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 #:

A9F0035

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.

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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: A9F0035

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
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Analytical Report

Apex Laboratories, LLC

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

Monday, June 24, 2019

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

RE: A9F0035 - 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 A9F0035, which was received by the laboratory on 6/3/2019 at 10:17:00AM.

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	2.6 degC	Cooler #2	1.4 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

Anchor QEA, LLC	Project: **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**	**A9F0035 - 06 24 19 1709**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RB-201905301712	A9F0035-01	Water	05/30/19 17:12	06/03/19 10:17
T4-PDI2019-SG21-190531	A9F0035-14	Sediment	05/31/19 12:56	06/03/19 10:17
T4-PDI2019-SG26-190530	A9F0035-15	Sediment	05/30/19 11:16	06/03/19 10:17
T4-PDI2019-SG38-190531	A9F0035-16	Sediment	05/31/19 10:27	06/03/19 10:17
T4-PDI2019-SG38-190531-Dup	A9F0035-17	Sediment	05/31/19 10:27	06/03/19 10:17

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
RB-201905301712 (A9F0035-01)				**Matrix: Water**		**Batch: 9060576**		
Acenaphthene	ND	0.396	0.396	ug/L	1	06/05/19 13:58	EPA 8270D	R-02
Acenaphthylene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Anthracene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Benz(a)anthracene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Benzo(a)pyrene	ND	0.0149	0.0297	ug/L	1	06/05/19 13:58	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0149	0.0297	ug/L	1	06/05/19 13:58	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0149	0.0297	ug/L	1	06/05/19 13:58	EPA 8270D	
Benzo(g,h,i)perylene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Chrysene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Fluoranthene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Fluorene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
1-Methylnaphthalene	ND	0.0198	0.0396	ug/L	1	06/05/19 13:58	EPA 8270D	
2-Methylnaphthalene	ND	0.0198	0.0396	ug/L	1	06/05/19 13:58	EPA 8270D	
Naphthalene	ND	0.0198	0.0396	ug/L	1	06/05/19 13:58	EPA 8270D	
Phenanthrene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Pyrene	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Carbazole	ND	0.0149	0.0297	ug/L	1	06/05/19 13:58	EPA 8270D	
Dibenzofuran	ND	0.00990	0.0198	ug/L	1	06/05/19 13:58	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*69 %*	*Limits: 44-120 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*47 %*	*44-120 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
Phenol-d6 (Surr)			*24 %*	*10-120 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*69 %*	*50-133 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
2-Fluorophenol (Surr)			*28 %*	*19-120 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*64 %*	*43-140 %*	*1*	*06/05/19 13:58*	*EPA 8270D*	
T4-PDI2019-SG21-190531 (A9F0035-14)				**Matrix: Sediment**		**Batch: 9060718**		
Acenaphthene	**255**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Acenaphthylene	ND	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Anthracene	**252**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Benz(a)anthracene	**1810**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Benzo(a)pyrene	**2600**	121	243	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Benzo(b)fluoranthene	**3270**	121	243	ug/kg dry	40	06/10/19 16:04	EPA 8270D	**M-05**

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Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

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**	**A9F0035 - 06 24 19 1709**

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-SG21-190531 (A9F0035-14)				**Matrix: Sediment**		**Batch: 9060718**		
Benzo(k)fluoranthene	**1270**	121	243	ug/kg dry	40	06/10/19 16:04	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**1720**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Chrysene	**2100**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Dibenz(a,h)anthracene	**355**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Fluoranthene	**3570**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Fluorene	**144**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	**J**
Indeno(1,2,3-cd)pyrene	**1770**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
2-Methylnaphthalene	ND	162	323	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Naphthalene	ND	162	323	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Phenanthrene	**1430**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Pyrene	**3480**	80.6	162	ug/kg dry	40	06/10/19 16:04	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*41 %*	*Limits: 37-122 %*	*40*	*06/10/19 16:04*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)			*48 %*	*44-115 %*	*40*	*06/10/19 16:04*	*EPA 8270D*	*S-05*
p-Terphenyl-d14 (Surr)			*65 %*	*54-127 %*	*40*	*06/10/19 16:04*	*EPA 8270D*	*S-05*
T4-PDI2019-SG26-190530 (A9F0035-15)				**Matrix: Sediment**		**Batch: 9060718**		
Acenaphthene	**132000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Acenaphthylene	ND	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Anthracene	**104000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Benz(a)anthracene	**630000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Benzo(a)pyrene	**964000**	31600	63100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Benzo(b)fluoranthene	**1130000**	31600	63100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	**M-05**
Benzo(k)fluoranthene	**487000**	31600	63100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**613000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Chrysene	**736000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Dibenz(a,h)anthracene	**124000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Fluoranthene	**995000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Fluorene	**54100**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**681000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
2-Methylnaphthalene	ND	42100	84100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Naphthalene	ND	42100	84100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Phenanthrene	**518000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	EPA 8270D	
Pyrene	**977000**	21000	42100	ug/kg dry	10000	06/10/19 12:59	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**	**A9F0035 - 06 24 19 1709**

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-SG26-190530 (A9F0035-15)				**Matrix: Sediment**		**Batch: 9060718**		
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 368 %*		*Limits: 37-122 %*	*10000*	*06/10/19 12:59*	*EPA 8270D*	*S-05*
2-Fluorobiphenyl (Surr)		*%*		*44-115 %*	*10000*	*06/10/19 12:59*	*EPA 8270D*	*S-06*
p-Terphenyl-d14 (Surr)		*%*		*54-127 %*	*10000*	*06/10/19 12:59*	*EPA 8270D*	*S-06*
T4-PDI2019-SG38-190531 (A9F0035-16RE5)				**Matrix: Sediment**		**Batch: 9060718**		
Acenaphthene	**24.9**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Acenaphthylene	ND	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Anthracene	**3.21**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	**J**
Benz(a)anthracene	**14.3**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Benzo(a)pyrene	**19.9**	2.71	5.41	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Benzo(b)fluoranthene	**30.7**	2.71	5.41	ug/kg dry	1	06/10/19 16:33	EPA 8270D	**M-05**
Benzo(k)fluoranthene	**9.76**	2.71	5.41	ug/kg dry	1	06/10/19 16:33	EPA 8270D	**M-05**
Benzo(g,h,i)perylene	**15.6**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Chrysene	**16.0**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Dibenz(a,h)anthracene	**3.30**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	**J**
Fluoranthene	**19.7**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Fluorene	ND	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Indeno(1,2,3-cd)pyrene	**14.6**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
2-Methylnaphthalene	ND	3.61	7.21	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Naphthalene	ND	3.61	7.21	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Phenanthrene	**7.99**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Pyrene	**19.9**	1.80	3.61	ug/kg dry	1	06/10/19 16:33	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 66 %*		*Limits: 37-122 %*	*1*	*06/10/19 16:33*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)		*65 %*		*44-115 %*	*1*	*06/10/19 16:33*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)		*90 %*		*54-127 %*	*1*	*06/10/19 16:33*	*EPA 8270D*	

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

ANALYTICAL SAMPLE RESULTS

Demand Parameters

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SG21-190531 (A9F0035-14)				**Matrix: Sediment**				
Batch: 9060687								
Total Organic Carbon	**0.68**	0.020	0.020	% by Weight	1	06/11/19 17:00	EPA 9060Amod	
T4-PDI2019-SG26-190530 (A9F0035-15)				**Matrix: Sediment**				
Batch: 9060687								
Total Organic Carbon	**4.6**	0.020	0.020	% by Weight	1	06/11/19 17:00	EPA 9060Amod	
T4-PDI2019-SG38-190531 (A9F0035-16)				**Matrix: Sediment**				
Batch: 9060687								
Total Organic Carbon	**0.038**	0.020	0.020	% by Weight	1	06/11/19 17:00	EPA 9060Amod	

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ANALYTICAL SAMPLE RESULTS

Solid and Moisture Determinations

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
T4-PDI2019-SG21-190531 (A9F0035-14)				**Matrix: Sediment**				
Batch: 9060683								
Total Solids	**63.4**	1.00	1.00	% by Weight	1	06/07/19 12:23	PSEP 1986	
T4-PDI2019-SG26-190530 (A9F0035-15)				**Matrix: Sediment**				
Batch: 9060683								
Total Solids	**62.0**	1.00	1.00	% by Weight	1	06/07/19 12:23	PSEP 1986	
T4-PDI2019-SG38-190531 (A9F0035-16)				**Matrix: Sediment**				
Batch: 9060683								
Total Solids	**73.0**	1.00	1.00	% by Weight	1	06/07/19 12:23	PSEP 1986	

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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-SG21-190531 (A9F0035-14)				**Matrix: Sediment**		**Batch: 9060930**		
Gravel (>2.00mm)	**1.07**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 4.75 mm sieve (#4)	**0.25**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 2.00 mm sieve (#10)	**0.82**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**77.5**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**0.35**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**12.2**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**39.1**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**15.0**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**4.12**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**4.42**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**2.22**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**17.1**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Clay (< 0.005 mm)	**4.30**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
T4-PDI2019-SG26-190530 (A9F0035-15)				**Matrix: Sediment**		**Batch: 9060930**		
Gravel (>2.00mm)	**14.2**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 4.75 mm sieve (#4)	**8.24**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 2.00 mm sieve (#10)	**5.91**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**65.3**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**7.48**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**7.92**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**22.5**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**13.8**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**5.92**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**5.66**	0.01	0.01	% of Total	1	06/21/19 13:40	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**	**A9F0035 - 06 24 19 1709**

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-SG26-190530 (A9F0035-15)				**Matrix: Sediment**		**Batch: 9060930**		
Percent Retained 0.063 mm sieve (#230)	**1.96**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**16.3**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Clay (< 0.005 mm)	**4.30**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
T4-PDI2019-SG38-190531 (A9F0035-16)				**Matrix: Sediment**		**Batch: 9060930**		
Gravel (>2.00mm)	**0.12**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 4.75 mm sieve (#4)	ND	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	GS-01
Percent Retained 2.00 mm sieve (#10)	**0.12**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**98.1**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**0.49**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**17.2**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**61.5**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.150 mm sieve (#100)	**17.7**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**0.81**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**0.30**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**0.11**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**1.70**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Clay (< 0.005 mm)	**0.10**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
T4-PDI2019-SG38-190531-Dup (A9F0035-17)				**Matrix: Sediment**		**Batch: 9060930**		
Gravel (>2.00mm)	**0.28**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 4.75 mm sieve (#4)	**0.11**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 2.00 mm sieve (#10)	**0.17**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Sand (0.063mm - 2.00mm)	**97.2**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.85 mm sieve (#20)	**0.37**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.425 mm sieve (#40)	**14.7**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.250 mm sieve (#60)	**63.7**	0.01	0.01	% of Total	1	06/21/19 13:40	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**	**A9F0035 - 06 24 19 1709**

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-SG38-190531-Dup (A9F0035-17)				**Matrix: Sediment**		**Batch: 9060930**		
Percent Retained 0.150 mm sieve (#100)	**16.9**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.106 mm sieve (#140)	**0.96**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.075 mm sieve (#200)	**0.40**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Percent Retained 0.063 mm sieve (#230)	**0.16**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Silt (0.005mm < 0.063mm)	**1.90**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**
Clay (< 0.005 mm)	**0.60**	0.01	0.01	% of Total	1	06/21/19 13:40	D422mod	**GS-01**

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060576 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9060576-BLK2)			Prepared: 06/05/19 07:04 Analyzed: 06/05/19 12:09									
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 70 %*	*Limits: 44-120 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*67 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*24 %*	*10-120 %*			*"*					
p-Terphenyl-d14 (Surr)			*87 %*	*50-133 %*			*"*					
2-Fluorophenol (Surr)			*40 %*	*19-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*77 %*	*43-140 %*			*"*					
LCS (9060576-BS2)			Prepared: 06/05/19 07:04 Analyzed: 06/05/19 12:45									
EPA 8270D												
Acenaphthene	2.63	0.0400	0.0800	ug/L	4	4.00	---	66	47-122%	---	---	
Acenaphthylene	2.79	0.0400	0.0800	ug/L	4	4.00	---	70	41-130%	---	---	
Anthracene	3.38	0.0400	0.0800	ug/L	4	4.00	---	84	57-123%	---	---	
Benz(a)anthracene	3.68	0.0400	0.0800	ug/L	4	4.00	---	92	58-125%	---	---	

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060576 - EPA 3510C (Acid Extraction)							**Water**					
LCS (9060576-BS2)			Prepared: 06/05/19 07:04		Analyzed: 06/05/19 12:45							
Benzo(a)pyrene	3.81	0.0600	0.120	ug/L	4	4.00	---	95	54-128%	---	---	
Benzo(b)fluoranthene	3.80	0.0600	0.120	ug/L	4	4.00	---	95	53-131%	---	---	
Benzo(k)fluoranthene	3.59	0.0600	0.120	ug/L	4	4.00	---	90	57-129%	---	---	
Benzo(g,h,i)perylene	3.24	0.0400	0.0800	ug/L	4	4.00	---	81	50-134%	---	---	
Chrysene	3.62	0.0400	0.0800	ug/L	4	4.00	---	90	59-123%	---	---	
Dibenz(a,h)anthracene	3.64	0.0400	0.0800	ug/L	4	4.00	---	91	51-134%	---	---	
Fluoranthene	3.43	0.0400	0.0800	ug/L	4	4.00	---	86	57-128%	---	---	
Fluorene	2.88	0.0400	0.0800	ug/L	4	4.00	---	72	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.86	0.0400	0.0800	ug/L	4	4.00	---	97	52-133%	---	---	
1-Methylnaphthalene	1.98	0.0800	0.160	ug/L	4	4.00	---	50	41-120%	---	---	
2-Methylnaphthalene	2.00	0.0800	0.160	ug/L	4	4.00	---	50	40-121%	---	---	
Naphthalene	2.09	0.0800	0.160	ug/L	4	4.00	---	52	40-121%	---	---	
Phenanthrene	3.40	0.0400	0.0800	ug/L	4	4.00	---	85	59-120%	---	---	
Pyrene	3.41	0.0400	0.0800	ug/L	4	4.00	---	85	57-126%	---	---	
Carbazole	3.49	0.0600	0.120	ug/L	4	4.00	---	87	60-122%	---	---	
Dibenzofuran	2.70	0.0400	0.0800	ug/L	4	4.00	---	68	53-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 74 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*68 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*24 %*		*10-120 %*				*"*			
p-Terphenyl-d14 (Surr)			*88 %*		*50-133 %*				*"*			
2-Fluorophenol (Surr)			*39 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*80 %*		*43-140 %*				*"*			
LCS Dup (9060576-BSD2)			Prepared: 06/05/19 07:04		Analyzed: 06/05/19 13:22							**Q-19**
EPA 8270D												
Acenaphthene	3.13	0.0400	0.0800	ug/L	4	4.00	---	78	47-122%	17	30%	
Acenaphthylene	3.22	0.0400	0.0800	ug/L	4	4.00	---	80	41-130%	14	30%	
Anthracene	3.51	0.0400	0.0800	ug/L	4	4.00	---	88	57-123%	4	30%	
Benz(a)anthracene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	58-125%	0.2	30%	
Benzo(a)pyrene	3.77	0.0600	0.120	ug/L	4	4.00	---	94	54-128%	1	30%	
Benzo(b)fluoranthene	3.85	0.0600	0.120	ug/L	4	4.00	---	96	53-131%	1	30%	
Benzo(k)fluoranthene	3.69	0.0600	0.120	ug/L	4	4.00	---	92	57-129%	3	30%	
Benzo(g,h,i)perylene	3.46	0.0400	0.0800	ug/L	4	4.00	---	87	50-134%	7	30%	
Chrysene	3.69	0.0400	0.0800	ug/L	4	4.00	---	92	59-123%	2	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**	**A9F0035 - 06 24 19 1709**

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 9060576 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9060576-BSD2)			Prepared: 06/05/19 07:04		Analyzed: 06/05/19 13:22							**Q-19**
Dibenz(a,h)anthracene	3.82	0.0400	0.0800	ug/L	4	4.00	---	95	51-134%	5	30%	
Fluoranthene	3.55	0.0400	0.0800	ug/L	4	4.00	---	89	57-128%	4	30%	
Fluorene	3.24	0.0400	0.0800	ug/L	4	4.00	---	81	52-124%	12	30%	
Indeno(1,2,3-cd)pyrene	3.29	0.0400	0.0800	ug/L	4	4.00	---	82	52-133%	16	30%	
1-Methylnaphthalene	2.73	0.0800	0.160	ug/L	4	4.00	---	68	41-120%	**32**	**30%**	Q-24
2-Methylnaphthalene	2.77	0.0800	0.160	ug/L	4	4.00	---	69	40-121%	**32**	**30%**	Q-24
Naphthalene	2.75	0.0800	0.160	ug/L	4	4.00	---	69	40-121%	27	30%	
Phenanthrene	3.40	0.0400	0.0800	ug/L	4	4.00	---	85	59-120%	0.09	30%	
Pyrene	3.50	0.0400	0.0800	ug/L	4	4.00	---	88	57-126%	3	30%	
Carbazole	3.70	0.0600	0.120	ug/L	4	4.00	---	93	60-122%	6	30%	
Dibenzofuran	3.23	0.0400	0.0800	ug/L	4	4.00	---	81	53-120%	18	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 76 %*		*Limits: 44-120 %*				*Dilution: 4x*			
2-Fluorobiphenyl (Surr)			*72 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*29 %*		*10-120 %*				*"*			
p-Terphenyl-d14 (Surr)			*89 %*		*50-133 %*				*"*			
2-Fluorophenol (Surr)			*41 %*		*19-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*80 %*		*43-140 %*				*"*			

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060718 - EPA 3546							**Sediment**					
Blank (9060718-BLK1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 09:54									
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	---	---	---	---	---	---	
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: 75 %*	*Limits: 37-122 %*				*Dilution: 1x*				
2-Fluorobiphenyl (Surr)			*74 %*	*44-115 %*				*"*				
Phenol-d6 (Surr)			*75 %*	*33-122 %*				*"*				
p-Terphenyl-d14 (Surr)			*86 %*	*54-127 %*				*"*				
2-Fluorophenol (Surr)			*73 %*	*35-115 %*				*"*				
2,4,6-Tribromophenol (Surr)			*73 %*	*39-132 %*				*"*				
LCS (9060718-BS1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 10:30									
EPA 8270D												
Acenaphthene	464	5.32	10.7	ug/kg wet	4	533	---	87	40-122%	---	---	
Acenaphthylene	472	5.32	10.7	ug/kg wet	4	533	---	89	32-132%	---	---	
Anthracene	495	5.32	10.7	ug/kg wet	4	533	---	93	47-123%	---	---	
Benz(a)anthracene	505	5.32	10.7	ug/kg wet	4	533	---	95	49-126%	---	---	
Benzo(a)pyrene	514	8.00	16.0	ug/kg wet	4	533	---	96	45-129%	---	---	
Benzo(b)fluoranthene	506	8.00	16.0	ug/kg wet	4	533	---	95	45-132%	---	---	
Benzo(k)fluoranthene	495	8.00	16.0	ug/kg wet	4	533	---	93	47-132%	---	---	

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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**	**A9F0035 - 06 24 19 1709**

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 9060718 - EPA 3546							**Sediment**					
LCS (9060718-BS1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 10:30									
Benzo(g,h,i)perylene	501	5.32	10.7	ug/kg wet	4	533	---	94	43-134%	---	---	
Chrysene	495	5.32	10.7	ug/kg wet	4	533	---	93	50-124%	---	---	
Dibenz(a,h)anthracene	487	5.32	10.7	ug/kg wet	4	533	---	91	45-134%	---	---	
Fluoranthene	521	5.32	10.7	ug/kg wet	4	533	---	98	50-127%	---	---	
Fluorene	484	5.32	10.7	ug/kg wet	4	533	---	91	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	461	5.32	10.7	ug/kg wet	4	533	---	86	45-133%	---	---	
2-Methylnaphthalene	476	10.7	21.3	ug/kg wet	4	533	---	89	38-122%	---	---	
Naphthalene	452	10.7	21.3	ug/kg wet	4	533	---	85	35-123%	---	---	
Phenanthrene	480	5.32	10.7	ug/kg wet	4	533	---	90	50-121%	---	---	
Pyrene	524	5.32	10.7	ug/kg wet	4	533	---	98	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 88 %*	*Limits: 37-122 %*			*Dilution: 4x*					
2-Fluorobiphenyl (Surr)			*88 %*	*44-115 %*			*"*					
Phenol-d6 (Surr)			*86 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*92 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*85 %*	*35-115 %*			*"*					
2,4,6-Tribromophenol (Surr)			*90 %*	*39-132 %*			*"*					
Duplicate (9060718-DUP1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 12:54									
QC Source Sample: Non-SDG (A9E0922-11)												
Acenaphthene	**619**	74.3	149	ug/kg dry	40	---	810	---	---	27	30%	
Acenaphthylene	**232**	74.3	149	ug/kg dry	40	---	ND	---	---		**30%**	Q-04
Anthracene	**1110**	74.3	149	ug/kg dry	40	---	660	---	---	**51**	**30%**	Q-04
Benz(a)anthracene	**5070**	74.3	149	ug/kg dry	40	---	4250	---	---	18	30%	
Benzo(a)pyrene	**5120**	112	224	ug/kg dry	40	---	5840	---	---	13	30%	
Benzo(b)fluoranthene	**7500**	112	224	ug/kg dry	40	---	6910	---	---	8	30%	M-05
Benzo(k)fluoranthene	**2690**	112	224	ug/kg dry	40	---	2280	---	---	16	30%	M-05
Benzo(g,h,i)perylene	**3100**	74.3	149	ug/kg dry	40	---	3840	---	---	21	30%	
Chrysene	**8290**	74.3	149	ug/kg dry	40	---	4320	---	---	**63**	**30%**	Q-04
Dibenz(a,h)anthracene	**709**	74.3	149	ug/kg dry	40	---	808	---	---	13	30%	
Fluoranthene	**17800**	74.3	149	ug/kg dry	40	---	5960	---	---	**100**	**30%**	Q-04
Fluorene	**422**	74.3	149	ug/kg dry	40	---	260	---	---	**47**	**30%**	Q-04
Indeno(1,2,3-cd)pyrene	**3130**	74.3	149	ug/kg dry	40	---	3810	---	---	20	30%	
2-Methylnaphthalene	ND	149	298	ug/kg dry	40	---	ND	---	---	---	30%	
Naphthalene	ND	149	298	ug/kg dry	40	---	149	---	---	***	**30%**	Q-04

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060718 - EPA 3546							**Sediment**					
Duplicate (9060718-DUP1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 12:54									
QC Source Sample: Non-SDG (A9E0922-11)												
Phenanthrene	**7110**	74.3	149	ug/kg dry	40	---	2510	---	---	**96**	**30%**	Q-04
Pyrene	**14600**	74.3	149	ug/kg dry	40	---	5890	---	---	**85**	**30%**	Q-04
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*113 %*	*Limits:*	*37-122 %*		*Dilution:*	*40x*				S-05
2-Fluorobiphenyl (Surr)			*87 %*		*44-115 %*			*"*				S-05
Phenol-d6 (Surr)			*78 %*		*33-122 %*			*"*				S-05
p-Terphenyl-d14 (Surr)			*100 %*		*54-127 %*			*"*				S-05
2-Fluorophenol (Surr)			*63 %*		*35-115 %*			*"*				S-05
2,4,6-Tribromophenol (Surr)			*106 %*		*39-132 %*			*"*				S-05
Matrix Spike (9060718-MS1)			Prepared: 06/07/19 13:14 Analyzed: 06/10/19 17:09									
QC Source Sample: T4-PDI2019-SG38-190531 (A9F0035-16RE5)												
EPA 8270D												
Acenaphthene	500	7.22	14.5	ug/kg dry	4	724	24.9	66	40-122%	---	---	
Acenaphthylene	495	7.22	14.5	ug/kg dry	4	724	ND	68	32-132%	---	---	
Anthracene	629	7.22	14.5	ug/kg dry	4	724	ND	87	47-123%	---	---	
Benz(a)anthracene	687	7.22	14.5	ug/kg dry	4	724	14.3	93	49-126%	---	---	
Benzo(a)pyrene	714	10.9	21.7	ug/kg dry	4	724	19.9	96	45-129%	---	---	
Benzo(b)fluoranthene	697	10.9	21.7	ug/kg dry	4	724	30.7	92	45-132%	---	---	
Benzo(k)fluoranthene	675	10.9	21.7	ug/kg dry	4	724	ND	93	47-132%	---	---	
Benzo(g,h,i)perylene	665	7.22	14.5	ug/kg dry	4	724	15.6	90	43-134%	---	---	
Chrysene	678	7.22	14.5	ug/kg dry	4	724	16.0	91	50-124%	---	---	
Dibenz(a,h)anthracene	665	7.22	14.5	ug/kg dry	4	724	ND	92	45-134%	---	---	
Fluoranthene	705	7.22	14.5	ug/kg dry	4	724	19.7	95	50-127%	---	---	
Fluorene	535	7.22	14.5	ug/kg dry	4	724	ND	74	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	609	7.22	14.5	ug/kg dry	4	724	14.6	82	45-133%	---	---	
2-Methylnaphthalene	453	14.5	28.9	ug/kg dry	4	724	ND	63	38-122%	---	---	
Naphthalene	441	14.5	28.9	ug/kg dry	4	724	ND	61	35-123%	---	---	
Phenanthrene	601	7.22	14.5	ug/kg dry	4	724	7.99	82	50-121%	---	---	
Pyrene	701	7.22	14.5	ug/kg dry	4	724	19.9	94	47-127%	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*67 %*	*Limits:*	*37-122 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*64 %*		*44-115 %*			*"*				
Phenol-d6 (Surr)			*61 %*		*33-122 %*			*"*				

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060718 - EPA 3546							**Sediment**					
Matrix Spike (9060718-MS1)				Prepared: 06/07/19 13:14		Analyzed: 06/10/19 17:09						
QC Source Sample: T4-PDI2019-SG38-190531 (A9F0035-16RE5)												
Surr: p-Terphenyl-d14 (Surr)			*Recovery: 90 %*	*Limits: 54-127 %*		*Dilution: 4x*						
2-Fluorophenol (Surr)			*55 %*	*35-115 %*		*"*						
2,4,6-Tribromophenol (Surr)			*85 %*	*39-132 %*		*"*						
Matrix Spike Dup (9060718-MSD1)				Prepared: 06/07/19 13:17		Analyzed: 06/10/19 17:46						
QC Source Sample: T4-PDI2019-SG38-190531 (A9F0035-16RE5)												
EPA 8270D												
Acenaphthene	527	7.17	14.4	ug/kg dry	4	718	24.9	70	40-122%	5	30%	
Acenaphthylene	534	7.17	14.4	ug/kg dry	4	718	ND	74	32-132%	7	30%	
Anthracene	616	7.17	14.4	ug/kg dry	4	718	ND	86	47-123%	2	30%	
Benz(a)anthracene	680	7.17	14.4	ug/kg dry	4	718	14.3	93	49-126%	1	30%	
Benzo(a)pyrene	719	10.8	21.6	ug/kg dry	4	718	19.9	97	45-129%	0.7	30%	
Benzo(b)fluoranthene	712	10.8	21.6	ug/kg dry	4	718	30.7	95	45-132%	2	30%	
Benzo(k)fluoranthene	685	10.8	21.6	ug/kg dry	4	718	ND	95	47-132%	1	30%	
Benzo(g,h,i)perylene	652	7.17	14.4	ug/kg dry	4	718	15.6	89	43-134%	2	30%	
Chrysene	662	7.17	14.4	ug/kg dry	4	718	16.0	90	50-124%	2	30%	
Dibenz(a,h)anthracene	659	7.17	14.4	ug/kg dry	4	718	ND	92	45-134%	0.9	30%	
Fluoranthene	708	7.17	14.4	ug/kg dry	4	718	19.7	96	50-127%	0.4	30%	
Fluorene	537	7.17	14.4	ug/kg dry	4	718	ND	75	43-125%	0.3	30%	
Indeno(1,2,3-cd)pyrene	608	7.17	14.4	ug/kg dry	4	718	14.6	83	45-133%	0.2	30%	
2-Methylnaphthalene	533	14.4	28.7	ug/kg dry	4	718	ND	74	38-122%	16	30%	
Naphthalene	498	14.4	28.7	ug/kg dry	4	718	ND	69	35-123%	12	30%	
Phenanthrene	599	7.17	14.4	ug/kg dry	4	718	7.99	82	50-121%	0.3	30%	
Pyrene	692	7.17	14.4	ug/kg dry	4	718	19.9	94	47-127%	1	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 80 %*	*Limits: 37-122 %*		*Dilution: 4x*						
2-Fluorobiphenyl (Surr)			*75 %*	*44-115 %*		*"*						
Phenol-d6 (Surr)			*76 %*	*33-122 %*		*"*						
p-Terphenyl-d14 (Surr)			*96 %*	*54-127 %*		*"*						
2-Fluorophenol (Surr)			*76 %*	*35-115 %*		*"*						
2,4,6-Tribromophenol (Surr)			*88 %*	*39-132 %*		*"*						

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

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 9060687 - PSEP TOC							**Sediment**					
Blank (9060687-BLK1)			Prepared: 06/07/19 07:00		Analyzed: 06/11/19 17:00							
EPA 9060Amod												
Total Organic Carbon	ND	0.020	0.020	% by Weight	1	---	---	---	---	---	---	
LCS (9060687-BS1)			Prepared: 06/07/19 07:00		Analyzed: 06/11/19 17:00							
EPA 9060Amod												
Total Organic Carbon	9800			mg/kg	1	10000	---	98	90-110%	---	---	
Duplicate (9060687-DUP1)			Prepared: 06/07/19 07:00		Analyzed: 06/11/19 17:00							
QC Source Sample: T4-PDI2019-SG38-190531 (A9F0035-16)												
EPA 9060Amod												
Total Organic Carbon	**0.038**	0.020	0.020	% by Weight	1	---	0.038	---	---	1	20%	

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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 9060683 - Total Solids (Dry Weight)							**Soil**					
Duplicate (9060683-DUP1)			Prepared: 06/06/19 17:58		Analyzed: 06/07/19 12:23							
QC Source Sample: Non-SDG (A9E0927-05)												
Total Solids	**56.8**	1.00	1.00	% by Weight	1	---	56.7	---	---	0.2	20%	
Duplicate (9060683-DUP2)			Prepared: 06/06/19 17:58		Analyzed: 06/07/19 12:23							
QC Source Sample: T4-PDI2019-SG38-190531 (A9F0035-16)												
PSEP 1986												
Total Solids	**73.1**	1.00	1.00	% by Weight	1	---	73.0	---	---	0.2	20%	

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SAMPLE PREPARATION INFORMATION

Semivolatile Organic Compounds by EPA 8270D

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9060576							
A9F0035-01	Water	EPA 8270D	05/30/19 17:12	06/05/19 07:04	1010mL/1mL	1000mL/1mL	0.99

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9060718							
A9F0035-14	Sediment	EPA 8270D	05/31/19 12:56	06/07/19 13:14	15.6g/2mL	15g/2mL	0.96
A9F0035-15	Sediment	EPA 8270D	05/30/19 11:16	06/07/19 13:14	15.34g/2mL	15g/2mL	0.98
A9F0035-16RE5	Sediment	EPA 8270D	05/31/19 10:27	06/07/19 13:14	15.19g/2mL	15g/2mL	0.99

Demand Parameters

Prep: PSEP TOC

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9060687							
A9F0035-14	Sediment	EPA 9060Amod	05/31/19 12:56	06/07/19 07:00	5g/5g	5g/5g	NA
A9F0035-15	Sediment	EPA 9060Amod	05/30/19 11:16	06/07/19 07:00	5g/5g	5g/5g	NA
A9F0035-16	Sediment	EPA 9060Amod	05/31/19 10:27	06/07/19 07:00	5g/5g	5g/5g	NA

Solid and Moisture Determinations

Prep: Total Solids (Dry Weight)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9060683							
A9F0035-14	Sediment	PSEP 1986	05/31/19 12:56	06/06/19 17:58			NA
A9F0035-15	Sediment	PSEP 1986	05/30/19 11:16	06/06/19 17:58			NA
A9F0035-16	Sediment	PSEP 1986	05/31/19 10:27	06/06/19 17:58			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: 9060930							
A9F0035-14	Sediment	D422mod	05/31/19 12:56	06/19/19 08:41			NA
A9F0035-15	Sediment	D422mod	05/30/19 11:16	06/19/19 09:00			NA
A9F0035-16	Sediment	D422mod	05/31/19 10:27	06/19/19 09:20			NA
A9F0035-17	Sediment	D422mod	05/31/19 10:27	06/19/19 09:44			NA

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SAMPLE PREPARATION INFORMATION

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

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QUALIFIER DEFINITIONS

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

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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.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
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.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
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.

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**	**A9F0035 - 06 24 19 1709**

REPORTING NOTES AND CONVENTIONS:

Abbreviations:

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

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

NR Result Not Reported

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

Blanks:

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

Apex Laboratories



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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

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Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

LABORATORY ACCREDITATION INFORMATION

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

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

Apex Laboratories

Matrix	Analysis	TNI_ID	Analyte	TNI_ID	Accreditation

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

Secondary Accreditations

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

Subcontract Laboratory Accreditations

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

Field Testing Parameters

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

Apex Laboratories

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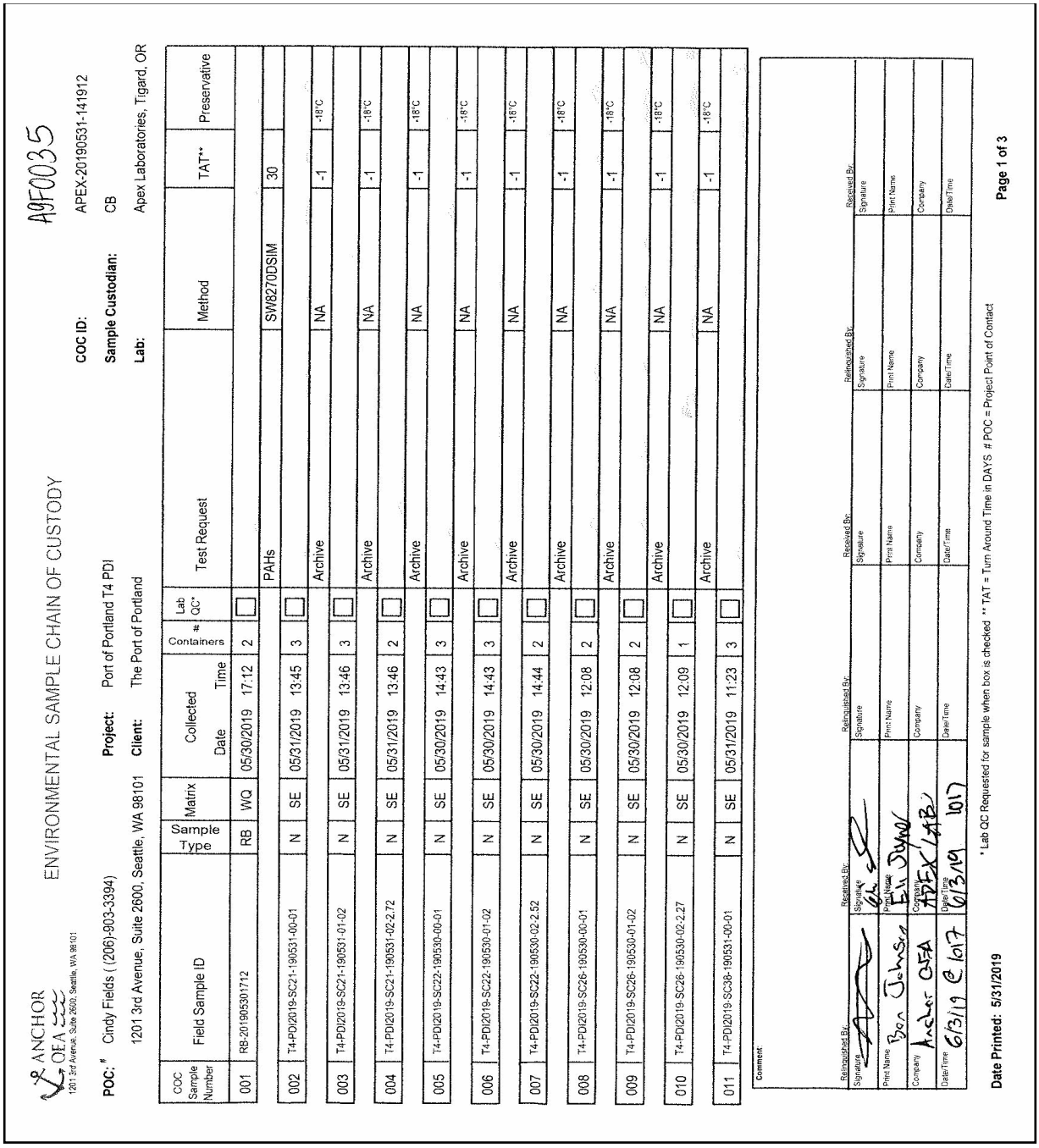

ANCHOR QEA
1201 3rd Avenue, Suite 2600, Seattle, WA 98101

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9F0035

COC ID: APEX-20190531-141912

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

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	RB-20190530T712	RB	WQ	05/30/2019	17:12	2	☐	PAHs	SW8270DSIM	30	
002	T4-PDI2019-SC21-190531-00-01	N	SE	05/31/2019	13:45	3	☐	Archive	NA	-1	-18°C
003	T4-PDI2019-SC21-190531-01-02	N	SE	05/31/2019	13:46	3	☐	Archive	NA	-1	-18°C
004	T4-PDI2019-SC21-190531-02-2.72	N	SE	05/31/2019	13:46	2	☐	Archive	NA	-1	-18°C
005	T4-PDI2019-SC22-190530-00-01	N	SE	05/30/2019	14:43	3	☐	Archive	NA	-1	-18°C
006	T4-PDI2019-SC22-190530-01-02	N	SE	05/30/2019	14:43	3	☐	Archive	NA	-1	-18°C
007	T4-PDI2019-SC22-190530-02-2.52	N	SE	05/30/2019	14:44	2	☐	Archive	NA	-1	-18°C
008	T4-PDI2019-SC26-190530-00-01	N	SE	05/30/2019	12:08	2	☐	Archive	NA	-1	-18°C
009	T4-PDI2019-SC26-190530-01-02	N	SE	05/30/2019	12:08	2	☐	Archive	NA	-1	-18°C
010	T4-PDI2019-SC26-190530-02-2.27	N	SE	05/30/2019	12:09	1	☐	Archive	NA	-1	-18°C
011	T4-PDI2019-SC38-190531-00-01	N	SE	05/31/2019	11:23	3	☐	Archive	NA	-1	-18°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Print Name: Ben Johnson	Print Name: Erin Dyas	Print Name:	Print Name:	Print Name:	Print Name:
Company: Anchor QEA	Company: APEX/LAB	Company:	Company:	Company:	Company:
Date/Time: 6/3/19 @ 1017	Date/Time: 6/3/19 1017	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Date Printed: 5/31/2019

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

Page 1 of 3

Apex Laboratories

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Apex Laboratories, LLC

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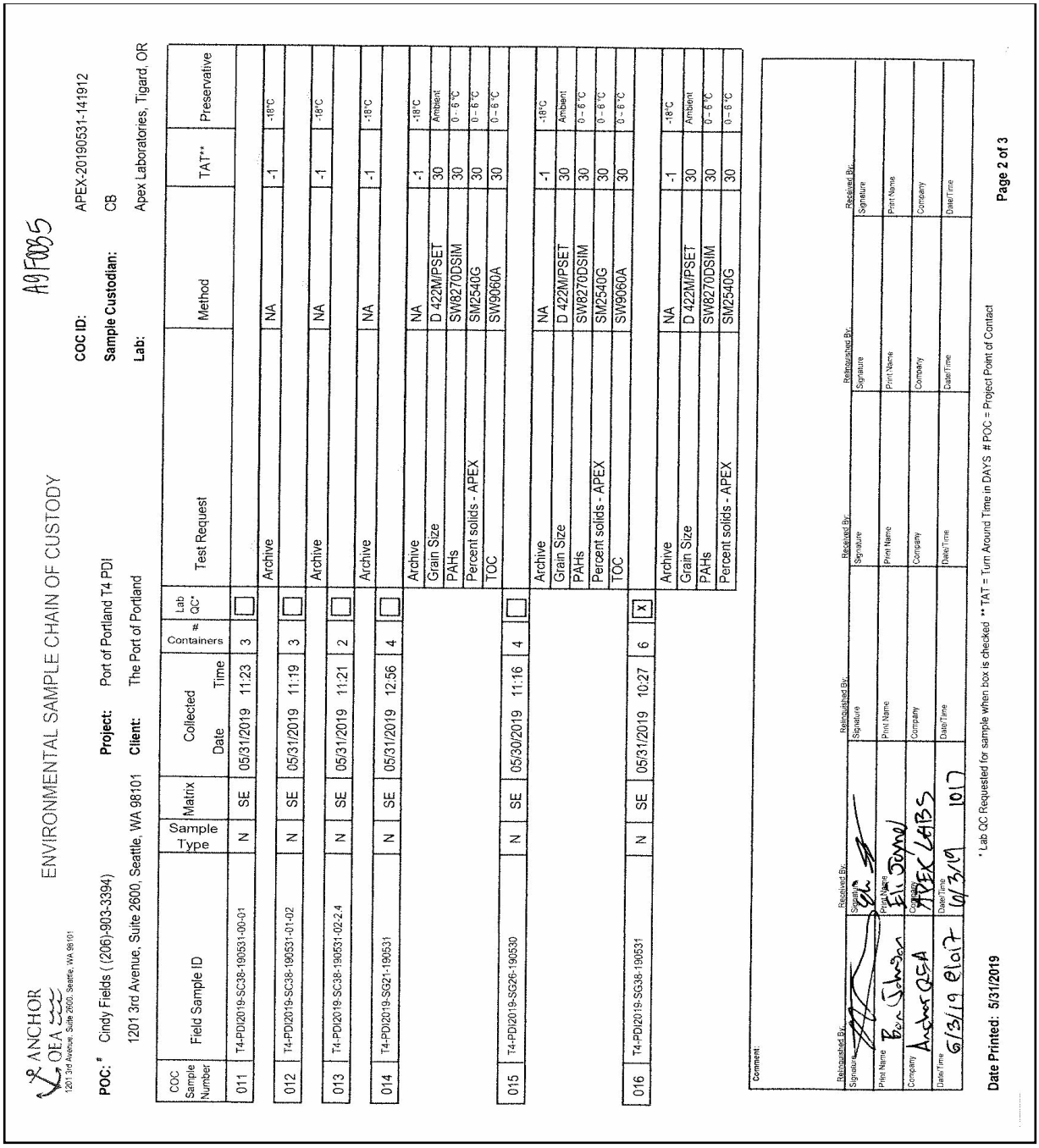
503-718-2323
EPA ID: OR01039

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**	**A9F0035 - 06 24 19 1709**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

A9F0035

COC ID: APEX-20190531-141912

Sample Custodian: CB

Lab: Apex Laboratories, Tigard, OR

POC: # Cindy Fields ((206)-903-3394)

Project: Port of Portland T4 PDI

Client: The Port of Portland

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

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
011	T4-PDI2019-SC38-190531-00-01	N	SE	05/31/2019	11:23	3					
								Archive	NA	-1	-18°C
012	T4-PDI2019-SC38-190531-01-02	N	SE	05/31/2019	11:19	3					
								Archive	NA	-1	-18°C
013	T4-PDI2019-SC38-190531-02-2.4	N	SE	05/31/2019	11:21	2					
								Archive	NA	-1	-18°C
014	T4-PDI2019-SG21-190531	N	SE	05/31/2019	12:56	4					
								Archive	NA	-1	-18°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
015	T4-PDI2019-SG26-190530	N	SE	05/30/2019	11:16	4					
								Archive	NA	-1	-18°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
016	T4-PDI2019-SG38-190531	N	SE	05/31/2019	10:27	6	X				
								Archive	NA	-1	-18°C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6°C
								Percent solids - APEX	SM2540G	30	0 - 6°C

Comment:

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

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

Relinquished By: Signature / Print Name: Ben Johnson / Company: Anchor QEA / Date/Time: 6/3/19 0107

Received By: Signature / Print Name: Eli Tomp / Company: APEX LABS / Date/Time: 6/3/19 1017

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

Date Printed: 5/31/2019

Page 2 of 3

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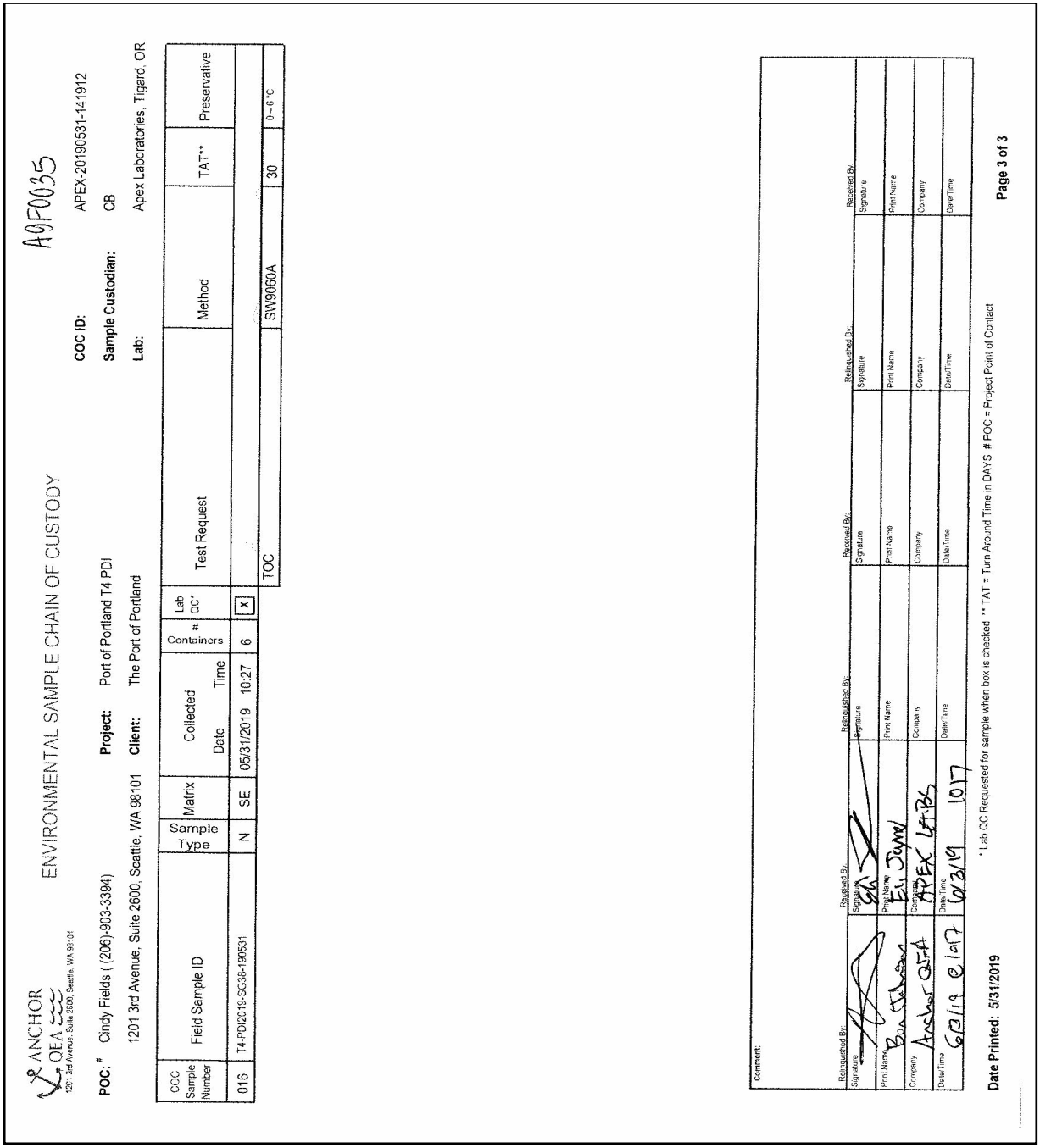
6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**



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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9F0035

COC ID: APEX-20190531-141912

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: CB
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
016	T4-PDI2019-SG38-190531	N	SE	05/31/2019	10:27	6	X				
								TOC	SW9060A	30	0 - 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Ben Johnson	Print Name: Eli Jones	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: APEX LABS	Company	Company	Company	Company
Date/Time: 6/3/19 @ 1017	Date/Time: 6/3/19 1017	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 5/31/2019

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

Page 3 of 3

Apex Laboratories

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6720 SW Macadam Ave. Suite 125	Project Number: **050332-01.32**	**Report ID:**
Portland, OR 97219	Project Manager: **Cindy Fields**	**A9F0035 - 06 24 19 1709**

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A9F0035

Project/Project #: Port of Portland T4 PDI

Delivery Info:

Date/time received: 6-3-19 @ 1017 By: EJ

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

Cooler Inspection Date/time inspected: 6-3-19 @ 1048 By: EJ

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

Signed/dated by client? Yes X No

Signed/dated by Apex? Yes X No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.6	1.4					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	Real	Real					
Condition:	good	good					

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

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

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

Samples Inspection: Date/time inspected: 6-3-19 @ 17:10 By: TMc

All samples intact? Yes No Comments:

(8) 6/3/19

Bottle labels/COCs agree? Yes No X Comments: 1L unpreserved amber Blank-190524-00-00 received but not listed on CoC (5/24/19 @ 1725)

COC/container discrepancies form initiated? Yes No NA

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

Do VOA vials have visible headspace? Yes No NA

Comments

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

Comments:

Additional information:

Labeled by: (8) Witness: CM Cooler Inspected by: TMc 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:	A9F0035-14		Client Sample ID:	T4-PDI2019-SG21-190531		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	Silty SAND with trace Clay			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.105	486.794	475.69	2.11	465.8

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.300	2.451	1.15	1.15	0.2	99.8
10	2.00	1.300	5.114	3.81	4.97	0.8	98.9
Pan		11.113	481.440	470.33	475.29	98.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9793		35-14	1.304	15.599	15.303	2.11

Hydrometer Analysis

Start Date/Time	6/19/2019	8:41	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.214		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	98.9		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	49.17		Corrected Dry Weight of Soil Tested (g) (W)	49.70

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	14	20.9	8.08	16.3	13.8	0.01348	0.050	16.08
2	13.5	20.9	7.58	15.3	13.8	0.01348	0.035	15.09
4	12	20.9	6.08	12.2	14.2	0.01348	0.025	12.10
8	11	20.9	5.08	10.2	14.3	0.01348	0.018	10.11
15	10.5	21	4.61	9.3	14.3	0.01348	0.013	9.18
30	10	21.2	4.18	8.4	14.5	0.01348	0.009	8.32
60	8.5	21.2	2.68	5.4	14.7	0.01348	0.007	5.34
90	8	21.2	2.18	4.4	14.8	0.01348	0.005	4.34
120	8	21.1	2.15	4.3	14.8	0.01348	0.005	4.27
240	7	21	1.11	2.2	15	0.01348	0.003	2.22
360	6.5	21	0.61	1.2	15	0.01348	0.003	1.22
1440	5.5	20.2		0.0	15.2	0.01365	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	1.289	1.462	0.17	6.59	0.3	98.6
40	0.425	1.288	7.372	6.08	63.57	12.2	86.3
60	0.250	1.300	20.751	19.45	245.76	39.1	47.2
100	0.150	1.293	8.750	7.46	315.60	15.0	32.2
140	0.105	1.281	3.329	2.05	334.79	4.1	28.1
200	0.075	1.285	3.481	2.20	355.35	4.4	23.7
230	0.063	1.298	2.400	1.10	365.68	2.2	21.5
			Sum	38.51	230 Minus	10.66	

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

Sample ID: T4-PDI2019-SG21-190531 (A9F0035-14)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*1.07*
Retained on No. 4 sieve		4.75	99.75	0.25
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	98.93	0.82
Sand				*77.48*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	98.59	0.35
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	86.35	12.24
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	47.21	39.13
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	32.21	15
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	28.09	4.12
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	23.67	4.42
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	21.45	2.22
Silt and Clay (Measurements in the Clay fraction are noted)				*21.45*
Hydrometer Test		0.0501	16.08	5.37
Hydrometer Test		0.0354	15.09	1
Hydrometer Test		0.0254	12.1	2.99
Hydrometer Test		0.0180	10.11	1.99
Hydrometer Test		0.0132	9.18	0.93
Hydrometer Test		0.0094	8.32	0.86
Hydrometer Test		0.0067	5.34	2.99
Hydrometer Test		0.0055	4.34	1
Hydrometer Test	Clay	0.0047	4.27	0.07
Hydrometer Test	Clay	0.0034	2.22	2.06
Hydrometer Test	Clay	0.0028	1.22	1
Hydrometer Test	Clay	0.0014	1.22	0

Grain Size Summary	Percent of Total Sample
Gravel	1.1
Sand	77.5
Coarse sand	0.3
Medium sand	66.4
Fine sand	10.8
Silt	17.1
Clay	4.3

Case Narrative for Sample ID: T4-PDI2019-SG21-190531 (A9F0035-14)

This data is not to be used for engineering purposes.

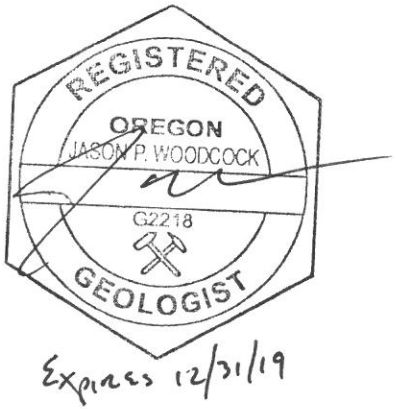
No difficulty dispersing the fraction passing the No. 10 sieve.

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.

+4 fraction consists entirely of organic and possible anthropogenic material.

+10 fraction consists almost entirely of organic and possible anthropogenic material.



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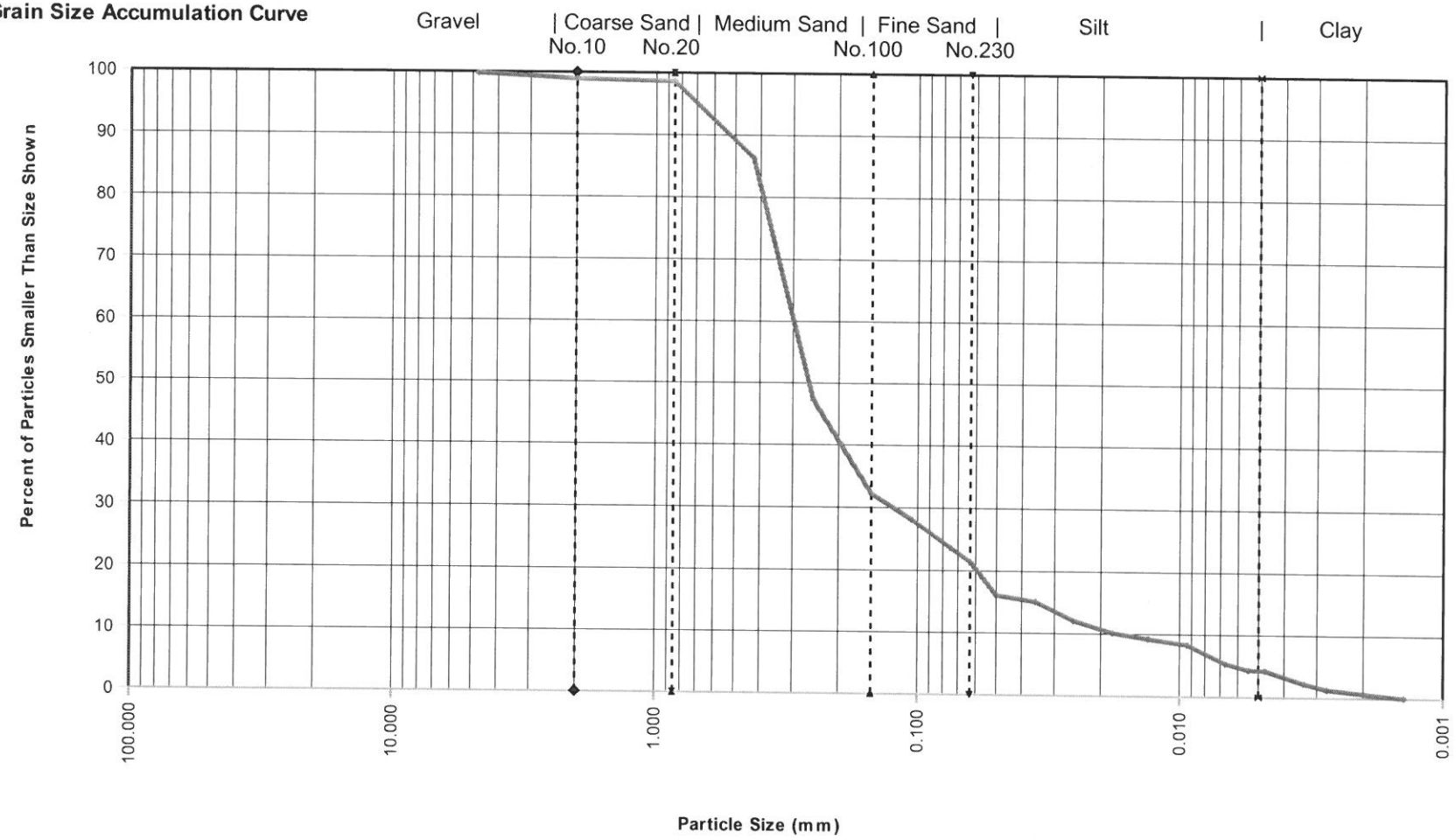
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SG21-190531 (A9F0035-14)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	Silty SAND with trace Clay

Report is complete only if it includes Apex Labs Additional Grain Size Data.
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Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-15		Client Sample ID:	T4-PDI2019-SG26-190530		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	Silty SAND with trace Gravel and Clay			Max Particle Size:	Gravel		
Particle Shape:	Sub-angular to Sub-rounded			Hardness	Hard and Durable		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	23.480	428.784	405.30	2.55	395.2

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	6.402	38.979	32.58	32.58	8.2	91.8
10	2.00	6.377	29.753	23.38	55.95	5.9	85.8
Pan		11.630	359.229	347.60	403.55	85.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9751		F3515	1.299	19.956	19.492	2.55

Hydrometer Analysis

Start Date/Time	6/19/2019	9:00	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	100.808		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	85.8		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	98.30		Corrected Dry Weight of Soil Tested (g) (W)	114.51

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	27	20.8	21.05	18.4	11.7	0.01348	0.046	15.78
2	24	20.9	18.08	15.8	12.2	0.01348	0.033	13.55
4	21.5	20.9	15.58	13.6	12.5	0.01348	0.024	11.68
8	19	21	13.11	11.5	13	0.01348	0.017	9.83
15	17	21.1	11.15	9.7	13.3	0.01348	0.013	8.36
30	14.5	21.2	8.68	7.6	13.7	0.01348	0.009	6.51
60	13	21.1	7.15	6.2	14	0.01348	0.007	5.36
90	11.5	21.2	5.68	5.0	14.2	0.01348	0.005	4.26
120	11	21.1	5.15	4.5	14.3	0.01348	0.005	3.86
240	10	21	4.11	3.6	14.5	0.01348	0.003	3.08
360	8.5	21	2.61	2.3	14.7	0.01348	0.003	1.96
1440	7	20.4	0.91	0.8	15	0.01365	0.001	0.68

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	1.303	9.871	8.57	85.50	7.5	78.4
40	0.425	1.294	10.364	9.07	116.77	7.9	70.4
60	0.250	1.289	27.052	25.76	205.61	22.5	47.9
100	0.150	1.301	17.153	15.85	260.26	13.8	34.1
140	0.105	1.288	8.067	6.78	283.64	5.9	28.2
200	0.075	1.293	7.776	6.48	305.99	5.7	22.5
230	0.063	1.278	3.528	2.25	313.75	2.0	20.6
			Sum	74.77	230 Minus	23.54	

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

Sample ID: T4-PDI2019-SG26-190530 (A9F0035-15)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*14.16*
Retained on No. 4 sieve	4.75	91.76	8.24
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	85.84	5.91
Sand			*65.29*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	78.36	7.48
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	70.44	7.92
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	47.94	22.5
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	34.1	13.84
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	28.18	5.92
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	22.52	5.66
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	20.55	1.96
Silt and Clay (Measurements in the Clay fraction are noted)			*20.55*
Hydrometer Test	0.0461	15.78	4.78
Hydrometer Test	0.0333	13.55	2.22
Hydrometer Test	0.0238	11.68	1.87
Hydrometer Test	0.0172	9.83	1.85
Hydrometer Test	0.0127	8.36	1.47
Hydrometer Test	0.0091	6.51	1.85
Hydrometer Test	0.0065	5.36	1.15
Hydrometer Test	0.0054	4.26	1.1
Hydrometer Test Clay	0.0047	3.86	0.4
Hydrometer Test Clay	0.0033	3.08	0.77
Hydrometer Test Clay	0.0027	1.96	1.12
Hydrometer Test Clay	0.0014	0.68	1.27

Grain Size Summary	Percent of Total Sample
Gravel	14.2
Sand	65.3
Coarse sand	7.5
Medium sand	44.3
Fine sand	13.5
Silt	16.3
Clay	4.3

Case Narrative for Sample ID: T4-PDI2019-SG26-190530 (A9F0035-15)

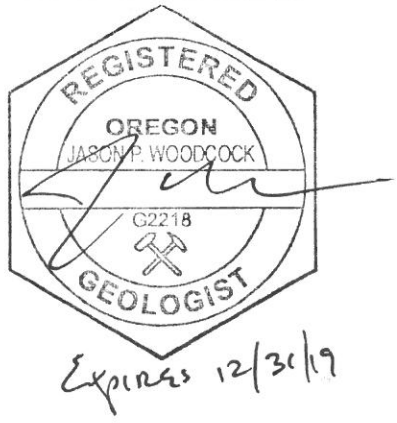
This data is not to be used for engineering purposes.

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.

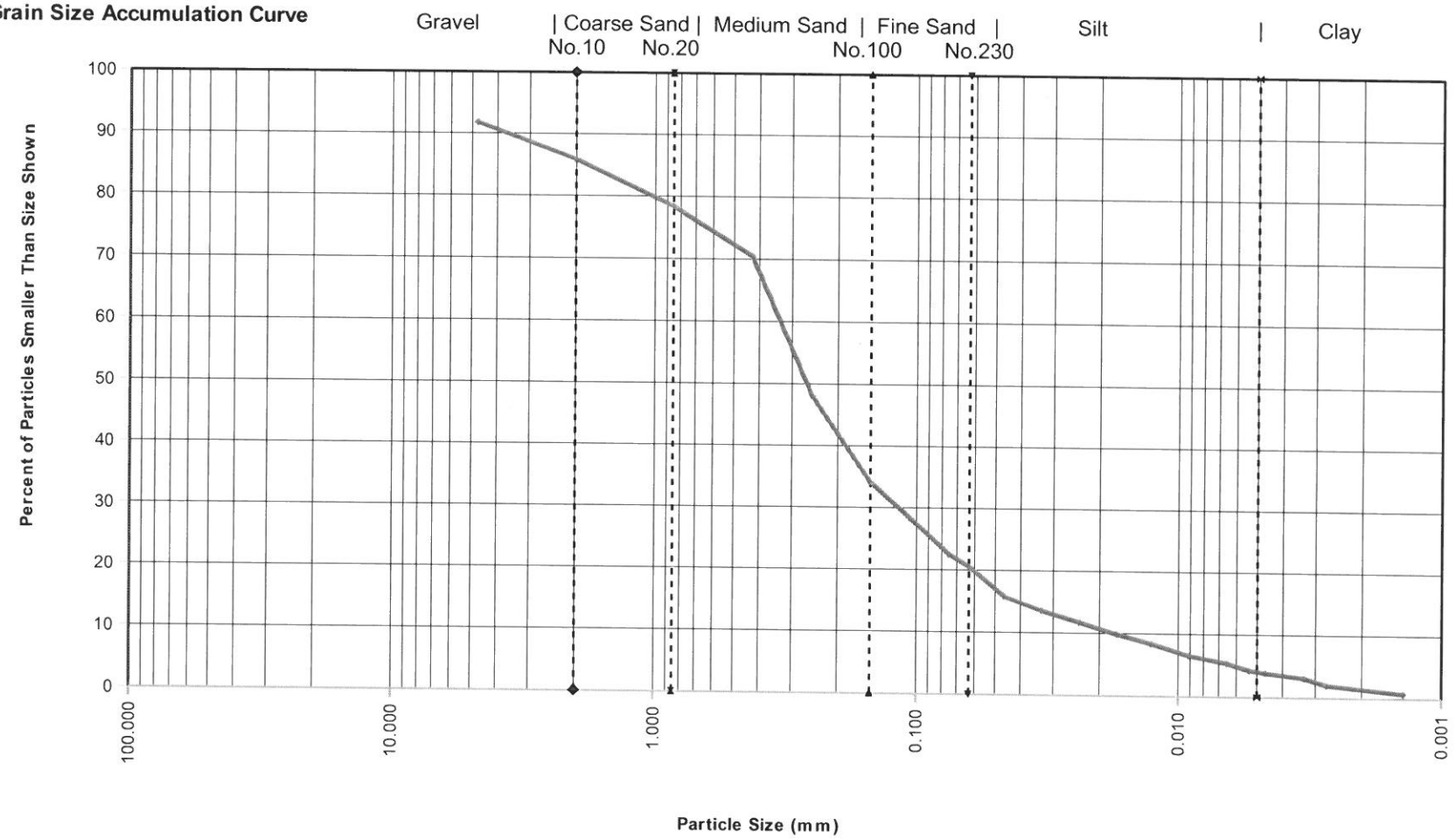
The assumed specific gravity used in the calculations was 2.65.

+4 and +10 fractions contain abundant organic and possible anthropogenic material.



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

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SG26-190530 (A9F0035-15)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Sub-angular to Sub-rounded	Hard and Durable	Silty SAND with trace Gravel and Clay

Report is complete only if it includes Apex Labs Additional Grain Size Data. 07/03/19 Anchor Port of Portland - T4 - PDI Page 41 of 740 Page 35 of 41 06/24/2019

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-16		Client Sample ID:	T4-PDI2019-SG38-190531		Batch Number:	9060930
Data Entered by:	SJL/JSJ	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	SAND with trace Silt			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.729	542.280	530.55	1.16	524.5

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	1.300	1.907	0.61	0.61	0.1	99.9
Pan		11.735	541.588	529.85	530.46	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9885		F003516	1.297	24.996	24.724	1.16

Hydrometer Analysis

Start Date/Time	6/19/2019	9:20	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	100.292		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	99.9		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	99.14		Corrected Dry Weight of Soil Tested (g) (W)	99.26

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8	21.2	2.18	2.2	14.8	0.01348	0.052	2.19
2	7	21.2	1.18	1.2	15	0.01348	0.037	1.19
4	7	21.2	1.18	1.2	15	0.01348	0.026	1.19
8	6	21.2	0.18	0.2	15.2	0.01348	0.019	0.18
15	6	21.2	0.18	0.2	15.2	0.01348	0.014	0.18
30	6	21.1	0.15	0.1	15.2	0.01348	0.010	0.15
60	6	21.1	0.15	0.1	15.2	0.01348	0.007	0.15
90	6	21	0.11	0.1	15.2	0.01348	0.006	0.11
120	6	21	0.11	0.1	15.2	0.01348	0.005	0.11
240	6	20.8	0.05	0.0	15.2	0.01348	0.003	0.05
360	5.5	20.9		0.0	15.2	0.01348	0.003	0.00
1440	5	20.5		0.0	15.3	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	1.297	1.787	0.49	3.20	0.5	99.4
40	0.425	1.298	18.392	17.09	93.51	17.2	82.2
60	0.250	2.592	63.613	61.02	415.89	61.5	20.7
100	0.150	1.292	18.816	17.52	508.47	17.7	3.0
140	0.105	1.303	2.110	0.81	512.73	0.8	2.2
200	0.075	1.299	1.593	0.29	514.28	0.3	1.9
230	0.063	1.305	1.419	0.11	514.89	0.1	1.8
			Sum	97.34	230 Minus	1.80	

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

Sample ID: T4-PDI2019-SG38-190531 (A9F0035-16)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0.12*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	99.88	0.12
Sand				*98.07*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.39	0.49
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	82.17	17.22
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	20.69	61.48
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	3.03	17.66
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	2.22	0.81
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	1.93	0.3
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	1.81	0.11
Silt and Clay (Measurements in the Clay fraction are noted)				*1.81*
Hydrometer Test		0.0519	2.19	0
Hydrometer Test		0.0369	1.19	0.62
Hydrometer Test		0.0261	1.19	0
Hydrometer Test		0.0186	0.18	1.01
Hydrometer Test		0.0136	0.18	0
Hydrometer Test		0.0096	0.15	0.03
Hydrometer Test		0.0068	0.15	0
Hydrometer Test		0.0055	0.11	0.03
Hydrometer Test	Clay	0.0048	0.11	0
Hydrometer Test	Clay	0.0034	0.05	0.07
Hydrometer Test	Clay	0.0028	0.05	0
Hydrometer Test	Clay	0.0014	0.05	0

Grain Size Summary	Percent of Total Sample
Gravel	0.1
Sand	98.1
Coarse sand	0.5
Medium sand	96.4
Fine sand	1.2
Silt	1.7
Clay	0.1

Case Narrative for Sample ID: T4-PDI2019-SG38-190531 (A9F0035-16)

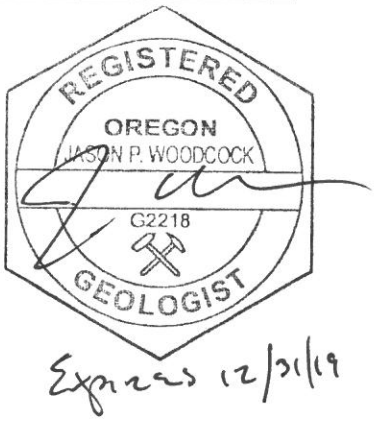
This data is not to be used for engineering purposes.

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 material present in +10 fraction.



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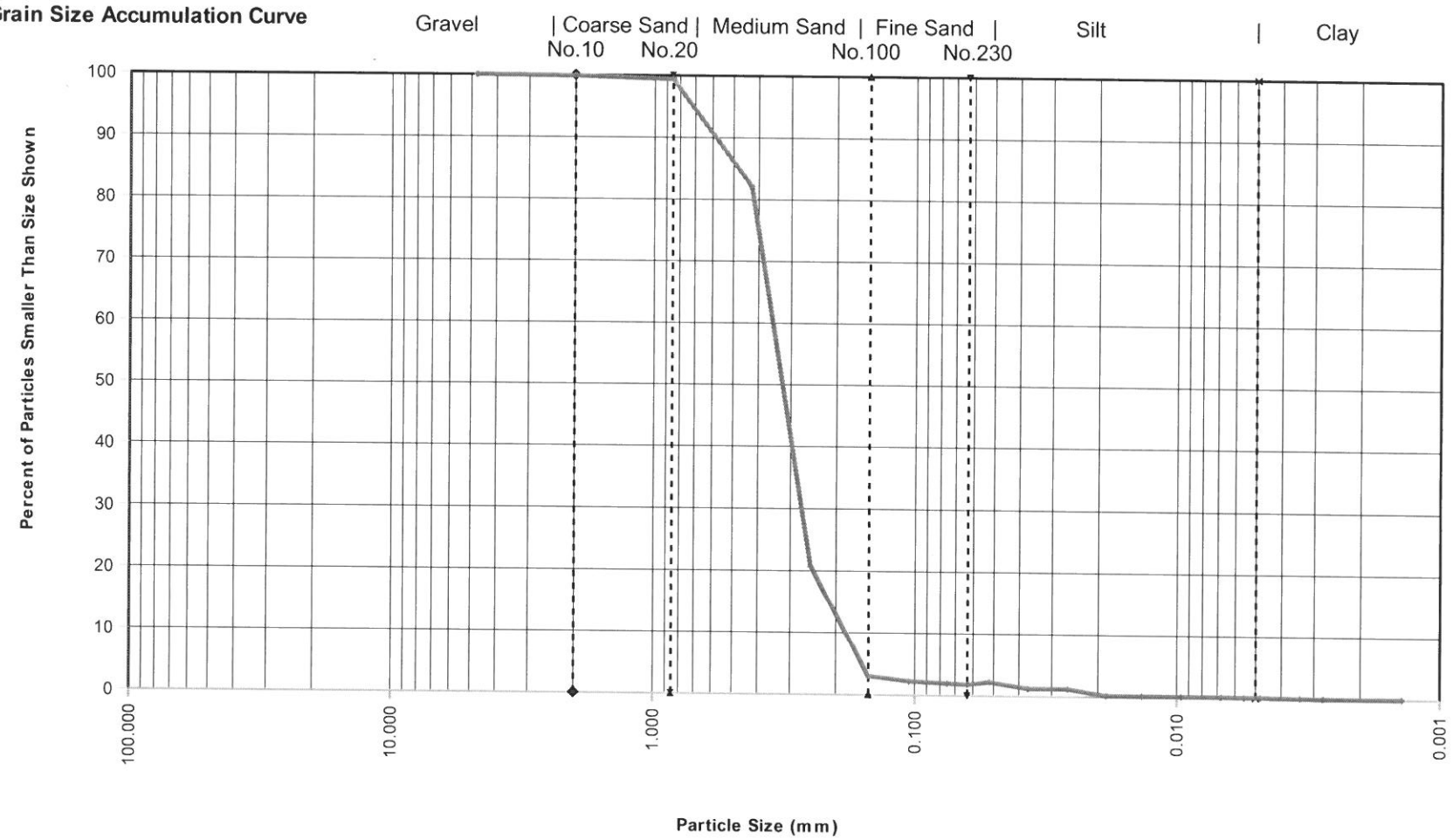
Apex Laboratories, LLC
Particle Size Analysis of Soil by ASTM D 422 Modified

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SG38-190531 (A9F0035-16)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	SAND with trace Silt

Report is complete only if it includes Apex Labs Additional Grain Size Data.
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Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-17		Client Sample ID:	T4-PDI2019-SG38-190531-Dup		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	SAND with trace Silt and Clay			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.249	477.560	466.31	0.99	461.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.309	1.820	0.51	0.51	0.1	99.9
10	2.00	1.301	2.071	0.77	1.28	0.2	99.7
Pan		11.264	476.164	464.90	466.18	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9902		35-17	1.289	16.969	16.815	0.99

Hydrometer Analysis

Start Date/Time	6/19/2019	9:44	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	103.639		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	99.7		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	102.62		Corrected Dry Weight of Soil Tested (g) (W)	102.91

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8.5	21.1	2.65	2.6	14.7	0.01348	0.052	2.57
2	8	21.1	2.15	2.1	14.8	0.01348	0.037	2.08
4	8	21.1	2.15	2.1	14.8	0.01348	0.026	2.08
8	7	21.2	1.18	1.1	15	0.01348	0.018	1.14
15	7	21.1	1.15	1.1	15	0.01348	0.013	1.11
30	6.5	21.1	0.65	0.6	15	0.01348	0.010	0.63
60	6.5	21.1	0.65	0.6	15	0.01348	0.007	0.63
90	6.5	21.1	0.65	0.6	15	0.01348	0.006	0.63
120	6.5	21.1	0.65	0.6	15	0.01348	0.005	0.63
240	6.5	21	0.61	0.6	15	0.01348	0.003	0.60
360	6	20.9	0.08	0.1	15.2	0.01348	0.003	0.08
1440	5	20.5		0.0	15.3	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	1.303	1.682	0.38	2.98	0.4	99.4
40	0.425	1.297	16.426	15.13	70.85	14.7	84.7
60	0.250	6.412	72.004	65.59	365.08	63.7	20.9
100	0.150	1.295	18.687	17.39	443.09	16.9	4.0
140	0.105	1.279	2.262	0.98	447.50	1.0	3.1
200	0.075	1.296	1.704	0.41	449.33	0.4	2.7
230	0.063	1.306	1.471	0.17	450.07	0.2	2.5
			Sum	100.05	230 Minus	2.57	

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

Sample ID: T4-PDI2019-SG38-190531-Dup (A9F0035-17)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*0.28*
Retained on No. 4 sieve	4.75	99.89	0.11
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	99.72	0.17
Sand			*97.22*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	99.35	0.37
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	84.65	14.7
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	20.91	63.74
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	4.01	16.9
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	3.06	0.96
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	2.66	0.4
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	2.5	0.16
Silt and Clay (Measurements in the Clay fraction are noted)			*2.5*
Hydrometer Test	0.0517	2.57	0
Hydrometer Test	0.0367	2.08	0.42
Hydrometer Test	0.0259	2.08	0
Hydrometer Test	0.0185	1.14	0.94
Hydrometer Test	0.0135	1.11	0.03
Hydrometer Test	0.0095	0.63	0.48
Hydrometer Test	0.0067	0.63	0
Hydrometer Test	0.0055	0.63	0
Hydrometer Test Clay	0.0048	0.63	0
Hydrometer Test Clay	0.0034	0.6	0.03
Hydrometer Test Clay	0.0028	0.08	0.52
Hydrometer Test Clay	0.0014	0.08	0

Grain Size Summary	Percent of Total Sample
Gravel	0.3
Sand	97.2
Coarse sand	0.4
Medium sand	95.3
Fine sand	1.5
Silt	1.9
Clay	0.6

Case Narrative for Sample ID: **T4-PDI2019-SG38-190531-Dup (A9F0035-17)**

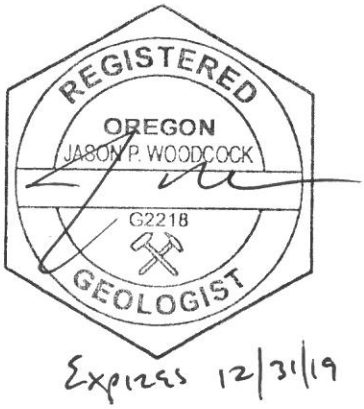
This data is not to be used for engineering purposes.

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.

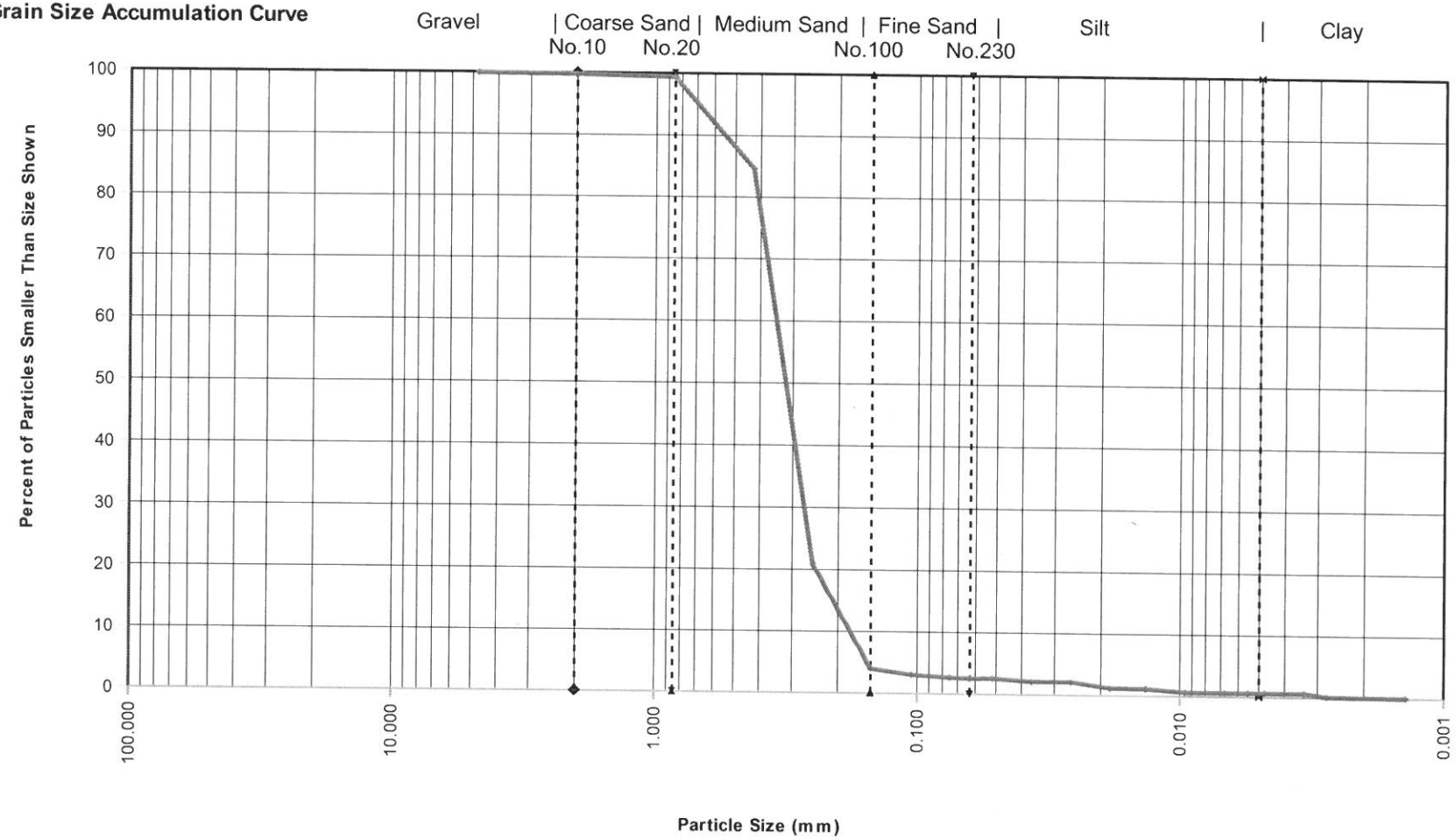
Organic material present in +10 fraction.



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-SG38-190531-Dup (A9F0035-17)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	SAND with trace Silt and Clay

Report is complete only if it includes Apex Labs Additional Grain Size Data.
07/03/19 Anchor Port of Portland - T4 - PDI Page 47 of 740
Page 41 of 41
06/24/2019

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)

A9F0035

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:	06/17/19 17:00 (10 day TAT)		
Received By:	Eli S. Joyner	Date Received:	06/03/19 10:17
Logged In By:	Susan L. Treat	Date Logged In:	06/03/19 17:06

Cooler #1 received at 2.6°C

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

Cooler #2 received at 1.4°C

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

Analysis	Due	TAT	Expires	Comments
A9F0035-01 RB-201905301712 [Water] Sampled 05/30/19 17:12 (GMT-08:00) Pacific Time (US & Canada) 2 Containers				
Project Mgmt				
Data Package	07/18/19 17:00	10	09/06/19 17:12	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/14/19 17:00	10	06/06/19 17:12	PAHs Only
A9F0035-02 T4-PDI2019-SC21-190531-00-01 [Sediment] Sampled 05/31/19 13:45 (GMT-08:00) Pacific Time (US & Canada) 3 Containers				
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 13:45	$2/sample/quarter
A9F0035-03 T4-PDI2019-SC21-190531-01-02 [Sediment] Sampled 05/31/19 13:46 (GMT-08:00) Pacific Time (US & Canada) 3 Containers				
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 13:46	$2/sample/quarter
A9F0035-04 T4-PDI2019-SC21-190531-02-2.72 [Sediment] Sampled 05/31/19 13:46 (GMT-08:00) Pacific Time (US & Canada) 2 Containers				
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 13:46	$2/sample/quarter
A9F0035-05 T4-PDI2019-SC22-190530-00-01 [Sediment] Sampled 05/30/19 14:43 (GMT-08:00) Pacific Time (US & Canada) 3 Containers				
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 14:43	$2/sample/quarter

A9F0035

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**

A9F0035-06 T4-PDI2019-SC22-190530-01-02 [Sediment] Sampled 05/30/19 14:43 (GMT-08:00) Pacific Time (US & Canada) 3 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 14:43	$2/sample/quarter

A9F0035-07 T4-PDI2019-SC22-190530-02-2.52 [Sediment] Sampled 05/30/19 14:44 (GMT-08:00) Pacific Time (US & Canada) 2 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 14:44	$2/sample/quarter

A9F0035-08 T4-PDI2019-SC26-190530-00-01 [Sediment] Sampled 05/30/19 12:08 (GMT-08:00) Pacific Time (US & Canada) 2 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 12:08	$2/sample/quarter

A9F0035-09 T4-PDI2019-SC26-190530-01-02 [Sediment] Sampled 05/30/19 12:08 (GMT-08:00) Pacific Time (US & Canada) 2 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 12:08	$2/sample/quarter

A9F0035-10 T4-PDI2019-SC26-190530-02-2.27 [Sediment] Sampled 05/30/19 12:09 (GMT-08:00) Pacific Time (US & Canada) 1 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 12:09	$2/sample/quarter

A9F0035-11 T4-PDI2019-SC38-190531-00-01 [Sediment] Sampled 05/31/19 11:23 (GMT-08:00) Pacific Time (US & Canada) 3 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 11:23	$2/sample/quarter

A9F0035-12 T4-PDI2019-SC38-190531-01-02 [Sediment] Sampled 05/31/19 11:19 (GMT-08:00) Pacific Time (US & Canada) 3 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 11:19	$2/sample/quarter

A9F0035-13 T4-PDI2019-SC38-190531-02-2.4 [Sediment] Sampled 05/31/19 11:21 (GMT-08:00) Pacific Time (US & Canada) 2 Containers

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 11:21	$2/sample/quarter

A9F0035

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

A9F0035-14 T4-PDI2019-SG21-190531 [Sediment] Sampled 05/31/19 12:56
(GMT-08:00) Pacific Time (US & Canada) 4 Containers

Dry Weight				
Dry Weight	06/06/19 17:00	3	11/27/19 12:56	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/14/19 17:00	10	11/27/19 12:56	
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 12:56	$2/sample/quarter
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/14/19 17:00	10	06/14/19 12:56	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/14/19 17:00	10	11/27/19 12:56	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/14/19 17:00	10	06/28/19 12:56	Units=%

A9F0035-15 T4-PDI2019-SG26-190530 [Sediment] Sampled 05/30/19 11:16
(GMT-08:00) Pacific Time (US & Canada) 4 Containers

Dry Weight				
Dry Weight	06/06/19 17:00	3	11/26/19 11:16	**USE SOLIDS DATA** Make Not Reportable.
Geotechnical				
Grain Size (D422m/PSET)	06/14/19 17:00	10	11/26/19 11:16	
Sample Control				
Archive Samples - Frozen	06/04/19 17:00	1	05/31/19 11:16	$2/sample/quarter
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	06/14/19 17:00	10	06/13/19 11:16	PAHs Only
Wet Chem				
Solids, PSEP 1986	06/14/19 17:00	10	11/26/19 11:16	Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/14/19 17:00	10	06/27/19 11:16	Units=%

A9F0035

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**

A9F0035-16 T4-PDI2019-SG38-190531 [Sediment] Sampled 05/31/19 10:27 (GMT-08:00) Pacific Time (US & Canada) 5 Containers

Dry Weight

Dry Weight	06/06/19 17:00	3	11/27/19 10:27	MS/MSD, **USE SOLIDS DATA** Make Not Reportable.

Geotechnical

Grain Size (D422m/PSET)	06/14/19 17:00	10	11/27/19 10:27	

Sample Control

Archive Samples - Frozen	06/04/19 17:00	1	06/01/19 10:27	$2/sample/quarter

Semivols (Scan)

8270D LL PAH/PHTH/Phenols	06/14/19 17:00	10	06/14/19 10:27	MS/MSD, PAHs Only

Wet Chem

Solids, PSEP 1986	06/14/19 17:00	10	11/27/19 10:27	MS/MSD, Enter TS data for DW. (Units=%)
Total Organic Carbon - Soil (9060A)	06/14/19 17:00	10	06/28/19 10:27	MS/MSD, Units=%

A9F0035-17 T4-PDI2019-SG38-190531-Dup [Sediment] Sampled 05/31/19 10:27 (GMT-08:00) Pacific Time (US & Canada) 1 Containers

Duplicate for grain size from T4-PDI2019-SG38-190531

Geotechnical

Grain Size (D422m/PSET)	06/14/19 17:00	10	11/27/19 10:27	

A9F0035-18 Blank-190524-00-00 [Water] Sampled 05/24/19 17:25 (GMT-08:00) Pacific Time (US & Canada) 1 Containers

Received but not listed on CoC

Sample Control

Hold Sample	06/14/19 17:00	10	02/16/22 17:25	

Reviewed By

Date

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9F0035

COC ID: APEX-20190531-141912

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: CB
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
011	T4-PDI2019-SC38-190531-00-01	N	SE	05/31/2019	11:23	3	☐				
								Archive	NA	-1	-18°C
012	T4-PDI2019-SC38-190531-01-02	N	SE	05/31/2019	11:19	3	☐				
								Archive	NA	-1	-18°C
013	T4-PDI2019-SC38-190531-02-2.4	N	SE	05/31/2019	11:21	2	☐				
								Archive	NA	-1	-18°C
014	T4-PDI2019-SG21-190531	N	SE	05/31/2019	12:56	4	☐				
								Archive	NA	-1	-18°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
015	T4-PDI2019-SG26-190530	N	SE	05/30/2019	11:16	4	☐				
								Archive	NA	-1	-18°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
016	T4-PDI2019-SG38-190531	N	SE	05/31/2019	10:27	6	X				
								Archive	NA	-1	-18°C
								Grain Size	D 422M/PSET	30	Ambient
								PAHs	SW8270DSIM	30	0 - 6 °C
								Percent solids - APEX	SM2540G	30	0 - 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature:	Signature:	Signature	Signature	Signature	Signature
Print Name: Ben Johnson	Print Name: Eli Joyner	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: APEX LABS	Company	Company	Company	Company
Date/Time: 6/3/19 0907	Date/Time: 6/3/19 1017	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 5/31/2019

* 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

A9F0035

COC ID: APEX-20190531-141912

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: CB

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
016	T4-PDI2019-SG38-190531	N	SE	05/31/2019	10:27	6	X				
								TOC	SW9060A	30	0 - 6 °C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Ben Johnson	Print Name: Eli Jayne	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: APEX Labs	Company	Company	Company	Company
Date/Time: 6/3/19 @ 1017	Date/Time: 6/3/19 1017	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 5/31/2019

* 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

A9F0035

COC ID: APEX-20190531-141912

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: CB
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	RB-201905301712	RB	WQ	05/30/2019	17:12	2	☐				
								PAHs	SW8270DSIM	30	
002	T4-PDI2019-SC21-190531-00-01	N	SE	05/31/2019	13:45	3	☐				
								Archive	NA	-1	-18°C
003	T4-PDI2019-SC21-190531-01-02	N	SE	05/31/2019	13:46	3	☐				
								Archive	NA	-1	-18°C
004	T4-PDI2019-SC21-190531-02-2.72	N	SE	05/31/2019	13:46	2	☐				
								Archive	NA	-1	-18°C
005	T4-PDI2019-SC22-190530-00-01	N	SE	05/30/2019	14:43	3	☐				
								Archive	NA	-1	-18°C
006	T4-PDI2019-SC22-190530-01-02	N	SE	05/30/2019	14:43	3	☐				
								Archive	NA	-1	-18°C
007	T4-PDI2019-SC22-190530-02-2.52	N	SE	05/30/2019	14:44	2	☐				
								Archive	NA	-1	-18°C
008	T4-PDI2019-SC26-190530-00-01	N	SE	05/30/2019	12:08	2	☐				
								Archive	NA	-1	-18°C
009	T4-PDI2019-SC26-190530-01-02	N	SE	05/30/2019	12:08	2	☐				
								Archive	NA	-1	-18°C
010	T4-PDI2019-SC26-190530-02-2.27	N	SE	05/30/2019	12:09	1	☐				
								Archive	NA	-1	-18°C
011	T4-PDI2019-SC38-190531-00-01	N	SE	05/31/2019	11:23	3	☐				

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name: Ben Johnson	Print Name: Eli Joyner	Print Name	Print Name	Print Name	Print Name
Company: Anchor QEA	Company: APEX LAB	Company	Company	Company	Company
Date/Time: 6/3/19 @ 1017	Date/Time: 6/3/19 1017	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 5/31/2019

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

APEX LABS COOLER RECEIPT FORM

Client: Anchor QEA Element WO#: A9 F0035

Project/Project #: Port of Portland T4 PDI

Delivery Info:

Date/time received: 6-3-19 @ 1017 By: EJ

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

Cooler Inspection Date/time inspected: 6-3-19 @ 1048 By: EJ

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

Signed/dated by client? Yes X No ___

Signed/dated by Apex? Yes X No ___

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	2.6	1.4					
Received on ice? (Y/N)	Y	Y					
Temp. blanks? (Y/N)	Y	Y					
Ice type: (Gel/Real/Other)	Real	Real					
Condition:	Good	Good					

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

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

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

Samples Inspection: Date/time inspected: 6-3-19 @ 17:10 By: TAG

All samples intact? Yes X No ___ Comments: ___

SR 6/3/19

Bottle labels/COCs agree? ~~Yes~~ X No X Comments: 1L unpreserved amber Blank-190524-00-00 received but not listed on CoC (5/24/19 @ 1725)

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

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

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

Comments ___

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

Comments: ___

Additional information: ___

Labeled by: SR Witness: OM Cooler Inspected by: TAG 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: A9F0035

CLASS: GCMS

METHOD: EPA 8270D

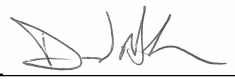
ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
RB-201905301712	A9F0035-01	Water
T4-PDI2019-SG21-190531	A9F0035-14	Sediment
T4-PDI2019-SG26-190530	A9F0035-15	Sediment
T4-PDI2019-SG38-190531	A9F0035-16	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: 6/28/2019 11:47AM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories **SDG:** A9F0035

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
Carbazole	2.00	4.00	ug/kg
Dibenzofuran	1.33	2.67	ug/kg

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

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories **SDG:** A9F0035

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

Batch Matrix: Water

Analyte	MDL	MRL	Units
Acenaphthene	0.0100	0.0200	ug/L
Acenaphthylene	0.0100	0.0200	ug/L
Anthracene	0.0100	0.0200	ug/L
Benz(a)anthracene	0.0100	0.0200	ug/L
Benzo(a)pyrene	0.0150	0.0300	ug/L
Benzo(b)fluoranthene	0.0150	0.0300	ug/L
Benzo(k)fluoranthene	0.0150	0.0300	ug/L
Benzo(g,h,i)perylene	0.0100	0.0200	ug/L
Chrysene	0.0100	0.0200	ug/L
Dibenz(a,h)anthracene	0.0100	0.0200	ug/L
Fluoranthene	0.0100	0.0200	ug/L
Fluorene	0.0100	0.0200	ug/L
Indeno(1,2,3-cd)pyrene	0.0100	0.0200	ug/L
1-Methylnaphthalene	0.0200	0.0400	ug/L
2-Methylnaphthalene	0.0200	0.0400	ug/L
Naphthalene	0.0200	0.0400	ug/L
Phenanthrene	0.0100	0.0200	ug/L
Pyrene	0.0100	0.0200	ug/L
Carbazole	0.0150	0.0300	ug/L
Dibenzofuran	0.0100	0.0200	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

RB-201905301712

Laboratory: Apex Laboratories | SDG: A9F0035

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

Matrix: Water | Laboratory ID: A9F0035-01 | File ID: J06051911.D

Sampled: 05/30/19 17:12 | Prepared: 06/05/19 07:04 | Analyzed: 06/05/19 13:58

Preparation: EPA 3510C (Acid Extraction | Initial/Final: 1010 mL / 1 mL

Batch: 9060576 | Sequence: 9F05024 | Calibration: A9D1505 | Instrument: SV-GCMS10

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
83-32-9	Acenaphthene	1	0.396	U
208-96-8	Acenaphthylene	1	0.00990	U
120-12-7	Anthracene	1	0.00990	U
56-55-3	Benz(a)anthracene	1	0.00990	U
50-32-8	Benzo(a)pyrene	1	0.0149	U
205-99-2	Benzo(b)fluoranthene	1	0.0149	U
207-08-9	Benzo(k)fluoranthene	1	0.0149	U
191-24-2	Benzo(g,h,i)perylene	1	0.00990	U
218-01-9	Chrysene	1	0.00990	U
53-70-3	Dibenz(a,h)anthracene	1	0.00990	U
206-44-0	Fluoranthene	1	0.00990	U
86-73-7	Fluorene	1	0.00990	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.00990	U
90-12-0	1-Methylnaphthalene	1	0.0198	U
91-57-6	2-Methylnaphthalene	1	0.0198	U
91-20-3	Naphthalene	1	0.0198	U
85-01-8	Phenanthrene	1	0.00990	U
129-00-0	Pyrene	1	0.00990	U
86-74-8	Carbazole	1	0.0149	U
132-64-9	Dibenzofuran	1	0.00990	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.95	3.42	69	44 - 120	
2-Fluorobiphenyl (Surr)	4.95	2.32	47	44 - 120	
Phenol-d6 (Surr)	4.95	1.17	24	10 - 120	
p-Terphenyl-d14 (Surr)	4.95	3.42	69	50 - 133	
2-Fluorophenol (Surr)	4.95	1.37	28	19 - 120	
2,4,6-Tribromophenol (Surr)	4.95	3.18	64	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	160867	6.803	206400	6.798	
Naphthalene-d8 (ISTD)	862768	8.076	844504	8.071	
Acenaphthene-d10 (ISTD)	427425	9.857	383862	9.857	
Phenanthrene-d10 (ISTD)	717900	11.371	643192	11.371	
Chrysene-d12 (ISTD)	610251	15.339	517740	15.339	
Perylene-d12 (ISTD)	500281	18.859	447263	18.859	
Dibenz(a,h)anthracene-d14 (ISTD)	465316	21.244	403143	21.25	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SG21-190531

Laboratory:	Apex Laboratories		SDG:	A9F0035	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9F0035-14	File ID:	E06101914.D
Sampled:	05/31/19 12:56	Prepared:	06/07/19 13:14	Analyzed:	06/10/19 16:04
Solids:	63.44	Preparation:	EPA 3546	Initial/Final:	15.6 g / 2 mL
Batch:	9060718	Sequence:	9F10028	Calibration:	A9A3103
Instrument:	SV-GCMS5				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	40	255	D
208-96-8	Acenaphthylene	40	80.6	U
120-12-7	Anthracene	40	252	D
56-55-3	Benz(a)anthracene	40	1810	D
50-32-8	Benzo(a)pyrene	40	2600	D
205-99-2	Benzo(b)fluoranthene	40	3270	D
207-08-9	Benzo(k)fluoranthene	40	1270	D
191-24-2	Benzo(g,h,i)perylene	40	1720	D
218-01-9	Chrysene	40	2100	D
53-70-3	Dibenz(a,h)anthracene	40	355	D
206-44-0	Fluoranthene	40	3570	D
86-73-7	Fluorene	40	144	JD
193-39-5	Indeno(1,2,3-cd)pyrene	40	1770	D
91-57-6	2-Methylnaphthalene	40	162	U
91-20-3	Naphthalene	40	162	U
85-01-8	Phenanthrene	40	1430	D
129-00-0	Pyrene	40	3480	D

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	505	209	41	37 - 122	D
2-Fluorobiphenyl (Surr)	505	244	48	44 - 115	D
p-Terphenyl-d14 (Surr)	505	330	65	54 - 127	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	253283	6.757	188386	6.762	
Naphthalene-d8 (ISTD)	996821	8.003	808977	8.008	
Acenaphthene-d10 (ISTD)	433403	9.779	457364	9.784	
Phenanthrene-d10 (ISTD)	714449	11.292	950149	11.297	
Chrysene-d12 (ISTD)	801428	15.197	911260	15.207	
Perylene-d12 (ISTD)	673016	18.711	753926	18.721	
Dibenz(a,h)anthracene-d14 (ISTD)	582057	21.107	645898	21.112	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SG26-190530

Laboratory: Apex Laboratories | SDG: A9F0035

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

Matrix: Sediment | Laboratory ID: A9F0035-15 | File ID: E06101909.D

Sampled: 05/30/19 11:16 | Prepared: 06/07/19 13:14 | Analyzed: 06/10/19 12:59

Solids: 61.95 | Preparation: EPA 3546 | Initial/Final: 15.34 g / 2 mL

Batch: 9060718 | Sequence: 9F10028 | Calibration: A9A3103 | Instrument: SV-GCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	10000	132000	D
208-96-8	Acenaphthylene	10000	21000	U
120-12-7	Anthracene	10000	104000	D
56-55-3	Benz(a)anthracene	10000	630000	D
50-32-8	Benzo(a)pyrene	10000	964000	D
205-99-2	Benzo(b)fluoranthene	10000	1130000	D
207-08-9	Benzo(k)fluoranthene	10000	487000	D
191-24-2	Benzo(g,h,i)perylene	10000	613000	D
218-01-9	Chrysene	10000	736000	D
53-70-3	Dibenz(a,h)anthracene	10000	124000	D
206-44-0	Fluoranthene	10000	995000	D
86-73-7	Fluorene	10000	54100	D
193-39-5	Indeno(1,2,3-cd)pyrene	10000	681000	D
91-57-6	2-Methylnaphthalene	10000	42100	U
91-20-3	Naphthalene	10000	42100	U
85-01-8	Phenanthrene	10000	518000	D
129-00-0	Pyrene	10000	977000	D

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	526	1930	368	37 - 122	D
2-Fluorobiphenyl (Surr)	526	0.00		44 - 115	D
p-Terphenyl-d14 (Surr)	526	0.00		54 - 127	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	256006	6.762	188386	6.762	
Naphthalene-d8 (ISTD)	987464	8.003	808977	8.008	
Acenaphthene-d10 (ISTD)	439188	9.778	457364	9.784	
Phenanthrene-d10 (ISTD)	778003	11.292	950149	11.297	
Chrysene-d12 (ISTD)	776782	15.202	911260	15.207	
Perylene-d12 (ISTD)	637111	18.716	753926	18.721	
Dibenz(a,h)anthracene-d14 (ISTD)	529122	21.107	645898	21.112	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

T4-PDI2019-SG38-190531

Laboratory:	Apex Laboratories		SDG:	A9F0035	
Client:	Anchor QEA, LLC		Project:	Port of Portland - T4 - PDI	
Matrix:	Sediment	Laboratory ID:	A9F0035-16RE5	File ID:	J06101915.D
Sampled:	05/31/19 10:27	Prepared:	06/07/19 13:14	Analyzed:	06/10/19 16:33
Solids:	72.97	Preparation:	EPA 3546	Initial/Final:	15.19 g / 2 mL
Batch:	9060718	Sequence:	9F10027	Calibration:	A9D1505
Instrument:	SV-GCMS10				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg dry)	Q
83-32-9	Acenaphthene	1	24.9	
208-96-8	Acenaphthylene	1	1.80	U
120-12-7	Anthracene	1	3.21	J
56-55-3	Benz(a)anthracene	1	14.3	
50-32-8	Benzo(a)pyrene	1	19.9	
205-99-2	Benzo(b)fluoranthene	1	30.7	
207-08-9	Benzo(k)fluoranthene	1	9.76	
191-24-2	Benzo(g,h,i)perylene	1	15.6	
218-01-9	Chrysene	1	16.0	
53-70-3	Dibenz(a,h)anthracene	1	3.30	J
206-44-0	Fluoranthene	1	19.7	
86-73-7	Fluorene	1	1.80	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	14.6	
91-57-6	2-Methylnaphthalene	1	3.61	U
91-20-3	Naphthalene	1	3.61	U
85-01-8	Phenanthrene	1	7.99	
129-00-0	Pyrene	1	19.9	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	451	298	66	37 - 122	
2-Fluorobiphenyl (Surr)	451	292	65	44 - 115	
p-Terphenyl-d14 (Surr)	451	407	90	54 - 127	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	258652	6.75	254610	6.75	
Naphthalene-d8 (ISTD)	1061263	8.017	1035312	8.017	
Acenaphthene-d10 (ISTD)	525137	9.798	503997	9.798	
Phenanthrene-d10 (ISTD)	883929	11.312	866763	11.312	
Chrysene-d12 (ISTD)	797940	15.232	803898	15.233	
Perylene-d12 (ISTD)	720268	18.736	749295	18.736	
Dibenz(a,h)anthracene-d14 (ISTD)	710054	21.132	731493	21.132	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Batch: 9060576 Batch Matrix: Water Preparation: EPA 3510C (Acid Extraction)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9060576-BLK2	J06051908.D	06/05/19 07:04	
LCS	9060576-BS2	J06051909.D	06/05/19 07:04	
LCS Dup	9060576-BSD2	J06051910.D	06/05/19 07:04	
RB-201905301712	A9F0035-01	J06051911.D	06/05/19 07:04	

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.

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories SDG: A9F0035

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

Batch: 9060718 Batch Matrix: Sediment Preparation: EPA 3546

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9060718-BLK1	J06101904.D	06/07/19 13:14	
LCS	9060718-BS1	J06101905.D	06/07/19 13:14	
T4-PDI2019-SG38-190531 (MS)	9060718-MS1	J06101916.D	06/07/19 13:14	
T4-PDI2019-SG38-190531 (MSD)	9060718-MSD1	J06101917.D	06/07/19 13:17	
T4-PDI2019-SG21-190531	A9F0035-14	E06101914.D	06/07/19 13:14	
T4-PDI2019-SG26-190530	A9F0035-15	E06101909.D	06/07/19 13:14	
T4-PDI2019-SG38-190531	A9F0035-16RE5	J06101915.D	06/07/19 13:14	

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:	A9F0035
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Water	Laboratory ID:	9060576-BLK2	File ID:	J06051908.D
Prepared:	06/05/19 07:04	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	06/05/19 12:09	Instrument:	SV-GCMS10		
Batch:	9060576	Sequence:	9F05024	Calibration:	A9D1505

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

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.55	3.17	70	44 - 120	
2-Fluorobiphenyl (Surr)	4.55	3.04	67	44 - 120	
Phenol-d6 (Surr)	4.55	1.08	24	10 - 120	
p-Terphenyl-d14 (Surr)	4.55	3.98	87	50 - 133	
2-Fluorophenol (Surr)	4.55	1.81	40	19 - 120	
2,4,6-Tribromophenol (Surr)	4.55	3.52	77	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	236426	6.803	206400	6.798	
Naphthalene-d8 (ISTD)	940946	8.076	844504	8.071	
Acenaphthene-d10 (ISTD)	422916	9.857	383862	9.857	
Phenanthrene-d10 (ISTD)	676456	11.371	643192	11.371	
Chrysene-d12 (ISTD)	546804	15.339	517740	15.339	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9F0035
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Water	Laboratory ID:	9060576-BLK2	File ID:	J06051908.D
Prepared:	06/05/19 07:04	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	06/05/19 12:09	Instrument:	SV-GCMS10		
Batch:	9060576	Sequence:	9F05024	Calibration:	A9D1505

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Perylene-d12 (ISTD)	455534	18.859	447263	18.859	
Dibenz(a,h)anthracene-d14 (ISTD)	411046	21.25	403143	21.25	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9F0035
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9060718-BLK1	File ID:	J06101904.D
Prepared:	06/07/19 13:14	Preparation:	EPA 3546	Initial/Final:	16 g / 2 mL
Analyzed:	06/10/19 09:54	Instrument:	SV-GCMS10		
Batch:	9060718	Sequence:	9F10027	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
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	235	75	37 - 122	
2-Fluorobiphenyl (Surr)	312	232	74	44 - 115	
Phenol-d6 (Surr)	312	235	75	33 - 122	
p-Terphenyl-d14 (Surr)	312	270	86	54 - 127	
2-Fluorophenol (Surr)	312	229	73	35 - 115	
2,4,6-Tribromophenol (Surr)	312	227	73	39 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	257818	6.749	254610	6.75	
Naphthalene-d8 (ISTD)	1076494	8.017	1035312	8.017	
Acenaphthene-d10 (ISTD)	516305	9.798	503997	9.798	
Phenanthrene-d10 (ISTD)	890294	11.312	866763	11.312	
Chrysene-d12 (ISTD)	802449	15.227	803898	15.233	
Perylene-d12 (ISTD)	725144	18.736	749295	18.736	
Dibenz(a,h)anthracene-d14 (ISTD)	706502	21.121	731493	21.132	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Water		
Batch:	9060576	Laboratory ID:	9060576-BS2
Preparation:	EPA 3510C (Acid Extraction)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	4.00	2.63	66	47 - 122
Acenaphthylene	4.00	2.79	70	41 - 130
Anthracene	4.00	3.38	84	57 - 123
Benz(a)anthracene	4.00	3.68	92	58 - 125
Benzo(a)pyrene	4.00	3.81	95	54 - 128
Benzo(b)fluoranthene	4.00	3.80	95	53 - 131
Benzo(k)fluoranthene	4.00	3.59	90	57 - 129
Benzo(g,h,i)perylene	4.00	3.24	81	50 - 134
Chrysene	4.00	3.62	90	59 - 123
Dibenz(a,h)anthracene	4.00	3.64	91	51 - 134
Fluoranthene	4.00	3.43	86	57 - 128
Fluorene	4.00	2.88	72	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.86	97	52 - 133
1-Methylnaphthalene	4.00	1.98	50	41 - 120
2-Methylnaphthalene	4.00	2.00	50	40 - 121
Naphthalene	4.00	2.09	52	40 - 121
Phenanthrene	4.00	3.40	85	59 - 120
Pyrene	4.00	3.41	85	57 - 126
Carbazole	4.00	3.49	87	60 - 122
Dibenzofuran	4.00	2.70	68	53 - 120

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Water		
Batch:	9060576	Laboratory ID:	9060576-BSD2
Preparation:	EPA 3510C (Acid Extraction)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS
Acenaphthene	4.00	3.13	78	17	30	47 - 122
Acenaphthylene	4.00	3.22	80	14	30	41 - 130
Anthracene	4.00	3.51	88	4	30	57 - 123
Benz(a)anthracene	4.00	3.67	92	0.2	30	58 - 125
Benzo(a)pyrene	4.00	3.77	94	1	30	54 - 128
Benzo(b)fluoranthene	4.00	3.85	96	1	30	53 - 131
Benzo(k)fluoranthene	4.00	3.69	92	3	30	57 - 129
Benzo(g,h,i)perylene	4.00	3.46	87	7	30	50 - 134
Chrysene	4.00	3.69	92	2	30	59 - 123
Dibenz(a,h)anthracene	4.00	3.82	95	5	30	51 - 134
Fluoranthene	4.00	3.55	89	4	30	57 - 128
Fluorene	4.00	3.24	81	12	30	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.29	82	16	30	52 - 133
1-Methylnaphthalene	4.00	2.73	68	32 *	30	41 - 120
2-Methylnaphthalene	4.00	2.77	69	32 *	30	40 - 121
Naphthalene	4.00	2.75	69	27	30	40 - 121
Phenanthrene	4.00	3.40	85	0.09	30	59 - 120
Pyrene	4.00	3.50	88	3	30	57 - 126
Carbazole	4.00	3.70	93	6	30	60 - 122
Dibenzofuran	4.00	3.23	81	18	30	53 - 120

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060718	Laboratory ID:	9060718-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	464	87	40 - 122
Acenaphthylene	533	472	89	32 - 132
Anthracene	533	495	93	47 - 123
Benz(a)anthracene	533	505	95	49 - 126
Benzo(a)pyrene	533	514	96	45 - 129
Benzo(b)fluoranthene	533	506	95	45 - 132
Benzo(k)fluoranthene	533	495	93	47 - 132
Benzo(g,h,i)perylene	533	501	94	43 - 134
Chrysene	533	495	93	50 - 124
Dibenz(a,h)anthracene	533	487	91	45 - 134
Fluoranthene	533	521	98	50 - 127
Fluorene	533	484	91	43 - 125
Indeno(1,2,3-cd)pyrene	533	461	86	45 - 133
2-Methylnaphthalene	533	476	89	38 - 122
Naphthalene	533	452	85	35 - 123
Phenanthrene	533	480	90	50 - 121
Pyrene	533	524	98	47 - 127

* = Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

T4-PDI2019-SG38-190531

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060718	Laboratory ID:	9060718-MS1
Preparation:	EPA 3546	Initial/Final:	15.14 g / 2 mL

Source Sample Name: T4-PDI2019-SG38-190531

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	724	24.9	500	66	40 - 122
Acenaphthylene	724	ND	495	68	32 - 132
Anthracene	724	ND	629	87	47 - 123
Benz(a)anthracene	724	14.3	687	93	49 - 126
Benzo(a)pyrene	724	19.9	714	96	45 - 129
Benzo(b)fluoranthene	724	30.7	697	92	45 - 132
Benzo(k)fluoranthene	724	ND	675	93	47 - 132
Benzo(g,h,i)perylene	724	15.6	665	90	43 - 134
Chrysene	724	16.0	678	91	50 - 124
Dibenz(a,h)anthracene	724	ND	665	92	45 - 134
Fluoranthene	724	19.7	705	95	50 - 127
Fluorene	724	ND	535	74	43 - 125
Indeno(1,2,3-cd)pyrene	724	14.6	609	82	45 - 133
2-Methylnaphthalene	724	ND	453	63	38 - 122
Naphthalene	724	ND	441	61	35 - 123
Phenanthrene	724	7.99	601	82	50 - 121
Pyrene	724	19.9	701	94	47 - 127

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

T4-PDI2019-SG38-190531

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Batch: 9060718
Laboratory ID: 9060718-MSD1
Preparation: EPA 3546
Initial/Final: 15.26 g / 2 mL

Source Sample Name: T4-PDI2019-SG38-190531

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % RECOVERY	% RPD	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	718	527	70	5	30	40 - 122
Acenaphthylene	718	534	74	7	30	32 - 132
Anthracene	718	616	86	2	30	47 - 123
Benz(a)anthracene	718	680	93	1	30	49 - 126
Benzo(a)pyrene	718	719	97	0.7	30	45 - 129
Benzo(b)fluoranthene	718	712	95	2	30	45 - 132
Benzo(k)fluoranthene	718	685	95	1	30	47 - 132
Benzo(g,h,i)perylene	718	652	89	2	30	43 - 134
Chrysene	718	662	90	2	30	50 - 124
Dibenz(a,h)anthracene	718	659	92	0.9	30	45 - 134
Fluoranthene	718	708	96	0.4	30	50 - 127
Fluorene	718	537	75	0.3	30	43 - 125
Indeno(1,2,3-cd)pyrene	718	608	83	0.2	30	45 - 133
2-Methylnaphthalene	718	533	74	16	30	38 - 122
Naphthalene	718	498	69	12	30	35 - 123
Phenanthrene	718	599	82	0.3	30	50 - 121
Pyrene	718	692	94	1	30	47 - 127

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
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:	A9F0035
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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Water	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	9060576-BLK2	J06051908.D	06/05/19 12:09
LCS	9060576-BS2	J06051909.D	06/05/19 12:45
LCS Dup	9060576-BSD2	J06051910.D	06/05/19 13:22
RB-201905301712	A9F0035-01	J06051911.D	06/05/19 13:58

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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10027	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9F10027-TUN1	J06101901.D	06/10/19 08:14
Calibration Check	9F10027-CCV1	J06101902.D	06/10/19 08:42
Calibration Blank	9F10027-CCB1	J06101903.D	06/10/19 09:18
Blank	9060718-BLK1	J06101904.D	06/10/19 09:54
LCS	9060718-BS1	J06101905.D	06/10/19 10:30
T4-PDI2019-SG38-190531	A9F0035-16RE5	J06101915.D	06/10/19 16:33
T4-PDI2019-SG38-190531 (MS)	9060718-MS1	J06101916.D	06/10/19 17:09
T4-PDI2019-SG38-190531 (MSD)	9060718-MSD1	J06101917.D	06/10/19 17:46

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10028	Instrument:	SV-GCMS5
Matrix:	Sediment	Calibration:	A9A3103

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9F10028-TUN2	E06101905.D	06/10/19 10:39
Calibration Check	9F10028-CCV2	E06101907.D	06/10/19 11:45
Calibration Blank	9F10028-CCB1	E06101908.D	06/10/19 12:22
T4-PDI2019-SG26-190530	A9F0035-15	E06101909.D	06/10/19 12:59
T4-PDI2019-SG21-190531	A9F0035-14	E06101914.D	06/10/19 16:04

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.

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
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:	A9F0035
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:	A9F0035
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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	J06101901.D	Injection Date:	06/10/19
Instrument ID:	SV-GCMS10	Injection Time:	08:14
Sequence:	9F10027	Lab Sample ID:	9F10027-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	28.00	PASS
m/z 68	Less than 2% of m/z 69	1.64	PASS
m/z 69	Less than 100% of m/z 198	33.06	PASS
m/z 70	Less than 2% of m/z 69	0.40	PASS
m/z 127	10 - 80% of m/z 198	53.30	PASS
m/z 197	Less than 2% of m/z 198	0.46	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.79	PASS
m/z 275	10 - 60% of m/z 198	27.61	PASS
m/z 365	1 - 100% of m/z 198	3.73	PASS
m/z 441	Less than 24% of m/z 442	15.01	PASS
m/z 442	50 - 200% of m/z 198	111.75	PASS
m/z 443	15 - 24% of m/z 442	19.69	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Lab File ID:	E06101905.D	Injection Date:	06/10/19
Instrument ID:	SV-GCMS5	Injection Time:	10:39
Sequence:	9F10028	Lab Sample ID:	9F10028-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 51	10 - 80% of m/z 198	43.76	PASS
m/z 68	Less than 2% of m/z 69	0.00	PASS
m/z 69	Less than 100% of m/z 198	47.10	PASS
m/z 70	Less than 2% of m/z 69	0.47	PASS
m/z 127	10 - 80% of m/z 198	52.96	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	6.78	PASS
m/z 275	10 - 60% of m/z 198	27.18	PASS
m/z 365	1 - 100% of m/z 198	3.29	PASS
m/z 441	Less than 24% of m/z 442	15.28	PASS
m/z 442	50 - 200% of m/z 198	103.65	PASS
m/z 443	15 - 24% of m/z 442	19.09	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: A9F0035

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: A9F0035
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: A9F0035
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: A9F0035
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: A9F0035
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: A9F0035

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: A9F0035
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

Client: Anchor QEA, LLC

Calibration: A9D1505

SDG: A9F0035

Project: Port of Portland - T4 - PDI

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: A9F0035
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: A9F0035
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				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
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:	A9F0035
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:	A9F0035
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:	A9F0035
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

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS10	Calibration:	A9D1505
Lab File ID:	J06101902.D	Calibration Date:	04/15/19 14:53
Sequence:	9F10027	Injection Date:	06/10/19
Lab Sample ID:	9F10027-CCV1	Injection Time:	08:42

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1040		1.28667	1.335202	3.8	20
Acenaphthylene	Ave	1000	1060		2.000623	2.122652	6.1	20
Anthracene	Ave	1000	1110		1.056941	1.172127	10.9	20
Benz(a)anthracene	Ave	1000	1090		1.091349	1.185076	8.6	20
Benzo(a)pyrene	XXX	1000	1110	11.2				20
Benzo(b)fluoranthene	XXX	1000	1110	10.8				20
Benzo(k)fluoranthene	XXX	1000	1070	6.5				20
Benzo(g,h,i)perylene	Ave	1000	1090		1.081412	1.175749	8.7	20
Chrysene	Ave	1000	1060		1.058934	1.120038	5.8	20
Dibenz(a,h)anthracene	Ave	1000	1050		1.00084	1.054072	5.3	20
Fluoranthene	Ave	1000	1150		1.082262	1.248145	15.3	20
Fluorene	Ave	1000	1060		1.316347	1.401373	6.5	20
Indeno(1,2,3-cd)pyrene	Ave	1000	988		1.118845	1.104888	-1.2	20
2-Methylnaphthalene	Ave	1000	1110		0.6788702	0.7516768	10.7	20
Naphthalene	Ave	1000	1030		1.035252	1.069168	3.3	20
Phenanthrene	Ave	1000	1060		1.085248	1.1507	6.0	20
Pyrene	Ave	1000	1110		1.115312	1.242727	11.4	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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Instrument ID:	SV-GCMS5	Calibration:	A9A3103
Lab File ID:	E06101907.D	Calibration Date:	01/31/19 12:46
Sequence:	9F10028	Injection Date:	06/10/19
Lab Sample ID:	9F10028-CCV2	Injection Time:	11:45

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1020		1.320947	1.345847	1.9	20
Acenaphthylene	Ave	1000	1040		1.948127	2.027558	4.1	20
Anthracene	Ave	1000	1030		1.126296	1.160054	3.0	20
Benz(a)anthracene	Ave	1000	978		1.128129	1.103439	-2.2	20
Benzo(a)pyrene	Ave	1000	1130		0.9593879	1.084136	13.0	20
Benzo(b)fluoranthene	Ave	1000	1120		1.056647	1.180288	11.7	20
Benzo(k)fluoranthene	Ave	1000	1160		1.038438	1.205925	16.1	20
Benzo(g,h,i)perylene	Ave	1000	1020		1.079251	1.100338	2.0	20
Chrysene	Ave	1000	1020		1.074697	1.090977	1.5	20
Dibenz(a,h)anthracene	Ave	1000	1040		1.003913	1.04188	3.8	20
Fluoranthene	Ave	1000	1070		1.138647	1.221335	7.3	20
Fluorene	Ave	1000	1130		1.375044	1.558518	13.3	20
Indeno(1,2,3-cd)pyrene	Ave	1000	995		1.096233	1.09081	-0.5	20
1-Methylnaphthalene	Ave	1000	1120		0.6426808	0.7175185	11.6	20
2-Methylnaphthalene	Ave	1000	1120		0.6711103	0.751878	12.0	20
Naphthalene	Ave	1000	1000		1.066921	1.066549	-0.03	20
Phenanthrene	Ave	1000	1040		1.097729	1.136914	3.6	20
Pyrene	Ave	1000	1090		1.156671	1.263063	9.2	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:	A9F0035
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:	A9F0035
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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Water	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 (9060576-BLK2)			Lab File ID: J06051908.D		Analyzed: 06/05/19 12:09			
Nitrobenzene-d5 (Surr)	4.55	70	44 - 120	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	4.55	67	44 - 120	9.162	9.169333	-0.0073	+/-1.0	
Phenol-d6 (Surr)	4.55	24	10 - 120	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	4.55	87	50 - 133	13.237	13.2467	-0.0097	+/-1.0	
2-Fluorophenol (Surr)	4.55	40	19 - 120	5.541	5.5363	0.0047	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.55	77	43 - 140	10.659	10.669	-0.0100	+/-1.0	
LCS (9060576-BS2)			Lab File ID: J06051909.D		Analyzed: 06/05/19 12:45			
Nitrobenzene-d5 (Surr)	5.00	74	44 - 120	7.354	7.358778	-0.0048	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	68	44 - 120	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	5.00	24	10 - 120	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	88	50 - 133	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	5.00	39	19 - 120	5.557	5.5363	0.0207	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	80	43 - 140	10.659	10.669	-0.0100	+/-1.0	
LCS Dup (9060576-BSD2)			Lab File ID: J06051910.D		Analyzed: 06/05/19 13:22			
Nitrobenzene-d5 (Surr)	5.00	76	44 - 120	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	72	44 - 120	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	5.00	29	10 - 120	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	89	50 - 133	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	5.00	41	19 - 120	5.546	5.5363	0.0097	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	80	43 - 140	10.659	10.669	-0.0100	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9D1505

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
RB-201905301712 (A9F0035-01)			Lab File ID: J06051911.D		Analyzed: 06/05/19 13:58			
Nitrobenzene-d5 (Surr)	4.95	69	44 - 120	7.349	7.358778	-0.0098	+/-1.0	
2-Fluorobiphenyl (Surr)	4.95	47	44 - 120	9.156	9.169333	-0.0133	+/-1.0	
Phenol-d6 (Surr)	4.95	24	10 - 120	6.455	6.441556	0.0134	+/-1.0	
p-Terphenyl-d14 (Surr)	4.95	69	50 - 133	13.232	13.2467	-0.0147	+/-1.0	
2-Fluorophenol (Surr)	4.95	28	19 - 120	5.541	5.5363	0.0047	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.95	64	43 - 140	10.659	10.669	-0.0100	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10027	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 (9F10027-CCV1)			Lab File ID: J06101902.D		Analyzed: 06/10/19 08:42			
Nitrobenzene-d5 (Surr)	1000	113	80 - 120	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	111	80 - 120	9.098	9.169333	-0.0713	+/-1.0	
Phenol-d6 (Surr)	1000	115	80 - 120	6.391	6.441556	-0.0506	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	108	80 - 120	13.152	13.2467	-0.0947	+/-1.0	
2-Fluorophenol (Surr)	1000	118	80 - 120	5.493	5.5363	-0.0433	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	106	80 - 120	10.601	10.669	-0.0680	+/-1.0	
Calibration Blank (9F10027-CCB1)			Lab File ID: J06101903.D		Analyzed: 06/10/19 09:18			
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	5.589	5.5363	0.0527	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.669	-10.6690	+/-1.0	
Blank (9060718-BLK1)			Lab File ID: J06101904.D		Analyzed: 06/10/19 09:54			
Nitrobenzene-d5 (Surr)	312	75	37 - 122	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	312	74	44 - 115	9.097	9.169333	-0.0723	+/-1.0	
Phenol-d6 (Surr)	312	75	33 - 122	6.396	6.441556	-0.0456	+/-1.0	
p-Terphenyl-d14 (Surr)	312	86	54 - 127	13.152	13.2467	-0.0947	+/-1.0	
2-Fluorophenol (Surr)	312	73	35 - 115	5.503	5.5363	-0.0333	+/-1.0	
2,4,6-Tribromophenol (Surr)	312	73	39 - 132	10.6	10.669	-0.0690	+/-1.0	
LCS (9060718-BS1)			Lab File ID: J06101905.D		Analyzed: 06/10/19 10:30			
Nitrobenzene-d5 (Surr)	333	88	37 - 122	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	333	88	44 - 115	9.098	9.169333	-0.0713	+/-1.0	
Phenol-d6 (Surr)	333	86	33 - 122	6.391	6.441556	-0.0506	+/-1.0	
p-Terphenyl-d14 (Surr)	333	92	54 - 127	13.147	13.2467	-0.0997	+/-1.0	
2-Fluorophenol (Surr)	333	85	35 - 115	5.493	5.5363	-0.0433	+/-1.0	
2,4,6-Tribromophenol (Surr)	333	90	39 - 132	10.601	10.669	-0.0680	+/-1.0	
T4-PDI2019-SG38-190531 (A9F0035-16RE5)			Lab File ID: J06101915.D		Analyzed: 06/10/19 16:33			
Nitrobenzene-d5 (Surr)	451	66	37 - 122	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	451	65	44 - 115	9.098	9.169333	-0.0713	+/-1.0	
p-Terphenyl-d14 (Surr)	451	90	54 - 127	13.152	13.2467	-0.0947	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10027	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
Matrix Spike (9060718-MS1)			Lab File ID: J06101916.D		Analyzed: 06/10/19 17:09			
Nitrobenzene-d5 (Surr)	453	67	37 - 122	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	453	64	44 - 115	9.098	9.169333	-0.0713	+/-1.0	
Phenol-d6 (Surr)	453	61	33 - 122	6.391	6.441556	-0.0506	+/-1.0	
p-Terphenyl-d14 (Surr)	453	90	54 - 127	13.152	13.2467	-0.0947	+/-1.0	
2-Fluorophenol (Surr)	453	55	35 - 115	5.493	5.5363	-0.0433	+/-1.0	
2,4,6-Tribromophenol (Surr)	453	85	39 - 132	10.601	10.669	-0.0680	+/-1.0	
Matrix Spike Dup (9060718-MSD1)			Lab File ID: J06101917.D		Analyzed: 06/10/19 17:46			
Nitrobenzene-d5 (Surr)	449	80	37 - 122	7.295	7.358778	-0.0638	+/-1.0	
2-Fluorobiphenyl (Surr)	449	75	44 - 115	9.098	9.169333	-0.0713	+/-1.0	
Phenol-d6 (Surr)	449	76	33 - 122	6.391	6.441556	-0.0506	+/-1.0	
p-Terphenyl-d14 (Surr)	449	96	54 - 127	13.147	13.2467	-0.0997	+/-1.0	
2-Fluorophenol (Surr)	449	76	35 - 115	5.493	5.5363	-0.0433	+/-1.0	
2,4,6-Tribromophenol (Surr)	449	88	39 - 132	10.601	10.669	-0.0680	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10028	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 (9F10028-CCV2)			Lab File ID: E06101907.D		Analyzed: 06/10/19 11:45			
Nitrobenzene-d5 (Surr)	1000	114	80 - 120	7.291	7.381	-0.0900	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	99	80 - 120	9.083	9.1815	-0.0985	+/-1.0	
Phenol-d6 (Surr)	1000	104	80 - 120	6.403	6.4784	-0.0754	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	103	80 - 120	13.127	13.2814	-0.1544	+/-1.0	
2-Fluorophenol (Surr)	1000	103	80 - 120	5.553	5.631	-0.0780	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	120	80 - 120	10.586	10.6855	-0.0995	+/-1.0	
Calibration Blank (9F10028-CCB1)			Lab File ID: E06101908.D		Analyzed: 06/10/19 12:22			
Nitrobenzene-d5 (Surr)			37 - 122	7.313	7.381	-0.0680	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 115	0	9.1815	-9.1815	+/-1.0	
Phenol-d6 (Surr)			33 - 122	0	6.4784	-6.4784	+/-1.0	
p-Terphenyl-d14 (Surr)			54 - 127	0	13.2814	-13.2814	+/-1.0	
2-Fluorophenol (Surr)			35 - 115	0	5.631	-5.6310	+/-1.0	
2,4,6-Tribromophenol (Surr)			39 - 132	0	10.6855	-10.6855	+/-1.0	
T4-PDI2019-SG26-190530 (A9F0035-15)			Lab File ID: E06101909.D		Analyzed: 06/10/19 12:59			
Nitrobenzene-d5 (Surr)	526	368	37 - 122	7.318	7.381	-0.0630	+/-1.0	*
2-Fluorobiphenyl (Surr)	526		44 - 115	0	9.1815	-9.1815	+/-1.0	*
p-Terphenyl-d14 (Surr)	526		54 - 127	0	13.2814	-13.2814	+/-1.0	*
T4-PDI2019-SG21-190531 (A9F0035-14)			Lab File ID: E06101914.D		Analyzed: 06/10/19 16:04			
Nitrobenzene-d5 (Surr)	505	41	37 - 122	7.297	7.381	-0.0840	+/-1.0	
2-Fluorobiphenyl (Surr)	505	48	44 - 115	9.083	9.1815	-0.0985	+/-1.0	
p-Terphenyl-d14 (Surr)	505	65	54 - 127	13.121	13.2814	-0.1604	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Water	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 (9060576-BLK2)			Lab File ID: J06051908.D			Analyzed: 06/05/19 12:09			
1,4-Dichlorobenzene-d4 (ISTD)	236426	6.803	206400	6.798	115	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	940946	8.076	844504	8.071	111	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	422916	9.857	383862	9.857	110	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	676456	11.371	643192	11.371	105	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	546804	15.339	517740	15.339	106	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	455534	18.859	447263	18.859	102	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	411046	21.25	403143	21.25	102	50 - 200	0.0000	+/-0.50	
LCS (9060576-BS2)			Lab File ID: J06051909.D			Analyzed: 06/05/19 12:45			
1,4-Dichlorobenzene-d4 (ISTD)	246892	6.803	206400	6.798	120	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	988101	8.076	844504	8.071	117	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	421341	9.857	383862	9.857	110	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	610994	11.371	643192	11.371	95	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	465272	15.34	517740	15.339	90	50 - 200	0.0010	+/-0.50	
Perylene-d12 (ISTD)	408551	18.859	447263	18.859	91	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	380508	21.25	403143	21.25	94	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F05024	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9D1505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (9060576-BSD2)			Lab File ID: J06051910.D			Analyzed: 06/05/19 13:22			
1,4-Dichlorobenzene-d4 (ISTD)	232851	6.803	206400	6.798	113	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	958743	8.076	844504	8.071	114	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	434177	9.857	383862	9.857	113	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	701450	11.371	643192	11.371	109	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	546780	15.339	517740	15.339	106	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	464626	18.859	447263	18.859	104	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	415513	21.25	403143	21.25	103	50 - 200	0.0000	+/-0.50	
RB-201905301712 (A9F0035-01)			Lab File ID: J06051911.D			Analyzed: 06/05/19 13:58			
1,4-Dichlorobenzene-d4 (ISTD)	160867	6.803	206400	6.798	78	50 - 200	0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	862768	8.076	844504	8.071	102	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	427425	9.857	383862	9.857	111	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	717900	11.371	643192	11.371	112	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	610251	15.339	517740	15.339	118	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	500281	18.859	447263	18.859	112	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	465316	21.244	403143	21.25	115	50 - 200	-0.0060	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10027	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 (9F10027-CCV1)			Lab File ID: J06101902.D			Analyzed: 06/10/19 08:42			
1,4-Dichlorobenzene-d4 (ISTD)	254610	6.75	207595	6.808	123	50 - 200	-0.0580	+/-0.50	
Naphthalene-d8 (ISTD)	1035312	8.017	870566	8.081	119	50 - 200	-0.0640	+/-0.50	
Acenaphthene-d10 (ISTD)	503997	9.798	408985	9.868	123	50 - 200	-0.0700	+/-0.50	
Phenanthrene-d10 (ISTD)	866763	11.312	701196	11.381	124	50 - 200	-0.0690	+/-0.50	
Chrysene-d12 (ISTD)	803898	15.233	609064	15.355	132	50 - 200	-0.1220	+/-0.50	
Perylene-d12 (ISTD)	749295	18.736	550560	18.875	136	50 - 200	-0.1390	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	731493	21.132	510954	21.266	143	50 - 200	-0.1340	+/-0.50	
Calibration Blank (9F10027-CCB1)			Lab File ID: J06101903.D			Analyzed: 06/10/19 09:18			
1,4-Dichlorobenzene-d4 (ISTD)	258066	6.75	254610	6.75	101	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1047899	8.017	1035312	8.017	101	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	484864	9.793	503997	9.798	96	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	787745	11.312	866763	11.312	91	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	682469	15.227	803898	15.233	85	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	608381	18.731	749295	18.736	81	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	545021	21.121	731493	21.132	75	50 - 200	-0.0110	+/-0.50	
Blank (9060718-BLK1)			Lab File ID: J06101904.D			Analyzed: 06/10/19 09:54			
1,4-Dichlorobenzene-d4 (ISTD)	257818	6.749	254610	6.75	101	50 - 200	-0.0010	+/-0.50	
Naphthalene-d8 (ISTD)	1076494	8.017	1035312	8.017	104	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	516305	9.798	503997	9.798	102	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	890294	11.312	866763	11.312	103	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	802449	15.227	803898	15.233	100	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	725144	18.736	749295	18.736	97	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	706502	21.121	731493	21.132	97	50 - 200	-0.0110	+/-0.50	
LCS (9060718-BS1)			Lab File ID: J06101905.D			Analyzed: 06/10/19 10:30			
1,4-Dichlorobenzene-d4 (ISTD)	262071	6.75	254610	6.75	103	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1038521	8.017	1035312	8.017	100	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	513020	9.798	503997	9.798	102	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	900124	11.312	866763	11.312	104	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	826482	15.232	803898	15.233	103	50 - 200	-0.0010	+/-0.50	
Perylene-d12 (ISTD)	772858	18.741	749295	18.736	103	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	754619	21.132	731493	21.132	103	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10027	Instrument:	SV-GCMS10
Matrix:	Sediment	Calibration:	A9D1505

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Duplicate (9060718-DUP1)			Lab File ID: J06101909.D			Analyzed: 06/10/19 12:54			
1,4-Dichlorobenzene-d4 (ISTD)	239827	6.75	254610	6.75	94	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1039820	8.017	1035312	8.017	100	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	532597	9.798	503997	9.798	106	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	926415	11.312	866763	11.312	107	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	814174	15.233	803898	15.233	101	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	759140	18.736	749295	18.736	101	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	761337	21.132	731493	21.132	104	50 - 200	0.0000	+/-0.50	
T4-PDI2019-SG38-190531 (A9F0035-16RE5)			Lab File ID: J06101915.D			Analyzed: 06/10/19 16:33			
1,4-Dichlorobenzene-d4 (ISTD)	258652	6.75	254610	6.75	102	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1061263	8.017	1035312	8.017	103	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	525137	9.798	503997	9.798	104	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	883929	11.312	866763	11.312	102	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	797940	15.232	803898	15.233	99	50 - 200	-0.0010	+/-0.50	
Perylene-d12 (ISTD)	720268	18.736	749295	18.736	96	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	710054	21.132	731493	21.132	97	50 - 200	0.0000	+/-0.50	
Matrix Spike (9060718-MS1)			Lab File ID: J06101916.D			Analyzed: 06/10/19 17:09			
1,4-Dichlorobenzene-d4 (ISTD)	259765	6.75	254610	6.75	102	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1077807	8.017	1035312	8.017	104	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	540094	9.798	503997	9.798	107	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	930494	11.312	866763	11.312	107	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	831515	15.238	803898	15.233	103	50 - 200	0.0050	+/-0.50	
Perylene-d12 (ISTD)	764386	18.741	749295	18.736	102	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	753933	21.132	731493	21.132	103	50 - 200	0.0000	+/-0.50	
Matrix Spike Dup (9060718-MSD1)			Lab File ID: J06101917.D			Analyzed: 06/10/19 17:46			
1,4-Dichlorobenzene-d4 (ISTD)	266507	6.75	254610	6.75	105	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1081554	8.017	1035312	8.017	104	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	541127	9.798	503997	9.798	107	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	925812	11.312	866763	11.312	107	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	831448	15.233	803898	15.233	103	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	755535	18.741	749295	18.736	101	50 - 200	0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	752666	21.132	731493	21.132	103	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F10028	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 (9F10028-CCV2)			Lab File ID: E06101907.D			Analyzed: 06/10/19 11:45			
1,4-Dichlorobenzene-d4 (ISTD)	188386	6.762	286436	6.848	66	50 - 200	-0.0860	+/-0.50	
Naphthalene-d8 (ISTD)	808977	8.008	1096117	8.099	74	50 - 200	-0.0910	+/-0.50	
Acenaphthene-d10 (ISTD)	457364	9.784	493423	9.88	93	50 - 200	-0.0960	+/-0.50	
Phenanthrene-d10 (ISTD)	950149	11.297	840808	11.399	113	50 - 200	-0.1020	+/-0.50	
Chrysene-d12 (ISTD)	911260	15.207	707423	15.416	129	50 - 200	-0.2090	+/-0.50	
Perylene-d12 (ISTD)	753926	18.721	630113	18.951	120	50 - 200	-0.2300	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	645898	21.112	502143	21.348	129	50 - 200	-0.2360	+/-0.50	
Calibration Blank (9F10028-CCB1)			Lab File ID: E06101908.D			Analyzed: 06/10/19 12:22			
1,4-Dichlorobenzene-d4 (ISTD)	258172	6.762	188386	6.762	137	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	943520	8.003	808977	8.008	117	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	433622	9.779	457364	9.784	95	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	741790	11.292	950149	11.297	78	50 - 200	-0.0050	+/-0.50	
Chrysene-d12 (ISTD)	707215	15.202	911260	15.207	78	50 - 200	-0.0050	+/-0.50	
Perylene-d12 (ISTD)	566475	18.716	753926	18.721	75	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	469479	21.107	645898	21.112	73	50 - 200	-0.0050	+/-0.50	
T4-PDI2019-SG26-190530 (A9F0035-15)			Lab File ID: E06101909.D			Analyzed: 06/10/19 12:59			
1,4-Dichlorobenzene-d4 (ISTD)	256006	6.762	188386	6.762	136	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	987464	8.003	808977	8.008	122	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	439188	9.778	457364	9.784	96	50 - 200	-0.0060	+/-0.50	
Phenanthrene-d10 (ISTD)	778003	11.292	950149	11.297	82	50 - 200	-0.0050	+/-0.50	
Chrysene-d12 (ISTD)	776782	15.202	911260	15.207	85	50 - 200	-0.0050	+/-0.50	
Perylene-d12 (ISTD)	637111	18.716	753926	18.721	85	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	529122	21.107	645898	21.112	82	50 - 200	-0.0050	+/-0.50	
T4-PDI2019-SG21-190531 (A9F0035-14)			Lab File ID: E06101914.D			Analyzed: 06/10/19 16:04			
1,4-Dichlorobenzene-d4 (ISTD)	253283	6.757	188386	6.762	134	50 - 200	-0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	996821	8.003	808977	8.008	123	50 - 200	-0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	433403	9.779	457364	9.784	95	50 - 200	-0.0050	+/-0.50	
Phenanthrene-d10 (ISTD)	714449	11.292	950149	11.297	75	50 - 200	-0.0050	+/-0.50	
Chrysene-d12 (ISTD)	801428	15.197	911260	15.207	88	50 - 200	-0.0100	+/-0.50	
Perylene-d12 (ISTD)	673016	18.711	753926	18.721	89	50 - 200	-0.0100	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	582057	21.107	645898	21.112	90	50 - 200	-0.0050	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories SDG: A9F0035

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
RB-201905301712	05/30/19 17:12	06/03/19 10:17	06/05/19 07:04	5.58	7.00	06/05/19 13:58	0.29	40.00	
T4-PDI2019-SG21-190531	05/31/19 12:56	06/03/19 10:17	06/07/19 13:14	7.01	14.00	06/10/19 16:04	3.12	40.00	
T4-PDI2019-SG26-190530	05/30/19 11:16	06/03/19 10:17	06/07/19 13:14	8.08	14.00	06/10/19 12:59	2.99	40.00	
T4-PDI2019-SG38-190531	05/31/19 10:27	06/03/19 10:17	06/07/19 13:14	7.12	14.00	06/10/19 16:33	3.14	40.00	

Apex Laboratories

SDG: A9F0035

CLASS: WET

METHOD: EPA 9060Amod

ANALYSES DATA PACKAGE COVER PAGE

EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
T4-PDI2019-SG21-190531	A9F0035-14	Sediment
T4-PDI2019-SG26-190530	A9F0035-15	Sediment
T4-PDI2019-SG38-190531	A9F0035-16	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: 6/28/2019 11:47AM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 9060Amod

Laboratory: Apex Laboratories **SDG:** A9F0035

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

T4-PDI2019-SG21-190531

Laboratory: Apex Laboratories SDG: A9F0035

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

Matrix: Sediment Laboratory ID: A9F0035-14

Sampled: 05/31/19 12:56 Prepared: 06/07/19 07:00 Analyzed: 06/11/19 17:00

Solids: 63.44 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9060687 Sequence: 9F11024 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.68	1		EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SG26-190530

Laboratory: Apex Laboratories SDG: A9F0035

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

Matrix: Sediment Laboratory ID: A9F0035-15

Sampled: 05/30/19 11:16 Prepared: 06/07/19 07:00 Analyzed: 06/11/19 17:00

Solids: 61.95 Preparation: PSEP TOC Initial/Final: 5 g / 5 g

Batch: 9060687 Sequence: 9F11024 Calibration: A8B0203 Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	4.6	1	E	EPA 9060Amod

INORGANIC ANALYSIS DATA SHEET

EPA 9060Amod

T4-PDI2019-SG38-190531

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-16
Sampled: 05/31/19 10:27
Prepared: 06/07/19 07:00
Analyzed: 06/11/19 17:00
Solids: 72.97
Preparation: PSEP TOC
Initial/Final: 5 g / 5 g
Batch: 9060687
Sequence: 9F11024
Calibration: A8B0203
Instrument: TOC

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TOC	Total Organic Carbon	0.038	1		EPA 9060Amod

PREPARATION BATCH SUMMARY

EPA 9060Amod

Laboratory: Apex Laboratories SDG: A9F0035

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

Batch: 9060687 Batch Matrix: Sediment Preparation: PSEP TOC

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9060687-BLK1		06/07/19 07:00	
LCS	9060687-BS1		06/07/19 07:00	
T4-PDI2019-SG38-190531 (Dup)	9060687-DUP1		06/07/19 07:00	
T4-PDI2019-SG21-190531	A9F0035-14		06/07/19 07:00	
T4-PDI2019-SG26-190530	A9F0035-15		06/07/19 07:00	
T4-PDI2019-SG38-190531	A9F0035-16		06/07/19 07:00	

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

METHOD BLANK DATA SHEET

EPA 9060Amod

Laboratory:	Apex Laboratories			SDG:	A9F0035
Client:	Anchor QEA, LLC			Project:	Port of Portland - T4 - PDI
Matrix:	Sediment	Laboratory ID:	9060687-BLK1	File ID:	
Prepared:	06/07/19 07:00	Preparation:	PSEP TOC	Initial/Final:	5 g / 5 g
Analyzed:	06/11/19 17:00	Instrument:	TOC		
Batch:	9060687	Sequence:	9F11024	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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Matrix:	Sediment		
Batch:	9060687	Laboratory ID:	9060687-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	9800	98	90 - 110

* = Values outside of QC limits

DUPLICATES

T4-PDI2019-SG38-190531

EPA 9060Amod

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Sediment
Batch: 9060687
Preparation: PSEP TOC
Source Sample Name: T4-PDI2019-SG38-190531

SDG: A9F0035
Project: Port of Portland - T4 - PDI
Laboratory ID: 9060687-DUP1
Lab Source ID: A9F0035-16
Initial/Final: 5 g / 5 g
% Solids: 72.97

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Organic Carbon	20	0.038		0.038		1		EPA 9060Amod

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060Amod

Laboratory:	Apex Laboratories	SDG:	A9F0035
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:	A9F0035
Client:	Anchor QEA, LLC	Project:	Port of Portland - T4 - PDI
Sequence:	9F11024	Instrument:	TOC
Matrix:	Sediment	Calibration:	A8B0203

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	9F11024-CCV1		06/11/19 17:00
Calibration Blank	9F11024-CCB1		06/11/19 17:00
Blank	9060687-BLK1		06/11/19 17:00
LCS	9060687-BS1		06/11/19 17:00
T4-PDI2019-SG21-190531	A9F0035-14		06/11/19 17:00
T4-PDI2019-SG26-190530	A9F0035-15		06/11/19 17:00
T4-PDI2019-SG38-190531	A9F0035-16		06/11/19 17:00
T4-PDI2019-SG38-190531 (Dup)	9060687-DUP1		06/11/19 17:00
Calibration Check	9F11024-CCV2		06/11/19 17:00
Calibration Blank	9F11024-CCB2		06/11/19 17:00
Calibration Check	9F11024-CCV3		06/11/19 17:00
Calibration Blank	9F11024-CCB3		06/11/19 17:00

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

INITIAL CALIBRATION DATA (Summary)

EPA 9060Amod

Laboratory: Apex Laboratories SDG: A9F0035

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: A9F0035
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:	A9F0035
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: A9F0035
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: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Instrument ID: TOC
Calibration: A8B0203
Control Limt: +/- 10.00%
Sequence: 9F11024

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9F11024-CCV1	Total Organic Carbon	10000	10000	103	mg/kg	EPA 9060Amod
9F11024-CCV2	Total Organic Carbon	10000	10000	100	mg/kg	EPA 9060Amod
9F11024-CCV3	Total Organic Carbon	10000	11000	108	mg/kg	EPA 9060Amod

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 9060Amod

Laboratory: Apex Laboratories
SDG: A9F0035
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: A9F0035
Client: Anchor QEA, LLC
Instrument ID: TOC
Project: Port of Portland - T4 - PDI
Sequence: 9F11024
Calibration: A8B0203

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9F11024-CCB1	Total Organic Carbon	ND	200 (Inst)	mg/kg		EPA 9060Amod
9F11024-CCB2	Total Organic Carbon	ND	200 (Inst)	mg/kg		EPA 9060Amod
9F11024-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: A9F0035

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-SG21-190531	05/31/19 12:56	06/03/19 10:17	06/07/19 07:00	6.75	28.00	06/11/19 17:00	11.17	28.00	
T4-PDI2019-SG26-190530	05/30/19 11:16	06/03/19 10:17	06/07/19 07:00	7.82	28.00	06/11/19 17:00	12.24	28.00	
T4-PDI2019-SG38-190531	05/31/19 10:27	06/03/19 10:17	06/07/19 07:00	6.86	28.00	06/11/19 17:00	11.27	28.00	

Apex Laboratories

SDG: A9F0035

CLASS: WET

METHOD: PSEP 1986

ANALYSES DATA PACKAGE COVER PAGE

PSEP 1986

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
T4-PDI2019-SG21-190531	A9F0035-14	Sediment
T4-PDI2019-SG26-190530	A9F0035-15	Sediment
T4-PDI2019-SG38-190531	A9F0035-16	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: 6/28/2019 11:47AM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

PSEP 1986

Laboratory: Apex Laboratories **SDG:** A9F0035

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

T4-PDI2019-SG21-190531

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-14
Sampled: 05/31/19 12:56
Prepared: 06/06/19 17:58
Analyzed: 06/07/19 12:23
Solids: 63.44
Preparation: Total Solids (Dry Weight)
Initial/Final: 1 N/A / 1 N/A
Batch: 9060683
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	63.4	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SG26-190530

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-15
Sampled: 05/30/19 11:16
Prepared: 06/06/19 17:58
Analyzed: 06/07/19 12:23
Solids: 61.95
Preparation: Total Solids (Dry Weight)
Initial/Final: 1 N/A / 1 N/A
Batch: 9060683
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	62.0	1		PSEP 1986

INORGANIC ANALYSIS DATA SHEET

PSEP 1986

T4-PDI2019-SG38-190531

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-16
Sampled: 05/31/19 10:27
Prepared: 06/06/19 17:58
Analyzed: 06/07/19 12:23
Solids: 72.97
Preparation: Total Solids (Dry Weight)
Initial/Final: 1 N/A / 1 N/A
Batch: 9060683
Calibration:
Instrument: Wet Chem Balance 1

CAS NO.	Analyte	Concentration (% by Weight)	Dilution Factor	Q	Method
TS	Total Solids	73.0	1		PSEP 1986

PREPARATION BATCH SUMMARY

PSEP 1986

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Batch: 9060683 Batch Matrix: Soil Preparation: Total Solids (Dry Weight)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
T4-PDI2019-SG38-190531 (Dup)	9060683-DUP2		06/06/19 17:58	
T4-PDI2019-SG21-190531	A9F0035-14		06/06/19 17:58	
T4-PDI2019-SG26-190530	A9F0035-15		06/06/19 17:58	
T4-PDI2019-SG38-190531	A9F0035-16		06/06/19 17:58	

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-SG38-190531

Laboratory: Apex Laboratories
Client: Anchor QEA, LLC
Matrix: Soil
Batch: 9060683
Preparation: Total Solids (Dry Weight)
Source Sample Name: T4-PDI2019-SG38-190531

SDG: A9F0035
Project: Port of Portland - T4 - PDI
Laboratory ID: 9060683-DUP2
Lab Source ID: A9F0035-16
Initial/Final: 1 N/A / 1 N/A
% Solids: 72.97

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (% by Weight)	C	DUPLICATE CONCENTRATION (% by Weight)	C	RPD %	Q	METHOD
Total Solids	20	73.0		73.1		0.2		PSEP 1986

* Values outside of QC limits

HOLDING TIME SUMMARY

PSEP 1986

Laboratory: Apex Laboratories SDG: A9F0035

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-SG21-190531	05/31/19 12:56	06/03/19 10:17	06/06/19 17:58	6.21	180.00	06/07/19 12:23	0.77		
T4-PDI2019-SG26-190530	05/30/19 11:16	06/03/19 10:17	06/06/19 17:58	7.28	180.00	06/07/19 12:23	0.77		
T4-PDI2019-SG38-190531	05/31/19 10:27	06/03/19 10:17	06/06/19 17:58	6.31	180.00	06/07/19 12:23	0.77		

Apex Laboratories

SDG: A9F0035

CLASS: WET

METHOD: D422mod

ANALYSES DATA PACKAGE COVER PAGE

D422mod

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI

Client Sample Id:	Lab Sample Id:	Matrix
T4-PDI2019-SG21-190531	A9F0035-14	Sediment
T4-PDI2019-SG26-190530	A9F0035-15	Sediment
T4-PDI2019-SG38-190531	A9F0035-16	Sediment
T4-PDI2019-SG38-190531-Dup	A9F0035-17	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: 6/28/2019 11:47AM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

D422mod

Laboratory: Apex Laboratories **SDG:** A9F0035

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-SG21-190531

Laboratory: Apex Laboratories | SDG: A9F0035

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

Matrix: Sediment | Laboratory ID: A9F0035-14

Sampled: 05/31/19 12:56 | Prepared: 06/19/19 08:41 | Analyzed: 06/21/19 13:40

Solids: 63.44 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060930 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	1.07	1		D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.25	1		D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.82	1		D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	77.5	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.35	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	12.2	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	39.1	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	15.0	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	4.12	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	4.42	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	2.22	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	17.1	1		D422mod
GS-Clay	Clay (< 0.005 mm)	4.30	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SG26-190530

Laboratory: Apex Laboratories | SDG: A9F0035

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

Matrix: Sediment | Laboratory ID: A9F0035-15

Sampled: 05/30/19 11:16 | Prepared: 06/19/19 09:00 | Analyzed: 06/21/19 13:40

Solids: 61.95 | Preparation: ASTM D 421 | Initial/Final: 1 N/A / 1 N/A

Batch: 9060930 | Calibration: | Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	14.2	1		D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	8.24	1		D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	5.91	1		D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	65.3	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	7.48	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	7.92	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	22.5	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	13.8	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	5.92	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	5.66	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	1.96	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	16.3	1		D422mod
GS-Clay	Clay (< 0.005 mm)	4.30	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SG38-190531

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-16
Sampled: 05/31/19 10:27
Prepared: 06/19/19 09:20
Analyzed: 06/21/19 13:40
Solids: 72.97
Preparation: ASTM D 421
Initial/Final: 1 N/A / 1 N/A
Batch: 9060930
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.12	1		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)	0.12	1		D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	98.1	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.49	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	17.2	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	61.5	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	17.7	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	0.81	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	0.30	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	0.11	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	1.70	1		D422mod
GS-Clay	Clay (< 0.005 mm)	0.10	1		D422mod

INORGANIC ANALYSIS DATA SHEET

D422mod

T4-PDI2019-SG38-190531-Dup

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Matrix: Sediment
Laboratory ID: A9F0035-17
Sampled: 05/31/19 10:27
Prepared: 06/19/19 09:44
Analyzed: 06/21/19 13:40
Solids: N/A
Preparation: ASTM D 421
Initial/Final: 1 N/A / 1 N/A
Batch: 9060930
Calibration:
Instrument: Inst

CAS NO.	Analyte	Concentration (% of Total)	Dilution Factor	Q	Method
GS-Gravel	Gravel (>2.00mm)	0.28	1		D422mod
GS-4.75	Percent Retained 4.75 mm sieve (#4)	0.11	1		D422mod
GS-2.00	Percent Retained 2.00 mm sieve (#10)	0.17	1		D422mod
GS-Sand	Sand (0.063mm - 2.00mm)	97.2	1		D422mod
GS-0.850	Percent Retained 0.85 mm sieve (#20)	0.37	1		D422mod
GS-0.425	Percent Retained 0.425 mm sieve (#40)	14.7	1		D422mod
GS-0.250	Percent Retained 0.250 mm sieve (#60)	63.7	1		D422mod
GS-0.150	Percent Retained 0.150 mm sieve (#100)	16.9	1		D422mod
GS-0.106	Percent Retained 0.106 mm sieve (#140)	0.96	1		D422mod
GS-0.075	Percent Retained 0.075 mm sieve (#200)	0.40	1		D422mod
GS-0.063	Percent Retained 0.063 mm sieve (#230)	0.16	1		D422mod
GS-SILT	Silt (0.005mm < 0.063mm)	1.90	1		D422mod
GS-Clay	Clay (< 0.005 mm)	0.60	1		D422mod

PREPARATION BATCH SUMMARY

D422mod

Laboratory: Apex Laboratories
SDG: A9F0035
Client: Anchor QEA, LLC
Project: Port of Portland - T4 - PDI
Batch: 9060930 Batch Matrix: Soil Preparation: ASTM D 421

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
T4-PDI2019-SG21-190531	A9F0035-14		06/19/19 08:41	
T4-PDI2019-SG26-190530	A9F0035-15		06/19/19 09:00	
T4-PDI2019-SG38-190531	A9F0035-16		06/19/19 09:20	
T4-PDI2019-SG38-190531-Dup	A9F0035-17		06/19/19 09:44	

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

HOLDING TIME SUMMARY

D422mod

Laboratory: Apex Laboratories SDG: A9F0035

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-SG21-190531	05/31/19 12:56	06/03/19 10:17	06/19/19 08:41	18.82	180.00	06/21/19 13:40	21.03	180.00	
T4-PDI2019-SG26-190530	05/30/19 11:16	06/03/19 10:17	06/19/19 09:00	19.91	180.00	06/21/19 13:40	22.10	180.00	
T4-PDI2019-SG38-190531	05/31/19 10:27	06/03/19 10:17	06/19/19 09:20	18.95	180.00	06/21/19 13:40	21.13	180.00	
T4-PDI2019-SG38-190531-Dup	05/31/19 10:27	06/03/19 10:17	06/19/19 09:44	18.97	180.00	06/21/19 13:40	21.13	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

Semivolatile Organic Compounds (PAHs) by EPA 8270D
Benchsheet & Analysis Sequence Data (water)

Batch 9060576
Sequence 9F05024 (A9F0035-01)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060576-BLK1		QC	06/05/19 07:04	1100	1				100					
	9060576-BLK2		QC	06/05/19 07:04	1100	1				100		Added 6/6/2019 by ams			
	9060576-BSD1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	9060576-BSD2		QC	06/05/19 07:04	1000	1	A19F006		50	100		Added 6/6/2019 by ams			
	9060576-BS1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	9060576-BS2		QC	06/05/19 07:04	1000	1	A19F006		50	100		Added 6/6/2019 by ams			
	A9E0906-03	E	8270 SIM PAH (16)	06/05/19 07:09	1000	2				100	19-26666 GWA-13.50'	Added 6/3, Dx@90.9			
	A9F0001-08	E	8270 SIM PAH (16)	06/05/19 10:10	990	2				100	6653 Cross(Water)	mg/kg			
	A9F0001-09	E	8270 SIM PAH (16)	06/05/19 10:10	940	2				100	6653 Down (Water)	mg/kg			
	A9F0006-14	E	8270 SIM PAH	06/05/19 07:04	1070	2				100	MW-12(053119)				
	A9F0006-15	B	8270 SIM PAH	06/05/19 14:08	1060	2				100	MW-11(053119)				
	A9F0008-10	B	8270 SIM PAH	06/05/19 07:04	1000	2				100	MW-11-5/31/19				
	A9F0008-10RE1	B	8270 SIM PAH	06/05/19 07:04	1000	2				100	MW-11-5/31/19	Added 6/6/2019 By bsj			
	A9F0008-11	B	8270 SIM PAH	06/05/19 10:10	980	2				100	MW-1-5/31/19				
	A9F0008-11RE1	B	8270 SIM PAH	06/05/19 10:10	980	2				100	MW-1-5/31/19	Added 6/6/2019 By bsj			
	A9F0018-01	C	8270 SIM PAH (16)	06/05/19 07:04	1020	2				100	RD-060319-284	MDL, custom: Benz AA, BAP, Dibenz, Indeno only			
	A9F0032-01	F	8270 SIM PAH (16)	06/05/19 07:04	1070	2				100	4HF01-Water Well				
	A9F0032-02	F	8270 SIM PAH (16)	06/05/19 07:04	1060	2				100	4HF01-Barn Well				
	A9F0032-03	F	8270 SIM PAH (16)	06/05/19 07:04	1070	2				100	4HF01-IRR Well				
	A9F0035-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 07:04	1010	1				100	RB-201905301712	PAHs Only			
	A9F0070-01	F	8270 SIM PAH	06/05/19 14:08	1000	2				100	Weddle Well				
	A9F0080-01	H	8270 PAH - Extract and Hold	06/05/19 14:08	1010	2				100	A1GP-1				
	A9F0080-02	H	8270 PAH - Extract and Hold	06/05/19 14:08	870	2				100	A1GP-2				
	A9F0080-03	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000	2				100	A1GP-Y				
	A9F0080-04	H	8270 PAH - Extract and Hold	06/05/19 14:08	910	2				100	A1GP-3				

Prepared By: Date

BSJ 6-07-19
Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	A9F0080-05	H	8270 PAH - Extract and Hold	06/05/19 14:08	880	2				100	A1GP-4				
	A9F0080-06	H	8270 PAH - Extract and Hold	06/05/19 14:08	970	2				100	Eq-053119				

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19B083	08/10/19	Conc. HCl - Omnitrace
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

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)

3x rinse

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060576-BLK1		QC	06/05/19 07:04	1100	1				100					
	9060576-BSD1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	9060576-BS1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	A9E0906-03	E	8270 SIM PAH (16)	06/05/19 07:09	1020	2				100	19-26666 GWA-13.50'	Added 6/3, Dx@90.9			
	A9F0001-08	D	8270 SIM PAH (16)	06/05/19 10:10	990	2				100	6653 Cross(Water)	mg/kg			
	A9F0001-09	D	8270 SIM PAH (16)	06/05/19 10:10	940	2				100	6653 Down (Water)	mg/kg			
	A9F0006-14	E	8270 SIM PAH	06/05/19 07:04	1070	2				100	MW-12(053119)				
	A9F0006-15	B	8270 SIM PAH	06/05/19 14:08	1000 1060	2				100	MW-11(053119)	E			
	A9F0008-10	B	8270 SIM PAH	06/05/19 07:04	1000	2				100	MW-11-5/31/19				
	A9F0008-11	B	8270 SIM PAH	06/05/19 10:10	980	2				100	MW-1-5/31/19				
	A9F0018-01	C	8270 SIM PAH (16)	06/05/19 07:04	1020	2				100	RD-060319-284	MDL, custom: Benz AA, BAP, Dibenz, Indeno only			
	A9F0032-01	F	8270 SIM PAH (16)	06/05/19 07:04	1070	2				100	4HF01-Water Well				
	A9F0032-02	F	8270 SIM PAH (16)	06/05/19 07:04	1060	2				100	4HF01-Barn Well				
	A9F0032-03	F	8270 SIM PAH (16)	06/05/19 07:04	1070	2				100	4HF01-IRR Well				
	A9F0035-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 07:04	1010	1				100	RB-20190530171 2	PAHs Only			
	A9F0070-01	F	8270 SIM PAH	06/05/19 14:08	1000	2				100	Weddle Well	D			
	A9F0080-01	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000 1010	2				100	A1GP-1	E			
	A9F0080-02	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000 870	2				100	A1GP-2	D			
	A9F0080-03	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000	2				100	A1GP-Y				
	A9F0080-04	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000 910	2				100	A1GP-3	E			
	A9F0080-05	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000 880	2				100	A1GP-4				
	A9F0080-06	H	8270 PAH - Extract and Hold	06/05/19 14:08	1000 970	2				100	Eq-053119				

Prepared By: [signature] Date: 6/5/19

Reviewed By: JRA Date: 06/05/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19B083	08/10/19	Conc. HCl - Omnitrace
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

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)

E = Emulsion

D = Decanted

3x rinse ✓

Witness: _____

Bottle Check: am 6.5.19

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
	9060576-BLK1		QC	06/05/19 07:04	1000	1				100					
	9060576-BSD1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	9060576-BS1		QC	06/05/19 07:04	1000	1	A19F006		50	100					
	A9E0906-03	E	8270 SIM PAH (16)	06/05/19 07:09	1000	2				100	19-26666 GWA-13.50'	Added 6/3, Dx@90.9			
	A9E0912-05	F	8270 SIM PAH (16)	06/05/19 07:09	1000	2				100	6245 W1	use Dx extract			
	A9F0001-08	D/E	8270 SIM PAH (16)	06/05/19 10:10	1000 990	2				100	6653 Cross(Water)	mg/kg D E	✓		
	A9F0001-09	D/E	8270 SIM PAH (16)	06/05/19 10:10	1000 940	2				100	6653 Down (Water)	mg/kg D E	✓		
	A9F0006-14	E	8270 SIM PAH	06/05/19 07:04	1000	2				100	MW-12(053119)				
	A9F0008-10	B	8270 SIM PAH	06/05/19 07:04	1000	2				100	MW-11-5/31/19				
	A9F0008-11	B	8270 SIM PAH	06/05/19 10:10	1000 980	2				100	MW-1-5/31/19	D E	✓		
	A9F0018-01	C	8270 SIM PAH (16)	06/05/19 07:04	1000	2				100	RD-060319-284	MDL, custom: Benz AA, BAP, Dibenz, Indeno only			
	A9F0032-01	F	8270 SIM PAH (16)	06/05/19 07:04	1000	2				100	4HF01-Water Well				
	A9F0032-02	F	8270 SIM PAH (16)	06/05/19 07:04	1000	2				100	4HF01-Barn Well				
	A9F0032-03	F	8270 SIM PAH (16)	06/05/19 07:04	1000	2				100	4HF01-IRR Well				
	A9F0035-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 07:04	1000	1				100	RB-20190530171 2	PAHs Only			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
~~A18B257~~	~~12/31/19~~	~~6N Sodium Hydroxide~~
A18K311	12/31/20	Glass Wool
A19B083	08/10/19	Conc. HCl - Omnitrace
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

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)

D = Decanted
E = Emulsion

Prepared By: [signature] Date: 6/5/19

Reviewed By: JRA Date: 06/05/19

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C (Acid Extraction)

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
3x rinse															

Witness: _____

Bottle Check: JAG 6/5/19

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

JAG 6/5/19

BATCH #: 9060576 (Water)

Prep Method: EPA 3510C ~~(Acid/Base Neutral)~~ Acid Extraction

#	Lab Number		Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surr.	Sample ID	Extraction Comments	pH <2	pH Other	pH >11
1	9060576-BLK1		QC	06/05/19 07:04	~~1000~~ 1100	1				100			✓		
3	9060576-BSD1		QC	06/05/19 07:04	1000	1	A19F006		50	100			✓		
2	9060576-BS1		QC	06/05/19 07:04	1000	1	A19F006		50	100			✓		
4	A9E0906-03	E	8270 SIM PAH (16)	06/05/19 07:09	1000	2				100	19-26666 GWA-13.50'	Added 6/3, Dx@90.9 #	✓		
5	~~A9E0912-05~~	~~F~~	~~8270 SIM PAH (16)~~	~~06/05/19 07:09~~	~~1000~~ 1020	2				~~100~~	~~6245 W1~~	~~use Dx extract~~ ★	✓		
6	A9F0006-14	E	8270 SIM PAH	06/05/19 07:04	~~1000~~ 1070	2				100	MW-12(053119)		✓		
7	A9F0008-10	B	8270 SIM PAH	06/05/19 07:04	~~1000~~ 1000	2				100	MW-11-5/31/19	#	✓		
8	A9F0018-01	C	8270 SIM PAH (16)	06/05/19 07:04	~~1000~~ 1020	2				100	RD-060319-284	MDL, custom: Benz AA, BAP, Dibenz, Indeno only	✓		
9	A9F0032-01	F	8270 SIM PAH (16)	06/05/19 07:04	~~1000~~ 1070	2				100	4HF01-Water Well		✓		
10	A9F0032-02	F	8270 SIM PAH (16)	06/05/19 07:04	~~1000~~ 1060	2				100	4HF01-Barn Well		✓		
11	A9F0032-03	F	8270 SIM PAH (16)	06/05/19 07:04	~~1000~~ 1070	2				100	4HF01-IRR Well		✓		
12	A9F0035-01	A	8270D LL PAH/PHTH/Phenols	06/05/19 07:04	~~1000~~ 1010	1				100	RB-20190530171 2	PAHs Only	✓		

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
~~A18B257~~	~~12/31/19~~	~~6N Sodium Hydroxide~~
A18K311	12/31/20	Glass Wool
A19B083	08/10/19	Conc. HCl - Omnitrace
A19D007	09/30/20	DCM CHEM PROD. 186806
A19D260	10/15/19	Sodium Sulfate Lot # Q098001

Analyte Spike(s)

Std ID	Exp. Date	Description
A19F006	11/30/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

JAG

Surrogate(s)

Std ID	Exp. Date	Description
A19E304	11/24/19	PAH Soil and Water Surr. (50ppm)

JAG

★ Removed from Batch

Emulsion

3x rinse

Witness: M 6.5.19

Bottle Check: M 6.5.19

JAG 6/5/19
Prepared By: Date

JRA 06/05/19
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

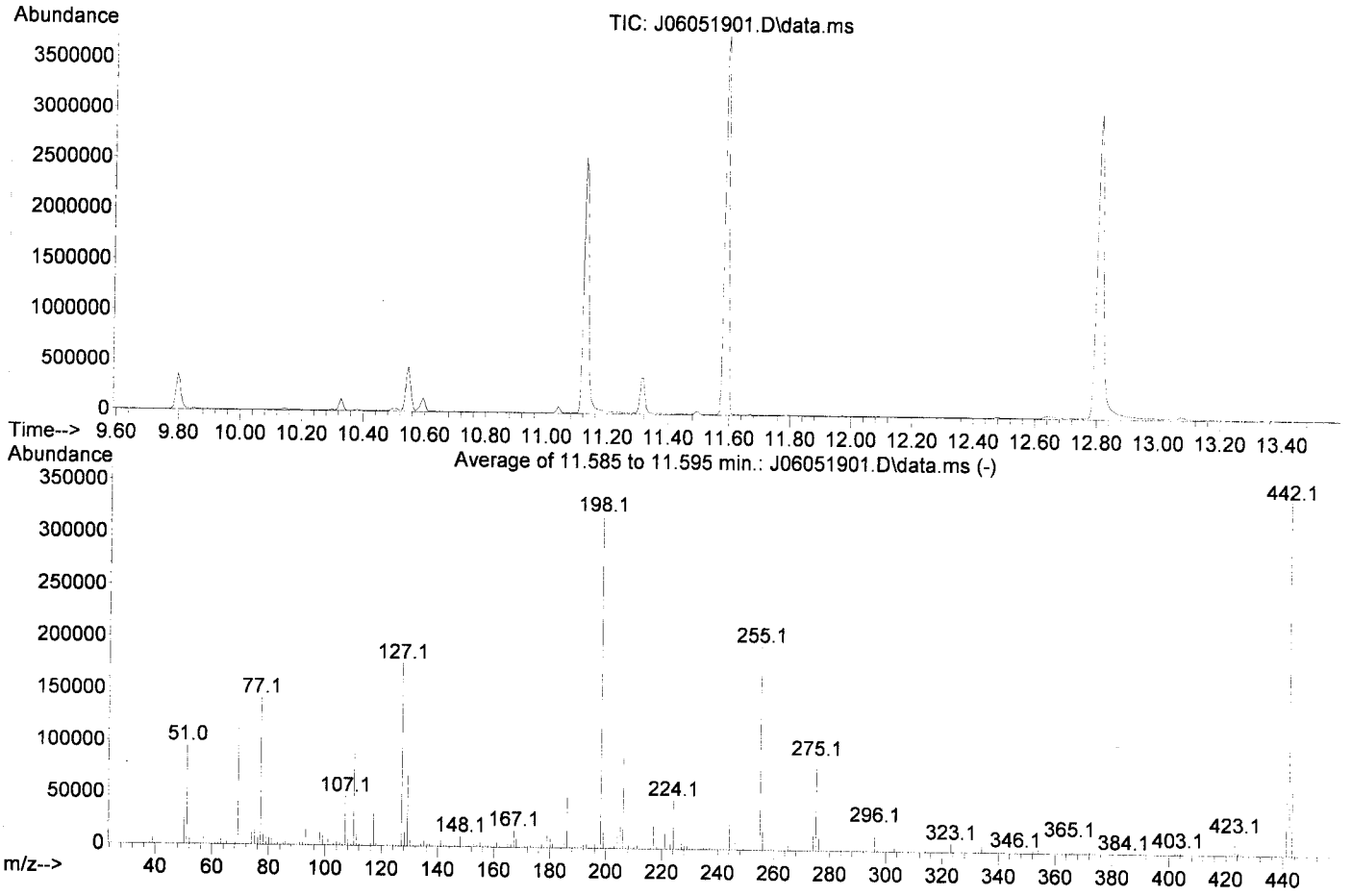
Comments:

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

No Name Entered Quantitation Report (Not Reviewed)

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

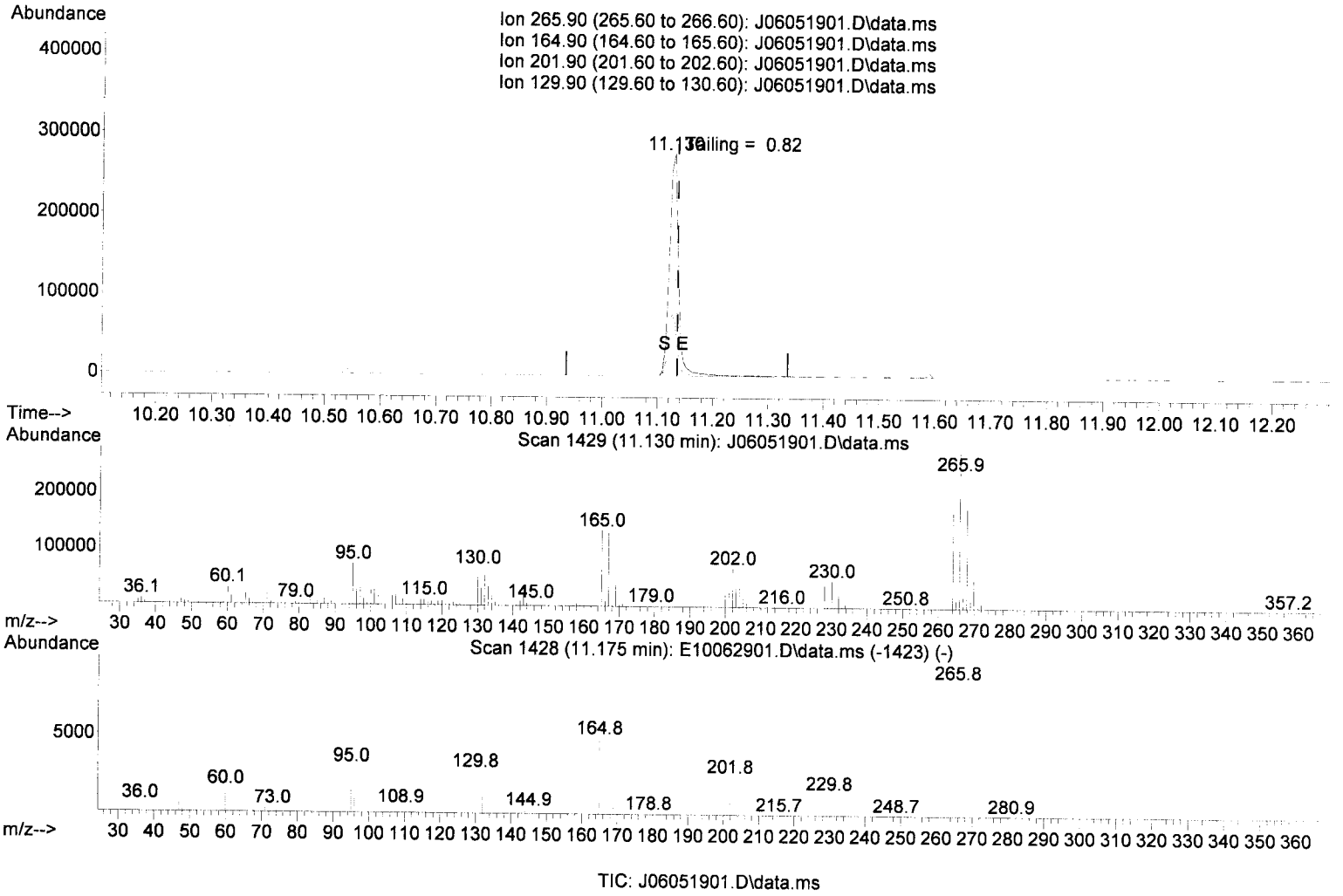
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

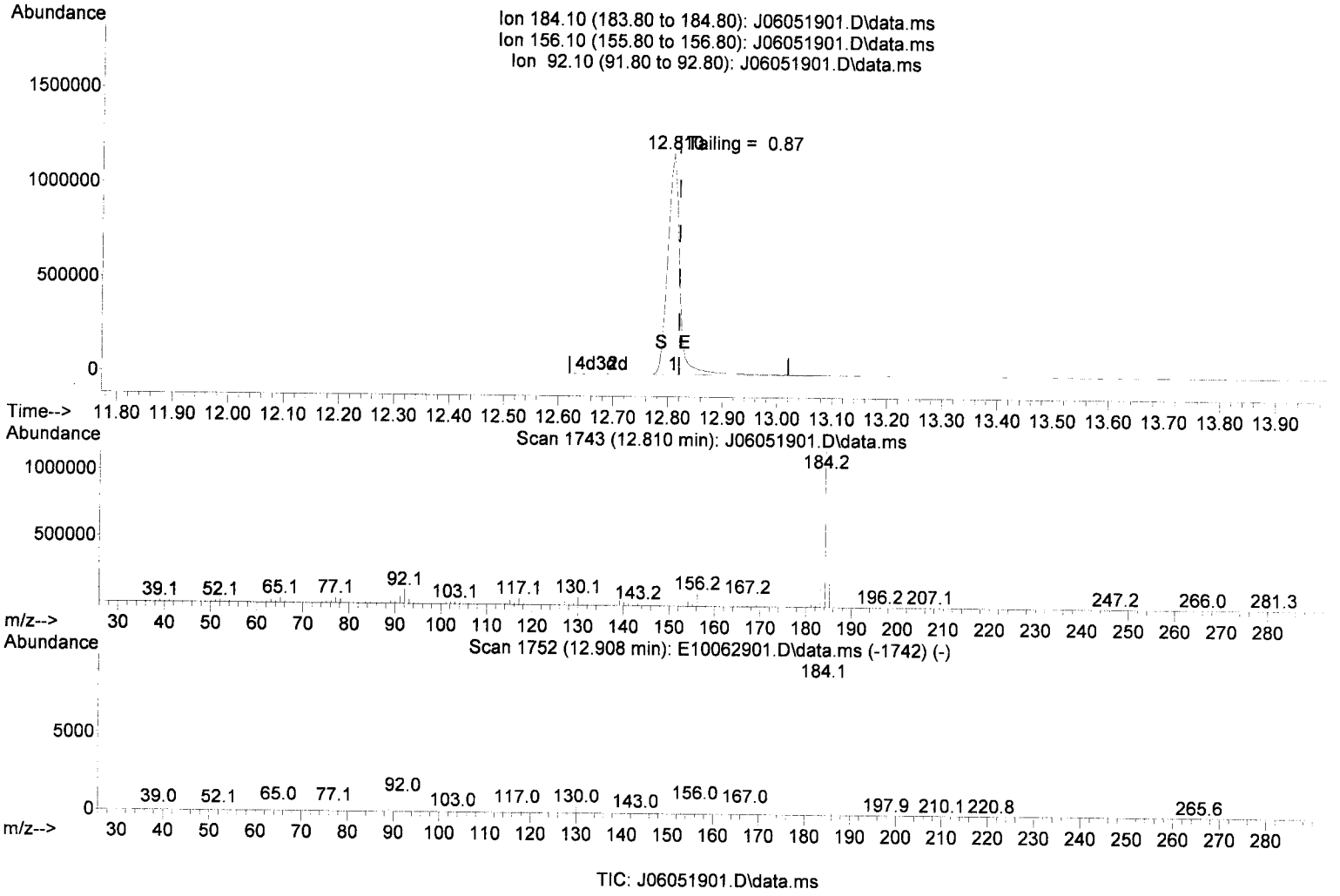
response 319665

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)

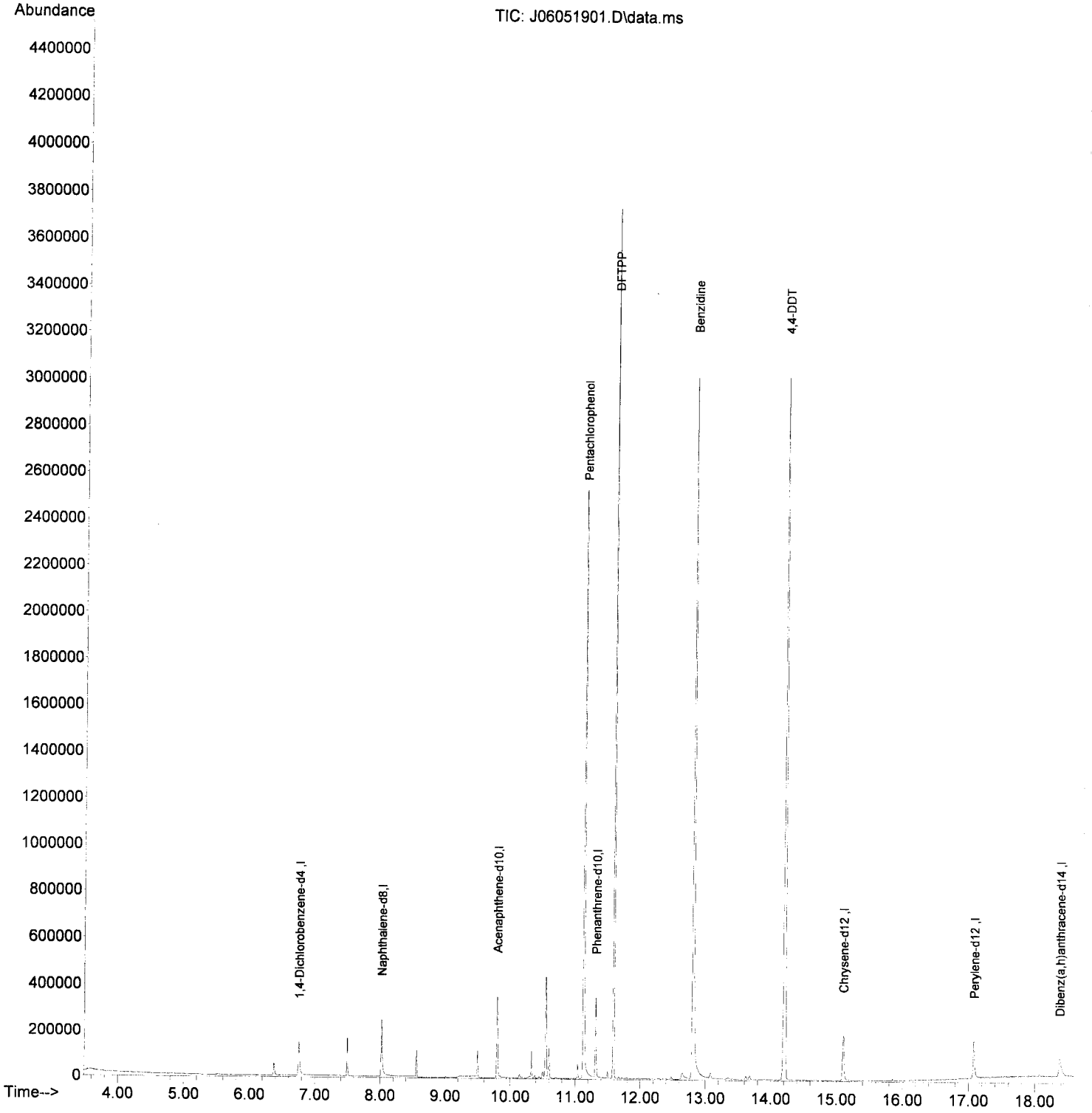
From:
9F05024-TUN1
SV-GCMS10

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

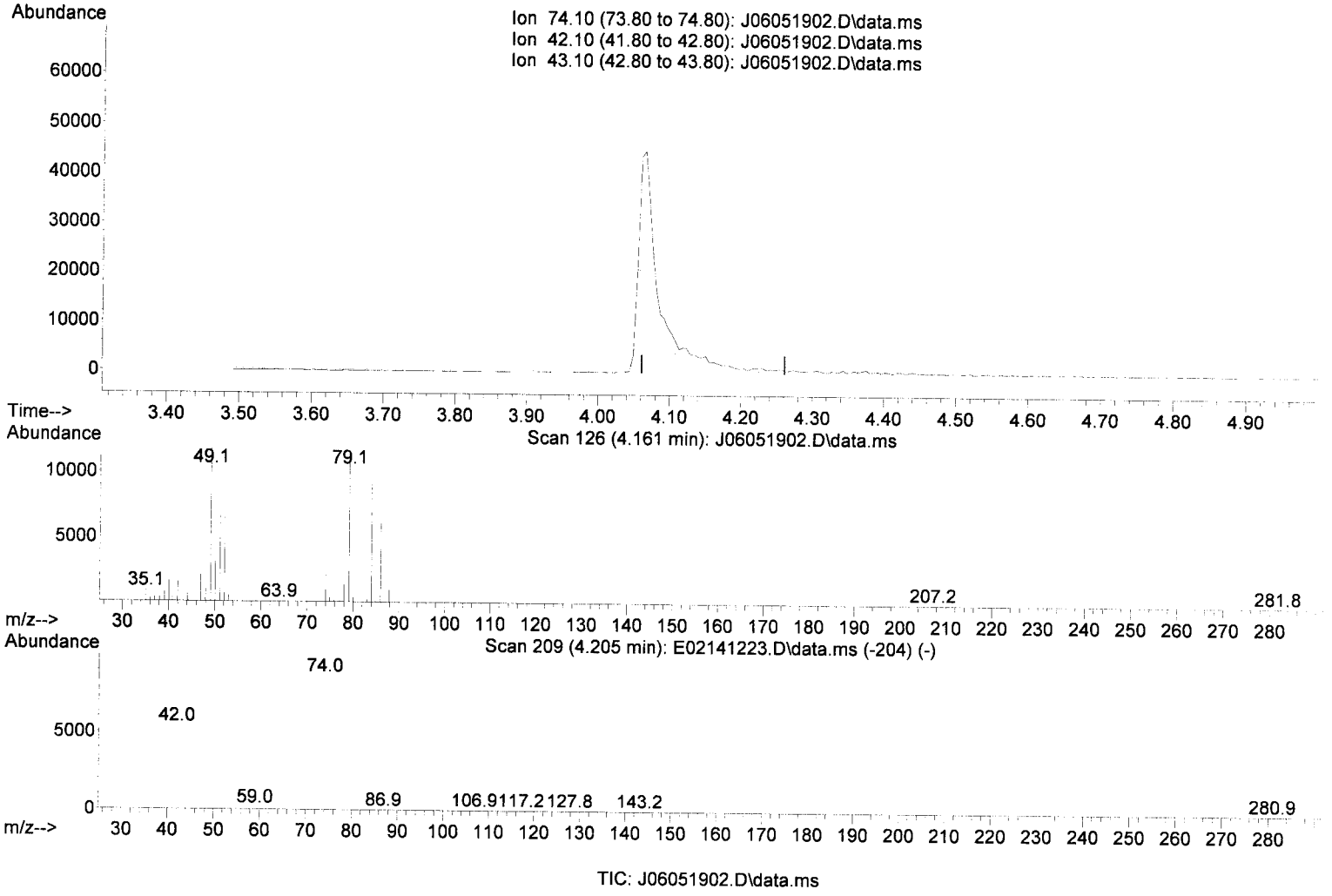
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	36060	1361.88	ng/ml	87
45) Dimethyl phthalate	9.558	163	276475	1035.49	ng/ml	99
46) 1,3-Dinitrobenzene	9.595	168	41887	1253.18	ng/ml	97
47) 2,6-Dinitrotoluene	9.622	165	61692	1093.10	ng/ml	97
48) 1,2-Dinitrobenzene	9.686	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

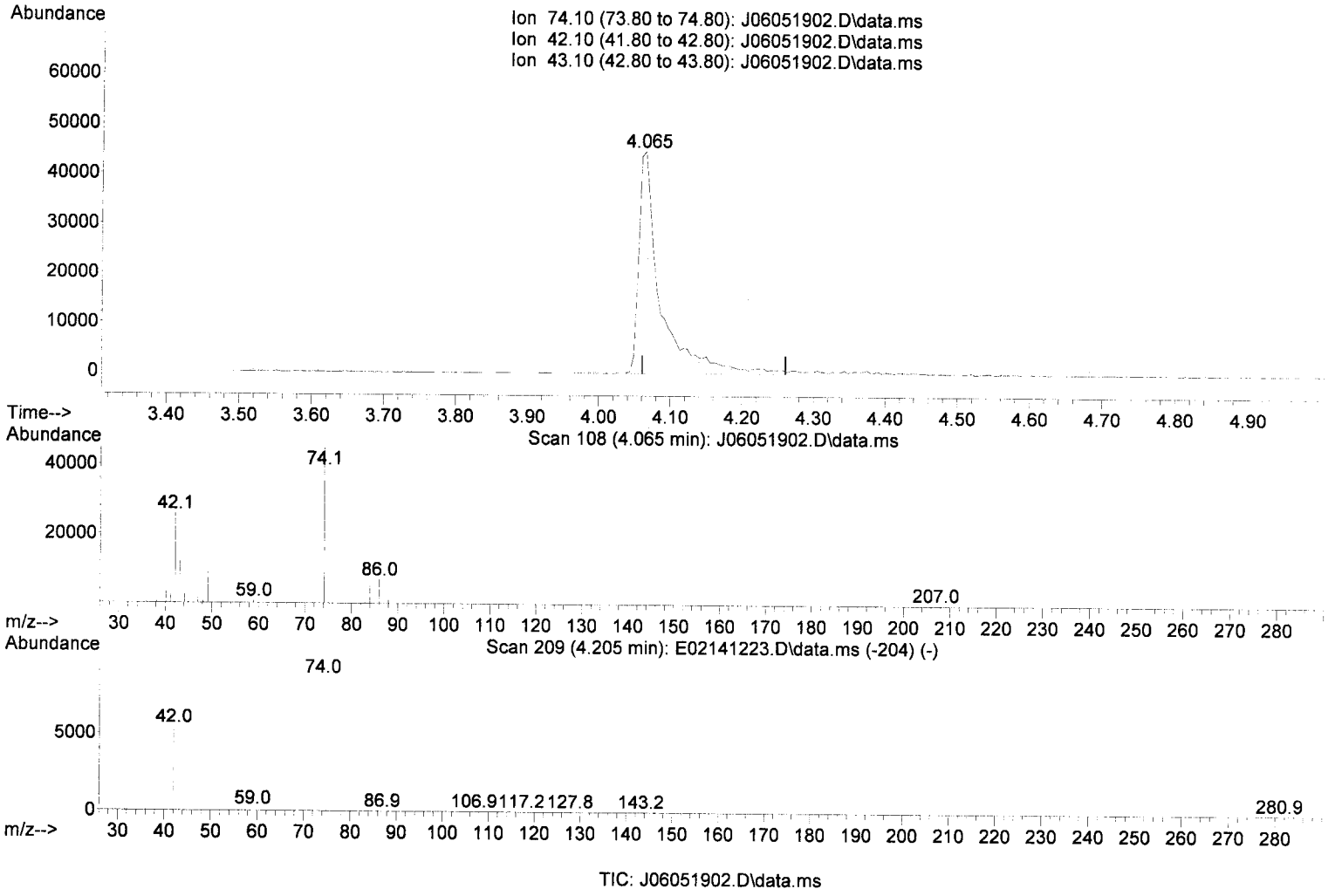
Ion	Exp%	Act%
74.10	100.00	0.00
42.10	62.90	0.00#
43.10	29.40	0.00
0.00	0.00	0.00

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

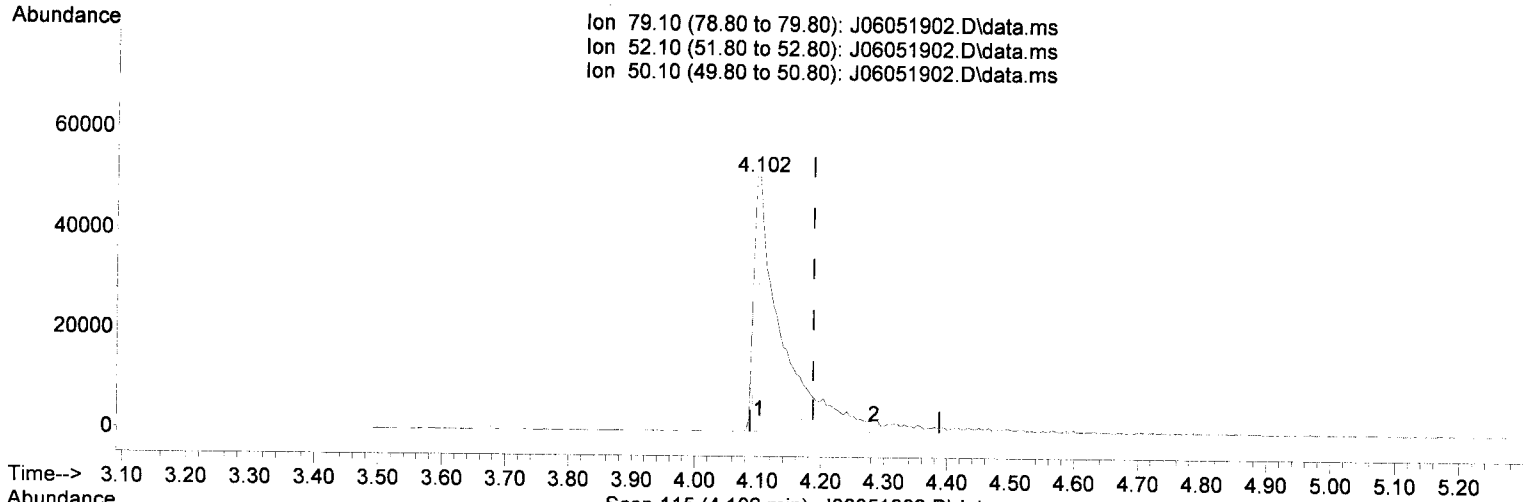
response 94637

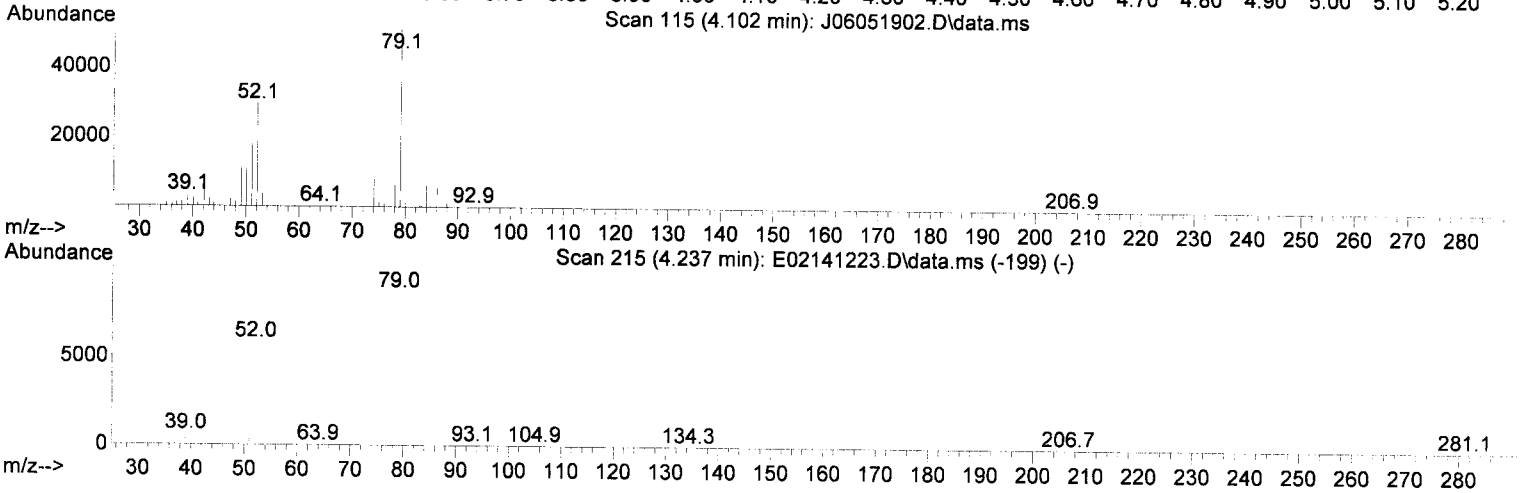
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	62.90	57.70
43.10	29.40	26.88
0.00	0.00	0.00

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

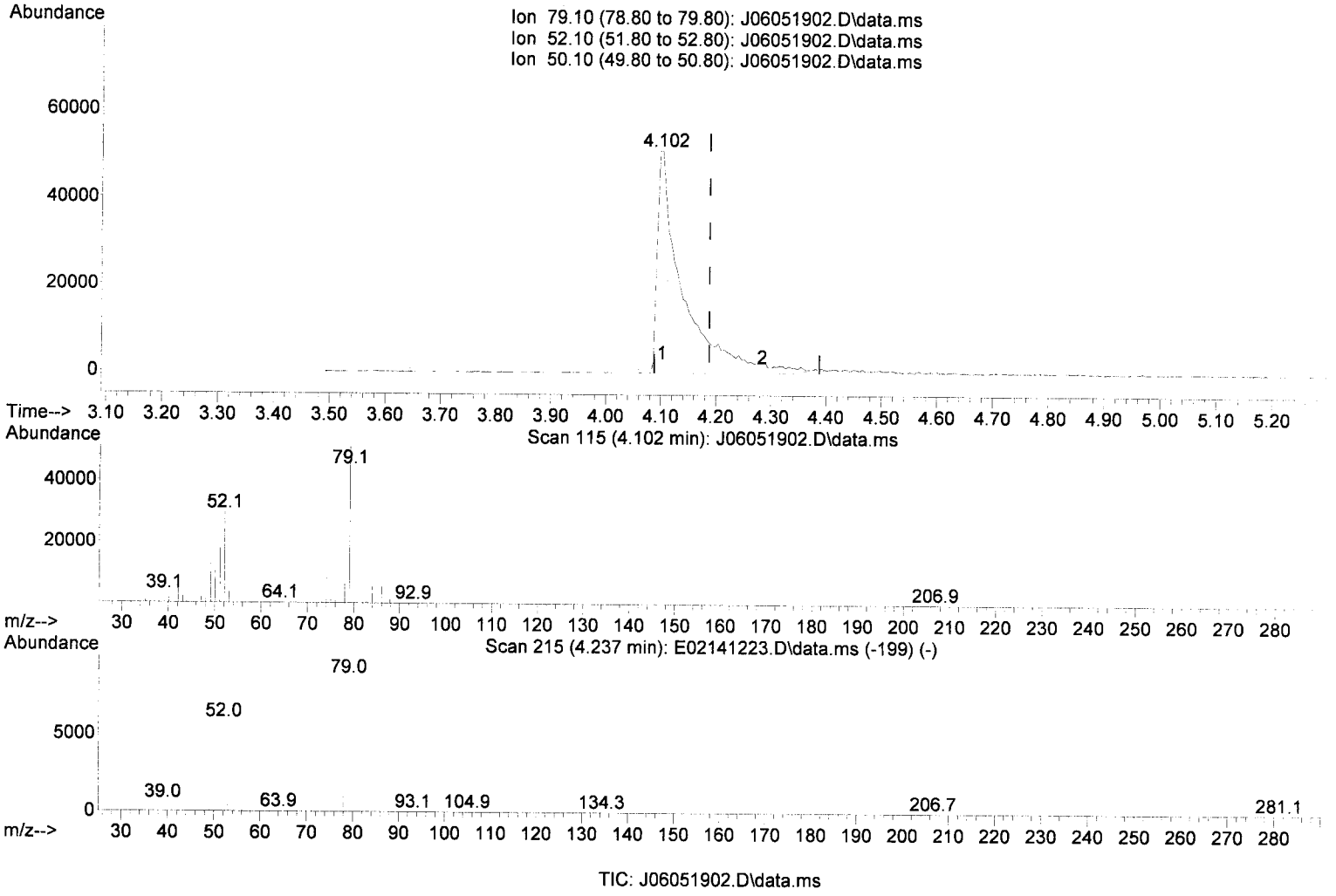
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	65.60	57.66
50.10	23.40	21.51
0.00	0.00	0.00

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

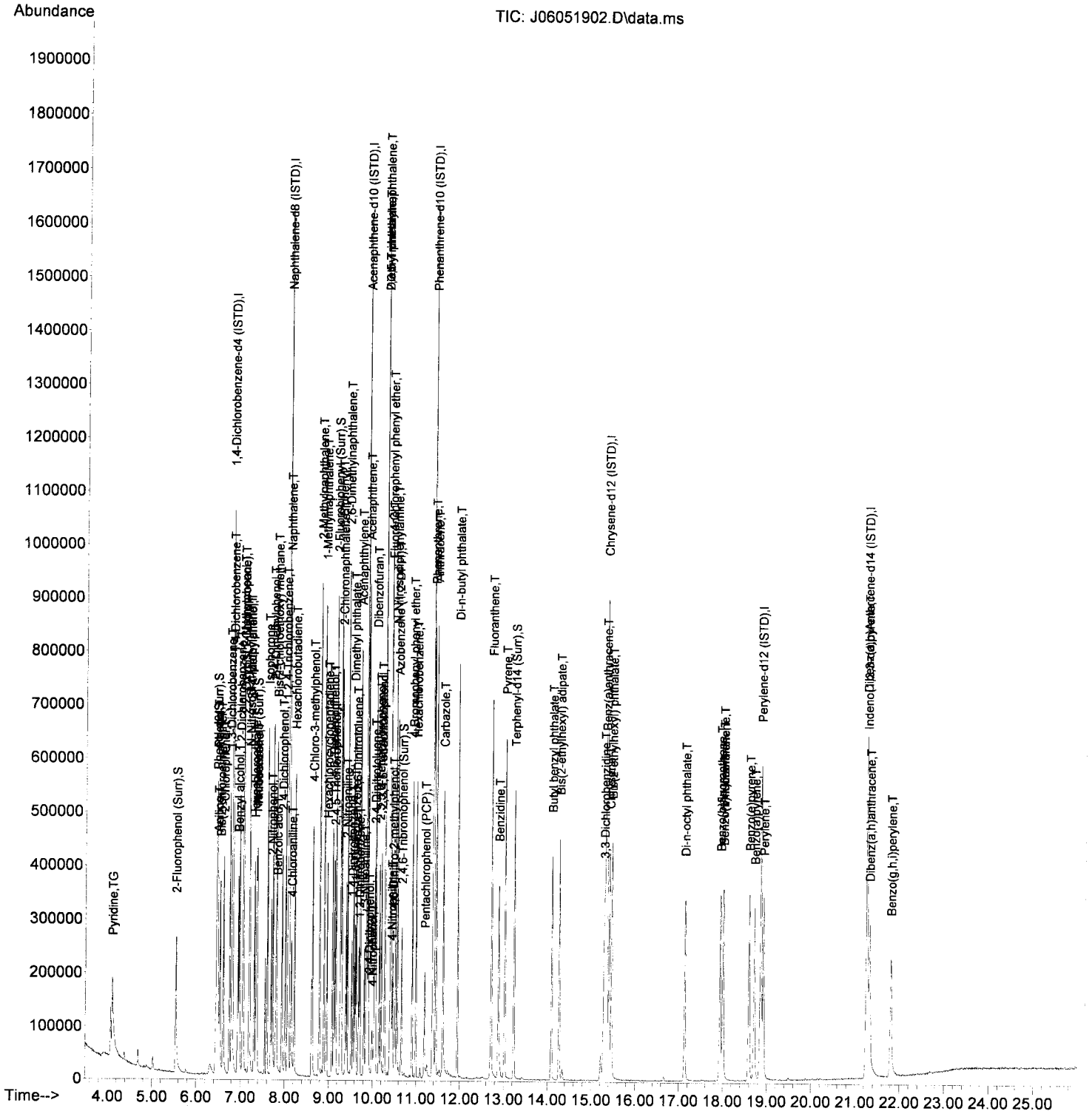
response 164962

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

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.		

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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

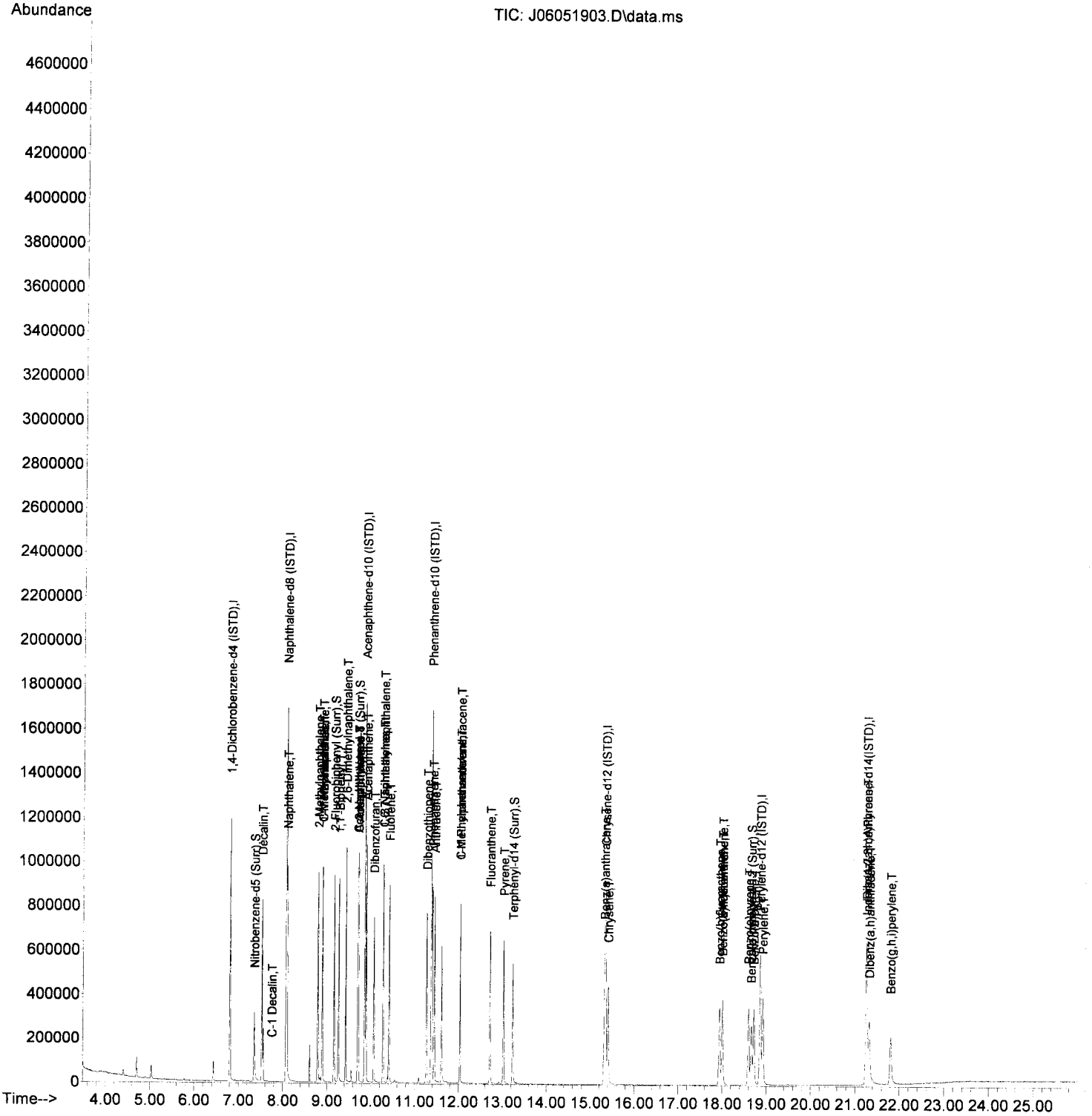
Quant Time: Jun 05 10:23:05 2019
Quant Method : T:\methods\SV10_041519_HOMOLOG.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue Apr 16 09:29:20 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

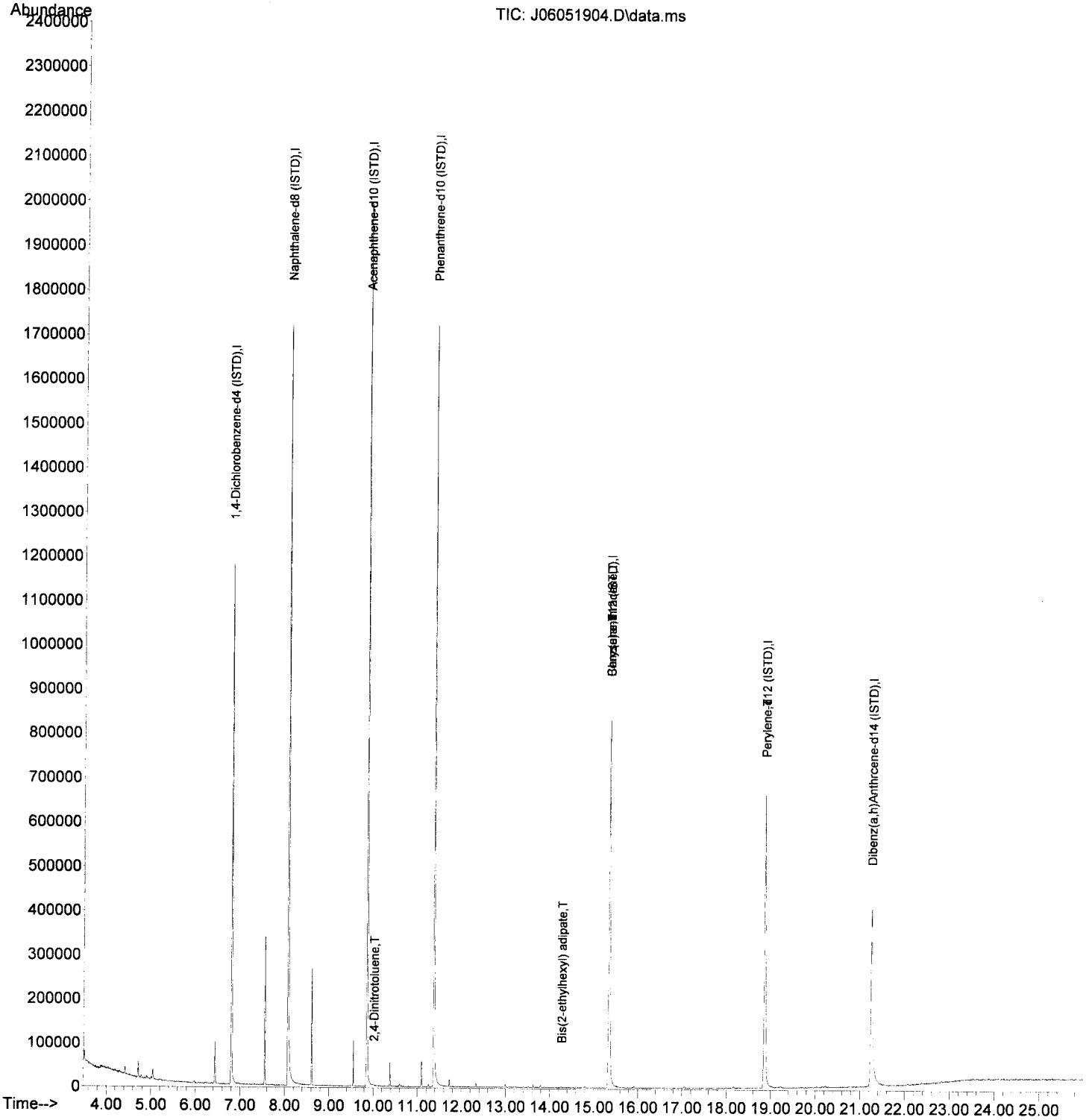
Quant Time: Jun 05 10:23:27 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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

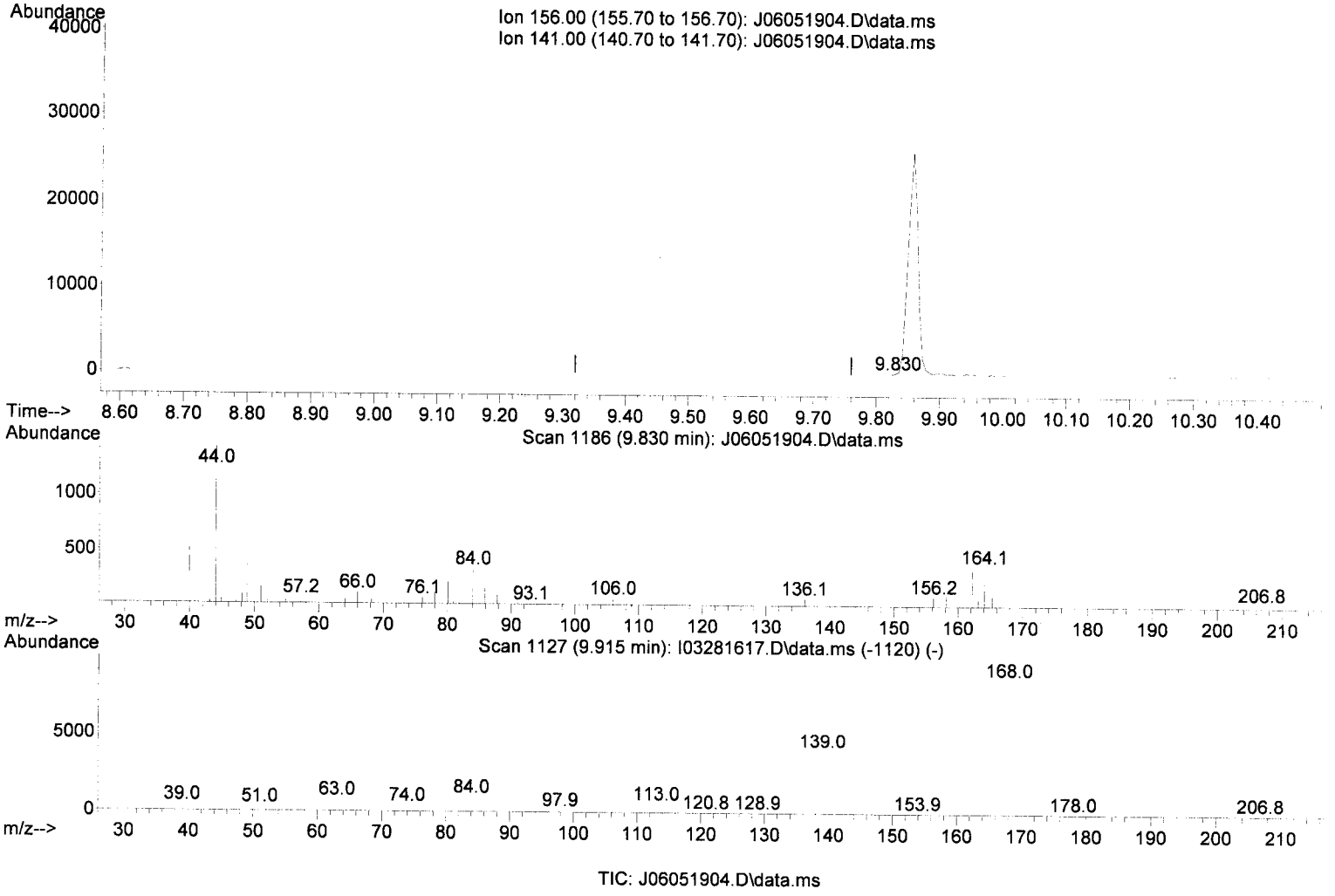
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
47) Benz(a)anthracene	15.345	228	1456	4.47 ng/ml	63
48) Chrysene	15.345	228	1456	4.58 ng/ml	60
49) C-1 Benz(a)anthracene/...	16.003		0	N.D.	
50) C-2 Benz(a)anthracene/...	16.842		0	N.D.	
51) C-3 Benz(a)anthracene/...	18.757	270	17	N.D.	
52) C-4 Benz(a)anthracene/...	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

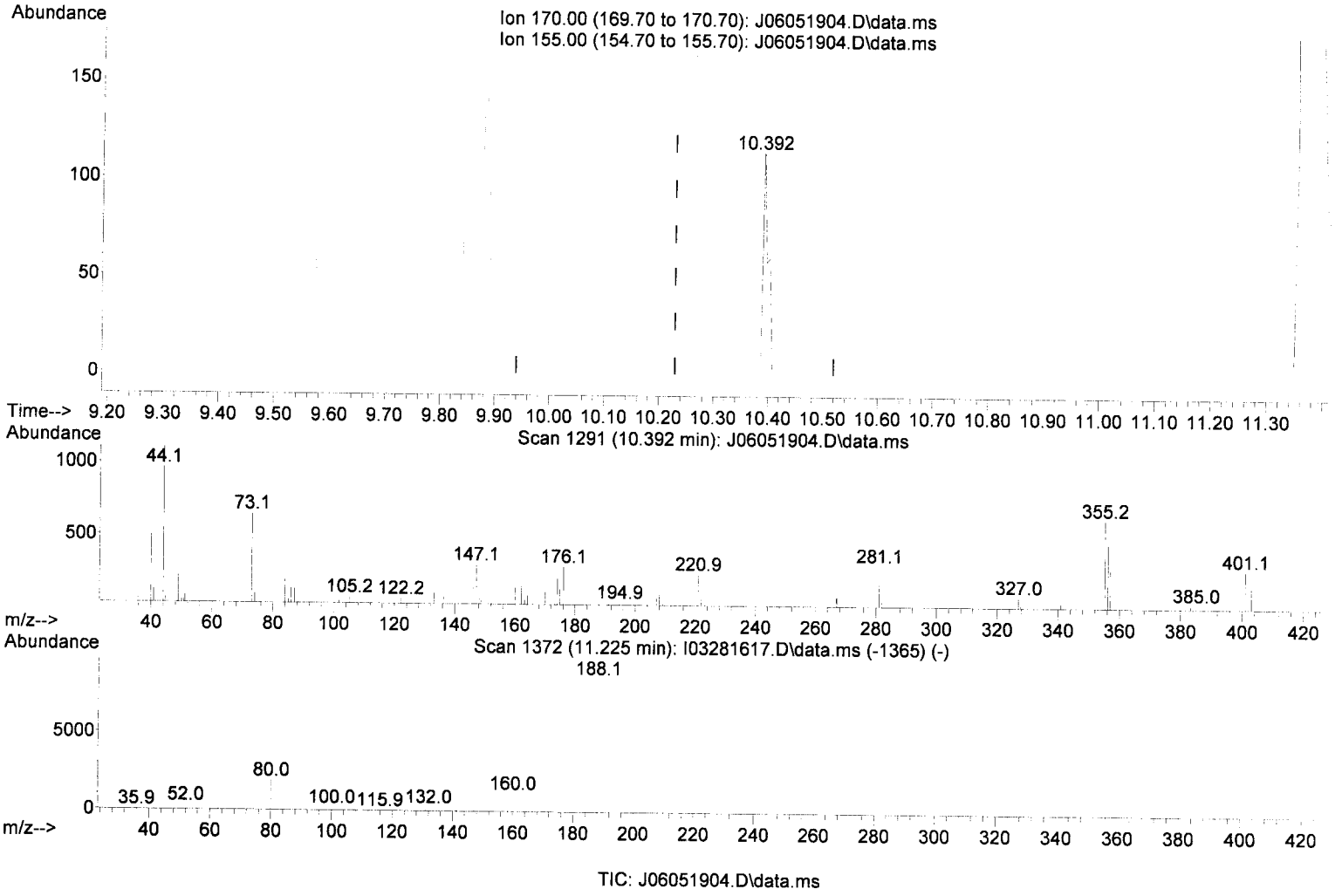
response 43

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

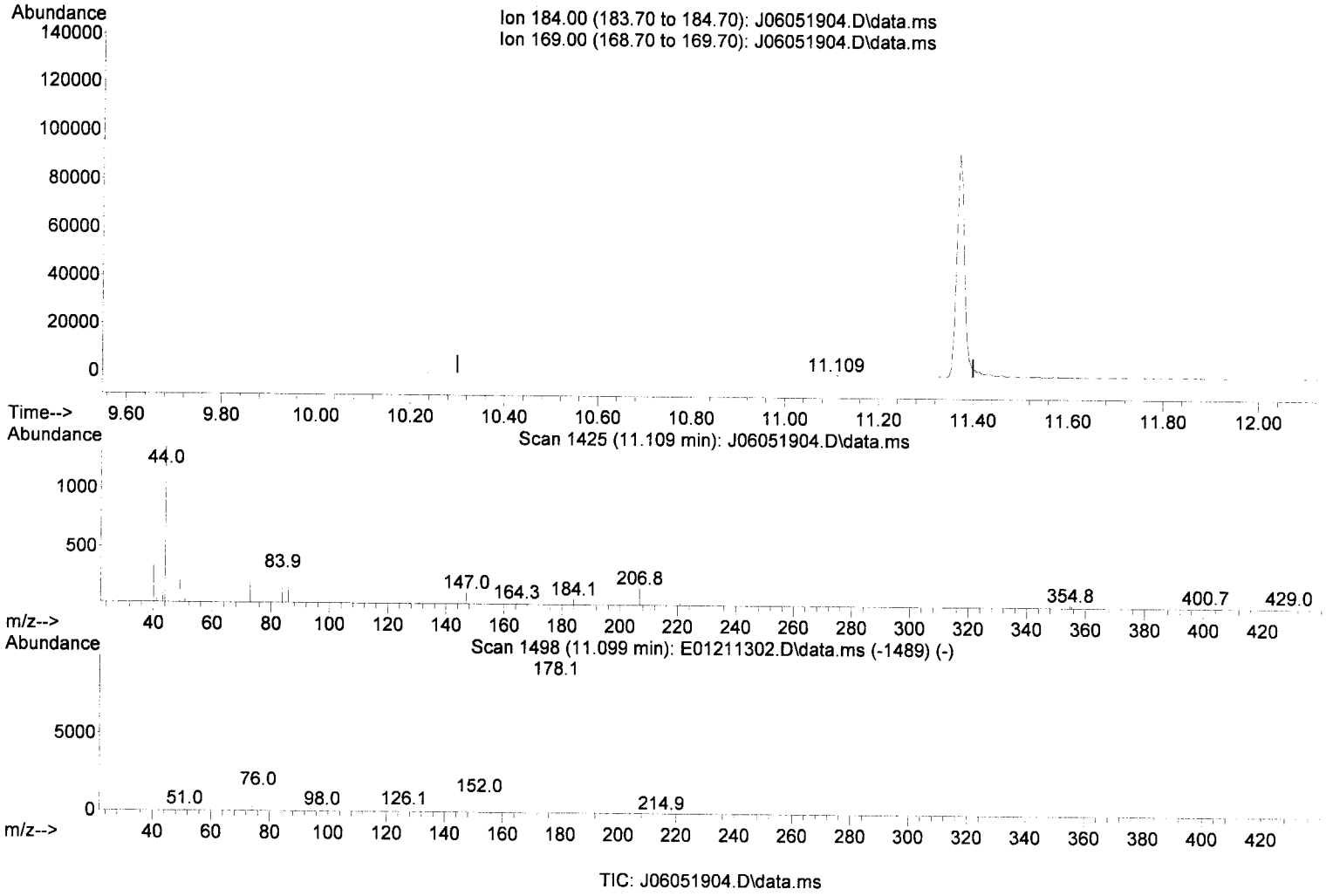
response 74

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

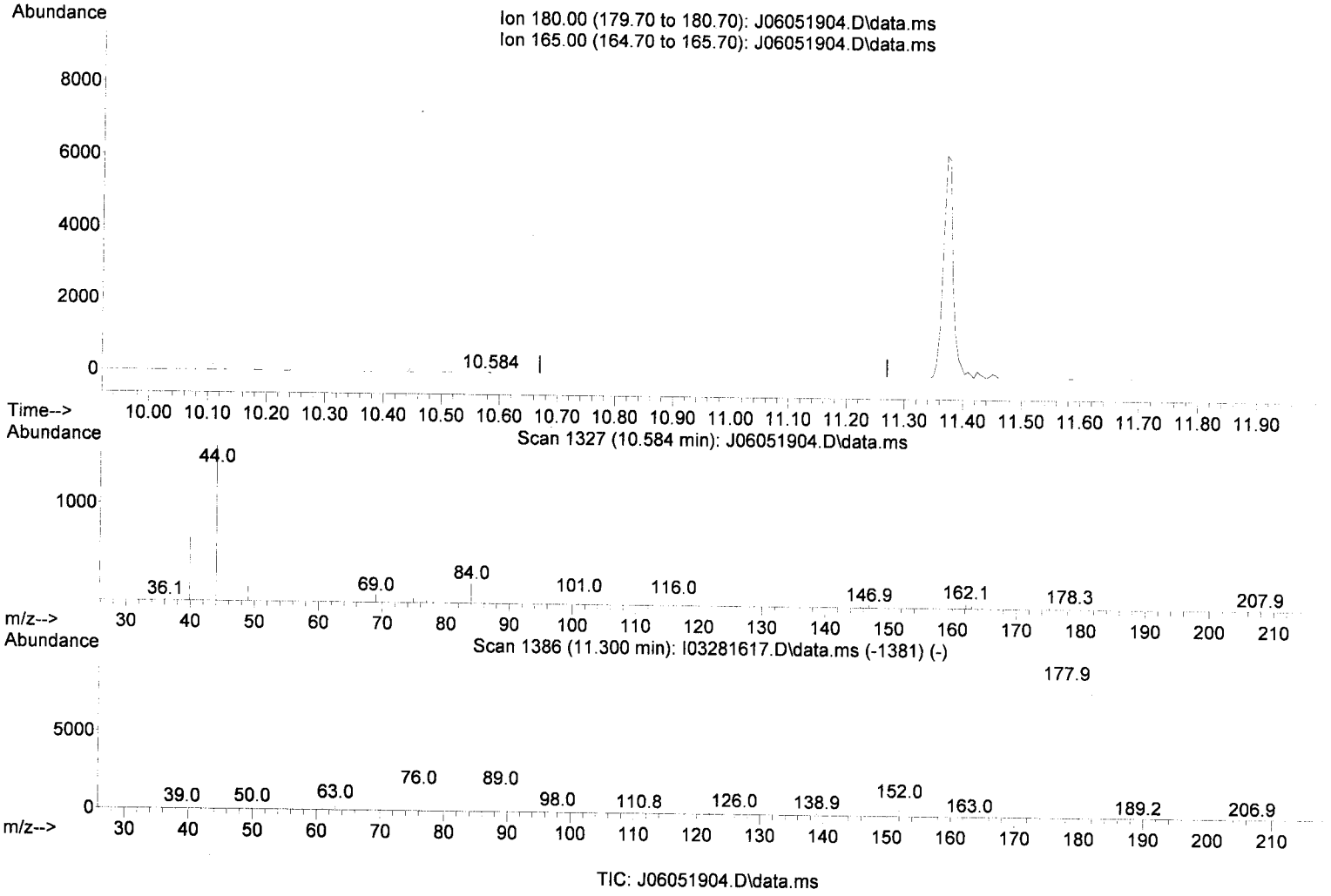
response 59

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

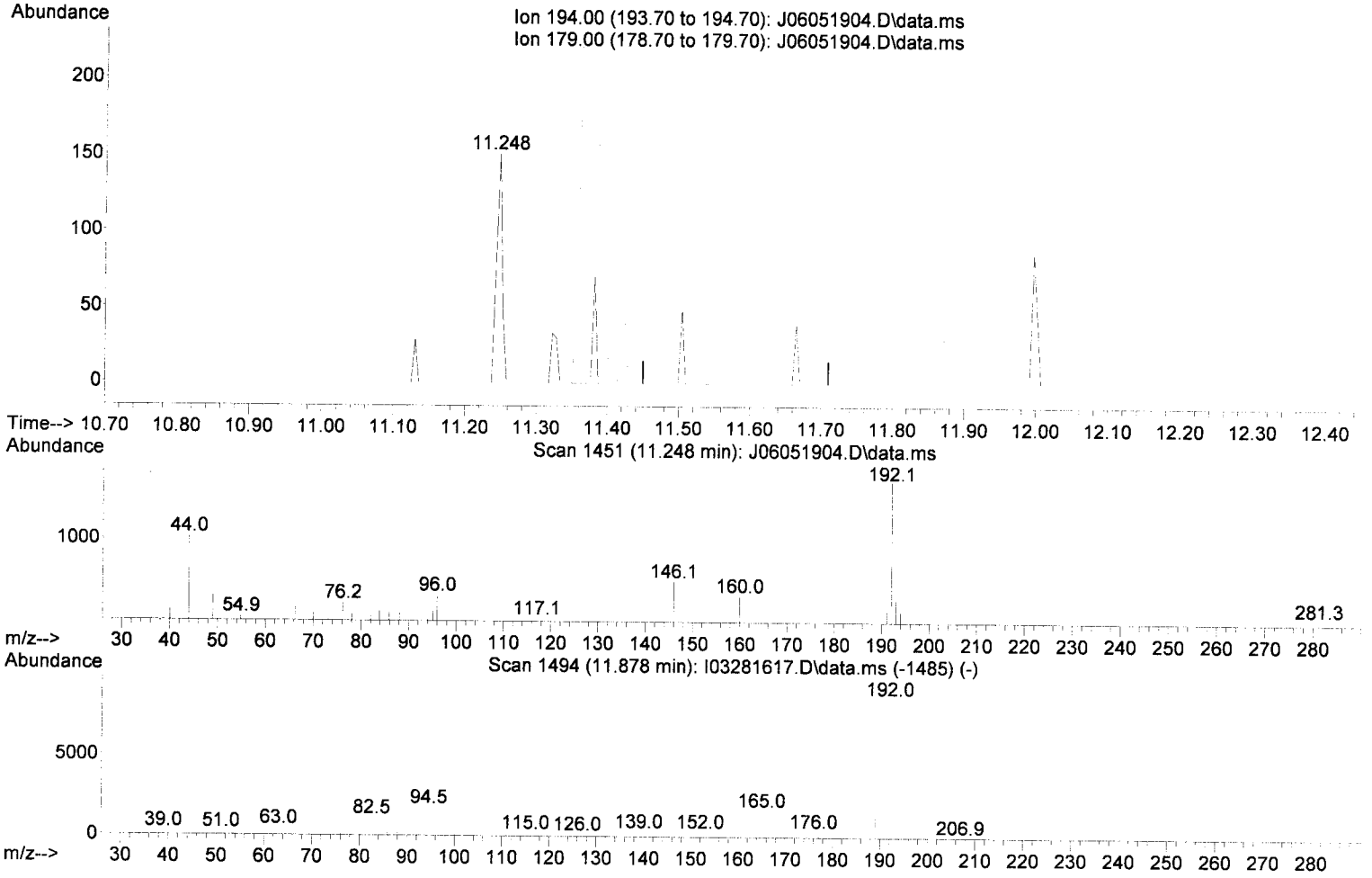
response 0

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

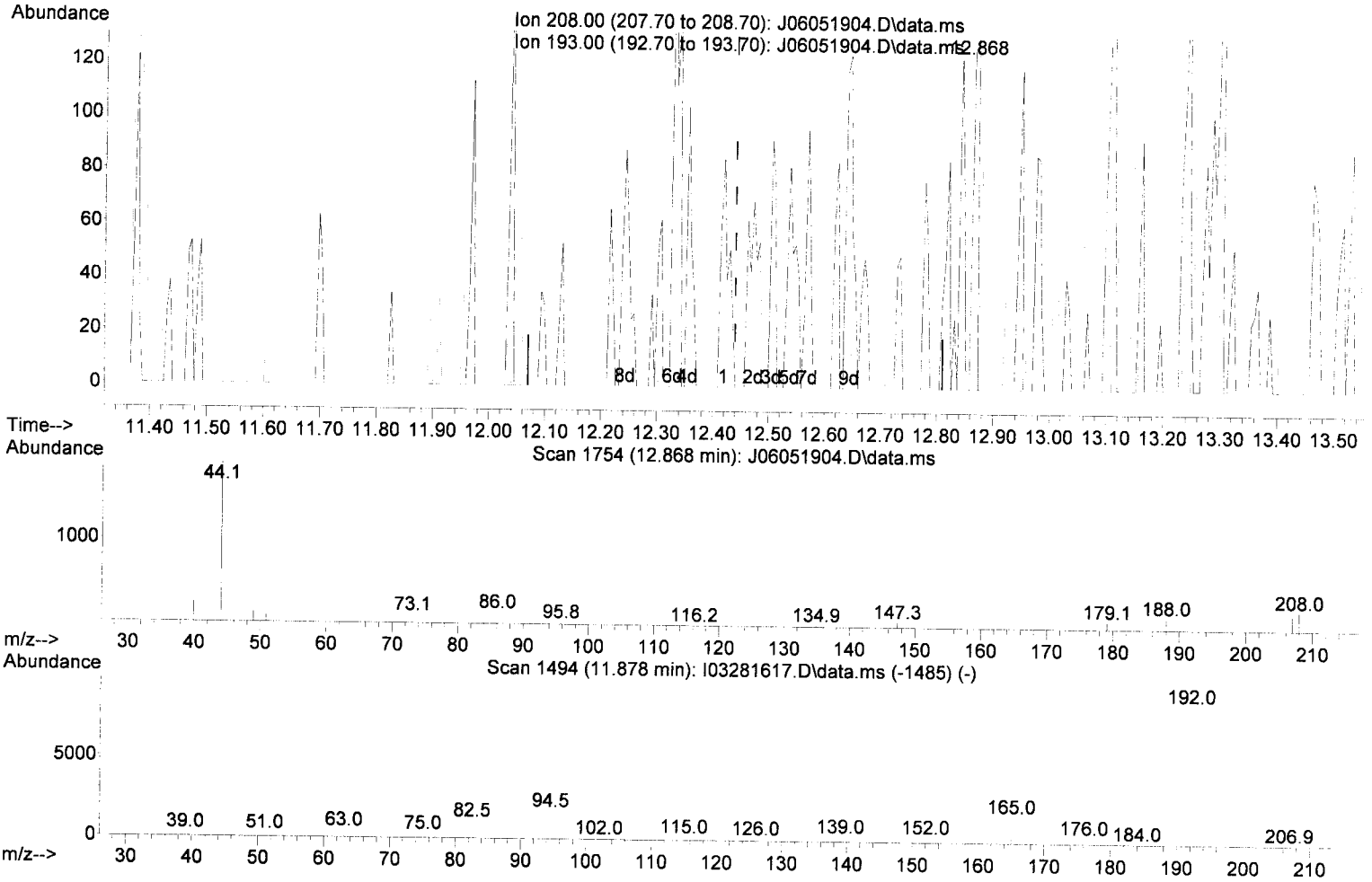
response 154

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

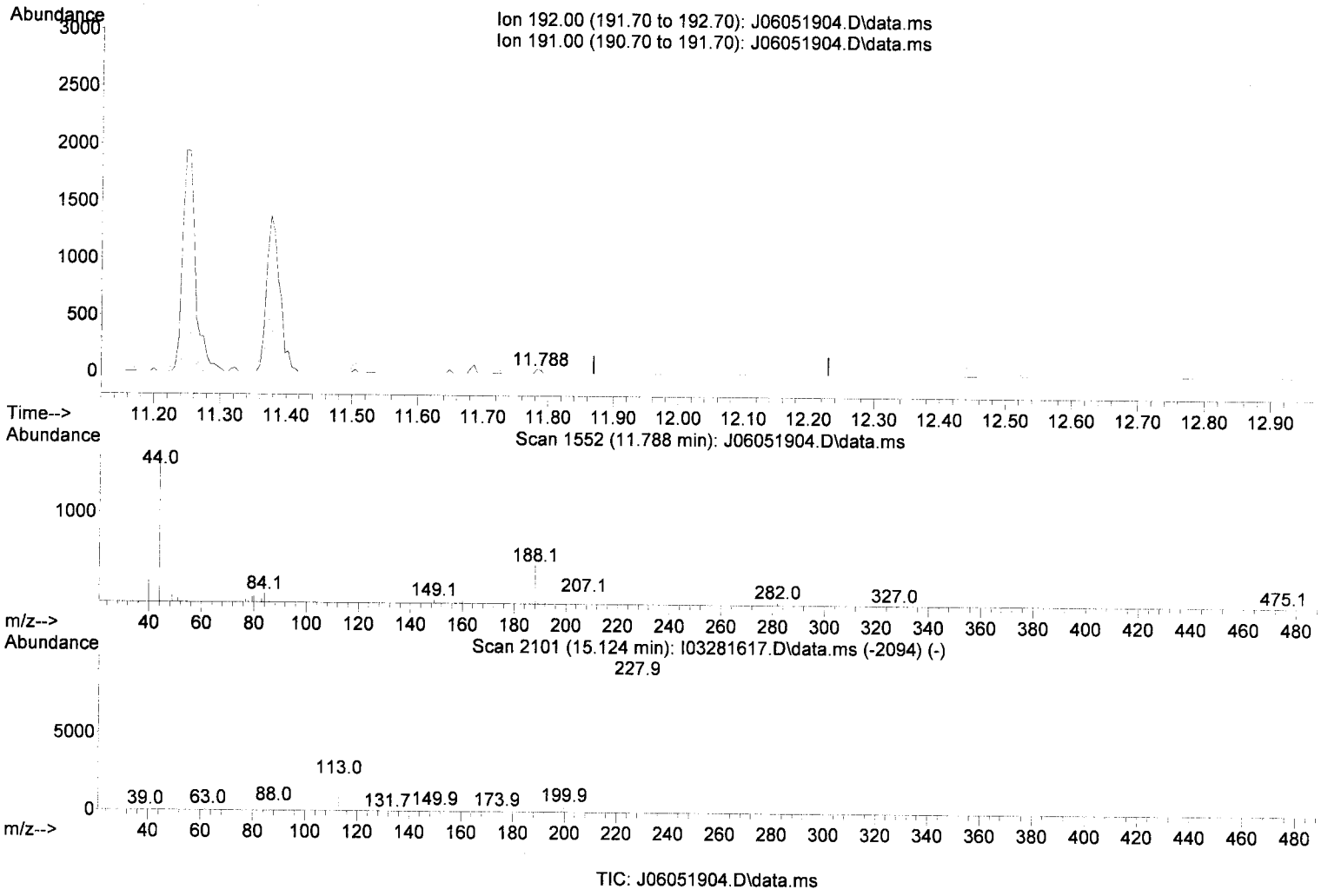
response 1546

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

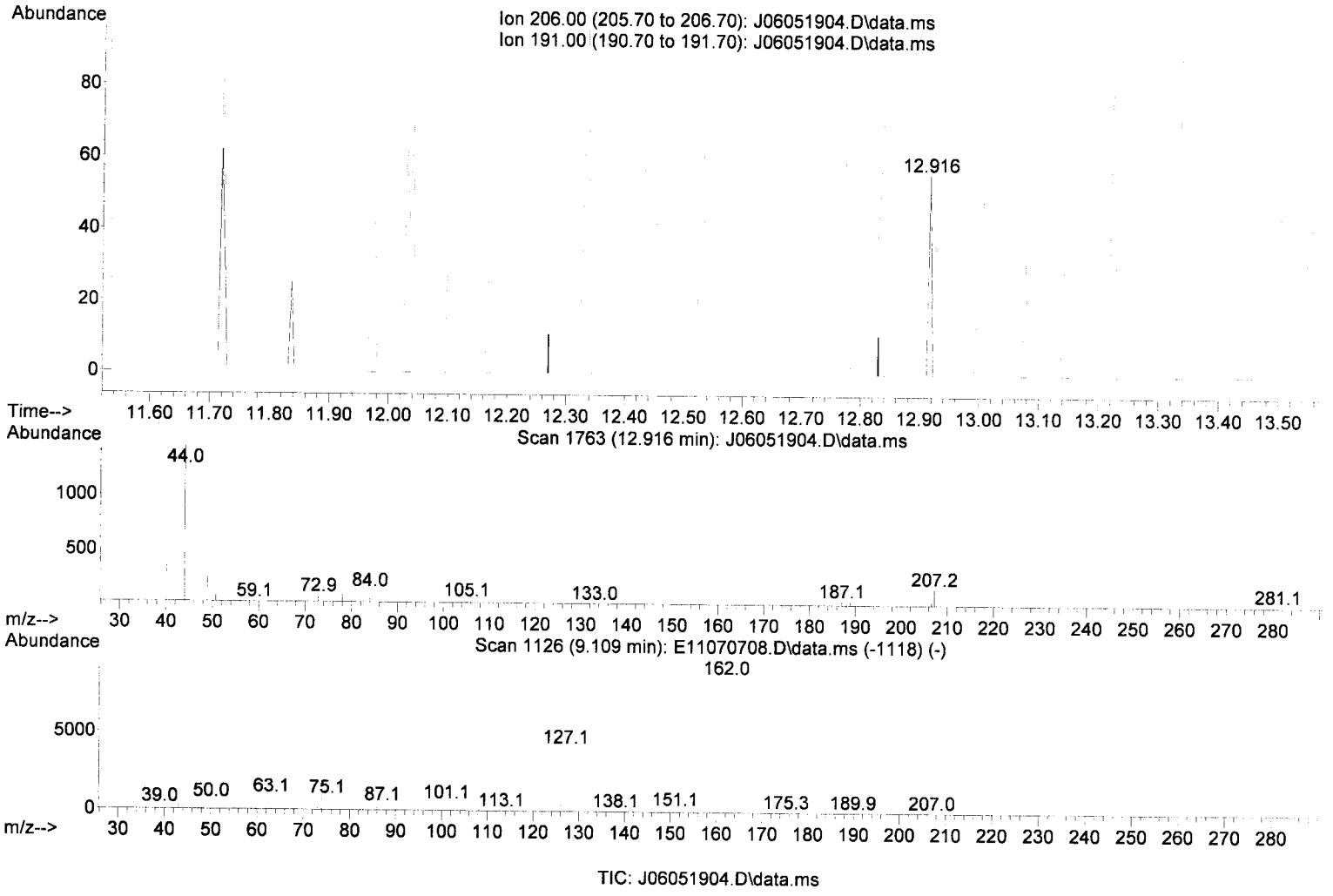
response 0

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

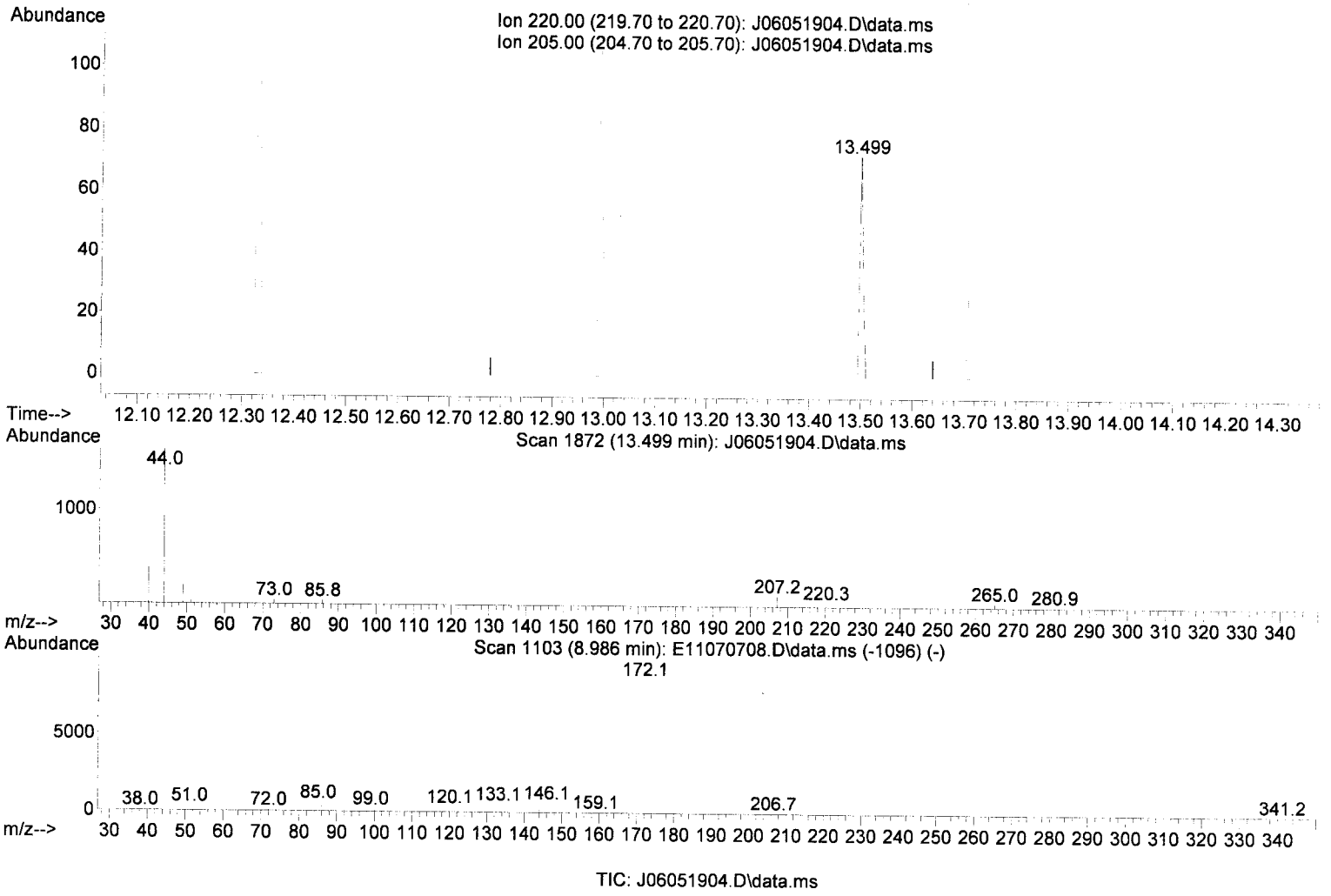
response 18

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

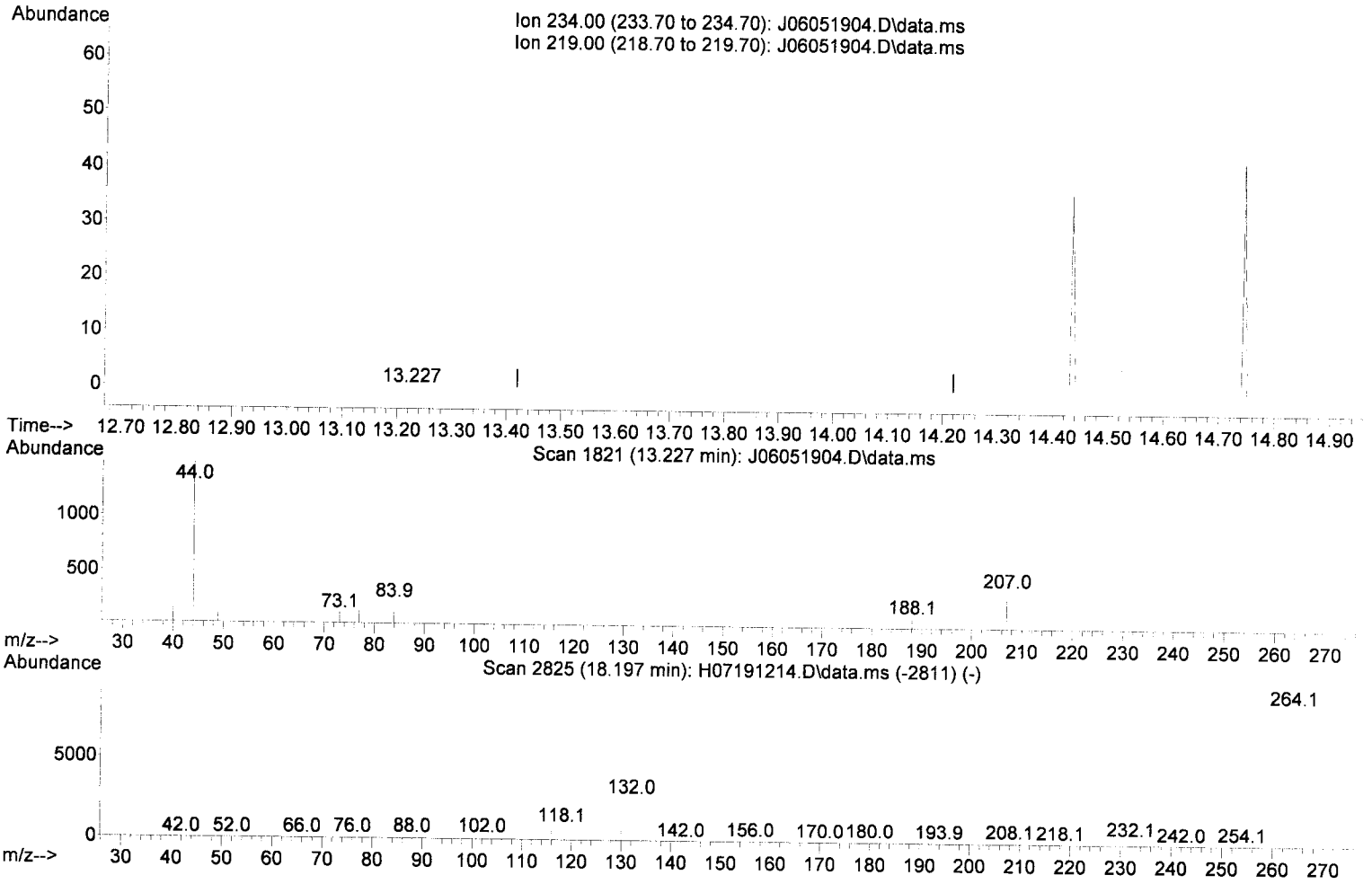
response 32

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

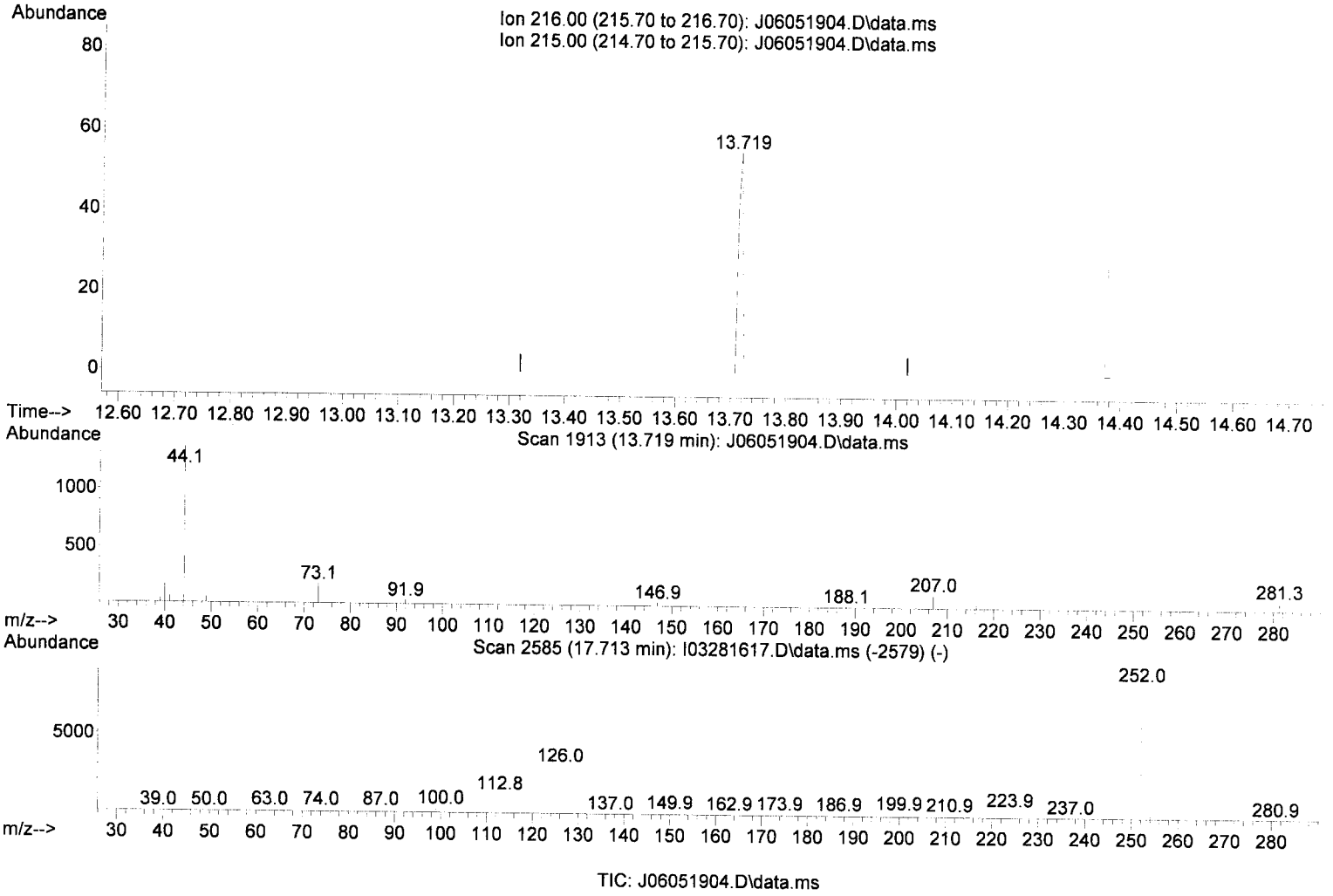
response 0

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

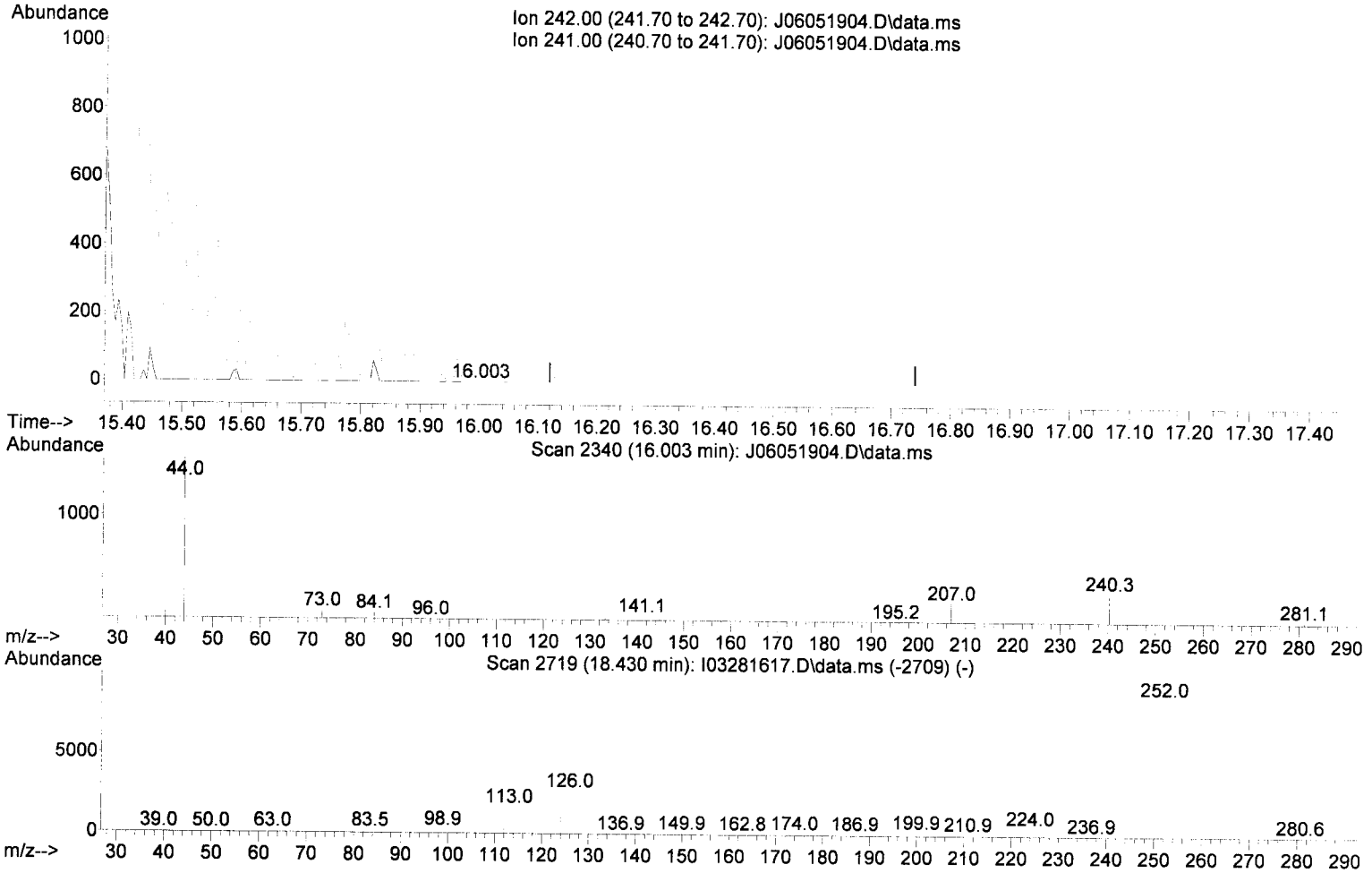
response 31

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

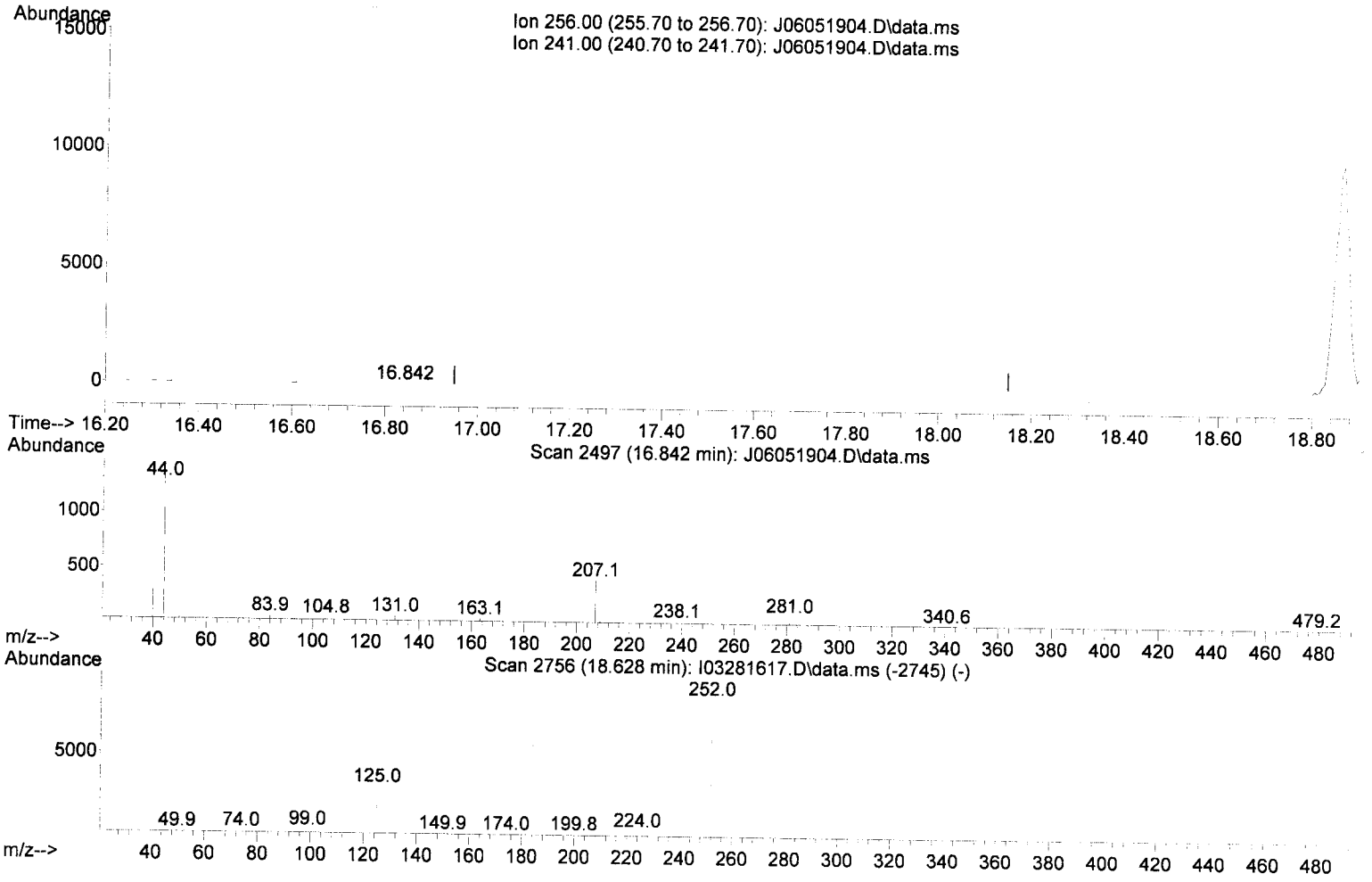
response 0

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

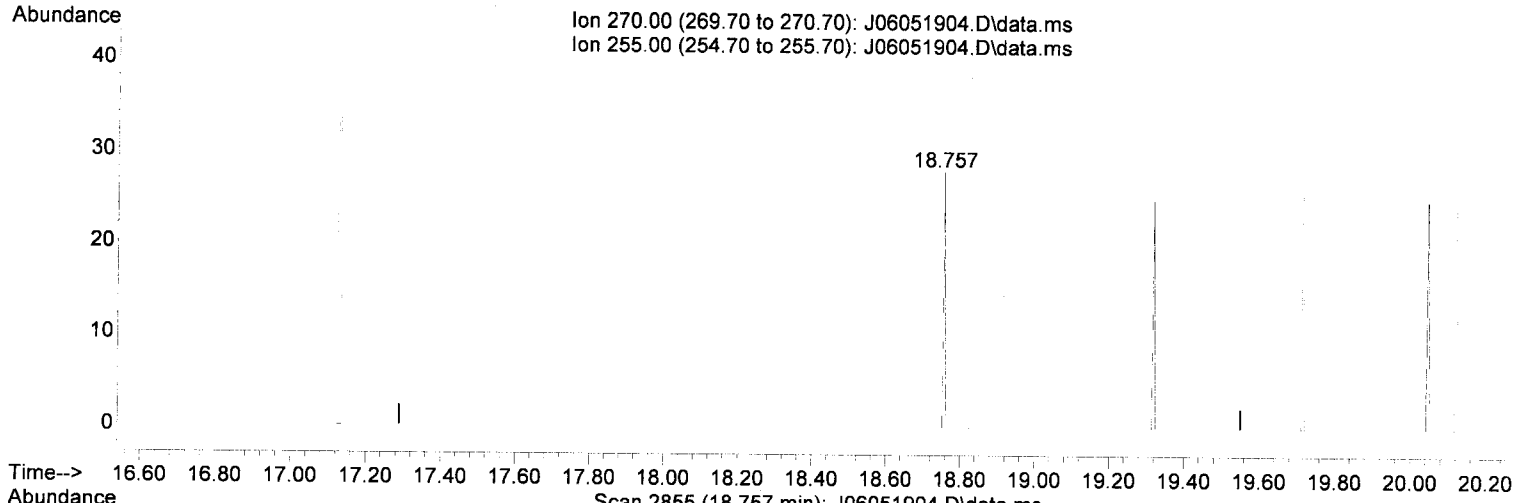
response 0

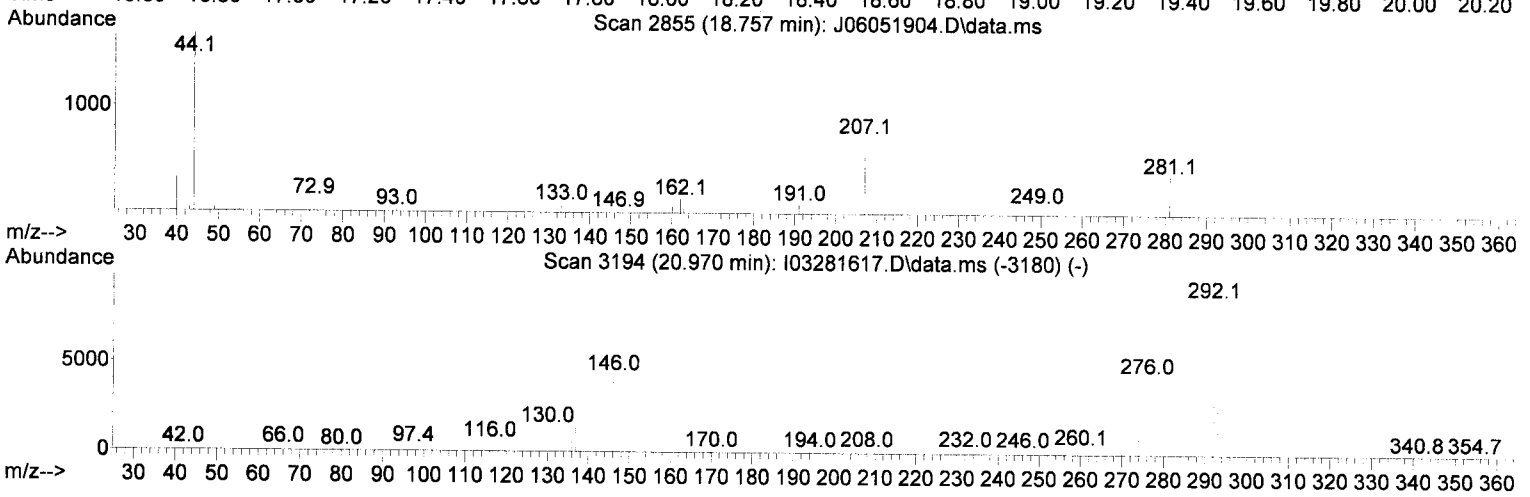
Ion	Exp%	Act%
256.00	100.00	0.00
241.00	50.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

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

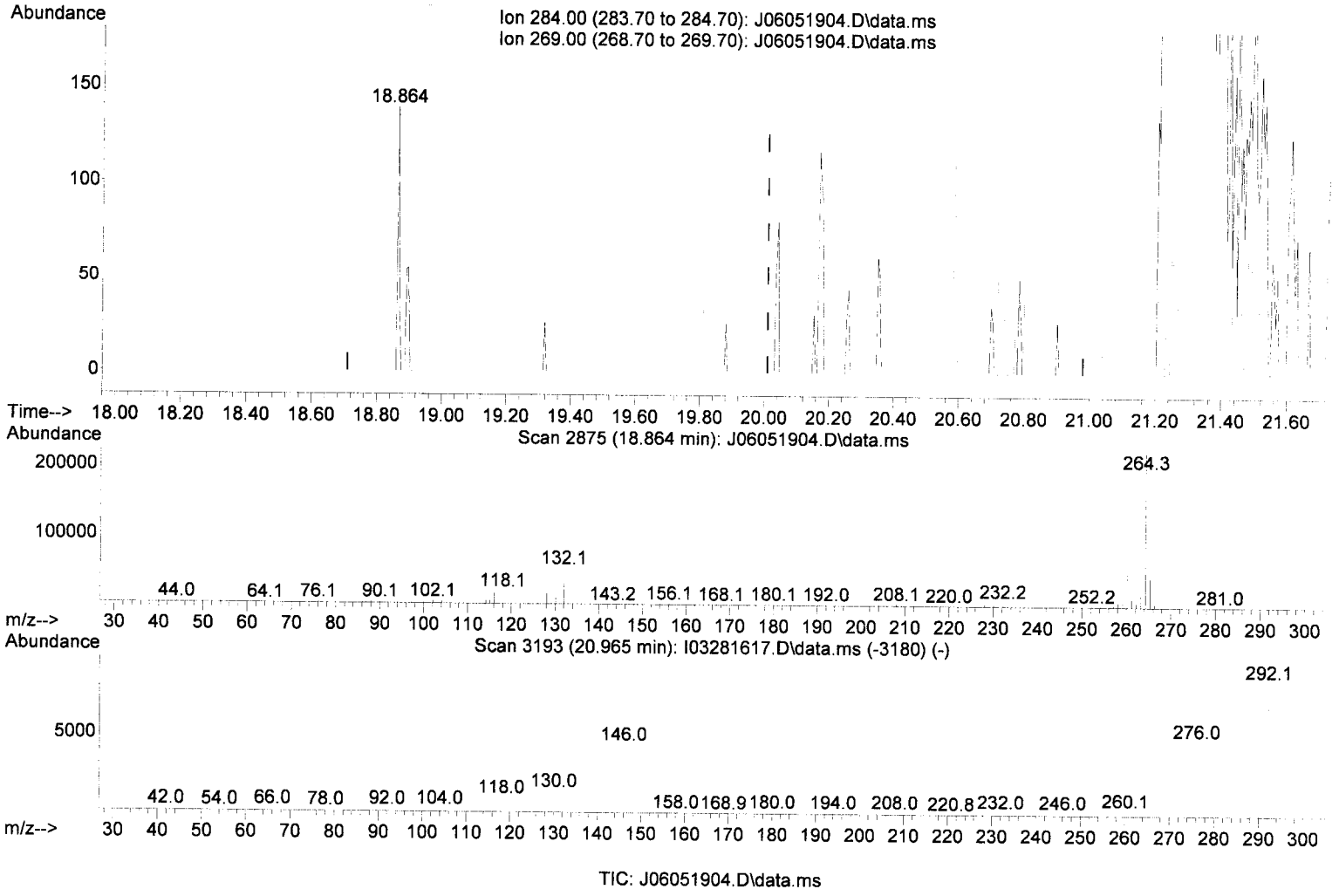
response 17

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

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

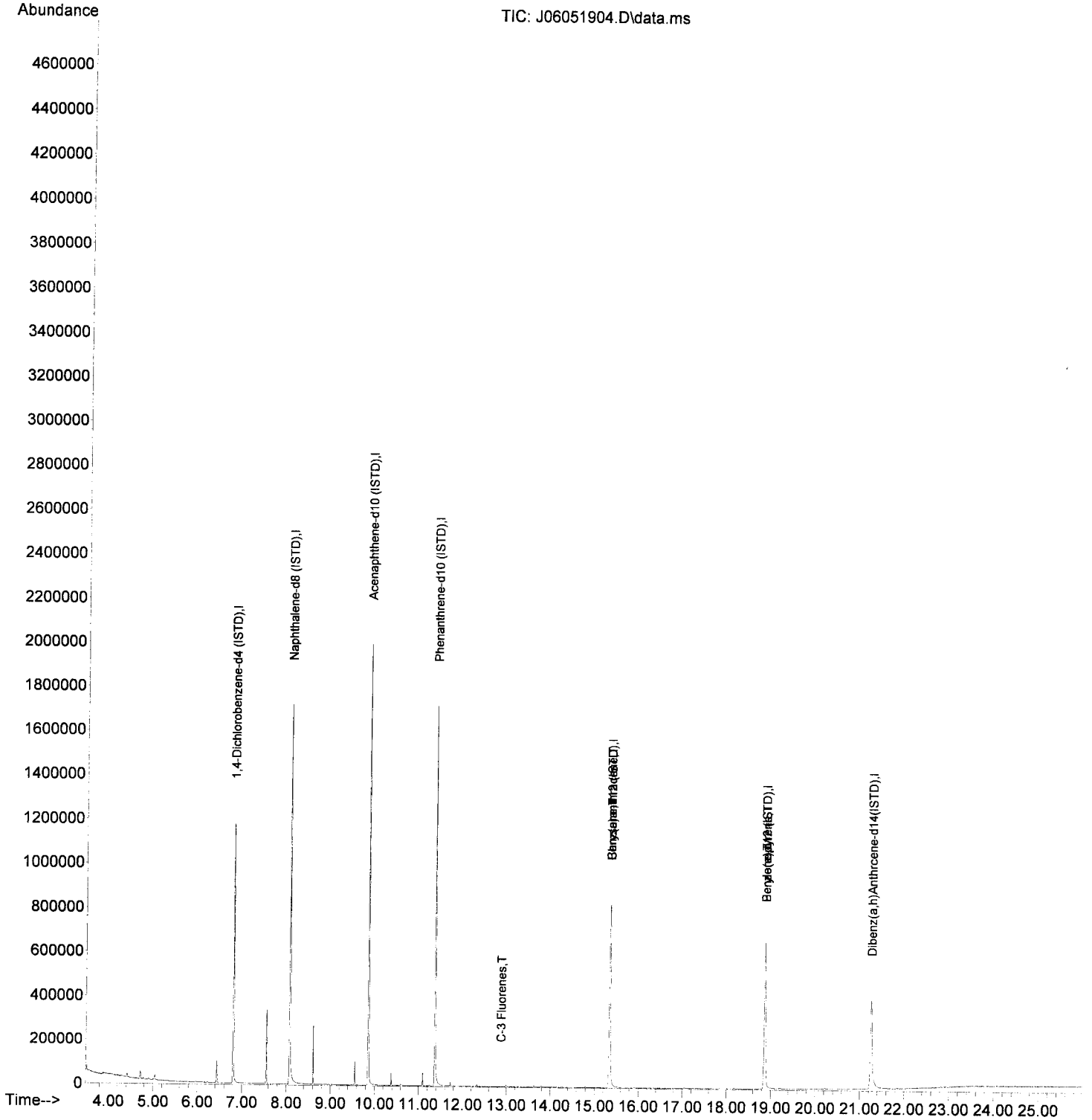
18.864min (-1.146) 1.17 ng/ml m

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



Data Path : T:\data\2019-06\9F05024\
Data File : J06051908.D
Acq On : 5 Jun 2019 12:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BLK2
Misc : 1x, 8270D LL ~~FULL LIST/~~ HOMOLOGS
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

PAH AMS 6/5/19

AMS 6/15/19

Quant Time: Jun 05 12:39:59 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	236426	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	940946	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	422916	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	676456	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	546804	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	455534	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	411046	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.541	112	306069	1991.40 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	234600	1186.64 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	629208	3487.25 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.162	172	998119	3344.98 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	130498	3869.12 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.237	244	1126058	4374.86 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.198	74	102	N.D.	
3) Pyridine	4.252	79	1829m	9.62 ng/ml#	
6) Phenol	6.471	94	11184	60.32 ng/ml	78
7) Aniline	6.477	93	95	N.D.	
8) Bis(2-chloroethyl) ether	6.519	93	2695	13.46 ng/ml#	32
9) 2-Chlorophenol	6.610	128	444	2.76 ng/ml#	56
10) 1,3-Dichlorobenzene	6.749	146	54	N.D.	
11) 1,4-Dichlorobenzene	6.819	146	187	N.D.	
12) Benzyl alcohol	6.947	108	331	35.68 ng/ml#	47
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	7.027	107	203	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.054	45	234	N.D.	
16) N-Nitrosodi-n-propylamine	7.183	70	397	3.03 ng/ml	70
17) 3+4-Methylphenol	7.193	107	188	10.24 ng/ml#	1
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.354	77	2502	14.88 ng/ml#	44
22) Isophorone	7.600	82	1846	5.27 ng/ml	60
23) 2-Nitrophenol	7.691	139	59	57.15 ng/ml	70
24) 2,4-Dimethylphenol	7.739	122	321	27.51 ng/ml#	57
25) Bis(2-chloroethoxy) me...	7.808	93	296	N.D.	
26) Benzoic acid	7.808	105	1237	765.77 ng/ml#	72
27) 2,4-Dichlorophenol	7.969	162	80	45.56 ng/ml	65
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.092	128	3401	6.98 ng/ml	94
30) 4-Chloroaniline	8.167	127	122	15.22 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.637	107	957	70.18 ng/ml	61
33) 2-Methylnaphthalene	8.798	142	948	2.97 ng/ml	97
34) 1-Methylnaphthalene	8.894	142	872	2.81 ng/ml#	60
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	9.087	196	136	46.03 ng/ml#	11
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	9.263	154	2130	6.21 ng/ml	80
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	9.434	138	62	65.80 ng/ml	77
43) 2,6-Dimethylnaphthalene	9.434	156	496	N.D.	

Data Path : T:\data\2019-06\9F05024\
Data File : J06051908.D
Acq On : 5 Jun 2019 12:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BLK2
Misc : 1x, 8270D LL FULL LIST/ HOMOLOGS
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

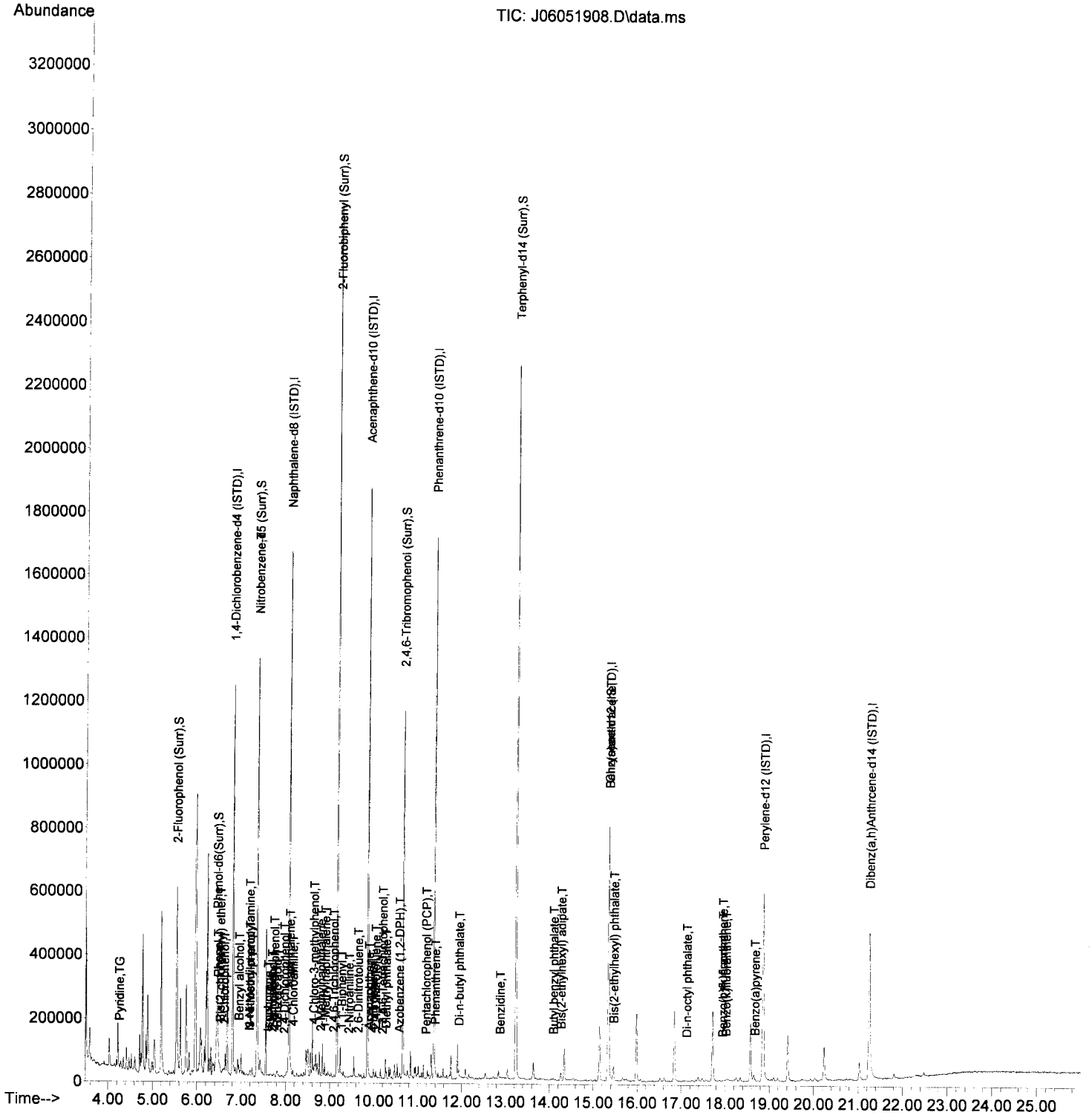
Quant Time: Jun 05 12:39:59 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.568	163	563	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.643	165	80	33.74 ng/ml#	59
48) 1,2-Dinitrobenzene	9.707	168	54	N.D.	
49) Acenaphthylene	9.707	152	459	N.D.	
50) 3-Nitroaniline	9.777	138	106	N.D.	
51) Acenaphthene	9.889	153	898	3.30 ng/ml	65
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.980	139	62	74.68 ng/ml	88
54) 2,4-Dinitrotoluene	10.039	165	251	63.26 ng/ml	74
55) Dibenzofuran	10.066	168	379	N.D.	
56) 2,3,5,6-Tetrachlorophenol	10.194	232	89	36.60 ng/ml#	3
57) 2,3,4,6-Tetrachlorophenol	10.194	232	89	14.69 ng/ml#	31
58) Diethyl phthalate	10.274	149	3045	10.84 ng/ml	93
59) 2,3,5-Trimethylnaphtha...	10.263	170	289	N.D.	
60) Fluorene	10.419	166	170	N.D.	
61) 4-Chlorophenyl phenyl ...	10.467	204	68	N.D.	
62) 4-Nitroaniline	10.386	138	76	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.520	169	392	N.D.	
66) Azobenzene (1,2-DPH)	10.579	77	1262	4.48 ng/ml#	1
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	11.012	284	53	N.D.	
70) Pentachlorophenol (PCP)	11.183	266	60	22.41 ng/ml#	19
71) Phenanthrene	11.397	178	1134	3.09 ng/ml	94
72) Anthracene	11.445	178	199	N.D.	
73) Carbazole	11.622	167	152	N.D.	
74) Di-n-butyl phthalate	11.938	149	10638	25.72 ng/ml	97
75) Fluoranthene	12.713	202	524	N.D.	
76) Benzidine	12.874	184	51	80.74 ng/ml#	1
77) Pyrene	13.034	202	466	N.D.	
80) Butyl benzyl phthalate	14.093	149	2408	44.35 ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.264	129	8412	53.99 ng/ml	94
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.345	228	1462	4.90 ng/ml	75
84) Chrysene	15.382	228	381	N.D.	
85) Bis(2-ethylhexyl) phth...	15.462	149	21900	95.35 ng/ml	89
87) Di-n-octyl phthalate	17.126	149	102	66.53 ng/ml#	1
88) Benzo(b)fluoranthene	17.939	252	82	9.18 ng/ml	54
89) Benzo(k)fluoranthene	18.014	252	147	10.96 ng/ml	75
90) Benzo(b+k)fluoranthene	17.939	252	82	17.41 ng/ml	53
91) Benzo(e)pyrene	18.602	252	226	N.D.	
92) Benzo(a)pyrene	18.671	252	135	10.98 ng/ml#	32
93) Perylene	18.896	252	108	N.D.	
95) Indeno(1,2,3-cd)pyrene	21.255	276	324	N.D.	
96) Dibenz(a,h)anthracene	21.324	278	111	N.D.	
97) Benzo(g,h,i)perylene	21.827	276	115	N.D.	

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051908.D
Acq On : 5 Jun 2019 12:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BLK2
Misc : 1x, 8270D LL FULL LIST/ HOMOLOGS
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 12:39:59 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 : J06051909.D
Acq On : 5 Jun 2019 12:45 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BS2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19

Quant Time: Jun 05 13:19:26 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	246892	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	988101	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	421341	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	610994	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.340	240	465272	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	408551	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	380508	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.557	112	77910	485.42 ng/ml	0.01
5) Phenol-d6(Surr)	6.455	99	62101	300.80 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.354	82	169835	923.17 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	253771	853.64 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	30087	1003.28 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	241086	1100.78 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.182	74	31437m	258.41 ng/ml#	
3) Pyridine	4.139	79	611m	3.08 ng/ml#	
6) Phenol	6.471	94	60665	272.52 ng/ml	97
7) Aniline	6.471	93	813	3.35 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.536	93	130216	622.93 ng/ml	97
9) 2-Chlorophenol	6.611	128	114160	680.15 ng/ml	95
10) 1,3-Dichlorobenzene	6.755	146	62882	332.96 ng/ml	97
11) 1,4-Dichlorobenzene	6.824	146	64893	344.42 ng/ml	100
12) Benzyl alcohol	6.948	108	37636	409.69 ng/ml	88
13) 1,2-Dichlorobenzene	6.974	146	67675	369.06 ng/ml	97
14) 2-Methylphenol	7.055	107	84118	647.01 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.065	45	146289	618.42 ng/ml	89
16) N-Nitrosodi-n-propylamine	7.194	70	102984	752.81 ng/ml	97
17) 3+4-Methylphenol	7.204	107	97368	607.75 ng/ml	98
18) Hexachloroethane	7.311	201	16957	333.93 ng/ml	93
20) Nitrobenzene	7.370	77	130257	741.66 ng/ml	96
22) Isophorone	7.600	82	279046	758.25 ng/ml	99
23) 2-Nitrophenol	7.691	139	66350	870.31 ng/ml	93
24) 2,4-Dimethylphenol	7.728	122	107059	711.20 ng/ml	97
25) Bis(2-chloroethoxy) me...	7.809	93	153103	775.68 ng/ml	99
26) Benzoic acid	7.798	105	33790	1104.99 ng/ml	95
27) 2,4-Dichlorophenol	7.942	162	96074	797.62 ng/ml	97
28) 1,2,4-Trichlorobenzene	8.017	180	56575	403.11 ng/ml	96
29) Naphthalene	8.097	128	267360	522.73 ng/ml	100
30) 4-Chloroaniline	8.151	127	2445	29.78 ng/ml	81
31) Hexachlorobutadiene	8.220	225	23203	304.29 ng/ml	96
32) 4-Chloro-3-methylphenol	8.632	107	103502	734.95 ng/ml	97
33) 2-Methylnaphthalene	8.793	142	168040	501.02 ng/ml	96
34) 1-Methylnaphthalene	8.894	142	161256	495.67 ng/ml	98
36) Hexachlorocyclopentadiene	8.959	237	19997	367.16 ng/ml	98
37) 2,4,6-Trichlorophenol	9.082	196	61657	828.03 ng/ml	97
38) 2,4,5-Trichlorophenol	9.124	198	58516	877.66 ng/ml	100
39) 1,1'-Biphenyl	9.258	154	205808	602.57 ng/ml	99
41) 2-Chloronaphthalene	9.290	162	151410	626.86 ng/ml	98
42) 2-Nitroaniline	9.386	138	66938	867.40 ng/ml	97
43) 2,6-Dimethylnaphthalene	9.424	156	141389	564.60 ng/ml	98

Data Path : T:\data\2019-06\9F05024\
Data File : J06051909.D
Acq On : 5 Jun 2019 12:45 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BS2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

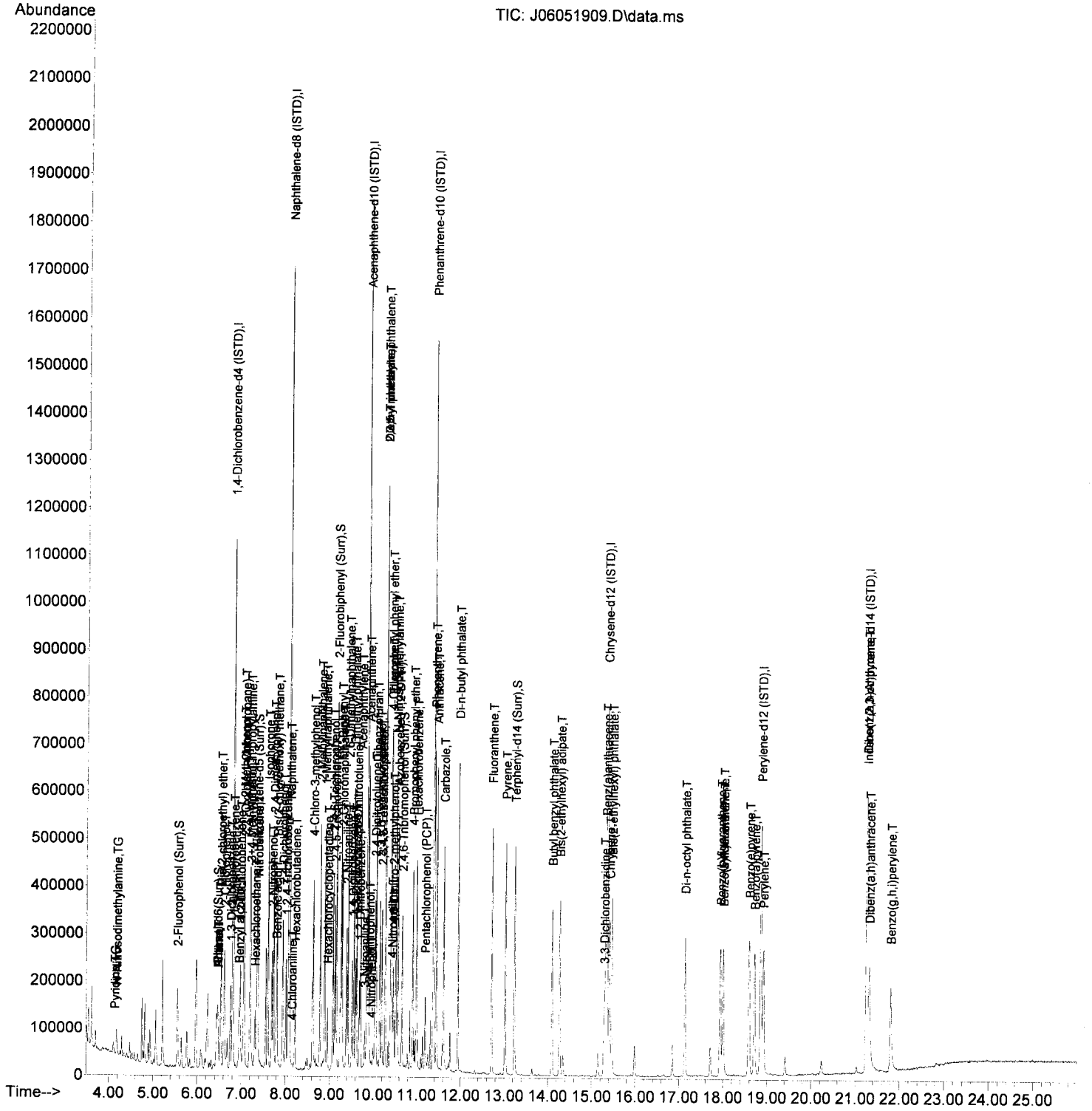
Quant Time: Jun 05 13:19:26 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	29272	1052.58	ng/ml	98
45) Dimethyl phthalate	9.558	163	234022	798.52	ng/ml	96
46) 1,3-Dinitrobenzene	9.595	168	33891	948.25	ng/ml	97
47) 2,6-Dinitrotoluene	9.622	165	53770	874.26	ng/ml	100
48) 1,2-Dinitrobenzene	9.686	168	23878	845.61	ng/ml	84
49) Acenaphthylene	9.713	152	293810	697.10	ng/ml	99
50) 3-Nitroaniline	9.804	138	17189	298.41	ng/ml	93
51) Acenaphthene	9.889	153	178363	658.01	ng/ml	97
52) 2,4-Dinitrophenol	9.911	184	14489	1232.74	ng/ml	96
53) 4-Nitrophenol	9.953	139	290	80.17	ng/ml	61
54) 2,4-Dinitrotoluene	10.039	165	64291	862.42	ng/ml	94
55) Dibenzofuran	10.060	168	239338	675.85	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.146	232	41950	798.15	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	10.194	232	45694	796.04	ng/ml	93
58) Diethyl phthalate	10.269	149	230921	824.99	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.269	170	155664	695.28	ng/ml	99
60) Fluorene	10.413	166	199444	719.20	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.403	204	84559	666.33	ng/ml	97
62) 4-Nitroaniline	10.429	138	35304	666.19	ng/ml	83
63) 4,6-Dinitro-2-methylph...	10.456	198	26043	1226.14	ng/ml	90
65) N-Nitrosodiphenylamine	10.520	169	165761	881.18	ng/ml	100
66) Azobenzene (1,2-DPH)	10.563	77	216287	849.51	ng/ml	92
68) 4-Bromophenyl phenyl e...	10.900	248	47470	789.31	ng/ml	95
69) Hexachlorobenzene	10.986	284	58947	803.86	ng/ml	98
70) Pentachlorophenol (PCP)	11.184	266	22430	696.03	ng/ml	96
71) Phenanthrene	11.392	178	281839	850.09	ng/ml	98
72) Anthracene	11.446	178	272689	844.52	ng/ml	99
73) Carbazole	11.606	167	238716	873.58	ng/ml	97
74) Di-n-butyl phthalate	11.938	149	349308	934.95	ng/ml	99
75) Fluoranthene	12.708	202	283604	857.77	ng/ml	98
76) Benzidine	0.000		0	N.D.		
77) Pyrene	13.024	202	290802	853.48	ng/ml	100
80) Butyl benzyl phthalate	14.093	149	133606	987.33	ng/ml	96
81) Bis(2-ethylhexyl) adipate	14.264	129	114048	860.23	ng/ml	96
82) 3,3-Dichlorobenzidine	15.286	252	58597	1299.98	ng/ml	92
83) Benz(a)anthracene	15.318	228	233717	920.56	ng/ml	100
84) Chrysene	15.404	228	222924	904.92	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.457	149	189832	971.30	ng/ml	98
87) Di-n-octyl phthalate	17.131	149	272160	972.22	ng/ml	96
88) Benzo(b)fluoranthene	17.939	252	223534	949.92	ng/ml	96
89) Benzo(k)fluoranthene	18.003	252	214953	897.50	ng/ml	94
90) Benzo(b+k)fluoranthene	18.003	252	448054	1856.10	ng/ml	94
91) Benzo(e)pyrene	18.597	252	217727	971.87	ng/ml	99
92) Benzo(a)pyrene	18.715	252	205027	952.64	ng/ml	97
93) Perylene	18.912	252	201856	973.33	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.255	276	205617	965.95	ng/ml	97
96) Dibenz(a,h)anthracene	21.314	278	173307	910.16	ng/ml	96
97) Benzo(g,h,i)perylene	21.801	276	166761	810.53	ng/ml	96

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051909.D
Acq On : 5 Jun 2019 12:45 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BS2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 13:19:26 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 : J06051910.D
Acq On : 5 Jun 2019 1:22 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BSD2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Q-19
AMS
6/5/19

Quant Time: Jun 05 13:51:11 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	232851	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	958743	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	434177	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	701450	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	546780	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	464626	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.250	292	415513	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.546	112	77666	513.08 ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	71350	366.44 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	165643	953.94 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	274677	896.65 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	34482	1001.61 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	286613	1113.57 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.102	74	32266m	281.22 ng/ml#	
3) Pyridine	4.198	79	384	N.D.	
6) Phenol	6.466	94	65275	309.43 ng/ml	97
7) Aniline	6.466	93	1532	6.69 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.530	93	128406	651.31 ng/ml	96
9) 2-Chlorophenol	6.610	128	118396	747.92 ng/ml	91
10) 1,3-Dichlorobenzene	6.750	146	99234	557.13 ng/ml	97
11) 1,4-Dichlorobenzene	6.819	146	99974	562.61 ng/ml	98
12) Benzyl alcohol	6.942	108	42386	481.54 ng/ml	97
13) 1,2-Dichlorobenzene	6.974	146	97323	562.74 ng/ml	97
14) 2-Methylphenol	7.054	107	89871	732.94 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.060	45	154554	692.76 ng/ml	91
16) N-Nitrosodi-n-propylamine	7.193	70	106956	828.99 ng/ml	97
17) 3+4-Methylphenol	7.204	107	106069	691.57 ng/ml	96
18) Hexachloroethane	7.311	201	28676	598.76 ng/ml	92
20) Nitrobenzene	7.370	77	139236	840.59 ng/ml	98
22) Isophorone	7.600	82	288911	809.10 ng/ml	98
23) 2-Nitrophenol	7.691	139	69355	932.30 ng/ml	93
24) 2,4-Dimethylphenol	7.728	122	97968	671.86 ng/ml	96
25) Bis(2-chloroethoxy) me...	7.809	93	159855	834.68 ng/ml	98
26) Benzoic acid	7.798	105	40639	1188.56 ng/ml	97
27) 2,4-Dichlorophenol	7.937	162	98123	837.39 ng/ml	93
28) 1,2,4-Trichlorobenzene	8.017	180	87103	639.64 ng/ml	99
29) Naphthalene	8.097	128	340597	686.31 ng/ml	100
30) 4-Chloroaniline	8.151	127	3379	36.30 ng/ml	98
31) Hexachlorobutadiene	8.220	225	42606	575.86 ng/ml	99
32) 4-Chloro-3-methylphenol	8.632	107	111777	810.89 ng/ml	94
33) 2-Methylnaphthalene	8.793	142	225164	691.89 ng/ml	99
34) 1-Methylnaphthalene	8.894	142	215580	682.95 ng/ml	95
36) Hexachlorocyclopentadiene	8.959	237	39215	668.72 ng/ml	99
37) 2,4,6-Trichlorophenol	9.082	196	66906	869.91 ng/ml	95
38) 2,4,5-Trichlorophenol	9.124	198	61170	889.85 ng/ml	99
39) 1,1'-Biphenyl	9.263	154	271420	771.17 ng/ml	99
41) 2-Chloronaphthalene	9.285	162	196022	787.56 ng/ml	95
42) 2-Nitroaniline	9.386	138	74149	926.64 ng/ml	98
43) 2,6-Dimethylnaphthalene	9.424	156	198287	768.40 ng/ml	98

Data Path : T:\data\2019-06\9F05024\
Data File : J06051910.D
Acq On : 5 Jun 2019 1:22 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BSD2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

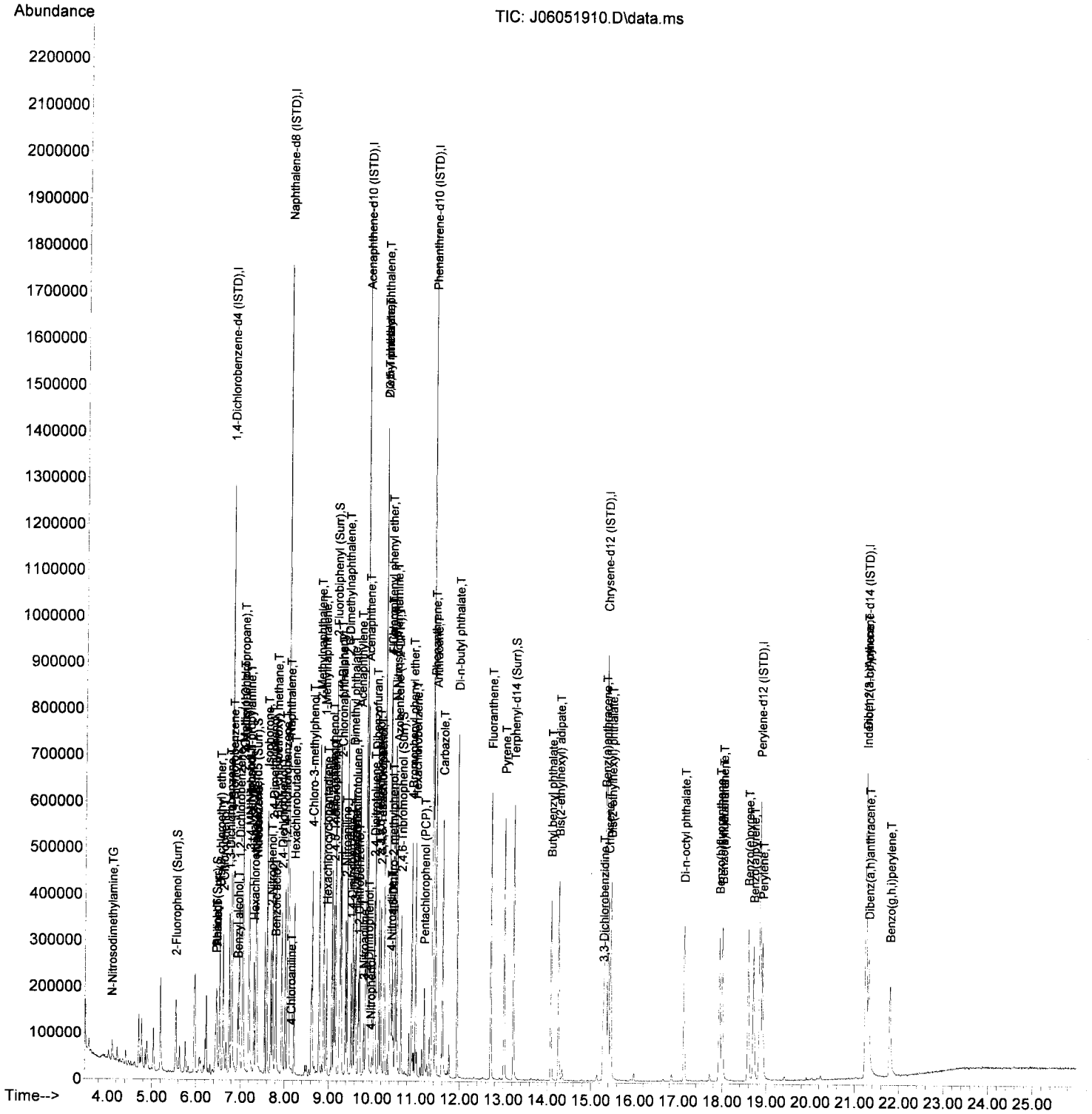
Quant Time: Jun 05 13:51:11 2019
Quant Method : T:\methods\SV10_041219R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Tue May 21 11:13:18 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	33057	1137.69	ng/ml	96
45) Dimethyl phthalate	9.558	163	257620	853.05	ng/ml	99
46) 1,3-Dinitrobenzene	9.595	168	38162	1028.03	ng/ml	95
47) 2,6-Dinitrotoluene	9.622	165	59857	941.99	ng/ml	95
48) 1,2-Dinitrobenzene	9.686	168	25633	880.93	ng/ml	85
49) Acenaphthylene	9.713	152	349083	803.76	ng/ml	99
50) 3-Nitroaniline	9.804	138	26257	442.36	ng/ml	95
51) Acenaphthene	9.889	153	218680	782.90	ng/ml	98
52) 2,4-Dinitrophenol	9.911	184	17151	1364.05	ng/ml	95
53) 4-Nitrophenol	9.964	139	138	76.42	ng/ml#	34
54) 2,4-Dinitrotoluene	10.039	165	73118	945.06	ng/ml	94
55) Dibenzofuran	10.066	168	295092	808.65	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	10.146	232	46177	849.55	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	10.194	232	47921	809.81	ng/ml	92
58) Diethyl phthalate	10.274	149	254791	883.36	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.274	170	189077	819.55	ng/ml	97
60) Fluorene	10.413	166	231585	810.41	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.403	204	102415	783.18	ng/ml	99
62) 4-Nitroaniline	10.429	138	44295	811.14	ng/ml	84
63) 4,6-Dinitro-2-methylph...	10.456	198	33133	1457.63	ng/ml	97
65) N-Nitrosodiphenylamine	10.520	169	191677	887.55	ng/ml	98
66) Azobenzene (1,2-DPH)	10.563	77	257752	881.83	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.900	248	57586	834.03	ng/ml	94
69) Hexachlorobenzene	10.986	284	68887	818.27	ng/ml	97
70) Pentachlorophenol (PCP)	11.184	266	26376	712.12	ng/ml	99
71) Phenanthrene	11.398	178	323864	850.88	ng/ml	98
72) Anthracene	11.446	178	325245	877.39	ng/ml	100
73) Carbazole	11.606	167	290207	925.06	ng/ml	98
74) Di-n-butyl phthalate	11.938	149	394750	920.33	ng/ml	99
75) Fluoranthene	12.708	202	337272	888.55	ng/ml	97
76) Benzidine	0.000		0	N.D.		
77) Pyrene	13.024	202	342440	875.43	ng/ml	100
80) Butyl benzyl phthalate	14.088	149	152912	962.94	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.264	129	131952	846.91	ng/ml	97
82) 3,3-Dichlorobenzidine	15.286	252	70533	1342.00	ng/ml	93
83) Benz(a)anthracene	15.318	228	274091	918.65	ng/ml	99
84) Chrysene	15.398	228	267325	923.40	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.457	149	212756	926.32	ng/ml	99
87) Di-n-octyl phthalate	17.131	149	312410	980.54	ng/ml	96
88) Benzo(b)fluoranthene	17.934	252	257871	963.31	ng/ml	95
89) Benzo(k)fluoranthene	18.003	252	251506	923.53	ng/ml	95
90) Benzo(b+k)fluoranthene	18.003	252	522179	1901.78	ng/ml	95
91) Benzo(e)pyrene	18.591	252	252596	991.44	ng/ml	98
92) Benzo(a)pyrene	18.714	252	230714	942.75	ng/ml	100
93) Perylene	18.918	252	234097	992.56	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.255	276	191020	821.78	ng/ml	94
96) Dibenz(a,h)anthracene	21.319	278	198446	954.38	ng/ml	93
97) Benzo(g,h,i)perylene	21.801	276	194446	865.47	ng/ml	94

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

Data Path : T:\data\2019-06\9F05024\
Data File : J06051910.D
Acq On : 5 Jun 2019 1:22 pm
Operator : JK/ AMS/ DTH
Sample : 9060576-BSD2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 13:51:11 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 : J06051911.D
Acq On : 5 Jun 2019 1:58 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-01
Misc : 1x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/5/19 R02

Quant Time: Jun 05 14:25:37 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	160867	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.076	136	862768	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.857	162	427425	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.371	188	717900	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.339	240	610251	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.859	264	500281	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.244	292	465316	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.541	112	144406	1380.87	ng/ml	0.00
5) Phenol-d6(Surr)	6.455	99	159536	1185.98	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.349	82	423462	3449.95	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.156	172	706370	2342.28	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.659	330	114825	3209.21	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.232	244	991921	3453.06	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.161	74	61	N.D.		
3) Pyridine	4.273	79	415m	3.21	ng/ml#	NR
6) Phenol	6.471	94	44553	305.83	ng/ml	99
7) Aniline	6.461	93	917	5.80	ng/ml#	1
8) Bis(2-chloroethyl) ether	6.514	93	1554	11.41	ng/ml#	49
9) 2-Chlorophenol	6.616	128	236	N.D.		
10) 1,3-Dichlorobenzene	6.819	146	183	N.D.		
11) 1,4-Dichlorobenzene	6.819	146	183	N.D.		NR
12) Benzyl alcohol	6.947	108	6823	138.48	ng/ml	94
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	7.054	107	1495	17.65	ng/ml	89
15) 2,2'-Oxybis(1-Chloropr...	7.049	45	93	N.D.		
16) N-Nitrosodi-n-propylamine	7.199	70	5054	↑56.70	ng/ml	65 R02
17) 3+4-Methylphenol	7.210	107	7285	↑83.87	ng/ml#	1 R02 NR ✓
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.349	77	4183	36.55	ng/ml#	43
22) Isophorone	7.605	82	4584	14.27	ng/ml	80
23) 2-Nitrophenol	7.691	139	1047	71.29	ng/ml#	67
24) 2,4-Dimethylphenol	7.728	122	786	31.08	ng/ml#	71
25) Bis(2-chloroethoxy) me...	7.814	93	1574	9.13	ng/ml#	1
26) Benzoic acid	7.809	105	11265	887.60	ng/ml	91
27) 2,4-Dichlorophenol	7.948	162	133	46.09	ng/ml#	1
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.092	128	6752	15.12	ng/ml	98
30) 4-Chloroaniline	8.140	127	376	17.12	ng/ml#	18
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.606	107	94	64.36	ng/ml#	1
33) 2-Methylnaphthalene	8.793	142	2054	7.01	ng/ml#	76
34) 1-Methylnaphthalene	8.894	142	2288	8.05	ng/ml#	63
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	9.087	196	261	47.57	ng/ml#	65
38) 2,4,5-Trichlorophenol	9.130	198	235	29.87	ng/ml#	31
39) 1,1'-Biphenyl	9.258	154	1802	5.20	ng/ml	84
41) 2-Chloronaphthalene	9.306	162	379	N.D.		
42) 2-Nitroaniline	9.376	138	158	66.94	ng/ml#	44
43) 2,6-Dimethylnaphthalene	9.419	156	1986	7.82	ng/ml#	1

Data Path : T:\data\2019-06\9F05024\
Data File : J06051911.D
Acq On : 5 Jun 2019 1:58 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-01
Misc : 1x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 14:25:37 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

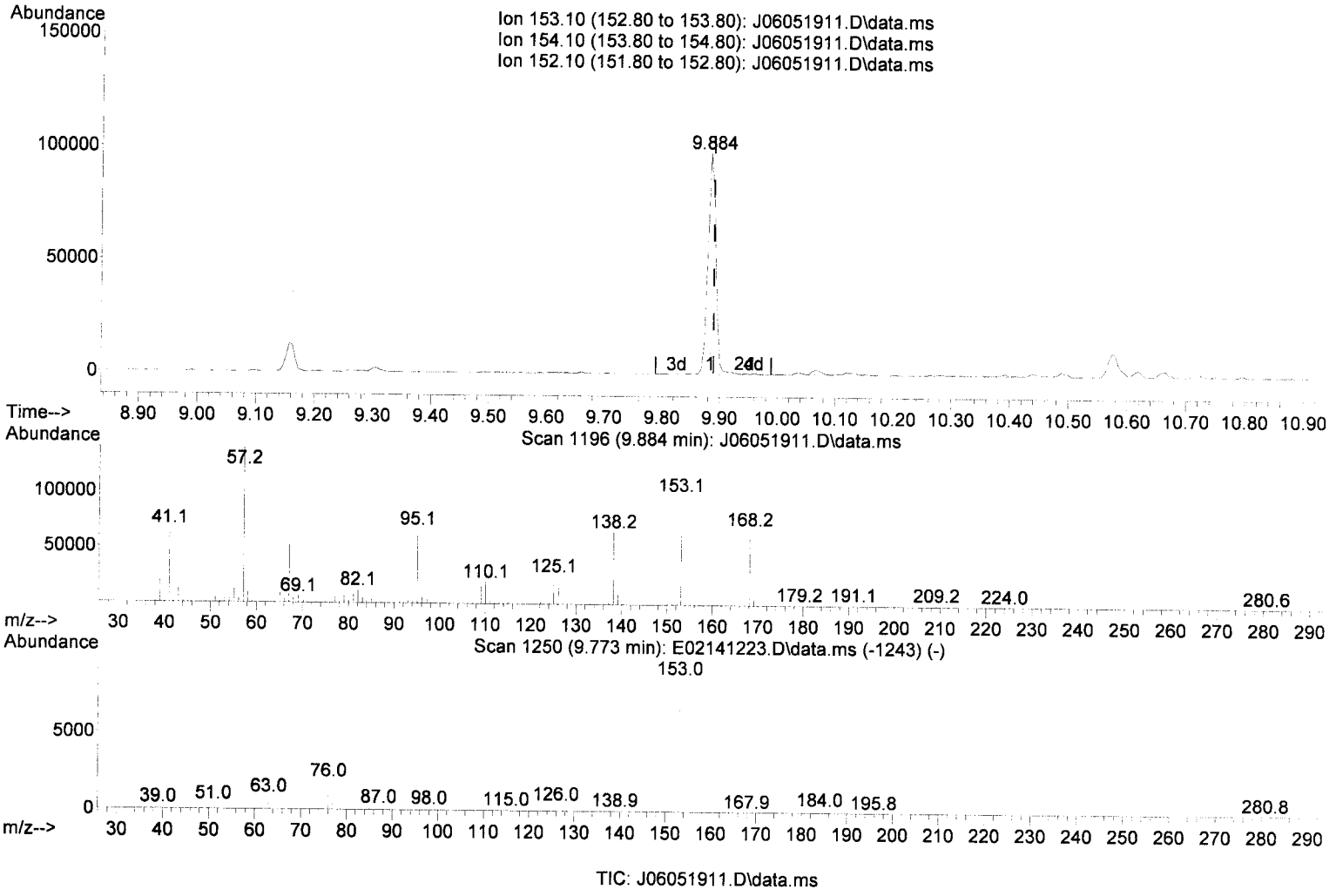
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	
44) 1,4-Dinitrobenzene	9.499	168	71	123.70 ng/ml#	17	
45) Dimethyl phthalate	9.558	163	4113	13.83 ng/ml	78	
46) 1,3-Dinitrobenzene	9.600	168	152	68.83 ng/ml#	1	
47) 2,6-Dinitrotoluene	9.606	165	4208	97.32 ng/ml#	48	
48) 1,2-Dinitrobenzene	9.675	168	394	13.75 ng/ml#	48	
49) Acenaphthylene	9.713	152	780	N.D.		
50) 3-Nitroaniline	9.798	138	410	7.02 ng/ml#	13	R-02
51) Acenaphthene	9.884	153	93248	339.11 ng/ml#	19	
52) 2,4-Dinitrophenol	9.921	184	64	166.97 ng/ml#	1	
53) 4-Nitrophenol	9.980	139	2962	↑143.16 ng/ml#	57	MDL=MRL MR
54) 2,4-Dinitrotoluene	10.028	165	1278	75.93 ng/ml#	44	
55) Dibenzofuran	10.066	168	780	N.D.		
56) 2,3,5,6-Tetrachlorophenol	10.146	232	268	39.83 ng/ml#	1	
57) 2,3,4,6-Tetrachlorophenol	10.199	232	310	18.44 ng/ml#	59	
58) Diethyl phthalate	10.274	149	32675	115.07 ng/ml	98	NR
59) 2,3,5-Trimethylnaphtha...	10.285	170	694	3.06 ng/ml	80	
60) Fluorene	10.408	166	615	N.D.		
61) 4-Chlorophenyl phenyl ...	10.461	204	53	N.D.		
62) 4-Nitroaniline	10.440	138	251	4.67 ng/ml#	42	
63) 4,6-Dinitro-2-methylph...	10.478	198	54	86.85 ng/ml#	1	
65) N-Nitrosodiphenylamine	10.520	169	1450	6.56 ng/ml	94	
66) Azobenzene (1,2-DPH)	10.574	77	263576	↑881.09 ng/ml#	1,202	NR
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
69) Hexachlorobenzene	0.000		0	N.D.		
70) Pentachlorophenol (PCP)	11.194	266	292	28.37 ng/ml#	65	
71) Phenanthrene	11.392	178	1633	4.19 ng/ml	75	
72) Anthracene	11.451	178	88	N.D.		
73) Carbazole	11.606	167	95	N.D.		
74) Di-n-butyl phthalate	11.938	149	31810	72.46 ng/ml	94	
75) Fluoranthene	12.708	202	401	N.D.		
76) Benzidine	12.836	184	92	81.00 ng/ml#	1	
77) Pyrene	13.018	202	327	N.D.		
80) Butyl benzyl phthalate	14.088	149	11155	91.80 ng/ml	97	
81) Bis(2-ethylhexyl) adipate	14.264	129	5186	29.82 ng/ml	95	
82) 3,3-Dichlorobenzidine	0.000		0	N.D.		
83) Benz(a)anthracene	15.350	228	1761	5.29 ng/ml	65	
84) Chrysene	15.398	228	96	N.D.		
85) Bis(2-ethylhexyl) phth...	15.457	149	32365	126.26 ng/ml	98	
87) Di-n-octyl phthalate	17.126	149	301	67.05 ng/ml#	1	
88) Benzo(b)fluoranthene	0.000		0	N.D.		
89) Benzo(k)fluoranthene	0.000		0	N.D.		
90) Benzo(b+k)fluoranthene	0.000		0	N.D.		
91) Benzo(e)pyrene	18.586	252	123	N.D.		
92) Benzo(a)pyrene	0.000		0	N.D.		
93) Perylene	18.859	252	1792	7.06 ng/ml	72	
95) Indeno(1,2,3-cd)pyrene	21.234	276	164	N.D.		
96) Dibenz(a,h)anthracene	21.260	278	135	N.D.		
97) Benzo(g,h,i)perylene	21.833	276	111	N.D.		

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F05024\
Data File : J06051911.D
Acq On : 5 Jun 2019 1:58 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-01
Misc : 1x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 14:25:37 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: J06051911.D\data.ms

(51) Acenaphthene (T)

9.884min (-0.005) 339.11 ng/ml

response 93248

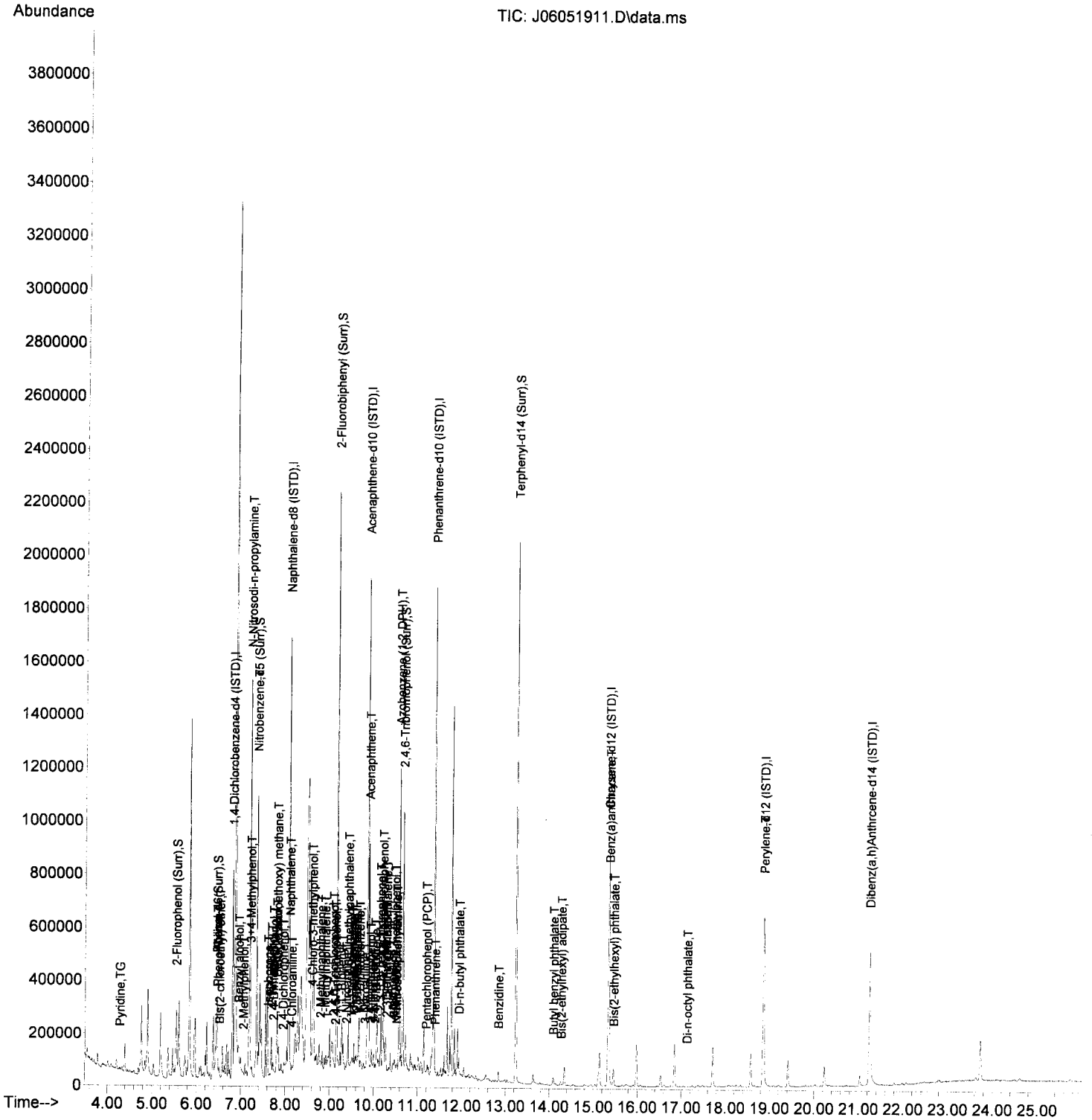
Ion	Exp%	Act%
153.10	100.00	100.00
154.10	93.50	9.86#
152.10	47.70	1.04#
0.00	0.00	0.00

R-02

6/6/19

Data Path : T:\data\2019-06\9F05024\
Data File : J06051911.D
Acq On : 5 Jun 2019 1:58 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-01
Misc : 1x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 05 14:25:37 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 (soil)

Batch 9060718
Sequence 9F10027 (A9F0035-16RE5)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060718 (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
	9060718-BLK1		QC	06/07/19 13:14	16	2				100					
	9060718-BS1		QC	06/07/19 13:14	15	2	A19F006		100	100					
	A9E0922-11	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.3	2				100	T4-PDI2019-SG24-190529	PAHs Only			
	A9E0922-11	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.3	2				100	T4-PDI2019-SG24-190529	Added for BatchQC in: 9060718			
	9060718-DUP1		QC	06/07/19 13:14	15.22	2		A9E0922-11		100					
	A9E0922-12	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.29	2				100	T4-PDI2019-SG25-190529	PAHs Only			
	A9E0922-13	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.78	2				100	T4-PDI2019-SG40-190528	PAHs Only			
	A9E0922-13RE1	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.78	2				100	T4-PDI2019-SG40-190528	Added 6/11/2019 by ams			
	A9E0922-13RE2	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.78	2				100	T4-PDI2019-SG40-190528	Added 6/11/2019 by ams			
	A9E0922-14	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.73	2				100	FD-201905281308	PAHs Only			
	A9E0922-14RE1	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.73	2				100	FD-201905281308	Added 6/11/2019 by ams			
	A9E0922-15	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.65	2				100	T4-PDI2019-SG41-190528	PAHs Only			
	A9E0922-15RE1	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.65	2				100	T4-PDI2019-SG41-190528	Added 6/11/2019 by ams			
	A9E0922-15RE2	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.65	2				100	T4-PDI2019-SG41-190528	Added 6/11/2019 by ams			
	A9F0028-01	E	8270D RSET Sediment Freshwater (2016)	06/07/19 13:14	15.22	2				100	DMMU1-DP	Use E container			
	A9F0028-01RE1	E	8270D RSET Sediment Freshwater (2016)	06/07/19 13:14	15.22	2				100	DMMU1-DP	Added 6/11/2019 by ams			
	A9F0028-01RE2	E	8270D RSET Sediment Freshwater (2016)	06/07/19 13:14	15.22	2				100	DMMU1-DP	Added 6/11/2019 by ams			
	A9F0035-14	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.6	2				100	T4-PDI2019-SG21-190531	PAHs Only			
	A9F0035-15	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.34	2				100	T4-PDI2019-SG26-190530	PAHs Only			

Prepared By: Date

DM 6/11/19

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060718 (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
	A9F0035-16	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	MS/MSD, PAHs Only			
	A9F0035-16	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added for BatchQC in: 9060718			
	A9F0035-16RE1	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE1	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE2	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE2	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE3	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE3	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE4	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE4	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE5	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	A9F0035-16RE5	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	15.19	2				100	T4-PDI2019-SG3 8-190531	Added 6/11/2019 by ams			
	9060718-MS1		QC	06/07/19 13:14	15.14	2	A19F006	A9F0035-16RE5	100	100					
	9060718-MSD1		QC	06/07/19 13:17	15.26	2	A19F006	A9F0035-16RE5	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)

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060718 (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

Method 3546 digestion time and temperture achieved.
Initial:

Witness:_____

Prepared By: Date

Reviewed By: Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060718 (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	9060718-BLK1		QC	06/07/19 13:14	~~15~~ 16	2✓				100					
2	9060718-BS1		QC	06/07/19 13:14	15	2✓	A19F006		100	100					
3	A9E0922-11	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.30	2✓				100	T4-PDI2019-SG24-190529	PAHs Only light # wet sand, rocks, org			
	A9E0922-11	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	~~15~~ 15.30	2✓				100	T4-PDI2019-SG24-190529	Added for BatchQC in: 9060718			
4	9060718-DUP1		QC	06/07/19 13:14	~~15~~ 15.22	2✓		A9E0922-11		100		light #			
5	A9E0922-12	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.29	2✓				100	T4-PDI2019-SG25-190529	PAHs Only heavy # wet sand, rocks, org			
6	A9E0922-13	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.78	2✓				100	T4-PDI2019-SG40-190528	PAHs Only sludge			
7	A9E0922-14	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.73	2✓				100	FD-201905281308	PAHs Only wet sand, rocks			
8	A9E0922-15	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.65	2✓				100	T4-PDI2019-SG41-190528	PAHs Only wet sand			
9	A9F0028-01	~~A~~ E	8270D RSET Sediment Freshwater (2016)	06/07/19 13:14	~~15~~ 15.22	2✓				100	DMMU1-DP	Use E container sludge			
10	A9F0035-14	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.60	2✓				100	T4-PDI2019-SG21-190531	PAHs Only wet sand, rocks, org			
11	A9F0035-15	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.34	2✓				100	T4-PDI2019-SG26-190530	PAHs Only heavy # wet sand/sludge, rocks			
12	A9F0035-16	A	8270D LL PAH/PHTH/Phenols	06/07/19 13:14	~~15~~ 15.19	2✓				100	T4-PDI2019-SG38-190531	MS/MSD, PAHs Only wet sand, rocks			
	A9F0035-16	A	8270D RSET Sediment Freshwater (2016)	06/07/19 13:16	~~15~~ 15.19	2✓				100	T4-PDI2019-SG38-190531	Added for BatchQC in: 9060718			
13	9060718-MS1		QC	06/07/19 13:14	~~15~~ 15.14	2✓	A19F006	A9F0035-16	100	100					
14	9060718-MSD1		QC	06/07/19 13:17	~~15~~ 15.26	2✓	A19F006	A9F0035-16	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) JRA

Std ID	Exp. Date	Description
A19F006	11/30/19	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s) JRA

Std ID	Exp. Date	Description
A19E304	11/24/19	PAH Soil and Water Surr. (50ppm)

JRA — Prepared By: CAH

06/07/19 — Date: 6·7·19

DTH — Reviewed By:

6/7/19 — Date

Printed: 6/7/2019 1:18:12PM

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060718 (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

Method 3546 digestion time and temperture achieved.
Initial: JRA

#-staining on turbovap

Witness: JAG 6/7/19

Prepared By: Date

Reviewed By: Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9F10027** Instrument: **SV-GCMS10**

Date: **06/10/19 08:03** Calibration: **A9D1505**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F10027-TUN1	Sediment	QC	QC			A19B027	A19E333
2	9F10027-CCV1	Sediment	QC	QC			A19B027	A19C237
3	9F10027-CCB1	Sediment	QC	QC			A19B027	
4	9060718-BLK1	Sediment	QC	QC		9060718	A19B027	
5	9060718-BS1	Sediment	QC	QC		9060718	A19B027	
6	A9F0028-01	Sediment	8270D RSET Sediment Freshwater (2		06/13/19	9060718	A19B027	
7	A9F0028-01RE1	Sediment	8270D RSET Sediment Freshwater (2		06/13/19	9060718	A19B027	
8	A9E0922-11	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
9	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
10	9060718-DUP1	Sediment	QC	QC		9060718	A19B027	
11	A9F0035-16	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
12	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
13	A9F0035-16RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
14	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
15	A9F0035-16RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
16	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
17	A9F0035-16RE3	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
18	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
19	A9F0035-16RE4	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
20	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
21	A9F0035-16RE5	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
22	"	Sediment	8270D RSET Sediment Freshwater (2	(QC Source)		9060718	A19B027	
23	9060718-MS1	Sediment	QC	QC		9060718	A19B027	
24	9060718-MSD1	Sediment	QC	QC		9060718	A19B027	
25	A9F0028-01RE2	Sediment	8270D RSET Sediment Freshwater (2		06/13/19	9060718	A19B027	
26	9F10027-IBL1	Sediment	QC	QC			A19B027	

Data Entered By: AMS 6/11/19

Data Reviewed By: [illegible] 6/11/19

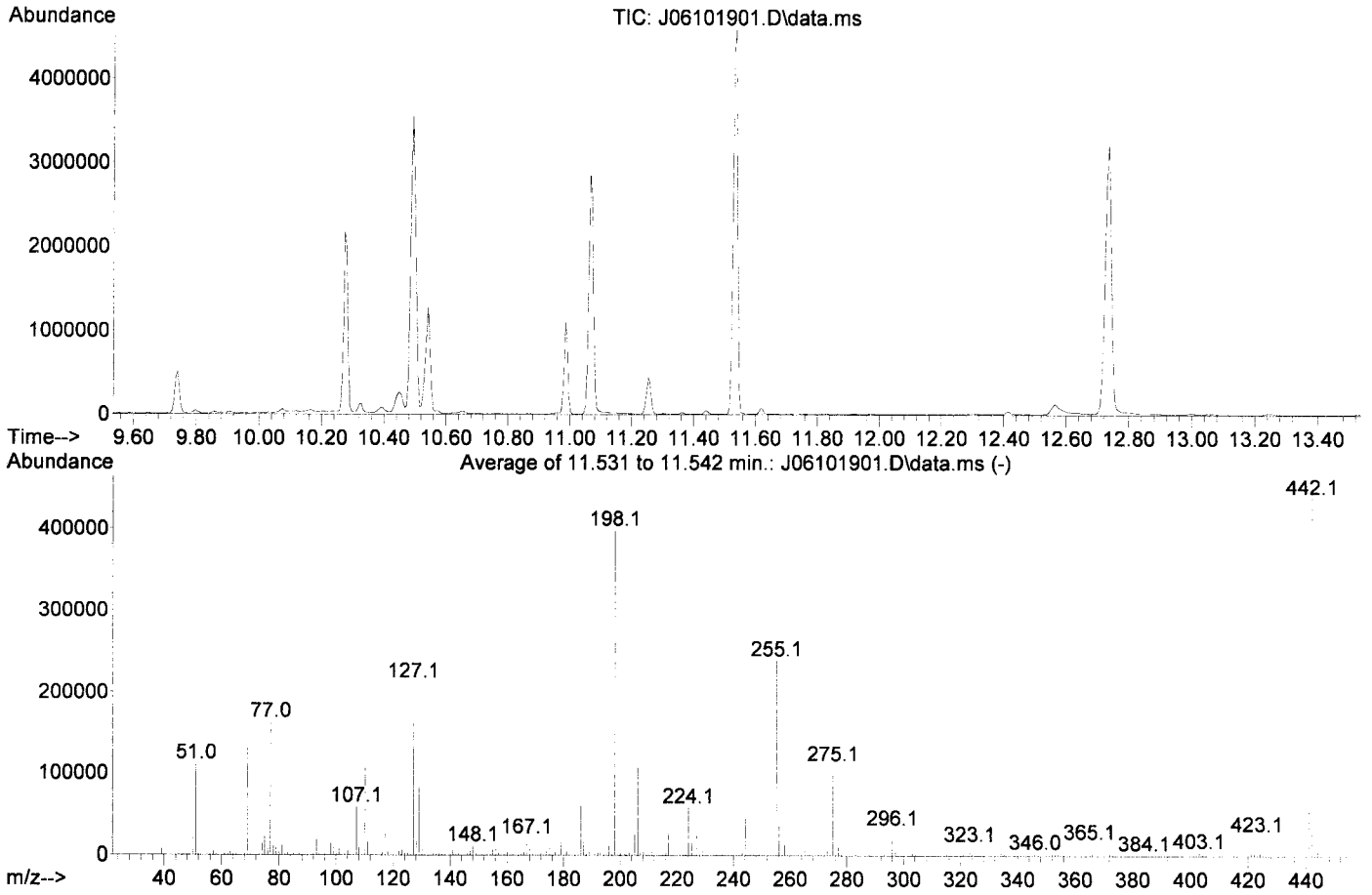
Comments:

Data Path : T:\data\2019-06\9F10027\
Data File : J06101901.D
Acq On : 10 Jun 2019 8:14 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-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 : Fri Jun 07 11:24:46 2019

AMS 6/10/19



AutoFind: Scans 1504, 1505, 1506; Background Corrected with Scan 1499

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	28.0	111395	PASS
68	69	0.00	2	1.6	2157	PASS
69	198	0.00	100	33.1	131505	PASS
70	69	0.00	2	0.4	530	PASS
127	198	10	80	53.3	212033	PASS
197	198	0.00	2	0.5	1819	PASS
198	198	100	100	100.0	397781	PASS
199	198	5	9	6.8	27018	PASS
275	198	10	60	27.6	109845	PASS
365	198	1	100	3.7	14848	PASS
441	442	0.01	24	15.0	66704	PASS
442	198	50	200	111.8	444523	PASS
443	442	15	24	19.7	87515	PASS

Data Path : T:\data\2019-06\9F10027\
Data File : J06101901.D
Acq On : 10 Jun 2019 8:14 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 10:31:13 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Fri Jun 07 11:24:46 2019
Response via : Initial Calibration
InstName : SV-GCMS10

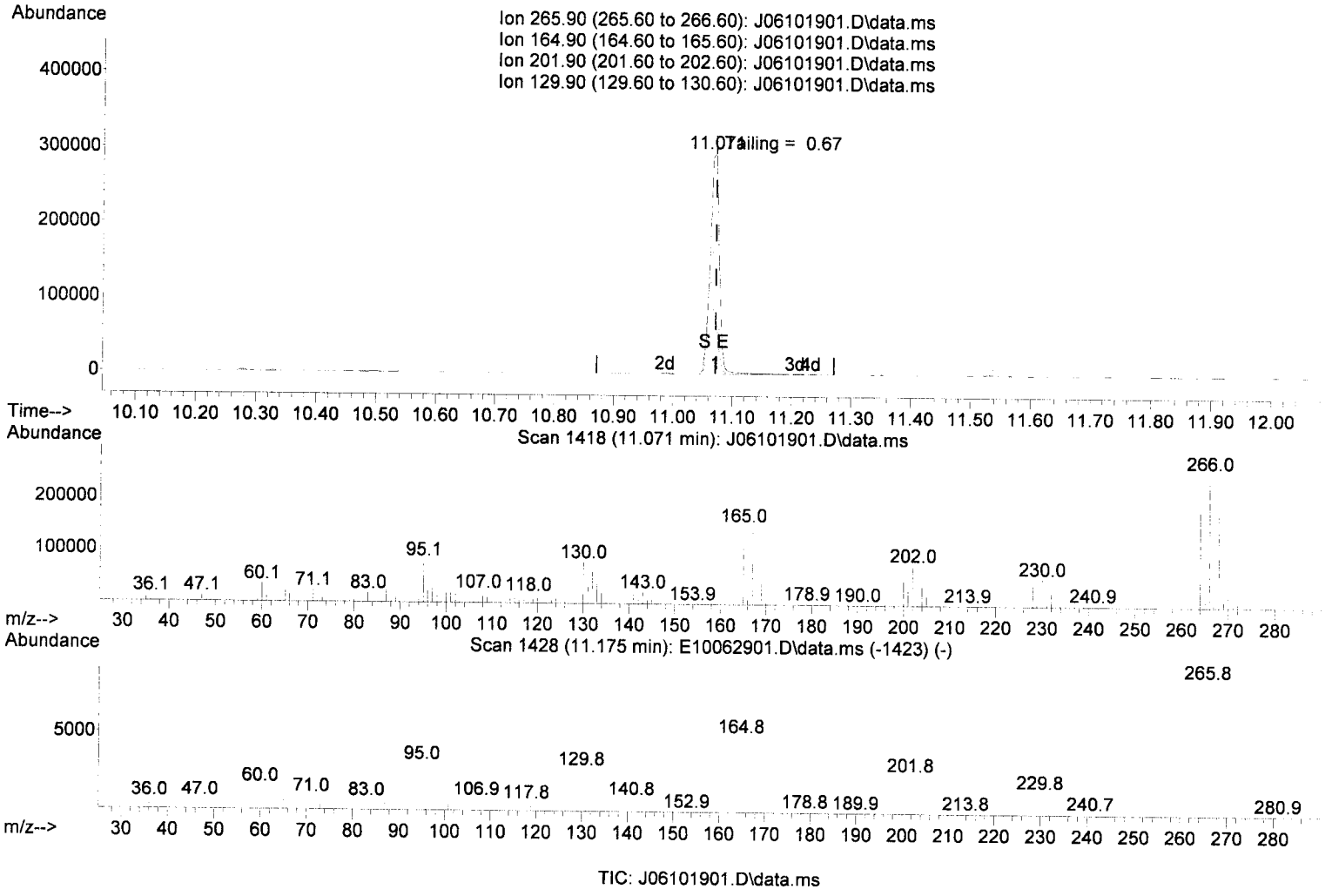
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.691	150	118871	2.00	ug/mL	0.00
2) Naphthalene-d8	7.958	136	263517	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.740	162	109100	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.253	188	159825	2.00	ug/mL	0.00
11) Chrysene-d12	15.008	240	130303	2.00	ug/mL	-0.01
12) Perylene-d12	17.003	264	108529	2.00	ug/mL	-0.01
13) Dibenz(a,h)anthracene-...	18.276	292	104296	2.00	ug/mL	-0.01
Target Compounds						Qvalue
4) Pentachlorophenol	11.071	266	312229	30.31	ug/mL	99
6) DFTPP	11.537	442	496815	38.51	ug/mL	90
7) Benzidine	12.735	184	1711327	30.10	ug/mL	99
8) 4,4-DDE	12.997	TIC	22933	No Calib		
9) 4,4-DDD	13.532	TIC	22122	No Calib		
10) 4,4-DDT	14.109	TIC	6604371	40.30	ug/mL	98

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101901.D
Acq On : 10 Jun 2019 8:14 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 10:31:13 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Fri Jun 07 11:24:46 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101901.D\data.ms

(4) Pentachlorophenol

11.071min (+ 0.000) 30.31 ug/mL

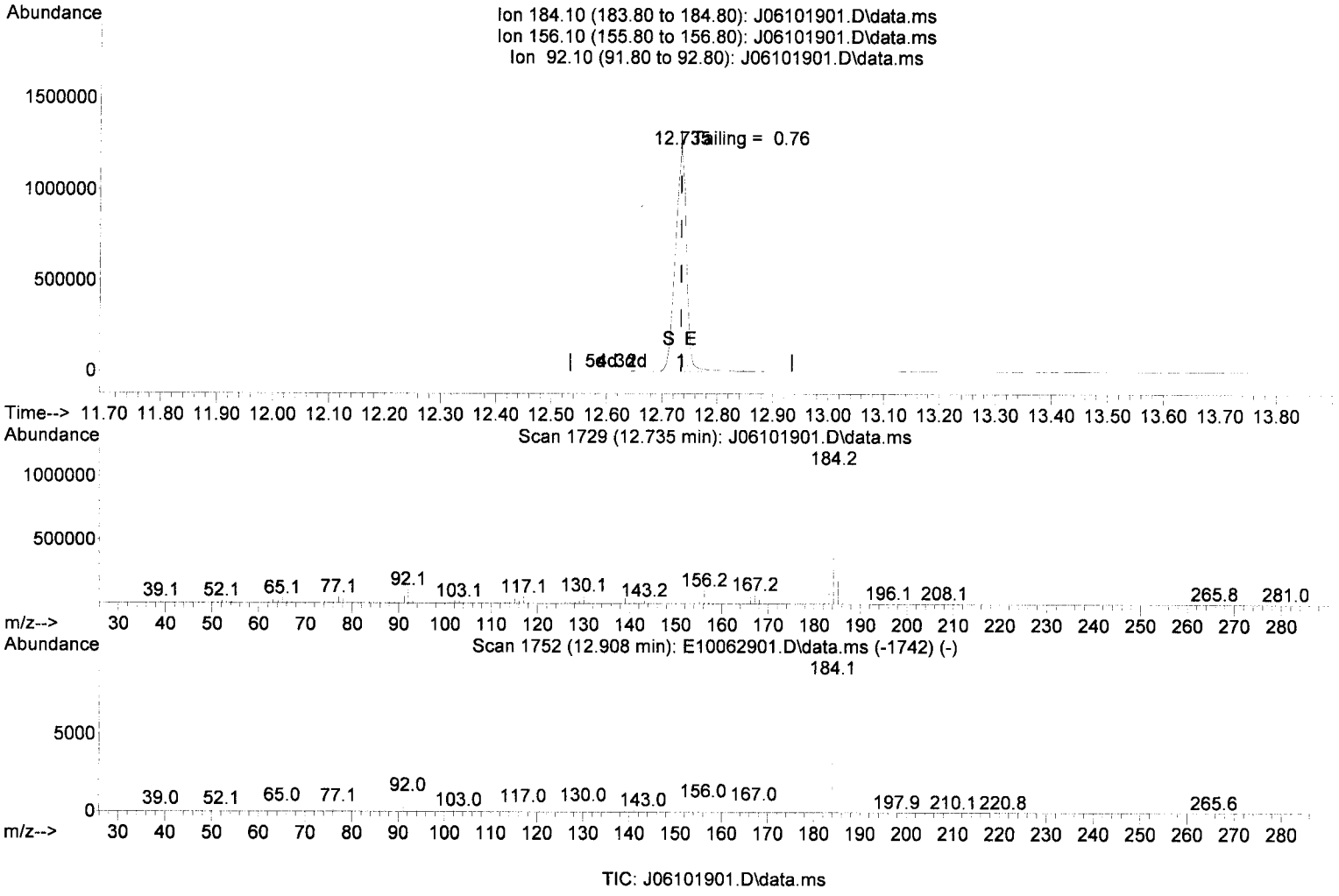
response 312229

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	50.63
201.90	25.80	25.33
129.90	27.30	26.34

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101901.D
Acq On : 10 Jun 2019 8:14 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 10:31:13 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Fri Jun 07 11:24:46 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101901.D\data.ms

(7) Benzidine

12.735min (+ 0.000) 30.10 ug/mL

response 1711327

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	8.33
92.10	8.20	8.70
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

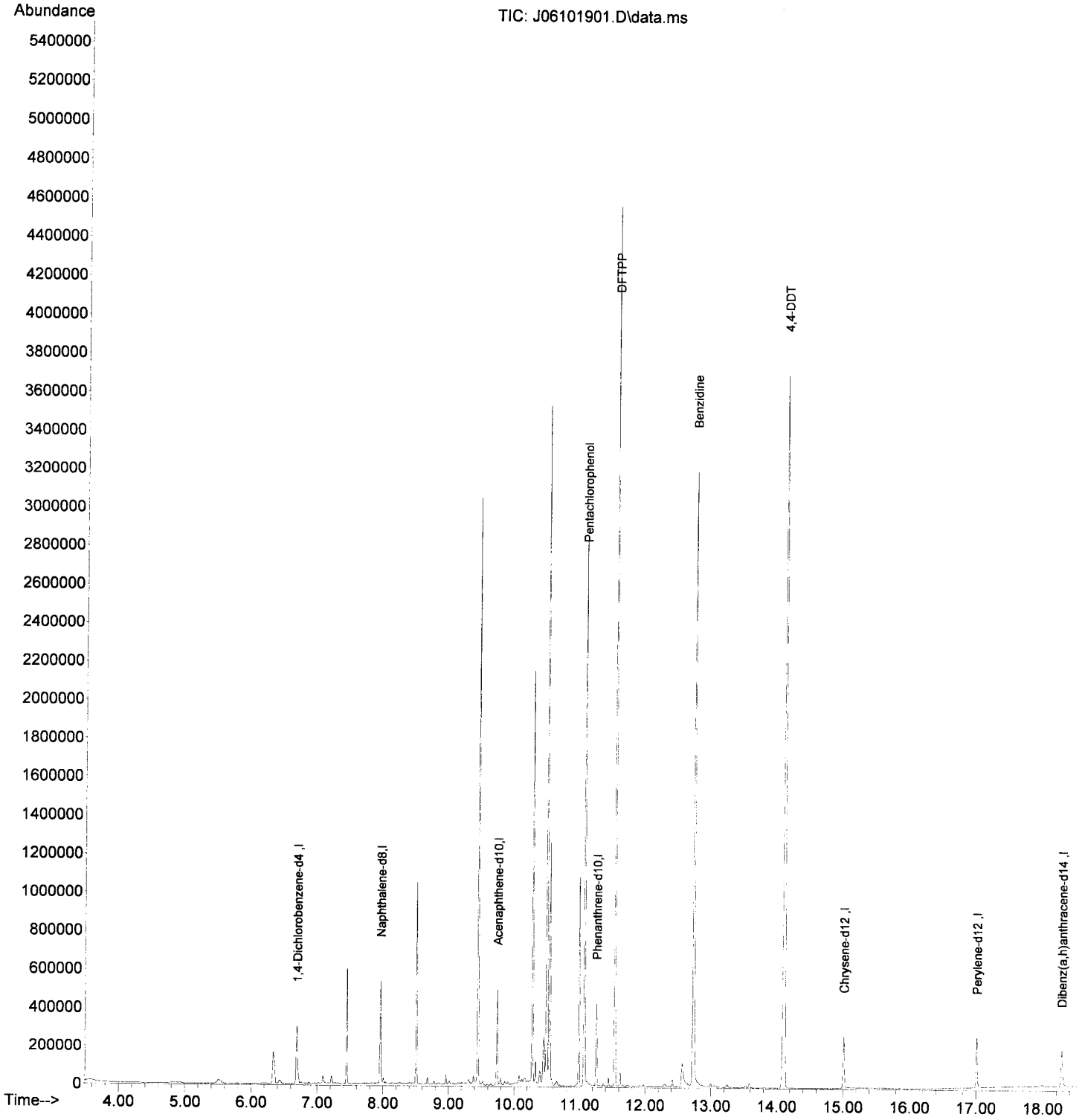
From:
9F10027-TUN1
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	22933		
DDD	22122		
DDT	6604371	**0.68**	**PASS**

Breakdown must be less than 20% to accept sample data.

Data Path : T:\data\2019-06\9F10027\
Data File : J06101901.D
Acq On : 10 Jun 2019 8:14 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 10:31:13 2019
Quant Method : T:\methods\DFTPP-8270.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Fri Jun 07 11:24:46 2019
Response via : Initial Calibration
InstName : SV-GCMS10



12/03/19 Anchor Port of Portland - T4 - PDI Page 231 of 740

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 10:44:56 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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	123	0.00
2	TG	N-Nitrosodimethylamine	1000.000	1033.858	-3.4	124	0.01
3	TG	Pyridine	1000.000	981.658	1.8	113	0.01
4	S	2-Fluorophenol (Surr)	1000.000	1175.310	-17.5	138	0.00
5	S	Phenol-d6(Surr)	1000.000	1151.074	-15.1	134	0.00
6	T	Phenol	1000.000	1104.985	-10.5	144	0.00
7	T	Aniline	1000.000	688.062	31.2#	77	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1026.328	-2.6	125	0.00
9	T	2-Chlorophenol	1000.000	1141.518	-14.2	128	0.00
10	T	1,3-Dichlorobenzene	1000.000	1024.108	-2.4	123	0.00
11	T	1,4-Dichlorobenzene	1000.000	998.229	0.2	122	0.00
12	T	Benzyl alcohol	1000.000	1207.016	-20.7#	145	0.00
13	T	1,2-Dichlorobenzene	1000.000	1033.760	-3.4	123	0.00
14	T	2-Methylphenol	1000.000	1196.151	-19.6	130	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	934.619	6.5	110	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1038.351	-3.8	116	0.00
17	T	3+4-Methylphenol	1000.000	1128.877	-12.9	132	0.00
18	T	Hexachloroethane	1000.000	1135.267	-13.5	139	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1132.111	-13.2	140	0.00
20	T	Nitrobenzene	1000.000	1191.532	-19.2	136	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	119	0.00
22	T	Isophorone	1000.000	1028.083	-2.8	118	0.00
23	T	2-Nitrophenol	1000.000	1330.344	-33.0#	156	0.00
24	T	2,4-Dimethylphenol	1000.000	1026.789	-2.7	119	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1145.962	-14.6	124	0.00
26	T	Benzoic acid	2000.000	1823.042	8.8	114	0.00
27	T	2,4-Dichlorophenol	1000.000	1101.158	-10.1	132	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1077.280	-7.7	123	0.00
29	T	Naphthalene	1000.000	1032.761	-3.3	116	0.00
30	T	4-Chloroaniline	1000.000	775.992	22.4#	87	0.00
31	T	Hexachlorobutadiene	1000.000	1034.004	-3.4	122	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1110.654	-11.1	134	0.00
33	T	2-Methylnaphthalene	1000.000	1107.247	-10.7	121	0.00
34	T	1-Methylnaphthalene	1000.000	1070.572	-7.1	120	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	123	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1289.233	-28.9#	152	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1032.000	-3.2	133	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1162.738	-16.3	136	0.00
39	T	1,1'-Biphenyl	1000.000	1107.836	-10.8	124	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1109.737	-11.0	124	0.00
41	T	2-Chloronaphthalene	1000.000	1141.645	-14.2	128	0.00
42	T	2-Nitroaniline	1000.000	1153.768	-15.4	146	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1064.832	-6.5	119	0.00
44	T	1,4-Dinitrobenzene	1000.000	1440.610	-44.1#	206	0.00
45	T	Dimethyl phthalate	1000.000	1060.713	-6.1	127	0.00
46	T	1,3-Dinitrobenzene	1000.000	1317.750	-31.8#	172	0.00
47	T	2,6-Dinitrotoluene	1000.000	1098.414	-9.8	132	0.00
48	T	1,2-Dinitrobenzene	1000.000	1155.788	-15.6	142	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:44:56 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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	1060.995	-6.1	122	0.00
50	T	3-Nitroaniline	1000.000	1012.510	-1.3	114	0.00
51	T	Acenaphthene	1000.000	1037.719	-3.8	123	0.00
52	T	2,4-Dinitrophenol	1000.000	1338.814	-33.9#	204	0.00
53	T	4-Nitrophenol	1000.000	1337.594	-33.8#	173	0.00
54	T	2,4-Dinitrotoluene	1000.000	1196.861	-19.7	151	0.00
55	T	Dibenzofuran	1000.000	1039.073	-3.9	123	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1128.897	-12.9	136	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1128.036	-12.8	135	0.00
58	T	Diethyl phthalate	1000.000	1130.170	-13.0	130	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1086.878	-8.7	128	0.00
60	T	Fluorene	1000.000	1064.592	-6.5	125	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1055.635	-5.6	126	0.00
62	T	4-Nitroaniline	1000.000	1280.743	-28.1#	147	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1519.027	-51.9#	221	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	124	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1115.201	-11.5	128	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1088.124	-8.8	124	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1063.275	-6.3	132	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1069.515	-7.0	124	0.00
69	T	Hexachlorobenzene	1000.000	948.254	5.2	116	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1037.045	-3.7	132	0.00
71	T	Phenanthrene	1000.000	1060.311	-6.0	126	0.00
72	T	Anthracene	1000.000	1108.981	-10.9	129	0.00
73	T	Carbazole	1000.000	1180.236	-18.0	134	0.00
74	T	Di-n-butyl phthalate	1000.000	1178.593	-17.9	134	0.00
75	T	Fluoranthene	1000.000	1153.274	-15.3	131	0.00
76	T	Benzidine	2000.000	1471.717	26.4#	83	0.00
77	T	Pyrene	1000.000	1114.242	-11.4	128	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	132	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1078.722	-7.9	135	0.01
80	T	Butyl benzyl phthalate	1000.000	1149.913	-15.0	149	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1064.747	-6.5	141	0.01
82	T	3,3-Dichlorobenzidine	2000.000	1063.684	46.8#	70	0.00
83	T	Benz(a)anthracene	1000.000	1085.882	-8.6	140	0.01
84	T	Chrysene	1000.000	1057.702	-5.8	136	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1104.482	-10.4	142	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	136	0.00
87	T	Di-n-octyl phthalate	1000.000	1140.325	-14.0	156	0.00
88	T	Benzo(b)fluoranthene	1000.000	1108.436	-10.8	146	0.00
89	T	Benzo(k)fluoranthene	1000.000	1065.156	-6.5	140	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2182.223	-9.1	143	0.00
91	T	Benzo(e)pyrene	1000.000	1130.739	-13.1	140	0.00
92	T	Benzo(a)pyrene	1000.000	1112.306	-11.2	144	0.00
93	T	Perylene	1000.000	1202.345	-20.2#	158	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	143	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:44:56 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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	987.526	1.2	145	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1053.187	-5.3	147	0.01
97 T	Benzo(g,h,i)perylene	1000.000	1087.235	-8.7	143	0.00

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

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 10:34:09 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.750	152	254610	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1035312	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	503997	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	866763	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	803898	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	749295	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	731493	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.493	112	194533	1175.31	ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	245072	1151.07	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	215756	1132.11	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	394623	1109.74	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	45300	1063.28	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	408202	1078.72	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.150	74	129706	1033.86	ng/ml	94
3) Pyridine	4.161	79	200949	981.66	ng/ml	91
6) Phenol	6.402	94	263257	1104.99	ng/ml	98
7) Aniline	6.434	93	172238	688.06	ng/ml	97
8) Bis(2-chloroethyl) ether	6.482	93	221250	1026.33	ng/ml	96
9) 2-Chlorophenol	6.546	128	197588	1141.52	ng/ml	96
10) 1,3-Dichlorobenzene	6.696	146	199457	1024.11	ng/ml	96
11) 1,4-Dichlorobenzene	6.766	146	193957	998.23	ng/ml	98
12) Benzyl alcohol	6.883	108	125077	1207.02	ng/ml	98
13) 1,2-Dichlorobenzene	6.915	146	195490	1033.76	ng/ml	97
14) 2-Methylphenol	6.990	107	160374	1196.15	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.006	45	227998	934.62	ng/ml	89
16) N-Nitrosodi-n-propylamine	7.140	70	146486	1038.35	ng/ml	98
17) 3+4-Methylphenol	7.140	107	203230	1128.88	ng/ml	99
18) Hexachloroethane	7.252	201	59451	1135.27	ng/ml	95
20) Nitrobenzene	7.311	77	215809	1191.53	ng/ml	96
22) Isophorone	7.547	82	396424	1028.08	ng/ml	96
23) 2-Nitrophenol	7.632	139	109671	1330.34	ng/ml	95
24) 2,4-Dimethylphenol	7.664	122	163128	1026.79	ng/ml	95
25) Bis(2-chloroethoxy) me...	7.750	93	236997	1145.96	ng/ml	98
26) Benzoic acid	7.755	105	109472	1823.04	ng/ml	95
27) 2,4-Dichlorophenol	7.873	162	141015	1101.16	ng/ml	94
28) 1,2,4-Trichlorobenzene	7.953	180	158415	1077.28	ng/ml	99
29) Naphthalene	8.033	128	553461	1032.76	ng/ml	100
30) 4-Chloroaniline	8.092	127	110086	651.27	ng/ml	98
31) Hexachlorobutadiene	8.162	225	82613	1034.00	ng/ml	98
32) 4-Chloro-3-methylphenol	8.568	107	169063	1110.65	ng/ml	96
33) 2-Methylnaphthalene	8.734	142	389110	1107.25	ng/ml	99
34) 1-Methylnaphthalene	8.836	142	364926	1070.57	ng/ml	98
36) Hexachlorocyclopentadiene	8.900	237	90643	1289.23	ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	92781	1032.00	ng/ml	97
38) 2,4,5-Trichlorophenol	9.055	198	93726	1162.74	ng/ml	99
39) 1,1'-Biphenyl	9.205	154	452612	1107.84	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	329847	1141.65	ng/ml	97
42) 2-Nitroaniline	9.328	138	109206	1153.77	ng/ml	97
43) 2,6-Dimethylnaphthalene	9.365	156	318968	1064.83	ng/ml	98

MS

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Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:09 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

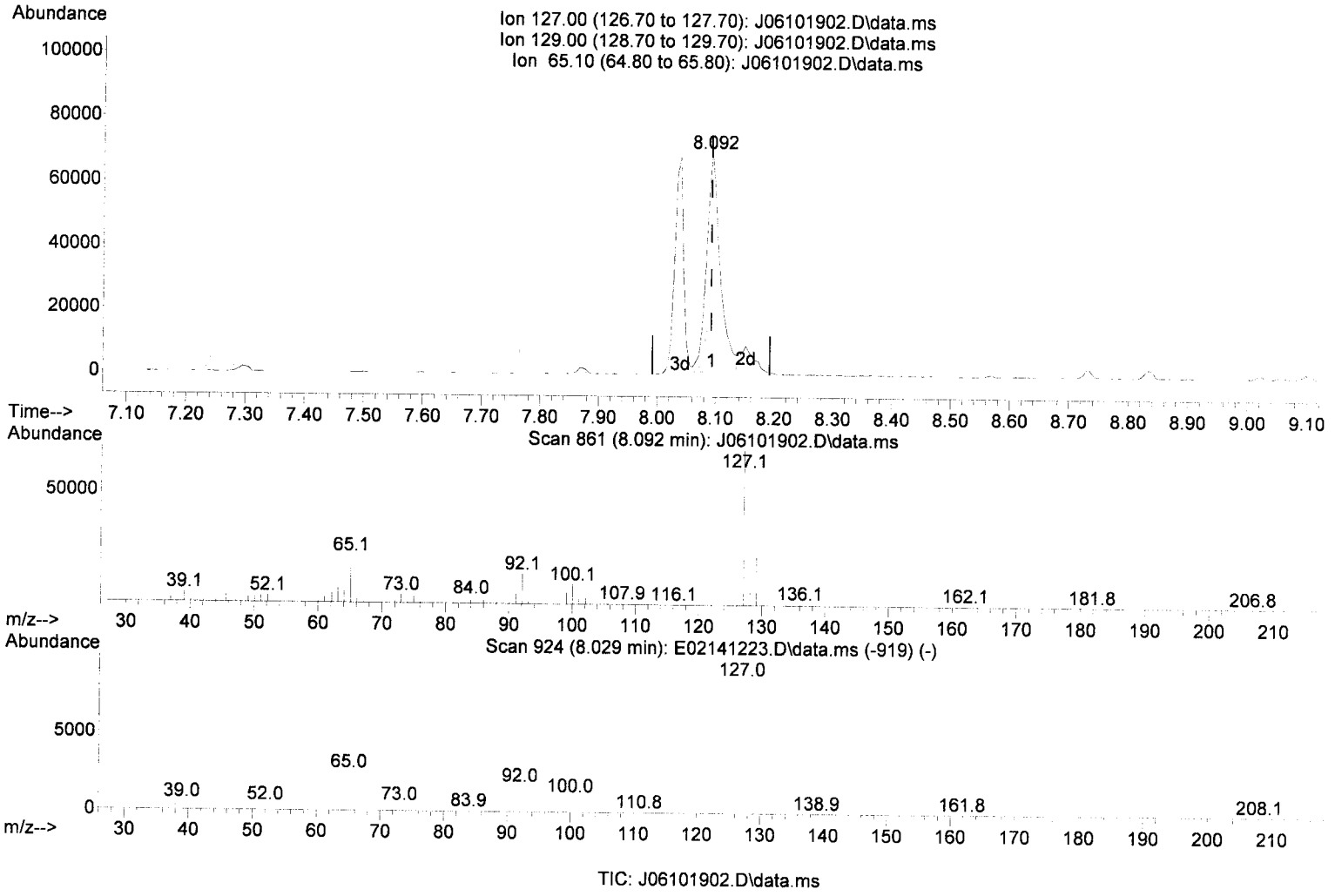
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	50540	1440.61	ng/ml	97
45) Dimethyl phthalate	9.504	163	371845	1060.71	ng/ml	99
46) 1,3-Dinitrobenzene	9.536	168	58088	1317.75	ng/ml	96
47) 2,6-Dinitrotoluene	9.568	165	81404	1098.41	ng/ml	95
48) 1,2-Dinitrobenzene	9.627	168	39039	1155.79	ng/ml	91
49) Acenaphthylene	9.654	152	534905	1061.00	ng/ml	98
50) 3-Nitroaniline	9.745	138	69764	1012.51	ng/ml	96
51) Acenaphthene	9.830	153	336469	1037.72	ng/ml	97
52) 2,4-Dinitrophenol	9.847	184	19406	1338.81	ng/ml	91
53) 4-Nitrophenol	9.911	139	66970	1337.59	ng/ml	94
54) 2,4-Dinitrotoluene	9.980	165	109230	1196.86	ng/ml	94
55) Dibenzofuran	10.002	168	440153	1039.07	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	10.087	232	72304	1128.90	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.130	232	78099	1128.04	ng/ml	98
58) Diethyl phthalate	10.216	149	378401	1130.17	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.210	170	291074	1086.88	ng/ml	94
60) Fluorene	10.355	166	353144	1064.59	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.344	204	160243	1055.63	ng/ml	99
62) 4-Nitroaniline	10.365	138	81186	1280.74	ng/ml	86
63) 4,6-Dinitro-2-methylph...	10.397	198	40456	1519.03	ng/ml	93
65) N-Nitrosodiphenylamine	10.462	169	297602	1115.20	ng/ml	99
66) Azobenzene (1,2-DPH)	10.504	77	393008	1088.12	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.841	248	91248	1069.51	ng/ml	96
69) Hexachlorobenzene	10.927	284	98644	948.25	ng/ml	98
70) Pentachlorophenol (PCP)	11.120	266	48337	1037.05	ng/ml	96
71) Phenanthrene	11.333	178	498692	1060.31	ng/ml	99
72) Anthracene	11.387	178	507978	1108.98	ng/ml	99
73) Carbazole	11.547	167	457519	1180.24	ng/ml	98
74) Di-n-butyl phthalate	11.879	149	624666	1178.59	ng/ml	99
75) Fluoranthene	12.633	202	540923	1153.27	ng/ml	98
76) Benzidine	12.794	184	250856	1471.72	ng/ml	97
77) Pyrene	12.943	202	538575	1114.24	ng/ml	99
80) Butyl benzyl phthalate	13.992	149	271236	1149.91	ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.168	129	243901	1064.75	ng/ml	99
82) 3,3-Dichlorobenzidine	15.168	252	87412	1063.68	ng/ml	92
83) Benz(a)anthracene	15.206	228	476340	1085.88	ng/ml	97
84) Chrysene	15.291	228	450198	1057.70	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.350	149	372965	1104.48	ng/ml	98
87) Di-n-octyl phthalate	17.024	149	593729	1140.32	ng/ml	97
88) Benzo(b)fluoranthene	17.816	252	479873	1108.44	ng/ml	95
89) Benzo(k)fluoranthene	17.880	252	467259	1065.16	ng/ml	96
90) Benzo(b+k)fluoranthene	17.880	252	967095	2182.22	ng/ml	96
91) Benzo(e)pyrene	18.474	252	464591	1130.74	ng/ml	96
92) Benzo(a)pyrene	18.592	252	439927	1112.31	ng/ml	97
93) Perylene	18.800	252	457315	1202.35	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.132	276	404109	987.53	ng/ml	91
96) Dibenz(a,h)anthracene	21.196	278	385523	1053.19	ng/ml	94
97) Benzo(g,h,i)perylene	21.672	276	430026	1087.23	ng/ml	99

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:09 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101902.D\data.ms

(30) 4-Chloroaniline (T)

8.092min (+ 0.000) 651.27 pg/ml

response 110086

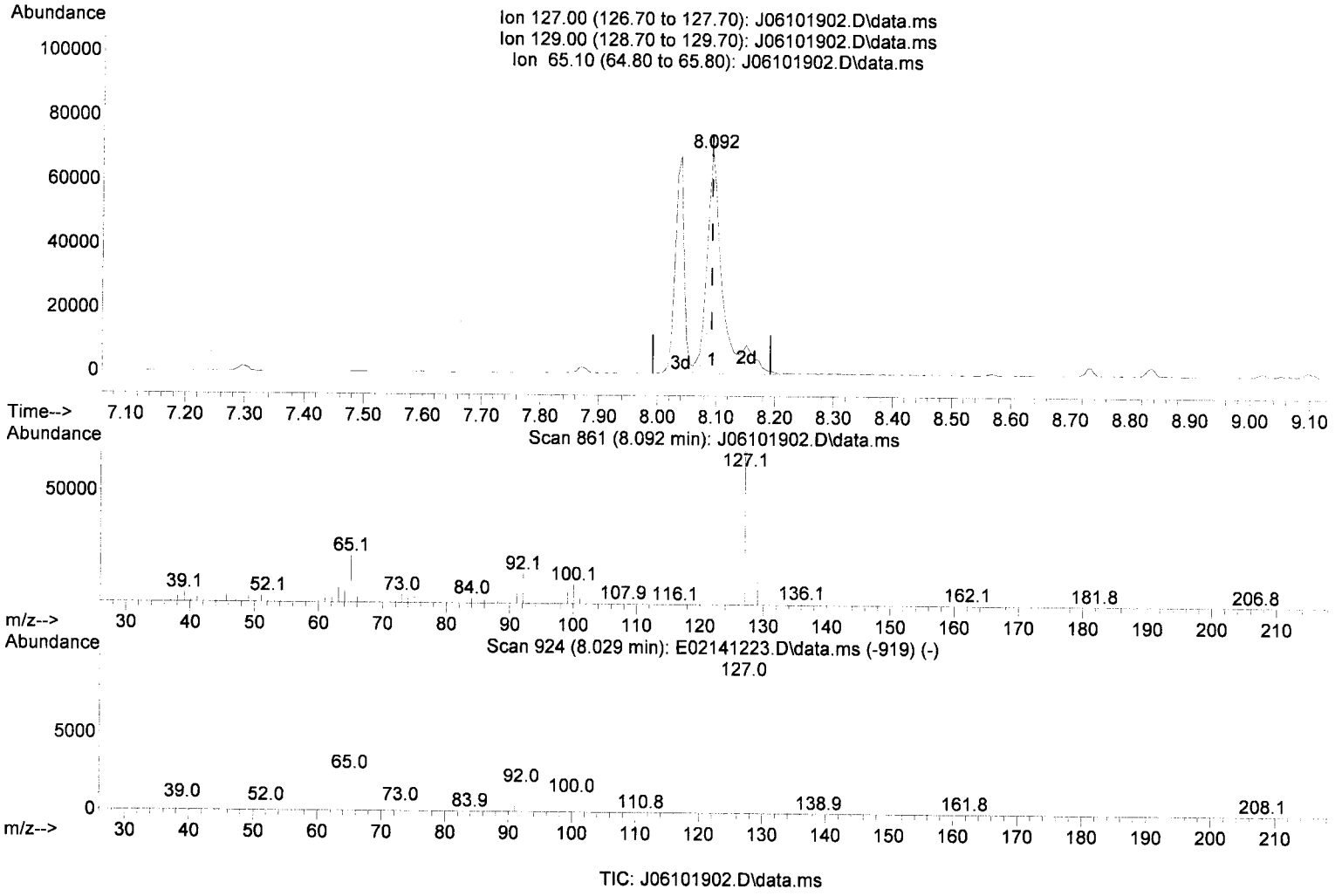
Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	31.74
65.10	31.40	30.25
0.00	0.00	0.00

AMS 6/10/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:09 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101902.D\data.ms

(30) 4-Chloroaniline (T)

8.092min (+ 0.000) 775.99 ng/ml m

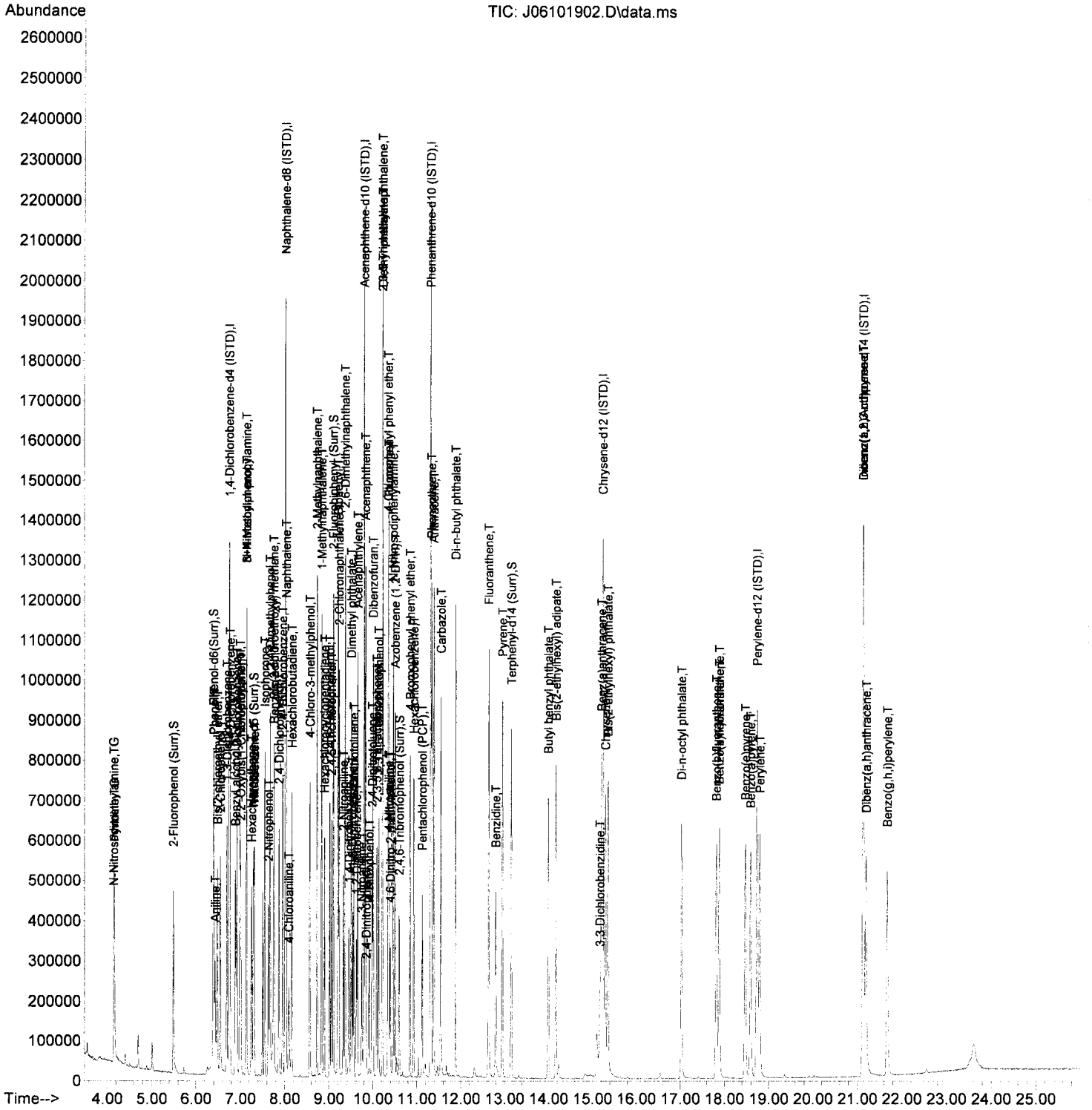
response 132592

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	31.74
65.10	31.40	30.25
0.00	0.00	0.00

AMS 6/10/19

Data Path : T:\data\2019-06\9F10027\
Data File : J06101902.D
Acq On : 10 Jun 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:09 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101903.D
Acq On : 10 Jun 2019 9:18 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 10:34:35 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.750	152	258066	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1047899	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	484864	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	787745	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	682469	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.731	264	608381	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.121	292	545021	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.589	112	52	0.31 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	4.129	79	50	N.D.	
6) Phenol	6.402	94	66	9.85 ng/ml#	44
7) Aniline	6.472	93	95	N.D.	
8) Bis(2-chloroethyl) ether	6.472	93	95	N.D.	
9) 2-Chlorophenol	6.562	128	76	N.D.	
10) 1,3-Dichlorobenzene	6.744	146	97	N.D.	
11) 1,4-Dichlorobenzene	6.744	146	97	N.D.	
12) Benzyl alcohol	6.905	108	93	33.06 ng/ml#	41
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	6.974	45	65	N.D.	
16) N-Nitrosodi-n-propylamine	7.060	70	62	N.D.	
17) 3+4-Methylphenol	7.194	107	59	9.29 ng/ml#	23
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.258	77	79	N.D.	
22) Isophorone	7.557	82	58	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	8.595	107	68	64.08 ng/ml#	1
33) 2-Methylnaphthalene	8.745	142	56	N.D.	
34) 1-Methylnaphthalene	0.000		0	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	0.000		0	N.D.	
39) 1,1'-Biphenyl	0.000		0	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	

Data Path : T:\data\2019-06\9F10027\
Data File : J06101903.D
Acq On : 10 Jun 2019 9:18 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

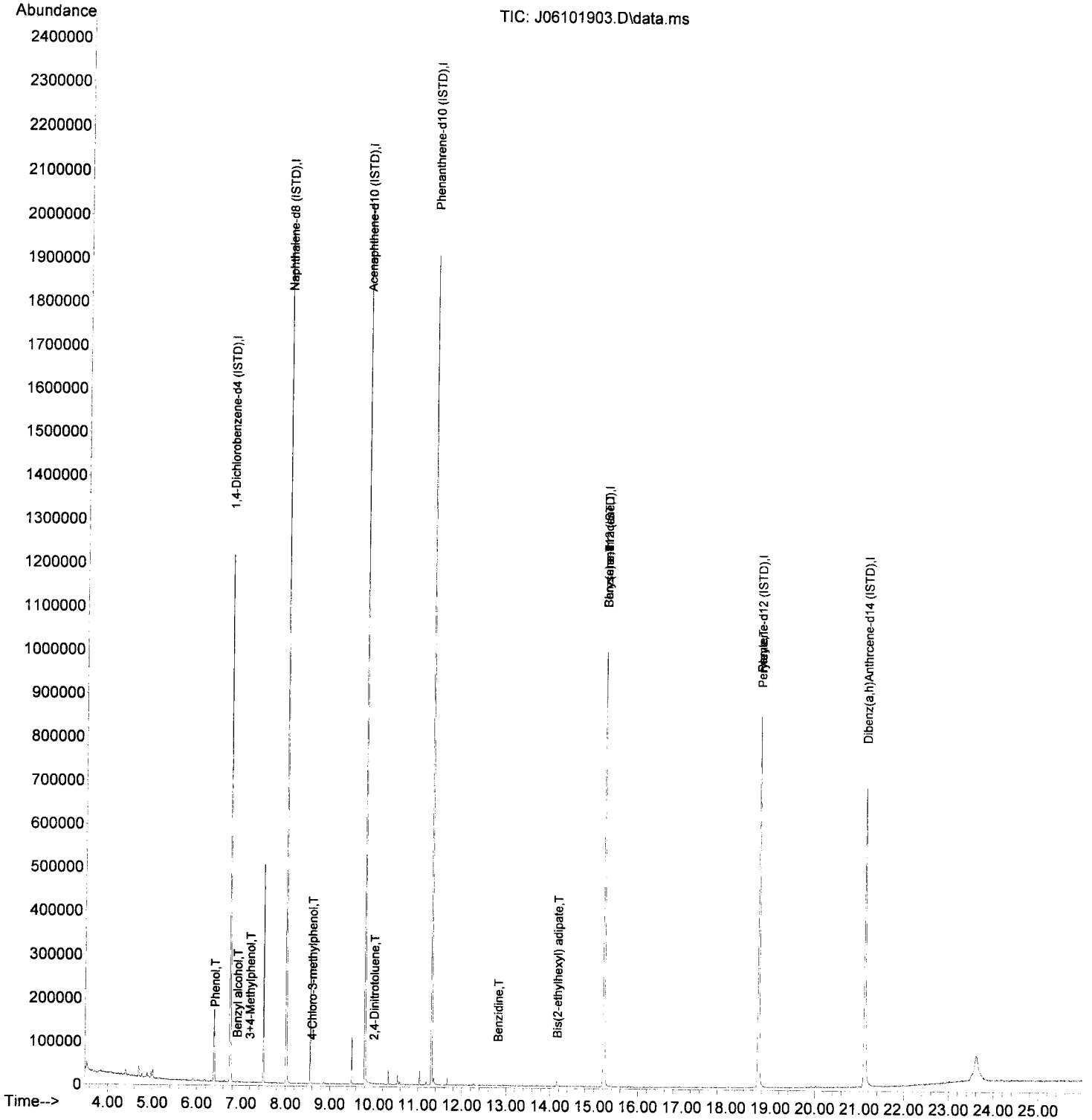
Quant Time: Jun 10 10:34:35 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.493	163	86	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	9.804	153	137	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.996	165	95	61.16 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	10.216	149	110	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.323	170	113	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)	10.483	77	115	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	11.312	178	299	N.D.	
72) Anthracene	11.312	178	299	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.884	149	69	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	12.815	184	124	81.14 ng/ml	66
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.163	129	3291	16.92 ng/ml	89
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	1693	4.55 ng/ml	82
84) Chrysene	15.227	228	1631	4.51 ng/ml	79
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	18.736	252	2136	6.92 ng/ml#	58
95) Indeno(1,2,3-cd)pyrene	21.121	276	158	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\9F10027\
Data File : J06101903.D
Acq On : 10 Jun 2019 9:18 am
Operator : JK/ AMS/ DTH
Sample : 9F10027-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:35 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101904.D
Acq On : 10 Jun 2019 9:54 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BLK1
Misc : 1x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 10:34:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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	152	257818	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1076494	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	516305	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	890294	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	802449	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	725144	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.121	292	706502	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.503	112	306952	1831.44 ng/ml	0.01
5) Phenol-d6(Surr)	6.396	99	405152	1879.27 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	365594	1877.13 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.097	172	676605	1857.35 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.600	330	80340	1818.44 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	814475	2156.23 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.096	74	102	N.D.	
3) Pyridine	4.252	79	494	N.D.	
6) Phenol	6.407	94	3067	22.34 ng/ml#	1 MDL=MRL
7) Aniline	6.445	93	157	N.D.	
8) Bis(2-chloroethyl) ether	6.471	93	322	N.D.	
9) 2-Chlorophenol	6.557	128	319	N.D.	
10) 1,3-Dichlorobenzene	6.712	146	51	N.D.	
11) 1,4-Dichlorobenzene	6.712	146	51	N.D.	
12) Benzyl alcohol	6.888	108	763	39.60 ng/ml#	50
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.995	107	388	2.86 ng/ml#	53
15) 2,2'-Oxybis(1-Chloropr...	7.017	45	170	N.D.	
16) N-Nitrosodi-n-propylamine	7.151	70	159	N.D.	
17) 3+4-Methylphenol	7.156	107	276	10.70 ng/ml#	36
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.295	77	1726	9.41 ng/ml#	43
22) Isophorone	7.546	82	538	N.D.	
23) 2-Nitrophenol	7.637	139	62	57.08 ng/ml#	38
24) 2,4-Dimethylphenol	7.664	122	143	26.20 ng/ml	84
25) Bis(2-chloroethoxy) me...	7.750	93	93	N.D.	
26) Benzoic acid	7.760	105	218	754.19 ng/ml#	77
27) 2,4-Dichlorophenol	7.873	162	86	45.52 ng/ml	80
28) 1,2,4-Trichlorobenzene	7.958	180	108	N.D.	
29) Naphthalene	8.038	128	1136	N.D.	
30) 4-Chloroaniline	8.028	127	70	14.82 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.573	107	452	66.36 ng/ml#	16
33) 2-Methylnaphthalene	8.734	142	344	N.D.	
34) 1-Methylnaphthalene	8.830	142	235	N.D.	
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	9.060	198	64	27.24 ng/ml#	8
39) 1,1'-Biphenyl	9.204	154	1522	3.64 ng/ml	75
41) 2-Chloronaphthalene	9.231	162	174	N.D.	
42) 2-Nitroaniline	9.253	138	52	65.57 ng/ml#	43
43) 2,6-Dimethylnaphthalene	9.370	156	185	N.D.	

Data Path : T:\data\2019-06\9F10027\
Data File : J06101904.D
Acq On : 10 Jun 2019 9:54 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BLK1
Misc : 1x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

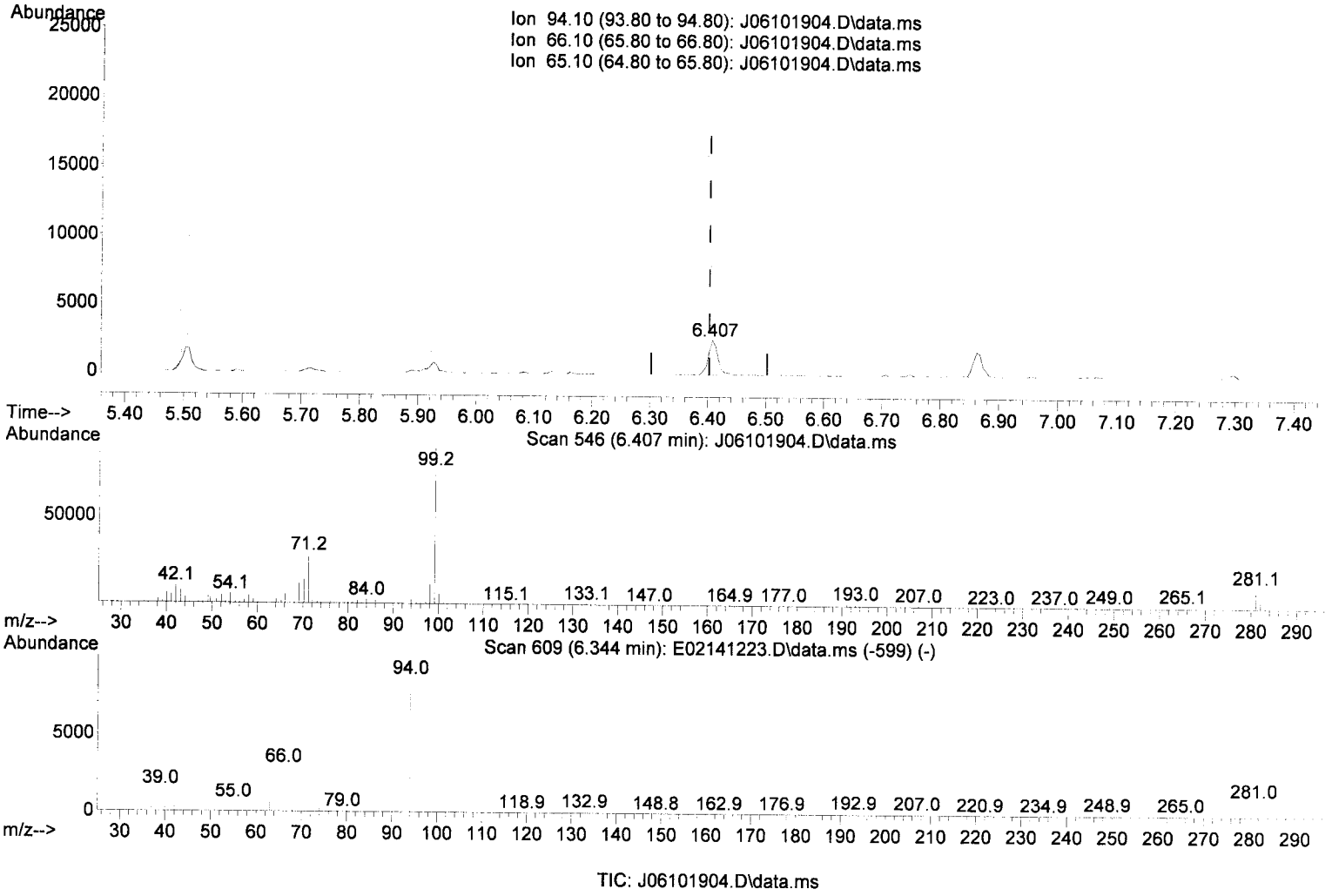
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.499	163	383	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.552	165	101	33.78 ng/ml#	20
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.648	152	298	N.D.	
50) 3-Nitroaniline	9.798	138	112	N.D.	
51) Acenaphthene	9.830	153	168	N.D.	
52) 2,4-Dinitrophenol	9.878	184	54	165.23 ng/ml#	50
53) 4-Nitrophenol	9.921	139	149	76.12 ng/ml#	38
54) 2,4-Dinitrotoluene	9.953	165	67	60.81 ng/ml#	17
55) Dibenzofuran	10.007	168	223	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	10.215	149	982	2.86 ng/ml	87
59) 2,3,5-Trimethylnaphtha...	10.322	170	224	N.D.	
60) Fluorene	10.354	166	155	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)	10.515	77	585	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.119	266	87	22.58 ng/ml#	40
71) Phenanthrene	11.333	178	1140	N.D.	
72) Anthracene	11.392	178	128	N.D.	
73) Carbazole	11.547	167	176	N.D.	
74) Di-n-butyl phthalate	11.879	149	3075	5.65 ng/ml	98
75) Fluoranthene	12.633	202	1179	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.932	202	1772	3.57 ng/ml	94
80) Butyl benzyl phthalate	13.986	149	1085	33.90 ng/ml	79
81) Bis(2-ethylhexyl) adipate	14.163	129	4649	20.33 ng/ml	95
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.227	228	2463	5.62 ng/ml	58
84) Chrysene	15.280	228	540	N.D.	
85) Bis(2-ethylhexyl) phth...	15.355	149	5932	17.60 ng/ml	80
87) Di-n-octyl phthalate	17.024	149	292	66.78 ng/ml#	1
88) Benzo(b)fluoranthene	17.810	252	481	10.02 ng/ml	54
89) Benzo(k)fluoranthene	17.885	252	90	10.63 ng/ml	53
90) Benzo(b+k)fluoranthene	17.885	252	90	17.32 ng/ml	53
91) Benzo(e)pyrene	18.463	252	256	N.D.	
92) Benzo(a)pyrene	18.591	252	86	10.65 ng/ml	59
93) Perylene	18.736	252	2512	6.82 ng/ml	61
95) Indeno(1,2,3-cd)pyrene	21.116	276	425	N.D.	
96) Dibenz(a,h)anthracene	21.137	278	145	N.D.	
97) Benzo(g,h,i)perylene	21.640	276	70	N.D.	

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101904.D
Acq On : 10 Jun 2019 9:54 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BLK1
Misc : 1x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101904.D\data.ms

(6) Phenol (T)

6.407min (+ 0.005) 22.34 ng/ml

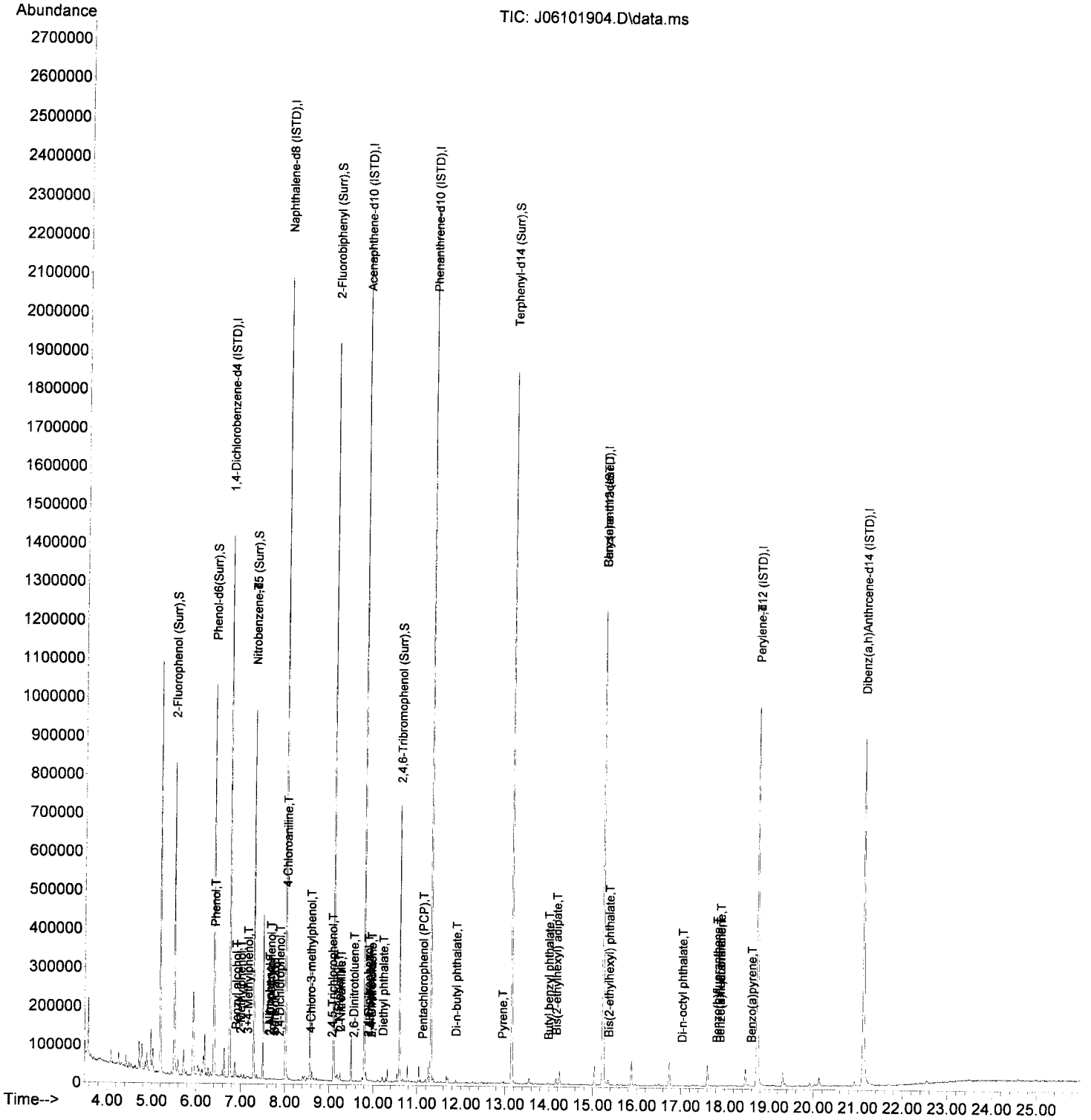
MDL=RL

response 3067

Ion	Exp%	Act%
94.10	100.00	100.00
66.10	34.30	205.24#
65.10	26.20	57.96#
0.00	0.00	0.00

Data Path : T:\data\2019-06\9F10027\
Data File : J06101904.D
Acq On : 10 Jun 2019 9:54 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BLK1
Misc : 1x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:34:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101905.D
Acq On : 10 Jun 2019 10:30 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 10:56:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.750	152	262071	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1038521	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	513020	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	900124	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	826482	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	772858	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	754619	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.493	112	90535	531.41 ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	118300	539.82 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	105898	550.64 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	199527	551.23 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	24363	563.21 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	223665	574.91 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.139	74	96378	746.34 ng/ml	95
3) Pyridine	4.150	79	128481	609.77 ng/ml	92
6) Phenol	6.407	94	221605	907.55 ng/ml	99
7) Aniline	6.429	93	160843	624.25 ng/ml	95
8) Bis(2-chloroethyl) ether	6.482	93	179064	806.99 ng/ml	99
9) 2-Chlorophenol	6.546	128	159540	895.46 ng/ml	93
10) 1,3-Dichlorobenzene	6.696	146	162141	808.81 ng/ml	97
11) 1,4-Dichlorobenzene	6.766	146	159616	798.10 ng/ml	99
12) Benzyl alcohol	6.883	108	101210	965.48 ng/ml	99
13) 1,2-Dichlorobenzene	6.921	146	157240	807.82 ng/ml	99
14) 2-Methylphenol	6.990	107	129508	938.44 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	186516	742.81 ng/ml	88
16) N-Nitrosodi-n-propylamine	7.140	70	116762	804.09 ng/ml	96
17) 3+4-Methylphenol	7.140	107	165019	920.14 ng/ml	97
18) Hexachloroethane	7.252	201	48126	892.84 ng/ml	95
20) Nitrobenzene	7.311	77	171518	920.03 ng/ml	97
22) Isophorone	7.547	82	331764	857.74 ng/ml	97
23) 2-Nitrophenol	7.632	139	103330	1254.52 ng/ml	92
24) 2,4-Dimethylphenol	7.664	122	131074	825.45 ng/ml	93
25) Bis(2-chloroethoxy) me...	7.750	93	195670	943.21 ng/ml	99
26) Benzoic acid	7.739	105	53313	1279.43 ng/ml	99
27) 2,4-Dichlorophenol	7.873	162	115926	909.61 ng/ml	96
28) 1,2,4-Trichlorobenzene	7.958	180	129004	874.56 ng/ml	98
29) Naphthalene	8.039	128	456034	848.33 ng/ml	99
30) 4-Chloroaniline	~~8.087~~	~~127~~	~~88999~~	~~531.26 ng/ml~~	~~99~~ MJ
31) Hexachlorobutadiene	8.162	225	67037	836.46 ng/ml	97
32) 4-Chloro-3-methylphenol	8.568	107	143616	950.14 ng/ml	96
33) 2-Methylnaphthalene	8.734	142	314606	892.47 ng/ml	99
34) 1-Methylnaphthalene	8.836	142	288486	843.71 ng/ml	98
36) Hexachlorocyclopentadiene	8.900	237	73100	1031.82 ng/ml	98
37) 2,4,6-Trichlorophenol	9.017	196	79068	870.04 ng/ml	98
38) 2,4,5-Trichlorophenol	9.055	198	79405	974.12 ng/ml	98
39) 1,1'-Biphenyl	9.205	154	365214	878.19 ng/ml	100
41) 2-Chloronaphthalene	9.226	162	273047	928.43 ng/ml	98
42) 2-Nitroaniline	9.328	138	93807	986.56 ng/ml	93
43) 2,6-Dimethylnaphthalene	9.365	156	271868	891.63 ng/ml	99

Data Path : T:\data\2019-06\9F10027\
Data File : J06101905.D
Acq On : 10 Jun 2019 10:30 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:56:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

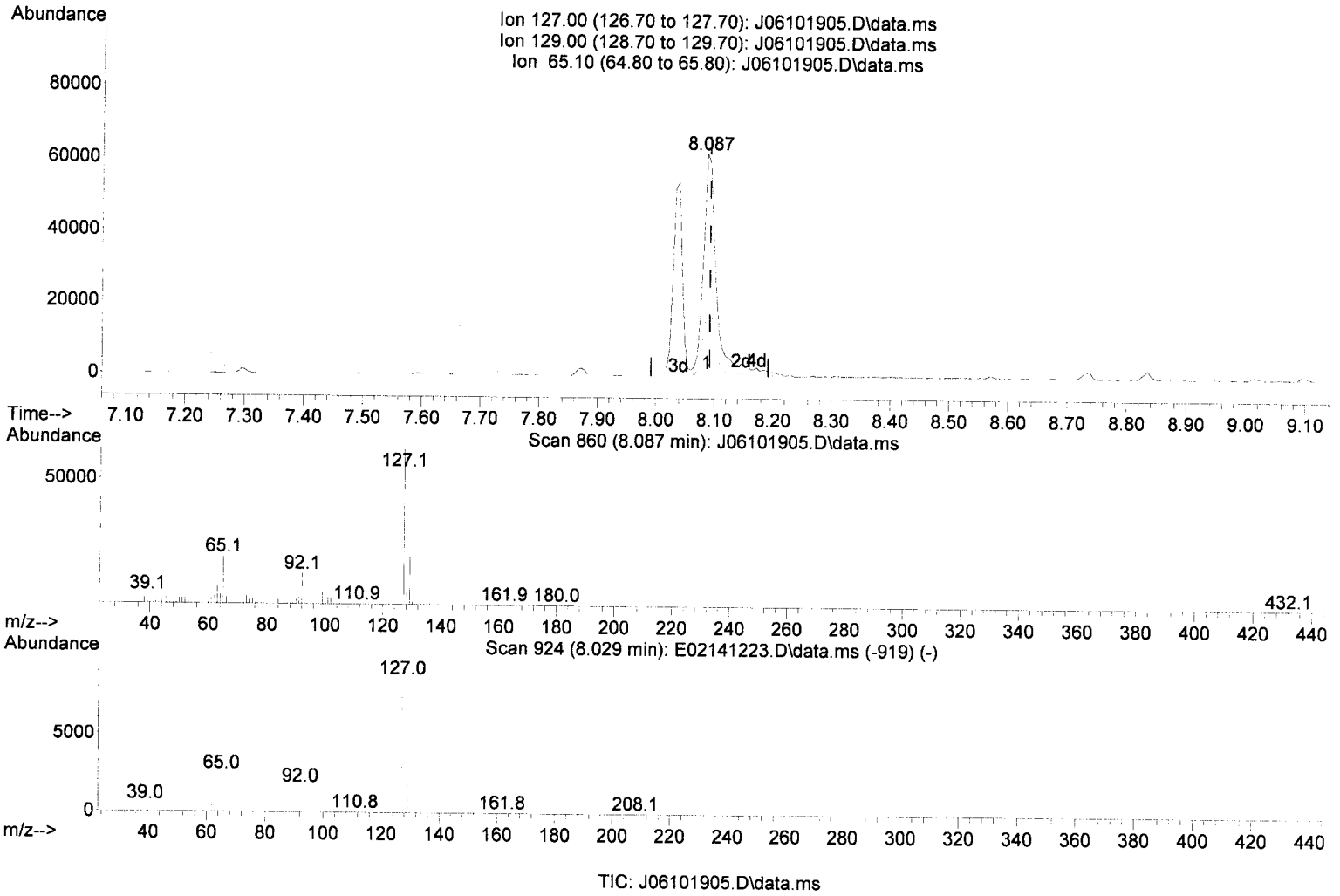
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	45446	1294.93	ng/ml	91
45) Dimethyl phthalate	9.504	163	325780	912.96	ng/ml	97
46) 1,3-Dinitrobenzene	9.536	168	50070	1131.30	ng/ml	95
47) 2,6-Dinitrotoluene	9.568	165	74701	993.21	ng/ml	92
48) 1,2-Dinitrobenzene	9.627	168	32758	952.78	ng/ml	89
49) Acenaphthylene	9.654	152	454467	885.59	ng/ml	99
50) 3-Nitroaniline	9.745	138	61474	876.50	ng/ml	99
51) Acenaphthene	9.830	153	287225	870.26	ng/ml	98
52) 2,4-Dinitrophenol	9.846	184	15680	1131.11	ng/ml	99
53) 4-Nitrophenol	9.911	139	53672	1081.14	ng/ml	88
54) 2,4-Dinitrotoluene	9.980	165	96536	1048.17	ng/ml	93
55) Dibenzofuran	10.002	168	385067	893.04	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	10.087	232	61599	953.09	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	10.130	232	64415	918.44	ng/ml	95
58) Diethyl phthalate	10.215	149	335425	984.19	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.210	170	250448	918.73	ng/ml	96
60) Fluorene	10.355	166	306610	908.05	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	138094	893.72	ng/ml	97
62) 4-Nitroaniline	10.365	138	77262	1197.40	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.397	198	37933	1420.49	ng/ml	91
65) N-Nitrosodiphenylamine	10.461	169	262577	947.48	ng/ml	99
66) Azobenzene (1,2-DPH)	10.504	77	337812	900.64	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.841	248	79572	898.09	ng/ml	95
69) Hexachlorobenzene	10.927	284	88084	815.36	ng/ml	97
70) Pentachlorophenol (PCP)	11.119	266	40198	839.01	ng/ml	94
71) Phenanthrene	11.333	178	439128	899.06	ng/ml	99
72) Anthracene	11.387	178	441336	927.78	ng/ml	99
73) Carbazole	11.547	167	403224	1001.62	ng/ml	99
74) Di-n-butyl phthalate	11.879	149	557266	1012.46	ng/ml	98
75) Fluoranthene	12.633	202	476198	977.65	ng/ml	98
76) Benzidine	12.794	184	183266	1063.65	ng/ml	96
77) Pyrene	12.938	202	493212	982.57	ng/ml	99
80) Butyl benzyl phthalate	13.992	149	235155	978.77	ng/ml	99
81) Bis(2-ethylhexyl) adipate	14.163	129	225747	958.57	ng/ml	100
82) 3,3-Dichlorobenzidine	15.168	252	191942	2771.54	ng/ml	99
83) Benz(a)anthracene	15.206	228	426927	946.64	ng/ml	99
84) Chrysene	15.286	228	406194	928.24	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.350	149	336248	968.54	ng/ml	99
87) Di-n-octyl phthalate	17.019	149	533629	1004.67	ng/ml	96
88) Benzo(b)fluoranthene	17.816	252	422678	949.52	ng/ml	94
89) Benzo(k)fluoranthene	17.880	252	420187	927.60	ng/ml	96
90) Benzo(b+k)fluoranthene	17.880	252	860927	1885.11	ng/ml	96
91) Benzo(e)pyrene	18.474	252	412982	974.49	ng/ml	98
92) Benzo(a)pyrene	18.591	252	392519	963.95	ng/ml	97
93) Perylene	18.795	252	383498	977.53	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	21.132	276	365105	864.87	ng/ml	90
96) Dibenz(a,h)anthracene	21.191	278	345146	913.99	ng/ml	94
97) Benzo(g,h,i)perylene	21.667	276	383414	939.68	ng/ml	96

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101905.D
Acq On : 10 Jun 2019 10:30 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:56:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101905.D\data.ms

(30) 4-Chloroaniline (T)

8.087min (-0.005) 531.26 ng/ml

response 88999

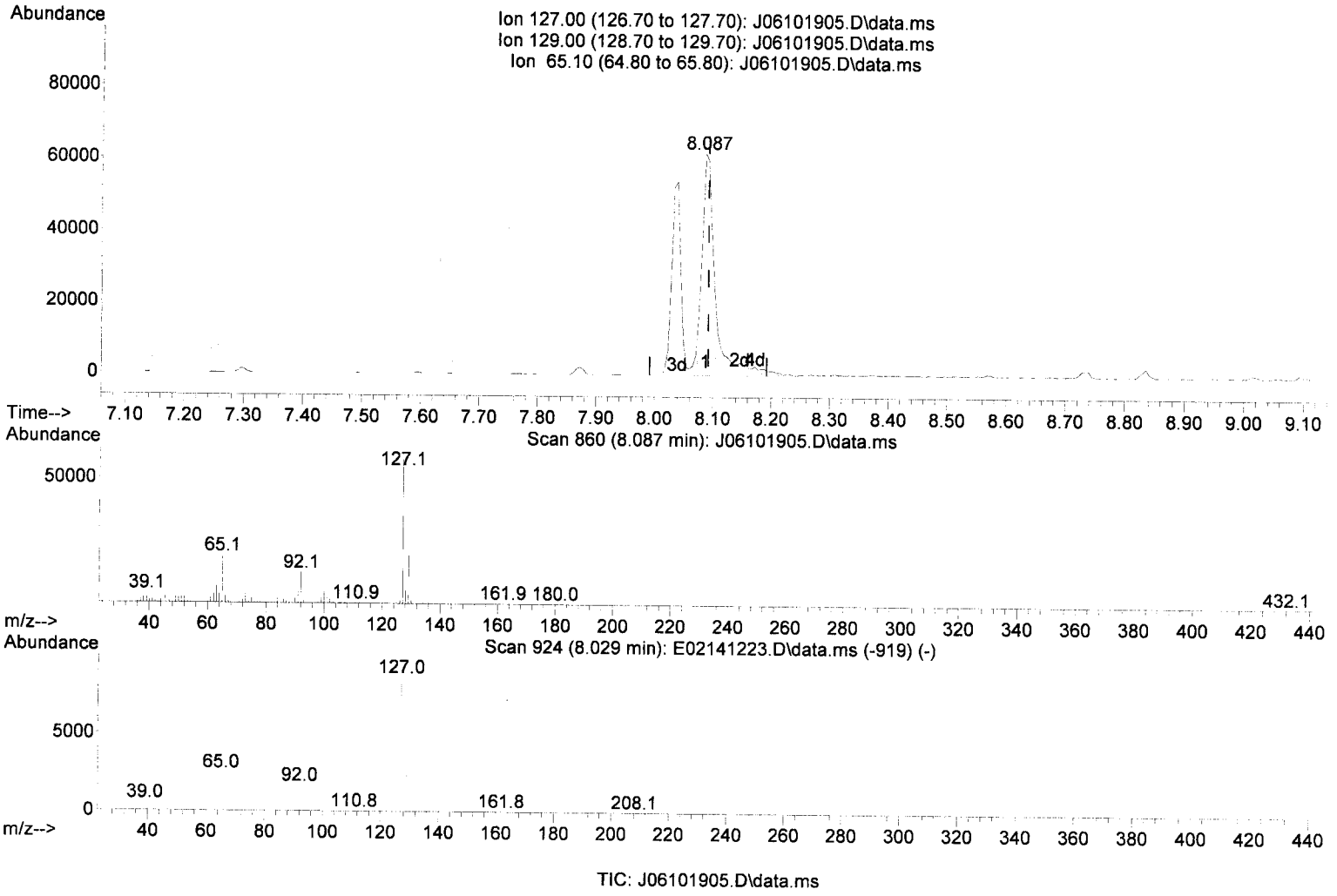
Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	31.00
65.10	31.40	30.51
0.00	0.00	0.00

AMS 6/10/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101905.D
Acq On : 10 Jun 2019 10:30 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:56:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101905.D\data.ms

(30) 4-Chloroaniline (T)

8.087min (-0.005) 609.33 ng/ml m

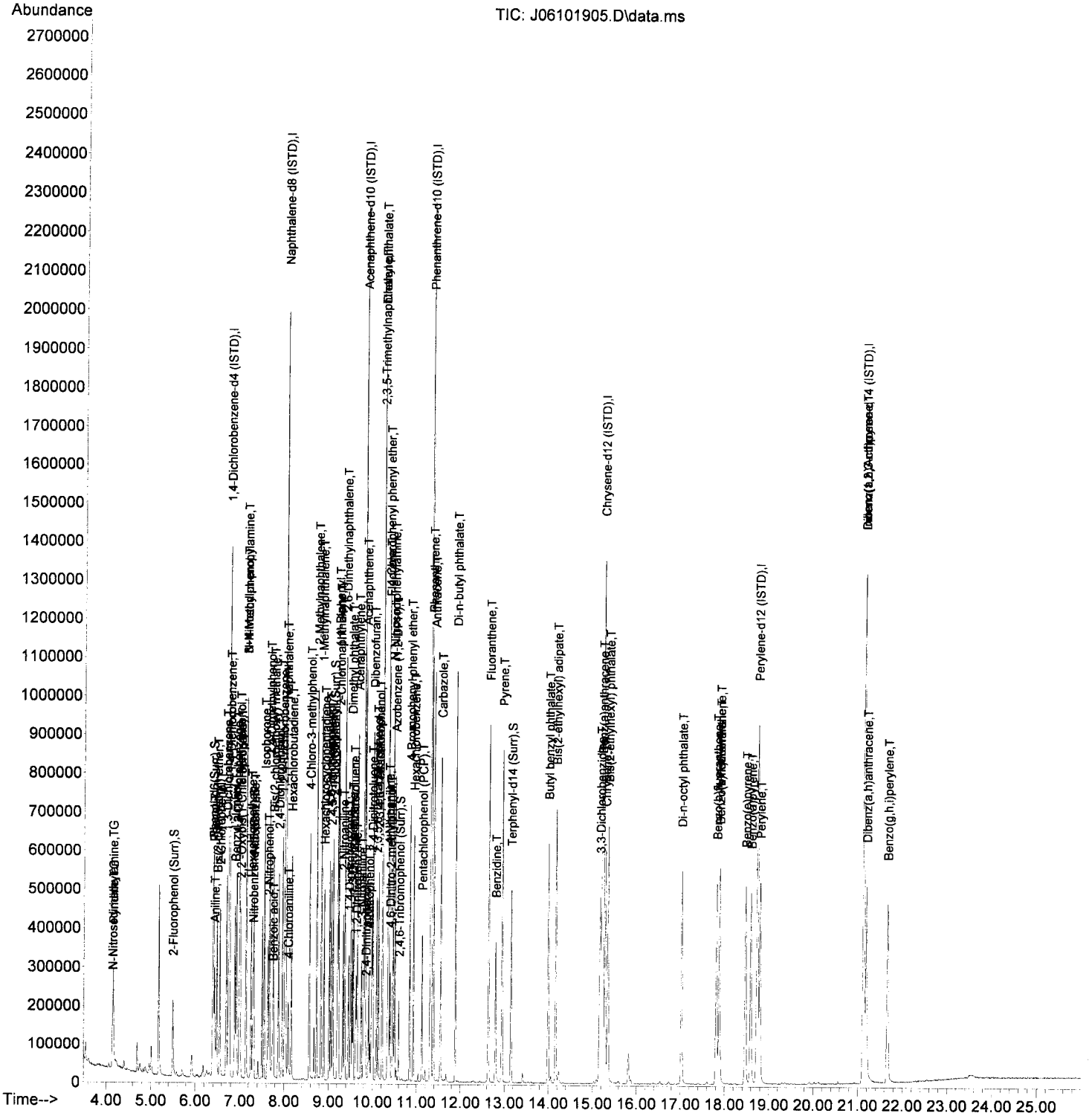
response 102906

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	31.20	31.00
65.10	31.40	30.51
0.00	0.00	0.00

AMS 6/10/19

Data Path : T:\data\2019-06\9F10027\
Data File : J06101905.D
Acq On : 10 Jun 2019 10:30 am
Operator : JK/ AMS/ DTH
Sample : 9060718-BS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 10:56:54 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101910.D
Acq On : 10 Jun 2019 1:30 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Mis-injection
Do Not Use
AMS
6/10/19

Quant Time: Jun 10 13:59:18 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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	152	8531	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	31259	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	8464	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	9523	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.222	240	6702	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.725	264	4698	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.116	292	4023	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.509	112	90	16.23 ng/ml	0.02
5) Phenol-d6(Surr)	6.434	99	56	7.85 ng/ml	0.04
19) Nitrobenzene-d5 (Surr)	7.316	82	103	34.50 ng/ml	0.03
40) 2-Fluorobiphenyl (Surr)	9.098	172	394	65.98 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00 ng/ml	
79) Terphenyl-d14 (Surr)	13.146	244	129	40.89 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.161	74	1114m	265.01 ng/ml#	
3) Pyridine	4.113	79	622m	90.69 ng/ml#	
6) Phenol	6.471	94	69	18.25 ng/ml#	44
7) Aniline	0.000		0	N.D.	
8) Bis(2-chloroethyl) ether	0.000		0	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	0.000		0	N.D.	
22) Isophorone	7.488	82	81	6.96 ng/ml	66
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\9F10027\
Data File : J06101910.D
Acq On : 10 Jun 2019 1:30 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

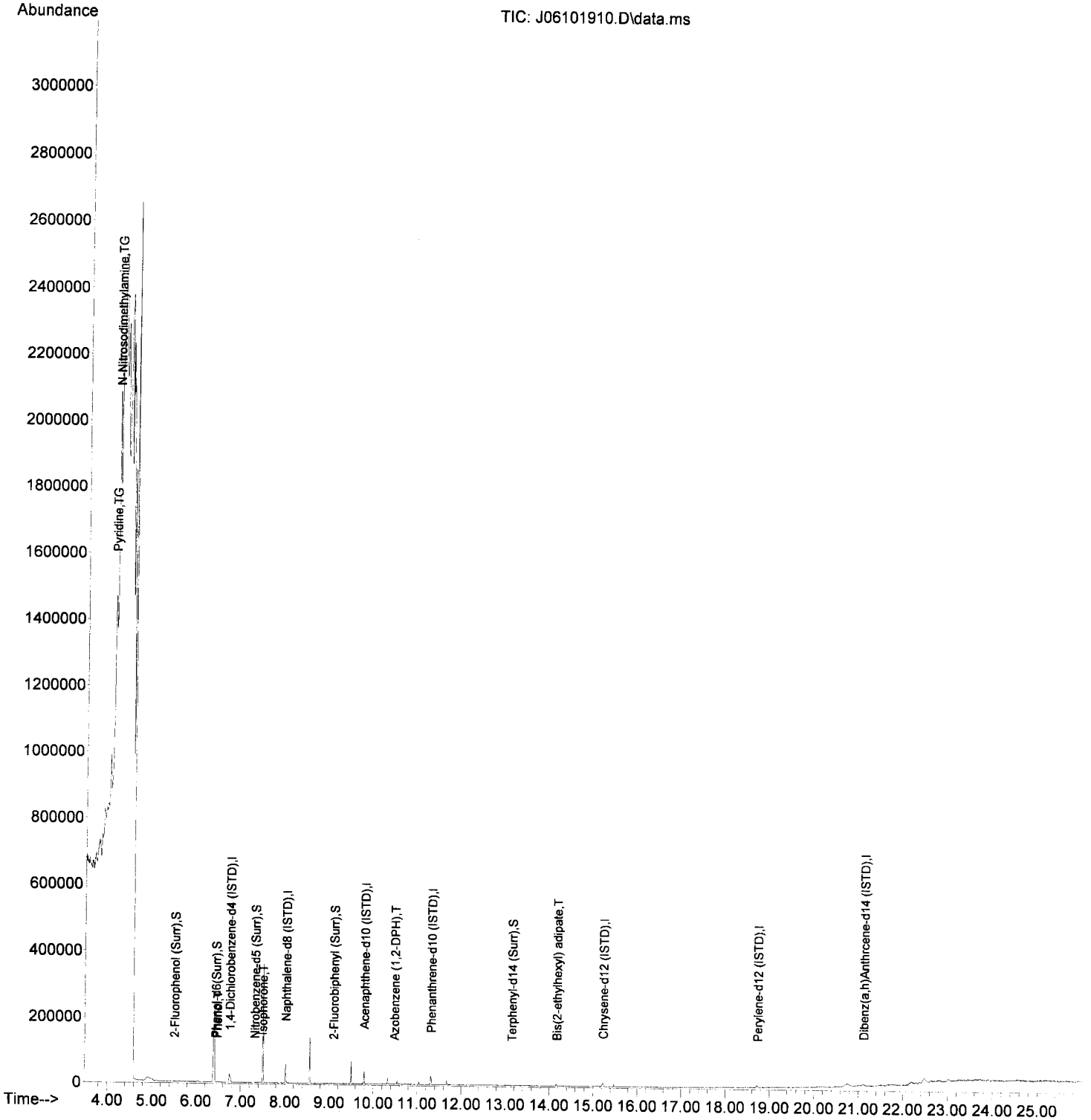
Quant Time: Jun 10 13:59:18 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	0.000		0	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.477	77	93	23.44 ng/ml	59
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	0.000		0	N.D.	
72) Anthracene	0.000		0	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	14.168	129	1860	973.96 ng/ml	81
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	0.000		0	N.D.	
84) Chrysene	0.000		0	N.D.	
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	0.000		0	N.D.	
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\9F10027\
Data File : J06101910.D
Acq On : 10 Jun 2019 1:30 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 13:59:18 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101911.D
Acq On : 10 Jun 2019 2:07 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE1@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS RK1 6/10 /19

Quant Time: Jun 10 14:33:38 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.744	152	272302	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.012	136	1115272	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	542725	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	927311	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	833178	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	758251	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.121	292	722033	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.487	112	6343	35.83	ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	8560	37.59	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	7861	56.65	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	15342	40.07	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	1491	58.75	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	21627	55.14	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	4.214	79	81	N.D.		
6) Phenol	6.413	94	148	10.15	ng/ml	51
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...	6.953	45	50	N.D.		
16) N-Nitrosodi-n-propylamine	7.103	70	103	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.295	77	93	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	7.750	105	78	752.81	ng/ml#	46
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	8.012	128	109	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	8.739	142	71	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	9.194	154	76	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	9.574	156	55	N.D.		

Data Path : T:\data\2019-06\9F10027\
Data File : J06101911.D
Acq On : 10 Jun 2019 2:07 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE1@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

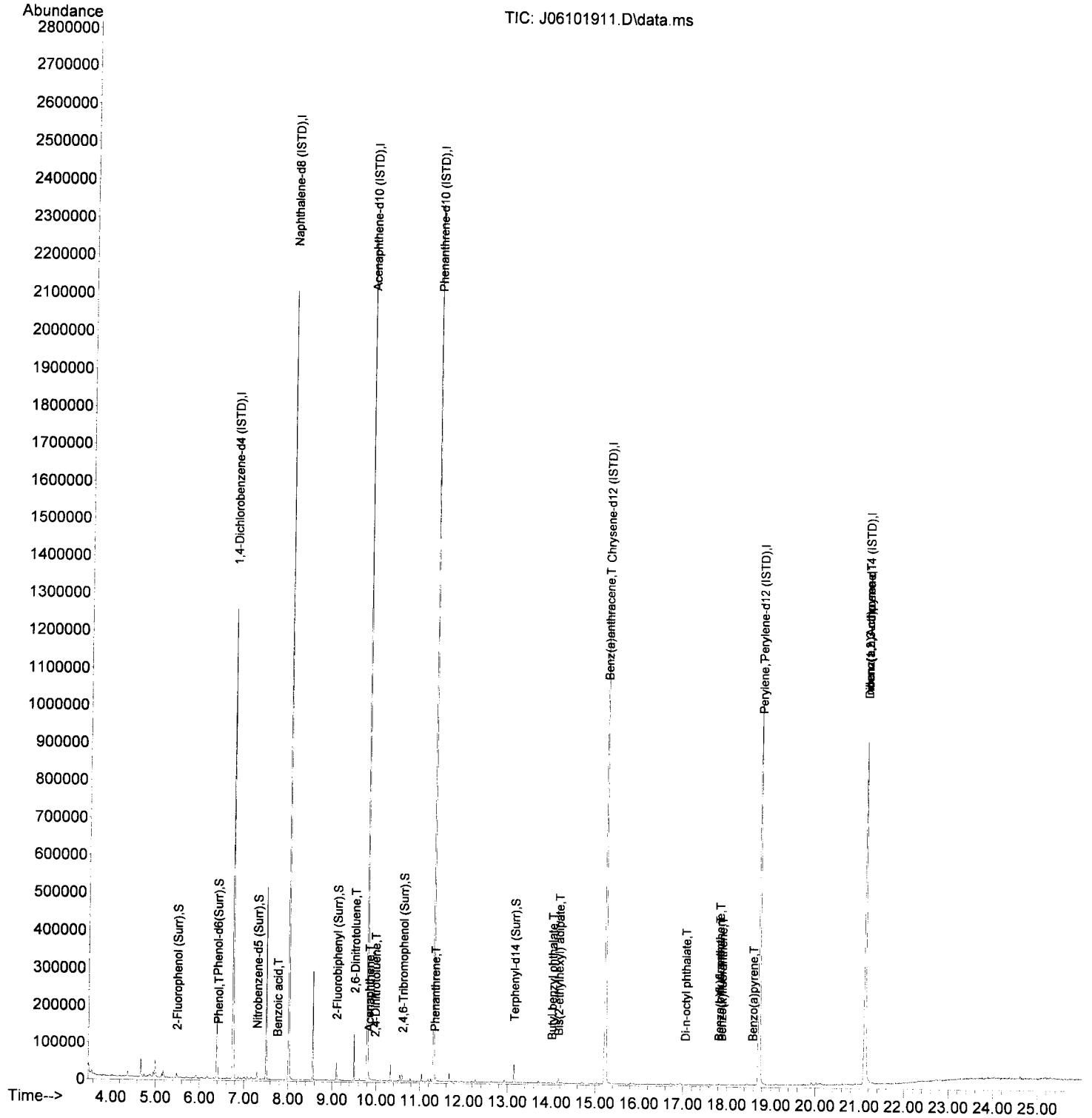
Quant Time: Jun 10 14:33:38 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.493	163	87	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	9.499	165	57	33.19 ng/ml#	20
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.643	152	50	N.D.	
50) 3-Nitroaniline	9.788	138	122	N.D.	
51) Acenaphthene	9.830	153	1321	3.78 ng/ml	82
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.969	165	218	62.24 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	10.210	149	104	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.205	170	51	N.D.	
60) Fluorene	10.355	166	89	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)	10.494	77	77	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	11.333	178	1262	2.51 ng/ml	90
72) Anthracene	11.387	178	197	N.D.	
73) Carbazole	11.547	167	92	N.D.	
74) Di-n-butyl phthalate	11.879	149	127	N.D.	
75) Fluoranthene	12.633	202	1147	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.938	202	1218	N.D.	
80) Butyl benzyl phthalate	14.008	149	76	29.58 ng/ml#	20
81) Bis(2-ethylhexyl) adipate	14.157	129	3822	16.10 ng/ml	93
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.216	228	2700	5.94 ng/ml	73
84) Chrysene	15.291	228	272	N.D.	
85) Bis(2-ethylhexyl) phth...	15.350	149	227	N.D.	
87) Di-n-octyl phthalate	17.051	149	130	66.46 ng/ml#	1
88) Benzo(b)fluoranthene	17.816	252	1419	12.11 ng/ml	81
89) Benzo(k)fluoranthene	17.875	252	268	11.01 ng/ml	70
90) Benzo(b+k)fluoranthene	17.816	252	1915	21.33 ng/ml	80
91) Benzo(e)pyrene	18.463	252	907	N.D.	
92) Benzo(a)pyrene	18.581	252	747	12.28 ng/ml	65
93) Perylene	18.741	252	2574	6.69 ng/ml	69
95) Indeno(1,2,3-cd)pyrene	21.121	276	1171	2.90 ng/ml#	1
96) Dibenz(a,h)anthracene	21.175	278	55	N.D.	
97) Benzo(g,h,i)perylene	21.662	276	768	N.D.	

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

Data Path : T:\data\2019-06\9F10027\
Data File : J06101911.D
Acq On : 10 Jun 2019 2:07 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE1@40
Misc : 40x, 8270D LL PAH
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 14:33:38 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101912.D
Acq On : 10 Jun 2019 2:43 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

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6/10/19
AMS

RR
AMS
6/10/19

Quant Time: Jun 10 15:09:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.744	152	6119	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	20783	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	7221	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	9731	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.227	240	8052	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.720	264	5343	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.116	292	5685	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.487	112	322	80.95 ng/ml	0.00
5) Phenol-d6(Surr)	6.396	99	717	140.13 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.300	82	1185	273.82 ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.103	172	2176	427.10 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00 ng/ml	
79) Terphenyl-d14 (Surr)	13.152	244	2176	574.10 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.086	79	72	14.64 ng/ml#	26
6) Phenol	0.000		0	N.D.	
7) Aniline	6.445	93	66	10.97 ng/ml#	46
8) Bis(2-chloroethyl) ether	6.445	93	66	12.74 ng/ml#	44
9) 2-Chlorophenol	6.535	128	50	12.02 ng/ml#	33
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.	
17) 3+4-Methylphenol	7.199	107	54	23.67 ng/ml#	20
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	7.734	105	59	781.63 ng/ml#	10
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\9F10027\
Data File : J06101912.D
Acq On : 10 Jun 2019 2:43 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

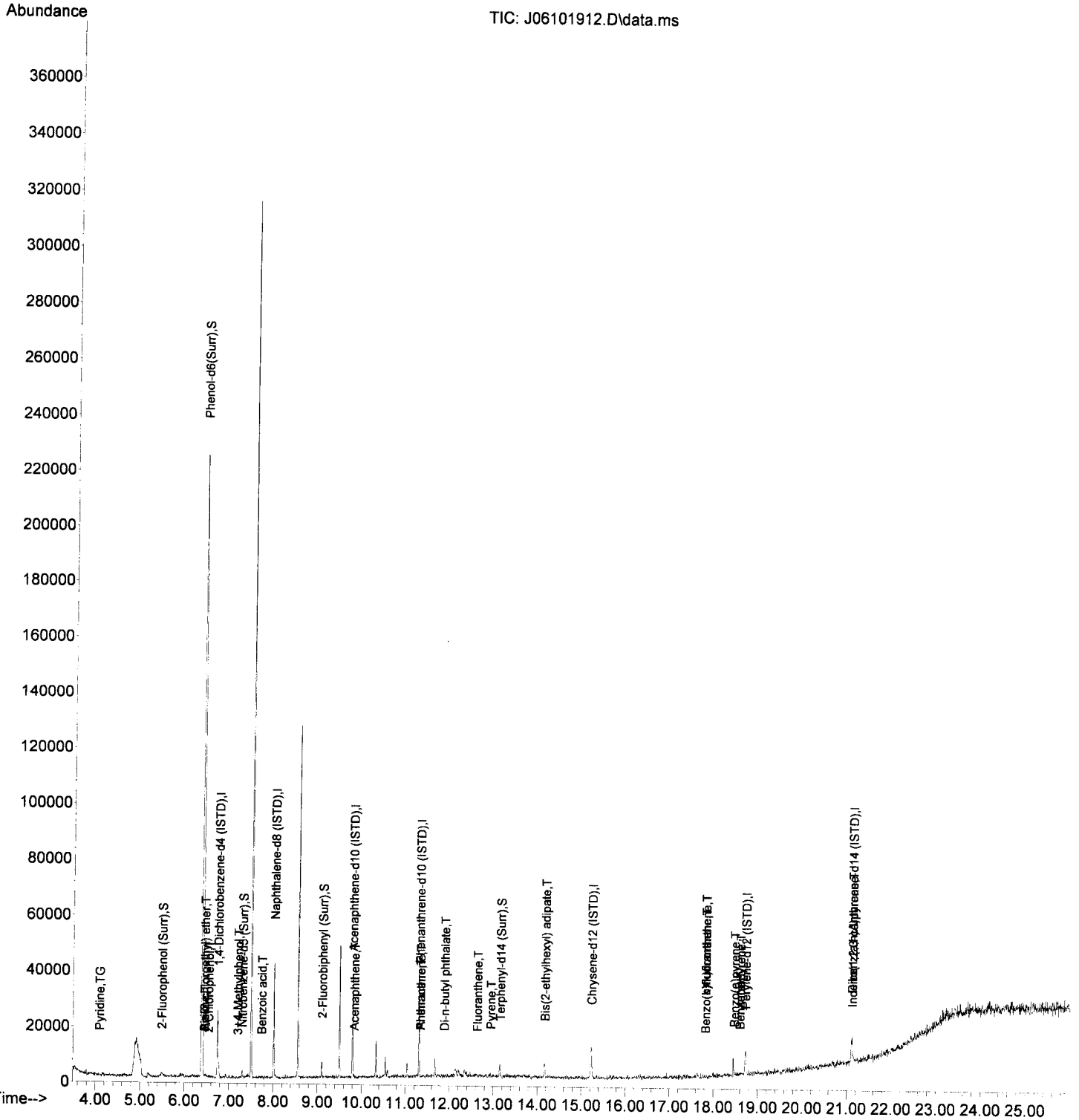
Quant Time: Jun 10 15:09:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	9.830	153	185	39.82 ng/ml#	65
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.333	178	78	14.77 ng/ml	60
72) Anthracene	11.333	178	78	15.17 ng/ml	60
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	11.879	149	63	10.59 ng/ml	78
75) Fluoranthene	12.628	202	81	15.38 ng/ml	58
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.932	202	55	10.14 ng/ml	58
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.168	129	1423	620.20 ng/ml	94
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	0.000		0	N.D.	
84) Chrysene	0.000		0	N.D.	
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	17.816	252	60	28.38 ng/ml	54
89) Benzo(k)fluoranthene	17.816	252	60	29.05 ng/ml	53
90) Benzo(b+k)fluoranthene	17.816	252	60	35.90 ng/ml	53
91) Benzo(e)pyrene	18.468	252	52	17.75 ng/ml	53
92) Benzo(a)pyrene	18.597	252	59	31.21 ng/ml	59
93) Perylene	18.597	252	59	21.75 ng/ml#	50
95) Indeno(1,2,3-cd)pyrene	21.121	276	65	20.44 ng/ml#	44
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\9F10027\
Data File : J06101912.D
Acq On : 10 Jun 2019 2:43 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE2@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 15:09:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101913.D
Acq On : 10 Jun 2019 3:20 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE3@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

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Quant Time: Jun 10 15:46:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.744	152	5661	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	17896	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.793	162	5827	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	8812	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.222	240	6070	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.720	264	5046	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.116	292	4517	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.503	112	733	199.18 ng/ml	0.01
5) Phenol-d6(Surr)	6.413	99	832	175.76 ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.300	82	962	242.58 ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	9.098	172	1955	475.52 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.606	330	124	305.62 ng/ml	0.01
79) Terphenyl-d14 (Surr)	13.152	244	1712	599.17 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	0.000		0	N.D.	
7) Aniline	0.000		0	N.D.	
8) Bis(2-chloroethyl) ether	0.000		0	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	0.000		0	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.226	77	60	14.90 ng/ml#	40
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\9F10027\
Data File : J06101913.D
Acq On : 10 Jun 2019 3:20 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE3@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

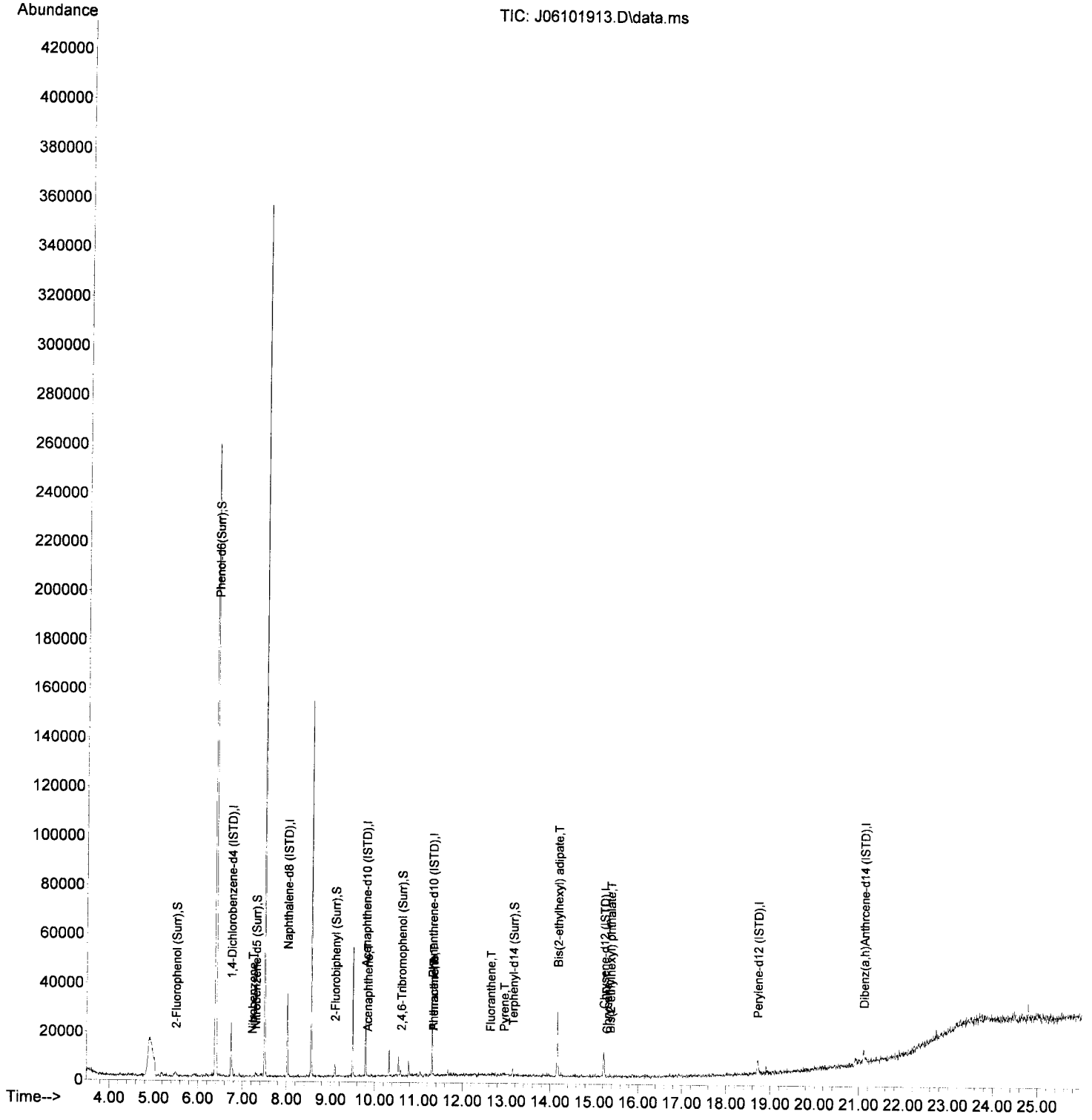
Quant Time: Jun 10 15:46:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

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	9.836	153	92	24.54 ng/ml#	35
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	0.000		0	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	0.000		0	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	0.000		0	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	0.000		0	N.D.	
71) Phenanthrene	11.333	178	70	14.64 ng/ml	60
72) Anthracene	11.333	178	70	15.03 ng/ml	60
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	12.633	202	163	34.18 ng/ml	58
76) Benzidine	0.000		0	N.D.	
77) Pyrene	12.943	202	77	15.67 ng/ml	58
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.168	129	8058	4658.78 ng/ml	96
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	0.000		0	N.D.	
84) Chrysene	15.291	228	62	19.29 ng/ml	50
85) Bis(2-ethylhexyl) phth...	15.366	149	94	36.87 ng/ml	52
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	0.000		0	N.D.	
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\9F10027\
Data File : J06101913.D
Acq On : 10 Jun 2019 3:20 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE3@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 15:46:48 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101914.D
Acq On : 10 Jun 2019 3:56 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE4@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

RR1

Quant Time: Jun 10 17:05:28 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 6/10/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.750	152	276224	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1108972	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	543758	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	914608	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	837441	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	764636	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.127	292	744344	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.493	112	69631	387.77 ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	90774	392.99 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	84099	419.65 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	162513	423.59 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	22968	524.46 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	231483	587.22 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	4.257	79	798m	3.59 ng/ml#	
6) Phenol	6.402	94	969	13.34 ng/ml#	1
7) Aniline	6.429	93	143	N.D.	
8) Bis(2-chloroethyl) ether	6.466	93	180	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	6.744	146	66	N.D.	
11) 1,4-Dichlorobenzene	6.744	146	66	N.D.	
12) Benzyl alcohol	6.878	108	118	33.23 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.980	107	263	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	166	N.D.	
16) N-Nitrosodi-n-propylamine	7.119	70	152	N.D.	
17) 3+4-Methylphenol	7.135	107	161	9.89 ng/ml#	35
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.333	77	83	N.D.	
22) Isophorone	7.557	82	102	N.D.	
23) 2-Nitrophenol	7.595	139	57	57.01 ng/ml#	38
24) 2,4-Dimethylphenol	7.675	122	82	25.83 ng/ml#	15
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.	
26) Benzoic acid	7.761	105	118	753.19 ng/ml#	45
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	956	N.D.	
30) 4-Chloroaniline	8.060	127	66	14.78 ng/ml#	43
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.557	107	92	64.20 ng/ml#	1
33) 2-Methylnaphthalene	8.734	142	464	N.D.	
34) 1-Methylnaphthalene	8.836	142	175	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	9.205	154	325	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	
43) 2,6-Dimethylnaphthalene	9.360	156	300	N.D.	

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Data Path : T:\data\2019-06\9F10027\
Data File : J06101914.D
Acq On : 10 Jun 2019 3:56 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE4@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

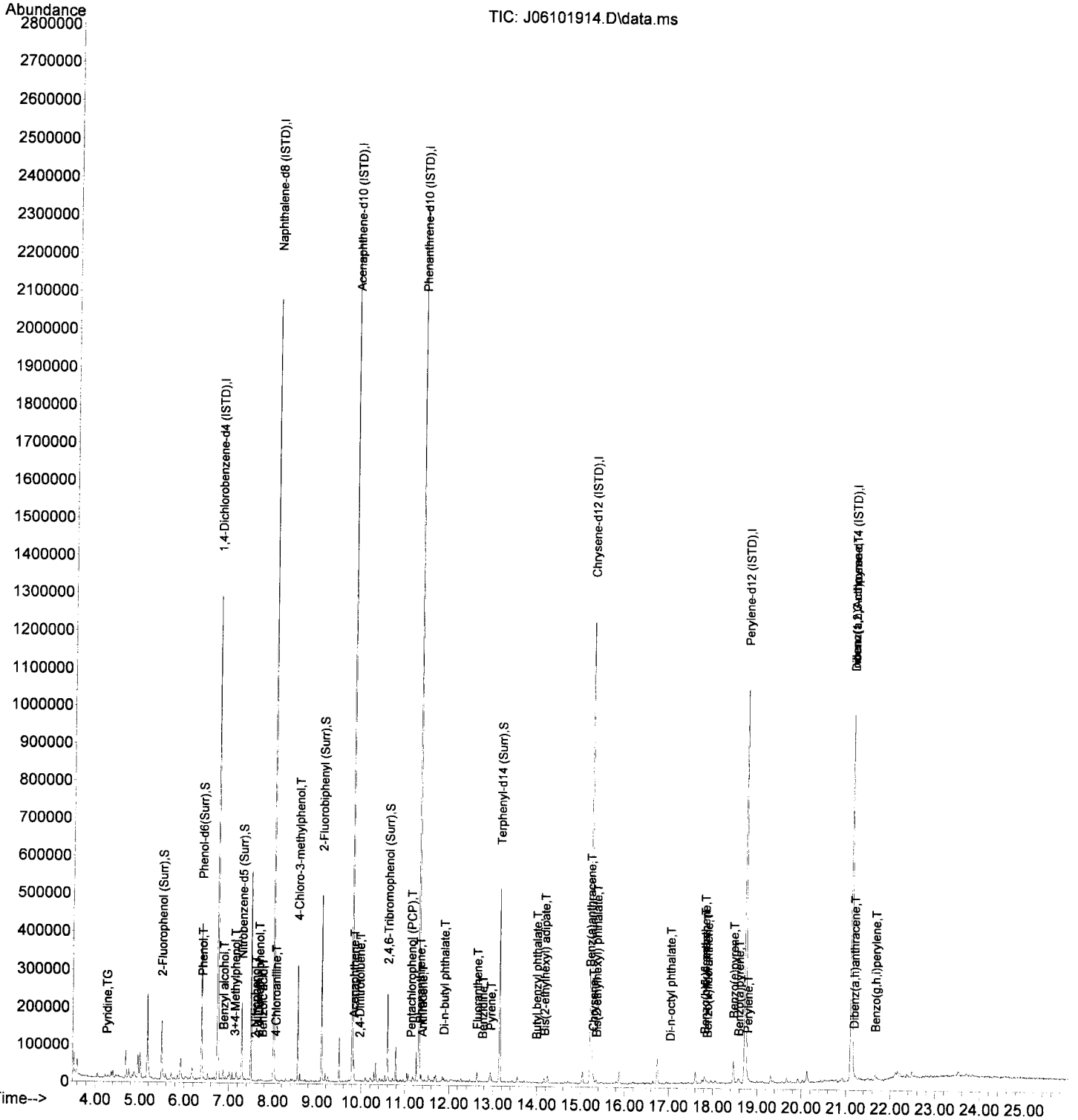
Quant Time: Jun 10 17:05:28 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.494	163	224	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	9.686	168	68	N.D.	
49) Acenaphthylene	9.654	152	559	N.D.	
50) 3-Nitroaniline	9.798	138	162	N.D.	
51) Acenaphthene	9.825	153	11714	33.49 ng/ml	98
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.959	165	369	63.71 ng/ml#	24
55) Dibenzofuran	10.007	168	350	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	10.216	149	429	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.221	170	184	N.D.	
60) Fluorene	10.349	166	619	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	10.456	169	275	N.D.	
66) Azobenzene (1,2-DPH)	10.483	77	403	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	402	28.98 ng/ml	92
71) Phenanthrene	11.333	178	5997	12.08 ng/ml	90
72) Anthracene	11.387	178	1786	3.70 ng/ml	94
73) Carbazole	11.547	167	995	N.D.	
74) Di-n-butyl phthalate	11.879	149	1839	3.29 ng/ml	87
75) Fluoranthene	12.633	202	12998	26.26 ng/ml	98
76) Benzidine	12.756	184	95	80.88 ng/ml	66
77) Pyrene	12.943	202	13868	27.19 ng/ml	96
80) Butyl benzyl phthalate	13.986	149	695	32.11 ng/ml	73
81) Bis(2-ethylhexyl) adipate	14.168	129	3625	15.19 ng/ml	83
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.201	228	10898	23.85 ng/ml	85
84) Chrysene	15.275	228	9304	20.98 ng/ml	93
85) Bis(2-ethylhexyl) phth...	15.350	149	3627	10.31 ng/ml	74
87) Di-n-octyl phthalate	17.030	149	505	67.14 ng/ml#	21
88) Benzo(b)fluoranthene	17.811	252	16849	47.15 ng/ml	88
89) Benzo(k)fluoranthene	17.869	252	4920	21.09 ng/ml	94
90) Benzo(b+k)fluoranthene	17.811	252	22253	65.81 ng/ml	86
91) Benzo(e)pyrene	18.463	252	9979	23.80 ng/ml	97
92) Benzo(a)pyrene	18.581	252	9038	32.67 ng/ml	94
93) Perylene	18.784	252	4254	10.96 ng/ml	80
95) Indeno(1,2,3-cd)pyrene	21.127	276	8265	19.85 ng/ml#	9
96) Dibenz(a,h)anthracene	21.180	278	1983	5.32 ng/ml	89
97) Benzo(g,h,i)perylene	21.662	276	8575	21.31 ng/ml	67

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

Data Path : T:\data\2019-06\9F10027\
Data File : J06101914.D
Acq On : 10 Jun 2019 3:56 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE4@4
Misc : 4x, 8270D LL PAH
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:28 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 6/10/19 MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.750	152	258652	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1061263	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	525137	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	883929	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.232	240	797940	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.736	264	720268	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	710054	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.493	112	260154	1547.21 ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	350434	1620.22 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	322102	1652.03 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	598935	1616.49 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	99810	2270.22 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	847157	2255.43 ng/ml	0.01
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.075	74	81	N.D.	
3) Pyridine	4.198	79	3282m	15.78 ng/ml	
6) Phenol	6.402	94	3427	23.79 ng/ml#	↑ max MRL
7) Aniline	6.423	93	228	N.D.	
8) Bis(2-chloroethyl) ether	6.471	93	394	N.D.	
9) 2-Chlorophenol	6.605	128	66	N.D.	
10) 1,3-Dichlorobenzene	6.739	146	74	N.D.	
11) 1,4-Dichlorobenzene	6.760	146	91	N.D.	
12) Benzyl alcohol	6.883	108	958	41.48 ng/ml#	19
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.996	107	729	5.35 ng/ml#	32
15) 2,2'-Oxybis(1-Chloropr...	6.980	45	271	N.D.	
16) N-Nitrosodi-n-propylamine	7.113	70	155	N.D.	
17) 3+4-Methylphenol	7.140	107	926	14.91 ng/ml#	23
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.333	77	105	N.D.	
22) Isophorone	7.557	82	294	N.D.	
23) 2-Nitrophenol	0.000		0	N.D.	
24) 2,4-Dimethylphenol	7.680	122	438	27.96 ng/ml#	73
25) Bis(2-chloroethoxy) me...	7.739	93	92	N.D.	
26) Benzoic acid	7.782	105	669	758.64 ng/ml	78
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.033	128	3221	5.86 ng/ml	100
30) 4-Chloroaniline	8.113	127	56	14.74 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.579	107	463	66.46 ng/ml#	9
33) 2-Methylnaphthalene	8.734	142	1566	4.35 ng/ml#	73
34) 1-Methylnaphthalene	8.836	142	972	2.78 ng/ml	88
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	9.205	154	1573	3.70 ng/ml	90
41) 2-Chloronaphthalene	9.269	162	139	N.D.	
42) 2-Nitroaniline	9.376	138	139	66.41 ng/ml#	56
43) 2,6-Dimethylnaphthalene	9.365	156	2229	7.14 ng/ml	98

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

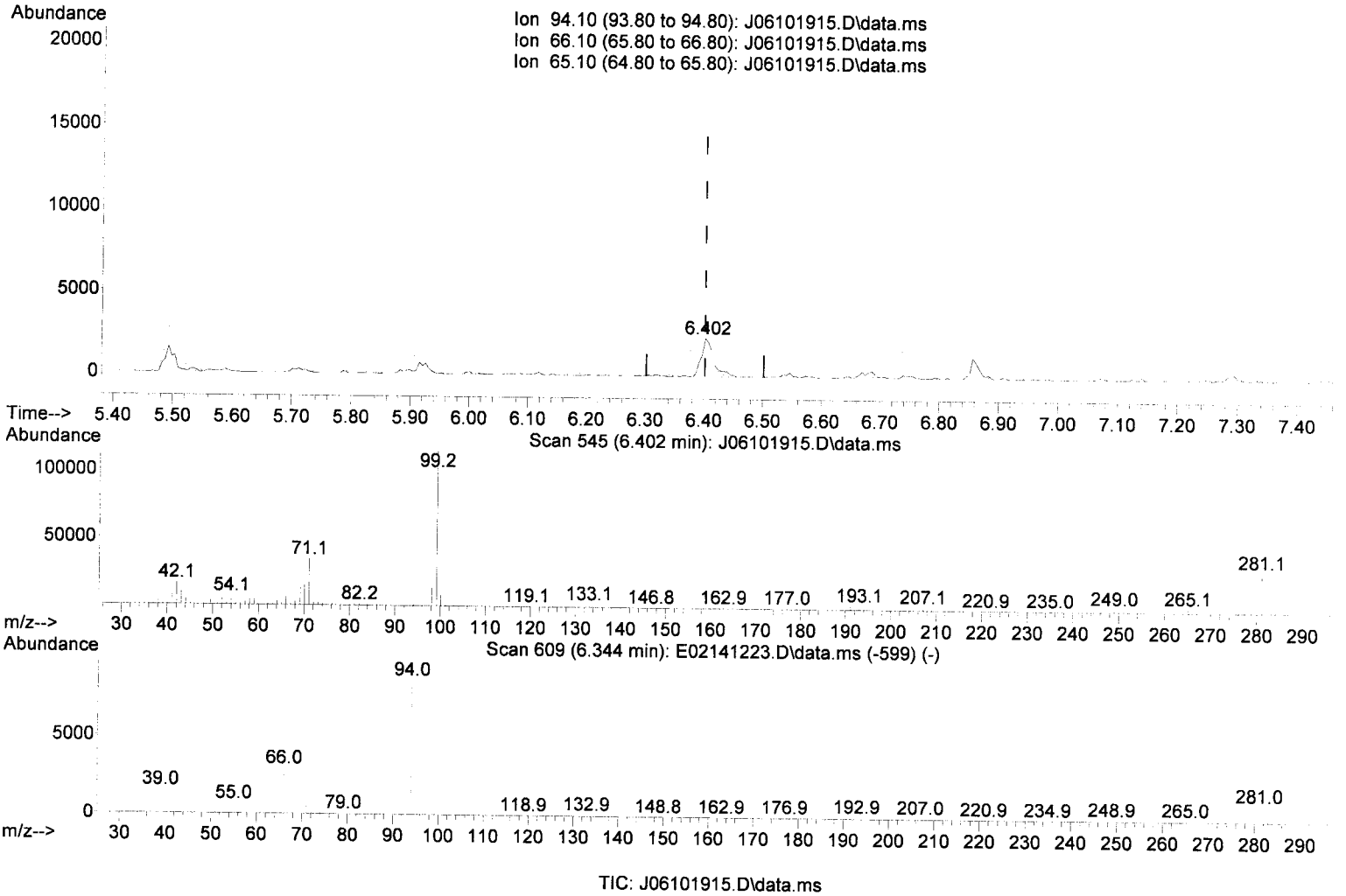
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.477	168	72	123.30 ng/ml#	78
45) Dimethyl phthalate	9.493	163	304	N.D.	
46) 1,3-Dinitrobenzene	9.536	168	64	66.20 ng/ml#	1
47) 2,6-Dinitrotoluene	9.547	165	113	33.91 ng/ml#	32
48) 1,2-Dinitrobenzene	9.659	168	75	N.D.	
49) Acenaphthylene	9.654	152	2724	5.19 ng/ml	96
50) 3-Nitroaniline	9.755	138	228	3.18 ng/ml#	52
51) Acenaphthene	9.830	153	46546	137.78 ng/ml	97
52) 2,4-Dinitrophenol	9.841	184	135	171.08 ng/ml#	1
53) 4-Nitrophenol	9.921	139	440	81.68 ng/ml#	37
54) 2,4-Dinitrotoluene	10.002	165	70	60.83 ng/ml#	1
55) Dibenzofuran	10.002	168	1366	3.09 ng/ml#	57
56) 2,3,5,6-Tetrachlorophenol	10.092	232	75	36.07 ng/ml#	1
57) 2,3,4,6-Tetrachlorophenol	10.135	232	224	16.27 ng/ml#	63
58) Diethyl phthalate	10.215	149	1336	3.83 ng/ml	81
59) 2,3,5-Trimethylnaphtha...	10.221	170	1500	5.38 ng/ml	75
60) Fluorene	10.349	166	2523	7.30 ng/ml	88
61) 4-Chlorophenyl phenyl ...	10.290	204	74	N.D.	
62) 4-Nitroaniline	10.360	138	79	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.467	169	550	N.D.	
66) Azobenzene (1,2-DPH)	10.483	77	417	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	11.125	266	2503	73.74 ng/ml	89
71) Phenanthrene	11.333	178	21252	144.31 ng/ml	96
72) Anthracene	11.387	178	8310	17.79 ng/ml	97
73) Carbazole	11.542	167	3855	9.75 ng/ml	87
74) Di-n-butyl phthalate	11.879	149	5766	10.67 ng/ml	92
75) Fluoranthene	12.633	202	52291	109.32 ng/ml	98
76) Benzidine	12.783	184	157	81.24 ng/ml#	1
77) Pyrene	12.938	202	54444	110.45 ng/ml	98
80) Butyl benzyl phthalate	13.986	149	2304	39.16 ng/ml	97
81) Bis(2-ethylhexyl) adipate	14.163	129	4529	19.92 ng/ml	96
82) 3,3-Dichlorobenzidine	15.158	252	106	Below Cal #	8
83) Benz(a)anthracene	15.206	228	34561	79.37 ng/ml mos	89
84) Chrysene	15.286	228	37437	88.61 ng/ml mos	94
85) Bis(2-ethylhexyl) phth...	15.345	149	17719	52.86 ng/ml	96
87) Di-n-octyl phthalate	17.040	149	1727	69.54 ng/ml#	1
88) Benzo(b)fluoranthene	17.811	252	67018	170.30 ng/ml mos	94
89) Benzo(k)fluoranthene	~~17.811~~	~~252~~	~~80575~~	~~196.58 ng/ml~~	~~93~~ mI Hit mos
90) Benzo(b+k)fluoranthene	17.811	252	87186	219.69 ng/ml	93
91) Benzo(e)pyrene	18.463	252	38189	96.69 ng/ml	91
92) Benzo(a)pyrene	18.586	252	38160	110.11 ng/ml	98
93) Perylene	18.789	252	16852	46.09 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.127	276	32052	80.69 ng/ml	93
96) Dibenz(a,h)anthracene	21.180	278	6504	18.30 ng/ml	81
97) Benzo(g,h,i)perylene	21.667	276	33171	86.40 ng/ml	90

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(6) Phenol (T)

6.402min (+ 0.000) 23.79 ng/ml ↑ MDL=MRL

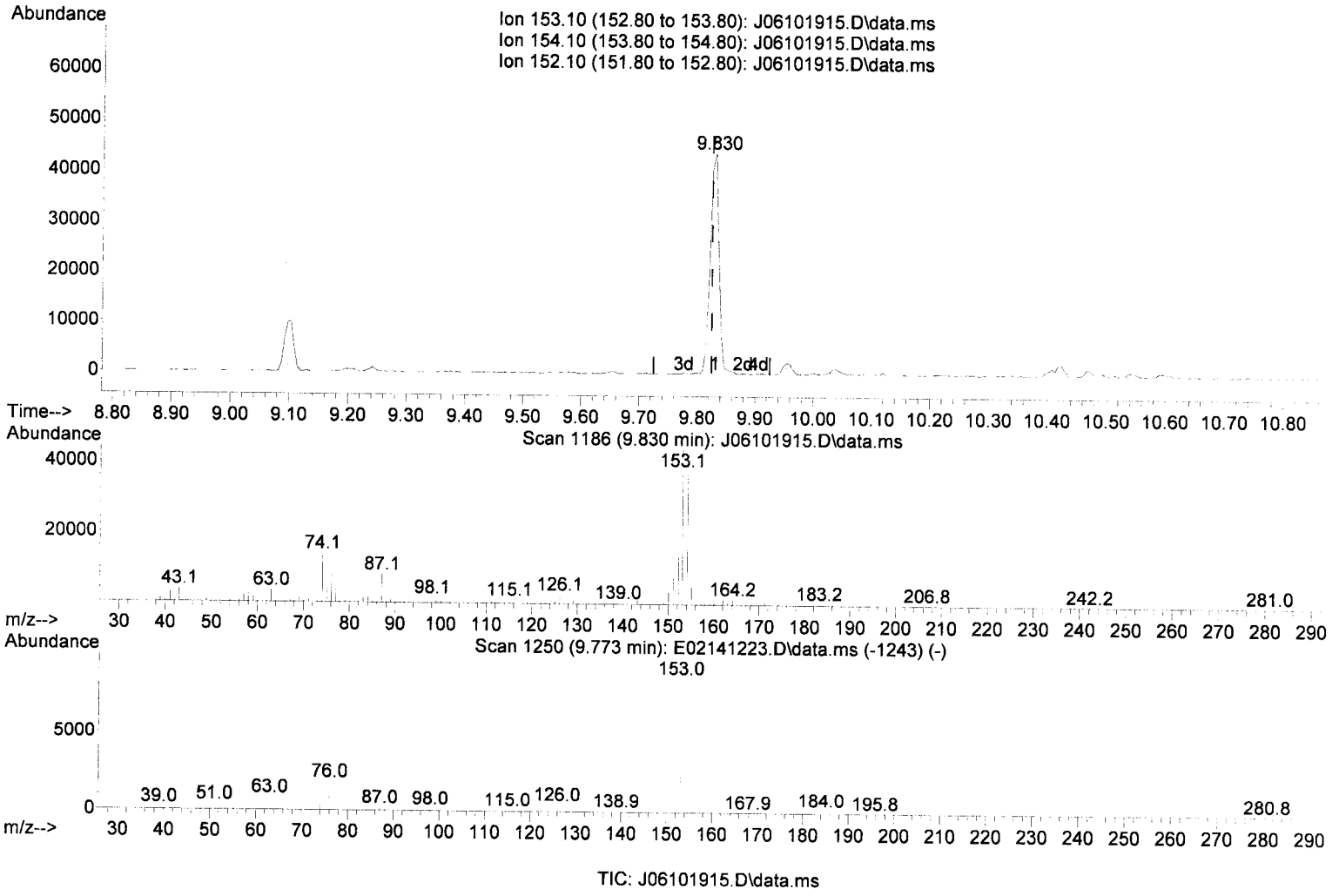
response 3427

Ion	Exp%	Act%
94.10	100.00	100.00
66.10	34.30	249.85#
65.10	26.20	71.09#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(51) Acenaphthene (T)

9.830min (+ 0.005) 137.78 ng/ml

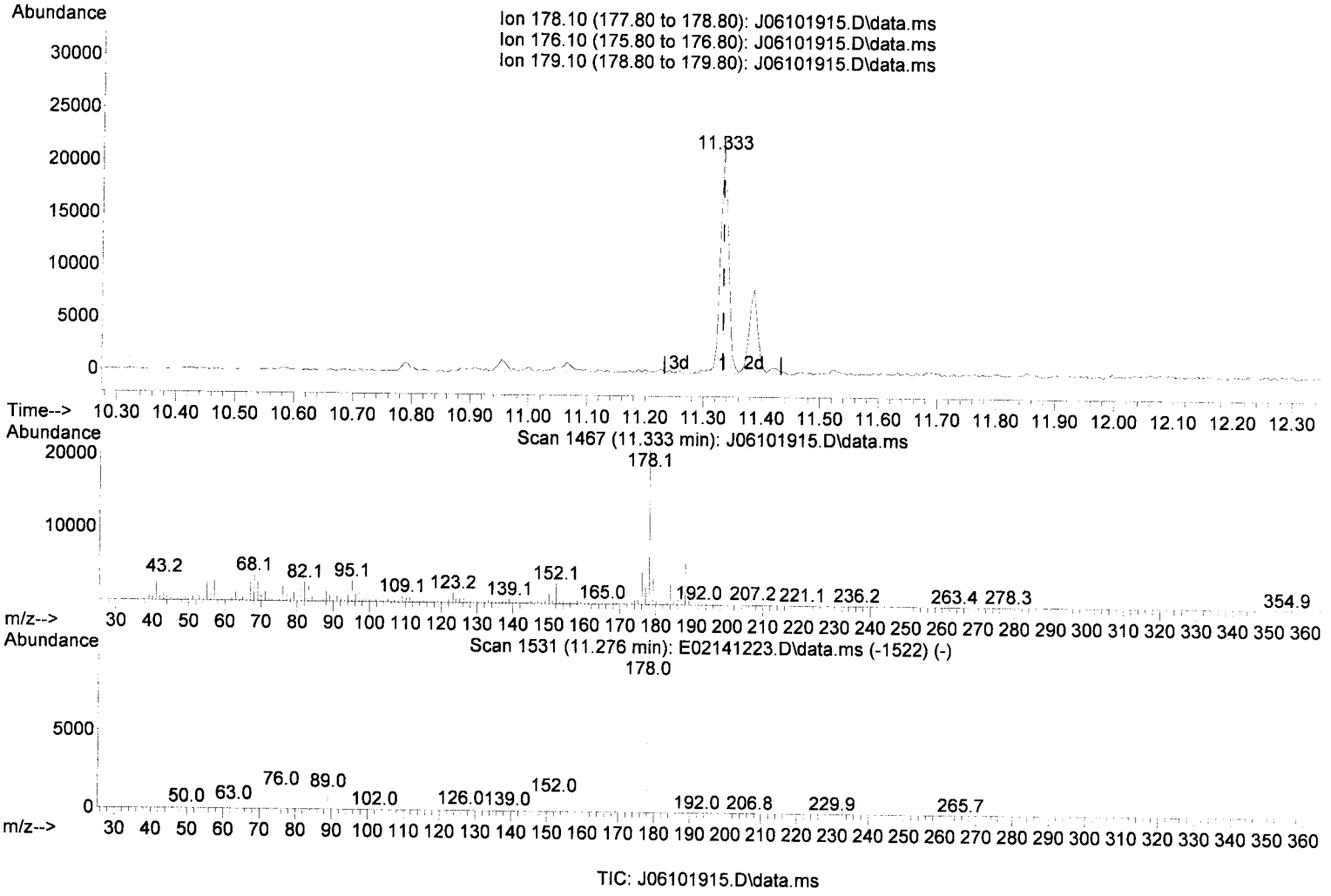
response 46546

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	93.50	89.47
152.10	47.70	49.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(71) Phenanthrene (T)

11.333min (+ 0.000) 44.31 ng/ml

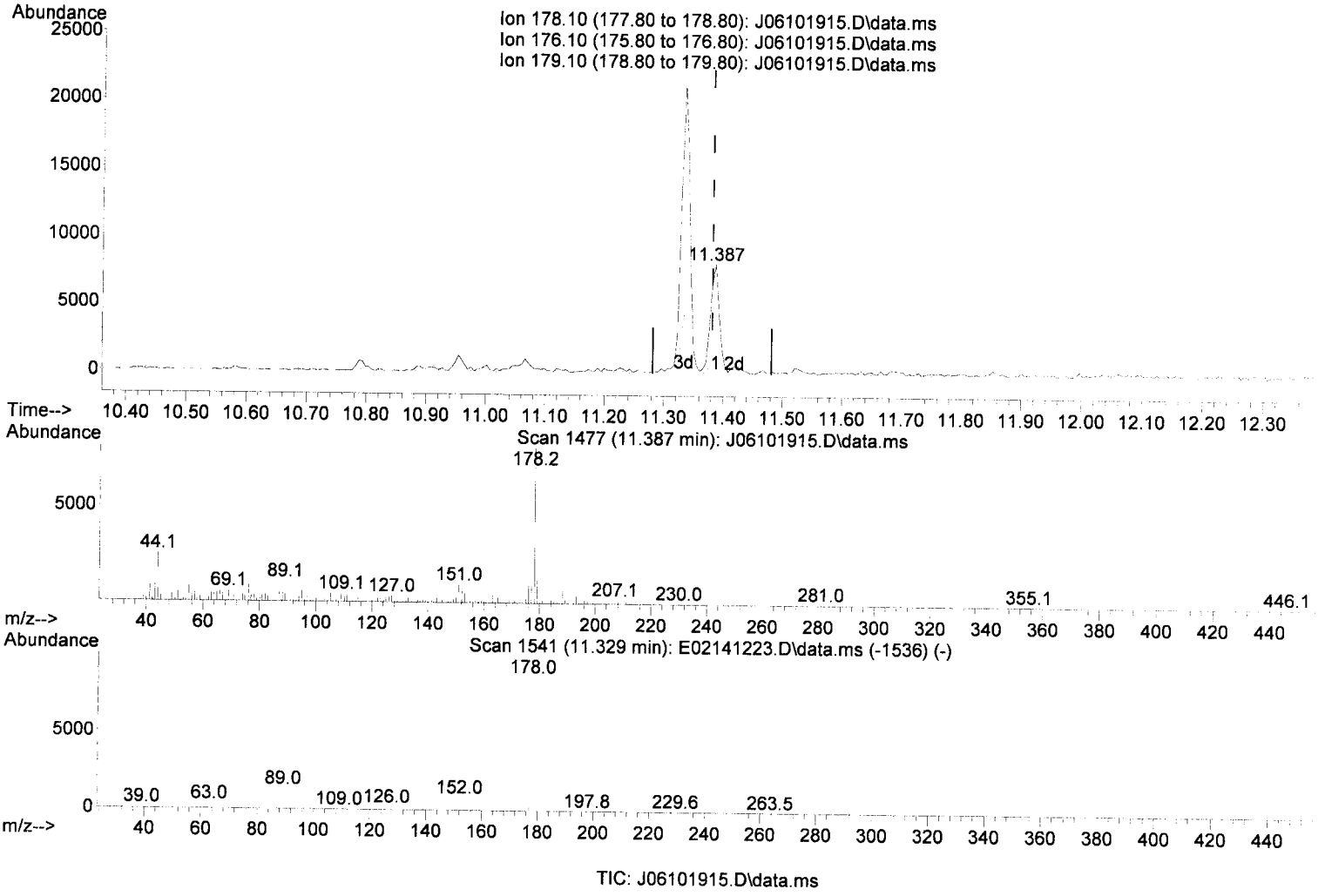
response 21252

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.40	20.88
179.10	15.20	16.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(72) Anthracene (T)

11.387min (+ 0.005) 17.79 ng/ml J

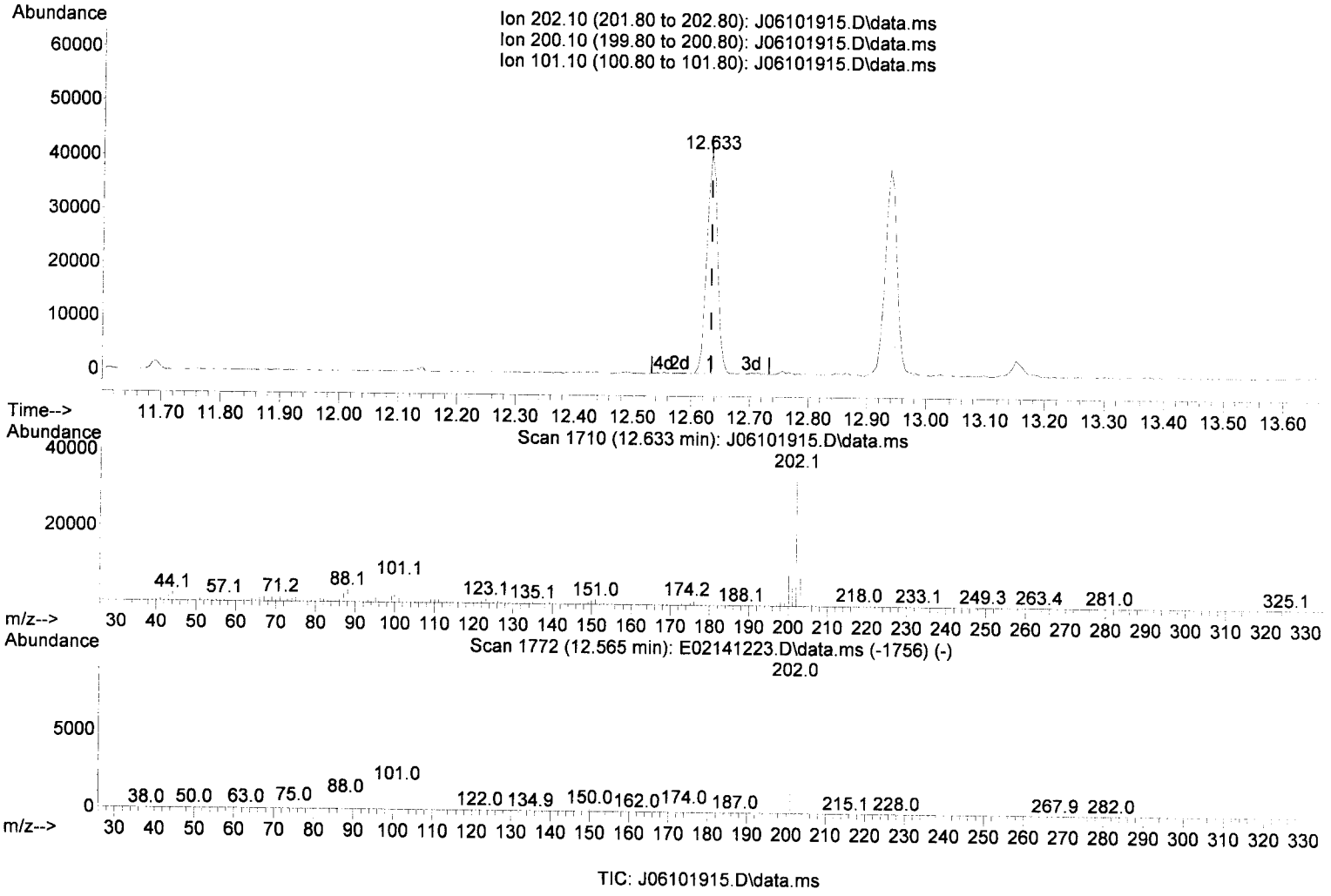
response 8310

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	18.70	16.47
179.10	15.90	15.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(75) Fluoranthene (T)

12.633min (+ 0.000) 109.32 ng/ml

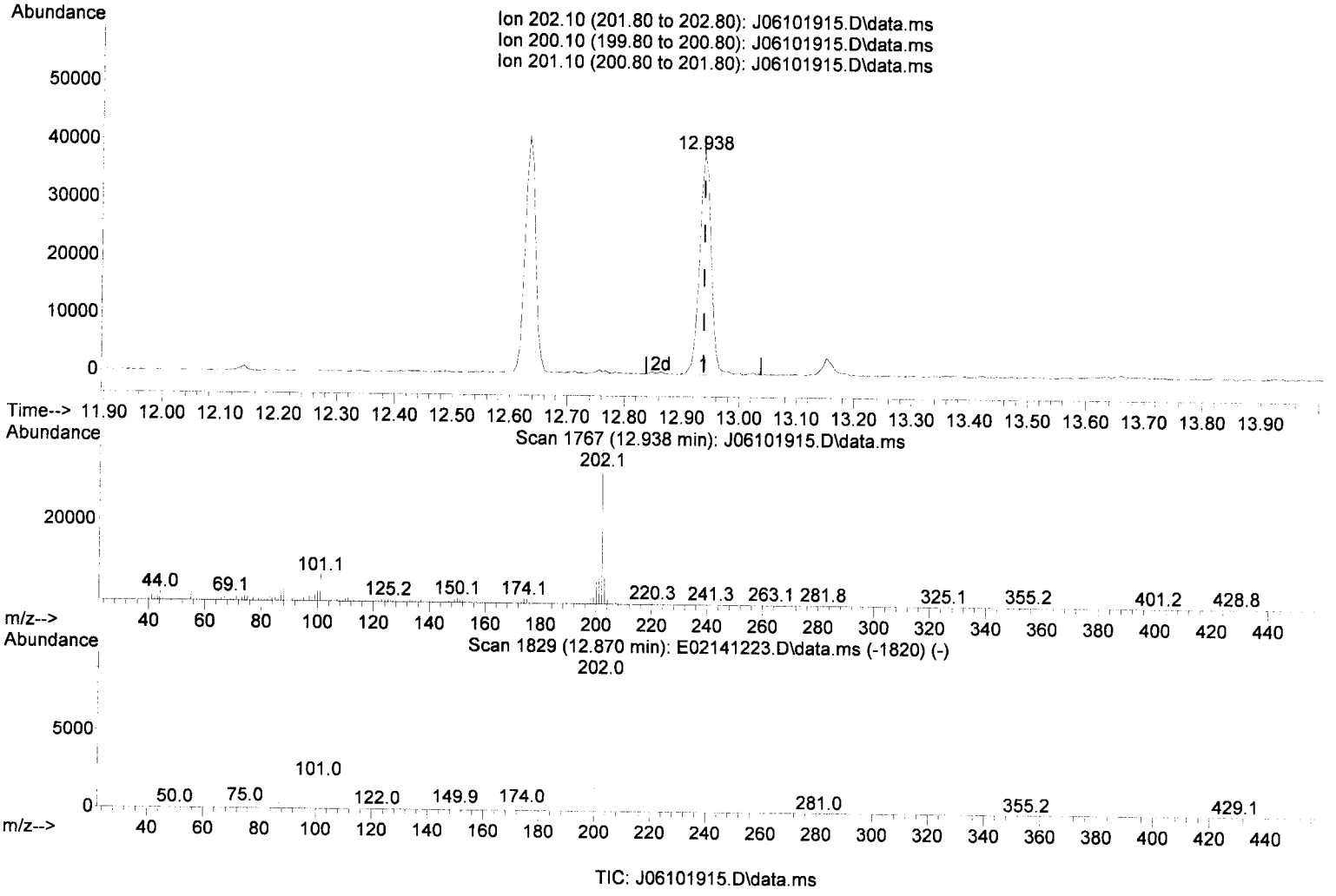
response 52291

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.20	19.66
101.10	17.00	15.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(77) Pyrene (T)

12.938min (+ 0.000) 110.45 ng/ml

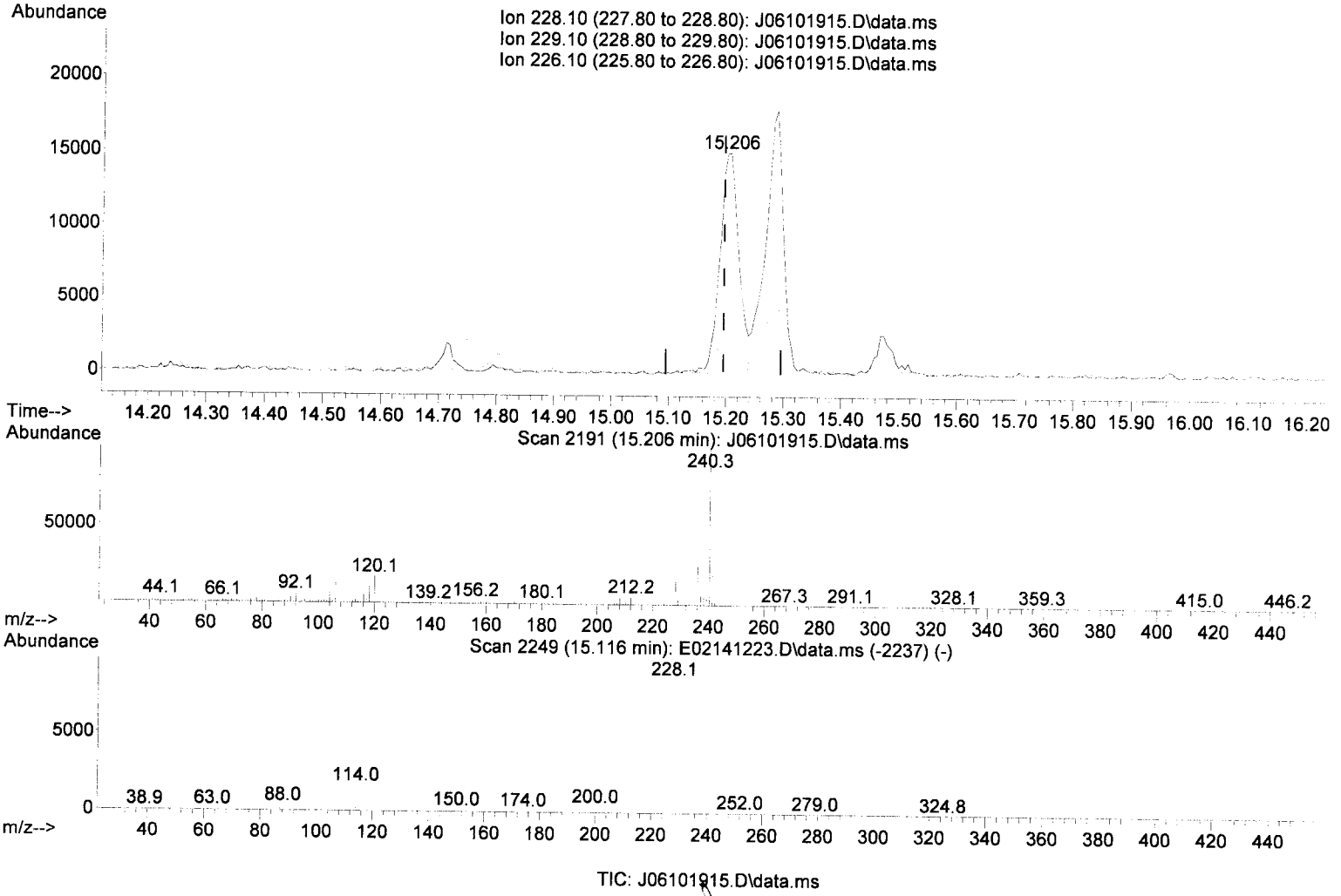
response 54444

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.70	19.86
201.10	17.30	18.69
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



(83) Benz(a)anthracene (T)

15.206min (+ 0.011) 79.37 ng/ml

response 34561

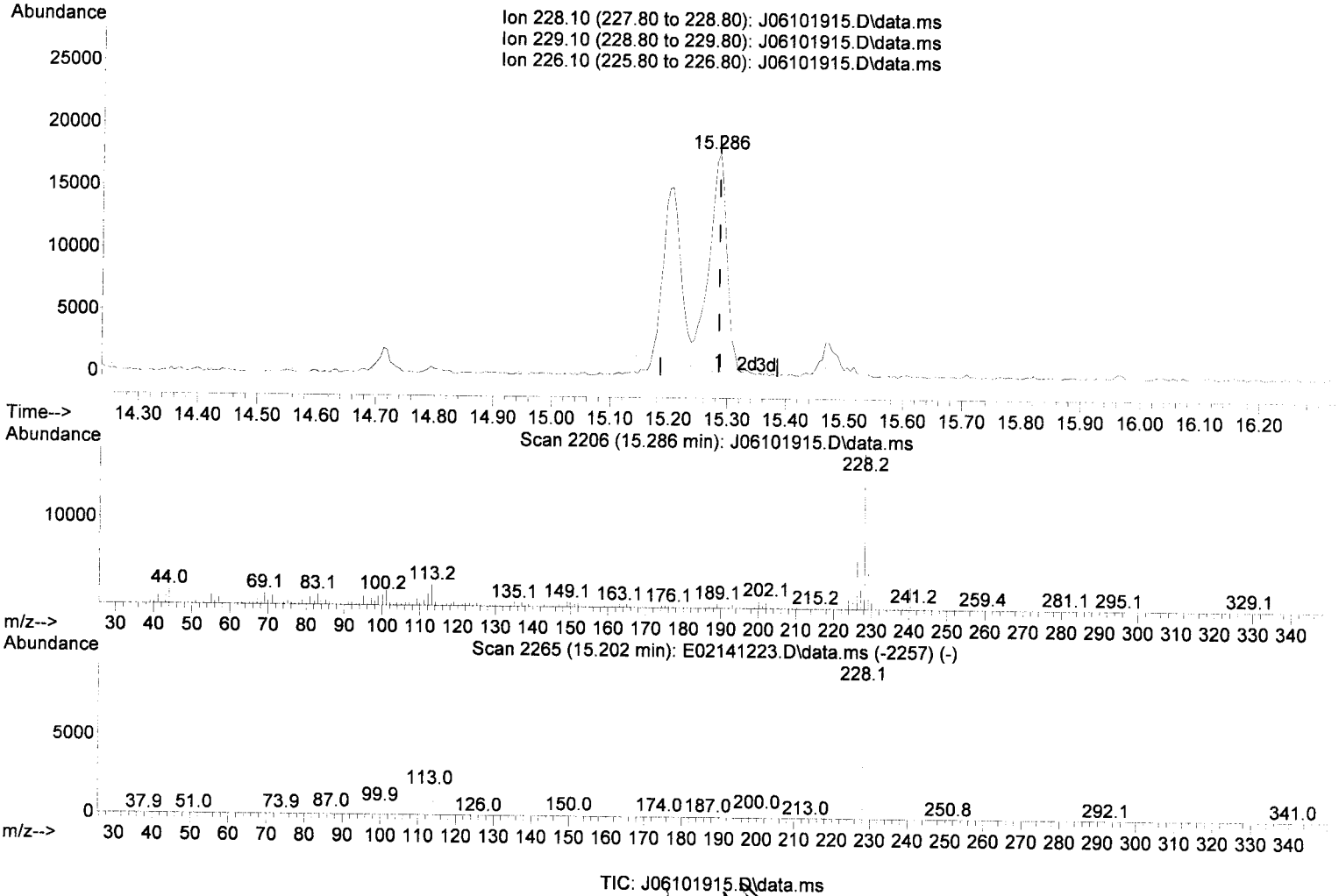
Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	22.14
226.10	26.50	33.89
0.00	0.00	0.00

MOS Not needed MKT 6/11/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(84) Chrysene (T)

15.286min (+ 0.000) 88.61 ng/ml

response 37437

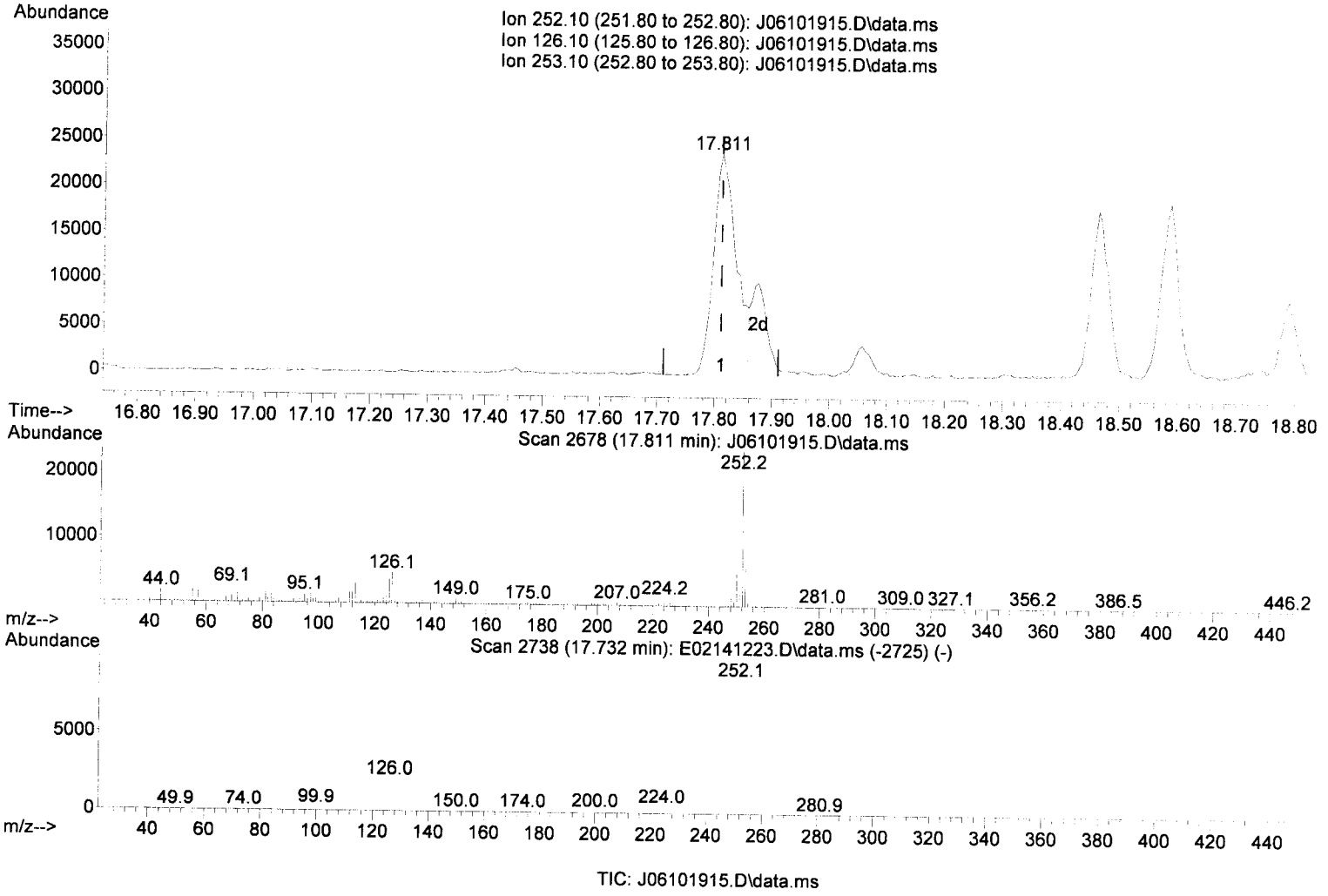
Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.50	23.61
226.10	29.30	31.15
0.00	0.00	0.00

mos Not part needed MKT 6/11/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.811min (+ 0.000) 170.30 ng/ml

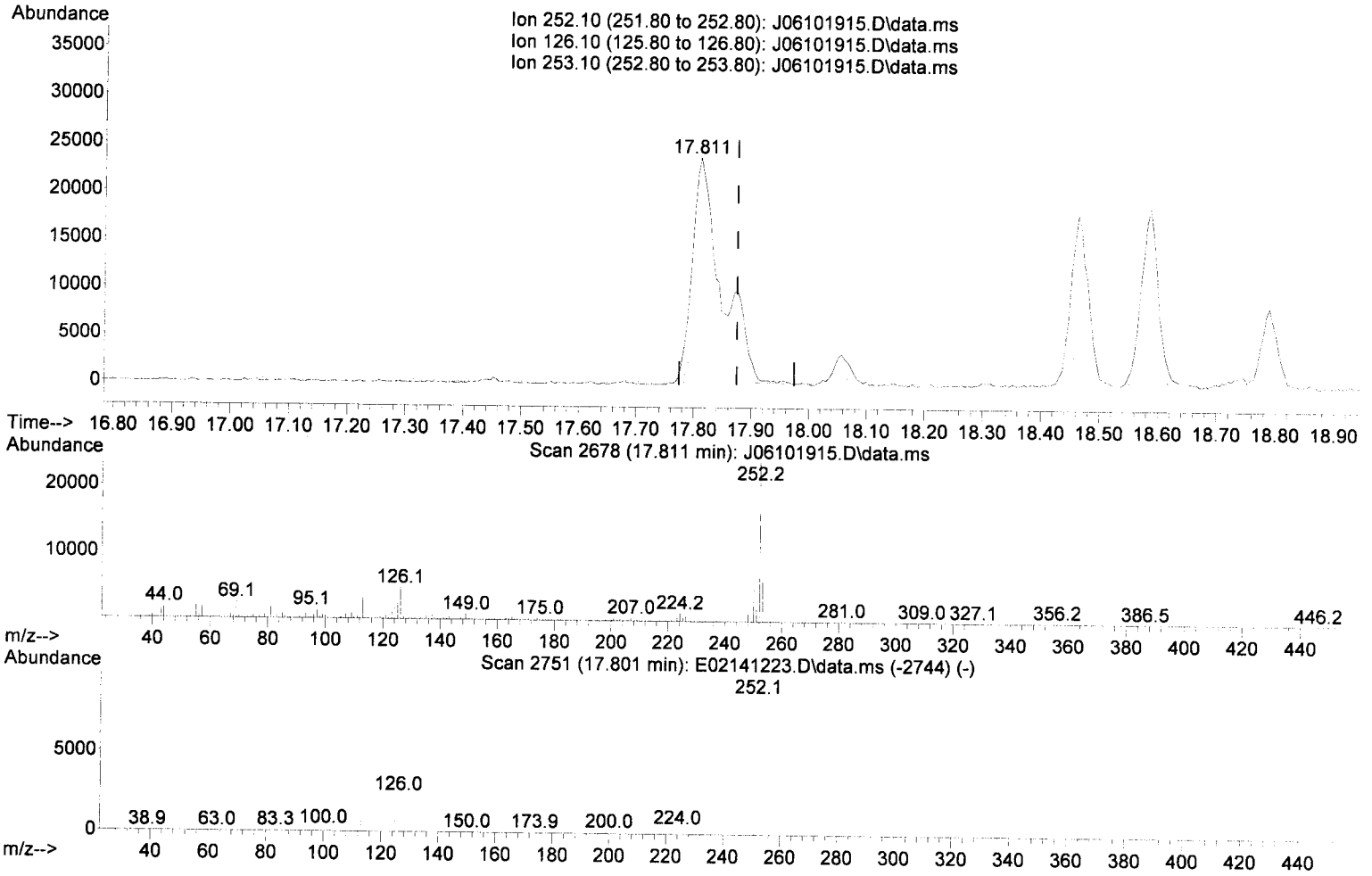
response 67018

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.90	19.89
253.10	22.00	25.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.811min (-0.064) 196.58 ng/ml

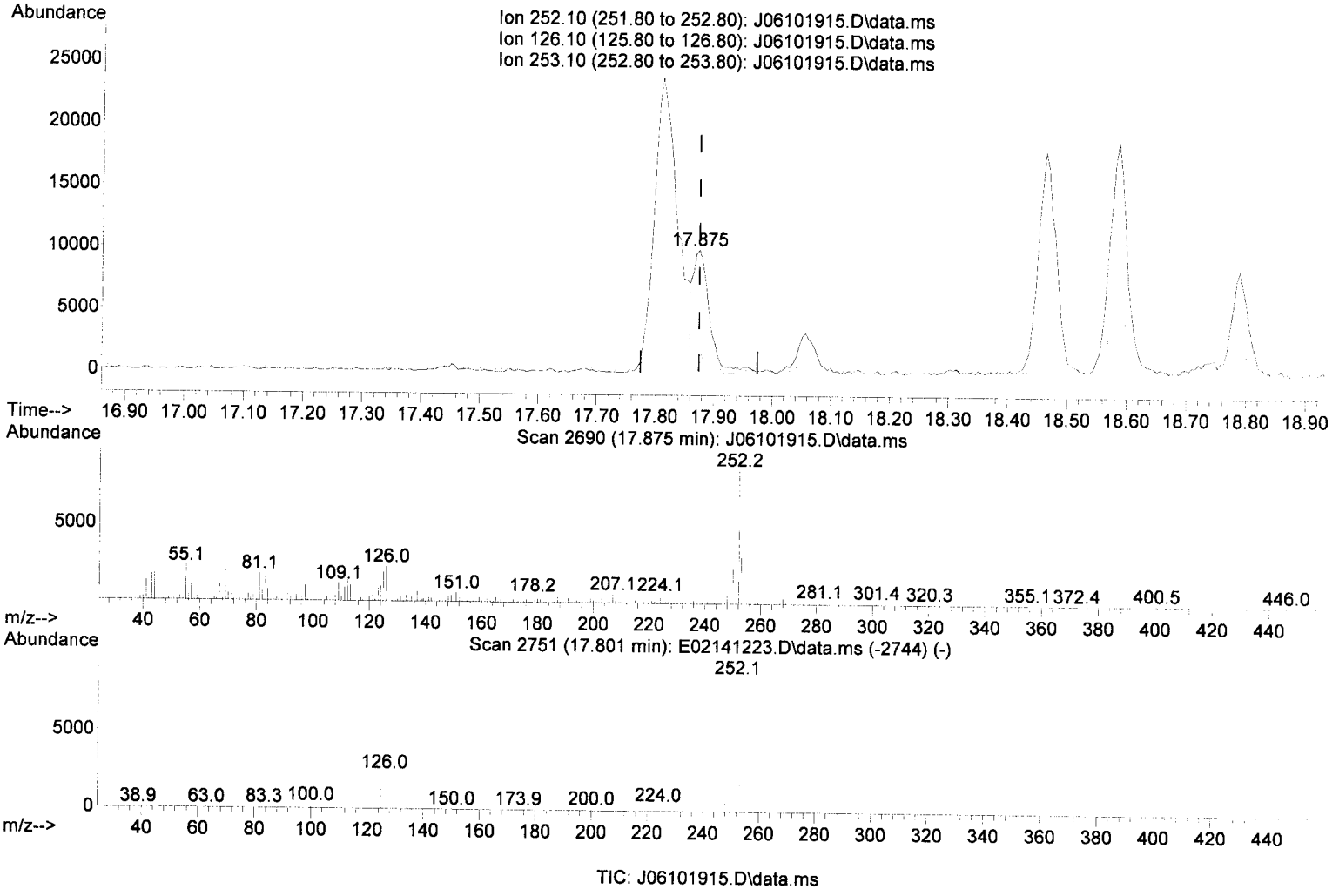
response 80575

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	19.89
253.10	21.70	25.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.875min (+ 0.000) 54.11 ng/ml m

response 18959

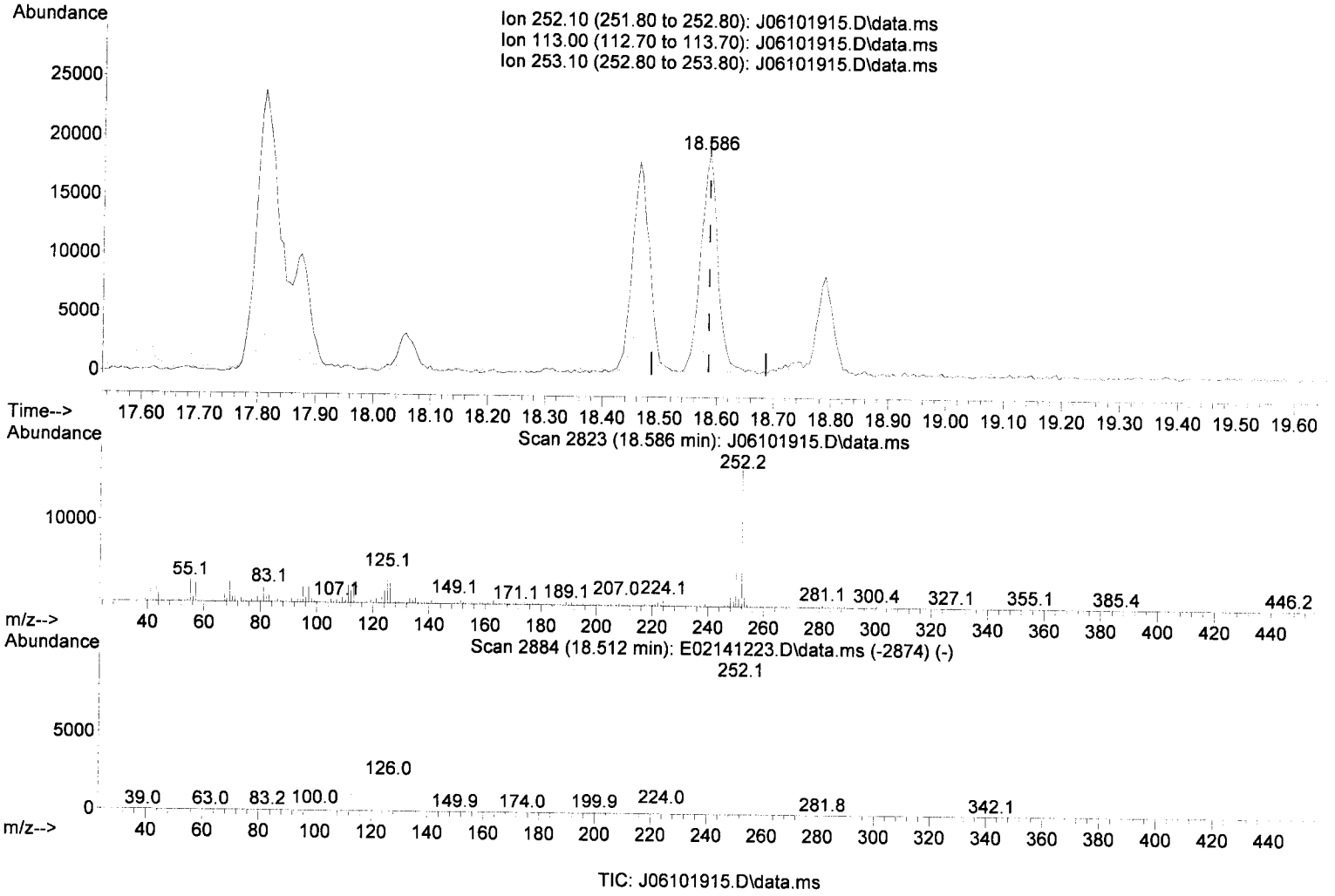
Ion	Exp%	Act%
252.10	100.00	100.00
126.10	23.30	22.97
253.10	21.70	30.50
0.00	0.00	0.00

MDS
JH 6/10/19

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(92) Benzo(a)pyrene (T)

18.586min (+ 0.000) 110.11 ng/ml

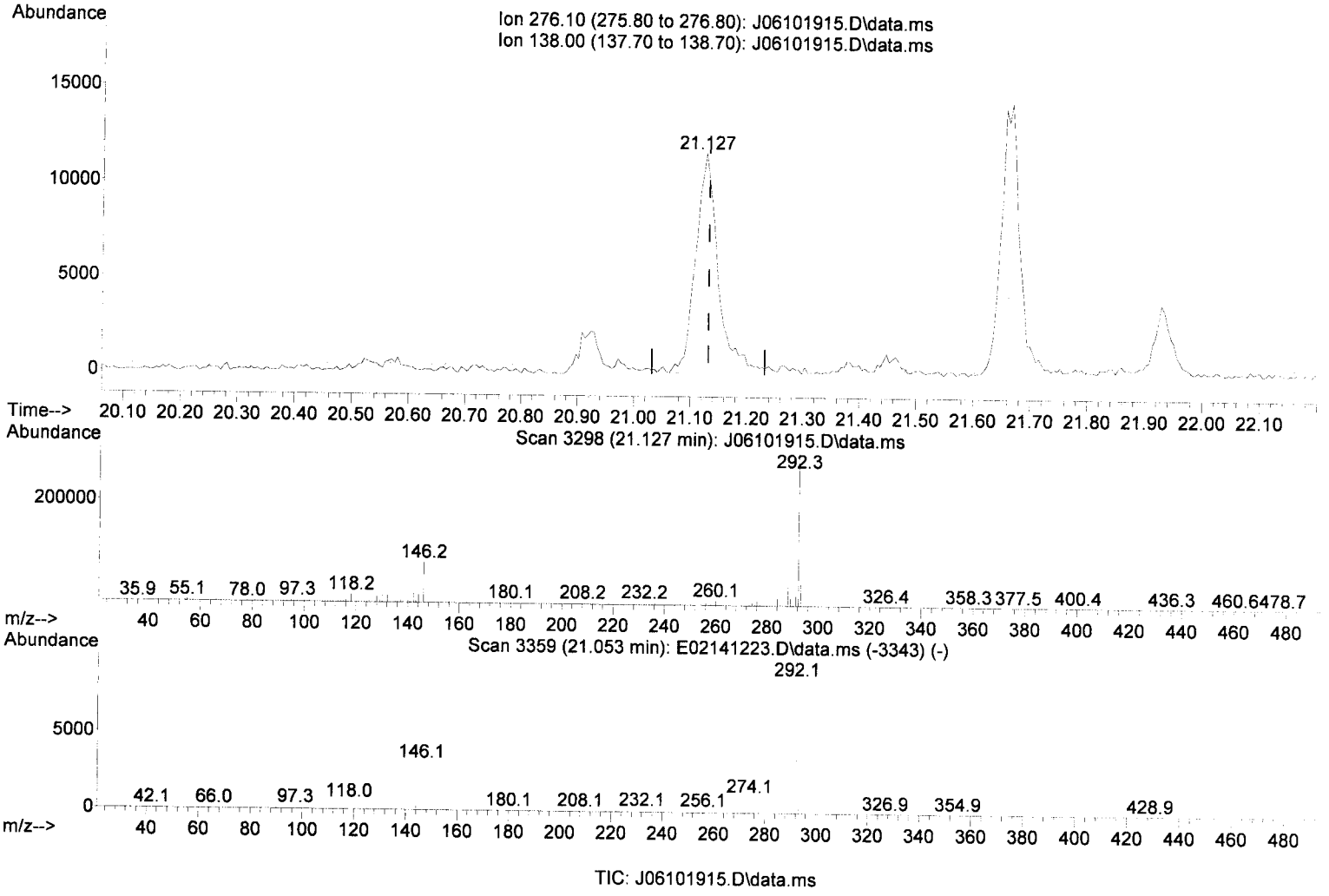
response 38160

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	13.40	13.31
253.10	21.60	20.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.127min (-0.005) 80.69 ng/ml

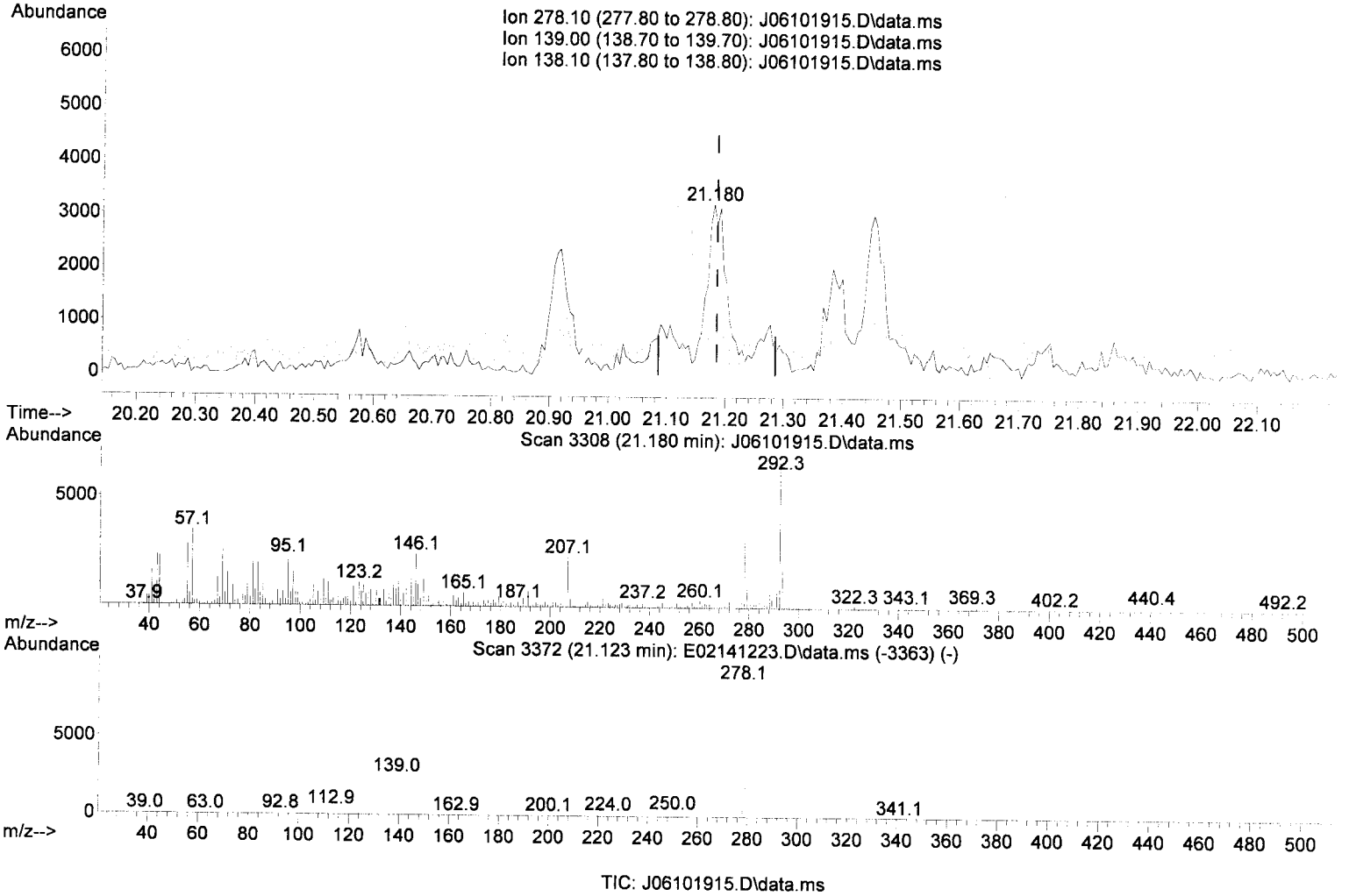
response 32052

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	30.60	34.21
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(96) Dibenz(a,h)anthracene (T)

21.180min (-0.005) 18.30 ng/ml J

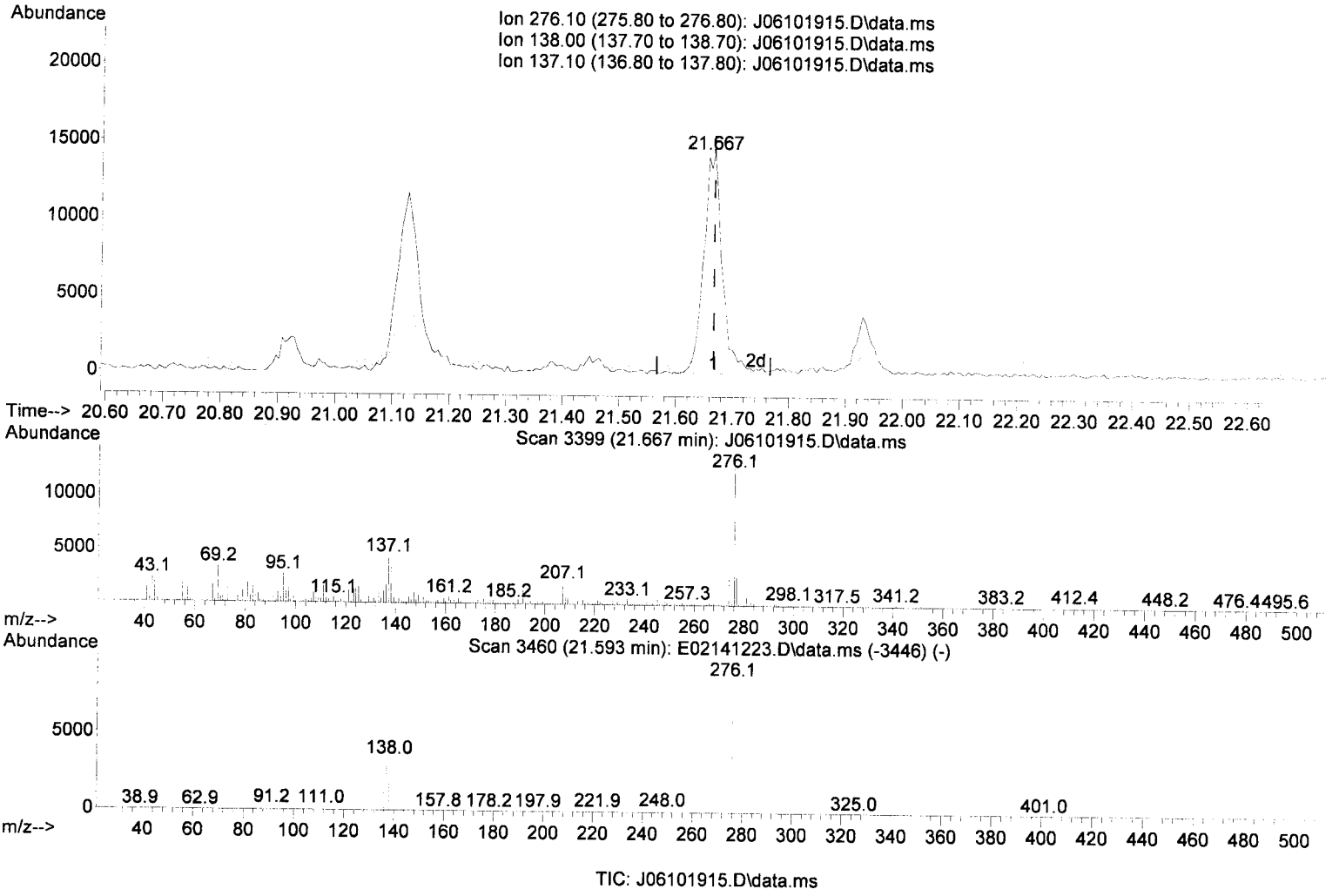
response 6504

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	25.20	36.87
138.10	18.50	24.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J06101915.D\data.ms

(97) Benzo(g,h,i)perylene (T)

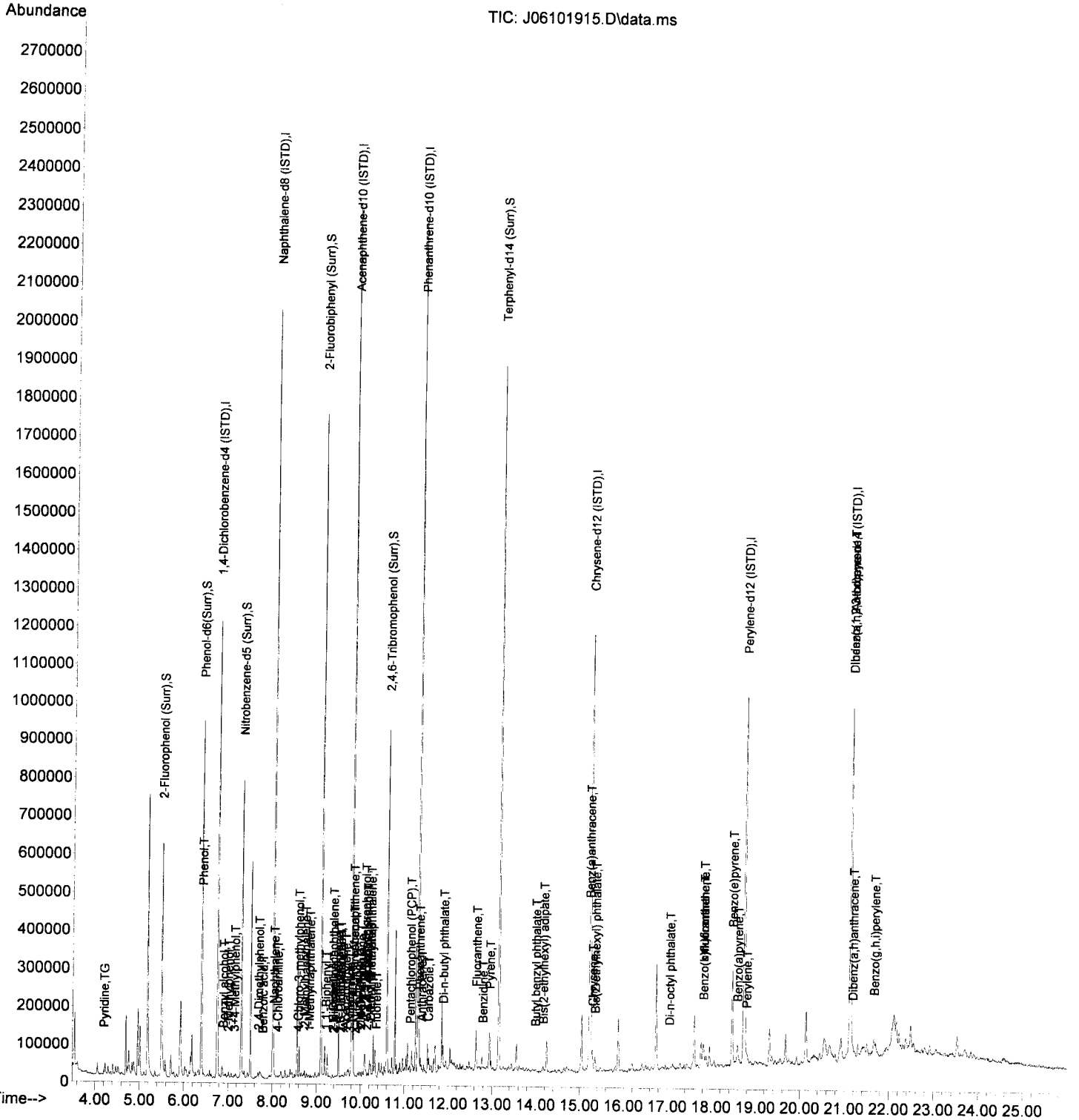
21.667min (+ 0.000) 86.40 ng/ml

response 33171

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	28.20	25.41
137.10	23.10	30.30
0.00	0.00	0.00

Data Path : T:\data\2019-06\9F10027\
Data File : J06101915.D
Acq On : 10 Jun 2019 4:33 pm
Operator : JK/ AMS/ DTH
Sample : A9F0035-16RE5
Misc : 1x, 8270D LL PAH
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:05:43 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-06\9F10027\
Data File : J06101916.D
Acq On : 10 Jun 2019 5:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:36:11 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

DTH 6/10/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.750	152	259765	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1077807	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	540094	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	930494	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.238	240	831515	2000.00	ng/ml	0.01
86) Perylene-d12 (ISTD)	18.741	264	764386	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	753933	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.493	112	58460	346.19	ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	82739	380.90	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	78658	417.47	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	151891	398.59	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	23742	532.46	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.152	244	219173	559.95	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.129	74	60759m	474.69	ng/ml	
3) Pyridine	4.150	79	76667m	367.09	ng/ml	
6) Phenol	6.402	94	151895	632.60	ng/ml	99
7) Aniline	6.434	93	92141	360.78	ng/ml	95
8) Bis(2-chloroethyl) ether	6.482	93	123678	562.33	ng/ml	98
9) 2-Chlorophenol	6.552	128	112329	636.08	ng/ml	95
10) 1,3-Dichlorobenzene	6.696	146	113490	571.15	ng/ml	100
11) 1,4-Dichlorobenzene	6.766	146	108471	547.18	ng/ml	95
12) Benzyl alcohol	6.883	108	72172	711.12	ng/ml	97
13) 1,2-Dichlorobenzene	6.921	146	108559	562.67	ng/ml	98
14) 2-Methylphenol	6.990	107	92528	676.43	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.006	45	126942	510.04	ng/ml	88
16) N-Nitrosodi-n-propylamine	7.140	70	87303	606.56	ng/ml	97
17) 3+4-Methylphenol	7.140	107	120934	705.13	ng/ml	98
18) Hexachloroethane	7.252	201	30699	574.59	ng/ml	95
20) Nitrobenzene	7.311	77	123095	666.15	ng/ml	97
22) Isophorone	7.547	82	244947	610.20	ng/ml	99
23) 2-Nitrophenol	7.632	139	62653	762.30	ng/ml	93
24) 2,4-Dimethylphenol	7.664	122	100299	613.69	ng/ml	91
25) Bis(2-chloroethoxy) me...	7.750	93	138074	641.31	ng/ml	97
26) Benzoic acid	7.755	105	139907	2058.86	ng/ml	98
27) 2,4-Dichlorophenol	7.873	162	86850	668.26	ng/ml	95
28) 1,2,4-Trichlorobenzene	7.958	180	92933	607.06	ng/ml	98
29) Naphthalene	8.039	128	339704	608.90	ng/ml	99
30) 4-Chloroaniline	8.087	127	70704	412.79	ng/ml	96
31) Hexachlorobutadiene	8.162	225	49082	590.10	ng/ml	99
32) 4-Chloro-3-methylphenol	8.568	107	121023	783.30	ng/ml	97
33) 2-Methylnaphthalene	8.734	142	228767	625.31	ng/ml	95
34) 1-Methylnaphthalene	8.836	142	220460	621.26	ng/ml	96
36) Hexachlorocyclopentadiene	8.900	237	34836	487.41	ng/ml	98
37) 2,4,6-Trichlorophenol	9.017	196	67781	715.78	ng/ml	100
38) 2,4,5-Trichlorophenol	9.060	198	70781	830.11	ng/ml	98
39) 1,1'-Biphenyl	9.205	154	287482	656.63	ng/ml	99
41) 2-Chloronaphthalene	9.226	162	209437	676.44	ng/ml	96
42) 2-Nitroaniline	9.328	138	85354	863.25	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.365	156	214389	667.87	ng/ml	97

Data Path : T:\data\2019-06\9F10027\
Data File : J06101916.D
Acq On : 10 Jun 2019 5:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

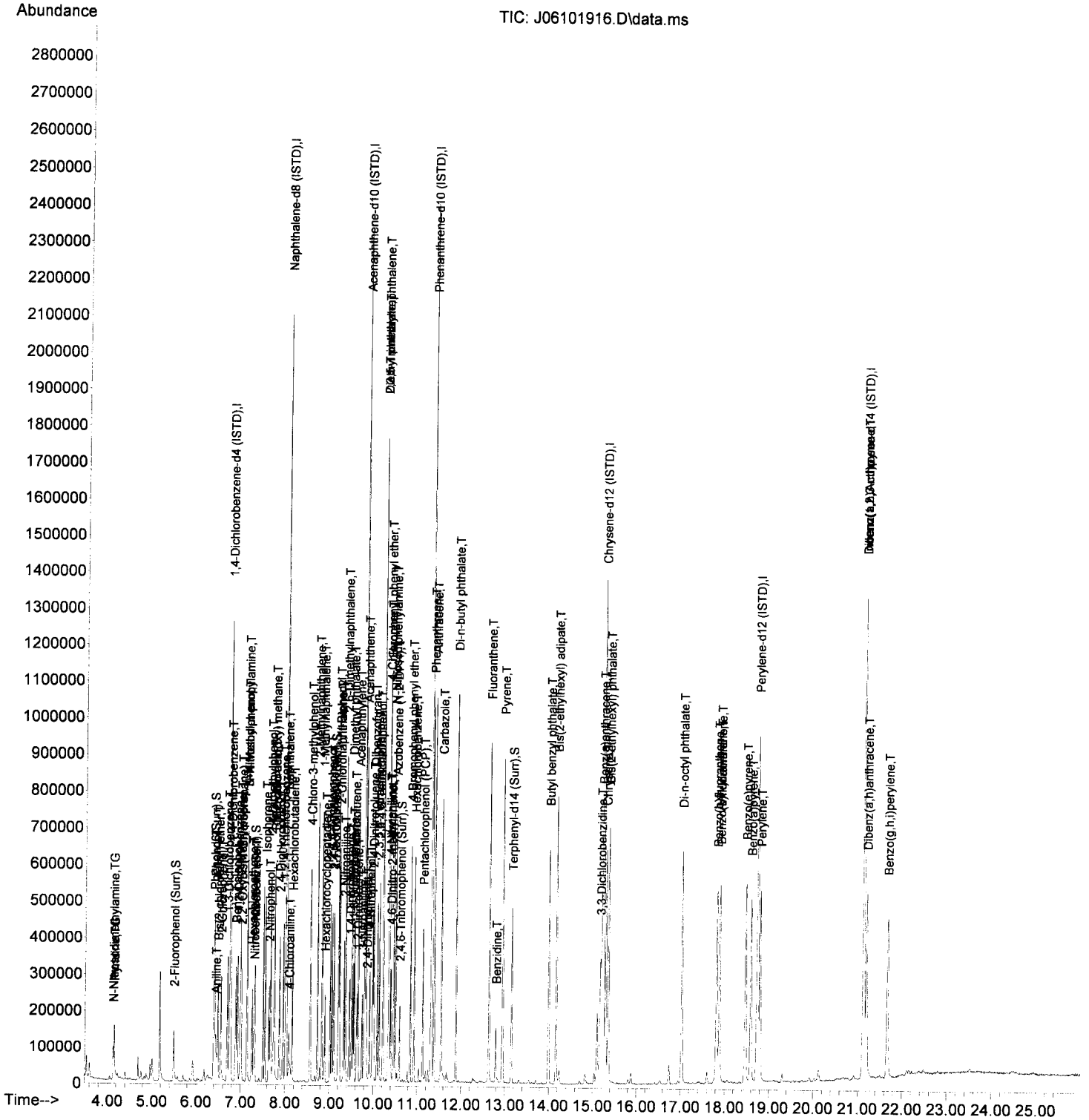
Quant Time: Jun 10 17:36:11 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	36902	1037.84	ng/ml	97
45) Dimethyl phthalate	9.504	163	297991	793.23	ng/ml	98
46) 1,3-Dinitrobenzene	9.536	168	44533	969.87	ng/ml	99
47) 2,6-Dinitrotoluene	9.568	165	62662	797.64	ng/ml	94
48) 1,2-Dinitrobenzene	9.627	168	28420	785.17	ng/ml	95
49) Acenaphthylene	9.654	152	369689	684.28	ng/ml	99
50) 3-Nitroaniline	9.745	138	47969	649.66	ng/ml	100
51) Acenaphthene	9.830	153	239745	689.99	ng/ml	98
52) 2,4-Dinitrophenol	9.846	184	21111	1353.59	ng/ml	98
53) 4-Nitrophenol	9.911	139	59645	1134.41	ng/ml	90
54) 2,4-Dinitrotoluene	9.980	165	92398	959.00	ng/ml	90
55) Dibenzofuran	10.002	168	321544	708.34	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	10.087	232	59691	881.02	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.130	232	64294	871.85	ng/ml	99
58) Diethyl phthalate	10.216	149	328272	914.92	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.216	170	211762	737.88	ng/ml	96
60) Fluorene	10.355	166	262588	738.69	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.344	204	118426	728.01	ng/ml	99
62) 4-Nitroaniline	10.365	138	77262	1137.38	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.397	198	43330	1518.36	ng/ml	93
65) N-Nitrosodiphenylamine	10.462	169	239719	836.77	ng/ml	97
66) Azobenzene (1,2-DPH)	10.504	77	297204	766.51	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.841	248	72809	794.94	ng/ml	93
69) Hexachlorobenzene	10.927	284	82724	740.75	ng/ml	98
70) Pentachlorophenol (PCP)	11.119	266	46225	928.75	ng/ml	96
71) Phenanthrene	11.339	178	419157	830.16	ng/ml	100
72) Anthracene	11.387	178	427265	868.89	ng/ml	100
73) Carbazole	11.547	167	400993	963.57	ng/ml	98
74) Di-n-butyl phthalate	11.879	149	591428	1039.45	ng/ml	99
75) Fluoranthene	12.633	202	490192	973.53	ng/ml	97
76) Benzidine	12.794	184	84652	522.42	ng/ml	95
77) Pyrene	12.943	202	502498	968.40	ng/ml	100
80) Butyl benzyl phthalate	13.997	149	262691	1080.57	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.168	129	241455	1019.06	ng/ml	98
82) 3,3-Dichlorobenzidine	15.168	252	140769	1897.66	ng/ml	97
83) Benz(a)anthracene	15.206	228	430677	949.18	ng/ml	99
84) Chrysene	15.291	228	412127	936.10	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.350	149	356786	1021.48	ng/ml	99
87) Di-n-octyl phthalate	17.024	149	622044	1168.72	ng/ml	96
88) Benzo(b)fluoranthene	17.816	252	423897	962.55	ng/ml	96
89) Benzo(k)fluoranthene	17.885	252	417393	931.67	ng/ml	95
90) Benzo(b+k)fluoranthene	17.885	252	857721	1898.81	ng/ml	95
91) Benzo(e)pyrene	18.474	252	411717	982.27	ng/ml	98
92) Benzo(a)pyrene	18.592	252	397382	986.41	ng/ml	98
93) Perylene	18.800	252	380575	980.83	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.132	276	354946	841.57	ng/ml	94
96) Dibenz(a,h)anthracene	21.196	278	346636	918.77	ng/ml	95
97) Benzo(g,h,i)perylene	21.672	276	374234	918.01	ng/ml	98

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

Data Path : T:\data\2019-06\9F10027\
Data File : J06101916.D
Acq On : 10 Jun 2019 5:09 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MS1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 10 17:36:11 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-06\9F10027\
Data File : J06101917.D
Acq On : 10 Jun 2019 5:46 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MSD1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 6/14/19

Quant Time: Jun 11 07:34:50 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.750	152	266507	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.017	136	1081554	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.798	162	541127	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.312	188	925812	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.233	240	831448	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.741	264	755535	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.132	292	752666	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.493	112	82343	475.28 ng/ml	0.00
5) Phenol-d6(Surr)	6.391	99	105523	473.50 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.295	82	97053	498.17 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.098	172	179849	471.06 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.601	330	24430	549.75 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.147	244	234605	599.43 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.129	74	74225	565.22 ng/ml	93
3) Pyridine	4.150	79	90814m	423.83 ng/ml	
6) Phenol	6.402	94	184667	746.84 ng/ml	98
7) Aniline	6.429	93	114201	435.85 ng/ml	89
8) Bis(2-chloroethyl) ether	6.482	93	150145	665.40 ng/ml	100
9) 2-Chlorophenol	6.552	128	134629	743.07 ng/ml	93
10) 1,3-Dichlorobenzene	6.696	146	137604	674.99 ng/ml	96
11) 1,4-Dichlorobenzene	6.766	146	134241	660.05 ng/ml	100
12) Benzyl alcohol	6.883	108	88824	841.97 ng/ml	97
13) 1,2-Dichlorobenzene	6.921	146	132070	667.22 ng/ml	96
14) 2-Methylphenol	6.990	107	111963	797.80 ng/ml	95
15) 2,2'-Oxybis(1-Chloropr...	7.012	45	154388	604.62 ng/ml	87
16) N-Nitrosodi-n-propylamine	7.140	70	104401	707.00 ng/ml	97
17) 3+4-Methylphenol	7.140	107	143078	800.10 ng/ml	97
18) Hexachloroethane	7.252	201	38821	708.23 ng/ml	95
20) Nitrobenzene	7.311	77	148169	781.56 ng/ml	98
22) Isophorone	7.547	82	282755	701.94 ng/ml	96
23) 2-Nitrophenol	7.632	139	88828	1048.86 ng/ml	93
24) 2,4-Dimethylphenol	7.664	122	118611	719.63 ng/ml	94
25) Bis(2-chloroethoxy) me...	7.755	93	161789	748.86 ng/ml	97
26) Benzoic acid	7.755	105	139396	2049.88 ng/ml	99
27) 2,4-Dichlorophenol	7.873	162	102198	776.32 ng/ml	95
28) 1,2,4-Trichlorobenzene	7.958	180	110414	718.75 ng/ml	98
29) Naphthalene	8.039	128	387859	692.80 ng/ml	99
30) 4-Chloroaniline	8.087	127	85420	491.84 ng/ml	96
31) Hexachlorobutadiene	8.162	225	57047	683.49 ng/ml	97
32) 4-Chloro-3-methylphenol	8.568	107	128814	827.02 ng/ml	95
33) 2-Methylnaphthalene	8.734	142	272528	742.35 ng/ml	96
34) 1-Methylnaphthalene	8.836	142	255241	716.78 ng/ml	98
36) Hexachlorocyclopentadiene	8.900	237	38548	534.82 ng/ml	99
37) 2,4,6-Trichlorophenol	9.017	196	69277	729.37 ng/ml	99
38) 2,4,5-Trichlorophenol	9.060	198	71124	832.44 ng/ml	96
39) 1,1'-Biphenyl	9.205	154	318426	725.92 ng/ml	99
41) 2-Chloronaphthalene	9.226	162	235622	759.56 ng/ml	95
42) 2-Nitroaniline	9.328	138	82352	834.11 ng/ml	95
43) 2,6-Dimethylnaphthalene	9.365	156	237884	739.65 ng/ml	100

Data Path : T:\data\2019-06\9F10027\
Data File : J06101917.D
Acq On : 10 Jun 2019 5:46 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MSD1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

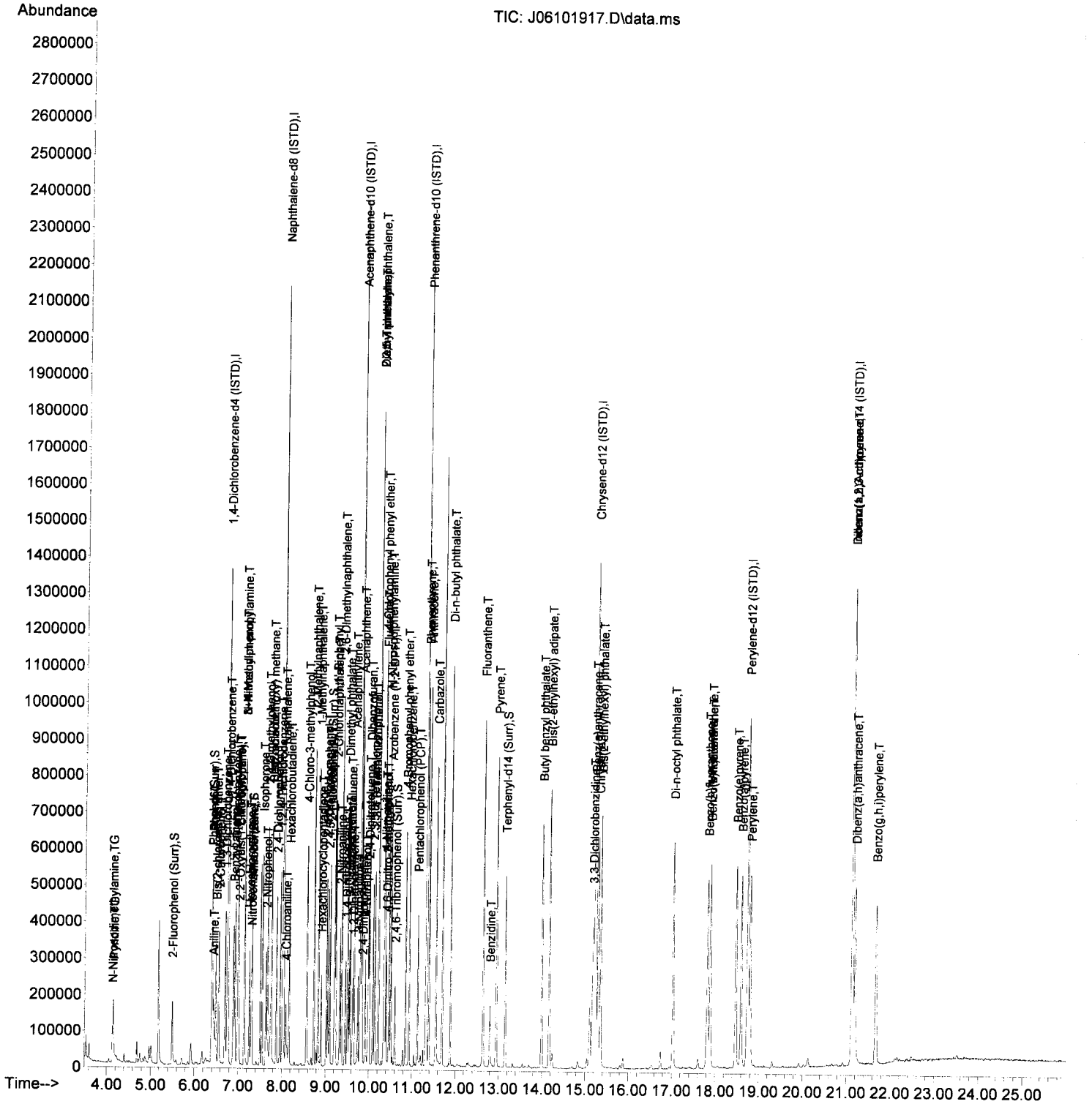
Quant Time: Jun 11 07:34:50 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.456	168	37760	1056.51	ng/ml	92
45) Dimethyl phthalate	9.504	163	297980	791.68	ng/ml	98
46) 1,3-Dinitrobenzene	9.536	168	43743	952.54	ng/ml	93
47) 2,6-Dinitrotoluene	9.568	165	64859	823.00	ng/ml	91
48) 1,2-Dinitrobenzene	9.627	168	29347	809.23	ng/ml	85
49) Acenaphthylene	9.654	152	402280	743.18	ng/ml	100
50) 3-Nitroaniline	9.745	138	49539	669.64	ng/ml	98
51) Acenaphthene	9.830	153	255354	733.51	ng/ml	97
52) 2,4-Dinitrophenol	9.846	184	19863	1292.90	ng/ml	92
53) 4-Nitrophenol	9.911	139	57611	1098.07	ng/ml	92
54) 2,4-Dinitrotoluene	9.980	165	88782	922.41	ng/ml	95
55) Dibenzofuran	10.002	168	330813	727.37	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	10.087	232	61838	909.39	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	10.130	232	62750	849.82	ng/ml	99
58) Diethyl phthalate	10.216	149	323095	898.77	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.216	170	221339	769.78	ng/ml	97
60) Fluorene	10.355	166	266053	747.01	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.344	204	121921	748.07	ng/ml	97
62) 4-Nitroaniline	10.365	138	75506	1109.41	ng/ml	88
63) 4,6-Dinitro-2-methylph...	10.397	198	41451	1462.14	ng/ml	94
65) N-Nitrosodiphenylamine	10.462	169	241818	848.37	ng/ml	99
66) Azobenzene (1,2-DPH)	10.504	77	300240	778.26	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.841	248	70883	777.83	ng/ml	93
69) Hexachlorobenzene	10.927	284	81738	735.62	ng/ml	97
70) Pentachlorophenol (PCP)	11.119	266	45707	923.25	ng/ml	99
71) Phenanthrene	11.333	178	419063	834.18	ng/ml	98
72) Anthracene	11.387	178	419863	858.15	ng/ml	100
73) Carbazole	11.547	167	401302	969.19	ng/ml	98
74) Di-n-butyl phthalate	11.879	149	581296	1026.81	ng/ml	99
75) Fluoranthene	12.633	202	493463	984.98	ng/ml	96
76) Benzidine	12.794	184	91453	560.15	ng/ml	97
77) Pyrene	12.943	202	497130	962.90	ng/ml	98
80) Butyl benzyl phthalate	13.992	149	260640	1072.67	ng/ml	98
81) Bis(2-ethylhexyl) adipate	14.168	129	241796	1020.58	ng/ml	99
82) 3,3-Dichlorobenzidine	15.168	252	161793	2248.02	ng/ml	99
83) Benz(a)anthracene	15.206	228	429278	946.17	ng/ml	99
84) Chrysene	15.291	228	405479	921.07	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.350	149	355583	1018.12	ng/ml	98
87) Di-n-octyl phthalate	17.024	149	611361	1162.61	ng/ml	96
88) Benzo(b)fluoranthene	17.816	252	431825	991.45	ng/ml	96
89) Benzo(k)fluoranthene	17.880	252	421954	953.03	ng/ml	96
90) Benzo(b+k)fluoranthene	17.880	252	868296	1944.43	ng/ml	96
91) Benzo(e)pyrene	18.474	252	414627	1000.80	ng/ml	97
92) Benzo(a)pyrene	18.591	252	398593	1000.81	ng/ml	98
93) Perylene	18.800	252	378576	987.11	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.132	276	356369	846.37	ng/ml	95
96) Dibenz(a,h)anthracene	21.196	278	345544	917.42	ng/ml	92
97) Benzo(g,h,i)perylene	21.672	276	369564	908.08	ng/ml	99

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

Data Path : T:\data\2019-06\9F10027\
Data File : J06101917.D
Acq On : 10 Jun 2019 5:46 pm
Operator : JK/ AMS/ DTH
Sample : 9060718-MSD1@4
Misc : 4x, 8270D LL PAH/8270D RSET Freshwater
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Jun 11 07:34:50 2019
Quant Method : T:\methods\SV10_041219R2.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Jun 07 17:08:08 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 (soil)

Sequence 9F10028 (A9F0035-14,15)

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9F10028**	Instrument:	**SV-GCMS5**
Date:	**06/10/19 08:04**	Calibration:	**A9A3103**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F10028-TUN1	Sediment	QC	QC			A19B027	A19E333
2	9F10028-IBL1	Sediment	QC	QC			A19B027	
3	9F10028-CCV1	Sediment	QC	QC			A19B027	A19C237
4	9F10028-IBL2	Sediment	QC	QC			A19B027	
5	9F10028-TUN2	Sediment	QC	QC			A19B027	A19E333
6	9F10028-IBL3	Sediment	QC	QC			A19B027	
7	9F10028-CCV2	Sediment	QC	QC			A19B027	A19C237
8	9F10028-CCB1	Sediment	QC	QC			A19B027	
9	A9F0035-15	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
10	A9E0922-12	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
11	A9E0922-13	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
12	A9E0922-14	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
13	A9E0922-15	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
14	A9F0035-14	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/14/19	9060718	A19B027	
15	A9E0922-13RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
16	A9E0922-15RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
17	A9E0922-14RE1	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
18	A9E0922-13RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
19	A9E0922-15RE2	Sediment	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	06/12/19	9060718	A19B027	
20	9F10028-IBL4	Sediment	QC	QC			A19B027	

Data Entered By: AMS 6/11/19

Data Reviewed By: [illegible] 6/11/19

Comments:

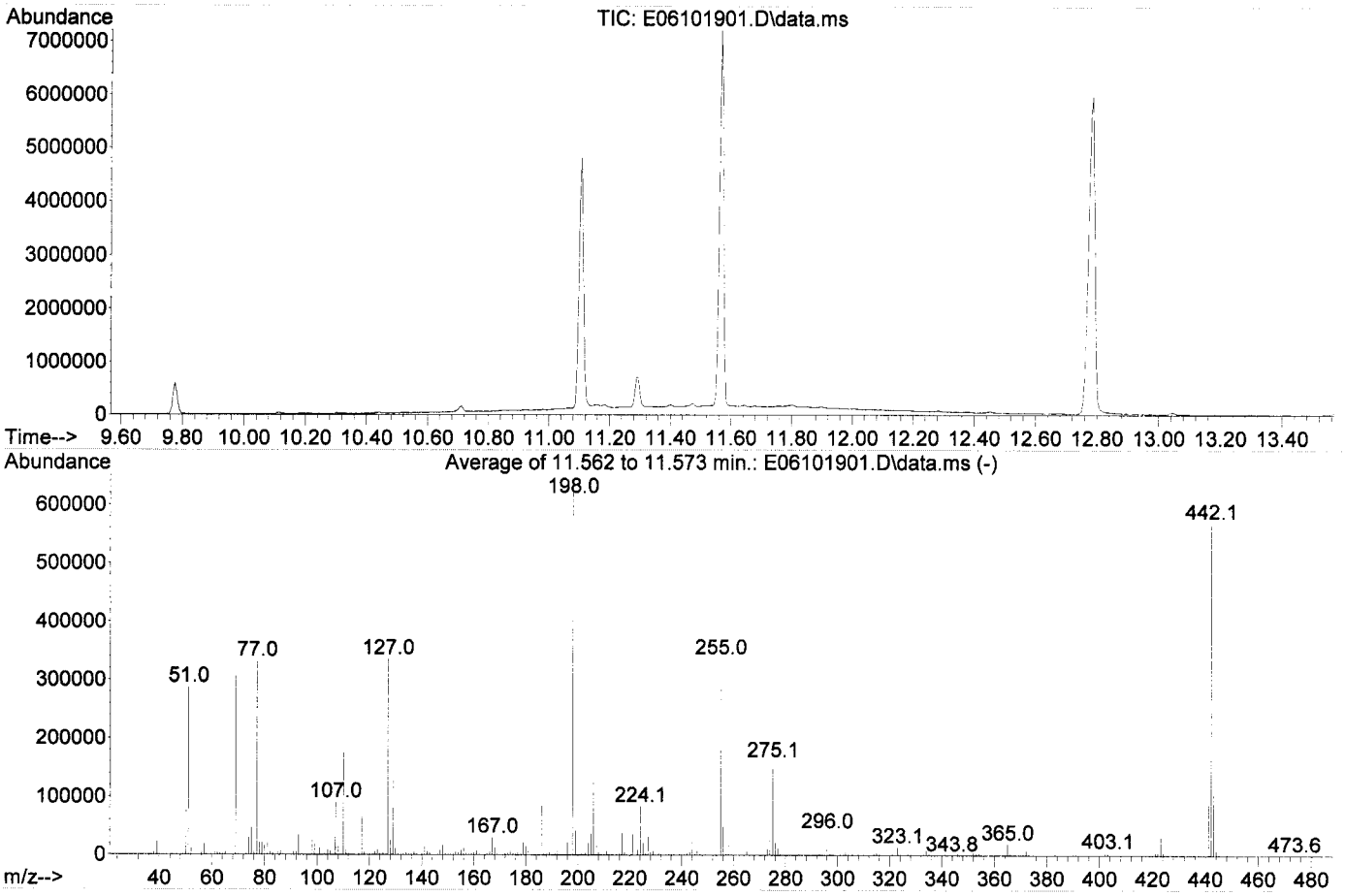
Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101901.D
Acq On : 10 Jun 2019 8:15 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Q14

DTH 6/10/19

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed May 15 13:49:43 2019



AutoFind: Scans 1491, 1492, 1493; Background Corrected with Scan 1486

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.3	287078	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.3	306106	PASS
70	69	0.00	2	0.4	1303	PASS
127	198	10	80	54.0	335166	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	620689	PASS
199	198	5	9	6.8	42096	PASS
275	198	10	60	25.9	160811	PASS
365	198	1	100	3.1	19077	PASS
441	442	0.01	24	15.4	87368	PASS
442	198	50	200	91.6	568448	PASS
443	442	15	24	19.4	110059	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101901.D
Acq On : 10 Jun 2019 8:15 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Q14
DTH 6/10/19

Quant Time: Jun 10 12:27:42 2019
Quant Method : C:\msdchem\1\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

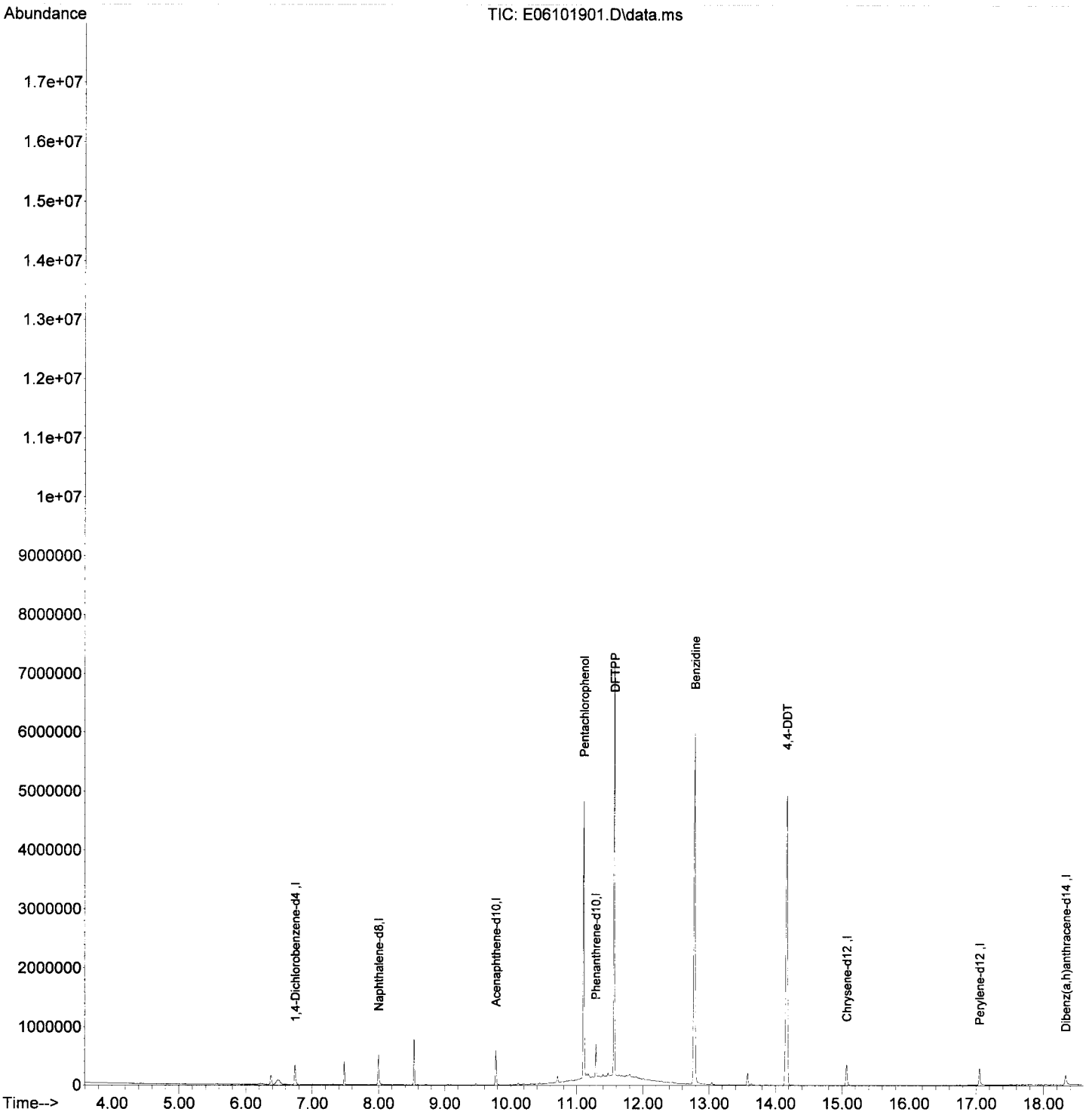
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.743	150	103328	2.00	ug/mL	0.00
2) Naphthalene-d8	8.000	136	250595	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.775	162	124510	2.00	ug/mL	-0.01
5) Phenanthrene-d10	11.289	188	217104	2.00	ug/mL	-0.01
11) Chrysene-d12	15.070	240	176631	2.00	ug/mL	-0.01
12) Perylene-d12	17.049	264	129191	2.00	ug/mL	0.00
13) Dibenz(a,h)anthracene-...	18.333	292	105430	2.00	ug/mL	#-0.01
Target Compounds						Qvalue
4) Pentachlorophenol	11.107	266	541704	46.07	ug/mL	95
6) DFTPP	11.573	442	667265	38.07	ug/mL	80
7) Benzidine	12.787	184	3209607	41.56	ug/mL	94
8) 4,4-DDE	13.043	TIC	60819	No Calib		
9) 4,4-DDD	13.584	TIC	271251	No Calib		
10) 4,4-DDT	14.172	TIC	8689099	39.03	ug/mL	97

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101901.D
Acq On : 10 Jun 2019 8:15 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN1
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 12:27:42 2019
Quant Method : C:\msdchem\1\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



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101903.D
Acq On : 10 Jun 2019 9:21 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Q14
DTH 6/10/19

Quant Time: Jun 10 13:23:28 2019
Quant Method : C:\msdchem\1\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	250251	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	688316	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.778	162	499166	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.292	188	927351	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.207	240	928131	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.721	264	799372	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.112	292	664664	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.548	112	160401	1028.12	ng/ml	-0.02
5) Phenol-d6(Surr)	6.404	99	218327	1046.21	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	132162	706.34	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	379752	1022.95	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.581	330	42253	1234.87	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.127	244	440162	1015.02	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.312	74	120494	1020.35	ng/ml	96
3) Pyridine	4.344	79	198456	1037.67	ng/ml	99
6) Phenol	6.414	94	246259	1126.19	ng/ml	88
7) Aniline	6.446	93	284486	998.38	ng/ml	99
8) Bis(2-chloroethyl) ether	6.494	93	181515	1015.60	ng/ml	98
9) 2-Chlorophenol	6.564	128	173410	1059.04	ng/ml	99
10) 1,3-Dichlorobenzene	6.708	146	188015	1004.47	ng/ml	98
11) 1,4-Dichlorobenzene	6.773	146	191322	1011.63	ng/ml	99
12) Benzyl alcohol	6.880	108	105955	1021.69	ng/ml	98
13) 1,2-Dichlorobenzene	6.922	146	180405	1007.05	ng/ml	98
14) 2-Methylphenol	6.987	107	96967	712.06	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	7.008	45	327701	1156.24	ng/ml	99
16) N-Nitrosodi-n-propylamine	7.131	70	106144	792.32	ng/ml	99
17) 3+4-Methylphenol	7.131	107	188550	1096.14	ng/ml	94
18) Hexachloroethane	7.249	117	70240	1006.08	ng/ml	84
20) Nitrobenzene	7.307	77	204960	1134.19	ng/ml	95
22) Isophorone	7.532	82	361365	1538.33	ng/ml	99
23) 2-Nitrophenol	7.623	139	89850	1697.01	ng/ml	97
24) 2,4-Dimethylphenol	7.650	122	99139	962.51	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.741	93	154550	1045.67	ng/ml	100
26) Benzoic acid	7.735	105	91688	2544.84	ng/ml	97
27) 2,4-Dichlorophenol	7.864	162	86602	1085.04	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.944	180	146108	1528.04	ng/ml	95
29) Naphthalene	8.024	128	370980	1010.32	ng/ml	100
30) 4-Chloroaniline	8.072	127	135100	1068.34	ng/ml	99
31) Hexachlorobutadiene	8.147	225	53118	1137.35	ng/ml	97
32) 4-Chloro-3-methylphenol	8.554	107	144586	1610.55	ng/ml	95
33) 2-Methylnaphthalene	8.714	142	355960	1541.17	ng/ml	97
34) 1-Methylnaphthalene	8.816	142	342057	1546.48	ng/ml	98
36) Hexachlorocyclopentadiene	8.880	237	67337	1051.63	ng/ml	97
37) 2,4,6-Trichlorophenol	9.003	196	91380	1210.10	ng/ml	98
38) 2,4,5-Trichlorophenol	9.040	196	84955	1083.86	ng/ml	99
39) 1,1'-Biphenyl	9.185	154	433573	1015.30	ng/ml	98
41) 2-Chloronaphthalene	9.212	162	310092	1005.77	ng/ml	98
42) 2-Nitroaniline	9.308	138	102543	1085.70	ng/ml	98

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101903.D
Acq On : 10 Jun 2019 9:21 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:23:28 2019
Quant Method : C:\msdchem\1\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

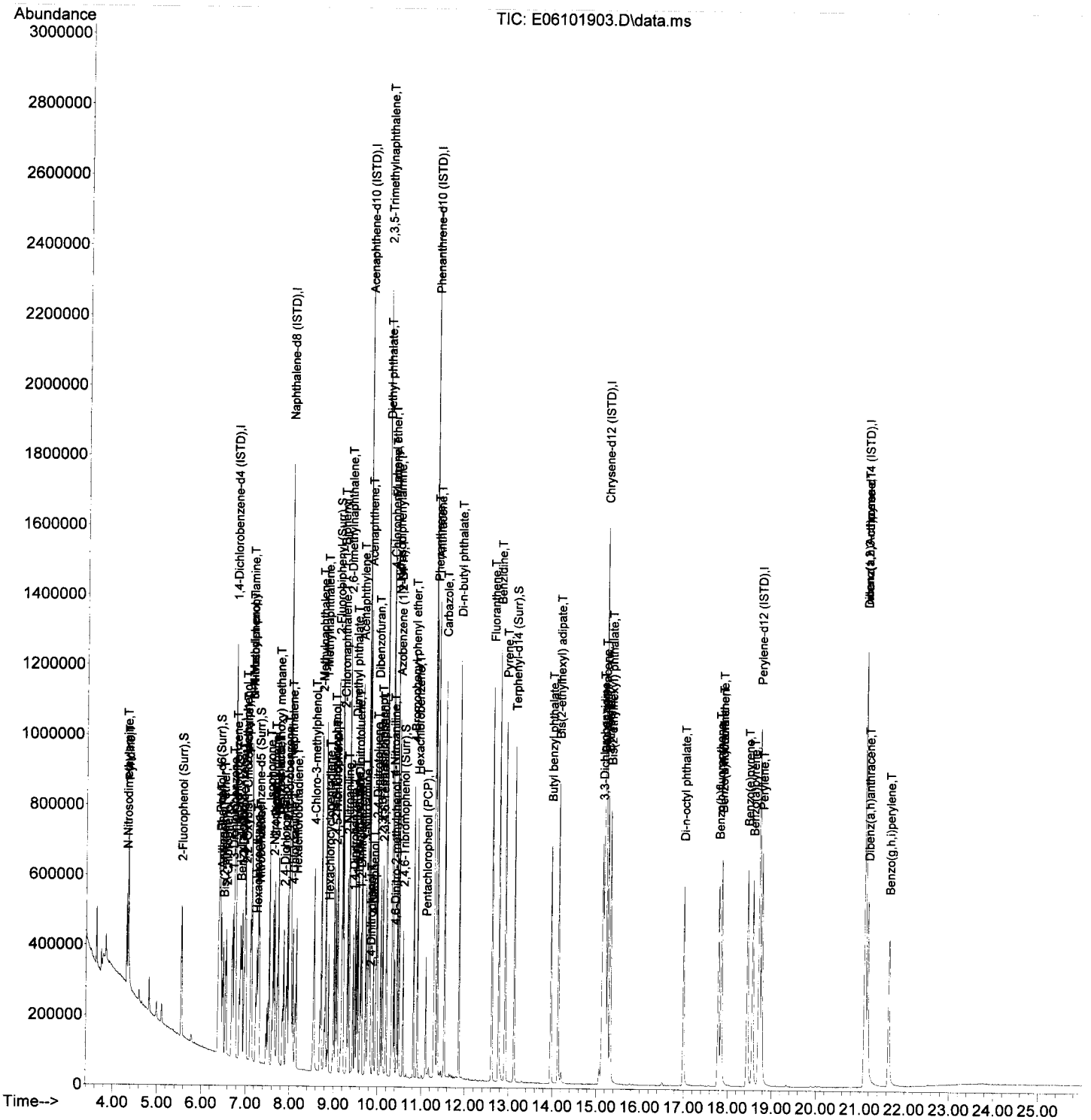
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.345	156	305844	1025.12	ng/ml	97
44) 1,4-Dinitrobenzene	9.436	168	47427	1285.06	ng/ml	98
45) Dimethyl phthalate	9.484	163	348623	1088.21	ng/ml	100
46) 1,3-Dinitrobenzene	9.522	168	56619	1203.68	ng/ml	95
47) 2,6-Dinitrotoluene	9.549	165	81759	1162.42	ng/ml	91
48) 1,2-Dinitrobenzene	9.607	168	37346	1180.09	ng/ml	89
49) Acenaphthylene	9.634	152	509872	1048.65	ng/ml	99
50) 3-Nitroaniline	9.725	138	86938	1074.93	ng/ml	95
51) Acenaphthene	9.811	153	337874	1024.84	ng/ml	99
52) 2,4-Dinitrophenol	9.832	184	25676	1306.83	ng/ml	83
53) 4-Nitrophenol	9.896	139	60476	1002.31	ng/ml	89
54) 2,4-Dinitrotoluene	9.960	165	106069	1172.29	ng/ml	98
55) Dibenzofuran	9.987	168	448007	1045.26	ng/ml	91
56) 2,3,5,6-Tetrachlorophenol	10.067	232	71073	1212.83	ng/ml	94
57) 2,3,4,6-Tetrachlorophenol	10.115	232	75297	1139.15	ng/ml	90
58) Diethyl phthalate	10.201	149	356069	1112.12	ng/ml	95
59) 2,3,5-Trimethylnaphtha...	10.196	170	290286	1091.52	ng/ml	96
60) Fluorene	10.335	166	369084	1075.46	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.324	204	165134	1086.72	ng/ml	90
62) 4-Nitroaniline	10.345	138	92622	1022.55	ng/ml	86
63) 4,6-Dinitro-2-methylph...	10.383	198	44604	1358.86	ng/ml	81
65) N-Nitrosodiphenylamine	10.442	169	314620	1073.93	ng/ml	96
66) Azobenzene (1,2-DPH)	10.485	77	418459	1045.43	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.821	248	91054	1061.31	ng/ml	94
69) Hexachlorobenzene	10.907	284	96823	1121.87	ng/ml	94
70) Pentachlorophenol (PCP)	11.105	266	42126	995.18	ng/ml	98
71) Phenanthrene	11.319	178	529723	1040.73	ng/ml	99
72) Anthracene	11.367	178	534566	1023.61	ng/ml	98
73) Carbazole	11.528	167	490073	1002.24	ng/ml	99
74) Di-n-butyl phthalate	11.859	149	575811	941.13	ng/ml	99
75) Fluoranthene	12.613	202	560867	1062.32	ng/ml	98
76) Benzidine	12.768	184	590427	3148.28	ng/ml	98
77) Pyrene	12.918	202	578979	1079.54	ng/ml	99
80) Butyl benzyl phthalate	13.966	149	233078	858.56	ng/ml	95
81) Bis(2-ethylhexyl) adipate	14.132	129	217389	804.70	ng/ml	99
82) 3,3-Dichlorobenzidine	15.138	252	274314	1793.98	ng/ml	99
83) Benz(a)anthracene	15.175	228	514367	982.51	ng/ml	98
84) Chrysene	15.261	228	503409	1009.38	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.320	149	335166	863.91	ng/ml	97
87) Di-n-octyl phthalate	16.999	149	474939	909.54	ng/ml	97
88) Benzo(b)fluoranthene	17.791	252	468711	1109.83	ng/ml	97
89) Benzo(k)fluoranthene	17.860	252	487465	1174.48	ng/ml	100
90) Benzo(b+k)fluoranthene	17.860	252	986045	2223.19	ng/ml	100
91) Benzo(e)pyrene	18.449	252	464692	1083.75	ng/ml	98
92) Benzo(a)pyrene	18.572	252	436980	1139.59	ng/ml	100
93) Perylene	18.775	252	479496	1094.08	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	21.112	276	345440	948.19	ng/ml	99
96) Dibenz(a,h)anthracene	21.176	278	342307	1026.00	ng/ml	98
97) Benzo(g,h,i)perylene	21.652	276	343603	957.99	ng/ml	82

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101903.D
Acq On : 10 Jun 2019 9:21 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV1
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:23:28 2019
Quant Method : C:\msdchem\1\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

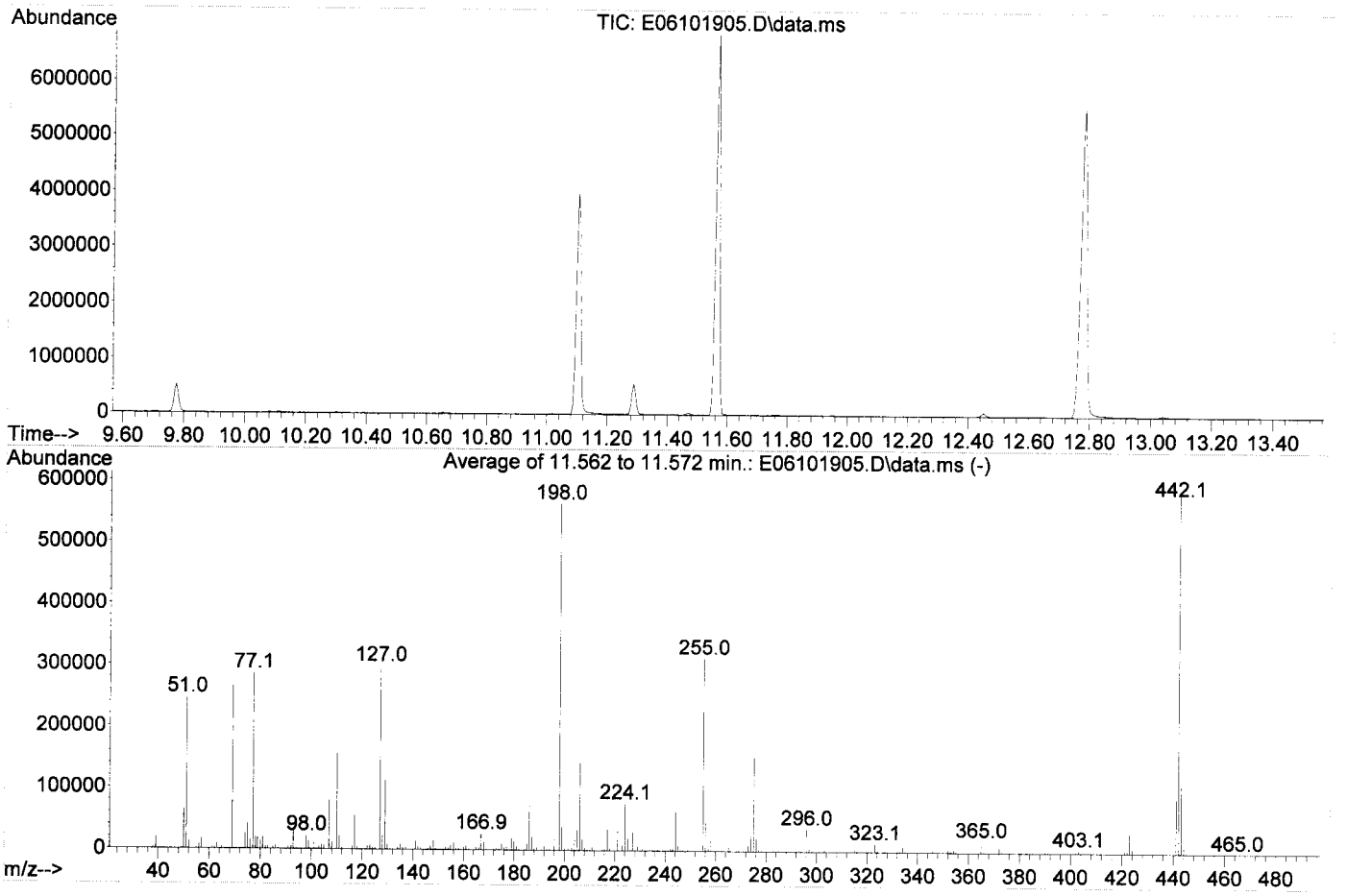


Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101905.D
Acq On : 10 Jun 2019 10:39 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

DTH 6/10/19

Method : C:\msdchem\1\METHODS\DFTPP-8270.M
Title : 8270 DFTPP Tune Method
Last Update : Wed May 15 13:49:43 2019



AutoFind: Scans 1491, 1492, 1493; Background Corrected with Scan 1486

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	43.8	246628	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.1	265463	PASS
70	69	0.00	2	0.5	1246	PASS
127	198	10	80	53.0	298496	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	563629	PASS
199	198	5	9	6.8	38208	PASS
275	198	10	60	27.2	153176	PASS
365	198	1	100	3.3	18526	PASS
441	442	0.01	24	15.3	89275	PASS
442	198	50	200	103.7	584213	PASS
443	442	15	24	19.1	111539	PASS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101905.D
Acq On : 10 Jun 2019 10:39 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 12:28:12 2019
Quant Method : C:\msdchem\1\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

DTT 6/10/19

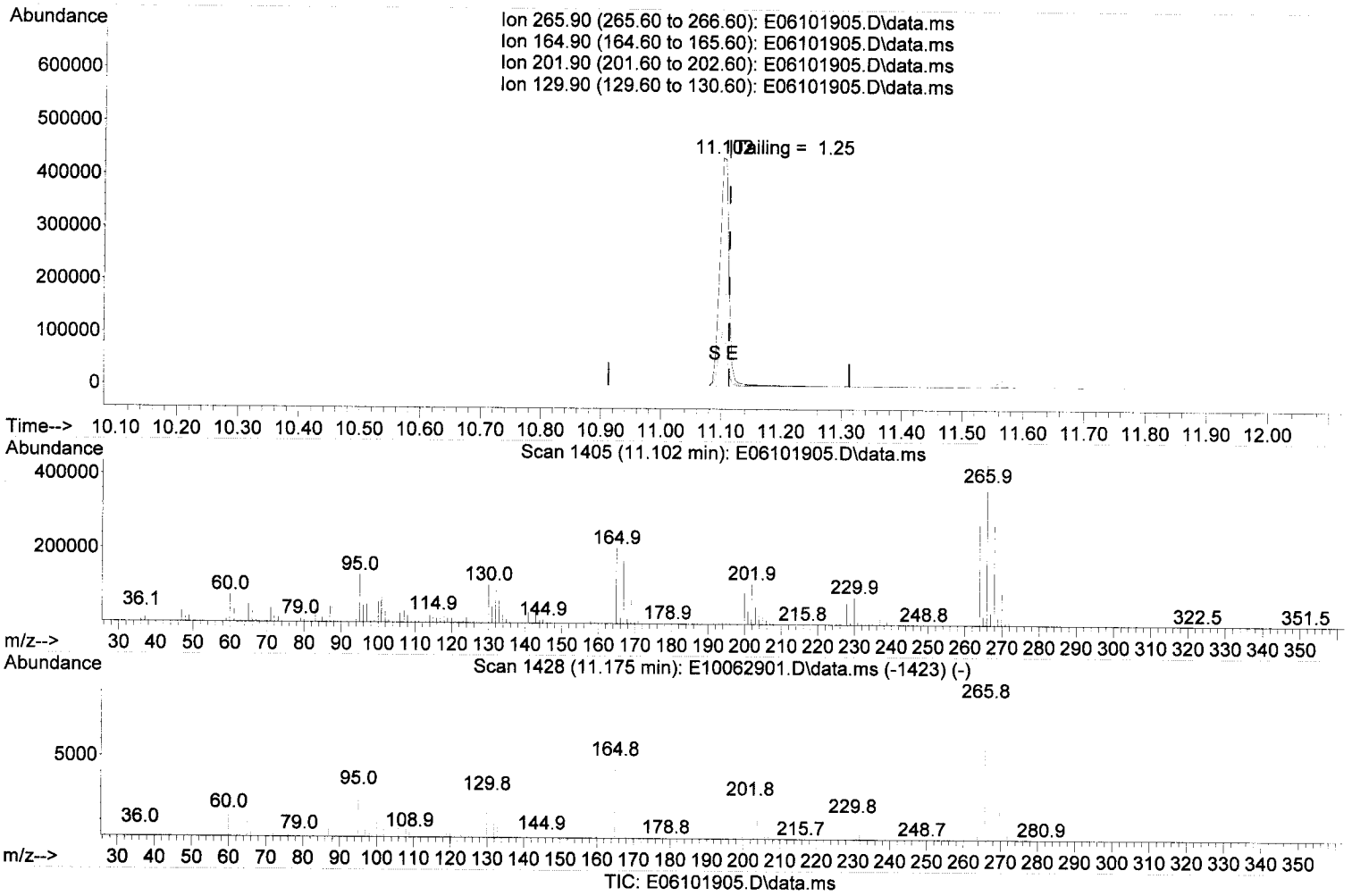
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.743	150	97703	2.00	ug/mL	0.00
2) Naphthalene-d8	8.000	136	219367	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.775	162	110789	2.00	ug/mL	-0.01
5) Phenanthrene-d10	11.289	188	194770	2.00	ug/mL	-0.01
11) Chrysene-d12	15.065	240	164920	2.00	ug/mL	-0.02
12) Perylene-d12	17.039	264	125903	2.00	ug/mL	-0.02
13) Dibenz(a,h)anthracene-...	18.322	292	107992	2.00	ug/mL	-0.02
Target Compounds						Qvalue
4) Pentachlorophenol	11.102	266	453243	43.32	ug/mL	97
6) DFTPP	11.567	442	637728	40.56	ug/mL	94
7) Benzidine	12.781	184	2951056	42.59	ug/mL	94
8) 4,4-DDE	13.043	TIC	29918	No Calib		
9) 4,4-DDD	13.578	TIC	10694	No Calib		
10) 4,4-DDT	14.167	TIC	8650858	43.31	ug/mL	97

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101905.D
Acq On : 10 Jun 2019 10:39 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 12:28:12 2019
Quant Method : C:\msdchem\1\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



(4) Pentachlorophenol

11.102min (-0.011) 43.32 ug/mL

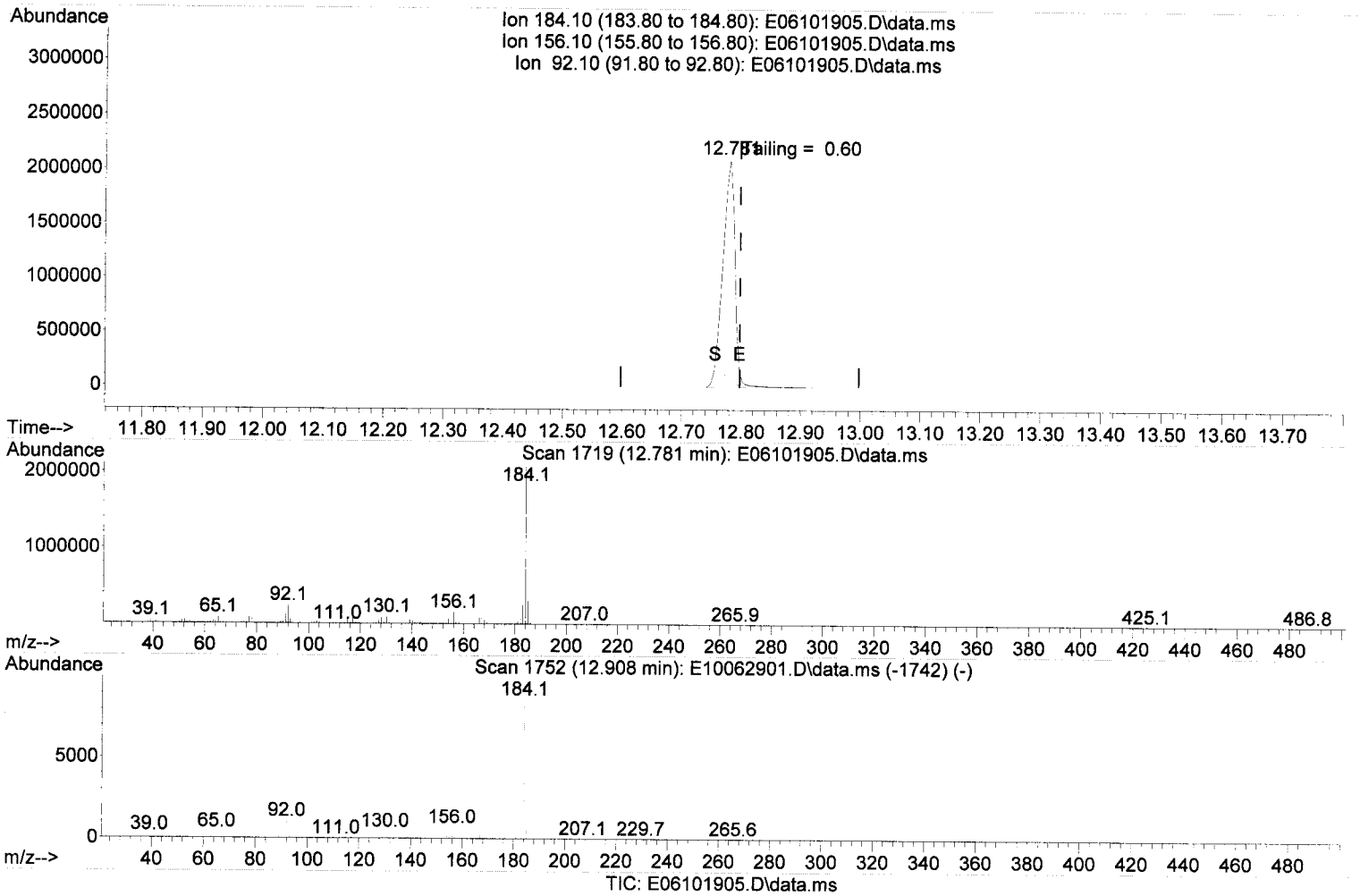
response 453243

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	47.60	47.07
201.90	23.20	25.19
129.90	27.10	23.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101905.D
Acq On : 10 Jun 2019 10:39 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 12:28:12 2019
Quant Method : C:\msdchem\1\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: E06101905.D\data.ms

(7) Benzidine

12.781min (-0.016) 42.59 ug/mL

response 2951056

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.34
92.10	8.20	11.42
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
9F10028-TUN2
SV-GCMS5

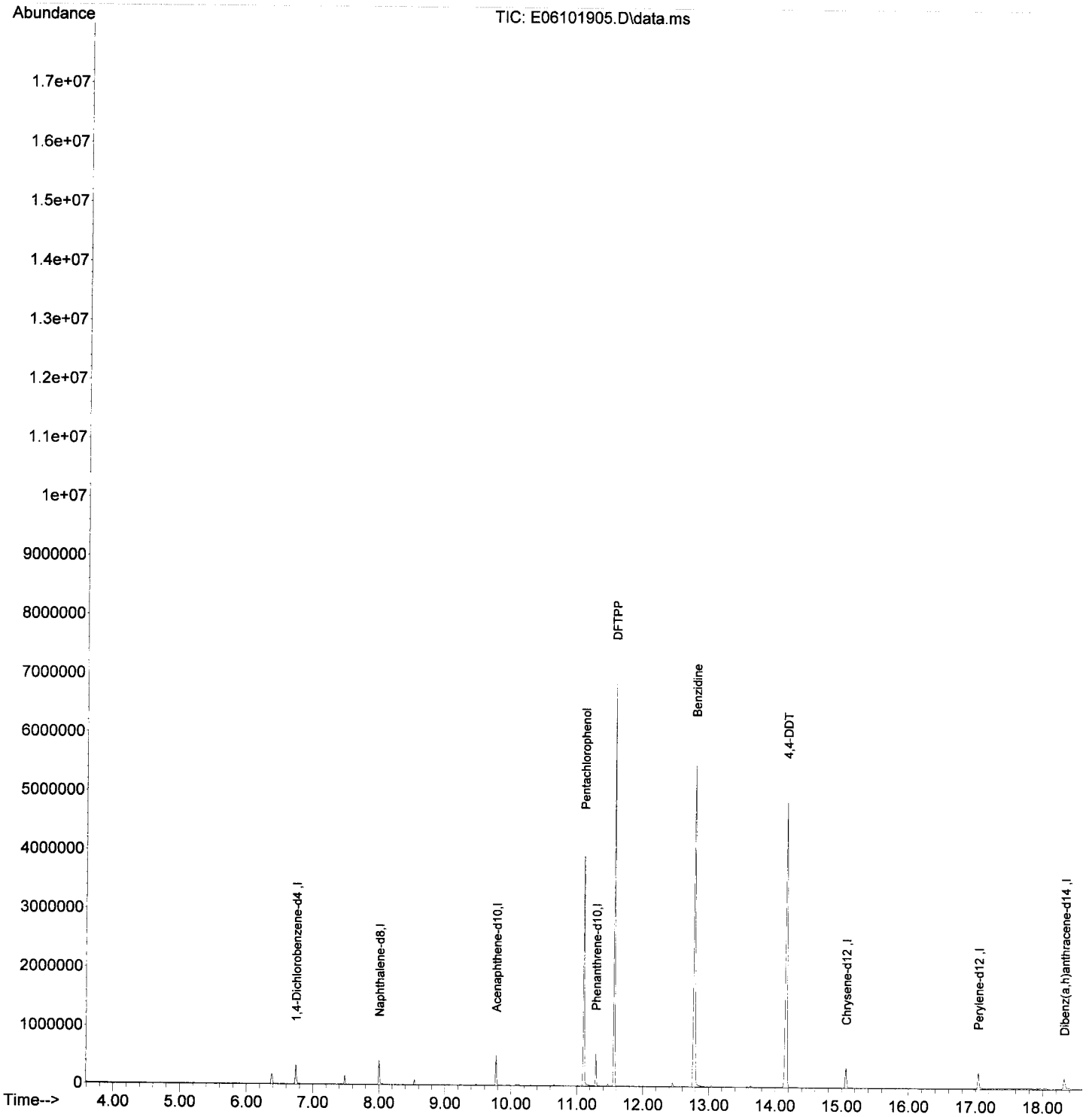
First Column Area Counts		Percent Breakdown	
DDE	29918		
DDD	10694		
DDT	**8650858**	**0.47**	**PASS**

Breakdown must be less than 20% to accept sample data.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101905.D
Acq On : 10 Jun 2019 10:39 am
Operator : JK/ AMS /DTH
Sample : 9F10028-TUN2
Misc : 1x, A19E333 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP-8270.M

Quant Time: Jun 10 12:28:12 2019
Quant Method : C:\msdchem\1\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 : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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

DNT 6/10/19

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	66	0.00
2	T	N-Nitrosodimethylamine	1000.000	1024.216	-2.4	67	-0.01
3	T	Pyridine	1000.000	1039.828	-4.0	68	-0.02
4	S	2-Fluorophenol (Surr)	1000.000	1026.233	-2.6	65	-0.01
5	S	Phenol-d6(Surr)	1000.000	1042.451	-4.2	67	0.00
6	T	Phenol	1000.000	1056.874	-5.7	69	0.00
7	T	Aniline	1000.000	1028.093	-2.8	70	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1023.754	-2.4	67	0.00
9	T	2-Chlorophenol	1000.000	1051.939	-5.2	67	0.00
10	T	1,3-Dichlorobenzene	1000.000	1010.377	-1.0	67	0.00
11	T	1,4-Dichlorobenzene	1000.000	1011.148	-1.1	67	0.00
12	T	Benzyl alcohol	1000.000	1076.400	-7.6	70	0.00
13	T	1,2-Dichlorobenzene	1000.000	1027.311	-2.7	68	0.00
14	T	2-Methylphenol	1000.000	1088.428	-8.8	70	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	1200.744	-20.1#	79	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1201.207	-20.1#	78	0.00
17	T	3+4-Methylphenol	1000.000	1107.897	-10.8	71	0.00
18	T	Hexachloroethane	1000.000	1028.834	-2.9	68	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1138.601	-13.9	76	0.00
20	T	Nitrobenzene	1000.000	1201.442	-20.1#	76	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	74	0.00
22	T	Isophorone	1000.000	1126.355	-12.6	79	0.00
23	T	2-Nitrophenol	1000.000	1178.045	-17.8	85	0.00
24	T	2,4-Dimethylphenol	1000.000	1010.310	-1.0	73	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1060.896	-6.1	77	0.00
26	T	Benzoic acid	2000.000	1949.082	2.5	76	0.00
27	T	2,4-Dichlorophenol	1000.000	1068.678	-6.9	77	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1026.153	-2.6	76	0.00
29	T	Naphthalene	1000.000	999.652	0.0	74	0.00
30	T	4-Chloroaniline	1000.000	1083.580	-8.4	82	0.00
31	T	Hexachlorobutadiene	1000.000	1085.109	-8.5	78	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1196.525	-19.7	91	0.00
33	T	2-Methylnaphthalene	1000.000	1120.349	-12.0	82	0.00
34	T	1-Methylnaphthalene	1000.000	1116.446	-11.6	82	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	93	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1098.058	-9.8	94	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1088.222	-8.8	96	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1113.150	-11.3	100	0.00
39	T	1,1'-Biphenyl	1000.000	979.808	2.0	90	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	985.834	1.4	90	0.00
41	T	2-Chloronaphthalene	1000.000	976.000	2.4	91	0.00
42	T	2-Nitroaniline	1000.000	1113.490	-11.3	108	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1003.886	-0.4	90	0.00
44	T	1,4-Dinitrobenzene	1000.000	1361.546	-36.2#	141	0.00
45	T	Dimethyl phthalate	1000.000	1142.129	-14.2	104	0.00
46	T	1,3-Dinitrobenzene	1000.000	1261.811	-26.2#	127	0.00
47	T	2,6-Dinitrotoluene	1000.000	1212.272	-21.2#	113	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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)
48	T	1,2-Dinitrobenzene	1000.000	1257.358	-25.7#	120	0.00
49	T	Acenaphthylene	1000.000	1040.773	-4.1	92	0.00
50	T	3-Nitroaniline	1000.000	1161.235	-16.1	114	0.00
51	T	Acenaphthene	1000.000	1018.850	-1.9	94	0.00
52	T	2,4-Dinitrophenol	1000.000	1457.428	-45.7#	192	0.00
53	T	4-Nitrophenol	1000.000	1131.861	-13.2	115	0.00
54	T	2,4-Dinitrotoluene	1000.000	1271.896	-27.2#	128	0.00
55	T	Dibenzofuran	1000.000	1078.293	-7.8	101	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1263.249	-26.3#	120	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1219.560	-22.0#	115	0.00
58	T	Diethyl phthalate	1000.000	1188.903	-18.9	106	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1130.993	-13.1	102	0.00
60	T	Fluorene	1000.000	1133.431	-13.3	104	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1161.645	-16.2	110	0.00
62	T	4-Nitroaniline	1000.000	1169.165	-16.9	121	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1538.354	-53.8#	187	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	113	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1049.000	-4.9	113	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1027.887	-2.8	107	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1202.103	-20.2#	127	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1046.663	-4.7	118	0.00
69	T	Hexachlorobenzene	1000.000	1049.652	-5.0	117	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1084.870	-8.5	125	0.00
71	T	Phenanthrene	1000.000	1035.697	-3.6	115	0.00
72	T	Anthracene	1000.000	1029.972	-3.0	114	0.00
73	T	Carbazole	1000.000	1034.210	-3.4	119	0.00
74	T	Di-n-butyl phthalate	1000.000	935.636	6.4	108	0.00
75	T	Fluoranthene	1000.000	1072.620	-7.3	121	0.00
76	T	Benzidine	2000.000	3030.369	-51.5#	212	0.00
77	T	Pyrene	1000.000	1091.981	-9.2	123	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	129	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1031.529	-3.2	129	0.00
80	T	Butyl benzyl phthalate	1000.000	831.771	16.8	104	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	774.005	22.6#	104	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1488.847	25.6#	96	0.00
83	T	Benz(a)anthracene	1000.000	978.115	2.2	130	0.00
84	T	Chrysene	1000.000	1015.148	-1.5	130	0.00
85	T	Bis(2-ethylhexyl) phthalate	1000.000	858.761	14.1	113	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	120	0.00
87	T	Di-n-octyl phthalate	1000.000	768.832	23.1#	89	0.00
88	T	Benzo(b)fluoranthene	1000.000	1117.013	-11.7	129	0.00
89	T	Benzo(k)fluoranthene	1000.000	1161.287	-16.1	130	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2213.208	-10.7	129	0.00
91	T	Benzo(e)pyrene	1000.000	1099.467	-9.9	128	0.00
92	T	Benzo(a)pyrene	1000.000	1130.029	-13.0	128	0.00
93	T	Perylene	1000.000	1106.097	-10.6	130	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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)
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	129	0.00
95	T	Indeno(1,2,3-cd)pyrene	1000.000	995.053	0.5	130	0.00
96	T	Dibenz(a,h)anthracene	1000.000	1037.818	-3.8	134	0.00
97	T	Benzo(g,h,i)perylene	1000.000	1019.539	-2.0	124	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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

JNT 6/10/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.762	152	188386	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.008	136	808977	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.784	162	457364	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.297	188	950149	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.207	240	911260	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.721	264	753926	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	21.112	292	645898	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.553	112	120526	1026.23	ng/ml	-0.01
5) Phenol-d6(Surr)	6.403	99	163764	1042.45	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.291	82	160375	1138.60	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	335324	985.83	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	42049	1202.10	ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.127	244	439189	1031.53	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	4.307	74	91050	1024.22	ng/ml	99
3) Pyridine	4.333	79	149706	1039.83	ng/ml	97
6) Phenol	6.414	94	173971	1056.87	ng/ml	100
7) Aniline	6.446	93	220532	1028.09	ng/ml	98
8) Bis(2-chloroethyl) ether	6.500	93	137739	1023.75	ng/ml	98
9) 2-Chlorophenol	6.564	128	129666	1051.94	ng/ml	96
10) 1,3-Dichlorobenzene	6.708	146	142368	1010.38	ng/ml	97
11) 1,4-Dichlorobenzene	6.778	146	143956	1011.15	ng/ml	98
12) Benzyl alcohol	6.885	108	84033	1076.40	ng/ml	98
13) 1,2-Dichlorobenzene	6.928	146	138539	1027.31	ng/ml	98
14) 2-Methylphenol	6.992	107	111578	1088.43	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	7.008	45	256185	1200.74	ng/ml	98
16) N-Nitrosodi-n-propylamine	7.136	70	121140	1201.21	ng/ml	97
17) 3+4-Methylphenol	7.136	107	143461	1107.90	ng/ml	94
18) Hexachloroethane	7.254	117	54072	1028.83	ng/ml	83
20) Nitrobenzene	7.313	77	163440	1201.44	ng/ml	96
22) Isophorone	7.537	82	310972	1126.35	ng/ml	98
23) 2-Nitrophenol	7.623	139	71564	1178.05	ng/ml	94
24) 2,4-Dimethylphenol	7.655	122	122305	1010.31	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.741	93	184288	1060.90	ng/ml	98
26) Benzoic acid	7.741	105	74040	1949.08	ng/ml	98
27) 2,4-Dichlorophenol	7.864	162	100248	1068.68	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.949	180	115319	1026.15	ng/ml	95
29) Naphthalene	8.029	128	431407	999.65	ng/ml	100
30) 4-Chloroaniline	8.078	127	161048	1083.58	ng/ml	99
31) Hexachlorobutadiene	8.152	225	59562	1085.11	ng/ml	97
32) 4-Chloro-3-methylphenol	8.554	107	124172	1196.53	ng/ml	93
33) 2-Methylnaphthalene	8.719	142	304126	1120.35	ng/ml	97
34) 1-Methylnaphthalene	8.821	142	290228	1116.45	ng/ml	97
36) Hexachlorocyclopentadiene	8.885	237	64422	1098.06	ng/ml	98
37) 2,4,6-Trichlorophenol	9.008	196	74862	1088.22	ng/ml	99
38) 2,4,5-Trichlorophenol	9.046	196	80043	1113.15	ng/ml	98
39) 1,1'-Biphenyl	9.190	154	383378	979.81	ng/ml	98
41) 2-Chloronaphthalene	9.211	162	275715	976.00	ng/ml	99
42) 2-Nitroaniline	9.313	138	96578	1113.49	ng/ml	92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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

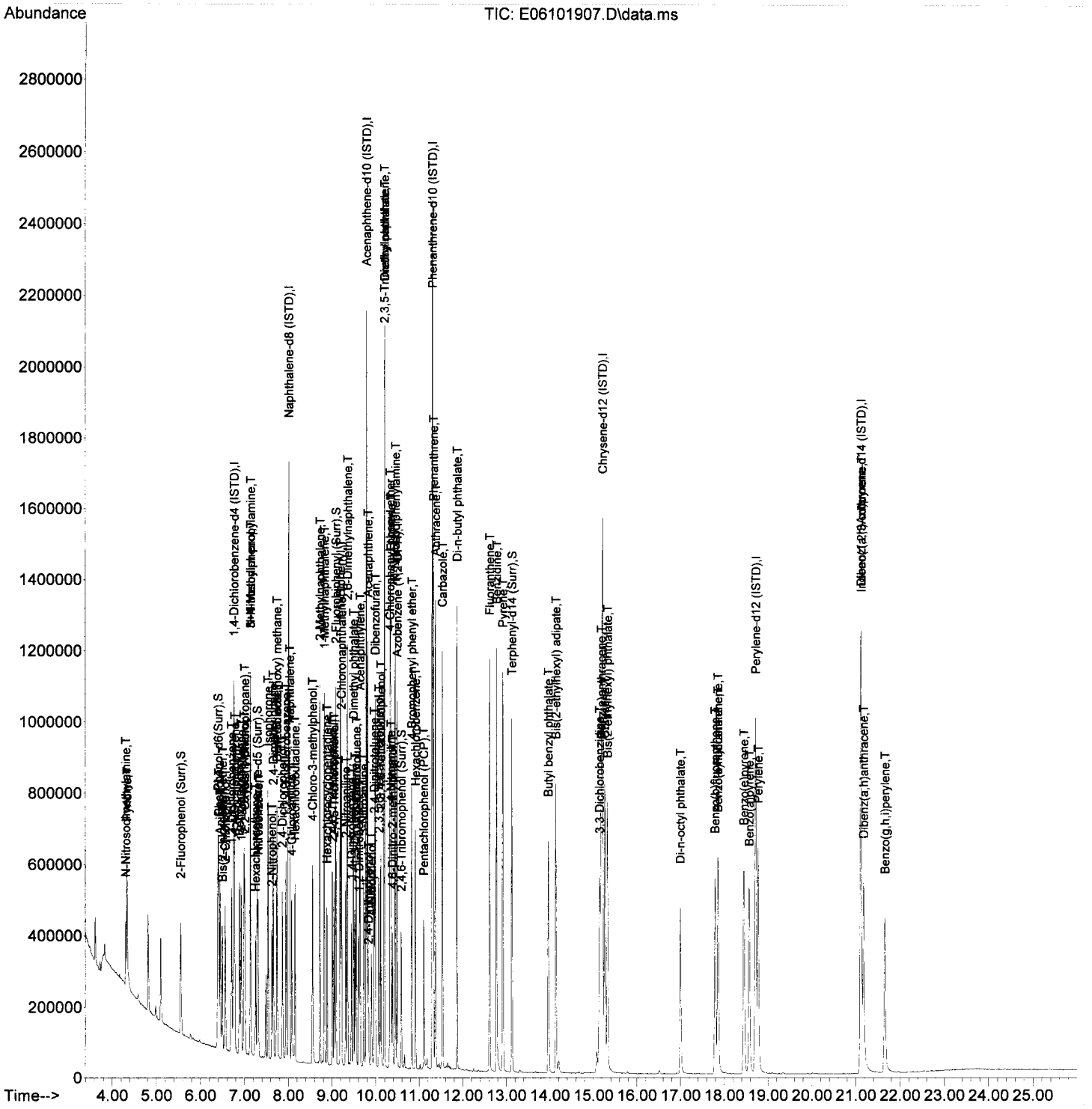
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	2,6-Dimethylnaphthalene	9.350	156	274428	1003.89	ng/ml	95
44)	1,4-Dinitrobenzene	9.441	168	46448	1361.55	ng/ml	94
45)	Dimethyl phthalate	9.490	163	335255	1142.13	ng/ml	100
46)	1,3-Dinitrobenzene	9.522	168	54662	1261.81	ng/ml	99
47)	2,6-Dinitrotoluene	9.554	165	78328	1212.27	ng/ml	83
48)	1,2-Dinitrobenzene	9.613	168	36635	1257.36	ng/ml	82
49)	Acenaphthylene	9.639	152	463666	1040.77	ng/ml	99
50)	3-Nitroaniline	9.725	138	86465	1161.24	ng/ml	92
51)	Acenaphthene	9.816	153	307771	1018.85	ng/ml	99
52)	2,4-Dinitrophenol	9.832	184	27396	1457.43	ng/ml	89
53)	4-Nitrophenol	9.901	139	63449	1131.86	ng/ml	84
54)	2,4-Dinitrotoluene	9.966	165	106183	1271.90	ng/ml	91
55)	Dibenzofuran	9.987	168	423462	1078.29	ng/ml	91
56)	2,3,5,6-Tetrachlorophenol	10.073	232	68097	1263.25	ng/ml	91
57)	2,3,4,6-Tetrachlorophenol	10.115	232	74174	1219.56	ng/ml	91
58)	Diethyl phthalate	10.201	149	348774	1188.90	ng/ml	95
59)	2,3,5-Trimethylnaphtha...	10.196	170	275595	1130.99	ng/ml	98
60)	Fluorene	10.340	166	356405	1133.43	ng/ml	100
61)	4-Chlorophenyl phenyl ...	10.324	204	161737	1161.65	ng/ml	91
62)	4-Nitroaniline	10.351	138	97034	1169.16	ng/ml	84
63)	4,6-Dinitro-2-methylph...	10.383	198	47814	1538.35	ng/ml	87
65)	N-Nitrosodiphenylamine	10.447	169	314872	1049.00	ng/ml	97
66)	Azobenzene (1,2-DPH)	10.490	77	421552	1027.89	ng/ml	98
68)	4-Bromophenyl phenyl e...	10.827	248	92005	1046.66	ng/ml	89
69)	Hexachlorobenzene	10.912	284	92817	1049.65	ng/ml	92
70)	Pentachlorophenol (PCP)	11.105	266	47579	1084.87	ng/ml	95
71)	Phenanthrene	11.319	178	540119	1035.70	ng/ml	99
72)	Anthracene	11.372	178	551112	1029.97	ng/ml	99
73)	Carbazole	11.527	167	518139	1034.21	ng/ml	99
74)	Di-n-butyl phthalate	11.864	149	586521	935.64	ng/ml	99
75)	Fluoranthene	12.613	202	580225	1072.62	ng/ml	97
76)	Benzidine	12.774	184	574348	3030.37	ng/ml	98
77)	Pyrene	12.918	202	600049	1091.98	ng/ml	99
80)	Butyl benzyl phthalate	13.966	149	221702	831.77	ng/ml	98
81)	Bis(2-ethylhexyl) adipate	14.137	129	205295	774.01	ng/ml	97
82)	3,3-Dichlorobenzidine	15.143	252	221587	1488.85	ng/ml	98
83)	Benz(a)anthracene	15.180	228	502760	978.11	ng/ml	97
84)	Chrysene	15.266	228	497082	1015.15	ng/ml	99
85)	Bis(2-ethylhexyl) phth...	15.325	149	327113	858.76	ng/ml	95
87)	Di-n-octyl phthalate	16.999	149	374413	768.83	ng/ml	97
88)	Benzo(b)fluoranthene	17.796	252	444925	1117.01	ng/ml	97
89)	Benzo(k)fluoranthene	17.860	252	454589	1161.29	ng/ml	100
90)	Benzo(b+k)fluoranthene	17.860	252	925809	2213.21	ng/ml	100
91)	Benzo(e)pyrene	18.454	252	444628	1099.47	ng/ml	99
92)	Benzo(a)pyrene	18.577	252	408679	1130.03	ng/ml	99
93)	Perylene	18.780	252	457202	1106.10	ng/ml	99
95)	Indeno(1,2,3-cd)pyrene	21.117	276	352276	995.05	ng/ml	99
96)	Dibenz(a,h)anthracene	21.176	278	336474	1037.82	ng/ml	98
97)	Benzo(g,h,i)perylene	21.658	276	355353	1019.54	ng/ml	79

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101907.D
Acq On : 10 Jun 2019 11:45 am
Operator : JK/ AMS /DTH
Sample : 9F10028-CCV2
Misc : 1x, A19C237@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:31:50 2019
Quant Method : C:\msdchem\1\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



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101908.D
Acq On : 10 Jun 2019 12:22 pm
Operator : JK/ AMS /DTH
Sample : 9F10028-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

AMS 6/10/19

Quant Time: Jun 10 12:52:54 2019
Quant Method : C:\msdchem\1\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	258172	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	943520	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.779	162	433622	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.292	188	741790	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.202	240	707215	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.716	264	566475	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.107	292	469479	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00 ng/ml	
5) Phenol-d6(Surr)	0.000	99	0	0.00 ng/ml	
19) Nitrobenzene-d5 (Surr)	7.313	82	87	0.45 ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00 ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00 ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00 ng/ml	
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.291	74	125	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	7.136	70	105	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	7.537	82	153	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	8.024	128	177	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.	

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101908.D
Acq On : 10 Jun 2019 12:22 pm
Operator : JK/ AMS /DTH
Sample : 9F10028-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:52:54 2019
Quant Method : C:\msdchem\1\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

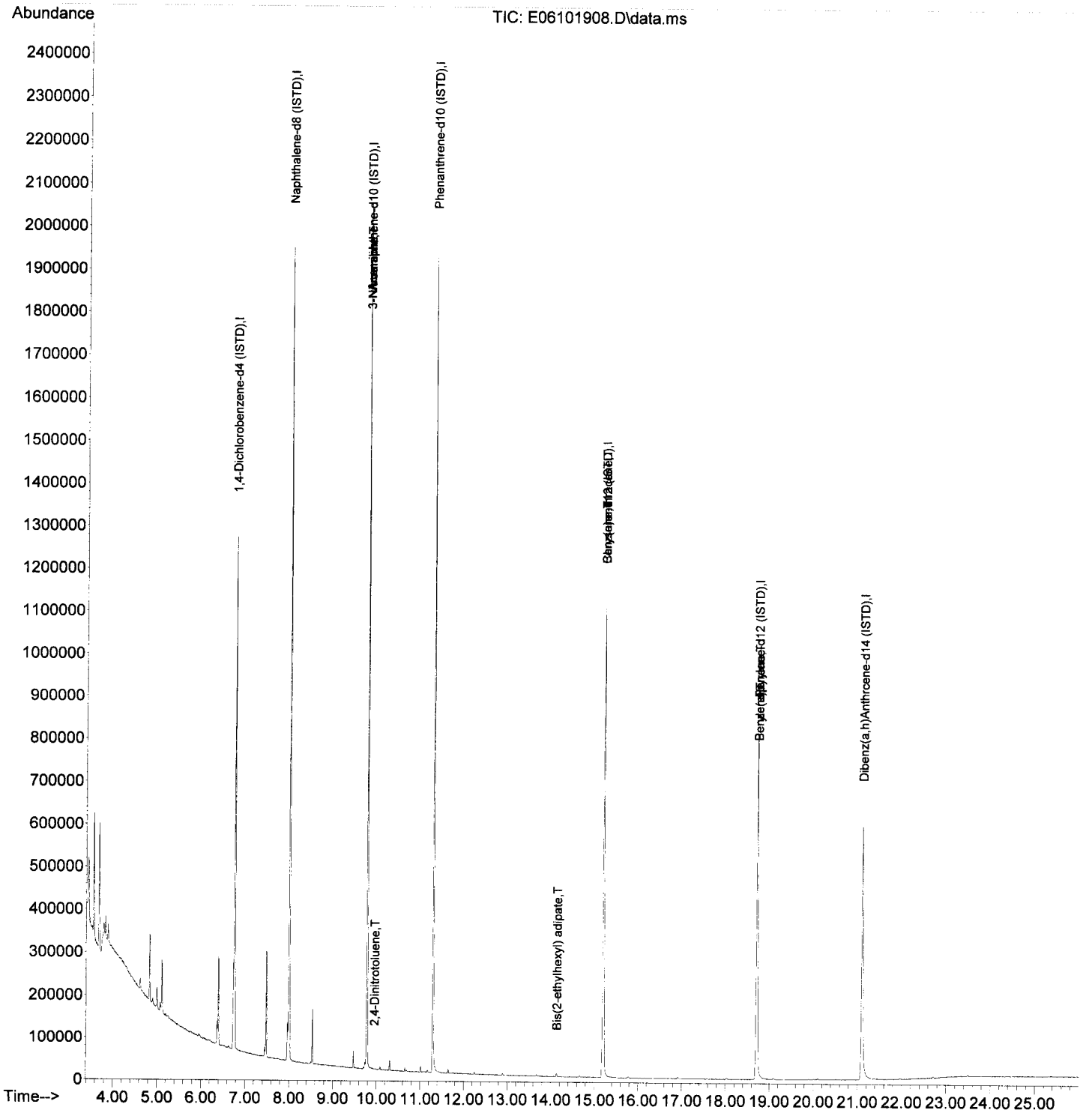
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.784	138	50	29.84 ng/ml#	1
51) Acenaphthene	9.779	153	120	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.950	165	104	62.32 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)	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	11.292	178	218	N.D.	
72) Anthracene	11.292	178	218	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	14.132	129	1590	7.72 ng/ml	78
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.202	228	1604	4.02 ng/ml	68
84) Chrysene	15.202	228	1604	4.22 ng/ml	66
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	18.721	252	2005	6.60 ng/ml#	12
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.721	252	2005	6.46 ng/ml	72
95) Indeno(1,2,3-cd)pyrene	21.112	276	235	N.D.	
96) Dibenz(a,h)anthracene	21.118	278	101	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\2019-06\9F10028\
Data File : E06101908.D
Acq On : 10 Jun 2019 12:22 pm
Operator : JK/ AMS /DTH
Sample : 9F10028-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 12:52:54 2019
Quant Method : C:\msdchem\1\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



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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

DTH 6/10/19
MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.762	152	256006	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	987464	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.778	162	439188	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.292	188	778003	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.202	240	776782	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.716	264	637111	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	21.107	292	529122	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	0.000	112	0	0.00 ng/ml	
5) Phenol-d6(Surr)	0.000	99	0	0.00 ng/ml	
19) Nitrobenzene-d5 (Surr)	7.318	82	176	0.92 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	4.323	74	75	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	6.382	94	84	N.D.	
7) Aniline	0.000		0	N.D.	
8) Bis(2-chloroethyl) ether	0.000		0	N.D.	
9) 2-Chlorophenol	0.000		0	N.D.	
10) 1,3-Dichlorobenzene	0.000		0	N.D.	
11) 1,4-Dichlorobenzene	0.000		0	N.D.	
12) Benzyl alcohol	0.000		0	N.D.	
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	0.000		0	N.D.	
15) 2,2'-Oxybis(1-Chloropr...	0.000		0	N.D.	
16) N-Nitrosodi-n-propylamine	7.120	70	169	N.D.	
17) 3+4-Methylphenol	0.000		0	N.D.	
18) Hexachloroethane	7.297	117	83	N.D.	
20) Nitrobenzene	0.000		0	N.D.	
22) Isophorone	7.553	82	103	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	8.024	128	4786	9.09 ng/ml	94
30) 4-Chloroaniline	8.024	127	600	3.31 ng/ml#	15
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.725	142	1468	4.43 ng/ml	90
34) 1-Methylnaphthalene	8.821	142	830	2.62 ng/ml	94
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	9.195	154	269	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\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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

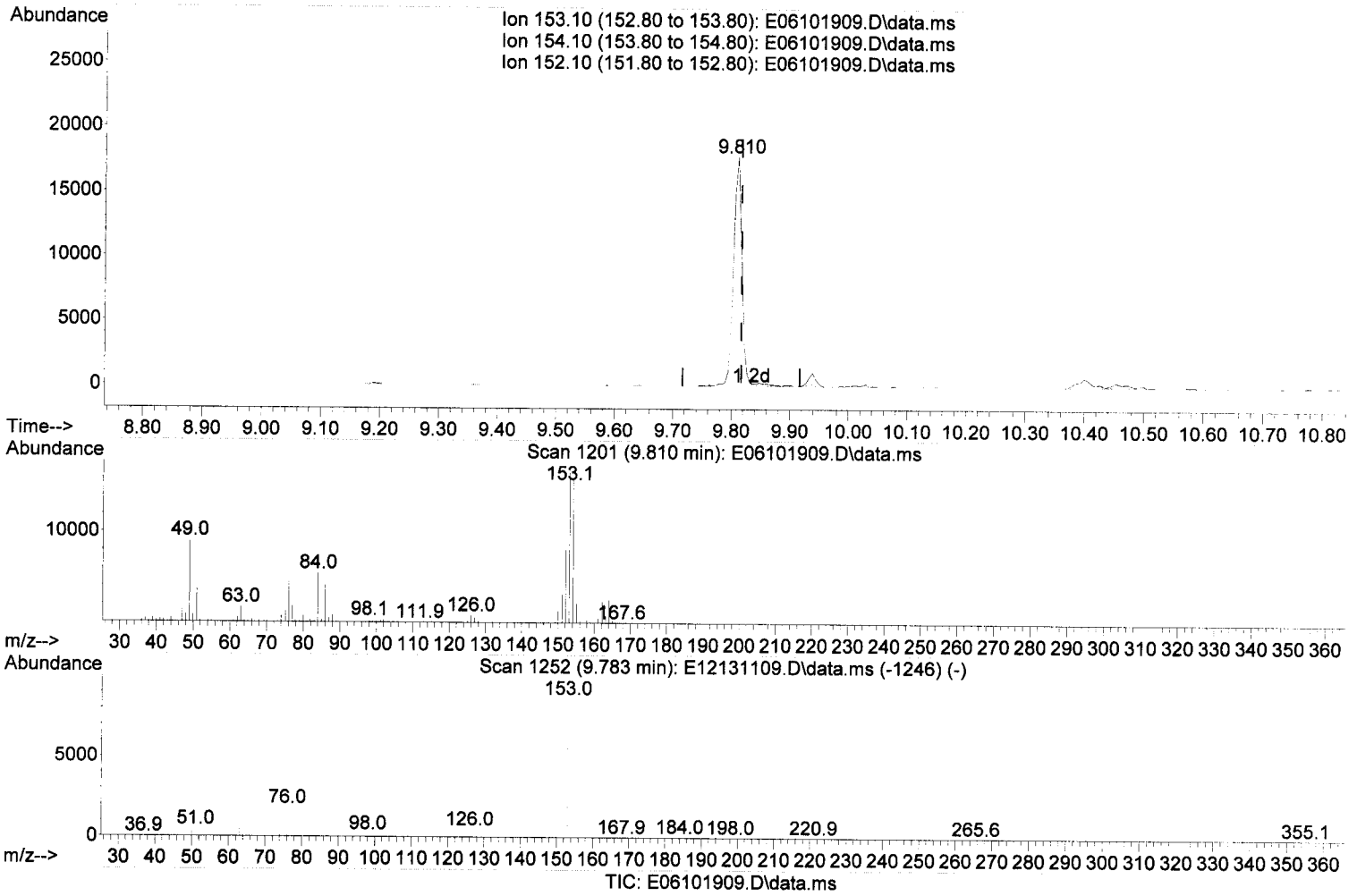
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.361	156	273	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	9.773	138	102	30.57 ng/ml#	1
51) Acenaphthene	9.810	153	18182	62.68 ng/ml	98
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.896	165	104	62.30 ng/ml#	26
55) Dibenzofuran	9.987	168	4978	13.20 ng/ml#	28
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...	10.196	170	84	N.D.	
60) Fluorene	10.335	166	7763	25.71 ng/ml	94
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	10.335	138	67	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.431	169	205	N.D.	
66) Azobenzene (1,2-DPH)	10.490	77	57	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	11.313	178	105146	246.23 ng/ml	99
72) Anthracene	11.367	178	21560	49.21 ng/ml	99
73) Carbazole	11.527	167	12039	29.35 ng/ml	98
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	12.613	202	209520	473.03 ng/ml	98
76) Benzidine	12.779	184	89	39.18 ng/ml	68
77) Pyrene	12.913	202	208949	464.39 ng/ml	99
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	14.132	129	1969	8.71 ng/ml	95
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	15.175	228	131110	299.23 ng/ml	98
84) Chrysene	15.255	228	145964	349.70 ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.304	149	54	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	17.791	252	180530	536.33 ng/ml MOS	97
89) Benzo(k)fluoranthene	~~17.849~~	~~252~~	~~64875~~	~~196.12 ng/ml~~	~~98~~ wr 14.7 MOS
90) Benzo(b+k)fluoranthene	17.791	252	266421	753.67 ng/ml	98
91) Benzo(e)pyrene	18.443	252	96413	282.12 ng/ml	97
92) Benzo(a)pyrene	18.566	252	140022	458.16 ng/ml	99
93) Perylene	18.764	252	45628	130.63 ng/ml	95
95) Indeno(1,2,3-cd)pyrene	21.107	276	93843	323.57 ng/ml	99
96) Dibenz(a,h)anthracene	21.160	278	15633	58.86 ng/ml	92
97) Benzo(g,h,i)perylene	21.642	276	83140	291.18 ng/ml	80

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(51) Acenaphthene (T)

9.810min (-0.006) 62.68 ng/ml

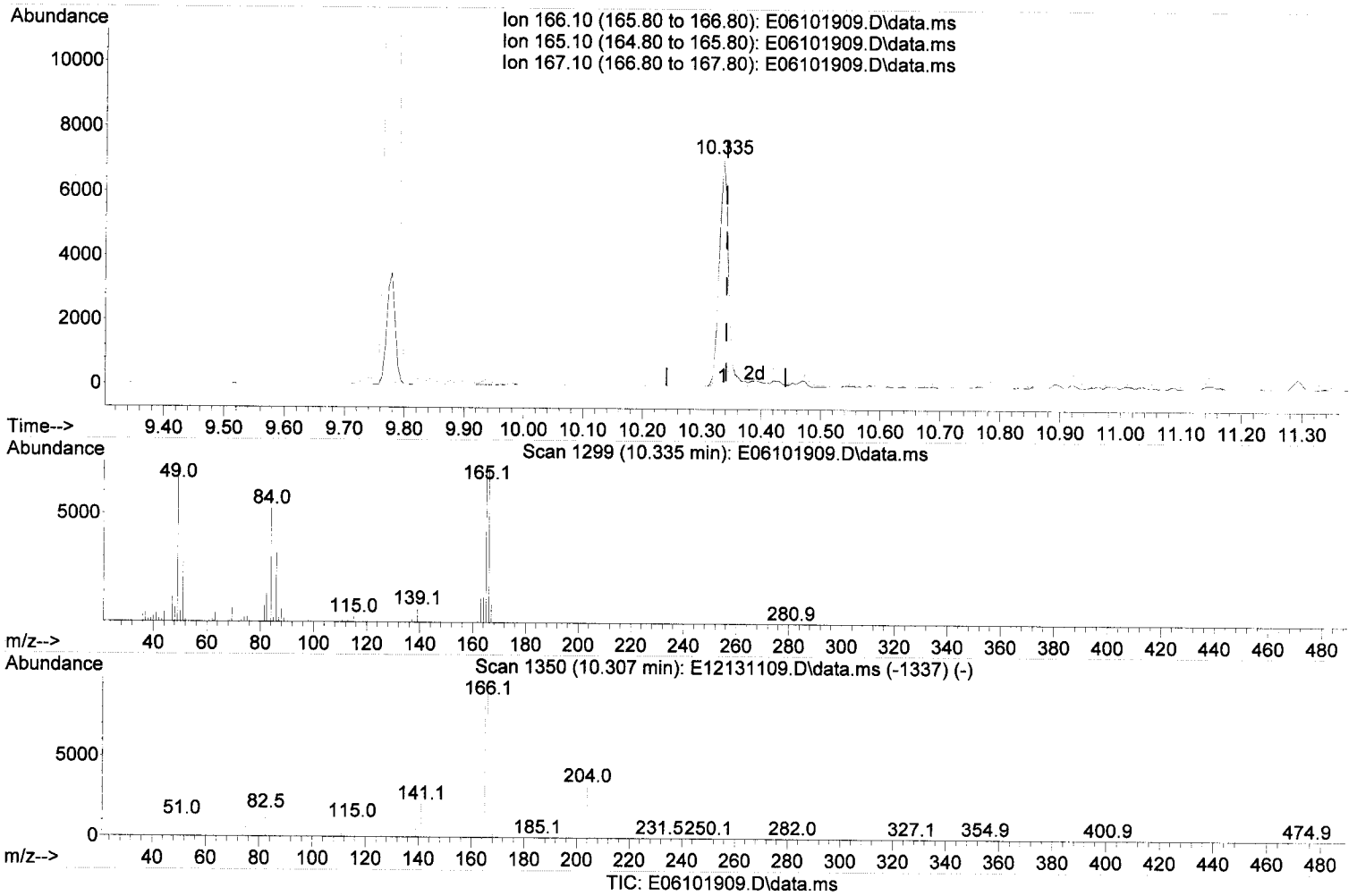
response 18182

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	92.00	90.45
152.10	47.10	45.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



TIC: E06101909.D\data.ms

(60) Fluorene (T)

10.335min (-0.006) 25.71 ng/ml

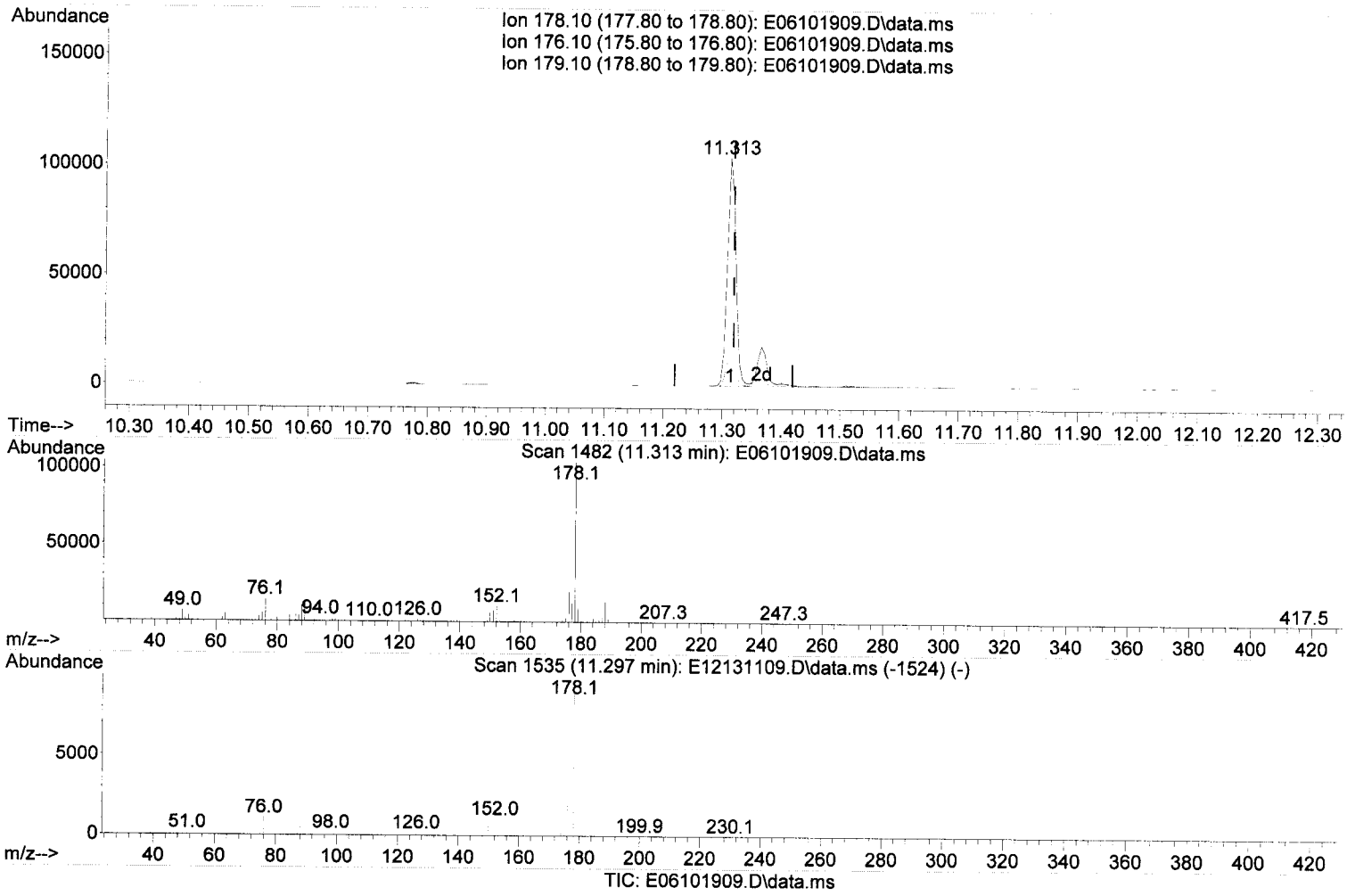
response 7763

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.50	100.04
167.10	13.60	13.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



TIC: E06101909.D\data.ms

(71) Phenanthrene (T)

11.313min (-0.006) 246.23 ng/ml

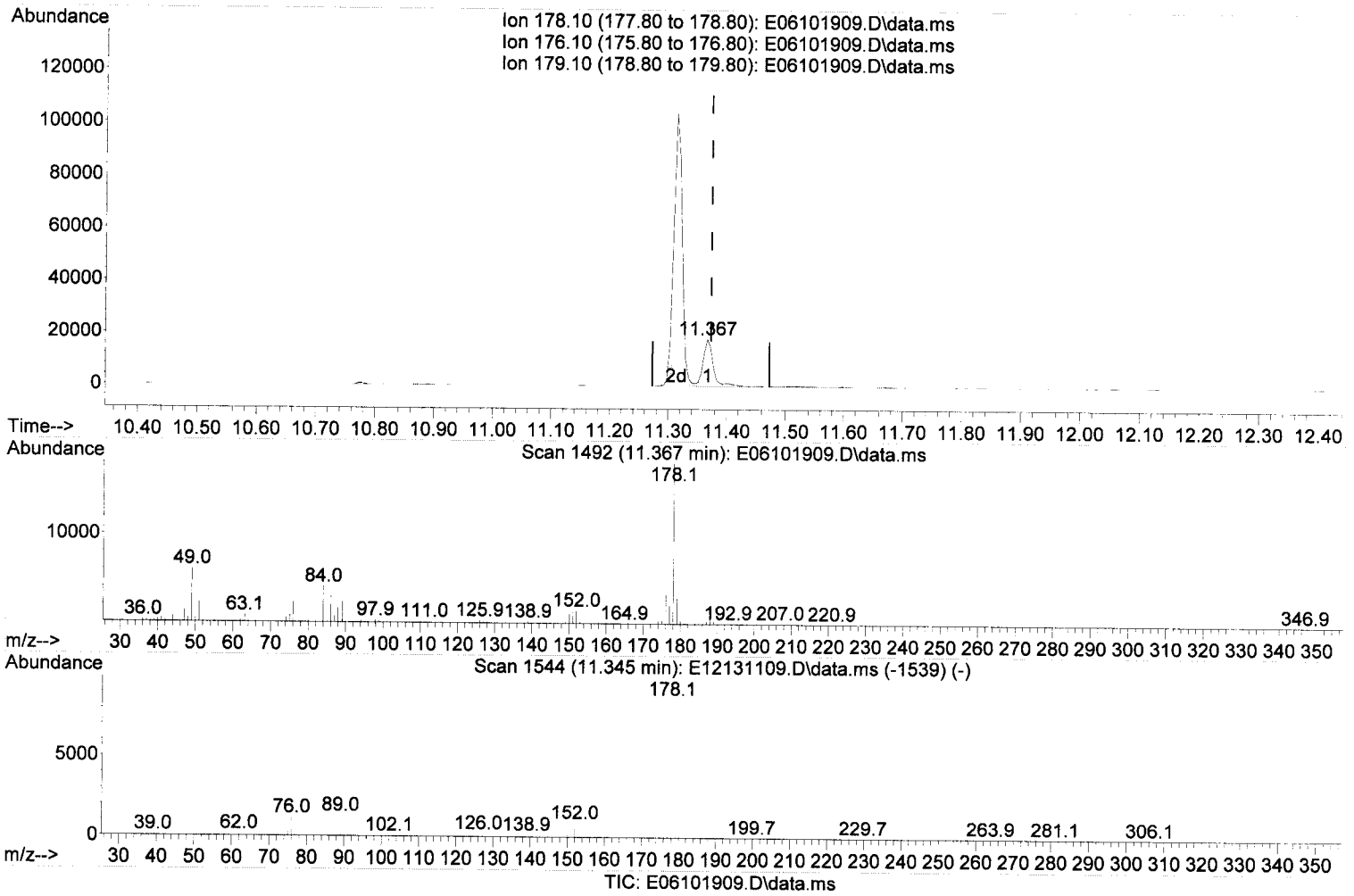
response 105146

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.10	18.83
179.10	15.00	16.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(72) Anthracene (T)

11.367min (-0.006) 49.21 ng/ml

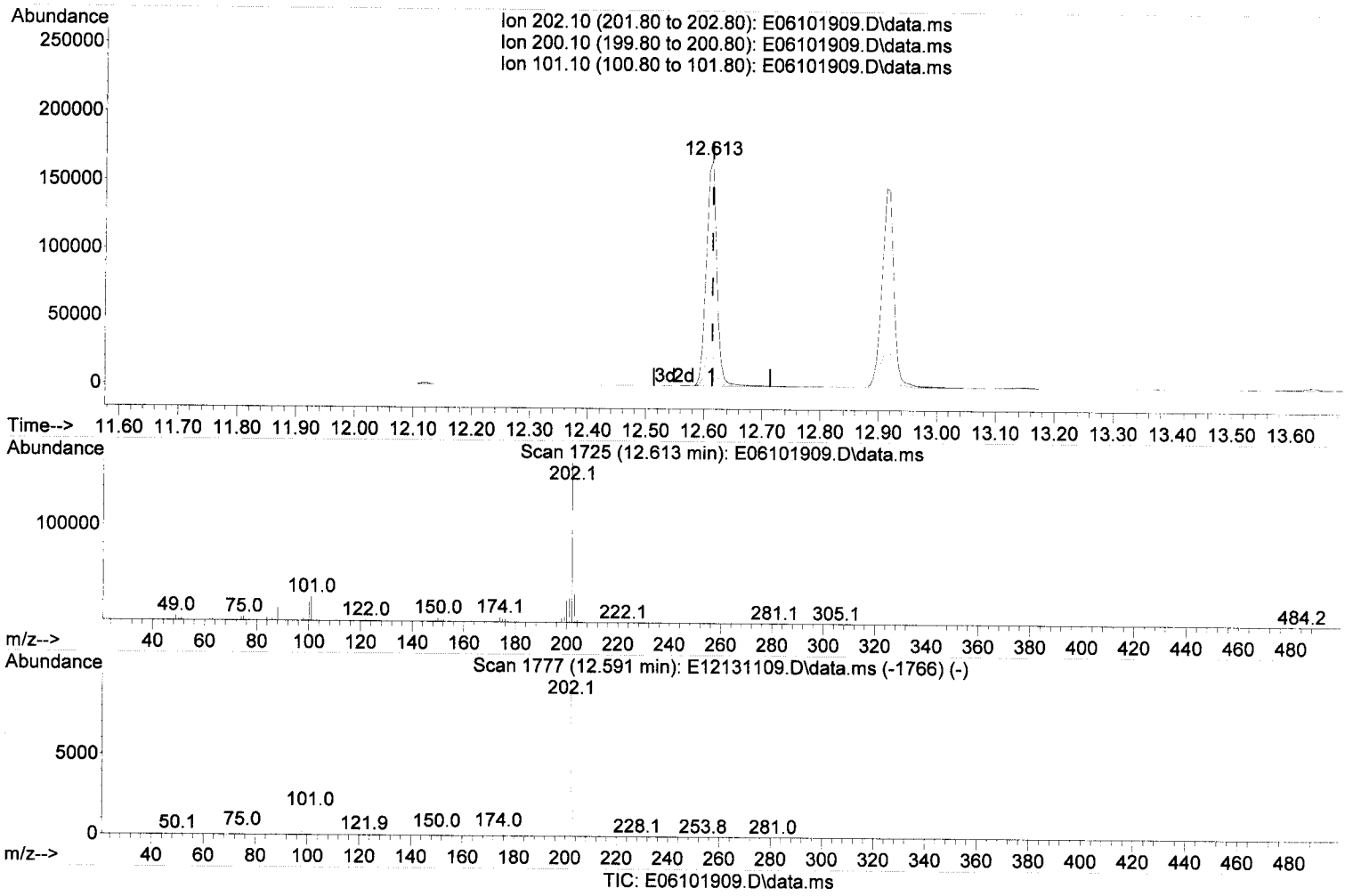
response 21560

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.10	18.42
179.10	15.50	16.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(75) Fluoranthene (T)

12.613min (-0.000) 473.03 ng/ml

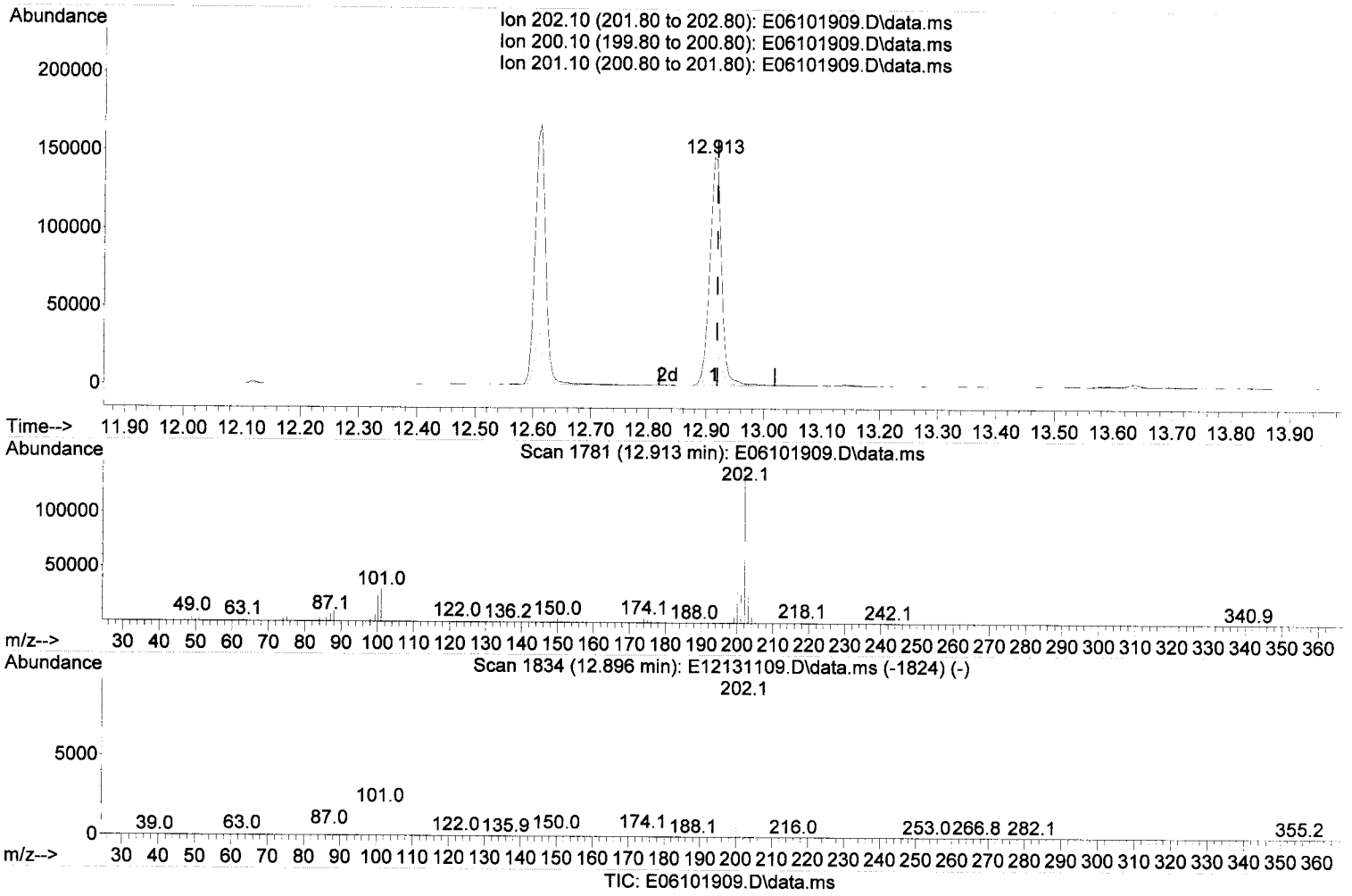
response 209520

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	21.00	19.74
101.10	15.70	15.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



TIC: E06101909.D\data.ms

(77) Pyrene (T)

12.913min (-0.006) 464.39 ng/ml

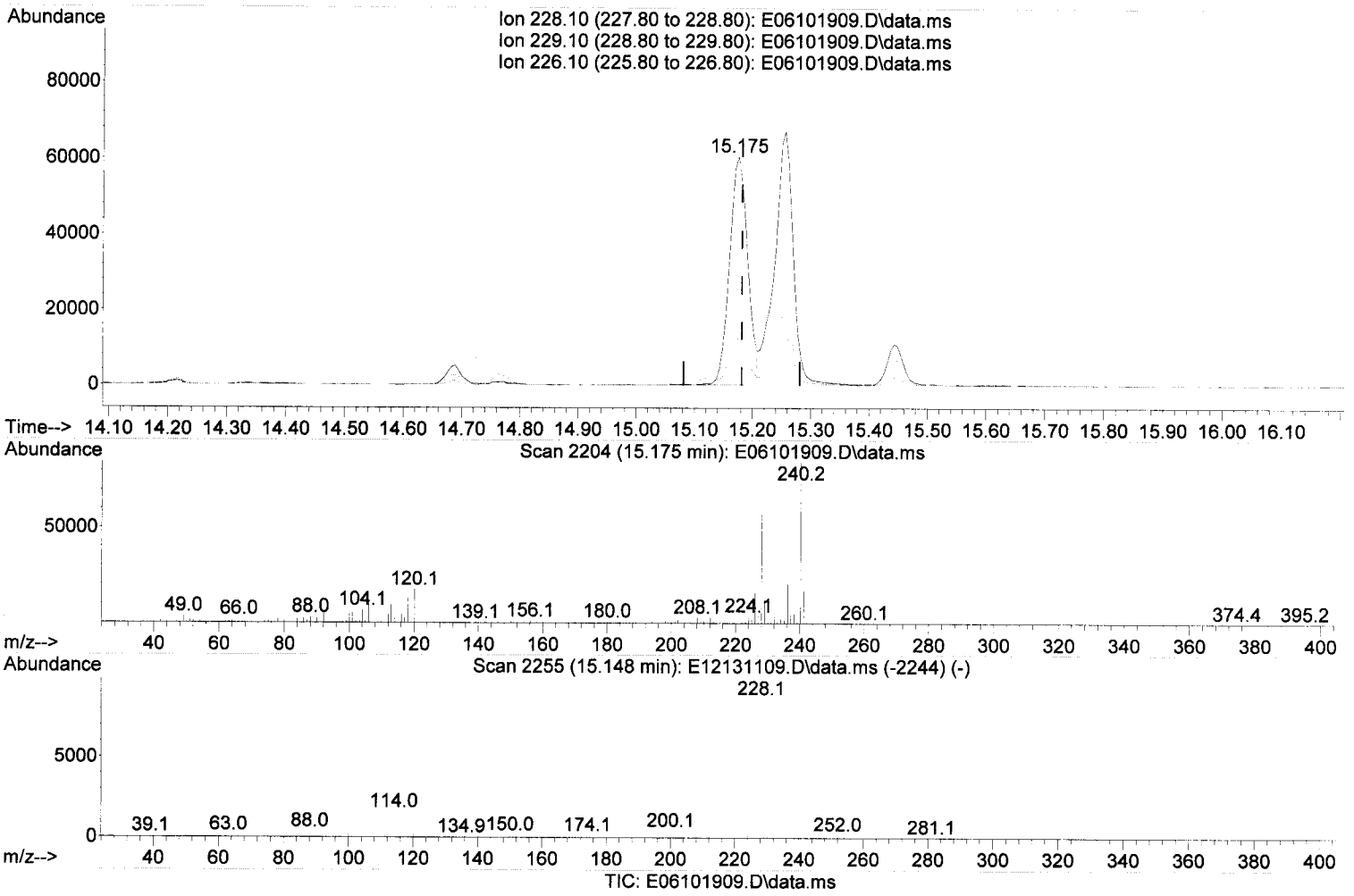
response 208949

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	21.20	20.15
201.10	17.50	17.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(83) Benz(a)anthracene (T)

15.175min (-0.006) 299.23 ng/ml

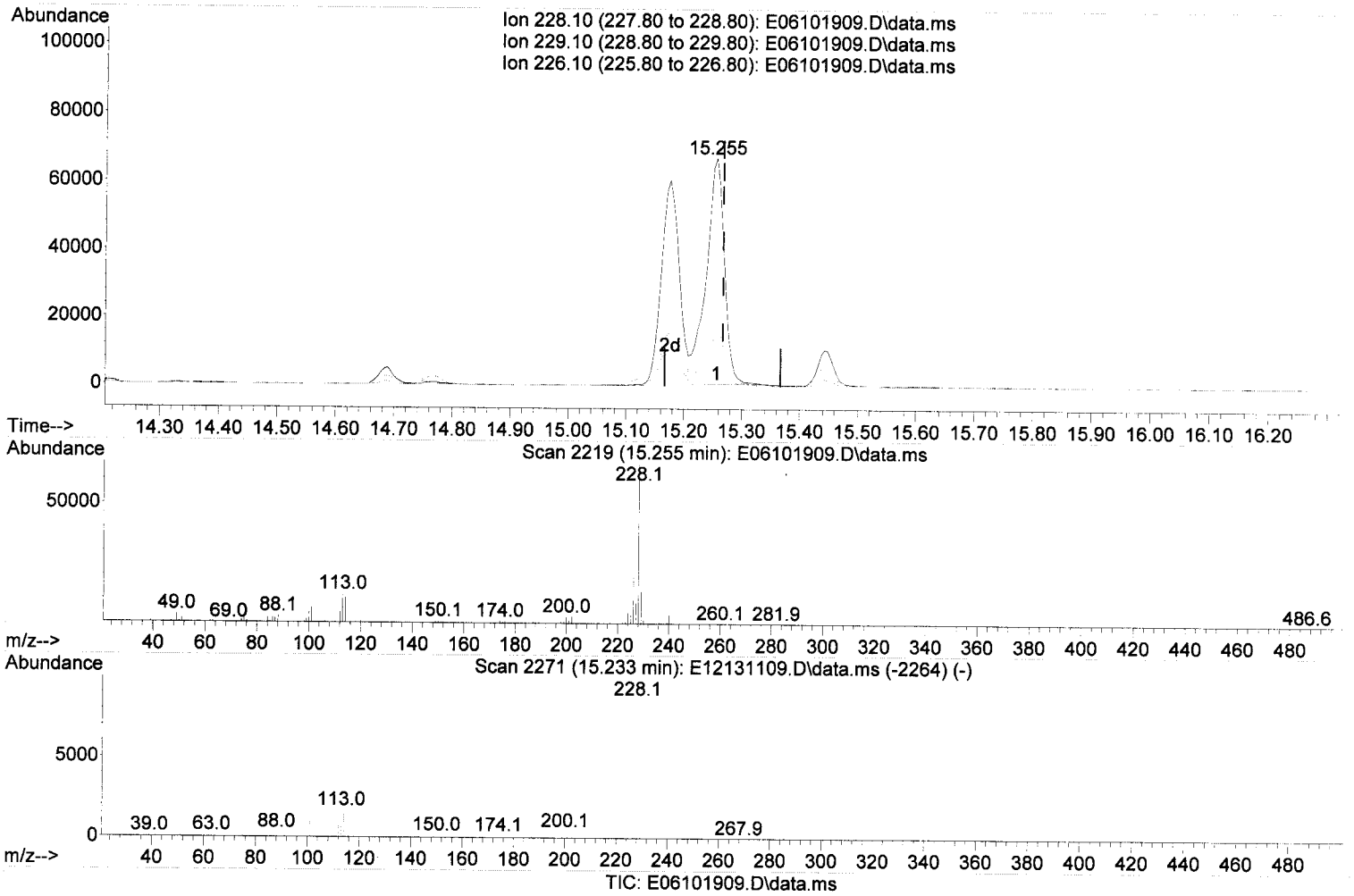
response 131110

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	20.10	20.64
226.10	27.80	26.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



TIC: E06101909.D\data.ms

(84) Chrysene (T)

15.255min (-0.011) 349.70 ng/ml

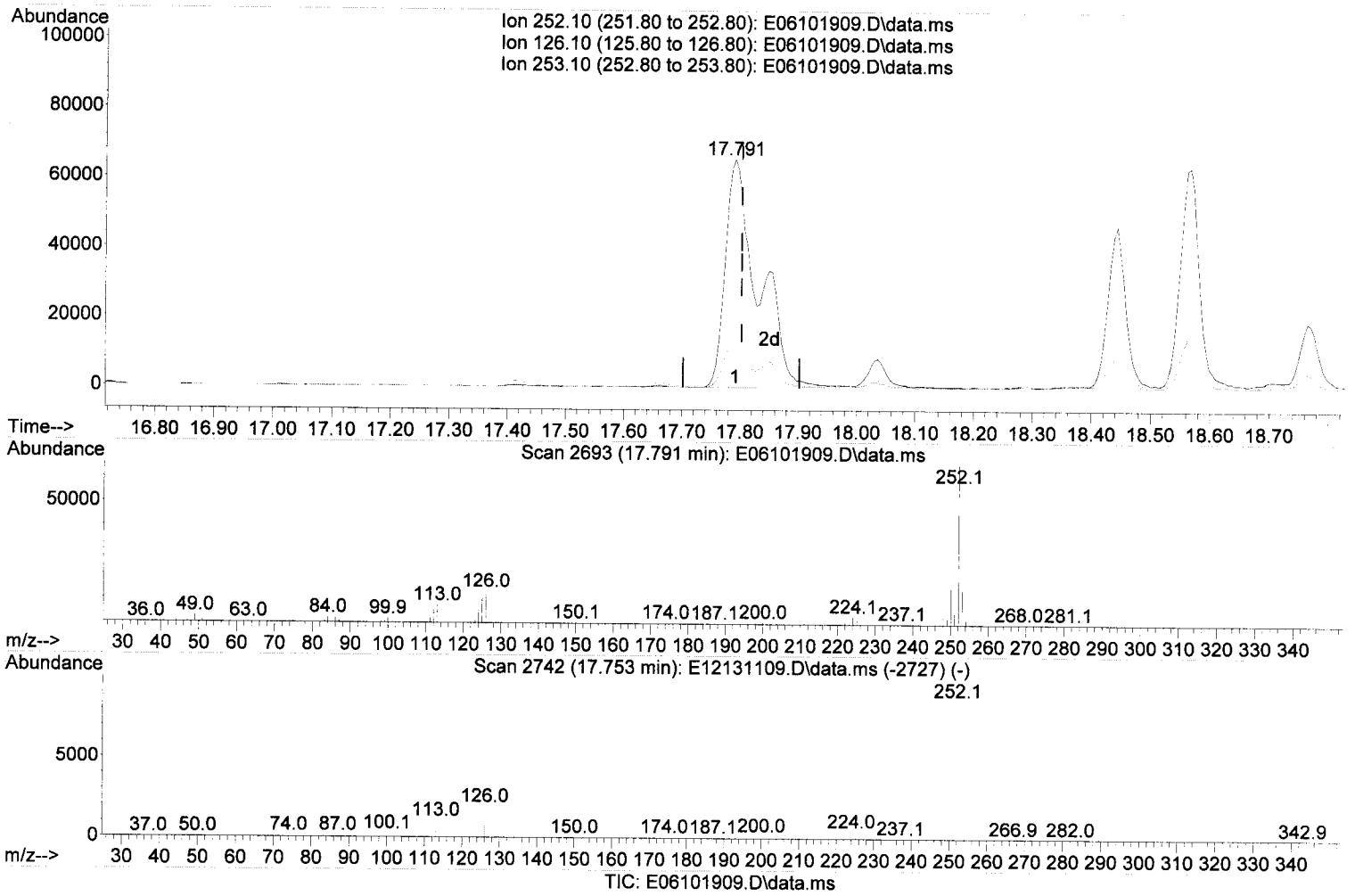
response 145964

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	20.00	19.89
226.10	29.80	29.15
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(88) Benzo(b)fluoranthene (T)

17.791min (-0.011) 536.33 ng/ml MO5

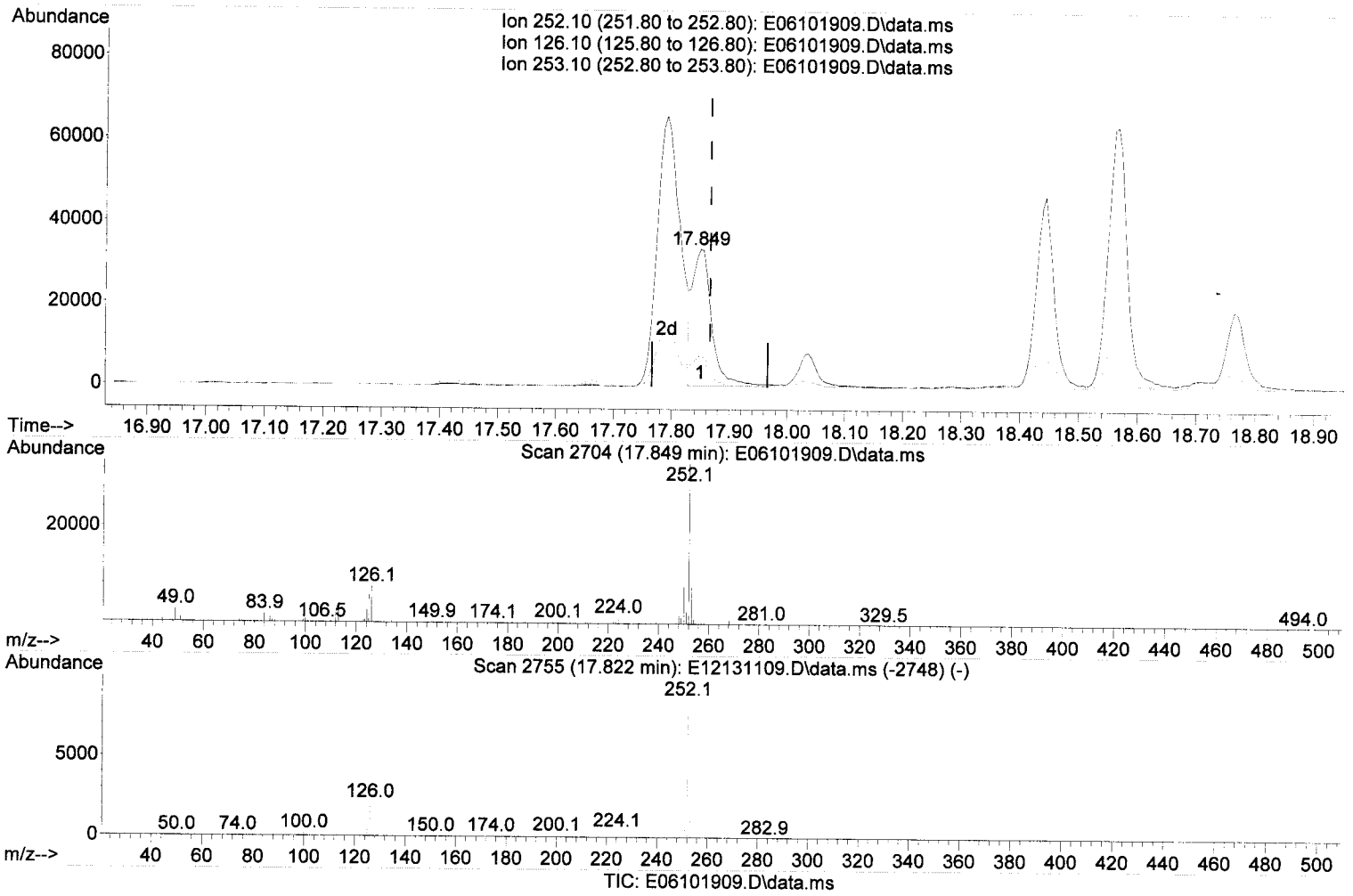
response 180530

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.80	19.87
253.10	22.40	21.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(89) Benzo(k)fluoranthene (T)

17.849min (-0.016) 231.49 ng/ml m

response 76577

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.80	22.63
253.10	21.80	22.83
0.00	0.00	0.00

MOS
DTH 6/10/19

Quantitation Report (Qedit)

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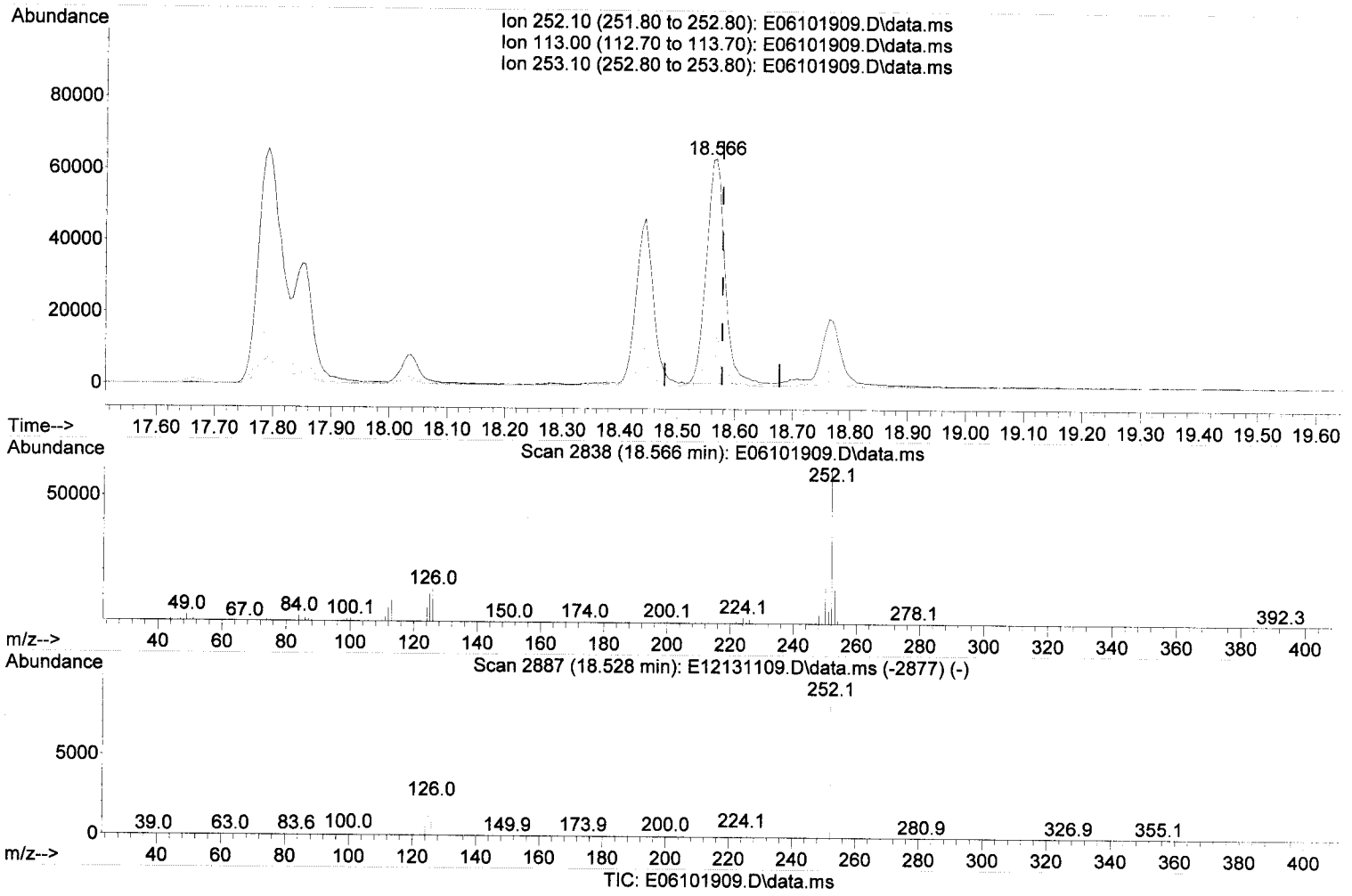
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\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



(92) Benzo(a)pyrene (T)

18.566min (-0.011) 458.16 ng/ml

response 140022

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	12.70	13.43
253.10	21.70	22.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
Misc : 10000x, 8270D LL PAH
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
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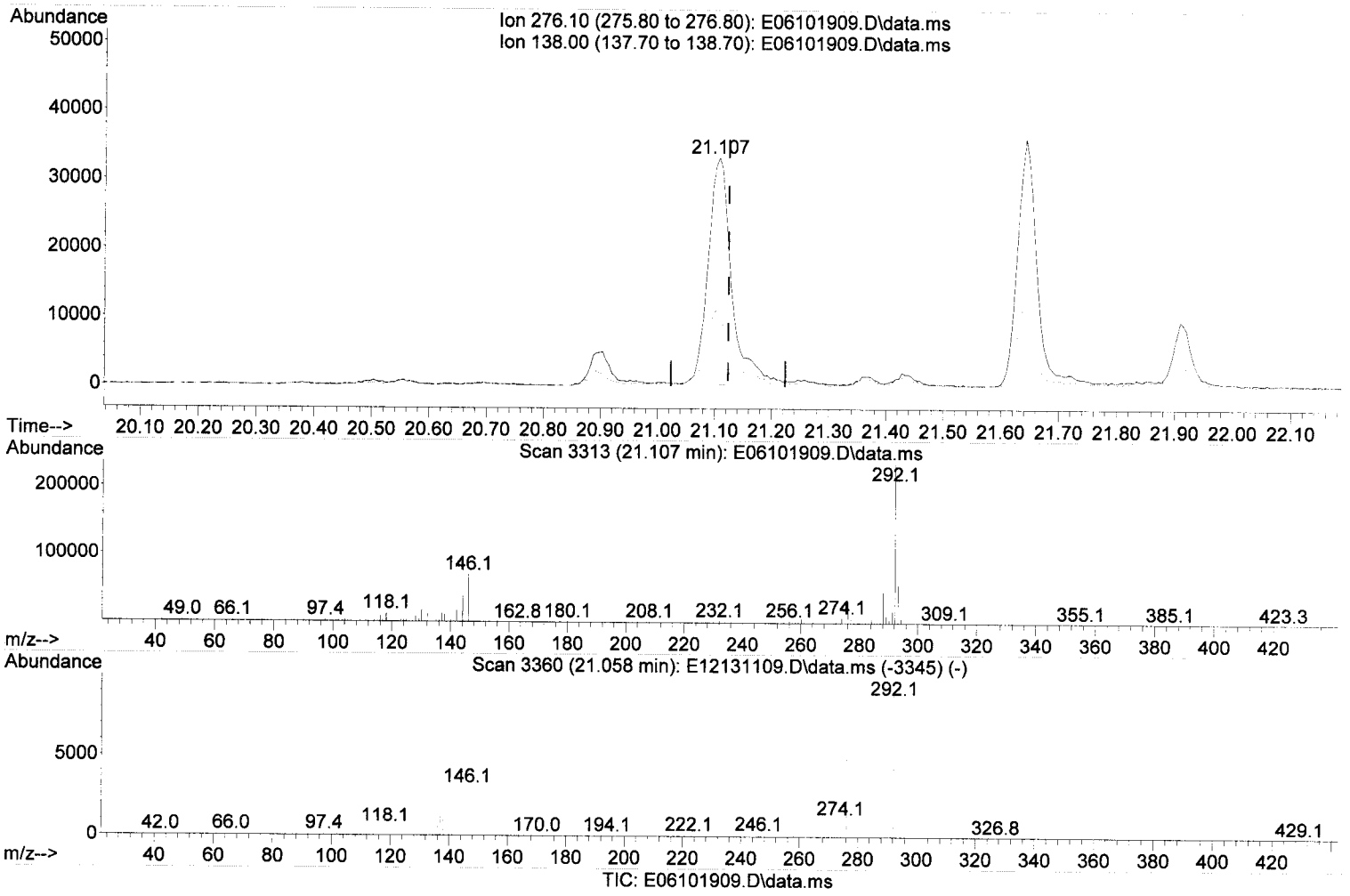

(95) Indeno(1,2,3-cd)pyrene (T)

21.107min (-0.016) 323.57 ng/ml

response 93843

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	30.90	31.19
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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Quant Time: Jun 10 13:26:03 2019
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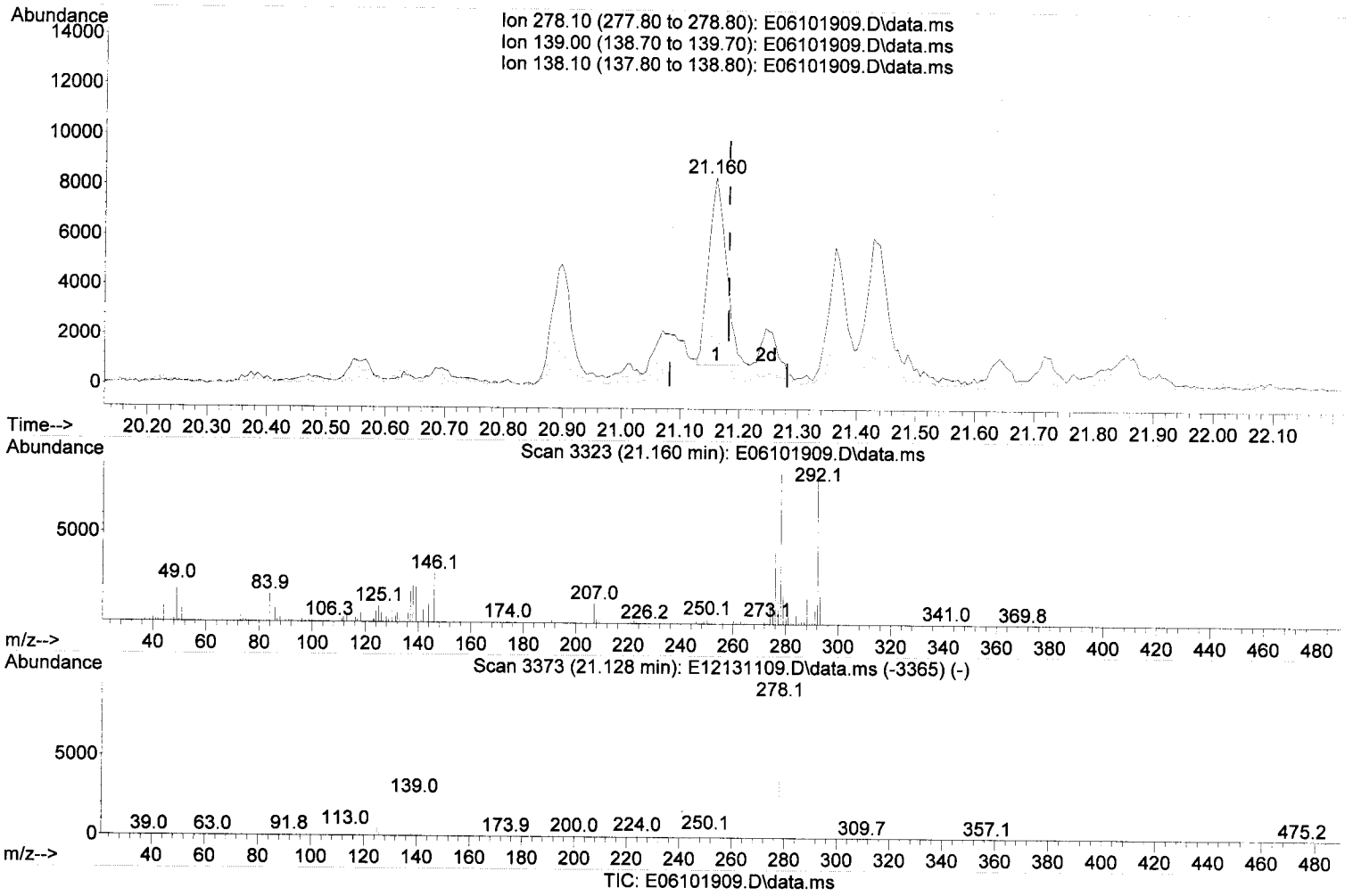
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(96) Dibenz(a,h)anthracene (T)

21.160min (-0.022) 58.86 ng/ml

response 15633

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	25.60	23.66
138.10	17.70	24.27
0.00	0.00	0.00

Quantitation Report (Qedit)

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Data File : E06101909.D
Acq On : 10 Jun 2019 12:59 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-15@10000
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ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 13:26:03 2019
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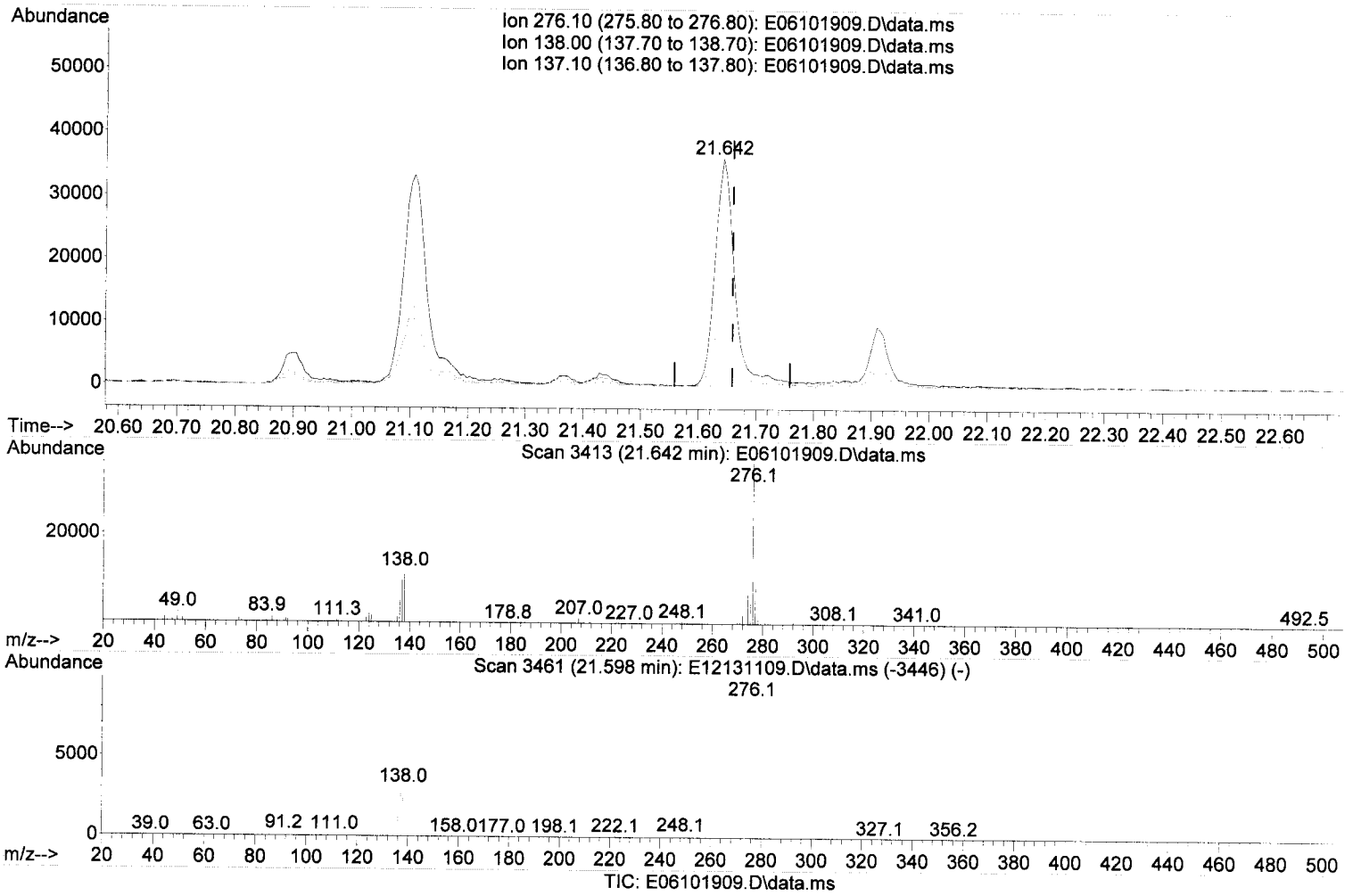
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



(97) Benzo(g,h,i)perylene (T)

21.642min (-0.016) 291.18 ng/ml

response 83140

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	45.90	32.50
137.10	39.00	27.13
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

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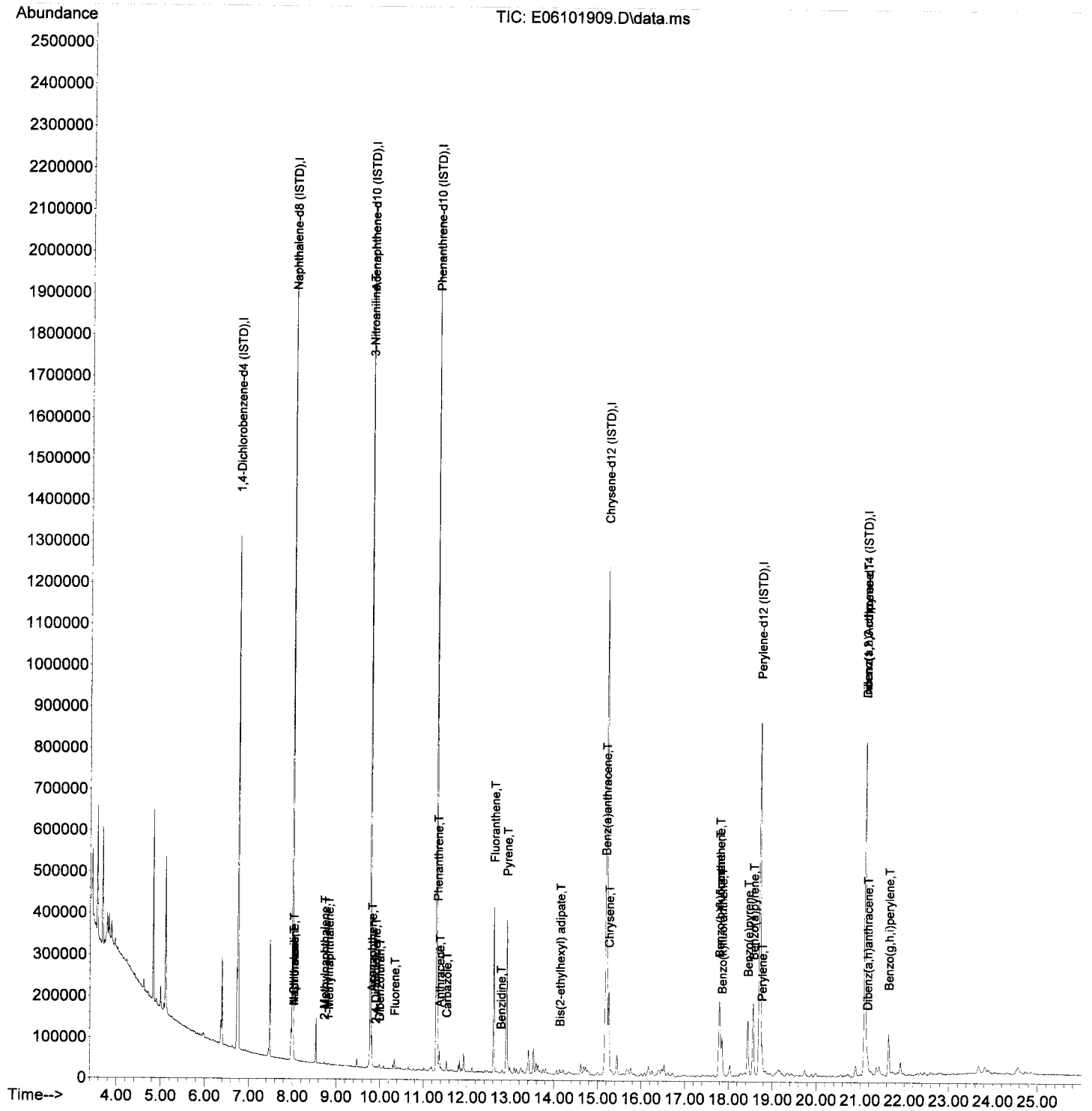

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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

JT 6/10/19

MOS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.757	152	253283	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	8.003	136	996821	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.779	162	433403	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.292	188	714449	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	15.197	240	801428	2000.00 ng/ml	-0.02
86) Perylene-d12 (ISTD)	18.711	264	673016	2000.00 ng/ml	-0.02
94) Dibenz(a,h)Anthrcene-d...	21.107	292	582057	2000.00 ng/ml	-0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.569	112	4125	26.12 ng/ml	0.00
5) Phenol-d6(Surr)	6.409	99	5950	28.17 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.297	82	4885	25.80 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	9.083	172	9749	30.25 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.586	330	740	44.28 ng/ml	0.00
79) Terphenyl-d14 (Surr)	13.121	244	15266	40.77 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	4.286	74	116	N.D.	
3) Pyridine	0.000		0	N.D.	
6) Phenol	6.430	94	139	N.D.	
7) Aniline	6.430	93	91	N.D.	
8) Bis(2-chloroethyl) ether	6.495	93	56	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...	7.003	45	88	N.D.	
16) N-Nitrosodi-n-propylamine	7.110	70	146	N.D.	
17) 3+4-Methylphenol	7.163	107	378	N.D.	
18) Hexachloroethane	7.270	117	60	N.D.	
20) Nitrobenzene	7.313	77	76	N.D.	
22) Isophorone	7.532	82	207	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	7.735	105	92	399.21 ng/ml#	8
27) 2,4-Dichlorophenol	0.000		0	N.D.	
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.	
29) Naphthalene	8.024	128	4302	8.09 ng/ml	94
30) 4-Chloroaniline	8.019	127	504	2.75 ng/ml#	10
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	0.000		0	N.D.	
33) 2-Methylnaphthalene	8.725	142	1095	3.27 ng/ml	90
34) 1-Methylnaphthalene	8.821	142	649	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	339	N.D.	
41) 2-Chloronaphthalene	0.000		0	N.D.	
42) 2-Nitroaniline	0.000		0	N.D.	

Quantitation Report (Not Reviewed)

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Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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)
43) 2,6-Dimethylnaphthalene	9.356	156	537	N.D.		
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	9.484	163	75	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	868	N.D.		
50) 3-Nitroaniline	9.773	138	118	30.82	ng/ml#	1
51) Acenaphthene	9.811	153	9027	31.54	ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	0.000		0	N.D.		
54) 2,4-Dinitrotoluene	9.950	165	87	62.11	ng/ml#	15
55) Dibenzofuran	9.987	168	2044	5.49	ng/ml#	1
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.		
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
58) Diethyl phthalate	10.196	149	137	N.D.		
59) 2,3,5-Trimethylnaphtha...	10.185	170	839	3.63	ng/ml	76
60) Fluorene	10.335	166	5309	17.82	ng/ml	98
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
62) 4-Nitroaniline	10.340	138	83	N.D.		
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.447	169	227	N.D.		
66) Azobenzene (1,2-DPH)	10.495	77	263	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	11.314	178	69234	176.56	ng/ml	99
72) Anthracene	11.367	178	12539	31.17	ng/ml	95
73) Carbazole	11.528	167	8733	23.18	ng/ml	99
74) Di-n-butyl phthalate	11.865	149	193	N.D.		
75) Fluoranthene	12.608	202	179739	441.89	ng/ml	98
76) Benzidine	0.000		0	N.D.		
77) Pyrene	12.913	202	178028	430.86	ng/ml	98
80) Butyl benzyl phthalate	13.961	149	711	3.03	ng/ml	81
81) Bis(2-ethylhexyl) adipate	14.132	129	1967	8.43	ng/ml	86
82) 3,3-Dichlorobenzidine	0.000		0	N.D.		
83) Benz(a)anthracene	15.170	228	101357	224.21	ng/ml	99
84) Chrysene	15.256	228	111649	259.26	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.320	149	20027	59.78	ng/ml	93
87) Di-n-octyl phthalate	16.999	149	234	31.20	ng/ml#	1
88) Benzo(b)fluoranthene	17.785	252	143756	404.30	ng/ml	98
89) Benzo(k)fluoranthene	~~17.785~~	~~252~~	~~185101~~	~~529.70~~	~~ng/ml~~	~~98~~
90) Benzo(b+k)fluoranthene	17.785	252	206111	551.96	ng/ml	98
91) Benzo(e)pyrene	18.443	252	77173	213.77	ng/ml	97
92) Benzo(a)pyrene	18.561	252	103794	321.50	ng/ml	98
93) Perylene	18.770	252	34378	93.17	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	21.102	276	69940	219.22	ng/ml	99
96) Dibenz(a,h)anthracene	21.160	278	12826	43.90	ng/ml	89
97) Benzo(g,h,i)perylene	21.642	276	66957	213.18	ng/ml	79

MOS

MI H.T MOS

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

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Quant Title : EPA 8270D: Semivolatile Organics
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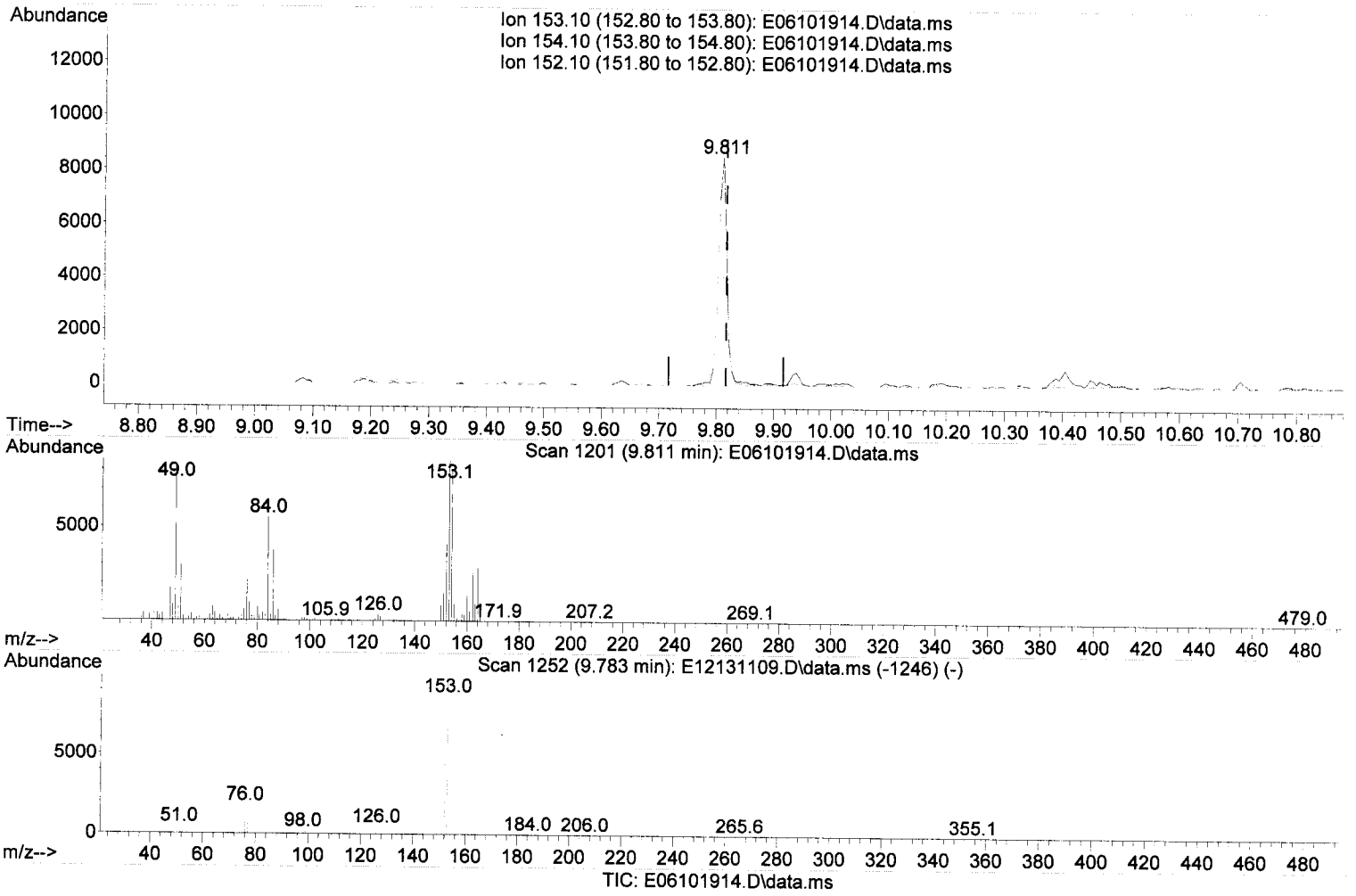

(51) Acenaphthene (T)

9.811min (-0.005) 31.54 ng/ml

response 9027

Ion	Exp%	Act%
153.10	100.00	100.00
154.10	92.00	93.21
152.10	47.10	48.31
0.00	0.00	0.00

Quantitation Report (Qedit)

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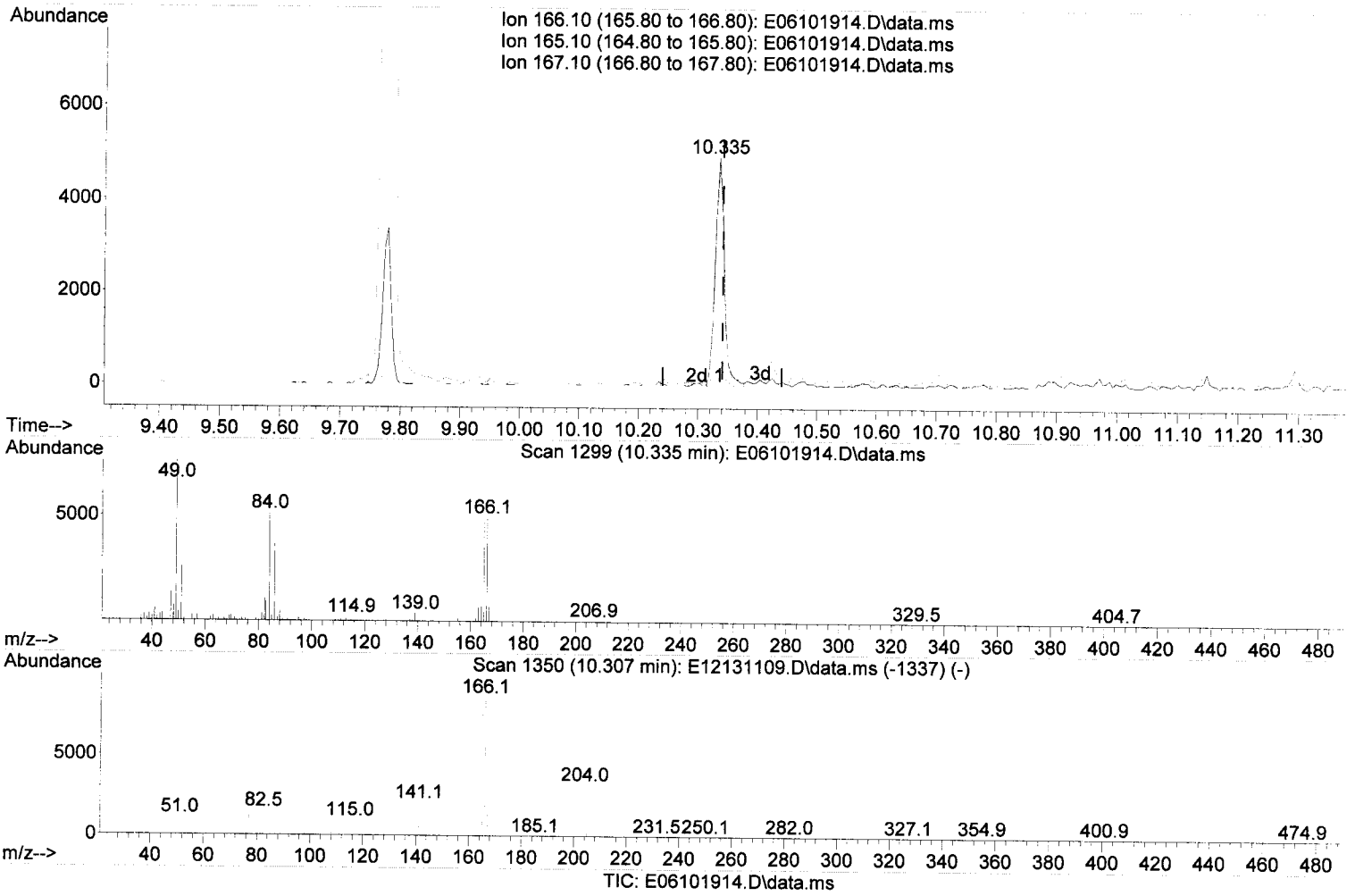

(60) Fluorene (T)

10.335min (-0.005) 17.82 ng/ml

response 5309

Ion	Exp%	Act%
166.10	100.00	100.00
165.10	93.50	95.22
167.10	13.60	14.52
0.00	0.00	0.00

Quantitation Report (Qedit)

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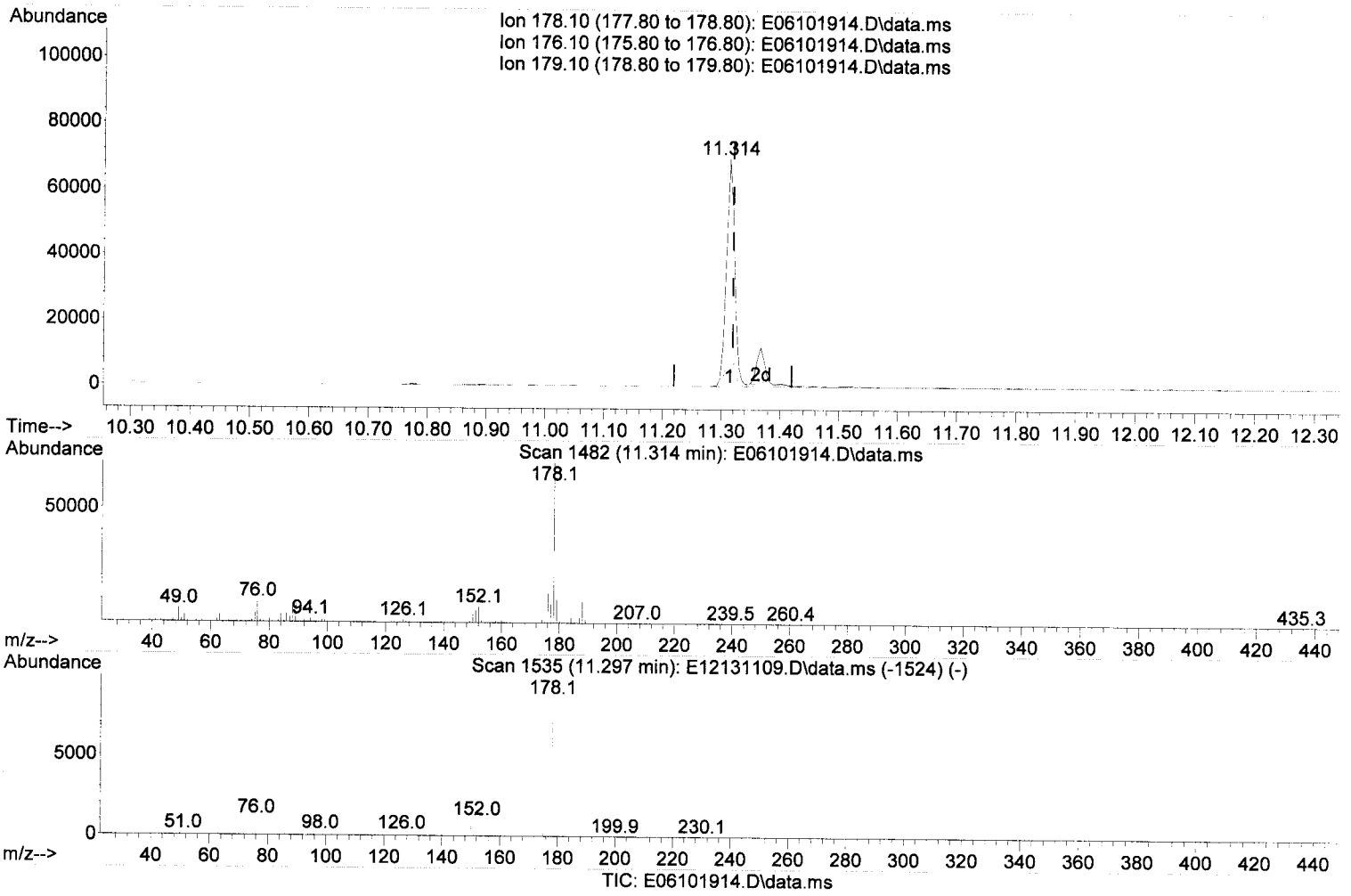

TIC: E06101914.D\data.ms

(71) Phenanthrene (T)

11.314min (-0.005) 176.56 ng/ml

response 69234

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.10	18.40
179.10	15.00	14.62
0.00	0.00	0.00

Quantitation Report (Qedit)

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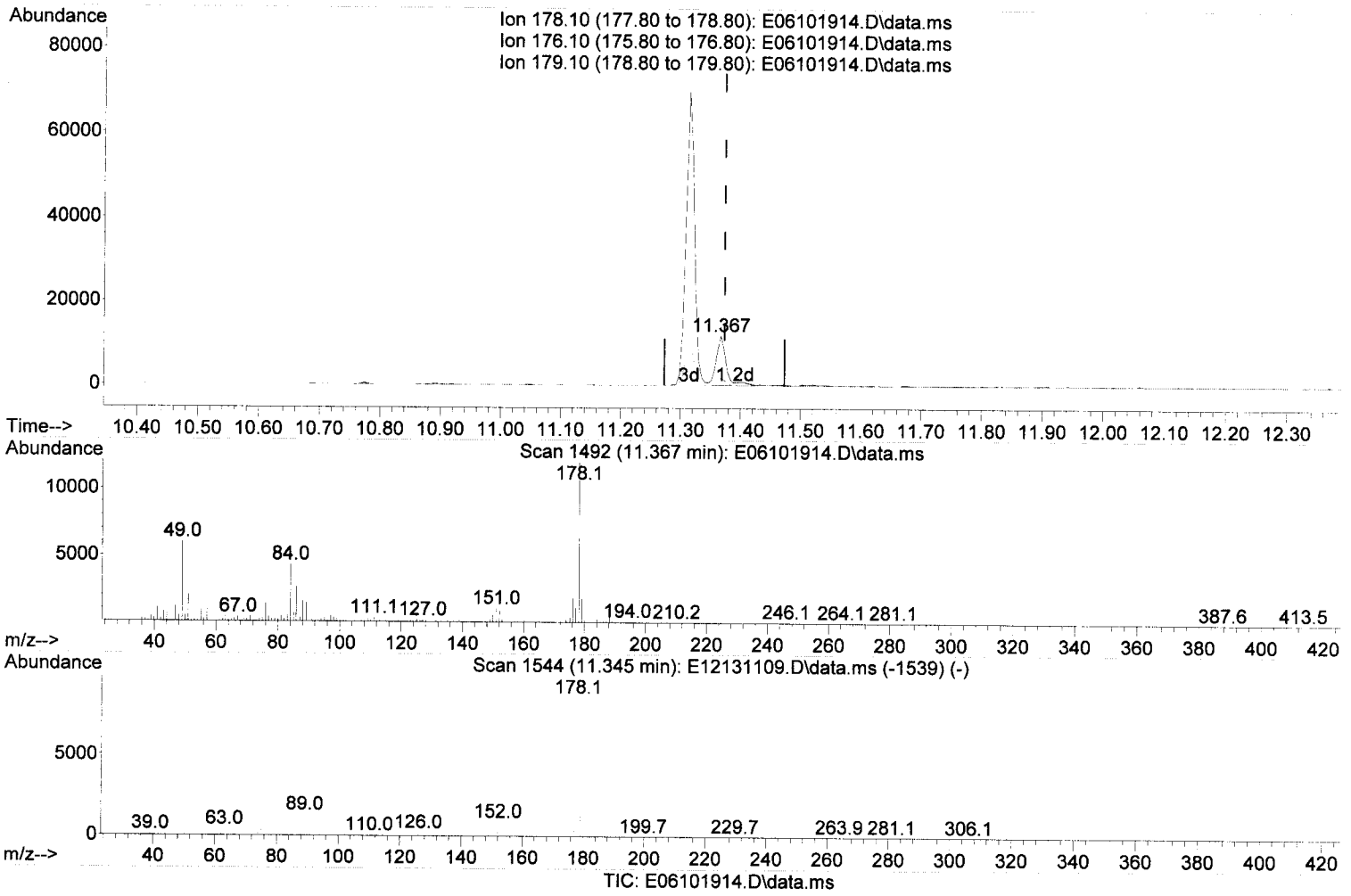
Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\METHODS\SV5_013019R4.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri May 31 15:11:51 2019
Response via : Initial Calibration
InstName : SV-GCMS5



TIC: E06101914.D\data.ms

(72) Anthracene (T)

11.367min (-0.005) 31.17 ng/ml

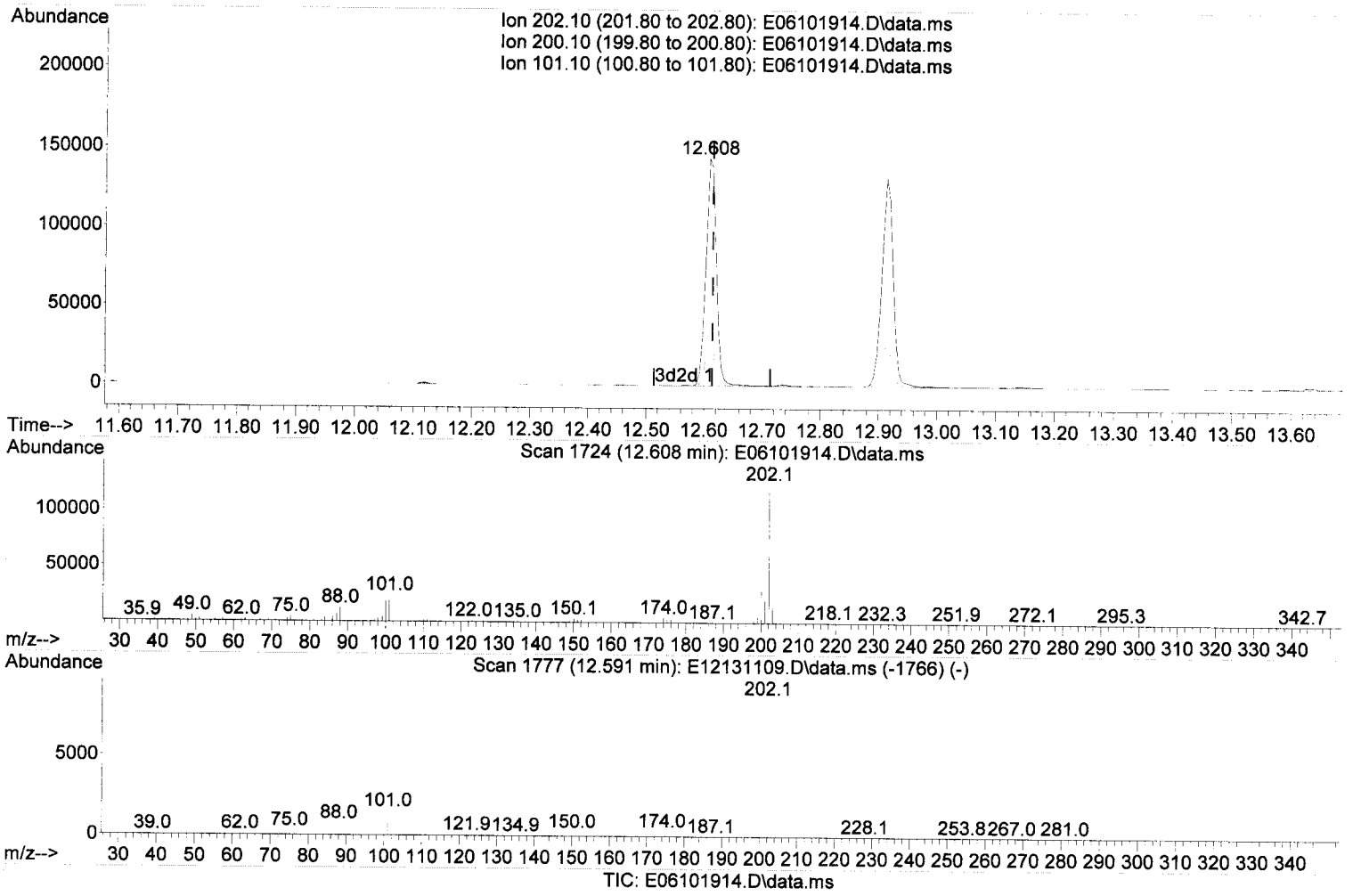
response 12539

Ion	Exp%	Act%
178.10	100.00	100.00
176.10	19.10	15.21
179.10	15.50	15.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



(75) Fluoranthene (T)

12.608min (-0.005) 441.89 ng/ml

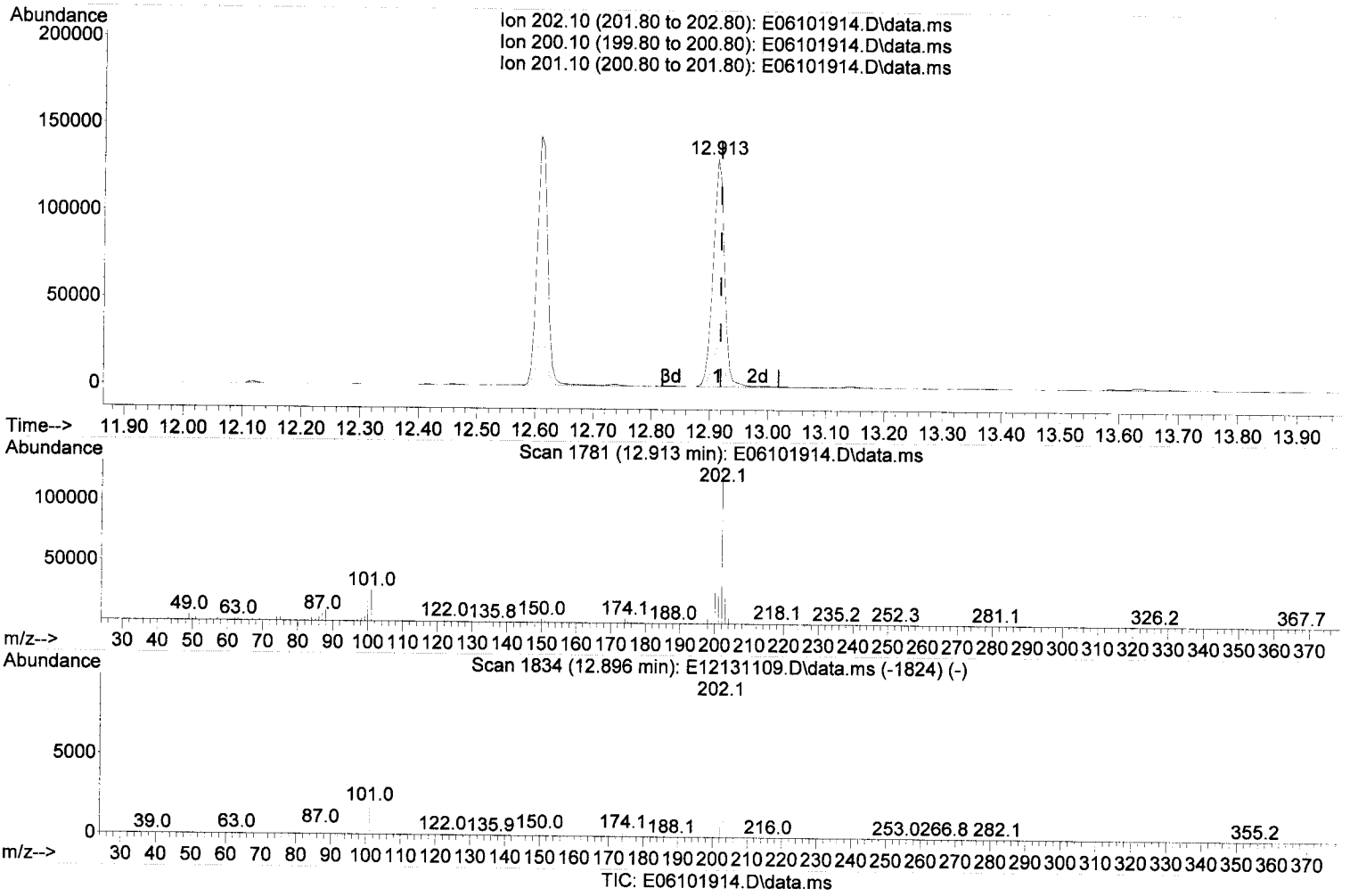
response 179739

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	21.00	20.06
101.10	15.70	16.65
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



TIC: E06101914.D\data.ms

(77) Pyrene (T)

12.913min (-0.005) 430.86 ng/ml

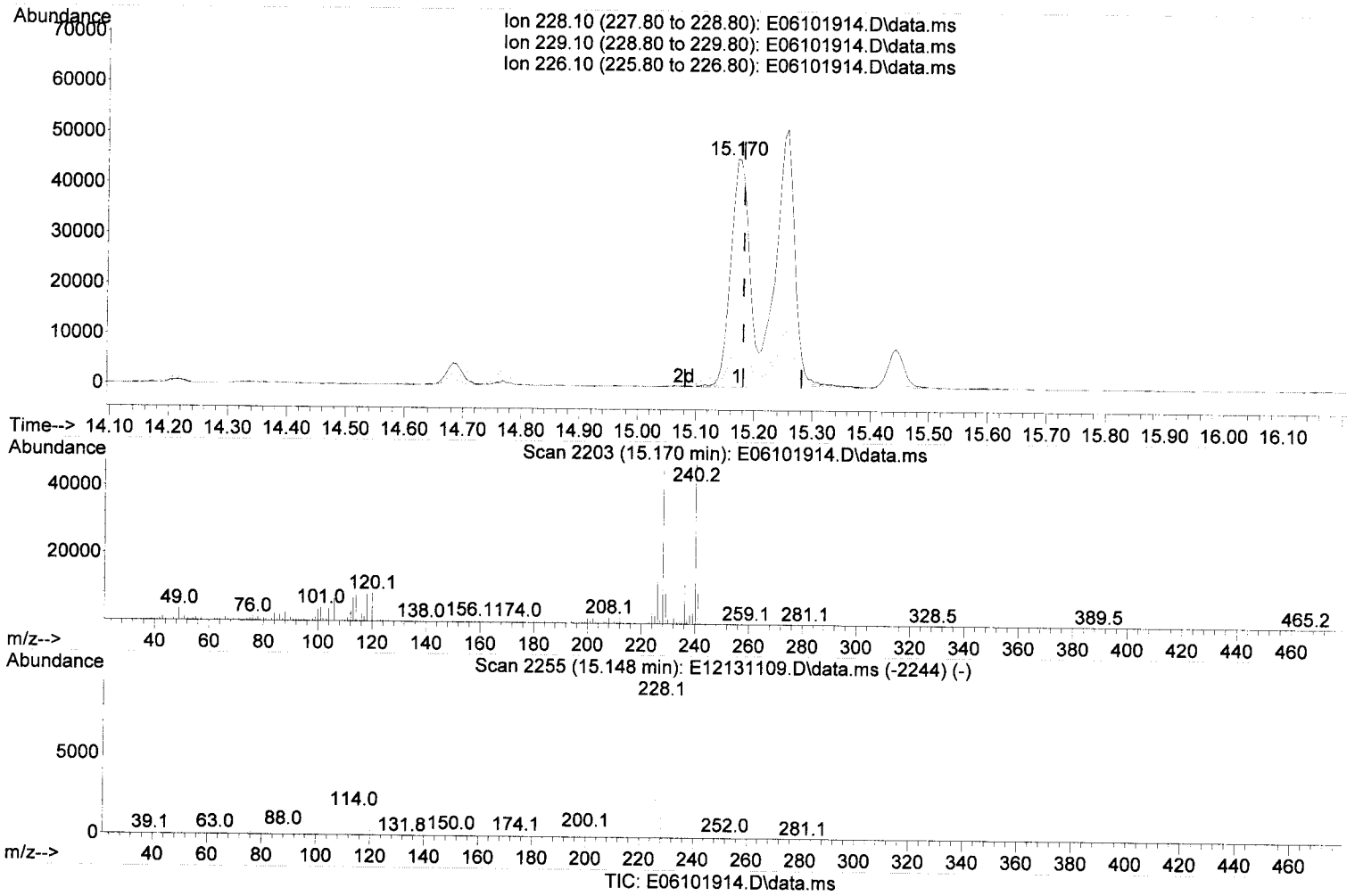
response 178028

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	21.20	19.62
201.10	17.50	17.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



TIC: E06101914.D\data.ms

(83) Benz(a)anthracene (T)

15.170min (-0.011) 224.21 ng/ml

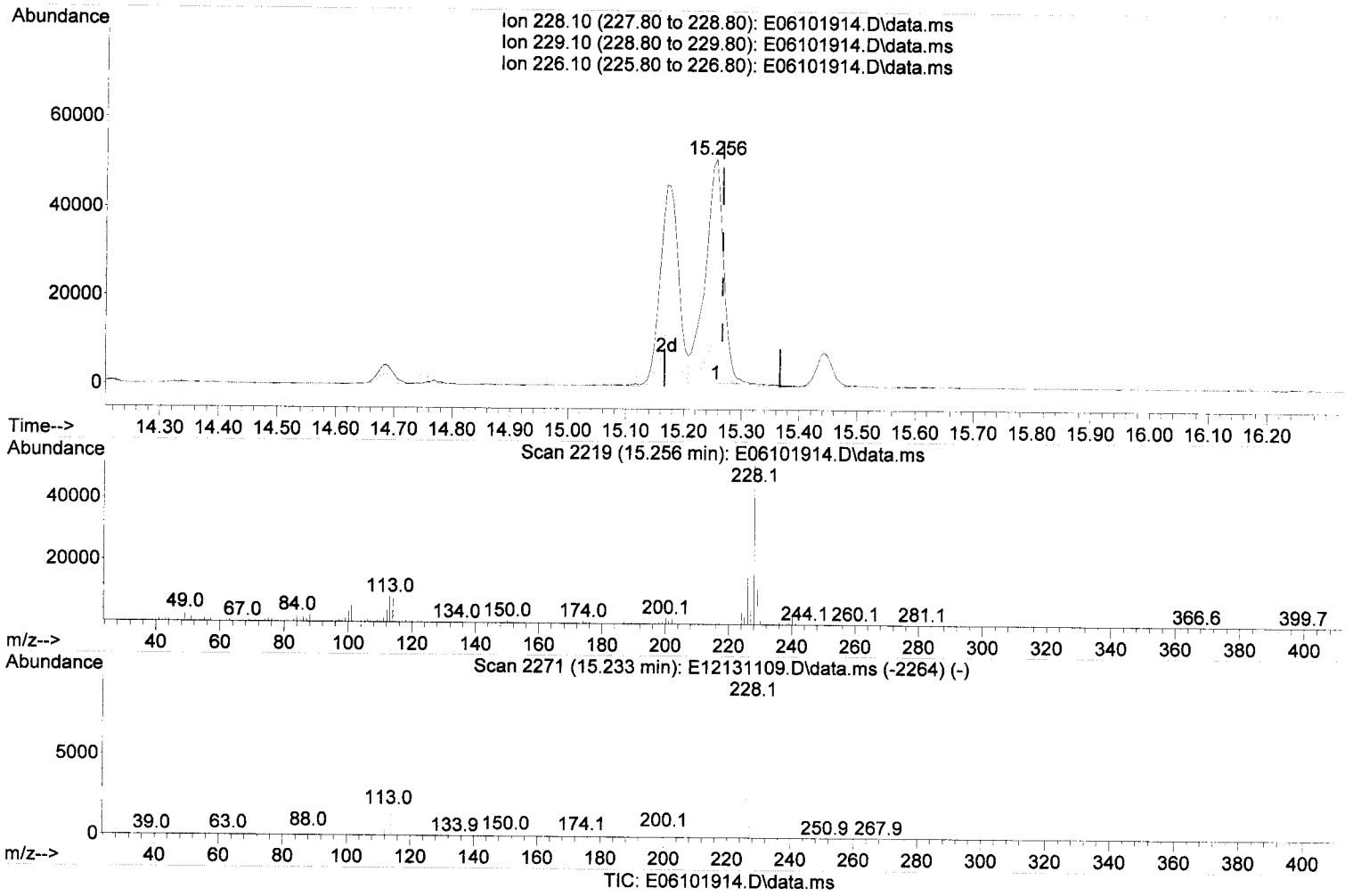
response 101357

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	20.10	19.93
226.10	27.80	27.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



TIC: E06101914.D\data.ms

(84) Chrysene (T)

15.256min (-0.011) 259.26 ng/ml

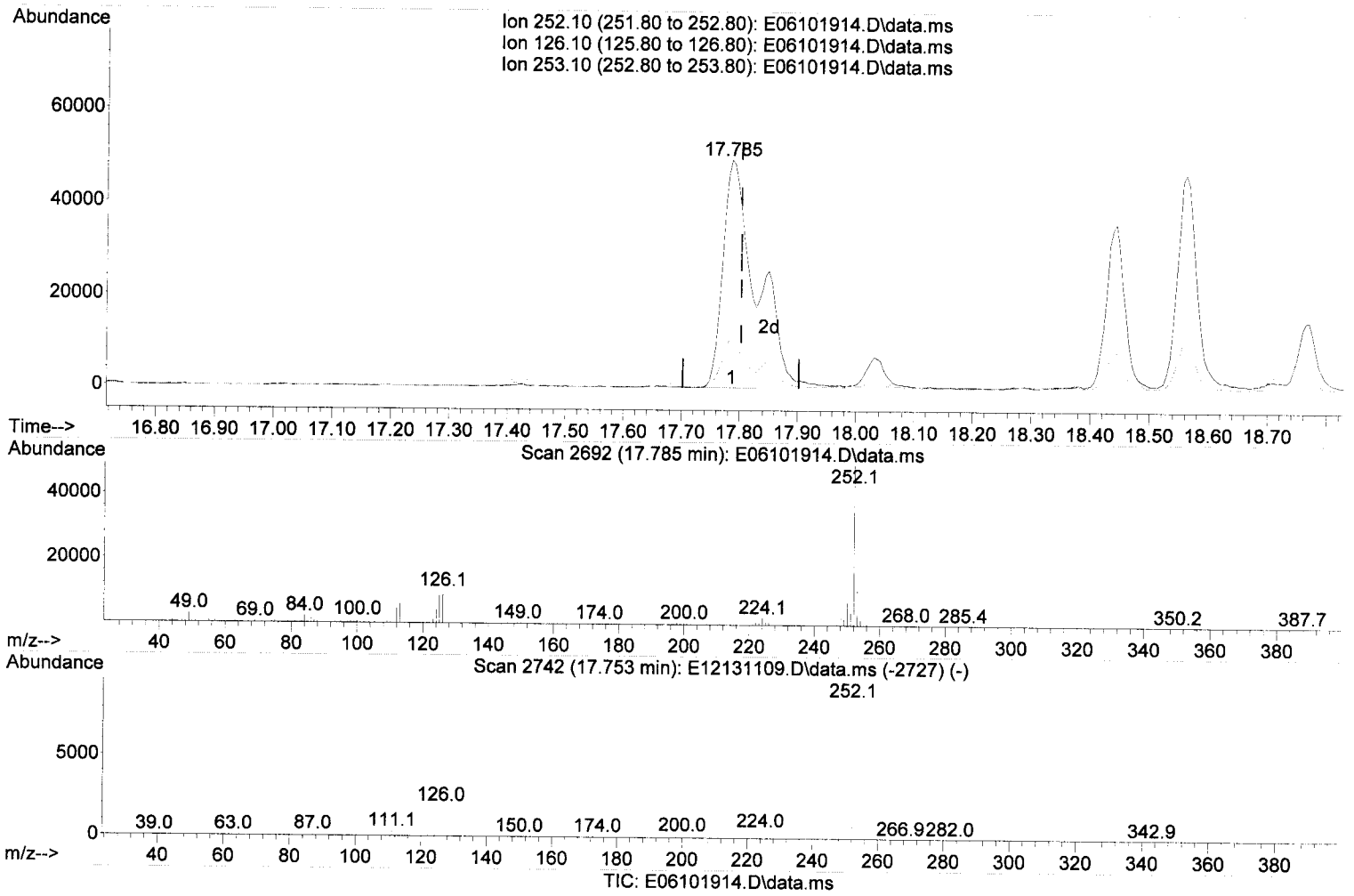
response 111649

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	20.00	21.85
226.10	29.80	30.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



(88) Benzo(b)fluoranthene (T)

17.785min (-0.016) 404.30 ng/ml MOS

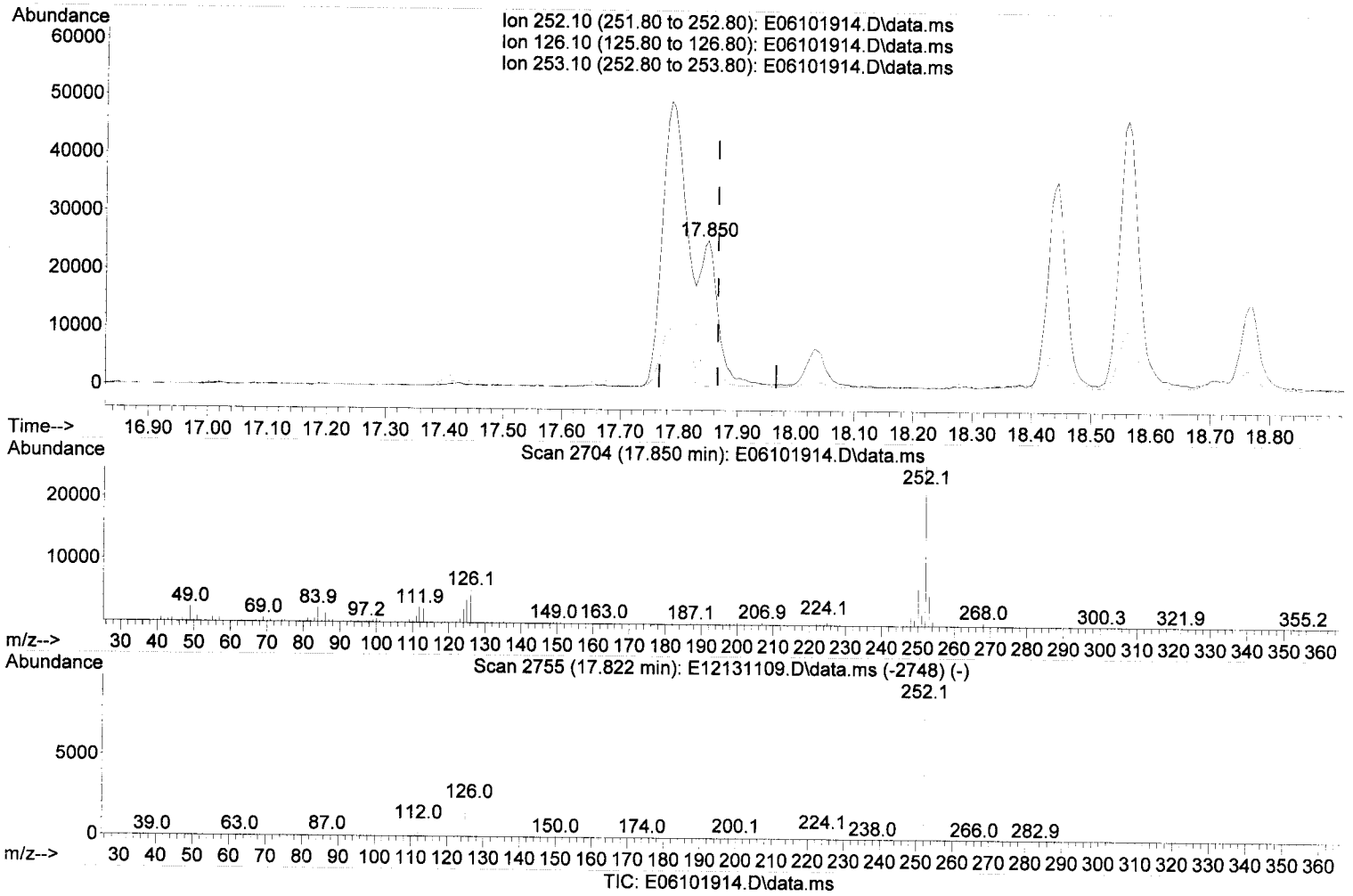
response 143756

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.80	20.36
253.10	22.40	21.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



(89) Benzo(k)fluoranthene (T)

17.850min (-0.016) 157.47 ng/ml (m) MDS

response 55027

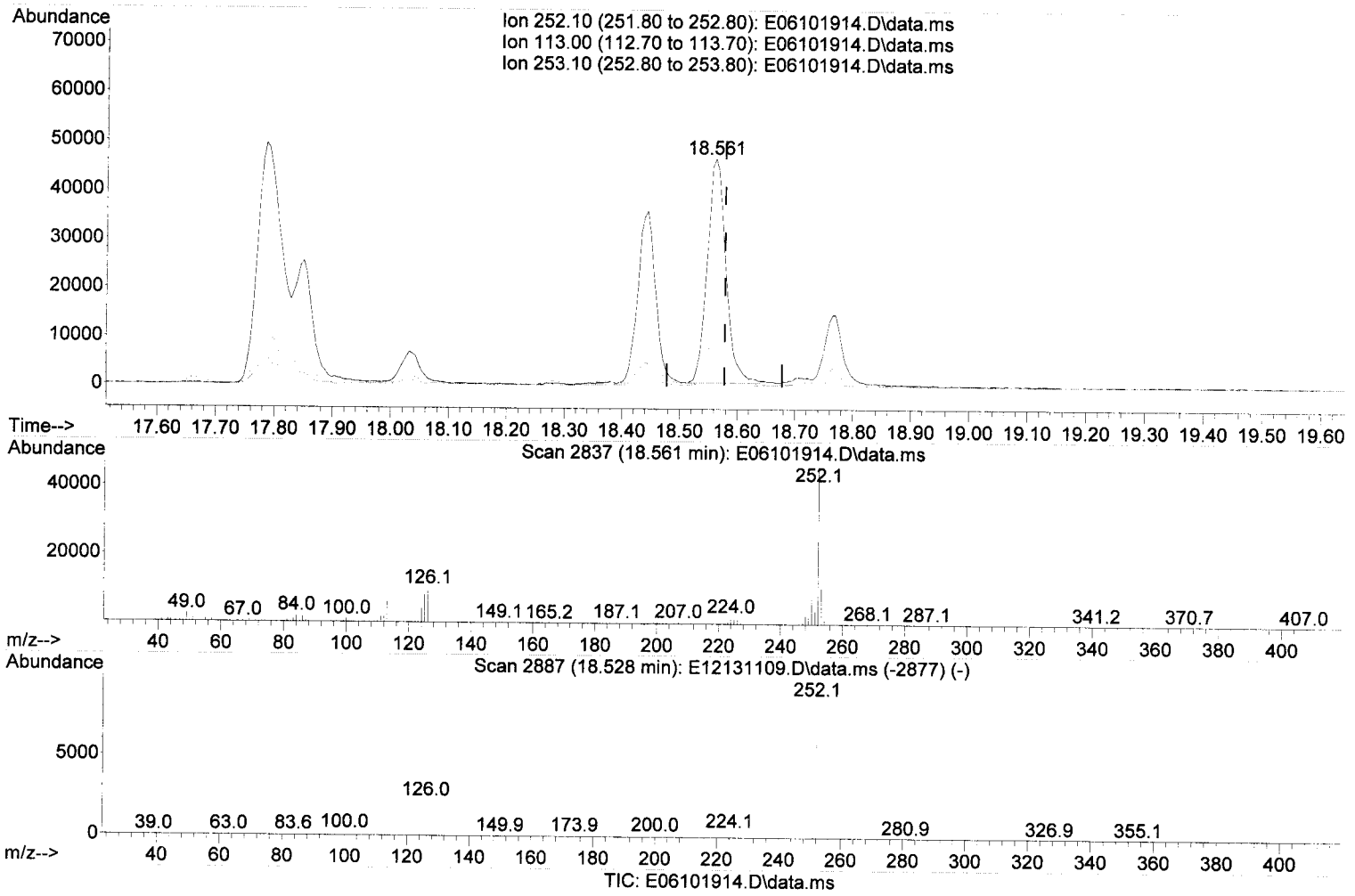
DTH 6/10/19

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	21.80	20.97
253.10	21.80	18.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



(92) Benzo(a)pyrene (T)

18.561min (-0.016) 321.50 ng/ml

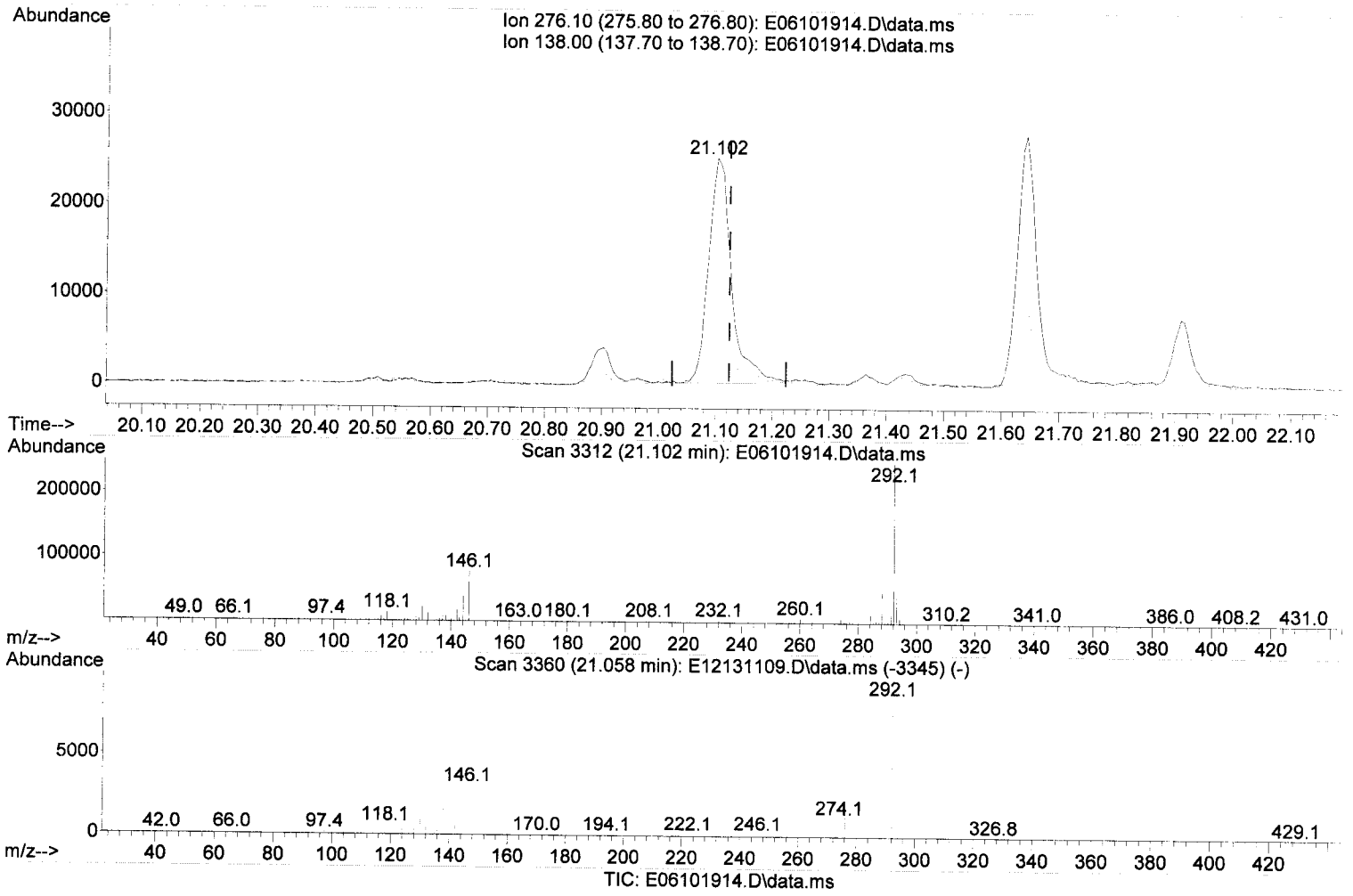
response 103794

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	12.70	13.33
253.10	21.70	22.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



TIC: E06101914.D\data.ms

(95) Indeno(1,2,3-cd)pyrene (T)

21.102min (-0.021) 219.22 ng/ml

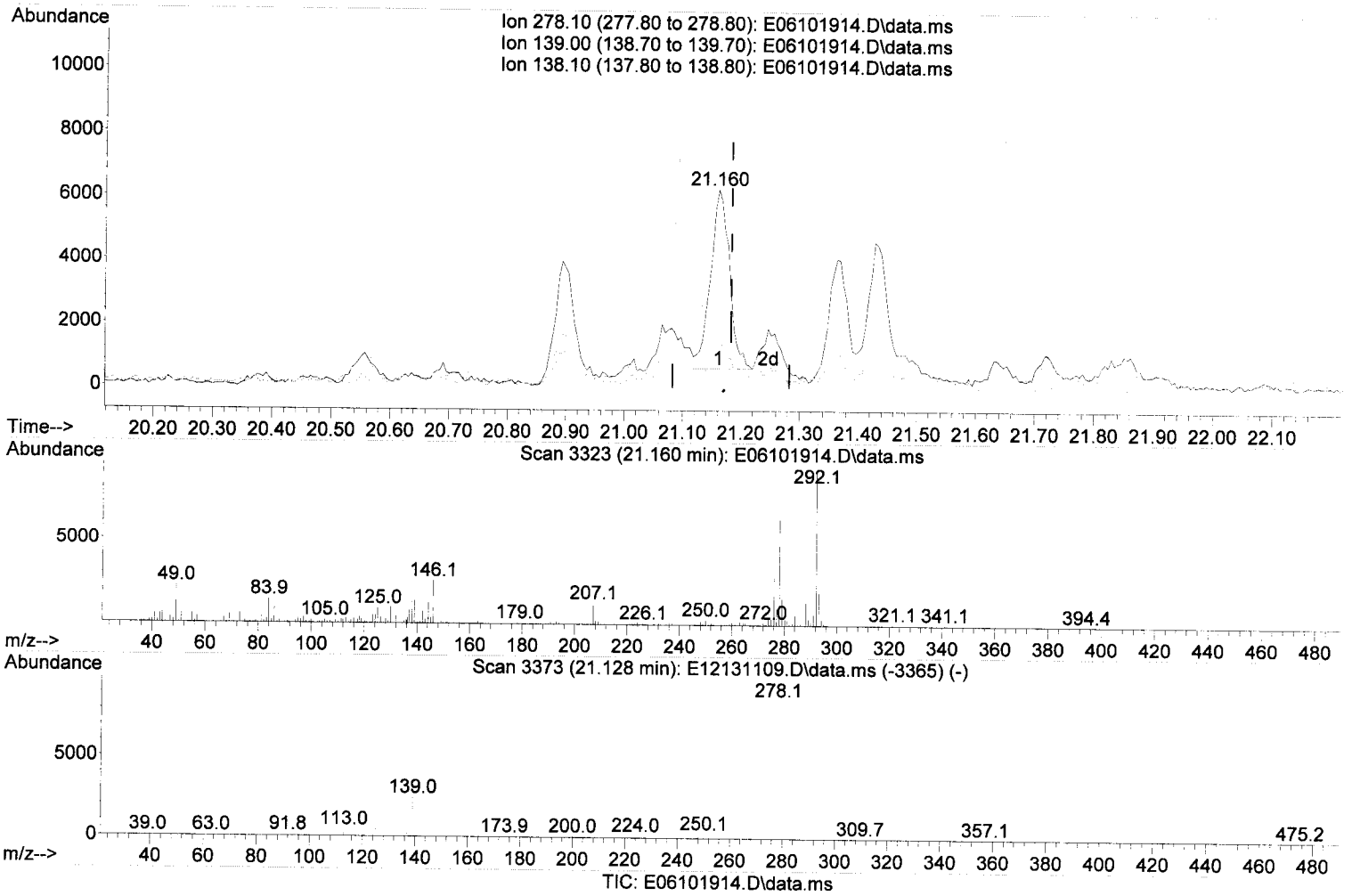
response 69940

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	30.90	31.68
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



(96) Dibenz(a,h)anthracene (T)

21.160min (-0.021) 43.90 ng/ml

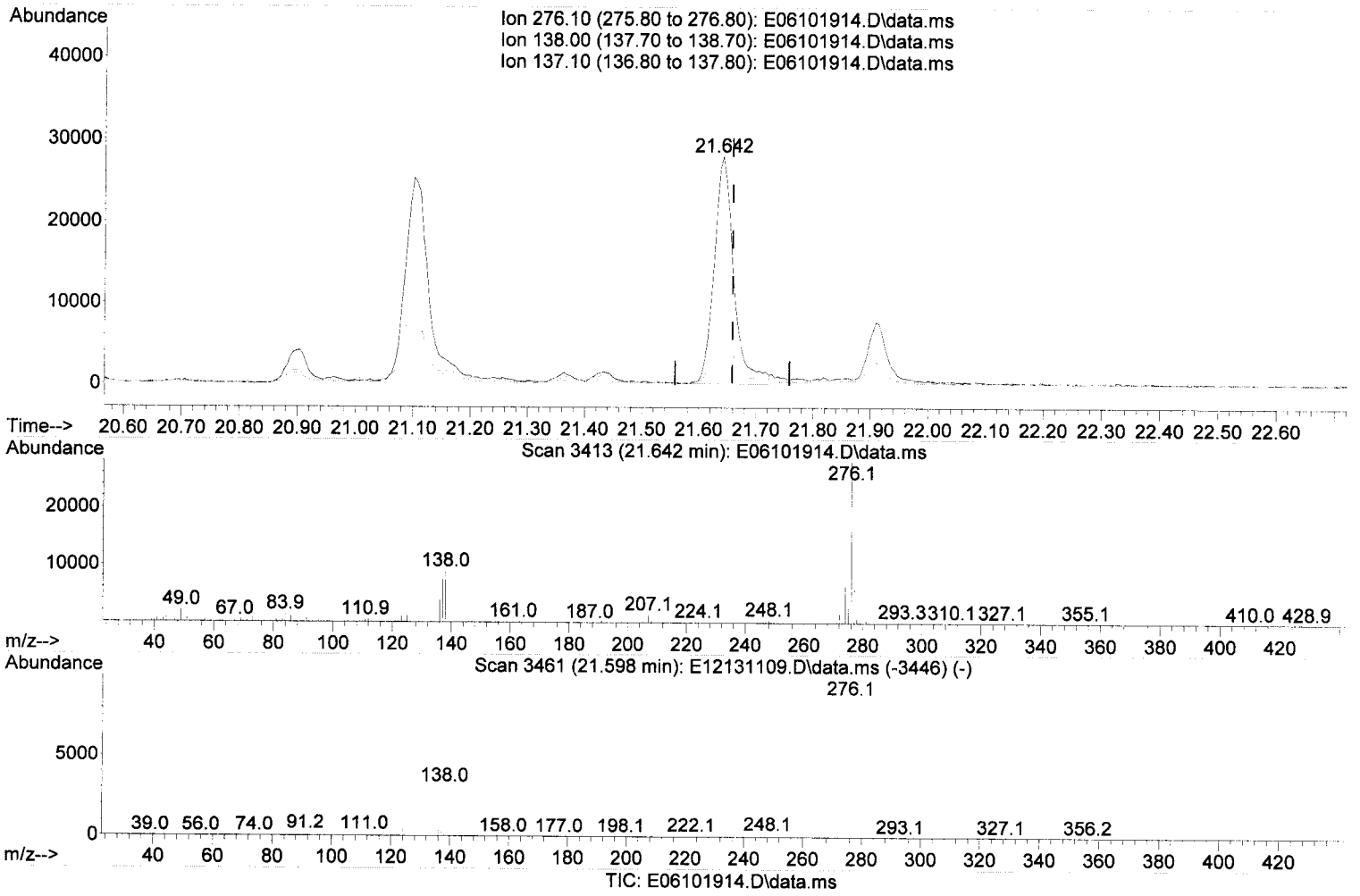
response 12826

Ion	Exp%	Act%
278.10	100.00	100.00
139.00	25.60	21.92
138.10	17.70	24.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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



TIC: E06101914.D\data.ms

(97) Benzo(g,h,i)perylene (T)

21.642min (-0.016) 213.18 ng/ml

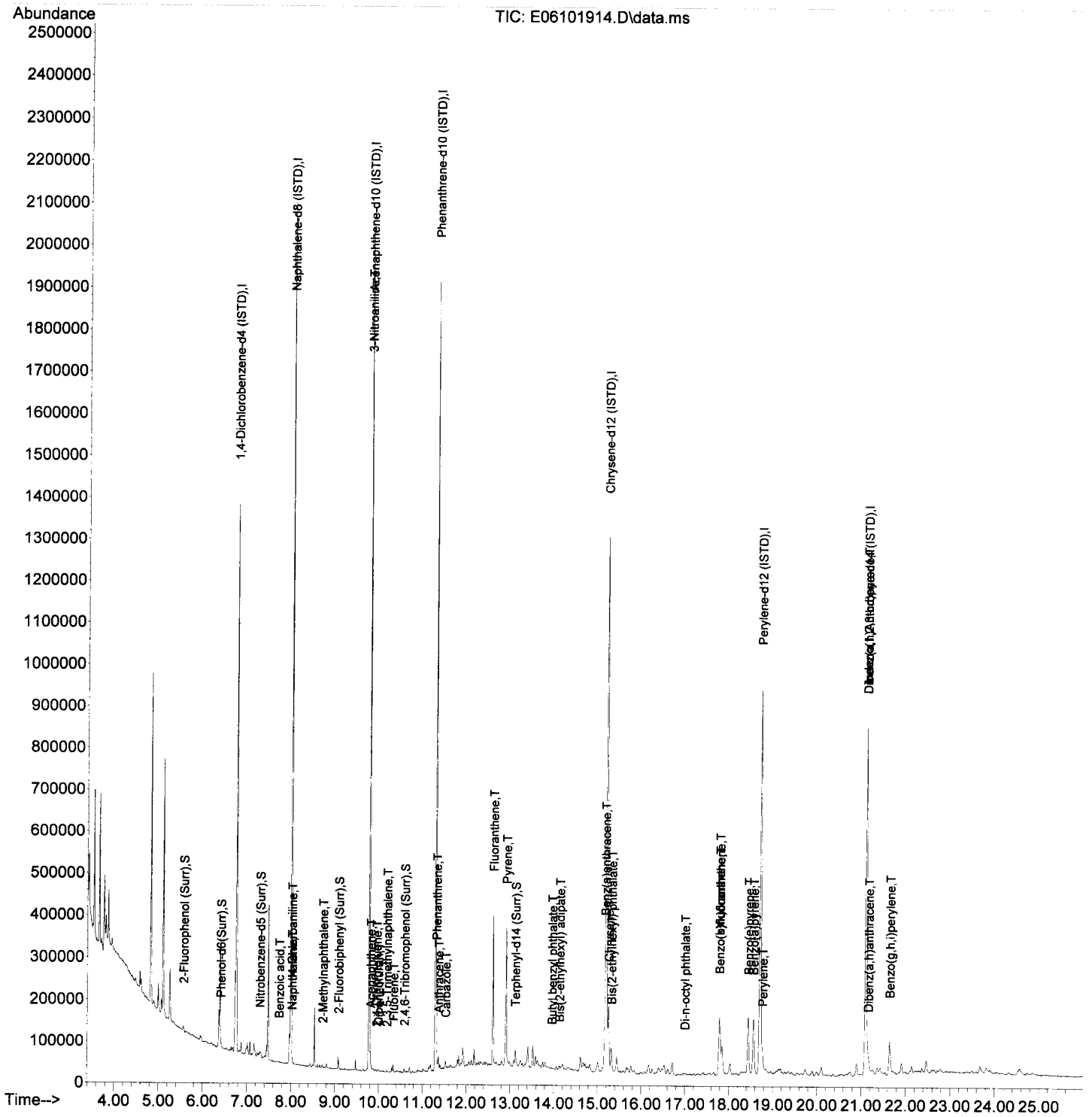
response 66957

Ion	Exp%	Act%
276.10	100.00	100.00
138.00	45.90	31.80
137.10	39.00	26.45
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\2019-06\9F10028\
Data File : E06101914.D
Acq On : 10 Jun 2019 4:04 pm
Operator : JK/ AMS /DTH
Sample : A9F0035-14@40
Misc : 40x, 8270D LL PAH
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV5_AQUISITION.M

Quant Time: Jun 10 16:43:25 2019
Quant Method : C:\msdchem\1\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
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

A 9A3103

1/31/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301914.D
2	50	50	2000	C:\msdchem\1\DATA\2019-01\9A30046\E01301915.D
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

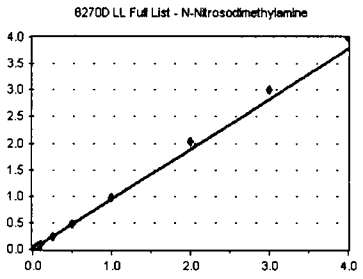
Element Calibration Review Sheet

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**

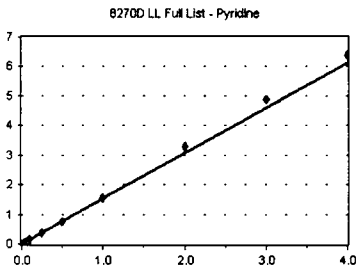


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2349	0.878	4.40
9A30046-CAL2	50	5969	0.849	4.41
9A30046-CAL3	100	12079	0.880	4.40
9A30046-CAL4	200	26607	0.915	4.39
9A30046-CAL5	500	68738	0.975	4.39
9A30046-CAL6	1000	136572	0.954	4.39
9A30046-CAL7	2000	276378	0.976	4.38
9A30046-CAL8	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**

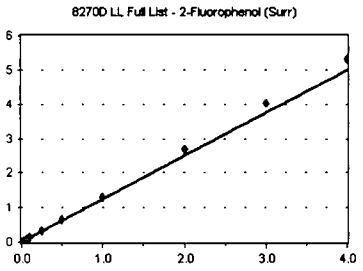


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~2510~~	~~0.938~~	~~4.47~~
9A30046-CAL2	50	9139	1.300	4.46
9A30046-CAL3	100	19576	1.427	4.45
9A30046-CAL4	200	42897	1.475	4.44
9A30046-CAL5	500	111106	1.575	4.43
9A30046-CAL6	1000	220078	1.537	4.43
9A30046-CAL7	2000	442924	1.564	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**

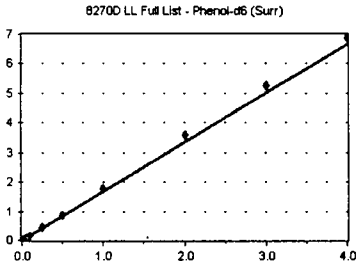


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2703	1.010	5.63
9A30046-CAL2	50	7768	1.105	5.63
9A30046-CAL3	100	16374	1.193	5.63
9A30046-CAL4	200	35753	1.229	5.63
9A30046-CAL5	500	92637	1.313	5.63
9A30046-CAL6	1000	186079	1.299	5.63
9A30046-CAL7	2000	365609	1.291	5.63
9A30046-CAL8	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**

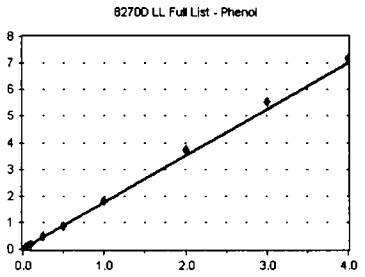
Element Calibration Review Sheet

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**

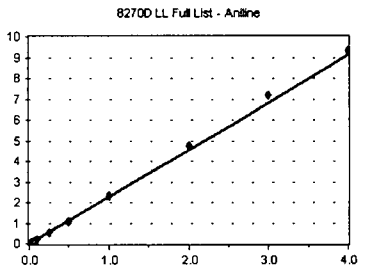


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3623	1.353	6.49
9A30046-CAL2	50	11772	1.675	6.49
9A30046-CAL3	100	24600	1.793	6.48
9A30046-CAL4	200	50967	1.752	6.48
9A30046-CAL5	500	128306	1.819	6.48
9A30046-CAL6	1000	252632	1.764	6.49
9A30046-CAL7	2000	512010	1.808	6.49
9A30046-CAL8	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**

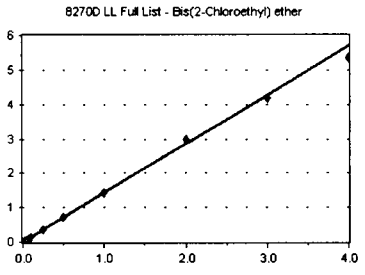


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~4076~~	~~1.523~~	~~6.53~~
9A30046-CAL2	50	15128	2.152	6.53
9A30046-CAL3	100	30756	2.242	6.53
9A30046-CAL4	200	63650	2.188	6.53
9A30046-CAL5	500	159299	2.259	6.53
9A30046-CAL6	1000	316926	2.213	6.53
9A30046-CAL7	2000	658664	2.326	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**

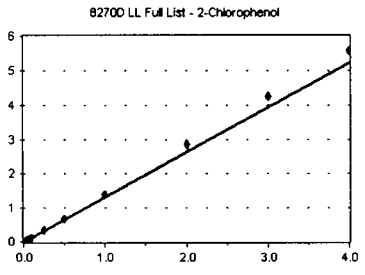


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3961	1.480	6.58
9A30046-CAL2	50	9806	1.395	6.58
9A30046-CAL3	100	18886	1.377	6.58
9A30046-CAL4	200	42294	1.454	6.58
9A30046-CAL5	500	105210	1.492	6.58
9A30046-CAL6	1000	205585	1.435	6.58
9A30046-CAL7	2000	405853	1.433	6.58
9A30046-CAL8	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**

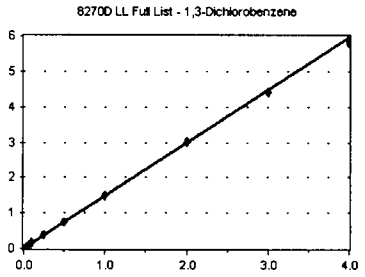
Element Calibration Review Sheet

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**

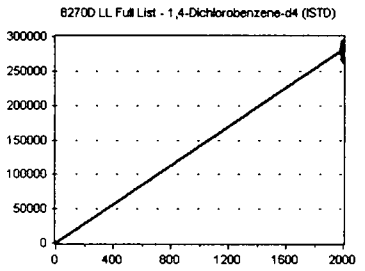


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3951	1.476	6.80
9A30046-CAL2	50	10651	1.515	6.80
9A30046-CAL3	100	20846	1.519	6.80
9A30046-CAL4	200	44104	1.516	6.79
9A30046-CAL5	500	108871	1.544	6.79
9A30046-CAL6	1000	212750	1.485	6.80
9A30046-CAL7	2000	418520	1.478	6.80
9A30046-CAL8	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**

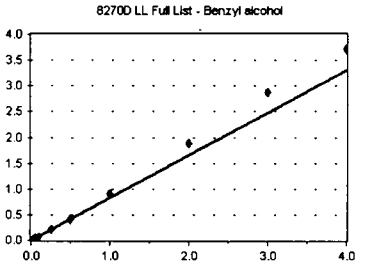


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3880	1.449	6.86
9A30046-CAL2	50	10515	1.496	6.86
9A30046-CAL3	100	21382	1.558	6.86
9A30046-CAL4	200	44829	1.541	6.86
9A30046-CAL5	500	111060	1.575	6.86
9A30046-CAL6	1000	215651	1.506	6.86
9A30046-CAL7	2000	426556	1.506	6.86
9A30046-CAL8	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**

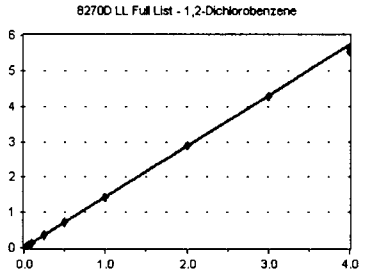
Element Calibration Review Sheet

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**

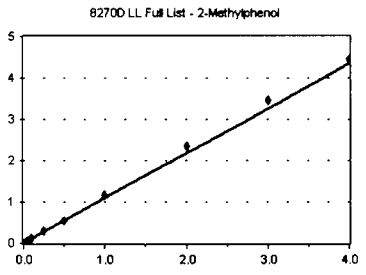


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	3694	1.380	7.01
9A30046-CAL2	50	10083	1.434	7.01
9A30046-CAL3	100	20256	1.476	7.01
9A30046-CAL4	200	42117	1.448	7.01
9A30046-CAL5	500	104161	1.477	7.01
9A30046-CAL6	1000	203885	1.424	7.01
9A30046-CAL7	2000	401451	1.418	7.01
9A30046-CAL8	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**

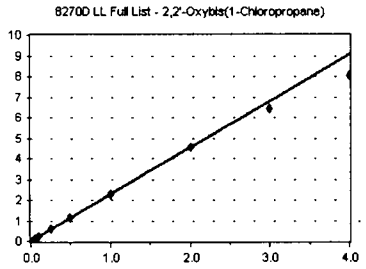


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2376	0.888	7.07
9A30046-CAL2	50	6847	0.974	7.07
9A30046-CAL3	100	14811	1.080	7.07
9A30046-CAL4	200	31237	1.074	7.06
9A30046-CAL5	500	81540	1.156	7.07
9A30046-CAL6	1000	158539	1.107	7.07
9A30046-CAL7	2000	326863	1.154	7.07
9A30046-CAL8	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**

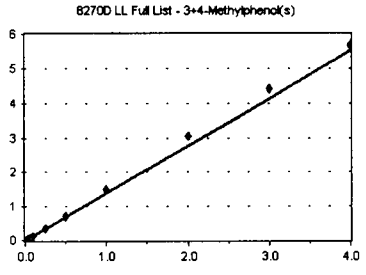


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5888	2.200	7.10
9A30046-CAL2	50	16784	2.388	7.10
9A30046-CAL3	100	32803	2.391	7.09
9A30046-CAL4	200	67804	2.331	7.09
9A30046-CAL5	500	168498	2.389	7.09
9A30046-CAL6	1000	325929	2.276	7.10
9A30046-CAL7	2000	642111	2.268	7.10
9A30046-CAL8	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**

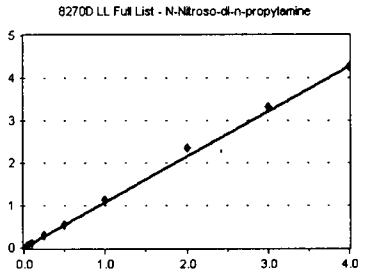
Element Calibration Review Sheet

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**

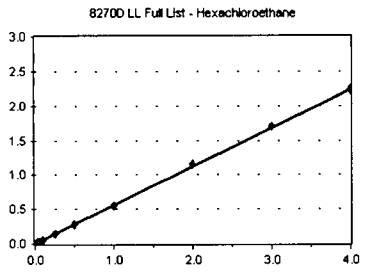


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2415	0.902	7.22
9A30046-CAL2	50	6849	0.974	7.22
9A30046-CAL3	100	14289	1.041	7.22
9A30046-CAL4	200	30932	1.063	7.22
9A30046-CAL5	500	81082	1.150	7.22
9A30046-CAL6	1000	155529	1.086	7.22
9A30046-CAL7	2000	323691	1.143	7.23
9A30046-CAL8	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**

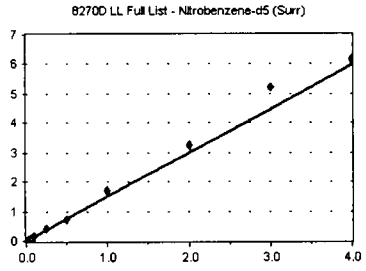


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1366	0.510	7.35
9A30046-CAL2	50	3855	0.548	7.35
9A30046-CAL3	100	7837	0.571	7.35
9A30046-CAL4	200	16252	0.559	7.35
9A30046-CAL5	500	40316	0.572	7.35
9A30046-CAL6	1000	80048	0.559	7.35
9A30046-CAL7	2000	158301	0.559	7.35
9A30046-CAL8	4000	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**

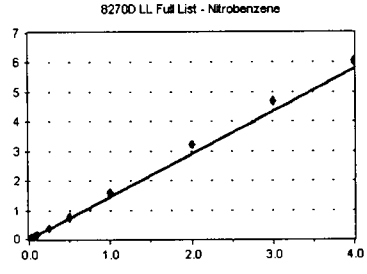


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3003~~	~~1.122~~	~~7.38~~
9A30046-CAL2	50	7789	1.108	7.38
9A30046-CAL3	100	17308	1.262	7.38
9A30046-CAL4	200	38942	1.339	7.38
9A30046-CAL5	500	116738	1.655	7.38
9A30046-CAL6	1000	210602	1.471	7.38
9A30046-CAL7	2000	486300	1.717	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**

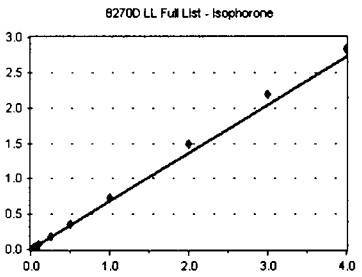
Element Calibration Review Sheet

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**

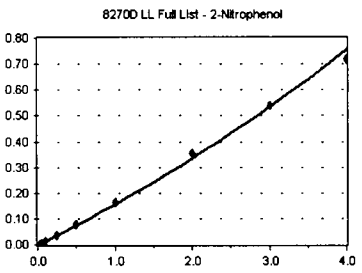


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5446	0.516	7.63
9A30046-CAL2	50	16770	0.628	7.63
9A30046-CAL3	100	35464	0.650	7.62
9A30046-CAL4	200	76306	0.676	7.62
9A30046-CAL5	500	203487	0.727	7.62
9A30046-CAL6	1000	391987	0.715	7.63
9A30046-CAL7	2000	818603	0.727	7.63
9A30046-CAL8	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**

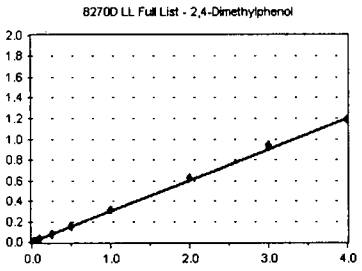


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~775~~	~~0.073~~	~~7.71~~
9A30046-CAL2	50	2288	0.086	7.71
9A30046-CAL3	100	5408	9.914	7.71
9A30046-CAL4	200	12965	0.115	7.71
9A30046-CAL5	500	40651	0.145	7.71
9A30046-CAL6	1000	83980	0.153	7.71
9A30046-CAL7	2000	184428	0.164	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**

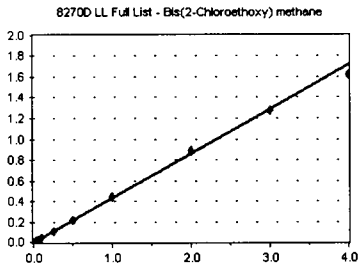


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~2085~~	~~0.197~~	~~7.74~~
9A30046-CAL2	50	7337	0.275	7.74
9A30046-CAL3	100	15179	0.278	7.74
9A30046-CAL4	200	32468	0.288	7.74
9A30046-CAL5	500	87099	0.311	7.74
9A30046-CAL6	1000	168017	0.307	7.74
9A30046-CAL7	2000	352518	0.313	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**

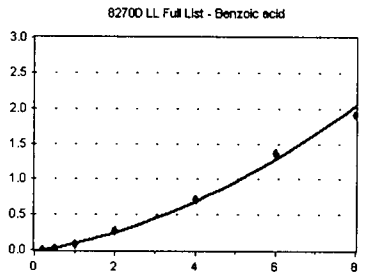
Element Calibration Review Sheet

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**

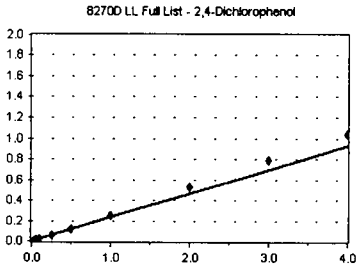


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~40~~	~~69~~	~~3.267~~	~~7.85~~
~~9A30046-CAL2~~	~~100~~	~~56~~	~~1.048~~	~~7.82~~
~~9A30046-CAL3~~	~~200~~	~~308~~	~~2.823~~	~~7.82~~
9A30046-CAL4	400	2001	8.862	7.77
9A30046-CAL5	1000	24058	0.043	7.79
9A30046-CAL6	2000	97527	8.897	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**

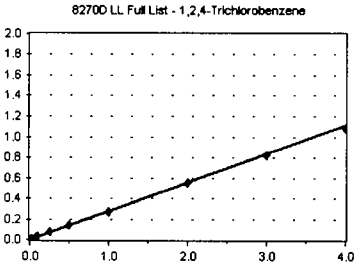


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~1557~~	~~0.147~~	~~7.95~~
9A30046-CAL2	50	4758	0.178	7.95
9A30046-CAL3	100	10325	0.189	7.95
9A30046-CAL4	200	23291	0.206	7.94
9A30046-CAL5	500	66479	0.238	7.95
9A30046-CAL6	1000	129436	0.236	7.95
9A30046-CAL7	2000	283710	0.252	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**

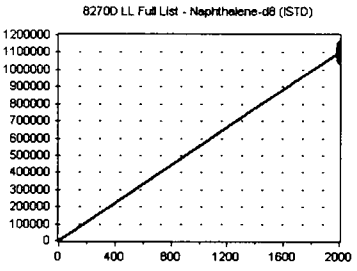


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2751	0.261	8.04
9A30046-CAL2	50	7910	0.296	8.04
9A30046-CAL3	100	15521	0.285	8.04
9A30046-CAL4	200	31882	0.282	8.04
9A30046-CAL5	500	78967	0.282	8.04
9A30046-CAL6	1000	151142	0.276	8.04
9A30046-CAL7	2000	307169	0.273	8.04
9A30046-CAL8	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**

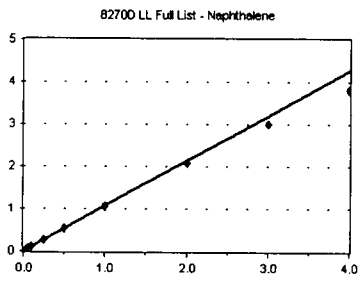
Element Calibration Review Sheet

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**

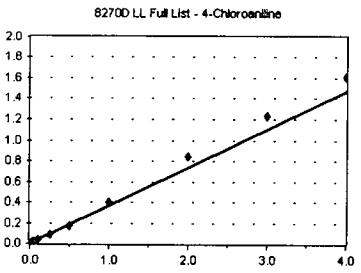


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	11917	1.129	8.12
9A30046-CAL2	50	30779	1.152	8.12
9A30046-CAL3	100	59651	1.094	8.12
9A30046-CAL4	200	122429	1.084	8.12
9A30046-CAL5	500	307927	1.101	8.12
9A30046-CAL6	1000	582708	1.063	8.12
9A30046-CAL7	2000	1180925	1.049	8.12
9A30046-CAL8	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**

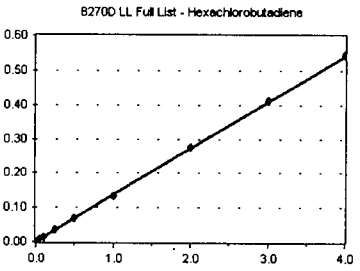


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	2975	0.282	8.16
9A30046-CAL2	50	8890	0.333	8.16
9A30046-CAL3	100	19347	0.355	8.16
9A30046-CAL4	200	39584	0.351	8.16
9A30046-CAL5	500	102663	0.367	8.16
9A30046-CAL6	1000	195519	0.357	8.16
9A30046-CAL7	2000	447643	0.398	8.16
9A30046-CAL8	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**

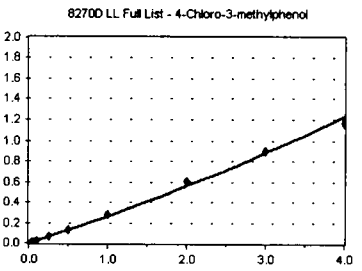


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1290	0.122	8.24
9A30046-CAL2	50	3731	0.140	8.24
9A30046-CAL3	100	7485	0.137	8.24
9A30046-CAL4	200	15189	0.135	8.24
9A30046-CAL5	500	38478	0.138	8.24
9A30046-CAL6	1000	76109	0.139	8.24
9A30046-CAL7	2000	151477	0.135	8.24
9A30046-CAL8	4000	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**

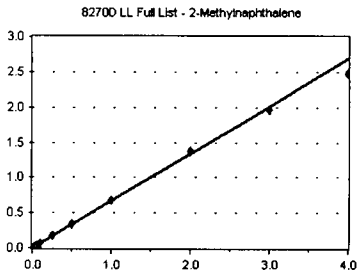
Element Calibration Review Sheet

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**

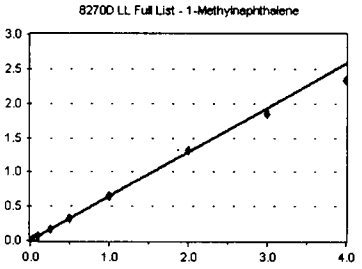


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6941	0.657	8.82
9A30046-CAL2	50	18189	0.681	8.82
9A30046-CAL3	100	36689	0.673	8.81
9A30046-CAL4	200	76316	0.676	8.81
9A30046-CAL5	500	195835	0.700	8.81
9A30046-CAL6	1000	368916	0.673	8.82
9A30046-CAL7	2000	771341	0.685	8.82
9A30046-CAL8	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**

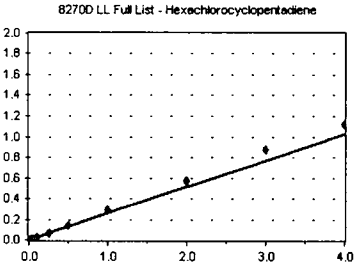


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6831	0.647	8.91
9A30046-CAL2	50	17571	0.658	8.92
9A30046-CAL3	100	35408	0.649	8.91
9A30046-CAL4	200	72918	0.646	8.91
9A30046-CAL5	500	188716	0.674	8.91
9A30046-CAL6	1000	353069	0.644	8.92
9A30046-CAL7	2000	730943	0.649	8.92
9A30046-CAL8	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**

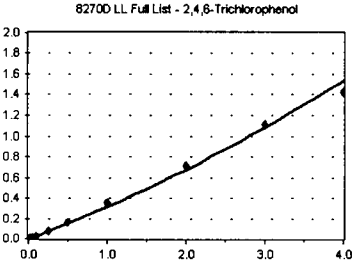


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	899	0.185	8.98
9A30046-CAL2	50	2439	0.208	8.98
9A30046-CAL3	100	5330	0.225	8.98
9A30046-CAL4	200	12226	0.246	8.98
9A30046-CAL5	500	34778	0.273	8.98
9A30046-CAL6	1000	68561	0.278	8.98
9A30046-CAL7	2000	153915	0.291	8.98
9A30046-CAL8	4000	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**

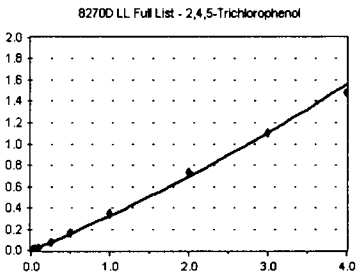
Element Calibration Review Sheet

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**

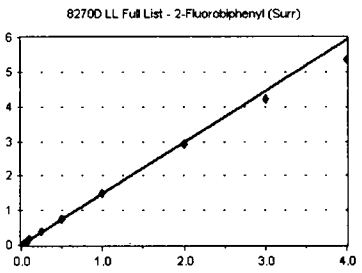


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	702	0.145	9.14
9A30046-CAL2	50	2609	0.223	9.13
9A30046-CAL3	100	6051	0.255	9.13
9A30046-CAL4	200	12964	0.260	9.13
9A30046-CAL5	500	40483	0.318	9.13
9A30046-CAL6	1000	79865	0.324	9.13
9A30046-CAL7	2000	183508	0.347	9.13
9A30046-CAL8	4000	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**

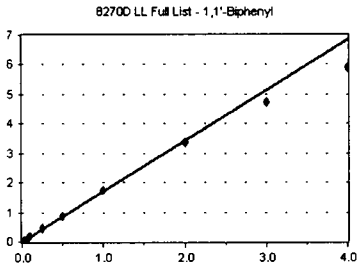


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7112	1.465	9.18
9A30046-CAL2	50	18089	1.543	9.18
9A30046-CAL3	100	36884	1.556	9.18
9A30046-CAL4	200	77186	1.550	9.18
9A30046-CAL5	500	198705	1.559	9.18
9A30046-CAL6	1000	371894	1.507	9.18
9A30046-CAL7	2000	786718	1.490	9.18
9A30046-CAL8	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**

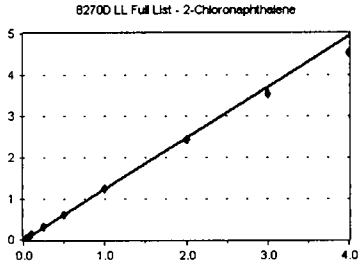


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	8419	1.734	9.28
9A30046-CAL2	50	21089	1.799	9.28
9A30046-CAL3	100	42772	1.804	9.28
9A30046-CAL4	200	88511	1.778	9.28
9A30046-CAL5	500	230563	1.809	9.28
9A30046-CAL6	1000	427889	1.734	9.28
9A30046-CAL7	2000	909543	1.722	9.29
9A30046-CAL8	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**

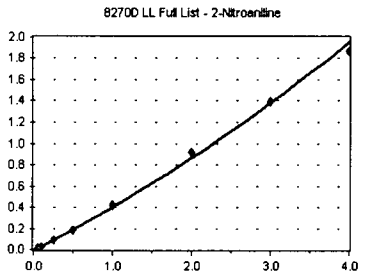
Element Calibration Review Sheet

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**

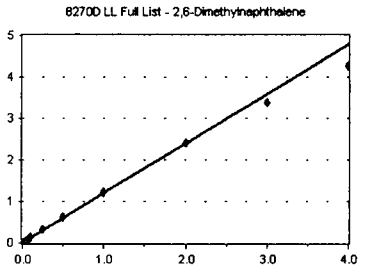


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~663~~	~~0.137~~	~~9.40~~
~~9A30046-CAL2~~	~~50~~	~~2037~~	~~0.174~~	~~9.40~~
9A30046-CAL3	100	4661	0.197	9.40
9A30046-CAL4	200	12071	0.242	9.40
9A30046-CAL5	500	43914	0.344	9.40
9A30046-CAL6	1000	89229	0.362	9.40
9A30046-CAL7	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**

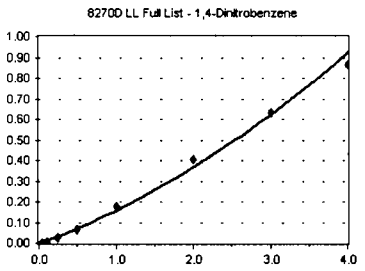


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5544	1.142	9.44
9A30046-CAL2	50	14256	1.216	9.45
9A30046-CAL3	100	29357	1.238	9.44
9A30046-CAL4	200	61710	1.240	9.44
9A30046-CAL5	500	161748	1.269	9.44
9A30046-CAL6	1000	304453	1.234	9.45
9A30046-CAL7	2000	646334	1.224	9.45
9A30046-CAL8	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**

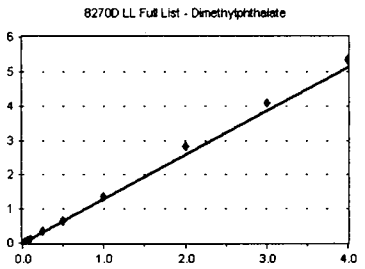


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~197~~	~~4.058~~	~~9.53~~
~~9A30046-CAL2~~	~~50~~	~~523~~	~~4.462~~	~~9.53~~
9A30046-CAL3	100	1254	5.289	9.53
9A30046-CAL4	200	3705	7.442	9.53
9A30046-CAL5	500	15009	0.118	9.53
9A30046-CAL6	1000	32964	0.134	9.53
9A30046-CAL7	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**

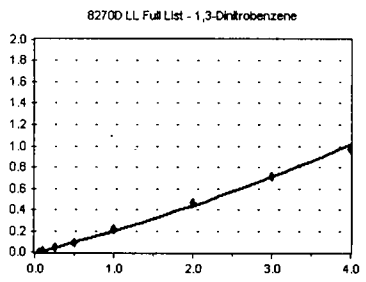
Element Calibration Review Sheet

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**

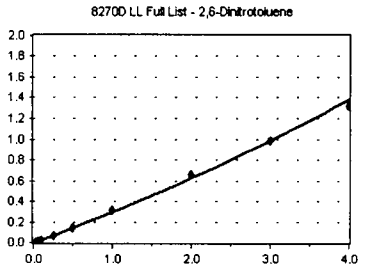


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~245~~	~~5.047~~	~~9.61~~
~~9A30046-CAL2~~	~~50~~	~~748~~	~~6.381~~	~~9.61~~
9A30046-CAL3	100	1734	7.313	9.61
9A30046-CAL4	200	5323	0.107	9.61
9A30046-CAL5	500	21039	0.165	9.61
9A30046-CAL6	1000	43195	0.175	9.61
9A30046-CAL7	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**

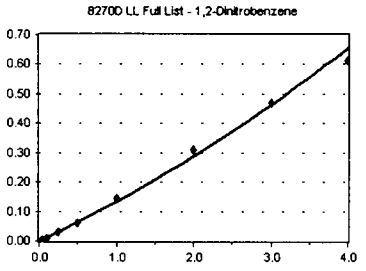


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~434~~	~~8.941~~	~~9.64~~
9A30046-CAL2	50	1439	0.123	9.64
9A30046-CAL3	100	3823	0.161	9.64
9A30046-CAL4	200	10458	0.210	9.64
9A30046-CAL5	500	35146	0.276	9.64
9A30046-CAL6	1000	69388	0.281	9.65
9A30046-CAL7	2000	164544	0.312	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**

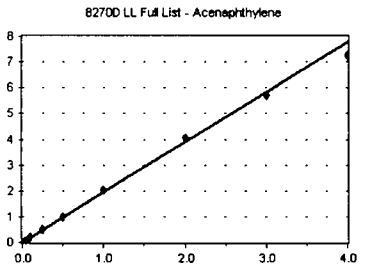


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~203~~	~~4.182~~	~~9.70~~
9A30046-CAL2	50	546	4.658	9.70
9A30046-CAL3	100	1698	7.161	9.70
9A30046-CAL4	200	4275	8.587	9.70
9A30046-CAL5	500	15598	0.122	9.70
9A30046-CAL6	1000	30555	0.124	9.70
9A30046-CAL7	2000	76738	0.145	9.71
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**

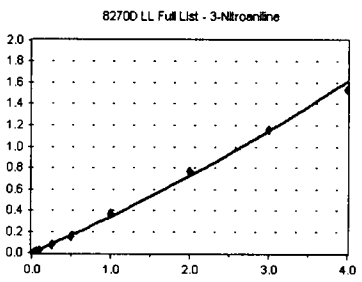
Element Calibration Review Sheet

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**

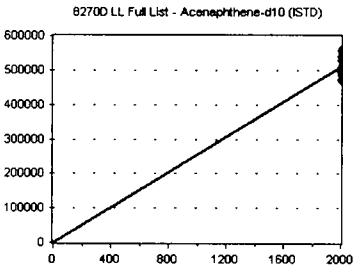


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~572~~	~~0.118~~	~~9.82~~
9A30046-CAL2	50	1785	0.152	9.82
9A30046-CAL3	100	4826	0.204	9.82
9A30046-CAL4	200	12489	0.251	9.82
9A30046-CAL5	500	40839	0.320	9.82
9A30046-CAL6	1000	75940	0.308	9.82
9A30046-CAL7	2000	193626	0.367	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**

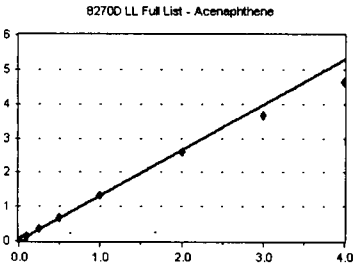


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	485404	242.702	9.88
9A30046-CAL2	2000	468864	234.432	9.88
9A30046-CAL3	2000	474233	237.117	9.88
9A30046-CAL4	2000	497817	248.908	9.88
9A30046-CAL5	2000	509897	254.948	9.88
9A30046-CAL6	2000	493423	246.712	9.88
9A30046-CAL7	2000	528163	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**

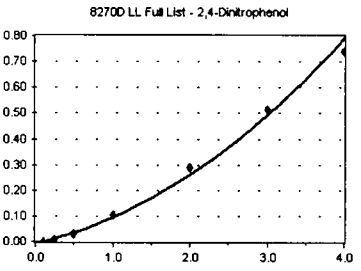


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6866	1.414	9.91
9A30046-CAL2	50	15975	1.363	9.91
9A30046-CAL3	100	32436	1.368	9.91
9A30046-CAL4	200	67960	1.365	9.91
9A30046-CAL5	500	176086	1.381	9.91
9A30046-CAL6	1000	328378	1.331	9.91
9A30046-CAL7	2000	694436	1.315	9.91
9A30046-CAL8	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

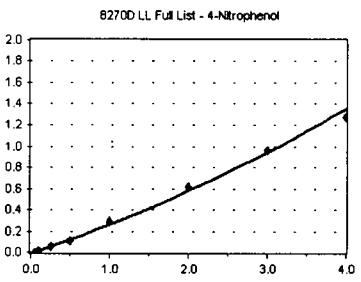
AVE RF **0.102** RF RSD **66.15** AVE RT **9.93**

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

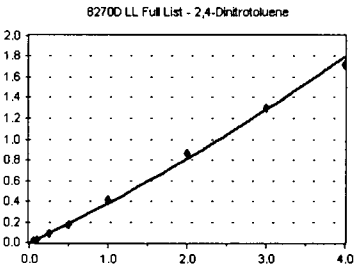


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

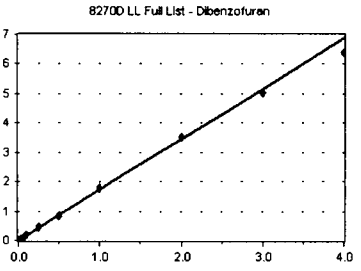


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

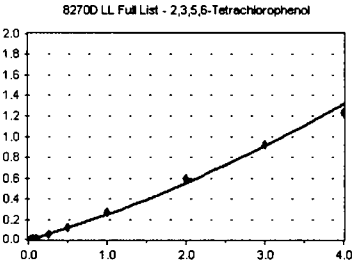


Curve Fit: **AVERAGE RF**

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**

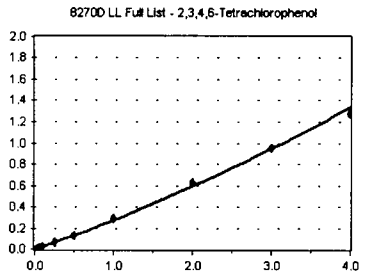
Element Calibration Review Sheet

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**

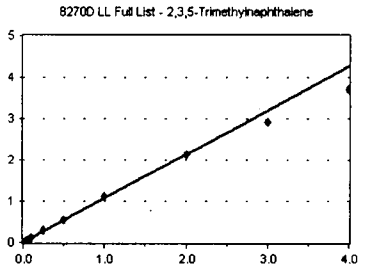


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~529~~	~~0.109~~	~~10.21~~
9A30046-CAL2	50	1812	0.155	10.21
9A30046-CAL3	100	4318	0.182	10.21
9A30046-CAL4	200	9650	0.194	10.21
9A30046-CAL5	500	33782	0.265	10.21
9A30046-CAL6	1000	64617	0.262	10.21
9A30046-CAL7	2000	156617	0.297	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**

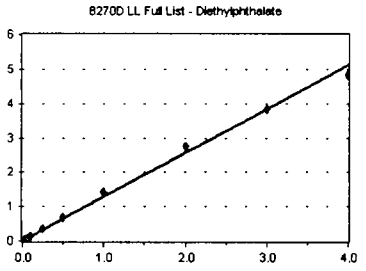


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5065	1.043	10.29
9A30046-CAL2	50	12539	1.070	10.29
9A30046-CAL3	100	25788	1.088	10.29
9A30046-CAL4	200	54877	1.102	10.29
9A30046-CAL5	500	148844	1.168	10.29
9A30046-CAL6	1000	270700	1.097	10.30
9A30046-CAL7	2000	590742	1.118	10.30
9A30046-CAL8	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**

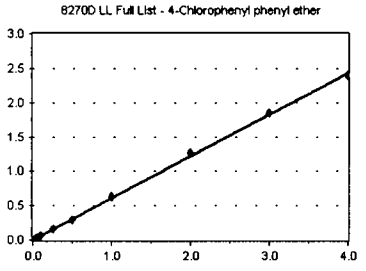


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5519	1.137	10.29
9A30046-CAL2	50	13590	1.159	10.30
9A30046-CAL3	100	27965	1.179	10.29
9A30046-CAL4	200	64179	1.289	10.29
9A30046-CAL5	500	182306	1.430	10.30
9A30046-CAL6	1000	329843	1.337	10.30
9A30046-CAL7	2000	754784	1.429	10.30
9A30046-CAL8	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**

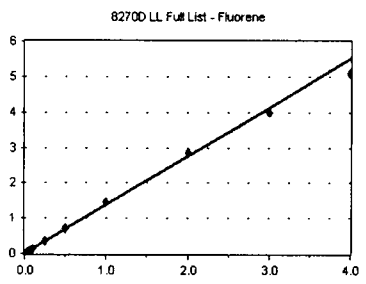
Element Calibration Review Sheet

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**

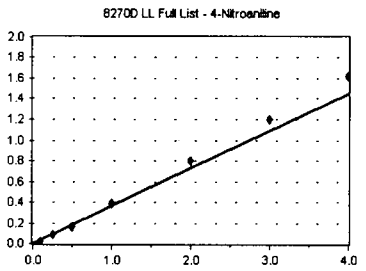


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6383	1.315	10.44
9A30046-CAL2	50	15560	1.327	10.44
9A30046-CAL3	100	32279	1.361	10.44
9A30046-CAL4	200	69347	1.393	10.44
9A30046-CAL5	500	189023	1.483	10.44
9A30046-CAL6	1000	344351	1.396	10.44
9A30046-CAL7	2000	765816	1.450	10.44
9A30046-CAL8	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**

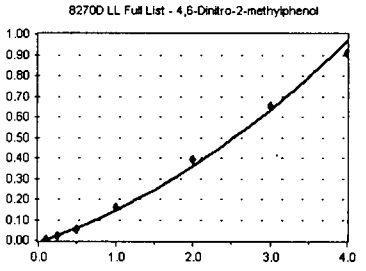


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~713~~	~~0.147~~	~~10.44~~
~~9A30046-CAL2~~	~~50~~	~~2087~~	~~0.178~~	~~10.44~~
~~9A30046-CAL3~~	~~100~~	~~5107~~	~~0.215~~	~~10.44~~
9A30046-CAL4	200	13118	0.264	10.44
9A30046-CAL5	500	45265	0.355	10.44
9A30046-CAL6	1000	79908	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**

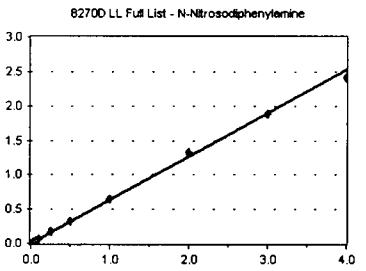


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9A30046-CAL2~~	~~50~~	~~74~~	~~6.313~~	~~10.48~~
~~9A30046-CAL3~~	~~100~~	~~342~~	~~1.442~~	~~10.47~~
9A30046-CAL4	200	1644	3.302	10.47
9A30046-CAL5	500	10218	8.016	10.47
9A30046-CAL6	1000	25579	0.104	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**

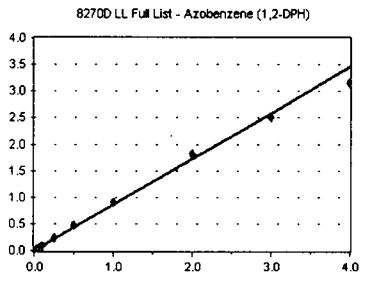
Element Calibration Review Sheet

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**

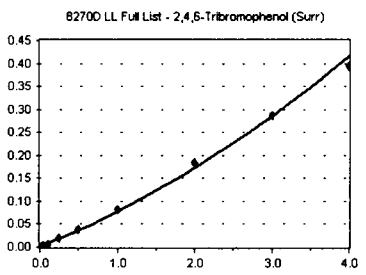


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6350	0.694	10.59
9A30046-CAL2	50	16055	0.817	10.59
9A30046-CAL3	100	34575	0.875	10.59
9A30046-CAL4	200	76986	0.905	10.59
9A30046-CAL5	500	223701	0.957	10.59
9A30046-CAL6	1000	394223	0.938	10.59
9A30046-CAL7	2000	914026	0.917	10.59
9A30046-CAL8	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**

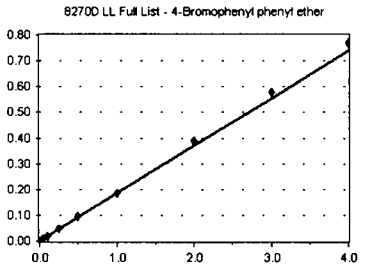


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	229	2.504	10.68
9A30046-CAL2	50	770	0.039	10.68
9A30046-CAL3	100	2028	5.130	10.68
9A30046-CAL4	200	5139	6.038	10.68
9A30046-CAL5	500	17303	7.400	10.68
9A30046-CAL6	1000	33163	7.888	10.68
9A30046-CAL7	2000	82762	8.302	10.68
9A30046-CAL8	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**

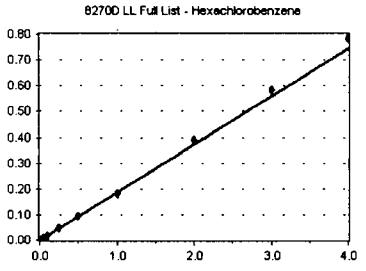


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	1566	0.171	10.93
9A30046-CAL2	50	3436	0.175	10.93
9A30046-CAL3	100	7025	0.178	10.93
9A30046-CAL4	200	15771	0.185	10.93
9A30046-CAL5	500	44122	0.189	10.92
9A30046-CAL6	1000	78242	0.186	10.93
9A30046-CAL7	2000	186018	0.187	10.93
9A30046-CAL8	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**

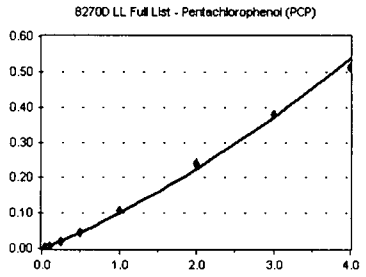
Element Calibration Review Sheet

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**

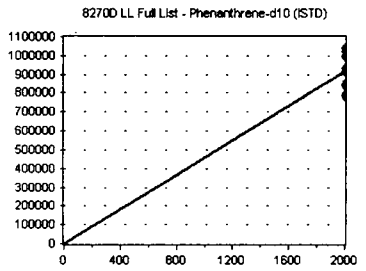


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~315~~	~~3.444~~	~~11.20~~
~~9A30046-CAL2~~	~~50~~	~~571~~	~~0.029~~	~~11.21~~
9A30046-CAL3	100	1341	3.392	11.20
9A30046-CAL4	200	4272	5.019	11.20
9A30046-CAL5	500	18186	7.778	11.20
9A30046-CAL6	1000	38085	9.059	11.20
9A30046-CAL7	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**

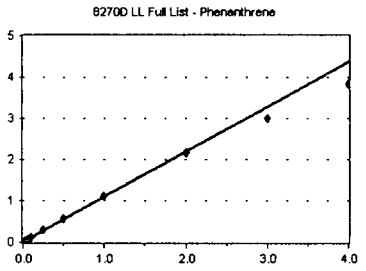


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	914631	457.316	11.40
9A30046-CAL2	2000	786274	393.137	11.40
9A30046-CAL3	2000	790595	395.298	11.40
9A30046-CAL4	2000	851122	425.561	11.40
9A30046-CAL5	2000	935268	467.634	11.40
9A30046-CAL6	2000	840808	420.404	11.40
9A30046-CAL7	2000	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**

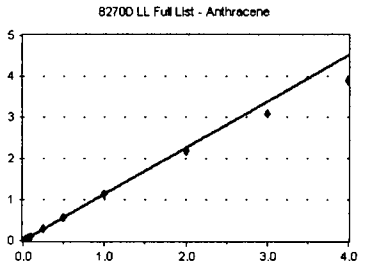


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10388	1.136	11.42
9A30046-CAL2	50	22253	1.132	11.42
9A30046-CAL3	100	45679	1.156	11.42
9A30046-CAL4	200	96988	1.140	11.42
9A30046-CAL5	500	271509	1.161	11.42
9A30046-CAL6	1000	468364	1.114	11.42
9A30046-CAL7	2000	1092838	1.096	11.43
9A30046-CAL8	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**

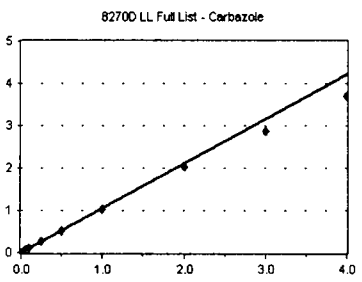
Element Calibration Review Sheet

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**

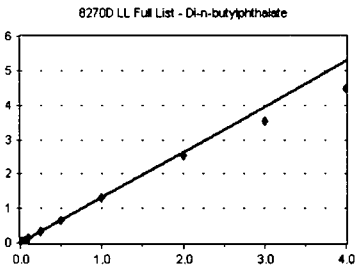


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	11056	1.209	11.63
9A30046-CAL2	50	21647	1.101	11.63
9A30046-CAL3	100	43052	1.089	11.63
9A30046-CAL4	200	91479	1.075	11.63
9A30046-CAL5	500	257322	1.101	11.63
9A30046-CAL6	1000	436227	1.038	11.63
9A30046-CAL7	2000	1032155	1.035	11.63
9A30046-CAL8	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**

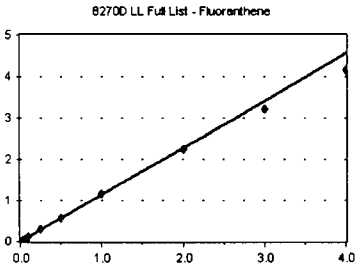


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	15373	1.681	11.97
9A30046-CAL2	50	26968	1.372	11.97
9A30046-CAL3	100	51497	1.303	11.97
9A30046-CAL4	200	111961	1.315	11.97
9A30046-CAL5	500	318442	1.362	11.97
9A30046-CAL6	1000	541942	1.289	11.97
9A30046-CAL7	2000	1296945	1.301	11.97
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**

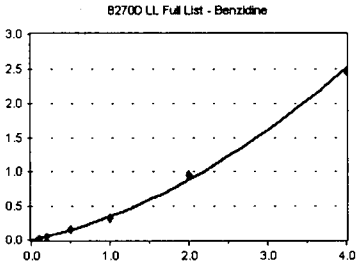


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10781	1.179	12.74
9A30046-CAL2	50	22810	1.160	12.75
9A30046-CAL3	100	45822	1.159	12.74
9A30046-CAL4	200	98210	1.154	12.74
9A30046-CAL5	500	281703	1.205	12.74
9A30046-CAL6	1000	478274	1.138	12.75
9A30046-CAL7	2000	1147170	1.151	12.75
9A30046-CAL8	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**

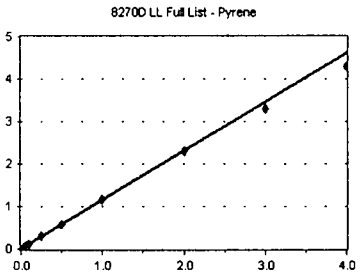
Element Calibration Review Sheet

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**

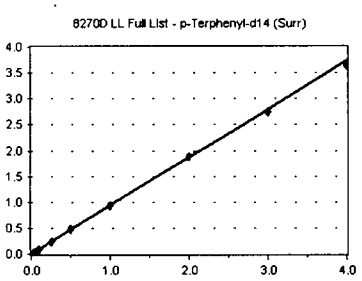


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10777	1.178	13.06
9A30046-CAL2	50	23055	1.173	13.06
9A30046-CAL3	100	46111	1.166	13.06
9A30046-CAL4	200	100024	1.175	13.06
9A30046-CAL5	500	285718	1.222	13.06
9A30046-CAL6	1000	486318	1.157	13.06
9A30046-CAL7	2000	1167359	1.171	13.06
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**

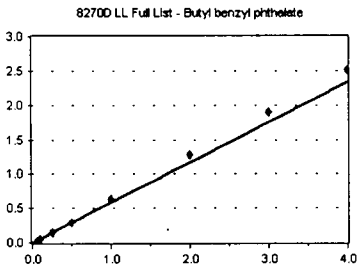


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7570	0.891	13.28
9A30046-CAL2	50	16079	0.926	13.28
9A30046-CAL3	100	32265	0.935	13.28
9A30046-CAL4	200	69836	0.967	13.28
9A30046-CAL5	500	202060	0.963	13.28
9A30046-CAL6	1000	340885	0.964	13.28
9A30046-CAL7	2000	841709	0.932	13.28
9A30046-CAL8	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**

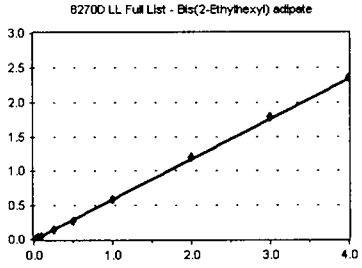


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3108~~	~~0.366~~	~~14.15~~
~~9A30046-CAL2~~	~~50~~	~~7172~~	~~0.413~~	~~14.15~~
9A30046-CAL3	100	14773	0.428	14.16
9A30046-CAL4	200	38485	0.533	14.15
9A30046-CAL5	500	124269	0.592	14.15
9A30046-CAL6	1000	212214	0.600	14.16
9A30046-CAL7	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**

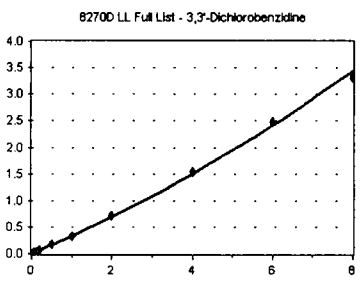
Element Calibration Review Sheet

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**

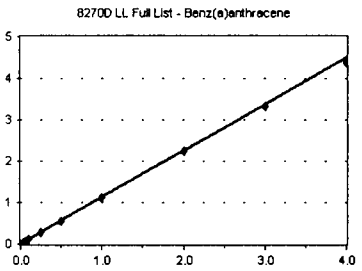


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	40	2805	0.165	15.35
9A30046-CAL2	100	8063	0.232	15.35
9A30046-CAL3	200	18339	0.266	15.34
9A30046-CAL4	400	43713	0.303	15.34
9A30046-CAL5	1000	145270	0.346	15.35
9A30046-CAL6	2000	231650	0.327	15.35
9A30046-CAL7	4000	642844	0.356	15.36
9A30046-CAL8	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**

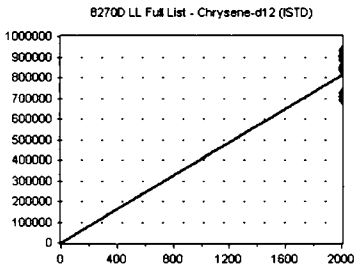


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	10870	1.280	15.39
9A30046-CAL2	50	20129	1.160	15.39
9A30046-CAL3	100	37587	1.089	15.38
9A30046-CAL4	200	79592	1.103	15.38
9A30046-CAL5	500	236770	1.129	15.39
9A30046-CAL6	1000	387630	1.096	15.39
9A30046-CAL7	2000	997082	1.104	15.40
9A30046-CAL8	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**

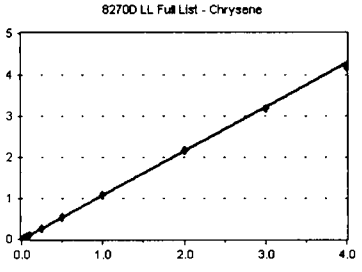


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	849263	424.632	15.42
9A30046-CAL2	2000	694365	347.183	15.41
9A30046-CAL3	2000	690491	345.246	15.41
9A30046-CAL4	2000	721909	360.954	15.41
9A30046-CAL5	2000	839042	419.521	15.42
9A30046-CAL6	2000	707423	353.712	15.42
9A30046-CAL7	2000	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**

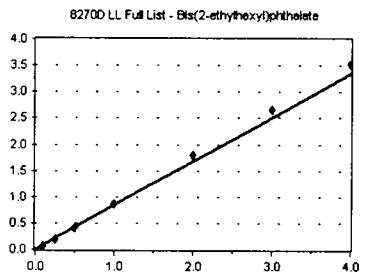
Element Calibration Review Sheet

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**

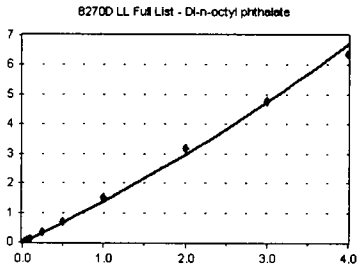


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3944~~	~~0.464~~	~~15.54~~
~~9A30046-CAL2~~	~~50~~	~~8608~~	~~0.496~~	~~15.54~~
~~9A30046-CAL3~~	~~100~~	~~19228~~	~~0.557~~	~~15.55~~
9A30046-CAL4	200	50647	0.702	15.54
9A30046-CAL5	500	168525	0.803	15.54
9A30046-CAL6	1000	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**

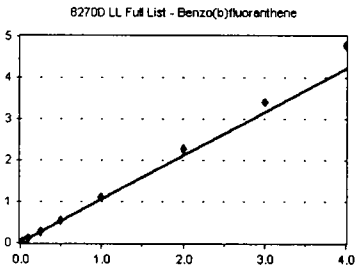


Standard	Concentration	Response	Response Factor	RT
~~9A30046-CAL1~~	~~20~~	~~3881~~	~~0.504~~	~~17.24~~
9A30046-CAL2	50	9748	0.636	17.24
9A30046-CAL3	100	21395	0.699	17.23
9A30046-CAL4	200	63652	0.991	17.23
9A30046-CAL5	500	245753	1.292	17.24
9A30046-CAL6	1000	421456	1.338	17.24
9A30046-CAL7	2000	1248768	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**

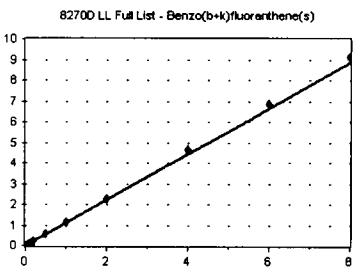


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6730	0.874	18.02
9A30046-CAL2	50	14286	0.932	18.02
9A30046-CAL3	100	29112	0.952	18.02
9A30046-CAL4	200	66187	1.030	18.02
9A30046-CAL5	500	209622	1.102	18.02
9A30046-CAL6	1000	343841	1.091	18.02
9A30046-CAL7	2000	927026	1.116	18.03
9A30046-CAL8	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**

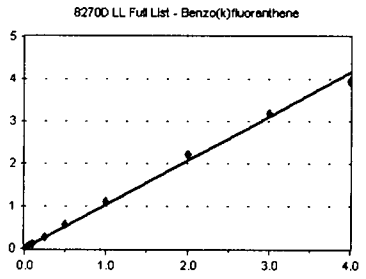
Element Calibration Review Sheet

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**

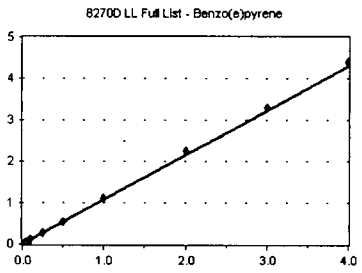


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7026	0.912	18.09
9A30046-CAL2	50	14559	0.950	18.09
9A30046-CAL3	100	29589	0.967	18.08
9A30046-CAL4	200	67887	1.057	18.09
9A30046-CAL5	500	210325	1.106	18.09
9A30046-CAL6	1000	349392	1.109	18.09
9A30046-CAL7	2000	931062	1.121	18.10
9A30046-CAL8	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**

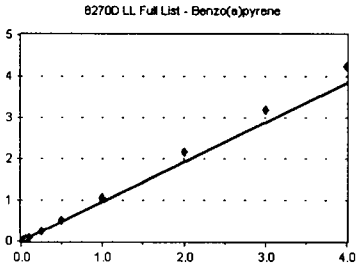


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7648	0.993	18.68
9A30046-CAL2	50	15484	1.010	18.67
9A30046-CAL3	100	31282	1.022	18.67
9A30046-CAL4	200	68515	1.066	18.67
9A30046-CAL5	500	211572	1.112	18.68
9A30046-CAL6	1000	347001	1.101	18.68
9A30046-CAL7	2000	912421	1.099	18.70
9A30046-CAL8	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**

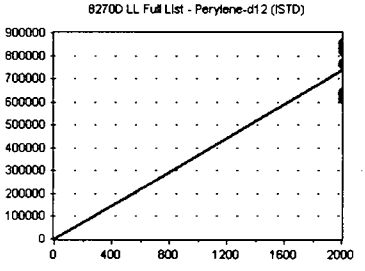


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	5806	0.754	18.80
9A30046-CAL2	50	12367	0.807	18.80
9A30046-CAL3	100	25304	0.827	18.80
9A30046-CAL4	200	58935	0.917	18.80
9A30046-CAL5	500	193455	1.017	18.80
9A30046-CAL6	1000	319982	1.016	18.80
9A30046-CAL7	2000	875788	1.055	18.82
9A30046-CAL8	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**

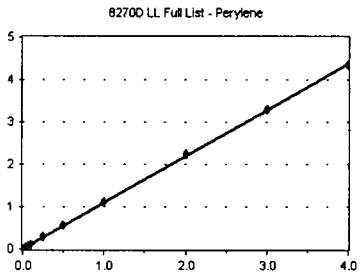
Element Calibration Review Sheet

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**

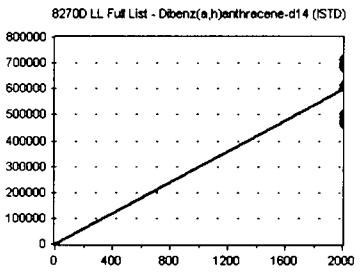


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	7762	1.008	19.00
9A30046-CAL2	50	16978	1.107	19.01
9A30046-CAL3	100	33514	1.095	19.01
9A30046-CAL4	200	70185	1.092	19.00
9A30046-CAL5	500	216816	1.140	19.01
9A30046-CAL6	1000	350972	1.114	19.01
9A30046-CAL7	2000	918814	1.107	19.02
9A30046-CAL8	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**

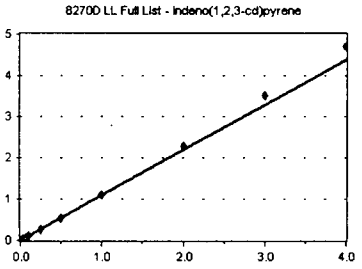


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	2000	614628	307.314	21.35
9A30046-CAL2	2000	475223	237.612	21.35
9A30046-CAL3	2000	467911	233.955	21.35
9A30046-CAL4	2000	493160	246.580	21.35
9A30046-CAL5	2000	615052	307.526	21.35
9A30046-CAL6	2000	502143	251.072	21.35
9A30046-CAL7	2000	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**

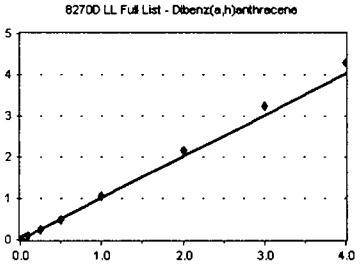


Standard	Concentration	Response	Response Factor	RT
9A30046-CAL1	20	6544	1.065	21.34
9A30046-CAL2	50	12358	1.040	21.34
9A30046-CAL3	100	24570	1.050	21.34
9A30046-CAL4	200	51991	1.054	21.34
9A30046-CAL5	500	166318	1.082	21.35
9A30046-CAL6	1000	270568	1.078	21.35
9A30046-CAL7	2000	772179	1.105	21.37
9A30046-CAL8	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**

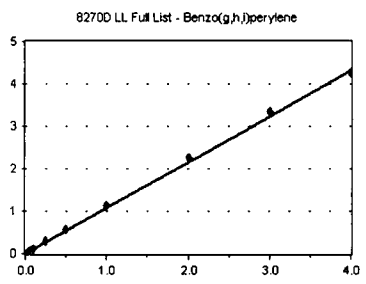
Element Calibration Review Sheet

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	9.971	1.009	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
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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

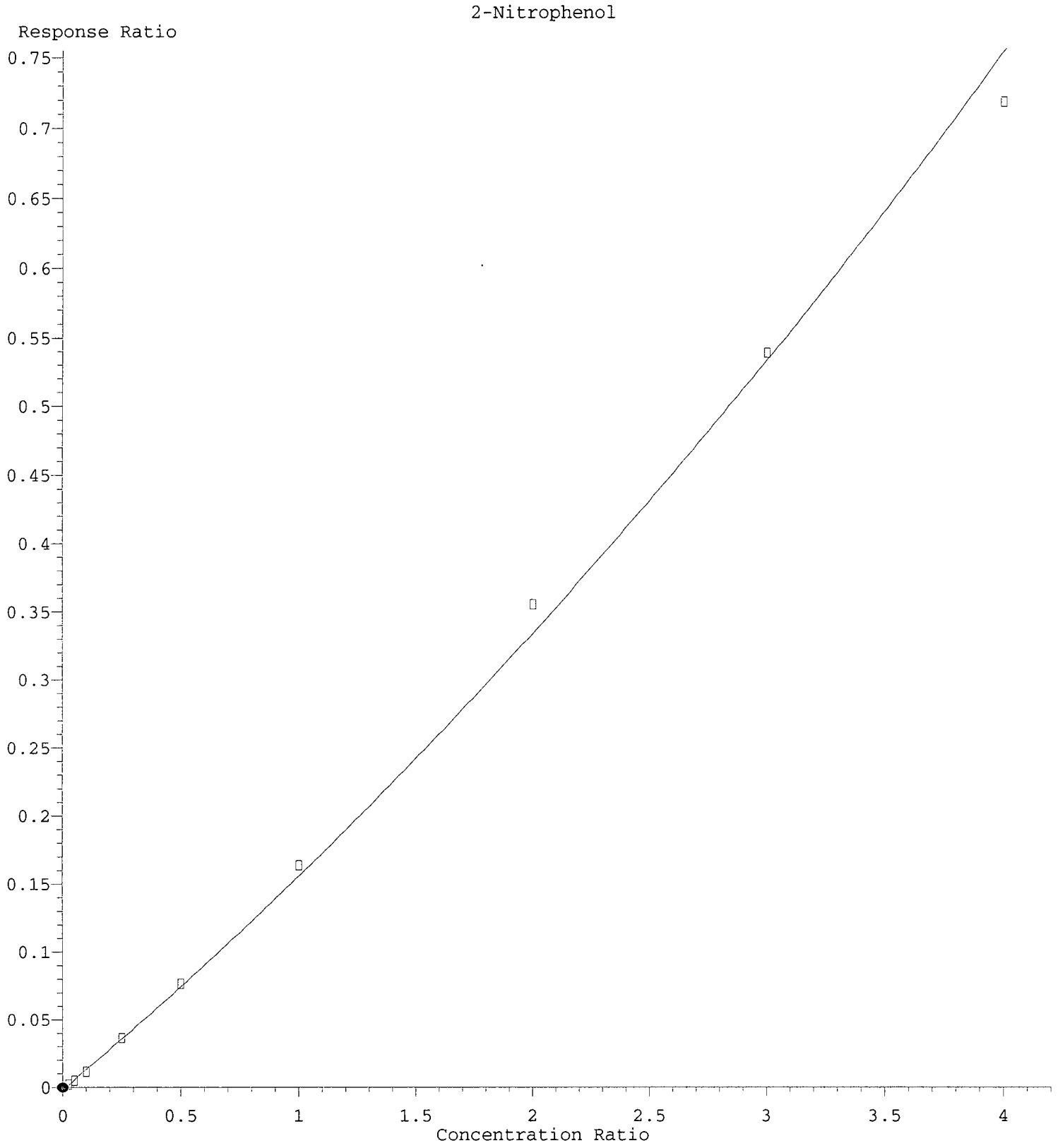
Method Path : C:\msdchem\1\METHODS\
Method File : SV5_013019.M
Title : EPA 8270D: Semivolatile Organics

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

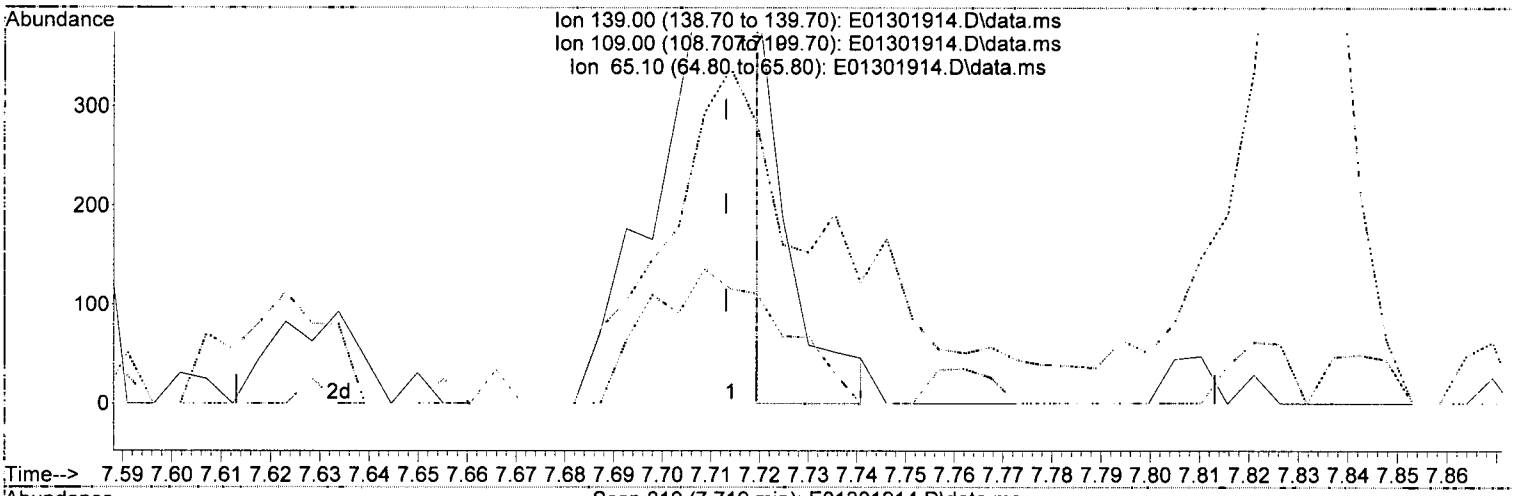


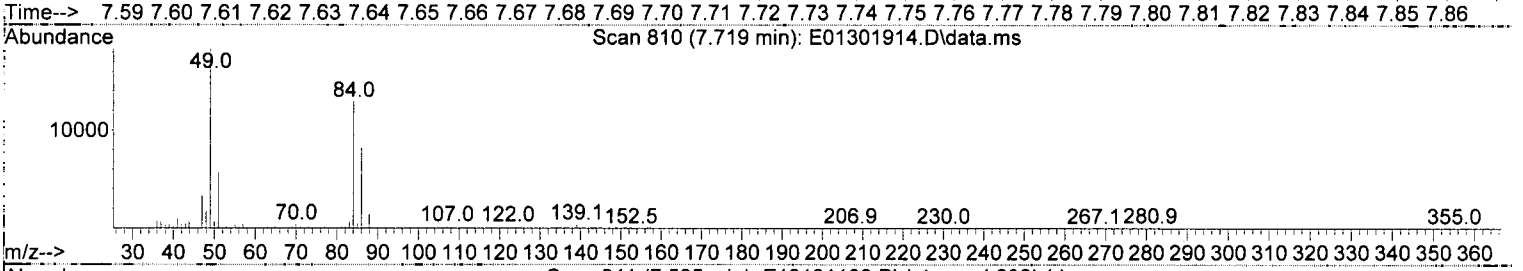
R = 1.05e-002 A*A + 1.47e-001 A - 1.78e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

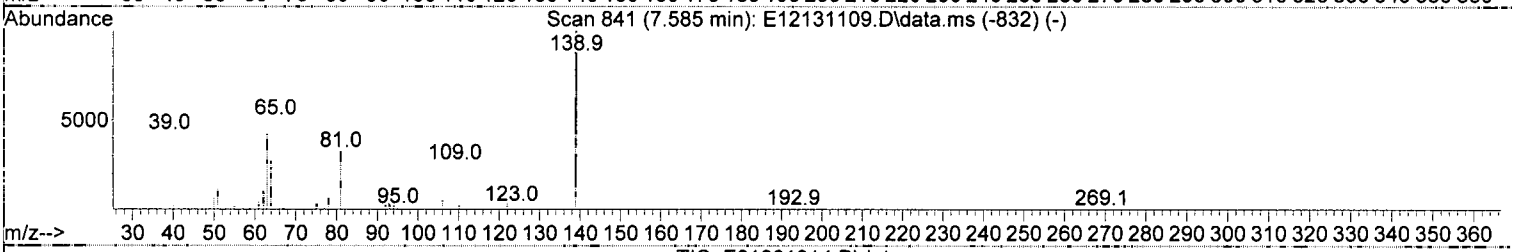
Quantitation Report (Qedit)

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







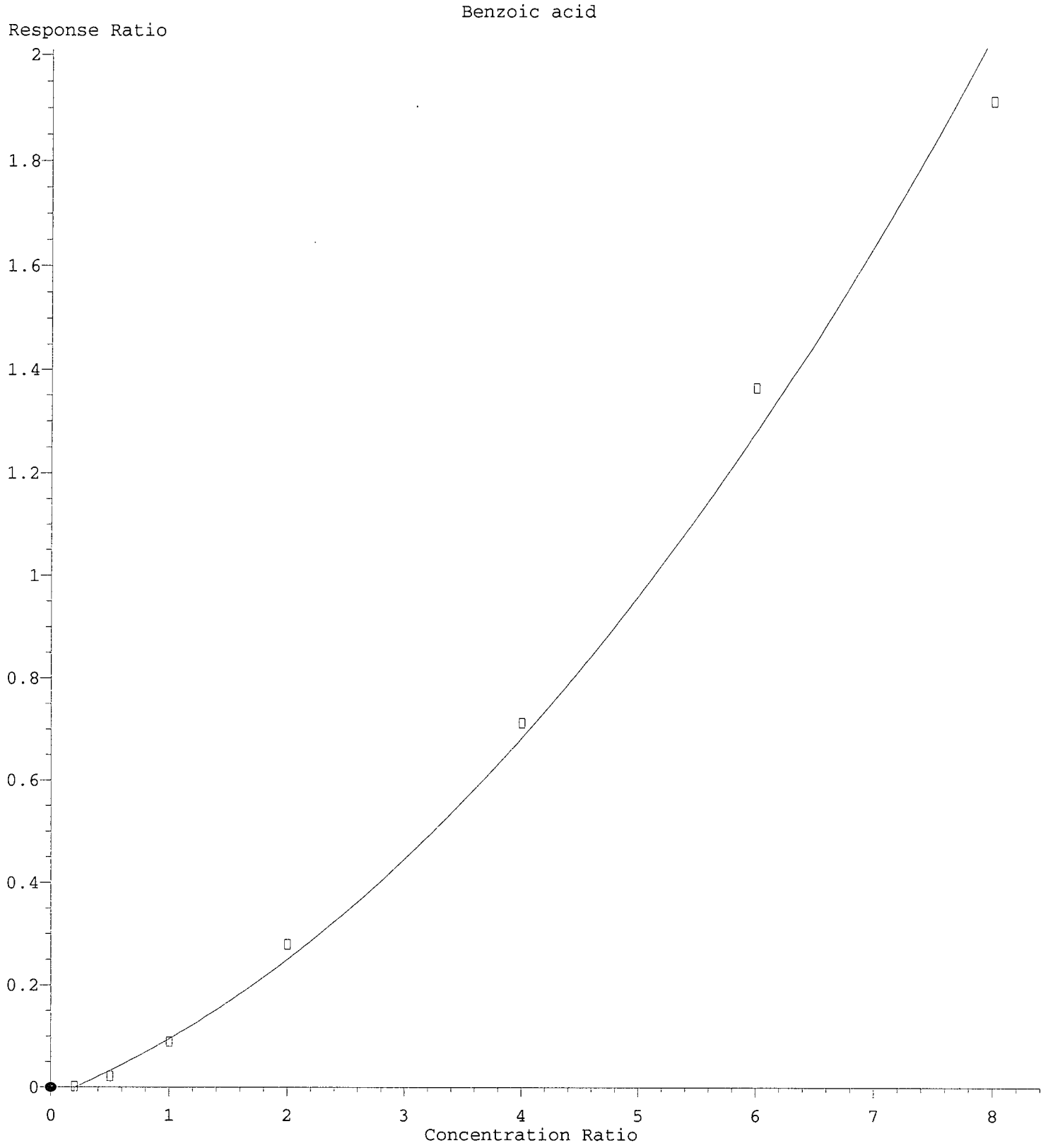
TIC: E01301914.D\data.ms

(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

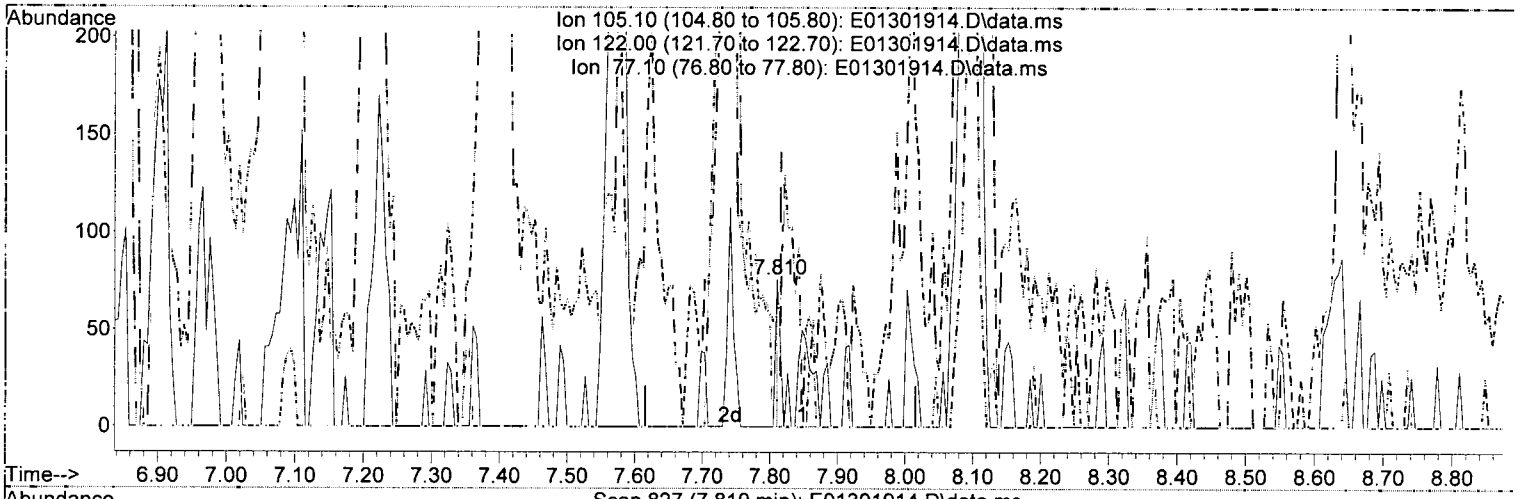


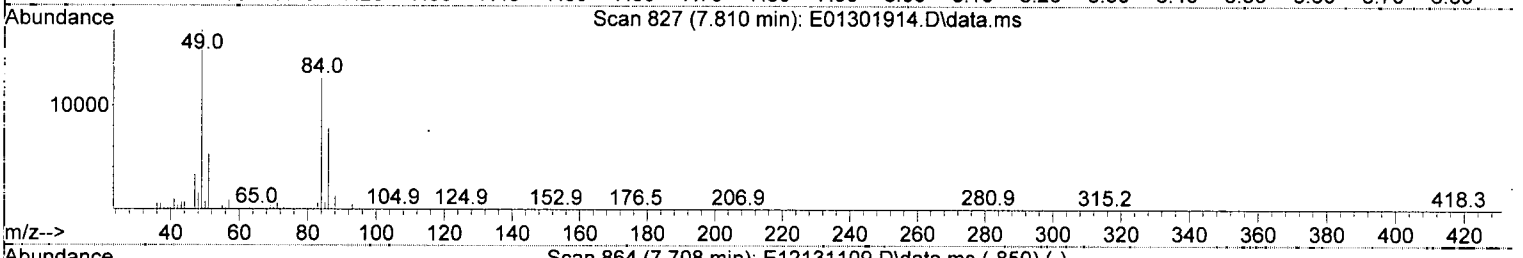
R = 2.05e-002 A*A + 9.40e-002 A - 1.95e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

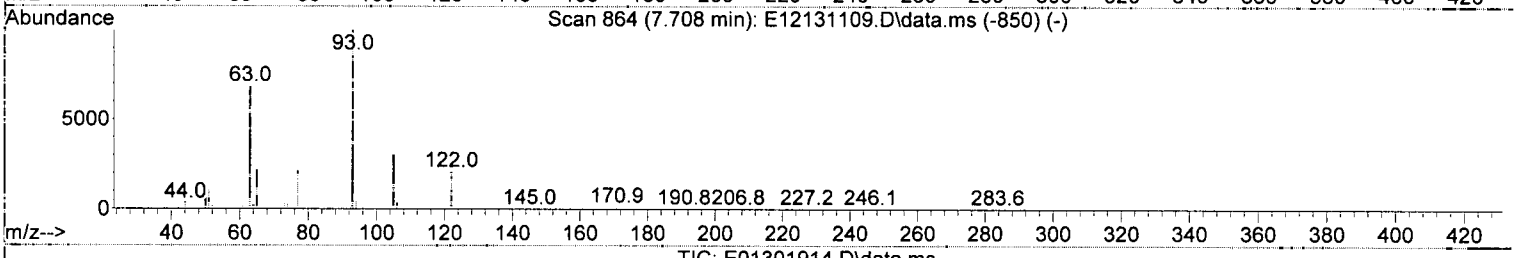
Quantitation Report (Qedit)

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







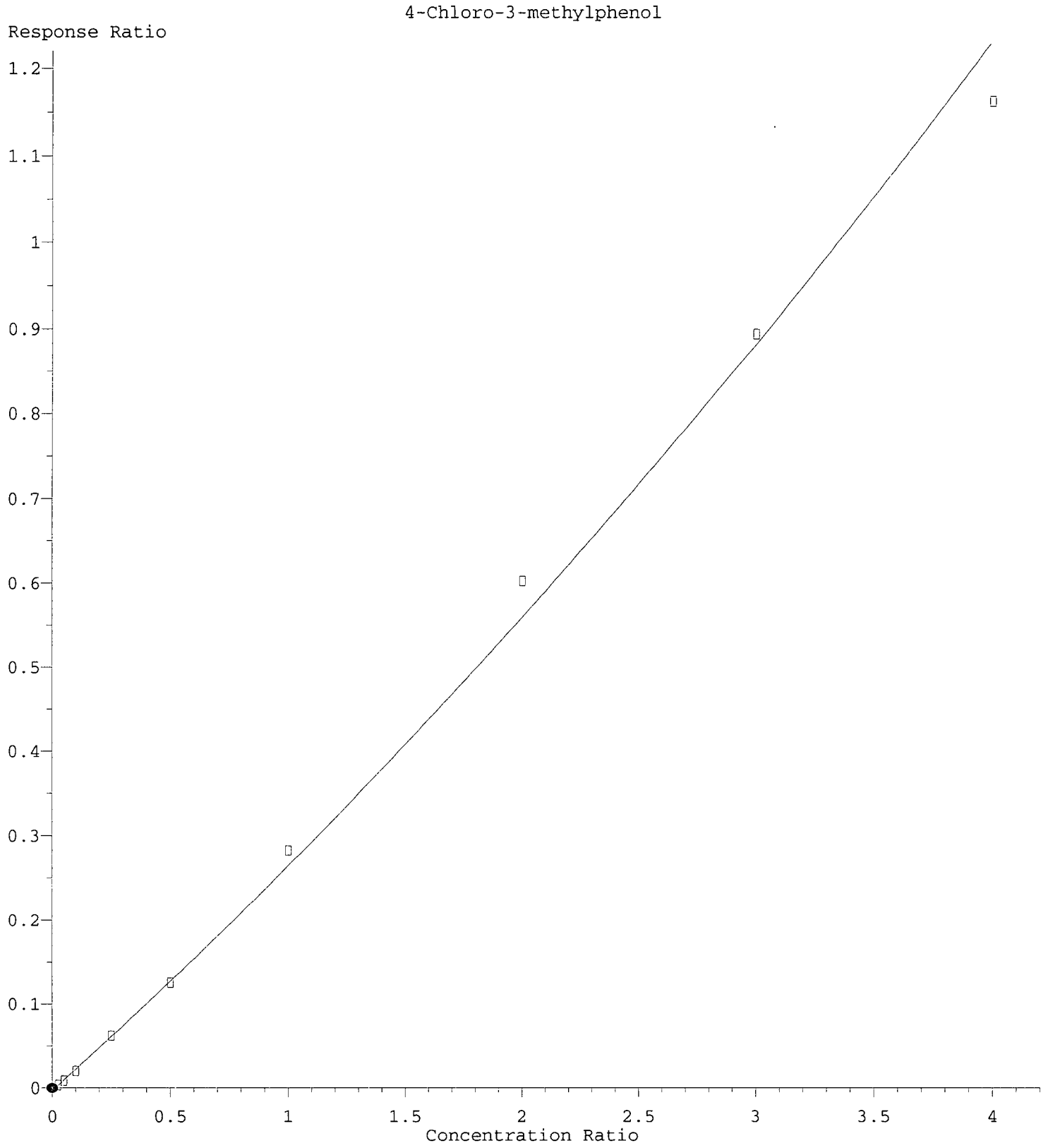
TIC: E01301914.D\data.ms

(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

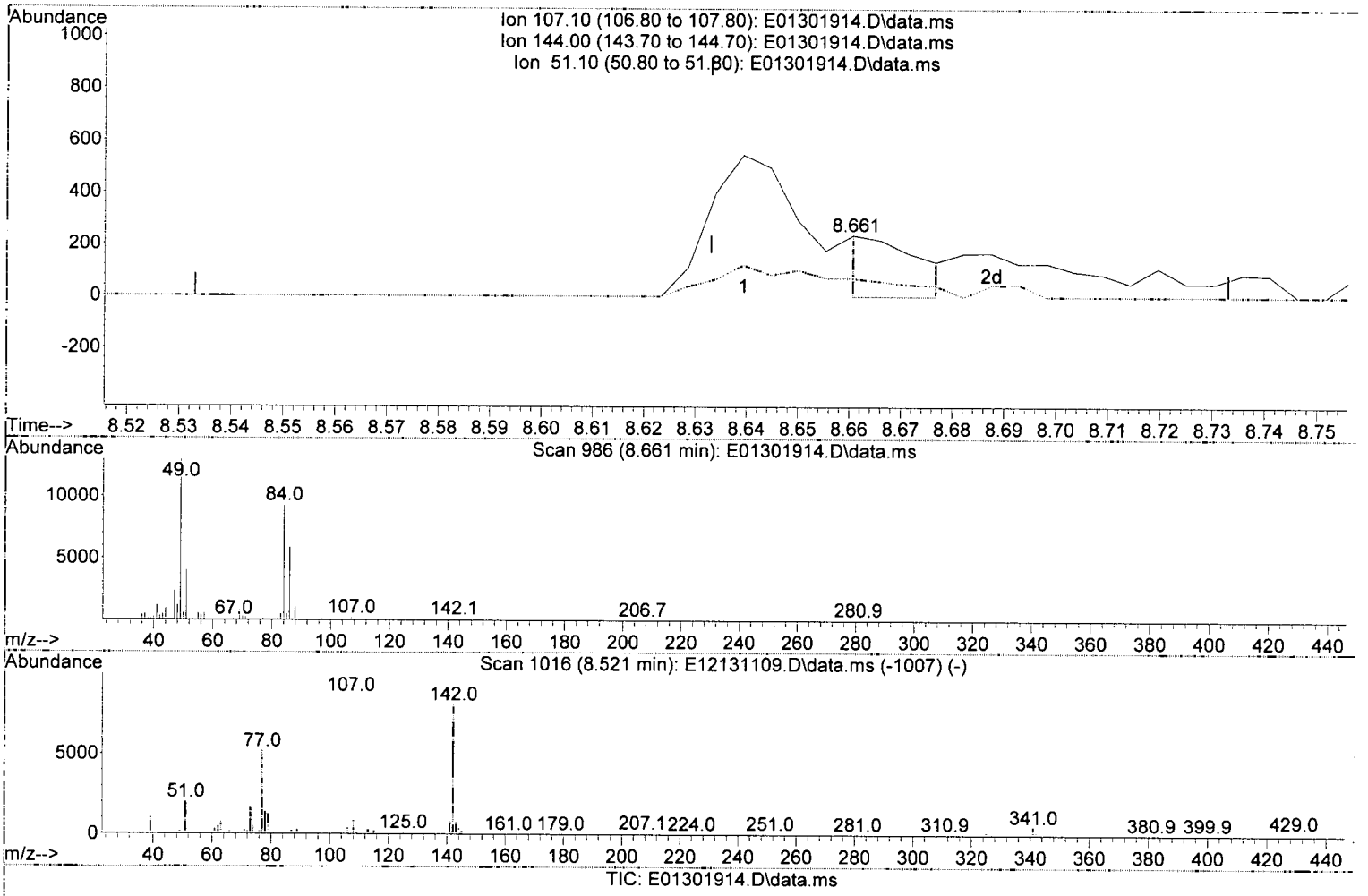


R = 1.37e-002 A*A + 2.54e-001 A - 3.38e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

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



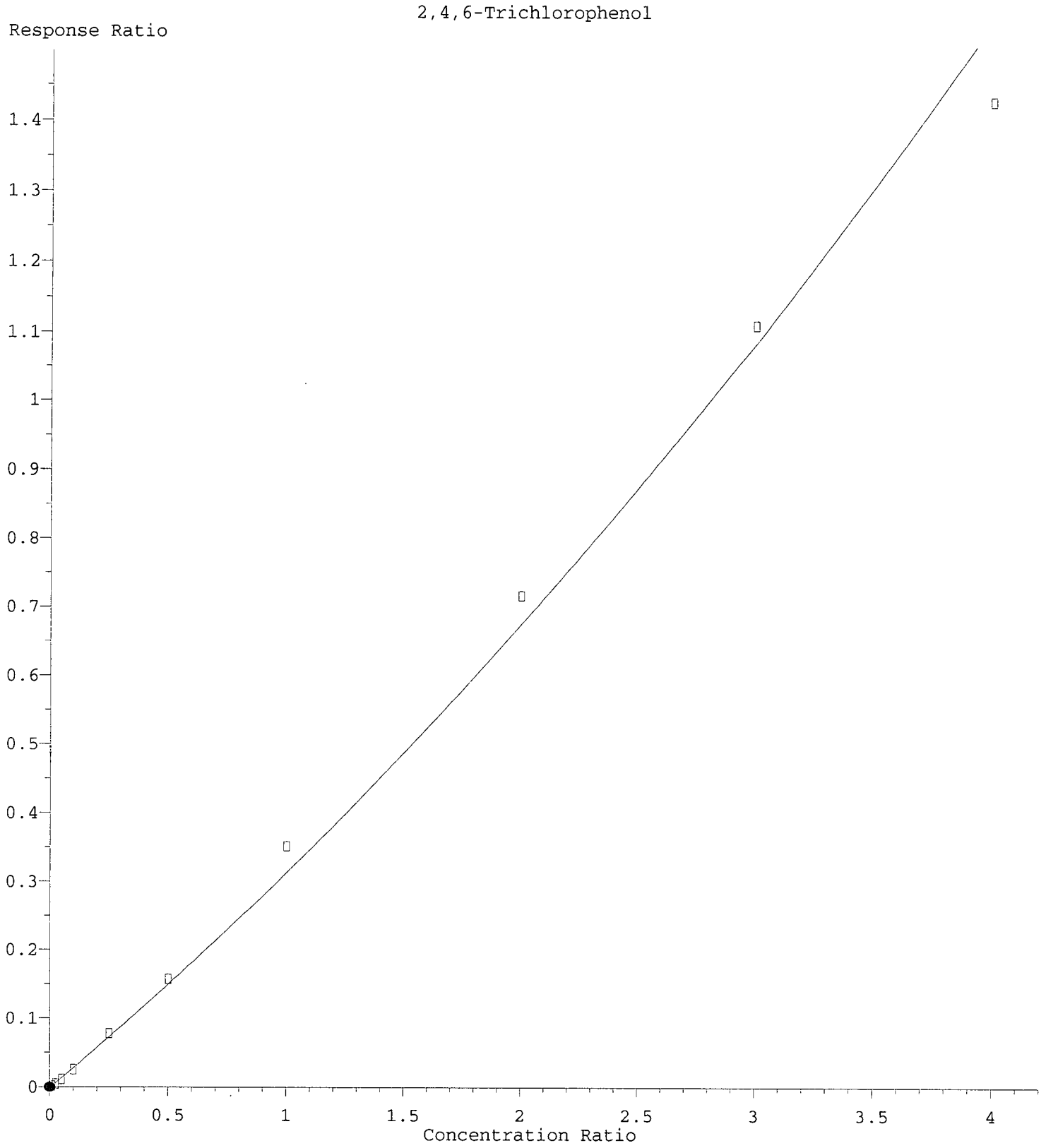
TIC: E01301914.D\data.ms

(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

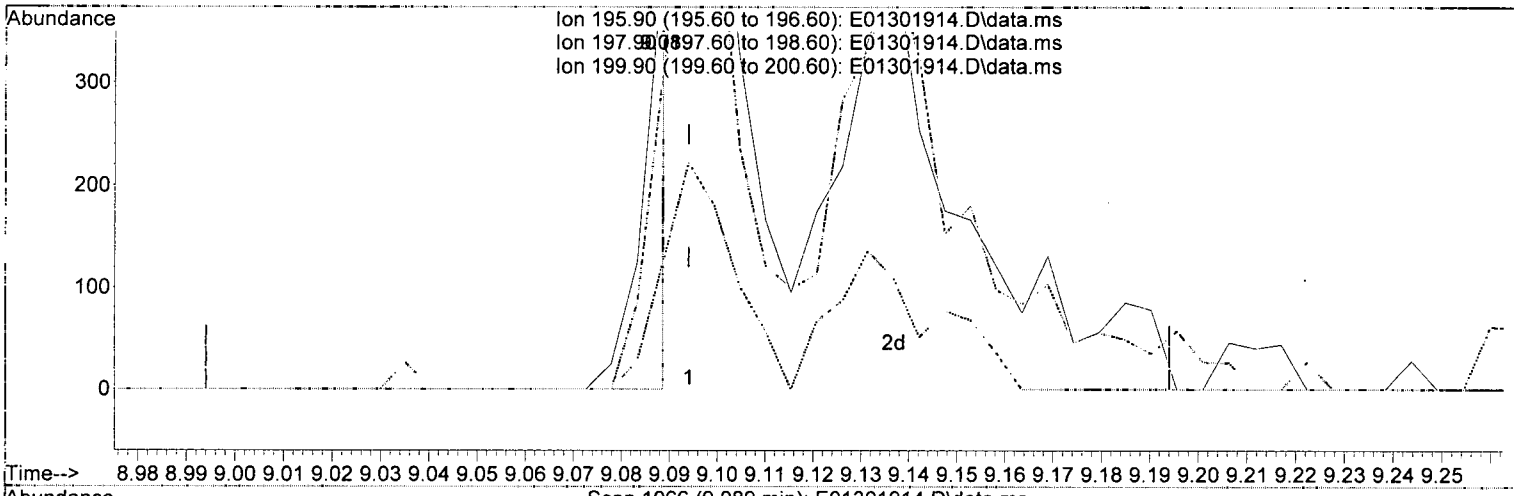


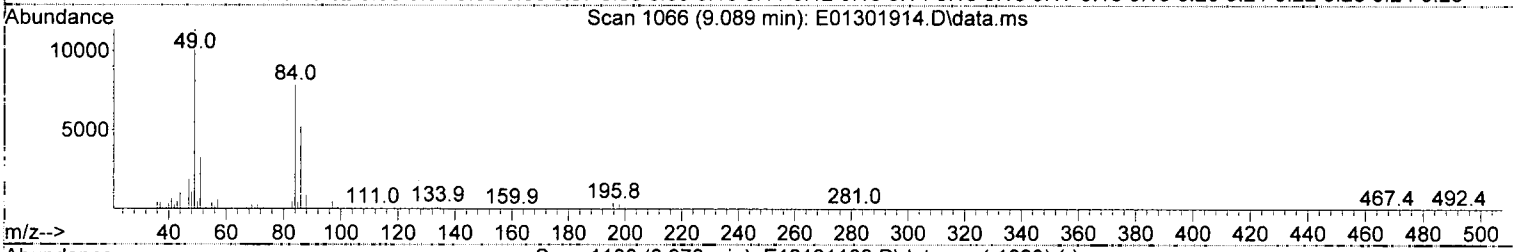
R = 2.36e-002 A*A + 2.91e-001 A - 1.61e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

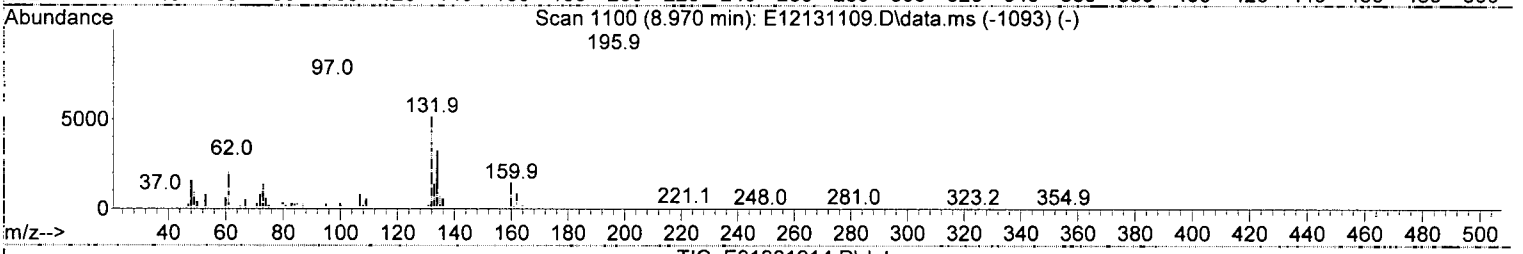
Quantitation Report (Qedit)

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







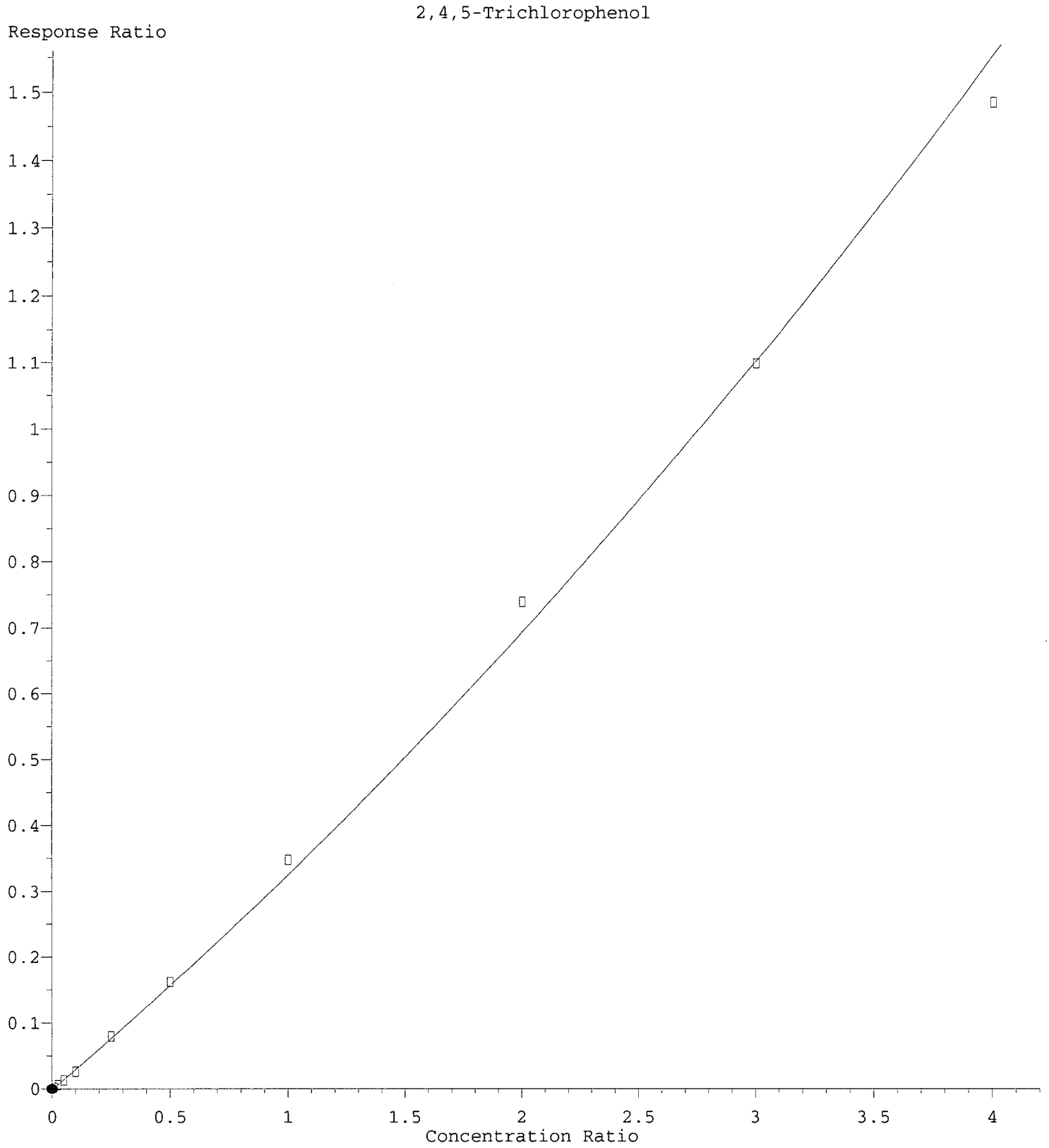
TIC: E01301914.D\data.ms

(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

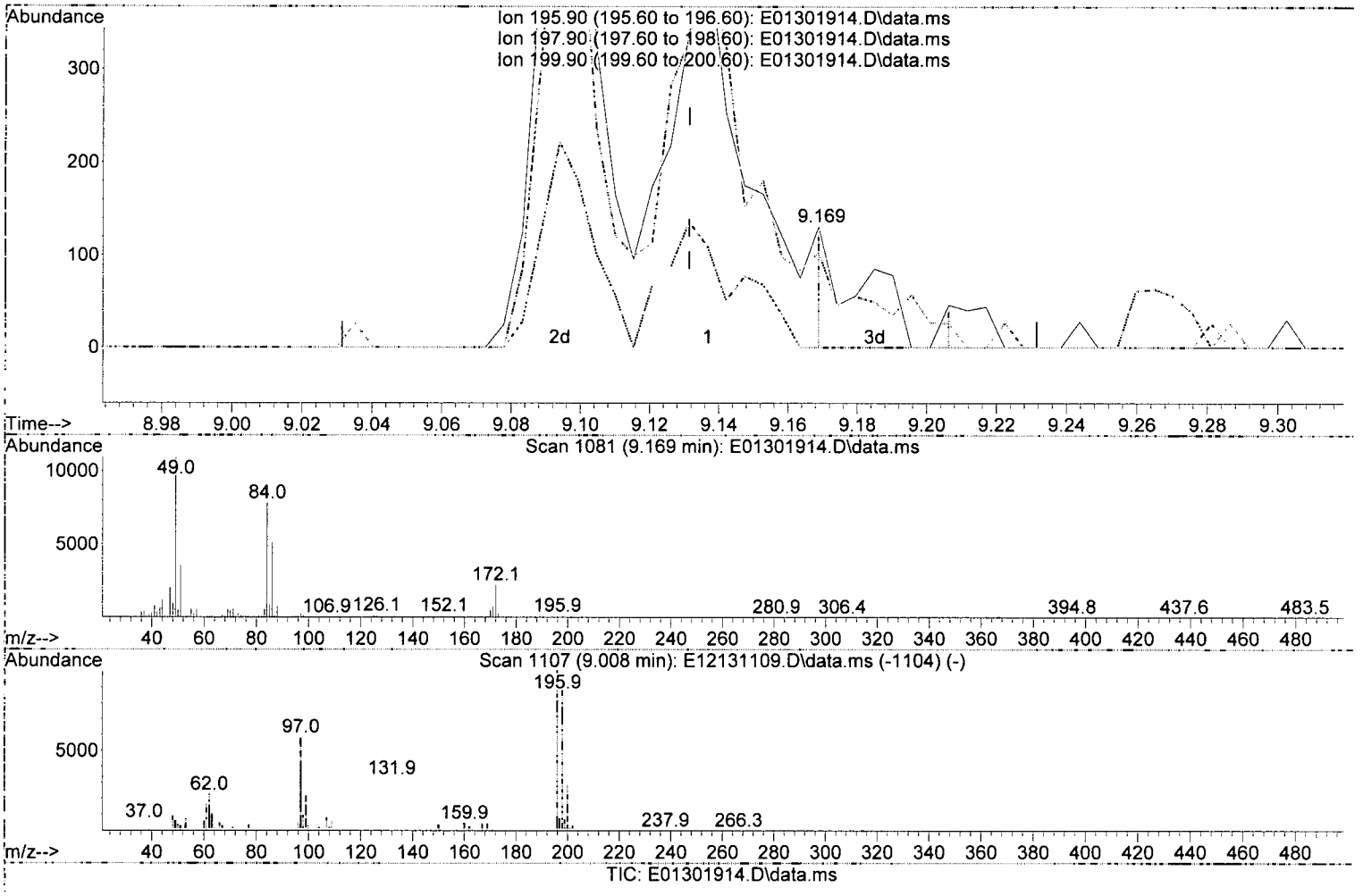


R = 2.08e-002 A*A + 3.06e-001 A - 1.73e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

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



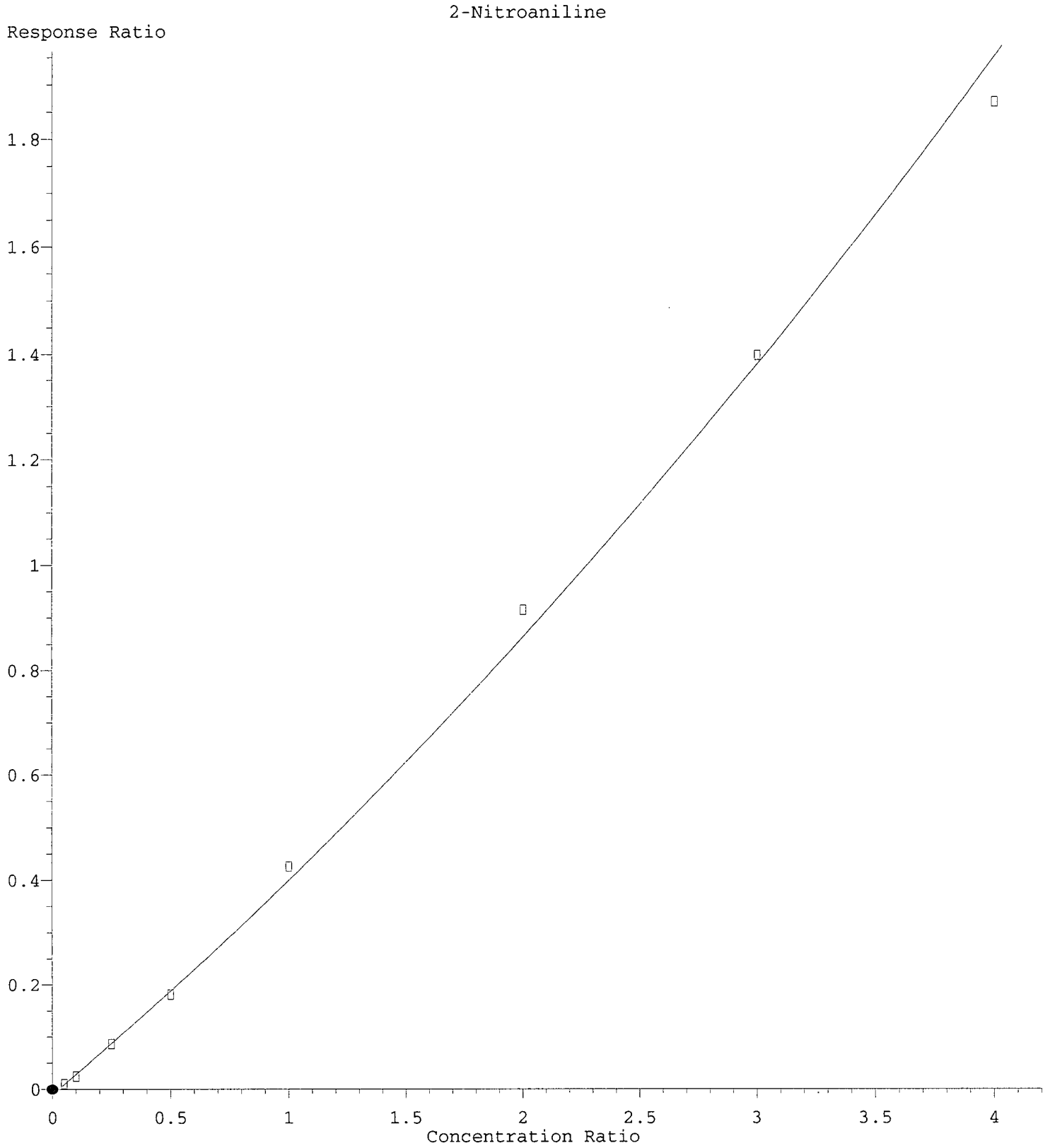
TIC: E01301914.D\data.ms

(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

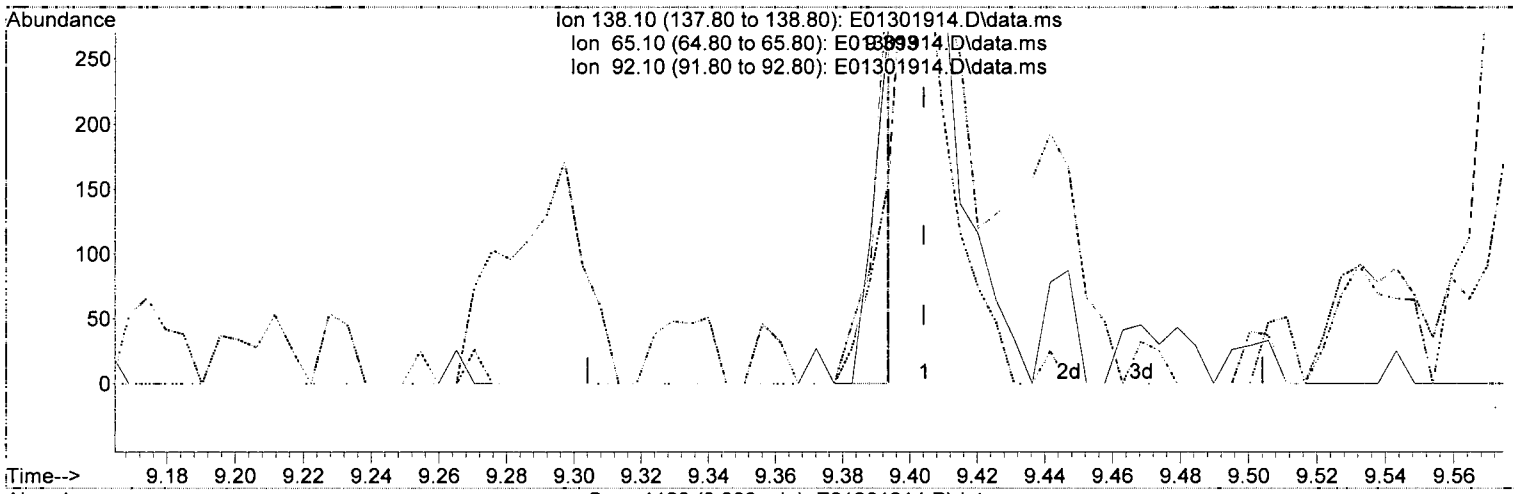


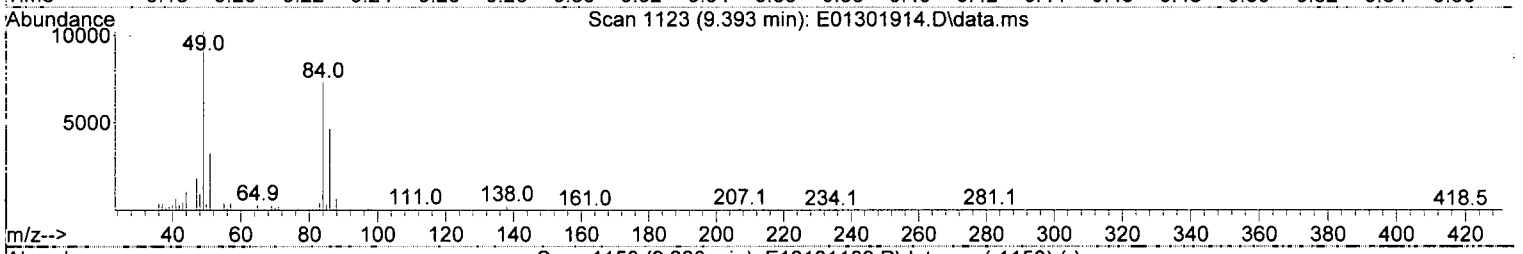
R = 2.70e-002 A*A + 3.83e-001 A - 1.04e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

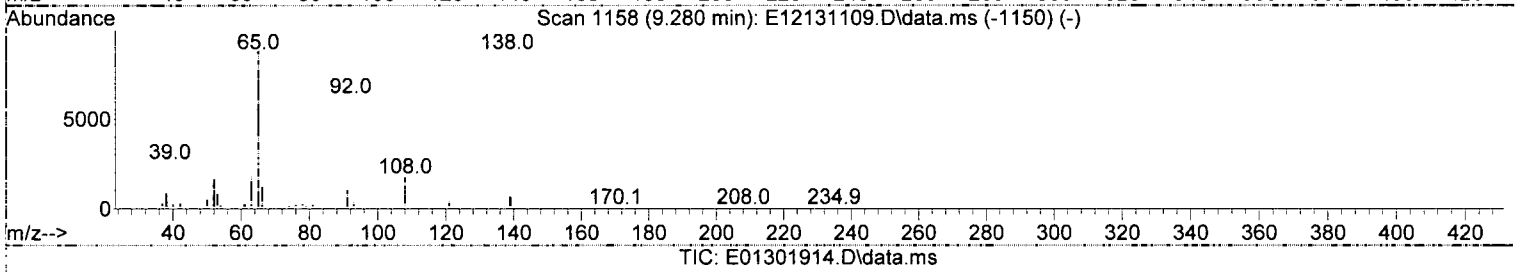
Quantitation Report (Qedit)

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







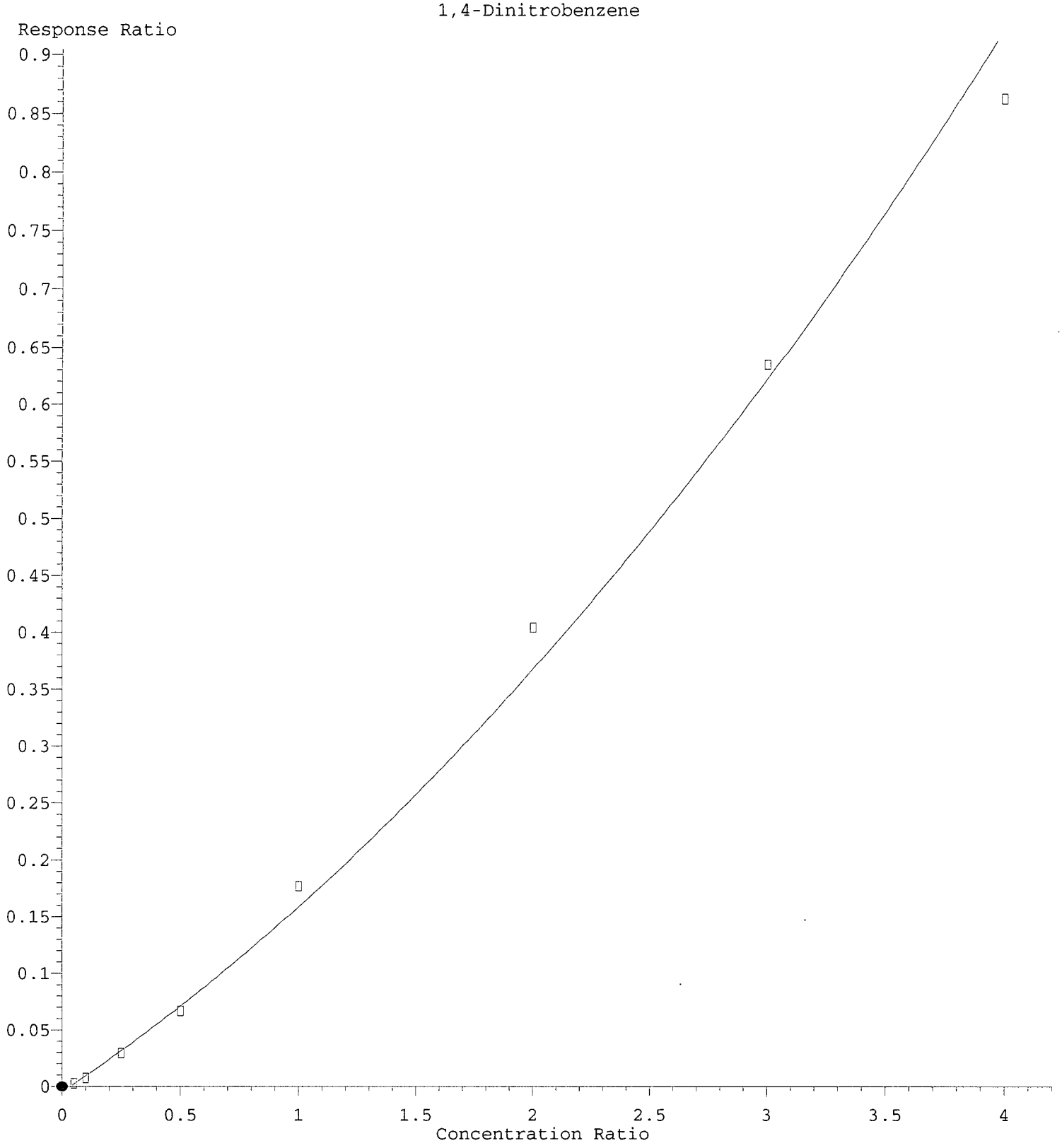
TIC: E01301914.D\data.ms

(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

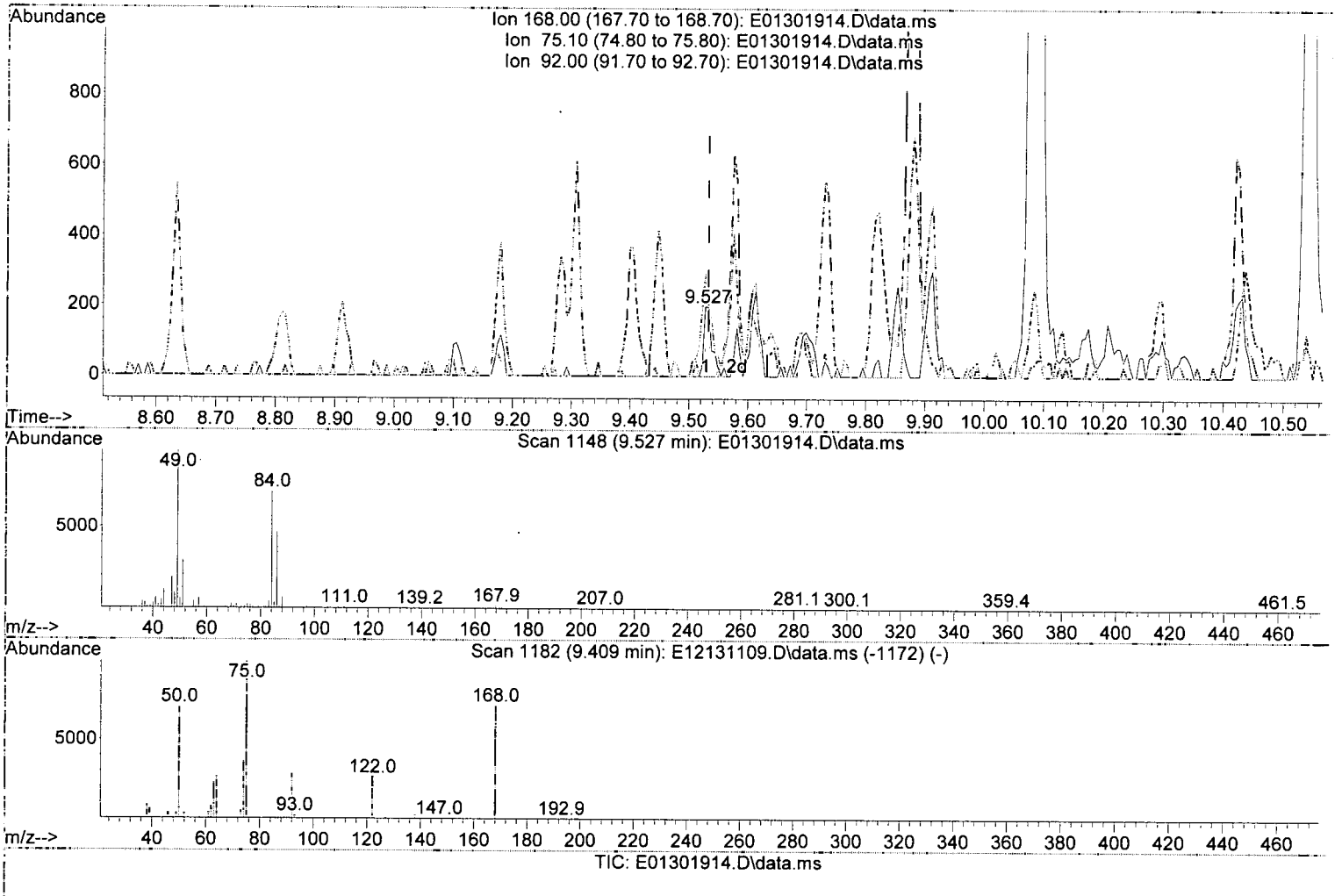


R = 2.26e-002 A*A + 1.41e-001 A - 5.01e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

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

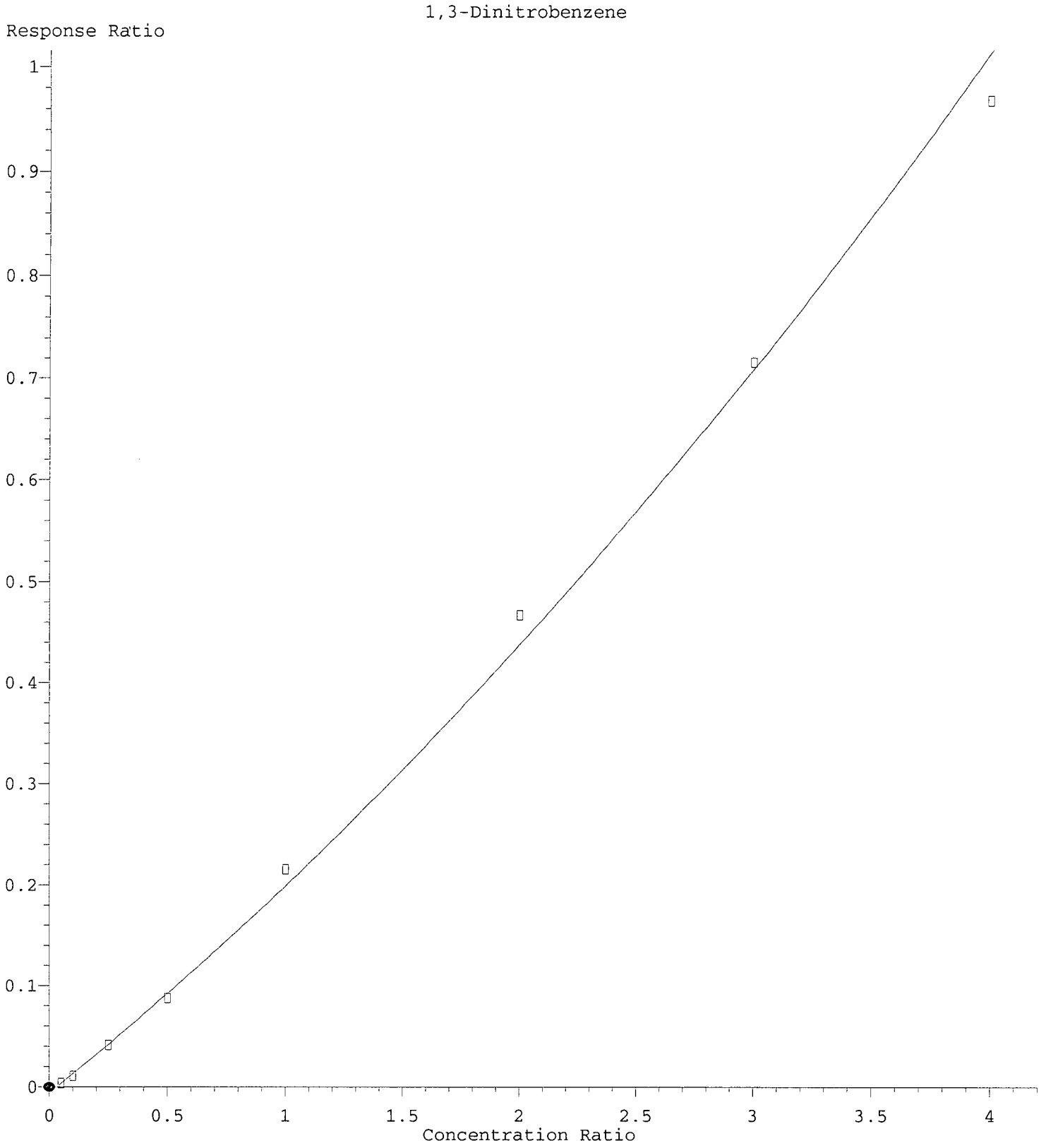


(44) 1,4-Dinitrobenzene (T)

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

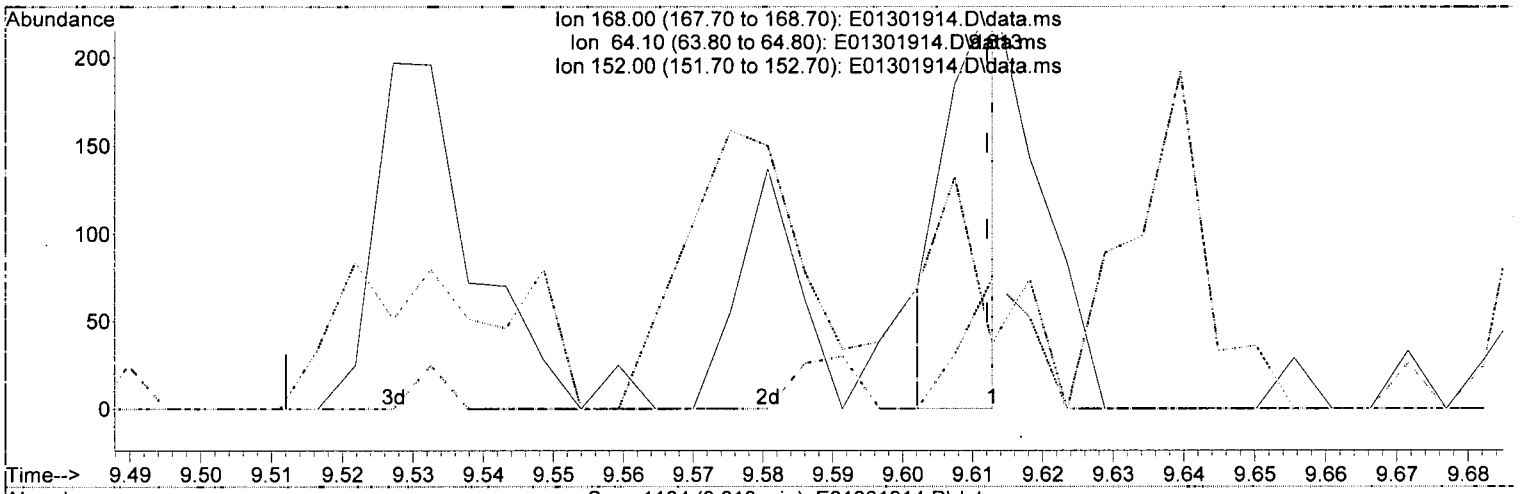


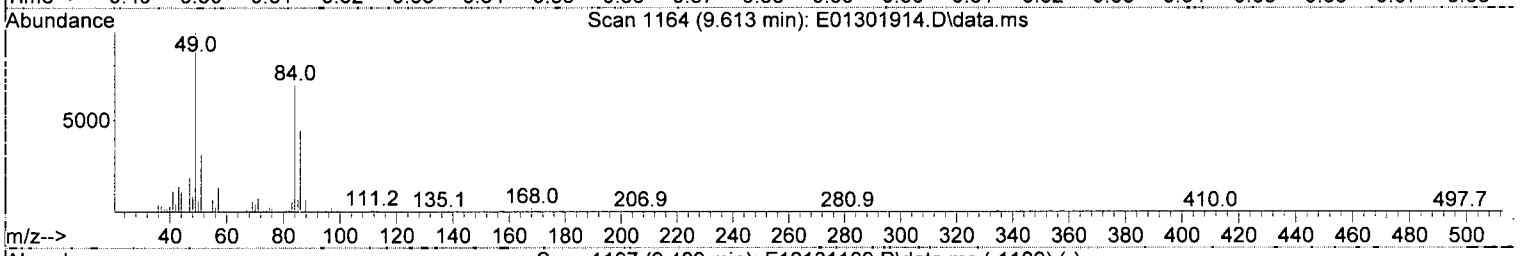
R = 1.65e-002 A*A + 1.89e-001 A - 6.37e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

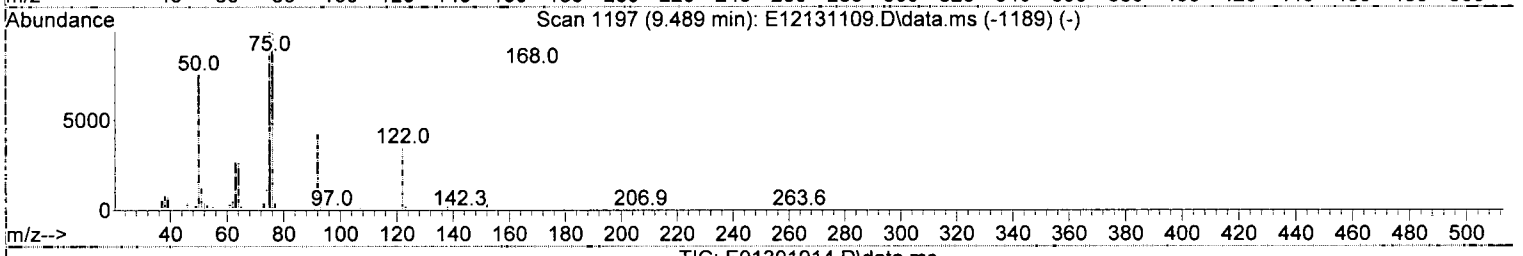
Quantitation Report (Qedit)

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







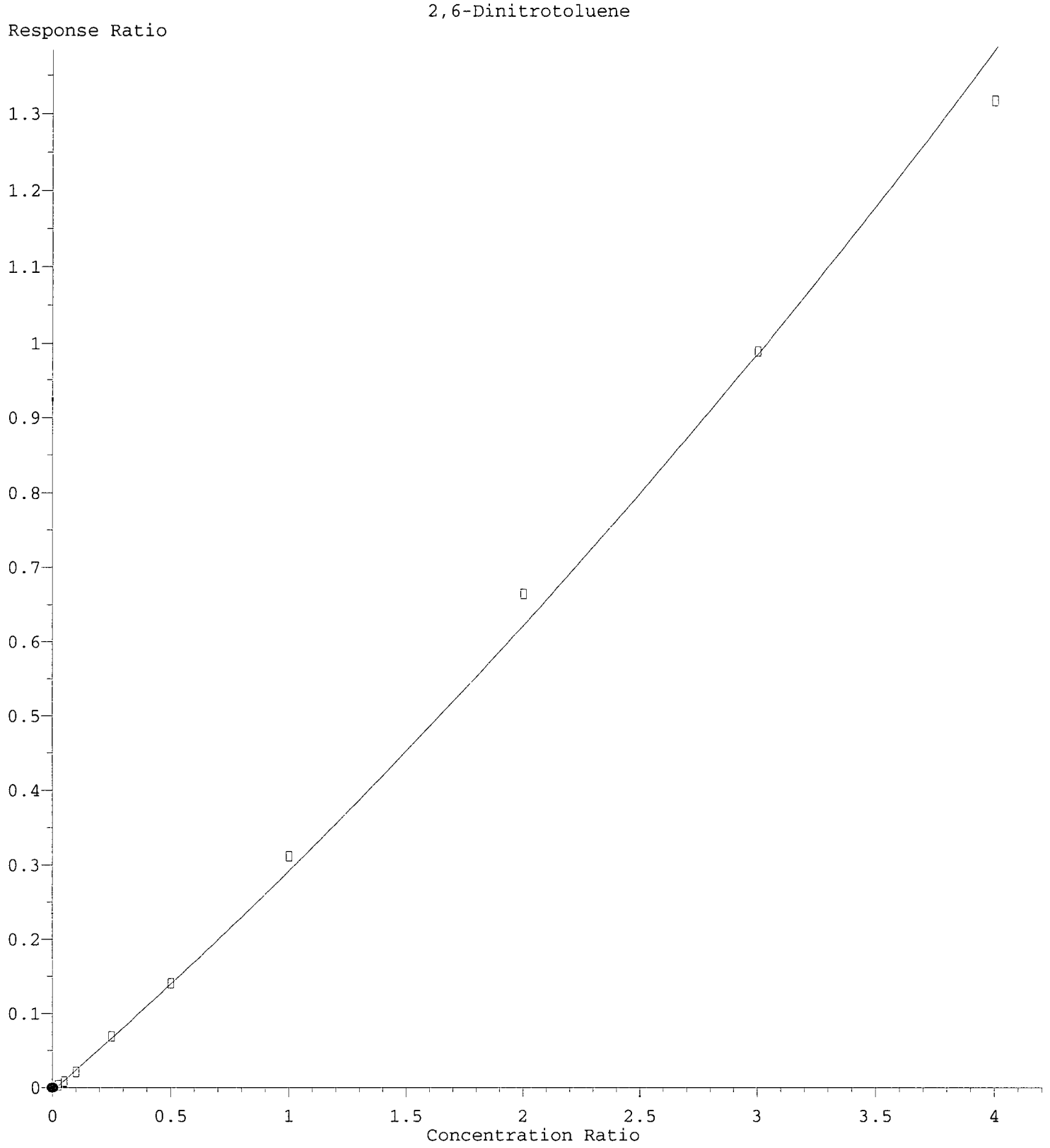
TIC: E01301914.D\data.ms

(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

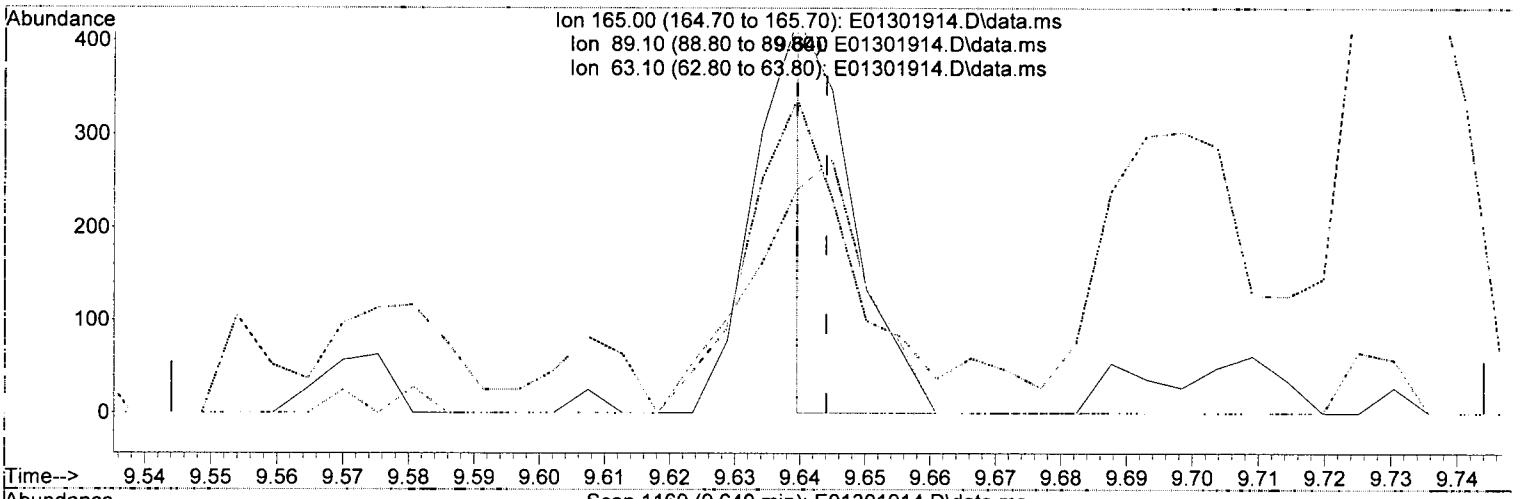


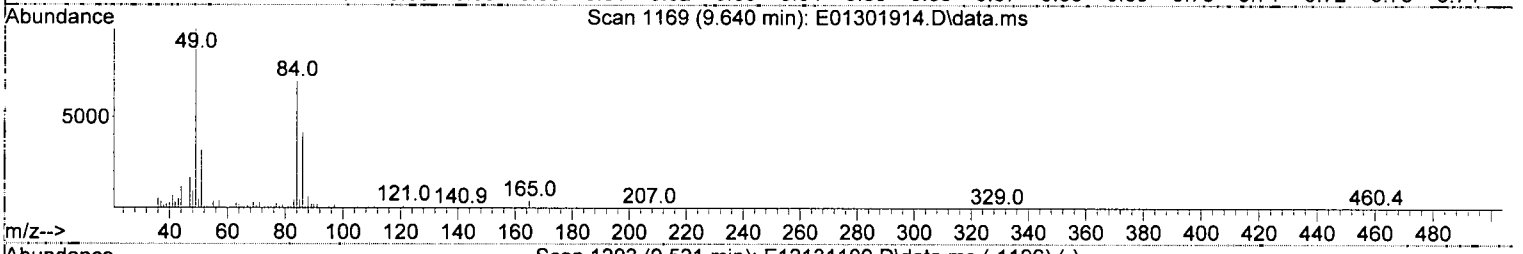
R = 1.67e-002 A*A + 2.80e-001 A - 4.44e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

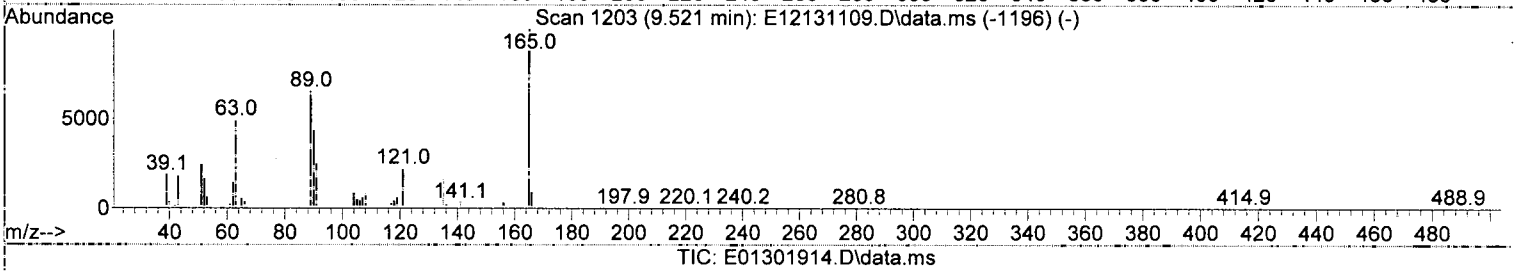
Quantitation Report (Qedit)

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







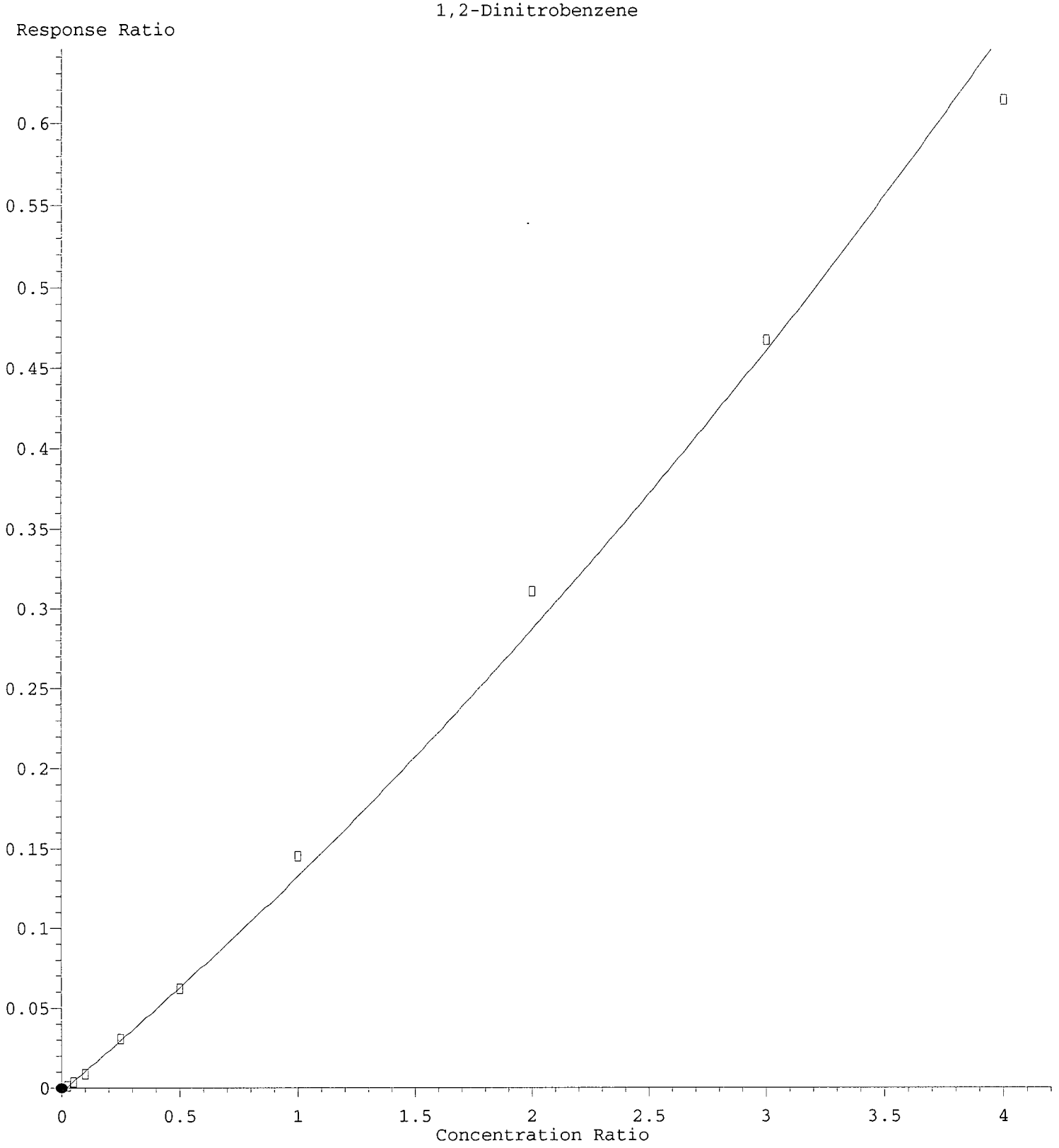
TIC: E01301914.D\data.ms

(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

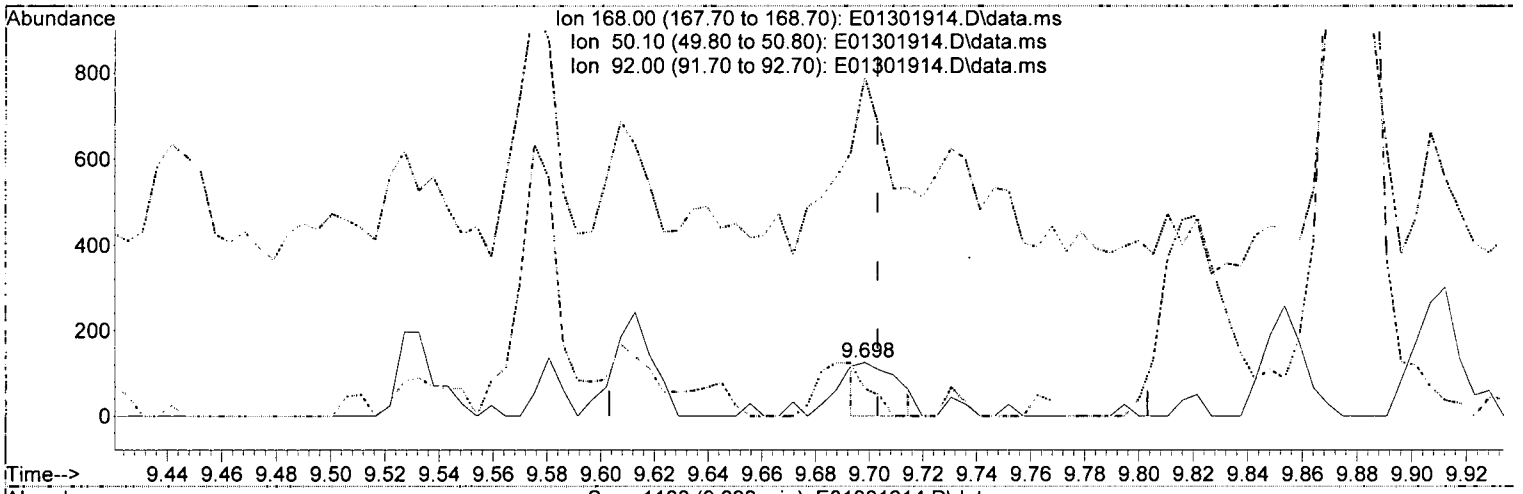


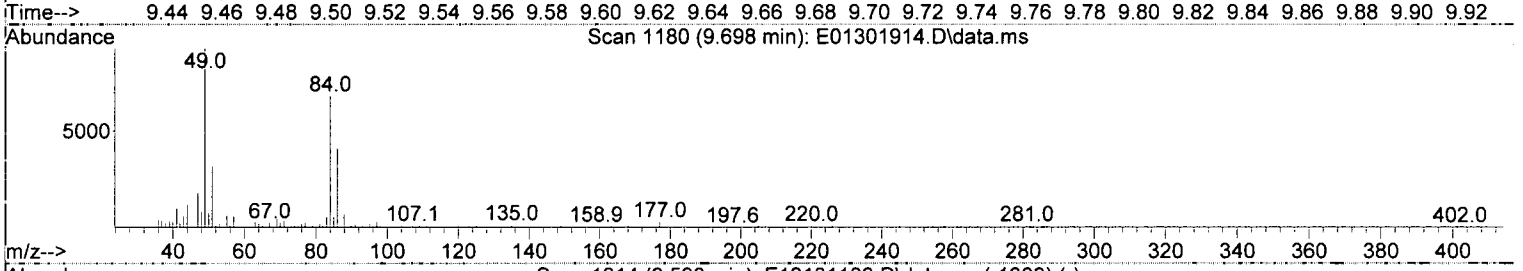
R = 9.99e-003 A*A + 1.25e-001 A - 2.17e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

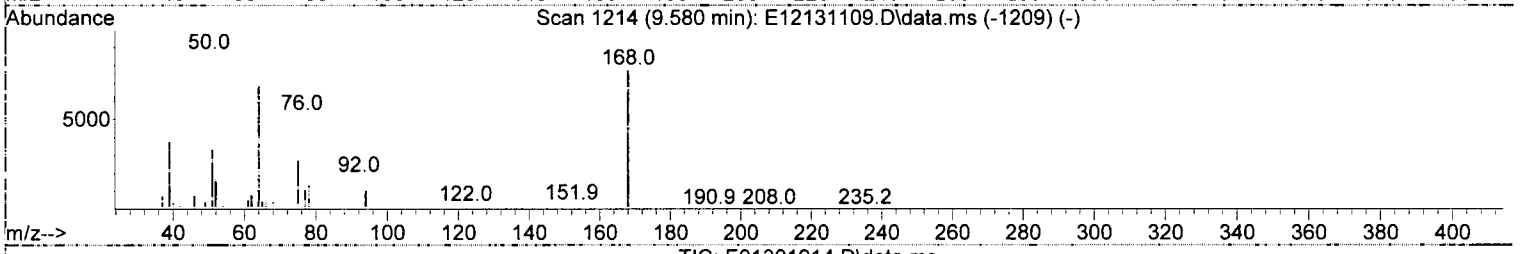
Quantitation Report (Qedit)

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







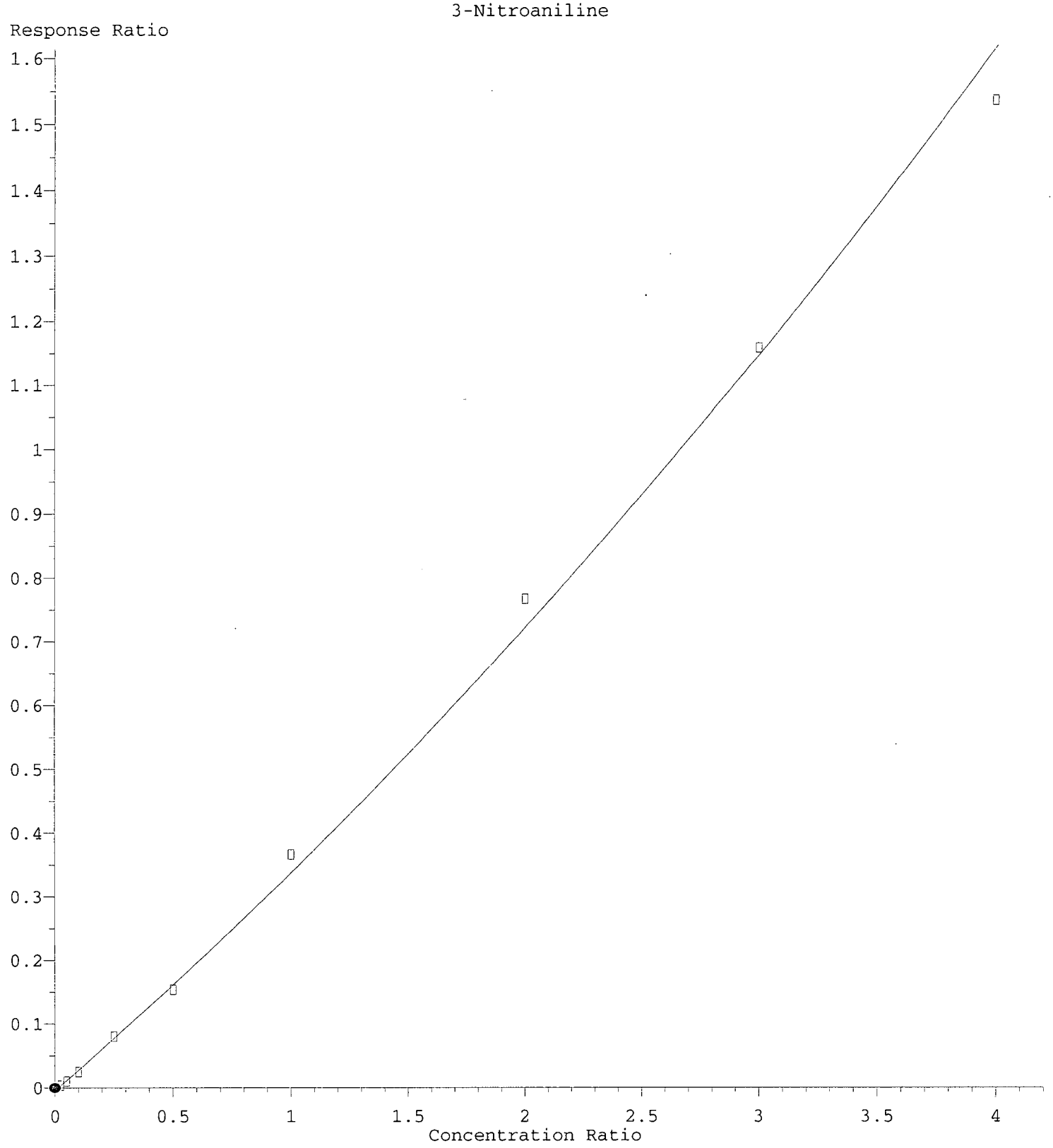
TIC: E01301914.D\data.ms

(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

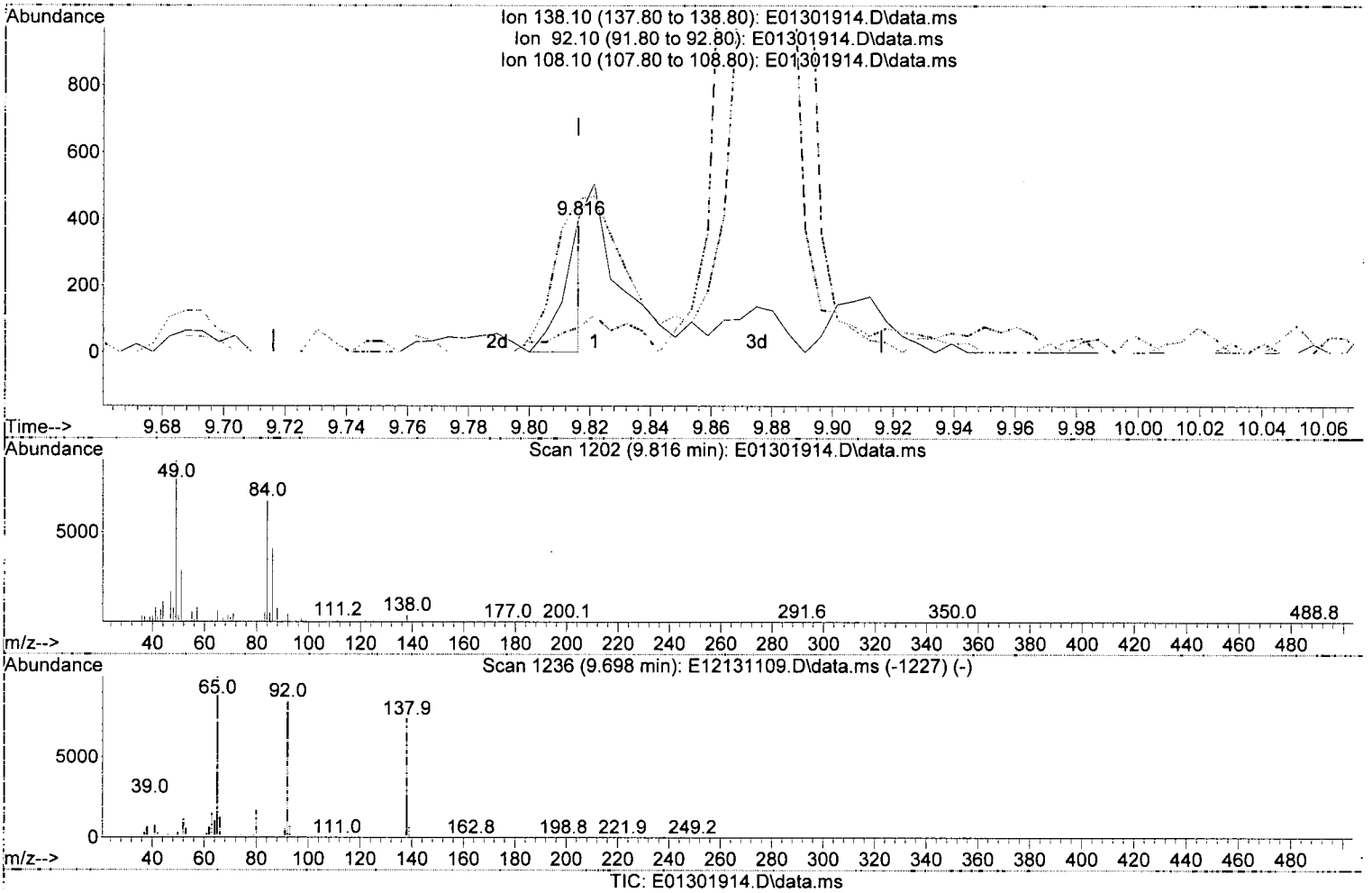


R = 2.09e-002 A*A + 3.22e-001 A - 4.69e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

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



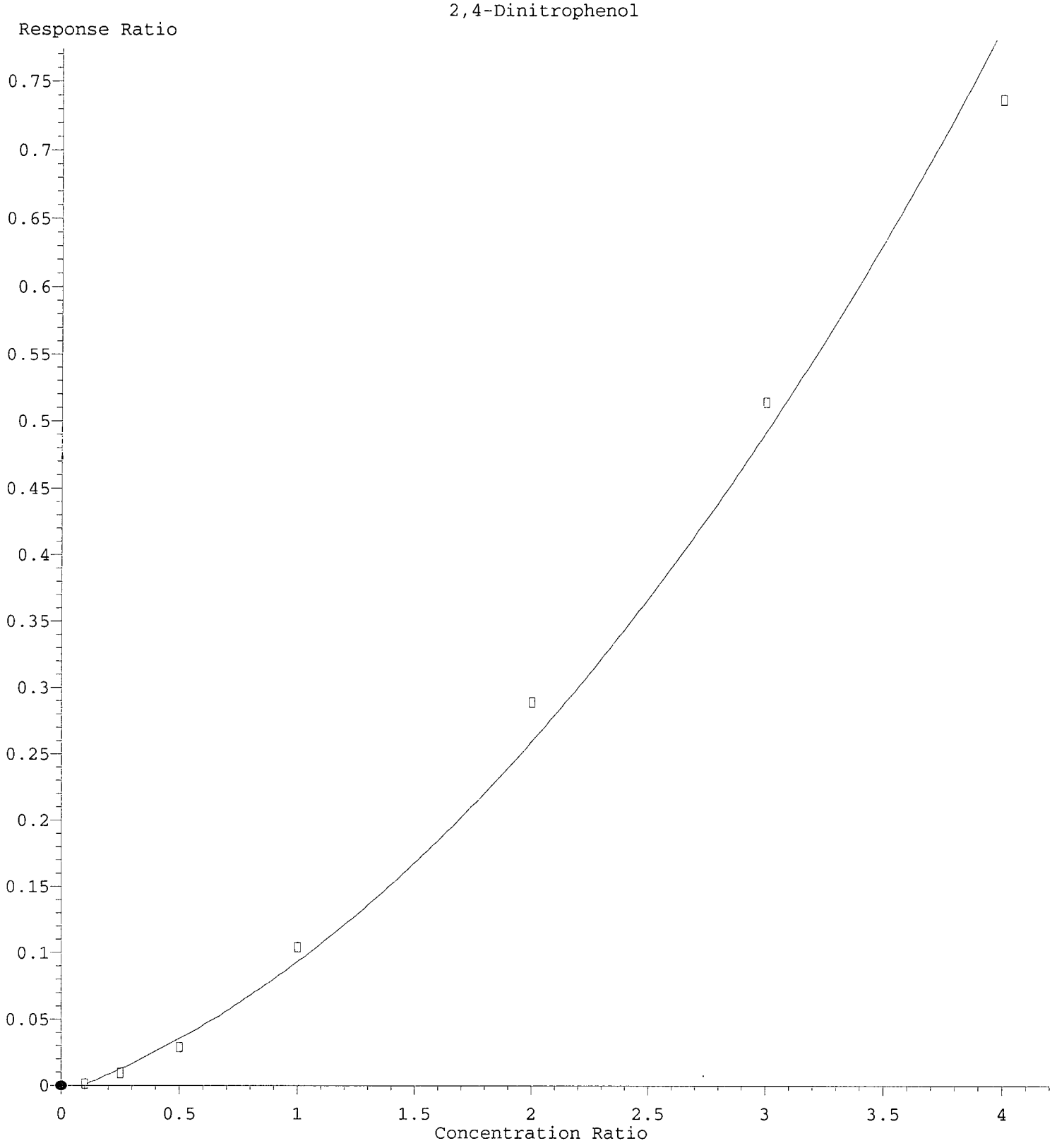
TIC: E01301914.D\data.ms

(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

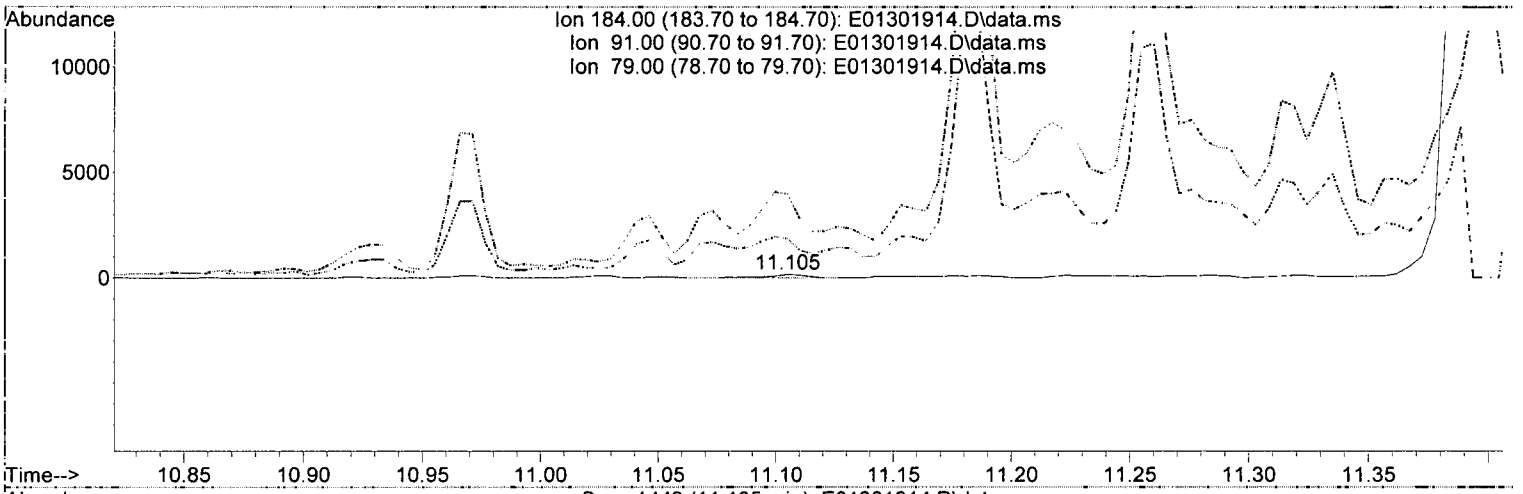


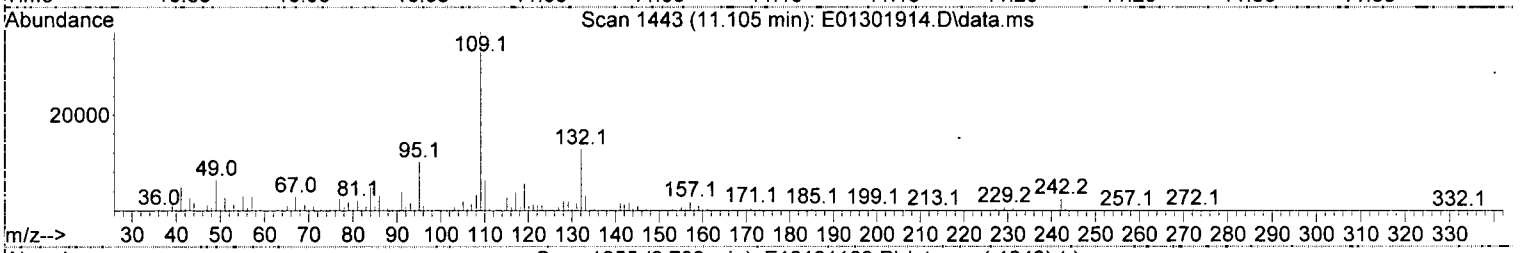
R = 3.32e-002 A*A + 6.65e-002 A - 6.19e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

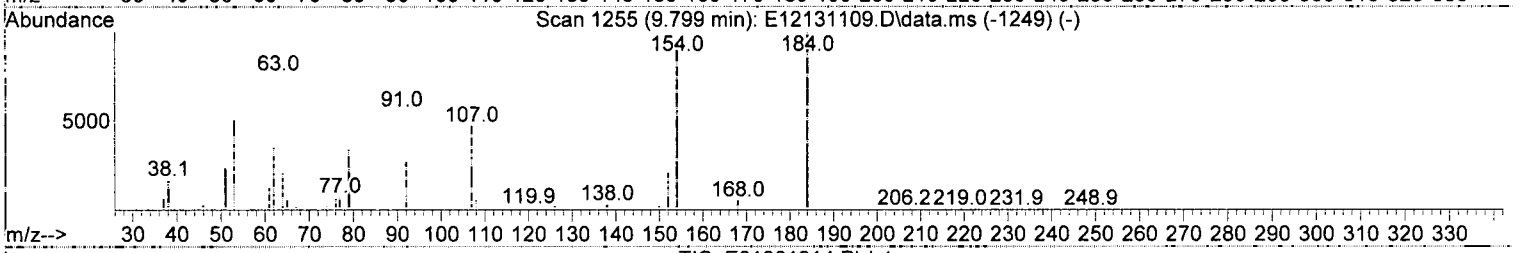
Quantitation Report (Qedit)

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







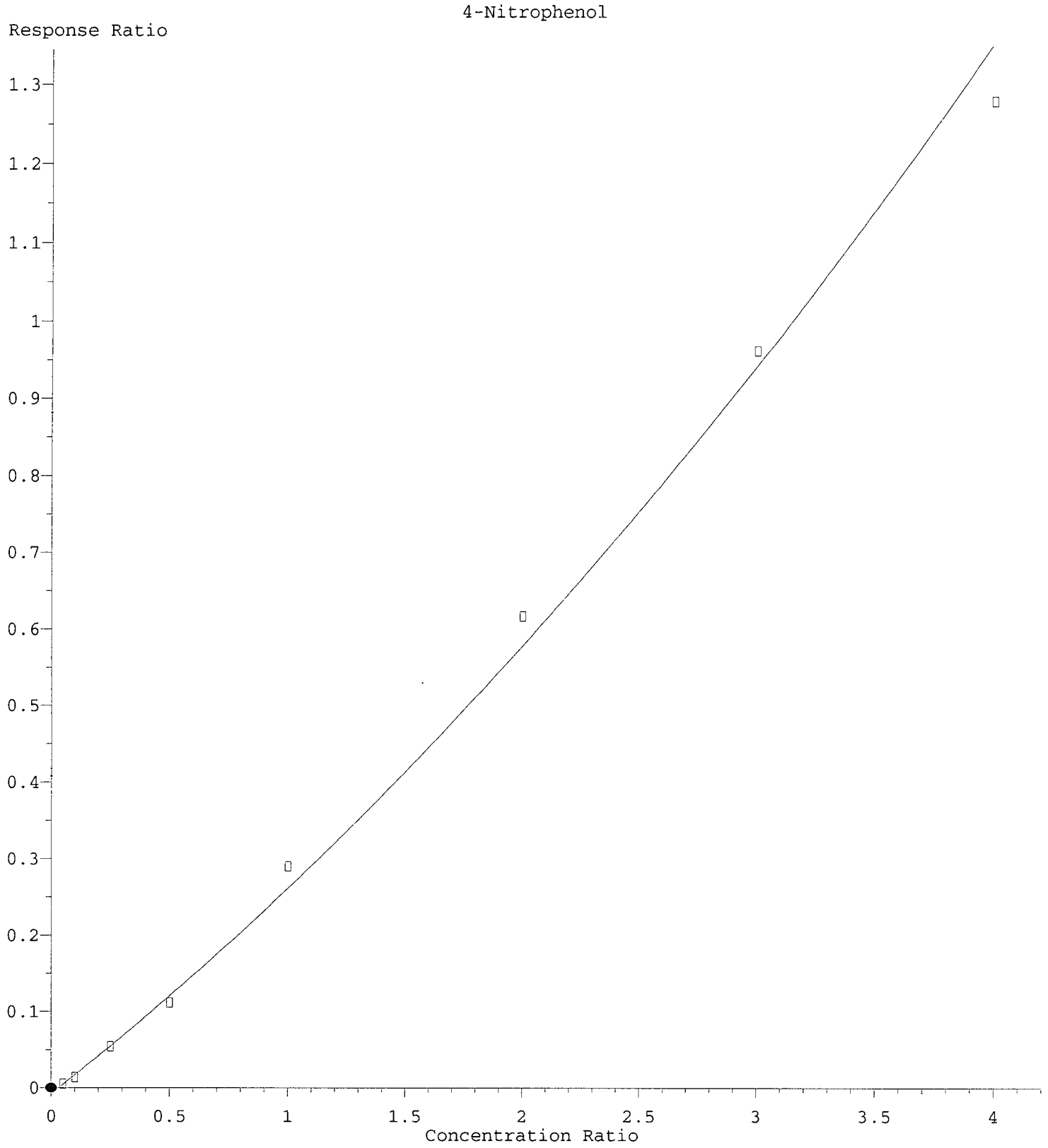
TIC: E01301914.D\data.ms

(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

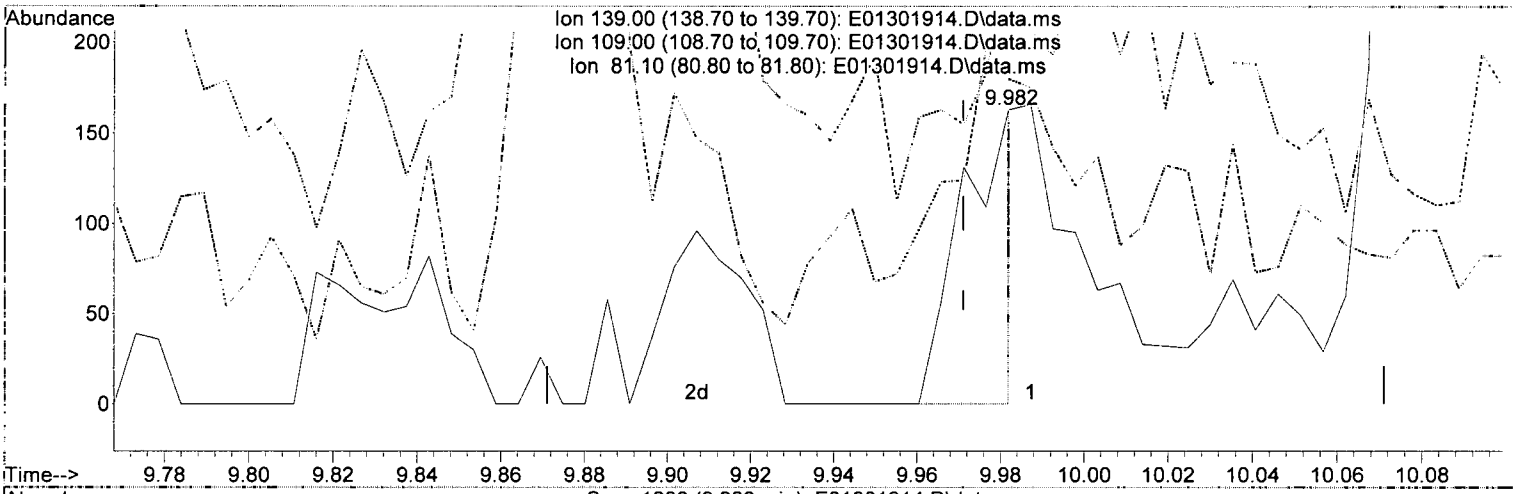


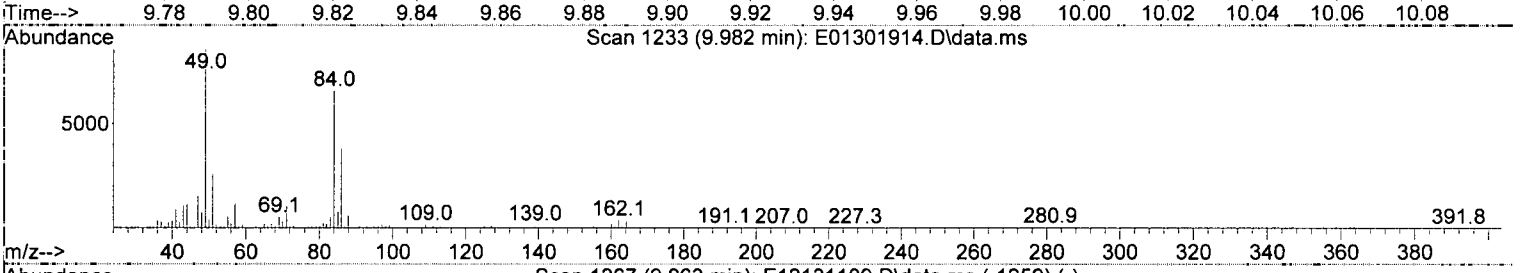
R = 2.37e-002 A*A + 2.46e-001 A - 8.09e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

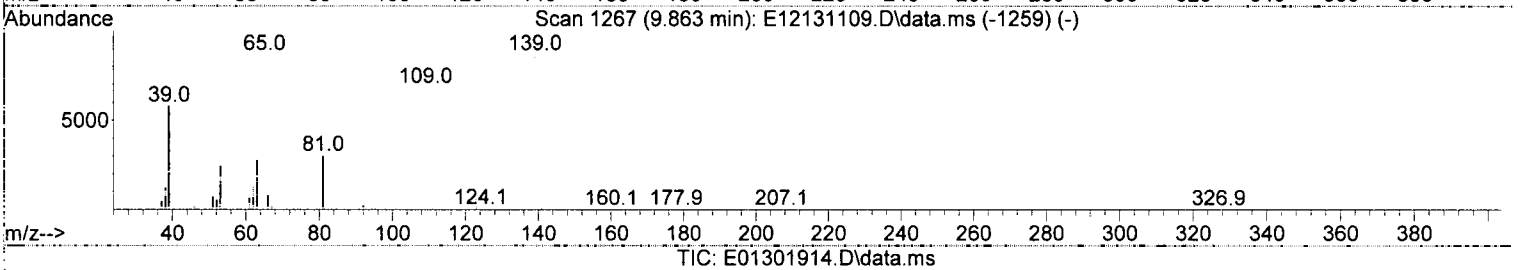
Quantitation Report (Qedit)

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







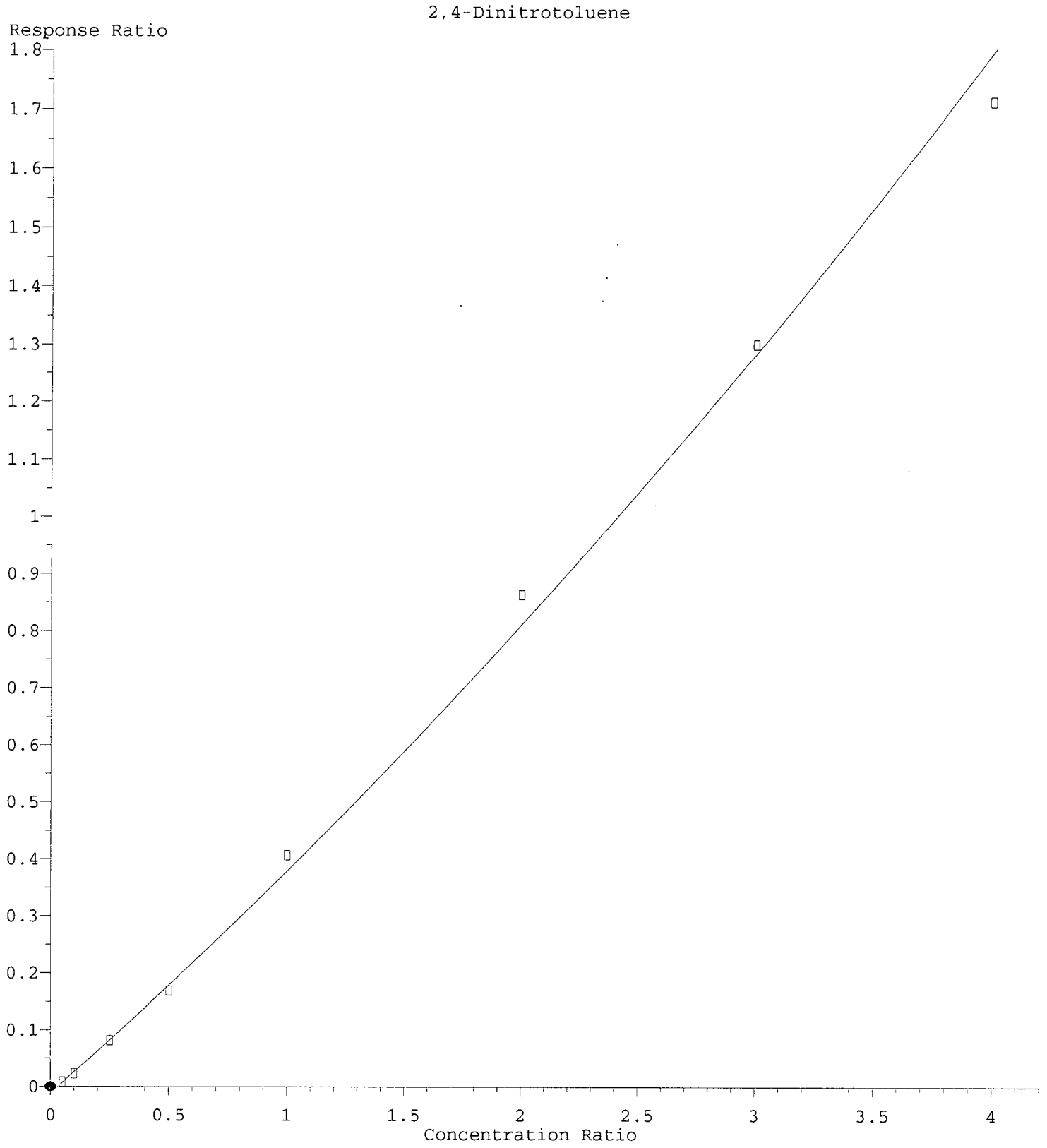
TIC: E01301914.D\data.ms

(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

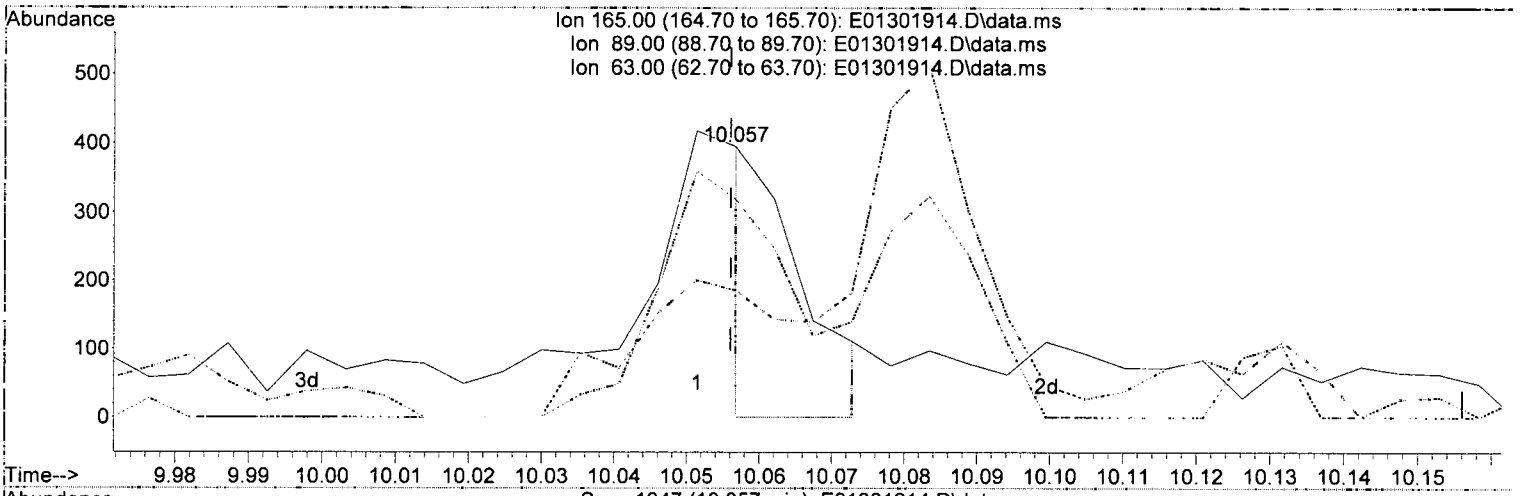


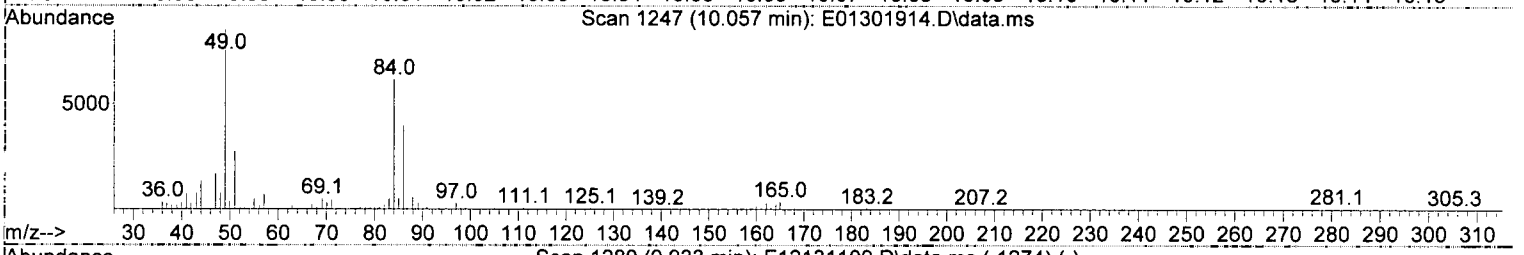
R = 2.07e-002 A*A + 3.70e-001 A - 1.13e-002
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

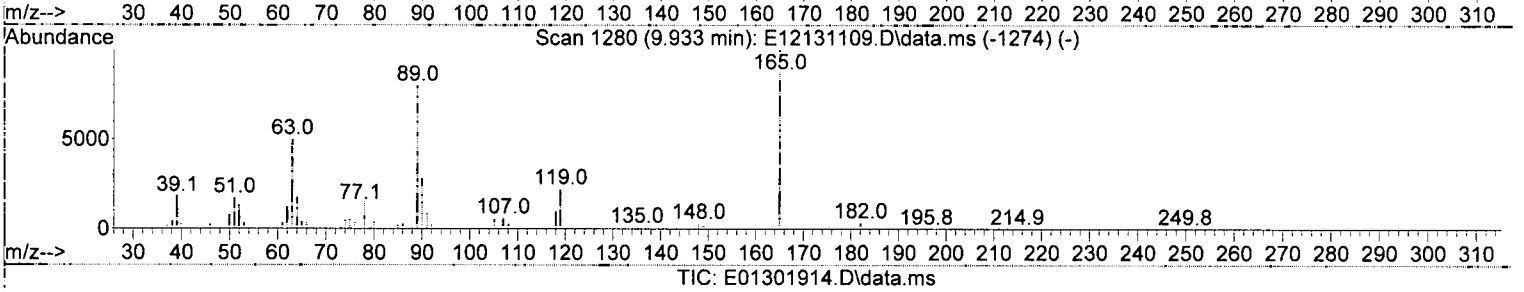
Quantitation Report (Qedit)

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







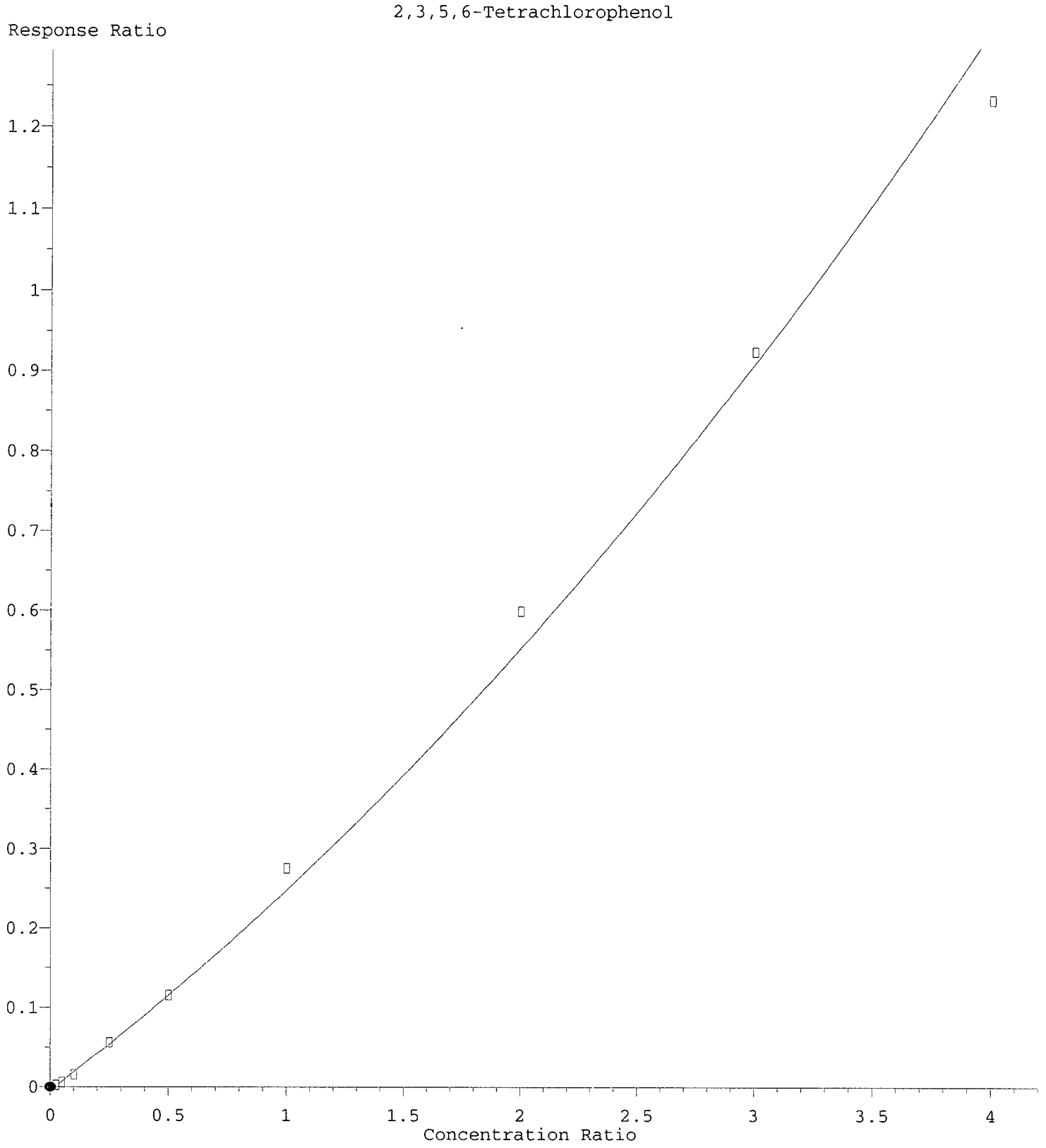
TIC: E01301914.D\data.ms

(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

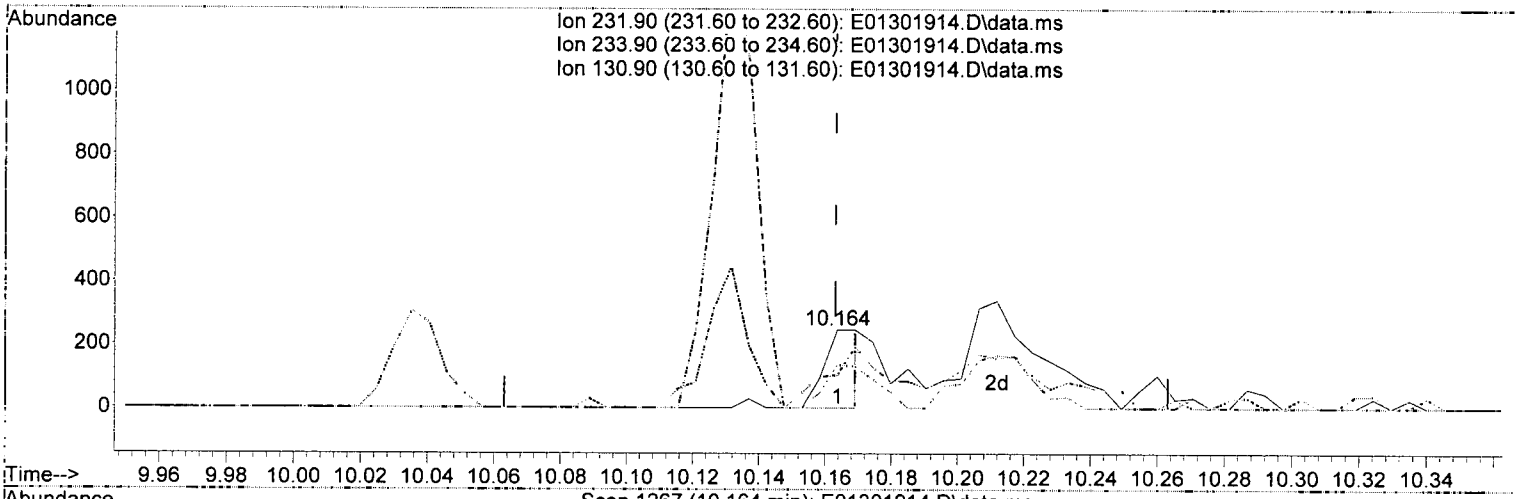


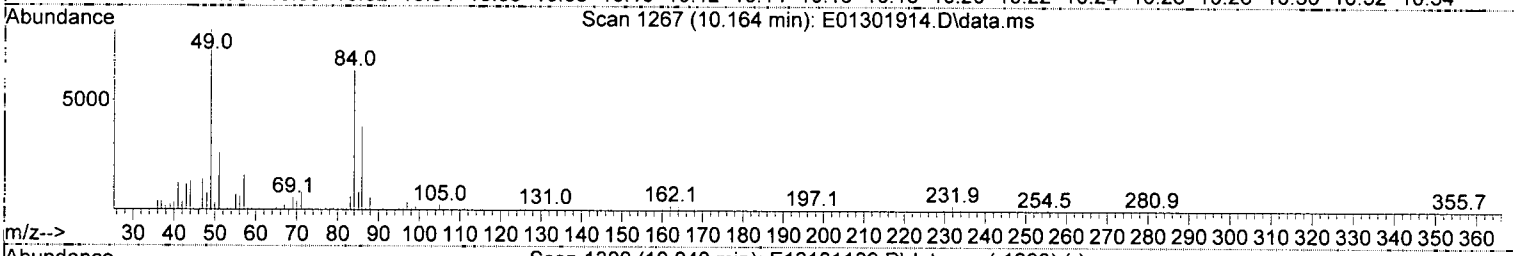
R = 2.63e-002 A*A + 2.26e-001 A - 4.06e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

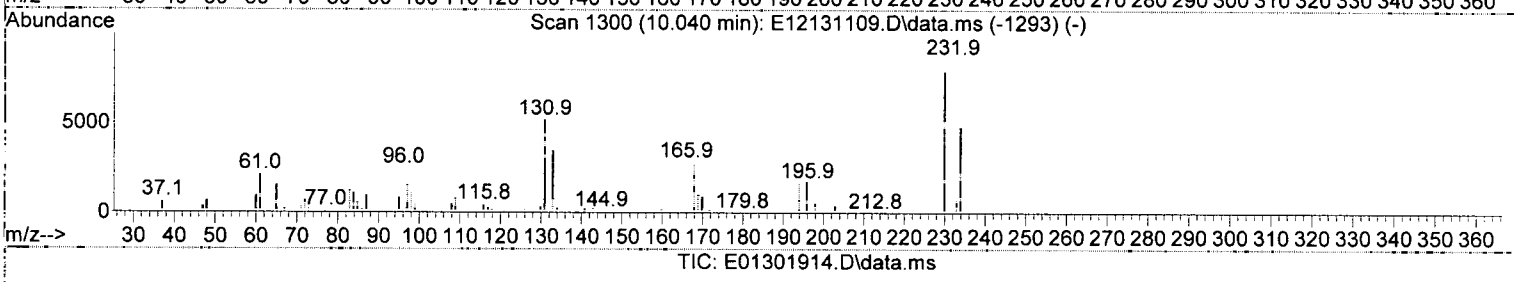
Quantitation Report (Qedit)

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







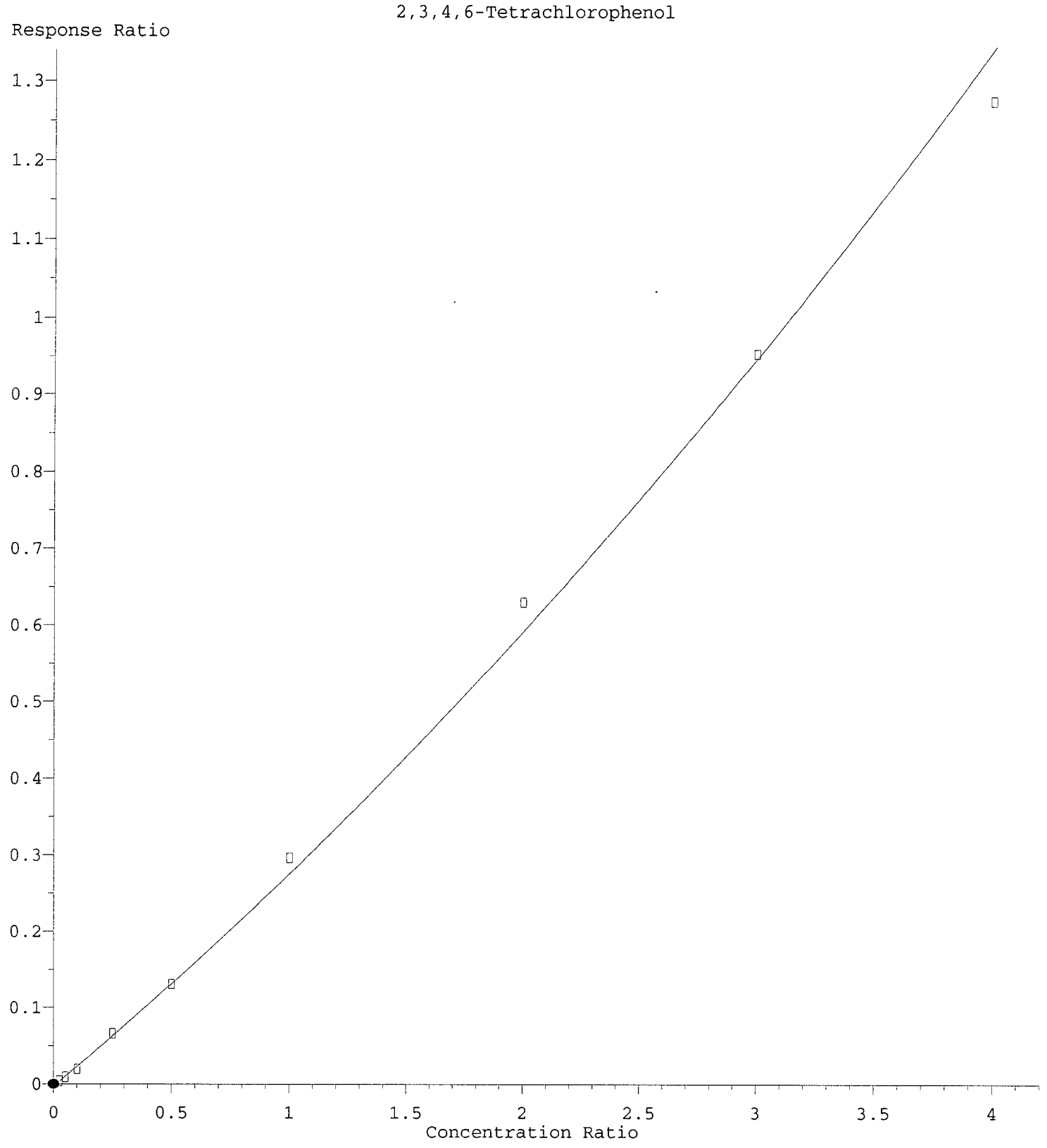
TIC: E01301914.D\data.ms

(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

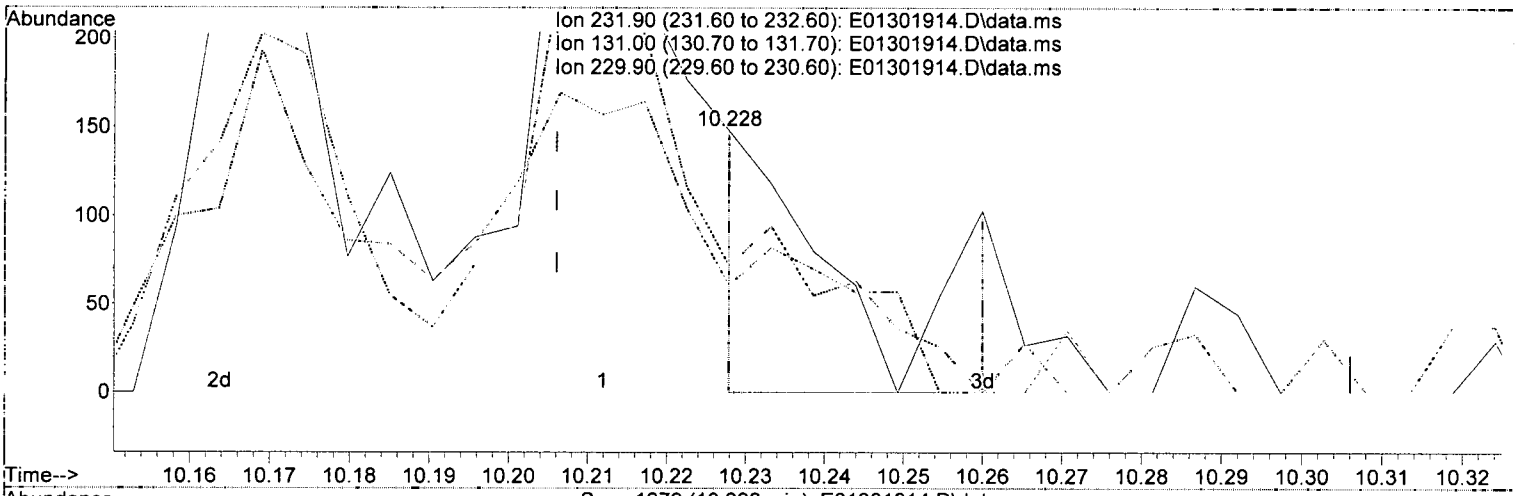


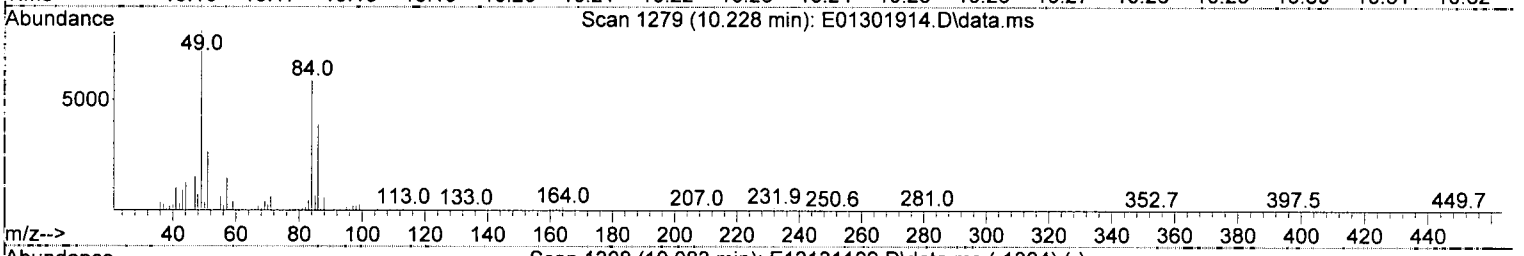
R = 1.91e-002 A*A + 2.59e-001 A - 3.03e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

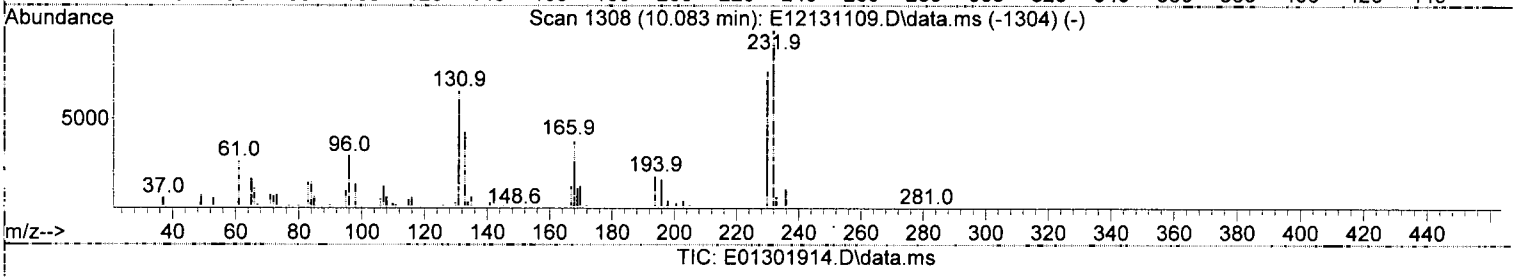
Quantitation Report (Qedit)

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







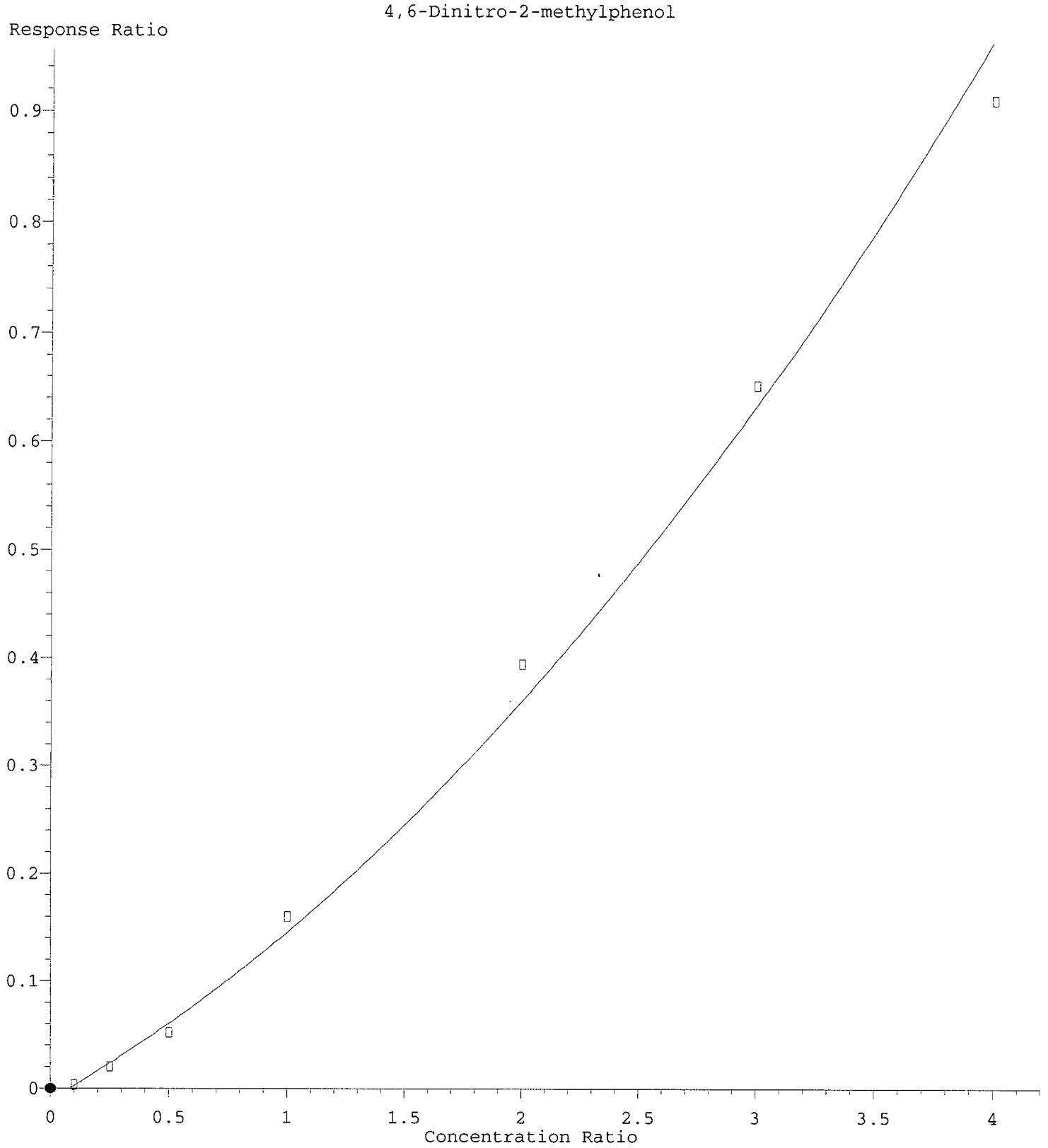
TIC: E01301914.D\data.ms

(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

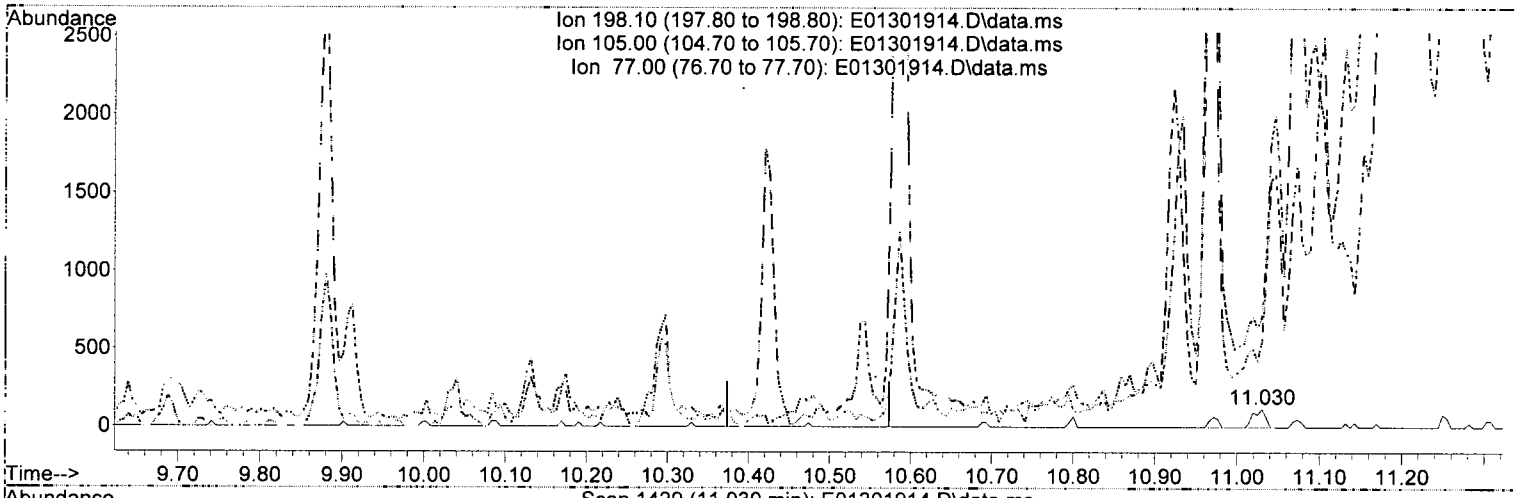


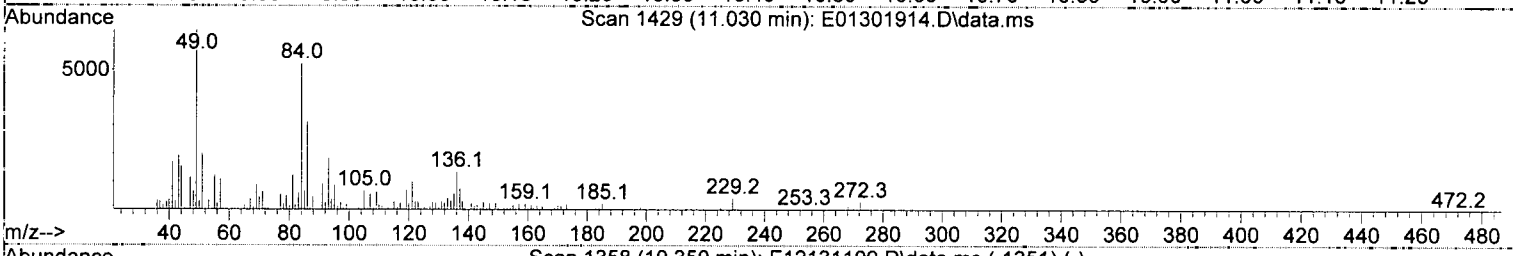
R = 2.93e-002 A*A + 1.27e-001 A - 1.03e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

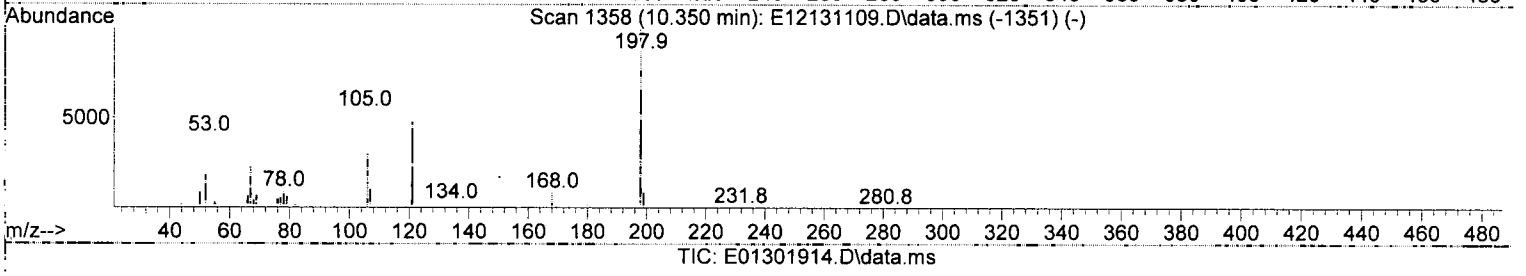
Quantitation Report (Qedit)

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







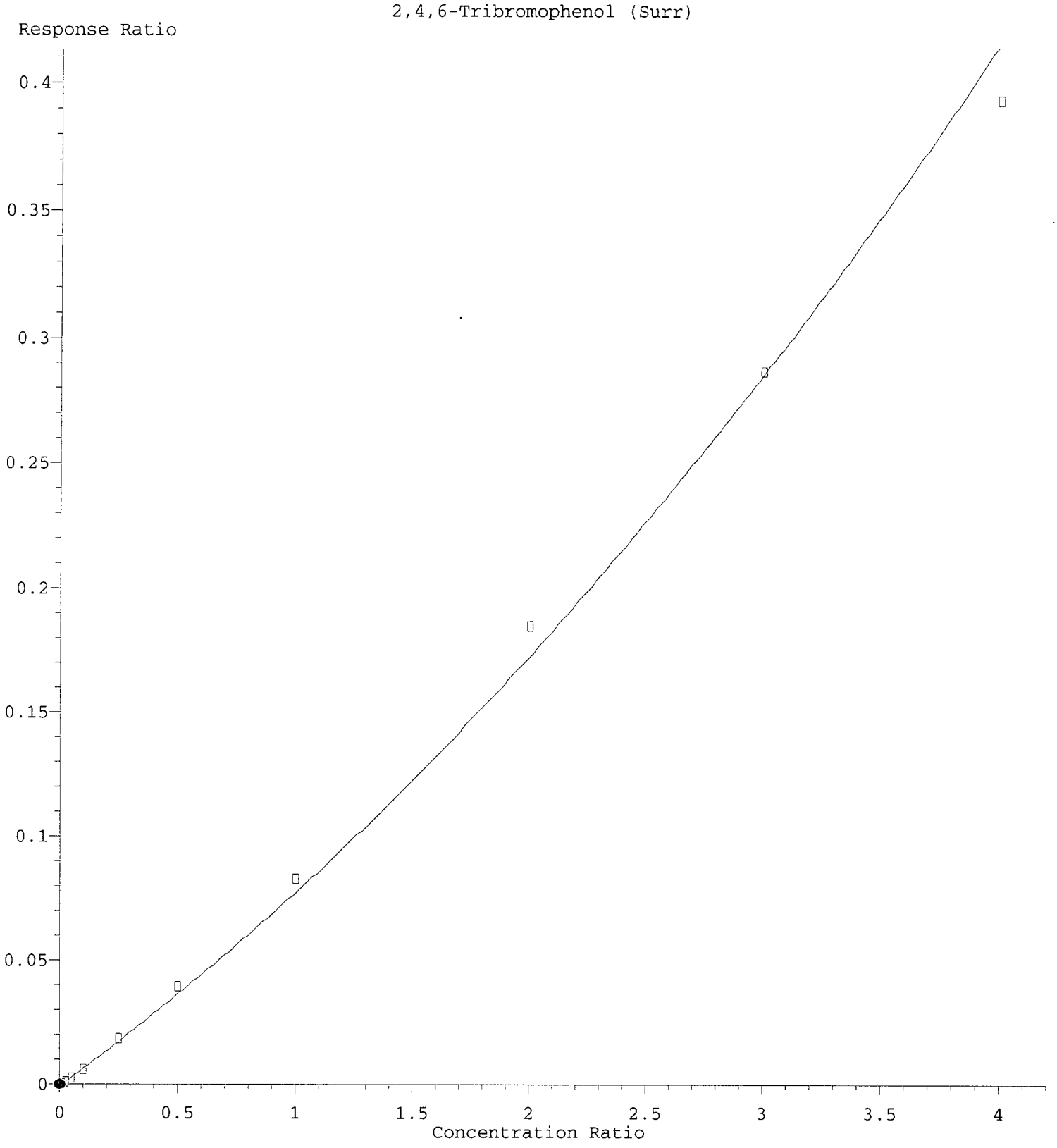
TIC: E01301914.D\data.ms

(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

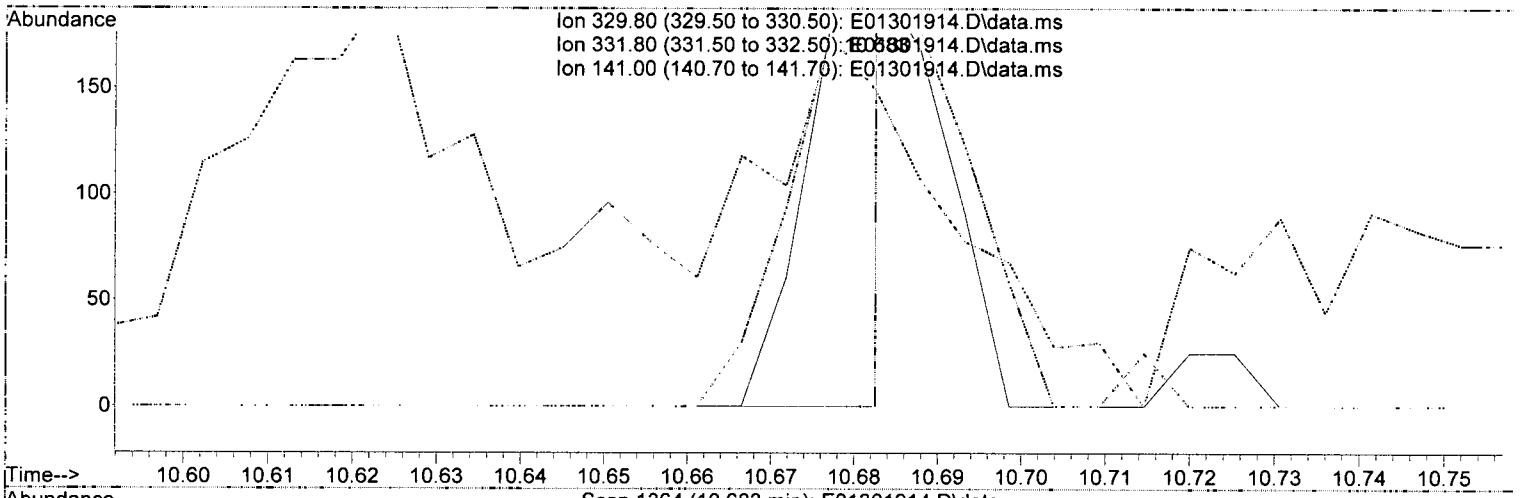


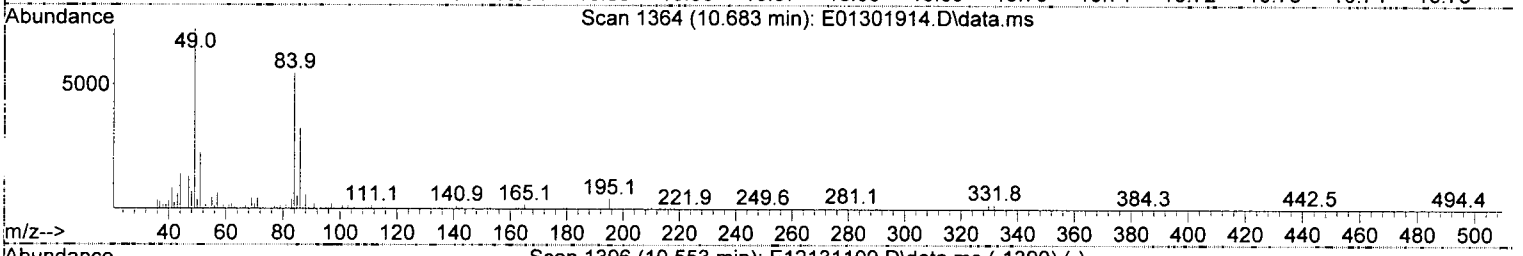
R = 8.71e-003 A*A + 6.92e-002 A - 5.01e-004
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

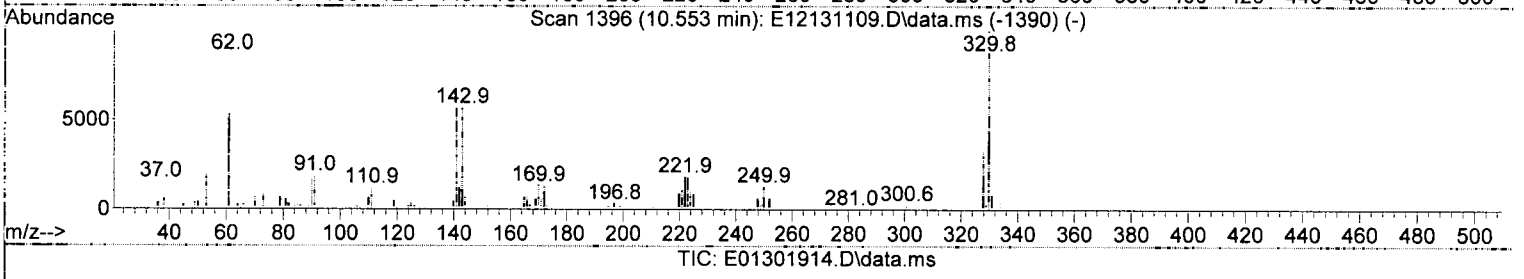
Quantitation Report (Qedit)

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







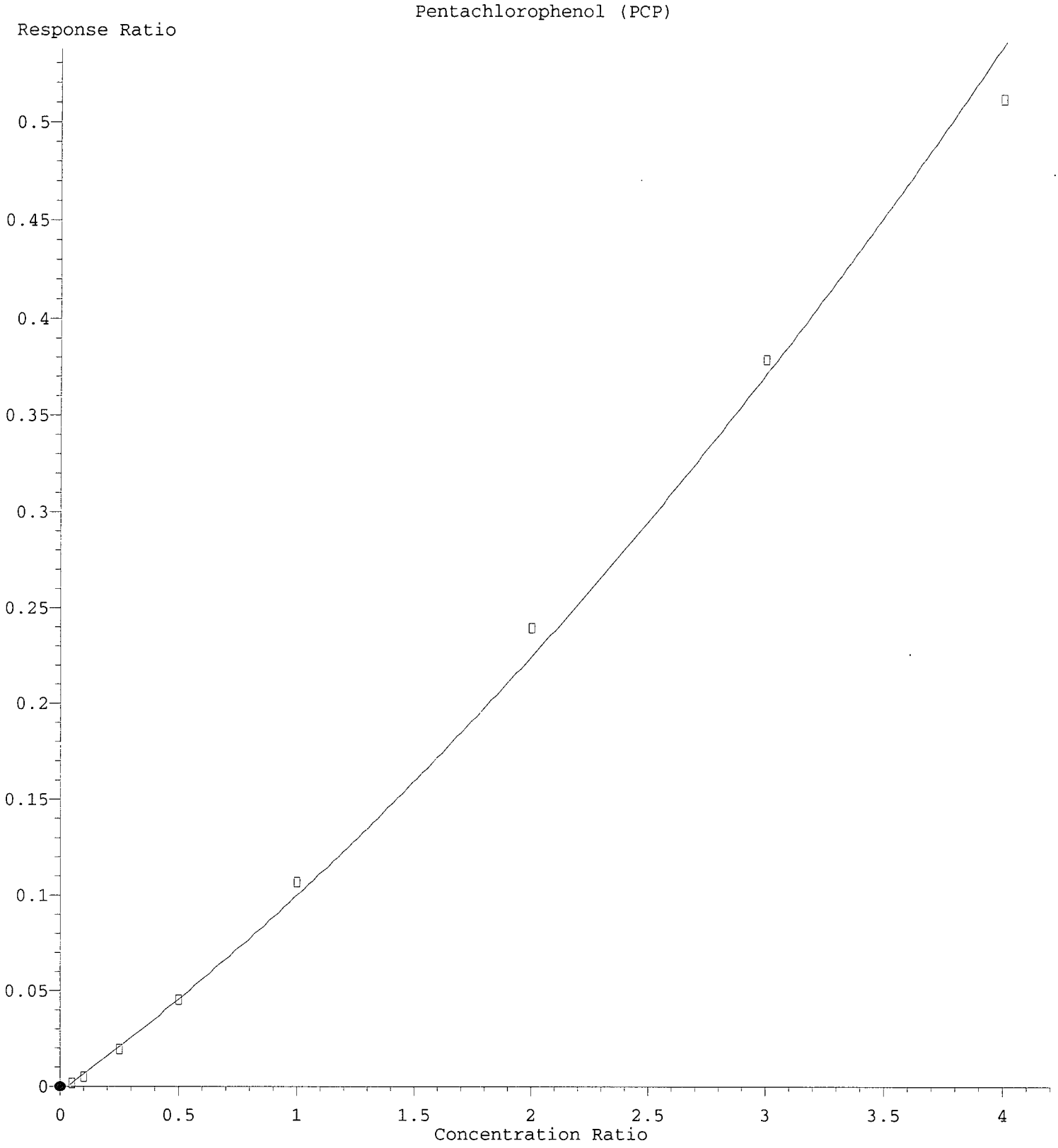
TIC: E01301914.D\data.ms

(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

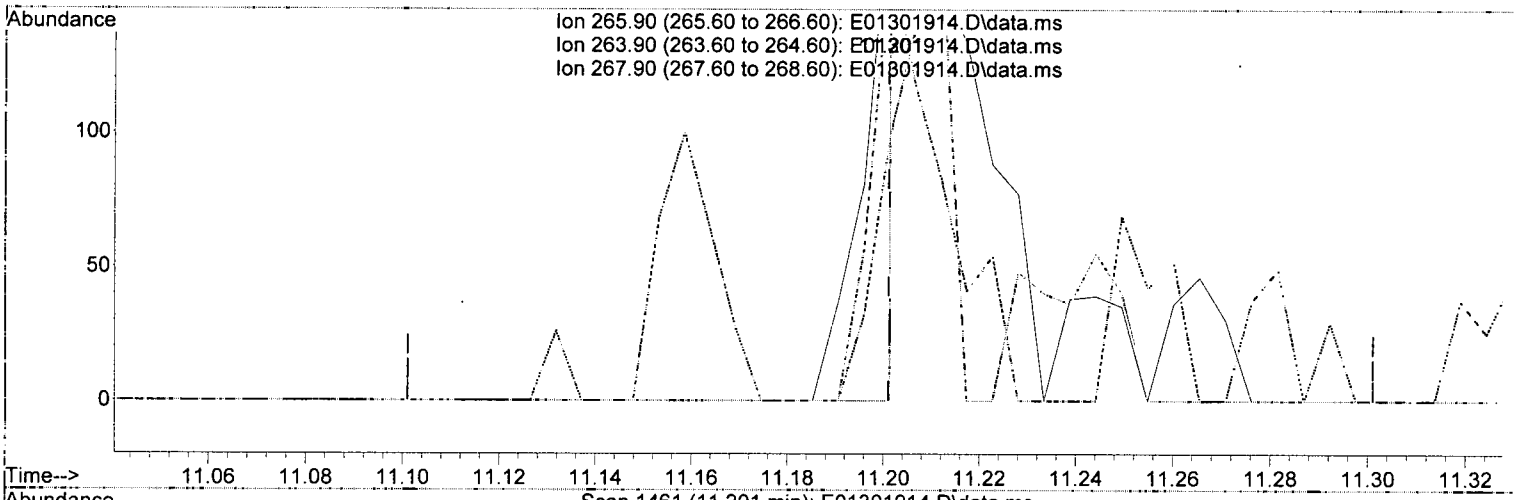


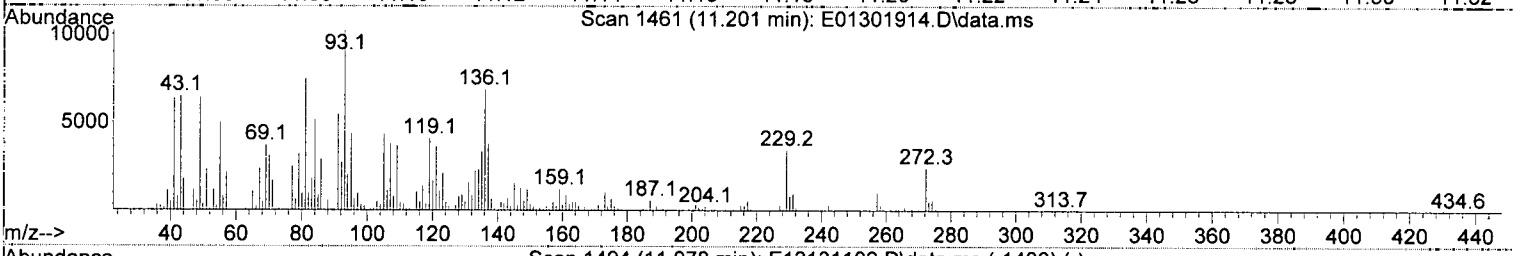
R = 1.08e-002 A*A + 9.25e-002 A - 3.25e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

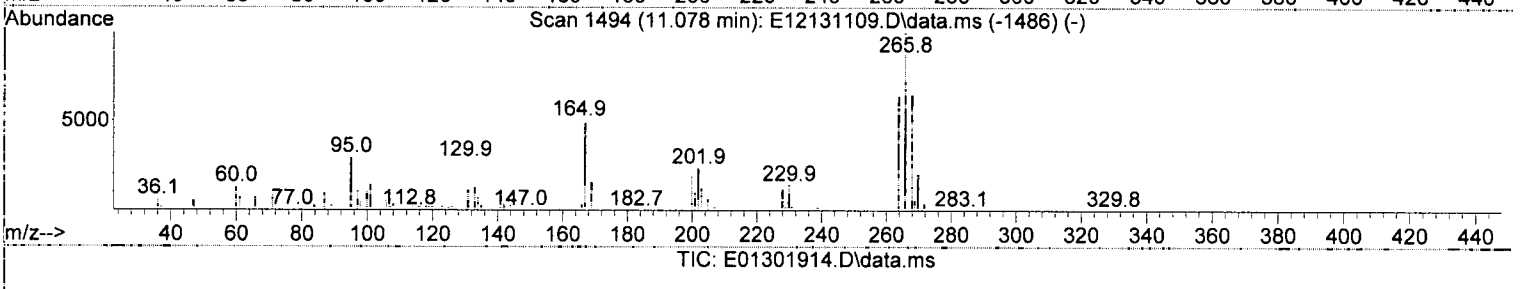
Quantitation Report (Qedit)

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







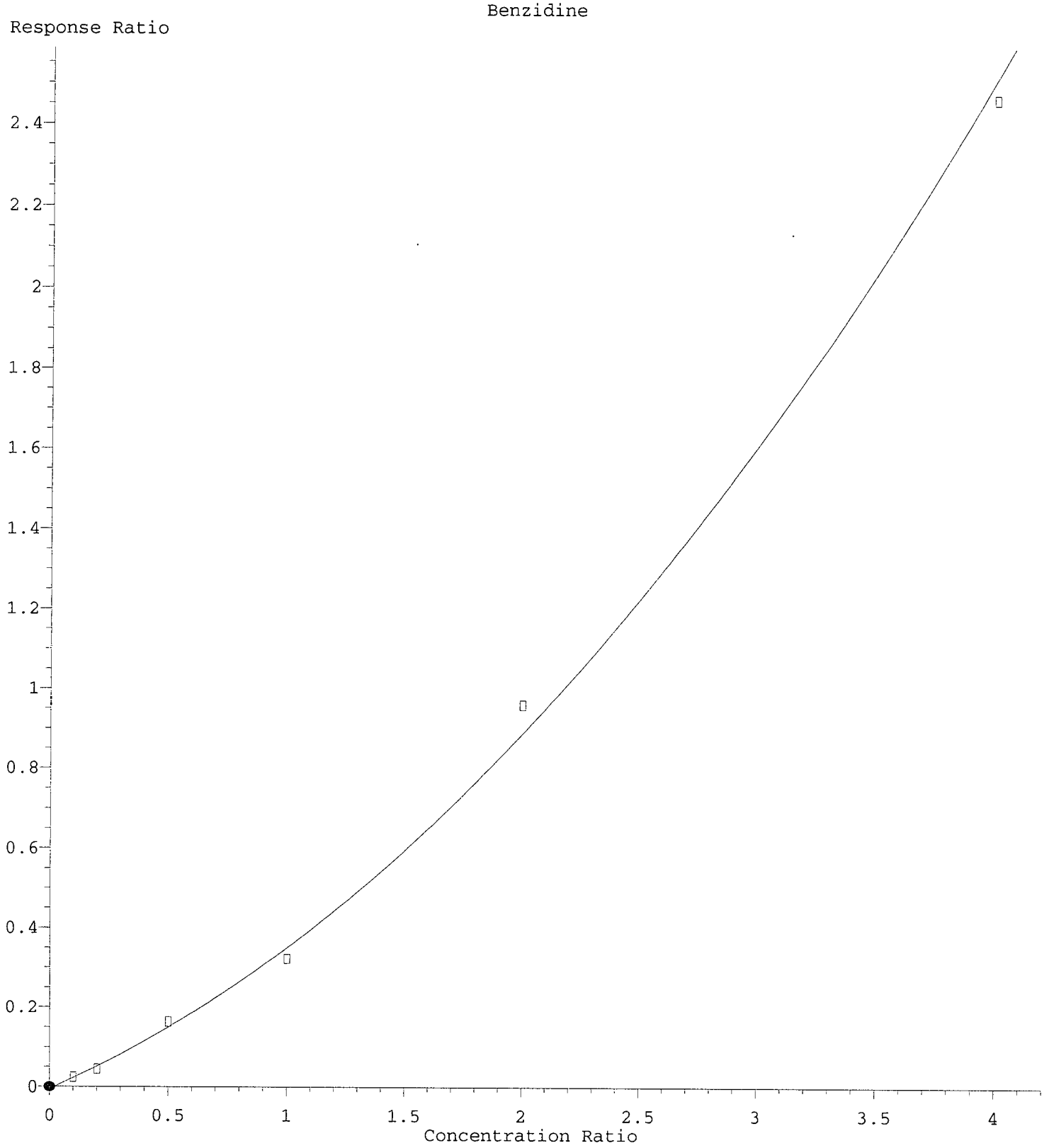
TIC: E01301914.D\data.ms

(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

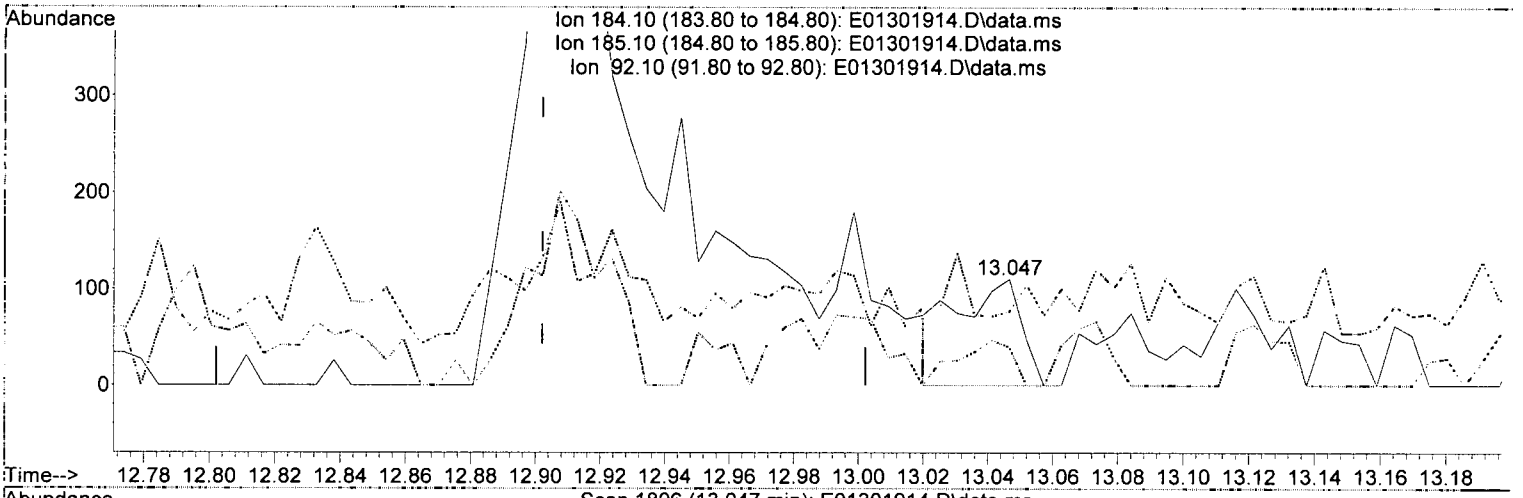


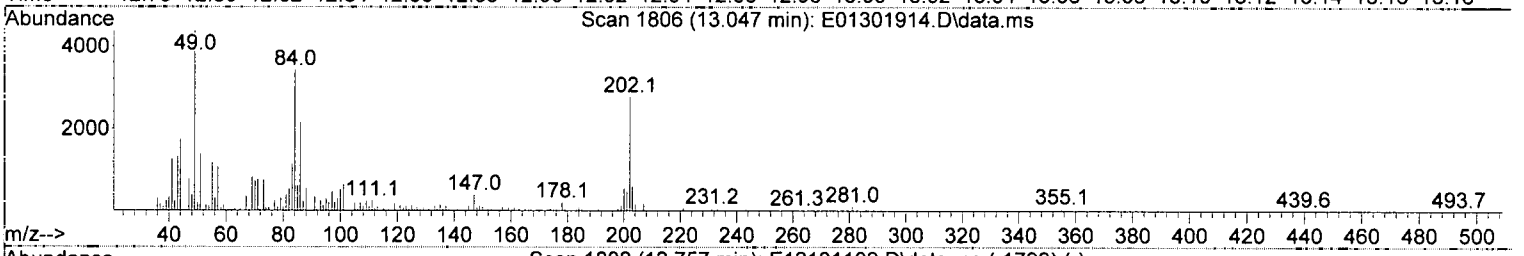
R = 9.14e-002 A*A + 2.64e-001 A - 5.09e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

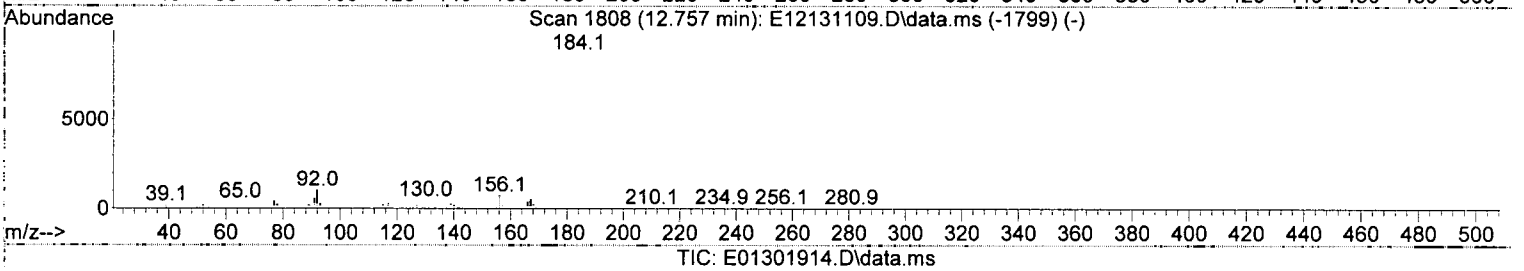
Quantitation Report (Qedit)

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







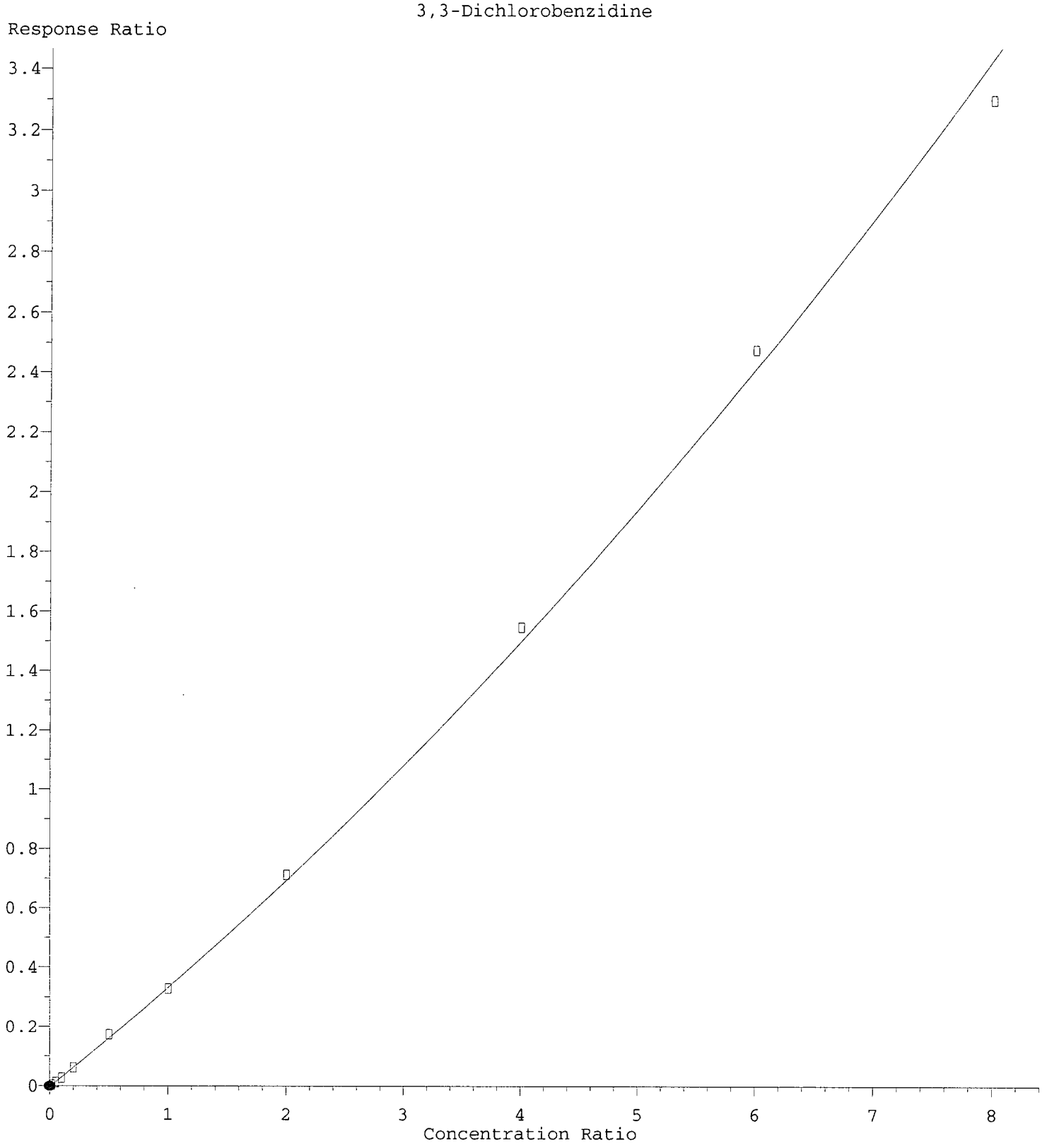
TIC: E01301914.D\data.ms

(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

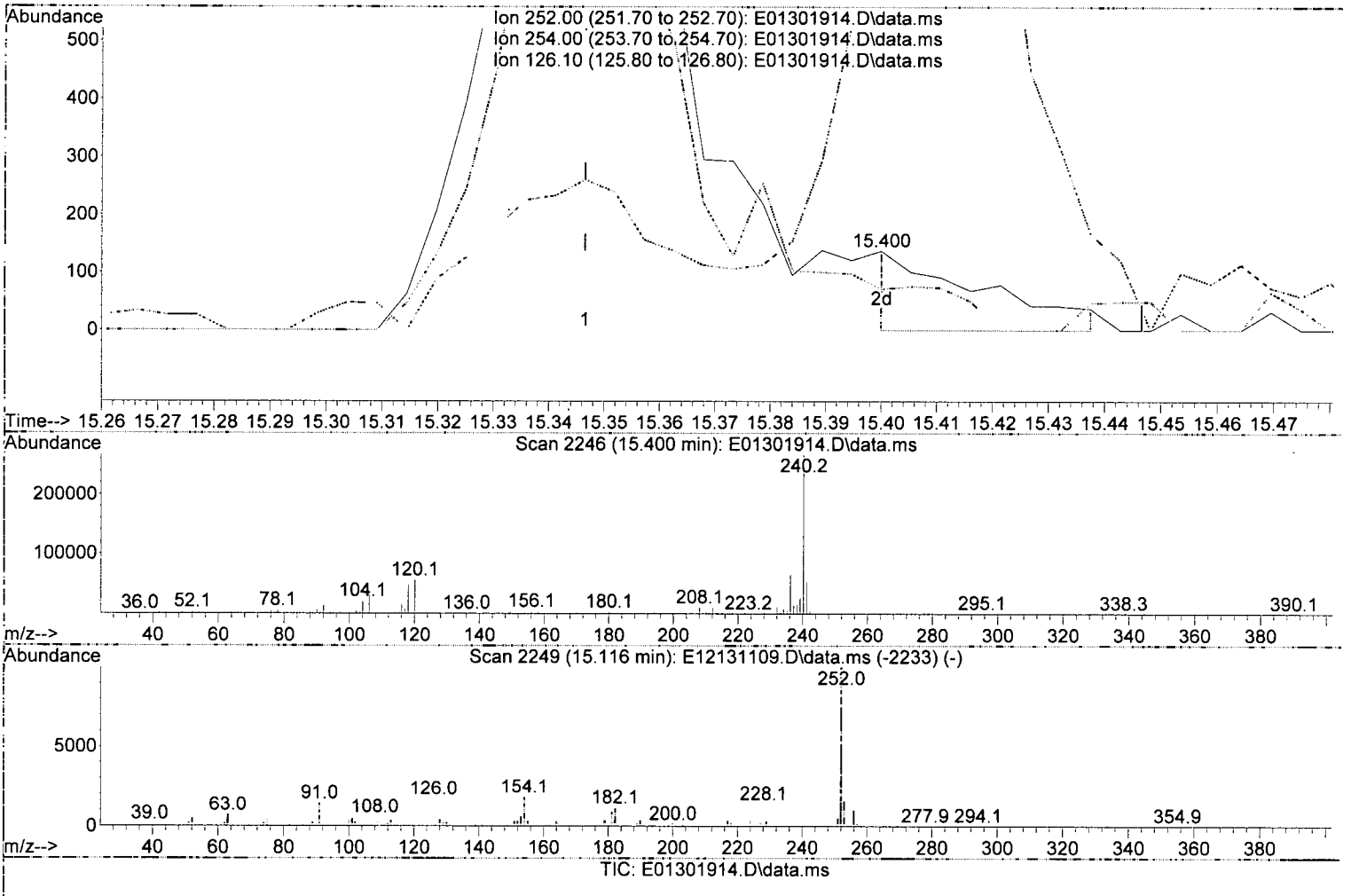


R = 1.36e-002 A*A + 3.21e-001 A - 3.38e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

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



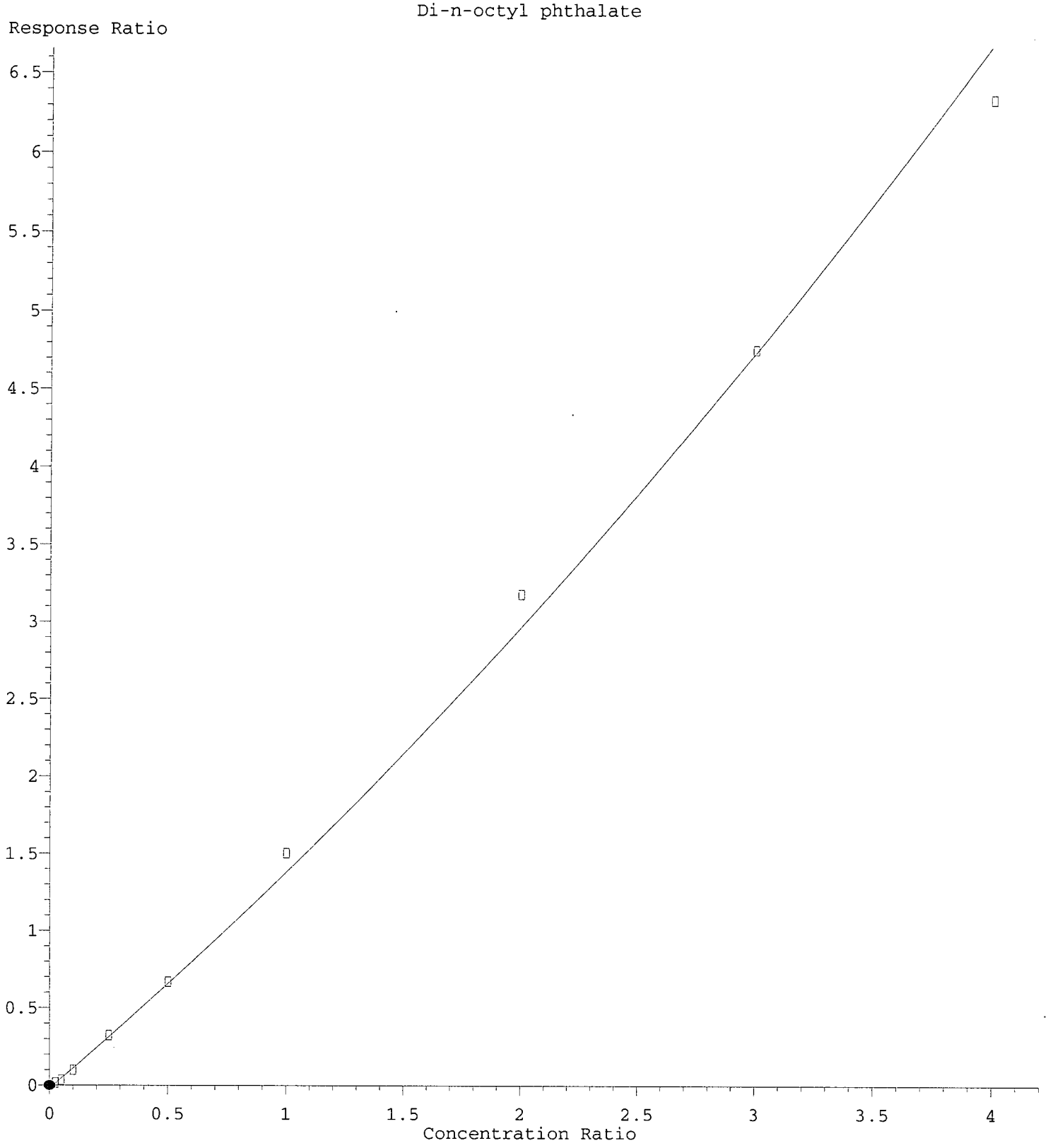
TIC: E01301914.D\data.ms

(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

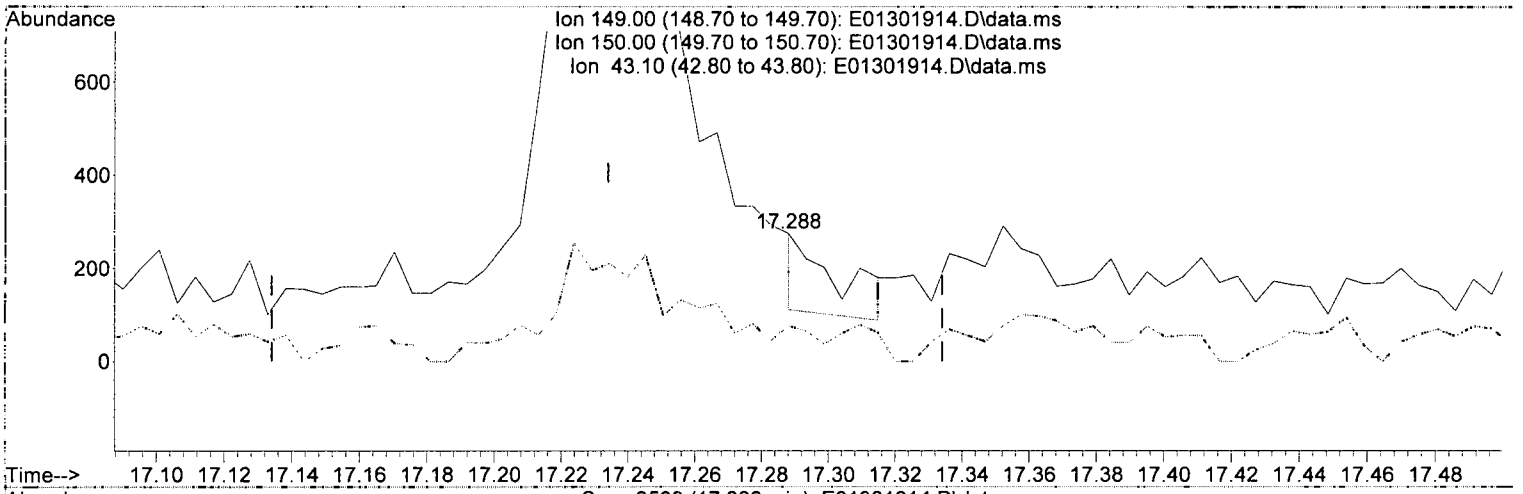


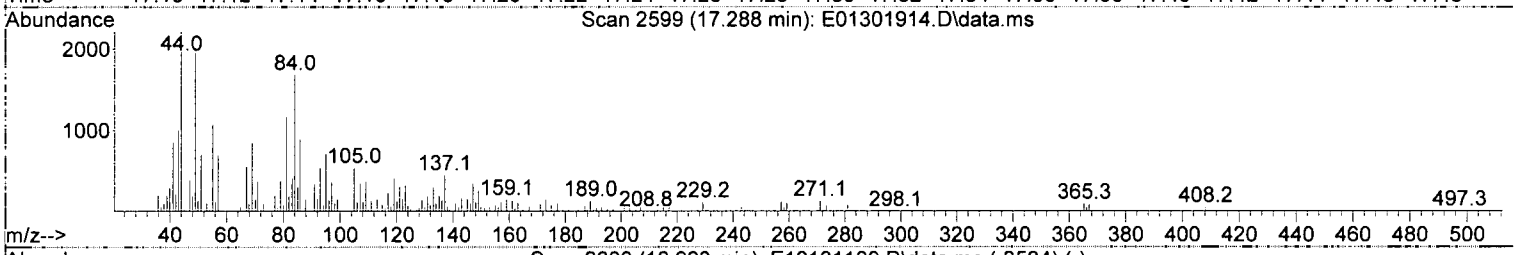
R = 9.25e-002 A*A + 1.31e+000 A - 2.01e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\METHODS\SV5_013019.M
Calibration Table Last Updated: Thu Jan 31 11:41:33 2019

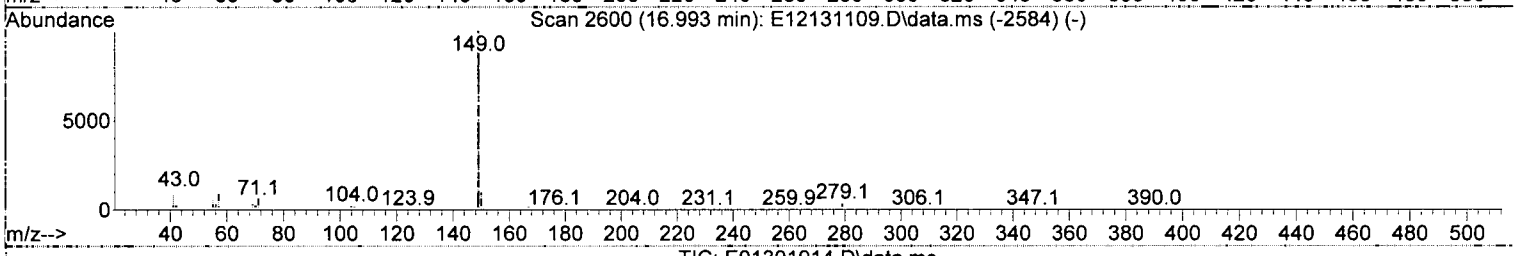
Quantitation Report (Qedit)

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

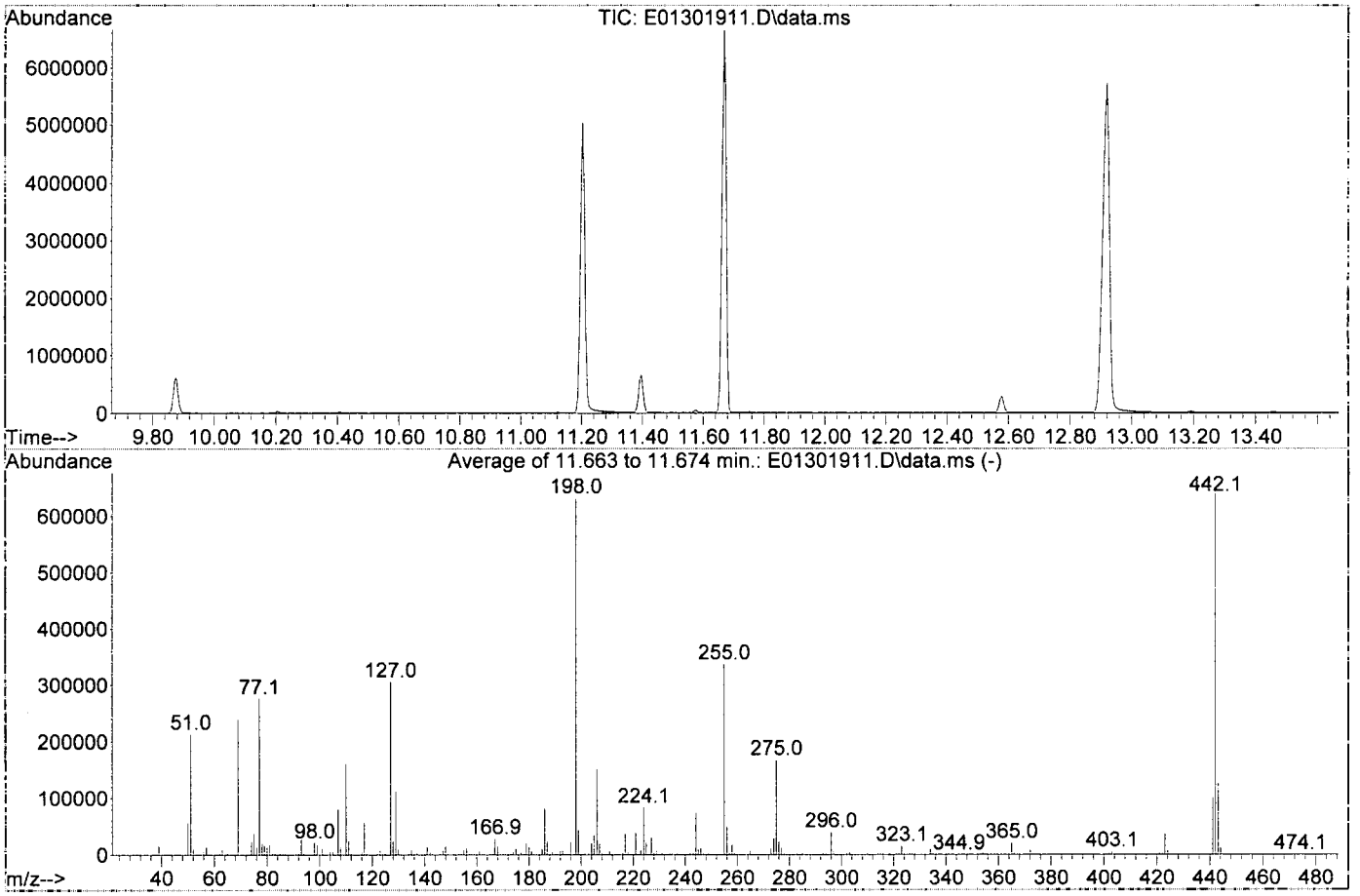
Retuned after this run

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

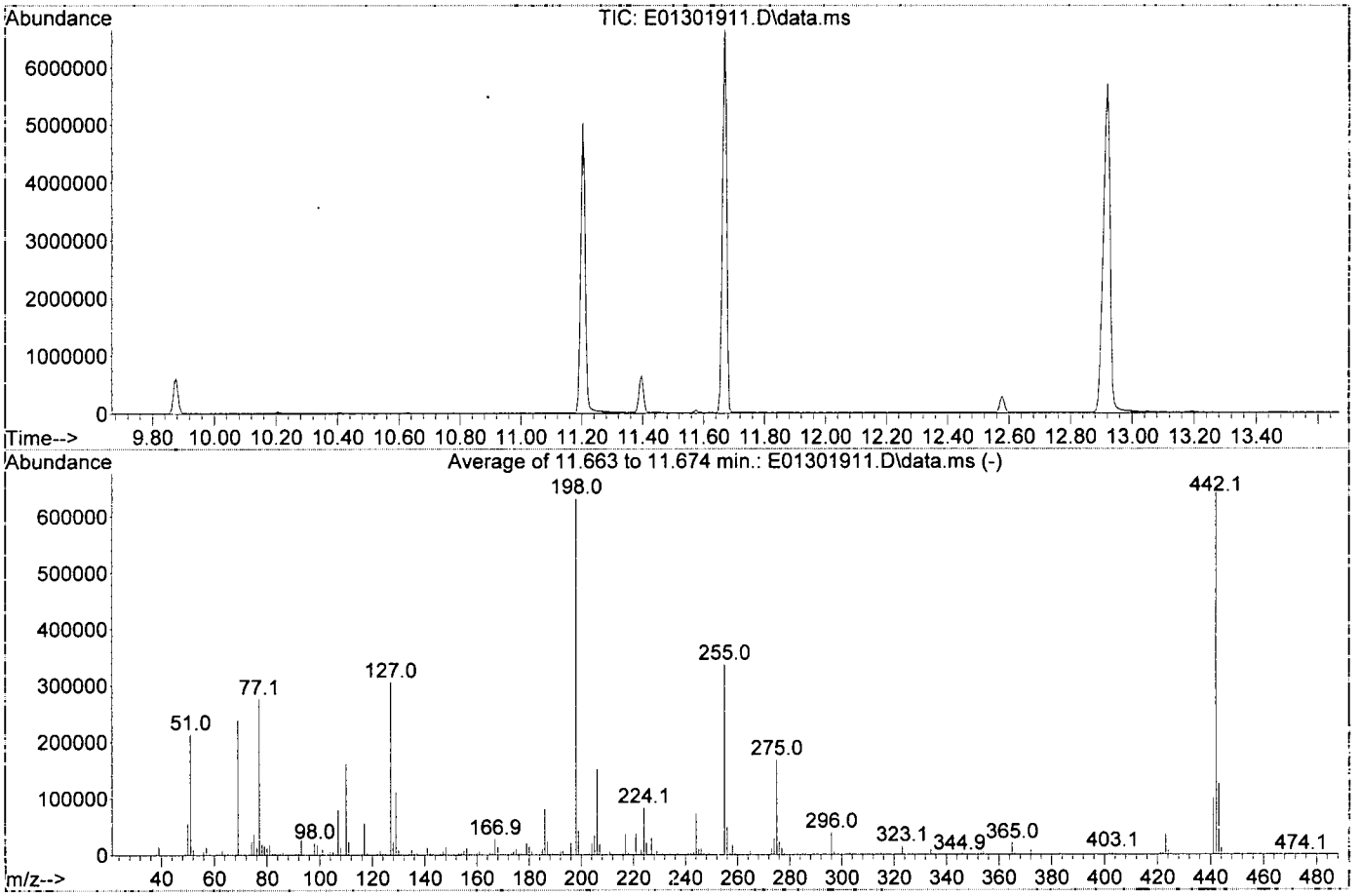
Data Path : C:\msdchem\1\DATA\2019-01\9A30046\
Data File : E01301911.D
Acq On : 30 Jan 2019 4:45 pm
Operator : JK/ AMS /DTH
Sample : 9A30046-TUN1
Misc : 1x, A19A180 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

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

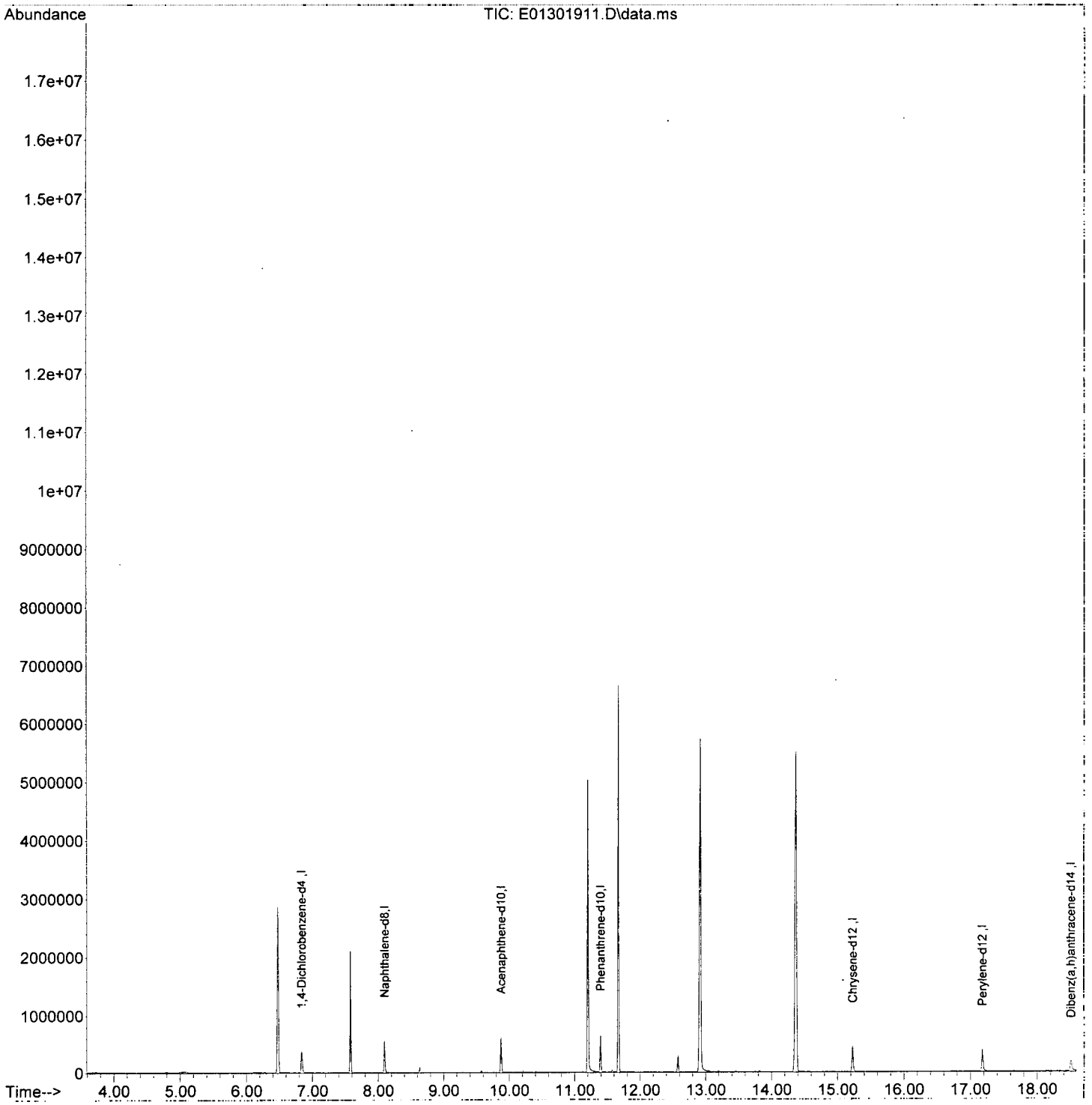
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.834	150	126132	2.00	ug/mL	0.00
2) Naphthalene-d8	8.096	136	289939	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.877	162	134988	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.396	188	238791	2.00	ug/mL	0.00
11) Chrysene-d12	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

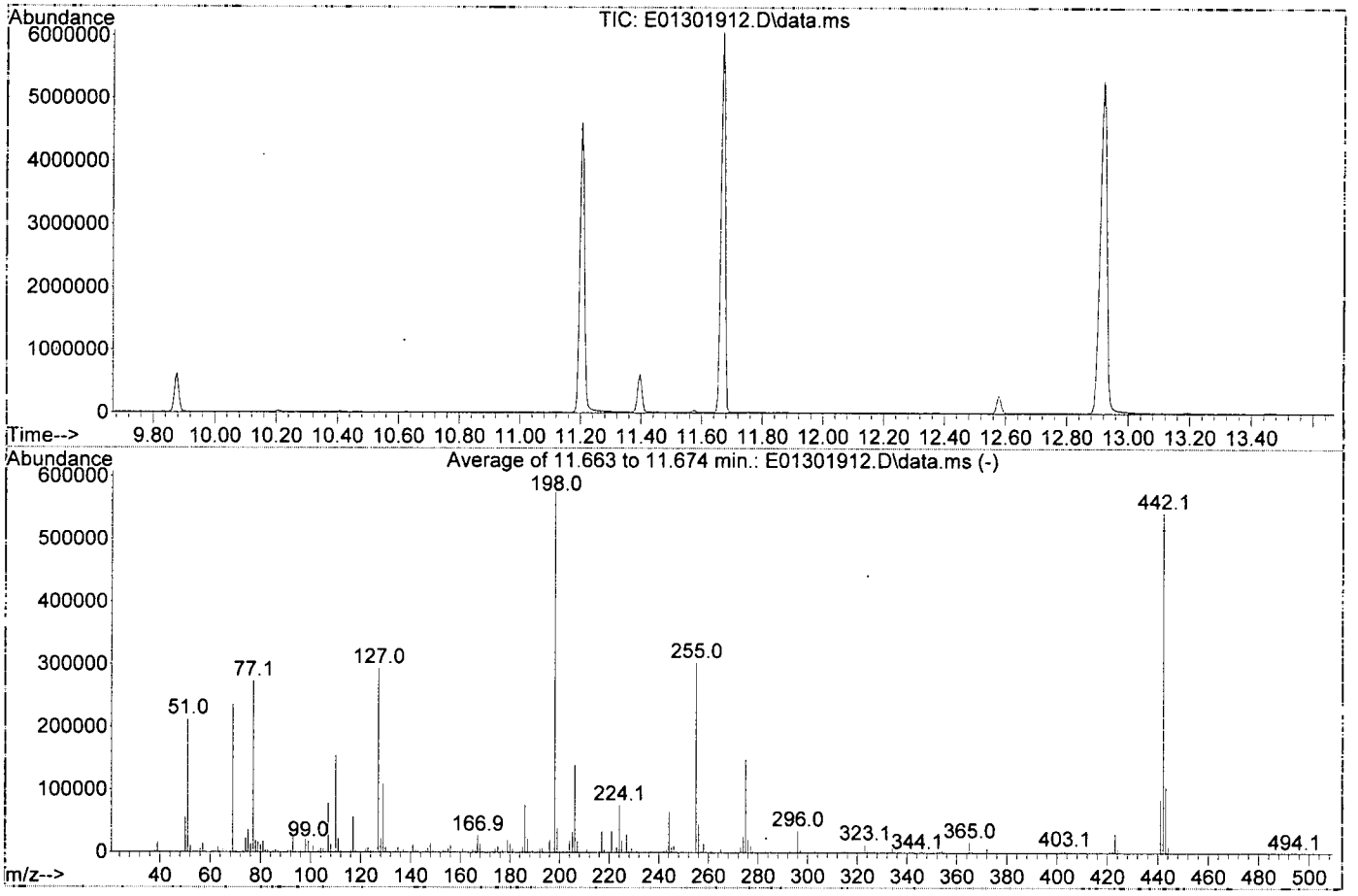
DFTPP

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

JK 1/31/19



AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

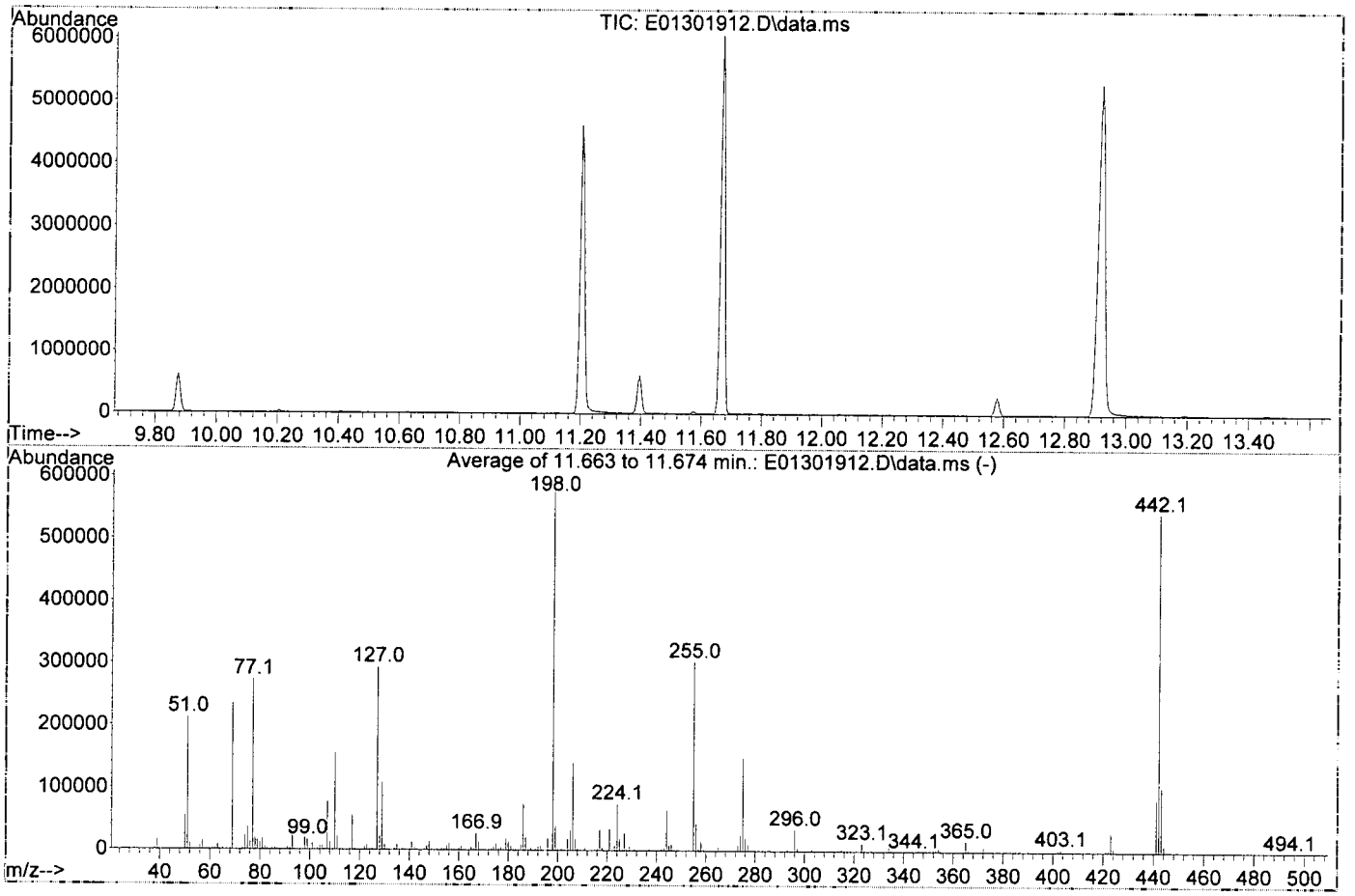
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.8	212856	PASS
68	69	0.00	2	1.2	2720	PASS
69	198	0.00	100	40.7	235823	PASS
70	69	0.00	2	0.5	1200	PASS
127	198	40	60	50.9	294293	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	578709	PASS
199	198	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



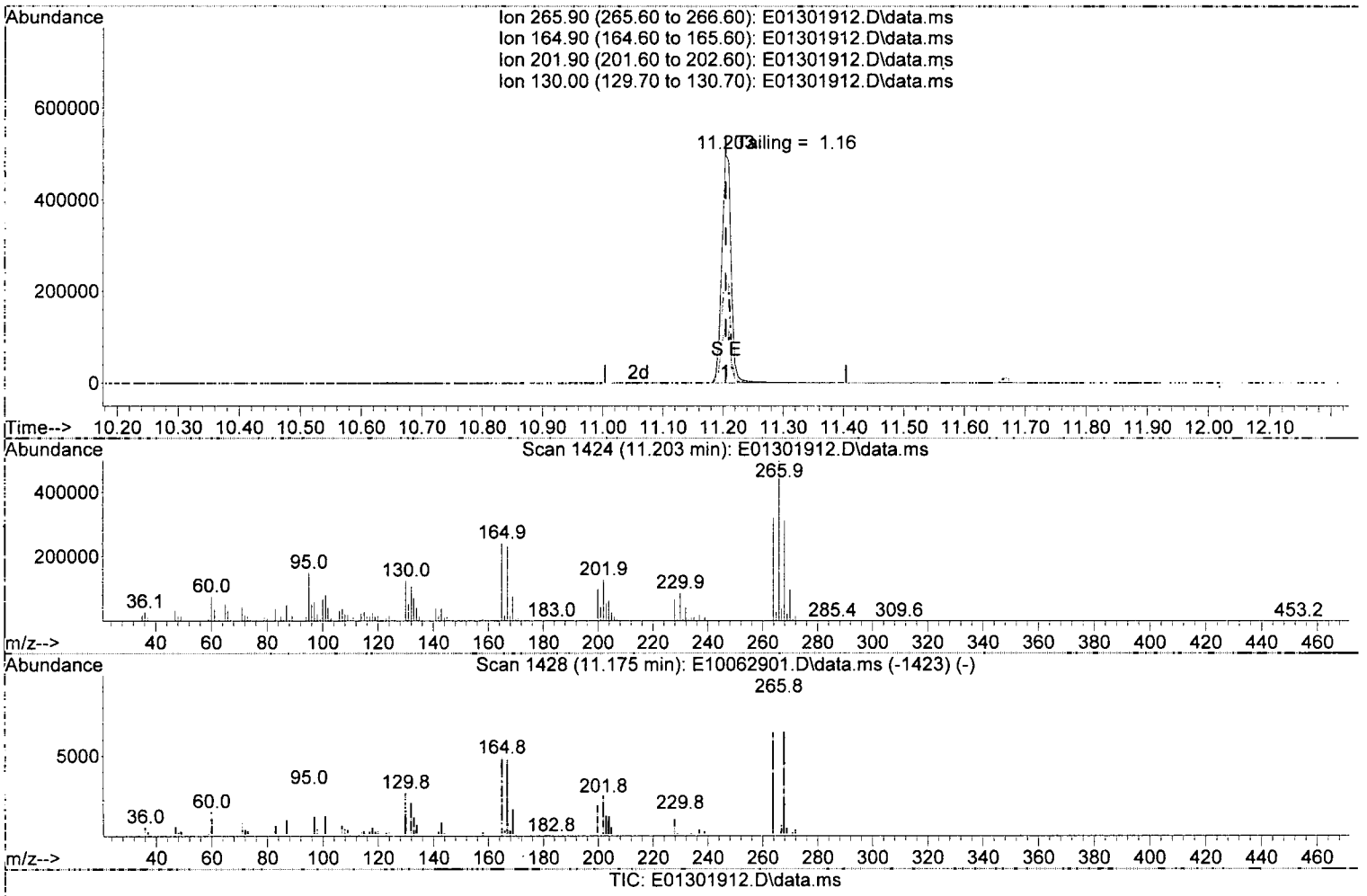
AutoFind: Scans 1510, 1511, 1512; Background Corrected with Scan 1505

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

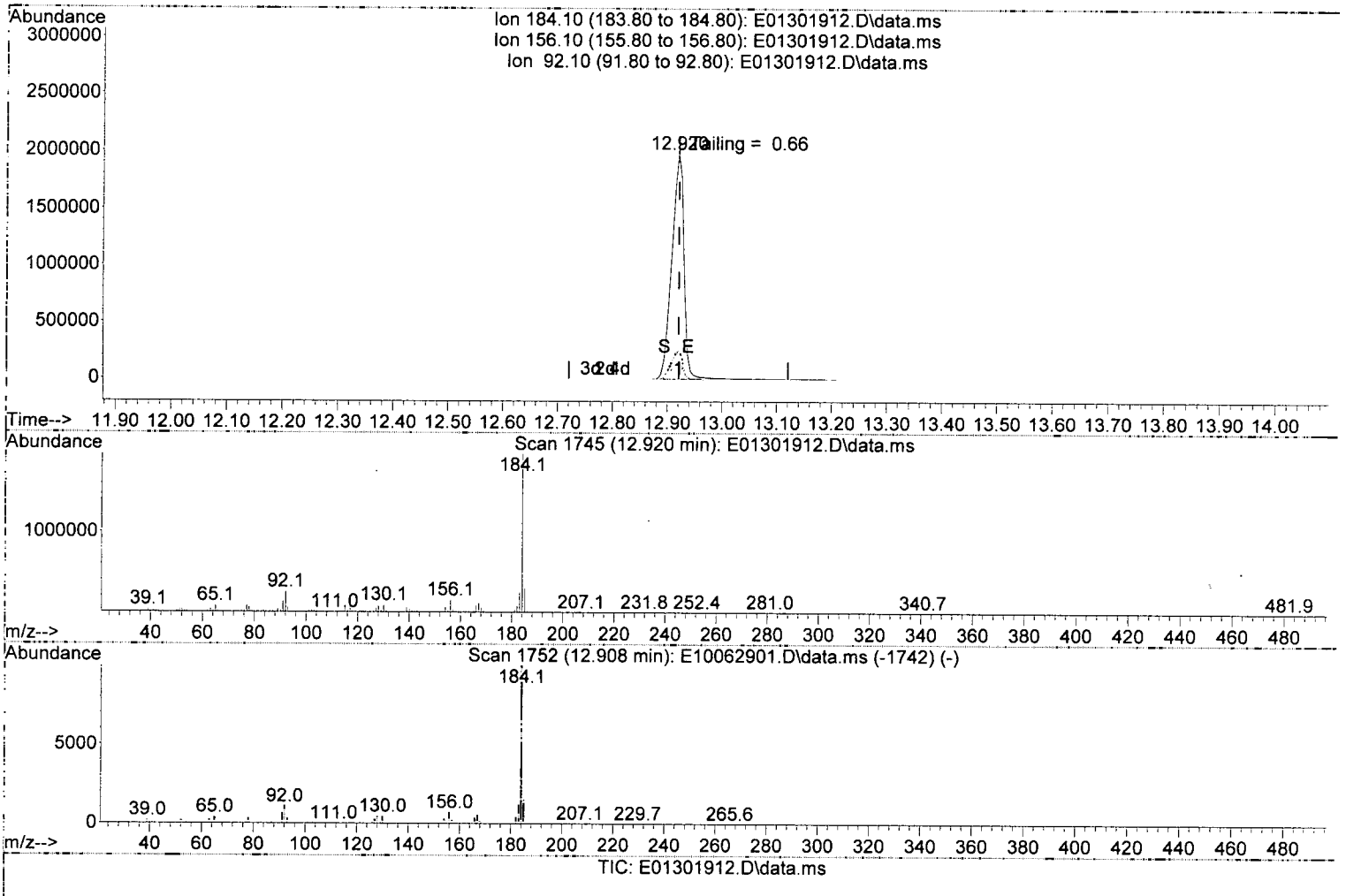
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.80	48.40
201.90	25.10	25.64
130.00	27.20	24.92

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



(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

JK 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

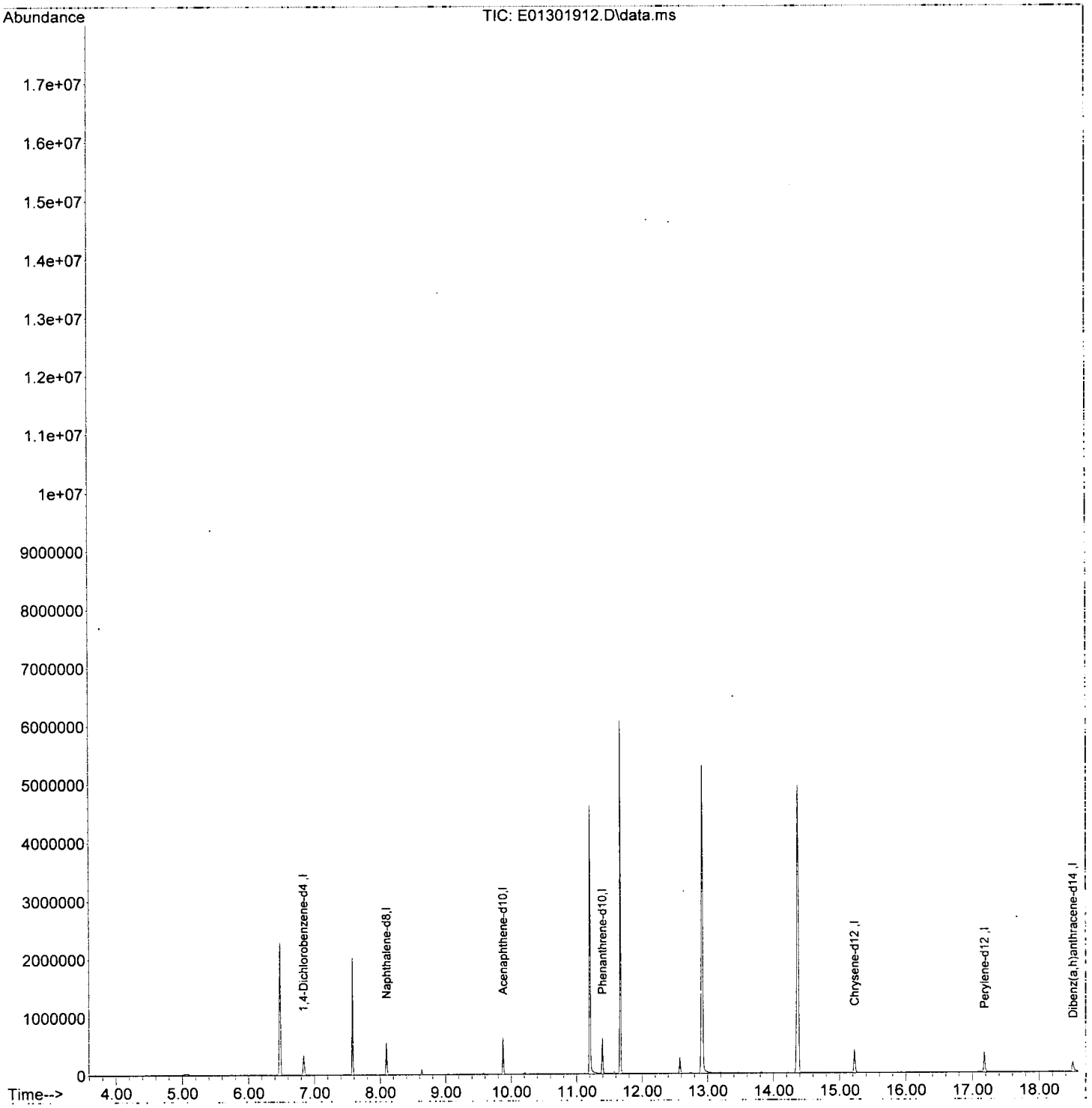
1/31/19

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

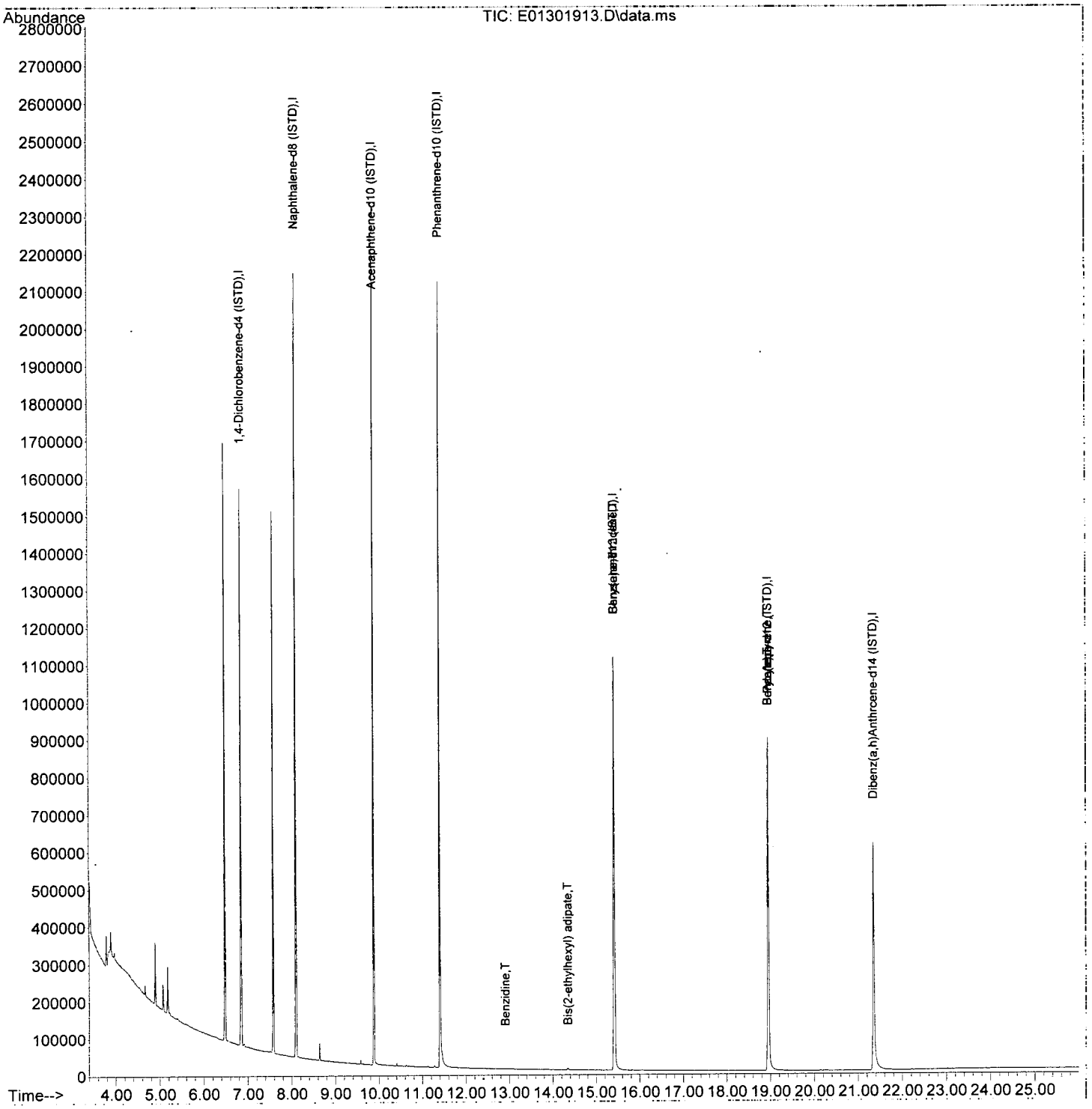
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	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

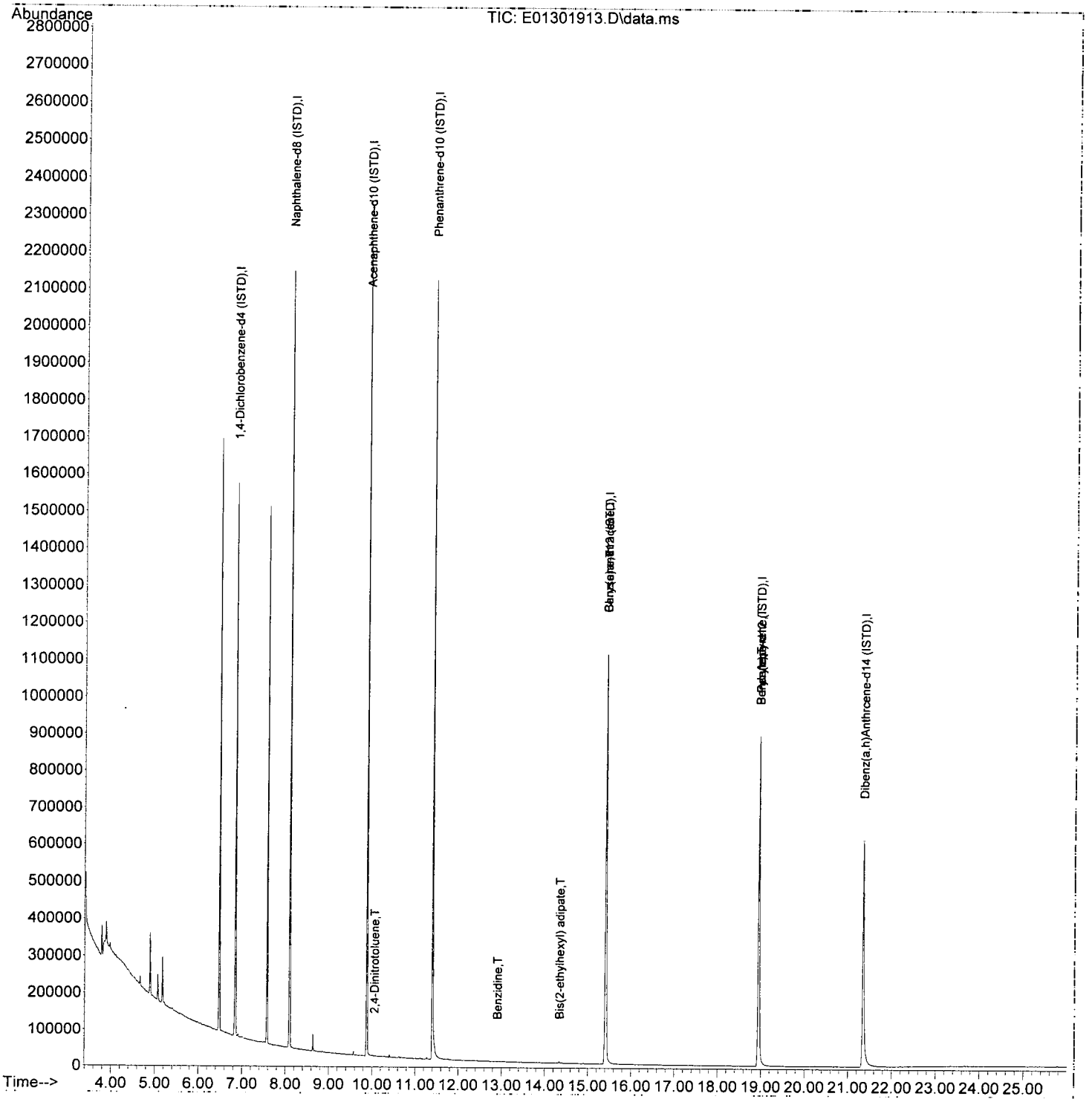
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.	
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		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

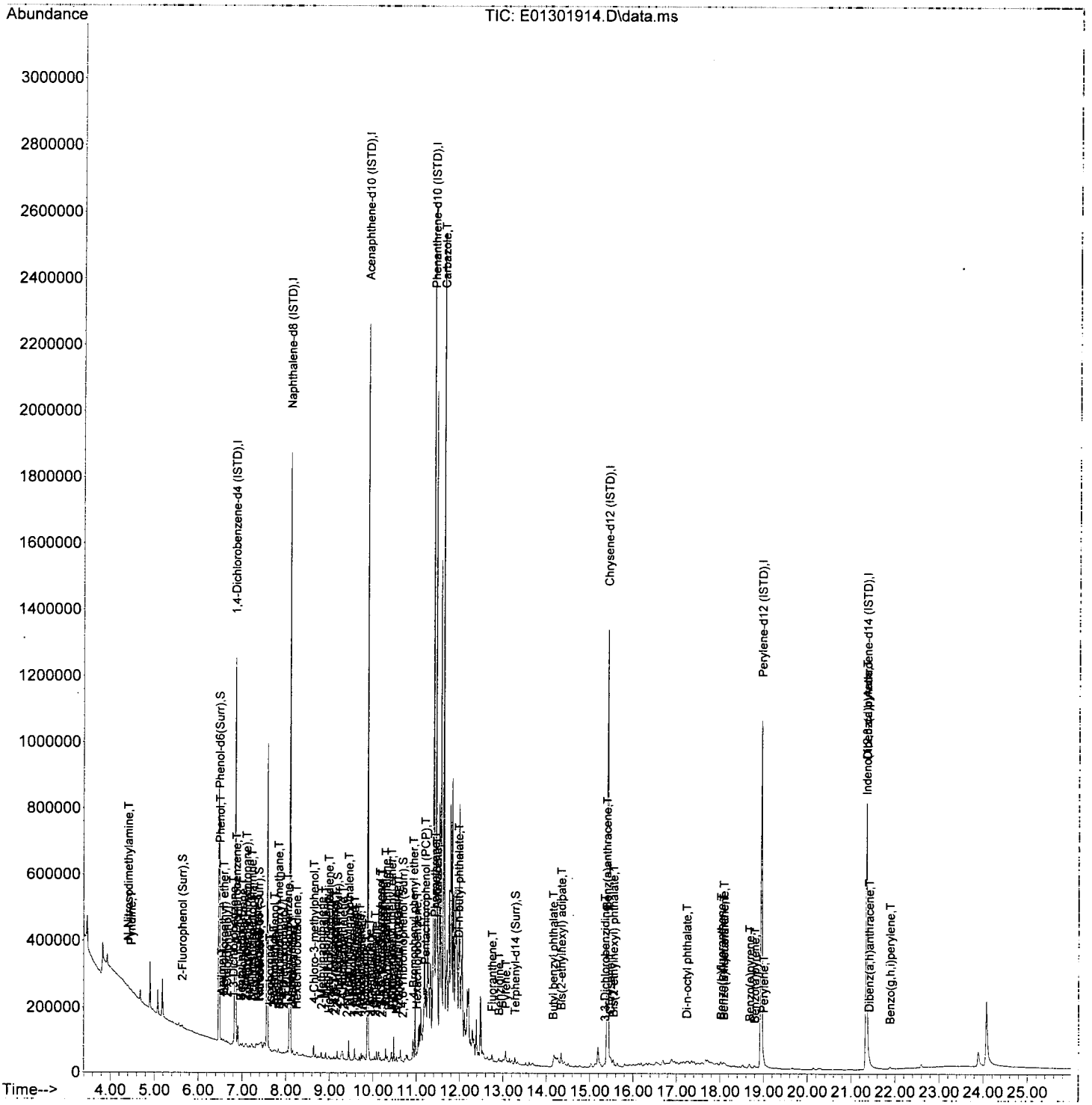
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	2,6-Dimethylnaphthalene	9.442	156	5544	18.54	ng/ml	98
44)	1,4-Dinitrobenzene	9.527	168	197	4.14	ng/ml	99
45)	Dimethyl phthalate	9.575	163	5420	15.96	ng/ml	97
46)	1,3-Dinitrobenzene	9.613	168	245	4.61	ng/ml	59
47)	2,6-Dinitrotoluene	9.640	165	434	5.63	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

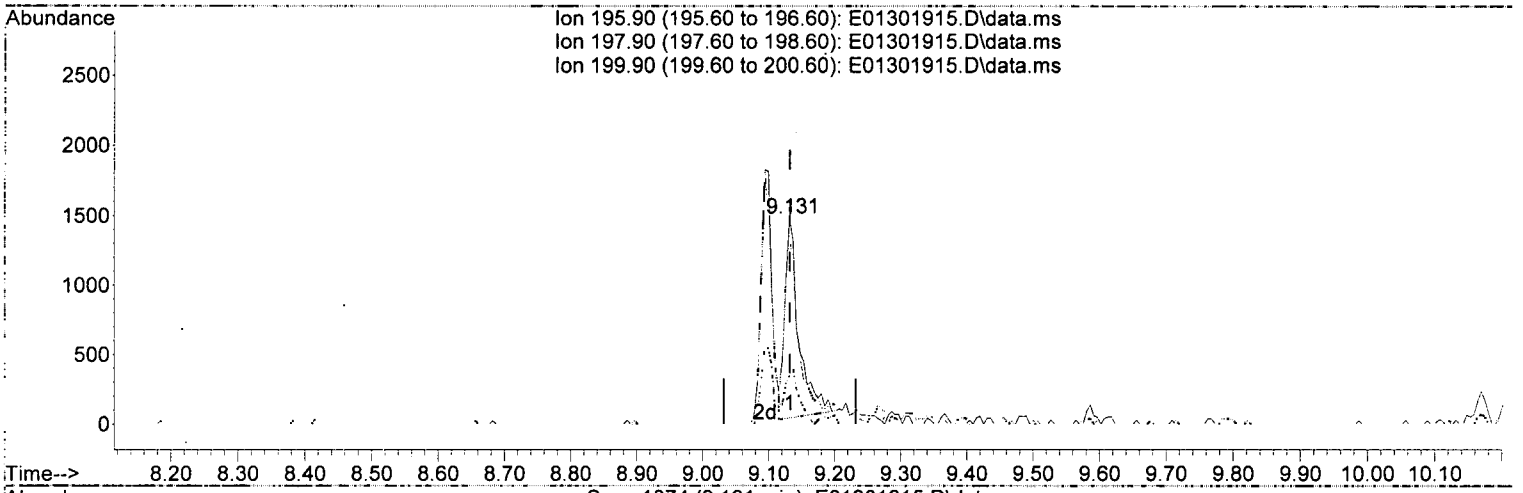
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	14256	49.36	ng/ml	98
44) 1,4-Dinitrobenzene	9.527	168	523	11.39	ng/ml#	65
45) Dimethyl phthalate	9.575	163	13040	39.75	ng/ml	97
46) 1,3-Dinitrobenzene	9.613	168	748	14.56	ng/ml	71
47) 2,6-Dinitrotoluene	9.639	165	1439	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

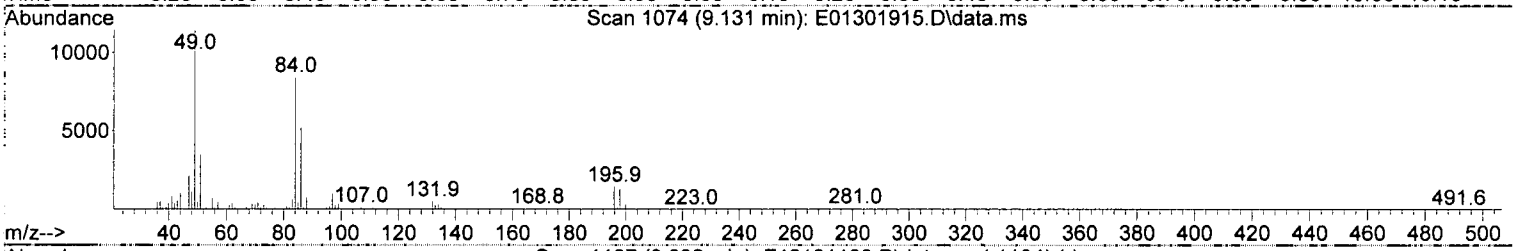
(#) = qualifier out of range (m) = manual integration (+) = signals summed

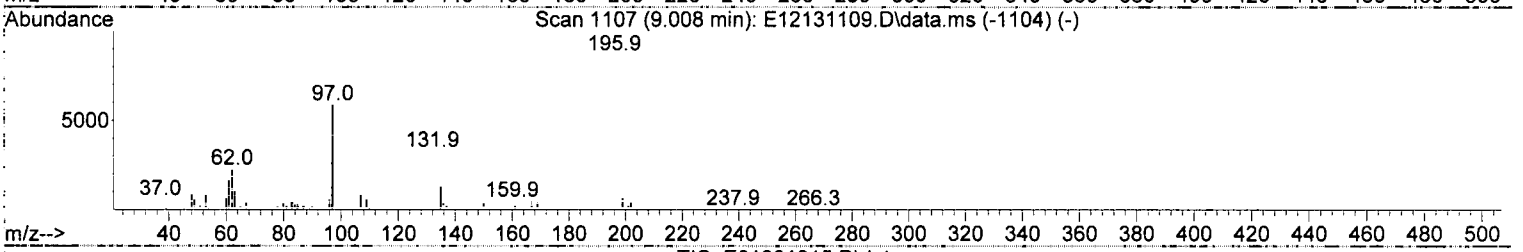
Quantitation Report (Qedit)

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

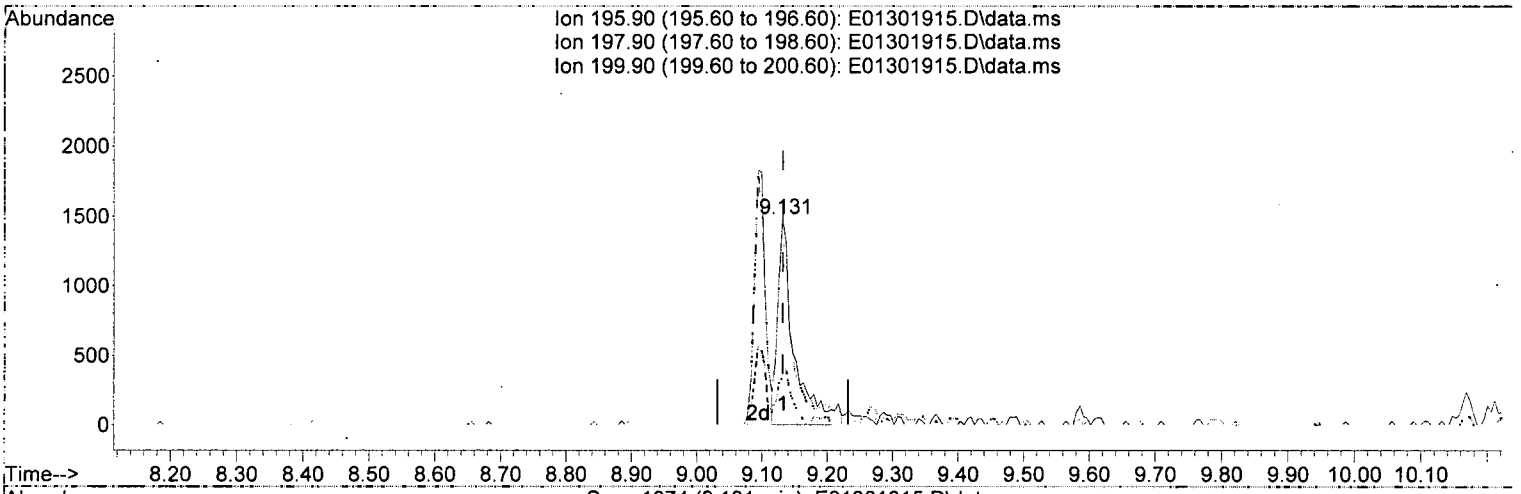
response 2141

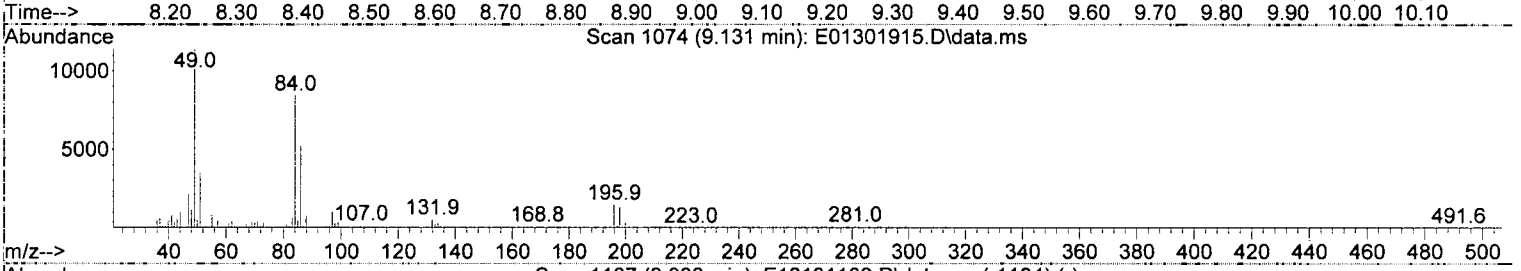
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.77
199.90	32.40	23.38
0.00	0.00	0.00

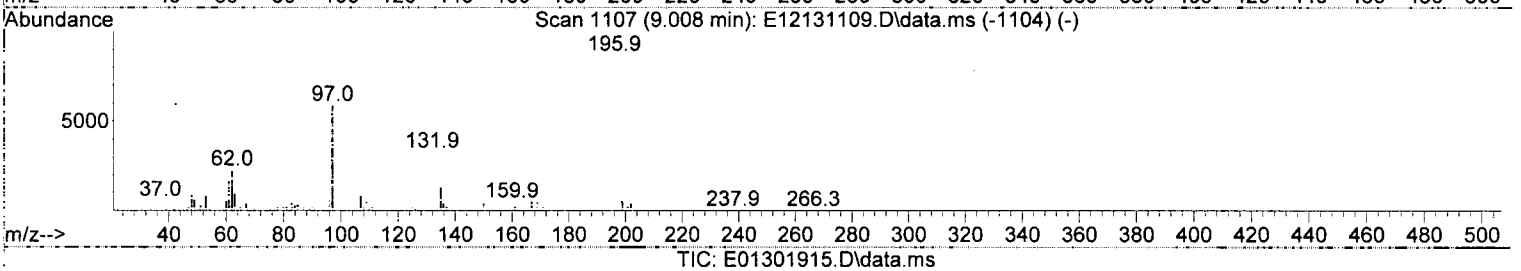
Quantitation Report (Qedit)

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

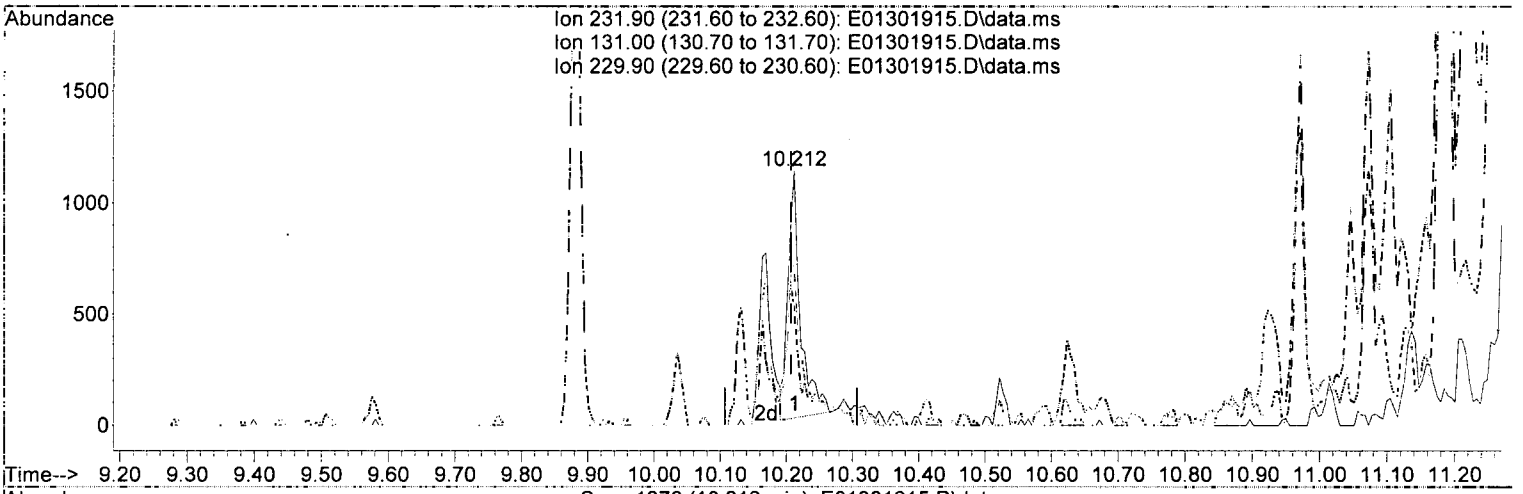
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.77
199.90	32.40	23.38
0.00	0.00	0.00

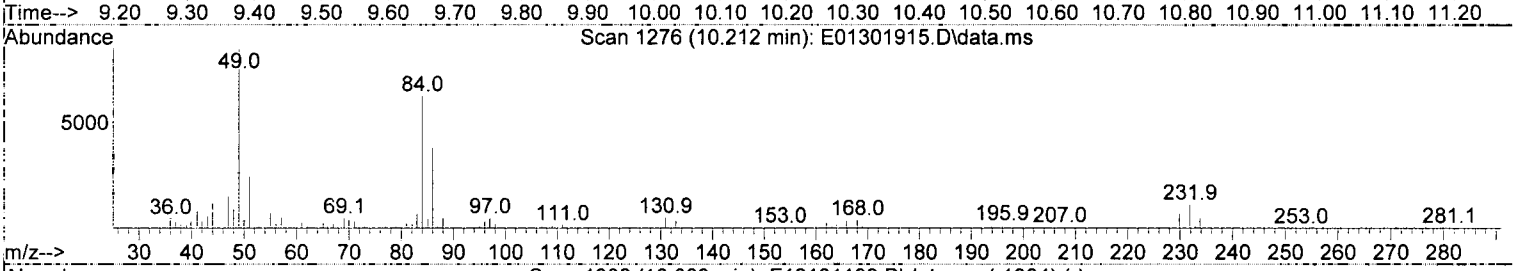
JK 1/31/19

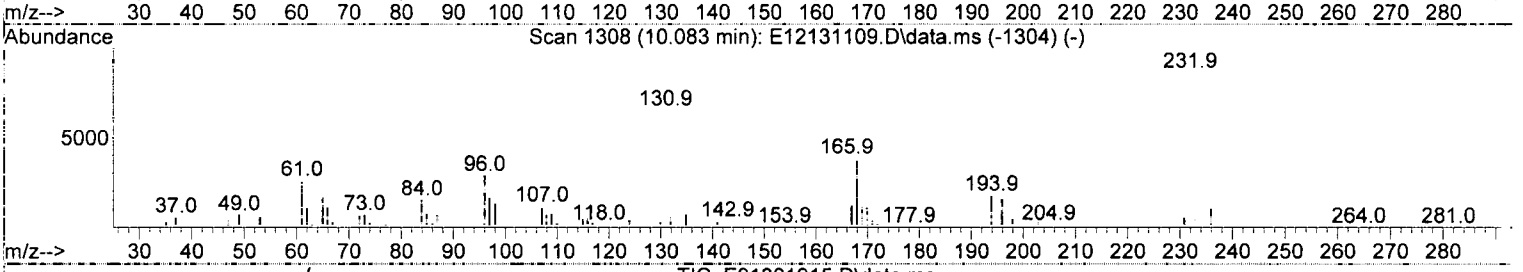
Quantitation Report (Qedit)

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

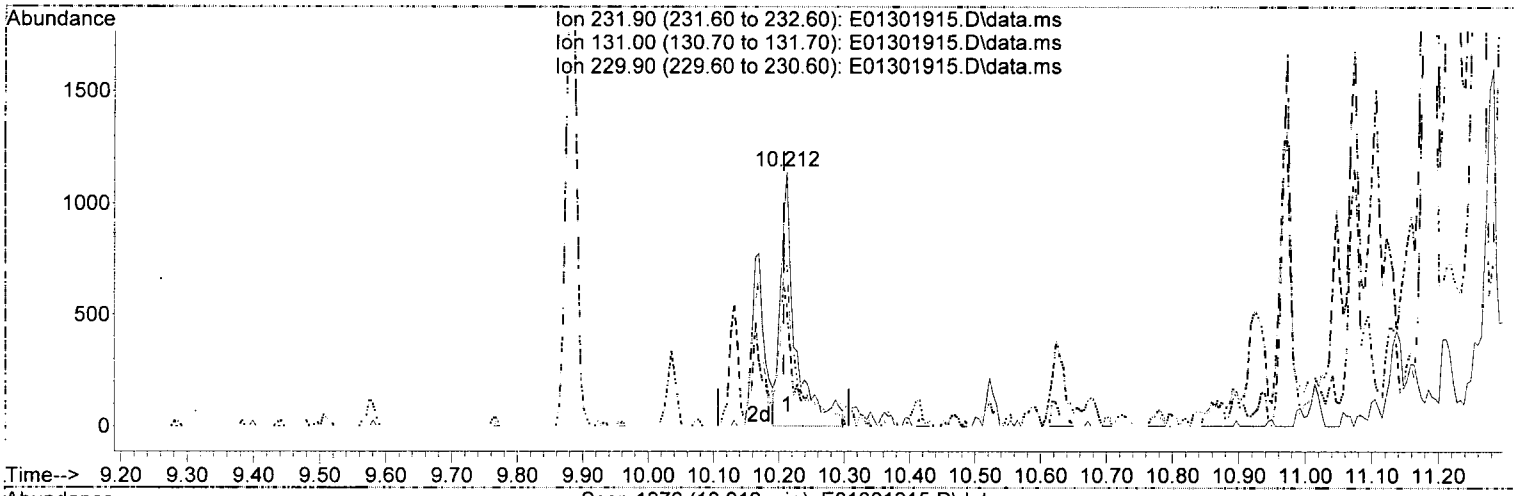
response 1470

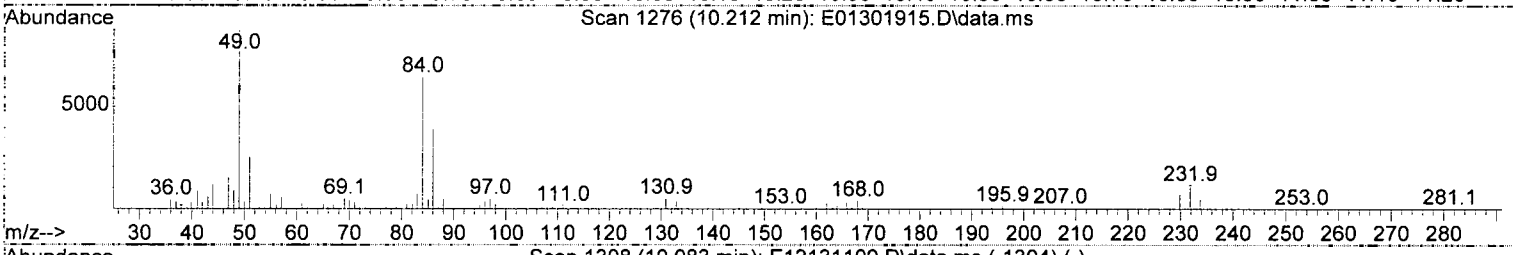
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	45.49
229.90	79.80	62.82
0.00	0.00	0.00

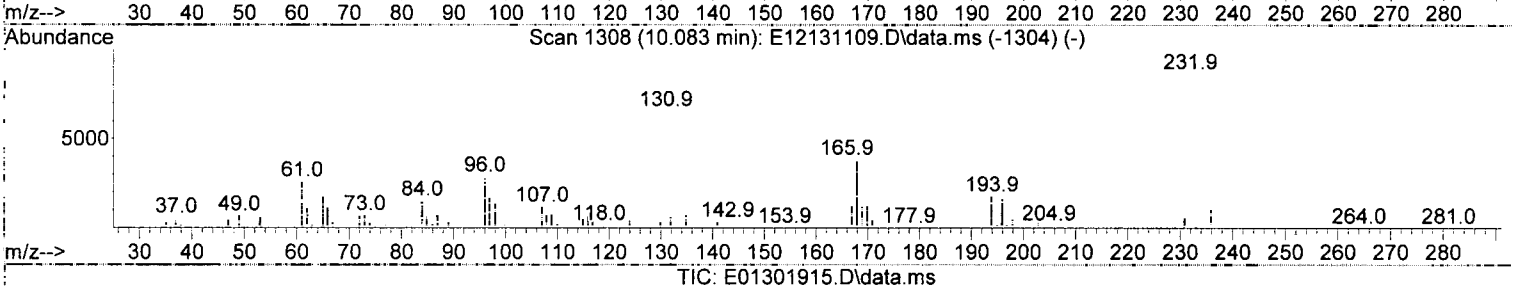
Quantitation Report (Qedit)

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

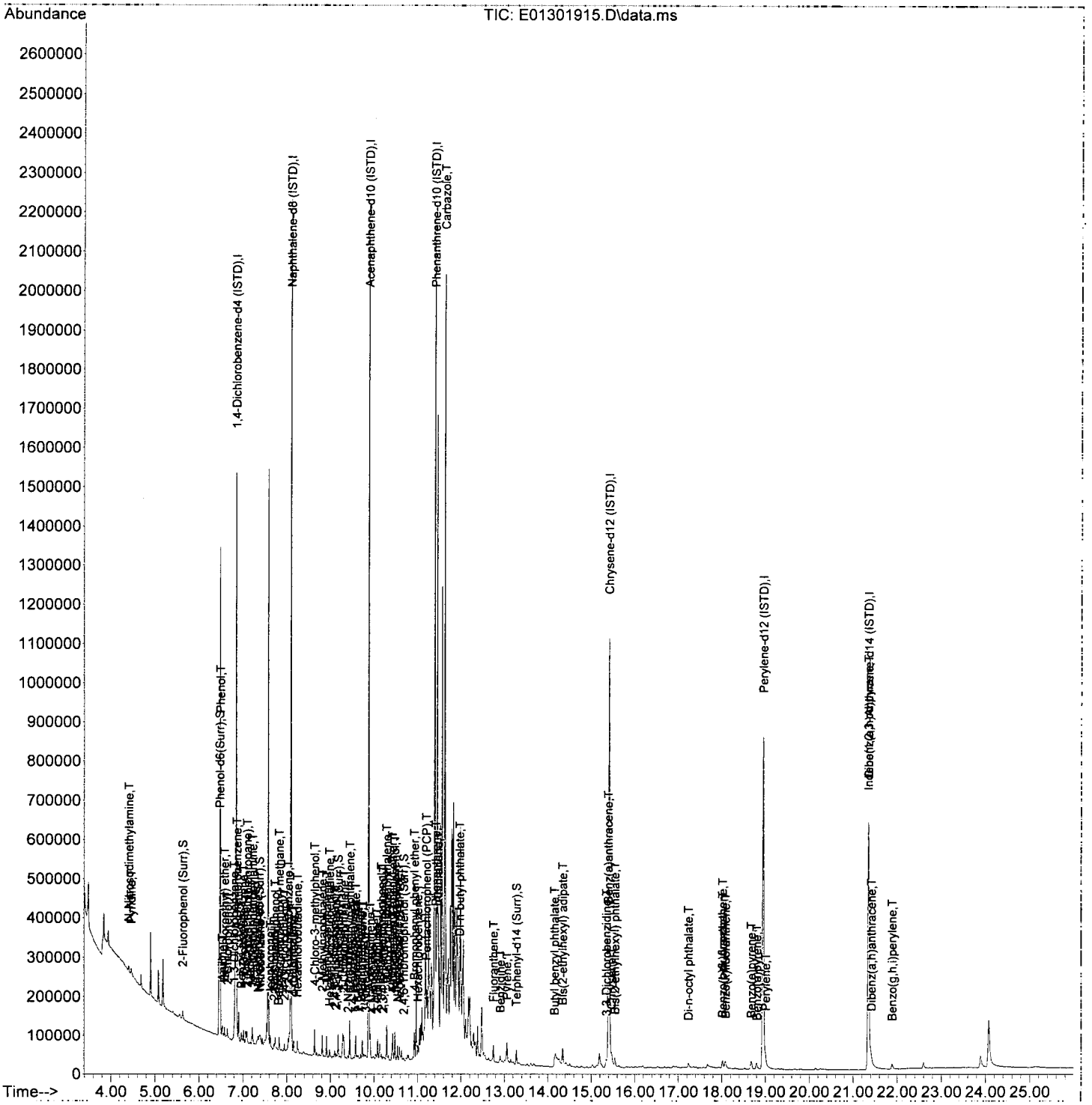
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	45.49
229.90	79.80	62.82
0.00	0.00	0.00

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

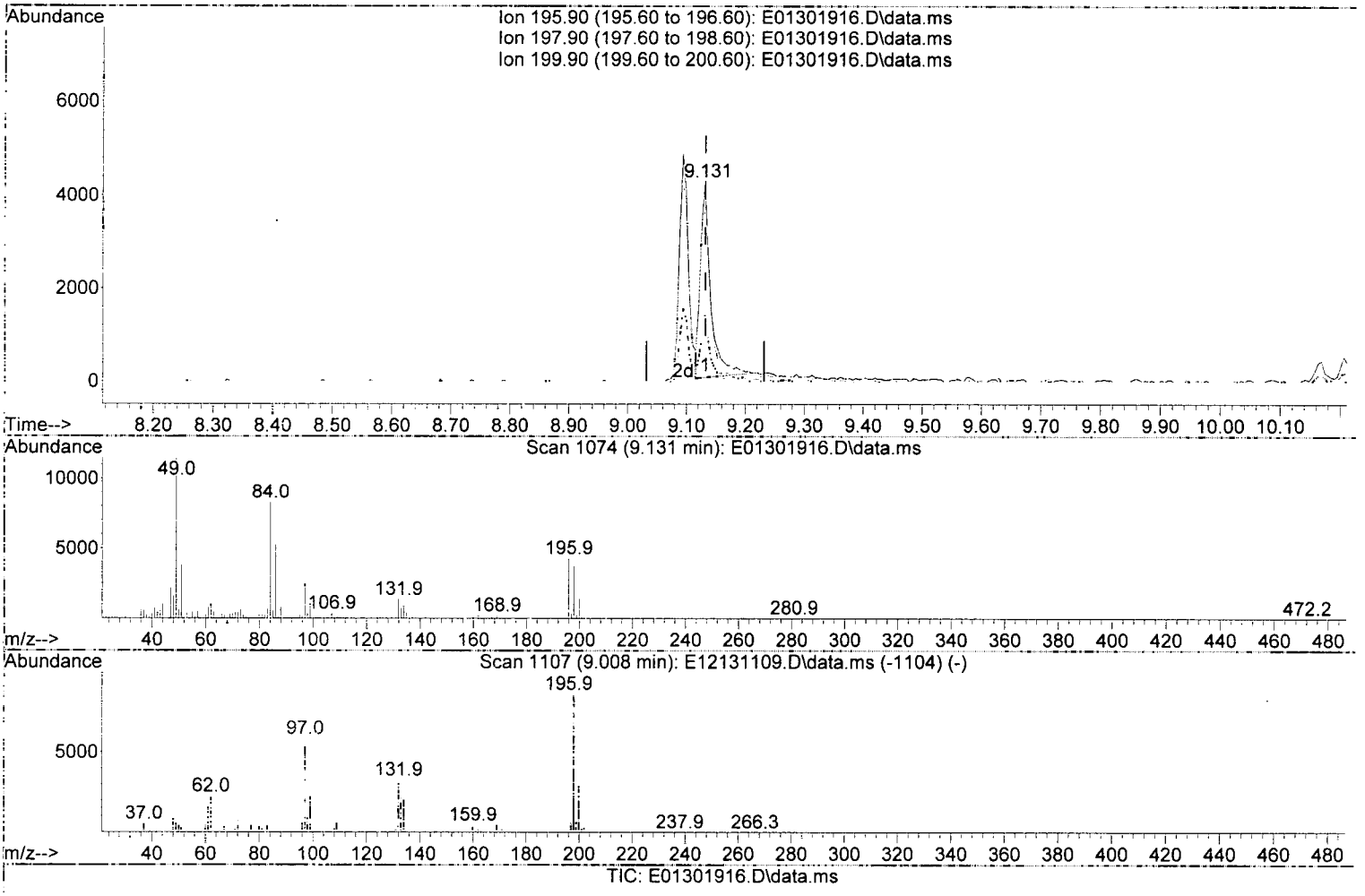
See M.I

(#) = 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

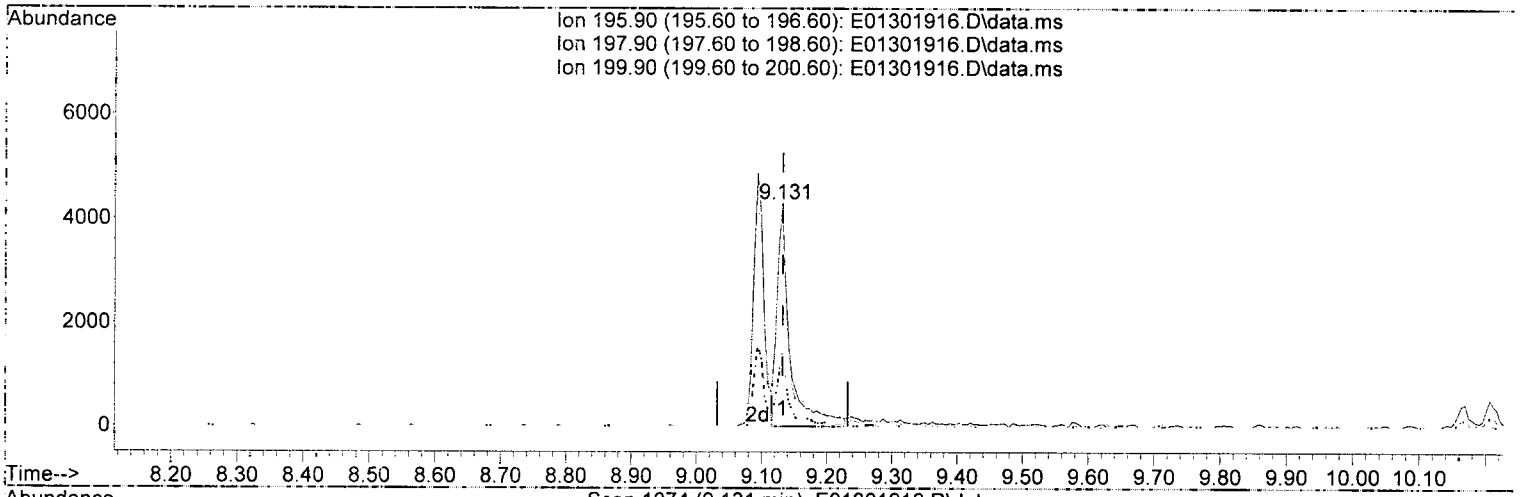
response 5163

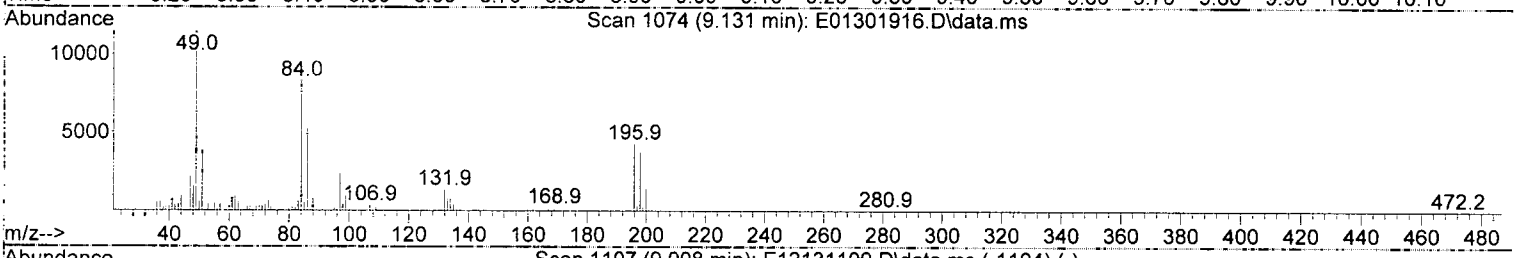
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.47
199.90	32.40	33.06
0.00	0.00	0.00

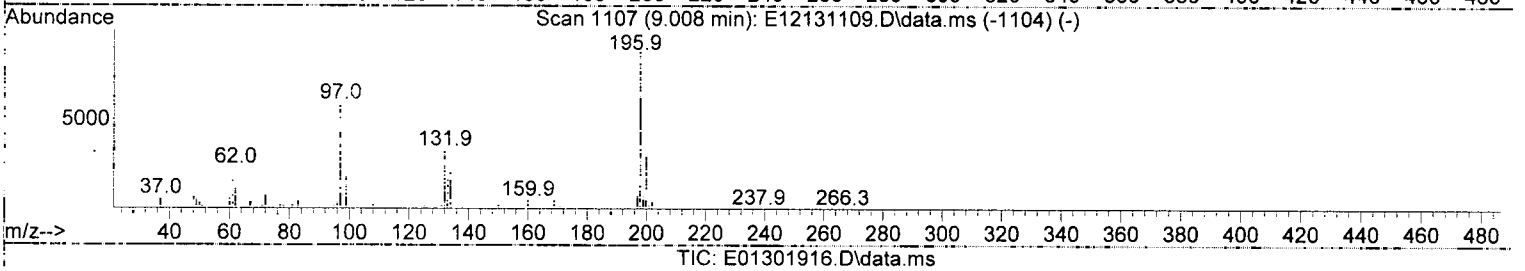
Quantitation Report (Qedit)

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

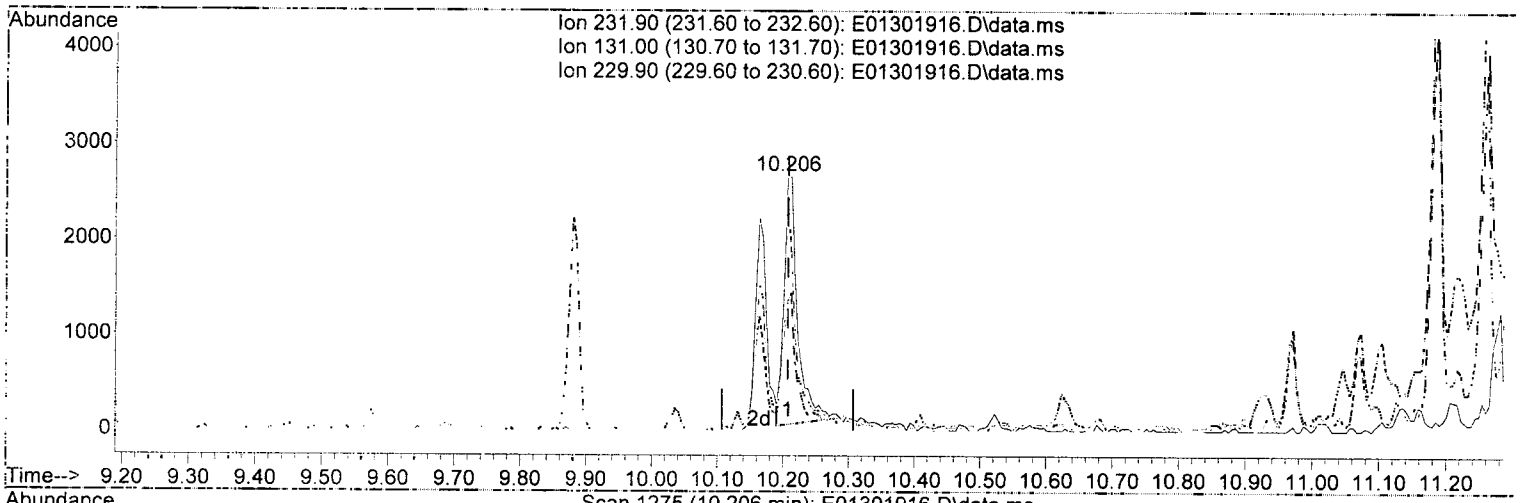
Ion	Exp%	Act%
195.90	100.00	100.00
197.90	96.30	87.47
199.90	32.40	33.06
0.00	0.00	0.00

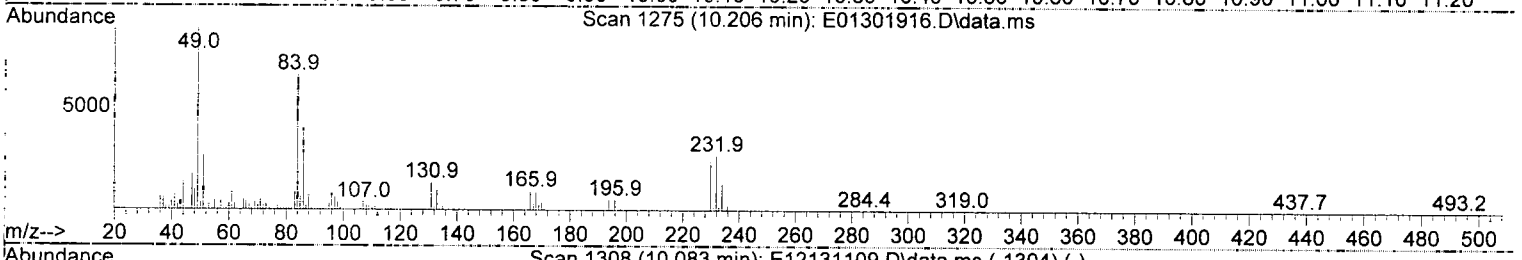
JK 1/31/19

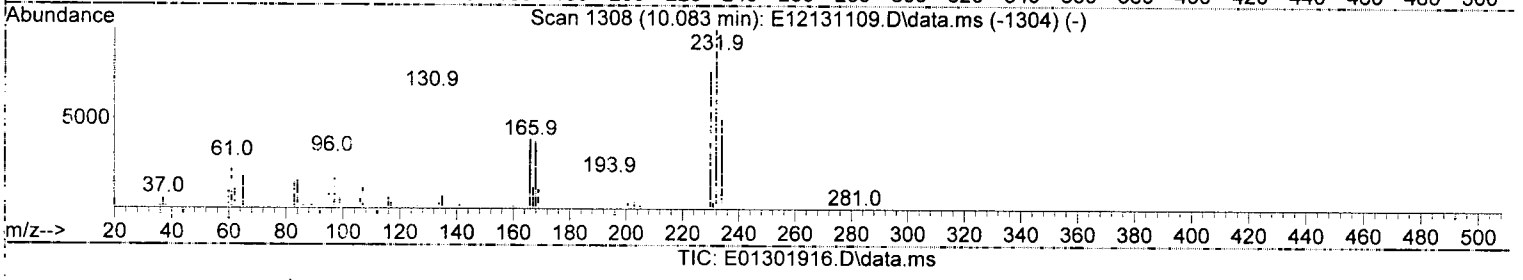
Quantitation Report (Qedit)

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

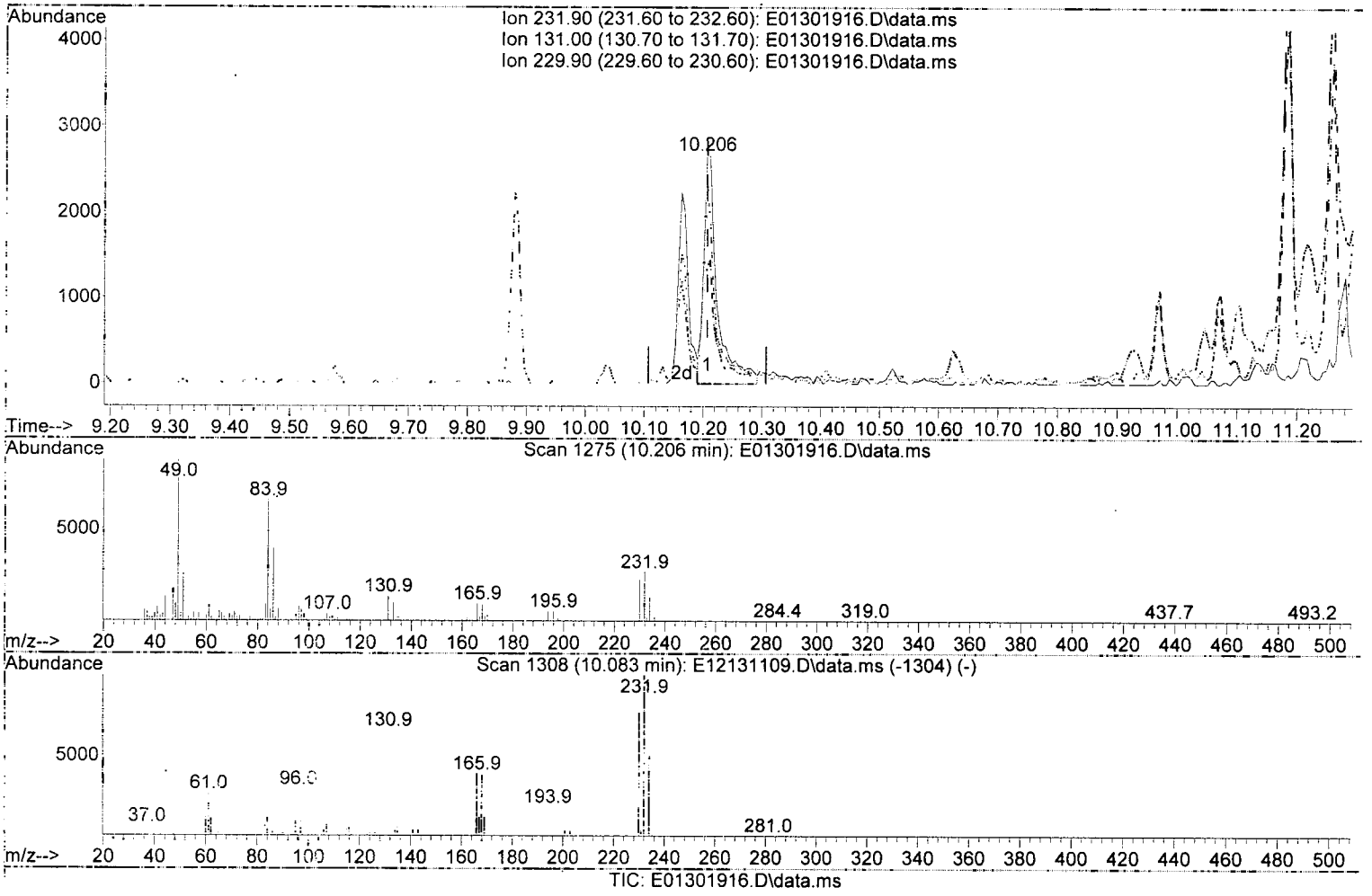
response 3745

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



(57) 2,3,4,6-Tetrachlorophenol (T)

10.206min (-0.000) 93.09 ng/ml m

response 4318

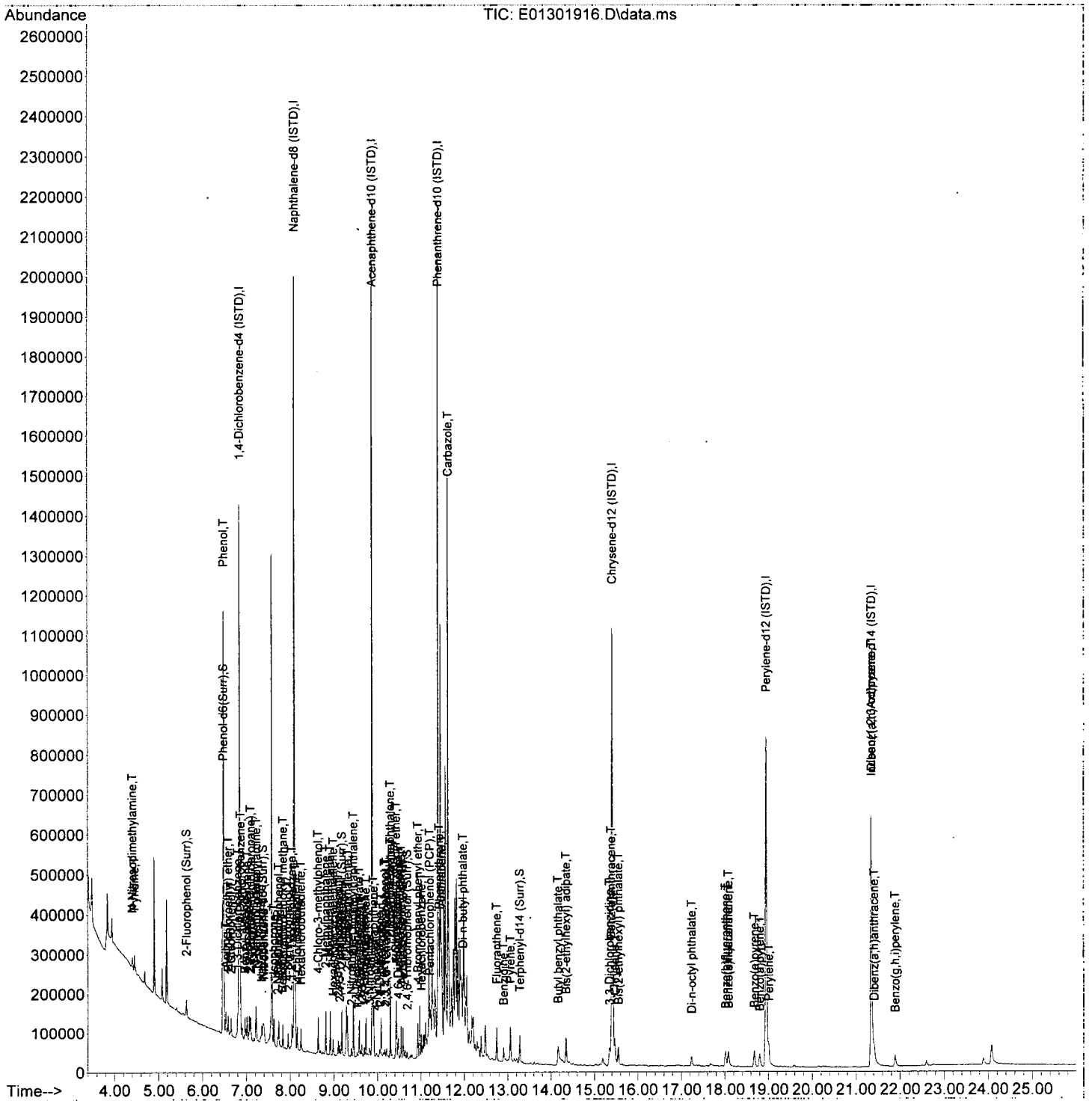
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	61.50	50.43
229.90	79.80	86.85
0.00	0.00	0.00

1/31/19

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

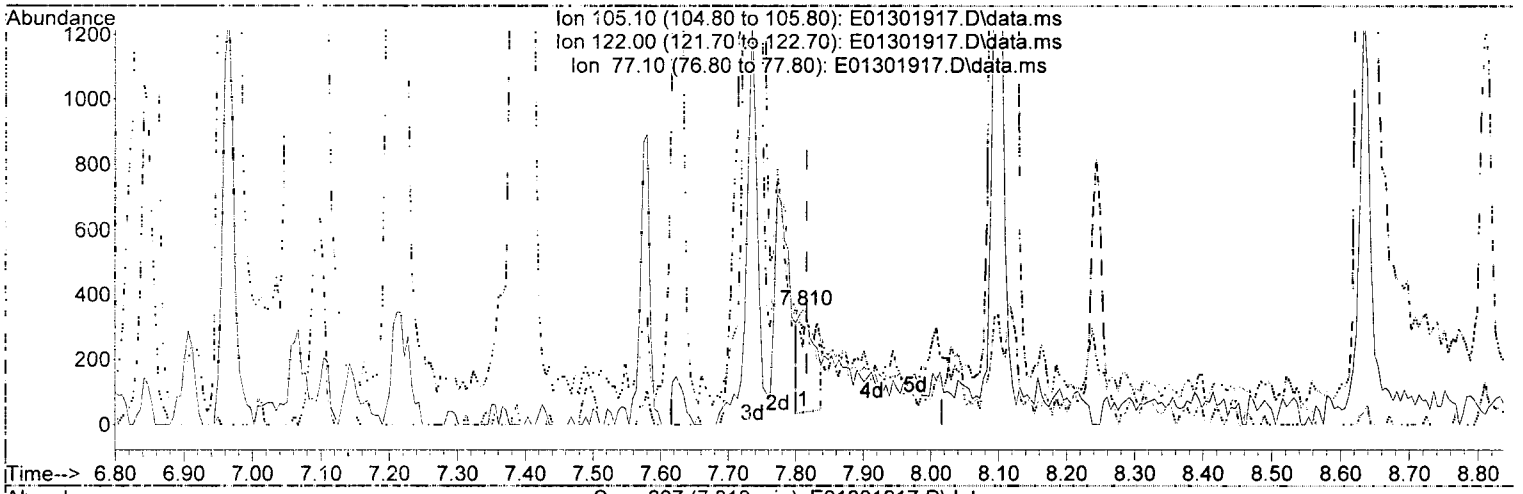
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.441	156	61710	201.24	ng/ml	99
44) 1,4-Dinitrobenzene	9.527	168	3705	75.97	ng/ml	93
45) Dimethyl phthalate	9.575	163	63042	180.98	ng/ml	99
46) 1,3-Dinitrobenzene	9.607	168	5323	97.57	ng/ml	96
47) 2,6-Dinitrotoluene	9.639	165	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

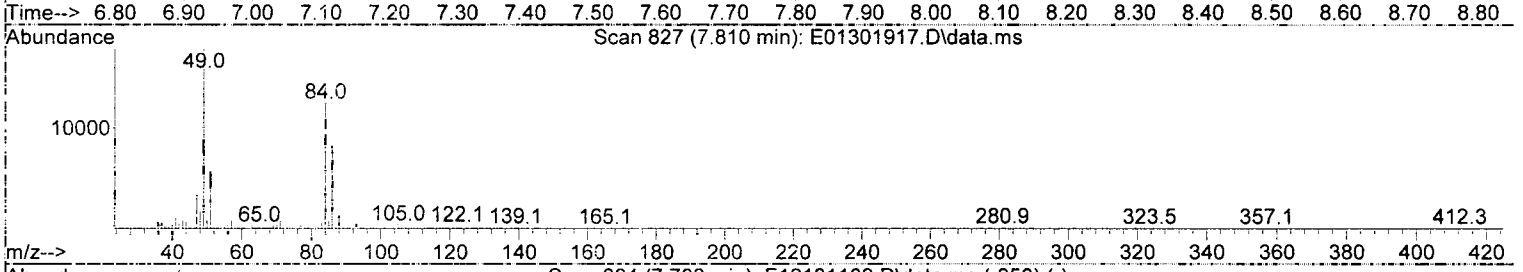
(#) = qualifier out of range (m) = manual integration (+) = signals summed

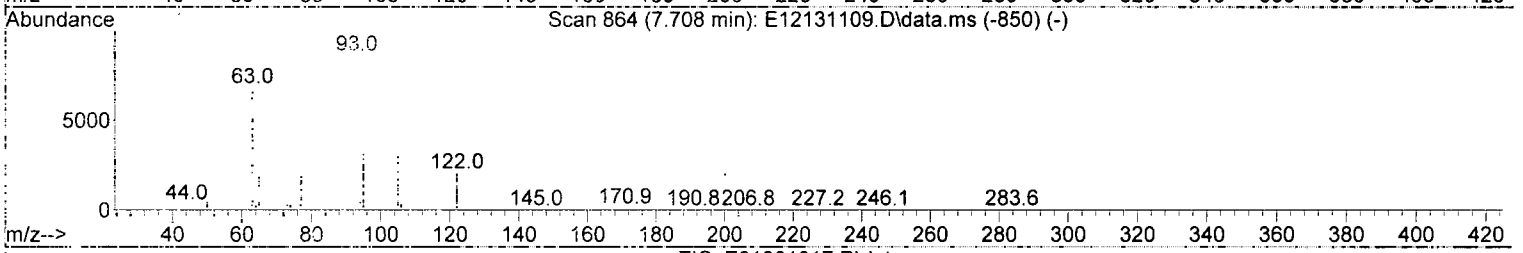
Quantitation Report (Qedit)

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

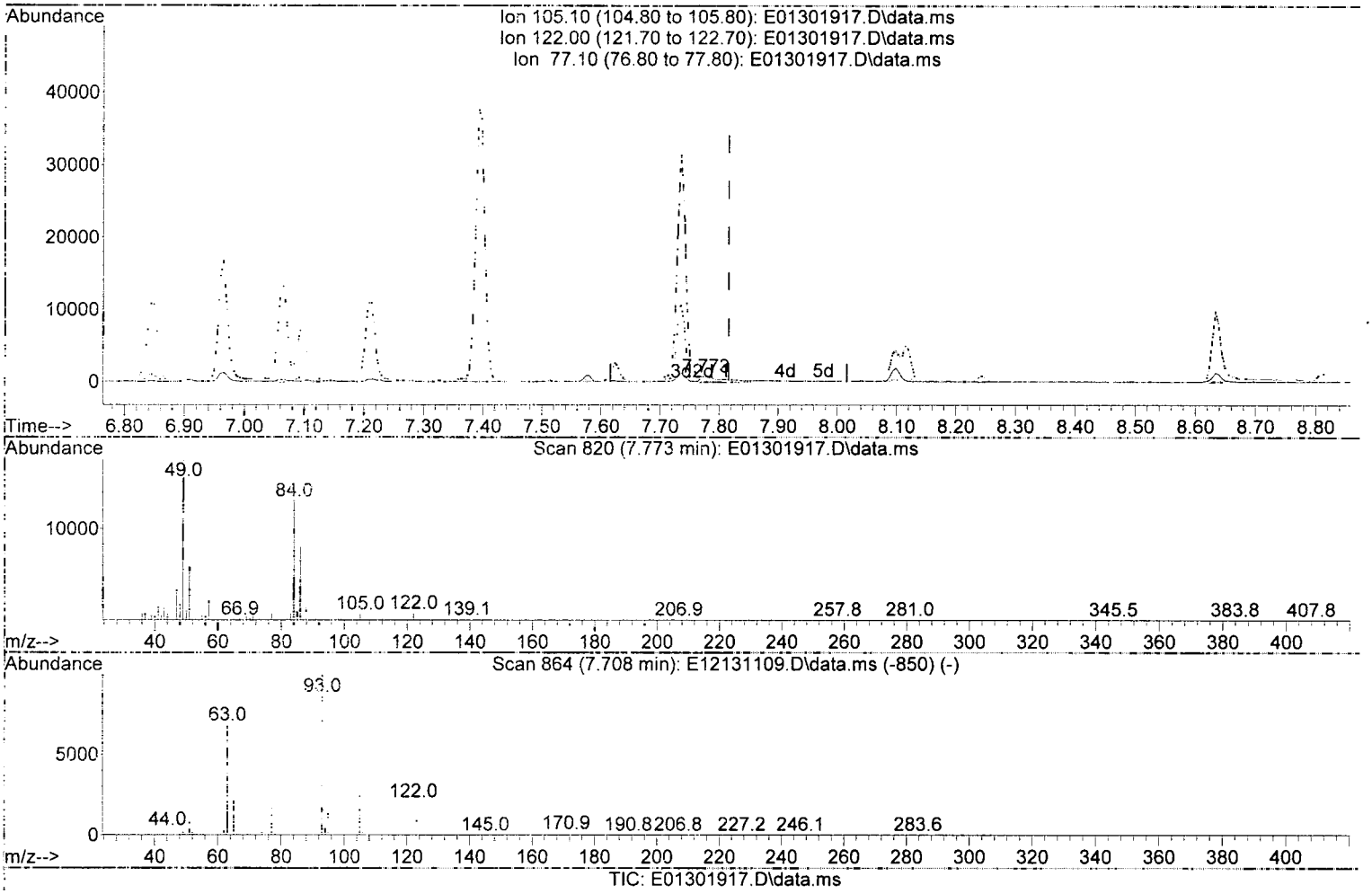
response 538

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

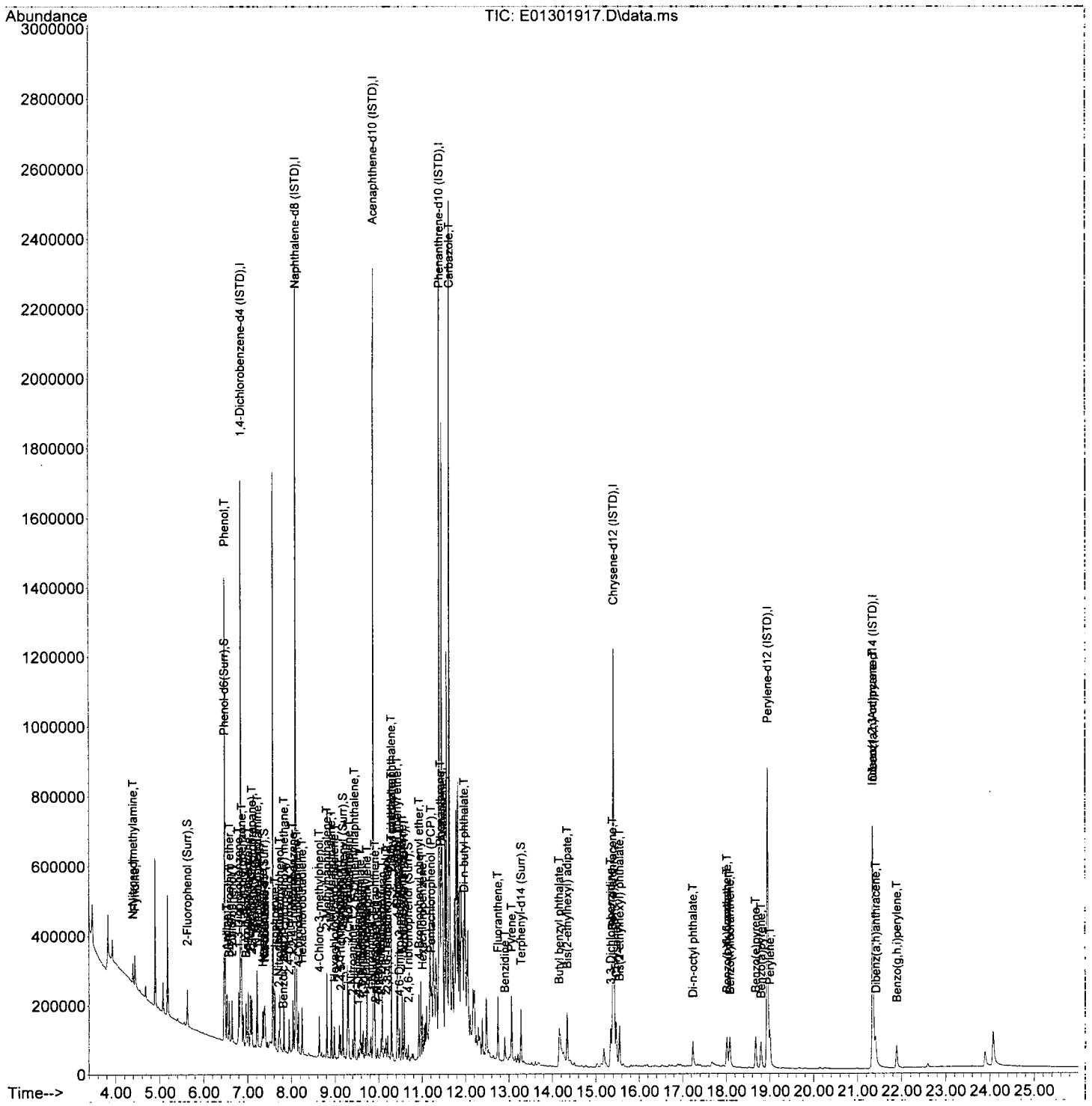
response 2001

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

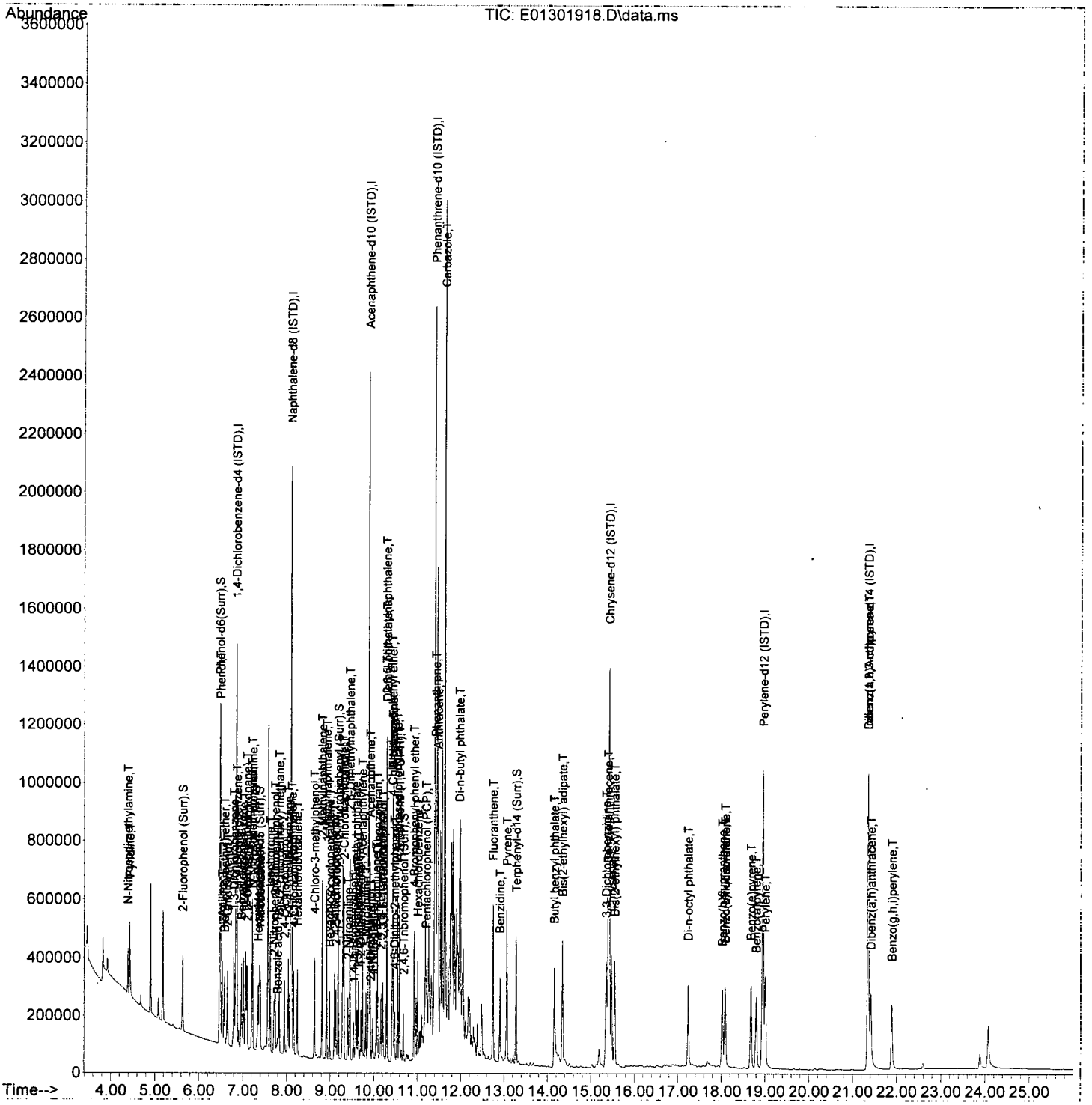
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.442	156	161748	514.96	ng/ml	97
44) 1,4-Dinitrobenzene	9.532	168	15009	300.45	ng/ml	87
45) Dimethyl phthalate	9.581	163	175061	490.67	ng/ml	100
46) 1,3-Dinitrobenzene	9.613	168	21039	376.51	ng/ml	92
47) 2,6-Dinitrotoluene	9.639	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

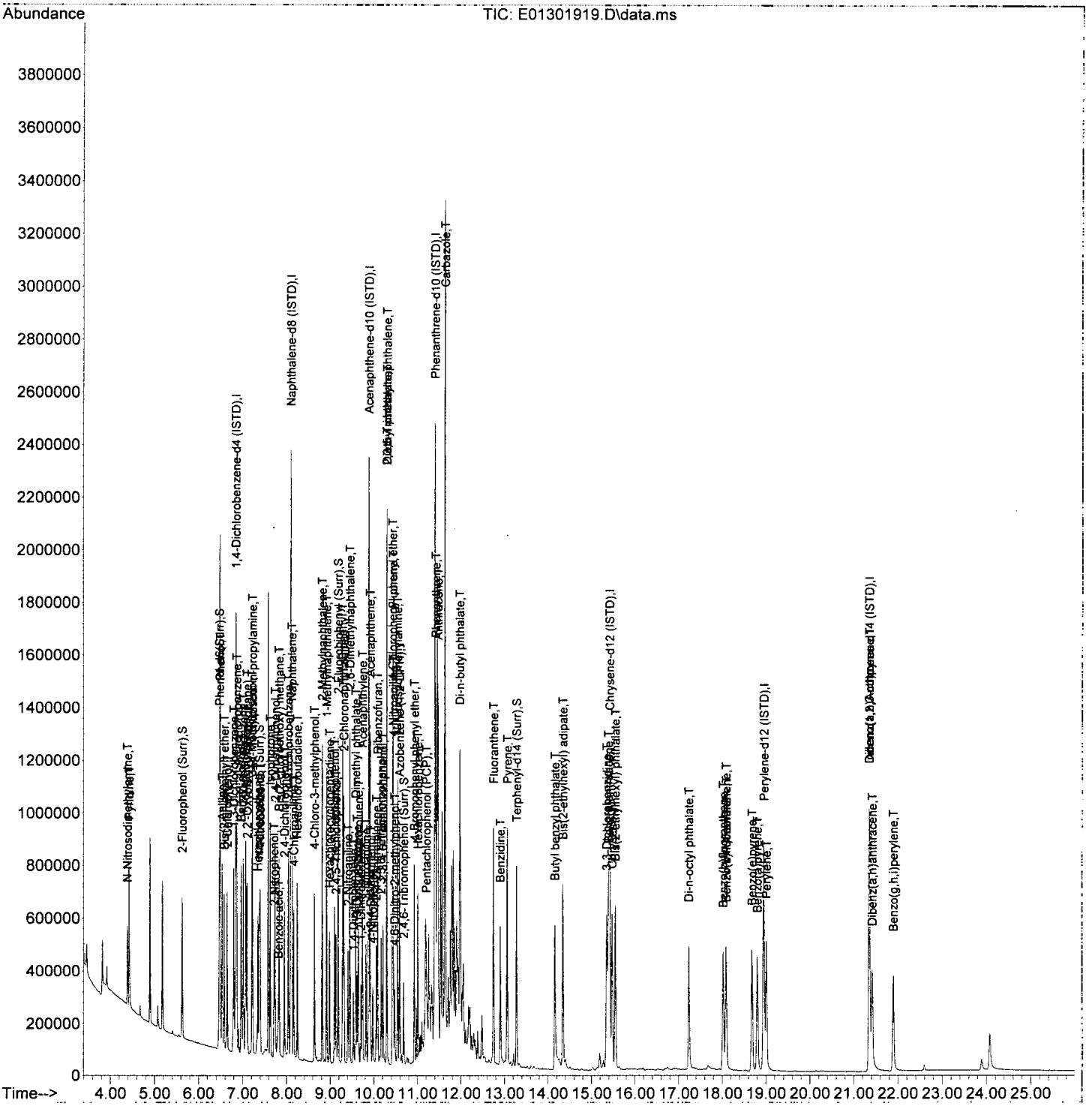
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	304453	1001.66	ng/ml	96
44) 1,4-Dinitrobenzene	9.533	168	32964	681.90	ng/ml	89
45) Dimethyl phthalate	9.581	163	323675	937.49	ng/ml	99
46) 1,3-Dinitrobenzene	9.613	168	43195	798.83	ng/ml	95
47) 2,6-Dinitrotoluene	9.645	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	1981.81	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

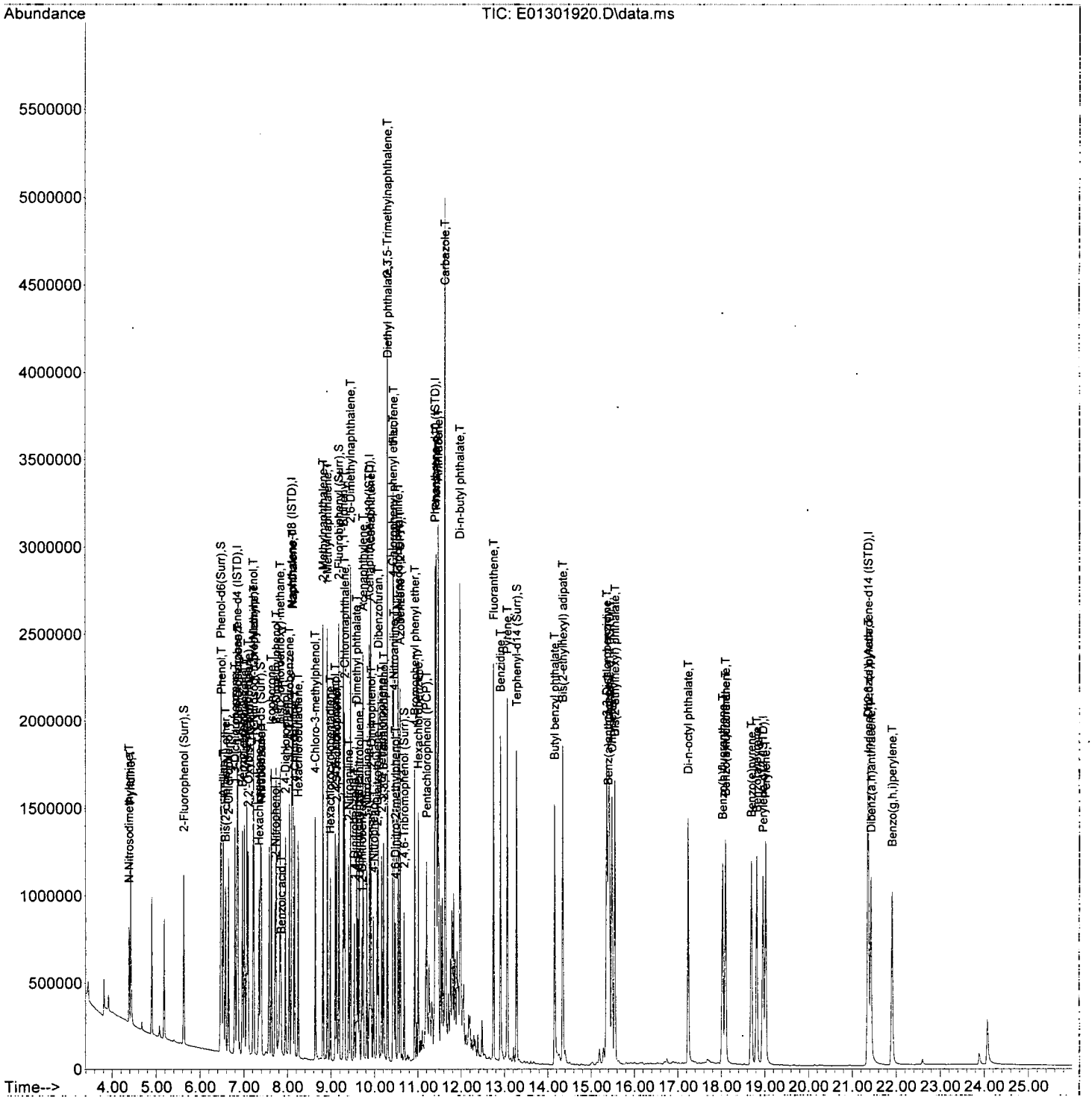
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	646334	1986.59	ng/ml	98
44) 1,4-Dinitrobenzene	9.533	168	93455	1806.07	ng/ml	94
45) Dimethyl phthalate	9.586	163	722554	1955.16	ng/ml	99
46) 1,3-Dinitrobenzene	9.618	168	113932	1968.41	ng/ml	91
47) 2,6-Dinitrotoluene	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

JJ 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

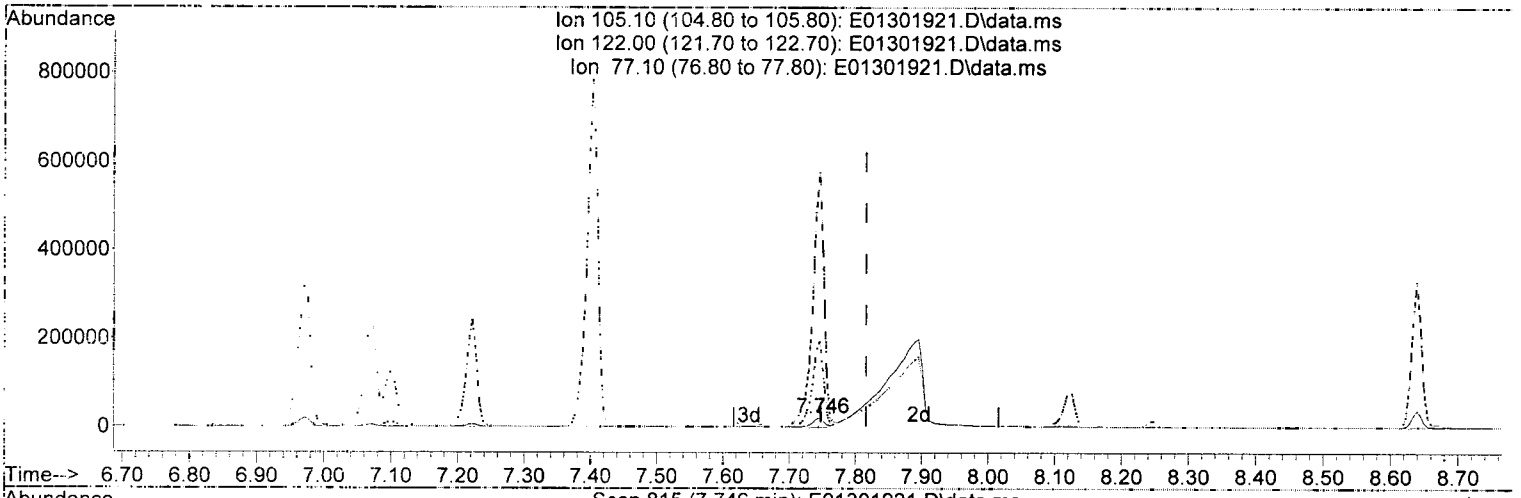
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.452	156	1294122	3896.32	ng/ml	98
44) 1,4-Dinitrobenzene	9.538	168	217979	4126.43	ng/ml	94
45) Dimethyl phthalate	9.597	163	1516221	4018.85	ng/ml	100
46) 1,3-Dinitrobenzene	9.623	168	251848	4262.23	ng/ml	93
47) 2,6-Dinitrotoluene	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

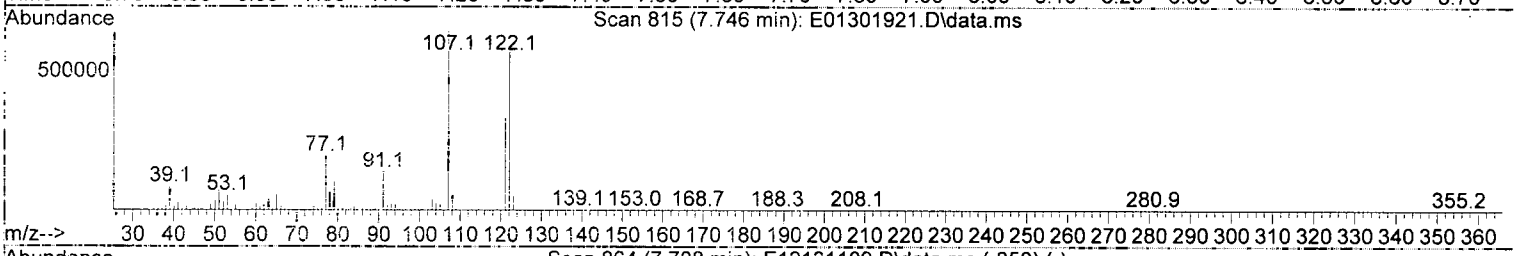
(#) = qualifier out of range (m) = manual integration (+) = signals summed

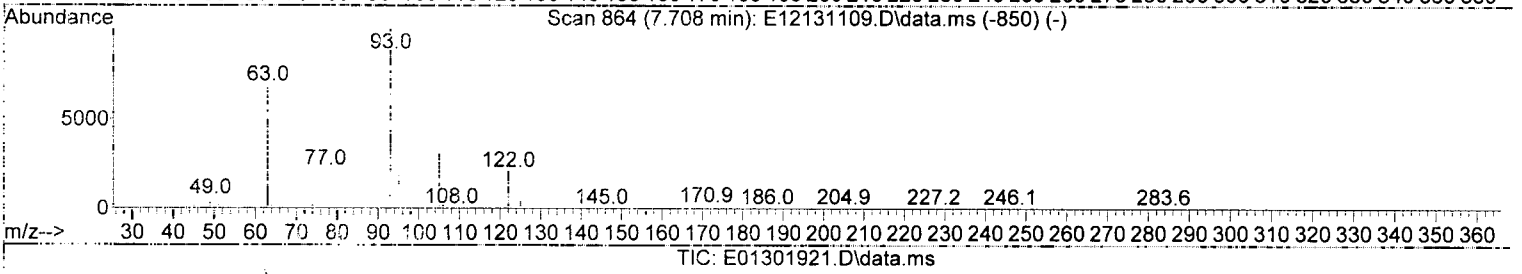
Quantitation Report (Qedit)

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

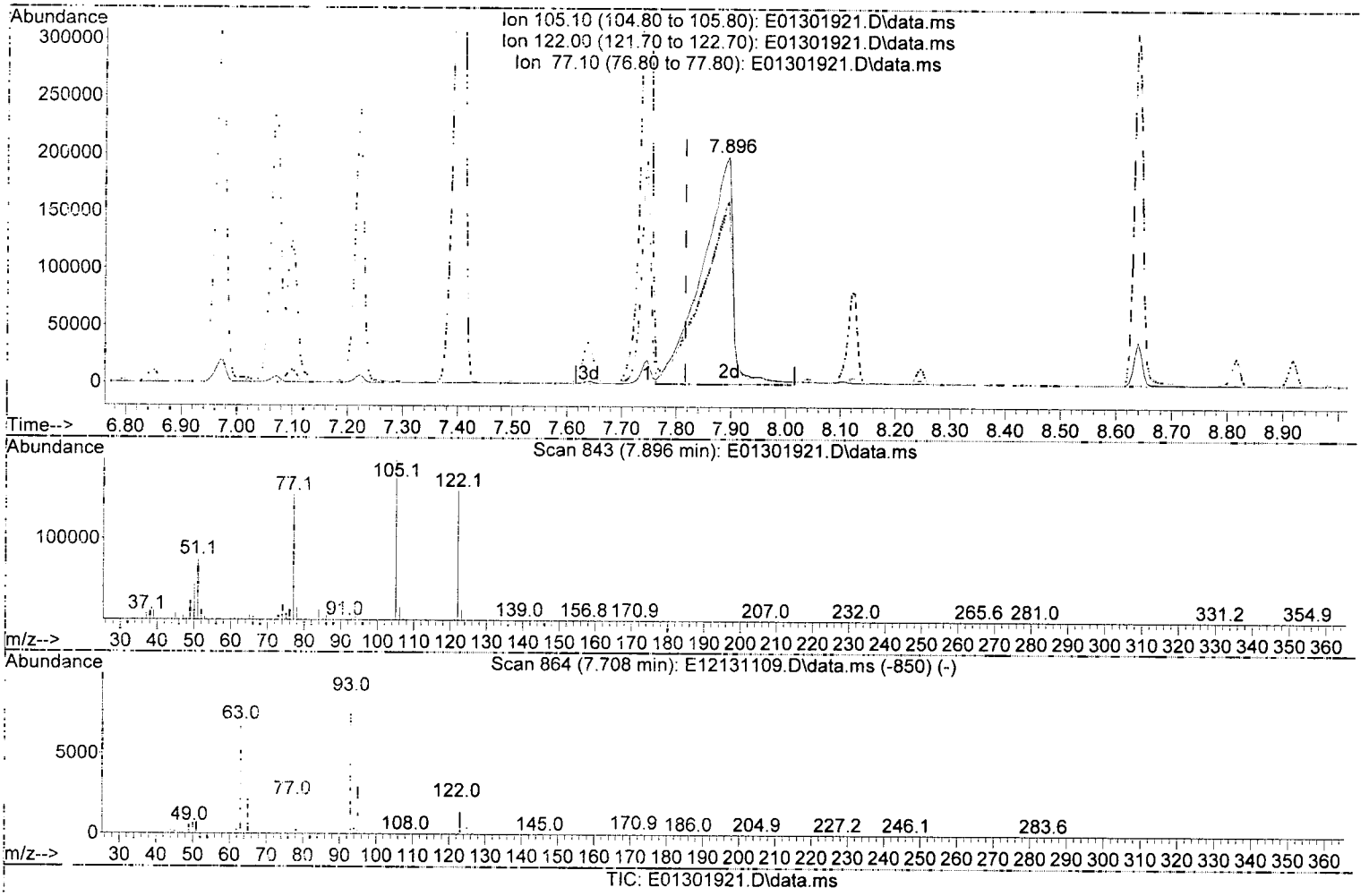
response 25997

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 JK 1/31/19

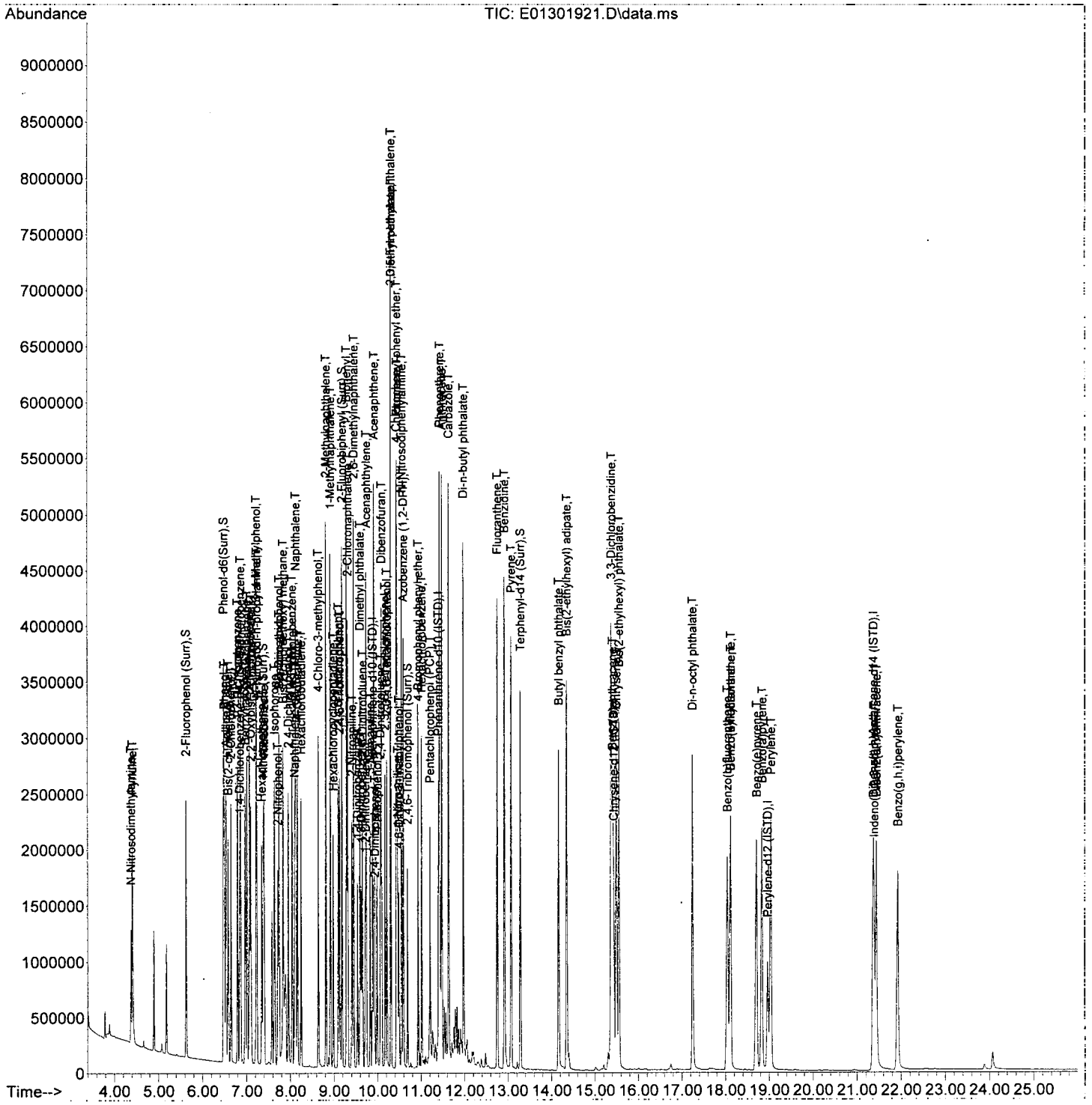
response 790966

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

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

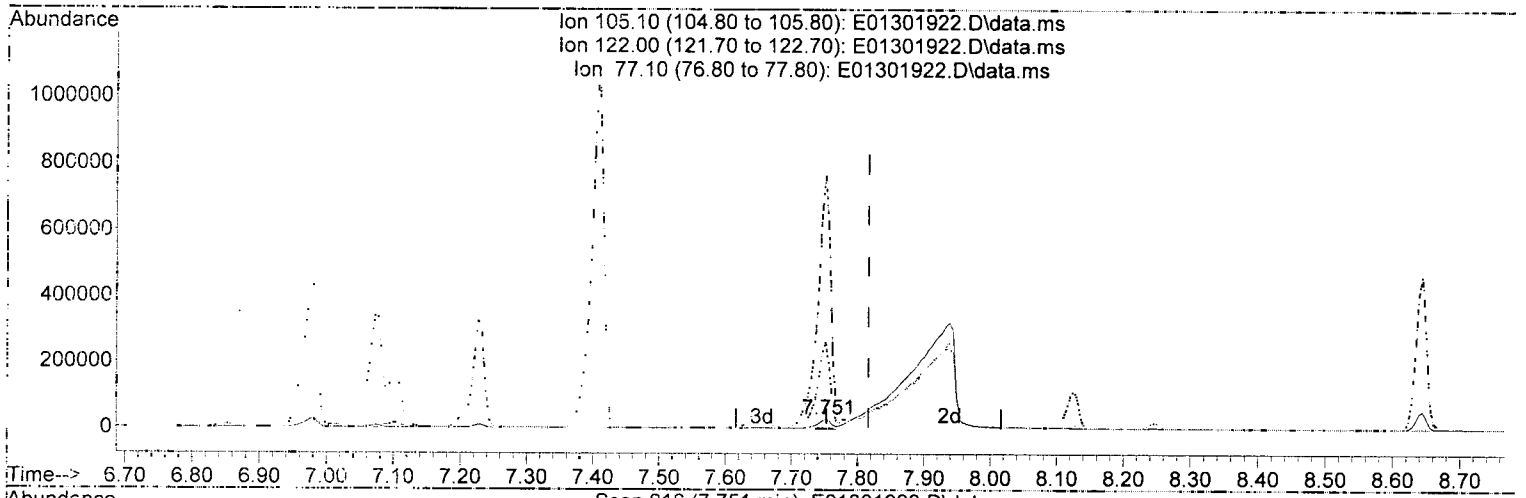
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.452	156	1873897	5466.42	ng/ml	99
44) 1,4-Dinitrobenzene	9.543	168	353235	6478.90	ng/ml	93
45) Dimethyl phthalate	9.607	163	2274017	5839.97	ng/ml	100
46) 1,3-Dinitrobenzene	9.634	168	398456	6533.67	ng/ml	91
47) 2,6-Dinitrotoluene	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

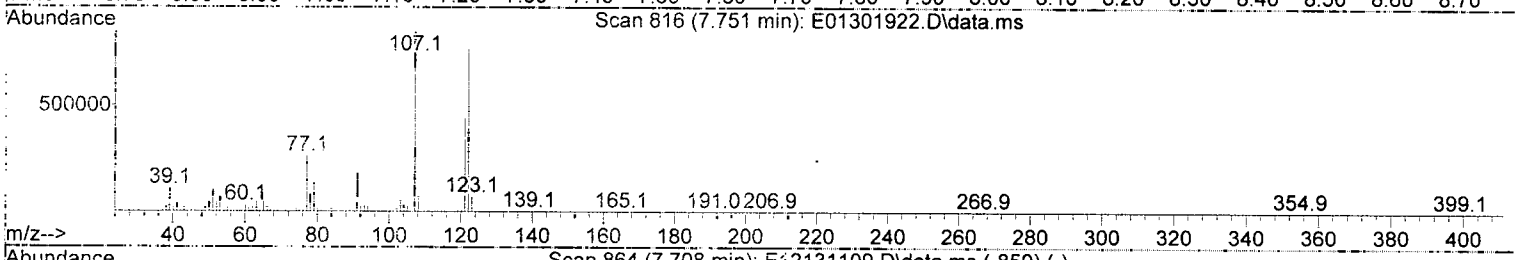
(#) = qualifier out of range (m) = manual integration (+) = signals summed

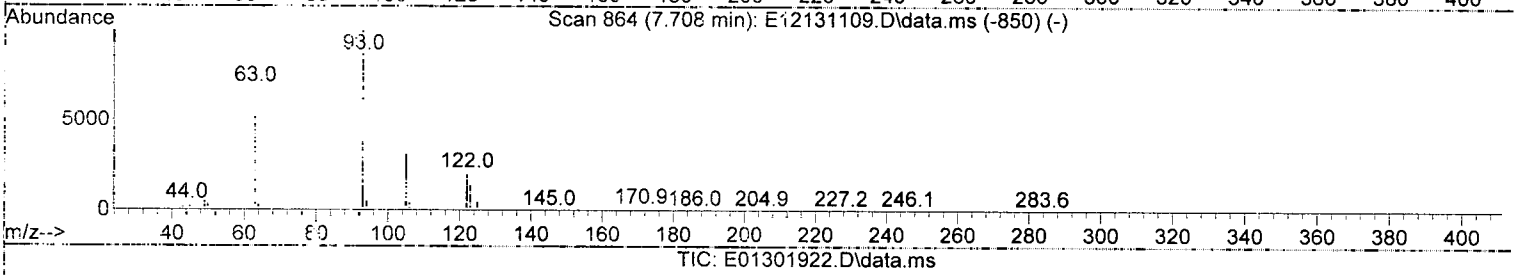
Quantitation Report (Qedit)

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

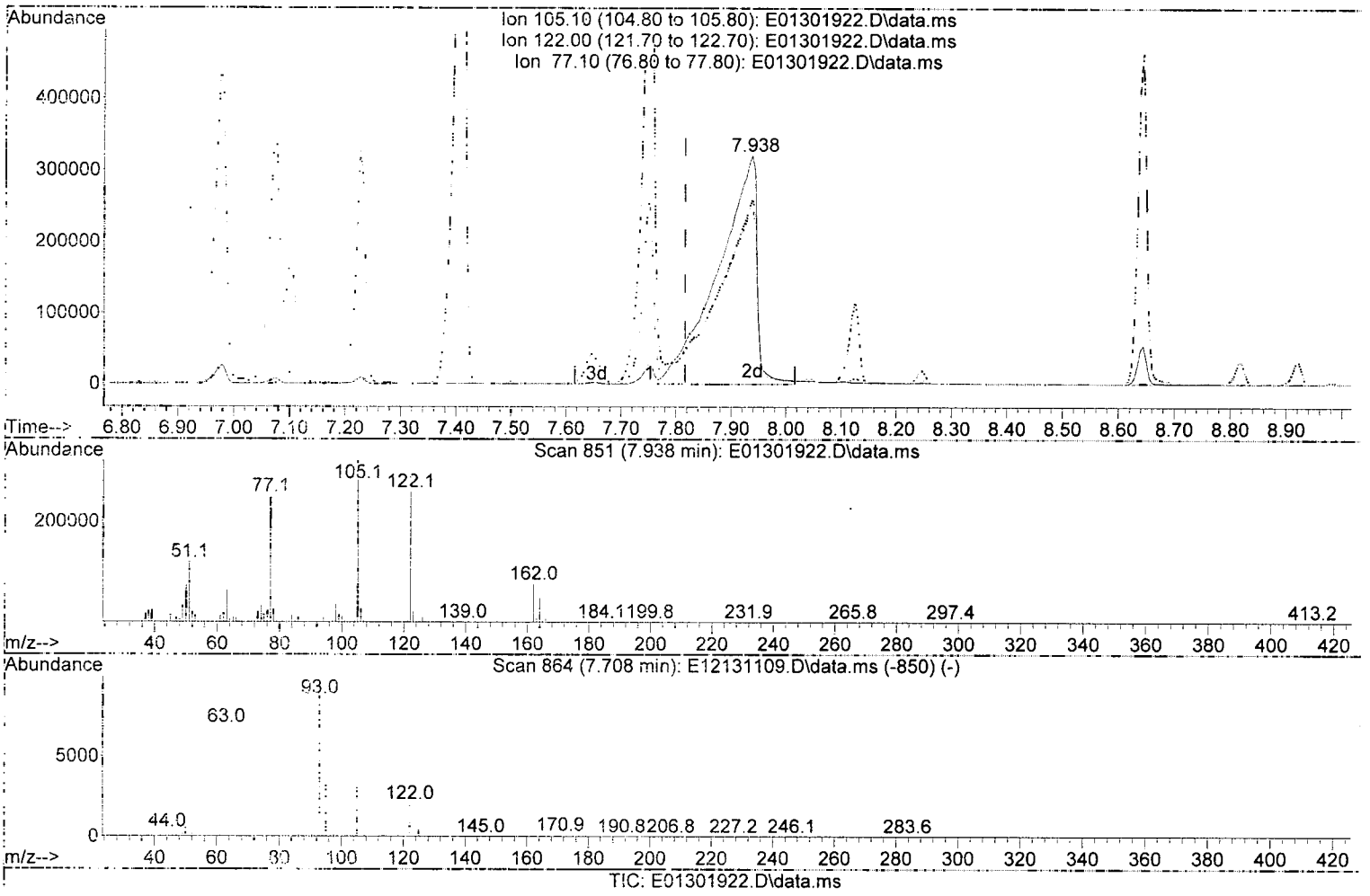
response 40451

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

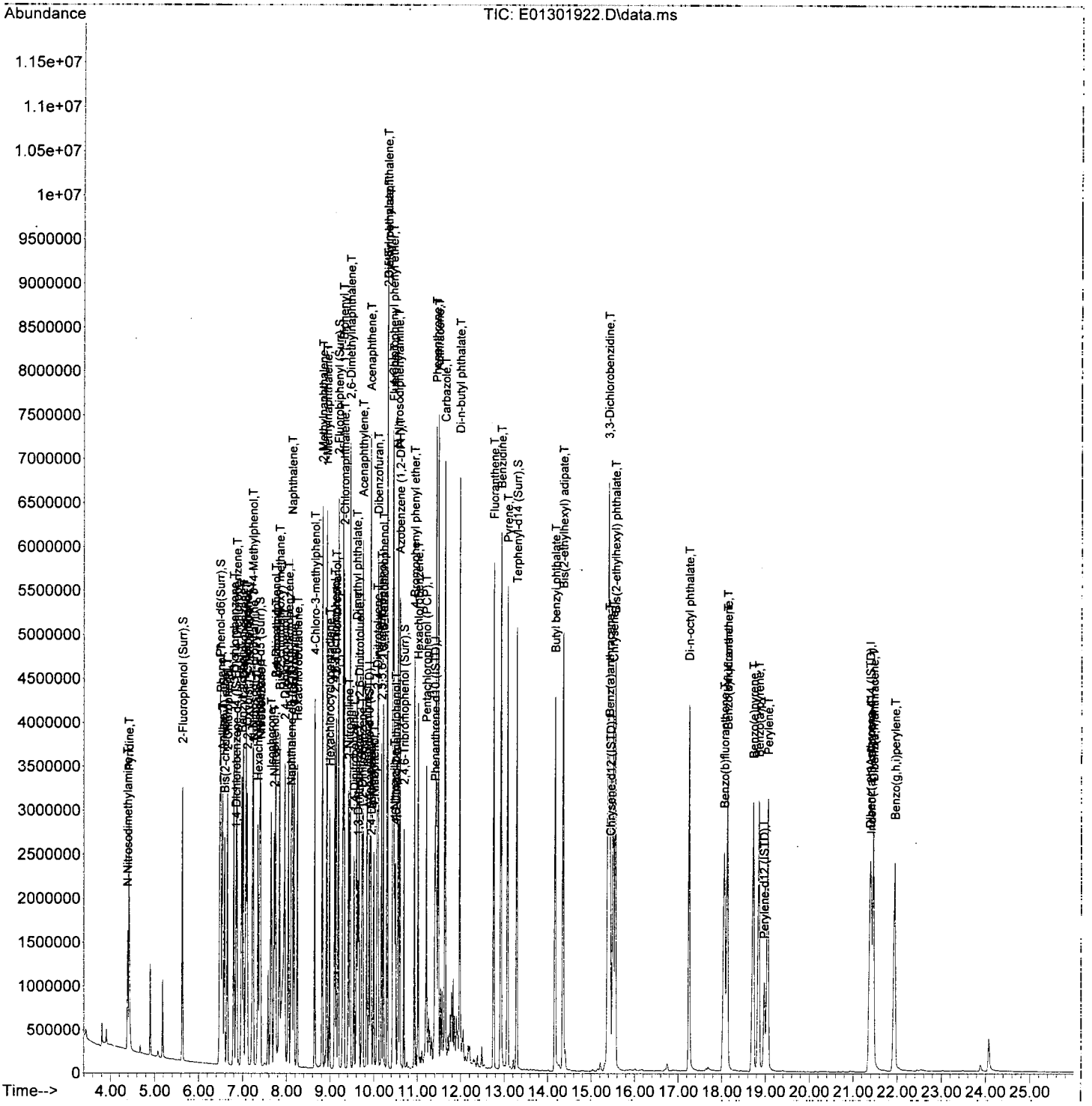
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	81.01
77.10	85.50	78.27
0.00	0.00	0.00

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

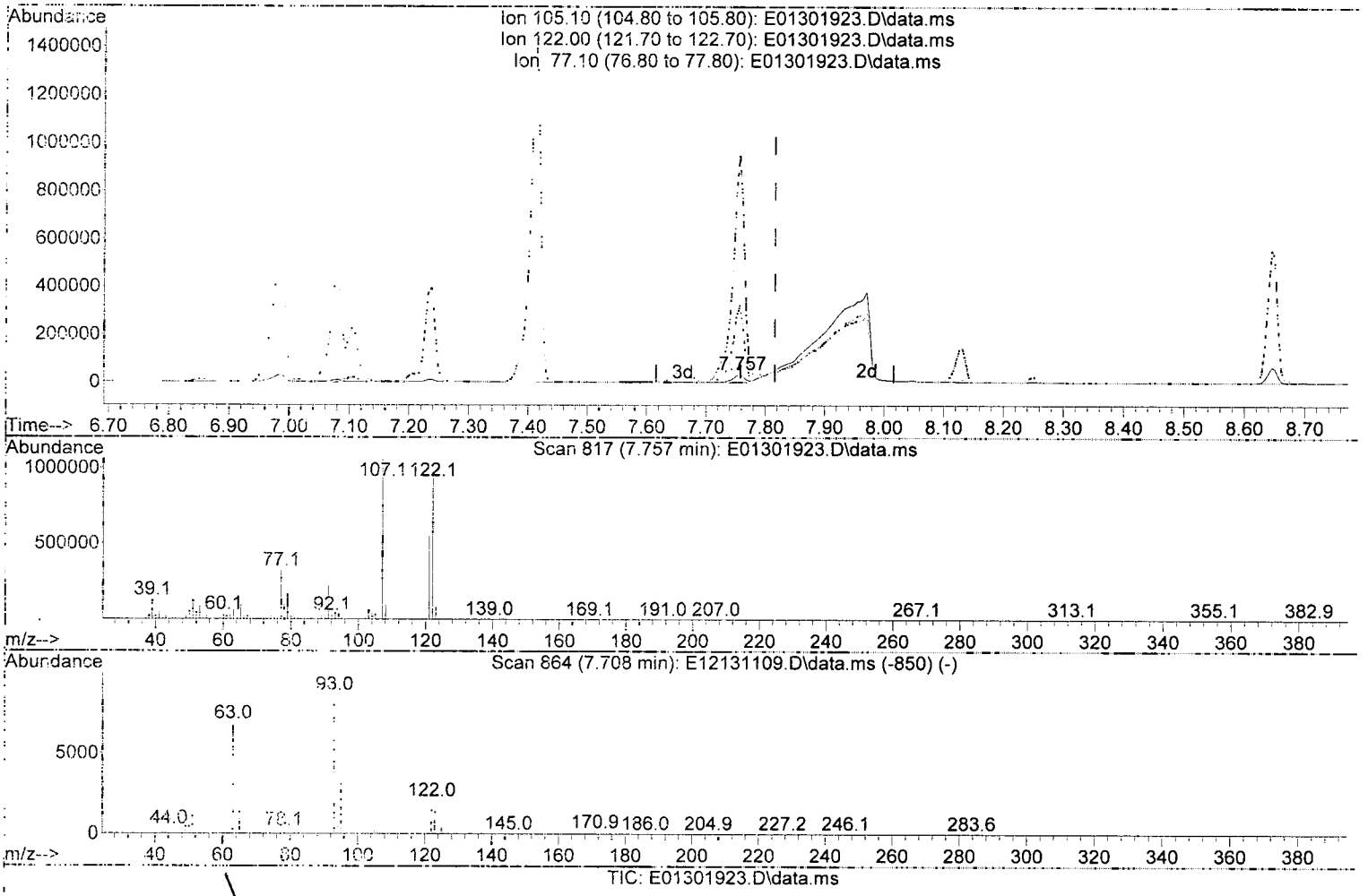
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.458	156	2321419	6939.99	ng/ml	98
44) 1,4-Dinitrobenzene	9.549	168	468426	8804.95	ng/ml	89
45) Dimethyl phthalate	9.613	163	2911473	7662.63	ng/ml	99
46) 1,3-Dinitrobenzene	9.645	168	525895	8837.38	ng/ml	95
47) 2,6-Dinitrotoluene	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

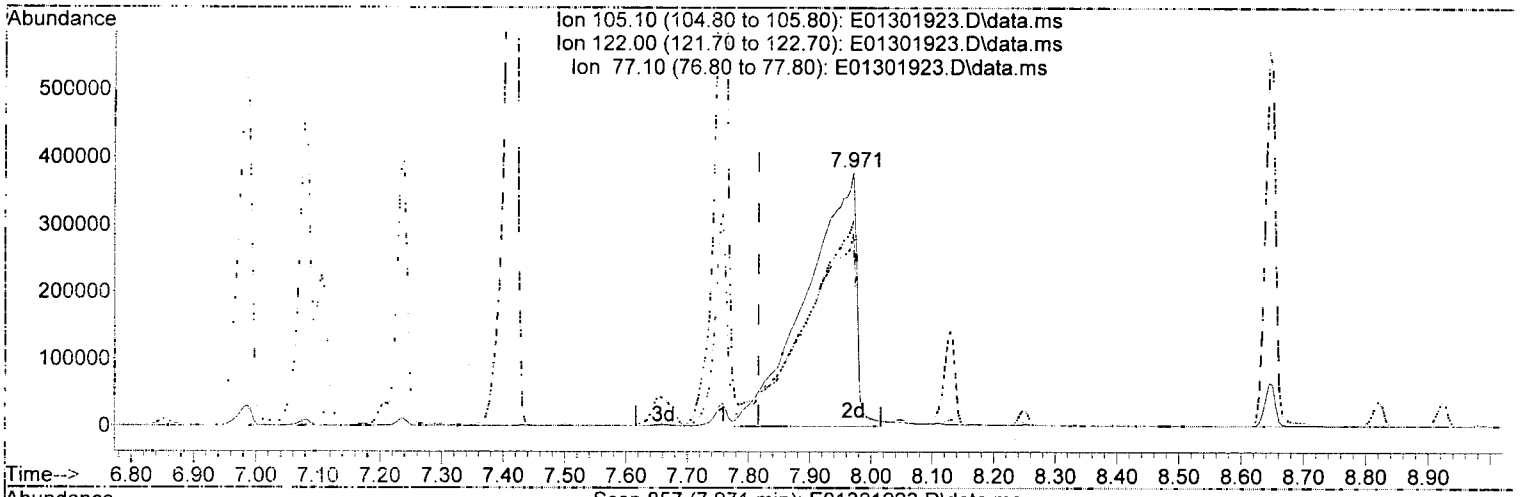
response 48296

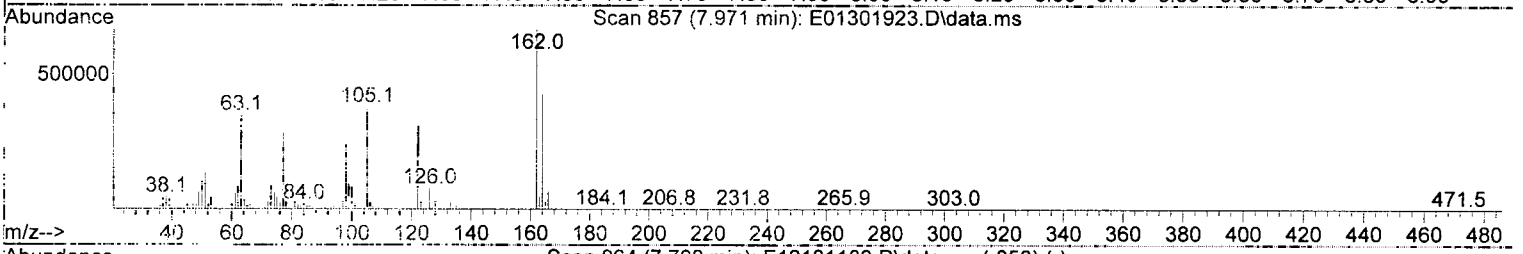
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	2734.05#
77.10	85.50	927.68#
0.00	0.00	0.00

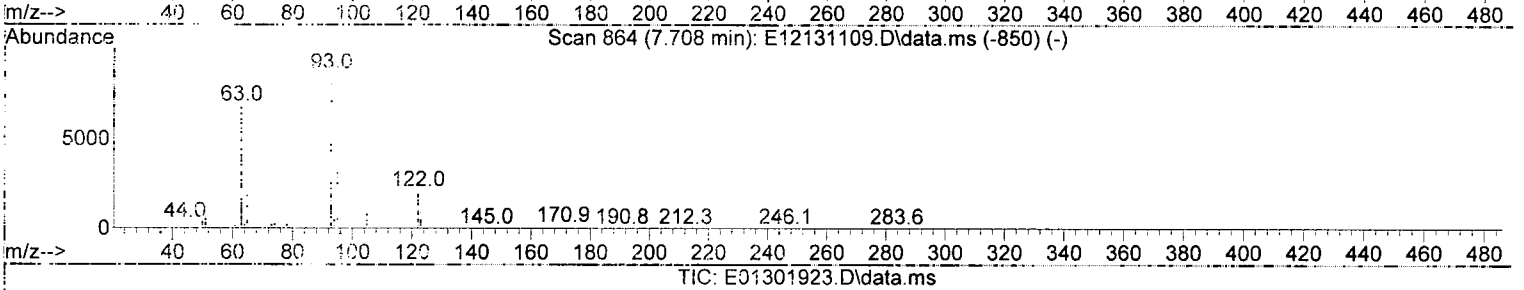
Quantitation Report (Qedit)

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

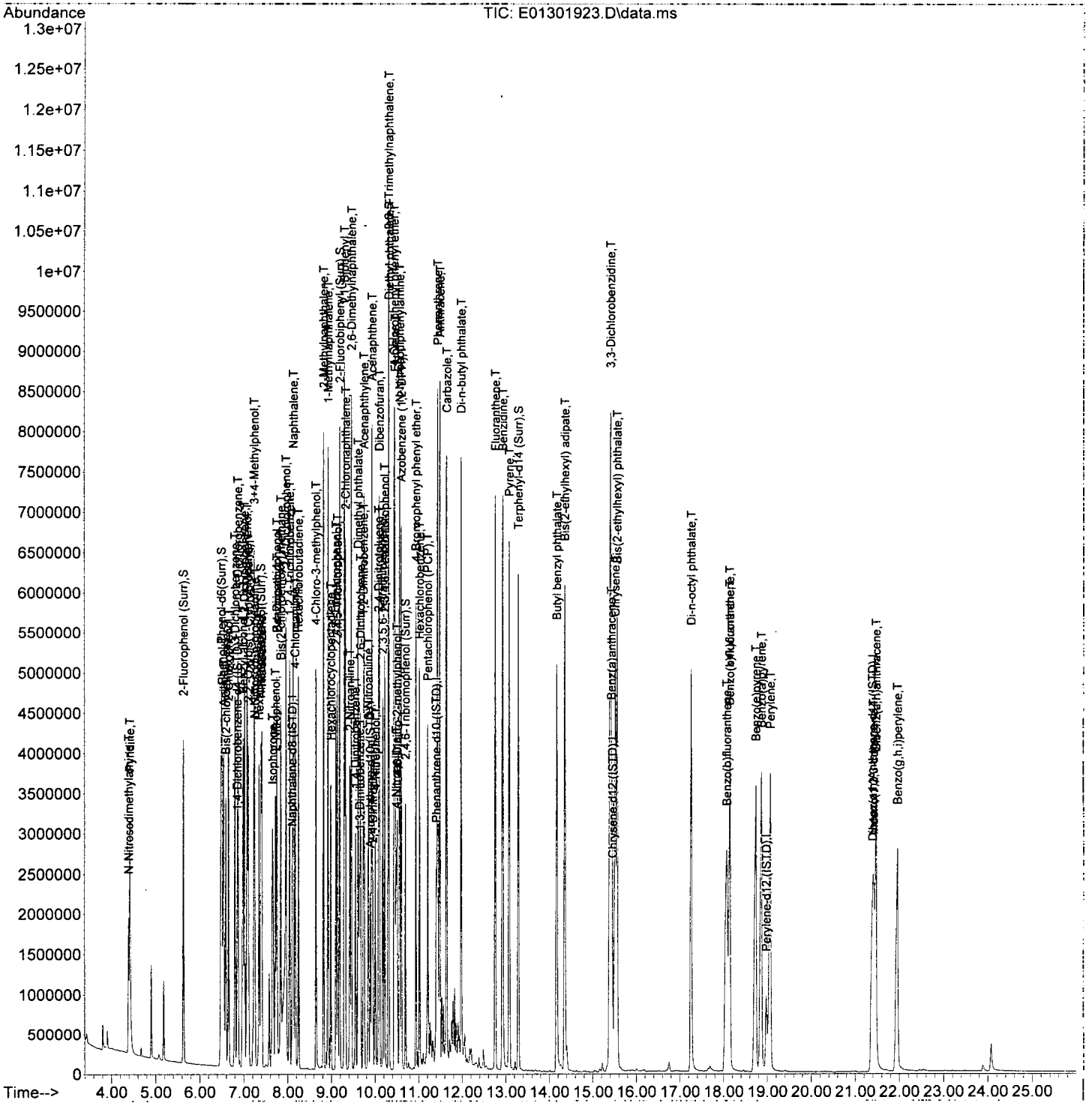
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	79.60	80.84
77.10	85.50	75.70
0.00	0.00	0.00

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

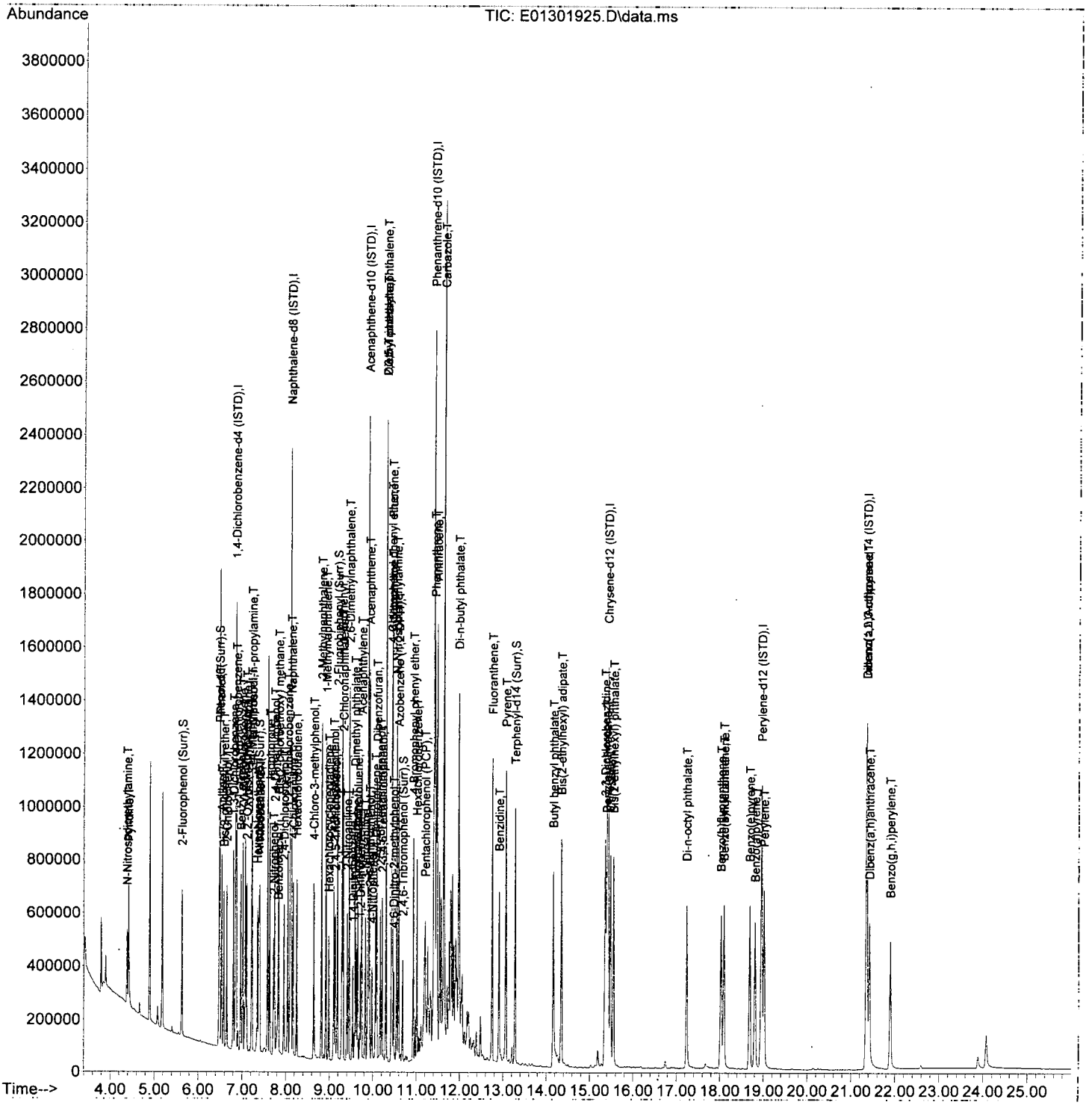
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	2,6-Dimethylnaphthalene	9.447	156	338148	1037.26	ng/ml	97
44)	1,4-Dinitrobenzene	9.533	168	44630	860.77	ng/ml	88
45)	Dimethyl phthalate	9.581	163	380922	1028.67	ng/ml	99
46)	1,3-Dinitrobenzene	9.613	168	57201	986.28	ng/ml	93
47)	2,6-Dinitrotoluene	9.645	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

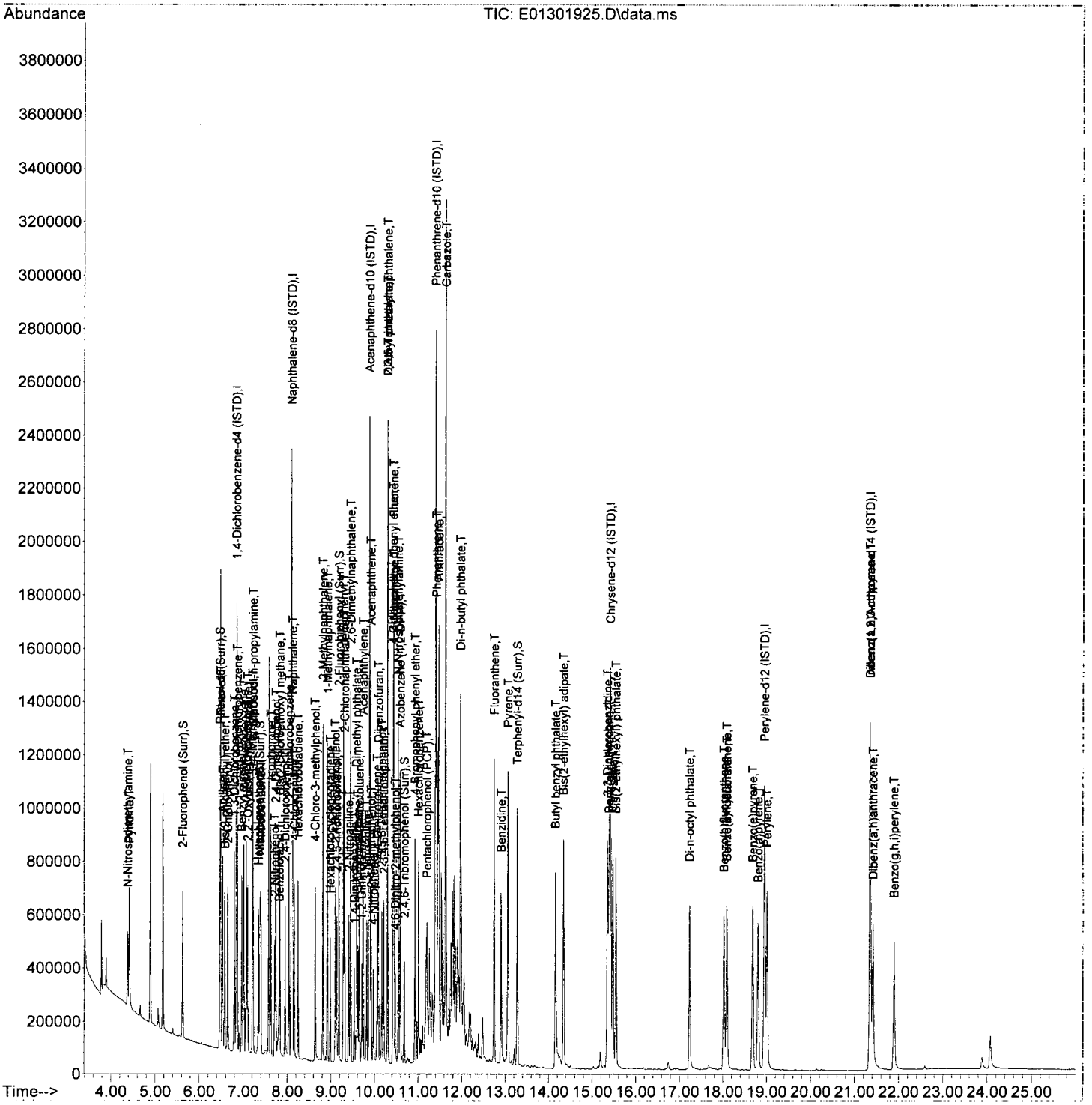
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) 2,6-Dimethylnaphthalene	9.447	156	338148	1069.02	ng/ml	97
44) 1,4-Dinitrobenzene	9.533	168	44630	1158.49	ng/ml	88
45) Dimethyl phthalate	9.581	163	380922	1121.50	ng/ml	99
46) 1,3-Dinitrobenzene	9.613	168	57201	1152.44	ng/ml	93
47) 2,6-Dinitrotoluene	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
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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
1	20	20	2000	C:\msdchem\1\data\2019-04\9D12042\J04121915.D
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
Title : EPA 8270D: Semivolatile Organics

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

Method Path : C:\msdchem\1\methods\
Method File : SV10_041219.M
Title : EPA 8270D: Semivolatile Organics

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
														3.00
1)	I	1,4-Dichlorobenzen...	----------ISTD----------											
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
														2.40
21)	I	Naphthalene-d8 (ISTD)	----------ISTD----------											
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
														3.28
35)	I	Acenaphthene-d10 (...	----------ISTD----------											
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

SV10_041219.M Mon Apr 15 10:45:34 2019

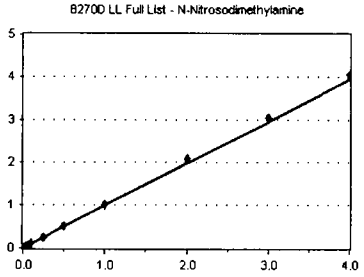
Element Calibration Review Sheet

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**

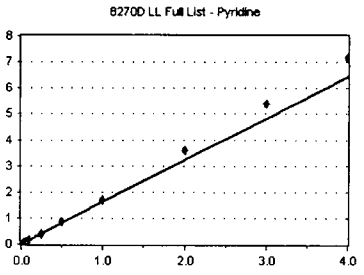


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1826	0.888	4.16
9D12042-CAL2	50	5209	0.995	4.15
9D12042-CAL3	100	10206	0.939	4.19
9D12042-CAL4	200	21690	0.973	4.20
9D12042-CAL5	500	53776	0.991	4.16
9D12042-CAL6	1000	104701	1.009	4.15
9D12042-CAL7	2000	208448	0.991	4.17
9D12042-CAL8	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**

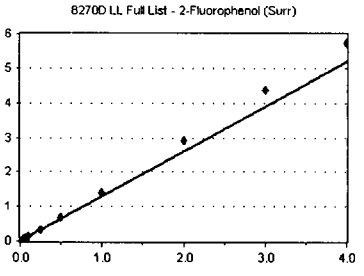


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2498	1.215	4.23
9D12042-CAL2	50	7142	1.364	4.20
9D12042-CAL3	100	16277	1.498	4.23
9D12042-CAL4	200	35631	1.598	4.21
9D12042-CAL5	500	87366	1.610	4.18
9D12042-CAL6	1000	177059	1.706	4.18
9D12042-CAL7	2000	358336	1.703	4.18
9D12042-CAL8	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**

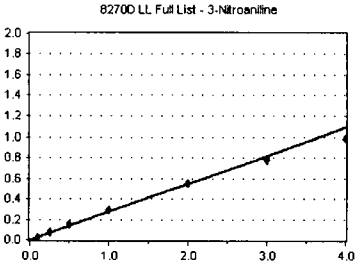


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2233	1.086	5.54
9D12042-CAL2	50	5365	1.025	5.54
9D12042-CAL3	100	12560	1.156	5.54
9D12042-CAL4	200	28367	1.272	5.54
9D12042-CAL5	500	73276	1.350	5.53
9D12042-CAL6	1000	141127	1.360	5.54
9D12042-CAL7	2000	292249	1.389	5.54
9D12042-CAL8	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

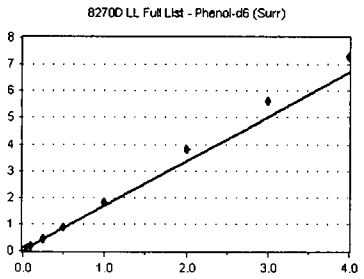
AVE RF **0.273** RF RSD **8.61** AVE RT **5.60**

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)

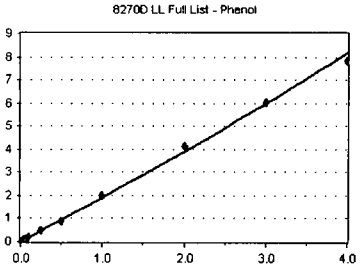


Curve Fit: **AVERAGE RF**

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

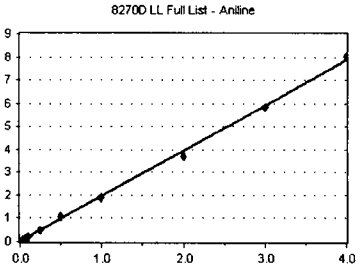


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

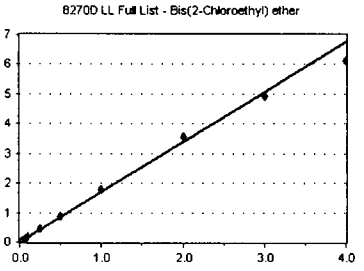


Curve Fit: **AVERAGE RF**

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**

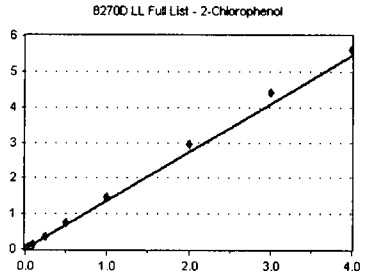
Element Calibration Review Sheet

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**

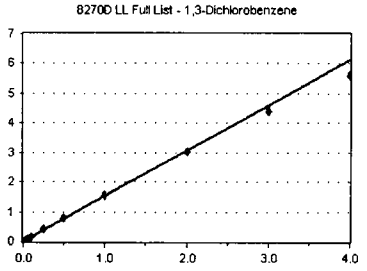


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2212	1.076	6.61
9D12042-CAL2	50	5987	1.143	6.61
9D12042-CAL3	100	14013	1.289	6.61
9D12042-CAL4	200	29959	1.344	6.61
9D12042-CAL5	500	78427	1.445	6.61
9D12042-CAL6	1000	154232	1.486	6.61
9D12042-CAL7	2000	308446	1.466	6.61
9D12042-CAL8	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**

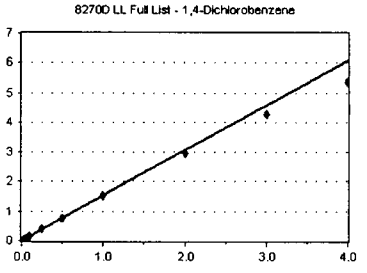


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	205604	102.802	6.81
9D12042-CAL2	2000	209444	104.722	6.81
9D12042-CAL3	2000	217345	108.673	6.81
9D12042-CAL4	2000	222946	111.473	6.81
9D12042-CAL5	2000	217042	108.521	6.81
9D12042-CAL6	2000	207595	103.798	6.81
9D12042-CAL7	2000	210386	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**

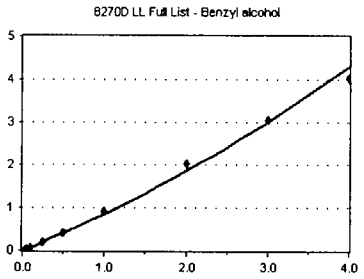
Element Calibration Review Sheet

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**

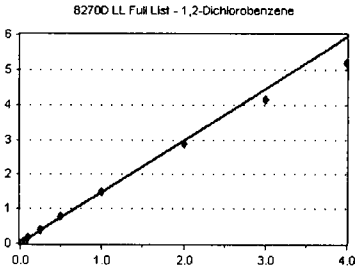


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~527~~	~~0.256~~	~~6.95~~
9D12042-CAL2	50	1873	0.358	6.95
9D12042-CAL3	100	4432	0.408	6.94
9D12042-CAL4	200	14374	0.645	6.94
9D12042-CAL5	500	38189	0.704	6.94
9D12042-CAL6	1000	86489	0.833	6.94
9D12042-CAL7	2000	196023	0.932	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**

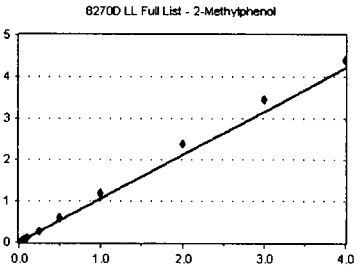


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2889	1.405	6.99
9D12042-CAL2	50	8131	1.553	6.98
9D12042-CAL3	100	16678	1.535	6.99
9D12042-CAL4	200	36123	1.620	6.99
9D12042-CAL5	500	87063	1.605	6.98
9D12042-CAL6	1000	158706	1.529	6.98
9D12042-CAL7	2000	313391	1.490	6.99
9D12042-CAL8	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**

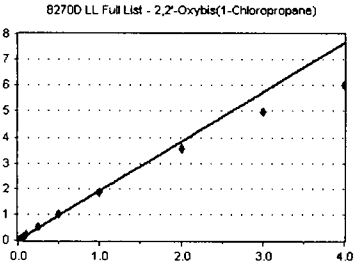


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1724	0.839	7.04
9D12042-CAL2	50	4259	0.813	7.04
9D12042-CAL3	100	9962	0.917	7.04
9D12042-CAL4	200	22860	1.025	7.04
9D12042-CAL5	500	61181	1.128	7.04
9D12042-CAL6	1000	123097	1.186	7.04
9D12042-CAL7	2000	248169	1.180	7.04
9D12042-CAL8	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**

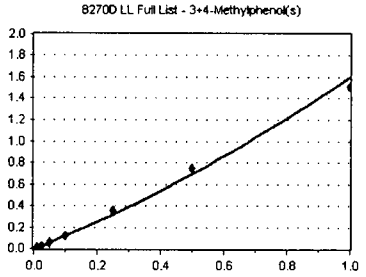
Element Calibration Review Sheet

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**

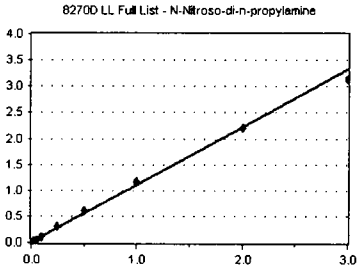


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1519	0.739	7.19
9D12042-CAL2	50	4279	0.817	7.19
9D12042-CAL3	100	11154	1.026	7.19
9D12042-CAL4	200	26267	1.178	7.19
9D12042-CAL5	500	77098	1.421	7.19
9D12042-CAL6	1000	154518	1.489	7.19
9D12042-CAL7	2000	319359	1.518	7.19
~~9D12042-CAL8~~	~~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**

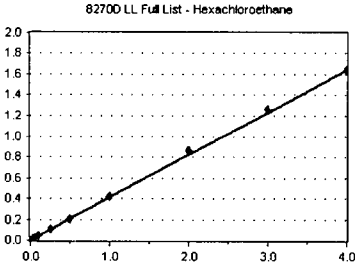


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2080	1.012	7.20
9D12042-CAL2	50	5246	1.002	7.20
9D12042-CAL3	100	11467	1.055	7.20
9D12042-CAL4	200	25133	1.127	7.20
9D12042-CAL5	500	67493	1.244	7.20
9D12042-CAL6	1000	126521	1.219	7.20
9D12042-CAL7	2000	245818	1.168	7.20
9D12042-CAL8	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**

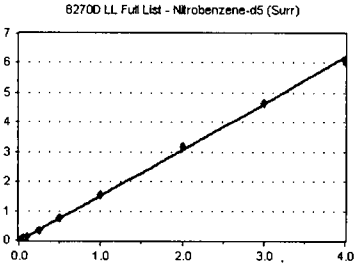


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	711	0.346	7.32
9D12042-CAL2	50	2137	0.408	7.32
9D12042-CAL3	100	4477	0.412	7.32
9D12042-CAL4	200	9240	0.414	7.32
9D12042-CAL5	500	23400	0.431	7.32
9D12042-CAL6	1000	42742	0.412	7.32
9D12042-CAL7	2000	89727	0.426	7.32
9D12042-CAL8	4000	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**

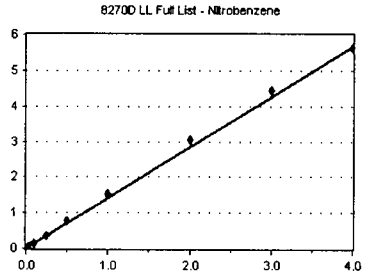
Element Calibration Review Sheet

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**

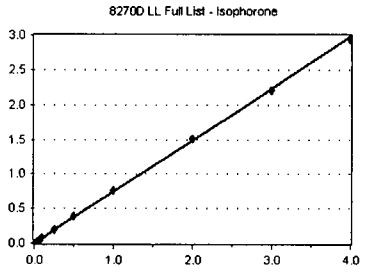


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2275~~	~~1.106~~	~~7.38~~
9D12042-CAL2	50	5793	1.106	7.37
9D12042-CAL3	100	14380	1.323	7.38
9D12042-CAL4	200	31068	1.394	7.38
9D12042-CAL5	500	80603	1.485	7.38
9D12042-CAL6	1000	159222	1.534	7.38
9D12042-CAL7	2000	323406	1.537	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**

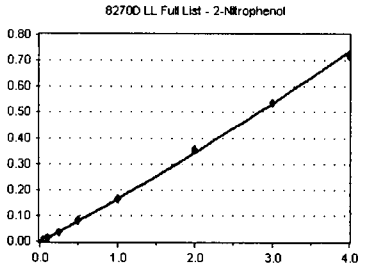


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5760	0.687	7.61
9D12042-CAL2	50	15037	0.703	7.61
9D12042-CAL3	100	31645	0.729	7.61
9D12042-CAL4	200	70389	0.776	7.61
9D12042-CAL5	500	179496	0.799	7.61
9D12042-CAL6	1000	336596	0.773	7.61
9D12042-CAL7	2000	660663	0.757	7.61
9D12042-CAL8	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**

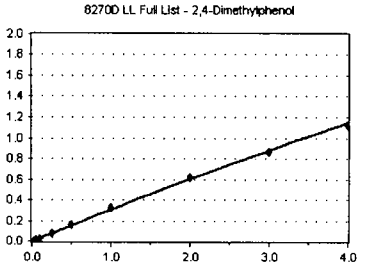


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~482~~	~~5.750~~	~~7.70~~
~~9D12042-CAL2~~	~~50~~	~~1610~~	~~7.531~~	~~7.69~~
9D12042-CAL3	100	3262	7.518	7.70
9D12042-CAL4	200	10018	0.110	7.70
9D12042-CAL5	500	30957	0.138	7.70
9D12042-CAL6	1000	70238	0.161	7.70
9D12042-CAL7	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**

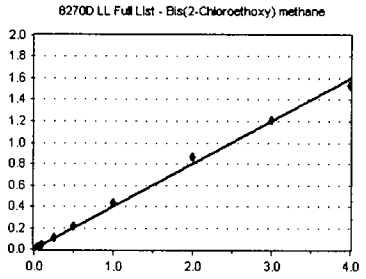
Element Calibration Review Sheet

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**

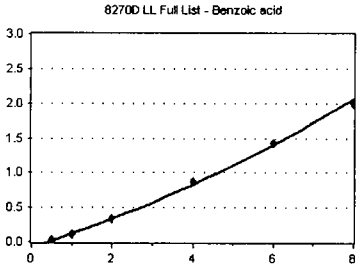


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2366	0.282	7.81
9D12042-CAL2	50	7058	0.330	7.81
9D12042-CAL3	100	18067	0.416	7.81
9D12042-CAL4	200	39106	0.431	7.81
9D12042-CAL5	500	99782	0.444	7.81
9D12042-CAL6	1000	191279	0.439	7.81
9D12042-CAL7	2000	381475	0.437	7.82
9D12042-CAL8	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**

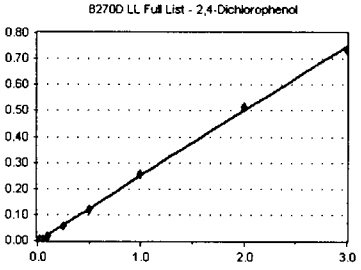


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~40~~	~~55~~	~~3.281~~	~~7.77~~
~~9D12042-CAL2~~	~~100~~	~~106~~	~~2.479~~	~~7.89~~
~~9D12042-CAL3~~	~~200~~	~~212~~	~~2.443~~	~~7.78~~
~~9D12042-CAL4~~	~~400~~	~~2517~~	~~0.014~~	~~7.77~~
9D12042-CAL5	1000	23976	5.336	7.79
9D12042-CAL6	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**

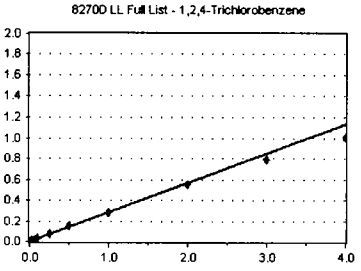


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~425~~	~~5.070~~	~~7.94~~
9D12042-CAL2	50	2177	0.102	7.94
9D12042-CAL3	100	5136	0.118	7.93
9D12042-CAL4	200	14168	0.156	7.93
9D12042-CAL5	500	50336	0.224	7.93
9D12042-CAL6	1000	106512	0.245	7.93
9D12042-CAL7	2000	222208	0.255	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**

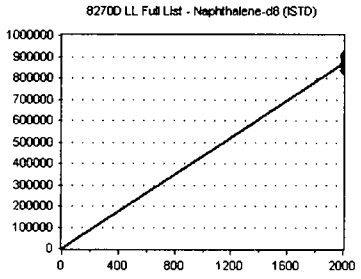
Element Calibration Review Sheet

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**

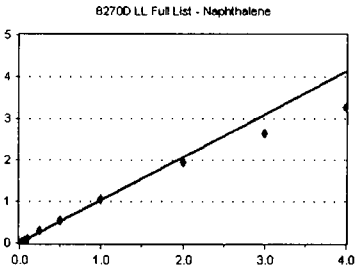


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	838248	419.124	8.08
9D12042-CAL2	2000	855155	427.578	8.08
9D12042-CAL3	2000	867816	433.908	8.08
9D12042-CAL4	2000	907511	453.756	8.08
9D12042-CAL5	2000	898567	449.283	8.08
9D12042-CAL6	2000	870566	435.283	8.08
9D12042-CAL7	2000	872864	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**

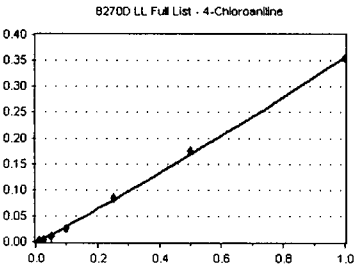


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8711	1.039	8.10
9D12042-CAL2	50	23251	1.088	8.10
9D12042-CAL3	100	49024	1.130	8.10
9D12042-CAL4	200	102649	1.131	8.10
9D12042-CAL5	500	257687	1.147	8.10
9D12042-CAL6	1000	475302	1.092	8.10
9D12042-CAL7	2000	918583	1.052	8.10
9D12042-CAL8	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**

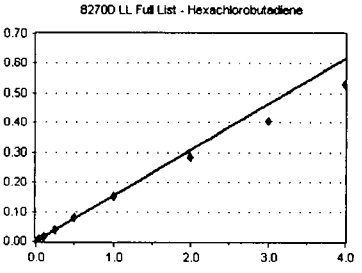


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1652	0.197	8.15
9D12042-CAL2	50	4055	0.190	8.15
9D12042-CAL3	100	9860	0.227	8.15
9D12042-CAL4	200	23535	0.259	8.15
9D12042-CAL5	500	75620	0.337	8.15
9D12042-CAL6	1000	151775	0.349	8.15
9D12042-CAL7	2000	308711	0.354	8.15
~~9D12042-CAL8~~	~~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**

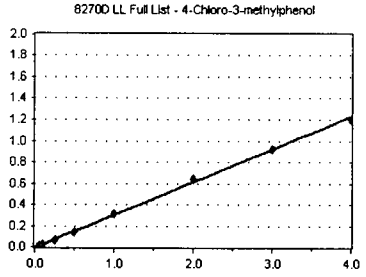
Element Calibration Review Sheet

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**

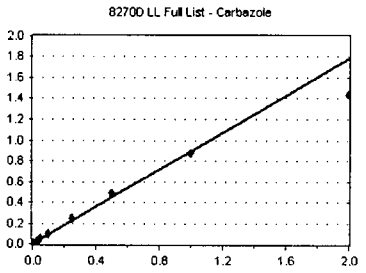


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~606~~	~~7.229~~	~~8.63~~
~~9D12042-CAL2~~	~~50~~	~~2641~~	~~0.124~~	~~8.63~~
9D12042-CAL3	100	5402	0.124	8.63
9D12042-CAL4	200	17148	0.189	8.62
9D12042-CAL5	500	61878	0.275	8.62
9D12042-CAL6	1000	126121	0.290	8.62
9D12042-CAL7	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**

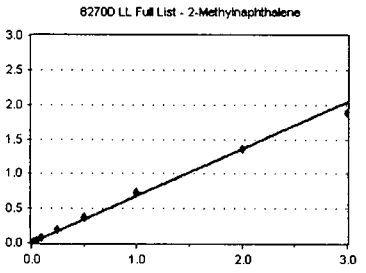


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5247	0.754	11.61
9D12042-CAL2	50	14600	0.833	11.61
9D12042-CAL3	100	36766	0.975	11.61
9D12042-CAL4	200	80323	1.009	11.61
9D12042-CAL5	500	187353	1.014	11.61
9D12042-CAL6	1000	340948	0.972	11.61
9D12042-CAL7	2000	651258	0.880	0.00
9D12042-CAL8	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**

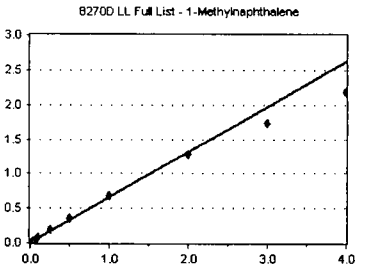


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4843	0.578	8.80
9D12042-CAL2	50	12740	0.596	8.80
9D12042-CAL3	100	27918	0.643	8.80
9D12042-CAL4	200	67852	0.748	8.80
9D12042-CAL5	500	173683	0.773	8.80
9D12042-CAL6	1000	322088	0.740	8.80
9D12042-CAL7	2000	633302	0.726	8.80
9D12042-CAL8	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**

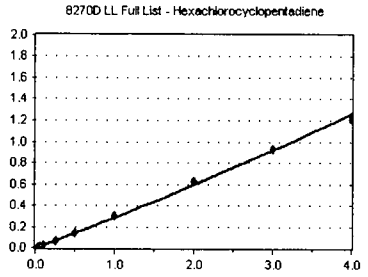
Element Calibration Review Sheet

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**

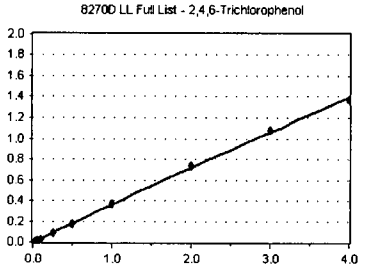


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~396~~	~~9.377~~	~~8.96~~
9D12042-CAL2	50	1375	0.128	8.97
9D12042-CAL3	100	3968	0.180	8.97
9D12042-CAL4	200	9648	0.211	8.97
9D12042-CAL5	500	28477	0.262	8.97
9D12042-CAL6	1000	59442	0.291	8.97
9D12042-CAL7	2000	126849	0.300	8.97
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**

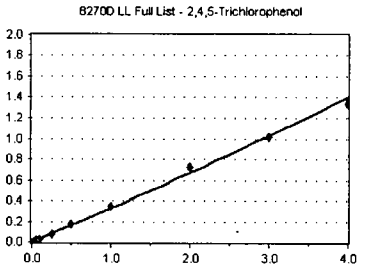


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~637~~	~~0.151~~	~~9.08~~
9D12042-CAL2	50	1647	0.154	9.08
9D12042-CAL3	100	3552	0.161	9.08
9D12042-CAL4	200	11339	0.247	9.08
9D12042-CAL5	500	35536	0.327	9.08
9D12042-CAL6	1000	69804	0.341	9.08
9D12042-CAL7	2000	154065	0.364	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**

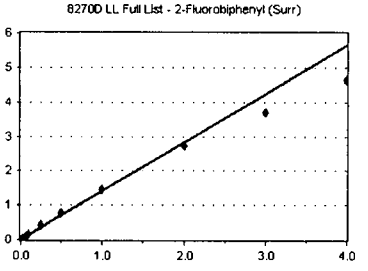


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~570~~	~~0.135~~	~~9.12~~
9D12042-CAL2	50	1937	0.181	9.12
9D12042-CAL3	100	4207	0.190	9.12
9D12042-CAL4	200	11558	0.252	9.12
9D12042-CAL5	500	34165	0.315	9.11
9D12042-CAL6	1000	69025	0.338	9.12
9D12042-CAL7	2000	144274	0.341	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**

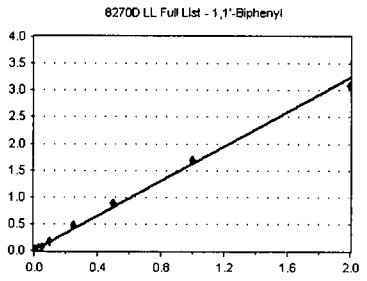
Element Calibration Review Sheet

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**

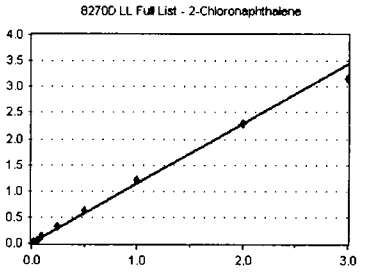


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5440	1.288	9.27
9D12042-CAL2	50	16008	1.495	9.27
9D12042-CAL3	100	33353	1.510	9.27
9D12042-CAL4	200	81722	1.783	9.27
9D12042-CAL5	500	202383	1.864	9.27
9D12042-CAL6	1000	365897	1.789	9.27
9D12042-CAL7	2000	716600	1.694	9.27
9D12042-CAL8	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**

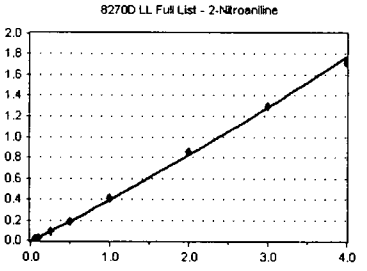


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	4110	0.973	9.30
9D12042-CAL2	50	11226	1.048	9.30
9D12042-CAL3	100	23833	1.079	9.30
9D12042-CAL4	200	56267	1.228	9.30
9D12042-CAL5	500	143842	1.325	9.30
9D12042-CAL6	1000	256777	1.256	9.30
9D12042-CAL7	2000	513880	1.215	9.30
9D12042-CAL8	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**

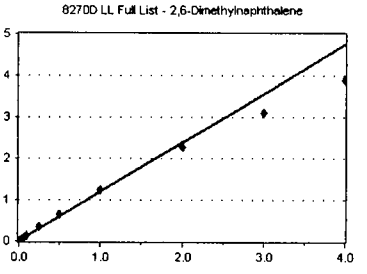


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~491~~	~~0.116~~	~~9.39~~
~~9D12042-CAL2~~	~~50~~	~~1501~~	~~0.140~~	~~9.39~~
9D12042-CAL3	100	3408	0.154	9.39
9D12042-CAL4	200	10366	0.226	9.39
9D12042-CAL5	500	37427	0.345	9.39
9D12042-CAL6	1000	74805	0.366	9.39
9D12042-CAL7	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

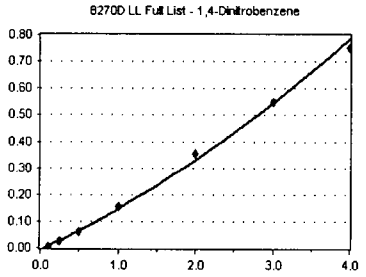
AVE RF **1.189** RF RSD **11.13** AVE RT **9.43**

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

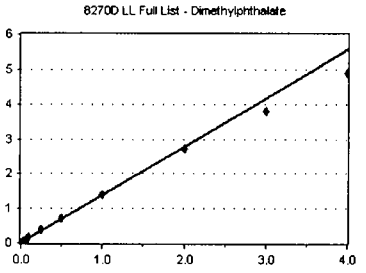


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

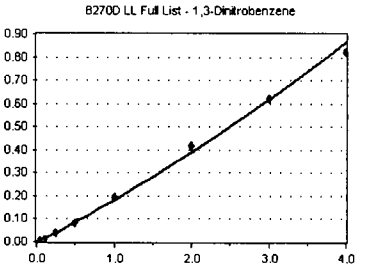


Curve Fit: **AVERAGE RF**

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

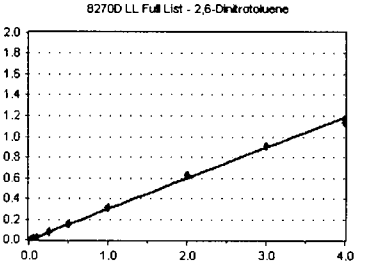


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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**

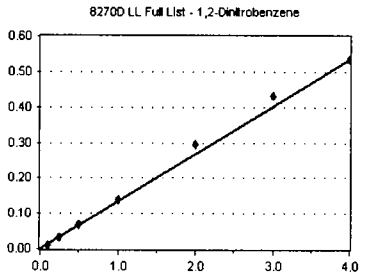
Element Calibration Review Sheet

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**

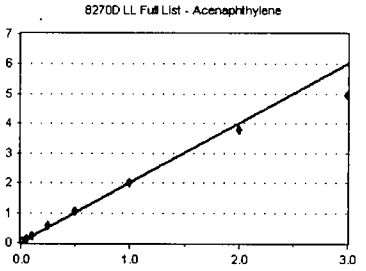


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~247~~	~~0.058~~	~~9.68~~
~~9D12042-CAL2~~	~~50~~	~~594~~	~~5.547~~	~~9.68~~
~~9D12042-CAL3~~	~~100~~	~~1685~~	~~7.629~~	~~9.69~~
9D12042-CAL4	200	5007	0.109	9.68
9D12042-CAL5	500	14052	0.129	9.69
9D12042-CAL6	1000	27578	0.135	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**

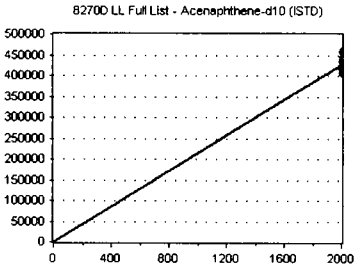


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8037	1.903	9.72
9D12042-CAL2	50	20809	1.943	9.72
9D12042-CAL3	100	47235	2.139	9.72
9D12042-CAL4	200	96629	2.109	9.72
9D12042-CAL5	500	239738	2.208	9.72
9D12042-CAL6	1000	438645	2.145	9.72
9D12042-CAL7	2000	847485	2.004	9.72
9D12042-CAL8	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**

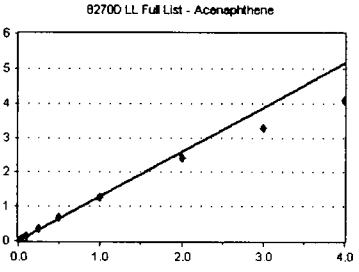


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	422298	211.149	9.86
9D12042-CAL2	2000	428361	214.180	9.86
9D12042-CAL3	2000	441746	220.873	9.86
9D12042-CAL4	2000	458269	229.135	9.86
9D12042-CAL5	2000	434239	217.120	9.86
9D12042-CAL6	2000	408985	204.493	9.87
9D12042-CAL7	2000	422972	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**

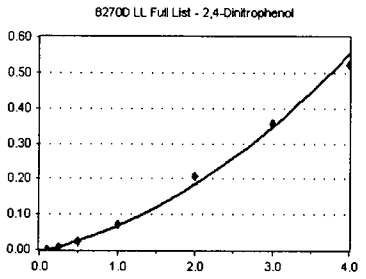
Element Calibration Review Sheet

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**

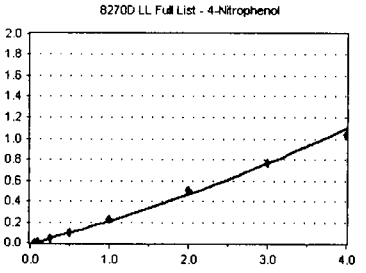


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9D12042-CAL3~~	~~100~~	~~95~~	~~4.301~~	~~9.91~~
9D12042-CAL4	200	631	1.377	9.91
9D12042-CAL5	500	3186	2.935	9.91
9D12042-CAL6	1000	9505	4.648	9.91
9D12042-CAL7	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**

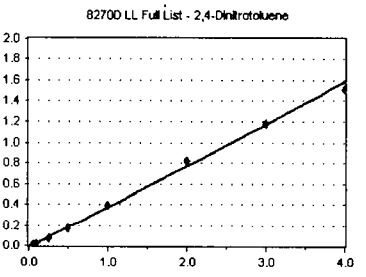


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~81~~	~~1.918~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~479~~	~~4.473~~	~~9.96~~
9D12042-CAL3	100	1391	6.298	9.96
9D12042-CAL4	200	5108	0.111	9.96
9D12042-CAL5	500	16667	0.154	9.96
9D12042-CAL6	1000	38661	0.189	9.96
9D12042-CAL7	2000	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**

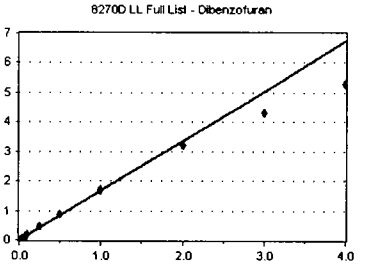


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~516~~	~~0.122~~	~~10.04~~
~~9D12042-CAL2~~	~~50~~	~~1414~~	~~0.132~~	~~10.04~~
9D12042-CAL3	100	3628	0.164	10.04
9D12042-CAL4	200	11165	0.244	10.04
9D12042-CAL5	500	34132	0.314	10.04
9D12042-CAL6	1000	72103	0.353	10.04
9D12042-CAL7	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**

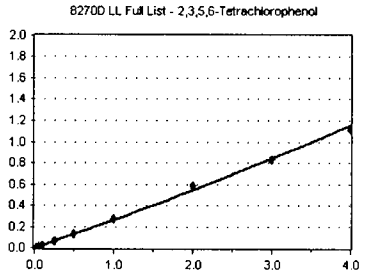
Element Calibration Review Sheet

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**

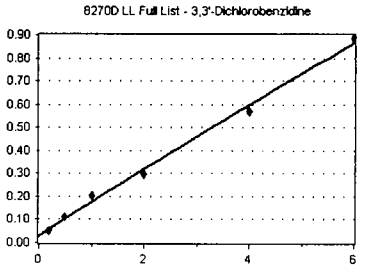


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~365~~	~~8.643~~	~~10.16~~
9D12042-CAL2	50	1033	0.096	10.15
9D12042-CAL3	100	2960	0.134	10.15
9D12042-CAL4	200	9240	0.202	10.15
9D12042-CAL5	500	26249	0.242	10.15
9D12042-CAL6	1000	53006	0.259	10.15
9D12042-CAL7	2000	116600	0.276	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**

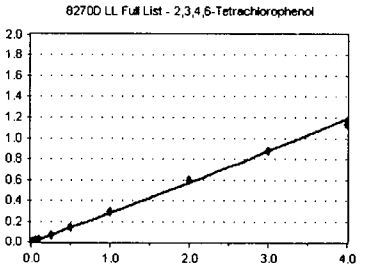


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~40~~	~~2133~~	~~0.175~~	~~0.00~~
~~9D12042-CAL2~~	~~100~~	~~6271~~	~~0.205~~	~~0.00~~
~~9D12042-CAL3~~	~~200~~	~~17285~~	~~0.255~~	~~15.29~~
9D12042-CAL4	400	40983	0.275	15.29
9D12042-CAL5	1000	74081	0.221	15.29
9D12042-CAL6	2000	125386	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**

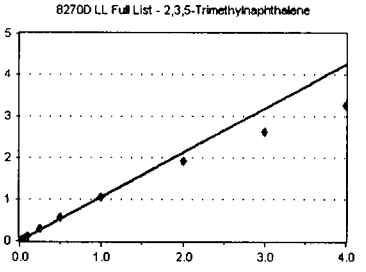


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	466	0.110	10.19
9D12042-CAL2	50	1825	0.170	10.19
9D12042-CAL3	100	4761	0.216	10.19
9D12042-CAL4	200	12019	0.262	10.19
9D12042-CAL5	500	29885	0.275	10.19
9D12042-CAL6	1000	57975	0.284	10.19
9D12042-CAL7	2000	124349	0.294	10.19
9D12042-CAL8	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**

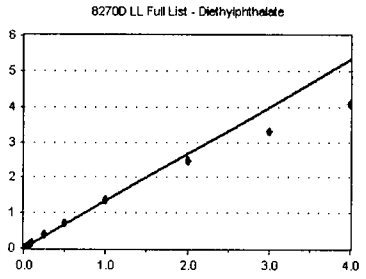
Element Calibration Review Sheet

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**

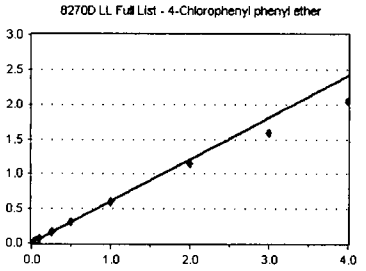


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5489	1.300	10.28
9D12042-CAL2	50	14203	1.326	10.28
9D12042-CAL3	100	33503	1.517	10.28
9D12042-CAL4	200	68644	1.498	10.28
9D12042-CAL5	500	165131	1.521	10.28
9D12042-CAL6	1000	290221	1.419	10.29
9D12042-CAL7	2000	569548	1.347	10.29
9D12042-CAL8	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**

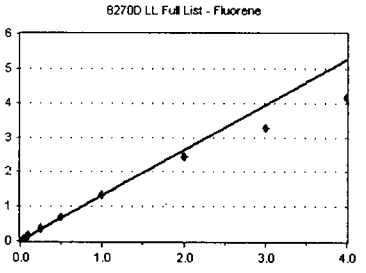


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2599	0.615	10.41
9D12042-CAL2	50	6570	0.614	10.41
9D12042-CAL3	100	14524	0.658	10.41
9D12042-CAL4	200	29693	0.648	10.41
9D12042-CAL5	500	70419	0.649	10.41
9D12042-CAL6	1000	127242	0.622	10.41
9D12042-CAL7	2000	257040	0.608	10.41
9D12042-CAL8	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**

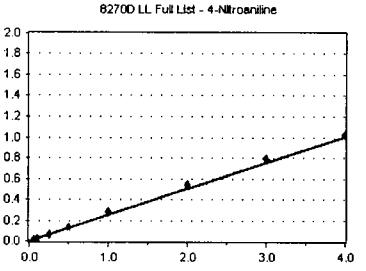


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5519	1.307	10.42
9D12042-CAL2	50	14499	1.354	10.42
9D12042-CAL3	100	32507	1.472	10.42
9D12042-CAL4	200	68196	1.488	10.42
9D12042-CAL5	500	160999	1.483	10.42
9D12042-CAL6	1000	283189	1.385	10.42
9D12042-CAL7	2000	562191	1.329	10.42
9D12042-CAL8	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**

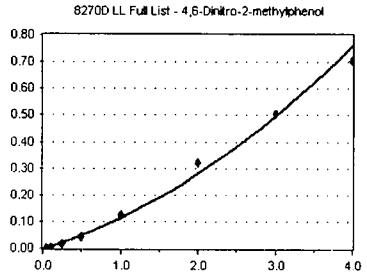
Element Calibration Review Sheet

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**

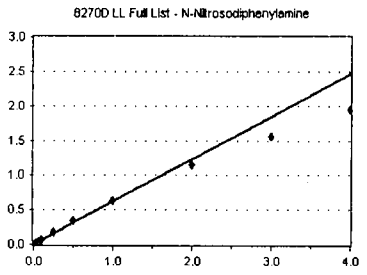


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~66~~	~~1.563~~	~~10.46~~
~~9D12042-CAL2~~	~~50~~	~~144~~	~~0.013~~	~~10.46~~
9D12042-CAL3	100	481	2.178	10.46
9D12042-CAL4	200	2085	0.045	10.46
9D12042-CAL5	500	7777	7.164	10.46
9D12042-CAL6	1000	18318	8.958	10.46
9D12042-CAL7	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**

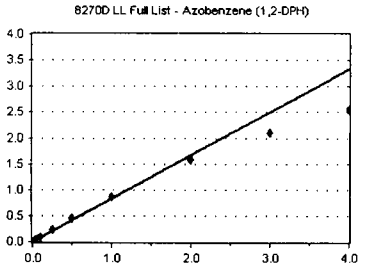


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3694	0.531	10.53
9D12042-CAL2	50	11052	0.631	10.53
9D12042-CAL3	100	26271	0.697	10.53
9D12042-CAL4	200	55332	0.695	10.53
9D12042-CAL5	500	133109	0.721	10.53
9D12042-CAL6	1000	233117	0.665	10.53
9D12042-CAL7	2000	470356	0.635	10.53
9D12042-CAL8	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**

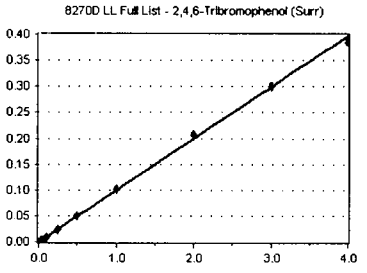


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5526	0.794	10.57
9D12042-CAL2	50	14382	0.821	10.57
9D12042-CAL3	100	34700	0.920	10.57
9D12042-CAL4	200	74635	0.938	10.57
9D12042-CAL5	500	177851	0.963	10.57
9D12042-CAL6	1000	317716	0.906	10.57
9D12042-CAL7	2000	640569	0.865	10.57
9D12042-CAL8	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**

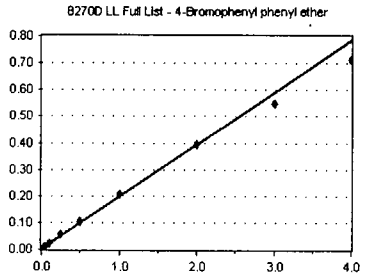
Element Calibration Review Sheet

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**

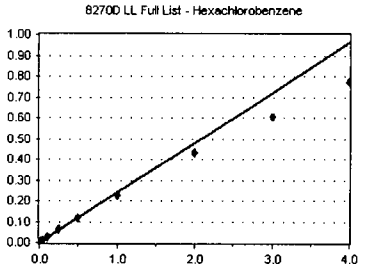


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	1143	0.164	10.91
9D12042-CAL2	50	3328	0.190	10.91
9D12042-CAL3	100	7754	0.206	10.91
9D12042-CAL4	200	17137	0.215	10.91
9D12042-CAL5	500	40555	0.220	10.91
9D12042-CAL6	1000	73569	0.210	10.91
9D12042-CAL7	2000	152125	0.205	10.91
9D12042-CAL8	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**

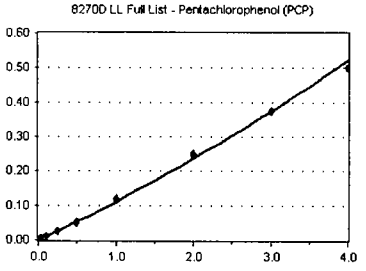


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	2003	0.288	10.99
9D12042-CAL2	50	4727	0.270	10.99
9D12042-CAL3	100	9841	0.261	10.99
9D12042-CAL4	200	19743	0.248	10.99
9D12042-CAL5	500	46685	0.253	10.99
9D12042-CAL6	1000	85256	0.243	10.99
9D12042-CAL7	2000	169660	0.229	11.00
9D12042-CAL8	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**

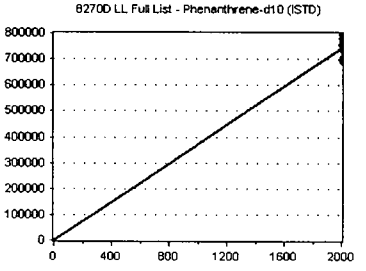


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~966~~	~~0.139~~	~~11.18~~
9D12042-CAL2	50	1190	6.789	11.18
9D12042-CAL3	100	2796	7.413	11.18
9D12042-CAL4	200	7672	9.639	11.18
9D12042-CAL5	500	18590	0.101	11.18
9D12042-CAL6	1000	36665	0.105	11.18
9D12042-CAL7	2000	88610	0.120	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**

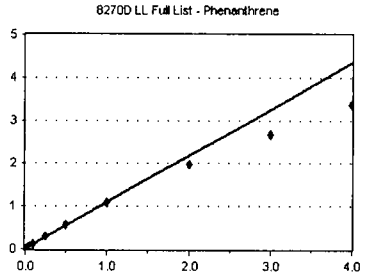
Element Calibration Review Sheet

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**

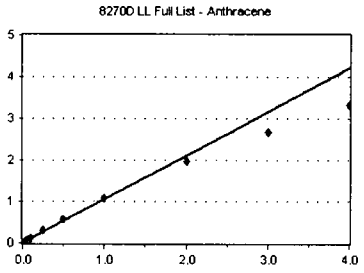


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	8041	1.156	11.40
9D12042-CAL2	50	20614	1.176	11.40
9D12042-CAL3	100	45844	1.215	11.40
9D12042-CAL4	200	95305	1.197	11.40
9D12042-CAL5	500	217396	1.177	11.40
9D12042-CAL6	1000	396616	1.131	11.40
9D12042-CAL7	2000	798010	1.078	11.41
9D12042-CAL8	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**

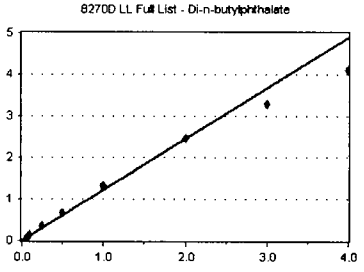


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6943	0.998	11.45
9D12042-CAL2	50	18968	1.082	11.45
9D12042-CAL3	100	44636	1.183	11.45
9D12042-CAL4	200	94023	1.181	11.45
9D12042-CAL5	500	221004	1.197	11.46
9D12042-CAL6	1000	394791	1.126	11.46
9D12042-CAL7	2000	805661	1.088	11.46
9D12042-CAL8	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**

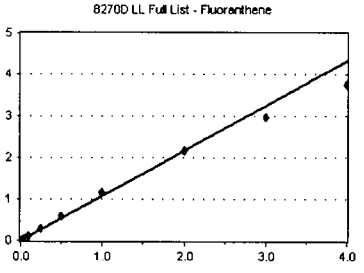


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~6378~~	~~0.917~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~17235~~	~~0.983~~	~~11.95~~
9D12042-CAL3	100	42155	1.118	11.95
9D12042-CAL4	200	102422	1.287	11.95
9D12042-CAL5	500	254292	1.377	11.95
9D12042-CAL6	1000	466951	1.332	11.95
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

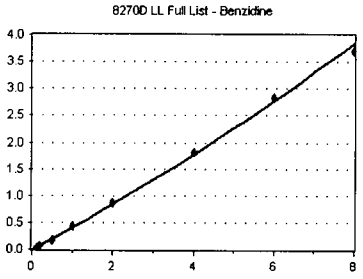
AVE RF **1.082** RF RSD **10.70** AVE RT **12.72**

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

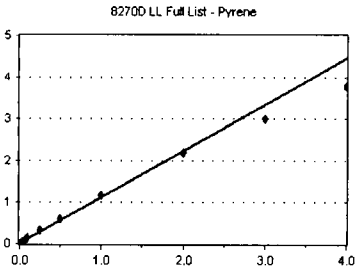


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

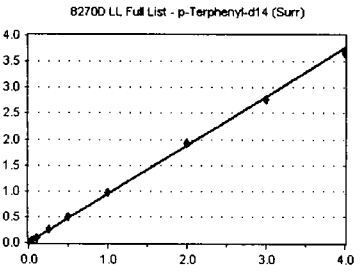


Curve Fit: **AVERAGE RF**

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**

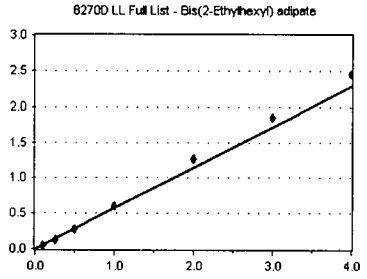
Element Calibration Review Sheet

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**

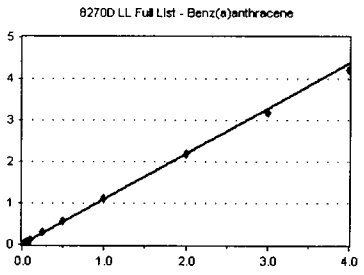


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~2012~~	~~0.330~~	~~0.00~~
~~9D12042-CAL2~~	~~50~~	~~4520~~	~~0.296~~	~~0.00~~
~~9D12042-CAL3~~	~~100~~	~~13416~~	~~0.396~~	~~14.29~~
9D12042-CAL4	200	32652	0.438	14.29
9D12042-CAL5	500	89139	0.531	14.29
9D12042-CAL6	1000	172525	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**

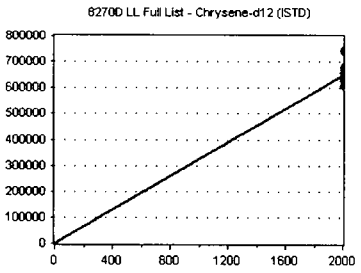


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	6716	1.101	15.33
9D12042-CAL2	50	15643	1.023	15.33
9D12042-CAL3	100	36438	1.076	15.33
9D12042-CAL4	200	84134	1.128	15.33
9D12042-CAL5	500	193655	1.153	15.33
9D12042-CAL6	1000	339038	1.113	15.33
9D12042-CAL7	2000	723880	1.102	15.33
9D12042-CAL8	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**

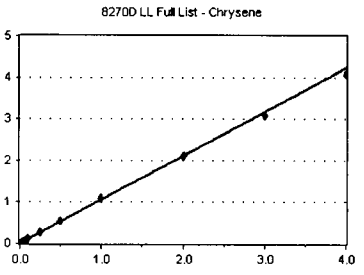


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	610059	305.030	15.35
9D12042-CAL2	2000	611518	305.759	15.35
9D12042-CAL3	2000	677420	338.710	15.36
9D12042-CAL4	2000	745877	372.938	15.36
9D12042-CAL5	2000	671794	335.897	15.36
9D12042-CAL6	2000	609064	304.532	15.36
9D12042-CAL7	2000	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**

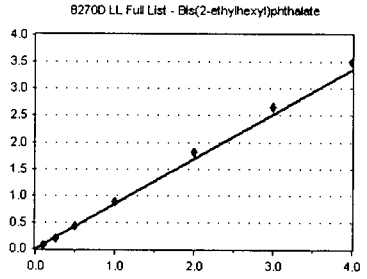
Element Calibration Review Sheet

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**

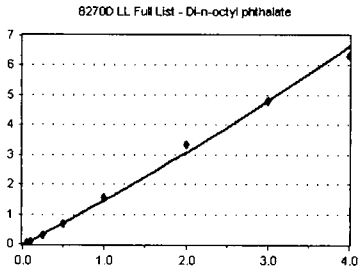


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1961~~	~~0.321~~	~~15.48~~
~~9D12042-CAL2~~	~~50~~	~~5834~~	~~0.382~~	~~15.49~~
~~9D12042-CAL3~~	~~100~~	~~17462~~	~~0.516~~	~~15.49~~
9D12042-CAL4	200	48543	0.651	15.49
9D12042-CAL5	500	135678	0.808	15.49
9D12042-CAL6	1000	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**

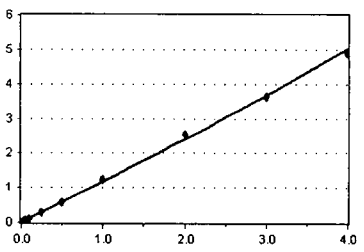


Standard	Concentration	Response	Response Factor	RT
~~9D12042-CAL1~~	~~20~~	~~1918~~	~~0.355~~	~~17.15~~
~~9D12042-CAL2~~	~~50~~	~~5426~~	~~0.399~~	~~17.17~~
9D12042-CAL3	100	17362	0.566	17.16
9D12042-CAL4	200	57618	0.833	17.16
9D12042-CAL5	500	179707	1.176	17.17
9D12042-CAL6	1000	379612	1.379	17.16
9D12042-CAL7	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**

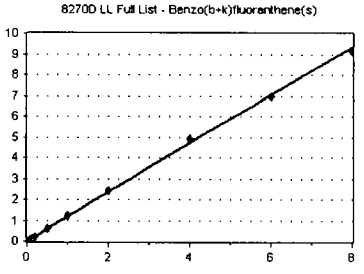


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	3779	0.699	17.93
9D12042-CAL2	50	11314	0.833	17.94
9D12042-CAL3	100	30164	0.984	17.94
9D12042-CAL4	200	73883	1.068	17.94
9D12042-CAL5	500	182995	1.198	17.95
9D12042-CAL6	1000	328149	1.192	17.95
9D12042-CAL7	2000	743627	1.221	17.96
9D12042-CAL8	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

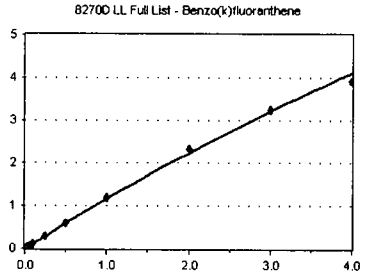
AVE RF **1.098** RF RSD **15.32** AVE RT **18.02**

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

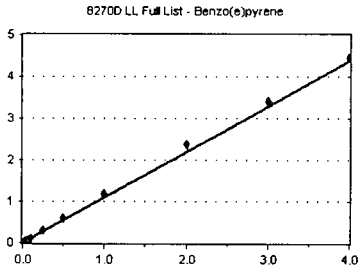


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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

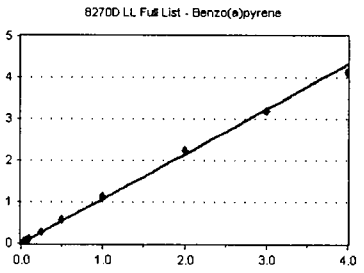


Curve Fit: **AVERAGE RF**

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

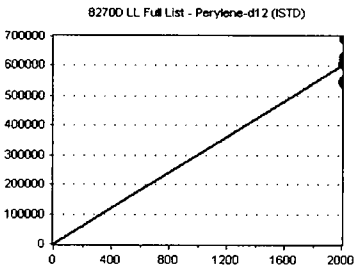


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

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**

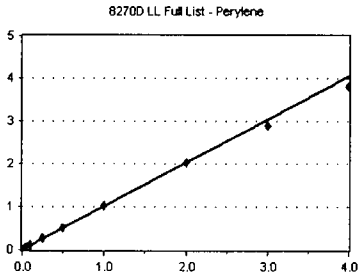
Element Calibration Review Sheet

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**

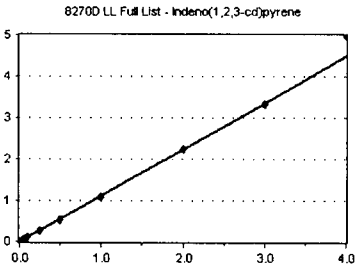


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	2000	486802	243.401	21.26
9D12042-CAL2	2000	498877	249.438	21.26
9D12042-CAL3	2000	548377	274.188	21.26
9D12042-CAL4	2000	629435	314.718	21.27
9D12042-CAL5	2000	566816	283.408	21.27
9D12042-CAL6	2000	510954	255.477	21.27
9D12042-CAL7	2000	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**

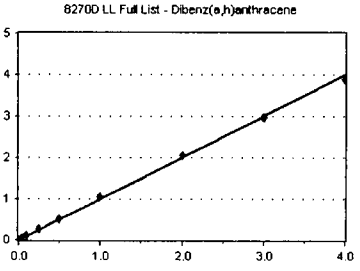


Standard	Concentration	Response	Response Factor	RT
9D12042-CAL1	20	5842	1.200	21.26
9D12042-CAL2	50	13136	1.053	21.26
9D12042-CAL3	100	29860	1.089	21.26
9D12042-CAL4	200	68379	1.086	21.26
9D12042-CAL5	500	156537	1.105	21.26
9D12042-CAL6	1000	278226	1.089	21.27
9D12042-CAL7	2000	633467	1.090	21.28
9D12042-CAL8	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**

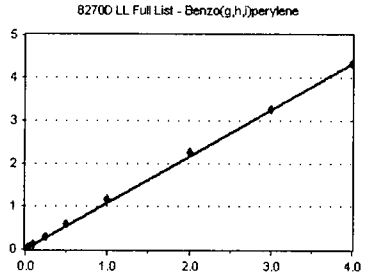
Element Calibration Review Sheet

Calibration ID: **A9D1505** Instrument: **SV-GCMS10** Calibration Date: **04/15/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9D1505**

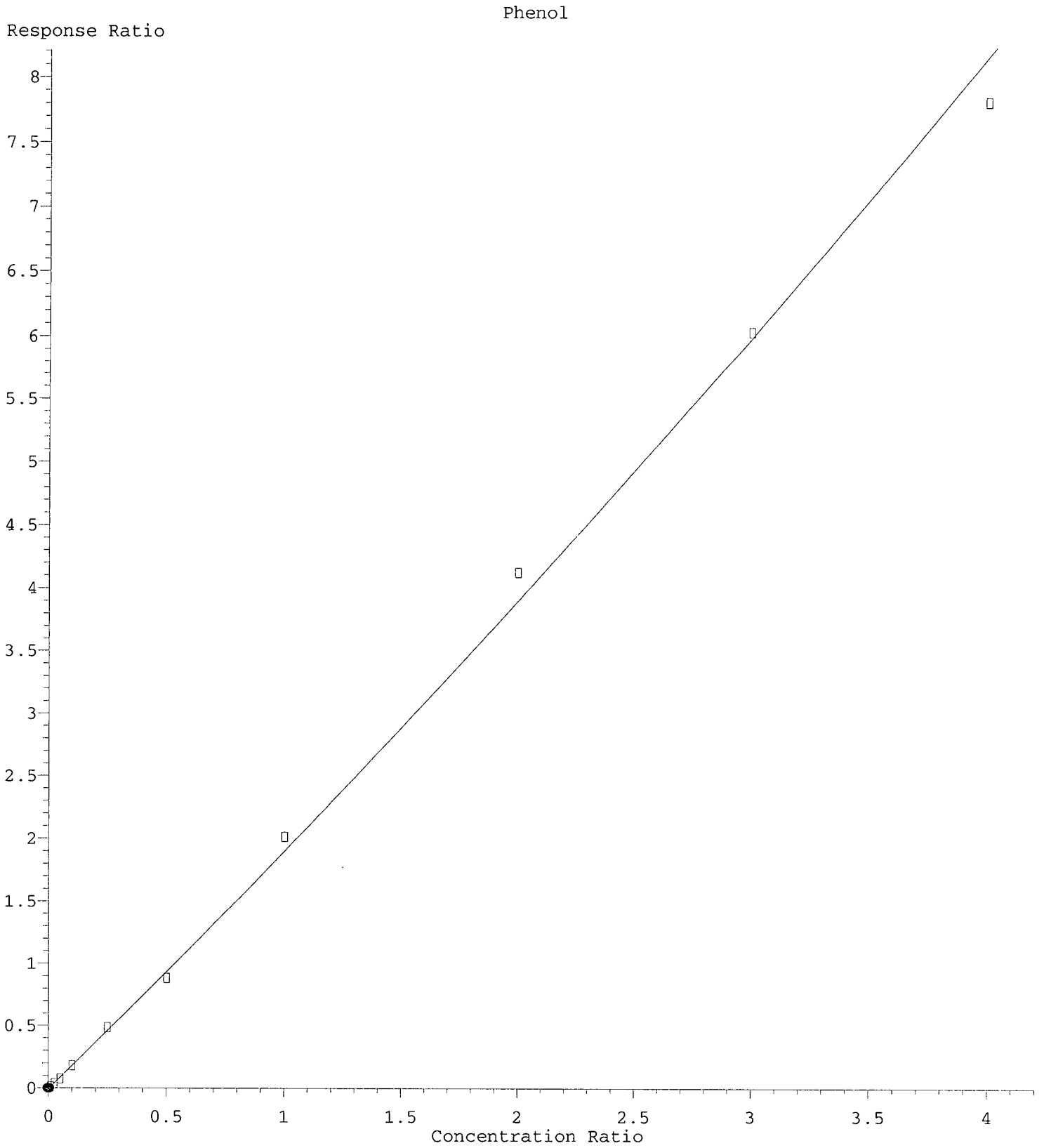
Benzo(g,h,i)perylene

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**

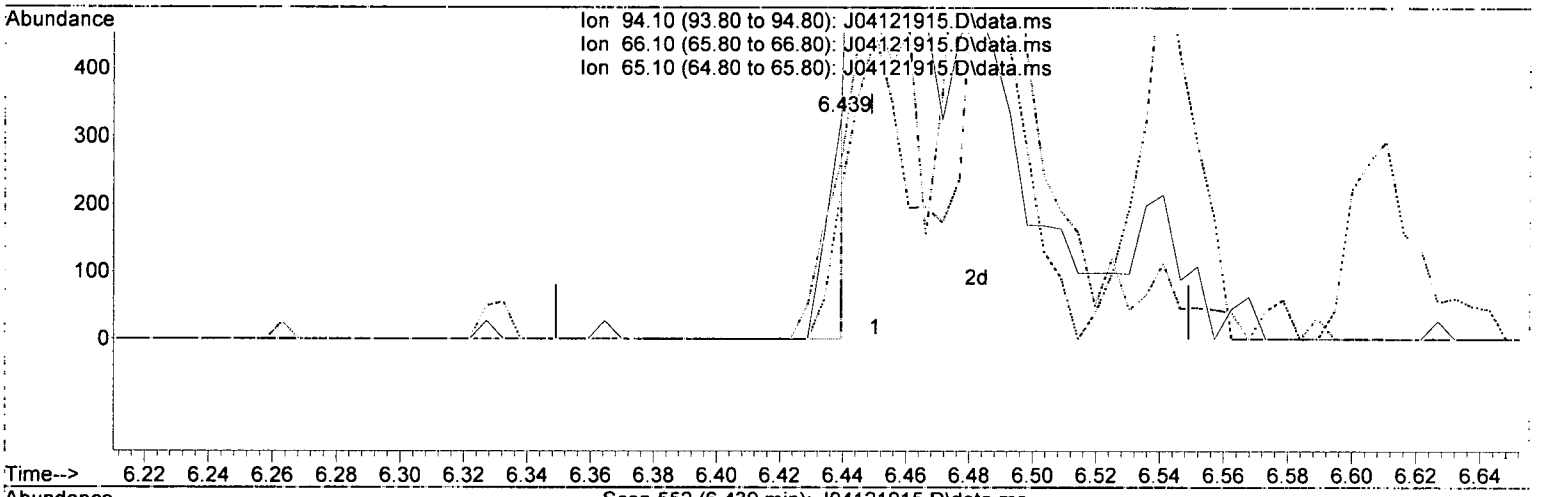


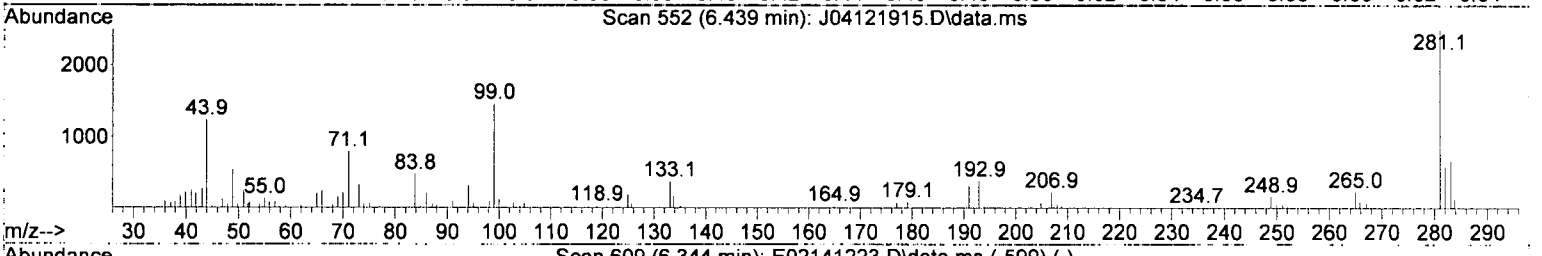
R = 4.53e-002 A*A + 1.86e+000 A - 8.91e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

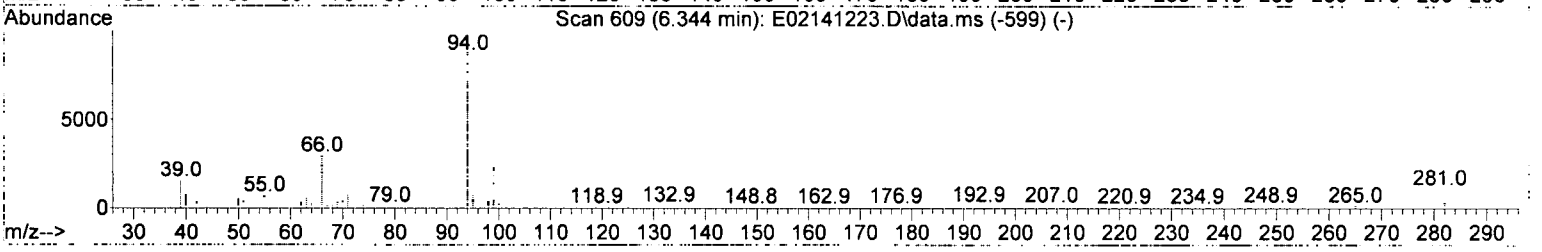
Quantitation Report (Qedit)

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







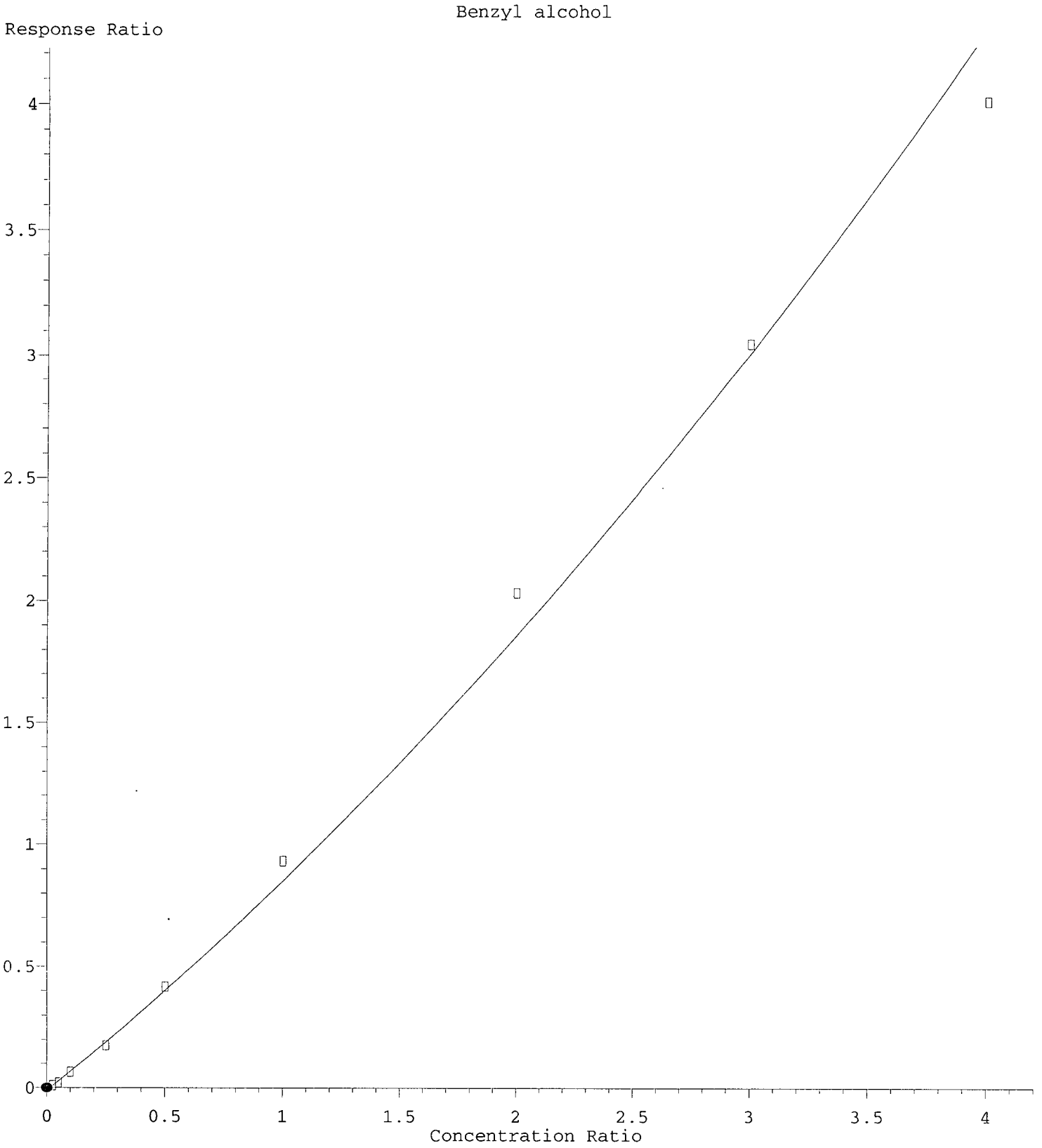
TIC: J04121915.D\data.ms

(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

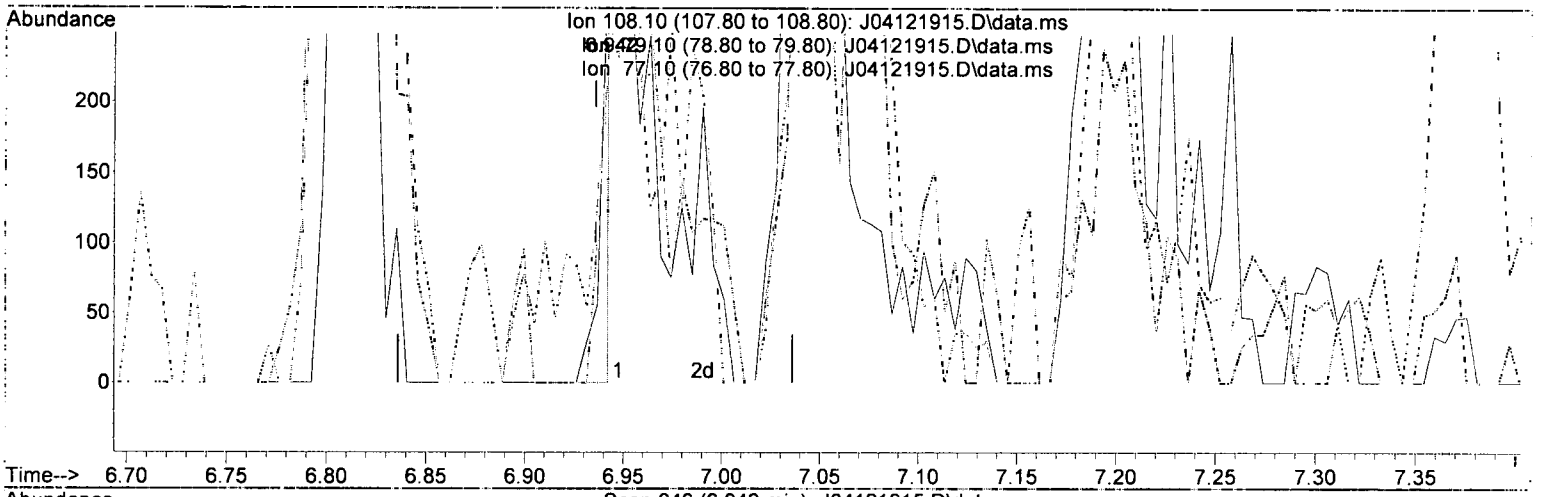


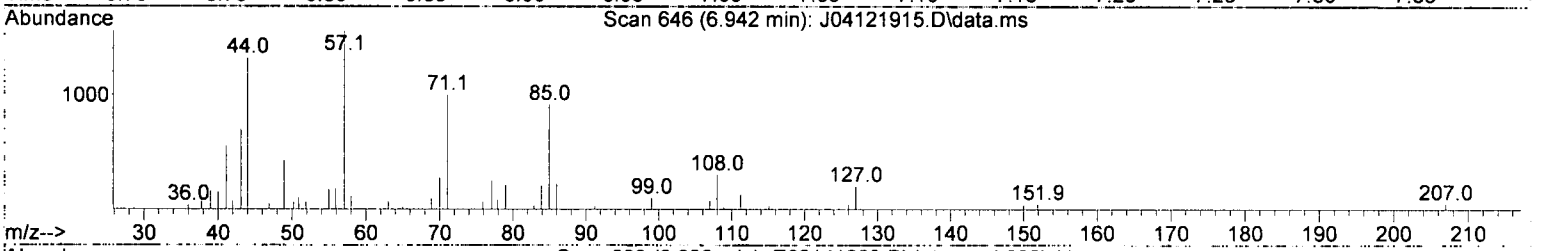
R = 7.20e-002 A*A + 7.92e-001 A - 1.27e-002
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

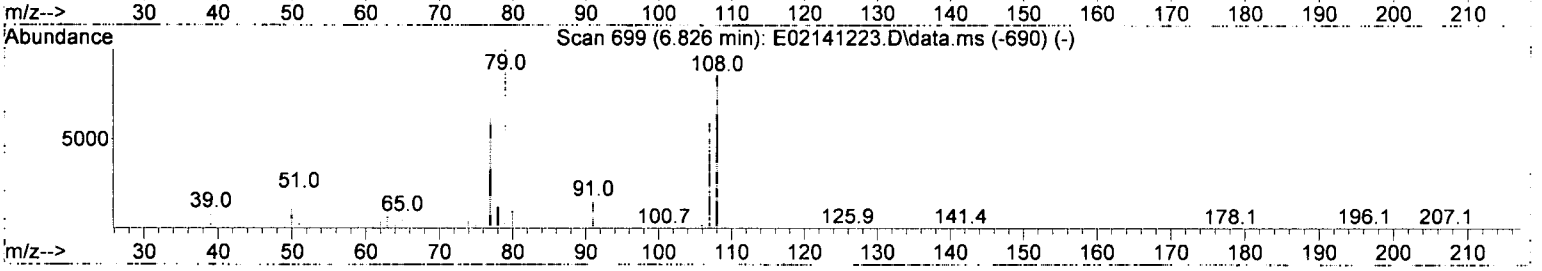
Quantitation Report (Qedit)

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







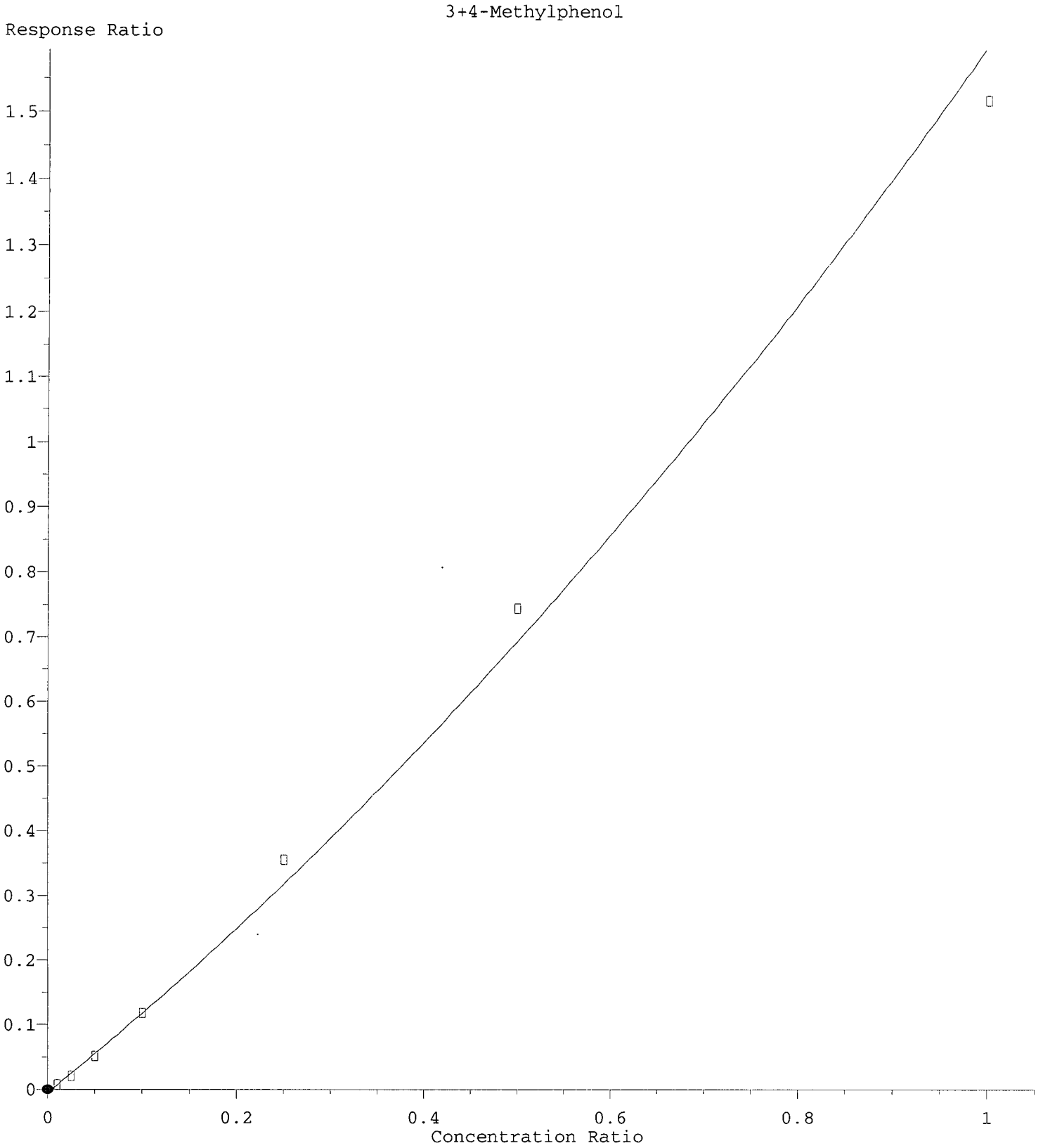
TIC: J04121915.D\data.ms

(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

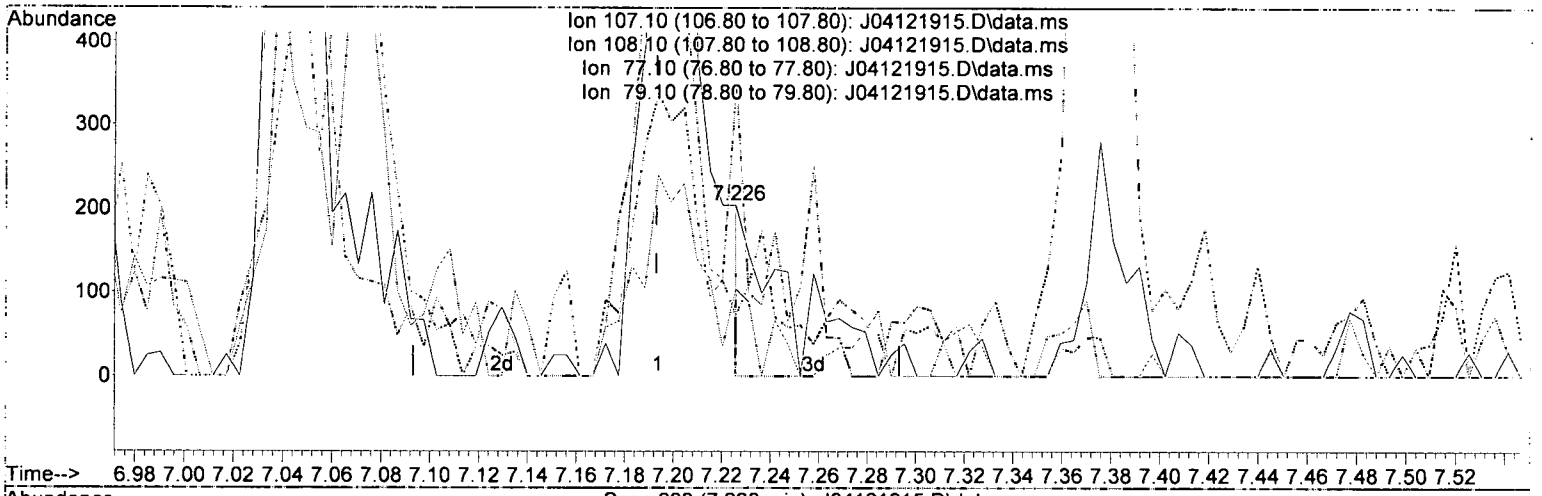


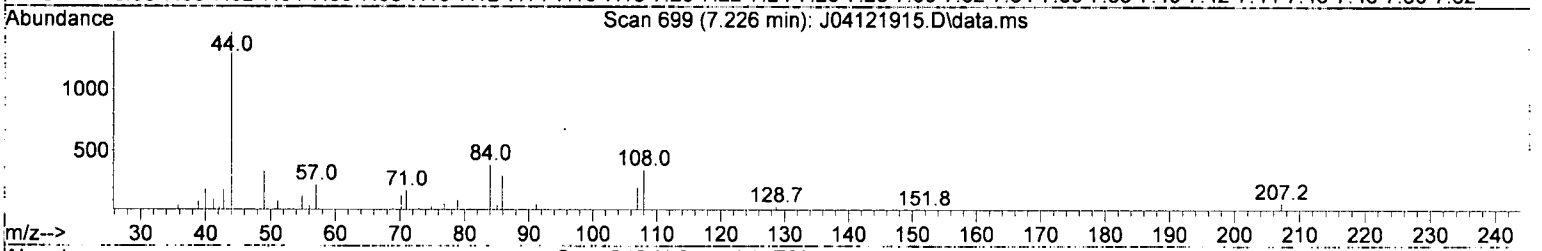
R = 4.16e-001 A*A + 1.19e+000 A - 5.31e-003
Coef of Det (r^2) = 0.990 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

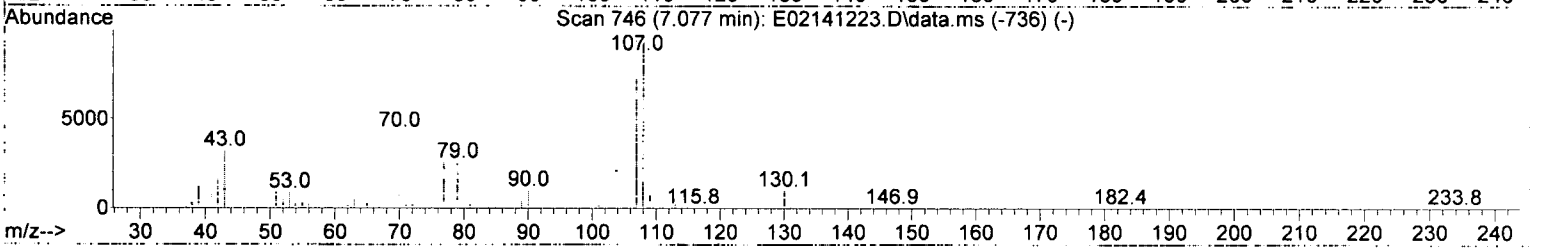
Quantitation Report (Qedit)

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







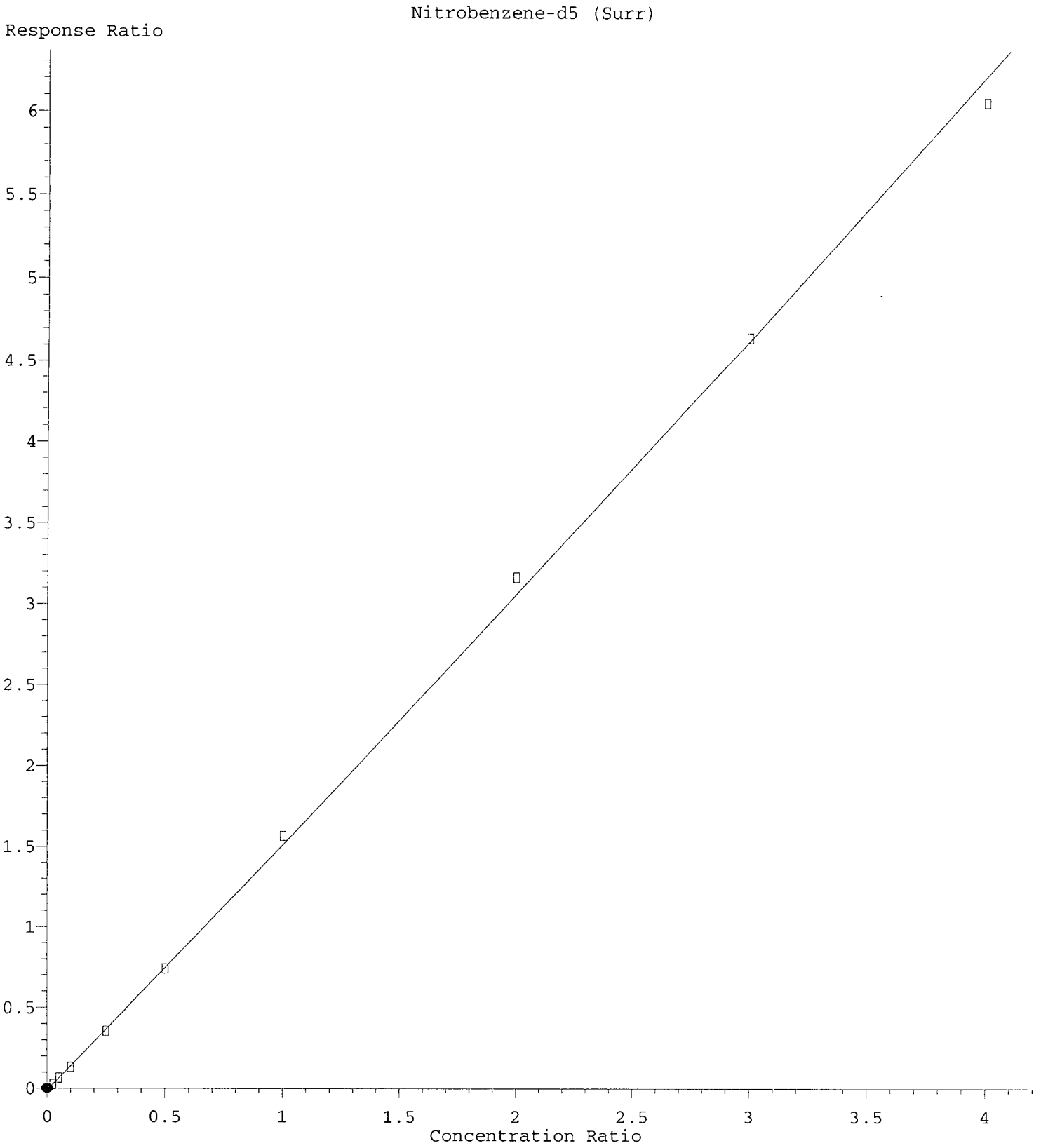
TIC: J04121915.D\data.ms

(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

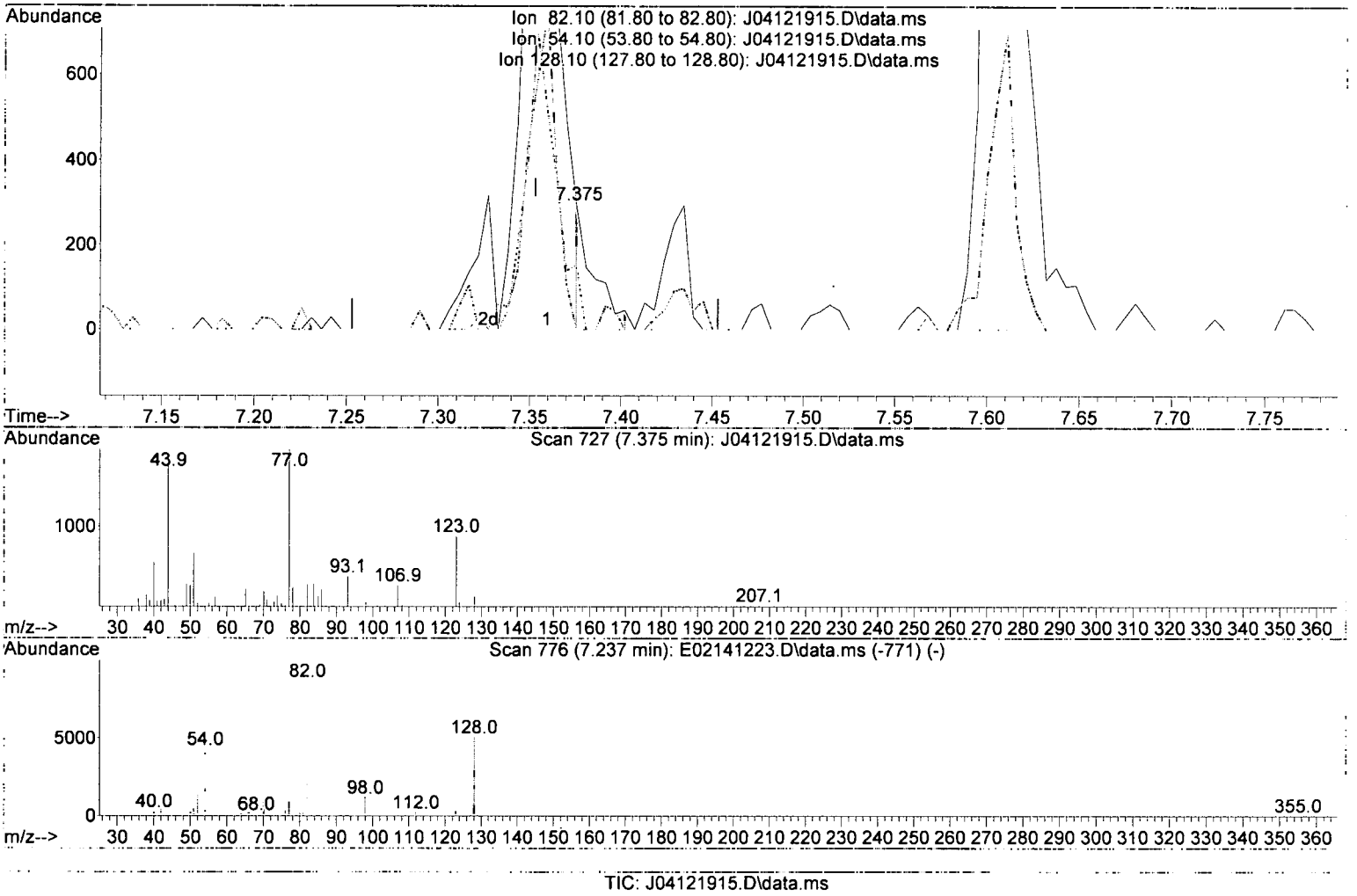


R = 1.06e-002 A*A + 1.52e+000 A - 1.41e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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



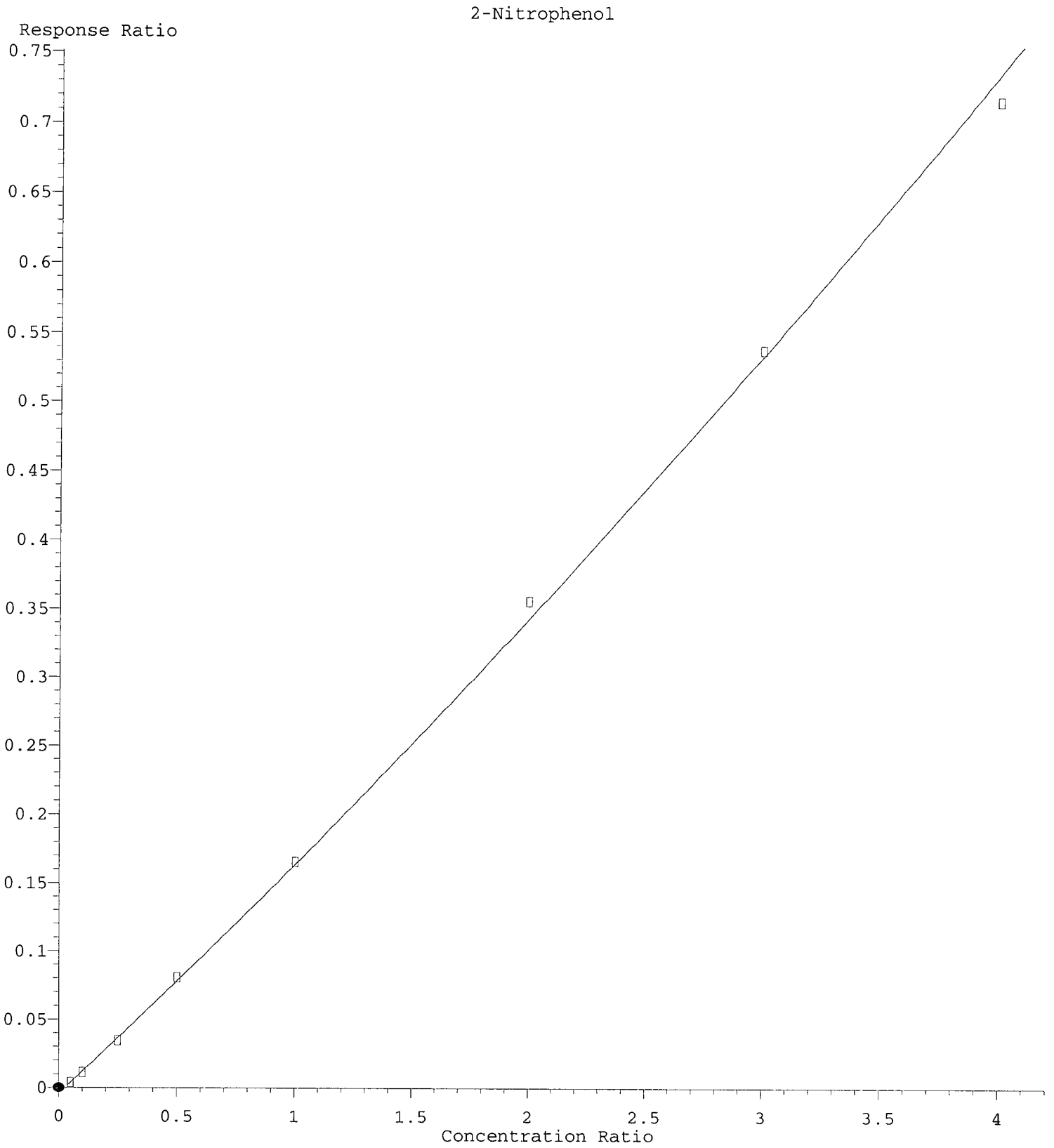
TIC: J04121915.D\data.ms

(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

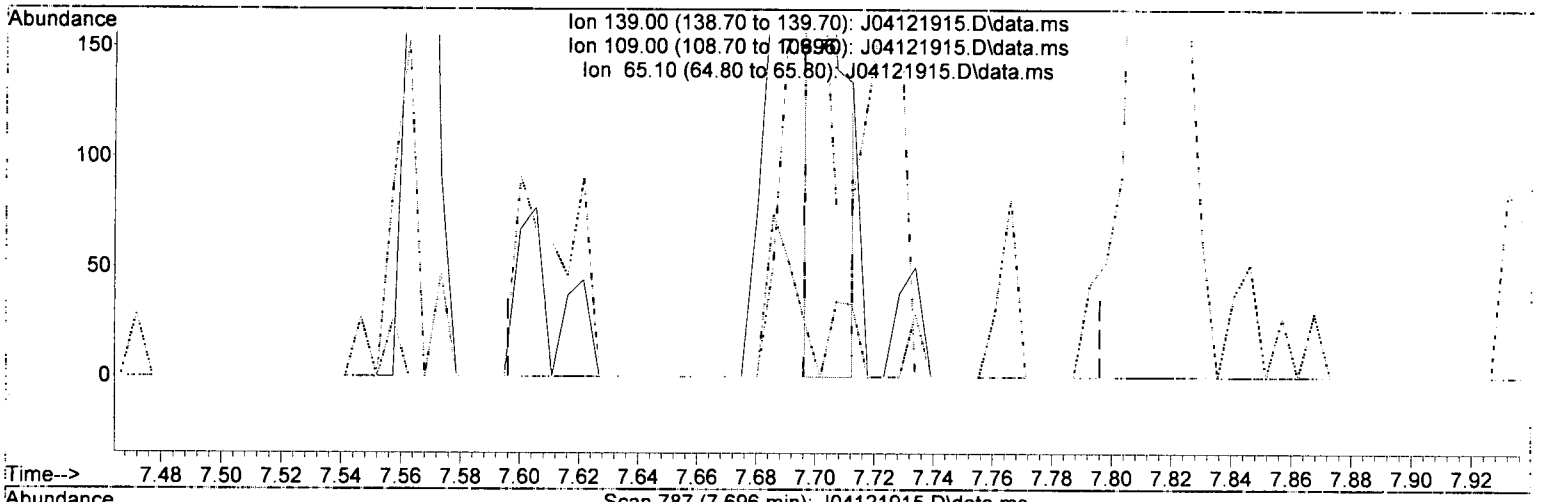


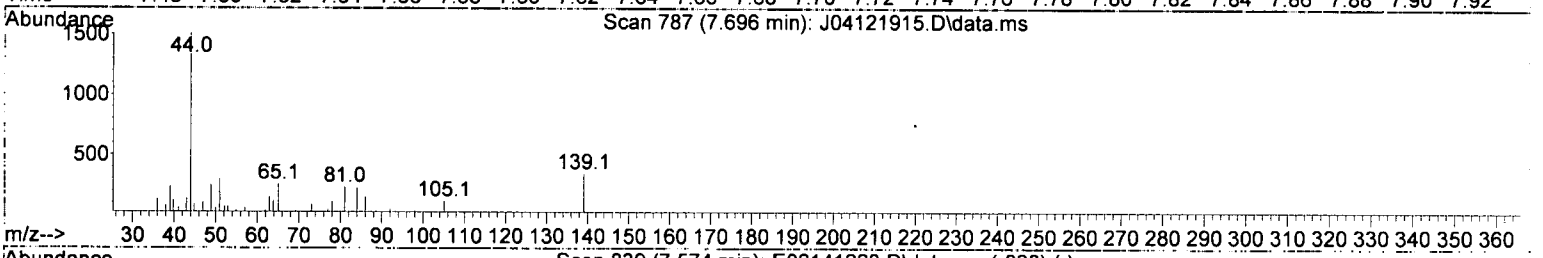
R = 5.66e-003 A*A + 1.62e-001 A - 4.58e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

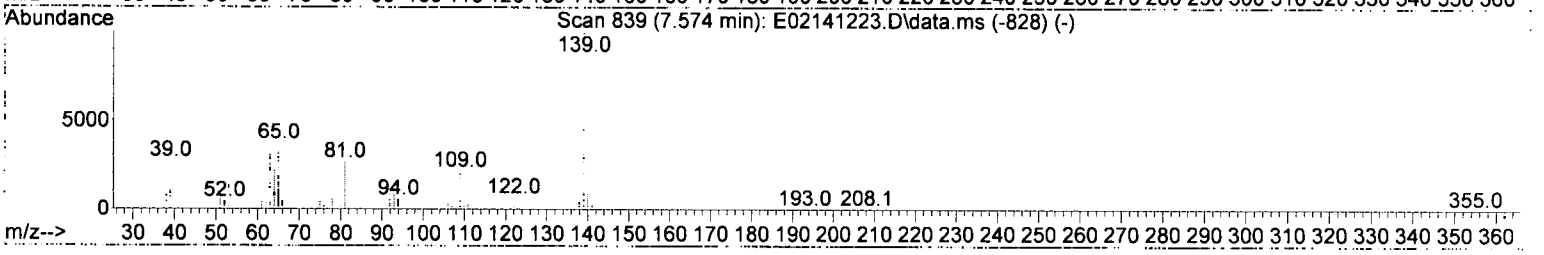
Quantitation Report (Qedit)

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







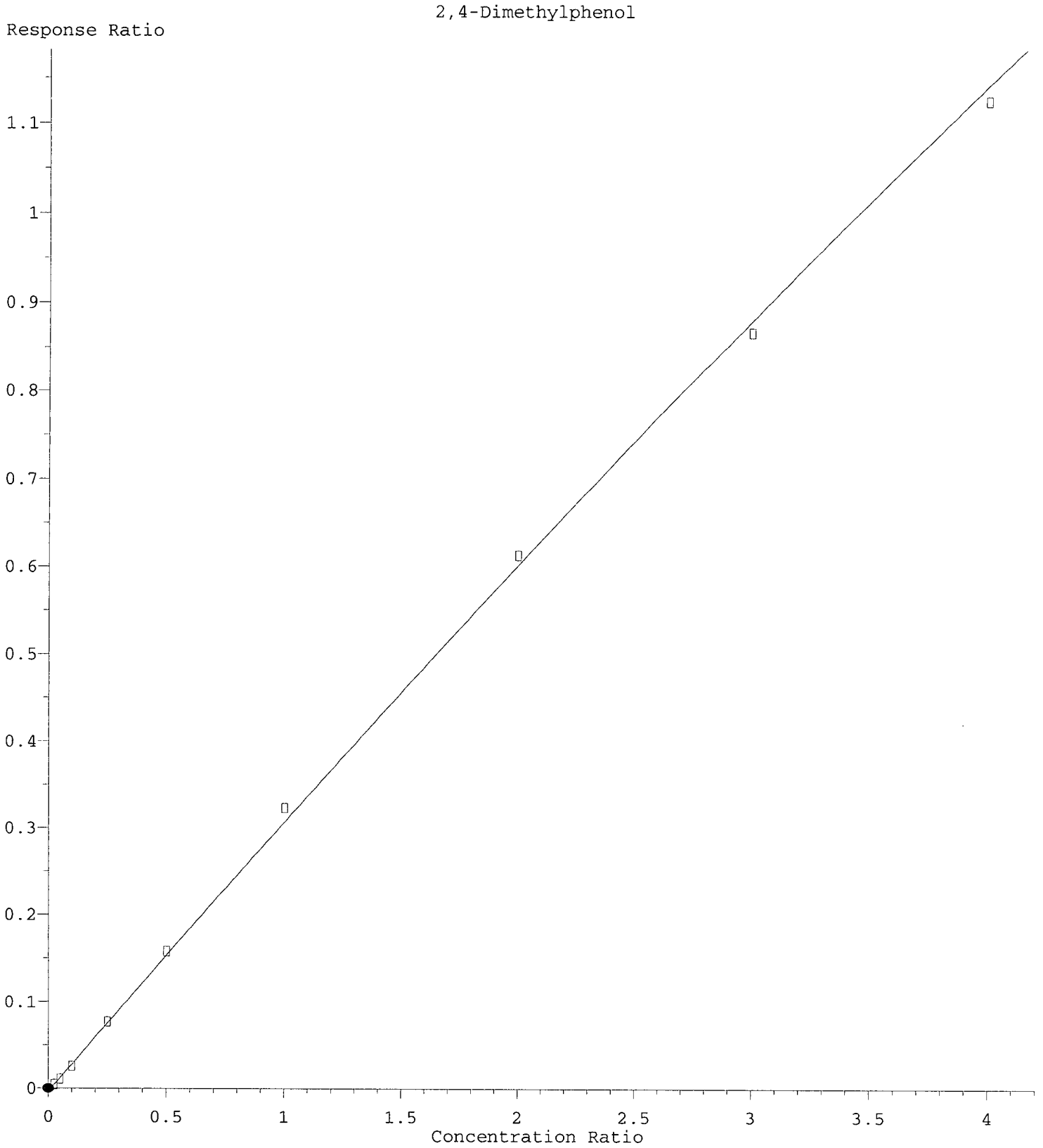
TIC: J04121915.D\data.ms

(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

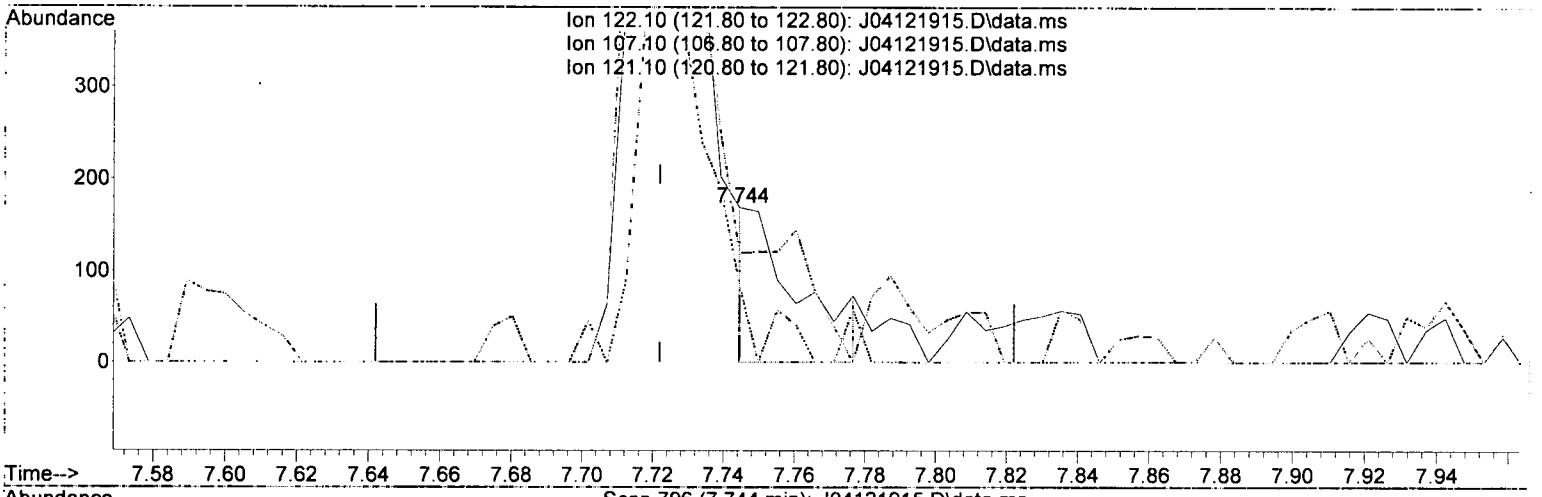


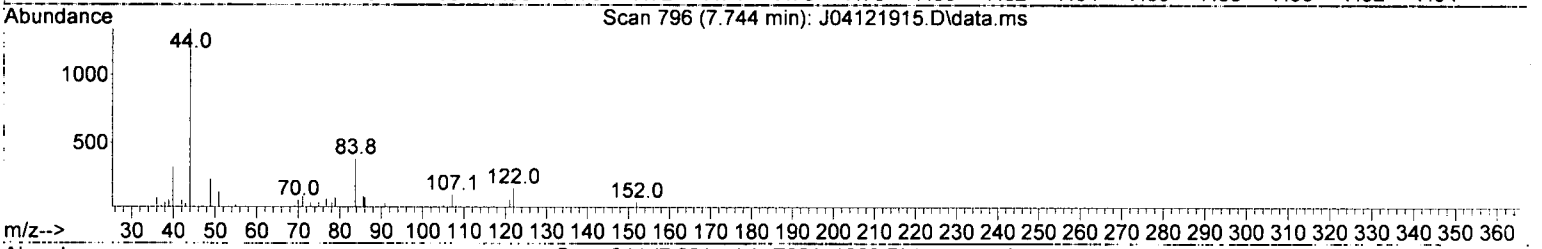
R = -8.10e-003 A*A + 3.19e-001 A - 4.04e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

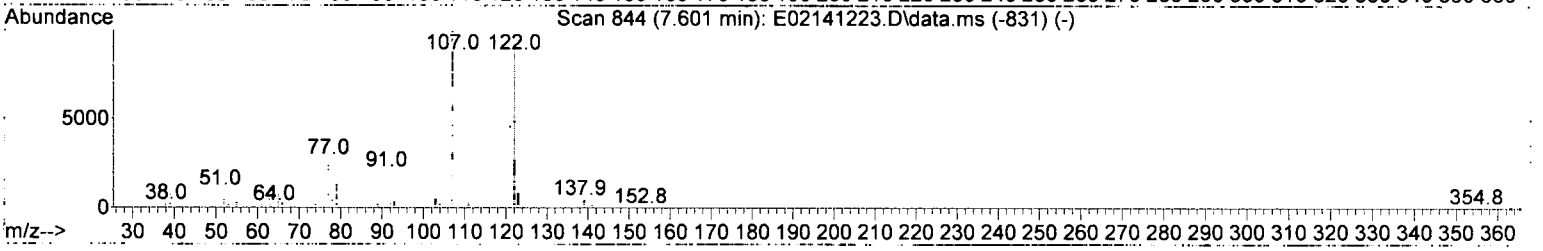
Quantitation Report (Qedit)

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







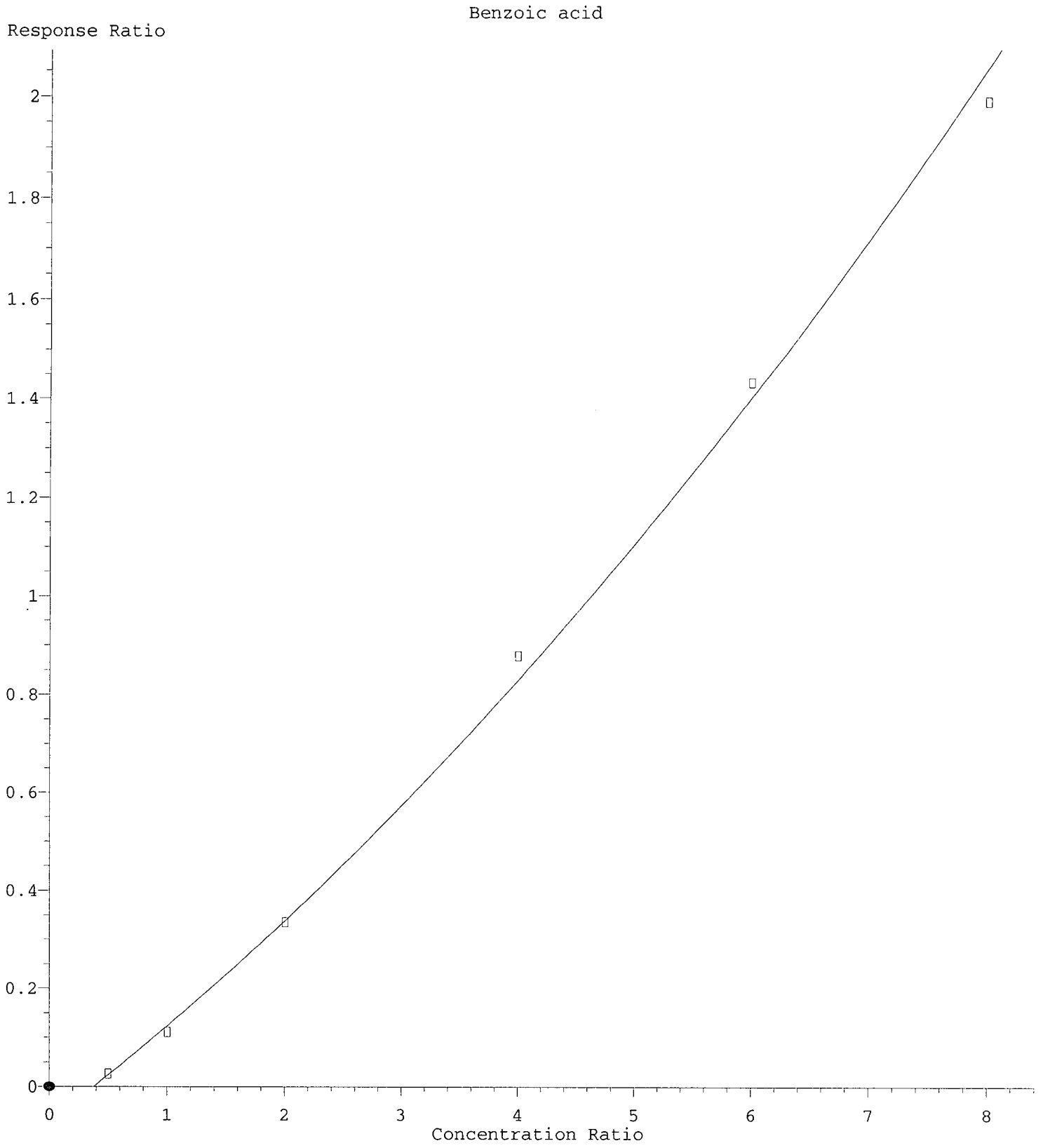
TIC: J04121915.D\data.ms

(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

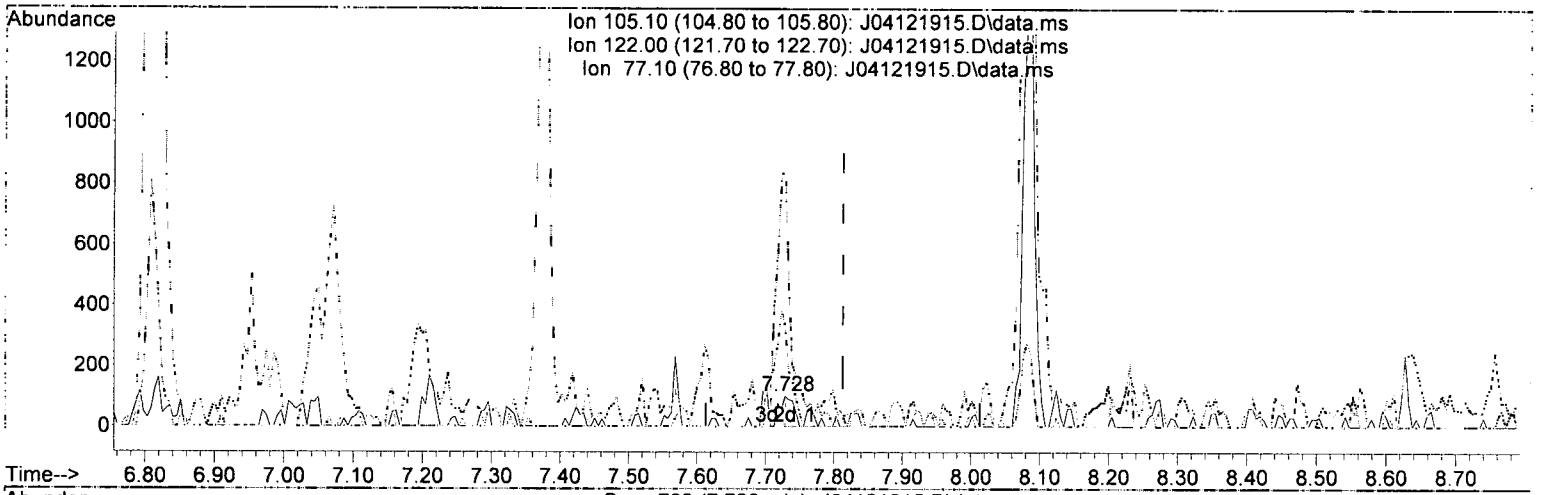


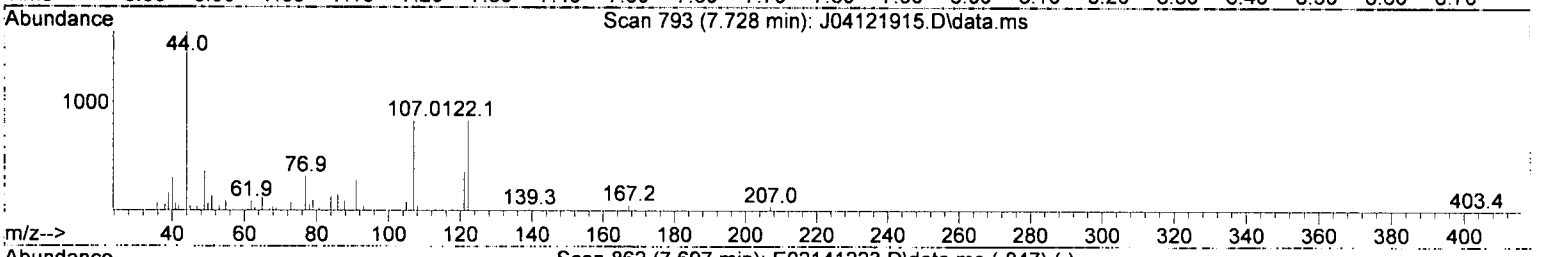
R = 1.02e-002 A*A + 1.84e-001 A - 7.08e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

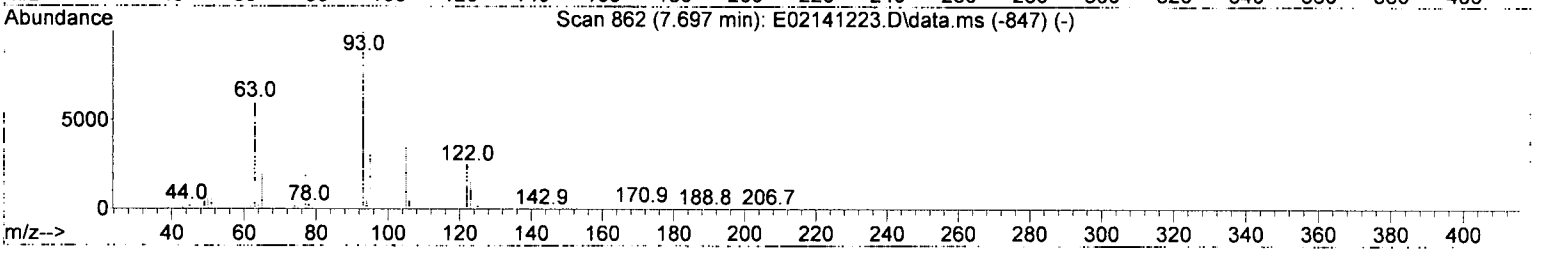
Quantitation Report (Qedit)

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







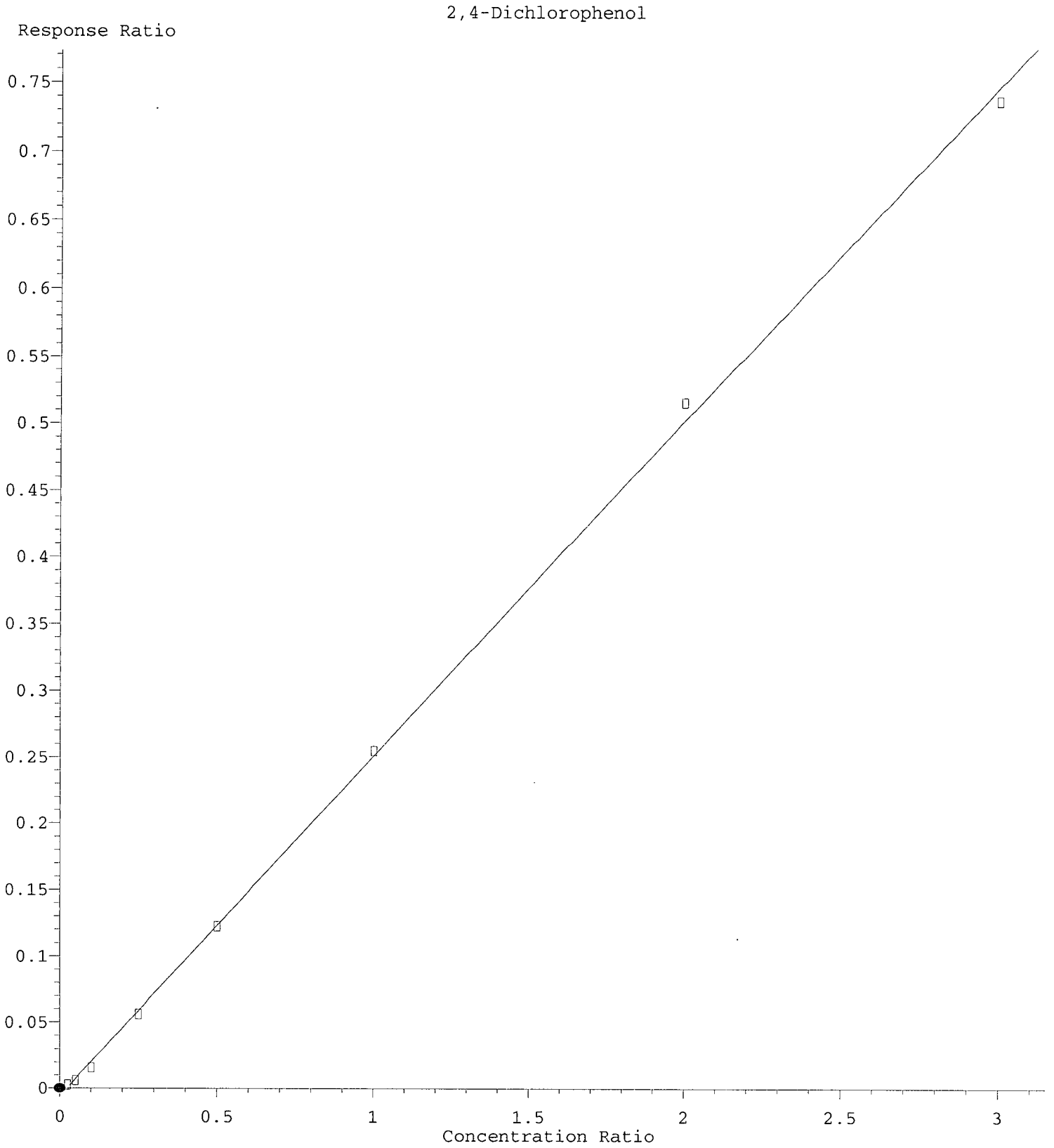
TIC: J04121915.D\data.ms

(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

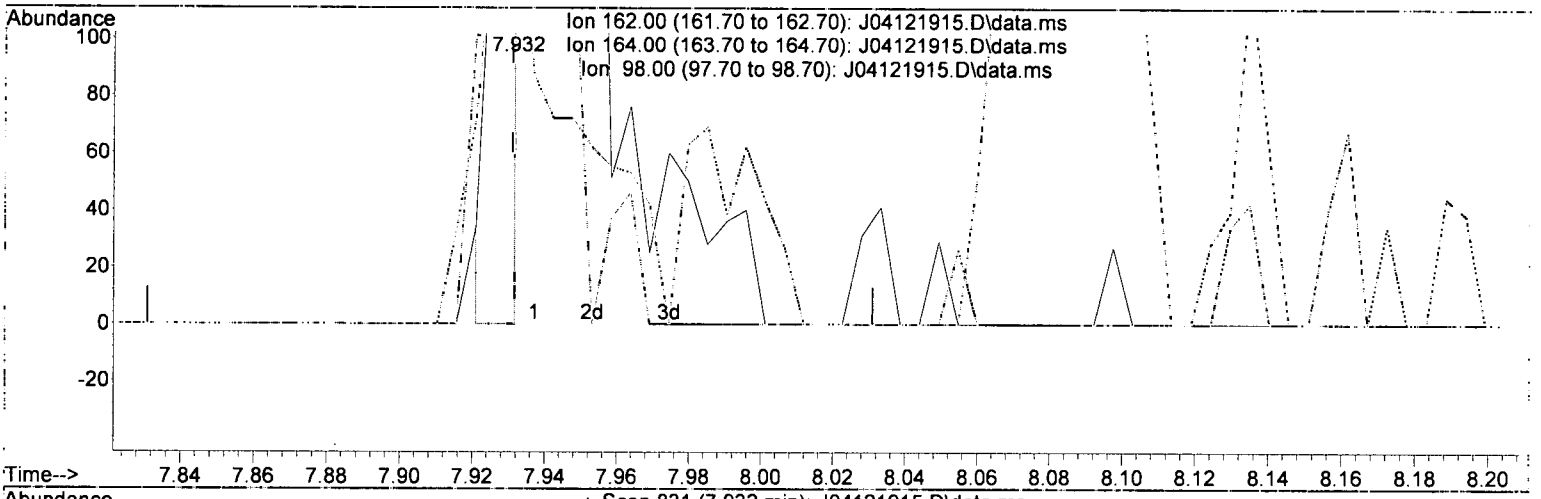


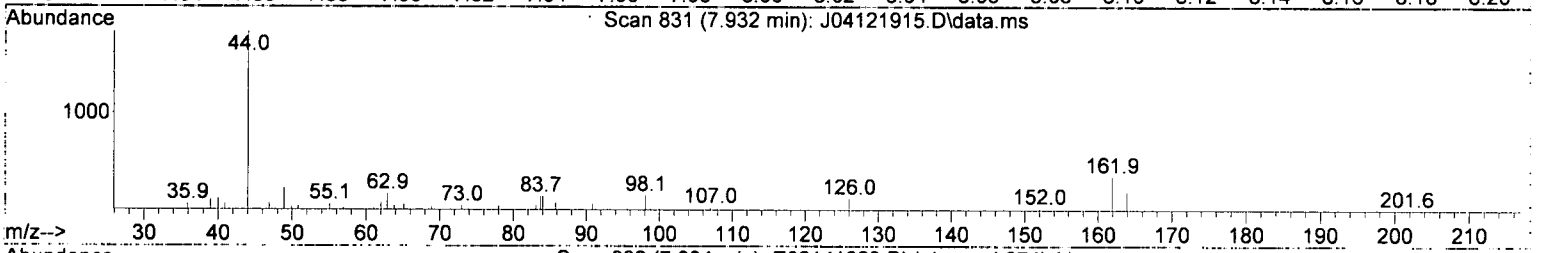
R = -2.93e-003 A*A + 2.60e-001 A - 5.83e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

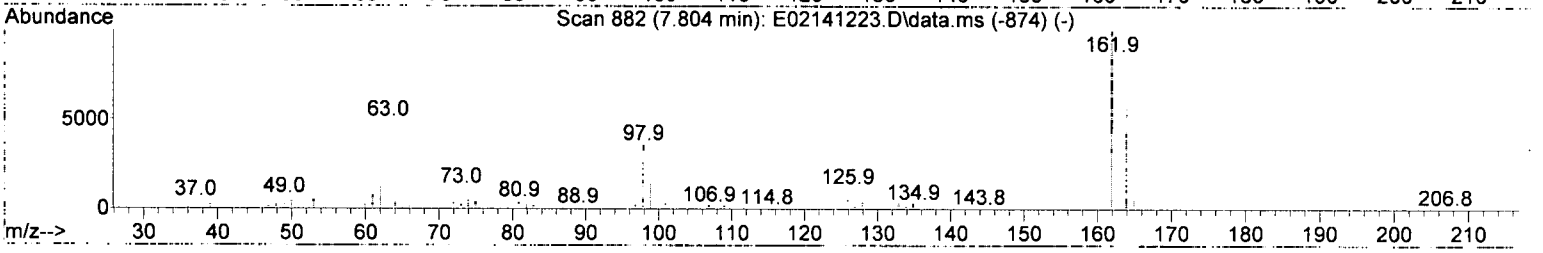
Quantitation Report (Qedit)

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







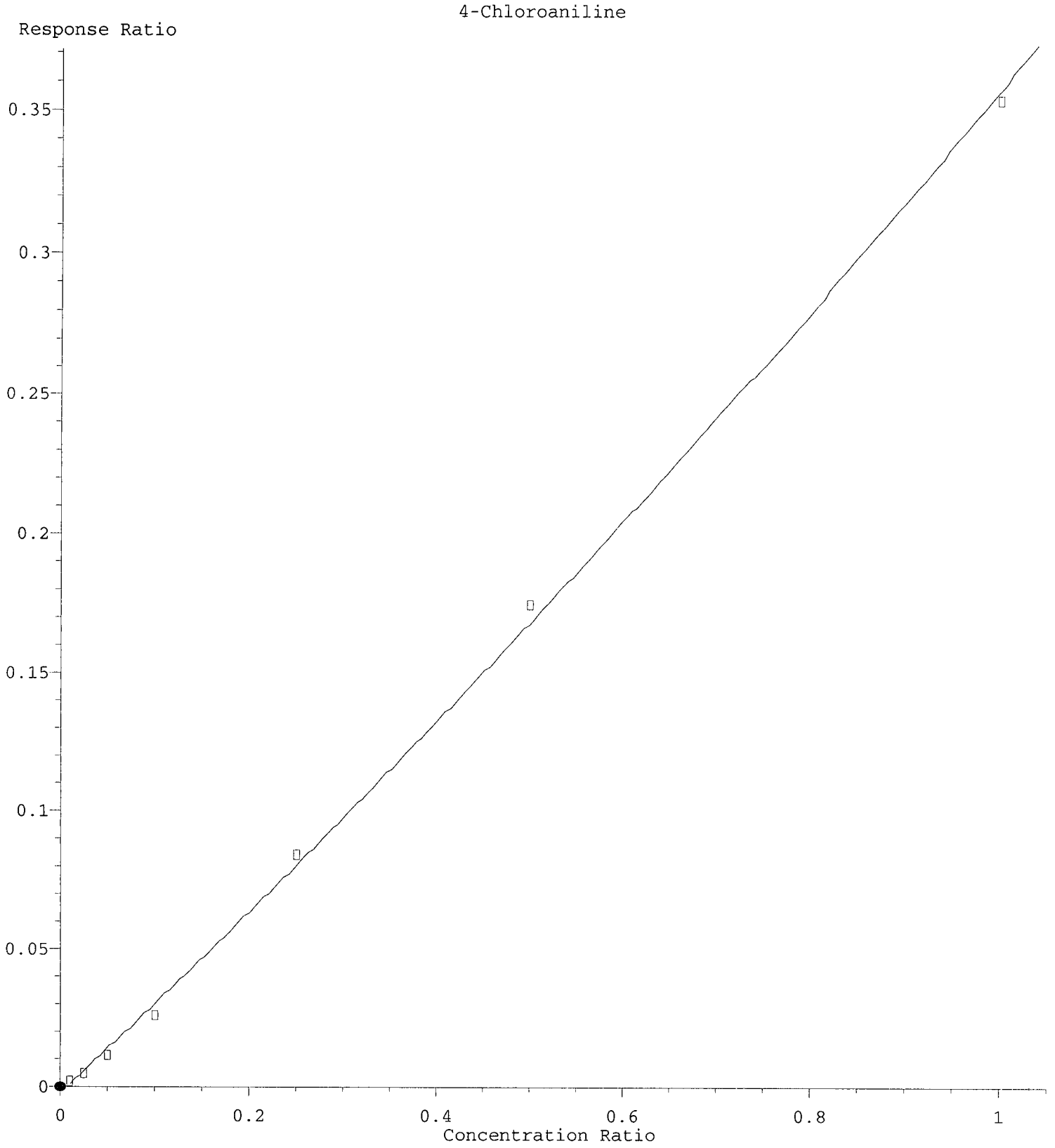
TIC: J04121915.D\data.ms

(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

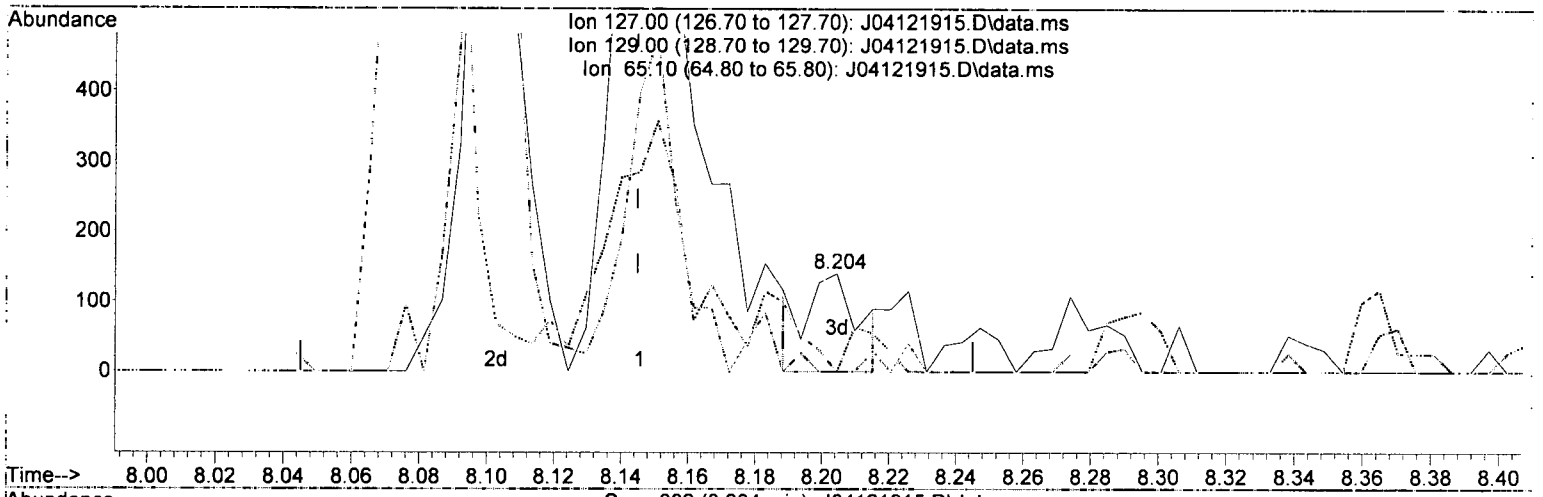


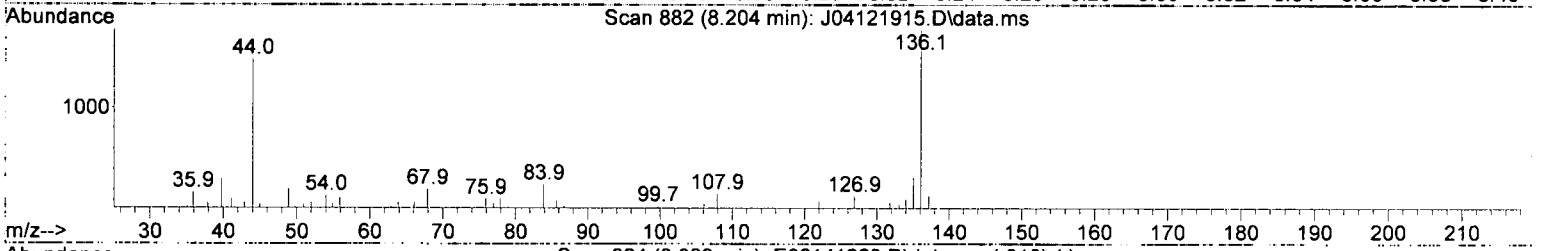
R = 3.85e-002 A*A + 3.21e-001 A - 2.32e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

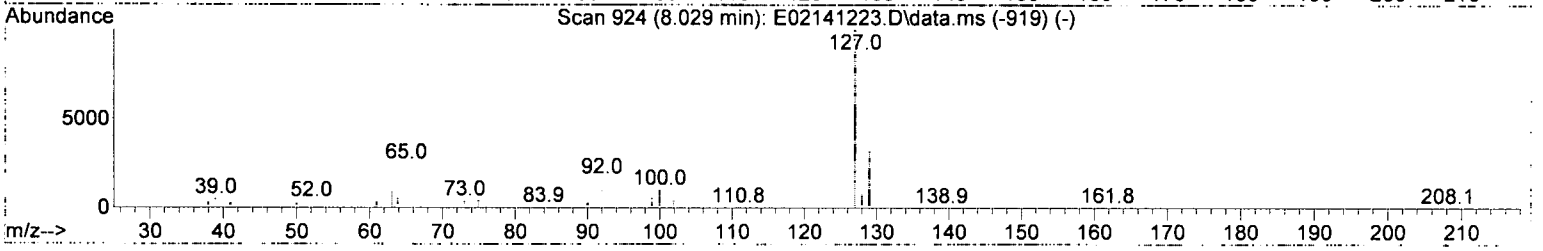
Quantitation Report (Qedit)

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







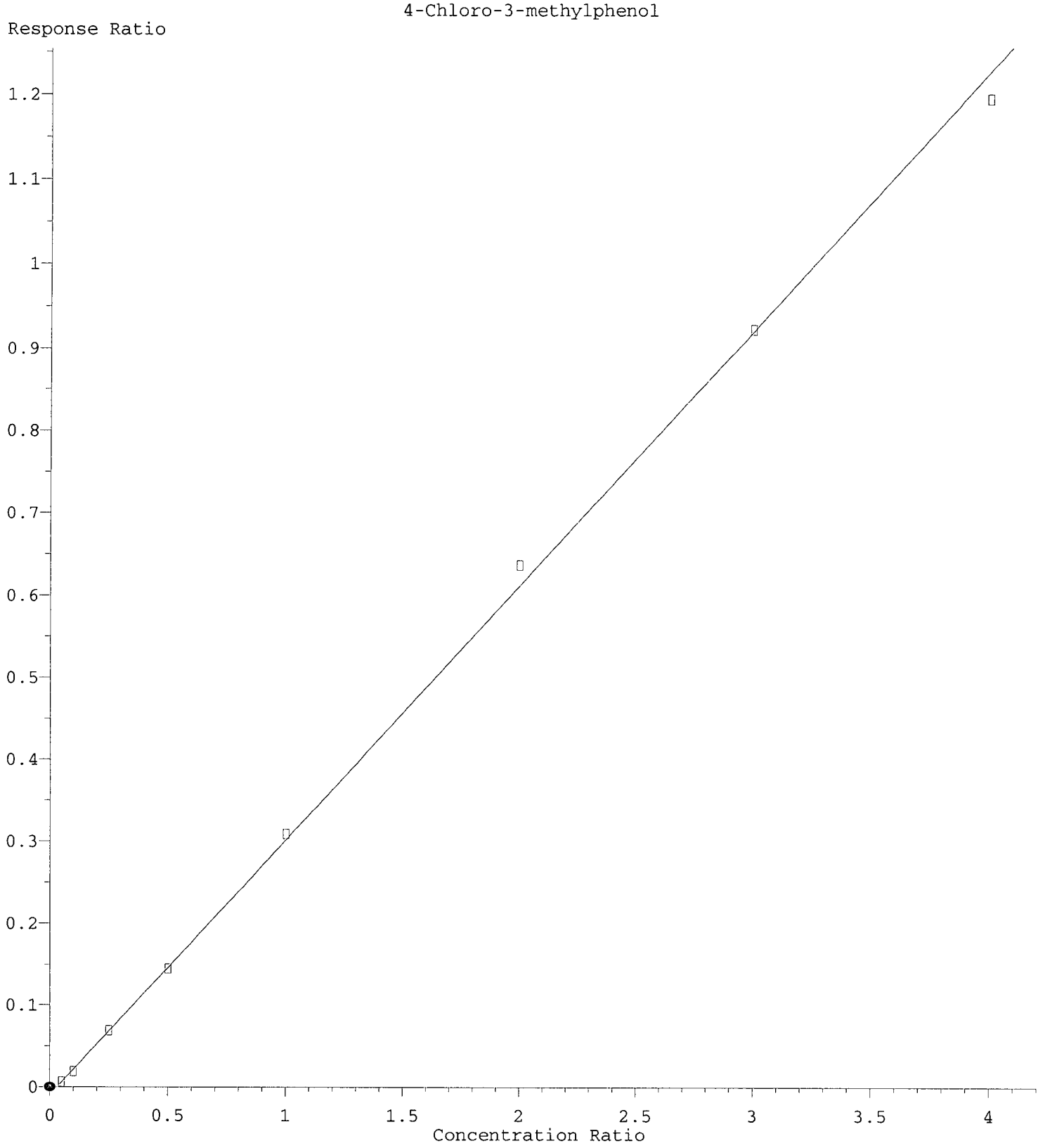
TIC: J04121915.D\data.ms

(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

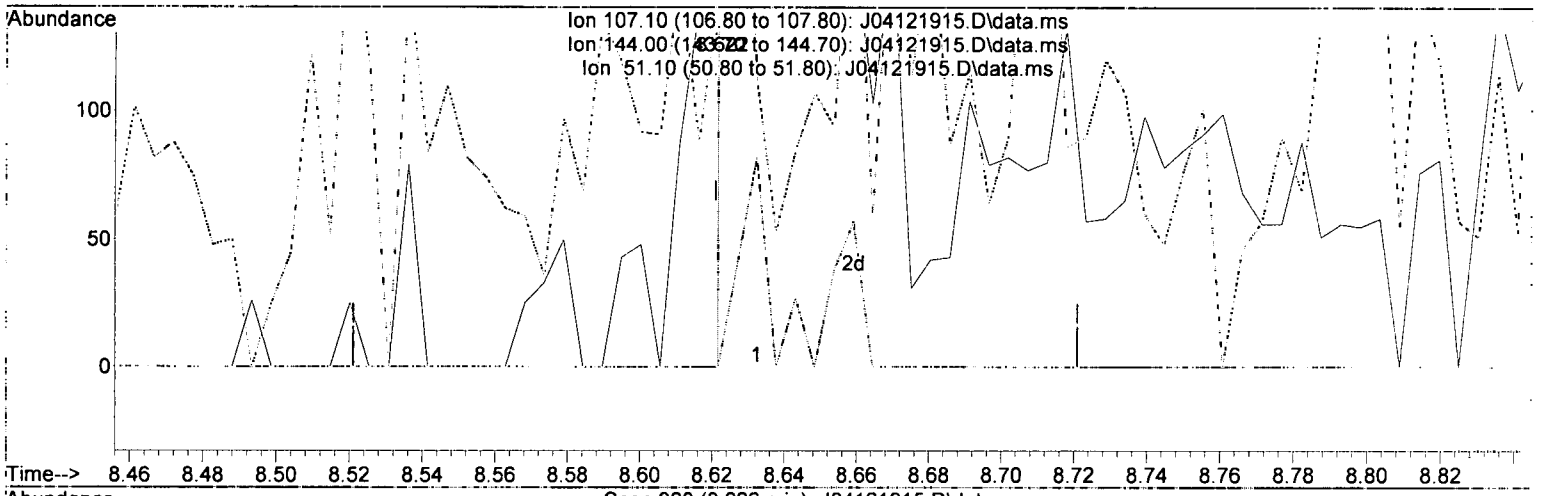


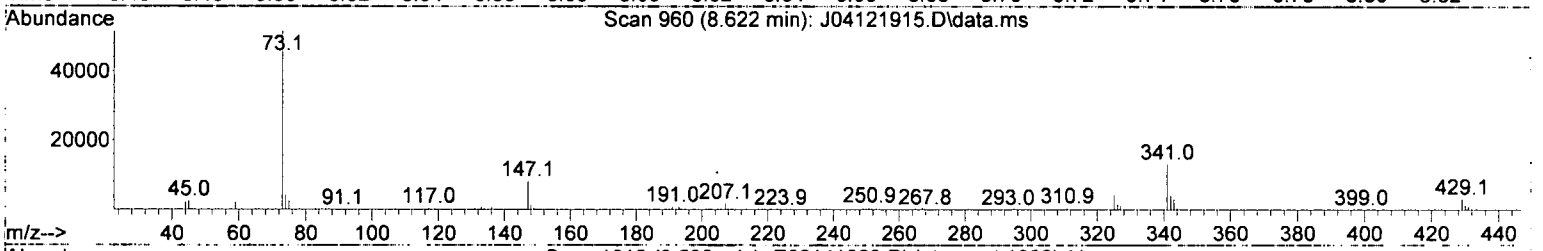
R = -7.81e-004 A*A + 3.12e-001 A - 9.94e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

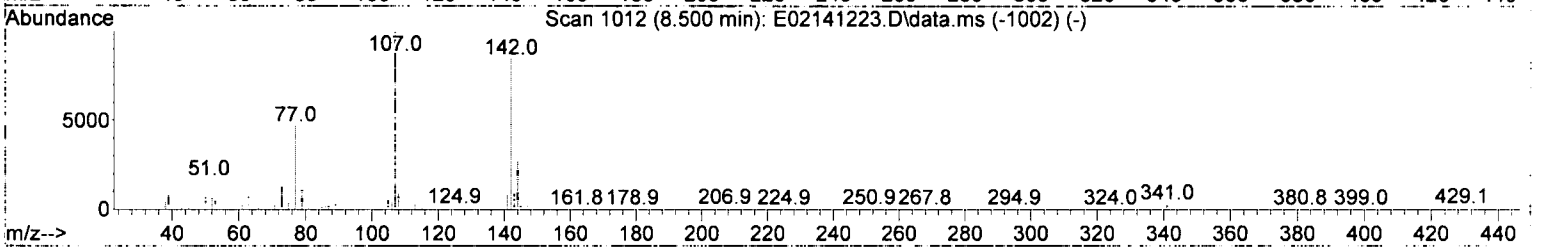
Quantitation Report (Qedit)

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







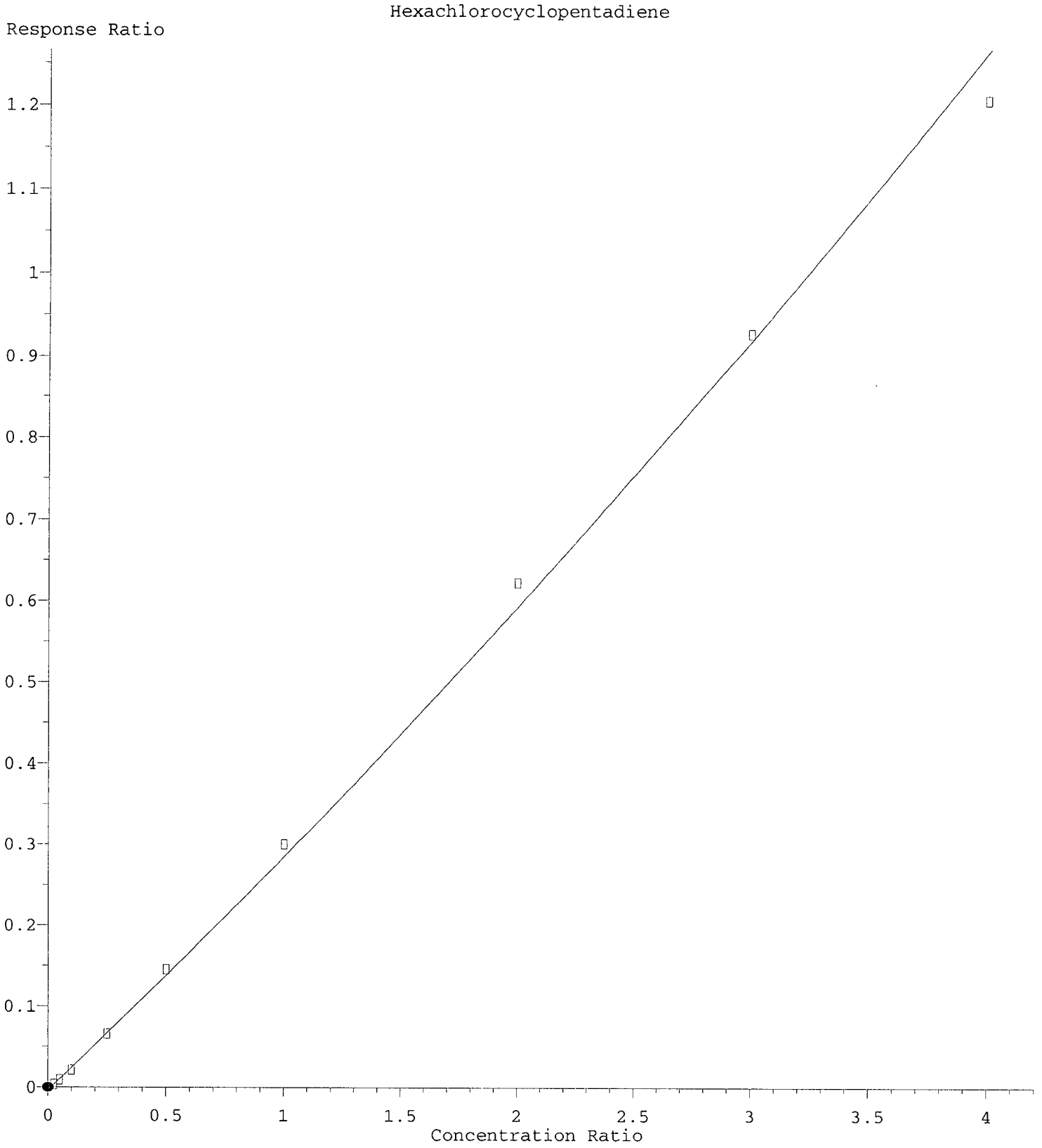
TIC: J04121915.D\data.ms

(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

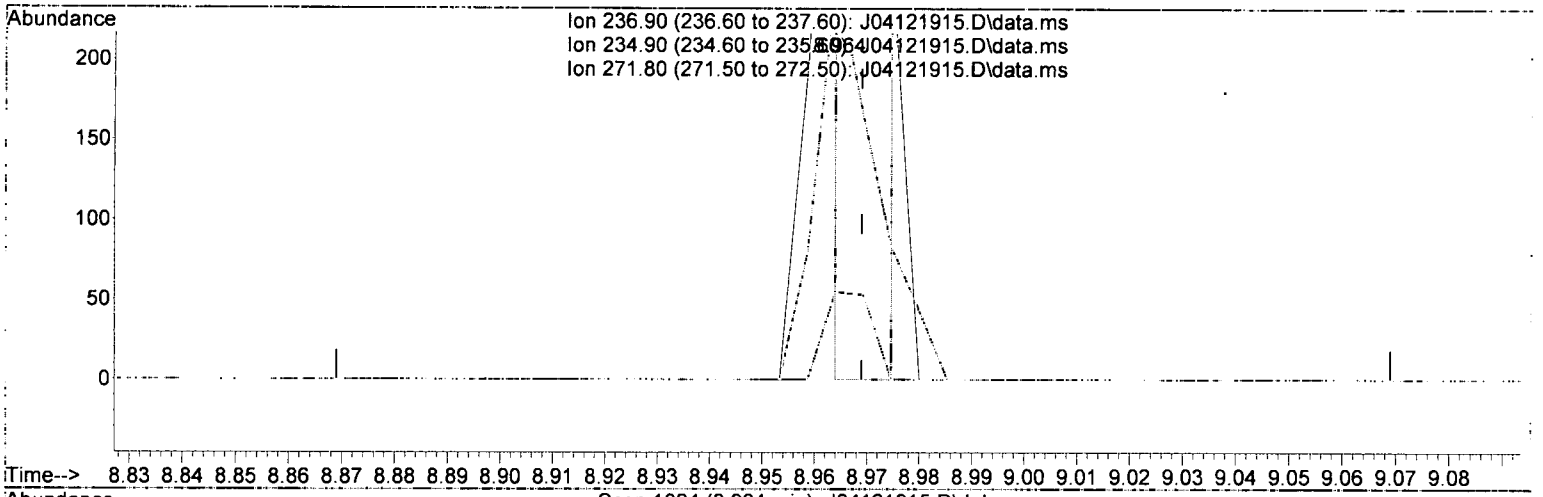


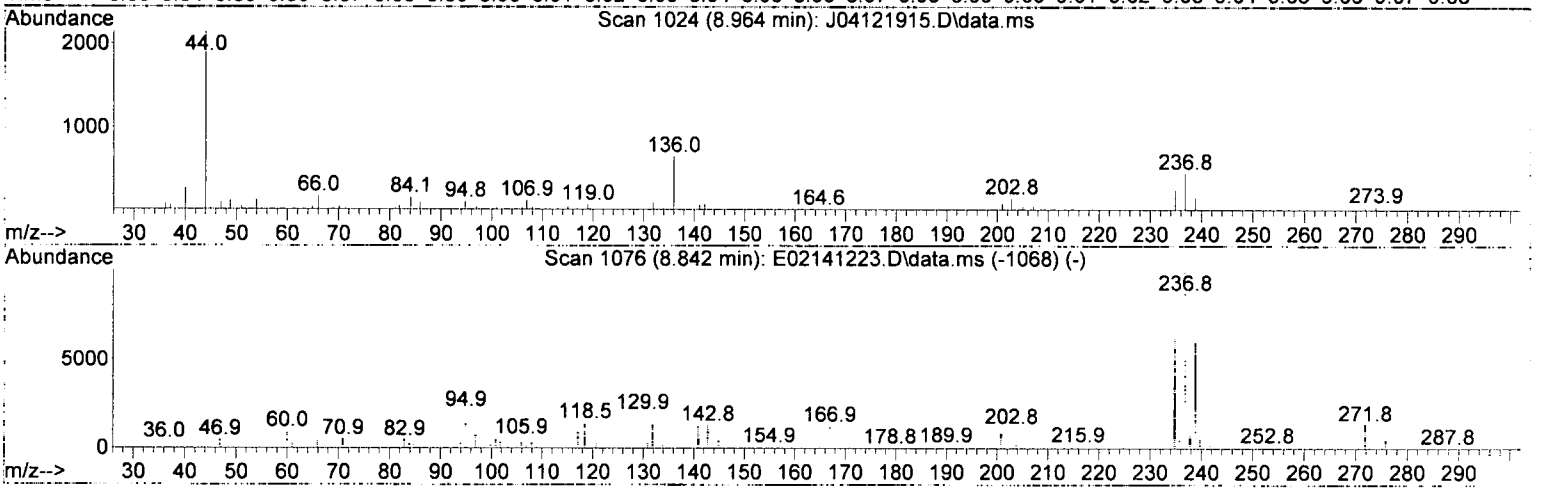
R = 9.35e-003 A*A + 2.79e-001 A - 4.15e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





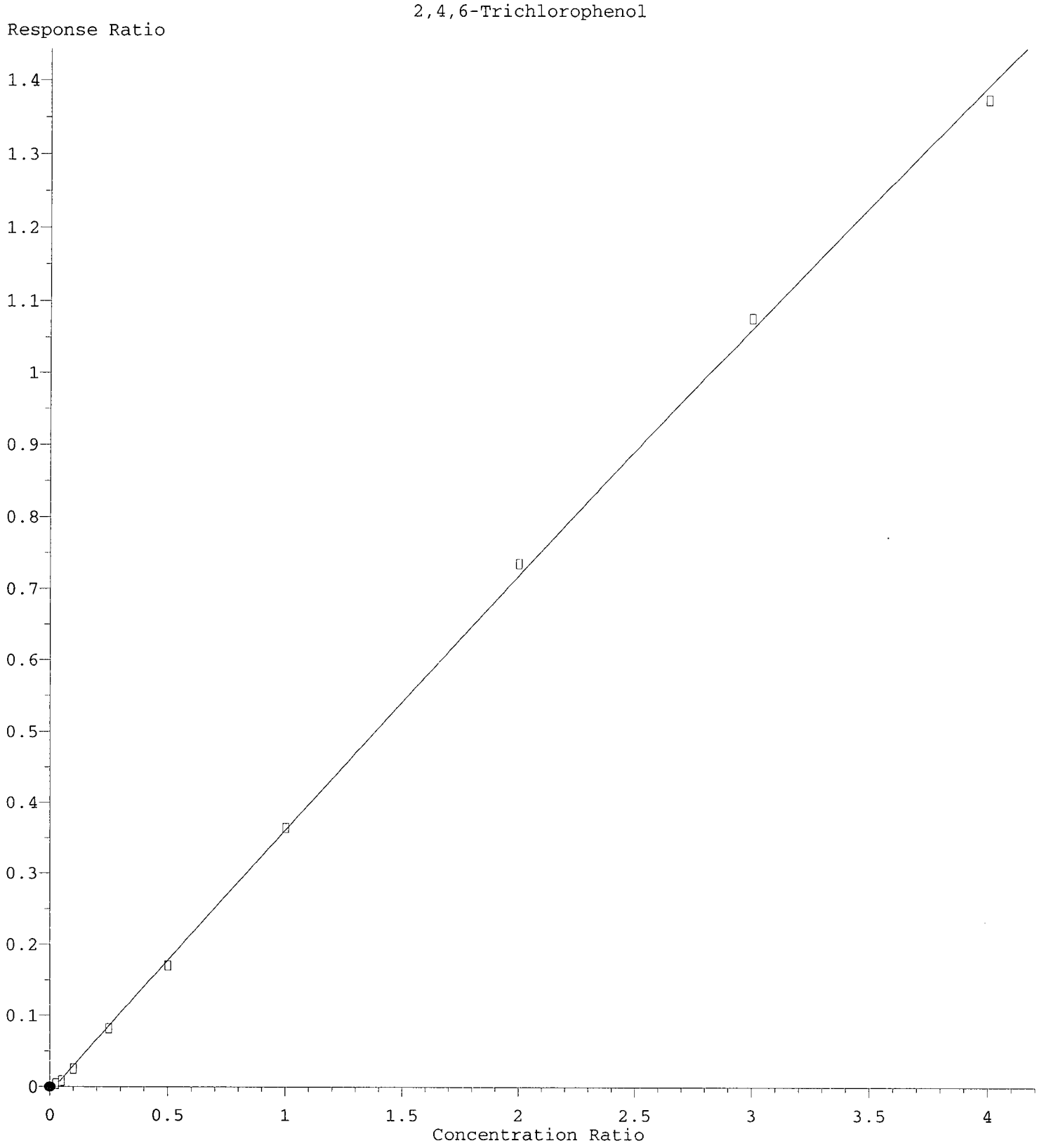
TIC: J04121915.D\data.ms

(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

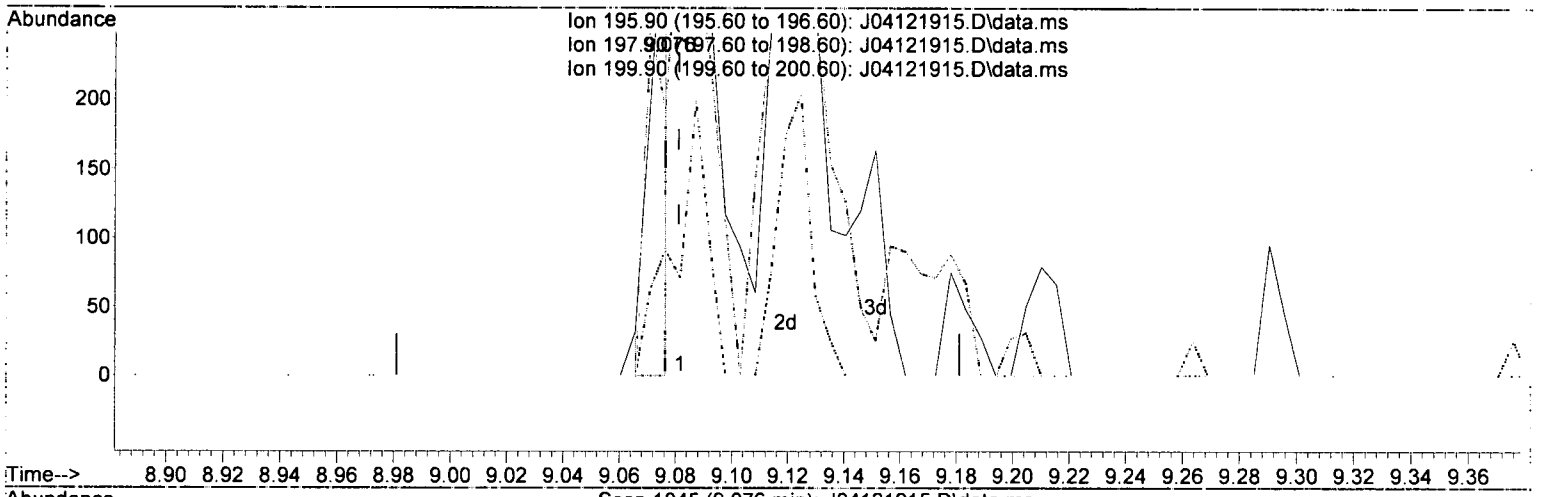


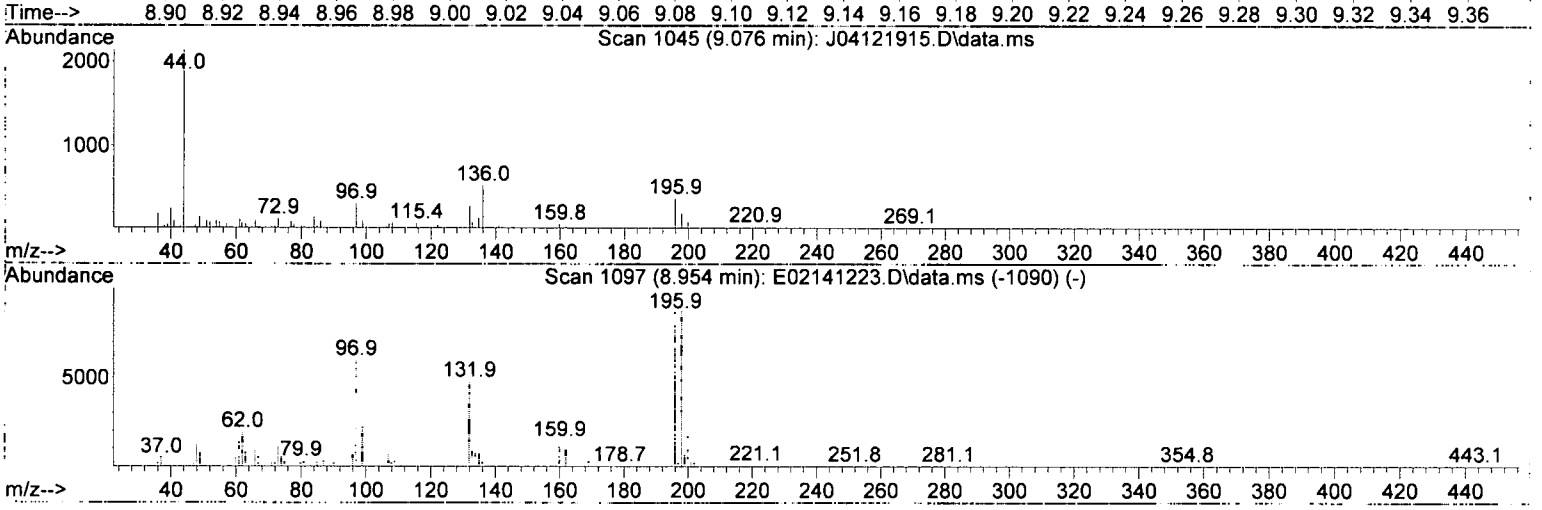
R = -6.54e-003 A*A + 3.76e-001 A - 8.34e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





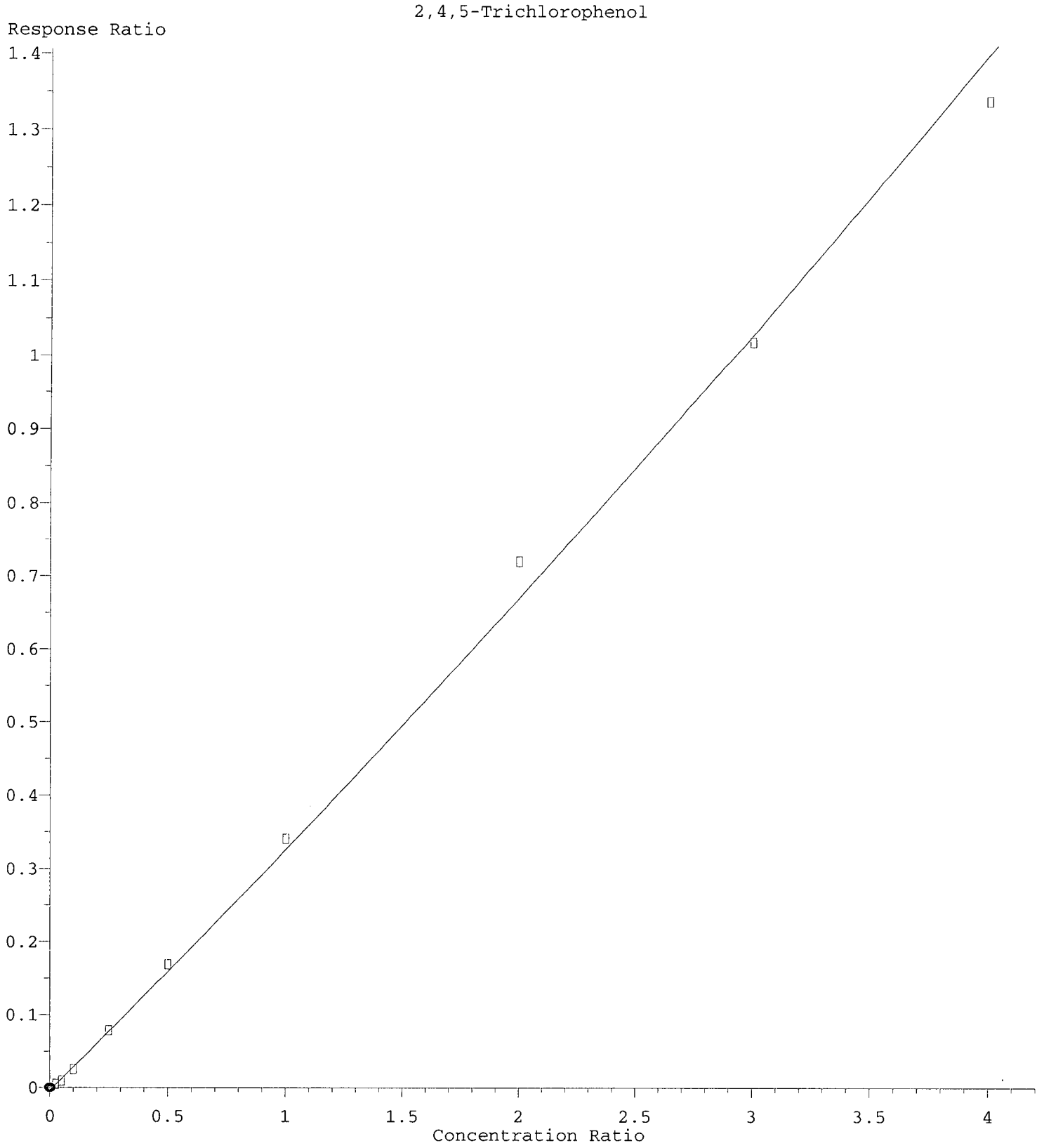
TIC: J04121915.D\data.ms

(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

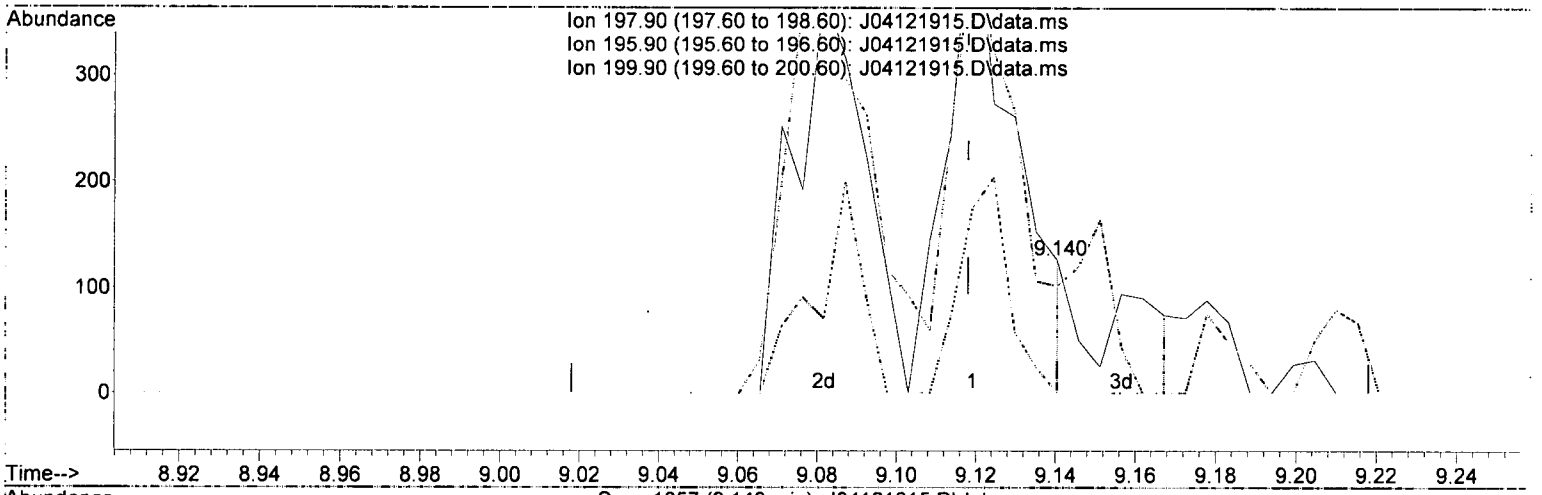


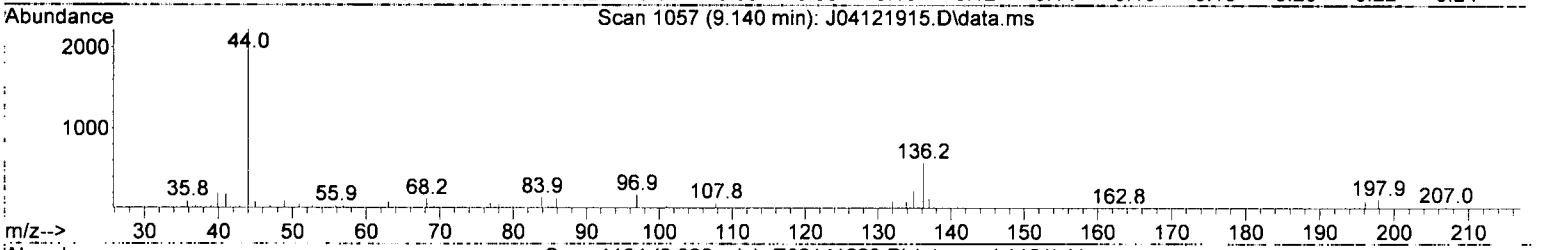
R = 7.07e-003 A*A + 3.23e-001 A - 4.28e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

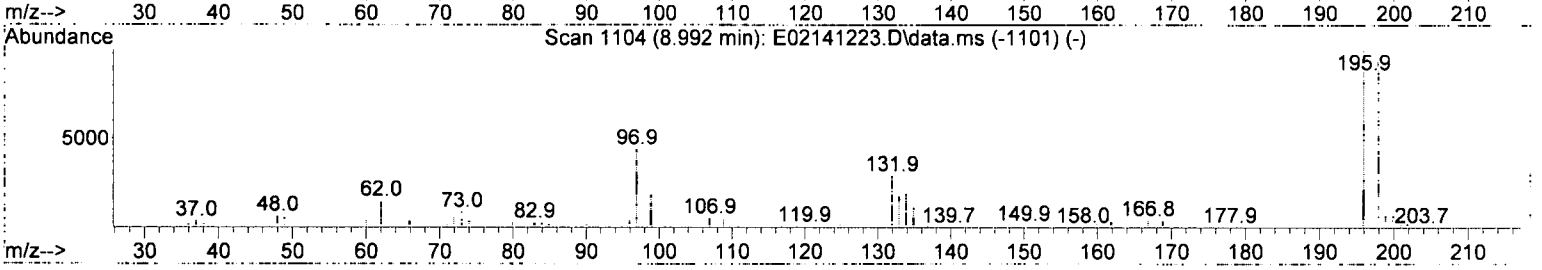
Quantitation Report (Qedit)

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







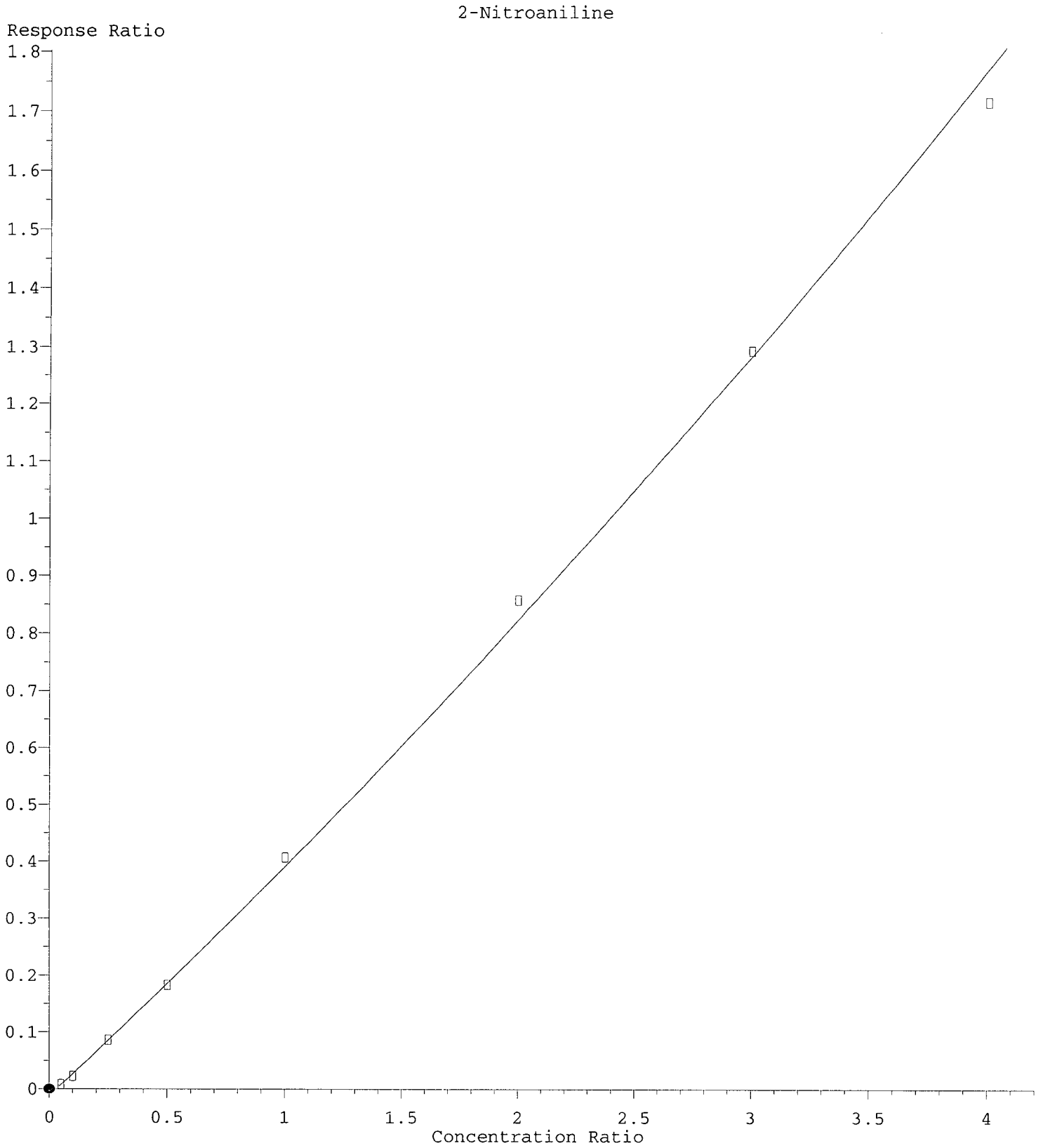
TIC: J04121915.D\data.ms

(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

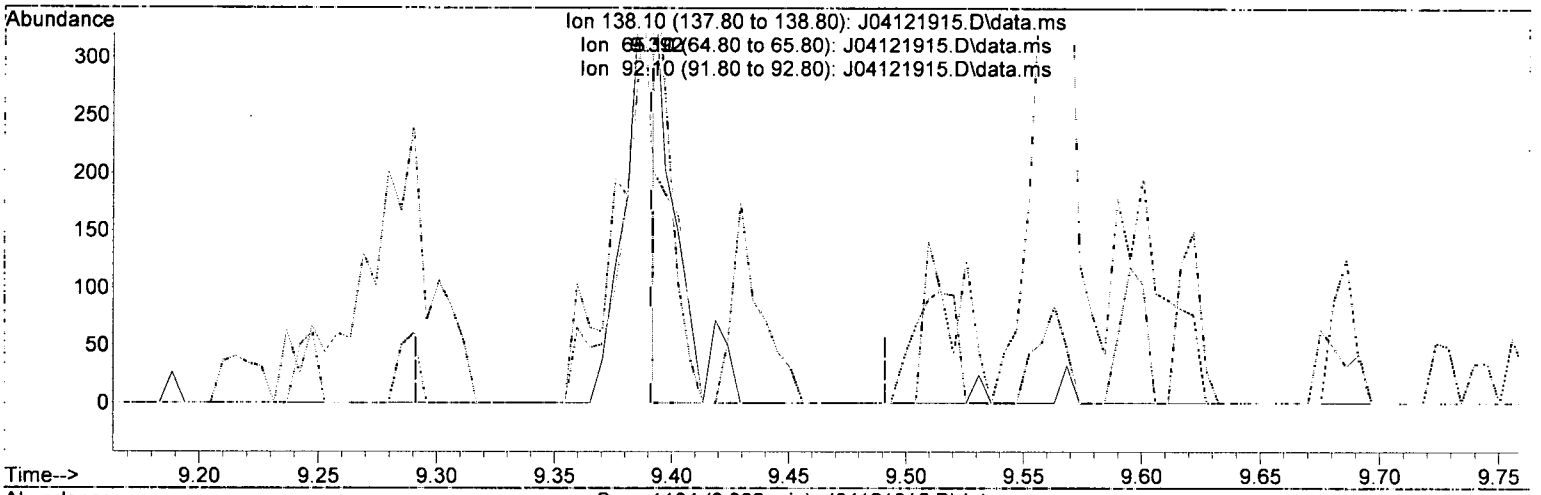


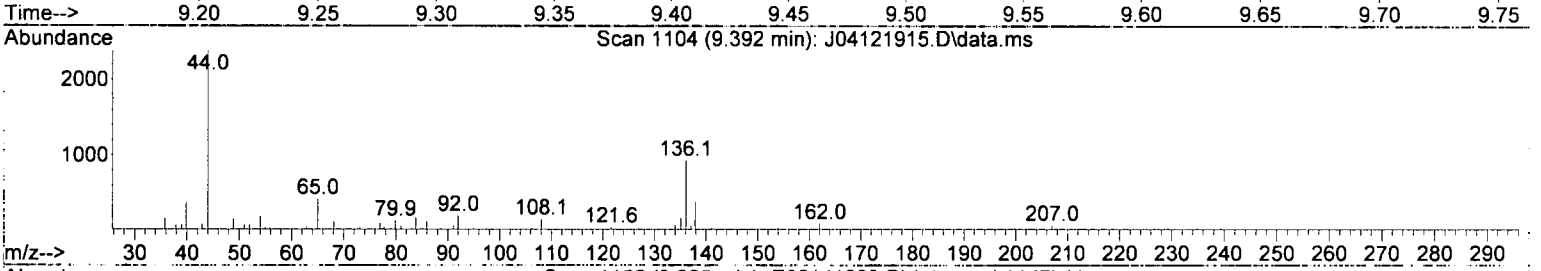
R = 1.42e-002 A*A + 3.89e-001 A - 1.27e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

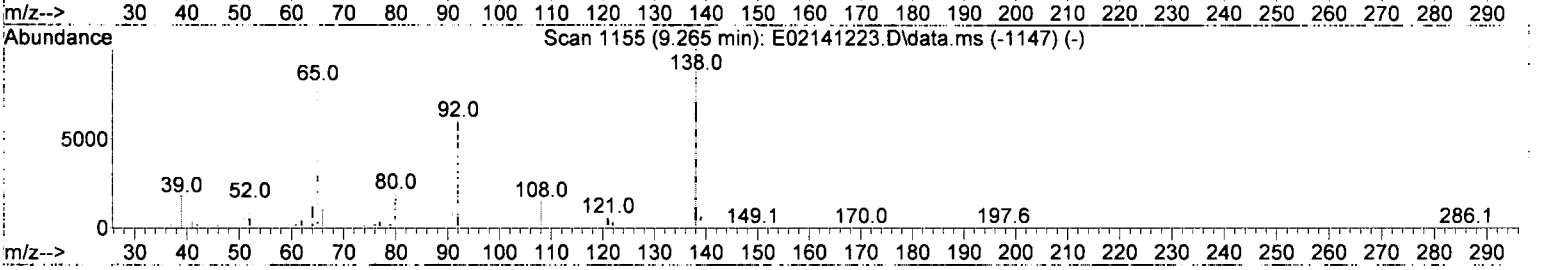
Quantitation Report (Qedit)

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







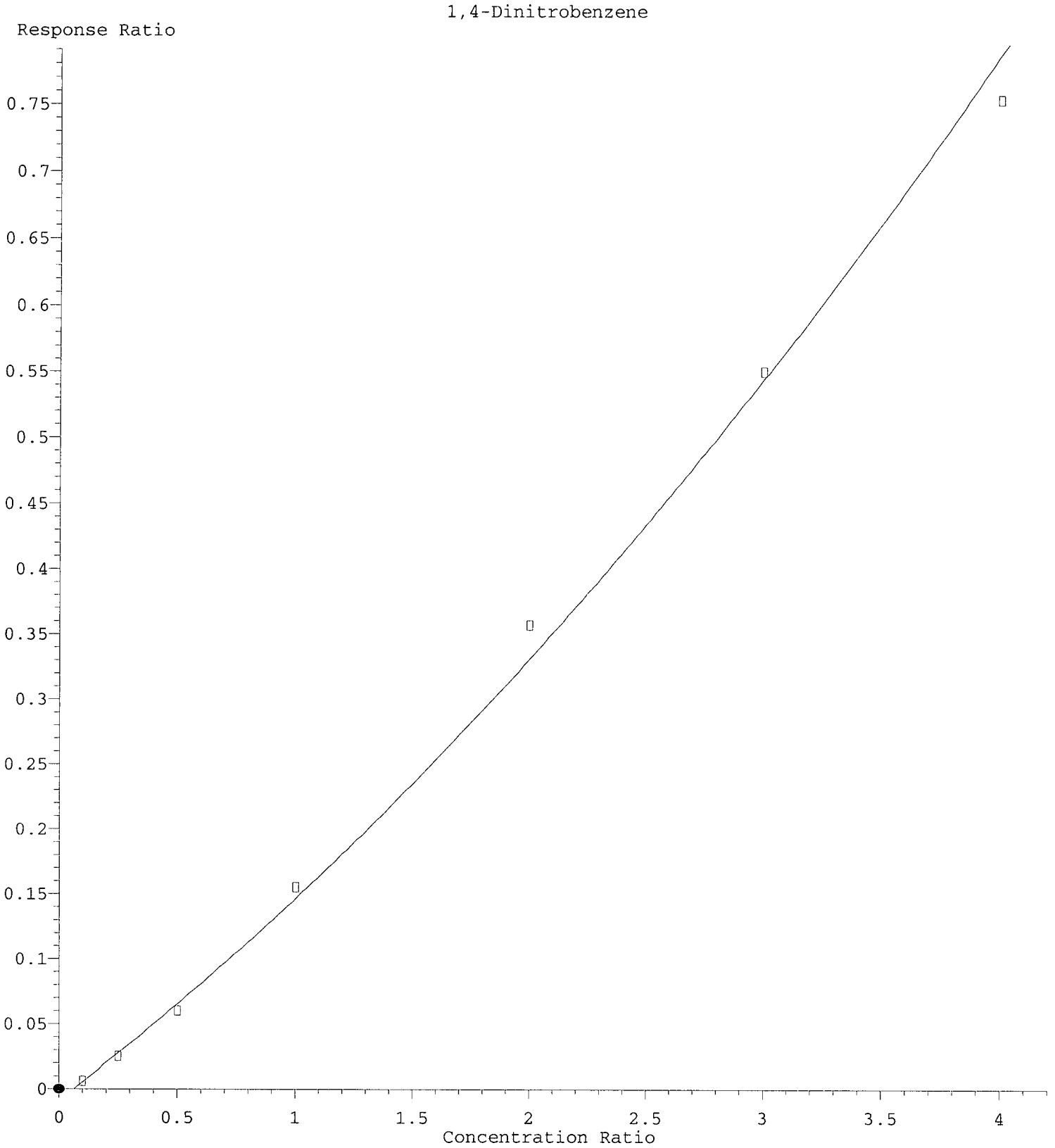
TIC: J04121915.D\data.ms

(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

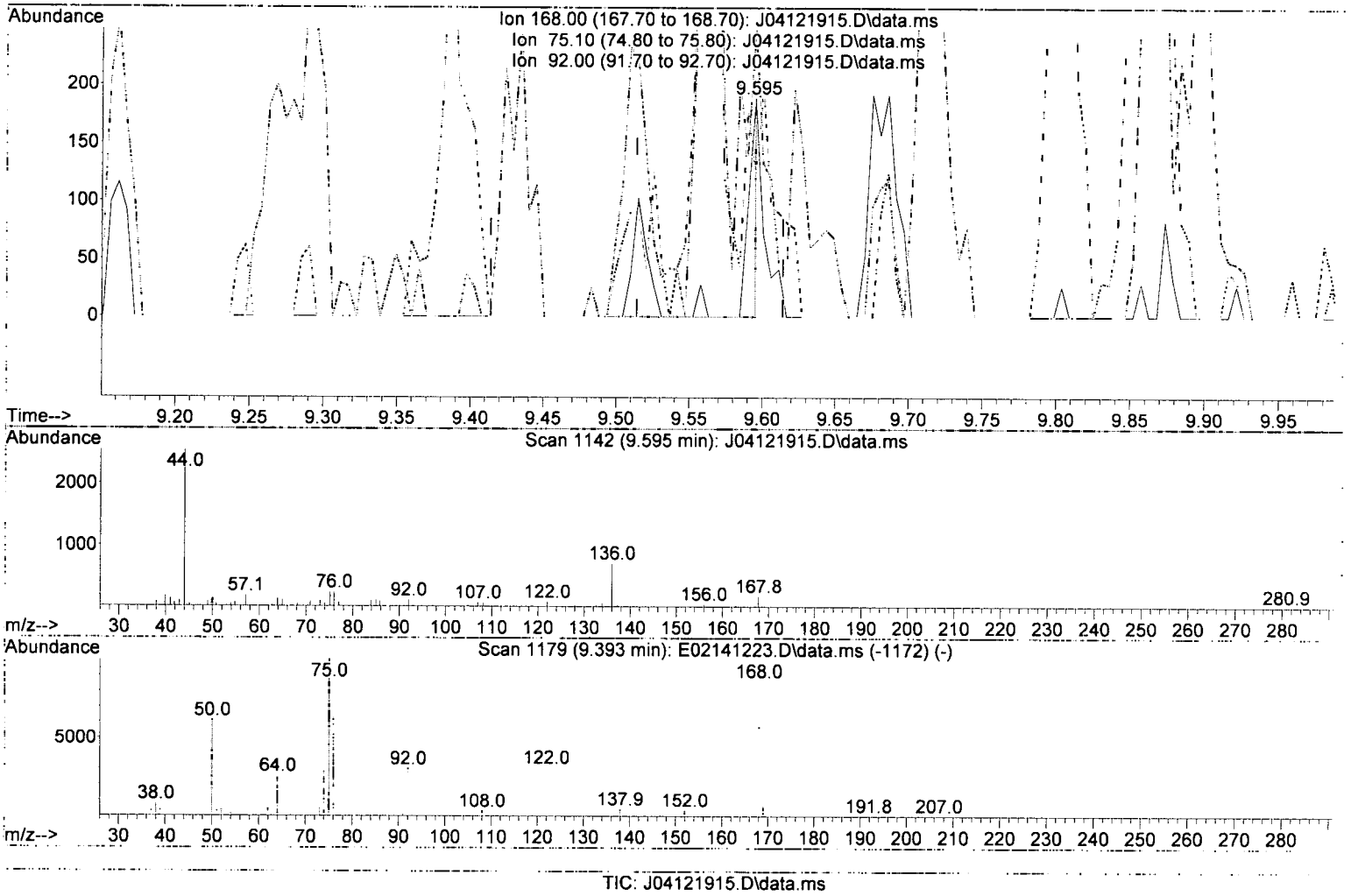


R = 1.45e-002 A*A + 1.41e-001 A - 8.59e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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



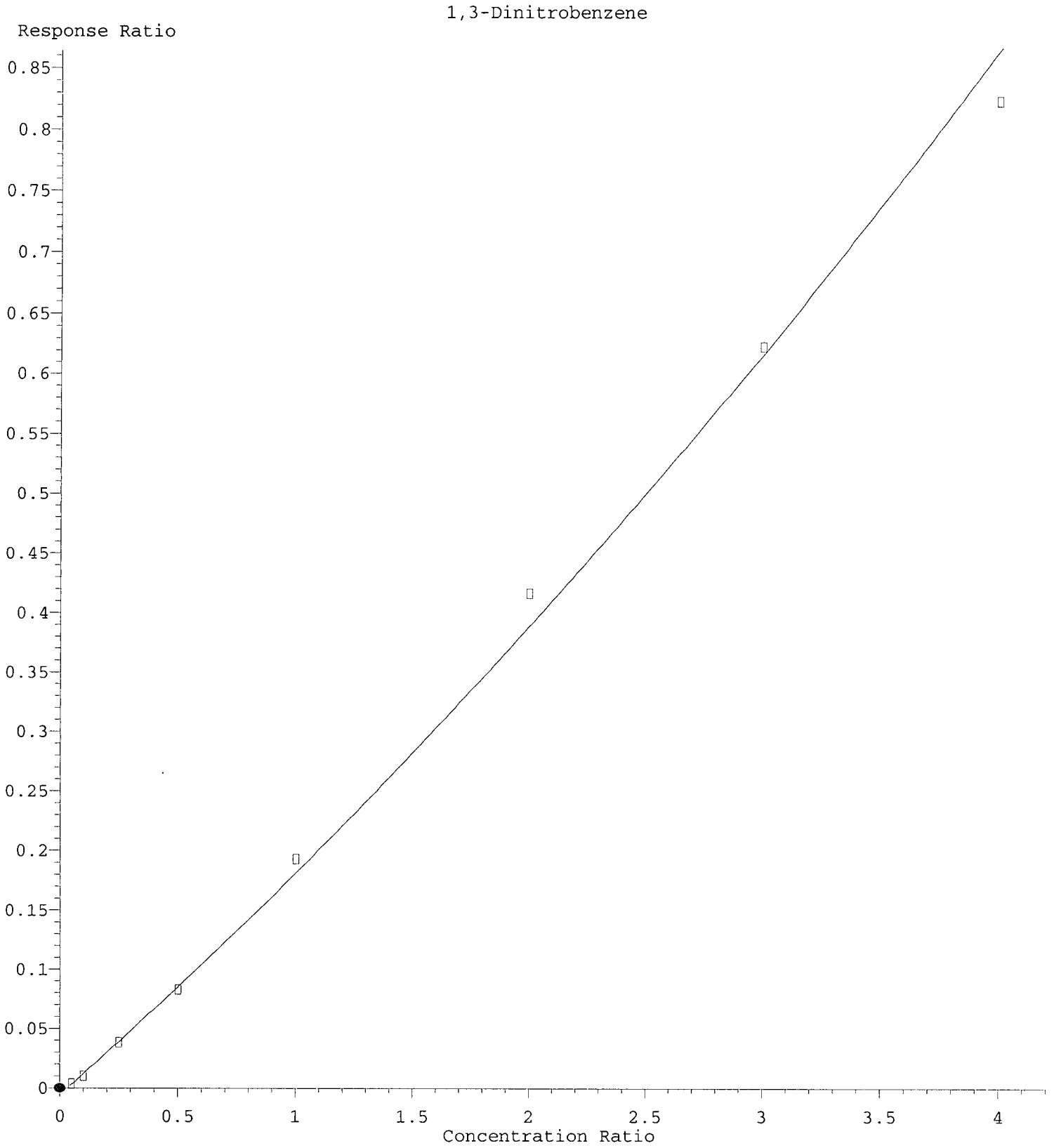
TIC: J04121915.D\data.ms

(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

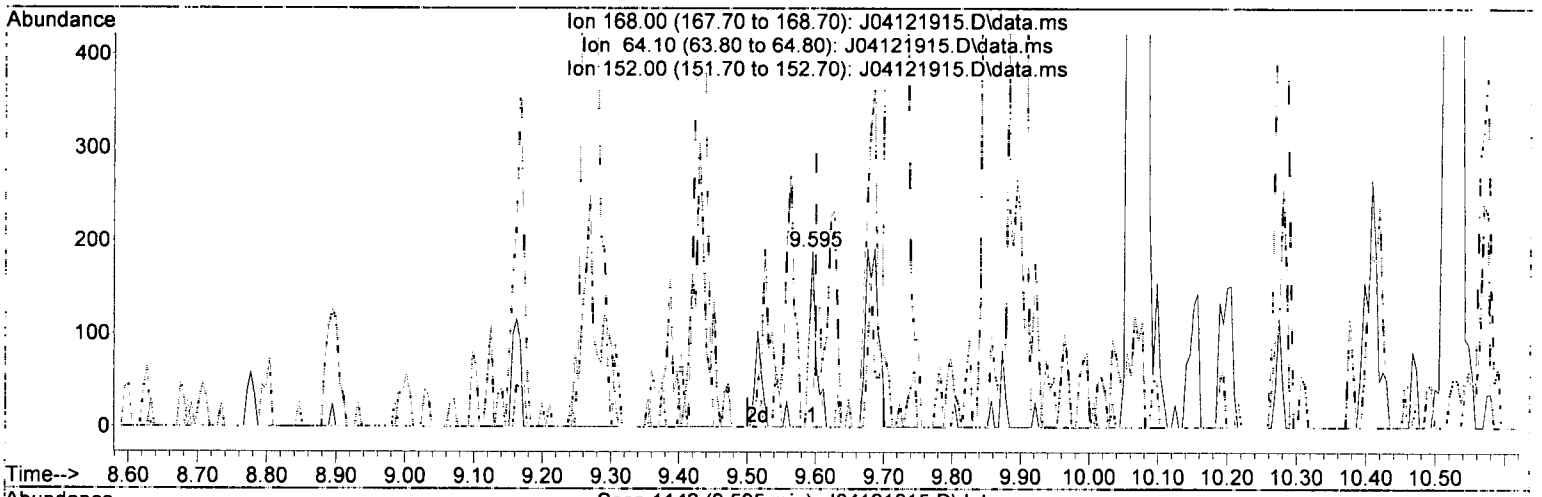


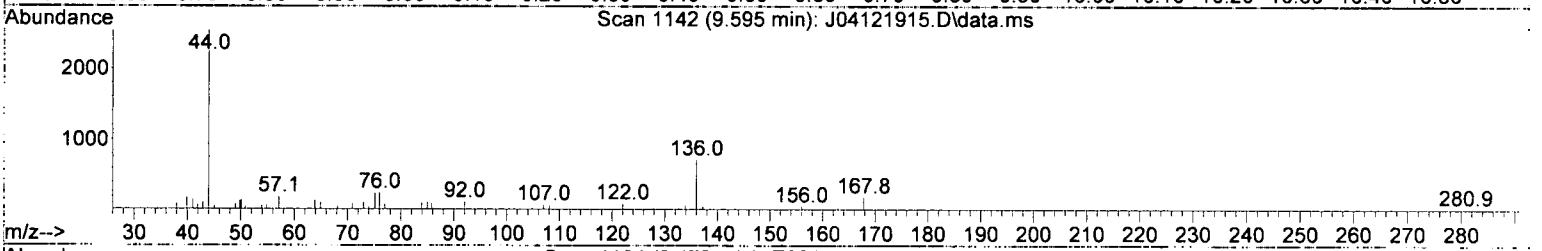
R = 1.02e-002 A*A + 1.77e-001 A - 5.75e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

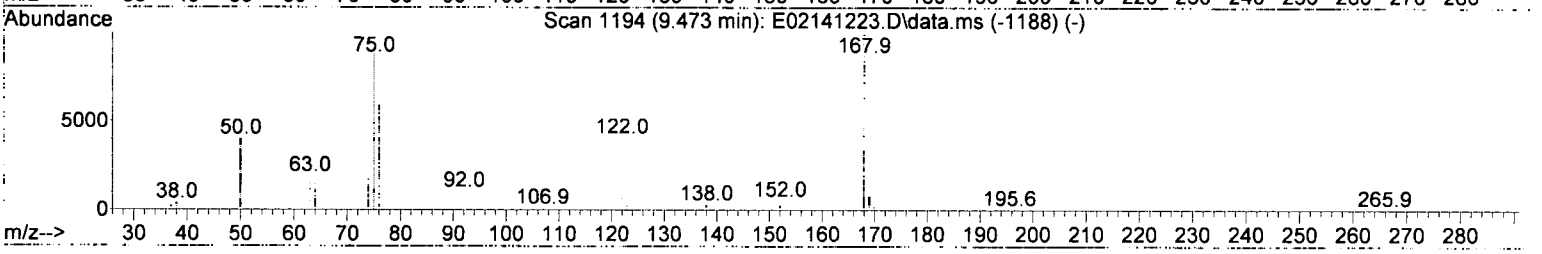
Quantitation Report (Qedit)

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







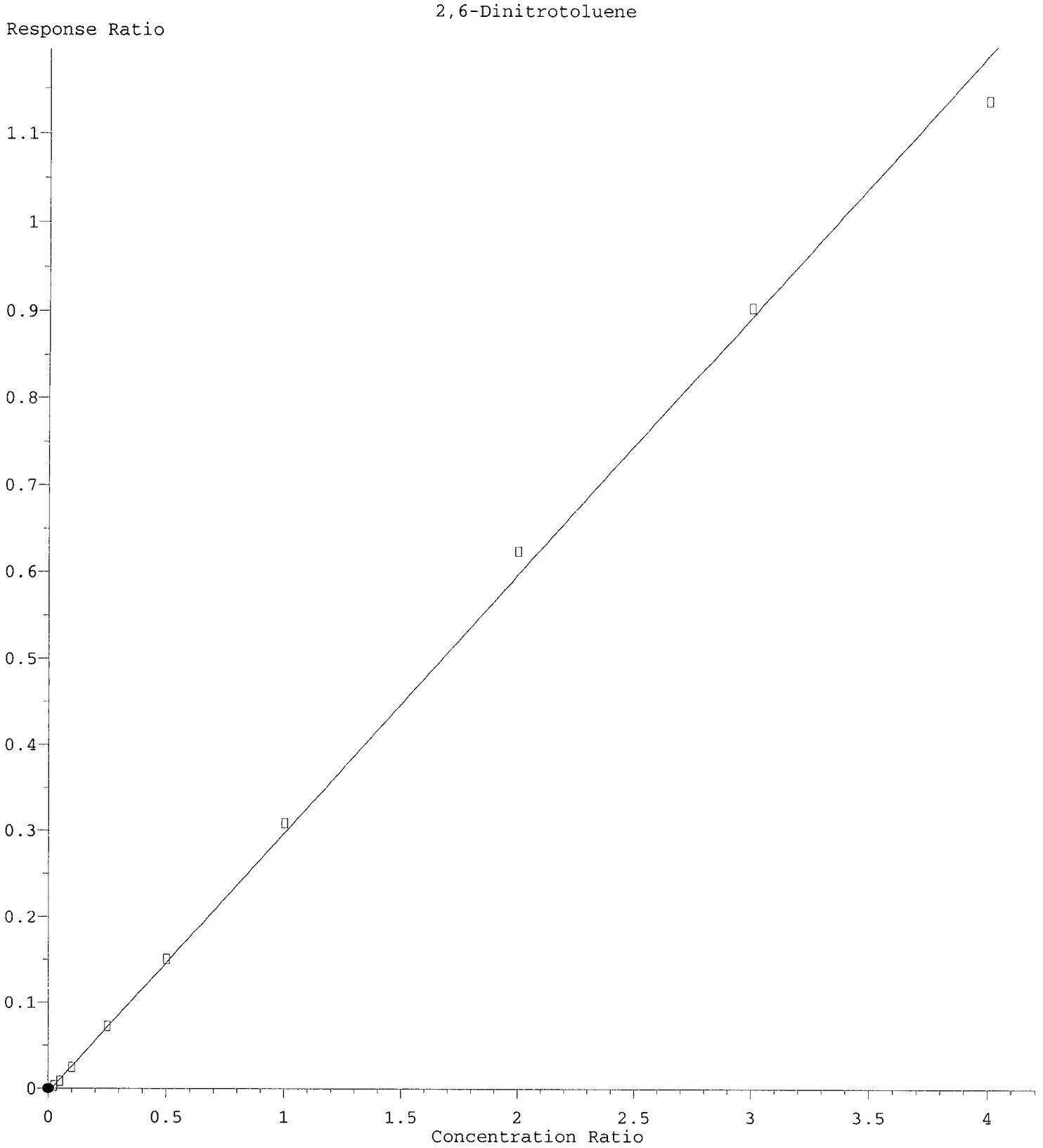
TIC: J04121915.D\data.ms

(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

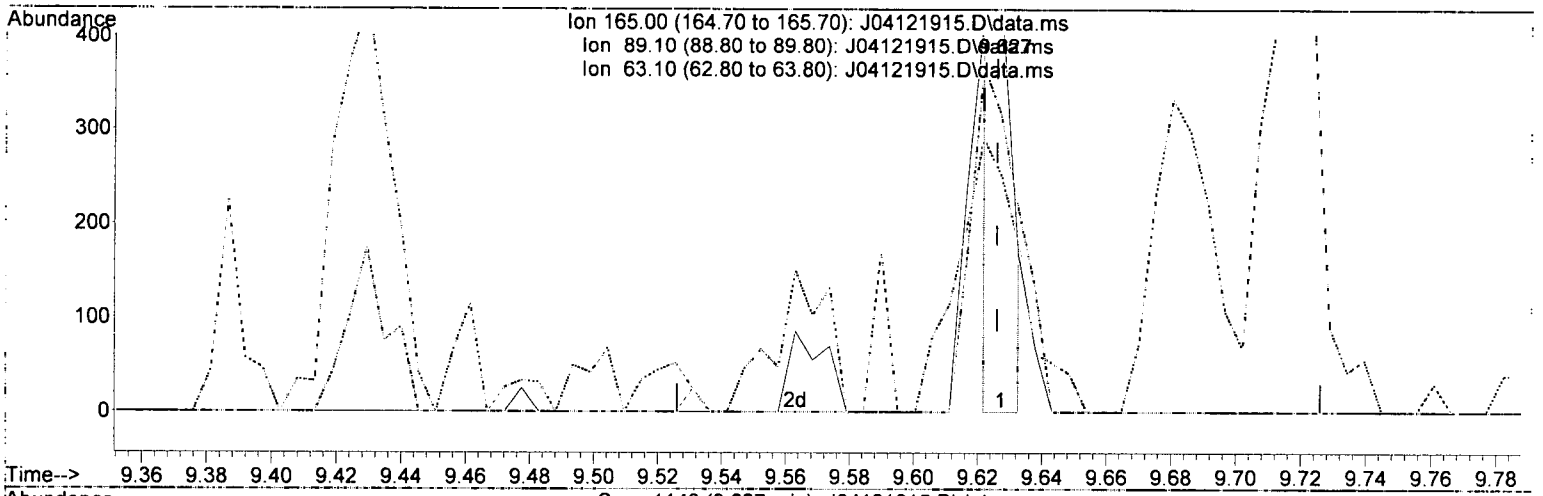


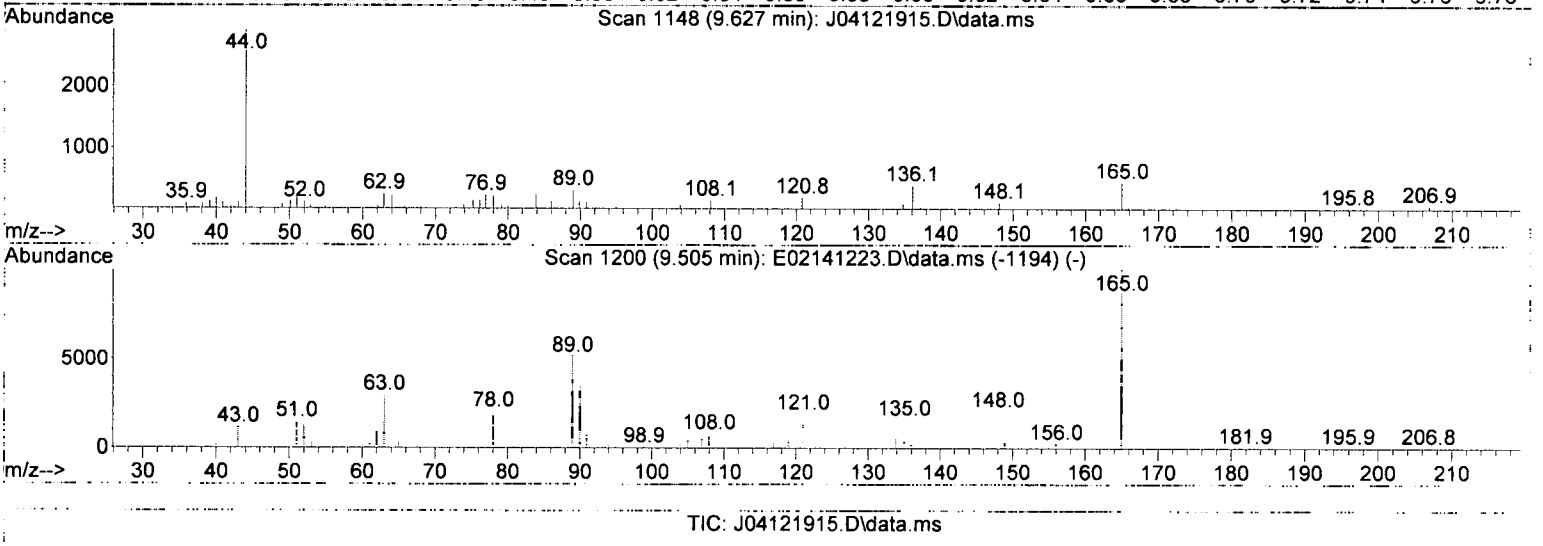
R = -1.37e-003 A*A + 3.04e-001 A - 4.94e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





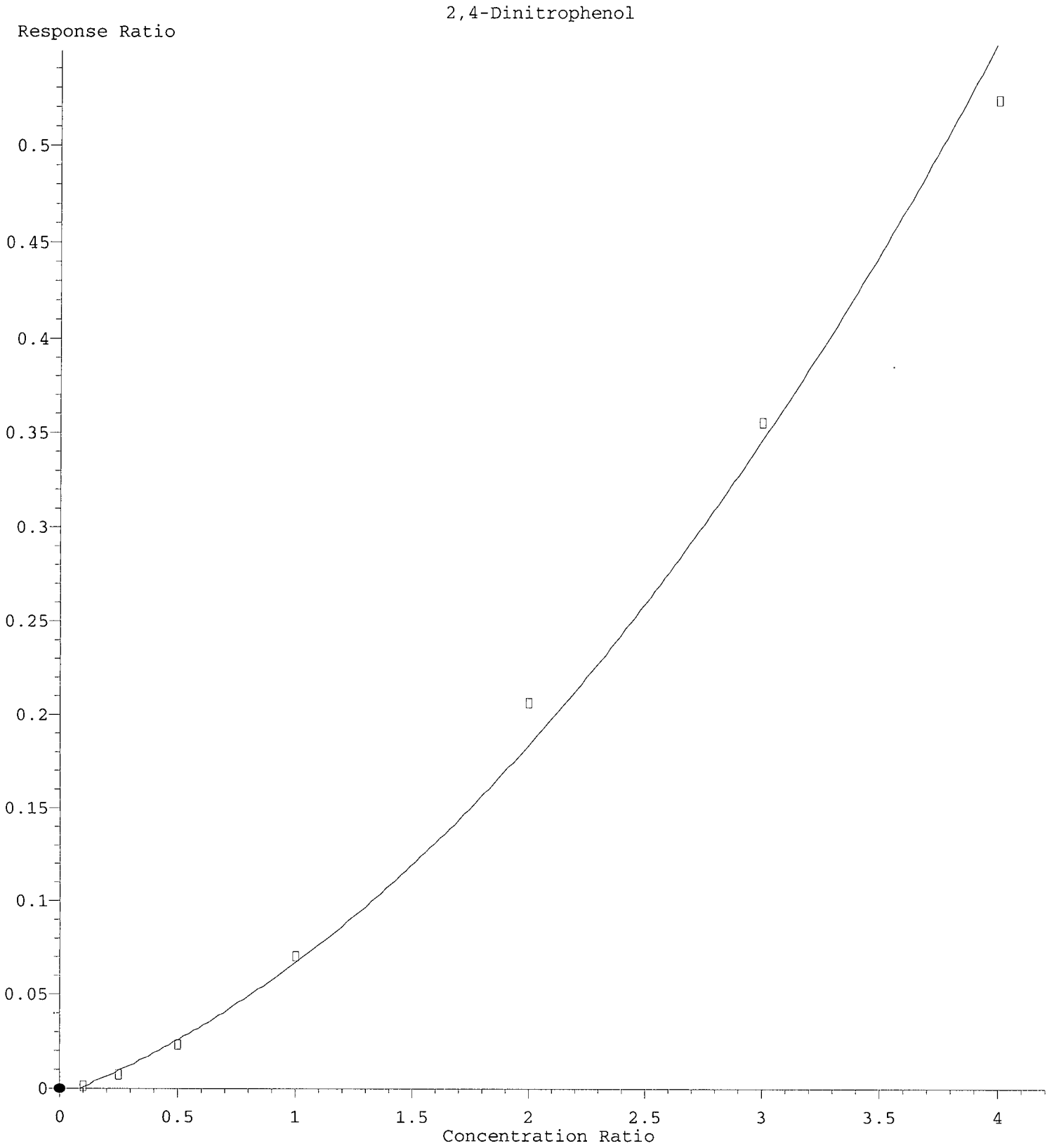
TIC: J04121915.D\data.ms

(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

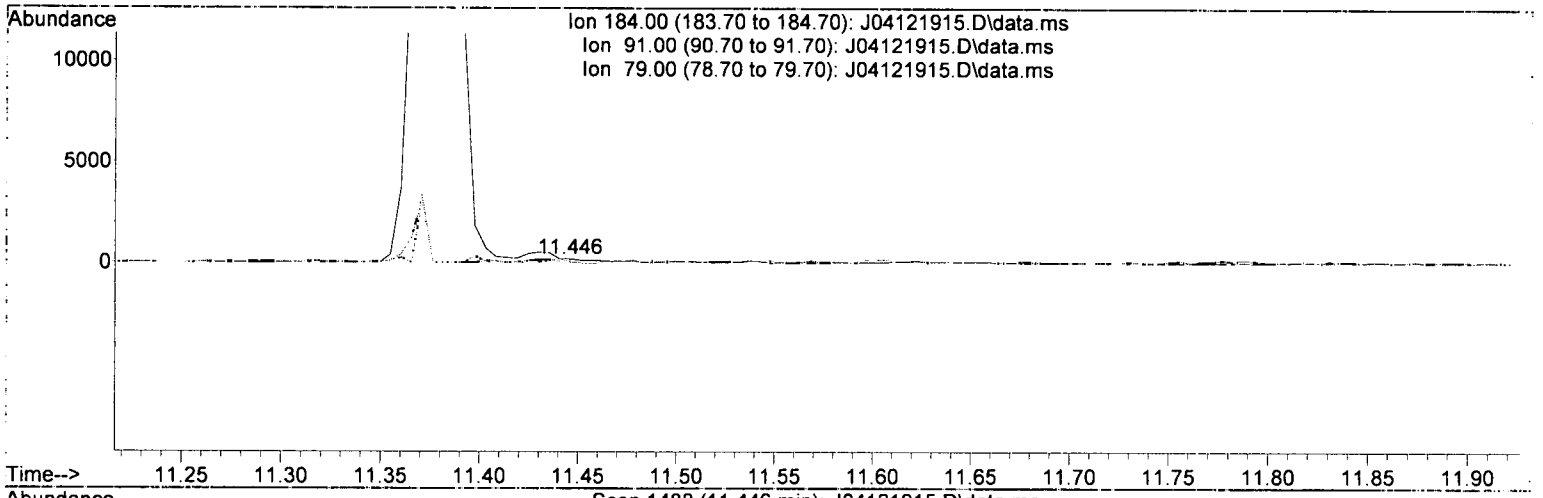


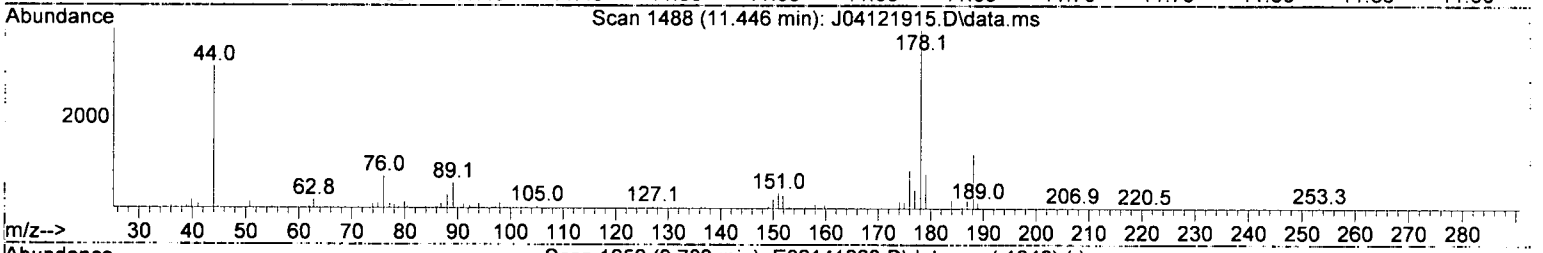
R = 2.28e-002 A*A + 4.83e-002 A - 4.04e-003
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

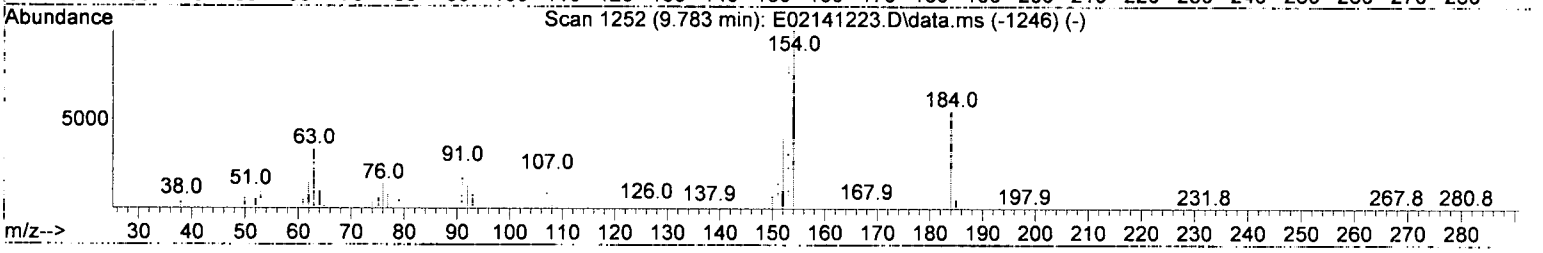
Quantitation Report (Qedit)

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







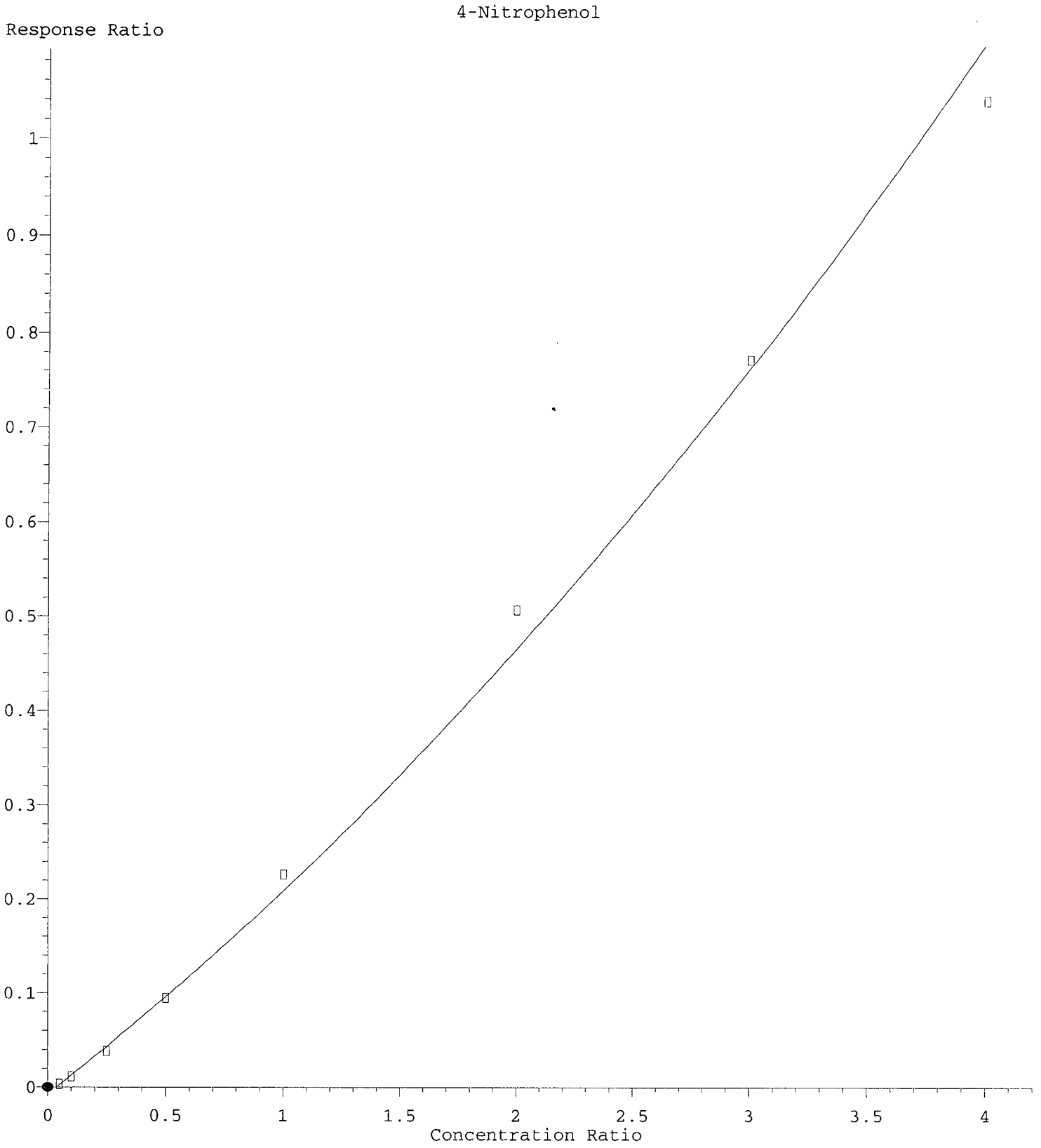
TIC: J04121915.D\data.ms

(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

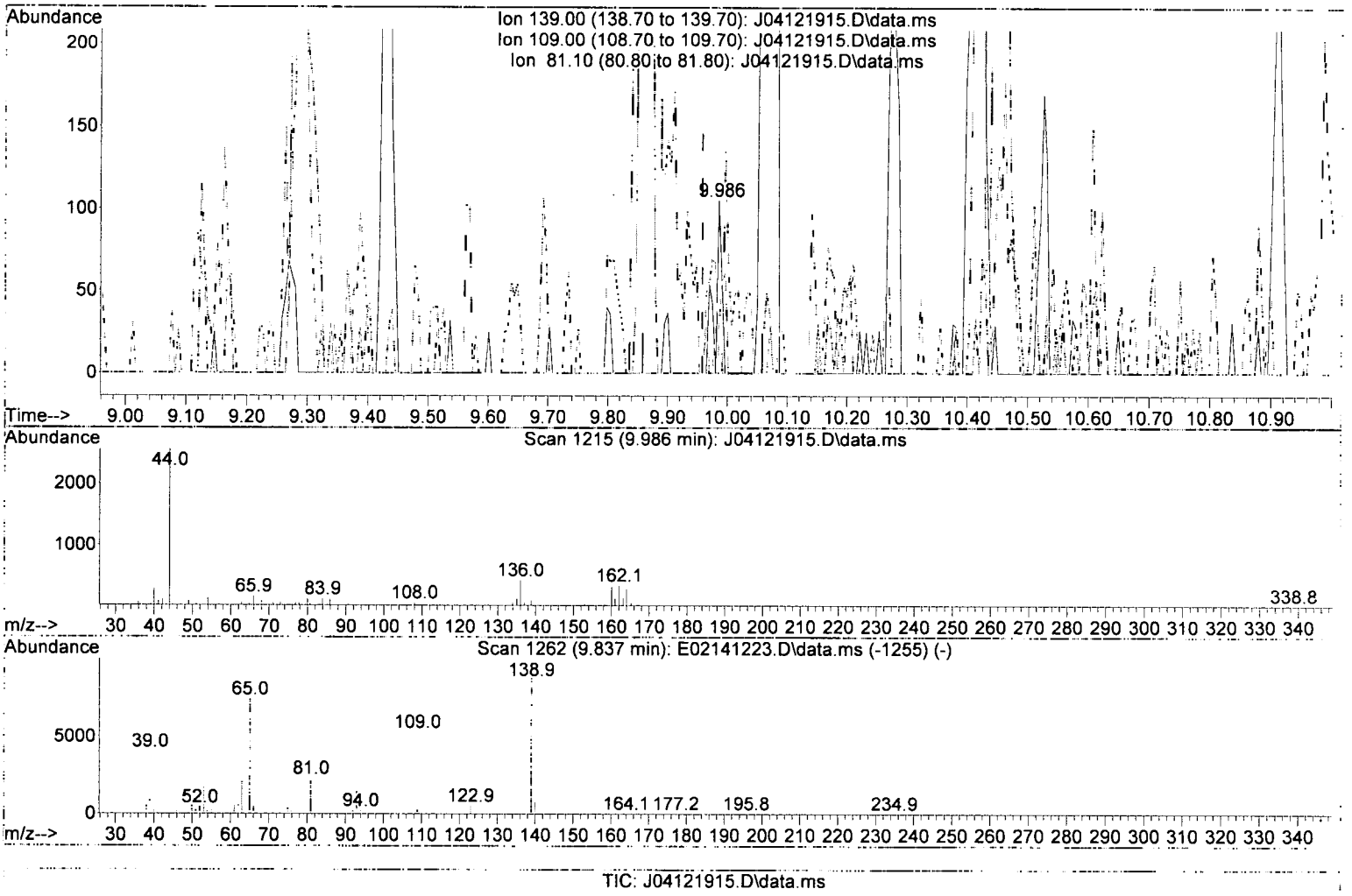


R = 2.02e-002 A*A + 1.96e-001 A - 7.20e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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



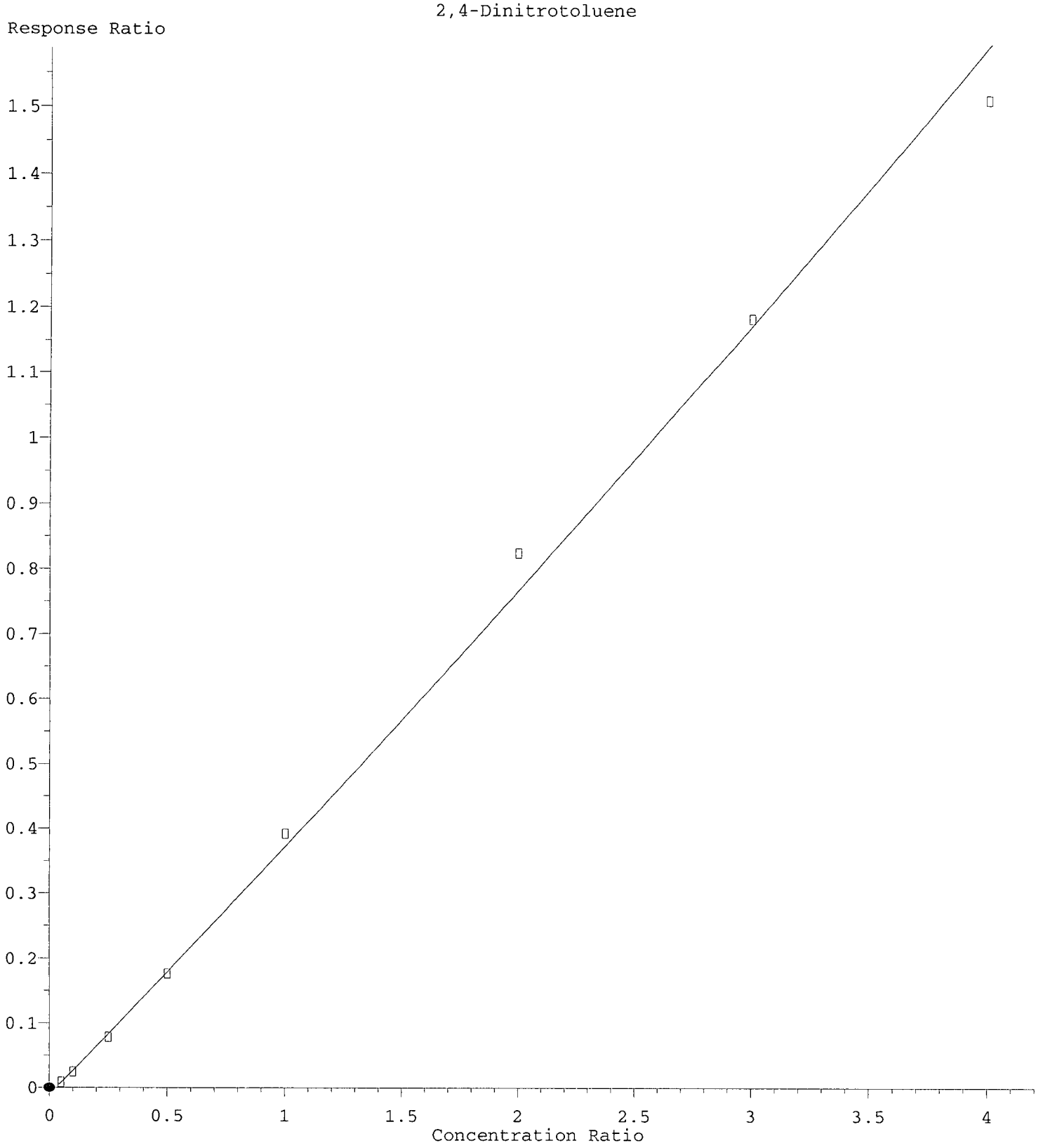
TIC: J04121915.D\data.ms

(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

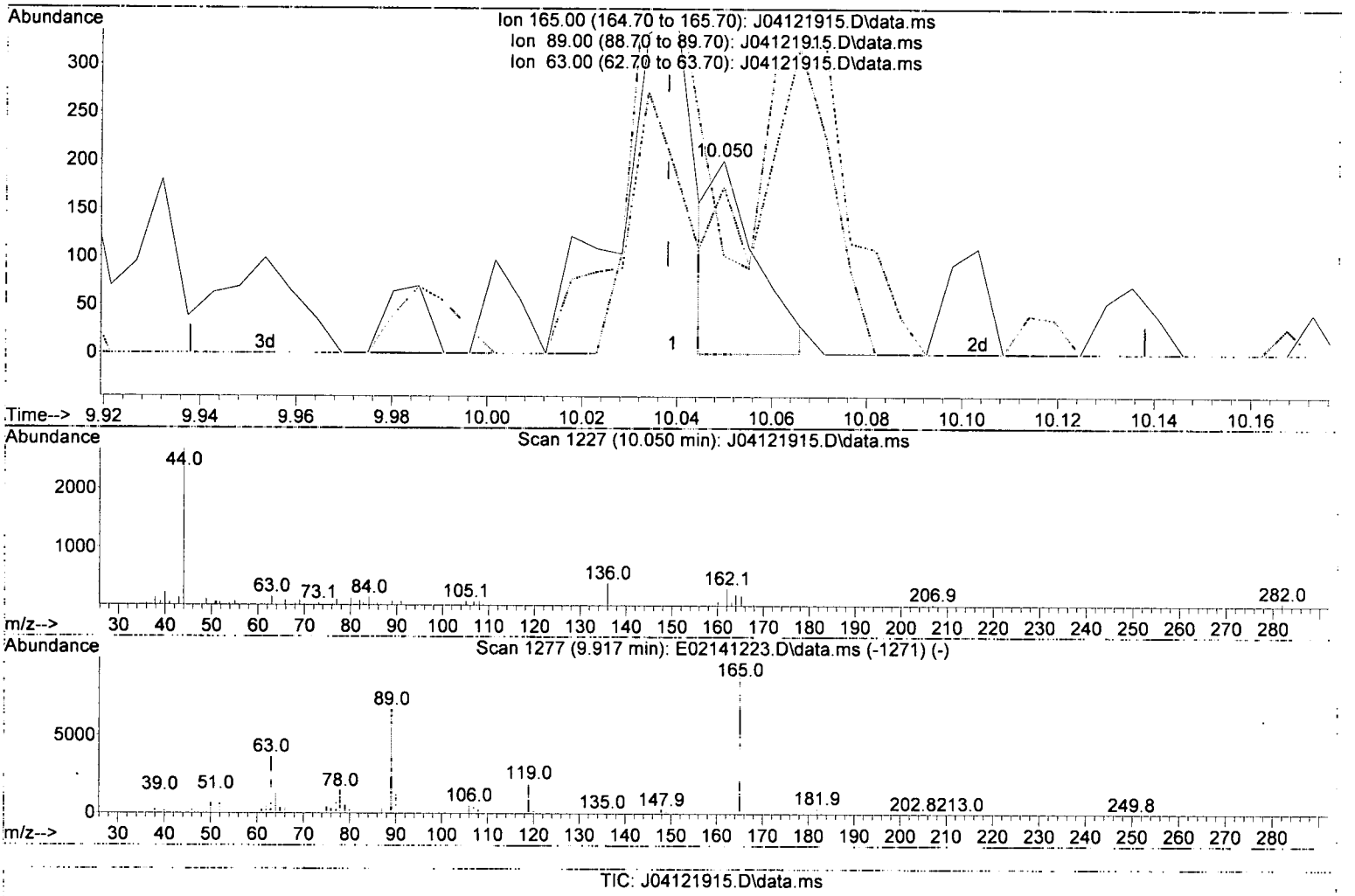


R = 5.63e-003 A*A + 3.78e-001 A - 1.14e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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



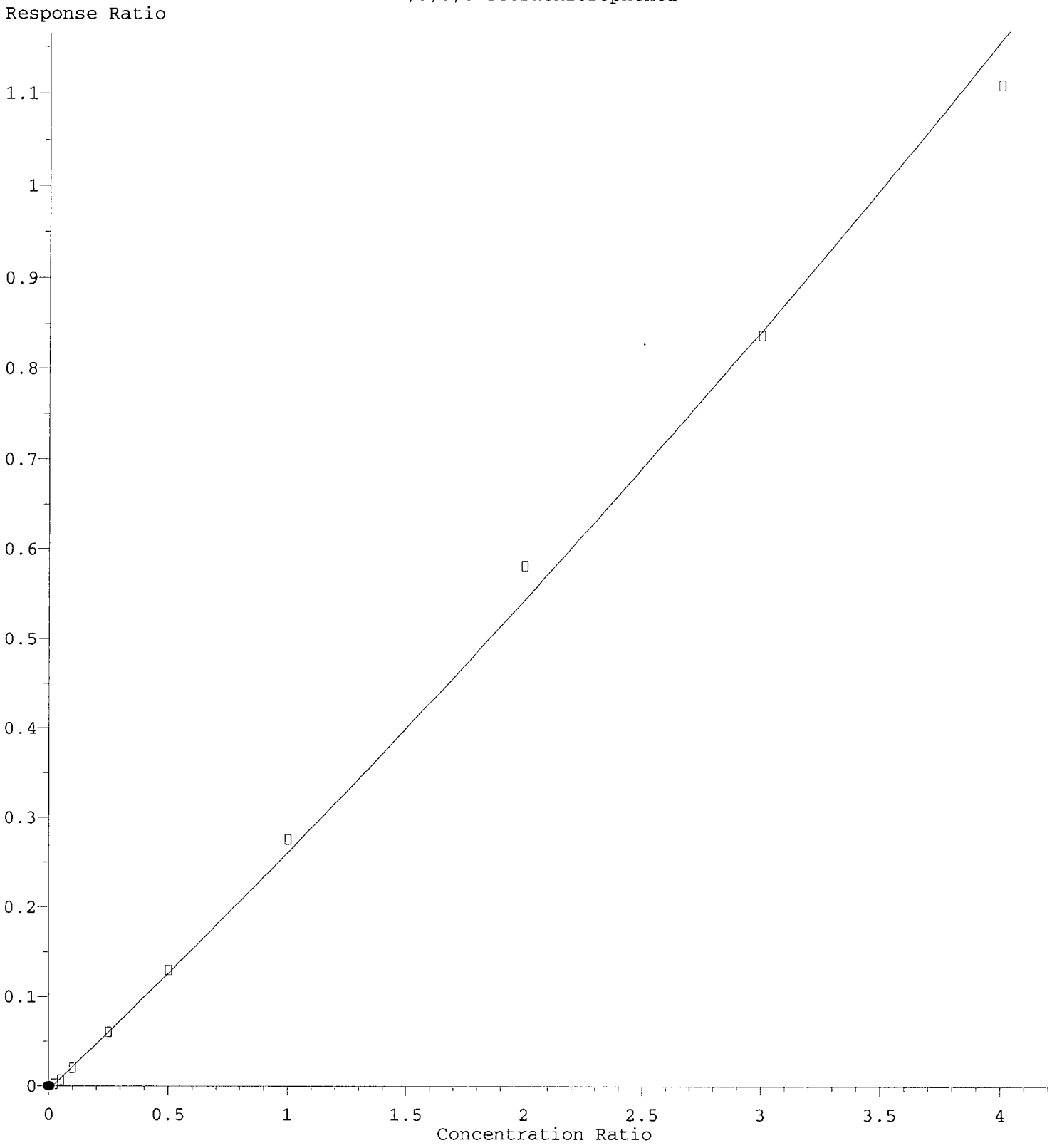
TIC: J04121915.D\data.ms

(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

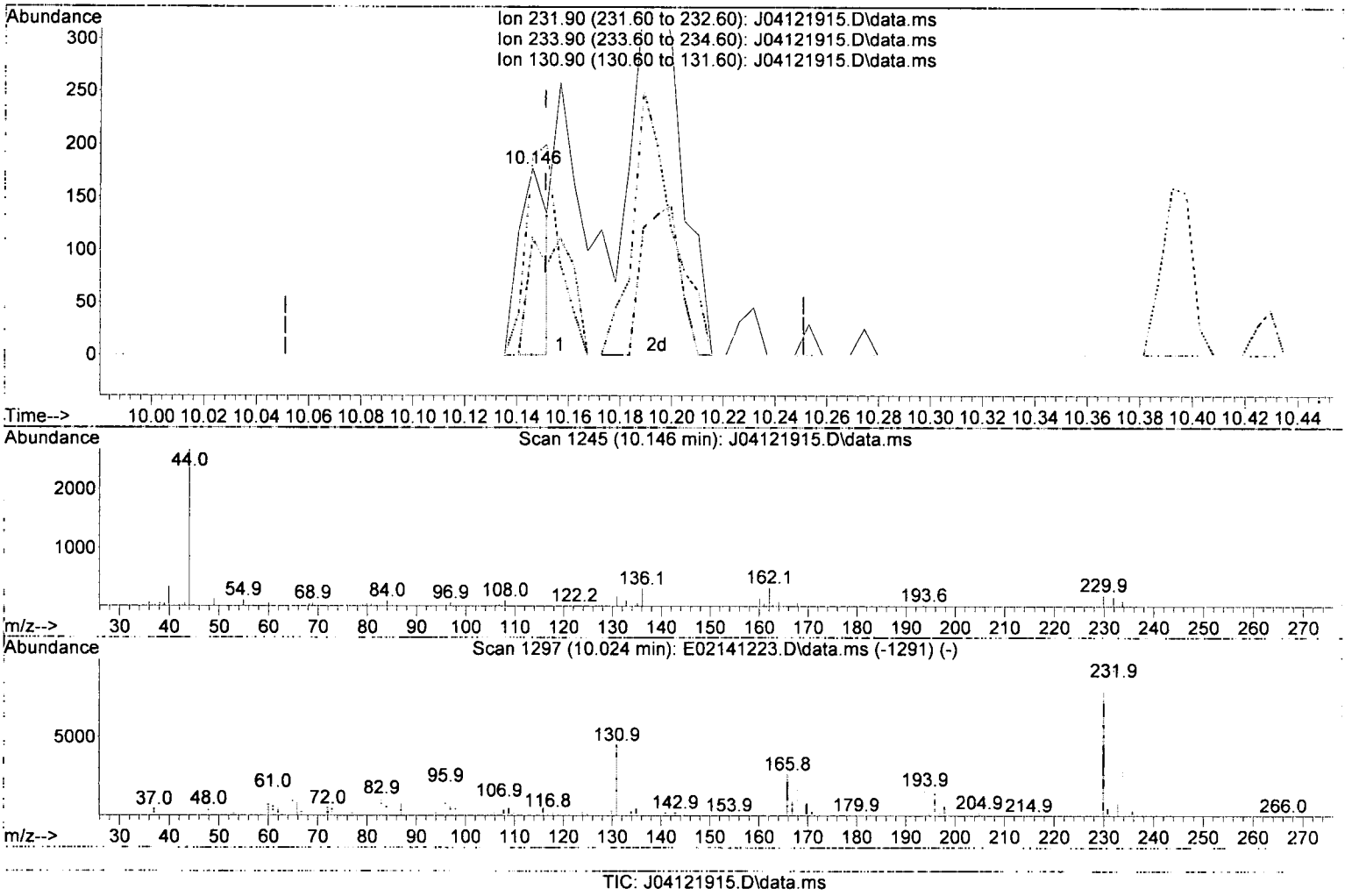


R = 8.29e-003 A*A + 2.57e-001 A - 4.50e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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



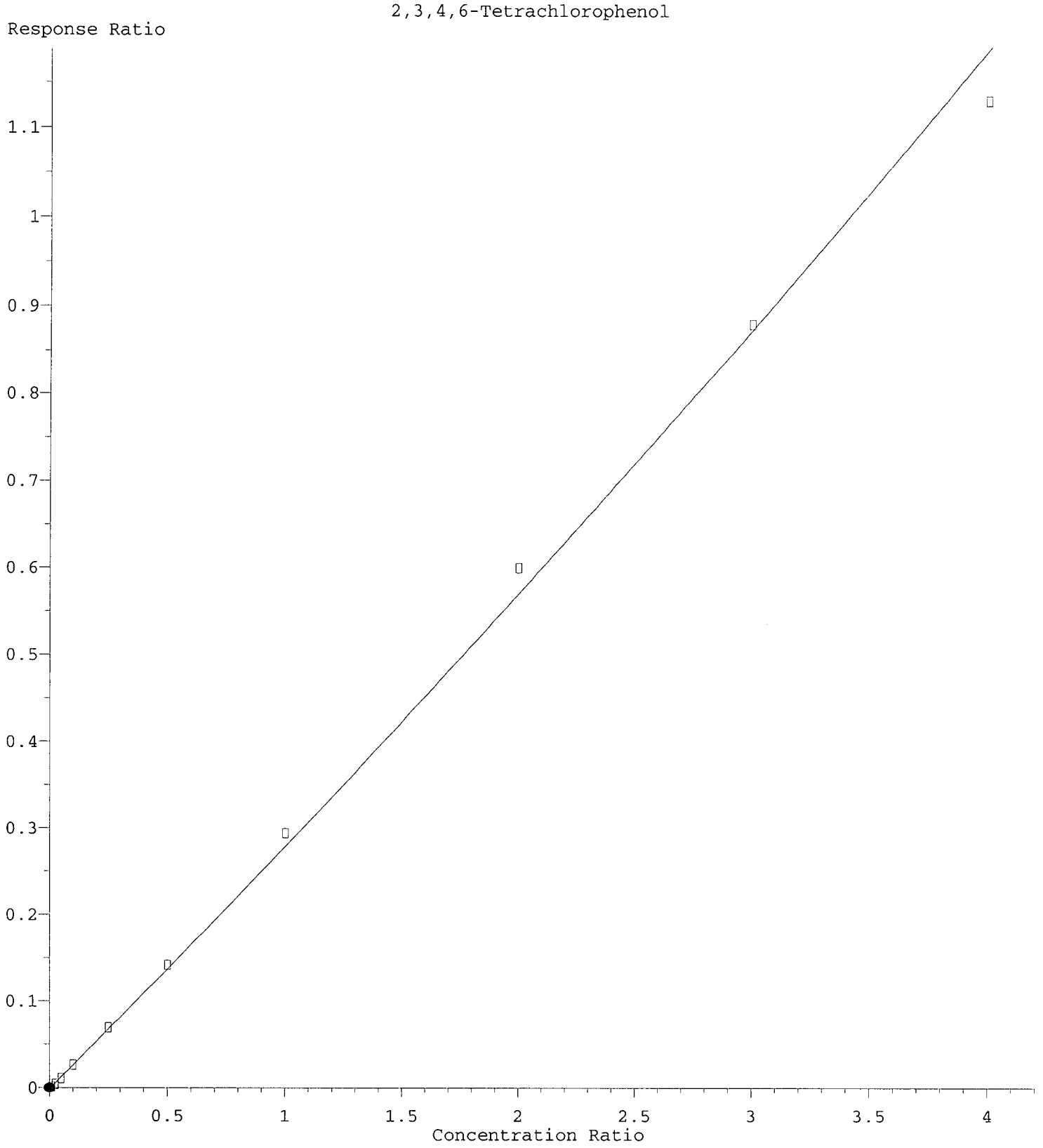
TIC: J04121915.D\data.ms

(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

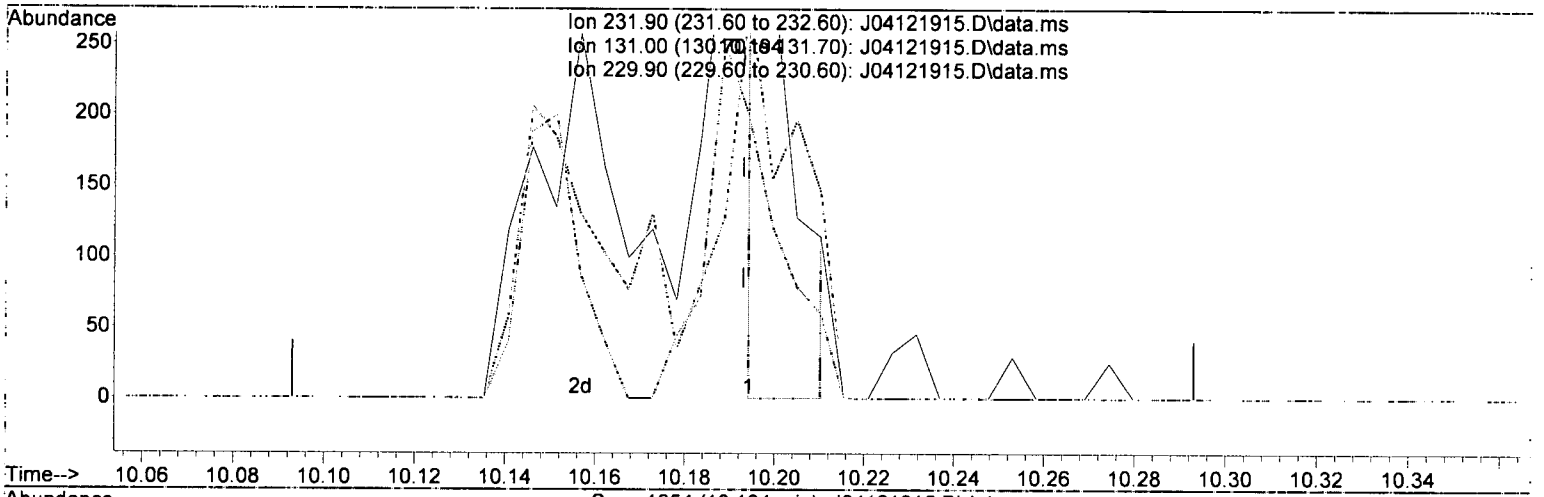


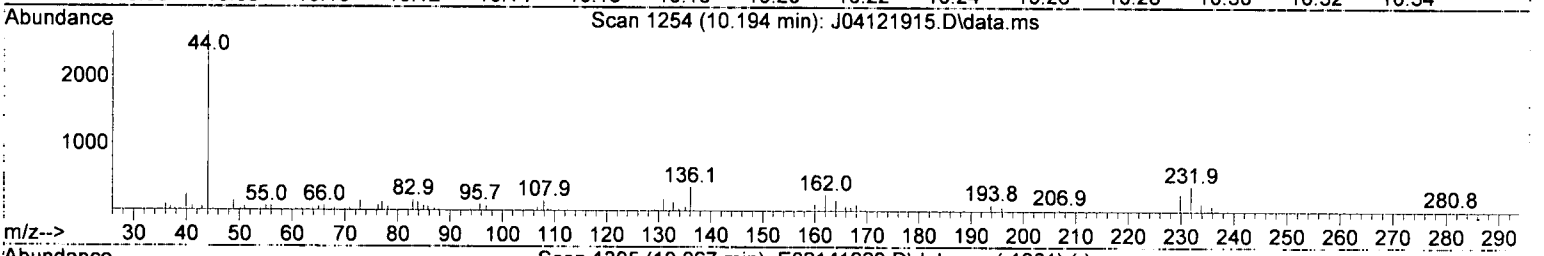
R = 5.62e-003 A*A + 2.75e-001 A - 1.81e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

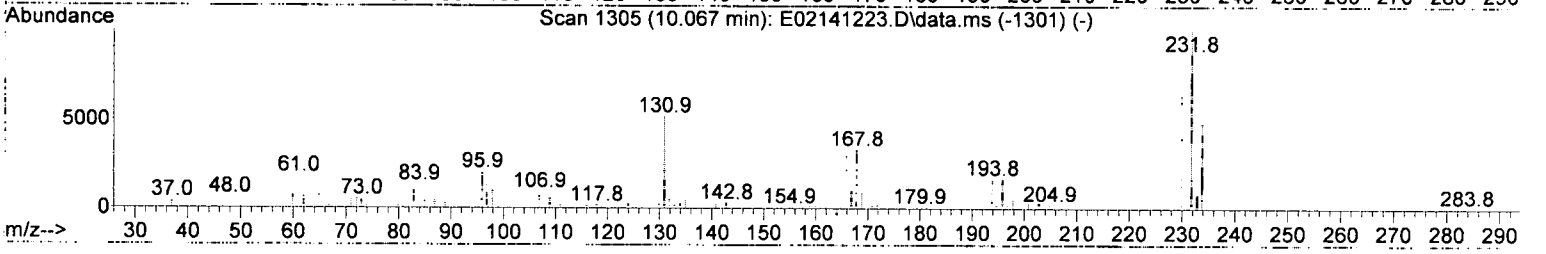
Quantitation Report (Qedit)

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







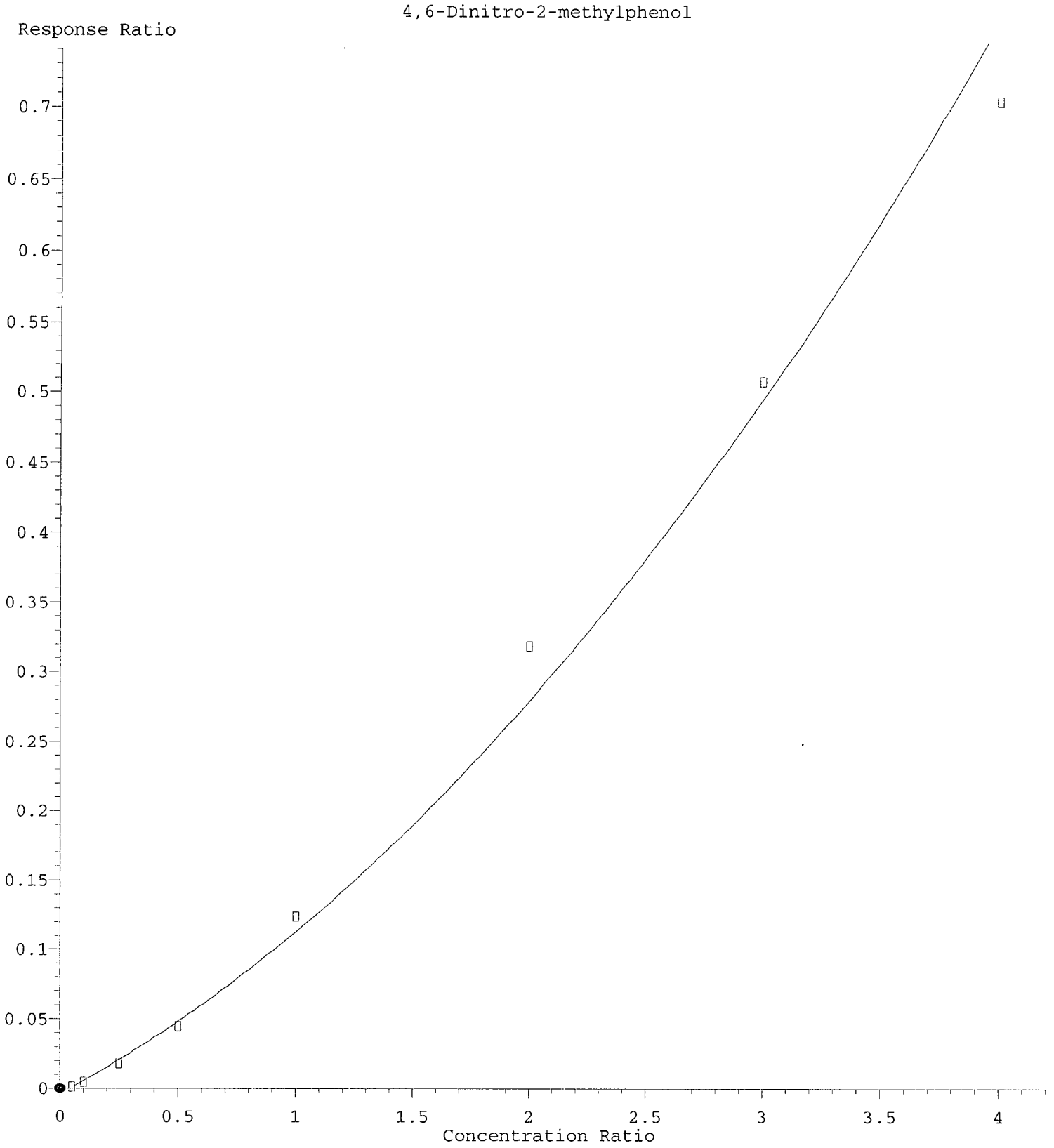
TIC: J04121915.D\data.ms

(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

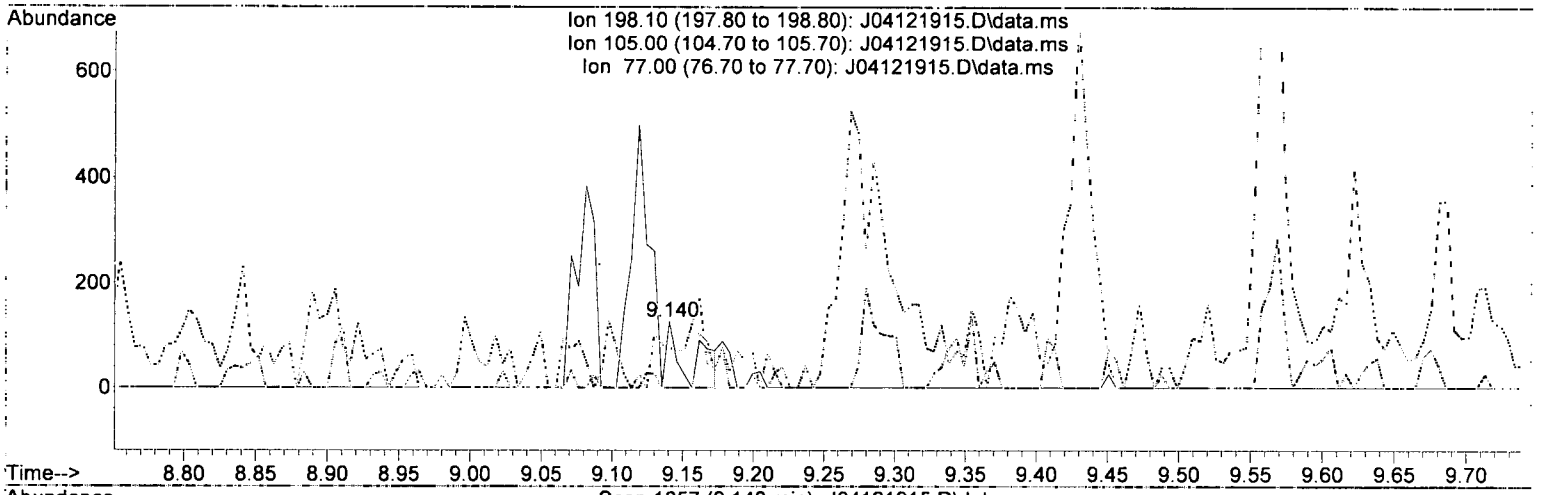


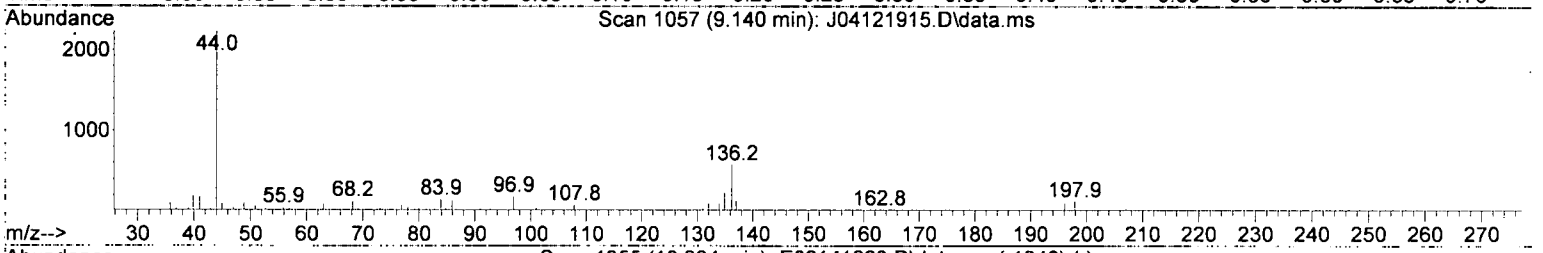
R = 2.48e-002 A*A + 9.20e-002 A - 3.92e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

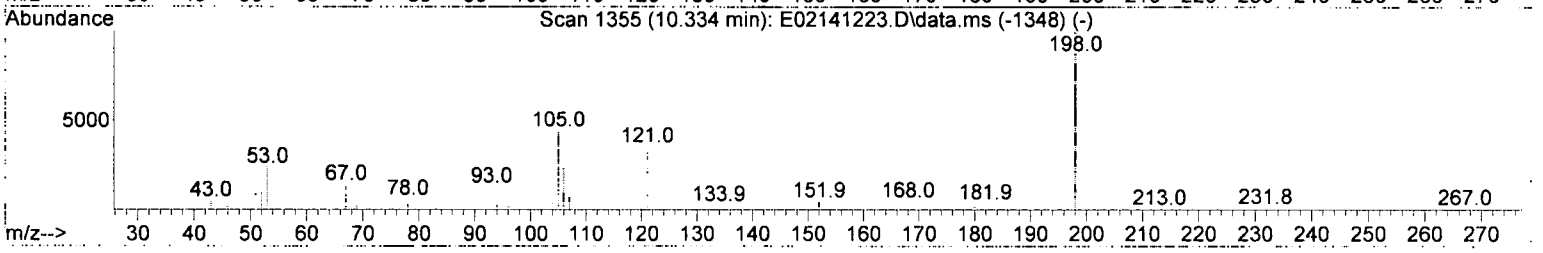
Quantitation Report (Qedit)

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







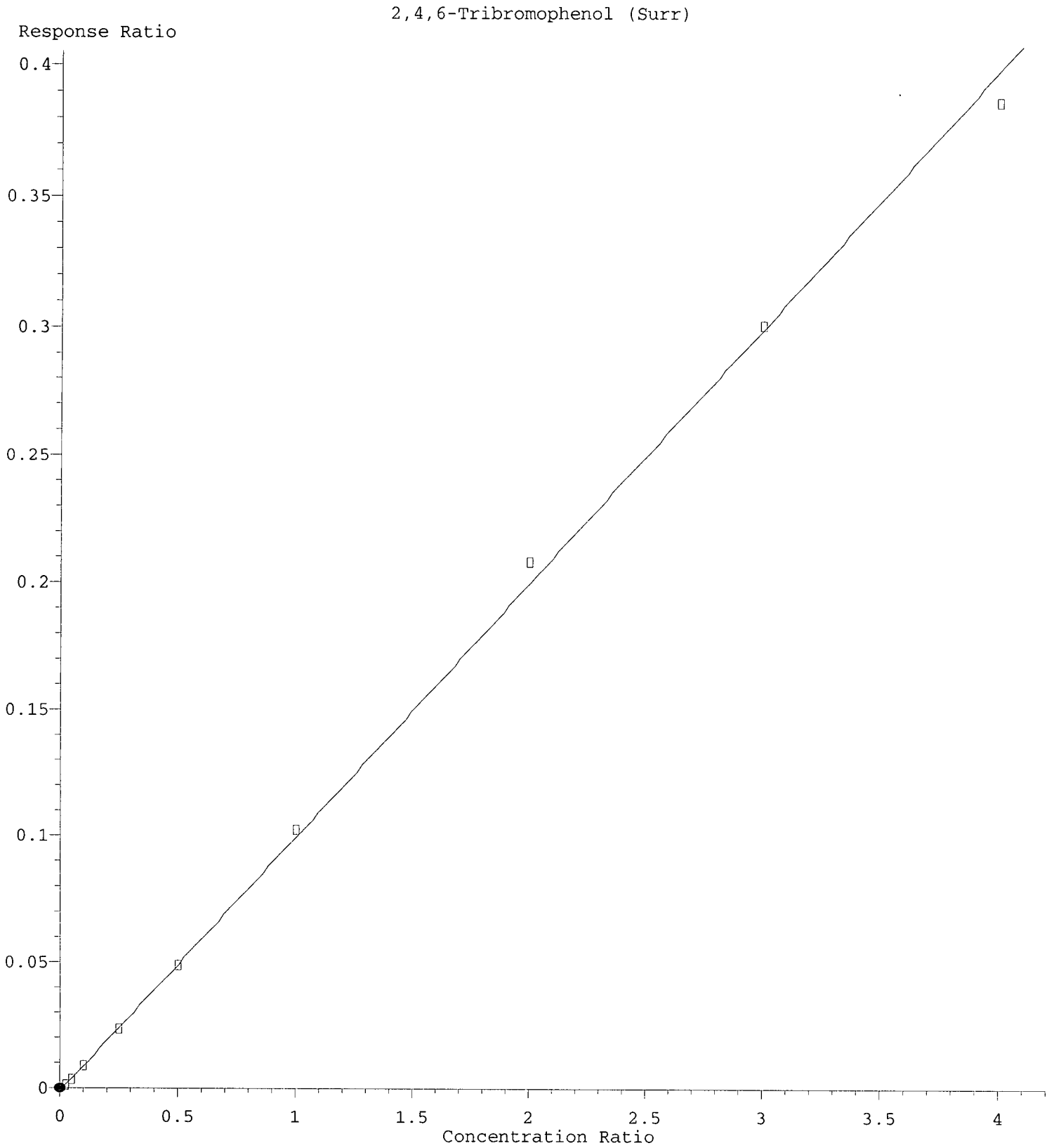
TIC: J04121915.D\data.ms

(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

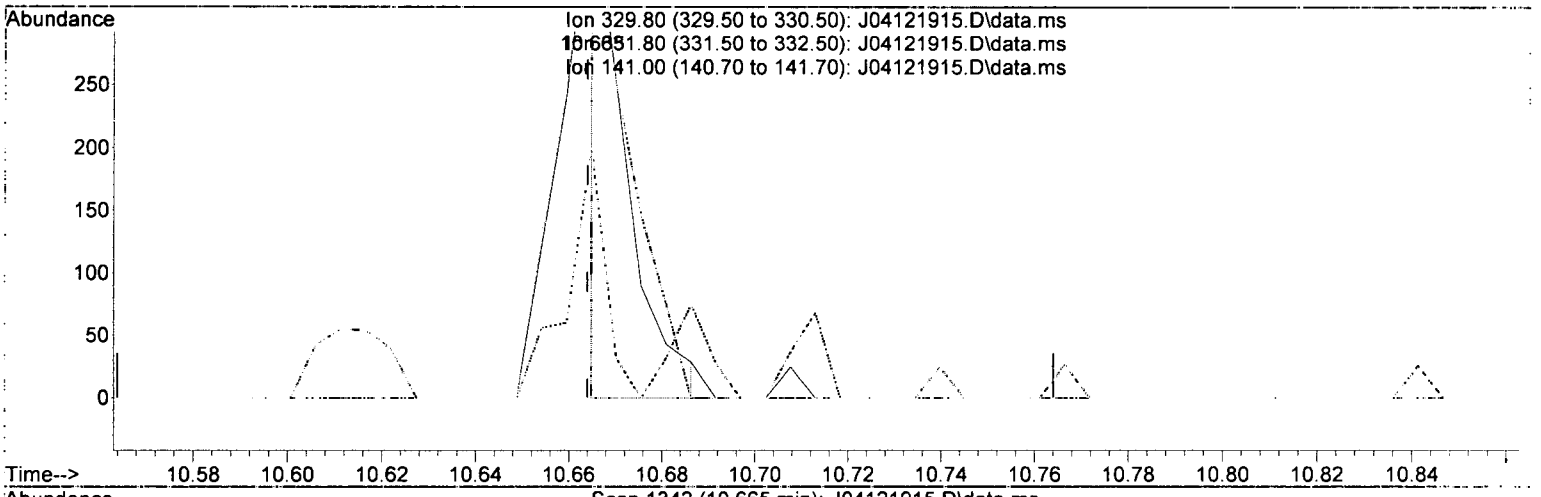


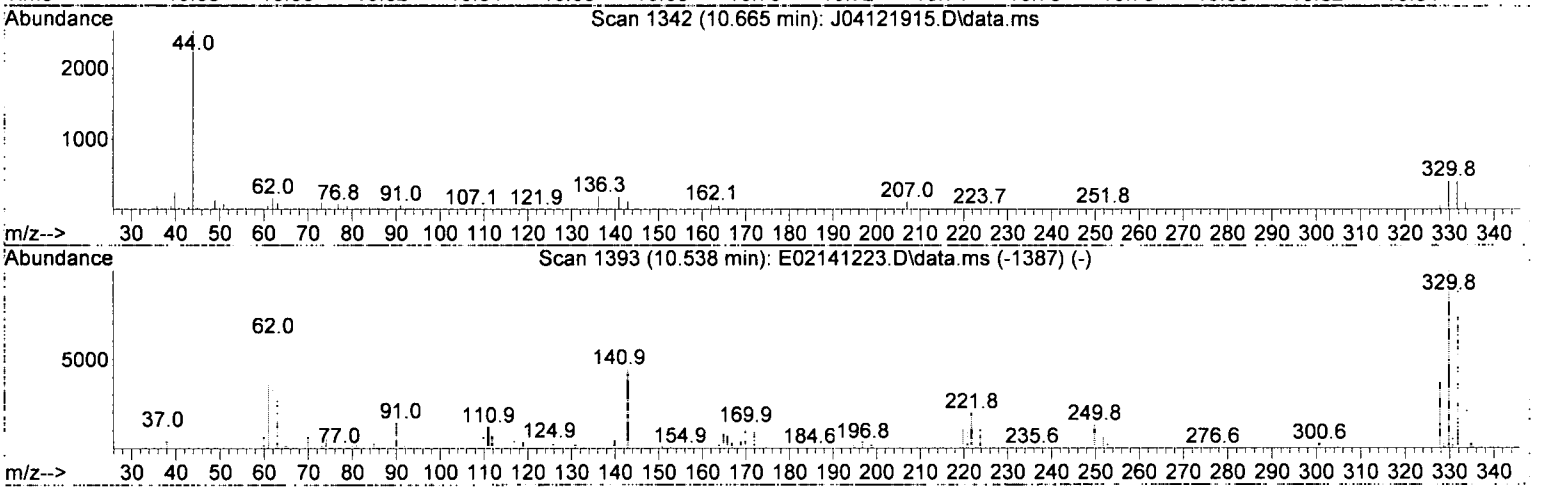
R = -3.14e-004 A*A + 1.01e-001 A - 1.36e-003
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





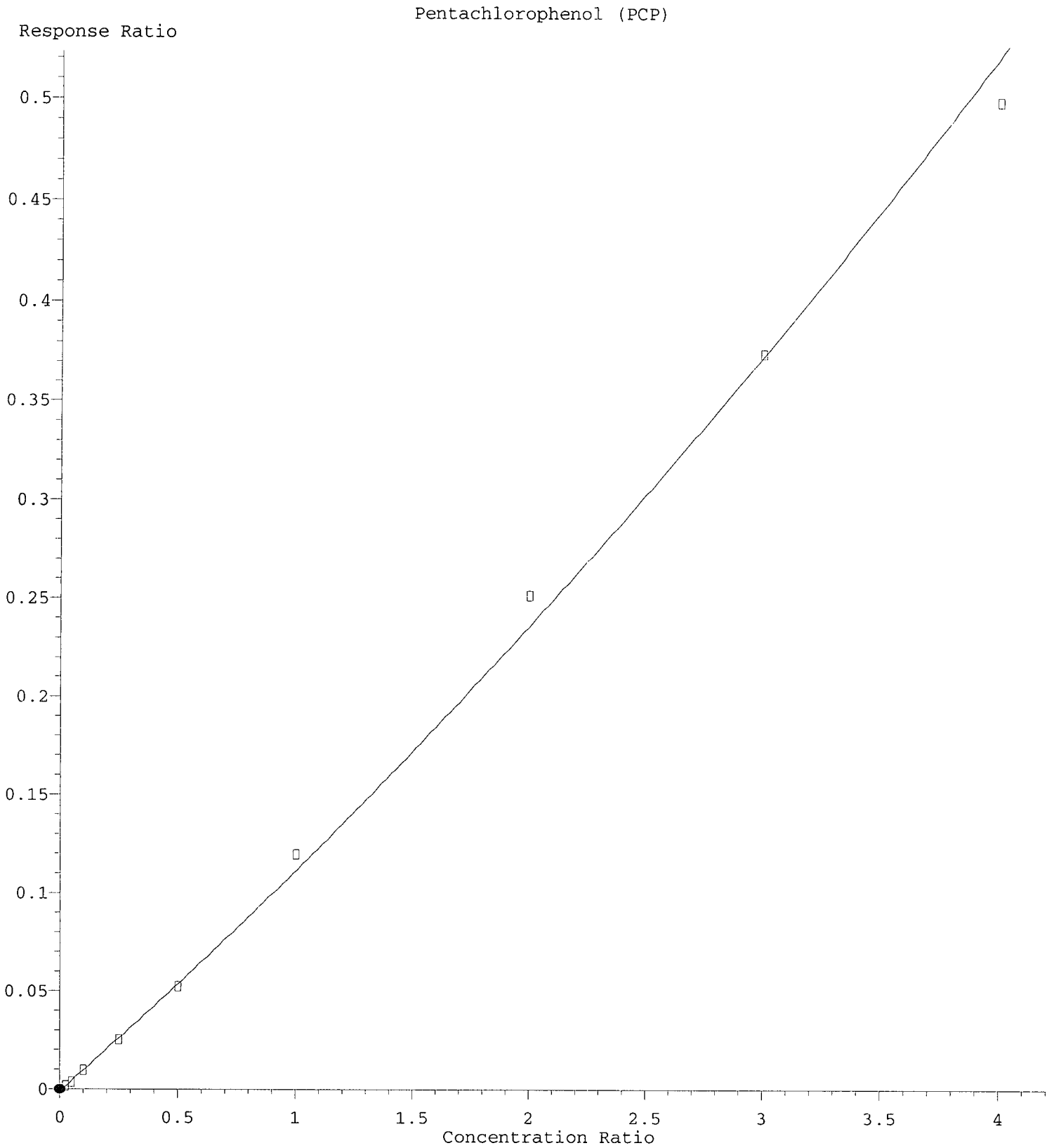
TIC: J04121915.D\data.ms

(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

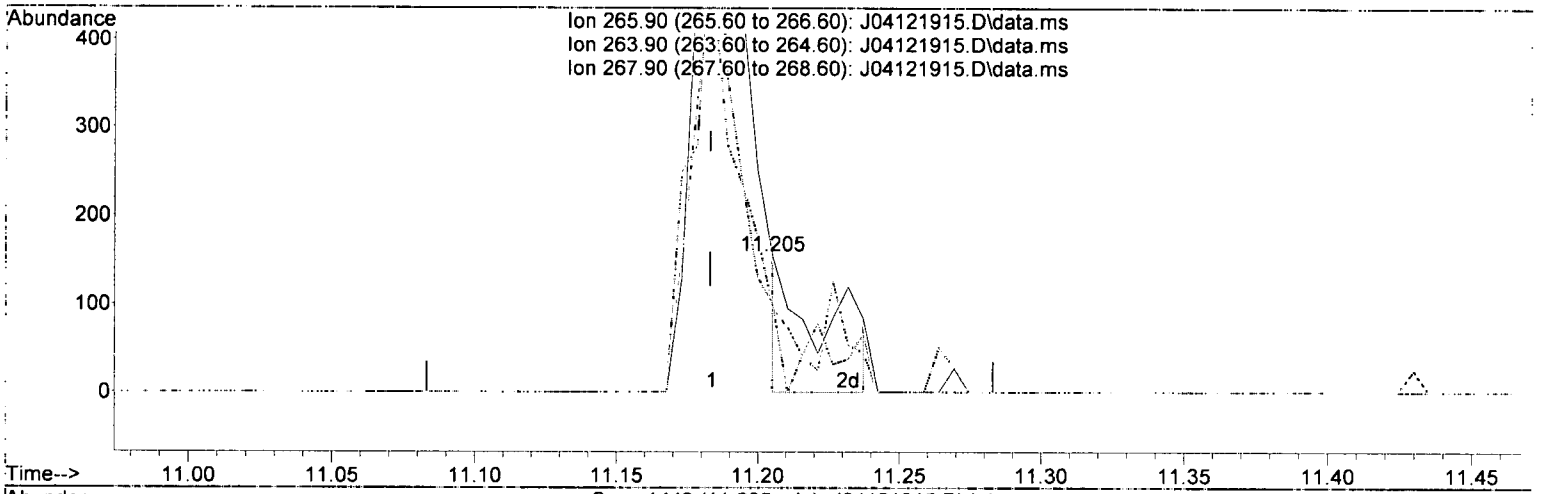


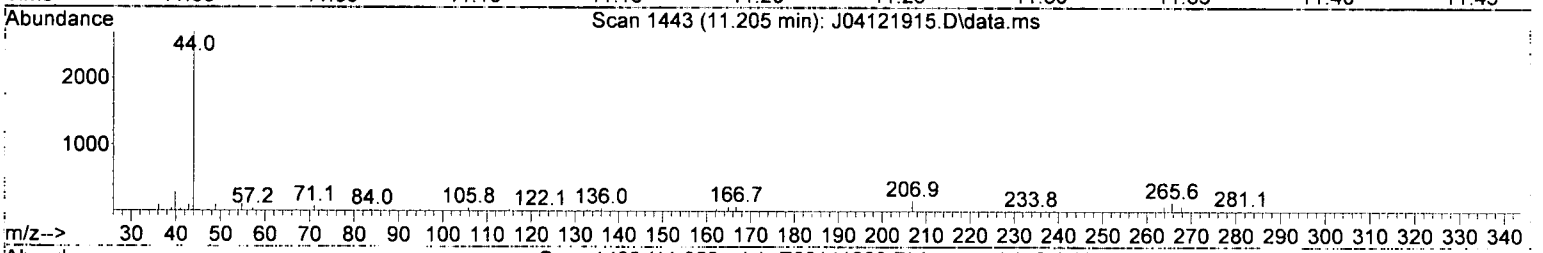
R = 5.98e-003 A*A + 1.07e-001 A - 1.11e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

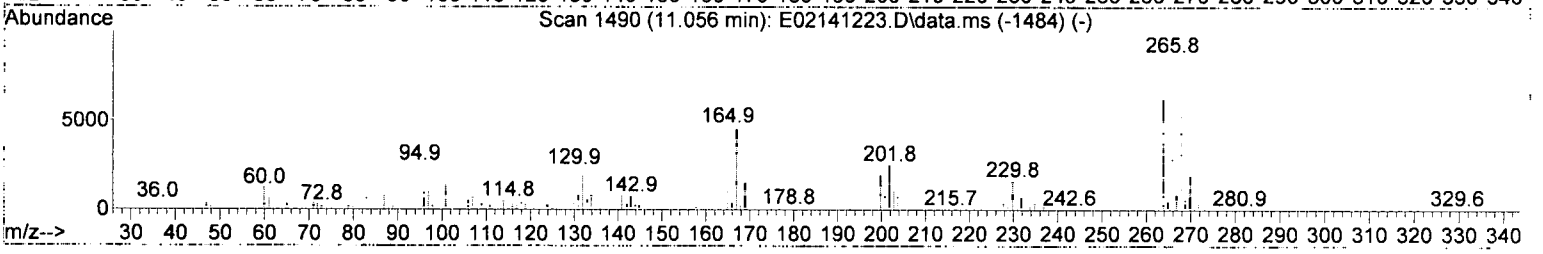
Quantitation Report (Qedit)

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







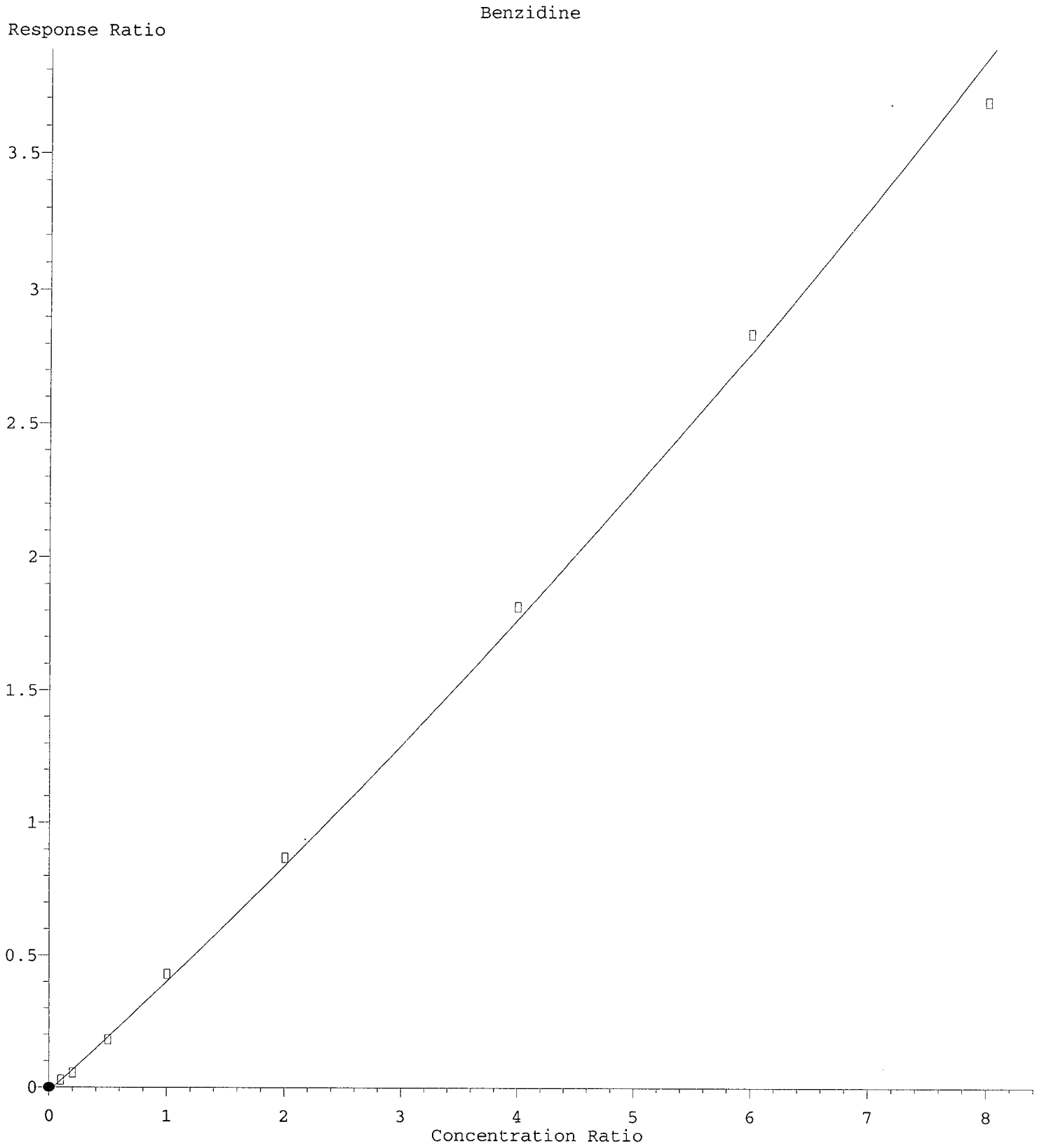
TIC: J04121915.D\data.ms

(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

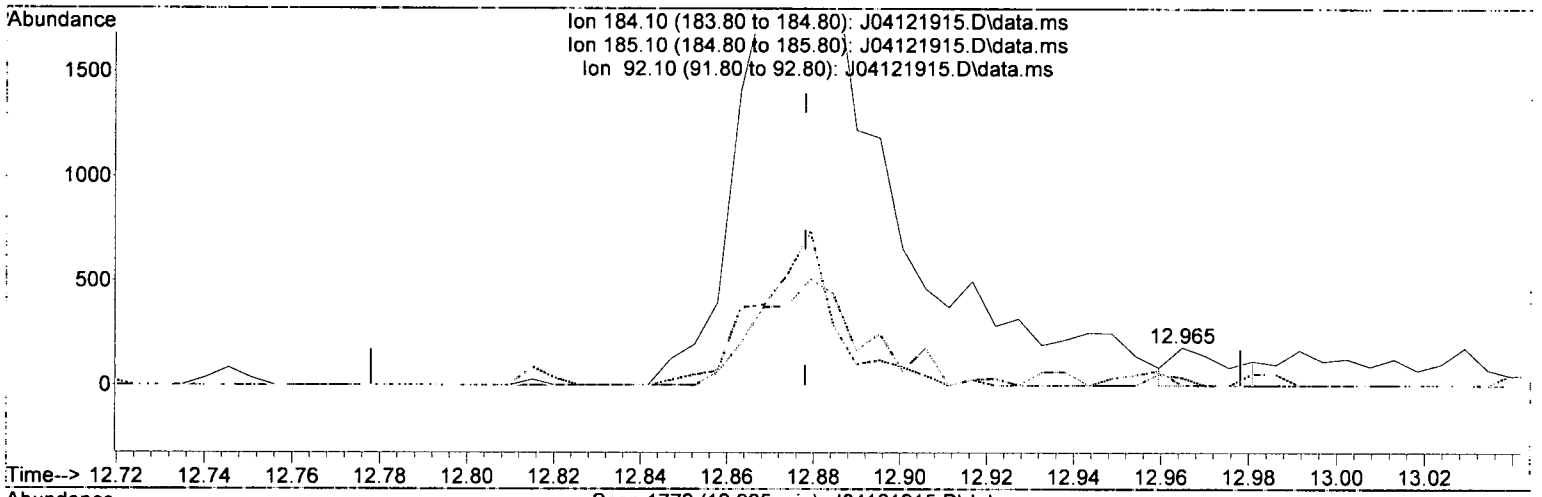


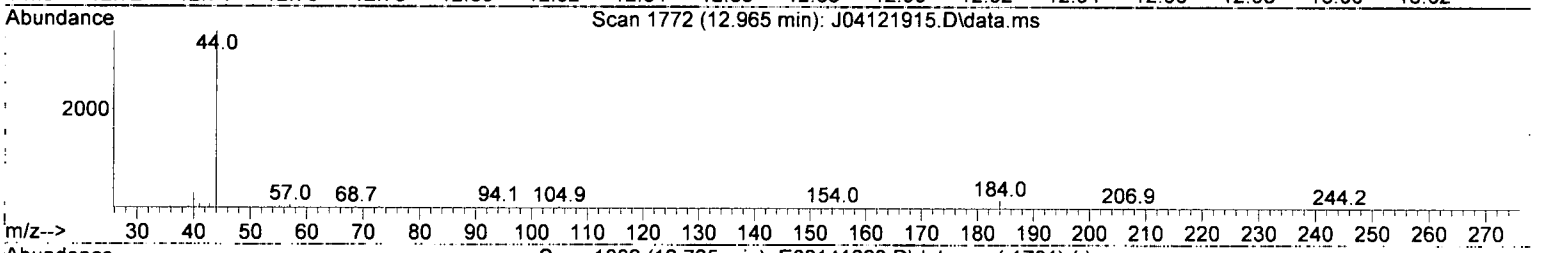
R = 9.30e-003 A*A + 4.09e-001 A - 1.64e-002
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

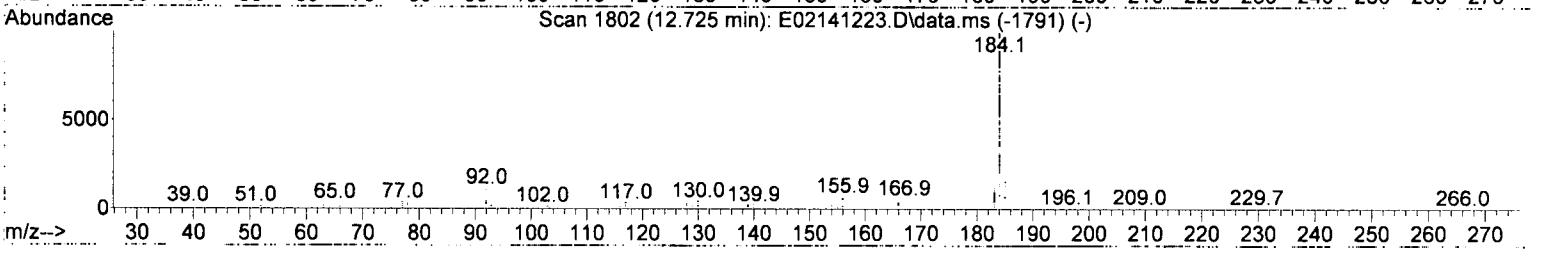
Quantitation Report (Qedit)

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







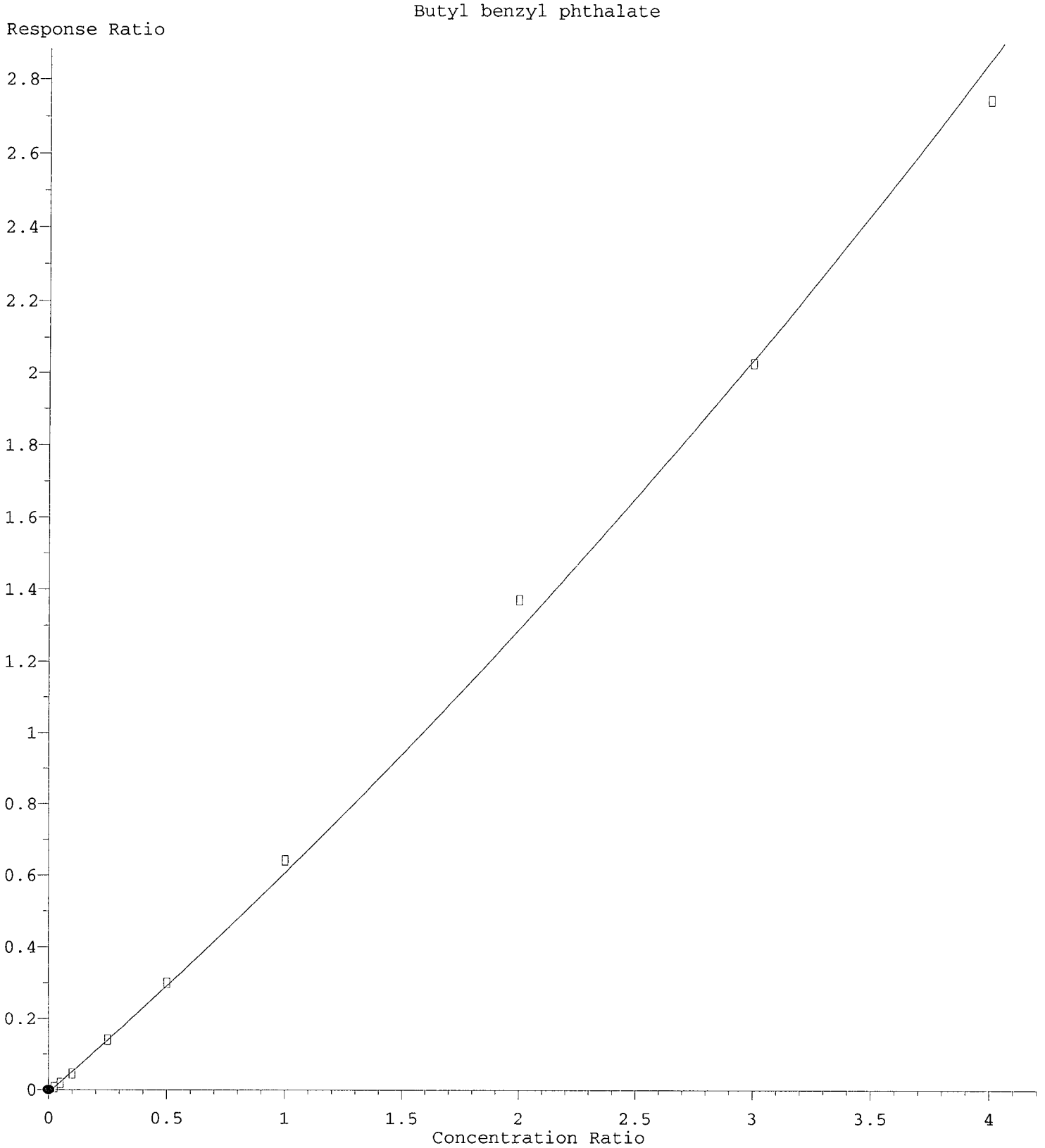
TIC: J04121915.D\data.ms

(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

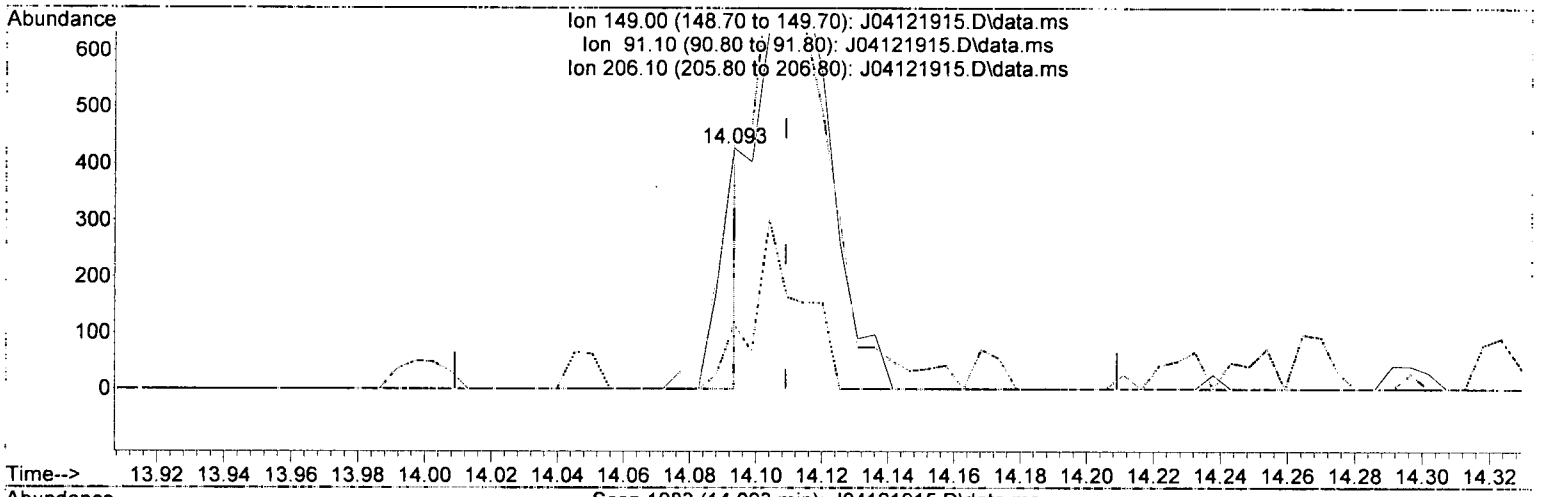


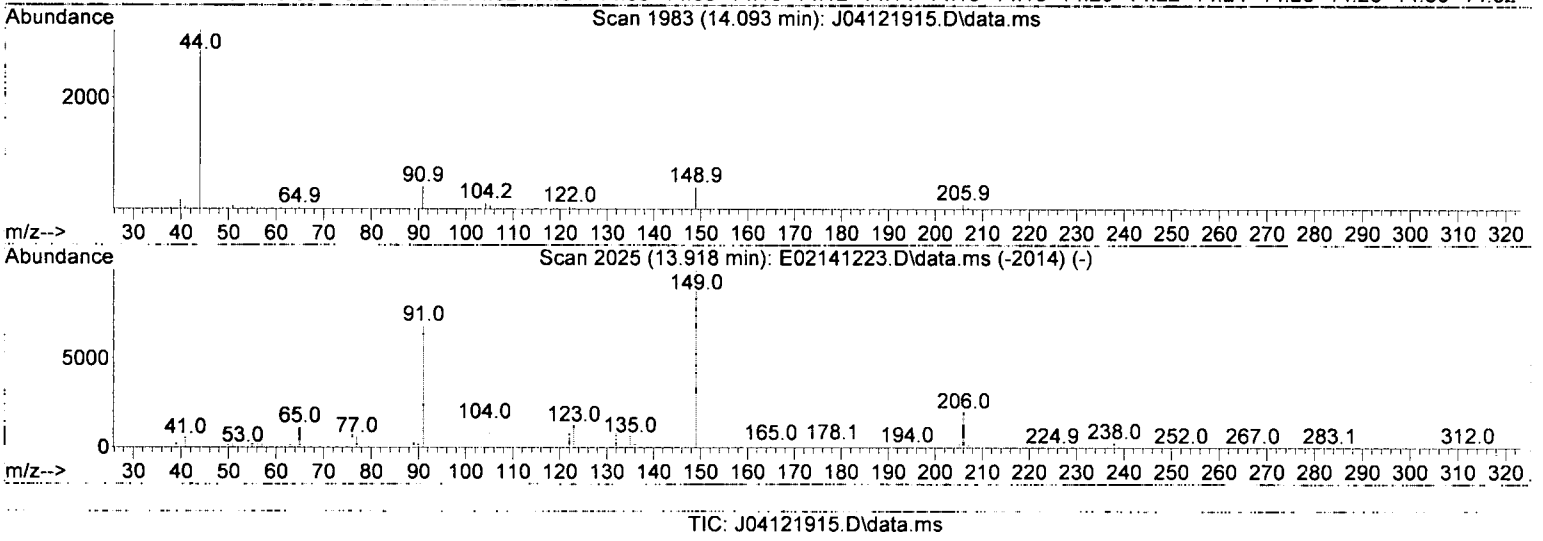
R = 3.32e-002 A*A + 5.83e-001 A - 8.53e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





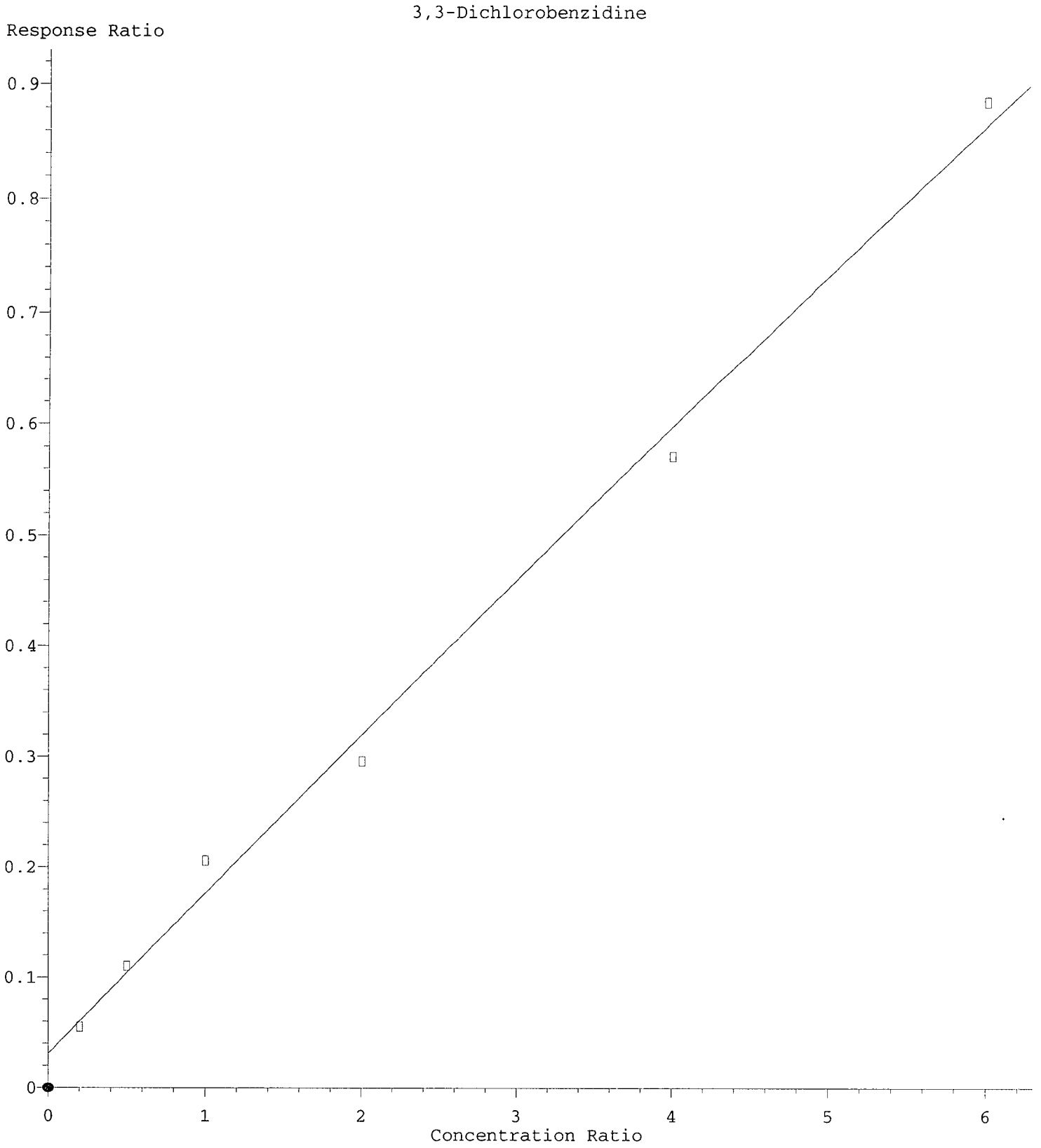
TIC: J04121915.D\data.ms

(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

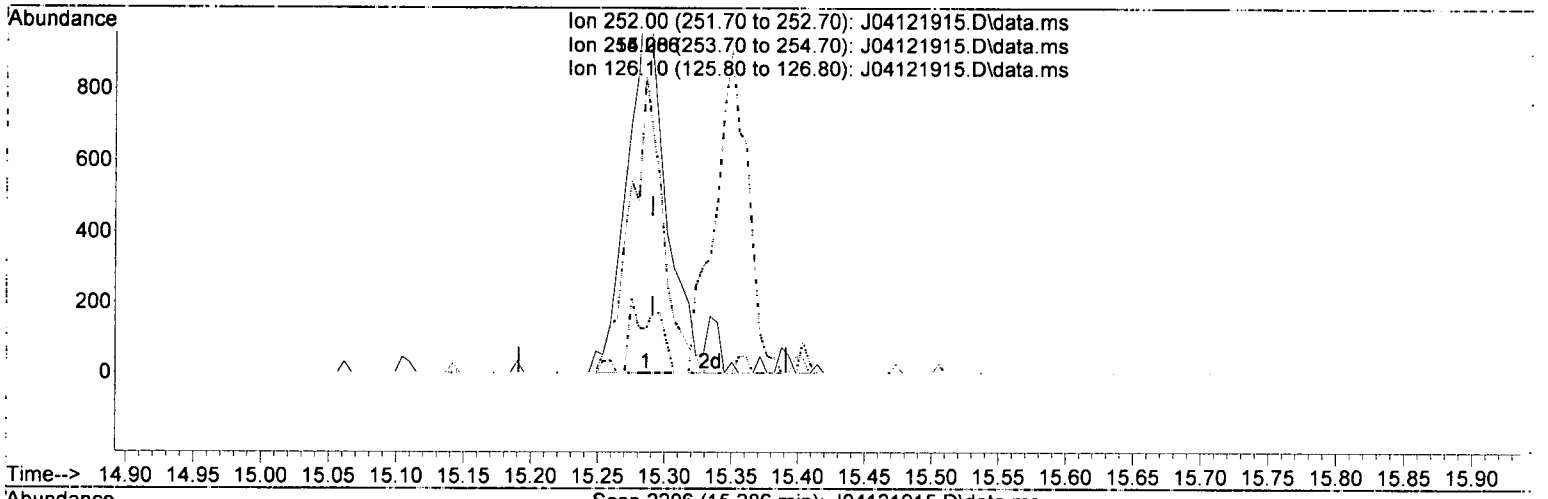


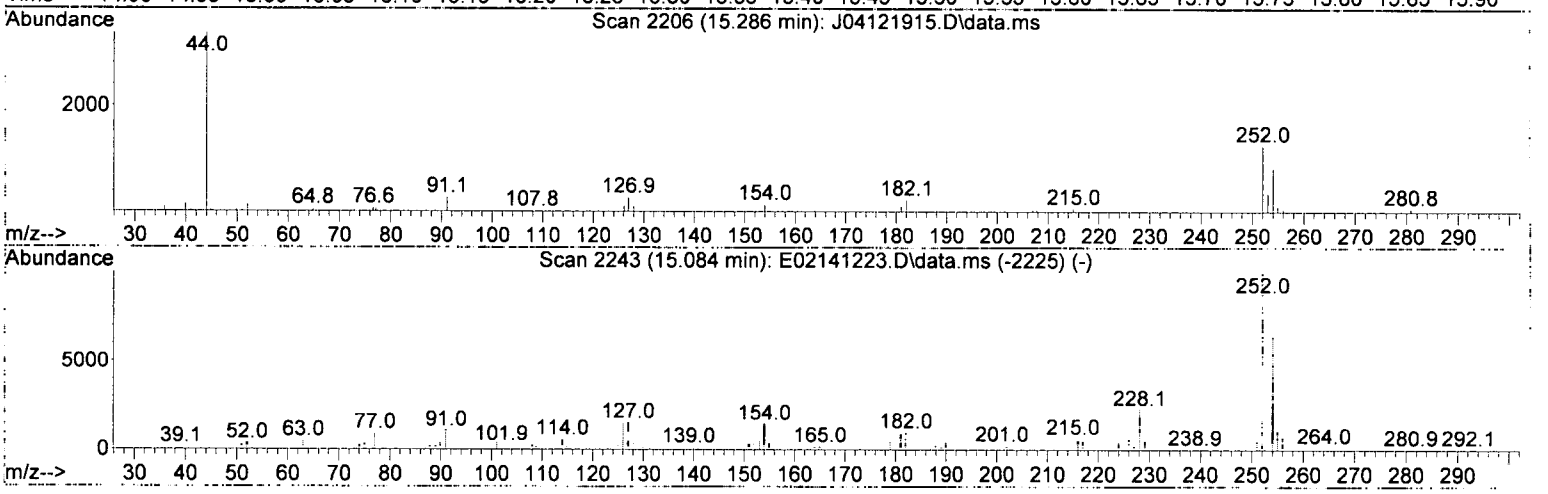
R = -1.36e-003 A*A + 1.47e-001 A + 3.08e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





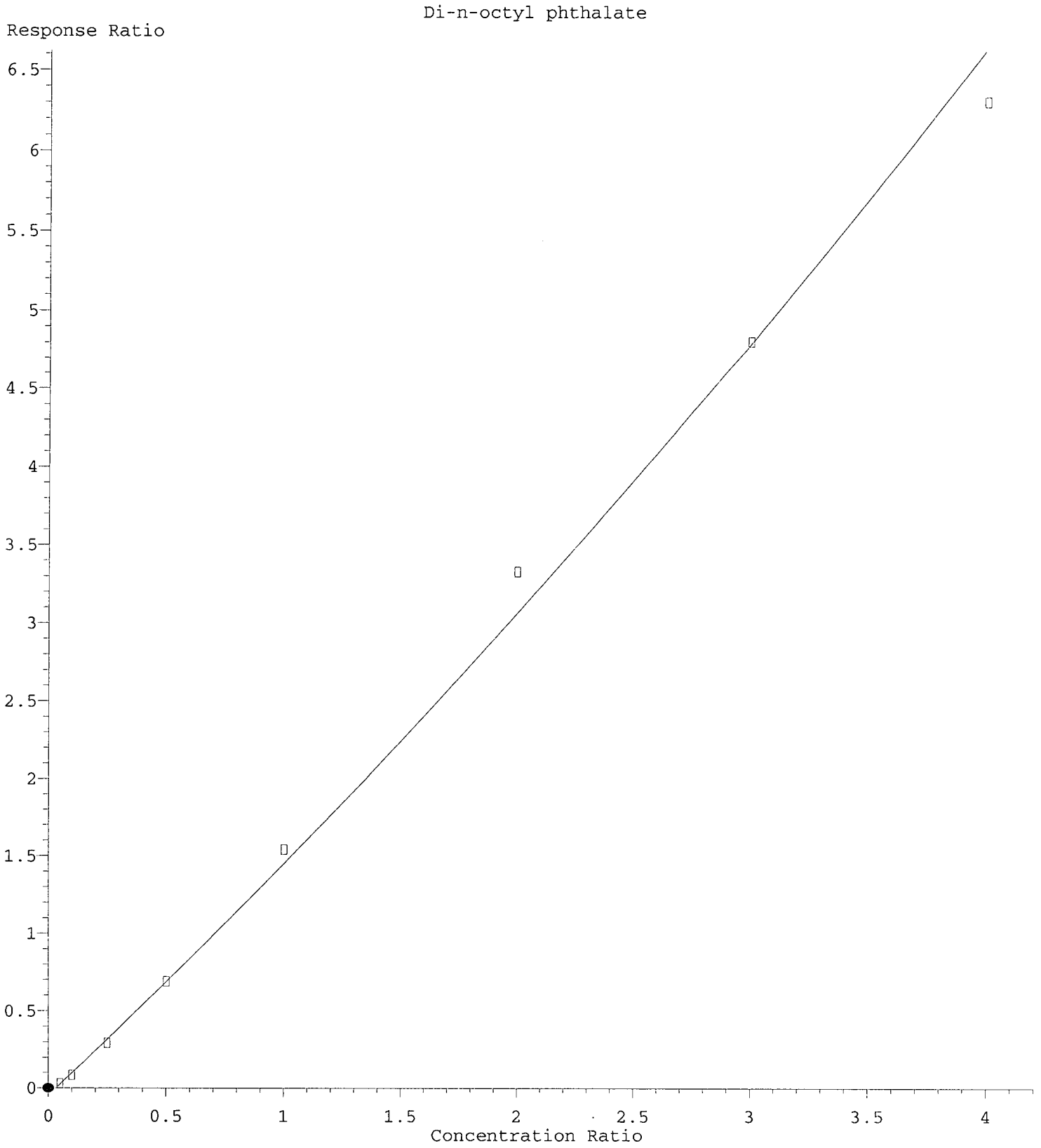
TIC: J04121915.D\data.ms

(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

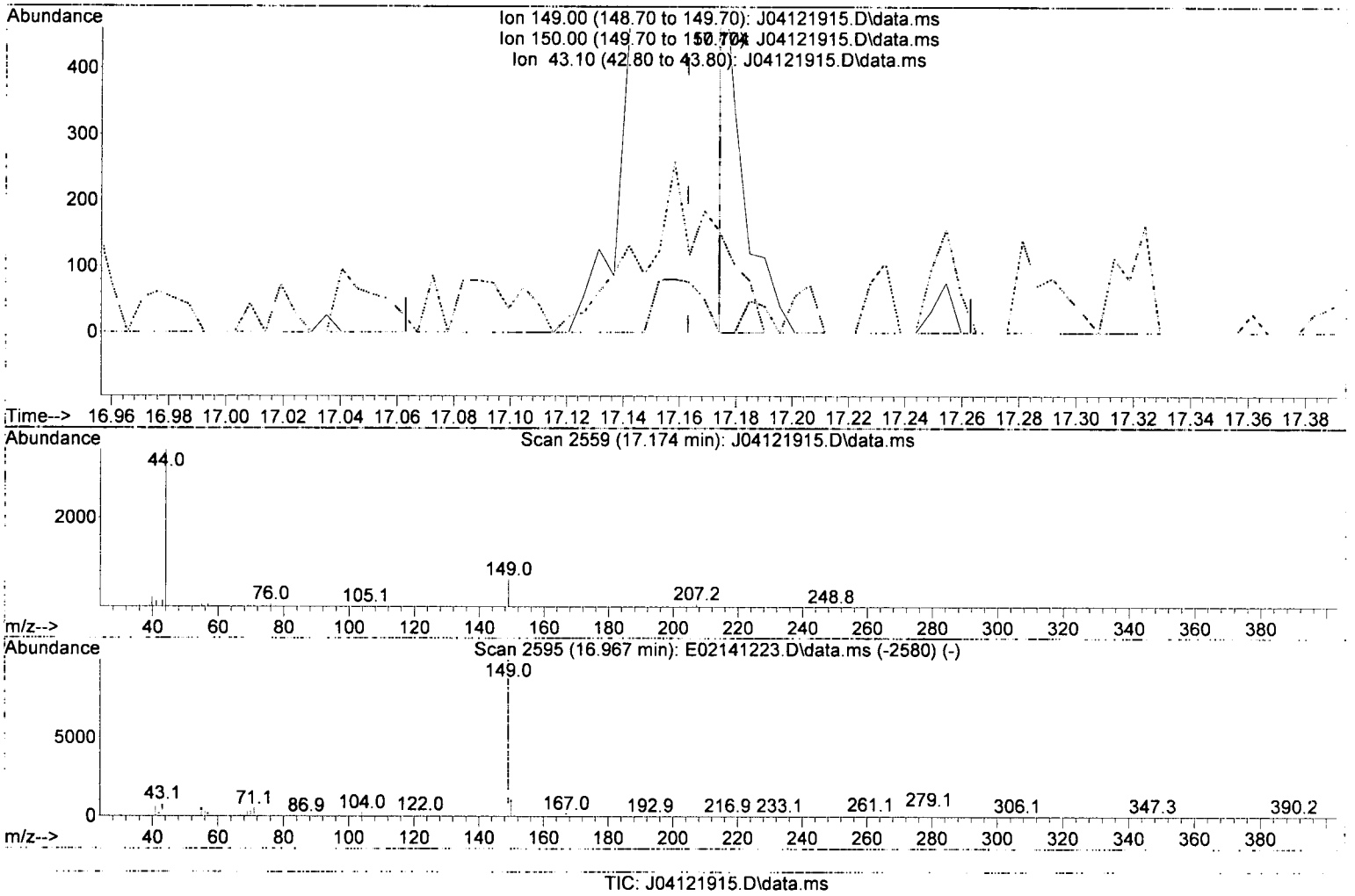


R = 5.80e-002 A*A + 1.44e+000 A - 4.78e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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

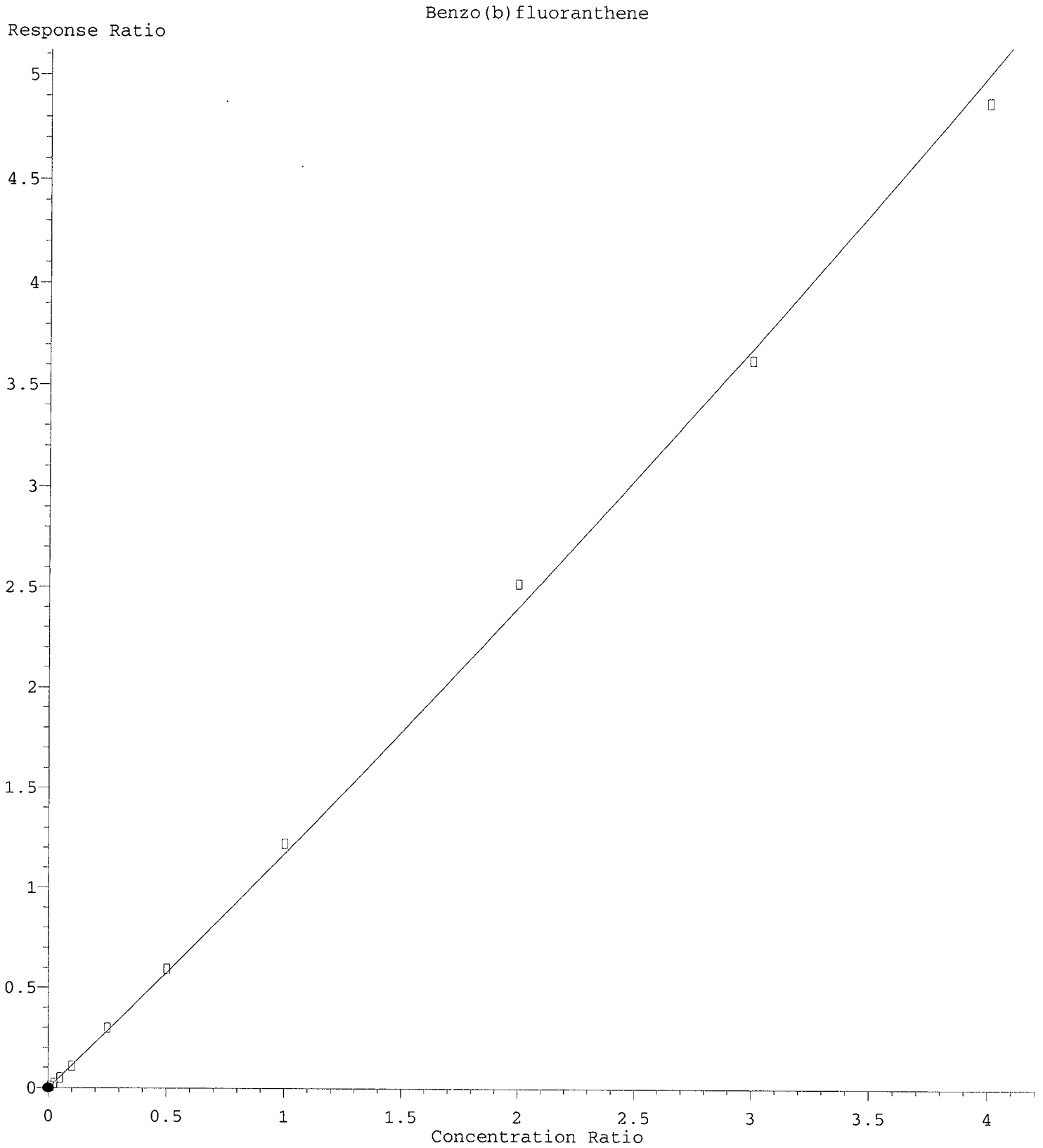


(87) Di-n-octyl phthalate (T)

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

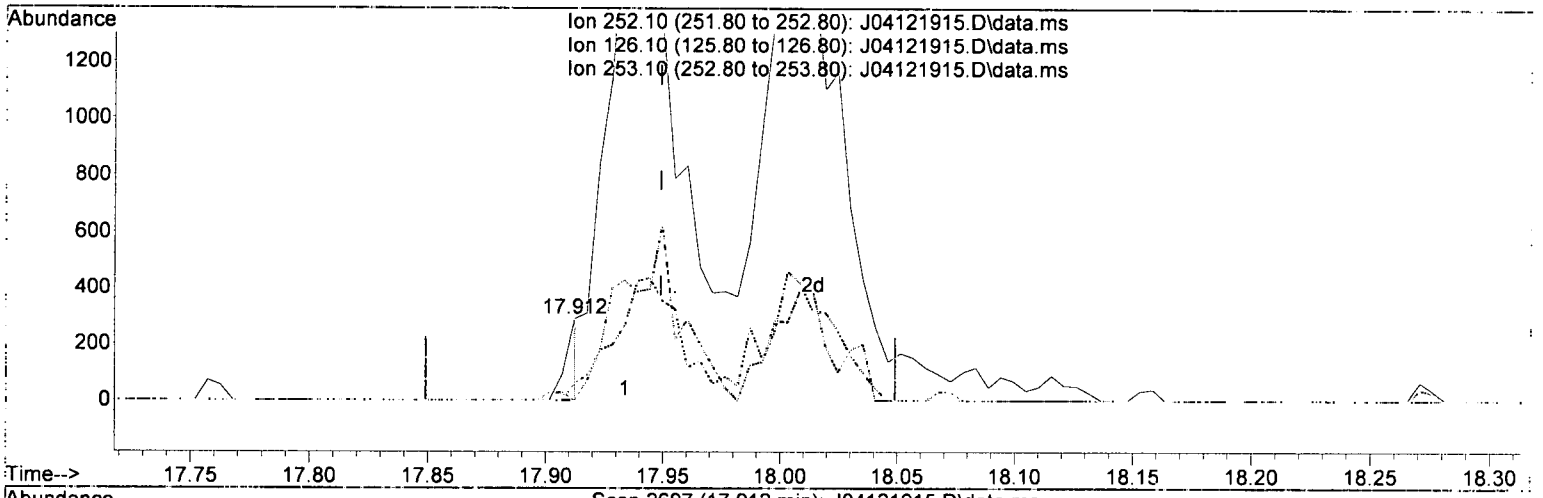


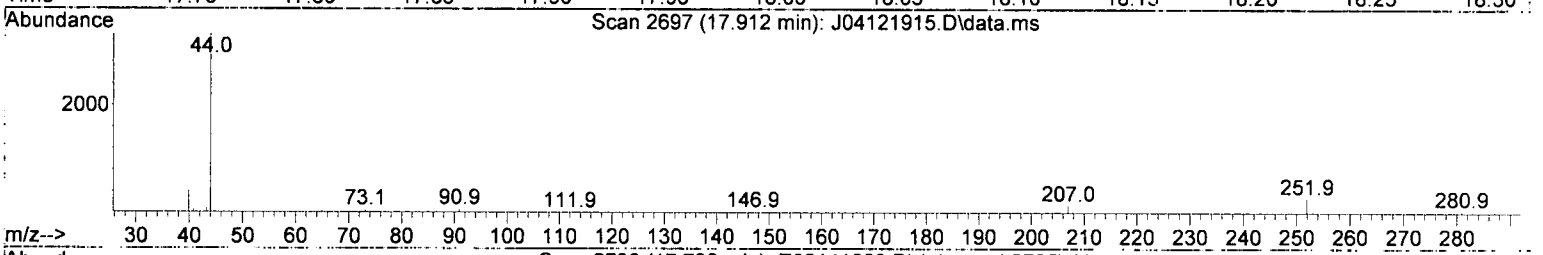
R = 2.59e-002 A*A + 1.15e+000 A - 5.10e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

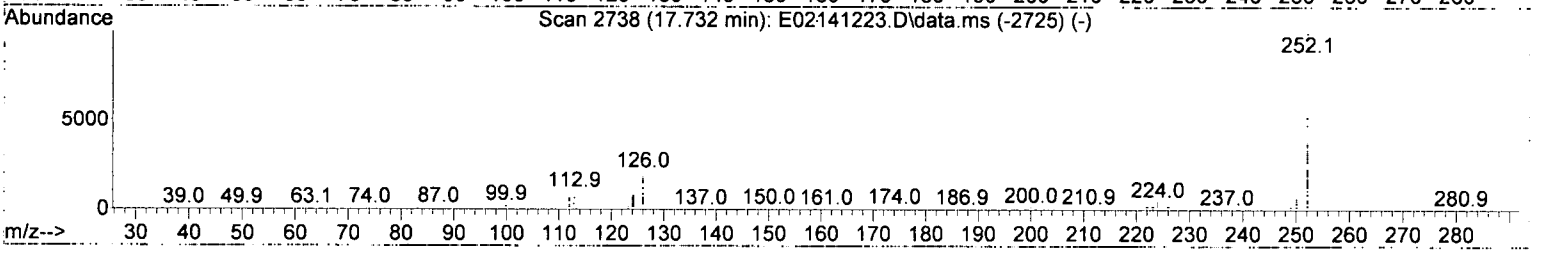
Quantitation Report (Qedit)

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







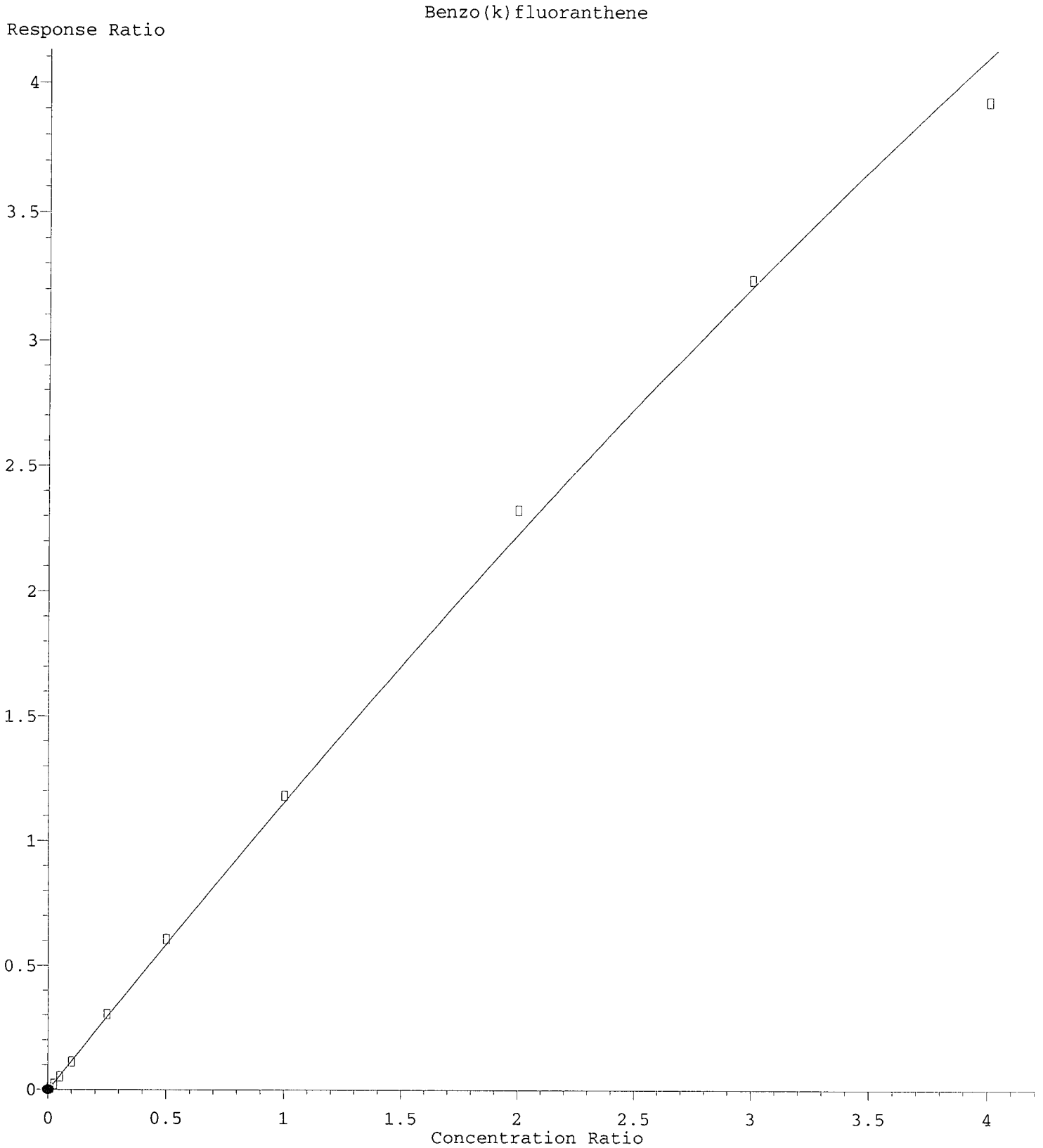
TIC: J04121915.D\data.ms

(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

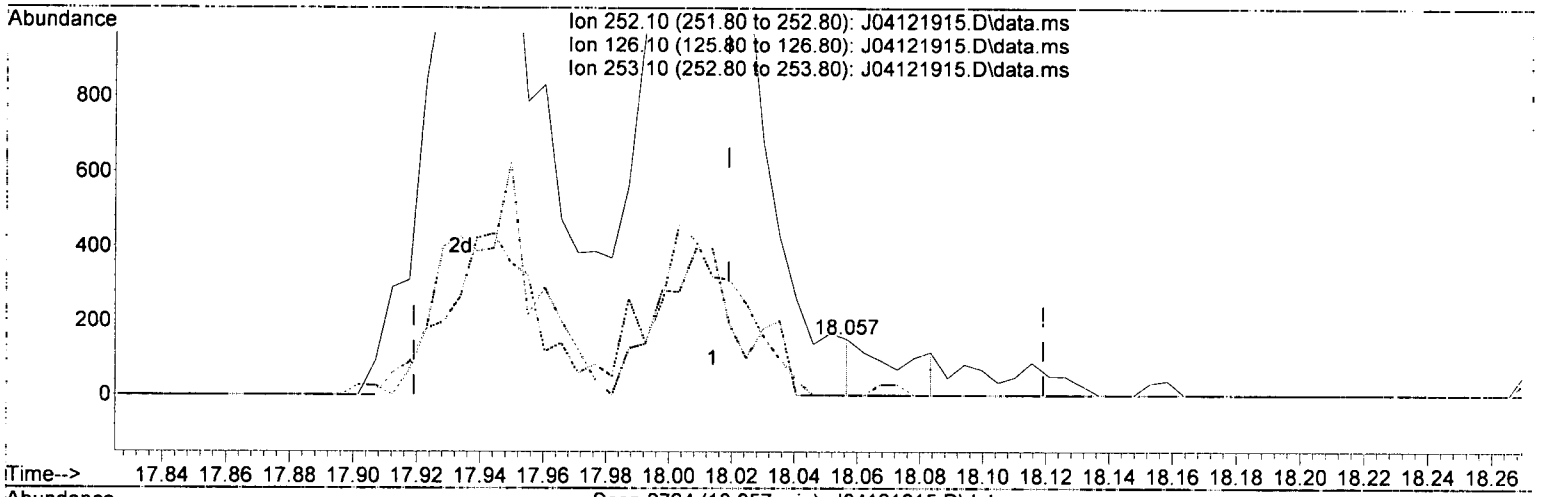


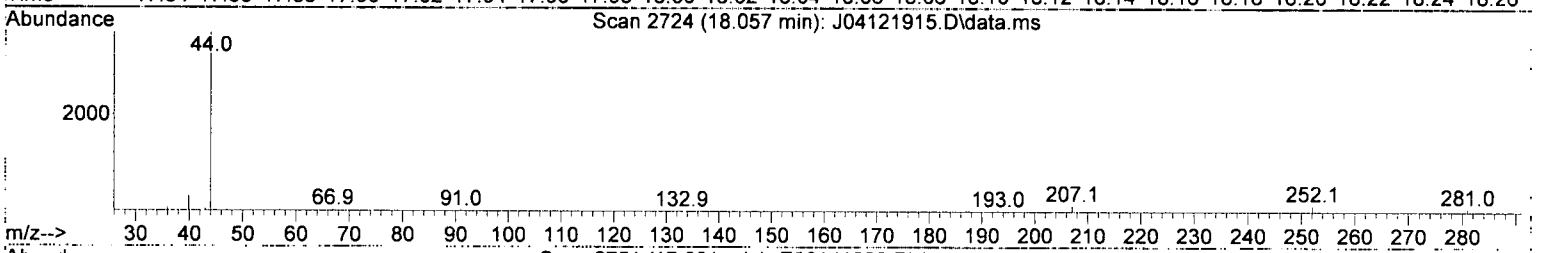
R = -4.47e-002 A*A + 1.21e+000 A - 6.28e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

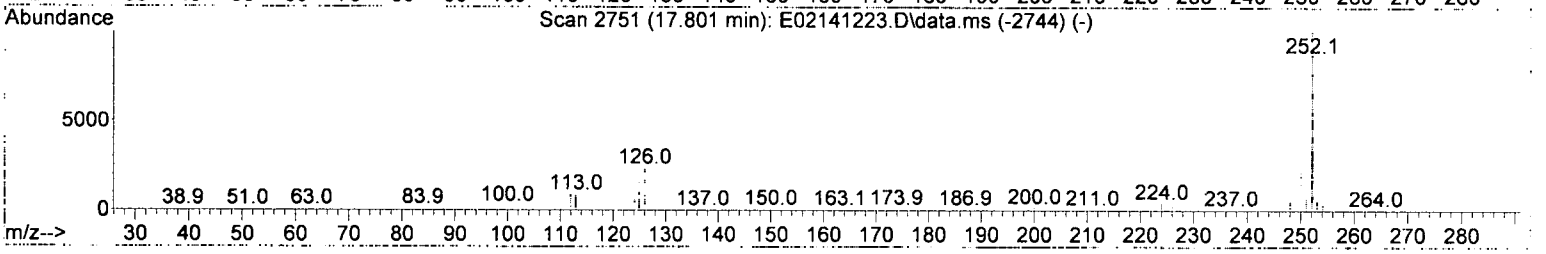
Quantitation Report (Qedit)

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







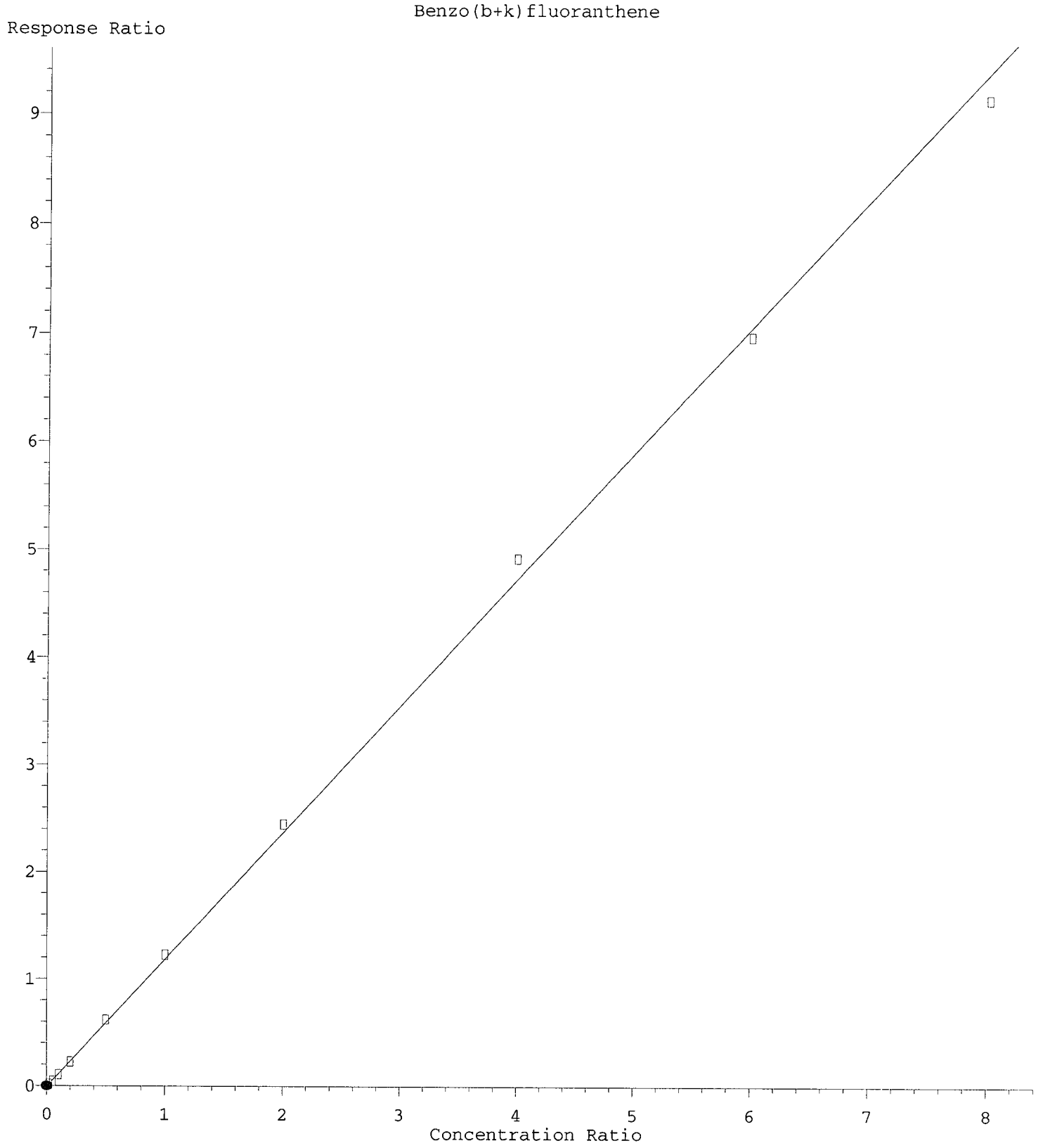
TIC: J04121915.D\data.ms

(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

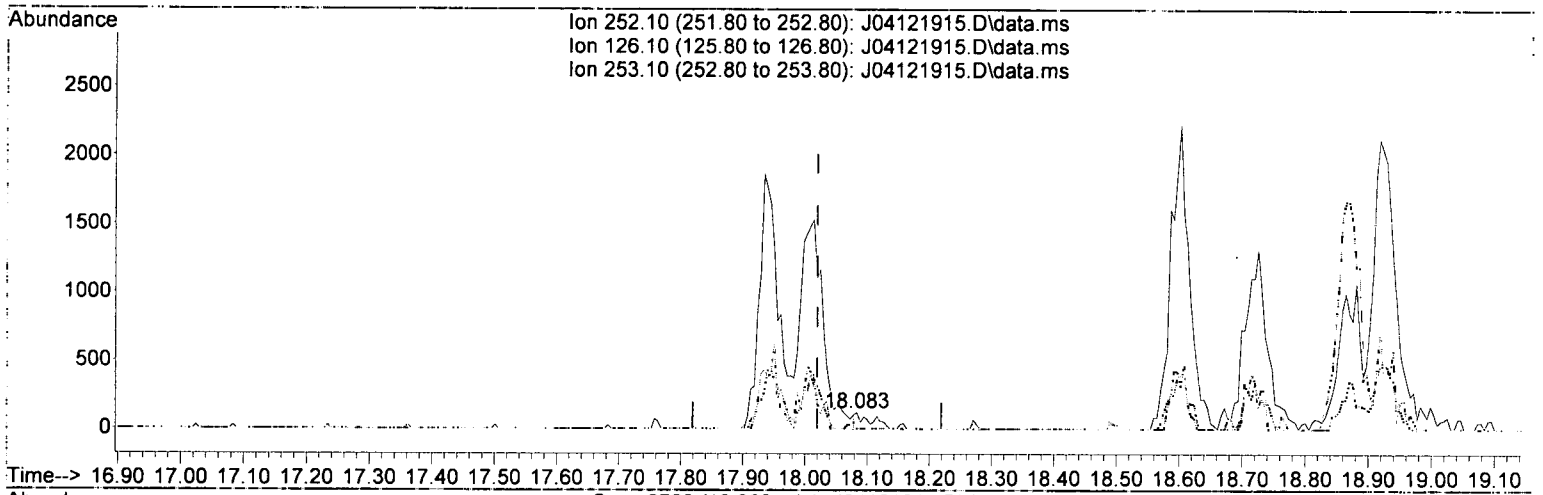


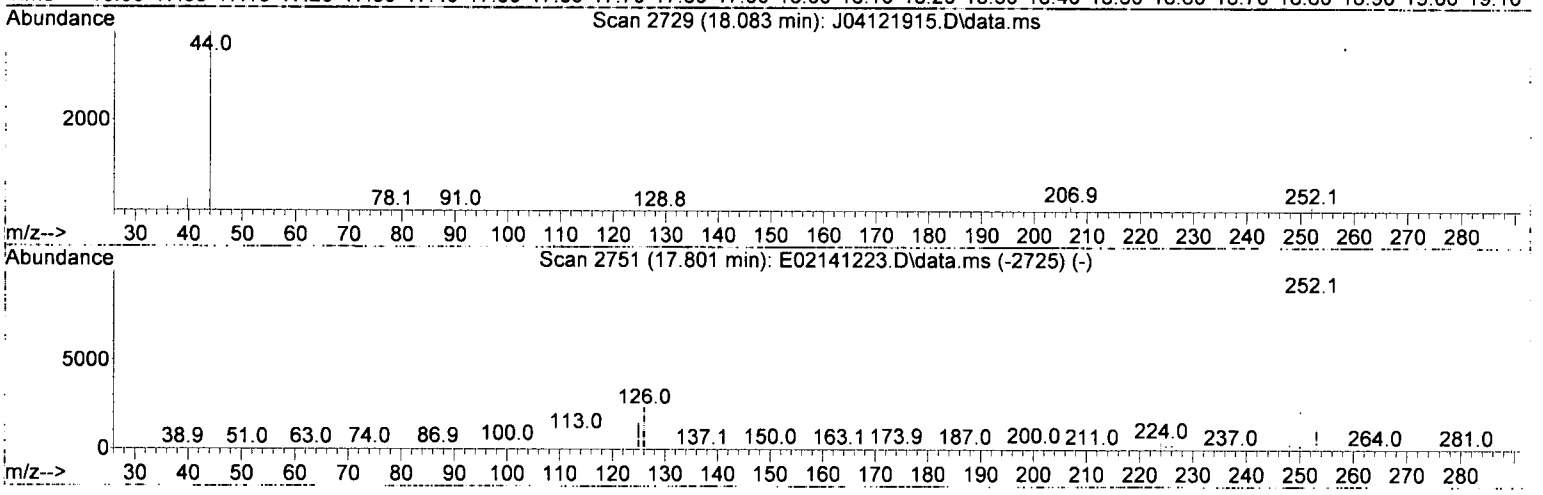
R = -2.85e-003 A*A + 1.20e+000 A - 1.02e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\5V10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

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





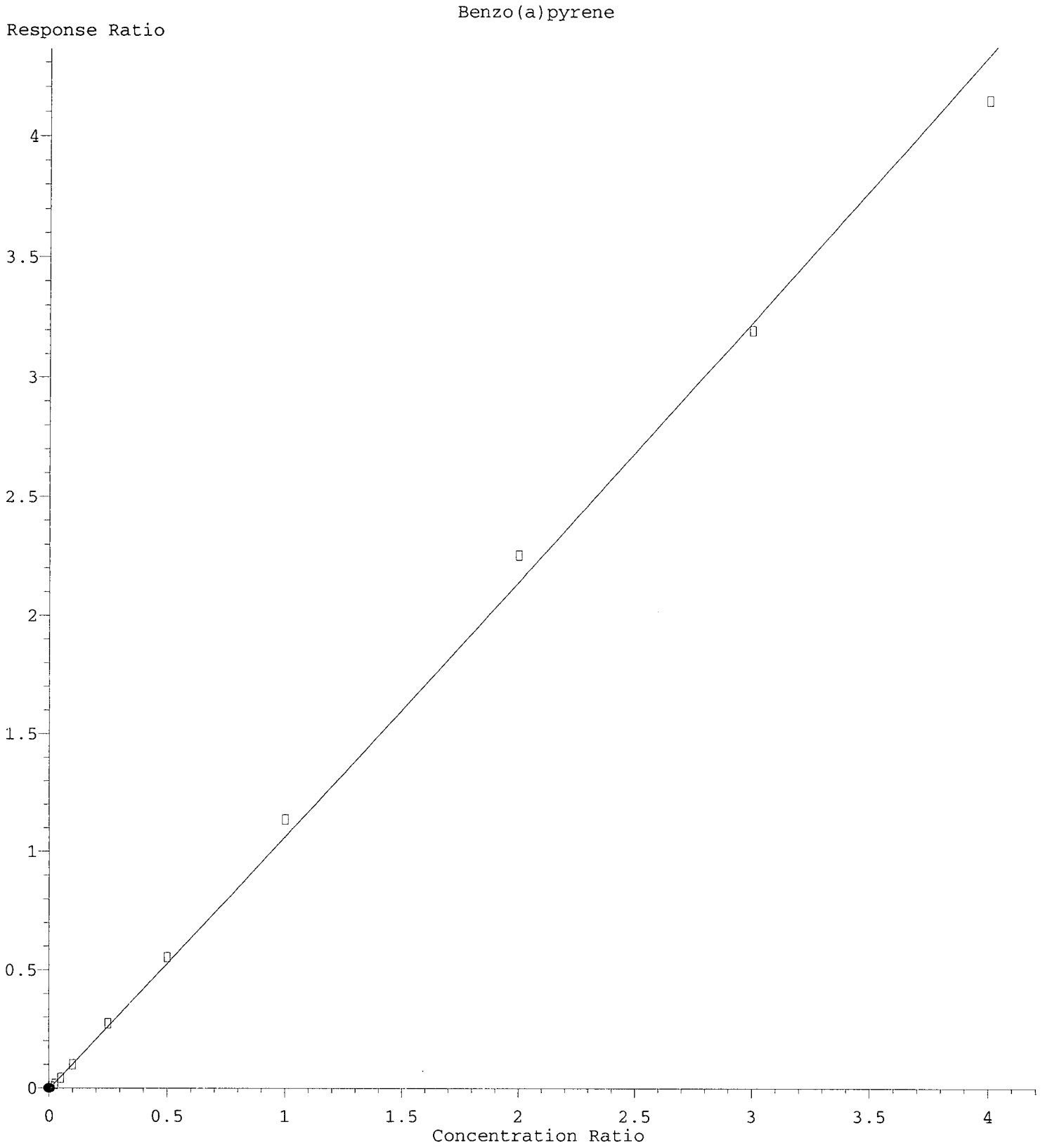
TIC: J04121915.D\data.ms

(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

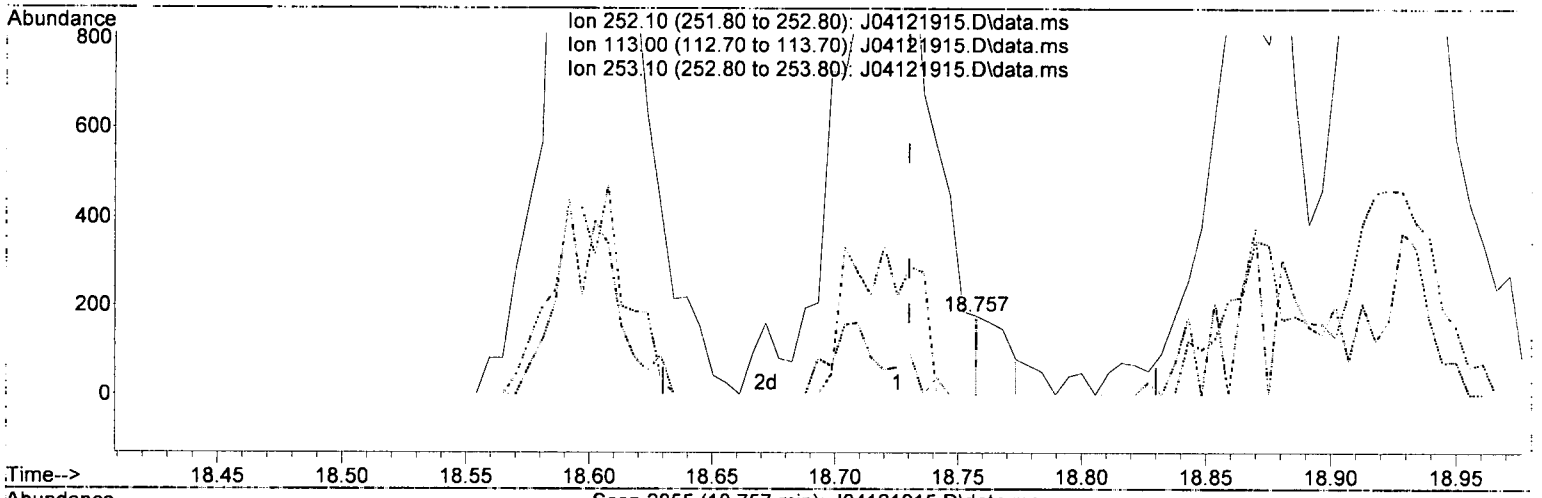


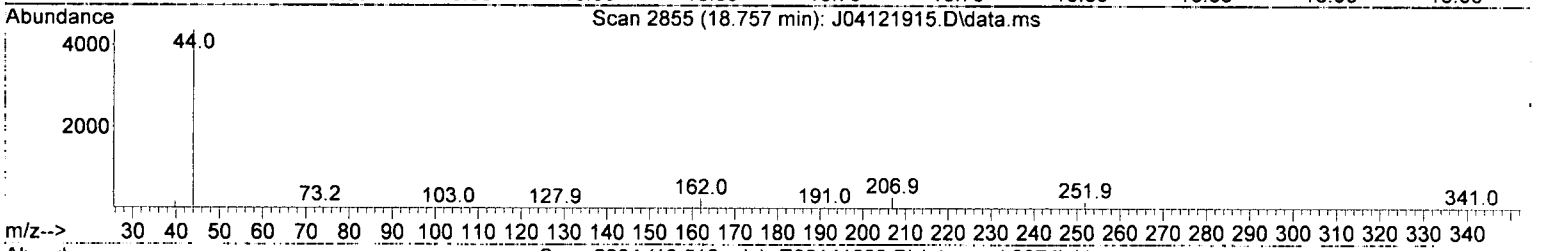
R = 5.46e-003 A*A + 1.06e+000 A - 5.54e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_041219.M
Calibration Table Last Updated: Mon Apr 15 09:41:18 2019

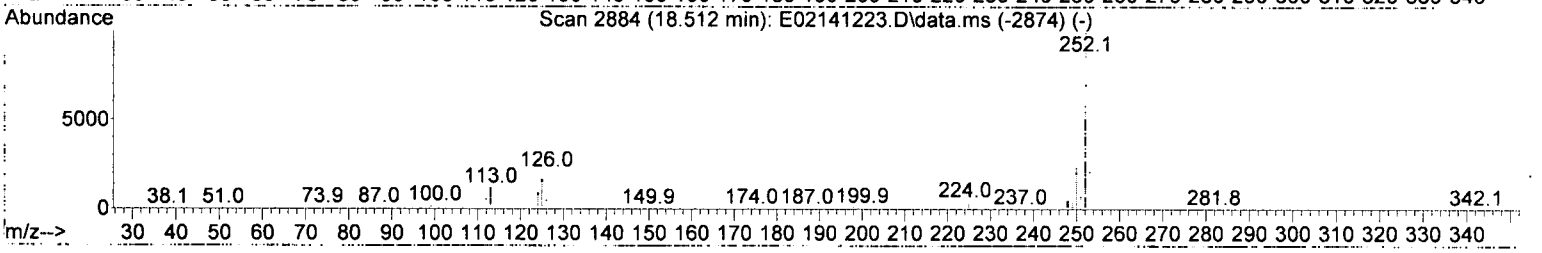
Quantitation Report (Qedit)

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

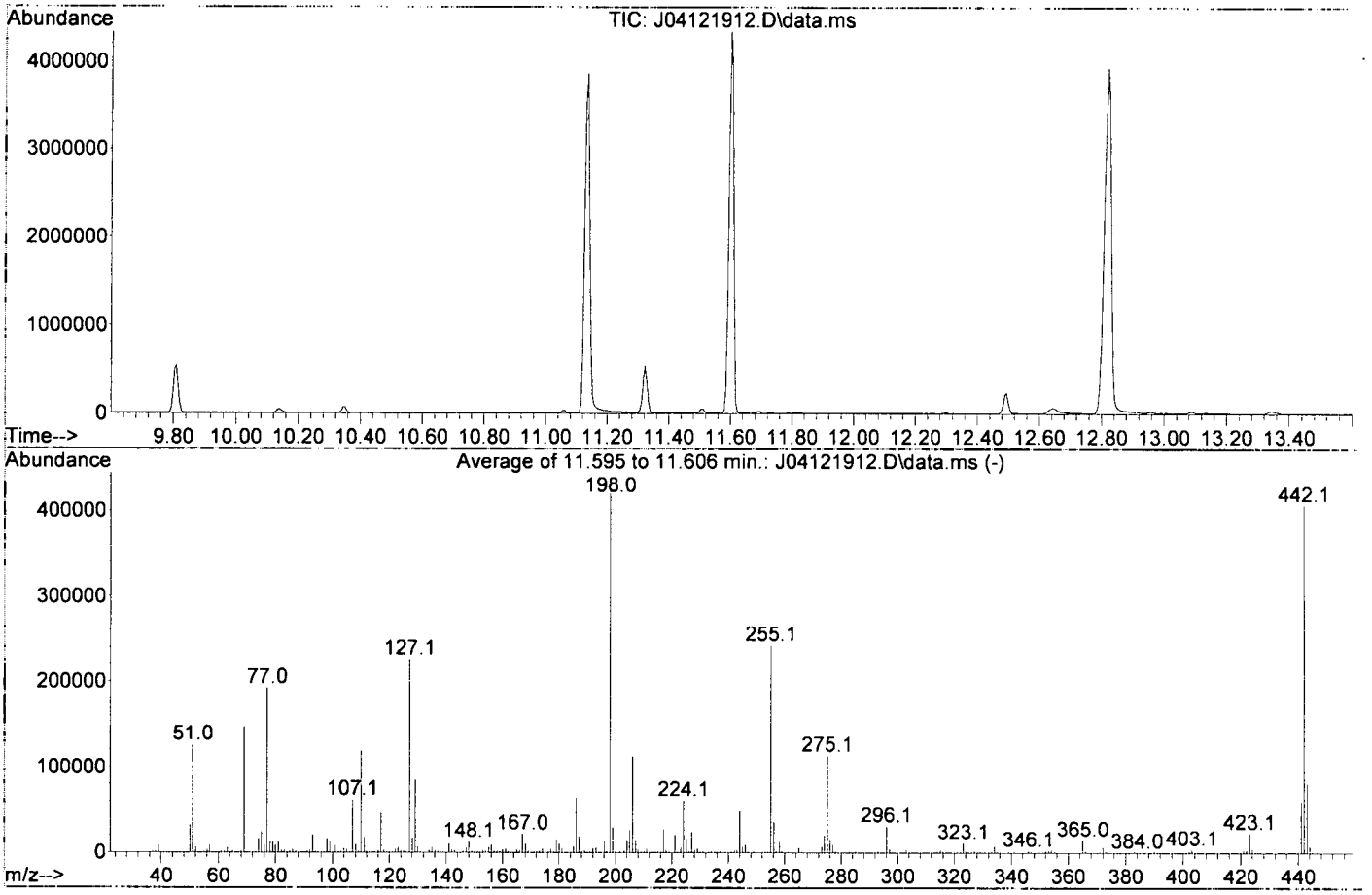
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.749	150	105364	2.00	ug/mL		0.00
2) Naphthalene-d8	8.022	136	259999	2.00	ug/mL		0.00
3) Acenaphthene-d10	9.809	162	118988	2.00	ug/mL		0.00
5) Phenanthrene-d10	11.323	188	190047	2.00	ug/mL		0.00
11) Chrysene-d12	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

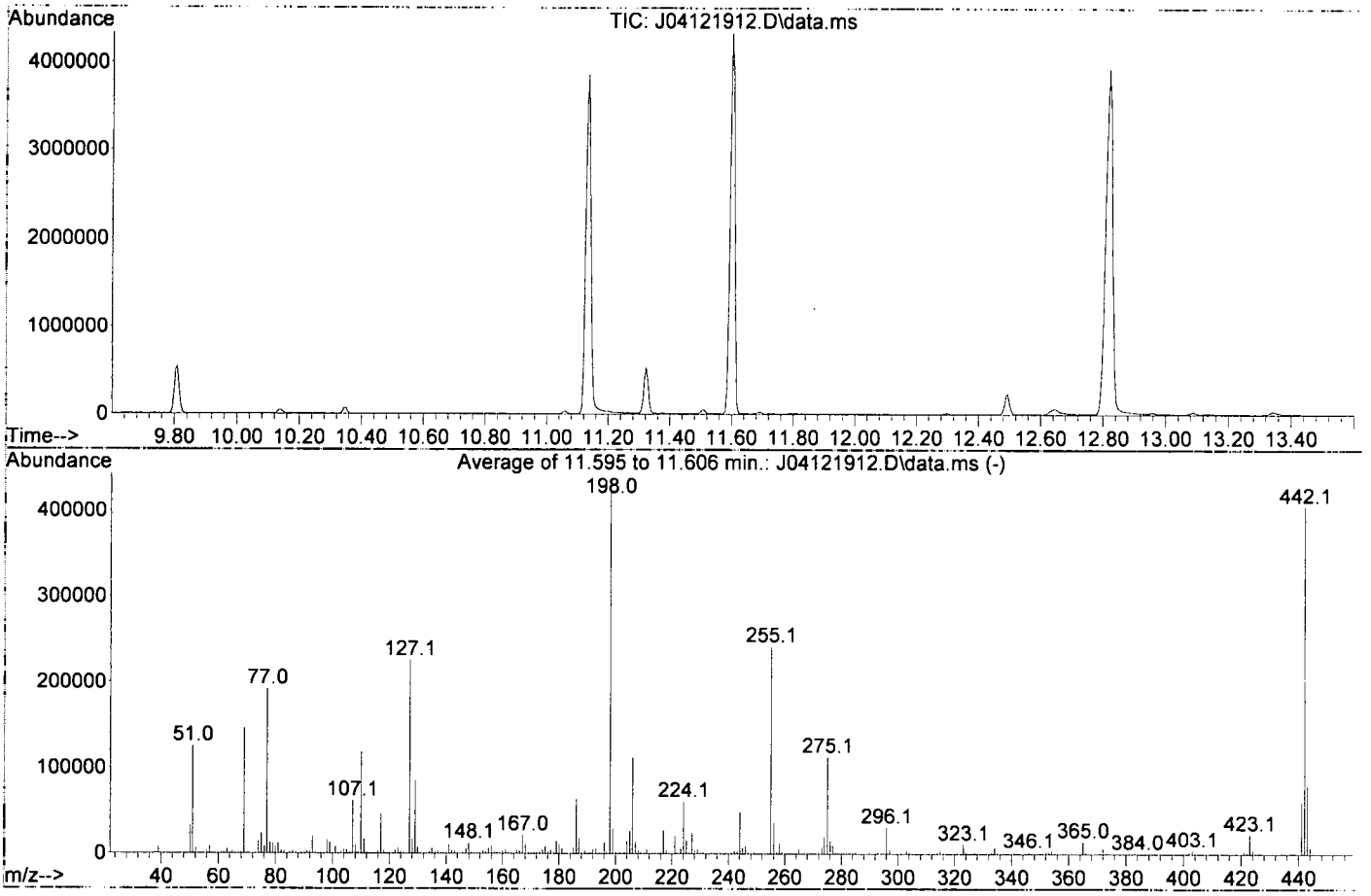
4/15/19

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

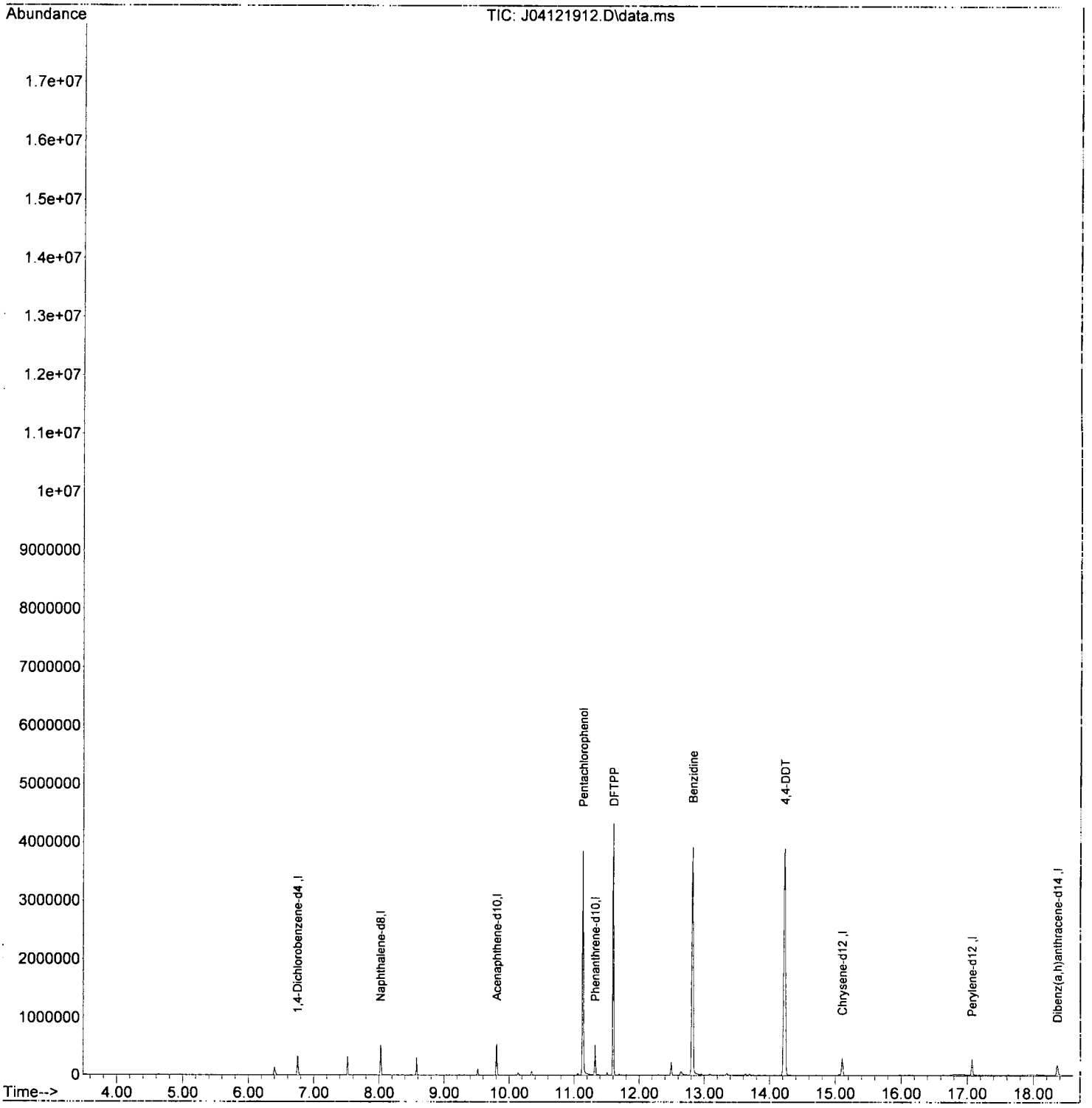
T-01

JK 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

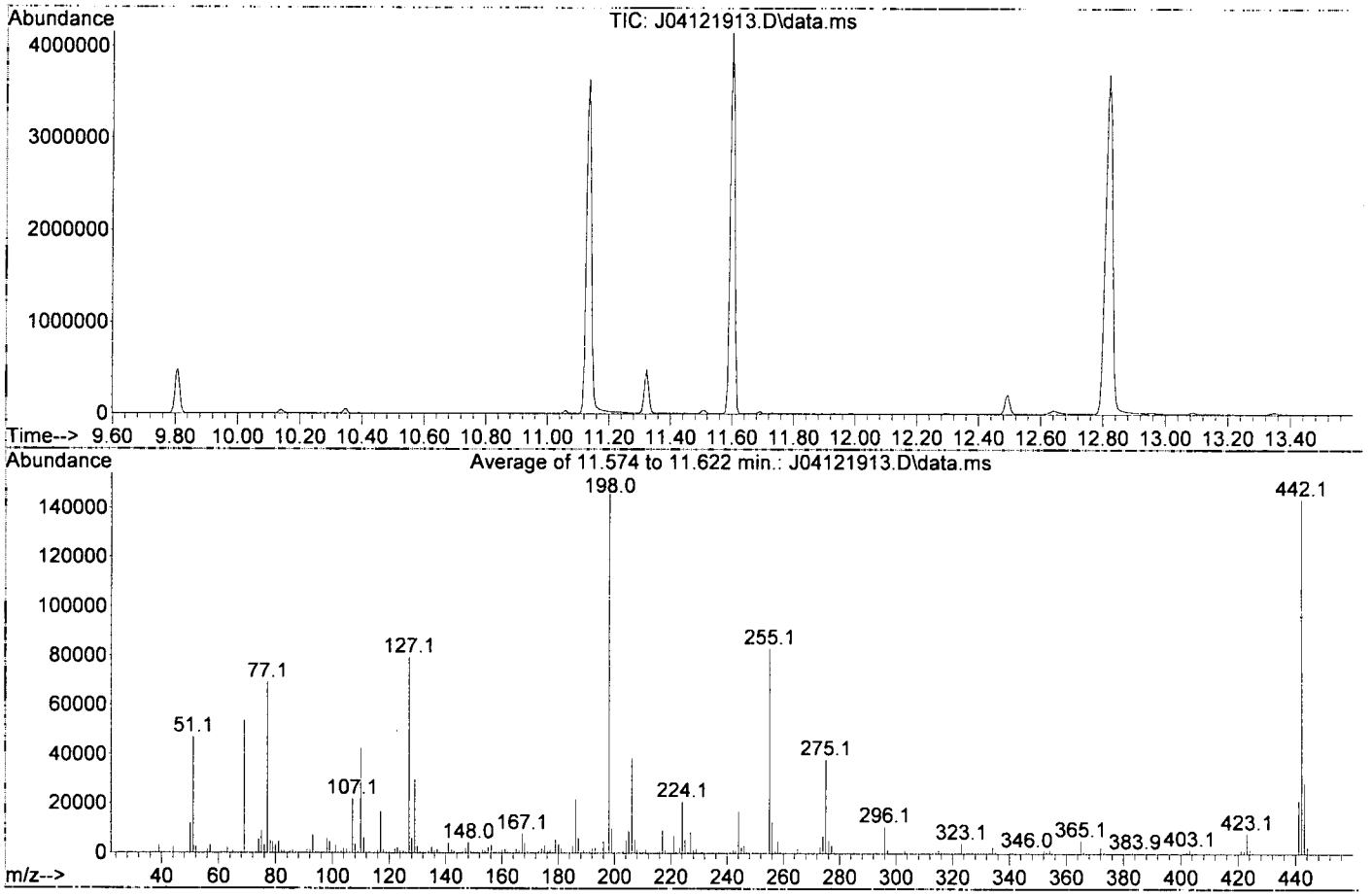
DFTPP

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.

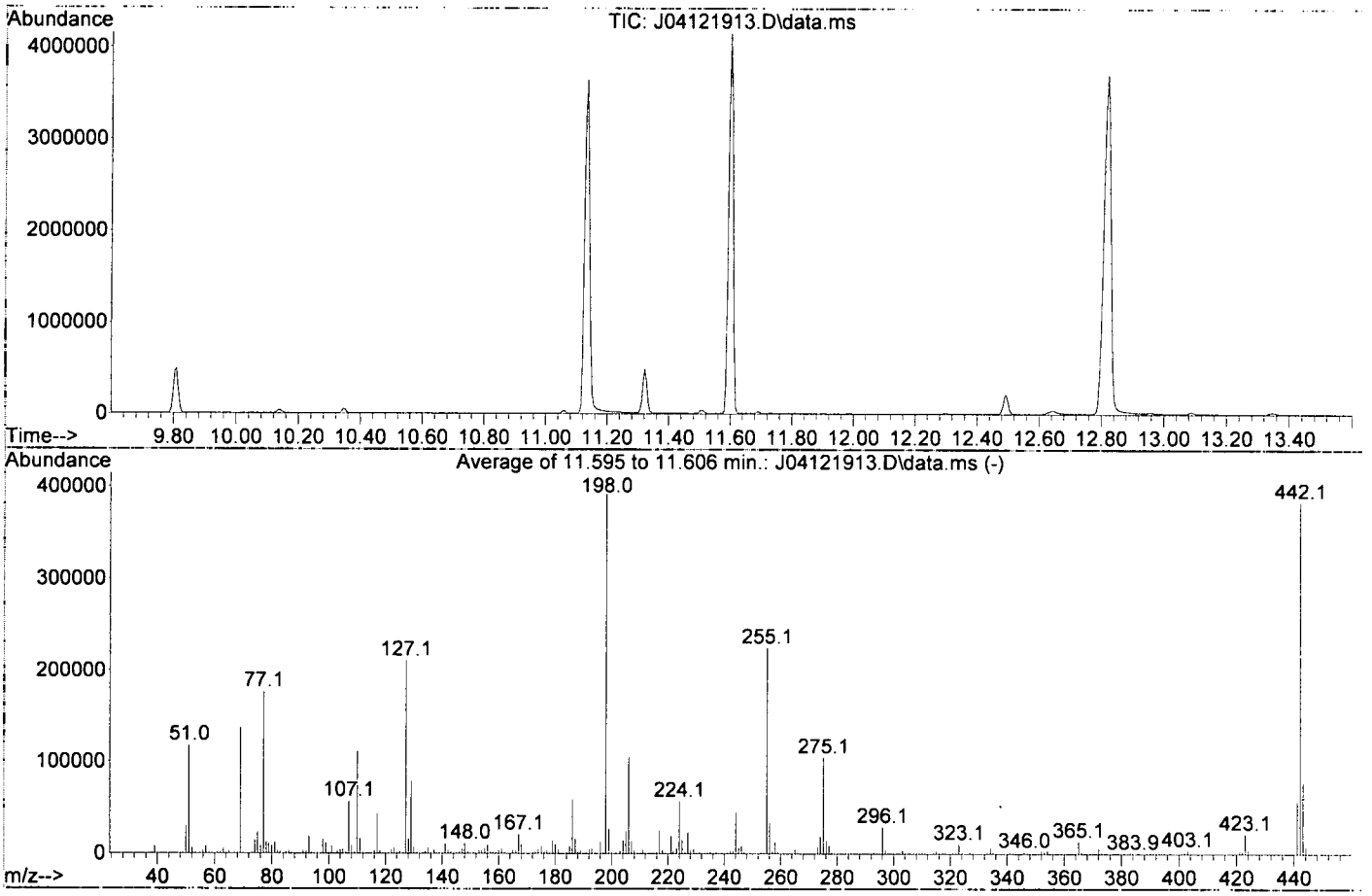
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.1	47075	PASS
68	69	0.00	2	1.4	739	PASS
69	198	0.00	100	36.8	53963	PASS
70	69	0.00	2	0.6	303	PASS
127	198	40	60	54.1	79320	PASS
197	198	0.00	1	0.3	412	PASS
198	198	100	100	100.0	146603	PASS
199	198	5	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



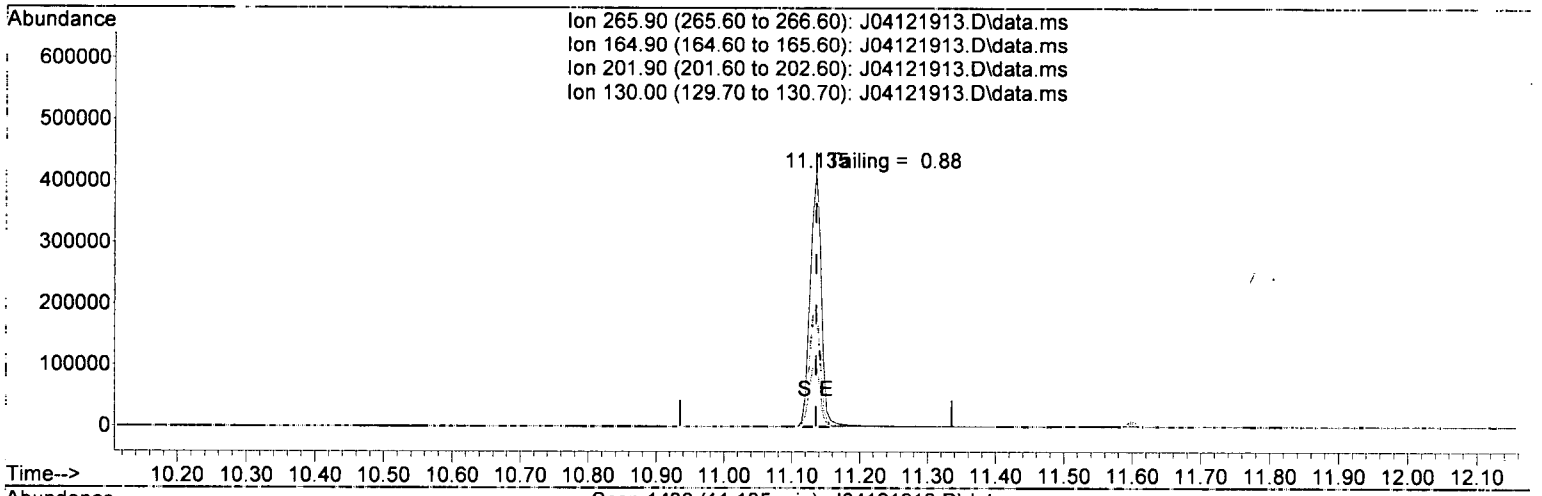
AutoFind: Scans 1516, 1517, 1518; Background Corrected with Scan 1511

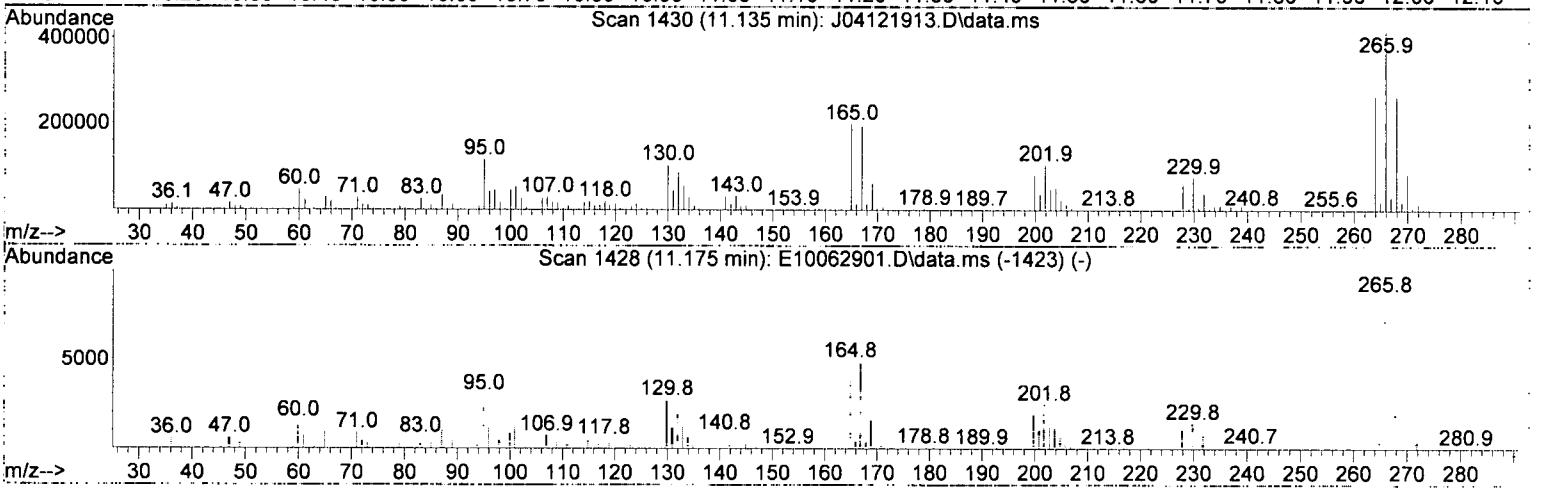
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	29.9	117992	PASS
68	69	0.00	2	1.4	1916	PASS
69	198	0.00	100	34.8	137277	PASS
70	69	0.00	2	0.5	700	PASS
127	198	10	80	53.5	211115	PASS
197	198	0.00	2	0.3	1356	PASS
198	198	100	100	100.0	394773	PASS
199	198	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

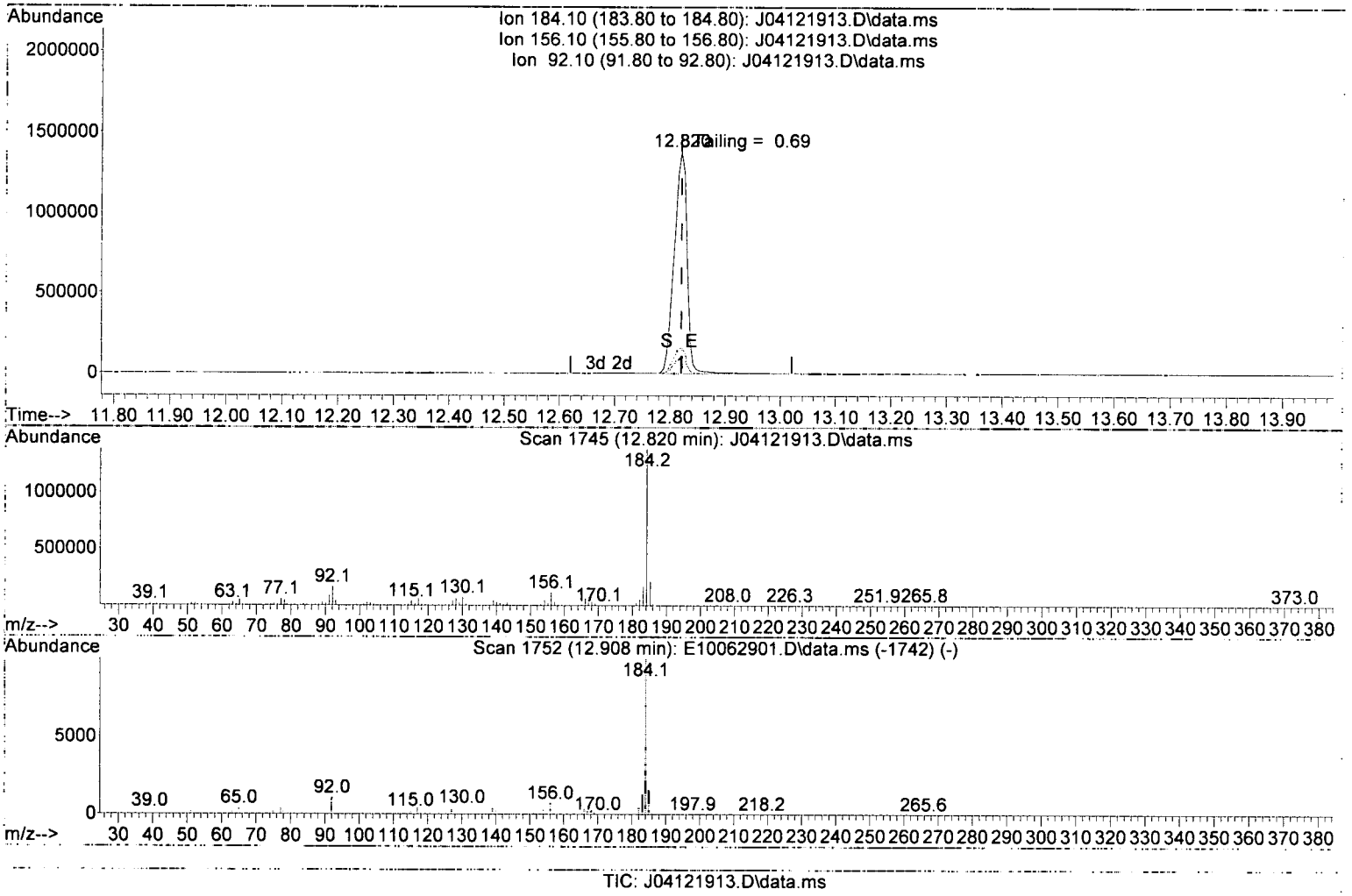
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.80	47.90
201.90	25.10	25.27
130.00	27.20	25.16

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

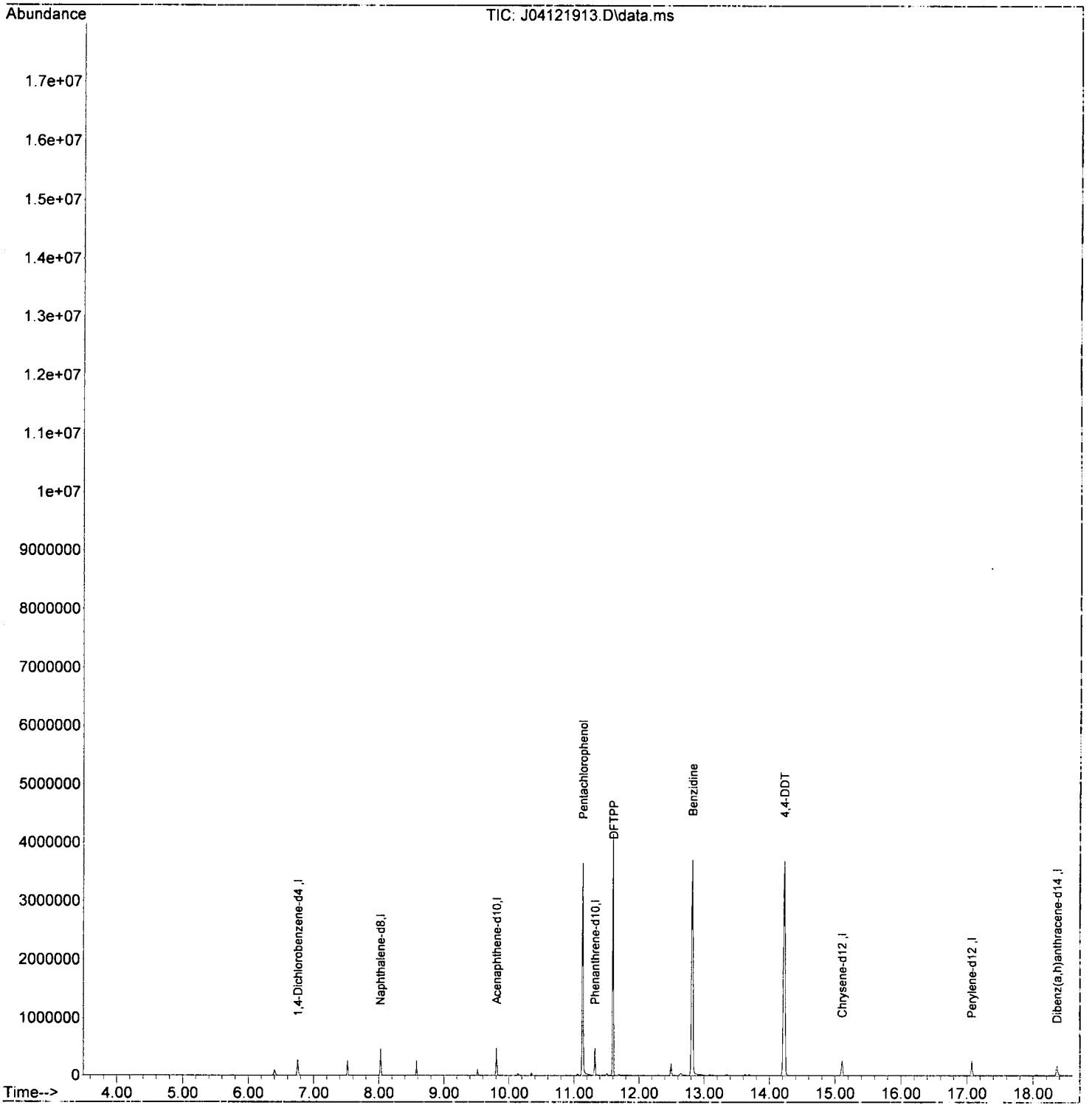
Breakdown must be less than 20% to accept sample data.

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

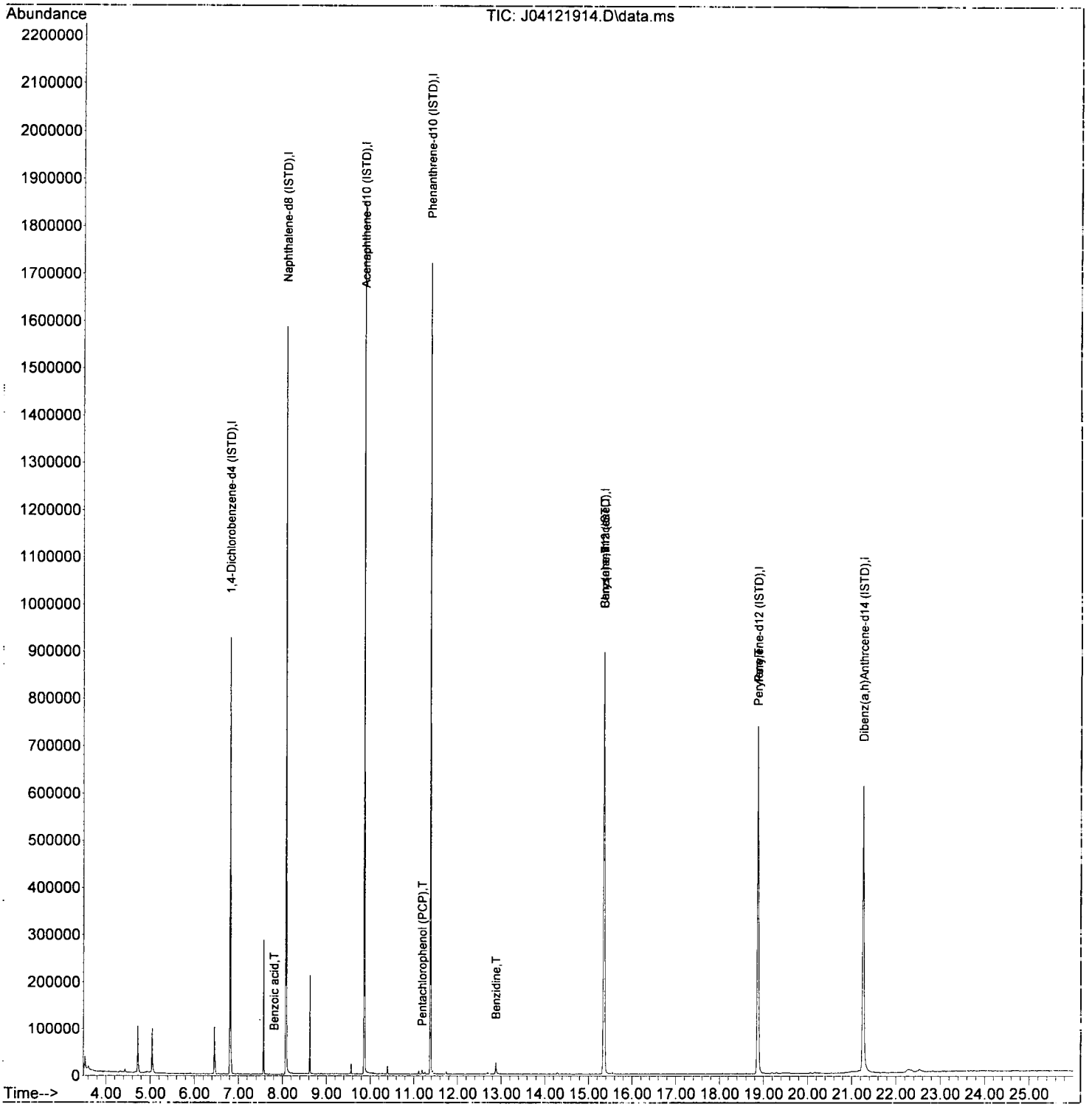
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.		
45) Dimethyl phthalate	0.000		0	N.D.		
46) 1,3-Dinitrobenzene	0.000		0	N.D.		
47) 2,6-Dinitrotoluene	0.000		0	N.D.		
48) 1,2-Dinitrobenzene	0.000		0	N.D.		
49) Acenaphthylene	0.000		0	N.D.		
50) 3-Nitroaniline	0.000		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
JD 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

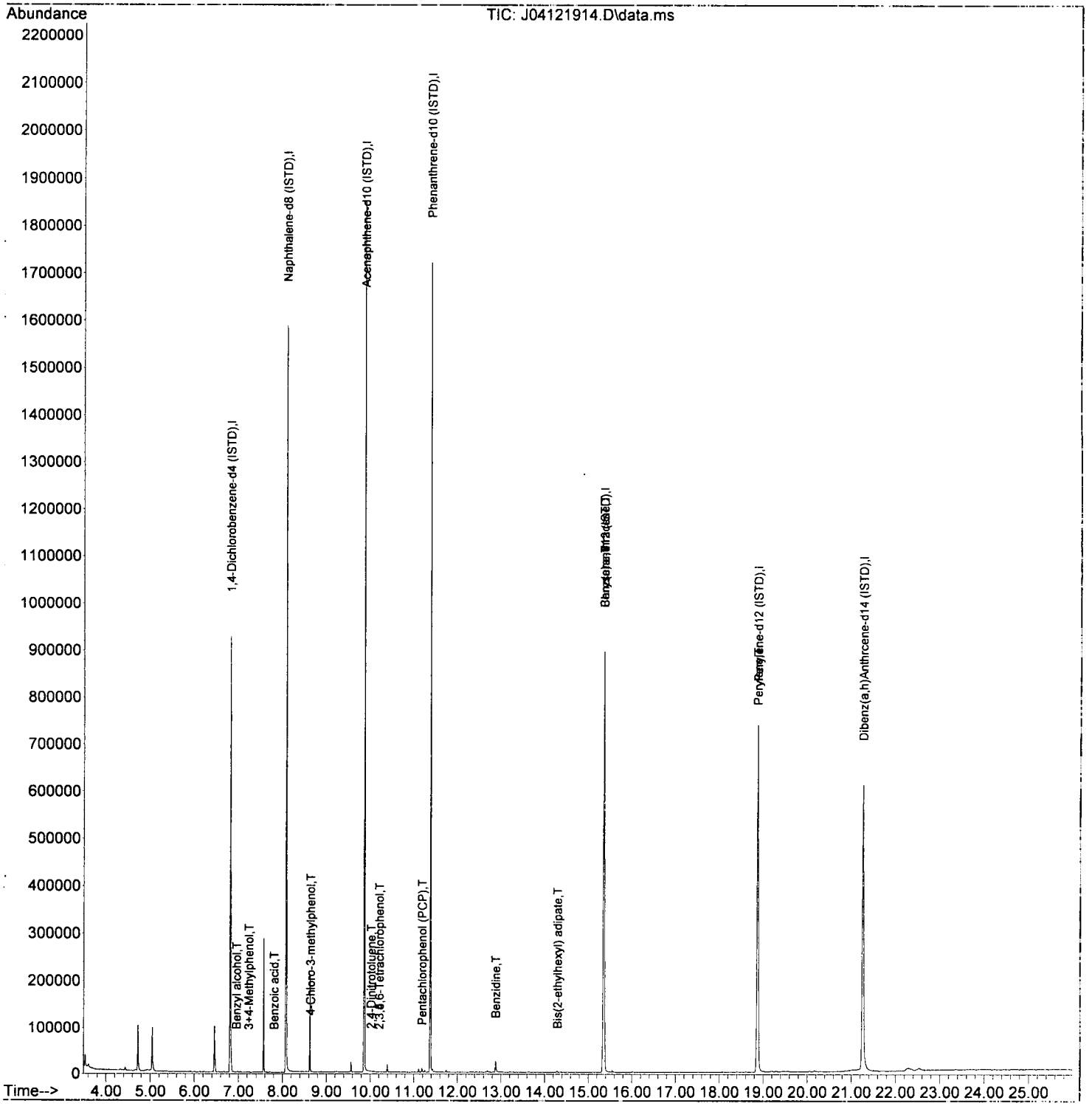
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	0.000		0	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	0.000		0	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
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

JR 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	19.54	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

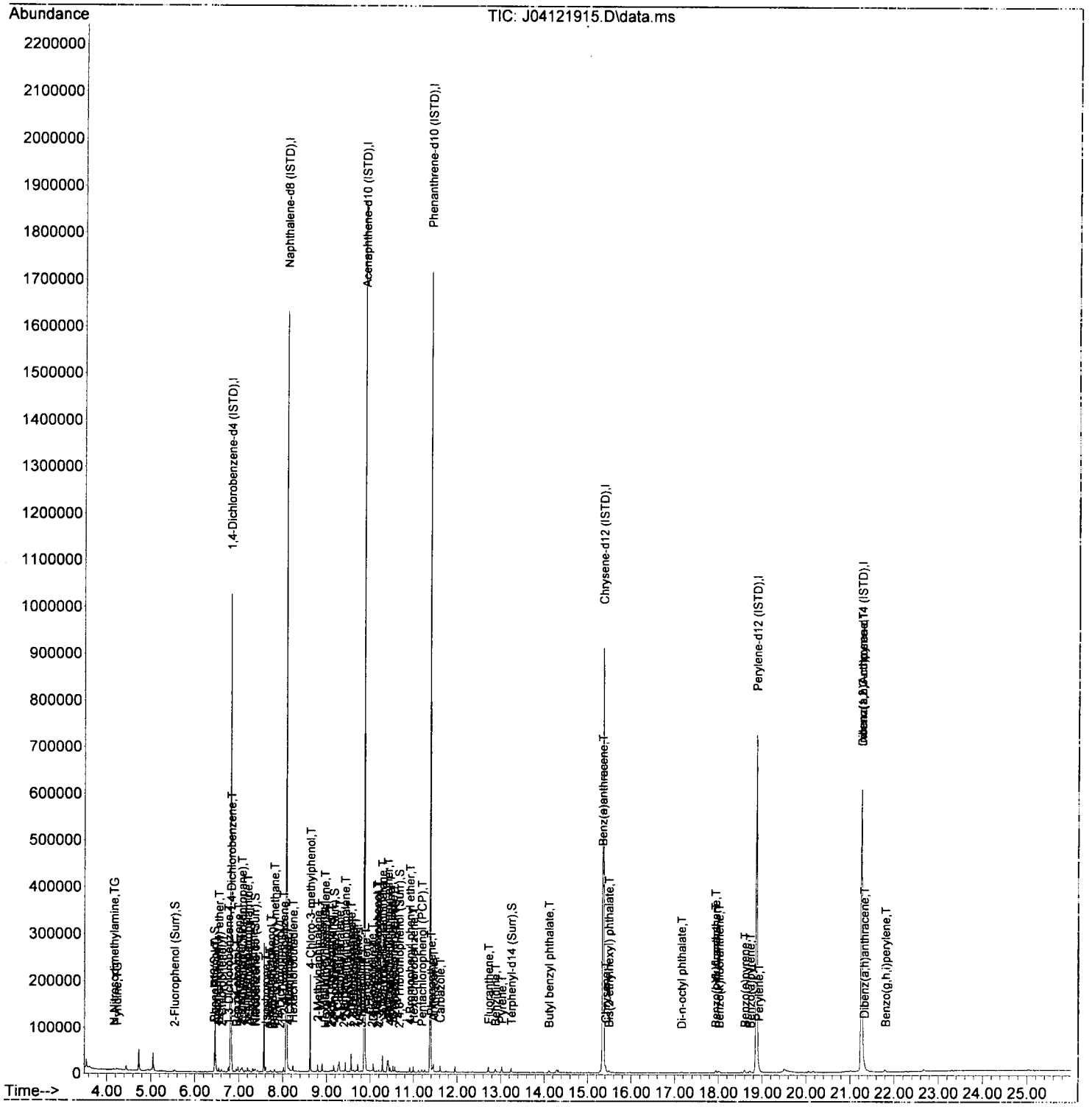
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	72	N.D.		
45) Dimethyl phthalate	9.563	163	5716	18.78	ng/ml	93
46) 1,3-Dinitrobenzene	9.595	168	137	3.07	ng/ml#	21
47) 2,6-Dinitrotoluene	9.627	165	429	6.50	ng/ml	91
48) 1,2-Dinitrobenzene	9.675	168	247	8.02	ng/ml#	68
49) 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

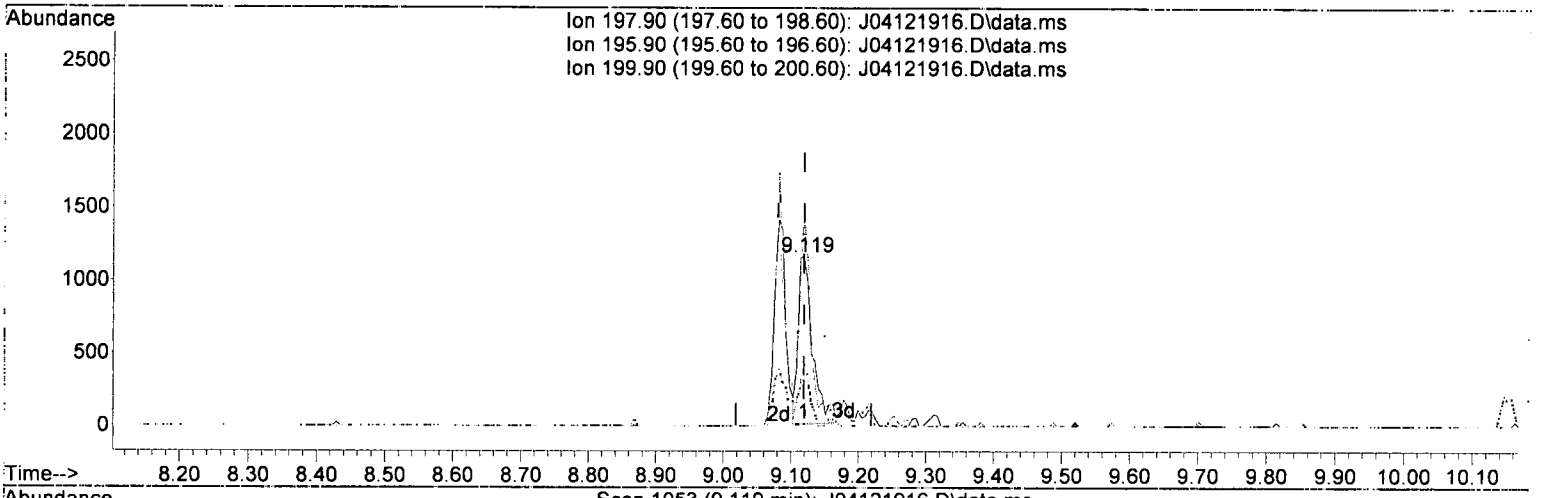
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.520	168	512	12.64	ng/ml#	61
45) Dimethyl phthalate	9.563	163	14804	47.96	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	496	10.98	ng/ml#	1
47) 2,6-Dinitrotoluene	9.627	165	1360	20.32	ng/ml	91
48) 1,2-Dinitrobenzene	9.681	168	594	19.02	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

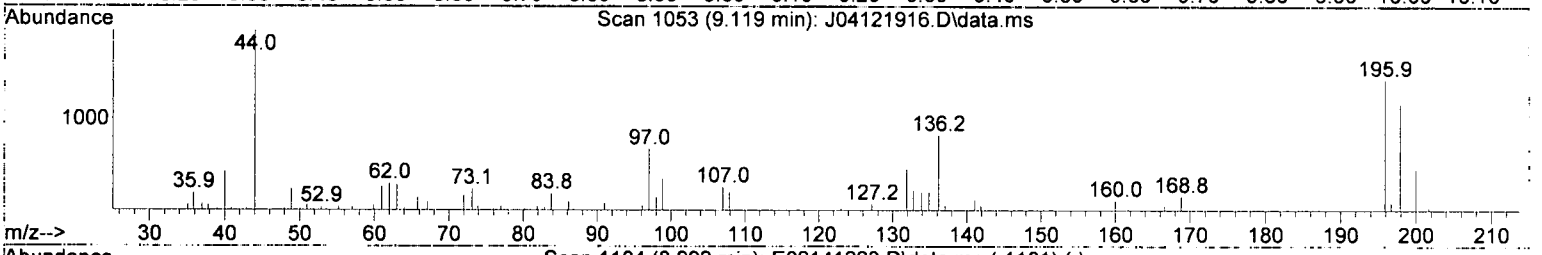
(#) = qualifier out of range (m) = manual integration (+) = signals summed

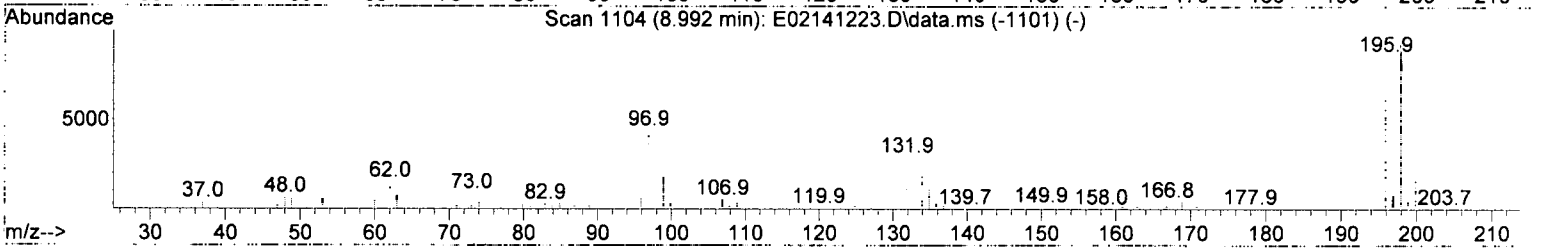
Quantitation Report (Qedit)

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

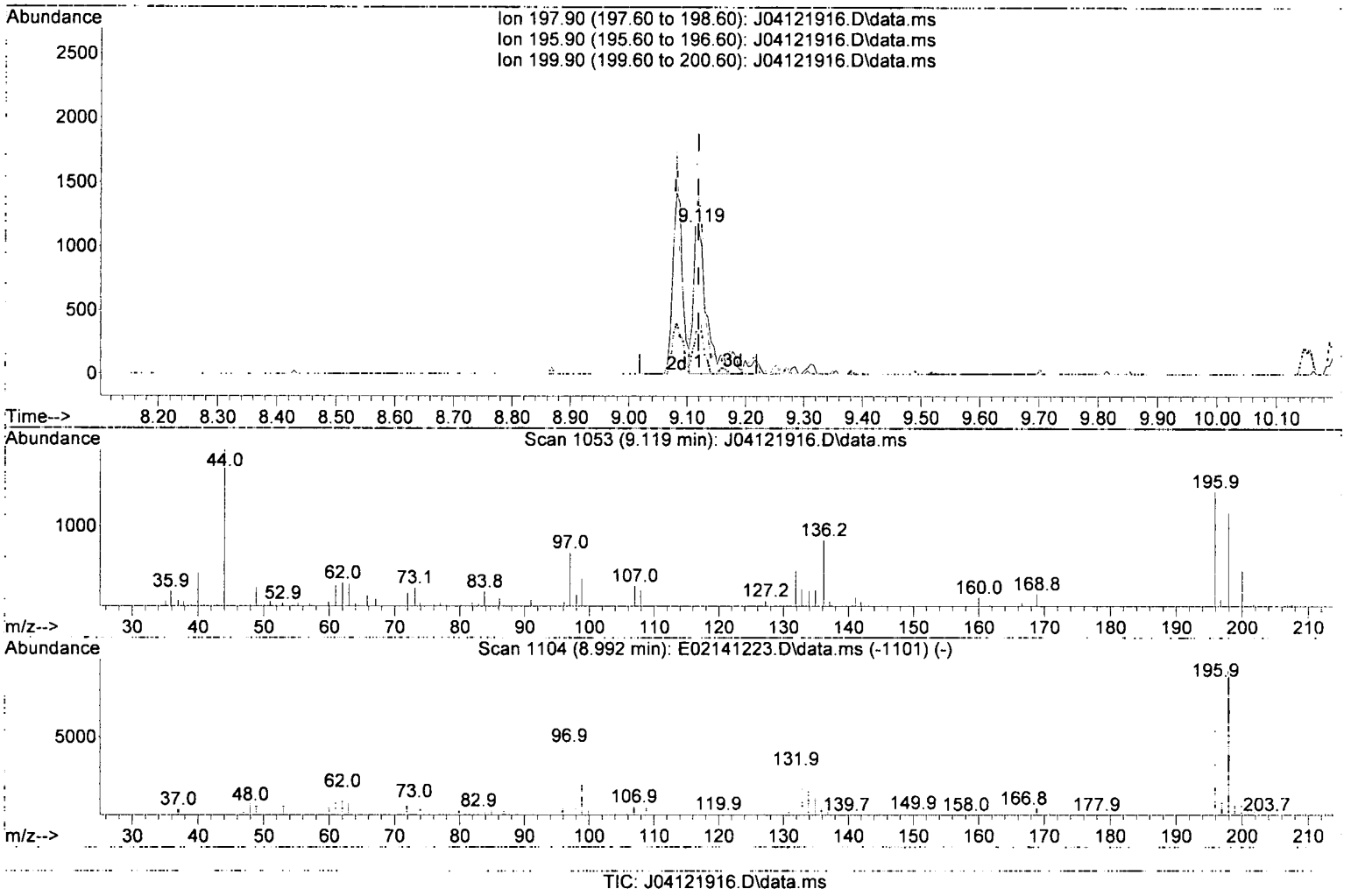
response 1719

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

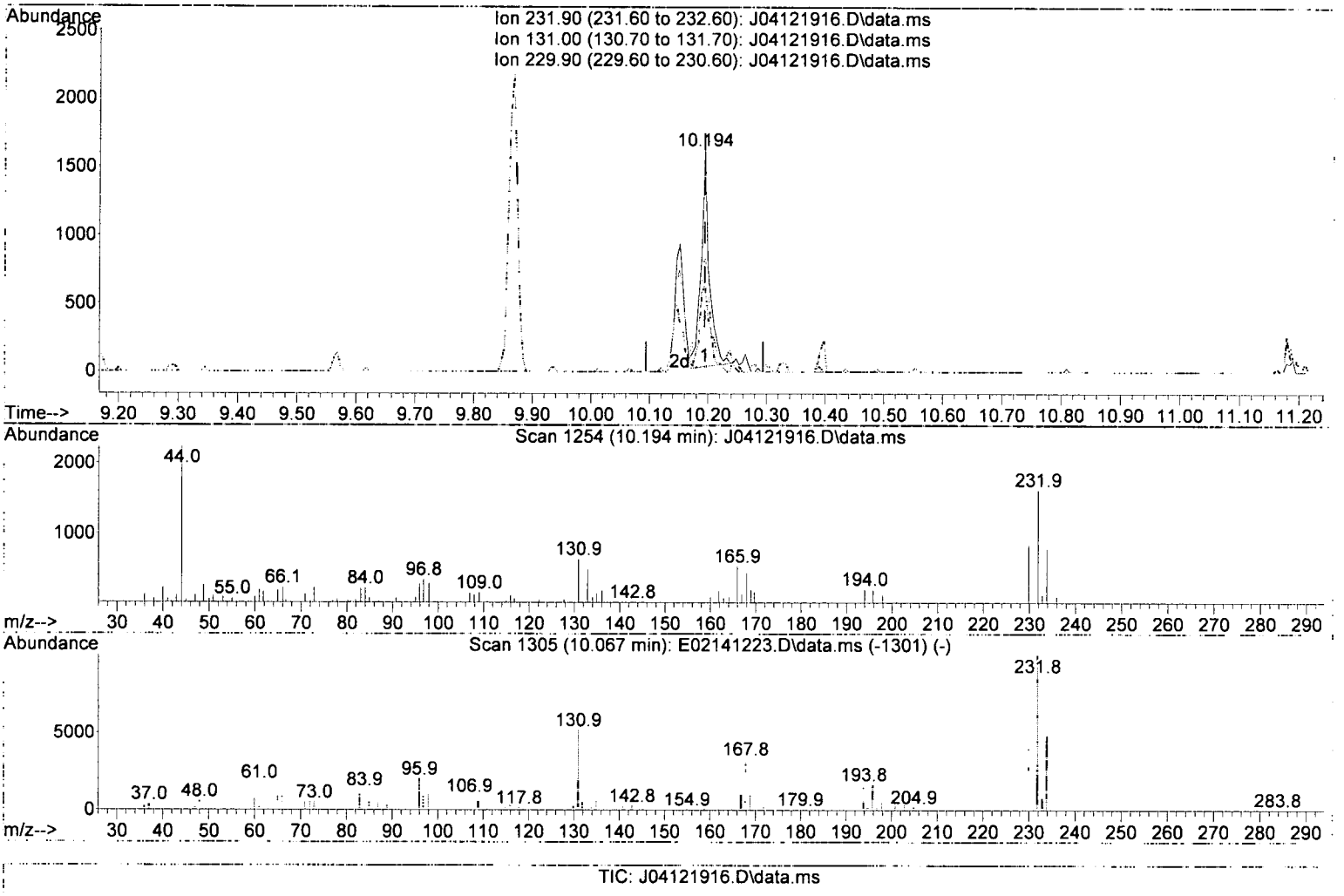
Ion	Exp%	Act%
197.90	100.00	100.00
195.90	105.00	122.31
199.90	31.10	39.71
0.00	0.00	0.00

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

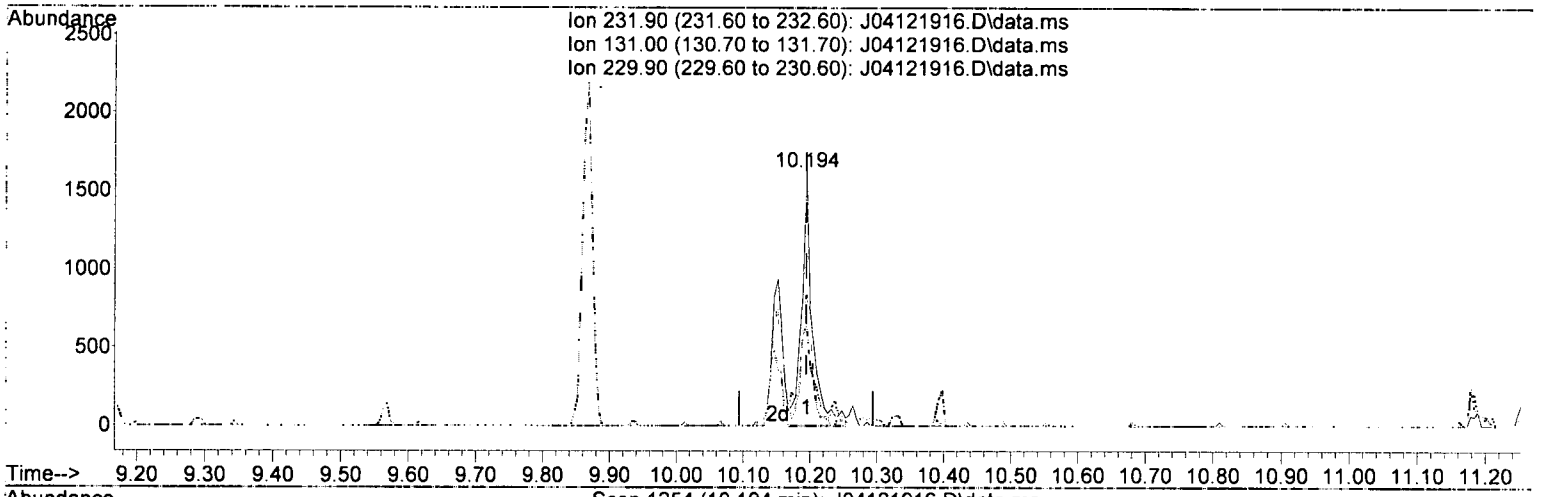
response 1586

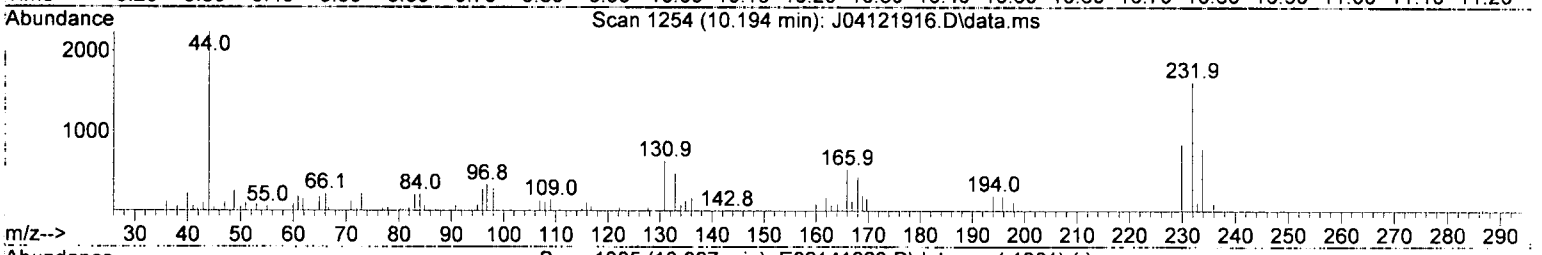
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	39.31
229.90	78.40	52.19
0.00	0.00	0.00

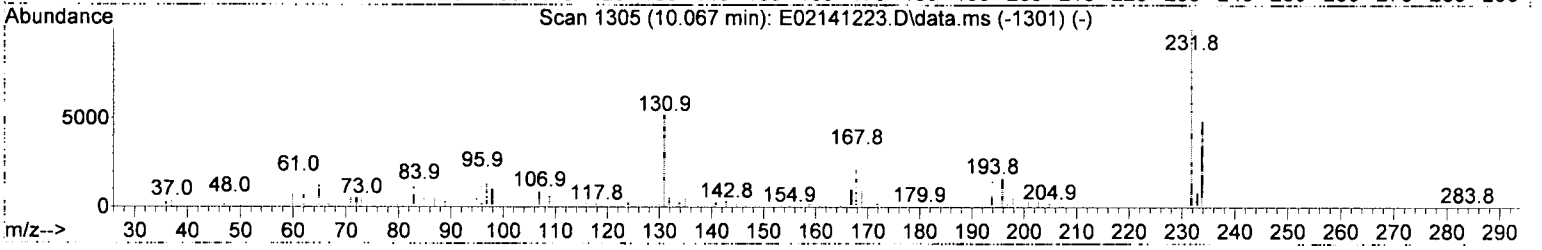
Quantitation Report (Qedit)

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

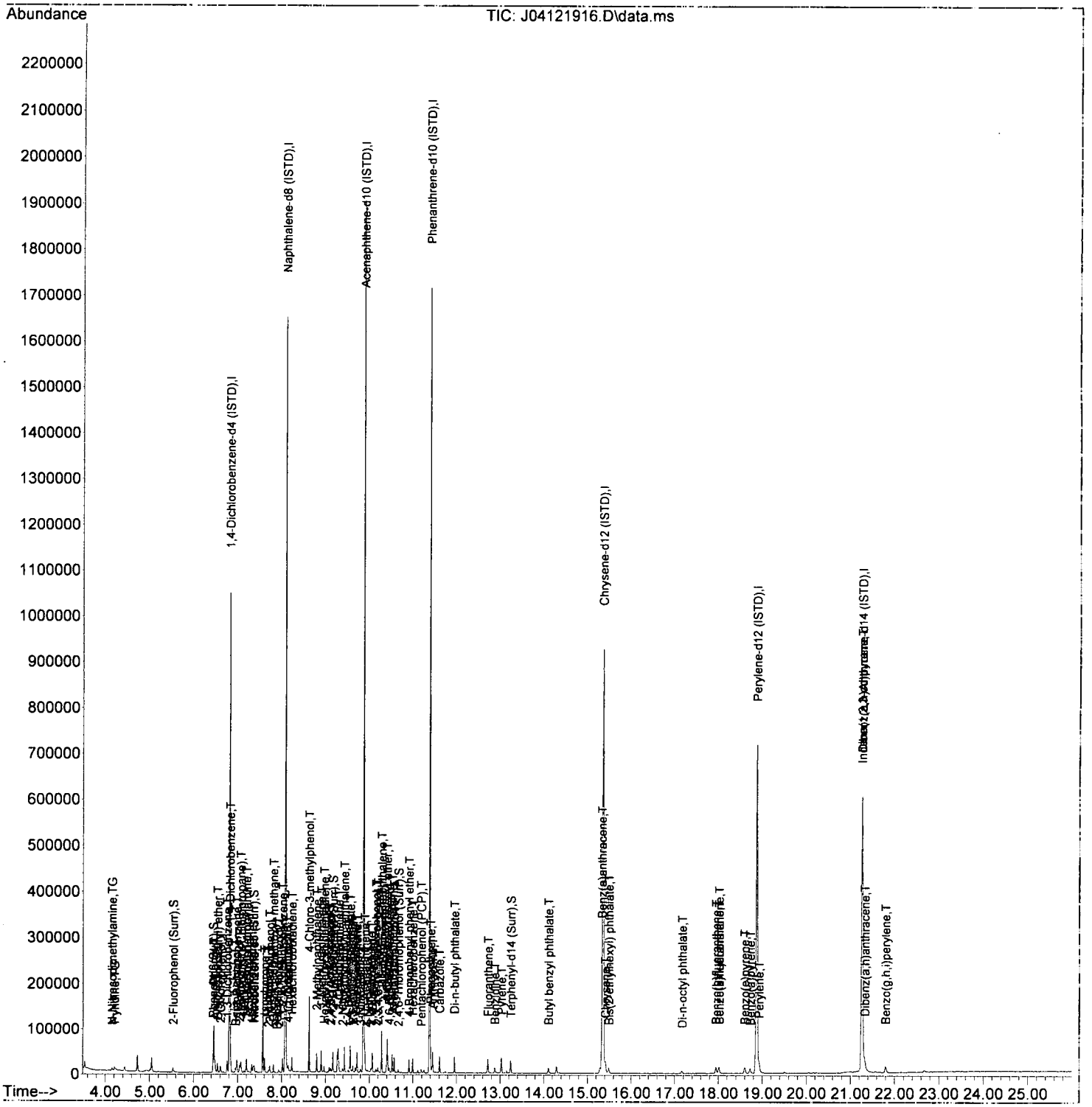
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	39.31
229.90	78.40	52.19
0.00	0.00	0.00

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 4/15/19

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

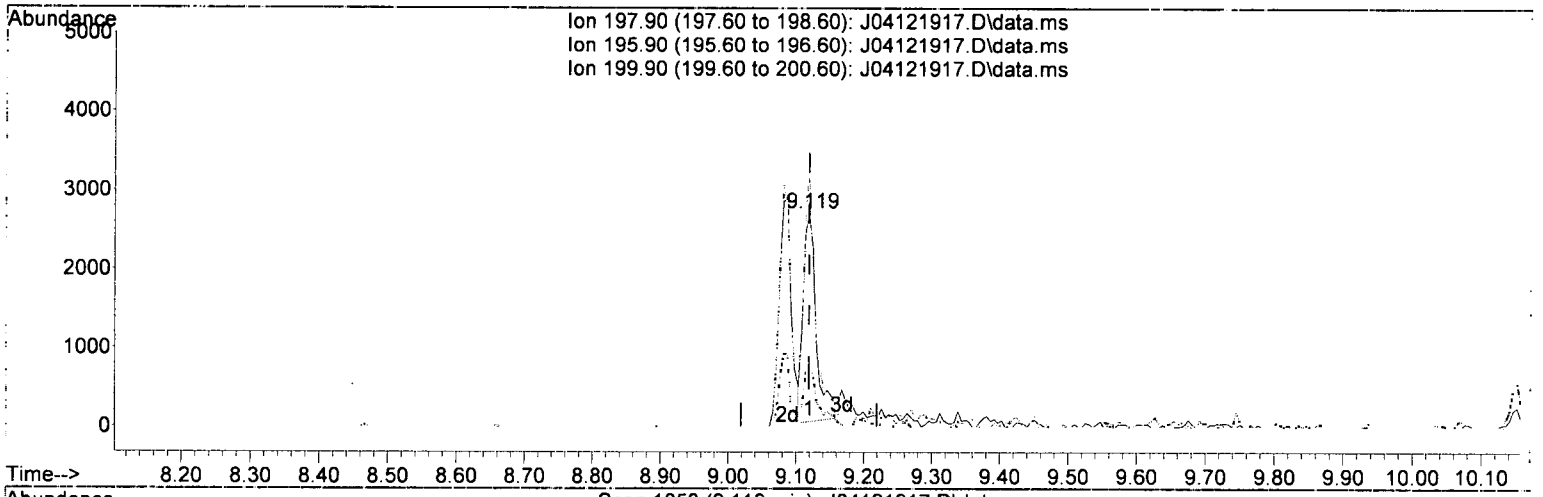
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	1082	25.89	ng/ml	93
45)	Dimethyl phthalate	9.563	163	32685	102.69	ng/ml	98
46)	1,3-Dinitrobenzene	9.600	168	1592	34.16	ng/ml	78
47)	2,6-Dinitrotoluene	9.627	165	3662	53.05	ng/ml	85
48)	1,2-Dinitrobenzene	9.686	168	1685	52.32	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

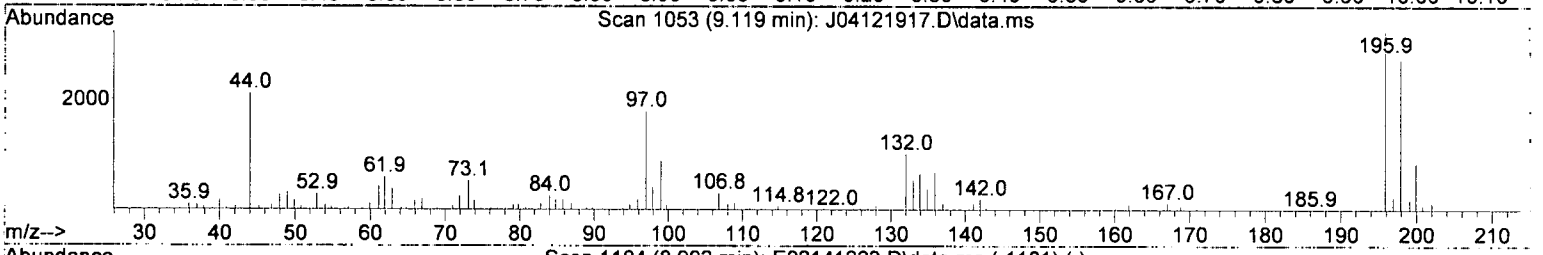
(#) = qualifier out of range (m) = manual integration (+) = signals summed

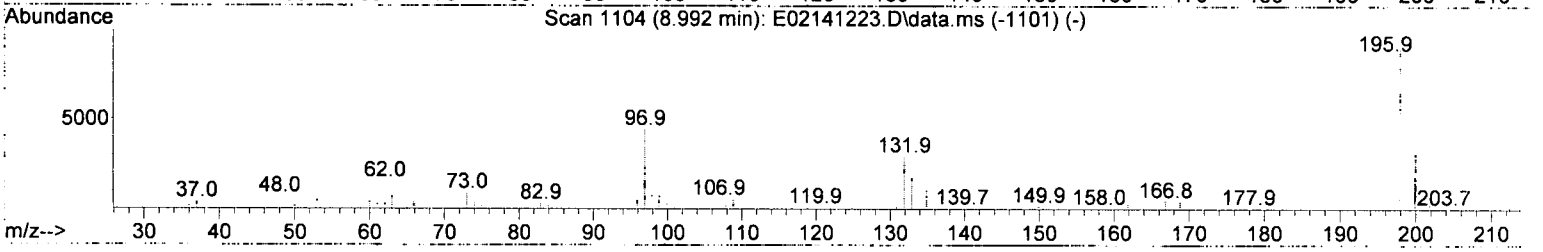
Quantitation Report (Qedit)

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

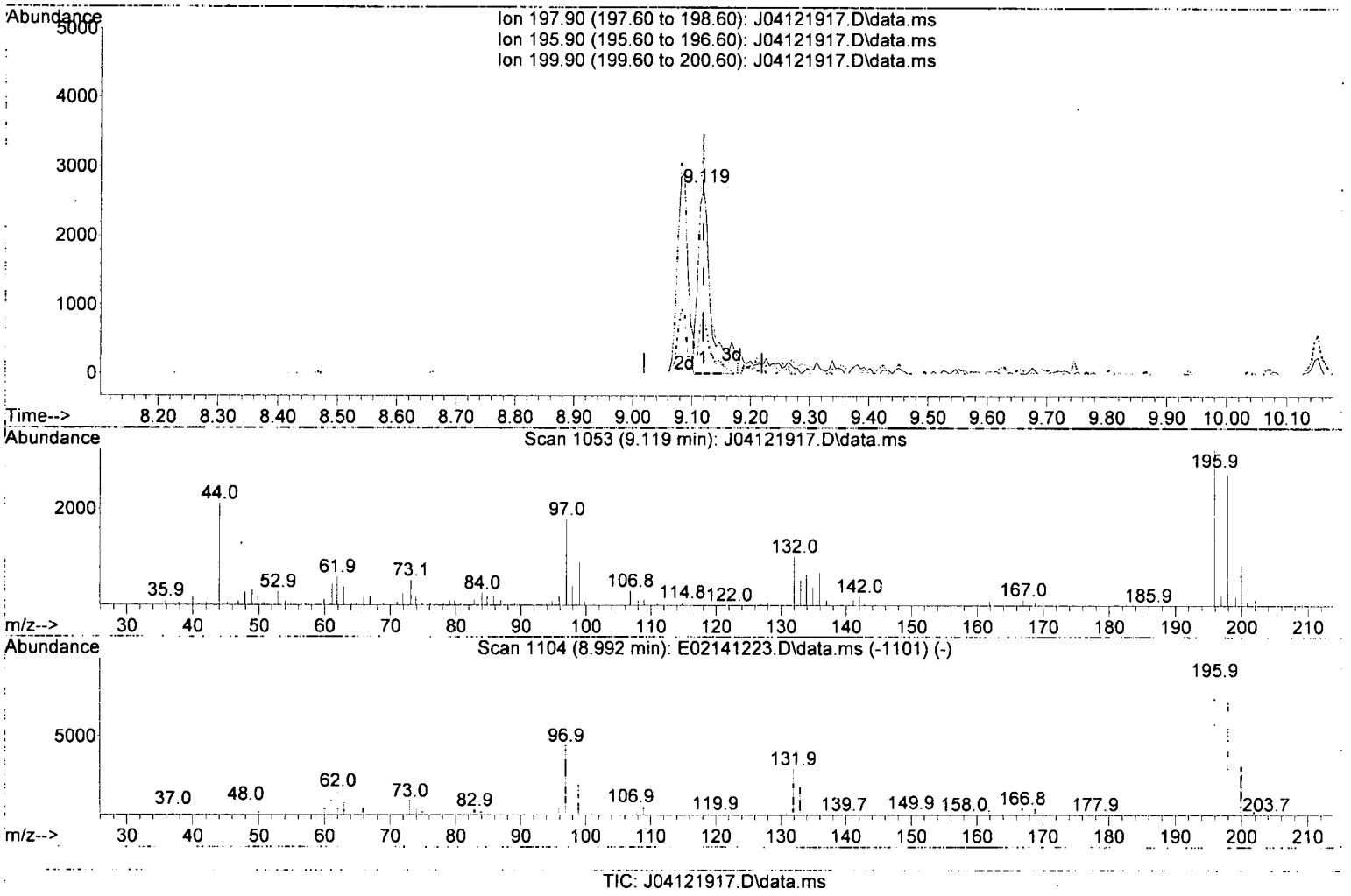
response 3524

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
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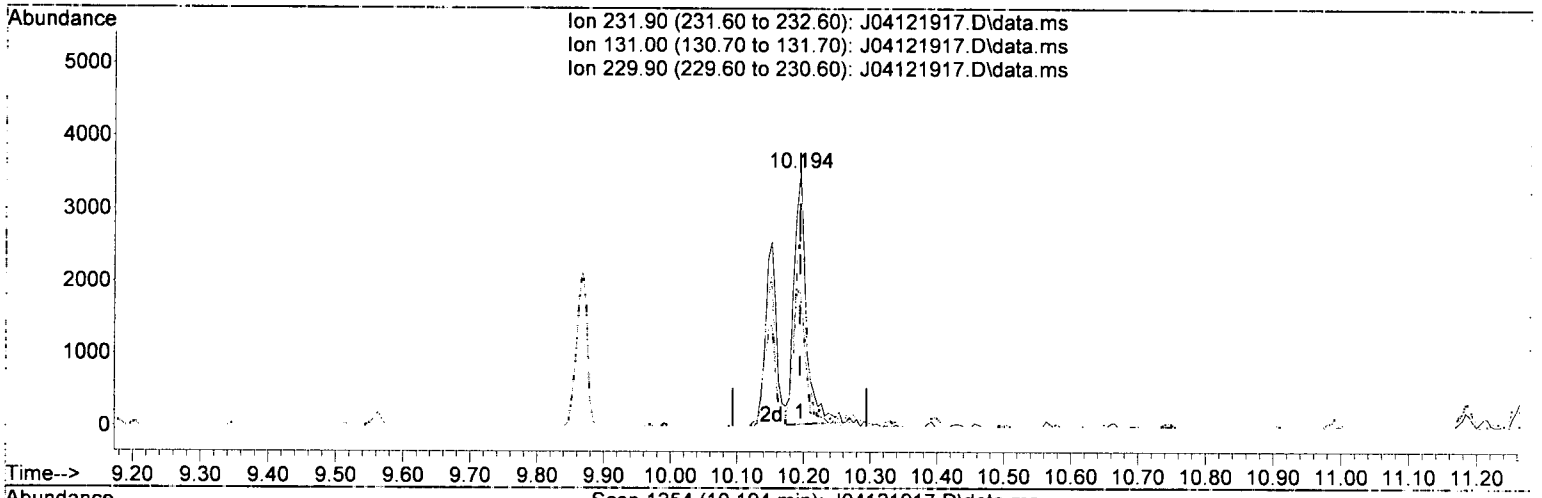
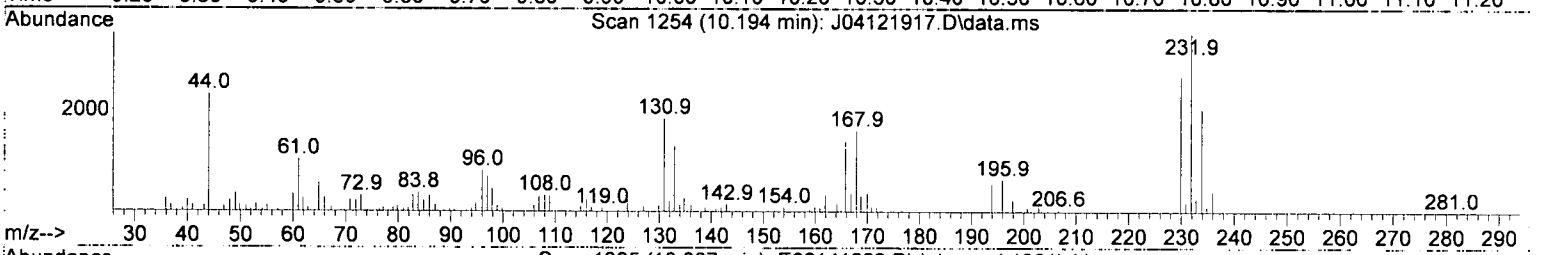
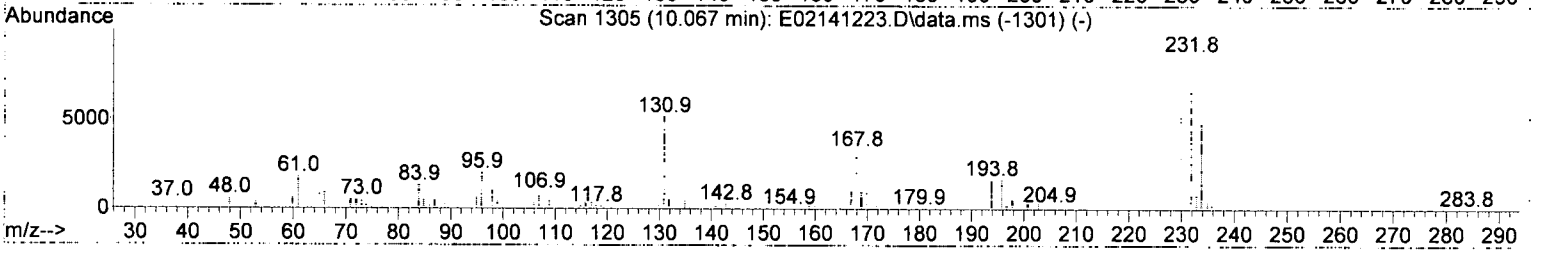
InstName : SV-GCMS10







TIC: J04121917.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

10.194min (+ 0.000) 70.37 ng/ml

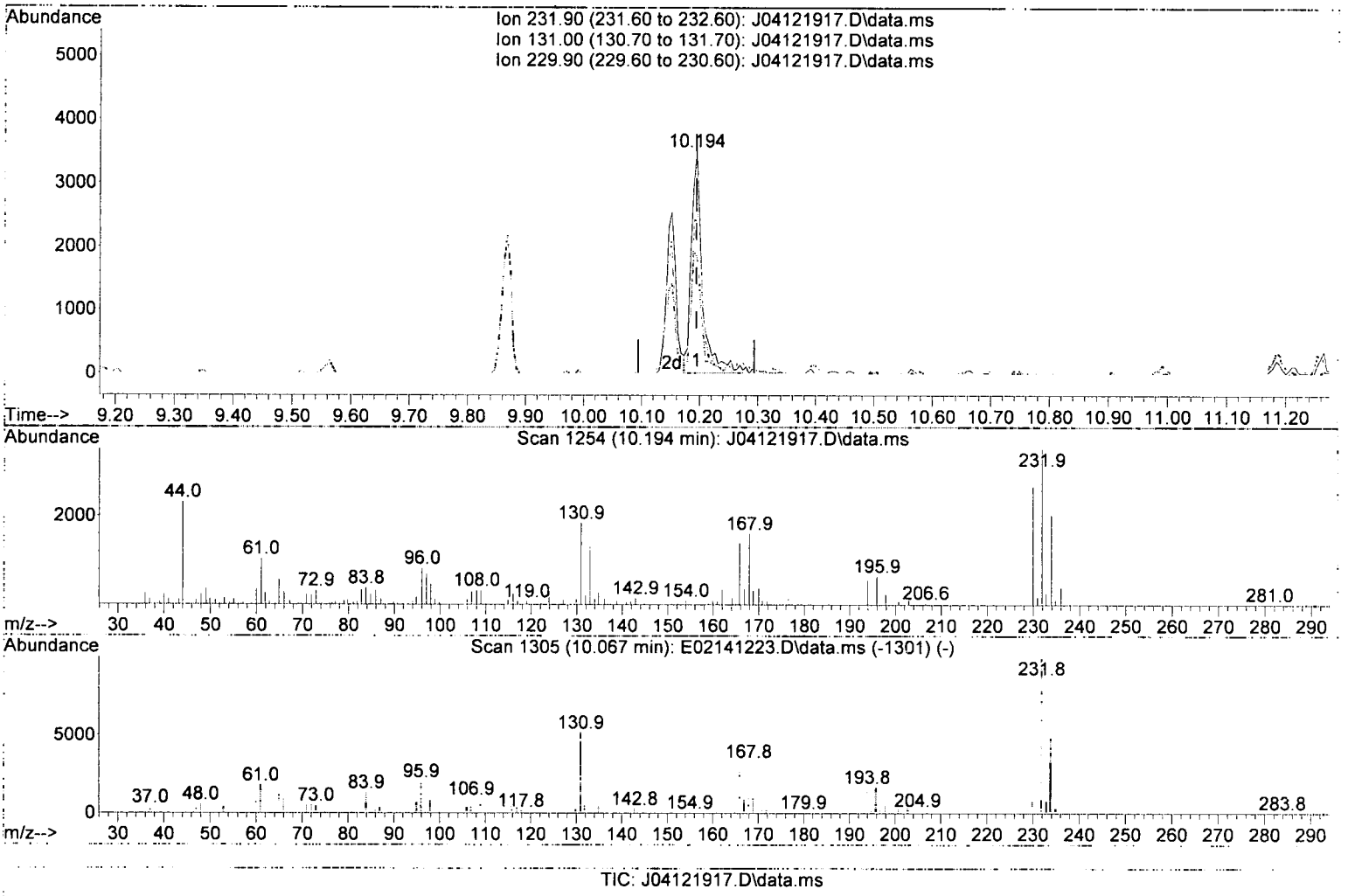
response 4469

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

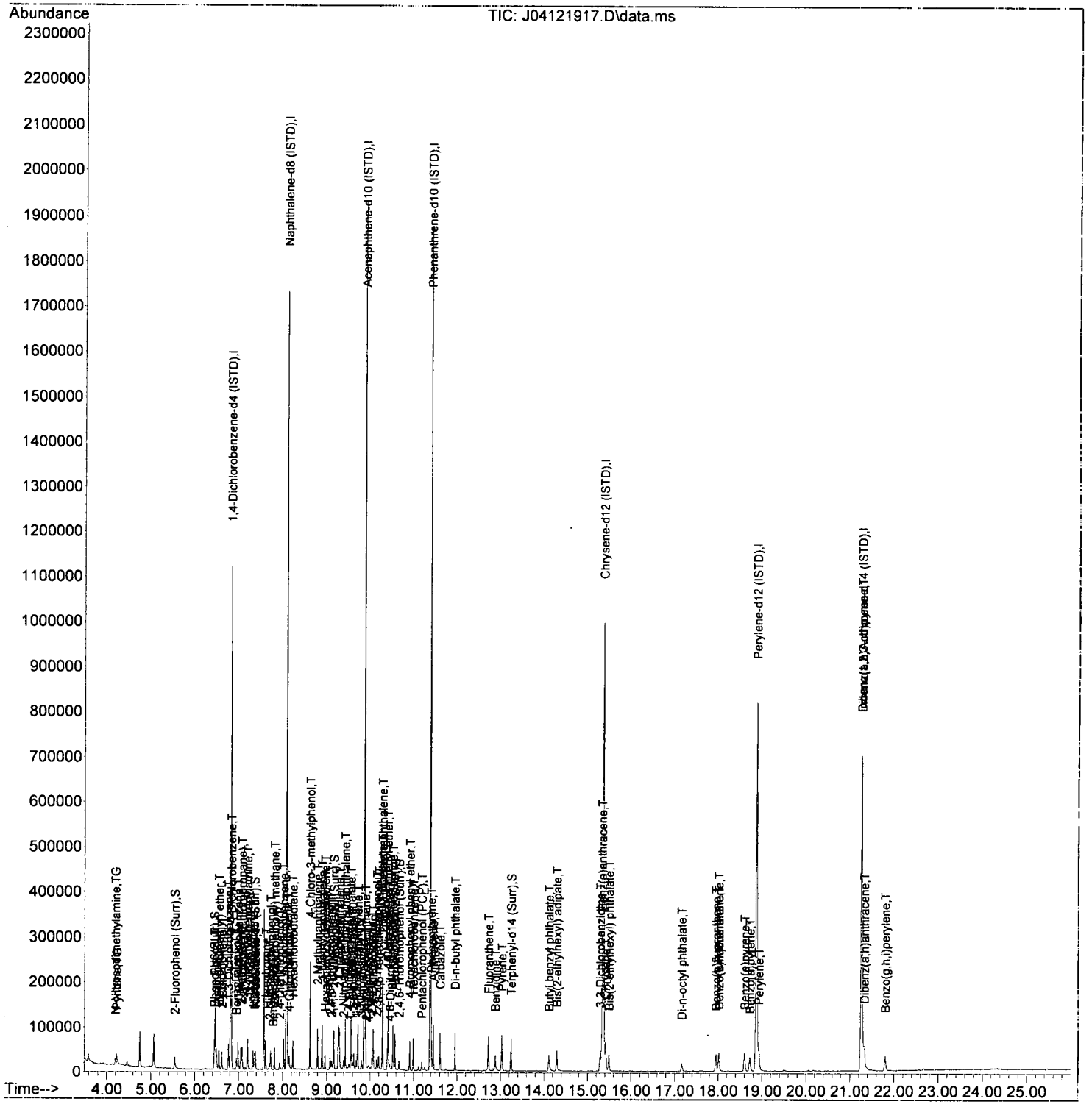
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	52.42
229.90	78.40	76.01
0.00	0.00	0.00

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

JJ 9/19/19

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

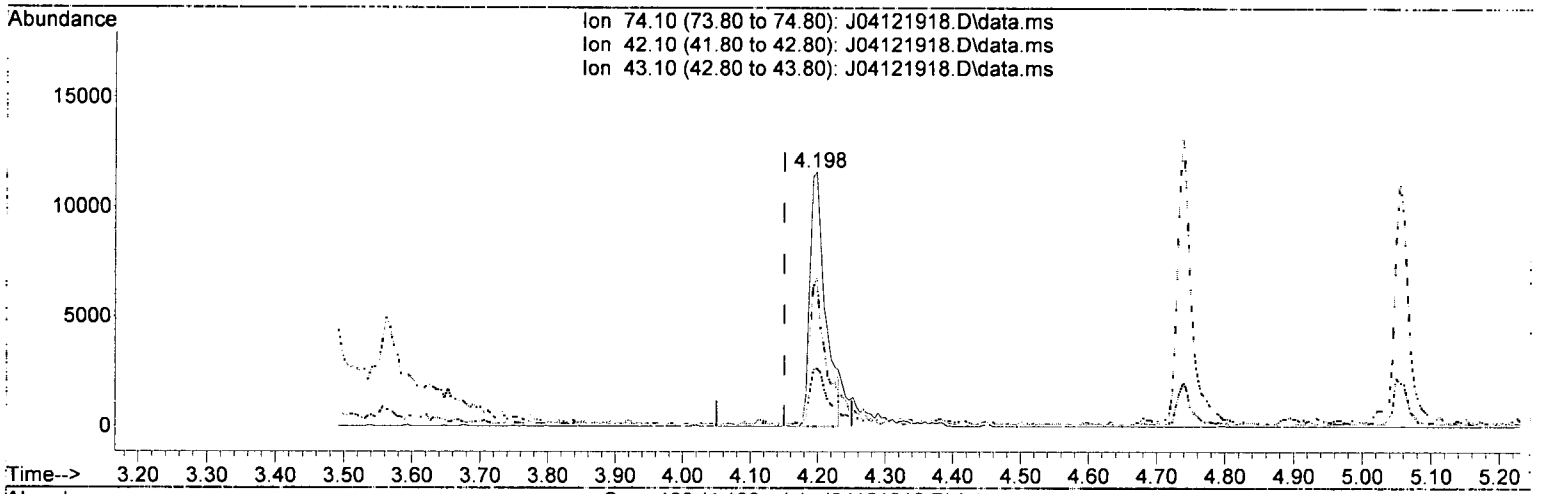
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.515	168	2775	64.01	ng/ml	86
45)	Dimethyl phthalate	9.563	163	68197	206.53	ng/ml	97
46)	1,3-Dinitrobenzene	9.595	168	4684	96.88	ng/ml	83
47)	2,6-Dinitrotoluene	9.627	165	11248	157.08	ng/ml	94
48)	1,2-Dinitrobenzene	9.681	168	5007	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

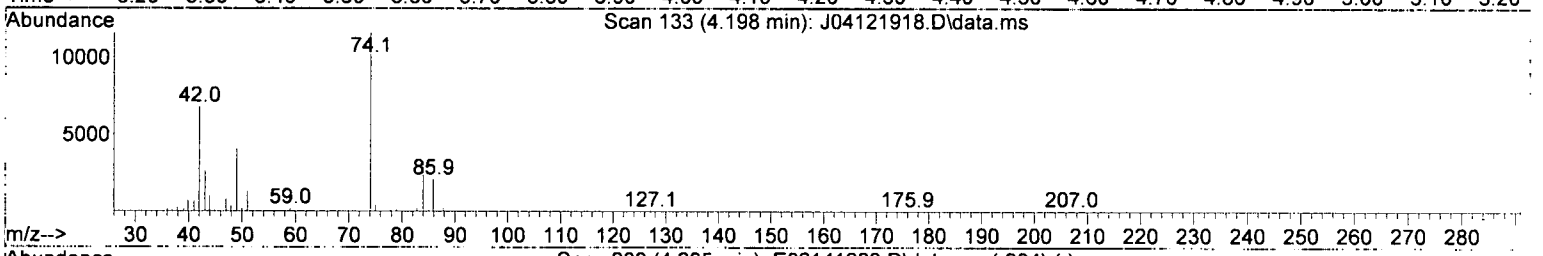
(#) = qualifier out of range (m) = manual integration (+) = signals summed

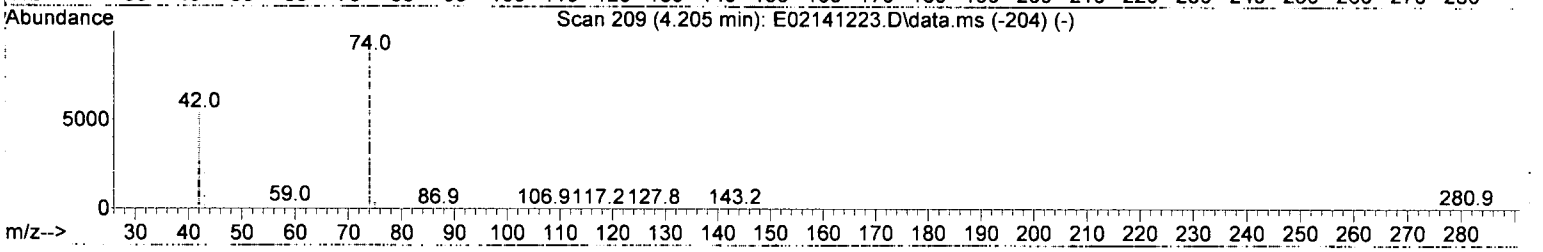
Quantitation Report (Qedit)

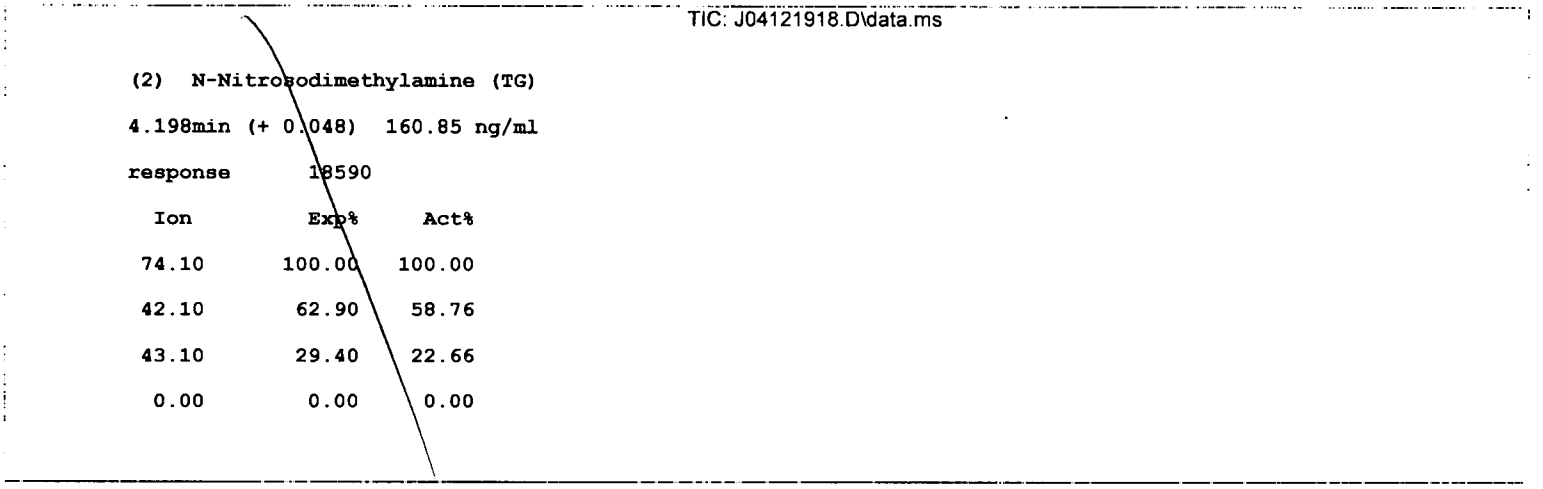
Data Path : C:\msdchem\1\data\2019-04\9D12042\
Data File : J04121918.D
Acq On : 12 Apr 2019 8:39 pm
Operator : JK/ AMS/ DTH
Sample : 9D12042-CAL4
Misc : 1x, A19D056 BNA@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

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

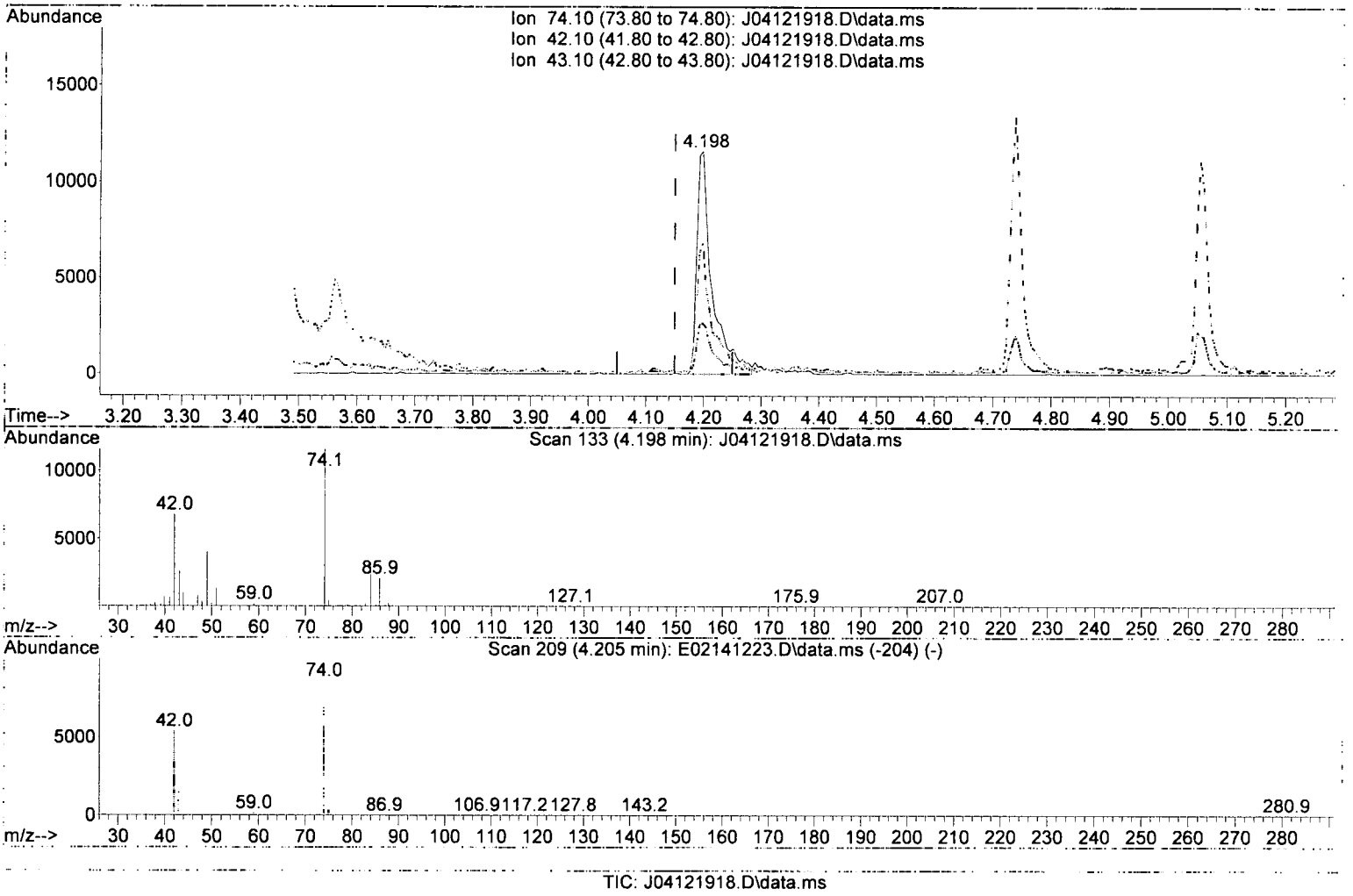
response 18590

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

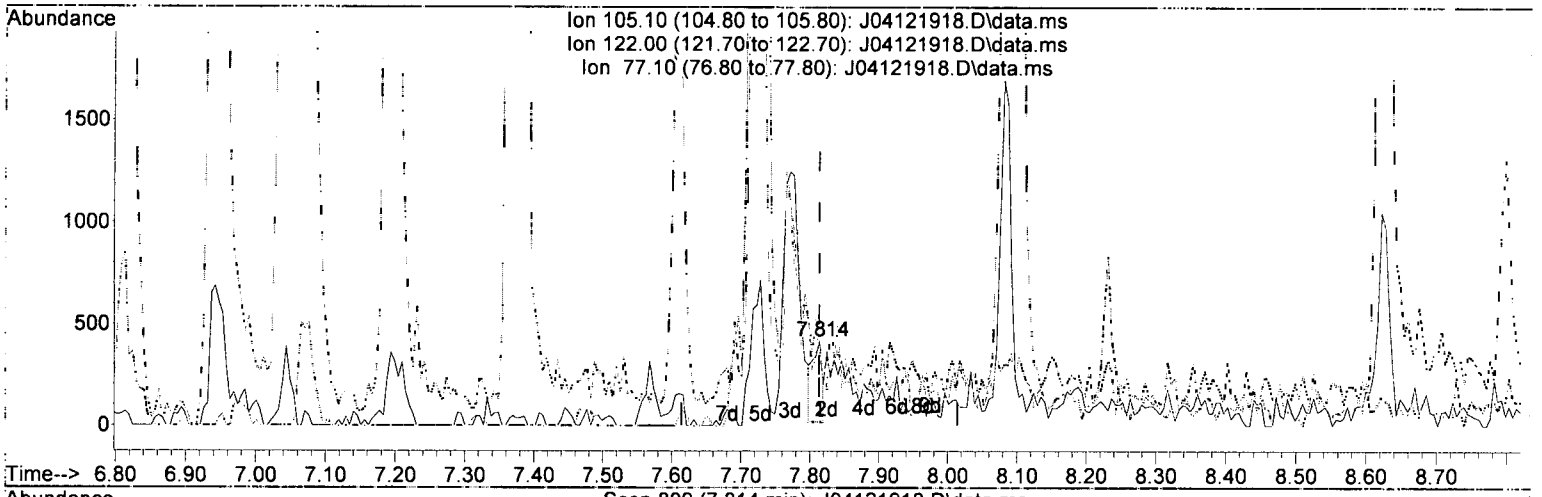
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	62.90	58.76
43.10	29.40	22.66
0.00	0.00	0.00

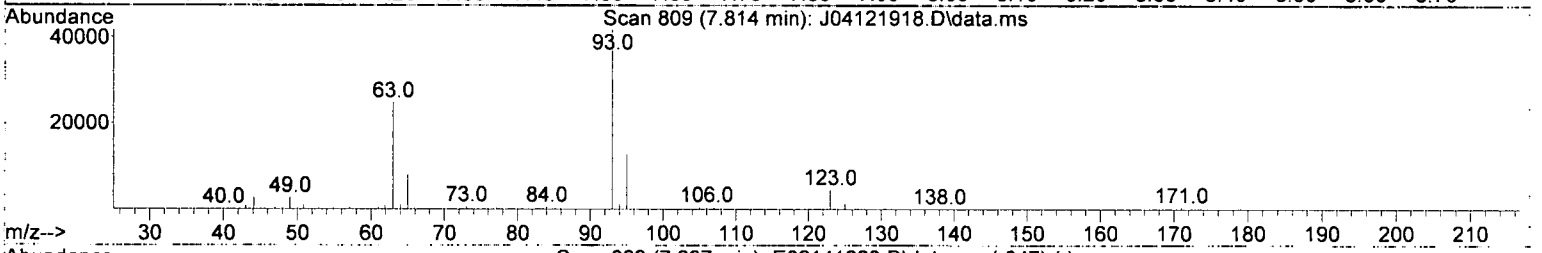
4/15/19

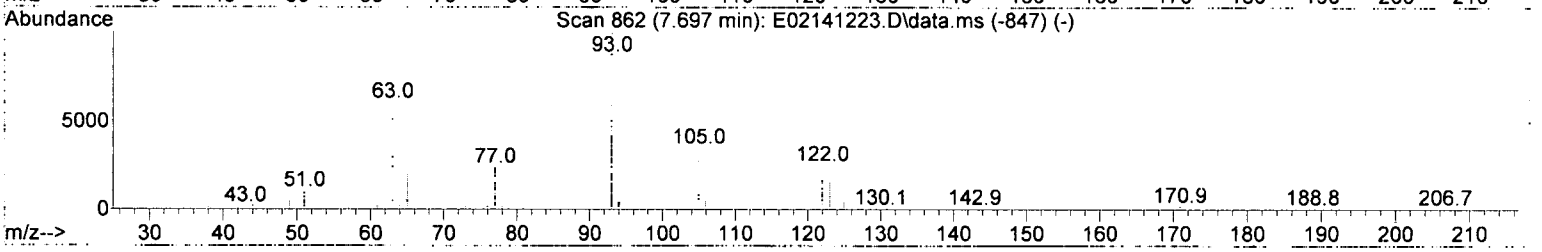
Quantitation Report (Qedit)

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

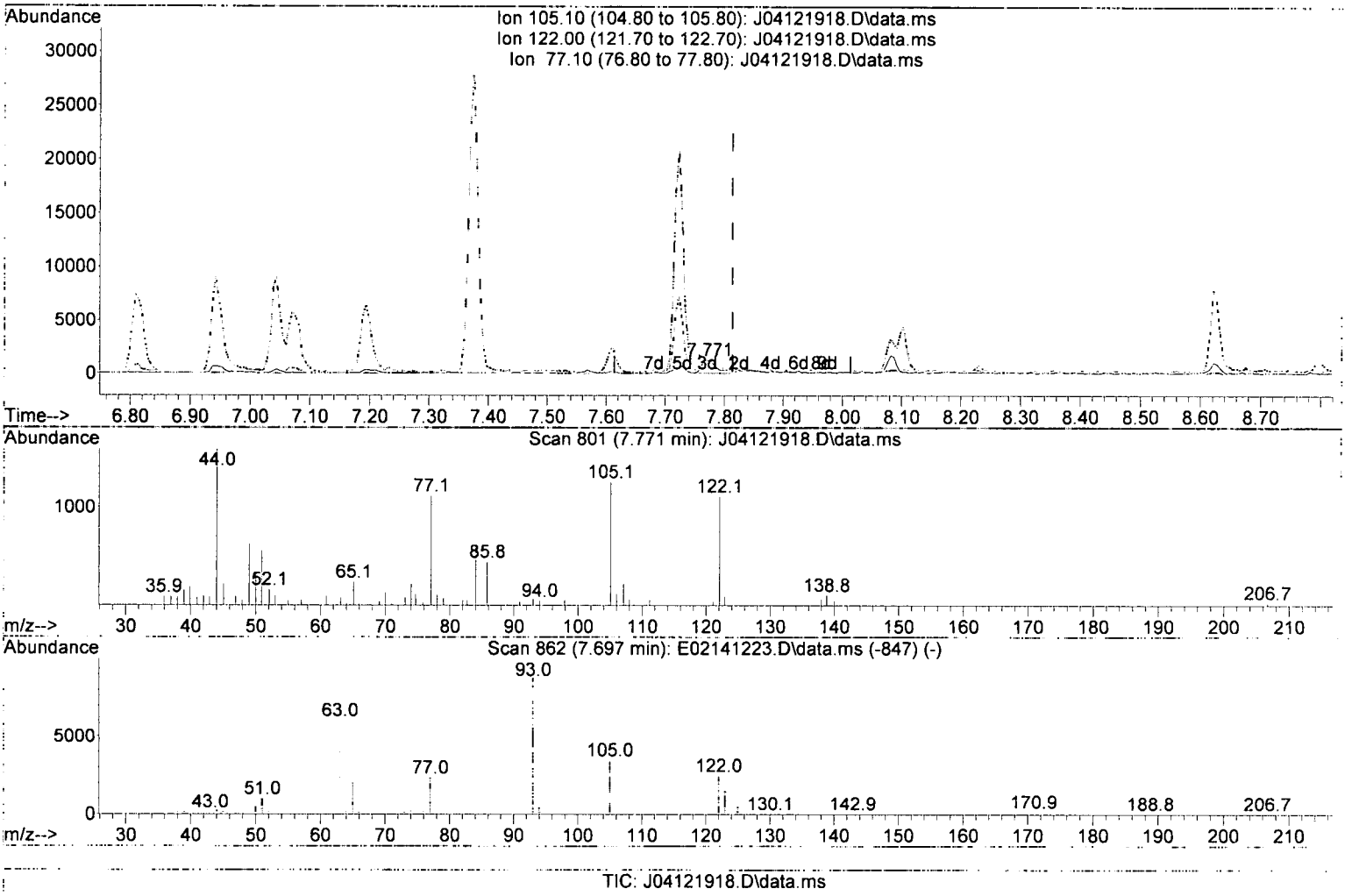
response 384

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

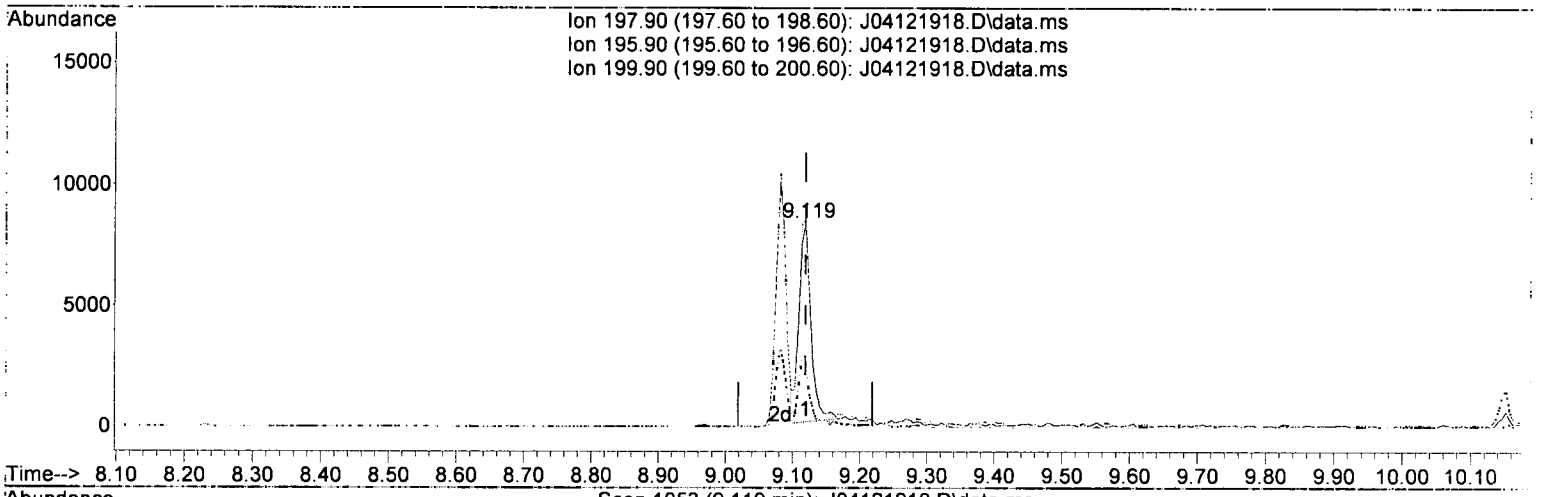
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	88.71
77.10	76.00	88.95
0.00	0.00	0.00

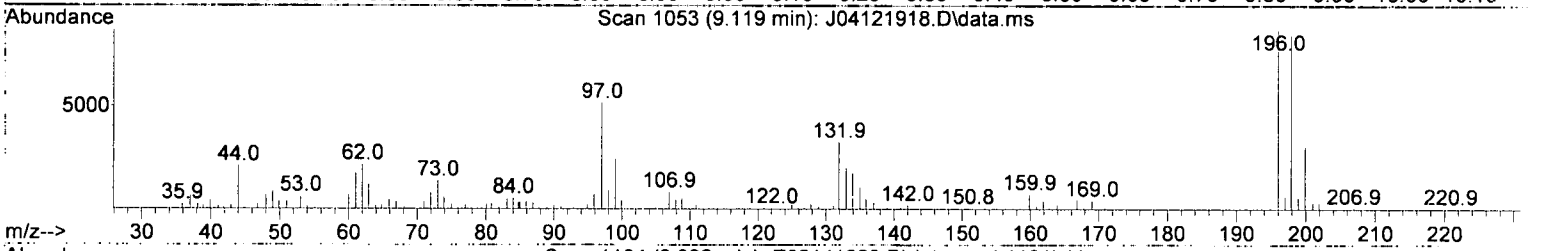
4/15/19

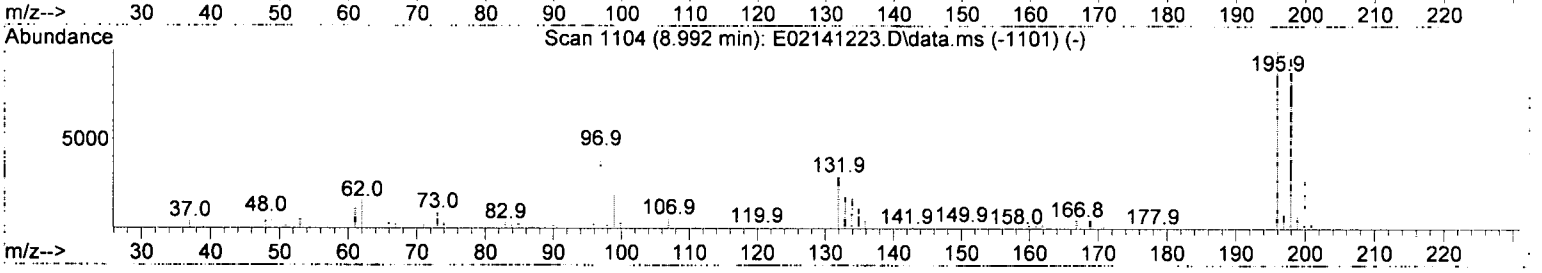
Quantitation Report (Qedit)

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

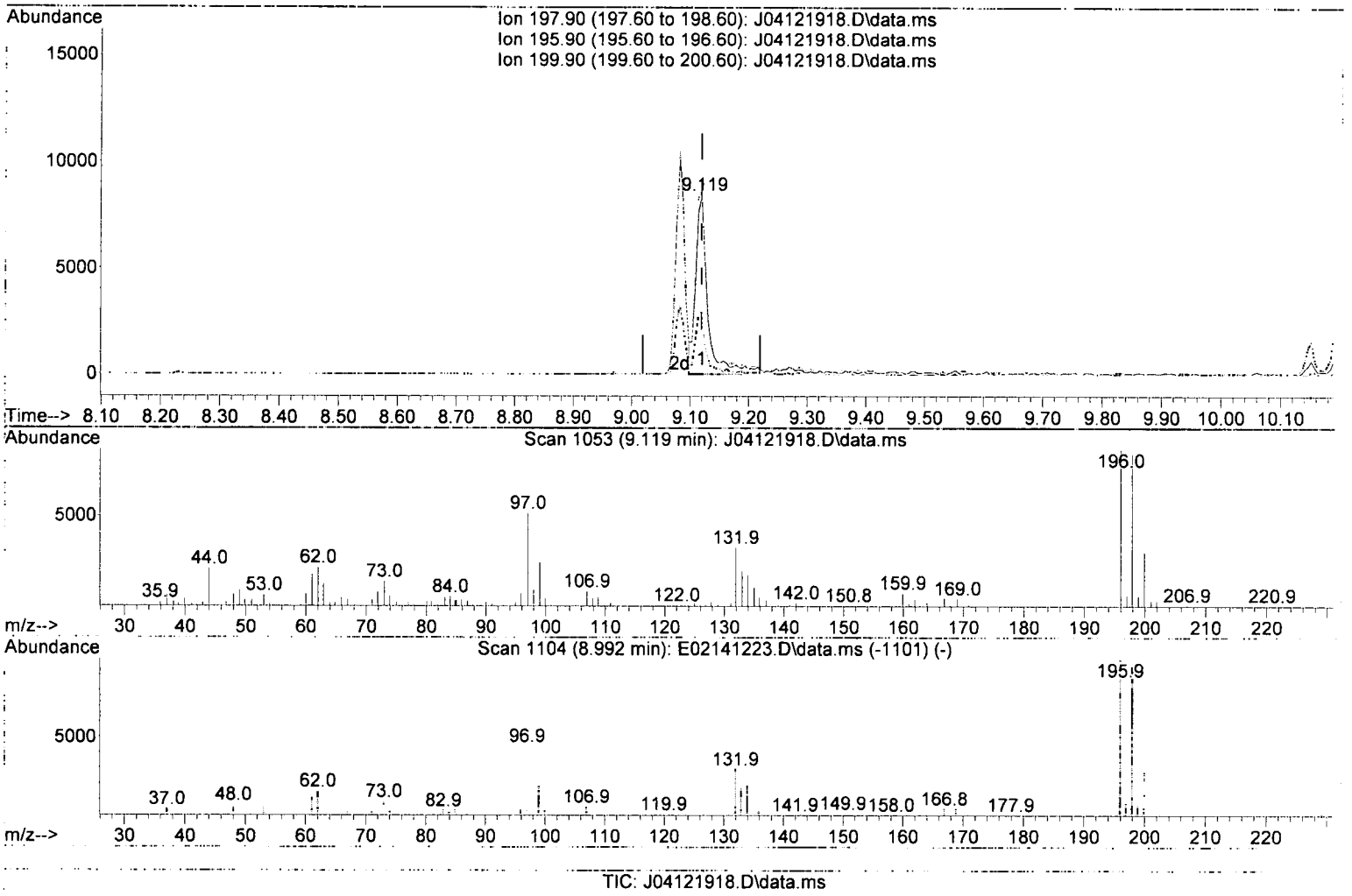
response 10174

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

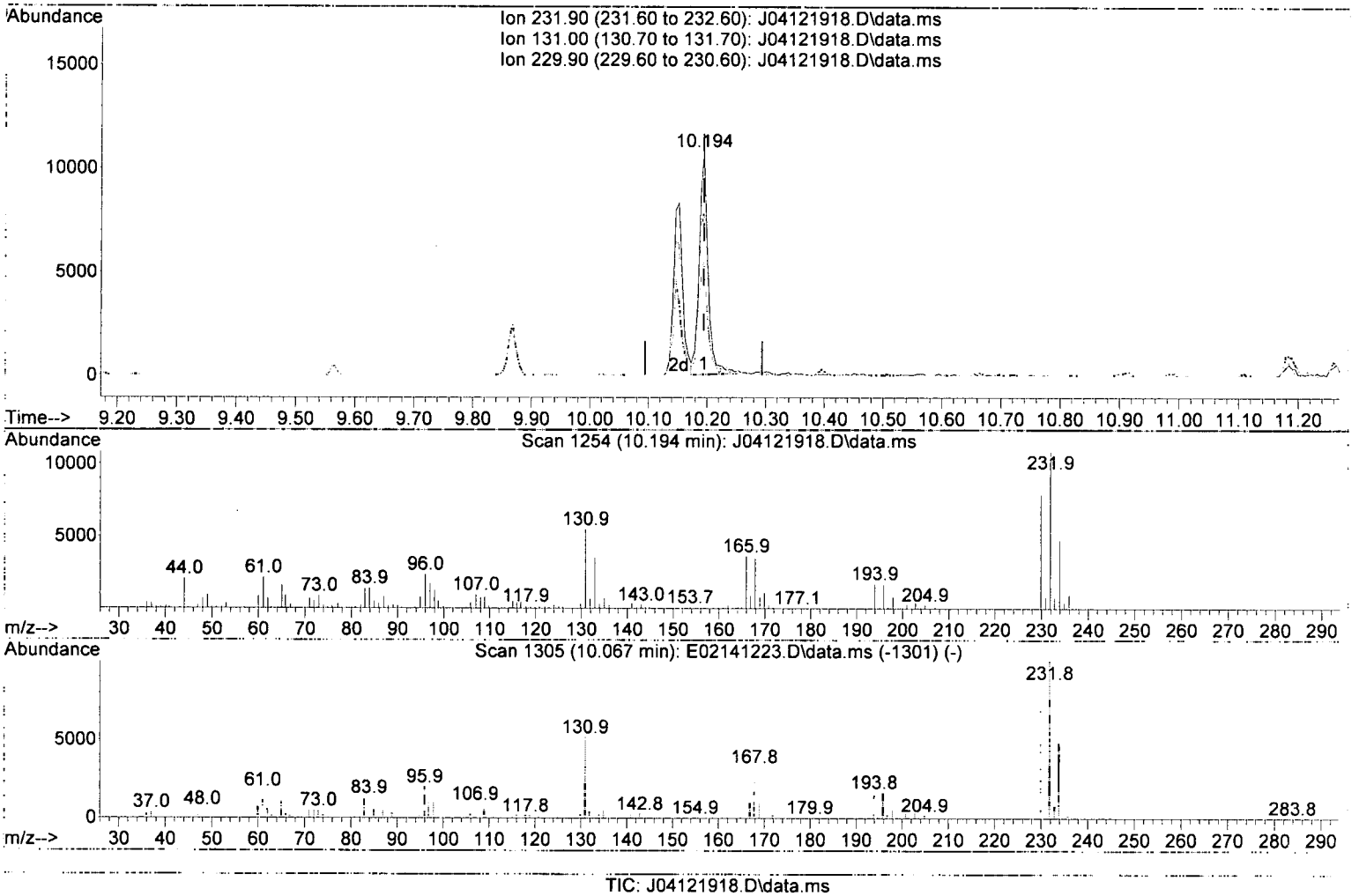
response 11558

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

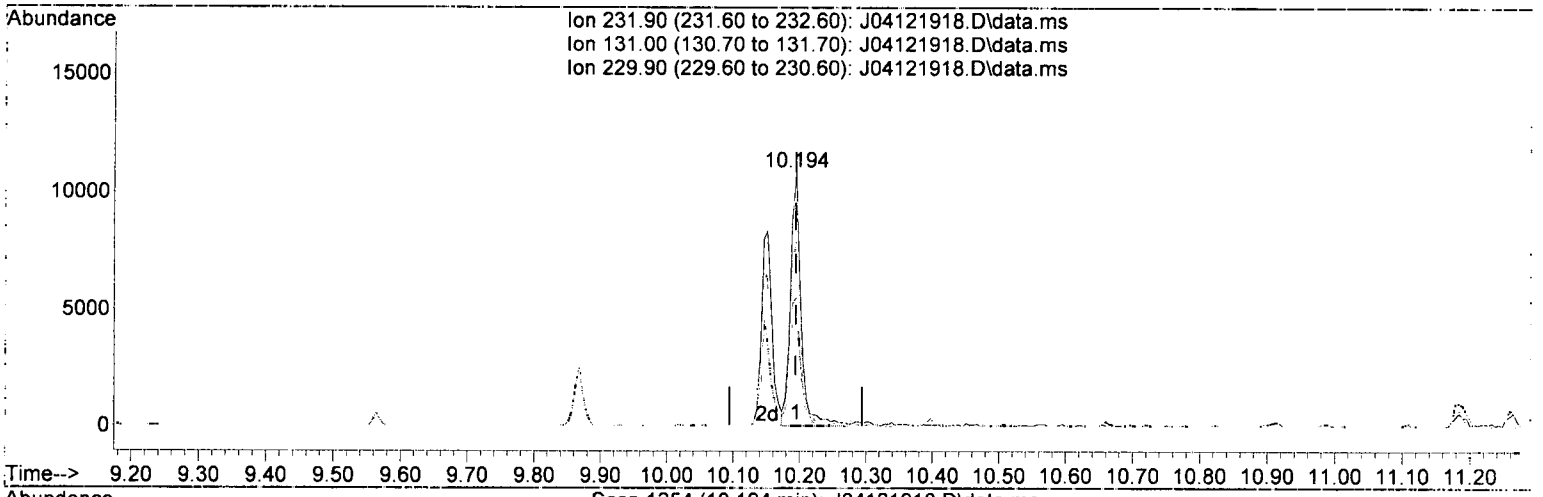
response 11552

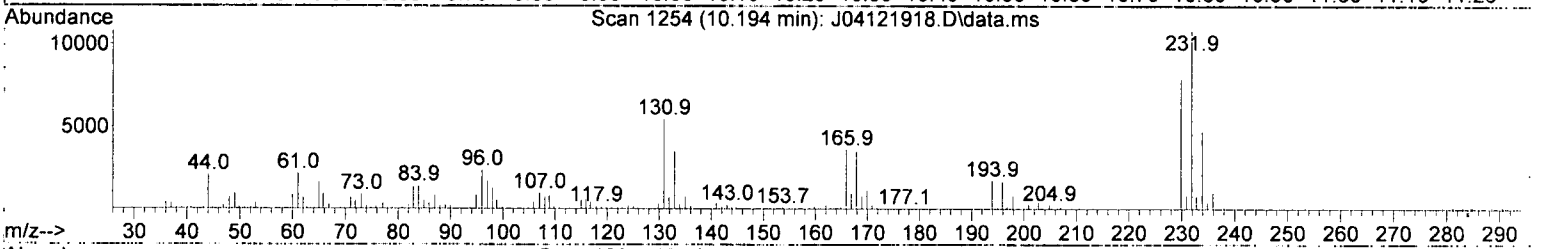
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	50.53
229.90	78.40	72.77
0.00	0.00	0.00

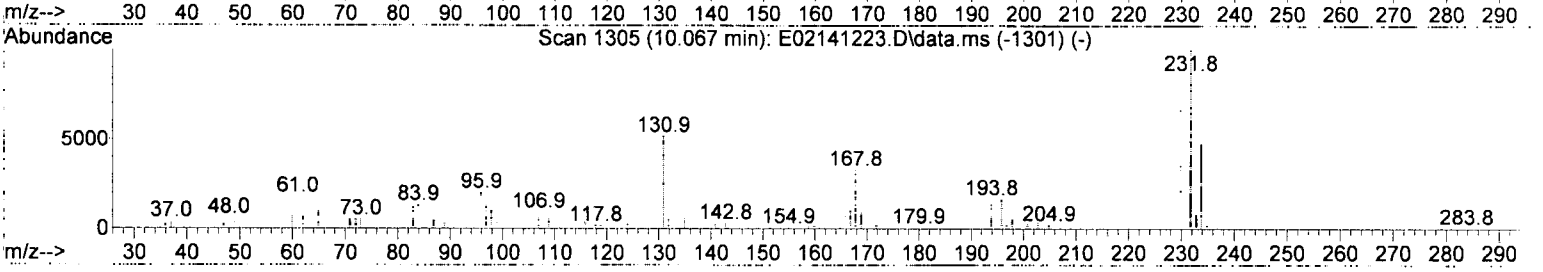
Quantitation Report (Qedit)

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

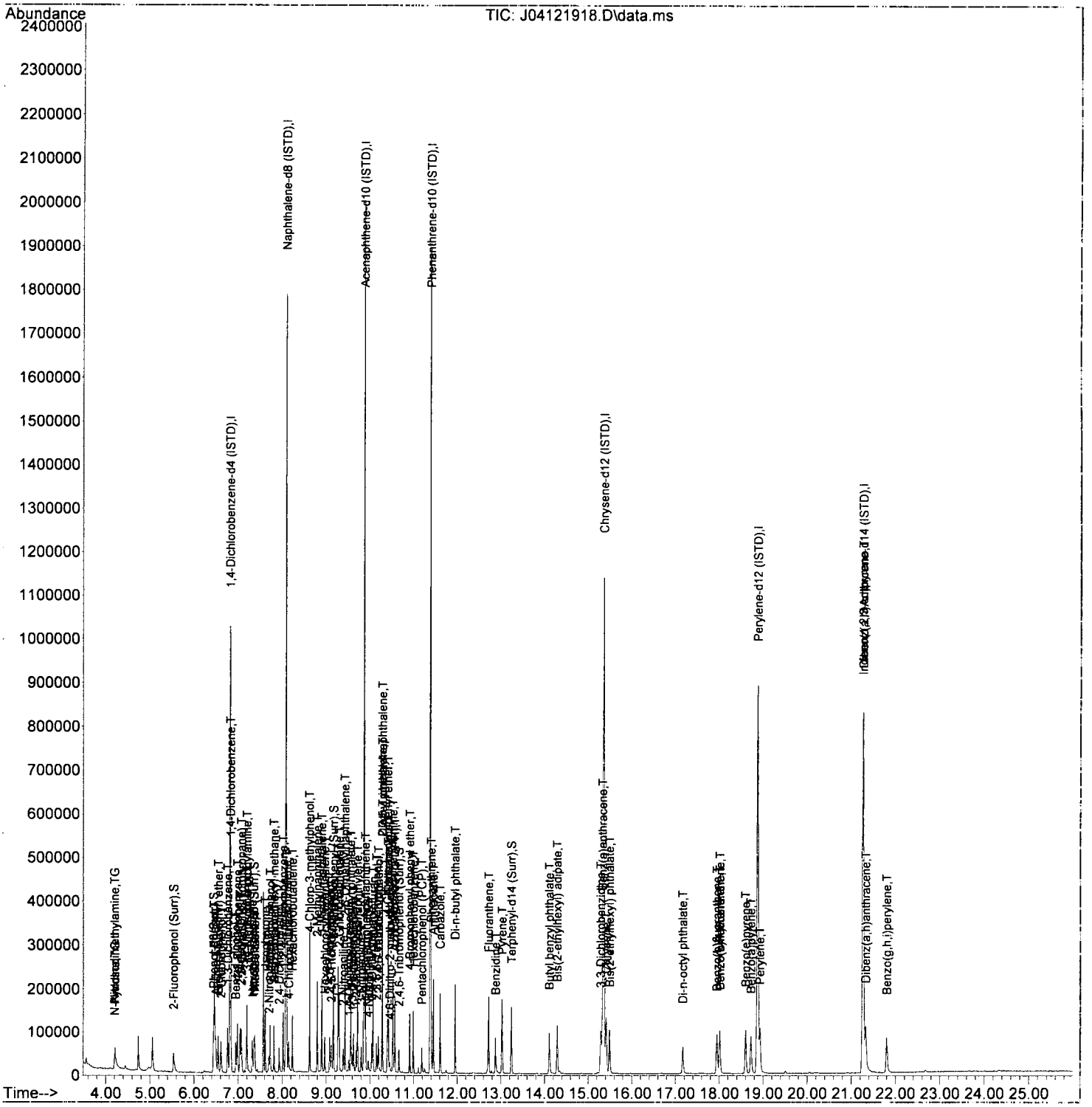
Ion	Exp%	Act%
231.90	100.00	100.00
131.00	63.10	50.53
229.90	78.40	72.77
0.00	0.00	0.00

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

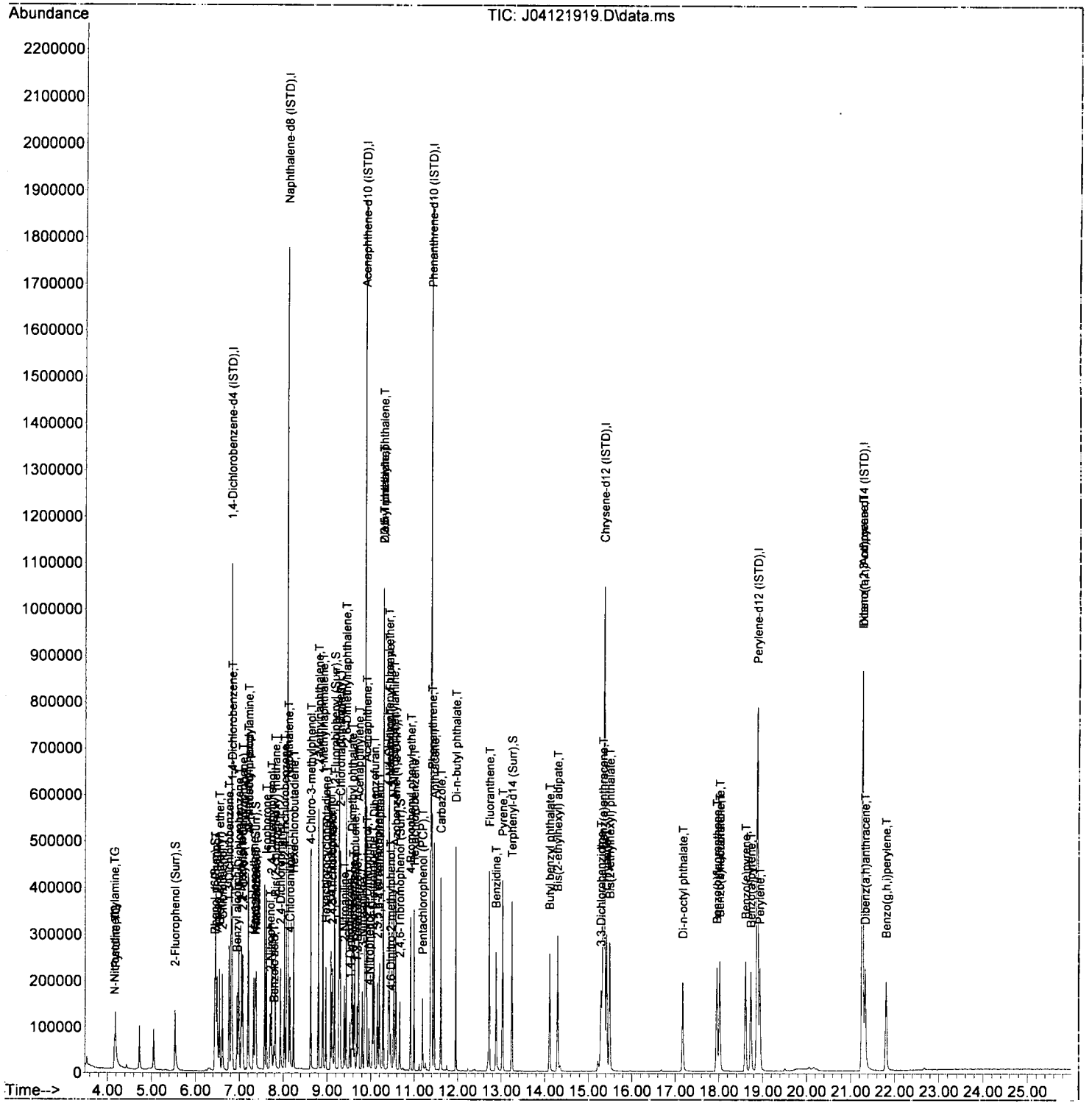
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	10966	266.95	ng/ml	96
45) Dimethyl phthalate	9.568	163	166367	531.71	ng/ml	98
46) 1,3-Dinitrobenzene	9.595	168	16599	362.32	ng/ml	87
47) 2,6-Dinitrotoluene	9.627	165	31238	460.37	ng/ml	95
48) 1,2-Dinitrobenzene	9.686	168	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

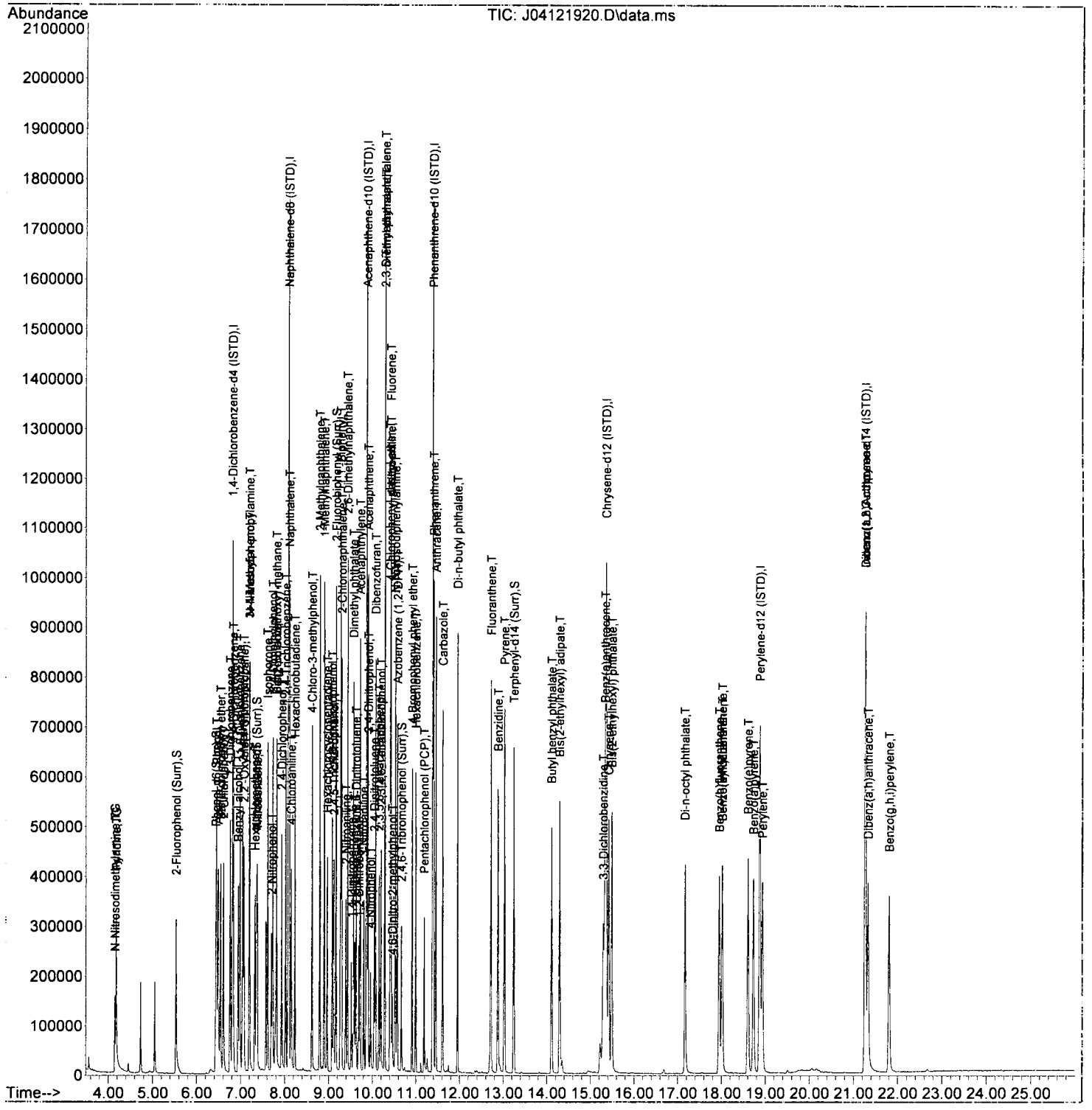
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	24586	635.47	ng/ml	90
45) Dimethyl phthalate	9.568	163	293273	995.18	ng/ml	98
46) 1,3-Dinitrobenzene	9.600	168	33847	784.43	ng/ml	98
47) 2,6-Dinitrotoluene	9.627	165	61642	964.55	ng/ml	98
48) 1,2-Dinitrobenzene	9.691	168	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

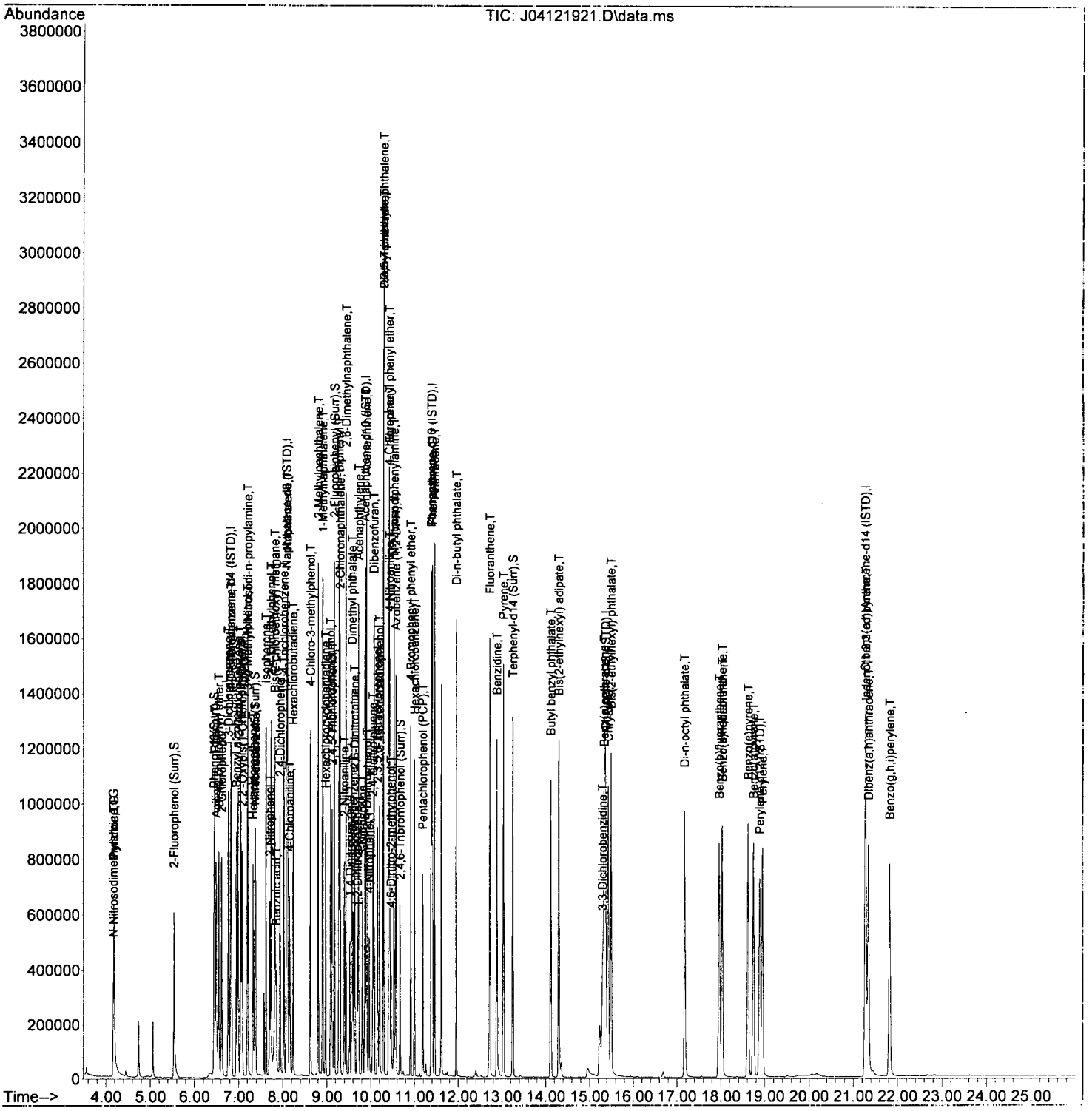
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.520	168	65644	1640.59	ng/ml	95
45) Dimethyl phthalate	9.573	163	593270	1946.60	ng/ml	99
46) 1,3-Dinitrobenzene	9.600	168	81663	1830.02	ng/ml	96
47) 2,6-Dinitrotoluene	9.632	165	130676	1977.14	ng/ml	95
48) 1,2-Dinitrobenzene	9.696	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

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

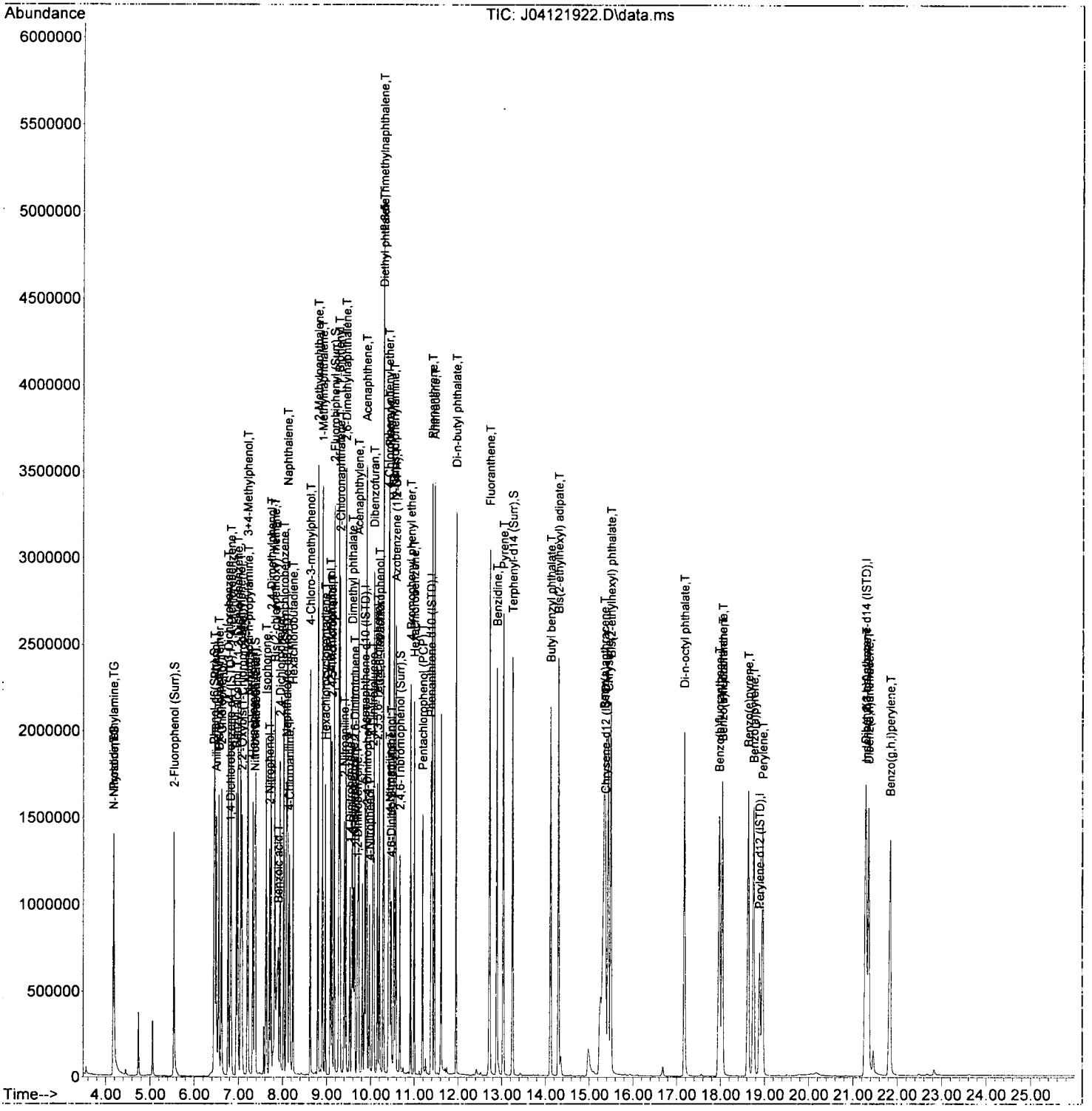
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.525	168	148152	3770.19	ng/ml	96
45) Dimethyl phthalate	9.584	163	1125792	3761.26	ng/ml	98
46) 1,3-Dinitrobenzene	9.611	168	172914	3945.59	ng/ml	98
47) 2,6-Dinitrotoluene	9.638	165	259088	3991.53	ng/ml	96
48) 1,2-Dinitrobenzene	9.702	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 9/19/19

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

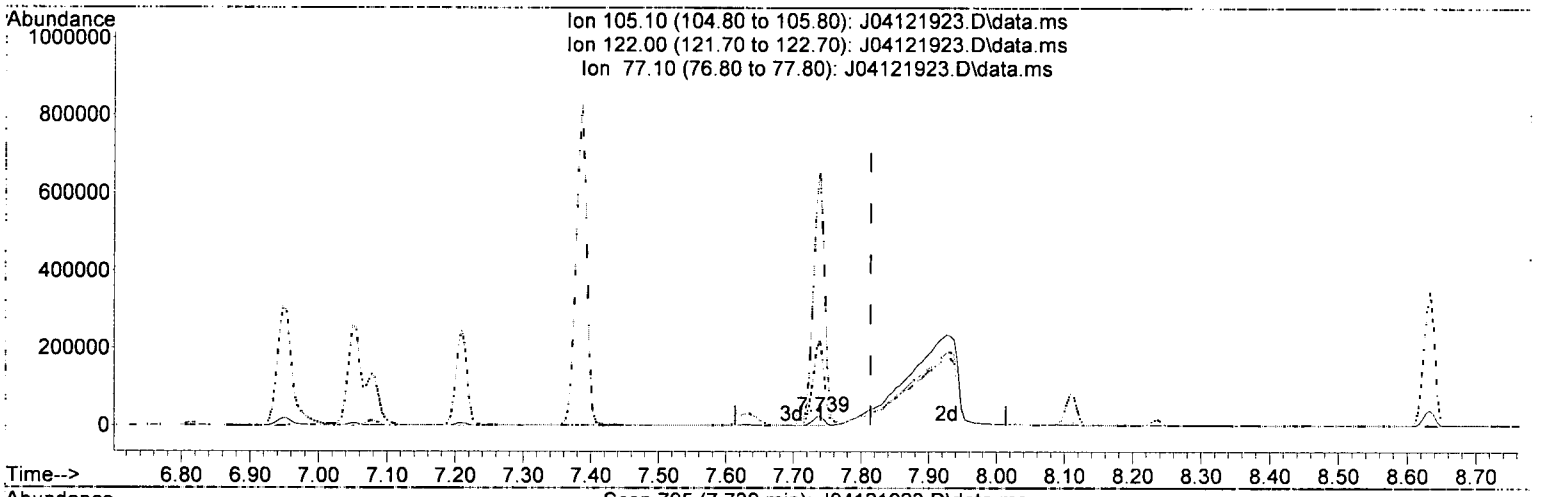
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44)	1,4-Dinitrobenzene	9.531	168	231647	5812.31	ng/ml	99
45)	Dimethyl phthalate	9.590	163	1593856	5250.38	ng/ml	97
46)	1,3-Dinitrobenzene	9.622	168	262552	5906.94	ng/ml	97
47)	2,6-Dinitrotoluene	9.649	165	380933	5786.37	ng/ml	89
48)	1,2-Dinitrobenzene	9.713	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

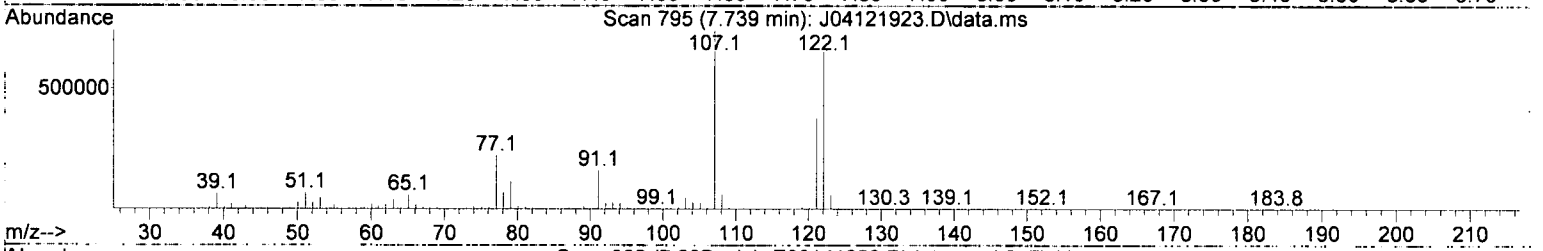
(#) = qualifier out of range (m) = manual integration (+) = signals summed

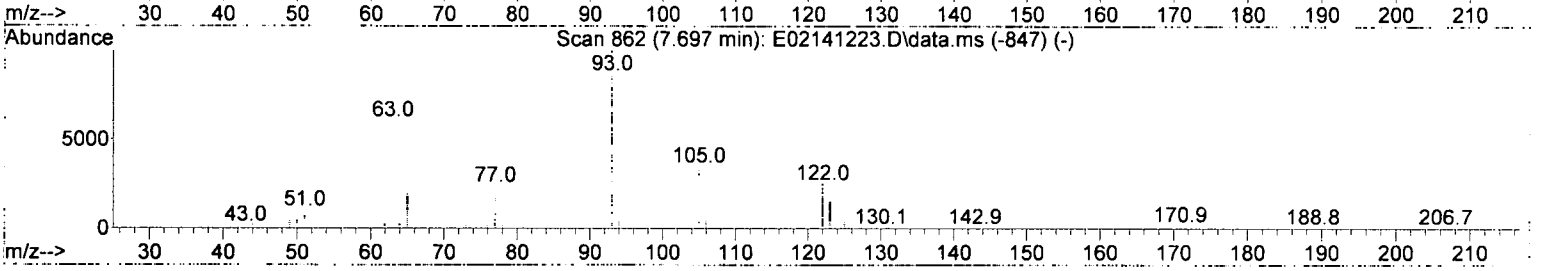
Quantitation Report (Qedit)

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

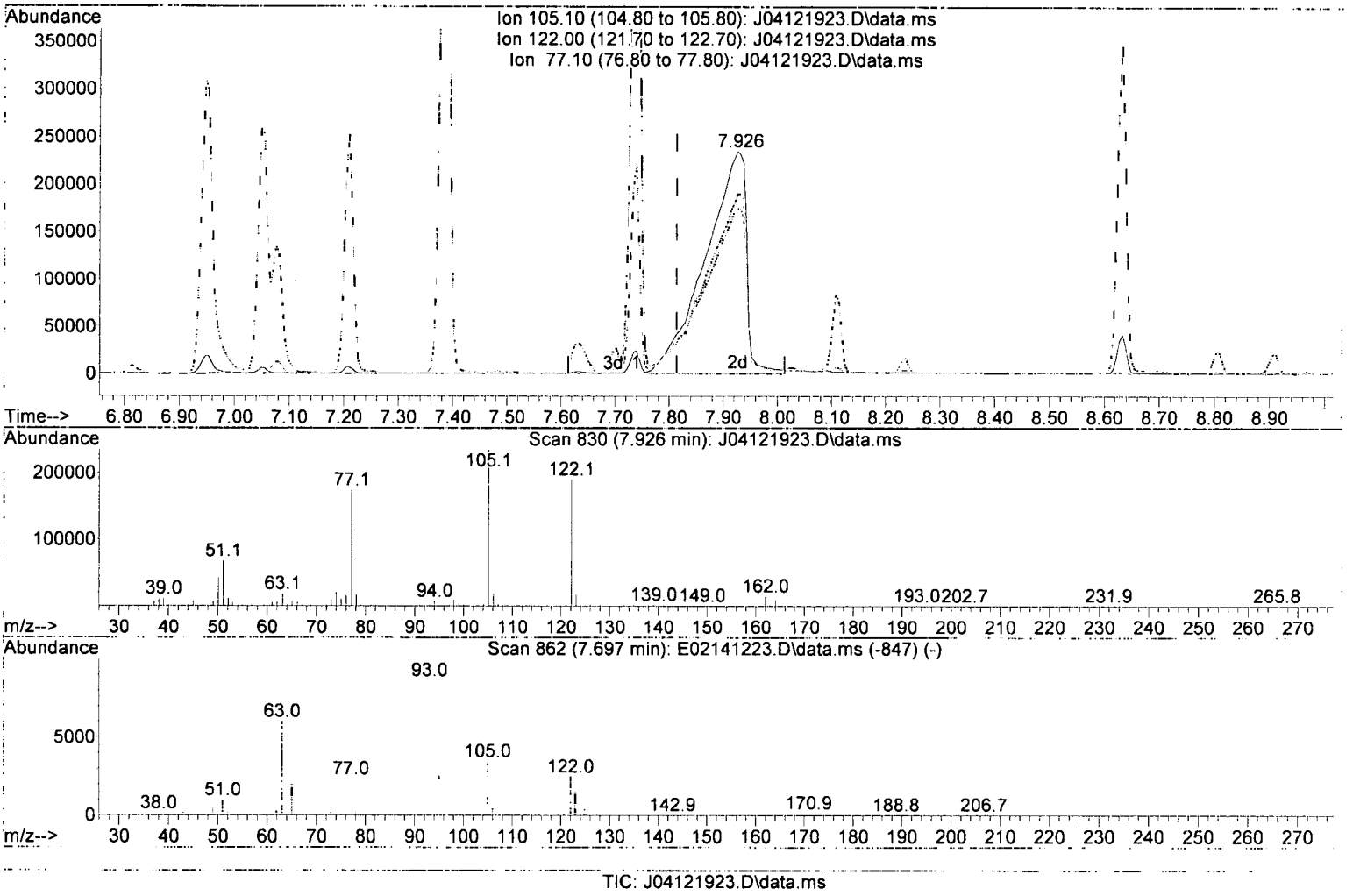
response 27049

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

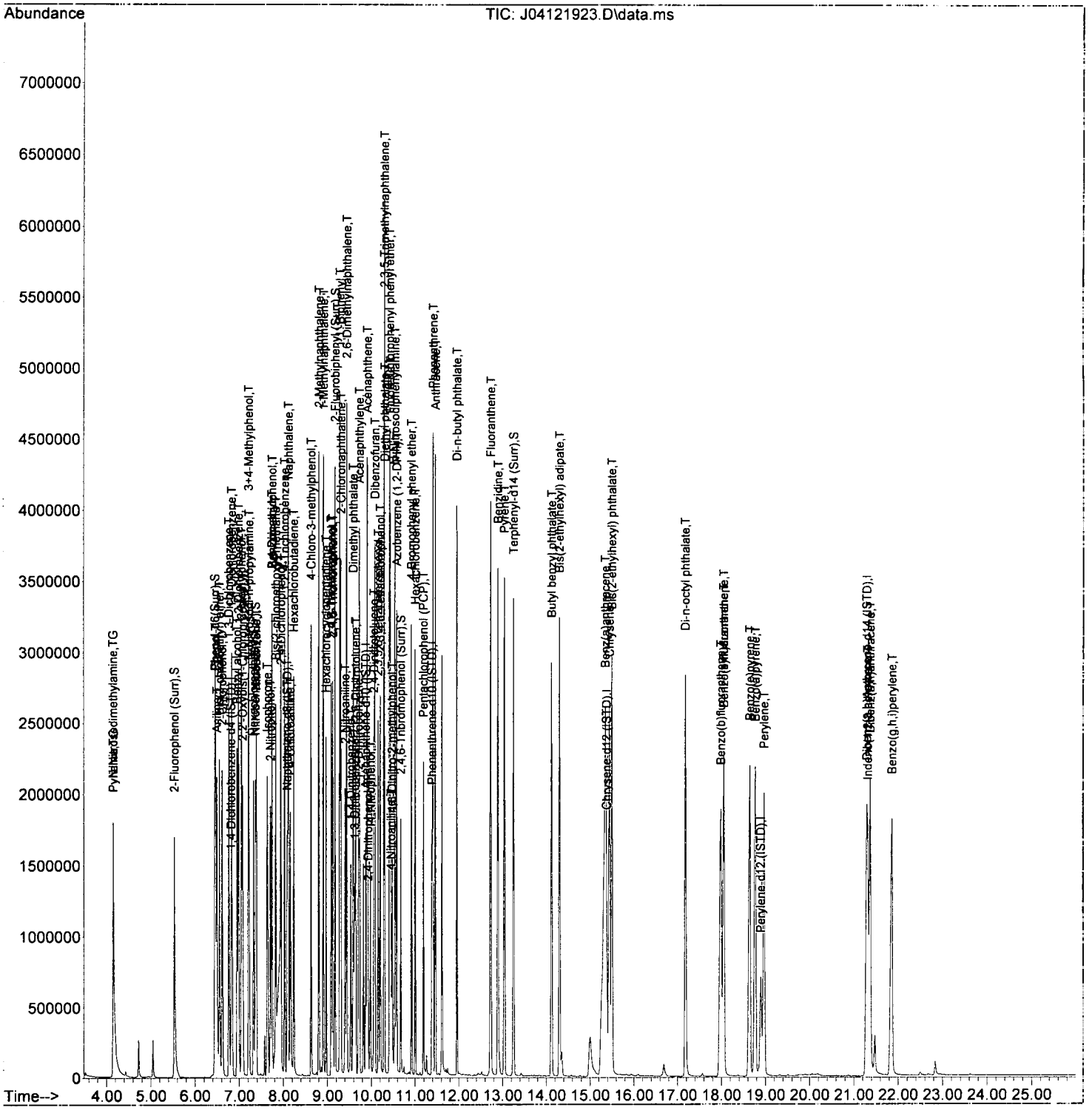
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	80.95
77.10	76.00	74.22
0.00	0.00	0.00

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	5922.93	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

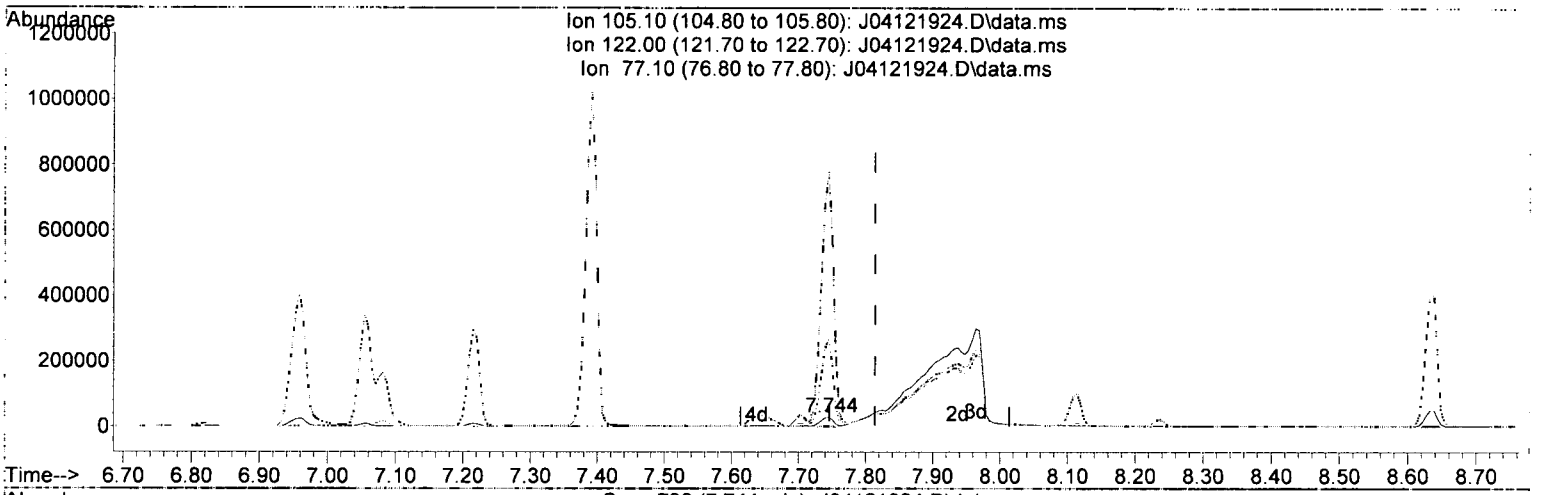
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.536	168	319922	7959.67	ng/ml	97
45) Dimethyl phthalate	9.600	163	2076750	6783.52	ng/ml	98
46) 1,3-Dinitrobenzene	9.633	168	349862	7805.01	ng/ml	95
47) 2,6-Dinitrotoluene	9.654	165	483438	7281.62	ng/ml	91
48) 1,2-Dinitrobenzene	9.718	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

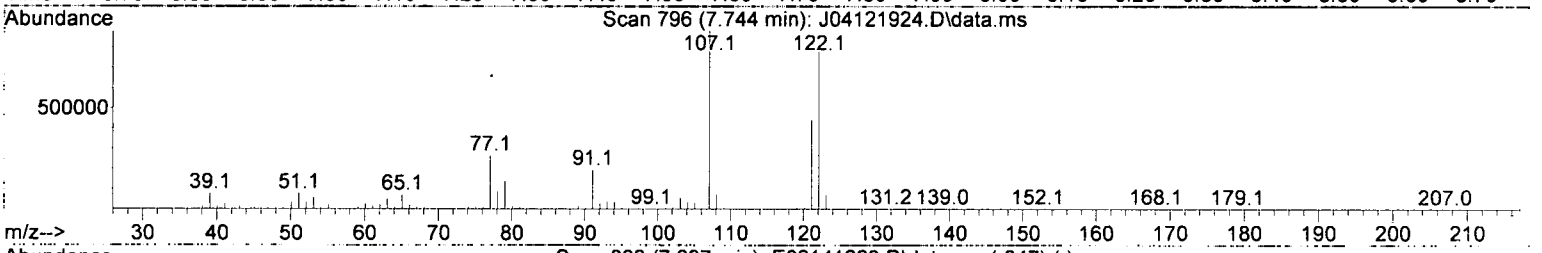
(#) = qualifier out of range (m) = manual integration (+) = signals summed

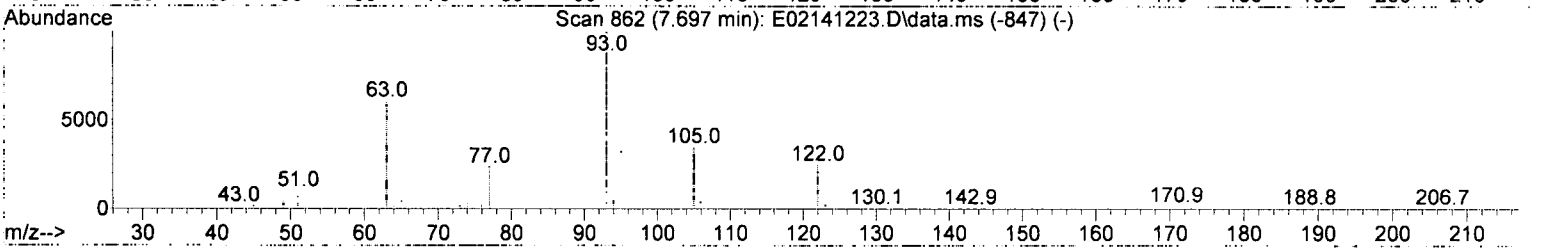
Quantitation Report (Qedit)

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

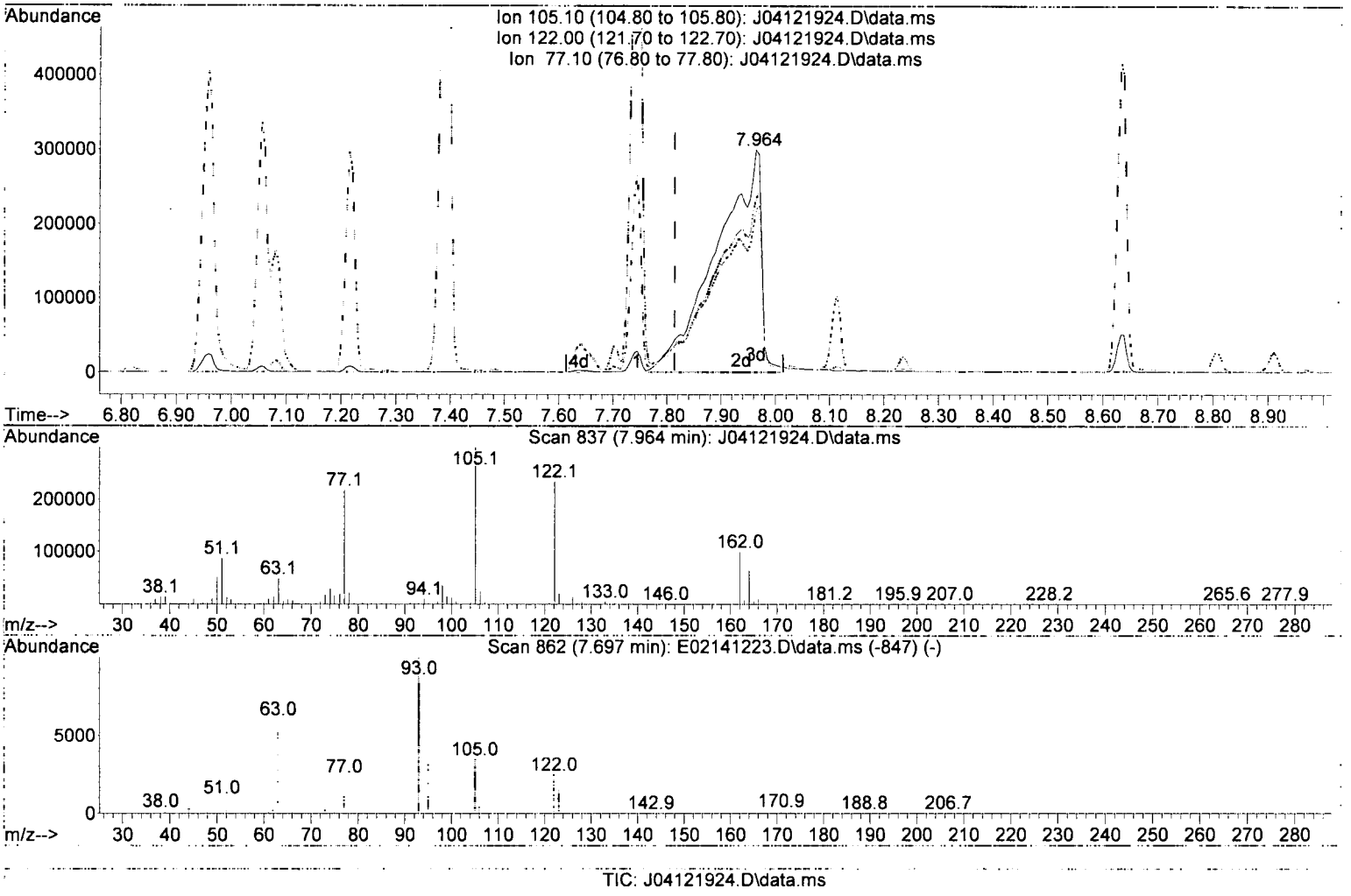
response 36749

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

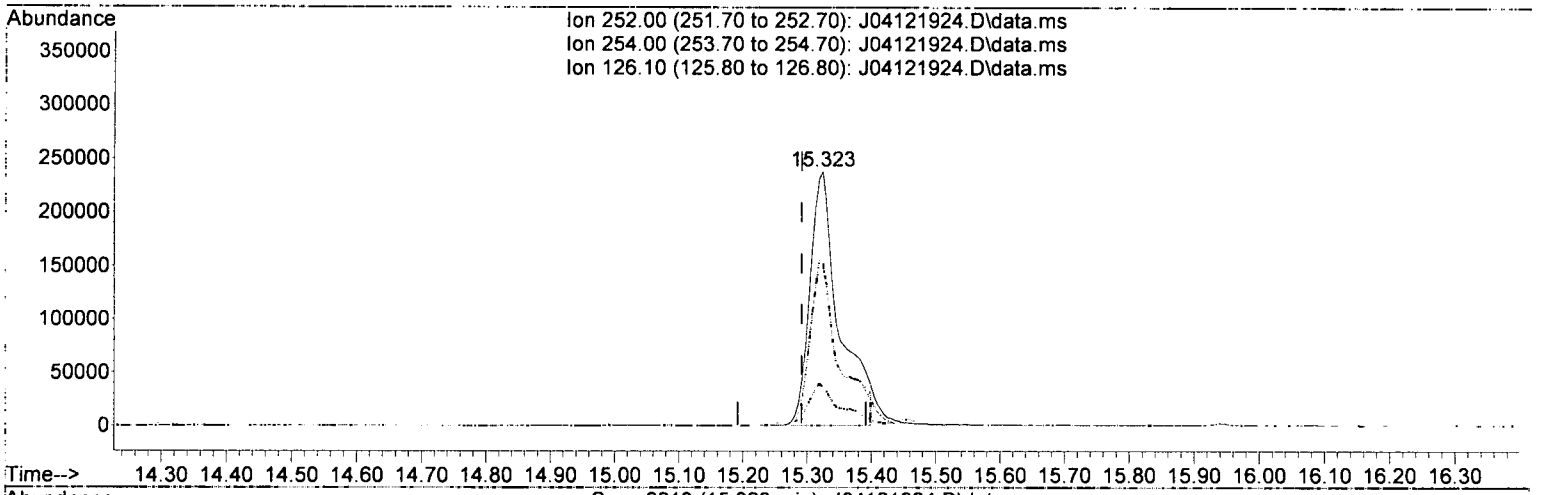
Ion	Exp%	Act%
105.10	100.00	100.00
122.00	80.70	78.16
77.10	76.00	72.89
0.00	0.00	0.00

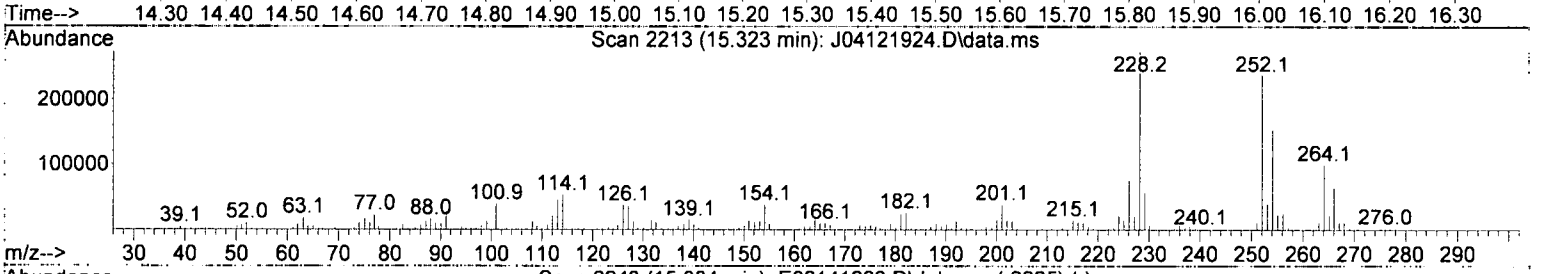
JK 4/15/19

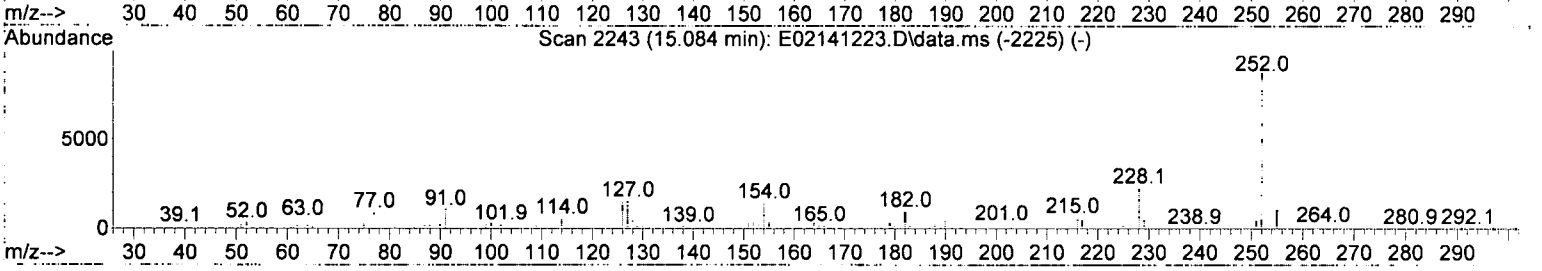
Quantitation Report (Qedit)

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

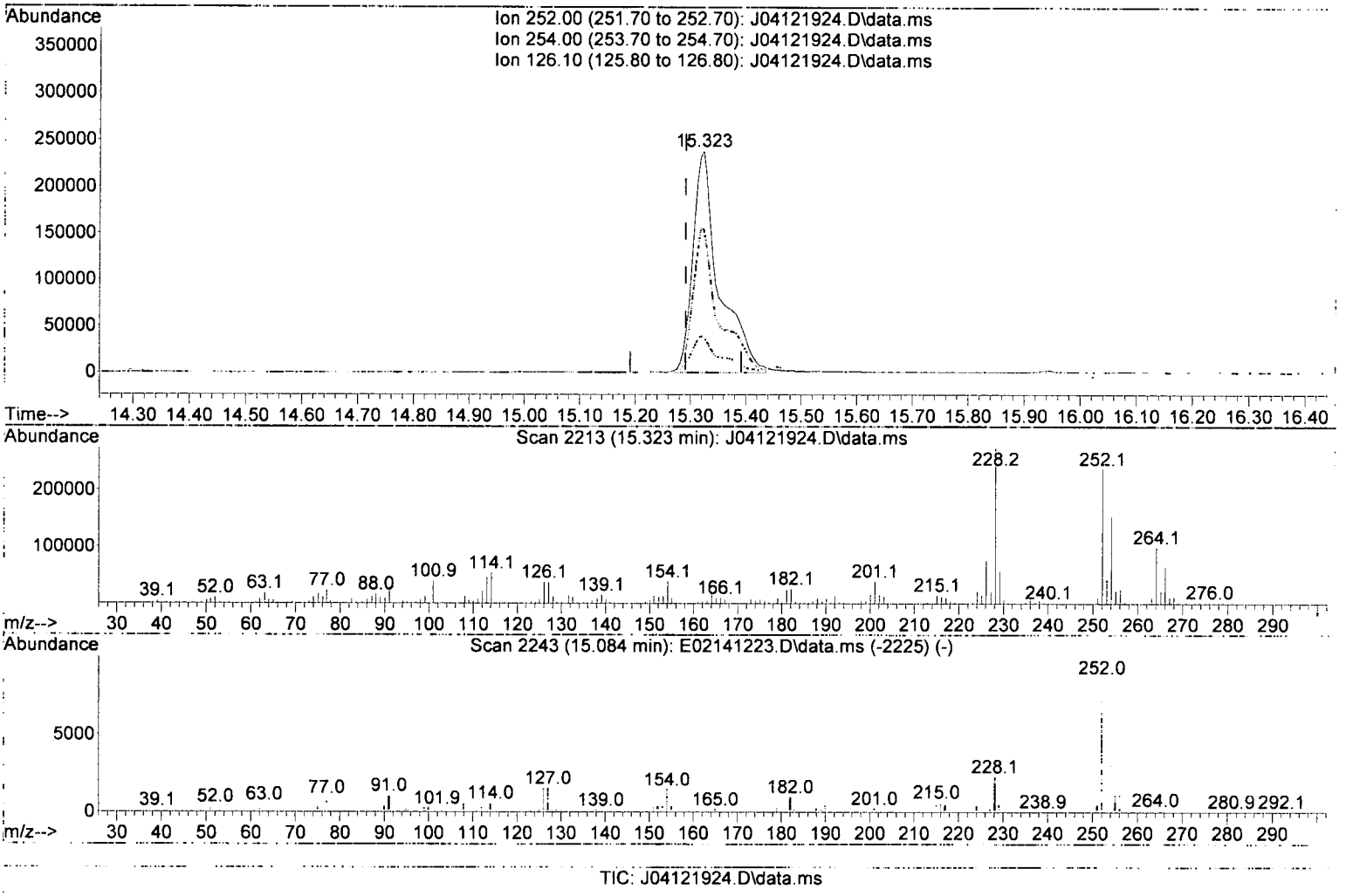
response 752117

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

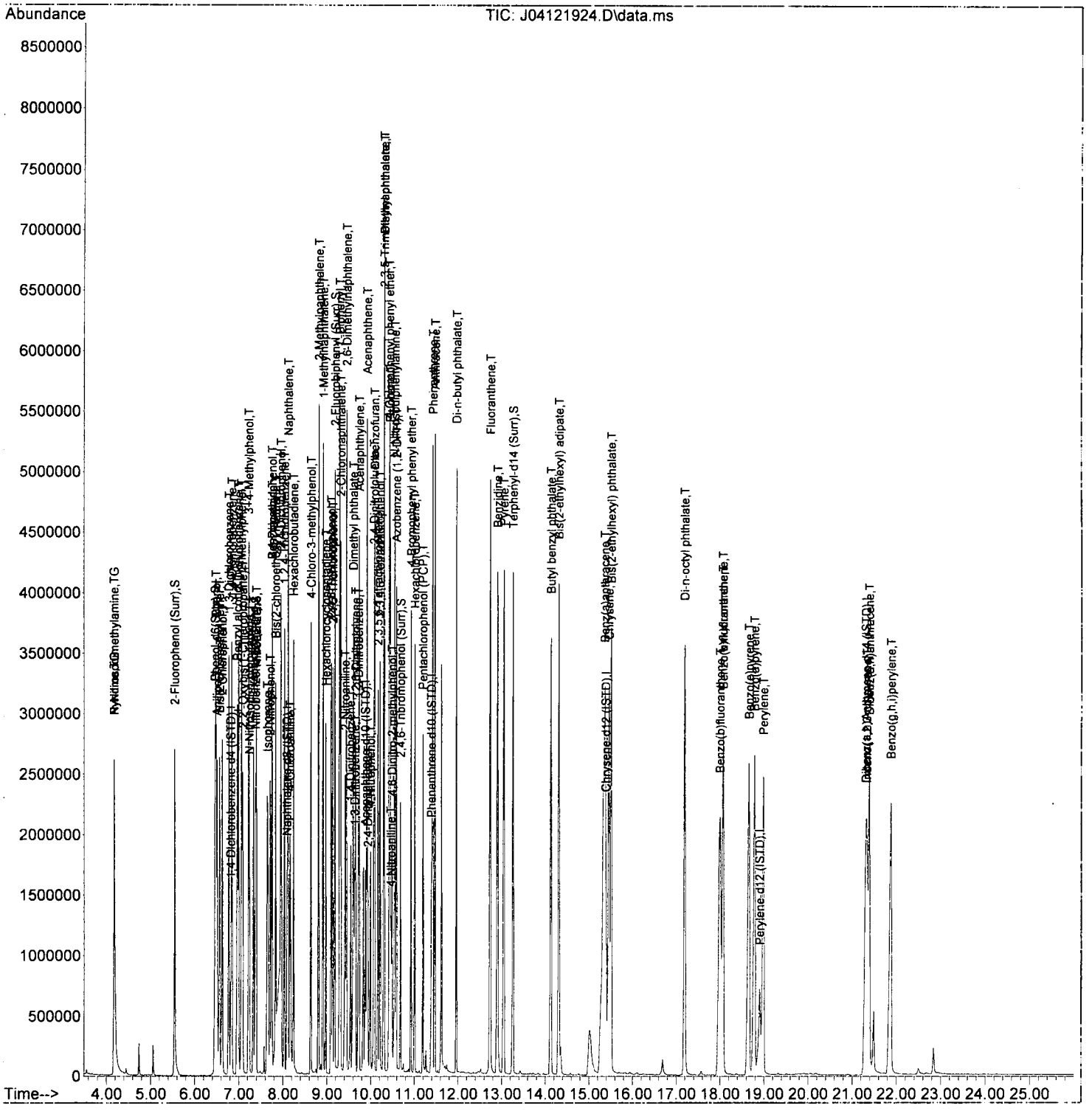
response 784747

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

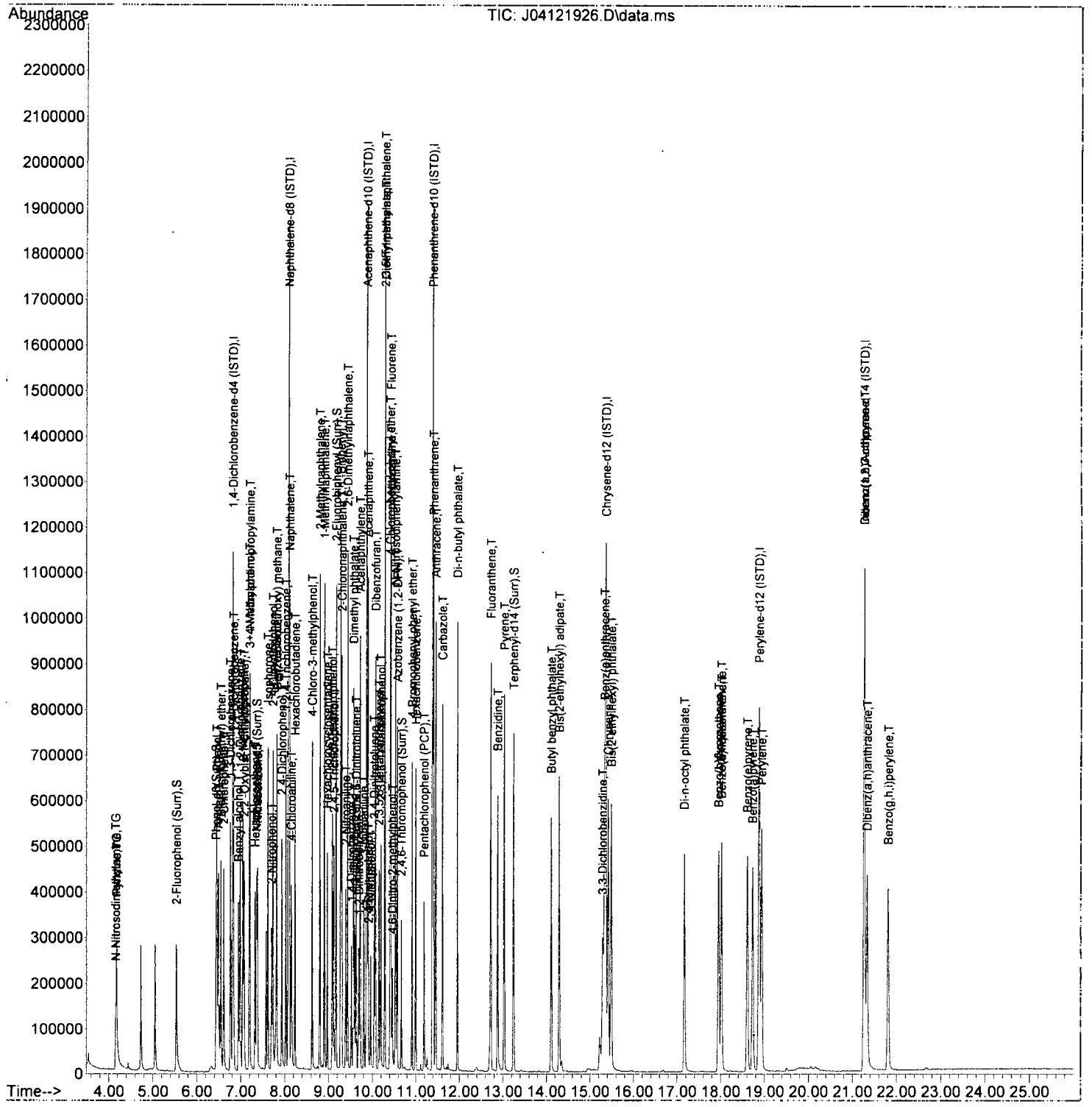
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	32109	746.64	ng/ml	98
45) Dimethyl phthalate	9.568	163	331508	1012.04	ng/ml	99
46) 1,3-Dinitrobenzene	9.600	168	42198	879.83	ng/ml	97
47) 2,6-Dinitrotoluene	9.627	165	71148	1001.57	ng/ml	95
48) 1,2-Dinitrobenzene	9.691	168	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 4/19/19

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

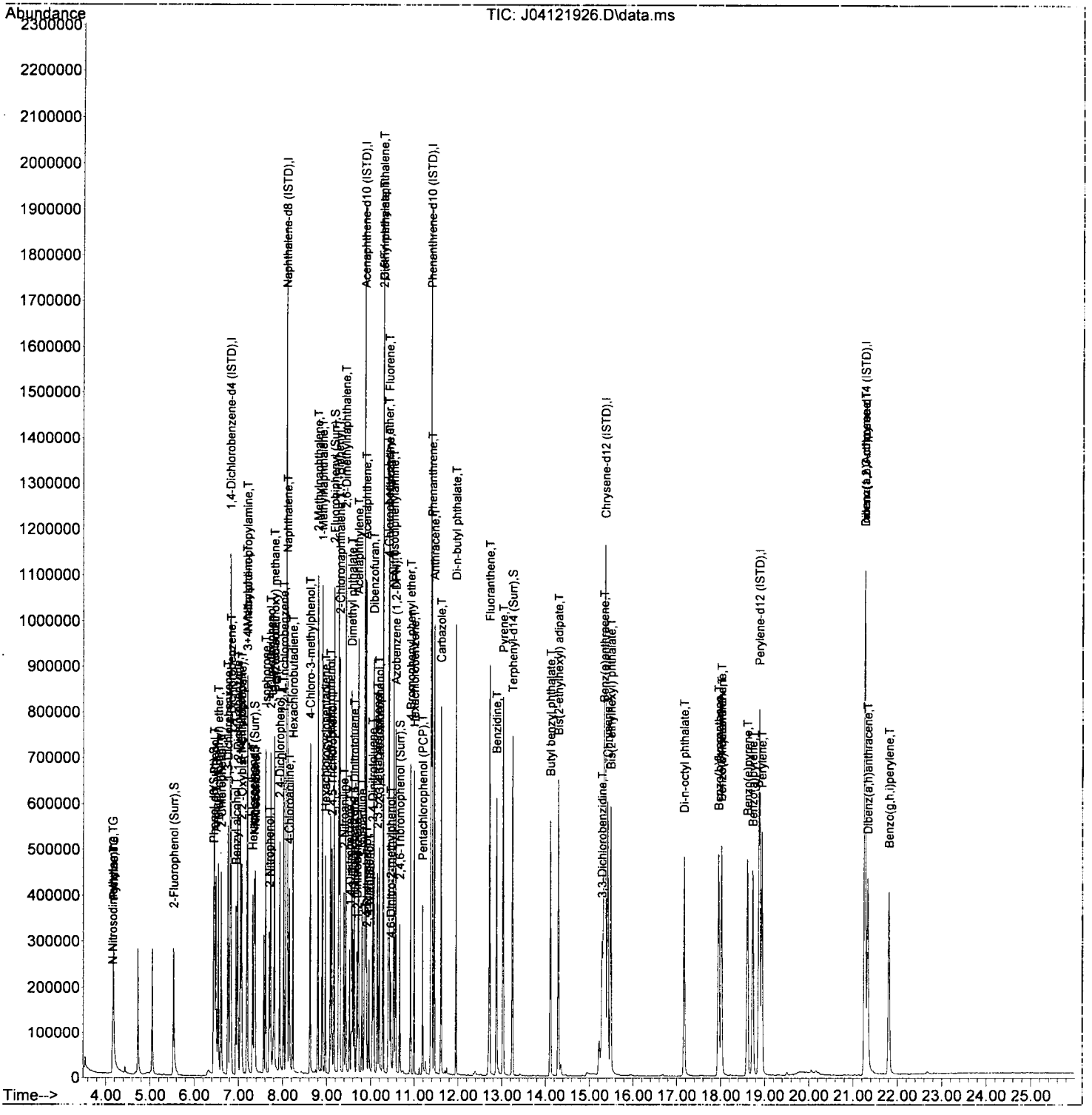
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.515	168	32109	1067.40	ng/ml	98
45) Dimethyl phthalate	9.568	163	331508	1048.39	ng/ml	99
46) 1,3-Dinitrobenzene	9.600	168	42198	1080.55	ng/ml	97
47) 2,6-Dinitrotoluene	9.627	165	71148	1065.26	ng/ml	95
48) 1,2-Dinitrobenzene	9.691	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

Conventional Chemistry Parameters
Total Organic Carbon (EPA 9060A mod)
Benchsheet & Analysis Sequence Data

Batch 9060687
Sequence 9F11024 (A9F0035-14,15,16)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9060687 (Sediment)

Prep Method: PSEP TOC

#	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
	9060687-BLK1		QC	06/07/19 07:00	5	5									
	9060687-BS1		QC	06/07/19 07:00	5	5	A19C282		1						
	A9F0028-01	A	Total Organic Carbon - Sediment (PSEP)	06/07/19 07:00	5	5					DMMU1-DP	Use E container			
	A9F0035-14	A	Total Organic Carbon - Soil (9060A)	06/07/19 07:00	5	5					T4-PDI2019-SG21-190531	Units=%			
	A9F0035-15	A	Total Organic Carbon - Soil (9060A)	06/07/19 07:00	5	5					T4-PDI2019-SG26-190530	Units=%			
	A9F0035-16	A	Total Organic Carbon - Sediment (PSEP)	06/07/19 07:00	5	5					T4-PDI2019-SG38-190531	Added for BatchQC in: 9060687			
	A9F0035-16	A	Total Organic Carbon - Soil (9060A)	06/07/19 07:00	5	5					T4-PDI2019-SG38-190531	MS/MSD, Units=%			
	9060687-DUP1		QC	06/07/19 07:00	5	5		A9F0035-16							

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

JKP 6-7-19
Prepared By: Date

6/12/19
Reviewed By: Date

ELEMENT SEQUENCE LOG

APEX LABORATORIES

Apex Laboratories

JUN 2 6 2019

Sequence: **9F11024** Instrument: **TOC**

Date: **06/11/19 08:10** Calibration: **A8B0203** ✓

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9F11024-CCV1	Sediment	QC	QC				A19C283 ✓
2	9F11024-CCB1	Sediment	QC	QC				
3	9060687-BLK1	Sediment	QC	QC		9060687		
4	9060687-BS1	Sediment	QC	QC		9060687		
5	A9F0028-01	Sediment	Total Organic Carbon - Sediment (PSI		06/13/19	9060687		
6	A9F0035-14	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/14/19	9060687		
7	A9F0035-15	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/14/19	9060687		
8	A9F0035-16	Sediment	Total Organic Carbon - Soil (9060A)	Anchor QEA, LLC	06/14/19	9060687		
9	"	Sediment	Total Organic Carbon - Sediment (PSI	(QC Source)		9060687		
10	9060687-DUP1	Sediment	QC	QC		9060687		
11	9060827-BLK1	Sediment	QC	QC		9060827		
12	9060827-BS1	Sediment	QC	QC		9060827		
13	9060827-BS2	Sediment	QC	QC		9060827		
14	9F11024-CCV2	Sediment	QC	QC				A19C283 ✓
15	9F11024-CCB2	Sediment	QC	QC				
16	9060827-BS3	Sediment	QC	QC		9060827		
17	9060827-BS4	Sediment	QC	QC		9060827		
18	9F11024-CCV3	Sediment	QC	QC				A19C283 ✓
19	9F11024-CCB3	Sediment	QC	QC				

Data Entered By: JKP 6-11-19 Comments:

Data Reviewed By: CWR 6/12/19

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9F11024-CCV1	1	20	282.60	208.54	10,427.24	10,296	
	2	20	277.70	203.31	10,165.51		
9F11024-CCB1	1	100	0.006	5.16	51.59	54	
	2	100	0.436	5.56	55.65		
9060687-BLK1	1	98.9	1.589	6.65	67.23	69	
	2	99.8	1.965	7	70.14		
	3	95.7	1.523	6.59	68.83		
9060687-BS1	1	20.0	266.8	192.22	9,611.10	9,763	
	2	20.0	269.5	194.9	9,744.96		
	3	20.0	273.2	198.64	9,932.07		
A9F0028-01	1	18.0	388.2	369.53	20,529.67	19,170	
	2	18.0	353.3	304.76	16,931.14		
	3	20.5	407.4	411	20,048.69		
A9F0035-14	1	40.0	339.9	283.2	7,079.98	6,808	
	2	39.4	296.6	224.41	5,695.79		
	3	36.6	337.8	279.97	7,649.58		
A9F0035-15	1	6.6	359.9	316.03	47,882.94	46,131	
	2	5.7	341.7	286	50,174.72		
	3	6.7	331.3	270.25	40,335.66		
A9F0035-16	1	58.4	20.03	23	393.80	379	
	2	63.1	20.07	23.03	365.00		
	3	62.7	20.86	23.69	377.87		
9060687-DUP1	1	61.8	20.06	23.02	372.54	384	
	2	63.5	21.37	24.12	379.80		
	3	58.4	20.45	23.35	399.82		

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
9060827-BLK1	1	92.8	1.565	6.63	71.40	70	
	2	94.7	1.784	6.83	72.13		
	3	99.3	1.386	6.46	65.04		
9060827-BS1	1	100.0	13.65	17.54	175.44	179	
	2	100.0	14.24	18.06	180.57		
	3	100.0	14.19	18.01	180.13		
9060827-BS2	1	100.0	13.93	17.79	177.88	179	
	2	100.0	14.27	18.08	180.83		
	3	100.0	13.89	17.75	177.53		
5D09031-CCV2	1	20.0	268.9	194.3	9,715.02	9,975	
	2	20.0	279	204.68	10,234.17		
5D09031-CCB2	1	100.0	0	5.15	51.53	52	
	2	100.0	0	5.15	51.53		
9060827-BS3	1	100	20.880	23.71	237.09	202	
	2	100	13.460	17.38	173.78		
	3	100	16.100	19.66	196.62		
9060827-BS4	1	100.0	12.81	16.81	168.10	184	
	2	100.0	14.1	17.94	179.35		
	3	100.0	16.86	20.31	203.13		
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!		

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
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!		
9F11027-CCV3	1	20.0	285.8	212.05	10,602.54	10,752	
	2	20.0	291.1	218.01	10,900.69		
9F11027-CCB3	1	100.0	0	5.15	51.53	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!		

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
9F11024-CCV1	1	20	282.60	208.54	10,427.24	10,296	
	2	20	277.70	203.31	10,165.51		
9F11024-CCB1	1	100	0.006	5.16	51.59	54	
	2	100	0.436	5.56	55.65		
9060687-BLK1	1	98.9	1.589	6.65	67.23	69	
	2	99.8	1.965	7	70.14		
	3	95.7	1.523	6.59	68.83		
9060687-BS1	1	20.0	266.8	192.22	9,611.10	9,763	
	2	20.0	269.5	194.9	9,744.96		
	3	20.0	273.2	198.64	9,932.07		
A9F0028-01	1	18.0	388.2	369.53	20,529.67	19,170	
	2	18.0	353.3	304.76	16,931.14		
	3	20.5	407.4	411	20,048.69		
A9F0035-14	1	40.0	339.9	283.2	7,079.98	6,808	
	2	39.4	296.6	224.41	5,695.79		
	3	36.6	337.8	279.97	7,649.58		
A9F0035-15	1	6.6	359.9	316.03	47,882.94	46,131	
	2	5.7	341.7	286	50,174.72		
	3	6.7	331.3	270.25	40,335.66		
A9F0035-16	1	58.4	20.03	23	393.80	379	
	2	63.1	20.07	23.03	365.00		
	3	62.7	20.86	23.69	377.87		
9060687-DUP1	1	61.8	20.06	23.02	372.54	384	
	2	63.5	21.37	24.12	379.80		
	3	58.4	20.45	23.35	399.82		

CMV 6/13/19

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
9060827-BLK1	1	92.8	1.565	6.63	71.40	70	
	2	94.7	1.784	6.83	72.13		
	3	99.3	1.386	6.46	65.04		
9060827-BS1	1	20.0	13.65	17.54	877.19	894	
	2	20.0	14.24	18.06	902.84		
	3	20.0	14.19	18.01	900.67		
9060827-BS2	1	20.0	13.93	17.79	889.38	894	
	2	20.0	14.27	18.08	904.15		
	3	20.0	13.89	17.75	887.64		
5D09031-CCV2	1	20.0	268.9	194.3	9,715.02	9,975	
	2	20.0	279	204.68	10,234.17		
5D09031-CCB2	1	100.0	0	5.15	51.53	52	
	2	100.0	0	5.15	51.53		
9060827-BS3	1	20	20.880	23.71	1,185.45	1,012	
	2	20	13.460	17.38	868.91		
	3	20	16.100	19.66	983.12		
9060827-BS4	1	20.0	12.81	16.81	840.52	918	
	2	20.0	14.1	17.94	896.77		
	3	20.0	16.86	20.31	1,015.67		
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!		

6/13/19

TOC Data

Sample ID (Reporting Levels based on lowest amount used.)	Rep #	Amount (mg or ul)	instrument response (ug C)	Calculated ug C	TOC (mg/kg or mg/l)	Average TOC (mg/kg or mg/l)	Date and Time
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!		
9F11027-CCV3	1	20.0	285.8	212.05	10,602.54	10,752	
	2	20.0	291.1	218.01	10,900.69		
9F11027-CCB3	1	100.0	0	5.15	51.53	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!		

6/19/19

Sequence 9F11024
Batch 9060687/9060827

TOC Soil data log

Date/Time 6-11-19 @ 1700
Analyst JKP

Sample ID	Wt1(mg or ul)** / Wt2(mg or ul)** / Wt3(mg or ul)**	raw TOC (ug)	Comments
9F11024-CCV1	20	282.6	
	20	277.7	
9F11024-CCB1	100	0.006	
	100	0.436	Time Out
9060687-BLK1	98.9	1.589	
	99.8	1.965	Time Out
	95.7	1.523	
9060687-BS1	20	266.8	
	20	269.5	
	20	273.2	
A9F0028-01	18.0	388.3	
	18.0	353.3	
	20.5	407.4	
A9F0035-14	40.0	339.9	
	39.4	296.6	
	36.6	337.8	
A9F0035-15	~~18.2~~ JKP 6-11-19	~~612.6~~	>533 reweigh
	~~5.7~~ JKP 6-13-19	~~316.7~~	5.7 341.7
	6.6	359.9	6.7 331.3
A9F0035-16	58.4	20.03	
	63.1	20.07	
	62.7	20.86	

Sample ID	Wt1(mg or ul)** / Wt2(mg or ul)** / Wt3(mg or ul)**	raw TOC (ug)	Comments
9060687-DUP1	61.8	20.06	
	63.5	21.37	
	58.4	20.45	
9060827-BLK1	92.8	1.565	
	94.7	1.784	
	99.3	1.386	
9060827-BS1	~~20~~ 100	13.65	
	JKP 20 100	14.24	
	6-13-19 ~~20~~ 100	14.19	Time Out
9060827-BS2	~~20~~ 100	13.93	
	JKP 20 100	14.27	Time Out
	6-13-19 ~~20~~ 100	13.89	Time Out
9F11024-CCV1	20	268.9	
	20	279	
9F11024-CCB1	100	0	
	100	0	
9060827-BS3	~~20~~ 100	20.88	
	JKP 20 100	13.46	
	6-13-19 ~~20~~ 100	16.1	Time Out
9060827-BS4	~~20~~ 100	12.81	
	JKP 20 100	14.1	Time Out
	6-13-19 ~~20~~ 100	16.86	Time Out

**Sample mass input into instrument as 1000 mg to output actual ug C

Sequence 9F11024
Batch 9060687/9060827

TOC Soil data log

Date/Time 6-11-19@1700
Analyst JRF

Sample ID	Wt1(mg or ul)**	raw TOC (ug)	Comments
	Wt2(mg or ul)**	raw TOC (ug)	
	Wt3(mg or ul)**	raw TOC (ug)	
9F11024-CCV3	20	~~20.88~~ JRF 6-11-19	285.8
	20	291.1	
9F11024-CCB3	100	0	
	100	0	

Batch 9060687 TOC PSEP preweigh Analyst JKP

Date/Time:	6/10/19	6/10/19			Effervesces?	Comments
T(°C) IN / OUT:	69.1/69.7	69.5/69.8	/	/		
Sample ID	Wt 1(g)	Wt 2(g)	Wt 3(g)	Wt 4(g)	(yes/no)	
A9F0028-01	9.4129	9.4109			No	
A9F0035-14	10.8627	10.8669			↓	
A9F0035-15	13.3991	13.4037			↓	
A9F0035-16	11.8305	11.8350			↓	
A9F0035-16D	11.4329	11.4374			↓	

JM oven on 6-7-19 @ 0700 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

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-CalA JKP 2-2-18	20	503.7	
	20	504.4	Time Out
	20	504.6	Time Out
8B02022-CalB JKP 2-2-18	20	529.1	Time Out
	20	532.5	Time Out
	20	537.6	Time Out
8B02022-ICV1	20	298.2	Time Out
	20	312	Time Out
	JKP 2-2-18 ~~20~~		
8B02022-ICB1	20	0	
	20	0	
	JKP 2-2-18 ~~20~~		
8B02022-ICV2	20	277.9	Time Out
	20	287.2	Time Out
8B02022-ICB2	20	0	
	20	0	

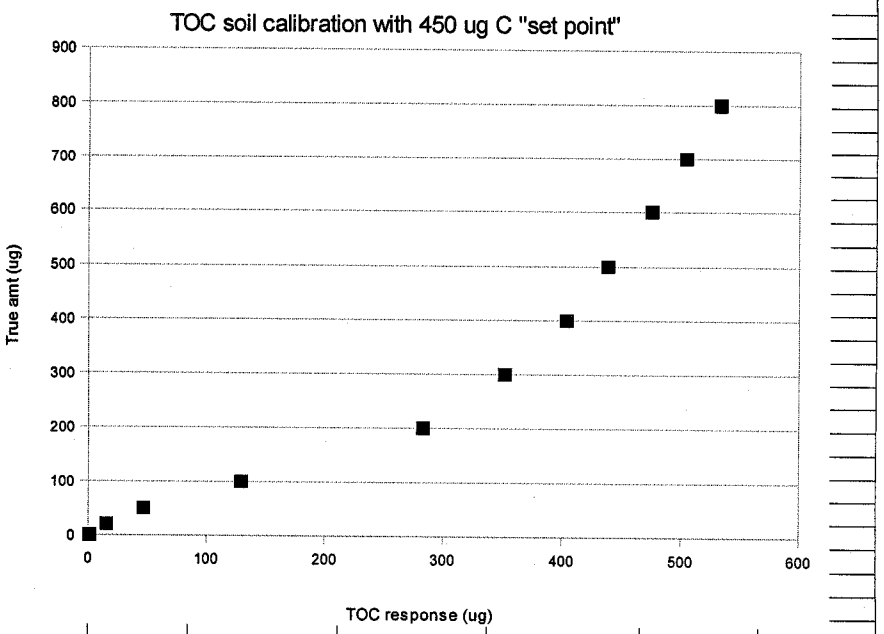
ICV1 failed high. Reprepped and reanalyzed below as ICV2
JKP 2-2-18

**Sample mass input into instrument as 1000 mg to output actual ug C

Cal Standard	Instrument Reponse	Average Instrument Response
1	1.85	1.38
	1.11	
	1.19	
2	14.4	15.6
	16.65	
	15.74	
3	44.37	46.83
	48.3	
	47.81	
4	123.9	129.37
	131.8	
	132.4	
5	278.8	283.5
	287.6	
	284.1	
6	350.7	352.23
	345	
	361	
7	399.1	403.87
	402.2	
	410.3	
8	437.8	438.7
	440.9	
	437.4	
9	473.2	475.5
	473.6	
	479.7	
10	503.7	504.23
	504.4	
	504.6	
11	529.1	533.07
	532.5	
	537.6	

450 ug curve

TOC resp ug C		True ug C
533.07		800
504.23		700
475.5		600
438.7		500
403.87		400
352.23		300
283.5		200
129.37		100
46.83		50
15.6		20
1.38		0



TOC resp ug C	Requant	% recovery
533.07	808.77	101.1
504.23	695.73	99.39
475.5	596.81	99.47
438.7	488.46	97.69
403.87	403.04	100.76
352.23	302.98	100.99
283.5	209.52	104.76
129.37	95.14	95.14
46.83	43.86	87.73
15.6	19.23	96.15
1.38	6.45	N/A

X (response)	X^2	X^3	y (ug C)
533.07	284160.07	151476261.9	800
504.23	254251.25	128201957.5	700
475.5	226100.25	107510668.9	600
438.7	192457.69	84431188.6	500
403.87	163108.28	65873999.14	400
352.23	124068.32	43700998.31	300
283.5	80372.25	22785532.88	200
129.37	16735.73	2165046.18	100
46.83	2192.74	102678.55	50
15.6	243.26	3793.98	20
1.38	1.91	2.64	0

curve calculations

0.00000740	-0.00289199	0.94586231	5.15285875
0	0	0.14	5.96
0.99945	8.03	#N/A	#N/A
4233.13	7	#N/A	#N/A
818003.66	450.89	#N/A	#N/A

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!		

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Conventional Chemistry Parameters
Total Suspended Solids (PSEP 1986)
Benchsheet Data

Batch 9060683 (A9F0035-14,15,16)

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 9060683 (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
A9E0922-09		06/06/19 17:58		1.3853	28.8031	21.5421	73.5	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-09		06/06/19 17:58		1.3853	28.8031	21.5421	73.5	Enter TS data for DW. (Units=%)
A9E0922-10		06/06/19 17:58		1.3620	27.0150	19.9811	72.6	Enter TS data for DW. (Units=%)
A9E0922-10		06/06/19 17:58		1.3620	27.0150	19.9811	72.6	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-11		06/06/19 17:58		1.3777	32.3050	23.1911	70.5	Enter TS data for DW. (Units=%)
A9E0922-11		06/06/19 17:58		1.3777	32.3050	23.1911	70.5	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-12		06/06/19 17:58		1.3841	34.8476	24.1216	67.9	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-12		06/06/19 17:58		1.3841	34.8476	24.1216	67.9	Enter TS data for DW. (Units=%)
A9E0922-13		06/06/19 17:58		1.3883	42.8619	29.3729	67.5	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-13		06/06/19 17:58		1.3883	42.8619	29.3729	67.5	Enter TS data for DW. (Units=%)
A9E0922-14		06/06/19 17:58		1.3940	34.7541	25.0060	70.8	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-14		06/06/19 17:58		1.3940	34.7541	25.0060	70.8	Enter TS data for DW. (Units=%)
A9E0922-15		06/06/19 17:58		1.3899	34.6308	24.5454	69.7	**USE SOLIDS DATA** Make Not Reportable.
A9E0922-15		06/06/19 17:58		1.3899	34.6308	24.5454	69.7	Enter TS data for DW. (Units=%)
A9E0927-05		06/06/19 17:58		1.3728	28.0082	16.4683	56.7	MS/MSD this sample, **USE SOLIDS DATA** Make Not Reportable.
A9E0927-05		06/06/19 17:58		1.3728	28.0082	16.4683	56.7	MS/MSD this sample, Enter TS data for DW. (Units=%)
9060683-DUP1	A9E0927-05	06/06/19 17:58		1.3674	30.6320	17.9908	56.8	
A9F0035-14		06/06/19 17:58		1.3744	30.6226	19.9~~386~~ 9299	63.~~5~~4	**USE SOLIDS DATA** Make Not Reportable.
A9F0035-14		06/06/19 17:58		1.3744	30.6226	19.9~~386~~ 6/7/19	63.~~5~~4 6/7/19	Enter TS data for DW. (Units=%)
A9F0035-15		06/06/19 17:58		1.3818	30.4945	19.4178	62.0	Enter TS data for DW. (Units=%)
A9F0035-15		06/06/19 17:58		1.3818	30.4945	19.4178	62.0	**USE SOLIDS DATA** Make Not Reportable.
A9F0035-16		06/06/19 17:58		1.3899	40.6634	30.0493	73.0	MS/MSD, **USE SOLIDS DATA** Make Not Reportable.

MRE 6-7-19

Prepared By: Date

6/7/19

Reviewed By: Date

Printed: 6/7/2019 12:21:21PM

PREPARATION BENCH SHEET

Apex Laboratories

BATCH #: 9060683 (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
A9F0035-16		06/06/19 17:58		1.3899	40.6634	30.0493	73.0	MS/MSD, Enter TS data for DW. (Units=%)
9060683-DUP2	A9F0035-16	06/06/19 17:58		1.3632	36.8238	27.2916	73.1	

Prepared By: Date

Reviewed By: Date

Total Solids Worksheet

Analyst: MRF Date: 06/05/19 MRF 6/6 Batch: 9060683
6-6-19

Sample ID	Vessel ID	Tare Weight (g)	DRY+ Tare Weight (g)	Ignited Weight (g)		Comments
				1st weighing	2nd weighing	
A9E0922-09	1	1.3853	28.8031	21.5421	21.5528	decanted 6/7 119
A9E0922-10	2	1.3620	27.0150	19.9811	19.9863	↓
A9E0922-11	3	1.3777	32.3050	23.1911	23.2009	
A9E0922-12	4	1.3841	34.8476	24.1216	24.1374	
A9E0922-13	5	1.3883	42.8019	29.3729	29.4001	
A9E0922-14	6	1.3940	34.7541	25.0060	25.0157	
A9E0922-15	7	1.3899	34.6308	24.5787	24.5454	
A9E0927-05	8	1.3728	28.0082	16.4683	16.4687	
9060683-DUP1	9	1.3674	30.6320	17.9908	18.0145	
A9F0035-14	10	1.3744	30.0226	19.9294	19.9386	
A9F0035-15	11	1.3818	30.4945	19.4178	19.4370	
A9F0035-16	12	1.3899	40.6634	30.0493	30.0653	
9060683-DUP1	13	1.3632	36.8238	27.2916	27.3007	

APEX LABORATORIES, LLC
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Grain Size by ASTM D 422m
Benchsheet Data

Batch 9060930 (A9F0035-14,15,16,17)

APEX LABORATORIES

Grain Size (D422m/PSET)

PREPARATION BENCH SHEET 9060930

Apex Laboratories
BATCH #: 9060930 (Soil)
Prep Method: ASTM D 421

Lab Number	Due	Prepared	Initial (N/A)	Final (N/A)	Client	ClientID / Sample	Extraction Comments
A9F0035-14	*06/14/19*	**06/19/19 08:41**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SG21-190531**	
☐ Grain Size (D422m/PSET)							
A9F0035-15	*06/14/19*	**06/19/19 09:00**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SG26-190530**	
☐ Grain Size (D422m/PSET)							
A9F0035-16	*06/14/19*	**06/19/19 09:20**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SG38-190531**	
☐ Grain Size (D422m/PSET)							
A9F0035-17	*06/14/19*	**06/19/19 09:44**	**1**	**1**	**Anchor QEA, LLC**	**T4-PDI2019-SG38-190531-I**	
☐ Grain Size (D422m/PSET)							
A9F0312-01	*06/21/19*	**06/19/19 09:07**	**1**	**1**		**HBC-1**	
☐ Grain Size (D422m/PSET)							
A9F0312-02	*06/21/19*	**06/19/19 09:28**	**1**	**1**		**HBC-2**	
☐ Grain Size (D422m/PSET)							
A9F0421-11	*06/25/19*	**06/19/19 08:50**	**1**	**1**		**WSC-1-D**	
☐ Grain Size (D422m/PSET)							

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L215	11/30/23	Grain Size Balance
A19F119	07/12/19	Na Hexametaphosphate 40 g/L
A19F222	07/18/19	Na Hexametaphosphate 40 g/L

Analyte Spike(s)

Std ID	Exp. Date	Description

James S Johnson 06/21/19
Prepared By: Date

6/21/19
Reviewed By: Date

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-14		Client Sample ID:	T4-PDI2019-SG21-190531		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	Silty SAND with trace Clay			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.105	486.794	475.69	2.11	465.8

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.300	2.451	1.15	1.15	0.2	99.8
10	2.00	1.300	5.114	3.81	4.97	0.8	98.9
Pan		11.113	481.440	470.33	475.29	98.8	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9793		35-14	1.304	15.599	15.303	2.11

Hydrometer Analysis

Start Date/Time	6/19/2019	8:41	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	50.214		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	98.9		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	49.17		Corrected Dry Weight of Soil Tested (g) (W)	49.70

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	14	20.9	8.08	16.3	13.8	0.01348	0.050	16.08
2	13.5	20.9	7.58	15.3	13.8	0.01348	0.035	15.09
4	12	20.9	6.08	12.2	14.2	0.01348	0.025	12.10
8	11	20.9	5.08	10.2	14.3	0.01348	0.018	10.11
15	10.5	21	4.61	9.3	14.3	0.01348	0.013	9.18
30	10	21.2	4.18	8.4	14.5	0.01348	0.009	8.32
60	8.5	21.2	2.68	5.4	14.7	0.01348	0.007	5.34
90	8	21.2	2.18	4.4	14.8	0.01348	0.005	4.34
120	8	21.1	2.15	4.3	14.8	0.01348	0.005	4.27
240	7	21	1.11	2.2	15	0.01348	0.003	2.22
360	6.5	21	0.61	1.2	15	0.01348	0.003	1.22
1440	5.5	20.2		0.0	15.2	0.01365	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	1.289	1.462	0.17	6.59	0.3	98.6
40	0.425	1.288	7.372	6.08	63.57	12.2	86.3
60	0.250	1.300	20.751	19.45	245.76	39.1	47.2
100	0.150	1.293	8.750	7.46	315.60	15.0	32.2
140	0.105	1.281	3.329	2.05	334.79	4.1	28.1
200	0.075	1.285	3.481	2.20	355.35	4.4	23.7
230	0.063	1.298	2.400	1.10	365.68	2.2	21.5
Sum				98.0	230 Minus	100.0	

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

Sample ID: T4-PDI2019-SG21-190531 (A9F0035-14)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*1.07*
Retained on No. 4 sieve		4.75	99.75	0.25
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	98.93	0.82
Sand				*77.48*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	98.59	0.35
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	86.35	12.24
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	47.21	39.13
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	32.21	15
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	28.09	4.12
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	23.67	4.42
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	21.45	2.22
Silt and Clay (Measurements in the Clay fraction are noted)				*21.45*
Hydrometer Test		0.0501	16.08	5.37
Hydrometer Test		0.0354	15.09	1
Hydrometer Test		0.0254	12.1	2.99
Hydrometer Test		0.0180	10.11	1.99
Hydrometer Test		0.0132	9.18	0.93
Hydrometer Test		0.0094	8.32	0.86
Hydrometer Test		0.0067	5.34	2.99
Hydrometer Test		0.0055	4.34	1
Hydrometer Test	Clay	0.0047	4.27	0.07
Hydrometer Test	Clay	0.0034	2.22	2.06
Hydrometer Test	Clay	0.0028	1.22	1
Hydrometer Test	Clay	0.0014	1.22	0

Grain Size Summary	Percent of Total Sample
Gravel	1.1
Sand	77.5
Coarse sand	0.3
Medium sand	66.4
Fine sand	10.8
Silt	17.1
Clay	4.3

Case Narrative for Sample ID: **T4-PDI2019-SG21-190531 (A9F0035-14)**

This data is not to be used for engineering purposes.

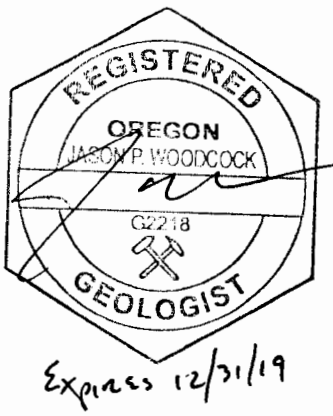
No difficulty dispersing the fraction passing the No. 10 sieve.

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.

+4 fraction consists entirely of organic and possible anthropogenic material.

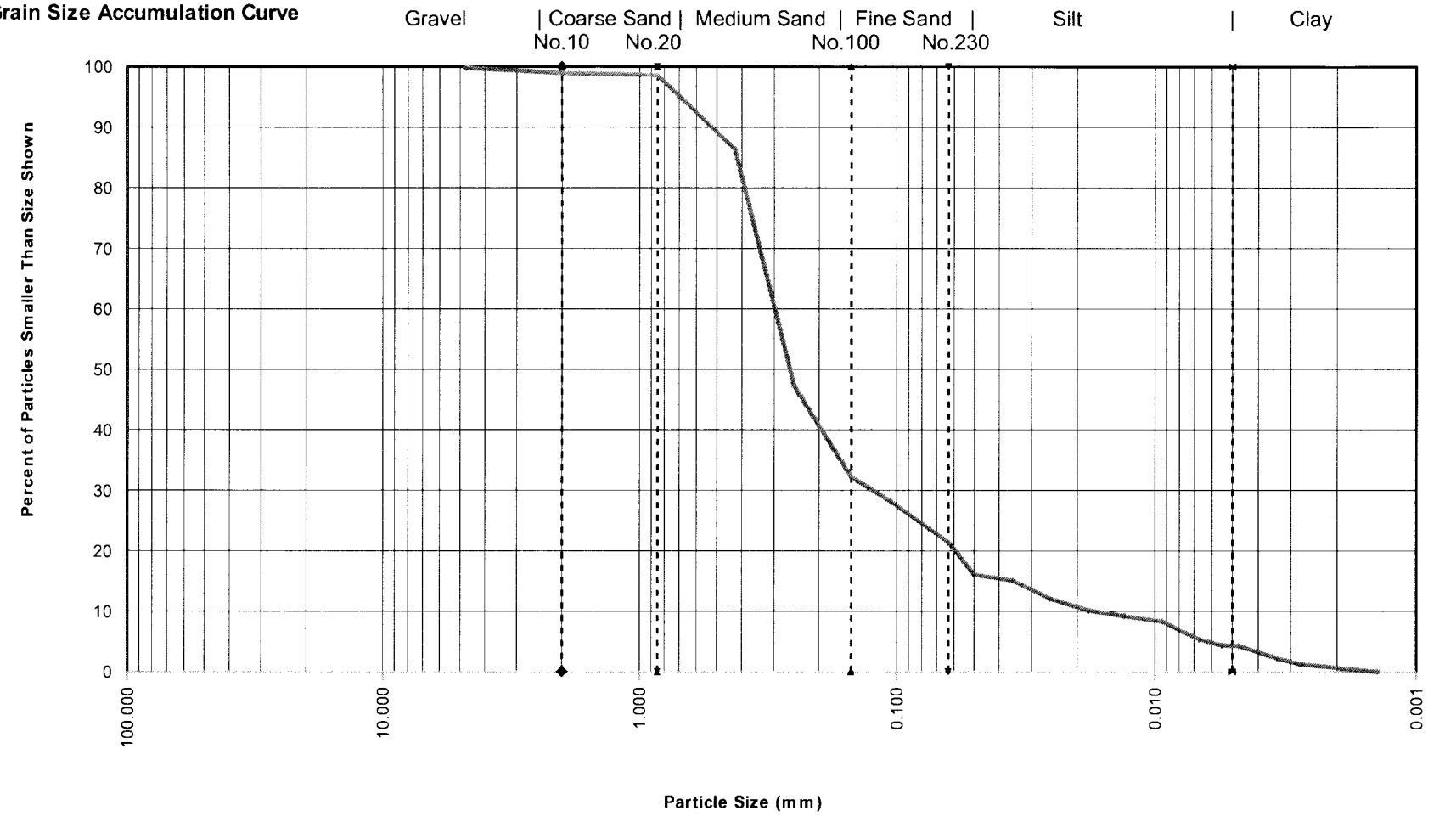
+10 fraction consists almost entirely of organic and possible anthropogenic material.



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-SG21-190531 (A9F0035-14)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	Silty SAND with trace Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9F0035-14

Whole Sample

									Total
Tare Values	5.348	5.757							11.105
Air Dry + Tare	264.584	222.210							486.794

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	1.300								1.300
Dry + Tare	2.451								2.451

Sieve Number 10

									Total
Tare Values	1.300								1.300
Dry + Tare	5.114								5.114

Pan

									Total
Tare Values	5.351	5.762							11.113
Dry + Tare	258.029	223.411							481.440

Ensure that Total % Retained is ~ 100%. 99.89

APEX
Grain Size Analysis

Analyst	Mary Armstrong-Byers
Batch number	9060930
Sample ID	A9F0035-14B
Start Date/ Time	11:35 AM 6/10/2019

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.348	264.584		
5.757	222.210		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
1.300	2.464	2.451

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
1.300	5.237	5.114

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.351	258.029		
5.762	223.411		

Date/Time/Temp	AME 061V
IN	6-12-19 14:25 104.6
OUT	6-14-19 09:52 107.1

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
35-14	1.304	15.599	15.303

APEX
Grain Size Analysis

Notes

Sample ID: A9F0035-14

+4 = entirely organics & possible anthropogenics

+10 = ~~almost~~ & visible
almost entirely all organics & possible anthropogenics

Maximum Particle Size: Gravel

Hardness and Shape: N/A

Soil/Sediment Classification:

Silty Sand w/ trace Clay

6/21/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sanguray		
Batch Number	9060930		
Sample ID	A9F0035-14B		
Start Date/Time	6-19-19	08:41	6-11-19 50.214
Air Dry Sample for Hydrometer Test	~~101.012~~		
Hydrometer	870249	Dispersant	A19F119

Time/Date: 06.18.19 12:40

8:41	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
8:42	1	14	20.9	
8:43	2	13.5	20.9	
8:45	4	12	20.9	
8:49	8	11	20.9	
8:56	15	10.5	21	
9:11	30	10	21.2	
9:41	60	8.5	21.2	
10:11	90	8.0	21.2	
10:41	120	8	21.1	
12:41	240	7	21	
14:41	360	6.5	21	
08:41	1440	5.5	20.2	

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	1.289	1.462
+40	1.288	7.372
+60	1.300	20.751
+100	1.293	8.750
+140	1.281	3.329
+200	1.285	3.481
+230	1.298	2.400
-230 (pan)	1.292	2.906

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-15		Client Sample ID:	T4-PDI2019-SG26-190530		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	Silty SAND with trace Gravel and Clay			Max Particle Size:	Gravel		
Particle Shape:	Sub-angular to Sub-rounded			Hardness	Hard and Durable		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	23.480	428.784	405.30	2.55	395.2

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	6.402	38.979	32.58	32.58	8.2	91.8
10	2.00	6.377	29.753	23.38	55.95	5.9	85.8
Pan		11.630	359.229	347.60	403.55	85.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9751		F3515	1.299	19.956	19.492	2.55

Hydrometer Analysis

Start Date/Time	6/19/2019	9:00	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	100.808		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	85.8		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	98.30		Corrected Dry Weight of Soil Tested (g) (W)	114.51

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	27	20.8	21.05	18.4	11.7	0.01348	0.046	15.78
2	24	20.9	18.08	15.8	12.2	0.01348	0.033	13.55
4	21.5	20.9	15.58	13.6	12.5	0.01348	0.024	11.68
8	19	21	13.11	11.5	13	0.01348	0.017	9.83
15	17	21.1	11.15	9.7	13.3	0.01348	0.013	8.36
30	14.5	21.2	8.68	7.6	13.7	0.01348	0.009	6.51
60	13	21.1	7.15	6.2	14	0.01348	0.007	5.36
90	11.5	21.2	5.68	5.0	14.2	0.01348	0.005	4.26
120	11	21.1	5.15	4.5	14.3	0.01348	0.005	3.86
240	10	21	4.11	3.6	14.5	0.01348	0.003	3.08
360	8.5	21	2.61	2.3	14.7	0.01348	0.003	1.96
1440	7	20.4	0.91	0.8	15	0.01365	0.001	0.68

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	1.303	9.871	8.57	85.50	7.5	78.4
40	0.425	1.294	10.364	9.07	116.77	7.9	70.4
60	0.250	1.289	27.052	25.76	205.61	22.5	47.9
100	0.150	1.301	17.153	15.85	260.26	13.8	34.1
140	0.105	1.288	8.067	6.78	283.64	5.9	28.2
200	0.075	1.293	7.776	6.48	305.99	5.7	22.5
230	0.063	1.278	3.528	2.25	313.75	2.0	20.6

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

Sample ID: T4-PDI2019-SG26-190530 (A9F0035-15)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*14.16*
Retained on No. 4 sieve		4.75	91.76	8.24
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	85.84	5.91
Sand				*65.29*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	78.36	7.48
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	70.44	7.92
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	47.94	22.5
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	34.1	13.84
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	28.18	5.92
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	22.52	5.66
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	20.55	1.96
Silt and Clay (Measurements in the Clay fraction are noted)				*20.55*
Hydrometer Test		0.0461	15.78	4.78
Hydrometer Test		0.0333	13.55	2.22
Hydrometer Test		0.0238	11.68	1.87
Hydrometer Test		0.0172	9.83	1.85
Hydrometer Test		0.0127	8.36	1.47
Hydrometer Test		0.0091	6.51	1.85
Hydrometer Test		0.0065	5.36	1.15
Hydrometer Test		0.0054	4.26	1.1
Hydrometer Test	Clay	0.0047	3.86	0.4
Hydrometer Test	Clay	0.0033	3.08	0.77
Hydrometer Test	Clay	0.0027	1.96	1.12
Hydrometer Test	Clay	0.0014	0.68	1.27

Grain Size Summary	Percent of Total Sample
Gravel	14.2
Sand	65.3
Coarse sand	7.5
Medium sand	44.3
Fine sand	13.5
Silt	16.3
Clay	4.3

Case Narrative for Sample ID: T4-PDI2019-SG26-190530 (A9F0035-15)

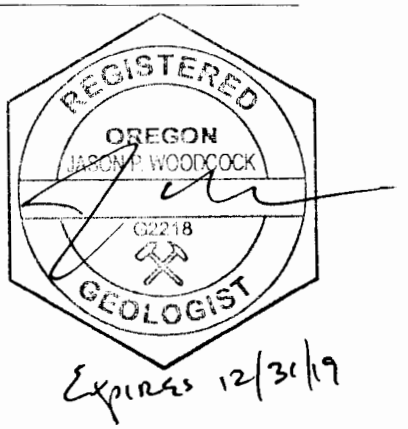
This data is not to be used for engineering purposes.

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.

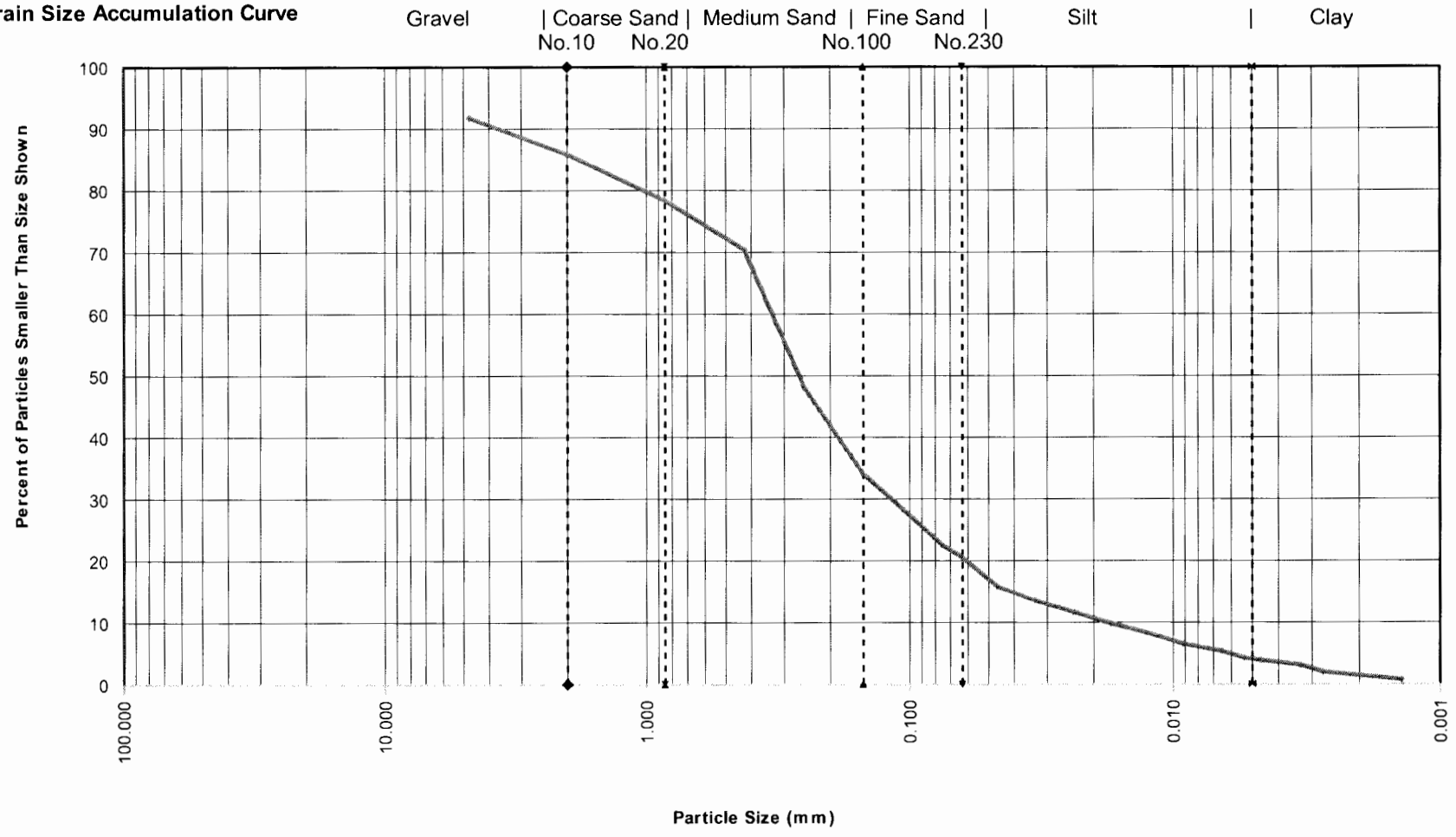
The assumed specific gravity used in the calculations was 2.65.

+4 and +10 fractions contain abundant organic and possible anthropogenic material.



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

Grain Size Accumulation Curve



Sample ID:	T4-PDI2019-SG26-190530 (A9F0035-15)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	Sub-angular to Sub-rounded	Hard and Durable	Silty SAND with trace Gravel and Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9F0035-15

Whole Sample

									Total
Tare Values	5.806	6.050	5.804	5.820					23.480
Air Dry + Tare	69.166	42.540	164.641	152.437					428.784

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	6.402								6.402
Dry + Tare	38.979								38.979

Sieve Number 10

									Total
Tare Values	6.377								6.377
Dry + Tare	29.753								29.753

Pan

									Total
Tare Values	5.805	5.825							11.630
Dry + Tare	222.036	137.193							359.229

Ensure that Total % Retained is ~ 100%. 99.86

APEX
Grain Size Analysis

Analyst	Sandra Langeway
Batch number	9060930
Sample ID	A9F0035 -15
Start Date/ Time	6-11-19 10:40

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.806	69.166		
6.050	42.540		
5.804	164.641		
5.820	152.437		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
6.402	39.920	38.979

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
6.377	30.272	29.753

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.805	222.036		
5.825	137.193		

Date/Time/Temp

IN	6-14-19 12:10
AMBIENT	105.2
OUT	6-18-19 11:36
	108.4

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
F3515	1.299	19.956	19.492

APEX
Grain Size Analysis

Notes

Sample ID: A9F0035-15

+4 & +10 contain abundant organic & anthropogenic material

Maximum Particle Size: Gravel

Hardness and Shape: Hard & durable; Sub-angular to Sub-rounded

Soil/Sediment Classification:

Silty Sand w/ trace Gravel & Clay

6/21/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Sangway
Batch Number	9060930
Sample ID	A9F0035-15
Start Date/Time	6-19-19 9:00
Air Dry Sample for Hydrometer Test	~~51.757~~ 100.808
Hydrometer	870249 Dispersant A19F119 Time/Date: 06/18/19 12:42

09:00	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
9:01	1	27	20.8	
9:02	2	24	20.9	
9:04	4	21.5	20.9	
9:08	8	19	21	
9:15	15	17	21.1	
9:30	30	14.5	21.2	
10:00	60	13	21.1	
10:30	90	11.5	21.2	
11:00	120	11	21.1	
13:00	240	10	21	
15:00	360	8.5	21	
09:00	1440	7.0	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	1.303	9.871
+40	1.294	10.364
+60	1.289	27.052
+100	1.301	17.153
+140	1.288	8.067
+200	1.293	7.776
+230	1.278	3.529
-230 (pan)	1.287	5.192

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-16		Client Sample ID:	T4-PDI2019-SG38-190531		Batch Number:	9060930
Data Entered by:	SJL/JSJ	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	SAND with trace Silt			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.729	542.280	530.55	1.16	524.5

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	1.300	1.907	0.61	0.61	0.1	99.9
Pan		11.735	541.588	529.85	530.46	99.9	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9885		F003516	1.297	24.996	24.724	1.16

Hydrometer Analysis

Start Date/Time	6/19/2019 9:20	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	100.292	G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	99.9	Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	99.14	Corrected Dry Weight of Soil Tested (g) (W)	99.26

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8	21.2	2.18	2.2	14.8	0.01348	0.052	2.19
2	7	21.2	1.18	1.2	15	0.01348	0.037	1.19
4	7	21.2	1.18	1.2	15	0.01348	0.026	1.19
8	6	21.2	0.18	0.2	15.2	0.01348	0.019	0.18
15	6	21.2	0.18	0.2	15.2	0.01348	0.014	0.18
30	6	21.1	0.15	0.1	15.2	0.01348	0.010	0.15
60	6	21.1	0.15	0.1	15.2	0.01348	0.007	0.15
90	6	21	0.11	0.1	15.2	0.01348	0.006	0.11
120	6	21	0.11	0.1	15.2	0.01348	0.005	0.11
240	6	20.8	0.05	0.0	15.2	0.01348	0.003	0.05
360	5.5	20.9		0.0	15.2	0.01348	0.003	0.00
1440	5	20.5		0.0	15.3	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	1.297	1.787	0.49	3.20	0.5	99.4
40	0.425	1.298	18.392	17.09	93.51	17.2	82.2
60	0.250	2.592	63.613	61.02	415.89	61.5	20.7
100	0.150	1.292	18.816	17.52	508.47	17.7	3.0
140	0.105	1.303	2.110	0.81	512.73	0.8	2.2
200	0.075	1.299	1.593	0.29	514.28	0.3	1.9
230	0.063	1.305	1.419	0.11	514.89	0.1	1.8
			Sum	97.34	230 Minus	1.80	

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

Sample ID: T4-PDI2019-SG38-190531 (A9F0035-16)

Grain Size Analysis Summary from Sieving and Hydrometer Testing		Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel				*0.12*
Retained on No. 4 sieve		4.75	100	0
Gravel, passing No. 4 sieve and retained on No. 10 sieve		2.00	99.88	0.12
Sand				*98.07*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve		0.8500	99.39	0.49
Medium sand, passing No.20 sieve and retained on No. 40 sieve		0.4250	82.17	17.22
Medium sand, passing No.40 sieve and retained on No. 60 sieve		0.2500	20.69	61.48
Medium sand, passing No. 60 sieve and retained on No.100 sieve		0.1500	3.03	17.66
Fine sand, passing No. 100 sieve and retained on No.140 sieve		0.1060	2.22	0.81
Fine sand passing No. 140 sieve and retained on No. 200 sieve		0.0750	1.93	0.3
Fine sand, passing No. 200 sieve and retained on No. 230 sieve		0.0630	1.81	0.11
Silt and Clay (Measurements in the Clay fraction are noted)				*1.81*
Hydrometer Test		0.0519	2.19	0
Hydrometer Test		0.0369	1.19	0.62
Hydrometer Test		0.0261	1.19	0
Hydrometer Test		0.0186	0.18	1.01
Hydrometer Test		0.0136	0.18	0
Hydrometer Test		0.0096	0.15	0.03
Hydrometer Test		0.0068	0.15	0
Hydrometer Test		0.0055	0.11	0.03
Hydrometer Test	Clay	0.0048	0.11	0
Hydrometer Test	Clay	0.0034	0.05	0.07
Hydrometer Test	Clay	0.0028	0.05	0
Hydrometer Test	Clay	0.0014	0.05	0

Grain Size Summary	Percent of Total Sample
Gravel	0.1
Sand	98.1
Coarse sand	0.5
Medium sand	96.4
Fine sand	1.2
Silt	1.7
Clay	0.1

Case Narrative for Sample ID: **T4-PDI2019-SG38-190531 (A9F0035-16)**

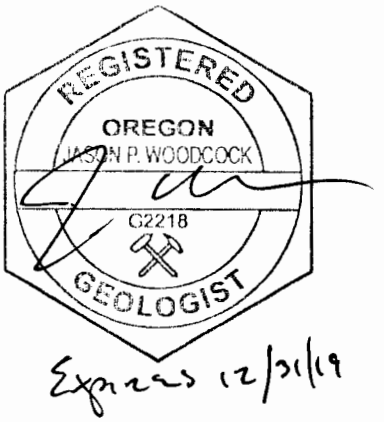
This data is not to be used for engineering purposes.

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.

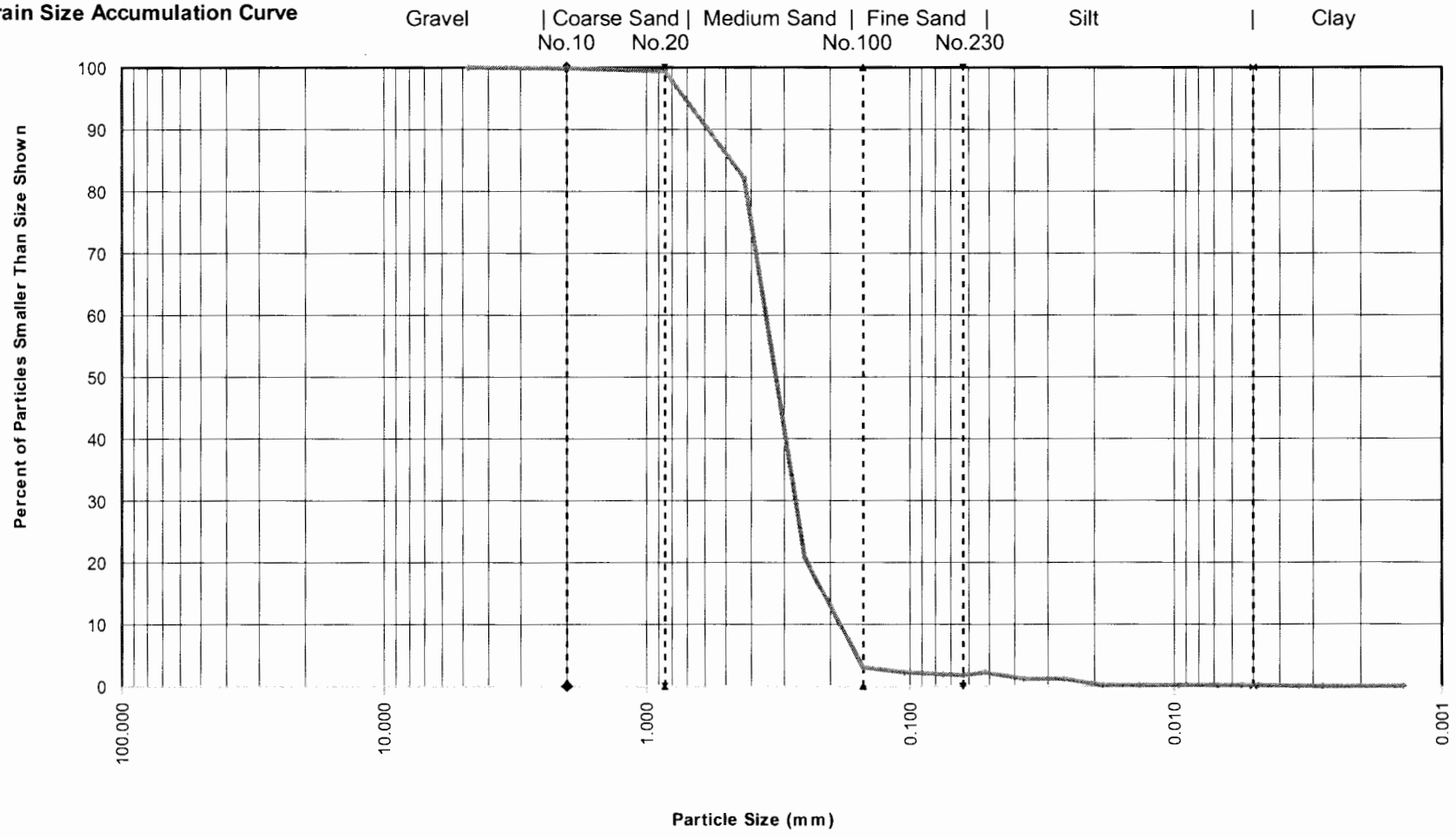
Organic material present in +10 fraction.



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-SG38-190531 (A9F0035-16)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	SAND with trace Silt

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9F0035-16

Whole Sample

									Total
Tare Values	6.052	5.677							11.729
Air Dry + Tare	261.887	280.393							542.280

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	1.300								1.300
Dry + Tare	1.907								1.907

Pan

									Total
Tare Values	6.053	5.682							11.735
Dry + Tare	292.626	248.962							541.588

Ensure that Total % Retained is ~ 100%. 99.97

APEX
Grain Size Analysis

Analyst	Sandra Longacre
Batch number	9060930
Sample ID	A9F0035-16
Start Date/ Time	06-12-19 8:15

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
6.052	261.887		
5.677	280.393		

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
1.300	1.914	1.907

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
6.053	292.626		
5.682	248.962		

Date/Time/Temp	AMEG61V
IN	6-12-19 14:25 104.6
OUT	6-14-19 09:52 107.1

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
F003516	1.297	24.996	24.724

APEX
Grain Size Analysis

Notes

Sample ID: A9F0035-16

+10 fraction contains some organics

Maximum Particle Size: Gravel

Hardness and Shape: N/A (low sample lo)

Soil/Sediment Classification:

SAND w/ trace Silt

6/21/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sandra Langway		
Batch Number	9060930		
Sample ID	A9F0035-16		
Start Date/Time	6-19-19 9:20		
Air Dry Sample for Hydrometer Test			100.292
Hydrometer	870249	Dispersant	A19F119

Time/Date: 06/18/19 12:43

09:20	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
9:21	1	8	21.2	
9:22	2	7	21.2	
9:24	4	7	21.2	
9:28	8	6	21.2	
9:35	15	6	21.2	
9:50	30	6	21.1	
10:20	60	6	21.1	
10:50	90	6	21	
11:20	120	6	21	
13:20	240	6	20.8	
15:20	360	5.5	20.9	
09:20	1440	5.0	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	1.297	1.787
+40	1.298	18.392
+60	1.289	35.056
+100	1.292	18.816
+140	1.303	2.110
+200	1.299	1.593
+230	1.305	1.419
-230 (pan)	1.297	1.394

1.303 ~~28.519~~ 28.557 JAG 06/21/19

Apex Laboratories, LLC

Particle Size Analysis of Soil by ASTM D 422

Sample ID:	A9F0035-17		Client Sample ID:	T4-PDI2019-SG38-190531-Dup		Batch Number:	9060930
Data Entered by:	SJL	Date:	06/21/19	Data Reviewed by:	JW	Date:	06/21/19
Sample Description:	SAND with trace Silt and Clay			Max Particle Size:	Gravel		
Particle Shape:	N/A			Hardness	N/A		

Whole Sample	Tare	Air Dry + Tare	Air Dry	Moisture	Dry Wt.
	11.249	477.560	466.31	0.99	461.7

Sieve Number	Opening (mm)	Tare	Dry + Tare	Weight Retained	Cumulative Wt. Retained	% Retained	% Passing
4	4.75	1.309	1.820	0.51	0.51	0.1	99.9
10	2.00	1.301	2.071	0.77	1.28	0.2	99.7
Pan		11.264	476.164	464.90	466.18	99.7	

Hygroscopic Moisture Correction

	Hygroscopic Correction Factor	Oven Sample	Pan No.	Tare	Air Dry + Tare	Oven Dry + Tare	Moisture
	0.9902		35-17	1.289	16.969	16.815	0.99

Hydrometer Analysis

Start Date/Time	6/19/2019	9:44	Dispersing Agent	$NaPO_3$
Air Dry Sample Wt. for Hydrometer Test (g)	103.639		G_s Correction Factor (α)	1.000
Percent Passing No.10 Sieve	99.7		Specific Gravity (G_s)	2.65
Dry Weight of Soil Tested (g)	102.62		Corrected Dry Weight of Soil Tested (g) (W)	102.91

Elapsed Time (min)	Hydrometer Reading	Temperature (°C)	Corrected Hydrometer Reading [R]	% Finer of Hydrometer Sample	L	K	Particle Diameter (mm)	Percent Passing
1	8.5	21.1	2.65	2.6	14.7	0.01348	0.052	2.57
2	8	21.1	2.15	2.1	14.8	0.01348	0.037	2.08
4	8	21.1	2.15	2.1	14.8	0.01348	0.026	2.08
8	7	21.2	1.18	1.1	15	0.01348	0.018	1.14
15	7	21.1	1.15	1.1	15	0.01348	0.013	1.11
30	6.5	21.1	0.65	0.6	15	0.01348	0.010	0.63
60	6.5	21.1	0.65	0.6	15	0.01348	0.007	0.63
90	6.5	21.1	0.65	0.6	15	0.01348	0.006	0.63
120	6.5	21.1	0.65	0.6	15	0.01348	0.005	0.63
240	6.5	21	0.61	0.6	15	0.01348	0.003	0.60
360	6	20.9	0.08	0.1	15.2	0.01348	0.003	0.08
1440	5	20.5		0.0	15.3	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	1.303	1.682	0.38	2.98	0.4	99.4
40	0.425	1.297	16.426	15.13	70.85	14.7	84.7
60	0.250	6.412	72.004	65.59	365.08	63.7	20.9
100	0.150	1.295	18.687	17.39	443.09	16.9	4.0
140	0.105	1.279	2.262	0.98	447.50	1.0	3.1
200	0.075	1.296	1.704	0.41	449.33	0.4	2.7
230	0.063	1.306	1.471	0.17	450.07	0.2	2.5
			Sum	100.09	230 Minus	2.57	

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

Sample ID: T4-PDI2019-SG38-190531-Dup (A9F0035-17)

Grain Size Analysis Summary from Sieving and Hydrometer Testing	Particle Size (mm)	Percent Finer	Total Percent of Sample
Gravel			*0.28*
Retained on No. 4 sieve	4.75	99.89	0.11
Gravel, passing No. 4 sieve and retained on No. 10 sieve	2.00	99.72	0.17
Sand			*97.22*
Coarse sand, passing No.10 sieve and retained on No. 20 sieve	0.8500	99.35	0.37
Medium sand, passing No.20 sieve and retained on No. 40 sieve	0.4250	84.65	14.7
Medium sand, passing No.40 sieve and retained on No. 60 sieve	0.2500	20.91	63.74
Medium sand, passing No. 60 sieve and retained on No.100 sieve	0.1500	4.01	16.9
Fine sand, passing No. 100 sieve and retained on No.140 sieve	0.1060	3.06	0.96
Fine sand passing No. 140 sieve and retained on No. 200 sieve	0.0750	2.66	0.4
Fine sand, passing No. 200 sieve and retained on No. 230 sieve	0.0630	2.5	0.16
Silt and Clay (Measurements in the Clay fraction are noted)			*2.5*
Hydrometer Test	0.0517	2.57	0
Hydrometer Test	0.0367	2.08	0.42
Hydrometer Test	0.0259	2.08	0
Hydrometer Test	0.0185	1.14	0.94
Hydrometer Test	0.0135	1.11	0.03
Hydrometer Test	0.0095	0.63	0.48
Hydrometer Test	0.0067	0.63	0
Hydrometer Test	0.0055	0.63	0
Hydrometer Test Clay	0.0048	0.63	0
Hydrometer Test Clay	0.0034	0.6	0.03
Hydrometer Test Clay	0.0028	0.08	0.52
Hydrometer Test Clay	0.0014	0.08	0

Grain Size Summary	Percent of Total Sample
Gravel	0.3
Sand	97.2
Coarse sand	0.4
Medium sand	95.3
Fine sand	1.5
Silt	1.9
Clay	0.6

Case Narrative for Sample ID: T4-PDI2019-SG38-190531-Dup (A9F0035-17)

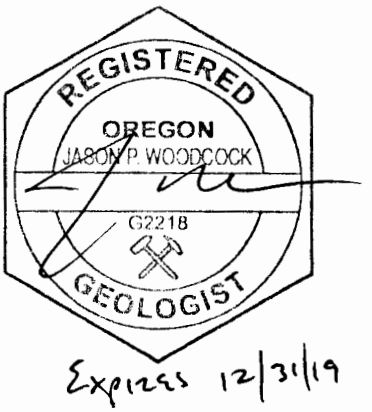
This data is not to be used for engineering purposes.

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.

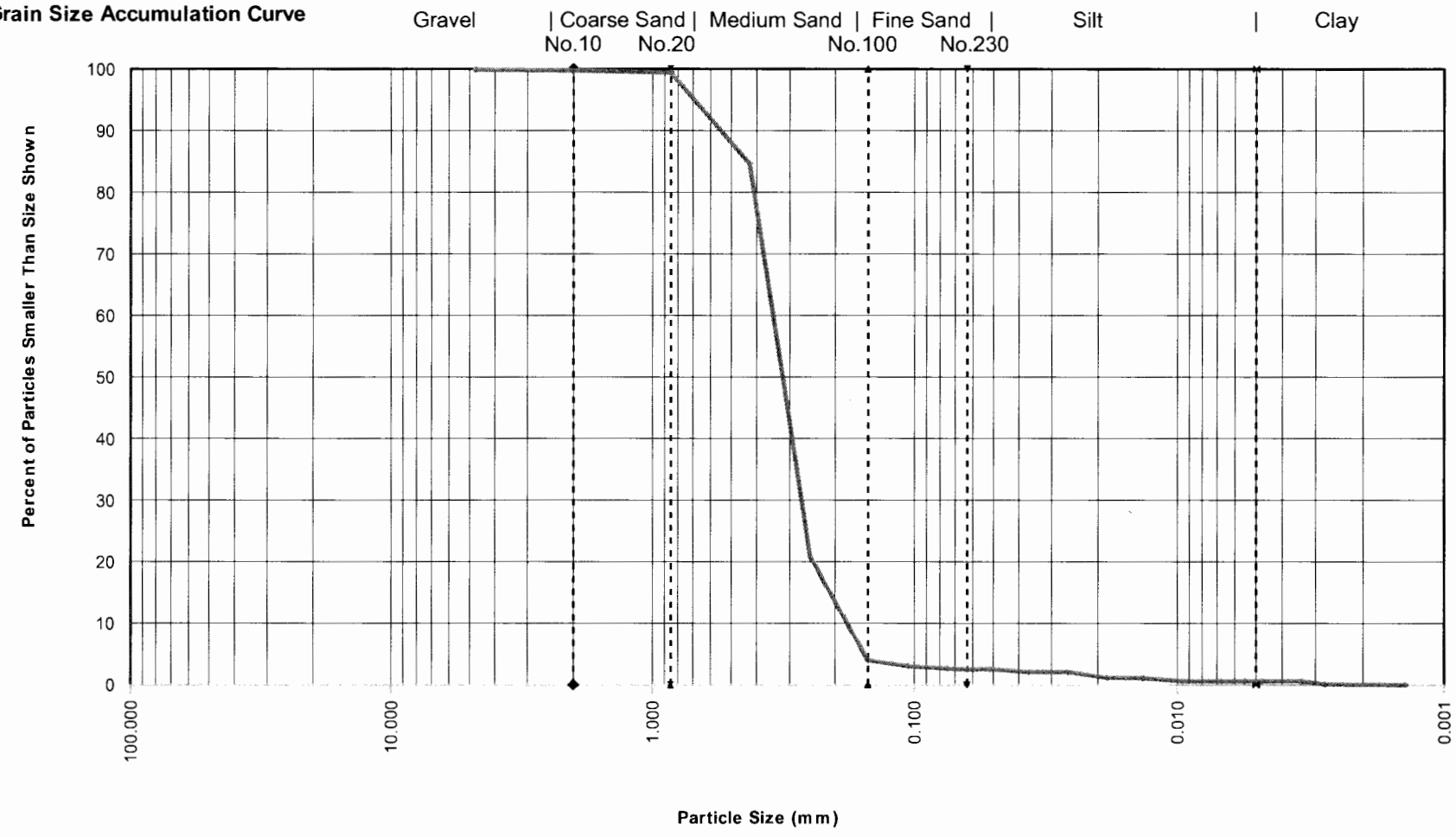
Organic material present in +10 fraction.



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-SG38-190531-Dup (A9F0035-17)			
Specific Gravity	MAXIMUM PARTICLE SIZE	GRAVEL & SAND		SOIL DESCRIPTION
		PARTICLE SHAPE	HARDNESS	
2.65	Gravel	N/A	N/A	SAND with trace Silt and Clay

Hydrometer S/N (drop down):	m	b
870249	-0.3341	12.9

Sample ID: A9F0035-17

Whole Sample

									Total
Tare Values	5.627	5.622							11.249
Air Dry + Tare	223.820	253.740							477.560

Sieve Number 4 Enter the weight of soil after wash and oven-dry at 50.

									Total
Tare Values	1.309								1.309
Dry + Tare	1.820								1.820

Sieve Number 10

									Total
Tare Values	1.301								1.301
Dry + Tare	2.071								2.071

Pan

									Total
Tare Values	5.635	5.629							11.264
Dry + Tare	245.340	230.824							476.164

Ensure that Total % Retained is ~ 100%. 99.97

APEX
Grain Size Analysis

Analyst	KAREN WILSON
Batch number	90609301
Sample ID	A9XF0035-17A
Start Date/ Time	6-12-19 09:15

Air Drying

Tare	Air Dry Sample + Tare	Tare	Air Dry Sample + Tare
5.627	223.820		
5.622	253.740		

Post 10 mesh sieving

+4 Fraction

Tare	+4 fraction (air dry) + tare	+4 fraction (oven dry) + tare
1.309	1.822	1.820

+10 Fraction

Tare	+10 fraction (air dry) + tare	+10 fraction (oven dry) + tare
1.301	2.078	2.071

-10 Fraction (Pan)

Tare	Pan fraction (air dry) + tare	Tare	Pan fraction (air dry) + tare
5.635	245.340		
5.629	230.824		

Date/Time/Temp	AME 001V
IN	6-12-19 14:25 104.6
OUT	6-14-19 09:52 107.1

Hygroscopic Moisture Correction

Pan No.	Tare	-10 fraction (air dry) + tare	-10 fraction (oven dry) + tare
35-17	1.289	16.969	14.815

APEX
Grain Size Analysis

Notes

Sample ID: A9F0035-17

+10 fraction contains organic material

Maximum Particle Size: Gravel

Hardness and Shape: N/A (low sample #s)

Soil/Sediment Classification:

Sand w/ trace Silt & Clay

6/21/19

APEX
Grain Size Analysis

Hydrometer Analysis

Analyst	Sancha Songwag		
Batch Number	9060930		
Sample ID	A9F0035-17A		
Start Date/Time	6-19-19 9:44		
Air Dry Sample for Hydrometer Test		103.639	
Hydrometer	870249	Dispersant	A19F119

Time/Date: 06/18/19 12:47

09:44	Time (min.)	Hydrometer Reading	Temperature (°C)	Amount of Foam
	0.5			
9:45	1	8.5	21.1	
9:46	2	8	21.1	
9:48	4	8	21.1	
9:52	8	7	21.2	
9:59	15	7	21.1	
10:14	30	6.5	21.1	
10:44	60	6.5	21.1	
11:14	90	6.5	21.1	
11:44	120	6.5	21.1	
13:44	240	6.5	21	
15:44	360	6	20.9	
9:44	1440	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	1.303	1.682
+40	1.297	16.426
+60	~~1.311~~	72.004
+100	1.295	18.687
+140	1.279	2.262
+200	1.296	1.704
+230	1.306	1.471
-230 (pan)	1.299	1.440

~~HJ~~ 6-21-19
6.412

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

Balance Checksheets

Extractions June 2019
Wet Chem June 2019
Grain Size June 2019

Balance Challenge Log

Extractions
AND FX-2000
ID# 5210177

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 2%	
10077	0.5g	0.48	0.52
1000143395	300g	294.00	306.00

If other than as listed above, the weight and tracking ID of the mass used to challenge the balance must be recorded.

Alternate Weight/ID used:

Date Range:

Month: June
Year: 2019

Day/Time	Initials	Weight One	Observed	Weight Two	Observed
1			~~0.50~~		
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 [illegible]	TJJ		.50		[illegible]
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		0.50g		300.00g	
17 7:15	JAG		.50		299.98
18 7:00	JAG		.50		299.98
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: June
Year: 2019

Alternate Weight/ID used:

Date Range:

Day/Time	Initials	Weight 1	Observed	Weight 2	Observed	Weight 3	Observed
1							
2							
3 1156	SAS		100.0025		0.1000		0.0051
4							
5 10:46	MRF		100.0020		0.1001		0.0051
6 8:10	MRF		100.0019		0.1000		0.0050
7 9:22	MRF		100.0021		0.1000		0.0050
8							
9							
10 12:14	JD		100.0020		0.1000		0.0051
11 08:00	MRF		100.0019		0.1000		0.0050
12 09:22	MRF		100.0017		0.1001		0.0051
13 14:53	JD		100.0021		0.1001		0.0050
14 09:37	MRF		100.0022		0.1001		0.0050
15							
16		100.0000g		0.1000g		.0050g	
17 0735	MRF		100.0021		0.1000		0.0050
18 1533	JKF		100.0025		0.1003		0.0050
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

Balance Challenge Log

Grain Size
Mettler B303
ID# 1115401761

Weight ID	weight (g)	acceptance range (g)	
	=/<1g	± 0.02g	
	>1g	± 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~~	06/03/19	~~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	(29.700g	29.998		1.000
6	KW 8:30	KW		199.991	-30.000g	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	TS		199.994		29.999		1.000
28	10:58	TS		199.993		29.999		1.000
29								
30								
31								