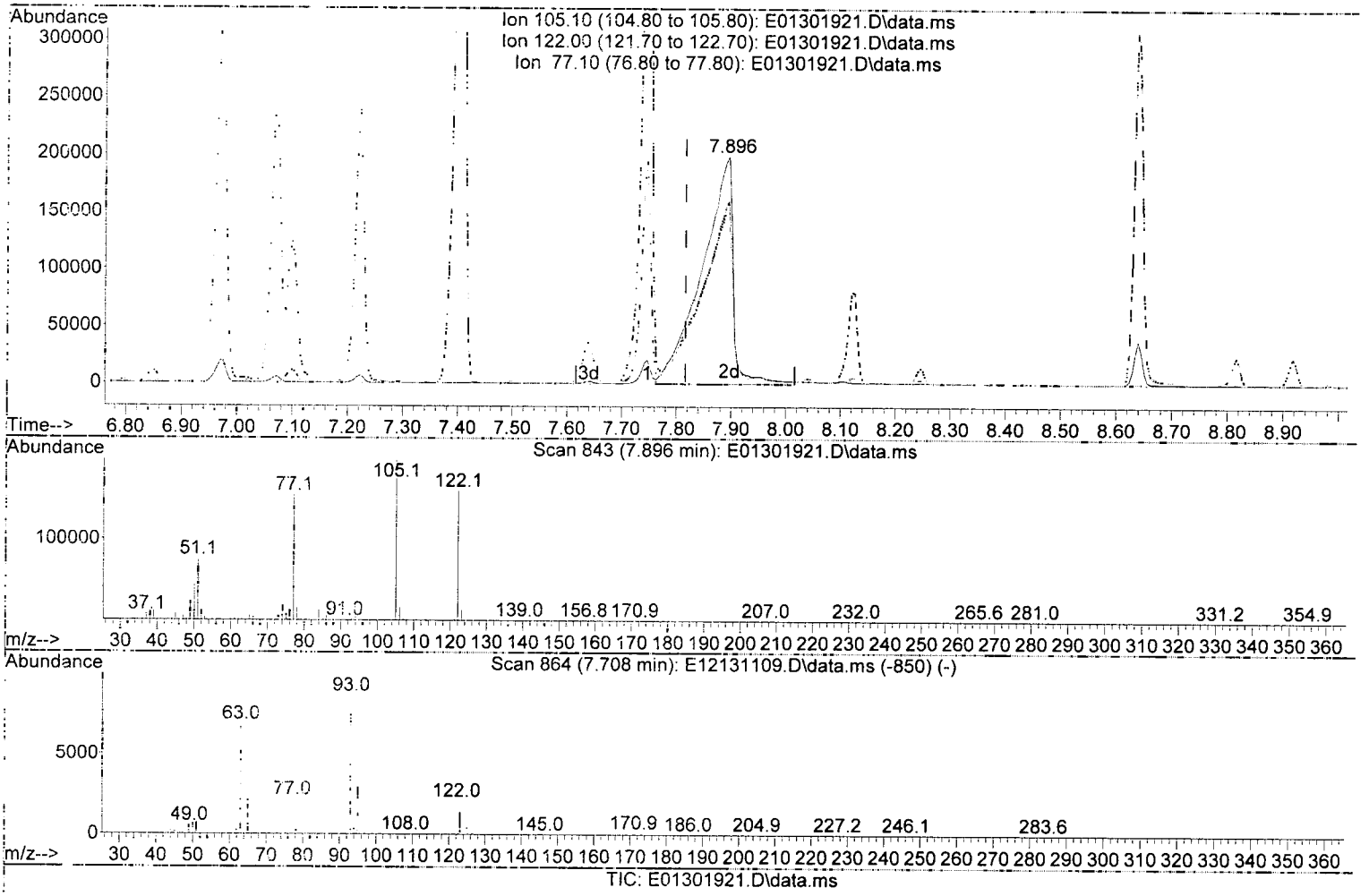
response 25997

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2760.05#
77.10	85.50	931.34#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301921.D
Acq On : 30 Jan 2019 11:15 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL8
Misc : 1x, A18L334@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(26) Benzoic acid (T)

7.896min (+ 0.080) 7389.38 ng/ml m

response 790966

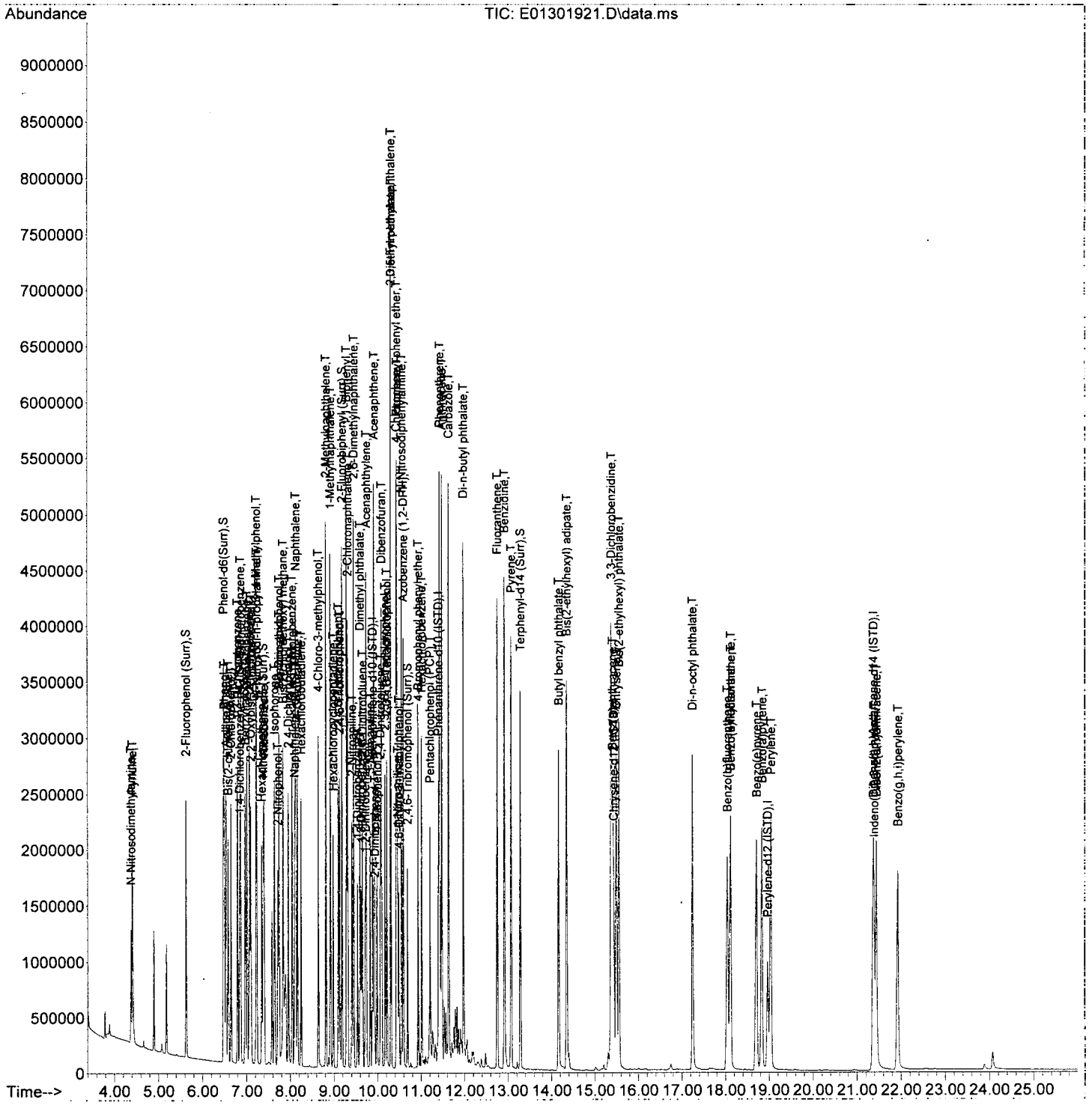
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	80.54
77.10	85.50	78.13
0.00	0.00	0.00

1/31/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301921.D
Acq On : 30 Jan 2019 11:15 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL8
Misc : 1x, A18L334@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301922.D
Acq On : 30 Jan 2019 11:51 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL9
Misc : 1x, A18L335@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:30 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

GK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	290473	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.104	136	1148108	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.885	162	556496	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.404	188	1043364	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.443	240	927852	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.973	264	856100	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.385	292	715157	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	1170363	6660.34	ng/ml	0.00
5) Phenol-d6(Surr)	6.484	99	1526449	6681.57	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.387	82	1512631	7387.54	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.185	172	2343826	5464.20	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.693	330	299172	7432.08	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.292	244	2557660	6092.00	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.387	74	871542	6922.39	ng/ml	85
3) Pyridine	4.419	79	1414684	6981.16	ng/ml	93
6) Phenol	6.500	94	1606385	6566.21	ng/ml	93
7) Aniline	6.542	93	2085810	6949.04	ng/ml	96
8) Bis(2-chloroethyl) ether	6.591	93	1215843	5920.94	ng/ml	95
9) 2-Chlorophenol	6.655	128	1233532	6413.88	ng/ml	97
10) 1,3-Dichlorobenzene	6.799	146	1285655	5584.18	ng/ml	97
11) 1,4-Dichlorobenzene	6.863	146	1303668	5558.04	ng/ml	99
12) Benzyl alcohol	6.981	108	832173	6136.30	ng/ml	91
13) 1,2-Dichlorobenzene	7.013	146	1239034	5618.50	ng/ml	99
14) 2-Methylphenol	7.072	107	1006886	6608.16	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.104	45	1862706	6679.16	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.243	70	964528	6748.99	ng/ml	94
17) 3+4-Methylphenol	7.227	107	1282429	6500.65	ng/ml	94
18) Hexachloroethane	7.345	117	494803	6011.35	ng/ml	85
20) Nitrobenzene	7.409	77	1366079	6710.99	ng/ml	92
22) Isophorone	7.644	82	2507237	6715.49	ng/ml	97
23) 2-Nitrophenol	7.719	139	619284	6182.97	ng/ml	88
24) 2,4-Dimethylphenol	7.751	122	1081606	6568.96	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.842	93	1460686	6119.43	ng/ml	99
26) Benzoic acid	~~7.751~~	105	40451	1248.51	ng/ml#	1
27) 2,4-Dichlorophenol	7.960	162	912238	6287.36	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.045	180	947888	5570.66	ng/ml	95
29) Naphthalene	8.126	128	3450382	5507.27	ng/ml	100
30) 4-Chloroaniline	8.168	127	1415802	6147.46	ng/ml	97
31) Hexachlorobutadiene	8.249	225	473675	5667.36	ng/ml	98
32) 4-Chloro-3-methylphenol	8.644	107	1026539	6084.76	ng/ml	97
33) 2-Methylnaphthalene	8.821	142	2256262	5520.59	ng/ml	97
34) 1-Methylnaphthalene	8.923	142	2130936	5353.31	ng/ml	98
36) Hexachlorocyclopentadiene	8.981	237	489813	6791.53	ng/ml	99
37) 2,4,6-Trichlorophenol	9.099	196	617479	6165.33	ng/ml	98
38) 2,4,5-Trichlorophenol	9.136	196	611970	5831.75	ng/ml	97
39) 1,1'-Biphenyl	9.292	154	2626639	5349.58	ng/ml	98
41) 2-Chloronaphthalene	9.318	162	1970530	5604.63	ng/ml	99
42) 2-Nitroaniline	9.420	138	778160	6408.20	ng/ml	84

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301922.D
Acq On : 30 Jan 2019 11:51 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL9
Misc : 1x, A18L335@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:30 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

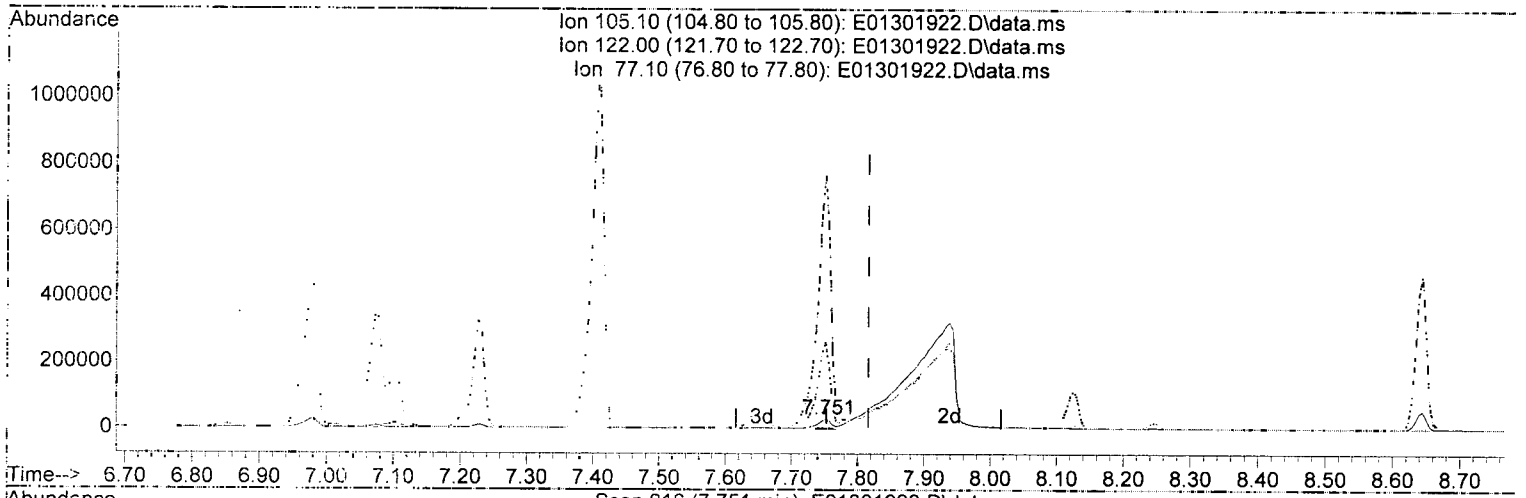
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.452	156	1873897	5466.42	ng/ml	99
44) 1,4-Dinitrobenzene	9.543	168	353235	6478.90	ng/ml	93
45) Dimethyl phthalate	9.607	163	2274017	5839.97	ng/ml	100
46) 1,3-Dinitrobenzene	9.634	168	398456	6533.67	ng/ml	91
47) 2,6-Dinitrotoluene	9.661	165	550344	6228.11	ng/ml	84
48) 1,2-Dinitrobenzene	9.725	168	260513	6758.99	ng/ml#	74
49) Acenaphthylene	9.746	152	3178592	5714.43	ng/ml	98
50) 3-Nitroaniline	9.843	138	645615	6400.74	ng/ml	96
51) Acenaphthene	9.923	153	2033161	5288.13	ng/ml	99
52) 2,4-Dinitrophenol	9.939	184	286154	5414.16	ng/ml	85
53) 4-Nitrophenol	9.998	139	535869	6292.27	ng/ml	83
54) 2,4-Dinitrotoluene	10.078	165	723845	6452.61	ng/ml	93
55) Dibenzofuran	10.094	168	2796501	5547.19	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.174	232	514203	6235.27	ng/ml	93
57) 2,3,4,6-Tetrachlorophenol	10.217	232	530685	6357.49	ng/ml	95
58) Diethyl phthalate	10.313	149	2138606	5494.51	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.308	170	1629306	5204.64	ng/ml	98
60) Fluorene	10.447	166	2221082	5509.90	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.436	204	1030051	5890.85	ng/ml	88
62) 4-Nitroaniline	10.474	138	669009	6462.04	ng/ml	80
63) 4,6-Dinitro-2-methylph...	10.500	198	362560	5558.92	ng/ml	85
65) N-Nitrosodiphenylamine	10.559	169	1960689	5821.00	ng/ml	99
66) Azobenzene (1,2-DPH)	10.597	77	2612835	6418.26	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.934	248	602434	6695.38	ng/ml	91
69) Hexachlorobenzene	11.019	284	606966	6534.21	ng/ml	95
70) Pentachlorophenol (PCP)	11.206	266	395292	6524.62	ng/ml	97
71) Phenanthrene	11.431	178	3142052	5195.31	ng/ml	98
72) Anthracene	11.485	178	3204108	5481.01	ng/ml	99
73) Carbazole	11.640	167	2995482	5834.43	ng/ml	99
74) Di-n-butyl phthalate	11.977	149	3697863	5870.49	ng/ml	99
75) Fluoranthene	12.758	202	3367710	5790.24	ng/ml	97
76) Benzidine	12.929	184	3789861	10411.39	ng/ml	98
77) Pyrene	13.078	202	3451729	5758.71	ng/ml	99
80) Butyl benzyl phthalate	14.175	149	1765700	5646.23	ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.357	129	1647877	6501.08	ng/ml	99
82) 3,3-Dichlorobenzidine	15.400	252	2297909	12597.23	ng/ml	99
83) Benz(a)anthracene	15.421	228	3081071	5756.40	ng/ml	99
84) Chrysene	15.512	228	2949203	5825.19	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.560	149	2465950	6252.31	ng/ml	95
87) Di-n-octyl phthalate	17.256	149	4069870	5590.76	ng/ml	98
88) Benzo(b)fluoranthene	18.063	252	2914506	5696.15	ng/ml	99
89) Benzo(k)fluoranthene	18.138	252	2736373	5680.51	ng/ml	97
90) Benzo(b+k)fluoranthene	18.138	252	5886892	11520.04	ng/ml	97
91) Benzo(e)pyrene	18.727	252	2825299	6402.81	ng/ml	99
92) Benzo(a)pyrene	18.855	252	2720886	5863.18	ng/ml	98
93) Perylene	19.064	252	2815058	5743.54	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.406	276	2513172	5722.50	ng/ml	94
96) Dibenz(a,h)anthracene	21.465	278	2316997	5518.68	ng/ml	96
97) Benzo(g,h,i)perylene	21.952	276	2394723	5413.62	ng/ml	85

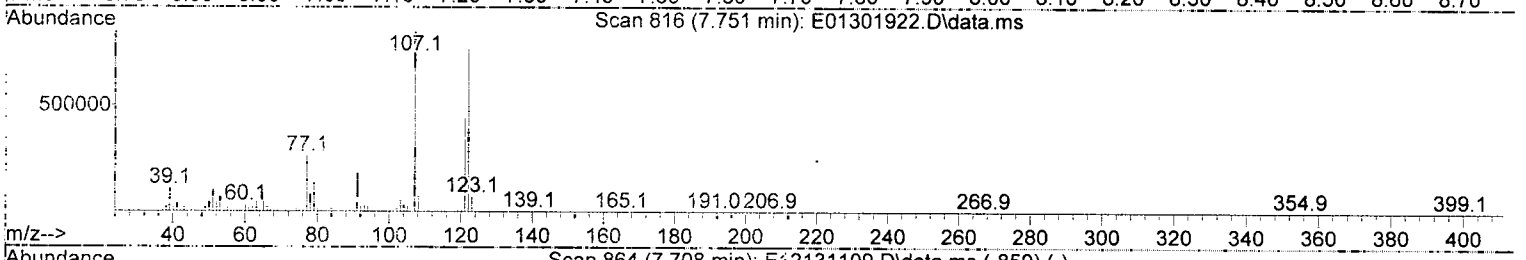
(#) = qualifier out of range (m) = manual integration (+) = signals summed

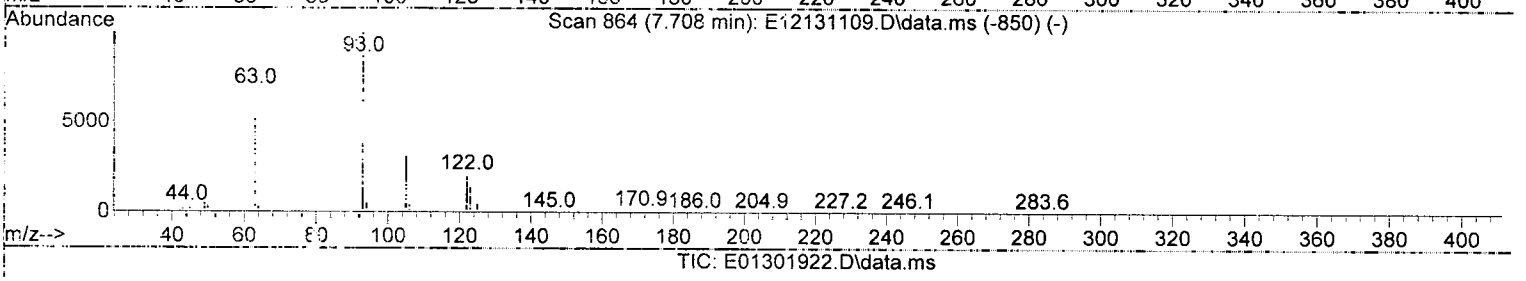
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301922.D
Acq On : 30 Jan 2019 11:51 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL9
Misc : 1x, A18L335@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:30 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301922.D\data.ms

(26) Benzoic acid (T)

7.751min (-0.064) 1248.51 ng/ml

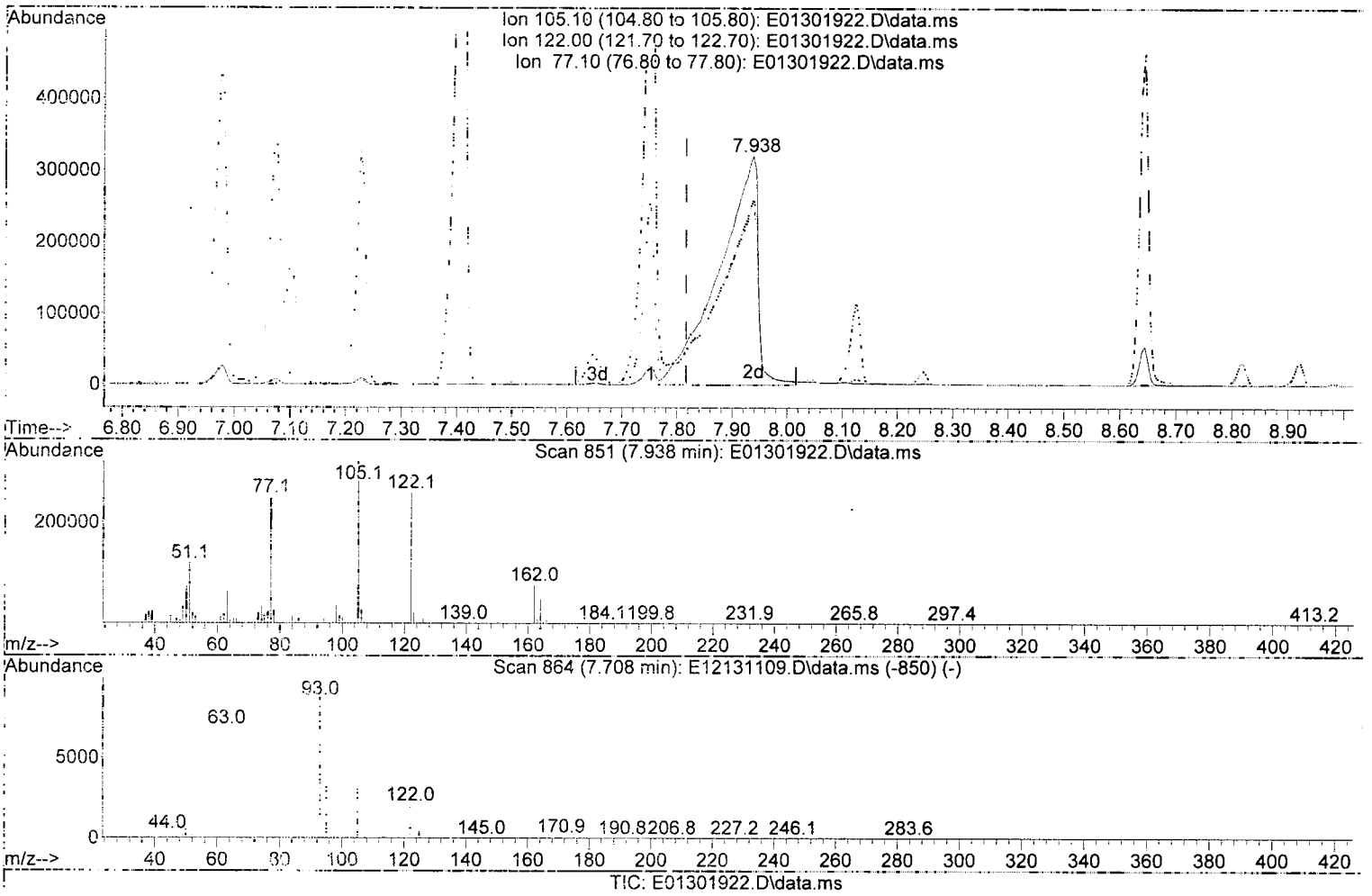
response 40451

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	**2724.94#**
77.10	85.50	**925.17#**
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301922.D
Acq On : 30 Jan 2019 11:51 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL9
Misc : 1x, A18L335@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:30 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E01301922.D\data.ms

(26) Benzoic acid (T)

7.938min (+ 0.123) 11774.00 ng/ml m

response 1567369

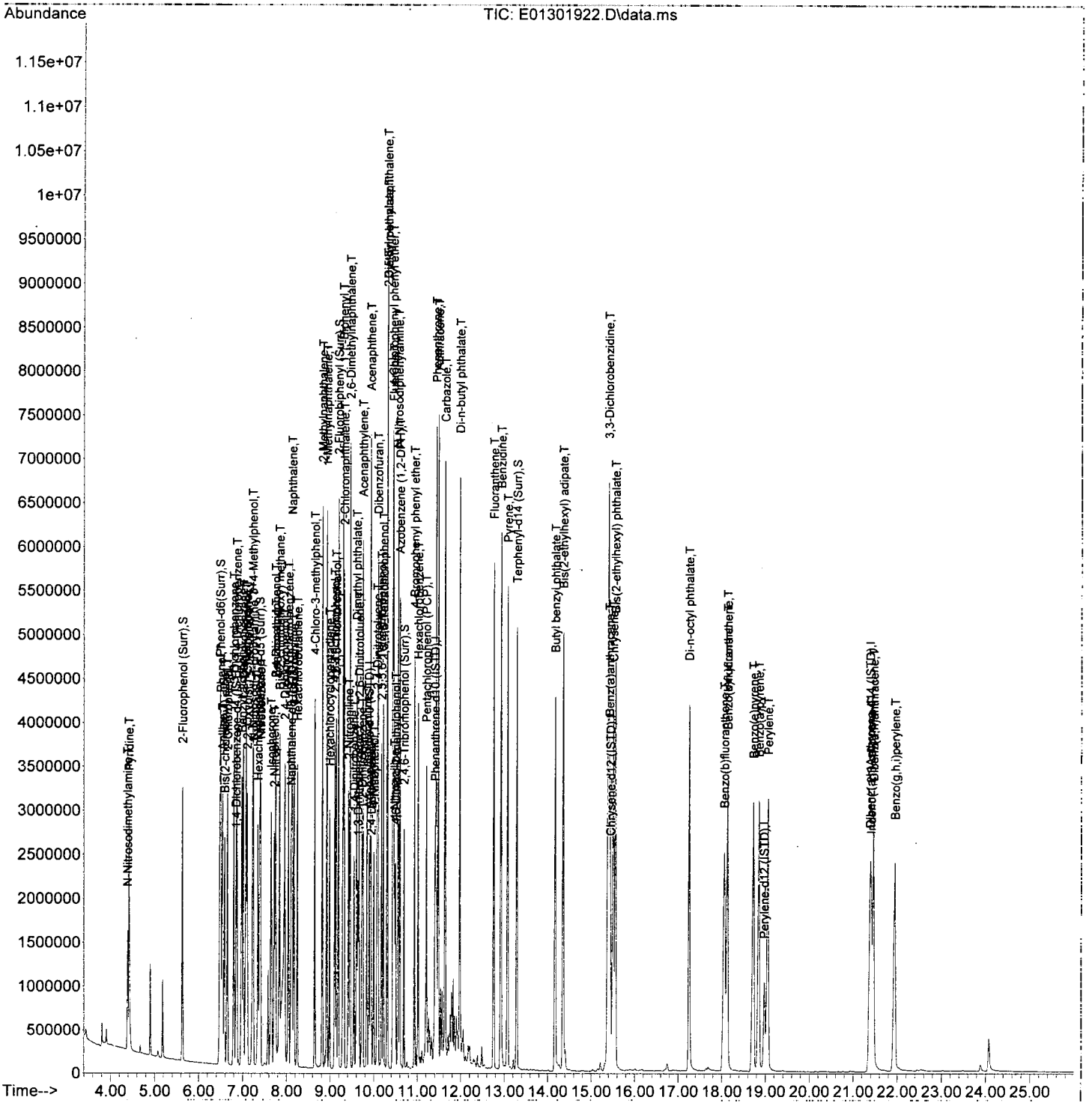
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	81.01
77.10	85.50	78.27
0.00	0.00	0.00

JK 1/31/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301922.D
Acq On : 30 Jan 2019 11:51 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-CAL9
Misc : 1x, A18L335@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:30 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301923.D
Acq.On : 31 Jan 2019 12:28 am
Operator : JK/ AMS /DTH
Sample : 9A30046-CALA
Misc : 1x, A18L336@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:36 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

JK 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.853	152	280934	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.104	136	1114798	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.886	162	543018	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.405	188	1023802	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.454	240	907570	2000.00	ng/ml	0.04
86) Perylene-d12 (ISTD)	18.978	264	832510	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	21.396	292	683312	2000.00	ng/ml	0.05
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.633	112	1496600	8806.09	ng/ml	0.00
5) Phenol-d6(Surr)	6.495	99	1930075	8735.18	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.393	82	1731910	8745.68	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.190	172	2900077	6928.80	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.699	330	403091	9663.57	ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.293	244	3299466	8034.51	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.393	74	1122619	9219.37	ng/ml	83
3) Pyridine	4.419	79	1799769	9183.04	ng/ml	93
6) Phenol	6.511	94	2021684	8544.36	ng/ml	94
7) Aniline	6.548	93	2632489	9068.14	ng/ml	96
8) Bis(2-chloroethyl) ether	6.596	93	1499102	7548.25	ng/ml	95
9) 2-Chlorophenol	6.655	128	1563047	8403.19	ng/ml	97
10) 1,3-Dichlorobenzene	6.805	146	1629041	7315.91	ng/ml	97
11) 1,4-Dichlorobenzene	6.869	146	1640871	7233.20	ng/ml	100
12) Benzyl alcohol	6.987	108	1046185	7688.30	ng/ml	91
13) 1,2-Dichlorobenzene	7.019	146	1561940	7323.23	ng/ml	99
14) 2-Methylphenol	7.078	107	1251343	8491.37	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.104	45	2259312	8376.35	ng/ml	90
16) N-Nitrosodi-n-propylamine	7.249	70	1199931	8681.24	ng/ml	94
17) 3+4-Methylphenol	7.238	107	1590888	8338.05	ng/ml	95
18) Hexachloroethane	7.350	117	626658	7871.76	ng/ml	83
20) Nitrobenzene	7.415	77	1701352	8641.84	ng/ml	90
22) Isophorone	7.655	82	3162533	8723.77	ng/ml	96
23) 2-Nitrophenol	7.725	139	801876	8245.20	ng/ml	86
24) 2,4-Dimethylphenol	7.757	122	1321200	8263.85	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.848	93	1803114	7779.71	ng/ml	100
26) Benzoic acid	~~7.757~~	~~105~~	48296	1340.17	~~ng/ml#~~	1
27) 2,4-Dichlorophenol	7.965	162	1159632	8231.27	ng/ml	99
28) 1,2,4-Trichlorobenzene	8.046	180	1206585	7302.88	ng/ml	95
29) Naphthalene	8.131	128	4249185	6984.92	ng/ml	99
30) 4-Chloroaniline	8.174	127	1793320	8019.32	ng/ml	96
31) Hexachlorobutadiene	8.249	225	608097	7493.07	ng/ml	97
32) 4-Chloro-3-methylphenol	8.645	107	1296093	7677.52	ng/ml	98
33) 2-Methylnaphthalene	8.821	142	2767888	6974.79	ng/ml	97
34) 1-Methylnaphthalene	8.923	142	2608946	6750.00	ng/ml	98
36) Hexachlorocyclopentadiene	8.987	237	607633	8634.28	ng/ml	98
37) 2,4,6-Trichlorophenol	9.105	196	774818	7807.23	ng/ml	98
38) 2,4,5-Trichlorophenol	9.142	196	807064	7518.74	ng/ml	98
39) 1,1'-Biphenyl	9.297	154	3199105	6677.22	ng/ml	97
41) 2-Chloronaphthalene	9.324	162	2468792	7196.08	ng/ml	100
42) 2-Nitroaniline	9.426	138	1014716	8563.66	ng/ml	83

see NJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301923.D
Acq On : 31 Jan 2019 12:28 am
Operator : JK/ AMS /DTH
Sample : 9A30046-CALA
Misc : 1x, A18L336@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:36 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

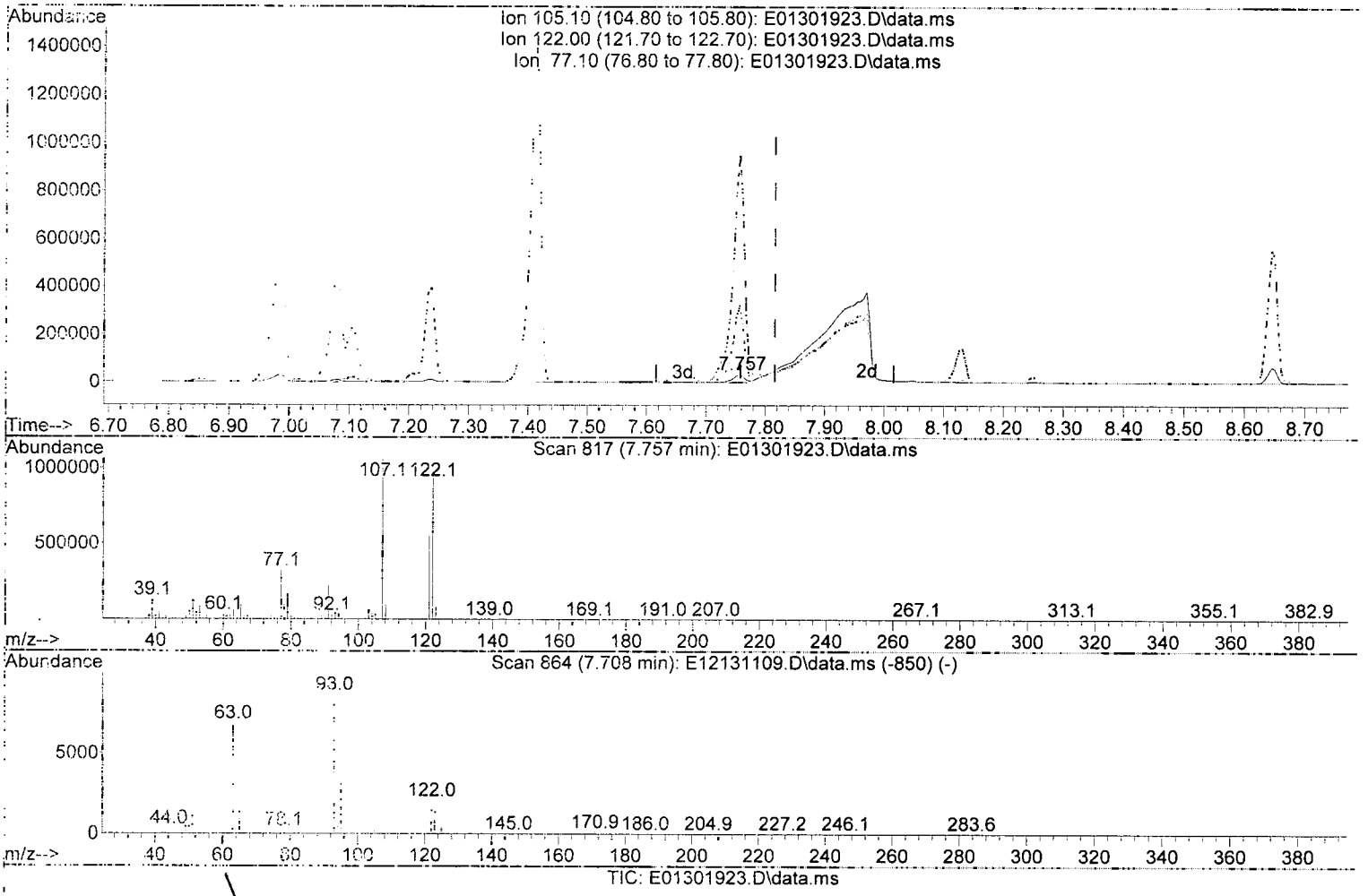
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.458	156	2321419	6939.99	ng/ml	98
44) 1,4-Dinitrobenzene	9.549	168	468426	8804.95	ng/ml	89
45) Dimethyl phthalate	9.613	163	2911473	7662.63	ng/ml	99
46) 1,3-Dinitrobenzene	9.645	168	525895	8837.38	ng/ml	95
47) 2,6-Dinitrotoluene	9.666	165	715275	8295.50	ng/ml	82
48) 1,2-Dinitrobenzene	9.736	168	333646	8871.28	ng/ml#	70
49) Acenaphthylene	9.747	152	3948147	7274.10	ng/ml	97
50) 3-Nitroaniline	9.848	138	834824	8482.01	ng/ml	97
51) Acenaphthene	9.928	153	2520666	6718.82	ng/ml	99
52) 2,4-Dinitrophenol	9.950	184	400481	7030.55	ng/ml	79
53) 4-Nitrophenol	10.009	139	695415	8031.66	ng/ml	82
54) 2,4-Dinitrotoluene	10.083	165	930978	8505.05	ng/ml	93
55) Dibenzofuran	10.100	168	3482255	7078.91	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.174	232	669191	8000.00	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.223	232	692769	8323.33	ng/ml	94
58) Diethyl phthalate	10.319	149	2624972	6911.48	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.308	170	2005572	6565.60	ng/ml	99
60) Fluorene	10.453	166	2767503	7035.83	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.436	204	1303879	7641.95	ng/ml	90
62) 4-Nitroaniline	10.485	138	879385	8704.92	ng/ml	80
63) 4,6-Dinitro-2-methylph...	10.506	198	494172	7276.17	ng/ml	86
65) N-Nitrosodiphenylamine	10.565	169	2473583	7484.03	ng/ml	99
66) Azobenzene (1,2-DPH)	10.602	77	3228382	8081.84	ng/ml	91
68) 4-Bromophenyl phenyl e...	10.939	248	789349	8940.36	ng/ml	88
69) Hexachlorobenzene	11.025	284	801760	8796.15	ng/ml	92
70) Pentachlorophenol (PCP)	11.212	266	524085	8437.76	ng/ml	97
71) Phenanthrene	11.437	178	3940073	6639.30	ng/ml	98
72) Anthracene	11.490	178	3984243	6945.75	ng/ml	99
73) Carbazole	11.645	167	3792212	7527.39	ng/ml	99
74) Di-n-butyl phthalate	11.977	149	4593818	7432.19	ng/ml	99
75) Fluoranthene	12.763	202	4263906	7471.19	ng/ml	97
76) Benzidine	12.934	184	4855656	13082.99	ng/ml	99
77) Pyrene	13.084	202	4397051	7476.01	ng/ml	98
80) Butyl benzyl phthalate	14.181	149	2274562	7195.35	ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.362	129	2130742	8593.90	ng/ml	98
82) 3,3-Dichlorobenzidine	15.411	252	2995565	15923.87	ng/ml	99
83) Benz(a)anthracene	15.432	228	3973101	7588.88	ng/ml	99
84) Chrysene	15.523	228	3809563	7692.71	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.566	149	3197212	8287.55	ng/ml	95
87) Di-n-octyl phthalate	17.267	149	5278776	7035.45	ng/ml	98
88) Benzo(b)fluoranthene	18.080	252	3991347	7678.49	ng/ml	99
89) Benzo(k)fluoranthene	18.149	252	3282962	6944.39	ng/ml	96
90) Benzo(b+k)fluoranthene	18.149	252	7617275	15030.09	ng/ml	96
91) Benzo(e)pyrene	18.743	252	3659927	8529.31	ng/ml	99
92) Benzo(a)pyrene	18.871	252	3529245	7581.59	ng/ml	99
93) Perylene	19.075	252	3618955	7592.94	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.417	276	3220620	7675.13	ng/ml	95
96) Dibenz(a,h)anthracene	21.476	278	2936332	7319.76	ng/ml	96
97) Benzo(g,h,i)perylene	21.963	276	2911992	6889.77	ng/ml	85

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301923.D
Acq On : 31 Jan 2019 12:28 am
Operator : JK/ AMS /DTH
Sample : 9A30046-CALA
Misc : 1x, A18L336@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:36 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E01301923.D\data.ms

(26) Benzoic acid (T)

7.757min (-0.059) 1340.17 ng/ml

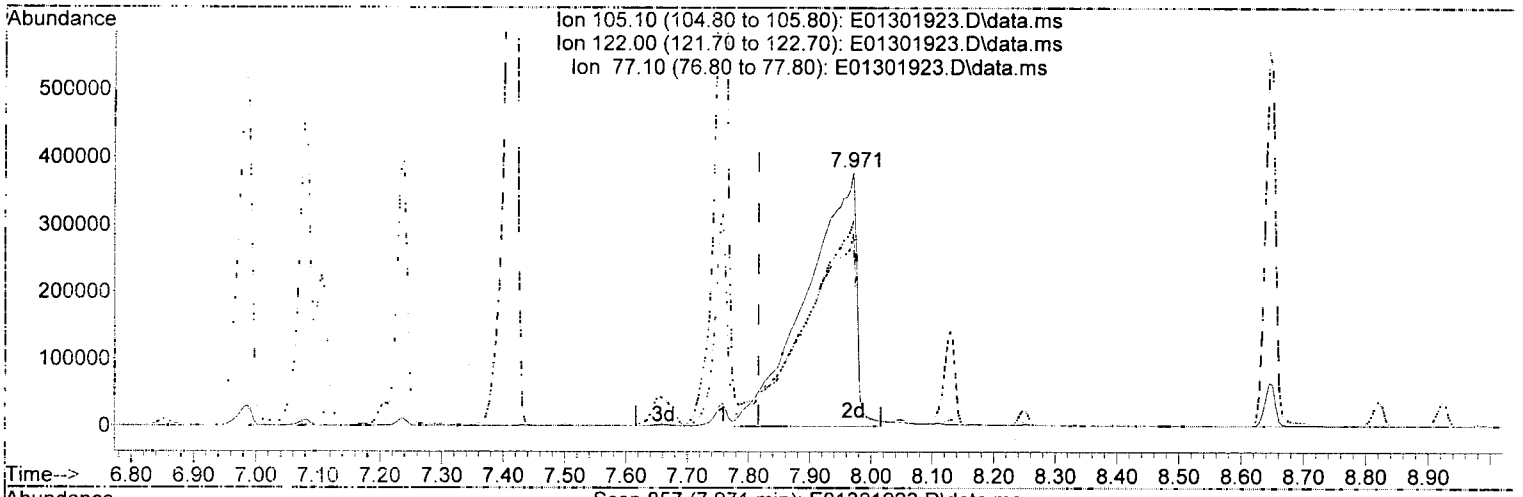
response 48296

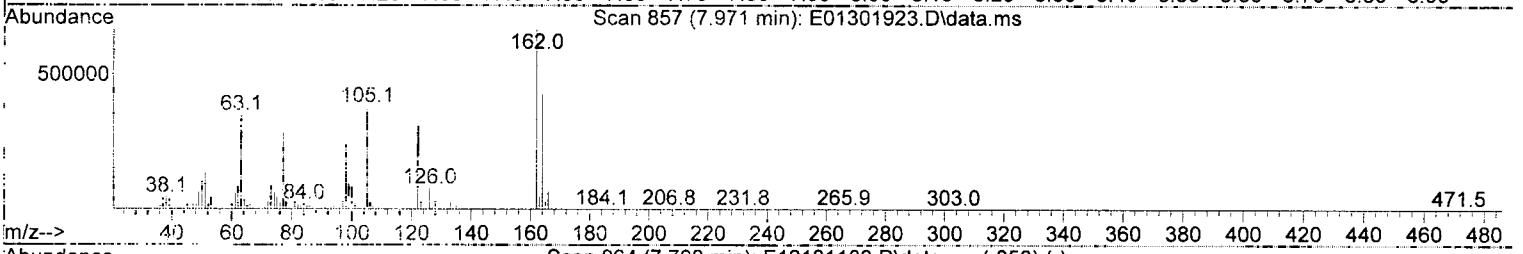
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2734.05#
77.10	85.50	927.68#
0.00	0.00	0.00

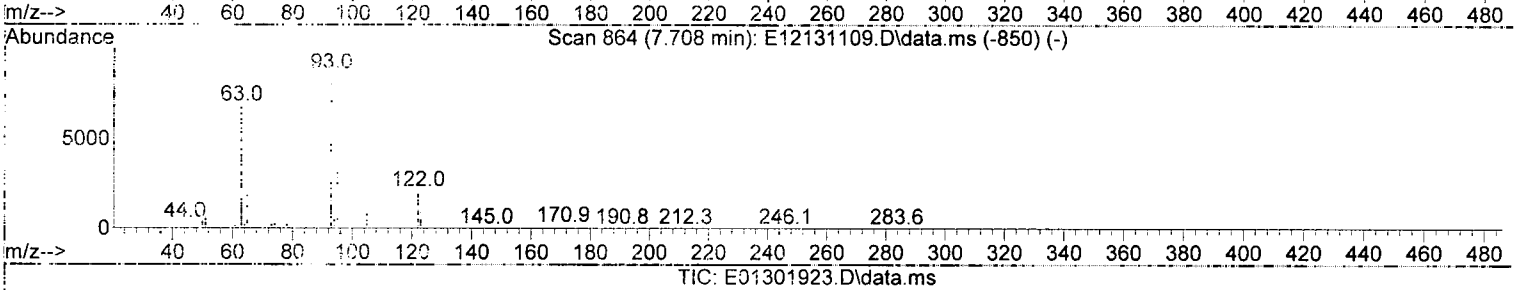
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301923.D
Acq On : 31 Jan 2019 12:28 am
Operator : JK/ AMS /DTH
Sample : 9A30046-CALA
Misc : 1x, A18L336@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:36 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5







TIC: E01301923.D\data.ms

(26) Benzoic acid (T)

7.971min (+ 0.155) 14891.92 ng/ml m

response 2134233

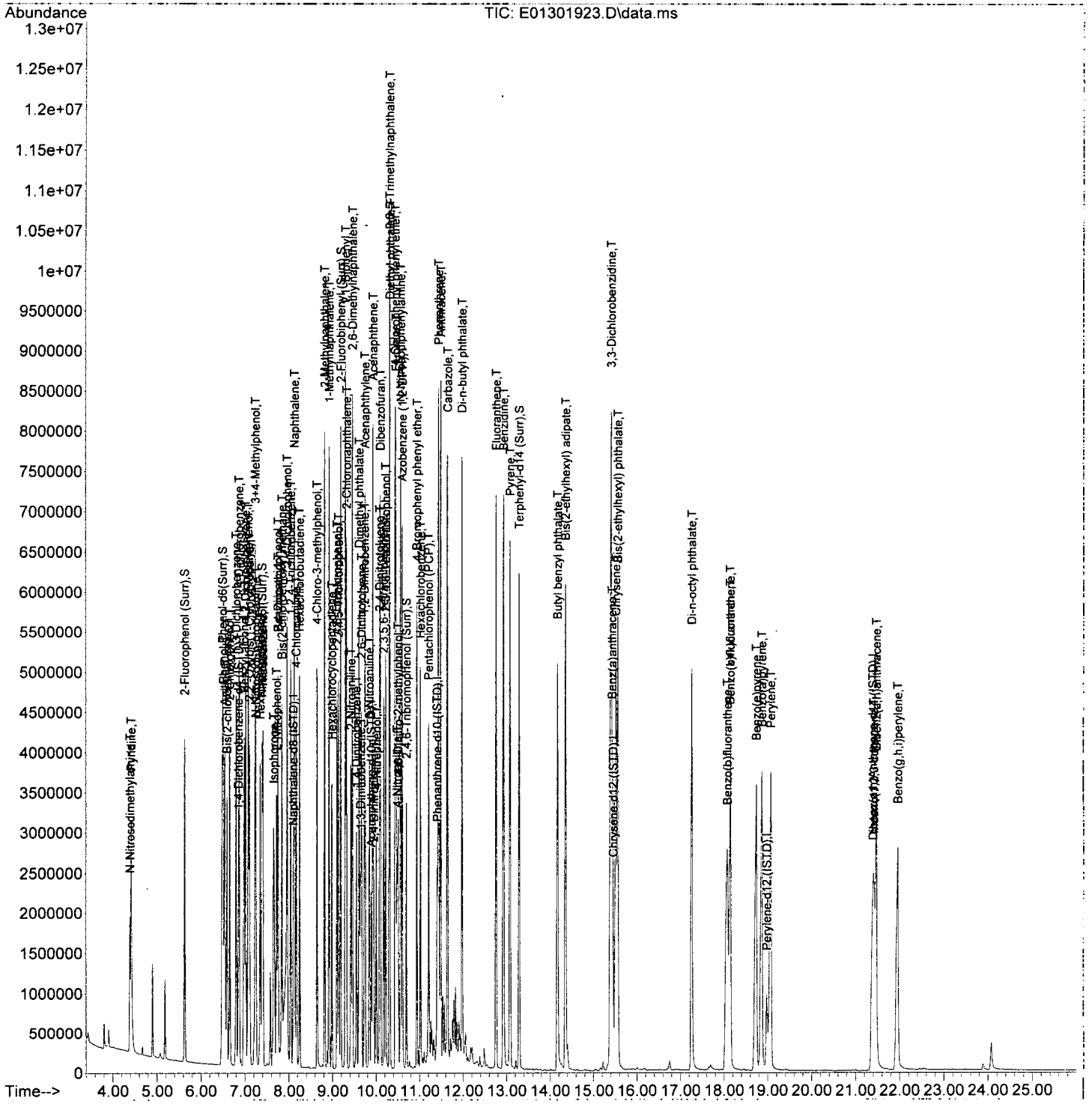
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	80.84
77.10	85.50	75.70
0.00	0.00	0.00

1/31/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301923.D
Acq On : 31 Jan 2019 12:28 am
Operator : JK/ AMS /DTH
Sample : 9A30046-CALA
Misc : 1x, A18L336@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:36 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

GJ 1/31/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	277641	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1090359	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	529225	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	987863	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	891477	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	813758	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.353	292	665943	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	177544	1057.07	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	240509	1101.41	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	220297	1125.63	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	400961	982.93	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	41202	1287.03	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	437453	1084.47	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.376	74	135584	1126.67	ng/ml	86
3) Pyridine	4.409	79	218654	1128.88	ng/ml	95
6) Phenol	6.489	94	247692	1059.25	ng/ml	91
7) Aniline	6.532	93	309908	1080.20	ng/ml	95
8) Bis(2-chloroethyl) ether	6.580	93	206192	1050.53	ng/ml	96
9) 2-Chlorophenol	6.650	128	191059	1039.35	ng/ml	96
10) 1,3-Dichlorobenzene	6.799	146	210822	958.02	ng/ml	96
11) 1,4-Dichlorobenzene	6.864	146	214824	958.21	ng/ml	99
12) Benzyl alcohol	6.965	108	113801	1019.39	ng/ml	94
13) 1,2-Dichlorobenzene	7.013	146	204761	971.42	ng/ml	99
14) 2-Methylphenol	7.067	107	158178	1086.10	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	317454	1190.91	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.222	70	158369	1159.36	ng/ml	96
17) 3+4-Methylphenol	7.211	107	206087	1092.94	ng/ml	94
18) Hexachloroethane	7.345	117	78838	1002.07	ng/ml	85
20) Nitrobenzene	7.398	77	219235	1126.79	ng/ml	92
22) Isophorone	7.628	82	400466	1129.44	ng/ml	96
23) 2-Nitrophenol	7.714	139	91410	960.98	ng/ml	87
24) 2,4-Dimethylphenol	7.741	122	164651	1052.94	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.832	93	248424	1095.87	ng/ml	99
26) Benzoic acid	7.821	105	122981	2100.46	ng/ml	96
27) 2,4-Dichlorophenol	7.949	162	135939	986.55	ng/ml	100
28) 1,2,4-Trichlorobenzene	8.040	180	154987	959.09	ng/ml	96
29) Naphthalene	8.120	128	591606	994.30	ng/ml	99
30) 4-Chloroaniline	8.163	127	222109	1015.48	ng/ml	96
31) Hexachlorobutadiene	8.243	225	77172	972.24	ng/ml	98
32) 4-Chloro-3-methylphenol	8.634	107	147250	1036.87	ng/ml	98
33) 2-Methylnaphthalene	8.816	142	394231	1015.69	ng/ml	96
34) 1-Methylnaphthalene	8.917	142	370979	981.33	ng/ml	97
36) Hexachlorocyclopentadiene	8.982	237	66625	971.40	ng/ml	98
37) 2,4,6-Trichlorophenol	9.094	196	87821	989.42	ng/ml	99
38) 2,4,5-Trichlorophenol	9.131	196	91305	1066.93	ng/ml	99
39) 1,1'-Biphenyl	9.281	154	462795	991.18	ng/ml	98
41) 2-Chloronaphthalene	9.308	162	332442	994.26	ng/ml	99
42) 2-Nitroaniline	9.404	138	111786	968.00	ng/ml	89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5

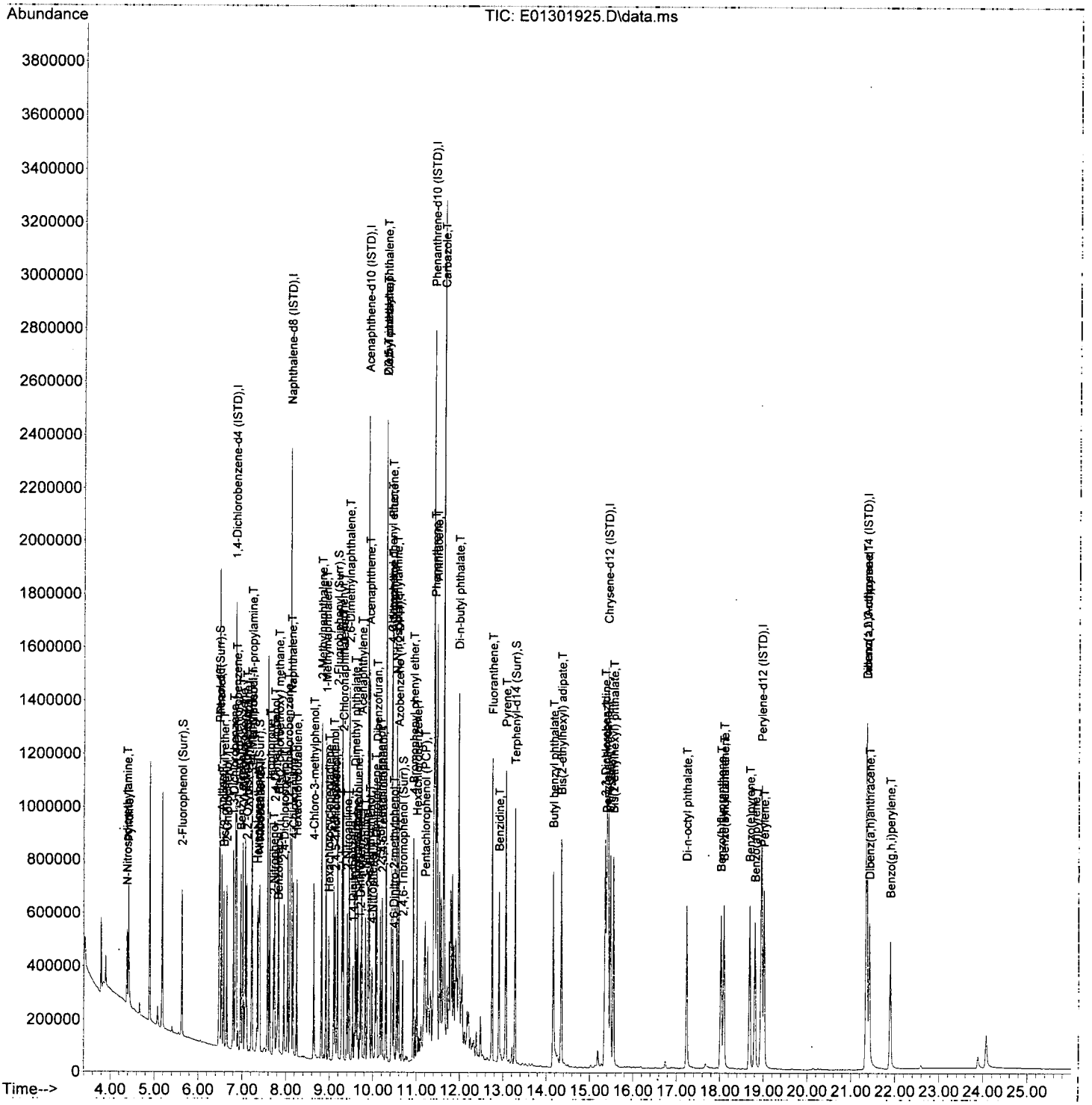
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	2,6-Dimethylnaphthalene	9.447	156	338148	1037.26	ng/ml	97
44)	1,4-Dinitrobenzene	9.533	168	44630	860.77	ng/ml	88
45)	Dimethyl phthalate	9.581	163	380922	1028.67	ng/ml	99
46)	1,3-Dinitrobenzene	9.613	168	57201	986.28	ng/ml	93
47)	2,6-Dinitrotoluene	9.645	165	84450	1004.95	ng/ml	86
48)	1,2-Dinitrobenzene	9.704	168	39174	1068.74	ng/ml#	72
49)	Acenaphthylene	9.736	152	551004	1041.63	ng/ml	99
50)	3-Nitroaniline	9.821	138	96272	1003.64	ng/ml	97
51)	Acenaphthene	9.912	153	361137	987.70	ng/ml	100
52)	2,4-Dinitrophenol	9.923	184	21125	730.73	ng/ml	87
53)	4-Nitrophenol	9.971	139	70280	1043.52	ng/ml	84
54)	2,4-Dinitrotoluene	10.057	165	108807	1019.92	ng/ml	93
55)	Dibenzofuran	10.089	168	483823	1009.17	ng/ml	92
56)	2,3,5,6-Tetrachlorophenol	10.164	232	71138	1053.44	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.212	232	77430	1057.03	ng/ml	92
58)	Diethyl phthalate	10.297	149	389146	1051.31	ng/ml	96
59)	2,3,5-Trimethylnaphtha...	10.297	170	309071	1038.17	ng/ml	97
60)	Fluorene	10.436	166	402110	1048.93	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.426	204	173539	1043.61	ng/ml	92
62)	4-Nitroaniline	10.442	138	103597	1052.22	ng/ml	79
63)	4,6-Dinitro-2-methylph...	10.474	198	40799	861.78	ng/ml	91
65)	N-Nitrosodiphenylamine	10.543	169	335063	1050.64	ng/ml	97
66)	Azobenzene (1,2-DPH)	10.586	77	474353	1230.68	ng/ml	99
68)	4-Bromophenyl phenyl e...	10.929	248	96780	1136.03	ng/ml	94
69)	Hexachlorobenzene	11.009	284	96201	1093.82	ng/ml	96
70)	Pentachlorophenol (PCP)	11.201	266	45098	955.89	ng/ml	97
71)	Phenanthrene	11.421	178	562373	982.11	ng/ml	99
72)	Anthracene	11.474	178	575013	1038.89	ng/ml	99
73)	Carbazole	11.629	167	522125	1074.10	ng/ml	99
74)	Di-n-butyl phthalate	11.971	149	663326	1112.22	ng/ml	99
75)	Fluoranthene	12.747	202	584676	1061.74	ng/ml	98
76)	Benzidine	12.907	184	351382	1232.02	ng/ml	99
77)	Pyrene	13.063	202	598814	1055.16	ng/ml	99
80)	Butyl benzyl phthalate	14.159	149	275114	1035.16	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	14.341	129	254845	1046.42	ng/ml	99
82)	3,3-Dichlorobenzidine	15.352	252	326783	2261.07	ng/ml	98
83)	Benz(a)anthracene	15.389	228	531189	1032.92	ng/ml	98
84)	Chrysene	15.475	228	493746	1015.03	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.544	149	376198	992.75	ng/ml	96
87)	Di-n-octyl phthalate	17.235	149	571095	1062.37	ng/ml	100
88)	Benzo(b)fluoranthene	18.021	252	464912	1072.93	ng/ml	99
89)	Benzo(k)fluoranthene	18.090	252	457480	1040.14	ng/ml	97
90)	Benzo(b+k)fluoranthene	18.090	252	951323	2080.05	ng/ml	97
91)	Benzo(e)pyrene	18.684	252	451868	1077.33	ng/ml	99
92)	Benzo(a)pyrene	18.807	252	426958	1068.81	ng/ml	100
93)	Perylene	19.010	252	475033	1019.64	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.353	276	363284	888.38	ng/ml	96
96)	Dibenz(a,h)anthracene	21.417	278	342915	877.12	ng/ml	96
97)	Benzo(g,h,i)perylene	21.893	276	378686	919.34	ng/ml	86

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 09:53:48 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 09:52:26 2019
Response via : Initial Calibration
InstName : SV-GCMS5



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Final Reqmnt
1/31/19

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.847	152	277641	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.099	136	1090359	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.880	162	529225	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.399	188	987863	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.416	240	891477	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.951	264	813758	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.353	292	665943	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.628	112	177544	1025.74	ng/ml	0.00
5) Phenol-d6(Surr)	6.473	99	240509	1038.80	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.377	82	220297	1061.23	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.179	172	400961	1018.74	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.682	330	41202	1137.97	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.277	244	437453	1050.25	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.376	74	135584	1034.87	ng/ml	86
3) Pyridine	4.409	79	218654	1030.49	ng/ml	95
6) Phenol	6.489	94	247692	1020.99	ng/ml	91
7) Aniline	6.532	93	309876	980.20	ng/ml	95
8) Bis(2-chloroethyl) ether	6.580	93	206192	1039.86	ng/ml	96
9) 2-Chlorophenol	6.650	128	191059	1051.71	ng/ml	96
10) 1,3-Dichlorobenzene	6.799	146	210822	1015.20	ng/ml	96
11) 1,4-Dichlorobenzene	6.864	146	214824	1023.84	ng/ml	99
12) Benzyl alcohol	6.965	108	113801	989.09	ng/ml	94
13) 1,2-Dichlorobenzene	7.013	146	204761	1030.25	ng/ml	99
14) 2-Methylphenol	7.067	107	158178	1046.97	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.099	45	317454	1009.58	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.222	70	158369	1065.53	ng/ml	96
17) 3+4-Methylphenol	7.211	107	206087	1079.89	ng/ml	94
18) Hexachloroethane	7.345	117	78838	1017.83	ng/ml	85
20) Nitrobenzene	7.398	77	219235	1093.50	ng/ml	92
22) Isophorone	7.628	82	400466	1076.18	ng/ml	96
23) 2-Nitrophenol	7.714	139	91410	1119.87	ng/ml	87
24) 2,4-Dimethylphenol	7.741	122	164651	1009.12	ng/ml	93
25) Bis(2-chloroethoxy) me...	7.832	93	248424	1061.05	ng/ml	99
26) Benzoic acid	7.821	105	122679	2255.56	ng/ml	96
27) 2,4-Dichlorophenol	7.949	162	135939	1075.18	ng/ml	100
28) 1,2,4-Trichlorobenzene	8.040	180	154987	1023.23	ng/ml	96
29) Naphthalene	8.120	128	591606	1017.09	ng/ml	99
30) 4-Chloroaniline	8.163	127	222109	1108.76	ng/ml	96
31) Hexachlorobutadiene	8.243	225	77172	1043.11	ng/ml	98
32) 4-Chloro-3-methylphenol	8.634	107	147250	1059.62	ng/ml	98
33) 2-Methylnaphthalene	8.816	142	394231	1077.50	ng/ml	96
34) 1-Methylnaphthalene	8.917	142	370979	1058.80	ng/ml	97
36) Hexachlorocyclopentadiene	8.982	237	66625	981.41	ng/ml	98
37) 2,4,6-Trichlorophenol	9.094	196	87821	1102.50	ng/ml	99
38) 2,4,5-Trichlorophenol	9.131	196	91305	1098.05	ng/ml	99
39) 1,1'-Biphenyl	9.281	154	462795	1022.17	ng/ml	98
41) 2-Chloronaphthalene	9.308	162	332442	1017.01	ng/ml	99
42) 2-Nitroaniline	9.404	138	111786	1113.80	ng/ml	89

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5

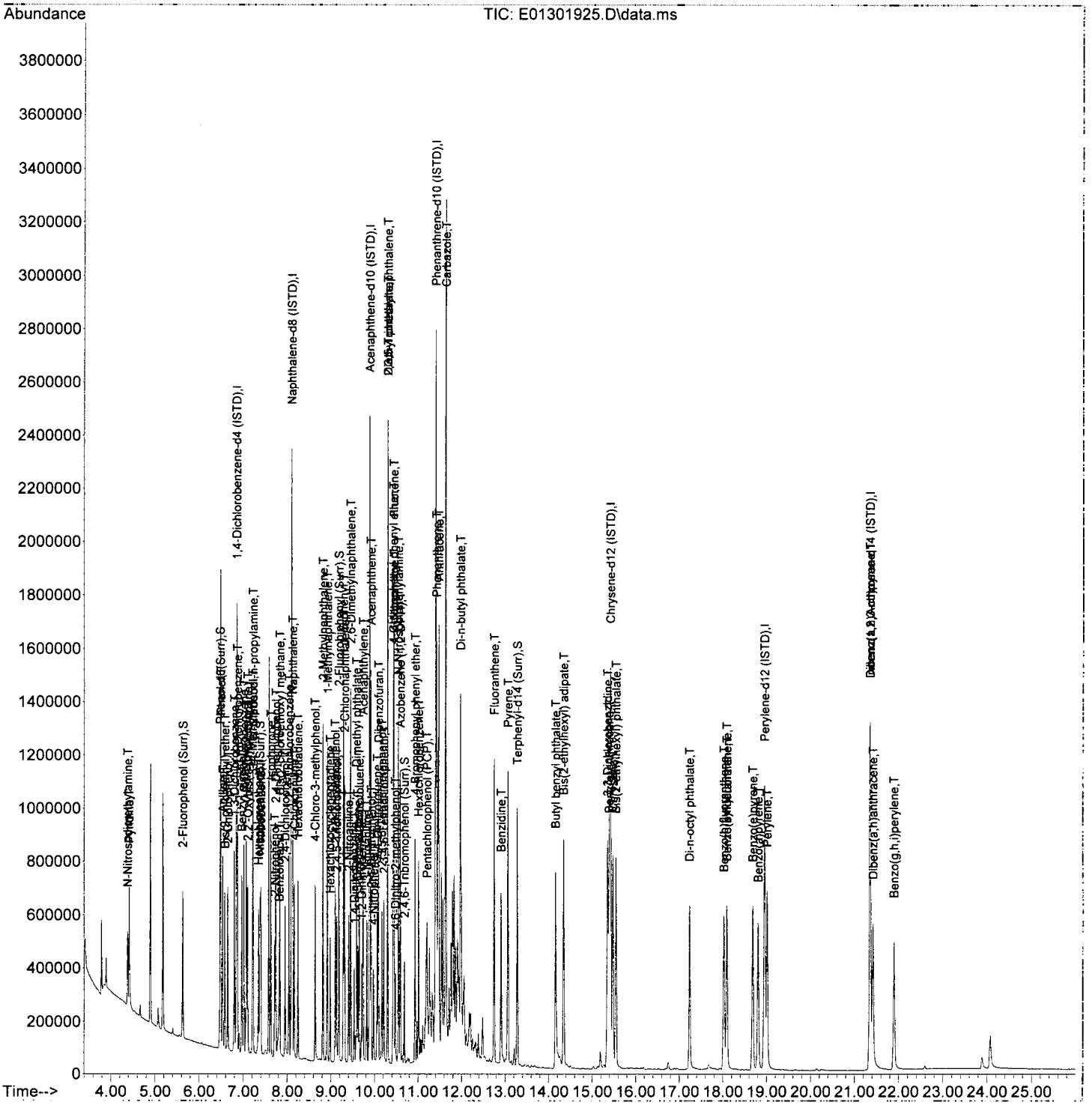
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	338148	1069.02	ng/ml	97
44) 1,4-Dinitrobenzene	9.533	168	44630	1158.49	ng/ml	88
45) Dimethyl phthalate	9.581	163	380922	1121.50	ng/ml	99
46) 1,3-Dinitrobenzene	9.613	168	57201	1152.44	ng/ml	93
47) 2,6-Dinitrotoluene	9.645	165	84450	1134.19	ng/ml	86
48) 1,2-Dinitrobenzene	9.704	168	39174	1168.42	ng/ml#	72
49) Acenaphthylene	9.736	152	551004	1068.88	ng/ml	99
50) 3-Nitroaniline	9.821	138	96272	1119.89	ng/ml	97
51) Acenaphthene	9.912	153	361137	1033.18	ng/ml	100
52) 2,4-Dinitrophenol	9.923	184	21125	1090.03	ng/ml	87
53) 4-Nitrophenol	9.971	139	70280	1088.31	ng/ml	84
54) 2,4-Dinitrotoluene	10.057	165	108807	1137.24	ng/ml	93
55) Dibenzofuran	10.089	168	483823	1064.71	ng/ml	92
56) 2,3,5,6-Tetrachlorophenol	10.164	232	71138	1150.76	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.212	232	77430	1106.82	ng/ml	92
58) Diethyl phthalate	10.297	149	389146	1146.40	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.297	170	309071	1096.15	ng/ml	97
60) Fluorene	10.436	166	402110	1105.14	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.426	204	173539	1077.17	ng/ml	92
62) 4-Nitroaniline	10.442	138	103597	1078.75	ng/ml	79
63) 4,6-Dinitro-2-methylph...	10.474	198	40799	1209.64	ng/ml	91
65) N-Nitrosodiphenylamine	10.543	169	335063	1073.65	ng/ml	97
66) Azobenzene (1,2-DPH)	10.586	77	474353	1112.48	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.929	248	96780	1058.95	ng/ml	94
69) Hexachlorobenzene	11.009	284	96201	1046.39	ng/ml	96
70) Pentachlorophenol (PCP)	11.201	266	45098	999.56	ng/ml	97
71) Phenanthrene	11.421	178	562373	1037.20	ng/ml	99
72) Anthracene	11.474	178	575013	1033.61	ng/ml	99
73) Carbazole	11.629	167	522125	1002.38	ng/ml	99
74) Di-n-butyl phthalate	11.971	149	663326	1017.76	ng/ml	99
75) Fluoranthene	12.747	202	584676	1039.58	ng/ml	98
76) Benzidine	12.907	184	351382	2024.85	ng/ml	99
77) Pyrene	13.063	202	598814	1048.13	ng/ml	99
80) Butyl benzyl phthalate	14.159	149	275114	1055.06	ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.341	129	254845	982.14	ng/ml	99
82) 3,3-Dichlorobenzidine	15.352	252	326783	2201.80	ng/ml	98
83) Benz(a)anthracene	15.389	228	531189	1056.36	ng/ml	98
84) Chrysene	15.475	228	493746	1030.71	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.544	149	376198	1009.54	ng/ml	96
87) Di-n-octyl phthalate	17.235	149	571095	1063.36	ng/ml	100
88) Benzo(b)fluoranthene	18.021	252	464912	1081.37	ng/ml	99
89) Benzo(k)fluoranthene	18.090	252	457480	1082.75	ng/ml	97
90) Benzo(b+k)fluoranthene	18.090	252	951323	2106.99	ng/ml	97
91) Benzo(e)pyrene	18.684	252	451868	1035.22	ng/ml	99
92) Benzo(a)pyrene	18.807	252	426958	1093.77	ng/ml	100
93) Perylene	19.010	252	475033	1064.74	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.353	276	363284	995.26	ng/ml	96
96) Dibenz(a,h)anthracene	21.417	278	342915	1025.85	ng/ml	96
97) Benzo(g,h,i)perylene	21.893	276	378686	1053.78	ng/ml	86

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301925.D
Acq On : 31 Jan 2019 1:40 am
Operator : JK/ AMS /DTH
Sample : 9A30046-ICV1
Misc : 1x, A19A013@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jan 31 12:00:55 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu Jan 31 10:44:49 2019
Response via : Initial Calibration
InstName : SV-GCMS5



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Calibration Data

Sequence 9D12042 (Cal ID A9D1505) GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9D12042**	Instrument:	**SV-GCMS10**
Date:	**04/12/19 17:14**	Calibration:	**A9D1505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9D12042-TUN1	Water	QC	QC			A19D031	A19D089
2	9D12042-TUN2	Water	QC	QC			A19D031	A19D089
3	9D12042-ICB1	Water	QC	QC			A19D031	
4	9D12042-CAL1	Water	QC	QC			A19D031	A19D053
5	9D12042-CAL2	Water	QC	QC			A19D031	A19D054
6	9D12042-CAL3	Water	QC	QC			A19D031	A19D055
7	9D12042-CAL4	Water	QC	QC			A19D031	A19D056
8	9D12042-CAL5	Water	QC	QC			A19D031	A19D057
9	9D12042-CAL6	Water	QC	QC			A19D031	A19D058
10	9D12042-CAL7	Water	QC	QC			A19D031	A19D059
11	9D12042-CAL8	Water	QC	QC			A19D031	A19D060
12	9D12042-CAL9	Water	QC	QC			A19D031	A19D061
13	9D12042-CALA	Water	QC	QC			A19D031	A19D062
14	9D12042-IBL1	Water	QC	QC			A19D031	
15	9D12042-ICV1	Water	QC	QC			A19D031	A19C239
16	9D12042-IBL2	Water	QC	QC			A19D031	

Data Entered By: 4/15/19

Data Reviewed By: 4/17/19

Comments: Raise 3,3-Dichlorobenzidene to 200/400 for soils

Calibration Status Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_041219.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Apr 15 09:10:15 2019
Response Via : Initial Calibration

A9D1505
4/15/19

#	ID	Conc	ISTD Conc	Path\File
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2	50	50	2000	C:\msdchem\1\data\2019-04\9D12042\J04121916.D
3	100	100	2000	C:\msdchem\1\data\2019-04\9D12042\J04121917.D
4	200	200	2000	C:\msdchem\1\data\2019-04\9D12042\J04121918.D
5	500	500	2000	C:\msdchem\1\data\2019-04\9D12042\J04121919.D
6	1000	1000	2000	C:\msdchem\1\data\2019-04\9D12042\J04121920.D
7	2000	2000	2000	C:\msdchem\1\data\2019-04\9D12042\J04121921.D
8	4000	4000	2000	C:\msdchem\1\data\2019-04\9D12042\J04121922.D
9	6000	6000	2000	C:\msdchem\1\data\2019-04\9D12042\J04121923.D
10	8000	8000	2000	C:\msdchem\1\data\2019-04\9D12042\J04121924.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Apr 15 09:09 2019	Apr 15 08:54 2019	12 Apr 2019 6:51 pm
2	50	Apr 15 09:09 2019	Apr 15 08:59 2019	12 Apr 2019 7:27 pm
3	100	Apr 15 09:09 2019	Apr 15 09:00 2019	12 Apr 2019 8:03 pm
4	200	Apr 15 09:09 2019	Apr 15 09:01 2019	12 Apr 2019 8:39 pm
5	500	Apr 15 09:09 2019	Apr 15 08:55 2019	12 Apr 2019 9:16 pm
6	1000	Apr 15 09:09 2019	Apr 15 08:55 2019	12 Apr 2019 9:52 pm
7	2000	Apr 15 09:09 2019	Apr 15 08:55 2019	12 Apr 2019 10:28 pm
8	4000	Apr 15 09:10 2019	Apr 15 08:55 2019	12 Apr 2019 11:04 pm
9	6000	Apr 15 09:10 2019	Apr 15 09:04 2019	12 Apr 2019 11:40 pm
10	8000	Apr 15 09:10 2019	Apr 15 09:05 2019	13 Apr 2019 12:15 am

SV10_041219.M Mon Apr 15 12:04:32 2019

Method Path : C:\msdchem\1\methods\
Method File : SV10_041219.M
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40)	S	2-Fluorobiphen...		1.365	1.351	1.571	1.631	1.557	1.472	1.360	1.233	1.160	1.411	11.25
41)	T	2-Chloronaphth...	0.973	1.048	1.079	1.228	1.325	1.256	1.215	1.144	1.051		1.147	10.16
42)	T	2-Nitroaniline				0.154	0.226	0.345	0.366	0.407	0.429	0.431	0.429	0.348	29.95
43)	T	2,6-Dimethylna...	1.059	1.207	1.248	1.323	1.361	1.306	1.238	1.137	1.038	0.970	1.189	11.13
44)	T	1,4-Dinitroben...				0.061	0.101	0.120	0.155	0.178	0.183	0.188	0.141	34.41
45)	T	Dimethyl phtha...	1.354	1.382	1.480	1.488	1.532	1.434	1.403	1.355	1.261	1.222	1.391	7.09
46)	T	1,3-Dinitroben...				0.072	0.102	0.153	0.166	0.193	0.208	0.208	0.206	0.163	31.75
47)	T	2,6-Dinitrotol...			0.127	0.166	0.245	0.288	0.301	0.309	0.312	0.301	0.284	0.259	26.10
48)	T	1,2-Dinitroben...					0.109	0.129	0.135	0.139	0.148	0.143	0.134	0.134	9.38
49)	T	Acenaphthylene	1.903	1.943	2.139	2.109	2.208	2.145	2.004	1.899	1.657		2.001	8.59
50)	T	3-Nitroaniline					0.245	0.293	0.300	0.296	0.274	0.261	0.246	0.273	8.61
51)	T	Acenaphthene	1.408	1.319	1.403	1.409	1.407	1.342	1.276	1.193	1.089	1.022	1.287	10.97
52)	T	2,4-Dinitrophenol					0.014	0.029	0.046	0.070	0.103	0.118	0.131	0.073	62.20
53)	T	4-Nitrophenol				0.063	0.111	0.154	0.189	0.226	0.253	0.257	0.260	0.189	39.12
54)	T	2,4-Dinitrotol...				0.164	0.244	0.314	0.353	0.392	0.412	0.394	0.378	0.331	26.17
55)	T	Dibenzofuran	1.700	1.774	1.786	1.856	1.873	1.747	1.699	1.604	1.442	1.329	1.681	10.48
56)	T	2,3,5,6-Tetrac...		0.096	0.134	0.202	0.242	0.259	0.276	0.291	0.279	0.277	0.228	30.66
57)	T	2,3,4,6-Tetrac...	0.110	0.170	0.216	0.262	0.275	0.284	0.294	0.300	0.293	0.283	0.249	25.53
58)	T	Diethyl phthalate	1.300	1.326	1.517	1.498	1.521	1.419	1.347	1.234	1.100	1.024	1.329	12.89
59)	T	2,3,5-Trimethy...	1.053	1.124	1.202	1.211	1.204	1.116	1.063	0.964	0.873	0.818	1.063	13.08
60)	T	Fluorene	1.307	1.354	1.472	1.488	1.483	1.385	1.329	1.216	1.094	1.036	1.316	12.04
61)	T	4-Chlorophenyl...	0.615	0.614	0.658	0.648	0.649	0.622	0.608	0.574	0.527	0.510	0.602	8.39
62)	T	4-Nitroaniline				0.180	0.243	0.254	0.270	0.276	0.270	0.263	0.256	0.252	12.23
63)	T	4,6-Dinitro-2-...				0.022	0.045	0.072	0.090	0.124	0.159	0.169	0.176	0.107	54.99
															5.07
64)	I	Phenanthrene-d10 (...	----------	ISTD	----------										
65)	T	N-Nitrosodiphe...	0.531	0.631	0.697	0.695	0.721	0.665	0.635	0.576	0.521	0.486	0.616	13.41
66)	T	Azobenzene (1,...	0.794	0.821	0.920	0.938	0.963	0.906	0.865	0.788	0.701	0.637	0.833	12.72
67)	S	2,4,6-Tribromo...			0.049	0.068	0.088	0.094	0.098	0.102	0.104	0.100	0.096	0.089	20.57
68)	T	4-Bromophenyl ...	0.164	0.190	0.206	0.215	0.220	0.210	0.205	0.198	0.183	0.178	0.197	9.01
69)	T	Hexachlorobenzene	0.288	0.270	0.261	0.248	0.253	0.243	0.229	0.215	0.201	0.193	0.240	12.70
70)	T	Pentachlorophe...			0.068	0.074	0.096	0.101	0.105	0.120	0.126	0.125	0.125	0.104	20.99
71)	T	Phenanthrene	1.156	1.176	1.215	1.197	1.177	1.131	1.078	0.984	0.893	0.845	1.085	12.23
72)	T	Anthracene	0.998	1.082	1.183	1.181	1.197	1.126	1.088	0.991	0.894	0.828	1.057	11.97
73)	T	Carbazole	0.754	0.833	0.975	1.009	1.014	0.972	0.880	0.718			0.894	13.01
74)	T	Di-n-butyl pht...			1.118	1.287	1.377	1.332	1.317	1.229	1.101	1.024	1.223	10.44
75)	T	Fluoranthene	0.942	0.962	1.129	1.208	1.238	1.176	1.159	1.083	0.990	0.936	1.082	10.70
76)	T	Benzidine			0.274	0.272	0.362	0.430	0.434	0.454	0.474	0.461	0.395	20.93
77)	T	Pyrene	1.015	1.042	1.181	1.234	1.278	1.200	1.168	1.088	0.999	0.948	1.115	10.03
															6.90
78)	I	Chrysene-d12 (ISTD)	----------	ISTD	----------										
79)	S	Terphenyl-d14 ...	0.817	0.900	0.960	0.969	1.012	0.993	0.970	0.963	0.920	0.912	0.941	5.99
80)	T	Butyl benzyl p...		0.276	0.369	0.445	0.562	0.599	0.642	0.685	0.676	0.686	0.549	27.53
81)	T	Bis(2-ethylhex...				0.438	0.531	0.567	0.595	0.633	0.614	0.613	0.570	11.84
82)	T	3,3-Dichlorobe...				0.275	0.221	0.206	0.148	0.143	0.148		0.190	28.01
83)	T	Benz(a)anthracene	1.101	1.023	1.076	1.128	1.153	1.113	1.102	1.098	1.062	1.057	1.091	3.46
84)	T	Chrysene	1.033	1.015	1.088	1.089	1.096	1.084	1.074	1.059	1.029	1.023	1.059	2.95
85)	T	Bis(2-ethylhex...				0.651	0.808	0.862	0.886	0.912	0.886	0.876	0.840	10.65
															7.73
86)	I	Perylene-d12 (ISTD)	----------	ISTD	----------										
87)	T	Di-n-octyl pht...			0.566	0.833	1.176	1.379	1.539	1.664	1.603	1.577	1.292	31.17

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88)	T	Benzo(b)fluora...	0.699	0.833	0.984	1.068	1.198	1.192	1.221	1.258	1.208	1.219	1.088	17.56
89)	T	Benzo(k)fluora...	0.627	0.853	1.029	1.119	1.211	1.211	1.182	1.162	1.079	0.983	1.046	17.75
90)	T	Benzo(b+k)fluo...	0.741	0.872	1.038	1.118	1.230	1.225	1.222	1.229	1.162	1.142	1.098	15.32
91)	T	Benzo(e)pyrene	0.844	0.896	1.052	1.110	1.217	1.203	1.198	1.194	1.134	1.118	1.097	11.91
92)	T	Benzo(a)pyrene	0.583	0.699	0.849	0.998	1.096	1.108	1.137	1.127	1.066	1.037	0.970	20.03
93)	T	Perylene	0.971	0.954	1.028	1.105	1.075	1.052	1.029	1.018	0.966	0.955	1.015	5.19
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											9.34
95)	T	Indeno(1,2,3-c...	1.200	1.053	1.089	1.086	1.105	1.089	1.090	1.120	1.107	1.249	1.119	5.31
96)	T	Dibenz(a,h)ant...	0.963	0.914	1.002	0.999	1.043	1.026	1.063	1.032	0.993	0.973	1.001	4.36
97)	T	Benzo(g,h,i)pe...	0.904	0.982	1.006	1.096	1.175	1.179	1.157	1.137	1.094	1.084	1.081	8.42

(#) = Out of Range

Response Factor Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_041219.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Apr 15 09:10:15 2019
Response Via : Initial Calibration

4/15/19

Calibration Files
20 =J04121915.D 50 =J04121916.D 100 =J04121917.D 200 =J04121918.D 500 =J04121919.D 1000=J04121920.D 2000=J04121921.D
4000=J04121922.D 6000=J04121923.D 8000=J04121924.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------	ISTD	----------									3.00
2)	TG	N-Nitrosodimet...	0.888	0.995	0.939	0.973	0.991	1.009	0.991	1.036	1.021	1.012	0.985	4.41
3)	TG	Pyridine	1.215	1.364	1.498	1.598	1.610	1.706	1.703	1.795	1.797	1.793	1.608	12.27
4)	S	2-Fluorophenol...	1.086	1.025	1.156	1.272	1.350	1.360	1.389	1.463	1.464	1.436	1.300	12.28
5)	S	Phenol-d6(Surr)		1.196	1.397	1.568	1.712	1.762	1.826	1.894	1.872	1.825	1.672	14.32
6)	T	Phenol	1.024	1.450	1.505	1.809	1.941	1.767	2.012	2.061	2.011	1.954	1.753	18.94
7)	T	Aniline		2.011	1.972	1.868	1.965	2.160	1.907	1.860	1.950	2.006	1.966	4.62
8)	T	Bis(2-chloroet...	1.724	1.649	1.643	1.711	1.781	1.704	1.774	1.777	1.641	1.530	1.693	4.69
9)	T	2-Chlorophenol	1.076	1.143	1.289	1.344	1.445	1.486	1.466	1.479	1.468	1.400	1.360	10.82
10)	T	1,3-Dichlorobe...	1.462	1.540	1.520	1.645	1.638	1.564	1.542	1.522	1.468	1.396	1.530	5.01
11)	T	1,4-Dichlorobe...	1.544	1.590	1.611	1.601	1.611	1.531	1.527	1.484	1.420	1.344	1.526	5.80
12)	T	Benzyl alcohol		0.358	0.408	0.645	0.704	0.833	0.932	1.017	1.017	1.004	0.769	33.42
13)	T	1,2-Dichlorobe...	1.405	1.553	1.535	1.620	1.605	1.529	1.490	1.437	1.384	1.297	1.485	6.94
14)	T	2-Methylphenol	0.839	0.813	0.917	1.025	1.128	1.186	1.180	1.192	1.152	1.100	1.053	13.92
15)	T	2,2'-Oxybis(1-...	2.142	2.068	2.029	2.018	2.081	2.004	1.877	1.780	1.656	1.507	1.916	10.81
16)	T	N-Nitrosodi-n-...	1.012	1.002	1.055	1.127	1.244	1.219	1.168	1.103	1.043		1.108	7.96
17)	T	3+4-Methylphenol	0.739	0.817	1.026	1.178	1.421	1.489	1.518				1.170	27.41
18)	T	Hexachloroethane	0.346	0.408	0.412	0.414	0.431	0.412	0.426	0.432	0.422	0.410	0.411	5.99
19)	S	Nitrobenzene-d...		0.948	1.285	1.307	1.424	1.482	1.567	1.582	1.549	1.516	1.407	14.44
20)	T	Nitrobenzene		1.106	1.323	1.394	1.485	1.534	1.537	1.532	1.482	1.411	1.423	9.81
21)	I	Naphthalene-d8 (ISTD)	----------	ISTD	----------									2.40
22)	T	Isophorone	0.687	0.703	0.729	0.776	0.799	0.773	0.757	0.754	0.737	0.733	0.745	4.57
23)	T	2-Nitrophenol			0.075	0.110	0.138	0.161	0.165	0.178	0.179	0.179	0.148	25.66
24)	T	2,4-Dimethylph...		0.172	0.214	0.257	0.308	0.315	0.323	0.306	0.289	0.281	0.274	18.59
25)	T	Bis(2-chloroet...	0.282	0.330	0.416	0.431	0.444	0.439	0.437	0.430	0.403	0.382	0.400	13.47
26)	T	Benzoic acid					0.053	0.111	0.168	0.220	0.239	0.249	0.173	45.07
27)	T	2,4-Dichloroph...		0.102	0.118	0.156	0.224	0.245	0.255	0.258	0.246		0.200	32.22
28)	T	1,2,4-Trichlor...	0.268	0.287	0.313	0.302	0.306	0.296	0.282	0.274	0.262	0.250	0.284	7.21
29)	T	Naphthalene	1.039	1.088	1.130	1.131	1.147	1.092	1.052	0.972	0.881	0.820	1.035	10.72
30)	T	4-Chloroaniline	0.197	0.190	0.227	0.259	0.337	0.349	0.354				0.273	26.43
31)	T	Hexachlorobuta...	0.178	0.164	0.171	0.157	0.158	0.156	0.150	0.142	0.135	0.132	0.154	9.53
32)	T	4-Chloro-3-met...			0.124	0.189	0.275	0.290	0.309	0.318	0.308	0.299	0.264	26.37
33)	T	2-Methylnaphth...	0.578	0.596	0.643	0.748	0.773	0.740	0.726	0.682	0.624		0.679	10.53
34)	T	1-Methylnaphth...	0.631	0.642	0.685	0.732	0.748	0.698	0.680	0.641	0.581	0.548	0.658	9.58
35)	I	Acenaphthene-d10 (...	----------	ISTD	----------									3.28
36)	T	Hexachlorocycl...		0.128	0.180	0.211	0.262	0.291	0.300	0.311	0.309	0.302	0.255	26.05
37)	T	2,4,6-Trichlor...		0.154	0.161	0.247	0.327	0.341	0.364	0.367	0.359	0.343	0.296	29.20
38)	T	2,4,5-Trichlor...		0.181	0.190	0.252	0.315	0.338	0.341	0.360	0.340	0.335	0.295	23.36
39)	T	1,1'-Biphenyl	1.288	1.495	1.510	1.783	1.864	1.789	1.694	1.546			1.621	11.97

Compound List Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_041219.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Mon Apr 15 09:10:15 2019
Response Via : Initial Calibration

Total Cpnds : 97

GJ 4/15/19

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.808	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	4.150	0.610	A	2	A	A
3	T	Pyridine	79	4.177	0.614	A	2	A	A
4	S	2-Fluorophenol (Surr)	112	5.535	0.813	A	1	A	R
5	S	Phenol-d6(Surr)	99	6.433	0.945	A	2	A	R
6	T	Phenol	94	6.449	0.947	Q	2	A	R
7	T	Aniline	93	6.487	0.953	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.541	0.961	A	2	A	R
9	T	2-Chlorophenol	128	6.605	0.970	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.755	0.992	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.830	1.003	A	2	A	R
12	T	Benzyl alcohol	108	6.936	1.019	Q	2	A	R
13	T	1,2-Dichlorobenzene	146	6.979	1.025	A	2	A	R
14	T	2-Methylphenol	107	7.044	1.035	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	7.070	1.039	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.198	1.057	A	2	A	R
17	T	3+4-Methylphenol	107	7.193	1.057	Q	3	A	R
18	T	Hexachloroethane	201	7.322	1.075	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.353	1.080	Q	2	A	R
20	T	Nitrobenzene	77	7.375	1.083	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	8.081	1.000	A	1	A	R
22	T	Isophorone	82	7.605	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.696	0.952	Q	2	A	R
24	T	2,4-Dimethylphenol	122	7.722	0.956	Q	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.814	0.967	A	2	A	R
26	T	Benzoic acid	105	7.813	0.967	Q	2	A	R
27	T	2,4-Dichlorophenol	162	7.931	0.981	Q	2	A	R
28	T	1,2,4-Trichlorobenzene	180	8.022	0.993	A	2	A	R
29	T	Naphthalene	128	8.103	1.003	A	1	A	R
30	T	4-Chloroaniline	127	8.145	1.008	Q	2	A	R
31	T	Hexachlorobutadiene	225	8.231	1.019	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.621	1.067	Q	2	A	R
33	T	2-Methylnaphthalene	142	8.797	1.089	A	2	A	R
34	T	1-Methylnaphthalene	142	8.900	1.101	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.868	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.969	0.909	Q	2	A	R
37	T	2,4,6-Trichlorophenol	196	9.081	0.920	Q	2	A	R
38	T	2,4,5-Trichlorophenol	198	9.118	0.924	Q	2	A	R
39	T	1,1'-Biphenyl	154	9.268	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	9.167	0.929	A	2	A	R
41	T	2-Chloronaphthalene	162	9.295	0.942	A	2	A	R
42	T	2-Nitroaniline	138	9.391	0.952	Q	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.429	0.956	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.514	0.964	Q	2	A	R
45	T	Dimethyl phthalate	163	9.568	0.970	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.600	0.973	Q	2	A	R
47	T	2,6-Dinitrotoluene	165	9.626	0.976	Q	2	A	R
48	T	1,2-Dinitrobenzene	168	9.691	0.982	A	2	A	R
49	T	Acenaphthylene	152	9.717	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.803	0.993	A	2	A	R
51	T	Acenaphthene	153	9.900	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.905	1.004	Q	2	A	R
53	T	4-Nitrophenol	139	9.958	1.009	Q	2	A	R
54	T	2,4-Dinitrotoluene	165	10.038	1.017	Q	2	A	R

55	T	Dibenzofuran	168	10.071	1.021	A	2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	10.151	1.029	Q	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.193	1.033	Q	2	A	R
58	T	Diethyl phthalate	149	10.285	1.042	A	2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.280	1.042	A	2	A	R
60	T	Fluorene	166	10.419	1.056	A	2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.408	1.055	A	2	A	R
62	T	4-Nitroaniline	138	10.423	1.056	A	2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.461	1.060	Q	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.381	1.000	A	2	A	R
65	T	N-Nitrosodiphenylamine	169	10.526	0.925	A	2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.574	0.929	A	2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.664	0.937	Q	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.911	0.959	A	2	A	R
69	T	Hexachlorobenzene	284	10.991	0.966	A	2	A	R
70	T	Pentachlorophenol (PCP)	266	11.183	0.983	Q	2	A	R
71	T	Phenanthrene	178	11.403	1.002	A	2	A	R
72	T	Anthracene	178	11.456	1.007	A	2	A	R
73	T	Carbazole	167	11.611	1.020	A	2	A	R
74	T	Di-n-butyl phthalate	149	11.948	1.050	A	2	A	R
75	T	Fluoranthene	202	12.719	1.117	A	2	A	R
76	T	Benzidine	184	12.878	1.132	Q	2	A	R
77	T	Pyrene	202	13.029	1.145	A	2	A	R
78	I	Chrysene-d12 (ISTD)	240	15.355	1.000	A	2	A	R
79	S	Terphenyl-d14 (Surr)	244	13.243	0.862	A	2	A	R
80	T	Butyl benzyl phthalate	149	14.109	0.919	Q	2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	14.291	0.931	A	2	A	R
82	T	3,3-Dichlorobenzidine	252	15.291	0.996	Q	2	A	R
83	T	Benz(a)anthracene	228	15.334	0.999	A	2	A	R
84	T	Chrysene	228	15.414	1.004	A	2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.489	1.009	A	2	A	R
86	I	Perylene-d12 (ISTD)	264	18.875	1.000	A	2	A	R
87	T	Di-n-octyl phthalate	149	17.163	0.909	Q	2	A	R
88	T	Benzo(b)fluoranthene	252	17.949	0.951	Q	2	A	R
89	T	Benzo(k)fluoranthene	252	18.019	0.955	Q	2	A	R
90	T	Benzo(b+k)fluoranthene	252	18.019	0.955	Q	2	A	R
91	T	Benzo(e)pyrene	252	18.607	0.986	A	2	A	R
92	T	Benzo(a)pyrene	252	18.730	0.992	Q	2	A	R
93	T	Perylene	252	18.934	1.003	A	2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	21.266	1.000	A	1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	21.266	1.000	A	1	A	R
96	T	Dibenz(a,h)anthracene	278	21.330	1.003	A	2	A	R
97	T	Benzo(g,h,i)perylene	276	21.811	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

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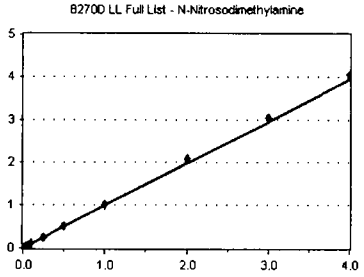
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

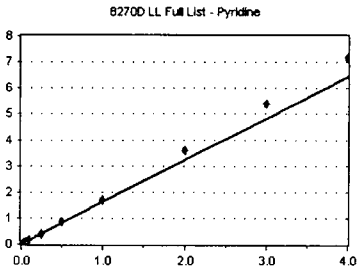


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1826	0.888	4.16
9D12042-CAL2	50	5209	0.995	4.15
9D12042-CAL3	100	10206	0.939	4.19
9D12042-CAL4	200	21690	0.973	4.20
9D12042-CAL5	500	53776	0.991	4.16
9D12042-CAL6	1000	104701	1.009	4.15
9D12042-CAL7	2000	208448	0.991	4.17
9D12042-CAL8	4000	426026	1.036	4.17
9D12042-CAL9	6000	627490	1.021	4.15
9D12042-CALA	8000	831842	1.012	4.17

AVE RF **0.985** RF RSD **4.41** AVE RT **4.17**

Pyridine

Curve Fit: **AVERAGE RF**

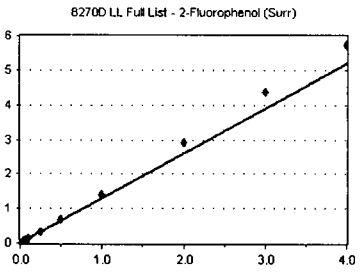


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2498	1.215	4.23
9D12042-CAL2	50	7142	1.364	4.20
9D12042-CAL3	100	16277	1.498	4.23
9D12042-CAL4	200	35631	1.598	4.21
9D12042-CAL5	500	87366	1.610	4.18
9D12042-CAL6	1000	177059	1.706	4.18
9D12042-CAL7	2000	358336	1.703	4.18
9D12042-CAL8	4000	737969	1.795	4.18
9D12042-CAL9	6000	1105047	1.797	4.16
9D12042-CALA	8000	1473300	1.793	4.17

AVE RF **1.608** RF RSD **12.27** AVE RT **4.19**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

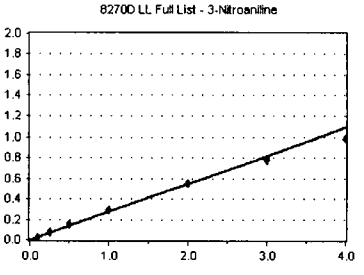


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2233	1.086	5.54
9D12042-CAL2	50	5365	1.025	5.54
9D12042-CAL3	100	12560	1.156	5.54
9D12042-CAL4	200	28367	1.272	5.54
9D12042-CAL5	500	73276	1.350	5.53
9D12042-CAL6	1000	141127	1.360	5.54
9D12042-CAL7	2000	292249	1.389	5.54
9D12042-CAL8	4000	601422	1.463	5.54
9D12042-CAL9	6000	900422	1.464	5.54
9D12042-CALA	8000	1179847	1.436	5.54

AVE RF **1.300** RF RSD **12.28** AVE RT **5.54**

3-Nitroaniline

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~533~~	~~0.126~~	~~9.80~~
~~9D12042-CAL2~~	~~50~~	~~1478~~	~~0.138~~	~~9.80~~
~~9D12042-CAL3~~	~~100~~	~~4053~~	~~0.183~~	~~9.80~~
9D12042-CAL4	200	11232	0.245	9.80
9D12042-CAL5	500	31835	0.293	9.80
9D12042-CAL6	1000	61316	0.300	9.80
9D12042-CAL7	2000	125110	0.296	9.81
9D12042-CAL8	4000	227237	0.274	0.00
9D12042-CAL9	6000	329674	0.261	0.00
9D12042-CALA	8000	417444	0.246	0.00

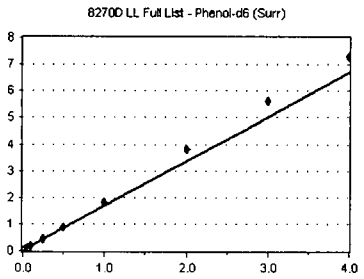
AVE RF **0.273** RF RSD **8.61** AVE RT **5.60**

Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Phenol-d6 (Surr)

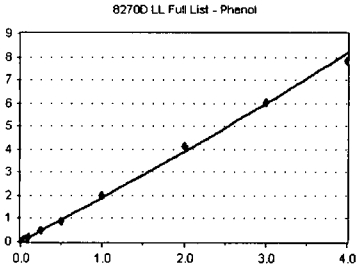


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2259~~	~~1.099~~	~~6.44~~
9D12042-CAL2	50	6263	1.196	6.44
9D12042-CAL3	100	15186	1.397	6.44
9D12042-CAL4	200	34950	1.568	6.44
9D12042-CAL5	500	92867	1.712	6.43
9D12042-CAL6	1000	182856	1.762	6.43
9D12042-CAL7	2000	384186	1.826	6.44
9D12042-CAL8	4000	778420	1.894	6.45
9D12042-CAL9	6000	1151230	1.872	6.45
9D12042-CALA	8000	1499696	1.825	6.46

AVE RF **1.672** RF RSD **14.32** AVE RT **6.44**

Phenol

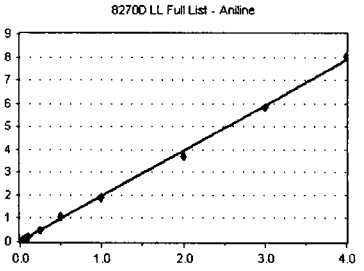


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2105	1.024	6.45
9D12042-CAL2	50	7594	1.450	6.45
9D12042-CAL3	100	16356	1.505	6.45
9D12042-CAL4	200	40326	1.809	6.45
9D12042-CAL5	500	105308	1.941	6.45
9D12042-CAL6	1000	183416	1.767	6.45
9D12042-CAL7	2000	423399	2.012	6.46
9D12042-CAL8	4000	846992	2.061	6.46
9D12042-CAL9	6000	1236521	2.011	6.47
9D12042-CALA	8000	1605219	1.954	6.47

AVE RF **1.753** RF RSD **18.94** AVE RT **6.46**

Aniline

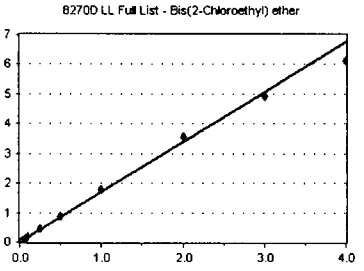


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~3702~~	~~1.801~~	~~6.49~~
9D12042-CAL2	50	10528	2.011	6.49
9D12042-CAL3	100	21433	1.972	6.49
9D12042-CAL4	200	41636	1.868	6.49
9D12042-CAL5	500	106597	1.965	6.49
9D12042-CAL6	1000	224184	2.160	6.49
9D12042-CAL7	2000	401171	1.907	6.49
9D12042-CAL8	4000	764336	1.860	6.49
9D12042-CAL9	6000	1198758	1.950	6.49
9D12042-CALA	8000	1648364	2.006	6.50

AVE RF **1.966** RF RSD **4.62** AVE RT **6.49**

Bis(2-Chloroethyl) ether



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3544	1.724	6.54
9D12042-CAL2	50	8634	1.649	6.54
9D12042-CAL3	100	17852	1.643	6.55
9D12042-CAL4	200	38143	1.711	6.55
9D12042-CAL5	500	96650	1.781	6.54
9D12042-CAL6	1000	176845	1.704	6.54
9D12042-CAL7	2000	373313	1.774	6.55
9D12042-CAL8	4000	730472	1.777	6.55
9D12042-CAL9	6000	1009123	1.641	6.55
9D12042-CALA	8000	1256889	1.530	6.56

AVE RF **1.693** RF RSD **4.69** AVE RT **6.55**

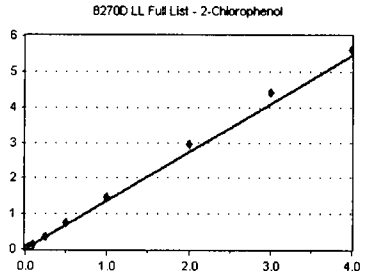
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

2-Chlorophenol

Curve Fit: **AVERAGE RF**

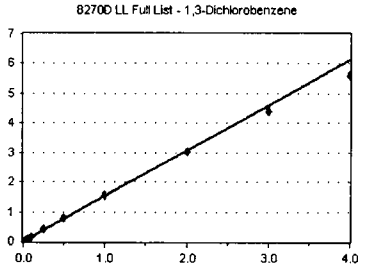


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2212	1.076	6.61
9D12042-CAL2	50	5987	1.143	6.61
9D12042-CAL3	100	14013	1.289	6.61
9D12042-CAL4	200	29959	1.344	6.61
9D12042-CAL5	500	78427	1.445	6.61
9D12042-CAL6	1000	154232	1.486	6.61
9D12042-CAL7	2000	308446	1.466	6.61
9D12042-CAL8	4000	607949	1.479	6.61
9D12042-CAL9	6000	902513	1.468	6.61
9D12042-CALA	8000	1150237	1.400	6.62

AVE RF **1.360** RF RSD **10.82** AVE RT **6.61**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3006	1.462	6.76
9D12042-CAL2	50	8063	1.540	6.76
9D12042-CAL3	100	16517	1.520	6.76
9D12042-CAL4	200	36684	1.645	6.76
9D12042-CAL5	500	88880	1.638	6.76
9D12042-CAL6	1000	162324	1.564	6.76
9D12042-CAL7	2000	324509	1.542	6.76
9D12042-CAL8	4000	625796	1.522	6.76
9D12042-CAL9	6000	902850	1.468	6.76
9D12042-CALA	8000	1147379	1.396	6.77

AVE RF **1.530** RF RSD **5.01** AVE RT **6.76**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

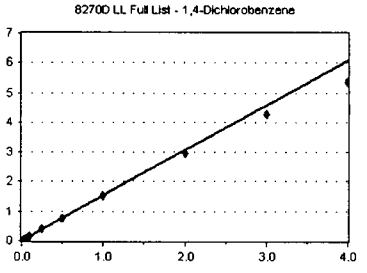


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	205604	102.802	6.81
9D12042-CAL2	2000	209444	104.722	6.81
9D12042-CAL3	2000	217345	108.673	6.81
9D12042-CAL4	2000	222946	111.473	6.81
9D12042-CAL5	2000	217042	108.521	6.81
9D12042-CAL6	2000	207595	103.798	6.81
9D12042-CAL7	2000	210386	105.193	6.81
9D12042-CAL8	2000	205518	102.759	6.81
9D12042-CAL9	2000	204951	102.475	6.81
9D12042-CALA	2000	205419	102.710	6.81

AVE RF **105.313** RF RSD **3.00** AVE RT **6.81**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3174	1.544	6.82
9D12042-CAL2	50	8325	1.590	6.82
9D12042-CAL3	100	17508	1.611	6.83
9D12042-CAL4	200	35701	1.601	6.82
9D12042-CAL5	500	87396	1.611	6.82
9D12042-CAL6	1000	158903	1.531	6.83
9D12042-CAL7	2000	321266	1.527	6.83
9D12042-CAL8	4000	609817	1.484	6.83
9D12042-CAL9	6000	873197	1.420	6.83
9D12042-CALA	8000	1104480	1.344	6.84

AVE RF **1.526** RF RSD **5.80** AVE RT **6.83**

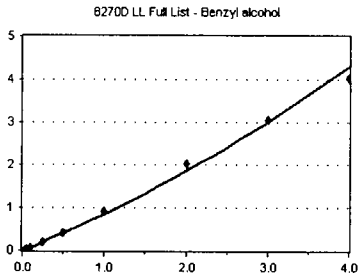
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Benzyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

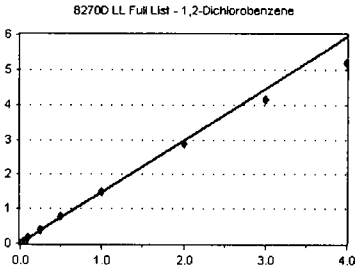


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~527~~	~~0.256~~	~~6.95~~
9D12042-CAL2	50	1873	0.358	6.95
9D12042-CAL3	100	4432	0.408	6.94
9D12042-CAL4	200	14374	0.645	6.94
9D12042-CAL5	500	38189	0.704	6.94
9D12042-CAL6	1000	86489	0.833	6.94
9D12042-CAL7	2000	196023	0.932	6.94
9D12042-CAL8	4000	417822	1.017	6.95
9D12042-CAL9	6000	625005	1.017	6.95
9D12042-CALA	8000	825334	1.004	6.96

AVE RF **0.769** RF RSD **33.42** AVE RT **6.95**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

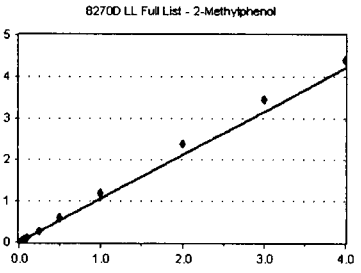


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2889	1.405	6.99
9D12042-CAL2	50	8131	1.553	6.98
9D12042-CAL3	100	16678	1.535	6.99
9D12042-CAL4	200	36123	1.620	6.99
9D12042-CAL5	500	87063	1.605	6.98
9D12042-CAL6	1000	158706	1.529	6.98
9D12042-CAL7	2000	313391	1.490	6.99
9D12042-CAL8	4000	590567	1.437	6.99
9D12042-CAL9	6000	851080	1.384	6.99
9D12042-CALA	8000	1066099	1.297	6.99

AVE RF **1.485** RF RSD **6.94** AVE RT **6.98**

2-Methylphenol

Curve Fit: **AVERAGE RF**

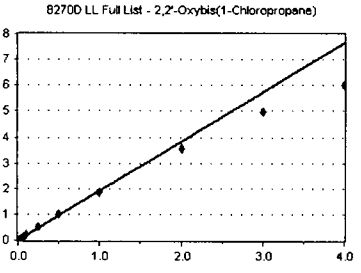


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1724	0.839	7.04
9D12042-CAL2	50	4259	0.813	7.04
9D12042-CAL3	100	9962	0.917	7.04
9D12042-CAL4	200	22860	1.025	7.04
9D12042-CAL5	500	61181	1.128	7.04
9D12042-CAL6	1000	123097	1.186	7.04
9D12042-CAL7	2000	248169	1.180	7.04
9D12042-CAL8	4000	490045	1.192	7.05
9D12042-CAL9	6000	708351	1.152	7.05
9D12042-CALA	8000	904249	1.100	7.05

AVE RF **1.053** RF RSD **13.92** AVE RT **7.05**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4404	2.142	7.07
9D12042-CAL2	50	10826	2.068	7.07
9D12042-CAL3	100	22045	2.029	7.07
9D12042-CAL4	200	44983	2.018	7.07
9D12042-CAL5	500	112928	2.081	7.07
9D12042-CAL6	1000	207984	2.004	7.07
9D12042-CAL7	2000	394994	1.877	7.08
9D12042-CAL8	4000	731830	1.780	7.08
9D12042-CAL9	6000	1018502	1.656	7.08
9D12042-CALA	8000	1238496	1.507	7.08

AVE RF **1.916** RF RSD **10.81** AVE RT **7.07**

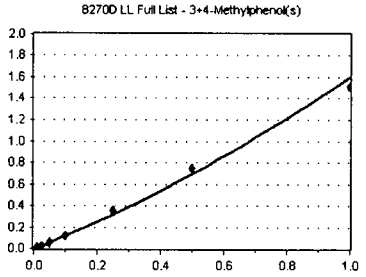
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

3+4-Methylphenol(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

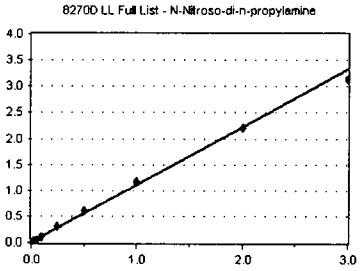


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1519	0.739	7.19
9D12042-CAL2	50	4279	0.817	7.19
9D12042-CAL3	100	11154	1.026	7.19
9D12042-CAL4	200	26267	1.178	7.19
9D12042-CAL5	500	77098	1.421	7.19
9D12042-CAL6	1000	154518	1.489	7.19
9D12042-CAL7	2000	319359	1.518	7.19
~~9D12042-CAL8~~	~~4000~~	~~622867~~	~~1.515~~	~~7.20~~
~~9D12042-CAL9~~	~~6000~~	~~876610~~	~~1.426~~	~~7.21~~
~~9D12042-CALA~~	~~8000~~	~~1108625~~	~~1.349~~	~~7.22~~

AVE RF **1.170** RF RSD **27.41** AVE RT **7.19**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

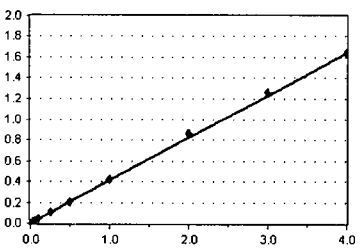


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2080	1.012	7.20
9D12042-CAL2	50	5246	1.002	7.20
9D12042-CAL3	100	11467	1.055	7.20
9D12042-CAL4	200	25133	1.127	7.20
9D12042-CAL5	500	67493	1.244	7.20
9D12042-CAL6	1000	126521	1.219	7.20
9D12042-CAL7	2000	245818	1.168	7.20
9D12042-CAL8	4000	453288	1.103	7.22
9D12042-CAL9	6000	641593	1.043	7.22
~~9D12042-CALA~~	~~8000~~	~~824622~~	~~1.004~~	~~7.23~~

AVE RF **1.108** RF RSD **7.96** AVE RT **7.20**

Hexachloroethane

Curve Fit: **AVERAGE RF**

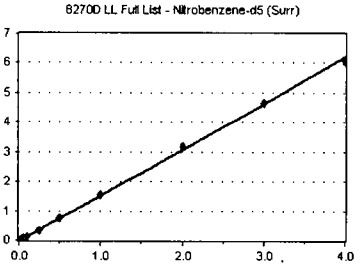


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	711	0.346	7.32
9D12042-CAL2	50	2137	0.408	7.32
9D12042-CAL3	100	4477	0.412	7.32
9D12042-CAL4	200	9240	0.414	7.32
9D12042-CAL5	500	23400	0.431	7.32
9D12042-CAL6	1000	42742	0.412	7.32
9D12042-CAL7	2000	89727	0.426	7.32
9D12042-CAL8	4000	177511	0.432	7.32
9D12042-CAL9	6000	259269	0.422	7.32
9D12042-CALA	8000	336985	0.410	7.32

AVE RF **0.411** RF RSD **5.99** AVE RT **7.32**

Nitrobenzene-d5 (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2134~~	~~1.038~~	~~7.36~~
9D12042-CAL2	50	4963	0.948	7.35
9D12042-CAL3	100	13960	1.285	7.35
9D12042-CAL4	200	29144	1.307	7.35
9D12042-CAL5	500	77263	1.424	7.35
9D12042-CAL6	1000	153864	1.482	7.35
9D12042-CAL7	2000	329613	1.567	7.36
9D12042-CAL8	4000	650463	1.582	7.37
9D12042-CAL9	6000	952331	1.549	7.37
9D12042-CALA	8000	1245282	1.516	7.37

AVE RF **1.407** RF RSD **14.44** AVE RT **7.36**

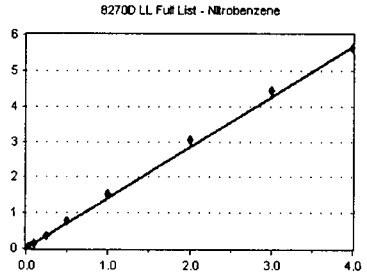
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Nitrobenzene

Curve Fit: **AVERAGE RF**

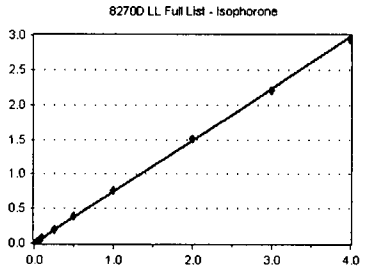


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2275~~	~~1.106~~	~~7.38~~
9D12042-CAL2	50	5793	1.106	7.37
9D12042-CAL3	100	14380	1.323	7.38
9D12042-CAL4	200	31068	1.394	7.38
9D12042-CAL5	500	80603	1.485	7.38
9D12042-CAL6	1000	159222	1.534	7.38
9D12042-CAL7	2000	323406	1.537	7.38
9D12042-CAL8	4000	629792	1.532	7.38
9D12042-CAL9	6000	911090	1.482	7.39
9D12042-CALA	8000	1159115	1.411	7.39

AVE RF **1.423** RF RSD **9.81** AVE RT **7.38**

Isophorone

Curve Fit: **AVERAGE RF**

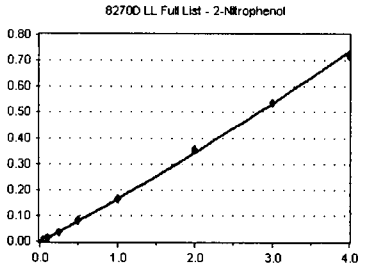


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5760	0.687	7.61
9D12042-CAL2	50	15037	0.703	7.61
9D12042-CAL3	100	31645	0.729	7.61
9D12042-CAL4	200	70389	0.776	7.61
9D12042-CAL5	500	179496	0.799	7.61
9D12042-CAL6	1000	336596	0.773	7.61
9D12042-CAL7	2000	660663	0.757	7.61
9D12042-CAL8	4000	1289086	0.754	7.62
9D12042-CAL9	6000	1905816	0.737	7.63
9D12042-CALA	8000	2513149	0.733	7.64

AVE RF **0.745** RF RSD **4.57** AVE RT **7.61**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

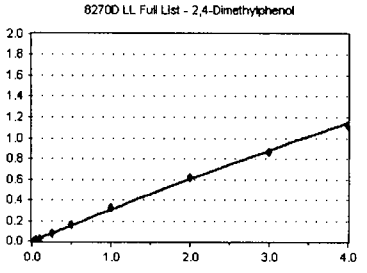


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~482~~	~~5.750~~	~~7.70~~
~~9D12042-CAL2~~	~~50~~	~~1610~~	~~7.531~~	~~7.69~~
9D12042-CAL3	100	3262	7.518	7.70
9D12042-CAL4	200	10018	0.110	7.70
9D12042-CAL5	500	30957	0.138	7.70
9D12042-CAL6	1000	70238	0.161	7.70
9D12042-CAL7	2000	144348	0.165	7.70
9D12042-CAL8	4000	303901	0.178	7.70
9D12042-CAL9	6000	463565	0.179	7.70
9D12042-CALA	8000	613878	0.179	7.70

AVE RF **0.148** RF RSD **25.66** AVE RT **7.70**

2,4-Dimethylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1331~~	~~0.159~~	~~7.73~~
9D12042-CAL2	50	3681	0.172	7.72
9D12042-CAL3	100	9305	0.214	7.72
9D12042-CAL4	200	23349	0.257	7.72
9D12042-CAL5	500	69085	0.308	7.72
9D12042-CAL6	1000	137294	0.315	7.72
9D12042-CAL7	2000	281937	0.323	7.73
9D12042-CAL8	4000	523529	0.306	7.73
9D12042-CAL9	6000	746900	0.289	7.74
9D12042-CALA	8000	964243	0.281	7.74

AVE RF **0.274** RF RSD **18.59** AVE RT **7.73**

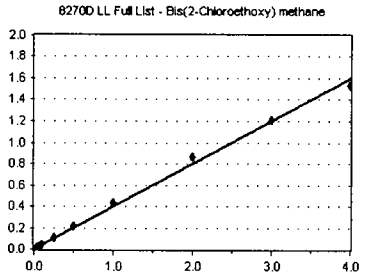
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**

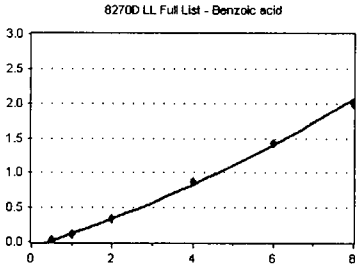


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2366	0.282	7.81
9D12042-CAL2	50	7058	0.330	7.81
9D12042-CAL3	100	18067	0.416	7.81
9D12042-CAL4	200	39106	0.431	7.81
9D12042-CAL5	500	99782	0.444	7.81
9D12042-CAL6	1000	191279	0.439	7.81
9D12042-CAL7	2000	381475	0.437	7.82
9D12042-CAL8	4000	734704	0.430	7.83
9D12042-CAL9	6000	1040589	0.403	7.83
9D12042-CALA	8000	1311481	0.382	7.83

AVE RF **0.400** RF RSD **13.47** AVE RT **7.82**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

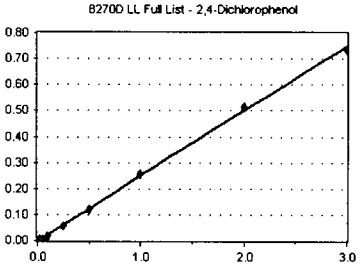


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~40~~	~~55~~	~~3.281~~	~~7.77~~
~~9D12042-CAL2~~	~~100~~	~~106~~	~~2.479~~	~~7.89~~
~~9D12042-CAL3~~	~~200~~	~~212~~	~~2.443~~	~~7.78~~
~~9D12042-CAL4~~	~~400~~	~~2517~~	~~0.014~~	~~7.77~~
9D12042-CAL5	1000	23976	5.336	7.79
9D12042-CAL6	2000	96370	0.111	7.81
9D12042-CAL7	4000	293257	0.168	7.85
9D12042-CAL8	8000	750898	0.220	7.90
9D12042-CAL9	12000	1234711	0.239	7.93
9D12042-CALA	16000	1706623	0.249	7.96

AVE RF **0.173** RF RSD **45.07** AVE RT **7.87**

2,4-Dichlorophenol

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

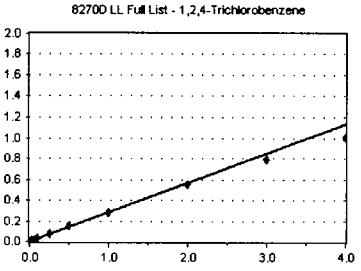


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~425~~	~~5.070~~	~~7.94~~
9D12042-CAL2	50	2177	0.102	7.94
9D12042-CAL3	100	5136	0.118	7.93
9D12042-CAL4	200	14168	0.156	7.93
9D12042-CAL5	500	50336	0.224	7.93
9D12042-CAL6	1000	106512	0.245	7.93
9D12042-CAL7	2000	222208	0.255	7.94
9D12042-CAL8	4000	440368	0.258	7.94
9D12042-CAL9	6000	634884	0.246	7.95
~~9D12042-CALA~~	~~8000~~	~~807681~~	~~0.236~~	~~7.95~~

AVE RF **0.200** RF RSD **32.22** AVE RT **7.94**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2246	0.268	8.02
9D12042-CAL2	50	6141	0.287	8.02
9D12042-CAL3	100	13568	0.313	8.02
9D12042-CAL4	200	27382	0.302	8.02
9D12042-CAL5	500	68791	0.306	8.02
9D12042-CAL6	1000	129034	0.296	8.02
9D12042-CAL7	2000	246059	0.282	8.02
9D12042-CAL8	4000	468931	0.274	8.03
9D12042-CAL9	6000	677553	0.262	8.03
9D12042-CALA	8000	857676	0.250	8.03

AVE RF **0.284** RF RSD **7.21** AVE RT **8.02**

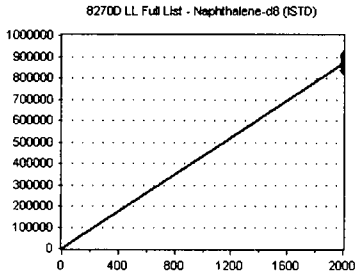
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**

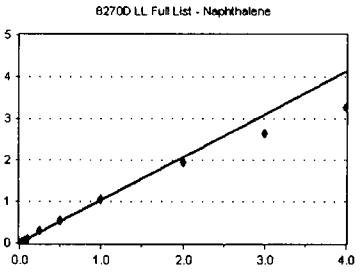


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	838248	419.124	8.08
9D12042-CAL2	2000	855155	427.578	8.08
9D12042-CAL3	2000	867816	433.908	8.08
9D12042-CAL4	2000	907511	453.756	8.08
9D12042-CAL5	2000	898567	449.283	8.08
9D12042-CAL6	2000	870566	435.283	8.08
9D12042-CAL7	2000	872864	436.432	8.08
9D12042-CAL8	2000	854691	427.346	8.09
9D12042-CAL9	2000	861766	430.883	8.09
9D12042-CALA	2000	857219	428.609	8.09

AVE RF **434.220** RF RSD **2.40** AVE RT **8.08**

Naphthalene

Curve Fit: **AVERAGE RF**

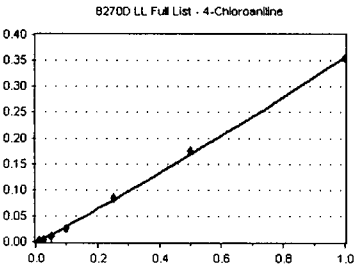


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8711	1.039	8.10
9D12042-CAL2	50	23251	1.088	8.10
9D12042-CAL3	100	49024	1.130	8.10
9D12042-CAL4	200	102649	1.131	8.10
9D12042-CAL5	500	257687	1.147	8.10
9D12042-CAL6	1000	475302	1.092	8.10
9D12042-CAL7	2000	918583	1.052	8.10
9D12042-CAL8	4000	1661053	0.972	8.11
9D12042-CAL9	6000	2278161	0.881	8.11
9D12042-CALA	8000	2813330	0.820	8.11

AVE RF **1.035** RF RSD **10.72** AVE RT **8.11**

4-Chloroaniline

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

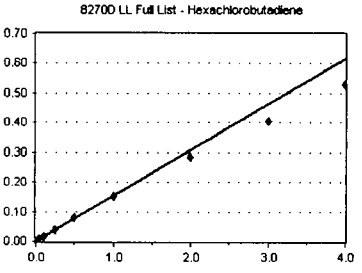


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1652	0.197	8.15
9D12042-CAL2	50	4055	0.190	8.15
9D12042-CAL3	100	9860	0.227	8.15
9D12042-CAL4	200	23535	0.259	8.15
9D12042-CAL5	500	75620	0.337	8.15
9D12042-CAL6	1000	151775	0.349	8.15
9D12042-CAL7	2000	308711	0.354	8.15
~~9D12042-CAL8~~	~~4000~~	~~625745~~	~~0.366~~	~~8.15~~
~~9D12042-CAL9~~	~~6000~~	~~903302~~	~~0.349~~	~~8.16~~
~~9D12042-CALA~~	~~8000~~	~~1106729~~	~~0.323~~	~~8.16~~

AVE RF **0.273** RF RSD **26.43** AVE RT **8.15**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1492	0.178	8.23
9D12042-CAL2	50	3496	0.164	8.23
9D12042-CAL3	100	7405	0.171	8.23
9D12042-CAL4	200	14260	0.157	8.23
9D12042-CAL5	500	35545	0.158	8.23
9D12042-CAL6	1000	67844	0.156	8.23
9D12042-CAL7	2000	131105	0.150	8.23
9D12042-CAL8	4000	243190	0.142	8.23
9D12042-CAL9	6000	350040	0.135	8.24
9D12042-CALA	8000	453153	0.132	8.24

AVE RF **0.154** RF RSD **9.53** AVE RT **8.23**

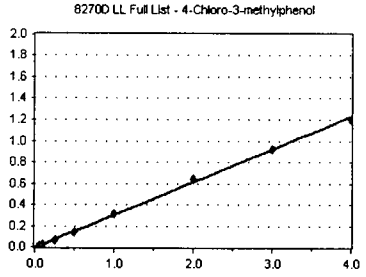
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

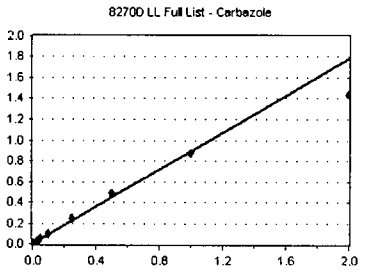


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~606~~	~~7.229~~	~~8.63~~
~~9D12042-CAL2~~	~~50~~	~~2641~~	~~0.124~~	~~8.63~~
9D12042-CAL3	100	5402	0.124	8.63
9D12042-CAL4	200	17148	0.189	8.62
9D12042-CAL5	500	61878	0.275	8.62
9D12042-CAL6	1000	126121	0.290	8.62
9D12042-CAL7	2000	269479	0.309	8.63
9D12042-CAL8	4000	543982	0.318	8.63
9D12042-CAL9	6000	795091	0.308	8.63
9D12042-CALA	8000	1024540	0.299	8.64

AVE RF **0.264** RF RSD **26.37** AVE RT **8.63**

Carbazole

Curve Fit: **AVERAGE RF**

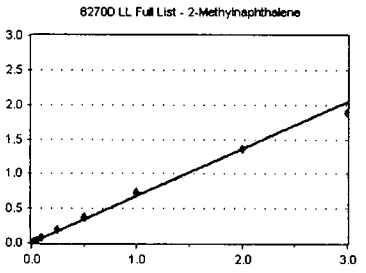


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5247	0.754	11.61
9D12042-CAL2	50	14600	0.833	11.61
9D12042-CAL3	100	36766	0.975	11.61
9D12042-CAL4	200	80323	1.009	11.61
9D12042-CAL5	500	187353	1.014	11.61
9D12042-CAL6	1000	340948	0.972	11.61
9D12042-CAL7	2000	651258	0.880	0.00
9D12042-CAL8	4000	1088868	0.718	0.00
~~9D12042-CAL9~~	~~6000~~	~~1519317~~	~~0.652~~	~~0.00~~
~~9D12042-CALA~~	~~8000~~	~~1858306~~	~~0.583~~	~~0.00~~

AVE RF **0.894** RF RSD **13.01** AVE RT **8.71**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

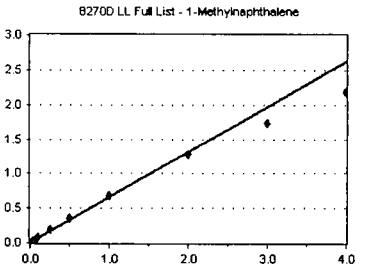


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4843	0.578	8.80
9D12042-CAL2	50	12740	0.596	8.80
9D12042-CAL3	100	27918	0.643	8.80
9D12042-CAL4	200	67852	0.748	8.80
9D12042-CAL5	500	173683	0.773	8.80
9D12042-CAL6	1000	322088	0.740	8.80
9D12042-CAL7	2000	633302	0.726	8.80
9D12042-CAL8	4000	1165928	0.682	8.80
9D12042-CAL9	6000	1614149	0.624	8.81
~~9D12042-CALA~~	~~8000~~	~~2022092~~	~~0.590~~	~~8.81~~

AVE RF **0.679** RF RSD **10.53** AVE RT **8.80**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5287	0.631	8.90
9D12042-CAL2	50	13733	0.642	8.90
9D12042-CAL3	100	29703	0.685	8.90
9D12042-CAL4	200	66438	0.732	8.90
9D12042-CAL5	500	168058	0.748	8.90
9D12042-CAL6	1000	303908	0.698	8.90
9D12042-CAL7	2000	593190	0.680	8.91
9D12042-CAL8	4000	1095549	0.641	8.91
9D12042-CAL9	6000	1501404	0.581	8.91
9D12042-CALA	8000	1877715	0.548	8.91

AVE RF **0.658** RF RSD **9.58** AVE RT **8.90**

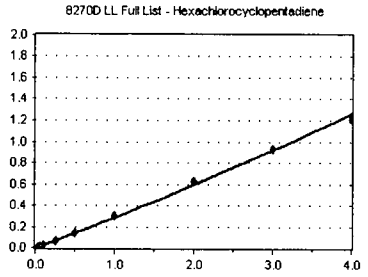
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Hexachlorocyclopentadiene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

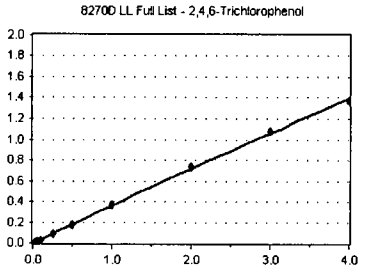


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~396~~	~~9.377~~	~~8.96~~
9D12042-CAL2	50	1375	0.128	8.97
9D12042-CAL3	100	3968	0.180	8.97
9D12042-CAL4	200	9648	0.211	8.97
9D12042-CAL5	500	28477	0.262	8.97
9D12042-CAL6	1000	59442	0.291	8.97
9D12042-CAL7	2000	126849	0.300	8.97
9D12042-CAL8	4000	258289	0.311	8.97
9D12042-CAL9	6000	390476	0.309	8.97
9D12042-CALA	8000	512416	0.302	8.98

AVE RF **0.255** RF RSD **26.05** AVE RT **8.97**

2,4,6-Trichlorophenol

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

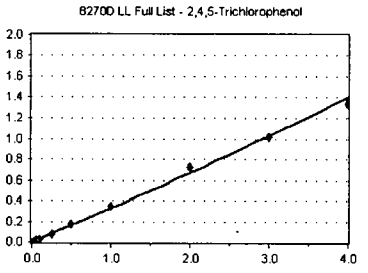


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~637~~	~~0.151~~	~~9.08~~
9D12042-CAL2	50	1647	0.154	9.08
9D12042-CAL3	100	3552	0.161	9.08
9D12042-CAL4	200	11339	0.247	9.08
9D12042-CAL5	500	35536	0.327	9.08
9D12042-CAL6	1000	69804	0.341	9.08
9D12042-CAL7	2000	154065	0.364	9.08
9D12042-CAL8	4000	304939	0.367	9.09
9D12042-CAL9	6000	453546	0.359	9.09
9D12042-CALA	8000	583608	0.343	9.09

AVE RF **0.296** RF RSD **29.20** AVE RT **9.08**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

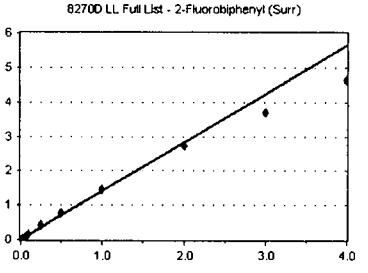


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~570~~	~~0.135~~	~~9.12~~
9D12042-CAL2	50	1937	0.181	9.12
9D12042-CAL3	100	4207	0.190	9.12
9D12042-CAL4	200	11558	0.252	9.12
9D12042-CAL5	500	34165	0.315	9.11
9D12042-CAL6	1000	69025	0.338	9.12
9D12042-CAL7	2000	144274	0.341	9.12
9D12042-CAL8	4000	298945	0.360	9.12
9D12042-CAL9	6000	429331	0.340	9.12
9D12042-CALA	8000	569105	0.335	9.13

AVE RF **0.295** RF RSD **23.36** AVE RT **9.12**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~4958~~	~~1.174~~	~~9.17~~
9D12042-CAL2	50	14620	1.365	9.17
9D12042-CAL3	100	29847	1.351	9.17
9D12042-CAL4	200	71986	1.571	9.17
9D12042-CAL5	500	177018	1.631	9.17
9D12042-CAL6	1000	318318	1.557	9.17
9D12042-CAL7	2000	622727	1.472	9.17
9D12042-CAL8	4000	1129555	1.360	9.17
9D12042-CAL9	6000	1558757	1.233	9.17
9D12042-CALA	8000	1972042	1.160	9.18

AVE RF **1.411** RF RSD **11.25** AVE RT **9.17**

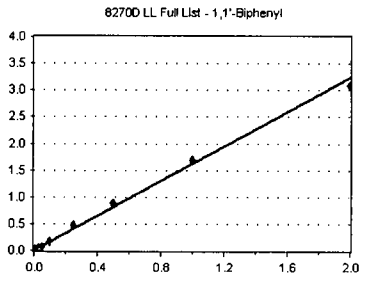
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

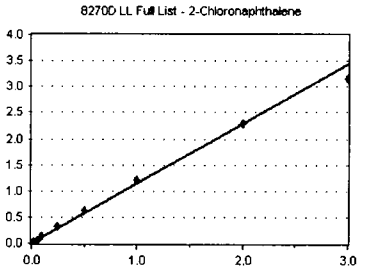


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5440	1.288	9.27
9D12042-CAL2	50	16008	1.495	9.27
9D12042-CAL3	100	33353	1.510	9.27
9D12042-CAL4	200	81722	1.783	9.27
9D12042-CAL5	500	202383	1.864	9.27
9D12042-CAL6	1000	365897	1.789	9.27
9D12042-CAL7	2000	716600	1.694	9.27
9D12042-CAL8	4000	1284403	1.546	9.27
~~9D12042-CAL9~~	~~6000~~	~~1770639~~	~~1.401~~	~~9.28~~
~~9D12042-CALA~~	~~8000~~	~~2197978~~	~~1.293~~	~~9.28~~

AVE RF **1.621** RF RSD **11.97** AVE RT **9.27**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**

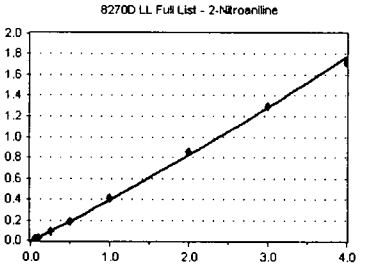


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4110	0.973	9.30
9D12042-CAL2	50	11226	1.048	9.30
9D12042-CAL3	100	23833	1.079	9.30
9D12042-CAL4	200	56267	1.228	9.30
9D12042-CAL5	500	143842	1.325	9.30
9D12042-CAL6	1000	256777	1.256	9.30
9D12042-CAL7	2000	513880	1.215	9.30
9D12042-CAL8	4000	950535	1.144	9.30
9D12042-CAL9	6000	1327873	1.051	9.31
~~9D12042-CALA~~	~~8000~~	~~1678580~~	~~0.988~~	~~9.31~~

AVE RF **1.147** RF RSD **10.16** AVE RT **9.30**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

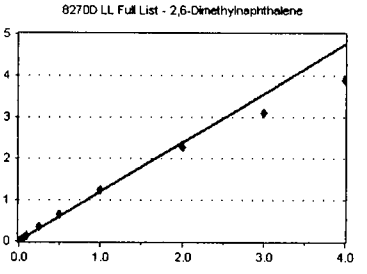


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~491~~	~~0.116~~	~~9.39~~
~~9D12042-CAL2~~	~~50~~	~~1501~~	~~0.140~~	~~9.39~~
9D12042-CAL3	100	3408	0.154	9.39
9D12042-CAL4	200	10366	0.226	9.39
9D12042-CAL5	500	37427	0.345	9.39
9D12042-CAL6	1000	74805	0.366	9.39
9D12042-CAL7	2000	172195	0.407	9.39
9D12042-CAL8	4000	356149	0.429	9.40
9D12042-CAL9	6000	544899	0.431	9.40
9D12042-CALA	8000	729589	0.429	9.41

AVE RF **0.348** RF RSD **29.95** AVE RT **9.39**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4471	1.059	9.43
9D12042-CAL2	50	12930	1.207	9.43
9D12042-CAL3	100	27574	1.248	9.43
9D12042-CAL4	200	60607	1.323	9.43
9D12042-CAL5	500	147706	1.361	9.43
9D12042-CAL6	1000	267086	1.306	9.43
9D12042-CAL7	2000	523522	1.238	9.43
9D12042-CAL8	4000	944826	1.137	9.44
9D12042-CAL9	6000	1312335	1.038	9.44
9D12042-CALA	8000	1648270	0.970	9.45

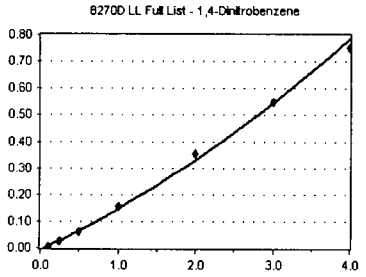
AVE RF **1.189** RF RSD **11.13** AVE RT **9.43**

Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

1,4-Dinitrobenzene

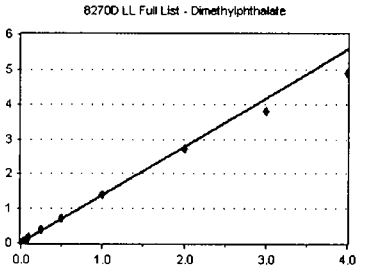


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~72~~	~~1.705~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~512~~	~~4.781~~	~~9.52~~
~~9D12042-CAL3~~	~~100~~	~~1082~~	~~4.899~~	~~9.52~~
9D12042-CAL4	200	2775	6.055	9.52
9D12042-CAL5	500	10966	0.101	9.52
9D12042-CAL6	1000	24586	0.120	9.52
9D12042-CAL7	2000	65644	0.155	9.52
9D12042-CAL8	4000	148152	0.178	9.53
9D12042-CAL9	6000	231647	0.183	9.53
9D12042-CALA	8000	319922	0.188	9.54

AVE RF **0.141** RF RSD **34.41** AVE RT **9.52**

Dimethylphthalate

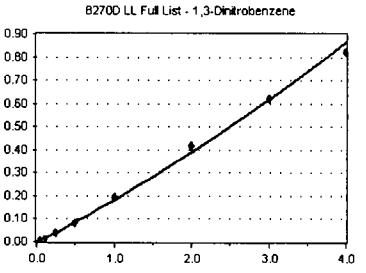


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5716	1.354	9.56
9D12042-CAL2	50	14804	1.382	9.56
9D12042-CAL3	100	32685	1.480	9.56
9D12042-CAL4	200	68197	1.488	9.56
9D12042-CAL5	500	166367	1.532	9.57
9D12042-CAL6	1000	293273	1.434	9.57
9D12042-CAL7	2000	593270	1.403	9.57
9D12042-CAL8	4000	1125792	1.355	9.58
9D12042-CAL9	6000	1593856	1.261	9.59
9D12042-CALA	8000	2076750	1.222	9.60

AVE RF **1.391** RF RSD **7.09** AVE RT **9.57**

1,3-Dinitrobenzene

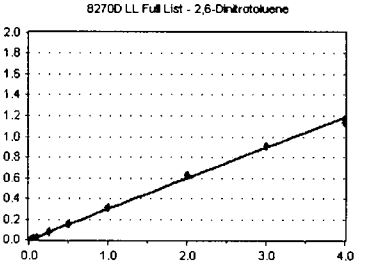


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~137~~	~~3.244~~	~~9.60~~
~~9D12042-CAL2~~	~~50~~	~~496~~	~~4.632~~	~~9.60~~
9D12042-CAL3	100	1592	7.208	9.60
9D12042-CAL4	200	4684	0.102	9.60
9D12042-CAL5	500	16599	0.153	9.60
9D12042-CAL6	1000	33847	0.166	9.60
9D12042-CAL7	2000	81663	0.193	9.60
9D12042-CAL8	4000	172914	0.208	9.61
9D12042-CAL9	6000	262552	0.208	9.62
9D12042-CALA	8000	349862	0.206	9.63

AVE RF **0.163** RF RSD **31.75** AVE RT **9.61**

2,6-Dinitrotoluene



Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~429~~	~~0.102~~	~~9.63~~
9D12042-CAL2	50	1360	0.127	9.63
9D12042-CAL3	100	3662	0.166	9.63
9D12042-CAL4	200	11248	0.245	9.63
9D12042-CAL5	500	31238	0.288	9.63
9D12042-CAL6	1000	61642	0.301	9.63
9D12042-CAL7	2000	130676	0.309	9.63
9D12042-CAL8	4000	259088	0.312	9.64
9D12042-CAL9	6000	380933	0.301	9.65
9D12042-CALA	8000	483438	0.284	9.65

AVE RF **0.259** RF RSD **26.10** AVE RT **9.63**

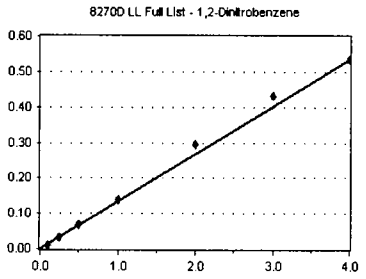
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

1,2-Dinitrobenzene

Curve Fit: **AVERAGE RF**

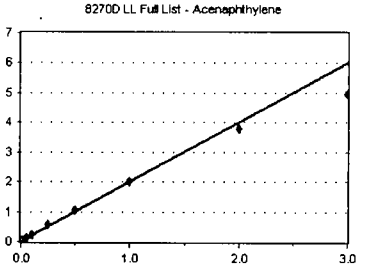


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~247~~	~~0.058~~	~~9.68~~
~~9D12042-CAL2~~	~~50~~	~~594~~	~~5.547~~	~~9.68~~
~~9D12042-CAL3~~	~~100~~	~~1685~~	~~7.629~~	~~9.69~~
9D12042-CAL4	200	5007	0.109	9.68
9D12042-CAL5	500	14052	0.129	9.69
9D12042-CAL6	1000	27578	0.135	9.69
9D12042-CAL7	2000	58797	0.139	9.70
9D12042-CAL8	4000	123107	0.148	9.70
9D12042-CAL9	6000	181239	0.143	9.71
9D12042-CALA	8000	227922	0.134	9.72

AVE RF **0.134** RF RSD **9.38** AVE RT **9.70**

Acenaphthylene

Curve Fit: **AVERAGE RF**

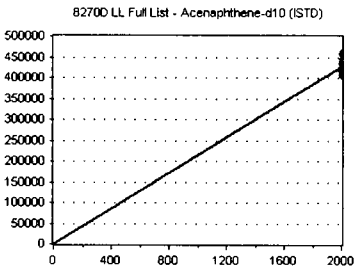


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8037	1.903	9.72
9D12042-CAL2	50	20809	1.943	9.72
9D12042-CAL3	100	47235	2.139	9.72
9D12042-CAL4	200	96629	2.109	9.72
9D12042-CAL5	500	239738	2.208	9.72
9D12042-CAL6	1000	438645	2.145	9.72
9D12042-CAL7	2000	847485	2.004	9.72
9D12042-CAL8	4000	1577347	1.899	9.72
9D12042-CAL9	6000	2093729	1.657	9.73
~~9D12042-CALA~~	~~8000~~	~~2539761~~	~~1.494~~	~~9.73~~

AVE RF **2.001** RF RSD **8.59** AVE RT **9.72**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

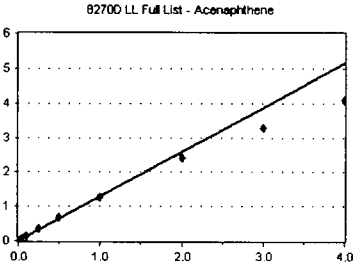


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	422298	211.149	9.86
9D12042-CAL2	2000	428361	214.180	9.86
9D12042-CAL3	2000	441746	220.873	9.86
9D12042-CAL4	2000	458269	229.135	9.86
9D12042-CAL5	2000	434239	217.120	9.86
9D12042-CAL6	2000	408985	204.493	9.87
9D12042-CAL7	2000	422972	211.486	9.87
9D12042-CAL8	2000	415395	207.698	9.87
9D12042-CAL9	2000	421304	210.652	9.87
9D12042-CALA	2000	424880	212.440	9.87

AVE RF **213.923** RF RSD **3.28** AVE RT **9.87**

Acenaphthene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5944	1.408	9.90
9D12042-CAL2	50	14121	1.319	9.90
9D12042-CAL3	100	30980	1.403	9.90
9D12042-CAL4	200	64550	1.409	9.90
9D12042-CAL5	500	152764	1.407	9.89
9D12042-CAL6	1000	274380	1.342	9.90
9D12042-CAL7	2000	539641	1.276	9.90
9D12042-CAL8	4000	991538	1.193	9.91
9D12042-CAL9	6000	1376414	1.089	9.91
9D12042-CALA	8000	1737085	1.022	9.91

AVE RF **1.287** RF RSD **10.97** AVE RT **9.90**

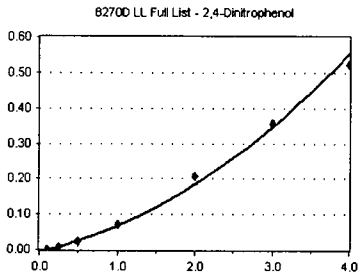
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

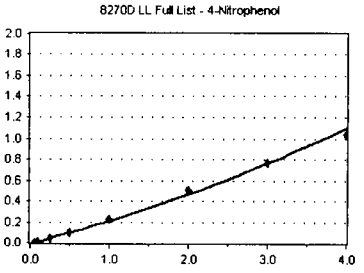


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9D12042-CAL3~~	~~100~~	~~95~~	~~4.301~~	~~9.91~~
9D12042-CAL4	200	631	1.377	9.91
9D12042-CAL5	500	3186	2.935	9.91
9D12042-CAL6	1000	9505	4.648	9.91
9D12042-CAL7	2000	29815	0.070	9.91
9D12042-CAL8	4000	85634	0.103	9.92
9D12042-CAL9	6000	149631	0.118	9.93
9D12042-CALA	8000	222443	0.131	9.93

AVE RF **0.073** RF RSD **62.20** AVE RT **9.91**

4-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

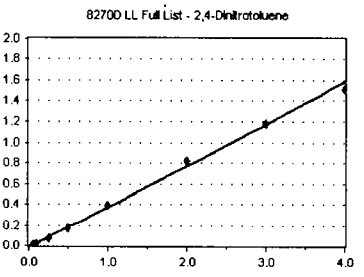


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~81~~	~~1.918~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~479~~	~~4.473~~	~~9.96~~
9D12042-CAL3	100	1391	6.298	9.96
9D12042-CAL4	200	5108	0.111	9.96
9D12042-CAL5	500	16667	0.154	9.96
9D12042-CAL6	1000	38661	0.189	9.96
9D12042-CAL7	2000	95687	0.226	9.96
9D12042-CAL8	4000	210496	0.253	9.98
9D12042-CAL9	6000	325043	0.257	9.98
9D12042-CALA	8000	441662	0.260	9.99

AVE RF **0.189** RF RSD **39.12** AVE RT **9.97**

2,4-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

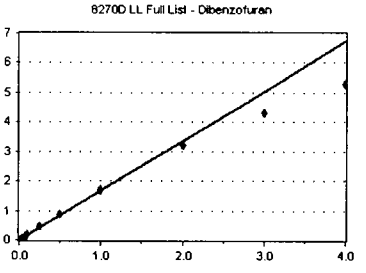


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~516~~	~~0.122~~	~~10.04~~
~~9D12042-CAL2~~	~~50~~	~~1414~~	~~0.132~~	~~10.04~~
9D12042-CAL3	100	3628	0.164	10.04
9D12042-CAL4	200	11165	0.244	10.04
9D12042-CAL5	500	34132	0.314	10.04
9D12042-CAL6	1000	72103	0.353	10.04
9D12042-CAL7	2000	165775	0.392	10.04
9D12042-CAL8	4000	342144	0.412	10.06
9D12042-CAL9	6000	498579	0.394	10.06
9D12042-CALA	8000	642029	0.378	10.07

AVE RF **0.331** RF RSD **26.17** AVE RT **10.05**

Dibenzofuran

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	7180	1.700	10.07
9D12042-CAL2	50	18996	1.774	10.07
9D12042-CAL3	100	39453	1.786	10.07
9D12042-CAL4	200	85043	1.856	10.07
9D12042-CAL5	500	203340	1.873	10.07
9D12042-CAL6	1000	357236	1.747	10.07
9D12042-CAL7	2000	718481	1.699	10.07
9D12042-CAL8	4000	1332830	1.604	10.08
9D12042-CAL9	6000	1822175	1.442	10.08
9D12042-CALA	8000	2258697	1.329	10.08

AVE RF **1.681** RF RSD **10.48** AVE RT **10.07**

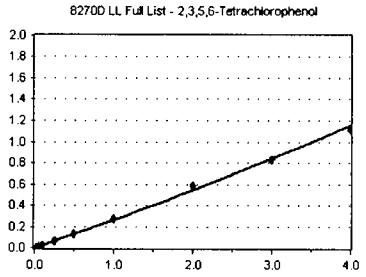
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

2,3,5,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

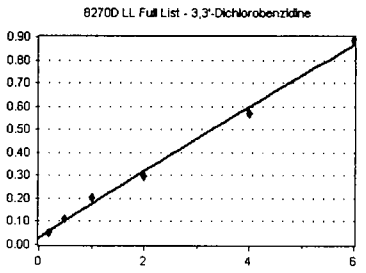


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~365~~	~~8.643~~	~~10.16~~
9D12042-CAL2	50	1033	0.096	10.15
9D12042-CAL3	100	2960	0.134	10.15
9D12042-CAL4	200	9240	0.202	10.15
9D12042-CAL5	500	26249	0.242	10.15
9D12042-CAL6	1000	53006	0.259	10.15
9D12042-CAL7	2000	116600	0.276	10.15
9D12042-CAL8	4000	241470	0.291	10.16
9D12042-CAL9	6000	352904	0.279	10.16
9D12042-CALA	8000	471457	0.277	10.16

AVE RF **0.228** RF RSD **30.66** AVE RT **10.15**

3,3'-Dichlorobenzidine

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

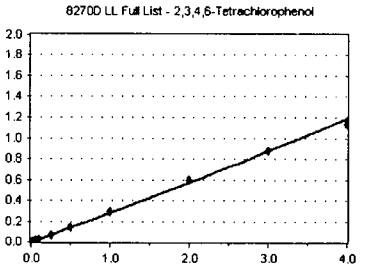


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~40~~	~~2133~~	~~0.175~~	~~0.00~~
~~9D12042-CAL2~~	~~100~~	~~6271~~	~~0.205~~	~~0.00~~
~~9D12042-CAL3~~	~~200~~	~~17285~~	~~0.255~~	~~15.29~~
9D12042-CAL4	400	40983	0.275	15.29
9D12042-CAL5	1000	74081	0.221	15.29
9D12042-CAL6	2000	125386	0.206	15.29
9D12042-CAL7	4000	194322	0.148	15.30
9D12042-CAL8	8000	367601	0.143	0.00
9D12042-CAL9	12000	561471	0.148	0.00
~~9D12042-CALA~~	~~16000~~	~~784747~~	~~0.156~~	~~0.00~~

AVE RF **0.190** RF RSD **28.01** AVE RT **10.19**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

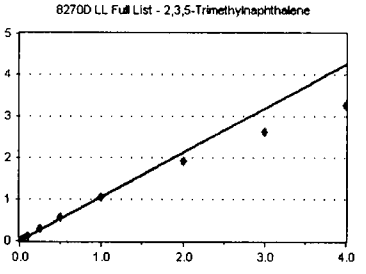


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	466	0.110	10.19
9D12042-CAL2	50	1825	0.170	10.19
9D12042-CAL3	100	4761	0.216	10.19
9D12042-CAL4	200	12019	0.262	10.19
9D12042-CAL5	500	29885	0.275	10.19
9D12042-CAL6	1000	57975	0.284	10.19
9D12042-CAL7	2000	124349	0.294	10.19
9D12042-CAL8	4000	249107	0.300	10.20
9D12042-CAL9	6000	370697	0.293	10.21
9D12042-CALA	8000	480353	0.283	10.21

AVE RF **0.249** RF RSD **25.53** AVE RT **10.20**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4447	1.053	10.27
9D12042-CAL2	50	12035	1.124	10.28
9D12042-CAL3	100	26553	1.202	10.28
9D12042-CAL4	200	55486	1.211	10.28
9D12042-CAL5	500	130703	1.204	10.28
9D12042-CAL6	1000	228198	1.116	10.28
9D12042-CAL7	2000	449654	1.063	10.29
9D12042-CAL8	4000	800915	0.964	10.29
9D12042-CAL9	6000	1102900	0.873	10.29
9D12042-CALA	8000	1390016	0.818	10.30

AVE RF **1.063** RF RSD **13.08** AVE RT **10.28**

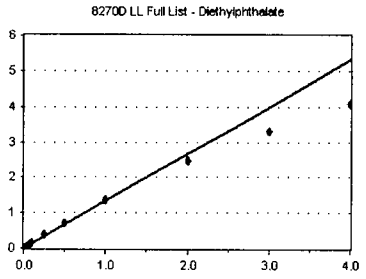
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Diethylphthalate

Curve Fit: **AVERAGE RF**

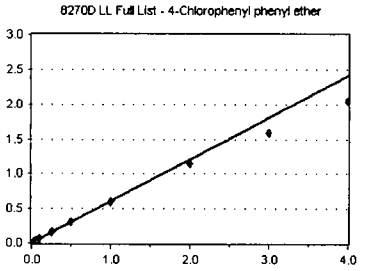


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5489	1.300	10.28
9D12042-CAL2	50	14203	1.326	10.28
9D12042-CAL3	100	33503	1.517	10.28
9D12042-CAL4	200	68644	1.498	10.28
9D12042-CAL5	500	165131	1.521	10.28
9D12042-CAL6	1000	290221	1.419	10.29
9D12042-CAL7	2000	569548	1.347	10.29
9D12042-CAL8	4000	1025219	1.234	10.29
9D12042-CAL9	6000	1390913	1.100	10.30
9D12042-CALA	8000	1740855	1.024	10.30

AVE RF **1.329** RF RSD **12.89** AVE RT **10.29**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**

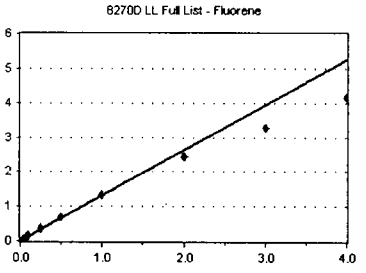


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2599	0.615	10.41
9D12042-CAL2	50	6570	0.614	10.41
9D12042-CAL3	100	14524	0.658	10.41
9D12042-CAL4	200	29693	0.648	10.41
9D12042-CAL5	500	70419	0.649	10.41
9D12042-CAL6	1000	127242	0.622	10.41
9D12042-CAL7	2000	257040	0.608	10.41
9D12042-CAL8	4000	476543	0.574	10.41
9D12042-CAL9	6000	666343	0.527	10.42
9D12042-CALA	8000	866576	0.510	10.42

AVE RF **0.602** RF RSD **8.39** AVE RT **10.41**

Fluorene

Curve Fit: **AVERAGE RF**

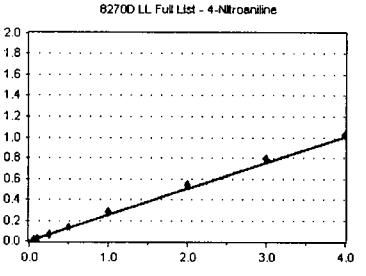


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5519	1.307	10.42
9D12042-CAL2	50	14499	1.354	10.42
9D12042-CAL3	100	32507	1.472	10.42
9D12042-CAL4	200	68196	1.488	10.42
9D12042-CAL5	500	160999	1.483	10.42
9D12042-CAL6	1000	283189	1.385	10.42
9D12042-CAL7	2000	562191	1.329	10.42
9D12042-CAL8	4000	1010351	1.216	10.43
9D12042-CAL9	6000	1382772	1.094	10.43
9D12042-CALA	8000	1760020	1.036	10.44

AVE RF **1.316** RF RSD **12.04** AVE RT **10.42**

4-Nitroaniline

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~410~~	~~9.709~~	~~10.42~~
~~9D12042-CAL2~~	~~50~~	~~1321~~	~~0.123~~	~~10.42~~
9D12042-CAL3	100	3975	0.180	10.42
9D12042-CAL4	200	11137	0.243	10.42
9D12042-CAL5	500	27588	0.254	10.42
9D12042-CAL6	1000	55130	0.270	10.42
9D12042-CAL7	2000	116803	0.276	10.43
9D12042-CAL8	4000	224177	0.270	10.44
9D12042-CAL9	6000	332833	0.263	10.45
9D12042-CALA	8000	435677	0.256	10.46

AVE RF **0.252** RF RSD **12.23** AVE RT **10.43**

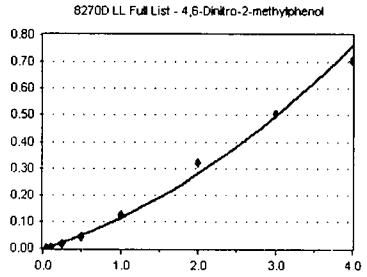
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

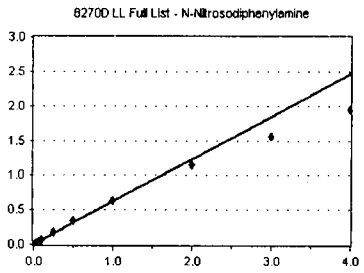


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~66~~	~~1.563~~	~~10.46~~
~~9D12042-CAL2~~	~~50~~	~~144~~	~~0.013~~	~~10.46~~
9D12042-CAL3	100	481	2.178	10.46
9D12042-CAL4	200	2085	0.045	10.46
9D12042-CAL5	500	7777	7.164	10.46
9D12042-CAL6	1000	18318	8.958	10.46
9D12042-CAL7	2000	52412	0.124	10.46
9D12042-CAL8	4000	132375	0.159	10.47
9D12042-CAL9	6000	214039	0.169	10.48
9D12042-CALA	8000	299612	0.176	10.49

AVE RF **0.107** RF RSD **54.99** AVE RT **10.47**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**

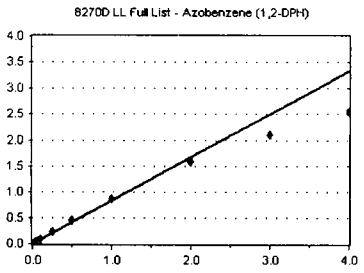


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3694	0.531	10.53
9D12042-CAL2	50	11052	0.631	10.53
9D12042-CAL3	100	26271	0.697	10.53
9D12042-CAL4	200	55332	0.695	10.53
9D12042-CAL5	500	133109	0.721	10.53
9D12042-CAL6	1000	233117	0.665	10.53
9D12042-CAL7	2000	470356	0.635	10.53
9D12042-CAL8	4000	873790	0.576	10.54
9D12042-CAL9	6000	1213548	0.521	10.54
9D12042-CALA	8000	1549603	0.486	10.55

AVE RF **0.616** RF RSD **13.41** AVE RT **10.53**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

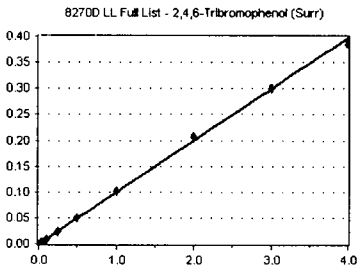


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5526	0.794	10.57
9D12042-CAL2	50	14382	0.821	10.57
9D12042-CAL3	100	34700	0.920	10.57
9D12042-CAL4	200	74635	0.938	10.57
9D12042-CAL5	500	177851	0.963	10.57
9D12042-CAL6	1000	317716	0.906	10.57
9D12042-CAL7	2000	640569	0.865	10.57
9D12042-CAL8	4000	1195391	0.788	10.58
9D12042-CAL9	6000	1634030	0.701	10.59
9D12042-CALA	8000	2030780	0.637	10.59

AVE RF **0.833** RF RSD **12.72** AVE RT **10.57**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~384~~	~~0.055~~	~~10.67~~
9D12042-CAL2	50	864	4.929	10.67
9D12042-CAL3	100	2582	6.846	10.67
9D12042-CAL4	200	7004	8.799	10.67
9D12042-CAL5	500	17282	9.357	10.67
9D12042-CAL6	1000	34203	9.756	10.67
9D12042-CAL7	2000	75759	0.102	10.67
9D12042-CAL8	4000	157542	0.104	10.67
9D12042-CAL9	6000	233263	0.100	10.68
9D12042-CALA	8000	307443	9.646	10.68

AVE RF **0.089** RF RSD **20.57** AVE RT **10.67**

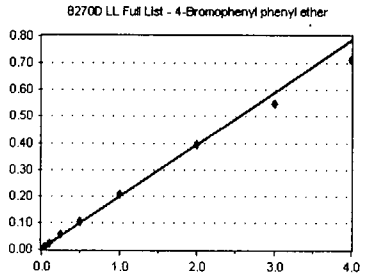
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**

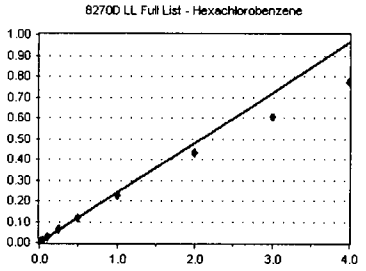


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1143	0.164	10.91
9D12042-CAL2	50	3328	0.190	10.91
9D12042-CAL3	100	7754	0.206	10.91
9D12042-CAL4	200	17137	0.215	10.91
9D12042-CAL5	500	40555	0.220	10.91
9D12042-CAL6	1000	73569	0.210	10.91
9D12042-CAL7	2000	152125	0.205	10.91
9D12042-CAL8	4000	299638	0.198	10.92
9D12042-CAL9	6000	426557	0.183	10.92
9D12042-CALA	8000	567177	0.178	10.92

AVE RF **0.197** RF RSD **9.01** AVE RT **10.91**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**

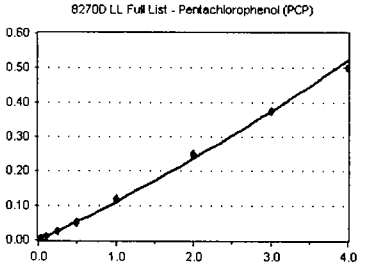


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2003	0.288	10.99
9D12042-CAL2	50	4727	0.270	10.99
9D12042-CAL3	100	9841	0.261	10.99
9D12042-CAL4	200	19743	0.248	10.99
9D12042-CAL5	500	46685	0.253	10.99
9D12042-CAL6	1000	85256	0.243	10.99
9D12042-CAL7	2000	169660	0.229	11.00
9D12042-CAL8	4000	325856	0.215	11.00
9D12042-CAL9	6000	468256	0.201	11.00
9D12042-CALA	8000	614308	0.193	11.01

AVE RF **0.240** RF RSD **12.70** AVE RT **10.99**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

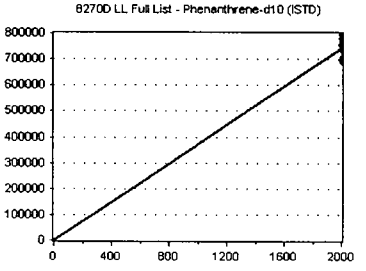


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~966~~	~~0.139~~	~~11.18~~
9D12042-CAL2	50	1190	6.789	11.18
9D12042-CAL3	100	2796	7.413	11.18
9D12042-CAL4	200	7672	9.639	11.18
9D12042-CAL5	500	18590	0.101	11.18
9D12042-CAL6	1000	36665	0.105	11.18
9D12042-CAL7	2000	88610	0.120	11.18
9D12042-CAL8	4000	190485	0.126	11.19
9D12042-CAL9	6000	290217	0.125	11.19
9D12042-CALA	8000	397295	0.125	11.19

AVE RF **0.104** RF RSD **20.99** AVE RT **11.19**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	695574	347.787	11.38
9D12042-CAL2	2000	701109	350.554	11.38
9D12042-CAL3	2000	754332	377.166	11.38
9D12042-CAL4	2000	795971	397.986	11.38
9D12042-CAL5	2000	738796	369.398	11.38
9D12042-CAL6	2000	701196	350.598	11.38
9D12042-CAL7	2000	740336	370.168	11.38
9D12042-CAL8	2000	758182	379.091	11.38
9D12042-CAL9	2000	776478	388.239	11.39
9D12042-CALA	2000	796822	398.411	11.39

AVE RF **372.940** RF RSD **5.07** AVE RT **11.38**

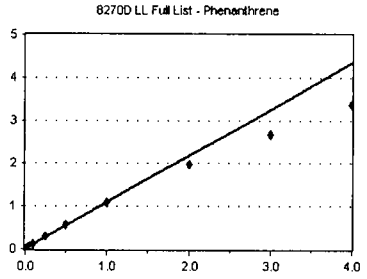
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Phenanthrene

Curve Fit: **AVERAGE RF**

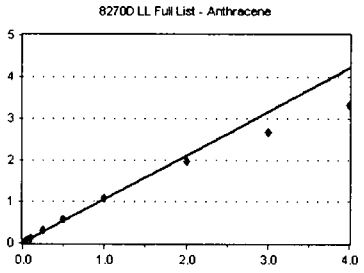


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8041	1.156	11.40
9D12042-CAL2	50	20614	1.176	11.40
9D12042-CAL3	100	45844	1.215	11.40
9D12042-CAL4	200	95305	1.197	11.40
9D12042-CAL5	500	217396	1.177	11.40
9D12042-CAL6	1000	396616	1.131	11.40
9D12042-CAL7	2000	798010	1.078	11.41
9D12042-CAL8	4000	1492206	0.984	11.41
9D12042-CAL9	6000	2079626	0.893	11.41
9D12042-CALA	8000	2691755	0.845	11.42

AVE RF **1.085** RF RSD **12.23** AVE RT **11.41**

Anthracene

Curve Fit: **AVERAGE RF**

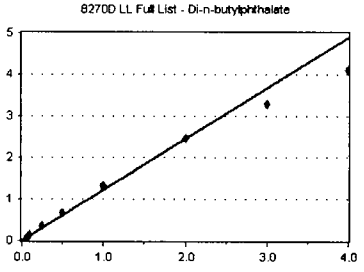


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6943	0.998	11.45
9D12042-CAL2	50	18968	1.082	11.45
9D12042-CAL3	100	44636	1.183	11.45
9D12042-CAL4	200	94023	1.181	11.45
9D12042-CAL5	500	221004	1.197	11.46
9D12042-CAL6	1000	394791	1.126	11.46
9D12042-CAL7	2000	805661	1.088	11.46
9D12042-CAL8	4000	1503459	0.991	11.46
9D12042-CAL9	6000	2083055	0.894	11.47
9D12042-CALA	8000	2638439	0.828	11.47

AVE RF **1.057** RF RSD **11.97** AVE RT **11.46**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

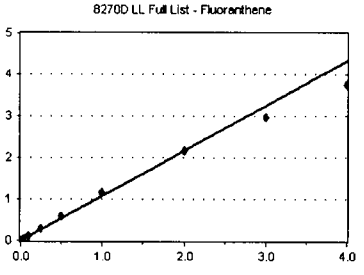


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~6378~~	~~0.917~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~17235~~	~~0.983~~	~~11.95~~
9D12042-CAL3	100	42155	1.118	11.95
9D12042-CAL4	200	102422	1.287	11.95
9D12042-CAL5	500	254292	1.377	11.95
9D12042-CAL6	1000	466951	1.332	11.95
9D12042-CAL7	2000	975285	1.317	11.95
9D12042-CAL8	4000	1863184	1.229	11.95
9D12042-CAL9	6000	2563602	1.101	11.95
9D12042-CALA	8000	3263829	1.024	11.96

AVE RF **1.223** RF RSD **10.44** AVE RT **11.95**

Fluoranthene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6550	0.942	12.72
9D12042-CAL2	50	16870	0.962	12.72
9D12042-CAL3	100	42585	1.129	12.72
9D12042-CAL4	200	96117	1.208	12.72
9D12042-CAL5	500	228649	1.238	12.72
9D12042-CAL6	1000	412285	1.176	12.72
9D12042-CAL7	2000	857707	1.159	12.72
9D12042-CAL8	4000	1642237	1.083	12.72
9D12042-CAL9	6000	2306517	0.990	12.73
9D12042-CALA	8000	2984085	0.936	12.74

AVE RF **1.082** RF RSD **10.70** AVE RT **12.72**

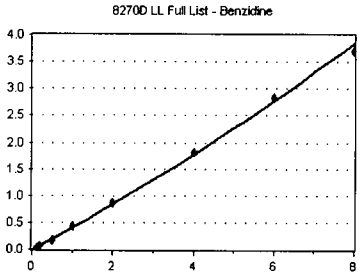
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

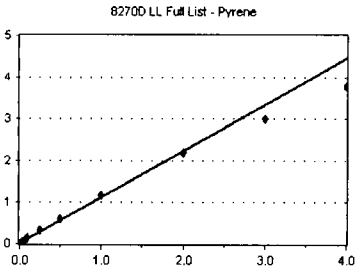


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~40~~	~~5651~~	~~0.406~~	~~12.87~~
~~9D12042-CAL2~~	~~100~~	~~8239~~	~~0.235~~	~~12.87~~
9D12042-CAL3	200	20642	0.274	12.87
9D12042-CAL4	400	43225	0.272	12.87
9D12042-CAL5	1000	133741	0.362	12.87
9D12042-CAL6	2000	301351	0.430	12.88
9D12042-CAL7	4000	643196	0.434	12.88
9D12042-CAL8	8000	1376314	0.454	12.89
9D12042-CAL9	12000	2206262	0.474	12.90
9D12042-CALA	16000	2941124	0.461	12.90

AVE RF **0.395** RF RSD **20.93** AVE RT **12.88**

Pyrene

Curve Fit: **AVERAGE RF**

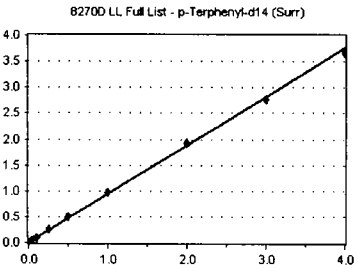


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	7061	1.015	13.03
9D12042-CAL2	50	18258	1.042	13.03
9D12042-CAL3	100	44554	1.181	13.03
9D12042-CAL4	200	98204	1.234	13.03
9D12042-CAL5	500	236036	1.278	13.03
9D12042-CAL6	1000	420841	1.200	13.03
9D12042-CAL7	2000	864674	1.168	13.03
9D12042-CAL8	4000	1649971	1.088	13.04
9D12042-CAL9	6000	2327794	0.999	13.05
9D12042-CALA	8000	3020323	0.948	13.05

AVE RF **1.115** RF RSD **10.03** AVE RT **13.03**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4983	0.817	13.24
9D12042-CAL2	50	13758	0.900	13.24
9D12042-CAL3	100	32507	0.960	13.24
9D12042-CAL4	200	72239	0.969	13.24
9D12042-CAL5	500	169985	1.012	13.24
9D12042-CAL6	1000	302416	0.993	13.24
9D12042-CAL7	2000	637269	0.970	13.25
9D12042-CAL8	4000	1238678	0.963	13.25
9D12042-CAL9	6000	1748485	0.920	13.25
9D12042-CALA	8000	2287744	0.912	13.26

AVE RF **0.941** RF RSD **5.99** AVE RT **13.25**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1437~~	~~0.236~~	~~14.11~~
9D12042-CAL2	50	4216	0.276	14.11
9D12042-CAL3	100	12505	0.369	14.11
9D12042-CAL4	200	33181	0.445	14.11
9D12042-CAL5	500	94315	0.562	14.11
9D12042-CAL6	1000	182466	0.599	14.11
9D12042-CAL7	2000	421549	0.642	14.11
9D12042-CAL8	4000	881875	0.685	14.12
9D12042-CAL9	6000	1284862	0.676	14.13
9D12042-CALA	8000	1721965	0.686	14.13

AVE RF **0.549** RF RSD **27.53** AVE RT **14.12**

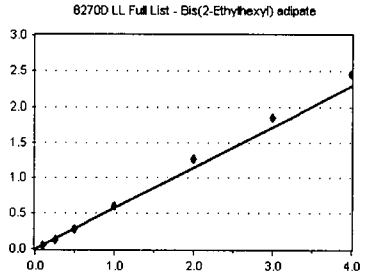
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**

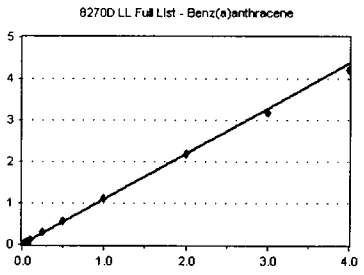


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2012~~	~~0.330~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~4520~~	~~0.296~~	~~0.00~~
~~9D12042-CAL3~~	~~100~~	~~13416~~	~~0.396~~	~~14.29~~
9D12042-CAL4	200	32652	0.438	14.29
9D12042-CAL5	500	89139	0.531	14.29
9D12042-CAL6	1000	172525	0.567	14.29
9D12042-CAL7	2000	390927	0.595	14.30
9D12042-CAL8	4000	814038	0.633	14.30
9D12042-CAL9	6000	1167165	0.614	14.30
9D12042-CALA	8000	1536908	0.613	14.31

AVE RF **0.570** RF RSD **11.84** AVE RT **14.30**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

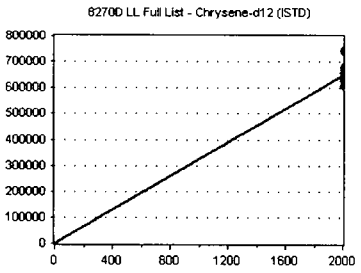


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6716	1.101	15.33
9D12042-CAL2	50	15643	1.023	15.33
9D12042-CAL3	100	36438	1.076	15.33
9D12042-CAL4	200	84134	1.128	15.33
9D12042-CAL5	500	193655	1.153	15.33
9D12042-CAL6	1000	339038	1.113	15.33
9D12042-CAL7	2000	723880	1.102	15.33
9D12042-CAL8	4000	1412877	1.098	15.35
9D12042-CAL9	6000	2019475	1.062	15.35
9D12042-CALA	8000	2651985	1.057	15.36

AVE RF **1.091** RF RSD **3.46** AVE RT **15.34**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

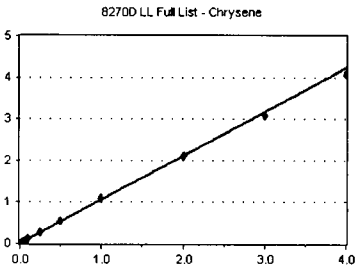


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	610059	305.030	15.35
9D12042-CAL2	2000	611518	305.759	15.35
9D12042-CAL3	2000	677420	338.710	15.36
9D12042-CAL4	2000	745877	372.938	15.36
9D12042-CAL5	2000	671794	335.897	15.36
9D12042-CAL6	2000	609064	304.532	15.36
9D12042-CAL7	2000	656807	328.403	15.37
9D12042-CAL8	2000	643412	321.706	15.37
9D12042-CAL9	2000	633760	316.880	15.38
9D12042-CALA	2000	627246	313.623	15.38

AVE RF **324.348** RF RSD **6.50** AVE RT **15.36**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6300	1.033	15.41
9D12042-CAL2	50	15517	1.015	15.41
9D12042-CAL3	100	36836	1.088	15.41
9D12042-CAL4	200	81237	1.089	15.41
9D12042-CAL5	500	184149	1.096	15.41
9D12042-CAL6	1000	330019	1.084	15.41
9D12042-CAL7	2000	705299	1.074	15.43
9D12042-CAL8	4000	1362723	1.059	15.44
9D12042-CAL9	6000	1955932	1.029	15.45
9D12042-CALA	8000	2567396	1.023	15.46

AVE RF **1.059** RF RSD **2.95** AVE RT **15.42**

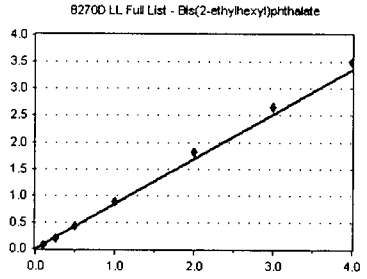
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

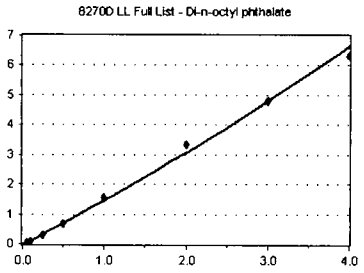


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1961~~	~~0.321~~	~~15.48~~
~~9D12042-CAL2~~	~~50~~	~~5834~~	~~0.382~~	~~15.49~~
~~9D12042-CAL3~~	~~100~~	~~17462~~	~~0.516~~	~~15.49~~
9D12042-CAL4	200	48543	0.651	15.49
9D12042-CAL5	500	135678	0.808	15.49
9D12042-CAL6	1000	262635	0.862	15.49
9D12042-CAL7	2000	581618	0.886	15.49
9D12042-CAL8	4000	1174172	0.912	15.50
9D12042-CAL9	6000	1684021	0.886	15.50
9D12042-CALA	8000	2197866	0.876	15.51

AVE RF **0.840** RF RSD **10.65** AVE RT **15.49**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

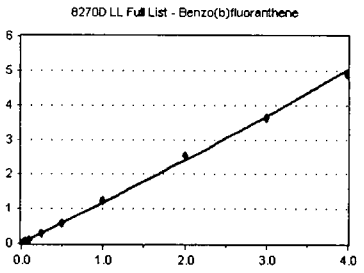


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1918~~	~~0.355~~	~~17.15~~
~~9D12042-CAL2~~	~~50~~	~~5426~~	~~0.399~~	~~17.17~~
9D12042-CAL3	100	17362	0.566	17.16
9D12042-CAL4	200	57618	0.833	17.16
9D12042-CAL5	500	179707	1.176	17.17
9D12042-CAL6	1000	379612	1.379	17.16
9D12042-CAL7	2000	937211	1.539	17.17
9D12042-CAL8	4000	2011354	1.664	17.17
9D12042-CAL9	6000	2987922	1.603	17.18
9D12042-CALA	8000	3987899	1.577	17.19

AVE RF **1.292** RF RSD **31.17** AVE RT **17.17**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

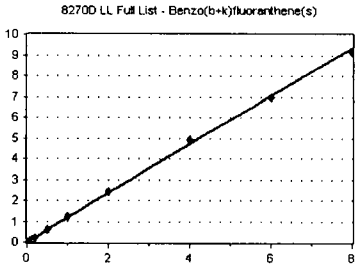


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3779	0.699	17.93
9D12042-CAL2	50	11314	0.833	17.94
9D12042-CAL3	100	30164	0.984	17.94
9D12042-CAL4	200	73883	1.068	17.94
9D12042-CAL5	500	182995	1.198	17.95
9D12042-CAL6	1000	328149	1.192	17.95
9D12042-CAL7	2000	743627	1.221	17.96
9D12042-CAL8	4000	1520664	1.258	17.97
9D12042-CAL9	6000	2251243	1.208	17.99
9D12042-CALA	8000	3082964	1.219	18.00

AVE RF **1.088** RF RSD **17.56** AVE RT **17.96**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	40	8014	0.741	17.93
9D12042-CAL2	100	23691	0.872	18.01
9D12042-CAL3	200	63641	1.038	18.01
9D12042-CAL4	400	154717	1.118	18.01
9D12042-CAL5	1000	376051	1.230	18.01
9D12042-CAL6	2000	674655	1.225	18.02
9D12042-CAL7	4000	1488733	1.222	18.03
9D12042-CAL8	8000	2970412	1.229	18.05
9D12042-CAL9	12000	4333245	1.162	18.06
9D12042-CALA	16000	5776538	1.142	18.07

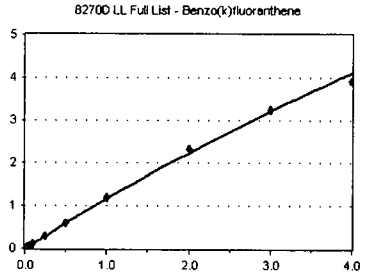
AVE RF **1.098** RF RSD **15.32** AVE RT **18.02**

Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Benzo(k)fluoranthene

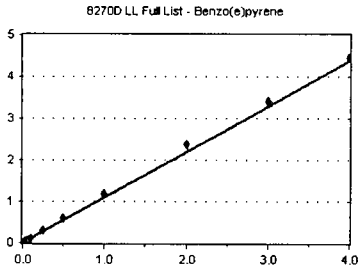


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3388	0.627	18.01
9D12042-CAL2	50	11590	0.853	18.01
9D12042-CAL3	100	31556	1.029	18.01
9D12042-CAL4	200	77404	1.119	18.01
9D12042-CAL5	500	185113	1.211	18.01
9D12042-CAL6	1000	333411	1.211	18.02
9D12042-CAL7	2000	719520	1.182	18.03
9D12042-CAL8	4000	1404715	1.162	18.05
9D12042-CAL9	6000	2012368	1.079	18.06
9D12042-CALA	8000	2486052	0.983	18.07

AVE RF **1.046** RF RSD **17.75** AVE RT **18.03**

Benzo(e)pyrene

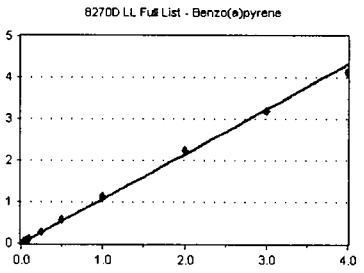


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4564	0.844	18.60
9D12042-CAL2	50	12166	0.896	18.60
9D12042-CAL3	100	32260	1.052	18.60
9D12042-CAL4	200	76788	1.110	18.60
9D12042-CAL5	500	185968	1.217	18.61
9D12042-CAL6	1000	331204	1.203	18.61
9D12042-CAL7	2000	729599	1.198	18.62
9D12042-CAL8	4000	1443185	1.194	18.63
9D12042-CAL9	6000	2113962	1.134	18.65
9D12042-CALA	8000	2828166	1.118	18.66

AVE RF **1.097** RF RSD **11.91** AVE RT **18.62**

Benzo(a)pyrene

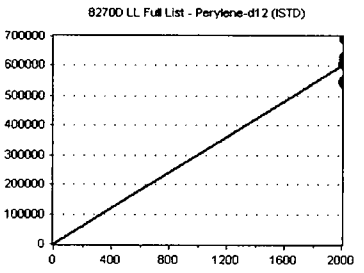


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3153	0.583	18.73
9D12042-CAL2	50	9489	0.699	18.73
9D12042-CAL3	100	26020	0.849	18.72
9D12042-CAL4	200	69007	0.998	18.72
9D12042-CAL5	500	167492	1.096	18.73
9D12042-CAL6	1000	305060	1.108	18.73
9D12042-CAL7	2000	692390	1.137	18.74
9D12042-CAL8	4000	1361909	1.127	18.76
9D12042-CAL9	6000	1987626	1.066	18.77
9D12042-CALA	8000	2622343	1.037	18.78

AVE RF **0.970** RF RSD **20.03** AVE RT **18.74**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	540507	270.253	18.87
9D12042-CAL2	2000	543287	271.643	18.87
9D12042-CAL3	2000	613080	306.540	18.87
9D12042-CAL4	2000	691727	345.863	18.88
9D12042-CAL5	2000	611227	305.613	18.88
9D12042-CAL6	2000	550560	275.280	18.88
9D12042-CAL7	2000	608933	304.467	18.88
9D12042-CAL8	2000	604409	302.205	18.89
9D12042-CAL9	2000	621448	310.724	18.89
9D12042-CALA	2000	632280	316.140	18.90

AVE RF **300.873** RF RSD **7.73** AVE RT **18.88**

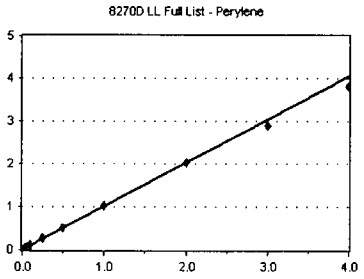
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

Perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5247	0.971	18.92
9D12042-CAL2	50	12964	0.954	18.92
9D12042-CAL3	100	31514	1.028	18.92
9D12042-CAL4	200	76410	1.105	18.92
9D12042-CAL5	500	164210	1.075	18.93
9D12042-CAL6	1000	289485	1.052	18.93
9D12042-CAL7	2000	626831	1.029	18.94
9D12042-CAL8	4000	1230925	1.018	18.96
9D12042-CAL9	6000	1800658	0.966	18.97
9D12042-CALA	8000	2414315	0.955	18.99

AVE RF **1.015** RF RSD **5.19** AVE RT **18.94**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

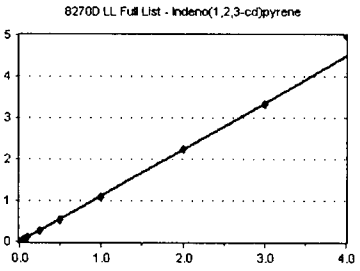


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	486802	243.401	21.26
9D12042-CAL2	2000	498877	249.438	21.26
9D12042-CAL3	2000	548377	274.188	21.26
9D12042-CAL4	2000	629435	314.718	21.27
9D12042-CAL5	2000	566816	283.408	21.27
9D12042-CAL6	2000	510954	255.477	21.27
9D12042-CAL7	2000	581304	290.652	21.27
9D12042-CAL8	2000	596931	298.465	21.29
9D12042-CAL9	2000	616591	308.295	21.30
9D12042-CALA	2000	623208	311.604	21.31

AVE RF **282.965** RF RSD **9.34** AVE RT **21.27**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

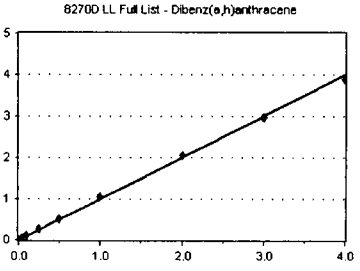


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5842	1.200	21.26
9D12042-CAL2	50	13136	1.053	21.26
9D12042-CAL3	100	29860	1.089	21.26
9D12042-CAL4	200	68379	1.086	21.26
9D12042-CAL5	500	156537	1.105	21.26
9D12042-CAL6	1000	278226	1.089	21.27
9D12042-CAL7	2000	633467	1.090	21.28
9D12042-CAL8	4000	1337697	1.120	21.30
9D12042-CAL9	6000	2048112	1.107	21.31
9D12042-CALA	8000	3112495	1.249	21.33

AVE RF **1.119** RF RSD **5.31** AVE RT **21.28**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4686	0.963	21.32
9D12042-CAL2	50	11403	0.914	21.33
9D12042-CAL3	100	27470	1.002	21.33
9D12042-CAL4	200	62866	0.999	21.33
9D12042-CAL5	500	147780	1.043	21.32
9D12042-CAL6	1000	262242	1.026	21.33
9D12042-CAL7	2000	618025	1.063	21.34
9D12042-CAL8	4000	1232473	1.032	21.36
9D12042-CAL9	6000	1836914	0.993	21.37
9D12042-CALA	8000	2425385	0.973	21.38

AVE RF **1.001** RF RSD **4.36** AVE RT **21.34**

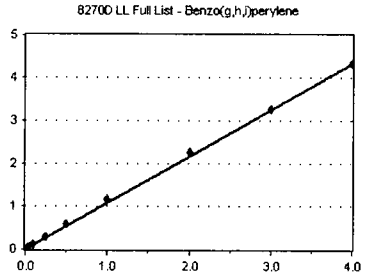
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

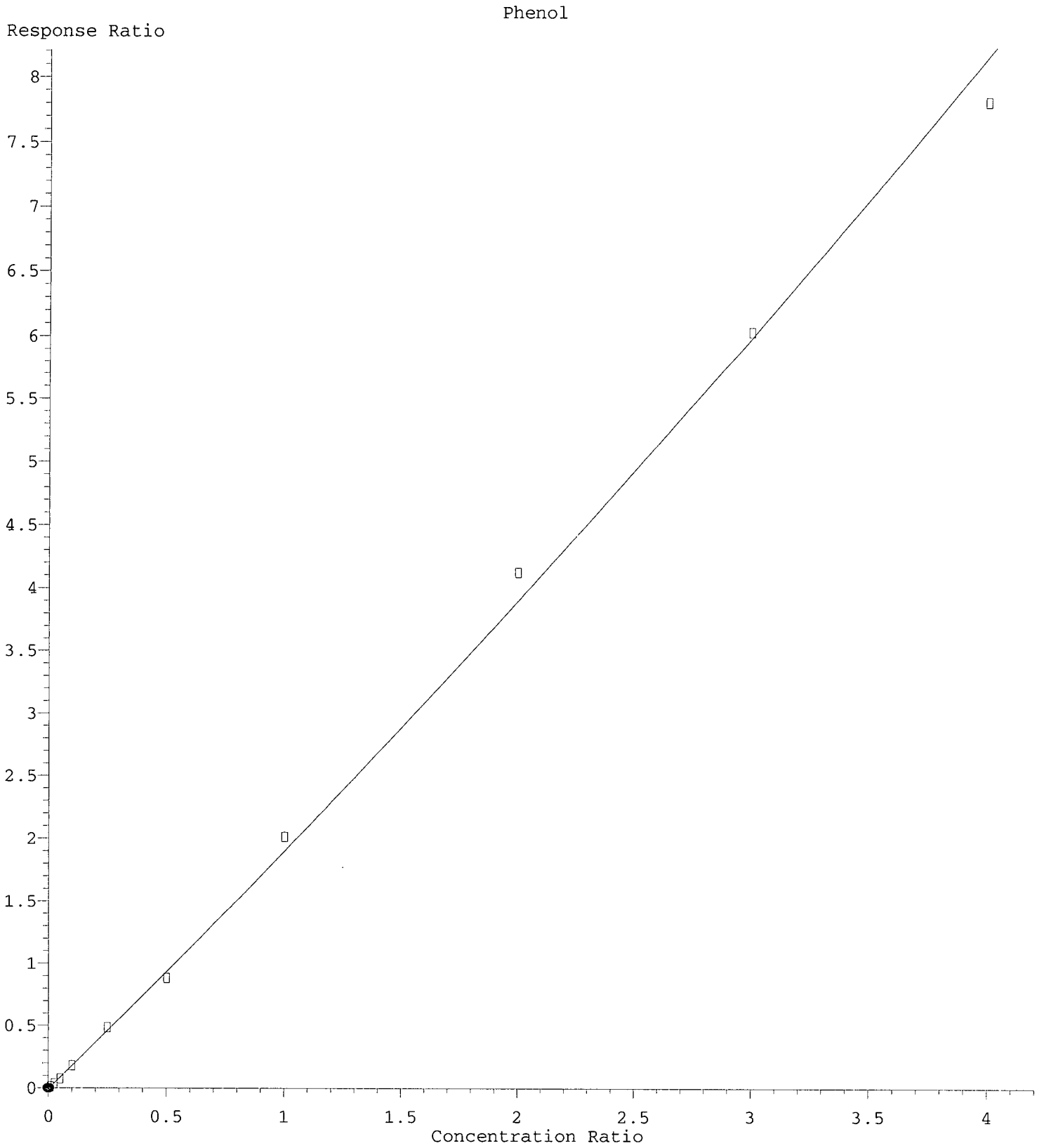
Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4399	0.904	21.81
9D12042-CAL2	50	12250	0.982	21.80
9D12042-CAL3	100	27580	1.006	21.80
9D12042-CAL4	200	68971	1.096	21.80
9D12042-CAL5	500	166477	1.175	21.81
9D12042-CAL6	1000	301297	1.179	21.81
9D12042-CAL7	2000	672680	1.157	21.82
9D12042-CAL8	4000	1357790	1.137	21.84
9D12042-CAL9	6000	2023853	1.094	21.87
9D12042-CALA	8000	2701841	1.084	21.88

AVE RF **1.081** RF RSD **8.42** AVE RT **21.82**

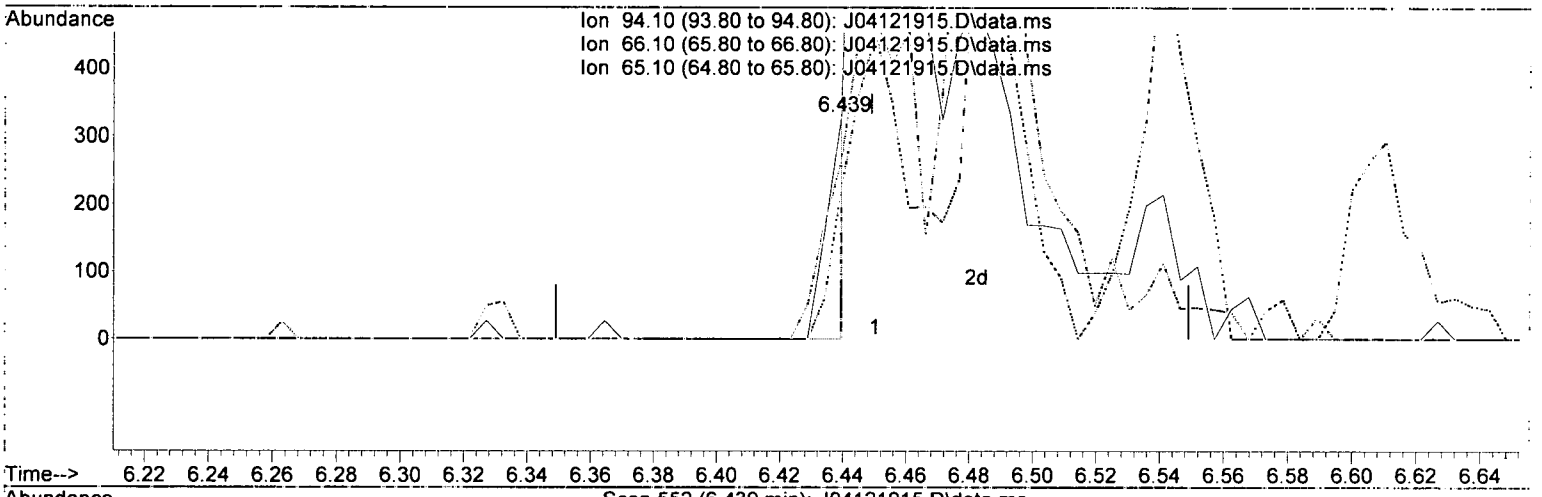


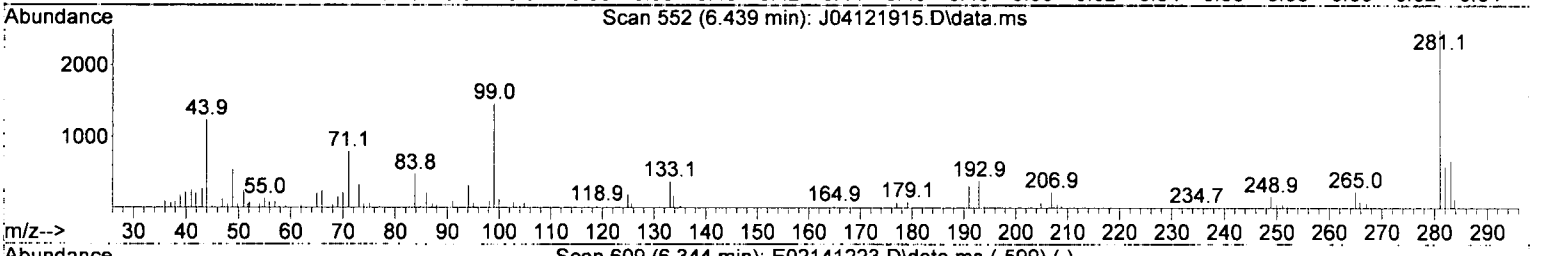
R = 4.53e-002 A*A + 1.86e+000 A - 8.91e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\8v10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

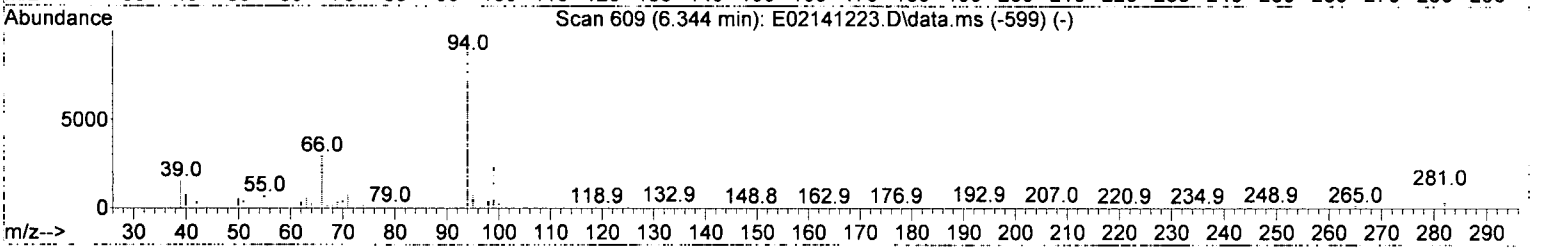
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







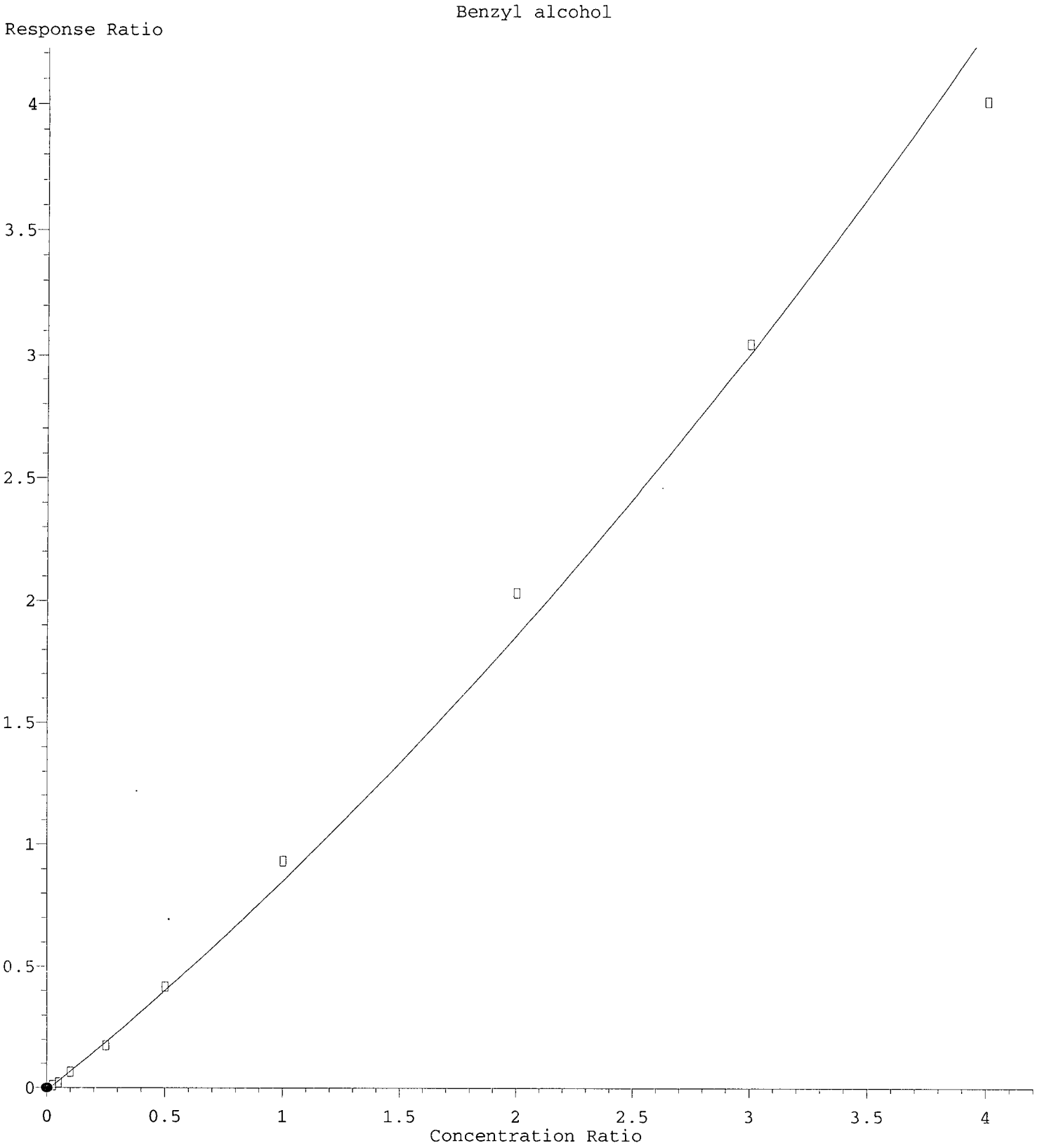
TIC: J04121915.D\data.ms

(6) Phenol (T)

6.439min (-0.010) 10.39 ng/ml m

response 156

Ion	Exp%	Act%
94.10	100.00	100.00
66.10	34.30	80.24#
65.10	26.20	68.09#
0.00	0.00	0.00

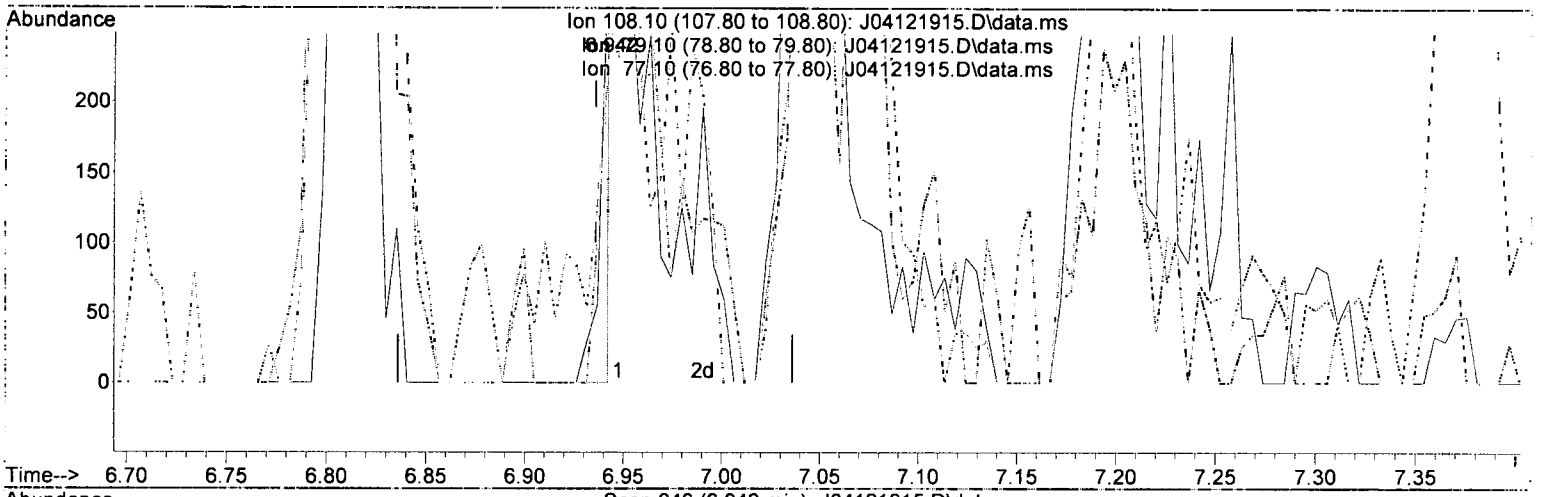


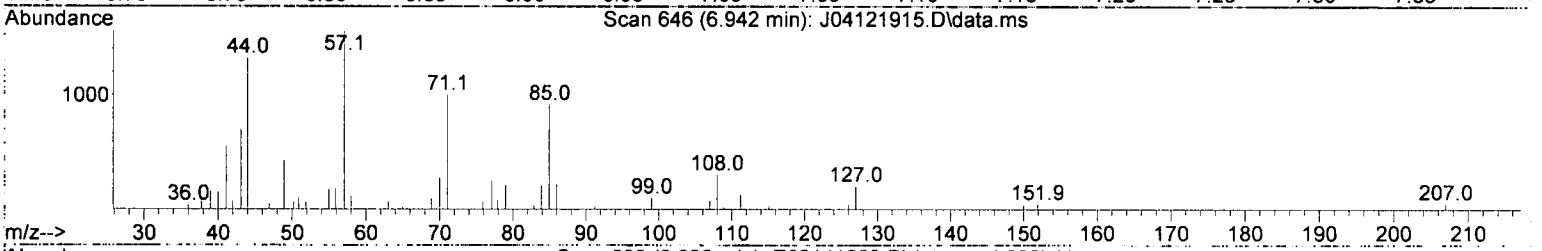
R = 7.20e-002 A*A + 7.92e-001 A - 1.27e-002
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

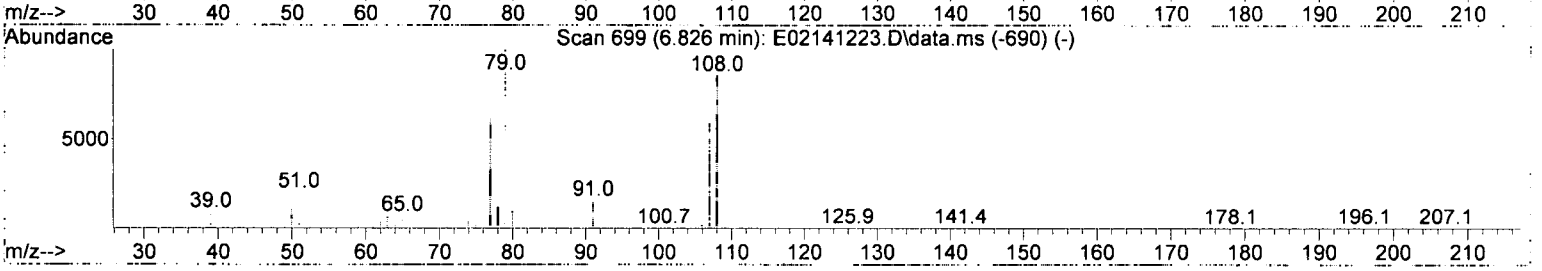
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







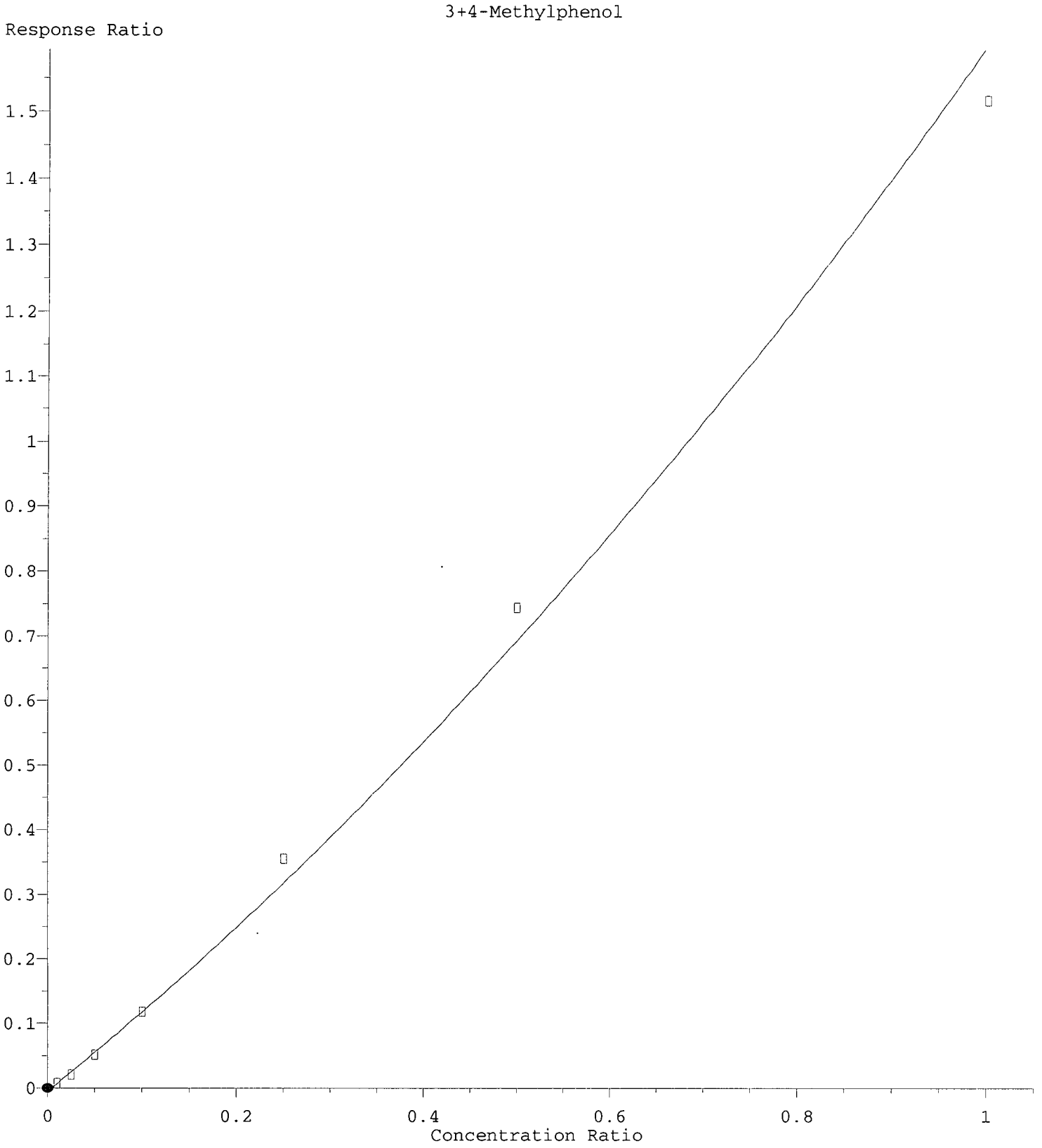
TIC: J04121915.D\data.ms

(12) Benzyl alcohol (T)

6.942min (+ 0.006) 33.75 ng/ml m

response 130

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	130.20	71.96#
77.10	80.10	82.55
0.00	0.00	0.00

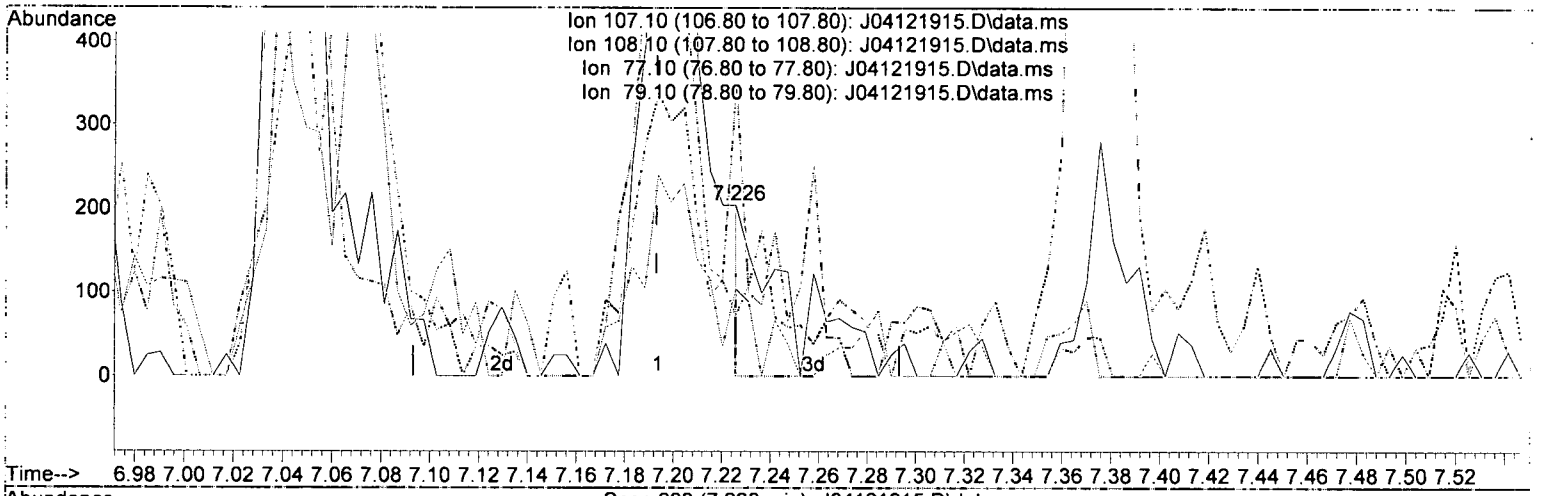


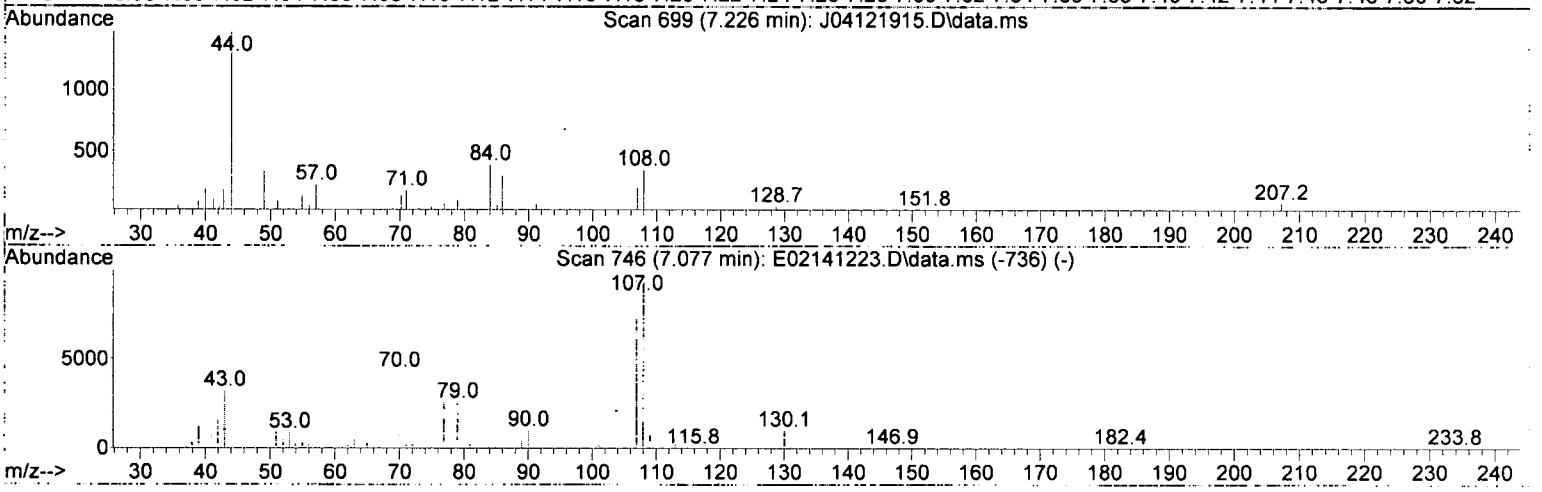
R = 4.16e-001 A*A + 1.19e+000 A - 5.31e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





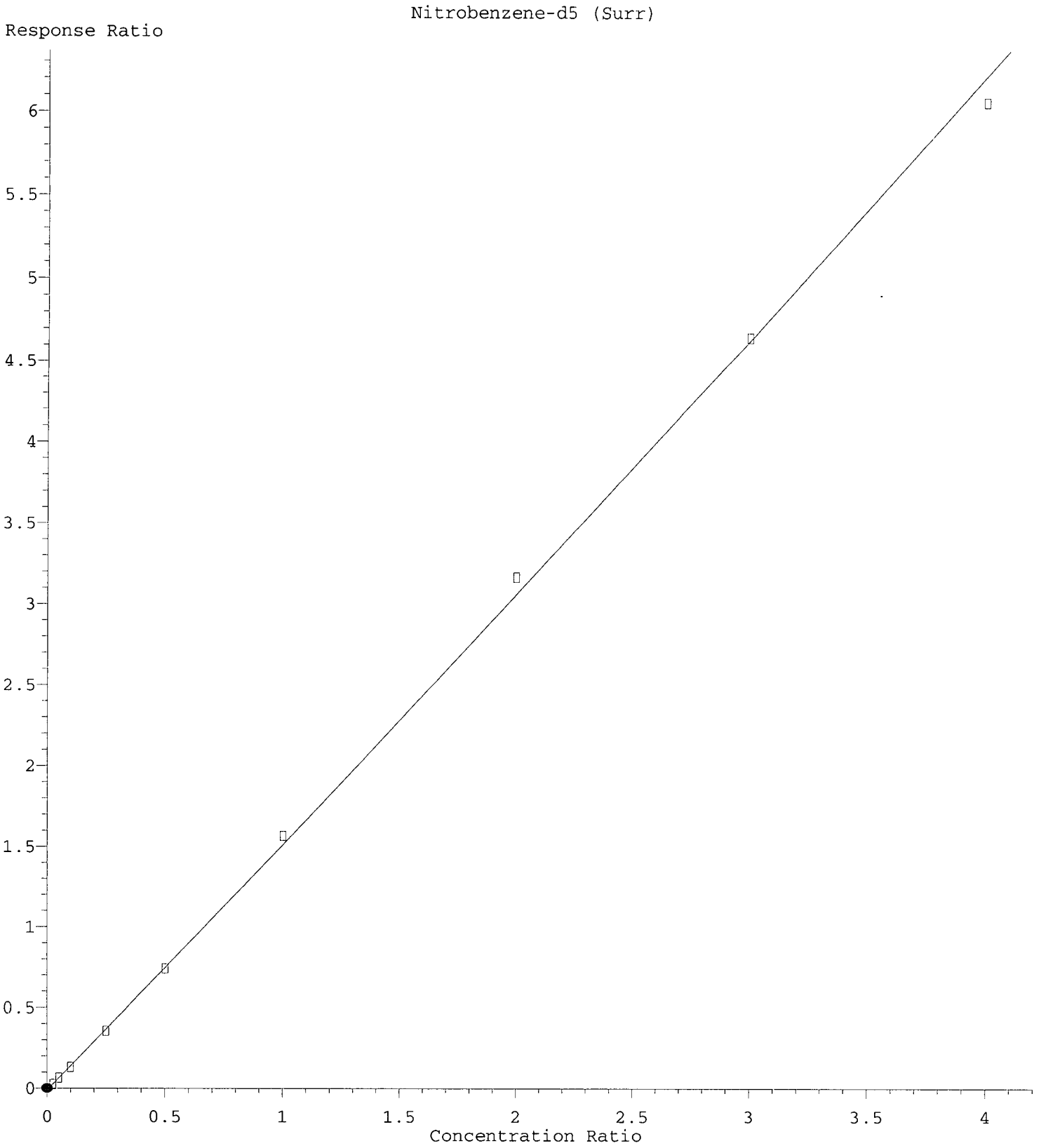
TIC: J04121915.D\data.ms

(17) 3+4-Methylphenol (T)

7.226min (+ 0.033) 10.21 ng/ml m

response 160

Ion	Exp%	Act%
107.10	100.00	100.00
108.10	91.10	171.08#
77.10	32.60	35.29
79.10	27.90	50.98

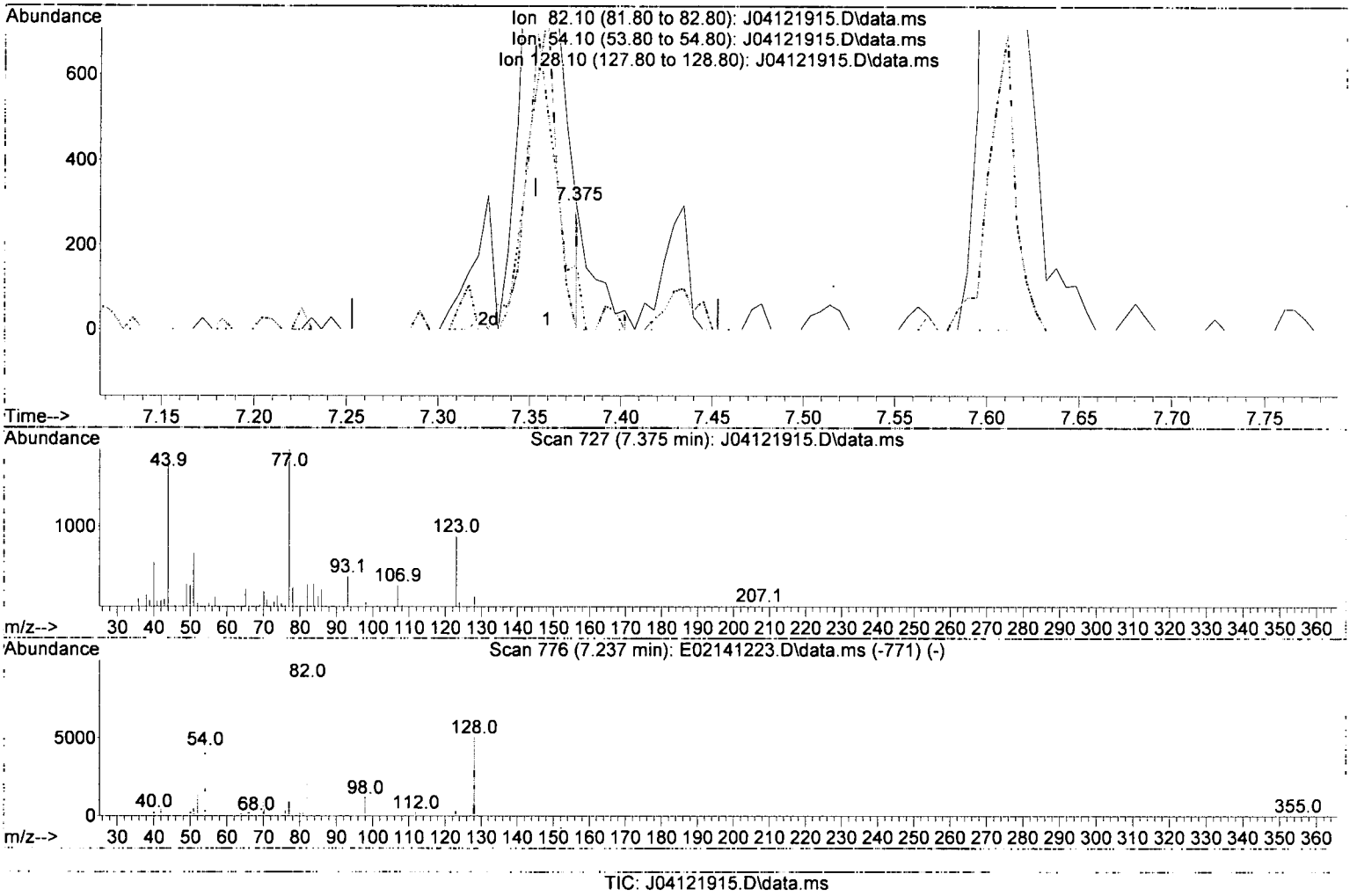


R = 1.06e-002 A*A + 1.52e+000 A - 1.41e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

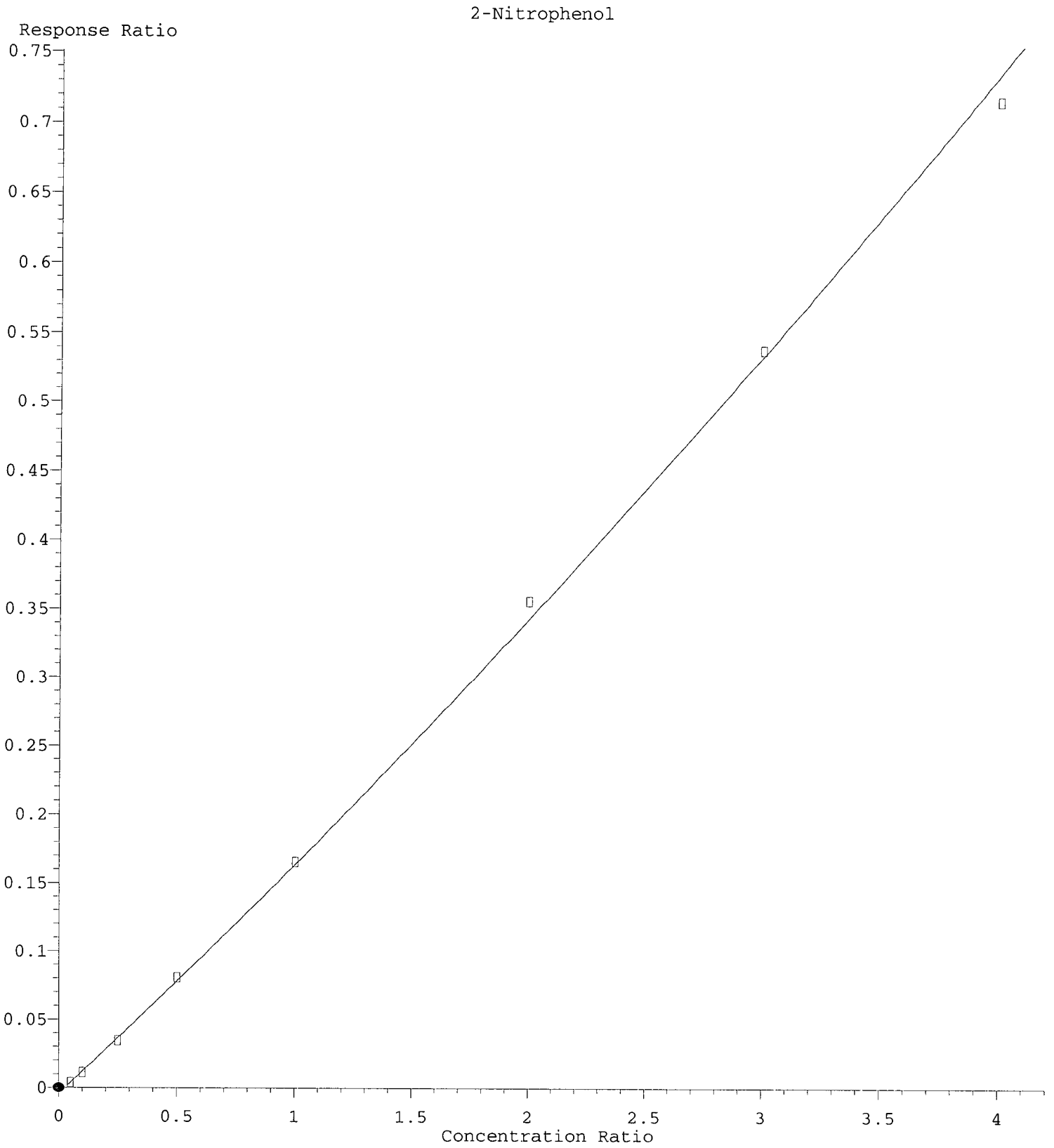


(19) Nitrobenzene-d5 (Surr) (S)

7.375min (+ 0.022) 19.52 ng/ml m

response 147

Ion	Exp%	Act%
82.10	100.00	100.00
54.10	47.50	0.00#
128.10	44.10	51.53
0.00	0.00	0.00

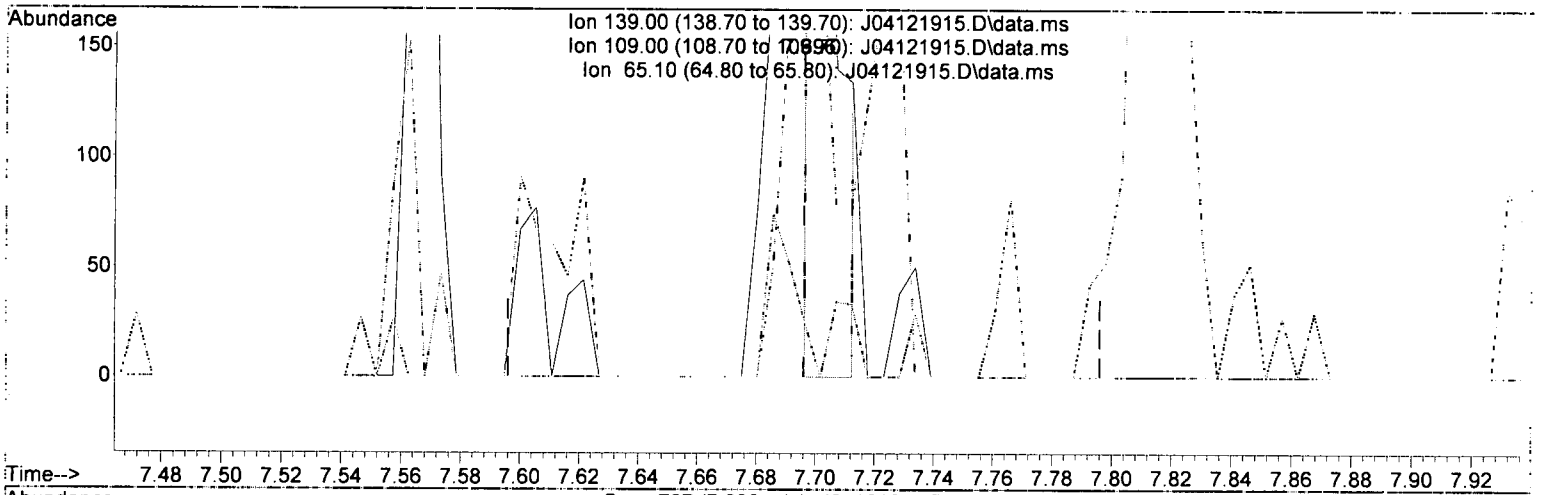


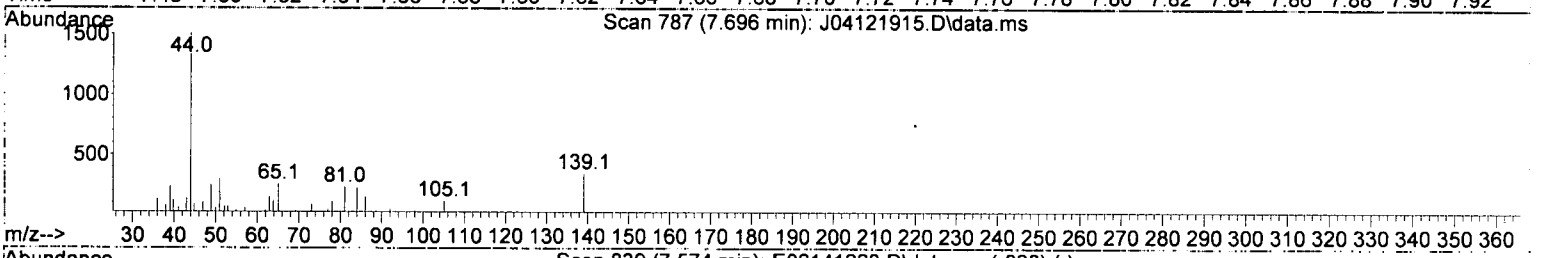
R = 5.66e-003 A*A + 1.62e-001 A - 4.58e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

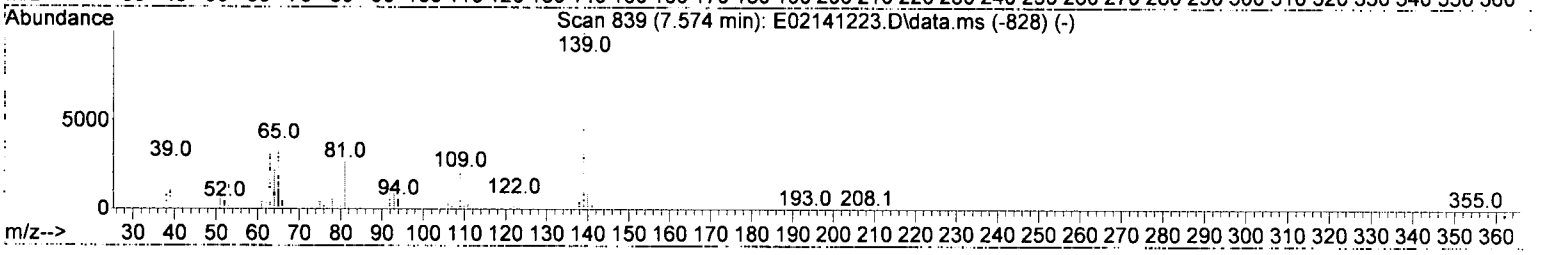
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







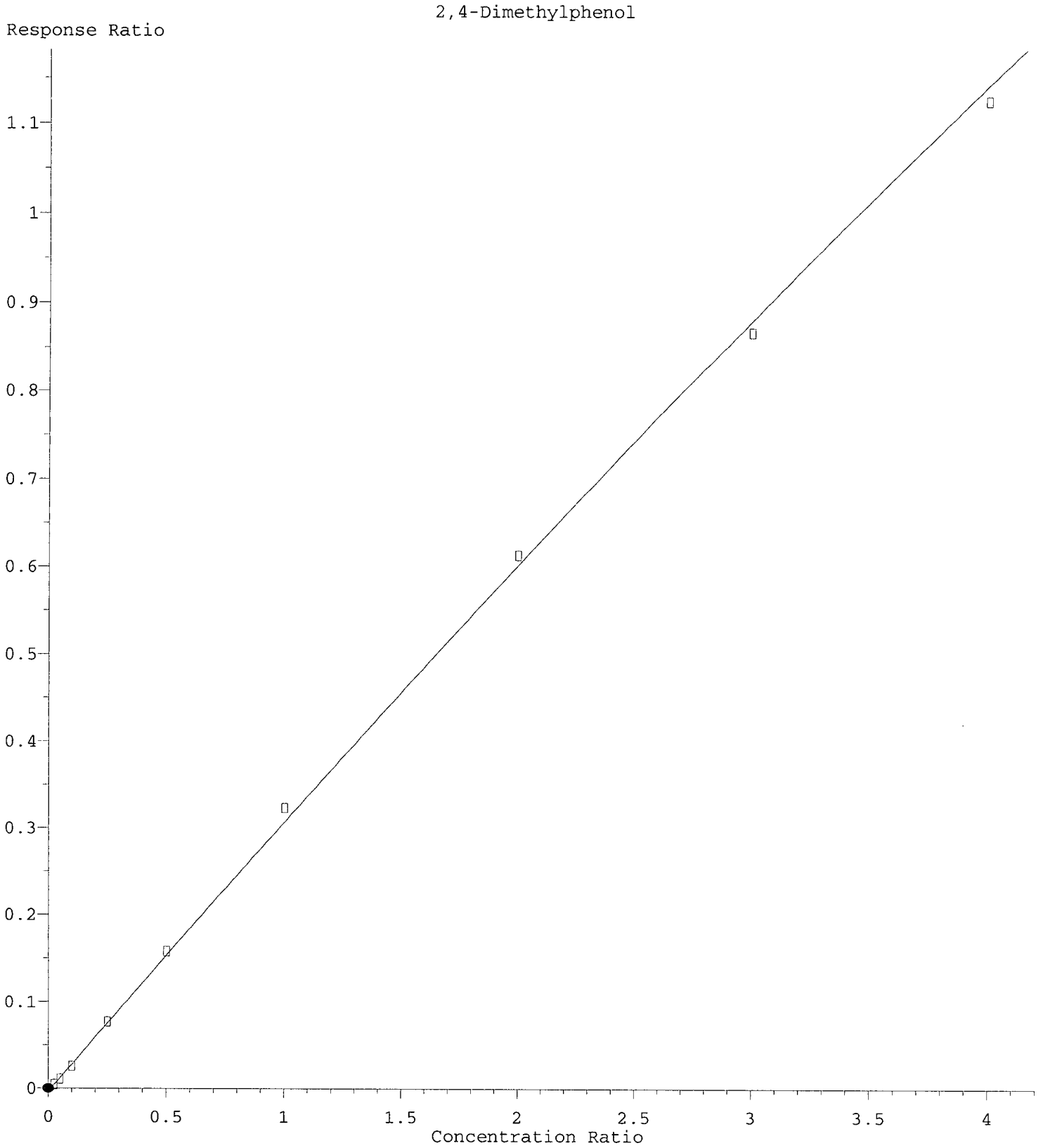
TIC: J04121915.D\data.ms

(23) 2-Nitrophenol (T)

7.696min (+ 0.000) 59.22 ng/ml m

response 194

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	21.70	7.20
65.10	46.00	73.78
0.00	0.00	0.00

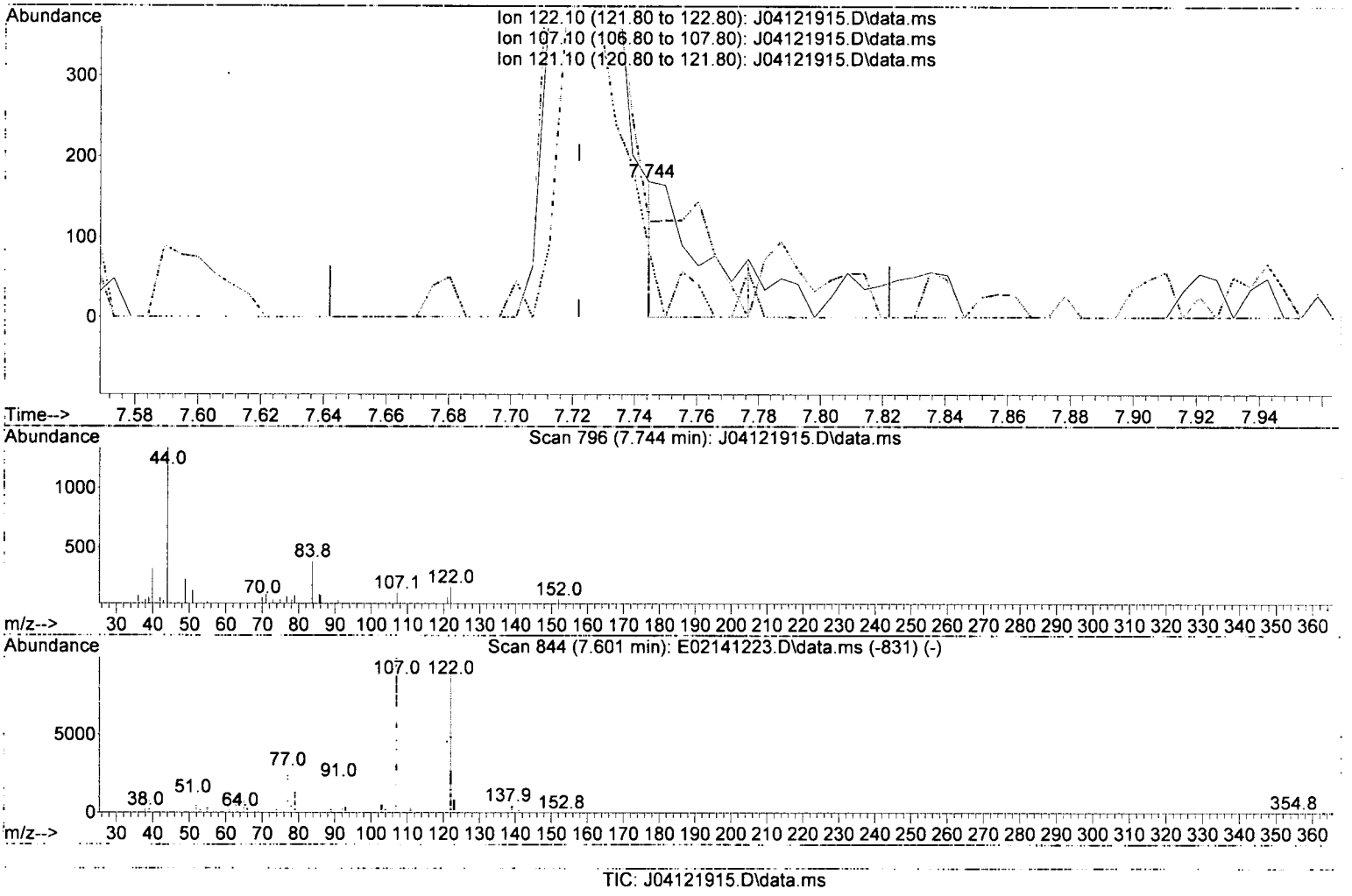


R = -8.10e-003 A*A + 3.19e-001 A - 4.04e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



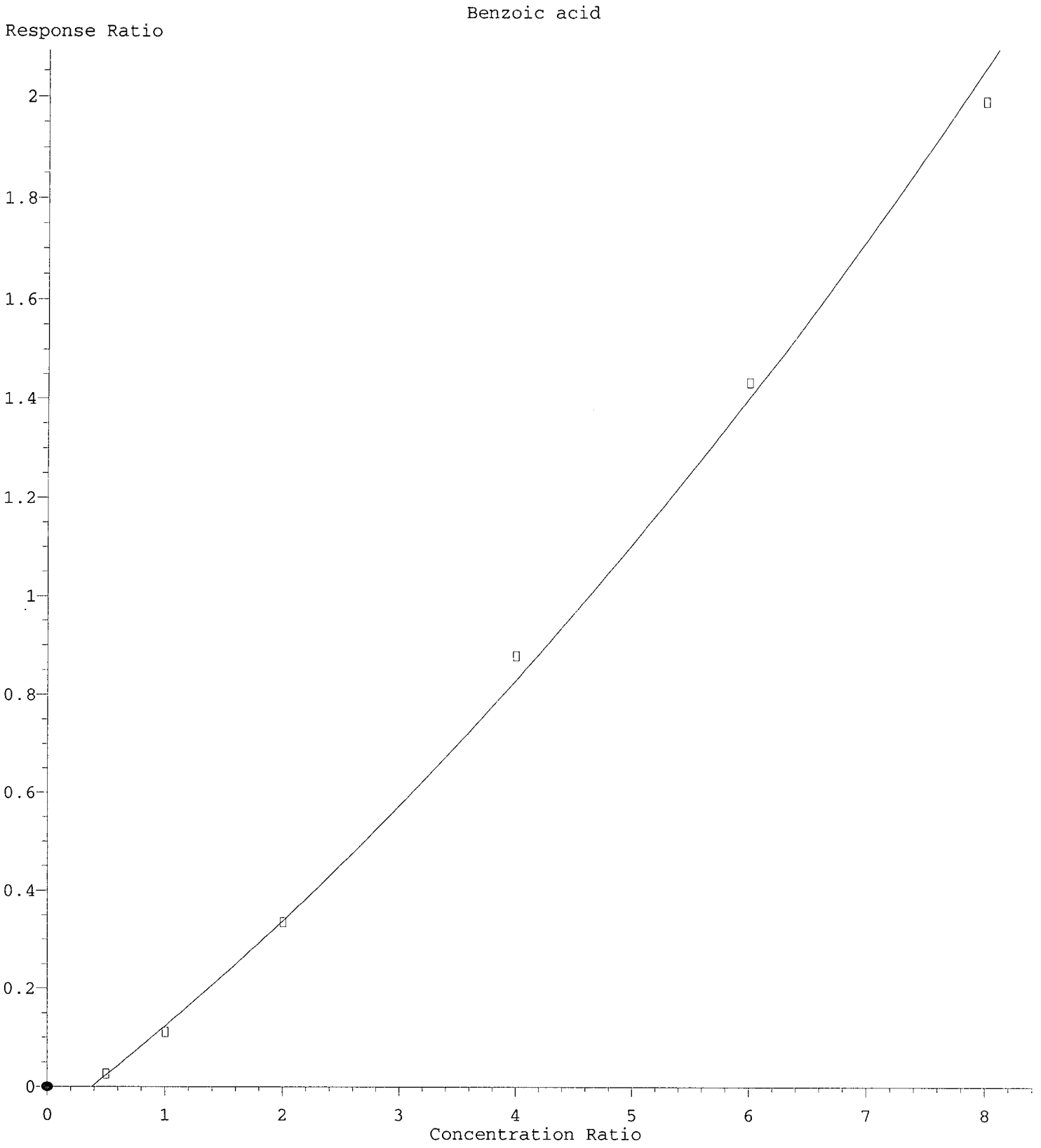
TIC: J04121915.D\data.ms

(24) 2,4-Dimethylphenol (T)

7.744min (+ 0.022) 26.60 ng/ml m

response 165

Ion	Exp%	Act%
122.10	100.00	100.00
107.10	112.80	71.01#
121.10	56.80	49.70
0.00	0.00	0.00

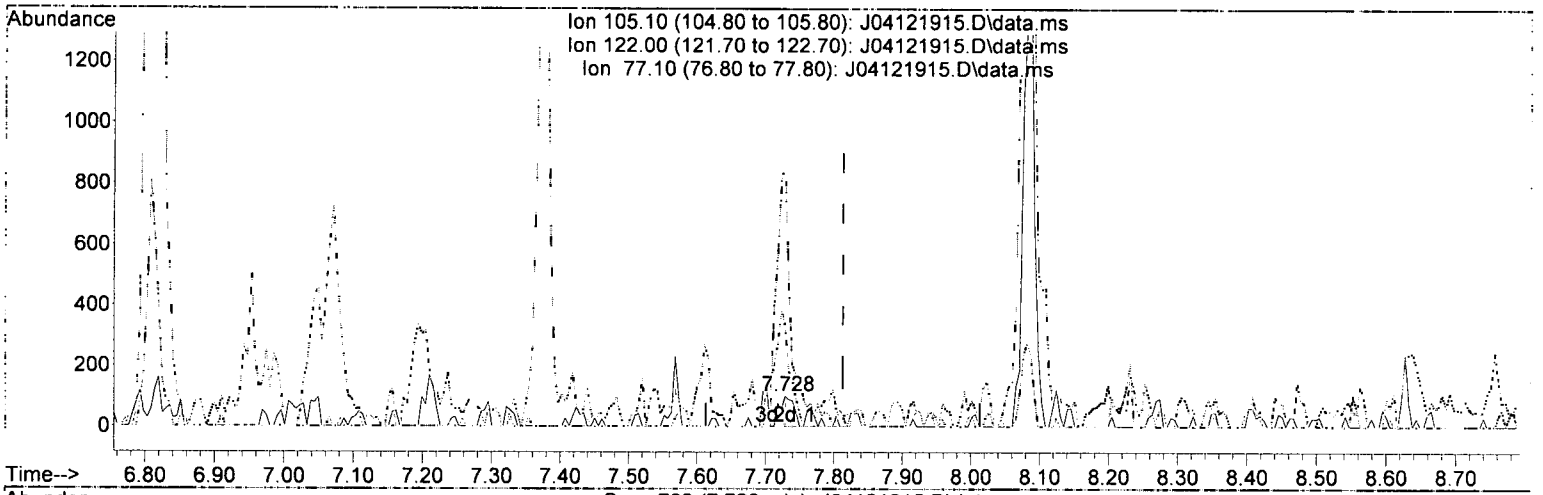


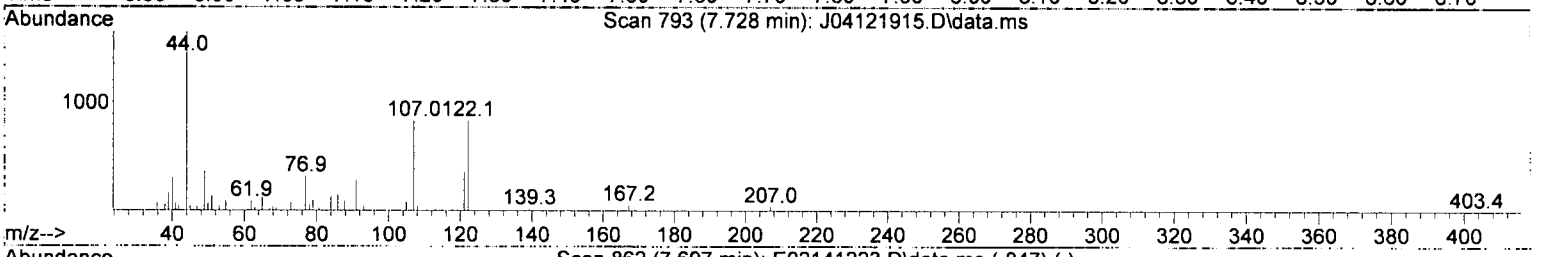
R = 1.02e-002 A*A + 1.84e-001 A - 7.08e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

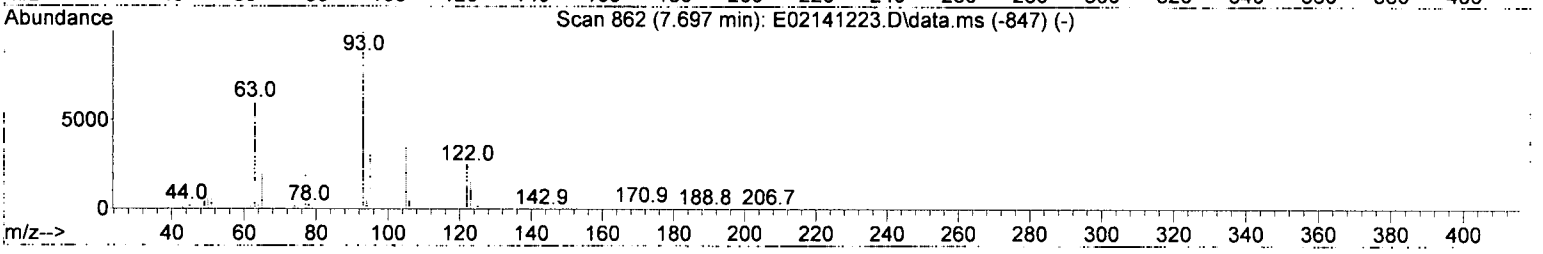
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







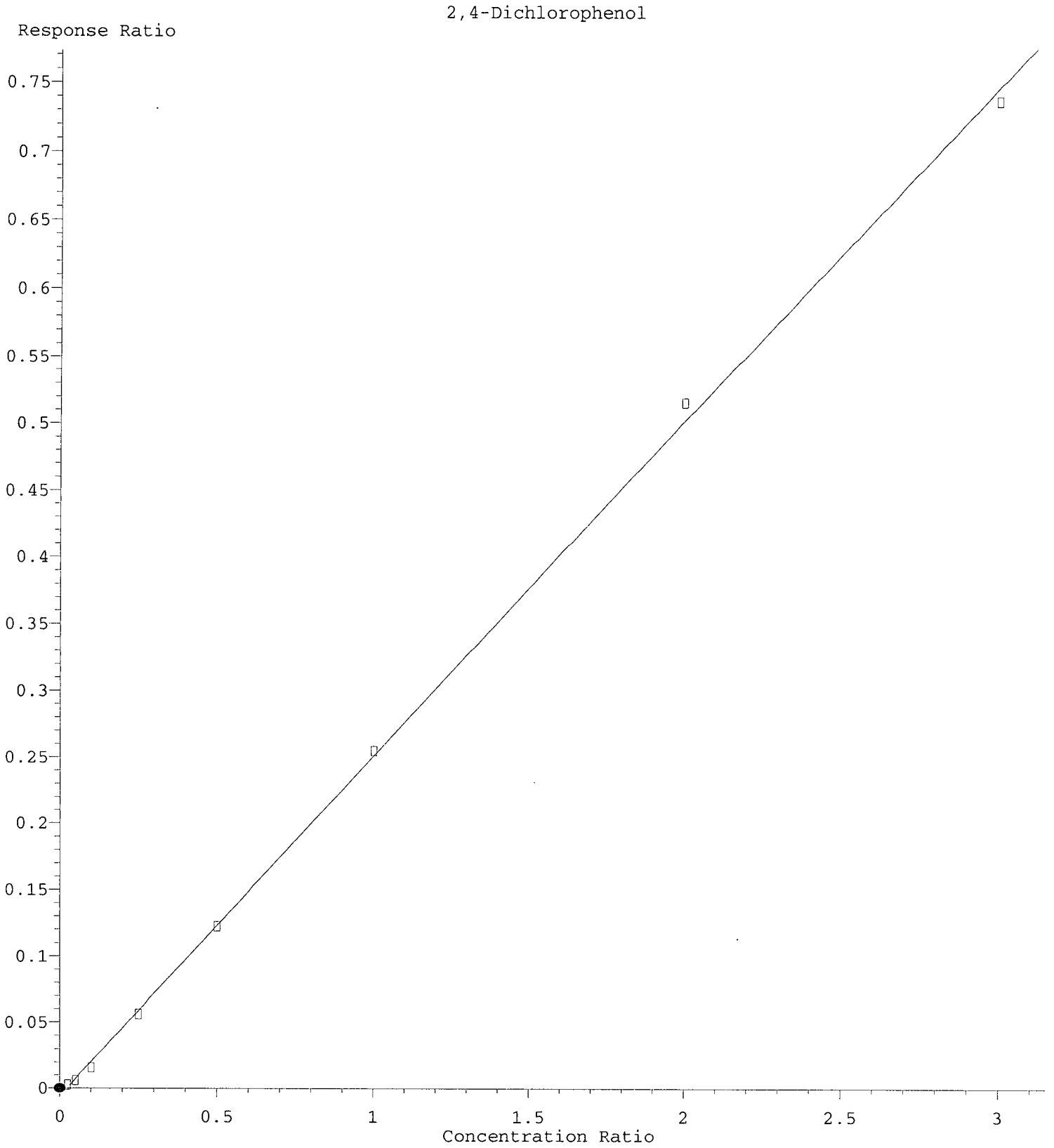
TIC: J04121915.D\data.ms

(26) Benzoic acid (T)

7.728min (-0.085) 753.95 ng/ml m

response 151

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	827.72#
77.10	76.00	329.70#
0.00	0.00	0.00

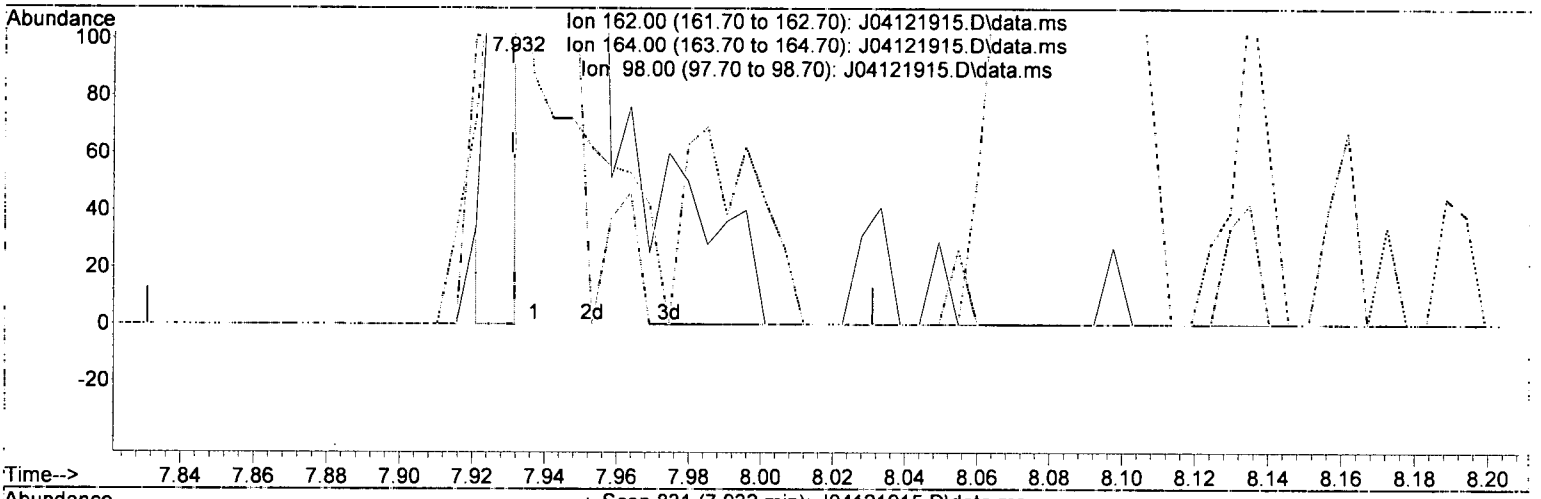


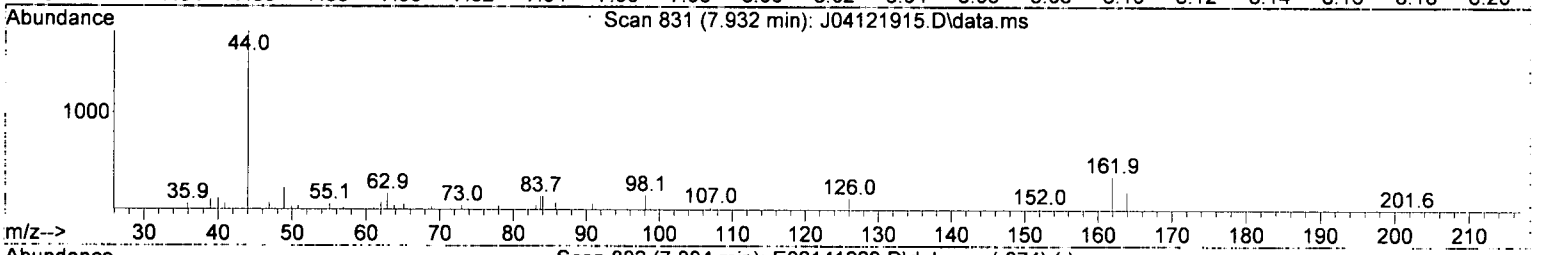
R = -2.93e-003 A*A + 2.60e-001 A - 5.83e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\5710_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

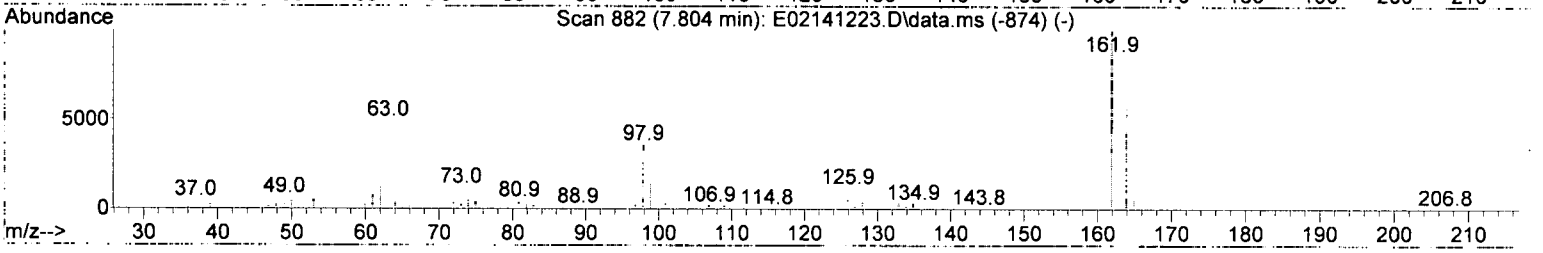
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







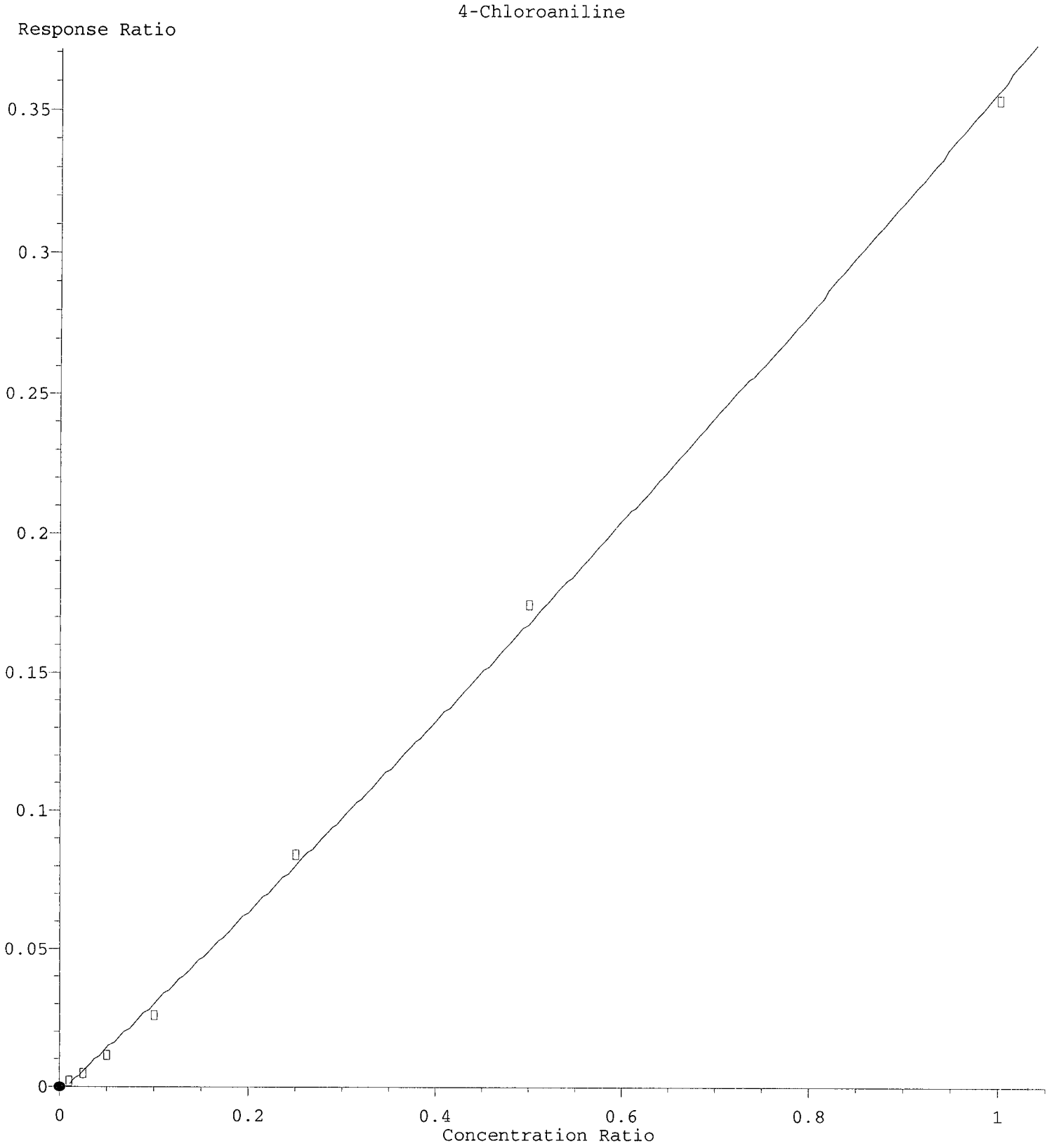
TIC: J04121915.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.932min (+ 0.001) 46.48 ng/ml m

response 172

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	63.60	57.06
98.00	37.40	46.26
0.00	0.00	0.00

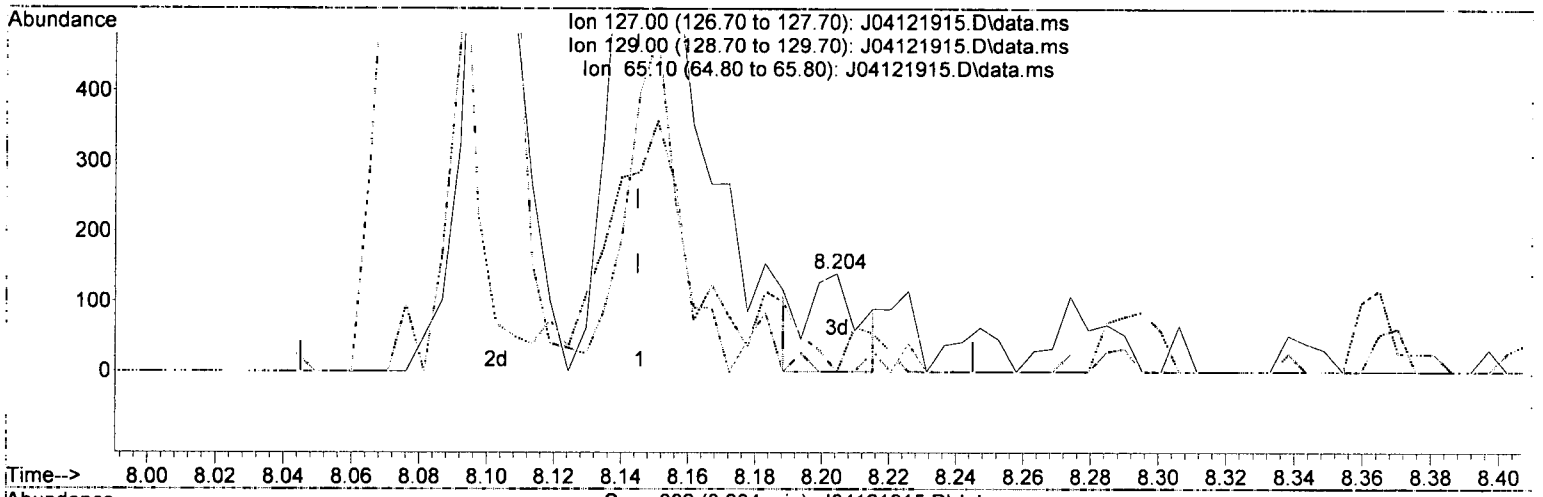


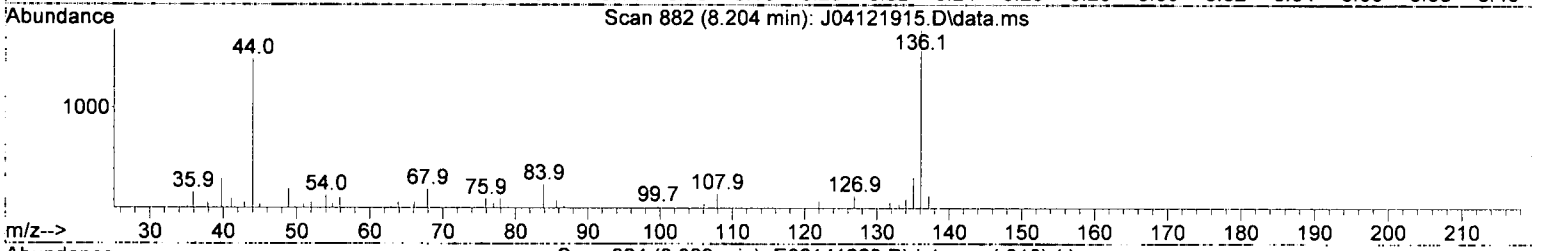
R = 3.85e-002 A*A + 3.21e-001 A - 2.32e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

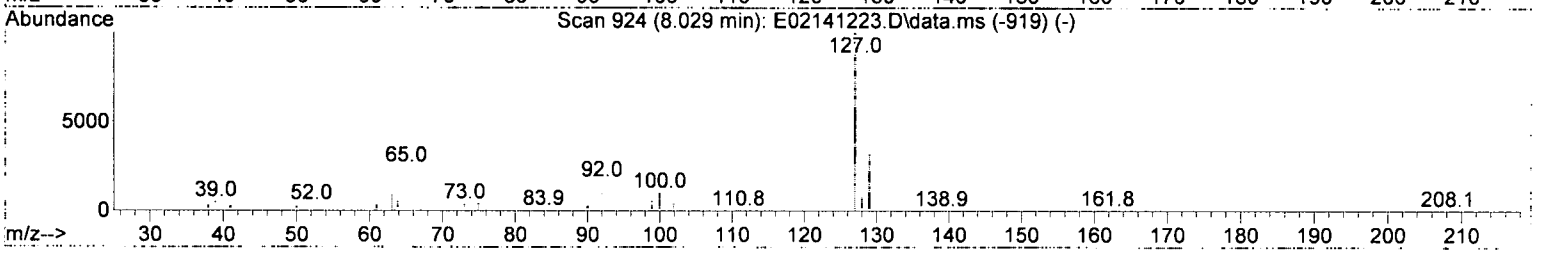
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







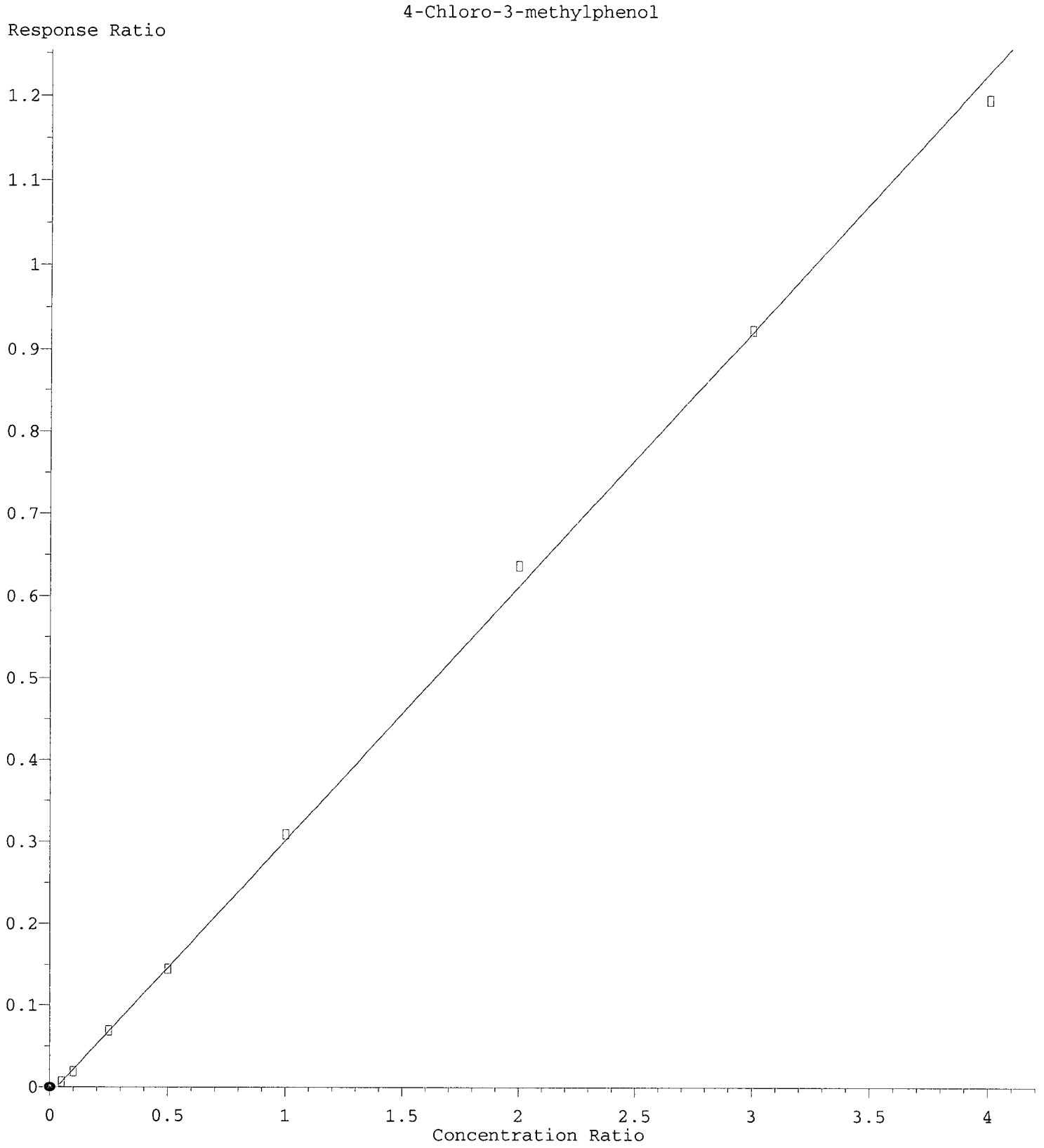
TIC: J04121915.D\data.ms

(30) 4-Chloroaniline (T)

8.204min (+ 0.059) 15.51 ng/ml m

response 148

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	0.00#
65.10	31.40	0.00#
0.00	0.00	0.00

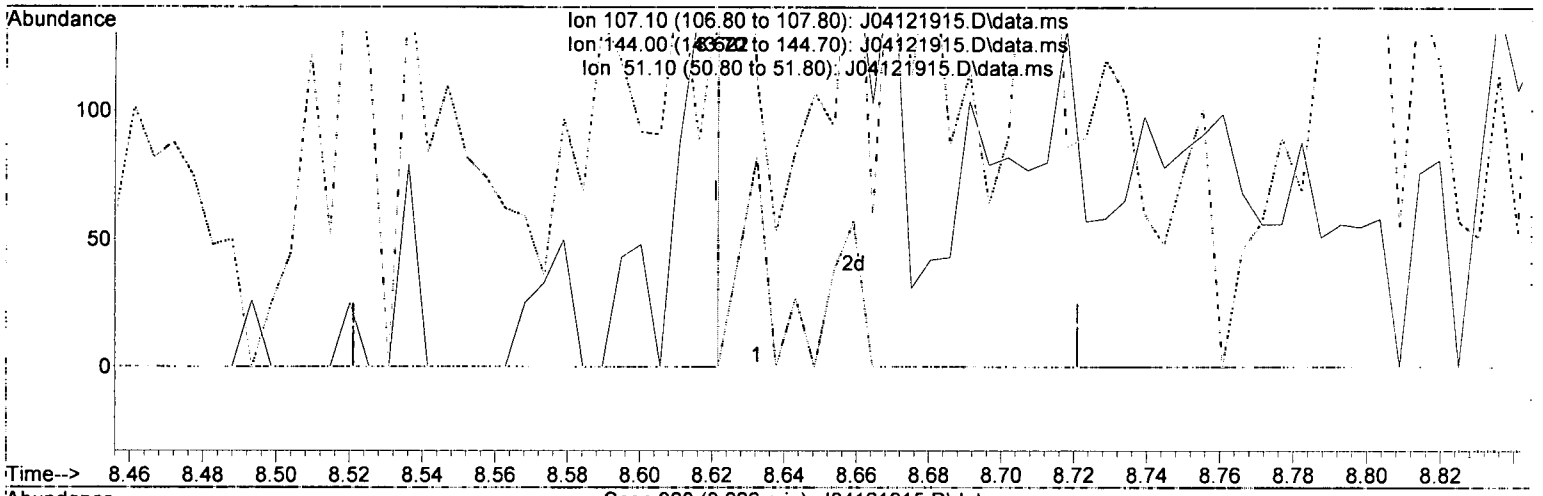


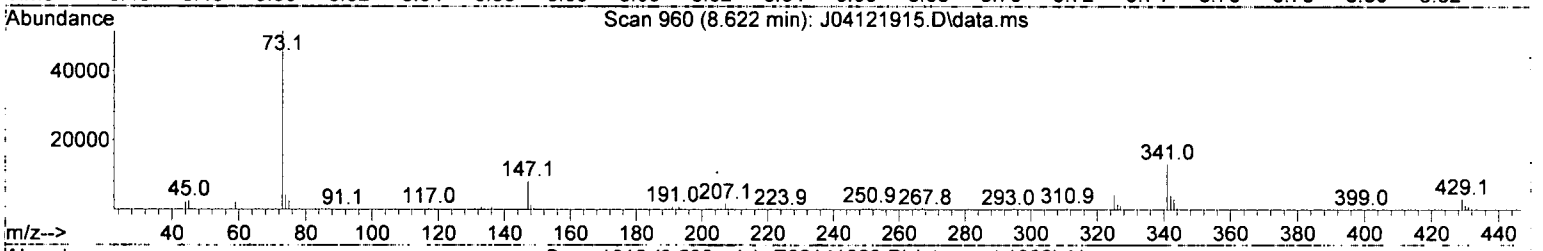
R = -7.81e-004 A*A + 3.12e-001 A - 9.94e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

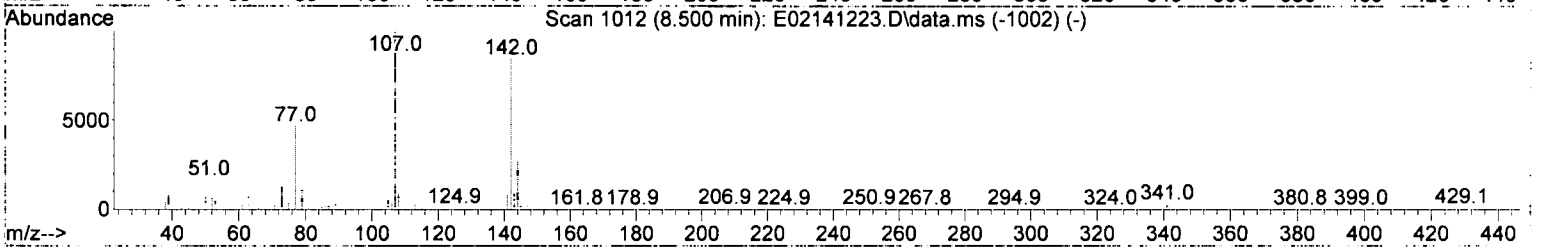
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







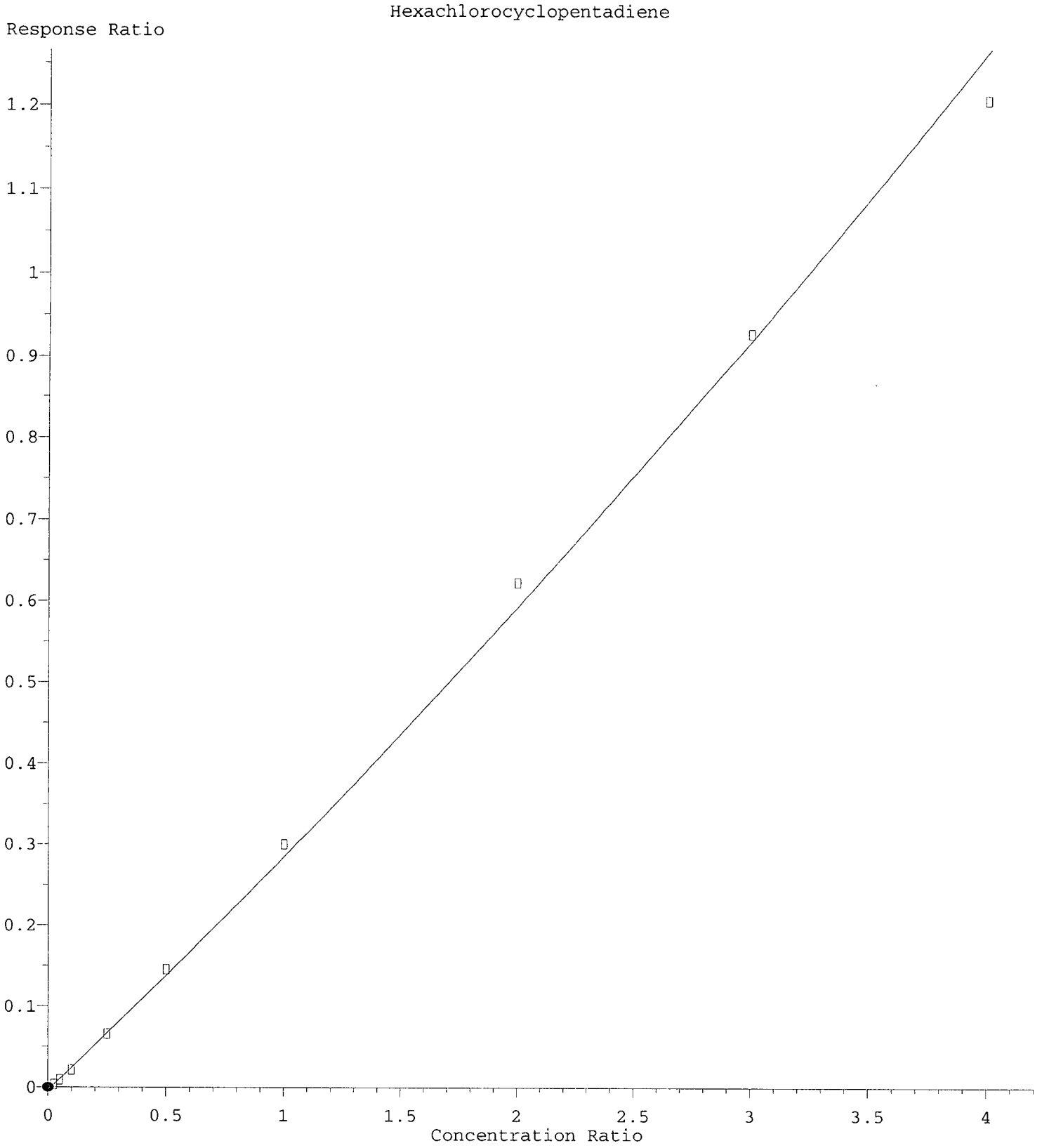
TIC: J04121915.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.622min (+ 0.001) 64.93 ng/ml m

response 165

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	26.00	0.00
51.10	19.80	52.30#
0.00	0.00	0.00

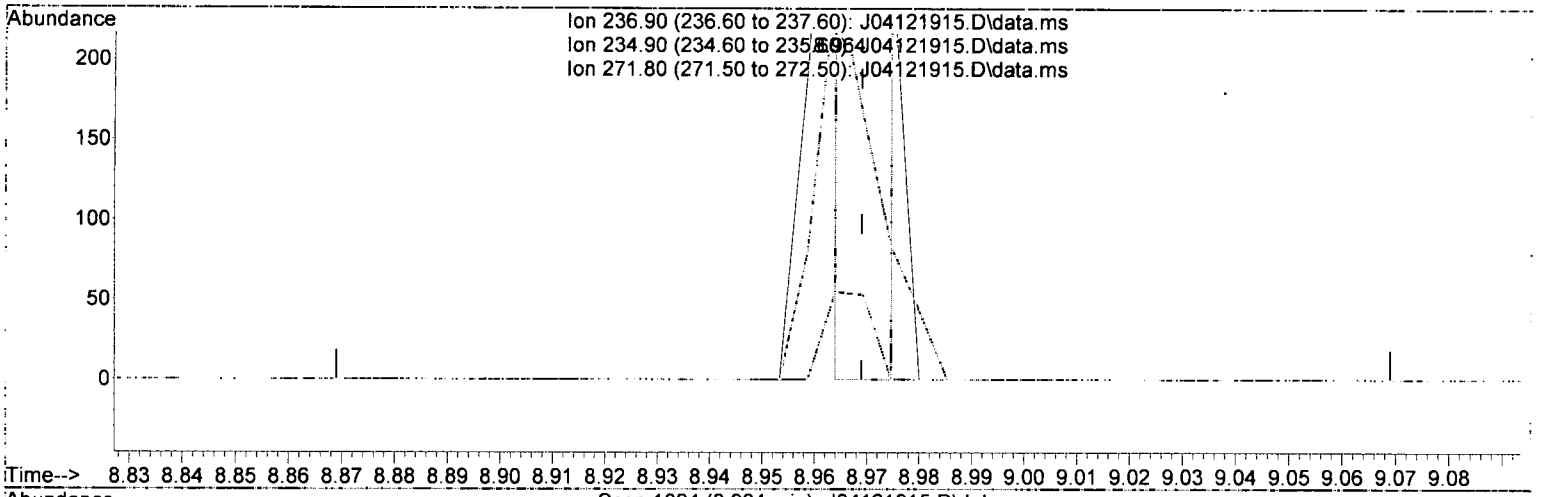


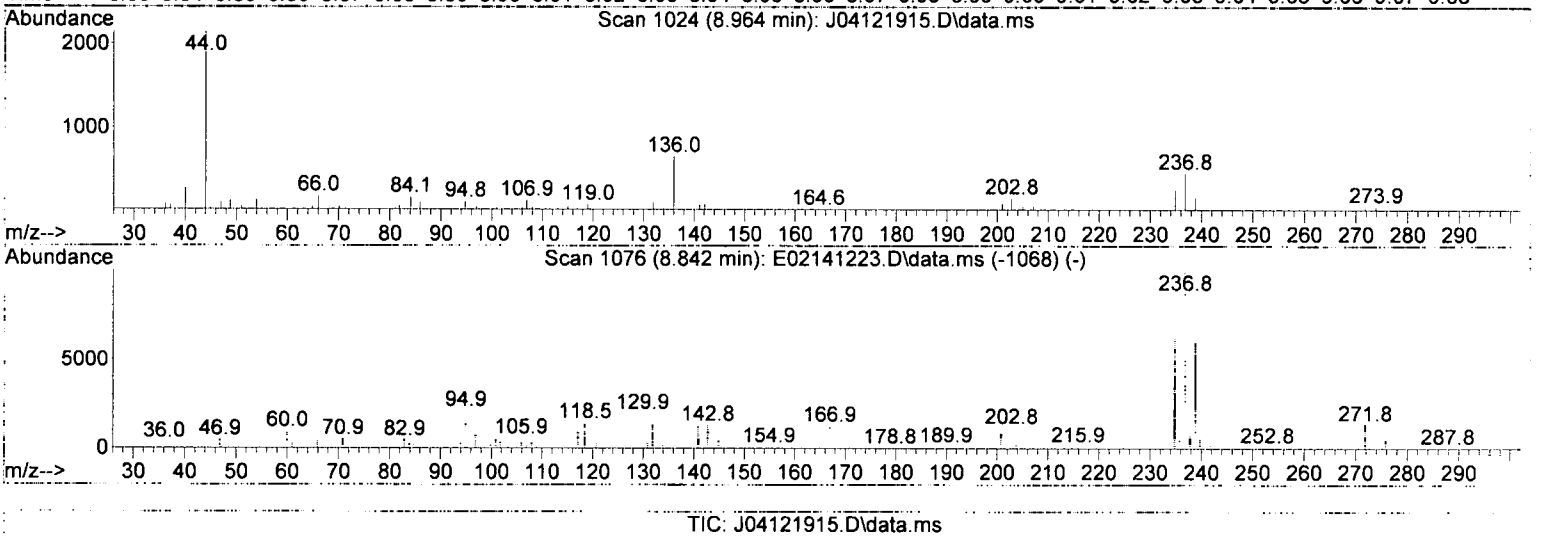
R = 9.35e-003 A*A + 2.79e-001 A - 4.15e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





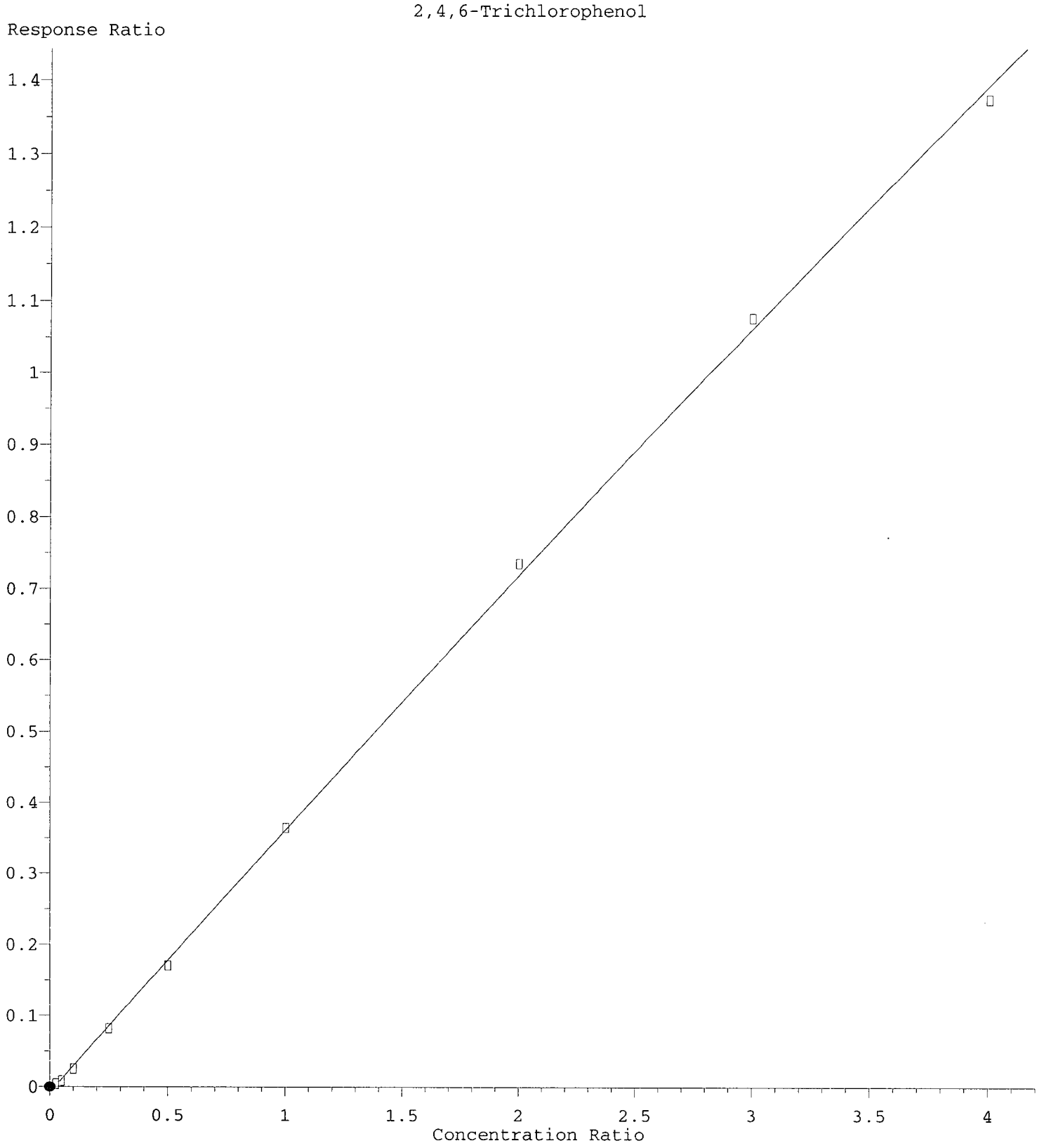
TIC: J04121915.D\data.ms

(36) Hexachlorocyclopentadiene (T)

8.964min (-0.005) 32.87 ng/ml m

response 188

Ion	Exp%	Act%
236.90	100.00	100.00
234.90	62.80	56.48
271.80	12.50	12.09
0.00	0.00	0.00

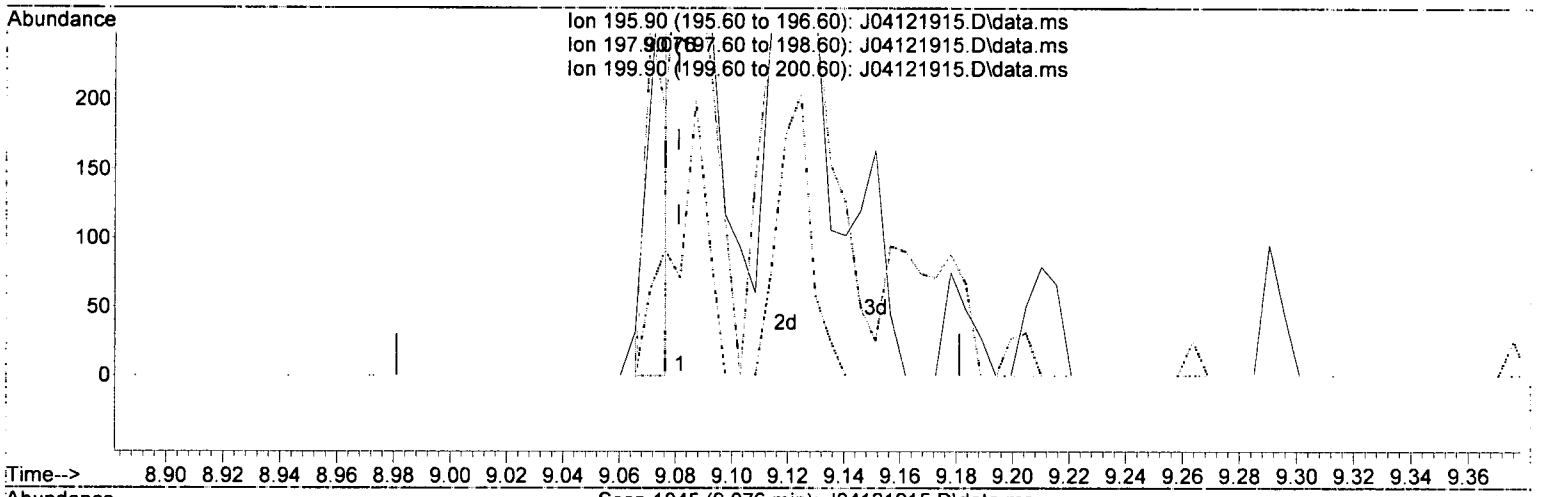


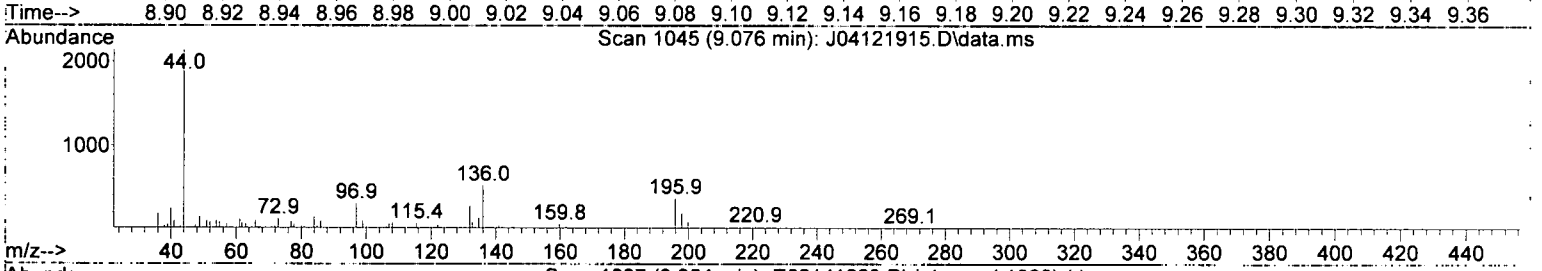
R = -6.54e-003 A*A + 3.76e-001 A - 8.34e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

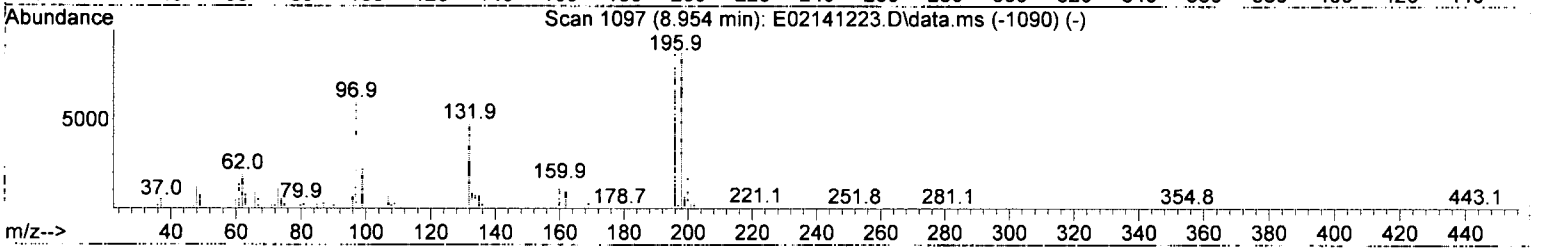
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







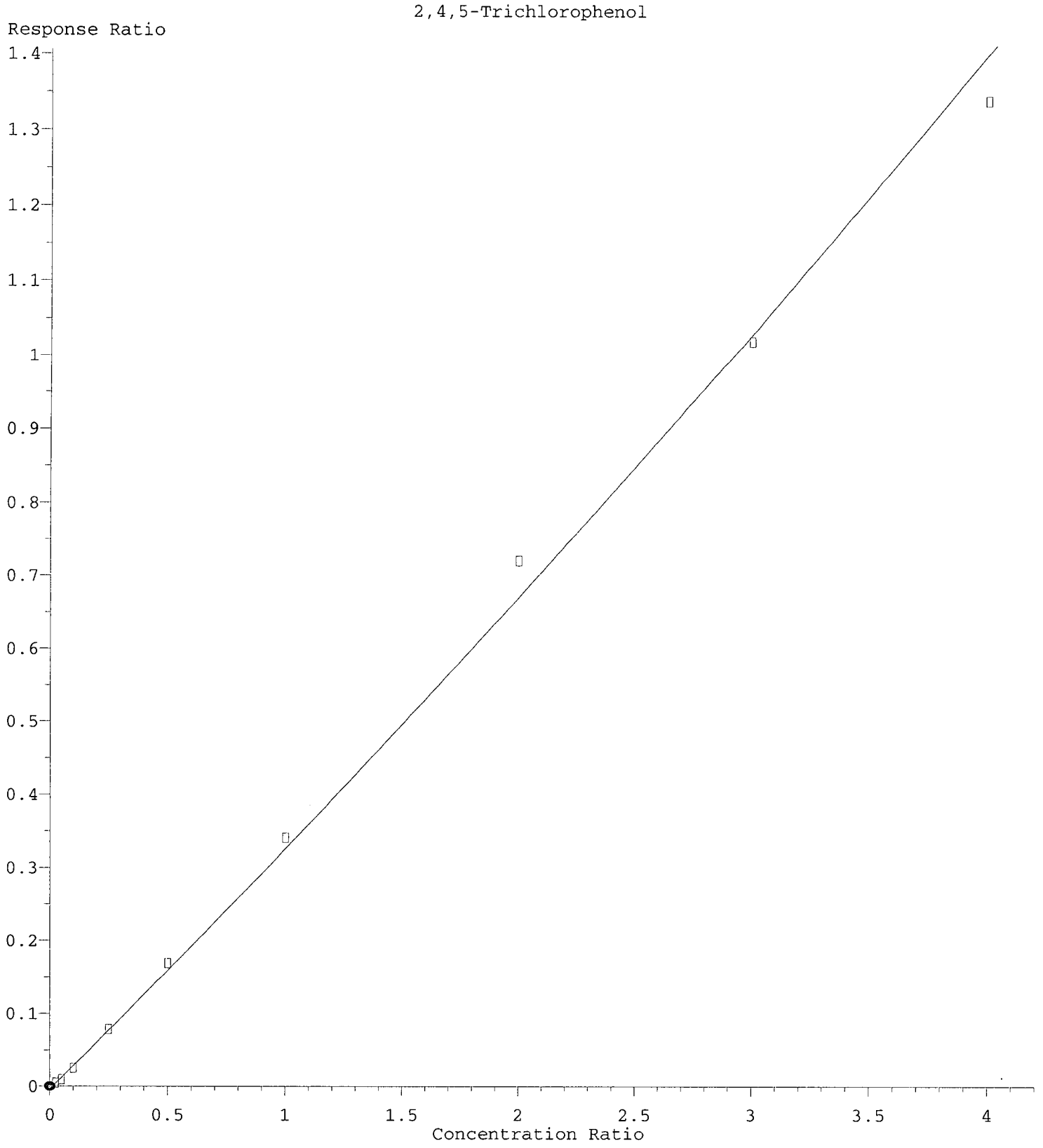
TIC: J04121915.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

9.076min (-0.005) 46.64 ng/ml m

response 184

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	97.50	51.47#
199.90	30.40	24.40
0.00	0.00	0.00

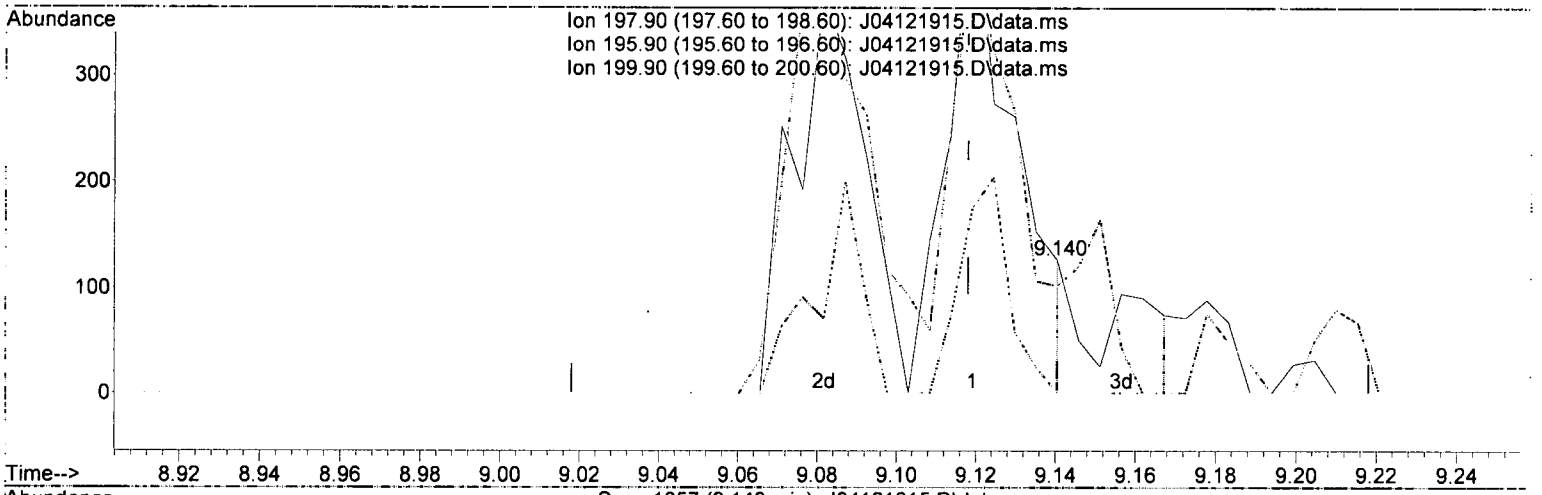


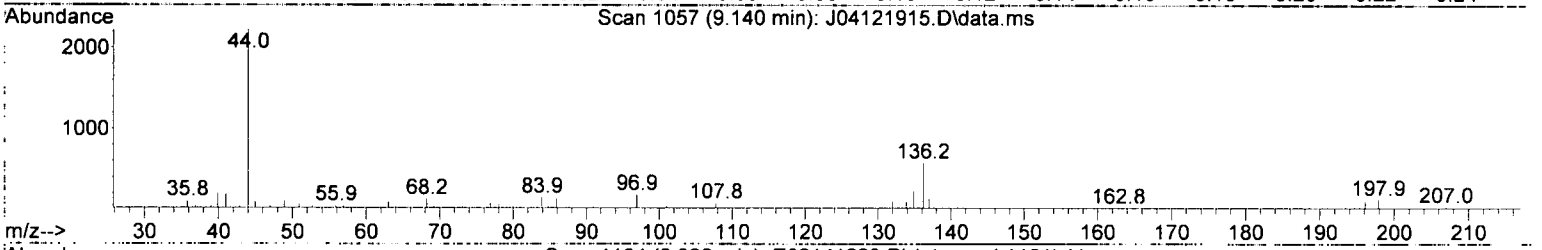
R = 7.07e-003 A*A + 3.23e-001 A - 4.28e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

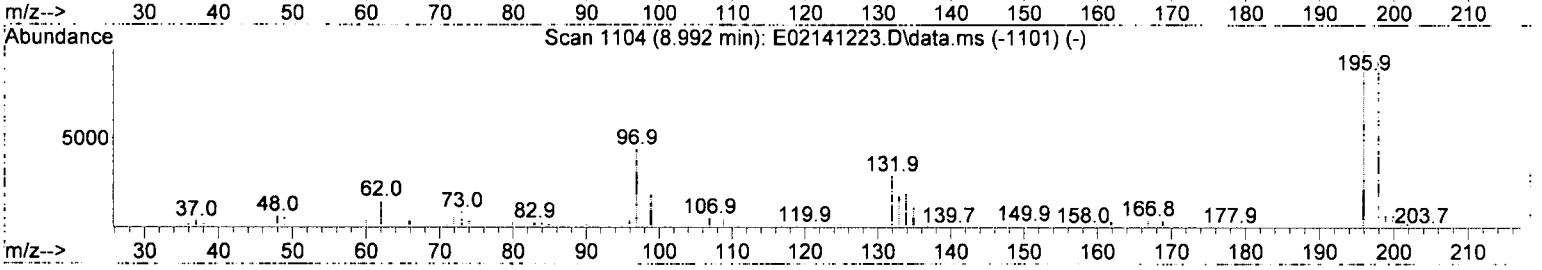
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







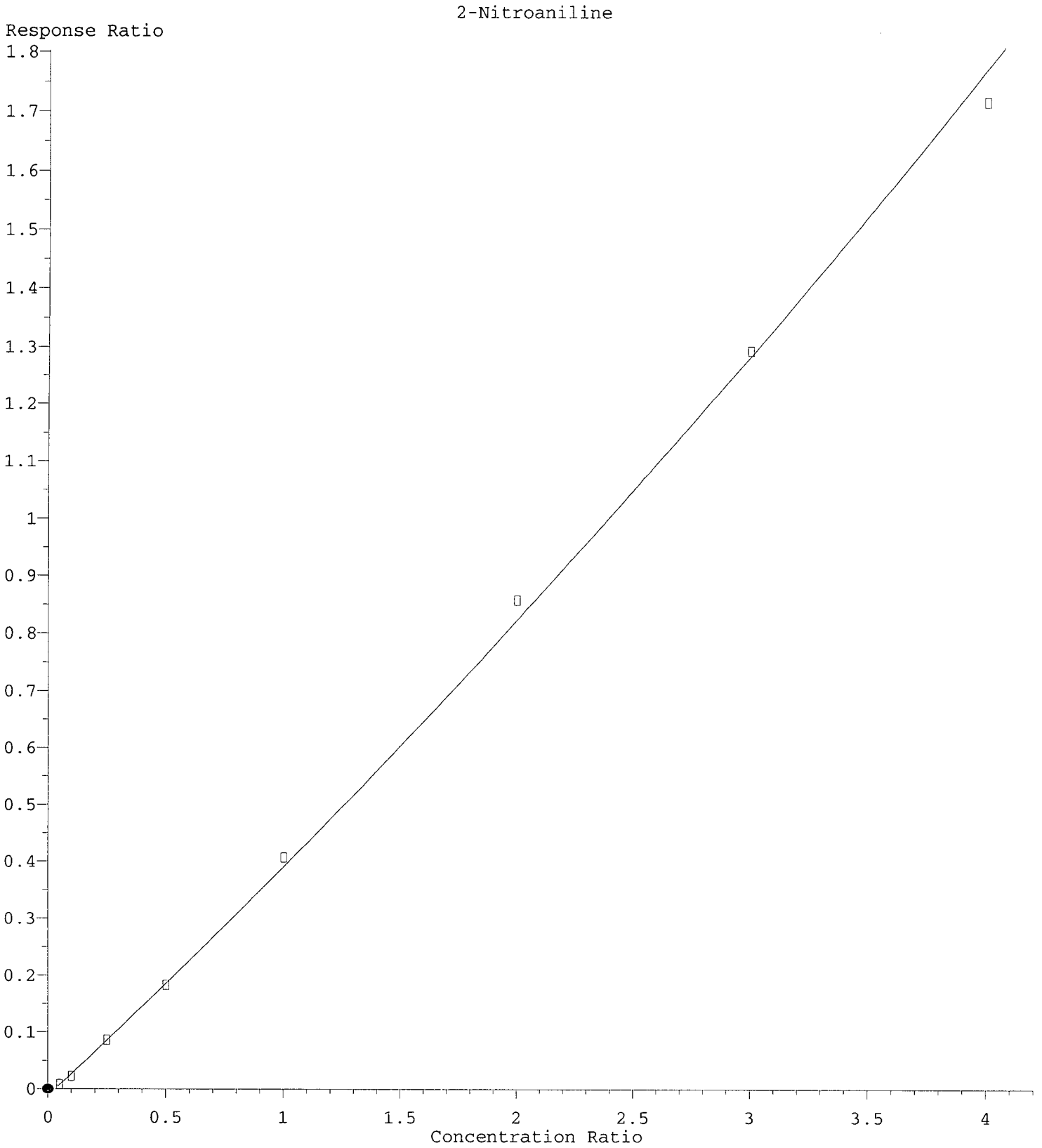
TIC: J04121915.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.140min (+ 0.022) 28.04 ng/ml m

response 107

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	80.95
199.90	31.10	0.00#
0.00	0.00	0.00

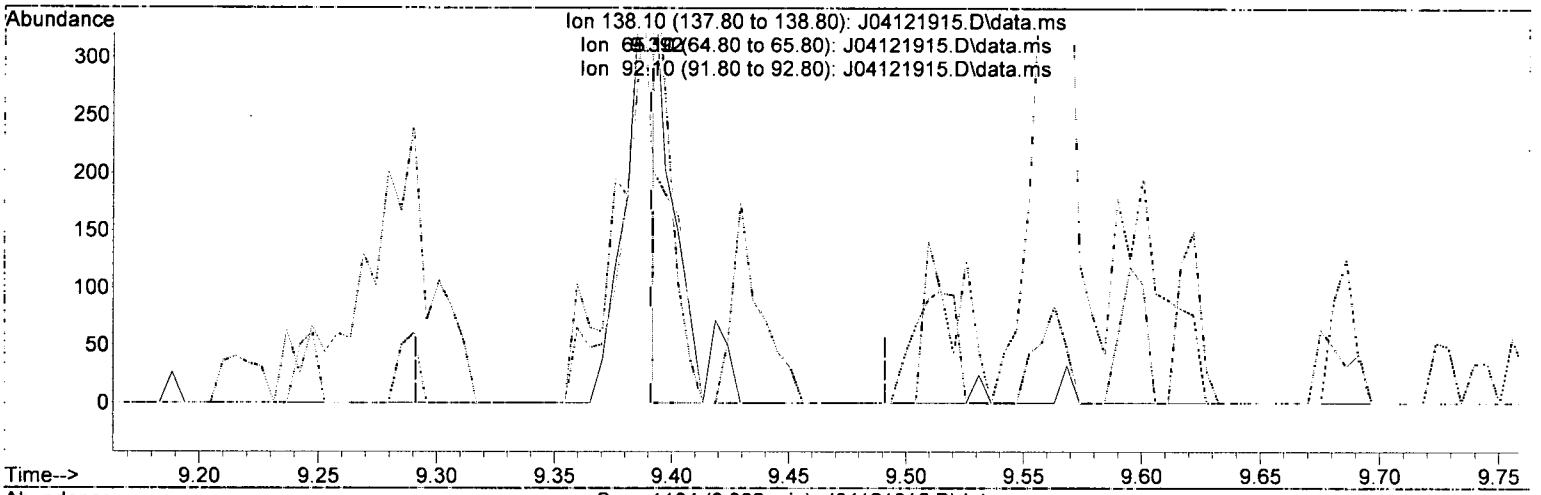


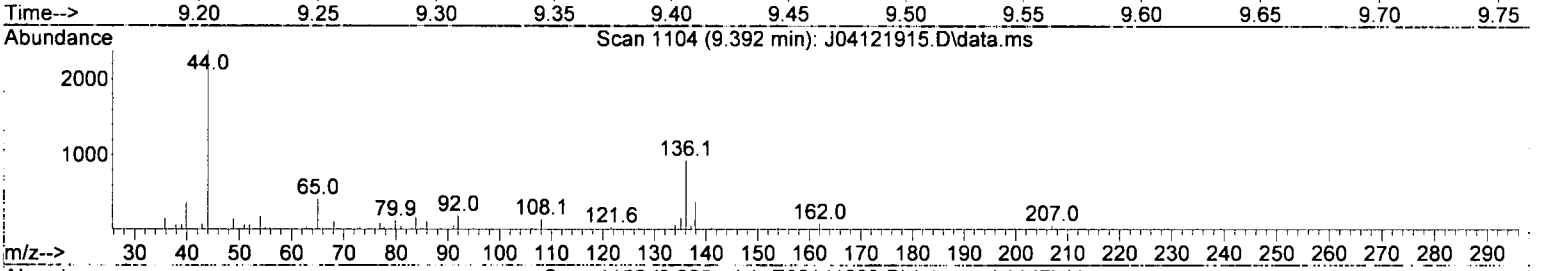
R = 1.42e-002 A*A + 3.89e-001 A - 1.27e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

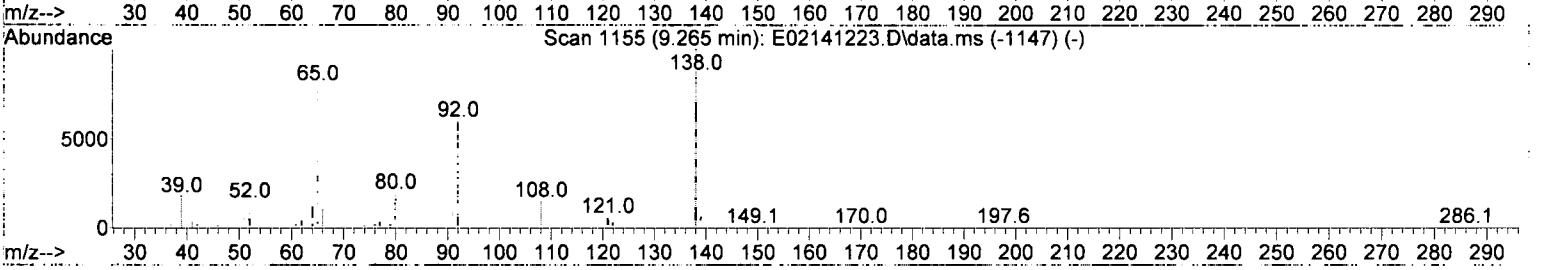
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







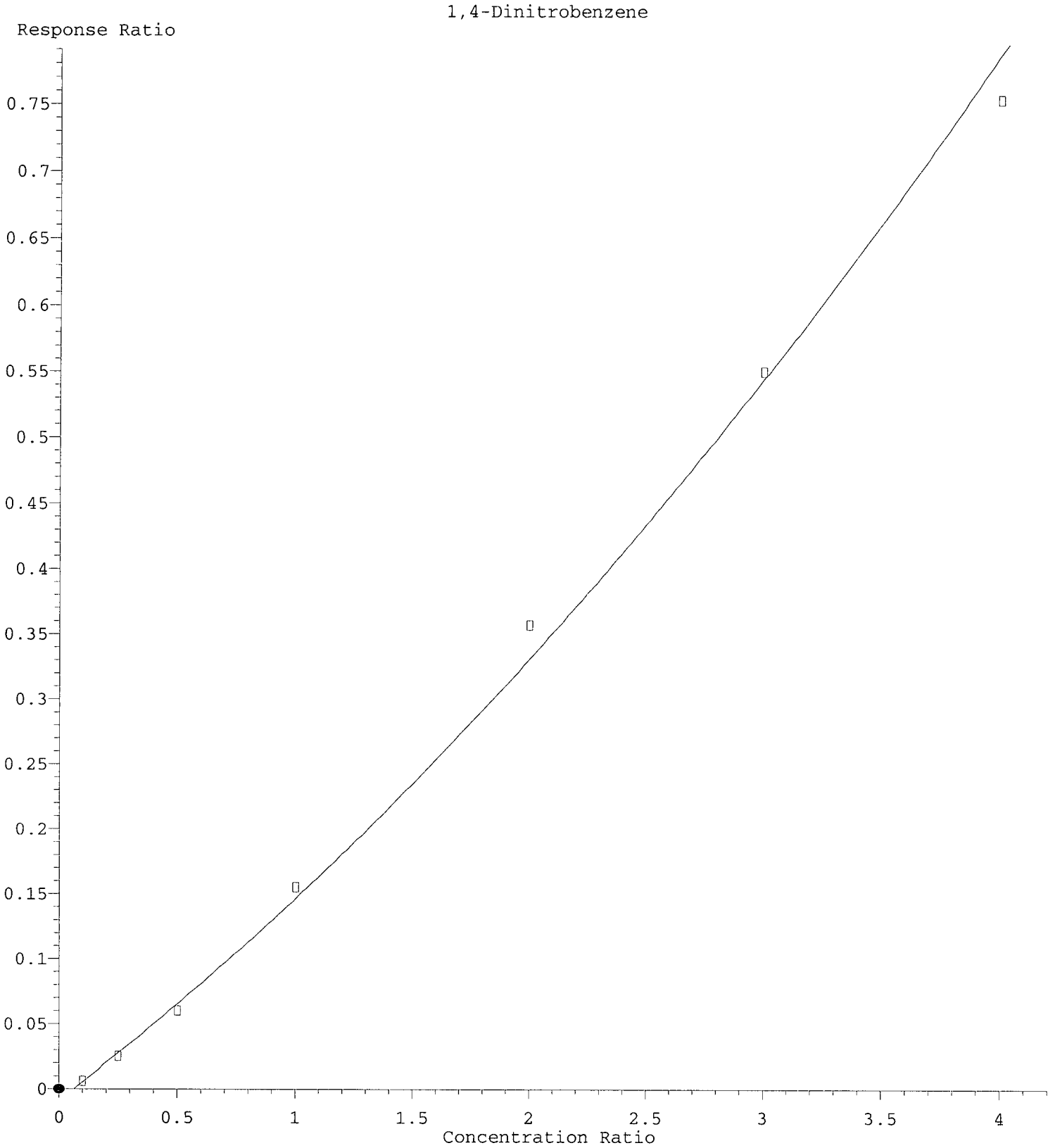
TIC: J04121915.D\data.ms

(42) 2-Nitroaniline (T)

9.392min (+ 0.001) 66.72 ng/ml m

response 138

Ion	Exp%	Act%
138.10	100.00	100.00
65.10	92.00	109.35
92.10	64.50	52.73
0.00	0.00	0.00

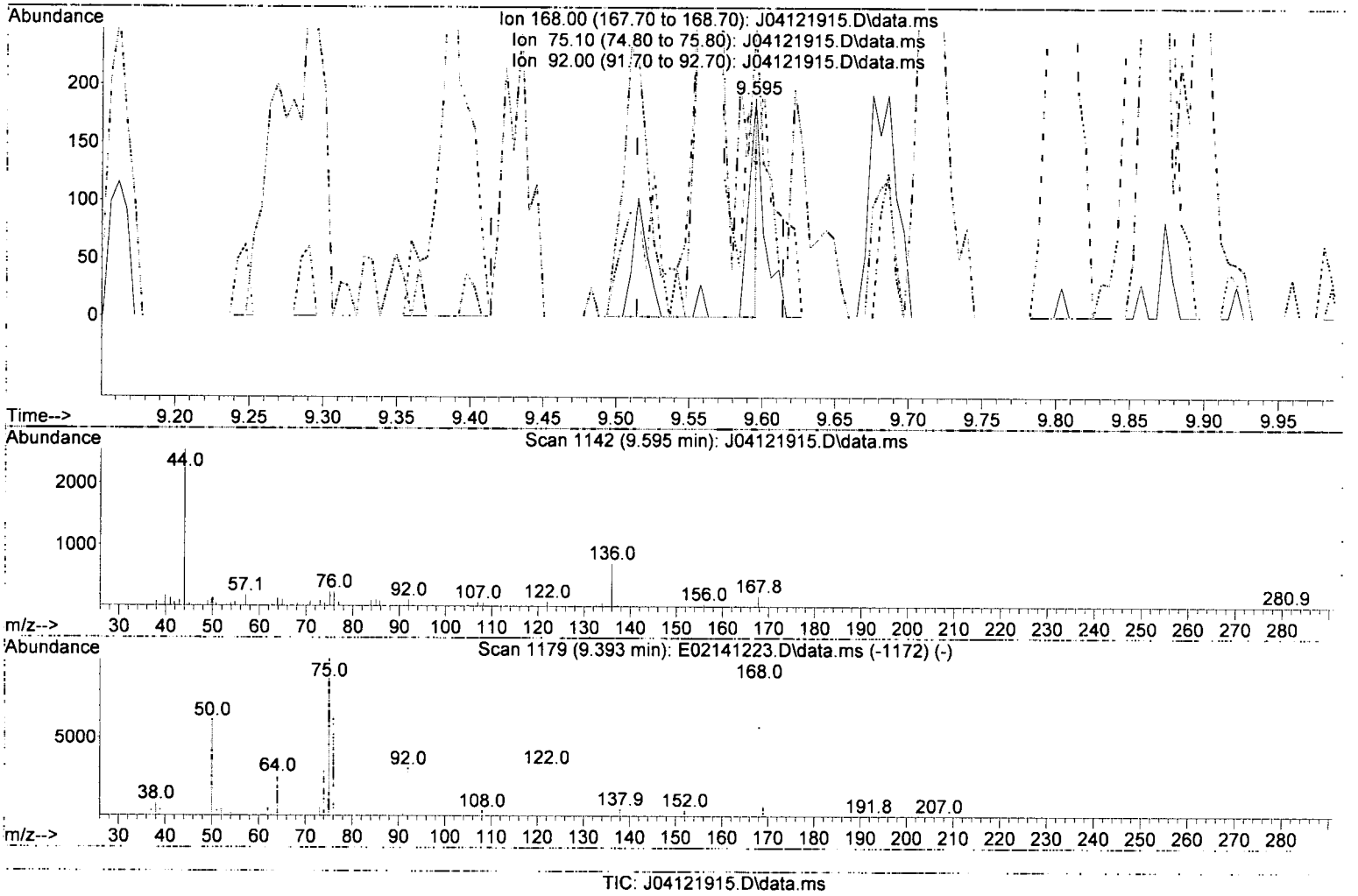


R = 1.45e-002 A*A + 1.41e-001 A - 8.59e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



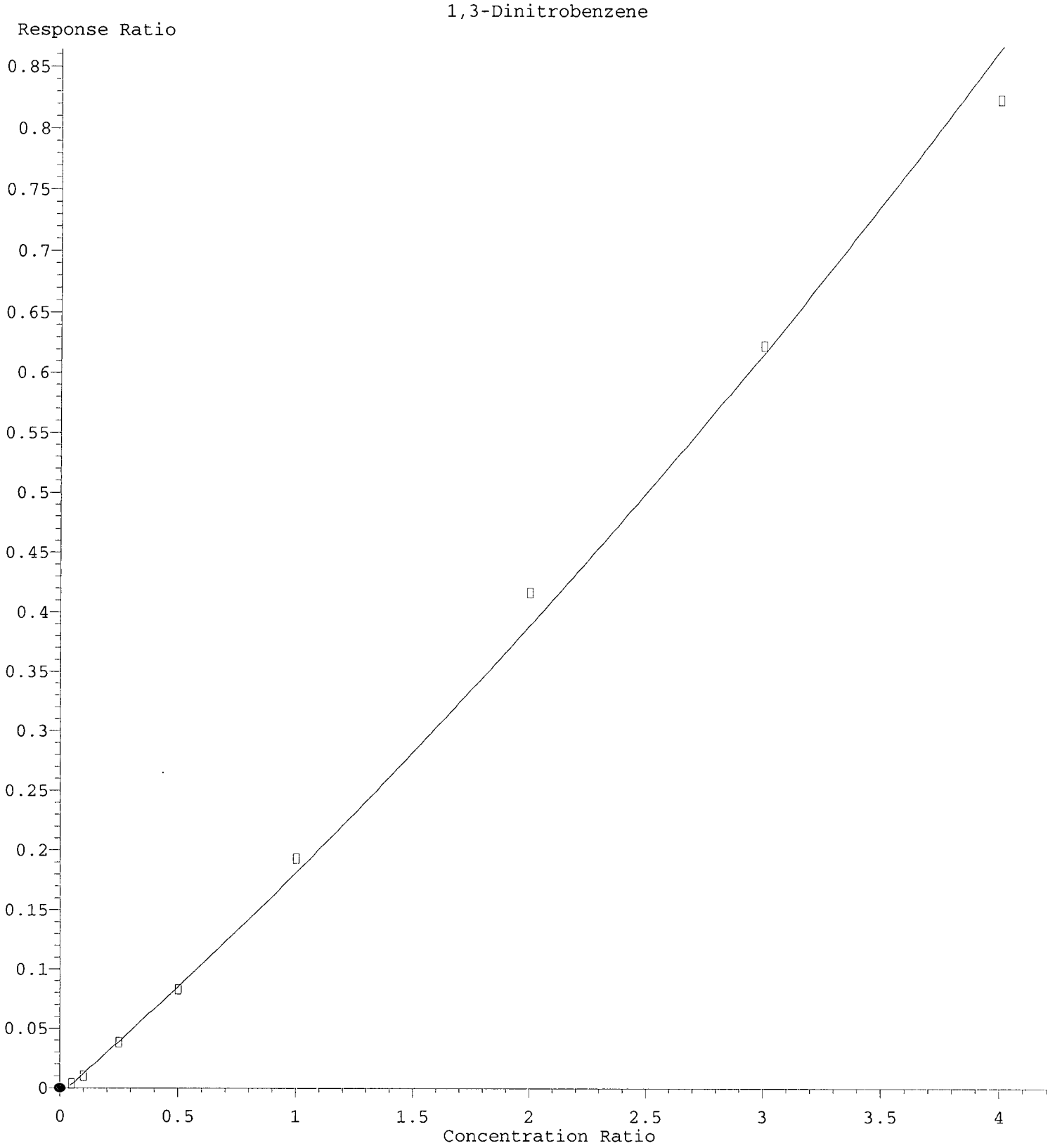
TIC: J04121915.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.595min (+ 0.081) 127.06 ng/ml m

response 171

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	134.30	131.75
92.00	43.50	66.14
0.00	0.00	0.00

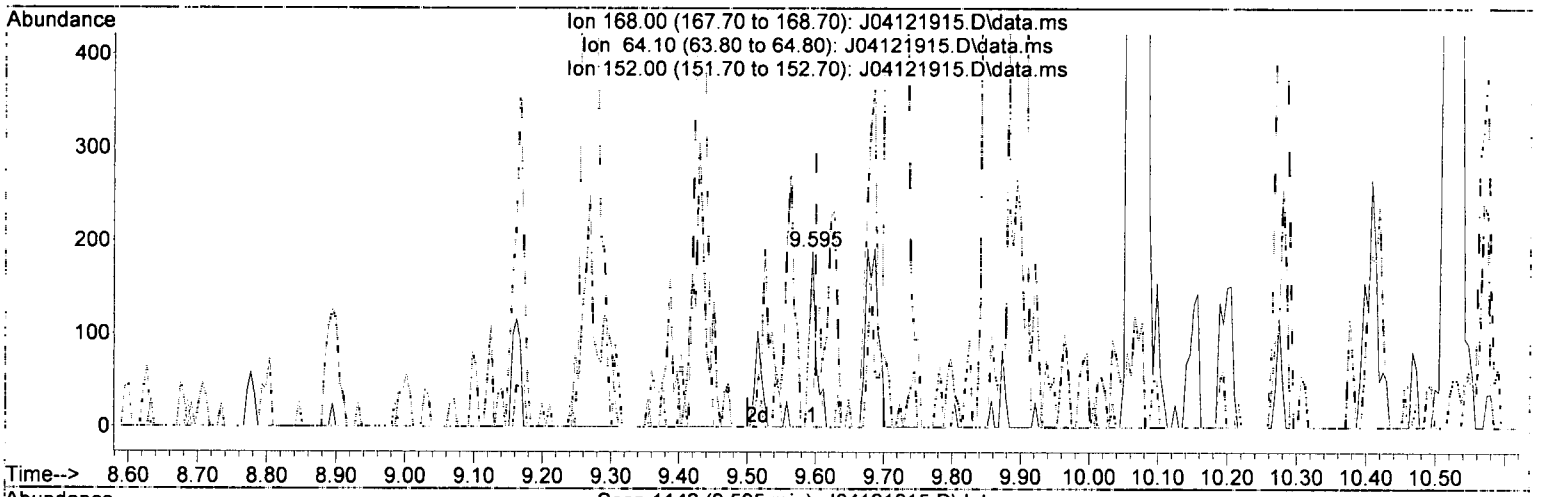


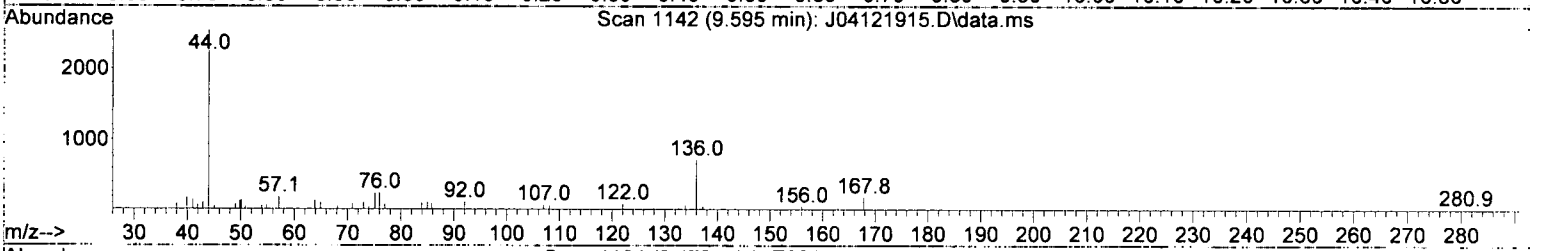
R = 1.02e-002 A*A + 1.77e-001 A - 5.75e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

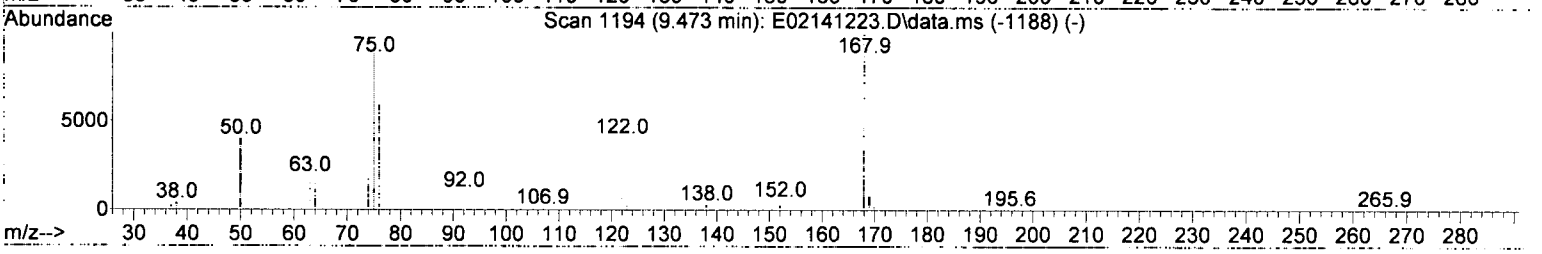
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







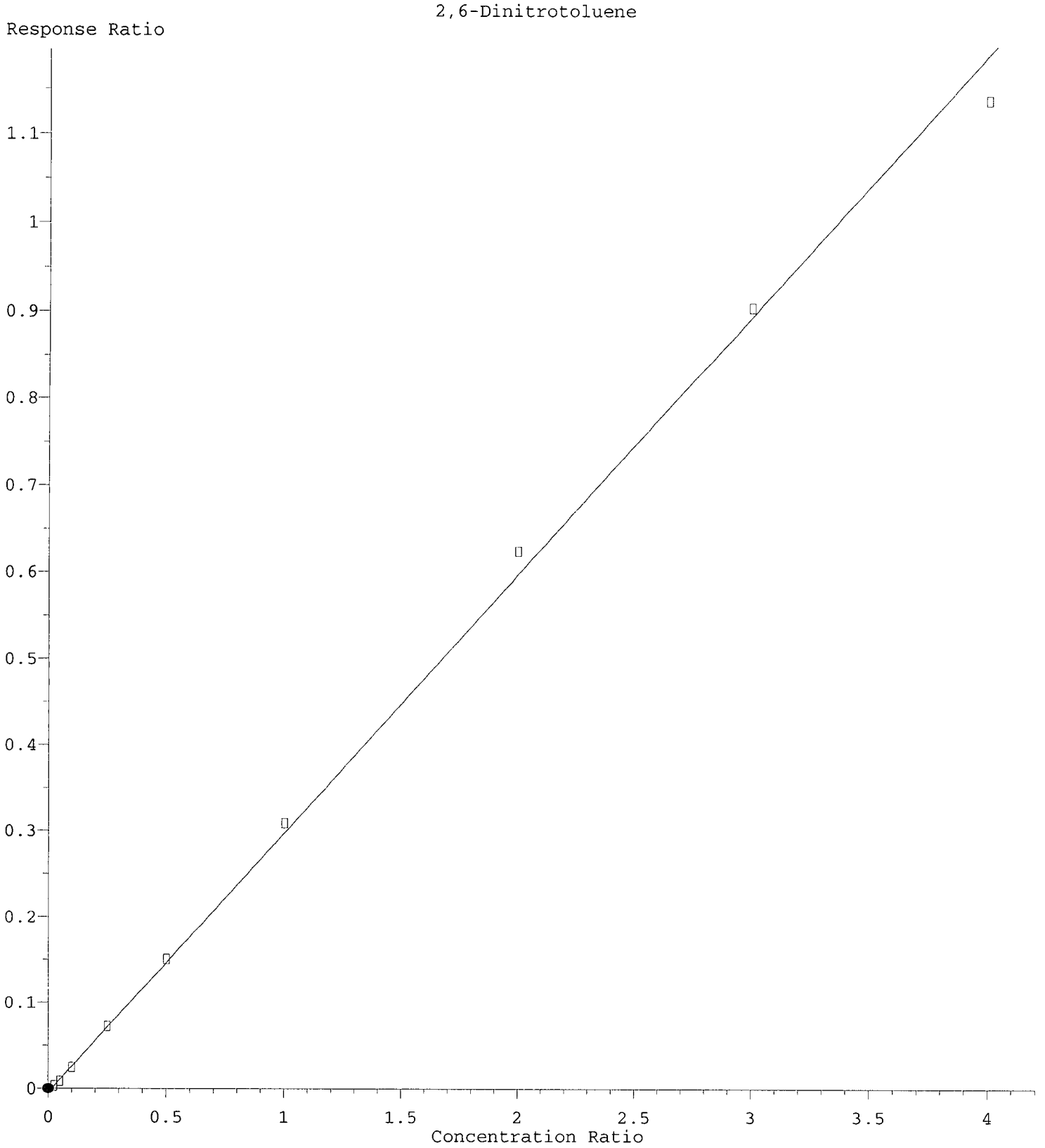
TIC: J04121915.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.595min (-0.005) 68.48 ng/ml

response 137

Ion	Exp%	Act%
168.00	100.00	100.00
64.10	29.70	80.42#
152.00	7.70	0.00
0.00	0.00	0.00

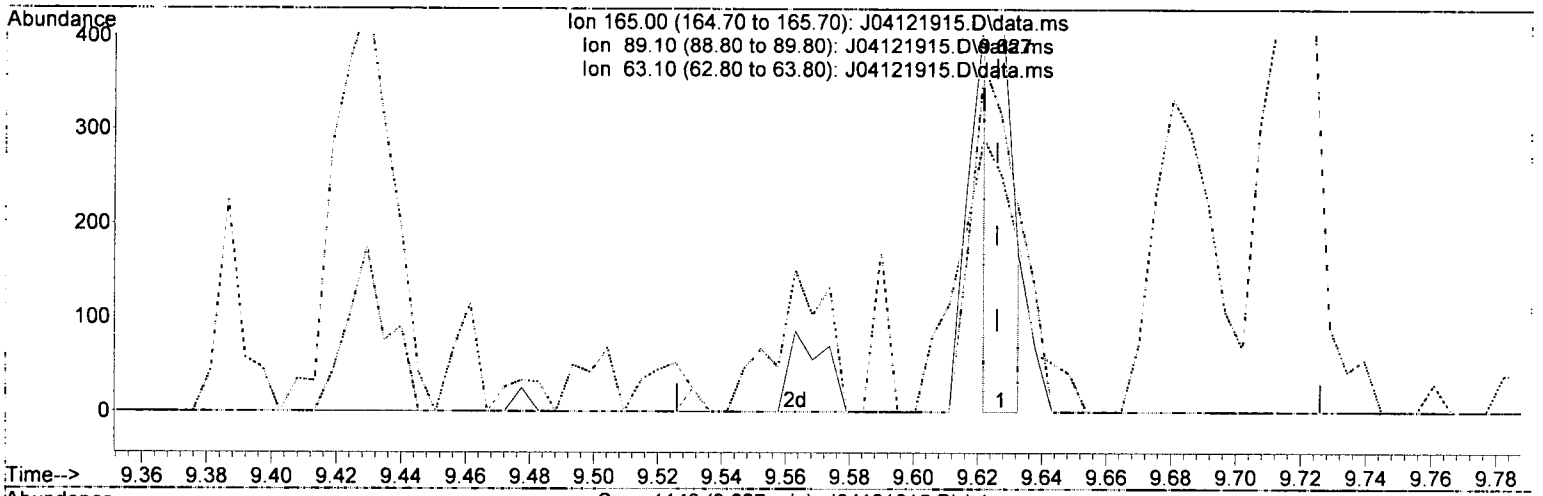


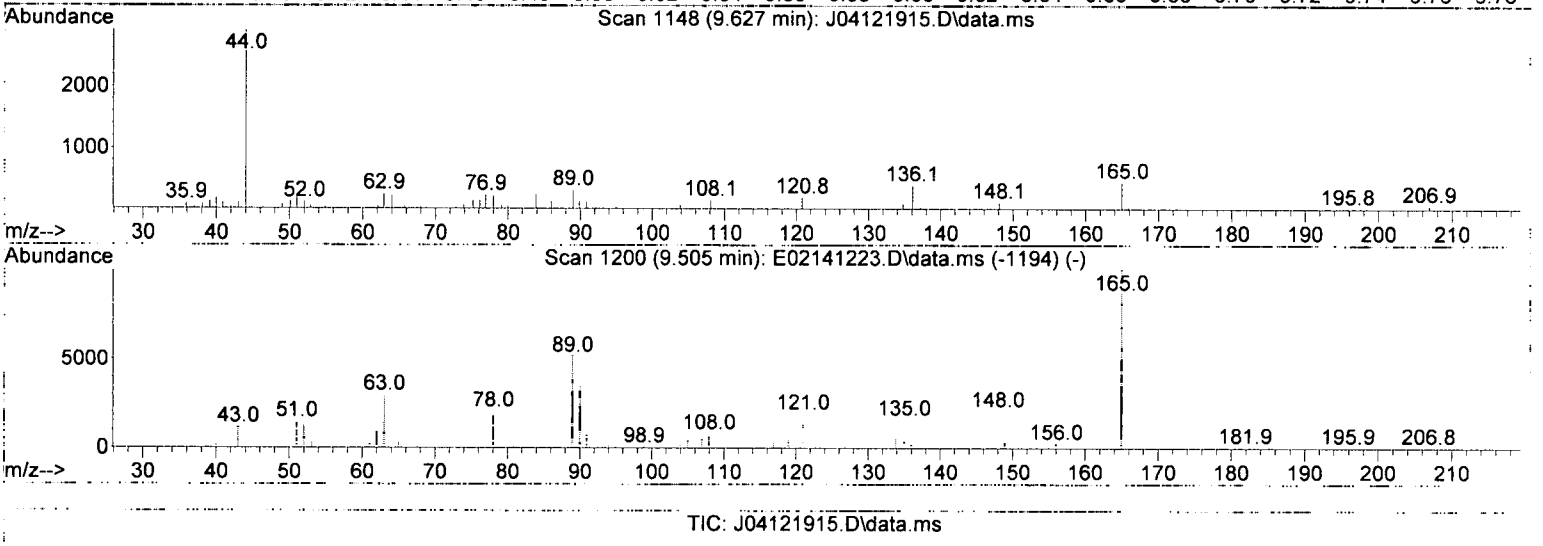
R = -1.37e-003 A*A + 3.04e-001 A - 4.94e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





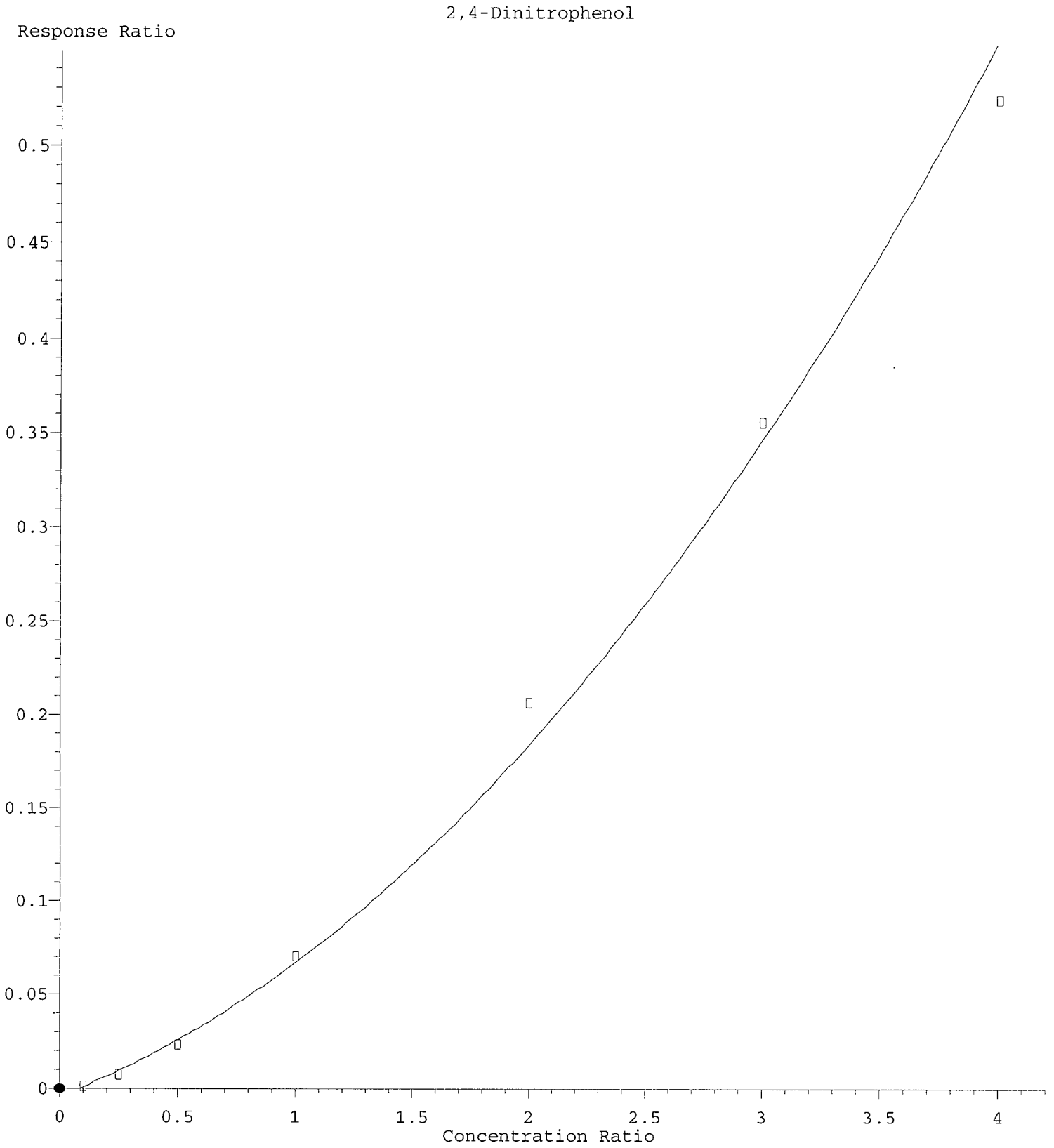
TIC: J04121915.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.627min (+ 0.001) 35.57 ng/ml m

response 197

Ion	Exp%	Act%
165.00	100.00	100.00
89.10	61.40	71.40
63.10	61.10	57.21
0.00	0.00	0.00

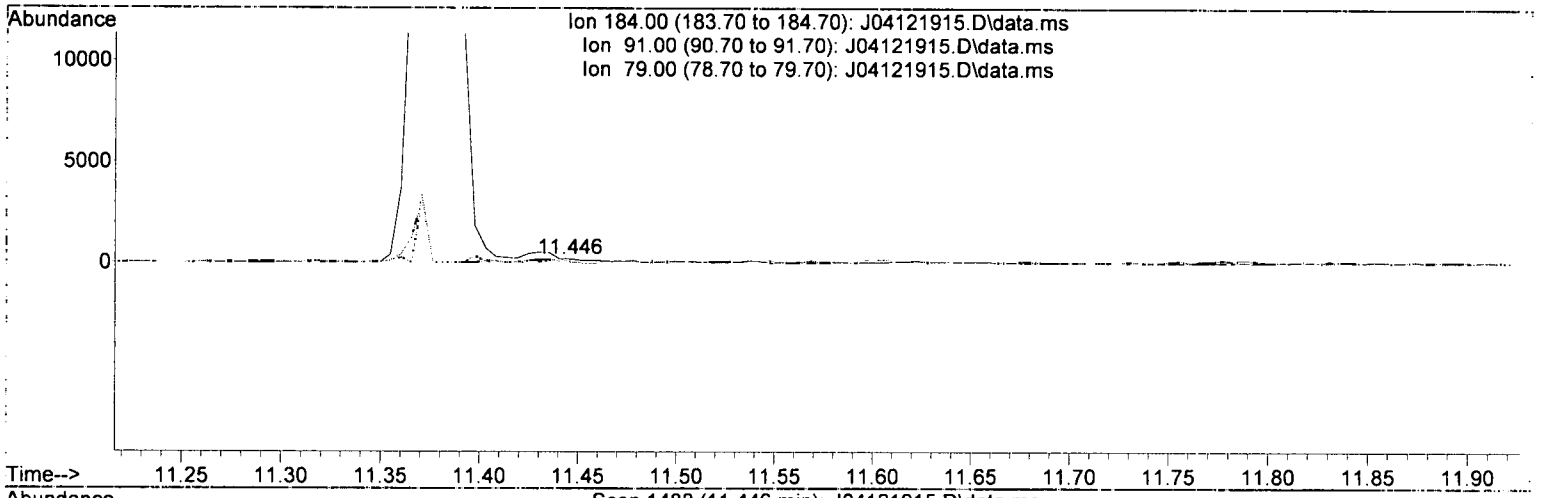


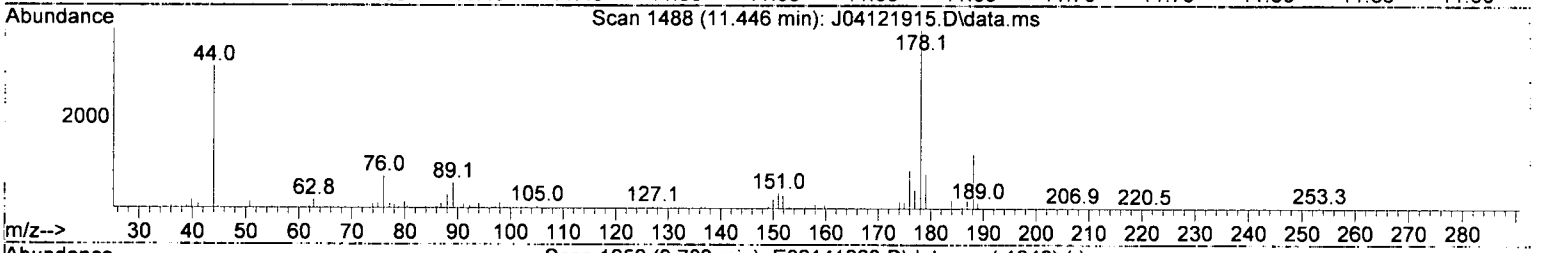
R = 2.28e-002 A*A + 4.83e-002 A - 4.04e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

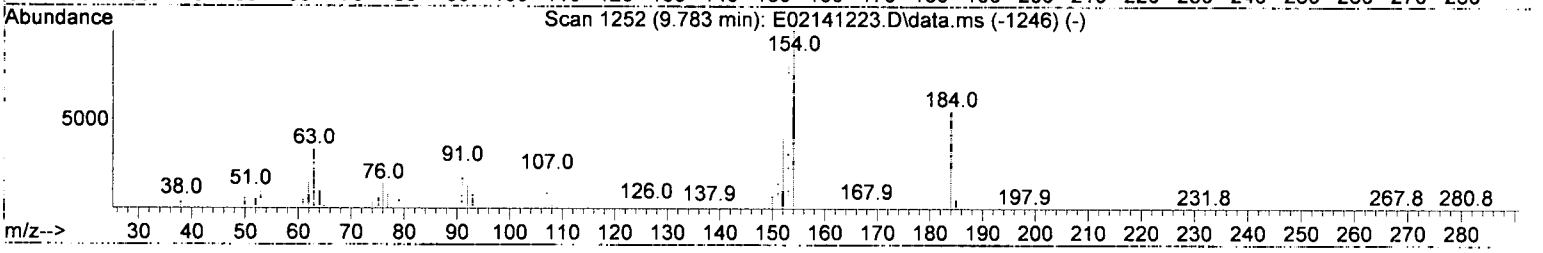
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







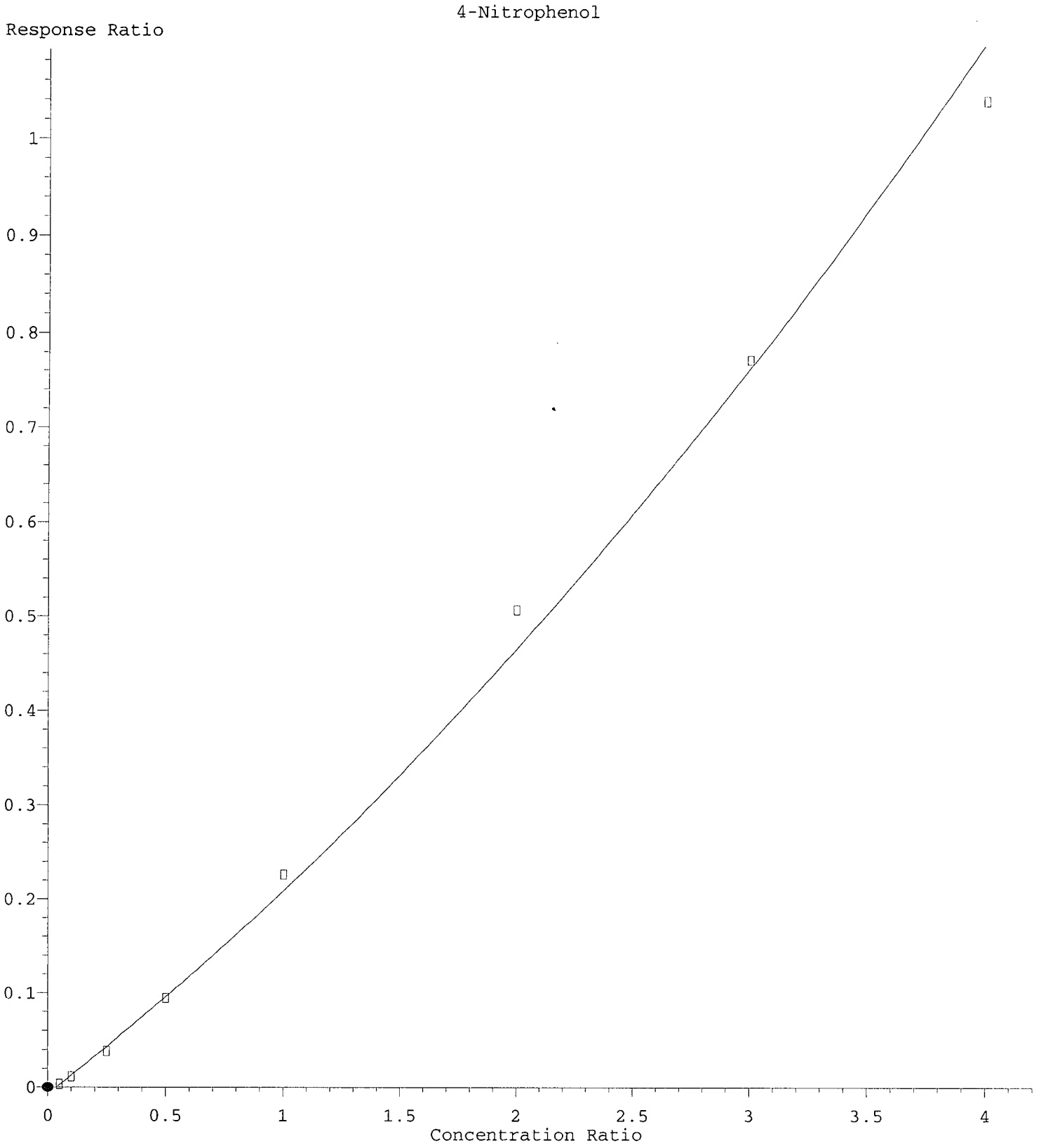
TIC: J04121915.D\data.ms

(52) 2,4-Dinitrophenol (T)

11.446min (+ 1.541) 172.30 ng/ml m

response 122

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	53.50	54.17
79.00	32.30	18.75
0.00	0.00	0.00

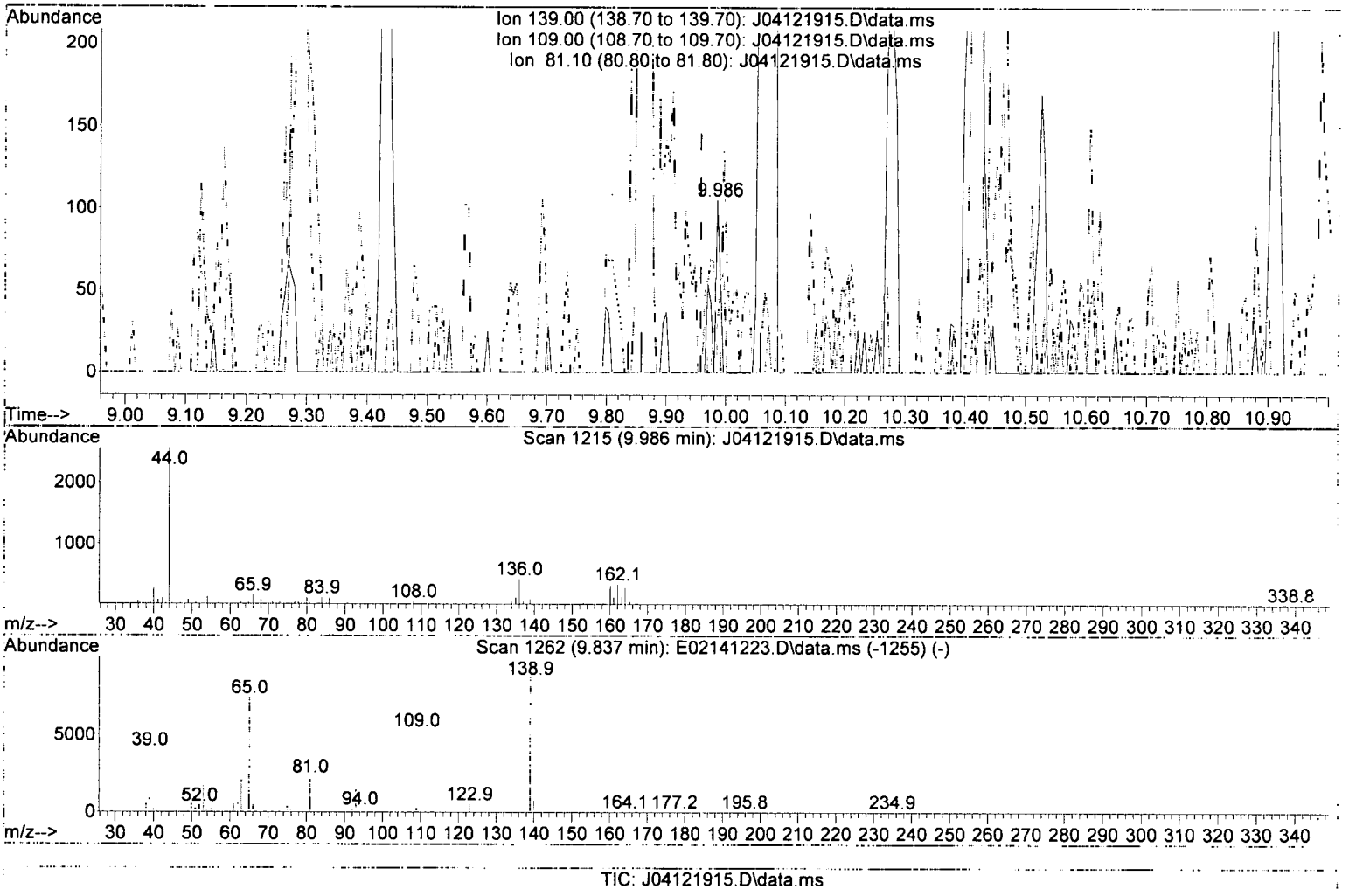


R = 2.02e-002 A*A + 1.96e-001 A - 7.20e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



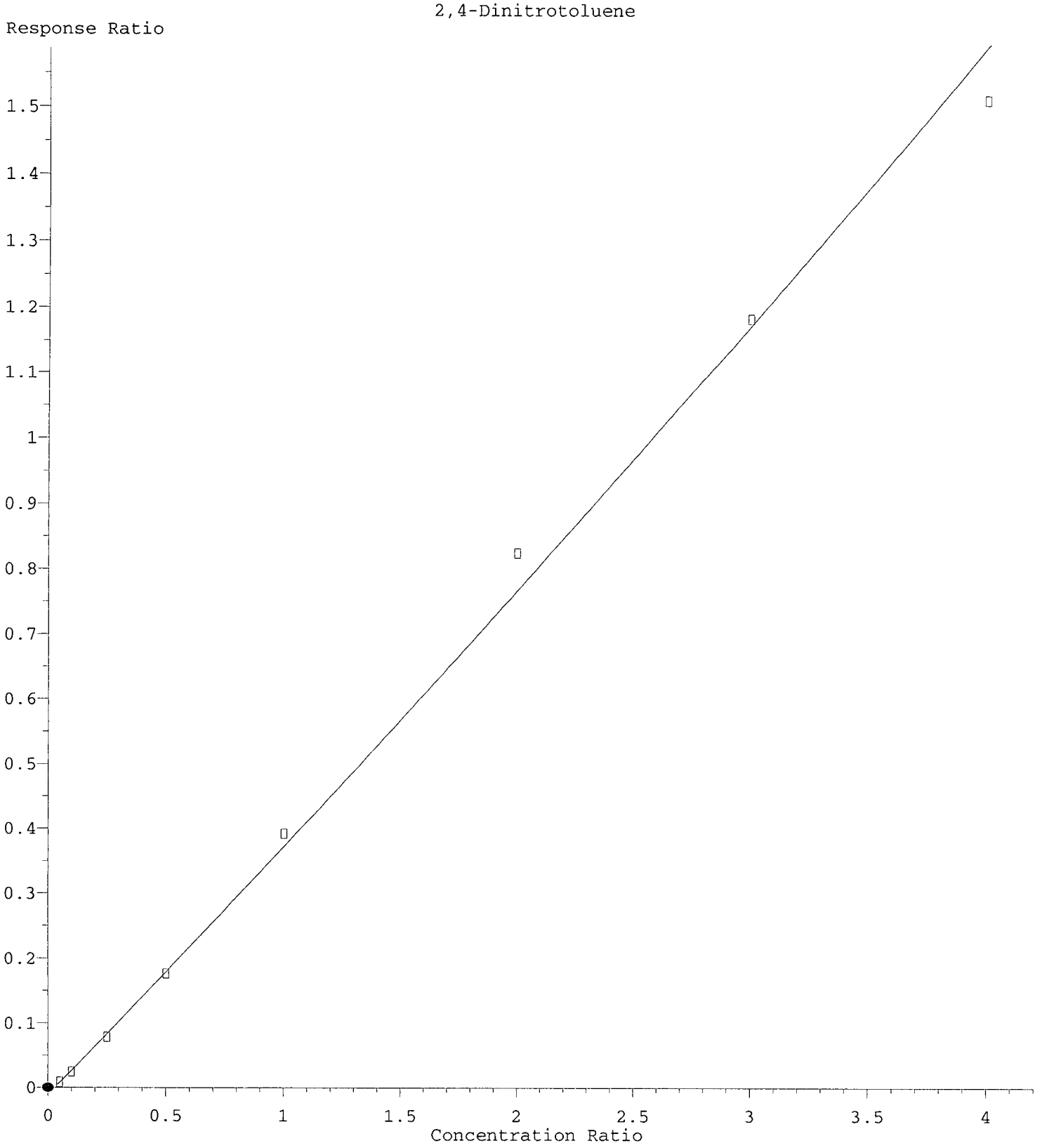
TIC: J04121915.D\data.ms

(53) 4-Nitrophenol (T)

9.986min (+ 0.028) 75.67 ng/ml m

response 103

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	64.20	26.67#
81.10	30.90	0.00#
0.00	0.00	0.00

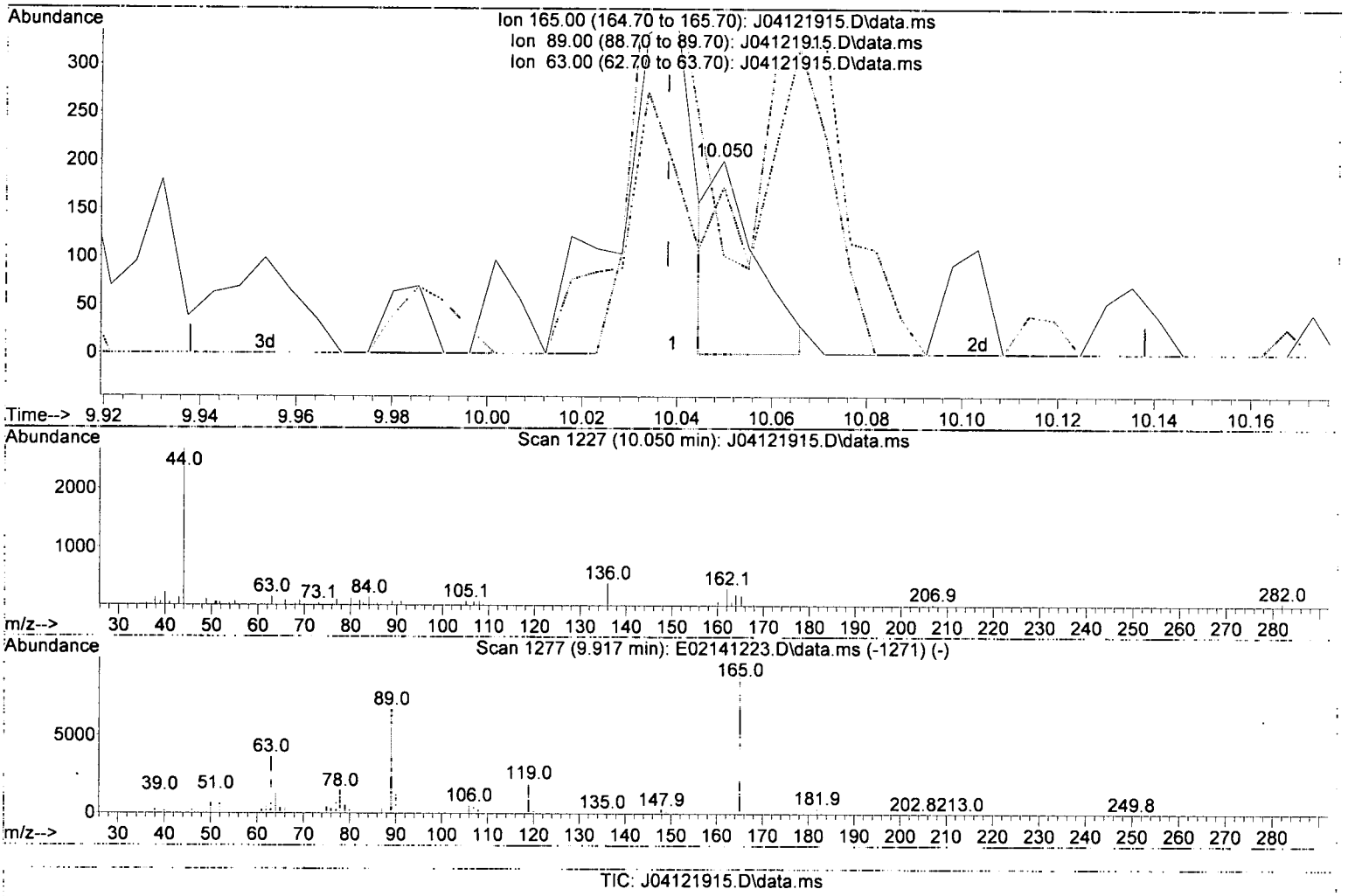


R = 5.63e-003 A*A + 3.78e-001 A - 1.14e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



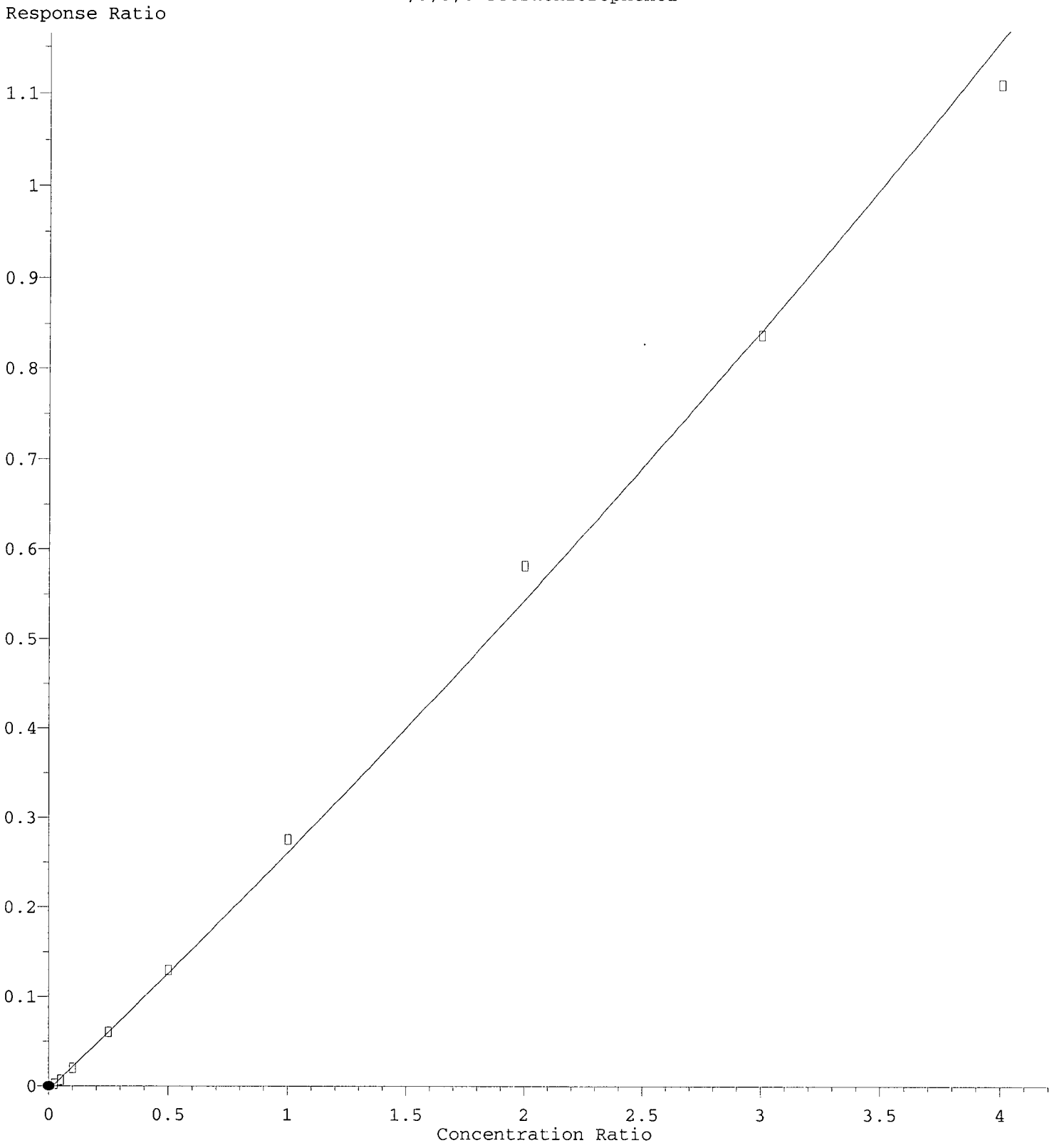
TIC: J04121915.D\data.ms

(54) 2,4-Dinitrotoluene (T)

10.050min (+ 0.012) 61.75 ng/ml m

response 130

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	80.10	50.75
63.00	47.20	86.57#
0.00	0.00	0.00

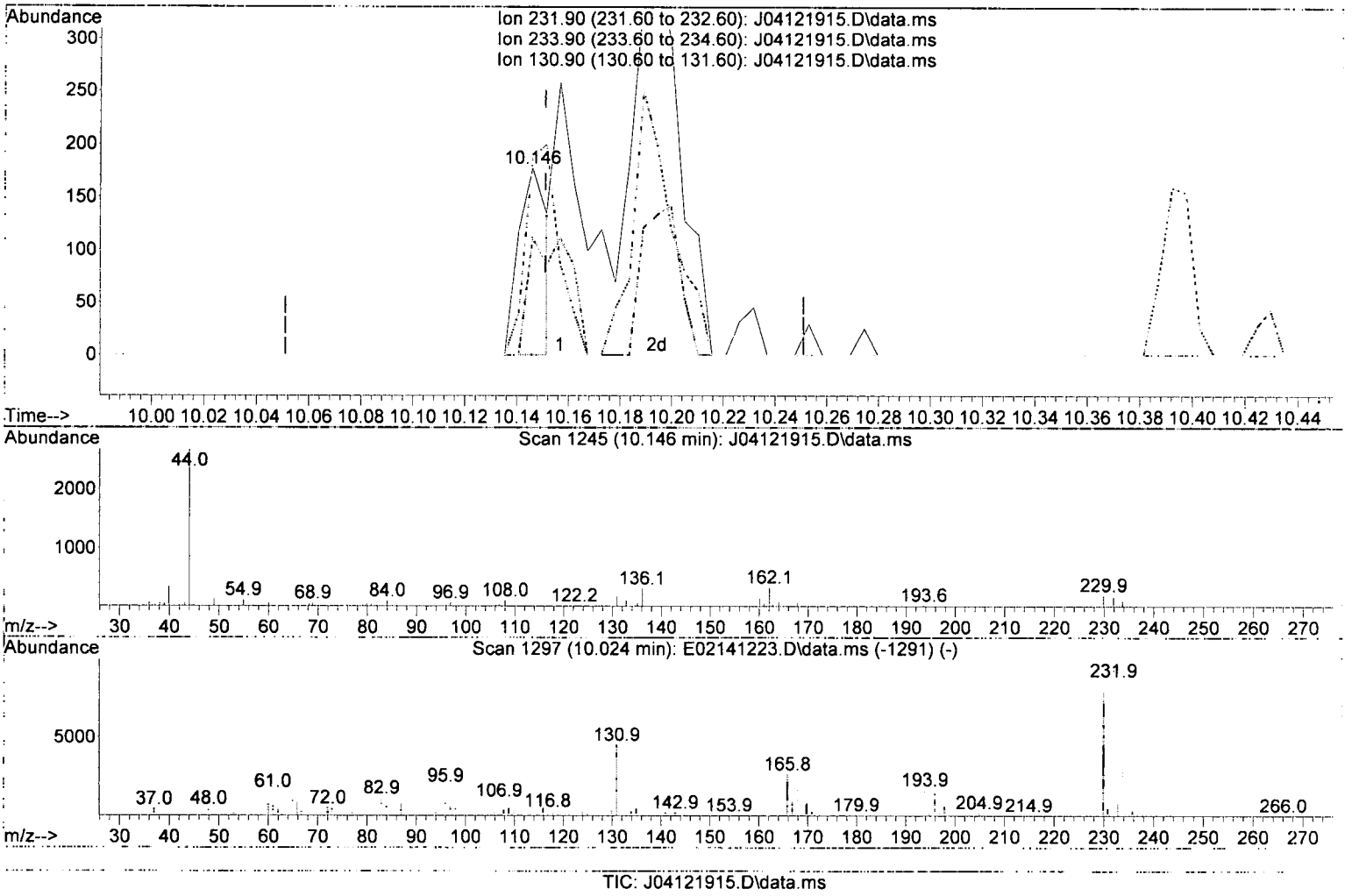


R = 8.29e-003 A*A + 2.57e-001 A - 4.50e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



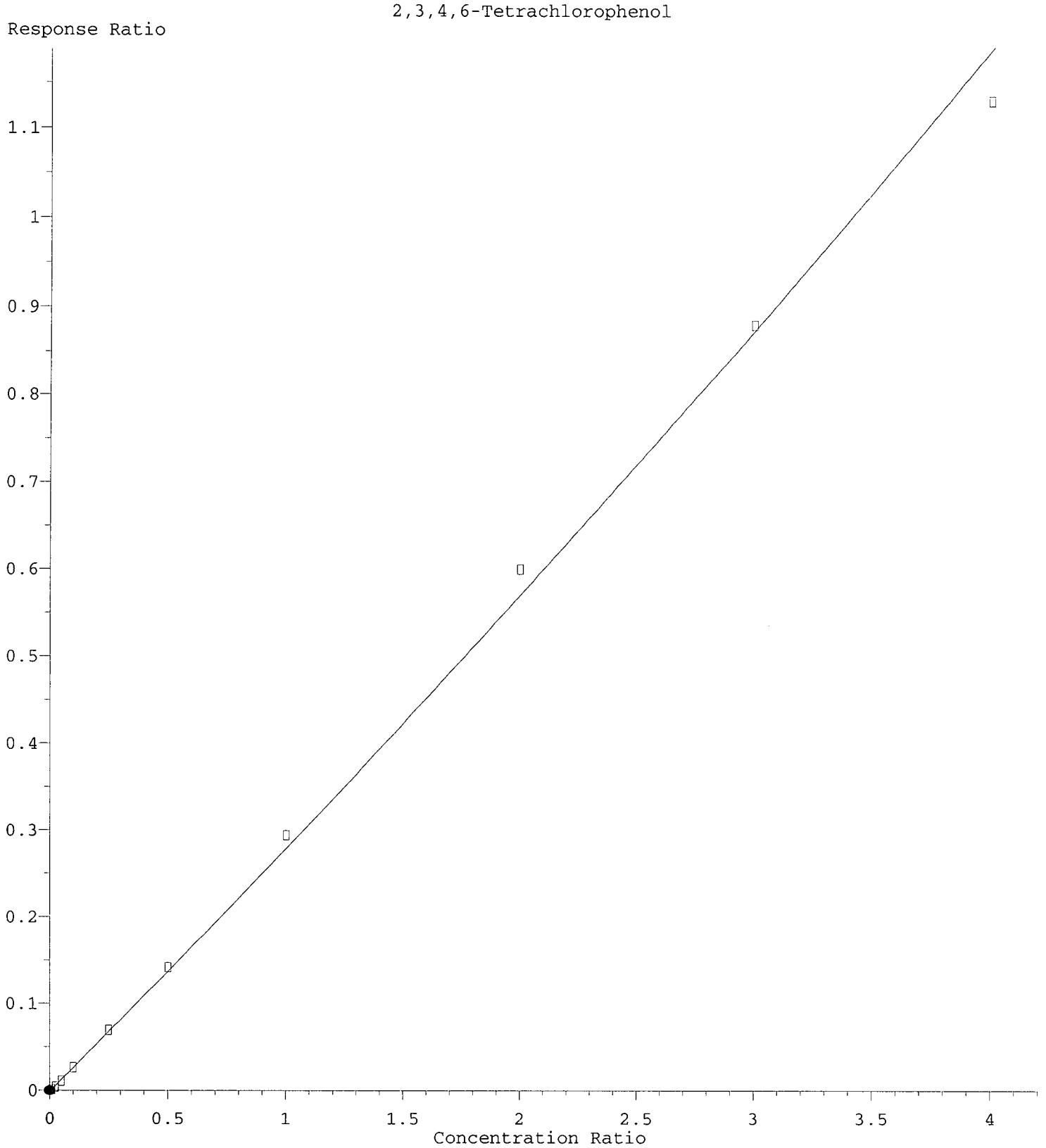
TIC: J04121915.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

10.146min (-0.005) 37.50 ng/ml m

response 138

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	49.20	62.71
130.90	53.00	106.21#
0.00	0.00	0.00

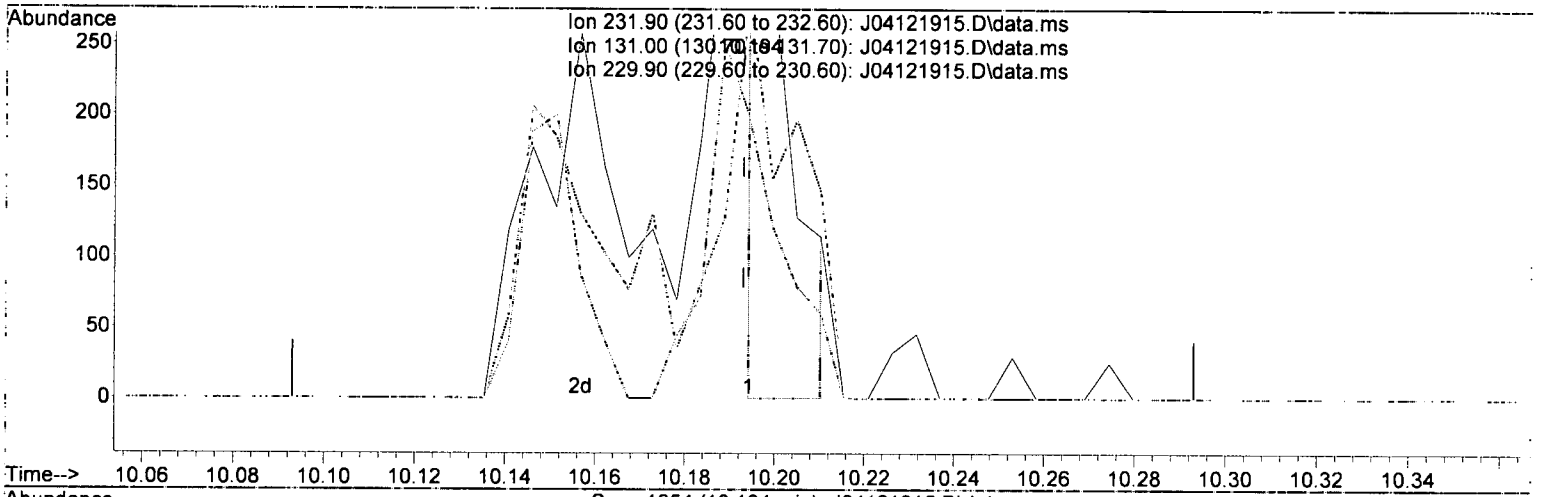


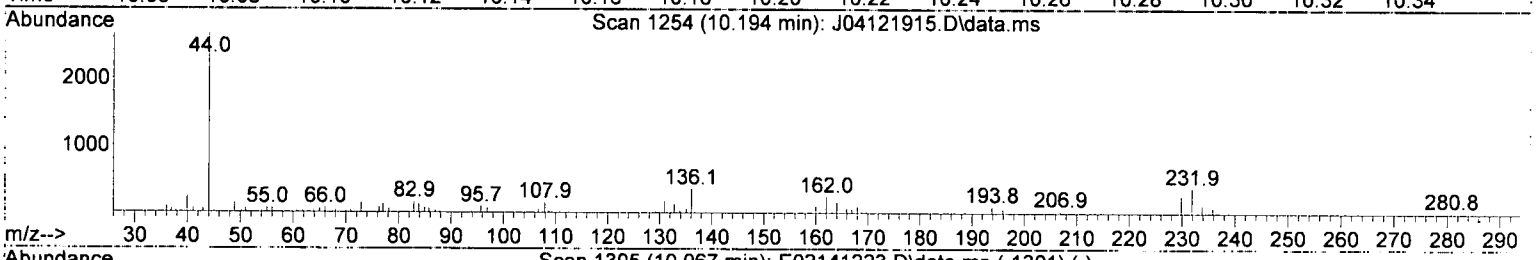
R = 5.62e-003 A*A + 2.75e-001 A - 1.81e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

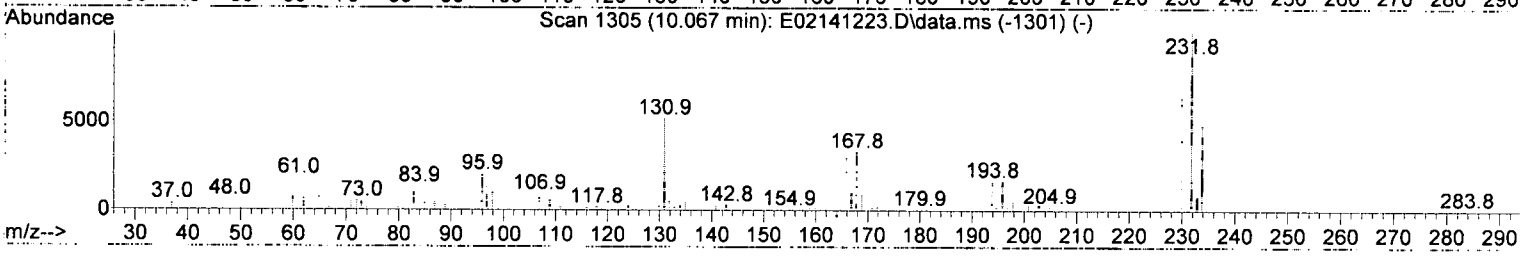
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







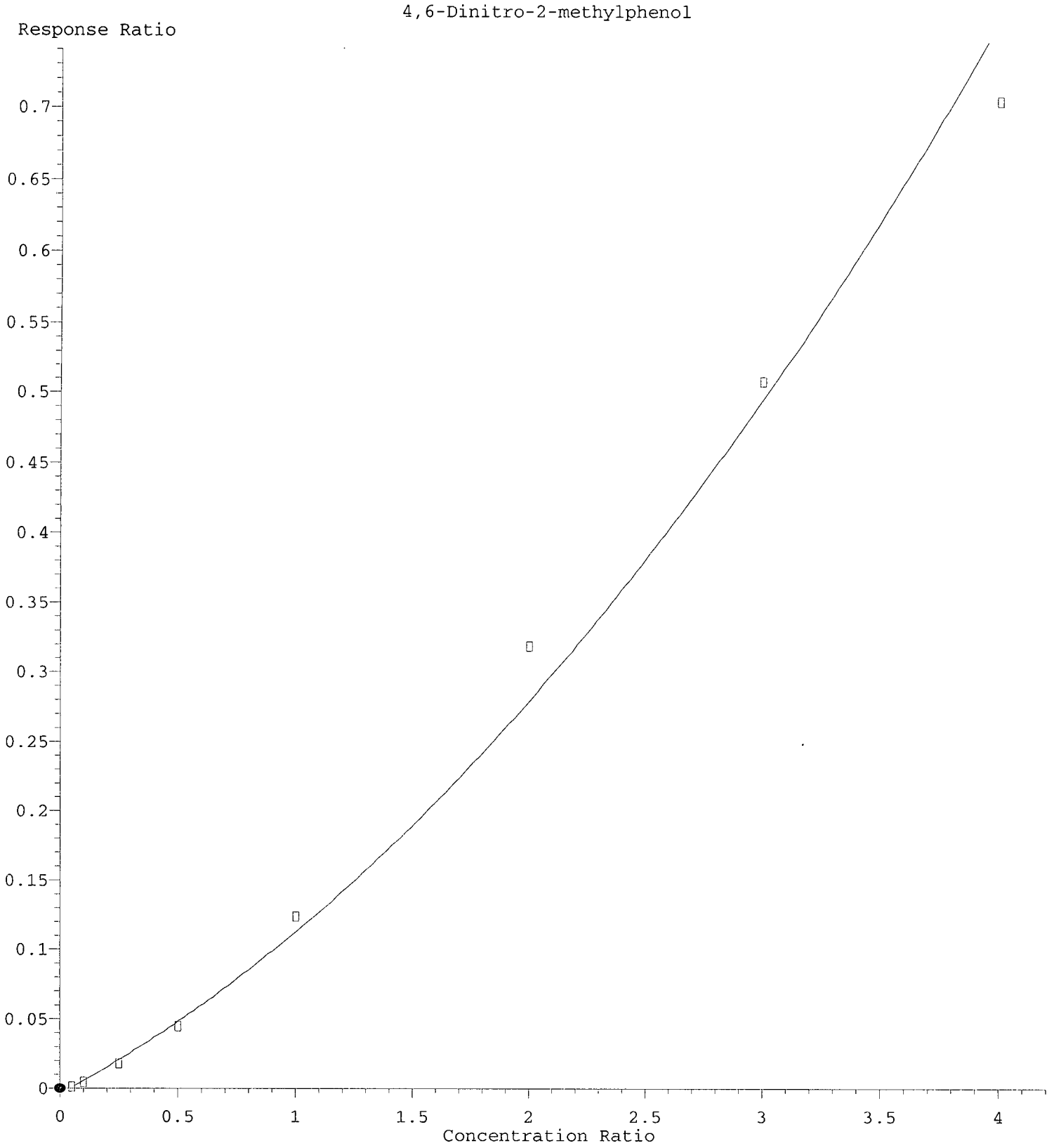
TIC: J04121915.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.001) 16.14 ng/ml m

response 173

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	51.03
229.90	78.40	72.05
0.00	0.00	0.00

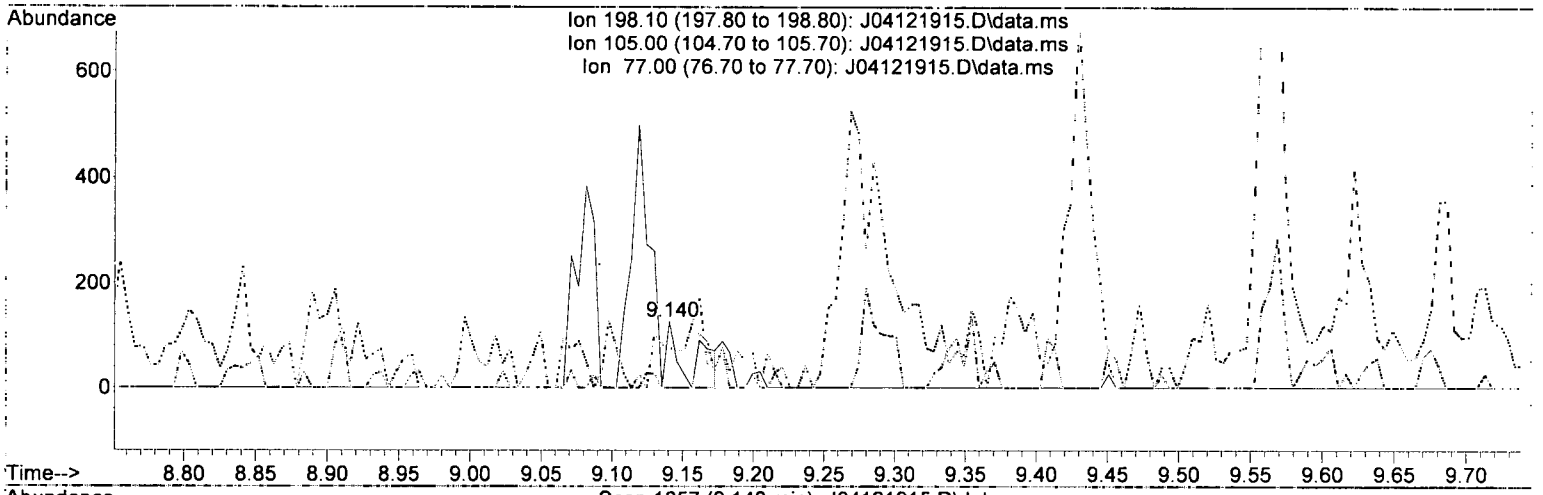


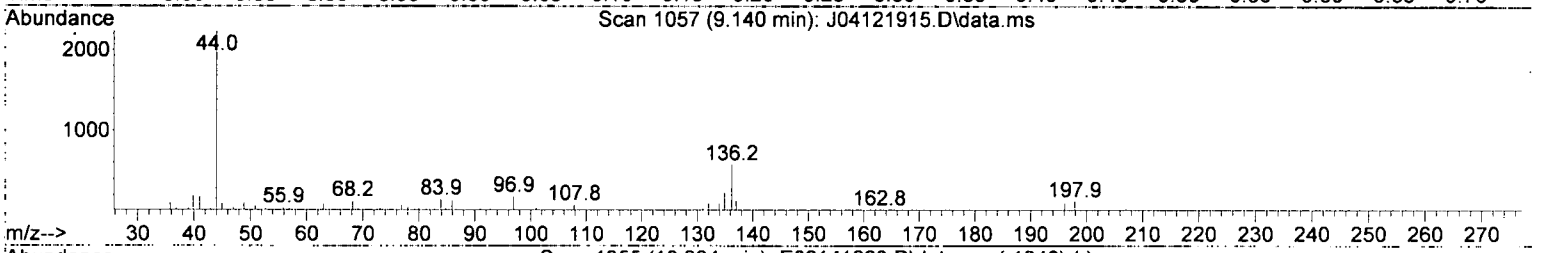
R = 2.48e-002 A*A + 9.20e-002 A - 3.92e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

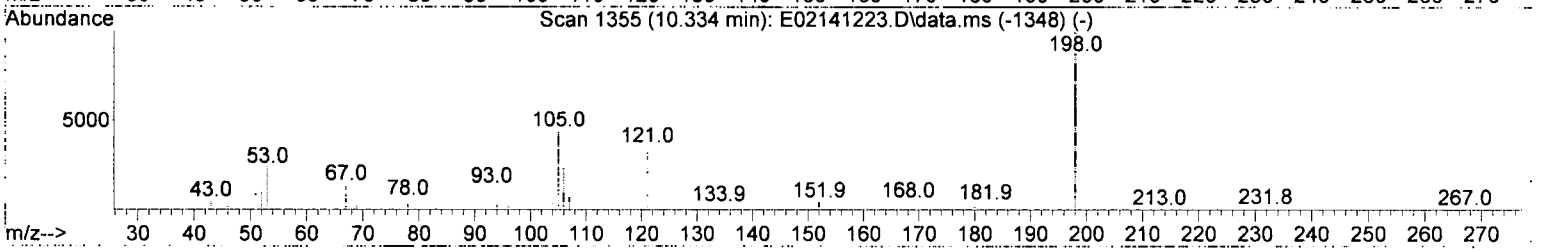
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







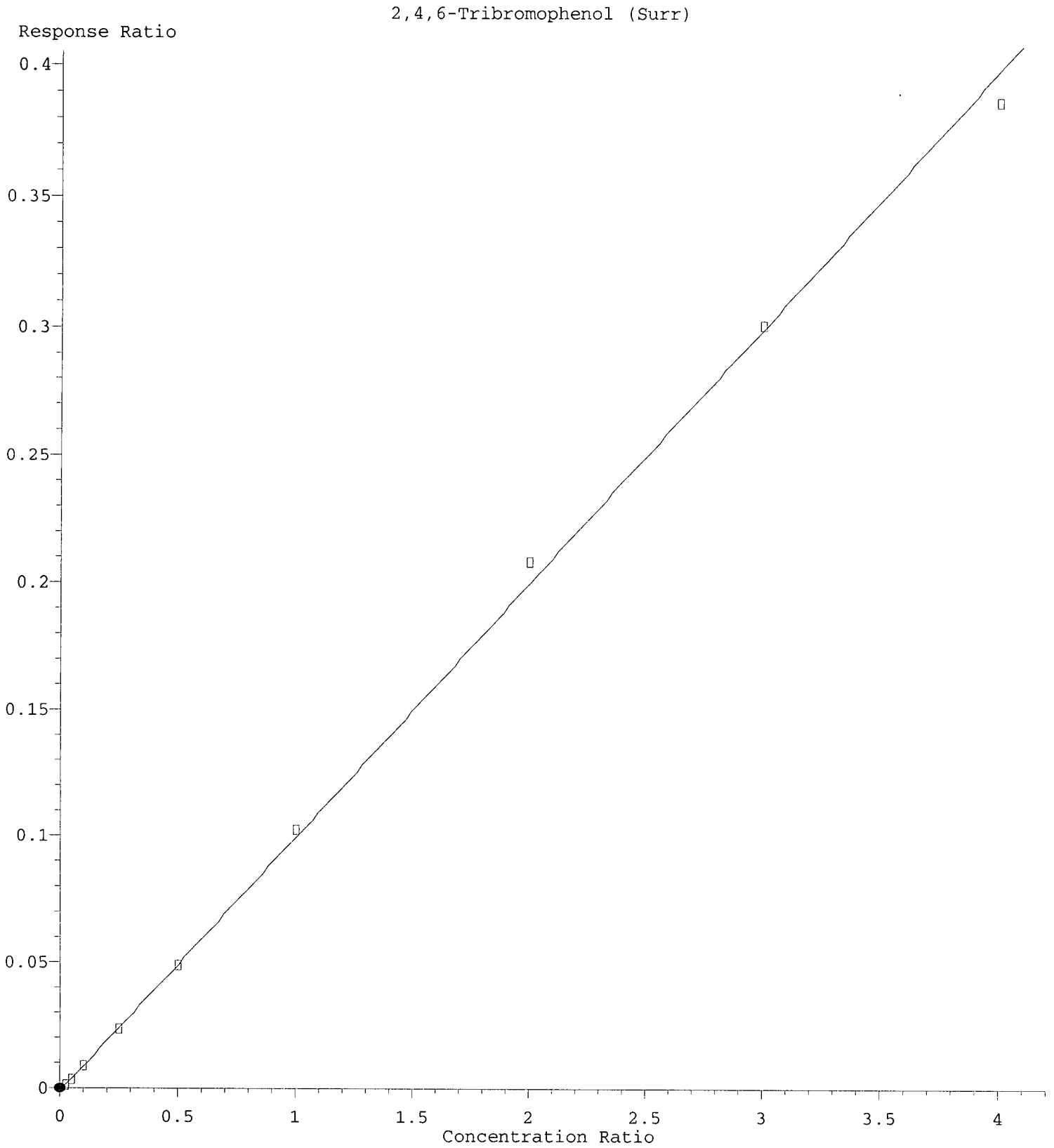
TIC: J04121915.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

9.140min (-1.321) 91.21 ng/ml m

response 140

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	58.40	0.00#
77.00	31.80	61.11
0.00	0.00	0.00

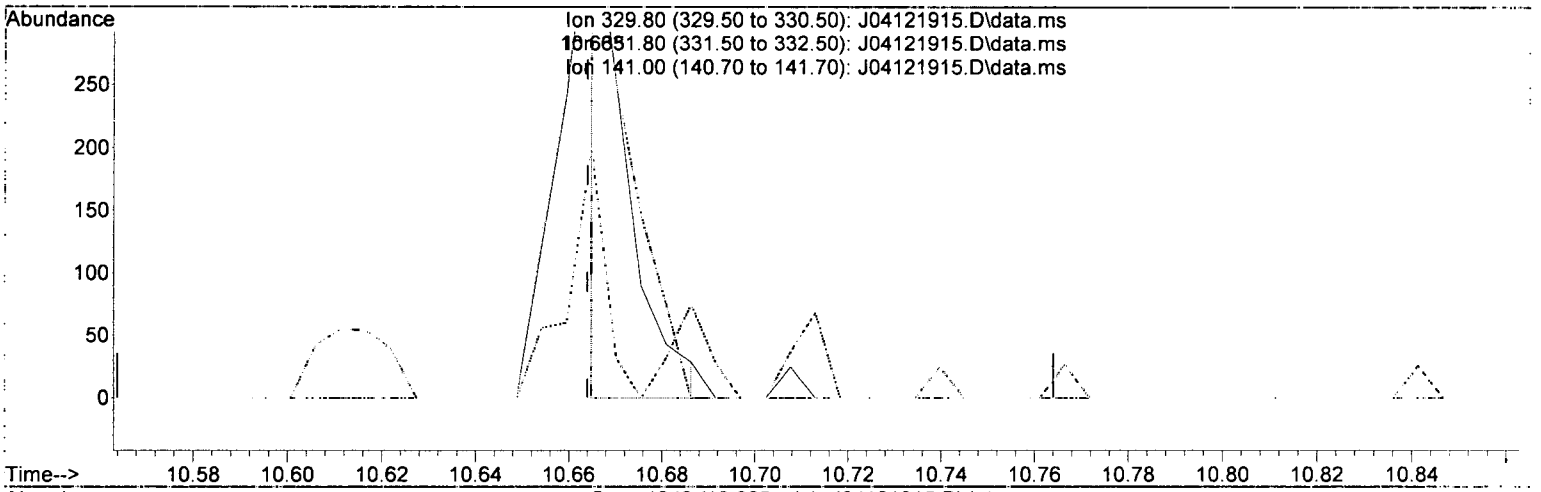


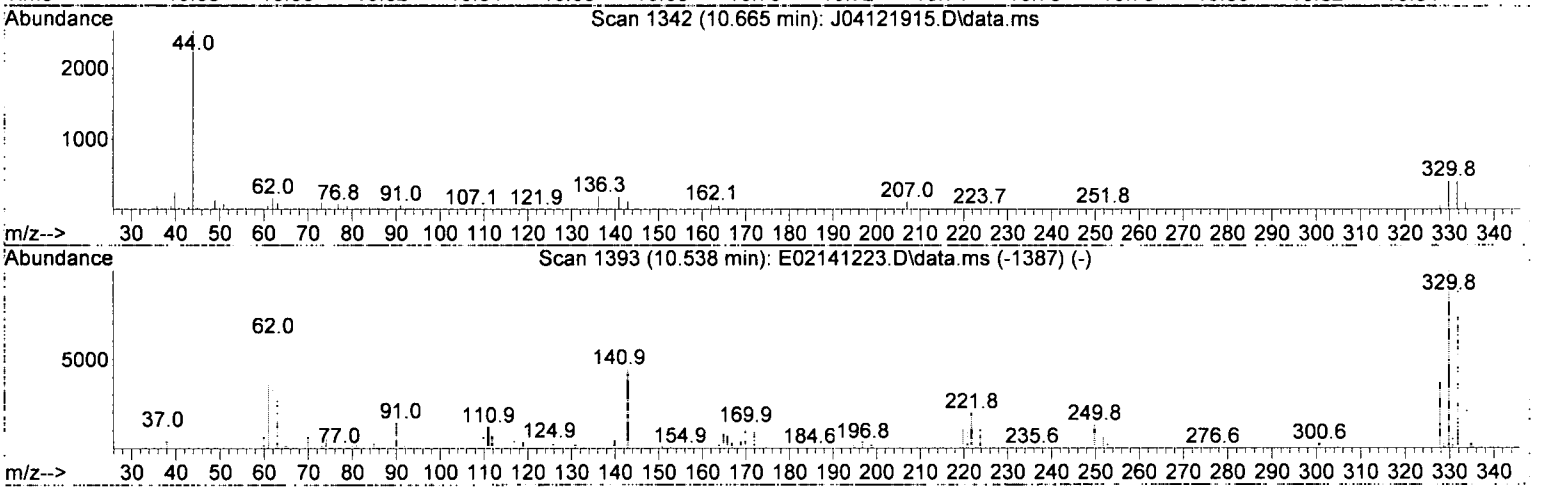
R = -3.14e-004 A*A + 1.01e-001 A - 1.36e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





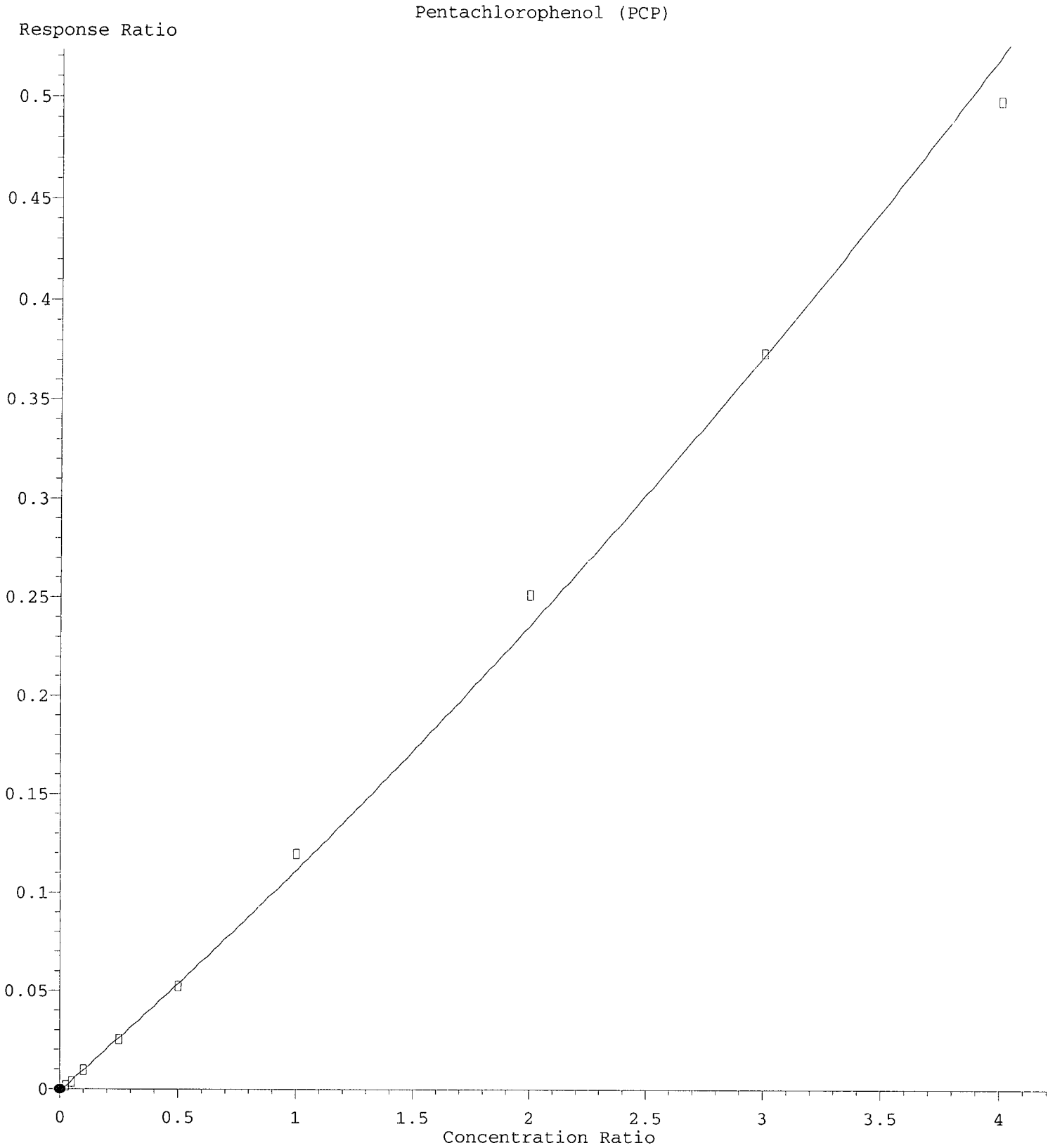
TIC: J04121915.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.665min (+ 0.001) 30.67 ng/ml m

response 132

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	95.30	97.88
141.00	47.50	47.17
0.00	0.00	0.00

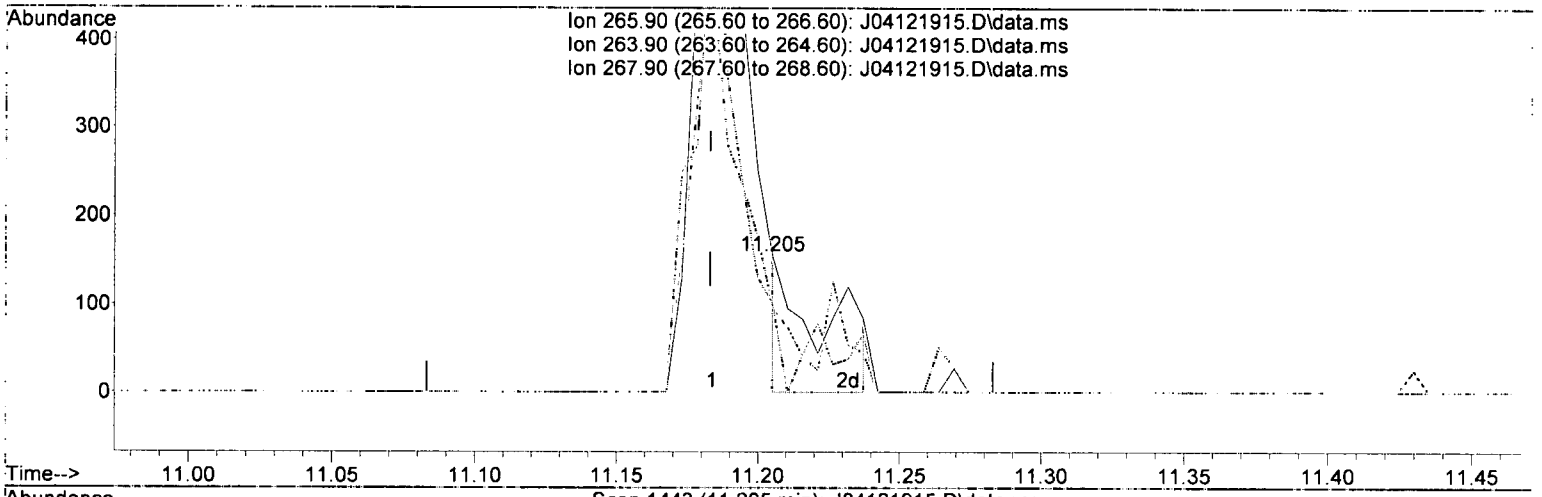


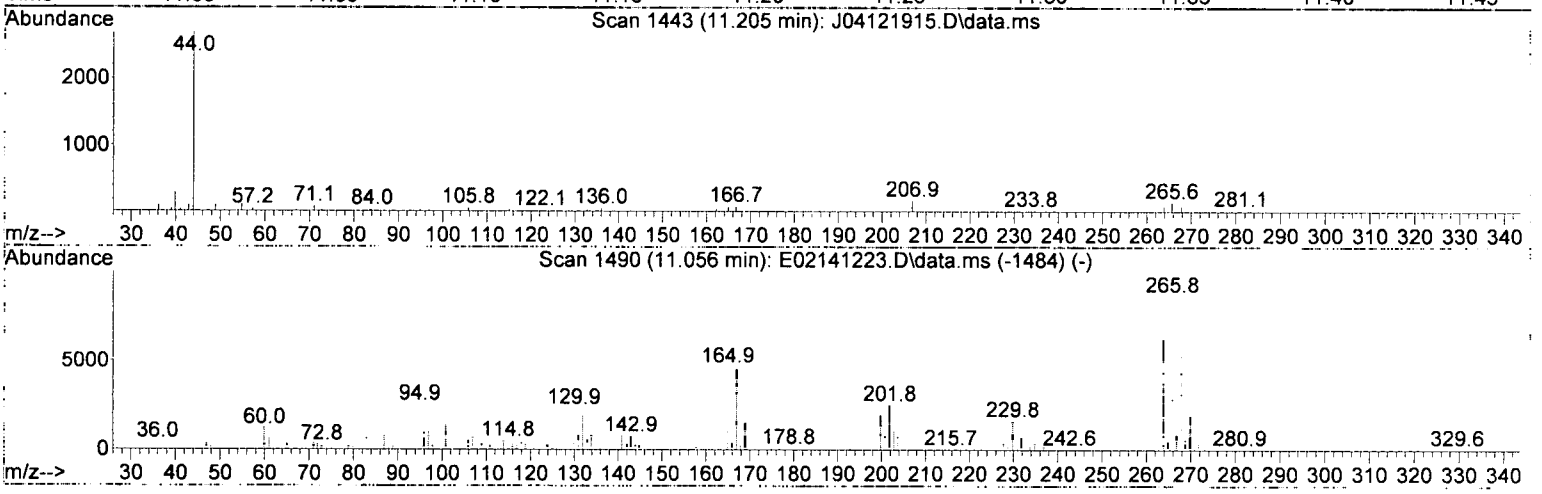
R = 5.98e-003 A*A + 1.07e-001 A - 1.11e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





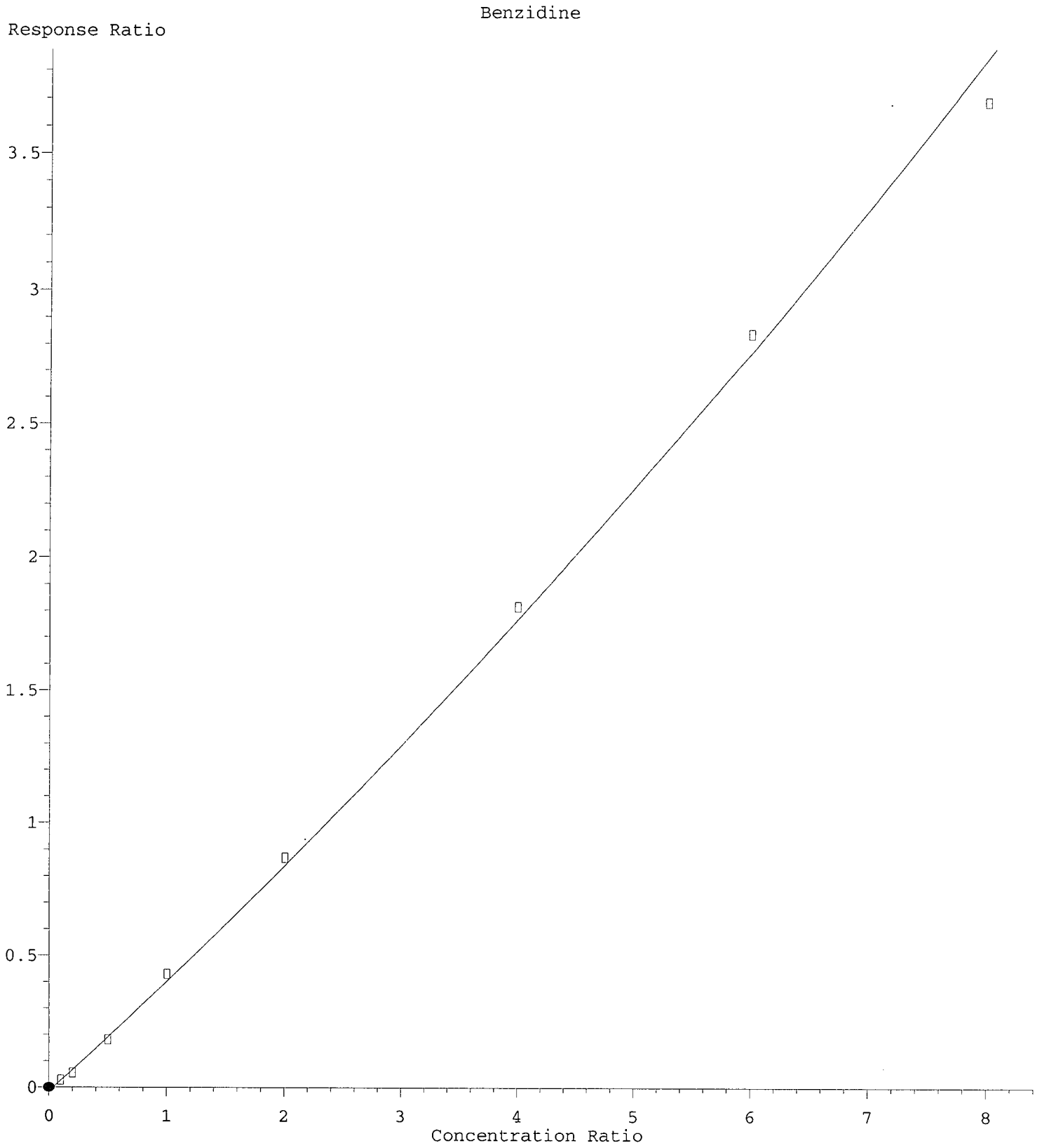
TIC: J04121915.D\data.ms

(70) Pentachlorophenol (PCP) (T)

11.205min (+ 0.022) 25.14 ng/ml m

response 163

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.20	65.16
267.90	61.20	61.94
0.00	0.00	0.00

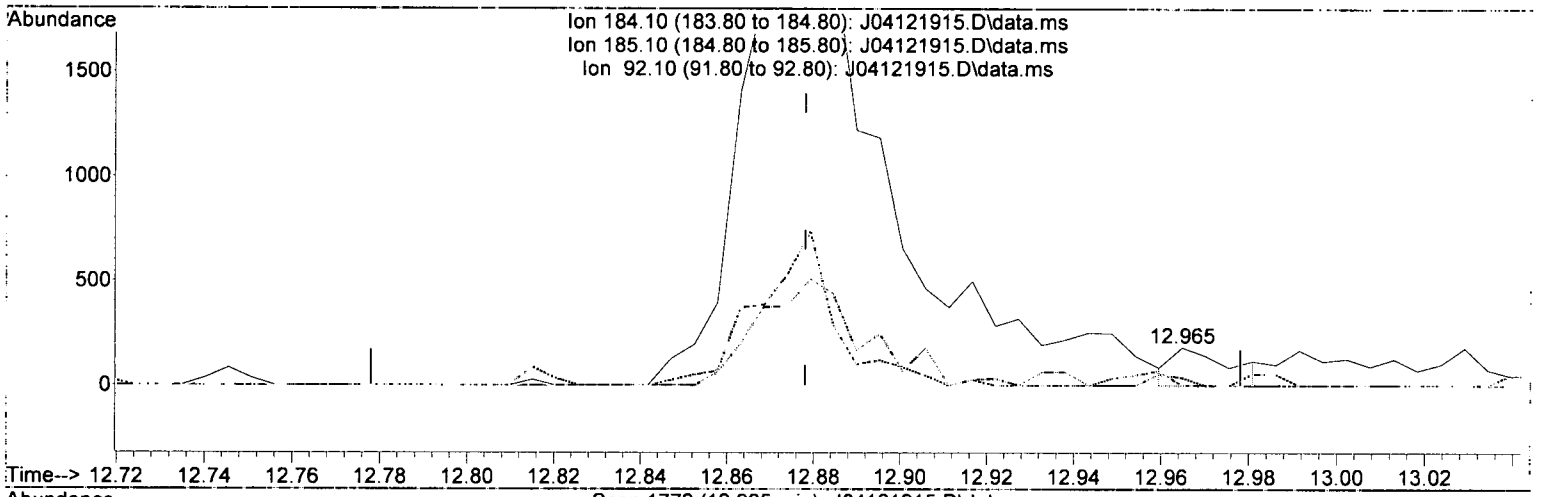


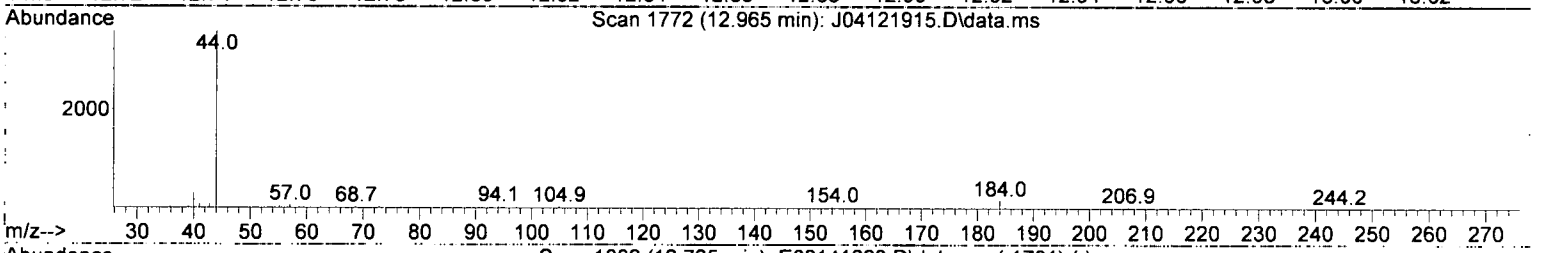
R = 9.30e-003 A*A + 4.09e-001 A - 1.64e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

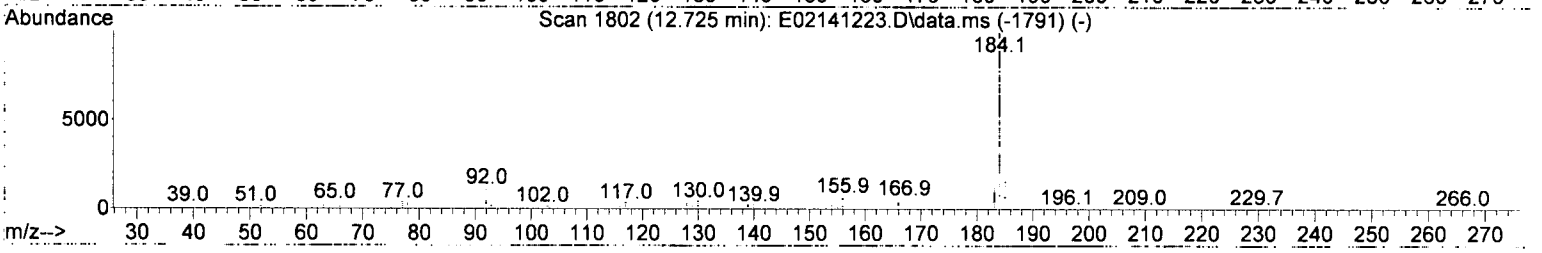
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







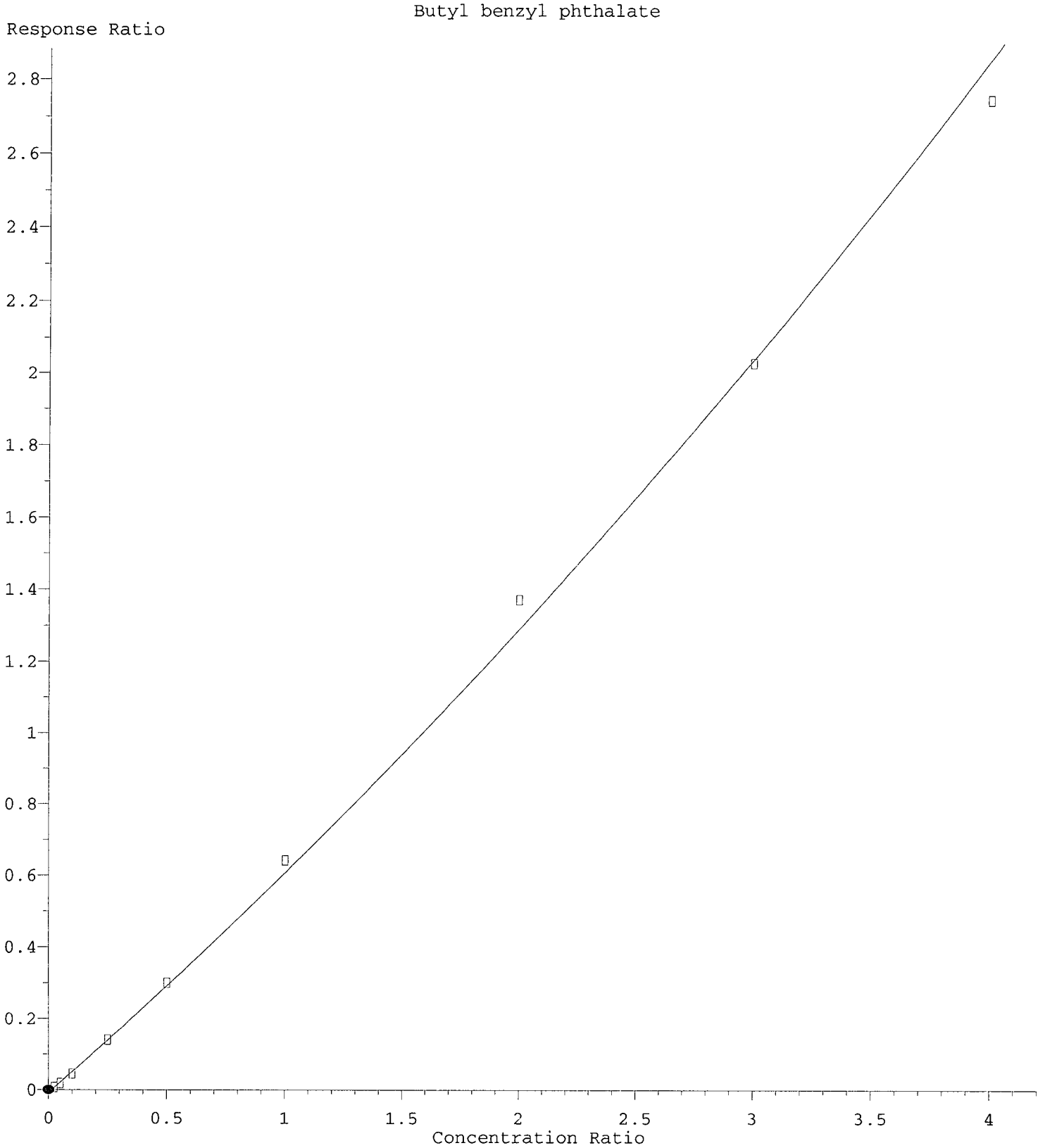
TIC: J04121915.D\data.ms

(76) Benzidine (T)

12.965min (+ 0.087) 81.55 ng/ml m

response 167

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	15.10	20.67
92.10	11.90	0.00
0.00	0.00	0.00

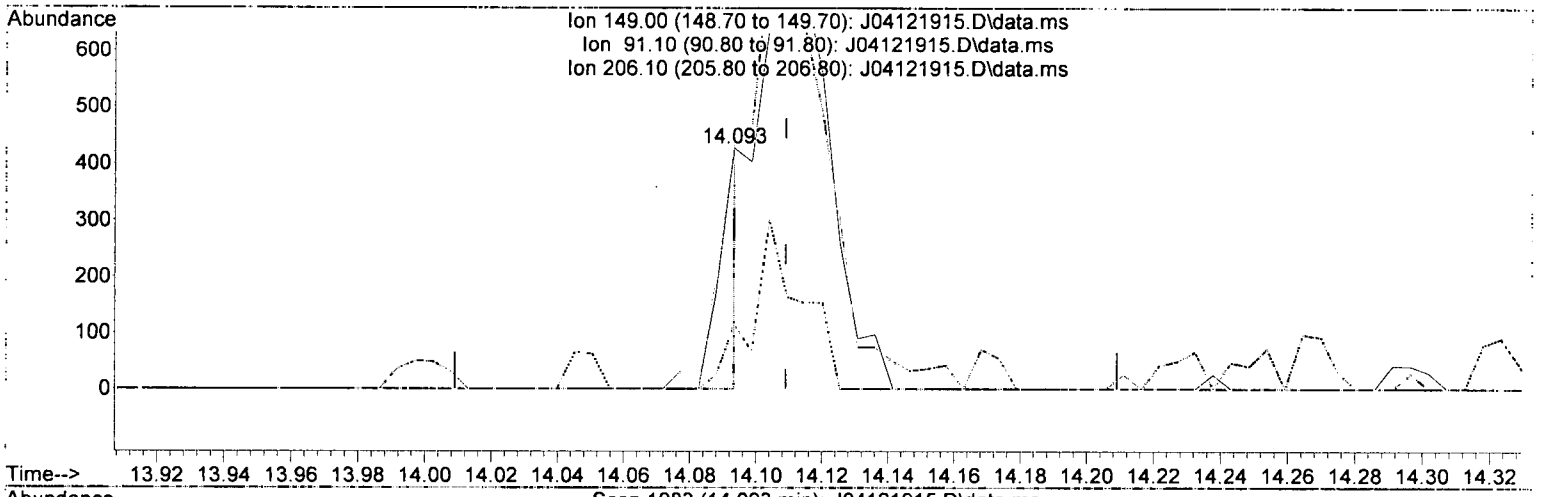


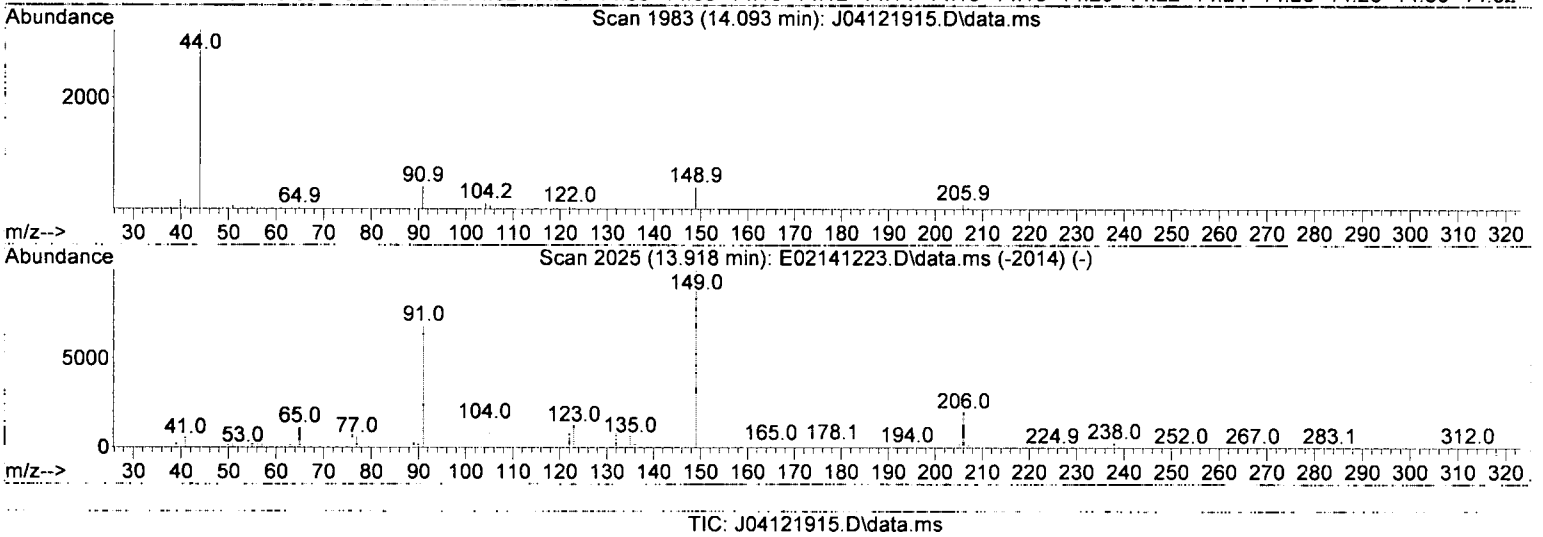
R = 3.32e-002 A*A + 5.83e-001 A - 8.53e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





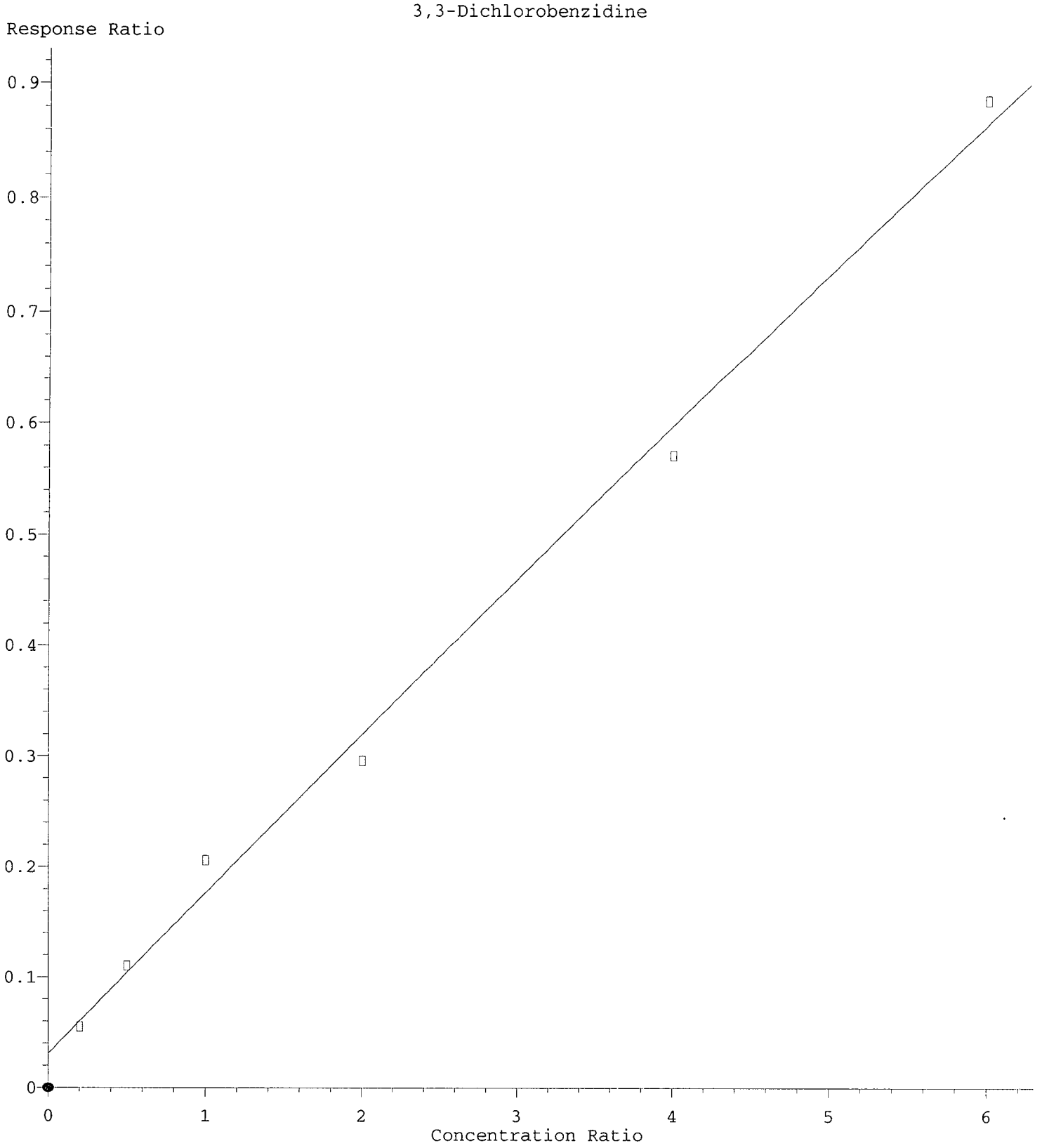
TIC: J04121915.D\data.ms

(80) Butyl benzyl phthalate (T)

14.093min (-0.016) 30.34 ng/ml m

response 192

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	76.30	101.17
206.10	18.00	26.64
0.00	0.00	0.00

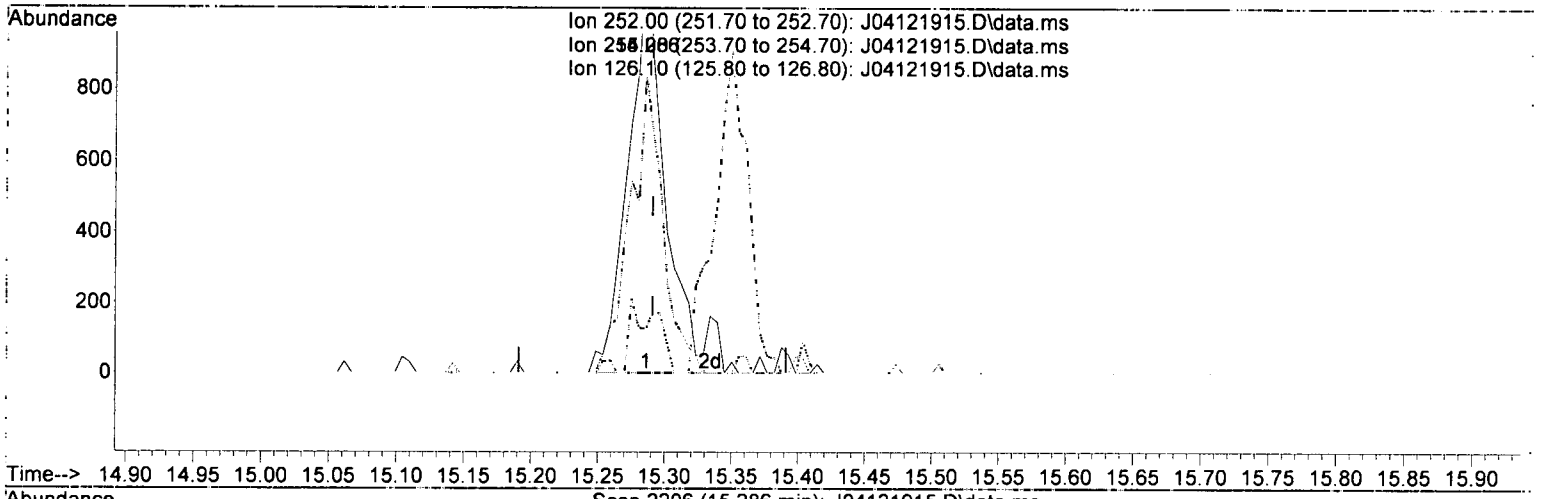


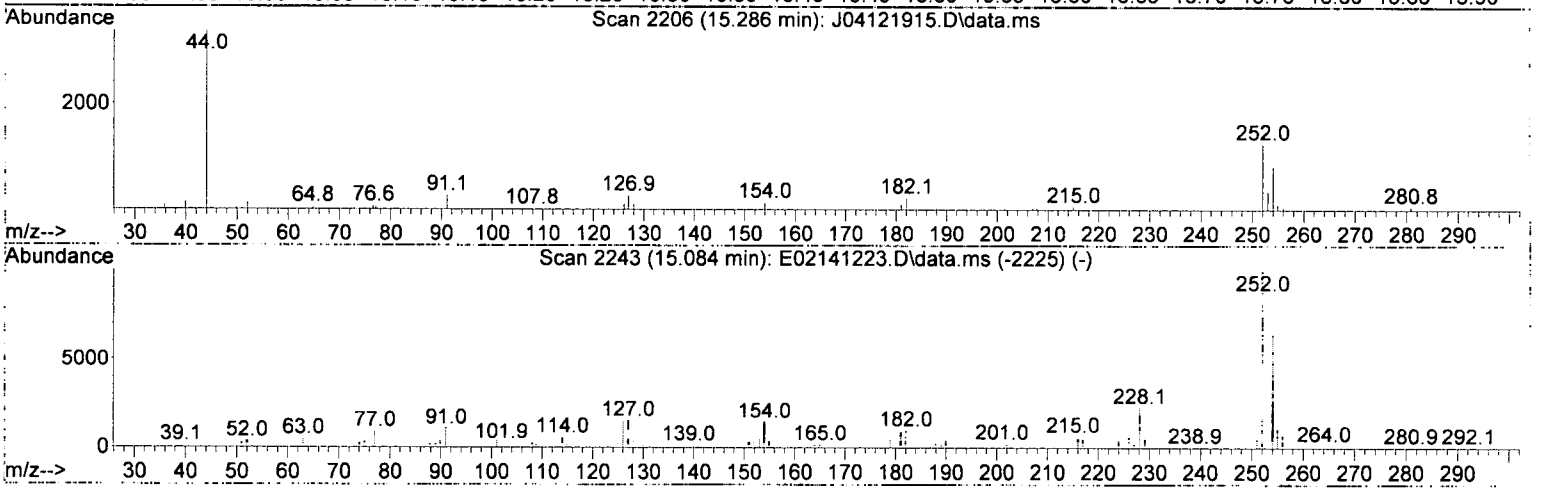
R = -1.36e-003 A*A + 1.47e-001 A + 3.08e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





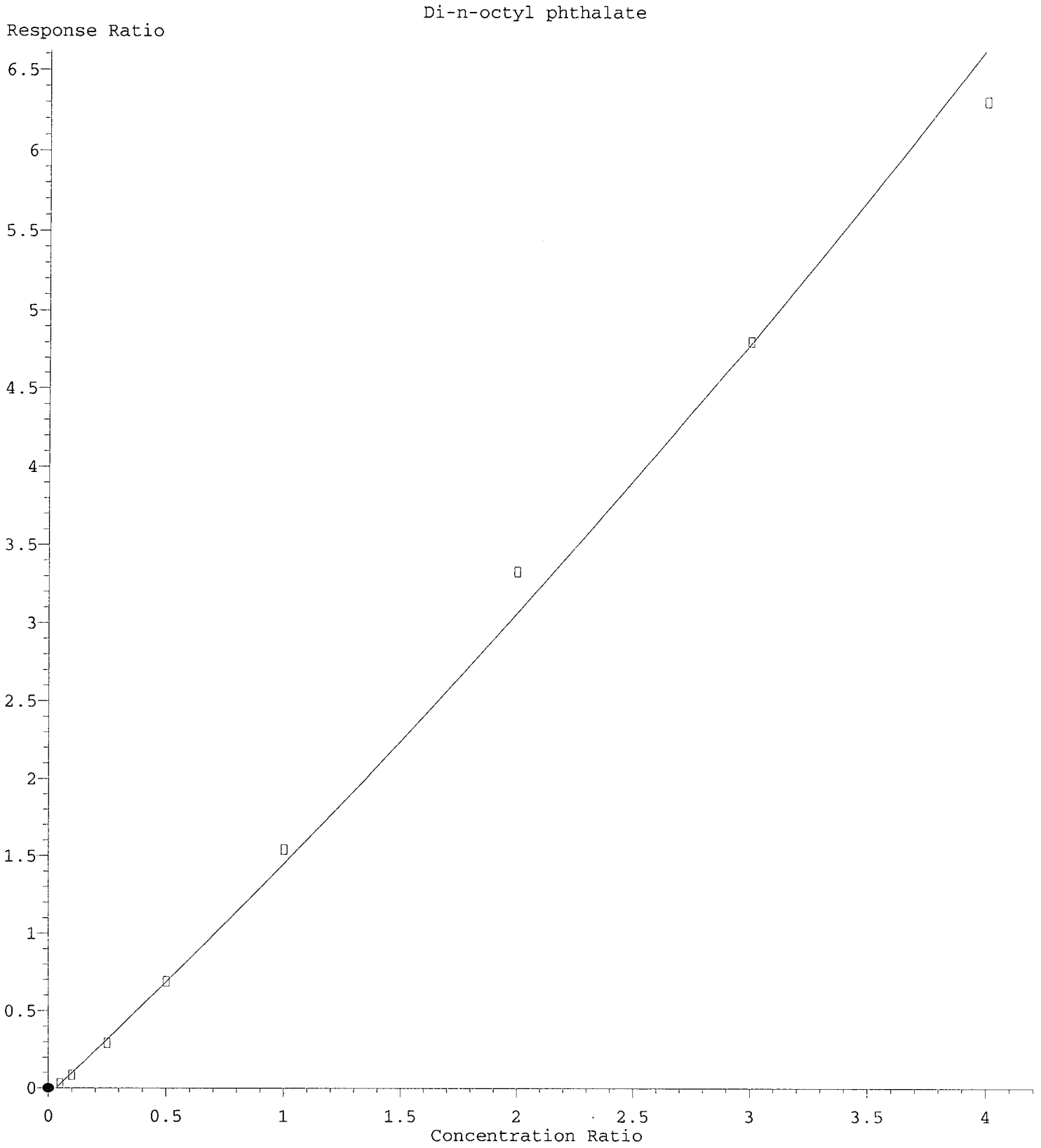
TIC: J04121915.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.286min (-0.005) -1.00 ng/ml m

response 2297

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	66.27
126.10	16.90	9.84
0.00	0.00	0.00

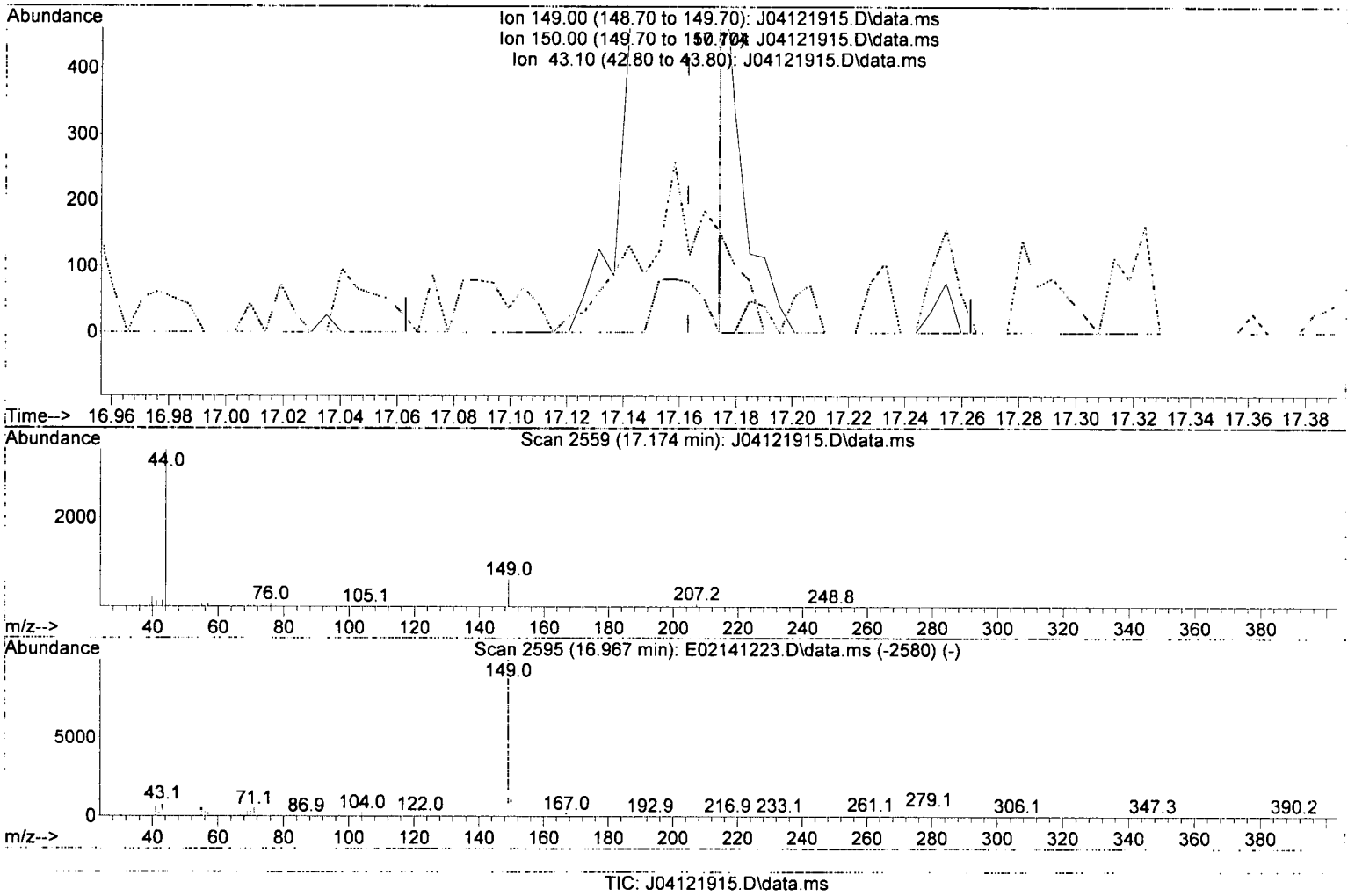


R = 5.80e-002 A*A + 1.44e+000 A - 4.78e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

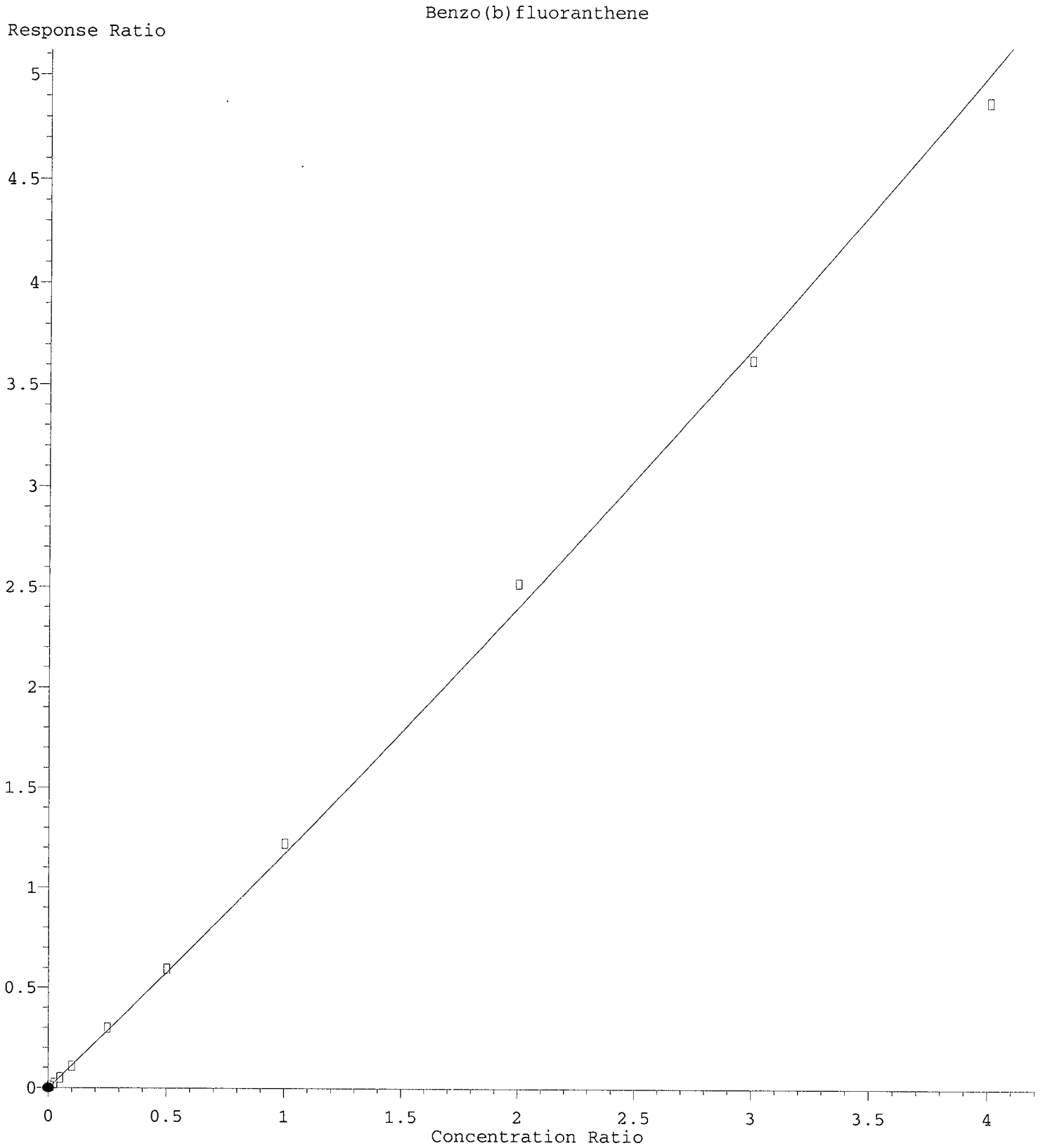


(87) Di-n-octyl phthalate (T)

17.174min (+ 0.011) 66.72 ng/ml m

response 196

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.60	0.00
43.10	10.40	24.44
0.00	0.00	0.00

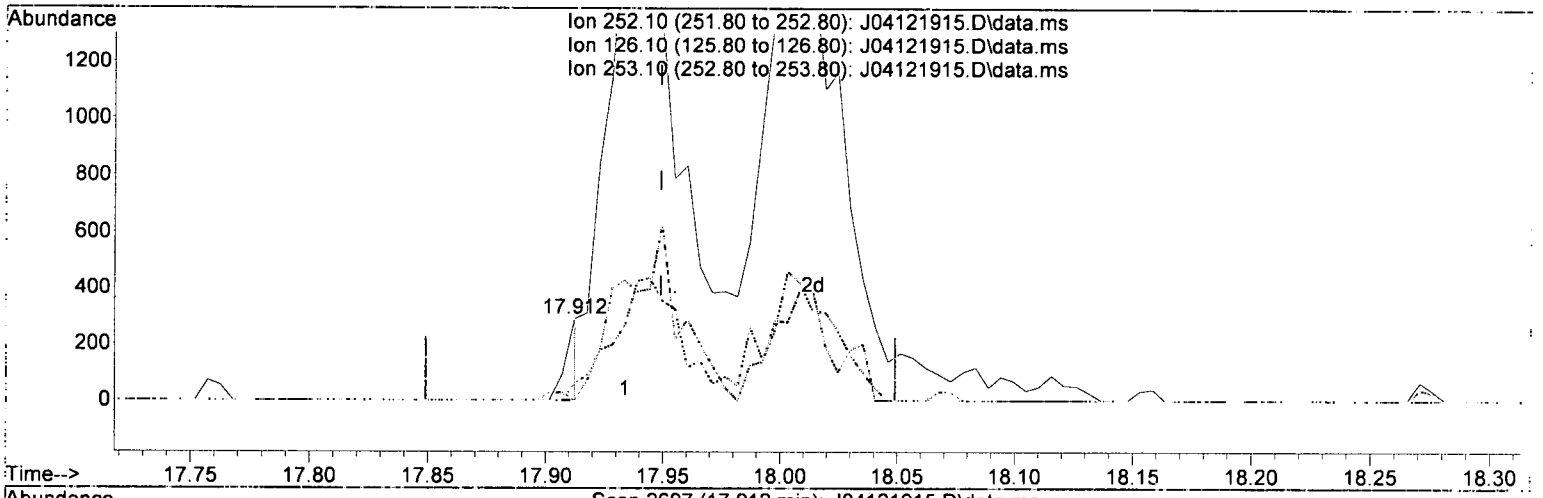


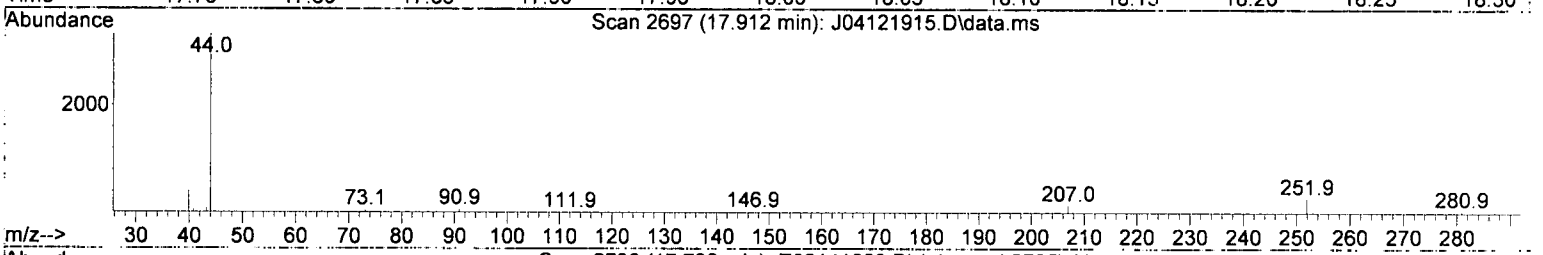
R = 2.59e-002 A*A + 1.15e+000 A - 5.10e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

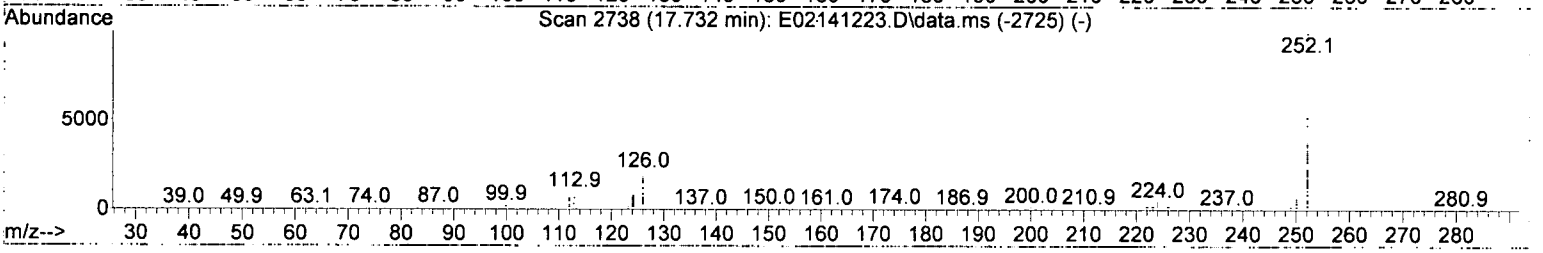
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







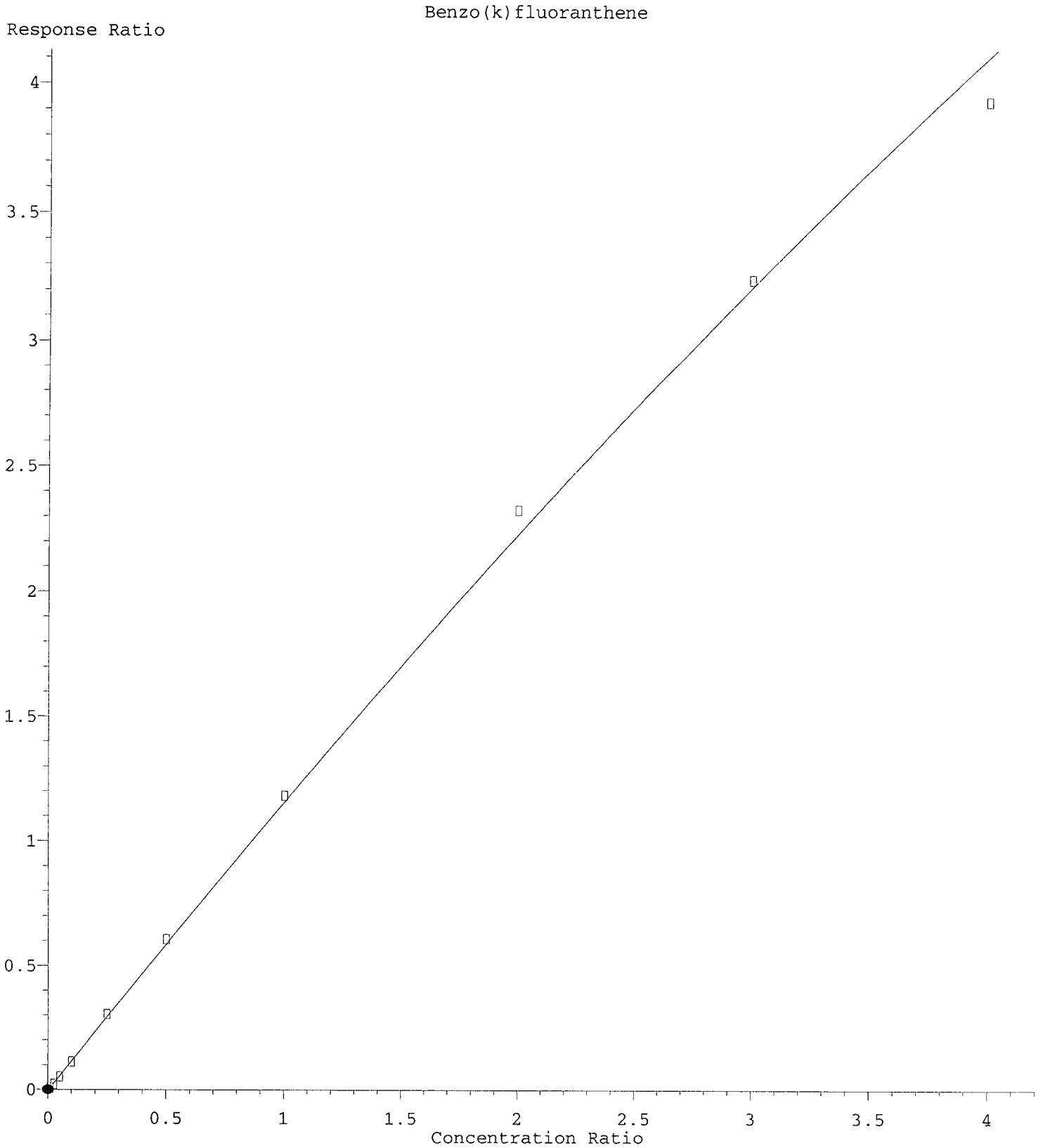
TIC: J04121915.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.912min (-0.037) 9.25 ng/ml m

response 122

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.90	0.00
253.10	22.00	21.03
0.00	0.00	0.00

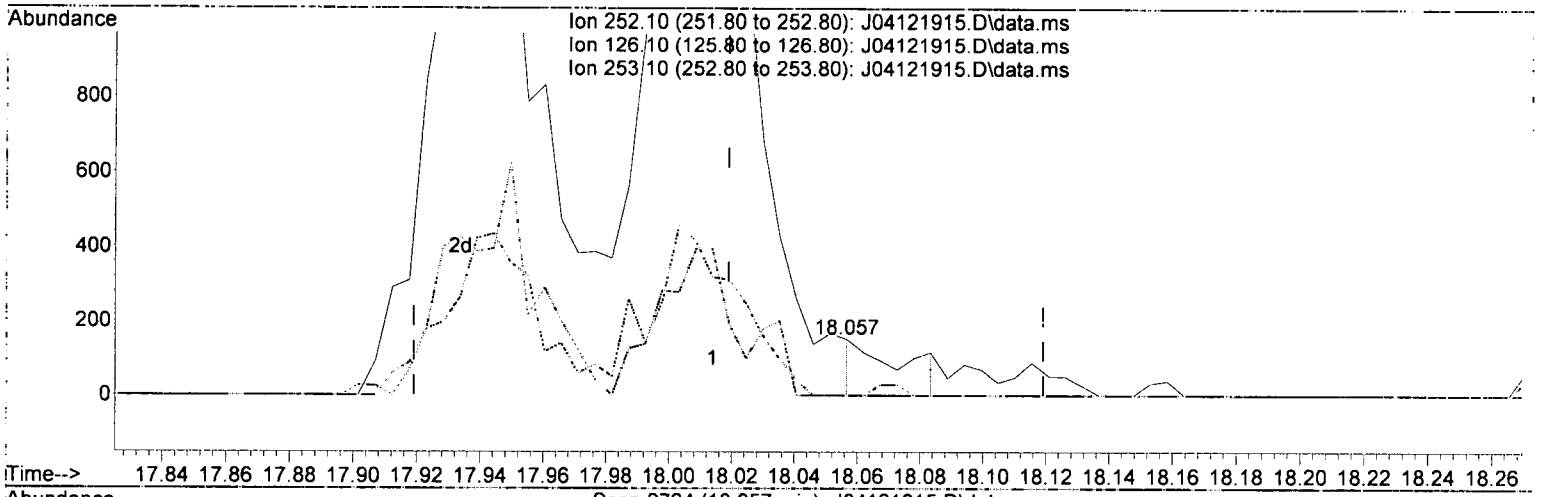


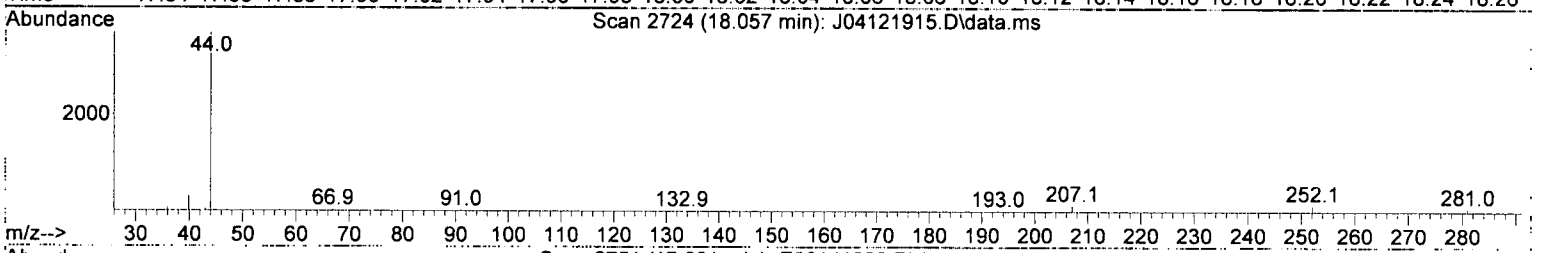
R = -4.47e-002 A*A + 1.21e+000 A - 6.28e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

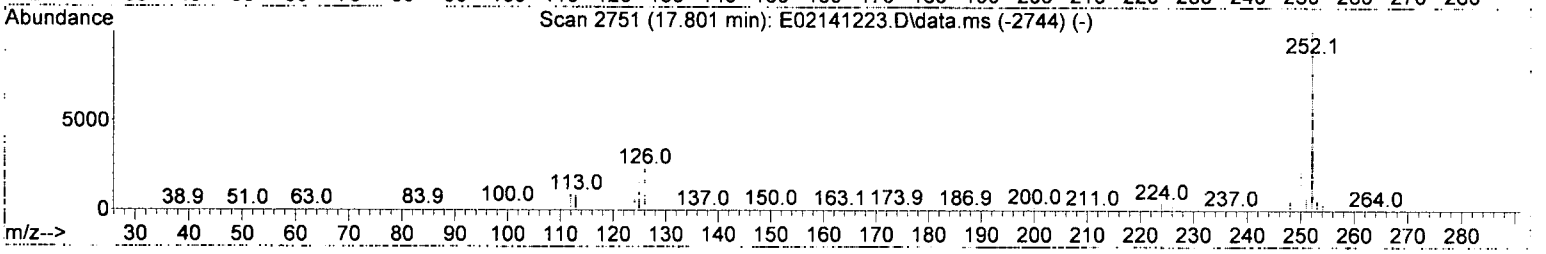
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







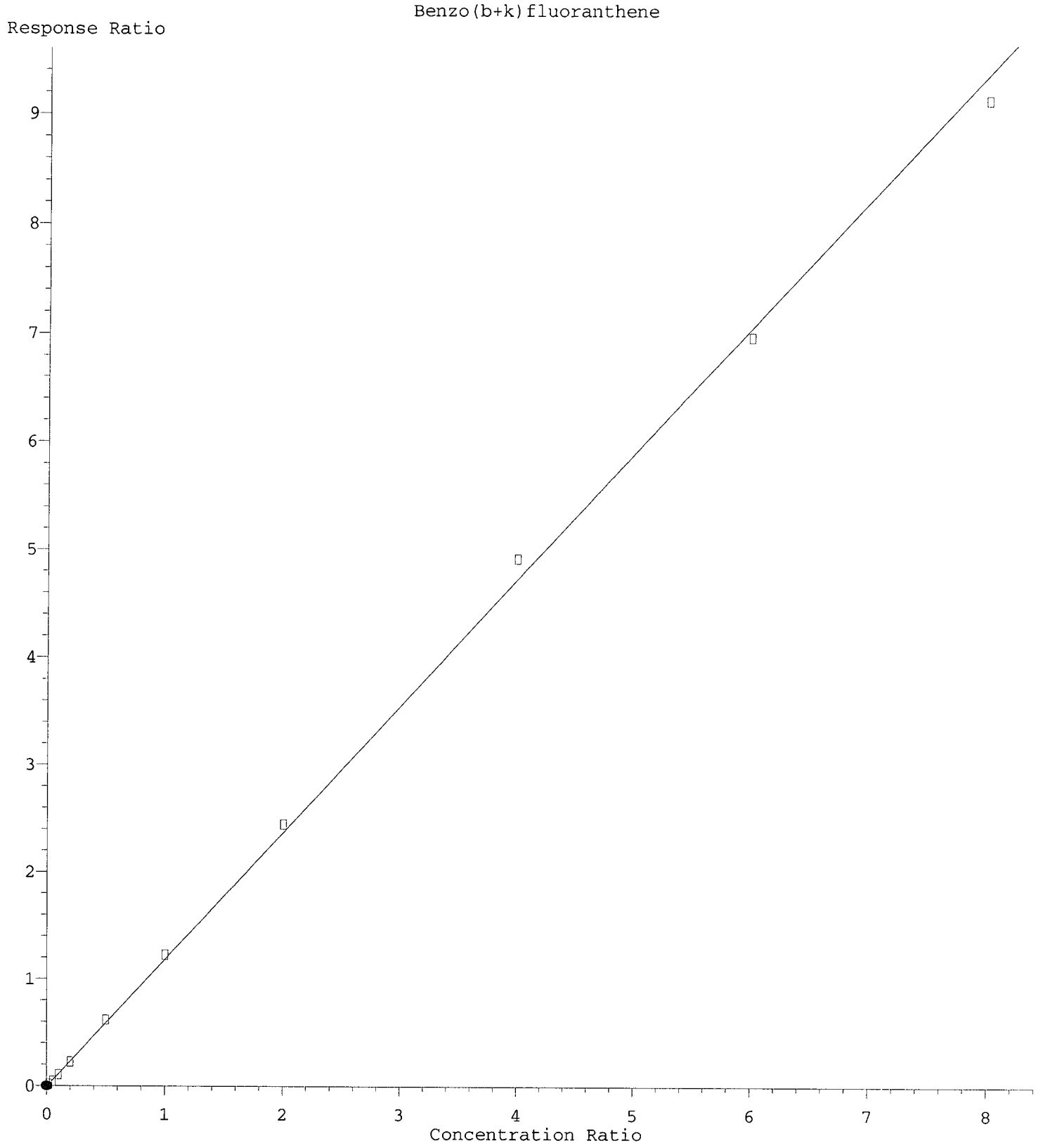
TIC: J04121915.D\data.ms

(89) Benzo(k)fluoranthene (T)

18.057min (+ 0.038) 10.91 ng/ml m

response 159

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	0.00
253.10	21.70	0.00
0.00	0.00	0.00

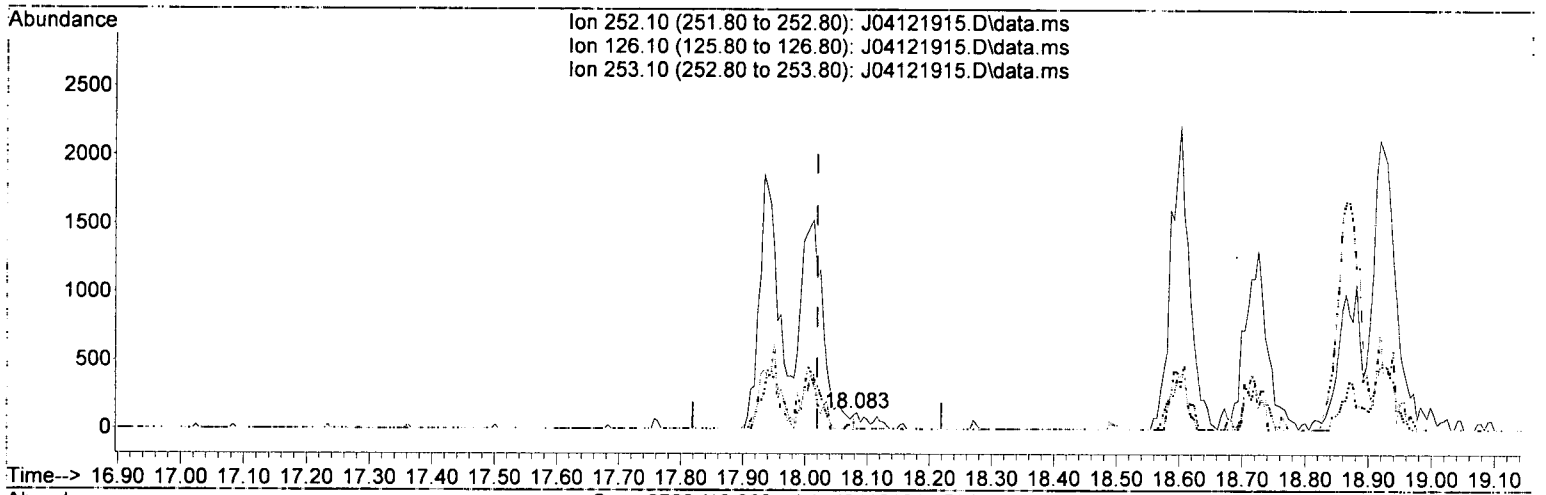


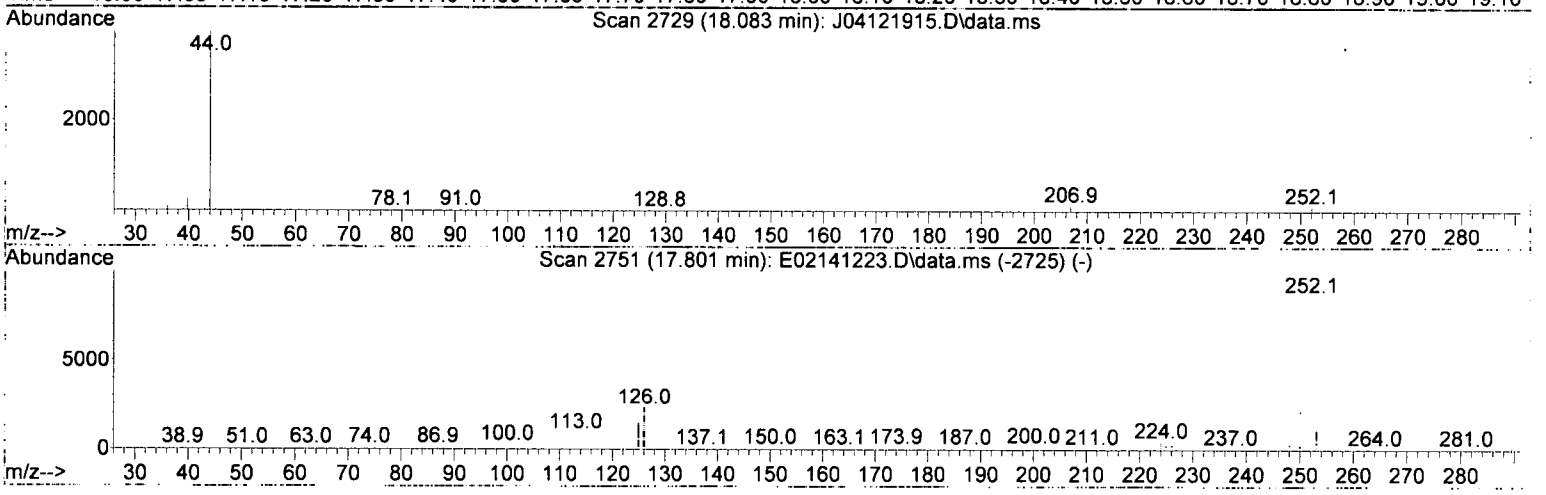
R = -2.85e-003 A*A + 1.20e+000 A - 1.02e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\5710_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10





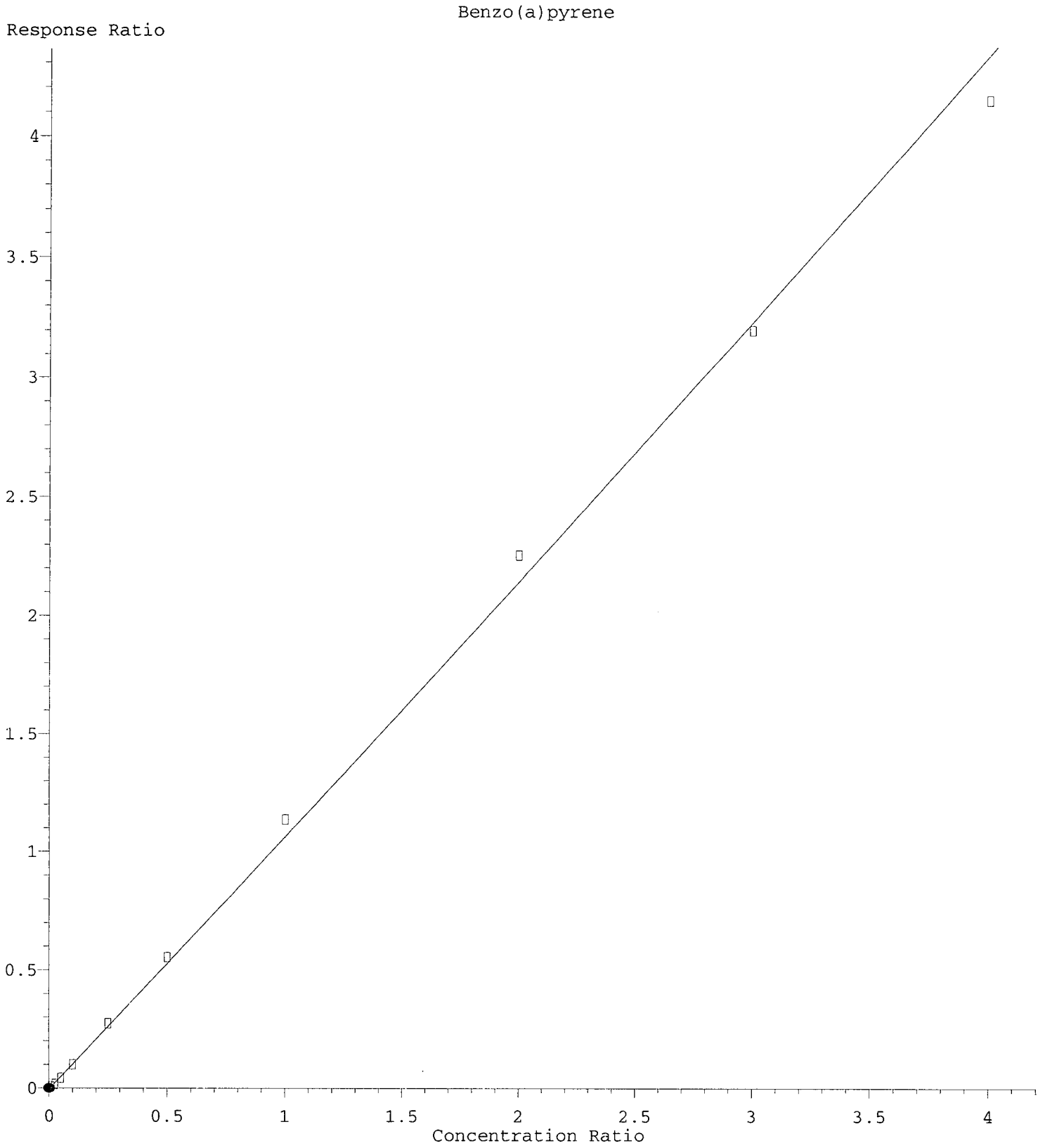
TIC: J04121915.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

18.083min (+ 0.064) 17.72 ng/ml m

response 196

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	0.00
253.10	21.70	0.00
0.00	0.00	0.00

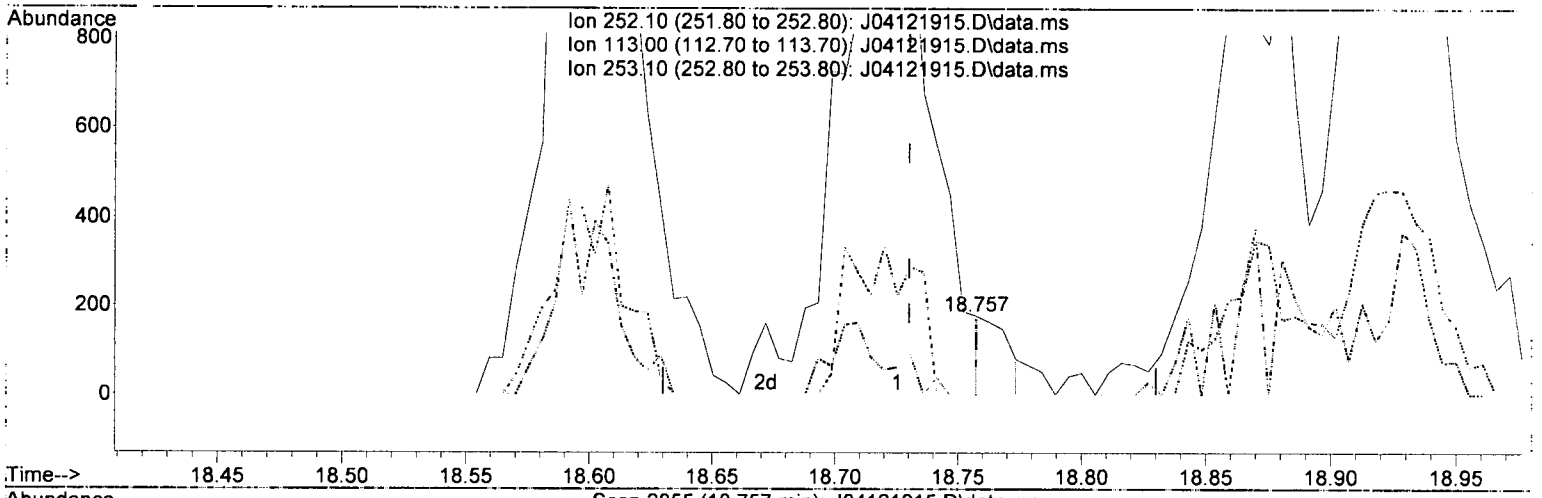


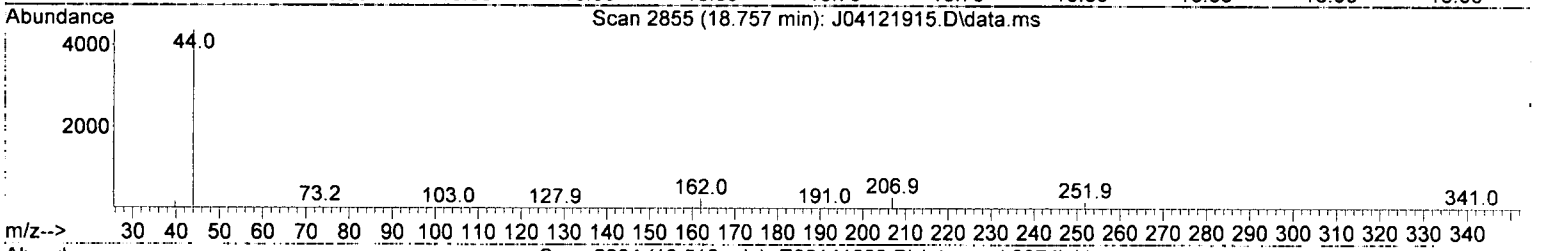
R = 5.46e-003 A*A + 1.06e+000 A - 5.54e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

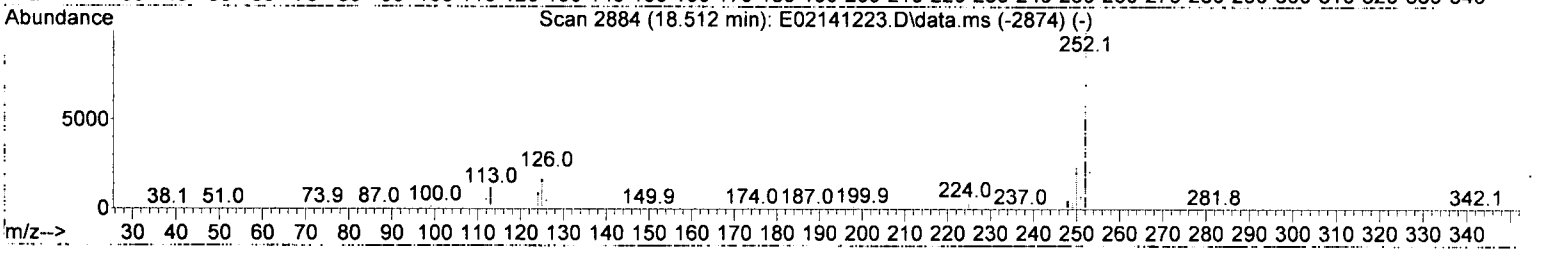
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\REQUANT\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 11:33:28 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121915.D\data.ms

(92) Benzo(a)pyrene (T)

18.757min (+ 0.027) 10.86 ng/ml m

response 124

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	13.40	0.00
253.10	21.60	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9D12042

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed	
9D12042-TUN1	MS Tune	Soil	A19D089	A19D031	4/12/2019	5:19:00PM
9D12042-TUN2	MS Tune	Soil	A19D089	A19D031	4/12/2019	5:47:00PM
9D12042-ICB1	Initial Cal Blank	Soil		A19D031	4/12/2019	6:15:00PM
9D12042-CAL1	Cal Standard	Soil	A19D053	"	4/12/2019	6:51:00PM
9D12042-CAL2	Cal Standard	Soil	A19D054	"	4/12/2019	7:27:00PM
9D12042-CAL3	Cal Standard	Soil	A19D055	"	4/12/2019	8:03:00PM
9D12042-CAL4	Cal Standard	Soil	A19D056	"	4/12/2019	8:39:00PM
9D12042-CAL5	Cal Standard	Soil	A19D057	"	4/12/2019	9:16:00PM
9D12042-CAL6	Cal Standard	Soil	A19D058	"	4/12/2019	9:52:00PM
9D12042-CAL7	Cal Standard	Soil	A19D059	"	4/12/2019	10:28:00PM
9D12042-CAL8	Cal Standard	Soil	A19D060	"	4/12/2019	11:04:00PM
9D12042-CAL9	Cal Standard	Soil	A19D061	"	4/12/2019	11:40:00PM
9D12042-CALA	Cal Standard	Soil	A19D062	"	4/13/2019	12:15:00AM
9D12042-ICV1	Initial Cal Check	Soil	A19C239	"	4/13/2019	1:26:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9D1505** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9D12042** Matrix: **Soil**

9D12042-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-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: 9D12042

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: **A9D1505** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9D12042** Matrix: **Soil**

9D12042-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: 9D12042

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed	
9D12042-TUN1	MS Tune	Water	A19D089	A19D031	4/12/2019	5:19:00PM
9D12042-TUN2	MS Tune	Water	A19D089	A19D031	4/12/2019	5:47:00PM
9D12042-ICB1	Initial Cal Blank	Water		A19D031	4/12/2019	6:15:00PM
9D12042-CAL1	Cal Standard	Water	A19D053	"	4/12/2019	6:51:00PM
9D12042-CAL2	Cal Standard	Water	A19D054	"	4/12/2019	7:27:00PM
9D12042-CAL3	Cal Standard	Water	A19D055	"	4/12/2019	8:03:00PM
9D12042-CAL4	Cal Standard	Water	A19D056	"	4/12/2019	8:39:00PM
9D12042-CAL5	Cal Standard	Water	A19D057	"	4/12/2019	9:16:00PM
9D12042-CAL6	Cal Standard	Water	A19D058	"	4/12/2019	9:52:00PM
9D12042-CAL7	Cal Standard	Water	A19D059	"	4/12/2019	10:28:00PM
9D12042-CAL8	Cal Standard	Water	A19D060	"	4/12/2019	11:04:00PM
9D12042-CAL9	Cal Standard	Water	A19D061	"	4/12/2019	11:40:00PM
9D12042-CALA	Cal Standard	Water	A19D062	"	4/13/2019	12:15:00AM
9D12042-ICV1	Initial Cal Check	Water	A19C239	"	4/13/2019	1:26:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9D1505** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9D12042** Matrix: **Water**

9D12042-CAL1	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL2	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL3	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL4	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL5	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL6	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL7	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL8	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-CAL9	**Inst. MRL**	**Recalc Res.**	**Cal Level**	**%Rec.**	**Qual**
9D12042-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: 9D12042

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: **A9D1505** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9D12042** Matrix: **Water**

9D12042-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

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

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/15/19

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	108	0.00
2	TG	N-Nitrosodimethylamine	1000.000	965.906	3.4	102	0.00
3	TG	Pyridine	1000.000	927.959	7.2	95	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1025.320	-2.5	106	0.00
5	S	Phenol-d6(Surr)	1000.000	1017.562	-1.8	105	0.00
6	T	Phenol	1000.000	1050.648	-5.1	121	0.00
7	T	Aniline	1000.000	1014.189	-1.4	100	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1016.599	-1.7	110	0.00
9	T	2-Chlorophenol	1000.000	1073.697	-7.4	107	0.00
10	T	1,3-Dichlorobenzene	1000.000	1024.137	-2.4	109	0.00
11	T	1,4-Dichlorobenzene	1000.000	1015.395	-1.5	110	0.00
12	T	Benzyl alcohol	1000.000	990.848	0.9	103	0.00
13	T	1,2-Dichlorobenzene	1000.000	1027.383	-2.7	108	0.00
14	T	2-Methylphenol	1000.000	1077.700	-7.8	104	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	993.420	0.7	103	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1060.937	-6.1	105	0.00
17	T	3+4-Methylphenol	1000.000	1052.775	-5.3	107	0.00
18	T	Hexachloroethane	1000.000	1019.949	-2.0	111	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1010.052	-1.0	110	0.00
20	T	Nitrobenzene	1000.000	1058.295	-5.8	106	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	108	0.00
22	T	Isophorone	1000.000	1028.661	-2.9	107	0.00
23	T	2-Nitrophenol	1000.000	1121.760	-12.2	118	0.00
24	T	2,4-Dimethylphenol	1000.000	987.262	1.3	104	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1113.781	-11.4	109	0.00
26	T	Benzoic acid	2000.000	1817.644	9.1	103	0.00
27	T	2,4-Dichlorophenol	1000.000	1020.661	-2.1	111	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1022.098	-2.2	106	0.00
29	T	Naphthalene	1000.000	1048.621	-4.9	107	0.00
30	T	4-Chloroaniline	1000.000	1033.027	-3.3	108	0.00
31	T	Hexachlorobutadiene	1000.000	995.324	0.5	106	0.00
32	T	4-Chloro-3-methylphenol	1000.000	992.952	0.7	108	0.00
33	T	2-Methylnaphthalene	1000.000	1085.222	-8.5	108	0.00
34	T	1-Methylnaphthalene	1000.000	1049.763	-5.0	107	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	111	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1089.803	-9.0	115	0.00
37	T	2,4,6-Trichlorophenol	1000.000	963.902	3.6	112	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1081.649	-8.2	114	0.00
39	T	1,1'-Biphenyl	1000.000	1089.764	-9.0	110	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1095.248	-9.5	110	0.00
41	T	2-Chloronaphthalene	1000.000	1107.028	-10.7	112	0.00
42	T	2-Nitroaniline	1000.000	1054.080	-5.4	119	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1071.651	-7.2	108	0.00
44	T	1,4-Dinitrobenzene	1000.000	1067.403	-6.7	131	0.00
45	T	Dimethyl phthalate	1000.000	1048.390	-4.8	113	0.00
46	T	1,3-Dinitrobenzene	1000.000	1080.548	-8.1	125	0.00
47	T	2,6-Dinitrotoluene	1000.000	1065.260	-6.5	115	0.00
48	T	1,2-Dinitrobenzene	1000.000	1016.448	-1.6	112	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1077.323	-7.7	112	0.00
50	T	3-Nitroaniline	1000.000	1139.377	-13.9	115	0.00
51	T	Acenaphthene	1000.000	1029.641	-3.0	110	0.00
52	T	2,4-Dinitrophenol	1000.000	962.195	3.8	117	0.00
53	T	4-Nitrophenol	1000.000	1076.922	-7.7	122	0.00
54	T	2,4-Dinitrotoluene	1000.000	1054.717	-5.5	119	0.00
55	T	Dibenzofuran	1000.000	1058.399	-5.8	113	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1034.556	-3.5	112	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1042.775	-4.3	112	0.00
58	T	Diethyl phthalate	1000.000	1068.746	-6.9	111	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1051.392	-5.1	111	0.00
60	T	Fluorene	1000.000	1070.707	-7.1	113	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1046.868	-4.7	113	0.00
62	T	4-Nitroaniline	1000.000	1186.320	-18.6	123	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1185.979	-18.6	147	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	113	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1079.662	-8.0	113	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1060.338	-6.0	110	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1004.377	-0.4	114	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1092.310	-9.2	115	0.00
69	T	Hexachlorobenzene	1000.000	987.469	1.3	110	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1050.075	-5.0	122	0.00
71	T	Phenanthrene	1000.000	1037.406	-3.7	112	0.00
72	T	Anthracene	1000.000	1053.610	-5.4	111	0.00
73	T	Carbazole	1000.000	1064.803	-6.5	110	0.00
74	T	Di-n-butyl phthalate	1000.000	1089.305	-8.9	113	0.00
75	T	Fluoranthene	1000.000	1098.536	-9.9	114	0.00
76	T	Benzidine	2000.000	1975.912	1.2	104	0.00
77	T	Pyrene	1000.000	1092.930	-9.3	114	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	116	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1045.592	-4.6	115	0.00
80	T	Butyl benzyl phthalate	1000.000	1011.767	-1.2	114	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	980.779	1.9	115	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2025.163	-1.3	101	0.00
83	T	Benz(a)anthracene	1000.000	1039.863	-4.0	118	0.00
84	T	Chrysene	1000.000	1020.998	-2.1	116	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1007.488	-0.7	114	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	119	0.00
87	T	Di-n-octyl phthalate	1000.000	993.336	0.7	118	0.00
88	T	Benzo(b)fluoranthene	1000.000	1030.121	-3.0	119	0.00
89	T	Benzo(k)fluoranthene	1000.000	1016.408	-1.6	117	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2049.178	-2.5	118	0.00
91	T	Benzo(e)pyrene	1000.000	1058.645	-5.9	115	0.00
92	T	Benzo(a)pyrene	1000.000	1035.112	-3.5	118	0.00
93	T	Perylene	1000.000	1170.703	-17.1	135	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	119	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	956.675	4.3	117	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1019.034	-1.9	118	0.00
97 T	Benzo(g,h,i)perylene	1000.000	1063.811	-6.4	116	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121912.D
Acq On : 12 Apr 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN1
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

T-01

Quant Time: Apr 15 08:50:09 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/15/19

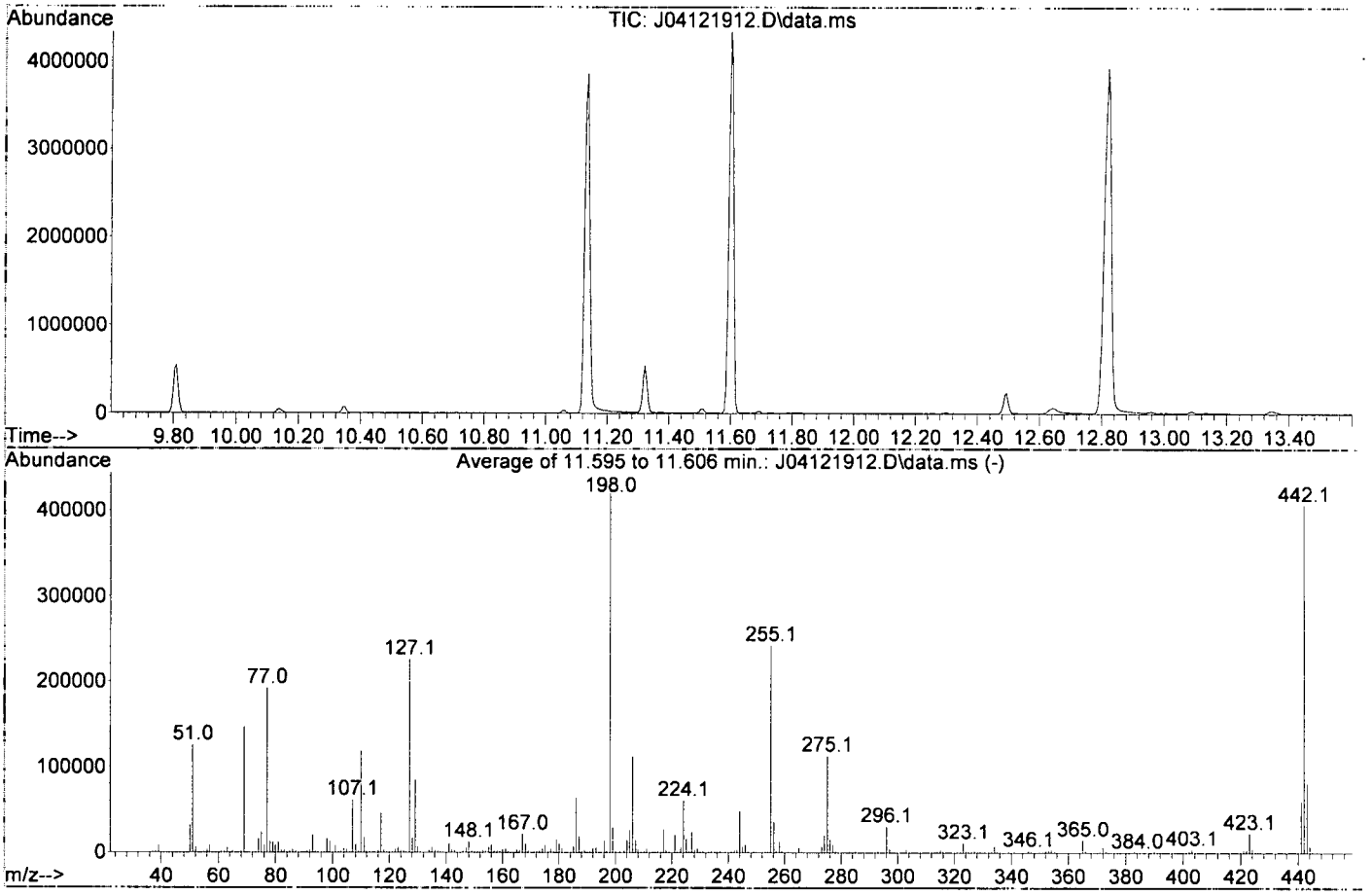
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.749	150	105364	2.00	ug/mL		0.00
2) Naphthalene-d8	8.022	136	259999	2.00	ug/mL		0.00
3) Acenaphthene-d10	9.809	162	118988	2.00	ug/mL		0.00
5) Phenanthrene-d10	11.323	188	190047	2.00	ug/mL		0.00
11) Chrysene-d12	15.104	240	146844	2.00	ug/mL		0.00
12) Perylene-d12	17.072	264	128559	2.00	ug/mL		0.00
13) Dibenz(a,h)anthracene-...	18.361	292	108852	2.00	ug/mL	#	0.00
Target Compounds							Qvalue
4) Pentachlorophenol	11.135	266	496307	43.01	ug/mL		97
6) DFTPP	11.606	442	509644	48.91	ug/mL	#	69
7) Benzidine	12.820	184	2327418	37.28	ug/mL		95
8) 4,4-DDE	13.088	TIC	24696	No Calib			
9) 4,4-DDD	13.628	TIC	31921	No Calib			
10) 4,4-DDT	14.232	TIC	7317139	41.59	ug/mL		98

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

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121912.D
Acq On : 12 Apr 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN1
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP-625.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Apr 15 08:49:58 2019



AutoFind: Scans 1516, 1517, 1518; Background Corrected with Scan 1511

T-01

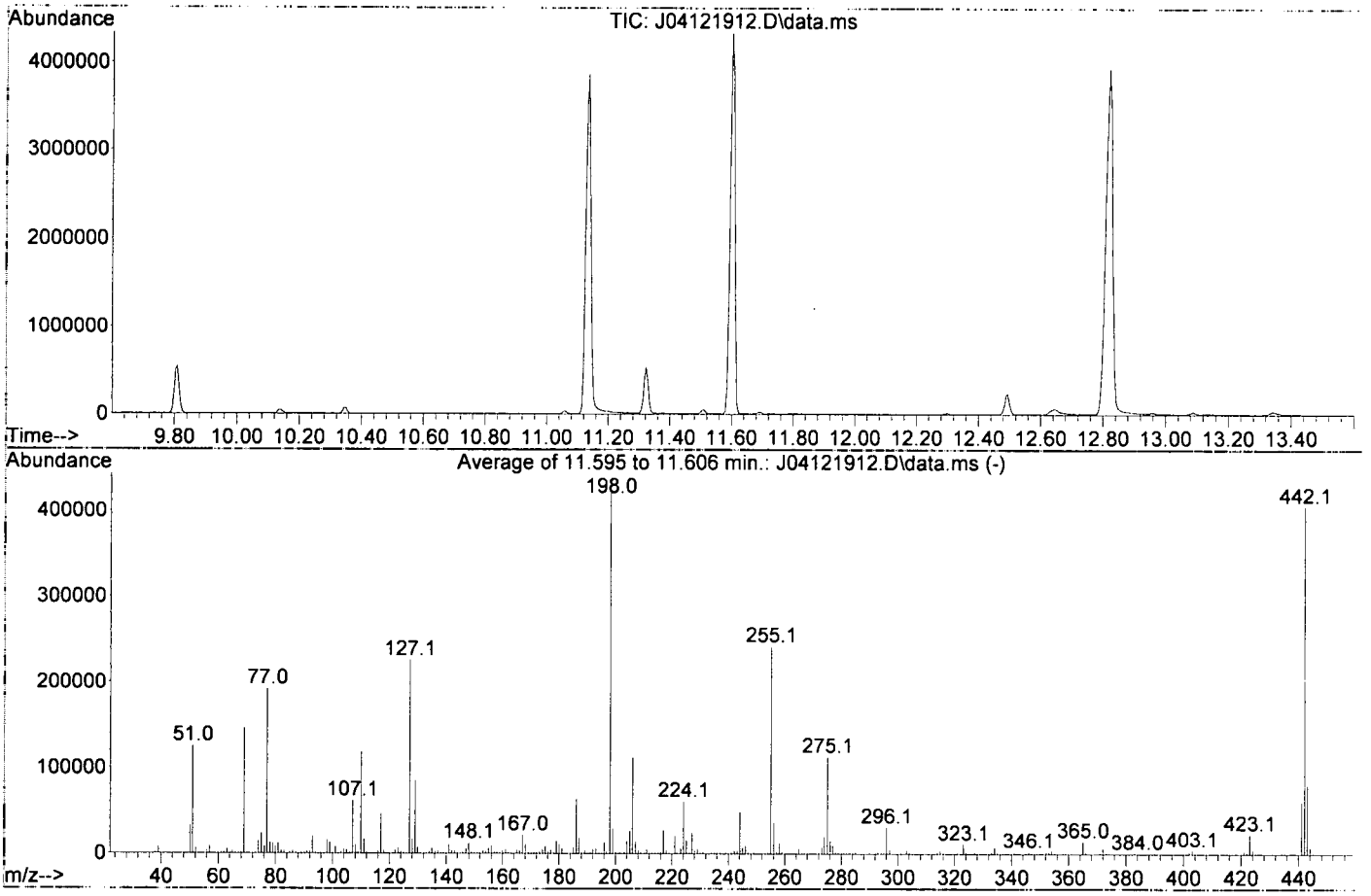
4/15/19

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	29.7	125636	FAIL*
68	69	0.00	2	1.4	2103	PASS
69	198	0.00	100	34.7	146789	PASS
70	69	0.00	2	0.5	756	PASS
127	198	40	60	53.5	226005	PASS
197	198	0.00	1	0.5	2241	PASS
198	198	100	100	100.0	422549	PASS
199	198	5	9	6.9	29192	PASS
275	198	10	30	26.8	113115	PASS
365	198	1	100	3.4	14380	PASS
441	443	0.01	100	75.1	60699	PASS
442	198	40	100	96.1	406187	PASS
443	442	17	23	19.9	80771	PASS

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121912.D
Acq On : 12 Apr 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN1
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed Apr 10 09:20:15 2019



AutoFind: Scans 1516, 1517, 1518; Background Corrected with Scan 1511

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	29.7	125636	PASS
68	69	0.00	2	1.4	2103	PASS
69	198	0.00	100	34.7	146789	PASS
70	69	0.00	2	0.5	756	PASS
127	198	10	80	53.5	226005	PASS
197	198	0.00	2	0.5	2241	PASS
198	198	100	100	100.0	422549	PASS
199	198	5	9	6.9	29192	PASS
275	198	10	60	26.8	113115	PASS
365	198	1	100	3.4	14380	PASS
441	442	0.01	24	14.9	60699	PASS
442	198	50	200	96.1	406187	PASS
443	442	15	24	19.9	80771	PASS

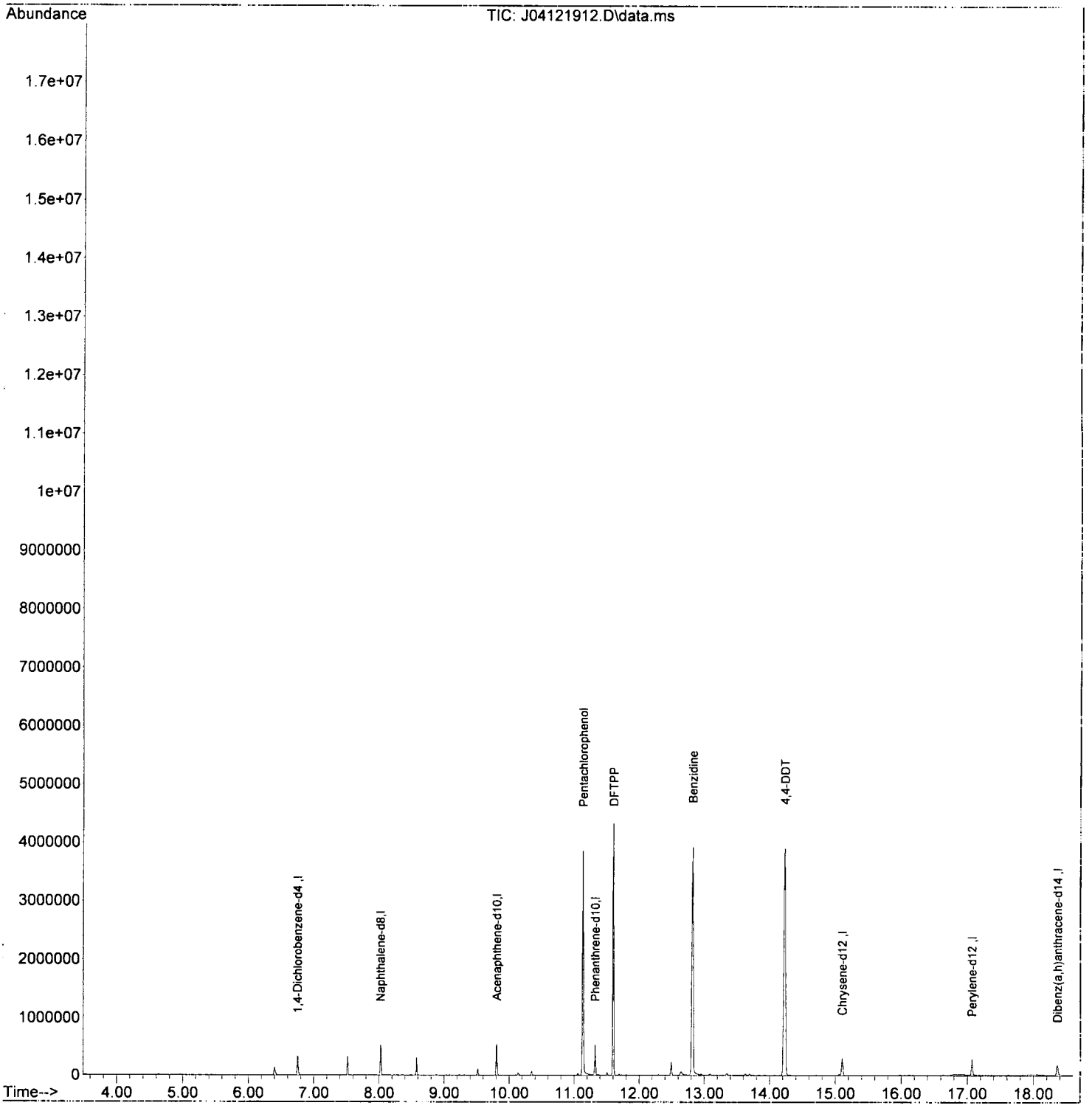
T-01

gjd 4/15/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121912.D
Acq On : 12 Apr 2019 5:19 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN1
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Apr 15 08:50:09 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Apr 15 08:50:50 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.755	150	96555	2.00	ug/mL		0.00
2) Naphthalene-d8	8.023	136	242638	2.00	ug/mL		0.00
3) Acenaphthene-d10	9.809	162	107879	2.00	ug/mL		0.00
5) Phenanthrene-d10	11.323	188	174337	2.00	ug/mL		0.00
11) Chrysene-d12	15.104	240	131592	2.00	ug/mL		0.00
12) Perylene-d12	17.072	264	108112	2.00	ug/mL		0.00
13) Dibenz(a,h)anthracene-...	18.361	292	98890	2.00	ug/mL	#	0.00
Target Compounds							Qvalue
4) Pentachlorophenol	11.135	266	464648	44.41	ug/mL		97
6) DFTPP	11.606	442	460400	48.17	ug/mL	#	66
7) Benzidine	12.820	184	2222430	38.81	ug/mL		95
8) 4,4-DDE	13.088	TIC	21833	No Calib			
9) 4,4-DDD	13.628	TIC	21085	No Calib			
10) 4,4-DDT	14.227	TIC	6698933	41.51	ug/mL		99

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

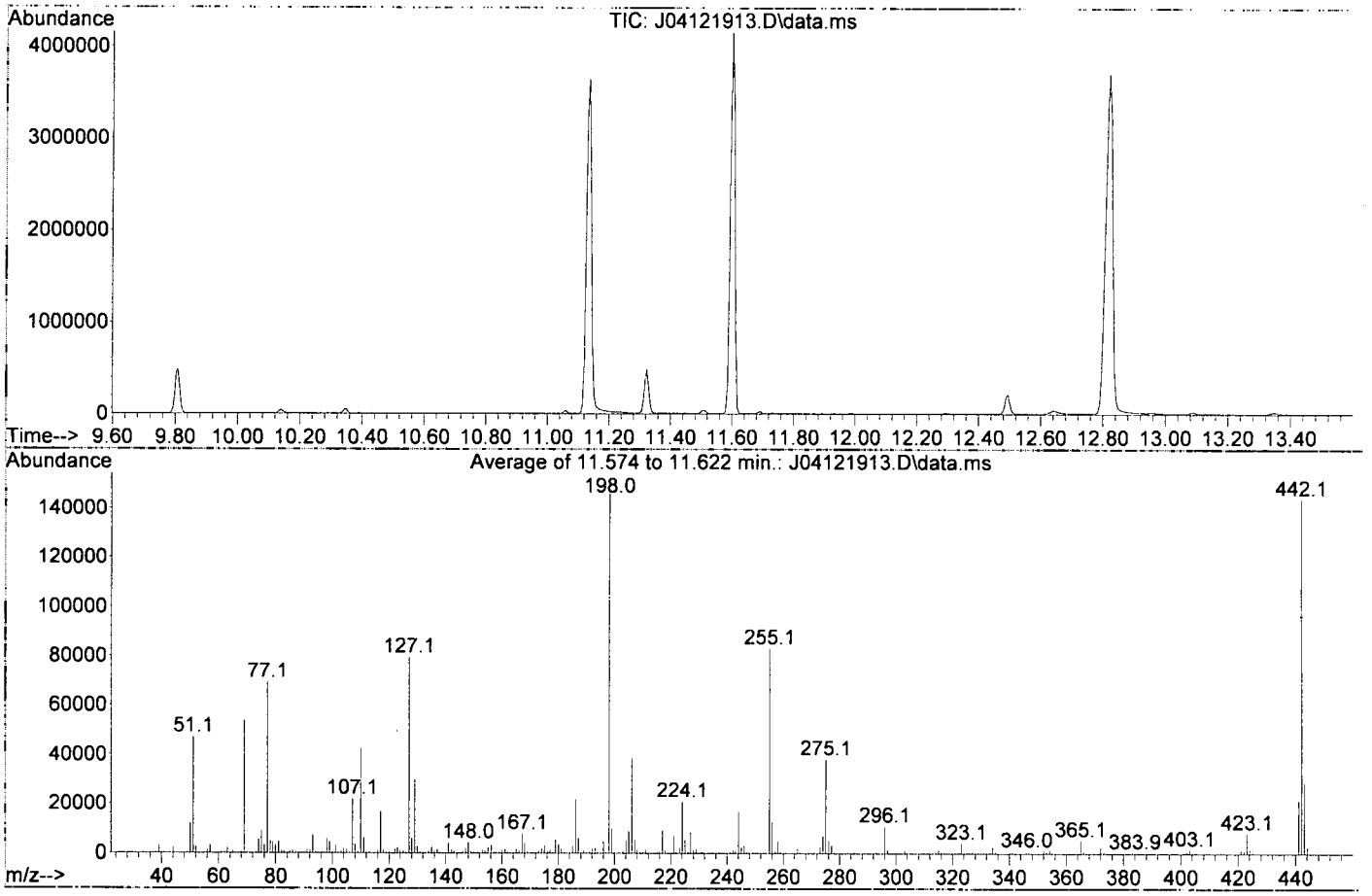
DFTPP

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP-625.M
Title : 8270 DFTPP Tune Method
Last Update : Mon Apr 15 08:49:58 2019

JK 4/15/19



Spectrum Information: Average of 11.574 to 11.622 min.

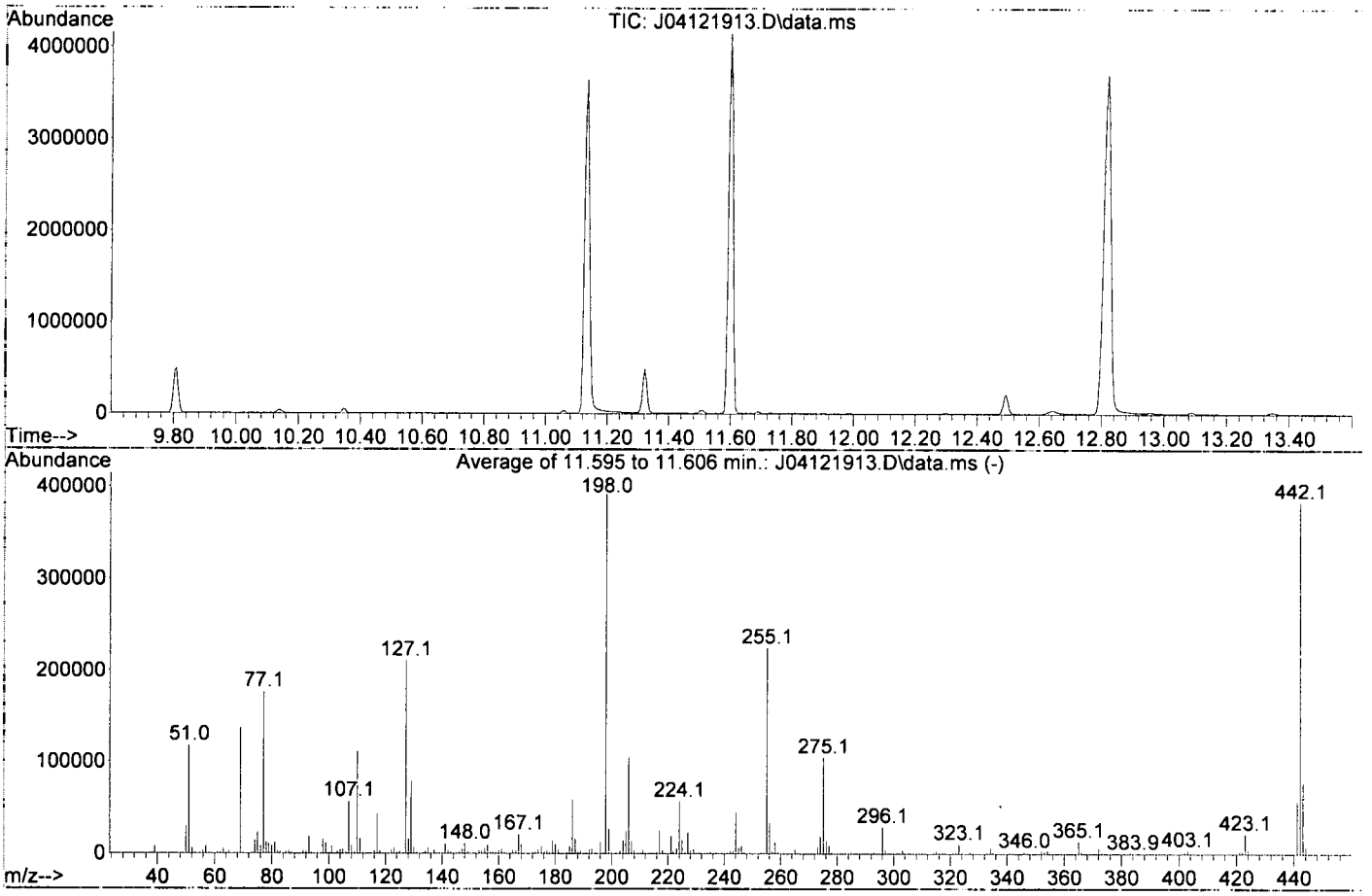
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.1	47075	PASS
68	69	0.00	2	1.4	739	PASS
69	198	0.00	100	36.8	53963	PASS
70	69	0.00	2	0.6	303	PASS
127	198	40	60	54.1	79320	PASS
197	198	0.00	1	0.3	412	PASS
198	198	100	100	100.0	146603	PASS
199	198	5	9	6.8	9971	PASS
275	198	10	30	26.0	38183	PASS
365	198	1	100	3.5	5166	PASS
441	443	0.01	100	75.0	21528	PASS
442	198	40	100	98.1	143756	PASS
443	442	17	23	20.0	28722	PASS

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed Apr 10 09:20:15 2019

JD 4/15/19



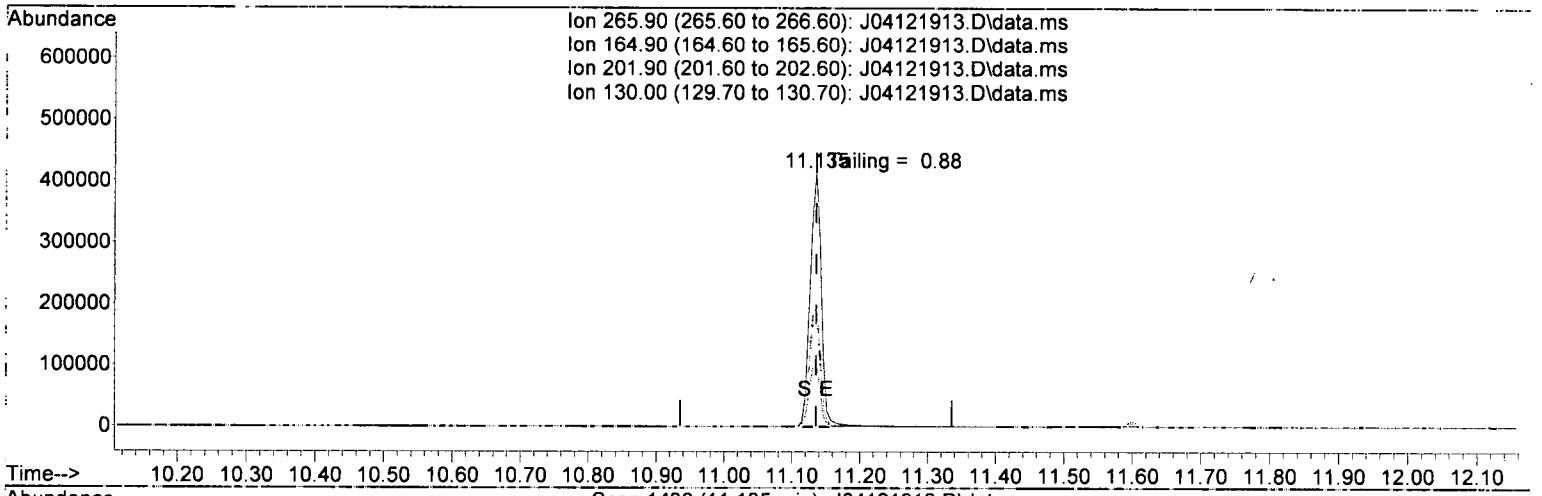
AutoFind: Scans 1516, 1517, 1518; Background Corrected with Scan 1511

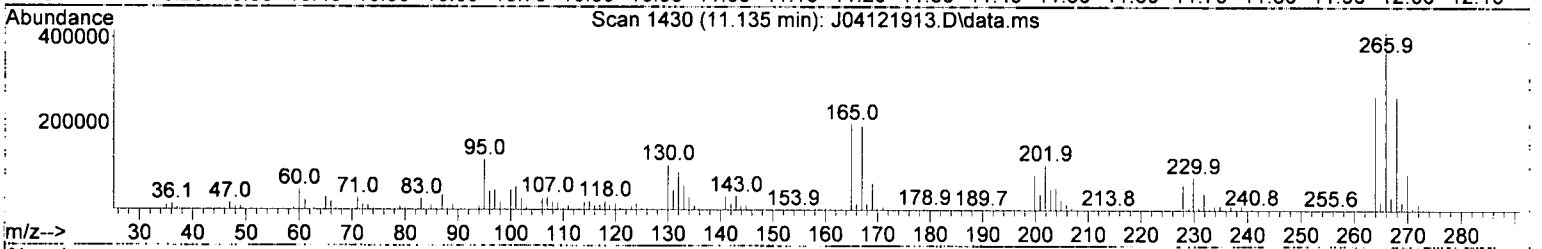
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	29.9	117992	PASS
68	69	0.00	2	1.4	1916	PASS
69	198	0.00	100	34.8	137277	PASS
70	69	0.00	2	0.5	700	PASS
127	198	10	80	53.5	211115	PASS
197	198	0.00	2	0.3	1356	PASS
198	198	100	100	100.0	394773	PASS
199	198	5	9	6.9	27253	PASS
275	198	10	60	26.5	104576	PASS
365	198	1	100	3.4	13573	PASS
441	442	0.01	24	14.9	57208	PASS
442	198	50	200	97.2	383808	PASS
443	442	15	24	20.2	77488	PASS

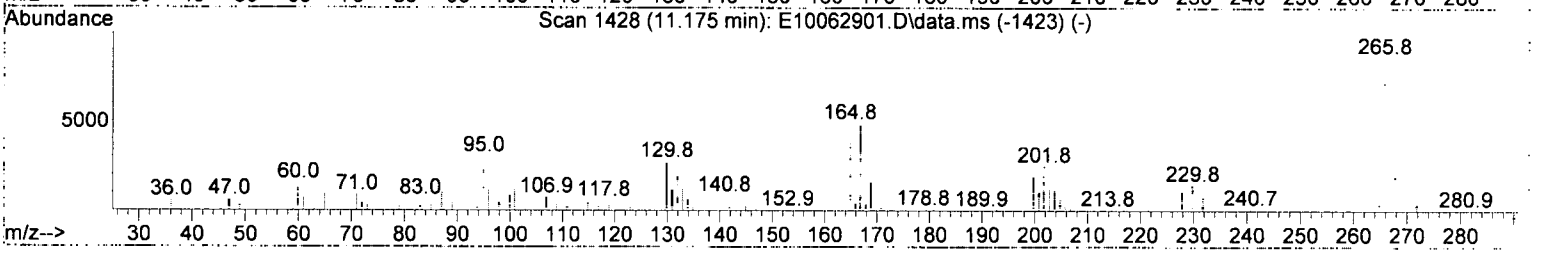
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Apr 15 08:50:50 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121913.D\data.ms

(4) Pentachlorophenol

11.135min (+ 0.000) 44.41 ug/mL

response 464648

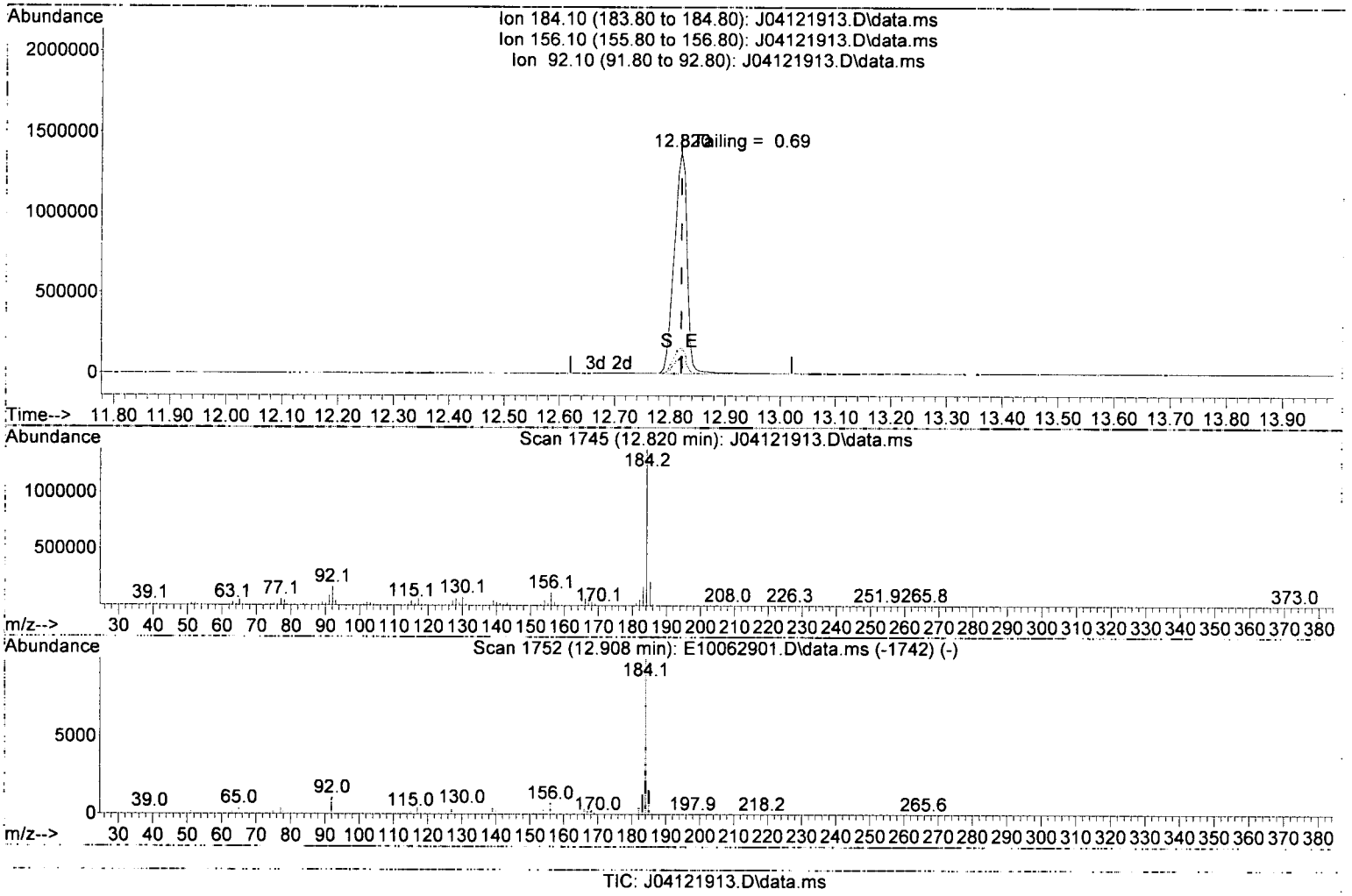
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.80	47.90
201.90	25.10	25.27
130.00	27.20	25.16

4/15/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Apr 15 08:50:50 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121913.D\data.ms

(7) Benzidine

12.820min (+ 0.000) 38.81 ug/mL

response 2222430

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.40	8.11
92.10	8.40	11.75
0.00	0.00	0.00

4/15/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9D12042-TUN2
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	21833		
DDD	21085		
DDT	6698933	0.64	PASS

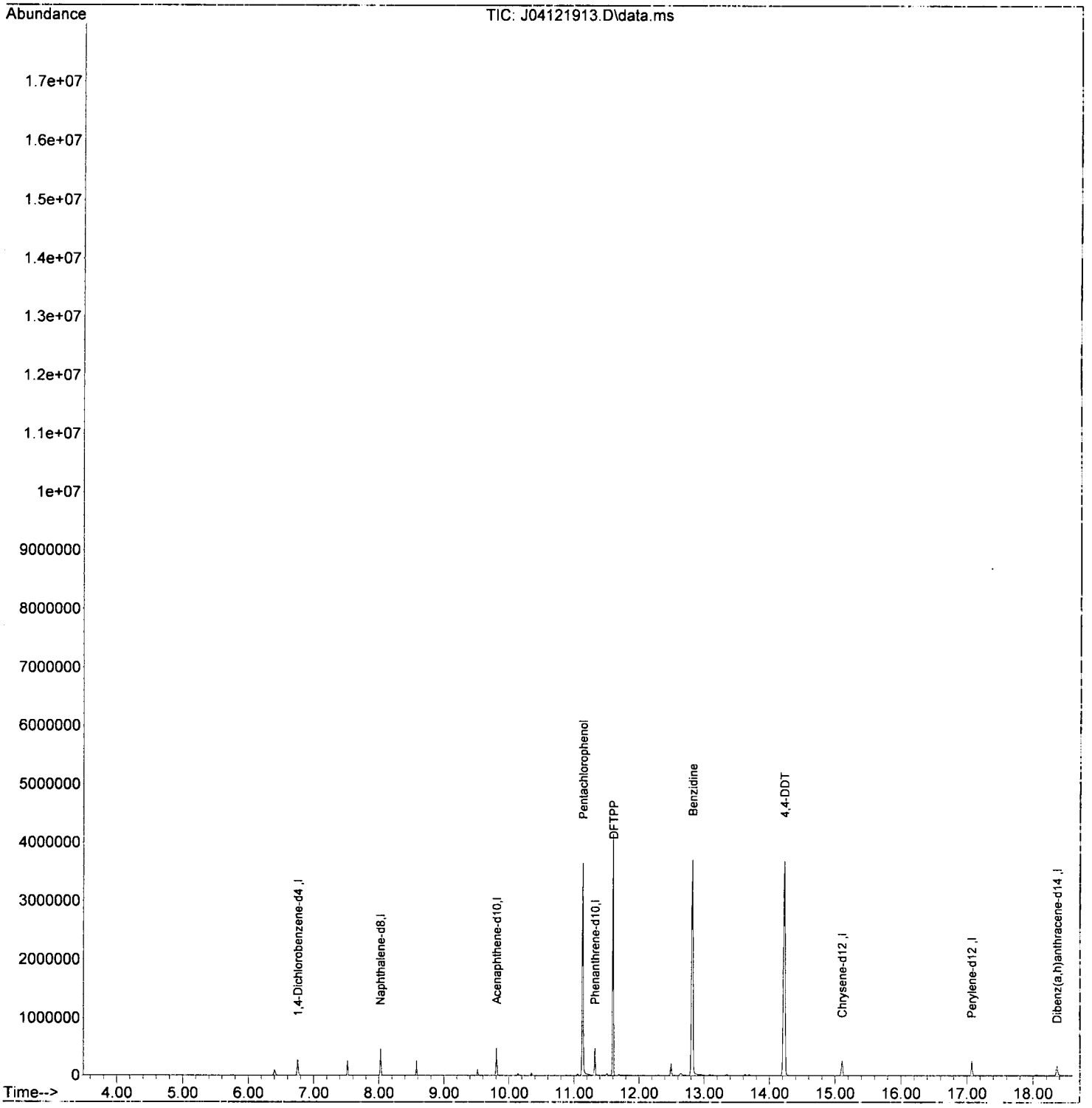
Breakdown must be less than 20% to accept sample data.

9/15/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121913.D
Acq On : 12 Apr 2019 5:47 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-TUN2
Misc : 1x, A19D089 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Apr 15 08:50:50 2019
Quant Method : C:\msdchem\1\methods\DFTPP-625.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Mon Apr 15 08:49:58 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:51 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JD 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	191647	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	826553	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.863	162	414672	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	690915	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	599238	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.870	264	535993	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.261	292	488117	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.632	112	56	0.42	ng/ml	0.10
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	6.520	93	66	N.D.		
8) Bis(2-chloroethyl) ether	6.520	93	66	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	6.953	108	54	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	7.231	107	56	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.365	77	53	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	7.809	105	64	535.50	ng/ml#	65
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.638	107	83	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 : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:51 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

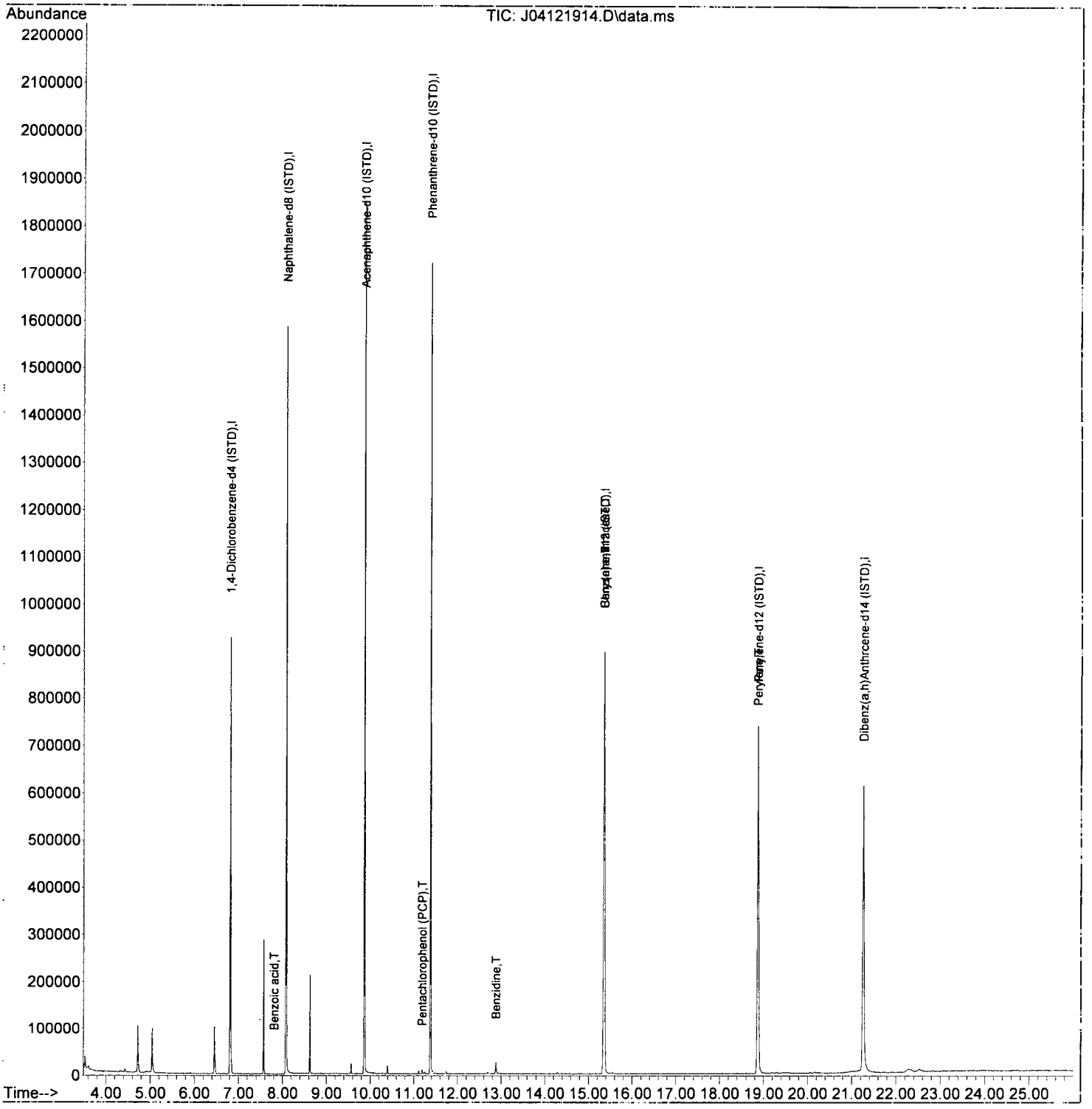
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	0.000		0	N.D.		
50) 3-Nitroaniline	0.000		0	N.D.		
51) Acenaphthene	9.863	153	128	N.D.		
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	0.000		0	N.D.		
54) 2,4-Dinitrotoluene	10.018	165	104	N.D.		
55) Dibenzofuran	0.000		0	N.D.		
56) 2,3,5,6-Tetrachlorophenol	10.205	232	90	N.D.		
57) 2,3,4,6-Tetrachlorophenol	10.205	232	90	N.D.		
58) Diethyl phthalate	10.280	149	73	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)	10.569	77	73	N.D.		
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
69) Hexachlorobenzene	0.000		0	N.D.		
70) Pentachlorophenol (PCP)	11.184	266	1392	81.96	ng/ml	81
71) Phenanthrene	11.376	178	277	N.D.		
72) Anthracene	11.376	178	277	N.D.		
73) Carbazole	0.000		0	N.D.		
74) Di-n-butyl phthalate	11.949	149	56	Below Cal		78
75) Fluoranthene	0.000		0	N.D.		
76) Benzidine	12.874	184	15679	203.41	ng/ml	97
77) Pyrene	0.000		0	N.D.		
80) Butyl benzyl phthalate	0.000		0	N.D.		
81) Bis(2-ethylhexyl) adipate	14.291	129	1022	Below Cal		93
82) 3,3-Dichlorobenzidine	15.281	252	236	Below Cal		83
83) Benz(a)anthracene	15.350	228	1625	4.71	ng/ml	66
84) Chrysene	15.350	228	1600	4.92	ng/ml	63
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	18.581	252	72	N.D.		
92) Benzo(a)pyrene	0.000		0	N.D.		
93) Perylene	18.864	252	1719	6.02	ng/ml	69
95) Indeno(1,2,3-cd)pyrene	21.255	276	344	N.D.		
96) Dibenz(a,h)anthracene	21.325	278	129	N.D.		
97) Benzo(g,h,i)perylene	0.000		0	N.D.		

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:51 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Requant
DD 4/15/19

Quant Time: Apr 15 12:07:03 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	191647	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	826553	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.863	162	414672	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	690915	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	599238	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.870	264	535993	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.261	292	488117	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.632	112	56	0.45	ng/ml	0.10
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	0.000		0	N.D.		
6) Phenol	0.000		0	N.D.		
7) Aniline	6.520	93	66	N.D.		
8) Bis(2-chloroethyl) ether	6.520	93	66	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	6.953	108	54	32.86	ng/ml#	74
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.		
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.		
17) 3+4-Methylphenol	7.231	107	56	9.40	ng/ml#	14
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.365	77	53	N.D.		
22) Isophorone	0.000		0	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	7.809	105	64	752.88	ng/ml#	65
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.638	107	83	64.31	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.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:03 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

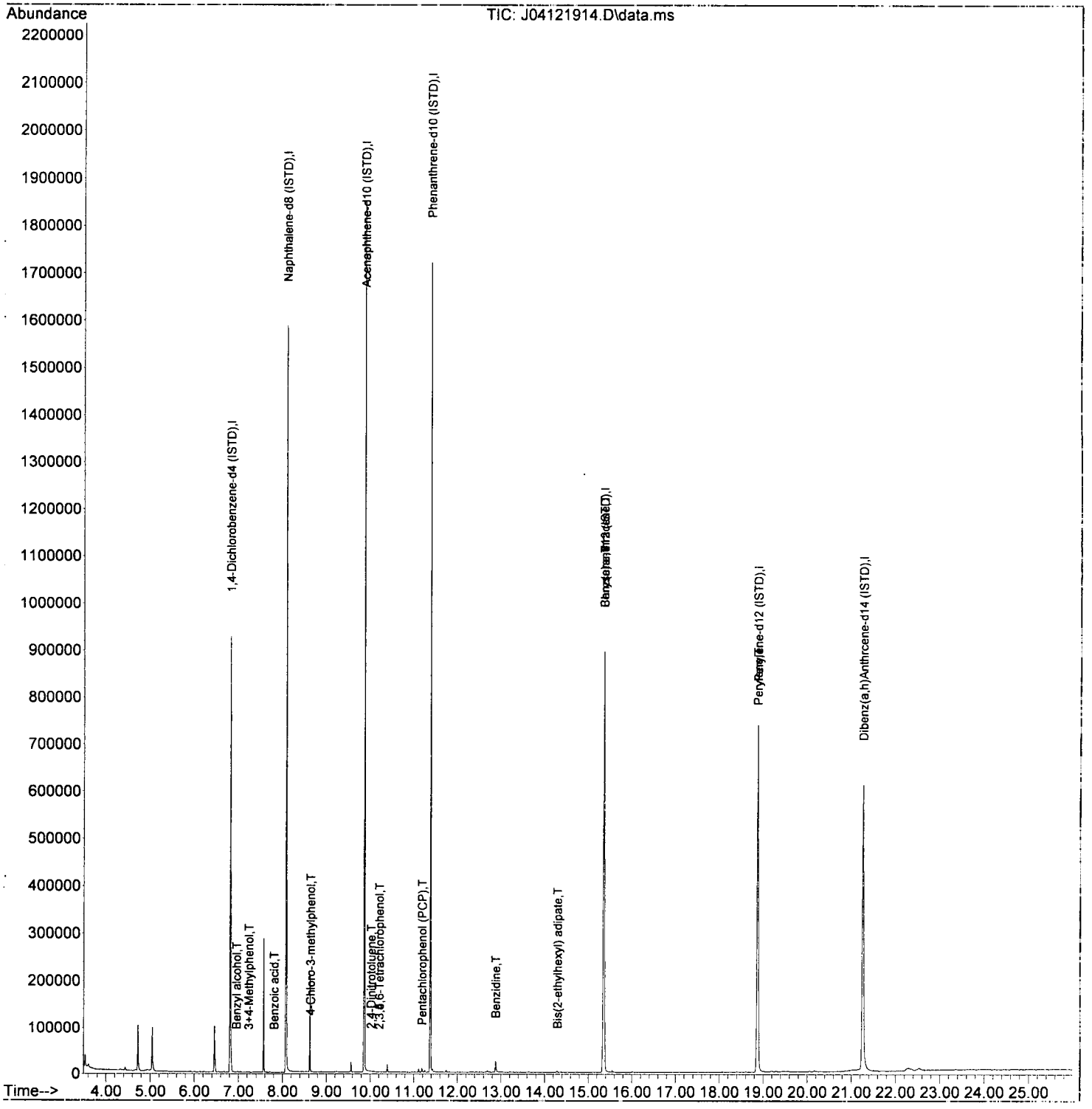
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.863	153	128	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	10.018	165	104	61.45 ng/ml#	17
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.205	232	90	36.65 ng/ml#	54
57) 2,3,4,6-Tetrachlorophenol	10.205	232	90	14.74 ng/ml#	36
58) Diethyl phthalate	10.280	149	73	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)	10.569	77	73	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.184	266	1392	58.47 ng/ml	81
71) Phenanthrene	11.376	178	277	N.D.	
72) Anthracene	11.376	178	277	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.949	149	56	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.874	184	15679	191.05 ng/ml	97
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.291	129	1022	5.99 ng/ml	93
82) 3,3-Dichlorobenzidine	15.281	252	236	Below Cal	83
83) Benz(a)anthracene	15.350	228	1625	4.97 ng/ml	66
84) Chrysene	15.350	228	1600	5.04 ng/ml	63
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	18.581	252	72	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.864	252	1719	6.32 ng/ml	69
95) Indeno(1,2,3-cd)pyrene	21.255	276	344	N.D.	
96) Dibenz(a,h)anthracene	21.325	278	129	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121914.D
Acq On : 12 Apr 2019 6:15 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:03 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:57 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	205604	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	838248	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.863	162	422298	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	695574	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	610059	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.870	264	540507	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.260	292	486802	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	2233	15.43	ng/ml	0.00
5) Phenol-d6(Surr)	6.439	99	2259	11.76	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.359	82	2134	12.91	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	4958	15.77	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	384	9.61	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	4983	16.49	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.161	74	1826m	17.13	ng/ml	
3) Pyridine	4.230	79	2498	14.70	ng/ml	81
6) Phenol	6.450	94	2105	9.75	ng/ml	94
7) Aniline	6.488	93	3702	19.64	ng/ml	99
8) Bis(2-chloroethyl) ether	6.541	93	3544	22.18	ng/ml	94
9) 2-Chlorophenol	6.605	128	2212	14.62	ng/ml	94
10) 1,3-Dichlorobenzene	6.760	146	3006	18.87	ng/ml	99
11) 1,4-Dichlorobenzene	6.824	146	3174	20.45	ng/ml	85
12) Benzyl alcohol	6.948	108	527	5.19	ng/ml	87
13) 1,2-Dichlorobenzene	6.985	146	2889	18.96	ng/ml	98
14) 2-Methylphenol	7.044	107	1724	14.50	ng/ml	91
15) 2,2'-Oxybis(1-Chloropr...	7.071	45	4404	21.04	ng/ml	89
16) N-Nitrosodi-n-propylamine	7.199	70	2080	17.68	ng/ml	91
17) 3+4-Methylphenol	7.194	107	1519	10.39	ng/ml	89
18) Hexachloroethane	7.322	201	711	16.28	ng/ml	77
20) Nitrobenzene	7.375	77	2275	14.10	ng/ml	99
22) Isophorone	7.605	82	5760	18.13	ng/ml	94
23) 2-Nitrophenol	7.696	139	482	5.84	ng/ml	62
24) 2,4-Dimethylphenol	7.728	122	1331	10.24	ng/ml	87
25) Bis(2-chloroethoxy) me...	7.814	93	2366	13.19	ng/ml	72
26) Benzoic acid	7.766	105	55	535.38	ng/ml#	71
27) 2,4-Dichlorophenol	7.937	162	425	4.07	ng/ml	67
28) 1,2,4-Trichlorobenzene	8.023	180	2246	17.81	ng/ml	96
29) Naphthalene	8.103	128	8711	19.48	ng/ml	99
30) 4-Chloroaniline	8.146	127	1652	15.32	ng/ml	91
31) Hexachlorobutadiene	8.231	225	1492	22.43	ng/ml	77
32) 4-Chloro-3-methylphenol	8.632	107	606	4.80	ng/ml#	68
33) 2-Methylnaphthalene	8.798	142	4843	16.21	ng/ml	92
34) 1-Methylnaphthalene	8.900	142	5287	18.44	ng/ml	95
36) Hexachlorocyclopentadiene	8.964	237	396	6.01	ng/ml	93
37) 2,4,6-Trichlorophenol	9.082	196	637	8.54	ng/ml	71
38) 2,4,5-Trichlorophenol	9.119	198	570	7.78	ng/ml	83
39) 1,1'-Biphenyl	9.269	154	5440	15.36	ng/ml	88
41) 2-Chloronaphthalene	9.296	162	4110	16.40	ng/ml	91
42) 2-Nitroaniline	9.392	138	491	5.67	ng/ml	83
43) 2,6-Dimethylnaphthalene	9.429	156	4471	17.28	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:57 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

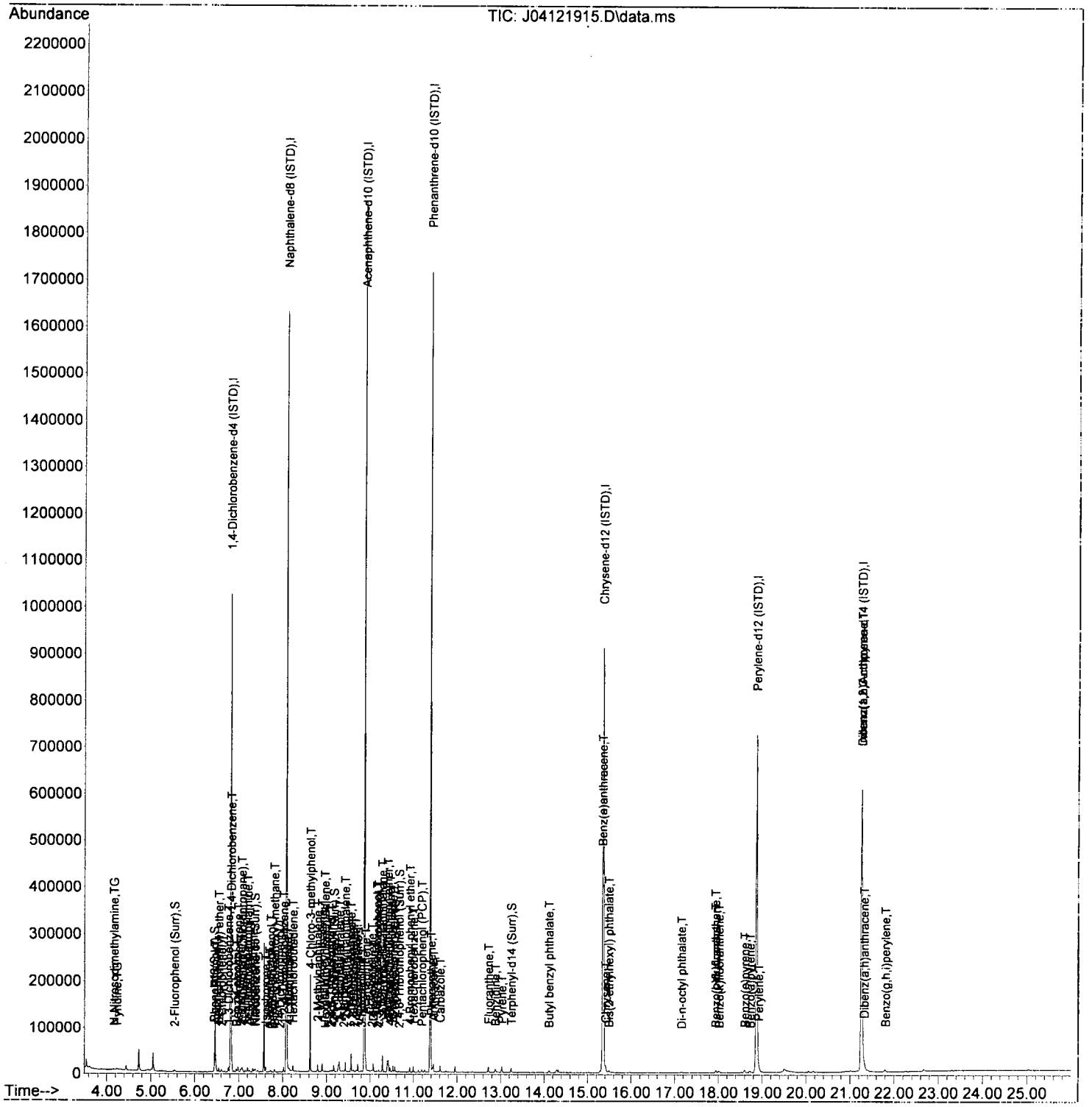
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	72	N.D.		
45) Dimethyl phthalate	9.563	163	5716	18.78	ng/ml	93
46) 1,3-Dinitrobenzene	9.595	168	137	3.07	ng/ml#	21
47) 2,6-Dinitrotoluene	9.627	165	429	6.50	ng/ml	91
48) 1,2-Dinitrobenzene	9.675	168	247	8.02	ng/ml#	68
49) Acenaphthylene	9.718	152	8037	17.73	ng/ml	91
50) 3-Nitroaniline	9.804	138	533	16.13	ng/ml#	76
51) Acenaphthene	9.895	153	5944	20.76	ng/ml	93
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.986	139	81	N.D.		
54) 2,4-Dinitrotoluene	10.039	165	516	6.23	ng/ml	79
55) Dibenzofuran	10.071	168	7180	19.60	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.157	232	365	6.25	ng/ml	82
57) 2,3,4,6-Tetrachlorophenol	10.194	232	466	7.68	ng/ml	89
58) Diethyl phthalate	10.280	149	5489	18.31	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.274	170	4447	18.62	ng/ml	85
60) Fluorene	10.419	166	5519	19.07	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.408	204	2599	19.74	ng/ml	95
62) 4-Nitroaniline	10.424	138	410	7.27	ng/ml	75
63) 4,6-Dinitro-2-methylph...	10.462	198	66	63.96	ng/ml#	1
65) N-Nitrosodiphenylamine	10.526	169	3694	15.82	ng/ml	83
66) Azobenzene (1,2-DPH)	10.569	77	5526	17.81	ng/ml	89
68) 4-Bromophenyl phenyl e...	10.911	248	1143	14.80	ng/ml	91
69) Hexachlorobenzene	10.991	284	2003	22.87	ng/ml	87
70) Pentachlorophenol (PCP)	11.184	266	966	71.99	ng/ml	81
71) Phenanthrene	11.403	178	8041	20.71	ng/ml	93
72) Anthracene	11.451	178	6943	17.74	ng/ml	90
73) Carbazole	11.606	167	5247	7.28	ng/ml	92
74) Di-n-butyl phthalate	11.948	149	6378	Below Cal		96
75) Fluoranthene	12.719	202	6550	15.31	ng/ml	91
76) Benzidine	12.874	184	5651	67.75	ng/ml	90
77) Pyrene	13.029	202	7061	16.03	ng/ml	96
80) Butyl benzyl phthalate	14.109	149	1437	6.93	ng/ml	91
81) Bis(2-ethylhexyl) adipate	14.291	129	2012	Below Cal		92
82) 3,3-Dichlorobenzidine	15.286	252	2133	Below Cal		97
83) Benz(a)anthracene	15.334	228	6716	19.13	ng/ml	88
84) Chrysene	15.409	228	6300	19.02	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.484	149	1961	7.18	ng/ml	82
87) Di-n-octyl phthalate	17.153	149	1918	4.78	ng/ml	95
88) Benzo(b)fluoranthene	17.934	252	3779	12.19	ng/ml	91
89) Benzo(k)fluoranthene	18.014	252	3388	11.63	ng/ml	97
90) Benzo(b+k)fluoranthene	17.934	252	8014	26.11	ng/ml	92
91) Benzo(e)pyrene	18.602	252	4564	15.02	ng/ml	97
92) Benzo(a)pyrene	18.725	252	3153	11.14	ng/ml	86
93) Perylene	18.918	252	5247	18.21	ng/ml	97
95) Indeno(1,2,3-cd)pyrene	21.260	276	5842	21.89	ng/ml	84
96) Dibenz(a,h)anthracene	21.319	278	4686	18.52	ng/ml	89
97) Benzo(g,h,i)perylene	21.806	276	4399	15.81	ng/ml	91

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121915.D
Acq On : 12 Apr 2019 6:51 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:54:57 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	209444	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	855155	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.863	162	428361	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	701109	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.350	240	611518	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.870	264	543287	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.260	292	498877	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	5365	36.39	ng/ml	0.00
5) Phenol-d6(Surr)	6.439	99	6263	32.01	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	4963	29.48	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	14620	45.83	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	864	21.44	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	13758	45.43	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.150	74	5209	47.98	ng/ml	96
3) Pyridine	4.204	79	7142	41.27	ng/ml	96
6) Phenol	6.450	94	7594	34.52	ng/ml	97
7) Aniline	6.487	93	10528	54.83	ng/ml	96
8) Bis(2-chloroethyl) ether	6.541	93	8634	53.05	ng/ml	96
9) 2-Chlorophenol	6.605	128	5987	38.86	ng/ml	79
10) 1,3-Dichlorobenzene	6.755	146	8063	49.68	ng/ml	98
11) 1,4-Dichlorobenzene	6.824	146	8325	52.66	ng/ml	93
12) Benzyl alcohol	6.953	108	1873	18.11	ng/ml#	74
13) 1,2-Dichlorobenzene	6.980	146	8131	52.40	ng/ml	94
14) 2-Methylphenol	7.044	107	4259	35.18	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.071	45	10826	50.78	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.199	70	5246	43.78	ng/ml	91
17) 3+4-Methylphenol	7.194	107	4279	28.73	ng/ml	96
18) Hexachloroethane	7.322	201	2137	48.05	ng/ml	78
20) Nitrobenzene	7.370	77	5793	35.25	ng/ml	97
22) Isophorone	7.605	82	15037	46.39	ng/ml	99
23) 2-Nitrophenol	7.691	139	1610	19.13	ng/ml	94
24) 2,4-Dimethylphenol	7.723	122	3681	27.77	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.814	93	7058	38.57	ng/ml	93
26) Benzoic acid	7.894	105	106	535.95	ng/ml#	53
27) 2,4-Dichlorophenol	7.937	162	2177	20.43	ng/ml	93
28) 1,2,4-Trichlorobenzene	8.023	180	6141	47.73	ng/ml	95
29) Naphthalene	8.103	128	23251	50.97	ng/ml	98
30) 4-Chloroaniline	8.146	127	4055	36.85	ng/ml	80
31) Hexachlorobutadiene	8.231	225	3496	51.51	ng/ml	93
32) 4-Chloro-3-methylphenol	8.627	107	2641	20.50	ng/ml	93
33) 2-Methylnaphthalene	8.798	142	12740	41.81	ng/ml	95
34) 1-Methylnaphthalene	8.900	142	13733	46.94	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	1375	20.57	ng/ml	83
37) 2,4,6-Trichlorophenol	9.082	196	1647	21.77	ng/ml	84
38) 2,4,5-Trichlorophenol	9.119	198	1719	23.12	ng/ml	83
39) 1,1'-Biphenyl	9.269	154	16008	44.55	ng/ml	98
41) 2-Chloronaphthalene	9.296	162	11226	44.17	ng/ml	98
42) 2-Nitroaniline	9.386	138	1501	17.10	ng/ml	88
43) 2,6-Dimethylnaphthalene	9.429	156	12930	49.27	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

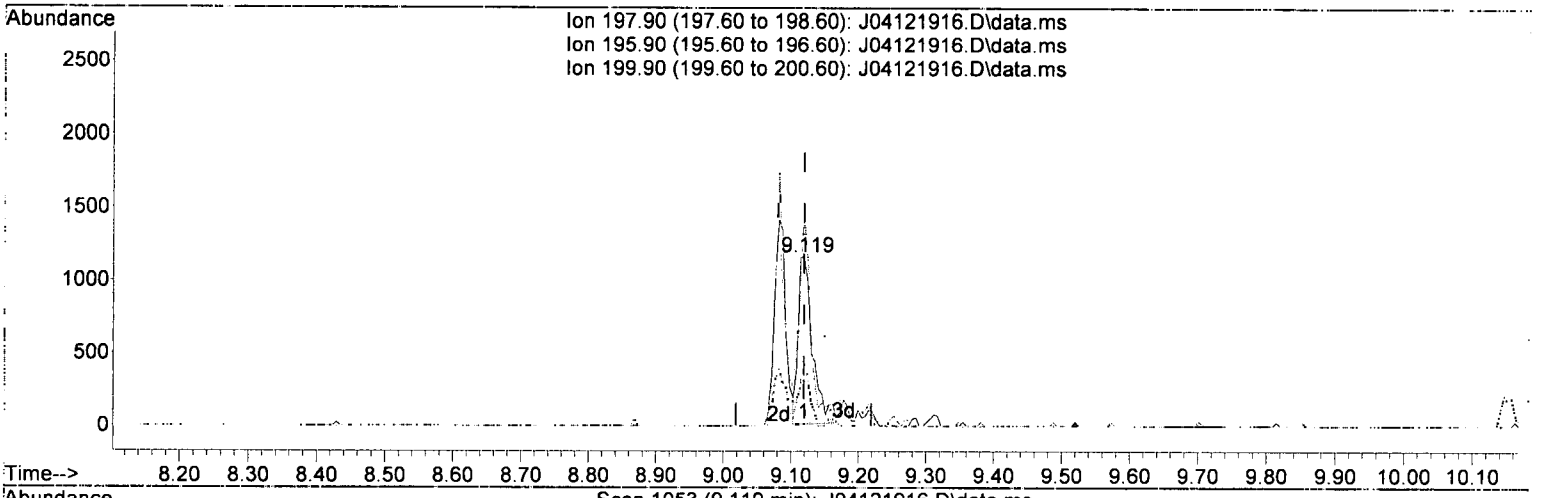
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.520	168	512	12.64	ng/ml#	61
45) Dimethyl phthalate	9.563	163	14804	47.96	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	496	10.98	ng/ml#	1
47) 2,6-Dinitrotoluene	9.627	165	1360	20.32	ng/ml	91
48) 1,2-Dinitrobenzene	9.681	168	594	19.02	ng/ml#	57
49) Acenaphthylene	9.718	152	20809	45.26	ng/ml	98
50) 3-Nitroaniline	9.798	138	1478	30.29	ng/ml	83
51) Acenaphthene	9.895	153	14121	48.61	ng/ml	93
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.964	139	479	9.21	ng/ml#	64
54) 2,4-Dinitrotoluene	10.039	165	1414	16.84	ng/ml	78
55) Dibenzofuran	10.066	168	18996	51.13	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	10.151	232	1033	17.43	ng/ml	83
57) 2,3,4,6-Tetrachlorophenol	10.194	232	1586	25.75	ng/ml	70
58) Diethyl phthalate	10.280	149	14203	46.71	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.280	170	12035	49.68	ng/ml	96
60) Fluorene	10.419	166	14499	49.39	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.408	204	6570	49.20	ng/ml	96
62) 4-Nitroaniline	10.419	138	1321	23.09	ng/ml#	60
63) 4,6-Dinitro-2-methylph...	10.456	198	144	66.03	ng/ml#	1
65) N-Nitrosodiphenylamine	10.526	169	11052	46.96	ng/ml	98
66) Azobenzene (1,2-DPH)	10.569	77	14382	45.98	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.905	248	3328	42.75	ng/ml	95
69) Hexachlorobenzene	10.991	284	4727	53.54	ng/ml	92
70) Pentachlorophenol (PCP)	11.184	266	1190	76.90	ng/ml	94
71) Phenanthrene	11.403	178	20614	52.67	ng/ml	98
72) Anthracene	11.451	178	18968	48.08	ng/ml	96
73) Carbazole	11.606	167	14600	35.92	ng/ml	98
74) Di-n-butyl phthalate	11.948	149	17235	20.46	ng/ml	99
75) Fluoranthene	12.719	202	16870	39.11	ng/ml	97
76) Benzidine	12.874	184	8239	101.83	ng/ml	98
77) Pyrene	13.029	202	18258	41.11	ng/ml	97
80) Butyl benzyl phthalate	14.109	149	4216	20.28	ng/ml	92
81) Bis(2-ethylhexyl) adipate	14.291	129	4520	Below Cal		94
82) 3,3-Dichlorobenzidine	15.291	252	6271	Below Cal		91
83) Benz(a)anthracene	15.329	228	15643	44.45	ng/ml	92
84) Chrysene	15.409	228	15517	46.74	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.489	149	5834	21.30	ng/ml	84
87) Di-n-octyl phthalate	17.169	149	5426	13.45	ng/ml	91
88) Benzo(b)fluoranthene	17.944	252	11314	36.32	ng/ml	91
89) Benzo(k)fluoranthene	18.014	252	11590	39.56	ng/ml	93
90) Benzo(b+k)fluoranthene	18.014	252	23691	76.79	ng/ml	93
91) Benzo(e)pyrene	18.597	252	12166	39.84	ng/ml	93
92) Benzo(a)pyrene	18.725	252	9489	33.36	ng/ml	95
93) Perylene	18.923	252	12964	44.76	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.255	276	13136	48.03	ng/ml	84
96) Dibenz(a,h)anthracene	21.325	278	11403	43.98	ng/ml	91
97) Benzo(g,h,i)perylene	21.795	276	12250	42.97	ng/ml	90

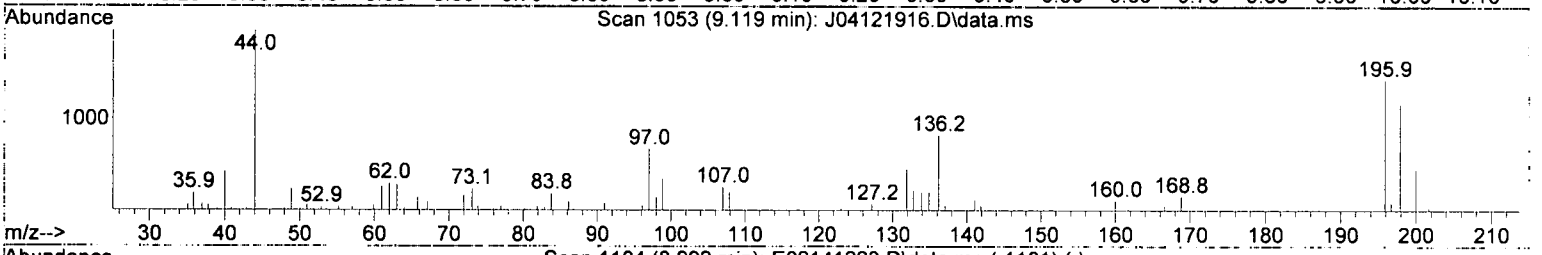
(#) = qualifier out of range (m) = manual integration (+) = signals summed

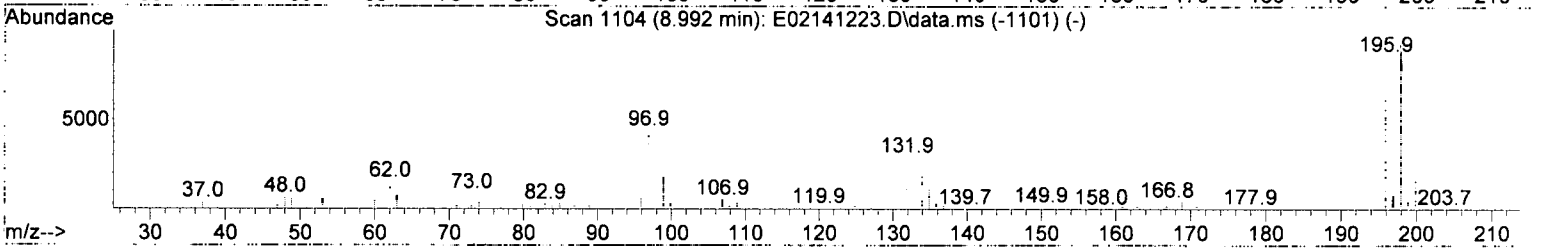
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121916.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 23.12 ng/ml

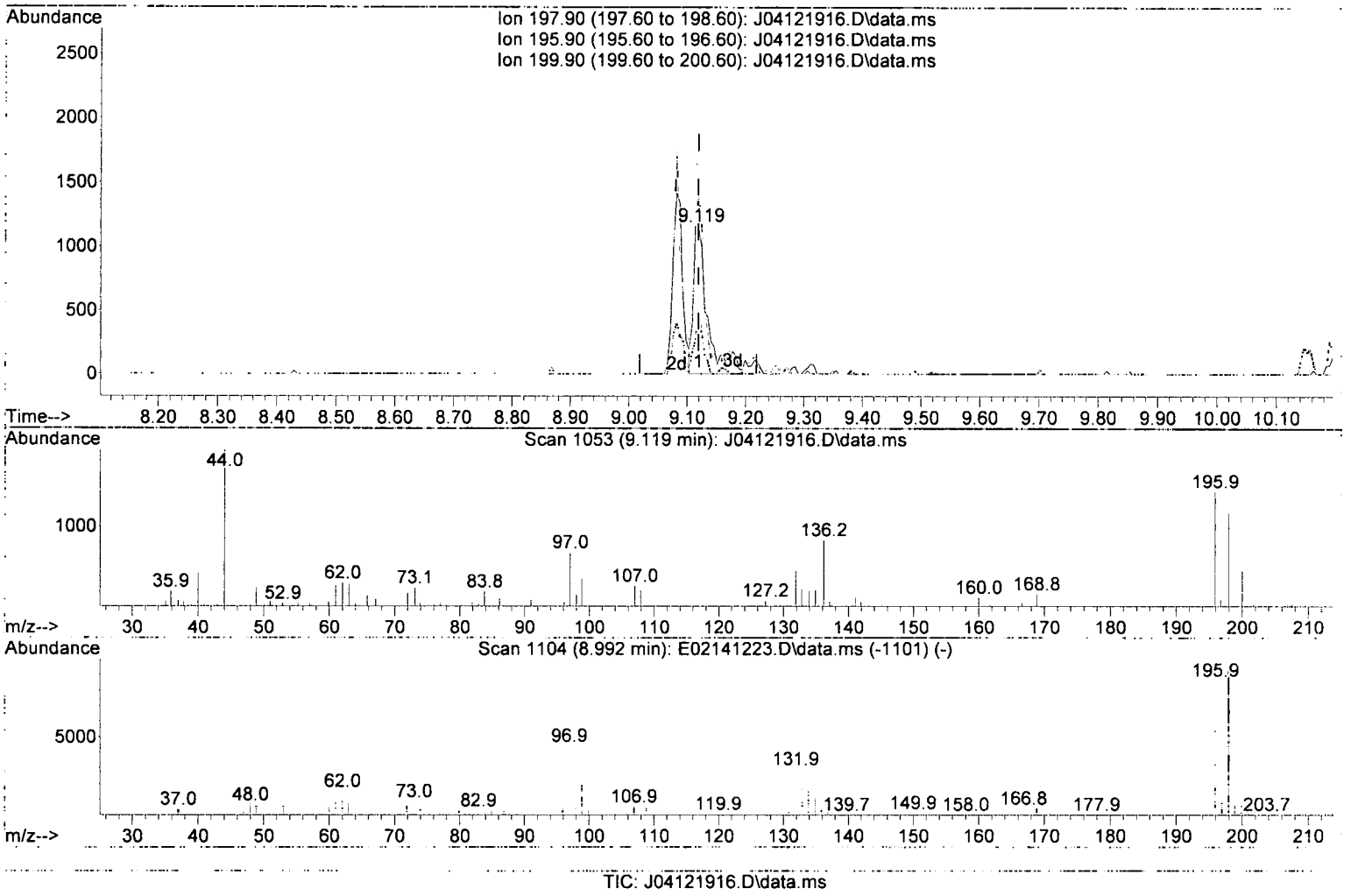
response 1719

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	122.31
199.90	31.10	39.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121916.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 26.05 ng/ml m

response 1937

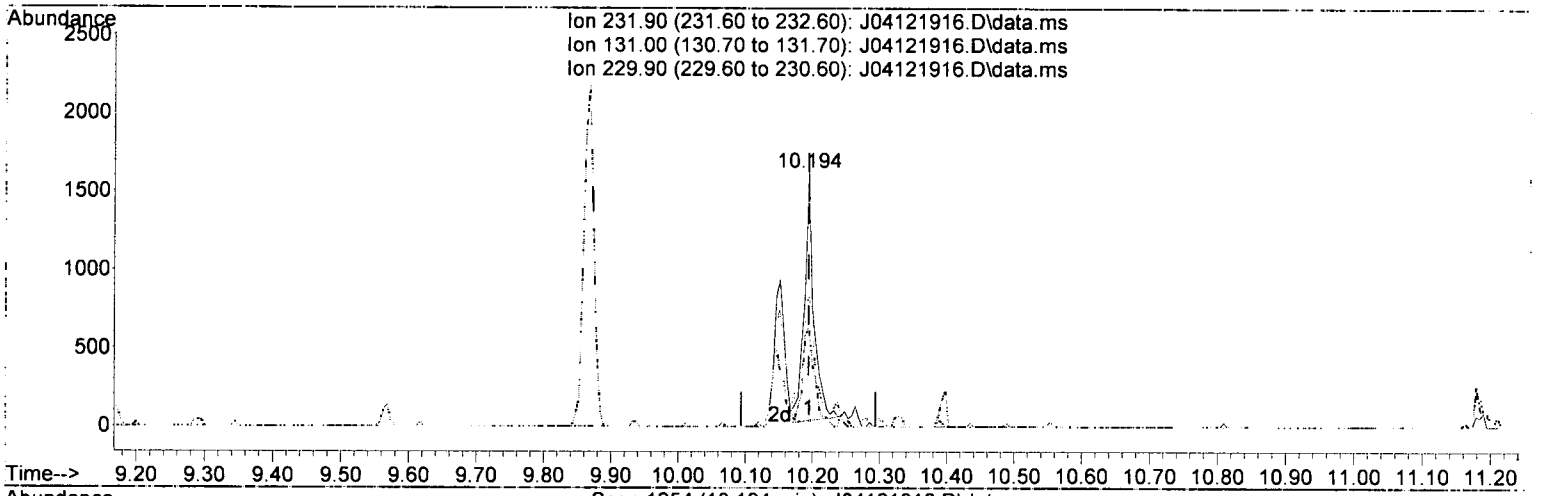
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	122.31
199.90	31.10	39.71
0.00	0.00	0.00

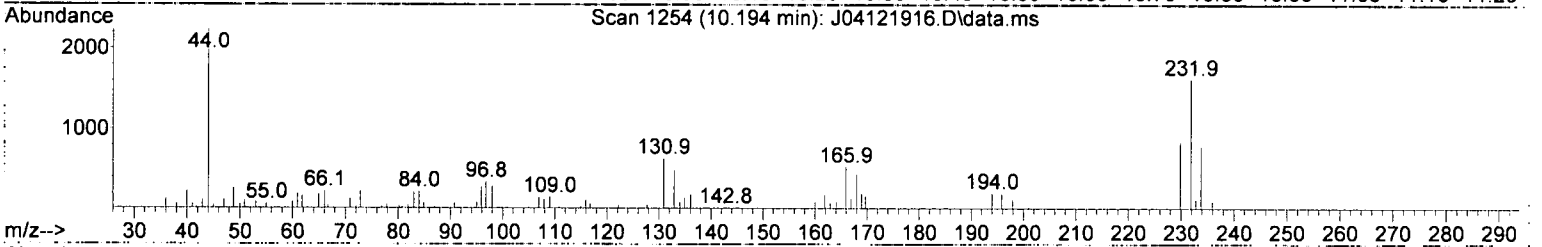
4/15/19

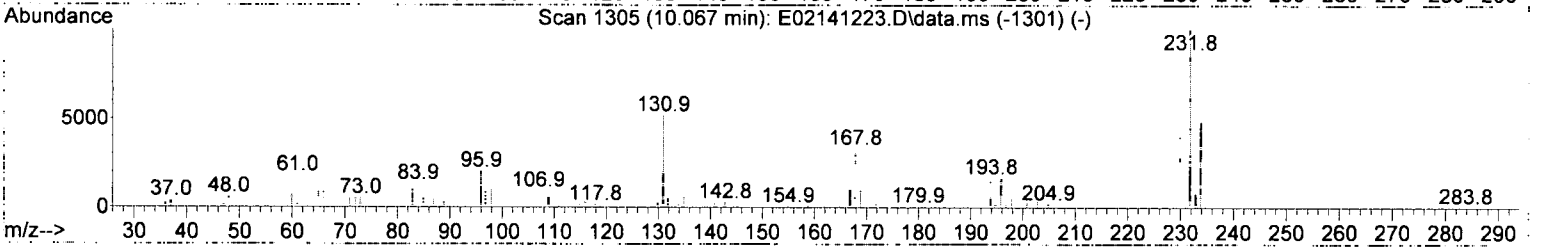
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121916.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 25.75 ng/ml

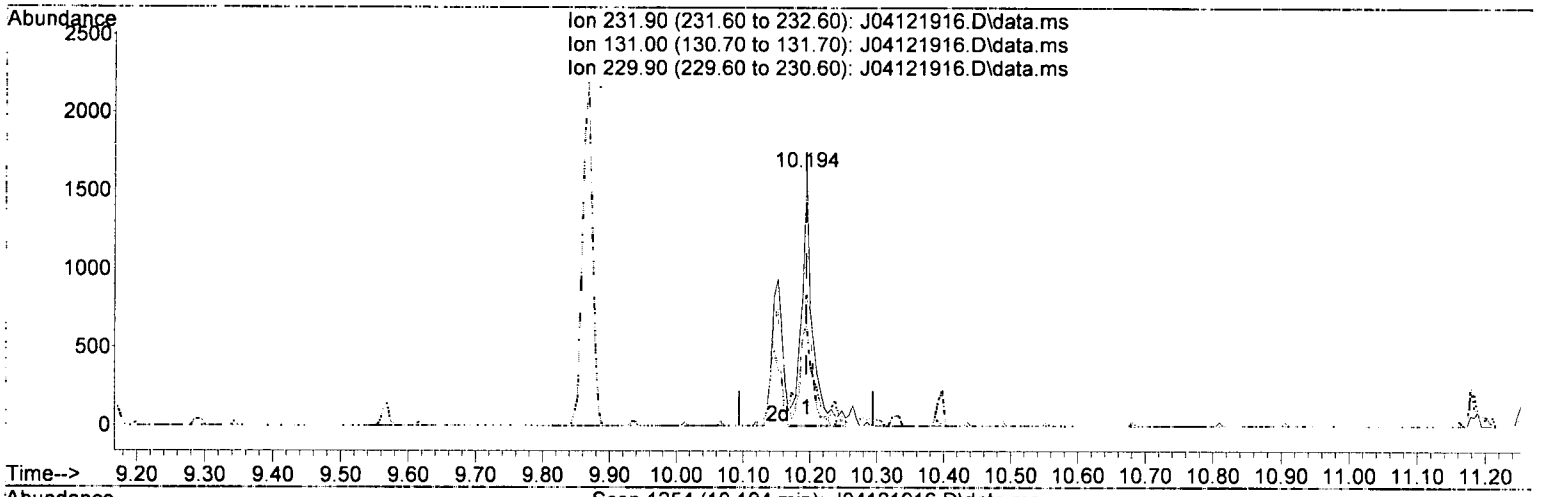
response 1586

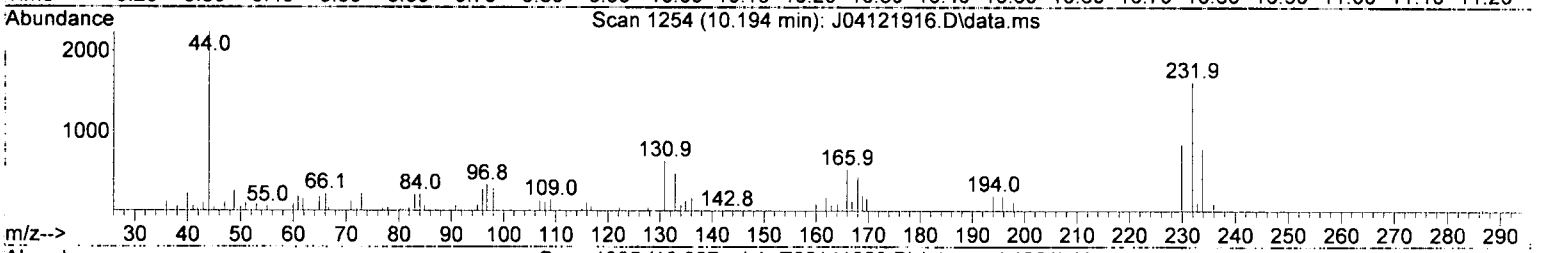
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	39.31
229.90	78.40	52.19
0.00	0.00	0.00

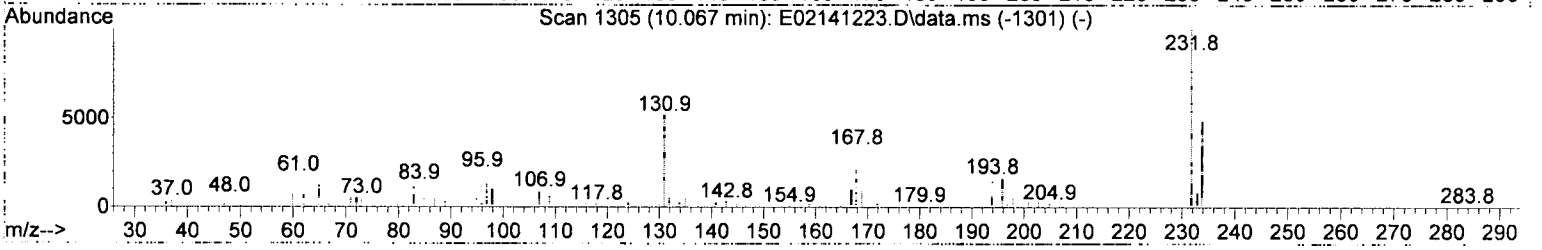
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121916.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 29.63 ng/ml m

response 1825

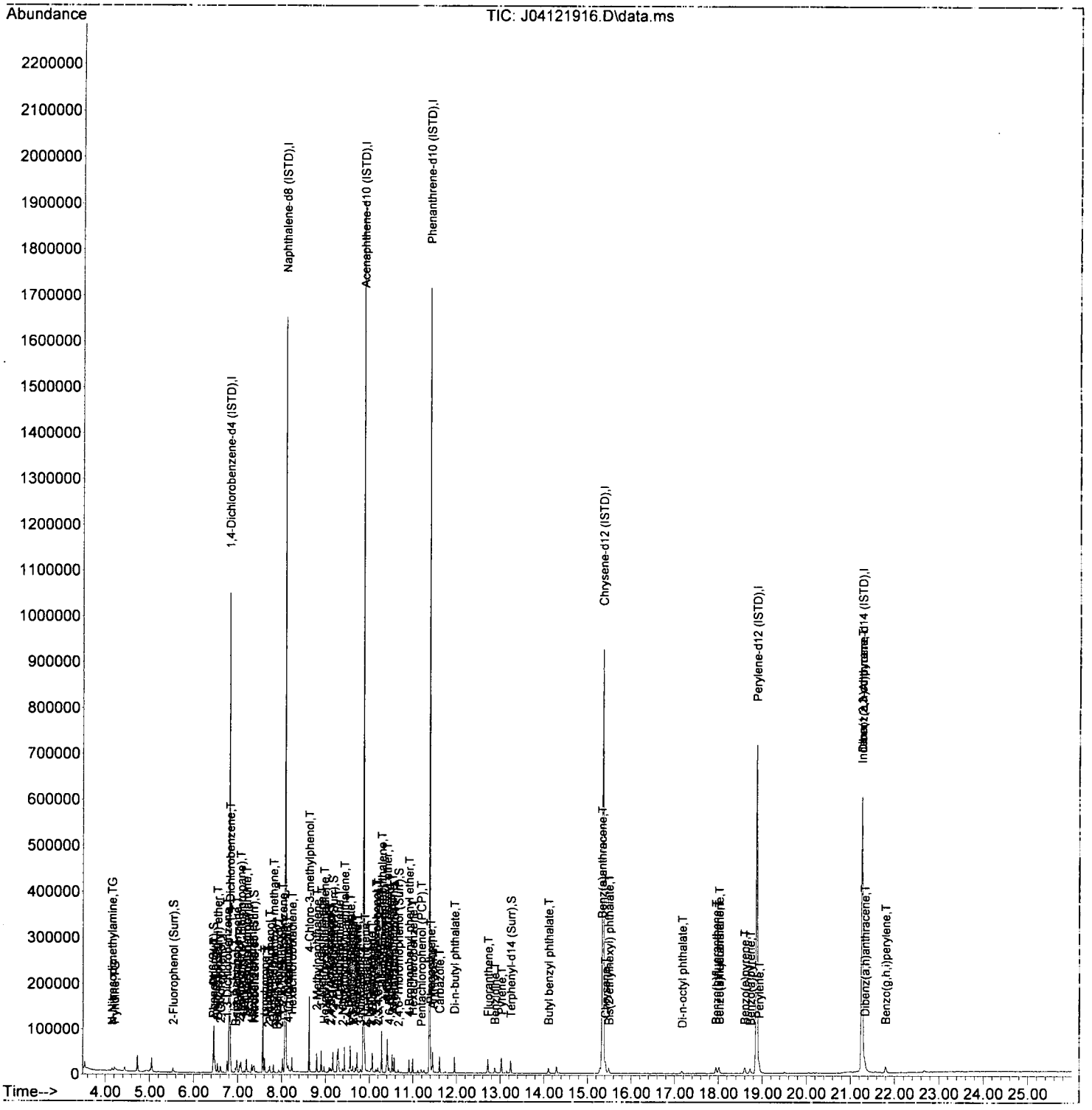
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	39.31
229.90	78.40	52.19
0.00	0.00	0.00

JK 4/19/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121916.D
Acq On : 12 Apr 2019 7:27 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:01 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/19/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	217345	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	867816	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.863	162	441746	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.376	188	754332	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.356	240	677420	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.870	264	613080	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.261	292	548377	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.541	112	12560	82.09	ng/ml	0.00
5) Phenol-d6(Surr)	6.439	99	15186	74.79	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	13960	79.90	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	29847	90.73	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	2582	59.56	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	32507	96.90	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.193	74	10206	90.58	ng/ml	97
3) Pyridine	4.225	79	16277	90.63	ng/ml	96
6) Phenol	6.450	94	16356	71.64	ng/ml	96
7) Aniline	6.493	93	21433	107.56	ng/ml	97
8) Bis(2-chloroethyl) ether	6.546	93	17852	105.70	ng/ml	95
9) 2-Chlorophenol	6.611	128	14013	87.64	ng/ml	96
10) 1,3-Dichlorobenzene	6.760	146	16517	98.07	ng/ml	92
11) 1,4-Dichlorobenzene	6.830	146	17508	106.73	ng/ml	99
12) Benzyl alcohol	6.942	108	4432	41.29	ng/ml	94
13) 1,2-Dichlorobenzene	6.985	146	16678	103.56	ng/ml	97
14) 2-Methylphenol	7.044	107	9962	79.29	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.071	45	22045	99.64	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.199	70	11467	92.22	ng/ml	96
17) 3+4-Methylphenol	7.194	107	11154	72.16	ng/ml	95
18) Hexachloroethane	7.322	201	4477	97.00	ng/ml	96
20) Nitrobenzene	7.375	77	14380	84.32	ng/ml	97
22) Isophorone	7.611	82	31645	96.20	ng/ml	98
23) 2-Nitrophenol	7.696	139	3262	38.18	ng/ml	86
24) 2,4-Dimethylphenol	7.723	122	9305	69.17	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.814	93	18067	97.30	ng/ml	97
26) Benzoic acid	7.782	105	212	537.11	ng/ml#	38
27) 2,4-Dichlorophenol	7.932	162	5136	47.50	ng/ml	90
28) 1,2,4-Trichlorobenzene	8.023	180	13568	103.91	ng/ml	96
29) Naphthalene	8.103	128	49024	105.91	ng/ml	99
30) 4-Chloroaniline	8.146	127	9860	88.31	ng/ml	88
31) Hexachlorobutadiene	8.231	225	7405	107.51	ng/ml	98
32) 4-Chloro-3-methylphenol	8.627	107	5402	41.32	ng/ml	92
33) 2-Methylnaphthalene	8.798	142	27918	90.28	ng/ml	95
34) 1-Methylnaphthalene	8.900	142	29703	100.04	ng/ml	95
36) Hexachlorocyclopentadiene	8.969	237	3968	57.55	ng/ml	92
37) 2,4,6-Trichlorophenol	9.082	196	3552	45.53	ng/ml	97
38) 2,4,5-Trichlorophenol	9.119	198	3524	45.96	ng/ml	90
39) 1,1'-Biphenyl	9.269	154	33353	90.00	ng/ml	99
41) 2-Chloronaphthalene	9.296	162	23833	90.94	ng/ml	99
42) 2-Nitroaniline	9.387	138	3408	37.65	ng/ml	73
43) 2,6-Dimethylnaphthalene	9.429	156	27574	101.89	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

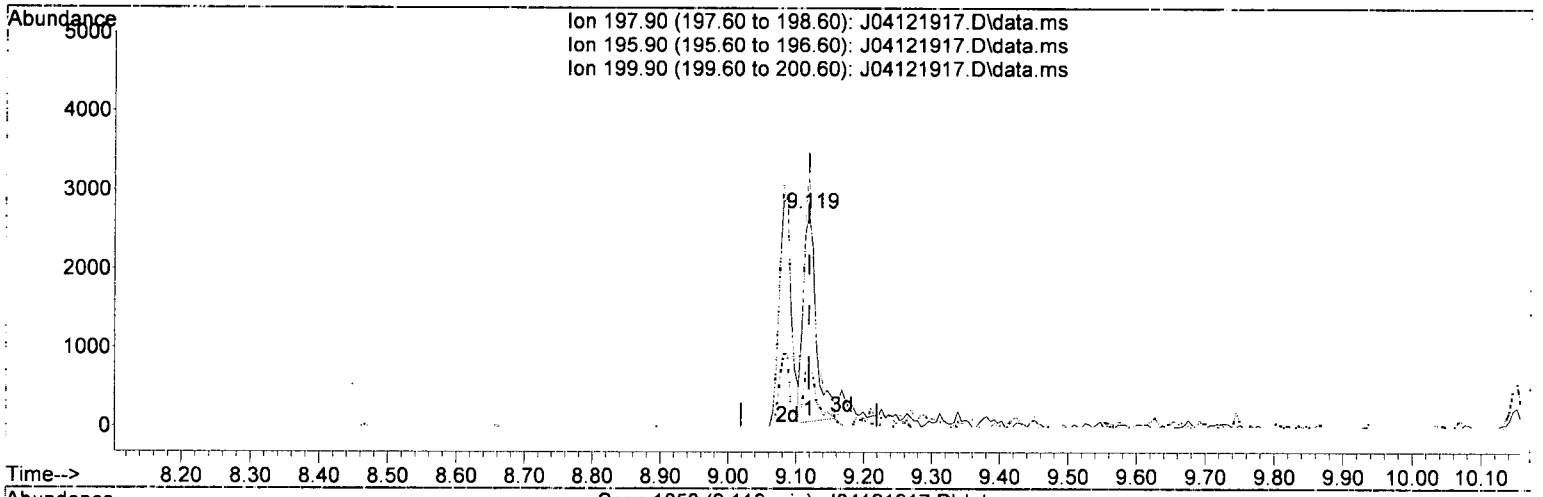
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	1082	25.89	ng/ml	93
45) Dimethyl phthalate	9.563	163	32685	102.69	ng/ml	98
46) 1,3-Dinitrobenzene	9.600	168	1592	34.16	ng/ml	78
47) 2,6-Dinitrotoluene	9.627	165	3662	53.05	ng/ml	85
48) 1,2-Dinitrobenzene	9.686	168	1685	52.32	ng/ml	89
49) Acenaphthylene	9.718	152	47235	99.63	ng/ml	97
50) 3-Nitroaniline	9.804	138	4053	67.56	ng/ml	90
51) Acenaphthene	9.895	153	30980	103.42	ng/ml	99
52) 2,4-Dinitrophenol	9.911	184	95	144.12	ng/ml#	1
53) 4-Nitrophenol	9.959	139	1391	25.93	ng/ml#	66
54) 2,4-Dinitrotoluene	10.039	165	3628	41.90	ng/ml	92
55) Dibenzofuran	10.066	168	39453	102.98	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.151	232	2960	48.42	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.194	232	4469	70.37	ng/ml	92
58) Diethyl phthalate	10.280	149	33503	106.85	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	10.280	170	26553	106.29	ng/ml	99
60) Fluorene	10.419	166	32507	107.38	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.408	204	14524	105.47	ng/ml	97
62) 4-Nitroaniline	10.419	138	3975	67.37	ng/ml	79
63) 4,6-Dinitro-2-methylph...	10.456	198	481	74.66	ng/ml#	51
65) N-Nitrosodiphenylamine	10.526	169	26271	103.75	ng/ml	97
66) Azobenzene (1,2-DPH)	10.569	77	34700	103.12	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.911	248	7754	92.57	ng/ml	97
69) Hexachlorobenzene	10.991	284	9841	103.60	ng/ml	94
70) Pentachlorophenol (PCP)	11.184	266	2796	108.89	ng/ml	89
71) Phenanthrene	11.403	178	45844	108.87	ng/ml	98
72) Anthracene	11.451	178	44636	105.16	ng/ml	98
73) Carbazole	11.606	167	36766	96.87	ng/ml	99
74) Di-n-butyl phthalate	11.949	149	42155	64.03	ng/ml	97
75) Fluoranthene	12.719	202	42585	91.77	ng/ml	98
76) Benzidine	12.874	184	20642	246.24	ng/ml	96
77) Pyrene	13.029	202	44554	93.25	ng/ml	99
80) Butyl benzyl phthalate	14.109	149	12505	54.30	ng/ml	93
81) Bis(2-ethylhexyl) adipate	14.291	129	13416	2.92	ng/ml	95
82) 3,3-Dichlorobenzidine	15.286	252	17285	30.85	ng/ml	93
83) Benz(a)anthracene	15.329	228	36438	93.47	ng/ml	98
84) Chrysene	15.409	228	36836	100.15	ng/ml	95
85) Bis(2-ethylhexyl) phth...	15.489	149	17462	57.56	ng/ml	99
87) Di-n-octyl phthalate	17.158	149	17362	38.13	ng/ml	98
88) Benzo(b)fluoranthene	17.944	252	30164	85.81	ng/ml	91
89) Benzo(k)fluoranthene	18.009	252	31556	95.46	ng/ml	97
90) Benzo(b+k)fluoranthene	18.009	252	63641	182.80	ng/ml	97
91) Benzo(e)pyrene	18.602	252	32260	93.62	ng/ml	98
92) Benzo(a)pyrene	18.720	252	26020	81.05	ng/ml	94
93) Perylene	18.923	252	31514	96.43	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.261	276	29860	99.33	ng/ml	97
96) Dibenz(a,h)anthracene	21.325	278	27470	96.38	ng/ml	89
97) Benzo(g,h,i)perylene	21.801	276	27580	88.00	ng/ml	91

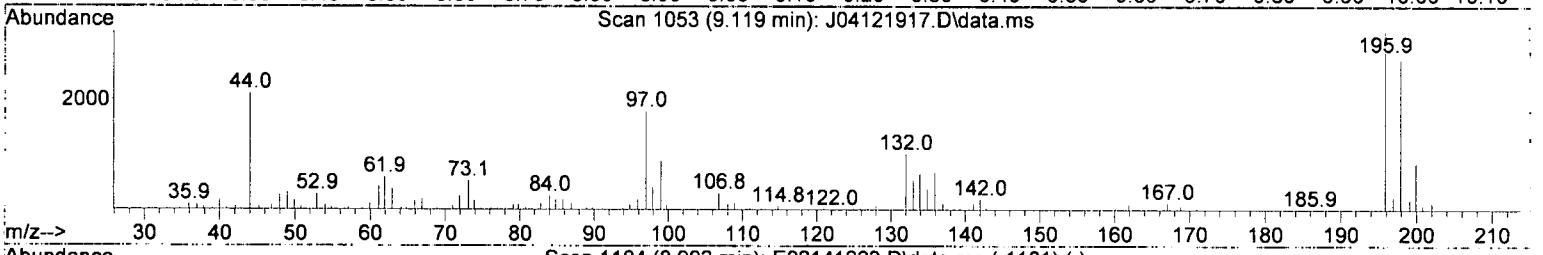
(#) = qualifier out of range (m) = manual integration (+) = signals summed

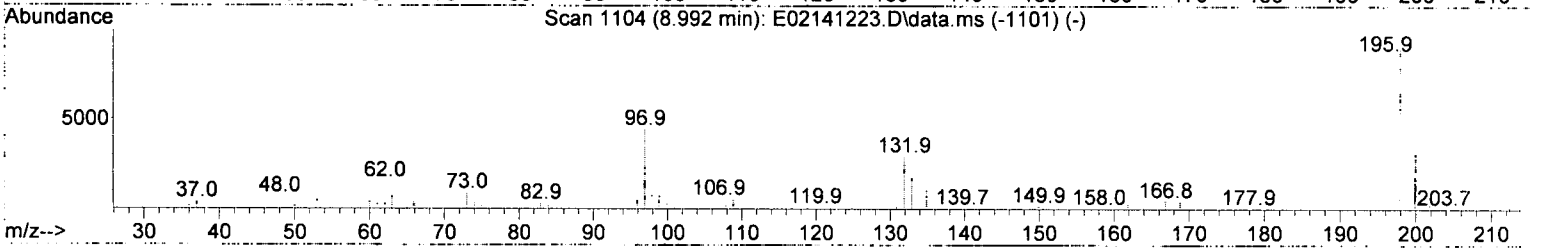
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121917.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 45.96 ng/ml

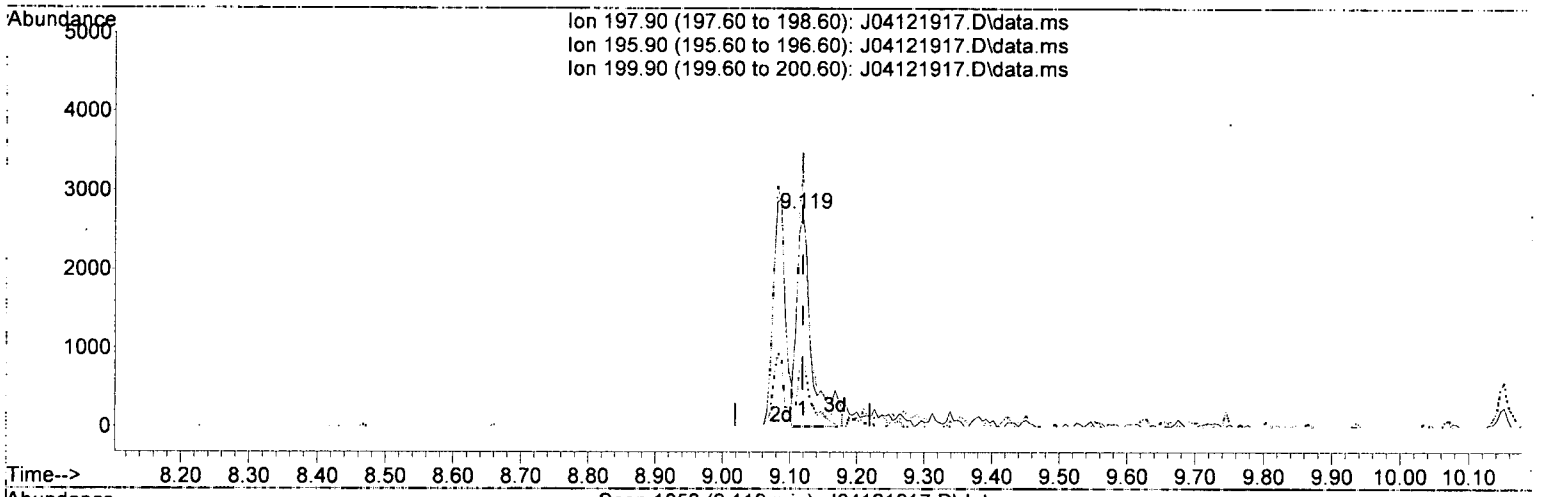
response 3524

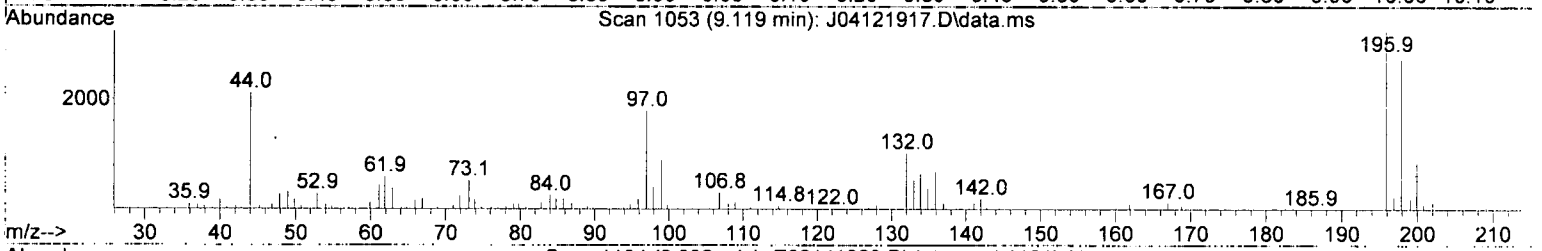
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	118.77
199.90	31.10	31.51
0.00	0.00	0.00

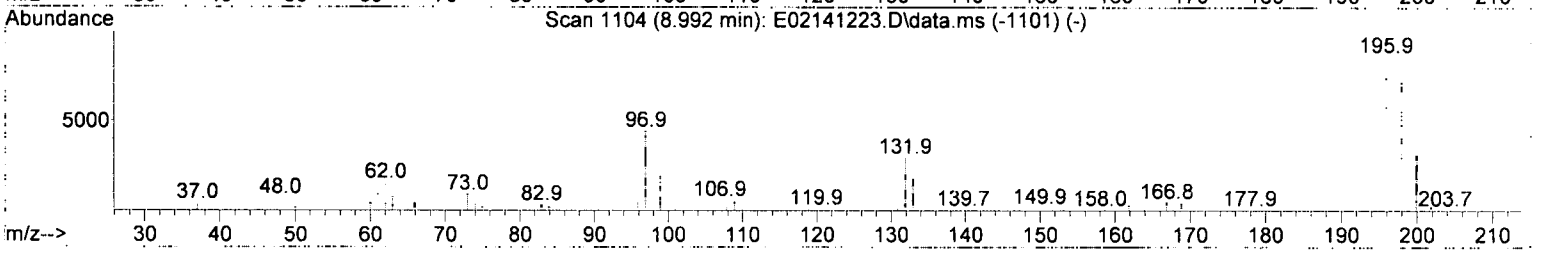
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121917.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 54.87 ng/ml (m)

response 4207

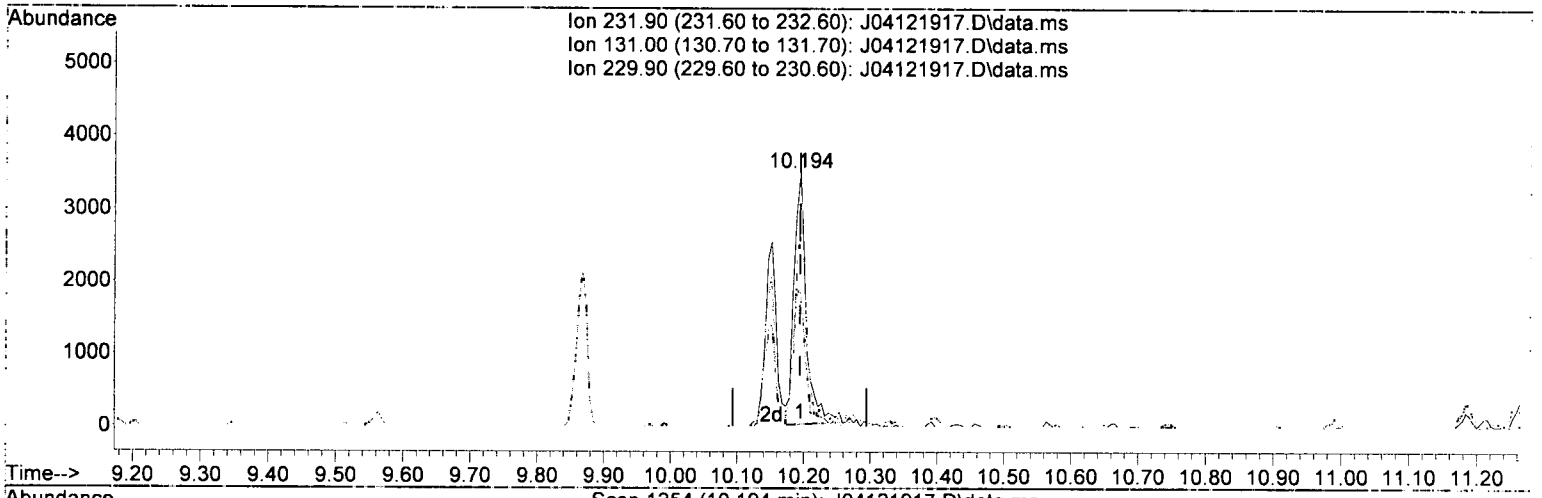
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	118.77
199.90	31.10	31.51
0.00	0.00	0.00

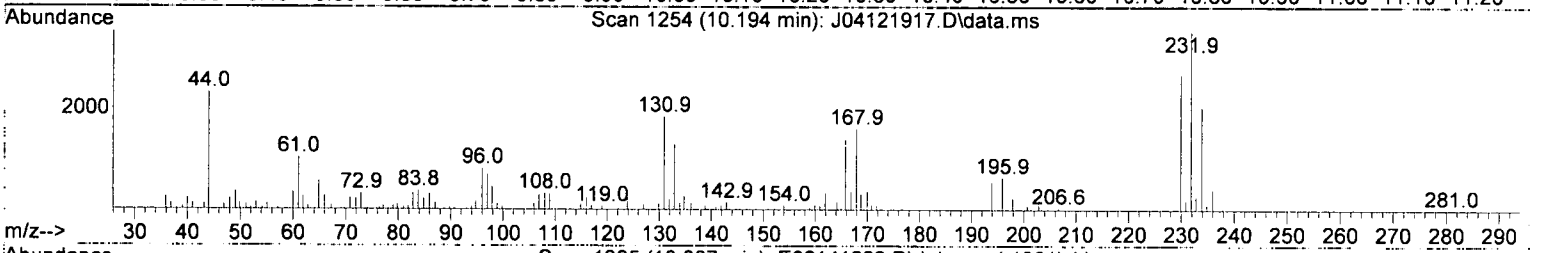
4/15/19

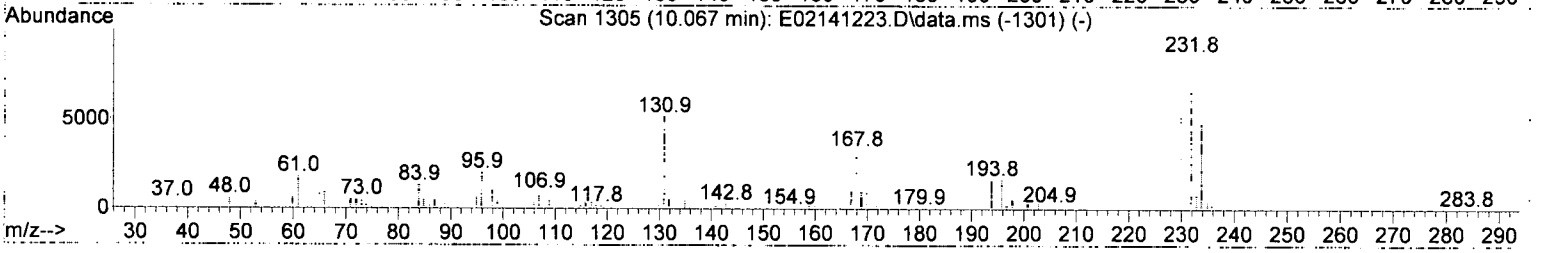
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121917.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 70.37 ng/ml

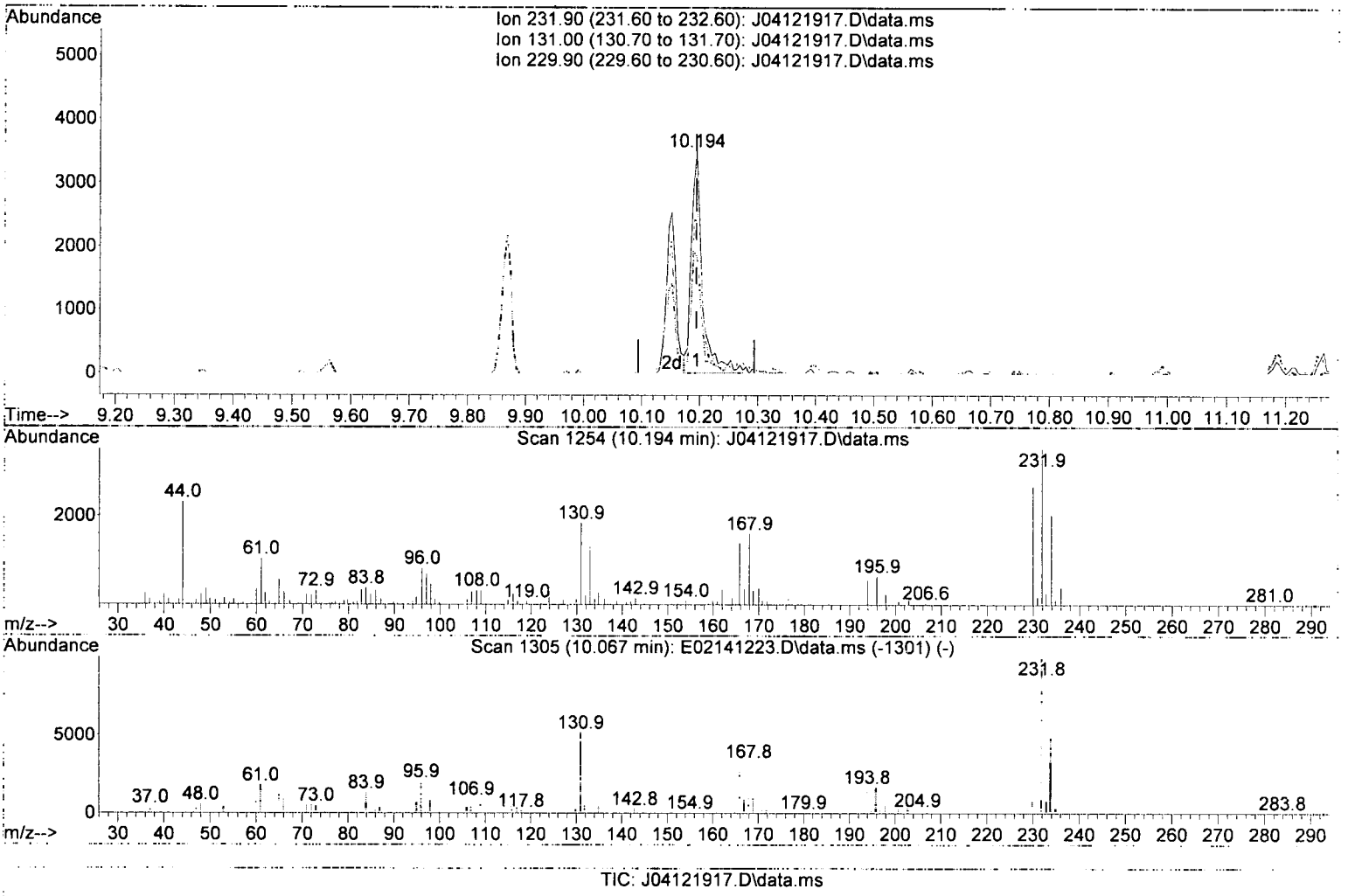
response 4469

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	52.42
229.90	78.40	76.01
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121917.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 74.97 ng/ml m

response 4761

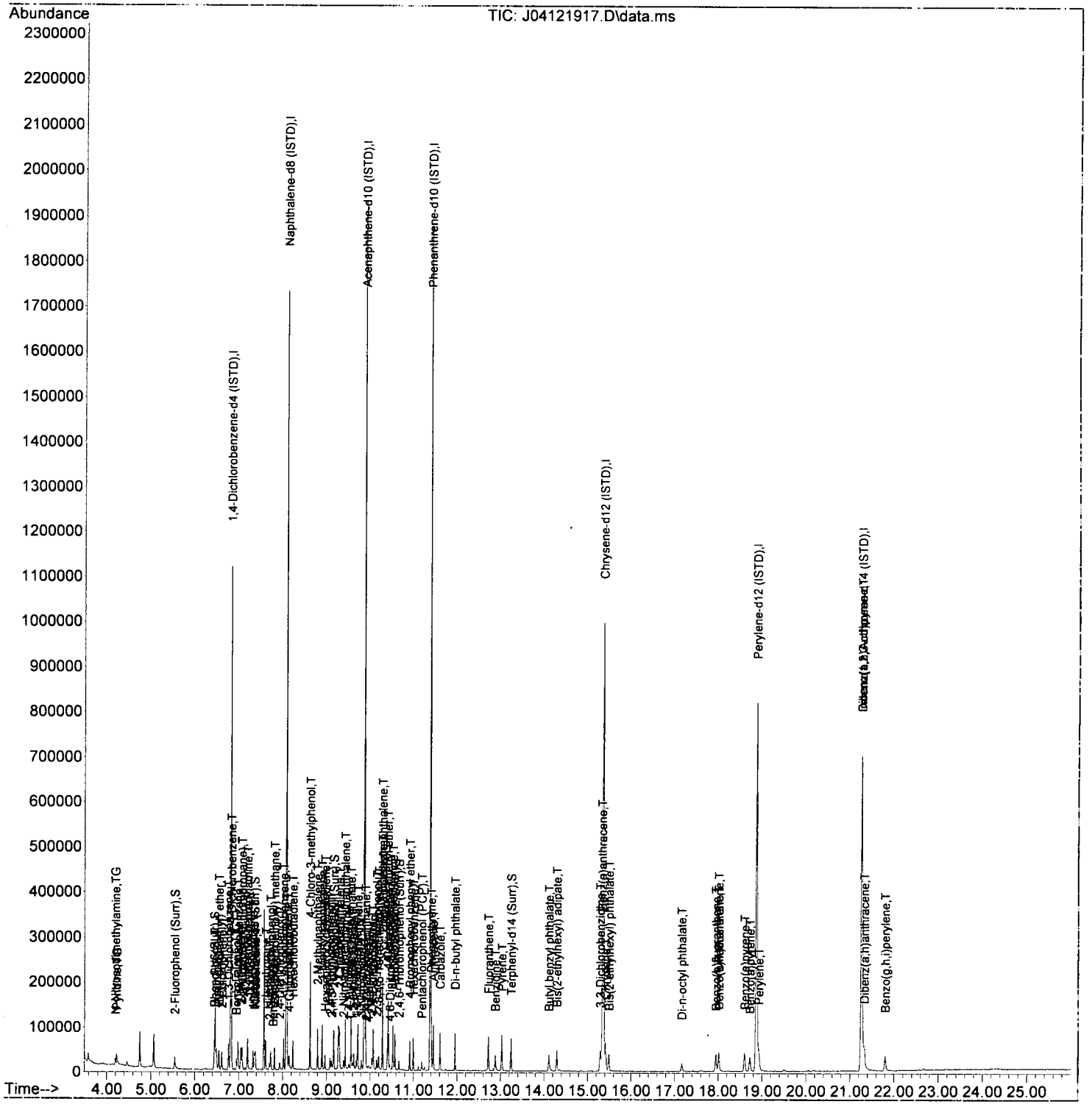
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	52.42
229.90	78.40	76.01
0.00	0.00	0.00

4/19/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121917.D
Acq On : 12 Apr 2019 8:03 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:06 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/19/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	222946	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	907511	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.862	162	458269	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	795971	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.355	240	745877	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.875	264	691727	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.266	292	629435	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	28367	180.74	ng/ml	0.00
5) Phenol-d6(Surr)	6.439	99	34950	167.79	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	29144	162.62	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	71986	210.94	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	7004	153.11	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	72239	195.58	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.198	74	18590	160.85	ng/ml	92
3) Pyridine	4.209	79	35631	193.42	ng/ml	92
6) Phenol	6.450	94	40326	172.18	ng/ml	98
7) Aniline	6.493	93	41636	203.70	ng/ml	93
8) Bis(2-chloroethyl) ether	6.546	93	38143	220.16	ng/ml	99
9) 2-Chlorophenol	6.605	128	29959	182.66	ng/ml	96
10) 1,3-Dichlorobenzene	6.760	146	36684	212.34	ng/ml	98
11) 1,4-Dichlorobenzene	6.824	146	35701	212.17	ng/ml	96
12) Benzyl alcohol	6.942	108	14374	130.54	ng/ml	95
13) 1,2-Dichlorobenzene	6.985	146	36123	218.68	ng/ml	95
14) 2-Methylphenol	7.044	107	22860	177.37	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	44983	198.21	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.199	70	25133	197.05	ng/ml	96
17) 3+4-Methylphenol	7.193	107	26267	165.67	ng/ml	97
18) Hexachloroethane	7.322	201	9240	195.16	ng/ml	84
20) Nitrobenzene	7.375	77	31068	177.59	ng/ml	99
22) Isophorone	7.611	82	70389	204.63	ng/ml	98
23) 2-Nitrophenol	7.696	139	10018	112.14	ng/ml	88
24) 2,4-Dimethylphenol	7.723	122	23349	165.99	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.814	93	39106	201.39	ng/ml	96
26) Benzoic acid	7.814	105	384	538.84	ng/ml	93
27) 2,4-Dichlorophenol	7.932	162	14168	125.31	ng/ml	92
28) 1,2,4-Trichlorobenzene	8.023	180	27382	200.53	ng/ml	95
29) Naphthalene	8.103	128	102649	212.05	ng/ml	100
30) 4-Chloroaniline	8.146	127	23535	201.56	ng/ml	98
31) Hexachlorobutadiene	8.231	225	14260	197.98	ng/ml	96
32) 4-Chloro-3-methylphenol	8.622	107	17148	125.44	ng/ml	98
33) 2-Methylnaphthalene	8.798	142	67852	209.83	ng/ml	97
34) 1-Methylnaphthalene	8.900	142	66438	213.99	ng/ml	97
36) Hexachlorocyclopentadiene	8.969	237	9648	134.89	ng/ml	99
37) 2,4,6-Trichlorophenol	9.082	196	11339	140.09	ng/ml	99
38) 2,4,5-Trichlorophenol	9.119	198	10174	127.91	ng/ml	97
39) 1,1'-Biphenyl	9.269	154	81722	212.56	ng/ml	99
41) 2-Chloronaphthalene	9.295	162	56267	206.96	ng/ml	95
42) 2-Nitroaniline	9.386	138	10366	110.39	ng/ml	97
43) 2,6-Dimethylnaphthalene	9.429	156	60607	215.87	ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

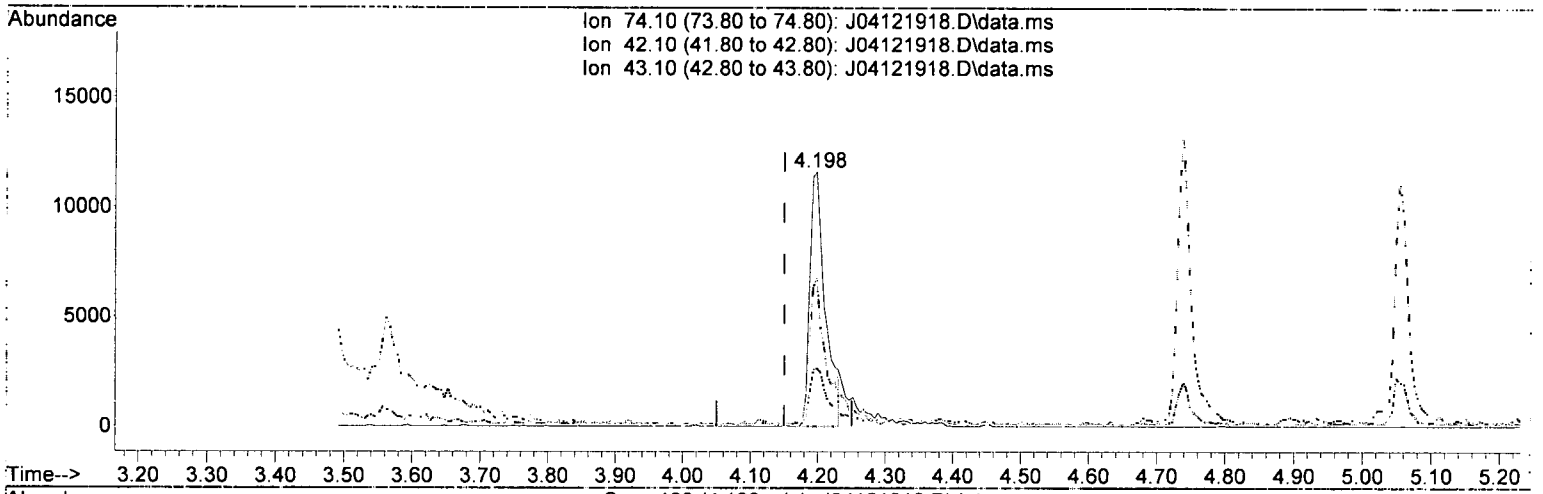
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	2775	64.01	ng/ml	86
45)	Dimethyl phthalate	9.563	163	68197	206.53	ng/ml	97
46)	1,3-Dinitrobenzene	9.595	168	4684	96.88	ng/ml	83
47)	2,6-Dinitrotoluene	9.627	165	11248	157.08	ng/ml	94
48)	1,2-Dinitrobenzene	9.681	168	5007	149.85	ng/ml	90
49)	Acenaphthylene	9.718	152	96629	196.46	ng/ml	99
50)	3-Nitroaniline	9.798	138	11232	169.11	ng/ml	93
51)	Acenaphthene	9.895	153	64550	207.72	ng/ml	99
52)	2,4-Dinitrophenol	9.905	184	631	162.38	ng/ml#	52
53)	4-Nitrophenol	9.959	139	5108	91.80	ng/ml	88
54)	2,4-Dinitrotoluene	10.039	165	11165	124.31	ng/ml	97
55)	Dibenzofuran	10.071	168	85043	213.97	ng/ml	99
56)	2,3,5,6-Tetrachlorophenol	10.151	232	9240	145.70	ng/ml	89
57)	2,3,4,6-Tetrachlorophenol	10.194	232	11552	175.34	ng/ml	89
58)	Diethyl phthalate	10.280	149	68644	211.02	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.280	170	55486	214.09	ng/ml	99
60)	Fluorene	10.419	166	68196	217.15	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.408	204	29693	207.85	ng/ml	96
62)	4-Nitroaniline	10.419	138	11137	181.96	ng/ml	96
63)	4,6-Dinitro-2-methylph...	10.456	198	2085	114.28	ng/ml	93
65)	N-Nitrosodiphenylamine	10.526	169	55332	207.08	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.568	77	74635	210.19	ng/ml	95
68)	4-Bromophenyl phenyl e...	10.911	248	17137	193.88	ng/ml	98
69)	Hexachlorobenzene	10.991	284	19743	196.98	ng/ml	95
70)	Pentachlorophenol (PCP)	11.184	266	7672	203.24	ng/ml	97
71)	Phenanthrene	11.403	178	95305	214.48	ng/ml	99
72)	Anthracene	11.451	178	94023	209.92	ng/ml	98
73)	Carbazole	11.606	167	80323	213.71	ng/ml	98
74)	Di-n-butyl phthalate	11.948	149	102422	166.02	ng/ml	98
75)	Fluoranthene	12.719	202	96117	196.29	ng/ml	98
76)	Benzidine	12.874	184	43225	487.30	ng/ml	97
77)	Pyrene	13.029	202	98204	194.79	ng/ml	98
80)	Butyl benzyl phthalate	14.109	149	33181	130.86	ng/ml	97
81)	Bis(2-ethylhexyl) adipate	14.291	129	32652	86.44	ng/ml	99
82)	3,3-Dichlorobenzidine	15.286	252	40983	321.81	ng/ml	94
83)	Benz(a)anthracene	15.329	228	84134	196.01	ng/ml	97
84)	Chrysene	15.409	228	81237	200.60	ng/ml	97
85)	Bis(2-ethylhexyl) phth...	15.489	149	48543	145.33	ng/ml	97
87)	Di-n-octyl phthalate	17.163	149	57618	112.15	ng/ml	99
88)	Benzo(b)fluoranthene	17.944	252	73883	186.28	ng/ml	96
89)	Benzo(k)fluoranthene	18.014	252	77404	207.53	ng/ml	96
90)	Benzo(b+k)fluoranthene	18.014	252	154717	393.88	ng/ml	96
91)	Benzo(e)pyrene	18.602	252	76788	197.50	ng/ml	99
92)	Benzo(a)pyrene	18.720	252	69007	190.52	ng/ml	97
93)	Perylene	18.923	252	76410	207.23	ng/ml	97
95)	Indeno(1,2,3-cd)pyrene	21.260	276	68379	198.17	ng/ml	90
96)	Dibenz(a,h)anthracene	21.325	278	62866	192.17	ng/ml	95
97)	Benzo(g,h,i)perylene	21.801	276	68971	191.73	ng/ml	98

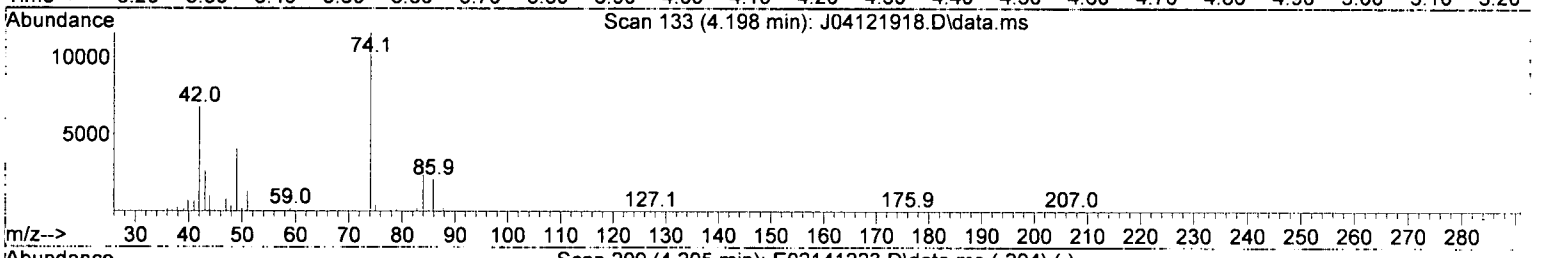
(#) = qualifier out of range (m) = manual integration (+) = signals summed

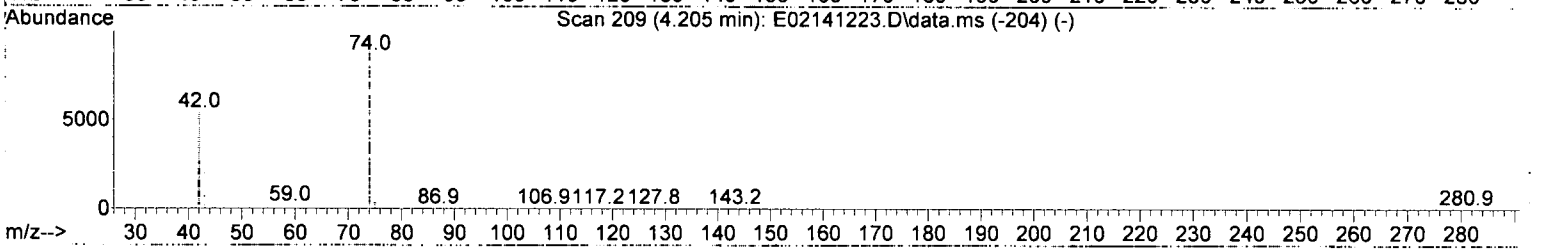
Quantitation Report (Qedit)

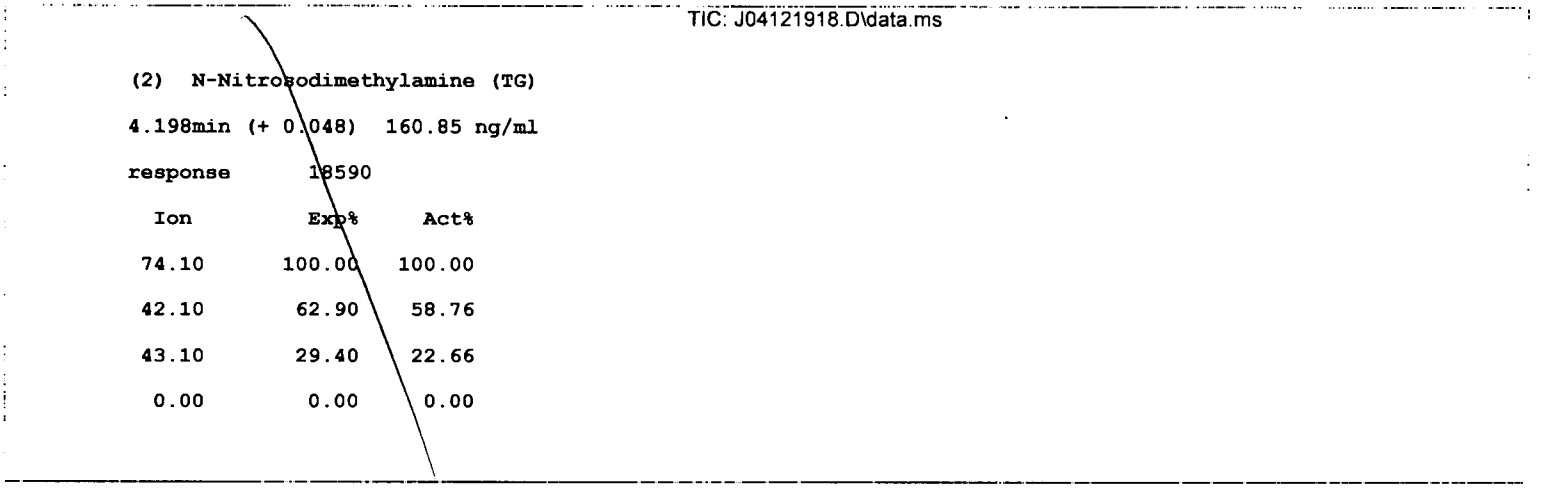
Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10









(2) N-Nitrosodimethylamine (TG)

4.198min (+ 0.048) 160.85 ng/ml

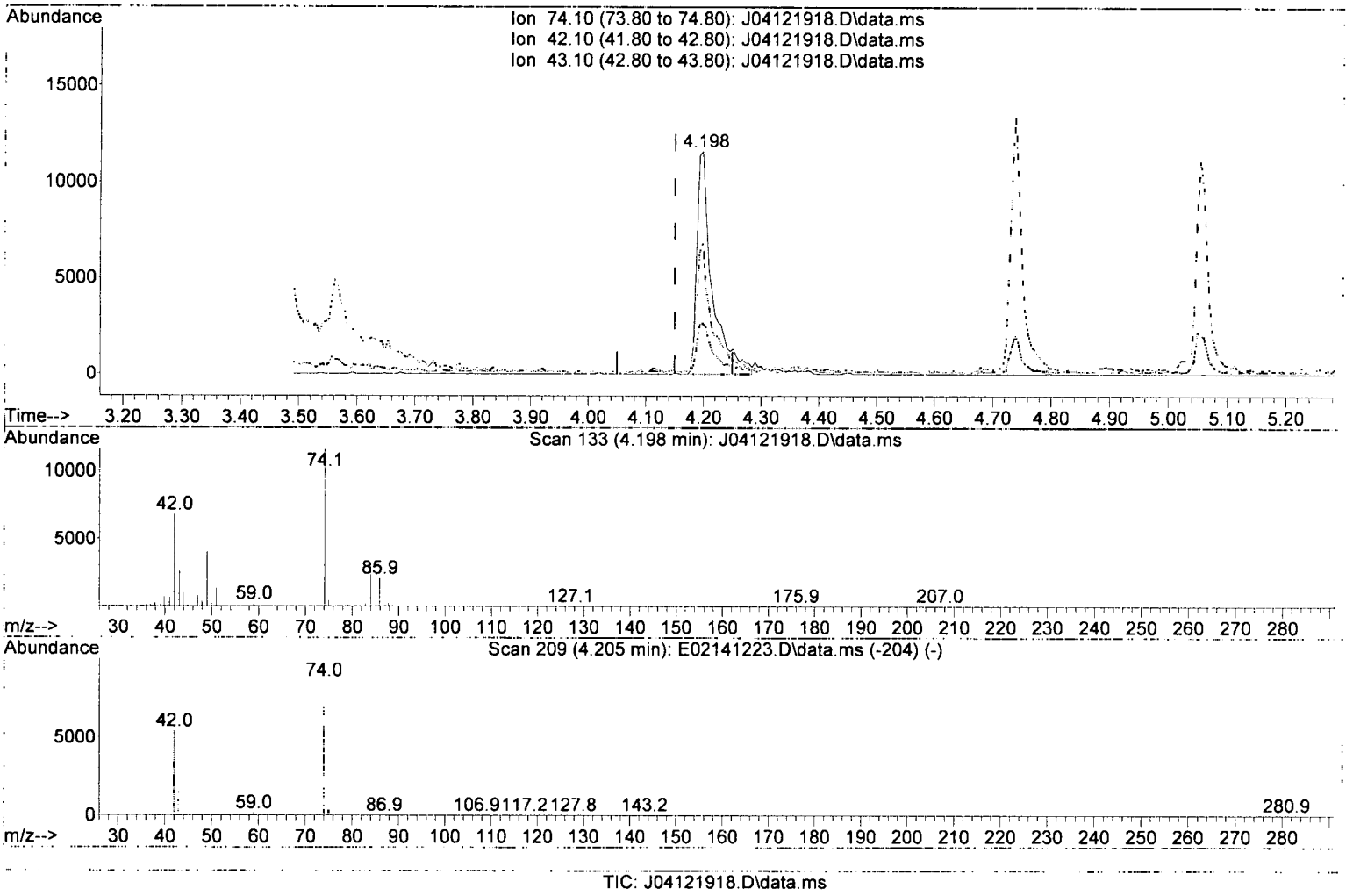
response 18590

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	62.90	58.76
43.10	29.40	22.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121918.D\data.ms

(2) N-Nitrosodimethylamine (TG)

4.198min (+ 0.048) 187.68 ng/ml m

response 21690

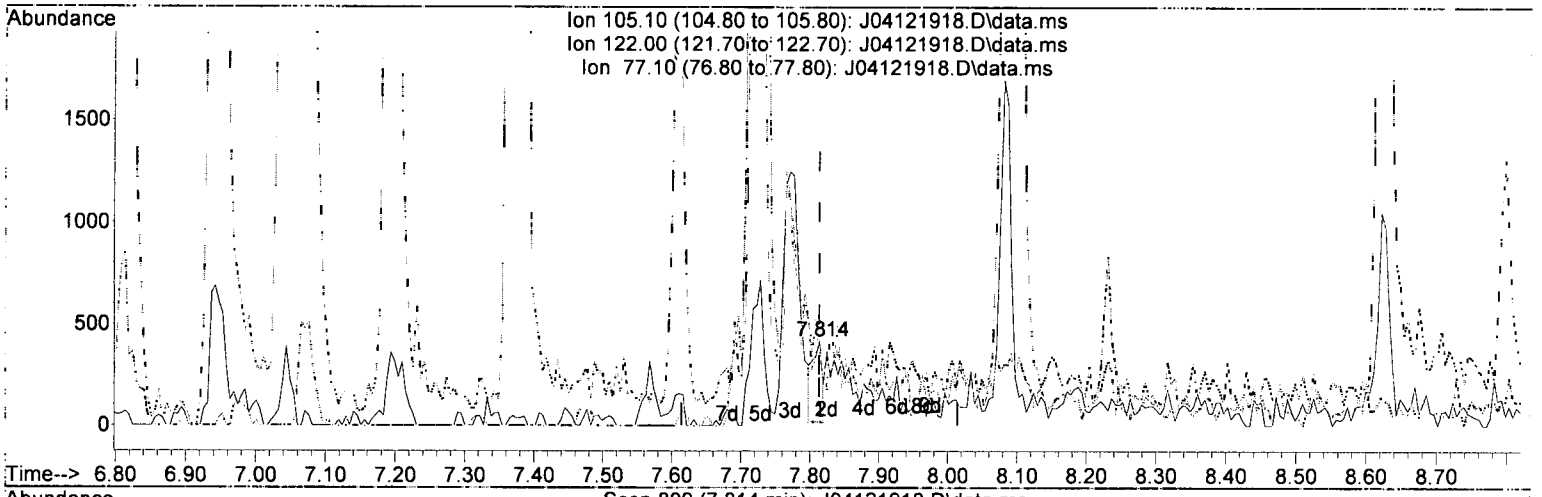
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	62.90	58.76
43.10	29.40	22.66
0.00	0.00	0.00

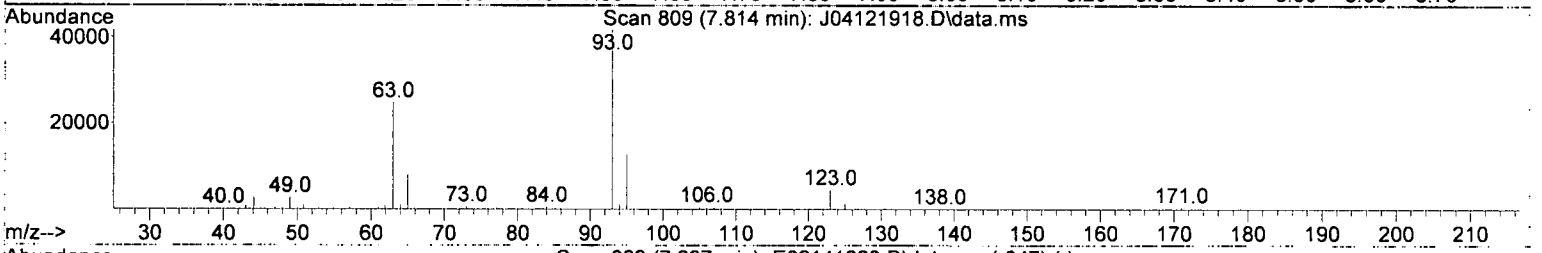
4/15/19

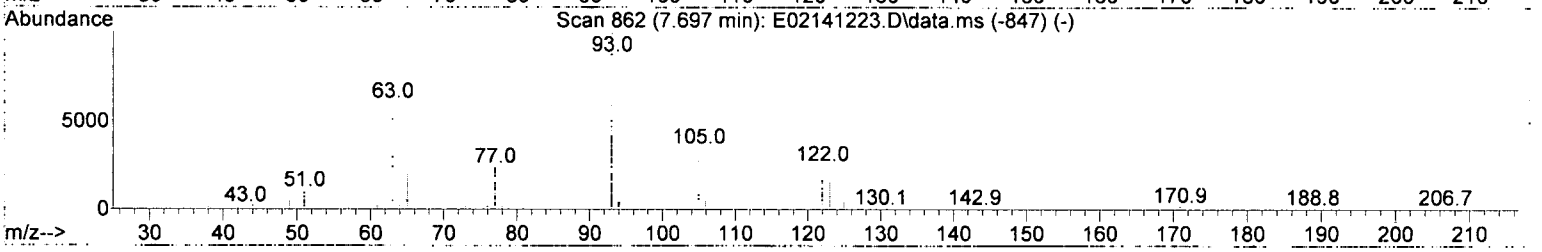
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121918.D\data.ms

(26) Benzoic acid (T)

7.814min (+ 0.000) 538.84 ng/ml

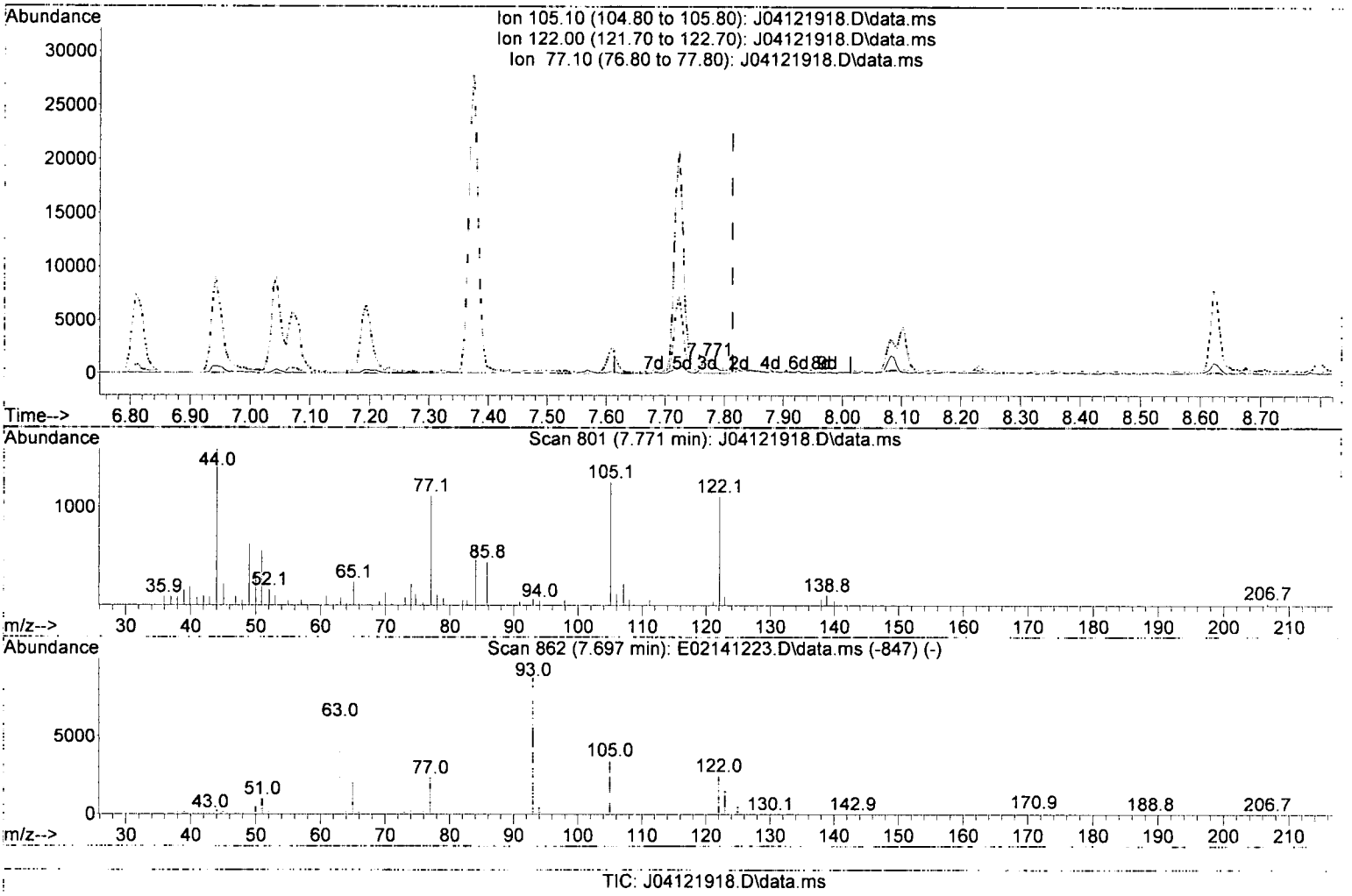
response 384

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	78.90
77.10	76.00	86.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121918.D\data.ms

(26) Benzoic acid (T)

7.771min (-0.043) 561.53 ng/ml m

response 2517

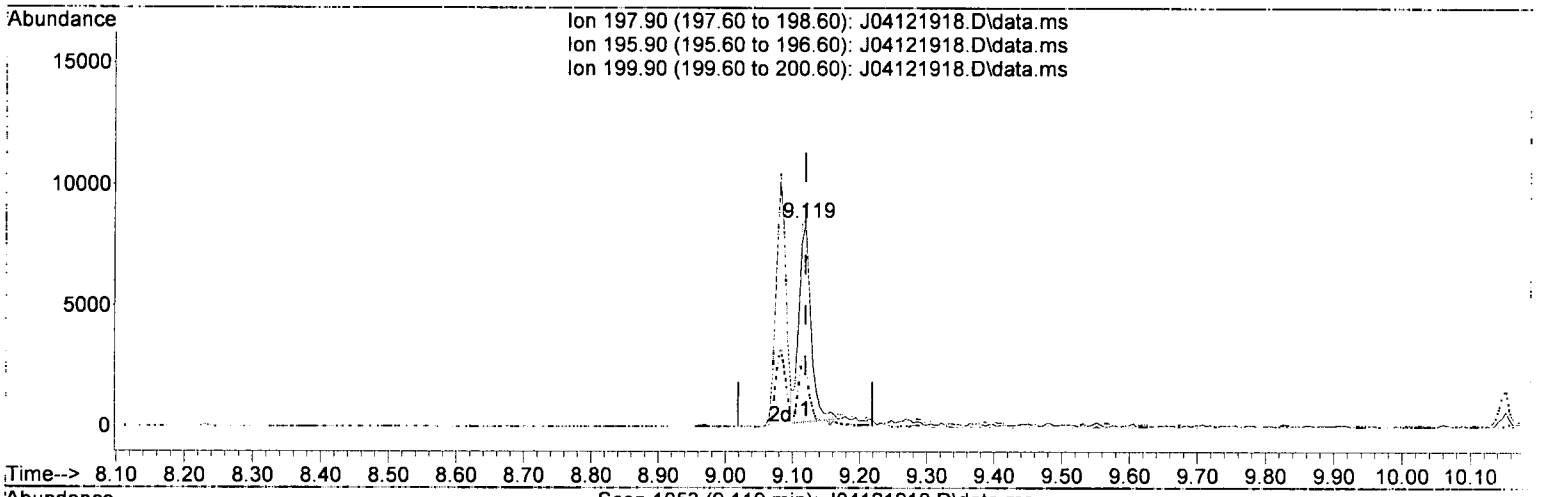
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	88.71
77.10	76.00	88.95
0.00	0.00	0.00

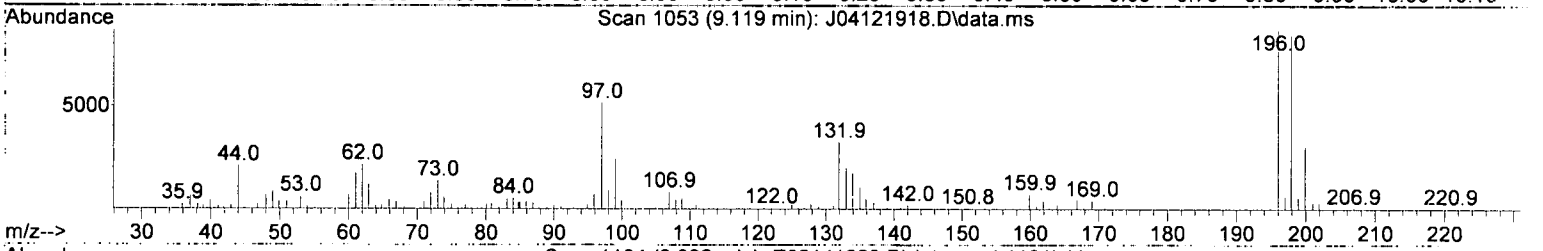
4/15/19

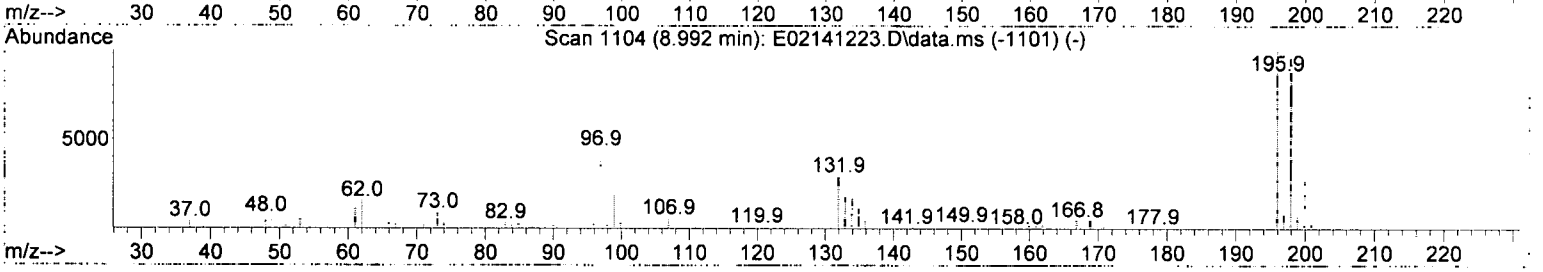
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121918.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 127.91 ng/ml

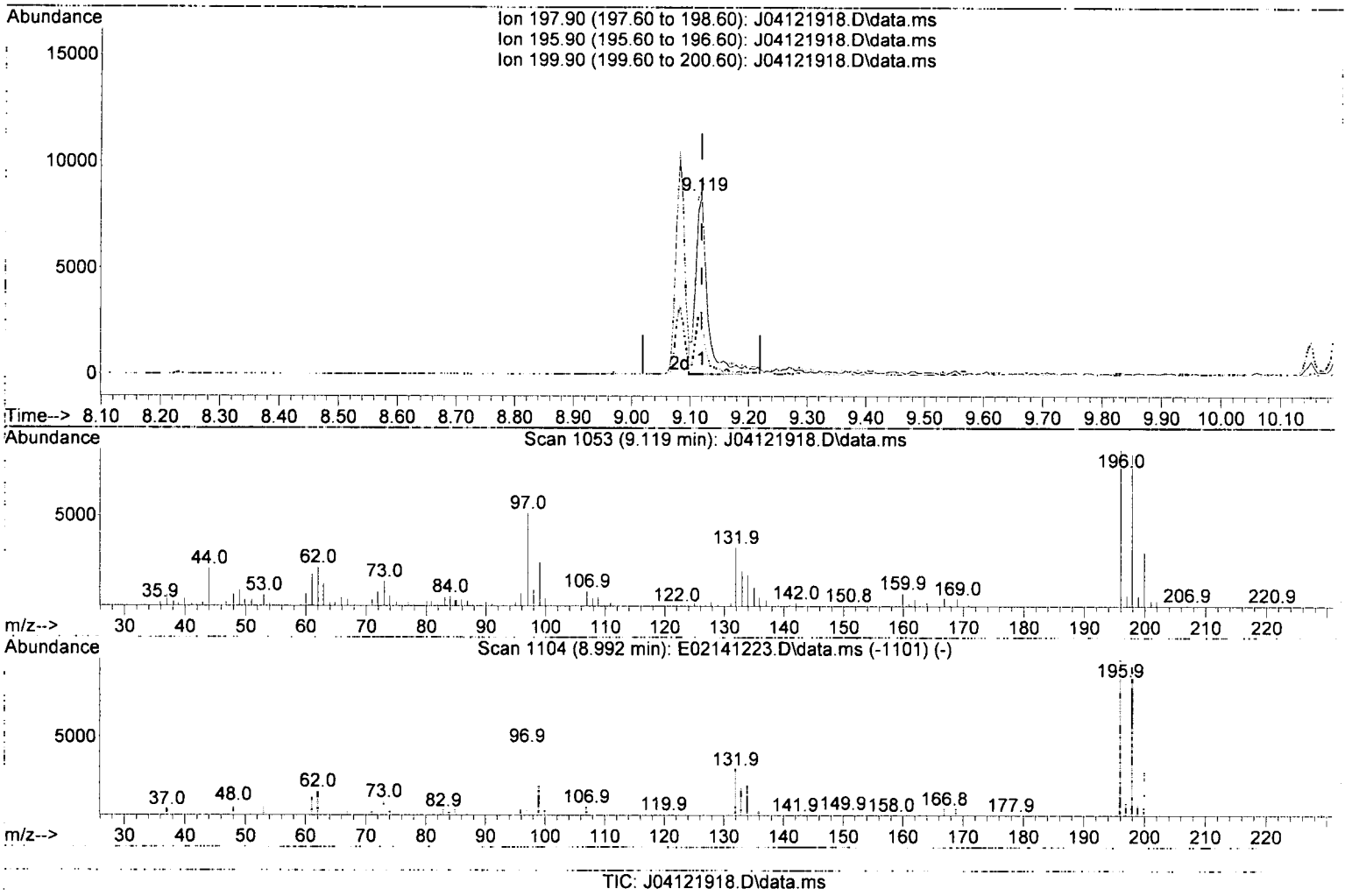
response 10174

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	102.98
199.90	31.10	35.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(38) 2,4,5-Trichlorophenol (T)

9.119min (+ 0.000) 145.31 ng/ml m 4/15/19

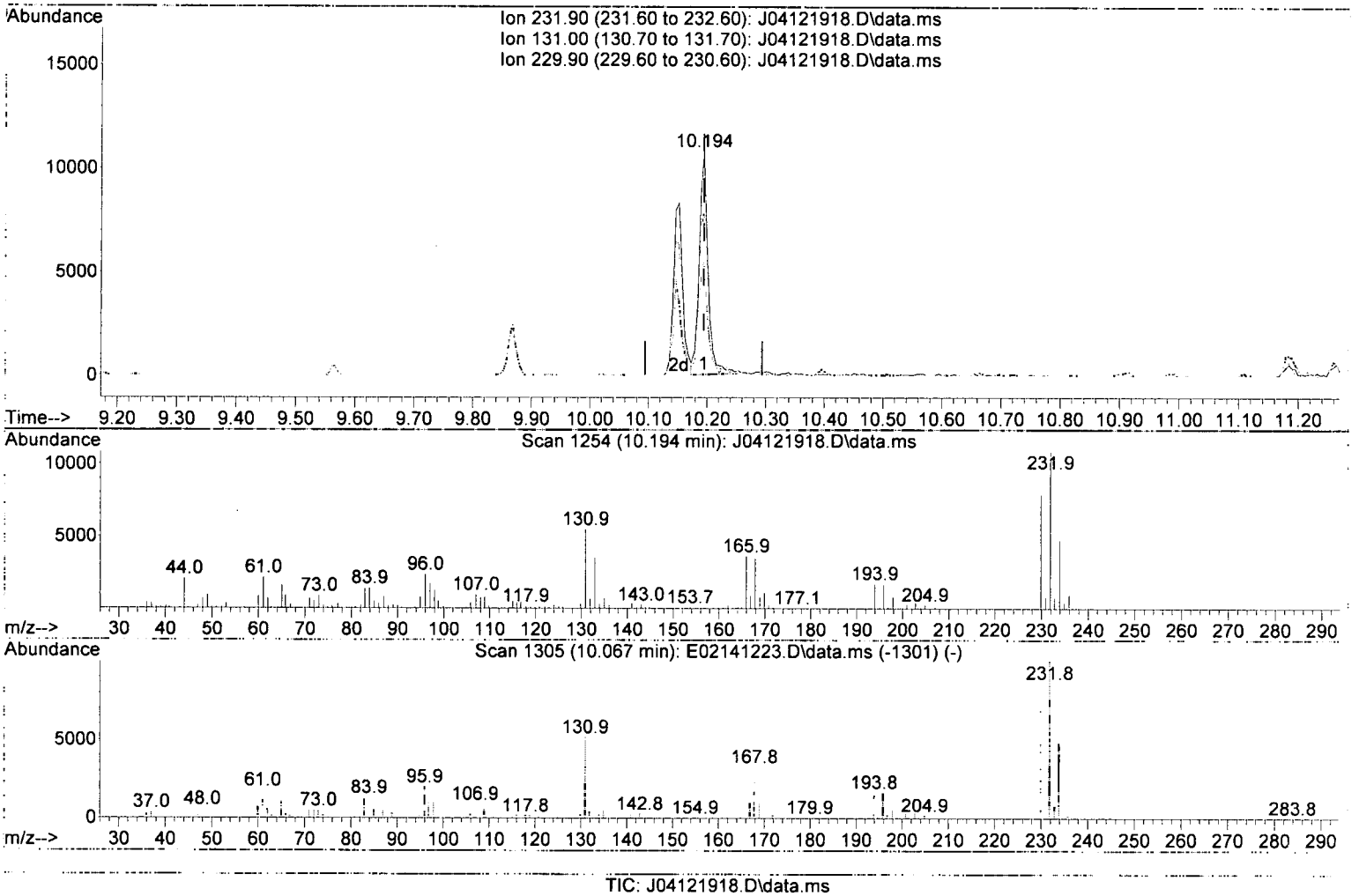
response 11558

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	102.98
199.90	31.10	35.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121918.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 175.34 ng/ml

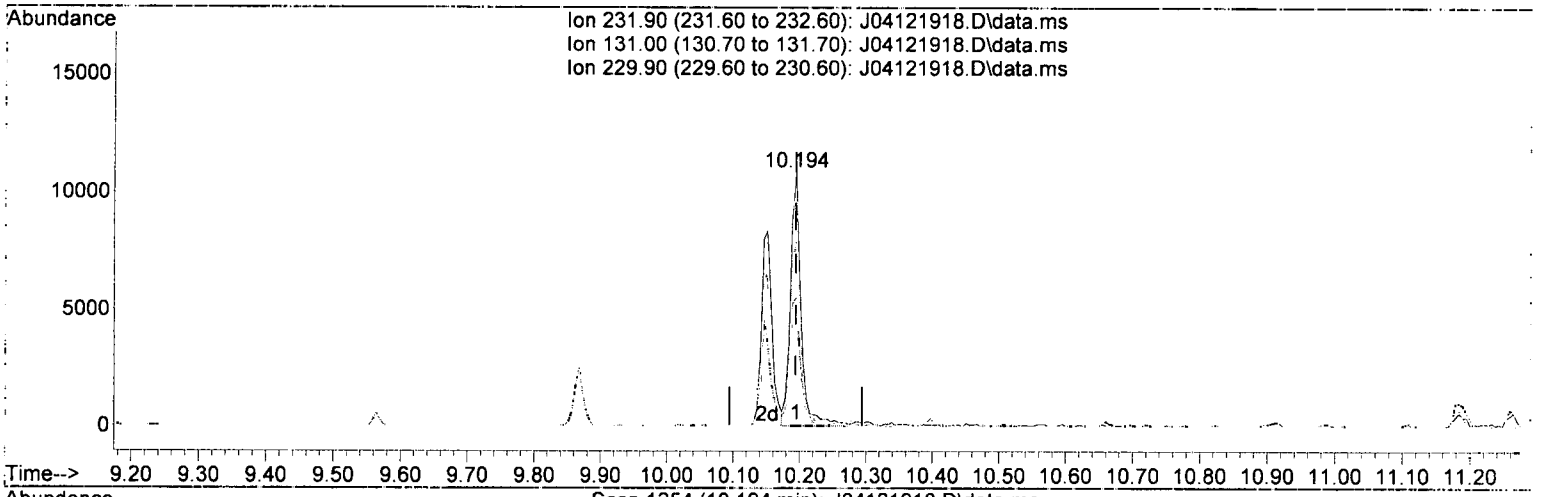
response 11552

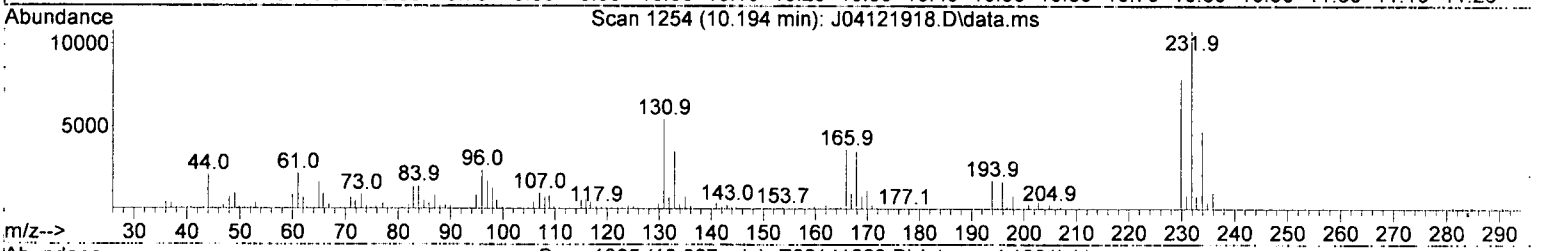
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	50.53
229.90	78.40	72.77
0.00	0.00	0.00

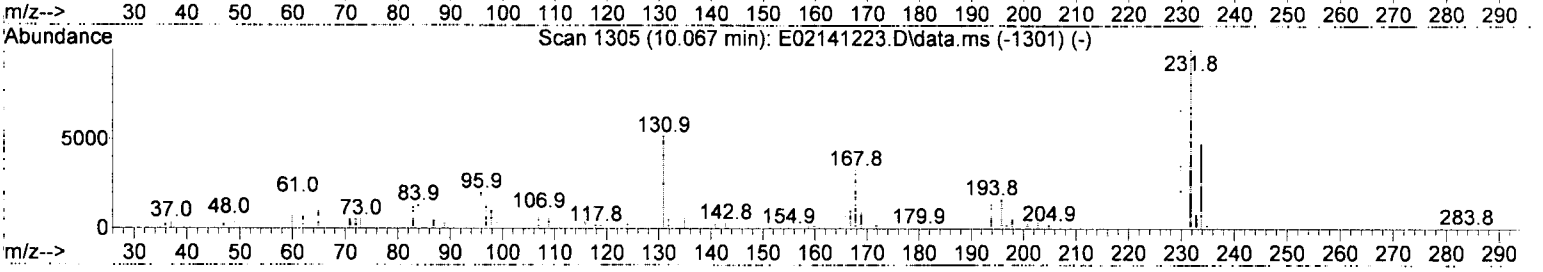
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121918.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 182.43 ng/ml m

response 12019

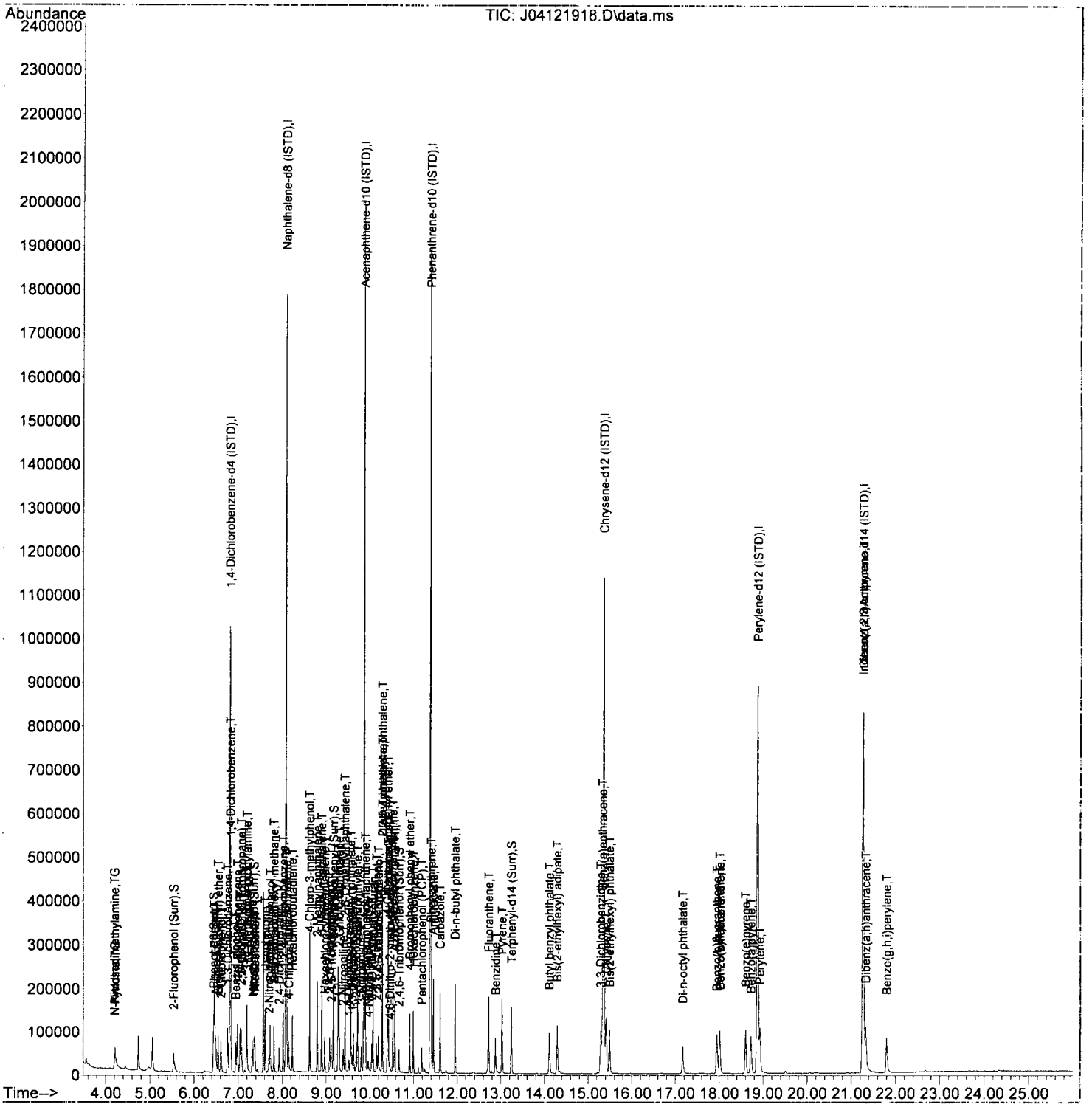
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	50.53
229.90	78.40	72.77
0.00	0.00	0.00

JK 4/15/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:11 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121919.D
Acq On : 12 Apr 2019 9:16 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:16 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	217042	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	898567	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.862	162	434239	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	738796	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.355	240	671794	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.875	264	611227	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.266	292	566816	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.530	112	73276	479.58	ng/ml	0.00
5) Phenol-d6(Surr)	6.434	99	92867	457.98	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	77263	442.84	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	177018	547.41	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	17282	407.03	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	169985	510.97	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.155	74	53776	477.96	ng/ml	95
3) Pyridine	4.177	79	87366	487.15	ng/ml	92
6) Phenol	6.450	94	105308	461.87	ng/ml	99
7) Aniline	6.487	93	106597	535.71	ng/ml	97
8) Bis(2-chloroethyl) ether	6.541	93	96650	573.04	ng/ml	99
9) 2-Chlorophenol	6.605	128	78427	491.19	ng/ml	96
10) 1,3-Dichlorobenzene	6.755	146	88880	528.47	ng/ml	98
11) 1,4-Dichlorobenzene	6.824	146	87396	533.51	ng/ml	98
12) Benzyl alcohol	6.937	108	38189	356.25	ng/ml	94
13) 1,2-Dichlorobenzene	6.979	146	87063	541.39	ng/ml	97
14) 2-Methylphenol	7.044	107	61181	487.62	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	112928	511.15	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.199	70	67493	543.56	ng/ml	99
17) 3+4-Methylphenol	7.193	107	77098	499.51	ng/ml	97
18) Hexachloroethane	7.322	201	23400	507.68	ng/ml	96
20) Nitrobenzene	7.375	77	80603	473.27	ng/ml	98
22) Isophorone	7.605	82	179496	527.00	ng/ml	100
23) 2-Nitrophenol	7.696	139	30957	349.98	ng/ml	95
24) 2,4-Dimethylphenol	7.723	122	69085	496.01	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.814	93	99782	518.97	ng/ml	99
26) Benzoic acid	7.787	105	23976	791.78	ng/ml	98
27) 2,4-Dichlorophenol	7.931	162	50336	449.64	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.022	180	68791	508.81	ng/ml	98
29) Naphthalene	8.103	128	257687	537.62	ng/ml	99
30) 4-Chloroaniline	8.145	127	75620	654.08	ng/ml	95
31) Hexachlorobutadiene	8.231	225	35545	498.41	ng/ml	95
32) 4-Chloro-3-methylphenol	8.621	107	61878	457.14	ng/ml	97
33) 2-Methylnaphthalene	8.798	142	173683	542.45	ng/ml	98
34) 1-Methylnaphthalene	8.900	142	168058	546.68	ng/ml	97
36) Hexachlorocyclopentadiene	8.969	237	28477	420.18	ng/ml	99
37) 2,4,6-Trichlorophenol	9.081	196	35536	463.35	ng/ml	97
38) 2,4,5-Trichlorophenol	9.114	198	34165	453.29	ng/ml	99
39) 1,1'-Biphenyl	9.269	154	202383	555.54	ng/ml	99
41) 2-Chloronaphthalene	9.295	162	143842	558.35	ng/ml	98
42) 2-Nitroaniline	9.386	138	37427	420.62	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.429	156	147706	555.20	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121919.D
Acq On : 12 Apr 2019 9:16 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:16 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

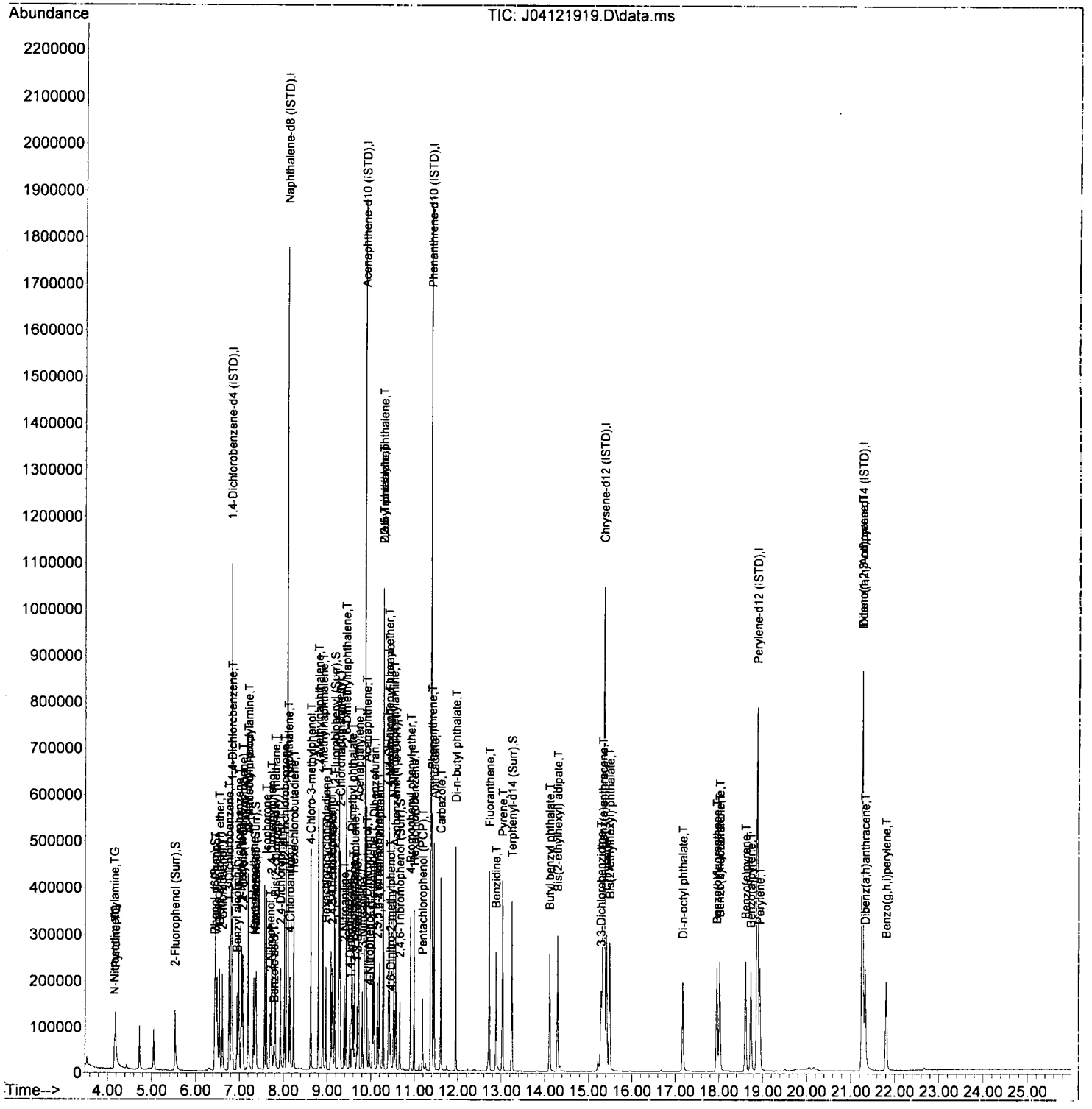
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	10966	266.95	ng/ml	96
45)	Dimethyl phthalate	9.568	163	166367	531.71	ng/ml	98
46)	1,3-Dinitrobenzene	9.595	168	16599	362.32	ng/ml	87
47)	2,6-Dinitrotoluene	9.627	165	31238	460.37	ng/ml	95
48)	1,2-Dinitrobenzene	9.686	168	14052	443.83	ng/ml	96
49)	Acenaphthylene	9.718	152	239738	514.40	ng/ml	99
50)	3-Nitroaniline	9.804	138	31835	510.70	ng/ml	98
51)	Acenaphthene	9.894	153	152764	518.80	ng/ml	99
52)	2,4-Dinitrophenol	9.905	184	3186	255.57	ng/ml	88
53)	4-Nitrophenol	9.959	139	16667	316.12	ng/ml	97
54)	2,4-Dinitrotoluene	10.039	165	34132	401.04	ng/ml	93
55)	Dibenzofuran	10.071	168	203340	539.93	ng/ml	99
56)	2,3,5,6-Tetrachlorophenol	10.151	232	26249	436.81	ng/ml	89
57)	2,3,4,6-Tetrachlorophenol	10.194	232	29885	478.70	ng/ml	91
58)	Diethyl phthalate	10.280	149	165131	535.73	ng/ml	99
59)	2,3,5-Trimethylnaphtha...	10.280	170	130703	532.22	ng/ml	98
60)	Fluorene	10.419	166	160999	541.02	ng/ml	98
61)	4-Chlorophenyl phenyl ...	10.408	204	70419	520.22	ng/ml	99
62)	4-Nitroaniline	10.424	138	27588	475.69	ng/ml	93
63)	4,6-Dinitro-2-methylph...	10.456	198	7777	266.49	ng/ml	96
65)	N-Nitrosodiphenylamine	10.526	169	133109	536.71	ng/ml	98
66)	Azobenzene (1,2-DPH)	10.568	77	177851	539.63	ng/ml	96
68)	4-Bromophenyl phenyl e...	10.911	248	40555	494.33	ng/ml	96
69)	Hexachlorobenzene	10.991	284	46685	501.82	ng/ml	96
70)	Pentachlorophenol (PCP)	11.183	266	18590	449.47	ng/ml	95
71)	Phenanthrene	11.403	178	217396	527.11	ng/ml	99
72)	Anthracene	11.456	178	221004	531.60	ng/ml	99
73)	Carbazole	11.606	167	187353	581.37	ng/ml	98
74)	Di-n-butyl phthalate	11.948	149	254292	473.52	ng/ml	99
75)	Fluoranthene	12.719	202	228649	503.09	ng/ml	99
76)	Benzidine	12.874	184	133741	1511.70	ng/ml	98
77)	Pyrene	13.029	202	236036	504.41	ng/ml	99
80)	Butyl benzyl phthalate	14.109	149	94315	412.99	ng/ml	96
81)	Bis(2-ethylhexyl) adipate	14.291	129	89139	395.05	ng/ml	97
82)	3,3-Dichlorobenzidine	15.286	252	74081	895.49	ng/ml	97
83)	Benz(a)anthracene	15.329	228	193655	500.91	ng/ml	99
84)	Chrysene	15.414	228	184149	504.87	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.489	149	135678	451.00	ng/ml	98
87)	Di-n-octyl phthalate	17.169	149	179707	395.85	ng/ml	97
88)	Benzo(b)fluoranthene	17.950	252	182995	522.16	ng/ml	95
89)	Benzo(k)fluoranthene	18.014	252	185113	561.68	ng/ml	98
90)	Benzo(b+k)fluoranthene	18.014	252	376051	1083.43	ng/ml	98
91)	Benzo(e)pyrene	18.607	252	185968	541.30	ng/ml	98
92)	Benzo(a)pyrene	18.725	252	167492	523.32	ng/ml	97
93)	Perylene	18.928	252	164210	503.99	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	21.260	276	156537	503.78	ng/ml	94
96)	Dibenz(a,h)anthracene	21.324	278	147780	501.64	ng/ml	97
97)	Benzo(g,h,i)perylene	21.806	276	166477	513.91	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121919.D
Acq On : 12 Apr 2019 9:16 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:16 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121920.D
Acq On : 12 Apr 2019 9:52 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:21 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	207595	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	870566	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.868	162	408985	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	701196	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.355	240	609064	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.875	264	550560	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.266	292	510954	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	141127	965.69	ng/ml	0.00
5) Phenol-d6(Surr)	6.434	99	182856	942.79	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	153864	922.01	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	318318	1045.15	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	34203	848.76	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	302416	1002.69	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.150	74	104701	972.93	ng/ml	95
3) Pyridine	4.177	79	177059	1032.21	ng/ml	91
6) Phenol	6.450	94	183416	841.06	ng/ml	95
7) Aniline	6.487	93	224184	1177.92	ng/ml	96
8) Bis(2-chloroethyl) ether	6.541	93	176845	1096.24	ng/ml	97
9) 2-Chlorophenol	6.605	128	154232	1009.91	ng/ml	94
10) 1,3-Dichlorobenzene	6.755	146	162324	1009.08	ng/ml	97
11) 1,4-Dichlorobenzene	6.830	146	158903	1014.17	ng/ml	100
12) Benzyl alcohol	6.937	108	86489	843.54	ng/ml	92
13) 1,2-Dichlorobenzene	6.979	146	158706	1031.80	ng/ml	98
14) 2-Methylphenol	7.044	107	123097	1025.74	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	207984	984.24	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.199	70	126521	1065.32	ng/ml	99
17) 3+4-Methylphenol	7.193	107	154518	1046.66	ng/ml	98
18) Hexachloroethane	7.322	201	42742	969.53	ng/ml	95
20) Nitrobenzene	7.375	77	159222	977.44	ng/ml	96
22) Isophorone	7.605	82	336596	1020.04	ng/ml	100
23) 2-Nitrophenol	7.696	139	70238	819.60	ng/ml	94
24) 2,4-Dimethylphenol	7.723	122	137294	1017.44	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.814	93	191279	1026.85	ng/ml	99
26) Benzoic acid	7.814	105	96370	1592.13	ng/ml	98
27) 2,4-Dichlorophenol	7.931	162	106512	982.06	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.022	180	129034	985.09	ng/ml	99
29) Naphthalene	8.103	128	475302	1023.54	ng/ml	99
30) 4-Chloroaniline	8.145	127	151775	1355.01	ng/ml	98
31) Hexachlorobutadiene	8.231	225	67844	981.90	ng/ml	96
32) 4-Chloro-3-methylphenol	8.621	107	126121	961.72	ng/ml	95
33) 2-Methylnaphthalene	8.798	142	322088	1038.32	ng/ml	98
34) 1-Methylnaphthalene	8.900	142	303908	1020.38	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	59442	931.23	ng/ml	97
37) 2,4,6-Trichlorophenol	9.081	196	69804	966.36	ng/ml	96
38) 2,4,5-Trichlorophenol	9.119	198	69025	972.35	ng/ml	97
39) 1,1'-Biphenyl	9.269	154	365897	1066.41	ng/ml	99
41) 2-Chloronaphthalene	9.295	162	256777	1058.27	ng/ml	97
42) 2-Nitroaniline	9.392	138	74805	892.61	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.429	156	267086	1065.93	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121920.D
Acq On : 12 Apr 2019 9:52 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:21 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

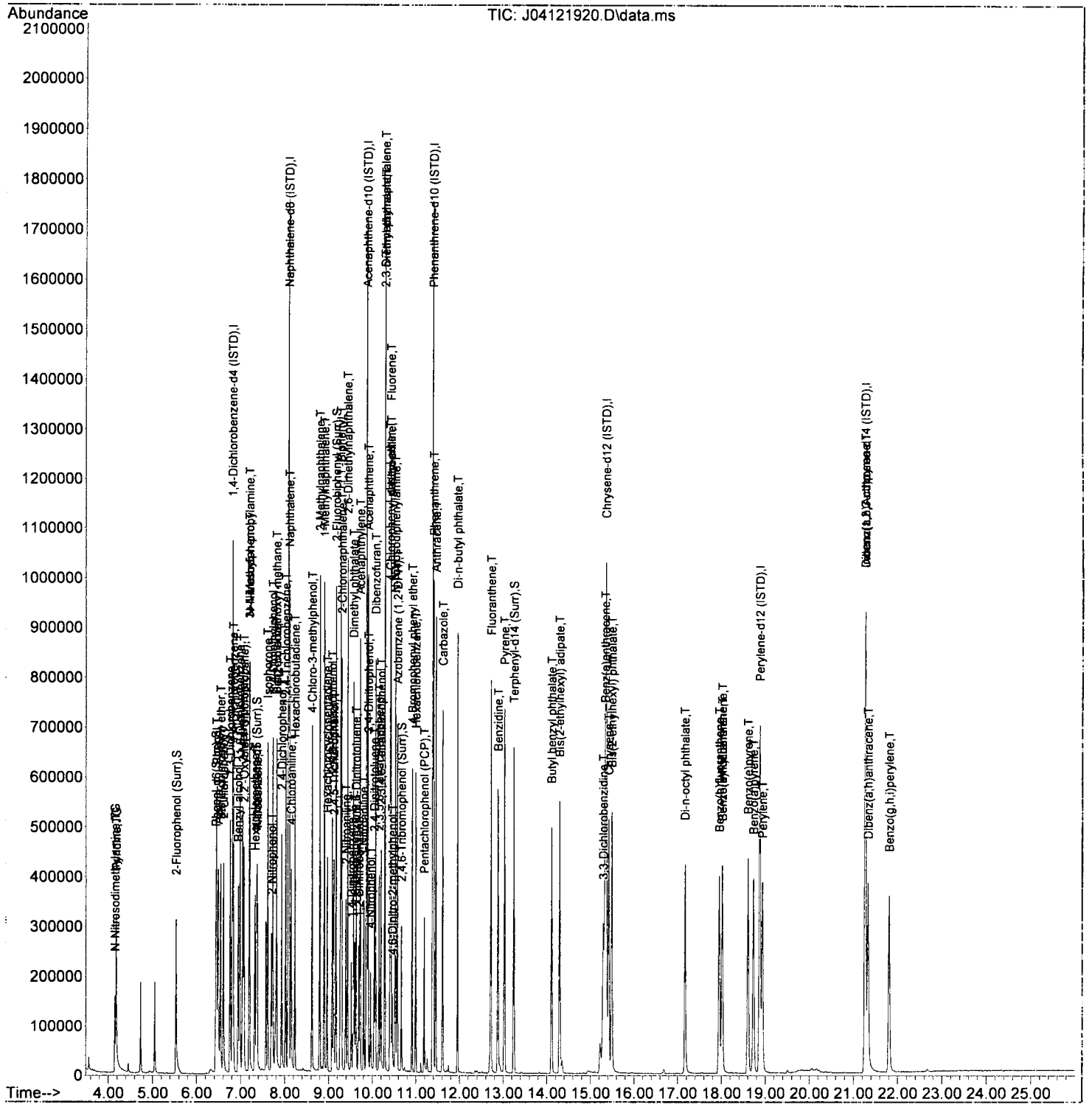
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	24586	635.47	ng/ml	90
45)	Dimethyl phthalate	9.568	163	293273	995.18	ng/ml	98
46)	1,3-Dinitrobenzene	9.600	168	33847	784.43	ng/ml	98
47)	2,6-Dinitrotoluene	9.627	165	61642	964.55	ng/ml	98
48)	1,2-Dinitrobenzene	9.691	168	27578	924.83	ng/ml	87
49)	Acenaphthylene	9.718	152	438645	999.30	ng/ml	99
50)	3-Nitroaniline	9.803	138	61316	1121.93	ng/ml	96
51)	Acenaphthene	9.900	153	274380	989.35	ng/ml	99
52)	2,4-Dinitrophenol	9.905	184	9505	500.16	ng/ml	91
53)	4-Nitrophenol	9.959	139	38661	778.55	ng/ml	92
54)	2,4-Dinitrotoluene	10.039	165	72103	899.50	ng/ml	94
55)	Dibenzofuran	10.071	168	357236	1007.14	ng/ml	99
56)	2,3,5,6-Tetrachlorophenol	10.151	232	53006	936.53	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.194	232	57975	985.99	ng/ml	94
58)	Diethyl phthalate	10.285	149	290221	999.70	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.280	170	228198	986.59	ng/ml	94
60)	Fluorene	10.419	166	283189	1010.38	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.408	204	127242	998.03	ng/ml	96
62)	4-Nitroaniline	10.424	138	55130	1009.29	ng/ml	95
63)	4,6-Dinitro-2-methylph...	10.461	198	18318	569.15	ng/ml	89
65)	N-Nitrosodiphenylamine	10.526	169	233117	990.35	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.574	77	317716	1015.71	ng/ml	92
68)	4-Bromophenyl phenyl e...	10.911	248	73569	944.82	ng/ml	96
69)	Hexachlorobenzene	10.991	284	85256	965.57	ng/ml	98
70)	Pentachlorophenol (PCP)	11.183	266	36665	877.43	ng/ml	97
71)	Phenanthrene	11.403	178	396616	1013.22	ng/ml	100
72)	Anthracene	11.456	178	394791	1000.55	ng/ml	99
73)	Carbazole	11.611	167	340948	1248.96	ng/ml	99
74)	Di-n-butyl phthalate	11.948	149	466951	949.24	ng/ml	99
75)	Fluoranthene	12.719	202	412285	955.79	ng/ml	98
76)	Benzidine	12.879	184	301351	3179.82	ng/ml	96
77)	Pyrene	13.029	202	420841	947.56	ng/ml	99
80)	Butyl benzyl phthalate	14.109	149	182466	881.28	ng/ml	99
81)	Bis(2-ethylhexyl) adipate	14.291	129	172525	913.46	ng/ml	99
82)	3,3-Dichlorobenzidine	15.291	252	125386	1989.57	ng/ml	99
83)	Benz(a)anthracene	15.334	228	339038	967.28	ng/ml	99
84)	Chrysene	15.414	228	330019	997.98	ng/ml	100
85)	Bis(2-ethylhexyl) phth...	15.489	149	262635	962.92	ng/ml	97
87)	Di-n-octyl phthalate	17.163	149	379612	928.34	ng/ml	98
88)	Benzo(b)fluoranthene	17.949	252	328149	1039.52	ng/ml	96
89)	Benzo(k)fluoranthene	18.019	252	333411	1123.13	ng/ml	95
90)	Benzo(b+k)fluoranthene	18.019	252	674655	2157.92	ng/ml	95
91)	Benzo(e)pyrene	18.607	252	331204	1070.27	ng/ml	99
92)	Benzo(a)pyrene	18.730	252	305060	1058.17	ng/ml	97
93)	Perylene	18.934	252	289485	986.39	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	21.266	276	278226	993.30	ng/ml	96
96)	Dibenz(a,h)anthracene	21.330	278	262242	987.50	ng/ml	93
97)	Benzo(g,h,i)perylene	21.811	276	301297	1031.78	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121920.D
Acq On : 12 Apr 2019 9:52 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:21 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121921.D
Acq On : 12 Apr 2019 10:28 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:26 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	210386	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	872864	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.868	162	422972	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	740336	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.366	240	656807	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.880	264	608933	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.271	292	581304	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	292249	1973.23	ng/ml	0.00
5) Phenol-d6(Surr)	6.439	99	384186	1954.56	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.359	82	329613	1948.97	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	622727	1977.02	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.670	330	75759	1780.60	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.248	244	637269	1959.34	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.166	74	208448	1911.30	ng/ml	93
3) Pyridine	4.177	79	358336	2061.29	ng/ml	93
6) Phenol	6.455	94	423399	1915.75	ng/ml	96
7) Aniline	6.487	93	401171	2079.88	ng/ml	96
8) Bis(2-chloroethyl) ether	6.546	93	373313	2283.42	ng/ml	96
9) 2-Chlorophenol	6.610	128	308446	1992.91	ng/ml	93
10) 1,3-Dichlorobenzene	6.760	146	324509	1990.54	ng/ml	97
11) 1,4-Dichlorobenzene	6.830	146	321266	2023.21	ng/ml	99
12) Benzyl alcohol	6.942	108	196023	1886.47	ng/ml	96
13) 1,2-Dichlorobenzene	6.985	146	313391	2010.43	ng/ml	99
14) 2-Methylphenol	7.044	107	248169	2040.51	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.076	45	394994	1844.42	ng/ml	89
16) N-Nitrosodi-n-propylamine	7.204	70	245818	2042.35	ng/ml	99
17) 3+4-Methylphenol	7.193	107	319359	2134.56	ng/ml	99
18) Hexachloroethane	7.322	201	89727	2008.30	ng/ml	99
20) Nitrobenzene	7.375	77	323406	1959.01	ng/ml	99
22) Isophorone	7.611	82	660663	1996.83	ng/ml	99
23) 2-Nitrophenol	7.696	139	144348	1679.95	ng/ml	95
24) 2,4-Dimethylphenol	7.728	122	281937	2083.85	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.819	93	381475	2042.50	ng/ml	99
26) Benzoic acid	7.851	105	293257	3675.18	ng/ml	99
27) 2,4-Dichlorophenol	7.937	162	222208	2043.40	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.022	180	246059	1873.55	ng/ml	98
29) Naphthalene	8.103	128	918583	1972.91	ng/ml	100
30) 4-Chloroaniline	8.151	127	308711	2748.83	ng/ml	98
31) Hexachlorobutadiene	8.231	225	131105	1892.47	ng/ml	99
32) 4-Chloro-3-methylphenol	8.627	107	269479	2049.47	ng/ml	97
33) 2-Methylnaphthalene	8.803	142	633302	2036.20	ng/ml	98
34) 1-Methylnaphthalene	8.905	142	593190	1986.41	ng/ml	99
36) Hexachlorocyclopentadiene	8.969	237	126849	1921.52	ng/ml	98
37) 2,4,6-Trichlorophenol	9.081	196	154065	2062.33	ng/ml	96
38) 2,4,5-Trichlorophenol	9.119	198	144274	1965.17	ng/ml	98
39) 1,1'-Biphenyl	9.269	154	716600	2019.47	ng/ml	100
41) 2-Chloronaphthalene	9.295	162	513880	2047.85	ng/ml	97
42) 2-Nitroaniline	9.392	138	172195	1986.76	ng/ml	96
43) 2,6-Dimethylnaphthalene	9.434	156	523522	2020.26	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121921.D
Acq On : 12 Apr 2019 10:28 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:26 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

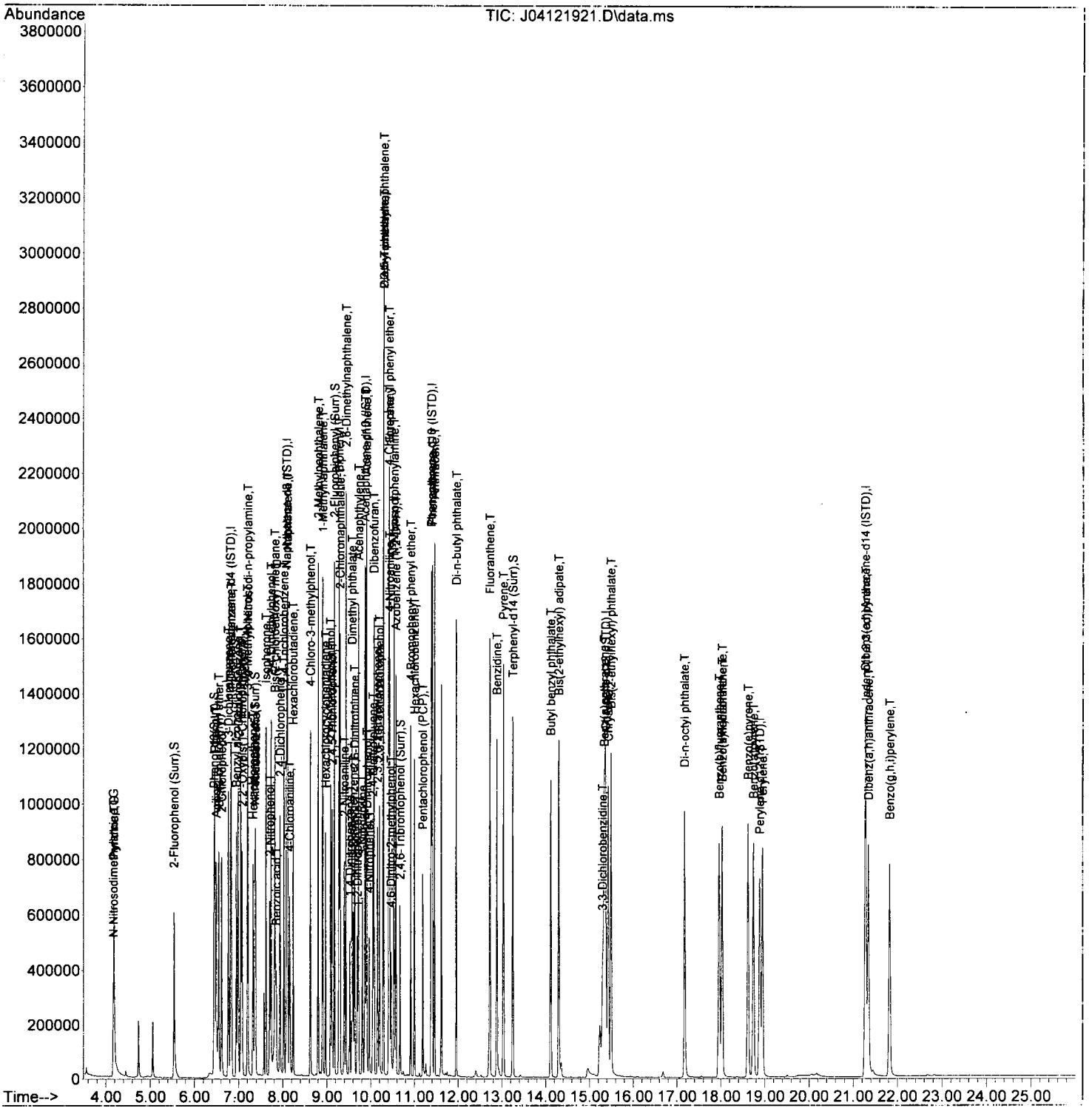
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.520	168	65644	1640.59	ng/ml	95
45)	Dimethyl phthalate	9.573	163	593270	1946.60	ng/ml	99
46)	1,3-Dinitrobenzene	9.600	168	81663	1830.02	ng/ml	96
47)	2,6-Dinitrotoluene	9.632	165	130676	1977.14	ng/ml	95
48)	1,2-Dinitrobenzene	9.696	168	58797	1906.56	ng/ml	83
49)	Acenaphthylene	9.723	152	847485	1866.85	ng/ml	99
50)	3-Nitroaniline	9.809	138	125110	2923.79	ng/ml	99
51)	Acenaphthene	9.900	153	539641	1881.48	ng/ml	99
52)	2,4-Dinitrophenol	9.910	184	29815	1195.29	ng/ml	90
53)	4-Nitrophenol	9.964	139	95687	1863.20	ng/ml	97
54)	2,4-Dinitrotoluene	10.044	165	165775	1999.68	ng/ml	98
55)	Dibenzofuran	10.071	168	718481	1958.60	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	10.151	232	116600	1992.01	ng/ml	96
57)	2,3,4,6-Tetrachlorophenol	10.194	232	124349	2044.88	ng/ml	95
58)	Diethyl phthalate	10.285	149	569548	1896.99	ng/ml	99
59)	2,3,5-Trimethylnaphtha...	10.285	170	449654	1879.75	ng/ml	97
60)	Fluorene	10.424	166	562191	1939.49	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.413	204	257040	1949.45	ng/ml	98
62)	4-Nitroaniline	10.429	138	116803	2067.65	ng/ml	94
63)	4,6-Dinitro-2-methylph...	10.461	198	52412	1434.08	ng/ml	98
65)	N-Nitrosodiphenylamine	10.531	169	470356	1892.57	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.574	77	640569	1939.57	ng/ml	92
68)	4-Bromophenyl phenyl e...	10.911	248	152125	1850.40	ng/ml	97
69)	Hexachlorobenzene	10.996	284	169660	1819.90	ng/ml	95
70)	Pentachlorophenol (PCP)	11.183	266	88610	1928.31	ng/ml	97
71)	Phenanthrene	11.408	178	798010	1930.86	ng/ml	99
72)	Anthracene	11.456	178	805661	1933.90	ng/ml	99
73)	Carbazole	11.611	167	651258	Below Cal		98
74)	Di-n-butyl phthalate	11.954	149	975285	1985.06	ng/ml	99
75)	Fluoranthene	12.718	202	857707	1883.28	ng/ml	98
76)	Benzidine	12.879	184	643196	5527.34	ng/ml	100
77)	Pyrene	13.034	202	864674	1843.96	ng/ml	99
80)	Butyl benzyl phthalate	14.114	149	421549	1888.00	ng/ml	98
81)	Bis(2-ethylhexyl) adipate	14.296	129	390927	1971.17	ng/ml	98
82)	3,3-Dichlorobenzidine	15.297	252	194322	3191.28	ng/ml	97
83)	Benz(a)anthracene	15.334	228	723880	1915.11	ng/ml	100
84)	Chrysene	15.425	228	705299	1977.80	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.489	149	581618	1977.43	ng/ml	99
87)	Di-n-octyl phthalate	17.169	149	937211	2072.23	ng/ml	97
88)	Benzo(b)fluoranthene	17.960	252	743627	2129.87	ng/ml	97
89)	Benzo(k)fluoranthene	18.030	252	719520	2191.44	ng/ml	97
90)	Benzo(b+k)fluoranthene	18.030	252	1488733	4305.31	ng/ml	97
91)	Benzo(e)pyrene	18.618	252	729599	2131.65	ng/ml	99
92)	Benzo(a)pyrene	18.741	252	692390	2171.47	ng/ml	98
93)	Perylene	18.944	252	626831	1931.12	ng/ml	100
95)	Indeno(1,2,3-cd)pyrene	21.282	276	633467	1987.86	ng/ml	95
96)	Dibenz(a,h)anthracene	21.340	278	618025	2045.60	ng/ml	94
97)	Benzo(g,h,i)perylene	21.822	276	672680	2024.78	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121921.D
Acq On : 12 Apr 2019 10:28 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:26 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121922.D
Acq On : 12 Apr 2019 11:04 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:31 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	205518	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.087	136	854691	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.868	162	415395	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	758182	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.372	240	643412	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.886	264	604409	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	21.287	292	596931	2000.00	ng/ml	0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.541	112	601422	4156.92	ng/ml	0.00
5) Phenol-d6(Surr)	6.445	99	778420	4054.04	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.365	82	650463	3937.23	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.172	172	1129555	3651.49	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.670	330	157542	3615.63	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.248	244	1238678	3887.70	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.172	74	426026	3998.84	ng/ml	90
3) Pyridine	4.177	79	737969	4345.64	ng/ml	94
6) Phenol	6.461	94	846992	3923.16	ng/ml	97
7) Aniline	6.493	93	764336	4056.59	ng/ml	98
8) Bis(2-chloroethyl) ether	6.552	93	730472	4573.86	ng/ml	96
9) 2-Chlorophenol	6.611	128	607949	4021.08	ng/ml	94
10) 1,3-Dichlorobenzene	6.760	146	625796	3929.56	ng/ml	98
11) 1,4-Dichlorobenzene	6.830	146	609817	3931.36	ng/ml	99
12) Benzyl alcohol	6.947	108	417822	4116.25	ng/ml	92
13) 1,2-Dichlorobenzene	6.985	146	590567	3878.27	ng/ml	98
14) 2-Methylphenol	7.049	107	490045	4124.71	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.076	45	731830	3498.22	ng/ml	88
16) N-Nitrosodi-n-propylamine	7.215	70	453288	3855.30	ng/ml	96
17) 3+4-Methylphenol	7.204	107	622867	4261.78	ng/ml	97
18) Hexachloroethane	7.322	201	177511	4067.21	ng/ml	97
20) Nitrobenzene	7.381	77	629792	3905.28	ng/ml	97
22) Isophorone	7.621	82	1289086	3979.06	ng/ml	97
23) 2-Nitrophenol	7.696	139	303901	3612.06	ng/ml	93
24) 2,4-Dimethylphenol	7.734	122	523529	3951.77	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.825	93	734704	4017.41	ng/ml	99
26) Benzoic acid	7.900	105	750898	8368.75	ng/ml	99
27) 2,4-Dichlorophenol	7.942	162	440368	4135.68	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.028	180	468931	3646.47	ng/ml	98
29) Naphthalene	8.108	128	1661053	3643.43	ng/ml	97
30) 4-Chloroaniline	8.151	127	625745	5690.25	ng/ml	98
31) Hexachlorobutadiene	8.231	225	243190	3585.02	ng/ml	98
32) 4-Chloro-3-methylphenol	8.627	107	543982	4225.11	ng/ml	95
33) 2-Methylnaphthalene	8.803	142	1165928	3828.42	ng/ml	98
34) 1-Methylnaphthalene	8.905	142	1095549	3746.66	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	258289	3983.95	ng/ml	97
37) 2,4,6-Trichlorophenol	9.087	196	304939	4156.41	ng/ml	98
38) 2,4,5-Trichlorophenol	9.119	198	298945	4146.28	ng/ml	99
39) 1,1'-Biphenyl	9.274	154	1284403	3685.63	ng/ml	99
41) 2-Chloronaphthalene	9.301	162	950535	3857.04	ng/ml	96
42) 2-Nitroaniline	9.397	138	356149	4184.16	ng/ml	97
43) 2,6-Dimethylnaphthalene	9.440	156	944826	3712.57	ng/ml	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121922.D
Acq On : 12 Apr 2019 11:04 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:31 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

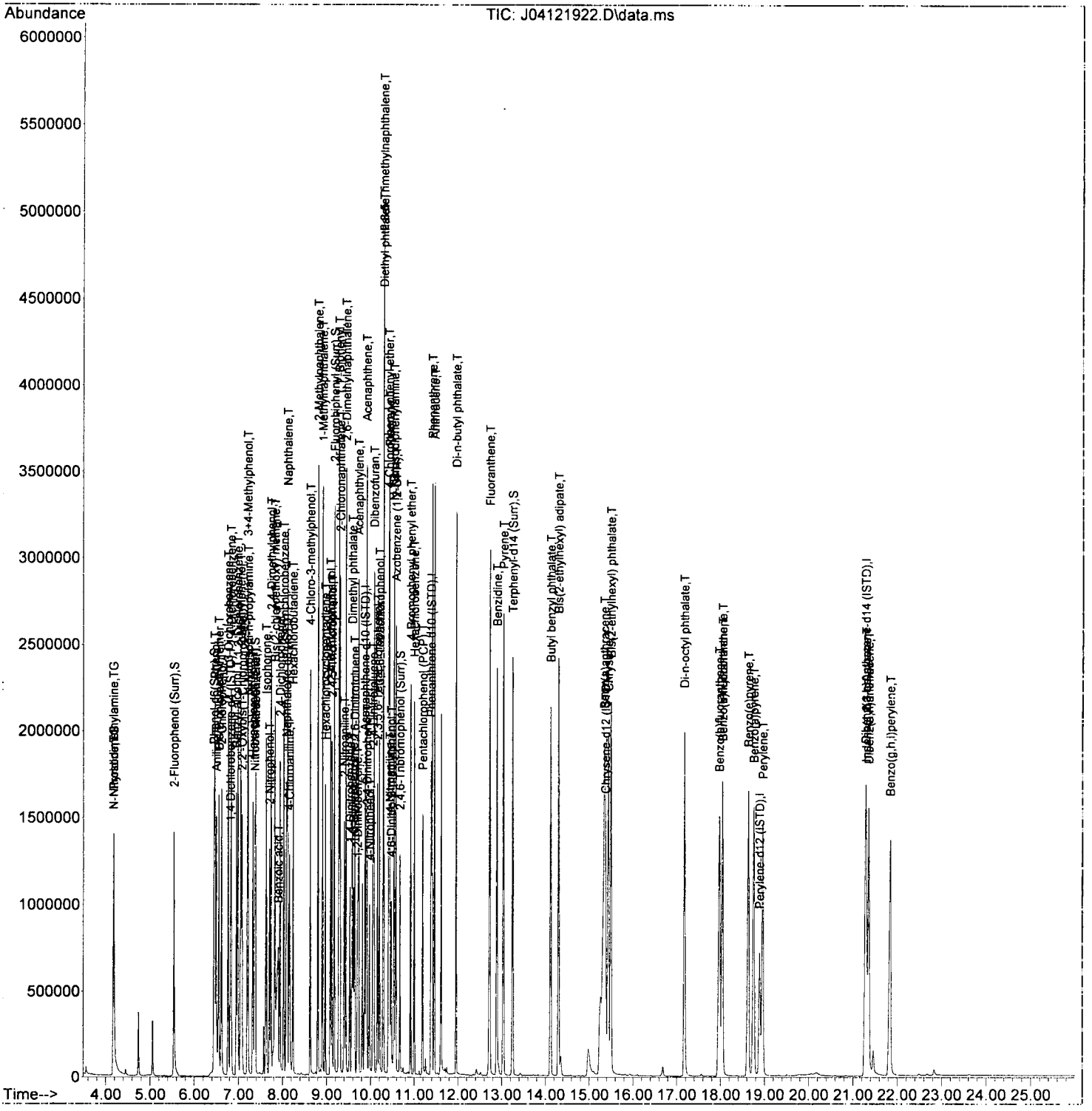
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.525	168	148152	3770.19	ng/ml	96
45) Dimethyl phthalate	9.584	163	1125792	3761.26	ng/ml	98
46) 1,3-Dinitrobenzene	9.611	168	172914	3945.59	ng/ml	98
47) 2,6-Dinitrotoluene	9.638	165	259088	3991.53	ng/ml	96
48) 1,2-Dinitrobenzene	9.702	168	123107	4064.69	ng/ml	93
49) Acenaphthylene	9.723	152	1577347	3537.98	ng/ml	98
50) 3-Nitroaniline	9.814	138	227237	Below Cal		100
51) Acenaphthene	9.905	153	991538	3520.09	ng/ml	99
52) 2,4-Dinitrophenol	9.916	184	85634	2985.64	ng/ml	92
53) 4-Nitrophenol	9.975	139	210496	4173.51	ng/ml	95
54) 2,4-Dinitrotoluene	10.055	165	342144	4202.44	ng/ml	94
55) Dibenzofuran	10.076	168	1332830	3699.60	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.157	232	241470	4200.55	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.199	232	249107	4171.21	ng/ml	95
58) Diethyl phthalate	10.290	149	1025219	3476.98	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.285	170	800915	3409.25	ng/ml	97
60) Fluorene	10.429	166	1010351	3549.17	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.413	204	476543	3680.13	ng/ml	98
62) 4-Nitroaniline	10.440	138	224177	4040.77	ng/ml	92
63) 4,6-Dinitro-2-methylph...	10.472	198	132375	3421.41	ng/ml	92
65) N-Nitrosodiphenylamine	10.536	169	873790	3433.11	ng/ml	100
66) Azobenzene (1,2-DPH)	10.579	77	1195391	3534.31	ng/ml	90
68) 4-Bromophenyl phenyl e...	10.916	248	299638	3558.92	ng/ml	98
69) Hexachlorobenzene	10.996	284	325856	3413.10	ng/ml	99
70) Pentachlorophenol (PCP)	11.189	266	190485	3931.16	ng/ml	97
71) Phenanthrene	11.408	178	1492206	3525.55	ng/ml	98
72) Anthracene	11.462	178	1503459	3523.94	ng/ml	99
73) Carbazole	11.611	167	1088868	Below Cal		99
74) Di-n-butyl phthalate	11.954	149	1863184	4141.28	ng/ml	98
75) Fluoranthene	12.724	202	1642237	3521.01	ng/ml	98
76) Benzidine	12.890	184	1376314	9381.83	ng/ml	99
77) Pyrene	13.040	202	1649971	3435.82	ng/ml	98
80) Butyl benzyl phthalate	14.120	149	881875	4031.91	ng/ml	99
81) Bis(2-ethylhexyl) adipate	14.296	129	814038	4174.04	ng/ml	99
82) 3,3-Dichlorobenzidine	15.307	252	367601	Below Cal		97
83) Benz(a)anthracene	15.345	228	1412877	3815.76	ng/ml	99
84) Chrysene	15.436	228	1362723	3900.89	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.495	149	1174172	4075.15	ng/ml	98
87) Di-n-octyl phthalate	17.174	149	2011354	4480.52	ng/ml	96
88) Benzo(b)fluoranthene	17.971	252	1520664	4388.04	ng/ml	96
89) Benzo(k)fluoranthene	18.046	252	1404715	4310.35	ng/ml	97
90) Benzo(b+k)fluoranthene	18.046	252	2970412	8654.53	ng/ml	97
91) Benzo(e)pyrene	18.634	252	1443185	4248.07	ng/ml	97
92) Benzo(a)pyrene	18.757	252	1361909	4303.18	ng/ml	98
93) Perylene	18.961	252	1230925	3820.57	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.298	276	1337697	4087.88	ng/ml	95
96) Dibenz(a,h)anthracene	21.357	278	1232473	3972.57	ng/ml	96
97) Benzo(g,h,i)perylene	21.843	276	1357790	3979.98	ng/ml	96

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121922.D
Acq On : 12 Apr 2019 11:04 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:31 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121923.D
Acq On : 12 Apr 2019 11:40 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:38 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	204951	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.087	136	861766	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.873	162	421304	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.387	188	776478	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.377	240	633760	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.891	264	621448	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.298	292	616591	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	900422	6240.78	ng/ml	0.00
5) Phenol-d6(Surr)	6.450	99	1151230	6012.24	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.365	82	952331	5780.37	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.172	172	1558757	4968.29	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.675	330	233263	5227.30	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.254	244	1748485	5571.36	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.150	74	627490	5906.15	ng/ml	88
3) Pyridine	4.155	79	1105047	6525.24	ng/ml	91
6) Phenol	6.466	94	1236521	5748.25	ng/ml	96
7) Aniline	6.493	93	1198758	6379.81	ng/ml	98
8) Bis(2-chloroethyl) ether	6.552	93	1009123	6336.12	ng/ml	96
9) 2-Chlorophenol	6.610	128	902513	5985.90	ng/ml	94
10) 1,3-Dichlorobenzene	6.760	146	902850	5684.95	ng/ml	97
11) 1,4-Dichlorobenzene	6.830	146	873197	5644.90	ng/ml	99
12) Benzyl alcohol	6.947	108	625005	6174.38	ng/ml	94
13) 1,2-Dichlorobenzene	6.985	146	851080	5604.53	ng/ml	99
14) 2-Methylphenol	7.049	107	708351	5978.68	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.076	45	1018502	4882.01	ng/ml	87
16) N-Nitrosodi-n-propylamine	7.220	70	641593	5471.96	ng/ml	96
17) 3+4-Methylphenol	7.210	107	876610	6014.53	ng/ml	98
18) Hexachloroethane	7.322	201	259269	5956.93	ng/ml	98
20) Nitrobenzene	7.386	77	911090	5665.21	ng/ml	95
22) Isophorone	7.632	82	1905816	5834.45	ng/ml	98
23) 2-Nitrophenol	7.702	139	463565	5464.54	ng/ml	94
24) 2,4-Dimethylphenol	7.739	122	746900	5591.56	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.830	93	1040589	5643.29	ng/ml	99
26) Benzoic acid	7.739	105	27049	836.96	ng/ml#	1
27) 2,4-Dichlorophenol	7.948	162	634884	5913.61	ng/ml	98
28) 1,2,4-Trichlorobenzene	8.028	180	677553	5225.48	ng/ml	99
29) Naphthalene	8.113	128	2278161	4955.99	ng/ml	97
30) 4-Chloroaniline	8.156	127	903302	8146.79	ng/ml	97
31) Hexachlorobutadiene	8.236	225	350040	5117.80	ng/ml	99
32) 4-Chloro-3-methylphenol	8.632	107	795091	6124.78	ng/ml	96
33) 2-Methylnaphthalene	8.809	142	1614149	5256.67	ng/ml	98
34) 1-Methylnaphthalene	8.910	142	1501404	5092.49	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	390476	5938.38	ng/ml	99
37) 2,4,6-Trichlorophenol	9.087	196	453546	6095.26	ng/ml	98
38) 2,4,5-Trichlorophenol	9.124	198	429331	5871.11	ng/ml	99
39) 1,1'-Biphenyl	9.279	154	1770639	5009.64	ng/ml	97
41) 2-Chloronaphthalene	9.306	162	1327873	5312.62	ng/ml	95
42) 2-Nitroaniline	9.402	138	544899	6311.87	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.440	156	1312335	5084.32	ng/ml	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121923.D
Acq On : 12 Apr 2019 11:40 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:38 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

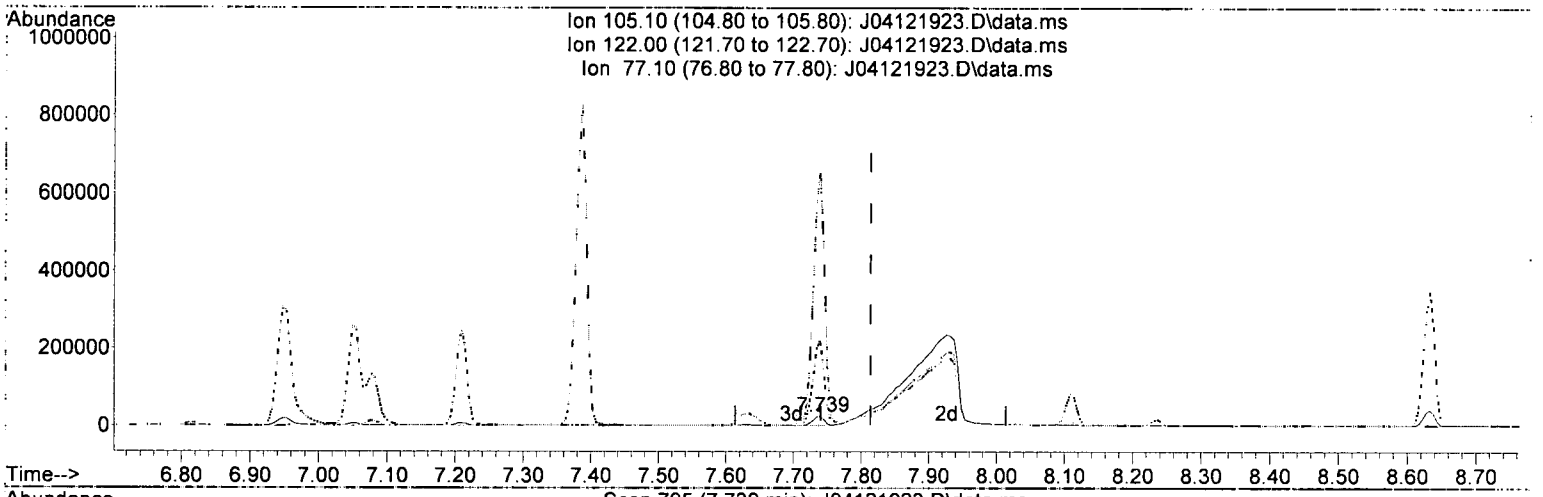
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.531	168	231647	5812.31	ng/ml	99
45)	Dimethyl phthalate	9.590	163	1593856	5250.38	ng/ml	97
46)	1,3-Dinitrobenzene	9.622	168	262552	5906.94	ng/ml	97
47)	2,6-Dinitrotoluene	9.649	165	380933	5786.37	ng/ml	89
48)	1,2-Dinitrobenzene	9.713	168	181239	5900.14	ng/ml	86
49)	Acenaphthylene	9.729	152	2093729	4630.36	ng/ml	97
50)	3-Nitroaniline	9.820	138	329674	Below Cal		98
51)	Acenaphthene	9.905	153	1376414	4817.92	ng/ml	98
52)	2,4-Dinitrophenol	9.927	184	149631	4702.65	ng/ml	96
53)	4-Nitrophenol	9.980	139	325043	6354.25	ng/ml	96
54)	2,4-Dinitrotoluene	10.060	165	498579	6037.99	ng/ml	96
55)	Dibenzofuran	10.082	168	1822175	4986.96	ng/ml	94
56)	2,3,5,6-Tetrachlorophenol	10.157	232	352904	6052.92	ng/ml	99
57)	2,3,4,6-Tetrachlorophenol	10.205	232	370697	6120.13	ng/ml	95
58)	Diethyl phthalate	10.301	149	1390913	4651.06	ng/ml	97
59)	2,3,5-Trimethylnaphtha...	10.290	170	1102900	4628.86	ng/ml	96
60)	Fluorene	10.429	166	1382772	4789.29	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.419	204	666343	5073.70	ng/ml	99
62)	4-Nitroaniline	10.451	138	332833	5915.14	ng/ml	91
63)	4,6-Dinitro-2-methylph...	10.478	198	214039	5197.80	ng/ml	93
65)	N-Nitrosodiphenylamine	10.542	169	1213548	4655.67	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.585	77	1634030	4717.36	ng/ml	87
68)	4-Bromophenyl phenyl e...	10.916	248	426557	4947.00	ng/ml	96
69)	Hexachlorobenzene	11.002	284	468256	4789.07	ng/ml	97
70)	Pentachlorophenol (PCP)	11.189	266	290217	5743.28	ng/ml	96
71)	Phenanthrene	11.414	178	2079626	4797.65	ng/ml	97
72)	Anthracene	11.467	178	2083055	4767.40	ng/ml	98
73)	Carbazole	11.617	167	1519317	Below Cal		98
74)	Di-n-butyl phthalate	11.954	149	2563602	6284.66	ng/ml	97
75)	Fluoranthene	12.729	202	2306517	4828.73	ng/ml	98
76)	Benzidine	12.895	184	2206262	12661.33	ng/ml	99
77)	Pyrene	13.045	202	2327794	4733.07	ng/ml	98
80)	Butyl benzyl phthalate	14.125	149	1284862	5963.82	ng/ml	97
81)	Bis(2-ethylhexyl) adipate	14.302	129	1167165	6000.84	ng/ml	100
82)	3,3-Dichlorobenzidine	15.313	252	561471	Below Cal		98
83)	Benz(a)anthracene	15.350	228	2019475	5537.06	ng/ml	98
84)	Chrysene	15.446	228	1955932	5684.27	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.500	149	1684021	5933.67	ng/ml	97
87)	Di-n-octyl phthalate	17.179	149	2987922	6473.44	ng/ml	96
88)	Benzo(b)fluoranthene	17.987	252	2251243	6318.09	ng/ml	97
89)	Benzo(k)fluoranthene	18.057	252	2012368	6005.62	ng/ml	98
90)	Benzo(b+k)fluoranthene	18.057	252	4333245	12279.08	ng/ml	98
91)	Benzo(e)pyrene	18.650	252	2113962	6051.92	ng/ml	98
92)	Benzo(a)pyrene	18.773	252	1987626	6108.05	ng/ml	99
93)	Perylene	18.971	252	1800658	5435.68	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.314	276	2048112	6059.28	ng/ml	95
96)	Dibenz(a,h)anthracene	21.373	278	1836914	5732.05	ng/ml	94
97)	Benzo(g,h,i)perylene	21.865	276	2023853	5743.20	ng/ml	98

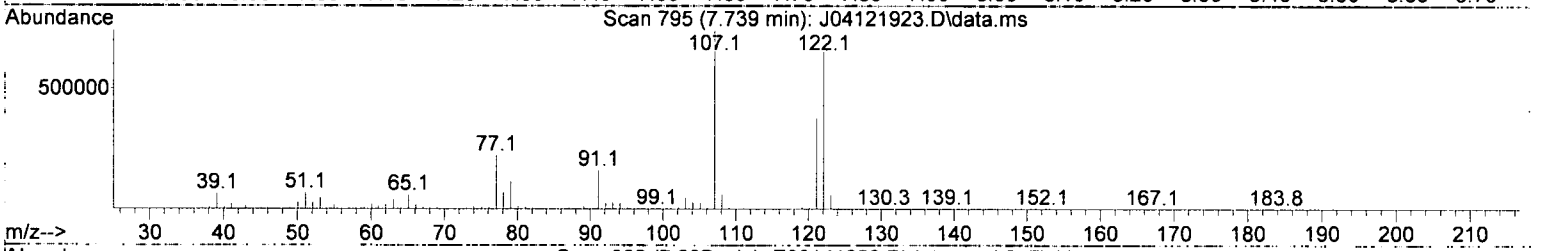
(#) = qualifier out of range (m) = manual integration (+) = signals summed

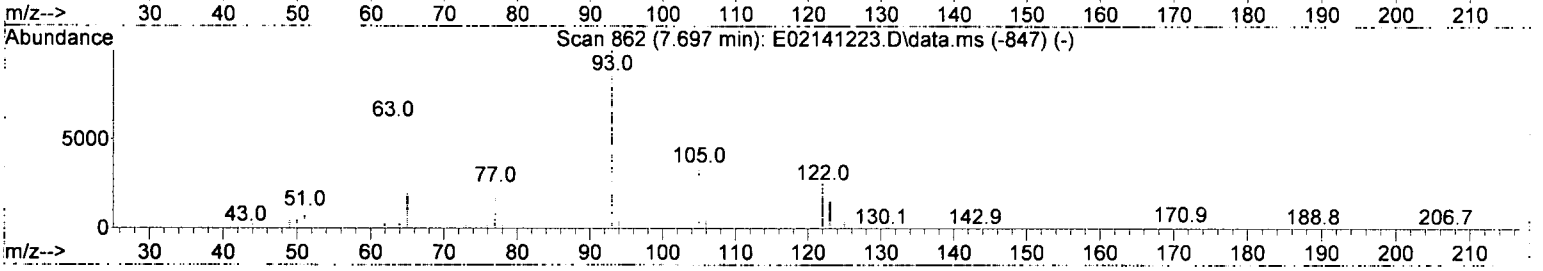
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121923.D
Acq On : 12 Apr 2019 11:40 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:38 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121923.D\data.ms

(26) Benzoic acid (T)

7.739min (-0.075) 836.96 ng/ml

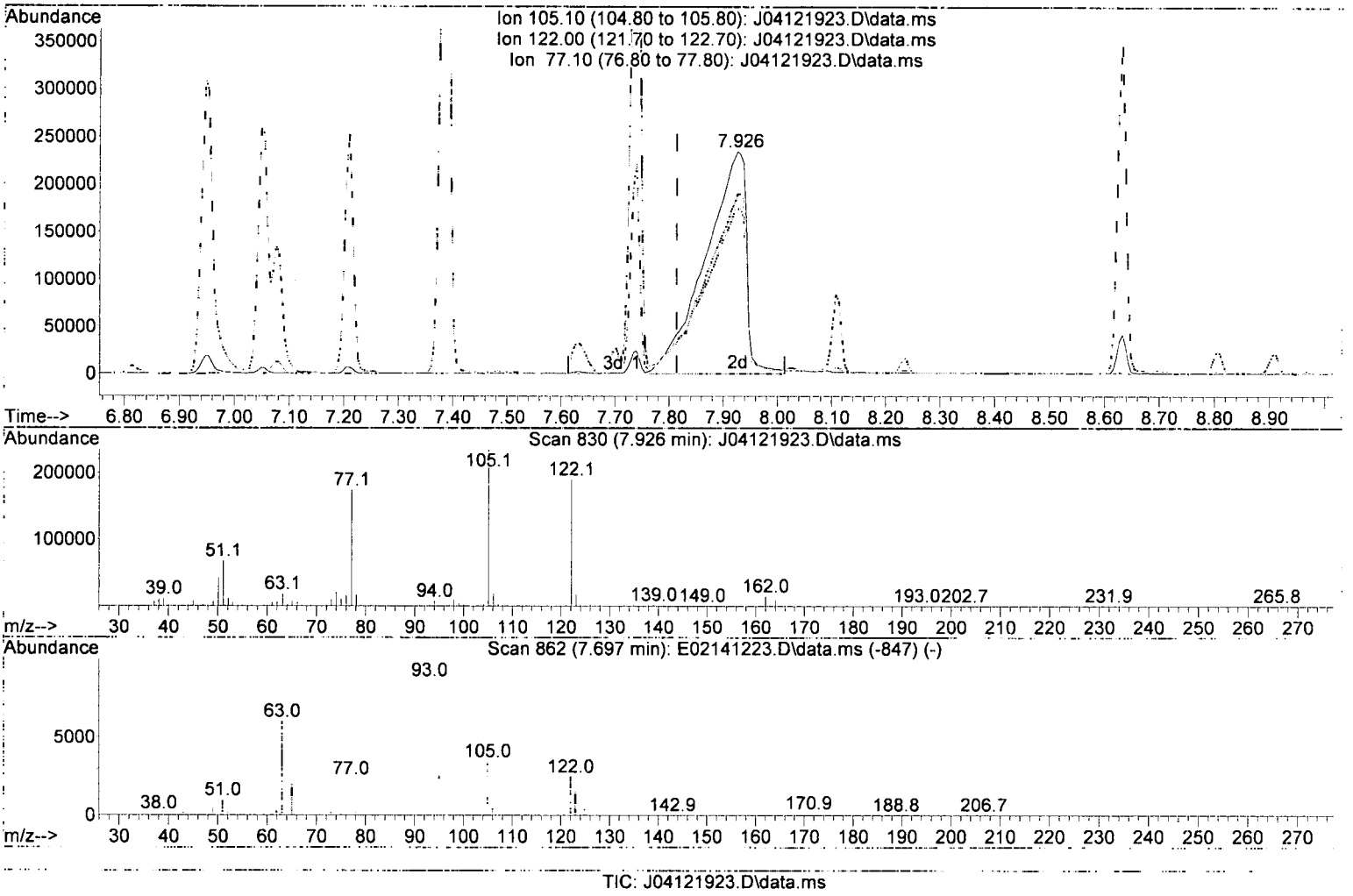
response 27049

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	2703.07#
77.10	76.00	914.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121923.D
Acq On : 12 Apr 2019 11:40 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:38 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121923.D\data.ms

(26) Benzoic acid (T)

7.926min (+ 0.112) 12780.48 ng/ml m

response 1234711

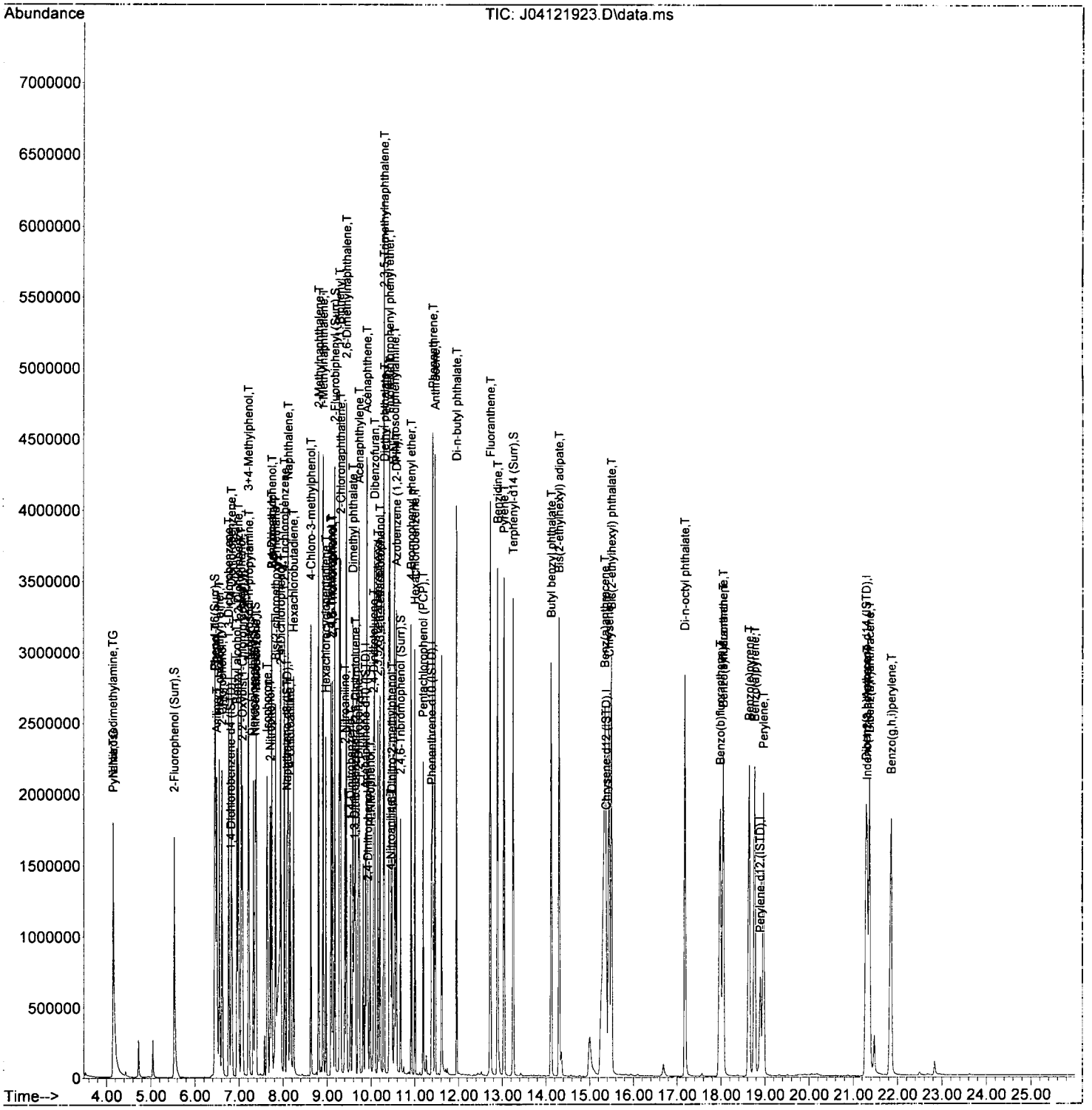
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	80.95
77.10	76.00	74.22
0.00	0.00	0.00

9/15/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121923.D
Acq On : 12 Apr 2019 11:40 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:38 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.814	152	205419	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.087	136	857219	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.873	162	424880	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.387	188	796822	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.382	240	627246	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.896	264	632280	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	21.309	292	623208	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.541	112	1179847	8158.82	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	1499696	7814.24	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.370	82	1245282	7541.28	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.178	172	1972042	6232.67	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.681	330	307443	6713.74	ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.259	244	2287744	7365.35	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.172	74	831842	7811.74	ng/ml	87
3) Pyridine	4.172	79	1473300	8679.93	ng/ml	90
6) Phenol	6.471	94	1605219	7438.75	ng/ml	99
7) Aniline	6.498	93	1648364	8752.63	ng/ml	98
8) Bis(2-chloroethyl) ether	6.557	93	1256889	7873.83	ng/ml	95
9) 2-Chlorophenol	6.616	128	1150237	7611.54	ng/ml	94
10) 1,3-Dichlorobenzene	6.766	146	1147379	7208.21	ng/ml	97
11) 1,4-Dichlorobenzene	6.835	146	1104480	7123.79	ng/ml	99
12) Benzyl alcohol	6.958	108	825334	8134.85	ng/ml	94
13) 1,2-Dichlorobenzene	6.985	146	1066099	7004.47	ng/ml	98
14) 2-Methylphenol	7.054	107	904249	7614.73	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.081	45	1238496	5922.98	ng/ml	81
16) N-Nitrosodi-n-propylamine	7.231	70	824622	7016.94	ng/ml	96
17) 3+4-Methylphenol	7.215	107	1108625	7589.08	ng/ml	98
18) Hexachloroethane	7.322	201	336985	7724.88	ng/ml	98
20) Nitrobenzene	7.391	77	1159115	7191.02	ng/ml	93
22) Isophorone	7.637	82	2513149	7734.54	ng/ml	97
23) 2-Nitrophenol	7.702	139	613878	7274.83	ng/ml	94
24) 2,4-Dimethylphenol	7.744	122	964243	7256.96	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.830	93	1311481	7150.11	ng/ml	98
26) Benzoic acid	7.744	105	36749	947.04	ng/ml#	1
27) 2,4-Dichlorophenol	7.948	162	807681	7562.89	ng/ml	97
28) 1,2,4-Trichlorobenzene	8.028	180	857676	6649.73	ng/ml	98
29) Naphthalene	8.114	128	2813330	6152.68	ng/ml	96
30) 4-Chloroaniline	8.156	127	1106729	10034.43	ng/ml	98
31) Hexachlorobutadiene	8.237	225	453153	6660.52	ng/ml	99
32) 4-Chloro-3-methylphenol	8.638	107	1024540	7934.14	ng/ml	96
33) 2-Methylnaphthalene	8.809	142	2022092	6620.12	ng/ml	98
34) 1-Methylnaphthalene	8.910	142	1877715	6402.65	ng/ml	97
36) Hexachlorocyclopentadiene	8.975	237	512416	7727.27	ng/ml	99
37) 2,4,6-Trichlorophenol	9.092	196	583608	7777.17	ng/ml	98
38) 2,4,5-Trichlorophenol	9.130	198	569105	7717.02	ng/ml	99
39) 1,1'-Biphenyl	9.280	154	2197978	6166.36	ng/ml	97
41) 2-Chloronaphthalene	9.306	162	1678580	6659.22	ng/ml	95
42) 2-Nitroaniline	9.408	138	729589	8380.10	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.445	156	1648270	6332.07	ng/ml	96

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

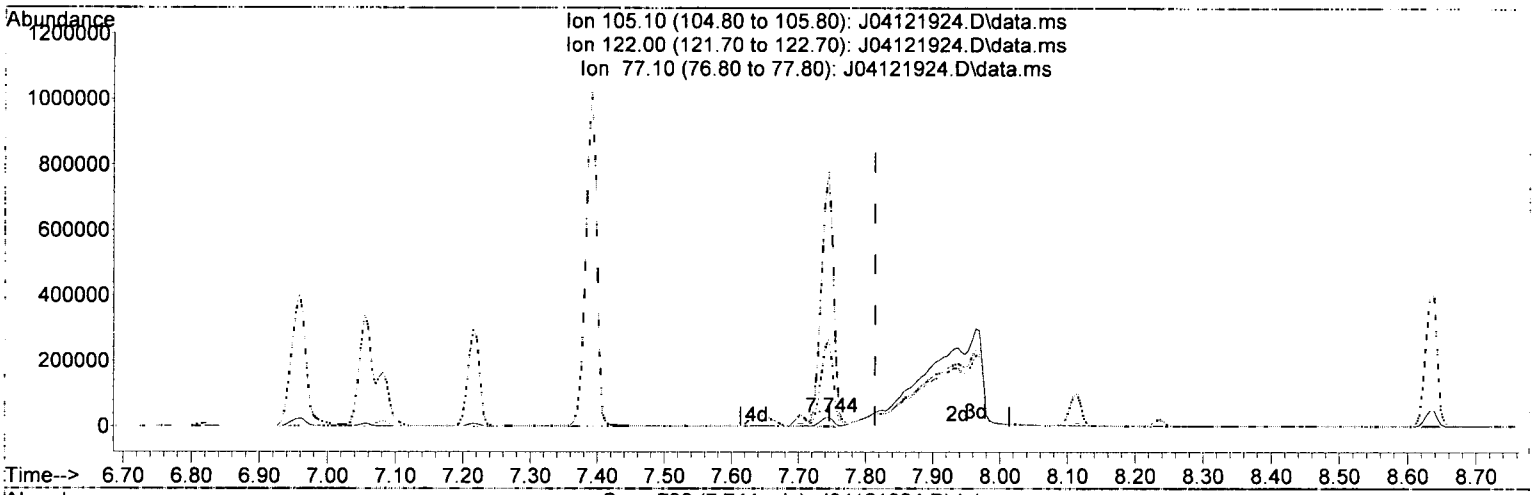
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.536	168	319922	7959.67	ng/ml	97
45) Dimethyl phthalate	9.600	163	2076750	6783.52	ng/ml	98
46) 1,3-Dinitrobenzene	9.633	168	349862	7805.01	ng/ml	95
47) 2,6-Dinitrotoluene	9.654	165	483438	7281.62	ng/ml	91
48) 1,2-Dinitrobenzene	9.718	168	227922	7357.43	ng/ml	90
49) Acenaphthylene	9.734	152	2539761	5569.50	ng/ml	97
50) 3-Nitroaniline	9.830	138	417444	Below Cal		97
51) Acenaphthene	9.911	153	1737085	6029.22	ng/ml	99
52) 2,4-Dinitrophenol	9.932	184	222443	6428.00	ng/ml	98
53) 4-Nitrophenol	9.991	139	441662	8561.36	ng/ml	98
54) 2,4-Dinitrotoluene	10.071	165	642029	7709.78	ng/ml	94
55) Dibenzofuran	10.082	168	2258697	6129.61	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.162	232	471457	8018.25	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.205	232	480353	7863.78	ng/ml	97
58) Diethyl phthalate	10.301	149	1740855	5772.23	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.296	170	1390016	5784.78	ng/ml	99
60) Fluorene	10.435	166	1760020	6044.60	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.419	204	866576	6542.78	ng/ml	99
62) 4-Nitroaniline	10.462	138	435677	7677.72	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.488	198	299612	6918.04	ng/ml	89
65) N-Nitrosodiphenylamine	10.547	169	1549603	5793.13	ng/ml	99
66) Azobenzene (1,2-DPH)	10.585	77	2030780	5713.07	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.922	248	567177	6409.91	ng/ml	98
69) Hexachlorobenzene	11.007	284	614308	6122.40	ng/ml	95
70) Pentachlorophenol (PCP)	11.194	266	397295	7541.07	ng/ml	97
71) Phenanthrene	11.419	178	2691755	6051.27	ng/ml	97
72) Anthracene	11.467	178	2638439	5884.32	ng/ml	97
73) Carbazole	11.617	167	1858306	Below Cal		97
74) Di-n-butyl phthalate	11.959	149	3263829	10160.74	ng/ml	96
75) Fluoranthene	12.735	202	2984085	6087.72	ng/ml	97
76) Benzidine	12.901	184	2941124	14984.41	ng/ml	99
77) Pyrene	13.050	202	3020323	5984.39	ng/ml	98
80) Butyl benzyl phthalate	14.131	149	1721965	8075.68	ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.307	129	1536908	7867.60	ng/ml	99
82) 3,3-Dichlorobenzidine	15.323	252	752117	Below Cal		98
83) Benz(a)anthracene	15.361	228	2651985	7346.81	ng/ml	98
84) Chrysene	15.457	228	2567396	7538.78	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.505	149	2197866	7824.63	ng/ml	97
87) Di-n-octyl phthalate	17.190	149	3987899	8491.91	ng/ml	95
88) Benzo(b)fluoranthene	17.998	252	3082964	8504.07	ng/ml	97
89) Benzo(k)fluoranthene	18.067	252	2486052	7292.16	ng/ml	97
90) Benzo(b+k)fluoranthene	18.067	252	5776538	16088.51	ng/ml	97
91) Benzo(e)pyrene	18.661	252	2828166	7957.85	ng/ml	98
92) Benzo(a)pyrene	18.784	252	2622343	7920.50	ng/ml	98
93) Perylene	18.987	252	2414315	7163.28	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.330	276	3112495	9110.45	ng/ml	95
96) Dibenz(a,h)anthracene	21.383	278	2425385	7488.00	ng/ml	95
97) Benzo(g,h,i)perylene	21.876	276	2701841	7585.76	ng/ml	97

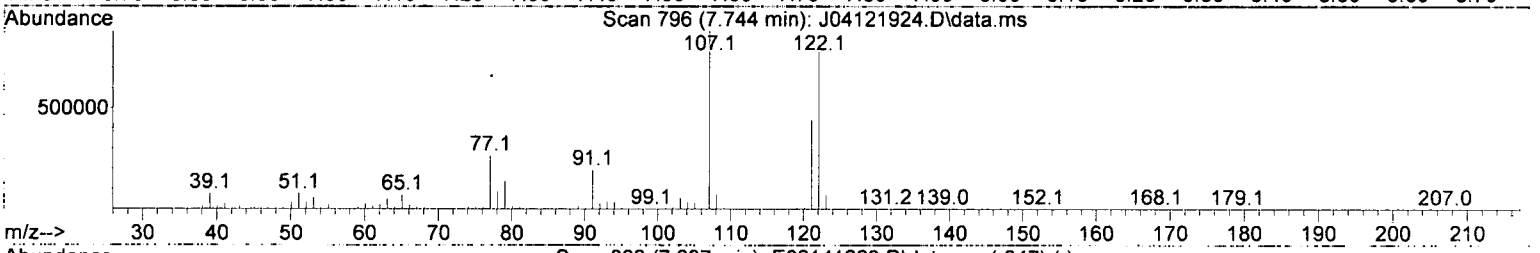
(#) = qualifier out of range (m) = manual integration (+) = signals summed

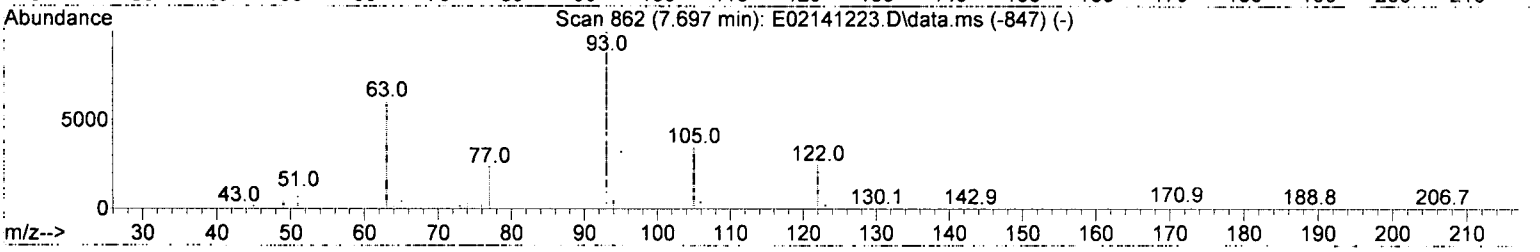
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121924.D\data.ms

(26) Benzoic acid (T)

7.744min (-0.069) 947.04 ng/ml

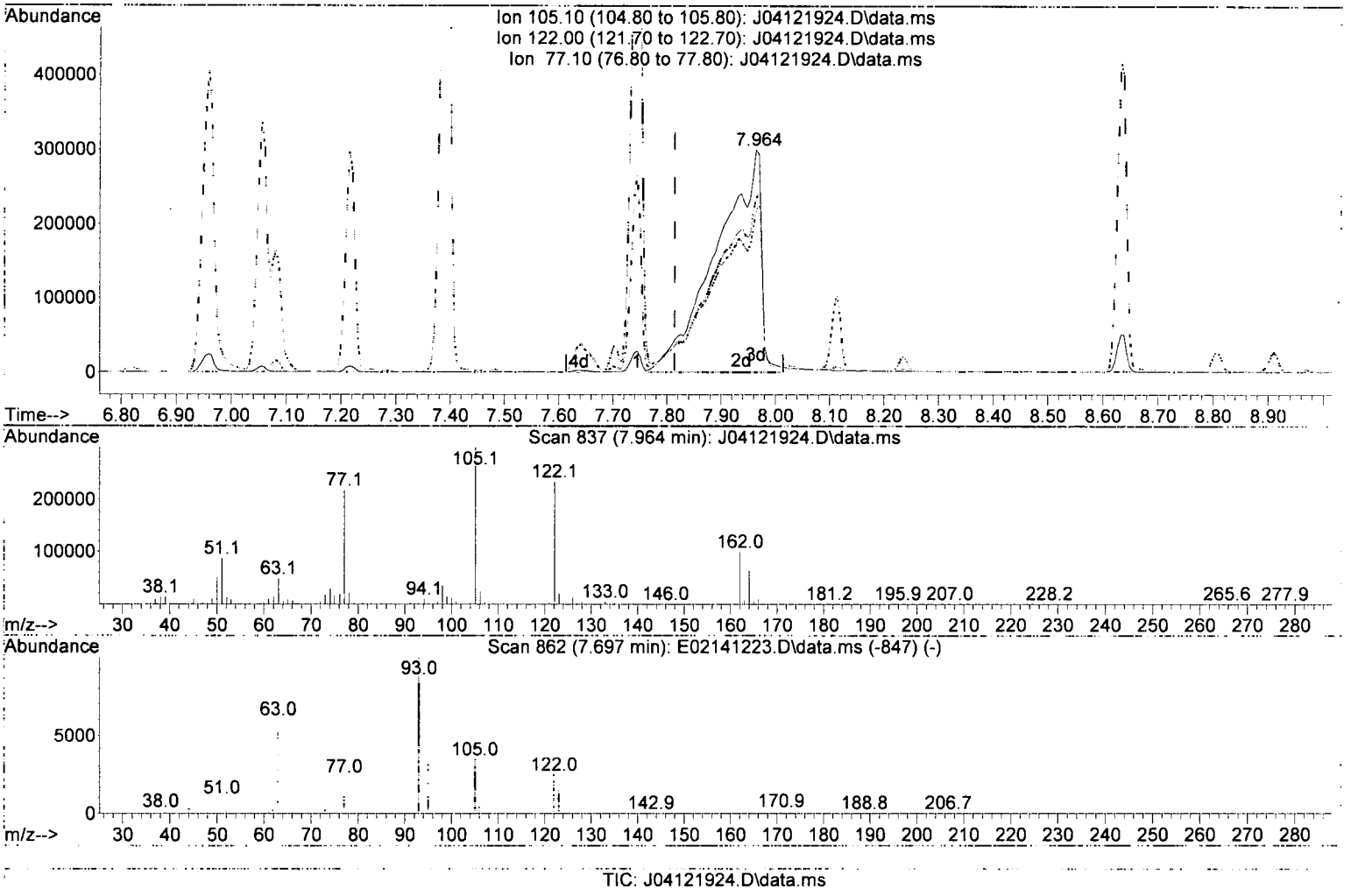
response 36749

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	2710.75#
77.10	76.00	928.46#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121924.D\data.ms

(26) Benzoic acid (T)

7.964min (+ 0.150) 16913.93 ng/ml m

response 1706623

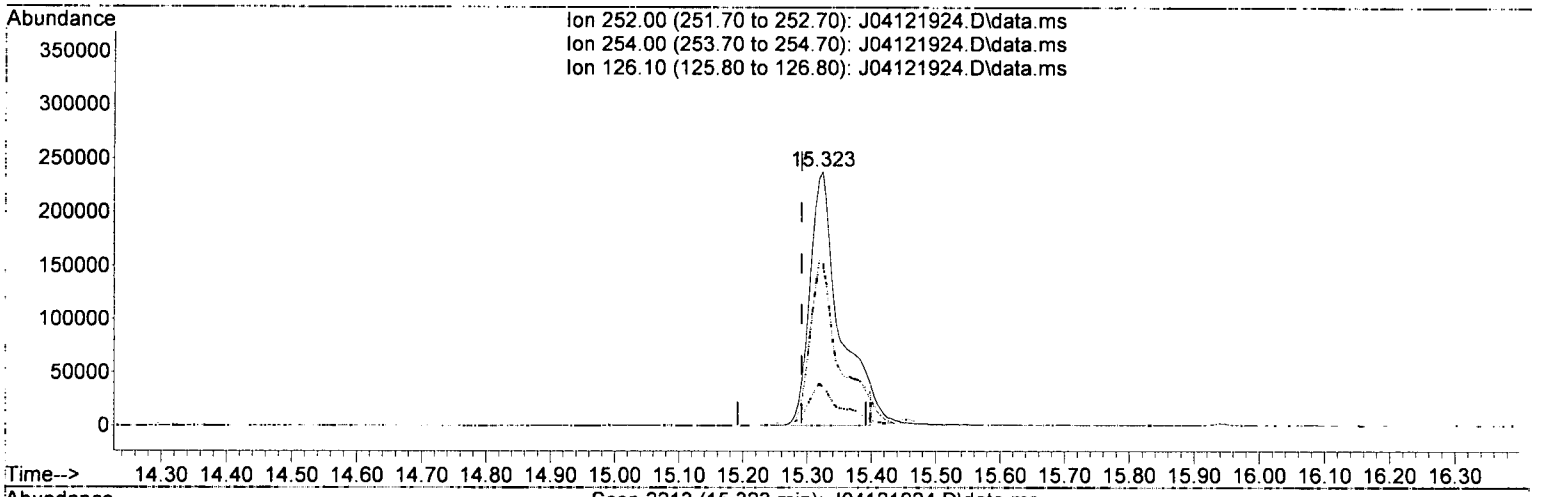
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	78.16
77.10	76.00	72.89
0.00	0.00	0.00

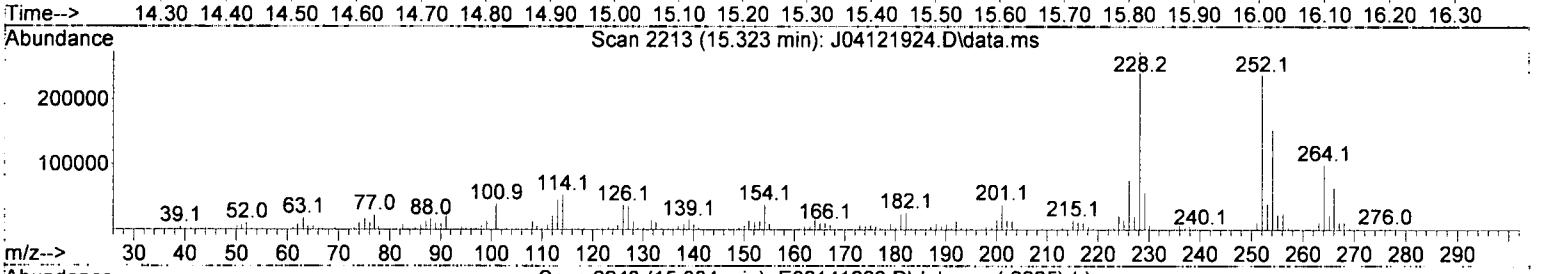
JK 4/15/19

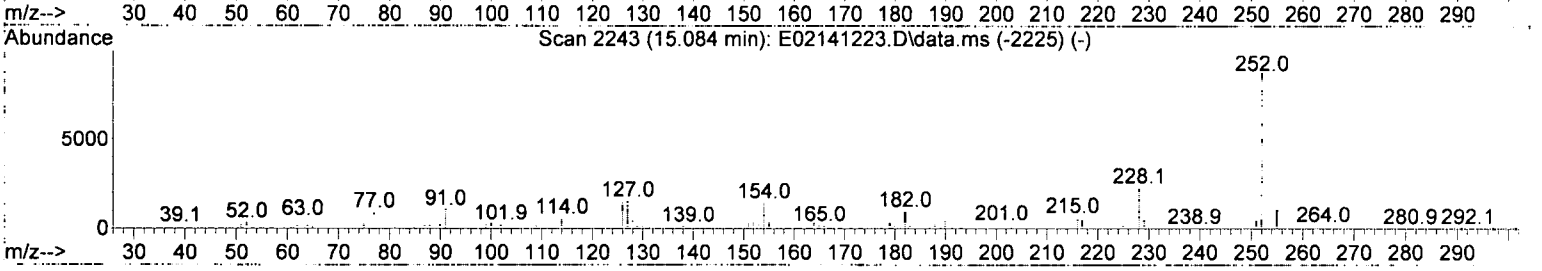
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J04121924.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.323min (+ 0.032) -2000.00 ng/ml

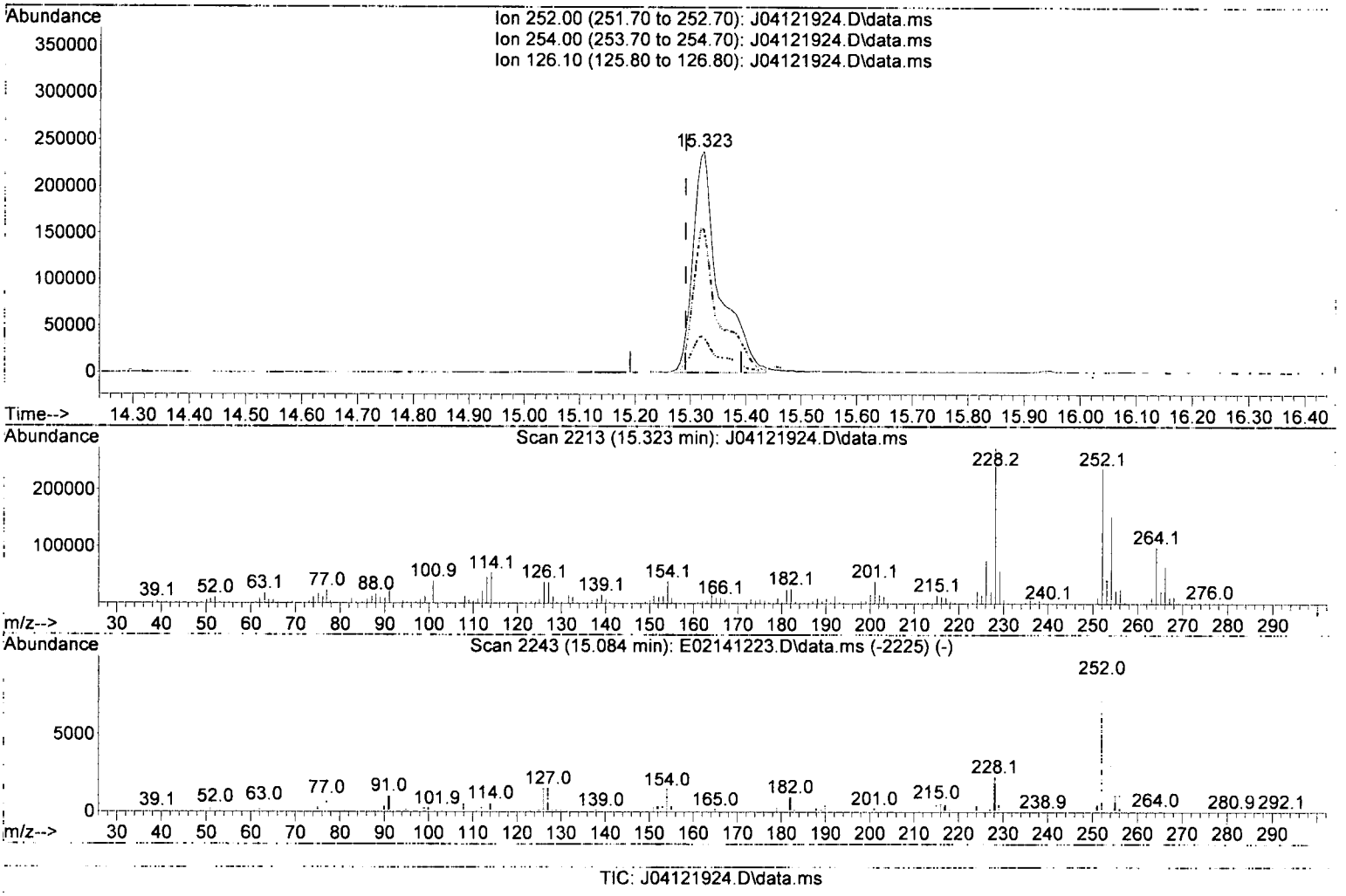
response 752117

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.46
126.10	16.90	15.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J04121924.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.323min (+ 0.032) -2000.00 ng/ml (m) 4/15/19

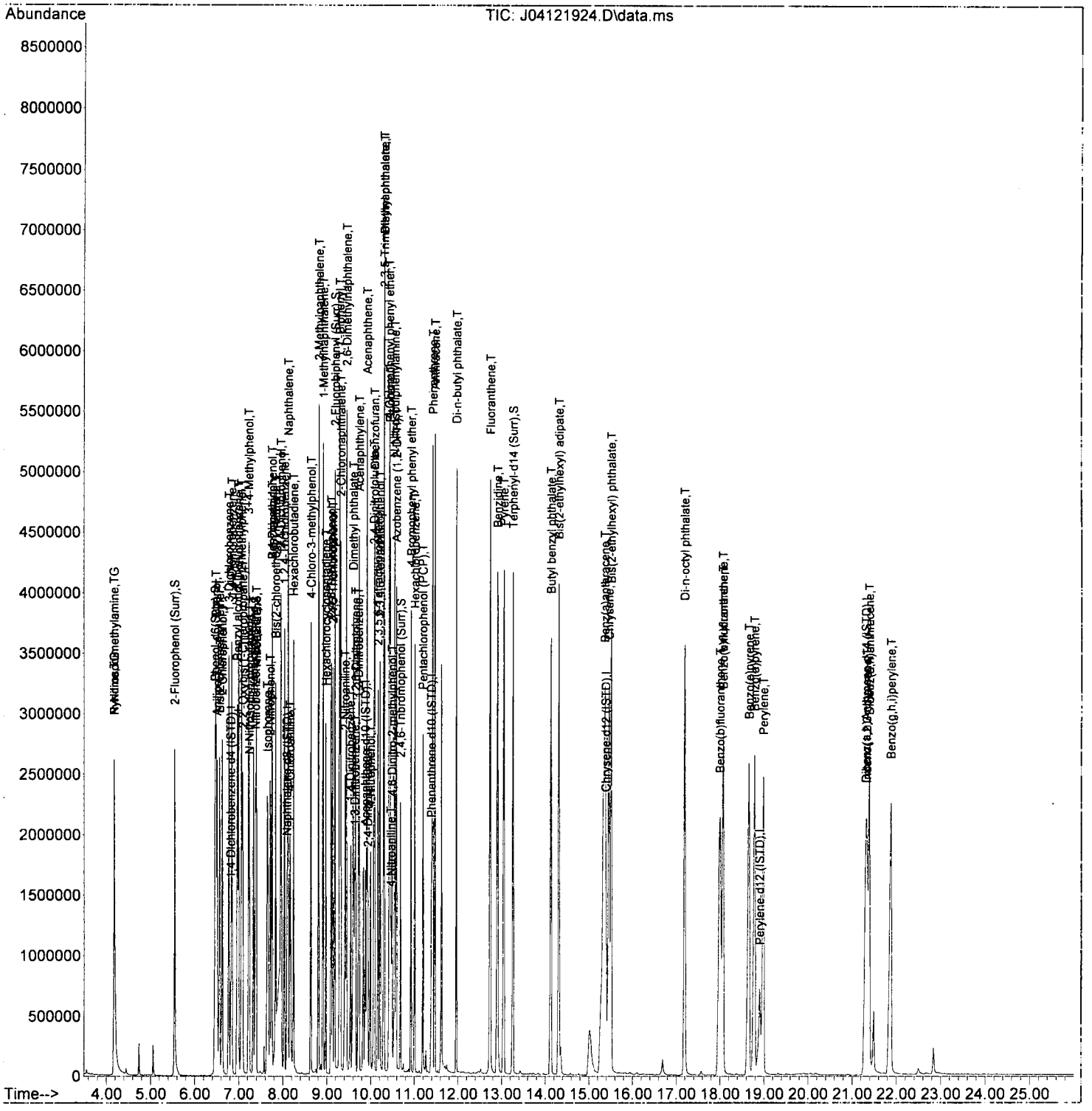
response 784747

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.46
126.10	16.90	15.60
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121924.D
Acq On : 13 Apr 2019 12:15 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:44 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:58 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

4/15/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	225231	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	940161	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.868	162	454606	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	789773	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.361	240	706895	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.875	264	657267	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.266	292	607358	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	150125	946.82	ng/ml	0.00
5) Phenol-d6(Surr)	6.434	99	191648	910.75	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	169867	938.21	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	351303	1037.70	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	38934	857.80	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	347922	993.92	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.155	74	107198	918.13	ng/ml	92
3) Pyridine	4.171	79	168038	902.91	ng/ml	91
6) Phenol	6.450	94	221184	934.83	ng/ml	97
7) Aniline	6.487	93	224581	1087.60	ng/ml	97
8) Bis(2-chloroethyl) ether	6.541	93	193865	1107.65	ng/ml	97
9) 2-Chlorophenol	6.605	128	164404	992.22	ng/ml	93
10) 1,3-Dichlorobenzene	6.755	146	176447	1010.99	ng/ml	98
11) 1,4-Dichlorobenzene	6.830	146	174527	1026.66	ng/ml	98
12) Benzyl alcohol	6.942	108	89446	804.07	ng/ml	93
13) 1,2-Dichlorobenzene	6.979	146	171866	1029.86	ng/ml	100
14) 2-Methylphenol	7.044	107	127820	981.70	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	214379	935.06	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.199	70	132402	1027.54	ng/ml	99
17) 3+4-Methylphenol	7.193	107	165705	1034.55	ng/ml	99
18) Hexachloroethane	7.322	201	47249	987.84	ng/ml	96
20) Nitrobenzene	7.375	77	169560	959.40	ng/ml	96
22) Isophorone	7.611	82	360193	1010.74	ng/ml	97
23) 2-Nitrophenol	7.691	139	82990	896.72	ng/ml	97
24) 2,4-Dimethylphenol	7.723	122	142361	976.90	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.814	93	209172	1039.79	ng/ml	99
26) Benzoic acid	7.814	105	98896	1540.07	ng/ml	98
27) 2,4-Dichlorophenol	7.931	162	118350	1010.43	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.022	180	136487	964.85	ng/ml	96
29) Naphthalene	8.103	128	510313	1017.58	ng/ml	99
30) 4-Chloroaniline	8.145	127	163413	1350.91	ng/ml	97
31) Hexachlorobutadiene	8.231	225	72214	967.78	ng/ml	98
32) 4-Chloro-3-methylphenol	8.621	107	136286	962.30	ng/ml	96
33) 2-Methylnaphthalene	8.798	142	346320	1033.79	ng/ml	99
34) 1-Methylnaphthalene	8.900	142	324946	1010.25	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	68590	966.71	ng/ml	95
37) 2,4,6-Trichlorophenol	9.081	196	77965	971.03	ng/ml	98
38) 2,4,5-Trichlorophenol	9.119	198	78439	994.08	ng/ml	97
39) 1,1'-Biphenyl	9.269	154	401597	1053.00	ng/ml	99
41) 2-Chloronaphthalene	9.295	162	288501	1069.70	ng/ml	97
42) 2-Nitroaniline	9.386	138	89325	958.90	ng/ml	99
43) 2,6-Dimethylnaphthalene	9.429	156	289552	1039.62	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:58 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10

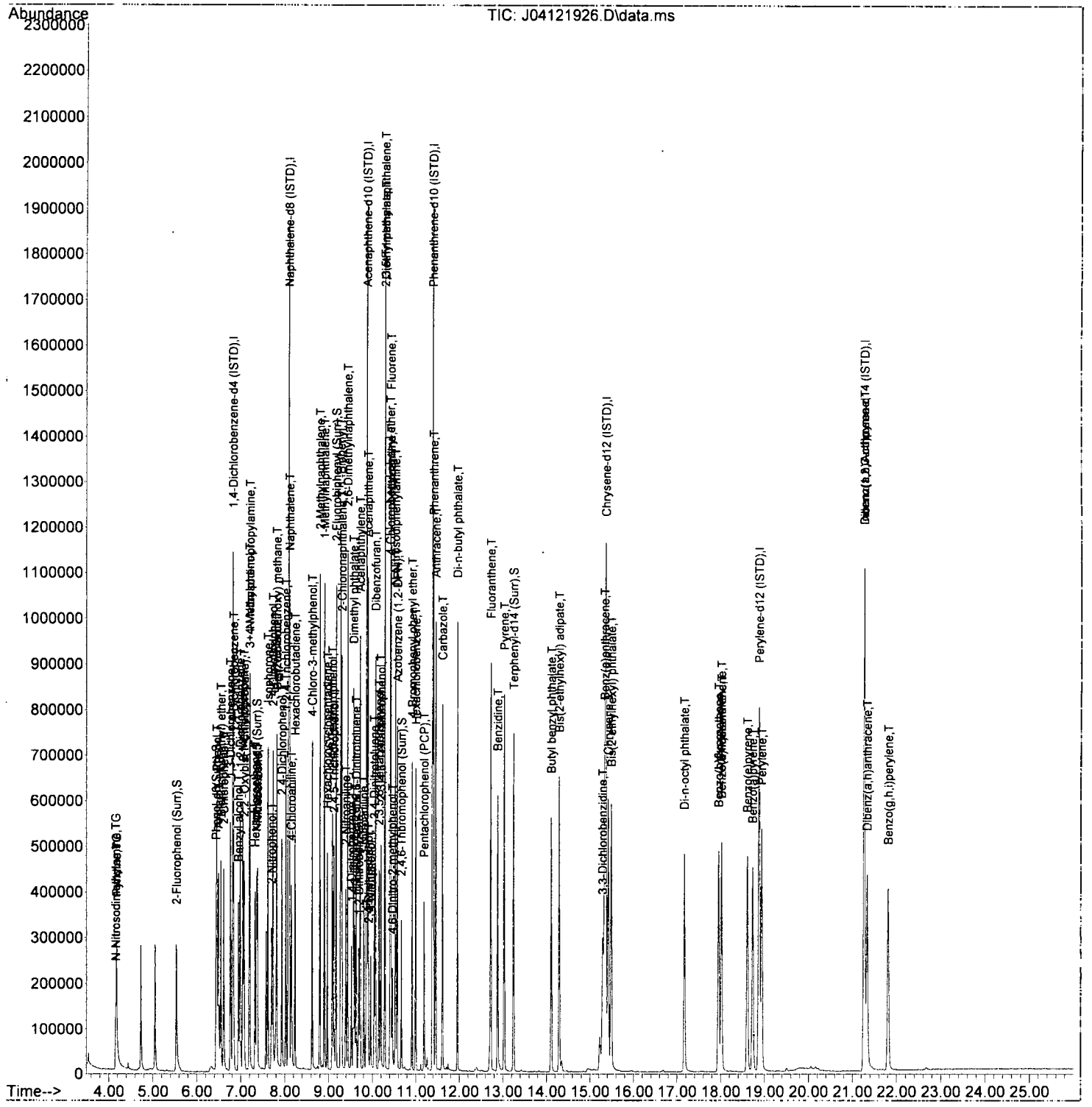
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	32109	746.64	ng/ml	98
45)	Dimethyl phthalate	9.568	163	331508	1012.04	ng/ml	99
46)	1,3-Dinitrobenzene	9.600	168	42198	879.83	ng/ml	97
47)	2,6-Dinitrotoluene	9.627	165	71148	1001.57	ng/ml	95
48)	1,2-Dinitrobenzene	9.691	168	30968	934.30	ng/ml	78
49)	Acenaphthylene	9.718	152	489910	1004.09	ng/ml	99
50)	3-Nitroaniline	9.803	138	70812	1173.57	ng/ml	96
51)	Acenaphthene	9.894	153	301133	976.85	ng/ml	99
52)	2,4-Dinitrophenol	9.910	184	11124	518.82	ng/ml	94
53)	4-Nitrophenol	9.959	139	47352	857.87	ng/ml	95
54)	2,4-Dinitrotoluene	10.039	165	86115	966.49	ng/ml	98
55)	Dibenzofuran	10.071	168	404403	1025.70	ng/ml	99
56)	2,3,5,6-Tetrachlorophenol	10.151	232	59505	945.85	ng/ml	97
57)	2,3,4,6-Tetrachlorophenol	10.194	232	65002	994.56	ng/ml	95
58)	Diethyl phthalate	10.285	149	322768	1000.24	ng/ml	98
59)	2,3,5-Trimethylnaphtha...	10.280	170	253977	987.85	ng/ml	98
60)	Fluorene	10.419	166	320366	1028.32	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.408	204	143339	1011.47	ng/ml	100
62)	4-Nitroaniline	10.424	138	67831	1117.19	ng/ml	93
63)	4,6-Dinitro-2-methylph...	10.461	198	26986	731.29	ng/ml	86
65)	N-Nitrosodiphenylamine	10.526	169	262526	990.20	ng/ml	100
66)	Azobenzene (1,2-DPH)	10.574	77	348955	990.46	ng/ml	91
68)	4-Bromophenyl phenyl e...	10.911	248	84915	968.23	ng/ml	97
69)	Hexachlorobenzene	10.991	284	93599	941.17	ng/ml	97
70)	Pentachlorophenol (PCP)	11.183	266	44624	943.63	ng/ml	98
71)	Phenanthrene	11.403	178	444580	1008.37	ng/ml	99
72)	Anthracene	11.456	178	439747	989.49	ng/ml	99
73)	Carbazole	11.606	167	376107	1216.39	ng/ml	98
74)	Di-n-butyl phthalate	11.948	149	526060	949.47	ng/ml	99
75)	Fluoranthene	12.719	202	469482	966.32	ng/ml	98
76)	Benzidine	12.874	184	313160	2975.76	ng/ml	98
77)	Pyrene	13.029	202	481350	962.25	ng/ml	99
80)	Butyl benzyl phthalate	14.109	149	208309	866.85	ng/ml	98
81)	Bis(2-ethylhexyl) adipate	14.291	129	197557	900.48	ng/ml	100
82)	3,3-Dichlorobenzidine	15.286	252	126187	1660.79	ng/ml	99
83)	Benz(a)anthracene	15.334	228	401111	986.00	ng/ml	99
84)	Chrysene	15.414	228	382137	995.66	ng/ml	100
85)	Bis(2-ethylhexyl) phth...	15.489	149	299160	945.04	ng/ml	98
87)	Di-n-octyl phthalate	17.163	149	448238	918.20	ng/ml	97
88)	Benzo(b)fluoranthene	17.949	252	390614	1036.51	ng/ml	96
89)	Benzo(k)fluoranthene	18.014	252	391287	1104.10	ng/ml	97
90)	Benzo(b+k)fluoranthene	18.014	252	796315	2133.54	ng/ml	97
91)	Benzo(e)pyrene	18.607	252	381547	1032.78	ng/ml	97
92)	Benzo(a)pyrene	18.725	252	358790	1042.49	ng/ml	98
93)	Perylene	18.934	252	390591	1114.83	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.266	276	325049	976.27	ng/ml	95
96)	Dibenz(a,h)anthracene	21.330	278	309719	981.16	ng/ml	92
97)	Benzo(g,h,i)perylene	21.811	276	349358	1006.46	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 08:55:58 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 08:54:36 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Reqmnt

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/19/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.808	152	225231	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.081	136	940161	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.868	162	454606	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.381	188	789773	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.361	240	706895	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.875	264	657267	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.266	292	607358	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.535	112	150125	1025.32	ng/ml	0.00
5) Phenol-d6(Surr)	6.434	99	191648	1017.56	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	169867	1010.05	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.167	172	351303	1095.25	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.665	330	38934	1004.38	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.243	244	347922	1045.59	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.155	74	107198	965.91	ng/ml	92
3) Pyridine	4.171	79	168038	927.96	ng/ml	91
6) Phenol	6.450	94	221184	1050.65	ng/ml	97
7) Aniline	6.487	93	224581	1014.19	ng/ml	97
8) Bis(2-chloroethyl) ether	6.541	93	193865	1016.60	ng/ml	97
9) 2-Chlorophenol	6.605	128	164404	1073.70	ng/ml	93
10) 1,3-Dichlorobenzene	6.755	146	176447	1024.14	ng/ml	98
11) 1,4-Dichlorobenzene	6.830	146	174527	1015.39	ng/ml	98
12) Benzyl alcohol	6.942	108	89446	990.85	ng/ml	93
13) 1,2-Dichlorobenzene	6.979	146	171866	1027.38	ng/ml	100
14) 2-Methylphenol	7.044	107	127820	1077.70	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.070	45	214379	993.42	ng/ml	91
16) N-Nitrosodi-n-propylamine	7.199	70	132402	1060.94	ng/ml	99
17) 3+4-Methylphenol	7.193	107	165705	1052.78	ng/ml	99
18) Hexachloroethane	7.322	201	47249	1019.95	ng/ml	96
20) Nitrobenzene	7.375	77	169560	1058.29	ng/ml	96
22) Isophorone	7.611	82	360193	1028.66	ng/ml	97
23) 2-Nitrophenol	7.691	139	82990	1121.76	ng/ml	97
24) 2,4-Dimethylphenol	7.723	122	142361	987.26	ng/ml	99
25) Bis(2-chloroethoxy) me...	7.814	93	209172	1113.78	ng/ml	99
26) Benzoic acid	7.814	105	98896	1817.64	ng/ml	98
27) 2,4-Dichlorophenol	7.931	162	118350	1020.66	ng/ml	96
28) 1,2,4-Trichlorobenzene	8.022	180	136487	1022.10	ng/ml	96
29) Naphthalene	8.103	128	510313	1048.62	ng/ml	99
30) 4-Chloroaniline	8.145	127	163413	1033.03	ng/ml	97
31) Hexachlorobutadiene	8.231	225	72214	995.32	ng/ml	98
32) 4-Chloro-3-methylphenol	8.621	107	136286	992.95	ng/ml	96
33) 2-Methylnaphthalene	8.798	142	346320	1085.22	ng/ml	99
34) 1-Methylnaphthalene	8.900	142	324946	1049.76	ng/ml	98
36) Hexachlorocyclopentadiene	8.969	237	68590	1089.80	ng/ml	95
37) 2,4,6-Trichlorophenol	9.081	196	77965	963.90	ng/ml	98
38) 2,4,5-Trichlorophenol	9.119	198	78439	1081.65	ng/ml	97
39) 1,1'-Biphenyl	9.269	154	401597	1089.76	ng/ml	99
41) 2-Chloronaphthalene	9.295	162	288501	1107.03	ng/ml	97
42) 2-Nitroaniline	9.386	138	89325	1054.08	ng/ml	99
43) 2,6-Dimethylnaphthalene	9.429	156	289552	1071.65	ng/ml	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10

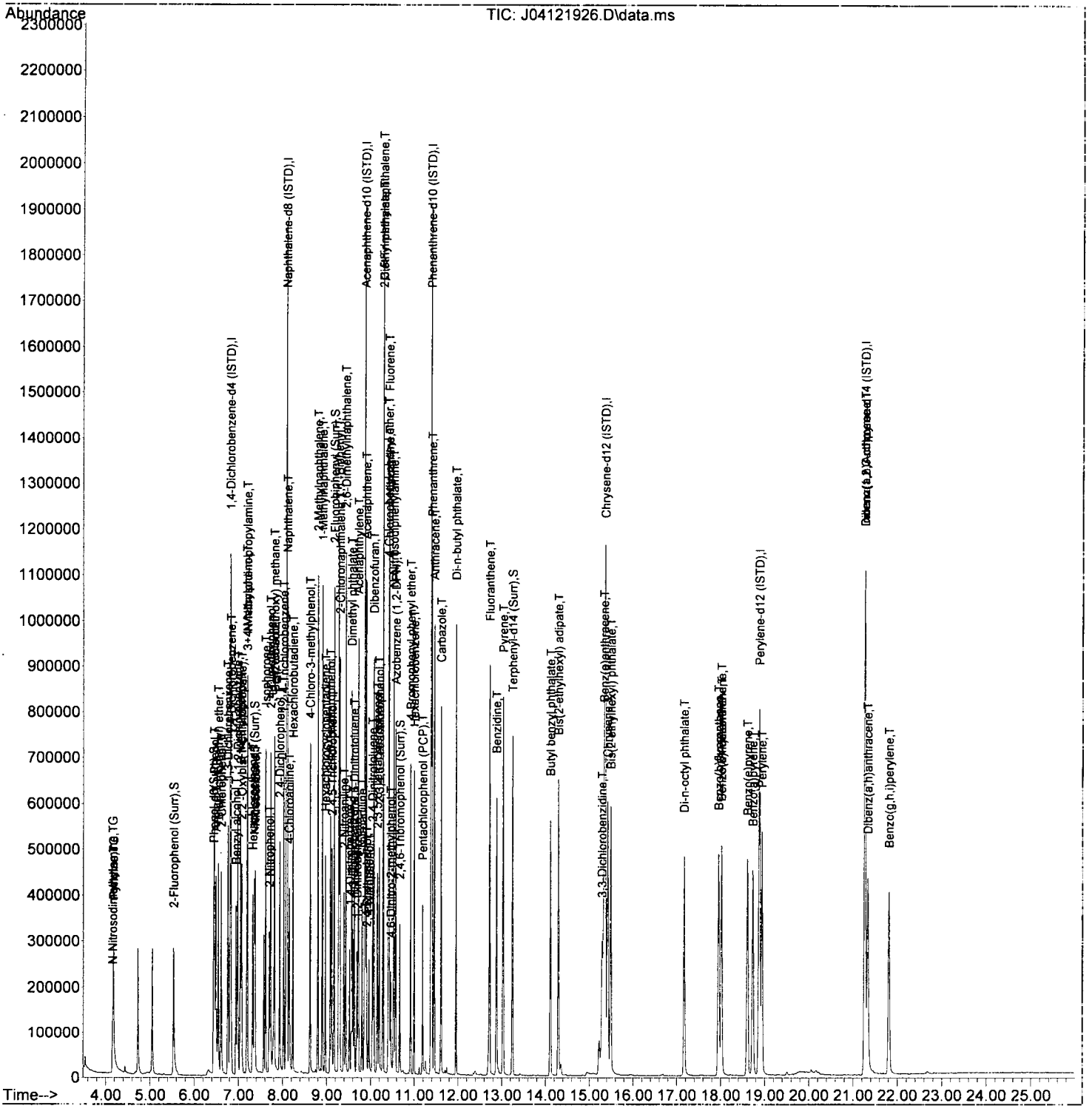
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	32109	1067.40	ng/ml	98
45) Dimethyl phthalate	9.568	163	331508	1048.39	ng/ml	99
46) 1,3-Dinitrobenzene	9.600	168	42198	1080.55	ng/ml	97
47) 2,6-Dinitrotoluene	9.627	165	71148	1065.26	ng/ml	95
48) 1,2-Dinitrobenzene	9.691	168	30968	1016.45	ng/ml	78
49) Acenaphthylene	9.718	152	489910	1077.32	ng/ml	99
50) 3-Nitroaniline	9.803	138	70812	1139.38	ng/ml	96
51) Acenaphthene	9.894	153	301133	1029.64	ng/ml	99
52) 2,4-Dinitrophenol	9.910	184	11124	962.19	ng/ml	94
53) 4-Nitrophenol	9.959	139	47352	1076.92	ng/ml	95
54) 2,4-Dinitrotoluene	10.039	165	86115	1054.72	ng/ml	98
55) Dibenzofuran	10.071	168	404403	1058.40	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	10.151	232	59505	1034.56	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.194	232	65002	1042.78	ng/ml	95
58) Diethyl phthalate	10.285	149	322768	1068.75	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.280	170	253977	1051.39	ng/ml	98
60) Fluorene	10.419	166	320366	1070.71	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.408	204	143339	1046.87	ng/ml	100
62) 4-Nitroaniline	10.424	138	67831	1186.32	ng/ml	93
63) 4,6-Dinitro-2-methylph...	10.461	198	26986	1185.98	ng/ml	86
65) N-Nitrosodiphenylamine	10.526	169	262526	1079.66	ng/ml	100
66) Azobenzene (1,2-DPH)	10.574	77	348955	1060.34	ng/ml	91
68) 4-Bromophenyl phenyl e...	10.911	248	84915	1092.31	ng/ml	97
69) Hexachlorobenzene	10.991	284	93599	987.47	ng/ml	97
70) Pentachlorophenol (PCP)	11.183	266	44624	1050.08	ng/ml	98
71) Phenanthrene	11.403	178	444580	1037.41	ng/ml	99
72) Anthracene	11.456	178	439747	1053.61	ng/ml	99
73) Carbazole	11.606	167	376107	1064.80	ng/ml	98
74) Di-n-butyl phthalate	11.948	149	526060	1089.31	ng/ml	99
75) Fluoranthene	12.719	202	469482	1098.54	ng/ml	98
76) Benzidine	12.874	184	313160	1975.91	ng/ml	98
77) Pyrene	13.029	202	481350	1092.93	ng/ml	99
80) Butyl benzyl phthalate	14.109	149	208309	1011.77	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.291	129	197557	980.78	ng/ml	100
82) 3,3-Dichlorobenzidine	15.286	252	126187	2025.16	ng/ml	99
83) Benz(a)anthracene	15.334	228	401111	1039.86	ng/ml	99
84) Chrysene	15.414	228	382137	1021.00	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.489	149	299160	1007.49	ng/ml	98
87) Di-n-octyl phthalate	17.163	149	448238	993.34	ng/ml	97
88) Benzo(b)fluoranthene	17.949	252	390614	1030.12	ng/ml	96
89) Benzo(k)fluoranthene	18.014	252	391287	1016.41	ng/ml	97
90) Benzo(b+k)fluoranthene	18.014	252	796315	2049.18	ng/ml	97
91) Benzo(e)pyrene	18.607	252	381547	1058.65	ng/ml	97
92) Benzo(a)pyrene	18.725	252	358790	1035.11	ng/ml	98
93) Perylene	18.934	252	390591	1170.70	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.266	276	325049	956.67	ng/ml	95
96) Dibenz(a,h)anthracene	21.330	278	309719	1019.03	ng/ml	92
97) Benzo(g,h,i)perylene	21.811	276	349358	1063.81	ng/ml	99

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121926.D
Acq On : 13 Apr 2019 1:26 am
Operator : JK/ AMS/ DTH
Sample : 9D12042-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Apr 15 12:07:14 2019
Quant Method : C:\msdchem\1\methods\SV10_041219.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Apr 15 09:10:15 2019
Response via : Initial Calibration
InstName : SV-GCMS10



APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Calibration Data

Sequence 9E08056 (Cal ID A9E1009) GCMS9

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9E08056**	Instrument:	**SV-GCMS9**
Date:	**05/08/19 18:26**	Calibration:	**A9E1009**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E08056-TUN1	Water	QC	QC			A19D031	A19D323
2	9E08056-ICB1	Water	QC	QC			A19D031	
3	9E08056-CAL1	Water	QC	QC			A19D031	A19D053
4	9E08056-CAL2	Water	QC	QC			A19D031	A19D054
5	9E08056-CAL3	Water	QC	QC			A19D031	A19D055
6	9E08056-CAL4	Water	QC	QC			A19D031	A19D056
7	9E08056-CAL5	Water	QC	QC			A19D031	A19D057
8	9E08056-CAL6	Water	QC	QC			A19D031	A19D058
9	9E08056-CAL7	Water	QC	QC			A19D031	A19D059
10	9E08056-CAL8	Water	QC	QC			A19D031	A19D060
11	9E08056-CAL9	Water	QC	QC			A19D031	A19D061
12	9E08056-CALA	Water	QC	QC			A19D031	A19D062
13	9E08056-IBL1	Water	QC	QC			A19D031	
14	9E08056-ICV1	Water	QC	QC			A19D031	A19C239
15	9E08056-IBL2	Water	QC	QC			A19D031	

Data Entered By: 5/10/19

Data Reviewed By: 5/14/19

Comments: Raise 3,3-Dichlorobenzidine to 200/400 for soils

Calibration Status Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_050819.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu May 09 12:25:58 2019
Response Via : Initial Calibration

A9E1009

5/9/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	T:\data\2019-05\9E08056\I05081919.D
2	50	50	2000	T:\data\2019-05\9E08056\I05081920.D
3	100	100	2000	T:\data\2019-05\9E08056\I05081921.D
4	200	200	2000	T:\data\2019-05\9E08056\I05081922.D
5	500	500	2000	T:\data\2019-05\9E08056\I05081923.D
6	1000	1000	2000	T:\data\2019-05\9E08056\I05081924.D
7	2000	2000	2000	T:\data\2019-05\9E08056\I05081925.D
8	4000	4000	2000	T:\data\2019-05\9E08056\I05081926.D
9	6000	6000	2000	T:\data\2019-05\9E08056\I05081927.D
10	8000	8000	2000	T:\data\2019-05\9E08056\I05081928.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	May 09 12:25 2019	May 09 11:27 2019	8 May 2019 8:12 pm
2	50	May 09 12:25 2019	May 09 11:31 2019	8 May 2019 8:48 pm
3	100	May 09 12:25 2019	May 09 11:34 2019	8 May 2019 9:25 pm
4	200	May 09 12:25 2019	May 09 11:48 2019	8 May 2019 10:01 pm
5	500	May 09 12:25 2019	May 09 11:02 2019	8 May 2019 10:38 pm
6	1000	May 09 12:25 2019	May 09 11:02 2019	8 May 2019 11:14 pm
7	2000	May 09 12:25 2019	May 09 11:03 2019	8 May 2019 11:50 pm
8	4000	May 09 12:25 2019	May 09 11:03 2019	9 May 2019 12:26 am
9	6000	May 09 12:25 2019	May 09 11:53 2019	9 May 2019 1:01 am
10	8000	May 09 12:25 2019	May 09 11:55 2019	9 May 2019 1:37 am

SV9_050819.M Thu May 09 17:08:41 2019

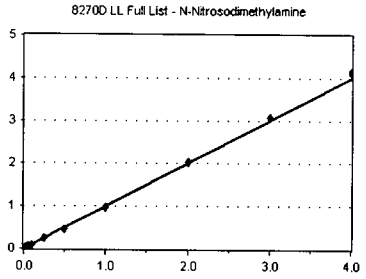
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

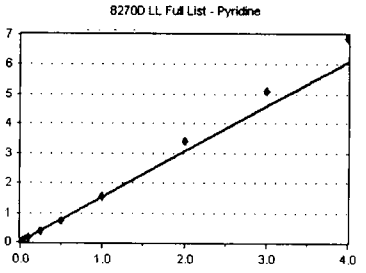


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1386	1.211	4.19
9E08056-CAL2	50	2851	0.973	4.18
9E08056-CAL3	100	5631	0.975	4.19
9E08056-CAL4	200	11200	0.931	4.17
9E08056-CAL5	500	27689	0.938	4.18
9E08056-CAL6	1000	53609	0.919	4.17
9E08056-CAL7	2000	104473	0.976	4.17
9E08056-CAL8	4000	199054	1.007	4.17
9E08056-CAL9	6000	300039	1.030	4.17
9E08056-CALA	8000	396249	1.035	4.16

AVE RF **0.999** RF RSD **8.42** AVE RT **4.17**

Pyridine

Curve Fit: **AVERAGE RF**

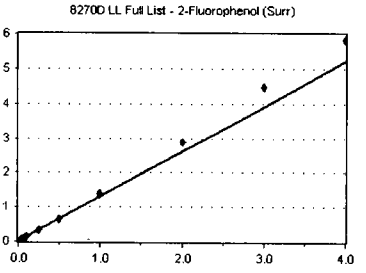


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1594	1.392	4.24
9E08056-CAL2	50	4118	1.406	4.22
9E08056-CAL3	100	7898	1.367	4.22
9E08056-CAL4	200	17242	1.433	4.19
9E08056-CAL5	500	44836	1.518	4.20
9E08056-CAL6	1000	85720	1.469	4.18
9E08056-CAL7	2000	164460	1.537	4.18
9E08056-CAL8	4000	337112	1.706	4.17
9E08056-CAL9	6000	496772	1.705	4.18
9E08056-CALA	8000	659225	1.722	4.16

AVE RF **1.526** RF RSD **9.08** AVE RT **4.19**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

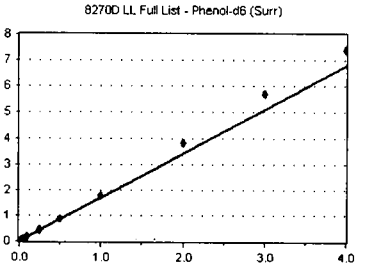


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1296	1.132	5.47
9E08056-CAL2	50	3106	1.060	5.47
9E08056-CAL3	100	7013	1.214	5.47
9E08056-CAL4	200	14997	1.247	5.47
9E08056-CAL5	500	39110	1.324	5.47
9E08056-CAL6	1000	76115	1.305	5.47
9E08056-CAL7	2000	148818	1.391	5.47
9E08056-CAL8	4000	284613	1.440	5.47
9E08056-CAL9	6000	435036	1.493	5.47
9E08056-CALA	8000	560056	1.463	5.47

AVE RF **1.307** RF RSD **11.06** AVE RT **5.47**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1675	1.463	6.35
9E08056-CAL2	50	4324	1.476	6.34
9E08056-CAL3	100	9148	1.583	6.34
9E08056-CAL4	200	19650	1.634	6.34
9E08056-CAL5	500	50799	1.720	6.34
9E08056-CAL6	1000	98894	1.695	6.34
9E08056-CAL7	2000	191806	1.792	6.34
9E08056-CAL8	4000	374178	1.894	6.35
9E08056-CAL9	6000	554225	1.902	6.35
9E08056-CALA	8000	706999	1.847	6.36

AVE RF **1.701** RF RSD **9.47** AVE RT **6.34**

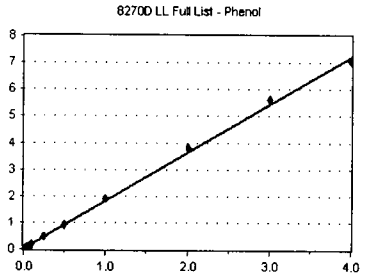
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Phenol

Curve Fit: **AVERAGE RF**

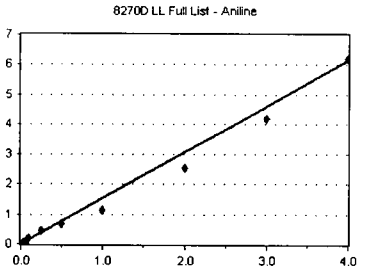


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1840	1.607	6.35
9E08056-CAL2	50	4928	1.682	6.35
9E08056-CAL3	100	10314	1.785	6.35
9E08056-CAL4	200	21991	1.828	6.35
9E08056-CAL5	500	56392	1.909	6.35
9E08056-CAL6	1000	107531	1.843	6.35
9E08056-CAL7	2000	203006	1.897	6.35
9E08056-CAL8	4000	375248	1.899	6.36
9E08056-CAL9	6000	546989	1.877	6.37
9E08056-CALA	8000	672921	1.758	6.38

AVE RF **1.809** RF RSD **5.59** AVE RT **6.36**

Aniline

Curve Fit: **AVERAGE RF**

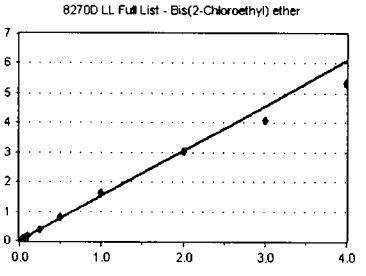


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~2217~~	~~1.936~~	~~6.39~~
9E08056-CAL2	50	5080	1.734	6.38
9E08056-CAL3	100	10637	1.841	6.38
9E08056-CAL4	200	21214	1.764	6.38
9E08056-CAL5	500	52964	1.793	6.38
9E08056-CAL6	1000	81018	1.389	6.38
9E08056-CAL7	2000	119883	1.120	6.38
9E08056-CAL8	4000	249012	1.260	6.39
9E08056-CAL9	6000	406652	1.396	6.39
9E08056-CALA	8000	595081	1.555	6.39

AVE RF **1.539** RF RSD **16.90** AVE RT **6.38**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

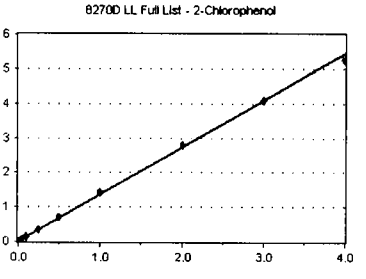


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1922	1.679	6.43
9E08056-CAL2	50	4474	1.527	6.43
9E08056-CAL3	100	8939	1.547	6.43
9E08056-CAL4	200	18736	1.558	6.43
9E08056-CAL5	500	45269	1.533	6.43
9E08056-CAL6	1000	91455	1.567	6.44
9E08056-CAL7	2000	172619	1.613	6.44
9E08056-CAL8	4000	297917	1.508	6.44
9E08056-CAL9	6000	395115	1.356	6.45
9E08056-CALA	8000	510517	1.334	6.45

AVE RF **1.522** RF RSD **6.93** AVE RT **6.44**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1505	1.315	6.50
9E08056-CAL2	50	3771	1.287	6.50
9E08056-CAL3	100	7863	1.361	6.50
9E08056-CAL4	200	16450	1.368	6.50
9E08056-CAL5	500	42307	1.433	6.50
9E08056-CAL6	1000	81650	1.399	6.50
9E08056-CAL7	2000	152301	1.423	6.50
9E08056-CAL8	4000	275296	1.393	6.50
9E08056-CAL9	6000	397555	1.364	6.50
9E08056-CALA	8000	503387	1.315	6.50

AVE RF **1.366** RF RSD **3.54** AVE RT **6.50**

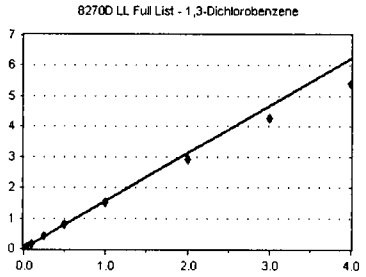
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

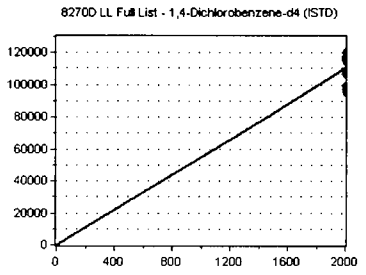


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2020	1.764	6.64
9E08056-CAL2	50	4617	1.576	6.64
9E08056-CAL3	100	9757	1.689	6.64
9E08056-CAL4	200	19525	1.623	6.64
9E08056-CAL5	500	48498	1.642	6.64
9E08056-CAL6	1000	91509	1.568	6.64
9E08056-CAL7	2000	163909	1.532	6.64
9E08056-CAL8	4000	287179	1.453	6.65
9E08056-CAL9	6000	414202	1.421	6.65
9E08056-CALA	8000	517626	1.352	6.65

AVE RF **1.562** RF RSD **8.09** AVE RT **6.64**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

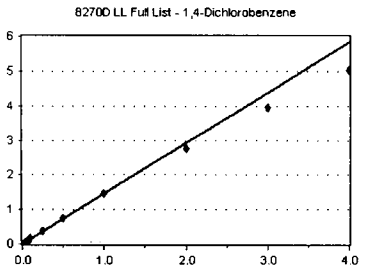


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	114486	57.243	6.70
9E08056-CAL2	2000	117186	58.593	6.69
9E08056-CAL3	2000	115550	57.775	6.69
9E08056-CAL4	2000	120284	60.142	6.69
9E08056-CAL5	2000	118130	59.065	6.70
9E08056-CAL6	2000	116694	58.347	6.70
9E08056-CAL7	2000	107016	53.508	6.70
9E08056-CAL8	2000	98792	49.396	6.70
9E08056-CAL9	2000	97132	48.566	6.70
9E08056-CALA	2000	95689	47.844	6.70

AVE RF **55.048** RF RSD **8.69** AVE RT **6.70**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

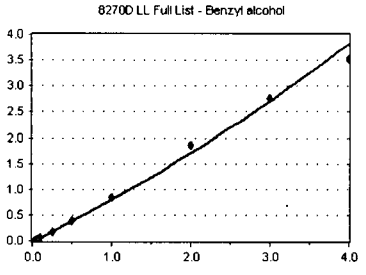


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1733	1.514	6.71
9E08056-CAL2	50	4532	1.547	6.71
9E08056-CAL3	100	8776	1.519	6.71
9E08056-CAL4	200	18751	1.559	6.71
9E08056-CAL5	500	45970	1.557	6.71
9E08056-CAL6	1000	87432	1.498	6.71
9E08056-CAL7	2000	154653	1.445	6.71
9E08056-CAL8	4000	272704	1.380	6.72
9E08056-CAL9	6000	384033	1.318	6.72
9E08056-CALA	8000	480345	1.255	6.72

AVE RF **1.459** RF RSD **7.34** AVE RT **6.71**

Benzyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~394~~	~~0.344~~	~~6.83~~
9E08056-CAL2	50	1234	0.421	6.83
9E08056-CAL3	100	2898	0.502	6.83
9E08056-CAL4	200	6970	0.579	6.82
9E08056-CAL5	500	21295	0.721	6.83
9E08056-CAL6	1000	45805	0.785	6.83
9E08056-CAL7	2000	91265	0.853	6.83
9E08056-CAL8	4000	184713	0.935	6.84
9E08056-CAL9	6000	269444	0.925	6.84
9E08056-CALA	8000	337977	0.883	6.85

AVE RF **0.734** RF RSD **26.02** AVE RT **6.83**

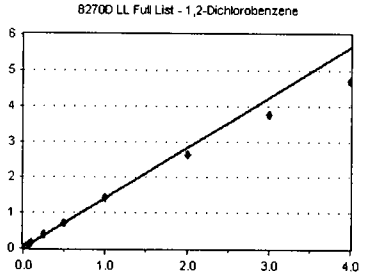
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

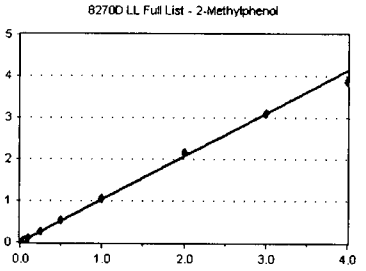


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1593	1.391	6.86
9E08056-CAL2	50	4338	1.481	6.86
9E08056-CAL3	100	8854	1.532	6.86
9E08056-CAL4	200	18424	1.532	6.86
9E08056-CAL5	500	45584	1.544	6.86
9E08056-CAL6	1000	84135	1.442	6.86
9E08056-CAL7	2000	151209	1.413	6.86
9E08056-CAL8	4000	259626	1.314	6.87
9E08056-CAL9	6000	366398	1.257	6.87
9E08056-CALA	8000	448803	1.173	6.87

AVE RF **1.408** RF RSD **8.95** AVE RT **6.86**

2-Methylphenol

Curve Fit: **AVERAGE RF**

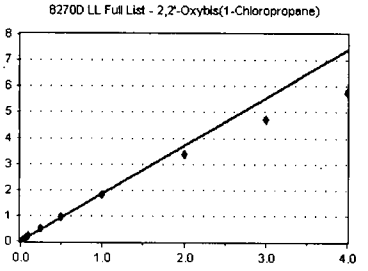


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1153	1.007	6.94
9E08056-CAL2	50	2679	0.914	6.93
9E08056-CAL3	100	6386	1.105	6.93
9E08056-CAL4	200	12165	1.011	6.93
9E08056-CAL5	500	33013	1.118	6.93
9E08056-CAL6	1000	61935	1.061	6.93
9E08056-CAL7	2000	113843	1.064	6.93
9E08056-CAL8	4000	213032	1.078	6.94
9E08056-CAL9	6000	301798	1.036	6.94
9E08056-CALA	8000	369236	0.965	6.94

AVE RF **1.036** RF RSD **6.11** AVE RT **6.93**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

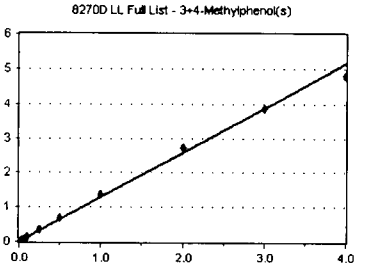


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2282	1.993	6.95
9E08056-CAL2	50	5842	1.994	6.95
9E08056-CAL3	100	12268	2.123	6.95
9E08056-CAL4	200	24389	2.028	6.95
9E08056-CAL5	500	59332	2.009	6.95
9E08056-CAL6	1000	109743	1.881	6.95
9E08056-CAL7	2000	195754	1.829	6.95
9E08056-CAL8	4000	331551	1.678	6.96
9E08056-CAL9	6000	456599	1.567	6.96
9E08056-CALA	8000	549922	1.437	6.96

AVE RF **1.854** RF RSD **12.12** AVE RT **6.95**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1360	1.188	7.08
9E08056-CAL2	50	3346	1.142	7.08
9E08056-CAL3	100	7451	1.290	7.08
9E08056-CAL4	200	15823	1.315	7.08
9E08056-CAL5	500	41496	1.405	7.08
9E08056-CAL6	1000	78741	1.350	7.08
9E08056-CAL7	2000	144919	1.354	7.08
9E08056-CAL8	4000	268146	1.357	7.09
9E08056-CAL9	6000	373641	1.282	7.10
9E08056-CALA	8000	458606	1.198	7.10

AVE RF **1.288** RF RSD **6.69** AVE RT **7.08**

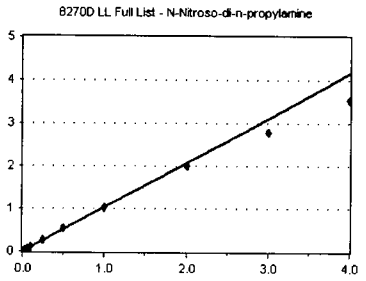
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

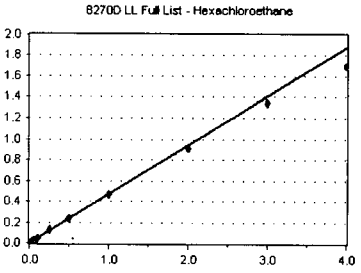


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1232	1.076	7.08
9E08056-CAL2	50	3144	1.073	7.08
9E08056-CAL3	100	6313	1.093	7.08
9E08056-CAL4	200	13250	1.102	7.08
9E08056-CAL5	500	33065	1.120	7.08
9E08056-CAL6	1000	62234	1.067	7.08
9E08056-CAL7	2000	111051	1.038	7.08
9E08056-CAL8	4000	197390	0.999	7.09
9E08056-CAL9	6000	270883	0.930	7.10
9E08056-CALA	8000	339637	0.887	7.11

AVE RF **1.038** RF RSD **7.40** AVE RT **7.09**

Hexachloroethane

Curve Fit: **AVERAGE RF**

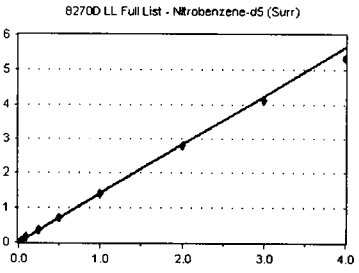


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	565	0.494	7.19
9E08056-CAL2	50	1408	0.481	7.19
9E08056-CAL3	100	2779	0.481	7.19
9E08056-CAL4	200	5764	0.479	7.19
9E08056-CAL5	500	14906	0.505	7.19
9E08056-CAL6	1000	27533	0.472	7.19
9E08056-CAL7	2000	49920	0.466	7.19
9E08056-CAL8	4000	89376	0.452	7.20
9E08056-CAL9	6000	130625	0.448	7.20
9E08056-CALA	8000	161926	0.423	7.20

AVE RF **0.470** RF RSD **5.05** AVE RT **7.20**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

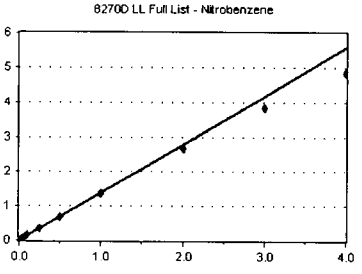


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1778	1.553	7.23
9E08056-CAL2	50	4032	1.376	7.23
9E08056-CAL3	100	8175	1.415	7.23
9E08056-CAL4	200	17627	1.465	7.23
9E08056-CAL5	500	42745	1.447	7.23
9E08056-CAL6	1000	81436	1.396	7.23
9E08056-CAL7	2000	149113	1.393	7.23
9E08056-CAL8	4000	275454	1.394	7.24
9E08056-CAL9	6000	400998	1.376	7.24
9E08056-CALA	8000	507577	1.326	7.25

AVE RF **1.414** RF RSD **4.40** AVE RT **7.23**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1693	1.479	7.25
9E08056-CAL2	50	4129	1.409	7.25
9E08056-CAL3	100	8591	1.487	7.25
9E08056-CAL4	200	18273	1.519	7.25
9E08056-CAL5	500	43153	1.461	7.25
9E08056-CAL6	1000	81129	1.390	7.25
9E08056-CAL7	2000	144892	1.354	7.25
9E08056-CAL8	4000	262312	1.328	7.26
9E08056-CAL9	6000	371635	1.275	7.26
9E08056-CALA	8000	462505	1.208	7.27

AVE RF **1.391** RF RSD **7.22** AVE RT **7.25**

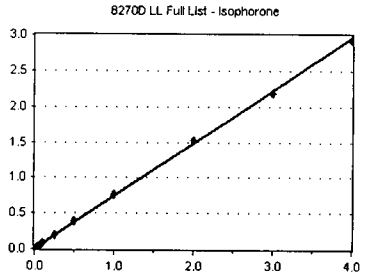
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Isophorone

Curve Fit: **AVERAGE RF**

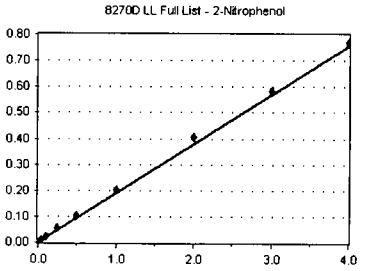


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3108	0.673	7.48
9E08056-CAL2	50	8299	0.711	7.48
9E08056-CAL3	100	16536	0.716	7.48
9E08056-CAL4	200	35486	0.756	7.48
9E08056-CAL5	500	89488	0.796	7.48
9E08056-CAL6	1000	169224	0.778	7.48
9E08056-CAL7	2000	306230	0.757	7.48
9E08056-CAL8	4000	573921	0.759	7.49
9E08056-CAL9	6000	838709	0.728	7.50
9E08056-CALA	8000	1078748	0.732	7.51

AVE RF **0.741** RF RSD **4.84** AVE RT **7.49**

2-Nitrophenol

Curve Fit: **AVERAGE RF**

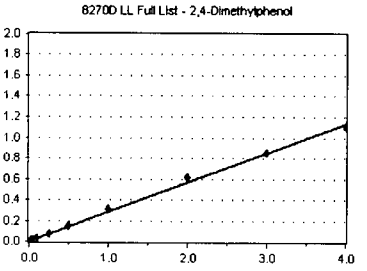


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	652	0.141	7.56
9E08056-CAL2	50	1851	0.159	7.56
9E08056-CAL3	100	3972	0.172	7.56
9E08056-CAL4	200	9275	0.198	7.56
9E08056-CAL5	500	25491	0.227	7.56
9E08056-CAL6	1000	44264	0.203	7.56
9E08056-CAL7	2000	81543	0.201	7.56
9E08056-CAL8	4000	153577	0.203	7.57
9E08056-CAL9	6000	224039	0.195	7.57
9E08056-CALA	8000	283482	0.192	7.57

AVE RF **0.189** RF RSD **13.19** AVE RT **7.57**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

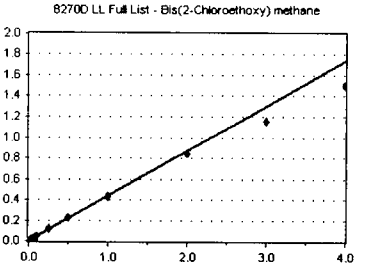


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~1035~~	~~0.224~~	~~7.60~~
9E08056-CAL2	50	2552	0.219	7.60
9E08056-CAL3	100	6013	0.260	7.60
9E08056-CAL4	200	13165	0.280	7.60
9E08056-CAL5	500	33821	0.301	7.60
9E08056-CAL6	1000	67530	0.310	7.60
9E08056-CAL7	2000	125958	0.311	7.60
9E08056-CAL8	4000	231859	0.307	7.61
9E08056-CAL9	6000	328729	0.286	7.62
9E08056-CALA	8000	412108	0.280	7.62

AVE RF **0.284** RF RSD **10.49** AVE RT **7.60**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1890	0.409	7.69
9E08056-CAL2	50	5405	0.463	7.68
9E08056-CAL3	100	11079	0.480	7.69
9E08056-CAL4	200	21622	0.460	7.68
9E08056-CAL5	500	53158	0.473	7.69
9E08056-CAL6	1000	98157	0.451	7.69
9E08056-CAL7	2000	173377	0.428	7.69
9E08056-CAL8	4000	317226	0.419	7.70
9E08056-CAL9	6000	444685	0.386	7.70
9E08056-CALA	8000	553975	0.376	7.70

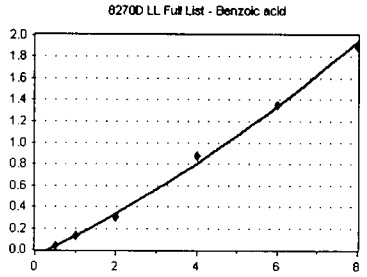
AVE RF **0.435** RF RSD **8.40** AVE RT **7.69**

Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Benzoic acid

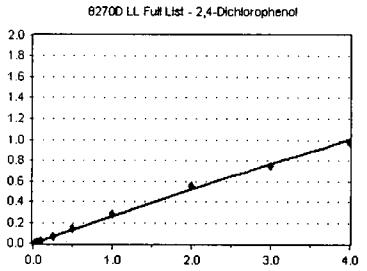


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~40~~	~~0~~	~~0.000~~	~~0.00~~
~~9E08056-CAL2~~	~~100~~	~~157~~	~~6.729~~	~~7.68~~
~~9E08056-CAL3~~	~~200~~	~~570~~	~~1.234~~	~~7.65~~
~~9E08056-CAL4~~	~~400~~	~~1808~~	~~1.925~~	~~7.65~~
9E08056-CAL5	1000	12609	5.611	7.67
9E08056-CAL6	2000	57591	0.132	7.70
9E08056-CAL7	4000	120684	0.149	7.72
9E08056-CAL8	8000	329662	0.218	7.78
9E08056-CAL9	12000	520098	0.226	7.80
9E08056-CALA	16000	699436	0.237	7.85

AVE RF **0.170** RF RSD **41.46** AVE RT **7.76**

2,4-Dichlorophenol

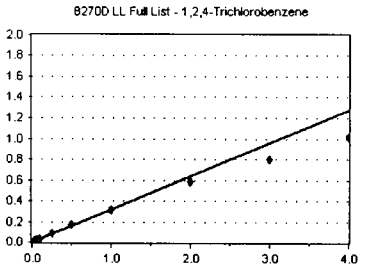


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~685~~	~~0.148~~	~~7.81~~
9E08056-CAL2	50	1767	0.151	7.80
9E08056-CAL3	100	4504	0.195	7.80
9E08056-CAL4	200	10432	0.222	7.80
9E08056-CAL5	500	28435	0.253	7.80
9E08056-CAL6	1000	59077	0.272	7.80
9E08056-CAL7	2000	112156	0.277	7.81
9E08056-CAL8	4000	210069	0.278	7.82
9E08056-CAL9	6000	285851	0.248	7.82
9E08056-CALA	8000	358983	0.244	7.83

AVE RF **0.238** RF RSD **17.71** AVE RT **7.81**

1,2,4-Trichlorobenzene

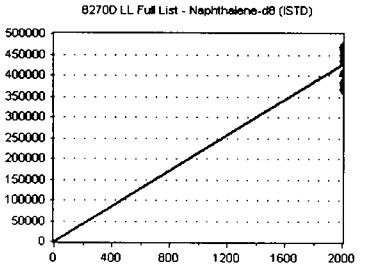


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1529	0.331	7.89
9E08056-CAL2	50	3994	0.342	7.89
9E08056-CAL3	100	8177	0.354	7.89
9E08056-CAL4	200	16423	0.350	7.89
9E08056-CAL5	500	39463	0.351	7.89
9E08056-CAL6	1000	73101	0.336	7.89
9E08056-CAL7	2000	127703	0.315	7.89
9E08056-CAL8	4000	222596	0.294	7.90
9E08056-CAL9	6000	308537	0.268	7.90
9E08056-CALA	8000	375837	0.255	7.90

AVE RF **0.320** RF RSD **11.19** AVE RT **7.89**

Naphthalene-d8 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	461650	230.825	7.95
9E08056-CAL2	2000	466642	233.321	7.94
9E08056-CAL3	2000	461862	230.931	7.94
9E08056-CAL4	2000	469577	234.788	7.94
9E08056-CAL5	2000	449407	224.703	7.95
9E08056-CAL6	2000	435111	217.555	7.95
9E08056-CAL7	2000	404790	202.395	7.95
9E08056-CAL8	2000	378186	189.093	7.95
9E08056-CAL9	2000	383773	191.887	7.95
9E08056-CALA	2000	368532	184.266	7.95

AVE RF **213.977** RF RSD **9.39** AVE RT **7.95**

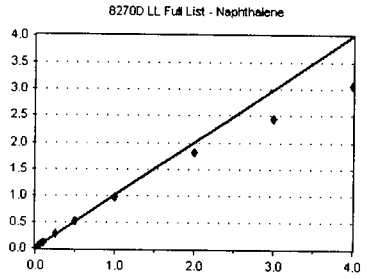
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Naphthalene

Curve Fit: **AVERAGE RF**

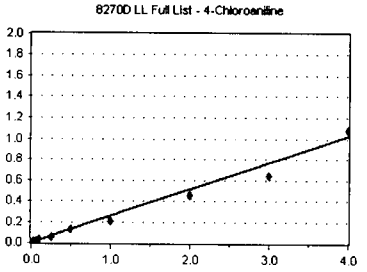


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4931	1.068	7.97
9E08056-CAL2	50	12776	1.095	7.96
9E08056-CAL3	100	25557	1.107	7.96
9E08056-CAL4	200	51599	1.099	7.96
9E08056-CAL5	500	121753	1.084	7.96
9E08056-CAL6	1000	228023	1.048	7.97
9E08056-CAL7	2000	397624	0.982	7.97
9E08056-CAL8	4000	687088	0.908	7.98
9E08056-CAL9	6000	939298	0.816	7.98
9E08056-CALA	8000	1132611	0.768	7.98

AVE RF **0.998** RF RSD **12.52** AVE RT **7.97**

4-Chloroaniline

Curve Fit: **AVERAGE RF**

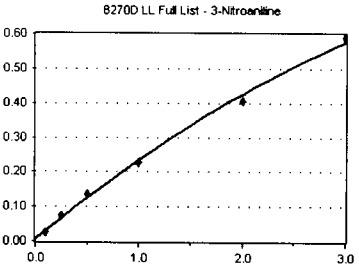


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1367	0.296	8.01
9E08056-CAL2	50	3426	0.294	8.01
9E08056-CAL3	100	6574	0.285	8.01
9E08056-CAL4	200	12811	0.273	8.01
9E08056-CAL5	500	25718	0.229	8.02
9E08056-CAL6	1000	57359	0.264	8.02
9E08056-CAL7	2000	84586	0.209	8.03
9E08056-CAL8	4000	170567	0.226	8.05
9E08056-CAL9	6000	243860	0.212	8.05
9E08056-CALA	8000	398347	0.270	8.04

AVE RF **0.256** RF RSD **13.18** AVE RT **8.03**

3-Nitroaniline

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

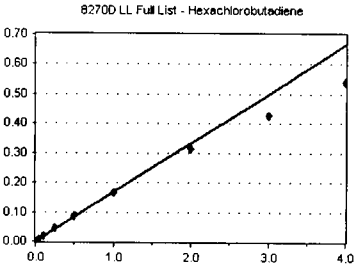


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~279~~	~~0.121~~	~~9.67~~
~~9E08056-CAL2~~	~~50~~	~~912~~	~~0.155~~	~~9.66~~
~~9E08056-CAL3~~	~~100~~	~~2267~~	~~0.190~~	~~9.65~~
9E08056-CAL4	200	6297	0.257	9.66
9E08056-CAL5	500	17372	0.298	9.66
9E08056-CAL6	1000	30789	0.274	9.67
9E08056-CAL7	2000	46893	0.225	9.67
9E08056-CAL8	4000	82018	0.202	9.68
9E08056-CAL9	6000	118898	0.197	0.00
~~9E08056-CALA~~	~~8000~~	~~173485~~	~~0.223~~	~~0.00~~

AVE RF **0.242** RF RSD **16.76** AVE RT **8.05**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	856	0.185	8.09
9E08056-CAL2	50	2007	0.172	8.09
9E08056-CAL3	100	4053	0.176	8.09
9E08056-CAL4	200	8220	0.175	8.09
9E08056-CAL5	500	20186	0.180	8.09
9E08056-CAL6	1000	37131	0.171	8.10
9E08056-CAL7	2000	67587	0.167	8.10
9E08056-CAL8	4000	118434	0.157	8.10
9E08056-CAL9	6000	164363	0.143	8.10
9E08056-CALA	8000	199760	0.136	8.10

AVE RF **0.166** RF RSD **9.74** AVE RT **8.10**

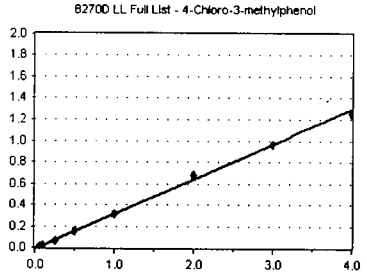
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

4-Chloro-3-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

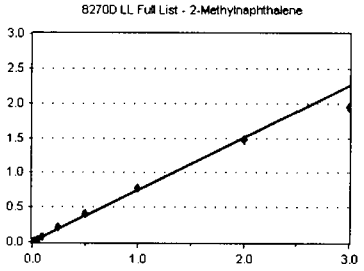


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~518~~	~~0.112~~	~~8.50~~
~~9E08056-CAL2~~	~~50~~	~~1435~~	~~0.123~~	~~8.50~~
9E08056-CAL3	100	2916	0.126	8.50
9E08056-CAL4	200	9012	0.192	8.49
9E08056-CAL5	500	29879	0.266	8.49
9E08056-CAL6	1000	67094	0.308	8.49
9E08056-CAL7	2000	128769	0.318	8.50
9E08056-CAL8	4000	257664	0.341	8.51
9E08056-CAL9	6000	368355	0.320	8.51
9E08056-CALA	8000	462055	0.313	8.51

AVE RF **0.273** RF RSD **27.63** AVE RT **8.50**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

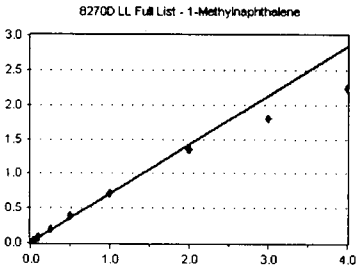


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3206	0.694	8.66
9E08056-CAL2	50	8403	0.720	8.66
9E08056-CAL3	100	17636	0.764	8.66
9E08056-CAL4	200	36961	0.787	8.66
9E08056-CAL5	500	94207	0.839	8.66
9E08056-CAL6	1000	177224	0.815	8.66
9E08056-CAL7	2000	312815	0.773	8.66
9E08056-CAL8	4000	555825	0.735	8.67
9E08056-CAL9	6000	744774	0.647	8.67
~~9E08056-CALA~~	~~8000~~	~~907754~~	~~0.616~~	~~8.67~~

AVE RF **0.753** RF RSD **7.98** AVE RT **8.66**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

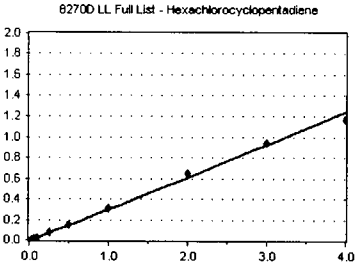


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3306	0.716	8.76
9E08056-CAL2	50	8435	0.723	8.76
9E08056-CAL3	100	17565	0.761	8.76
9E08056-CAL4	200	36346	0.774	8.76
9E08056-CAL5	500	90038	0.801	8.76
9E08056-CAL6	1000	166590	0.766	8.76
9E08056-CAL7	2000	290157	0.717	8.76
9E08056-CAL8	4000	506152	0.669	8.77
9E08056-CAL9	6000	691750	0.601	8.77
9E08056-CALA	8000	826000	0.560	8.77

AVE RF **0.709** RF RSD **10.96** AVE RT **8.76**

Hexachlorocyclopentadiene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~56~~	~~2.429~~	~~8.83~~
9E08056-CAL2	50	592	0.101	8.83
9E08056-CAL3	100	1795	0.150	8.83
9E08056-CAL4	200	5324	0.217	8.83
9E08056-CAL5	500	16399	0.281	8.83
9E08056-CAL6	1000	34750	0.309	8.83
9E08056-CAL7	2000	65488	0.315	8.83
9E08056-CAL8	4000	130554	0.322	8.83
9E08056-CAL9	6000	188663	0.313	8.83
9E08056-CALA	8000	228123	0.293	8.83

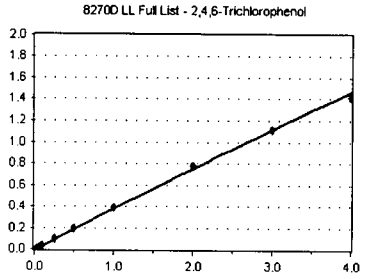
AVE RF **0.256** RF RSD **31.74** AVE RT **8.83**

Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

2,4,6-Trichlorophenol

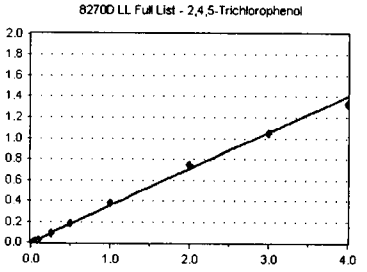


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~344~~	~~0.149~~	~~8.95~~
9E08056-CAL2	50	987	0.168	8.94
9E08056-CAL3	100	2595	0.217	8.94
9E08056-CAL4	200	7125	0.291	8.94
9E08056-CAL5	500	21591	0.370	8.94
9E08056-CAL6	1000	44351	0.395	8.94
9E08056-CAL7	2000	81849	0.393	8.94
9E08056-CAL8	4000	157742	0.389	8.95
9E08056-CAL9	6000	223754	0.371	8.95
9E08056-CALA	8000	275262	0.354	8.95

AVE RF **0.327** RF RSD **25.56** AVE RT **8.95**

2,4,5-Trichlorophenol

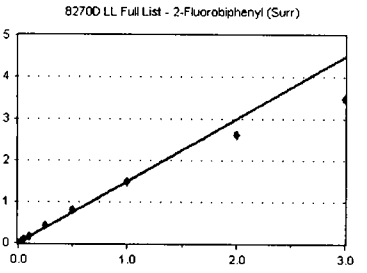


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~415~~	~~0.180~~	~~8.99~~
9E08056-CAL2	50	1083	0.184	8.99
9E08056-CAL3	100	2692	0.225	8.99
9E08056-CAL4	200	6364	0.260	8.99
9E08056-CAL5	500	19810	0.340	8.98
9E08056-CAL6	1000	42377	0.377	8.98
9E08056-CAL7	2000	78891	0.379	8.98
9E08056-CAL8	4000	152327	0.375	8.99
9E08056-CAL9	6000	209851	0.348	8.99
9E08056-CALA	8000	259729	0.334	9.00

AVE RF **0.314** RF RSD **23.08** AVE RT **8.99**

2-Fluorobiphenyl (Surr)

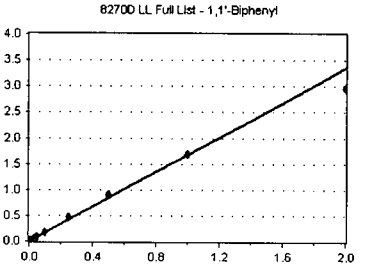


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3096	1.343	9.02
9E08056-CAL2	50	8836	1.502	9.02
9E08056-CAL3	100	19505	1.633	9.02
9E08056-CAL4	200	41740	1.702	9.02
9E08056-CAL5	500	100779	1.729	9.02
9E08056-CAL6	1000	182200	1.621	9.02
9E08056-CAL7	2000	311047	1.495	9.02
9E08056-CAL8	4000	532909	1.313	9.03
9E08056-CAL9	6000	698194	1.158	9.03
~~9E08056-CALA~~	~~8000~~	~~835510~~	~~1.073~~	~~9.03~~

AVE RF **1.500** RF RSD **12.96** AVE RT **9.02**

1,1'-Biphenyl



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3301	1.432	9.13
9E08056-CAL2	50	9087	1.545	9.13
9E08056-CAL3	100	20138	1.686	9.13
9E08056-CAL4	200	44415	1.812	9.13
9E08056-CAL5	500	111947	1.920	9.13
9E08056-CAL6	1000	204461	1.819	9.13
9E08056-CAL7	2000	349335	1.679	9.13
9E08056-CAL8	4000	599715	1.478	9.14
~~9E08056-CAL9~~	~~6000~~	~~789288~~	~~1.309~~	~~9.14~~
~~9E08056-CALA~~	~~8000~~	~~939145~~	~~1.207~~	~~9.14~~

AVE RF **1.671** RF RSD **10.48** AVE RT **9.13**

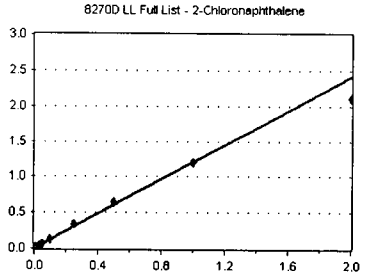
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**

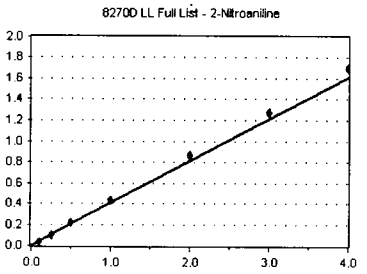


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2457	1.066	9.15
9E08056-CAL2	50	6592	1.120	9.15
9E08056-CAL3	100	14570	1.220	9.15
9E08056-CAL4	200	32196	1.313	9.15
9E08056-CAL5	500	80038	1.373	9.15
9E08056-CAL6	1000	145871	1.298	9.15
9E08056-CAL7	2000	248276	1.193	9.15
9E08056-CAL8	4000	426263	1.050	9.16
~~9E08056-CAL9~~	~~6000~~	~~576153~~	~~0.956~~	~~9.16~~
~~9E08056-CALA~~	~~8000~~	~~683312~~	~~0.878~~	~~9.16~~

AVE RF **1.204** RF RSD **9.89** AVE RT **9.15**

2-Nitroaniline

Curve Fit: **AVERAGE RF**

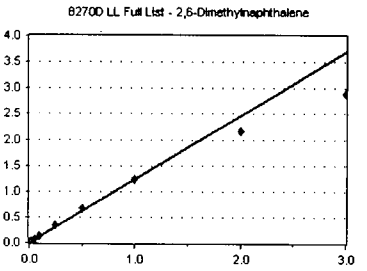


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~198~~	~~8.587~~	~~9.25~~
~~9E08056-CAL2~~	~~50~~	~~759~~	~~0.129~~	~~9.25~~
~~9E08056-CAL3~~	~~100~~	~~1934~~	~~0.162~~	~~9.25~~
9E08056-CAL4	200	7039	0.287	9.25
9E08056-CAL5	500	22855	0.392	9.24
9E08056-CAL6	1000	48960	0.436	9.25
9E08056-CAL7	2000	89274	0.429	9.25
9E08056-CAL8	4000	175844	0.433	9.26
9E08056-CAL9	6000	257132	0.427	9.26
9E08056-CALA	8000	330555	0.425	9.27

AVE RF **0.404** RF RSD **13.26** AVE RT **9.25**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

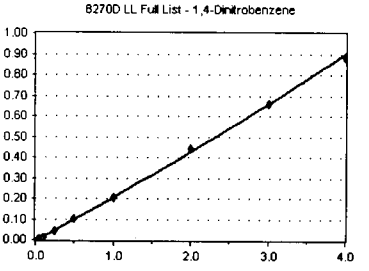


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2570	1.115	9.29
9E08056-CAL2	50	7150	1.215	9.29
9E08056-CAL3	100	15688	1.314	9.29
9E08056-CAL4	200	34391	1.403	9.29
9E08056-CAL5	500	82179	1.410	9.29
9E08056-CAL6	1000	150715	1.341	9.29
9E08056-CAL7	2000	257201	1.236	9.29
9E08056-CAL8	4000	440208	1.085	9.30
9E08056-CAL9	6000	582020	0.966	9.30
~~9E08056-CALA~~	~~8000~~	~~693134~~	~~0.890~~	~~9.30~~

AVE RF **1.231** RF RSD **12.38** AVE RT **9.29**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~116~~	~~5.031~~	~~9.38~~
~~9E08056-CAL2~~	~~50~~	~~303~~	~~5.150~~	~~9.38~~
9E08056-CAL3	100	955	7.996	9.37
9E08056-CAL4	200	3037	0.124	9.37
9E08056-CAL5	500	10337	0.177	9.37
9E08056-CAL6	1000	23019	0.205	9.38
9E08056-CAL7	2000	42957	0.206	9.38
9E08056-CAL8	4000	89593	0.221	9.39
9E08056-CAL9	6000	132868	0.220	9.39
9E08056-CALA	8000	171694	0.221	9.40

AVE RF **0.182** RF RSD **28.96** AVE RT **9.38**

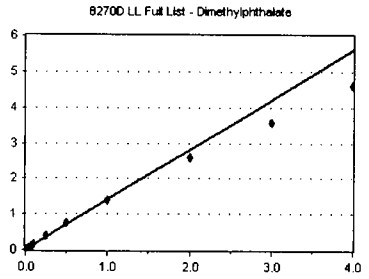
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Dimethylphthalate

Curve Fit: **AVERAGE RF**

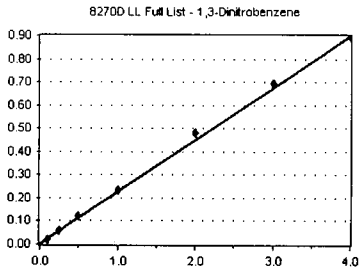


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3008	1.305	9.42
9E08056-CAL2	50	8669	1.473	9.42
9E08056-CAL3	100	18418	1.542	9.42
9E08056-CAL4	200	38348	1.564	9.42
9E08056-CAL5	500	91807	1.575	9.42
9E08056-CAL6	1000	167550	1.490	9.43
9E08056-CAL7	2000	291628	1.402	9.43
9E08056-CAL8	4000	526270	1.297	9.44
9E08056-CAL9	6000	719060	1.193	9.45
9E08056-CALA	8000	895747	1.151	9.46

AVE RF **1.399** RF RSD **11.07** AVE RT **9.43**

1,3-Dinitrobenzene

Curve Fit: **AVERAGE RF**

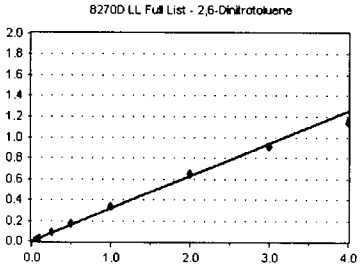


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~110~~	~~0.048~~	~~9.46~~
~~9E08056-CAL2~~	~~50~~	~~617~~	~~0.105~~	~~9.45~~
~~9E08056-CAL3~~	~~100~~	~~1664~~	~~0.139~~	~~9.45~~
9E08056-CAL4	200	4229	0.172	9.45
9E08056-CAL5	500	13273	0.228	9.45
9E08056-CAL6	1000	27406	0.244	9.46
9E08056-CAL7	2000	48772	0.234	9.46
9E08056-CAL8	4000	97308	0.240	9.47
9E08056-CAL9	6000	139435	0.231	9.48
9E08056-CALA	8000	173847	0.223	9.49

AVE RF **0.225** RF RSD **10.70** AVE RT **9.47**

2,6-Dinitrotoluene

Curve Fit: **AVERAGE RF**

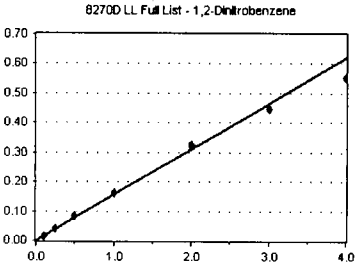


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~309~~	~~0.134~~	~~9.48~~
~~9E08056-CAL2~~	~~50~~	~~1045~~	~~0.178~~	~~9.48~~
9E08056-CAL3	100	2837	0.238	9.48
9E08056-CAL4	200	7570	0.309	9.48
9E08056-CAL5	500	20865	0.358	9.48
9E08056-CAL6	1000	39367	0.350	9.49
9E08056-CAL7	2000	70090	0.337	9.49
9E08056-CAL8	4000	131486	0.324	9.50
9E08056-CAL9	6000	182024	0.302	9.51
9E08056-CALA	8000	222349	0.286	9.51

AVE RF **0.313** RF RSD **12.48** AVE RT **9.49**

1,2-Dinitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~108~~	~~4.684~~	~~9.54~~
~~9E08056-CAL2~~	~~50~~	~~519~~	~~0.088~~	~~9.54~~
~~9E08056-CAL3~~	~~100~~	~~1261~~	~~0.106~~	~~9.54~~
9E08056-CAL4	200	3477	0.142	9.54
9E08056-CAL5	500	9375	0.161	9.54
9E08056-CAL6	1000	19142	0.170	9.55
9E08056-CAL7	2000	34100	0.164	9.55
9E08056-CAL8	4000	65816	0.162	9.56
9E08056-CAL9	6000	89987	0.149	9.57
9E08056-CALA	8000	107372	0.138	9.58

AVE RF **0.155** RF RSD **7.87** AVE RT **9.56**

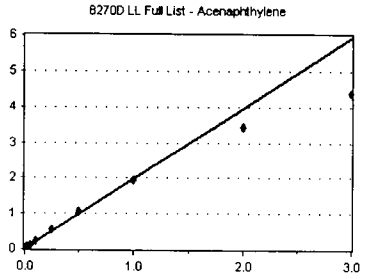
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Acenaphthylene

Curve Fit: **AVERAGE RF**

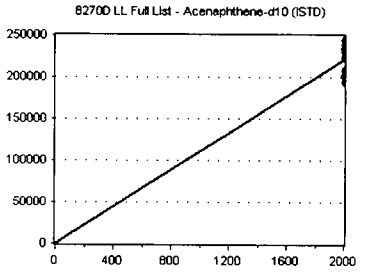


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4296	1.863	9.57
9E08056-CAL2	50	11830	2.011	9.57
9E08056-CAL3	100	26148	2.189	9.57
9E08056-CAL4	200	54704	2.231	9.57
9E08056-CAL5	500	129518	2.222	9.57
9E08056-CAL6	1000	242796	2.160	9.57
9E08056-CAL7	2000	407881	1.961	9.57
9E08056-CAL8	4000	694303	1.711	9.58
9E08056-CAL9	6000	879320	1.459	9.59
~~9E08056-CALA~~	~~8000~~	~~984732~~	~~1.265~~	~~9.59~~

AVE RF **1.978** RF RSD **13.33** AVE RT **9.57**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

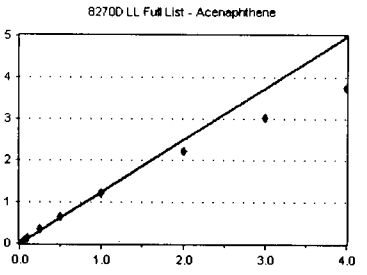


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	230578	115.289	9.71
9E08056-CAL2	2000	235336	117.668	9.71
9E08056-CAL3	2000	238866	119.433	9.71
9E08056-CAL4	2000	245169	122.585	9.71
9E08056-CAL5	2000	233204	116.602	9.71
9E08056-CAL6	2000	224844	112.422	9.72
9E08056-CAL7	2000	208028	104.014	9.72
9E08056-CAL8	2000	202901	101.450	9.72
9E08056-CAL9	2000	200935	100.468	9.72
9E08056-CALA	2000	194593	97.296	9.72

AVE RF **110.723** RF RSD **8.19** AVE RT **9.72**

Acenaphthene

Curve Fit: **AVERAGE RF**

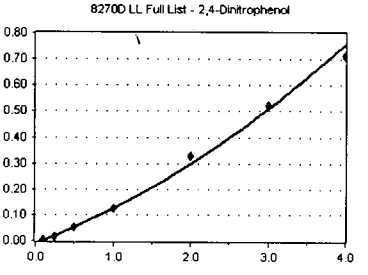


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2971	1.289	9.75
9E08056-CAL2	50	8352	1.420	9.75
9E08056-CAL3	100	16799	1.407	9.75
9E08056-CAL4	200	34142	1.393	9.75
9E08056-CAL5	500	79978	1.372	9.75
9E08056-CAL6	1000	146889	1.307	9.75
9E08056-CAL7	2000	254388	1.223	9.75
9E08056-CAL8	4000	449192	1.107	9.76
9E08056-CAL9	6000	608926	1.010	9.76
9E08056-CALA	8000	730149	0.938	9.76

AVE RF **1.246** RF RSD **13.87** AVE RT **9.75**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9E08056-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9E08056-CAL3~~	~~100~~	~~124~~	~~1.038~~	~~9.77~~
9E08056-CAL4	200	725	2.957	9.77
9E08056-CAL5	500	3835	6.578	9.76
9E08056-CAL6	1000	12133	0.108	9.77
9E08056-CAL7	2000	25811	0.124	9.77
9E08056-CAL8	4000	66685	0.164	9.78
9E08056-CAL9	6000	105311	0.175	9.78
9E08056-CALA	8000	138854	0.178	9.79

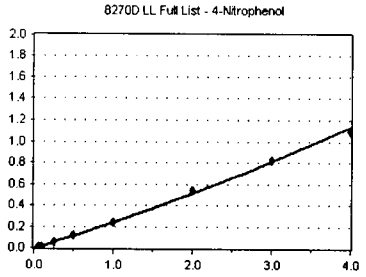
AVE RF **0.121** RF RSD **47.41** AVE RT **9.77**

Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

4-Nitrophenol

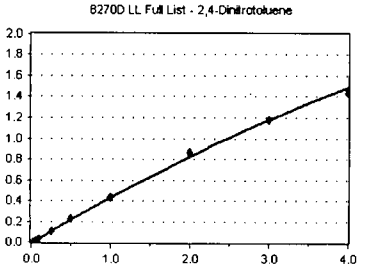


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~173~~	~~7.503~~	~~9.85~~
~~9E08056-CAL2~~	~~50~~	~~405~~	~~6.884~~	~~9.84~~
9E08056-CAL3	100	1299	0.109	9.84
9E08056-CAL4	200	3537	0.144	9.84
9E08056-CAL5	500	11649	0.200	9.83
9E08056-CAL6	1000	26763	0.238	9.83
9E08056-CAL7	2000	48681	0.234	9.84
9E08056-CAL8	4000	110480	0.272	9.85
9E08056-CAL9	6000	165172	0.274	9.85
9E08056-CALA	8000	212171	0.273	9.86

AVE RF **0.218** RF RSD **28.71** AVE RT **9.84**

2,4-Dinitrotoluene

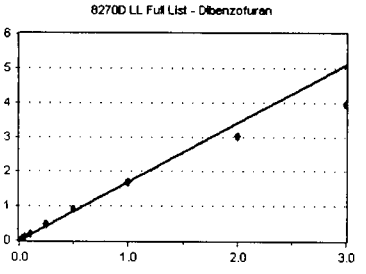


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~414~~	~~0.180~~	~~9.90~~
9E08056-CAL2	50	1084	0.184	9.89
9E08056-CAL3	100	3069	0.257	9.89
9E08056-CAL4	200	8883	0.362	9.90
9E08056-CAL5	500	25345	0.435	9.90
9E08056-CAL6	1000	50363	0.448	9.90
9E08056-CAL7	2000	90563	0.435	9.90
9E08056-CAL8	4000	174398	0.430	9.91
9E08056-CAL9	6000	237610	0.394	9.92
9E08056-CALA	8000	279820	0.359	9.93

AVE RF **0.367** RF RSD **24.75** AVE RT **9.90**

Dibenzofuran

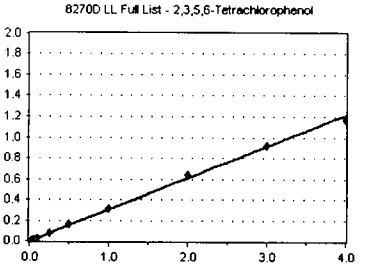


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3412	1.480	9.92
9E08056-CAL2	50	10231	1.739	9.92
9E08056-CAL3	100	21911	1.835	9.92
9E08056-CAL4	200	47089	1.921	9.92
9E08056-CAL5	500	113330	1.944	9.92
9E08056-CAL6	1000	206307	1.835	9.92
9E08056-CAL7	2000	351544	1.690	9.92
9E08056-CAL8	4000	609207	1.501	9.93
9E08056-CAL9	6000	796168	1.321	9.93
~~9E08056-CALA~~	~~8000~~	~~933154~~	~~1.199~~	~~9.94~~

AVE RF **1.696** RF RSD **12.81** AVE RT **9.92**

2,3,5,6-Tetrachlorophenol



Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~213~~	~~9.238~~	~~10.01~~
9E08056-CAL2	50	720	0.122	10.01
9E08056-CAL3	100	1956	0.164	10.00
9E08056-CAL4	200	5912	0.241	10.00
9E08056-CAL5	500	17017	0.292	10.00
9E08056-CAL6	1000	35452	0.315	10.01
9E08056-CAL7	2000	64681	0.311	10.01
9E08056-CAL8	4000	128540	0.317	10.01
9E08056-CAL9	6000	183781	0.305	10.02
9E08056-CALA	8000	227276	0.292	10.02

AVE RF **0.262** RF RSD **27.46** AVE RT **10.01**

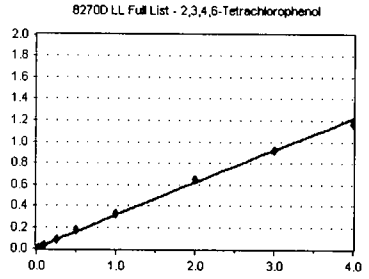
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

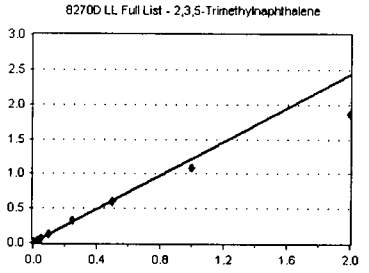


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	352	0.153	10.05
9E08056-CAL2	50	1085	0.184	10.05
9E08056-CAL3	100	3032	0.254	10.05
9E08056-CAL4	200	7180	0.293	10.05
9E08056-CAL5	500	19079	0.327	10.05
9E08056-CAL6	1000	38150	0.339	10.05
9E08056-CAL7	2000	68233	0.328	10.05
9E08056-CAL8	4000	131983	0.325	10.06
9E08056-CAL9	6000	183789	0.305	10.06
9E08056-CALA	8000	226177	0.291	10.07

AVE RF **0.280** RF RSD **22.92** AVE RT **10.05**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

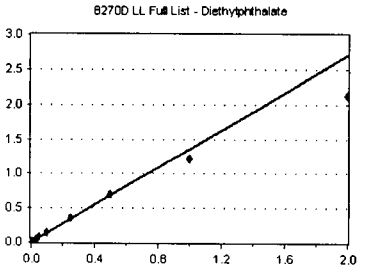


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2925	1.269	10.13
9E08056-CAL2	50	7475	1.271	10.13
9E08056-CAL3	100	15984	1.338	10.13
9E08056-CAL4	200	31957	1.303	10.13
9E08056-CAL5	500	76253	1.308	10.13
9E08056-CAL6	1000	135724	1.207	10.13
9E08056-CAL7	2000	226222	1.087	10.14
9E08056-CAL8	4000	377414	0.930	10.14
~~9E08056-CAL9~~	~~6000~~	~~492303~~	~~0.817~~	~~10.15~~
~~9E08056-CALA~~	~~8000~~	~~595050~~	~~0.764~~	~~10.15~~

AVE RF **1.214** RF RSD **11.44** AVE RT **10.13**

Diethylphthalate

Curve Fit: **AVERAGE RF**

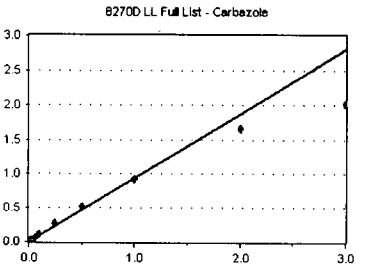


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3091	1.341	10.13
9E08056-CAL2	50	8249	1.402	10.13
9E08056-CAL3	100	17729	1.484	10.13
9E08056-CAL4	200	36994	1.509	10.13
9E08056-CAL5	500	84929	1.457	10.14
9E08056-CAL6	1000	154986	1.379	10.14
9E08056-CAL7	2000	252775	1.215	10.14
9E08056-CAL8	4000	430062	1.060	10.15
~~9E08056-CAL9~~	~~6000~~	~~560826~~	~~0.930~~	~~10.16~~
~~9E08056-CALA~~	~~8000~~	~~666758~~	~~0.857~~	~~10.16~~

AVE RF **1.356** RF RSD **11.17** AVE RT **10.14**

Carbazole

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3928	0.881	11.46
9E08056-CAL2	50	10615	0.949	11.45
9E08056-CAL3	100	22432	1.015	11.45
9E08056-CAL4	200	48320	1.061	11.45
9E08056-CAL5	500	116650	1.074	11.45
9E08056-CAL6	1000	218760	1.029	11.46
9E08056-CAL7	2000	364563	0.920	11.46
9E08056-CAL8	4000	666936	0.824	11.46
9E08056-CAL9	6000	822554	0.671	0.00
~~9E08056-CALA~~	~~8000~~	~~892838~~	~~0.563~~	~~0.00~~

AVE RF **0.936** RF RSD **13.91** AVE RT **10.18**

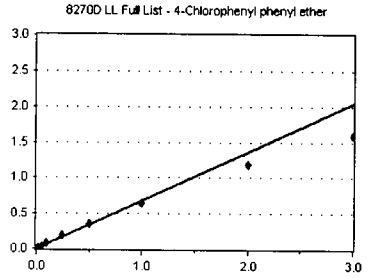
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**

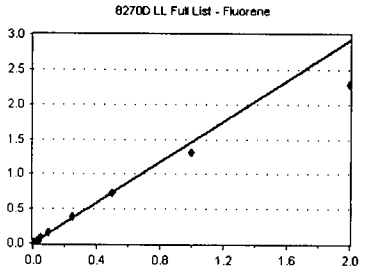


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1452	0.630	10.26
9E08056-CAL2	50	4291	0.729	10.26
9E08056-CAL3	100	9040	0.757	10.26
9E08056-CAL4	200	19218	0.784	10.26
9E08056-CAL5	500	44439	0.762	10.26
9E08056-CAL6	1000	79614	0.708	10.26
9E08056-CAL7	2000	136404	0.656	10.26
9E08056-CAL8	4000	239379	0.590	10.27
9E08056-CAL9	6000	319658	0.530	10.27
~~9E08056-CALA~~	~~8000~~	~~378804~~	~~0.487~~	~~10.28~~

AVE RF **0.683** RF RSD **12.71** AVE RT **10.26**

Fluorene

Curve Fit: **AVERAGE RF**

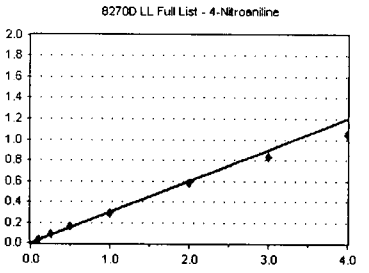


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3504	1.520	10.27
9E08056-CAL2	50	8897	1.512	10.26
9E08056-CAL3	100	19156	1.604	10.26
9E08056-CAL4	200	38831	1.584	10.27
9E08056-CAL5	500	91858	1.576	10.27
9E08056-CAL6	1000	163031	1.450	10.27
9E08056-CAL7	2000	271787	1.306	10.28
9E08056-CAL8	4000	463326	1.142	10.28
~~9E08056-CAL9~~	~~6000~~	~~605832~~	~~1.005~~	~~10.29~~
~~9E08056-CALA~~	~~8000~~	~~722035~~	~~0.928~~	~~10.29~~

AVE RF **1.462** RF RSD **10.99** AVE RT **10.27**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

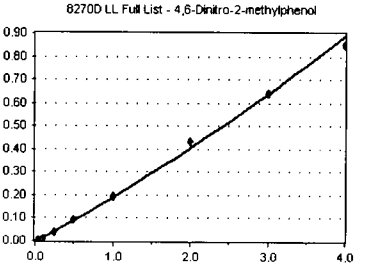


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~396~~	~~0.172~~	~~10.28~~
~~9E08056-CAL2~~	~~50~~	~~1270~~	~~0.216~~	~~10.28~~
~~9E08056-CAL3~~	~~100~~	~~2732~~	~~0.229~~	~~10.28~~
9E08056-CAL4	200	7673	0.313	10.28
9E08056-CAL5	500	19675	0.337	10.28
9E08056-CAL6	1000	36743	0.327	10.28
9E08056-CAL7	2000	59807	0.287	10.29
9E08056-CAL8	4000	119176	0.294	10.30
9E08056-CAL9	6000	166859	0.277	10.31
9E08056-CALA	8000	203360	0.261	10.32

AVE RF **0.300** RF RSD **9.17** AVE RT **10.29**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9E08056-CAL2~~	~~50~~	~~217~~	~~3.688~~	~~10.31~~
9E08056-CAL3	100	760	0.064	10.31
9E08056-CAL4	200	2514	0.103	10.31
9E08056-CAL5	500	8901	0.153	10.31
9E08056-CAL6	1000	21051	0.187	10.31
9E08056-CAL7	2000	40019	0.192	10.32
9E08056-CAL8	4000	87463	0.216	10.33
9E08056-CAL9	6000	129071	0.214	10.34
9E08056-CALA	8000	165731	0.213	10.35

AVE RF **0.168** RF RSD **34.03** AVE RT **10.32**

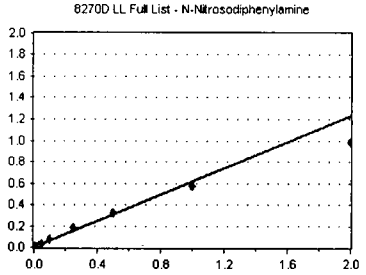
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**

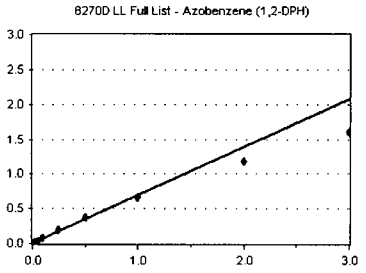


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2436	0.546	10.38
9E08056-CAL2	50	6367	0.569	10.38
9E08056-CAL3	100	14816	0.671	10.38
9E08056-CAL4	200	32443	0.713	10.38
9E08056-CAL5	500	78301	0.721	10.38
9E08056-CAL6	1000	139124	0.654	10.38
9E08056-CAL7	2000	227824	0.575	10.38
9E08056-CAL8	4000	398485	0.493	10.39
~~9E08056-CAL9~~	~~6000~~	~~527740~~	~~0.431~~	~~10.40~~
~~9E08056-CALA~~	~~8000~~	~~645120~~	~~0.407~~	~~10.40~~

AVE RF **0.618** RF RSD **13.51** AVE RT **10.38**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

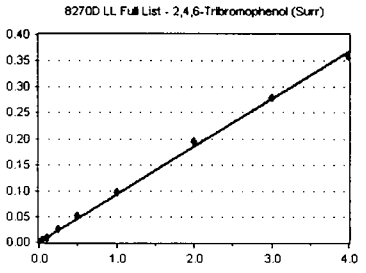


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2808	0.630	10.42
9E08056-CAL2	50	7675	0.686	10.42
9E08056-CAL3	100	17330	0.784	10.42
9E08056-CAL4	200	36434	0.800	10.42
9E08056-CAL5	500	87002	0.801	10.42
9E08056-CAL6	1000	156991	0.738	10.42
9E08056-CAL7	2000	264872	0.668	10.43
9E08056-CAL8	4000	481159	0.595	10.43
9E08056-CAL9	6000	656969	0.536	10.44
~~9E08056-CALA~~	~~8000~~	~~801688~~	~~0.506~~	~~10.44~~

AVE RF **0.693** RF RSD **13.73** AVE RT **10.42**

2,4,6-Tribromophenol (Surr)

Curve Fit: **AVERAGE RF**

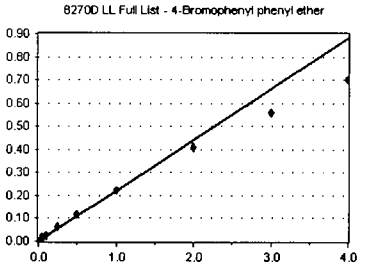


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~296~~	~~6.639~~	~~10.52~~
9E08056-CAL2	50	790	7.066	10.52
9E08056-CAL3	100	1794	8.120	10.51
9E08056-CAL4	200	4189	9.201	10.51
9E08056-CAL5	500	11050	0.102	10.52
9E08056-CAL6	1000	22087	0.104	10.52
9E08056-CAL7	2000	38932	9.822	10.52
9E08056-CAL8	4000	78802	9.740	10.52
9E08056-CAL9	6000	114295	9.328	10.53
9E08056-CALA	8000	142560	8.992	10.53

AVE RF **9.204** RF RSD **11.41** AVE RT **10.52**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	976	0.219	10.76
9E08056-CAL2	50	2481	0.222	10.76
9E08056-CAL3	100	5435	0.246	10.76
9E08056-CAL4	200	10934	0.240	10.76
9E08056-CAL5	500	27078	0.249	10.76
9E08056-CAL6	1000	49801	0.234	10.76
9E08056-CAL7	2000	88111	0.222	10.76
9E08056-CAL8	4000	164575	0.203	10.77
9E08056-CAL9	6000	229006	0.187	10.77
9E08056-CALA	8000	278562	0.176	10.77

AVE RF **0.220** RF RSD **11.23** AVE RT **10.76**

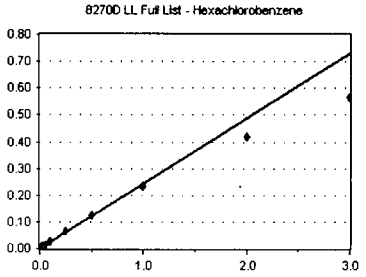
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**

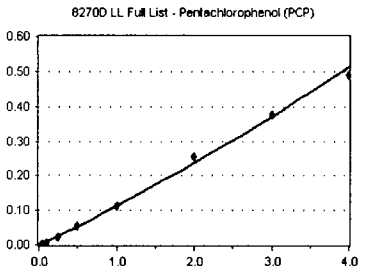


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1039	0.233	10.84
9E08056-CAL2	50	3112	0.278	10.84
9E08056-CAL3	100	6195	0.280	10.84
9E08056-CAL4	200	11859	0.260	10.84
9E08056-CAL5	500	28884	0.266	10.84
9E08056-CAL6	1000	52902	0.249	10.84
9E08056-CAL7	2000	92531	0.233	10.84
9E08056-CAL8	4000	169055	0.209	10.85
9E08056-CAL9	6000	231353	0.189	10.85
~~9E08056-CALA~~	~~8000~~	~~281208~~	~~0.177~~	~~10.85~~

AVE RF **0.244** RF RSD **12.77** AVE RT **10.84**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

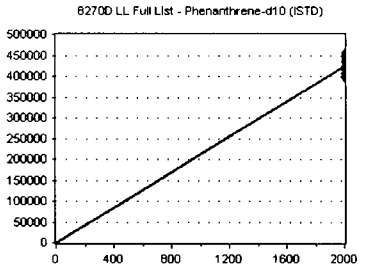


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~515~~	~~0.116~~	~~11.03~~
~~9E08056-CAL2~~	~~50~~	~~782~~	~~6.994~~	~~11.04~~
9E08056-CAL3	100	1222	5.531	11.03
9E08056-CAL4	200	3055	6.710	11.04
9E08056-CAL5	500	10538	9.704	11.03
9E08056-CAL6	1000	23287	0.110	11.04
9E08056-CAL7	2000	45320	0.114	11.03
9E08056-CAL8	4000	103356	0.128	11.04
9E08056-CAL9	6000	153485	0.125	11.05
9E08056-CALA	8000	193595	0.122	11.05

AVE RF **0.102** RF RSD **26.74** AVE RT **11.04**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

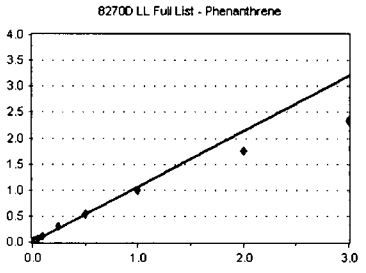


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	445843	222.922	11.22
9E08056-CAL2	2000	447217	223.608	11.22
9E08056-CAL3	2000	441856	220.928	11.22
9E08056-CAL4	2000	455298	227.649	11.22
9E08056-CAL5	2000	434358	217.179	11.22
9E08056-CAL6	2000	425173	212.587	11.22
9E08056-CAL7	2000	396363	198.182	11.22
9E08056-CAL8	2000	404511	202.255	11.23
9E08056-CAL9	2000	408419	204.210	11.23
9E08056-CALA	2000	396349	198.175	11.23

AVE RF **212.769** RF RSD **5.28** AVE RT **11.22**

Phenanthrene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5060	1.135	11.25
9E08056-CAL2	50	13230	1.183	11.24
9E08056-CAL3	100	26210	1.186	11.24
9E08056-CAL4	200	53865	1.183	11.24
9E08056-CAL5	500	127029	1.170	11.24
9E08056-CAL6	1000	232143	1.092	11.25
9E08056-CAL7	2000	398028	1.004	11.25
9E08056-CAL8	4000	712691	0.881	11.25
9E08056-CAL9	6000	956642	0.781	11.26
~~9E08056-CALA~~	~~8000~~	~~1153195~~	~~0.727~~	~~11.26~~

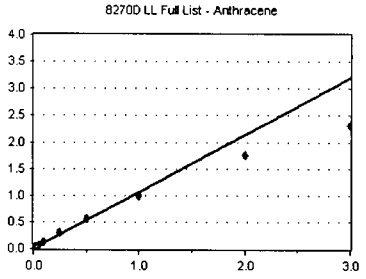
AVE RF **1.068** RF RSD **13.94** AVE RT **11.25**

Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Anthracene

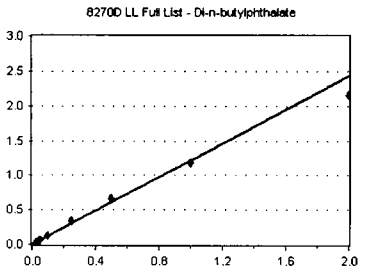


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5028	1.128	11.30
9E08056-CAL2	50	12760	1.141	11.30
9E08056-CAL3	100	26491	1.199	11.30
9E08056-CAL4	200	54658	1.200	11.30
9E08056-CAL5	500	128961	1.188	11.30
9E08056-CAL6	1000	235356	1.107	11.30
9E08056-CAL7	2000	397681	1.003	11.30
9E08056-CAL8	4000	710857	0.879	11.31
9E08056-CAL9	6000	942171	0.769	11.31
~~9E08056-CALA~~	~~8000~~	~~1111218~~	~~0.701~~	~~11.31~~

AVE RF **1.068** RF RSD **14.39** AVE RT **11.30**

Di-n-butylphthalate

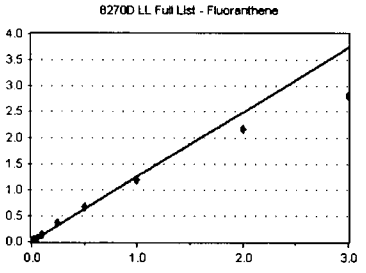


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~4702~~	~~1.055~~	~~11.79~~
9E08056-CAL2	50	11962	1.070	11.79
9E08056-CAL3	100	26562	1.202	11.79
9E08056-CAL4	200	58030	1.275	11.79
9E08056-CAL5	500	147202	1.356	11.79
9E08056-CAL6	1000	281730	1.325	11.79
9E08056-CAL7	2000	471443	1.189	11.79
9E08056-CAL8	4000	869303	1.075	11.80
~~9E08056-CAL9~~	~~6000~~	~~1162762~~	~~0.949~~	~~11.80~~
~~9E08056-CALA~~	~~8000~~	~~1386560~~	~~0.875~~	~~11.80~~

AVE RF **1.213** RF RSD **9.34** AVE RT **11.79**

Fluoranthene

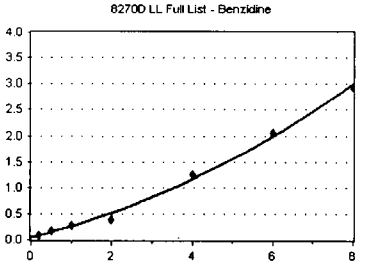


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5484	1.230	12.52
9E08056-CAL2	50	14115	1.262	12.52
9E08056-CAL3	100	29669	1.343	12.52
9E08056-CAL4	200	63551	1.396	12.52
9E08056-CAL5	500	155537	1.432	12.52
9E08056-CAL6	1000	287574	1.353	12.53
9E08056-CAL7	2000	475094	1.199	12.53
9E08056-CAL8	4000	874011	1.080	12.53
9E08056-CAL9	6000	1152260	0.940	12.54
~~9E08056-CALA~~	~~8000~~	~~1406107~~	~~0.887~~	~~12.54~~

AVE RF **1.248** RF RSD **12.71** AVE RT **12.53**

Benzidine



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

Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~40~~	~~5337~~	~~0.599~~	~~12.68~~
~~9E08056-CAL2~~	~~100~~	~~6670~~	~~0.298~~	~~12.68~~
~~9E08056-CAL3~~	~~200~~	~~14400~~	~~0.326~~	~~12.68~~
9E08056-CAL4	400	37553	0.412	12.68
9E08056-CAL5	1000	76984	0.354	12.68
9E08056-CAL6	2000	119397	0.281	12.68
9E08056-CAL7	4000	153390	0.193	12.68
9E08056-CAL8	8000	507935	0.314	12.69
9E08056-CAL9	12000	835608	0.341	12.70
9E08056-CALA	16000	1165482	0.368	12.70

AVE RF **0.323** RF RSD **21.84** AVE RT **12.69**

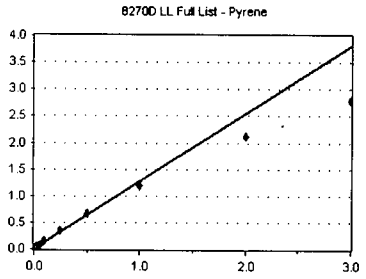
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Pyrene

Curve Fit: **AVERAGE RF**

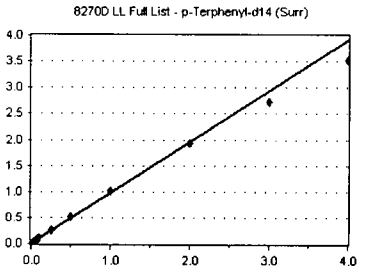


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5874	1.318	12.82
9E08056-CAL2	50	14957	1.338	12.82
9E08056-CAL3	100	31027	1.404	12.82
9E08056-CAL4	200	65571	1.440	12.82
9E08056-CAL5	500	154311	1.421	12.82
9E08056-CAL6	1000	286850	1.349	12.82
9E08056-CAL7	2000	468721	1.183	12.82
9E08056-CAL8	4000	853568	1.055	12.83
9E08056-CAL9	6000	1135183	0.926	12.84
~~9E08056-CALA~~	~~8000~~	~~1376701~~	~~0.868~~	~~12.84~~

AVE RF **1.270** RF RSD **14.05** AVE RT **12.82**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

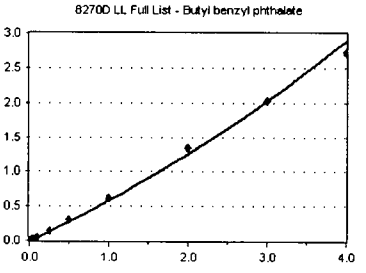


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4571	0.975	13.02
9E08056-CAL2	50	10935	0.930	13.02
9E08056-CAL3	100	23610	1.015	13.02
9E08056-CAL4	200	49759	1.037	13.02
9E08056-CAL5	500	118955	1.060	13.02
9E08056-CAL6	1000	219562	1.024	13.02
9E08056-CAL7	2000	356113	1.008	13.02
9E08056-CAL8	4000	667601	0.965	13.03
9E08056-CAL9	6000	884802	0.906	13.04
9E08056-CALA	8000	1074072	0.880	13.04

AVE RF **0.980** RF RSD **6.07** AVE RT **13.03**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

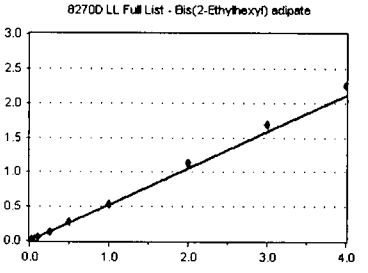


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	1472	0.314	13.84
9E08056-CAL2	50	4377	0.372	13.84
9E08056-CAL3	100	9184	0.395	13.84
9E08056-CAL4	200	23562	0.491	13.84
9E08056-CAL5	500	63002	0.562	13.84
9E08056-CAL6	1000	128733	0.600	13.84
9E08056-CAL7	2000	219372	0.621	13.85
9E08056-CAL8	4000	466198	0.674	13.85
9E08056-CAL9	6000	660330	0.676	13.86
9E08056-CALA	8000	830873	0.681	13.86

AVE RF **0.539** RF RSD **25.48** AVE RT **13.85**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	2977	0.635	14.01
9E08056-CAL2	50	5191	0.442	14.01
9E08056-CAL3	100	10197	0.439	14.01
9E08056-CAL4	200	22694	0.473	14.01
9E08056-CAL5	500	56949	0.508	14.01
9E08056-CAL6	1000	114896	0.536	14.01
9E08056-CAL7	2000	191848	0.543	14.01
9E08056-CAL8	4000	395039	0.571	14.02
9E08056-CAL9	6000	550853	0.564	14.03
9E08056-CALA	8000	686647	0.563	14.03

AVE RF **0.527** RF RSD **11.82** AVE RT **14.02**

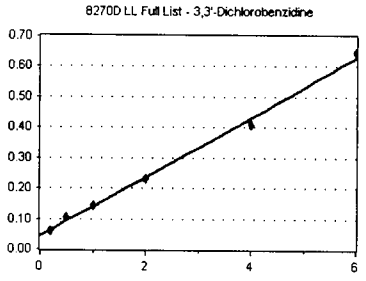
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

3,3'-Dichlorobenzidine

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

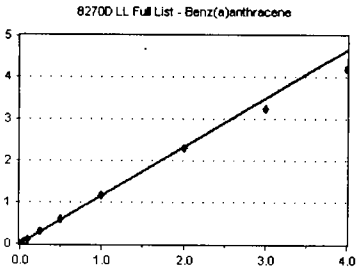


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~40~~	~~2583~~	~~0.275~~	~~0.00~~
~~9E08056-CAL2~~	~~100~~	~~6262~~	~~0.266~~	~~0.00~~
~~9E08056-CAL3~~	~~200~~	~~13834~~	~~0.298~~	~~14.98~~
9E08056-CAL4	400	28902	0.301	14.99
9E08056-CAL5	1000	47477	0.212	14.99
9E08056-CAL6	2000	62412	0.145	14.99
9E08056-CAL7	4000	81995	0.116	15.00
9E08056-CAL8	8000	140872	0.102	15.01
9E08056-CAL9	12000	210131	0.108	15.02
~~9E08056-CALA~~	~~16000~~	~~287387~~	~~0.118~~	~~15.03~~

AVE RF **0.164** RF RSD **47.85** AVE RT **15.00**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

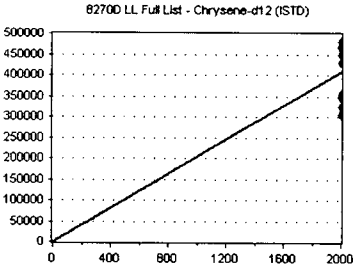


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5805	1.238	15.03
9E08056-CAL2	50	13479	1.147	15.03
9E08056-CAL3	100	26892	1.157	15.02
9E08056-CAL4	200	58075	1.210	15.03
9E08056-CAL5	500	138304	1.233	15.02
9E08056-CAL6	1000	257723	1.202	15.03
9E08056-CAL7	2000	409861	1.161	15.03
9E08056-CAL8	4000	790890	1.143	15.05
9E08056-CAL9	6000	1056377	1.081	15.06
9E08056-CALA	8000	1276068	1.046	15.06

AVE RF **1.162** RF RSD **5.39** AVE RT **15.04**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

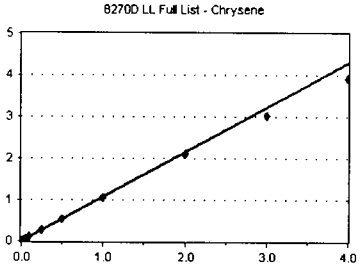


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	468796	234.398	15.05
9E08056-CAL2	2000	470097	235.048	15.05
9E08056-CAL3	2000	464995	232.498	15.05
9E08056-CAL4	2000	479919	239.960	15.05
9E08056-CAL5	2000	448745	224.373	15.05
9E08056-CAL6	2000	428978	214.489	15.06
9E08056-CAL7	2000	353171	176.585	15.06
9E08056-CAL8	2000	346046	173.023	15.07
9E08056-CAL9	2000	325607	162.804	15.08
9E08056-CALA	2000	305019	152.510	15.09

AVE RF **204.569** RF RSD **16.76** AVE RT **15.06**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	5174	1.104	15.11
9E08056-CAL2	50	12647	1.076	15.11
9E08056-CAL3	100	25625	1.102	15.11
9E08056-CAL4	200	53969	1.125	15.11
9E08056-CAL5	500	126427	1.127	15.11
9E08056-CAL6	1000	231498	1.079	15.12
9E08056-CAL7	2000	375111	1.062	15.12
9E08056-CAL8	4000	726806	1.050	15.13
9E08056-CAL9	6000	987765	1.011	15.15
9E08056-CALA	8000	1196829	0.981	15.16

AVE RF **1.072** RF RSD **4.43** AVE RT **15.12**

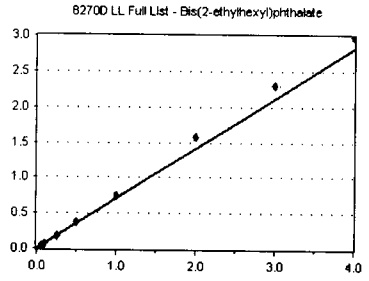
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

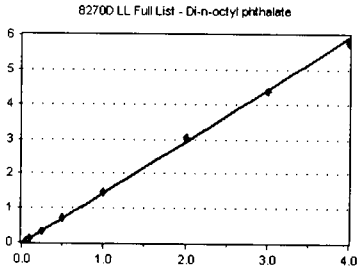


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~1776~~	~~0.379~~	~~15.18~~
~~9E08056-CAL2~~	~~50~~	~~5059~~	~~0.430~~	~~15.18~~
9E08056-CAL3	100	11680	0.502	15.18
9E08056-CAL4	200	29512	0.615	15.18
9E08056-CAL5	500	81848	0.730	15.18
9E08056-CAL6	1000	159937	0.746	15.18
9E08056-CAL7	2000	265428	0.752	15.19
9E08056-CAL8	4000	541901	0.783	15.19
9E08056-CAL9	6000	749108	0.767	15.20
9E08056-CALA	8000	911551	0.747	15.20

AVE RF **0.705** RF RSD **13.70** AVE RT **15.19**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

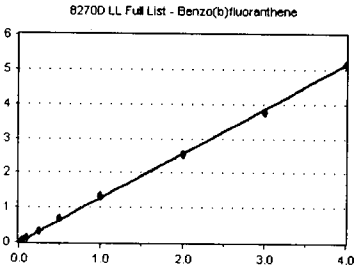


Standard	Concentration	Response	Response Factor	RT
~~9E08056-CAL1~~	~~20~~	~~2233~~	~~0.516~~	~~16.84~~
~~9E08056-CAL2~~	~~50~~	~~6475~~	~~0.593~~	~~16.84~~
9E08056-CAL3	100	14915	0.686	16.84
9E08056-CAL4	200	42140	0.939	16.84
9E08056-CAL5	500	132449	1.250	16.84
9E08056-CAL6	1000	284170	1.419	16.84
9E08056-CAL7	2000	490249	1.468	16.85
9E08056-CAL8	4000	1106017	1.530	16.86
9E08056-CAL9	6000	1544982	1.462	16.87
9E08056-CALA	8000	1949268	1.443	16.88

AVE RF **1.275** RF RSD **23.85** AVE RT **16.85**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

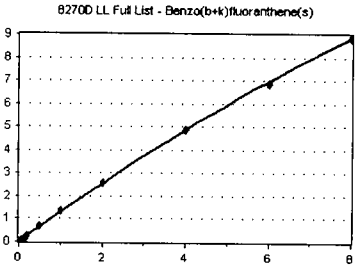


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4502	1.041	17.61
9E08056-CAL2	50	11686	1.070	17.61
9E08056-CAL3	100	23806	1.095	17.61
9E08056-CAL4	200	54791	1.221	17.61
9E08056-CAL5	500	139653	1.318	17.61
9E08056-CAL6	1000	268390	1.340	17.62
9E08056-CAL7	2000	444019	1.330	17.62
9E08056-CAL8	4000	916793	1.268	17.65
9E08056-CAL9	6000	1322262	1.251	17.67
9E08056-CALA	8000	1745814	1.292	17.67

AVE RF **1.223** RF RSD **9.23** AVE RT **17.63**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	40	8905	1.029	17.61
9E08056-CAL2	100	24677	1.130	17.68
9E08056-CAL3	200	50907	1.171	17.61
9E08056-CAL4	400	114689	1.278	17.61
9E08056-CAL5	1000	289741	1.367	17.68
9E08056-CAL6	2000	543058	1.356	17.69
9E08056-CAL7	4000	864585	1.294	17.69
9E08056-CAL8	8000	1749715	1.210	17.72
9E08056-CAL9	12000	2421312	1.146	17.74
9E08056-CALA	16000	2997124	1.109	17.75

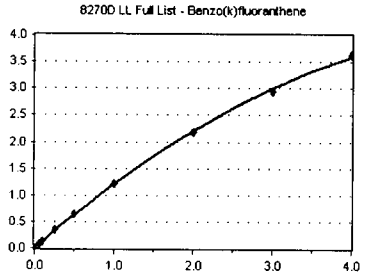
AVE RF **1.209** RF RSD **9.25** AVE RT **17.68**

Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Benzo(k)fluoranthene

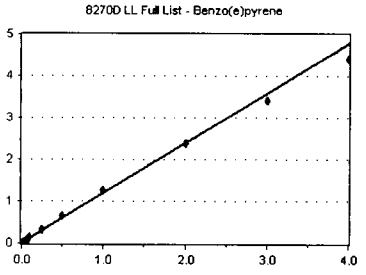


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4403	1.018	17.68
9E08056-CAL2	50	12101	1.108	17.68
9E08056-CAL3	100	25069	1.153	17.68
9E08056-CAL4	200	56932	1.268	17.68
9E08056-CAL5	500	142423	1.344	17.68
9E08056-CAL6	1000	262537	1.311	17.69
9E08056-CAL7	2000	401664	1.203	17.69
9E08056-CAL8	4000	788525	1.091	17.72
9E08056-CAL9	6000	1035740	0.980	17.74
9E08056-CALA	8000	1226693	0.908	17.75

AVE RF **1.138** RF RSD **12.73** AVE RT **17.70**

Benzo(e)pyrene

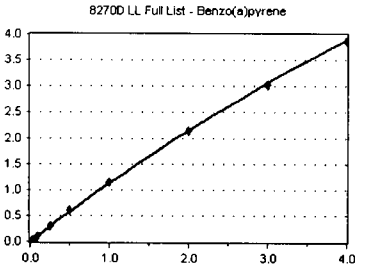


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4695	1.085	18.27
9E08056-CAL2	50	12373	1.133	18.27
9E08056-CAL3	100	25730	1.184	18.27
9E08056-CAL4	200	55890	1.245	18.27
9E08056-CAL5	500	140018	1.321	18.27
9E08056-CAL6	1000	259798	1.297	18.28
9E08056-CAL7	2000	421328	1.262	18.28
9E08056-CAL8	4000	863719	1.195	18.30
9E08056-CAL9	6000	1199867	1.135	18.32
9E08056-CALA	8000	1487060	1.101	18.34

AVE RF **1.196** RF RSD **6.93** AVE RT **18.29**

Benzo(a)pyrene

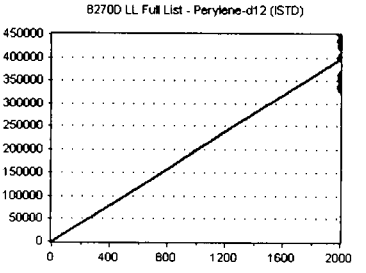


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3596	0.831	18.38
9E08056-CAL2	50	10371	0.950	18.39
9E08056-CAL3	100	21986	1.011	18.38
9E08056-CAL4	200	49339	1.099	18.38
9E08056-CAL5	500	129040	1.218	18.39
9E08056-CAL6	1000	245703	1.227	18.39
9E08056-CAL7	2000	383125	1.147	18.41
9E08056-CAL8	4000	770441	1.066	18.43
9E08056-CAL9	6000	1066798	1.009	18.45
9E08056-CALA	8000	1307681	0.968	18.46

AVE RF **1.053** RF RSD **11.81** AVE RT **18.41**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	432537	216.268	18.54
9E08056-CAL2	2000	436889	218.445	18.54
9E08056-CAL3	2000	434795	217.398	18.53
9E08056-CAL4	2000	448879	224.440	18.54
9E08056-CAL5	2000	423882	211.941	18.54
9E08056-CAL6	2000	400554	200.277	18.54
9E08056-CAL7	2000	333963	166.982	18.54
9E08056-CAL8	2000	361418	180.709	18.56
9E08056-CAL9	2000	352282	176.141	18.57
9E08056-CALA	2000	337687	168.843	18.57

AVE RF **198.144** RF RSD **11.43** AVE RT **18.55**

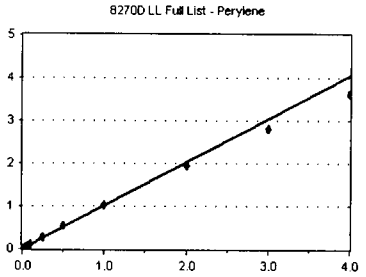
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Perylene

Curve Fit: **AVERAGE RF**

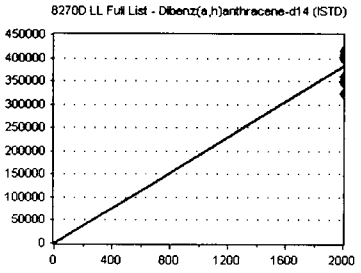


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4452	1.029	18.59
9E08056-CAL2	50	10773	0.986	18.59
9E08056-CAL3	100	22641	1.041	18.59
9E08056-CAL4	200	46507	1.036	18.59
9E08056-CAL5	500	116376	1.098	18.59
9E08056-CAL6	1000	216265	1.080	18.60
9E08056-CAL7	2000	344990	1.033	18.61
9E08056-CAL8	4000	705720	0.976	18.63
9E08056-CAL9	6000	989986	0.937	18.65
9E08056-CALA	8000	1226461	0.908	18.66

AVE RF **1.013** RF RSD **5.95** AVE RT **18.61**

Dibenz(a,h)anthracene-d14 (ISTD

Curve Fit: **AVERAGE RF**

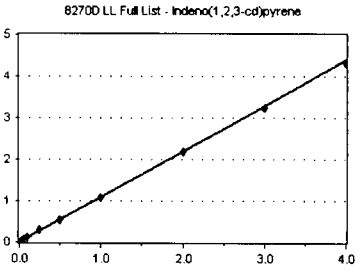


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	2000	400350	200.175	20.92
9E08056-CAL2	2000	403848	201.924	20.92
9E08056-CAL3	2000	409849	204.925	20.92
9E08056-CAL4	2000	416516	208.258	20.92
9E08056-CAL5	2000	408680	204.340	20.92
9E08056-CAL6	2000	399119	199.560	20.92
9E08056-CAL7	2000	322705	161.353	20.93
9E08056-CAL8	2000	360190	180.095	20.95
9E08056-CAL9	2000	359354	179.677	20.96
9E08056-CALA	2000	348077	174.038	20.96

AVE RF **191.434** RF RSD **8.46** AVE RT **20.93**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

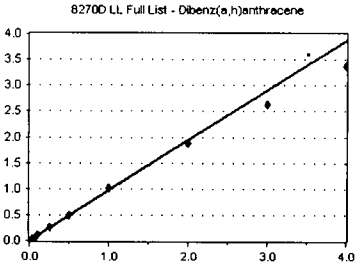


Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4515	1.128	20.91
9E08056-CAL2	50	10988	1.088	20.91
9E08056-CAL3	100	22712	1.108	20.91
9E08056-CAL4	200	45199	1.085	20.91
9E08056-CAL5	500	116104	1.136	20.92
9E08056-CAL6	1000	217807	1.091	20.92
9E08056-CAL7	2000	348943	1.081	20.94
9E08056-CAL8	4000	792468	1.100	20.96
9E08056-CAL9	6000	1164266	1.080	20.98
9E08056-CALA	8000	1508870	1.084	21.00

AVE RF **1.098** RF RSD **1.82** AVE RT **20.94**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	3890	0.972	20.97
9E08056-CAL2	50	9885	0.979	20.99
9E08056-CAL3	100	20562	1.003	20.98
9E08056-CAL4	200	43093	1.035	20.98
9E08056-CAL5	500	106785	1.045	20.98
9E08056-CAL6	1000	199329	0.999	20.99
9E08056-CAL7	2000	325096	1.007	20.99
9E08056-CAL8	4000	675316	0.937	21.02
9E08056-CAL9	6000	945959	0.877	21.04
9E08056-CALA	8000	1170463	0.841	21.06

AVE RF **0.970** RF RSD **6.84** AVE RT **21.00**

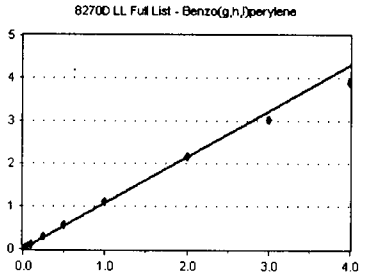
Element Calibration Review Sheet

Calibration ID: **A9E1009** Instrument: **SV-GCMS9** Calibration Date: **05/10/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9E1009**

Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9E08056-CAL1	20	4035	1.008	21.45
9E08056-CAL2	50	10510	1.041	21.45
9E08056-CAL3	100	22018	1.074	21.45
9E08056-CAL4	200	46913	1.126	21.45
9E08056-CAL5	500	120043	1.175	21.45
9E08056-CAL6	1000	226164	1.133	21.46
9E08056-CAL7	2000	360991	1.119	21.47
9E08056-CAL8	4000	777615	1.079	21.50
9E08056-CAL9	6000	1089470	1.011	21.52
9E08056-CALA	8000	1353653	0.972	21.53

AVE RF **1.074** RF RSD **6.08** AVE RT **21.47**

Compound List Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_050819.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu May 09 12:25:58 2019
Response Via : Initial Calibration

JR 5/9/19

Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.697	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	4.172	0.623	A	2	A	R
3	T	Pyridine	79	4.183	0.625	A	2	A	R
4	S	2-Fluorophenol (Surr)	112	5.467	0.816	A	1	A	R
5	S	Phenol-d6 (Surr)	99	6.338	0.946	A	2	A	R
6	T	Phenol	94	6.354	0.949	A	2	A	R
7	T	Aniline	93	6.381	0.953	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.435	0.961	A	2	A	R
9	T	2-Chlorophenol	128	6.499	0.970	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.643	0.992	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.713	1.002	A	2	A	R
12	T	Benzyl alcohol	108	6.825	1.019	Q	2	A	R
13	T	1,2-Dichlorobenzene	146	6.863	1.025	A	2	A	R
14	T	2-Methylphenol	107	6.932	1.035	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	6.954	1.038	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	7.077	1.057	A	2	A	R
17	T	3+4-Methylphenol	107	7.077	1.057	A	3	A	R
18	T	Hexachloroethane	201	7.194	1.074	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.232	1.080	A	2	A	R
20	T	Nitrobenzene	77	7.248	1.082	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	7.948	1.000	A	1	A	R
22	T	Isophorone	82	7.483	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.563	0.952	A	2	A	R
24	T	2,4-Dimethylphenol	122	7.600	0.956	A	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.686	0.967	A	2	A	R
26	T	Benzoic acid	105	7.696	0.968	Q	2	A	R
27	T	2,4-Dichlorophenol	162	7.803	0.982	Q	2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.890	0.993	A	2	A	R
29	T	Naphthalene	128	7.970	1.003	A	1	A	R
30	T	4-Chloroaniline	127	8.023	1.009	A	2	A	R
31	T	Hexachlorobutadiene	225	8.098	1.019	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.493	1.069	Q	2	A	R
33	T	2-Methylnaphthalene	142	8.659	1.089	A	2	A	R
34	T	1-Methylnaphthalene	142	8.761	1.102	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.719	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.825	0.908	Q	2	A	R
37	T	2,4,6-Trichlorophenol	196	8.943	0.920	Q	2	A	R
38	T	2,4,5-Trichlorophenol	198	8.980	0.924	Q	2	A	R
39	T	1,1'-Biphenyl	154	9.125	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	9.023	0.928	A	2	A	R
41	T	2-Chloronaphthalene	162	9.151	0.942	A	2	A	R
42	T	2-Nitroaniline	138	9.248	0.952	A	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.285	0.955	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.376	0.965	Q	2	A	R
45	T	Dimethyl phthalate	163	9.425	0.970	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.456	0.973	A	2	A	R
47	T	2,6-Dinitrotoluene	165	9.488	0.976	A	2	A	R
48	T	1,2-Dinitrobenzene	168	9.547	0.982	A	2	A	R
49	T	Acenaphthylene	152	9.574	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.665	0.994	Q	2	A	R
51	T	Acenaphthene	153	9.751	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.766	1.005	Q	2	A	R
53	T	4-Nitrophenol	139	9.831	1.012	Q	2	A	R
54	T	2,4-Dinitrotoluene	165	9.895	1.018	Q	2	A	R

55	T	Dibenzofuran	168	9.921	1.021	A	2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	10.007	1.030	Q	2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	10.050	1.034	Q	2	A	R
58	T	Diethyl phthalate	149	10.135	1.043	A	2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.130	1.042	A	2	A	R
60	T	Fluorene	166	10.269	1.057	A	2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.258	1.055	A	2	A	R
62	T	4-Nitroaniline	138	10.280	1.058	A	2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.312	1.061	Q	2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.222	1.000	A	2	A	R
65	T	N-Nitrosodiphenylamine	169	10.376	0.925	A	2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.419	0.928	A	2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.515	0.937	A	2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.756	0.959	A	2	A	R
69	T	Hexachlorobenzene	284	10.841	0.966	A	2	A	R
70	T	Pentachlorophenol (PCP)	266	11.034	0.983	Q	2	A	R
71	T	Phenanthrene	178	11.248	1.002	A	2	A	R
72	T	Anthracene	178	11.296	1.007	A	2	A	R
73	T	Carbazole	167	11.457	1.021	A	2	A	R
74	T	Di-n-butyl phthalate	149	11.794	1.051	A	2	A	R
75	T	Fluoranthene	202	12.526	1.116	A	2	A	R
76	T	Benzidine	184	12.676	1.130	Q	2	A	R
77	T	Pyrene	202	12.820	1.142	A	2	A	R
78	I	Chrysene-d12 (ISTD)	240	15.057	1.000	A	2	A	R
79	S	Terphenyl-d14 (Surr)	244	13.024	0.865	A	2	A	R
80	T	Butyl benzyl phthalate	149	13.842	0.919	Q	2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	14.014	0.931	A	2	A	R
82	T	3,3-Dichlorobenzidine	252	14.992	0.996	Q	2	A	R
83	T	Benz(a)anthracene	228	15.030	0.998	A	2	A	R
84	T	Chrysene	228	15.116	1.004	A	2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.179	1.008	A	2	A	R
86	I	Perylene-d12 (ISTD)	264	18.539	1.000	A	2	A	R
87	T	Di-n-octyl phthalate	149	16.843	0.909	Q	2	A	R
88	T	Benzo(b)fluoranthene	252	17.618	0.950	Q	2	A	R
89	T	Benzo(k)fluoranthene	252	17.688	0.954	Q	2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.688	0.954	Q	2	A	R
91	T	Benzo(e)pyrene	252	18.277	0.986	A	2	A	R
92	T	Benzo(a)pyrene	252	18.394	0.992	Q	2	A	R
93	T	Perylene	252	18.597	1.003	A	2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	20.924	1.000	A	1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	20.924	1.000	A	1	A	R
96	T	Dibenz(a,h)anthracene	278	20.988	1.003	A	2	A	R
97	T	Benzo(g,h,i)perylene	276	21.464	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_050819.M Thu May 09 13:09:14 2019

Response Factor Report SV-GCMS9

Method Path : T:\methods\
Method File : SV9_050819.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Thu May 09 12:25:58 2019
Response Via : Initial Calibration

5/9/19

Calibration Files
20 =I05081919.D 50 =I05081920.D 100 =I05081921.D 200 =I05081922.D 500 =I05081923.D 1000=I05081924.D 2000=I05081925.D
4000=I05081926.D 6000=I05081927.D 8000=I05081928.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------											8.69
2)	T	N-Nitrosodimet...	1.211	0.973	0.975	0.931	0.938	0.919	0.976	1.007	1.030	1.035	0.999	8.42
3)	T	Pyridine	1.392	1.406	1.367	1.433	1.518	1.469	1.537	1.706	1.705	1.722	1.526	9.08
4)	S	2-Fluorophenol...	1.132	1.060	1.214	1.247	1.324	1.305	1.391	1.440	1.493	1.463	1.307	11.06
5)	S	Phenol-d6 (Surr)	1.463	1.476	1.583	1.634	1.720	1.695	1.792	1.894	1.902	1.847	1.701	9.47
6)	T	Phenol	1.607	1.682	1.785	1.828	1.909	1.843	1.897	1.899	1.877	1.758	1.809	5.59
7)	T	Aniline		1.734	1.841	1.764	1.793	1.389	1.120	1.260	1.396	1.555	1.539	16.90
8)	T	Bis(2-chloroet...	1.679	1.527	1.547	1.558	1.533	1.567	1.613	1.508	1.356	1.334	1.522	6.93
9)	T	2-Chlorophenol	1.315	1.287	1.361	1.368	1.433	1.399	1.423	1.393	1.364	1.315	1.366	3.54
10)	T	1,3-Dichlorobe...	1.764	1.576	1.689	1.623	1.642	1.568	1.532	1.453	1.421	1.352	1.562	8.09
11)	T	1,4-Dichlorobe...	1.514	1.547	1.519	1.559	1.557	1.498	1.445	1.380	1.318	1.255	1.459	7.34
12)	T	Benzyl alcohol		0.421	0.502	0.579	0.721	0.785	0.853	0.935	0.925	0.883	0.734	26.02
13)	T	1,2-Dichlorobe...	1.391	1.481	1.532	1.532	1.544	1.442	1.413	1.314	1.257	1.173	1.408	8.95
14)	T	2-Methylphenol	1.007	0.914	1.105	1.011	1.118	1.061	1.064	1.078	1.036	0.965	1.036	6.11
15)	T	2,2'-Oxybis(1-...	1.993	1.994	2.123	2.028	2.009	1.881	1.829	1.678	1.567	1.437	1.854	12.12
16)	T	N-Nitrosodi-n-...	1.076	1.073	1.093	1.102	1.120	1.067	1.038	0.999	0.930	0.887	1.038	7.40
17)	T	3+4-Methylphenol	1.188	1.142	1.290	1.315	1.405	1.350	1.354	1.357	1.282	1.198	1.288	6.69
18)	T	Hexachloroethane	0.494	0.481	0.481	0.479	0.505	0.472	0.466	0.452	0.448	0.423	0.470	5.05
19)	S	Nitrobenzene-d...	1.553	1.376	1.415	1.465	1.447	1.396	1.393	1.394	1.376	1.326	1.414	4.40
20)	T	Nitrobenzene	1.479	1.409	1.487	1.519	1.461	1.390	1.354	1.328	1.275	1.208	1.391	7.22
21)	I	Naphthalene-d8 (ISTD)	----------ISTD----------											9.39
22)	T	Isophorone	0.673	0.711	0.716	0.756	0.796	0.778	0.757	0.759	0.728	0.732	0.741	4.84
23)	T	2-Nitrophenol	0.141	0.159	0.172	0.198	0.227	0.203	0.201	0.203	0.195	0.192	0.189	13.19
24)	T	2,4-Dimethylph...		0.219	0.260	0.280	0.301	0.310	0.311	0.307	0.286	0.280	0.284	10.49
25)	T	Bis(2-chloroet...	0.409	0.463	0.480	0.460	0.473	0.451	0.428	0.419	0.386	0.376	0.435	8.40
26)	T	Benzoic acid					0.056	0.132	0.149	0.218	0.226	0.237	0.170	41.46
27)	T	2,4-Dichloroph...		0.151	0.195	0.222	0.253	0.272	0.277	0.278	0.248	0.244	0.238	17.71
28)	T	1,2,4-Trichlor...	0.331	0.342	0.354	0.350	0.351	0.336	0.315	0.294	0.268	0.255	0.320	11.19
29)	T	Naphthalene	1.068	1.095	1.107	1.099	1.084	1.048	0.982	0.908	0.816	0.768	0.998	12.52
30)	T	4-Chloroaniline	0.296	0.294	0.285	0.273	0.229	0.264	0.209	0.226	0.212	0.270	0.256	13.18
31)	T	Hexachlorobuta...	0.185	0.172	0.176	0.175	0.180	0.171	0.167	0.157	0.143	0.136	0.166	9.74
32)	T	4-Chloro-3-met...			0.126	0.192	0.266	0.308	0.318	0.341	0.320	0.313	0.273	27.63
33)	T	2-Methylnaphth...	0.694	0.720	0.764	0.787	0.839	0.815	0.773	0.735	0.647		0.753	7.98
34)	T	1-Methylnaphth...	0.716	0.723	0.761	0.774	0.801	0.766	0.717	0.669	0.601	0.560	0.709	10.96
35)	I	Acenaphthene-d10 (...	----------ISTD----------											8.19
36)	T	Hexachlorocycl...		0.101	0.150	0.217	0.281	0.309	0.315	0.322	0.313	0.293	0.256	31.74
37)	T	2,4,6-Trichlor...		0.168	0.217	0.291	0.370	0.395	0.393	0.389	0.371	0.354	0.327	25.56
38)	T	2,4,5-Trichlor...		0.184	0.225	0.260	0.340	0.377	0.379	0.375	0.348	0.334	0.314	23.08
39)	T	1,1'-Biphenyl	1.432	1.545	1.686	1.812	1.920	1.819	1.679	1.478			1.671	10.48

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Method Path : T:\methods\
Method File : SV9_050819.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.343	1.502	1.633	1.702	1.729	1.621	1.495	1.313	1.158		1.500	12.96
41)	T	2-Chloronaphth...	1.066	1.120	1.220	1.313	1.373	1.298	1.193	1.050			1.204	9.89
42)	T	2-Nitroaniline				0.287	0.392	0.436	0.429	0.433	0.427	0.425	0.404	13.26
43)	T	2,6-Dimethylna...	1.115	1.215	1.314	1.403	1.410	1.341	1.236	1.085	0.966		1.231	12.38
44)	T	1,4-Dinitroben...			0.080	0.124	0.177	0.205	0.206	0.221	0.220	0.221	0.182	28.96
45)	T	Dimethyl phtha...	1.305	1.473	1.542	1.564	1.575	1.490	1.402	1.297	1.193	1.151	1.399	11.07
46)	T	1,3-Dinitroben...				0.172	0.228	0.244	0.234	0.240	0.231	0.223	0.225	10.70
47)	T	2,6-Dinitrotol...			0.238	0.309	0.358	0.350	0.337	0.324	0.302	0.286	0.313	12.48
48)	T	1,2-Dinitroben...				0.142	0.161	0.170	0.164	0.162	0.149	0.138	0.155	7.87
49)	T	Acenaphthylene	1.863	2.011	2.189	2.231	2.222	2.160	1.961	1.711	1.459		1.978	13.33
50)	T	3-Nitroaniline				0.257	0.298	0.274	0.225	0.202	0.197		0.242	16.76
51)	T	Acenaphthene	1.289	1.420	1.407	1.393	1.372	1.307	1.223	1.107	1.010	0.938	1.246	13.87
52)	T	2,4-Dinitrophenol				0.030	0.066	0.108	0.124	0.164	0.175	0.178	0.121	47.41
53)	T	4-Nitrophenol			0.109	0.144	0.200	0.238	0.234	0.272	0.274	0.273	0.218	28.71
54)	T	2,4-Dinitrotol...		0.184	0.257	0.362	0.435	0.448	0.435	0.430	0.394	0.359	0.367	24.75
55)	T	Dibenzofuran	1.480	1.739	1.835	1.921	1.944	1.835	1.690	1.501	1.321		1.696	12.81
56)	T	2,3,5,6-Tetrac...		0.122	0.164	0.241	0.292	0.315	0.311	0.317	0.305	0.292	0.262	27.46
57)	T	2,3,4,6-Tetrac...	0.153	0.184	0.254	0.293	0.327	0.339	0.328	0.325	0.305	0.291	0.280	22.92
58)	T	Diethyl phthalate	1.341	1.402	1.484	1.509	1.457	1.379	1.215	1.060			1.356	11.17
59)	T	2,3,5-Trimethy...	1.269	1.271	1.338	1.303	1.308	1.207	1.087	0.930			1.214	11.44
60)	T	Fluorene	1.520	1.512	1.604	1.584	1.576	1.450	1.306	1.142			1.462	10.99
61)	T	4-Chlorophenyl...	0.630	0.729	0.757	0.784	0.762	0.708	0.656	0.590	0.530		0.683	12.71
62)	T	4-Nitroaniline				0.313	0.337	0.327	0.287	0.294	0.277	0.261	0.300	9.17
63)	T	4,6-Dinitro-2-...			0.064	0.103	0.153	0.187	0.192	0.216	0.214	0.213	0.168	34.03
														5.28
64)	I	Phenanthrene-d10 (...	----------			ISTD	----------							
65)	T	N-Nitrosodiphe...	0.546	0.569	0.671	0.713	0.721	0.654	0.575	0.493			0.618	13.51
66)	T	Azobenzene (1,...	0.630	0.686	0.784	0.800	0.801	0.738	0.668	0.595	0.536		0.693	13.73
67)	S	2,4,6-Tribromo...		0.071	0.081	0.092	0.102	0.104	0.098	0.097	0.093	0.090	0.092	11.41
68)	T	4-Bromophenyl ...	0.219	0.222	0.246	0.240	0.249	0.234	0.222	0.203	0.187	0.176	0.220	11.23
69)	T	Hexachlorobenzene	0.233	0.278	0.280	0.260	0.266	0.249	0.233	0.209	0.189		0.244	12.77
70)	T	Pentachlorophe...			0.055	0.067	0.097	0.110	0.114	0.128	0.125	0.122	0.102	26.74
71)	T	Phenanthrene	1.135	1.183	1.186	1.183	1.170	1.092	1.004	0.881	0.781		1.068	13.94
72)	T	Anthracene	1.128	1.141	1.199	1.200	1.188	1.107	1.003	0.879	0.769		1.068	14.39
73)	T	Carbazole	0.881	0.949	1.015	1.061	1.074	1.029	0.920	0.824	0.671		0.936	13.91
74)	T	Di-n-butyl pht...		1.070	1.202	1.275	1.356	1.325	1.189	1.075			1.213	9.34
75)	T	Fluoranthene	1.230	1.262	1.343	1.396	1.432	1.353	1.199	1.080	0.940		1.248	12.71
76)	T	Benzidine				0.412	0.354	0.281	0.193	0.314	0.341	0.368	0.323	21.84
77)	T	Pyrene	1.318	1.338	1.404	1.440	1.421	1.349	1.183	1.055	0.926		1.270	14.05
														16.76
78)	I	Chrysene-d12 (ISTD)	----------			ISTD	----------							
79)	S	Terphenyl-d14 ...	0.975	0.930	1.015	1.037	1.060	1.024	1.008	0.965	0.906	0.880	0.980	6.07
80)	T	Butyl benzyl p...	0.314	0.372	0.395	0.491	0.562	0.600	0.621	0.674	0.676	0.681	0.539	25.48
81)	T	Bis(2-ethylhex...	0.635	0.442	0.439	0.473	0.508	0.536	0.543	0.571	0.564	0.563	0.527	11.82
82)	T	3,3-Dichlorobe...				0.301	0.212	0.145	0.116	0.102	0.108		0.164	47.85
83)	T	Benz(a)anthracene	1.238	1.147	1.157	1.210	1.233	1.202	1.161	1.143	1.081	1.046	1.162	5.39
84)	T	Chrysene	1.104	1.076	1.102	1.125	1.127	1.079	1.062	1.050	1.011	0.981	1.072	4.43
85)	T	Bis(2-ethylhex...			0.502	0.615	0.730	0.746	0.752	0.783	0.767	0.747	0.705	13.70
														11.43
86)	I	Perylene-d12 (ISTD)	----------			ISTD	----------							
87)	T	Di-n-octyl pht...			0.686	0.939	1.250	1.419	1.468	1.530	1.462	1.443	1.275	23.85

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Method Path : T:\methods\
Method File : SV9_050819.M
Title : EPA 8270D: Semivolatile Organics

88)	T	Benzo(b)fluora...	1.041	1.070	1.095	1.221	1.318	1.340	1.330	1.268	1.251	1.292	1.223	9.23
89)	T	Benzo(k)fluora...	1.018	1.108	1.153	1.268	1.344	1.311	1.203	1.091	0.980	0.908	1.138	12.73
90)	T	Benzo(b+k)fluo...	1.029	1.130	1.171	1.278	1.367	1.356	1.294	1.210	1.146	1.109	1.209	9.25
91)	T	Benzo(e)pyrene	1.085	1.133	1.184	1.245	1.321	1.297	1.262	1.195	1.135	1.101	1.196	6.93
92)	T	Benzo(a)pyrene	0.831	0.950	1.011	1.099	1.218	1.227	1.147	1.066	1.009	0.968	1.053	11.81
93)	T	Perylene	1.029	0.986	1.041	1.036	1.098	1.080	1.033	0.976	0.937	0.908	1.013	5.95
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											8.46
95)	T	Indeno(1,2,3-c...	1.128	1.088	1.108	1.085	1.136	1.091	1.081	1.100	1.080	1.084	1.098	1.82
96)	T	Dibenz(a,h)ant...	0.972	0.979	1.003	1.035	1.045	0.999	1.007	0.937	0.877	0.841	0.970	6.84
97)	T	Benzo(g,h,i)pe...	1.008	1.041	1.074	1.126	1.175	1.133	1.119	1.079	1.011	0.972	1.074	6.08

(#) = Out of Range

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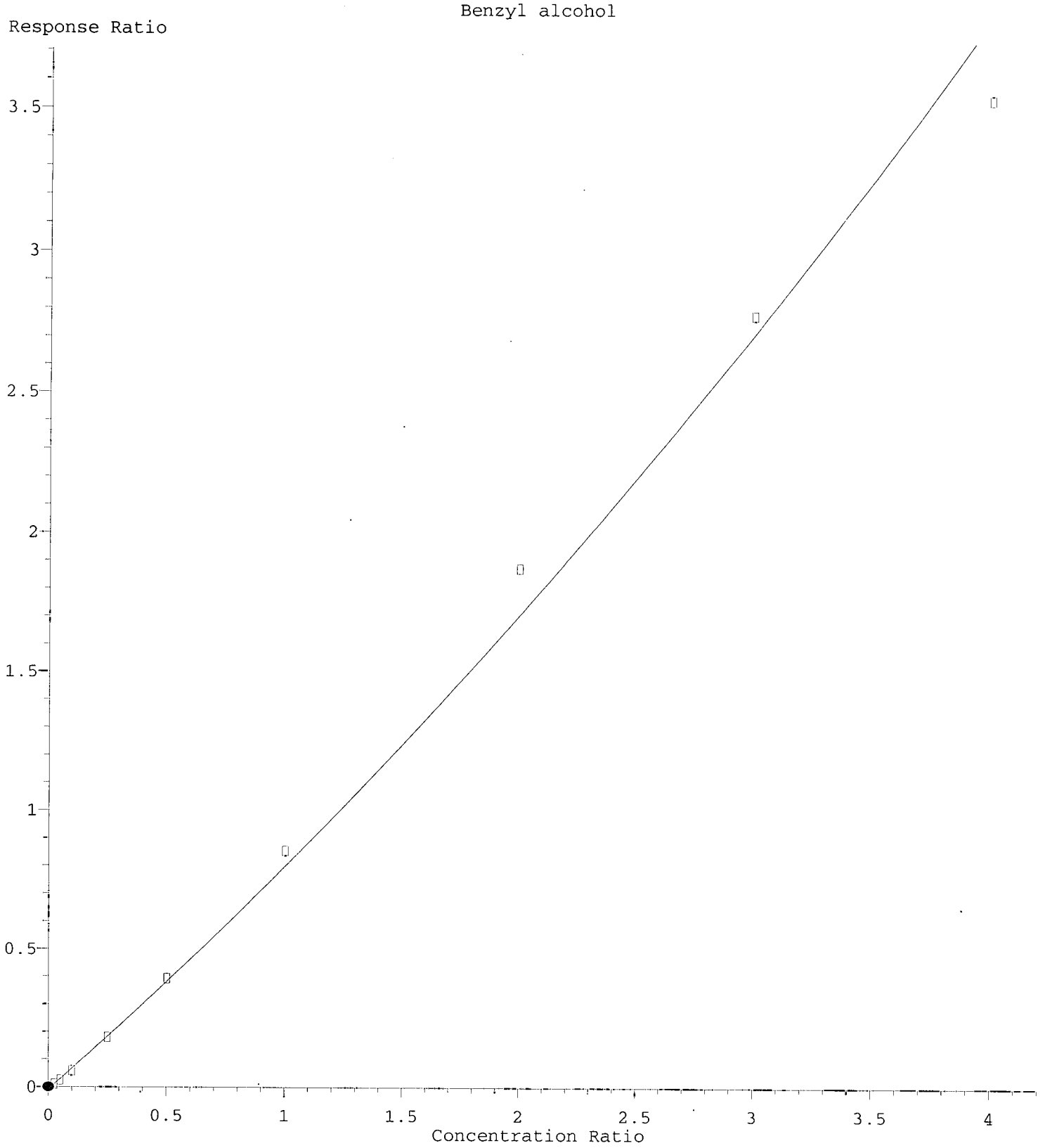
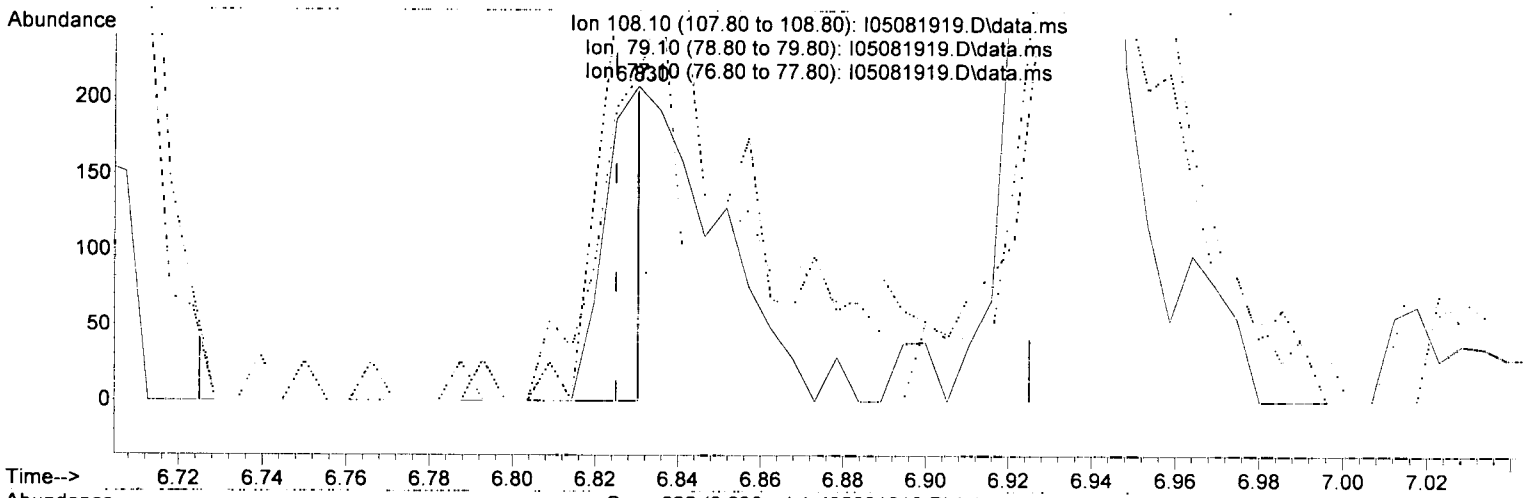


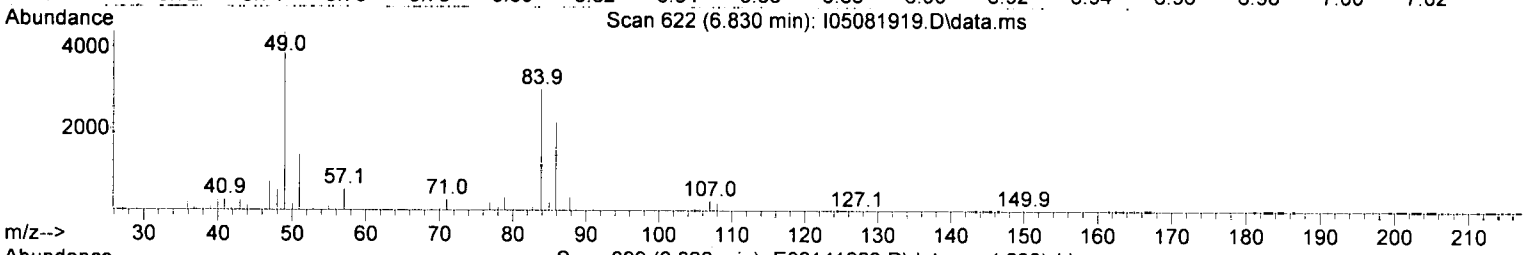
R = 4.94e-002 A*A + 7.58e-001 A - 9.75e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

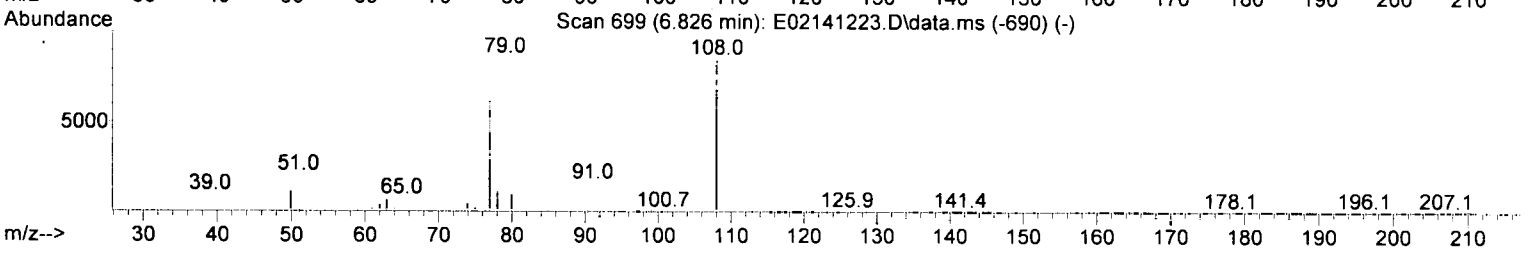
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







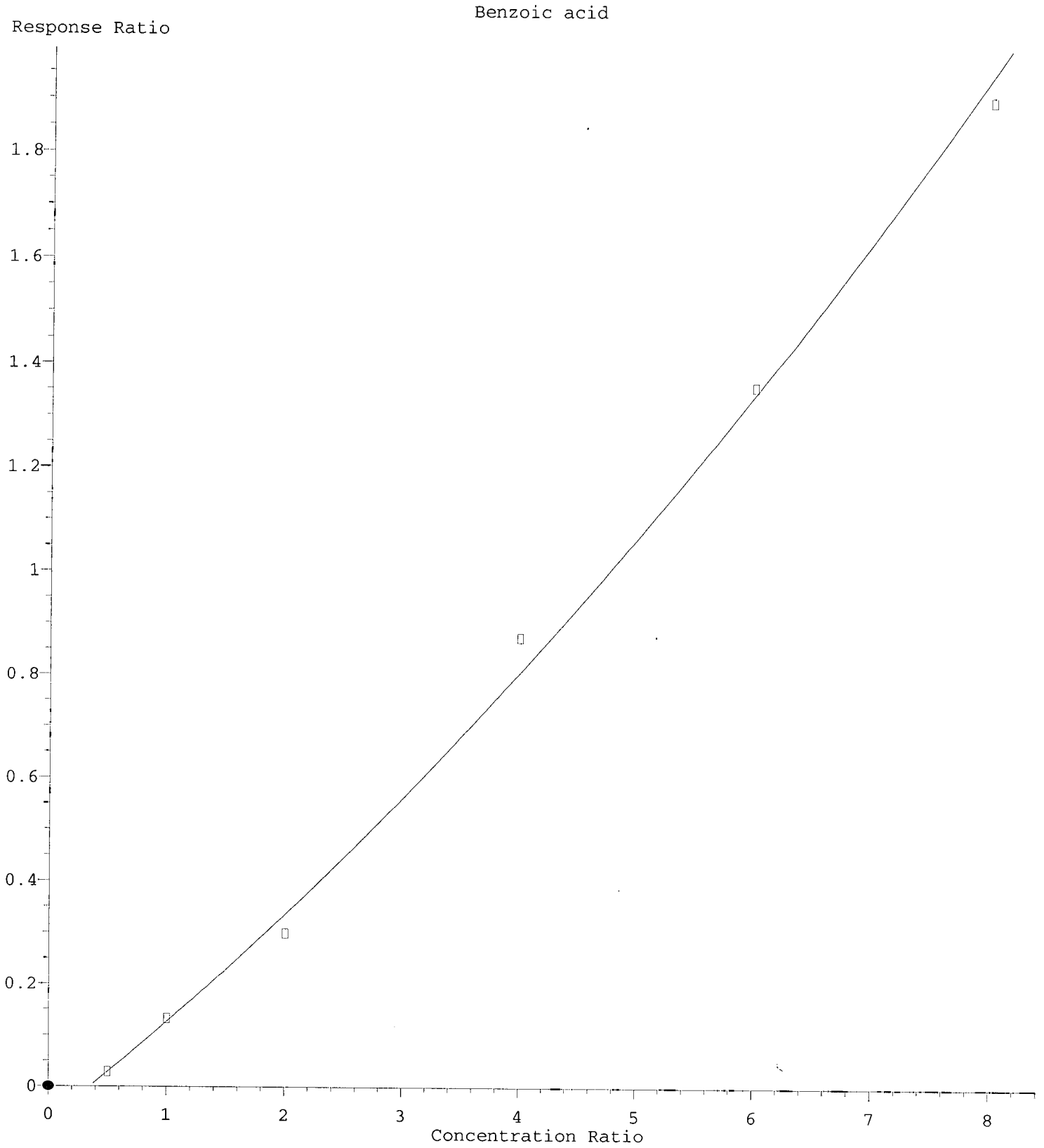
TIC: I05081919.D\data.ms

(12) Benzyl alcohol (T)

6.830min (+ 0.005) 29.07 ng/ml m

response 147

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	130.20	173.56#
77.10	80.10	103.37
0.00	0.00	0.00

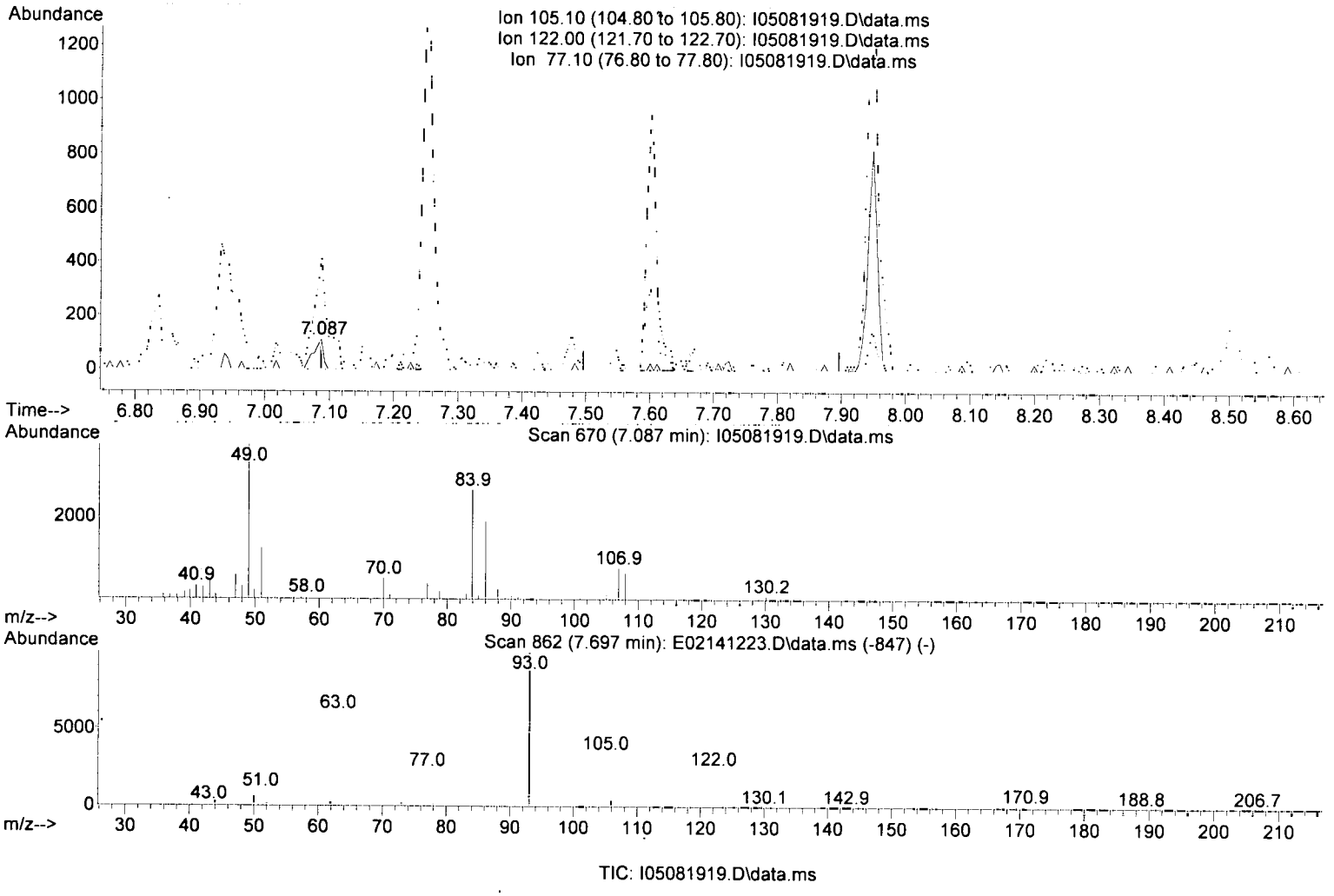


R = 8.50e-003 A*A + 1.84e-001 A - 6.57e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



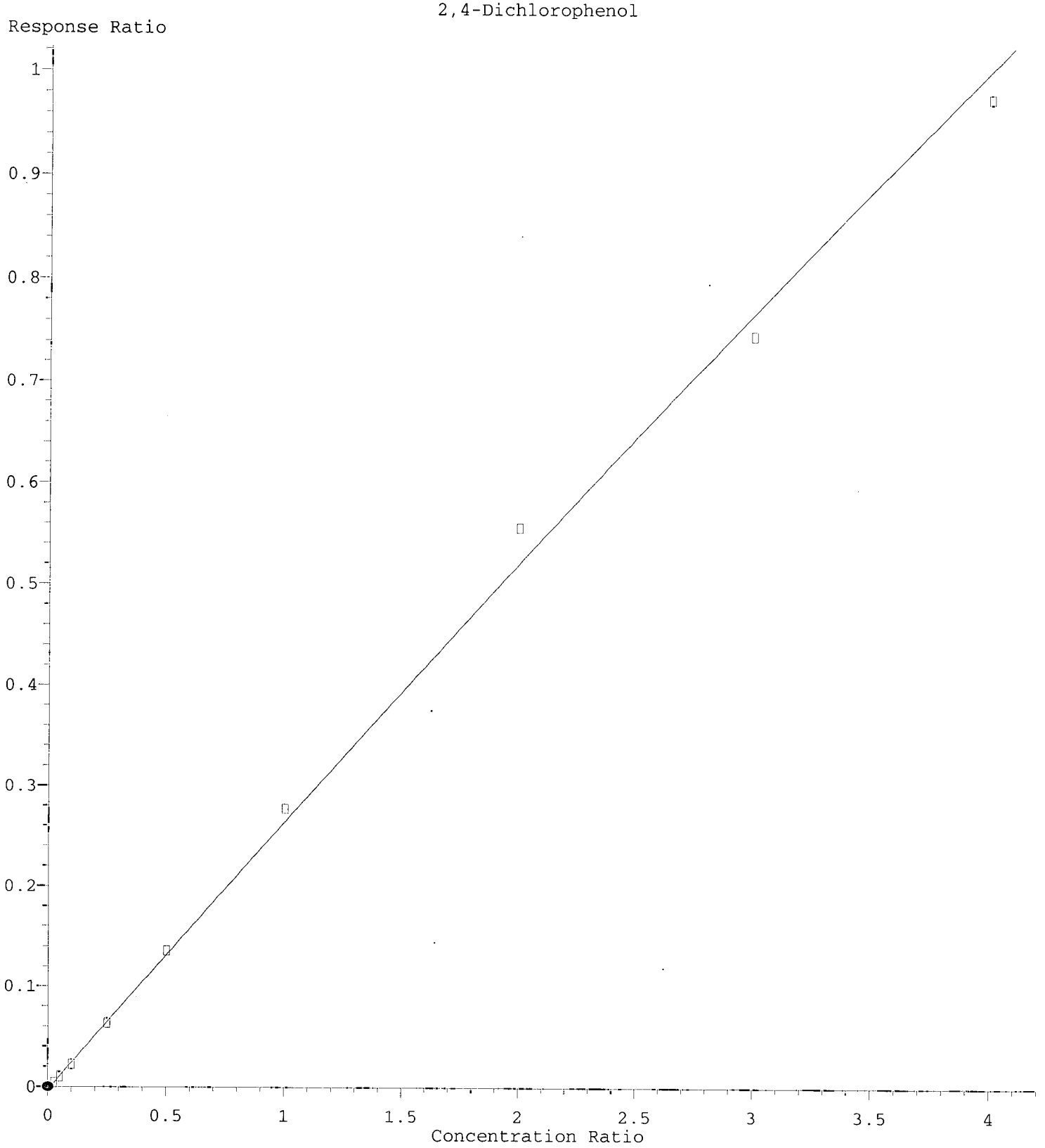
TIC: I05081919.D\data.ms

(26) Benzoic acid (T)

7.087min (-0.609) 707.06 ng/ml m

response 107

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	0.00#
77.10	76.00	371.17#
0.00	0.00	0.00

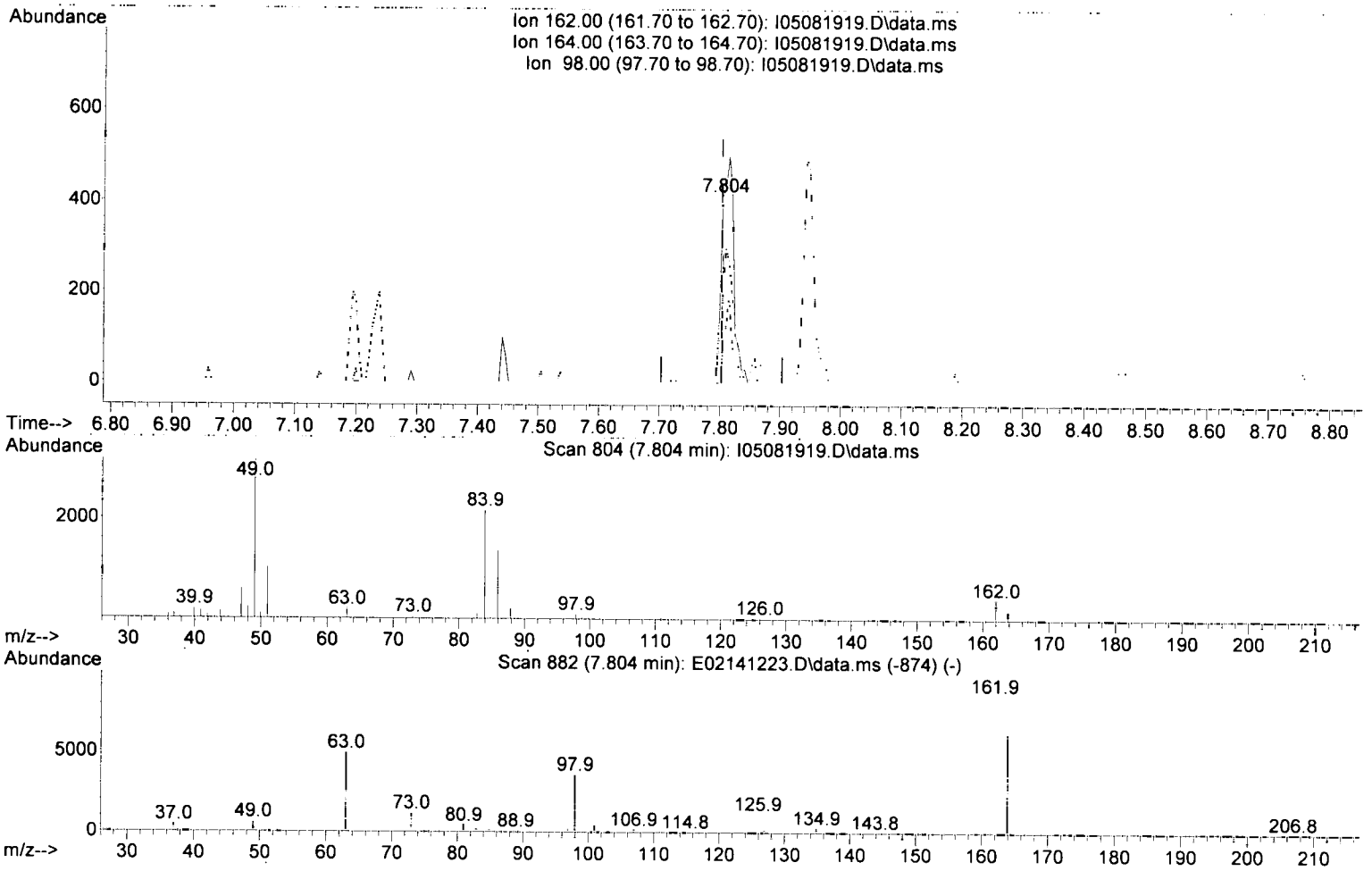


R = -5.43e-003 A*A + 2.73e-001 A - 3.28e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



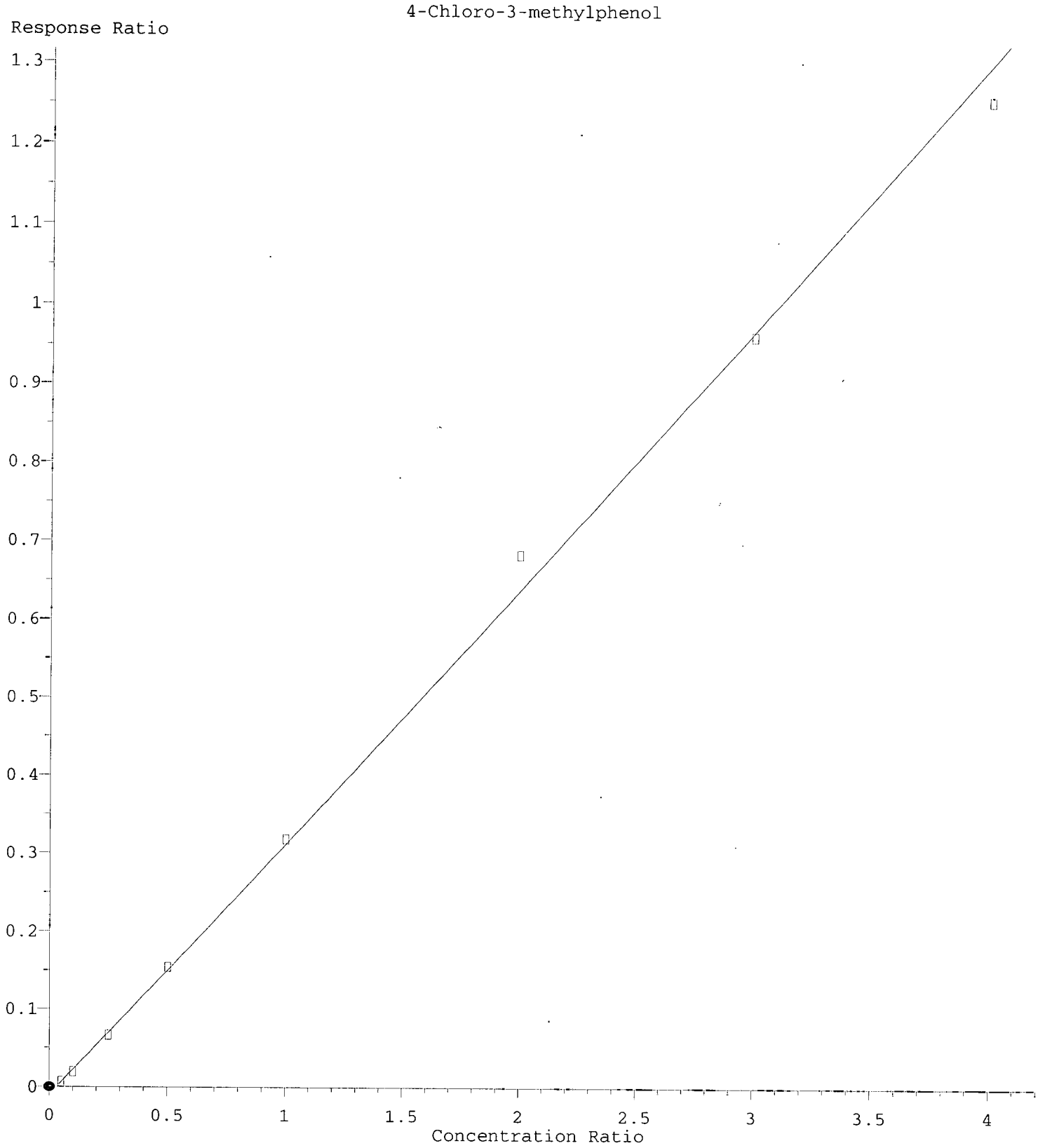
TIC: I05081919.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.804min (+ 0.001) 26.83 ng/ml m

response 175

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	63.60	43.20
98.00	37.40	28.40
0.00	0.00	0.00

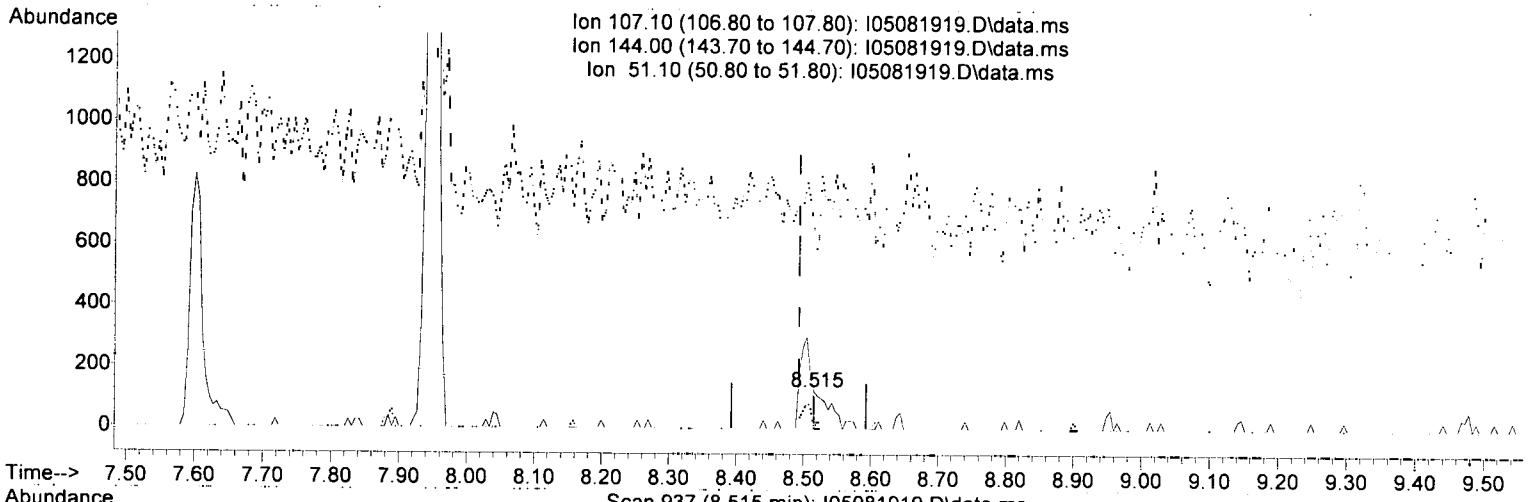


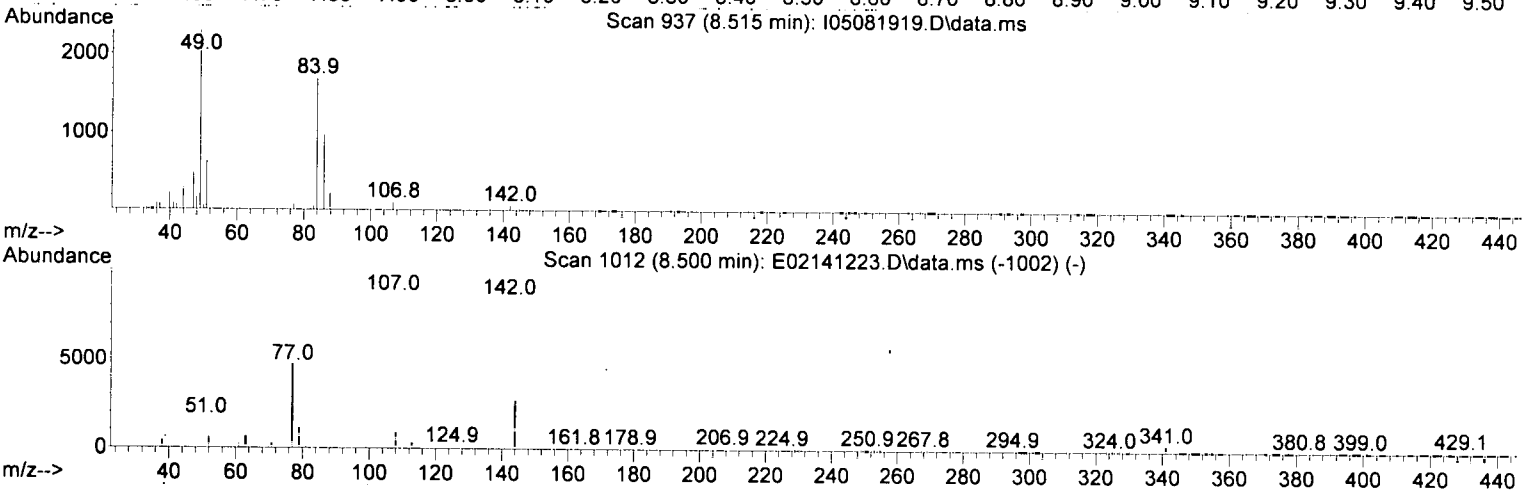
R = 1.82e-003 A*A + 3.20e-001 A - 1.04e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





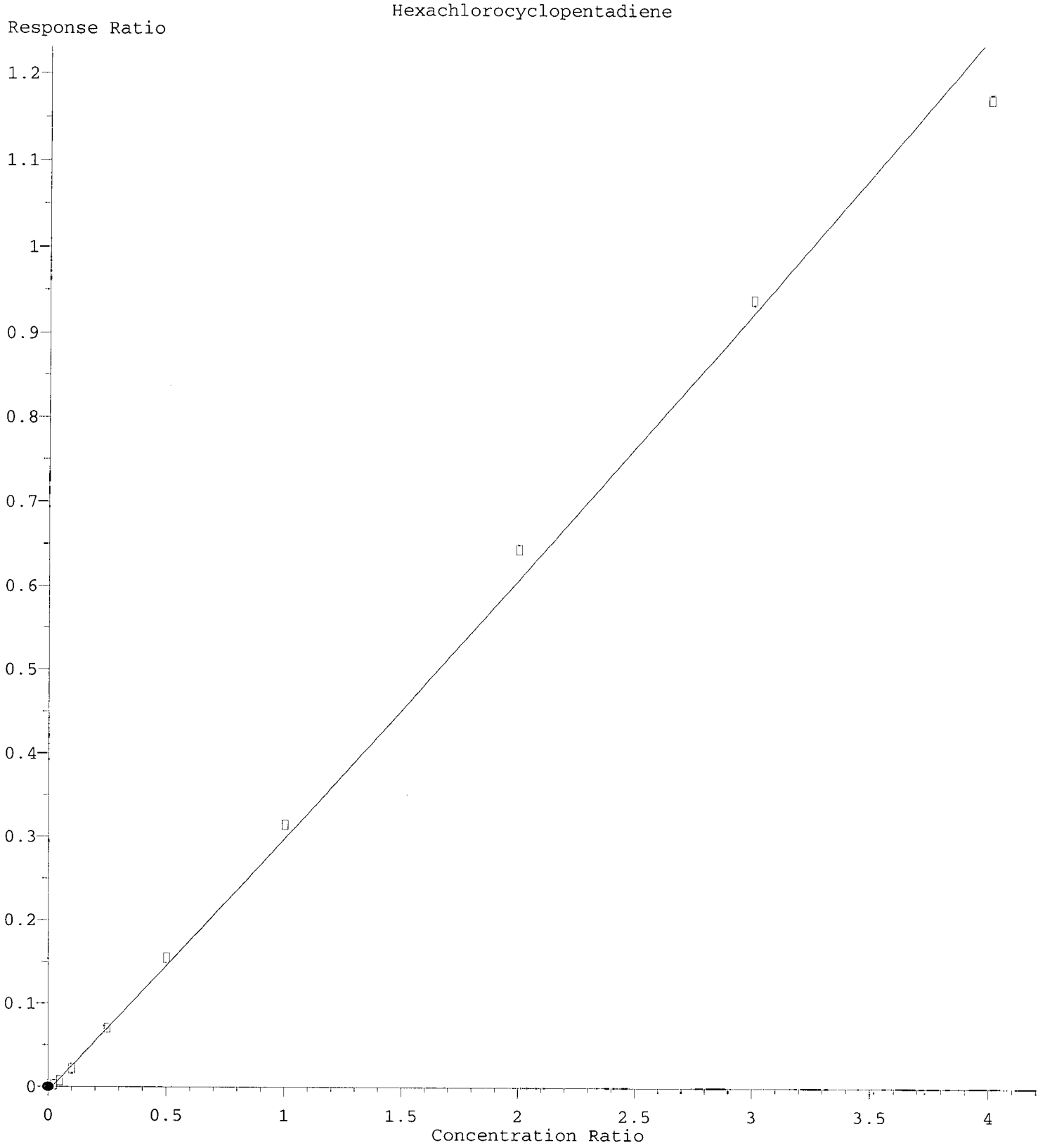
TIC: I05081919.D\data.ms

(32) 4-Chloro-3-methylphenol (T)

8.515min (+ 0.022) 67.07 ng/ml m

response 174

Ion	Exp%	Act%
107.10	100.00	100.00
144.00	26.00	0.00
51.10	19.80	529.75#
0.00	0.00	0.00

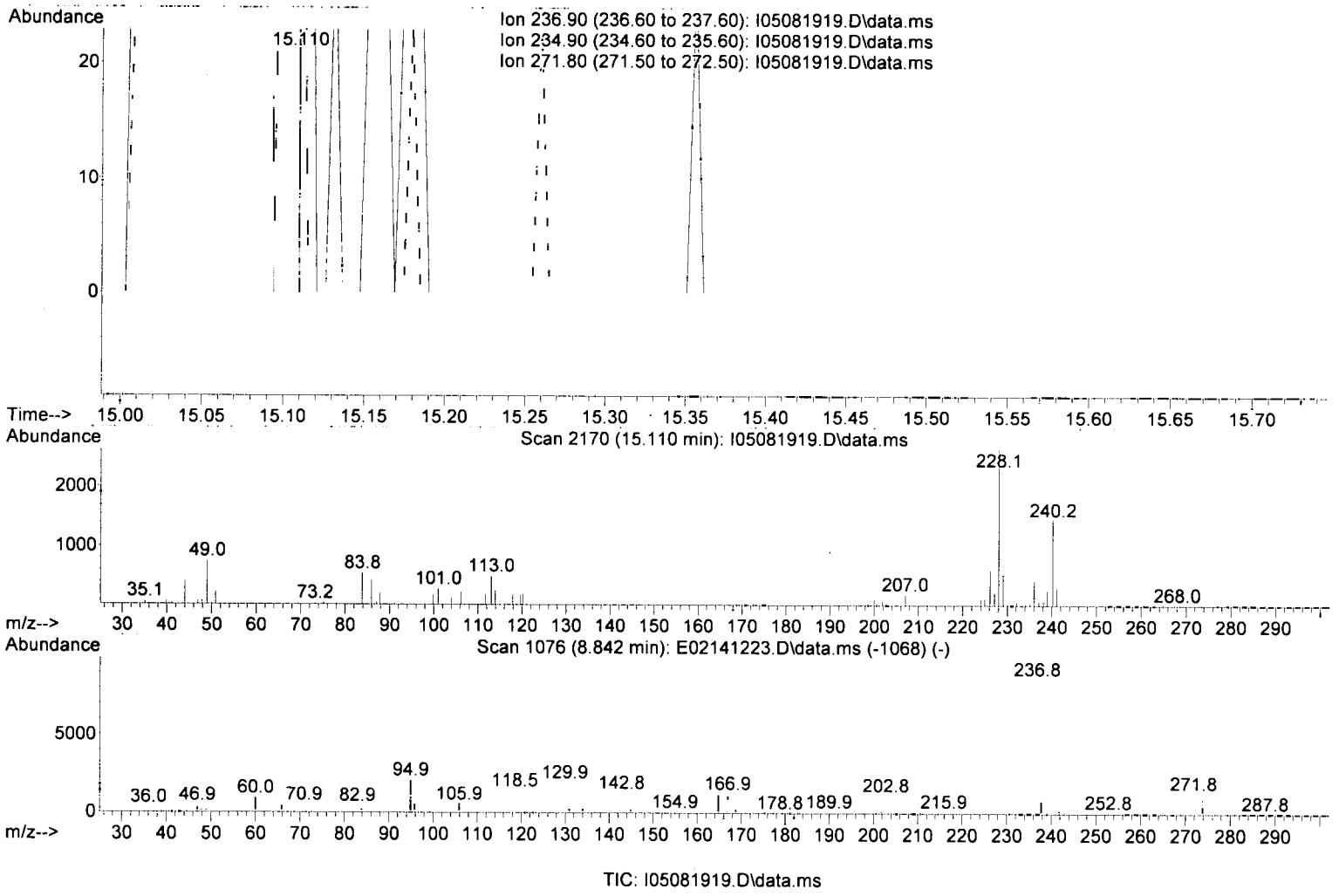


R = 3.01e-003 A*A + 3.01e-001 A - 5.61e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



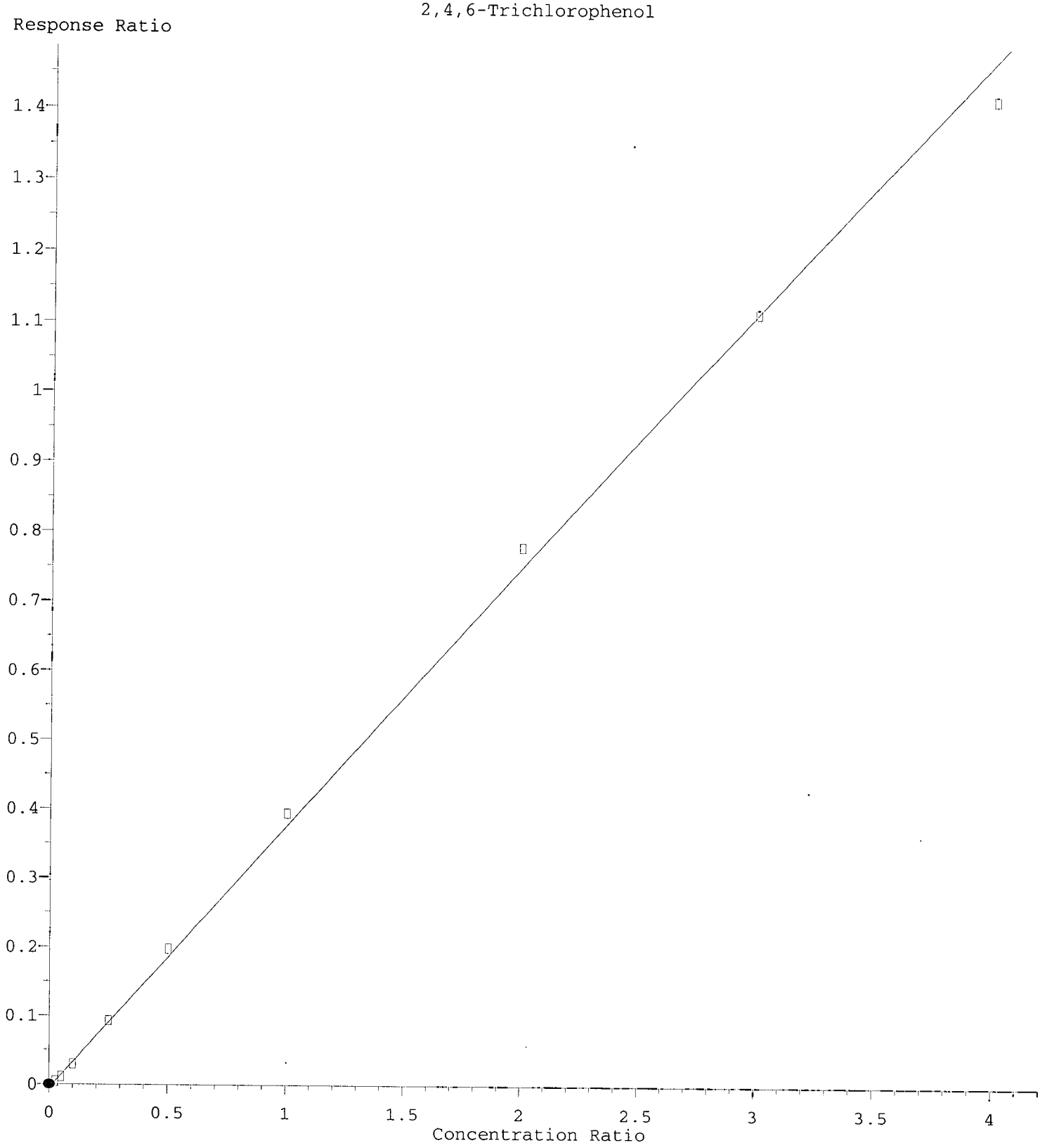
TIC: I05081919.D\data.ms

(36) Hexachlorocyclopentadiene (T)

15.110min (+ 6.285) 40.65 ng/ml m

response 115

Ion	Exp%	Act%
236.90	100.00	100.00
234.90	62.80	64.00
271.80	12.50	0.00
0.00	0.00	0.00

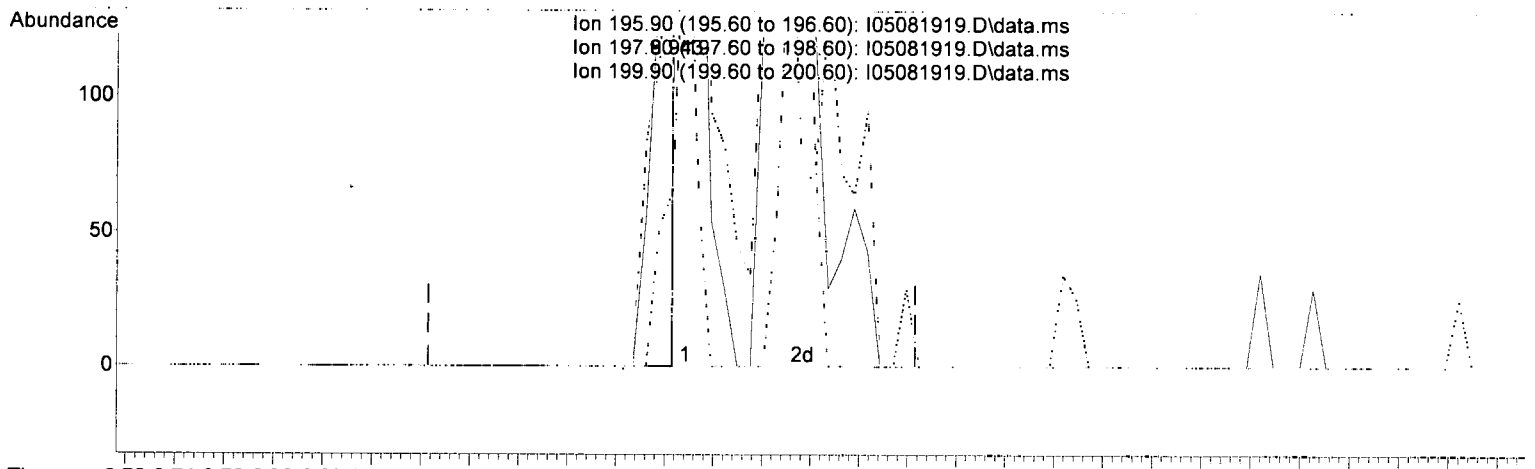


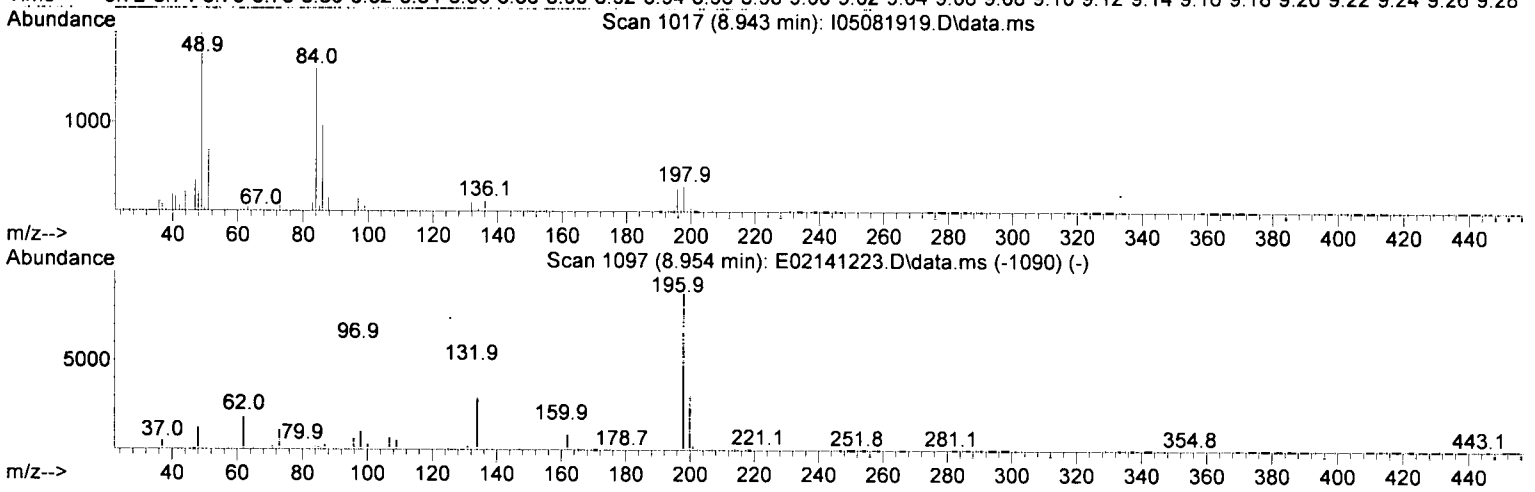
R = -4.37e-003 A*A + 3.86e-001 A - 6.17e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





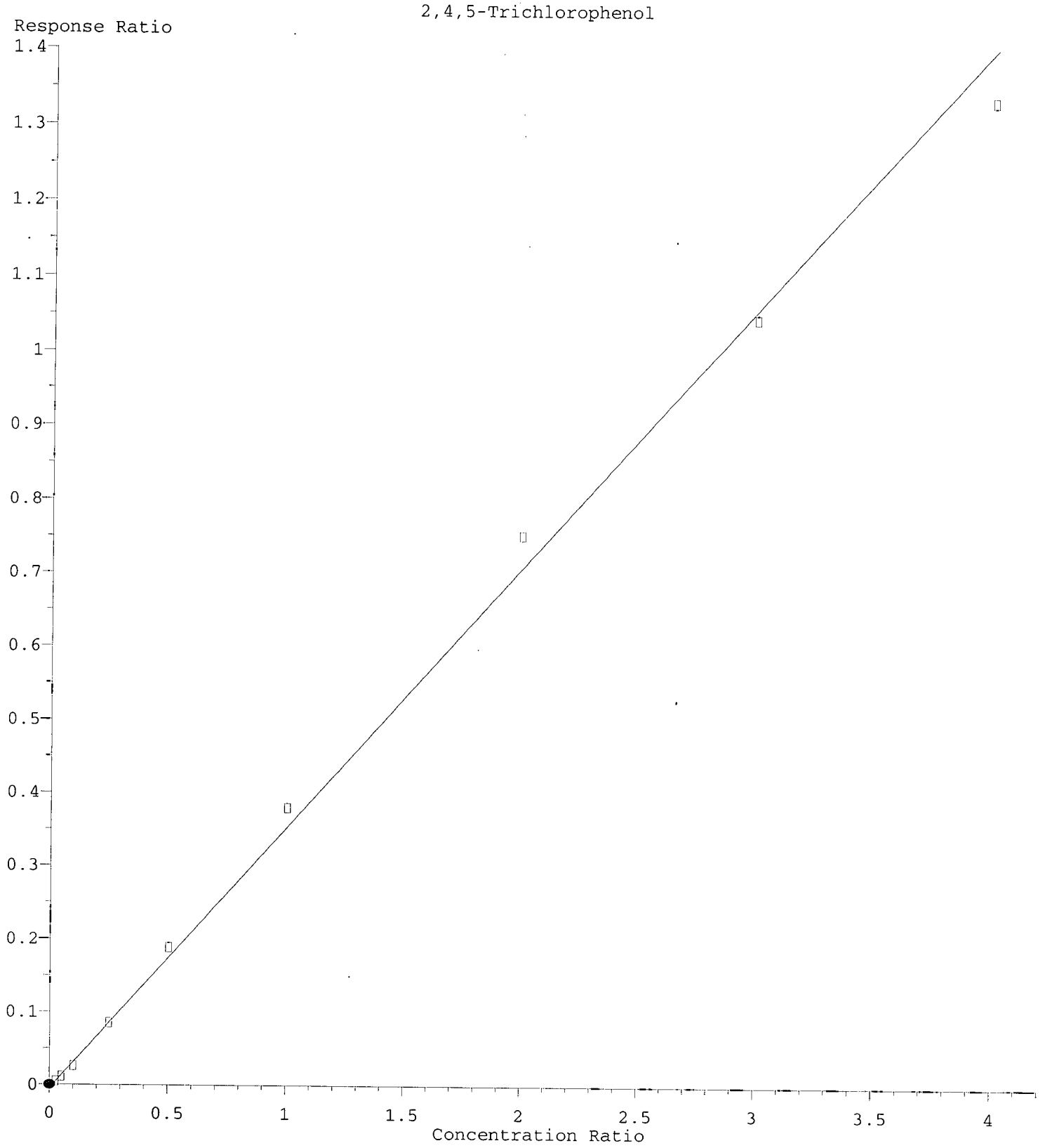
TIC: I05081919.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

8.943min (+ 0.000) 35.47 ng/ml m

response 156

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	97.50	110.11
199.90	30.40	23.47
0.00	0.00	0.00

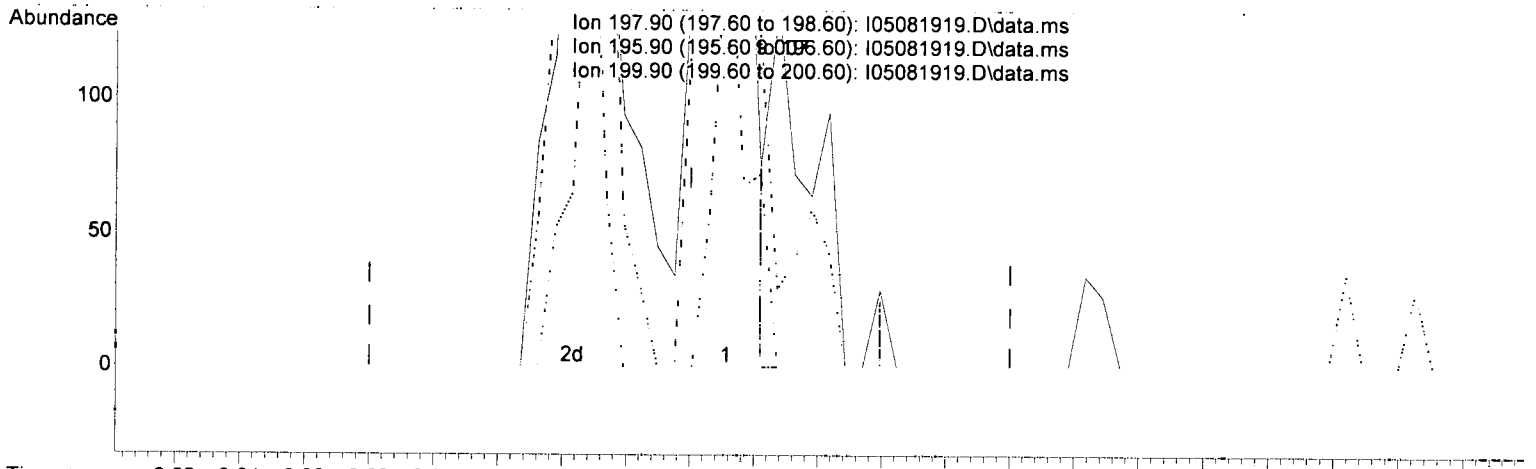


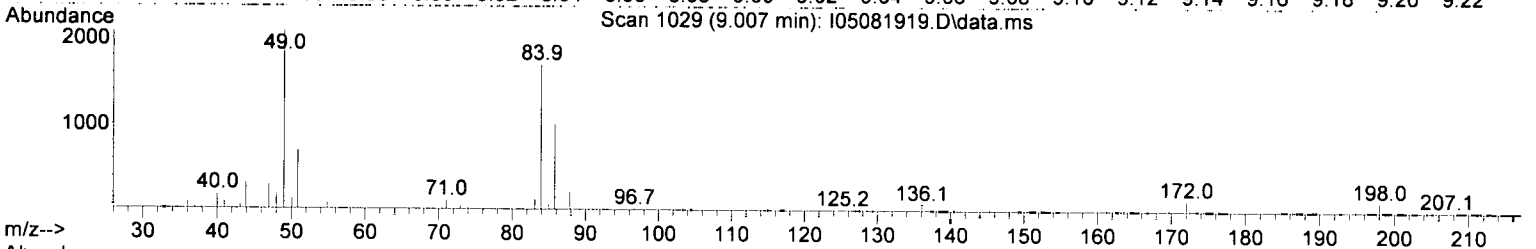
R = -2.14e-003 A*A + 3.60e-001 A - 5.07e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

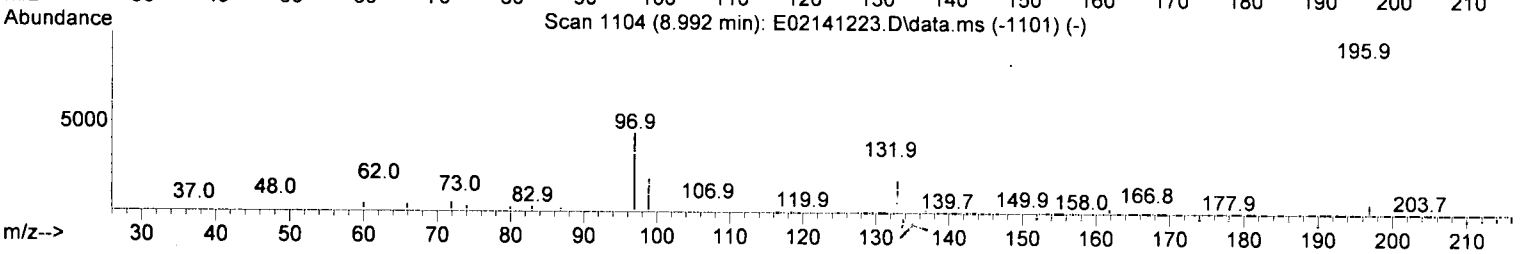
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







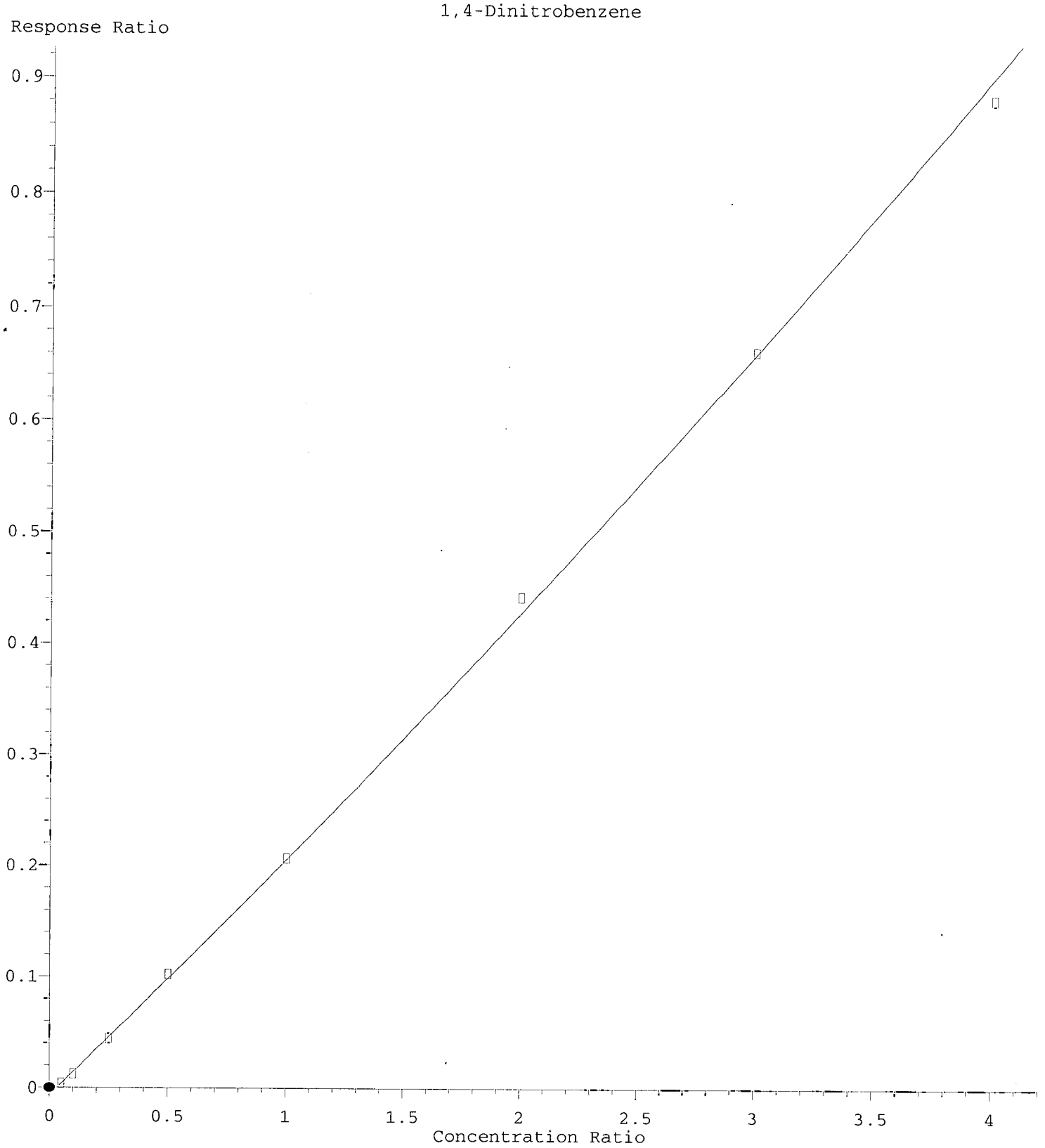
TIC: I05081919.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

9.007min (+ 0.027) 31.20 ng/ml m

response 126

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	21.64#
199.90	31.10	0.00#
0.00	0.00	0.00

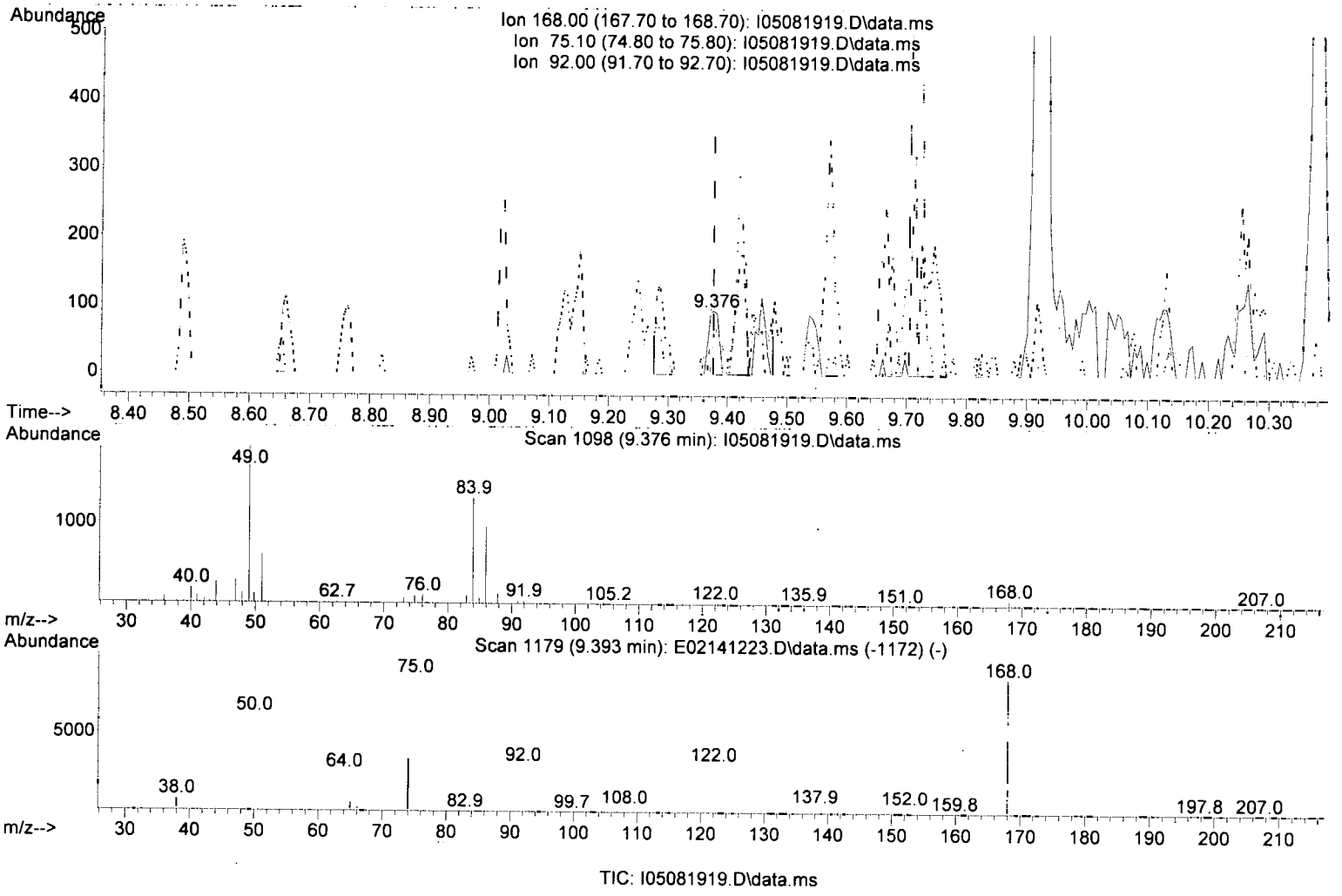


R = 4.91e-003 A*A + 2.07e-001 A - 6.78e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



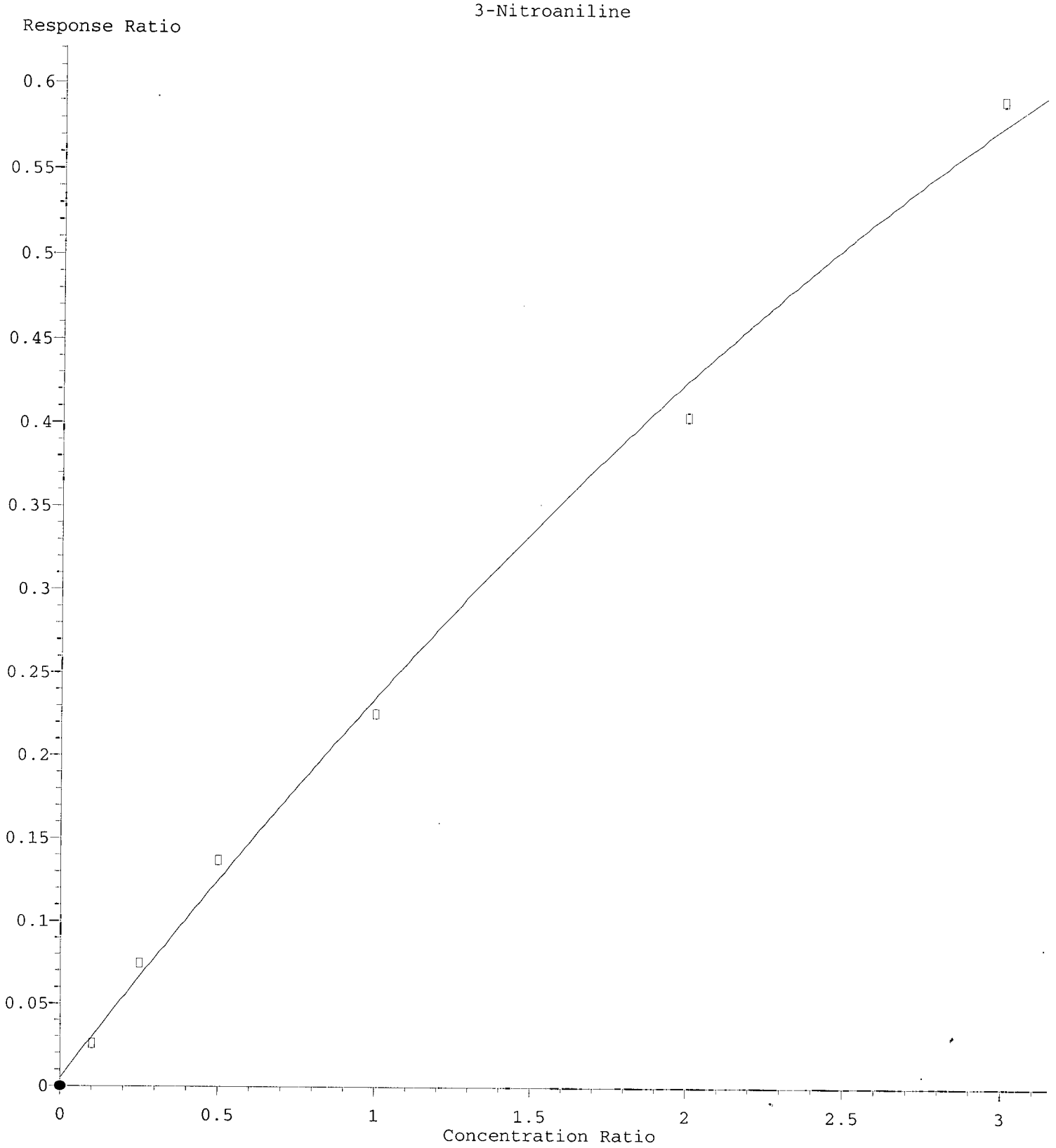
TIC: I05081919.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.376min (+ 0.000) 70.15 ng/ml

response 116

Ion	Exp%	Act%
168.00	100.00	100.00
75.10	134.30	124.73
92.00	43.50	65.59
0.00	0.00	0.00

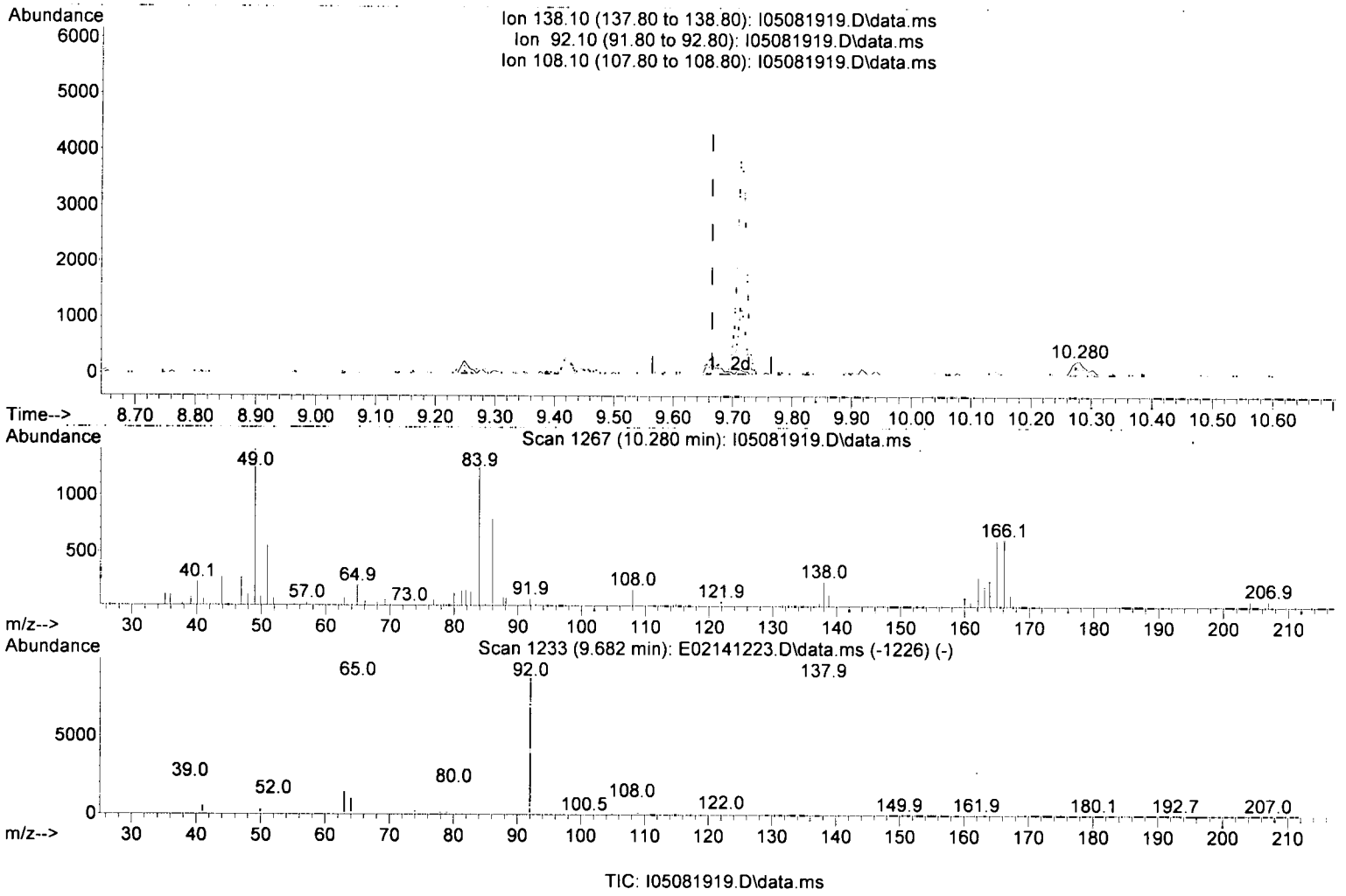


R = -1.97e-002 A*A + 2.50e-001 A + 5.08e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



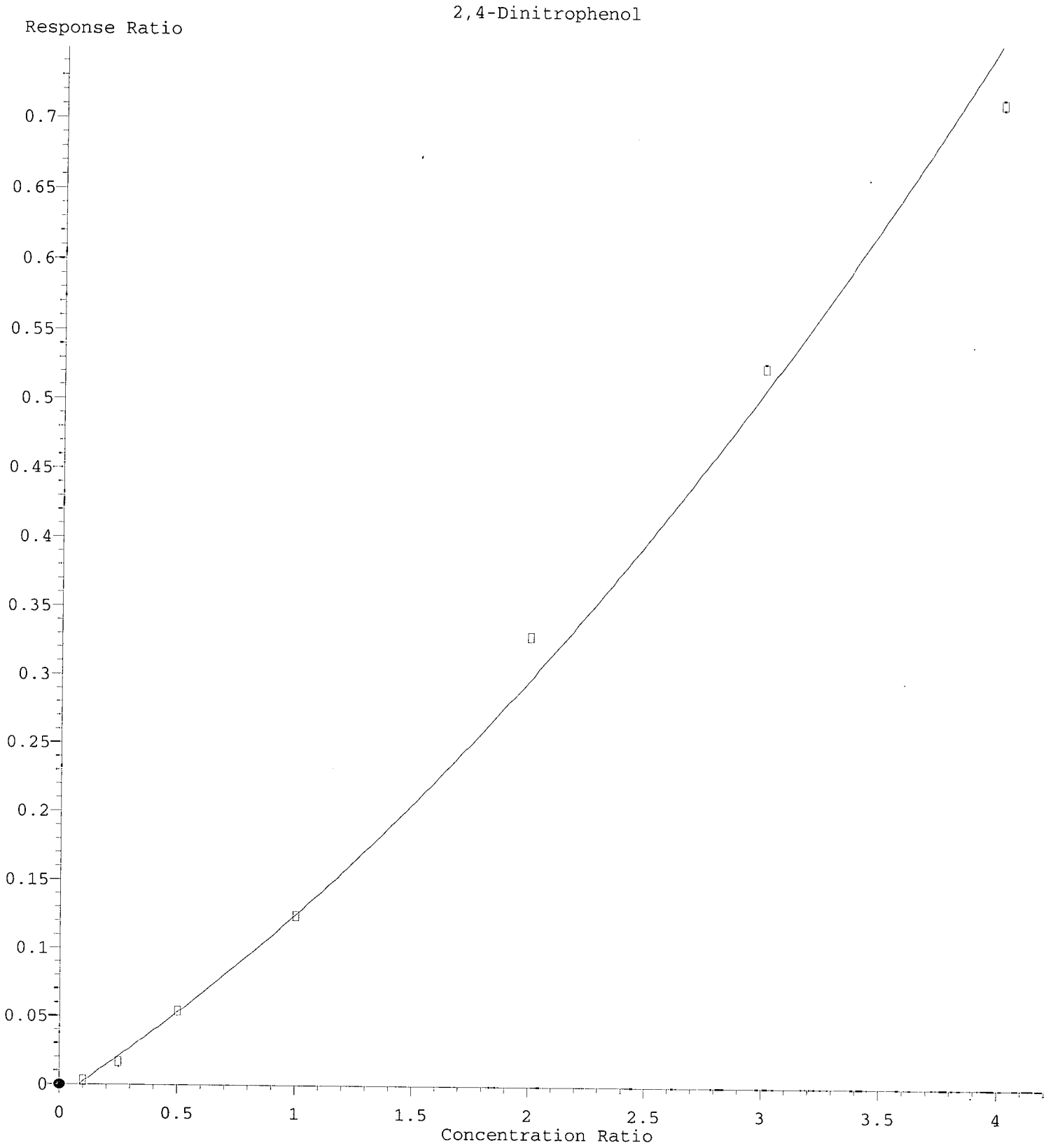
TIC: I05081919.D\data.ms

(50) 3-Nitroaniline (T)

10.280min (+ 0.615) -1.00 ng/ml m

response 1143

Ion	Exp%	Act%
138.10	100.00	100.00
92.10	114.60	35.66#
108.10	11.10	70.08#
0.00	0.00	0.00

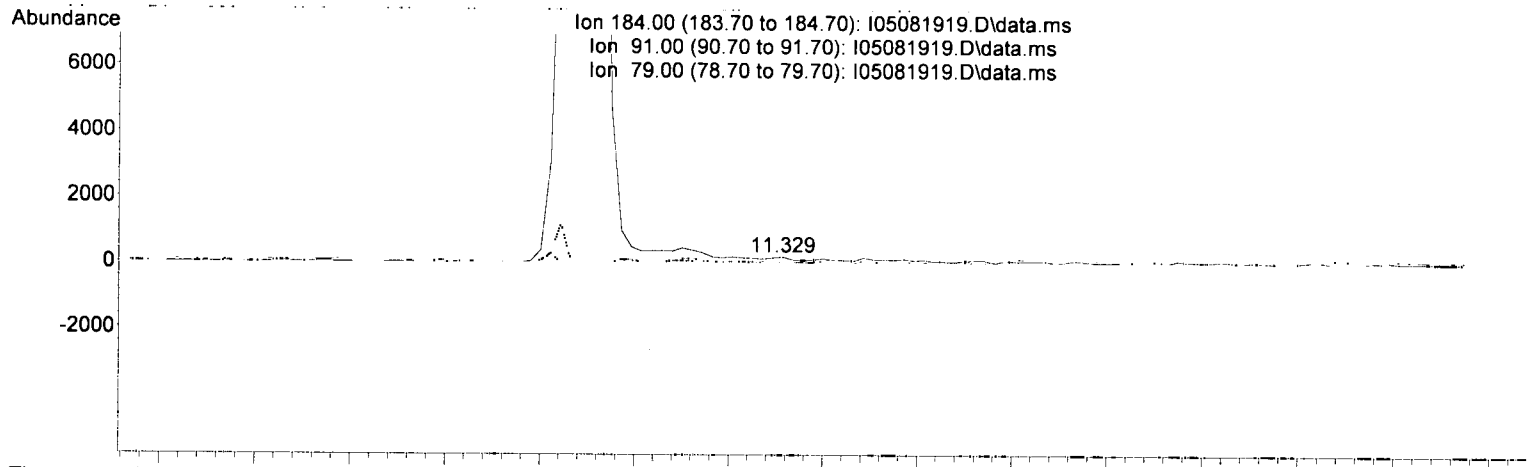


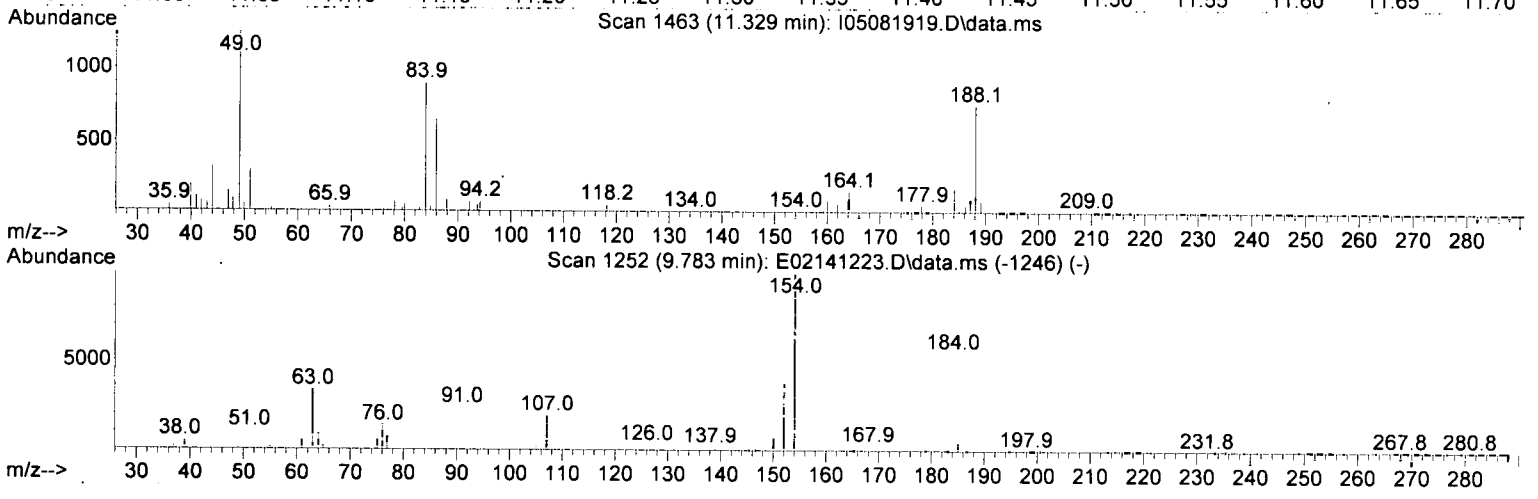
R = 1.91e-002 A*A + 1.15e-001 A - 9.32e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





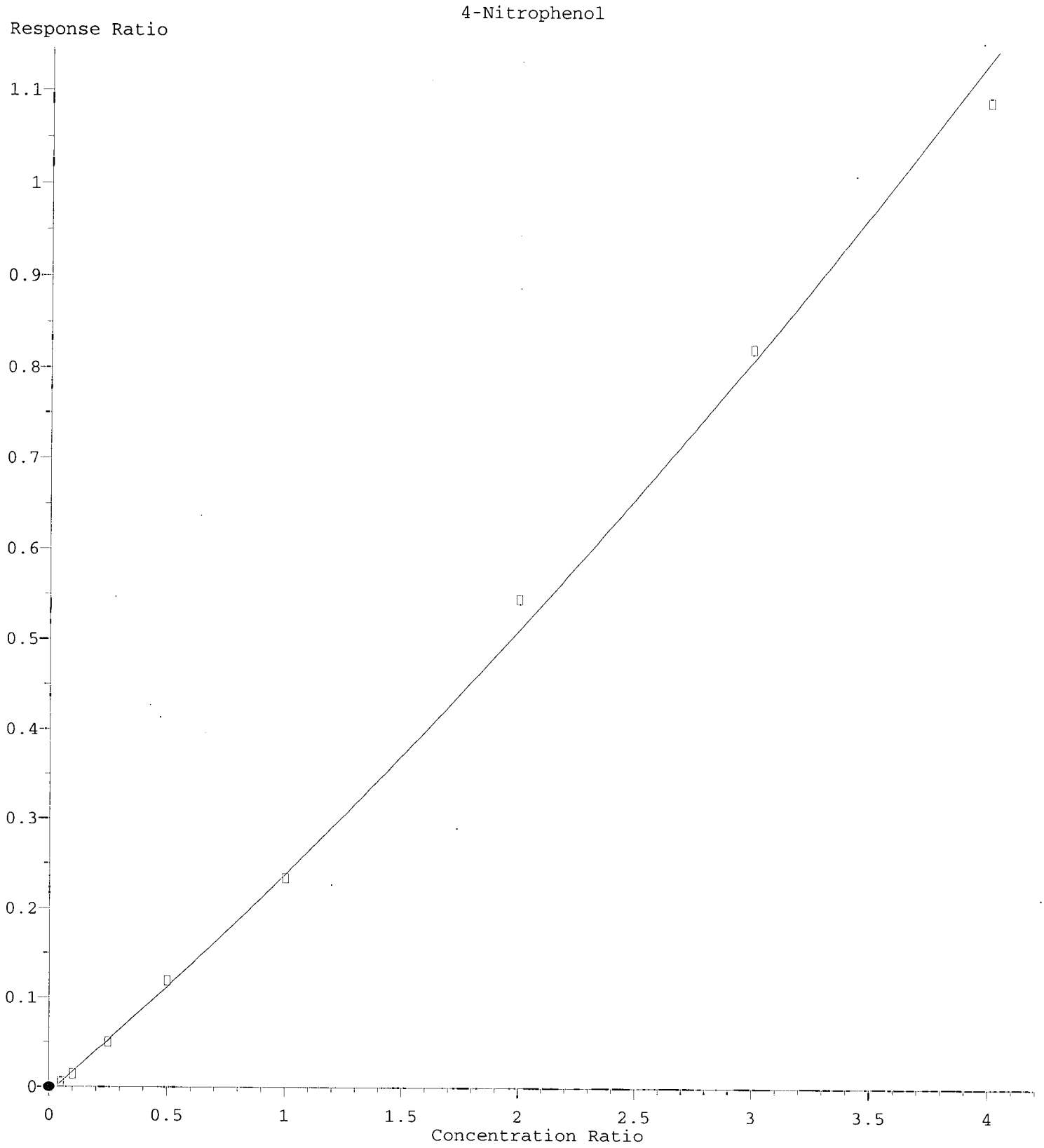
TIC: I05081919.D\data.ms

(52) 2,4-Dinitrophenol (T)

11.329min (+ 1.563) 173.74 ng/ml m

response 190

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	53.50	0.00#
79.00	32.30	25.00
0.00	0.00	0.00

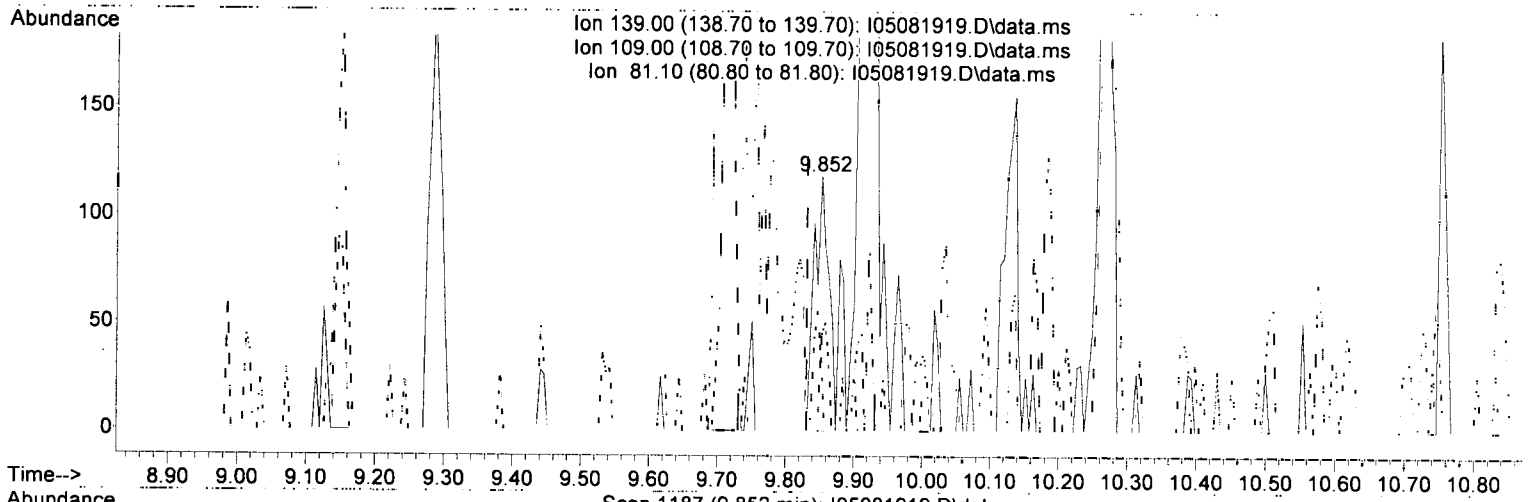


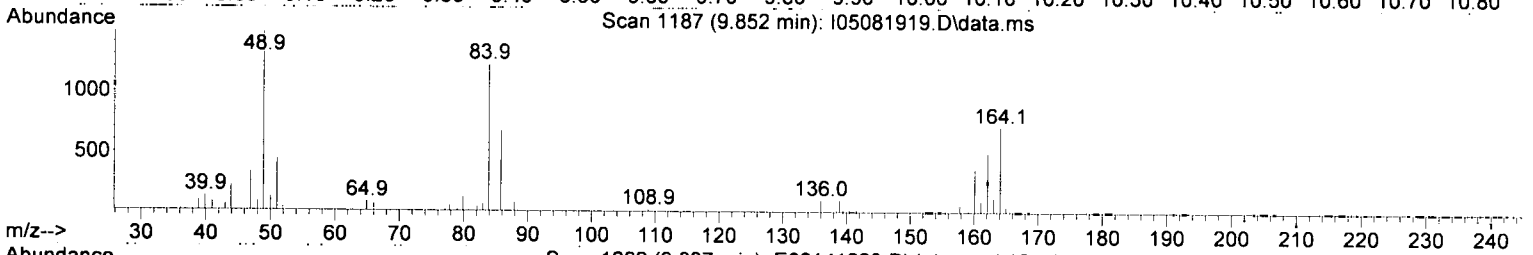
R = 1.35e-002 A*A + 2.32e-001 A - 6.72e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

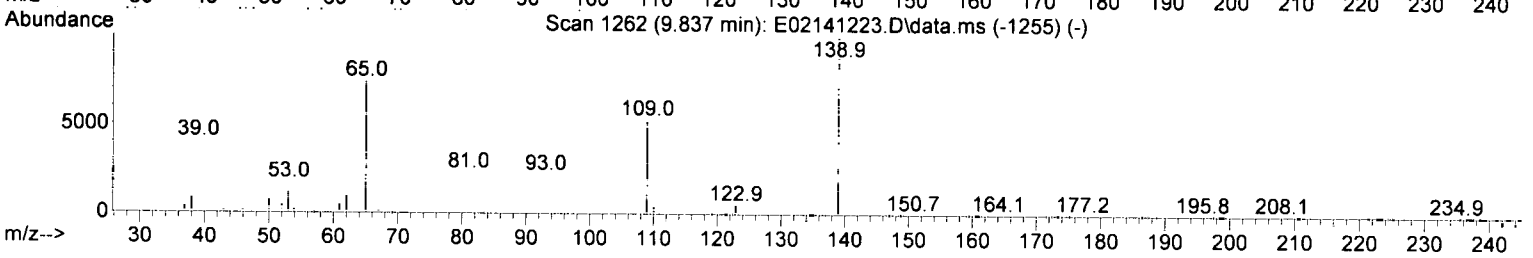
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







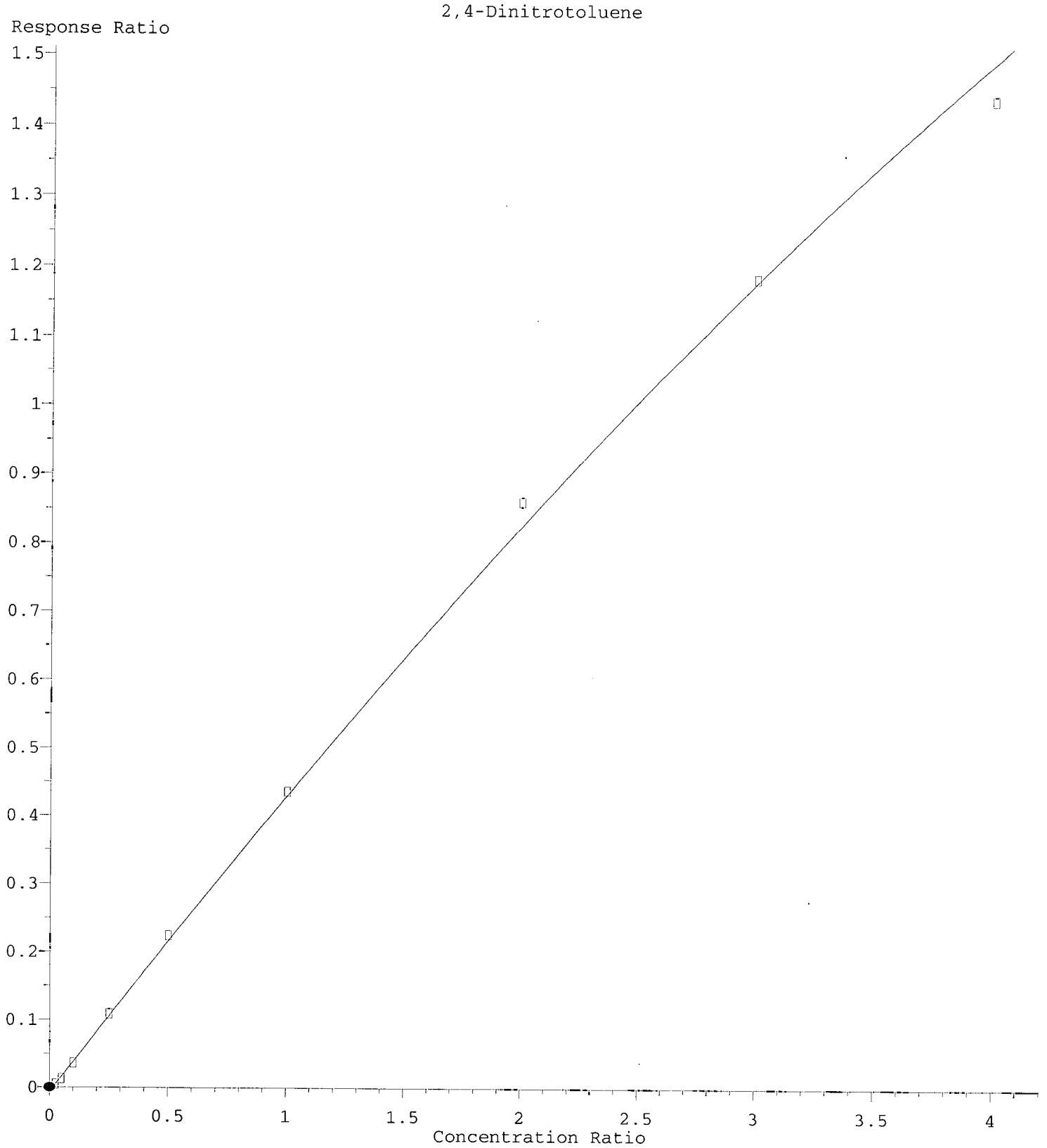
TIC: I05081919.D\data.ms

(53) 4-Nitrophenol (T)

9.852min (+ 0.021) 64.39 ng/ml

response 173

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	64.20	36.97
81.10	30.90	26.89
0.00	0.00	0.00

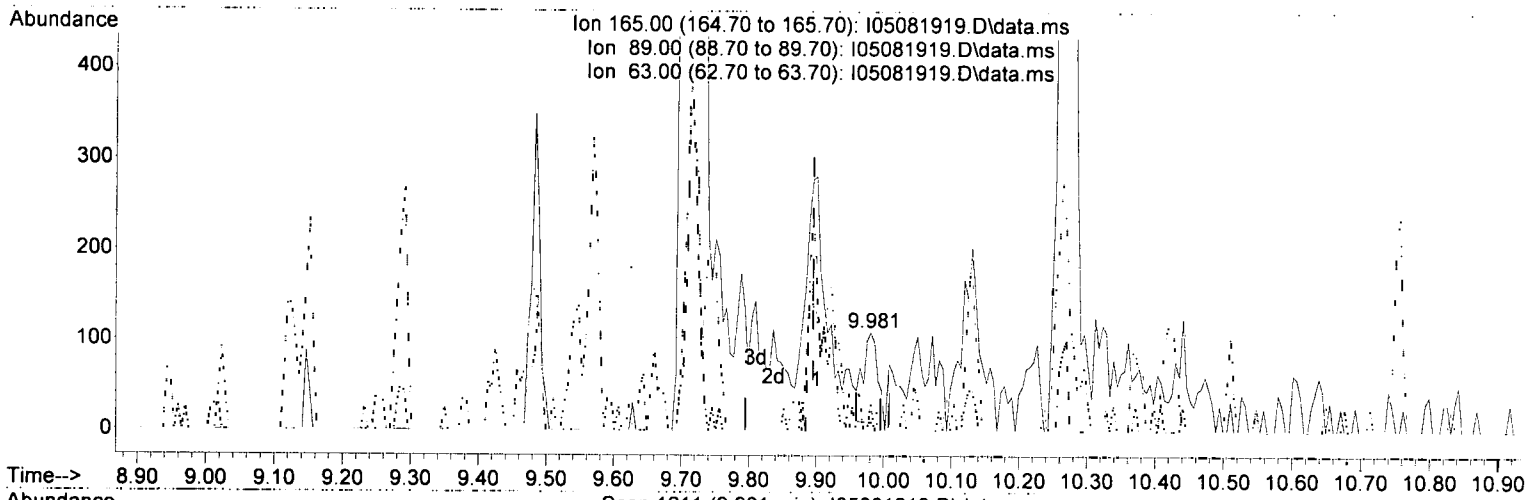


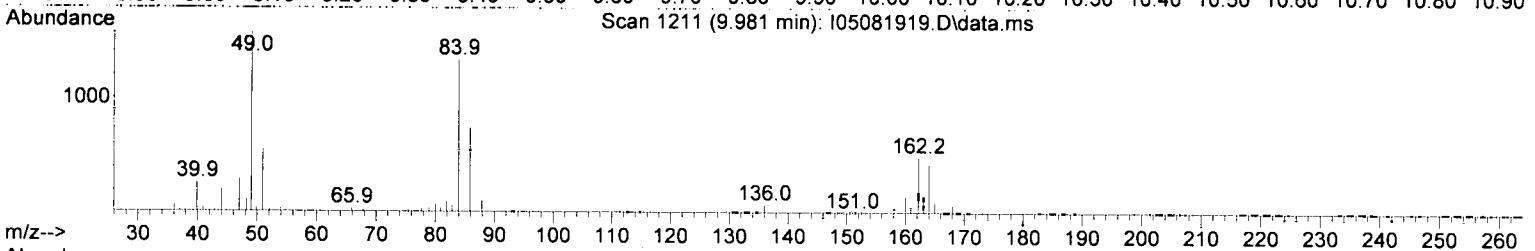
R = -2.06e-002 A*A + 4.57e-001 A - 7.48e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

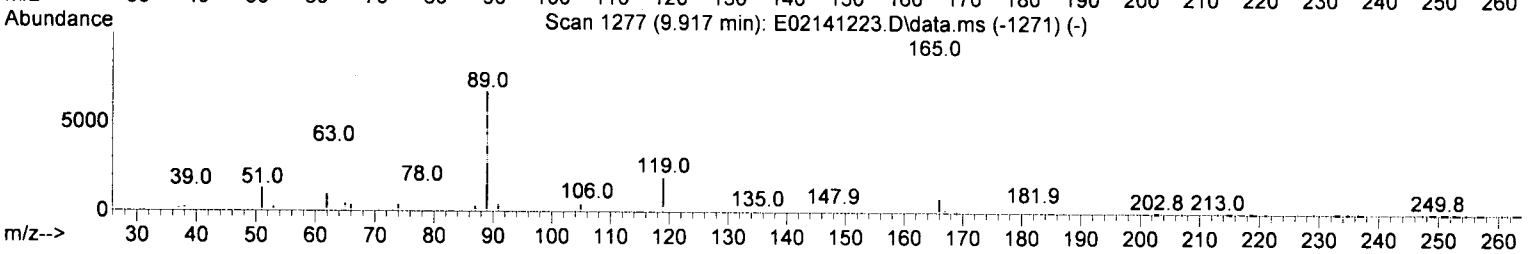
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081919.D\data.ms

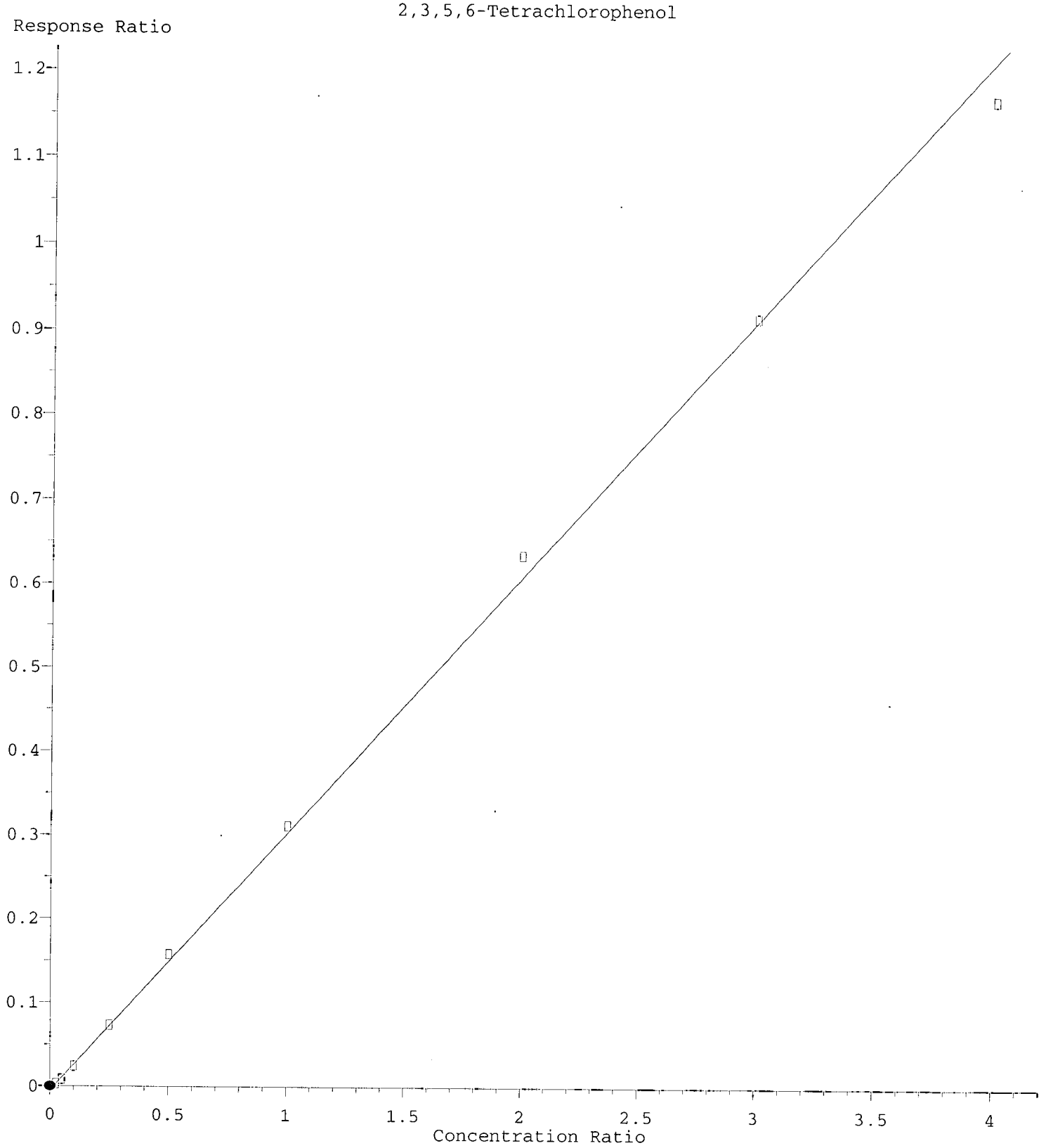
(54) 2,4-Dinitrotoluene (T)

9.981min (+ 0.086) 35.93 ng/ml m

response 167

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	80.10	26.61#
63.00	47.20	0.00#
0.00	0.00	0.00

J

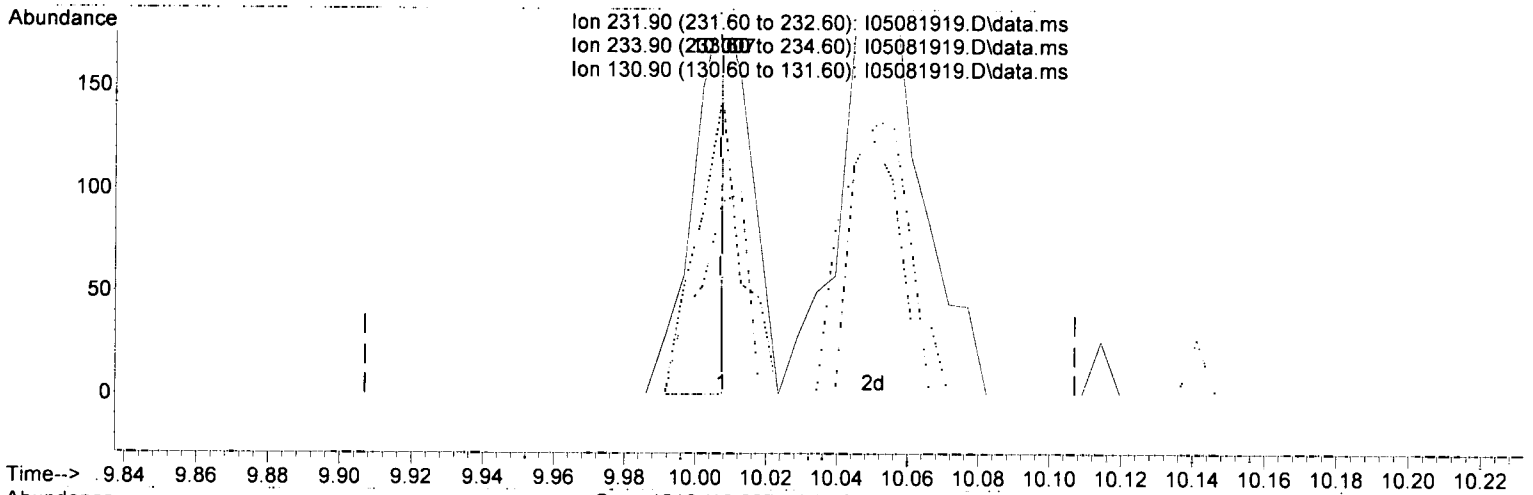


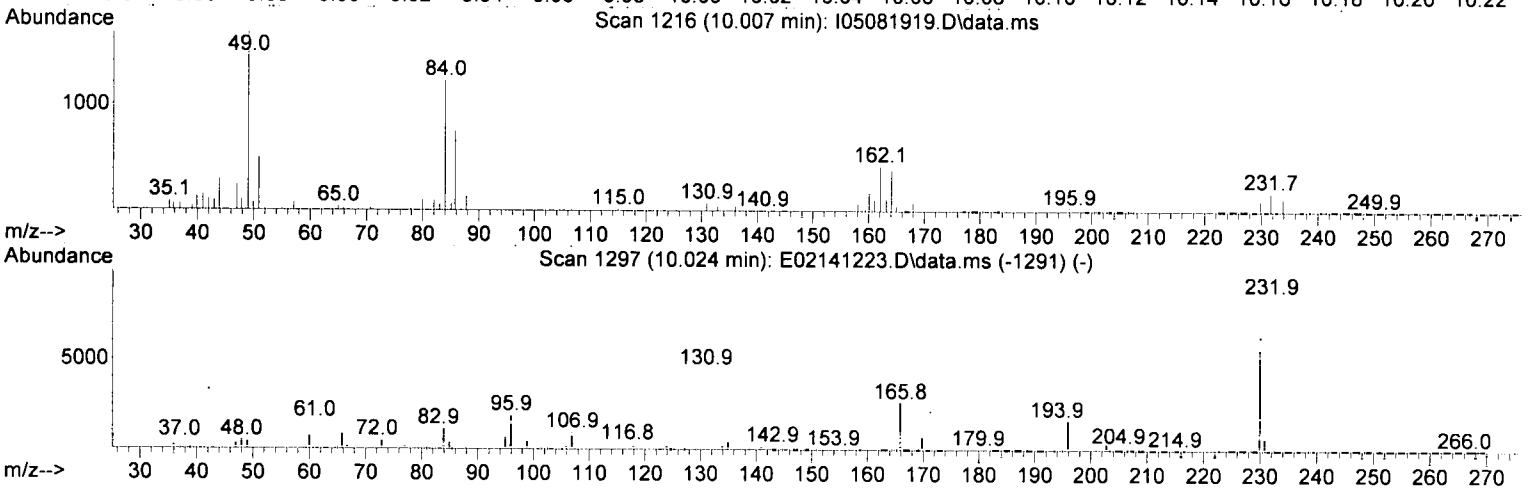
R = -1.07e-003 A*A + 3.09e-001 A - 5.22e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





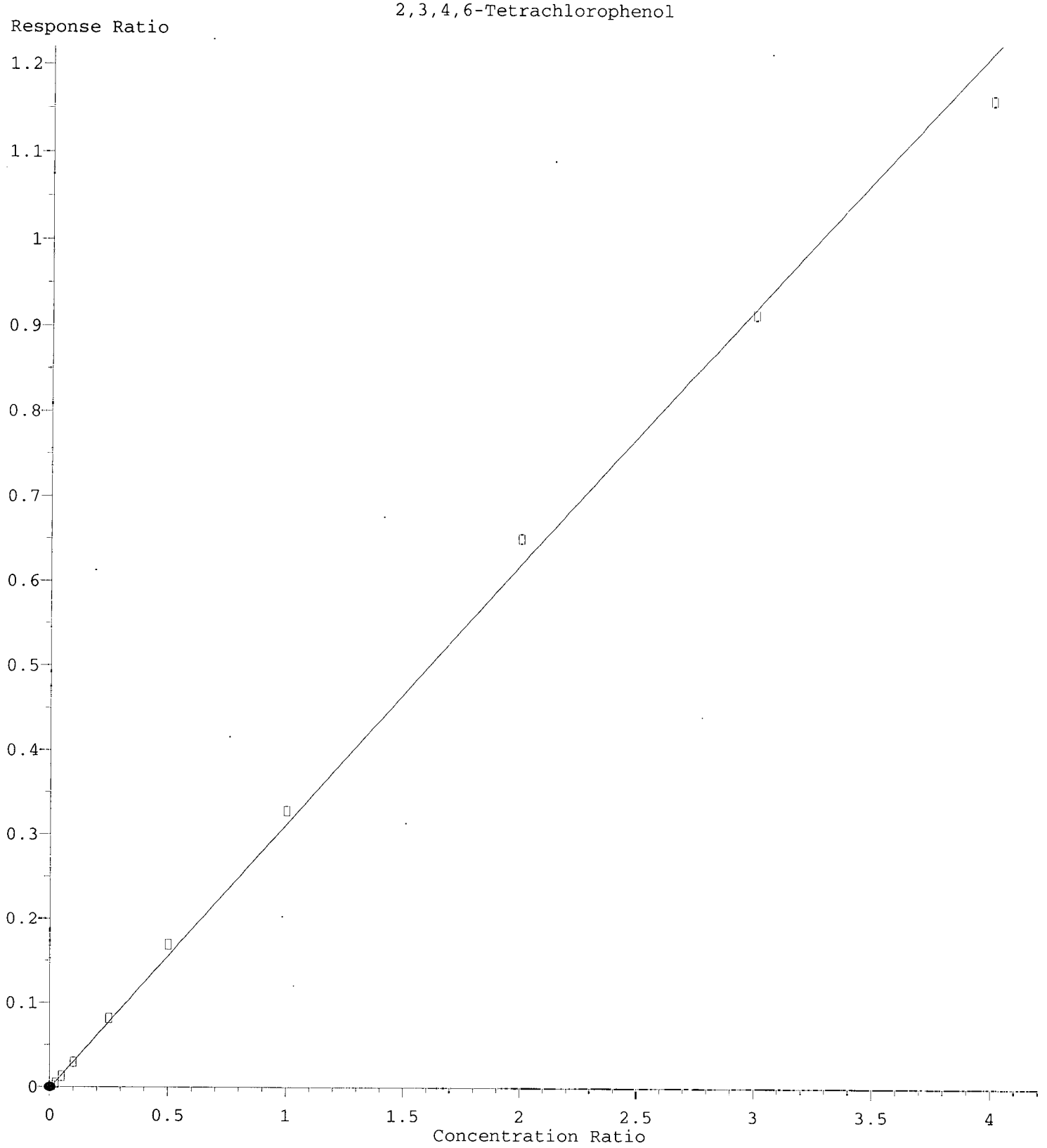
TIC: I05081919.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

10.007min (+ 0.000) 37.74 ng/ml m

response 140

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	49.20	72.86
130.90	53.00	47.24
0.00	0.00	0.00

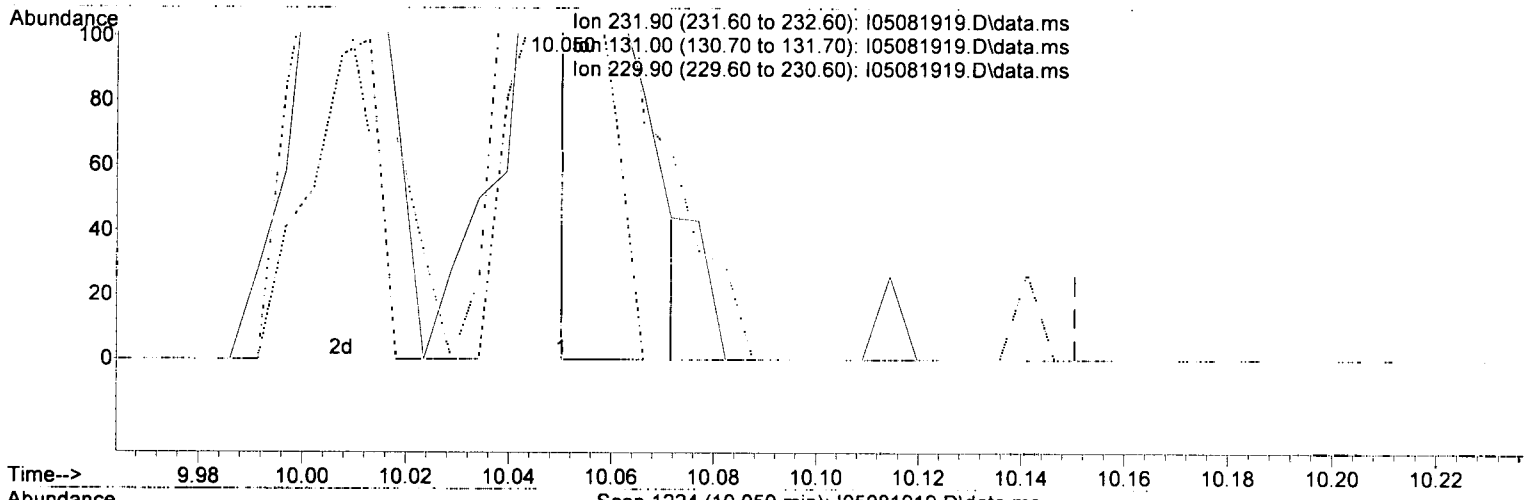


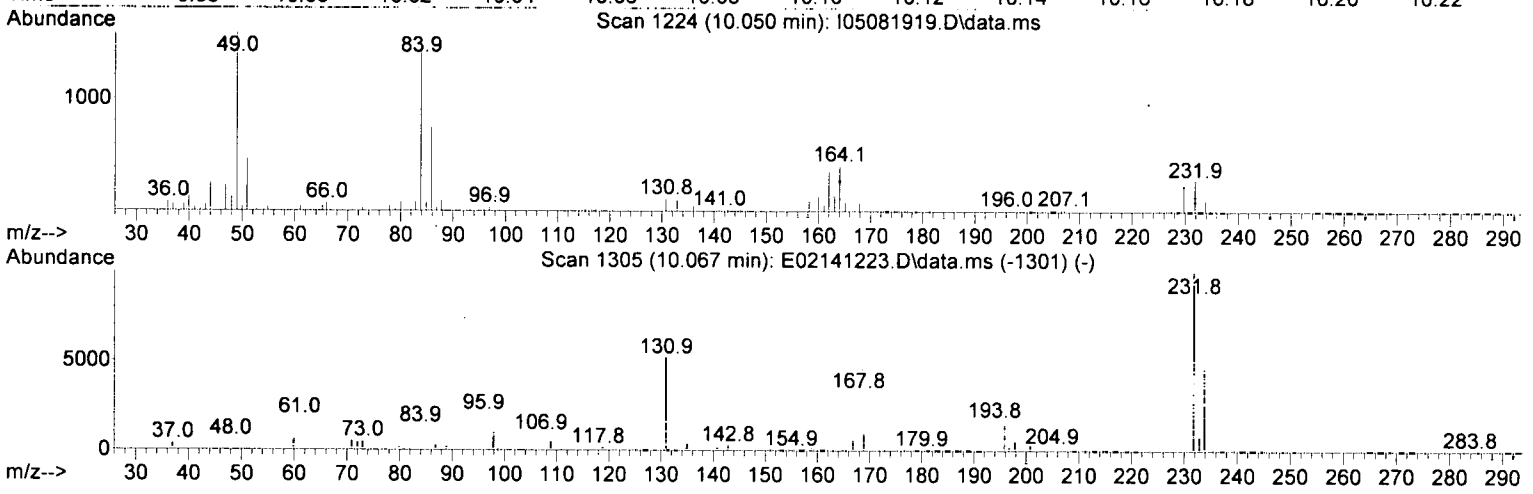
R = -3.25e-003 A*A + 3.18e-001 A - 1.92e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9





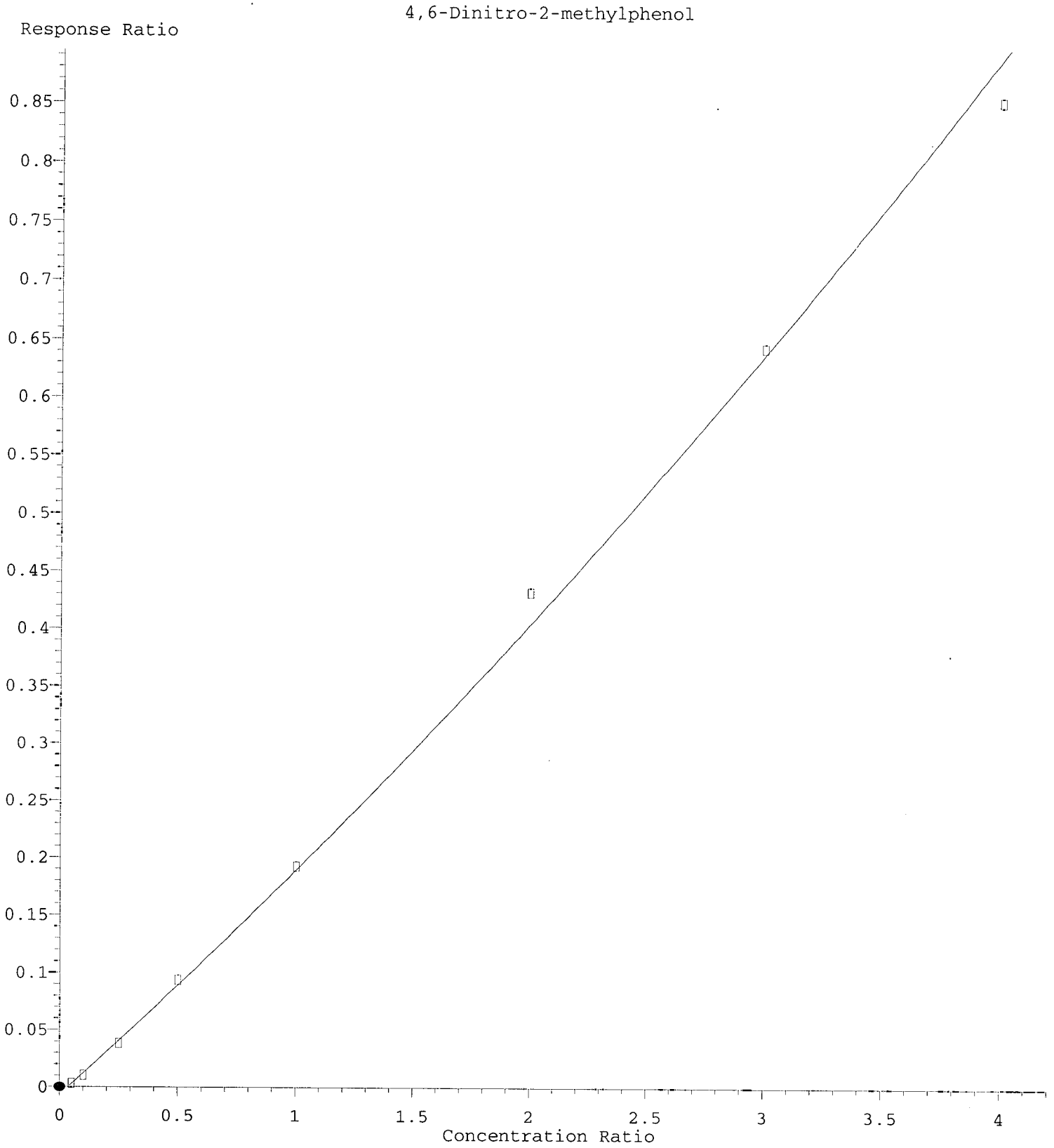
TIC: I05081919.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.050min (-0.000) 16.03 ng/ml m

response 145

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	45.33
229.90	78.40	85.47
0.00	0.00	0.00

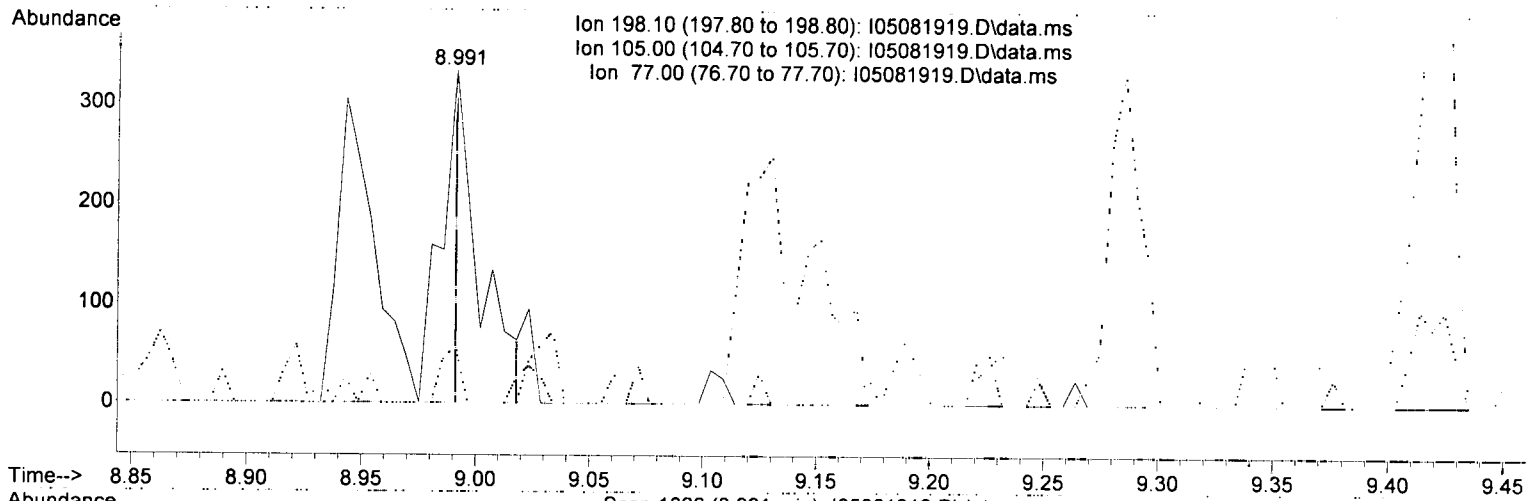


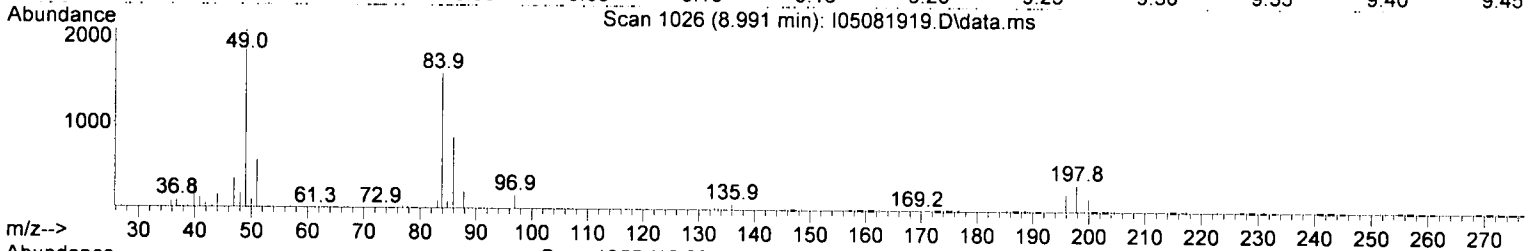
R = 9.20e-003 A*A + 1.87e-001 A - 6.68e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

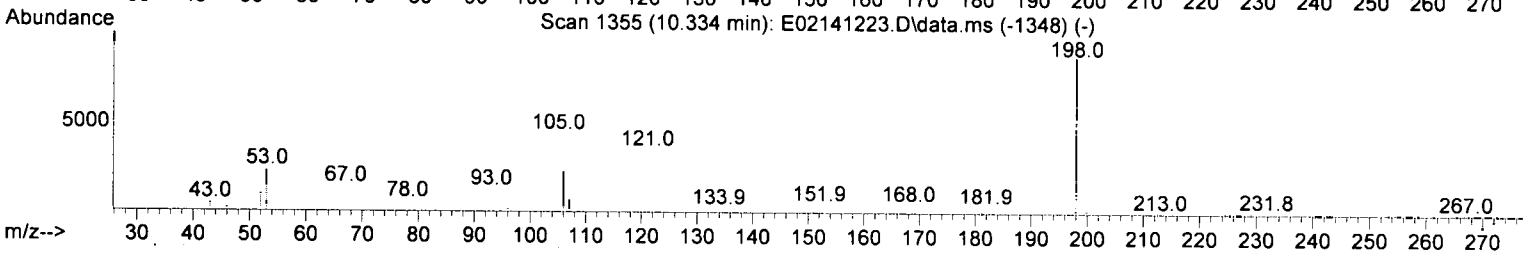
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







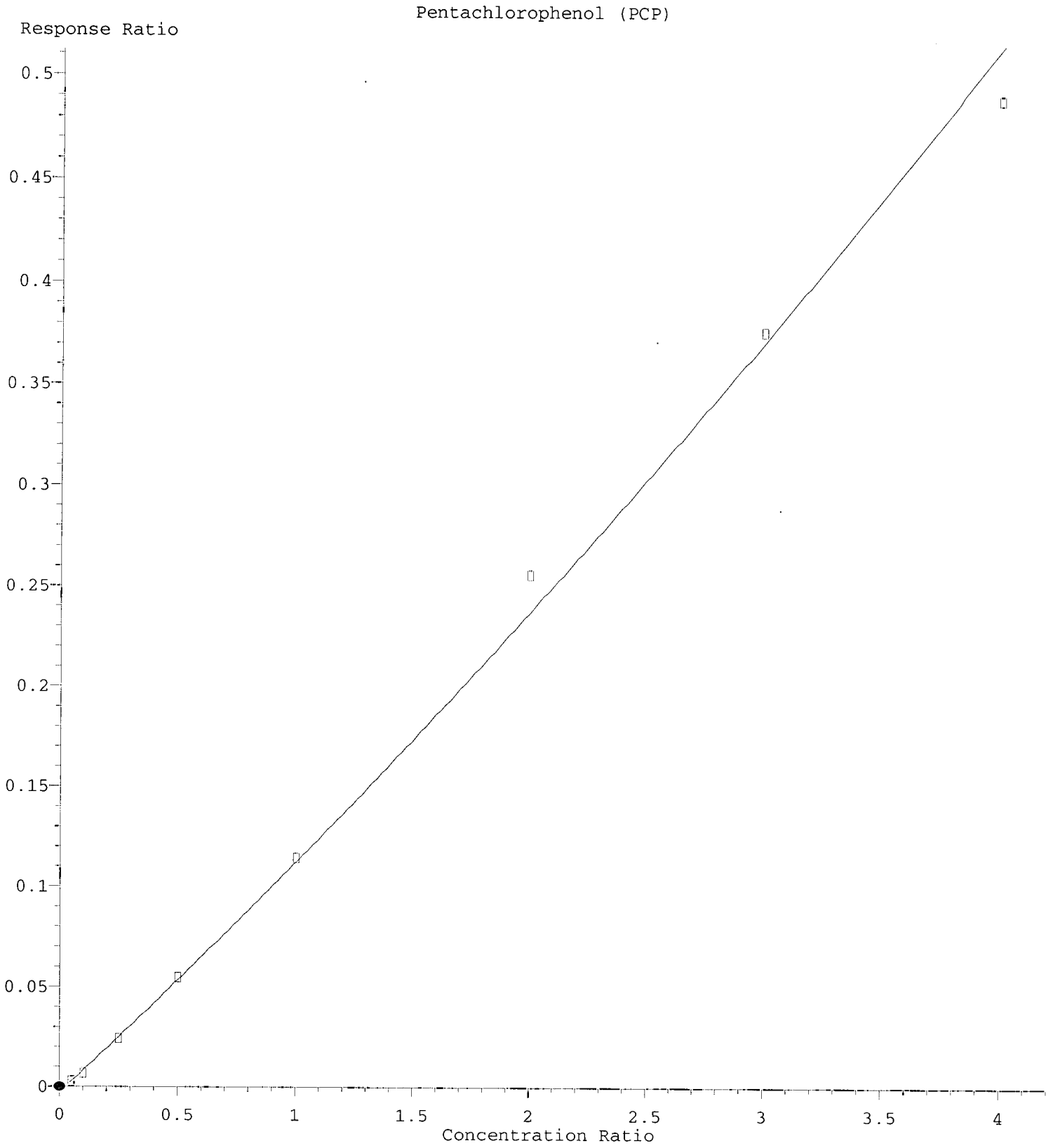
TIC: I05081919.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

8.991min (-1.321) 79.54 ng/ml m

response 177

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	58.40	0.00#
77.00	31.80	16.77
0.00	0.00	0.00

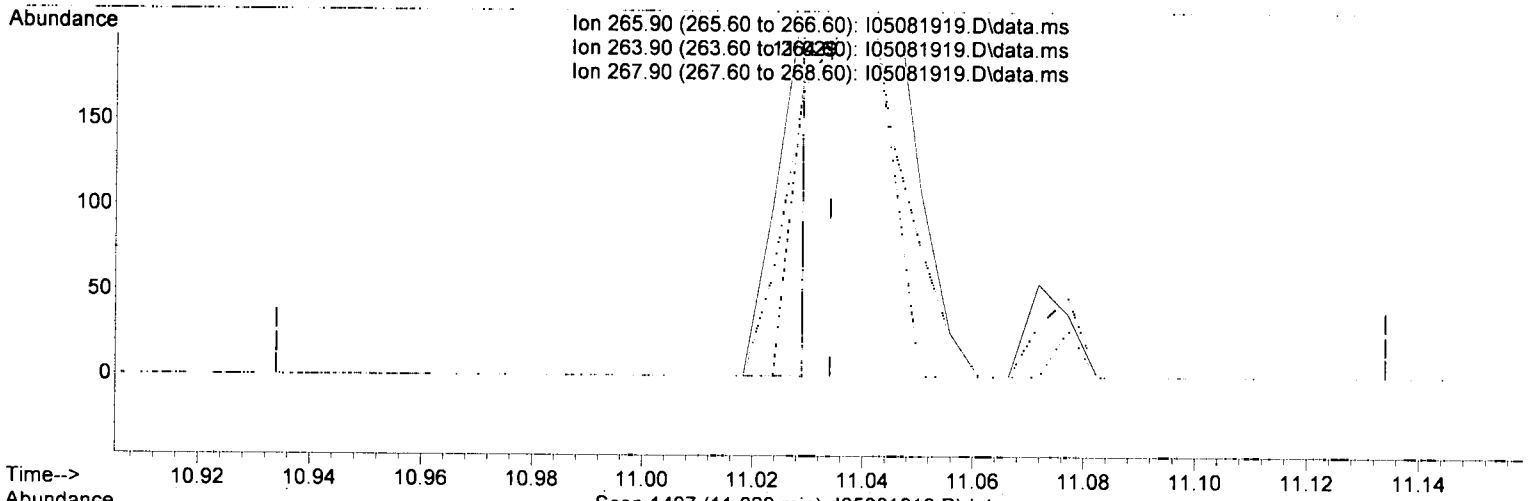


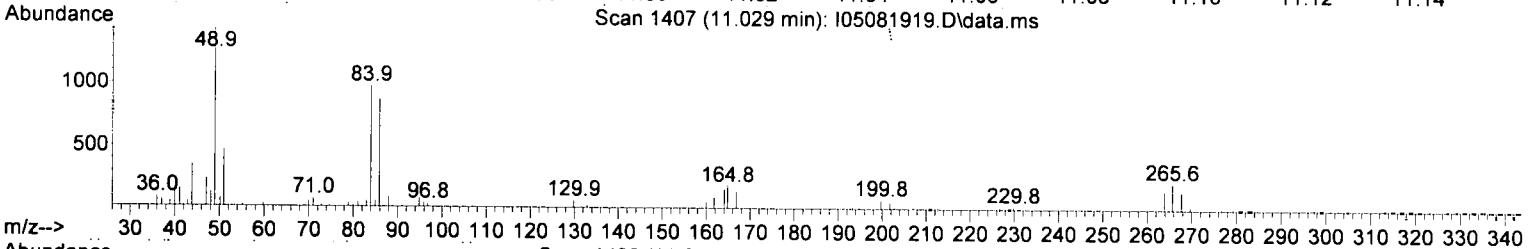
R = 4.56e-003 A*A + 1.11e-001 A - 3.12e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

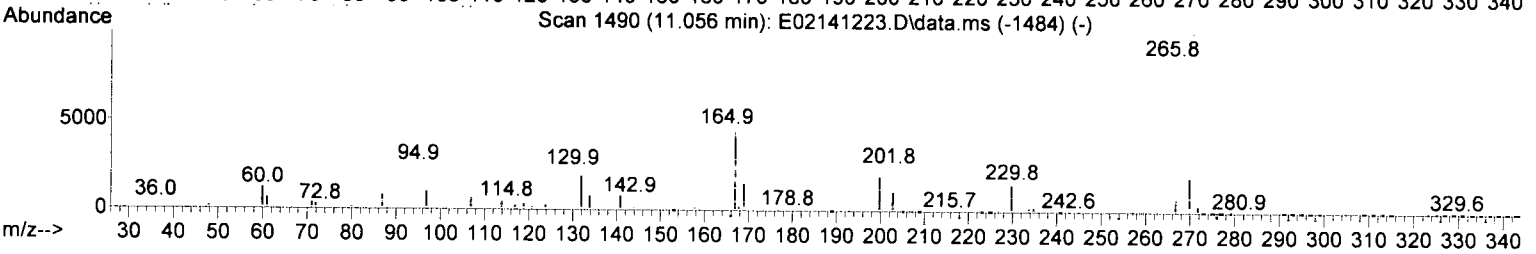
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







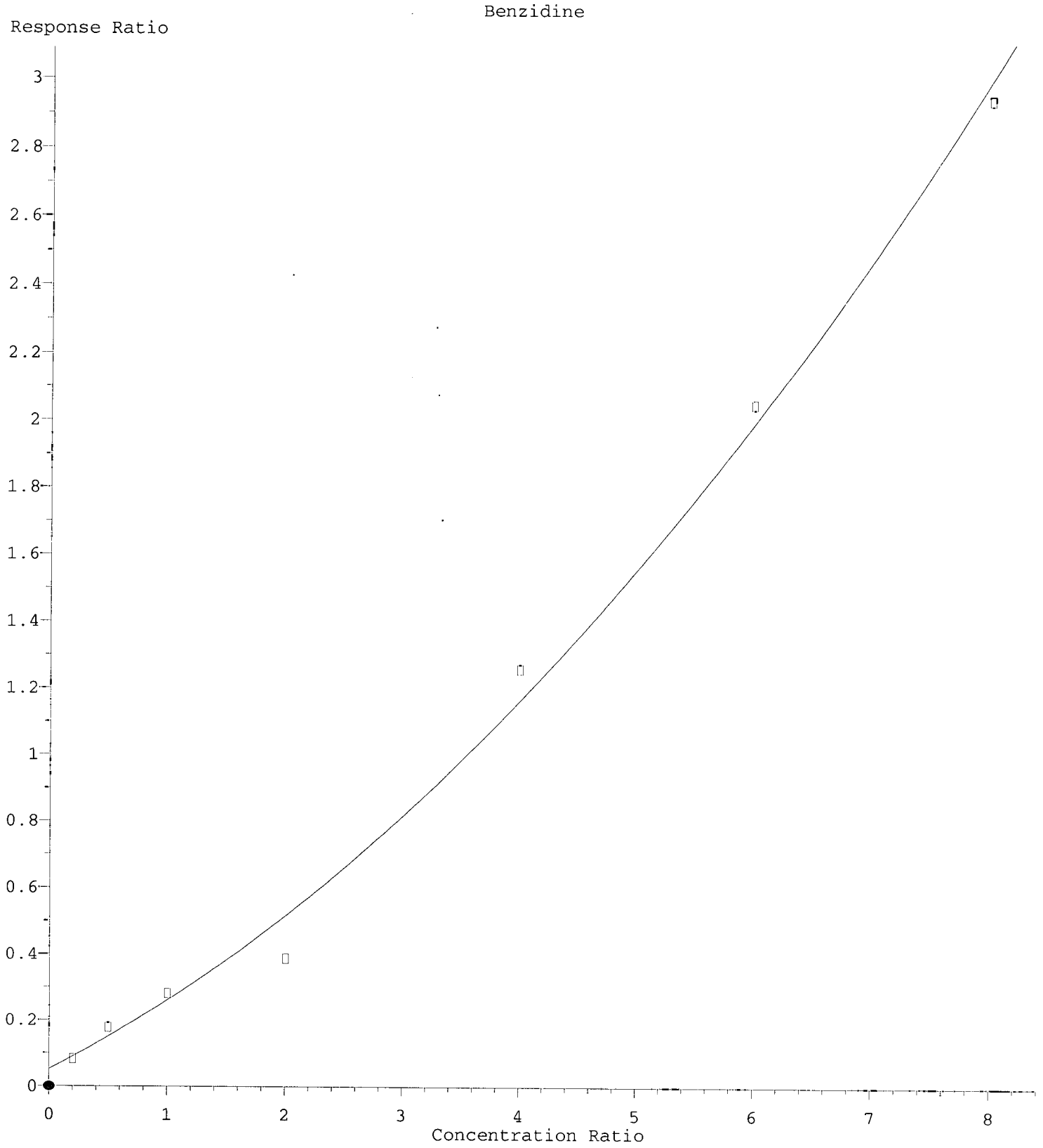
TIC: I05081919.D\data.ms

(70) Pentachlorophenol (PCP) (T)

11.029min (-0.005) 60.50 ng/ml m

response 107

Ion	Exp%	Act%
265.90	100.00	100.00
263.90	65.20	74.89
267.90	61.20	72.29
0.00	0.00	0.00

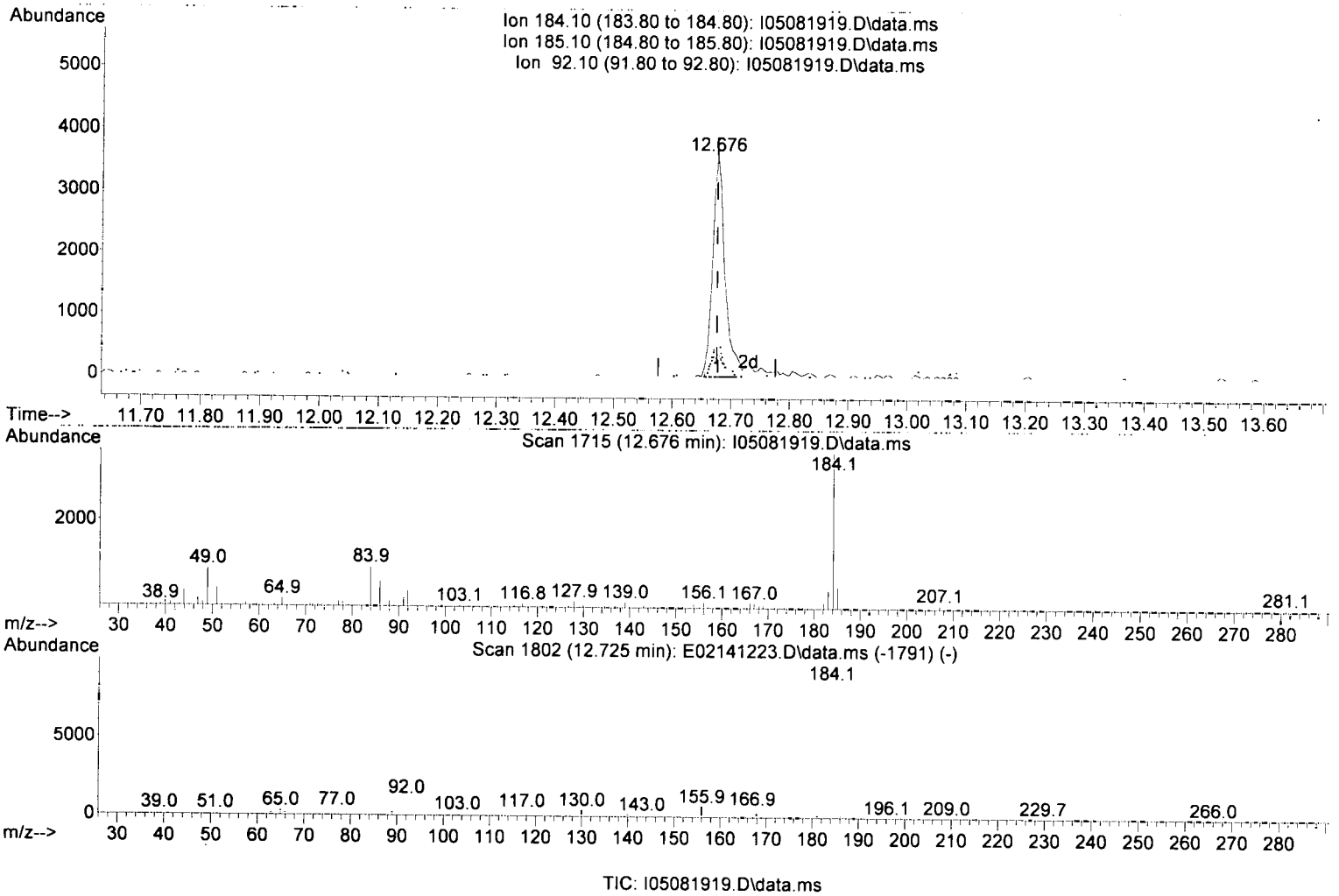


R = 2.27e-002 A*A + 1.87e-001 A + 5.11e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



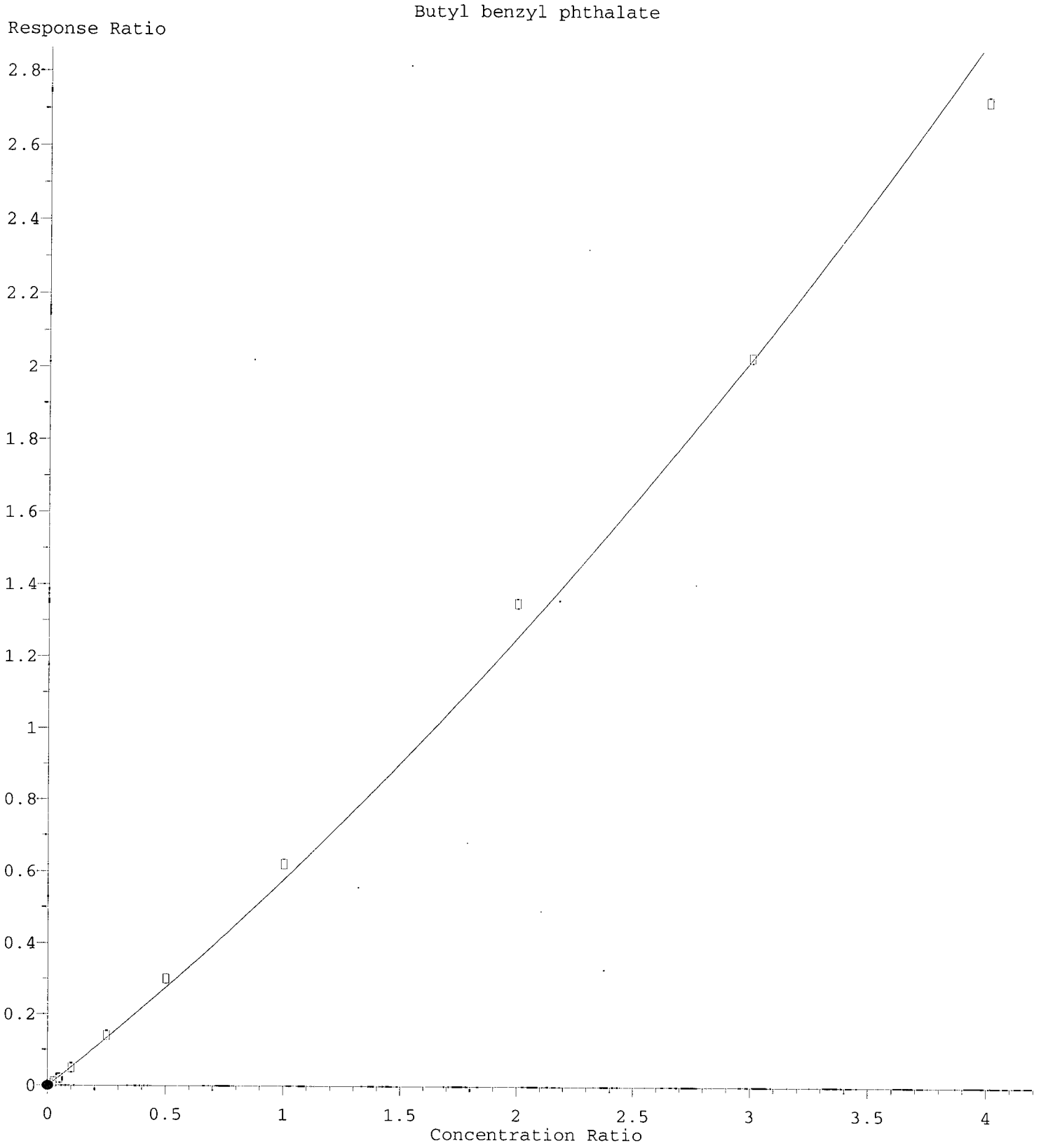
TIC: I05081919.D\data.ms

(76) Benzidine (T)

12.676min (+ 0.000) -1.00 ng/ml m

response 6349

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	15.10	14.46
92.10	11.90	10.75
0.00	0.00	0.00

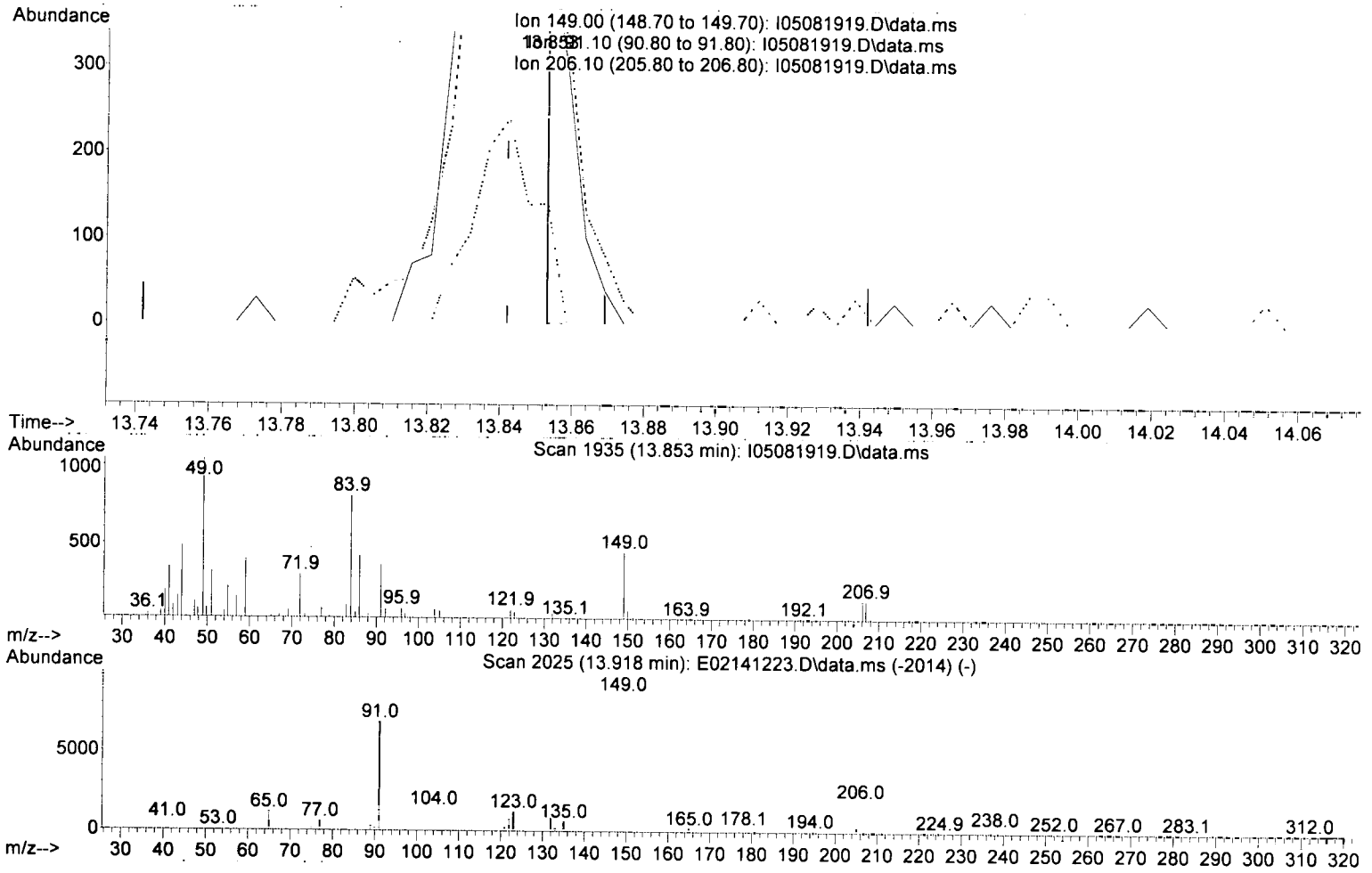


R = 4.75e-002 A*A + 5.33e-001 A - 2.59e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



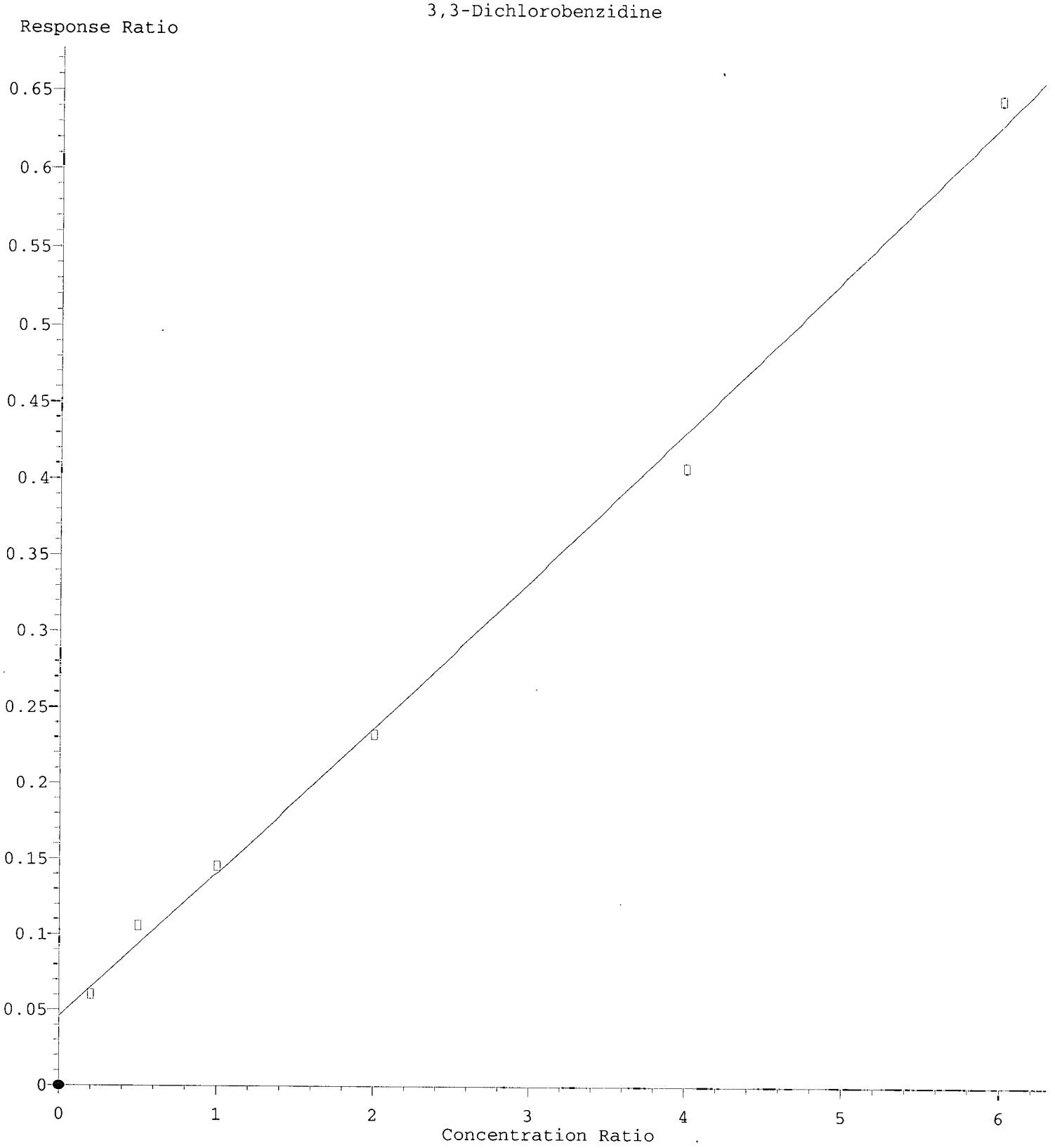
TIC: I05081919.D\data.ms

(80) Butyl benzyl phthalate (T)

13.853min (+ 0.011) 10.86 ng/ml m

response 141

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	76.30	80.79
206.10	18.00	31.13
0.00	0.00	0.00

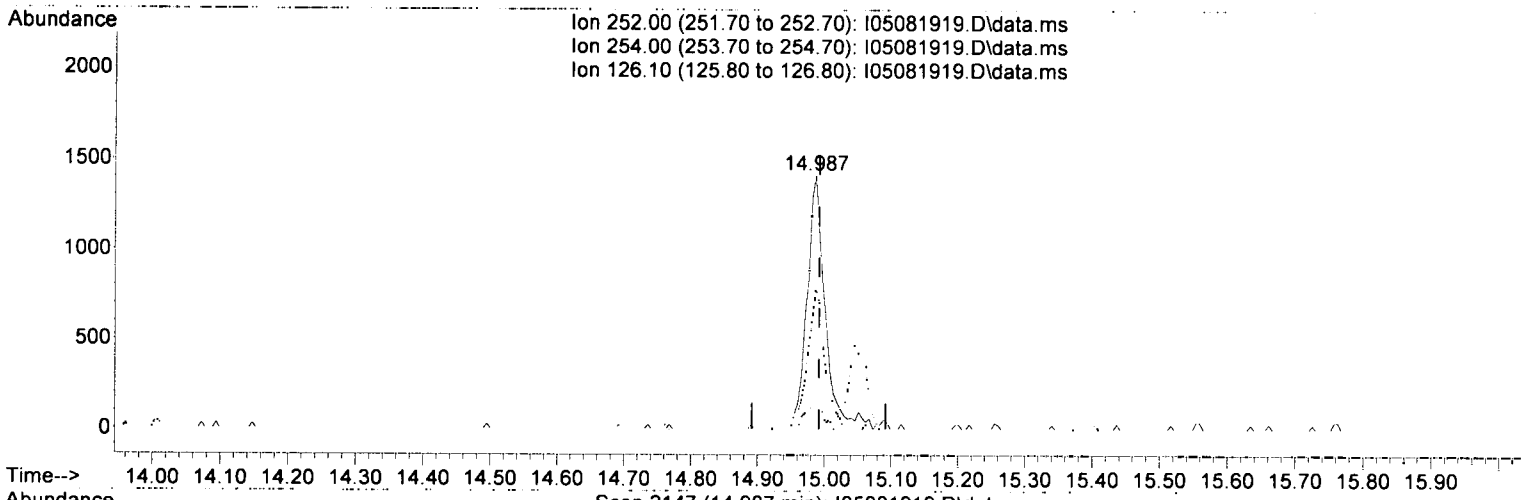


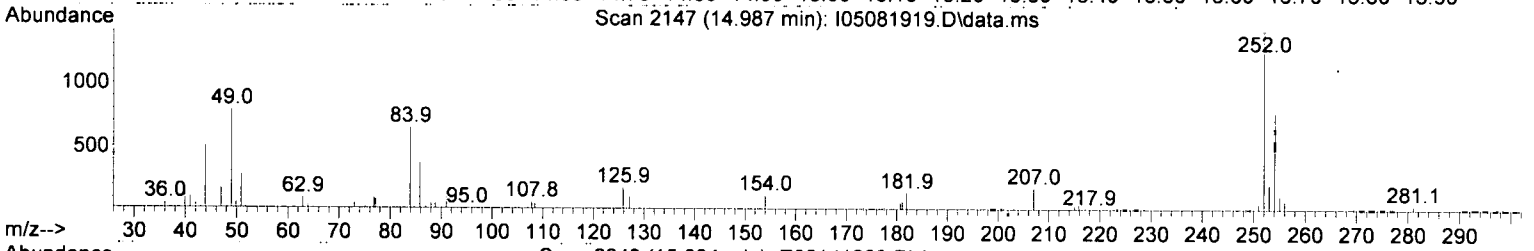
R = 5.56e-004 A*A + 9.39e-002 A + 4.63e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

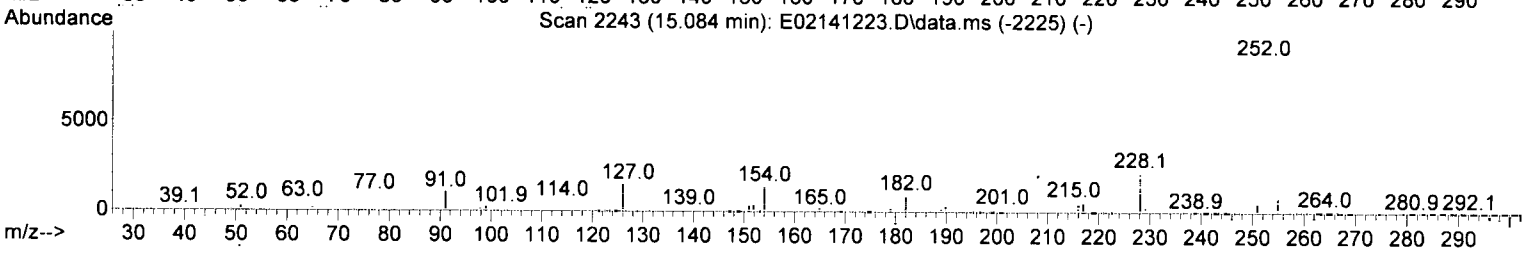
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







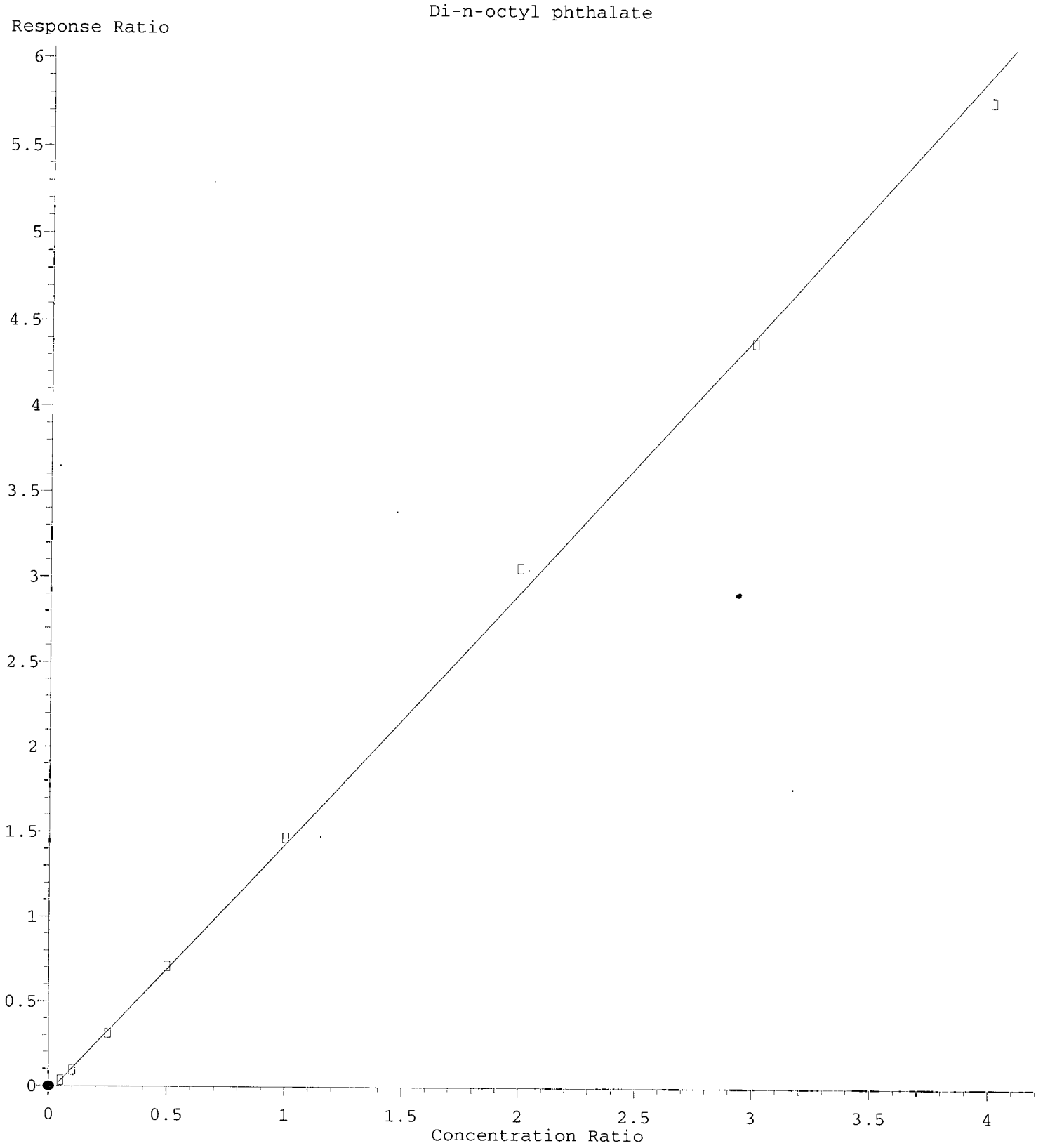
TIC: I05081919.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.987min (-0.005) -1.00 ng/ml m

response 2973

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	55.05
126.10	16.90	13.29
0.00	0.00	0.00

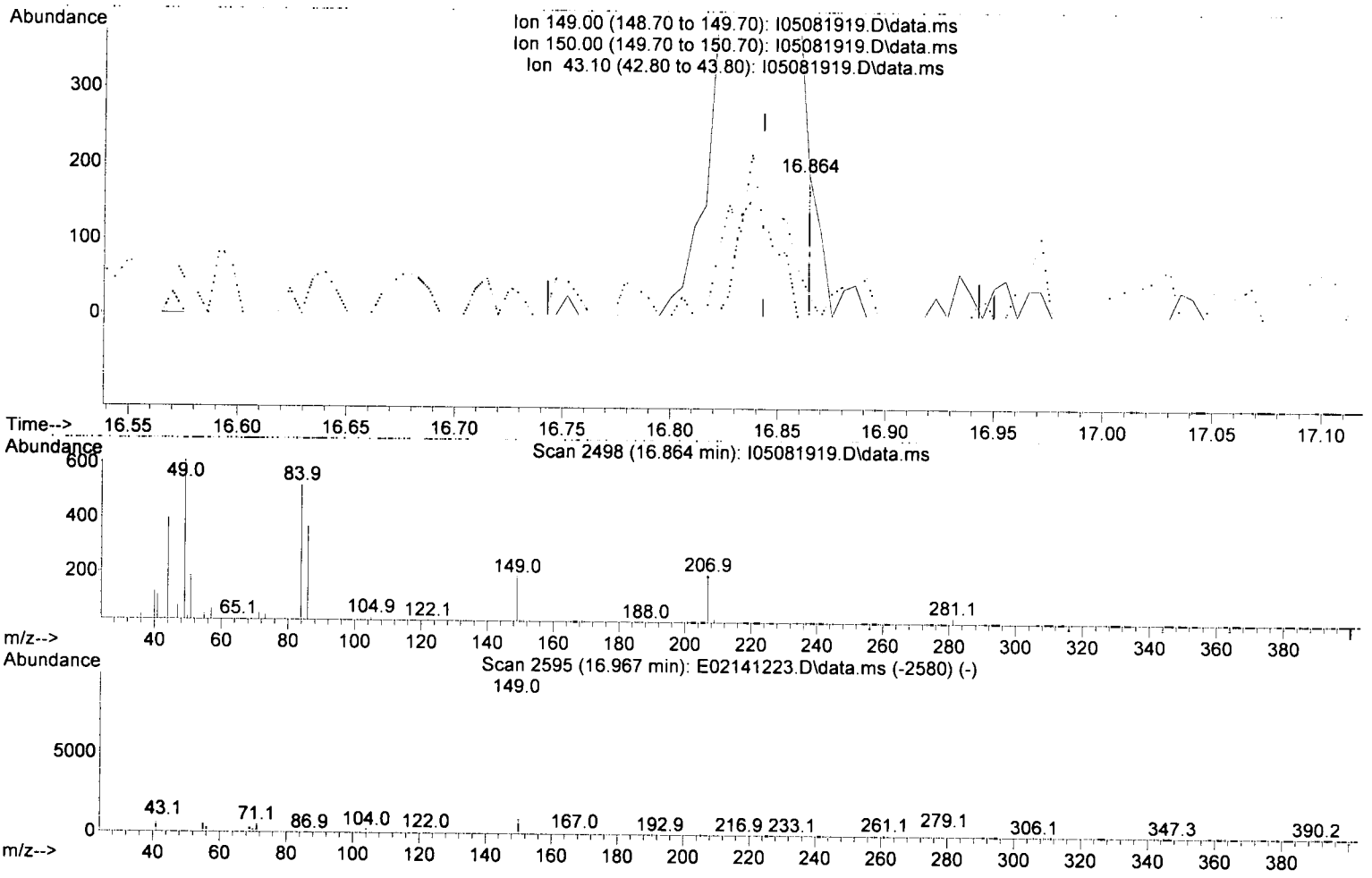


R = 7.21e-003 A*A + 1.46e+000 A - 4.17e-002
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



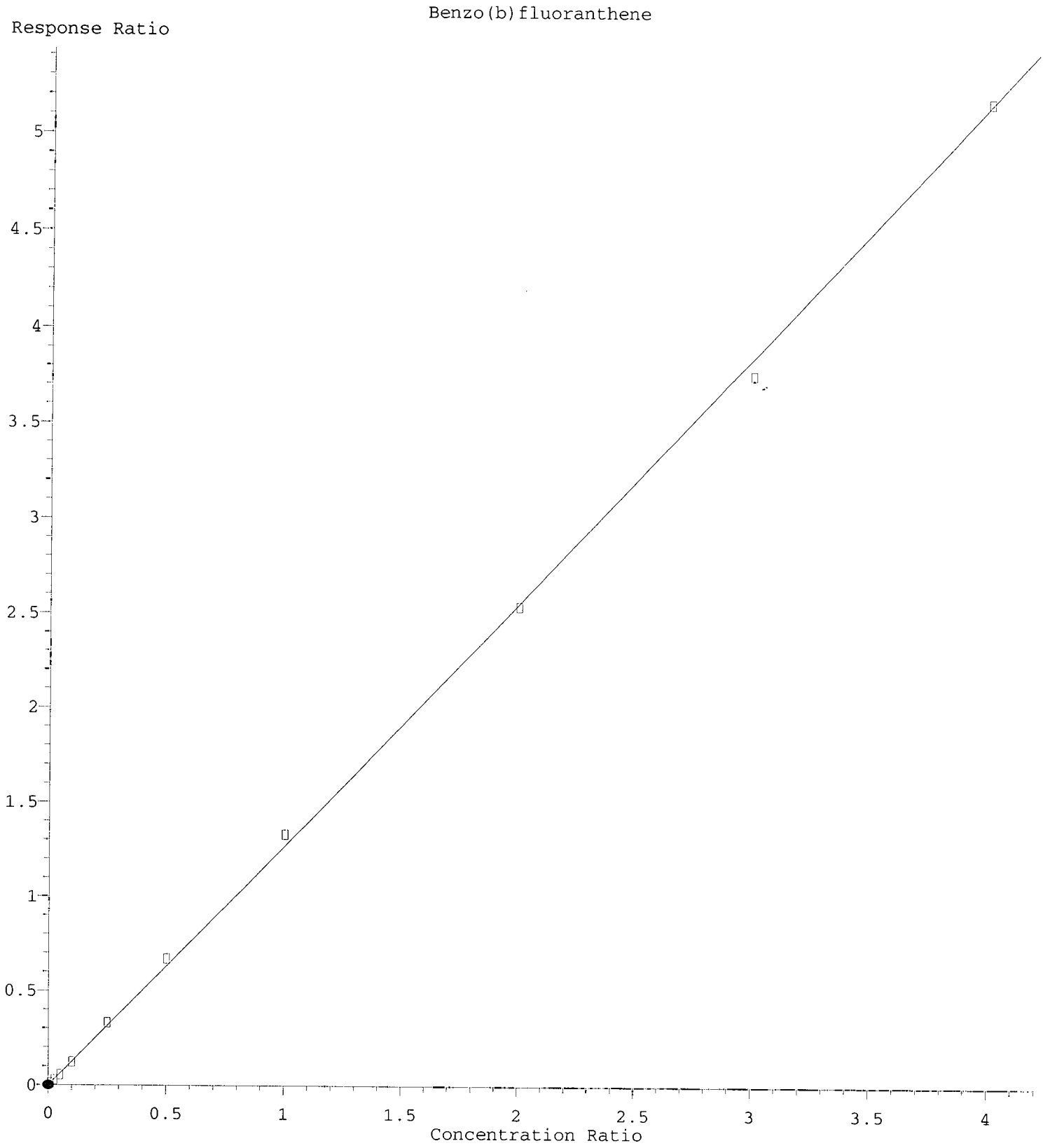
TIC: I05081919.D\data.ms

(87) Di-n-octyl phthalate (T)

16.864min (+ 0.021) 57.38 ng/ml m

response 110

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.60	0.00
43.10	10.40	16.04
0.00	0.00	0.00

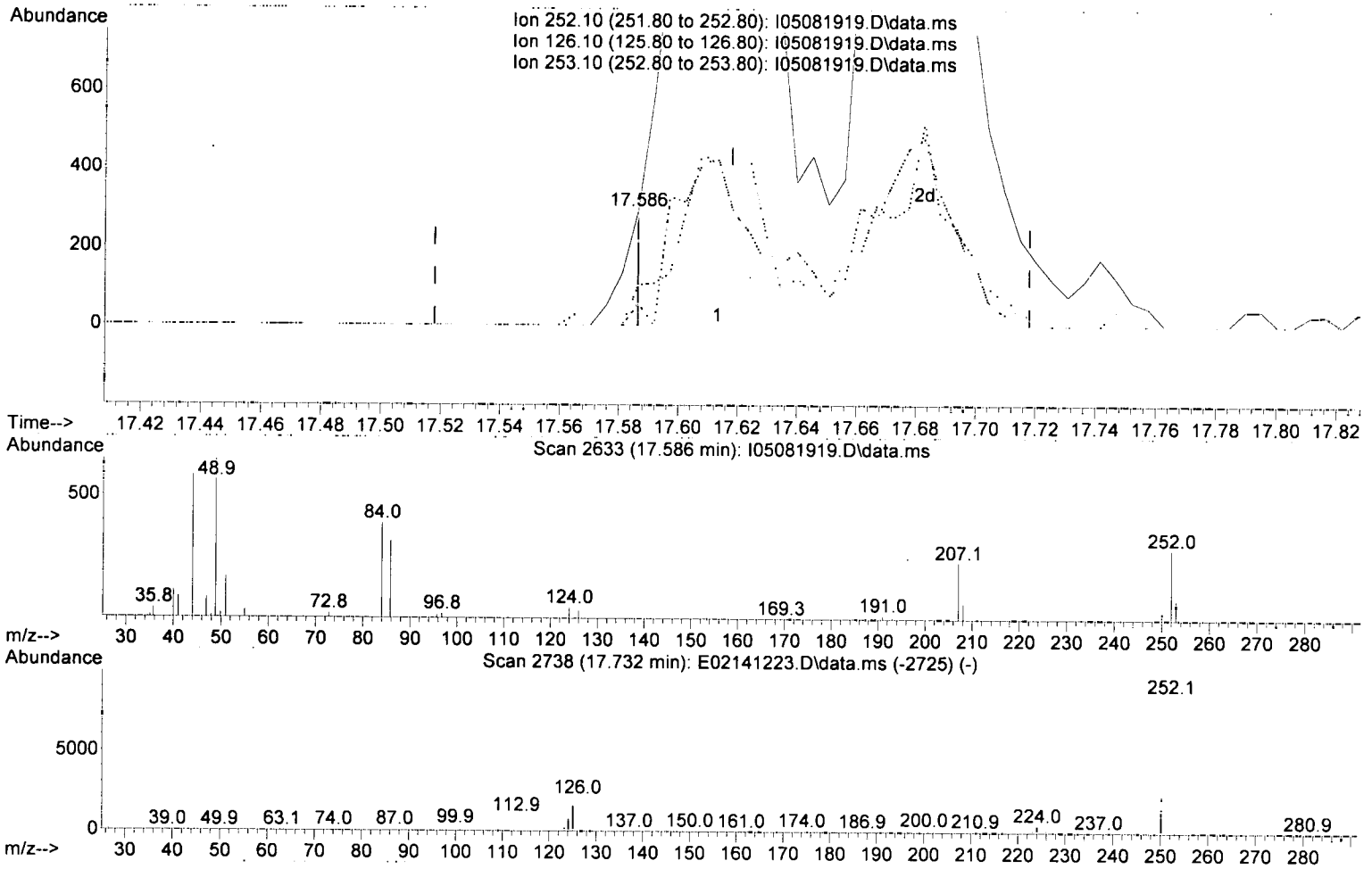


R = 6.58e-003 A*A + 1.26e+000 A - 2.78e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



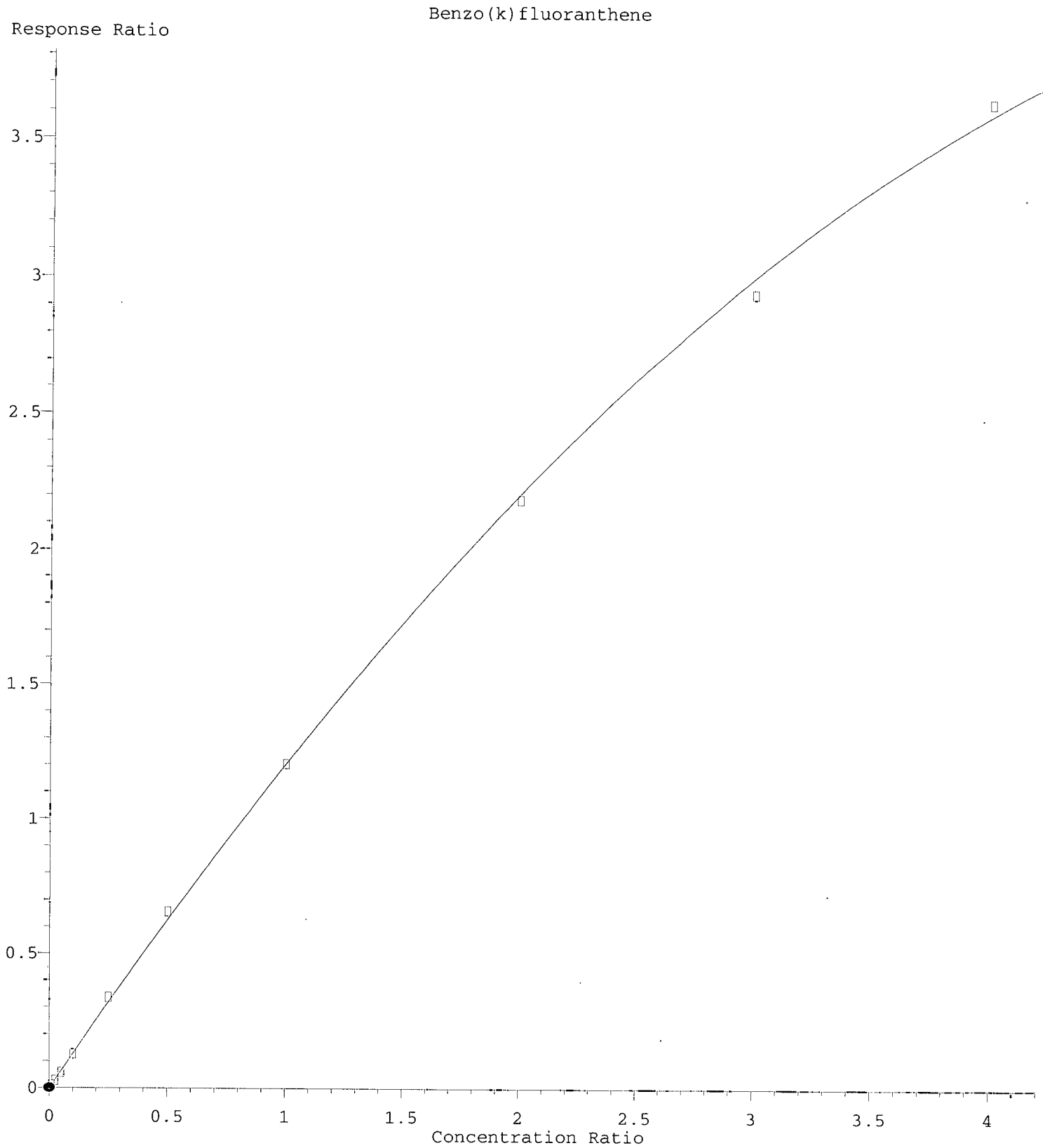
TIC: I05081919.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.586min (-0.032) 4.95 ng/ml m

response 153

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.90	18.71
253.10	22.00	35.03
0.00	0.00	0.00

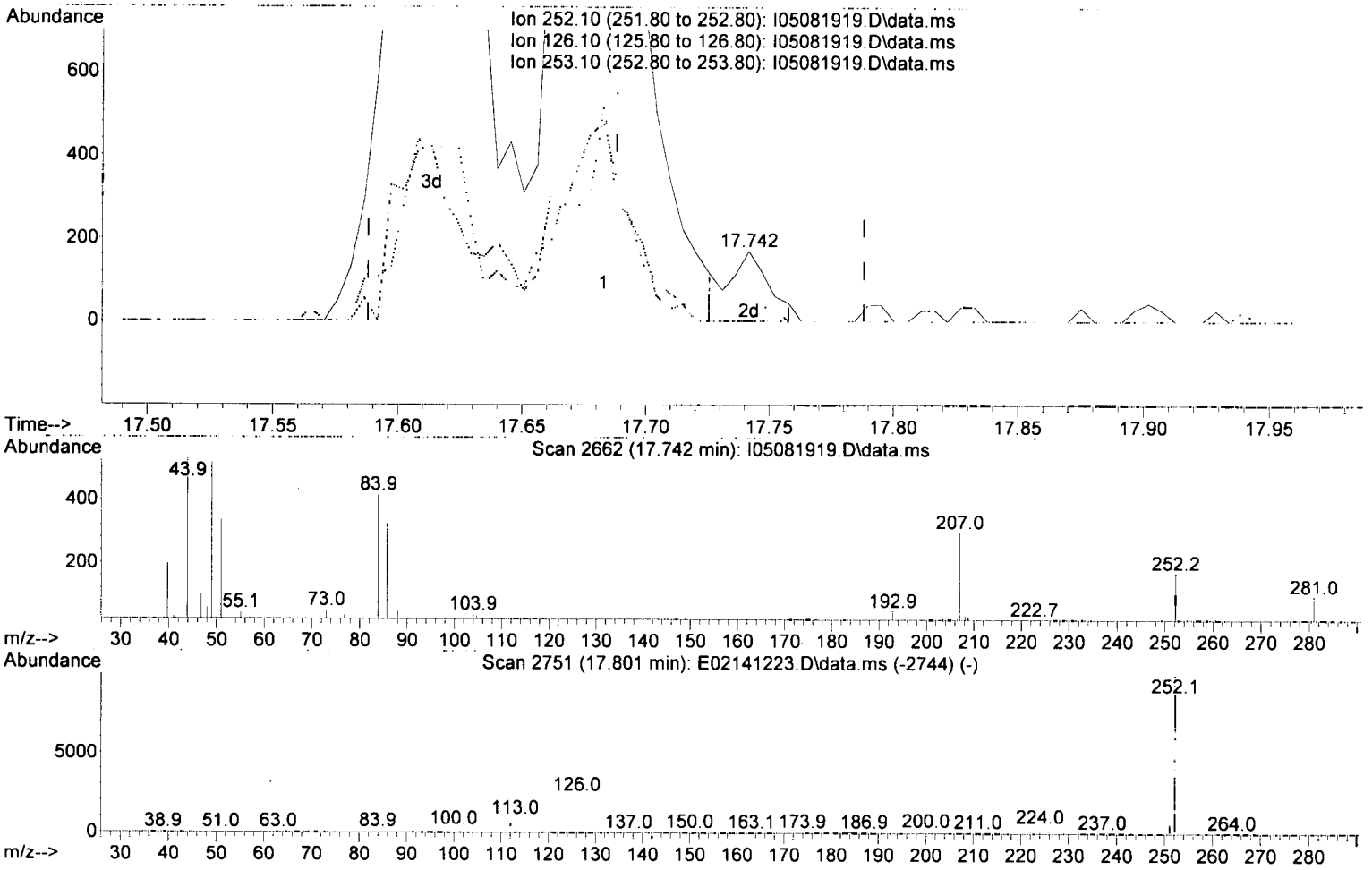


R = -1.03e-001 A*A + 1.31e+000 A - 3.30e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



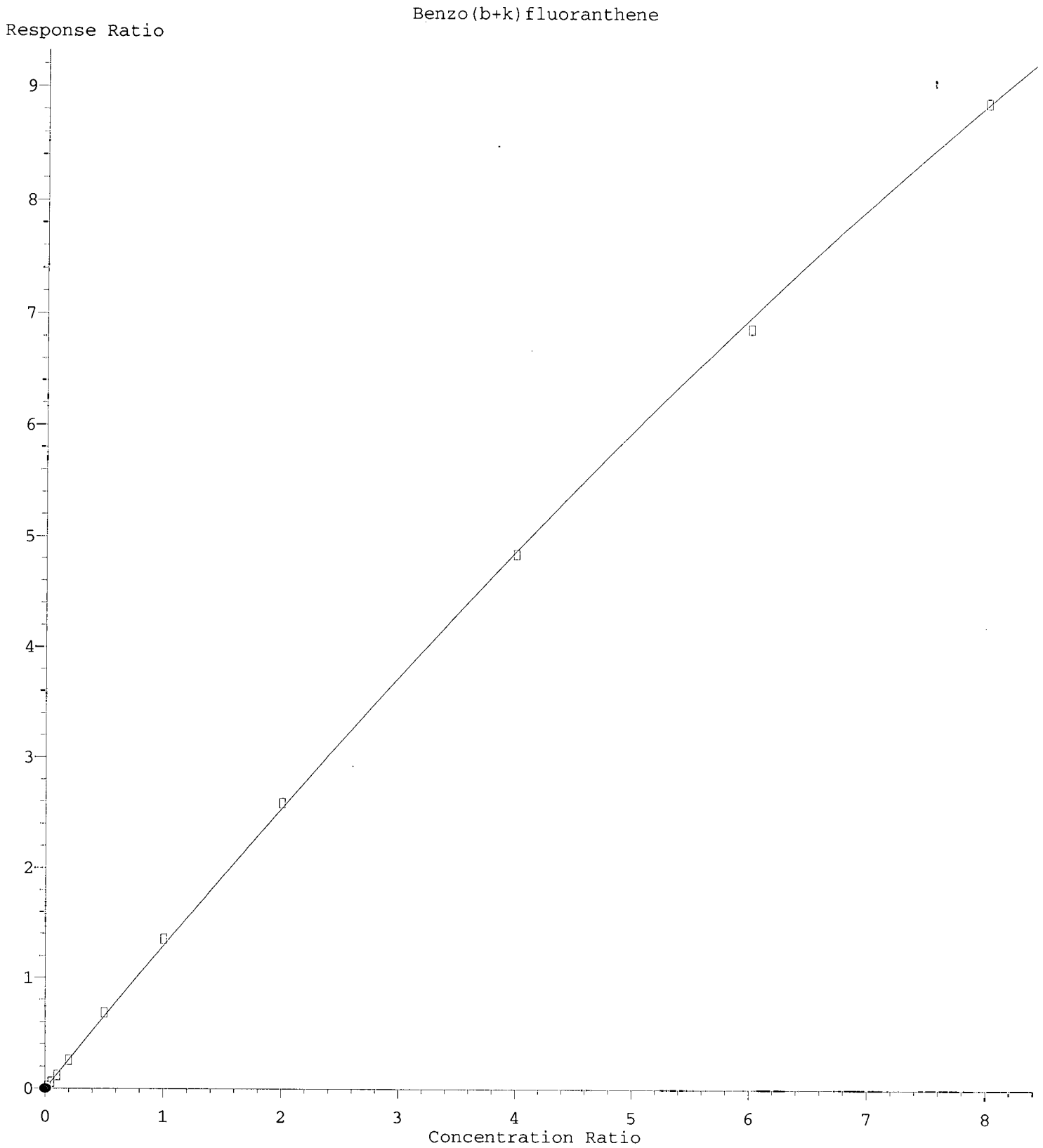
TIC: I05081919.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.742min (+ 0.054) 5.70 ng/ml m

response 187

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	0.00
253.10	21.70	0.00
0.00	0.00	0.00

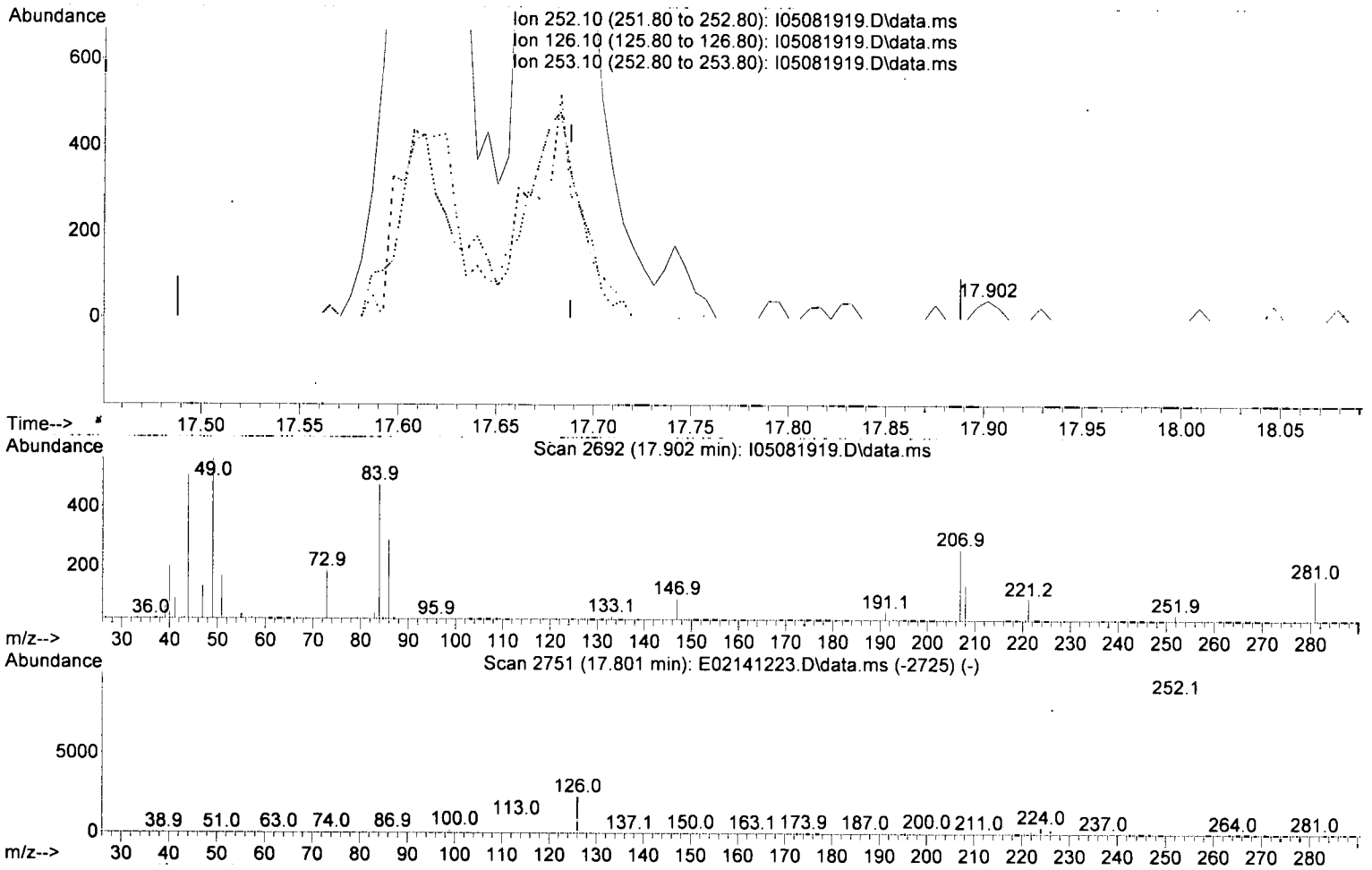


R = -2.76e-002 A*A + 1.33e+000 A - 6.81e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



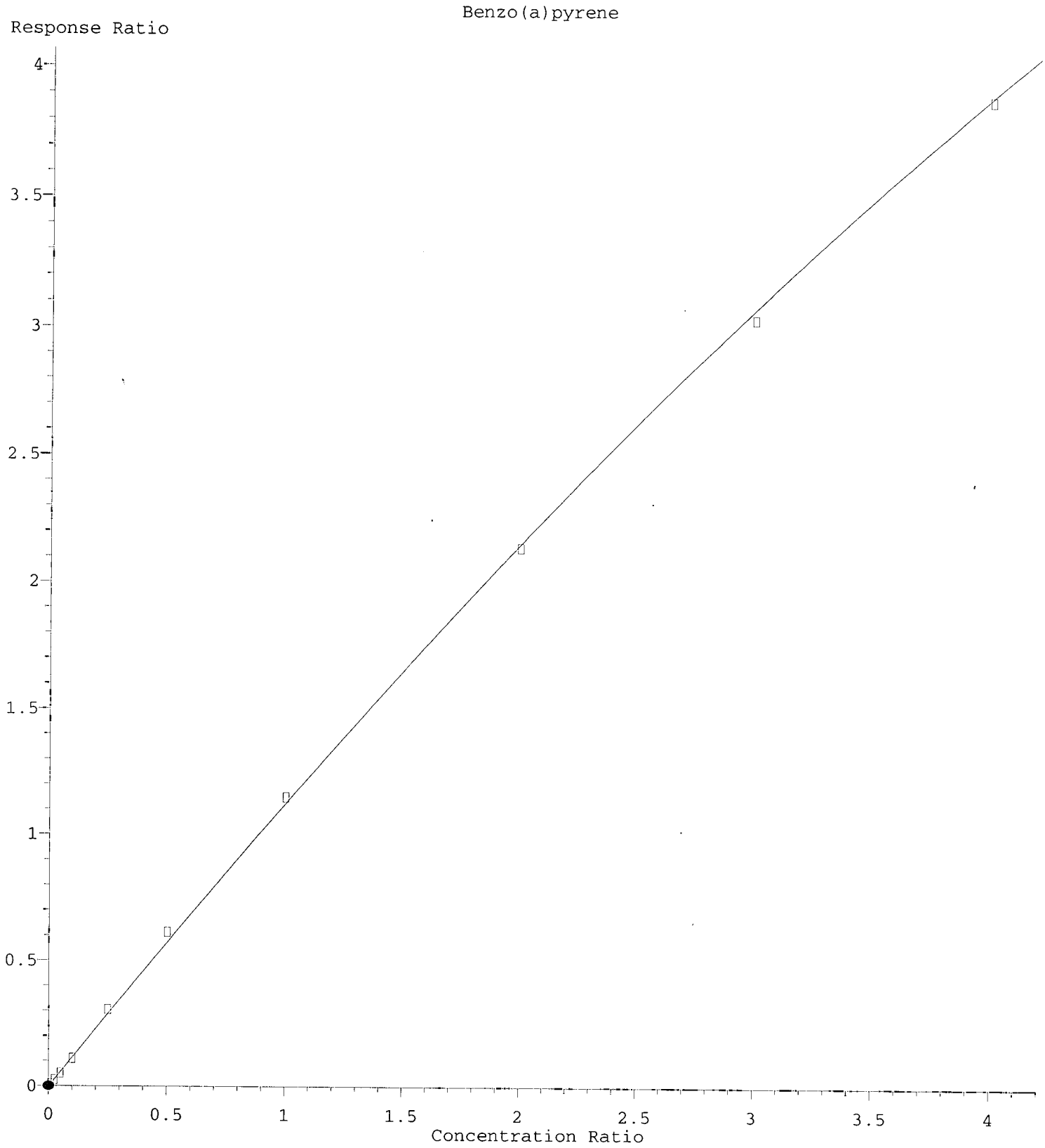
TIC: I05081919.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

17.902min (+ 0.214) 10.63 ng/ml m

response 115

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	0.00
253.10	21.70	0.00
0.00	0.00	0.00

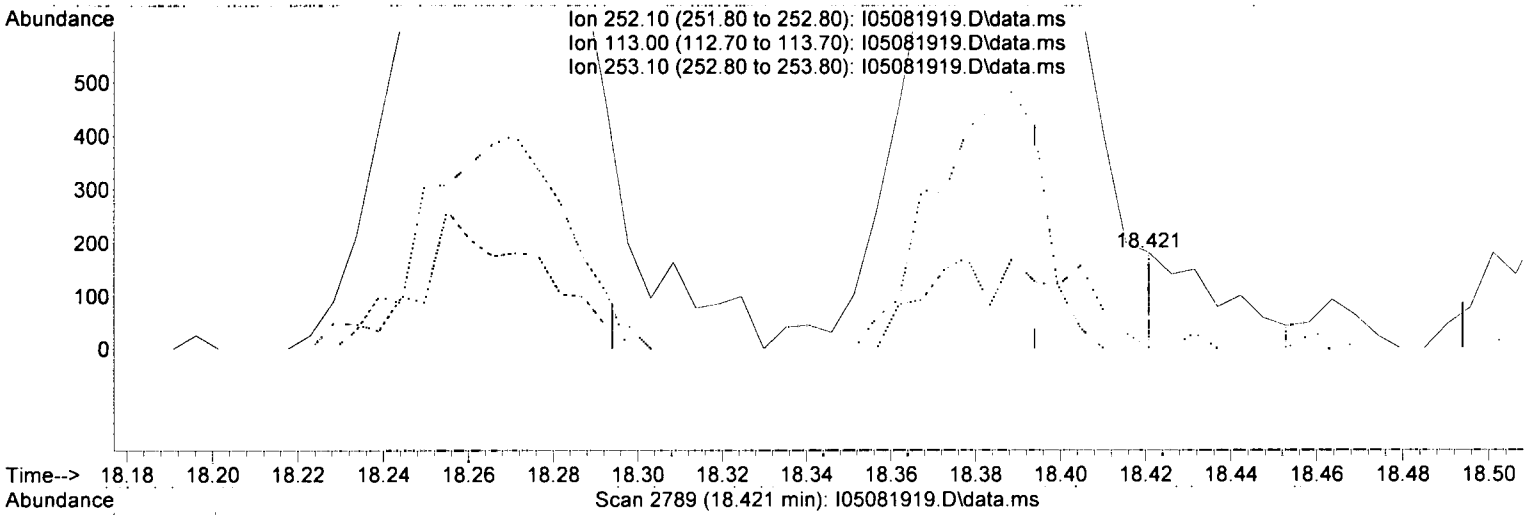


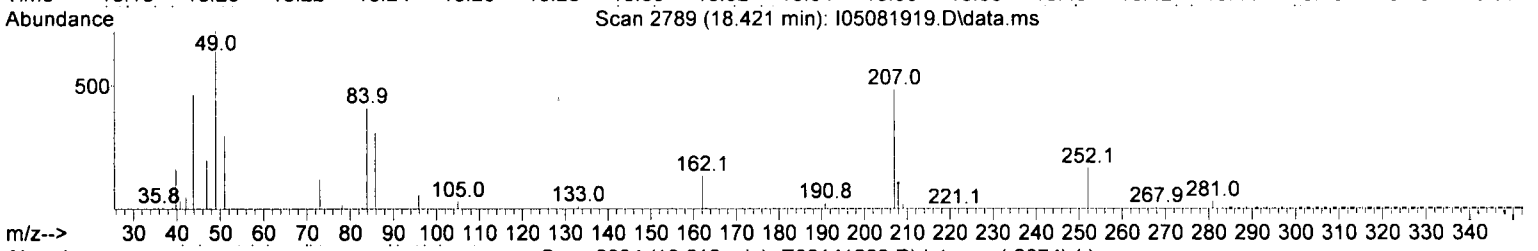
R = -5.14e-002 A*A + 1.18e+000 A - 3.91e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: T:\methods\SV9_050819.M
Calibration Table Last Updated: Thu May 09 13:06:21 2019

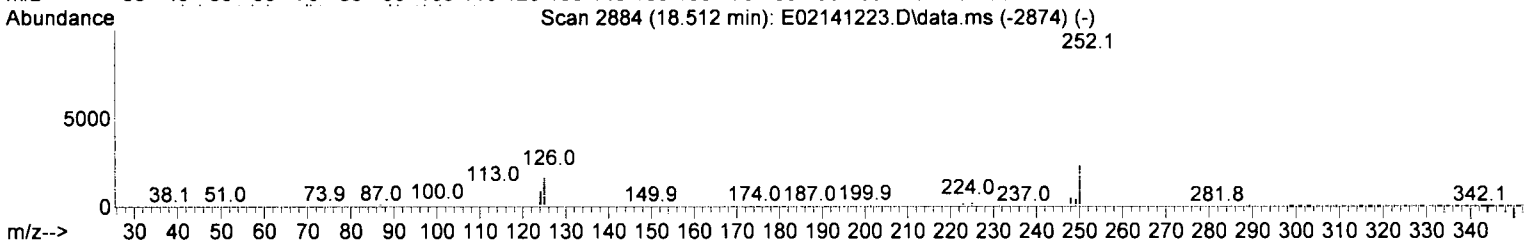
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\REQUANT\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 13:11:43 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081919.D\data.ms

(92) Benzo(a)pyrene (T)

18.421min (+ 0.027) 7.36 ng/ml m

response 183

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	13.40	0.00
253.10	21.60	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9E08056

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9E08056-TUN1	MS Tune	Soil	A19D323	A19D031	5/8/2019 7:08:00PM
9E08056-ICB1	Initial Cal Blank	Soil		A19D031	5/8/2019 7:35:00PM
9E08056-CAL1	Cal Standard	Soil	A19D053	"	5/8/2019 8:12:00PM
9E08056-CAL2	Cal Standard	Soil	A19D054	"	5/8/2019 8:48:00PM
9E08056-CAL3	Cal Standard	Soil	A19D055	"	5/8/2019 9:25:00PM
9E08056-CAL4	Cal Standard	Soil	A19D056	"	5/8/2019 10:01:00PM
9E08056-CAL5	Cal Standard	Soil	A19D057	"	5/8/2019 10:38:00PM
9E08056-CAL6	Cal Standard	Soil	A19D058	"	5/8/2019 11:14:00PM
9E08056-CAL7	Cal Standard	Soil	A19D059	"	5/8/2019 11:50:00PM
9E08056-CAL8	Cal Standard	Soil	A19D060	"	5/9/2019 12:26:00AM
9E08056-CAL9	Cal Standard	Soil	A19D061	"	5/9/2019 1:01:00AM
9E08056-CALA	Cal Standard	Soil	A19D062	"	5/9/2019 1:37:00AM
9E08056-ICV1	Initial Cal Check	Soil	A19C239	"	5/9/2019 2:48:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9E1009** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9E08056** Matrix: **Soil**

9E08056-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-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: 9E08056

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: **A9E1009** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9E08056** Matrix: **Soil**

9E08056-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: 9E08056

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD ID	Analyzed
9E08056-TUN1	MS Tune	Water	A19D323	A19D031	5/8/2019 7:08:00PM
9E08056-ICB1	Initial Cal Blank	Water		A19D031	5/8/2019 7:35:00PM
9E08056-CAL1	Cal Standard	Water	A19D053	"	5/8/2019 8:12:00PM
9E08056-CAL2	Cal Standard	Water	A19D054	"	5/8/2019 8:48:00PM
9E08056-CAL3	Cal Standard	Water	A19D055	"	5/8/2019 9:25:00PM
9E08056-CAL4	Cal Standard	Water	A19D056	"	5/8/2019 10:01:00PM
9E08056-CAL5	Cal Standard	Water	A19D057	"	5/8/2019 10:38:00PM
9E08056-CAL6	Cal Standard	Water	A19D058	"	5/8/2019 11:14:00PM
9E08056-CAL7	Cal Standard	Water	A19D059	"	5/8/2019 11:50:00PM
9E08056-CAL8	Cal Standard	Water	A19D060	"	5/9/2019 12:26:00AM
9E08056-CAL9	Cal Standard	Water	A19D061	"	5/9/2019 1:01:00AM
9E08056-CALA	Cal Standard	Water	A19D062	"	5/9/2019 1:37:00AM
9E08056-ICV1	Initial Cal Check	Water	A19C239	"	5/9/2019 2:48:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9E1009** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9E08056** Matrix: **Water**

9E08056-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9E08056-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: 9E08056

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: **A9E1009** Instrument: **SV-GCMS9**

8270D LL Full List Sequence: **9E08056** Matrix: **Water**

9E08056-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\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:47 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

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	100	0.00
2	T	N-Nitrosodimethylamine	1000.000	979.663	2.0	106	0.00
3	T	Pyridine	1000.000	944.023	5.6	98	0.00
4	S	2-Fluorophenol (Surr)	1000.000	1015.004	-1.5	102	0.00
5	S	Phenol-d6 (Surr)	1000.000	1003.193	-0.3	101	0.00
6	T	Phenol	1000.000	1055.456	-5.5	104	0.00
7	T	Aniline	1000.000	1016.543	-1.7	113	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1038.528	-3.9	101	0.00
9	T	2-Chlorophenol	1000.000	1028.048	-2.8	100	0.00
10	T	1,3-Dichlorobenzene	1000.000	988.801	1.1	98	0.00
11	T	1,4-Dichlorobenzene	1000.000	1008.149	-0.8	98	0.00
12	T	Benzyl alcohol	1000.000	966.033	3.4	94	0.00
13	T	1,2-Dichlorobenzene	1000.000	1021.899	-2.2	100	0.00
14	T	2-Methylphenol	1000.000	1042.888	-4.3	102	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	986.011	1.4	97	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1034.019	-3.4	101	0.00
17	T	3+4-Methylphenol	1000.000	1053.446	-5.3	100	0.00
18	T	Hexachloroethane	1000.000	1002.566	-0.3	100	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	982.981	1.7	100	0.00
20	T	Nitrobenzene	1000.000	997.639	0.2	100	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	102	0.00
22	T	Isophorone	1000.000	1041.611	-4.2	101	0.00
23	T	2-Nitrophenol	1000.000	1112.080	-11.2	106	0.00
24	T	2,4-Dimethylphenol	1000.000	1029.019	-2.9	96	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1029.922	-3.0	101	0.00
26	T	Benzoic acid	2000.000	1883.744	5.8	88	0.00
27	T	2,4-Dichlorophenol	1000.000	1034.808	-3.5	103	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1012.195	-1.2	98	0.00
29	T	Naphthalene	1000.000	1009.997	-1.0	98	0.00
30	T	4-Chloroaniline	1000.000	967.402	3.3	96	0.00
31	T	Hexachlorobutadiene	1000.000	1022.646	-2.3	102	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1007.280	-0.7	100	0.00
33	T	2-Methylnaphthalene	1000.000	1061.904	-6.2	100	0.00
34	T	1-Methylnaphthalene	1000.000	1041.615	-4.2	98	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	101	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1071.823	-7.2	102	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1042.933	-4.3	100	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1087.056	-8.7	102	0.00
39	T	1,1'-Biphenyl	1000.000	1072.168	-7.2	100	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1079.788	-8.0	101	0.00
41	T	2-Chloronaphthalene	1000.000	1075.710	-7.6	101	0.00
42	T	2-Nitroaniline	1000.000	1099.892	-10.0	103	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1064.534	-6.5	99	0.00
44	T	1,4-Dinitrobenzene	1000.000	1073.010	-7.3	105	0.00
45	T	Dimethyl phthalate	1000.000	1061.689	-6.2	101	0.00
46	T	1,3-Dinitrobenzene	1000.000	1096.253	-9.6	102	0.00
47	T	2,6-Dinitrotoluene	1000.000	1126.253	-12.6	102	0.00
48	T	1,2-Dinitrobenzene	1000.000	1070.352	-7.0	99	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:47 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 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	1088.765	-8.9	101	0.00
50	T	3-Nitroaniline	1000.000	1148.365	-14.8	105	0.00
51	T	Acenaphthene	1000.000	1038.577	-3.9	100	0.00
52	T	2,4-Dinitrophenol	1000.000	946.801	5.3	93	0.00
53	T	4-Nitrophenol	1000.000	1034.680	-3.5	99	0.00
54	T	2,4-Dinitrotoluene	1000.000	1028.340	-2.8	100	0.00
55	T	Dibenzofuran	1000.000	1074.202	-7.4	101	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1036.218	-3.6	99	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1057.546	-5.8	99	0.00
58	T	Diethyl phthalate	1000.000	1008.933	-0.9	100	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	979.815	2.0	100	0.00
60	T	Fluorene	1000.000	980.699	1.9	100	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1021.183	-2.1	100	0.00
62	T	4-Nitroaniline	1000.000	1148.137	-14.8	107	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1164.436	-16.4	114	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	102	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1041.336	-4.1	100	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1062.752	-6.3	101	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1085.756	-8.6	98	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1067.925	-6.8	102	0.00
69	T	Hexachlorobenzene	1000.000	1008.788	-0.9	101	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1037.903	-3.8	103	0.00
71	T	Phenanthrene	1000.000	1007.111	-0.7	100	0.00
72	T	Anthracene	1000.000	1026.924	-2.7	101	0.00
73	T	Carbazole	1000.000	1083.500	-8.3	100	0.00
74	T	Di-n-butyl phthalate	1000.000	1076.331	-7.6	100	0.00
75	T	Fluoranthene	1000.000	1068.458	-6.8	100	0.00
76	T	Benzidine	2000.000	1732.757	13.4	83	0.00
77	T	Pyrene	1000.000	1041.218	-4.1	100	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	101	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1043.187	-4.3	101	0.00
80	T	Butyl benzyl phthalate	1000.000	1062.300	-6.2	99	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	995.630	0.4	99	0.00
82	T	3,3-Dichlorobenzidine	2000.000	2074.489	-3.7	100	0.00
83	T	Benz(a)anthracene	1000.000	1044.678	-4.5	102	0.00
84	T	Chrysene	1000.000	1000.048	-0.0	100	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1060.069	-6.0	101	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	102	0.00
87	T	Di-n-octyl phthalate	1000.000	1012.789	-1.3	101	0.00
88	T	Benzo(b)fluoranthene	1000.000	1035.108	-3.5	100	0.00
89	T	Benzo(k)fluoranthene	1000.000	1008.985	-0.9	98	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2026.947	-1.3	99	0.00
91	T	Benzo(e)pyrene	1000.000	1058.505	-5.9	100	0.00
92	T	Benzo(a)pyrene	1000.000	1026.248	-2.6	98	0.00
93	T	Perylene	1000.000	1159.571	-16.0	111	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	100	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:47 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 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	987.220	1.3	99	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1027.936	-2.8	99	0.00
97 T	Benzo(g,h,i)perylene	1000.000	1055.892	-5.6	100	0.00

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 09 10:13:18 2019
Quant Method : T:\methods\DFTPP-625.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu May 09 10:12:54 2019
Response via : Initial Calibration
InstName : SV-GCMS9

9/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.942	136	177402	2.00	ug/mL	0.00
2) Acenaphthene-d10	9.713	162	79924	2.00	ug/mL	0.00
4) Phenanthrene-d10	11.221	188	119012	2.00	ug/mL	0.00
10) Chrysene-d12	14.944	240	104422	2.00	ug/mL	0.00
11) Perylene-d12	16.933	264	91182	2.00	ug/mL	0.00
Target Compounds						Qvalue
3) Pentachlorophenol	11.039	266	258730	28.85	ug/mL	98
5) DFTPP	11.504	442	233124	23.30	ug/mL#	68
6) Benzidine	12.687	184	1059560	29.57	ug/mL	96
7) 4,4-DDE	12.949	TIC	14865	No Calib	#	
8) 4,4-DDD	13.467	TIC	27182	5.51	ug/mL#	100
9) 4,4-DDT	14.045	TIC	3476962	34.67	ug/mL#	1

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

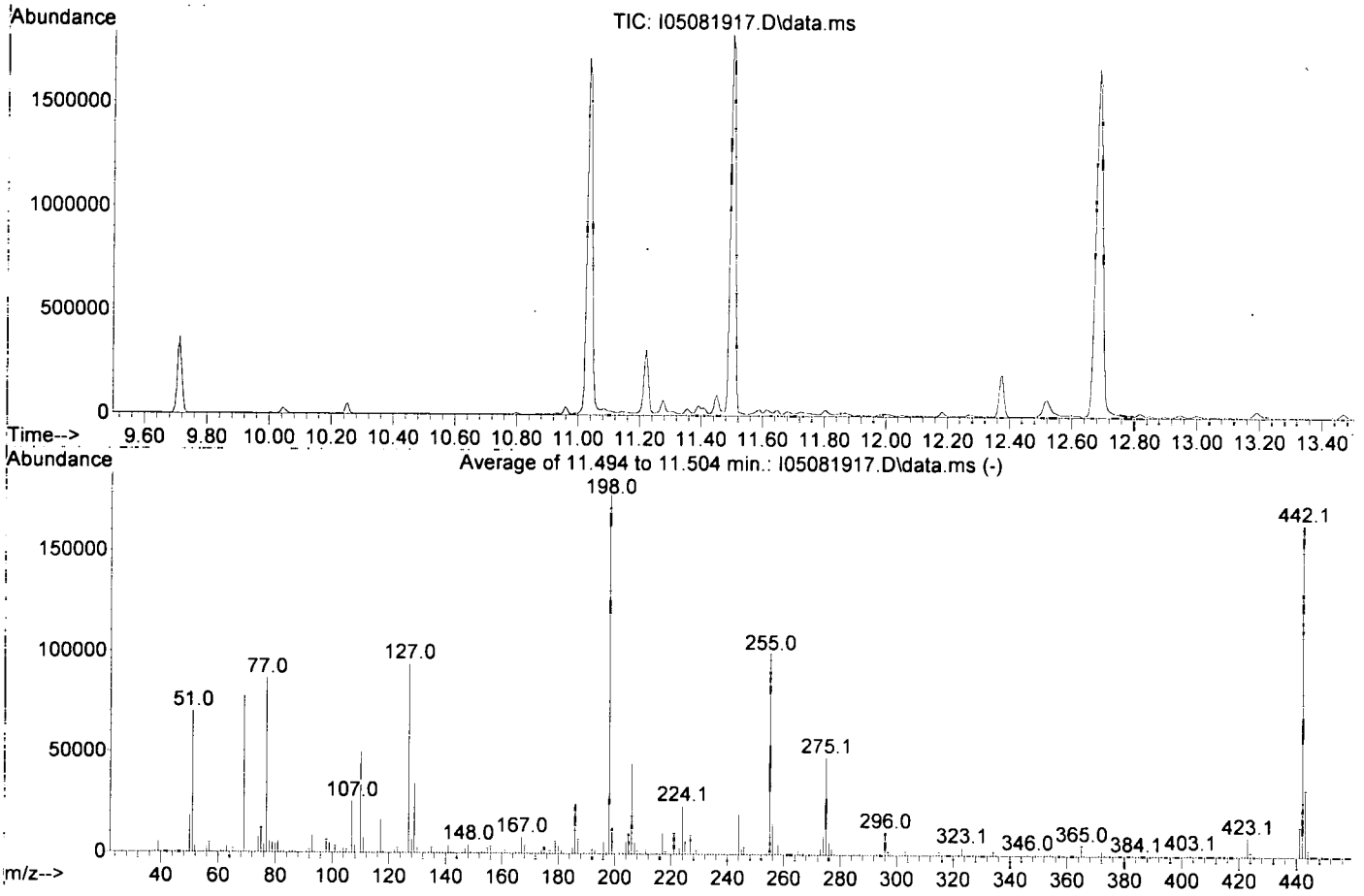
DFTPP

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

JK 5/9/19

Method : T:\methods\DFTPP-625.M
Title : DFTPP Tune Methodug/mL
Last Update : Thu May 09 10:12:54 2019



AutoFind: Scans 1497, 1498, 1499; Background Corrected with Scan 1491

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.1	70134	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.5	78009	PASS
70	69	0.00	2	0.5	368	PASS
127	198	40	60	52.5	94209	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	179499	PASS
199	198	5	9	7.1	12762	PASS
275	198	10	30	27.0	48432	PASS
365	198	1	100	2.9	5249	PASS
441	443	0.01	100	43.2	14368	PASS
442	198	40	100	91.7	164629	PASS
443	442	17	23	20.2	33256	PASS

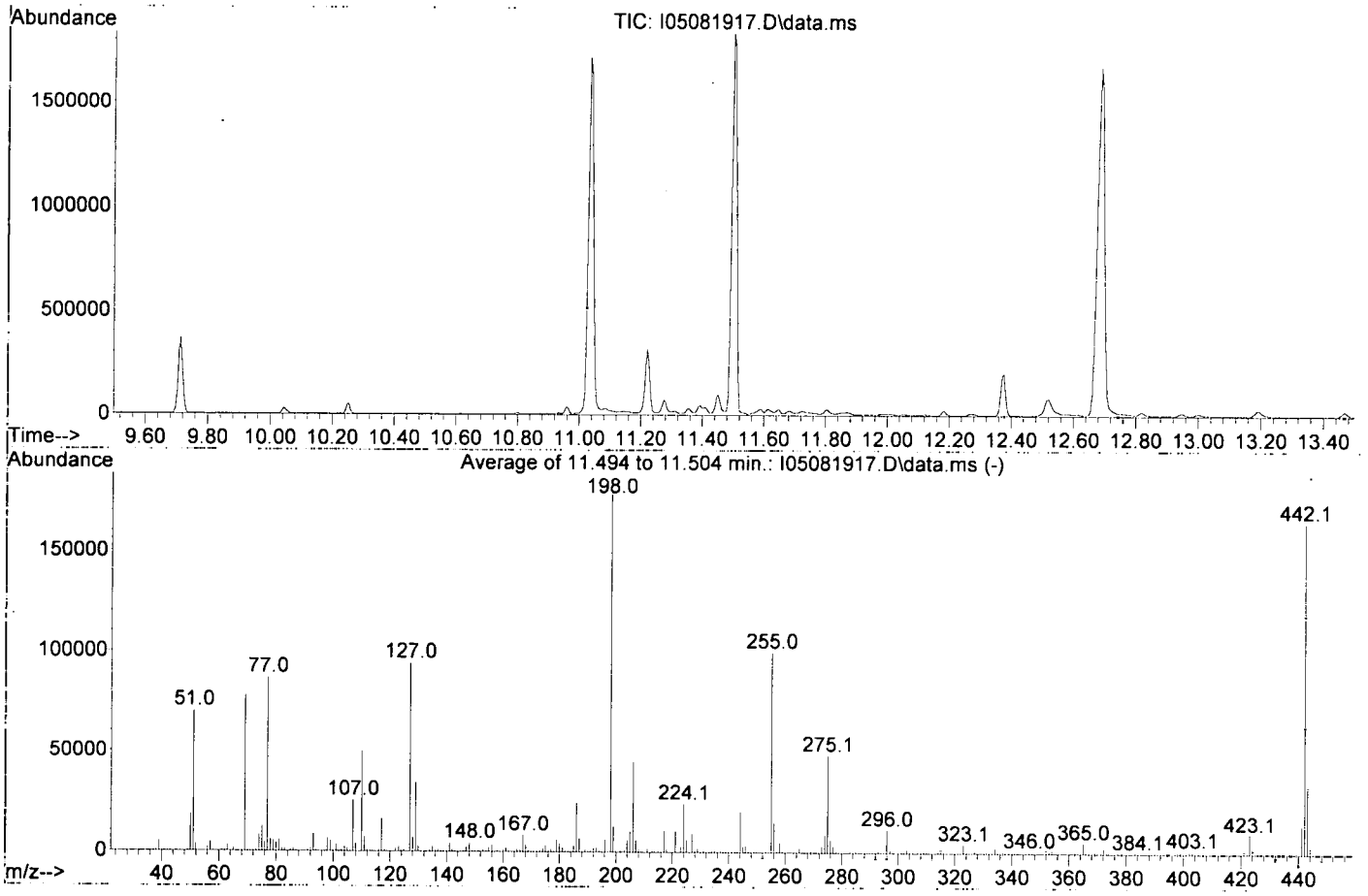
DFTPP

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP-8270.M
Title : DFTPP Tune Methodug/mL
Last Update : Wed May 08 19:51:32 2019

JK 5/10/19



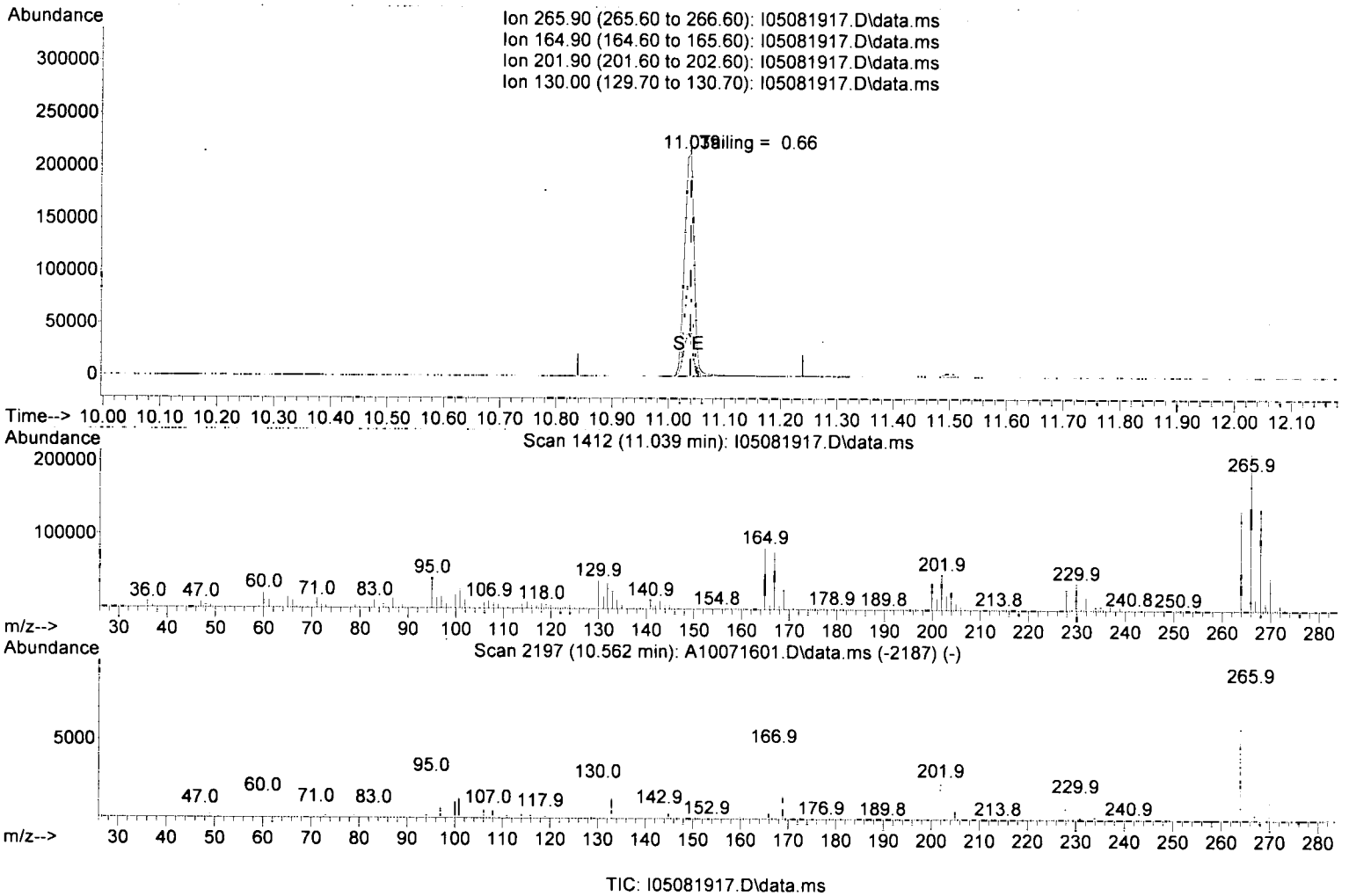
AutoFind: Scans 1497, 1498, 1499; Background Corrected with Scan 1491

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	39.1	70134	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.5	78009	PASS
70	69	0.00	2	0.5	368	PASS
127	198	10	80	52.5	94209	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	179499	PASS
199	198	5	9	7.1	12762	PASS
275	198	10	60	27.0	48432	PASS
365	198	1	100	2.9	5249	PASS
441	442	0.01	24	8.7	14368	PASS
442	198	50	200	91.7	164629	PASS
443	442	15	24	20.2	33256	PASS

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 09 10:13:18 2019
Quant Method : T:\methods\DFTPP-625.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu May 09 10:12:54 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I05081917.D\data.ms

(3) Pentachlorophenol

11.039min (0.000) 28.85 ug/mL

response 258730

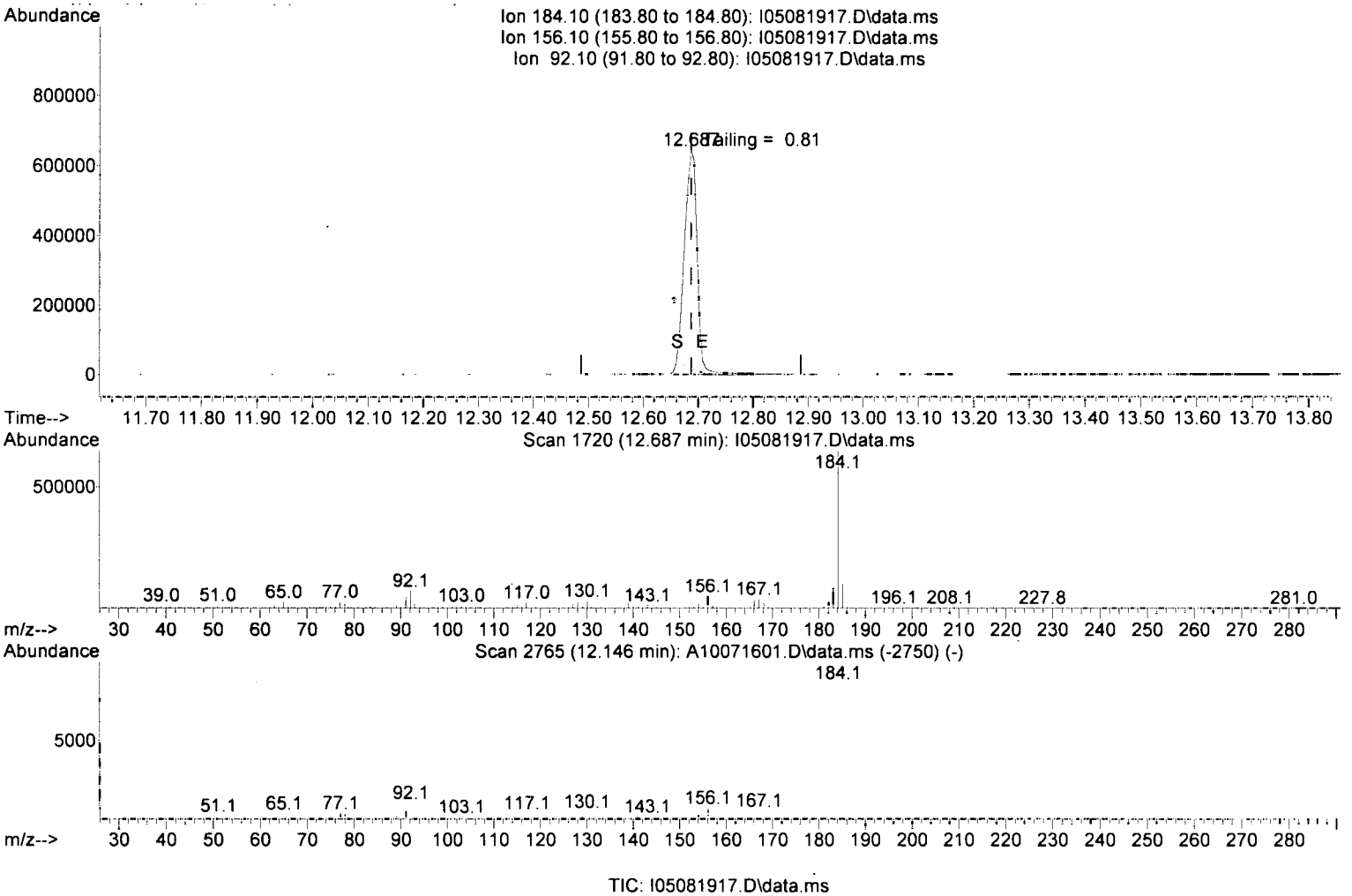
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	40.70	38.94
201.90	21.80	22.28
130.00	18.60	17.95

JK 5/9/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 09 10:13:18 2019
Quant Method : T:\methods\DFTPP-625.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu May 09 10:12:54 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I05081917.D\data.ms

(6) Benzidine

12.687min (0.000) 29.57 ug/mL

response 1059560

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	7.00	7.51
92.10	8.90	10.92
0.00	0.00	0.00

5/9/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9E08056-TUN1
SV-GCMS9

First Column Area Counts		Percent Breakdown	
DDE	14865		
DDD	27182		
DDT	1347696[illegible]	1.19	PASS

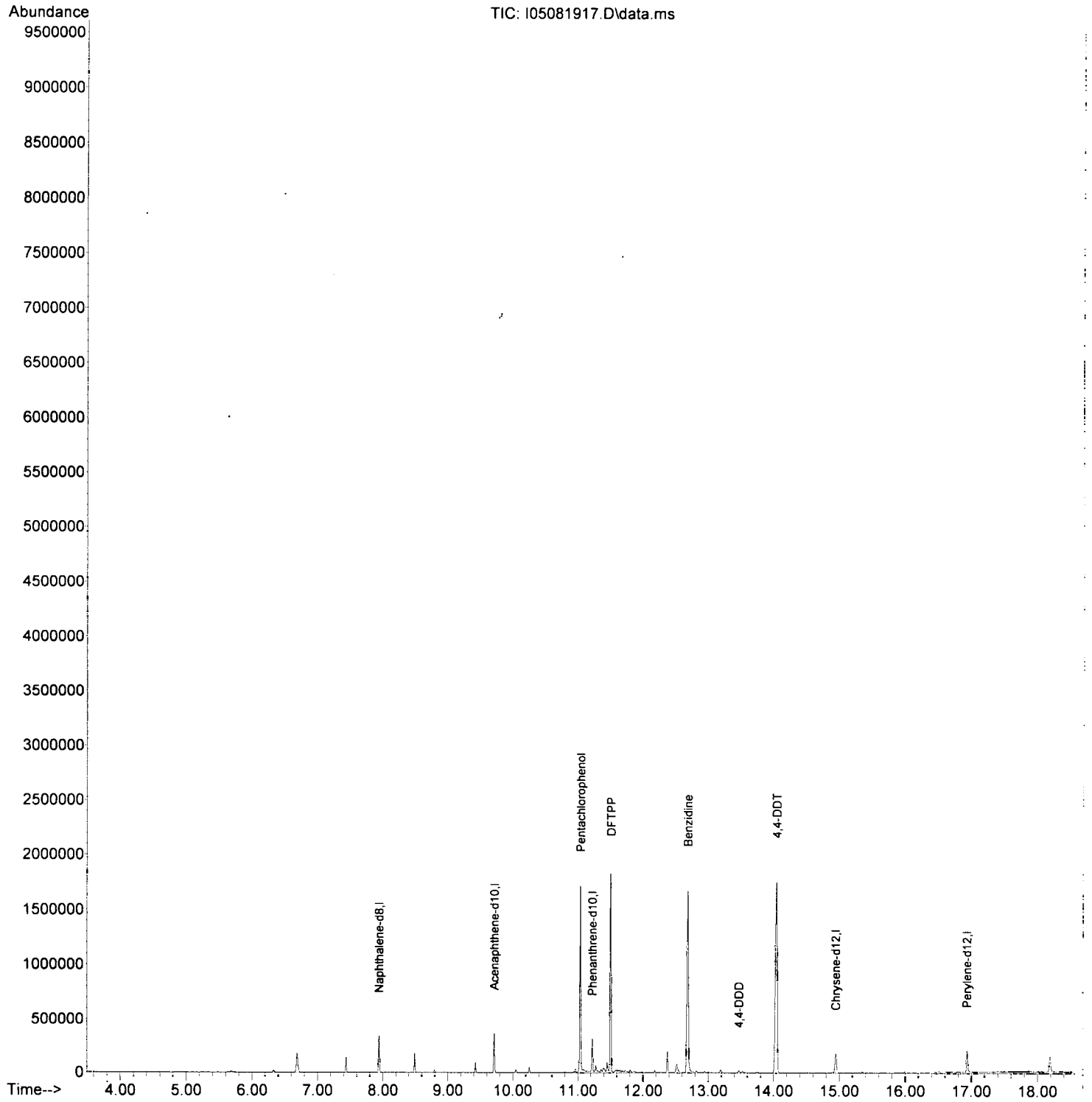
Breakdown must be less than 20% to accept sample data.

5/9/19

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081917.D
Acq On : 8 May 2019 7:08 pm
Operator : JK /AMS /DTH
Sample : 9E08056-TUN1
Misc : 1x, A19D323 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: May 09 10:13:18 2019
Quant Method : T:\methods\DFTPP-625.M
Quant Title : DFTPP Tune Methodug/mL
QLast Update : Thu May 09 10:12:54 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:07 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	127428	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	522440	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	251914	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	480361	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	512978	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.539	264	472385	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	430097	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.477	112	80	0.94	ng/ml	0.01
5) Phenol-d6 (Surr)	6.360	99	63	0.56	ng/ml	0.02
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	4.188	74	449	6.67	ng/ml#	1
3) Pyridine	4.279	79	159	N.D.		
6) Phenol	6.360	94	69	N.D.		
7) Aniline	6.387	93	176	N.D.		
8) Bis(2-chloroethyl) ether	6.435	93	248	N.D.		
9) 2-Chlorophenol	6.499	128	75	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	52	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	7.210	77	113	N.D.		
22) Isophorone	7.478	82	59	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	7.964	128	78	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\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:07 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

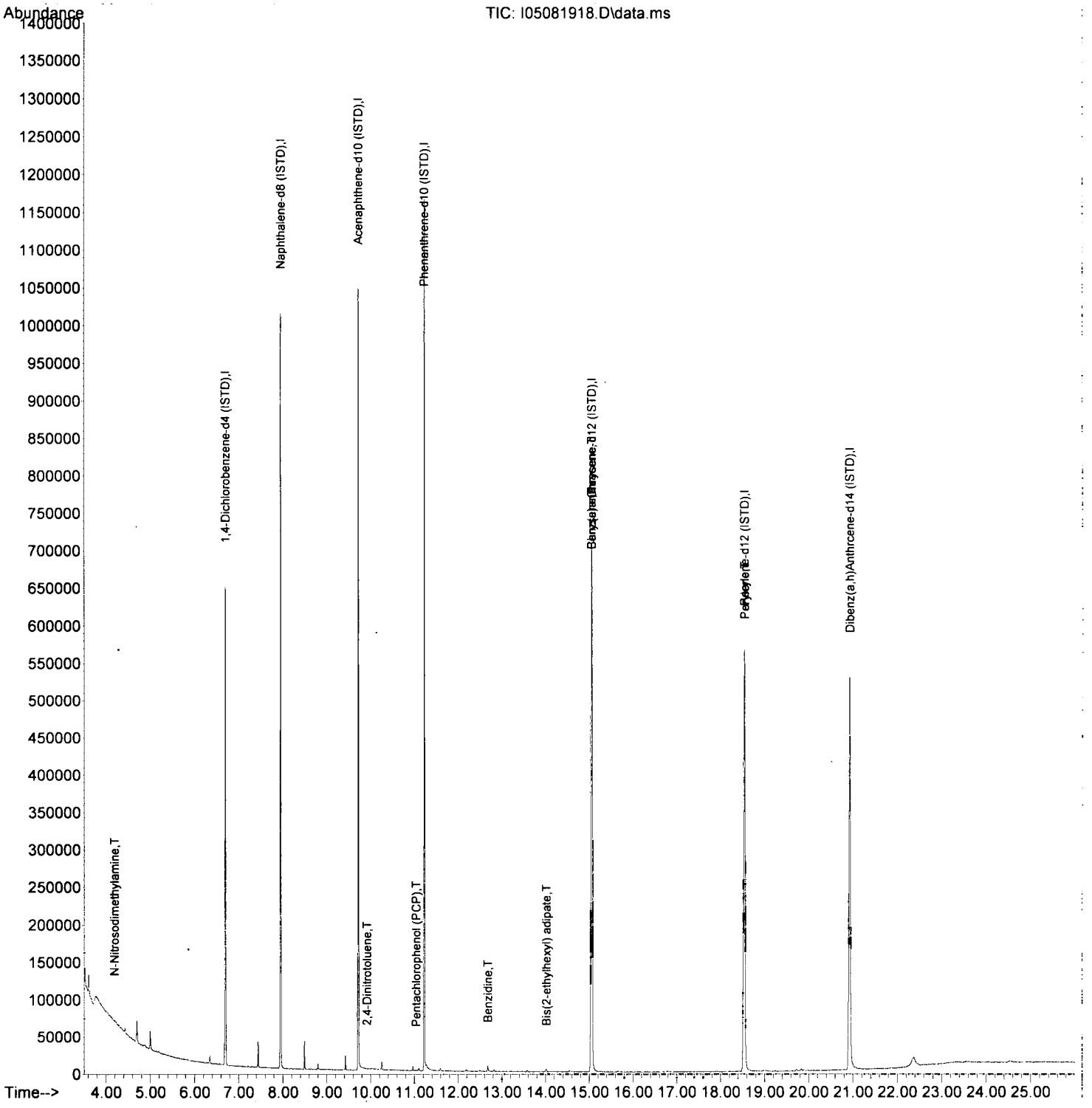
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	0.000		0	N.D.		
50) 3-Nitroaniline	0.000		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	9.911	165	97	33.10	ng/ml#	17
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	10.131	149	55	N.D.		
59) 2,3,5-Trimethylnaphtha...	10.238	170	50	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)	11.035	266	254	90.33	ng/ml	86
71) Phenanthrene	11.222	178	214	N.D.		
72) Anthracene	11.222	178	214	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	12.677	184	5254	103.92	ng/ml	99
77) Pyrene	0.000		0	N.D.		
80) Butyl benzyl phthalate	0.000		0	N.D.		
81) Bis(2-ethylhexyl) adipate	14.014	129	1009	7.10	ng/ml	94
82) 3,3-Dichlorobenzidine	14.992	252	376	Below	Cal	91
83) Benz(a)anthracene	15.046	228	1291	4.40	ng/ml	68
84) Chrysene	15.046	228	1279	4.68	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	18.544	252	1717	7.10	ng/ml	74
95) Indeno(1,2,3-cd)pyrene	20.929	276	304	N.D.		
96) Dibenz(a,h)anthracene	20.924	278	137	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\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:07 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Final Reqmant

Quant Time: May 09 17:11:39 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	127428	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	522440	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	251914	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	480361	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	512978	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.539	264	472385	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	430097	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.477	112	80	0.96	ng/ml	0.01
5) Phenol-d6 (Surr)	6.360	99	63	0.58	ng/ml	0.02
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	4.188	74	449	7.05	ng/ml#	1
3) Pyridine	4.279	79	159	N.D.		
6) Phenol	6.360	94	69	N.D.		
7) Aniline	6.387	93	176	N.D.		
8) Bis(2-chloroethyl) ether	6.435	93	248	2.56	ng/ml	93
9) 2-Chlorophenol	6.499	128	75	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	0.000		0	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	0.000		0	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	52	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	7.210	77	113	N.D.		
22) Isophorone	7.478	82	59	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	7.964	128	78	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\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:39 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

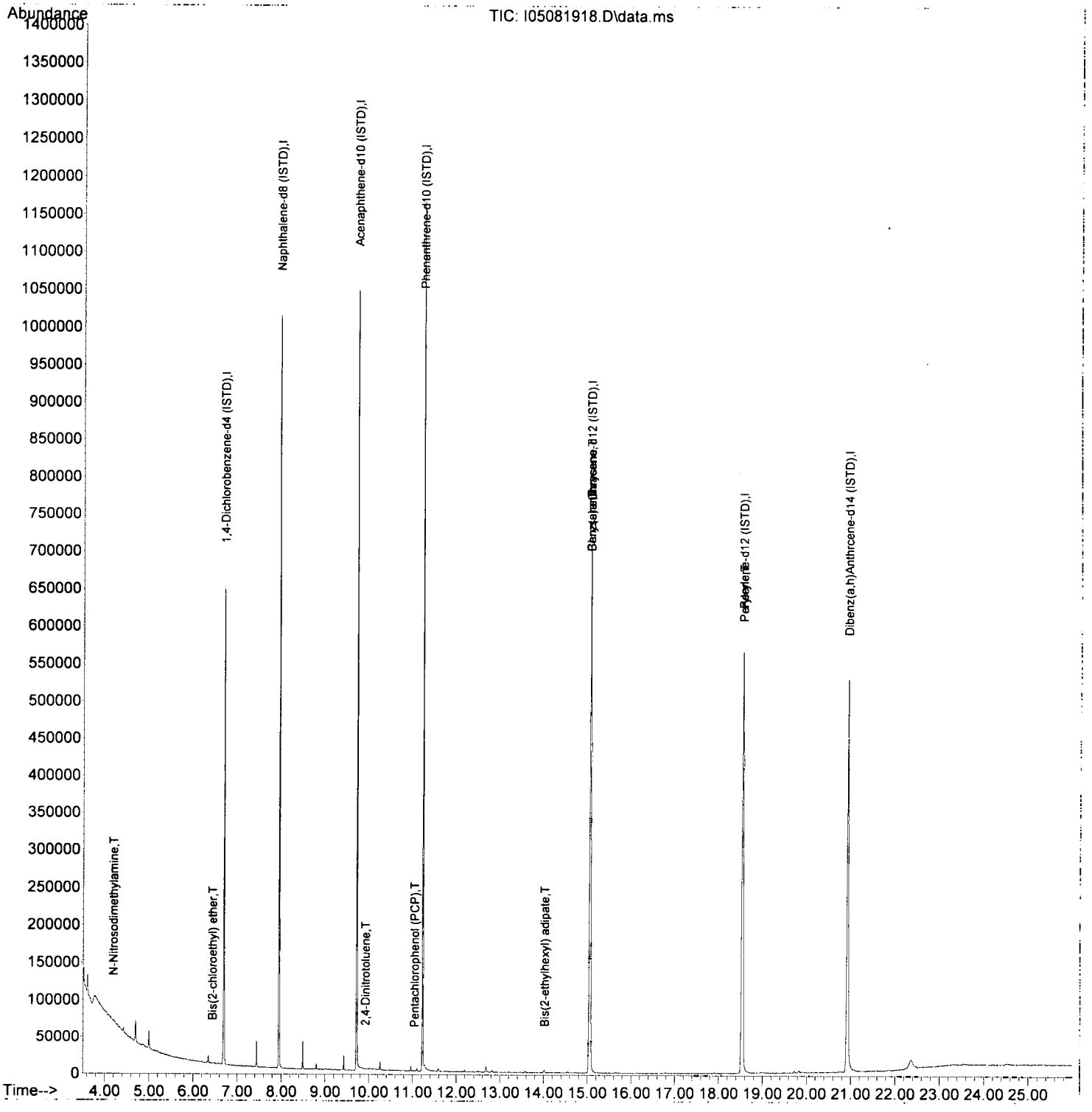
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
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	9.911	165	97	34.45 ng/ml#	17
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	10.131	149	55	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.238	170	50	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)	11.035	266	254	65.69 ng/ml	86
71) Phenanthrene	11.222	178	214	N.D.	
72) Anthracene	11.222	178	214	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	12.677	184	5254	Below Cal	99
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.014	129	1009	7.46 ng/ml	94
82) 3,3-Dichlorobenzidine	14.992	252	376	Below Cal	91
83) Benz(a)anthracene	15.046	228	1291	4.33 ng/ml	68
84) Chrysene	15.046	228	1279	4.65 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	18.544	252	1717	7.18 ng/ml	74
95) Indeno(1,2,3-cd)pyrene	20.929	276	304	N.D.	
96) Dibenz(a,h)anthracene	20.924	278	137	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\2019-05\9E08056\
Data File : I05081918.D
Acq On : 8 May 2019 7:35 pm
Operator : JK /AMS /DTH
Sample : 9E08056-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:39 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:14 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	114486	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	461650	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	230578	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	445843	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	468796	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.538	264	432537	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	400350	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.472	112	1296	16.93	ng/ml	0.00
5) Phenol-d6 (Surr)	6.349	99	1675	16.59	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.231	82	1778	21.02	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	3096	18.40	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	296	43.31	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	4571	20.48	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.193	74	1386	22.92	ng/ml#	36
3) Pyridine	4.236	79	1594	16.87	ng/ml#	49
6) Phenol	6.354	94	1840	16.72	ng/ml	97
7) Aniline	6.386	93	2217	22.05	ng/ml	98
8) Bis(2-chloroethyl) ether	6.434	93	1922	21.30	ng/ml	92
9) 2-Chlorophenol	6.504	128	1505	19.20	ng/ml	85
10) 1,3-Dichlorobenzene	6.643	146	2020	23.21	ng/ml	92
11) 1,4-Dichlorobenzene	6.713	146	1733	20.88	ng/ml	84
12) Benzyl alcohol	6.830	108	394	32.12	ng/ml#	67
13) 1,2-Dichlorobenzene	6.862	146	1593	19.64	ng/ml	94
14) 2-Methylphenol	6.937	107	1153	18.58	ng/ml	78
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	2282	18.10	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.082	70	1232	19.27	ng/ml	95
17) 3+4-Methylphenol	7.082	107	1360	17.39	ng/ml	87
18) Hexachloroethane	7.194	201	565	22.14	ng/ml	83
20) Nitrobenzene	7.253	77	1693	19.66	ng/ml	97
22) Isophorone	7.478	82	3108	18.23	ng/ml	95
23) 2-Nitrophenol	7.563	139	652	40.14	ng/ml	98
24) 2,4-Dimethylphenol	7.601	122	1035	15.16	ng/ml	84
25) Bis(2-chloroethoxy) me...	7.686	93	1890	18.62	ng/ml	96
26) Benzoic acid	0.000		0	N.D.		
27) 2,4-Dichlorophenol	7.814	162	685	21.81	ng/ml	91
28) 1,2,4-Trichlorobenzene	7.889	180	1529	21.22	ng/ml	95
29) Naphthalene	7.970	128	4931	21.54	ng/ml	95
30) 4-Chloroaniline	8.012	127	1367	22.10	ng/ml	95
31) Hexachlorobutadiene	8.093	225	856	23.61	ng/ml	89
32) 4-Chloro-3-methylphenol	8.504	107	518	37.77	ng/ml#	1
33) 2-Methylnaphthalene	8.660	142	3206	19.00	ng/ml	99
34) 1-Methylnaphthalene	8.761	142	3306	20.65	ng/ml	94
36) Hexachlorocyclopentadiene	8.825	237	56	33.22	ng/ml#	27
37) 2,4,6-Trichlorophenol	8.948	196	344	40.72	ng/ml#	74
38) 2,4,5-Trichlorophenol	8.991	198	415	38.85	ng/ml#	62
39) 1,1'-Biphenyl	9.125	154	3301	16.94	ng/ml	98
41) 2-Chloronaphthalene	9.152	162	2457	17.33	ng/ml	92
42) 2-Nitroaniline	9.248	138	198	4.26	ng/ml#	79
43) 2,6-Dimethylnaphthalene	9.285	156	2570	18.38	ng/ml	87

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:14 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	116	66.58	ng/ml	86
45) Dimethyl phthalate	9.419	163	3008	18.69	ng/ml	98
46) 1,3-Dinitrobenzene	9.456	168	110	4.44	ng/ml	48
47) 2,6-Dinitrotoluene	9.483	165	309	8.81	ng/ml#	66
48) 1,2-Dinitrobenzene	9.537	168	108	6.10	ng/ml#	1
49) Acenaphthylene	9.569	152	4296	19.09	ng/ml	98
50) 3-Nitroaniline	9.665	138	279	22.94	ng/ml	83
51) Acenaphthene	9.745	153	2971	20.99	ng/ml	98
52) 2,4-Dinitrophenol	0.000		0	N.D		
53) 4-Nitrophenol	9.852	139	173	78.89	ng/ml	74
54) 2,4-Dinitrotoluene	9.900	165	414	39.85	ng/ml	83
55) Dibenzofuran	9.922	168	3412	17.51	ng/ml#	82
56) 2,3,5,6-Tetrachlorophenol	10.007	232	213	55.74	ng/ml	79
57) 2,3,4,6-Tetrachlorophenol	10.050	232	352	45.87	ng/ml	85
58) Diethyl phthalate	10.130	149	3091	20.52	ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.130	170	2925	22.62	ng/ml	91
60) Fluorene	10.269	166	3504	22.08	ng/ml	90
61) 4-Chlorophenyl phenyl ...	10.259	204	1452	19.48	ng/ml	86
62) 4-Nitroaniline	10.280	138	396	11.51	ng/ml	79
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.376	169	2436	17.88	ng/ml	89
66) Azobenzene (1,2-DPH)	10.419	77	2808	16.45	ng/ml	96
68) 4-Bromophenyl phenyl e...	10.756	248	976	21.64	ng/ml#	83
69) Hexachlorobenzene	10.836	284	1039	21.71	ng/ml	90
70) Pentachlorophenol (PCP)	11.034	266	515	103.76	ng/ml	75
71) Phenanthrene	11.248	178	5060	21.87	ng/ml	94
72) Anthracene	11.296	178	5028	22.51	ng/ml	95
73) Carbazole	11.457	167	3928	22.54	ng/ml	99
74) Di-n-butyl phthalate	11.794	149	4702	17.52	ng/ml	96
75) Fluoranthene	12.521	202	5484	21.36	ng/ml	96
76) Benzidine	12.676	184	5337	112.28	ng/ml	99
77) Pyrene	12.821	202	5874	22.60	ng/ml	96
80) Butyl benzyl phthalate	13.837	149	1472	44.58	ng/ml	83
81) Bis(2-ethylhexyl) adipate	14.014	129	2977	22.91	ng/ml	95
82) 3,3-Dichlorobenzidine	14.987	252	2583	Below	Cal	87
83) Benz(a)anthracene	15.030	228	5805	21.64	ng/ml	99
84) Chrysene	15.110	228	5174	20.70	ng/ml	93
85) Bis(2-ethylhexyl) phth...	15.180	149	1776	9.88	ng/ml	99
87) Di-n-octyl phthalate	16.838	149	2233	79.02	ng/ml	86
88) Benzo(b)fluoranthene	17.613	252	4502	27.10	ng/ml	97
89) Benzo(k)fluoranthene	~~17.683~~	~~252~~	~~3913~~	~~23.87~~	~~ng/ml~~	96
90) Benzo(b+k)fluoranthene	17.613	252	8905	50.62	ng/ml	96
91) Benzo(e)pyrene	18.266	252	4695	19.12	ng/ml	91
92) Benzo(a)pyrene	18.383	252	3596	26.47	ng/ml	90
93) Perylene	18.587	252	4452	20.10	ng/ml	96
95) Indeno(1,2,3-cd)pyrene	20.913	276	4515	19.92	ng/ml	73
96) Dibenz(a,h)anthracene	20.972	278	3890	20.39	ng/ml	98
97) Benzo(g,h,i)perylene	21.448	276	4035	19.00	ng/ml	72

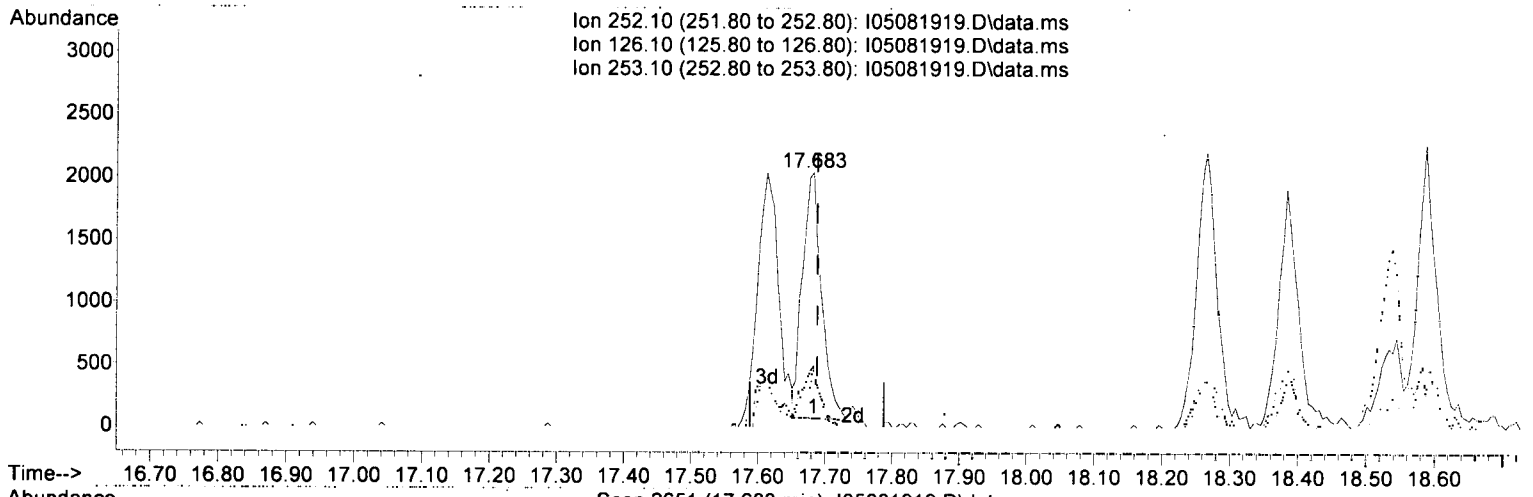
See ML

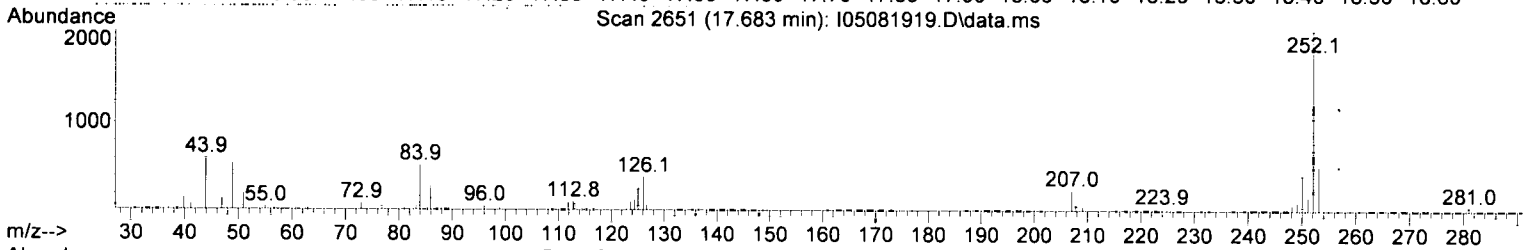
(#) = qualifier out of range (m) = manual integration (+) = signals summed

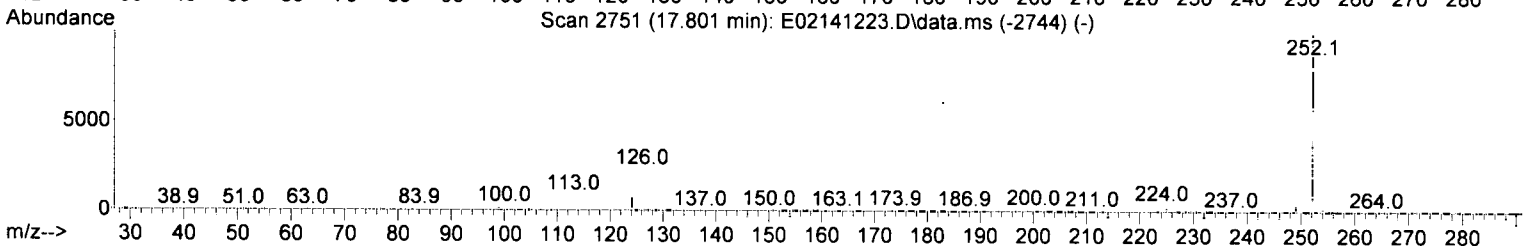
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:14 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081919.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.683min (-0.006) 23.87 ng/ml

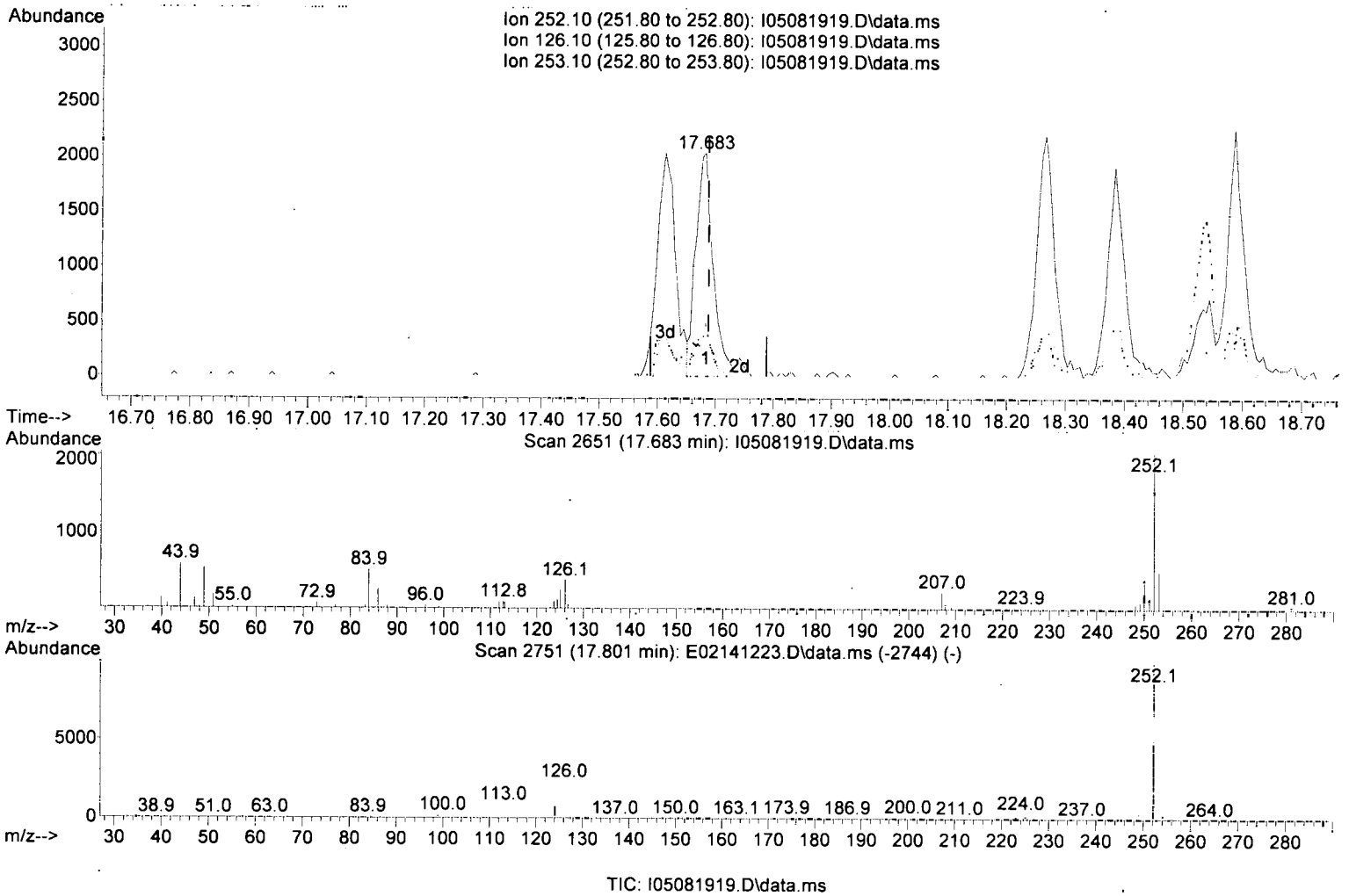
response 3913

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	23.46
253.10	21.70	25.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:14 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I05081919.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.683min (-0.006) 25.71 ng/ml m

5/9/19

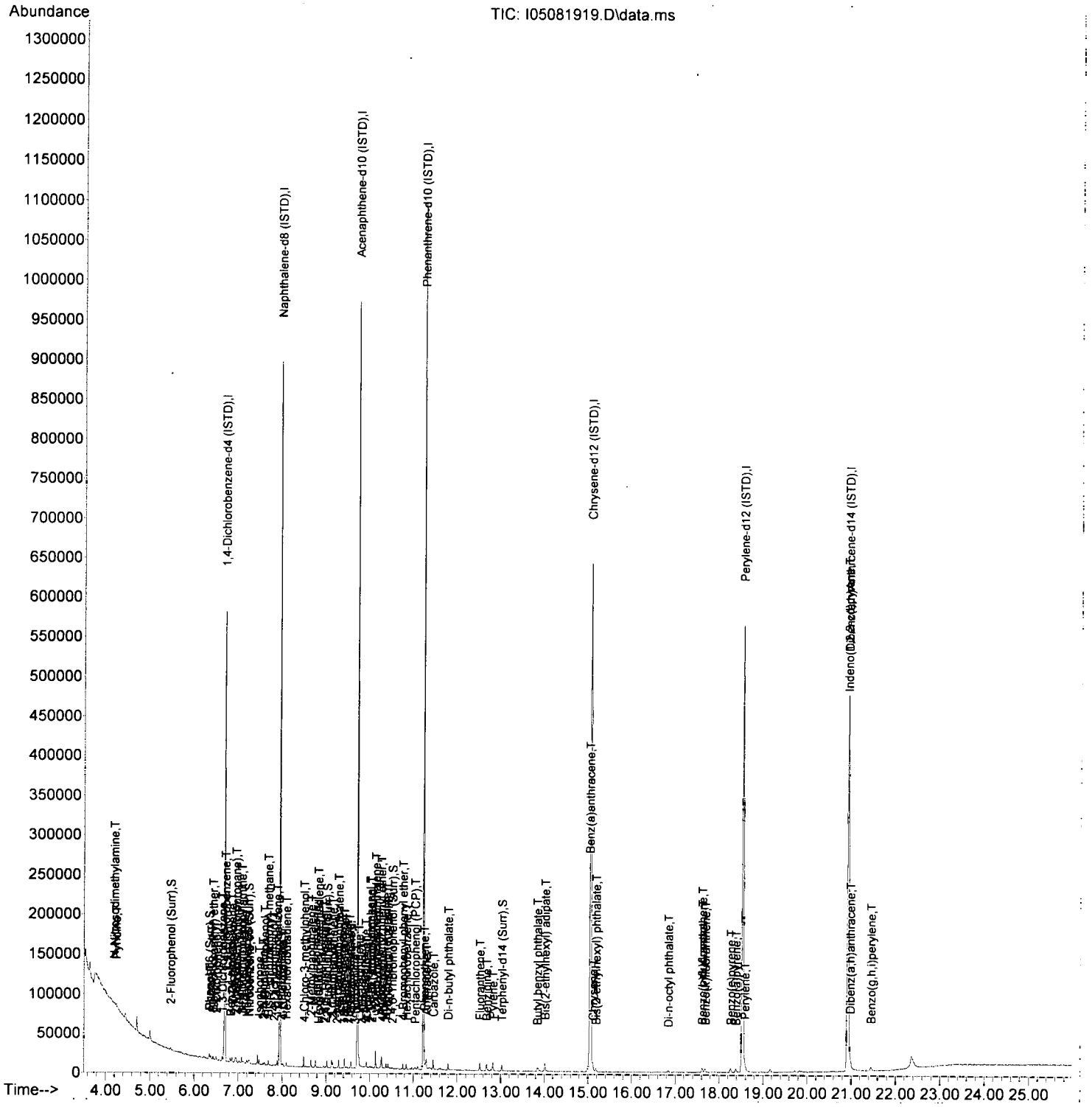
response 4403

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	19.44
253.10	21.70	25.42
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081919.D
Acq On : 8 May 2019 8:12 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL1
Misc : 1x, A19D053 BNA@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:14 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081920.D
Acq On : 8 May 2019 8:48 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

5/9/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.691	152	117186	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	466642	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	235336	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	447217	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	470097	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.539	264	436889	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.919	292	403848	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.467	112	3106	39.64 ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	4324	41.83 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.232	82	4032	46.57 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	8836	51.45 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	790	70.57 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	10935	48.86 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.178	74	2851	46.07 ng/ml#	70
3) Pyridine	4.215	79	4118	42.59 ng/ml#	61
6) Phenol	6.354	94	4928	43.76 ng/ml	93
7) Aniline	6.381	93	5080	49.37 ng/ml	94
8) Bis(2-chloroethyl) ether	6.429	93	4474	48.44 ng/ml	98
9) 2-Chlorophenol	6.499	128	3771	47.01 ng/ml	92
10) 1,3-Dichlorobenzene	6.643	146	4617	51.82 ng/ml	93
11) 1,4-Dichlorobenzene	6.707	146	4532	53.35 ng/ml	98
12) Benzyl alcohol	6.830	108	1234	49.30 ng/ml	89
13) 1,2-Dichlorobenzene	6.863	146	4338	52.25 ng/ml	97
14) 2-Methylphenol	6.932	107	2679	42.19 ng/ml	93
15) 2,2'-Oxybis(1-Chloropr...	6.948	45	5842	45.28 ng/ml	98
16) N-Nitrosodi-n-propylamine	7.077	70	3144	48.05 ng/ml	93
17) 3+4-Methylphenol	7.082	107	3346	41.79 ng/ml	97
18) Hexachloroethane	7.194	201	1408	53.91 ng/ml	85
20) Nitrobenzene	7.248	77	4129	46.85 ng/ml	98
22) Isophorone	7.478	82	8299	48.17 ng/ml	97
23) 2-Nitrophenol	7.563	139	1851	66.48 ng/ml	98
24) 2,4-Dimethylphenol	7.601	122	2552	36.98 ng/ml	95
25) Bis(2-chloroethoxy) me...	7.681	93	5405	52.67 ng/ml	97
26) Benzoic acid	7.681	105	157	795.44 ng/ml	94
27) 2,4-Dichlorophenol	7.804	162	1767	40.41 ng/ml	94
28) 1,2,4-Trichlorobenzene	7.890	180	3994	54.83 ng/ml	89
29) Naphthalene	7.964	128	12776	55.21 ng/ml	99
30) 4-Chloroaniline	8.013	127	3426	54.81 ng/ml	93
31) Hexachlorobutadiene	8.093	225	2007	54.77 ng/ml	85
32) 4-Chloro-3-methylphenol	8.499	107	1435	51.37 ng/ml#	1
33) 2-Methylnaphthalene	8.660	142	8403	49.27 ng/ml	98
34) 1-Methylnaphthalene	8.756	142	8435	52.12 ng/ml	99
36) Hexachlorocyclopentadiene	8.826	237	592	49.29 ng/ml	88
37) 2,4,6-Trichlorophenol	8.943	196	987	55.28 ng/ml	84
38) 2,4,5-Trichlorophenol	8.991	196	862	49.18 ng/ml	92
39) 1,1'-Biphenyl	9.125	154	9087	45.69 ng/ml	98
41) 2-Chloronaphthalene	9.152	162	6592	45.56 ng/ml	97
42) 2-Nitroaniline	9.248	138	759	16.01 ng/ml	94
43) 2,6-Dimethylnaphthalene	9.286	156	7150	50.10 ng/ml	98

See MZ

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081920.D
Acq On : 8 May 2019 8:48 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

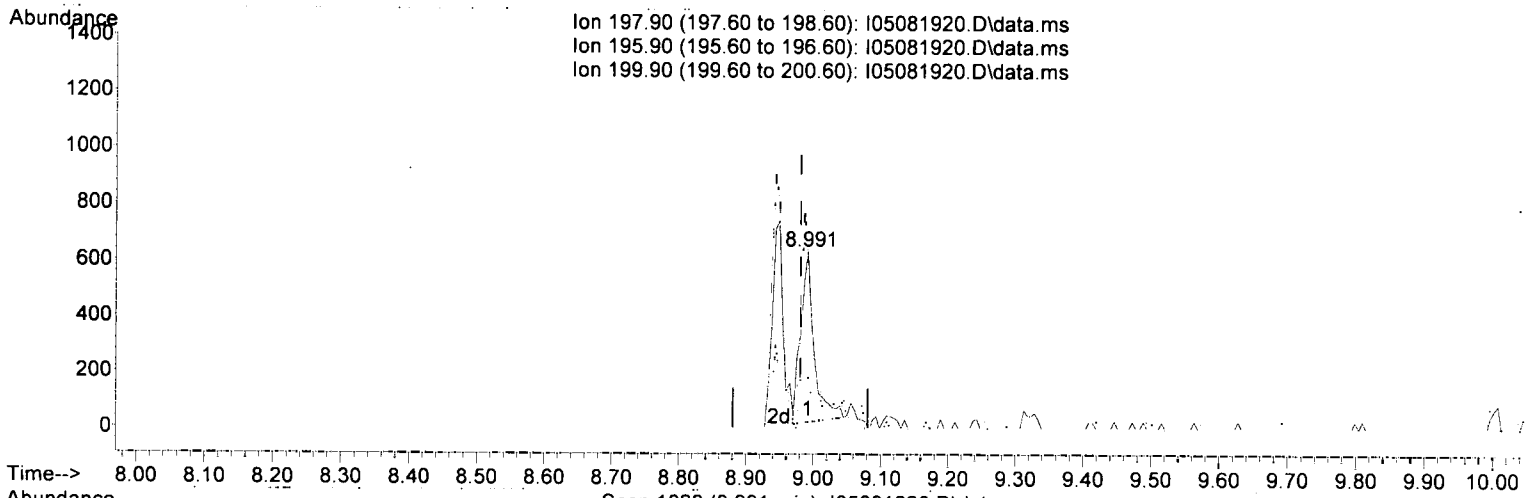
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	303	74.86	ng/ml#	70
45) Dimethyl phthalate	9.419	163	8669	52.79	ng/ml	98
46) 1,3-Dinitrobenzene	9.451	168	617	24.40	ng/ml	76
47) 2,6-Dinitrotoluene	9.483	165	1045	29.21	ng/ml	77
48) 1,2-Dinitrobenzene	9.542	168	519	28.72	ng/ml	93
49) Acenaphthylene	9.569	152	11830	51.50	ng/ml	98
50) 3-Nitroaniline	9.660	138	912	40.89	ng/ml	93
51) Acenaphthene	9.745	153	8352	57.80	ng/ml	96
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.842	139	405	87.39	ng/ml	91
54) 2,4-Dinitrotoluene	9.890	165	1084	53.31	ng/ml	92
55) Dibenzofuran	9.917	168	10231	51.44	ng/ml	86
56) 2,3,5,6-Tetrachlorophenol	10.008	232	720	71.19	ng/ml	84
57) 2,3,4,6-Tetrachlorophenol	10.050	232	1085	66.47	ng/ml	86
58) Diethyl phthalate	10.131	149	8249	53.66	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.131	170	7475	56.65	ng/ml	91
60) Fluorene	10.264	166	8897	54.93	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.259	204	4291	56.42	ng/ml	86
62) 4-Nitroaniline	10.275	138	1270	36.16	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.312	198	217	101.38	ng/ml	71
65) N-Nitrosodiphenylamine	10.377	169	6367	46.58	ng/ml	96
66) Azobenzene (1,2-DPH)	10.419	77	7675	44.83	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.756	248	2481	54.83	ng/ml#	77
69) Hexachlorobenzene	10.837	284	3112	64.82	ng/ml	90
70) Pentachlorophenol (PCP)	11.035	266	782	116.47	ng/ml	75
71) Phenanthrene	11.243	178	13230	57.00	ng/ml	98
72) Anthracene	11.297	178	12760	56.96	ng/ml	98
73) Carbazole	11.452	167	10615	51.27	ng/ml	99
74) Di-n-butyl phthalate	11.794	149	11962	44.43	ng/ml	98
75) Fluoranthene	12.521	202	14115	54.81	ng/ml	98
76) Benzidine	12.677	184	6670	136.06	ng/ml	95
77) Pyrene	12.821	202	14957	57.38	ng/ml	97
80) Butyl benzyl phthalate	13.837	149	4377	64.96	ng/ml	93
81) Bis(2-ethylhexyl) adipate	14.008	129	5191	39.84	ng/ml	96
82) 3,3-Dichlorobenzidine	14.987	252	6262	Below Cal		92
83) Benz(a)anthracene	15.030	228	13479	50.10	ng/ml	97
84) Chrysene	15.105	228	12647	50.46	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.180	149	5059	28.08	ng/ml	88
87) Di-n-octyl phthalate	16.843	149	6475	93.63	ng/ml	96
88) Benzo(b)fluoranthene	17.613	252	11686	54.36	ng/ml	93
89) Benzo(k)fluoranthene	17.677	252	12101	54.18	ng/ml	97
90) Benzo(b+k)fluoranthene	17.677	252	24677	108.29	ng/ml	97
91) Benzo(e)pyrene	18.271	252	12373	49.90	ng/ml	96
92) Benzo(a)pyrene	18.389	252	10371	55.04	ng/ml	94
93) Perylene	18.587	252	10773	48.16	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.913	276	10988	48.06	ng/ml	74
96) Dibenz(a,h)anthracene	20.988	278	9885	51.38	ng/ml	89
97) Benzo(g,h,i)perylene	21.454	276	10510	49.07	ng/ml	91

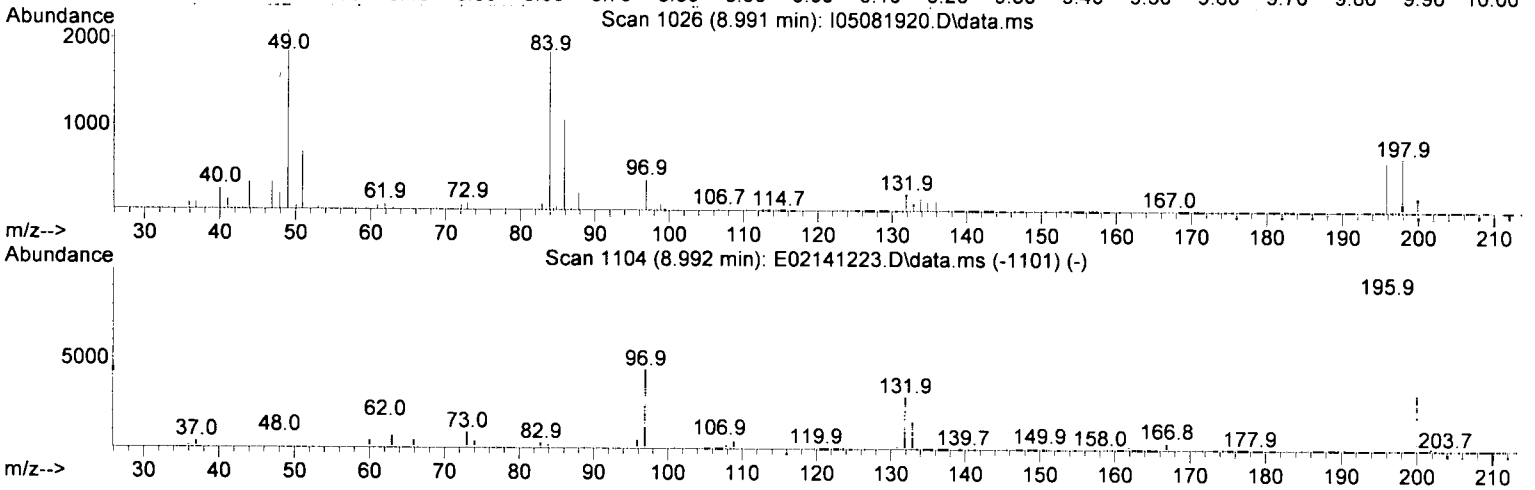
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081920.D
Acq On : 8 May 2019 8:48 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081920.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.991min (+0.011) 49.18 ng/ml

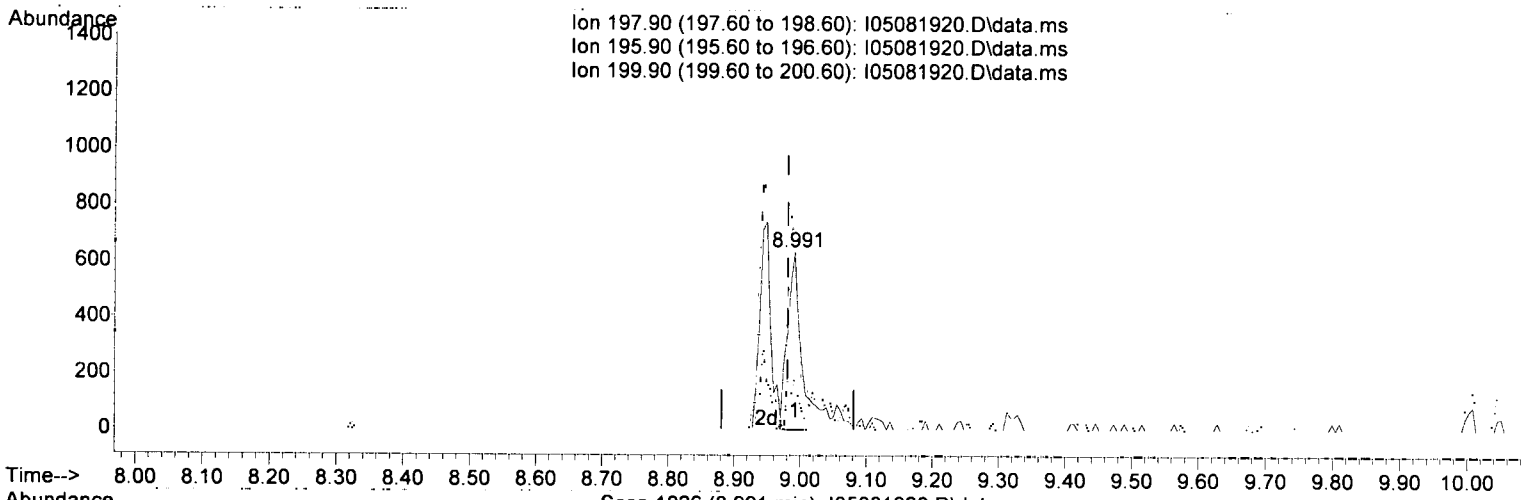
response 862

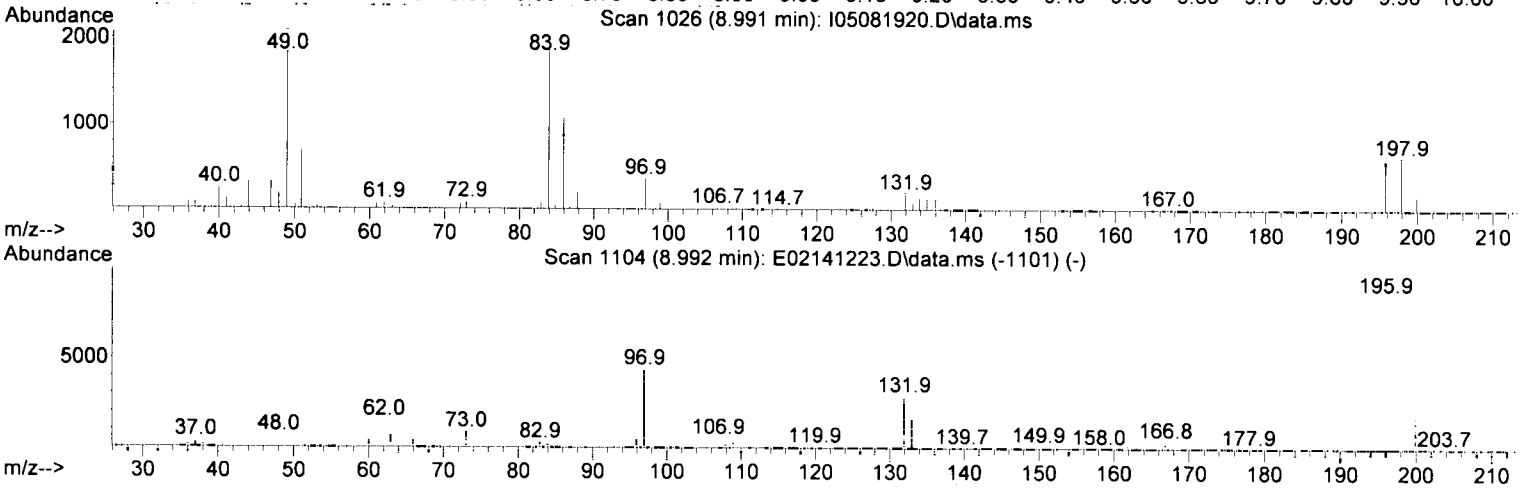
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	95.28
199.90	31.10	29.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081920.D
Acq On : 8 May 2019 8:48 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081920.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.991min (+ 0.011) 54.39 ng/ml (m) JK 5/9/19

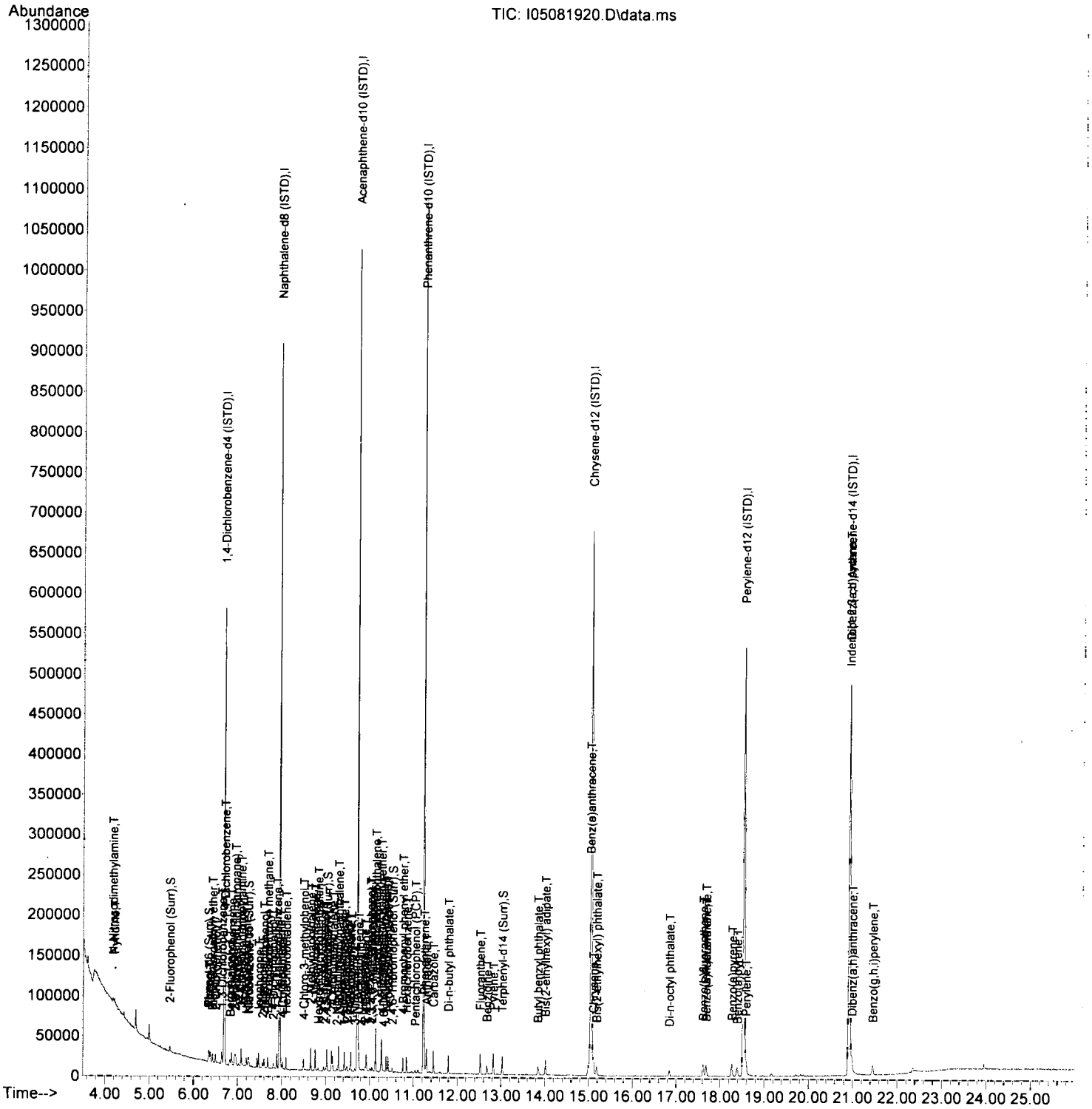
response 1083

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	95.28
199.90	31.10	29.13
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081920.D
Acq On : 8 May 2019 8:48 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL2
Misc : 1x, A19D054 BNA@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.691	152	115550	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	461862	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	238866	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.221	188	441856	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	464995	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.533	264	434795	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.919	292	409849	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.472	112	7013	90.77	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	9148	89.75	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.231	82	8175	95.75	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	19505	111.89	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	1794	127.24	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.019	244	23610	106.65	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.188	74	5631	92.28	ng/ml	76
3) Pyridine	4.215	79	7898	82.84	ng/ml	84
6) Phenol	6.354	94	10314	92.88	ng/ml	98
7) Aniline	6.381	93	10637	104.83	ng/ml	92
8) Bis(2-chloroethyl) ether	6.429	93	8939	98.15	ng/ml	95
9) 2-Chlorophenol	6.499	128	7863	99.40	ng/ml	91
10) 1,3-Dichlorobenzene	6.643	146	9757	111.06	ng/ml	97
11) 1,4-Dichlorobenzene	6.713	146	8776	104.78	ng/ml	95
12) Benzyl alcohol	6.825	108	2898	84.51	ng/ml	99
13) 1,2-Dichlorobenzene	6.862	146	8854	108.15	ng/ml	98
14) 2-Methylphenol	6.932	107	6386	101.99	ng/ml	89
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	12268	96.43	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.076	70	6313	97.85	ng/ml	91
17) 3+4-Methylphenol	7.076	107	7451	94.37	ng/ml	95
18) Hexachloroethane	7.194	201	2779	107.90	ng/ml	88
20) Nitrobenzene	7.247	77	8591	98.85	ng/ml	93
22) Isophorone	7.477	82	16536	96.96	ng/ml	97
23) 2-Nitrophenol	7.563	139	3972	114.25	ng/ml	89
24) 2,4-Dimethylphenol	7.595	122	6013	88.03	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.686	93	11079	109.07	ng/ml	99
26) Benzoic acid	7.686	105	112	794.36	ng/ml#	27
27) 2,4-Dichlorophenol	7.804	162	4504	88.55	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.889	180	8177	113.42	ng/ml	96
29) Naphthalene	7.964	128	25557	111.59	ng/ml	100
30) 4-Chloroaniline	8.012	127	6574	106.26	ng/ml	95
31) Hexachlorobutadiene	8.093	225	4053	111.76	ng/ml	98
32) 4-Chloro-3-methylphenol	8.499	107	2916	73.90	ng/ml#	53
33) 2-Methylnaphthalene	8.659	142	17636	104.47	ng/ml	96
34) 1-Methylnaphthalene	8.756	142	17565	109.66	ng/ml	96
36) Hexachlorocyclopentadiene	8.825	237	1795	84.61	ng/ml	92
37) 2,4,6-Trichlorophenol	8.943	196	2595	91.22	ng/ml	97
38) 2,4,5-Trichlorophenol	8.986	198	2233	80.70	ng/ml	98
39) 1,1'-Biphenyl	9.125	154	20138	99.75	ng/ml	99
41) 2-Chloronaphthalene	9.146	162	14570	99.21	ng/ml	98
42) 2-Nitroaniline	9.248	138	1934	40.20	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.285	156	15688	108.29	ng/ml	93

See MI

See MI

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

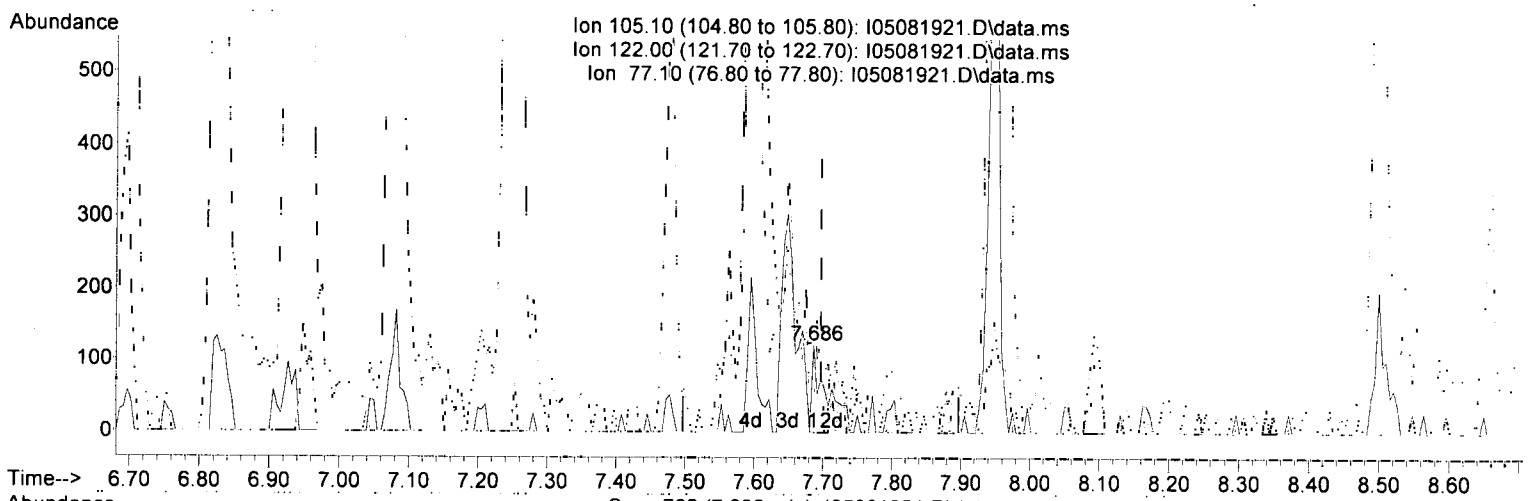
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.371	168	955	103.43	ng/ml	92
45) Dimethyl phthalate	9.419	163	18418	110.50	ng/ml	98
46) 1,3-Dinitrobenzene	9.451	168	1664	64.83	ng/ml	89
47) 2,6-Dinitrotoluene	9.483	165	2837	78.12	ng/ml	85
48) 1,2-Dinitrobenzene	9.537	168	1261	68.76	ng/ml	90
49) Acenaphthylene	9.569	152	26148	112.15	ng/ml	99
50) 3-Nitroaniline	9.654	138	2267	78.90	ng/ml	98
51) Acenaphthene	9.745	153	16799	114.54	ng/ml	99
52) 2,4-Dinitrophenol	9.767	184	124	187.96	ng/ml	80
53) 4-Nitrophenol	9.836	139	1299	119.92	ng/ml	95
54) 2,4-Dinitrotoluene	9.890	165	3069	92.76	ng/ml	97
55) Dibenzofuran	9.916	168	21911	108.53	ng/ml	90
56) 2,3,5,6-Tetrachlorophenol	10.002	232	1956	108.24	ng/ml	81
57) 2,3,4,6-Tetrachlorophenol	~~10.050~~	~~232~~	~~2718~~	~~111.52~~	~~ng/ml#~~	77 see MJ
58) Diethyl phthalate	10.130	149	17729	113.63	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.130	170	15984	119.35	ng/ml	93
60) Fluorene	10.264	166	19156	116.53	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.259	204	9040	117.10	ng/ml	84
62) 4-Nitroaniline	10.275	138	2732	76.64	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.307	198	760	134.94	ng/ml	75
65) N-Nitrosodiphenylamine	10.376	169	14816	109.71	ng/ml	98
66) Azobenzene (1,2-DPH)	10.419	77	17330	102.46	ng/ml	88
68) 4-Bromophenyl phenyl e...	10.756	248	5435	121.58	ng/ml#	78
69) Hexachlorobenzene	10.836	284	6195	130.59	ng/ml	90
70) Pentachlorophenol (PCP)	11.034	266	1222	138.21	ng/ml	89
71) Phenanthrene	11.243	178	26210	114.29	ng/ml	99
72) Anthracene	11.296	178	26491	119.69	ng/ml	97
73) Carbazole	11.451	167	22432	103.59	ng/ml	100
74) Di-n-butyl phthalate	11.788	149	26562	99.86	ng/ml	99
75) Fluoranthene	12.521	202	29669	116.61	ng/ml	98
76) Benzidine	12.676	184	14400	277.95	ng/ml	99
77) Pyrene	12.815	202	31027	120.46	ng/ml	96
80) Butyl benzyl phthalate	13.837	149	9184	99.39	ng/ml	94
81) Bis(2-ethylhexyl) adipate	14.008	129	10197	79.13	ng/ml	100
82) 3,3-Dichlorobenzidine	14.982	252	13834	121.71	ng/ml	94
83) Benz(a)anthracene	15.024	228	26892	101.04	ng/ml	99
84) Chrysene	15.105	228	25625	103.37	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.179	149	11680	65.53	ng/ml	93
87) Di-n-octyl phthalate	16.838	149	14915	122.97	ng/ml	98
88) Benzo(b)fluoranthene	17.613	252	23806	101.01	ng/ml	93
89) Benzo(k)fluoranthene	17.677	252	25069	102.98	ng/ml	96
90) Benzo(b+k)fluoranthene	17.613	252	50907	205.68	ng/ml	91
91) Benzo(e)pyrene	18.266	252	25730	104.26	ng/ml	96
92) Benzo(a)pyrene	18.383	252	21986	104.74	ng/ml	97
93) Perylene	18.592	252	22641	101.71	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.908	276	22712	97.88	ng/ml	100
96) Dibenz(a,h)anthracene	20.977	278	20562	105.30	ng/ml	90
97) Benzo(g,h,i)perylene	21.448	276	22018	101.29	ng/ml	86

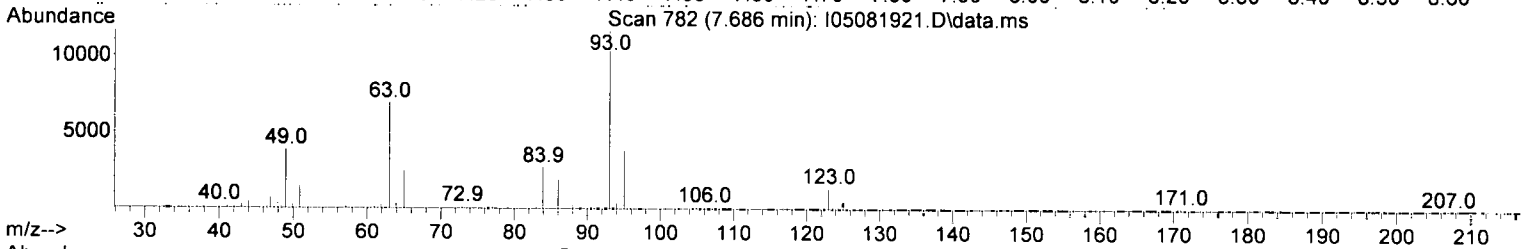
(#) = qualifier out of range (m) = manual integration (+) = signals summed

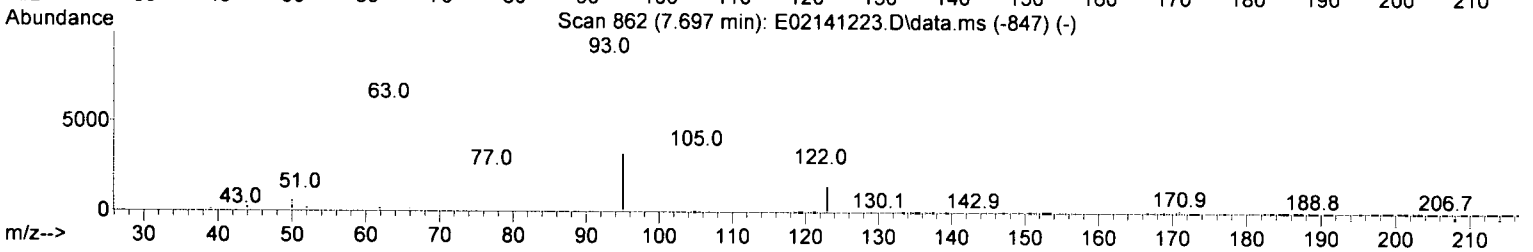
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081921.D\data.ms

(26) Benzoic acid (T)

7.686min (-0.011) 794.36 ng/ml

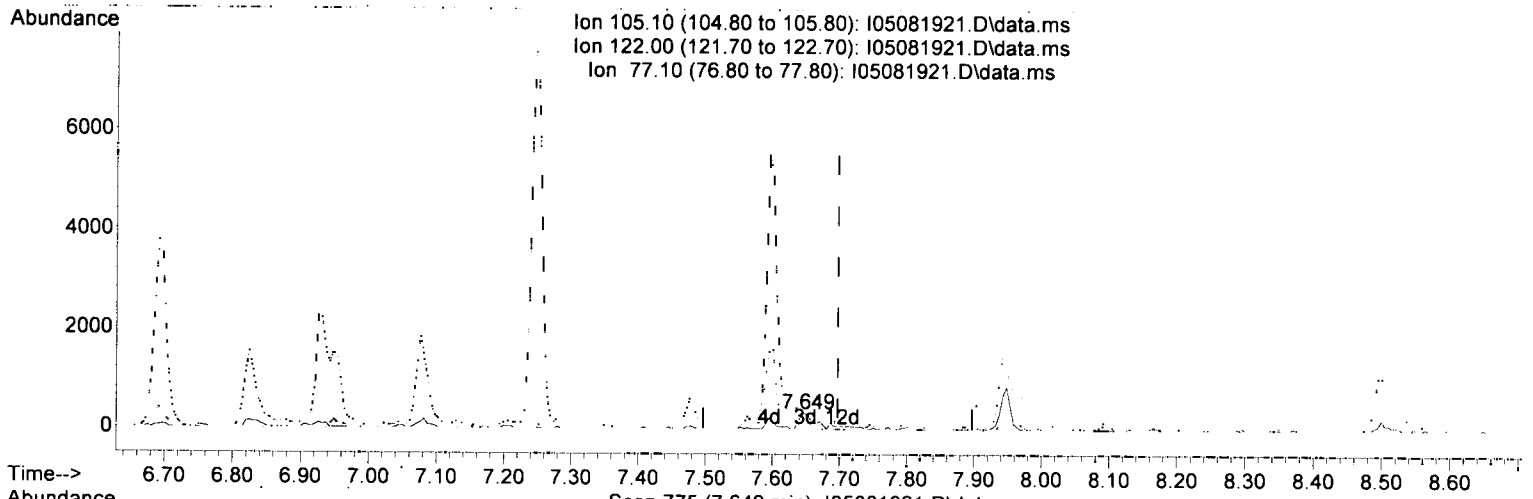
response 112

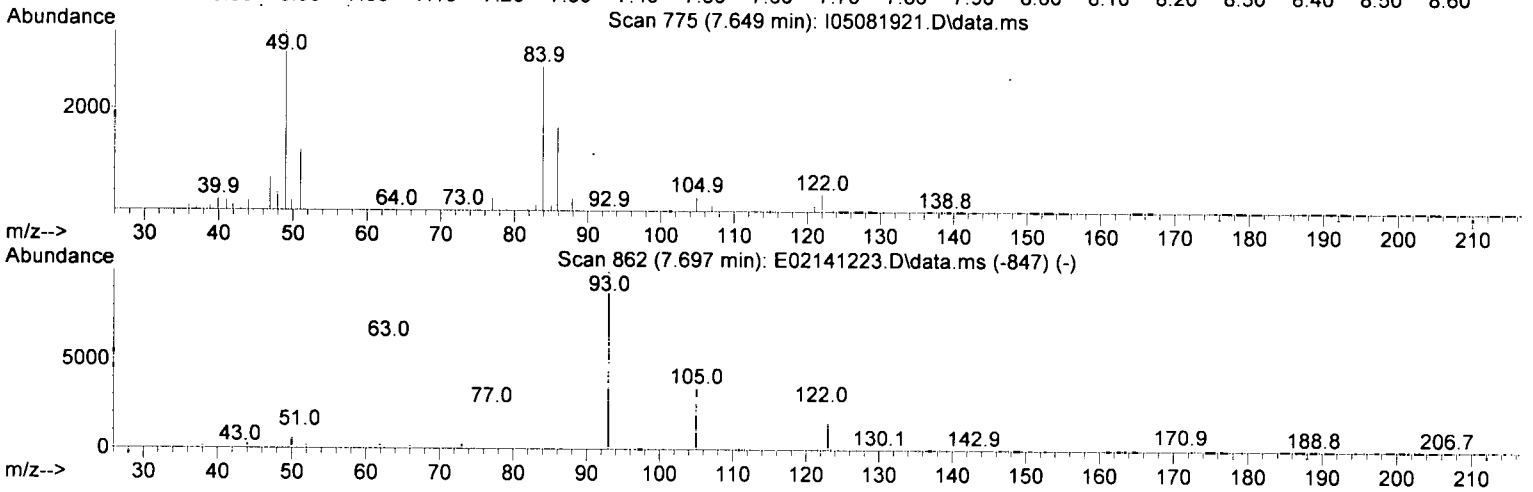
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	0.00#
77.10	76.00	122.13#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081921.D\data.ms

(26) Benzoic acid (T)

7.649min (-0.048) 805.72 ng/ml (m)

response 570

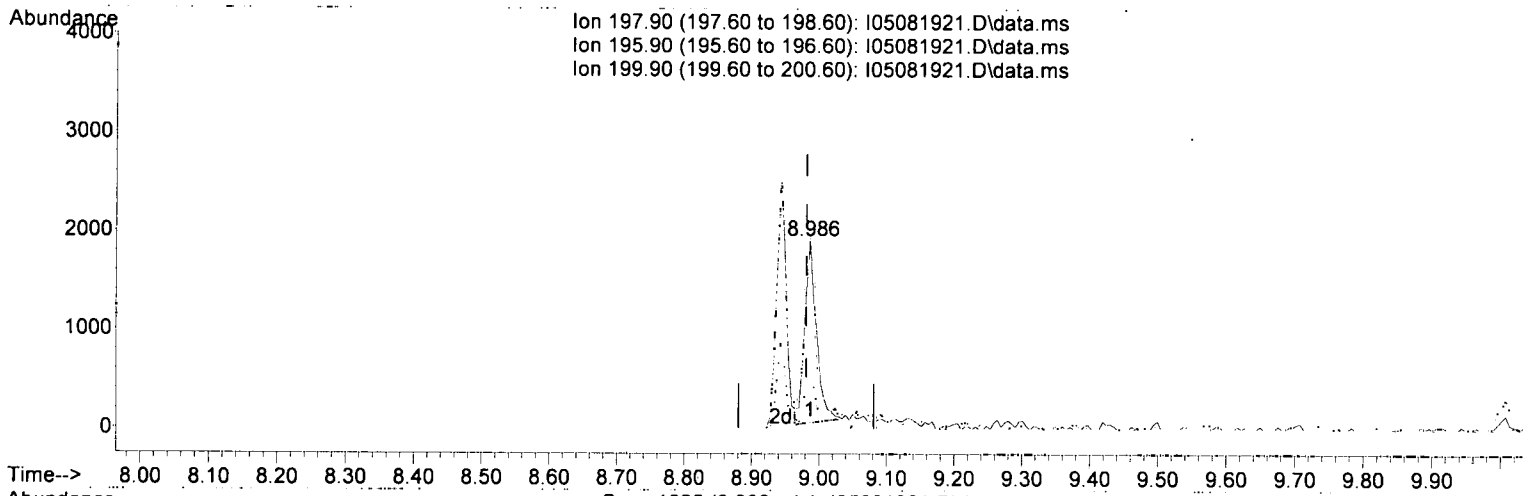
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	116.39#
77.10	76.00	86.89
0.00	0.00	0.00

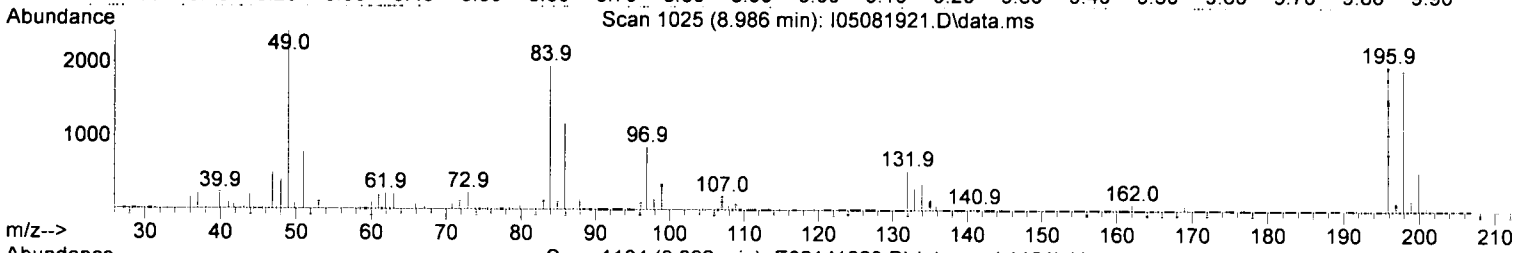
JK 5/9/19

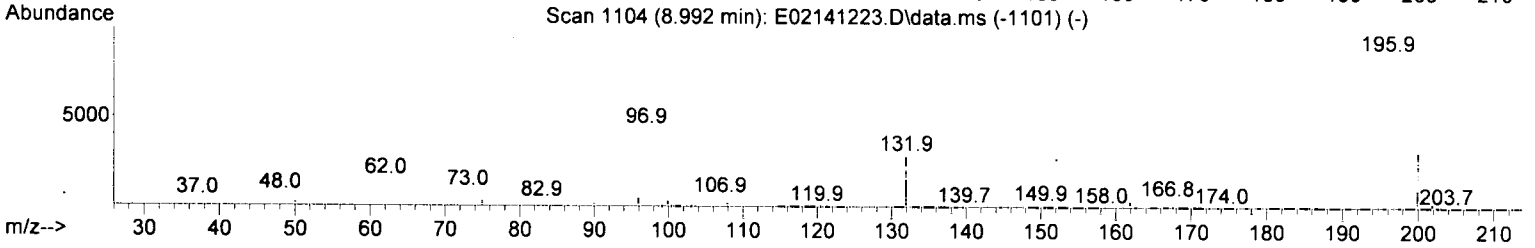
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081921.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.986min (+ 0.005) 80.70 ng/ml

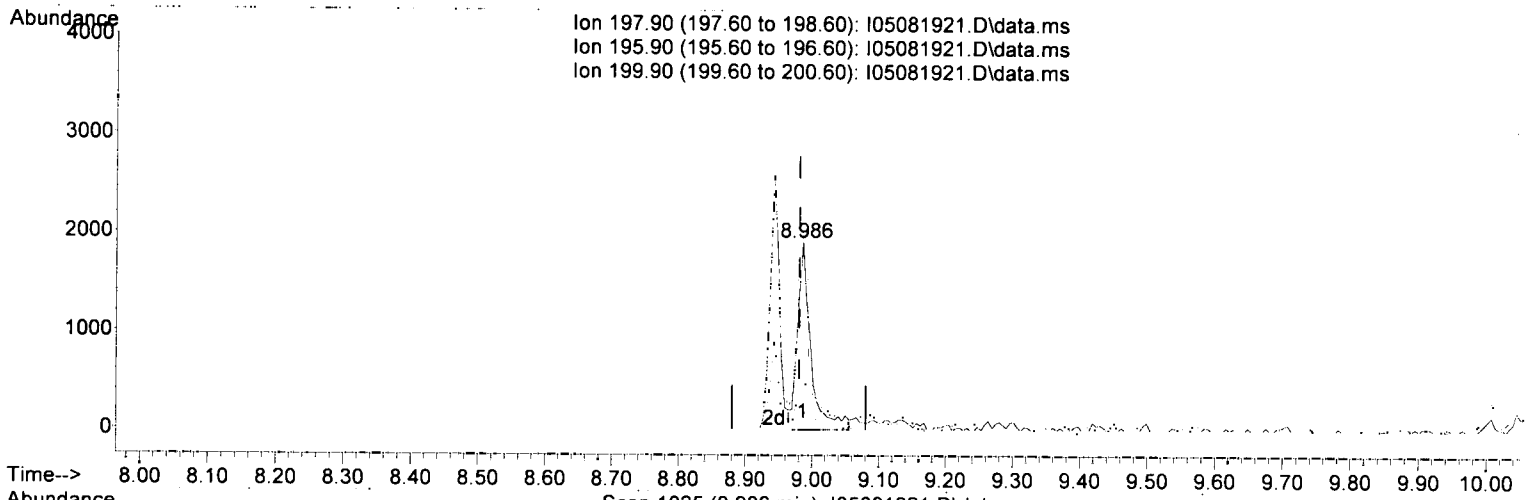
response 2233

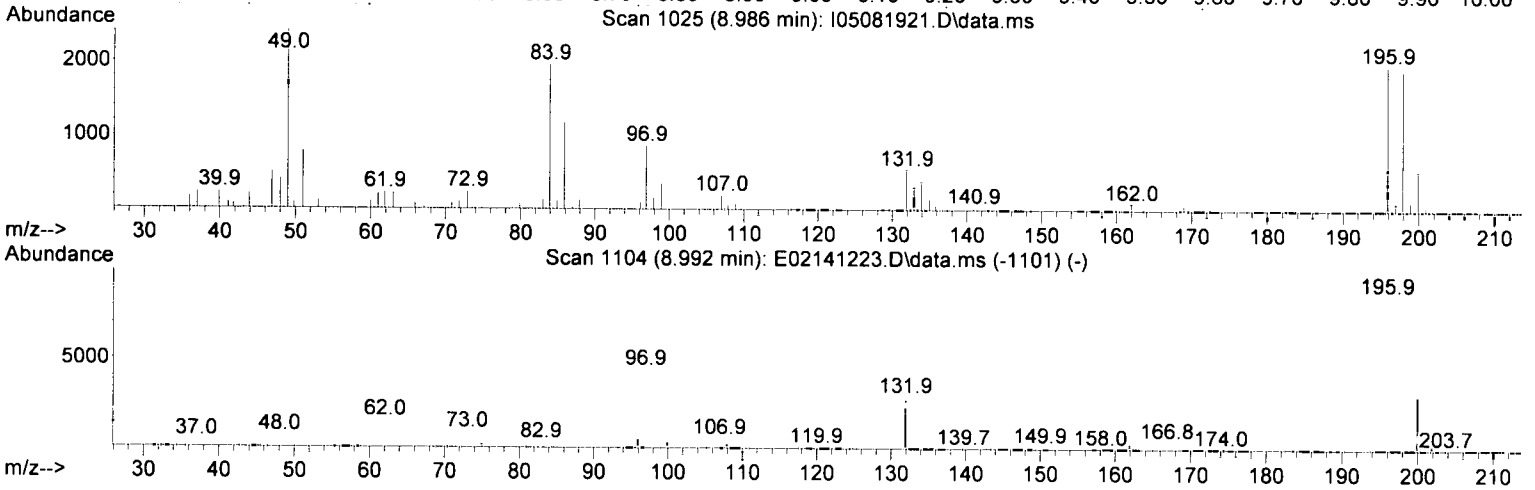
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	103.25
199.90	31.10	28.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081921.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.986min (+ 0.005) 91.36 ng/ml m

response 2692

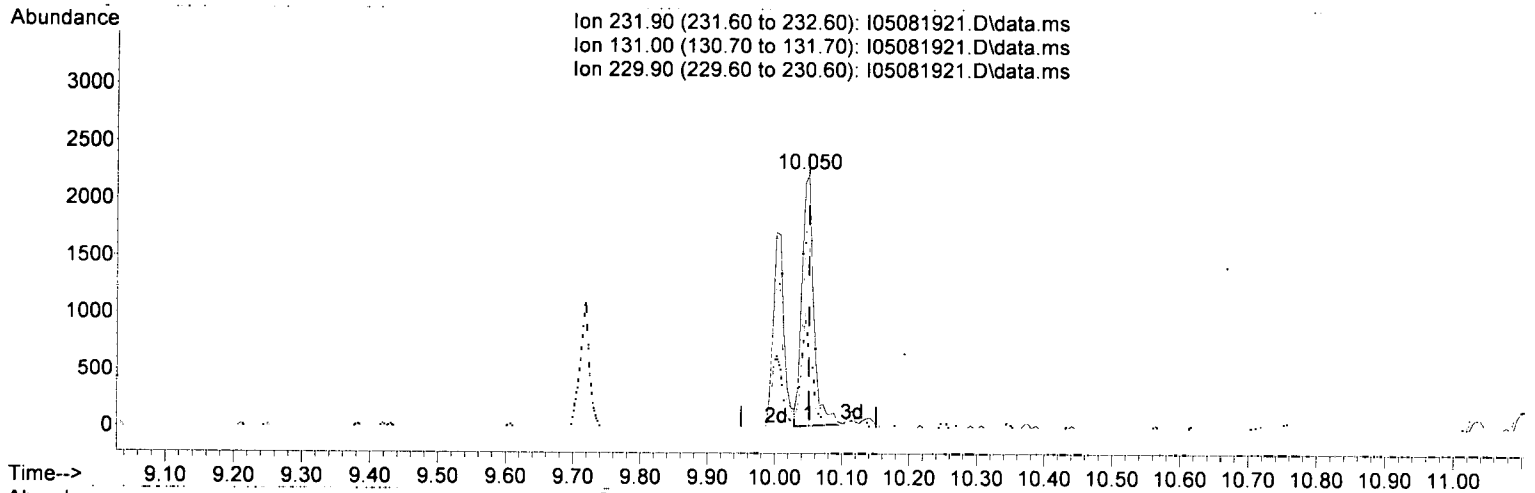
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	103.25
199.90	31.10	28.81
0.00	0.00	0.00

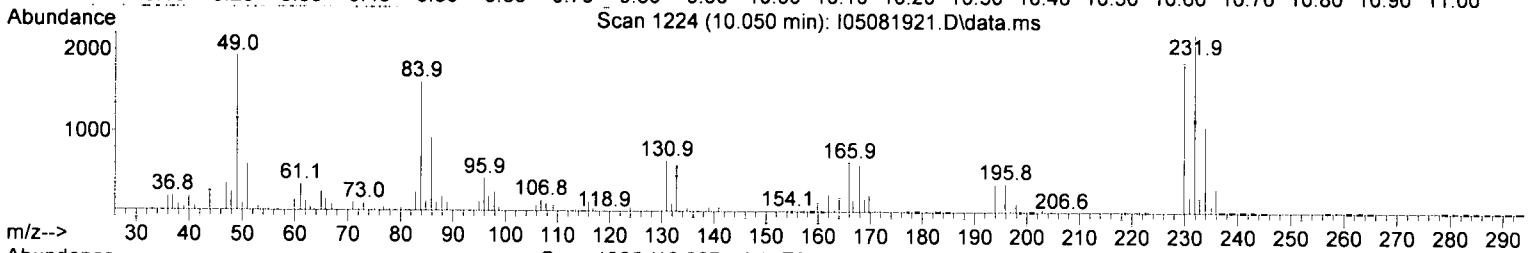
5/9/19

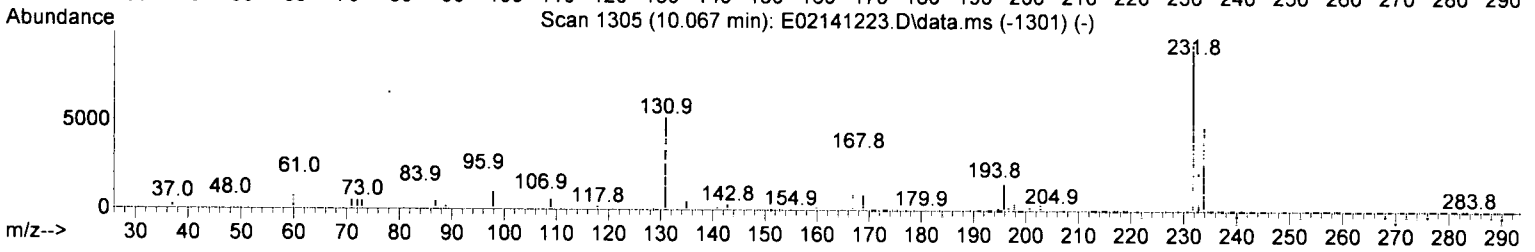
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081921.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.050min (-0.000) 111.52 ng/ml

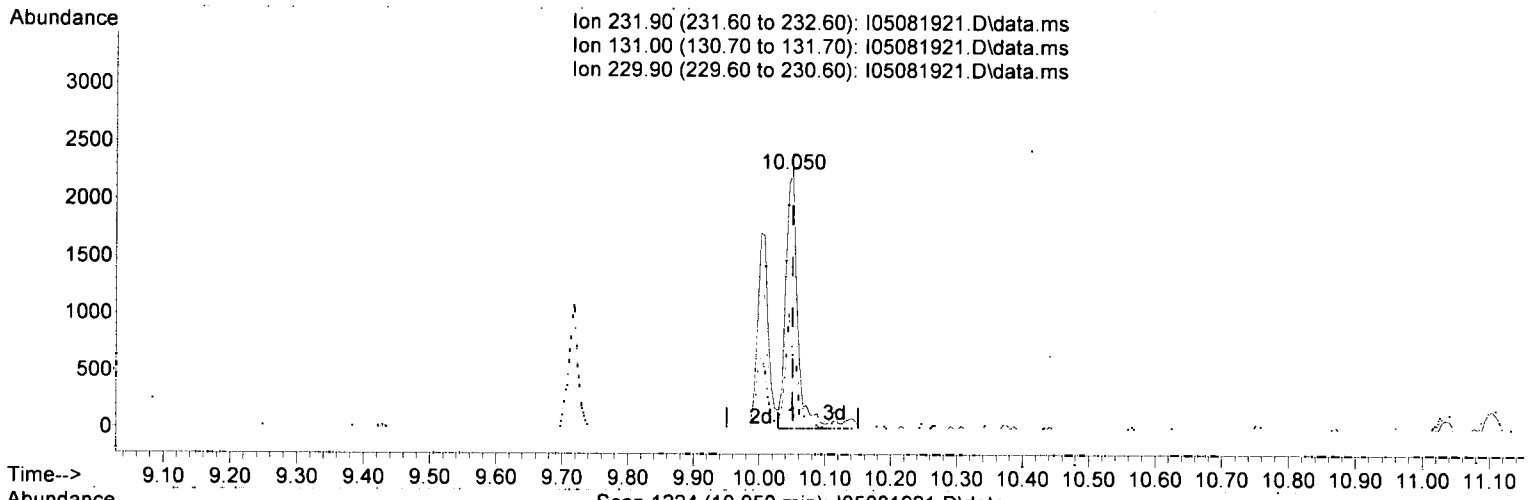
response 2712

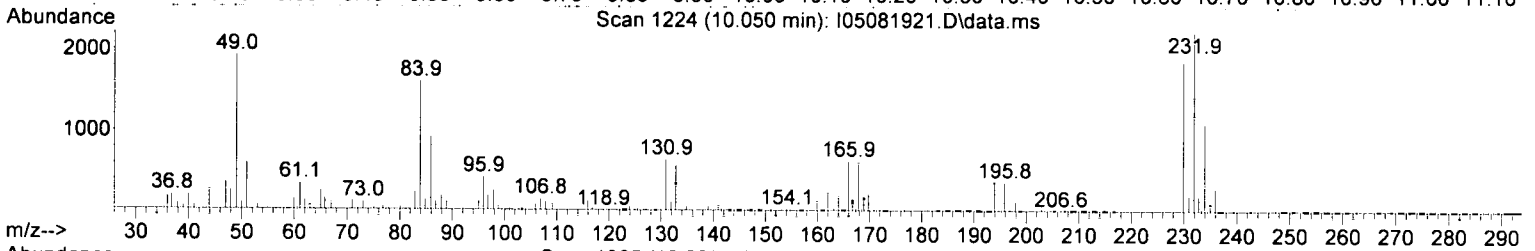
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	29.25#
229.90	78.40	83.76
0.00	0.00	0.00

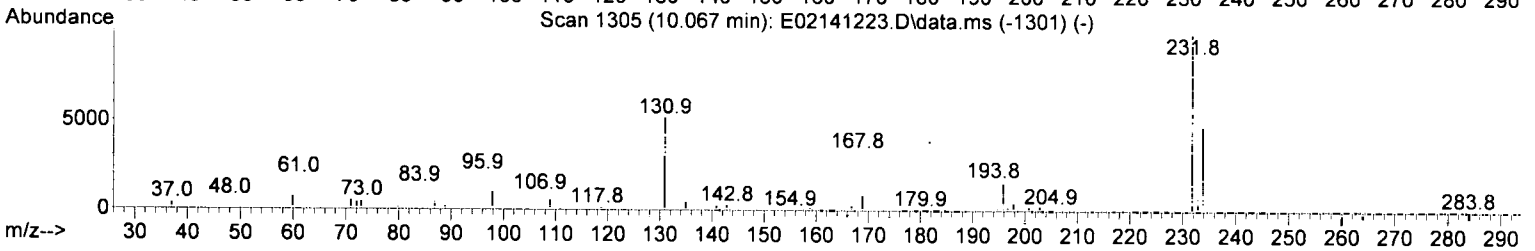
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081921.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.050min (-0.000) 120.47 ng/ml m

5/9/19

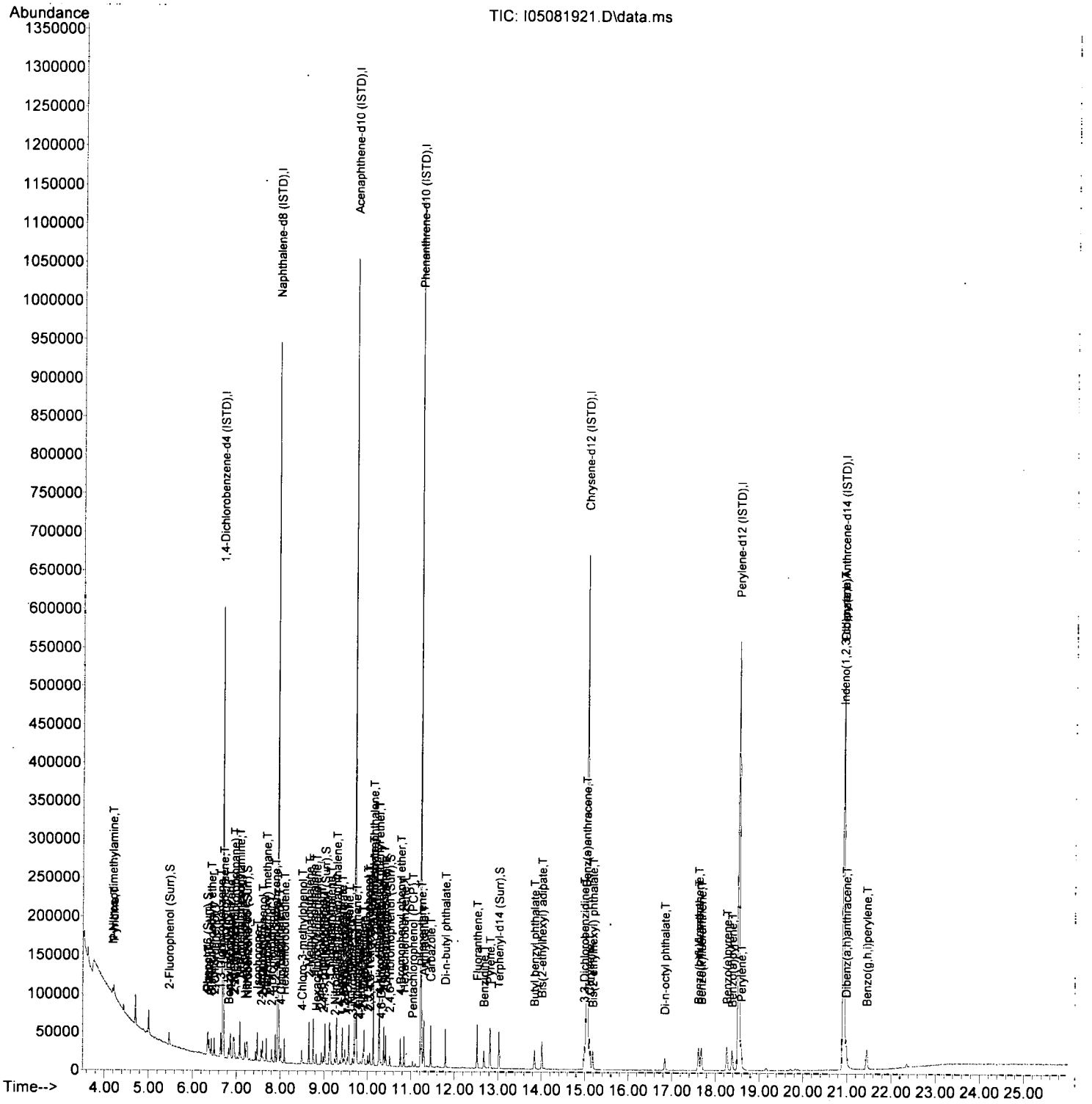
response 3032

Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	29.25#
229.90	78.40	83.76
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081921.D
Acq On : 8 May 2019 9:25 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL3
Misc : 1x, A19D055 BNA@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:31 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081922.D
Acq On : 8 May 2019 10:01 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.691	152	120284	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.943	136	469577	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	245169	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	455298	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	479919	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.539	264	448879	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.919	292	416516	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.467	112	14997	186.46	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	19650	185.20	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.226	82	17627	198.33	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	41740	233.29	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.510	330	4189	254.08	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	49759	217.77	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.167	74	11200	176.32	ng/ml	91
3) Pyridine	4.188	79	17242	173.73	ng/ml	95
6) Phenol	6.349	94	21991	190.24	ng/ml	99
7) Aniline	6.381	93	21214	200.85	ng/ml	98
8) Bis(2-chloroethyl) ether	6.429	93	18736	197.62	ng/ml	95
9) 2-Chlorophenol	6.499	128	16450	199.77	ng/ml	92
10) 1,3-Dichlorobenzene	6.643	146	19525	213.49	ng/ml	94
11) 1,4-Dichlorobenzene	6.707	146	18751	215.07	ng/ml	94
12) Benzyl alcohol	6.820	108	6970	163.75	ng/ml	98
13) 1,2-Dichlorobenzene	6.863	146	18424	216.20	ng/ml	96
14) 2-Methylphenol	6.927	107	12165	186.63	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.948	45	24389	184.15	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.077	70	13250	197.28	ng/ml	92
17) 3+4-Methylphenol	7.077	107	15823	192.53	ng/ml	97
18) Hexachloroethane	7.194	201	5764	214.99	ng/ml	84
20) Nitrobenzene	7.248	77	18273	201.98	ng/ml	96
22) Isophorone	7.478	82	35486	204.67	ng/ml	97
23) 2-Nitrophenol	7.563	139	9275	229.22	ng/ml	93
24) 2,4-Dimethylphenol	7.595	122	13165	189.57	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.681	93	21622	209.37	ng/ml	99
26) Benzoic acid	~~7.697~~	~~105~~	~~180~~	~~795.98~~	~~ng/ml~~	98 see MJ
27) 2,4-Dichlorophenol	7.804	162	10432	189.02	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.890	180	16423	224.06	ng/ml	98
29) Naphthalene	7.964	128	51599	221.59	ng/ml	100
30) 4-Chloroaniline	8.013	127	12811	203.66	ng/ml	98
31) Hexachlorobutadiene	8.093	225	8220	222.93	ng/ml	98
32) 4-Chloro-3-methylphenol	8.494	107	9012	163.32	ng/ml	85
33) 2-Methylnaphthalene	8.660	142	36961	215.36	ng/ml	97
34) 1-Methylnaphthalene	8.756	142	36346	223.19	ng/ml	96
36) Hexachlorocyclopentadiene	8.826	237	5324	184.81	ng/ml	92
37) 2,4,6-Trichlorophenol	8.943	196	7125	189.25	ng/ml	94
38) 2,4,5-Trichlorophenol	8.986	198	6364	172.87	ng/ml	96
39) 1,1'-Biphenyl	9.125	154	44415	214.36	ng/ml	99
41) 2-Chloronaphthalene	9.146	162	32196	213.60	ng/ml	96
42) 2-Nitroaniline	9.248	138	7039	142.55	ng/ml	83
43) 2,6-Dimethylnaphthalene	9.286	156	34391	231.30	ng/ml	94

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081922.D
Acq On : 8 May 2019 10:01 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

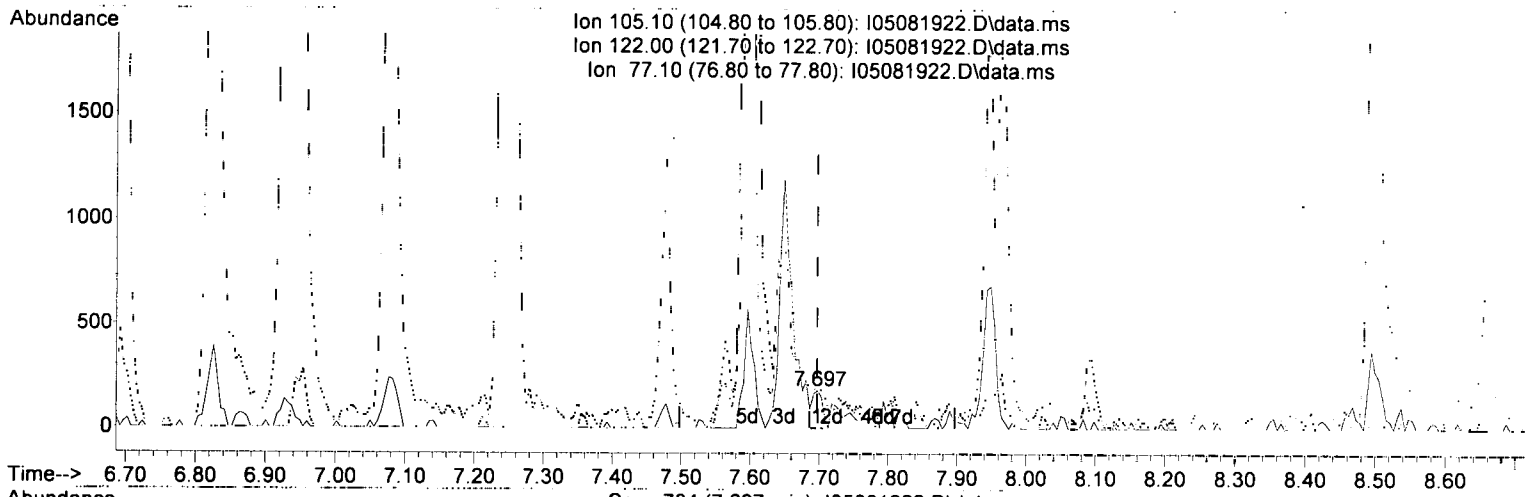
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.371	168	3037	191.61	ng/ml	97
45) Dimethyl phthalate	9.419	163	38348	224.15	ng/ml	100
46) 1,3-Dinitrobenzene	9.451	168	4229	160.53	ng/ml	91
47) 2,6-Dinitrotoluene	9.483	165	7570	203.08	ng/ml	88
48) 1,2-Dinitrobenzene	9.537	168	3477	184.71	ng/ml	85
49) Acenaphthylene	9.569	152	54704	228.60	ng/ml	99
50) 3-Nitroaniline	9.660	138	6297	189.89	ng/ml	91
51) Acenaphthene	9.745	153	34142	226.81	ng/ml	97
52) 2,4-Dinitrophenol	9.767	184	725	248.66	ng/ml	76
53) 4-Nitrophenol	9.836	139	3537	198.32	ng/ml	89
54) 2,4-Dinitrotoluene	9.895	165	8883	204.75	ng/ml	82
55) Dibenzofuran	9.922	168	47089	227.25	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.002	232	5912	222.82	ng/ml	89
57) 2,3,4,6-Tetrachlorophenol	10.045	232	7180	231.35	ng/ml	85
58) Diethyl phthalate	10.131	149	36994	231.01	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.131	170	31957	232.47	ng/ml	98
60) Fluorene	10.270	166	38831	230.14	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.259	204	19218	242.54	ng/ml	86
62) 4-Nitroaniline	10.275	138	7673	209.71	ng/ml	93
63) 4,6-Dinitro-2-methylph...	10.307	198	2514	238.84	ng/ml	83
65) N-Nitrosodiphenylamine	10.377	169	32443	233.15	ng/ml	97
66) Azobenzene (1,2-DPH)	10.419	77	36434	209.04	ng/ml	90
68) 4-Bromophenyl phenyl e...	10.756	248	10934	237.37	ng/ml	83
69) Hexachlorobenzene	10.837	284	11859	242.61	ng/ml	94
70) Pentachlorophenol (PCP)	11.035	266	3055	222.18	ng/ml	97
71) Phenanthrene	11.243	178	53865	227.94	ng/ml	97
72) Anthracene	11.297	178	54658	239.66	ng/ml	97
73) Carbazole	11.452	167	48320	211.98	ng/ml	97
74) Di-n-butyl phthalate	11.794	149	58030	211.72	ng/ml	99
75) Fluoranthene	12.521	202	63551	242.40	ng/ml	97
76) Benzidine	12.677	184	37553	670.44	ng/ml	99
77) Pyrene	12.816	202	65571	247.07	ng/ml	99
80) Butyl benzyl phthalate	13.843	149	23562	195.74	ng/ml	87
81) Bis(2-ethylhexyl) adipate	14.014	129	22694	170.62	ng/ml	93
82) 3,3-Dichlorobenzidine	14.987	252	28902	759.23	ng/ml	90
83) Benz(a)anthracene	15.025	228	58075	211.43	ng/ml	98
84) Chrysene	15.105	228	53969	210.93	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.180	149	29512	160.43	ng/ml	94
87) Di-n-octyl phthalate	16.843	149	42140	211.67	ng/ml	98
88) Benzo(b)fluoranthene	17.613	252	54791	212.85	ng/ml	95
89) Benzo(k)fluoranthene	17.678	252	56932	216.15	ng/ml	94
90) Benzo(b+k)fluoranthene	17.613	252	114689	428.28	ng/ml	94
91) Benzo(e)pyrene	18.266	252	55890	219.38	ng/ml	94
92) Benzo(a)pyrene	18.384	252	49339	214.68	ng/ml	98
93) Perylene	18.592	252	46507	202.37	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.913	276	45199	191.67	ng/ml	96
96) Dibenz(a,h)anthracene	20.983	278	43093	217.16	ng/ml	94
97) Benzo(g,h,i)perylene	21.448	276	46913	212.36	ng/ml	89

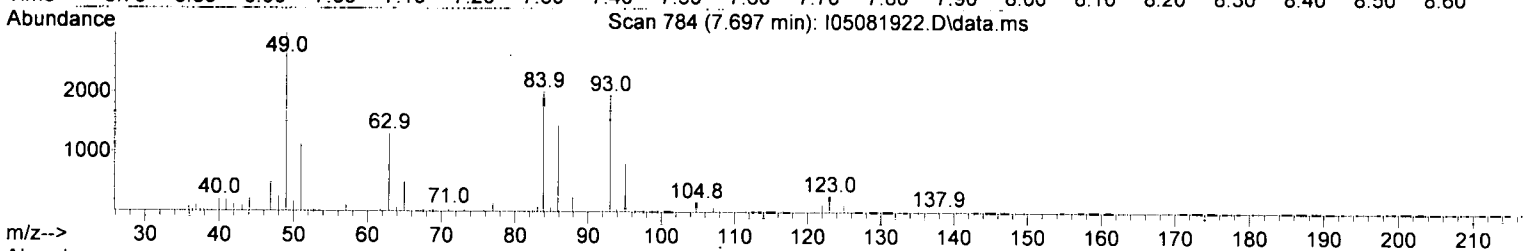
(#) = qualifier out of range (m) = manual integration (+) = signals summed

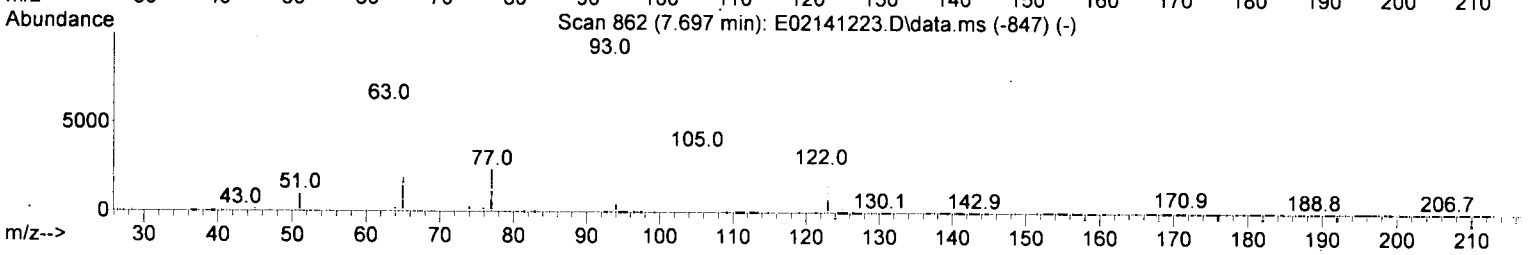
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081922.D
Acq On : 8 May 2019 10:01 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081922.D\data.ms

(26) Benzoic acid (T)

7.697min (+ 0.000) 795.98 ng/ml

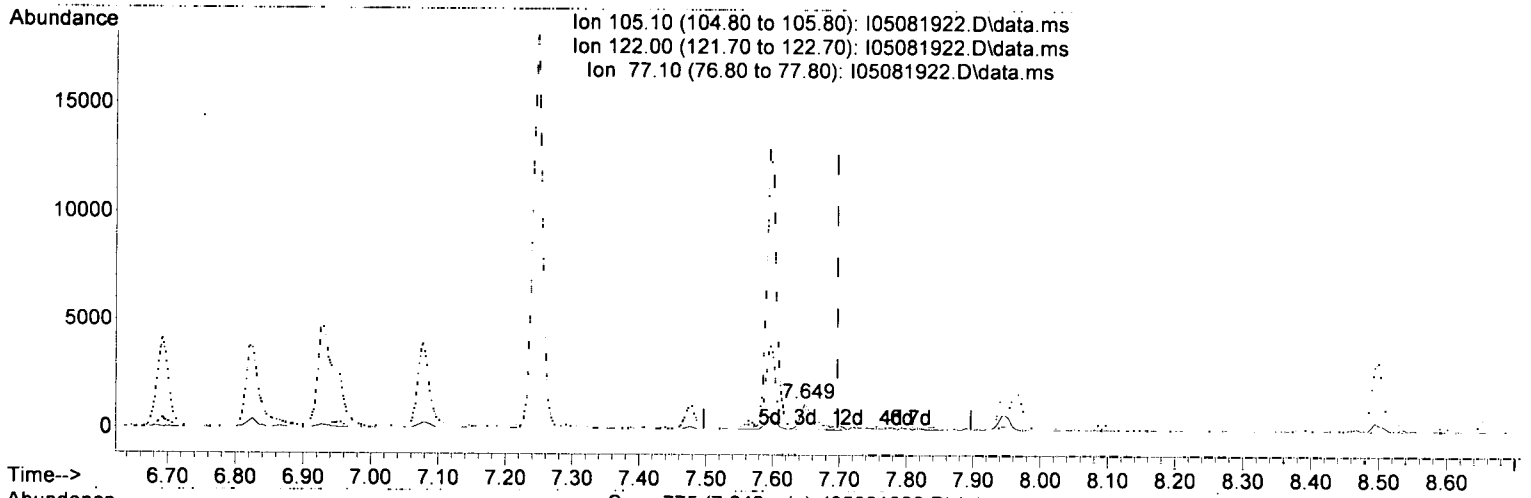
response 180

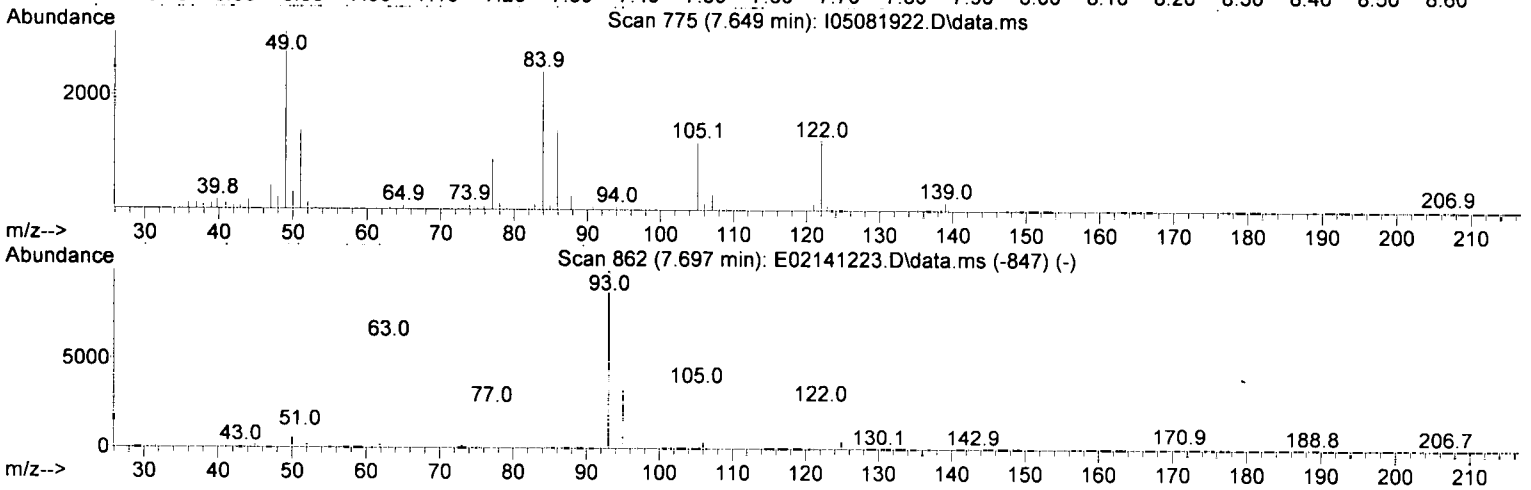
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	82.68
77.10	76.00	77.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081922.D
Acq On : 8 May 2019 10:01 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081922.D\data.ms

(26) Benzoic acid (T)

7.649min (-0.048) 835.63 ng/ml m

5/9/19

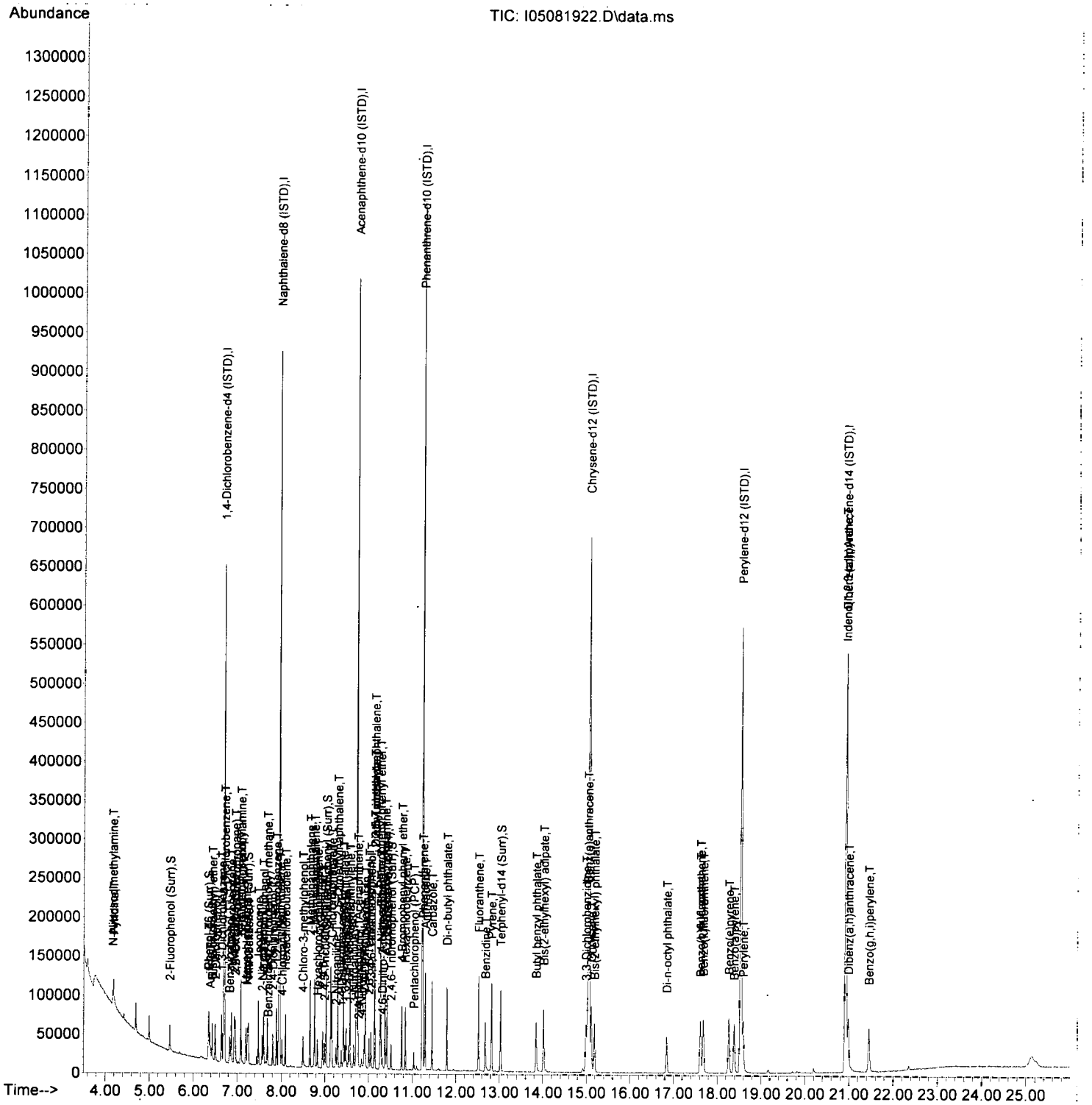
response 1808

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	101.76
77.10	76.00	76.19
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081922.D
Acq On : 8 May 2019 10:01 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081923.D
Acq On : 8 May 2019 10:38 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:45 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	118130	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	449407	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.713	162	233204	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	434358	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.051	240	448745	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.538	264	423882	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	408680	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.472	112	39110	495.14	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	50799	487.51	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.231	82	42745	489.72	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	100779	592.16	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.515	330	11050	653.33	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	118955	556.78	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.183	74	27689	443.85	ng/ml	94
3) Pyridine	4.199	79	44836	460.01	ng/ml	96
6) Phenol	6.349	94	56392	496.73	ng/ml	97
7) Aniline	6.381	93	52964	510.59	ng/ml	99
8) Bis(2-chloroethyl) ether	6.429	93	45269	486.19	ng/ml	98
9) 2-Chlorophenol	6.499	128	42307	523.15	ng/ml	93
10) 1,3-Dichlorobenzene	6.643	146	48498	539.96	ng/ml	96
11) 1,4-Dichlorobenzene	6.713	146	45970	536.88	ng/ml	96
12) Benzyl alcohol	6.825	108	21295	455.40	ng/ml	94
13) 1,2-Dichlorobenzene	6.862	146	45584	544.66	ng/ml	95
14) 2-Methylphenol	6.932	107	33013	515.71	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.948	45	59332	456.16	ng/ml	97
16) N-Nitrosodi-n-propylamine	7.076	70	33065	501.29	ng/ml	97
17) 3+4-Methylphenol	7.076	107	41496	514.11	ng/ml	95
18) Hexachloroethane	7.194	201	14906	566.11	ng/ml	86
20) Nitrobenzene	7.247	77	43153	485.69	ng/ml	94
22) Isophorone	7.477	82	89488	539.19	ng/ml	96
23) 2-Nitrophenol	7.563	139	25491	610.26	ng/ml	96
24) 2,4-Dimethylphenol	7.595	122	33821	508.87	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.686	93	53158	537.84	ng/ml	99
26) Benzoic acid	7.670	105	12609	1109.66	ng/ml	96
27) 2,4-Dichlorophenol	7.804	162	28435	518.94	ng/ml	95
28) 1,2,4-Trichlorobenzene	7.889	180	39463	562.55	ng/ml	97
29) Naphthalene	7.964	128	121753	546.34	ng/ml	99
30) 4-Chloroaniline	8.018	127	25718	427.20	ng/ml	95
31) Hexachlorobutadiene	8.093	225	20186	572.03	ng/ml	97
32) 4-Chloro-3-methylphenol	8.494	107	29879	489.21	ng/ml	97
33) 2-Methylnaphthalene	8.660	142	94207	573.54	ng/ml	97
34) 1-Methylnaphthalene	8.756	142	90038	577.72	ng/ml	97
36) Hexachlorocyclopentadiene	8.825	237	16399	526.00	ng/ml	98
37) 2,4,6-Trichlorophenol	8.943	196	21591	531.23	ng/ml	100
38) 2,4,5-Trichlorophenol	8.980	198	19810	501.07	ng/ml	99
39) 1,1'-Biphenyl	9.125	154	111947	568.00	ng/ml	99
41) 2-Chloronaphthalene	9.152	162	80038	558.24	ng/ml	93
42) 2-Nitroaniline	9.243	138	22855	486.58	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.285	156	82179	581.06	ng/ml	96

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081923.D
Acq On : 8 May 2019 10:38 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:45 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

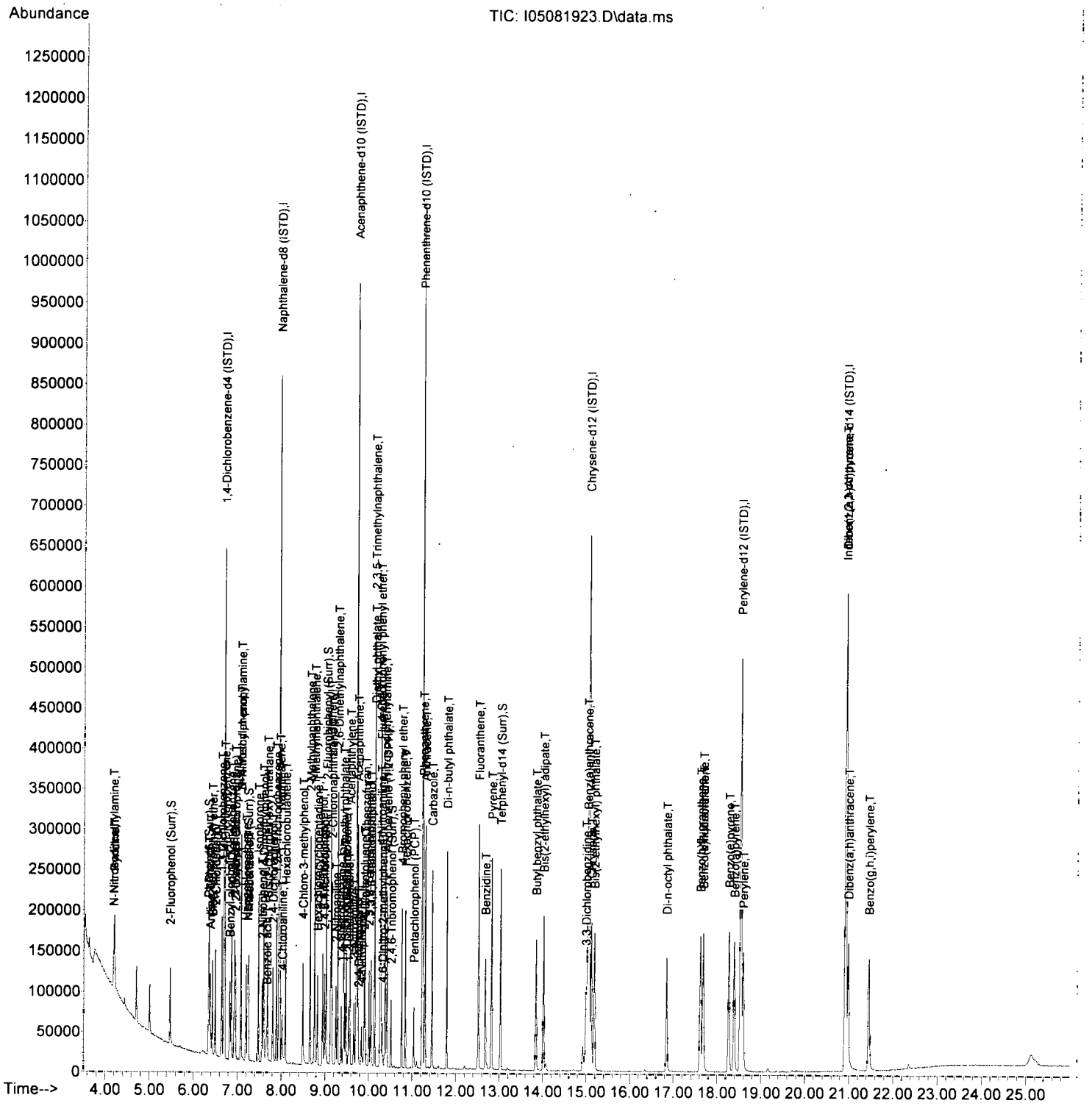
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.371	168	10337	524.07	ng/ml	84
45) Dimethyl phthalate	9.424	163	91807	564.16	ng/ml	99
46) 1,3-Dinitrobenzene	9.451	168	13273	529.67	ng/ml	97
47) 2,6-Dinitrotoluene	9.483	165	20865	588.48	ng/ml	86
48) 1,2-Dinitrobenzene	9.537	168	9375	523.58	ng/ml	85
49) Acenaphthylene	9.569	152	129518	569.00	ng/ml	99
50) 3-Nitroaniline	9.660	138	17372	538.16	ng/ml	89
51) Acenaphthene	9.745	153	79978	558.57	ng/ml	99
52) 2,4-Dinitrophenol	9.761	184	3835	566.86	ng/ml	99
53) 4-Nitrophenol	9.831	139	11649	504.51	ng/ml	84
54) 2,4-Dinitrotoluene	9.895	165	25345	552.15	ng/ml	82
55) Dibenzofuran	9.922	168	113330	574.99	ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	10.002	232	17017	570.18	ng/ml	90
57) 2,3,4,6-Tetrachlorophenol	10.045	232	19079	582.63	ng/ml	88
58) Diethyl phthalate	10.136	149	84929	557.56	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.130	170	76253	583.17	ng/ml	94
60) Fluorene	10.269	166	91858	572.35	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.259	204	44439	589.61	ng/ml	88
62) 4-Nitroaniline	10.275	138	19675	565.32	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.312	198	8901	633.37	ng/ml	77
65) N-Nitrosodiphenylamine	10.376	169	78301	589.83	ng/ml	96
66) Azobenzene (1,2-DPH)	10.419	77	87002	523.24	ng/ml	90
68) 4-Bromophenyl phenyl e...	10.756	248	27078	616.17	ng/ml	86
69) Hexachlorobenzene	10.836	284	28884	619.40	ng/ml	93
70) Pentachlorophenol (PCP)	11.034	266	10538	588.98	ng/ml	94
71) Phenanthrene	11.243	178	127029	563.47	ng/ml	98
72) Anthracene	11.296	178	128961	592.72	ng/ml	98
73) Carbazole	11.452	167	116650	540.21	ng/ml	98
74) Di-n-butyl phthalate	11.794	149	147202	562.95	ng/ml	99
75) Fluoranthene	12.521	202	155537	621.85	ng/ml	96
76) Benzidine	12.676	184	76984	1386.28	ng/ml	97
77) Pyrene	12.821	202	154311	609.46	ng/ml	99
80) Butyl benzyl phthalate	13.842	149	63002	491.75	ng/ml	91
81) Bis(2-ethylhexyl) adipate	14.014	129	56949	457.91	ng/ml	98
82) 3,3-Dichlorobenzidine	14.987	252	47477	1694.22	ng/ml	97
83) Benz(a)anthracene	15.024	228	138304	538.49	ng/ml	97
84) Chrysene	15.110	228	126427	528.46	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.180	149	81848	475.85	ng/ml	96
87) Di-n-octyl phthalate	16.843	149	132449	524.88	ng/ml	99
88) Benzo(b)fluoranthene	17.613	252	139653	554.84	ng/ml	95
89) Benzo(k)fluoranthene	17.677	252	142423	562.67	ng/ml	94
90) Benzo(b+k)fluoranthene	17.677	252	289741	1117.93	ng/ml	94
91) Benzo(e)pyrene	18.271	252	140018	582.00	ng/ml	98
92) Benzo(a)pyrene	18.389	252	129040	575.04	ng/ml	97
93) Perylene	18.592	252	116376	536.26	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.919	276	116104	501.79	ng/ml	95
96) Dibenz(a,h)anthracene	20.983	278	106785	548.44	ng/ml	96
97) Benzo(g,h,i)perylene	21.453	276	120043	553.82	ng/ml	89

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081923.D
Acq On : 8 May 2019 10:38 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL5
Misc : 1x, A19D057 BNA@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:45 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081924.D
Acq On : 8 May 2019 11:14 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:52 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	116694	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	435111	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.719	162	224844	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	425173	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.057	240	428978	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.539	264	400554	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	399119	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.467	112	76115	975.49	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	98894	960.76	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.232	82	81436	944.48	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	182200	1110.38	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	22087	1300.38	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	219562	1075.04	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.172	74	53609	869.93	ng/ml	100
3) Pyridine	4.183	79	85720	890.30	ng/ml	99
6) Phenol	6.354	94	107531	958.84	ng/ml	97
7) Aniline	6.381	93	81018	790.65	ng/ml	97
8) Bis(2-chloroethyl) ether	6.435	93	91455	994.32	ng/ml	98
9) 2-Chlorophenol	6.499	128	81650	1022.08	ng/ml	95
10) 1,3-Dichlorobenzene	6.643	146	91509	1031.37	ng/ml	98
11) 1,4-Dichlorobenzene	6.713	146	87432	1033.67	ng/ml	97
12) Benzyl alcohol	6.825	108	45805	949.75	ng/ml	91
13) 1,2-Dichlorobenzene	6.863	146	84135	1017.65	ng/ml	97
14) 2-Methylphenol	6.932	107	61935	979.41	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.954	45	109743	854.12	ng/ml	95
16) N-Nitrosodi-n-propylamine	7.077	70	62234	955.13	ng/ml	96
17) 3+4-Methylphenol	7.077	107	78741	987.56	ng/ml	98
18) Hexachloroethane	7.194	201	27533	1058.54	ng/ml	94
20) Nitrobenzene	7.248	77	81129	924.35	ng/ml	95
22) Isophorone	7.483	82	169224	1053.31	ng/ml	95
23) 2-Nitrophenol	7.563	139	44264	1073.97	ng/ml	99
24) 2,4-Dimethylphenol	7.601	122	67530	1049.45	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.686	93	98157	1025.75	ng/ml	99
26) Benzoic acid	7.697	105	57591	2238.59	ng/ml	98
27) 2,4-Dichlorophenol	7.804	162	59077	1097.68	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.890	180	73101	1076.31	ng/ml	97
29) Naphthalene	7.970	128	228023	1056.83	ng/ml	99
30) 4-Chloroaniline	8.023	127	57359	984.09	ng/ml	96
31) Hexachlorobutadiene	8.098	225	37131	1086.79	ng/ml	99
32) 4-Chloro-3-methylphenol	8.494	107	67094	1083.65	ng/ml	98
33) 2-Methylnaphthalene	8.660	142	177224	1114.40	ng/ml	97
34) 1-Methylnaphthalene	8.761	142	166590	1104.02	ng/ml	98
36) Hexachlorocyclopentadiene	8.826	237	34750	1111.10	ng/ml	96
37) 2,4,6-Trichlorophenol	8.943	196	44351	1093.91	ng/ml	99
38) 2,4,5-Trichlorophenol	8.981	198	42377	1080.38	ng/ml	99
39) 1,1'-Biphenyl	9.125	154	204461	1075.97	ng/ml	99
41) 2-Chloronaphthalene	9.152	162	145871	1055.23	ng/ml	96
42) 2-Nitroaniline	9.248	138	48960	1081.11	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.286	156	150715	1105.27	ng/ml	96

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081924.D
Acq On : 8 May 2019 11:14 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:52 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

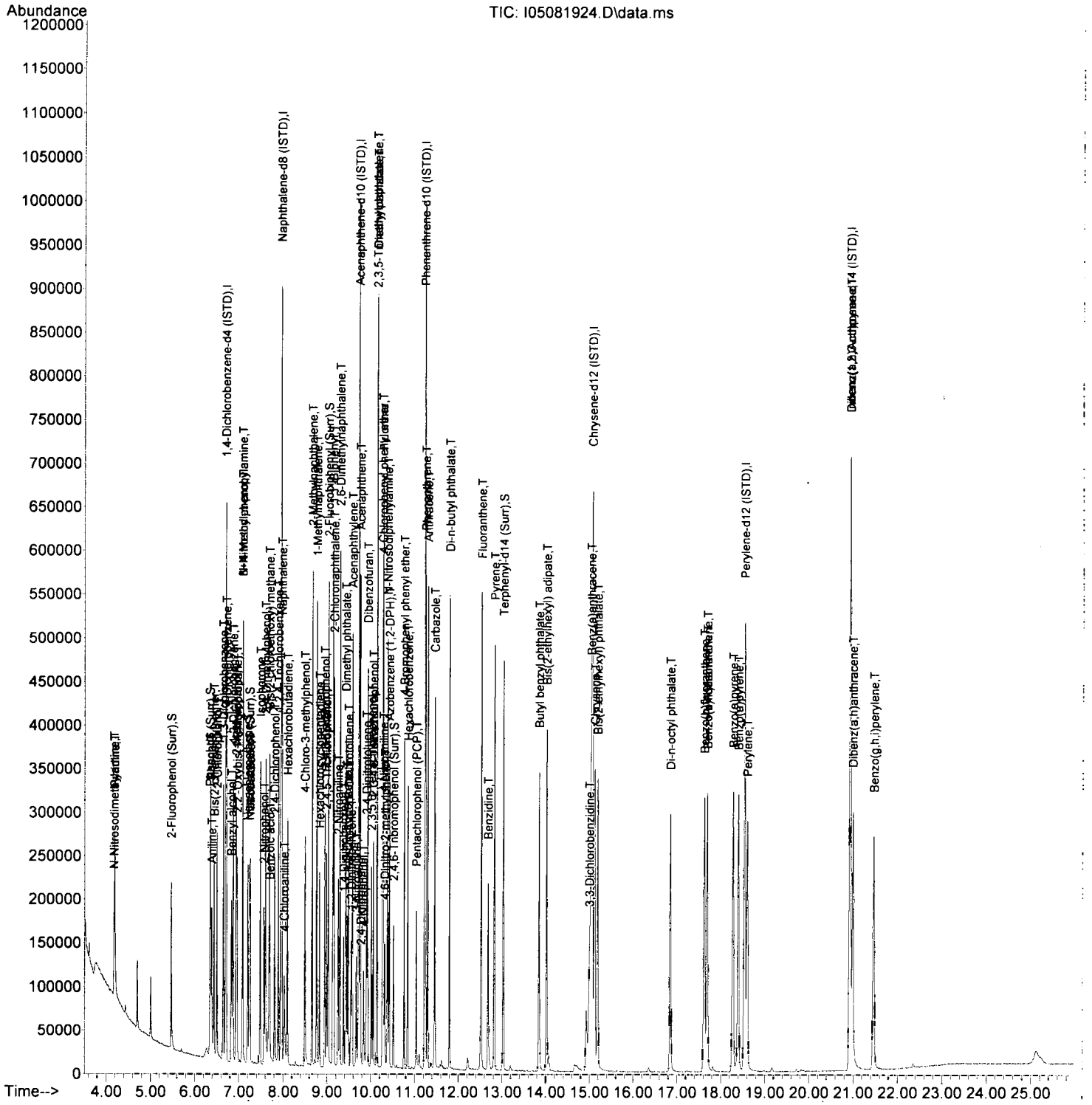
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	23019	1115.72	ng/ml	81
45) Dimethyl phthalate	9.425	163	167550	1067.88	ng/ml	99
46) 1,3-Dinitrobenzene	9.457	168	27406	1134.32	ng/ml	91
47) 2,6-Dinitrotoluene	9.489	165	39367	1151.59	ng/ml	78
48) 1,2-Dinitrobenzene	9.548	168	19142	1108.80	ng/ml#	72
49) Acenaphthylene	9.574	152	242796	1106.31	ng/ml	99
50) 3-Nitroaniline	9.665	138	30789	1019.40	ng/ml	92
51) Acenaphthene	9.751	153	146889	1064.01	ng/ml	99
52) 2,4-Dinitrophenol	9.767	184	12133	1336.11	ng/ml	87
53) 4-Nitrophenol	9.831	139	26763	1084.22	ng/ml	89
54) 2,4-Dinitrotoluene	9.895	165	50363	1106.48	ng/ml	85
55) Dibenzofuran	9.922	168	206307	1085.63	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.008	232	35452	1158.39	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.050	232	38150	1171.11	ng/ml	87
58) Diethyl phthalate	10.136	149	154986	1055.31	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.131	170	135724	1076.59	ng/ml	96
60) Fluorene	10.270	166	163031	1053.59	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.259	204	79614	1095.58	ng/ml	88
62) 4-Nitroaniline	10.280	138	36743	1094.98	ng/ml	91
63) 4,6-Dinitro-2-methylph...	10.312	198	21051	1355.86	ng/ml	82
65) N-Nitrosodiphenylamine	10.377	169	139124	1070.63	ng/ml	98
66) Azobenzene (1,2-DPH)	10.419	77	156991	964.57	ng/ml	91
68) 4-Bromophenyl phenyl e...	10.756	248	49801	1157.73	ng/ml	87
69) Hexachlorobenzene	10.842	284	52902	1158.97	ng/ml	91
70) Pentachlorophenol (PCP)	11.035	266	23287	1202.11	ng/ml	98
71) Phenanthrene	11.248	178	232143	1051.98	ng/ml	100
72) Anthracene	11.297	178	235356	1105.09	ng/ml	99
73) Carbazole	11.457	167	218760	1070.75	ng/ml	98
74) Di-n-butyl phthalate	11.794	149	281730	1100.70	ng/ml	99
75) Fluoranthene	12.527	202	287574	1174.59	ng/ml	97
76) Benzidine	12.677	184	119397	2129.89	ng/ml	97
77) Pyrene	12.821	202	286850	1157.41	ng/ml	100
80) Butyl benzyl phthalate	13.843	149	128733	996.48	ng/ml	90
81) Bis(2-ethylhexyl) adipate	14.014	129	114896	966.42	ng/ml	98
82) 3,3-Dichlorobenzidine	14.993	252	62412	2491.37	ng/ml	94
83) Benz(a)anthracene	15.030	228	257723	1049.68	ng/ml	99
84) Chrysene	15.116	228	231498	1012.24	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.180	149	159937	972.69	ng/ml	96
87) Di-n-octyl phthalate	16.843	149	284170	1052.31	ng/ml	98
88) Benzo(b)fluoranthene	17.619	252	268390	1108.16	ng/ml	96
89) Benzo(k)fluoranthene	17.688	252	262537	1105.11	ng/ml	95
90) Benzo(b+k)fluoranthene	17.688	252	543058	2204.99	ng/ml	95
91) Benzo(e)pyrene	18.277	252	259798	1142.77	ng/ml	98
92) Benzo(a)pyrene	18.394	252	245703	1147.61	ng/ml	97
93) Perylene	18.597	252	216265	1054.59	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.924	276	217807	963.89	ng/ml	94
96) Dibenz(a,h)anthracene	20.988	278	199329	1048.27	ng/ml	94
97) Benzo(g,h,i)perylene	21.464	276	226164	1068.40	ng/ml	90

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081924.D
Acq On : 8 May 2019 11:14 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL6
Misc : 1x, A19D058 BNA@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:02:52 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081925.D
Acq On : 8 May 2019 11:50 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:00 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	107016	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	404790	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.719	162	208028	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.222	188	396363	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.062	240	353171	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.544	264	333963	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.929	292	322705	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.467	112	148818	2079.73	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	191806	2031.91	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.232	82	149113	1885.78	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	311047	2048.84	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	38932	2416.44	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	356113	2117.90	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.167	74	104473	1848.62	ng/ml	97
3) Pyridine	4.183	79	164460	1862.57	ng/ml	99
6) Phenol	6.354	94	203006	1973.89	ng/ml	97
7) Aniline	6.381	93	119883	1275.74	ng/ml	97
8) Bis(2-chloroethyl) ether	6.435	93	172619	2046.48	ng/ml	98
9) 2-Chlorophenol	6.499	128	152301	2078.88	ng/ml	94
10) 1,3-Dichlorobenzene	6.643	146	163909	2014.44	ng/ml	95
11) 1,4-Dichlorobenzene	6.713	146	154653	1993.74	ng/ml	97
12) Benzyl alcohol	6.825	108	91265	1975.88	ng/ml	93
13) 1,2-Dichlorobenzene	6.863	146	151209	1994.34	ng/ml	98
14) 2-Methylphenol	6.932	107	113843	1963.07	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	195754	1661.32	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.082	70	111051	1858.47	ng/ml	94
17) 3+4-Methylphenol	7.082	107	144919	1981.92	ng/ml	98
18) Hexachloroethane	7.194	201	49920	2092.81	ng/ml	90
20) Nitrobenzene	7.253	77	144892	1800.13	ng/ml	91
22) Isophorone	7.483	82	306230	2048.86	ng/ml	95
23) 2-Nitrophenol	7.563	139	81543	2100.52	ng/ml	99
24) 2,4-Dimethylphenol	7.601	122	125958	2104.07	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.686	93	173377	1947.52	ng/ml	99
26) Benzoic acid	7.724	105	120684	3889.47	ng/ml	98
27) 2,4-Dichlorophenol	7.809	162	112156	2211.77	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.889	180	127703	2021.09	ng/ml	96
29) Naphthalene	7.970	128	397624	1980.92	ng/ml	98
30) 4-Chloroaniline	8.034	127	84586	1559.92	ng/ml	96
31) Hexachlorobutadiene	8.098	225	67587	2126.39	ng/ml	100
32) 4-Chloro-3-methylphenol	8.499	107	128769	2162.11	ng/ml	95
33) 2-Methylnaphthalene	8.660	142	312815	2114.36	ng/ml	98
34) 1-Methylnaphthalene	8.761	142	290157	2066.96	ng/ml	98
36) Hexachlorocyclopentadiene	8.825	237	65488	2203.54	ng/ml	98
37) 2,4,6-Trichlorophenol	8.943	196	81849	2145.98	ng/ml	98
38) 2,4,5-Trichlorophenol	8.981	198	78891	2159.17	ng/ml	97
39) 1,1'-Biphenyl	9.130	154	349335	1986.97	ng/ml	98
41) 2-Chloronaphthalene	9.152	162	248276	1941.20	ng/ml	97
42) 2-Nitroaniline	9.253	138	89274	2130.66	ng/ml	86
43) 2,6-Dimethylnaphthalene	9.291	156	257201	2038.65	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081925.D
Acq On : 8 May 2019 11:50 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:00 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

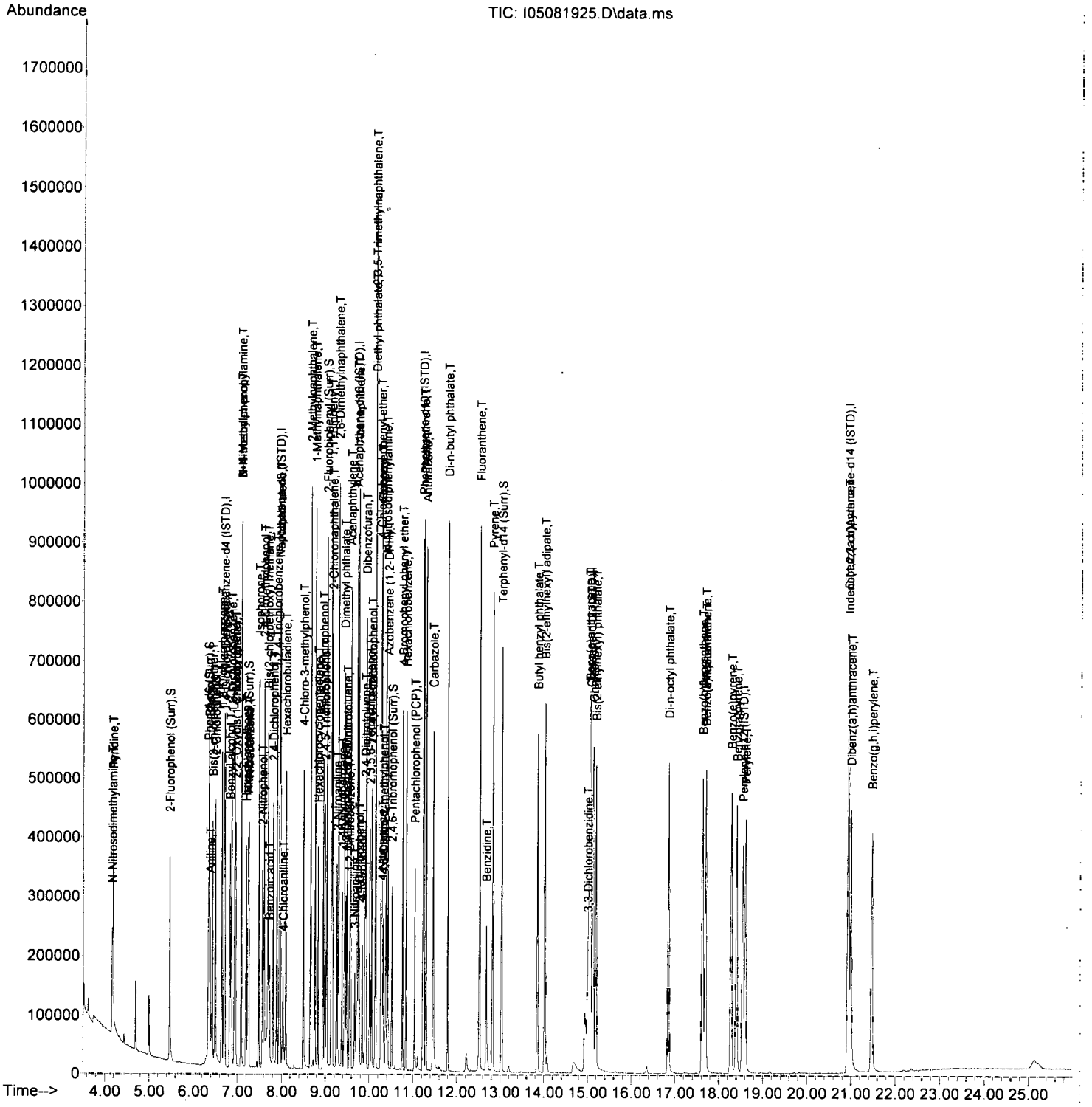
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	42957	2139.47	ng/ml	82
45) Dimethyl phthalate	9.430	163	291628	2008.94	ng/ml	98
46) 1,3-Dinitrobenzene	9.462	168	48772	2181.83	ng/ml	90
47) 2,6-Dinitrotoluene	9.489	165	70090	2216.06	ng/ml	85
48) 1,2-Dinitrobenzene	9.548	168	34100	2134.92	ng/ml	88
49) Acenaphthylene	9.574	152	407881	2008.76	ng/ml	99
50) 3-Nitroaniline	9.665	138	46893	1795.57	ng/ml	95
51) Acenaphthene	9.751	153	254388	1991.66	ng/ml	100
52) 2,4-Dinitrophenol	9.767	184	25811	2502.10	ng/ml	88
53) 4-Nitrophenol	9.836	139	48681	2007.95	ng/ml	86
54) 2,4-Dinitrotoluene	9.901	165	90563	2127.03	ng/ml	81
55) Dibenzofuran	9.922	168	351544	1999.43	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.008	232	64681	2181.55	ng/ml	88
57) 2,3,4,6-Tetrachlorophenol	10.050	232	68233	2234.46	ng/ml	88
58) Diethyl phthalate	10.141	149	252775	1860.29	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.136	170	226222	1939.49	ng/ml	98
60) Fluorene	10.275	166	271787	1898.41	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.259	204	136404	2028.81	ng/ml	90
62) 4-Nitroaniline	10.286	138	59807	1926.38	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.318	198	40019	2494.03	ng/ml	75
65) N-Nitrosodiphenylamine	10.382	169	227824	1880.66	ng/ml	98
66) Azobenzene (1,2-DPH)	10.425	77	264872	1745.69	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.756	248	88111	2197.21	ng/ml	89
69) Hexachlorobenzene	10.842	284	92531	2174.50	ng/ml	91
70) Pentachlorophenol (PCP)	11.034	266	45320	2323.06	ng/ml	97
71) Phenanthrene	11.248	178	398028	1934.81	ng/ml	98
72) Anthracene	11.302	178	397681	2003.00	ng/ml	100
73) Carbazole	11.457	167	364563	2063.64	ng/ml	98
74) Di-n-butyl phthalate	11.794	149	471443	1975.77	ng/ml	98
75) Fluoranthene	12.527	202	475094	2081.55	ng/ml	97
76) Benzidine	12.677	184	153390	2855.74	ng/ml	99
77) Pyrene	12.821	202	468721	2028.71	ng/ml	99
80) Butyl benzyl phthalate	13.848	149	219372	1966.35	ng/ml	91
81) Bis(2-ethylhexyl) adipate	14.014	129	191848	1960.05	ng/ml	97
82) 3,3-Dichlorobenzidine	14.998	252	81995	4181.32	ng/ml	98
83) Benz(a)anthracene	15.030	228	409861	2027.64	ng/ml	99
84) Chrysene	15.121	228	375111	1992.25	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.185	149	265428	1960.75	ng/ml	95
87) Di-n-octyl phthalate	16.848	149	490249	1949.45	ng/ml	98
88) Benzo(b)fluoranthene	17.624	252	444019	2152.11	ng/ml	96
89) Benzo(k)fluoranthene	17.694	252	401664	2075.77	ng/ml	96
90) Benzo(b+k)fluoranthene	17.694	252	864585	4211.83	ng/ml	96
91) Benzo(e)pyrene	18.282	252	421328	2222.82	ng/ml	98
92) Benzo(a)pyrene	18.405	252	383125	2137.17	ng/ml	97
93) Perylene	18.608	252	344990	2017.74	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.935	276	348943	1909.89	ng/ml	93
96) Dibenz(a,h)anthracene	20.994	278	325096	2114.51	ng/ml	96
97) Benzo(g,h,i)perylene	21.470	276	360991	2109.13	ng/ml	91

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081925.D
Acq On : 8 May 2019 11:50 pm
Operator : JK /AMS /DTH
Sample : 9E08056-CAL7
Misc : 1x, A19D059 BNA@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:00 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081926.D
Acq On : 9 May 2019 12:26 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:08 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	98792	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.954	136	378186	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.724	162	202901	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.227	188	404511	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.073	240	346046	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.555	264	361418	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.951	292	360190	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.467	112	284613	4308.58	ng/ml	0.00
5) Phenol-d6 (Surr)	6.349	99	374178	4293.86	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.237	82	275454	3773.57	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.029	172	532909	3598.93	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.521	330	78802	4693.62	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.030	244	667601	4052.16	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.167	74	199054	3815.42	ng/ml	99
3) Pyridine	4.172	79	337112	4135.74	ng/ml	99
6) Phenol	6.360	94	375248	3952.38	ng/ml	100
7) Aniline	6.387	93	249012	2870.46	ng/ml	96
8) Bis(2-chloroethyl) ether	6.440	93	297917	3825.96	ng/ml	99
9) 2-Chlorophenol	6.504	128	275296	4070.56	ng/ml	94
10) 1,3-Dichlorobenzene	6.649	146	287179	3823.24	ng/ml	97
11) 1,4-Dichlorobenzene	6.718	146	272704	3808.28	ng/ml	97
12) Benzyl alcohol	6.836	108	184713	4060.15	ng/ml	92
13) 1,2-Dichlorobenzene	6.868	146	259626	3709.35	ng/ml	98
14) 2-Methylphenol	6.937	107	213032	3979.25	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.959	45	331551	3048.03	ng/ml	92
16) N-Nitrosodi-n-propylamine	7.093	70	197390	3578.37	ng/ml	93
17) 3+4-Methylphenol	7.087	107	268146	3972.46	ng/ml	99
18) Hexachloroethane	7.200	201	89376	4058.84	ng/ml	87
20) Nitrobenzene	7.258	77	262312	3530.24	ng/ml	93
22) Isophorone	7.494	82	573921	4110.00	ng/ml	94
23) 2-Nitrophenol	7.574	139	153577	4204.01	ng/ml	96
24) 2,4-Dimethylphenol	7.611	122	231859	4145.56	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.697	93	317226	3814.03	ng/ml	98
26) Benzoic acid	7.783	105	329662	8705.24	ng/ml	97
27) 2,4-Dichlorophenol	7.815	162	210069	4356.34	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.895	180	222596	3770.73	ng/ml	98
29) Naphthalene	7.975	128	687088	3663.80	ng/ml	97
30) 4-Chloroaniline	8.045	127	170567	3366.84	ng/ml	95
31) Hexachlorobutadiene	8.098	225	118434	3988.23	ng/ml	99
32) 4-Chloro-3-methylphenol	8.505	107	257664	4420.43	ng/ml	96
33) 2-Methylnaphthalene	8.665	142	555825	4021.18	ng/ml	98
34) 1-Methylnaphthalene	8.767	142	506152	3859.27	ng/ml	98
36) Hexachlorocyclopentadiene	8.831	237	130554	4365.71	ng/ml	100
37) 2,4,6-Trichlorophenol	8.949	196	157742	4195.02	ng/ml	98
38) 2,4,5-Trichlorophenol	8.986	198	152327	4304.48	ng/ml	99
39) 1,1'-Biphenyl	9.136	154	599715	3497.29	ng/ml	98
41) 2-Chloronaphthalene	9.157	162	426263	3417.05	ng/ml	98
42) 2-Nitroaniline	9.259	138	175844	4302.84	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.296	156	440208	3577.39	ng/ml	97

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081926.D
Acq On : 9 May 2019 12:26 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:08 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

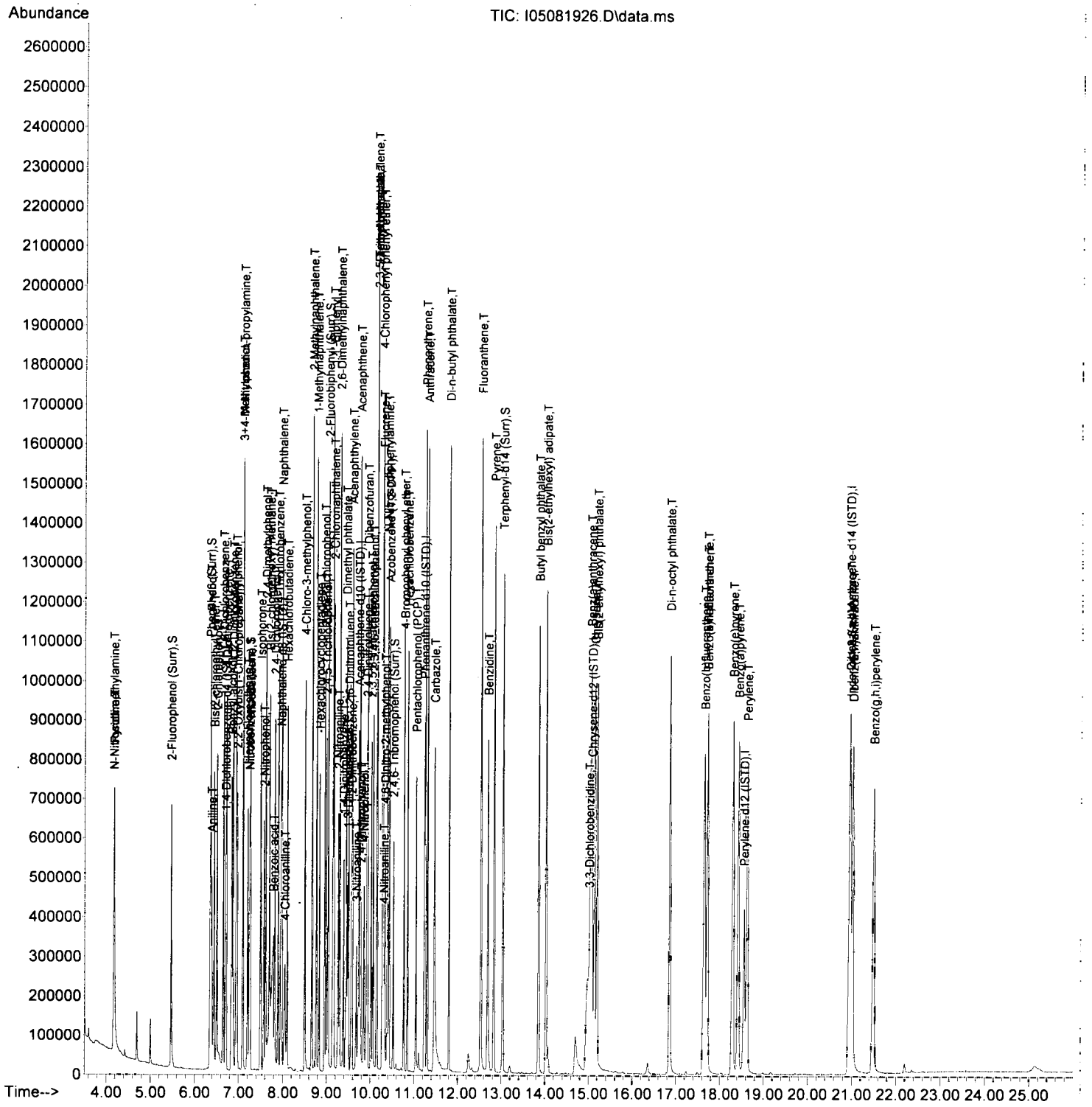
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.387	168	89593	4300.59	ng/ml	80
45)	Dimethyl phthalate	9.441	163	526270	3716.92	ng/ml	97
46)	1,3-Dinitrobenzene	9.473	168	97308	4463.09	ng/ml	90
47)	2,6-Dinitrotoluene	9.499	165	131486	4262.28	ng/ml	83
48)	1,2-Dinitrobenzene	9.564	168	65816	4224.70	ng/ml	80
49)	Acenaphthylene	9.580	152	694303	3505.74	ng/ml	97
50)	3-Nitroaniline	9.676	138	82018	4212.09	ng/ml	94
51)	Acenaphthene	9.756	153	449192	3605.68	ng/ml	99
52)	2,4-Dinitrophenol	9.778	184	66685	5006.82	ng/ml	88
53)	4-Nitrophenol	9.847	139	110480	4293.76	ng/ml	87
54)	2,4-Dinitrotoluene	9.911	165	174398	4193.29	ng/ml	85
55)	Dibenzofuran	9.927	168	609207	3552.47	ng/ml	98
56)	2,3,5,6-Tetrachlorophenol	10.013	232	128540	4189.58	ng/ml	90
57)	2,3,4,6-Tetrachlorophenol	10.056	232	131983	4411.97	ng/ml	91
58)	Diethyl phthalate	10.147	149	430062	3245.01	ng/ml	95
59)	2,3,5-Trimethylnaphtha...	10.141	170	377414	3317.49	ng/ml	98
60)	Fluorene	10.280	166	463326	3318.07	ng/ml	99
61)	4-Chlorophenyl phenyl ...	10.270	204	239379	3650.38	ng/ml	89
62)	4-Nitroaniline	10.302	138	119176	3935.66	ng/ml	94
63)	4,6-Dinitro-2-methylph...	10.329	198	87463	4765.28	ng/ml	78
65)	N-Nitrosodiphenylamine	10.393	169	398485	3223.19	ng/ml	99
66)	Azobenzene (1,2-DPH)	10.430	77	481159	3107.29	ng/ml	86
68)	4-Bromophenyl phenyl e...	10.767	248	164575	4021.31	ng/ml	86
69)	Hexachlorobenzene	10.847	284	169055	3892.80	ng/ml	94
70)	Pentachlorophenol (PCP)	11.040	266	103356	4679.02	ng/ml	97
71)	Phenanthrene	11.254	178	712691	3394.59	ng/ml	98
72)	Anthracene	11.307	178	710857	3508.25	ng/ml	98
73)	Carbazole	11.462	167	666936	4706.84	ng/ml	99
74)	Di-n-butyl phthalate	11.799	149	869303	3569.78	ng/ml	98
75)	Fluoranthene	12.532	202	874011	3752.21	ng/ml	98
76)	Benzidine	12.687	184	507935	7862.86	ng/ml	98
77)	Pyrene	12.832	202	853568	3619.97	ng/ml	98
80)	Butyl benzyl phthalate	13.853	149	466198	3979.59	ng/ml	91
81)	Bis(2-ethylhexyl) adipate	14.024	129	395039	4119.09	ng/ml	97
82)	3,3-Dichlorobenzidine	15.009	252	140872	7405.50	ng/ml	95
83)	Benz(a)anthracene	15.046	228	790890	3993.20	ng/ml	99
84)	Chrysene	15.132	228	726806	3939.62	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.190	149	541901	4085.51	ng/ml	94
87)	Di-n-octyl phthalate	16.859	149	1106017	3530.60	ng/ml	97
88)	Benzo(b)fluoranthene	17.651	252	916793	3978.72	ng/ml	96
89)	Benzo(k)fluoranthene	17.720	252	788525	3971.90	ng/ml	96
90)	Benzo(b+k)fluoranthene	17.720	252	1749715	7921.59	ng/ml	96
91)	Benzo(e)pyrene	18.303	252	863719	4210.62	ng/ml	99
92)	Benzo(a)pyrene	18.426	252	770441	3963.51	ng/ml	97
93)	Perylene	18.630	252	705720	3813.99	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	20.962	276	792468	3886.05	ng/ml	95
96)	Dibenz(a,h)anthracene	21.020	278	675316	3935.31	ng/ml	96
97)	Benzo(g,h,i)perylene	21.496	276	777615	4070.47	ng/ml	93

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

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081926.D
Acq On : 9 May 2019 12:26 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL8
Misc : 1x, A19D060 BNA@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:08 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.702	152	97132	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.954	136	383773	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.724	162	200935	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.232	188	408419	2000.00	ng/ml	0.01
78) Chrysene-d12 (ISTD)	15.083	240	325607	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.565	264	352282	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	20.956	292	359354	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.472	112	435036	6698.29	ng/ml	0.00
5) Phenol-d6 (Surr)	6.354	99	554225	6468.67	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.242	82	400998	5587.34	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.034	172	698194	4761.29	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.526	330	114295	6644.05	ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.040	244	884802	5707.63	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.172	74	300039	5849.36	ng/ml	98
3) Pyridine	4.178	79	496772	6198.63	ng/ml	98
6) Phenol	6.370	94	546989	5859.74	ng/ml	98
7) Aniline	6.392	93	406652	4767.74	ng/ml	97
8) Bis(2-chloroethyl) ether	6.445	93	395115	5160.94	ng/ml	96
9) 2-Chlorophenol	6.504	128	397555	5978.76	ng/ml	95
10) 1,3-Dichlorobenzene	6.649	146	414202	5608.54	ng/ml	97
11) 1,4-Dichlorobenzene	6.718	146	384033	5454.63	ng/ml	98
12) Benzyl alcohol	6.841	108	269444	5748.55	ng/ml	93
13) 1,2-Dichlorobenzene	6.868	146	366398	5324.29	ng/ml	99
14) 2-Methylphenol	6.943	107	301798	5733.66	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.959	45	456599	4269.37	ng/ml	93
16) N-Nitrosodi-n-propylamine	7.103	70	270883	4994.60	ng/ml	92
17) 3+4-Methylphenol	7.098	107	373641	5629.91	ng/ml	97
18) Hexachloroethane	7.200	201	130625	6033.47	ng/ml	90
20) Nitrobenzene	7.264	77	371635	5087.01	ng/ml	92
22) Isophorone	7.504	82	838709	5918.77	ng/ml	94
23) 2-Nitrophenol	7.574	139	224039	6026.89	ng/ml	98
24) 2,4-Dimethylphenol	7.617	122	328729	5791.99	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.702	93	444685	5268.64	ng/ml	96
26) Benzoic acid	~~7.617~~	~~105~~	~~12038~~	~~1146.75~~	~~ng/ml#~~	1
27) 2,4-Dichlorophenol	7.820	162	285851	5779.38	ng/ml	100
28) 1,2,4-Trichlorobenzene	7.895	180	308537	5150.47	ng/ml	100
29) Naphthalene	7.980	128	939298	4935.76	ng/ml	95
30) 4-Chloroaniline	8.045	127	243860	4743.50	ng/ml	95
31) Hexachlorobutadiene	8.103	225	164363	5454.30	ng/ml	99
32) 4-Chloro-3-methylphenol	8.505	107	368355	6047.98	ng/ml	97
33) 2-Methylnaphthalene	8.665	142	744774	5309.71	ng/ml	100
34) 1-Methylnaphthalene	8.767	142	691750	5197.62	ng/ml	100
36) Hexachlorocyclopentadiene	8.831	237	188663	6229.45	ng/ml	99
37) 2,4,6-Trichlorophenol	8.954	196	223754	5978.05	ng/ml	98
38) 2,4,5-Trichlorophenol	8.991	198	209851	6044.28	ng/ml	99
39) 1,1'-Biphenyl	9.136	154	789288	4647.84	ng/ml	97
41) 2-Chloronaphthalene	9.162	162	576153	4663.80	ng/ml	98
42) 2-Nitroaniline	9.264	138	257132	6353.49	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.296	156	582020	4776.12	ng/ml	98

See MI

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

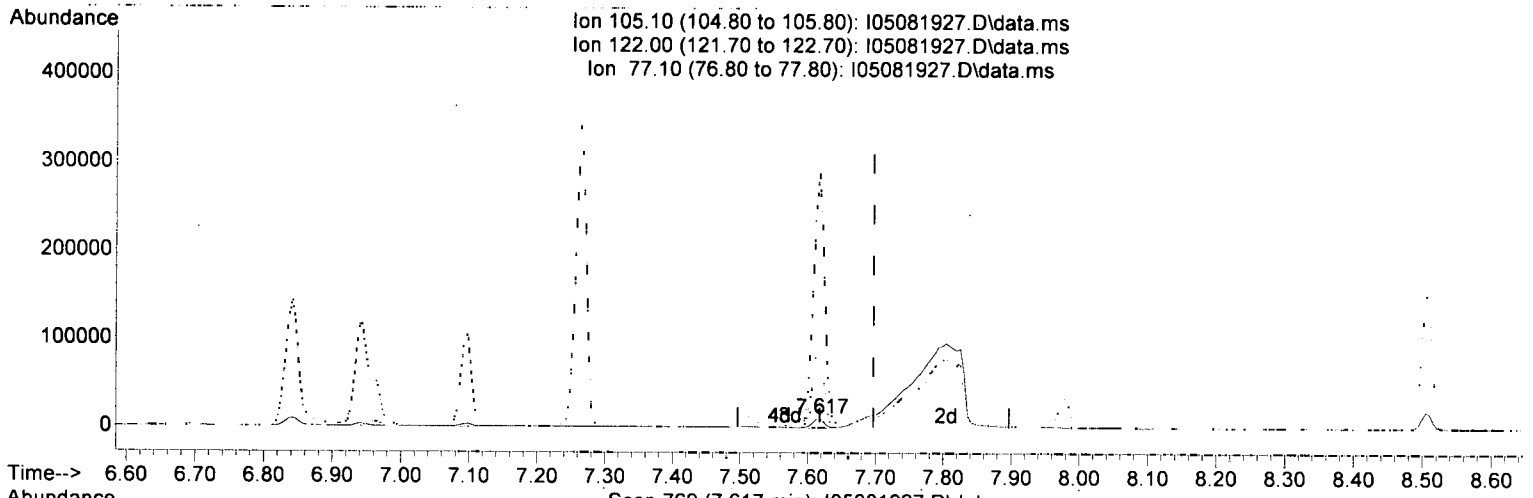
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.392	168	132868	6167.00	ng/ml	80
45) Dimethyl phthalate	9.451	163	719060	5128.25	ng/ml	97
46) 1,3-Dinitrobenzene	9.483	168	139435	6457.85	ng/ml	92
47) 2,6-Dinitrotoluene	9.505	165	182024	5958.26	ng/ml	87
48) 1,2-Dinitrobenzene	9.574	168	89987	5832.75	ng/ml	85
49) Acenaphthylene	9.585	152	879320	4483.39	ng/ml	96
50) 3-Nitroaniline	9.681	138	118898	Below Cal		95
51) Acenaphthene	9.762	153	608926	4935.69	ng/ml	99
52) 2,4-Dinitrophenol	9.783	184	105311	6831.80	ng/ml	90
53) 4-Nitrophenol	9.852	139	165172	6138.35	ng/ml	91
54) 2,4-Dinitrotoluene	9.922	165	237610	5783.24	ng/ml	89
55) Dibenzofuran	9.933	168	796168	4688.12	ng/ml	100
56) 2,3,5,6-Tetrachlorophenol	10.018	232	183781	5808.43	ng/ml	88
57) 2,3,4,6-Tetrachlorophenol	10.061	232	183789	6207.71	ng/ml	91
58) Diethyl phthalate	10.157	149	560826	4273.09	ng/ml	93
59) 2,3,5-Trimethylnaphtha...	10.147	170	492303	4369.71	ng/ml	98
60) Fluorene	10.286	166	605832	4381.07	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.270	204	319658	4922.28	ng/ml	93
62) 4-Nitroaniline	10.307	138	166859	5564.25	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.339	198	129071	6438.23	ng/ml	77
65) N-Nitrosodiphenylamine	10.398	169	527740	4227.84	ng/ml	100
66) Azobenzene (1,2-DPH)	10.435	77	656969	4202.06	ng/ml	84
68) 4-Bromophenyl phenyl e...	10.767	248	229006	5542.11	ng/ml	91
69) Hexachlorobenzene	10.853	284	231353	5276.35	ng/ml	92
70) Pentachlorophenol (PCP)	11.045	266	153485	6449.00	ng/ml	97
71) Phenanthrene	11.259	178	956642	4512.95	ng/ml	96
72) Anthracene	11.313	178	942171	4605.35	ng/ml	96
73) Carbazole	11.462	167	822554	Below Cal		99
74) Di-n-butyl phthalate	11.799	149	1162762	4729.17	ng/ml	96
75) Fluoranthene	12.537	202	1152260	4899.43	ng/ml	98
76) Benzidine	12.698	184	835608	11543.22	ng/ml	98
77) Pyrene	12.837	202	1135183	4768.23	ng/ml	97
80) Butyl benzyl phthalate	13.859	149	660330	5691.70	ng/ml	92
81) Bis(2-ethylhexyl) adipate	14.030	129	550853	6104.32	ng/ml	97
82) 3,3-Dichlorobenzidine	~~15.019~~	~~252~~	~~133256~~	~~7443.98~~	~~ng/ml~~	98 See MI
83) Benz(a)anthracene	15.057	228	1056377	5668.45	ng/ml	98
84) Chrysene	15.148	228	987765	5690.22	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.196	149	749108	6002.20	ng/ml	94
87) Di-n-octyl phthalate	16.870	149	1544982	4650.93	ng/ml	98
88) Benzo(b)fluoranthene	17.667	252	1322262	5724.25	ng/ml	96
89) Benzo(k)fluoranthene	17.736	252	1035740	5629.61	ng/ml	96
90) Benzo(b+k)fluoranthene	17.736	252	2421312	11319.06	ng/ml	96
91) Benzo(e)pyrene	18.319	252	1199867	6001.03	ng/ml	99
92) Benzo(a)pyrene	18.448	252	1066798	5628.06	ng/ml	97
93) Perylene	18.651	252	989986	5489.03	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.983	276	1164266	5722.54	ng/ml	95
96) Dibenz(a,h)anthracene	21.042	278	945959	5525.27	ng/ml	96
97) Benzo(g,h,i)perylene	21.518	276	1089470	5716.16	ng/ml	94

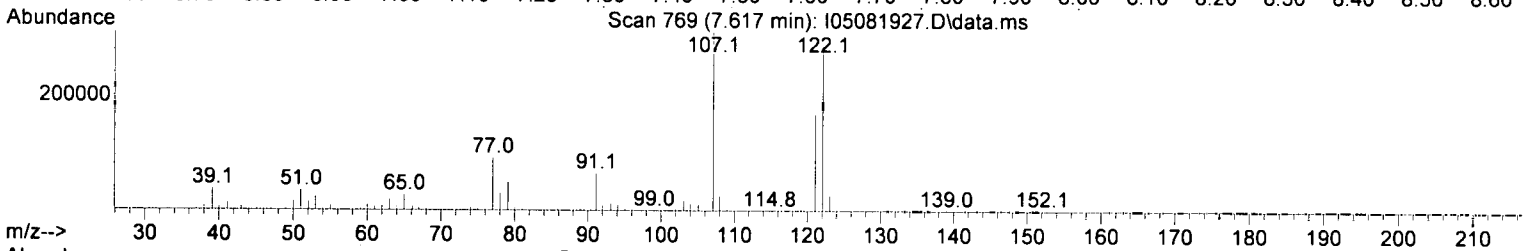
(#) = qualifier out of range (m) = manual integration (+) = signals summed

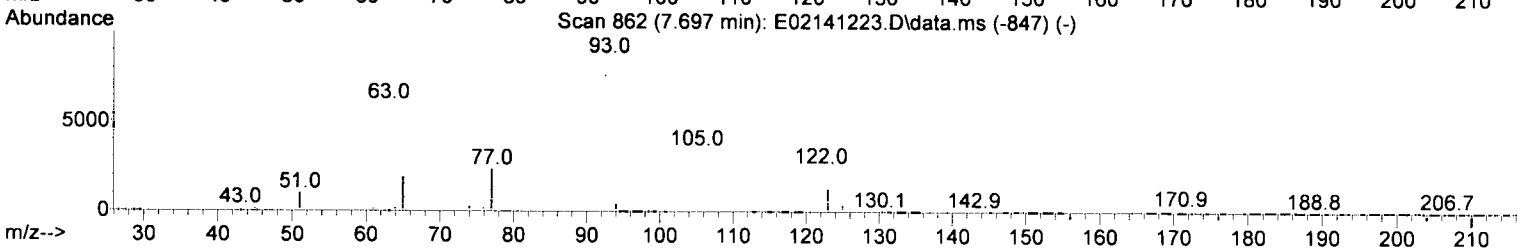
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081927.D\data.ms

(26) Benzoic acid (T)

7.617min (-0.080) 1146.75 ng/ml

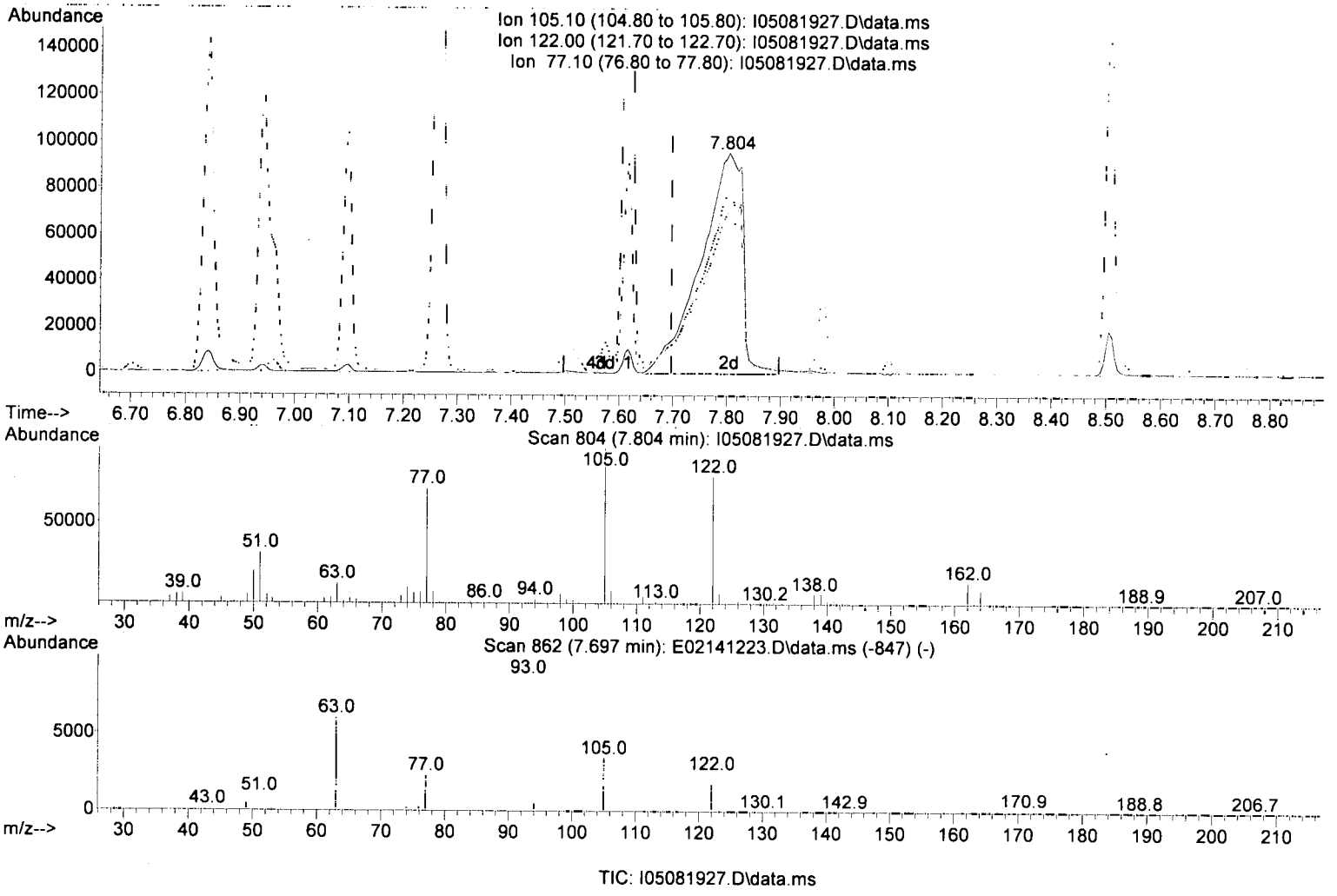
response 12038

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	2757.81#
77.10	76.00	872.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



TIC: I05081927.D\data.ms

(26) Benzoic acid (T)

7.804min (+ 0.107) 12091.52 ng/ml (m)

response 520098

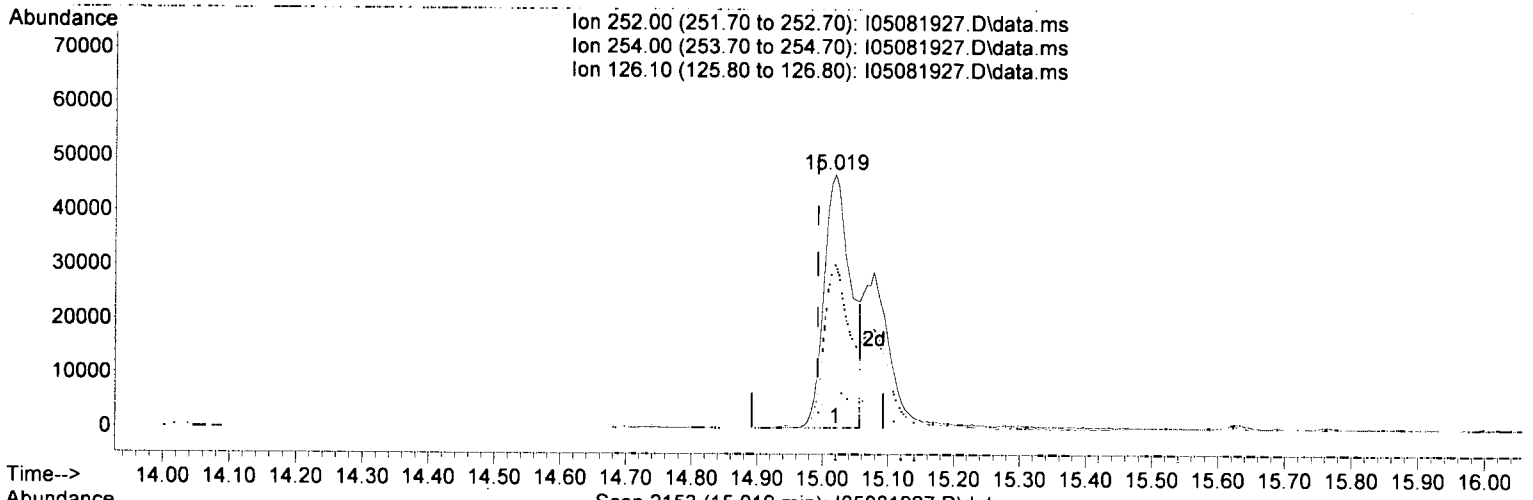
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	82.17
77.10	76.00	74.36
0.00	0.00	0.00

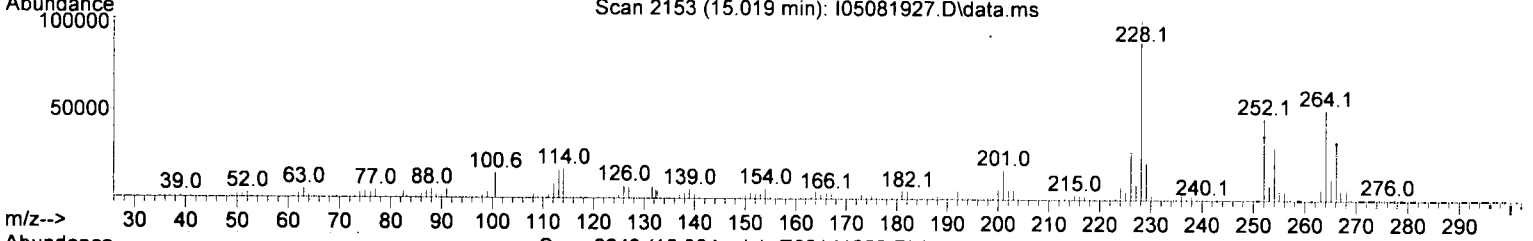
JK 5/9/19

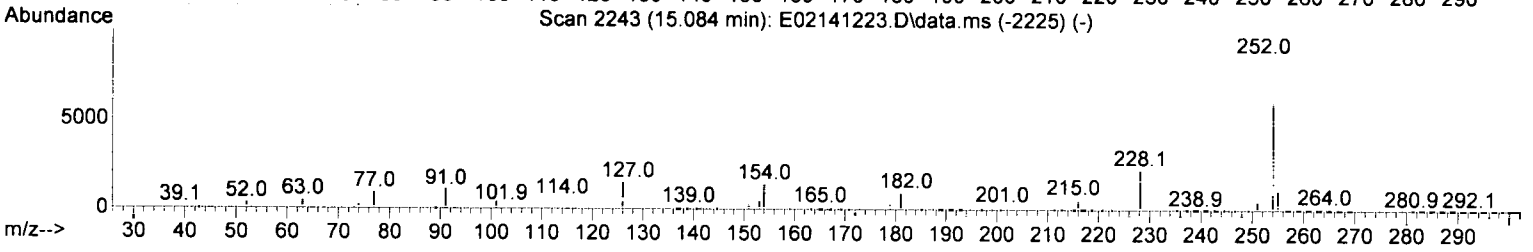
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.019min (+ 0.027) 7443.98 ng/ml

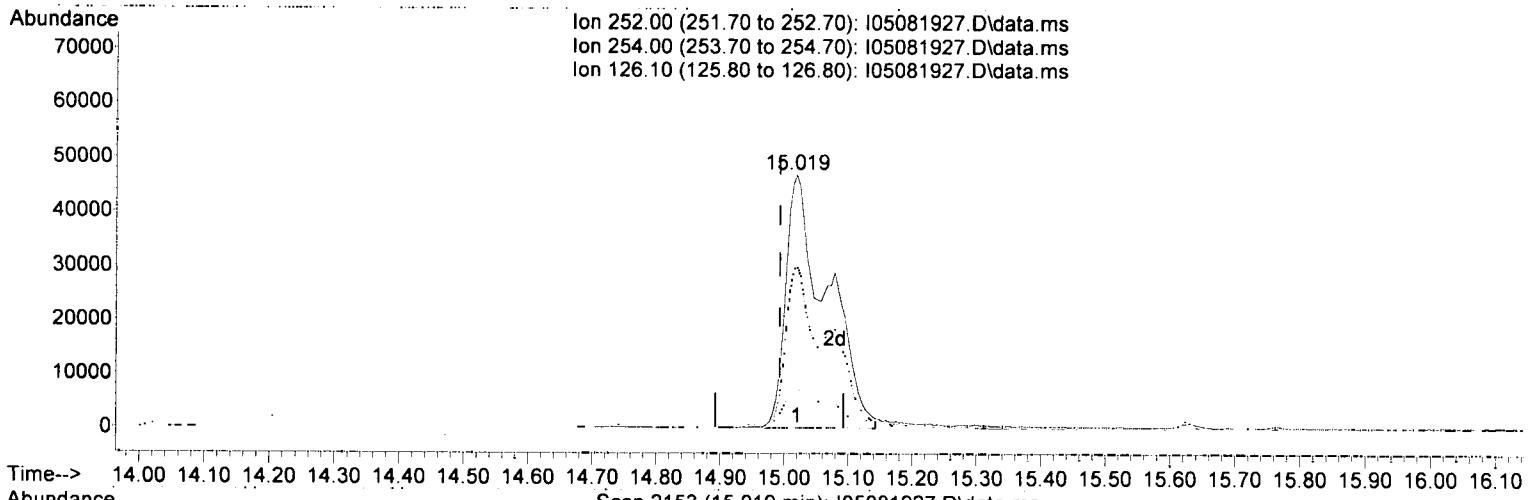
response 133256

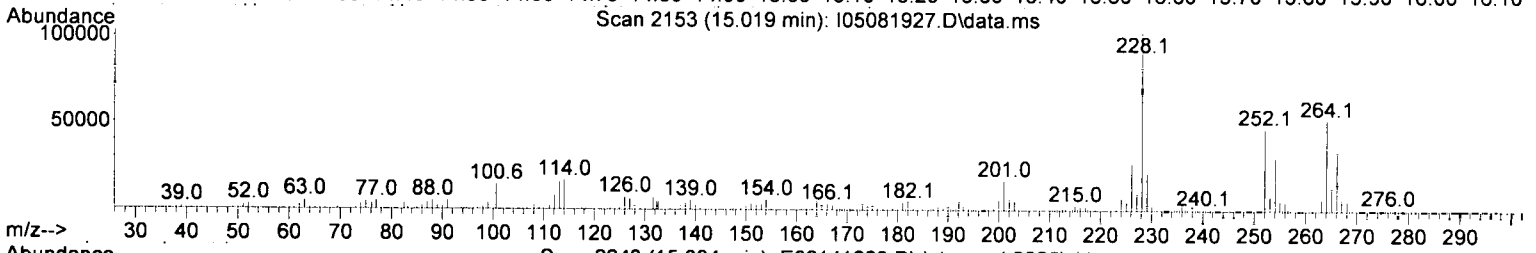
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.54
126.10	16.90	15.63
0.00	0.00	0.00

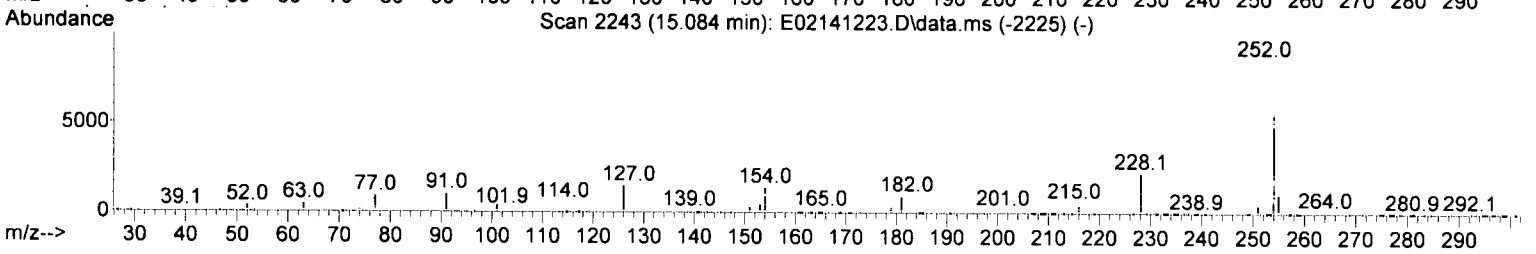
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.019min (+ 0.027) 11468.11 ng/ml m 5/9/19

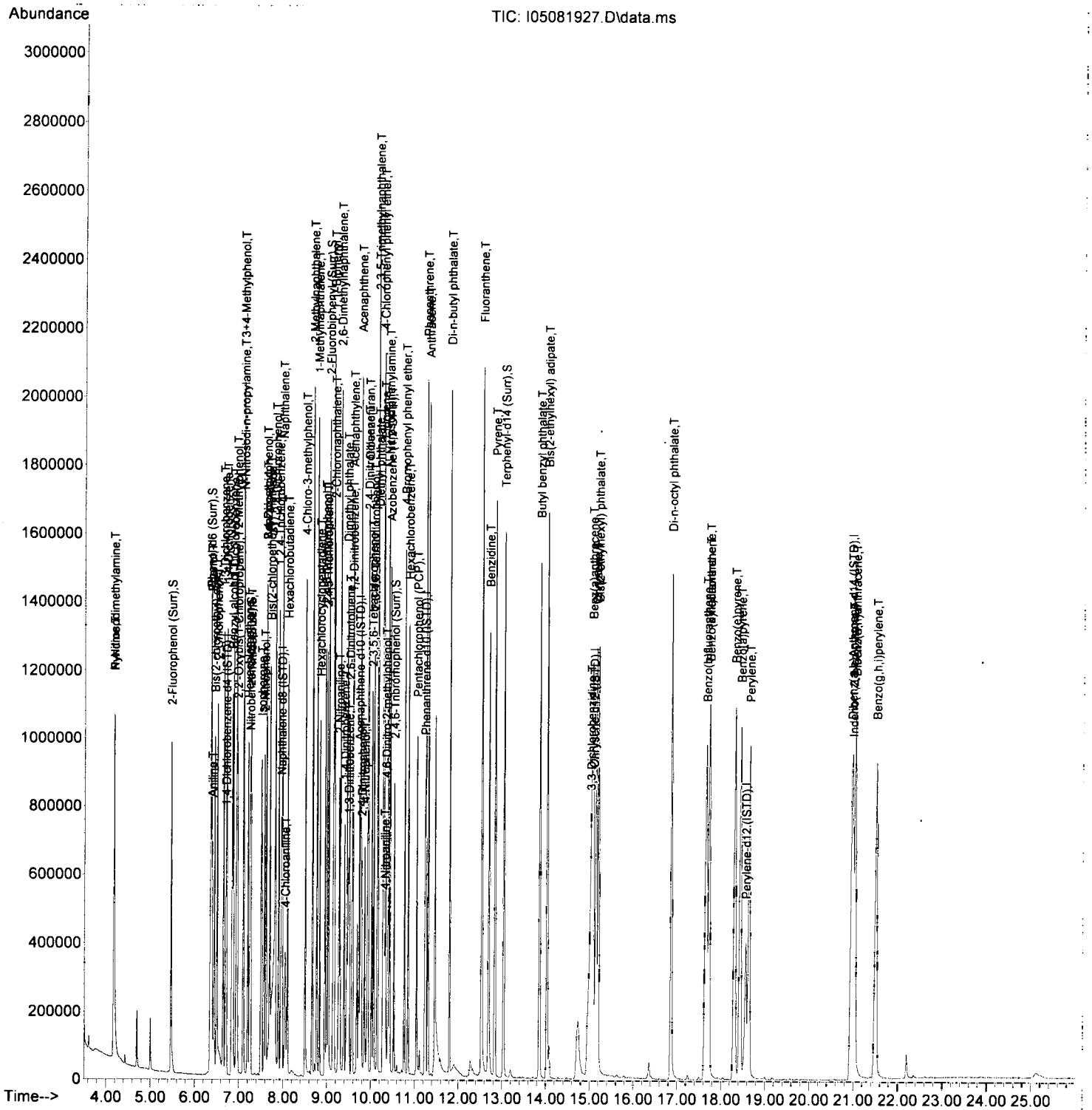
response 210131

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.54
126.10	16.90	15.63
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081927.D
Acq On : 9 May 2019 1:01 am
Operator : JK /AMS /DTH
Sample : 9E08056-CAL9
Misc : 1x, A19D061 BNA@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:16 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	95689	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.954	136	368532	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.724	162	194593	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.232	188	396349	2000.00	ng/ml	0.01
78) Chrysene-d12 (ISTD)	15.089	240	305019	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.571	264	337687	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	20.962	292	348077	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.467	112	560056	8753.27	ng/ml	0.00
5) Phenol-d6 (Surr)	6.360	99	706999	8376.22	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.248	82	507577	7179.02	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	9.034	172	835510	5883.40	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.532	330	142560	8432.13	ng/ml	0.02
79) Terphenyl-d14 (Surr)	13.040	244	1074072	7396.22	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.162	74	396249	7841.50	ng/ml	99
3) Pyridine	4.162	79	659225	8349.73	ng/ml	98
6) Phenol	6.376	94	672921	7317.52	ng/ml	90
7) Aniline	6.392	93	595081	7082.17	ng/ml	95
8) Bis(2-chloroethyl) ether	6.445	93	510517	6768.86	ng/ml	96
9) 2-Chlorophenol	6.504	128	503387	7684.51	ng/ml	95
10) 1,3-Dichlorobenzene	6.649	146	517626	7114.66	ng/ml	96
11) 1,4-Dichlorobenzene	6.718	146	480345	6925.49	ng/ml	97
12) Benzyl alcohol	6.847	108	337977	7070.03	ng/ml	93
13) 1,2-Dichlorobenzene	6.868	146	448803	6620.11	ng/ml	99
14) 2-Methylphenol	6.943	107	369236	7120.66	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.959	45	549922	5219.51	ng/ml	90
16) N-Nitrosodi-n-propylamine	7.109	70	339637	6356.74	ng/ml	94
17) 3+4-Methylphenol	7.098	107	458606	7014.35	ng/ml	100
18) Hexachloroethane	7.200	201	161926	7592.02	ng/ml	89
20) Nitrobenzene	7.269	77	462505	6426.32	ng/ml	89
22) Isophorone	7.510	82	1078748	7927.56	ng/ml	93
23) 2-Nitrophenol	7.574	139	283482	7925.73	ng/ml	97
24) 2,4-Dimethylphenol	7.622	122	412108	7561.36	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.702	93	553975	6834.95	ng/ml	96
26) Benzoic acid	~~7.622~~	~~105~~	~~15549~~	1267.44	ng/ml#	1
27) 2,4-Dichlorophenol	7.825	162	358983	7465.88	ng/ml	99
28) 1,2,4-Trichlorobenzene	7.900	180	375837	6533.38	ng/ml	99
29) Naphthalene	7.980	128	1132611	6197.70	ng/ml	94
30) 4-Chloroaniline	8.039	127	398347	8068.99	ng/ml	95
31) Hexachlorobutadiene	8.103	225	199760	6903.08	ng/ml	99
32) 4-Chloro-3-methylphenol	8.510	107	462055	7683.16	ng/ml	96
33) 2-Methylnaphthalene	8.670	142	907754	6739.28	ng/ml	99
34) 1-Methylnaphthalene	8.772	142	826000	6463.00	ng/ml	99
36) Hexachlorocyclopentadiene	8.831	237	228123	7653.38	ng/ml	97
37) 2,4,6-Trichlorophenol	8.954	196	275262	7566.36	ng/ml	97
38) 2,4,5-Trichlorophenol	8.997	198	259729	7806.13	ng/ml	98
39) 1,1'-Biphenyl	9.141	154	939145	5710.53	ng/ml	94
41) 2-Chloronaphthalene	9.162	162	683312	5711.49	ng/ml	97
42) 2-Nitroaniline	9.269	138	330555	8433.89	ng/ml	91
43) 2,6-Dimethylnaphthalene	9.302	156	693134	5873.31	ng/ml	97

See ML

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Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

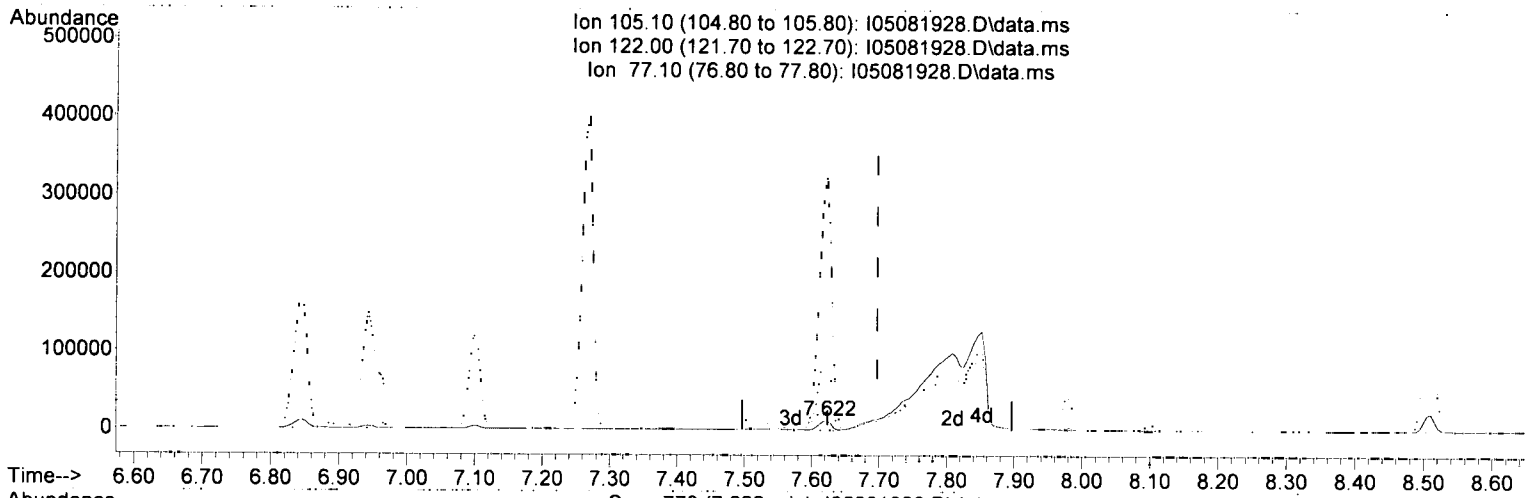
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
44) 1,4-Dinitrobenzene	9.398	168	171694	7925.07 ng/ml	81	
45) Dimethyl phthalate	9.462	163	895747	6596.56 ng/ml	97	
46) 1,3-Dinitrobenzene	9.489	168	173847	8314.03 ng/ml	95	
47) 2,6-Dinitrotoluene	9.510	165	222349	7515.44 ng/ml	89	
48) 1,2-Dinitrobenzene	9.580	168	107372	7186.42 ng/ml	96	
49) Acenaphthylene	9.585	152	984732	5184.49 ng/ml	96	
50) 3-Nitroaniline	9.692	138	173485	Below Cal	90	
51) Acenaphthene	9.762	153	730149	6111.16 ng/ml	99	
52) 2,4-Dinitrophenol	9.794	184	138854	8328.38 ng/ml	85	
53) 4-Nitrophenol	9.863	139	212171	7786.41 ng/ml	91	
54) 2,4-Dinitrotoluene	9.927	165	279820	7051.12 ng/ml	93	
55) Dibenzofuran	9.938	168	933154	5673.82 ng/ml	97	
56) 2,3,5,6-Tetrachlorophenol	10.018	232	227276	7182.34 ng/ml	91	
57) 2,3,4,6-Tetrachlorophenol	10.066	232	226177	7900.84 ng/ml	90	
58) Diethyl phthalate	10.163	149	666758	5245.78 ng/ml	93	
59) 2,3,5-Trimethylnaphtha...	10.147	170	595050	5453.83 ng/ml	98	
60) Fluorene	10.286	166	722035	5391.56 ng/ml	100	
61) 4-Chlorophenyl phenyl ...	10.275	204	378804	6023.15 ng/ml	92	
62) 4-Nitroaniline	10.318	138	203360	7002.47 ng/ml	94	
63) 4,6-Dinitro-2-methylph...	10.345	198	165731	7900.50 ng/ml	79	
65) N-Nitrosodiphenylamine	10.398	169	645120	5325.58 ng/ml	100	
66) Azobenzene (1,2-DPH)	10.435	77	801688	5283.85 ng/ml	86	
68) 4-Bromophenyl phenyl e...	10.772	248	278562	6946.70 ng/ml	90	
69) Hexachlorobenzene	10.853	284	281208	6608.67 ng/ml	93	
70) Pentachlorophenol (PCP)	11.045	266	193595	7963.68 ng/ml	97	
71) Phenanthrene	11.259	178	1153195	5605.85 ng/ml	96	
72) Anthracene	11.313	178	1111218	5597.06 ng/ml	95	
73) Carbazole	11.462	167	892838	Below Cal	100	
74) Di-n-butyl phthalate	11.799	149	1386560	5811.14 ng/ml	95	
75) Fluoranthene	12.543	202	1406107	6160.86 ng/ml	98	
76) Benzidine	12.703	184	1165482	15132.51 ng/ml	98	
77) Pyrene	12.842	202	1376701	5958.81 ng/ml	96	
80) Butyl benzyl phthalate	13.864	149	830873	7307.82 ng/ml	92	
81) Bis(2-ethylhexyl) adipate	14.030	129	686647	8122.73 ng/ml	96	See NI
82) 3,3-Dichlorobenzidine	15.025	252	162347	9581.85 ng/ml	98	
83) Benz(a)anthracene	15.062	228	1276068	7309.47 ng/ml	98	
84) Chrysene	15.158	228	1196829	7359.94 ng/ml	97	
85) Bis(2-ethylhexyl) phth...	15.201	149	911551	7796.76 ng/ml	94	
87) Di-n-octyl phthalate	16.875	149	1949268	5698.09 ng/ml	98	
88) Benzo(b)fluoranthene	17.672	252	1745814	7653.17 ng/ml	96	
89) Benzo(k)fluoranthene	17.747	252	1092068	6332.06 ng/ml	97	See NI
90) Benzo(b+k)fluoranthene	17.747	252	2997124	14716.03 ng/ml	97	
91) Benzo(e)pyrene	18.335	252	1487060	7758.85 ng/ml	98	
92) Benzo(a)pyrene	18.464	252	1307681	7196.72 ng/ml	97	
93) Perylene	18.662	252	1226461	7094.08 ng/ml	99	
95) Indeno(1,2,3-cd)pyrene	20.999	276	1508870	7656.59 ng/ml	98	
96) Dibenz(a,h)anthracene	21.058	278	1170463	7058.07 ng/ml	94	
97) Benzo(g,h,i)perylene	21.534	276	1353653	7332.36 ng/ml	94	

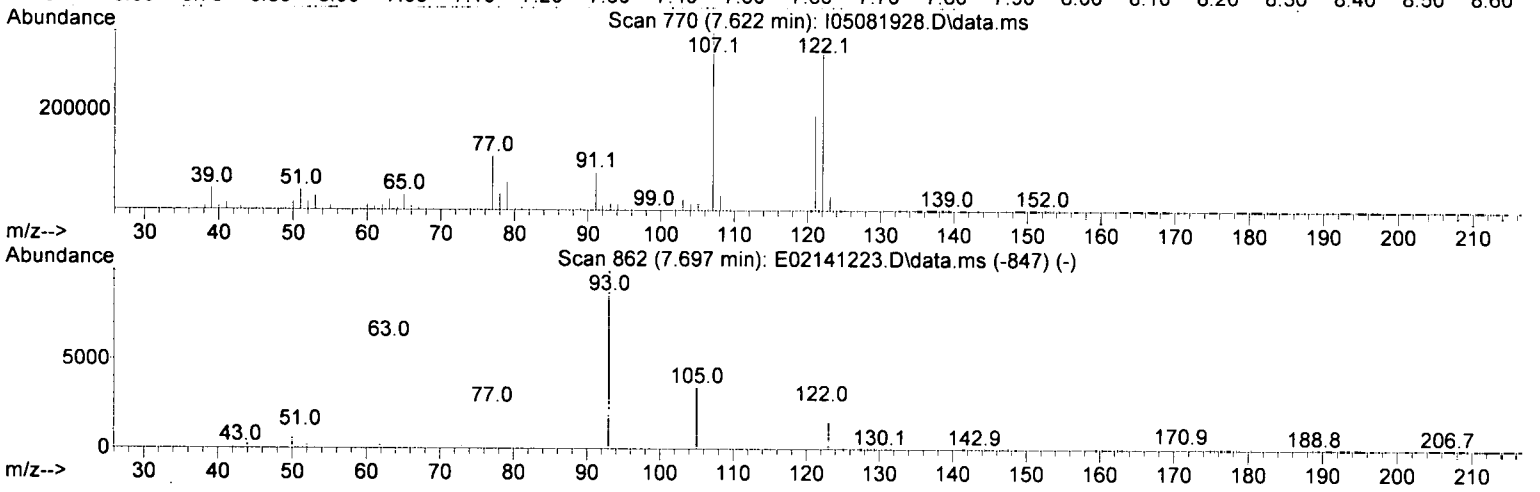
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9





TIC: I05081928.D\data.ms

(26) Benzoic acid (T)

7.622min (-0.075) 1267.44 ng/ml

response 15549

Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	2689.53#
77.10	76.00	883.46#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
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ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
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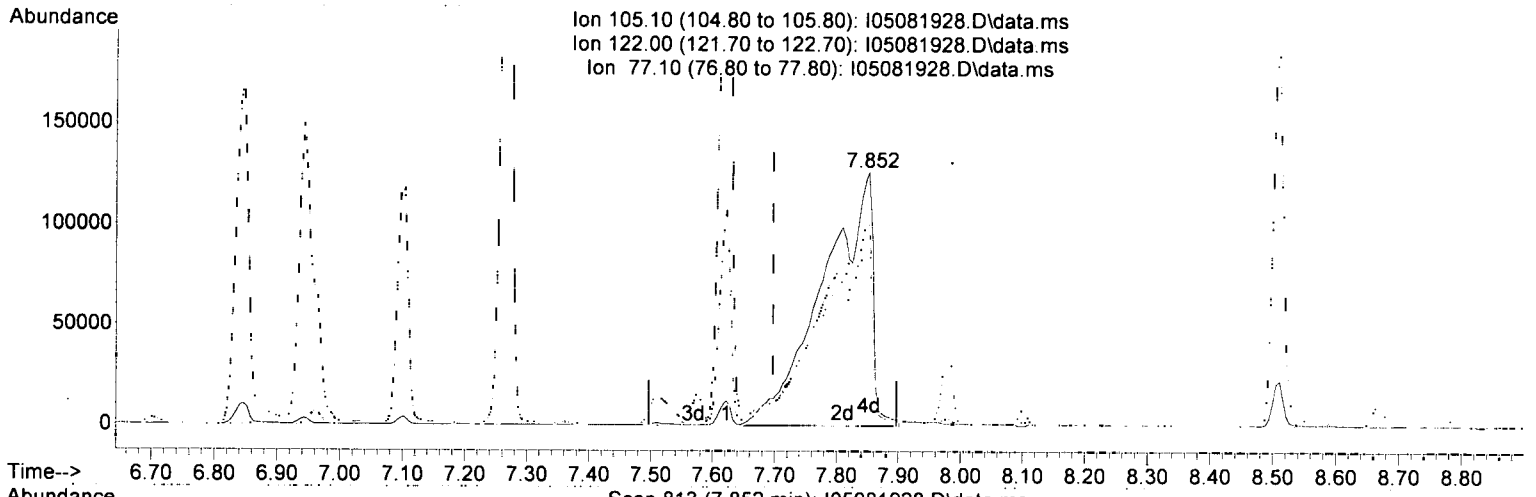
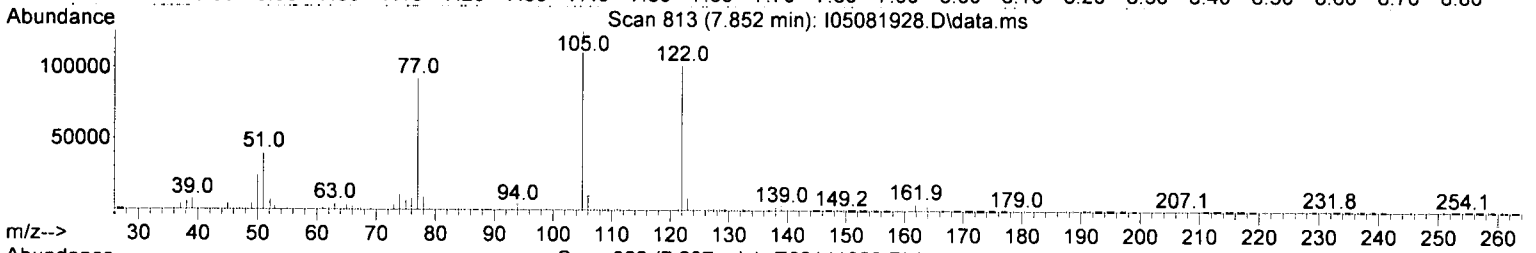
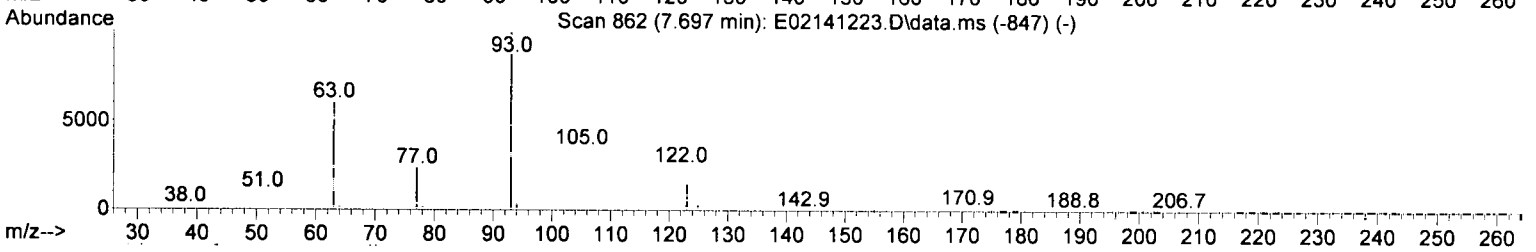
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081928.D\data.ms

(26) Benzoic acid (T)

7.852min (+ 0.155) 15436.52 ng/ml (m)

5/9/19

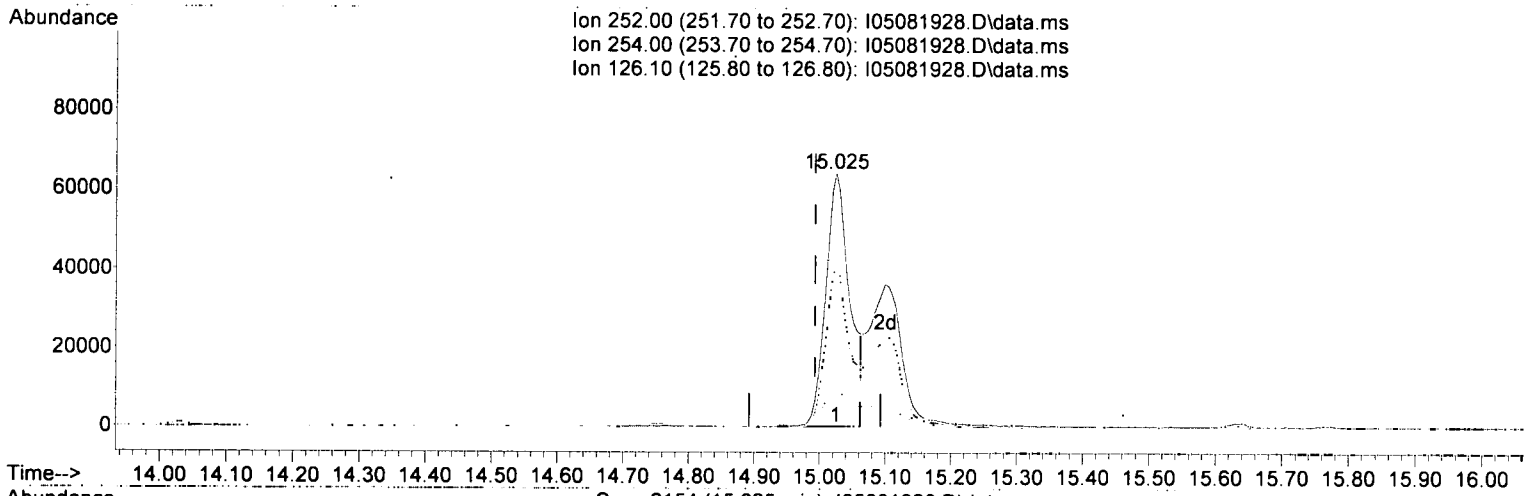
response 699436

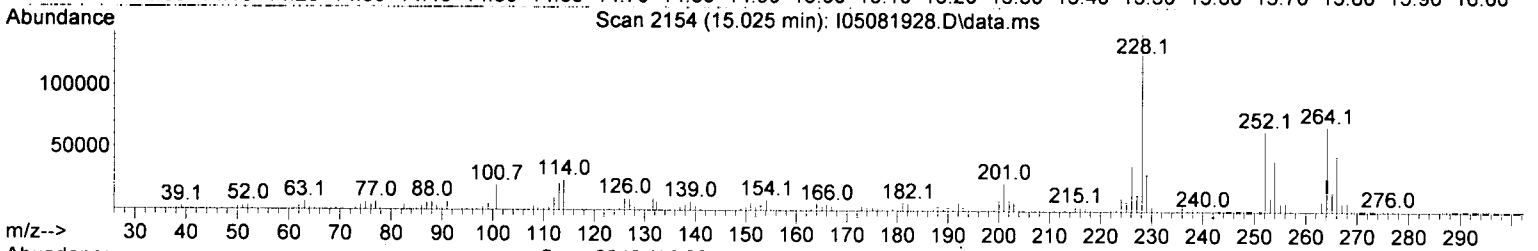
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	80.97
77.10	76.00	73.43
0.00	0.00	0.00

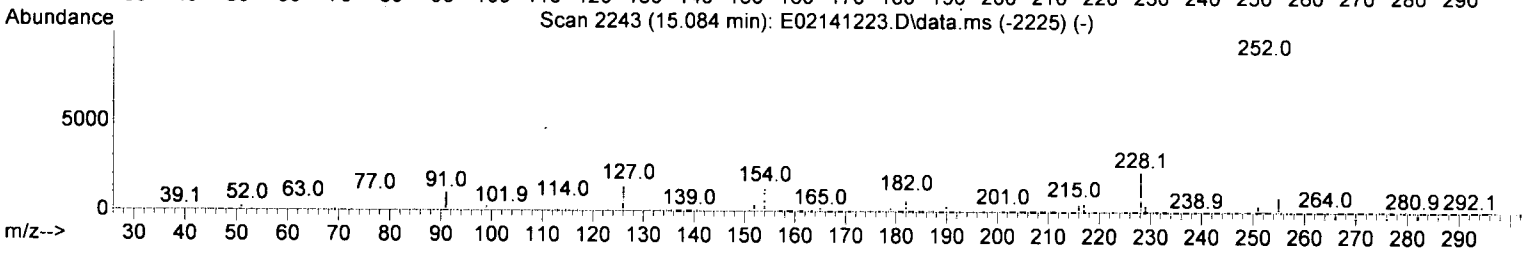
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081928.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.025min (+ 0.032) 9581.85 ng/ml

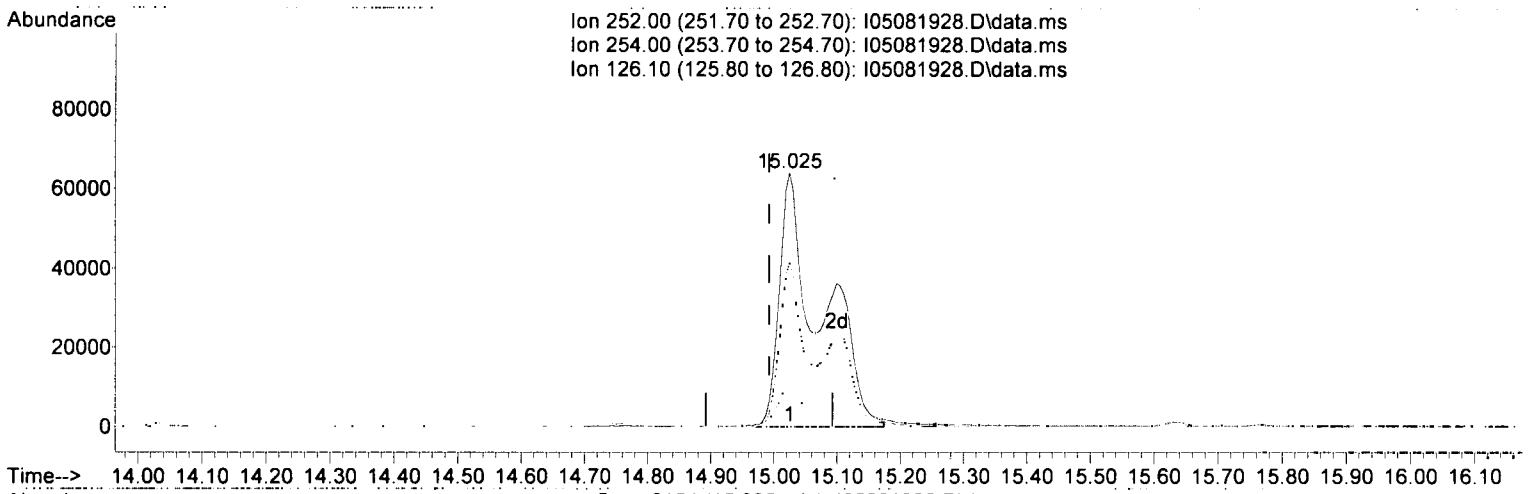
response 162347

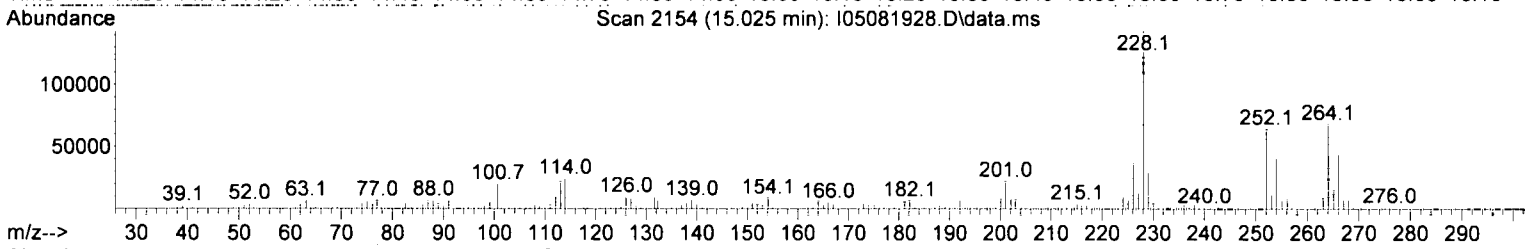
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.49
126.10	16.90	15.19
0.00	0.00	0.00

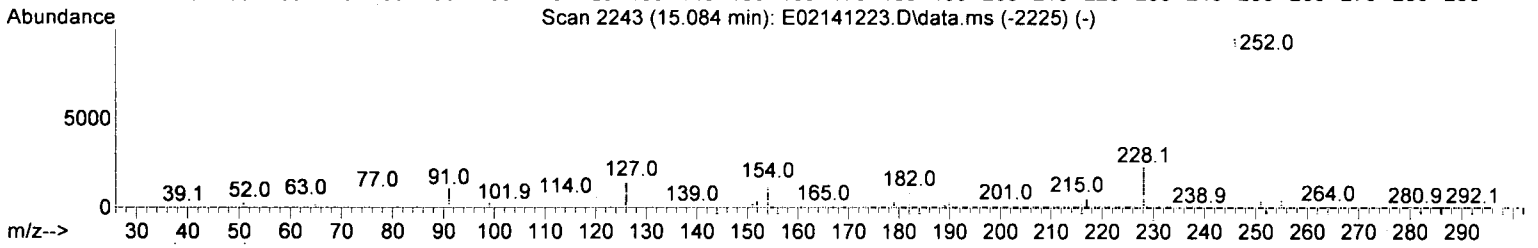
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081928.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

15.025min (+ 0.032) 16113.65 ng/ml m

5/9/19

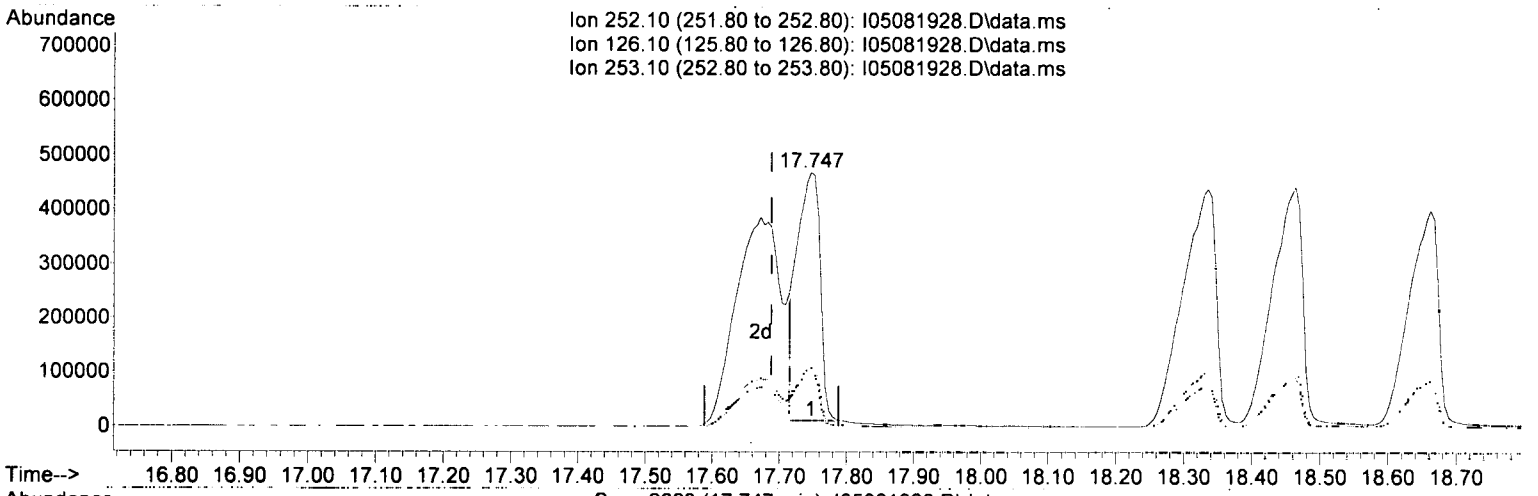
response 287387

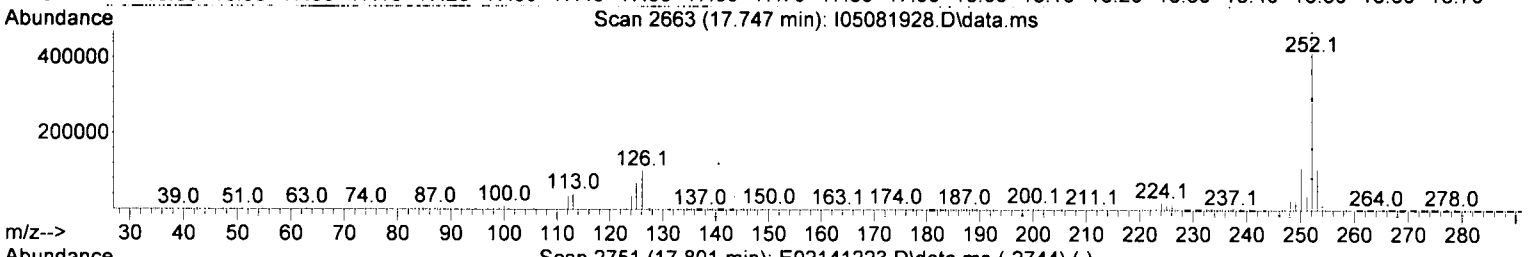
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.10	64.49
126.10	16.90	15.19
0.00	0.00	0.00

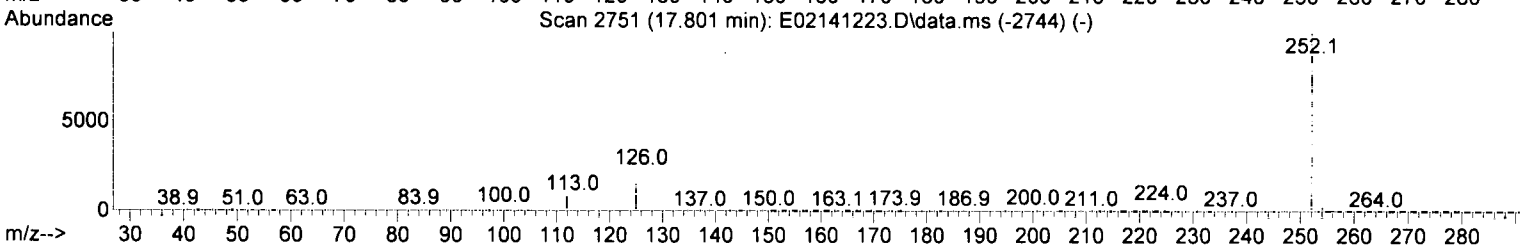
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081928.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.747min (+ 0.059) 6332.06 ng/ml

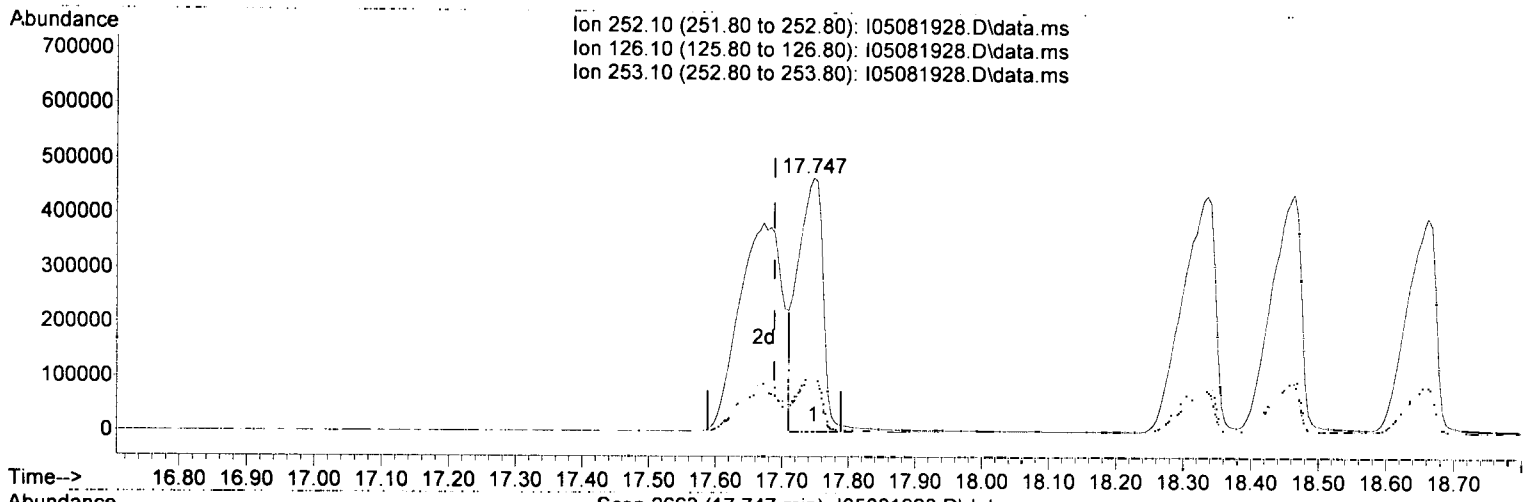
response 1092068

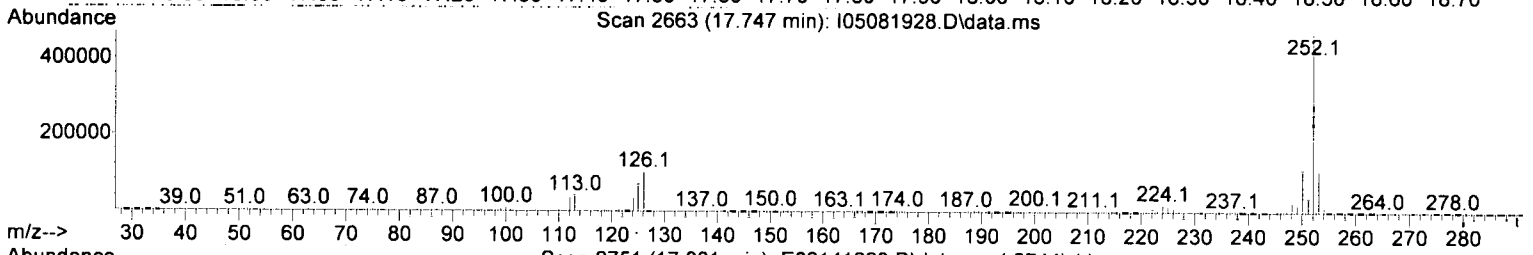
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	21.87
253.10	21.70	23.14
0.00	0.00	0.00

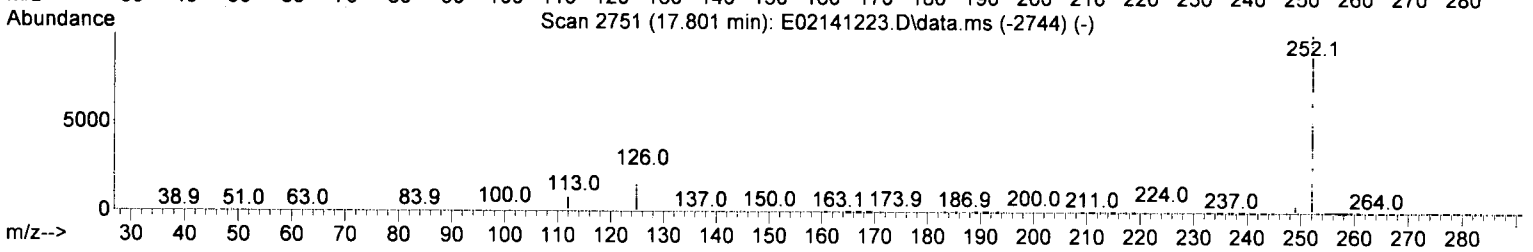
Quantitation Report (Qedit)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9







TIC: I05081928.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.747min (+ 0.059) 7354.87 ng/ml m GJ 5/9/19

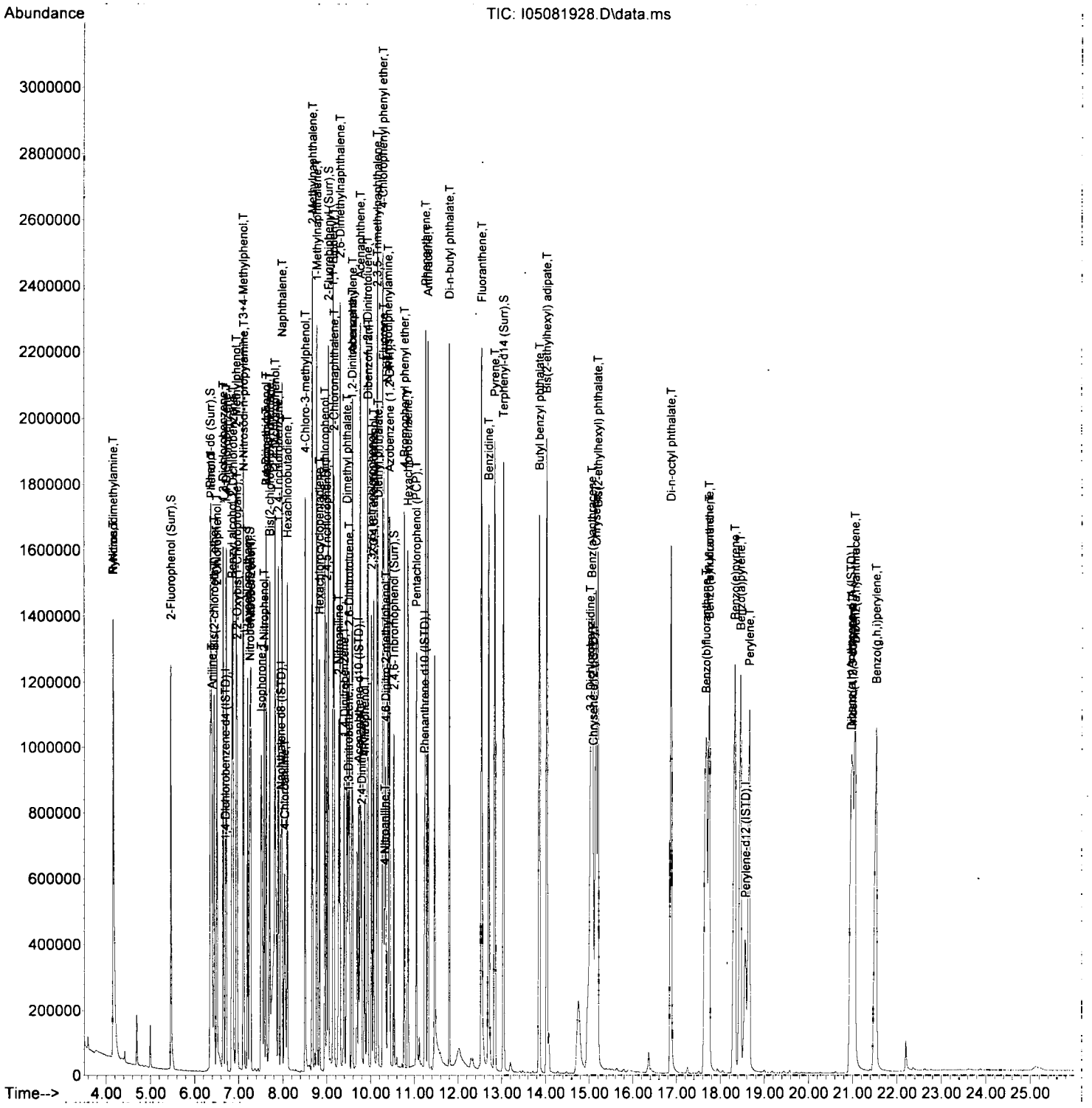
response 1226693

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	21.87
253.10	21.70	23.14
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081928.D
Acq On : 9 May 2019 1:37 am
Operator : JK /AMS /DTH
Sample : 9E08056-CALA
Misc : 1x, A19D062 BNA@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:23 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

JK 5/9/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	116606	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	444228	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.719	162	227633	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.227	188	432433	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.057	240	431821	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.544	264	409331	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	397711	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.466	112	77339	991.92	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	99468	967.06	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.231	82	81052	940.74	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	184294	1109.38	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	21607	1252.19	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	220750	1073.74	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.167	74	57086	927.05	ng/ml	98
3) Pyridine	4.183	79	83967	872.75	ng/ml	97
6) Phenol	6.354	94	111298	993.18	ng/ml	98
7) Aniline	6.381	93	91216	890.85	ng/ml	94
8) Bis(2-chloroethyl) ether	6.434	93	92166	1002.81	ng/ml	98
9) 2-Chlorophenol	6.499	128	81865	1025.54	ng/ml	95
10) 1,3-Dichlorobenzene	6.643	146	90060	1015.81	ng/ml	96
11) 1,4-Dichlorobenzene	6.713	146	85768	1014.76	ng/ml	97
12) Benzyl alcohol	6.825	108	42923	893.60	ng/ml	95
13) 1,2-Dichlorobenzene	6.862	146	83881	1015.35	ng/ml	97
14) 2-Methylphenol	6.932	107	62992	996.88	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	106577	830.11	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.082	70	62598	961.44	ng/ml	94
17) 3+4-Methylphenol	7.082	107	79117	993.02	ng/ml	98
18) Hexachloroethane	7.194	201	27479	1057.26	ng/ml	93
20) Nitrobenzene	7.247	77	80915	922.61	ng/ml	94
22) Isophorone	7.483	82	171349	1044.65	ng/ml	95
23) 2-Nitrophenol	7.568	139	46713	1109.25	ng/ml	93
24) 2,4-Dimethylphenol	7.601	122	64853	987.16	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.686	93	99442	1017.85	ng/ml	98
26) Benzoic acid	7.702	105	50958	2053.05	ng/ml	96
27) 2,4-Dichlorophenol	7.809	162	60602	1102.81	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.889	180	71884	1036.67	ng/ml	99
29) Naphthalene	7.970	128	223784	1015.89	ng/ml	98
30) 4-Chloroaniline	8.023	127	54929	923.06	ng/ml	95
31) Hexachlorobutadiene	8.098	225	37710	1081.09	ng/ml	99
32) 4-Chloro-3-methylphenol	8.499	107	67175	1063.65	ng/ml	97
33) 2-Methylnaphthalene	8.660	142	177506	1093.27	ng/ml	98
34) 1-Methylnaphthalene	8.761	142	163988	1064.48	ng/ml	98
36) Hexachlorocyclopentadiene	8.831	237	35605	1123.95	ng/ml	97
37) 2,4,6-Trichlorophenol	8.943	196	44187	1077.06	ng/ml	98
38) 2,4,5-Trichlorophenol	8.986	198	43264	1089.29	ng/ml	98
39) 1,1'-Biphenyl	9.125	154	203941	1060.08	ng/ml	99
41) 2-Chloronaphthalene	9.152	162	147432	1053.45	ng/ml	96
42) 2-Nitroaniline	9.248	138	50581	1103.22	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.285	156	149204	1080.78	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	24100	1150.84	ng/ml	79
45) Dimethyl phthalate	9.430	163	169073	1064.38	ng/ml	100
46) 1,3-Dinitrobenzene	9.456	168	28035	1146.14	ng/ml	91
47) 2,6-Dinitrotoluene	9.489	165	40105	1158.80	ng/ml	80
48) 1,2-Dinitrobenzene	9.547	168	18904	1081.60	ng/ml	77
49) Acenaphthylene	9.574	152	245169	1108.43	ng/ml	99
50) 3-Nitroaniline	9.665	138	32303	1059.76	ng/ml	95
51) Acenaphthene	9.751	153	147329	1054.13	ng/ml	99
52) 2,4-Dinitrophenol	9.767	184	11258	1250.76	ng/ml	90
53) 4-Nitrophenol	9.836	139	26562	1064.89	ng/ml	86
54) 2,4-Dinitrotoluene	9.895	165	50566	1097.56	ng/ml	87
55) Dibenzofuran	9.922	168	207368	1077.84	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.007	232	35153	1136.16	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.050	232	37583	1140.48	ng/ml	86
58) Diethyl phthalate	10.136	149	155688	1047.10	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.130	170	135406	1060.91	ng/ml	99
60) Fluorene	10.269	166	163155	1041.47	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.264	204	79372	1078.87	ng/ml	84
62) 4-Nitroaniline	10.286	138	39138	1152.06	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.312	198	23959	1498.70	ng/ml	81
65) N-Nitrosodiphenylamine	10.382	169	139086	1052.37	ng/ml	98
66) Azobenzene (1,2-DPH)	10.425	77	159312	962.39	ng/ml	85
68) 4-Bromophenyl phenyl e...	10.756	248	50774	1160.53	ng/ml	89
69) Hexachlorobenzene	10.842	284	53277	1147.59	ng/ml	91
70) Pentachlorophenol (PCP)	11.034	266	24081	1220.08	ng/ml	95
71) Phenanthrene	11.248	178	232643	1036.54	ng/ml	99
72) Anthracene	11.296	178	237192	1095.01	ng/ml	98
73) Carbazole	11.457	167	219325	1054.27	ng/ml	98
74) Di-n-butyl phthalate	11.794	149	282307	1084.43	ng/ml	99
75) Fluoranthene	12.527	202	288406	1158.21	ng/ml	96
76) Benzidine	12.676	184	99508	1770.57	ng/ml	98
77) Pyrene	12.821	202	286022	1134.69	ng/ml	100
80) Butyl benzyl phthalate	13.842	149	126879	976.97	ng/ml	90
81) Bis(2-ethylhexyl) adipate	14.014	129	113335	947.01	ng/ml	98
82) 3,3-Dichlorobenzidine	14.992	252	62301	2467.19	ng/ml	97
83) Benz(a)anthracene	15.030	228	262028	1060.19	ng/ml	99
84) Chrysene	15.115	228	231406	1005.17	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.180	149	161392	975.08	ng/ml	95
87) Di-n-octyl phthalate	16.843	149	287021	1041.82	ng/ml	98
88) Benzo(b)fluoranthene	17.619	252	267547	1081.70	ng/ml	96
89) Benzo(k)fluoranthene	17.688	252	258374	1063.39	ng/ml	96
90) Benzo(b+k)fluoranthene	17.688	252	537352	2135.29	ng/ml	96
91) Benzo(e)pyrene	18.276	252	259061	1115.09	ng/ml	97
92) Benzo(a)pyrene	18.394	252	240398	1099.22	ng/ml	96
93) Perylene	18.597	252	240296	1146.64	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.924	276	215601	957.51	ng/ml	96
96) Dibenz(a,h)anthracene	20.988	278	198191	1045.97	ng/ml	93
97) Benzo(g,h,i)perylene	21.464	276	225482	1068.95	ng/ml	90

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

Quantitation Report (Not Reviewed)

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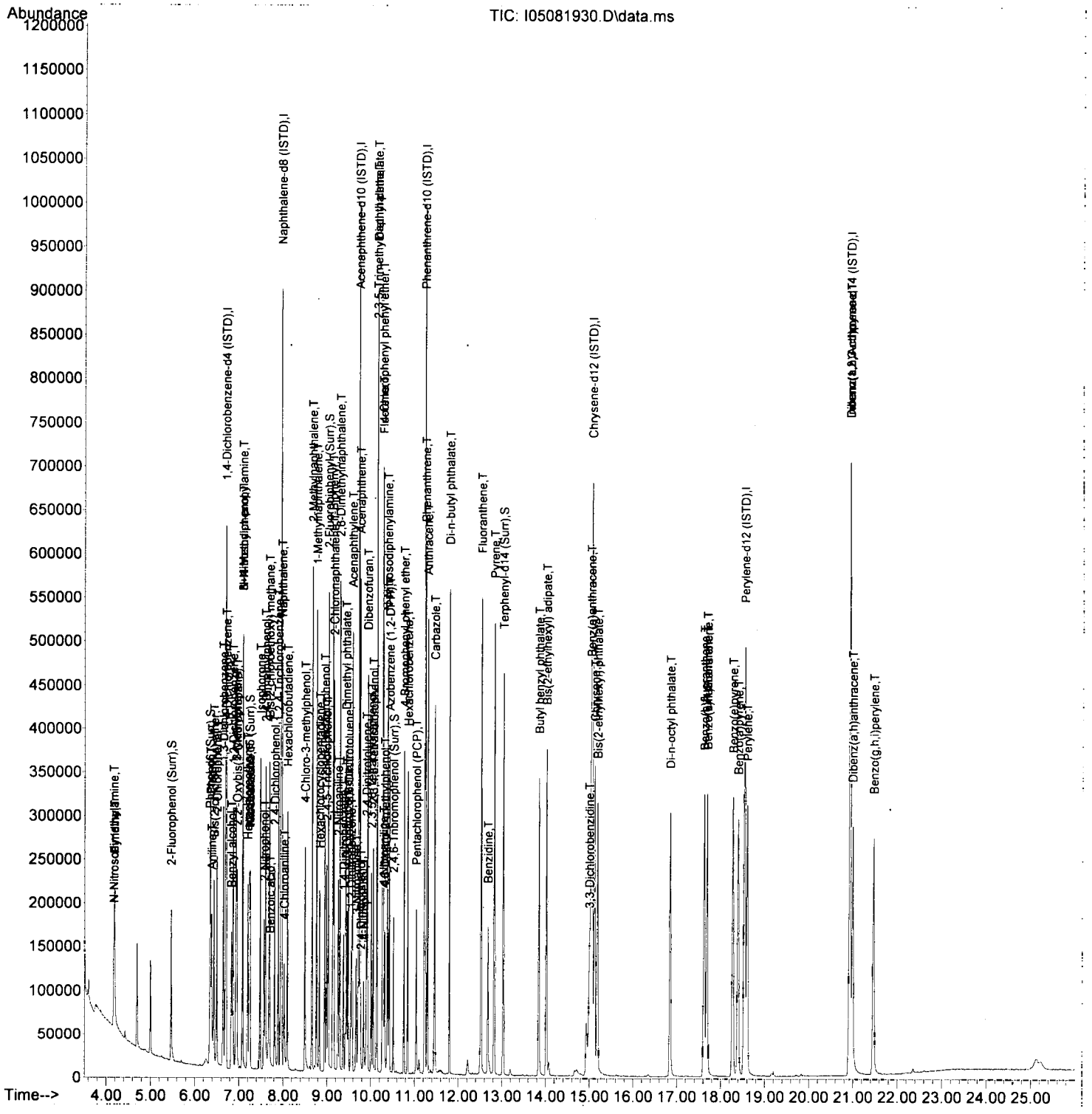
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 11:03:38 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 11:01:22 2019
Response via : Initial Calibration
InstName : SV-GCMS9



Quantitation Report (Not Reviewed)

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Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Final Reqmant

JK 5/9/19

Quant Time: May 09 17:11:47 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.697	152	116606	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.948	136	444228	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.719	162	227633	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.227	188	432433	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.057	240	431821	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.544	264	409331	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.924	292	397711	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.466	112	77339	1015.00	ng/ml	0.00
5) Phenol-d6 (Surr)	6.338	99	99468	1003.19	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.231	82	81052	982.98	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.023	172	184294	1079.79	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.516	330	21607	1085.76	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.024	244	220750	1043.19	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.167	74	57086	979.66	ng/ml	98
3) Pyridine	4.183	79	83967	944.02	ng/ml	97
6) Phenol	6.354	94	111298	1055.46	ng/ml	98
7) Aniline	6.381	93	91216	1016.54	ng/ml	94
8) Bis(2-chloroethyl) ether	6.434	93	92166	1038.53	ng/ml	98
9) 2-Chlorophenol	6.499	128	81865	1028.05	ng/ml	95
10) 1,3-Dichlorobenzene	6.643	146	90060	988.80	ng/ml	96
11) 1,4-Dichlorobenzene	6.713	146	85768	1008.15	ng/ml	97
12) Benzyl alcohol	6.825	108	42923	966.03	ng/ml	95
13) 1,2-Dichlorobenzene	6.862	146	83881	1021.90	ng/ml	97
14) 2-Methylphenol	6.932	107	62992	1042.89	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.953	45	106577	986.01	ng/ml	94
16) N-Nitrosodi-n-propylamine	7.082	70	62598	1034.02	ng/ml	94
17) 3+4-Methylphenol	7.082	107	79117	1053.45	ng/ml	98
18) Hexachloroethane	7.194	201	27479	1002.57	ng/ml	93
20) Nitrobenzene	7.247	77	80915	997.64	ng/ml	94
22) Isophorone	7.483	82	171349	1041.61	ng/ml	95
23) 2-Nitrophenol	7.568	139	46713	1112.08	ng/ml	93
24) 2,4-Dimethylphenol	7.601	122	64853	1029.02	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.686	93	99442	1029.92	ng/ml	98
26) Benzoic acid	7.702	105	50958	1883.74	ng/ml	96
27) 2,4-Dichlorophenol	7.809	162	60602	1034.81	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.889	180	71884	1012.20	ng/ml	99
29) Naphthalene	7.970	128	223784	1010.00	ng/ml	98
30) 4-Chloroaniline	8.023	127	54929	967.40	ng/ml	95
31) Hexachlorobutadiene	8.098	225	37710	1022.65	ng/ml	99
32) 4-Chloro-3-methylphenol	8.499	107	67175	1007.28	ng/ml	97
33) 2-Methylnaphthalene	8.660	142	177506	1061.90	ng/ml	98
34) 1-Methylnaphthalene	8.761	142	163988	1041.62	ng/ml	98
36) Hexachlorocyclopentadiene	8.831	237	35605	1071.82	ng/ml	97
37) 2,4,6-Trichlorophenol	8.943	196	44187	1042.93	ng/ml	98
38) 2,4,5-Trichlorophenol	8.986	198	43264	1087.06	ng/ml	98
39) 1,1'-Biphenyl	9.125	154	203941	1072.17	ng/ml	99
41) 2-Chloronaphthalene	9.152	162	147432	1075.71	ng/ml	96
42) 2-Nitroaniline	9.248	138	50581	1099.89	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.285	156	149204	1064.53	ng/ml	95

Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-05\9E08056\
Data File : I05081930.D
Acq On : 9 May 2019 2:48 am
Operator : JK /AMS /DTH
Sample : 9E08056-ICV1
Misc : 1x, A19C239 BNA@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV9_AQUISITION.M

Quant Time: May 09 17:11:47 2019
Quant Method : T:\methods\SV9_050819.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Thu May 09 12:25:58 2019
Response via : Initial Calibration
InstName : SV-GCMS9

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.376	168	24100	1073.01	ng/ml	79
45) Dimethyl phthalate	9.430	163	169073	1061.69	ng/ml	100
46) 1,3-Dinitrobenzene	9.456	168	28035	1096.25	ng/ml	91
47) 2,6-Dinitrotoluene	9.489	165	40105	1126.25	ng/ml	80
48) 1,2-Dinitrobenzene	9.547	168	18904	1070.35	ng/ml	77
49) Acenaphthylene	9.574	152	245169	1088.77	ng/ml	99
50) 3-Nitroaniline	9.665	138	32303	1148.36	ng/ml	95
51) Acenaphthene	9.751	153	147329	1038.58	ng/ml	99
52) 2,4-Dinitrophenol	9.767	184	11258	946.80	ng/ml	90
53) 4-Nitrophenol	9.836	139	26562	1034.68	ng/ml	86
54) 2,4-Dinitrotoluene	9.895	165	50566	1028.34	ng/ml	87
55) Dibenzofuran	9.922	168	207368	1074.20	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.007	232	35153	1036.22	ng/ml	87
57) 2,3,4,6-Tetrachlorophenol	10.050	232	37583	1057.55	ng/ml	86
58) Diethyl phthalate	10.136	149	155688	1008.93	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.130	170	135406	979.82	ng/ml	99
60) Fluorene	10.269	166	163155	980.70	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.264	204	79372	1021.18	ng/ml	84
62) 4-Nitroaniline	10.286	138	39138	1148.14	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.312	198	23959	1164.44	ng/ml	81
65) N-Nitrosodiphenylamine	10.382	169	139086	1041.34	ng/ml	98
66) Azobenzene (1,2-DPH)	10.425	77	159312	1062.75	ng/ml	85
68) 4-Bromophenyl phenyl e...	10.756	248	50774	1067.93	ng/ml	89
69) Hexachlorobenzene	10.842	284	53277	1008.79	ng/ml	91
70) Pentachlorophenol (PCP)	11.034	266	24081	1037.90	ng/ml	95
71) Phenanthrene	11.248	178	232643	1007.11	ng/ml	99
72) Anthracene	11.296	178	237192	1026.92	ng/ml	98
73) Carbazole	11.457	167	219325	1083.50	ng/ml	98
74) Di-n-butyl phthalate	11.794	149	282307	1076.33	ng/ml	99
75) Fluoranthene	12.527	202	288406	1068.46	ng/ml	96
76) Benzidine	12.676	184	99508	1732.76	ng/ml	98
77) Pyrene	12.821	202	286022	1041.22	ng/ml	100
80) Butyl benzyl phthalate	13.842	149	126879	1062.30	ng/ml	90
81) Bis(2-ethylhexyl) adipate	14.014	129	113335	995.63	ng/ml	98
82) 3,3-Dichlorobenzidine	14.992	252	62301	2074.49	ng/ml	97
83) Benz(a)anthracene	15.030	228	262028	1044.68	ng/ml	99
84) Chrysene	15.115	228	231406	1000.05	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.180	149	161392	1060.07	ng/ml	95
87) Di-n-octyl phthalate	16.843	149	287021	1012.79	ng/ml	98
88) Benzo(b)fluoranthene	17.619	252	267547	1035.11	ng/ml	96
89) Benzo(k)fluoranthene	17.688	252	258374	1008.99	ng/ml	96
90) Benzo(b+k)fluoranthene	17.688	252	537352	2026.95	ng/ml	96
91) Benzo(e)pyrene	18.276	252	259061	1058.50	ng/ml	97
92) Benzo(a)pyrene	18.394	252	240398	1026.25	ng/ml	96
93) Perylene	18.597	252	240296	1159.57	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.924	276	215601	987.22	ng/ml	96
96) Dibenz(a,h)anthracene	20.988	278	198191	1027.94	ng/ml	93
97) Benzo(g,h,i)perylene	21.464	276	225482	1055.89	ng/ml	90

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

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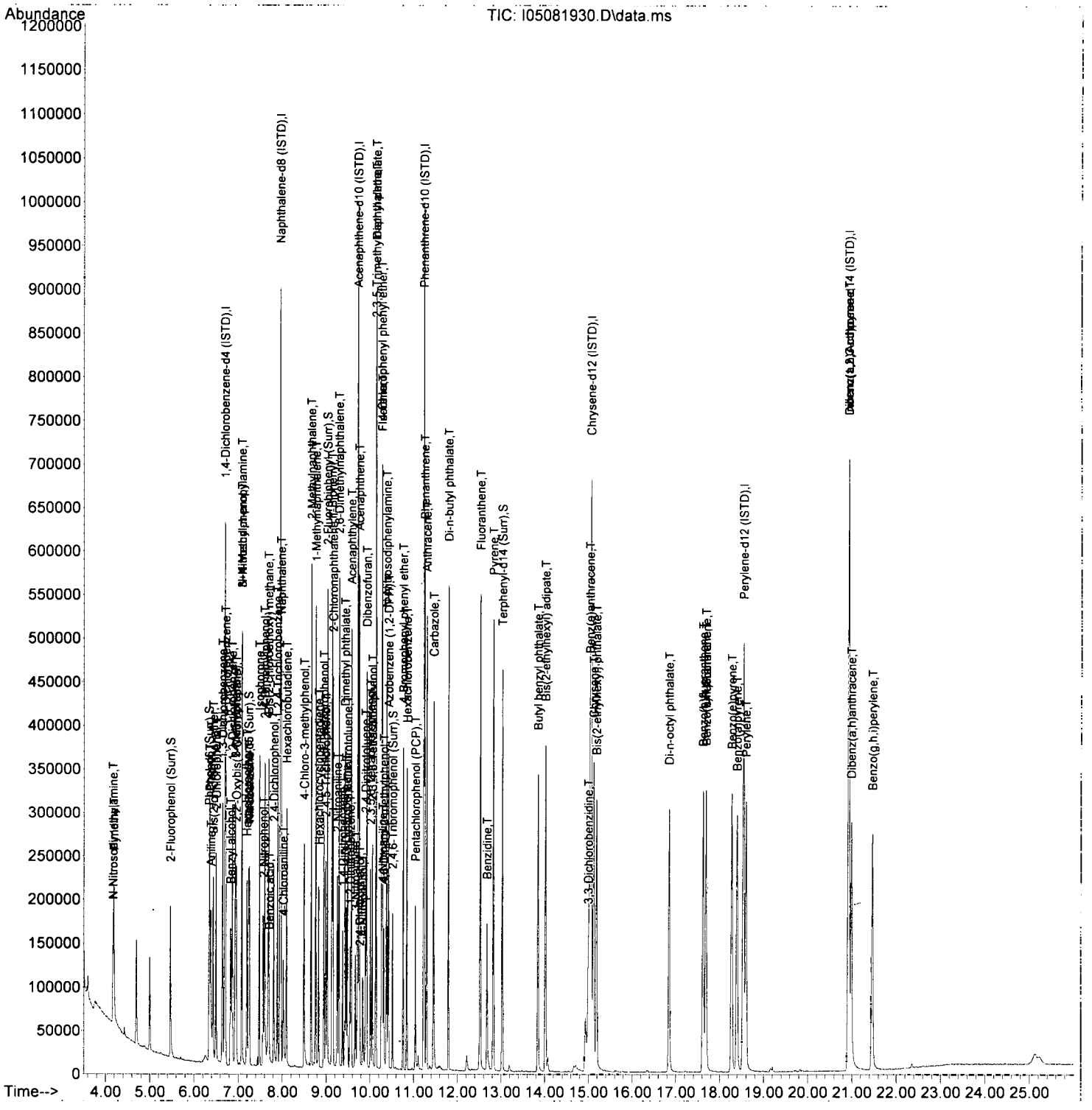


APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Conventional Chemistry Parameters
Total Organic Carbon (EPA 9060A mod)
Benchsheet & Analysis Sequence Data

Batch 9051253
Sequence 9E30017 (A9E0766-01,02,03,04,05,06,07,16)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9051253 (Sediment)

Prep Method: PSEP TOC

JUN 2 1 2019

#	Lab Number		Analysis	Prepared	Initial (g)	Final (g)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9051253-BLK1		QC	05/24/19 10:20	5	5									
	9051253-BS1		QC	05/24/19 10:20	5	5	A19C282		1						
	A9E0766-01	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					FD-20190522094 7	Units=%			
	A9E0766-02	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-01-03	Units=%			
	A9E0766-03	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-03-05	Units=%			
	A9E0766-04	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-05-07	Units=%			
	A9E0766-05	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-07-09	MS/MSD this sample, Units=%			
	9051253-DUP1		QC	05/24/19 10:20	5	5		A9E0766-05							
	A9E0766-06	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-09-11	Units=%			
	A9E0766-07	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC1 8-190522-11-13	Units=%			
	A9E0766-16	A	Total Organic Carbon - Soil (9060A)	05/24/19 10:20	5	5					T4-PDI2019-SC6 7-190522-01-03	Units=%			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L221	11/30/23	Wet Chem Balance 3

Analyte Spike(s)

Std ID	Exp. Date	Description
A19C282	09/22/19	TOC 10k ppm secondary

Surrogate(s)

Std ID	Exp. Date	Description

Prepared By: 5-24-19 Date

Reviewed By: 5/30/19 Date

APEX LABORATORIES

ELEMENT SEQUENCE LOG

Apex Laboratories

JUN 2 4 2019

Sequence: **9E30017** Instrument: **TOC**

Date: **05/30/19 08:29** Calibration: **A8B0203**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9E30017-CCV1	Sediment	QC	QC				A19C283
2	9E30017-CCB1	Sediment	QC	QC				
3	9051253-BLK1	Sediment	QC	QC		9051253		
4	9051253-BS1	Sediment	QC	QC		9051253		
5	A9E0766-01	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
6	A9E0766-02	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
7	A9E0766-03	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
8	A9E0766-04	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
9	A9E0766-05	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
10	9051253-DUP1	Sediment	QC	QC		9051253		
11	A9E0766-06	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
12	A9E0766-07	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
13	9E30017-CCV2	Sediment	QC	QC				A19C283
14	9E30017-CCB2	Sediment	QC	QC				
15	A9E0766-16	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/06/19	9051253		
16	9E30017-CCV3	Sediment	QC	QC				A19C283
17	9E30017-CCB3	Sediment	QC	QC				

Data Entered By: NVO 5/30/19

Data Reviewed By: CWR 5/30/19

Comments:

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9E30017-CCV1	1	20	284.60	210.73	10,536.39	10,528	
	2	20	284.30	210.4	10,519.94		
9E30017-CCB1	1	100	0.02	5.17	51.71	52	
	2	100	0	5.15	51.53		
9051253-BLK1	1	99.7	2.668	7.66	76.79	72	
	2	99.3	1.716	6.77	68.15		
	3	95.5	1.848	6.89	72.16		
9051253-BS1	1	20.0	284.1	210.18	10,508.98	10,245	
	2	20.0	277.8	203.42	10,170.77		
	3	20.0	275.6	201.12	10,055.76		
A9E0766-01	1	54.6	27.82	29.39	538.24	530	
	2	57.2	26.61	28.41	496.75		
	3	57.9	31.32	32.17	555.58		
A9E0766-02	1	39.3	92.99	74.05	1,884.30	1,831	
	2	39.4	92.5	73.76	1,872.05		
	3	41.2	88.93	71.6	1,737.93		
A9E0766-03	1	33.7	110.6	84.4	2,504.55	2,529	
	2	31.6	92.26	73.61	2,329.57		
	3	34.2	127.6	94.14	2,752.51		
A9E0766-04	1	57.5	30.27	31.34	545.04	508	
	2	57.3	24.04	26.32	459.39		
	3	59.5	29.71	30.9	519.26		
A9E0766-05	1	44.6	42.13	40.42	906.33	965	
	2	46.3	42.63	40.79	881.05		
	3	43.0	52.01	47.57	1,106.18		

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
A9E0766-05DUP	1	43.5	39.66	38.58	886.87	913	
	2	45.7	43.55	41.47	907.47		
	3	45.9	46.18	43.39	945.41		
A9E0766-06	1	35.7	42.84	40.95	1,147.00	1,249	
	2	40.0	65.46	56.75	1,418.82		
	3	41.8	54.67	49.43	1,182.51		
A9E0766-07	1	31.9	39.94	38.79	1,215.95	1,262	
	2	32.8	44.9	42.46	1,294.57		
	3	36.9	51.35	47.1	1,276.41		
9E30017-CCV2	1	20.0	287.9	214.39	10,719.50	10,549	
	2	20.0	281.7	207.57	10,378.57		
9E30017-CCB2	1	100.0	0	5.15	51.53	52	
	2	100.0	0.02	5.17	51.72		
A9E0766-16	1	66.8	42.610	40.78	610.45	600	
	2	63.8	38.400	37.63	589.79		
	3	65.6	40.610	39.29	598.94		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
Sample ID	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	3			5.15	#DIV/0!		
9E30017-CCV3	1	20.0	263.8	189.3	9,464.95	9,873	
	2	20.0	279.9	205.64	10,282.04		
9E30017-CCB3	1	100.0	0	5.16	51.56	52	
	2	100.0	0	5.15	51.53		
				5.15	#DIV/0!		
				5.15	#DIV/0!		
				5.15	#DIV/0!		
				5.15	#DIV/0!		
				5.15	#DIV/0!		
				5.15	#DIV/0!		

Sequence 9E30017
Batch 9051253

TOC Soil data log

Date/Time 5/30/19 / 0820
Analyst LWO

Sample ID	Wt1(mg or ul)** / Wt2(mg or ul)** / Wt3(mg or ul)**	raw TOC (ug)	Comments
9E30017 -CCV1	20 20	284.6 284.3	
9E30017 -CCB1	100 100	0.019 0	
9051253 -BLK1	99.7 99.3 95.5	2.668 1.716 1.848	Time out
9051253 -BS1	20 20 20	284.1 277.8 275.6	
A9E0166 -01	54.6 57.2 57.9	27.82 26.61 31.32	
A9E0166 -02	39.3 39.4 41.2	92.99 92.50 88.93	
A9E0166 -03	33.7 31.6 34.2	110.6 92.26 127.6	
A9E0766 -04	57.5 ~~54.3~~ 57.3 59.5	~~46.99~~ 32.27. LWO 5/30/19 24.04 29.71	

Sample ID	Wt1(mg or ul)** / Wt2(mg or ul)** / Wt3(mg or ul)**	raw TOC (ug)	Comments
A9T0766 -05	44.6 46.3 43.0	42.12 42.63 52.01	
A9E0766 -05 DUP1	43.5 45.7 45.9	39.66 43.55 46.18	
A9E0766 -06	35.7 40.0 41.8	42.84 65.46 54.67	
A9E0766 -07	31.9 32.8 36.9	39.94 44.9 51.35	
~~A9E~~ LWO 5/30/19 9E30017 CCV2	20 20	267.9 261.7	
9E30017 CCB2	100 100	0 0.02	
A9E0776 -16	66.8 63.8 65.6	42.61 38.41 40.61	
9E30017 -CCV3	20 20	263.9 279.9	Time Out
9E30017 CCB3	100 100	0.003 0	

**Sample mass input into instrument as 1000 mg to output actual ug C

Batch 1051253 TOC PSEP preweigh Analyst JKP

Date/Time:	5-28-19 0650	5-28-19 0830			Effervesces?	Comments
T(°C) IN / OUT:	10.0 / 12.0	11.5 / 11.9	/	/		
Sample ID	Wt 1(g)	Wt 2(g)	Wt 3(g)	Wt 4(g)	(yes/no)	
A9E0766-01	12.2348	12.2363			no	
A9E0766-02	14.8317	14.8364			no	
A9E0766-03	14.9414	14.9460			no	
A9E0766-04	11.9036	11.9013			no	
A9E0766-05	14.5985	14.5999			no	
A9E0766-05DUP	13.3182	13.3220			no	
A9E0766-06	14.1321	14.1328			no	
A9E0766-07	16.7739	16.7761			no	
A9E0766-16	10.6907	10.6901			no	

Dried @ 1020 on 5-24-19 JKP

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Conventional Chemistry Parameters
Total Organic Carbon (EPA 9060A mod)
Calibration Data

Sequence 8B02022 (Cal ID A8B0203) TOC

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	8B02022	Instrument:	TOC
Date:	02/02/18 10:15	Calibration:	A8B0203

Order	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	8B02022-CAL1	Soil	QC	QC				
2	8B02022-CAL2	Soil	QC	QC				A18B030
3	8B02022-CAL3	Soil	QC	QC				A18B029
4	8B02022-CAL4	Soil	QC	QC				A18B028
5	8B02022-CAL5	Soil	QC	QC				A18B027
6	8B02022-CAL6	Soil	QC	QC				A18B026
7	8B02022-CAL7	Soil	QC	QC				A18B025
8	8B02022-CAL8	Soil	QC	QC				A18B024
9	8B02022-CAL9	Soil	QC	QC				A18B023
10	8B02022-CALA	Soil	QC	QC				A18B022
11	8B02022-CALB	Soil	QC	QC				A18B021
12	8B02022-ICV1	Soil	QC	QC				A18B031
13	8B02022-ICB1	Soil	QC	QC				
14	8B02022-ICV2	Soil	QC	QC				A18B031
15	8B02022-ICB2	Soil	QC	QC				

Data Entered By: JKP 2-2-18

Comments:

Data Reviewed By: JCS 2/14/18

2/2/2018 5:40:11PM

TOC Data

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL1	1	20	1.847	6.89	344.50	323	
	2	20	1.106	6.2	309.77		
	3	20	1.192	6.28	313.81		
[redacted]	1	20.0	14.4	18.2	909.78	[redacted]	
	2	20.0	16.65	20.13	1,006.70		
	3	20.0	15.74	19.35	967.66		
[redacted]	1	20.0	44.37	42.07	2,103.69	[redacted]	
	2	20.0	48.3	44.93	2,246.27		
	3	20.0	47.81	44.57	2,228.65		
[redacted]	1	20.0	123.9	92.03	4,601.40	[redacted]	
	2	20.0	131.8	96.53	4,826.34		
	3	20.0	132.4	96.87	4,843.42		
[redacted]	1	20.0	278.8	204.47	10,223.57	[redacted]	
	2	20.0	287.6	214.05	10,702.70		
	3	20.0	284.1	210.18	10,508.98		
[redacted]	1	20.0	350.7	300.44	15,022.06	[redacted]	
	2	20.0	345	291.2	14,560.12		
	3	20.0	361	317.95	15,897.40		
[redacted]	1	20.0	399.1	392.54	19,626.76	[redacted]	
	2	20.0	402.2	399.33	19,966.67		
	3	20.0	410.3	417.65	20,882.38		

TOC Data

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
8B02022-CAL8	1	20.0	437.8	486.05	24,302.72	24,424	
	2	20.0	440.9	494.4	24,719.83		
	3	20.0	437.4	484.99	24,249.38		
8B02022-CAL9	1	20.0	473.2	589.45	29,472.51	29,844	
	2	20.0	473.6	590.72	29,536.19		
	3	20.0	479.7	610.45	30,522.56		
8B02022-CAL10	1	20.0	503.7	693.77	34,688.41	34,786	
	2	20.0	504.4	696.34	34,816.94		
	3	20.0	504.6	697.07	34,853.73		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL11	1	20	529.100	792.36	39,618.21	40,444	
	2	20	532.500	806.41	40,320.67		
	3	20	537.600	827.87	41,393.75		
8B02022-ICV1	1	20.0	298.2	226.32	11,315.89	11,747	
	2	20.0	312	243.55	12,177.38		
	3			5.15	#DIV/0!		
8B022-ICB1	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		
8B02022-ICV2	1	20.0	277.9	203.52	10,176.04	10,428	
	2	20.0	287.2	213.61	10,680.34		
	3			5.15	#DIV/0!		
8B02022-ICB2	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		

⇒ ICV1 failed high. Reprepped and reanalyzed below as ICV2. JKP 2-2-18

Page 2

Sequence 8B02022
Batch

TOC Soil data log

Date/Time 2-2-18 @ 1735 ~~1520~~
Analyst JKP JKP 2-2-18

Sample ID	Wt1(mg or ul)**	raw TOC (ug)	Comments
	Wt2(mg or ul)**	raw TOC (ug)	
	Wt3(mg or ul)**	raw TOC (ug)	
8B02022-Cal1	20	1.847	
	20	1.106	
	20	1.192	
8B02022-Cal2	20	14.4	Time Out
	20	16.65	
	20	15.74	
8B02022-Cal3	20	44.37	
	20	48.3	
	20	47.81	
8B02022-Cal4	20	123.9	Time Out
	20	131.8	
	20	132.4	
8B02022-Cal5	20	278.8	
	20	287.6	
	20	284.1	
8B02022-Cal6	20	350.7	Time Out
	20	345	
	20	361	
8B02022-Cal7	20	399.1	Time Out
	20	402.2	
	20	410.3	
8B02022-Cal8	20	437.8	Time Out
	20	440.9	
	20	437.4	

Sample ID	Wt1(mg or ul)**	raw TOC (ug)	Comments
	Wt2(mg or ul)**	raw TOC (ug)	
	Wt3(mg or ul)**	raw TOC (ug)	
8B02022-Cal9	20	473.2	Time Out
	20	473.6	Time Out
	20	479.7	Time Out
8B02022-Cal10A JKP 2-2-18	20	503.7	
	20	504.4	Time Out
	20	504.6	Time Out
8B02022-Cal10B JKP 2-2-18	20	529.1	Time Out
	20	532.5	Time Out
	20	537.6	Time Out
8B02022-ICV1	20	298.2	Time Out
	20	312	Time Out
	JKP 2-2-18 ~~20~~		
8B02022-ICB1	20	0	
	20	0	
	JKP 2-2-18 ~~20~~		
8B02022-ICV2	20	277.9	Time Out
	20	287.2	Time Out
8B02022-ICB2	20	0	
	20	0	

ICV1 failed high. Reprepped and reanalyzed below as ICV2
JKP 2-2-18

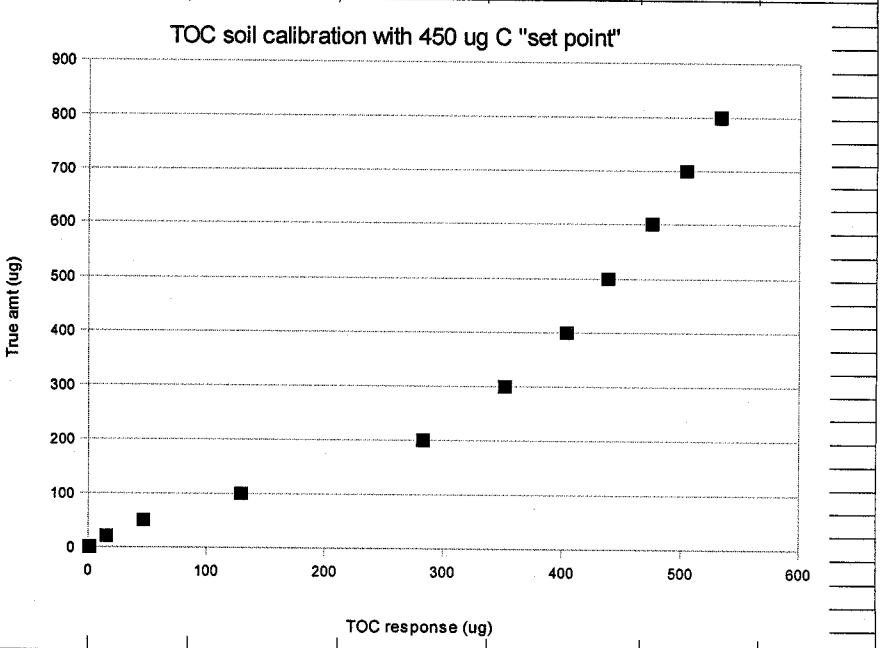
**Sample mass input into instrument as 1000 mg to output actual ug C

Cal Standard	Instrument Reponse	Average Instrument Response
1	1.85	1.38
	1.11	
	1.19	
2	14.4	15.6
	16.65	
	15.74	
3	44.37	46.83
	48.3	
	47.81	
4	123.9	129.37
	131.8	
	132.4	
5	278.8	283.5
	287.6	
	284.1	
6	350.7	352.23
	345	
	361	
7	399.1	403.87
	402.2	
	410.3	
8	437.8	438.7
	440.9	
	437.4	
9	473.2	475.5
	473.6	
	479.7	
10	503.7	504.23
	504.4	
	504.6	
11	529.1	533.07
	532.5	
	537.6	

450 ug curve

TOC resp ug C		True ug C
533.07		800
504.23		700
475.5		600
438.7		500
403.87		400
352.23		300
283.5		200
129.37		100
46.83		50
15.6		20
1.38		0

TOC resp ug C	Requant	% recovery
533.07	808.77	101.1
504.23	695.73	99.39
475.5	596.81	99.47
438.7	488.46	97.69
403.87	403.04	100.76
352.23	302.98	100.99
283.5	209.52	104.76
129.37	95.14	95.14
46.83	43.86	87.73
15.6	19.23	96.15
1.38	6.45	N/A



X (response)	X^2	X^3	y (ug C)
533.07	284160.07	151476261.9	800
504.23	254251.25	128201957.5	700
475.5	226100.25	107510668.9	600
438.7	192457.69	84431188.6	500
403.87	163108.28	65873999.14	400
352.23	124068.32	43700998.31	300
283.5	80372.25	22785532.88	200
129.37	16735.73	2165046.18	100
46.83	2192.74	102678.55	50
15.6	243.26	3793.98	20
1.38	1.91	2.64	0

curve calculations

0.00000740	-0.00289199	0.94586231	5.15285875
0	0	0.14	5.96
0.99945	8.03	#N/A	#N/A
4233.13	7	#N/A	#N/A
818003.66	450.89	#N/A	#N/A

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CAL1	1	20	1.847	6.89	344.50	323	
	2	20	1.106	6.2	309.77		
	3	20	1.192	6.28	313.81		
8B02022-CAL2	1	20.0	14.4	18.2	909.78	961	
	2	20.0	16.65	20.13	1,006.70		
	3	20.0	15.74	19.35	967.66		
8B02022-CAL3	1	20.0	44.37	42.07	2,103.69	2,193	
	2	20.0	48.3	44.93	2,246.27		
	3	20.0	47.81	44.57	2,228.65		
8B02022-CAL4	1	20.0	123.9	92.03	4,601.40	4,757	
	2	20.0	131.8	96.53	4,826.34		
	3	20.0	132.4	96.87	4,843.42		
8B02022-CAL5	1	20.0	278.8	204.47	10,223.57	10,478	
	2	20.0	287.6	214.05	10,702.70		
	3	20.0	284.1	210.18	10,508.98		
8B02022-CAL6	1	20.0	350.7	300.44	15,022.06	15,160	
	2	20.0	345	291.2	14,560.12		
	3	20.0	361	317.95	15,897.40		
8B02022-CAL7	1	20.0	399.1	392.54	19,626.76	20,159	
	2	20.0	402.2	399.33	19,966.67		
	3	20.0	410.3	417.65	20,882.38		

Sample ID	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
8B02022-CAL8	1	20.0	437.8	486.05	24,302.72	24,424	
	2	20.0	440.9	494.4	24,719.83		
	3	20.0	437.4	484.99	24,249.38		
8B02022-CAL9	1	20.0	473.2	589.45	29,472.51	29,844	
	2	20.0	473.6	590.72	29,536.19		
	3	20.0	479.7	610.45	30,522.56		
8B02022-CALA	1	20.0	503.7	693.77	34,688.41	34,786	
	2	20.0	504.4	696.34	34,816.94		
	3	20.0	504.6	697.07	34,853.73		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
	1			5.15	#DIV/0!	#DIV/0!	
	2			5.15	#DIV/0!		
8B02022-CALB	1	20	529.100	792.36	39,618.21	40,444	
	2	20	532.500	806.41	40,320.67		
	3	20	537.600	827.87	41,393.75		
8B02022-ICV1	1	20.0	298.2	226.32	11,315.89	11,747	
	2	20.0	312	243.55	12,177.38		
	3			5.15	#DIV/0!		
8B022-ICB1	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		
8B02022-ICV2	1	20.0	277.9	203.52	10,176.04	10,428	
	2	20.0	287.2	213.61	10,680.34		
	3			5.15	#DIV/0!		
8B02022-ICB2	1	20.0	0	5.15	257.64	258	
	2	20.0	0	5.15	257.64		
	3			5.15	#DIV/0!		

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Conventional Chemistry Parameters
Total Suspended Solids (PSEP 1986)
Benchsheet Data

Batch 9051375 (A9E0766-01,02,03,04,05,06,07,16)

PREPARATION BENCH SHEET

BATCH #: 9051375 (Matrix: Soil)

Apex Laboratories

Percent Solids Worksheet

JUN 2 1 2019

Lab Number	QC Source ID	Prepared (Time In)	Weighed (Time Out)	Tare Wt. (g)	Wet Weight (+Tare) (g)	Dry Weight (+Tare) (g)	% Solids (Calc)	Sample Comments
A9E0744-19		05/29/19 15:51		1.3976	29.3081	20.1314	67.1	MS/MSD this sample, **USE SOLIDS DATA** Make Not Reportable.
A9E0744-19		05/29/19 15:51		1.3976	29.3081	20.1314	67.1	MS/MSD this sample, Enter TS data for DW. (Units=%)
9051375-DUP1	A9E0744-19	05/29/19 15:51		1.3830	27.0801	18.5340	66.7	
A9E0744-20		05/29/19 15:51		1.3805	29.1027	19.7973	66.4	**USE SOLIDS DATA** Make Not Reportable.
A9E0744-20		05/29/19 15:51		1.3805	29.1027	19.7973	66.4	Enter TS data for DW. (Units=%)
A9E0744-21		05/29/19 15:51		1.3819	27.2325	18.3320	65.6	Enter TS data for DW. (Units=%)
A9E0744-21		05/29/19 15:51		1.3819	27.2325	18.3320	65.6	**USE SOLIDS DATA** Make Not Reportable.
A9E0744-22		05/29/19 15:51		1.3715	29.2913	~~20.4794~~ 20.4698	68.4	**USE SOLIDS DATA** Make Not Reportable.
A9E0744-22		05/29/19 15:51		1.3715	29.2913	~~20.4794~~ 1 cm 6/14/19	68.4	Enter TS data for DW. (Units=%)
A9E0766-01		05/29/19 15:51		1.3866	31.5131	23.1740	72.3	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-01		05/29/19 15:51		1.3866	31.5131	23.1740	72.3	Enter TS data for DW. (Units=%)
A9E0766-02		05/29/19 15:51		1.3764	30.2017	21.2142	68.8	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-02		05/29/19 15:51		1.3764	30.2017	21.2142	68.8	Enter TS data for DW. (Units=%)
A9E0766-03		05/29/19 15:51		1.3925	28.5700	20.5335	70.4	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-03		05/29/19 15:51		1.3925	28.5700	20.5335	70.4	Enter TS data for DW. (Units=%)
A9E0766-04		05/29/19 15:51		1.3923	26.2761	20.3142	76.0	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-04		05/29/19 15:51		1.3923	26.2761	20.3142	76.0	Enter TS data for DW. (Units=%)
A9E0766-05		05/29/19 15:51		1.3948	31.1339	21.8780	68.9	MS/MSD this sample, Enter TS data for DW. (Units=%)
A9E0766-05		05/29/19 15:51		1.3948	31.1339	21.8780	68.9	MS/MSD this sample, **USE SOLIDS DATA** Make Not Reportable.
9051375-DUP2	A9E0766-05	05/29/19 15:51		1.4030	29.7565	~~20.8870~~ 20.7030 cm 5/31/19	~~68.4~~ 68.6 cm 5/31/19	
A9E0766-06		05/29/19 15:51		1.3752	33.4674	23.7112	69.6	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-06		05/29/19 15:51		1.3752	33.4674	23.7112	69.6	Enter TS data for DW. (Units=%)

MPE 5-30-19
Prepared By: Date

CMR 6/14/19
Reviewed By: Date

Printed: 5/30/2019 3:19:55PM

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 9051375 (Matrix: Soil)

Percent Solids Worksheet

Lab Number	QC Source ID	Prepared (Time In)	Weighed (Time Out)	Tare Wt. (g)	Wet Weight (+Tare) (g)	Dry Weight (+Tare) (g)	% Solids (Calc)	Sample Comments
A9E0766-07		05/29/19 15:51		1.3673	31.5302	22.6318	70.5	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-07		05/29/19 15:51		1.3673	31.5302	22.6318	70.5	Enter TS data for DW. (Units=%)
A9E0766-16		05/29/19 15:51		1.3836	31.4372	~~26.6665~~ 26.2665	~~84.1~~ 82.8	**USE SOLIDS DATA** Make Not Reportable.
A9E0766-16		05/29/19 15:51		1.3836	31.4372	~~26.6665~~ 26.2665	~~84.1~~ 82.8	Enter TS data for DW. (Units=%)

MRE 5-30-19
Prepared By: Date

Reviewed By: Date

Total Solids Worksheet

Analyst: MRF Date: 05/29/19 Batch: 9051375

Sample ID	Vessel ID	Tare Weight (g)	wet+ Tare Weight (g)	DRY Weight (g) 1st weighing	DRY Weight (g) 2nd weighing	Comments
A9E0744-19	1	1.3976	29.3081	20.1314	20.1391	
9051375-DUP1	2	1.3830	27.0801	18.5363	18.5340	
A9E0744-20	3	1.3805	29.1027	19.8034	19.7973	
A9E0744-21	4	1.3819	27.2325	18.3320	18.3472	
A9E0744-22	5	1.3715	29.2913	20.4698	20.4794	
A9E0766-01	6	1.3866	31.5131	23.1740	23.1754	
A9E0766-02	7	1.3764	30.2017	21.2247	21.2142	→ MRE 5/30
A9E0766-03	8	1.3925	28.5700	20.5463	20.5335	
A9E0766-04	9	~~1.3888~~	26.2761	20.3142	20.3238	1.3923 Tare
A9E0766-05	10	1.3948	31.1339	21.8847	21.8780	
9051375-DUP2	11	1.4030	29.7565	20.9070	20.9319	
A9E0766-06	12	1.3752	33.4674	23.7112	23.7328	
A9E0766-07	13	1.3673	31.5302	22.6318	22.6337	
A9E0766-08 16	14	1.3836	31.4372	26.2665	26.2665	
MRE 5/29						

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Grain Size by ASTM D 422m
Benchsheet Data

Batch 9060757 (A9E0766-02,03,04,05,06,07,16)

APEX LABORATORIES

Grain Size (D422m/PSET)

PREPARATION BENCH SHEET

9060757

JUN 19 2019
JUN 20 2019

Apex Laboratories
BATCH #: 9060757 (Soil)
Prep Method: ASTM D 421

Lab Number	Due	Prepared	Initial (N/A)	Final (N/A)	Client	ClientID / Sample	Extraction Comments
A9E0766-02	*06/06/19*	**06/10/19 08:13**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9E0766-03	*06/06/19*	**06/10/19 08:28**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9E0766-04	*06/06/19*	**06/10/19 08:46**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9E0766-05	*06/06/19*	**06/10/19 08:06**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9E0766-06	*06/06/19*	**06/10/19 08:19**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9E0766-07	*06/06/19*	**06/10/19 08:38**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC18-190522-**	X
☐ Grain Size (D422m/PSET)							
A9E0766-16	*06/06/19*	**06/10/19 08:54**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SC67-190522-(**	X
☐ Grain Size (D422m/PSET)							
A9F0028-01	*06/13/19*	**06/10/19 08:01**	**1**	**1**	**Farallon Consulting**	**DMMU1-DP**	X
☐ Grain Size (D422m/PSET)							

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L215	11/30/19	Grain Size Balance
A13L217	11/30/19	Sample Prep Bal2
A19F068	07/07/19	Na Hexametaphosphate 40 g/L

Analyte Spike(s)

Std ID	Exp. Date	Description

JJG 06/19/19

James J Johnson 06/12/19
Prepared By: Date

Reviewed By: 6/13/19
Date

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

APEO7660

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	FD-201905220947	FD	SE	05/22/2019		1	☒ No QC CJ 5/22/19				
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
002	T4-PDI2019-SC18-190522-01-03	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
003	T4-PDI2019-SC18-190522-03-05	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C

X
X
X

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Janisch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Janisch	Print Name:	Print Name:	Print Name: E Jones	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

A9E0766

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
004	T4-PDI2019-SC18-190522-05-07	N	SE	05/22/2019	9:47	4	☐				
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
005	T4-PDI2019-SC18-190522-07-09	N	SE	05/22/2019	9:47	5	☒				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
006	T4-PDI2019-SC18-190522-09-11	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
007	T4-PDI2019-SC18-190522-11-13	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C

X
X
X

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Jarosch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Jarosch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9E0766

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
008	T4-PDI2019-SC18-190522-13-13.6	N	SE	05/22/2019	9:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
009	T4-PDI2019-SC46-190522-01-03	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
010	T4-PDI2019-SC46-190522-03-05	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
011	T4-PDI2019-SC46-190522-05-6.9	N	SE	05/22/2019	15:47	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
012	T4-PDI2019-SC47-190522-01-03	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
013	T4-PDI2019-SC47-190522-03-05	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
014	T4-PDI2019-SC47-190522-05-07	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐				

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Janisch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Janisch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 05/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

APEX 1606

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

COC ID: APEX-20190522-165912

POC: # Cindy Fields ((206)-903-3394)
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

Project: Port of Portland T4 PDI
Client: The Port of Portland

Sample Custodian: CO
Lab: Apex Laboratories, Tigard, OR

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
015	T4-PDI2019-SC47-190522-07-7.6	N	SE	05/22/2019	14:26	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
016	T4-PDI2019-SC67-190522-01-03	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Aroclor PCBs	SW8082A	30	0 - 6 °C
								Grain Size	D 422M/PSET	30	Ambient
								Percent solids - APEX	SM2540G	30	0 - 6 °C
								TOC	SW9060A	30	0 - 6 °C
017	T4-PDI2019-SC67-190522-03-05	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
018	T4-PDI2019-SC67-190522-05-07	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient
019	T4-PDI2019-SC67-190522-07-08	N	SE	05/22/2019	12:45	4	☐				
								Archive	NA	-1	-18°C
								Archive(GS)	NA	-1	Ambient

4

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature: Casey Jarosch	Signature: Courier	Signature:	Signature:	Signature:	Signature:
Print Name: Casey Jarosch	Print Name:	Print Name:	Print Name: Eli Joyner	Print Name:	Print Name:
Company: Anchor QEA	Company:	Company:	Company: APEX LABS	Company:	Company:
Date/Time: 5/23/19 1000	Date/Time:	Date/Time:	Date/Time: 5-23-19 1000	Date/Time:	Date/Time:

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

Date Printed: 5/22/2019

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-02		**Client Sample ID:**	T4-PDI2019-SC18-190522-01-03		**Batch Number:**	9060757
Data Entered by:	SJL/JSJ	**Date:**	06/12/19	**Data Reviewed by:**	JW	**Date:**	06/13/19
Sample Description:	Silty SAND with some Clay			**Max Particle Size:**	Medium Sand		
Particle Shape:	N/A			**Hardness**	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	17.864	556.046	538.18	3.90	518.0

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		17.878	555.840	537.96	537.96	99.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9624		766-2	1.299	16.425	15.857	3.90

Hydrometer Analysis

Start Date/Time	6/10/2019	8:13	**Dispersing Agent**	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	51.990		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		**Specific Gravity (G_s)**	2.65
Dry Weight of Soil Tested (g)	50.04		Corrected Dry Weight of Soil Tested (g) (W)	50.04

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	27	20.6	20.98	41.9	11.7	0.01348	0.046	41.93
2	22.5	20.6	16.48	32.9	12.4	0.01348	0.034	32.94
4	18	20.6	11.98	23.9	13.2	0.01348	0.024	23.94
8	16.5	20.7	10.51	21.0	13.3	0.01348	0.017	21.01
15	15	20.7	9.01	18.0	13.7	0.01348	0.013	18.01
30	14	20.8	8.05	16.1	13.8	0.01348	0.009	16.08
60	12	20.8	6.05	12.1	14.2	0.01348	0.007	12.09
90	11	20.9	5.08	10.2	14.3	0.01348	0.005	10.15
120	11	21	5.11	10.2	14.3	0.01348	0.005	10.22
240	10	21.1	4.15	8.3	14.5	0.01348	0.003	8.29
360	9	21	3.11	6.2	14.7	0.01348	0.003	6.22
1440	8	20.5	1.95	3.9	14.8	0.01348	0.001	3.89

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.302	0.00	0.00	0.0	100.0
40	0.425	1.306	1.321	0.01	0.16	0.0	100.0
60	0.250	1.295	1.396	0.10	1.20	0.2	99.8
100	0.150	1.298	3.230	1.93	21.19	3.9	95.9
140	0.105	1.286	7.879	6.59	89.41	13.2	82.7
200	0.075	1.295	11.386	10.09	193.83	20.2	62.6
230	0.063	1.298	6.202	4.90	244.57	9.8	52.8
Sum		23.67		230 Minus		26.40	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-01-03 (A9E0766-02)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				*47.24*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.97	0.03
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	99.77	0.2
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	95.91	3.86
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	82.73	13.18
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	62.56	20.17
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	52.76	9.8
Silt and Clay (Measurements in the Clay fraction are noted)				*52.76*
Hydrometer Test		0.0461	41.93	10.83
Hydrometer Test		0.0336	32.94	8.99
Hydrometer Test		0.0245	23.94	8.99
Hydrometer Test		0.0174	21.01	2.93
Hydrometer Test		0.0129	18.01	3
Hydrometer Test		0.0091	16.08	1.93
Hydrometer Test		0.0066	12.09	4
Hydrometer Test		0.0054	10.15	1.93
Hydrometer Test	Clay	0.0047	10.22	0
Hydrometer Test	Clay	0.0033	8.29	1.86
Hydrometer Test	Clay	0.0027	6.22	2.07
Hydrometer Test	Clay	0.0014	3.89	2.33

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	47.2
Coarse sand	0.0
Medium sand	4.1
Fine sand	43.1
Silt	42.6
Clay	10.2

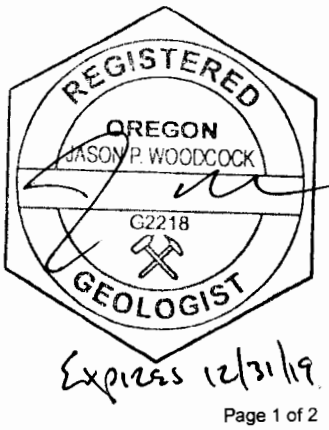
Case Narrative for Sample ID: T4-PDI2019-SC18-190522-01-03 (A9E0766-02)

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

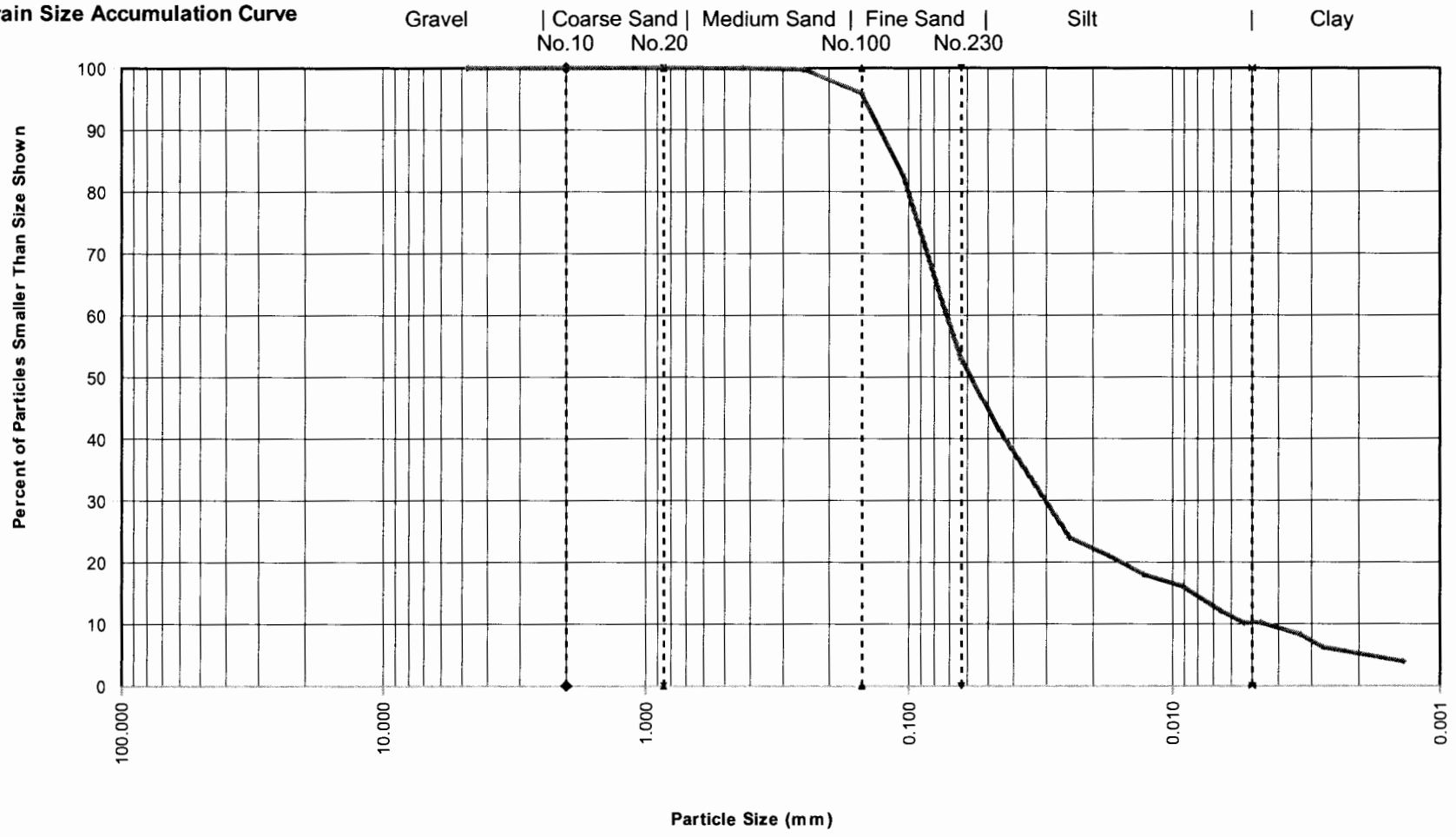
The assumed specific gravity used in the calculations was 2.65.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-01-03 (A9E0766-02)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9E0766-02

Whole Sample

									Total
Tare Values	6.011	5.968	5.885						17.864
Air Dry + Tare	195.522	221.477	139.047						556.046

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan

									Total
Tare Values	6.018	5.974	5.886						17.878
Dry + Tare	153.260	201.260	201.320						555.840

Ensure that Total % Retained is ~ 100%. 99.81

APEX
Grain Size Analysis

Analyst	KAREN WILSON
Batch number	19E0766-02B
~~06-10-19~~ Sample ID	9060757
Start Date/ Time	6-7-19 11:00

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
6.011	195.522		
5.748	221.477		
5.885	139.647		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
6.018	153.26		
5.974	201.26		
5.886	201.32		

Date/Time/Temp

AMBIENT IN	06/07/19 1955 106.4
OUT	06/11/19 1110 109.0

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
766-2	1.299	16.425	15.857

APEX
Grain Size Analysis

Notes

Sample ID: A9E0766-02B

Maximum Particle Size: 4" 6/13 Medium ~~Coarse~~ Sand

Hardness and Shape: ~~N/A~~

Soil/Sediment Classification: Silty Sand w/ some Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguesa		
Batch Number	9060757		
Sample ID	A9E0766-02B		
Start Date/Time	6-10-19	08:13	
Air Dry Sample for Hydrometer Test		51.99	
Hydrometer	870249	Dispersant	A19F068

Time/Date: 06-07-19 @ 12:05

08:13	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:14	1	27	20.6	
8:15	2	22.5	20.6	
8:17	4	18	20.6	
8:21	8	16.5	20.7	
8:28	15	15	20.7	
8:43	30	14	20.8	
9:13	60	12	20.8	
9:43	90	11	20.9	
10:13	120	11	21	
12:13	240	10	21.1	
14:13	360	9	21.0	
08:13	1440	8	20.5	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.302	1.302
+40	1.306	1.321
+60	1.295	1.396
+100	1.298	~~3.230~~
+140	1.286	7.879
+200	1.295	11.386
+230	1.298	6.202
-230 (pan)	1.294	8.191

AG 06/12/19

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-03		Client Sample ID:	T4-PDI2019-SC18-190522-03-05		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Coarse Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.854	556.376	544.52	4.34	521.9

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.862	555.728	543.87	543.87	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9584		E76603	1.288	21.112	20.287	4.34

Hydrometer Analysis

Start Date/Time	6/19/2019	8:28	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.408		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	48.31		Corrected Dry Weight of Soil Tested (g) (W)	48.31

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	28	20.6	21.98	45.5	11.5	0.01348	0.046	45.50
2	24	20.7	18.01	37.3	12.2	0.01348	0.033	37.29
4	22	20.7	16.01	33.1	12.5	0.01348	0.024	33.15
8	18	20.8	12.05	24.9	13.2	0.01348	0.017	24.94
15	16	20.9	10.08	20.9	13.5	0.01348	0.013	20.87
30	14	20.8	8.05	16.7	13.8	0.01348	0.009	16.66
60	12.5	20.8	6.55	13.6	14	0.01348	0.007	13.55
90	11	20.9	5.08	10.5	14.3	0.01348	0.005	10.52
120	11	21	5.11	10.6	14.3	0.01348	0.005	10.59
240	10	21.1	4.15	8.6	14.5	0.01348	0.003	8.59
360	9	21.2	3.18	6.6	14.7	0.01348	0.003	6.58
1440	8	20.6	1.98	4.1	14.8	0.01348	0.001	4.10

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.284	1.293	0.01	0.10	0.0	100.0
40	0.425	1.307	1.334	0.03	0.39	0.1	99.9
60	0.250	1.287	1.720	0.43	5.06	0.9	99.0
100	0.150	1.298	4.207	2.91	36.45	6.0	93.0
140	0.105	1.305	6.970	5.67	97.57	11.7	81.3
200	0.075	1.312	9.575	8.26	186.72	17.1	64.2
230	0.063	1.305	5.693	4.39	234.06	9.1	55.1
Pan			21.69	21.69	255.75	44.9	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-03-05 (A9E0766-03)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				***0***
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				***44.91***
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.98	0.02
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.93	0.06
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	99.03	0.9
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	93.01	6.02
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	81.28	11.73
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	64.18	17.1
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	55.09	9.08
Silt and Clay (Measurements in the Clay fraction are noted)				***55.09***
Hydrometer Test		0.0457	45.5	9.6
Hydrometer Test		0.0333	37.29	8.21
Hydrometer Test		0.0238	33.15	4.14
Hydrometer Test		0.0173	24.94	8.21
Hydrometer Test		0.0128	20.87	4.07
Hydrometer Test		0.0091	16.66	4.21
Hydrometer Test		0.0065	13.55	3.1
Hydrometer Test		0.0054	10.52	3.04
Hydrometer Test	Clay	0.0047	10.59	0
Hydrometer Test	Clay	0.0033	8.59	1.93
Hydrometer Test	Clay	0.0027	6.58	2
Hydrometer Test	Clay	0.0014	4.1	2.48

Grain Size Summary	**Percent of Total Sample**
Gravel	0.0
Sand	44.9
Coarse sand	0.0
Medium sand	7.0
Fine sand	37.9
Silt	44.6
Clay	10.5

Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-03-05 (A9E0766-03)**

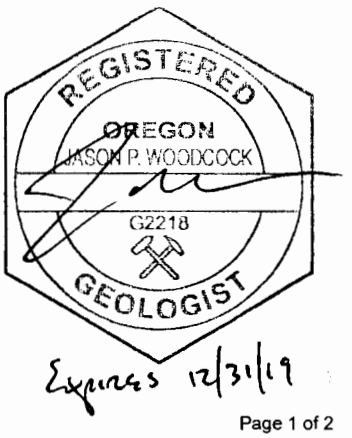
This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

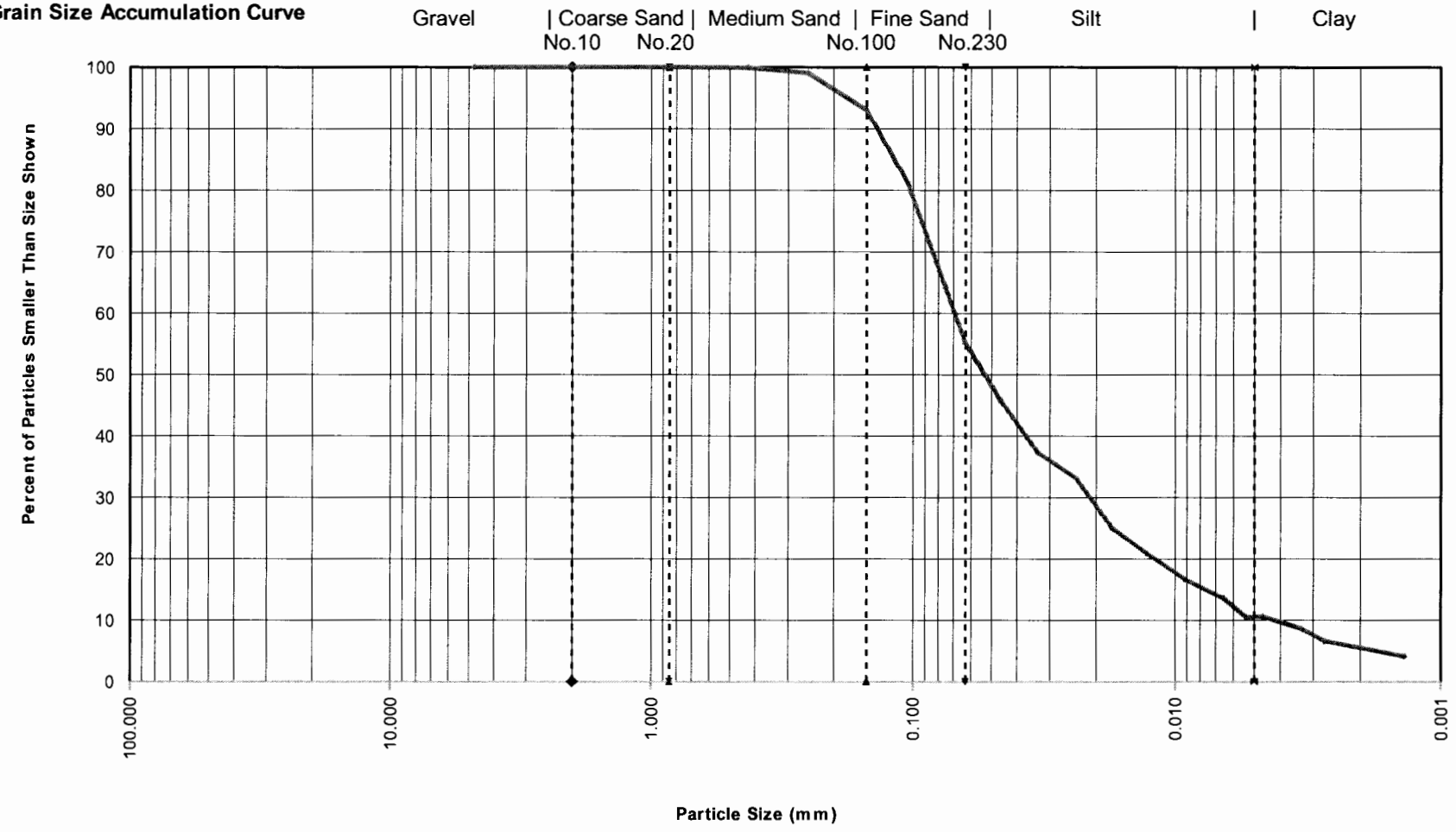
The assumed specific gravity used in the calculations was 2.65.

+20 and +40 fractions contain abundant organic material.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-03-05 (A9E0766-03)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Coarse Sand	N/A	N/A	Silty SAND with some Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9E0766-03

Whole Sample

									Total
Tare Values	5.881	5.973							11.854
Air Dry + Tare	258.762	297.614							556.376

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan

									Total
Tare Values	5.884	5.978							11.862
Dry + Tare	282.783	272.945							555.728

Ensure that Total % Retained is ~ 100%. 99.69

APEX
Grain Size Analysis

Analyst	Sandra Langway
Batch number	9060757
Sample ID	A9E0766-03B
Start Date/ Time	06/07/2019 15:22

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.881	258.762		
5.973	297.614		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.884	282.783		
5.978	272.945		

Date/Time/Temp	
IN	AMED01V 06/07/19 1955 106.4
OUT	06/11/19 1110 109.0 °C

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
E76603	1.288	21.112	20.287

APEX
Grain Size Analysis

Notes

Sample ID: A9E0766-03

+20 + +40 fractions contain abundant organic material

JSG 06/12/19

Maximum Particle Size: Coarse Sand

Hardness and Shape: N/A

Soil/Sediment Classification:

Silty Sand w/ some Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Langowicz		
Batch Number	9060757		
Sample ID	A9E0766-03B		
Start Date/Time	6-10-19 08:28		
Air Dry Sample for Hydrometer Test			50.408
Hydrometer	870249	Dispersant	A195068

Time/Date: 06-07-19 16:38

08:28 8hr

Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
0.5			
1	28	20.6	
2	24	20.7	
4	22	20.7	
8	18	20.8	
15	16	20.9	
30	14	20.8	
60	12.5	20.8	
90	11	20.9	
120	11	21	
240	10	21.1	
360	9	21.2	
1440	8	20.6	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.284	1.293
+40	1.307	1.334
+60	1.287	1.720
+100	1.298	4.207
+140	1.305	6.970
+200	1.312	9.575
+230	1.305	5.693
-230 (pan)	1.297	7.740

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-04		Client Sample ID:	T4-PDI2019-SC18-190522-05-07		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	SAND with some Silt and trace Clay			Max Particle Size:	Coarse Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	18.017	544.670	526.65	2.51	513.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		18.037	544.460	526.42	526.42	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9755		E76604	1.300	16.140	15.776	2.51

Hydrometer Analysis

Start Date/Time	6/10/2019	8:46	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.480		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	49.24		Corrected Dry Weight of Soil Tested (g) (W)	49.24

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	11	20.7	5.01	10.2	14.3	0.01348	0.051	10.18
2	10.5	20.7	4.51	9.2	14.3	0.01348	0.036	9.17
4	10	20.8	4.05	8.2	14.5	0.01348	0.026	8.22
8	10	20.7	4.01	8.2	14.5	0.01348	0.018	8.15
15	10	20.9	4.08	8.3	14.5	0.01348	0.013	8.29
30	8	20.9	2.08	4.2	14.8	0.01348	0.009	4.23
60	7	20.9	1.08	2.2	15	0.01348	0.007	2.19
90	7	21	1.11	2.3	15	0.01348	0.006	2.26
120	6	21	0.11	0.2	15.2	0.01348	0.005	0.23
240	6	21.1	0.15	0.3	15.2	0.01348	0.003	0.30
360	6	21.1	0.15	0.3	15.2	0.01348	0.003	0.30
1440	5.5	20.7		0.0	15.2	0.01348	0.001	0.00

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.307	0.00	0.05	0.0	100.0
40	0.425	1.307	1.338	0.03	0.38	0.1	99.9
60	0.250	1.311	7.074	5.76	60.47	11.7	88.2
100	0.150	1.290	23.817	22.53	295.39	45.7	42.5
140	0.105	1.302	10.044	8.74	386.56	17.8	24.7
200	0.075	1.296	5.756	4.46	433.07	9.1	15.7
230	0.063	1.300	2.700	1.40	447.67	2.8	12.8
Pan			42.93	24.0	5.31		

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-05-07 (A9E0766-04)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				***0***
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				***87.18***
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.99	0.01
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.93	0.06
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	88.22	11.7
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	42.48	45.75
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	24.72	17.75
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	15.67	9.06
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	12.82	2.84
Silt and Clay (Measurements in the Clay fraction are noted)				***12.89***
Hydrometer Test		0.0510	10.18	2.64
Hydrometer Test		0.0360	9.17	1.02
Hydrometer Test		0.0257	8.22	0.95
Hydrometer Test		0.0181	8.15	0.07
Hydrometer Test		0.0133	8.29	0
Hydrometer Test		0.0095	4.23	3.93
Hydrometer Test		0.0067	2.19	2.03
Hydrometer Test		0.0055	2.26	0
Hydrometer Test	Clay	0.0048	0.23	1.96
Hydrometer Test	Clay	0.0034	0.3	0
Hydrometer Test	Clay	0.0028	0.3	0
Hydrometer Test	Clay	0.0014	0.3	0

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	87.2
Coarse sand	0.0
Medium sand	57.5
Fine sand	29.7
Silt	10.6
Clay	2.3

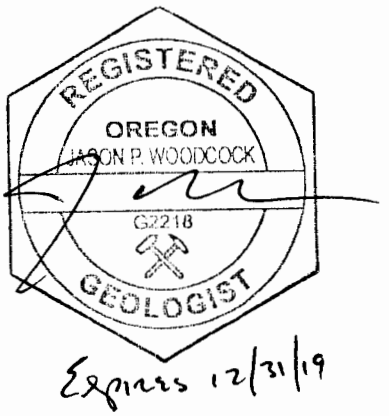
Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-05-07 (A9E0766-04)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

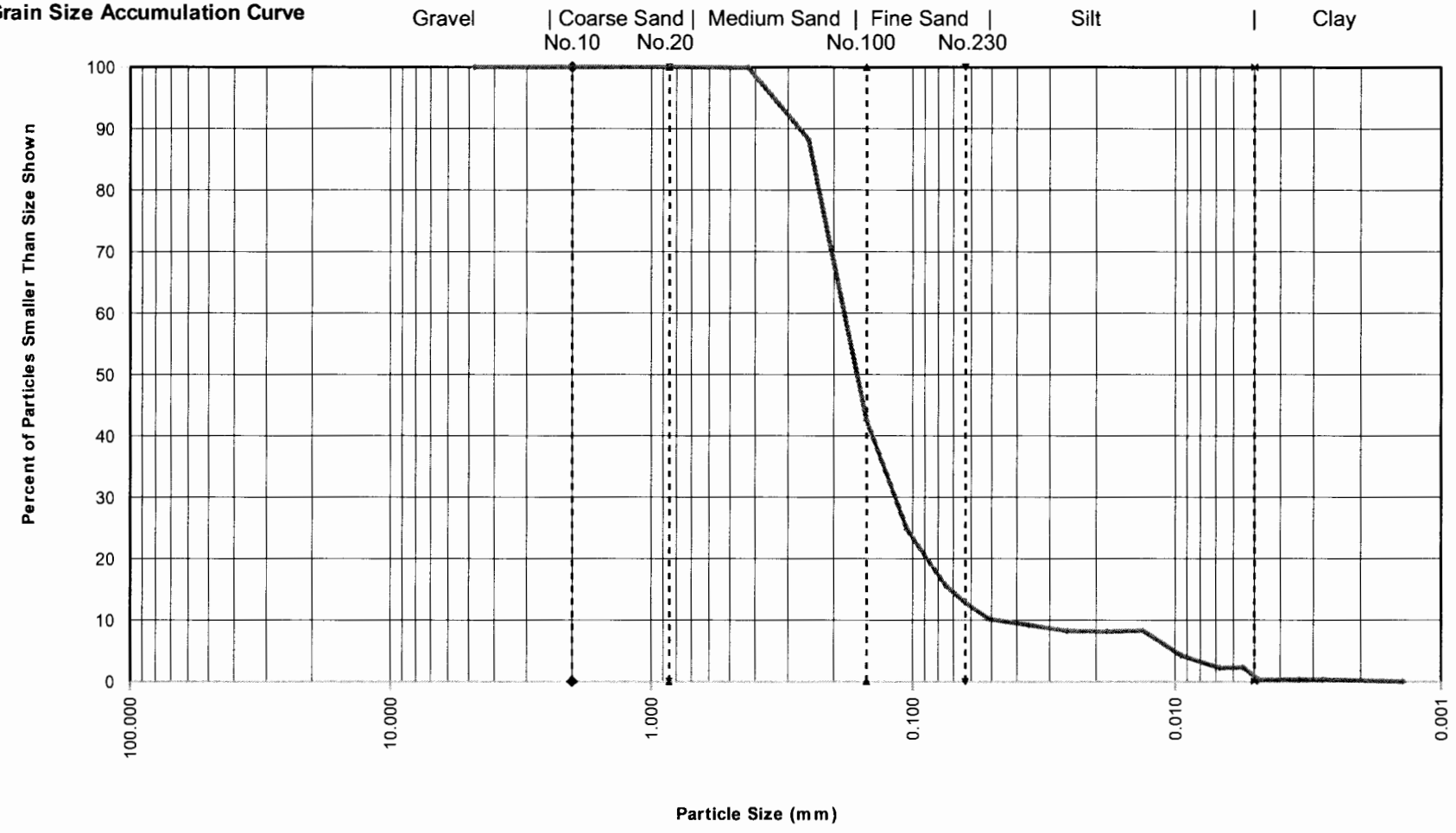
The assumed specific gravity used in the calculations was 2.65.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-05-07 (A9E0766-04)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Coarse Sand	N/A	N/A	SAND with some Silt and trace Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9E0766-04

Whole Sample

									Total
Tare Values	6.047	6.030	5.940						18.017
Air Dry + Tare	174.870	220.270	149.530						544.670

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan

									Total
Tare Values	6.054	6.039	5.944						18.037
Dry + Tare	125.540	158.600	260.320						544.460

Ensure that Total % Retained is ~ 100%. 99.89

APEX
Grain Size Analysis

Analyst	KAREN WILSON
Batch number	
Sample ID	A9E0766-04B
Start Date/ Time	6-7-19 12:20

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
6,047	174,87		
6,030	220,27		
5,940	~~77,953~~	149.53	
		JG 06/11/19	

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
6.054	125.54	~~6.054~~	~~25275.160~~ JG 06/11/19
6.039	158.60	6.04)	197.953
5.944	260.32	0	~~50.48~~
		1.30	~~16.14~~
			JG 06/11/19

Date/Time/Temp

ANEDOIV IN	06/07/19 1955 106.4
OUT	06/11/19 1110 109.0 F

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
766-4	1.30	16.14	15.776

APEX
Grain Size Analysis

Notes

Sample ID: A9E0766-04

Maximum Particle Size: Course Sand

Hardness and Shape: N/A

Soil/Sediment Classification:

SAND w/ some Silt & trace Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Jongway
Batch Number	9060757
Sample ID	A9E0766-04B
Start Date/Time	6-10-19 8:46
Air Dry Sample for Hydrometer Test	50.48
Hydrometer	870249 Dispersant AF068 Time/Date: 06-07-19 16:37

		Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
08:46	09:46				
		0.5			
9:47	9:47	1	11	20.7	
9:48	9:48	2	10.5	20.7	
9:50	9:50	4	10	20.8	
9:54	9:54	8	10	20.7	
	9:01	15	10	20.9	
	9:16	30	8	20.9	
	9:46	60	7	20.9	
	10:16	90	7	21	
	10:46	120	6	21	
	12:46	240	6	21.1	
	14:46	360	6	21.1	
	08:46	1440	5.5	20.7	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare	
+20	1.302	1,307	
+40	1.307	1.338	
+60	1.311	7.074	
+100	1.290	23.817	
+140	1.302	10.044	
+200	1.296	~~5.796~~	5.756
+230	1.300	2700	
-230 (pan)	1.304	2.743	

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-05		Client Sample ID:	T4-PDI2019-SC18-190522-07-09		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.818	509.791	497.97	3.35	481.8

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.831	509.762	497.93	497.93	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9676		766.05C	1.282	15.516	15.055	3.35

Hydrometer Analysis

Start Date/Time	6/10/2019	8:06	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	52.169		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	50.48		Corrected Dry Weight of Soil Tested (g) (W)	50.48

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	18	20.4	13.31	26.4	13.2	0.01365	0.050	26.36
2	15	20.5	10.33	20.5	13.7	0.01348	0.035	20.47
4	13	20.5	8.33	16.5	14	0.01348	0.025	16.51
8	12	20.5	7.33	14.5	14.2	0.01348	0.018	14.53
15	10	20.6	5.36	10.6	14.5	0.01348	0.013	10.61
30	10	20.7	5.38	10.7	14.5	0.01348	0.009	10.66
60	8	20.7	3.38	6.7	14.8	0.01348	0.007	6.70
90	8	20.8	3.41	6.8	14.8	0.01348	0.005	6.75
120	7.5	20.9	2.93	5.8	14.8	0.01348	0.005	5.81
240	7	21.1	2.48	4.9	15	0.01348	0.003	4.92
360	6	21.1	1.48	2.9	15.2	0.01348	0.003	2.94
1440	5.5	20.4	0.81	1.6	15.2	0.01365	0.001	1.60

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.294	1.294	0.00	0.00	0.0	100.0
40	0.425	1.278	1.289	0.01	0.10	0.0	100.0
60	0.250	1.294	2.144	0.85	8.22	1.7	98.3
100	0.150	1.301	12.710	11.41	117.11	22.6	75.7
140	0.105	1.298	12.361	11.06	222.70	21.9	53.8
200	0.075	1.272	9.962	8.69	305.65	17.2	36.6
230	0.063	1.302	4.625	3.32	337.36	6.6	30.0
			35.35		240 MDLP	15.13	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-07-09 (A9E0766-05)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				***0***
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				***70.02***
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.98	0.02
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	98.29	1.68
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	75.69	22.6
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	53.78	21.92
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	36.56	17.21
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	29.98	6.58
Silt and Clay (Measurements in the Clay fraction are noted)				***29.98***
Hydrometer Test		0.0496	26.36	3.62
Hydrometer Test		0.0353	20.47	5.89
Hydrometer Test		0.0252	16.51	3.96
Hydrometer Test		0.0180	14.53	1.98
Hydrometer Test		0.0133	10.61	3.91
Hydrometer Test		0.0094	10.66	0
Hydrometer Test		0.0067	6.7	3.91
Hydrometer Test		0.0055	6.75	0
Hydrometer Test	Clay	0.0047	5.81	0.89
Hydrometer Test	Clay	0.0034	4.92	0.89
Hydrometer Test	Clay	0.0028	2.94	1.98
Hydrometer Test	Clay	0.0014	1.6	1.34

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	70.0
Coarse sand	0.0
Medium sand	24.3
Fine sand	45.7
Silt	23.3
Clay	6.7

Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-07-09 (A9E0766-05)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

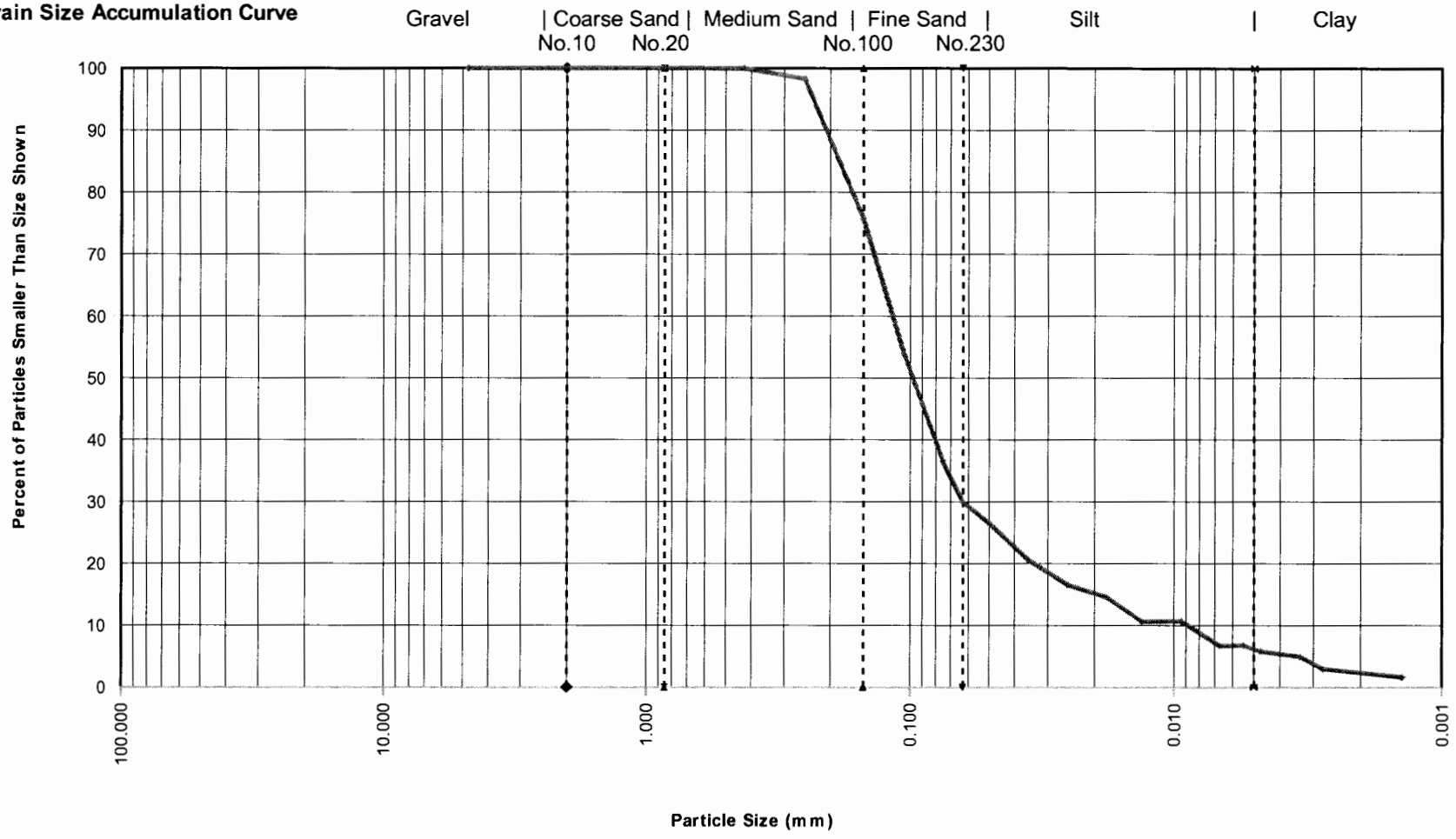
The assumed specific gravity used in the calculations was 2.65.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-07-09 (A9E0766-05)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Hydrometer S/N (drop down):	m	b
229773	-0.2529	9.85

Sample ID: A9E0766-05

Whole Sample

									Total
Tare Values	6.109	5.709							11.818
Air Dry + Tare	278.764	231.027							509.791

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan

									Total
Tare Values	6.114	5.717							11.831
Dry + Tare	257.401	252.361							509.762

Ensure that Total % Retained is ~ 100%. 99.88

APEX
Grain Size Analysis

Analyst	Mary Armstrong-Byers
Batch number	9060757
Sample ID	A9E0766-05C
Start Date/ Time	12:12pm

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
6.109			
MAB 6/7/19 ~~12.142~~	278.764		
5.709	231.027		
MAB ~~6.109~~			

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
6.114	257.401		
5.717	252.361		

Date/Time/Temp

AMEO01V	06/07/19
IN	1955
	106.4
OUT	06/11/19
	1110
	109.0

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
766.05C	1.282	15.516	15.055

APEX
Grain Size Analysis

Notes

Sample ID: A9F0766-05C

Maximum Particle Size: Medium Sand.

Hardness and Shape: NA

Soil/Sediment Classification:

Silty Sand w/ some Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguecy		
Batch Number	9060757		
Sample ID	A9E0766-05C		
Start Date/Time	06-10-19	08:06	
Air Dry Sample for Hydrometer Test	~~50g~~ max 52.169g		
Hydrometer	229773	Dispersant	A19F068

Time/Date: 06-07-19 @ ~~16:35~~ MJ 06-07-19 16:35

08:06	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:07	1	18	20.4	
8:08	2	15	20.5	
8:10	4	13	20.5	
8:14	8	12	20.5	
8:21	15	10	20.6	
8:36	30	10	20.7	
9:06	60	8	20.7	
9:36	90	8	20.8	
10:06	120	7.5	20.9	
12:06	240	7	21.1	
14:06	360	6	21.1	
08:06	1440	5.5	20.4	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.294	1,294
+40	1.278	1.289
+60	1.294	2.144
+100	1.301	12.716
+140	1.298	12.361
+200	1.272	9.962
+230	1.302	4.625
-230 (pan)	1.302	5.167

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-06		Client Sample ID:	T4-PDI2019-SC18-190522-09-11		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.658	505.457	493.80	3.85	475.5

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.691	504.952	493.26	493.26	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9629		E76606	1.293	20.804	20.081	3.85

Hydrometer Analysis

Start Date/Time	6/10/2019	8:19	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.222		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	48.36		Corrected Dry Weight of Soil Tested (g) (W)	48.36

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	24	20.5	19.33	40.0	12.2	0.01348	0.047	39.98
2	20	20.6	15.36	31.8	12.9	0.01348	0.034	31.76
4	17.5	20.6	12.86	26.6	13.2	0.01348	0.024	26.59
8	15	20.7	10.38	21.5	13.7	0.01348	0.018	21.47
15	14	20.7	9.38	19.4	13.8	0.01348	0.013	19.40
30	12.5	20.8	7.91	16.4	14	0.01348	0.009	16.35
60	11	20.9	6.43	13.3	14.3	0.01348	0.007	13.30
90	10	20.9	5.43	11.2	14.5	0.01348	0.005	11.24
120	9	21	4.46	9.2	14.7	0.01348	0.005	9.22
240	8.5	21.1	3.98	8.2	14.7	0.01348	0.003	8.24
360	8	21	3.46	7.2	14.8	0.01348	0.003	7.15
1440	7	20.5	2.33	4.8	15	0.01348	0.001	4.82

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.304	0.00	0.02	0.0	100.0
40	0.425	1.300	1.316	0.02	0.18	0.0	100.0
60	0.250	1.297	1.467	0.17	1.85	0.4	99.6
100	0.150	1.295	5.849	4.55	46.57	9.4	90.2
140	0.105	1.300	10.072	8.77	132.73	18.1	72.1
200	0.075	1.304	10.512	9.21	223.17	19.0	53.0
230	0.063	1.300	5.099	3.80	260.48	7.9	45.2
Pan		1.302	26.532	24.80	285.28	67.8	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-09-11 (A9E0766-06)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				*54.84*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.96	0.03
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	99.61	0.35
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	90.19	9.42
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	72.06	18.14
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	53.02	19.04
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	45.16	7.86
Silt and Clay (Measurements in the Clay fraction are noted)				*45.16*
Hydrometer Test		0.0471	39.98	5.18
Hydrometer Test		0.0342	31.76	8.22
Hydrometer Test		0.0245	26.59	5.17
Hydrometer Test		0.0176	21.47	5.12
Hydrometer Test		0.0129	19.4	2.07
Hydrometer Test		0.0092	16.35	3.05
Hydrometer Test		0.0066	13.3	3.05
Hydrometer Test		0.0054	11.24	2.07
Hydrometer Test	Clay	0.0047	9.22	2.02
Hydrometer Test	Clay	0.0033	8.24	0.98
Hydrometer Test	Clay	0.0027	7.15	1.09
Hydrometer Test	Clay	0.0014	4.82	2.33

Grain Size Summary	Percent of Total Sample
Gravel	0.0
Sand	54.8
Coarse sand	0.0
Medium sand	9.8
Fine sand	45.0
Silt	33.9
Clay	11.2

Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-09-11 (A9E0766-06)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

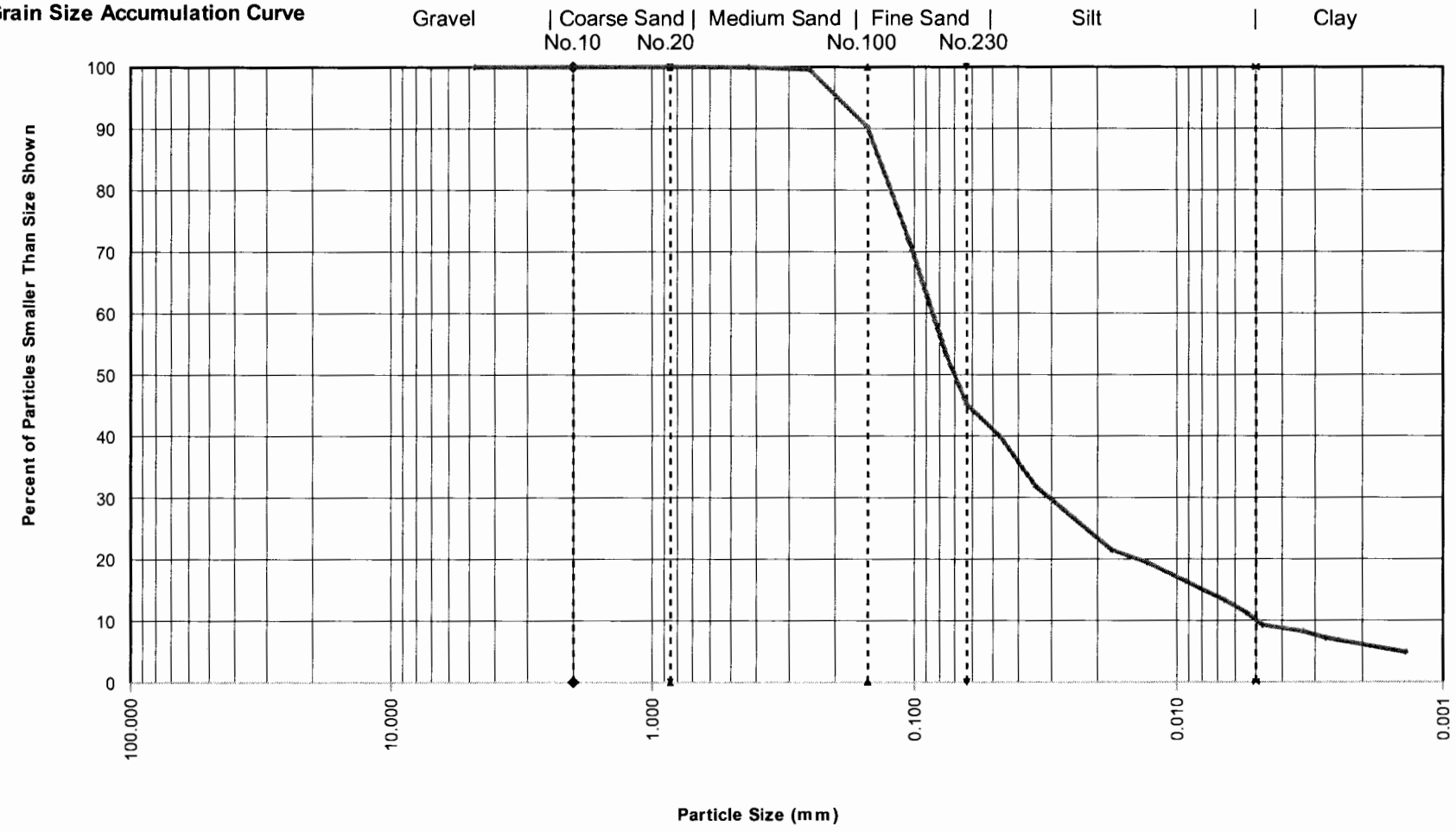
The assumed specific gravity used in the calculations was 2.65.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-09-11 (A9E0766-06)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Hydrometer S/N (drop down):	m	b
229773	-0.2529	9.85

Sample ID: A9E0766-06

Whole Sample

									Total
Tare Values	6.092	5.566							11.658
Air Dry + Tare	211.083	294.374							505.457

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10

									Total
Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan

									Total
Tare Values	6.132	5.559							11.691
Dry + Tare	253.615	251.337							504.952

Ensure that Total % Retained is ~ 100%. 99.74

APEX
Grain Size Analysis

Analyst	Sandra Langeway
Batch number	9060757
Sample ID	A9E0766-06B
Start Date/ Time	06-07-19 ~~15:55~~ 06-7-19 15:58

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
6.092	211.083		
5.566	294.374		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
6.132	253.615		
5.559	251.337		

Date/Time/Temp	
AMEO01V	06/07/19
IN	1955
	106.4
OUT	06/11/19
	1110
	109.0

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
E76606	1.293	20.804	20.081

APEX
Grain Size Analysis

Notes

Sample ID: AAE0766-06

Maximum Particle Size: Medium Sand

Hardness and Shape: N/A

Soil/Sediment Classification:

Silty Sand w/ Some Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguexy		
Batch Number	9060754		
Sample ID	APE0766-06B		
Start Date/Time	06-10-19	8:19	
Air Dry Sample for Hydrometer Test		50.222	
Hydrometer	229773	Dispersant	APF0685

Time/Date: 06-07-19 16:39

8:19	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
8:	0.5			
8:20	1	24.0	20.5	
8:21	2	20.0	20.6	
8:23	4	17.5	20.6	
8:27	8	15.0	20.7	
8:34	15	14.0	20.7	
8:49	30	12.5	20.8	
9:19	60	11.0	20.9	
9:49	90	10.0	20.9	
10:19	120	9.0	21.0	
12:19	240	8.5	21.1	
14:19	360	8	21.0	
08:19	1440	7	20.5	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.302	1.304
+40	1.300	1.316
+60	1.297	1.467
+100	1.295	5.849
+140	1.300	10.072
+200	1.304	10.512
+230	1.300	5.099
-230 (pan)	1.288	6.172

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-07		Client Sample ID:	T4-PDI2019-SC18-190522-11-13		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Silty SAND with some Clay			Max Particle Size:	Medium Sand		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.852	462.999	451.15	3.20	437.2

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	0.000	0.000	0.00	0.00	0.0	100.0
10	2.00	0.000	0.000	0.00	0.00	0.0	100.0
Pan		11.878	462.785	450.91	450.91	99.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9690		E76607	1.295	23.893	23.193	3.20

Hydrometer Analysis

Start Date/Time	6/10/2019	8:38	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	57.259		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	100.0		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	55.49		Corrected Dry Weight of Soil Tested (g) (W)	55.49

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	19	20.7	14.38	25.9	13	0.01348	0.049	25.92
2	17	20.7	12.38	22.3	13.3	0.01348	0.035	22.32
4	15.5	20.8	10.91	19.7	13.5	0.01348	0.025	19.66
8	15	20.7	10.38	18.7	13.7	0.01348	0.018	18.71
15	12	20.8	7.41	13.4	14.2	0.01348	0.013	13.35
30	11	20.8	6.41	11.6	14.3	0.01348	0.009	11.55
60	10	20.9	5.43	9.8	14.5	0.01348	0.007	9.79
90	9	21	4.46	8.0	14.7	0.01348	0.005	8.04
120	8.5	21	3.96	7.1	14.7	0.01348	0.005	7.14
240	8	21	3.46	6.2	14.8	0.01348	0.003	6.23
360	7	21.1	2.48	4.5	15	0.01348	0.003	4.48
1440	6	20.6	1.36	2.4	15.2	0.01348	0.001	2.45

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.298	1.300	0.00	0.02	0.0	100.0
40	0.425	1.298	1.308	0.01	0.09	0.0	100.0
60	0.250	1.292	2.023	0.73	5.85	1.3	98.7
100	0.150	1.294	15.338	14.04	116.45	25.3	73.3
140	0.105	1.297	13.148	11.85	209.77	21.4	52.0
200	0.075	1.292	9.536	8.24	274.69	14.9	37.1
230	0.063	1.306	4.334	3.03	298.54	5.5	31.7
			37.91		74.55		

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC18-190522-11-13 (A9E0766-07)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				***0***
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	100	0
Sand				***68.32***
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	100	0
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	99.98	0.02
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	98.66	1.32
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	73.35	25.31
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	51.99	21.36
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	37.13	14.86
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	31.68	5.46
Silt and Clay (Measurements in the Clay fraction are noted)				***31.68***
Hydrometer Test		0.0486	25.92	5.75
Hydrometer Test		0.0348	22.32	3.6
Hydrometer Test		0.0248	19.66	2.66
Hydrometer Test		0.0176	18.71	0.95
Hydrometer Test		0.0131	13.35	5.36
Hydrometer Test		0.0093	11.55	1.8
Hydrometer Test		0.0066	9.79	1.76
Hydrometer Test		0.0054	8.04	1.76
Hydrometer Test	Clay	0.0047	7.14	0.9
Hydrometer Test	Clay	0.0033	6.23	0.9
Hydrometer Test	Clay	0.0028	4.48	1.76
Hydrometer Test	Clay	0.0014	2.45	2.03

Grain Size Summary	**Percent of Total Sample**
Gravel	0.0
Sand	68.3
Coarse sand	0.0
Medium sand	26.6
Fine sand	41.7
Silt	23.6
Clay	8.0

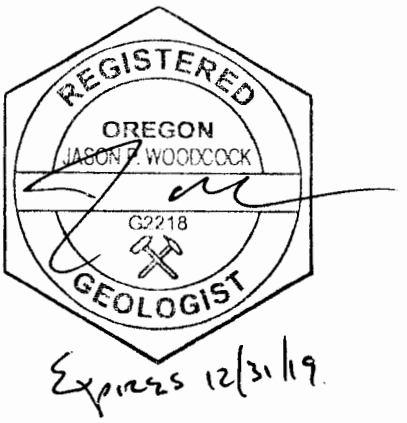
Case Narrative for Sample ID: **T4-PDI2019-SC18-190522-11-13 (A9E0766-07)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

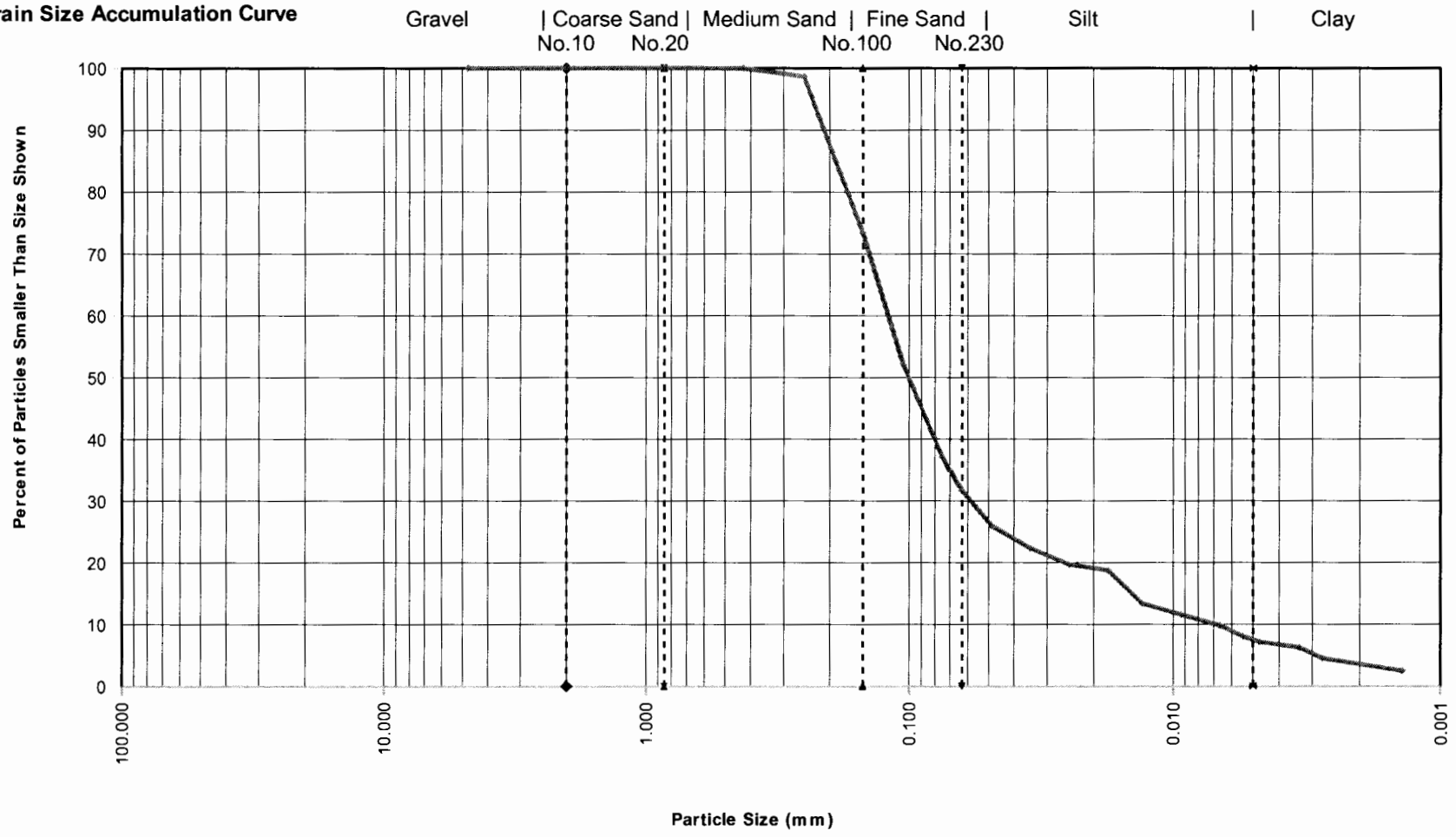
Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.



Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC18-190522-11-13 (A9E0766-07)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Medium Sand	N/A	N/A	Silty SAND with some Clay

Hydrometer S/N (drop down):	m	b
229773	-0.2529	9.85

Sample ID: A9E0766-07

Whole Sample Total

Tare Values	5.923	5.929							11.852
Air Dry + Tare	279.042	183.957							462.999

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50. Total

Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Sieve Number 10 Total

Tare Values	0.000								0.000
Dry + Tare	0.000								0.000

Pan Total

Tare Values	5.934	5.944							11.878
Dry + Tare	304.997	157.788							462.785

Ensure that Total % Retained is ~ 100%. 99.84

APEX
Grain Size Analysis

Analyst	James S. Johnson
Batch number	9060757
Sample ID	APE0766-07
Start Date/ Time	06/07/19 1915

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.923	279.042		
5.929	183.957		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
	N/A	JG 06/07/19

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
	N/A	JG 06/07/19

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.934	304.997		
5.944	157.788		

Date/Time/Temp

AMEDDV IN	06/07/19 1955 106.4
OUT	06/11/19 1110 109.6

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
E76607	~~5.944~~ 1.295	~~23.893~~	23.193

APEX
Grain Size Analysis

Notes

Sample ID: A9E0766-07

Maximum Particle Size: Medium Sand

Hardness and Shape: N/A

Soil/Sediment Classification:

Silty Sand w/ some Clay

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguesa		
Batch Number	9060754		
Sample ID	A9E0766-07		
Start Date/Time	06-10-19 8:38		
Air Dry Sample for Hydrometer Test			57.259
Hydrometer	229773	Dispersant	A19F068

Time/Date: 06/07/19 @ 1952

8:38	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:39	1	19.0	20.7	
8:40	2	17.0	20.7	
8:42	4	15.5	20.8	
8:46	8	15	20.7	
8:53	15	12	20.8	
9:08	30	11	20.8	
9:38	60	10	20.9	
10:08	90	9	21.0	
10:38	120	8.5	21.0	
12:38	240	8	21.0	
14:38	360	7	21.1	
8:38	1440	6	20.6	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.298	1.300
+40	1.298	1.308
+60	1.292	2.023
+100	1.294	15.338
+140	1.297	13.148
+200	1.292	9.536
+230	1.306	4.334
-230 (pan)	1.286	5.110

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9E0766-16		Client Sample ID:	T4-PDI2019-SC67-190522-01-03		Batch Number:	9060757
Data Entered by:	JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	SAND with trace Silt			Max Particle Size:	Gravel		
Particle Shape:	Sub-angular to Rounded			Hardness	Hard and Durable		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.254	407.424	396.17	1.65	389.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.298	10.430	9.13	9.13	2.3	97.7
10	2.00	1.303	4.473	3.17	12.30	0.8	96.8
Pan		11.266	394.818	383.55	395.85	96.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9837		E76616	1.288	24.656	24.276	1.65

Hydrometer Analysis

Start Date/Time	6/10/2019	8:54	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	109.167		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	96.8		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	107.39		Corrected Dry Weight of Soil Tested (g) (W)	110.89

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8	20.7	3.38	3.1	14.8	0.01348	0.052	2.95
2	8	20.7	3.38	3.1	14.8	0.01348	0.037	2.95
4	7.5	20.7	2.88	2.6	14.8	0.01348	0.026	2.52
8	7	20.7	2.38	2.1	15	0.01348	0.018	2.08
15	7	20.7	2.38	2.1	15	0.01348	0.013	2.08
30	7	20.8	2.41	2.2	15	0.01348	0.010	2.10
60	5	20.9	0.43	0.4	15.3	0.01348	0.007	0.38
90	5	20.9	0.43	0.4	15.3	0.01348	0.006	0.38
120	4.5	21		0.0	15.3	0.01348	0.005	0.00
240	5	21	0.46	0.4	15.3	0.01348	0.003	0.40
360	5	21.1	0.48	0.4	15.3	0.01348	0.003	0.42
1440	4	20.7		0.0	15.5	0.01348	0.001	0.00

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.293	3.774	2.48	21.02	2.2	94.6
40	0.425	1.311	29.757	28.45	120.96	25.7	69.0
60	0.250	1.308	57.787	56.48	319.40	50.9	18.0
100	0.150	1.300	17.054	15.75	374.75	14.2	3.8
140	0.105	1.297	2.855	1.56	380.22	1.4	2.4
200	0.075	1.295	1.801	0.51	382.00	0.5	2.0
230	0.063	1.280	1.459	0.18	382.63	0.2	1.8

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: T4-PDI2019-SC67-190522-01-03 (A9E0766-16)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*3.16*
Retained on No. 4 sieve		4.75	97.66	2.34
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	96.84	0.81
Sand				*95.05*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	94.61	2.24
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	68.95	25.65
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	18.02	50.93
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	3.82	14.21
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	2.41	1.4
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	1.95	0.46
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	1.79	0.16
Silt and Clay (Measurements in the Clay fraction are noted)				*1.84*
Hydrometer Test		0.0519	2.95	0
Hydrometer Test		0.0367	2.95	0
Hydrometer Test		0.0259	2.52	0
Hydrometer Test		0.0185	2.08	0
Hydrometer Test		0.0135	2.08	0
Hydrometer Test		0.0095	2.1	0
Hydrometer Test		0.0068	0.38	1.41
Hydrometer Test		0.0056	0.38	0
Hydrometer Test	Clay	0.0048	0.38	0
Hydrometer Test	Clay	0.0034	0.4	0
Hydrometer Test	Clay	0.0028	0.42	0
Hydrometer Test	Clay	0.0014	0.42	0

Grain Size Summary	Percent of Total Sample
Gravel	3.2
Sand	95.1
Coarse sand	2.2
Medium sand	90.8
Fine sand	2.0
Silt	1.4
Clay	0.4

Case Narrative for Sample ID: **T4-PDI2019-SC67-190522-01-03 (A9E0766-16)**

This data is not to be used for engineering purposes.

No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.

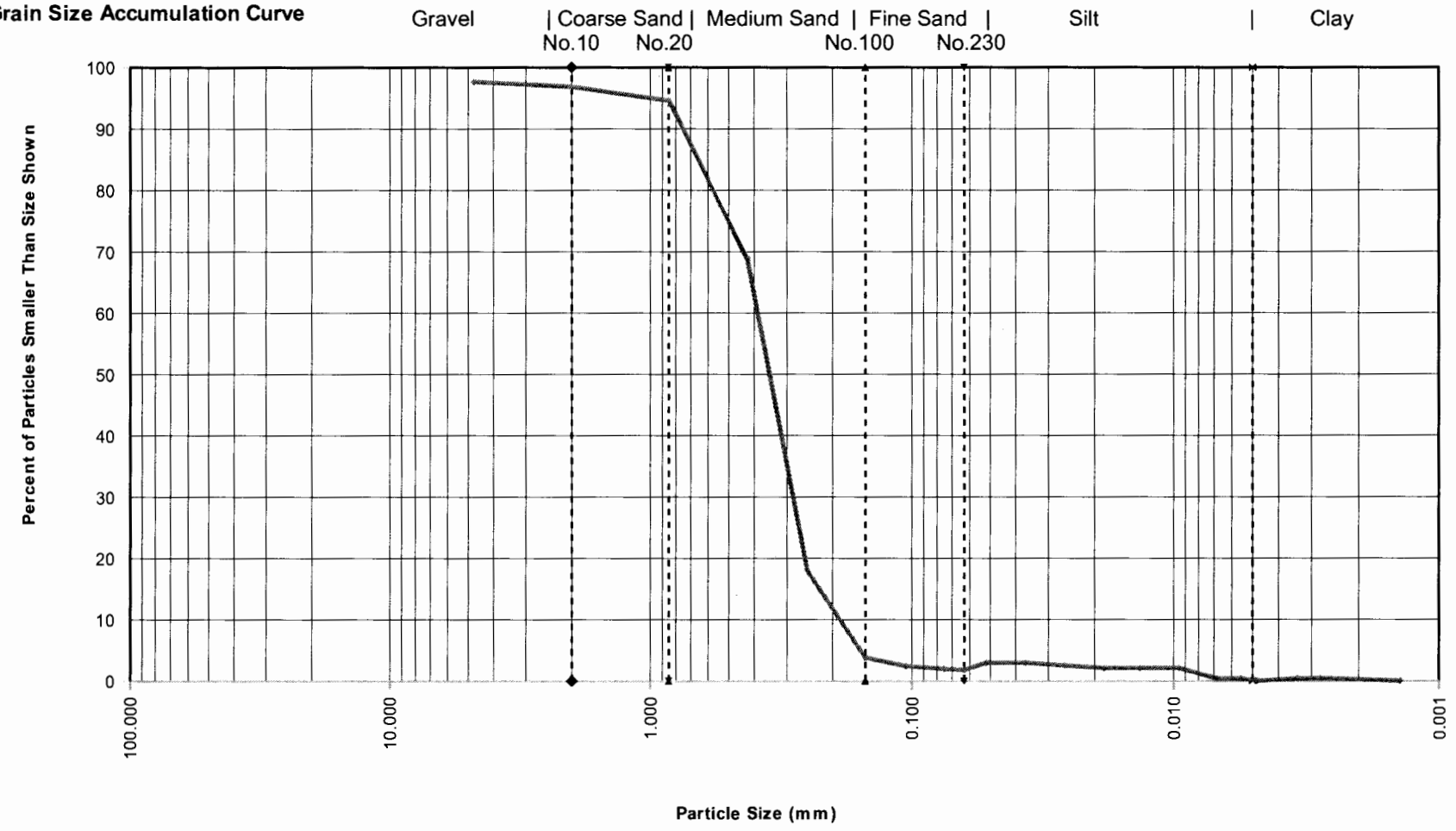
Organic and possible anthropogenic material present in +4 and +10 fractions.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SC67-190522-01-03 (A9E0766-16)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Sub-angular to Rounded	Hard and Durable	SAND with trace Silt

Hydrometer S/N (drop down):	m	b
229773	-0.2529	9.85

Sample ID: A9E0766-16

Whole Sample

									Total
Tare Values	5.625	5.629							11.254
Air Dry + Tare	247.692	159.732							407.424

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	1.298								1.298
Dry + Tare	10.430								10.430

Sieve Number 10

									Total
Tare Values	1.303								1.303
Dry + Tare	4.473								4.473

Pan

									Total
Tare Values	5.630	5.636							11.266
Dry + Tare	272.641	122.177							394.818

Ensure that Total % Retained is ~ 100%. 99.95

APEX
Grain Size Analysis

Analyst	James S. Johnson
Batch number	9060757
Sample ID	A9E0766-16
Start Date/ Time	06/07/19 1905

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.625	247.692		
5.629	159.732		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
1.298	~~5.630~~ 10.624	~~06/07/19~~ 10.430

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
1.303	4.534	4.473

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.630	272.641		
5.636	122.177		

Date/Time/Temp

AMEbalV IN	06/07/19 1955 106.4
OUT	06/11/19 1110 109.0 °C

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
E76616	1.288	24.656	24.276

APEX
Grain Size Analysis

Notes

Sample ID: AGE0766-16

+4 & +10 fractions contain some organics & possible anthropogenics

Maximum Particle Size: Gravel

Hardness and Shape: Hard & Durable; Sub-angular to Rounded.

Soil/Sediment Classification:

SAND w/ trace SILT

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Tanzway		
Batch Number	9060757		
Sample ID	A9E0766-16		
Start Date/Time	06-10-19	8:54	
Air Dry Sample for Hydrometer Test		109.167	
Hydrometer	229773 Dispersant	A19F068	Time/Date: 06/07/19 @ 1952

8:54	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:55	1	8.0	20.7	
8:56	2	8.0	20.7	
8:58	4	7.5	20.7	
9:02	8	7.0	20.7	
9:09	15	7.0	20.7	
9:24	30	7.0	20.8	
9:54	60	5.0	20.9	
10:24	90	5.0	20.9	
10:54	120	4.5	21.0	
12:54	240	5	21	
14:54	360	5	21.1	
08:54	1440	4	20.7	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.293	3.774
+40	1.311	29.757
+60	1.308	57.787
+100	1.300	17.054
+140	1.297	2.855
+200	1.295	1.801
+230	1.280	1.459
-230 (pan)	1.285	1.470

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0028-01		Client Sample ID:	DMMU1-DP		Batch Number:	9060757
Data Entered by:	SJL/JSJ	Date:	06/12/19	Data Reviewed by:	JW	Date:	06/13/19
Sample Description:	Clayey Silty SAND			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.374	262.132	250.76	4.03	241.0

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.302	2.182	0.88	0.88	0.4	99.6
10	2.00	1.303	2.055	0.75	1.63	0.3	99.3
Pan		12.680	261.442	248.76	250.39	99.0	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9612		28-1	1.303	15.078	14.544	4.03

Hydrometer Analysis

Start Date/Time	6/10/2019 8:01	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.613	G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	99.3	Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	48.65	Corrected Dry Weight of Soil Tested (g) (W)	48.98

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	32	20.7	26.01	53.1	10.9	0.01348	0.045	52.75
2	28	20.8	22.05	45.0	11.5	0.01348	0.032	44.71
4	24	20.8	18.05	36.8	12.2	0.01348	0.024	36.60
8	21	20.7	15.01	30.7	12.7	0.01348	0.017	30.44
15	19	20.8	13.05	26.6	13	0.01348	0.013	26.46
30	17	20.7	11.01	22.5	13.3	0.01348	0.009	22.33
60	14	20.9	8.08	16.5	13.8	0.01348	0.006	16.39
90	13	20.9	7.08	14.5	14	0.01348	0.005	14.36
120	12.5	20.9	6.58	13.4	14	0.01348	0.005	13.34
240	11	21	5.11	10.4	14.3	0.01348	0.003	10.37
360	10	21	4.11	8.4	14.5	0.01348	0.003	8.34
1440	8.5	20.5	2.45	5.0	14.7	0.01348	0.001	4.96

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Retained	% Retained	% Passing
20	0.850	1.302	1.422	0.12	2.22	0.2	99.1
40	0.425	1.298	2.099	0.80	6.16	1.6	97.4
60	0.250	1.302	3.720	2.42	18.04	4.9	92.5
100	0.150	1.304	7.666	6.36	49.31	13.0	79.5
140	0.105	1.301	5.600	4.30	70.44	8.8	70.7
200	0.075	1.301	6.015	4.71	93.61	9.6	61.1
230	0.063	1.295	3.796	2.50	105.90	5.1	56.0
Sum			21.22		230 Minus	27.44	

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Sample ID: DMMU1-DP (A9F0028-01)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0.68*
Retained on No. 4 sieve		4.75	99.63	0.37
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	99.32	0.31
Sand				*43.31*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.08	0.24
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	97.44	1.64
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	92.51	4.94
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	79.52	12.99
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	70.74	8.78
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	61.12	9.62
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	56.01	5.11
Silt and Clay (Measurements in the Clay fraction are noted)				*56.01*
Hydrometer Test		0.0445	52.75	3.26
Hydrometer Test		0.0323	44.71	8.04
Hydrometer Test		0.0235	36.6	8.11
Hydrometer Test		0.0170	30.44	6.15
Hydrometer Test		0.0125	26.46	3.99
Hydrometer Test		0.0090	22.33	4.12
Hydrometer Test		0.0065	16.39	5.95
Hydrometer Test		0.0053	14.36	2.03
Hydrometer Test	Clay	0.0046	13.34	1.01
Hydrometer Test	Clay	0.0033	10.37	2.97
Hydrometer Test	Clay	0.0027	8.34	2.03
Hydrometer Test	Clay	0.0014	4.96	3.38

Grain Size Summary	Percent of Total Sample
Gravel	0.7
Sand	43.3
Coarse sand	0.2
Medium sand	19.6
Fine sand	23.5
Silt	41.7
Clay	14.4

Case Narrative for Sample ID: DMMU1-DP (A9F0028-01)

This data is not to be used for engineering purposes.

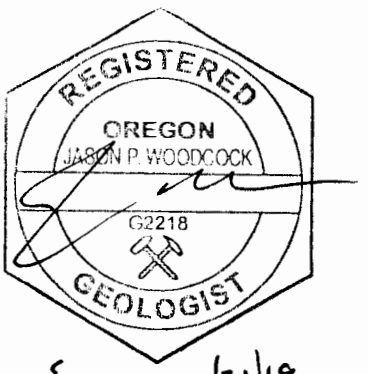
No difficulty dispersing the fraction passing the No. 10 sieve.

Dispersion device used: Commercial drink mixer operating at least 10,000 rpm for one minute.

The assumed specific gravity used in the calculations was 2.65.

Organic material present in +4 fraction.

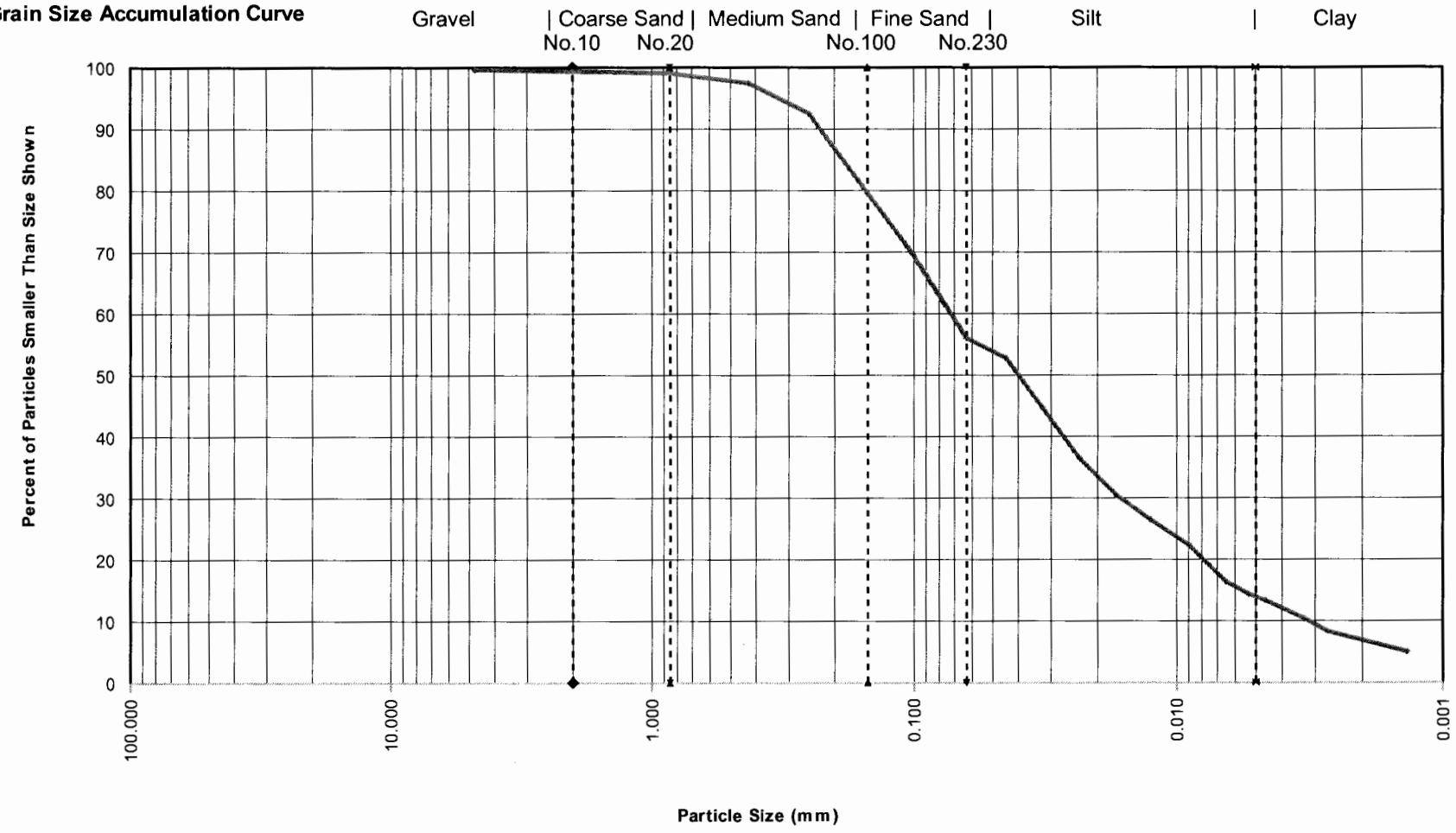
+10 and +20 fractions contain abundant organic material.



Expires 12/31/19

Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	DMMU1-DP (A9F0028-01)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	Clayey Silty SAND

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9F0028-01

Whole Sample

									Total
Tare Values	5.641	5.733							11.374
Air Dry + Tare	113.204	148.928							262.132

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	1.302								1.302
Dry + Tare	2.182								2.182

Sieve Number 10

									Total
Tare Values	1.303								1.303
Dry + Tare	2.055								2.055

Pan

									Total
Tare Values	5.650	5.739	1.291						12.680
Dry + Tare	124.732	134.122	2.588						261.442

Ensure that Total % Retained is ~ 100%. 99.72

APEX
Grain Size Analysis

Analyst	KAREN WILSON
Batch number	9060757
Sample ID	A9F0028-01F
Start Date/ Time	6-7-19 09:35 K

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.641	113.204		
5.733	148.928		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
1.302	2.224	2.182

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
1.303	3.484	2.055

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.650	124.732		
5.739	134.122		
1.291	2.588		

Date/Time/Temp

AMEC01 V IN	06/07/19 1955 106.4
OUT	06/11/19 1110 109.0

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
28-1	1.303	15.078	14.544

APEX
Grain Size Analysis

Sample ID: A9F0028-01F

Notes

+20 fraction contains abundant organics

@6/12/19

- +4 contains abundant organics
- +10 almost entirely all organics

Maximum Particle Size: Gravel

Hardness and Shape: N/A (low sample #)

Soil/Sediment Classification:

Clayey Silty Sand

6/13/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguay		
Batch Number	9060757		
Sample ID	A9F0028-01F		
Start Date/Time	06-10-19	08:01	
Air Dry Sample for Hydrometer Test		50.413	
Hydrometer	870249	Dispersant	A19F068

Time/Date: 06-07-19 @ 12:07

08:01	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:02	1	32	20.7	
8:03	2	28	20.8	
8:05	4	24	20.8	
8:09	8	21	20.7	
8:16	15	19	20.8	
8:31	30	17	20.7	
9:01	60	14	20.9	
9:31	90	13	20.9	
10:01	120	12.5	20.9	
12:01	240	11	21	
14:01	360	10	21.0	
08.01	1440	8.5	20.5	

Note:

1 cm foam = 5 hydrometer units.

Adjust Hydrometer Reading entered into Excel spreadsheet by adding 5 hydrometer units per cm of foam.

Sieve Analysis of Portion Finer Than No. 10 Sieve

Sieve No.	Tare	Oven Dry + Tare
+20	1.302	1.422
+40	1.298	2.099
+60	1.302	3.720
+100	1.304	7.666
+140	1.301	5.600
+200	1.301	6.015
+230	1.295	3.796
-230 (pan)	1.288	5.613

APEX LABORATORIES, LLC
12232 SW Garden Place Tigard OR 97223
phone 503-718-2323
fax 503-718-0333

Balance Checksheets

Extractions May 2019
Extractions June 2019
Wet Chem May 2019
Grain Size June 2019

ance Challenge Log

ractions
D FX-2000
5210177

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
10077	0.5g	0.48	0.52
~~10077 and 02 J60965 11~~	~~100g~~	~~98.00~~	~~102.00~~
1000143395	300g	294.00	306.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

JCS 7/22/18

nth: May
ar: 2019

Alternate Weight/ID used: 0.1g | 10660

Date Range: 5/1 → 5/31/19 JCS 5/31/19

JCS 4/30/19

Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1 07:55 5/1/19	JAG	0.10g (0.08 → 0.12g) acceptable JCS 4/30/19	.10		299.99
2 7:45	RR		0.10		299.98
3 8:30	JAG		.11		300.00
4					
5					
6 7:35	JAG		.10		299.98
7 1225	JC		0.10		299.97
8 8:00	RR		0.10		299.99
9 ~~8:35~~	~~JAG~~		.10		299.98
10 7:55	JAG		.10		299.97
11					
12					
13 1220	JC			300.00g JCS 7/22/18	
14 6:35	RR		0.11		299.99
15 7:25	JAG		0.10		299.98
16 10:20	Client	0.50g	.11		299.98
			0.10	~~100.00g~~	299.99
17					
18					
19					
20 11:48	JC		0.10		299.98
21 1155	JC		0.09		299.98
22 1215	JC		0.11		299.98
23 10:45	JAG		.10		299.97
24 6:50	JAG		.09		299.97
25					
26					
27					
28 12:00	JAG		.10		299.98
29 07:05	JAG		.10		299.97
30 12:05	JAG		.10		299.97
31 13:35	JRA		0.10		299.99

Balance Challenge Log

Extractions
AND FX-2000
ID# 5210177

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
10077	0.5g	0.48	0.52
1000143395	300g	294.00	306.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Alternate Weight/ID used:

Date Range:

Month: June
Year: 2019

Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1		0.50g	~~0.50~~	300.00g	
2					
3 10:30	CmH		0.50		299.99
4 7:05	JAG		.50		299.99
5 7:30	SL		0.49		300.00
6 8:50	JAG		.49		299.97
7 7:02	JAG		.50		299.97
8					
9					
10 1:30	TJJ		.50		299.95
11 6806	TJJ		0.51		300.01
12 0842	TJJ		0.49		299.97
13 10:15	CmH		0.50		299.97
14 1303	CCS		0.50		299.98
15					
16					
17 7:15	JAG		.50		299.98
18 7:00	JAG		.50		299.95
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Balance Challenge Log

Wet Chem Balance 1
Ohaus Adventurer Pro
ID# 8C30461093

Weight ID	weight (g)	acceptance range (g)	
	<0.5000g	± 0.5mg	
	>/=0.5000g	± 0.1%	
1000015949	0.005g	0.0045	0.0055
66067	0.100g	0.0995	0.1005
66067	100g	99.9000	100.1000

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Month: May
Year: 2019

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1 0643	JKP		99.9992		0.0999		0.0049
2 1023	MRF		99.9993		0.1000		0.0051
3 0645	JKP		99.9988		0.0998		0.0051
4							
5					~~0.1001~~ MRF 5/6		0.0051
6 0930	[illegible]		99.9994		0.1001		~~0.0050~~ JKP 5-7-19
7 0843	JKP		99.9995		0.1002		0.0050
8 1013	MRF		99.9995		0.1000		0.0050
9 0730	MRF		100.0005		0.0999		0.0051
10 1048	SAS		100.0003		0.1003		0.0050
11 12:00	[illegible]		100.0003		0.0999		0.0049
12							
13 10:12	MRF		100.0005		0.1001		0.0050
14 07:58	MRF		100.0004		0.1002		0.0051
15 10:35	MRF		100.0003		0.1000		0.0050
16		100.0000g	100.0013	0.1000g	0.1000	.0050g	0.0051
17							
18							
19							
20 7:30	JAG		100.0017		.1001		.0049
21 0700	JKP		100.0020		0.1001		0.0049
22 0725	MRF		100.0019		0.1001		0.0049
23 0813	MRF		100.0023		0.1000		0.0050
24 0657	JKP		100.0021		0.1000		0.0051
25							
26							
27							
28 0815	MRF		100.0026		0.1002		0.0051
29 1023	MRF		100.0024		0.1000		0.0050
30 10:21	MRF		100.0027		0.1001		0.0050
31 13:42	JD		100.0025		0.1001		0.0051

Balance Challenge Log

Grain Size
Mettler B303
ID# 1115401761

Weight ID	weight (g) =/<1g >1g	acceptance range (g) ± 0.02g ± 2%	
03-J68208-34	1g	0.980	1.020
10077	10g	9.800	10.200
03-J68630-11	200g	196.000	204.000

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Alternate Weight/ID used:
03-J68514-10 10g
SN 7172 30g JCS 6/4/19

Date Range:
06/02/19 - 6/3/19
6/4/19 - July JCS 6/28/19

Month: June
Year: 2019

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1							
2 ~~1045~~	~~KW~~	6/3/19	~~199.992~~		~~10.000~~		~~1.000~~
3 1045	KW		199.992		10.000		1.000
4 1250	KW		199.992	30.000g	29.998		1.000
5 1030	KW		199.992	(29.400g	29.998		1.000
6 KW 8:30			199.991	-30.600g	29.999		1.000
7 08:45	KW		199.991	acceptable	30.000		1.000
8				JCS			
9				6/4/19			
10 11:15	KW		199.992		30.000		1.000
11 08:55	KW		199.991		30.000		1.000
12 08:15	KW		199.991		29.999		1.000
13							
14 08:45	KW		199.991		29.999		1.000
15							
16		200.000g		(10.000g)		1.000g	
17 08:40	KW		199.993		29.998		0.999
18 08:55	KW		199.990		30.000		1.000
19 1050	KW		199.992		29.999		1.000
20 13:13	KW		199.991		29.998		0.999
21 09:10	KW		199.993		30.000		1.000
22							
23							
24							
25 1100	KW		199.992		29.999		1.000
26 10:35	KW		199.993		29.999		1.000
27 10:46	KW		199.994		29.999		1.000
28 10:38	KW		199.993		29.999		1.000
29							
30							
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