Apex Laboratories, LLC
6700 SW Sandburg St. Tigard, Oregon 97223
503.718.2323

Level IV Data Package for

Anchor QEA, LLC

Gasco PreRD_DG 2019 – 2b Depos. Surface Grabs

Apex Laboratories Work Order #:

A9I0877

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

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Analytical Case Narrative

Analytical Case Narrative

Client: Anchor QEA, LLC Date: 12/04/2019
Project: Gasco PreRD_DG 2019 – 2b Depos. Surface Grabs
Apex Work Order Number: A9I0877

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

Analytical Report

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

AMENDED REPORT

Friday, November 1, 2019

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

RE: A9I0877 - Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs - [none]

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

Enclosed are the results of analyses for work order A9I0877, which was received by the laboratory on 9/27/2019 at 10:25:00AM.

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 sample receipt, unless prior arrangements have been made.

Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1 1.7 degC

This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.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

Apex Laboratories

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

Darwin Thomas, Business Development Director

Apex Laboratories, LLC

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RB-20190926140400	**A9I0877-01**	**Water**	**09/26/19 14:04**	**09/27/19 10:25**

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Darwin Thomas, Business Development Director

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AMENDED REPORT

Anchor QEA, LLC	Project:	**Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number:	**[none]**	**Report ID:**
Portland, OR 97219	Project Manager:	**Ryan Barth**	**A9I0877 - 11 01 19 0542**

ANALYTICAL CASE NARRATIVE

Work Order: A9I0877

Amended Report Revision #1

This report supersedes all previous reports.

Semivolatiles by EPA 8270D: Benzo(j,k)fluoranthene Analyte Name
Apex Laboratories calibrates its Semivolatile Mass Spectrometers for Benzo(k)fluoranthene using Benzo(k)fluoranthene itself, not including the Benzo(j)fluoranthene isomer, which co-elutes with Benzo(k)fluoranthene. Data is reported in this amended report as Benzo(k)fluoranthene, but in the EDD this data is reported as Benzo(j,k)fluoranthene. The data for Benzo(k)fluoranthene and Benzo(j,k)fluoranthene are identical.

David Jack
Technical Manager
Apex Laboratories
October 30, 2019

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 8270D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
RB-20190926140400 (A9I0877-01)				**Matrix: Water**		**Batch: 9100526**		
Acenaphthene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Acenaphthylene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Anthracene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Benz(a)anthracene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Benzo(a)pyrene	ND	0.0144	0.0288	ug/L	1	10/02/19 19:02	EPA 8270D	
Benzo(b)fluoranthene	ND	0.0144	0.0288	ug/L	1	10/02/19 19:02	EPA 8270D	
Benzo(k)fluoranthene	ND	0.0144	0.0288	ug/L	1	10/02/19 19:02	EPA 8270D	X
Benzo(g,h,i)perylene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Chrysene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Dibenz(a,h)anthracene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Fluoranthene	**0.00970**	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	**J**
Fluorene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Indeno(1,2,3-cd)pyrene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
2-Methylnaphthalene	ND	0.0192	0.0385	ug/L	1	10/02/19 19:02	EPA 8270D	
Naphthalene	**0.0211**	0.0192	0.0385	ug/L	1	10/02/19 19:02	EPA 8270D	**J**
Phenanthrene	ND	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Pyrene	**0.0221**	0.00962	0.0192	ug/L	1	10/02/19 19:02	EPA 8270D	
Bis(2-ethylhexyl)phthalate	ND	0.192	0.385	ug/L	1	10/02/19 19:02	EPA 8270D	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*67 %*	*Limits: 44-120 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	
2-Fluorobiphenyl (Surr)			*59 %*	*44-120 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	
Phenol-d6 (Surr)			*24 %*	*10-120 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	
p-Terphenyl-d14 (Surr)			*66 %*	*50-133 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	
2-Fluorophenol (Surr)			*42 %*	*19-120 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	
2,4,6-Tribromophenol (Surr)			*82 %*	*43-140 %*	*1*	*10/02/19 19:02*	*EPA 8270D*	

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Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
RB-20190926140400 (A9I0877-01)				**Matrix: Water**				
Batch: 9100506								
Arsenic	ND	0.500	1.00	ug/L	1	10/02/19 21:13	EPA 6020A	
Cadmium	ND	0.0400	0.200	ug/L	1	10/02/19 21:13	EPA 6020A	
Copper	ND	1.00	2.00	ug/L	1	10/02/19 21:13	EPA 6020A	
Lead	ND	0.100	0.200	ug/L	1	10/02/19 21:13	EPA 6020A	
Mercury	ND	0.0400	0.0800	ug/L	1	10/02/19 21:13	EPA 6020A	
Zinc	ND	2.00	4.00	ug/L	1	10/02/19 21:13	EPA 6020A	

Apex Laboratories

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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 9100526 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9100526-BLK2)			Prepared: 10/02/19 07:02 Analyzed: 10/02/19 16:39									
EPA 8270D												
Acenaphthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	0.0182	0.0364	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	0.0136	0.0273	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	0.00909	0.0182	ug/L	1	---	---	---	---	---	---	
4-Chloro-3-methylphenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
2-Chlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dimethylphenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4-Dinitrophenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
4,6-Dinitro-2-methylphenol	ND	0.227	0.455	ug/L	1	---	---	---	---	---	---	
2-Methylphenol	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
3+4-Methylphenol(s)	ND	0.0227	0.0455	ug/L	1	---	---	---	---	---	---	
2-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
4-Nitrophenol	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	0.0909	0.182	ug/L	1	---	---	---	---	---	---	
Phenol	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
2,3,4,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	

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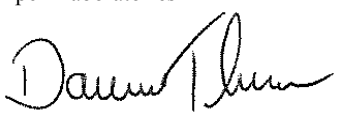

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Darwin Thomas, Business Development Director

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EPA ID: OR01039

AMENDED REPORT

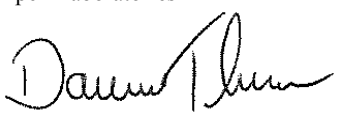
Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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 9100526 - EPA 3510C (Acid Extraction)							**Water**					
Blank (9100526-BLK2)			Prepared: 10/02/19 07:02 Analyzed: 10/02/19 16:39									
2,3,5,6-Tetrachlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,5-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
2,4,6-Trichlorophenol	ND	0.0455	0.0909	ug/L	1	---	---	---	---	---	---	
Bis(2-ethylhexyl)phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Butyl benzyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Diethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Dimethylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-butylphthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Di-n-octyl phthalate	ND	0.182	0.364	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 74 %*	*Limits: 44-120 %*			*Dilution: 1x*					
2-Fluorobiphenyl (Surr)			*60 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*28 %*	*10-120 %*			*"*					
p-Terphenyl-d14 (Surr)			*73 %*	*50-133 %*			*"*					
2-Fluorophenol (Surr)			*48 %*	*19-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*85 %*	*43-140 %*			*"*					
LCS (9100526-BS2)			Prepared: 10/02/19 07:02 Analyzed: 10/02/19 17:15									
EPA 8270D												
Acenaphthene	3.19	0.0400	0.0800	ug/L	4	4.00	---	80	47-122%	---	---	
Acenaphthylene	3.37	0.0400	0.0800	ug/L	4	4.00	---	84	41-130%	---	---	
Anthracene	3.48	0.0400	0.0800	ug/L	4	4.00	---	87	57-123%	---	---	
Benz(a)anthracene	3.64	0.0400	0.0800	ug/L	4	4.00	---	91	58-125%	---	---	
Benzo(a)pyrene	3.73	0.0600	0.120	ug/L	4	4.00	---	93	54-128%	---	---	
Benzo(b)fluoranthene	3.75	0.0600	0.120	ug/L	4	4.00	---	94	53-131%	---	---	
Benzo(k)fluoranthene	3.69	0.0600	0.120	ug/L	4	4.00	---	92	57-129%	---	---	
Benzo(g,h,i)perylene	3.76	0.0400	0.0800	ug/L	4	4.00	---	94	50-134%	---	---	
Chrysene	3.66	0.0400	0.0800	ug/L	4	4.00	---	92	59-123%	---	---	
Dibenz(a,h)anthracene	3.71	0.0400	0.0800	ug/L	4	4.00	---	93	51-134%	---	---	
Fluoranthene	3.79	0.0400	0.0800	ug/L	4	4.00	---	95	57-128%	---	---	
Fluorene	3.35	0.0400	0.0800	ug/L	4	4.00	---	84	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.47	0.0400	0.0800	ug/L	4	4.00	---	87	52-133%	---	---	
1-Methylnaphthalene	3.18	0.0800	0.160	ug/L	4	4.00	---	79	41-120%	---	---	
2-Methylnaphthalene	3.19	0.0800	0.160	ug/L	4	4.00	---	80	40-121%	---	---	
Naphthalene	3.15	0.0800	0.160	ug/L	4	4.00	---	79	40-121%	---	---	

Apex Laboratories



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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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 9100526 - EPA 3510C (Acid Extraction)							**Water**					
LCS (9100526-BS2)			Prepared: 10/02/19 07:02		Analyzed: 10/02/19 17:15							
Phenanthrene	3.39	0.0400	0.0800	ug/L	4	4.00	---	85	59-120%	---	---	
Pyrene	3.82	0.0400	0.0800	ug/L	4	4.00	---	96	57-126%	---	---	
Carbazole	3.73	0.0600	0.120	ug/L	4	4.00	---	93	60-122%	---	---	
Dibenzofuran	3.38	0.0400	0.0800	ug/L	4	4.00	---	84	53-120%	---	---	
4-Chloro-3-methylphenol	3.50	0.400	0.800	ug/L	4	4.00	---	87	52-120%	---	---	
2-Chlorophenol	3.20	0.200	0.400	ug/L	4	4.00	---	80	38-120%	---	---	
2,4-Dichlorophenol	3.58	0.200	0.400	ug/L	4	4.00	---	90	47-121%	---	---	
2,4-Dimethylphenol	3.66	0.200	0.400	ug/L	4	4.00	---	91	31-124%	---	---	
2,4-Dinitrophenol	4.53	1.00	2.00	ug/L	4	4.00	---	113	23-143%	---	---	Q-41
4,6-Dinitro-2-methylphenol	4.75	1.00	2.00	ug/L	4	4.00	---	119	44-137%	---	---	Q-41
2-Methylphenol	2.87	0.100	0.200	ug/L	4	4.00	---	72	30-120%	---	---	
3+4-Methylphenol(s)	2.67	0.100	0.200	ug/L	4	4.00	---	67	29-120%	---	---	
2-Nitrophenol	3.44	0.400	0.800	ug/L	4	4.00	---	86	47-123%	---	---	
4-Nitrophenol	1.75	0.400	0.800	ug/L	4	4.00	---	44	5-120%	---	---	
Pentachlorophenol (PCP)	3.67	0.400	0.800	ug/L	4	4.00	---	92	35-138%	---	---	
Phenol	1.22	0.800	0.800	ug/L	4	4.00	---	30	5-120%	---	---	
2,3,4,6-Tetrachlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	50-128%	---	---	
2,3,5,6-Tetrachlorophenol	3.79	0.200	0.400	ug/L	4	4.00	---	95	50-121%	---	---	
2,4,5-Trichlorophenol	3.67	0.200	0.400	ug/L	4	4.00	---	92	53-123%	---	---	
2,4,6-Trichlorophenol	3.74	0.200	0.400	ug/L	4	4.00	---	93	50-125%	---	---	
Bis(2-ethylhexyl)phthalate	4.24	0.800	1.60	ug/L	4	4.00	---	106	55-135%	---	---	
Butyl benzyl phthalate	4.19	0.800	1.60	ug/L	4	4.00	---	105	53-134%	---	---	
Diethylphthalate	3.71	0.800	1.60	ug/L	4	4.00	---	93	55-125%	---	---	
Dimethylphthalate	3.59	0.800	1.60	ug/L	4	4.00	---	90	45-127%	---	---	
Di-n-butylphthalate	3.99	0.800	1.60	ug/L	4	4.00	---	100	59-127%	---	---	
Di-n-octyl phthalate	4.47	0.800	1.60	ug/L	4	4.00	---	112	51-140%	---	---	

Surr: Nitrobenzene-d5 (Surr)	*Recovery: 83 %*	*Limits: 44-120 %*	*Dilution: 4x*
2-Fluorobiphenyl (Surr)	*75 %*	*44-120 %*	*"*
Phenol-d6 (Surr)	*31 %*	*10-120 %*	*"*
p-Terphenyl-d14 (Surr)	*91 %*	*50-133 %*	*"*
2-Fluorophenol (Surr)	*52 %*	*19-120 %*	*"*
2,4,6-Tribromophenol (Surr)	*91 %*	*43-140 %*	*"*

LCS Dup (9100526-BSD2) Prepared: 10/02/19 07:02 Analyzed: 10/02/19 17:51 **Q-19**

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Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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 9100526 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9100526-BSD2)			Prepared: 10/02/19 07:02		Analyzed: 10/02/19 17:51							**Q-19**
EPA 8270D												
Acenaphthene	3.06	0.0400	0.0800	ug/L	4	4.00	---	77	47-122%	4	30%	
Acenaphthylene	3.19	0.0400	0.0800	ug/L	4	4.00	---	80	41-130%	5	30%	
Anthracene	3.49	0.0400	0.0800	ug/L	4	4.00	---	87	57-123%	0.3	30%	
Benz(a)anthracene	3.67	0.0400	0.0800	ug/L	4	4.00	---	92	58-125%	0.7	30%	
Benzo(a)pyrene	3.66	0.0600	0.120	ug/L	4	4.00	---	92	54-128%	2	30%	
Benzo(b)fluoranthene	3.64	0.0600	0.120	ug/L	4	4.00	---	91	53-131%	3	30%	
Benzo(k)fluoranthene	3.53	0.0600	0.120	ug/L	4	4.00	---	88	57-129%	5	30%	
Benzo(g,h,i)perylene	3.68	0.0400	0.0800	ug/L	4	4.00	---	92	50-134%	2	30%	
Chrysene	3.62	0.0400	0.0800	ug/L	4	4.00	---	90	59-123%	1	30%	
Dibenz(a,h)anthracene	3.56	0.0400	0.0800	ug/L	4	4.00	---	89	51-134%	4	30%	
Fluoranthene	3.82	0.0400	0.0800	ug/L	4	4.00	---	95	57-128%	0.6	30%	
Fluorene	3.31	0.0400	0.0800	ug/L	4	4.00	---	83	52-124%	1	30%	
Indeno(1,2,3-cd)pyrene	3.42	0.0400	0.0800	ug/L	4	4.00	---	86	52-133%	1	30%	
1-Methylnaphthalene	3.00	0.0800	0.160	ug/L	4	4.00	---	75	41-120%	6	30%	
2-Methylnaphthalene	3.04	0.0800	0.160	ug/L	4	4.00	---	76	40-121%	5	30%	
Naphthalene	2.98	0.0800	0.160	ug/L	4	4.00	---	74	40-121%	6	30%	
Phenanthrene	3.37	0.0400	0.0800	ug/L	4	4.00	---	84	59-120%	0.8	30%	
Pyrene	3.83	0.0400	0.0800	ug/L	4	4.00	---	96	57-126%	0.3	30%	
Carbazole	3.77	0.0600	0.120	ug/L	4	4.00	---	94	60-122%	1	30%	
Dibenzofuran	3.29	0.0400	0.0800	ug/L	4	4.00	---	82	53-120%	3	30%	
4-Chloro-3-methylphenol	3.44	0.400	0.800	ug/L	4	4.00	---	86	52-120%	2	30%	
2-Chlorophenol	2.84	0.200	0.400	ug/L	4	4.00	---	71	38-120%	12	30%	
2,4-Dichlorophenol	3.32	0.200	0.400	ug/L	4	4.00	---	83	47-121%	8	30%	
2,4-Dimethylphenol	3.41	0.200	0.400	ug/L	4	4.00	---	85	31-124%	7	30%	
2,4-Dinitrophenol	4.44	1.00	2.00	ug/L	4	4.00	---	111	23-143%	2	30%	Q-41
4,6-Dinitro-2-methylphenol	4.80	1.00	2.00	ug/L	4	4.00	---	120	44-137%	1	30%	Q-41
2-Methylphenol	2.63	0.100	0.200	ug/L	4	4.00	---	66	30-120%	9	30%	
3+4-Methylphenol(s)	2.37	0.100	0.200	ug/L	4	4.00	---	59	29-120%	12	30%	
2-Nitrophenol	3.37	0.400	0.800	ug/L	4	4.00	---	84	47-123%	2	30%	
4-Nitrophenol	1.75	0.400	0.800	ug/L	4	4.00	---	44	5-120%	0.01	30%	
Pentachlorophenol (PCP)	3.72	0.400	0.800	ug/L	4	4.00	---	93	35-138%	1	30%	
Phenol	0.997	0.800	0.800	ug/L	4	4.00	---	25	5-120%	20	30%	
2,3,4,6-Tetrachlorophenol	3.61	0.200	0.400	ug/L	4	4.00	---	90	50-128%	0.7	30%	

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Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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 9100526 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (9100526-BSD2)			Prepared: 10/02/19 07:02		Analyzed: 10/02/19 17:51							**Q-19**
2,3,5,6-Tetrachlorophenol	3.83	0.200	0.400	ug/L	4	4.00	---	96	50-121%	1	30%	
2,4,5-Trichlorophenol	3.62	0.200	0.400	ug/L	4	4.00	---	91	53-123%	1	30%	
2,4,6-Trichlorophenol	3.63	0.200	0.400	ug/L	4	4.00	---	91	50-125%	3	30%	
Bis(2-ethylhexyl)phthalate	3.89	0.800	1.60	ug/L	4	4.00	---	97	55-135%	9	30%	
Butyl benzyl phthalate	4.01	0.800	1.60	ug/L	4	4.00	---	100	53-134%	4	30%	
Diethylphthalate	3.64	0.800	1.60	ug/L	4	4.00	---	91	55-125%	2	30%	
Dimethylphthalate	3.50	0.800	1.60	ug/L	4	4.00	---	88	45-127%	2	30%	
Di-n-butylphthalate	3.94	0.800	1.60	ug/L	4	4.00	---	98	59-127%	1	30%	
Di-n-octyl phthalate	4.17	0.800	1.60	ug/L	4	4.00	---	104	51-140%	7	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 77 %*		*Limits: 44-120 %*			*Dilution: 4x*				
2-Fluorobiphenyl (Surr)			*74 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*26 %*		*10-120 %*			*"*				
p-Terphenyl-d14 (Surr)			*86 %*		*50-133 %*			*"*				
2-Fluorophenol (Surr)			*48 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*87 %*		*43-140 %*			*"*				

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9100506 - EPA 3015A							**Water**					
Blank (9100506-BLK1)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 20:01							
EPA 6020A												
Arsenic	ND	0.500	1.00	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	0.0400	0.200	ug/L	1	---	---	---	---	---	---	
Copper	ND	1.00	2.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	0.100	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	0.0400	0.0800	ug/L	1	---	---	---	---	---	---	
Zinc	ND	2.00	4.00	ug/L	1	---	---	---	---	---	---	
LCS (9100506-BS1)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 20:05							
EPA 6020A												
Arsenic	50.4	0.500	1.00	ug/L	1	55.6	---	91	80-120%	---	---	
Cadmium	51.7	0.0400	0.200	ug/L	1	55.6	---	93	80-120%	---	---	
Copper	55.4	1.00	2.00	ug/L	1	55.6	---	100	80-120%	---	---	
Lead	56.4	0.100	0.200	ug/L	1	55.6	---	102	80-120%	---	---	
Mercury	1.09	0.0400	0.0800	ug/L	1	1.11	---	98	80-120%	---	---	
Zinc	54.4	2.00	4.00	ug/L	1	55.6	---	98	80-120%	---	---	
Duplicate (9100506-DUP1)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 21:31							
QC Source Sample: Non-SDG (A9I0899-02)												
Arsenic	**0.602**	0.500	1.00	ug/L	1	---	0.619	---	---	3	20%	J
Cadmium	**0.598**	0.0400	0.200	ug/L	1	---	0.553	---	---	8	20%	
Copper	**5.63**	1.00	2.00	ug/L	1	---	5.70	---	---	1	20%	
Lead	**1.57**	0.100	0.200	ug/L	1	---	1.49	---	---	6	20%	
Mercury	ND	0.0400	0.0800	ug/L	1	---	ND	---	---	---	20%	
Zinc	**15.0**	2.00	4.00	ug/L	1	---	14.9	---	---	0.3	20%	
Matrix Spike (9100506-MS1)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 21:35							
QC Source Sample: Non-SDG (A9I0899-02)												
EPA 6020A												
Arsenic	53.5	0.500	1.00	ug/L	1	55.6	0.619	95	75-125%	---	---	
Cadmium	53.4	0.0400	0.200	ug/L	1	55.6	0.553	95	75-125%	---	---	
Copper	61.4	1.00	2.00	ug/L	1	55.6	5.70	100	75-125%	---	---	
Lead	54.9	0.100	0.200	ug/L	1	55.6	1.49	96	75-125%	---	---	

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EPA ID: OR01039

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020A (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 9100506 - EPA 3015A							**Water**					
Matrix Spike (9100506-MS1)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 21:35							
QC Source Sample: Non-SDG (A9I0899-02)												
Mercury	1.07	0.0400	0.0800	ug/L	1	1.11	ND	97	75-125%	---	---	
Zinc	70.0	2.00	4.00	ug/L	1	55.6	14.9	99	75-125%	---	---	
Matrix Spike (9100506-MS2)			Prepared: 10/01/19 14:22		Analyzed: 10/02/19 22:51							
QC Source Sample: Non-SDG (A9J0014-01)												
EPA 6020A												
Arsenic	65.4	0.500	1.00	ug/L	1	55.6	6.29	106	75-125%	---	---	
Cadmium	54.7	0.0400	0.200	ug/L	1	55.6	ND	98	75-125%	---	---	
Copper	66.8	1.00	2.00	ug/L	1	55.6	11.3	100	75-125%	---	---	
Lead	54.2	0.100	0.200	ug/L	1	55.6	0.228	97	75-125%	---	---	
Mercury	1.08	0.0400	0.0800	ug/L	1	1.11	ND	97	75-125%	---	---	
Zinc	173	2.00	4.00	ug/L	1	55.6	117	101	75-125%	---	---	

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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: 9100526							
A9I0877-01	Water	EPA 8270D	09/26/19 14:04	10/02/19 07:02	1040mL/1mL	1000mL/1mL	0.96

Total Metals by EPA 6020A (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 9100506							
A9I0877-01	Water	EPA 6020A	09/26/19 14:04	10/01/19 14:22	45mL/50mL	45mL/50mL	1.00

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QUALIFIER DEFINITIONS

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

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J	Estimated Result. Result detected below the lowest point of the calibration curve, but above the specified MDL.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
X	See Case Narrative.

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

Abbreviations:

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

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

NR Result Not Reported

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

Detection Limits: Limit of Detection (LOD)

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

Reporting Limits: Limit of Quantitation (LOQ)

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

Reporting Conventions:

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

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

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

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

QC Source:

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

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

Miscellaneous Notes:

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

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

Blanks:

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

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AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

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

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

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

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6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

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

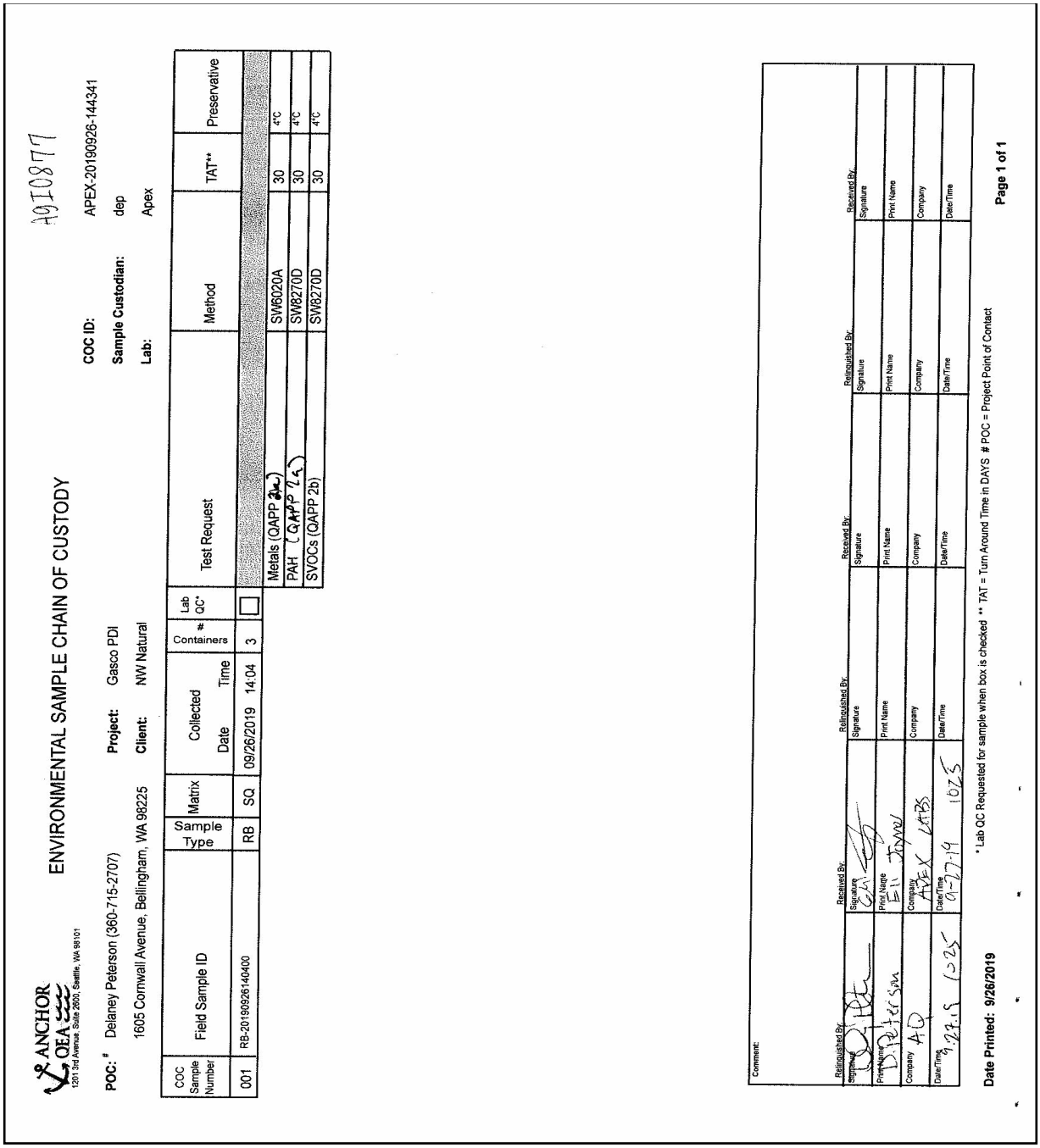
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**



ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

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

A9I0877

COC ID: APEX-20190926-144341

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

Project: Gasco PDI

Client: NW Natural

Sample Custodian: dep

Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	# Containers	Lab QC*	Test Request	Method	TAT**	Preservative
001	RB-20190926140400	RB	SQ	09/26/2019	14:04	3	☐	Metals (QAPP 2b)	SW6020A	30	4°C
								PAH (QAPP 2b)	SW8270D	30	4°C
								SVOCs (QAPP 2b)	SW8270D	30	4°C

Comment:

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

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

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

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

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

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

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

Date Printed: 9/26/2019

Page 1 of 1

Apex Laboratories

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

Darwin Thomas, Business Development Director

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

AMENDED REPORT

Anchor QEA, LLC	Project: **Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs**	
6720 SW Macadam Ave. Suite 125	Project Number: **[none]**	**Report ID:**
Portland, OR 97219	Project Manager: **Ryan Barth**	**A9I0877 - 11 01 19 0542**

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A9I0877

Project/Project #: Gasco PDI

Delivery Info:

Date/time received: 9/27/19 @ 1025 By: EJ

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

Cooler Inspection Date/time inspected: 9/27/19 @ ~~1127~~ 1127 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)	1.7						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	real						
Condition:	good						

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

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

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

Samples Inspection: Date/time inspected: 9/27/19 @ 1152 By:

All samples intact? Yes X No Comments:

Bottle labels/COCs agree? Yes X No Comments:

COC/container discrepancies form initiated? Yes No NA X

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

Do VOA vials have visible headspace? Yes No NA X

Comments

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

Comments:

Additional information:

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

Apex Laboratories

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

Darwin Thomas, Business Development Director

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

A9I0877

Apex Laboratories

Client:	**Anchor QEA, LLC**	**Project Manager:**	**Darwin Thomas**
Project:	**Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs**	**Project Number:**	**[none]**

Report To:

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

Invoice To:

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

Date Due:	10/11/19 17:00 (10 day TAT)		
Received By:	Eli S. Joyner	Date Received:	09/27/19 10:25
Logged In By:	Susan L. Treat	Date Logged In:	09/27/19 13:02

Cooler #1 received at 1.7°C

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

Analysis	Due	TAT	Expires	Comments
A9I0877-01 RB-20190926140400 [Water] Sampled 09/26/19 14:04 (GMT-08:00) Pacific Time (US & Canada) 3 Containers				
Metals				
Metals, Select 1	10/10/19 17:00	10	03/24/20 14:04	6020A: As,Cd,Cu,Pb,Hg,Zn
Project Mgmt				
Data Package	11/22/19 17:00	10	01/03/20 14:04	
Semivols (Scan)				
8270D LL PAH/PHTH/Phenols	10/10/19 17:00	10	10/03/19 14:04	PAH + Bis2EHP

Analysis groups included in this work order

Metals, Select 1

As (Arsenic) - 6020 - Total	Cd (Cadmium) - 6020 - Total	Cu (Copper) - 6020 - Total	Hg (Mercury) - 6020 - Total
Pb (Lead) - 6020 - Total	Zn (Zinc) - 6020 - Total		

Reviewed By

Date

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

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

A9I0877

COC ID: APEX-20190926-144341

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

Project: Gasco PDI
Client: NW Natural

Sample Custodian: dep
Lab: Apex

COC Sample Number	Field Sample ID	Sample Type	Matrix	Collected Date	Collected Time	Containers #	Lab QC*	Test Request	Method	TAT**	Preservative
001	RB-20190926140400	RB	SQ	09/26/2019	14:04	3	☐				
								Metals (QAPP 2a)	SW6020A	30	4°C
								PAH (QAPP 2a)	SW8270D	30	4°C
								SVOCs (QAPP 2b)	SW8270D	30	4°C

Comment:

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Print Name D. Peterson	Print Name Eli Jones	Print Name	Print Name	Print Name	Print Name
Company AQ	Company APEX LABS	Company	Company	Company	Company
Date/Time 9.27.19 1025	Date/Time 9-27-19 1025	Date/Time	Date/Time	Date/Time	Date/Time

Date Printed: 9/26/2019

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

APEX LABS COOLER RECEIPT FORM

Client: Anchor Element WO#: A9I0877

Project/Project #: Gasco PD1

Delivery Info:

Date/time received: 9/27/19 @ 1025 By: EJ

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

Cooler Inspection Date/time inspected: 9/27/19 @ ~~1127~~ (9/27/19) 1127 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)	1.7						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	real						
Condition:	good						

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

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

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

Samples Inspection: Date/time inspected: 9/27/19 @ 1152 By: ___

All samples intact? Yes X No ___ Comments: ___

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

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

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

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

Comments ___

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

Comments: ___

Additional information: ___

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

CLP-Like Forms

Apex Laboratories

SDG: A9I0877

CLASS: GCMS

METHOD: EPA 8270D

ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs

Client Sample Id:	Lab Sample Id:	Matrix
RB-20190926140400	A9I0877-01	Water

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: 11/1/2019 12:46PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories **SDG:** A9I0877

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 2b. Depos. Surfa

Batch Matrix: Water

Analyte	MDL	MRL	Units
Acenaphthene	0.0100	0.0200	ug/L
Acenaphthylene	0.0100	0.0200	ug/L
Anthracene	0.0100	0.0200	ug/L
Benz(a)anthracene	0.0100	0.0200	ug/L
Benzo(a)pyrene	0.0150	0.0300	ug/L
Benzo(b)fluoranthene	0.0150	0.0300	ug/L
Benzo(k)fluoranthene	0.0150	0.0300	ug/L
Benzo(g,h,i)perylene	0.0100	0.0200	ug/L
Chrysene	0.0100	0.0200	ug/L
Dibenz(a,h)anthracene	0.0100	0.0200	ug/L
Fluoranthene	0.0100	0.0200	ug/L
Fluorene	0.0100	0.0200	ug/L
Indeno(1,2,3-cd)pyrene	0.0100	0.0200	ug/L
1-Methylnaphthalene	0.0200	0.0400	ug/L
2-Methylnaphthalene	0.0200	0.0400	ug/L
Naphthalene	0.0200	0.0400	ug/L
Phenanthrene	0.0100	0.0200	ug/L
Pyrene	0.0100	0.0200	ug/L
Carbazole	0.0150	0.0300	ug/L
Dibenzofuran	0.0100	0.0200	ug/L
4-Chloro-3-methylphenol	0.100	0.200	ug/L
2-Chlorophenol	0.0500	0.100	ug/L
2,4-Dichlorophenol	0.0500	0.100	ug/L
2,4-Dimethylphenol	0.0500	0.100	ug/L
2,4-Dinitrophenol	0.250	0.500	ug/L
4,6-Dinitro-2-methylphenol	0.250	0.500	ug/L
2-Methylphenol	0.0250	0.0500	ug/L
3+4-Methylphenol(s)	0.0250	0.0500	ug/L
2-Nitrophenol	0.100	0.200	ug/L
4-Nitrophenol	0.100	0.200	ug/L
Pentachlorophenol (PCP)	0.100	0.200	ug/L
Phenol	0.200	0.400	ug/L
2,3,4,6-Tetrachlorophenol	0.0500	0.100	ug/L
2,3,5,6-Tetrachlorophenol	0.0500	0.100	ug/L
2,4,5-Trichlorophenol	0.0500	0.100	ug/L
2,4,6-Trichlorophenol	0.0500	0.100	ug/L
Bis(2-ethylhexyl)phthalate	0.200	0.400	ug/L

METHOD DETECTION AND REPORTING LIMITS

EPA 8270D

Laboratory: Apex Laboratories **SDG:** A9I0877

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 2b. Depos. Surfa

Batch Matrix: Water

Analyte	MDL	MRL	Units
Butyl benzyl phthalate	0.200	0.400	ug/L
Diethylphthalate	0.200	0.400	ug/L
Dimethylphthalate	0.200	0.400	ug/L
Di-n-butylphthalate	0.200	0.400	ug/L
Di-n-octyl phthalate	0.200	0.400	ug/L

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

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

RB-20190926140400

Laboratory:	Apex Laboratories			SDG:	A9I0877
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water	Laboratory ID:	A9I0877-01	File ID:	J10021919.D
Sampled:	09/26/19 14:04	Prepared:	10/02/19 07:02	Analyzed:	10/02/19 19:02
		Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1040 mL / 1 mL

Batch: 9100526 Sequence: 9J02030 Calibration: A9I2405 Instrument: SV-GCMS10

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
83-32-9	Acenaphthene	1	0.00962	U
208-96-8	Acenaphthylene	1	0.00962	U
120-12-7	Anthracene	1	0.00962	U
56-55-3	Benz(a)anthracene	1	0.00962	U
50-32-8	Benzo(a)pyrene	1	0.0144	U
205-99-2	Benzo(b)fluoranthene	1	0.0144	U
207-08-9	Benzo(k)fluoranthene	1	0.0144	UX
191-24-2	Benzo(g,h,i)perylene	1	0.00962	U
218-01-9	Chrysene	1	0.00962	U
53-70-3	Dibenz(a,h)anthracene	1	0.00962	U
206-44-0	Fluoranthene	1	0.00970	J
86-73-7	Fluorene	1	0.00962	U
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.00962	U
91-57-6	2-Methylnaphthalene	1	0.0192	U
91-20-3	Naphthalene	1	0.0211	J
85-01-8	Phenanthrene	1	0.00962	U
129-00-0	Pyrene	1	0.0221	
117-81-7	Bis(2-ethylhexyl)phthalate	1	0.192	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.81	3.25	67	44 - 120	
2-Fluorobiphenyl (Surr)	4.81	2.83	59	44 - 120	
Phenol-d6 (Surr)	4.81	1.14	24	10 - 120	
p-Terphenyl-d14 (Surr)	4.81	3.19	66	50 - 133	
2-Fluorophenol (Surr)	4.81	2.02	42	19 - 120	
2,4,6-Tribromophenol (Surr)	4.81	3.94	82	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	291078	6.52	255195	6.525	
Naphthalene-d8 (ISTD)	1127715	7.787	977789	7.787	
Acenaphthene-d10 (ISTD)	600842	9.568	514601	9.568	
Phenanthrene-d10 (ISTD)	1085585	11.082	960230	11.082	
Chrysene-d12 (ISTD)	1088672	14.799	948244	14.805	
Perylene-d12 (ISTD)	1063507	18.27	966601	18.281	
Dibenz(a,h)anthracene-d14 (ISTD)	917575	20.661	821200	20.667	

* Values outside of QC limits

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD DG 2019 - 2b. Depos. Surface Grabs
Batch: 9100526 Batch Matrix: Water Preparation: EPA 3510C (Acid Extraction)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9100526-BLK2	J10021915.D	10/02/19 07:02	
LCS	9100526-BS2	J10021916.D	10/02/19 07:02	
LCS Dup	9100526-BSD2	J10021917.D	10/02/19 07:02	
RB-20190926140400	A9I0877-01	J10021919.D	10/02/19 07:02	

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:	A9I0877
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water	Laboratory ID:	9100526-BLK2	File ID:	J10021915.D
Prepared:	10/02/19 07:02	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/02/19 16:39	Instrument:	SV-GCMS10		
Batch:	9100526	Sequence:	9J02030	Calibration:	A9I2405

CAS NO.	COMPOUND	CONC. (ug/L)	Q
83-32-9	Acenaphthene	0.00909	U
208-96-8	Acenaphthylene	0.00909	U
120-12-7	Anthracene	0.00909	U
56-55-3	Benz(a)anthracene	0.00909	U
50-32-8	Benzo(a)pyrene	0.0136	U
205-99-2	Benzo(b)fluoranthene	0.0136	U
207-08-9	Benzo(k)fluoranthene	0.0136	U
191-24-2	Benzo(g,h,i)perylene	0.00909	U
218-01-9	Chrysene	0.00909	U
53-70-3	Dibenz(a,h)anthracene	0.00909	U
206-44-0	Fluoranthene	0.00909	U
86-73-7	Fluorene	0.00909	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.00909	U
90-12-0	1-Methylnaphthalene	0.0182	U
91-57-6	2-Methylnaphthalene	0.0182	U
91-20-3	Naphthalene	0.0182	U
85-01-8	Phenanthrene	0.00909	U
129-00-0	Pyrene	0.00909	U
86-74-8	Carbazole	0.0136	U
132-64-9	Dibenzofuran	0.00909	U
59-50-7	4-Chloro-3-methylphenol	0.0909	U
95-57-8	2-Chlorophenol	0.0455	U
120-83-2	2,4-Dichlorophenol	0.0455	U
105-67-9	2,4-Dimethylphenol	0.0455	U
51-28-5	2,4-Dinitrophenol	0.227	U
534-52-1	4,6-Dinitro-2-methylphenol	0.227	U
95-48-7	2-Methylphenol	0.0227	U
NA	3+4-Methylphenol(s)	0.0227	U
88-75-5	2-Nitrophenol	0.0909	U
100-02-7	4-Nitrophenol	0.0909	U
87-86-5	Pentachlorophenol (PCP)	0.0909	U
108-95-2	Phenol	0.182	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.0455	U
935-95-5	2,3,5,6-Tetrachlorophenol	0.0455	U
95-95-4	2,4,5-Trichlorophenol	0.0455	U

METHOD BLANK DATA SHEET

EPA 8270D

Laboratory:	Apex Laboratories			SDG:	A9I0877
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water	Laboratory ID:	9100526-BLK2	File ID:	J10021915.D
Prepared:	10/02/19 07:02	Preparation:	EPA 3510C (Acid Extraction	Initial/Final:	1100 mL / 1 mL
Analyzed:	10/02/19 16:39	Instrument:	SV-GCMS10		
Batch:	9100526	Sequence:	9J02030	Calibration:	A9I2405

CAS NO.	COMPOUND	CONC. (ug/L)	Q
88-06-2	2,4,6-Trichlorophenol	0.0455	U
117-81-7	Bis(2-ethylhexyl)phthalate	0.182	U
85-68-7	Butyl benzyl phthalate	0.182	U
84-66-2	Diethylphthalate	0.182	U
131-11-3	Dimethylphthalate	0.182	U
84-74-2	Di-n-butylphthalate	0.182	U
117-84-0	Di-n-octyl phthalate	0.182	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Nitrobenzene-d5 (Surr)	4.55	3.38	74	44 - 120	
2-Fluorobiphenyl (Surr)	4.55	2.74	60	44 - 120	
Phenol-d6 (Surr)	4.55	1.29	28	10 - 120	
p-Terphenyl-d14 (Surr)	4.55	3.30	73	50 - 133	
2-Fluorophenol (Surr)	4.55	2.18	48	19 - 120	
2,4,6-Tribromophenol (Surr)	4.55	3.85	85	43 - 140	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4 (ISTD)	297010	6.525	255195	6.525	
Naphthalene-d8 (ISTD)	1138904	7.792	977789	7.787	
Acenaphthene-d10 (ISTD)	618083	9.568	514601	9.568	
Phenanthrene-d10 (ISTD)	1171179	11.082	960230	11.082	
Chrysene-d12 (ISTD)	1250096	14.804	948244	14.805	
Perylene-d12 (ISTD)	1291277	18.281	966601	18.281	
Dibenz(a,h)anthracene-d14 (ISTD)	1084542	20.672	821200	20.667	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix: Water
Batch: 9100526
Laboratory ID: 9100526-BS2
Preparation: EPA 3510C (Acid Extraction)
Initial/Final: 1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Acenaphthene	4.00	3.19	80	47 - 122
Acenaphthylene	4.00	3.37	84	41 - 130
Anthracene	4.00	3.48	87	57 - 123
Benz(a)anthracene	4.00	3.64	91	58 - 125
Benzo(a)pyrene	4.00	3.73	93	54 - 128
Benzo(b)fluoranthene	4.00	3.75	94	53 - 131
Benzo(k)fluoranthene	4.00	3.69	92	57 - 129
Benzo(g,h,i)perylene	4.00	3.76	94	50 - 134
Chrysene	4.00	3.66	92	59 - 123
Dibenz(a,h)anthracene	4.00	3.71	93	51 - 134
Fluoranthene	4.00	3.79	95	57 - 128
Fluorene	4.00	3.35	84	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.47	87	52 - 133
1-Methylnaphthalene	4.00	3.18	79	41 - 120
2-Methylnaphthalene	4.00	3.19	80	40 - 121
Naphthalene	4.00	3.15	79	40 - 121
Phenanthrene	4.00	3.39	85	59 - 120
Pyrene	4.00	3.82	96	57 - 126
Carbazole	4.00	3.73	93	60 - 122
Dibenzofuran	4.00	3.38	84	53 - 120
4-Chloro-3-methylphenol	4.00	3.50	87	52 - 120
2-Chlorophenol	4.00	3.20	80	38 - 120
2,4-Dichlorophenol	4.00	3.58	90	47 - 121
2,4-Dimethylphenol	4.00	3.66	91	31 - 124
2,4-Dinitrophenol	4.00	4.53	113	23 - 143
4,6-Dinitro-2-methylphenol	4.00	4.75	119	44 - 137
2-Methylphenol	4.00	2.87	72	30 - 120
3+4-Methylphenol(s)	4.00	2.67	67	29 - 120
2-Nitrophenol	4.00	3.44	86	47 - 123
4-Nitrophenol	4.00	1.75	44	5 - 120

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water		
Batch:	9100526	Laboratory ID:	9100526-BS2
Preparation:	EPA 3510C (Acid Extraction)	Initial/Final:	1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Pentachlorophenol (PCP)	4.00	3.67	92	35 - 138
Phenol	4.00	1.22	30	5 - 120
2,3,4,6-Tetrachlorophenol	4.00	3.63	91	50 - 128
2,3,5,6-Tetrachlorophenol	4.00	3.79	95	50 - 121
2,4,5-Trichlorophenol	4.00	3.67	92	53 - 123
2,4,6-Trichlorophenol	4.00	3.74	93	50 - 125
Bis(2-ethylhexyl)phthalate	4.00	4.24	106	55 - 135
Butyl benzyl phthalate	4.00	4.19	105	53 - 134
Diethylphthalate	4.00	3.71	93	55 - 125
Dimethylphthalate	4.00	3.59	90	45 - 127
Di-n-butylphthalate	4.00	3.99	100	59 - 127
Di-n-octyl phthalate	4.00	4.47	112	51 - 140

* = Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix: Water
Batch: 9100526
Laboratory ID: 9100526-BSD2
Preparation: EPA 3510C (Acid Extraction)
Initial/Final: 1000 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	
Acenaphthene	4.00	3.06	77	4	30	47 - 122
Acenaphthylene	4.00	3.19	80	5	30	41 - 130
Anthracene	4.00	3.49	87	0.3	30	57 - 123
Benz(a)anthracene	4.00	3.67	92	0.7	30	58 - 125
Benzo(a)pyrene	4.00	3.66	92	2	30	54 - 128
Benzo(b)fluoranthene	4.00	3.64	91	3	30	53 - 131
Benzo(k)fluoranthene	4.00	3.53	88	5	30	57 - 129
Benzo(g,h,i)perylene	4.00	3.68	92	2	30	50 - 134
Chrysene	4.00	3.62	90	1	30	59 - 123
Dibenz(a,h)anthracene	4.00	3.56	89	4	30	51 - 134
Fluoranthene	4.00	3.82	95	0.6	30	57 - 128
Fluorene	4.00	3.31	83	1	30	52 - 124
Indeno(1,2,3-cd)pyrene	4.00	3.42	86	1	30	52 - 133
1-Methylnaphthalene	4.00	3.00	75	6	30	41 - 120
2-Methylnaphthalene	4.00	3.04	76	5	30	40 - 121
Naphthalene	4.00	2.98	74	6	30	40 - 121
Phenanthrene	4.00	3.37	84	0.8	30	59 - 120
Pyrene	4.00	3.83	96	0.3	30	57 - 126
Carbazole	4.00	3.77	94	1	30	60 - 122
Dibenzofuran	4.00	3.29	82	3	30	53 - 120
4-Chloro-3-methylphenol	4.00	3.44	86	2	30	52 - 120
2-Chlorophenol	4.00	2.84	71	12	30	38 - 120
2,4-Dichlorophenol	4.00	3.32	83	8	30	47 - 121
2,4-Dimethylphenol	4.00	3.41	85	7	30	31 - 124
2,4-Dinitrophenol	4.00	4.44	111	2	30	23 - 143
4,6-Dinitro-2-methylphenol	4.00	4.80	120	1	30	44 - 137
2-Methylphenol	4.00	2.63	66	9	30	30 - 120
3+4-Methylphenol(s)	4.00	2.37	59	12	30	29 - 120
2-Nitrophenol	4.00	3.37	84	2	30	47 - 123
4-Nitrophenol	4.00	1.75	44	0.01	30	5 - 120

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water		
Batch:	9100526	Laboratory ID:	9100526-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	
Pentachlorophenol (PCP)	4.00	3.72	93	1	30	35 - 138
Phenol	4.00	0.997	25	20	30	5 - 120
2,3,4,6-Tetrachlorophenol	4.00	3.61	90	0.7	30	50 - 128
2,3,5,6-Tetrachlorophenol	4.00	3.83	96	1	30	50 - 121
2,4,5-Trichlorophenol	4.00	3.62	91	1	30	53 - 123
2,4,6-Trichlorophenol	4.00	3.63	91	3	30	50 - 125
Bis(2-ethylhexyl)phthalate	4.00	3.89	97	9	30	55 - 135
Butyl benzyl phthalate	4.00	4.01	100	4	30	53 - 134
Diethylphthalate	4.00	3.64	91	2	30	55 - 125
Dimethylphthalate	4.00	3.50	88	2	30	45 - 127
Di-n-butylphthalate	4.00	3.94	98	1	30	59 - 127
Di-n-octyl phthalate	4.00	4.17	104	7	30	51 - 140

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9I19035	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

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

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

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02030	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	9J02030-TUN2	J10021904.D	10/02/19 10:11
Calibration Check	9J02030-CCV2	J10021905.D	10/02/19 10:39
Calibration Blank	9J02030-CCB1	J10021906.D	10/02/19 11:15
Blank	9100526-BLK2	J10021915.D	10/02/19 16:39
LCS	9100526-BS2	J10021916.D	10/02/19 17:15
LCS Dup	9100526-BSD2	J10021917.D	10/02/19 17:51
RB-20190926140400	A9I0877-01	J10021919.D	10/02/19 19:02

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:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Lab File ID:	J09191916.D	Injection Date:	09/20/19
Instrument ID:	SV-GCMS10	Injection Time:	00:22
Sequence:	9I19035	Lab Sample ID:	9I19035-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.61	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.51	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.90	PASS
m/z 365	1 - 100% of m/z 198	3.17	PASS
m/z 441	Less than 150% of m/z 443	73.90	PASS
m/z 442	0.1 - 200% of m/z 198	95.52	PASS
m/z 443	15 - 24% of m/z 442	19.71	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Lab File ID:	J10021904.D	Injection Date:	10/02/19
Instrument ID:	SV-GCMS10	Injection Time:	10:11
Sequence:	9J02030	Lab Sample ID:	9J02030-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
m/z 68	Less than 2% of m/z 69	1.36	PASS
m/z 69	Base peak, 100% relative abundance	100.00	PASS
m/z 70	Less than 2% of m/z 69	0.55	PASS
m/z 197	Less than 2% of m/z 198	0.00	PASS
m/z 198	Base peak, 100% relative abundance	100.00	PASS
m/z 199	5 - 9% of m/z 198	6.81	PASS
m/z 365	1 - 100% of m/z 198	3.51	PASS
m/z 441	Less than 150% of m/z 443	75.88	PASS
m/z 442	0.1 - 200% of m/z 198	116.93	PASS
m/z 443	15 - 24% of m/z 442	19.75	PASS

INITIAL CALIBRATION DATA (Summary)

EPA 8270D

Laboratory: Apex Laboratories SDG: A9I0877

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grab

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

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

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

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface
Calibration: A9I2405
Instrument: SV-GCMS10
Calibration Date: 09/24/19 12:40

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Acenaphthene	20	1.387139	50	1.465177	100	1.444455	200	1.458304	500	1.435781	1000	1.37025
Acenaphthylene	20	1.943712	50	2.089623	100	2.211243	200	2.225813	500	2.309322	1000	2.183771
Anthracene	20	0.9951892	50	1.126429	100	1.165603	200	1.205198	500	1.196213	1000	1.142983
Benz(a)anthracene	20	1.160991	50	1.06995	100	1.154466	200	1.114494	500	1.142581	1000	1.101713
Benzo(a)pyrene	20	0.5735994	50	0.6774644	100	0.8890347	200	0.9169897	500	1.02761	1000	1.026781
Benzo(b)fluoranthene	20	0.7158776	50	0.7954364	100	1.015807	200	1.038157	500	1.108912	1000	1.109485
Benzo(k)fluoranthene	20	0.705265	50	0.8635365	100	1.038213	200	1.064845	500	1.120218	1000	1.117069
Benzo(b+k)fluoranthene(s)	40	0.7342124	100	0.8714657	200	1.06775	400	1.078713	1000	1.136196	2000	1.134211
Benzo(g,h,i)perylene	20	0.8503915	50	0.9437662	100	1.107488	200	1.164969	500	1.222029	1000	1.214462
Chrysene	20	0.9945931	50	1.051087	100	1.093909	200	1.079592	500	1.093683	1000	1.062001
Dibenz(a,h)anthracene	20	0.9578393	50	1.019058	100	1.090869	200	1.097365	500	1.134733	1000	1.104801
Fluoranthene	20	1.064548	50	1.145916	100	1.255752	200	1.261732	500	1.315847	1000	1.256722
Fluorene	20	1.422735	50	1.444081	100	1.592168	200	1.562318	500	1.562158	1000	1.459883
Indeno(1,2,3-cd)pyrene	20	1.102051	50	1.169408	100	1.175957	200	1.156023	500	1.17071	1000	1.152494
1-Methylnaphthalene	20	0.7366736	50	0.7695878	100	0.7774042	200	0.7926092	500	0.8043127	1000	0.7520123
2-Methylnaphthalene	20	0.7055696	50	0.7739031	100	0.7758033	200	0.8187475	500	0.8328583	1000	0.7928421
Naphthalene	20	1.146264	50	1.150802	100	1.167151	200	1.172727	500	1.186172	1000	1.117145
Phenanthrene	20	1.195009	50	1.197392	100	1.224623	200	1.228283	500	1.224617	1000	1.146124
Pyrene	20	1.098706	50	1.202944	100	1.242163	200	1.307583	500	1.336081	1000	1.283352
Carbazole	20	0.7984112	50	0.9004153	100	0.9787618	200	1.010698	500	1.001555	1000	0.8613414
Dibenzofuran	20	1.821625	50	1.906898	100	2.037226	200	2.018423	500	1.982566	1000	1.887185
4-Chloro-3-methylphenol	20	~~0.1569115~~	50	~~0.1743164~~	100	0.197123	200	0.2197758	500	0.2781846	1000	0.2840447
2-Chlorophenol	20	1.230865	50	1.299351	100	1.339463	200	1.473585	500	1.520086	1000	1.505381
2,4-Dichlorophenol	20	~~0.1312097~~	50	0.1695328	100	0.2138224	200	0.251967	500	0.2951581	1000	0.3028913
2,4-Dimethylphenol	20	~~0.1944~~	50	0.1981005	100	0.249496	200	0.264704	500	0.2828699	1000	0.2871584
2,4-Dinitrophenol	20	~~0~~	50	~~0~~	100	~~5.494943E-03~~	200	1.301196E-02	500	2.920926E-02	1000	6.180619E-02
4,6-Dinitro-2-methylphenol	20	~~0~~	50	~~1.337172E-02~~	100	~~0.0247435~~	200	4.093209E-02	500	9.085052E-02	1000	0.1331837
2-Methylphenol	20	0.9295757	50	0.8796476	100	0.9810251	200	1.076563	500	1.154826	1000	1.147864
3+4-Methylphenol(s)	20	1.06531	50	1.132761	100	1.159969	200	1.345101	500	1.440506	1000	1.458462
2-Nitrophenol	20	~~0.0861908~~	50	~~0.1137355~~	100	0.1220013	200	0.1353245	500	0.1797043	1000	0.2007836
4-Nitrophenol	20	~~1.873457E-02~~	50	~~4.537296E-02~~	100	6.847545E-02	200	9.464728E-02	500	0.1640399	1000	0.2011801

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: Apex Laboratories

Client: Anchor QEA, LLC

Calibration: A9I2405

SDG: A9I0877

Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface

Instrument: SV-GCMS10

Calibration Date: 09/24/19 12:40

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Pentachlorophenol (PCP)	20	~~8.691609E-02~~	50	~~5.118127E-02~~	100	7.761508E-02	200	6.955638E-02	500	0.1080871	1000	0.1222728
Phenol	20	1.541752	50	1.561941	100	1.608017	200	1.797137	500	1.826981	1000	1.842828
2,3,4,6-Tetrachlorophenol	20	~~0.13364~~	50	0.163122	100	0.2361525	200	0.2622007	500	0.3227598	1000	0.3465662
2,3,5,6-Tetrachlorophenol	20	~~0.120838~~	50	0.1089211	100	0.1844545	200	0.2156618	500	0.2958013	1000	0.3147484
2,4,5-Trichlorophenol	20	~~0.1901559~~	50	0.2373804	100	0.2701951	200	0.3011386	500	0.3811527	1000	0.3898394
2,4,6-Trichlorophenol	20	~~0.1746999~~	50	0.2365366	100	0.2572544	200	0.3068435	500	0.3835634	1000	0.4024493
Bis(2-ethylhexyl)phthalate	20	~~0.2293689~~	50	~~0.3123726~~	100	~~0.4749806~~	200	0.520599	500	0.7063373	1000	0.7429592
Butyl benzyl phthalate	20	~~0.2186725~~	50	0.2430642	100	0.3343815	200	0.379613	500	0.4872825	1000	0.5328862
Diethylphthalate	20	1.254436	50	1.387673	100	1.556467	200	1.504663	500	1.488445	1000	1.460229
Dimethylphthalate	20	1.434756	50	1.459594	100	1.596102	200	1.569984	500	1.599808	1000	1.540098
Di-n-butylphthalate	20	~~1.016657~~	50	1.070578	100	1.256574	200	1.258672	500	1.31772	1000	1.283145
Di-n-octyl phthalate	20	~~0.2876625~~	50	~~0.359494~~	100	0.5972254	200	0.6937602	500	0.9792716	1000	1.135609
2,3,5-Trimethylnaphthalene	20	1.19105	50	1.237598	100	1.255318	200	1.278229	500	1.274081	1000	1.216964
2,6-Dimethylnaphthalene	20	1.107994	50	1.334965	100	1.409892	200	1.425676	500	1.404685	1000	1.335547
Benzo(e)pyrene	20	0.7469389	50	0.8957272	100	1.031861	200	1.038735	500	1.102471	1000	1.104983
1,1'-Biphenyl	20	1.593219	50	1.861849	100	1.891301	200	1.926064	500	1.922996	1000	1.826688
Perylene	20	0.8005198	50	0.9000655	100	0.8921393	200	0.9200652	500	0.9506848	1000	0.9144488
Nitrobenzene-d5 (Surr)	20	0.9806475	50	1.085379	100	1.135054	200	1.209032	500	1.31341	1000	1.321832
2-Fluorobiphenyl (Surr)	20	1.476909	50	1.609929	100	1.734744	200	1.751334	500	1.739556	1000	1.652173
Phenol-d6 (Surr)	20	1.197274	50	1.304845	100	1.445522	200	1.602349	500	1.667059	1000	1.681755
p-Terphenyl-d14 (Surr)	20	0.8205178	50	0.9023018	100	0.9773009	200	0.9592621	500	0.994643	1000	0.9688955
2-Fluorophenol (Surr)	20	0.9398586	50	1.045277	100	0.9521188	200	1.216931	500	1.280008	1000	1.263499
2,4,6-Tribromophenol (Surr)	20	~~6.623006E-02~~	50	7.092577E-02	100	8.598271E-02	200	9.861561E-02	500	0.1200291	1000	0.122147

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface
Calibration: A9I2405
Instrument: SV-GCMS10
Matrix:
Calibration Date: 09/24/19 12:40

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Acenaphthene	2000	1.3141	4000	1.127129	6000	1.013245	8000	~~0.9282602~~				
Acenaphthylene	2000	2.066515	4000	1.748495	6000	1.519472	8000	~~1.324874~~				
Anthracene	2000	1.087514	4000	0.9437941	6000	0.8437674	8000	~~0.7448748~~				
Benz(a)anthracene	2000	1.124688	4000	1.115111	6000	1.106753	8000	1.07572				
Benzo(a)pyrene	2000	1.091404	4000	1.048852	6000	1.010301	8000	0.9676185				
Benzo(b)fluoranthene	2000	1.177652	4000	1.182772	6000	1.176711	8000	1.12806				
Benzo(k)fluoranthene	2000	1.167974	4000	1.078346	6000	0.9727135	8000	0.8542889				
Benzo(b+k)fluoranthene(s)	4000	1.191029	8000	1.147505	12000	1.112943	16000	1.060446				
Benzo(g,h,i)perylene	2000	1.250377	4000	1.243478	6000	1.204491	8000	1.158473				
Chrysene	2000	1.053921	4000	1.041373	6000	1.00938	8000	0.9848763				
Dibenz(a,h)anthracene	2000	1.14524	4000	1.151969	6000	1.102805	8000	1.053858				
Fluoranthene	2000	1.228565	4000	1.087861	6000	0.9920321	8000	0.8907439				
Fluorene	2000	1.38538	4000	1.15108	6000	1.025113	8000	~~0.9142278~~				
Indeno(1,2,3-cd)pyrene	2000	1.20516	4000	1.22416	6000	1.229731	8000	1.241071				
1-Methylnaphthalene	2000	0.7398778	4000	0.6351137	6000	0.5768393	8000	0.5319497				
2-Methylnaphthalene	2000	0.7829658	4000	0.678854	6000	0.6199818	8000	0.5696241				
Naphthalene	2000	1.076346	4000	0.9247484	6000	0.8259695	8000	0.7538274				
Phenanthrene	2000	1.091051	4000	0.9399318	6000	0.851062	8000	~~0.7677285~~				
Pyrene	2000	1.225105	4000	1.09439	6000	0.9974297	8000	0.9149714				
Carbazole	2000	0.5922316	4000	~~0.3504932~~	6000	~~0.3356799~~	8000	~~0.249538~~				
Dibenzofuran	2000	1.852082	4000	1.60426	6000	1.422149	8000	1.264436				
4-Chloro-3-methylphenol	2000	0.3089864	4000	0.2914504	6000	0.2779513	8000	0.2655486				
2-Chlorophenol	2000	1.484607	4000	1.474844	6000	1.444576	8000	1.38865				
2,4-Dichlorophenol	2000	0.3201088	4000	0.3053461	6000	0.2873242	8000	0.2716327				
2,4-Dimethylphenol	2000	0.3044865	4000	0.286533	6000	0.2842333	8000	0.2557606				
2,4-Dinitrophenol	2000	9.957952E-02	4000	0.1369712	6000	0.1528641	8000	~~0.1635984~~				
4,6-Dinitro-2-methylphenol	2000	0.1736742	4000	0.2029718	6000	0.212265	8000	0.2122266				
2-Methylphenol	2000	1.116896	4000	1.057322	6000	1.00091	8000	0.9567711				
3+4-Methylphenol(s)	2000	1.400529	4000	1.304656	6000	1.18889	8000	~~1.118737~~				
2-Nitrophenol	2000	0.1891146	4000	0.2009709	6000	0.2008293	8000	0.1949359				
4-Nitrophenol	2000	0.2419629	4000	0.2567932	6000	0.2625059	8000	~~0.2571442~~				

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 2b. Depos. Surface
Calibration: A9I2405
Instrument: SV-GCMS10
Matrix:
Calibration Date: 09/24/19 12:40

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF	ng/mL	RF
Pentachlorophenol (PCP)	2000	0.1418302	4000	0.1484859	6000	0.1453844	8000	0.1384905				
Phenol	2000	1.776393	4000	1.793731	6000	1.708216	8000	1.624675				
2,3,4,6-Tetrachlorophenol	2000	0.3641115	4000	0.3547479	6000	0.3390141	8000	0.3257666				
2,3,5,6-Tetrachlorophenol	2000	0.3435903	4000	0.3418179	6000	0.3354848	8000	0.3215912				
2,4,5-Trichlorophenol	2000	0.4178827	4000	0.4063886	6000	0.3928207	8000	0.3663551				
2,4,6-Trichlorophenol	2000	0.4232436	4000	0.4186057	6000	0.4009108	8000	0.3885235				
Bis(2-ethylhexyl)phthalate	2000	0.7763648	4000	0.7902806	6000	0.7625502	8000	0.7368646				
Butyl benzyl phthalate	2000	0.5700974	4000	0.5904404	6000	0.5801587	8000	0.5694196				
Diethylphthalate	2000	1.383707	4000	1.20631	6000	1.077035	8000	0.9764122				
Dimethylphthalate	2000	1.48145	4000	1.34643	6000	1.249458	8000	1.165787				
Di-n-butylphthalate	2000	1.234995	4000	1.082271	6000	0.9583471	8000	~~0.8647394~~				
Di-n-octyl phthalate	2000	1.33731	4000	1.351805	6000	1.295496	8000	1.228669				
2,3,5-Trimethylnaphthalene	2000	1.168098	4000	1.003502	6000	0.8946988	8000	0.8133397				
2,6-Dimethylnaphthalene	2000	1.262926	4000	1.089174	6000	0.9790218	8000	~~0.8795554~~				
Benzo(e)pyrene	2000	1.132581	4000	1.109684	6000	1.089407	8000	1.027112				
1,1'-Biphenyl	2000	1.723435	4000	1.451071	6000	1.274641	8000	~~1.139707~~				
Perylene	2000	0.9539392	4000	0.9130756	6000	0.9081392	8000	0.8666273				
Nitrobenzene-d5 (Surr)	2000	1.281854	4000	1.28613	6000	1.24582	8000	1.192526				
2-Fluorobiphenyl (Surr)	2000	1.564374	4000	1.350787	6000	1.207146	8000	~~1.092707~~				
Phenol-d6 (Surr)	2000	1.673553	4000	1.705426	6000	1.658679	8000	1.598233				
p-Terphenyl-d14 (Surr)	2000	0.953339	4000	0.9235964	6000	0.8801238	8000	0.8367959				
2-Fluorophenol (Surr)	2000	1.332531	4000	1.380766	6000	1.371479	8000	1.354202				
2,4,6-Tribromophenol (Surr)	2000	0.1302975	4000	0.1246898	6000	0.1182398	8000	0.1123724				

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surfac
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J09191929.D		
Sequence:	9I19035	Inject Date:	09/20/19
Lab Sample ID:	9I19035-ICV1	Inject Time:	07:50

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Acenaphthene	1000	1000	0.2	70 - 130
Acenaphthylene	1000	1060	5.9	70 - 130
Anthracene	1000	1060	5.8	70 - 130
Benz(a)anthracene	1000	1030	2.9	70 - 130
Benzo(a)pyrene	1000	971	-2.9	70 - 130
Benzo(b)fluoranthene	1000	1010	0.9	70 - 130
Benzo(k)fluoranthene	1000	992	-0.8	70 - 130
Benzo(g,h,i)perylene	1000	1050	5.5	70 - 130
Chrysene	1000	1010	1.0	70 - 130
Dibenz(a,h)anthracene	1000	1020	1.9	70 - 130
Fluoranthene	1000	1090	8.8	70 - 130
Fluorene	1000	1050	4.6	70 - 130
Indeno(1,2,3-cd)pyrene	1000	974	-2.6	70 - 130
1-Methylnaphthalene	1000	1070	7.3	70 - 130
2-Methylnaphthalene	1000	1100	9.7	70 - 130
Naphthalene	1000	1050	4.8	70 - 130
Phenanthrene	1000	1020	1.6	70 - 130
Pyrene	1000	1070	7.1	70 - 130
Carbazole	1000	965	-3.5	70 - 130
Dibenzofuran	1000	1070	7.1	70 - 130
4-Chloro-3-methylphenol	1000	1060	5.6	70 - 130
2-Chlorophenol	1000	1010	0.9	70 - 130
2,4-Dichlorophenol	1000	969	-3.1	70 - 130
2,4-Dimethylphenol	1000	968	-3.2	70 - 130
2,4-Dinitrophenol	1000	972	-2.8	70 - 130
4,6-Dinitro-2-methylphenol	1000	1160	15.8	70 - 130
2-Methylphenol	1000	1050	5.3	70 - 130
3+4-Methylphenol(s)	1000	1070	6.7	70 - 130
2-Nitrophenol	1000	969	-3.1	70 - 130
4-Nitrophenol	1000	1110	10.7	70 - 130
Pentachlorophenol (PCP)	1000	976	-2.4	70 - 130

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surfac
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J09191929.D		
Sequence:	9I19035	Inject Date:	09/20/19
Lab Sample ID:	9I19035-ICV1	Inject Time:	07:50

ANALYTE	EXPECTED (ng/mL)	FOUND (ng/mL)	% DRIFT	QC LIMIT
Phenol	1000	990	-1.0	70 - 130
2,3,4,6-Tetrachlorophenol	1000	1010	1.4	70 - 130
2,3,5,6-Tetrachlorophenol	1000	1080	7.7	70 - 130
2,4,5-Trichlorophenol	1000	1050	4.8	70 - 130
2,4,6-Trichlorophenol	1000	1030	3.4	70 - 130
Bis(2-ethylhexyl)phthalate	1000	1040	3.9	70 - 130
Butyl benzyl phthalate	1000	1000	0.4	70 - 130
Diethylphthalate	1000	1090	8.7	70 - 130
Dimethylphthalate	1000	1060	6.1	70 - 130
Di-n-butylphthalate	1000	1060	5.8	70 - 130
Di-n-octyl phthalate	1000	1010	1.4	70 - 130
Nitrobenzene-d5 (Surr)	1000	1070	6.6	70 - 130
2-Fluorobiphenyl (Surr)	1000	1060	6.2	70 - 130
Phenol-d6 (Surr)	1000	1020	1.6	70 - 130
p-Terphenyl-d14 (Surr)	1000	1060	6.1	70 - 130
2-Fluorophenol (Surr)	1000	981	-1.9	70 - 130
2,4,6-Tribromophenol (Surr)	1000	1040	4.1	70 - 130

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J10021905.D	Calibration Date:	09/24/19 12:40
Sequence:	9J02030	Injection Date:	10/02/19
Lab Sample ID:	9J02030-CCV2	Injection Time:	10:39

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Acenaphthene	Ave	1000	1010		1.335064	1.350856	1.2	20
Acenaphthylene	Ave	1000	1060		2.033107	2.164368	6.5	20
Anthracene	Ave	1000	1040		1.078521	1.126463	4.4	20
Benz(a)anthracene	Ave	1000	1030		1.116647	1.148114	2.8	20
Benzo(a)pyrene	XXX	1000	1070	6.9				20
Benzo(b)fluoranthene	XXX	1000	1040	4.1				20
Benzo(k)fluoranthene	XXX	1000	1020	2.3				20
Benzo(g,h,i)perylene	Ave	1000	1140		1.135992	1.289362	13.5	20
Chrysene	Ave	1000	1050		1.046442	1.094889	4.6	20
Dibenz(a,h)anthracene	Ave	1000	1050		1.085854	1.14001	5.0	20
Fluoranthene	Ave	1000	1130		1.149972	1.303323	13.3	20
Fluorene	Ave	1000	1010		1.400546	1.417304	1.2	20
Indeno(1,2,3-cd)pyrene	Ave	1000	1010		1.182676	1.193341	0.9	20
1-Methylnaphthalene	Ave	1000	1050		0.711638	0.7503153	5.4	20
2-Methylnaphthalene	Ave	1000	1070		0.735115	0.7860162	6.9	20
Naphthalene	Ave	1000	1050		1.052115	1.109593	5.5	20
Phenanthrene	Ave	1000	1000		1.12201	1.12537	0.3	20
Pyrene	Ave	1000	1120		1.170273	1.313635	12.3	20
Carbazole	XXX	1000	1150	14.7				20
Dibenzofuran	Ave	1000	1050		1.779685	1.866079	4.9	20
4-Chloro-3-methylphenol	Ave	1000	1070		0.2653831	0.2848631	7.3	20
2-Chlorophenol	Ave	1000	1080		1.416141	1.526198	7.8	20
2,4-Dichlorophenol	XXX	1000	1070	6.8				20
2,4-Dimethylphenol	Ave	1000	1170		0.2681491	0.3140923	17.1	20
2,4-Dinitrophenol	XXX	1000	1360	36.2 *				20
4,6-Dinitro-2-methylphenol	XXX	1000	1240	23.9 *				20
2-Methylphenol	Ave	1000	1070		1.03014	1.102733	7.0	20
3+4-Methylphenol(s)	Ave	1000	1100		1.277354	1.405678	10.0	20
2-Nitrophenol	XXX	1000	1080	8.0				20
4-Nitrophenol	XXX	1000	1140	14.1				20

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID:	SV-GCMS10	Calibration:	A9I2405
Lab File ID:	J10021905.D	Calibration Date:	09/24/19 12:40
Sequence:	9J02030	Injection Date:	10/02/19
Lab Sample ID:	9J02030-CCV2	Injection Time:	10:39

COMPOUND	Curve Fit	Calculated Concentration (ng/mL) [L/Q Fits]			Response Factors [Ave RF]			Limit
		STD	CCV	% DIFF	ICAL	CCV	% Drift	
Pentachlorophenol (PCP)	XXX	1000	1050	5.4				20
Phenol	Ave	1000	1030		1.708167	1.755951	2.8	20
2,3,4,6-Tetrachlorophenol	XXX	1000	1110	10.6				20
2,3,5,6-Tetrachlorophenol	XXX	1000	1110	10.8				20
2,4,5-Trichlorophenol	XXX	1000	1100	10.1				20
2,4,6-Trichlorophenol	XXX	1000	1100	9.6				20
Bis(2-ethylhexyl)phthalate	Ave	1000	1100		0.7194223	0.793049	10.2	20
Butyl benzyl phthalate	XXX	1000	1070	6.9				20
Diethylphthalate	Ave	1000	1060		1.329538	1.408427	5.9	20
Dimethylphthalate	Ave	1000	1050		1.444347	1.523363	5.5	20
Di-n-butylphthalate	Ave	1000	1060		1.182788	1.258823	6.4	20
Di-n-octyl phthalate	XXX	1000	1020	1.6				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:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9I19035	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (9I19035-ICV1)				Lab File ID: J09191929.D		Analyzed: 09/20/19 07:50		
Nitrobenzene-d5 (Surr)	1000	107	70 - 130	7.113	7.1168	-0.0038	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	106	70 - 130	8.927	8.927444	-0.0004	+/-1.0	
Phenol-d6 (Surr)	1000	102	70 - 130	6.209	6.2088	0.0002	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	106	70 - 130	12.917	12.9267	-0.0097	+/-1.0	
2-Fluorophenol (Surr)	1000	98	70 - 130	5.316	5.3054	0.0106	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	104	70 - 130	10.419	10.42356	-0.0046	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02030	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Calibration Check (9J02030-CCV2)			Lab File ID: J10021905.D		Analyzed: 10/02/19 10:39			
Nitrobenzene-d5 (Surr)	1000	100	80 - 120	7.065	7.1168	-0.0518	+/-1.0	
2-Fluorobiphenyl (Surr)	1000	104	80 - 120	8.878	8.927444	-0.0494	+/-1.0	
Phenol-d6 (Surr)	1000	106	80 - 120	6.161	6.2088	-0.0478	+/-1.0	
p-Terphenyl-d14 (Surr)	1000	103	80 - 120	12.847	12.9267	-0.0797	+/-1.0	
2-Fluorophenol (Surr)	1000	111	80 - 120	5.257	5.3054	-0.0484	+/-1.0	
2,4,6-Tribromophenol (Surr)	1000	100	80 - 120	10.371	10.42356	-0.0526	+/-1.0	
Calibration Blank (9J02030-CCB1)			Lab File ID: J10021906.D		Analyzed: 10/02/19 11:15			
Nitrobenzene-d5 (Surr)			44 - 120	0	7.1168	-7.1168	+/-1.0	
2-Fluorobiphenyl (Surr)			44 - 120	0	8.927444	-8.9274	+/-1.0	
Phenol-d6 (Surr)			10 - 120	0	6.2088	-6.2088	+/-1.0	
p-Terphenyl-d14 (Surr)			50 - 133	0	12.9267	-12.9267	+/-1.0	
2-Fluorophenol (Surr)			19 - 120	5.364	5.3054	0.0586	+/-1.0	
2,4,6-Tribromophenol (Surr)			43 - 140	0	10.42356	-10.4236	+/-1.0	
Blank (9100526-BLK2)			Lab File ID: J10021915.D		Analyzed: 10/02/19 16:39			
Nitrobenzene-d5 (Surr)	4.55	74	44 - 120	7.07	7.1168	-0.0468	+/-1.0	
2-Fluorobiphenyl (Surr)	4.55	60	44 - 120	8.878	8.927444	-0.0494	+/-1.0	
Phenol-d6 (Surr)	4.55	28	10 - 120	6.166	6.2088	-0.0428	+/-1.0	
p-Terphenyl-d14 (Surr)	4.55	73	50 - 133	12.858	12.9267	-0.0687	+/-1.0	
2-Fluorophenol (Surr)	4.55	48	19 - 120	5.257	5.3054	-0.0484	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.55	85	43 - 140	10.37	10.42356	-0.0536	+/-1.0	
LCS (9100526-BS2)			Lab File ID: J10021916.D		Analyzed: 10/02/19 17:15			
Nitrobenzene-d5 (Surr)	5.00	83	44 - 120	7.065	7.1168	-0.0518	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	75	44 - 120	8.878	8.927444	-0.0494	+/-1.0	
Phenol-d6 (Surr)	5.00	31	10 - 120	6.161	6.2088	-0.0478	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	91	50 - 133	12.852	12.9267	-0.0747	+/-1.0	
2-Fluorophenol (Surr)	5.00	52	19 - 120	5.247	5.3054	-0.0584	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	91	43 - 140	10.371	10.42356	-0.0526	+/-1.0	
LCS Dup (9100526-BSD2)			Lab File ID: J10021917.D		Analyzed: 10/02/19 17:51			
Nitrobenzene-d5 (Surr)	5.00	77	44 - 120	7.071	7.1168	-0.0458	+/-1.0	
2-Fluorobiphenyl (Surr)	5.00	74	44 - 120	8.878	8.927444	-0.0494	+/-1.0	
Phenol-d6 (Surr)	5.00	26	10 - 120	6.167	6.2088	-0.0418	+/-1.0	
p-Terphenyl-d14 (Surr)	5.00	86	50 - 133	12.852	12.9267	-0.0747	+/-1.0	
2-Fluorophenol (Surr)	5.00	48	19 - 120	5.263	5.3054	-0.0424	+/-1.0	
2,4,6-Tribromophenol (Surr)	5.00	87	43 - 140	10.371	10.42356	-0.0526	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02030	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
RB-20190926140400 (A9I0877-01)				Lab File ID: J10021919.D		Analyzed: 10/02/19 19:02		
Nitrobenzene-d5 (Surr)	4.81	67	44 - 120	7.07	7.1168	-0.0468	+/-1.0	
2-Fluorobiphenyl (Surr)	4.81	59	44 - 120	8.878	8.927444	-0.0494	+/-1.0	
Phenol-d6 (Surr)	4.81	24	10 - 120	6.167	6.2088	-0.0418	+/-1.0	
p-Terphenyl-d14 (Surr)	4.81	66	50 - 133	12.852	12.9267	-0.0747	+/-1.0	
2-Fluorophenol (Surr)	4.81	42	19 - 120	5.247	5.3054	-0.0584	+/-1.0	
2,4,6-Tribromophenol (Surr)	4.81	82	43 - 140	10.371	10.42356	-0.0526	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02030	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (9J02030-CCV2)			Lab File ID: J10021905.D			Analyzed: 10/02/19 10:39			
1,4-Dichlorobenzene-d4 (ISTD)	255195	6.525	283511	6.568	90	50 - 200	-0.0430	+/-0.50	
Naphthalene-d8 (ISTD)	977789	7.787	1143968	7.835	85	50 - 200	-0.0480	+/-0.50	
Acenaphthene-d10 (ISTD)	514601	9.568	583825	9.616	88	50 - 200	-0.0480	+/-0.50	
Phenanthrene-d10 (ISTD)	960230	11.082	1065192	11.135	90	50 - 200	-0.0530	+/-0.50	
Chrysene-d12 (ISTD)	948244	14.805	1048464	14.917	90	50 - 200	-0.1120	+/-0.50	
Perylene-d12 (ISTD)	966601	18.281	1042709	18.399	93	50 - 200	-0.1180	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	821200	20.667	886236	20.795	93	50 - 200	-0.1280	+/-0.50	
Calibration Blank (9J02030-CCB1)			Lab File ID: J10021906.D			Analyzed: 10/02/19 11:15			
1,4-Dichlorobenzene-d4 (ISTD)	287849	6.525	255195	6.525	113	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1118144	7.787	977789	7.787	114	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	578428	9.568	514601	9.568	112	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1022979	11.077	960230	11.082	107	50 - 200	-0.0050	+/-0.50	
Chrysene-d12 (ISTD)	1053619	14.799	948244	14.805	111	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	1060202	18.276	966601	18.281	110	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	859804	20.661	821200	20.667	105	50 - 200	-0.0060	+/-0.50	
Blank (9100526-BLK2)			Lab File ID: J10021915.D			Analyzed: 10/02/19 16:39			
1,4-Dichlorobenzene-d4 (ISTD)	297010	6.525	255195	6.525	116	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1138904	7.792	977789	7.787	116	50 - 200	0.0050	+/-0.50	
Acenaphthene-d10 (ISTD)	618083	9.568	514601	9.568	120	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1171179	11.082	960230	11.082	122	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1250096	14.804	948244	14.805	132	50 - 200	-0.0010	+/-0.50	
Perylene-d12 (ISTD)	1291277	18.281	966601	18.281	134	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1084542	20.672	821200	20.667	132	50 - 200	0.0050	+/-0.50	
LCS (9100526-BS2)			Lab File ID: J10021916.D			Analyzed: 10/02/19 17:15			
1,4-Dichlorobenzene-d4 (ISTD)	289502	6.52	255195	6.525	113	50 - 200	-0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	1106638	7.793	977789	7.787	113	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10 (ISTD)	598606	9.568	514601	9.568	116	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1095440	11.082	960230	11.082	114	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1046381	14.805	948244	14.805	110	50 - 200	0.0000	+/-0.50	
Perylene-d12 (ISTD)	1042842	18.276	966601	18.281	108	50 - 200	-0.0050	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	899718	20.672	821200	20.667	110	50 - 200	0.0050	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02030	Instrument:	SV-GCMS10
Matrix:	Water	Calibration:	A9I2405

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (9100526-BSD2)			Lab File ID: J10021917.D			Analyzed: 10/02/19 17:51			
1,4-Dichlorobenzene-d4 (ISTD)	305358	6.525	255195	6.525	120	50 - 200	0.0000	+/-0.50	
Naphthalene-d8 (ISTD)	1147570	7.793	977789	7.787	117	50 - 200	0.0060	+/-0.50	
Acenaphthene-d10 (ISTD)	619721	9.568	514601	9.568	120	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1178965	11.082	960230	11.082	123	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1205287	14.81	948244	14.805	127	50 - 200	0.0050	+/-0.50	
Perylene-d12 (ISTD)	1250865	18.281	966601	18.281	129	50 - 200	0.0000	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	1092794	20.677	821200	20.667	133	50 - 200	0.0100	+/-0.50	
RB-20190926140400 (A9I0877-01)			Lab File ID: J10021919.D			Analyzed: 10/02/19 19:02			
1,4-Dichlorobenzene-d4 (ISTD)	291078	6.52	255195	6.525	114	50 - 200	-0.0050	+/-0.50	
Naphthalene-d8 (ISTD)	1127715	7.787	977789	7.787	115	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10 (ISTD)	600842	9.568	514601	9.568	117	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10 (ISTD)	1085585	11.082	960230	11.082	113	50 - 200	0.0000	+/-0.50	
Chrysene-d12 (ISTD)	1088672	14.799	948244	14.805	115	50 - 200	-0.0060	+/-0.50	
Perylene-d12 (ISTD)	1063507	18.27	966601	18.281	110	50 - 200	-0.0110	+/-0.50	
Dibenz(a,h)anthracene-d14 (ISTD)	917575	20.661	821200	20.667	112	50 - 200	-0.0060	+/-0.50	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: Apex Laboratories

SDG: A9I0877

Client: Anchor QEA, LLC

Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs

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-20190926140400	09/26/19 14:04	09/27/19 10:25	10/02/19 07:02	5.71	7.00	10/02/19 19:02	0.50	40.00	

Apex Laboratories

SDG: A9I0877

CLASS: METALS

METHOD: EPA 6020A

ANALYSES DATA PACKAGE COVER PAGE

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco PreRD_DG 2019 - 2b. Depos. Surface Grabs

Client Sample Id:	Lab Sample Id:	Matrix
RB-20190926140400	A9I0877-01	Water

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: 11/1/2019 12:46PM
Title: Technical Manager

METHOD DETECTION AND REPORTING LIMITS

EPA 6020A

Laboratory: Apex Laboratories **SDG:** A9I0877

Client: Anchor QEA, LLC **Project:** Gasco_PreRD_DG 2019 - 2b. Depos. Surfa

Batch Matrix: Water

Analyte	MDL	MRL	Units
Arsenic	0.500	1.00	ug/L
Cadmium	0.0400	0.200	ug/L
Copper	0.500	1.00	ug/L
Lead	0.100	0.200	ug/L
Mercury	0.0400	0.0800	ug/L
Zinc	2.00	4.00	ug/L

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

INORGANIC ANALYSIS DATA SHEET

EPA 6020A

RB-20190926140400

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix: Water
Laboratory ID: A9I0877-01
File ID: 9j02063-038
Sampled: 09/26/19 14:04
Prepared: 10/01/19 14:22
Analyzed: 10/02/19 21:13
Solids: N/A
Preparation: EPA 3015A
Initial/Final: 45 mL / 50 mL
Batch: 9100506
Sequence: 9J02063
Instrument: ICPMS6

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	Method
7440-38-2	Arsenic	0.500	1	U	EPA 6020A
7440-43-9	Cadmium	0.0400	1	U	EPA 6020A
7440-50-8	Copper	1.00	1	U	EPA 6020A
7439-92-1	Lead	0.100	1	U	EPA 6020A
7439-97-6	Mercury	0.0400	1	U	EPA 6020A
7440-66-6	Zinc	2.00	1	U	EPA 6020A

PREPARATION BATCH SUMMARY

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Batch: 9100506 Batch Matrix: Water Preparation: EPA 3015A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	9100506-BLK1	9j02063-022	10/01/19 14:22	
LCS	9100506-BS1	9j02063-023	10/01/19 14:22	
RB-20190926140400	A9I0877-01	9j02063-038	10/01/19 14:22	

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

METHOD BLANK DATA SHEET

EPA 6020A

Laboratory:	Apex Laboratories			SDG:	A9I0877
Client:	Anchor QEA, LLC			Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water	Laboratory ID:	9100506-BLK1	File ID:	9j02063-022
Prepared:	10/01/19 14:22	Preparation:	EPA 3015A	Initial/Final:	45 mL / 50 mL
Analyzed:	10/02/19 20:01	Instrument:	ICPMS6		
Batch:	9100506	Sequence:	9J02063	Calibration:	UNASSIGNED

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7440-38-2	Arsenic	0.500	U
7440-43-9	Cadmium	0.0400	U
7440-50-8	Copper	1.00	U
7439-92-1	Lead	0.100	U
7439-97-6	Mercury	0.0400	U
7440-66-6	Zinc	2.00	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Matrix:	Water		
Batch:	9100506	Laboratory ID:	9100506-BS1
Preparation:	EPA 3015A	Initial/Final:	45 mL / 50 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. (*=Out)	QC LIMITS REC.
Arsenic	55.6	50.4	91	80 - 120
Cadmium	55.6	51.7	93	80 - 120
Copper	55.6	55.4	100	80 - 120
Lead	55.6	56.4	102	80 - 120
Mercury	1.11	1.09	98	80 - 120
Zinc	55.6	54.4	98	80 - 120

* = Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02063	Instrument:	ICPMS6
Matrix:	Water	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	9J02063-ICV1	9j02063-013	10/02/19 19:20
Initial Cal Blank	9J02063-ICB1	9j02063-014	10/02/19 19:24
Instrument RL Check	9J02063-CRL1	9j02063-015	10/02/19 19:29
Instrument RL Check	9J02063-CRL2	9j02063-016	10/02/19 19:34
Instrument RL Check	9J02063-CRL3	9j02063-017	10/02/19 19:38
Instrument RL Check	9J02063-CRL4	9j02063-018	10/02/19 19:43
Blank	9100506-BLK1	9j02063-022	10/02/19 20:01
LCS	9100506-BS1	9j02063-023	10/02/19 20:05
Calibration Check	9J02063-CCV1	9j02063-032	10/02/19 20:46
Calibration Blank	9J02063-CCB1	9j02063-033	10/02/19 20:51
RB-20190926140400	A9I0877-01	9j02063-038	10/02/19 21:13
Calibration Check	9J02063-CCV2	9j02063-044	10/02/19 21:40
Calibration Blank	9J02063-CCB2	9j02063-045	10/02/19 21:44
Calibration Check	9J02063-CCV3	9j02063-056	10/02/19 22:33
Calibration Blank	9J02063-CCB3	9j02063-057	10/02/19 22:37
Calibration Check	9J02063-CCV4	9j02063-063	10/02/19 23:04
Calibration Blank	9J02063-CCB4	9j02063-064	10/02/19 23:08
Instrument RL Check	9J02063-CRL5	9j02063-065	10/02/19 23:13
Instrument RL Check	9J02063-CRL6	9j02063-066	10/02/19 23:17
Instrument RL Check	9J02063-CRL7	9j02063-067	10/02/19 23:22
Instrument RL Check	9J02063-CRL8	9j02063-068	10/02/19 23:26
Calibration Check	9J02063-CCV5	9j02063-079	10/03/19 00:15
Calibration Blank	9J02063-CCB5	9j02063-080	10/03/19 00:20
Calibration Check	9J02063-CCV6	9j02063-091	10/03/19 01:08
Calibration Blank	9J02063-CCB6	9j02063-092	10/03/19 01:13
Calibration Check	9J02063-CCV7	9j02063-098	10/03/19 01:39
Calibration Blank	9J02063-CCB7	9j02063-099	10/03/19 01:44
Instrument RL Check	9J02063-CRL9	9j02063-100	10/03/19 01:48
Instrument RL Check	9J02063-CRLA	9j02063-101	10/03/19 01:53
Instrument RL Check	9J02063-CRLB	9j02063-102	10/03/19 01:57
Instrument RL Check	9J02063-CRLC	9j02063-103	10/03/19 02:02
Calibration Check	9J02063-CCV8	9j02063-111	10/03/19 02:37
Calibration Blank	9J02063-CCB8	9j02063-112	10/03/19 02:42

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020A

Laboratory:	Apex Laboratories	SDG:	A9I0877
Client:	Anchor QEA, LLC	Project:	Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence:	9J02063	Instrument:	ICPMS6
Matrix:	Water	Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Instrument RL Check	9J02063-CRLD	9j02063-113	10/03/19 02:46
Instrument RL Check	9J02063-CRLE	9j02063-114	10/03/19 02:50
Instrument RL Check	9J02063-CRLF	9j02063-115	10/03/19 02:55
Instrument RL Check	9J02063-CRLG	9j02063-116	10/03/19 02:59

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

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 9J02063

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9J02063-ICV1	Arsenic	100	95.7	96	ug/L	EPA 6020A
	Cadmium	100	95.7	96	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	98.6	99	ug/L	EPA 6020A
	Mercury	800	796	99	ng/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J02063-CCV1	Arsenic	100	94.8	95	ug/L	EPA 6020A
	Cadmium	100	95.1	95	ug/L	EPA 6020A
	Copper	100	100	100	ug/L	EPA 6020A
	Lead	100	105	105	ug/L	EPA 6020A
	Mercury	800	832	104	ng/L	EPA 6020A
	Zinc	100	101	101	ug/L	EPA 6020A
9J02063-CCV2	Arsenic	100	94.9	95	ug/L	EPA 6020A
	Cadmium	100	94.2	94	ug/L	EPA 6020A
	Copper	100	100	100	ug/L	EPA 6020A
	Lead	100	98.3	98	ug/L	EPA 6020A
	Mercury	800	790	99	ng/L	EPA 6020A
	Zinc	100	100	100	ug/L	EPA 6020A
9J02063-CCV3	Arsenic	100	94.1	94	ug/L	EPA 6020A
	Cadmium	100	95.4	95	ug/L	EPA 6020A
	Copper	100	98.5	99	ug/L	EPA 6020A
	Lead	100	97.4	97	ug/L	EPA 6020A
	Mercury	800	770	96	ng/L	EPA 6020A
	Zinc	100	98.4	98	ug/L	EPA 6020A
9J02063-CCV4	Arsenic	100	92.3	92	ug/L	EPA 6020A
	Cadmium	100	95.1	95	ug/L	EPA 6020A
	Copper	100	100	100	ug/L	EPA 6020A
	Lead	100	101	101	ug/L	EPA 6020A
	Mercury	800	788	98	ng/L	EPA 6020A
	Zinc	100	99.4	99	ug/L	EPA 6020A
9J02063-CCV5	Arsenic	100	96.1	96	ug/L	EPA 6020A
	Cadmium	100	96.3	96	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	98.6	99	ug/L	EPA 6020A
	Mercury	800	769	96	ng/L	EPA 6020A
	Zinc	100	101	101	ug/L	EPA 6020A
9J02063-CCV6	Arsenic	100	96.3	96	ug/L	EPA 6020A
	Cadmium	100	94.7	95	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	98.3	98	ug/L	EPA 6020A
	Mercury	800	773	97	ng/L	EPA 6020A
	Zinc	100	99.1	99	ug/L	EPA 6020A
9J02063-CCV7	Arsenic	100	92.2	92	ug/L	EPA 6020A
	Copper	100	96.7	97	ug/L	EPA 6020A
	Lead	100	97.5	97	ug/L	EPA 6020A
	Mercury	800	773	97	ng/L	EPA 6020A

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Control Limt: +/- 10.00%
Sequence: 9J02063

Lab Sample ID	Analyte	True	Found	%R	Units	Method
9J02063-CCV7	Zinc	100	95.5	96	ug/L	EPA 6020A
9J02063-CCV8	Arsenic	100	96.0	96	ug/L	EPA 6020A
	Cadmium	100	94.4	94	ug/L	EPA 6020A
	Copper	100	101	101	ug/L	EPA 6020A
	Lead	100	95.9	96	ug/L	EPA 6020A
	Mercury	800	747	93	ng/L	EPA 6020A
	Zinc	100	99.9	100	ug/L	EPA 6020A

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence: 9J02063
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9J02063-ICB1	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
9J02063-CCB1	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9J02063-CCB2	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9J02063-CCB3	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
9J02063-CCB4	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
9J02063-CCB5	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A

INSTRUMENT BLANKS
EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Instrument ID: ICPMS6
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Sequence: 9J02063
Calibration: UNASSIGNED

Lab Sample ID	Analyte	Found	RL	Units	C	Method
9J02063-CCB5	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9J02063-CCB6	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
9J02063-CCB7	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
9J02063-CCB8	Mercury	ND	36.0 (Inst)	ng/L		EPA 6020A
	Zinc	ND	1.80 (Inst)	ug/L		EPA 6020A
	Copper	ND	0.450 (Inst)	ug/L		EPA 6020A
	Cadmium	ND	0.0360 (Inst)	ug/L		EPA 6020A
	Arsenic	ND	0.450 (Inst)	ug/L		EPA 6020A
	Lead	ND	0.0900 (Inst)	ug/L		EPA 6020A

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

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J02063

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J02063-CRL1	Arsenic	0.180	0.174	97	ug/L	70 - 130
	Cadmium	0.180	0.170	94	ug/L	70 - 130
	Lead	0.180	0.212	118	ug/L	70 - 130
9J02063-CRL2	Arsenic	0.900	0.902	100	ug/L	70 - 130
	Cadmium	0.900	0.866	96	ug/L	70 - 130
	Lead	0.900	0.946	105	ug/L	70 - 130
	Mercury	36.0	39.8	111	ng/L	70 - 130
9J02063-CRL3	Arsenic	1.80	1.81	101	ug/L	70 - 130
	Cadmium	1.80	1.73	96	ug/L	70 - 130
	Copper	1.80	1.86	103	ug/L	70 - 130
	Lead	1.80	1.74	96	ug/L	70 - 130
	Mercury	72.0	73.4	102	ng/L	70 - 130
	Zinc	1.80	2.13	119	ug/L	70 - 130
9J02063-CRL4	Arsenic	3.60	3.55	99	ug/L	70 - 130
	Cadmium	3.60	3.43	95	ug/L	70 - 130
	Copper	3.60	3.66	102	ug/L	70 - 130
	Lead	3.60	3.43	95	ug/L	70 - 130
	Mercury	144	143	100	ng/L	70 - 130
	Zinc	3.60	3.86	107	ug/L	70 - 130
9J02063-CRL5	Arsenic	0.180	0.178	99	ug/L	70 - 130
	Cadmium	0.180	0.179	99	ug/L	70 - 130
	Lead	0.180	0.202	112	ug/L	70 - 130
9J02063-CRL6	Arsenic	0.900	0.925	103	ug/L	70 - 130
	Cadmium	0.900	0.879	98	ug/L	70 - 130
	Copper	0.900	1.12	124	ug/L	70 - 130
	Lead	0.900	0.895	99	ug/L	70 - 130
	Mercury	36.0	38.7	108	ng/L	70 - 130
9J02063-CRL7	Arsenic	1.80	1.73	96	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J02063

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J02063-CRL7	Cadmium	1.80	1.72	96	ug/L	70 - 130
	Copper	1.80	1.82	101	ug/L	70 - 130
	Lead	1.80	1.73	96	ug/L	70 - 130
	Mercury	72.0	75.2	104	ng/L	70 - 130
	Zinc	1.80	2.15	119	ug/L	70 - 130
9J02063-CRL8	Arsenic	3.60	3.58	100	ug/L	70 - 130
	Cadmium	3.60	3.41	95	ug/L	70 - 130
	Copper	3.60	3.51	98	ug/L	70 - 130
	Lead	3.60	3.45	96	ug/L	70 - 130
	Mercury	144	147	102	ng/L	70 - 130
	Zinc	3.60	3.68	102	ug/L	70 - 130
9J02063-CRL9	Arsenic	0.180	0.177	98	ug/L	70 - 130
	Lead	0.180	0.199	111	ug/L	70 - 130
9J02063-CRLA	Arsenic	0.900	0.900	100	ug/L	70 - 130
	Copper	0.900	1.15	127	ug/L	70 - 130
	Lead	0.900	0.960	107	ug/L	70 - 130
	Mercury	36.0	39.5	110	ng/L	70 - 130
9J02063-CRLB	Arsenic	1.80	1.78	99	ug/L	70 - 130
	Copper	1.80	1.80	100	ug/L	70 - 130
	Lead	1.80	1.69	94	ug/L	70 - 130
	Mercury	72.0	75.2	104	ng/L	70 - 130
	Zinc	1.80	2.04	113	ug/L	70 - 130
9J02063-CRLC	Arsenic	3.60	3.46	96	ug/L	70 - 130
	Copper	3.60	3.54	98	ug/L	70 - 130
	Lead	3.60	3.36	93	ug/L	70 - 130
	Mercury	144	139	97	ng/L	70 - 130
	Zinc	3.60	3.68	102	ug/L	70 - 130
9J02063-CRLD	Arsenic	0.180	0.184	102	ug/L	70 - 130

CRDL STANDARD

EPA 6020A

Laboratory: Apex Laboratories
SDG: A9I0877
Client: Anchor QEA, LLC
Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs
Instrument ID: ICPMS6
Calibration: UNASSIGNED
Sequence: 9J02063

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
9J02063-CRLD	Cadmium	0.180	0.170	95	ug/L	70 - 130
	Lead	0.180	0.203	113	ug/L	70 - 130
9J02063-CRLE	Arsenic	0.900	0.919	102	ug/L	70 - 130
	Cadmium	0.900	0.869	97	ug/L	70 - 130
	Copper	0.900	1.14	127	ug/L	70 - 130
	Lead	0.900	0.887	99	ug/L	70 - 130
	Mercury	36.0	36.2	101	ng/L	70 - 130
9J02063-CRLF	Arsenic	1.80	1.77	98	ug/L	70 - 130
	Cadmium	1.80	1.71	95	ug/L	70 - 130
	Copper	1.80	1.80	100	ug/L	70 - 130
	Lead	1.80	1.67	93	ug/L	70 - 130
	Mercury	72.0	71.9	100	ng/L	70 - 130
	Zinc	1.80	1.99	111	ug/L	70 - 130
9J02063-CRLG	Arsenic	3.60	3.58	99	ug/L	70 - 130
	Cadmium	3.60	3.35	93	ug/L	70 - 130
	Copper	3.60	3.57	99	ug/L	70 - 130
	Lead	3.60	3.39	94	ug/L	70 - 130
	Mercury	144	138	96	ng/L	70 - 130
	Zinc	3.60	3.66	102	ug/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 6020A

Laboratory: Apex Laboratories SDG: A9I0877

Client: Anchor QEA, LLC Project: Gasco_PreRD_DG 2019 - 2b. Depos. Surface Grabs

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-20190926140400	09/26/19 14:04	09/27/19 10:25	10/01/19 14:22	5.01	28.00	10/02/19 21:13	6.30	28.00	
RB-20190926140400	09/26/19 14:04	09/27/19 10:25	10/01/19 14:22	5.01	180.00	10/02/19 21:13	6.30	180.00	

Raw Data

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

Batch 9100526
Sequence 9J02030 (A9I0877-01)

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9100526 (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
	9100526-BLK1		QC	10/02/19 07:02	1100	1				100					
	9100526-BLK2		QC	10/02/19 07:02	1100	1				100		Added 10/3/2019 by ams			
	9100526-BSD1		QC	10/02/19 07:02	1000	1	A19I181		50	100					
	9100526-BSD2		QC	10/02/19 07:02	1000	1	A19I181		50	100		Added 10/3/2019 by ams			
	9100526-BS1		QC	10/02/19 07:02	1000	1	A19I181		50	100					
	9100526-BS2		QC	10/02/19 07:02	1000	1	A19I181		50	100		Added 10/3/2019 by ams			
	A9I0854-07RE1	B	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	1070	1				100	P-2D-0919	Surr failure Added 9/30/2019 By ams			
	A9I0877-01	B	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	1040	1				100	RB-20190926140400	PAH + Bis2EHP			
	A9I0929-01	J	8270 SIM PAH (16)	10/02/19 07:07	1050	2				100	BLD69-P1				
	A9I0929-01RE1	J	8270 SIM PAH (16)	10/02/19 07:07	1050	2				100	BLD69-P1	Added 10/7/2019 By hml			
	A9I0929-02	J	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P2				
	A9I0929-02RE1	J	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P2	Added 10/7/2019 By hml			
	A9I0929-03	J	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P3				
	A9I0929-03RE1	J	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P3	Added 10/7/2019 By hml			
	A9I0929-04	I	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P4				
	A9I0929-04RE1	I	8270 SIM PAH (16)	10/02/19 07:07	1070	2				100	BLD69-P4	Added 10/7/2019 By hml			
	A9I0936-09	E	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	1040	1				100	PDI-FB-1909291637	Waters only PAH Only			
	A9I0936-10	E	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	940	1				100	PDI-RB-1909291555	Waters. PAH Only			
	A9J0014-01	G	625 Full List (Scan)	10/02/19 07:07	1070	5				100	Semi-Annual	custom list, Acid Extraction only, MDL			

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19H399	08/23/21	Conc. HCl - Omnitrace
A19H436	07/31/21	Sodium Sulfate Lot # 190116
A19I262	08/30/22	DCM CHEM PROD. 186806

Analyte Spike(s)

Std ID	Exp. Date	Description
A19I181	03/14/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19I198	03/14/20	PAH Soil and Water Surr. (50ppm)

Prepared By: Date

Reviewed By: 10/10/19 Date

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9100526 (Water)

Prep Method: EPA 3510C (Acid Extraction)

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

3x rinse

Witness: _____

Bottle Check: _____

Prepared By: _____ Date _____

Reviewed By: _____ Date _____

Apex Laboratories

PREPARATION BENCH SHEET

BATCH #: 9100526 (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
1	9100526-BLK1		QC	10/02/19 07:02	~~1000~~ 1000	1				100			X		
2	9100526-BSD1		QC	10/02/19 07:02	1000	1	A19I181		50	100			X		
3	9100526-BS1		QC	10/02/19 07:02	1000	1	A19I181		50	100			X		
4	A9I0854-07RE1	B	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	~~1000~~ 1070	1				100	P-2D-0919 ✓	Surr failure Added 9/30/2019 By ams	X		
5	A9I0877-01	B	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	~~1000~~ 1040	1				100	RB-20190926140400 ✓	PAH + Bis2EHP	X		
6	A9I0929-01	J	8270 SIM PAH (16)	10/02/19 07:07	~~1000~~ 1050	2				100	BLD69-P1 ✓		X		
7	A9I0929-02	J	8270 SIM PAH (16)	10/02/19 07:07	~~1000~~ 1070	2				100	BLD69-P2 ✓		X		
8	A9I0929-03	J	8270 SIM PAH (16)	10/02/19 07:07	~~1000~~ 1070	2				100	BLD69-P3 ✓		X		
9	A9I0929-04	J	8270 SIM PAH (16)	10/02/19 07:07	~~1000~~ 1070	2				100	BLD69-P4 ✓		X		
10	A9I0936-09	E	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	~~1000~~ 1040	1				100	PDI-FB-1909291637 ✓	Waters only PAH Only	X		
11	A9I0936-10	E	8270D LL PAH/PHTH/Phenols	10/02/19 07:02	~~1000~~ 940	1				100	PDI-RB-1909291555 ✓	Waters. PAH Only	X		
12	A9J0014-01	G	625 Full List (Scan)	10/02/19 07:07	~~1000~~ 1070	5				100	Semi-Annual ✓	custom list, Acid Extraction only, MDL	X		

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A18K311	12/31/20	Glass Wool
A19H399	08/23/21	Conc. HCl - Omnitrace
A19H436	07/31/21	Sodium Sulfate Lot # 190116
A19I262	08/30/22	DCM CHEM PROD. 186806

Analyte Spike(s)

Std ID	Exp. Date	Description
A19I181	03/14/20	8270D PAH+/Phenols (JSCS) Spike @ 80 PPM

Surrogate(s)

Std ID	Exp. Date	Description
A19I198	03/14/20	PAH Soil and Water Surr. (50ppm)

3x rinse ✓

Witness: JAG 10/2/19

Bottle Check: JAG 10/2/19

Prepared By: AJJ 10-2-19 Date

Reviewed By: CAM 10/02/19 Date

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9J02030**	Instrument:	**SV-GCMS10**
Date:	**10/02/19 08:08**	Calibration:	**A9I2405**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J02030-TUN1	Water	QC	QC			A19G233	A19I165
2	9J02030-CCV1	Water	QC	QC			A19G233	A19G243
3	9J02030-IBL1	Water	QC	QC			A19G233	
4	9J02030-TUN2	Water	QC	QC			A19G233	A19I165
5	9J02030-CCV2	Water	QC	QC			A19G233	A19G243
6	9J02030-CCB1	Water	QC	QC			A19G233	
7	A9I0893-13RE1	Sediment	8270D LL Full List		10/10/19	9100490	A19G233	
8	9100490-MS2	Sediment	QC	QC		9100490	A19G233	
9	9100490-MSD2	Sediment	QC	QC		9100490	A19G233	
10	A9I0822-02RE1	Sediment	8270D LL Full List		10/08/19	9100490	A19G233	
11	9100490-DUP2	Sediment	QC	QC		9100490	A19G233	
12	9100490-MS1	Sediment	QC	QC		9100490	A19G233	
13	9100490-MSD1	Sediment	QC	QC		9100490	A19G233	
14	A9I0854-12RE1	Water	8270D LL Full List		10/09/19	9100456	A19G233	
15	9100526-BLK2	Water	QC	QC		9100526	A19G233	
16	9100526-BS2	Water	QC	QC		9100526	A19G233	
17	9100526-BSD2	Water	QC	QC		9100526	A19G233	
18	A9I0854-07RE1	Water	8270D LL PAH/PHTH/Phenols		10/09/19	9100526	A19G233	
19	A9I0877-01	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	10/10/19	9100526	A19G233	
20	A9I0936-09	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	10/11/19	9100526	A19G233	
21	A9I0936-10	Water	8270D LL PAH/PHTH/Phenols	Anchor QEA, LLC	10/11/19	9100526	A19G233	
22	A9J0006-07RE1	Sediment	8270D LL Full List		10/11/19	9100490	A19G233	
23	A9J0006-13RE1	Sediment	8270D LL Full List		10/11/19	9100490	A19G233	
24	A9J0006-16RE1	Sediment	8270D LL Full List		10/11/19	9100490	A19G233	
25	A9J0006-23RE1	Sediment	8270D LL Full List		10/11/19	9100490	A19G233	
26	A9J0014-01	Water	625 Full List (Scan)		10/07/19	9100526	A19G233	
27	9J02030-IBL2	Water	QC	QC			A19G233	

Data Entered By: AMS 10/3/19

Data Reviewed By: [illegible] 10/3/19

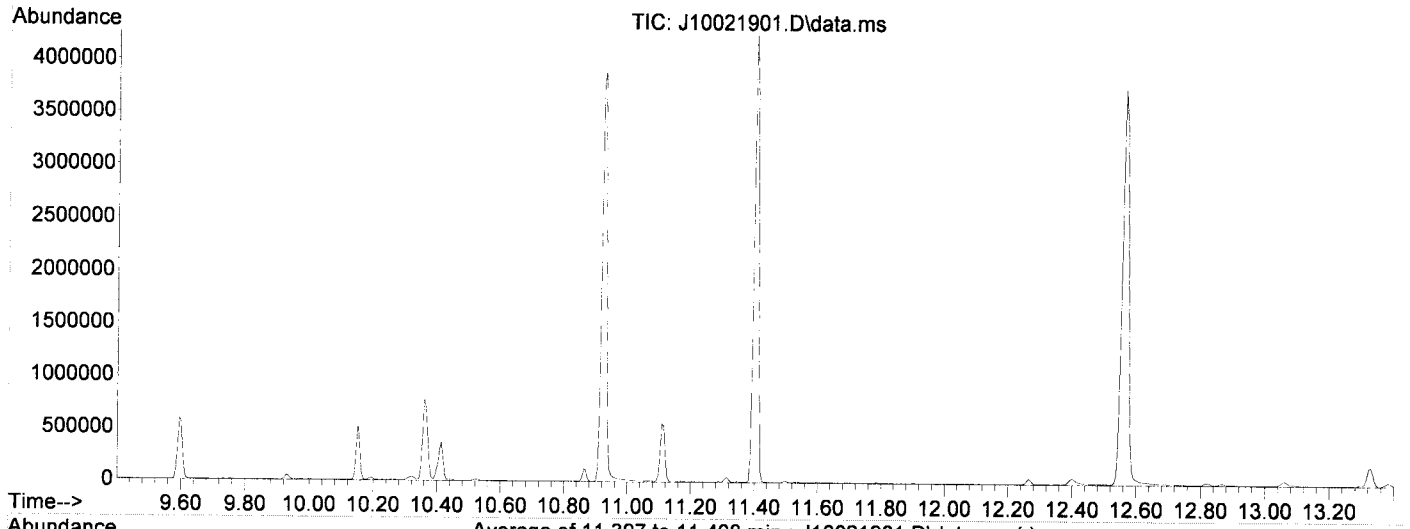
Comments:

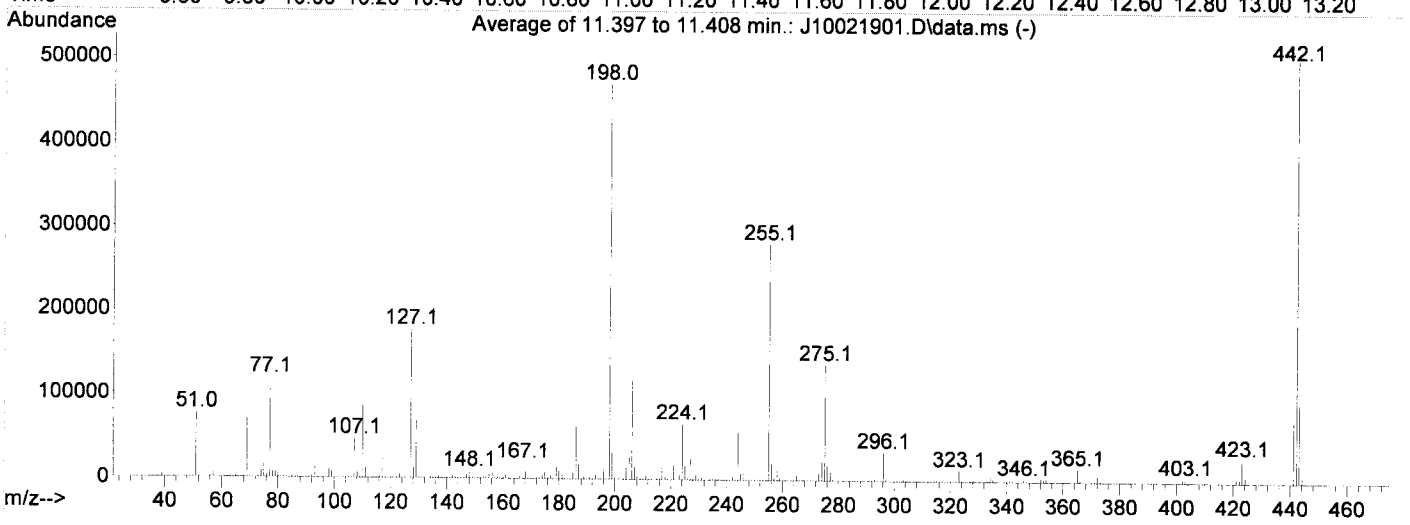
Data Path : T:\data\2019-10\9J02030\
Data File : J10021901.D
Acq On : 2 Oct 2019 8:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Oct 01 08:55:47 2019

Q-14 AMS 10/3/19





AutoFind: Scans 1479, 1480, 1481; Background Corrected with Scan 1474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.4	1298	PASS
69	198	0.01	100	20.1	94316	PASS
70	69	0.00	2	0.5	450	PASS
197	198	0.00	2	0.1	472	PASS
198	198	100	100	100.0	469717	PASS
199	198	5	9	6.8	32165	PASS
365	198	1	100	3.3	15278	PASS
441	443	0.01	150	74.0	73259	PASS
442	198	0.10	200	106.8	501696	PASS
443	442	15	24	19.7	99019	PASS

Data Path : T:\data\2019-10\9J02030\
Data File : J10021901.D
Acq On : 2 Oct 2019 8:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:45:32 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10

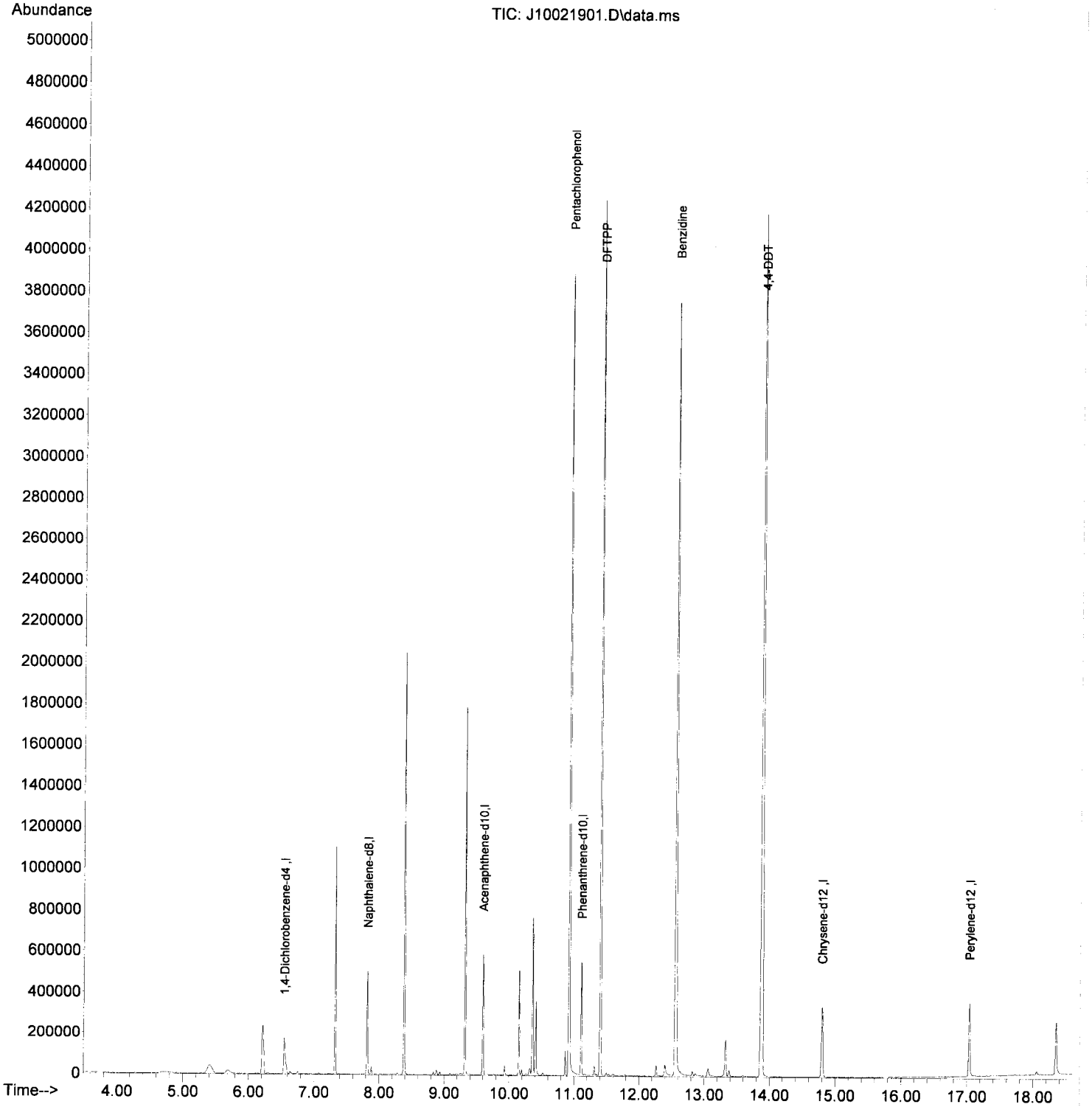
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.546	150	89262	2.00	ug/mL	0.00
2) Naphthalene-d8	7.819	136	270032	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.595	162	138251	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.109	188	235841	2.00	ug/mL	0.00
11) Chrysene-d12	14.799	240	196866	2.00	ug/mL	0.00
12) Perylene-d12	17.035	264	187303	2.00	ug/mL	#-0.06
Target Compounds						Qvalue
4) Pentachlorophenol	10.927	266	598119	45.81	ug/mL	81
6) DFTPP	11.408	442	613811	32.24	ug/mL	72
7) Benzidine	12.563	184	2295943	27.37	ug/mL	97
8) 4,4-DDE	12.820	TIC	25185	No Calib		
9) 4,4-DDD	13.328	TIC	239956	No Calib		
10) 4,4-DDT	13.884	TIC	7305822	30.21	ug/mL	95

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

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021901.D
Acq On : 2 Oct 2019 8:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:45:32 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-10\9J02030\
Data File : J10021902.D
Acq On : 2 Oct 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Q-14
AMS
10/3/19

Quant Time: Oct 03 10:48:36 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	236371	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	986444	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	520624	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	962782	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.810	240	914165	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.276	264	943504	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.672	292	823809	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.268	112	158560	1105.43	ng/ml	0.02
5) Phenol-d6(Surr)	6.167	99	205148	1117.38	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.065	82	154141	1082.20	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	431668	1059.45	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	58435	1006.94	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.852	244	454386	1078.58	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.915	74	77834	864.48	ng/ml	93
3) Pyridine	3.942	79	139794m	910.74	ng/ml#	
6) Phenol	6.177	94	216783	1073.82	ng/ml	96
7) Aniline	6.204	93	92347	530.19	ng/ml	97
8) Bis(2-chloroethyl) ether	6.263	93	207770	1140.36	ng/ml	99
9) 2-Chlorophenol	6.322	128	179720	1073.81	ng/ml	100
10) 1,3-Dichlorobenzene	6.471	146	195822	1040.93	ng/ml	99
11) 1,4-Dichlorobenzene	6.541	146	192147	1039.23	ng/ml	98
12) Benzyl alcohol	6.659	108	106477	1070.76	ng/ml	95
13) 1,2-Dichlorobenzene	6.691	146	190135	1042.74	ng/ml	95
14) 2-Methylphenol	6.766	107	143682	1180.16	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	142936	888.97	ng/ml	92
16) N-Nitrosodi-n-propylamine	6.921	70	106484	1006.65	ng/ml	93
17) 3+4-Methylphenol	6.915	107	181598	1202.92	ng/ml	94
18) Hexachloroethane	7.028	201	62503	1100.21	ng/ml	98
20) Nitrobenzene	7.087	77	152066	1053.75	ng/ml	91
22) Isophorone	7.322	82	303148	963.95	ng/ml	100
23) 2-Nitrophenol	7.407	139	106743	1141.37	ng/ml	87
24) 2,4-Dimethylphenol	7.445	122	168282	1272.39	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.536	93	191068	999.37	ng/ml	98
26) Benzoic acid	7.536	105	124925	2304.28	ng/ml	95
27) 2,4-Dichlorophenol	7.643	162	158453	1071.31	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.734	180	177592	1028.64	ng/ml	98
29) Naphthalene	7.809	128	542984	1046.36	ng/ml	99
30) 4-Chloroaniline	7.867	127	95161	585.30	ng/ml	96
31) Hexachlorobutadiene	7.942	225	95857	1027.47	ng/ml	97
32) 4-Chloro-3-methylphenol	8.344	107	144125	1101.09	ng/ml	95
33) 2-Methylnaphthalene	8.509	142	391357	1079.38	ng/ml	99
34) 1-Methylnaphthalene	8.606	142	374212	1066.14	ng/ml	98
36) Hexachlorocyclopentadiene	8.675	237	101061	1255.30	ng/ml	97
37) 2,4,6-Trichlorophenol	8.793	196	114482	1134.12	ng/ml	97
38) 2,4,5-Trichlorophenol	8.825	198	112712	1132.20	ng/ml	98
39) 1,1'-Biphenyl	8.980	154	466590	1042.70	ng/ml	99
41) 2-Chloronaphthalene	9.001	162	354085	1095.63	ng/ml	97
42) 2-Nitroaniline	9.098	138	107653	1112.80	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.140	156	336501	1025.05	ng/ml	98

Data Path : T:\data\2019-10\9J02030\
Data File : J10021902.D
Acq On : 2 Oct 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

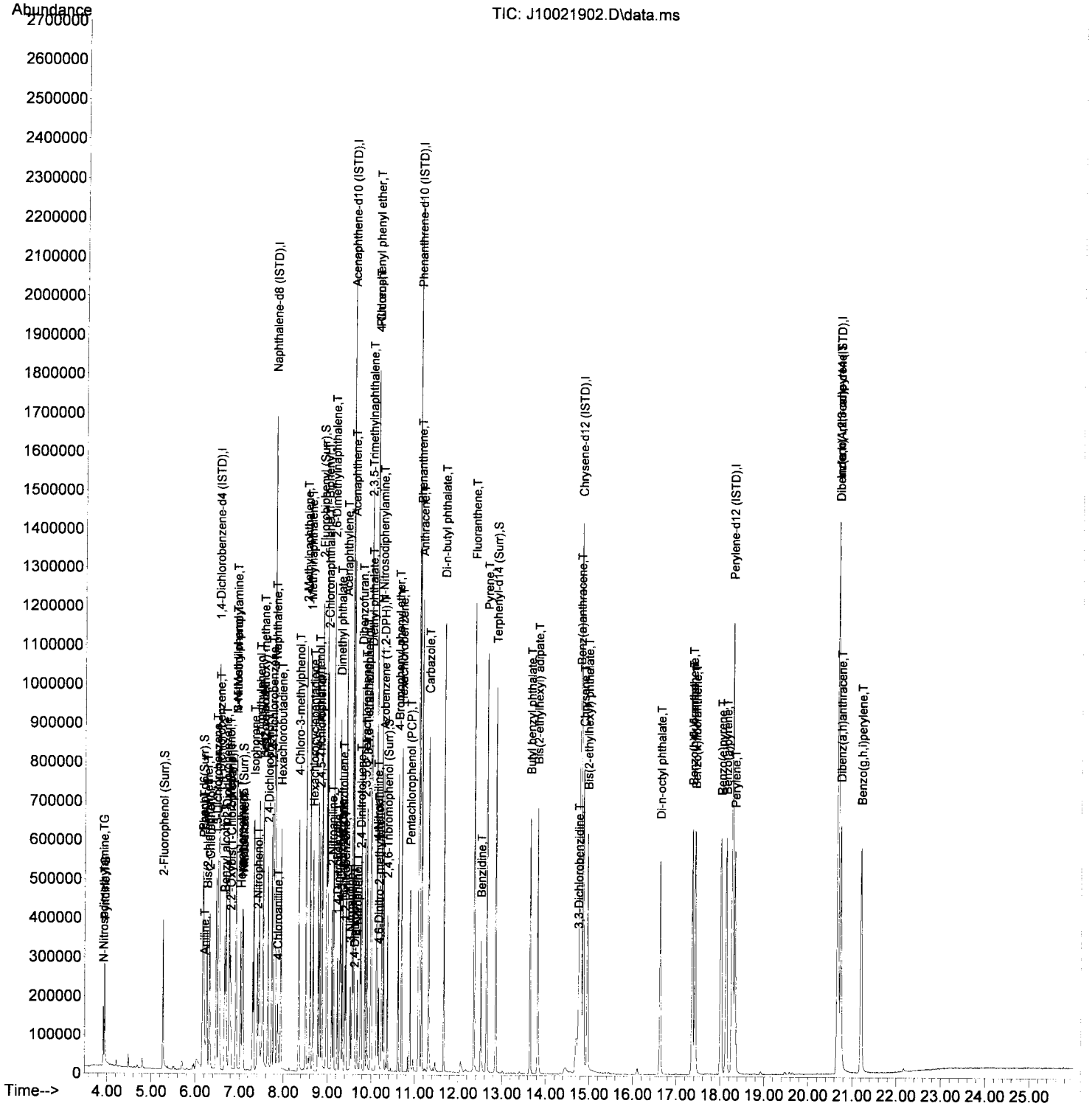
Quant Time: Oct 03 10:48:36 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.226	168	49737	1215.30	ng/ml	93
45) Dimethyl phthalate	9.285	163	405105	1077.46	ng/ml	99
46) 1,3-Dinitrobenzene	9.306	168	59567	1145.34	ng/ml	93
47) 2,6-Dinitrotoluene	9.344	165	91111	1075.96	ng/ml	89
48) 1,2-Dinitrobenzene	9.397	168	41031	1077.20	ng/ml	91
49) Acenaphthylene	9.424	152	564092	1065.85	ng/ml	99
50) 3-Nitroaniline	9.515	138	61510	924.17	ng/ml	91
51) Acenaphthene	9.600	153	349436	1005.47	ng/ml	100
52) 2,4-Dinitrophenol	9.616	184	20077	1025.39	ng/ml	93
53) 4-Nitrophenol	9.681	139	58619	1130.23	ng/ml	92
54) 2,4-Dinitrotoluene	9.750	165	111550	1055.06	ng/ml	92
55) Dibenzofuran	9.777	168	493109	1064.40	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.857	232	90483	1130.25	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.900	232	96512	1102.28	ng/ml	97
58) Diethyl phthalate	10.002	149	376527	1087.93	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	9.986	170	320796	1087.41	ng/ml	98
60) Fluorene	10.125	166	373371	1024.12	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.119	204	184021	1035.36	ng/ml	95
62) 4-Nitroaniline	10.135	138	69506	1242.33	ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.167	198	39831	1069.35	ng/ml	95
65) N-Nitrosodiphenylamine	10.237	169	309471	1042.49	ng/ml	99
66) Azobenzene (1,2-DPH)	10.280	77	281584	937.33	ng/ml	90
68) 4-Bromophenyl phenyl e...	10.617	248	111694	1028.12	ng/ml	96
69) Hexachlorobenzene	10.697	284	135315	1038.25	ng/ml	96
70) Pentachlorophenol (PCP)	10.889	266	67079	1026.76	ng/ml	98
71) Phenanthrene	11.103	178	543758	1006.72	ng/ml	99
72) Anthracene	11.157	178	548794	1057.02	ng/ml	99
73) Carbazole	11.312	167	452582	1168.72	ng/ml	100
74) Di-n-butyl phthalate	11.665	149	615616	1081.20	ng/ml	100
75) Fluoranthene	12.360	202	610606	1103.00	ng/ml	99
76) Benzidine	12.515	184	185790	1427.47	ng/ml	99
77) Pyrene	12.649	202	614592	1090.94	ng/ml	99
80) Butyl benzyl phthalate	13.644	149	262081	1114.32	ng/ml	92
81) Bis(2-ethylhexyl) adipate	13.815	129	233912	1103.23	ng/ml	99
82) 3,3-Dichlorobenzidine	14.751	252	106385	1380.06	ng/ml	99
83) Benz(a)anthracene	14.783	228	531933	1042.19	ng/ml	97
84) Chrysene	14.864	228	509580	1065.38	ng/ml	100
85) Bis(2-ethylhexyl) phth...	14.960	149	370045	1125.32	ng/ml	99
87) Di-n-octyl phthalate	16.629	149	596092	1094.87	ng/ml	99
88) Benzo(b)fluoranthene	17.361	252	548662	1054.06	ng/ml	99
89) Benzo(k)fluoranthene	17.431	252	530292	1011.02	ng/ml	100
90) Benzo(b+k)fluoranthene	17.361	252	1102269	2062.47	ng/ml	99
91) Benzo(e)pyrene	18.014	252	542082	1117.84	ng/ml	99
92) Benzo(a)pyrene	18.132	252	508525	1075.75	ng/ml	99
93) Perylene	18.335	252	459630	1080.20	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.667	276	482584	990.63	ng/ml	99
96) Dibenz(a,h)anthracene	20.731	278	474962	1061.92	ng/ml	99
97) Benzo(g,h,i)perylene	21.202	276	514865	1100.33	ng/ml	98

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021902.D
Acq On : 2 Oct 2019 8:42 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV1
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:48:36 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



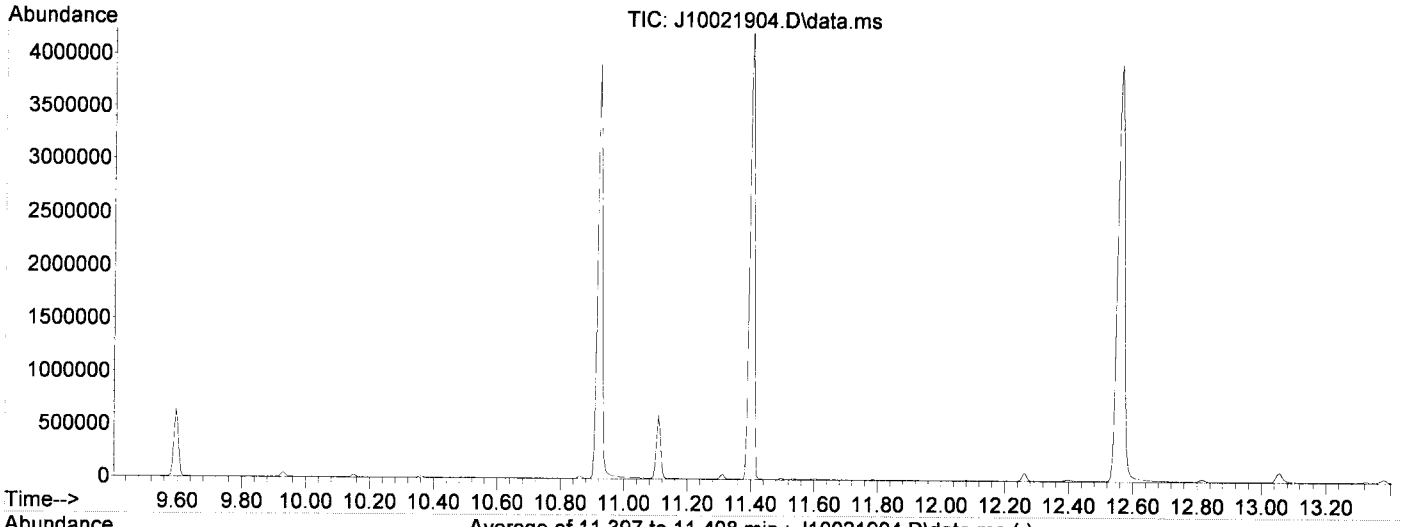
Data Path : T:\data\2019-10\9J02030\
Data File : J10021904.D
Acq On : 2 Oct 2019 10:11 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN2
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

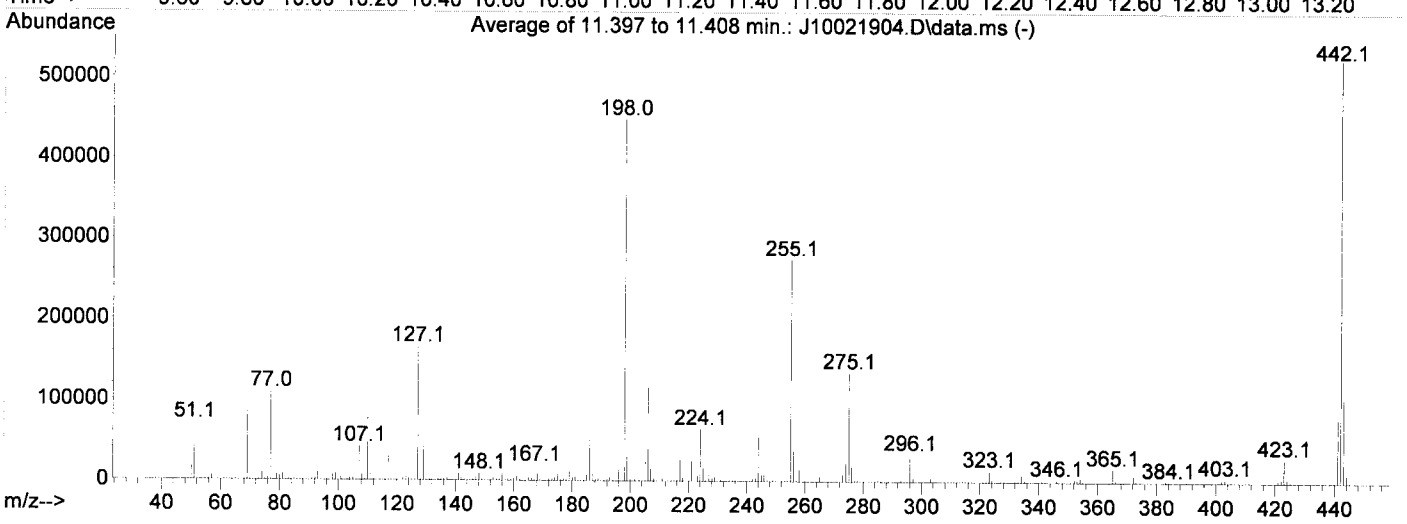
Replaced liner

AMS 10/3/19

Integration File: rteint.p

Method : T:\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Tue Oct 01 08:55:47 2019





AutoFind: Scans 1479, 1480, 1481; Background Corrected with Scan 1474

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.4	1166	PASS
69	198	0.01	100	19.2	85800	PASS
70	69	0.00	2	0.6	473	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	447890	PASS
199	198	5	9	6.8	30504	PASS
365	198	1	100	3.5	15728	PASS
441	443	0.01	150	75.9	78499	PASS
442	198	0.10	200	116.9	523712	PASS
443	442	15	24	19.8	103453	PASS

J

Data Path : T:\data\2019-10\9J02030\
Data File : J10021904.D
Acq On : 2 Oct 2019 10:11 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN2
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:49:05 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.552	150	93677	2.00	ug/mL	0.00
2) Naphthalene-d8	7.819	136	263918	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.595	162	144596	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.109	188	233767	2.00	ug/mL	0.00
11) Chrysene-d12	14.794	240	193566	2.00	ug/mL	-0.01
12) Perylene-d12	17.158	264	189	2.00	ug/mL	# 0.06
Target Compounds						Qvalue
4) Pentachlorophenol	10.921	266	578983	42.40	ug/mL	84
6) DFTPP	11.403	442	609310	32.29	ug/mL	84
7) Benzidine	12.563	184	2604921	31.32	ug/mL	97
8) 4,4-DDE	12.815	TIC	26058	No Calib		
9) 4,4-DDD	13.318	TIC	9734	No Calib		
10) 4,4-DDT	13.874	TIC	7482839	31.21	ug/mL	95

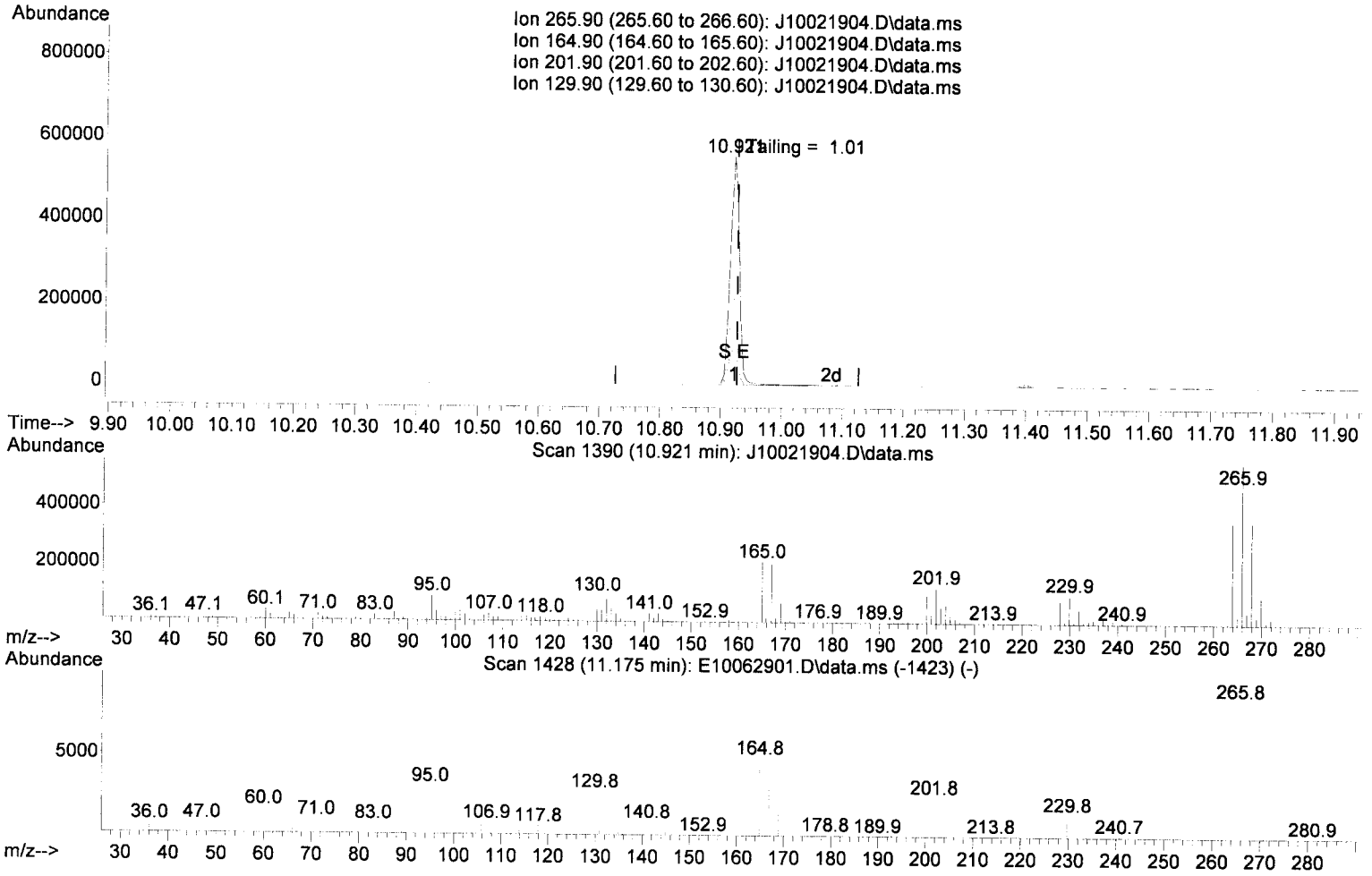
(#) = qualifier out of range (m) = manual integration (+) = signals summed

✓

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021904.D
Acq On : 2 Oct 2019 10:11 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN2
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:49:05 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021904.D\data.ms

(4) Pentachlorophenol

10.921min (-0.005) 42.40 ug/mL

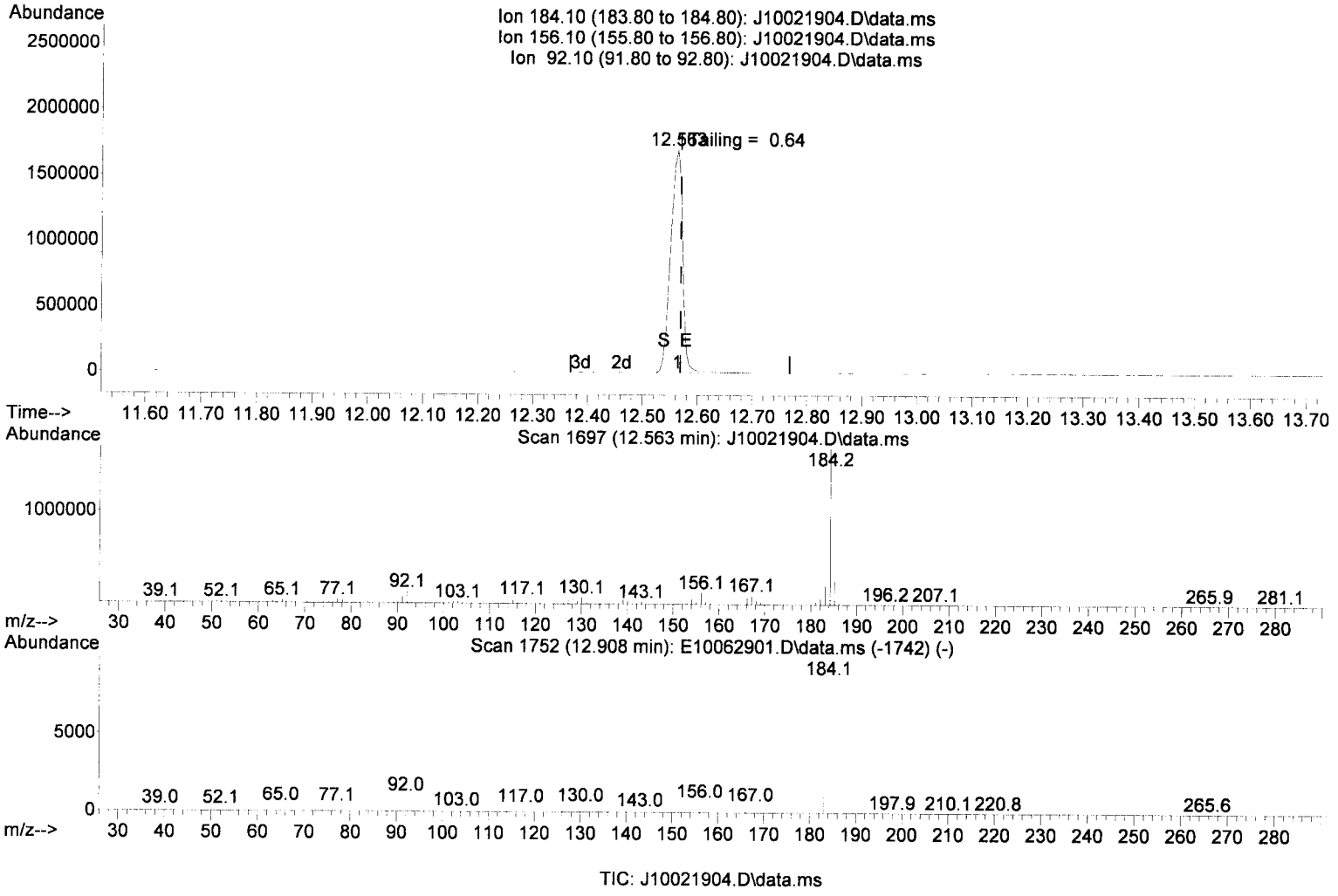
response 578983

Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	37.90
201.90	25.80	22.25
129.90	27.30	16.33

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021904.D
Acq On : 2 Oct 2019 10:11 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN2
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:49:05 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021904.D\data.ms

(7) Benzidine

12.563min (-0.005) 31.32 ug/mL

response 2604921

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.32
92.10	8.20	7.38
0.00	0.00	0.00

DDT Breakdown Check (Validated 5/1/2013)

From:
9J02030-TUN2
SV-GCMS10

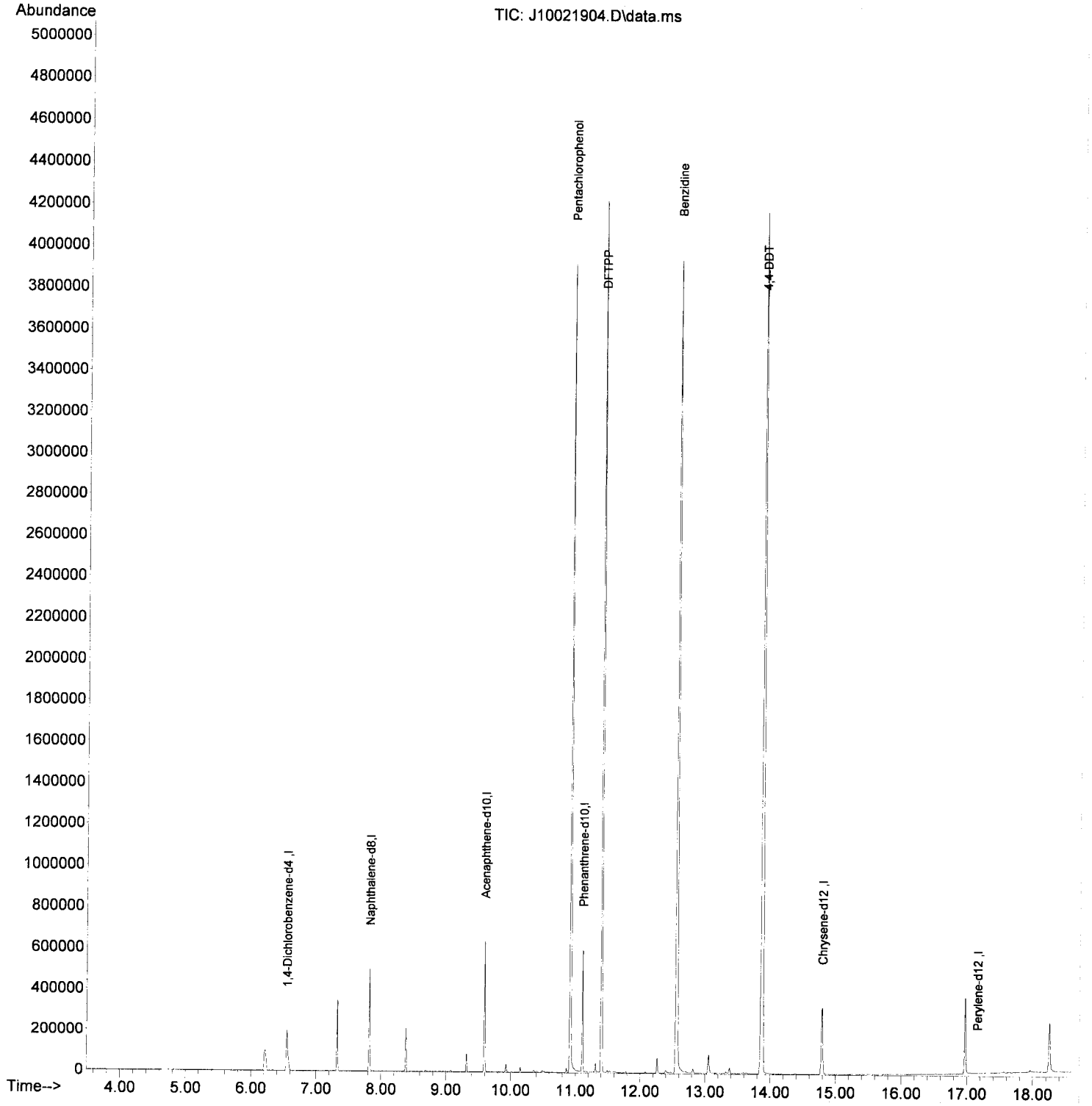
First Column Area Counts		Percent Breakdown	
DDE	26058		
DDD	9734		
DDT	7482839	**0.48**	**PASS**

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

J

Data Path : T:\data\2019-10\9J02030\
Data File : J10021904.D
Acq On : 2 Oct 2019 10:11 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-TUN2
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Oct 03 10:49:05 2019
Quant Method : T:\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Tue Oct 01 08:55:47 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 10/3/19

Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	90	0.00
2	TG	N-Nitrosodimethylamine	1000.000	952.289	4.8	88	0.02
3	TG	Pyridine	1000.000	949.940	5.0	86	0.02
4	S	2-Fluorophenol (Surr)	1000.000	1110.603	-11.1	96	0.00
5	S	Phenol-d6(Surr)	1000.000	1062.760	-6.3	88	0.00
6	T	Phenol	1000.000	1027.974	-2.8	86	0.00
7	T	Aniline	1000.000	664.414	33.6#	66	0.00
8	T	Bis(2-chloroethyl) ether	1000.000	1160.082	-16.0	96	0.00
9	T	2-Chlorophenol	1000.000	1077.716	-7.8	91	0.00
10	T	1,3-Dichlorobenzene	1000.000	1038.007	-3.8	92	0.00
11	T	1,4-Dichlorobenzene	1000.000	1043.088	-4.3	91	0.00
12	T	Benzyl alcohol	1000.000	1016.497	-1.6	87	0.00
13	T	1,2-Dichlorobenzene	1000.000	1046.360	-4.6	91	0.00
14	T	2-Methylphenol	1000.000	1070.469	-7.0	86	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	865.809	13.4	74	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	924.928	7.5	77	0.00
17	T	3+4-Methylphenol	1000.000	1100.461	-10.0	87	0.00
18	T	Hexachloroethane	1000.000	1045.857	-4.6	94	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1002.390	-0.2	82	0.00
20	T	Nitrobenzene	1000.000	977.637	2.2	81	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	85	0.00
22	T	Isophorone	1000.000	997.298	0.3	82	0.00
23	T	2-Nitrophenol	1000.000	1080.427	-8.0	87	0.00
24	T	2,4-Dimethylphenol	1000.000	1171.334	-17.1	93	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	989.181	1.1	79	0.00
26	T	Benzoic acid	2000.000	2410.537	-20.5#	134	0.02
27	T	2,4-Dichlorophenol	1000.000	1067.767	-6.8	90	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	1068.936	-6.9	88	0.00
29	T	Naphthalene	1000.000	1054.631	-5.5	85	0.00
30	T	4-Chloroaniline	1000.000	637.917	36.2#	52	0.00
31	T	Hexachlorobutadiene	1000.000	1074.306	-7.4	87	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1073.403	-7.3	86	0.00
33	T	2-Methylnaphthalene	1000.000	1069.243	-6.9	85	0.00
34	T	1-Methylnaphthalene	1000.000	1054.350	-5.4	85	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	88	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1358.550	-35.9#	108	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1096.117	-9.6	93	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1100.544	-10.1	95	0.00
39	T	1,1'-Biphenyl	1000.000	1022.215	-2.2	85	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1036.054	-3.6	87	0.00
41	T	2-Chloronaphthalene	1000.000	1060.446	-6.0	88	0.00
42	T	2-Nitroaniline	1000.000	1071.420	-7.1	90	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1026.987	-2.7	85	0.00
44	T	1,4-Dinitrobenzene	1000.000	1185.909	-18.6	108	0.00
45	T	Dimethyl phthalate	1000.000	1054.707	-5.5	87	0.00
46	T	1,3-Dinitrobenzene	1000.000	1065.944	-6.6	95	0.00
47	T	2,6-Dinitrotoluene	1000.000	1049.965	-5.0	90	0.00
48	T	1,2-Dinitrobenzene	1000.000	1036.368	-3.6	86	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 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	1064.562	-6.5	87	0.00
50	T	3-Nitroaniline	1000.000	850.548	14.9	74	0.00
51	T	Acenaphthene	1000.000	1011.829	-1.2	87	0.00
52	T	2,4-Dinitrophenol	1000.000	1362.326	-36.2#	164	0.00
53	T	4-Nitrophenol	1000.000	1140.750	-14.1	100	0.00
54	T	2,4-Dinitrotoluene	1000.000	1033.869	-3.4	93	0.00
55	T	Dibenzofuran	1000.000	1048.544	-4.9	87	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1108.093	-10.8	95	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1106.447	-10.6	95	0.00
58	T	Diethyl phthalate	1000.000	1059.336	-5.9	85	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1078.926	-7.9	89	0.00
60	T	Fluorene	1000.000	1011.965	-1.2	86	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1033.604	-3.4	87	0.00
62	T	4-Nitroaniline	1000.000	1329.236	-32.9#	116	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1239.322	-23.9#	121	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	90	0.00
65	T	N-Nitrosodiphenylamine	1000.000	999.845	0.0	84	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	913.842	8.6	77	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	995.047	0.5	89	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1018.651	-1.9	88	0.00
69	T	Hexachlorobenzene	1000.000	1044.257	-4.4	89	0.00
70	T	Pentachlorophenol (PCP)	1000.000	1053.612	-5.4	106	0.00
71	T	Phenanthrene	1000.000	1002.994	-0.3	89	0.00
72	T	Anthracene	1000.000	1044.452	-4.4	89	0.00
73	T	Carbazole	1000.000	1147.419	-14.7	97	0.00
74	T	Di-n-butyl phthalate	1000.000	1064.285	-6.4	88	0.00
75	T	Fluoranthene	1000.000	1133.352	-13.3	93	0.00
76	T	Benzidine	2000.000	1670.626	16.5	73	0.00
77	T	Pyrene	1000.000	1122.504	-12.3	92	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	90	0.00
79	S	Terphenyl-d14 (Surr)	1000.000	1034.654	-3.5	89	0.00
80	T	Butyl benzyl phthalate	1000.000	1069.356	-6.9	93	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1105.529	-10.6	98	0.00
82	T	3,3-Dichlorobenzidine	2000.000	1378.985	31.1#	63	-0.01
83	T	Benz(a)anthracene	1000.000	1028.180	-2.8	94	0.00
84	T	Chrysene	1000.000	1046.298	-4.6	93	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1102.342	-10.2	97	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	93	0.00
87	T	Di-n-octyl phthalate	1000.000	1016.306	-1.6	95	0.00
88	T	Benzo(b)fluoranthene	1000.000	1041.122	-4.1	96	0.00
89	T	Benzo(k)fluoranthene	1000.000	1022.502	-2.3	94	0.00
90	T	Benzo(b+k)fluoranthene	2000.000	2060.653	-3.0	95	0.00
91	T	Benzo(e)pyrene	1000.000	1116.325	-11.6	96	0.00
92	T	Benzo(a)pyrene	1000.000	1069.165	-6.9	97	0.00
93	T	Perylene	1000.000	1059.791	-6.0	97	0.00
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	93	0.00

Evaluate Continuing Calibration Report

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 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	1009.018	-0.9	96	0.00
96 T	Dibenz(a,h)anthracene	1000.000	1049.874	-5.0	96	0.00
97 T	Benzo(g,h,i)perylene	1000.000	1135.009	-13.5	98	0.00

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	255195	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	977789	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	514601	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	960230	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.805	240	948244	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.281	264	966601	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.667	292	821200	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.257	112	171989	1110.60	ng/ml	0.00
5) Phenol-d6(Surr)	6.161	99	210659	1062.76	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.065	82	154144	1002.39	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	417251	1036.05	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	57580	995.05	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.847	244	452131	1034.65	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.861	74	92568	952.29	ng/ml	93
3) Pyridine	3.883	79	157423	949.94	ng/ml	98
6) Phenol	6.177	94	224055	1027.97	ng/ml	96
7) Aniline	6.199	93	124941	664.41	ng/ml	98
8) Bis(2-chloroethyl) ether	6.257	93	228195	1160.08	ng/ml	96
9) 2-Chlorophenol	6.322	128	194739	1077.72	ng/ml	97
10) 1,3-Dichlorobenzene	6.466	146	210823	1038.01	ng/ml	97
11) 1,4-Dichlorobenzene	6.541	146	208220	1043.09	ng/ml	99
12) Benzyl alcohol	6.659	108	108930	1016.50	ng/ml	99
13) 1,2-Dichlorobenzene	6.691	146	205989	1046.36	ng/ml	97
14) 2-Methylphenol	6.766	107	140706	1070.47	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	150298	865.81	ng/ml	91
16) N-Nitrosodi-n-propylamine	6.921	70	105631	924.93	ng/ml	94
17) 3+4-Methylphenol	6.915	107	179361	1100.46	ng/ml	95
18) Hexachloroethane	7.028	201	64147	1045.86	ng/ml	95
20) Nitrobenzene	7.086	77	152317	977.64	ng/ml	91
22) Isophorone	7.322	82	310885	997.30	ng/ml	100
23) 2-Nitrophenol	7.407	139	99923	1080.43	ng/ml	88
24) 2,4-Dimethylphenol	7.445	122	153558	1171.33	ng/ml	94
25) Bis(2-chloroethoxy) me...	7.536	93	187460	989.18	ng/ml	98
26) Benzoic acid	7.536	105	132983	2410.54	ng/ml	93
27) 2,4-Dichlorophenol	7.643	162	156538	1067.77	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.734	180	182929	1068.94	ng/ml	99
29) Naphthalene	7.814	128	542474	1054.63	ng/ml	99
30) 4-Chloroaniline	7.867	127	102846	637.92	ng/ml	97
31) Hexachlorobutadiene	7.942	225	99347	1074.31	ng/ml	98
32) 4-Chloro-3-methylphenol	8.343	107	139268	1073.40	ng/ml	96
33) 2-Methylnaphthalene	8.509	142	384279	1069.24	ng/ml	97
34) 1-Methylnaphthalene	8.611	142	366825	1054.35	ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	108108	1358.55	ng/ml	98
37) 2,4,6-Trichlorophenol	8.793	196	109267	1096.12	ng/ml	99
38) 2,4,5-Trichlorophenol	8.830	198	108231	1100.54	ng/ml	97
39) 1,1'-Biphenyl	8.980	154	452133	1022.22	ng/ml	99
41) 2-Chloronaphthalene	9.001	162	338750	1060.45	ng/ml	98
42) 2-Nitroaniline	9.098	138	102271	1071.42	ng/ml	92
43) 2,6-Dimethylnaphthalene	9.140	156	333238	1026.99	ng/ml	99

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

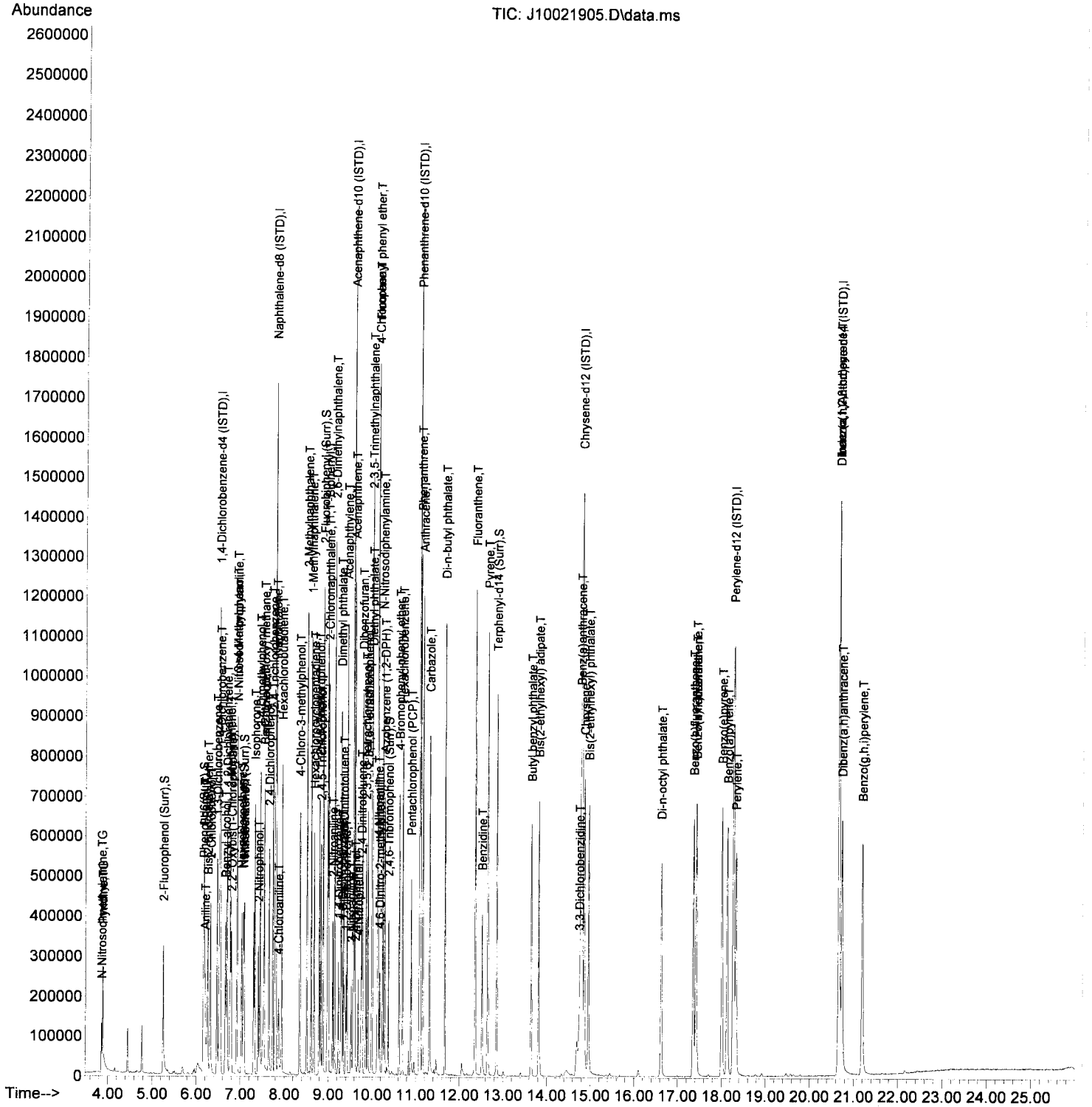
Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.226	168	47836	1185.91	ng/ml	88
45) Dimethyl phthalate	9.285	163	391962	1054.71	ng/ml	100
46) 1,3-Dinitrobenzene	9.312	168	54509	1065.94	ng/ml	86
47) 2,6-Dinitrotoluene	9.344	165	87844	1049.96	ng/ml	89
48) 1,2-Dinitrobenzene	9.397	168	39019	1036.37	ng/ml	91
49) Acenaphthylene	9.424	152	556893	1064.56	ng/ml	100
50) 3-Nitroaniline	9.515	138	56650	850.55	ng/ml	96
51) Acenaphthene	9.600	153	347576	1011.83	ng/ml	99
52) 2,4-Dinitrophenol	9.616	184	29531	1362.33	ng/ml	95
53) 4-Nitrophenol	9.681	139	58557	1140.75	ng/ml	92
54) 2,4-Dinitrotoluene	9.750	165	107951	1033.87	ng/ml	94
55) Dibenzofuran	9.777	168	480143	1048.54	ng/ml	97
56) 2,3,5,6-Tetrachlorophenol	9.857	232	87605	1108.09	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.900	232	95765	1106.45	ng/ml	97
58) Diethyl phthalate	10.001	149	362389	1059.34	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	9.985	170	314610	1078.93	ng/ml	97
60) Fluorene	10.124	166	364673	1011.97	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.119	204	181584	1033.60	ng/ml	95
62) 4-Nitroaniline	10.135	138	73508	1329.24	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.167	198	47142	1239.32	ng/ml	95
65) N-Nitrosodiphenylamine	10.237	169	296025	999.84	ng/ml	99
66) Azobenzene (1,2-DPH)	10.280	77	273801	913.84	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.617	248	110372	1018.65	ng/ml	96
69) Hexachlorobenzene	10.697	284	135737	1044.26	ng/ml	94
70) Pentachlorophenol (PCP)	10.889	266	68785	1053.61	ng/ml	98
71) Phenanthrene	11.103	178	540307	1002.99	ng/ml	100
72) Anthracene	11.157	178	540832	1044.45	ng/ml	99
73) Carbazole	11.312	167	445860	1147.42	ng/ml	99
74) Di-n-butyl phthalate	11.665	149	604380	1064.29	ng/ml	99
75) Fluoranthene	12.360	202	625745	1133.35	ng/ml	98
76) Benzidine	12.515	184	220226	1670.63	ng/ml	99
77) Pyrene	12.644	202	630696	1122.50	ng/ml	99
80) Butyl benzyl phthalate	13.644	149	260348	1069.36	ng/ml	91
81) Bis(2-ethylhexyl) adipate	13.815	129	243138	1105.53	ng/ml	97
82) 3,3-Dichlorobenzidine	14.746	252	110282	1378.99	ng/ml	96
83) Benz(a)anthracene	14.778	228	544346	1028.18	ng/ml	98
84) Chrysene	14.858	228	519111	1046.30	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.960	149	376002	1102.34	ng/ml	98
87) Di-n-octyl phthalate	16.623	149	563846	1016.31	ng/ml	99
88) Benzo(b)fluoranthene	17.361	252	555077	1041.12	ng/ml	98
89) Benzo(k)fluoranthene	17.425	252	549322	1022.50	ng/ml	99
90) Benzo(b+k)fluoranthene	17.425	252	1128254	2060.65	ng/ml	99
91) Benzo(e)pyrene	18.008	252	554600	1116.32	ng/ml	99
92) Benzo(a)pyrene	18.131	252	517755	1069.17	ng/ml	99
93) Perylene	18.329	252	461987	1059.79	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.661	276	489986	1009.02	ng/ml	98
96) Dibenz(a,h)anthracene	20.731	278	468088	1049.87	ng/ml	98
97) Benzo(g,h,i)perylene	21.196	276	529412	1135.01	ng/ml	97

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021905.D
Acq On : 2 Oct 2019 10:39 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCV2
Misc : 1x, A19G243@1000
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:50:07 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Data Path : T:\data\2019-10\9J02030\
Data File : J10021906.D
Acq On : 2 Oct 2019 11:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 10/3/19

Quant Time: Oct 03 10:50:39 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.525	152	287849	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	1118144	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	578428	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.077	188	1022979	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.799	240	1053619	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.276	264	1060202	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	859804	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.364	112	154	0.88	ng/ml	0.11
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	0.000	82	0	0.00	ng/ml	
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.851	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	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	7.055	77	55	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	7.803	128	151	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	9.290	156	54	N.D.		

Data Path : T:\data\2019-10\9J02030\
Data File : J10021906.D
Acq On : 2 Oct 2019 11:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

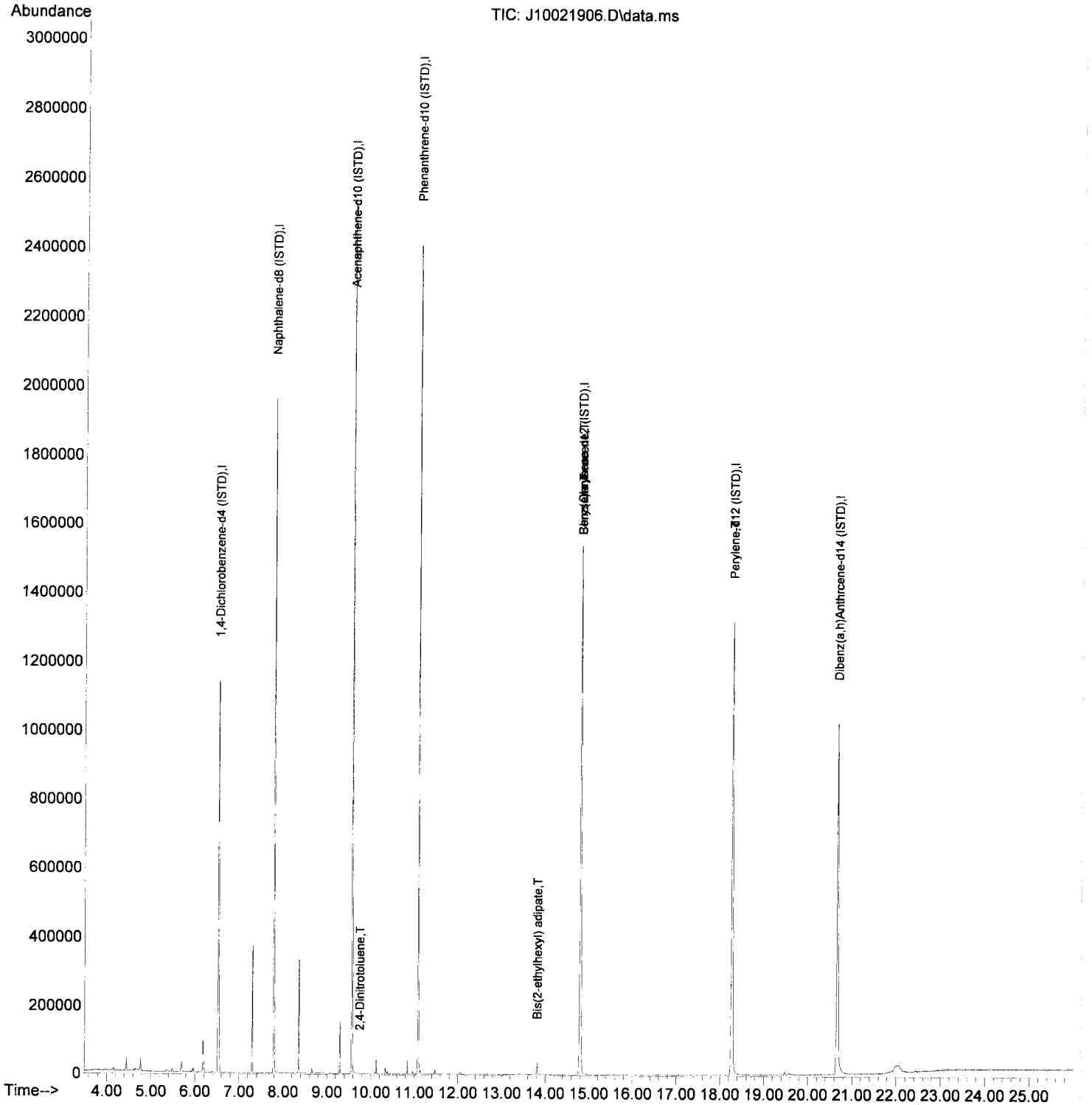
Quant Time: Oct 03 10:50:39 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.290	163	59	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	9.574	153	126	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.740	165	80	54.39 ng/ml#	27
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	0.000		0	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.093	170	175	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	11.082	178	316	N.D.	
72) Anthracene	11.082	178	316	N.D.	
73) Carbazole	0.000		0	N.D.	
74) Di-n-butyl phthalate	0.000		0	N.D.	
75) Fluoranthene	0.000		0	N.D.	
76) Benzidine	0.000		0	N.D.	
77) Pyrene	0.000		0	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.810	129	12031	49.23 ng/ml	95
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.805	228	2503	4.25 ng/ml	59
84) Chrysene	14.805	228	2503	4.54 ng/ml	58
85) Bis(2-ethylhexyl) phth...	0.000		0	N.D.	
87) Di-n-octyl phthalate	0.000		0	N.D.	
88) Benzo(b)fluoranthene	0.000		0	N.D.	
89) Benzo(k)fluoranthene	0.000		0	N.D.	
90) Benzo(b+k)fluoranthene	0.000		0	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.276	252	3173	6.64 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.661	276	362	N.D.	
96) Dibenz(a,h)anthracene	20.661	278	150	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\2019-10\9J02030\
Data File : J10021906.D
Acq On : 2 Oct 2019 11:15 am
Operator : JK/ AMS/ DTH
Sample : 9J02030-CCB1
Misc : 1x, DCM + ISTD
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:50:39 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021915.D
Acq On : 2 Oct 2019 4:39 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BLK2
Misc : 1x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 10/3/19 AMS 10/3/19

Quant Time: Oct 03 10:51:35 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.525	152	297010	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.792	136	1138904	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	618083	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	1171179	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.804	240	1250096	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.281	264	1291277	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.672	292	1084542	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.257	112	432388	2399.02 ng/ml	0.00
5) Phenol-d6(Surr)	6.166	99	327054	1417.67 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	664970	3715.46 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	1459065	3016.36 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.370	330	297512	4238.03 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.858	244	2089017	3626.18 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.	
3) Pyridine	3.936	79	1926m	9.99 ng/ml#	
6) Phenol	6.182	94	11022	43.45 ng/ml	83
7) Aniline	6.182	93	518	N.D.	
8) Bis(2-chloroethyl) ether	6.247	93	1133	4.95 ng/ml#	58
9) 2-Chlorophenol	6.316	128	451	N.D.	
10) 1,3-Dichlorobenzene	6.466	146	66	N.D.	
11) 1,4-Dichlorobenzene	6.541	146	282	N.D.	
12) Benzyl alcohol	6.669	108	1000	32.39 ng/ml#	1
13) 1,2-Dichlorobenzene	0.000		0	N.D.	
14) 2-Methylphenol	6.771	107	906	5.92 ng/ml#	57
15) 2,2'-Oxybis(1-Chloropr...	6.824	45	239	N.D.	
16) N-Nitrosodi-n-propylamine	6.915	70	310	N.D.	
17) 3+4-Methylphenol	6.921	107	851	4.49 ng/ml#	1
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.070	77	2778	15.32 ng/ml#	39
22) Isophorone	7.332	82	587	N.D.	
23) 2-Nitrophenol	7.397	139	339	45.33 ng/ml#	1
24) 2,4-Dimethylphenol	7.461	122	517	3.39 ng/ml#	2
25) Bis(2-chloroethoxy) me...	7.541	93	216	N.D.	
26) Benzoic acid	7.498	105	14888	966.35 ng/ml	91
27) 2,4-Dichlorophenol	7.648	162	84	25.39 ng/ml#	1
28) 1,2,4-Trichlorobenzene	7.734	180	65	N.D.	
29) Naphthalene	7.814	128	10290	17.17 ng/ml	96
30) 4-Chloroaniline	7.846	127	193	14.24 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.322	107	2268	15.01 ng/ml	61
33) 2-Methylnaphthalene	8.509	142	2311	5.52 ng/ml	78
34) 1-Methylnaphthalene	8.605	142	1474	3.64 ng/ml	92
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	0.000		0	N.D.	
38) 2,4,5-Trichlorophenol	8.793	198	71	23.35 ng/ml#	55
39) 1,1'-Biphenyl	8.980	154	3444	6.48 ng/ml	89
41) 2-Chloronaphthalene	9.001	162	129	N.D.	
42) 2-Nitroaniline	9.124	138	127	31.56 ng/ml#	76
43) 2,6-Dimethylnaphthalene	9.146	156	665	N.D.	

Data Path : T:\data\2019-10\9J02030\
Data File : J10021915.D
Acq On : 2 Oct 2019 4:39 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BLK2
Misc : 1x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

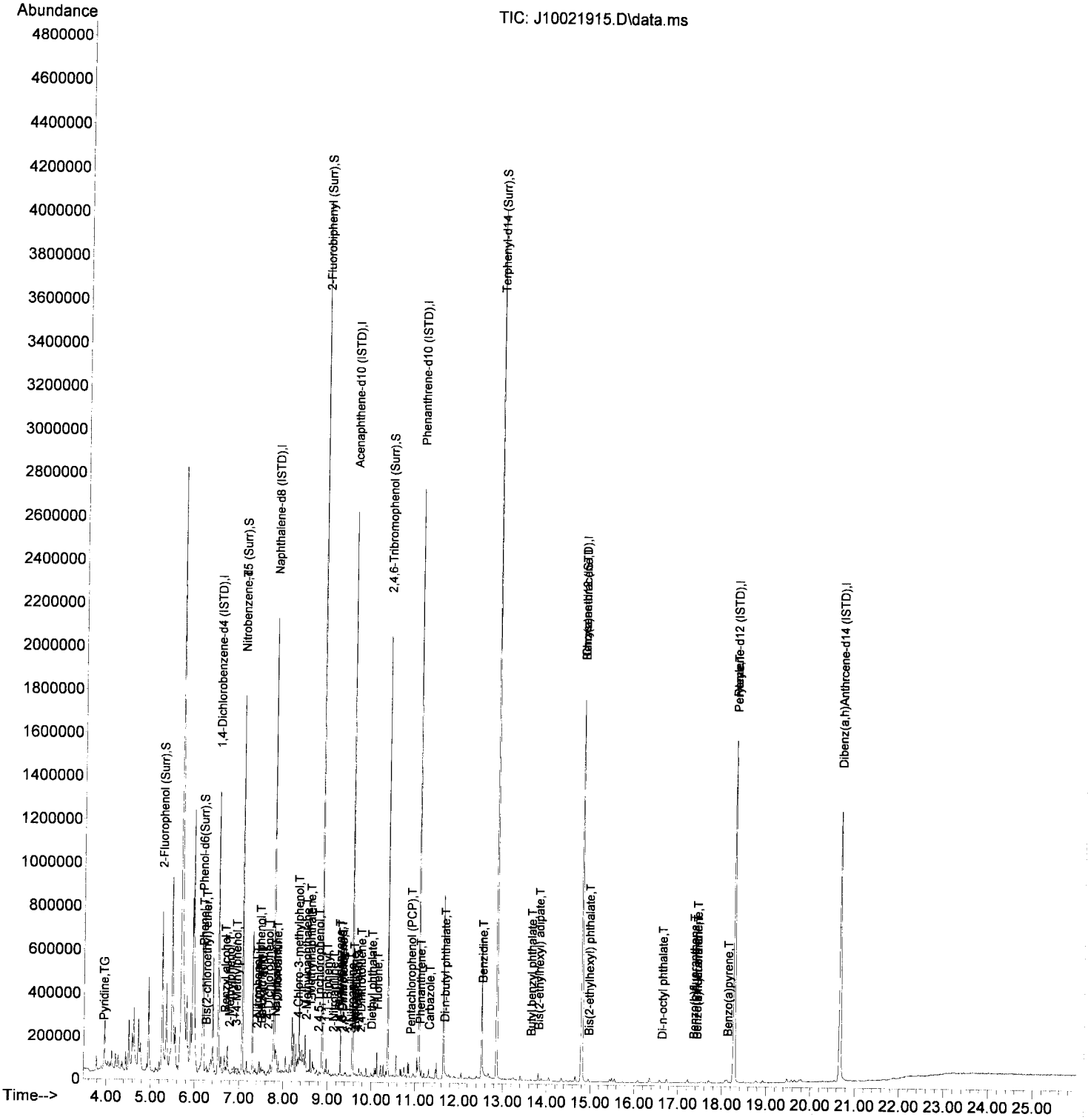
Quant Time: Oct 03 10:51:35 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.258	168	65	67.62 ng/ml#	12
45) Dimethyl phthalate	9.285	163	471	N.D.	
46) 1,3-Dinitrobenzene	9.311	168	50	58.66 ng/ml#	1
47) 2,6-Dinitrotoluene	9.333	165	533	30.22 ng/ml	87
48) 1,2-Dinitrobenzene	9.386	168	92	N.D.	
49) Acenaphthylene	9.424	152	992	N.D.	
50) 3-Nitroaniline	9.531	138	145	31.21 ng/ml#	36
51) Acenaphthene	9.595	153	2272	5.51 ng/ml#	57
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.675	139	585	83.26 ng/ml#	1
54) 2,4-Dinitrotoluene	9.750	165	91	54.43 ng/ml#	45
55) Dibenzofuran	9.771	168	741	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.996	149	1348	3.28 ng/ml	84
59) 2,3,5-Trimethylnaphtha...	9.985	170	135	N.D.	
60) Fluorene	10.124	166	1108	2.56 ng/ml	92
61) 4-Chlorophenyl phenyl ...	10.119	204	51	N.D.	
62) 4-Nitroaniline	10.130	138	123	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.247	169	525	N.D.	
66) Azobenzene (1,2-DPH)	10.290	77	426	N.D.	
68) 4-Bromophenyl phenyl e...	10.622	248	58	N.D.	
69) Hexachlorobenzene	10.702	284	69	N.D.	
70) Pentachlorophenol (PCP)	10.889	266	101	77.77 ng/ml#	46
71) Phenanthrene	11.103	178	3114	4.74 ng/ml	81
72) Anthracene	11.151	178	389	N.D.	
73) Carbazole	11.317	167	850	6.94 ng/ml	81
74) Di-n-butyl phthalate	11.665	149	7509	10.84 ng/ml	94
75) Fluoranthene	12.365	202	1110	N.D.	
76) Benzidine	12.526	184	146	123.84 ng/ml#	1
77) Pyrene	12.649	202	1276	N.D.	
80) Butyl benzyl phthalate	13.638	149	1481	33.93 ng/ml	86
81) Bis(2-ethylhexyl) adipate	13.815	129	12379	42.70 ng/ml	98
82) 3,3-Dichlorobenzidine	0.000		0	N.D.	
83) Benz(a)anthracene	14.810	228	3431	4.92 ng/ml	79
84) Chrysene	14.863	228	268	N.D.	
85) Bis(2-ethylhexyl) phth...	14.960	149	7357	16.36 ng/ml	86
87) Di-n-octyl phthalate	16.634	149	281	58.30 ng/ml#	1
88) Benzo(b)fluoranthene	17.350	252	410	8.53 ng/ml#	43
89) Benzo(k)fluoranthene	17.425	252	61	8.56 ng/ml#	1
90) Benzo(b+k)fluoranthene	17.425	252	61	15.82 ng/ml#	1
91) Benzo(e)pyrene	18.008	252	283	N.D.	
92) Benzo(a)pyrene	18.121	252	125	10.03 ng/ml	44
93) Perylene	18.286	252	4152	7.13 ng/ml	66
95) Indeno(1,2,3-cd)pyrene	20.661	276	566	N.D.	
96) Dibenz(a,h)anthracene	20.725	278	51	N.D.	
97) Benzo(g,h,i)perylene	21.201	276	130	N.D.	

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021915.D
Acq On : 2 Oct 2019 4:39 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BLK2
Misc : 1x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:51:35 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021916.D
Acq On : 2 Oct 2019 5:15 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BS2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 10/3/19

Quant Time: Oct 03 10:51:42 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.520	152	289502	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	1106638	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	598606	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	1095440	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.805	240	1046381	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.276	264	1042842	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.672	292	899718	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.247	112	114050	649.19 ng/ml	0.00
5) Phenol-d6(Surr)	6.161	99	86706	385.59 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.065	82	181466	1040.22 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	440891	941.12 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	75431	1140.26 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.852	244	547680	1135.76 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.818	74	28474m	258.21 ng/ml	
3) Pyridine	3.786	79	757m	4.03 ng/ml#	
6) Phenol	6.177	94	75150	303.93 ng/ml	95
7) Aniline	6.177	93	2109	9.89 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.257	93	145039	649.96 ng/ml	95
9) 2-Chlorophenol	6.316	128	163894	799.53 ng/ml	99
10) 1,3-Dichlorobenzene	6.466	146	151569	657.83 ng/ml	99
11) 1,4-Dichlorobenzene	6.536	146	151836	670.49 ng/ml	99
12) Benzyl alcohol	6.659	108	59741	506.76 ng/ml	98
13) 1,2-Dichlorobenzene	6.691	146	152757	684.00 ng/ml	97
14) 2-Methylphenol	6.766	107	107098	718.23 ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.787	45	129893	659.59 ng/ml	91
16) N-Nitrosodi-n-propylamine	6.915	70	102224	789.02 ng/ml	100
17) 3+4-Methylphenol	6.921	107	123550	668.21 ng/ml	98
18) Hexachloroethane	7.028	201	44649	641.69 ng/ml	95
20) Nitrobenzene	7.086	77	138668	784.56 ng/ml	92
22) Isophorone	7.322	82	294972	836.08 ng/ml	97
23) 2-Nitrophenol	7.407	139	89128	860.94 ng/ml	92
24) 2,4-Dimethylphenol	7.445	122	135735	914.83 ng/ml	97
25) Bis(2-chloroethoxy) me...	7.536	93	177647	828.26 ng/ml	98
26) Benzoic acid	7.514	105	56519	1424.64 ng/ml	93
27) 2,4-Dichlorophenol	7.648	162	148271	895.93 ng/ml	96
28) 1,2,4-Trichlorobenzene	7.734	180	142894	737.77 ng/ml	99
29) Naphthalene	7.809	128	457912	786.58 ng/ml	100
30) 4-Chloroaniline	7.862	127	5094	40.13 ng/ml	87
31) Hexachlorobutadiene	7.942	225	73509	702.35 ng/ml	96
32) 4-Chloro-3-methylphenol	8.343	107	128359	874.13 ng/ml	98
33) 2-Methylnaphthalene	8.509	142	324209	797.07 ng/ml	99
34) 1-Methylnaphthalene	8.611	142	312821	794.44 ng/ml	99
36) Hexachlorocyclopentadiene	8.675	237	69320	748.87 ng/ml	98
37) 2,4,6-Trichlorophenol	8.793	196	107927	934.93 ng/ml	99
38) 2,4,5-Trichlorophenol	8.830	198	104597	918.10 ng/ml	98
39) 1,1'-Biphenyl	8.980	154	397747	773.06 ng/ml	99
41) 2-Chloronaphthalene	9.001	162	301711	811.95 ng/ml	99
42) 2-Nitroaniline	9.098	138	102227	927.04 ng/ml	92
43) 2,6-Dimethylnaphthalene	9.140	156	287959	762.91 ng/ml	98

Data Path : T:\data\2019-10\9J02030\
Data File : J10021916.D
Acq On : 2 Oct 2019 5:15 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BS2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

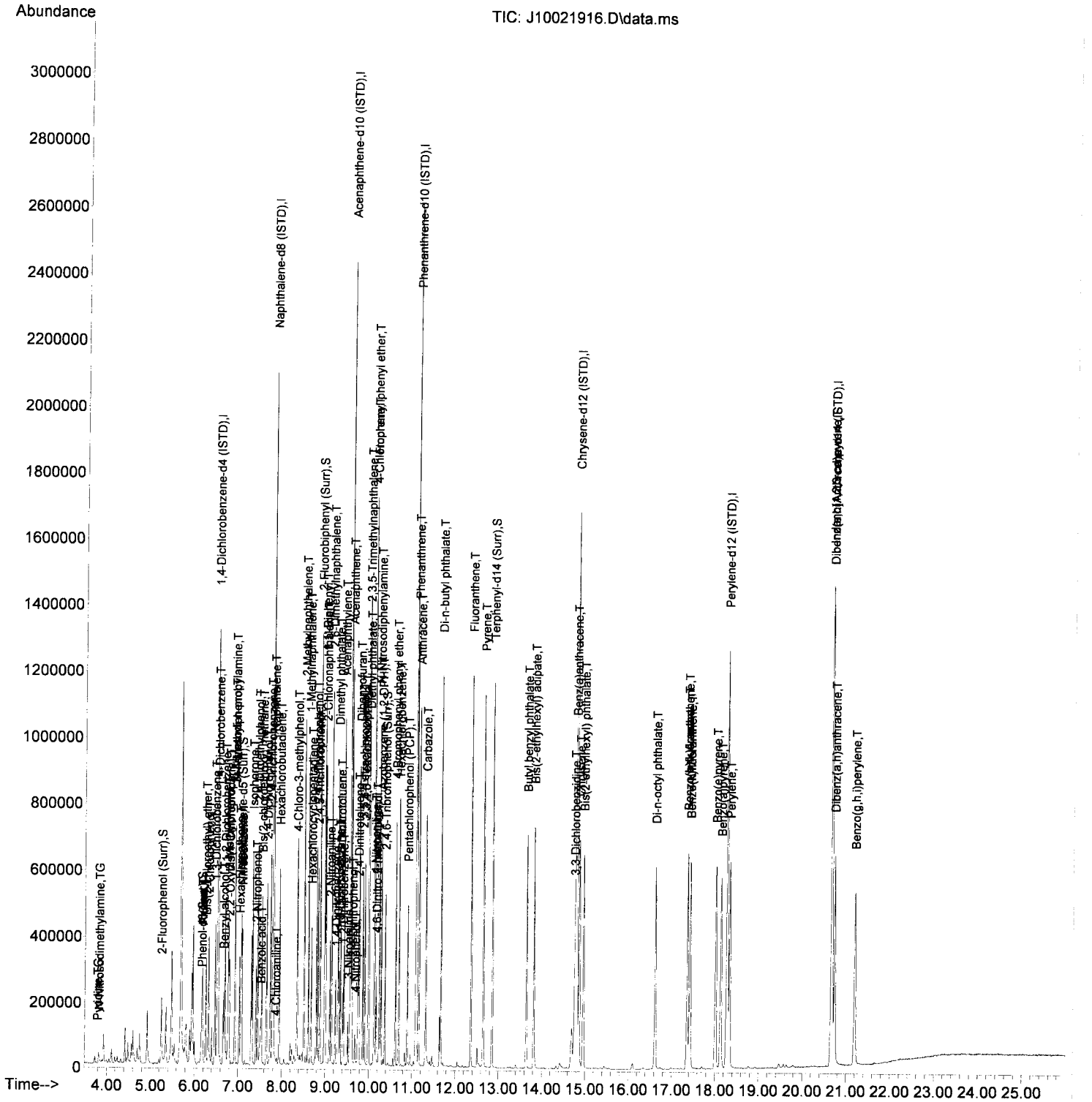
Quant Time: Oct 03 10:51:42 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	47567	1030.64	ng/ml	79
45) Dimethyl phthalate	9.285	163	387730	896.91	ng/ml	99
46) 1,3-Dinitrobenzene	9.312	168	55121	936.05	ng/ml	88
47) 2,6-Dinitrotoluene	9.344	165	87698	903.86	ng/ml	90
48) 1,2-Dinitrobenzene	9.397	168	37212	849.67	ng/ml	94
49) Acenaphthylene	9.424	152	512697	842.54	ng/ml	100
50) 3-Nitroaniline	9.515	138	35614	438.77	ng/ml	97
51) Acenaphthene	9.600	153	318601	797.32	ng/ml	100
52) 2,4-Dinitrophenol	9.616	184	26570	1132.55	ng/ml	95
53) 4-Nitrophenol	9.681	139	22145	437.01	ng/ml	95
54) 2,4-Dinitrotoluene	9.750	165	109043	903.63	ng/ml	95
55) Dibenzofuran	9.777	168	449830	844.49	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.857	232	86431	946.82	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.900	232	90963	908.29	ng/ml	99
58) Diethyl phthalate	10.002	149	369554	928.68	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	9.985	170	291791	860.24	ng/ml	99
60) Fluorene	10.125	166	350824	836.91	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.119	204	169891	831.34	ng/ml	95
62) 4-Nitroaniline	10.135	138	61782	960.41	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.167	198	52010	1186.47	ng/ml	96
65) N-Nitrosodiphenylamine	10.237	169	290004	858.61	ng/ml	99
66) Azobenzene (1,2-DPH)	10.280	77	264039	772.49	ng/ml	94
68) 4-Bromophenyl phenyl e...	10.617	248	104845	848.21	ng/ml	98
69) Hexachlorobenzene	10.697	284	129510	873.37	ng/ml	97
70) Pentachlorophenol (PCP)	10.889	266	67513	916.77	ng/ml	99
71) Phenanthrene	11.103	178	521038	847.84	ng/ml	100
72) Anthracene	11.157	178	513657	869.53	ng/ml	100
73) Carbazole	11.312	167	438261	931.73	ng/ml	100
74) Di-n-butyl phthalate	11.665	149	645532	996.44	ng/ml	99
75) Fluoranthene	12.360	202	597196	948.14	ng/ml	99
76) Benzidine	0.000		0	N.D.		
77) Pyrene	12.644	202	612217	955.12	ng/ml	100
80) Butyl benzyl phthalate	13.644	149	281161	1047.61	ng/ml	93
81) Bis(2-ethylhexyl) adipate	13.815	129	258062	1063.34	ng/ml	98
82) 3,3-Dichlorobenzidine	14.751	252	177173	2173.21	ng/ml	98
83) Benz(a)anthracene	14.783	228	532087	910.77	ng/ml	98
84) Chrysene	14.863	228	501283	915.61	ng/ml	100
85) Bis(2-ethylhexyl) phth...	14.960	149	399210	1060.61	ng/ml	99
87) Di-n-octyl phthalate	16.623	149	673406	1117.47	ng/ml	99
88) Benzo(b)fluoranthene	17.361	252	537780	936.61	ng/ml	99
89) Benzo(k)fluoranthene	17.420	252	536311	923.62	ng/ml	97
90) Benzo(b+k)fluoranthene	17.361	252	1089030	1844.10	ng/ml	99
91) Benzo(e)pyrene	18.014	252	511027	953.42	ng/ml	100
92) Benzo(a)pyrene	18.131	252	485942	931.42	ng/ml	99
93) Perylene	18.335	252	493628	1049.59	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.661	276	461457	867.34	ng/ml	98
96) Dibenz(a,h)anthracene	20.731	278	452829	927.01	ng/ml	99
97) Benzo(g,h,i)perylene	21.202	276	479775	938.83	ng/ml	100

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021916.D
Acq On : 2 Oct 2019 5:15 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BS2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:51:42 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021917.D
Acq On : 2 Oct 2019 5:51 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BSD2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Q-19

AMS 10/3/19

Quant Time: Oct 03 10:51:49 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.525	152	305358	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.793	136	1147570	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	619721	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	1178965	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.810	240	1205287	2000.00 ng/ml	0.00
86) Perylene-d12 (ISTD)	18.281	264	1250865	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.677	292	1092794	2000.00 ng/ml	0.01
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.263	112	110397	595.77 ng/ml	0.01
5) Phenol-d6(Surr)	6.167	99	76497	322.52 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.071	82	176907	961.43 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	448305	924.34 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	77457	1088.64 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.852	244	599244	1078.86 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.824	74	11706m	100.64 ng/ml	
3) Pyridine	3.845	79	866m	4.37 ng/ml#	
6) Phenol	6.177	94	65024	249.32 ng/ml	96
7) Aniline	6.177	93	1464	6.51 ng/ml#	1
8) Bis(2-chloroethyl) ether	6.263	93	147045	624.73 ng/ml	96
9) 2-Chlorophenol	6.322	128	153766	711.17 ng/ml	98
10) 1,3-Dichlorobenzene	6.471	146	143042	588.58 ng/ml	98
11) 1,4-Dichlorobenzene	6.541	146	143616	601.26 ng/ml	98
12) Benzyl alcohol	6.659	108	54164	439.34 ng/ml	98
13) 1,2-Dichlorobenzene	6.691	146	148222	629.23 ng/ml	97
14) 2-Methylphenol	6.771	107	103402	657.44 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.792	45	127694	614.75 ng/ml	88
16) N-Nitrosodi-n-propylamine	6.921	70	98051	717.52 ng/ml	93
17) 3+4-Methylphenol	6.921	107	115383	591.63 ng/ml	97
18) Hexachloroethane	7.028	201	37941	516.97 ng/ml	94
20) Nitrobenzene	7.087	77	138294	741.81 ng/ml	94
22) Isophorone	7.322	82	284619	777.96 ng/ml	97
23) 2-Nitrophenol	7.408	139	90267	841.87 ng/ml	91
24) 2,4-Dimethylphenol	7.445	122	131345	853.67 ng/ml	97
25) Bis(2-chloroethoxy) me...	7.536	93	173905	781.89 ng/ml	99
26) Benzoic acid	7.509	105	49697	1331.89 ng/ml	91
27) 2,4-Dichlorophenol	7.648	162	142288	830.36 ng/ml	95
28) 1,2,4-Trichlorobenzene	7.734	180	132599	660.20 ng/ml	97
29) Naphthalene	7.814	128	449204	744.10 ng/ml	100
30) 4-Chloroaniline	7.873	127	4306	35.16 ng/ml	93
31) Hexachlorobutadiene	7.942	225	61982	571.09 ng/ml	97
32) 4-Chloro-3-methylphenol	8.344	107	130922	859.79 ng/ml	96
33) 2-Methylnaphthalene	8.509	142	320226	759.19 ng/ml	99
34) 1-Methylnaphthalene	8.611	142	306088	749.61 ng/ml	98
36) Hexachlorocyclopentadiene	8.675	237	52083	543.49 ng/ml	95
37) 2,4,6-Trichlorophenol	8.793	196	108343	907.38 ng/ml	99
38) 2,4,5-Trichlorophenol	8.830	198	106723	905.17 ng/ml	99
39) 1,1'-Biphenyl	8.980	154	396419	744.23 ng/ml	99
41) 2-Chloronaphthalene	9.001	162	294159	764.66 ng/ml	98
42) 2-Nitroaniline	9.098	138	106709	934.36 ng/ml	91
43) 2,6-Dimethylnaphthalene	9.140	156	286064	732.06 ng/ml	99

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021917.D
Acq On : 2 Oct 2019 5:51 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BSD2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

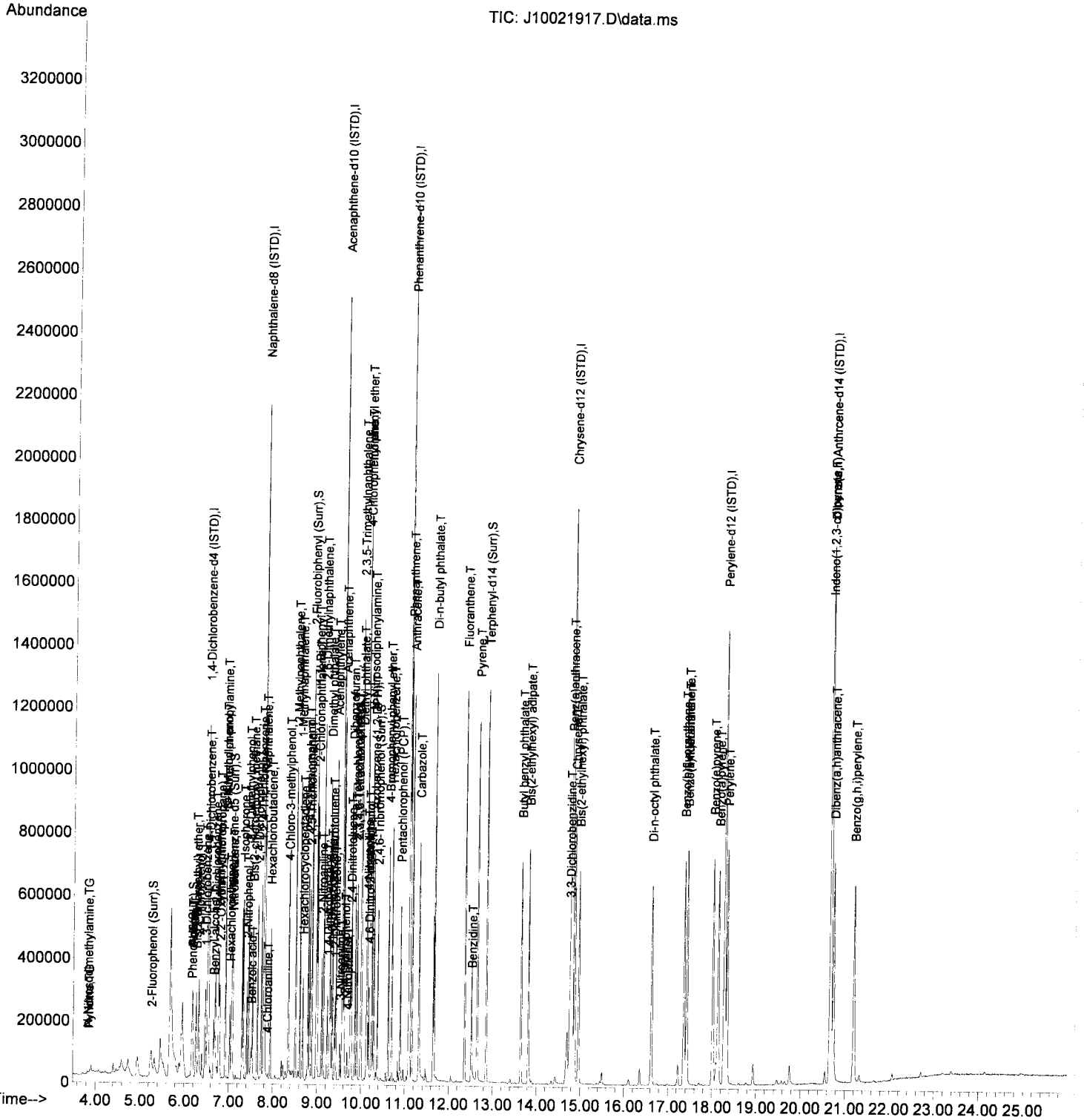
Quant Time: Oct 03 10:51:49 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.231	168	51284	1068.70	ng/ml	84
45) Dimethyl phthalate	9.285	163	392118	876.15	ng/ml	99
46) 1,3-Dinitrobenzene	9.312	168	58323	955.13	ng/ml	89
47) 2,6-Dinitrotoluene	9.344	165	89641	892.66	ng/ml	92
48) 1,2-Dinitrobenzene	9.397	168	39037	860.97	ng/ml	93
49) Acenaphthylene	9.424	152	503015	798.46	ng/ml	99
50) 3-Nitroaniline	9.515	138	31478	374.77	ng/ml	92
51) Acenaphthene	9.600	153	316526	765.14	ng/ml	99
52) 2,4-Dinitrophenol	9.622	184	26706	1109.00	ng/ml	90
53) 4-Nitrophenol	9.686	139	22922	436.94	ng/ml	97
54) 2,4-Dinitrotoluene	9.756	165	116052	927.67	ng/ml	83
55) Dibenzofuran	9.777	168	453308	822.02	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.857	232	90543	957.54	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	9.900	232	93504	902.04	ng/ml	98
58) Diethyl phthalate	10.002	149	375022	910.31	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	9.991	170	295948	842.77	ng/ml	94
60) Fluorene	10.125	166	359382	828.12	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.119	204	176050	832.12	ng/ml	97
62) 4-Nitroaniline	10.135	138	61551	924.22	ng/ml	92
63) 4,6-Dinitro-2-methylph...	10.167	198	54640	1200.86	ng/ml	98
65) N-Nitrosodiphenylamine	10.237	169	309017	850.08	ng/ml	99
66) Azobenzene (1,2-DPH)	10.280	77	276283	751.04	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.617	248	112101	842.66	ng/ml	96
69) Hexachlorobenzene	10.697	284	133293	835.20	ng/ml	97
70) Pentachlorophenol (PCP)	10.889	266	73775	929.69	ng/ml	96
71) Phenanthrene	11.103	178	556454	841.32	ng/ml	99
72) Anthracene	11.157	178	554585	872.31	ng/ml	99
73) Carbazole	11.317	167	475766	942.51	ng/ml	98
74) Di-n-butyl phthalate	11.665	149	686257	984.26	ng/ml	99
75) Fluoranthene	12.360	202	646890	954.27	ng/ml	99
76) Benzidine	12.521	184	80	123.46	ng/ml#	1
77) Pyrene	12.649	202	660857	957.96	ng/ml	98
80) Butyl benzyl phthalate	13.644	149	309024	1001.86	ng/ml	94
81) Bis(2-ethylhexyl) adipate	13.815	129	283638	1014.64	ng/ml	98
82) 3,3-Dichlorobenzidine	14.751	252	196810	2081.88	ng/ml	97
83) Benz(a)anthracene	14.783	228	617464	917.56	ng/ml	97
84) Chrysene	14.864	228	570368	904.44	ng/ml	99
85) Bis(2-ethylhexyl) phth...	14.960	149	421857	973.02	ng/ml	98
87) Di-n-octyl phthalate	16.623	149	750775	1043.69	ng/ml	99
88) Benzo(b)fluoranthene	17.361	252	626506	910.12	ng/ml	99
89) Benzo(k)fluoranthene	17.426	252	614817	882.11	ng/ml	97
90) Benzo(b+k)fluoranthene	17.426	252	1257592	1775.61	ng/ml	97
91) Benzo(e)pyrene	18.014	252	603683	938.98	ng/ml	100
92) Benzo(a)pyrene	18.137	252	572789	915.47	ng/ml	99
93) Perylene	18.335	252	577161	1023.11	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.661	276	553186	856.05	ng/ml	93
96) Dibenz(a,h)anthracene	20.736	278	528419	890.63	ng/ml	99
97) Benzo(g,h,i)perylene	21.202	276	571596	920.89	ng/ml	97

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

Data Path : T:\data\2019-10\9J02030\
Data File : J10021917.D
Acq On : 2 Oct 2019 5:51 pm
Operator : JK/ AMS/ DTH
Sample : 9100526-BSD2@4
Misc : 4x, 8270D LL P/P/P / 625 FULL LIST CUSTOM
ALS Vial : 14 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:51:49 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH
Sample : A9I0887-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

AMS 10/3/19

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.520	152	291078	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.787	136	1127715	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.568	162	600842	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.082	188	1085585	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.799	240	1088672	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.270	264	1063507	2000.00 ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.661	292	917575	2000.00 ng/ml	0.00
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.247	112	370415	2097.05 ng/ml	0.00
5) Phenol-d6(Surr)	6.167	99	268992	1189.75 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.070	82	591944	3374.84 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.878	172	1383941	2943.15 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.371	330	266996	4099.73 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.852	244	1665974	3320.64 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.893	74	209	N.D.	
3) Pyridine	3.925	79	1523m	8.06 ng/ml#	
6) Phenol	6.177	94	8964	36.06 ng/ml	67
7) Aniline	6.188	93	378	N.D.	
8) Bis(2-chloroethyl) ether	6.247	93	1206	5.38 ng/ml#	60
9) 2-Chlorophenol	6.316	128	317	N.D.	
10) 1,3-Dichlorobenzene	6.541	146	359	N.D.	
11) 1,4-Dichlorobenzene	6.541	146	375	N.D.	
12) Benzyl alcohol	6.664	108	807	30.99 ng/ml#	7
13) 1,2-Dichlorobenzene	6.691	146	58	N.D.	
14) 2-Methylphenol	6.766	107	799	5.33 ng/ml#	35
15) 2,2'-Oxybis(1-Chloropr...	6.798	45	179	N.D.	
16) N-Nitrosodi-n-propylamine	6.915	70	464	3.56 ng/ml	61
17) 3+4-Methylphenol	6.921	107	544	2.93 ng/ml#	1
18) Hexachloroethane	0.000		0	N.D.	
20) Nitrobenzene	7.070	77	2175	12.24 ng/ml#	36
22) Isophorone	7.322	82	938	2.61 ng/ml#	48
23) 2-Nitrophenol	7.413	139	246	44.52 ng/ml#	58
24) 2,4-Dimethylphenol	7.429	122	145	N.D.	
25) Bis(2-chloroethoxy) me...	7.536	93	120	N.D.	
26) Benzoic acid	7.498	105	16260	982.79 ng/ml	92
27) 2,4-Dichlorophenol	7.653	162	87	25.41 ng/ml#	1
28) 1,2,4-Trichlorobenzene	7.755	180	98	N.D.	
29) Naphthalene	7.809	128	13018	21.94 ng/ml	97
30) 4-Chloroaniline	7.841	127	300	14.81 ng/ml#	1
31) Hexachlorobutadiene	0.000		0	N.D.	
32) 4-Chloro-3-methylphenol	8.354	107	692	4.62 ng/ml	75
33) 2-Methylnaphthalene	8.509	142	2738	6.61 ng/ml	98
34) 1-Methylnaphthalene	8.611	142	1335	3.33 ng/ml	72
36) Hexachlorocyclopentadiene	0.000		0	N.D.	
37) 2,4,6-Trichlorophenol	8.793	196	104	24.63 ng/ml	72
38) 2,4,5-Trichlorophenol	8.793	198	95	23.58 ng/ml#	64
39) 1,1'-Biphenyl	8.980	154	3378	6.54 ng/ml	90
41) 2-Chloronaphthalene	9.017	162	310	N.D.	
42) 2-Nitroaniline	9.108	138	80	31.17 ng/ml#	1
43) 2,6-Dimethylnaphthalene	9.140	156	744	N.D.	

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH #AMS 10/3/19
Sample : A9I0887-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10

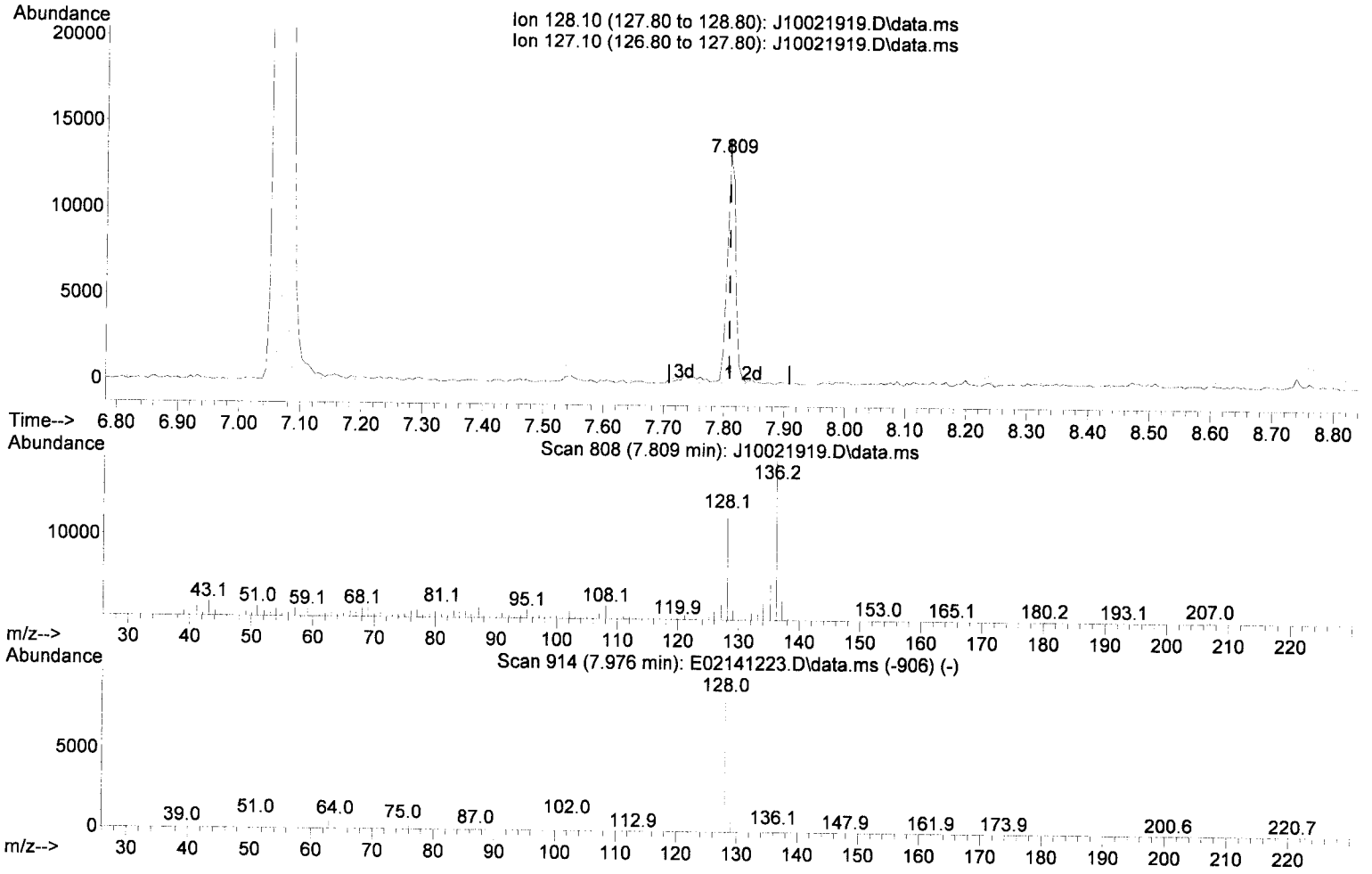
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.301	168	63	67.61 ng/ml#	1
45) Dimethyl phthalate	9.279	163	375	N.D.	
46) 1,3-Dinitrobenzene	9.301	168	63	58.89 ng/ml#	1
47) 2,6-Dinitrotoluene	9.333	165	604	31.07 ng/ml#	46
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.424	152	885	N.D.	
50) 3-Nitroaniline	9.531	138	86	30.62 ng/ml#	1
51) Acenaphthene	9.600	153	1839	4.59 ng/ml	84
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	9.681	139	170	76.59 ng/ml#	1
54) 2,4-Dinitrotoluene	9.745	165	118	54.65 ng/ml#	43
55) Dibenzofuran	9.772	168	659	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	9.996	149	1818	4.55 ng/ml	89
59) 2,3,5-Trimethylnaphtha...	9.969	170	401	N.D.	
60) Fluorene	10.119	166	749	N.D.	
61) 4-Chlorophenyl phenyl ...	10.114	204	126	N.D.	
62) 4-Nitroaniline	10.119	138	122	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	10.248	169	617	N.D.	
66) Azobenzene (1,2-DPH)	10.296	77	586	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.889	266	186	78.93 ng/ml#	45
71) Phenanthrene	11.103	178	3854	6.33 ng/ml	100
72) Anthracene	11.151	178	730	N.D.	
73) Carbazole	11.312	167	301	6.11 ng/ml#	32
74) Di-n-butyl phthalate	11.665	149	42352	65.97 ng/ml	97
75) Fluoranthene	12.360	202	6297	(10.09 ng/ml	93
76) Benzidine	12.515	184	95	123.59 ng/ml#	1
77) Pyrene	12.644	202	14631	123.03 ng/ml	95
80) Butyl benzyl phthalate	13.639	149	1327	34.07 ng/ml	82
81) Bis(2-ethylhexyl) adipate	13.810	129	17777	70.40 ng/ml	98
82) 3,3-Dichlorobenzidine	14.719	252	80	Below Cal #	25
83) Benz(a)anthracene	14.799	228	6056	(9.96) ng/ml	77
84) Chrysene	14.858	228	2867	5.03 ng/ml	95
85) Bis(2-ethylhexyl) phth...	14.954	149	14773	37.72 ng/ml	99
87) Di-n-octyl phthalate	16.639	149	251	58.33 ng/ml#	1
88) Benzo(b)fluoranthene	17.356	252	1033	9.72 ng/ml	88
89) Benzo(k)fluoranthene	17.415	252	383	9.10 ng/ml#	25
90) Benzo(b+k)fluoranthene	17.463	252	64	15.84 ng/ml#	1
91) Benzo(e)pyrene	17.992	252	863	N.D.	
92) Benzo(a)pyrene	18.110	252	925	11.56 ng/ml	91
93) Perylene	18.270	252	3664	7.64 ng/ml	77
95) Indeno(1,2,3-cd)pyrene	20.645	276	491	N.D.	
96) Dibenz(a,h)anthracene	20.731	278	66	N.D.	
97) Benzo(g,h,i)perylene	21.180	276	530	N.D.	

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

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH AMS 10/3/19
Sample : A9I088-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021919.D\data.ms

(29) Naphthalene (T)

7.809min (-0.000) 21.94 ng/ml

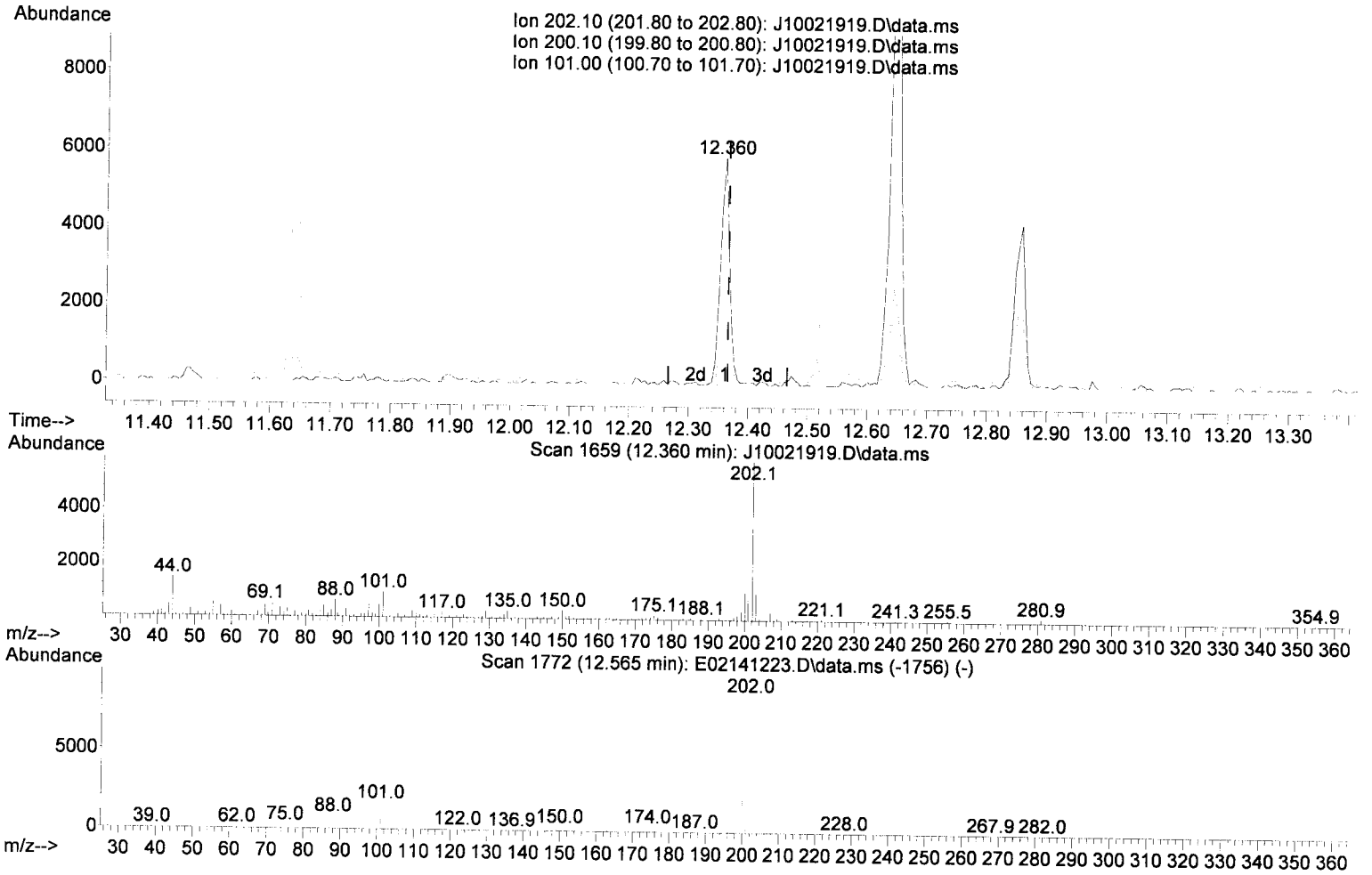
response 13018

Ion	Exp%	Act%
128.10	100.00	100.00
127.10	12.70	14.01
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH AMS 10/3/19
Sample : A9I0887-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021919.D\data.ms

(75) Fluoranthene (T)

12.360min (-0.005) 10.09 ng/ml

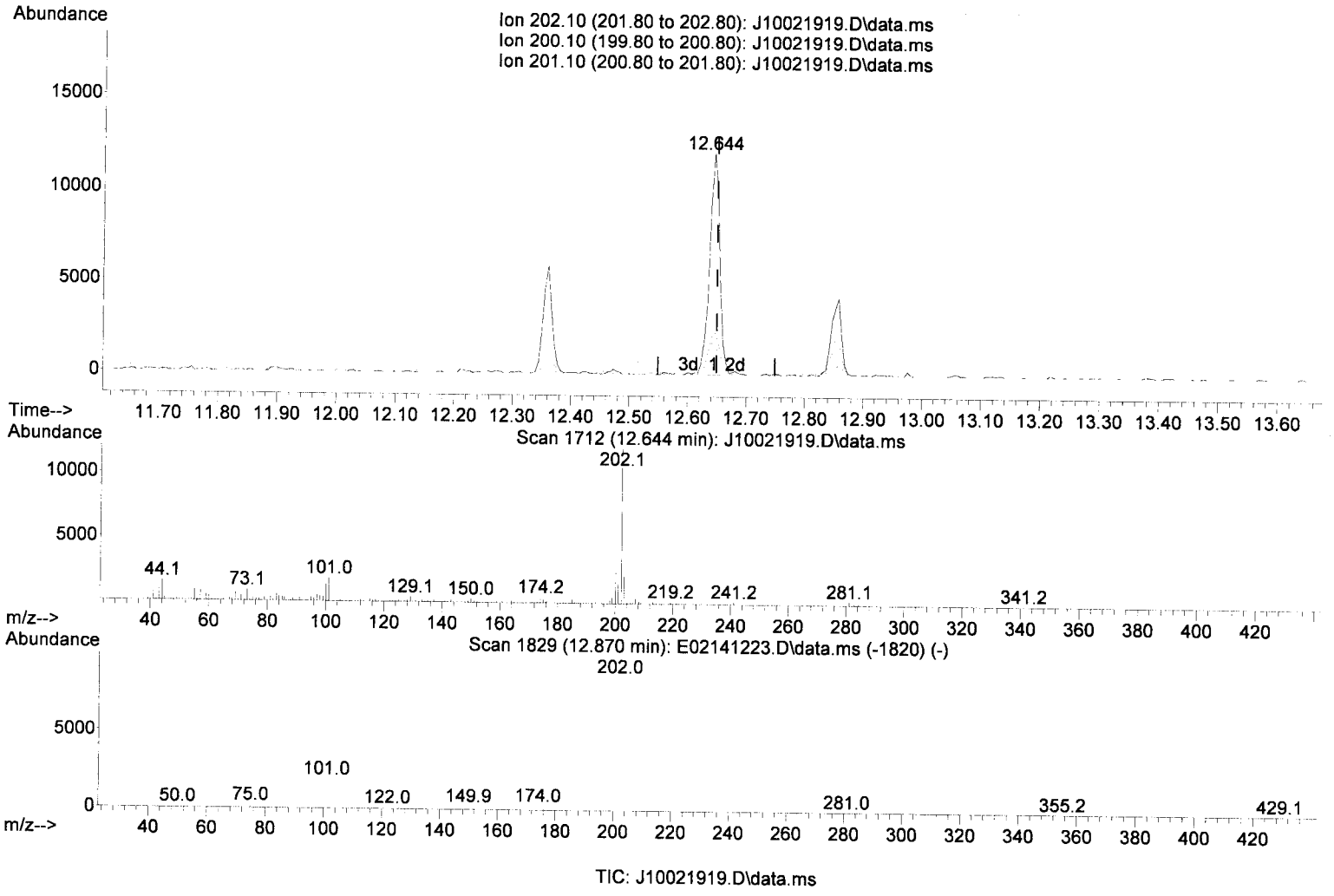
response 6297

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.90	17.36
101.00	13.50	16.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH AMS 10/3/19
Sample : A9I0887-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021919.D\data.ms

(77) Pyrene (T)

12.644min (-0.005) 23.03 ng/ml

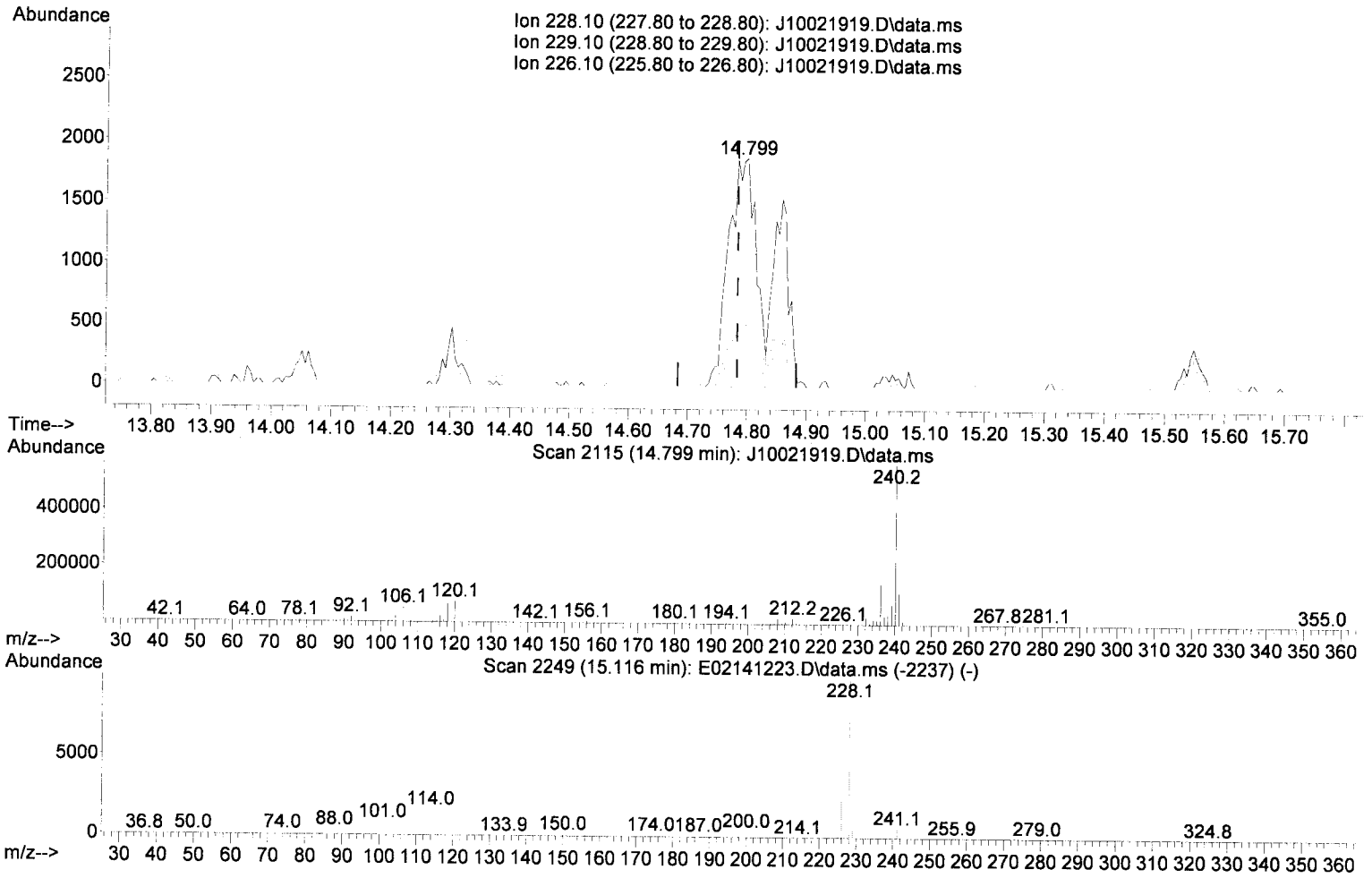
response 14631

Ion	Exp%	Act%
202.10	100.00	100.00
200.10	20.60	20.95
201.10	16.70	12.74
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH AMS 10/3/19
Sample : A9I0887-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J10021919.D\data.ms

(83) Benz(a)anthracene (T)

14.799min (+ 0.016) 9.96 ng/ml

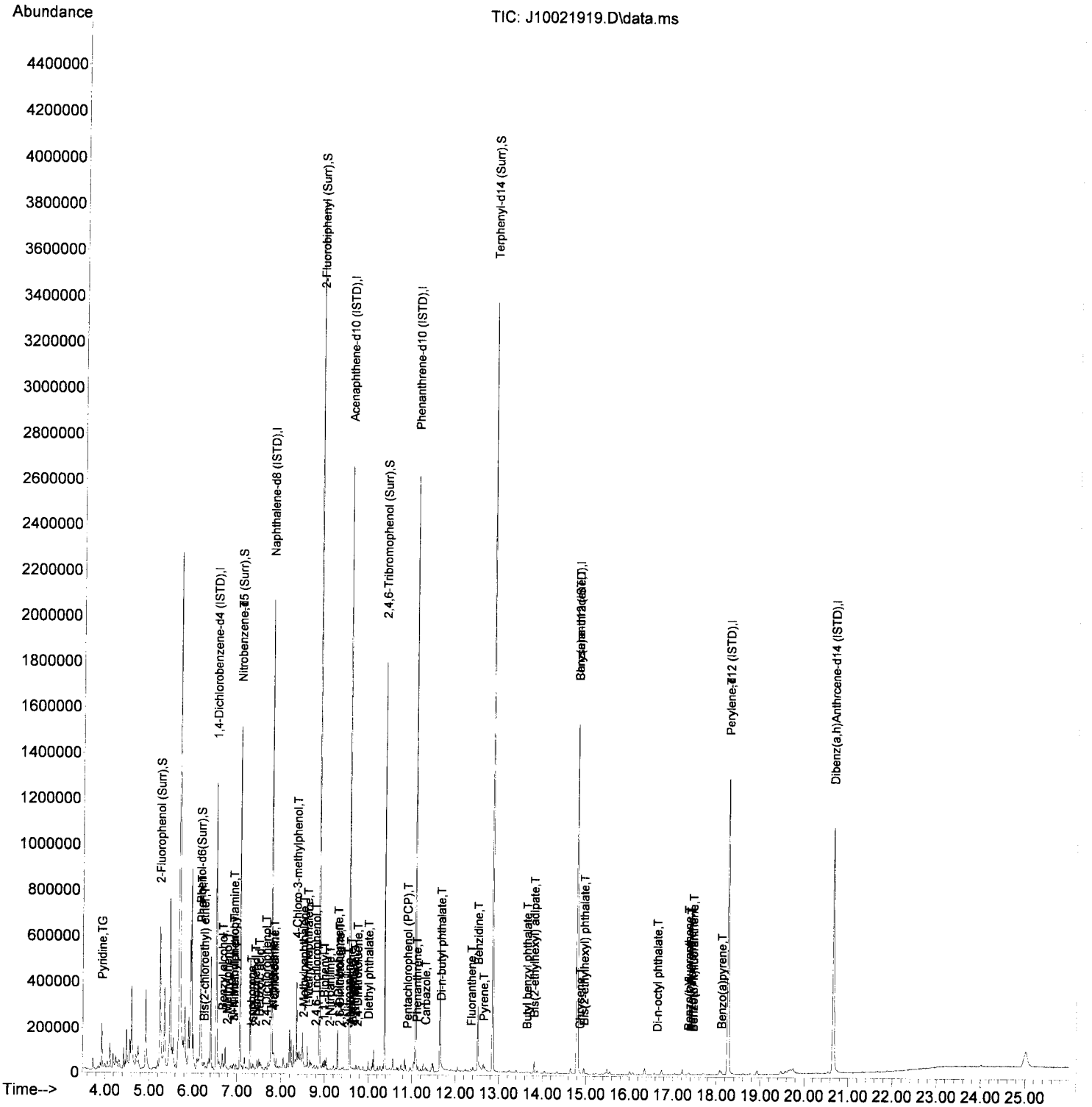
response 6056

Ion	Exp%	Act%
228.10	100.00	100.00
229.10	19.60	28.13
226.10	27.90	13.80
0.00	0.00	0.00

No Name Entered Quantitation Report (Not Reviewed)

Data Path : T:\data\2019-10\9J02030\
Data File : J10021919.D
Acq On : 2 Oct 2019 7:02 pm
Operator : JK/ AMS/ DTH
Sample : A9I0880-01
Misc : 1x, 8270D LL PAH/BEHP
ALS Vial : 16 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Oct 03 10:52:02 2019
Quant Method : T:\methods\SV10_091919R1.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Mon Sep 30 10:30:27 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Semivolatile Organic Compounds (PAHs) by EPA 8270D
Calibration Data

Sequence 9I19035 (Cal ID A9I2405) SV-GCMS10

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence:	**9I19035**	Instrument:	**SV-GCMS10**
Date:	**09/19/19 17:44**	Calibration:	**A9I2405**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9I19035-IBL1	Water	QC	QC			A19I086	
2	9I19035-TUN1	Water	QC	QC			A19I086	A19I165
3	9I19035-ICB1	Water	QC	QC			A19I086	
4	9I19035-CAL1	Water	QC	QC			A19I086	A19G238
5	9I19035-CAL2	Water	QC	QC			A19I086	A19G239
6	9I19035-CAL3	Water	QC	QC			A19I086	A19G240
7	9I19035-CAL4	Water	QC	QC			A19I086	A19G241
8	9I19035-CAL5	Water	QC	QC			A19I086	A19G242
9	9I19035-CAL6	Water	QC	QC			A19I086	A19G243
10	9I19035-CAL7	Water	QC	QC			A19I086	A19G244
11	9I19035-CAL8	Water	QC	QC			A19I086	A19G245
12	9I19035-CAL9	Water	QC	QC			A19I086	A19G246
13	9I19035-CALA	Water	QC	QC			A19I086	A19G247
14	9I19035-IBL2	Water	QC	QC			A19I086	
15	9I19035-ICV1	Water	QC	QC			A19I086	A19I254
16	9I19035-IBL3	Water	QC	QC			A19I086	

Data Entered By: 9/24/19

Data Reviewed By: 9/26/19

Comments:

Calibration Status Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

A9I 2405

9/23/19

#	ID	Conc	ISTD Conc	Path\File
1	20	20	2000	C:\msdchem\1\data\2019-09\9I19035\J09191918.D
2	50	50	2000	C:\msdchem\1\data\2019-09\9I19035\J09191919.D
3	100	100	2000	C:\msdchem\1\data\2019-09\9I19035\J09191920.D
4	200	200	2000	C:\msdchem\1\data\2019-09\9I19035\J09191921.D
5	500	500	2000	C:\msdchem\1\data\2019-09\9I19035\J09191922.D
6	1000	1000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191923.D
7	2000	2000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191924.D
8	4000	4000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191925.D
9	6000	6000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191926.D
10	8000	8000	2000	C:\msdchem\1\data\2019-09\9I19035\J09191927.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Sep 20 10:40 2019	Sep 20 10:14 2019	20 Sep 2019 1:24 am
2	50	Sep 20 10:40 2019	Sep 20 10:17 2019	20 Sep 2019 1:59 am
3	100	Sep 20 10:40 2019	Sep 20 10:18 2019	20 Sep 2019 2:34 am
4	200	Sep 20 10:40 2019	Sep 20 10:21 2019	20 Sep 2019 3:09 am
5	500	Sep 20 10:40 2019	Sep 20 10:22 2019	20 Sep 2019 3:44 am
6	1000	Sep 20 10:40 2019	Sep 20 09:46 2019	20 Sep 2019 4:19 am
7	2000	Sep 20 10:40 2019	Sep 20 09:46 2019	20 Sep 2019 4:54 am
8	4000	Sep 20 10:40 2019	Sep 20 10:28 2019	20 Sep 2019 5:29 am
9	6000	Sep 20 10:40 2019	Sep 20 10:29 2019	20 Sep 2019 6:04 am
10	8000	Sep 20 10:41 2019	Sep 20 10:30 2019	20 Sep 2019 6:39 am

SV10_091919.M Fri Sep 20 14:11:04 2019

Compound List Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

9/20/19

Total Cpnds : 97

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4 (ISTD)	152	6.568	1.000	A	2	A	R
2	T	N-Nitrosodimethylamine	74	3.883	0.591	A	2	A	A
3	T	Pyridine	79	3.904	0.594	A	2	A	A
4	S	2-Fluorophenol (Surr)	112	5.289	0.805	A	1	A	R
5	S	Phenol-d6(Surr)	99	6.204	0.945	A	2	A	R
6	T	Phenol	94	6.215	0.946	A	2	A	R
7	T	Aniline	93	6.241	0.950	A	2	A	R
8	T	Bis(2-chloroethyl) ether	93	6.305	0.960	A	2	A	R
9	T	2-Chlorophenol	128	6.364	0.969	A	2	A	R
10	T	1,3-Dichlorobenzene	146	6.514	0.992	A	2	A	R
11	T	1,4-Dichlorobenzene	146	6.584	1.002	A	2	A	R
12	T	Benzyl alcohol	108	6.701	1.020	Q	2	A	R
13	T	1,2-Dichlorobenzene	146	6.739	1.026	A	2	A	R
14	T	2-Methylphenol	107	6.808	1.037	A	2	A	R
15	T	2,2'-Oxybis(1-Chloropropane)	45	6.835	1.041	A	2	A	R
16	T	N-Nitrosodi-n-propylamine	70	6.963	1.060	A	2	A	R
17	T	3+4-Methylphenol	107	6.958	1.059	A	3	A	R
18	T	Hexachloroethane	201	7.076	1.077	A	2	A	R
19	S	Nitrobenzene-d5 (Surr)	82	7.113	1.083	A	2	A	R
20	T	Nitrobenzene	77	7.129	1.085	A	2	A	R
21	I	Naphthalene-d8 (ISTD)	136	7.835	1.000	A	1	A	R
22	T	Isophorone	82	7.370	0.941	A	2	A	R
23	T	2-Nitrophenol	139	7.450	0.951	Q	2	A	R
24	T	2,4-Dimethylphenol	122	7.487	0.956	A	2	A	R
25	T	Bis(2-chloroethoxy) methane	93	7.579	0.967	A	2	A	R
26	T	Benzoic acid	105	7.578	0.967	Q	2	A	R
27	T	2,4-Dichlorophenol	162	7.690	0.981	Q	2	A	R
28	T	1,2,4-Trichlorobenzene	180	7.782	0.993	A	2	A	R
29	T	Naphthalene	128	7.857	1.003	A	1	A	R
30	T	4-Chloroaniline	127	7.904	1.009	Q	2	A	R
31	T	Hexachlorobutadiene	225	7.990	1.020	A	2	A	R
32	T	4-Chloro-3-methylphenol	107	8.386	1.070	A	2	A	R
33	T	2-Methylnaphthalene	142	8.557	1.092	A	2	A	R
34	T	1-Methylnaphthalene	142	8.659	1.105	A	2	A	R
35	I	Acenaphthene-d10 (ISTD)	162	9.616	1.000	A	2	A	R
36	T	Hexachlorocyclopentadiene	237	8.728	0.908	A	2	A	R
37	T	2,4,6-Trichlorophenol	196	8.840	0.919	Q	2	A	R
38	T	2,4,5-Trichlorophenol	198	8.872	0.923	Q	2	A	R
39	T	1,1'-Biphenyl	154	9.028	0.939	A	2	A	R
40	S	2-Fluorobiphenyl (Surr)	172	8.926	0.928	A	2	A	R
41	T	2-Chloronaphthalene	162	9.049	0.941	A	2	A	R
42	T	2-Nitroaniline	138	9.145	0.951	Q	2	A	R
43	T	2,6-Dimethylnaphthalene	156	9.188	0.955	A	2	A	R
44	T	1,4-Dinitrobenzene	168	9.274	0.964	Q	2	A	R
45	T	Dimethyl phthalate	163	9.333	0.971	A	2	A	R
46	T	1,3-Dinitrobenzene	168	9.354	0.973	Q	2	A	R
47	T	2,6-Dinitrotoluene	165	9.391	0.977	Q	2	A	R
48	T	1,2-Dinitrobenzene	168	9.445	0.982	A	2	A	R
49	T	Acenaphthylene	152	9.471	0.985	A	2	A	R
50	T	3-Nitroaniline	138	9.562	0.994	Q	2	A	R
51	T	Acenaphthene	153	9.648	1.003	A	2	A	R
52	T	2,4-Dinitrophenol	184	9.664	1.005	Q	2	A	R
53	T	4-Nitrophenol	139	9.723	1.011	Q	2	A	R
54	T	2,4-Dinitrotoluene	165	9.798	1.019	Q	2	A	R

55	T	Dibenzofuran	168	9.825	1.022	A		2	A	R
56	T	2,3,5,6-Tetrachlorophenol	232	9.905	1.030	Q		2	A	R
57	T	2,3,4,6-Tetrachlorophenol	232	9.947	1.034	Q		2	A	R
58	T	Diethyl phthalate	149	10.050	1.045	A		2	A	R
59	T	2,3,5-Trimethylnaphthalene	170	10.039	1.044	A		2	A	R
60	T	Fluorene	166	10.172	1.058	A		2	A	R
61	T	4-Chlorophenyl phenyl ether	204	10.167	1.057	A		2	A	R
62	T	4-Nitroaniline	138	10.183	1.059	A		2	A	R
63	T	4,6-Dinitro-2-methylphenol	198	10.215	1.062	Q		2	A	R
64	I	Phenanthrene-d10 (ISTD)	188	11.135	1.000	A		2	A	R
65	T	N-Nitrosodiphenylamine	169	10.284	0.924	A		2	A	R
66	T	Azobenzene (1,2-DPH)	77	10.327	0.927	A		2	A	R
67	S	2,4,6-Tribromophenol (Surr)	330	10.418	0.936	Q		2	A	R
68	T	4-Bromophenyl phenyl ether	248	10.670	0.958	A		2	A	R
69	T	Hexachlorobenzene	284	10.745	0.965	A		2	A	R
70	T	Pentachlorophenol (PCP)	266	10.942	0.983	Q		2	A	R
71	T	Phenanthrene	178	11.156	1.002	A		2	A	R
72	T	Anthracene	178	11.210	1.007	A		2	A	R
73	T	Carbazole	167	11.365	1.021	Q		2	A	R
74	T	Di-n-butyl phthalate	149	11.718	1.052	A		2	A	R
75	T	Fluoranthene	202	12.424	1.116	A		2	A	R
76	T	Benzidine	184	12.579	1.130	Q		2	A	R
77	T	Pyrene	202	12.713	1.142	A		2	A	R
78	I	Chrysene-d12 (ISTD)	240	14.917	1.000	A		2	A	R
79	S	Terphenyl-d14 (Surr)	244	12.922	0.866	A		2	A	R
80	T	Butyl benzyl phthalate	149	13.734	0.921	Q		2	A	R
81	T	Bis(2-ethylhexyl) adipate	129	13.911	0.933	A		2	A	R
82	T	3,3-Dichlorobenzidine	252	14.863	0.996	Q		2	A	R
83	T	Benz(a)anthracene	228	14.890	0.998	A		2	A	R
84	T	Chrysene	228	14.976	1.004	A		2	A	R
85	T	Bis(2-ethylhexyl) phthalate	149	15.071	1.010	A		2	A	R
86	I	Perylene-d12 (ISTD)	264	18.399	1.000	A		2	A	R
87	T	Di-n-octyl phthalate	149	16.746	0.910	Q		2	A	R
88	T	Benzo(b)fluoranthene	252	17.478	0.950	Q		2	A	R
89	T	Benzo(k)fluoranthene	252	17.548	0.954	Q		2	A	R
90	T	Benzo(b+k)fluoranthene	252	17.548	0.954	Q		2	A	R
91	T	Benzo(e)pyrene	252	18.137	0.986	A		2	A	R
92	T	Benzo(a)pyrene	252	18.254	0.992	Q		2	A	R
93	T	Perylene	252	18.458	1.003	A		2	A	B
94	I	Dibenz(a,h)Anthrcene-d14 (I...	292	20.795	1.000	A		1	A	B
95	T	Indeno(1,2,3-cd)pyrene	276	20.790	1.000	A		1	A	R
96	T	Dibenz(a,h)anthracene	278	20.865	1.003	A		2	A	R
97	T	Benzo(g,h,i)perylene	276	21.325	1.025	A		2	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

SV10_091919.M Fri Sep 20 12:56:52 2019

Response Factor Report SV-GCMS10

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics
Last Update : Fri Sep 20 10:41:03 2019
Response Via : Initial Calibration

9/23/19

Calibration Files
20 =J09191918.D 50 =J09191919.D 100 =J09191920.D 200 =J09191921.D 500 =J09191922.D 1000=J09191923.D 2000=J09191924.D
4000=J09191925.D 6000=J09191926.D 8000=J09191927.D

		Compound	20	50	100	200	500	1000	2000	4000	6000	8000	Avg	%RSD
														3.51
1)	I	1,4-Dichlorobenzen...	----------ISTD----------											
2)	TG	N-Nitrosodimet...	0.759	0.758	0.808	0.697	0.702	0.739	0.762	0.786	0.804	0.804	0.762	5.28
3)	TG	Pyridine			1.053	1.277	1.346	1.118	1.285	1.376	1.417	1.443	1.375	1.299	10.27
4)	S	2-Fluorophenol...	0.940	1.045	0.952	1.217	1.280	1.263	1.333	1.381	1.371	1.354	1.214	14.15
5)	S	Phenol-d6(Surr)	1.197	1.305	1.446	1.602	1.667	1.682	1.674	1.705	1.659	1.598	1.553	11.41
6)	T	Phenol	1.542	1.562	1.608	1.797	1.827	1.843	1.776	1.794	1.708	1.625	1.708	6.71
7)	T	Aniline			1.505	1.592	1.714	1.671	1.336	1.129	1.375	1.569	1.374	1.474	12.65
8)	T	Bis(2-chloroet...	1.409	1.401	1.477	1.489	1.547	1.678	1.759	1.573				1.542	8.18
9)	T	2-Chlorophenol	1.231	1.299	1.339	1.474	1.520	1.505	1.485	1.475	1.445	1.389	1.416	6.89
10)	T	1,3-Dichlorobe...	1.526	1.590	1.641	1.679	1.688	1.625	1.631	1.578	1.503	1.457	1.592	4.80
11)	T	1,4-Dichlorobe...	1.540	1.656	1.606	1.633	1.652	1.622	1.590	1.515	1.433	1.397	1.564	5.83
12)	T	Benzyl alcohol		0.475	0.613	0.639	0.793	0.881	0.917	0.951	0.916	0.866	0.783	21.39
13)	T	1,2-Dichlorobe...	1.431	1.680	1.634	1.675	1.672	1.602	1.552	1.481	1.383	1.318	1.543	8.56
14)	T	2-Methylphenol	0.930	0.880	0.981	1.077	1.155	1.148	1.117	1.057	1.001	0.957	1.030	9.22
15)	T	2,2'-Oxybis(1-...	1.500	1.454	1.504	1.552	1.511	1.442	1.285	1.209	1.125	1.024	1.360	13.68
16)	T	N-Nitrosodi-n-...	0.922	0.898	0.938	0.991	0.999	0.963	0.901	0.825	0.768	0.745	0.895	9.91
17)	T	3+4-Methylphenol	1.065	1.133	1.160	1.345	1.441	1.458	1.401	1.305	1.189		1.277	11.32
18)	T	Hexachloroethane	0.434	0.455	0.452	0.472	0.494	0.484	0.503	0.510	0.500	0.503	0.481	5.45
19)	S	Nitrobenzene-d...	0.981	1.085	1.135	1.209	1.313	1.322	1.282	1.286	1.246	1.193	1.205	9.14
20)	T	Nitrobenzene	1.076	1.183	1.189	1.302	1.341	1.327	1.281	1.234	1.165	1.113	1.221	7.44
														4.83
21)	I	Naphthalene-d8 (ISTD)	----------ISTD----------											
22)	T	Isophorone	0.569	0.605	0.640	0.652	0.683	0.661	0.671	0.637	0.632	0.627	0.638	5.17
23)	T	2-Nitrophenol			0.122	0.135	0.180	0.201	0.189	0.201	0.201	0.195	0.178	17.69
24)	T	2,4-Dimethylph...		0.198	0.249	0.265	0.283	0.287	0.304	0.287	0.284	0.256	0.268	11.73
25)	T	Bis(2-chloroet...	0.388	0.385	0.394	0.408	0.432	0.413	0.411	0.376	0.348	0.321	0.388	8.46
26)	T	Benzoic acid					0.037	0.087	0.142	0.188	0.195	0.216	0.144	48.51
27)	T	2,4-Dichloroph...		0.170	0.214	0.252	0.295	0.303	0.320	0.305	0.287	0.272	0.269	18.30
28)	T	1,2,4-Trichlor...	0.357	0.371	0.359	0.374	0.372	0.362	0.355	0.336	0.317	0.297	0.350	7.29
29)	T	Naphthalene	1.146	1.151	1.167	1.173	1.186	1.117	1.076	0.925	0.826	0.754	1.052	15.05
30)	T	4-Chloroaniline	0.125	0.244	0.255	0.320	0.351	0.349	0.340	0.277	0.276	0.276	0.281	23.94
31)	T	Hexachlorobuta...	0.184	0.200	0.195	0.200	0.201	0.199	0.191	0.185	0.174	0.163	0.189	6.74
32)	T	4-Chloro-3-met...			0.197	0.220	0.278	0.284	0.309	0.291	0.278	0.266	0.265	14.24
33)	T	2-Methylnaphth...	0.706	0.774	0.776	0.819	0.833	0.793	0.783	0.679	0.620	0.570	0.735	12.00
34)	T	1-Methylnaphth...	0.737	0.770	0.777	0.793	0.804	0.752	0.740	0.635	0.577	0.532	0.712	13.43
														3.37
35)	I	Acenaphthene-d10 (...	----------ISTD----------											
36)	T	Hexachlorocycl...		0.218	0.261	0.286	0.327	0.342	0.363	0.328	0.338	0.320	0.309	14.82
37)	T	2,4,6-Trichlor...		0.237	0.257	0.307	0.384	0.402	0.423	0.419	0.401	0.389	0.358	19.99
38)	T	2,4,5-Trichlor...		0.237	0.270	0.301	0.381	0.390	0.418	0.406	0.393	0.366	0.351	18.51
39)	T	1,1'-Biphenyl	1.593	1.862	1.891	1.926	1.923	1.827	1.723	1.451	1.275		1.719	13.51

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
Title : EPA 8270D: Semivolatile Organics

40)	S	2-Fluorobiphen...	1.477	1.610	1.735	1.751	1.740	1.652	1.564	1.351	1.207		1.565	12.07
41)	T	2-Chloronaphth...	1.194	1.263	1.356	1.408	1.432	1.325	1.296	1.154	1.045	0.943	1.242	12.73
42)	T	2-Nitroaniline		0.177	0.224	0.264	0.357	0.389	0.424	0.415	0.416	0.398	0.340	27.55
43)	T	2,6-Dimethylna...	1.108	1.335	1.410	1.426	1.405	1.336	1.263	1.089	0.979		1.261	12.95
44)	T	1,4-Dinitroben...			0.065	0.084	0.127	0.151	0.184	0.203	0.205	0.206	0.153	36.62
45)	T	Dimethyl phtha...	1.435	1.460	1.596	1.570	1.600	1.540	1.481	1.346	1.249	1.166	1.444	10.30
46)	T	1,3-Dinitroben...			0.099	0.125	0.180	0.196	0.220	0.228	0.229	0.221	0.187	26.72
47)	T	2,6-Dinitrotol...		0.189	0.212	0.275	0.327	0.334	0.344	0.334	0.324	0.306	0.294	19.32
48)	T	1,2-Dinitroben...				0.119	0.146	0.155	0.160	0.159	0.150	0.136	0.146	10.12
49)	T	Acenaphthylene	1.944	2.090	2.211	2.226	2.309	2.184	2.067	1.748	1.519		2.033	12.60
50)	T	3-Nitroaniline		0.137	0.196	0.256	0.282	0.261	0.196				0.221	24.71
51)	T	Acenaphthene	1.387	1.465	1.444	1.458	1.436	1.370	1.314	1.127	1.013		1.335	12.00
52)	T	2,4-Dinitrophenol				0.013	0.029	0.062	0.100	0.137	0.153		0.082	69.44
53)	T	4-Nitrophenol			0.068	0.095	0.164	0.201	0.242	0.257	0.263		0.184	42.54
54)	T	2,4-Dinitrotol...			0.221	0.277	0.369	0.398	0.439	0.437	0.413	0.366	0.365	21.35
55)	T	Dibenzofuran	1.822	1.907	2.037	2.018	1.983	1.887	1.852	1.604	1.422	1.264	1.780	14.79
56)	T	2,3,5,6-Tetrac...		0.109	0.184	0.216	0.296	0.315	0.344	0.342	0.335	0.322	0.274	30.66
57)	T	2,3,4,6-Tetrac...		0.163	0.236	0.262	0.323	0.347	0.364	0.355	0.339	0.326	0.302	22.30
58)	T	Diethyl phthalate	1.254	1.388	1.556	1.505	1.488	1.460	1.384	1.206	1.077	0.976	1.330	14.62
59)	T	2,3,5-Trimethy...	1.191	1.238	1.255	1.278	1.274	1.217	1.168	1.004	0.895	0.813	1.133	14.83
60)	T	Fluorene	1.423	1.444	1.592	1.562	1.562	1.460	1.385	1.151	1.025		1.401	13.79
61)	T	4-Chlorophenyl...	0.710	0.743	0.775	0.749	0.750	0.718	0.704	0.618	0.558	0.502	0.683	13.46
62)	T	4-Nitroaniline			0.181	0.210	0.234	0.216	0.220	0.221	0.217	0.220	0.215	7.13
63)	T	4,6-Dinitro-2-...				0.041	0.091	0.133	0.174	0.203	0.212	0.212	0.152	43.85
														4.15
64)	I	Phenanthrene-d10 (...	----------	ISTD	----------									
65)	T	N-Nitrosodiphe...	0.518	0.605	0.660	0.703	0.703	0.658	0.604	0.483			0.617	13.21
66)	T	Azobenzene (1,...	0.596	0.640	0.676	0.698	0.710	0.667	0.627	0.537	0.465		0.624	12.85
67)	S	2,4,6-Tribromo...		0.071	0.086	0.099	0.120	0.122	0.130	0.125	0.118	0.112	0.109	18.24
68)	T	4-Bromophenyl ...	0.208	0.233	0.237	0.239	0.238	0.236	0.235	0.223	0.211	0.198	0.226	6.56
69)	T	Hexachlorobenzene	0.300	0.280	0.292	0.278	0.295	0.286	0.279	0.252	0.231	0.215	0.271	10.61
70)	T	Pentachlorophe...			0.078	0.070	0.108	0.122	0.142	0.148	0.145	0.138	0.119	26.11
71)	T	Phenanthrene	1.195	1.197	1.225	1.228	1.225	1.146	1.091	0.940	0.851		1.122	12.26
72)	T	Anthracene	0.995	1.126	1.166	1.205	1.196	1.143	1.088	0.944	0.844		1.079	11.55
73)	T	Carbazole	0.798	0.900	0.979	1.011	1.002	0.861	0.592				0.878	16.89
74)	T	Di-n-butyl pht...		1.071	1.257	1.259	1.318	1.283	1.235	1.082	0.958		1.183	10.85
75)	T	Fluoranthene	1.065	1.146	1.256	1.262	1.316	1.257	1.229	1.088	0.992	0.891	1.150	12.02
76)	T	Benzidine			0.114	0.197	0.271	0.284	0.275	0.307	0.320	0.323	0.261	27.45
77)	T	Pyrene	1.099	1.203	1.242	1.308	1.336	1.283	1.225	1.094	0.997	0.915	1.170	11.89
														4.74
78)	I	Chrysene-d12 (ISTD)	----------	ISTD	----------									
79)	S	Terphenyl-d14 ...	0.821	0.902	0.977	0.959	0.995	0.969	0.953	0.924	0.880	0.837	0.922	6.53
80)	T	Butyl benzyl p...		0.243	0.334	0.380	0.487	0.533	0.570	0.590	0.580	0.569	0.476	26.60
81)	T	Bis(2-ethylhex...				0.336	0.441	0.473	0.506	0.520	0.488	0.482	0.464	13.26
82)	T	3,3-Dichlorobe...				0.241	0.193	0.167	0.129	0.122	0.119	0.117	0.155	30.50
83)	T	Benz(a)anthracene	1.161	1.070	1.154	1.114	1.143	1.102	1.125	1.115	1.107	1.076	1.117	2.72
84)	T	Chrysene	0.995	1.051	1.094	1.080	1.094	1.062	1.054	1.041	1.009	0.985	1.046	3.74
85)	T	Bis(2-ethylhex...				0.521	0.706	0.743	0.776	0.790	0.763	0.737	0.719	12.78
														4.02
86)	I	Perylene-d12 (ISTD)	----------	ISTD	----------									
87)	T	Di-n-octyl pht...			0.597	0.694	0.979	1.136	1.337	1.352	1.295	1.229	1.077	27.27

Method Path : C:\msdchem\1\methods\
Method File : SV10_091919.M
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88)	T	Benzo(b)fluora...	0.716	0.795	1.016	1.038	1.109	1.109	1.178	1.183	1.177	1.128	1.045	15.65
89)	T	Benzo(k)fluora...	0.705	0.864	1.038	1.065	1.120	1.117	1.168	1.078	0.973	0.854	0.998	14.77
90)	T	Benzo(b+k)fluo...	0.734	0.871	1.068	1.079	1.136	1.134	1.191	1.148	1.113	1.060	1.053	13.45
91)	T	Benzo(e)pyrene	0.747	0.896	1.032	1.039	1.102	1.105	1.133	1.110	1.089	1.027	1.028	11.67
92)	T	Benzo(a)pyrene	0.574	0.677	0.889	0.917	1.028	1.027	1.091	1.049	1.010	0.968	0.923	18.38
93)	T	Perylene	0.801	0.900	0.892	0.920	0.951	0.914	0.954	0.913	0.908	0.867	0.902	4.87
94)	I	Dibenz(a,h)Anthrce...	----------ISTD----------											6.05
95)	T	Indeno(1,2,3-c...	1.102	1.169	1.176	1.156	1.171	1.152	1.205	1.224	1.230	1.241	1.183	3.60
96)	T	Dibenz(a,h)ant...	0.958	1.019	1.091	1.097	1.135	1.105	1.145	1.152	1.103	1.054	1.086	5.57
97)	T	Benzo(g,h,i)pe...	0.850	0.944	1.107	1.165	1.222	1.214	1.250	1.243	1.204	1.158	1.136	11.87

(#) = Out of Range

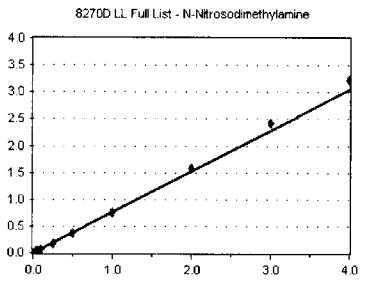
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

N-Nitrosodimethylamine

Curve Fit: **AVERAGE RF**

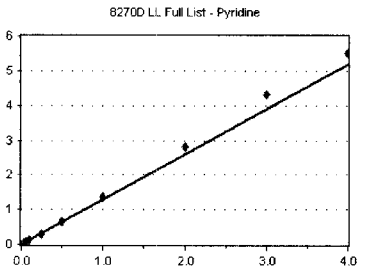


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2214	0.759	3.97
9I19035-CAL2	50	5516	0.758	3.95
9I19035-CAL3	100	11734	0.808	3.95
9I19035-CAL4	200	19941	0.697	3.92
9I19035-CAL5	500	52485	0.702	3.93
9I19035-CAL6	1000	104763	0.739	3.88
9I19035-CAL7	2000	217151	0.762	3.94
9I19035-CAL8	4000	480484	0.786	3.93
9I19035-CAL9	6000	674636	0.804	3.88
9I19035-CALA	8000	866525	0.804	3.96

AVE RF **0.762** RF RSD **5.28** AVE RT **3.93**

Pyridine

Curve Fit: **AVERAGE RF**

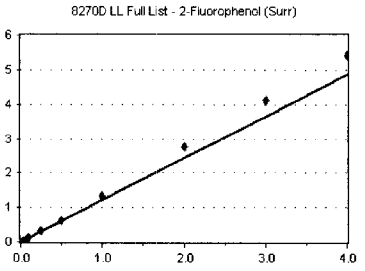


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2206~~	~~0.756~~	~~4.05~~
9I19035-CAL2	50	7667	1.053	4.00
9I19035-CAL3	100	18548	1.277	3.99
9I19035-CAL4	200	38499	1.346	3.95
9I19035-CAL5	500	83583	1.118	3.96
9I19035-CAL6	1000	182180	1.285	3.90
9I19035-CAL7	2000	392152	1.376	3.96
9I19035-CAL8	4000	866960	1.417	3.94
9I19035-CAL9	6000	1210013	1.443	3.89
9I19035-CALA	8000	1480958	1.375	3.96

AVE RF **1.299** RF RSD **10.27** AVE RT **3.95**

2-Fluorophenol (Surr)

Curve Fit: **AVERAGE RF**

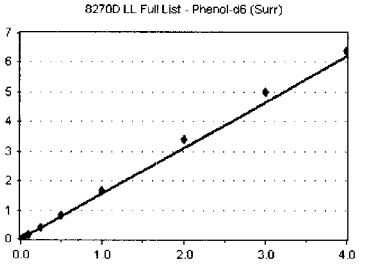


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2742	0.940	5.32
9I19035-CAL2	50	7611	1.045	5.31
9I19035-CAL3	100	13834	0.952	5.31
9I19035-CAL4	200	34817	1.217	5.30
9I19035-CAL5	500	95687	1.280	5.31
9I19035-CAL6	1000	179108	1.263	5.29
9I19035-CAL7	2000	379802	1.333	5.31
9I19035-CAL8	4000	844515	1.381	5.31
9I19035-CAL9	6000	1150405	1.371	5.30
9I19035-CALA	8000	1458990	1.354	5.32

AVE RF **1.214** RF RSD **14.15** AVE RT **5.31**

Phenol-d6 (Surr)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3493	1.197	6.20
9I19035-CAL2	50	9501	1.305	6.20
9I19035-CAL3	100	21003	1.446	6.20
9I19035-CAL4	200	45844	1.602	6.20
9I19035-CAL5	500	124621	1.667	6.20
9I19035-CAL6	1000	238398	1.682	6.20
9I19035-CAL7	2000	477001	1.674	6.21
9I19035-CAL8	4000	1043086	1.705	6.22
9I19035-CAL9	6000	1391310	1.659	6.22
9I19035-CALA	8000	1721904	1.598	6.23

AVE RF **1.553** RF RSD **11.41** AVE RT **6.21**

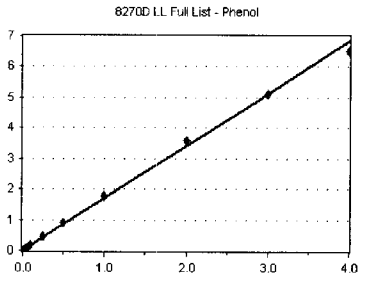
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Phenol

Curve Fit: **AVERAGE RF**

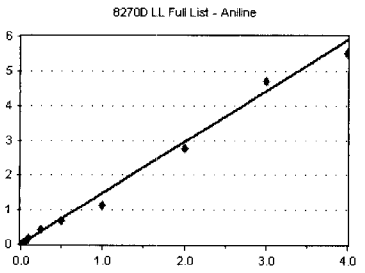


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4498	1.542	6.22
9I19035-CAL2	50	11373	1.562	6.22
9I19035-CAL3	100	23364	1.608	6.22
9I19035-CAL4	200	51417	1.797	6.22
9I19035-CAL5	500	136576	1.827	6.22
9I19035-CAL6	1000	261231	1.843	6.22
9I19035-CAL7	2000	506313	1.776	6.22
9I19035-CAL8	4000	1097096	1.794	6.23
9I19035-CAL9	6000	1432862	1.708	6.23
9I19035-CALA	8000	1750392	1.625	6.25

AVE RF **1.708** RF RSD **6.71** AVE RT **6.22**

Aniline

Curve Fit: **AVERAGE RF**

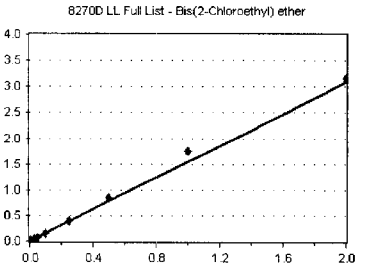


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2038~~	~~0.699~~	~~6.25~~
9I19035-CAL2	50	10955	1.505	6.25
9I19035-CAL3	100	23125	1.592	6.25
9I19035-CAL4	200	49031	1.714	6.25
9I19035-CAL5	500	124901	1.671	6.25
9I19035-CAL6	1000	189393	1.336	6.24
9I19035-CAL7	2000	321662	1.129	6.25
9I19035-CAL8	4000	840844	1.375	6.25
9I19035-CAL9	6000	1316393	1.569	6.25
9I19035-CALA	8000	1480736	1.374	6.26

AVE RF **1.474** RF RSD **12.65** AVE RT **6.25**

Bis(2-Chloroethyl) ether

Curve Fit: **AVERAGE RF**

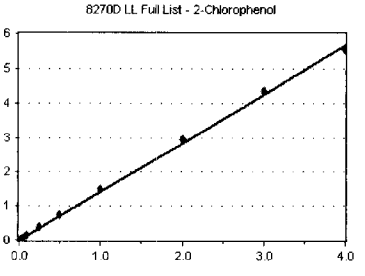


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4110	1.409	6.31
9I19035-CAL2	50	10198	1.401	6.31
9I19035-CAL3	100	21464	1.477	6.31
9I19035-CAL4	200	42595	1.489	6.31
9I19035-CAL5	500	115667	1.547	6.31
9I19035-CAL6	1000	237931	1.678	6.31
9I19035-CAL7	2000	501220	1.759	6.31
9I19035-CAL8	4000	962255	1.573	6.32
~~9I19035-CAL9~~	~~6000~~	~~1158478~~	~~1.381~~	~~6.32~~
~~9I19035-CALA~~	~~8000~~	~~1435010~~	~~1.332~~	~~6.32~~

AVE RF **1.542** RF RSD **8.18** AVE RT **6.31**

2-Chlorophenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3591	1.231	6.37
9I19035-CAL2	50	9461	1.299	6.36
9I19035-CAL3	100	19462	1.339	6.37
9I19035-CAL4	200	42160	1.474	6.36
9I19035-CAL5	500	113634	1.520	6.37
9I19035-CAL6	1000	213396	1.505	6.36
9I19035-CAL7	2000	423147	1.485	6.37
9I19035-CAL8	4000	902056	1.475	6.37
9I19035-CAL9	6000	1211719	1.445	6.37
9I19035-CALA	8000	1496104	1.389	6.38

AVE RF **1.416** RF RSD **6.89** AVE RT **6.37**

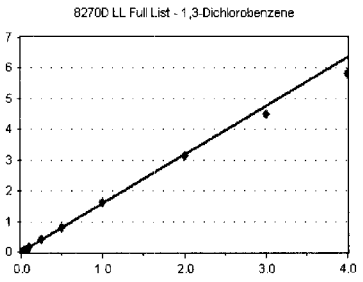
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,3-Dichlorobenzene

Curve Fit: **AVERAGE RF**

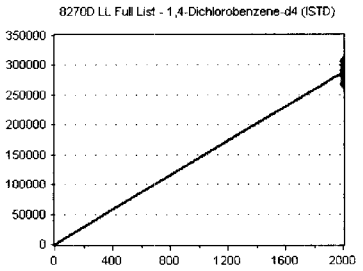


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4452	1.526	6.52
9I19035-CAL2	50	11576	1.590	6.52
9I19035-CAL3	100	23840	1.641	6.52
9I19035-CAL4	200	48050	1.679	6.51
9I19035-CAL5	500	126152	1.688	6.51
9I19035-CAL6	1000	230358	1.625	6.51
9I19035-CAL7	2000	464902	1.631	6.52
9I19035-CAL8	4000	965051	1.578	6.52
9I19035-CAL9	6000	1260484	1.503	6.52
9I19035-CALA	8000	1570022	1.457	6.53

AVE RF **1.592** RF RSD **4.80** AVE RT **6.52**

1,4-Dichlorobenzene-d4 (ISTD)

Curve Fit: **AVERAGE RF**

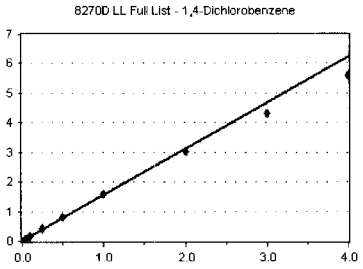


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	291746	145.873	6.57
9I19035-CAL2	2000	291253	145.626	6.57
9I19035-CAL3	2000	290594	145.297	6.57
9I19035-CAL4	2000	286105	143.053	6.57
9I19035-CAL5	2000	299020	149.510	6.57
9I19035-CAL6	2000	283511	141.755	6.57
9I19035-CAL7	2000	285023	142.511	6.57
9I19035-CAL8	2000	305814	152.907	6.57
9I19035-CAL9	2000	279602	139.801	6.57
9I19035-CALA	2000	269345	134.673	6.58

AVE RF **144.101** RF RSD **3.51** AVE RT **6.57**

1,4-Dichlorobenzene

Curve Fit: **AVERAGE RF**

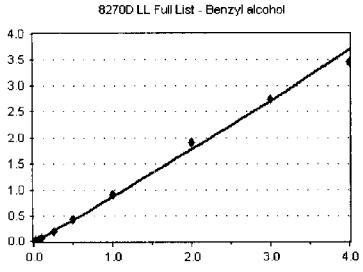


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4492	1.540	6.59
9I19035-CAL2	50	12059	1.656	6.59
9I19035-CAL3	100	23338	1.606	6.59
9I19035-CAL4	200	46724	1.633	6.58
9I19035-CAL5	500	123497	1.652	6.59
9I19035-CAL6	1000	229877	1.622	6.58
9I19035-CAL7	2000	453326	1.590	6.59
9I19035-CAL8	4000	926647	1.515	6.59
9I19035-CAL9	6000	1202300	1.433	6.59
9I19035-CALA	8000	1504749	1.397	6.59

AVE RF **1.564** RF RSD **5.83** AVE RT **6.59**

Benzyl alcohol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1506~~	~~0.516~~	~~6.72~~
9I19035-CAL2	50	3460	0.475	6.71
9I19035-CAL3	100	8907	0.613	6.71
9I19035-CAL4	200	18281	0.639	6.70
9I19035-CAL5	500	59263	0.793	6.70
9I19035-CAL6	1000	124850	0.881	6.70
9I19035-CAL7	2000	261354	0.917	6.71
9I19035-CAL8	4000	581465	0.951	6.71
9I19035-CAL9	6000	768204	0.916	6.71
9I19035-CALA	8000	932774	0.866	6.72

AVE RF **0.783** RF RSD **21.39** AVE RT **6.71**

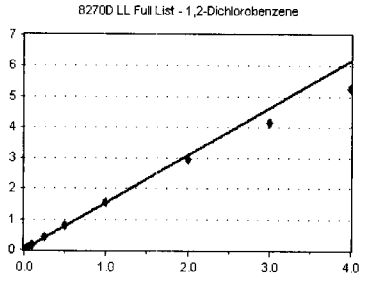
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,2-Dichlorobenzene

Curve Fit: **AVERAGE RF**

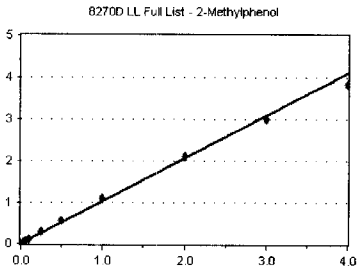


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4176	1.431	6.74
9I19035-CAL2	50	12229	1.680	6.74
9I19035-CAL3	100	23746	1.634	6.74
9I19035-CAL4	200	47924	1.675	6.74
9I19035-CAL5	500	124976	1.672	6.74
9I19035-CAL6	1000	227139	1.602	6.74
9I19035-CAL7	2000	442316	1.552	6.74
9I19035-CAL8	4000	906070	1.481	6.74
9I19035-CAL9	6000	1159865	1.383	6.74
9I19035-CALA	8000	1419977	1.318	6.74

AVE RF **1.543** RF RSD **8.56** AVE RT **6.74**

2-Methylphenol

Curve Fit: **AVERAGE RF**

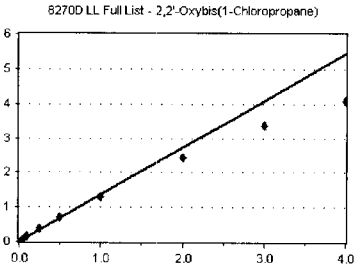


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2712	0.930	6.81
9I19035-CAL2	50	6405	0.880	6.81
9I19035-CAL3	100	14254	0.981	6.81
9I19035-CAL4	200	30801	1.077	6.81
9I19035-CAL5	500	86329	1.155	6.81
9I19035-CAL6	1000	162716	1.148	6.81
9I19035-CAL7	2000	318341	1.117	6.81
9I19035-CAL8	4000	646688	1.057	6.81
9I19035-CAL9	6000	839569	1.001	6.82
9I19035-CALA	8000	1030806	0.957	6.82

AVE RF **1.030** RF RSD **9.22** AVE RT **6.81**

2,2'-Oxybis(1-Chloropropane)

Curve Fit: **AVERAGE RF**

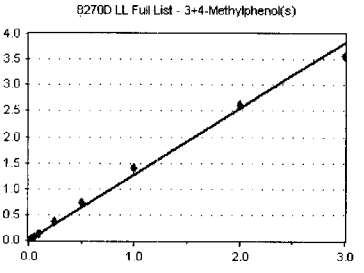


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4376	1.500	6.84
9I19035-CAL2	50	10585	1.454	6.84
9I19035-CAL3	100	21848	1.504	6.84
9I19035-CAL4	200	44401	1.552	6.84
9I19035-CAL5	500	112933	1.511	6.84
9I19035-CAL6	1000	204366	1.442	6.84
9I19035-CAL7	2000	366117	1.285	6.84
9I19035-CAL8	4000	739481	1.209	6.84
9I19035-CAL9	6000	943818	1.125	6.84
9I19035-CALA	8000	1103589	1.024	6.85

AVE RF **1.360** RF RSD **13.68** AVE RT **6.84**

3+4-Methylphenol(s)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3108	1.065	6.96
9I19035-CAL2	50	8248	1.133	6.96
9I19035-CAL3	100	16854	1.160	6.96
9I19035-CAL4	200	38484	1.345	6.96
9I19035-CAL5	500	107685	1.441	6.96
9I19035-CAL6	1000	206745	1.458	6.96
9I19035-CAL7	2000	399183	1.401	6.96
9I19035-CAL8	4000	797964	1.305	6.97
9I19035-CAL9	6000	997248	1.189	6.97
~~9I19035-CALA~~	~~8000~~	~~1205305~~	~~1.119~~	~~6.99~~

AVE RF **1.277** RF RSD **11.32** AVE RT **6.96**

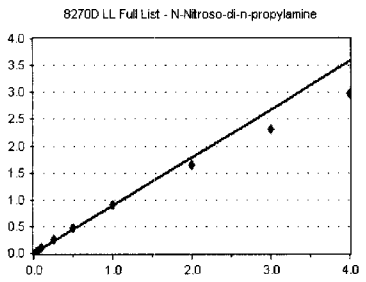
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

N-Nitroso-di-n-propylamine

Curve Fit: **AVERAGE RF**

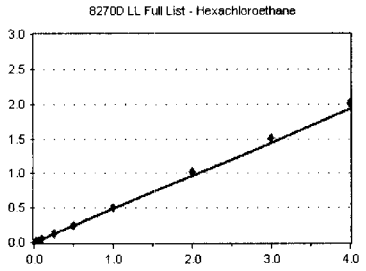


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2691	0.922	6.96
9I19035-CAL2	50	6538	0.898	6.96
9I19035-CAL3	100	13631	0.938	6.96
9I19035-CAL4	200	28365	0.991	6.96
9I19035-CAL5	500	74700	0.999	6.96
9I19035-CAL6	1000	136460	0.963	6.96
9I19035-CAL7	2000	256713	0.901	6.97
9I19035-CAL8	4000	504346	0.825	6.98
9I19035-CAL9	6000	644101	0.768	6.99
9I19035-CALA	8000	803148	0.745	7.00

AVE RF **0.895** RF RSD **9.91** AVE RT **6.97**

Hexachloroethane

Curve Fit: **AVERAGE RF**

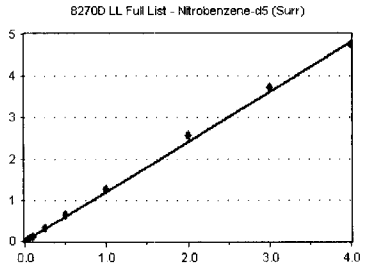


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	1267	0.434	7.08
9I19035-CAL2	50	3313	0.455	7.08
9I19035-CAL3	100	6562	0.452	7.08
9I19035-CAL4	200	13490	0.472	7.08
9I19035-CAL5	500	36961	0.494	7.08
9I19035-CAL6	1000	68545	0.484	7.08
9I19035-CAL7	2000	143490	0.503	7.08
9I19035-CAL8	4000	311702	0.510	7.08
9I19035-CAL9	6000	419784	0.500	7.08
9I19035-CALA	8000	541884	0.503	7.08

AVE RF **0.481** RF RSD **5.45** AVE RT **7.08**

Nitrobenzene-d5 (Surr)

Curve Fit: **AVERAGE RF**

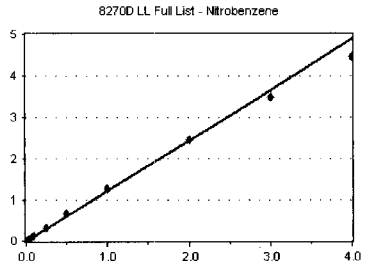


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2861	0.981	7.11
9I19035-CAL2	50	7903	1.085	7.11
9I19035-CAL3	100	16492	1.135	7.11
9I19035-CAL4	200	34591	1.209	7.11
9I19035-CAL5	500	98184	1.313	7.11
9I19035-CAL6	1000	187377	1.322	7.11
9I19035-CAL7	2000	365358	1.282	7.11
9I19035-CAL8	4000	786633	1.286	7.12
9I19035-CAL9	6000	1045001	1.246	7.12
9I19035-CALA	8000	1284804	1.193	7.13

AVE RF **1.205** RF RSD **9.14** AVE RT **7.12**

Nitrobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3138	1.076	7.14
9I19035-CAL2	50	8614	1.183	7.14
9I19035-CAL3	100	17280	1.189	7.14
9I19035-CAL4	200	37240	1.302	7.13
9I19035-CAL5	500	100238	1.341	7.13
9I19035-CAL6	1000	188065	1.327	7.13
9I19035-CAL7	2000	365107	1.281	7.14
9I19035-CAL8	4000	754990	1.234	7.14
9I19035-CAL9	6000	977466	1.165	7.15
9I19035-CALA	8000	1198679	1.113	7.15

AVE RF **1.221** RF RSD **7.44** AVE RT **7.14**

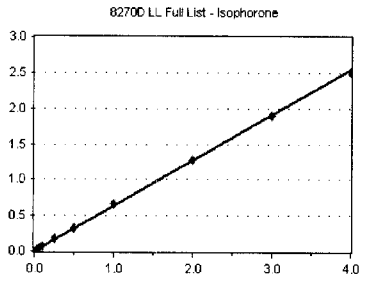
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Isophorone

Curve Fit: **AVERAGE RF**

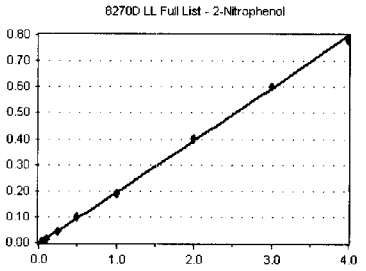


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6954	0.569	7.37
9I19035-CAL2	50	18082	0.605	7.37
9I19035-CAL3	100	37997	0.640	7.37
9I19035-CAL4	200	78525	0.652	7.37
9I19035-CAL5	500	207804	0.683	7.37
9I19035-CAL6	1000	377941	0.661	7.37
9I19035-CAL7	2000	734609	0.671	7.38
9I19035-CAL8	4000	1524753	0.637	7.38
9I19035-CAL9	6000	2075603	0.632	7.39
9I19035-CALA	8000	2693969	0.627	7.40

AVE RF **0.638** RF RSD **5.17** AVE RT **7.38**

2-Nitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

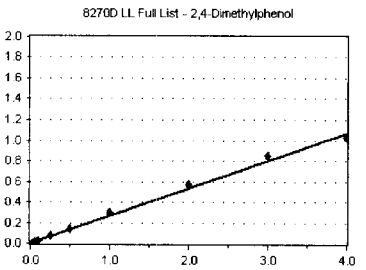


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1053~~	~~0.086~~	~~7.46~~
~~9I19035-CAL2~~	~~50~~	~~3400~~	~~0.114~~	~~7.46~~
9I19035-CAL3	100	7240	0.122	7.45
9I19035-CAL4	200	16298	0.135	7.45
9I19035-CAL5	500	54694	0.180	7.45
9I19035-CAL6	1000	114845	0.201	7.45
9I19035-CAL7	2000	207149	0.189	7.46
9I19035-CAL8	4000	481353	0.201	7.46
9I19035-CAL9	6000	659170	0.201	7.46
9I19035-CALA	8000	838038	0.195	7.46

AVE RF **0.178** RF RSD **17.69** AVE RT **7.45**

2,4-Dimethylphenol

Curve Fit: **AVERAGE RF**

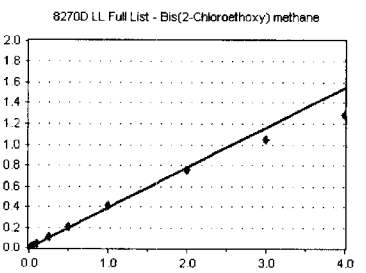


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2375~~	~~0.194~~	~~7.49~~
9I19035-CAL2	50	5922	0.198	7.49
9I19035-CAL3	100	14806	0.249	7.49
9I19035-CAL4	200	31880	0.265	7.49
9I19035-CAL5	500	86093	0.283	7.49
9I19035-CAL6	1000	164250	0.287	7.49
9I19035-CAL7	2000	333523	0.304	7.49
9I19035-CAL8	4000	686286	0.287	7.50
9I19035-CAL9	6000	932922	0.284	7.50
9I19035-CALA	8000	1099526	0.256	7.51

AVE RF **0.268** RF RSD **11.73** AVE RT **7.49**

Bis(2-Chloroethoxy) methane

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4738	0.388	7.58
9I19035-CAL2	50	11523	0.385	7.58
9I19035-CAL3	100	23395	0.394	7.58
9I19035-CAL4	200	49149	0.408	7.58
9I19035-CAL5	500	131344	0.432	7.58
9I19035-CAL6	1000	236290	0.413	7.58
9I19035-CAL7	2000	449978	0.411	7.58
9I19035-CAL8	4000	900203	0.376	7.59
9I19035-CAL9	6000	1142883	0.348	7.59
9I19035-CALA	8000	1380842	0.321	7.60

AVE RF **0.388** RF RSD **8.46** AVE RT **7.58**

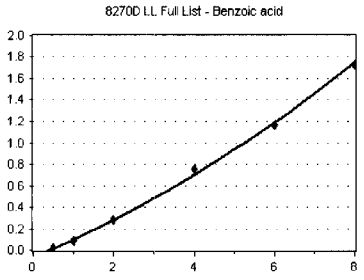
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Benzoic acid

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

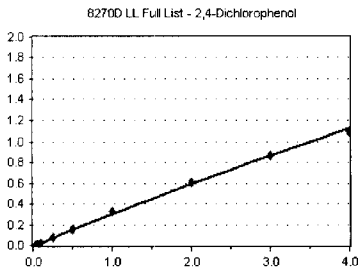


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~229~~	~~9.372~~	~~7.55~~
~~9I19035-CAL2~~	~~100~~	~~200~~	~~3.345~~	~~7.57~~
~~9I19035-CAL3~~	~~200~~	~~2086~~	~~0.018~~	~~7.54~~
~~9I19035-CAL4~~	~~400~~	~~3335~~	~~1.385~~	~~7.54~~
9I19035-CAL5	1000	22389	0.037	7.55
9I19035-CAL6	2000	99342	8.684	7.58
9I19035-CAL7	4000	311714	0.142	7.61
9I19035-CAL8	8000	902544	0.188	7.67
9I19035-CAL9	12000	1277463	0.195	7.69
9I19035-CALA	16000	1853462	0.216	7.73

AVE RF **0.144** RF RSD **48.51** AVE RT **7.64**

2,4-Dichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

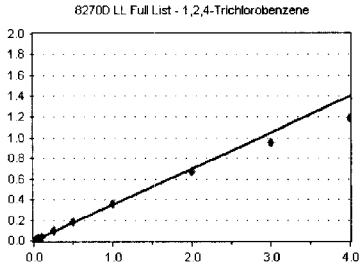


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1603~~	~~0.131~~	~~7.69~~
9I19035-CAL2	50	5068	0.170	7.69
9I19035-CAL3	100	12689	0.214	7.69
9I19035-CAL4	200	30346	0.252	7.69
9I19035-CAL5	500	89833	0.295	7.69
9I19035-CAL6	1000	173249	0.303	7.69
9I19035-CAL7	2000	350635	0.320	7.69
9I19035-CAL8	4000	731346	0.305	7.70
9I19035-CAL9	6000	943067	0.287	7.70
9I19035-CALA	8000	1167761	0.272	7.71

AVE RF **0.269** RF RSD **18.30** AVE RT **7.70**

1,2,4-Trichlorobenzene

Curve Fit: **AVERAGE RF**

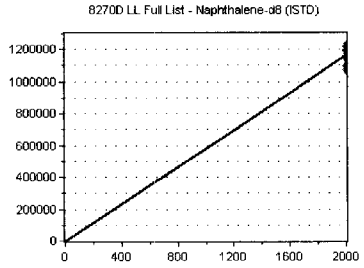


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4361	0.357	7.78
9I19035-CAL2	50	11103	0.371	7.78
9I19035-CAL3	100	21292	0.359	7.78
9I19035-CAL4	200	45007	0.374	7.78
9I19035-CAL5	500	113367	0.372	7.78
9I19035-CAL6	1000	206953	0.362	7.78
9I19035-CAL7	2000	388384	0.355	7.78
9I19035-CAL8	4000	805154	0.336	7.78
9I19035-CAL9	6000	1041502	0.317	7.79
9I19035-CALA	8000	1277566	0.297	7.79

AVE RF **0.350** RF RSD **7.29** AVE RT **7.78**

Naphthalene-d8 (ISTD)

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1221708	610.854	7.84
9I19035-CAL2	2000	1195757	597.878	7.84
9I19035-CAL3	2000	1186873	593.437	7.84
9I19035-CAL4	2000	1204364	602.182	7.84
9I19035-CAL5	2000	1217422	608.711	7.84
9I19035-CAL6	2000	1143968	571.984	7.84
9I19035-CAL7	2000	1095362	547.681	7.84
9I19035-CAL8	2000	1197569	598.784	7.84
9I19035-CAL9	2000	1094080	547.040	7.84
9I19035-CALA	2000	1074761	537.381	7.85

AVE RF **581.593** RF RSD **4.83** AVE RT **7.84**

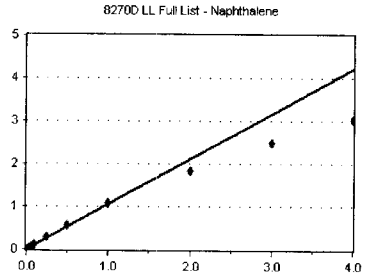
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Naphthalene

Curve Fit: **AVERAGE RF**

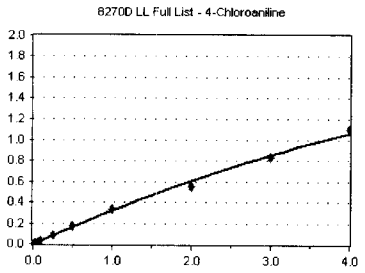


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	14004	1.146	7.86
9I19035-CAL2	50	34402	1.151	7.86
9I19035-CAL3	100	69263	1.167	7.86
9I19035-CAL4	200	141239	1.173	7.86
9I19035-CAL5	500	361018	1.186	7.86
9I19035-CAL6	1000	638989	1.117	7.86
9I19035-CAL7	2000	1178988	1.076	7.86
9I19035-CAL8	4000	2214900	0.925	7.86
9I19035-CAL9	6000	2711030	0.826	7.87
9I19035-CALA	8000	3240737	0.754	7.87

AVE RF **1.052** RF RSD **15.05** AVE RT **7.86**

4-Chloroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

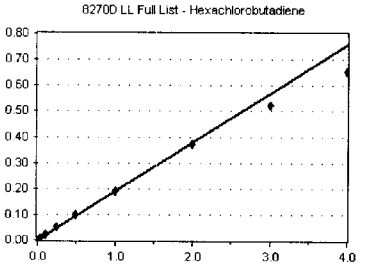


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	1531	0.125	7.91
9I19035-CAL2	50	7306	0.244	7.91
9I19035-CAL3	100	15139	0.255	7.91
9I19035-CAL4	200	38526	0.320	7.91
9I19035-CAL5	500	106945	0.351	7.91
9I19035-CAL6	1000	199585	0.349	7.91
9I19035-CAL7	2000	372183	0.340	7.92
9I19035-CAL8	4000	663200	0.277	7.93
9I19035-CAL9	6000	906180	0.276	7.93
9I19035-CALA	8000	1186251	0.276	7.93

AVE RF **0.281** RF RSD **23.94** AVE RT **7.91**

Hexachlorobutadiene

Curve Fit: **AVERAGE RF**

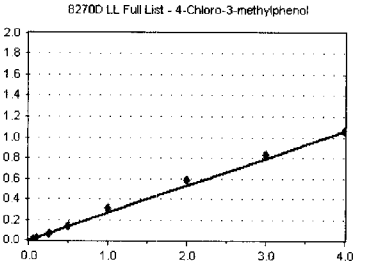


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2247	0.184	7.99
9I19035-CAL2	50	5972	0.200	7.99
9I19035-CAL3	100	11598	0.195	7.99
9I19035-CAL4	200	24136	0.200	7.99
9I19035-CAL5	500	61063	0.201	7.99
9I19035-CAL6	1000	113762	0.199	7.99
9I19035-CAL7	2000	208693	0.191	7.99
9I19035-CAL8	4000	442903	0.185	7.99
9I19035-CAL9	6000	570722	0.174	8.00
9I19035-CALA	8000	701350	0.163	8.00

AVE RF **0.189** RF RSD **6.74** AVE RT **7.99**

4-Chloro-3-methylphenol

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1917~~	~~0.157~~	~~8.39~~
~~9I19035-CAL2~~	~~50~~	~~5211~~	~~0.174~~	~~8.39~~
9I19035-CAL3	100	11698	0.197	8.39
9I19035-CAL4	200	26469	0.220	8.39
9I19035-CAL5	500	84667	0.278	8.39
9I19035-CAL6	1000	162469	0.284	8.39
9I19035-CAL7	2000	338452	0.309	8.39
9I19035-CAL8	4000	698064	0.291	8.39
9I19035-CAL9	6000	912303	0.278	8.40
9I19035-CALA	8000	1141605	0.266	8.40

AVE RF **0.265** RF RSD **14.24** AVE RT **8.39**

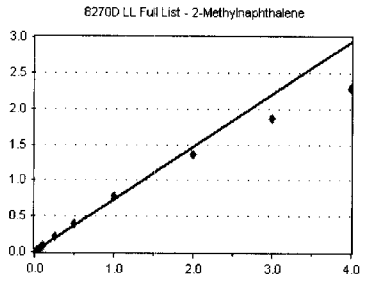
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2-Methylnaphthalene

Curve Fit: **AVERAGE RF**

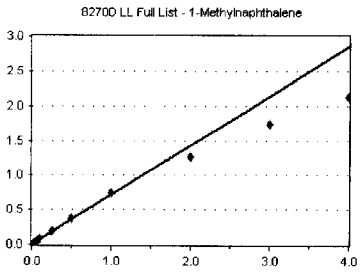


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8620	0.706	8.55
9I19035-CAL2	50	23135	0.774	8.56
9I19035-CAL3	100	46039	0.776	8.56
9I19035-CAL4	200	98607	0.819	8.56
9I19035-CAL5	500	253485	0.833	8.56
9I19035-CAL6	1000	453493	0.793	8.56
9I19035-CAL7	2000	857631	0.783	8.56
9I19035-CAL8	4000	1625949	0.679	8.56
9I19035-CAL9	6000	2034929	0.620	8.56
9I19035-CALA	8000	2448839	0.570	8.56

AVE RF **0.735** RF RSD **12.00** AVE RT **8.56**

1-Methylnaphthalene

Curve Fit: **AVERAGE RF**

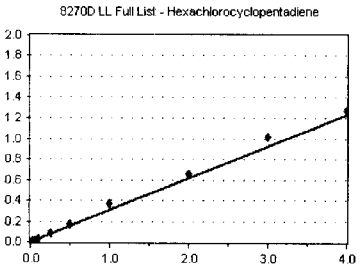


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9000	0.737	8.65
9I19035-CAL2	50	23006	0.770	8.65
9I19035-CAL3	100	46134	0.777	8.66
9I19035-CAL4	200	95459	0.793	8.65
9I19035-CAL5	500	244797	0.804	8.66
9I19035-CAL6	1000	430139	0.752	8.66
9I19035-CAL7	2000	810434	0.740	8.66
9I19035-CAL8	4000	1521185	0.635	8.66
9I19035-CAL9	6000	1893325	0.577	8.66
9I19035-CALA	8000	2286875	0.532	8.66

AVE RF **0.712** RF RSD **13.43** AVE RT **8.66**

Hexachlorocyclopentadiene

Curve Fit: **AVERAGE RF**

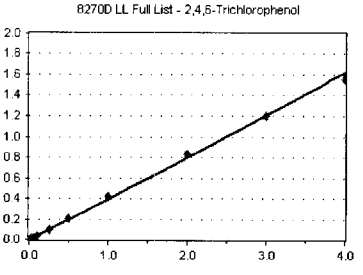


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1303~~	~~0.203~~	~~8.72~~
9I19035-CAL2	50	3356	0.218	8.72
9I19035-CAL3	100	8031	0.261	8.72
9I19035-CAL4	200	17504	0.286	8.73
9I19035-CAL5	500	51180	0.327	8.72
9I19035-CAL6	1000	99801	0.342	8.73
9I19035-CAL7	2000	213088	0.363	8.72
9I19035-CAL8	4000	417829	0.328	8.73
9I19035-CAL9	6000	601203	0.338	8.73
9I19035-CALA	8000	759063	0.320	8.73

AVE RF **0.309** RF RSD **14.82** AVE RT **8.73**

2,4,6-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1119~~	~~0.175~~	~~8.84~~
9I19035-CAL2	50	3644	0.237	8.84
9I19035-CAL3	100	7912	0.257	8.84
9I19035-CAL4	200	18771	0.307	8.84
9I19035-CAL5	500	59985	0.384	8.84
9I19035-CAL6	1000	117480	0.402	8.84
9I19035-CAL7	2000	248218	0.423	8.84
9I19035-CAL8	4000	532499	0.419	8.85
9I19035-CAL9	6000	713503	0.401	8.85
9I19035-CALA	8000	922776	0.389	8.85

AVE RF **0.358** RF RSD **19.99** AVE RT **8.84**

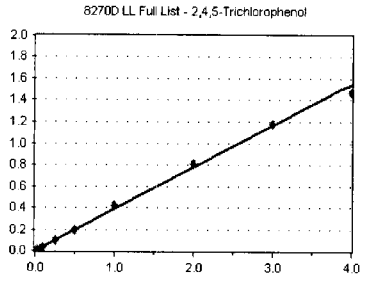
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2,4,5-Trichlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

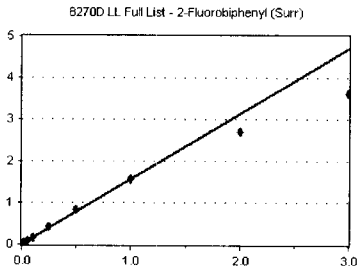


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1218~~	~~0.190~~	~~8.87~~
9I19035-CAL2	50	3657	0.237	8.87
9I19035-CAL3	100	8310	0.270	8.87
9I19035-CAL4	200	18422	0.301	8.87
9I19035-CAL5	500	59608	0.381	8.87
9I19035-CAL6	1000	113799	0.390	8.87
9I19035-CAL7	2000	245074	0.418	8.87
9I19035-CAL8	4000	516958	0.406	8.88
9I19035-CAL9	6000	699105	0.393	8.88
9I19035-CALA	8000	870124	0.366	8.88

AVE RF **0.351** RF RSD **18.51** AVE RT **8.88**

2-Fluorobiphenyl (Surr)

Curve Fit: **AVERAGE RF**

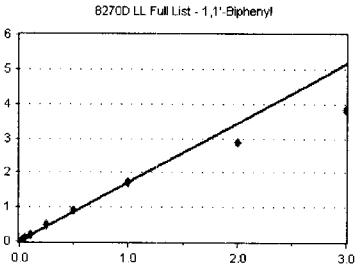


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9460	1.477	8.93
9I19035-CAL2	50	24802	1.610	8.93
9I19035-CAL3	100	53353	1.735	8.93
9I19035-CAL4	200	107137	1.751	8.93
9I19035-CAL5	500	272047	1.740	8.93
9I19035-CAL6	1000	482290	1.652	8.93
9I19035-CAL7	2000	917452	1.564	8.93
9I19035-CAL8	4000	1718307	1.351	8.93
9I19035-CAL9	6000	2148364	1.207	8.93
~~9I19035-CALA~~	~~8000~~	~~2595271~~	~~1.093~~	~~8.94~~

AVE RF **1.565** RF RSD **12.07** AVE RT **8.93**

1,1'-Biphenyl

Curve Fit: **AVERAGE RF**

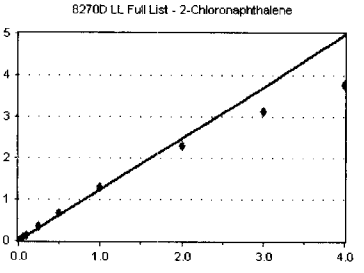


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	10205	1.593	9.03
9I19035-CAL2	50	28683	1.862	9.03
9I19035-CAL3	100	58168	1.891	9.03
9I19035-CAL4	200	117826	1.926	9.03
9I19035-CAL5	500	300735	1.923	9.03
9I19035-CAL6	1000	533233	1.827	9.03
9I19035-CAL7	2000	1010736	1.723	9.03
9I19035-CAL8	4000	1845876	1.451	9.03
9I19035-CAL9	6000	2268485	1.275	9.04
~~9I19035-CALA~~	~~8000~~	~~2706900~~	~~1.140~~	~~9.04~~

AVE RF **1.719** RF RSD **13.51** AVE RT **9.03**

2-Chloronaphthalene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7646	1.194	9.05
9I19035-CAL2	50	19450	1.263	9.05
9I19035-CAL3	100	41705	1.356	9.05
9I19035-CAL4	200	86117	1.408	9.05
9I19035-CAL5	500	223930	1.432	9.05
9I19035-CAL6	1000	386877	1.325	9.05
9I19035-CAL7	2000	759926	1.296	9.05
9I19035-CAL8	4000	1467799	1.154	9.06
9I19035-CAL9	6000	1860060	1.045	9.06
9I19035-CALA	8000	2240055	0.943	9.06

AVE RF **1.242** RF RSD **12.73** AVE RT **9.05**

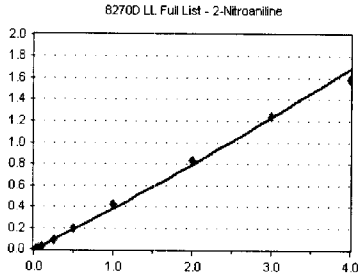
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

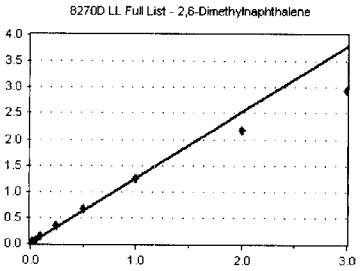


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~939~~	~~0.147~~	~~9.15~~
9I19035-CAL2	50	2728	0.177	9.15
9I19035-CAL3	100	6877	0.224	9.15
9I19035-CAL4	200	16161	0.264	9.15
9I19035-CAL5	500	55795	0.357	9.15
9I19035-CAL6	1000	113482	0.389	9.15
9I19035-CAL7	2000	248865	0.424	9.15
9I19035-CAL8	4000	528406	0.415	9.16
9I19035-CAL9	6000	739914	0.416	9.16
9I19035-CALA	8000	944974	0.398	9.17

AVE RF **0.340** RF RSD **27.55** AVE RT **9.15**

2,6-Dimethylnaphthalene

Curve Fit: **AVERAGE RF**

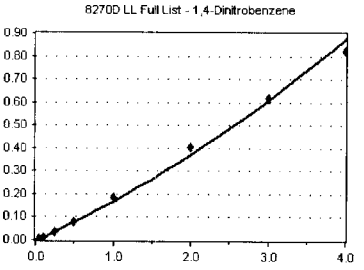


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7097	1.108	9.19
9I19035-CAL2	50	20566	1.335	9.19
9I19035-CAL3	100	43362	1.410	9.19
9I19035-CAL4	200	87215	1.426	9.19
9I19035-CAL5	500	219677	1.405	9.19
9I19035-CAL6	1000	389863	1.336	9.19
9I19035-CAL7	2000	740663	1.263	9.19
9I19035-CAL8	4000	1385514	1.089	9.19
9I19035-CAL9	6000	1742370	0.979	9.20
~~9I19035-CALA~~	~~8000~~	~~2089018~~	~~0.880~~	~~9.20~~

AVE RF **1.261** RF RSD **12.95** AVE RT **9.19**

1,4-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

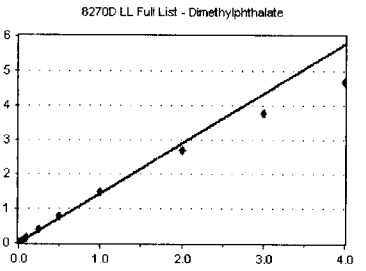


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~381~~	~~5.948~~	~~9.27~~
~~9I19035-CAL2~~	~~50~~	~~915~~	~~5.939~~	~~9.27~~
9I19035-CAL3	100	2006	0.065	9.27
9I19035-CAL4	200	5164	8.441	9.27
9I19035-CAL5	500	19841	0.127	9.27
9I19035-CAL6	1000	44207	0.151	9.27
9I19035-CAL7	2000	108019	0.184	9.28
9I19035-CAL8	4000	258106	0.203	9.29
9I19035-CAL9	6000	365105	0.205	9.29
9I19035-CALA	8000	488295	0.206	9.30

AVE RF **0.153** RF RSD **36.62** AVE RT **9.28**

Dimethylphthalate

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9190	1.435	9.33
9I19035-CAL2	50	22486	1.460	9.33
9I19035-CAL3	100	49089	1.596	9.33
9I19035-CAL4	200	96043	1.570	9.33
9I19035-CAL5	500	250192	1.600	9.33
9I19035-CAL6	1000	449574	1.540	9.33
9I19035-CAL7	2000	868820	1.481	9.34
9I19035-CAL8	4000	1712764	1.346	9.35
9I19035-CAL9	6000	2223667	1.249	9.35
9I19035-CALA	8000	2768841	1.166	9.36

AVE RF **1.444** RF RSD **10.30** AVE RT **9.34**

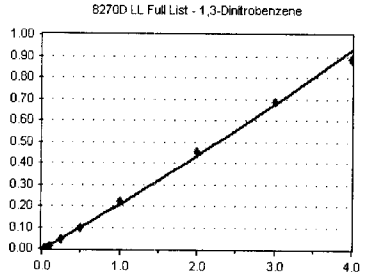
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

1,3-Dinitrobenzene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

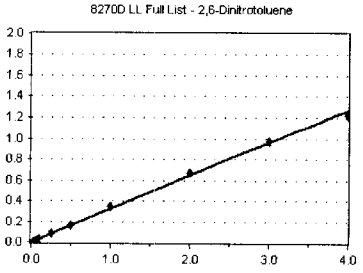


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~417~~	~~6.510~~	~~9.35~~
~~9I19035-CAL2~~	~~50~~	~~1390~~	~~9.023~~	~~9.35~~
9I19035-CAL3	100	3033	9.862	9.35
9I19035-CAL4	200	7621	0.125	9.35
9I19035-CAL5	500	28132	0.180	9.35
9I19035-CAL6	1000	57342	0.196	9.35
9I19035-CAL7	2000	128986	0.220	9.36
9I19035-CAL8	4000	289563	0.228	9.37
9I19035-CAL9	6000	407082	0.229	9.38
9I19035-CALA	8000	525829	0.221	9.39

AVE RF **0.187** RF RSD **26.72** AVE RT **9.36**

2,6-Dinitrotoluene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

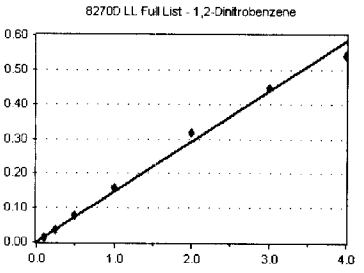


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1042~~	~~0.163~~	~~9.39~~
9I19035-CAL2	50	2915	0.189	9.39
9I19035-CAL3	100	6526	0.212	9.39
9I19035-CAL4	200	16812	0.275	9.39
9I19035-CAL5	500	51160	0.327	9.39
9I19035-CAL6	1000	97373	0.334	9.39
9I19035-CAL7	2000	201552	0.344	9.39
9I19035-CAL8	4000	424265	0.334	9.40
9I19035-CAL9	6000	575872	0.324	9.41
9I19035-CALA	8000	727325	0.306	9.41

AVE RF **0.294** RF RSD **19.32** AVE RT **9.39**

1,2-Dinitrobenzene

Curve Fit: **AVERAGE RF**

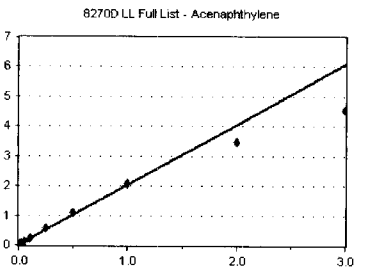


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~304~~	~~4.746~~	~~9.44~~
~~9I19035-CAL2~~	~~50~~	~~1349~~	~~8.757~~	~~9.44~~
~~9I19035-CAL3~~	~~100~~	~~2742~~	~~8.915~~	~~9.45~~
9I19035-CAL4	200	7269	0.119	9.44
9I19035-CAL5	500	22807	0.146	9.45
9I19035-CAL6	1000	45222	0.155	9.45
9I19035-CAL7	2000	94079	0.160	9.45
9I19035-CAL8	4000	202294	0.159	9.47
9I19035-CAL9	6000	266233	0.150	9.47
9I19035-CALA	8000	322227	0.136	9.48

AVE RF **0.146** RF RSD **10.12** AVE RT **9.46**

Acenaphthylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12450	1.944	9.47
9I19035-CAL2	50	32192	2.090	9.47
9I19035-CAL3	100	68008	2.211	9.47
9I19035-CAL4	200	136163	2.226	9.47
9I19035-CAL5	500	361152	2.309	9.47
9I19035-CAL6	1000	637470	2.184	9.47
9I19035-CAL7	2000	1211941	2.067	9.48
9I19035-CAL8	4000	2224222	1.748	9.48
9I19035-CAL9	6000	2704211	1.519	9.48
~~9I19035-CALA~~	~~8000~~	~~3146686~~	~~1.325~~	~~9.49~~

AVE RF **2.033** RF RSD **12.60** AVE RT **9.48**

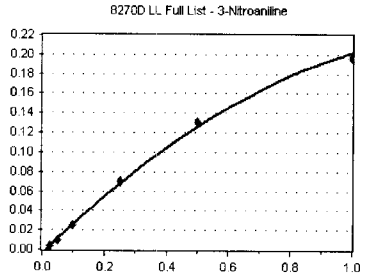
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

3-Nitroaniline

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

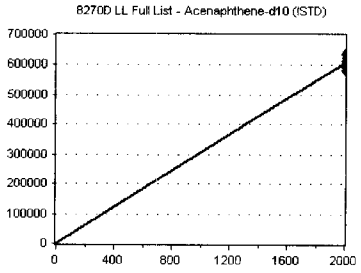


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~592~~	~~9.242~~	~~9.56~~
9I19035-CAL2	50	2106	0.137	9.56
9I19035-CAL3	100	6036	0.196	9.56
9I19035-CAL4	200	15637	0.256	9.56
9I19035-CAL5	500	44178	0.282	9.56
9I19035-CAL6	1000	76212	0.261	9.56
9I19035-CAL7	2000	114743	0.196	9.56
~~9I19035-CAL8~~	~~4000~~	~~123216~~	~~9.686~~	~~9.57~~
~~9I19035-CAL9~~	~~6000~~	~~180797~~	~~0.102~~	~~0.00~~
~~9I19035-CALA~~	~~8000~~	~~174843~~	~~7.362~~	~~0.00~~

AVE RF **0.221** RF RSD **24.71** AVE RT **9.56**

Acenaphthene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

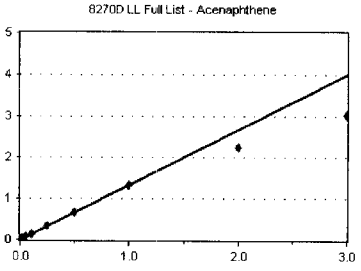


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	640527	320.263	9.62
9I19035-CAL2	2000	616226	308.113	9.62
9I19035-CAL3	2000	615111	307.555	9.62
9I19035-CAL4	2000	611745	305.873	9.62
9I19035-CAL5	2000	625555	312.778	9.62
9I19035-CAL6	2000	583825	291.913	9.62
9I19035-CAL7	2000	586466	293.233	9.62
9I19035-CAL8	2000	636039	318.020	9.62
9I19035-CAL9	2000	593235	296.618	9.62
9I19035-CALA	2000	593771	296.885	9.63

AVE RF **305.125** RF RSD **3.32** AVE RT **9.62**

Acenaphthene

Curve Fit: **AVERAGE RF**

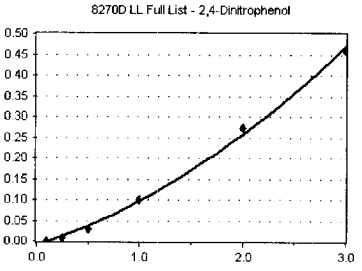


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8885	1.387	9.65
9I19035-CAL2	50	22572	1.465	9.65
9I19035-CAL3	100	44425	1.444	9.65
9I19035-CAL4	200	89211	1.458	9.65
9I19035-CAL5	500	224540	1.436	9.65
9I19035-CAL6	1000	399993	1.370	9.65
9I19035-CAL7	2000	770675	1.314	9.65
9I19035-CAL8	4000	1433796	1.127	9.66
9I19035-CAL9	6000	1803278	1.013	9.66
~~9I19035-CALA~~	~~8000~~	~~2204696~~	~~0.928~~	~~9.66~~

AVE RF **1.335** RF RSD **12.00** AVE RT **9.65**

2,4-Dinitrophenol

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL2~~	~~50~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL3~~	~~100~~	~~169~~	~~5.495~~	~~9.67~~
9I19035-CAL4	200	796	1.301	9.67
9I19035-CAL5	500	4568	2.921	9.67
9I19035-CAL6	1000	18042	6.181	9.66
9I19035-CAL7	2000	58400	9.958	9.67
9I19035-CAL8	4000	174238	0.137	9.68
9I19035-CAL9	6000	272053	0.153	9.68
~~9I19035-CALA~~	~~8000~~	~~388560~~	~~0.164~~	~~9.69~~

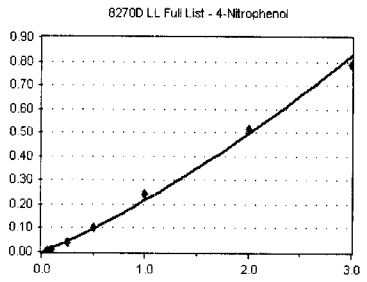
AVE RF **8.224** RF RSD **69.44** AVE RT **9.67**

Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

4-Nitrophenol

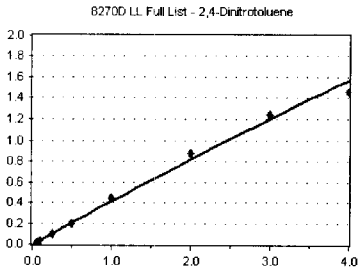


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~120~~	~~1.873~~	~~9.72~~
~~9I19035-CAL2~~	~~50~~	~~699~~	~~4.537~~	~~9.72~~
9I19035-CAL3	100	2106	6.848	9.72
9I19035-CAL4	200	5790	9.465	9.72
9I19035-CAL5	500	25654	0.164	9.72
9I19035-CAL6	1000	58727	0.201	9.72
9I19035-CAL7	2000	141903	0.242	9.73
9I19035-CAL8	4000	326661	0.257	9.74
9I19035-CAL9	6000	467183	0.263	9.75
~~9I19035-CALA~~	~~8000~~	~~610739~~	~~0.257~~	~~9.76~~

AVE RF **0.184** RF RSD **42.54** AVE RT **9.73**

2,4-Dinitrotoluene

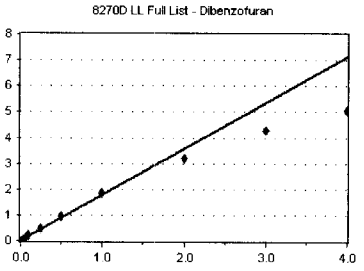


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1027~~	~~0.160~~	~~9.80~~
~~9I19035-CAL2~~	~~50~~	~~2508~~	~~0.163~~	~~9.80~~
9I19035-CAL3	100	6812	0.221	9.80
9I19035-CAL4	200	16915	0.277	9.80
9I19035-CAL5	500	57760	0.369	9.80
9I19035-CAL6	1000	116247	0.398	9.80
9I19035-CAL7	2000	257547	0.439	9.80
9I19035-CAL8	4000	555824	0.437	9.81
9I19035-CAL9	6000	734363	0.413	9.82
9I19035-CALA	8000	868405	0.366	9.83

AVE RF **0.365** RF RSD **21.35** AVE RT **9.81**

Dibenzofuran

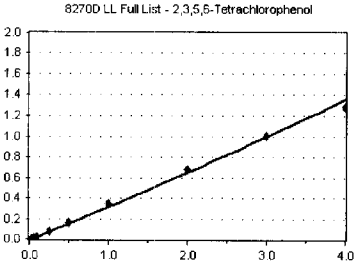


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11668	1.822	9.83
9I19035-CAL2	50	29377	1.907	9.83
9I19035-CAL3	100	62656	2.037	9.83
9I19035-CAL4	200	123476	2.018	9.83
9I19035-CAL5	500	310051	1.983	9.83
9I19035-CAL6	1000	550893	1.887	9.83
9I19035-CAL7	2000	1086183	1.852	9.83
9I19035-CAL8	4000	2040744	1.604	9.83
9I19035-CAL9	6000	2531005	1.422	9.84
9I19035-CALA	8000	3003141	1.264	9.84

AVE RF **1.780** RF RSD **14.79** AVE RT **9.83**

2,3,5,6-Tetrachlorophenol



Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~774~~	~~0.121~~	~~9.91~~
9I19035-CAL2	50	1678	0.109	9.91
9I19035-CAL3	100	5673	0.184	9.91
9I19035-CAL4	200	13193	0.216	9.91
9I19035-CAL5	500	46260	0.296	9.91
9I19035-CAL6	1000	91879	0.315	9.91
9I19035-CAL7	2000	201504	0.344	9.91
9I19035-CAL8	4000	434819	0.342	9.91
9I19035-CAL9	6000	597064	0.335	9.92
9I19035-CALA	8000	763806	0.322	9.92

AVE RF **0.274** RF RSD **30.66** AVE RT **9.91**

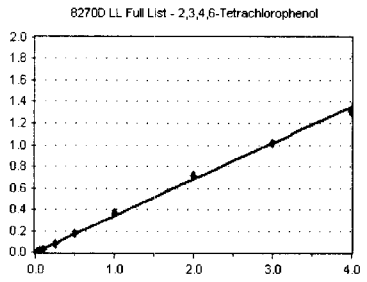
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

2,3,4,6-Tetrachlorophenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

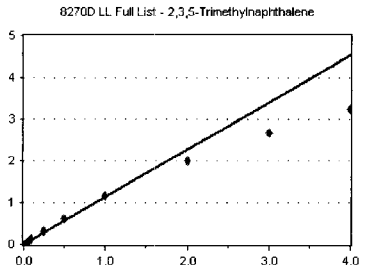


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~856~~	~~0.134~~	~~9.95~~
9I19035-CAL2	50	2513	0.163	9.95
9I19035-CAL3	100	7263	0.236	9.95
9I19035-CAL4	200	16040	0.262	9.95
9I19035-CAL5	500	50476	0.323	9.95
9I19035-CAL6	1000	101167	0.347	9.95
9I19035-CAL7	2000	213539	0.364	9.95
9I19035-CAL8	4000	451267	0.355	9.96
9I19035-CAL9	6000	603345	0.339	9.96
9I19035-CALA	8000	773723	0.326	9.96

AVE RF **0.302** RF RSD **22.30** AVE RT **9.95**

2,3,5-Trimethylnaphthalene

Curve Fit: **AVERAGE RF**

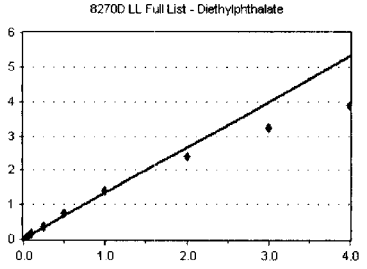


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7629	1.191	10.03
9I19035-CAL2	50	19066	1.238	10.03
9I19035-CAL3	100	38608	1.255	10.03
9I19035-CAL4	200	78195	1.278	10.04
9I19035-CAL5	500	199252	1.274	10.03
9I19035-CAL6	1000	355247	1.217	10.04
9I19035-CAL7	2000	685050	1.168	10.04
9I19035-CAL8	4000	1276533	1.004	10.04
9I19035-CAL9	6000	1592300	0.895	10.05
9I19035-CALA	8000	1931750	0.813	10.05

AVE RF **1.133** RF RSD **14.83** AVE RT **10.04**

Diethylphthalate

Curve Fit: **AVERAGE RF**

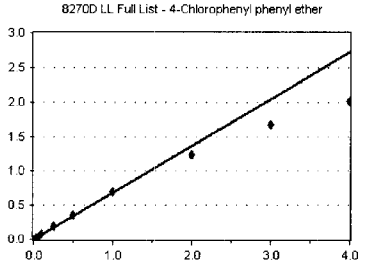


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8035	1.254	10.04
9I19035-CAL2	50	21378	1.388	10.04
9I19035-CAL3	100	47870	1.556	10.04
9I19035-CAL4	200	92047	1.505	10.04
9I19035-CAL5	500	232776	1.488	10.04
9I19035-CAL6	1000	426259	1.460	10.05
9I19035-CAL7	2000	811497	1.384	10.06
9I19035-CAL8	4000	1534521	1.206	10.06
9I19035-CAL9	6000	1916805	1.077	10.07
9I19035-CALA	8000	2319061	0.976	10.07

AVE RF **1.330** RF RSD **14.62** AVE RT **10.05**

4-Chlorophenyl phenyl ether

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	4548	0.710	10.17
9I19035-CAL2	50	11449	0.743	10.17
9I19035-CAL3	100	23837	0.775	10.17
9I19035-CAL4	200	45790	0.749	10.17
9I19035-CAL5	500	117369	0.750	10.17
9I19035-CAL6	1000	209713	0.718	10.17
9I19035-CAL7	2000	412942	0.704	10.17
9I19035-CAL8	4000	786385	0.618	10.17
9I19035-CAL9	6000	992417	0.558	10.18
9I19035-CALA	8000	1192807	0.502	10.18

AVE RF **0.683** RF RSD **13.46** AVE RT **10.17**

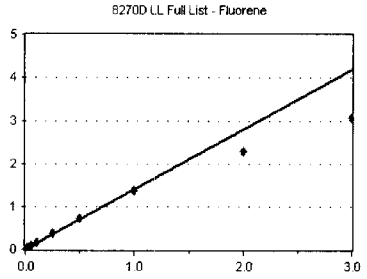
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Fluorene

Curve Fit: **AVERAGE RF**

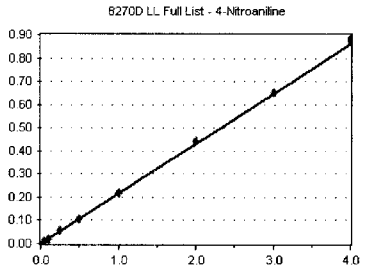


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9113	1.423	10.17
9I19035-CAL2	50	22247	1.444	10.17
9I19035-CAL3	100	48968	1.592	10.17
9I19035-CAL4	200	95574	1.562	10.17
9I19035-CAL5	500	244304	1.562	10.17
9I19035-CAL6	1000	426158	1.460	10.17
9I19035-CAL7	2000	812478	1.385	10.18
9I19035-CAL8	4000	1464263	1.151	10.18
9I19035-CAL9	6000	1824399	1.025	10.19
~~9I19035-CALA~~	~~8000~~	~~2171368~~	~~0.914~~	~~10.19~~

AVE RF **1.401** RF RSD **13.79** AVE RT **10.18**

4-Nitroaniline

Curve Fit: **AVERAGE RF**

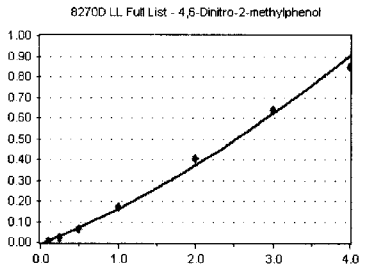


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~719~~	~~0.112~~	~~10.18~~
~~9I19035-CAL2~~	~~50~~	~~2192~~	~~0.142~~	~~10.18~~
9I19035-CAL3	100	5563	0.181	10.18
9I19035-CAL4	200	12832	0.210	10.18
9I19035-CAL5	500	36541	0.234	10.18
9I19035-CAL6	1000	63138	0.216	10.18
9I19035-CAL7	2000	129234	0.220	10.19
9I19035-CAL8	4000	281600	0.221	10.20
9I19035-CAL9	6000	385746	0.217	10.21
9I19035-CALA	8000	523369	0.220	10.21

AVE RF **0.215** RF RSD **7.13** AVE RT **10.19**

4,6-Dinitro-2-methylphenol

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

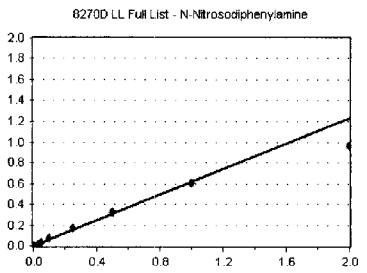


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~0~~	~~0.000~~	~~0.00~~
~~9I19035-CAL2~~	~~50~~	~~206~~	~~1.337~~	~~10.22~~
~~9I19035-CAL3~~	~~100~~	~~761~~	~~0.025~~	~~10.21~~
9I19035-CAL4	200	2504	4.093	10.22
9I19035-CAL5	500	14208	9.085	10.22
9I19035-CAL6	1000	38878	0.133	10.22
9I19035-CAL7	2000	101854	0.174	10.22
9I19035-CAL8	4000	258196	0.203	10.23
9I19035-CAL9	6000	377769	0.212	10.24
9I19035-CALA	8000	504056	0.212	10.24

AVE RF **0.152** RF RSD **43.85** AVE RT **10.23**

N-Nitrosodiphenylamine

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	5957	0.518	10.29
9I19035-CAL2	50	16461	0.605	10.29
9I19035-CAL3	100	36899	0.660	10.29
9I19035-CAL4	200	77183	0.703	10.29
9I19035-CAL5	500	197334	0.703	10.29
9I19035-CAL6	1000	350586	0.658	10.29
9I19035-CAL7	2000	659355	0.604	10.29
9I19035-CAL8	4000	1182676	0.483	10.30
~~9I19035-CAL9~~	~~6000~~	~~1569352~~	~~0.455~~	~~10.30~~
~~9I19035-CALA~~	~~8000~~	~~1760214~~	~~0.377~~	~~10.31~~

AVE RF **0.617** RF RSD **13.21** AVE RT **10.29**

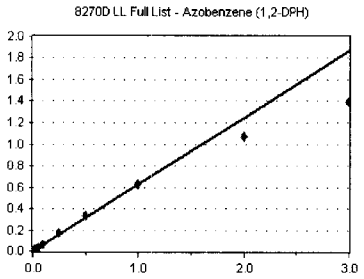
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Azobenzene (1,2-DPH)

Curve Fit: **AVERAGE RF**

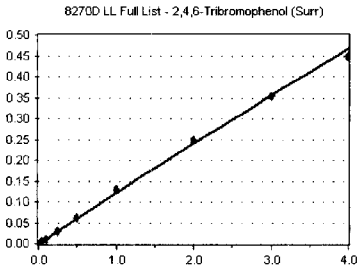


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6853	0.596	10.33
9I19035-CAL2	50	17404	0.640	10.33
9I19035-CAL3	100	37821	0.676	10.33
9I19035-CAL4	200	76676	0.698	10.33
9I19035-CAL5	500	199437	0.710	10.33
9I19035-CAL6	1000	355316	0.667	10.33
9I19035-CAL7	2000	684303	0.627	10.33
9I19035-CAL8	4000	1316342	0.537	10.34
9I19035-CAL9	6000	1601806	0.465	10.34
~~9I19035-CALA~~	~~8000~~	~~1950077~~	~~0.418~~	~~10.34~~

AVE RF **0.624** RF RSD **12.85** AVE RT **10.33**

2,4,6-Tribromophenol (Surr)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

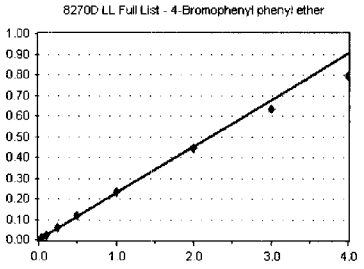


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~762~~	~~6.623~~	~~10.41~~
9I19035-CAL2	50	1929	7.093	10.42
9I19035-CAL3	100	4809	8.598	10.42
9I19035-CAL4	200	10829	9.862	10.42
9I19035-CAL5	500	33701	0.120	10.42
9I19035-CAL6	1000	65055	0.122	10.42
9I19035-CAL7	2000	142266	0.130	10.42
9I19035-CAL8	4000	305471	0.125	10.43
9I19035-CAL9	6000	407389	0.118	10.43
9I19035-CALA	8000	524653	0.112	10.44

AVE RF **0.109** RF RSD **18.24** AVE RT **10.42**

4-Bromophenyl phenyl ether

Curve Fit: **AVERAGE RF**

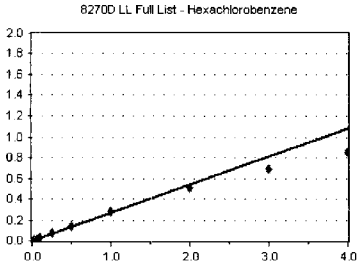


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	2390	0.208	10.67
9I19035-CAL2	50	6326	0.233	10.67
9I19035-CAL3	100	13242	0.237	10.67
9I19035-CAL4	200	26212	0.239	10.67
9I19035-CAL5	500	66857	0.238	10.67
9I19035-CAL6	1000	125621	0.236	10.67
9I19035-CAL7	2000	256334	0.235	10.67
9I19035-CAL8	4000	546207	0.223	10.68
9I19035-CAL9	6000	726568	0.211	10.68
9I19035-CALA	8000	926306	0.198	10.68

AVE RF **0.226** RF RSD **6.56** AVE RT **10.67**

Hexachlorobenzene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	3454	0.300	10.75
9I19035-CAL2	50	7615	0.280	10.75
9I19035-CAL3	100	16314	0.292	10.75
9I19035-CAL4	200	30519	0.278	10.75
9I19035-CAL5	500	82813	0.295	10.75
9I19035-CAL6	1000	152211	0.286	10.75
9I19035-CAL7	2000	304969	0.279	10.75
9I19035-CAL8	4000	617226	0.252	10.75
9I19035-CAL9	6000	795928	0.231	10.76
9I19035-CALA	8000	1001688	0.215	10.76

AVE RF **0.271** RF RSD **10.61** AVE RT **10.75**

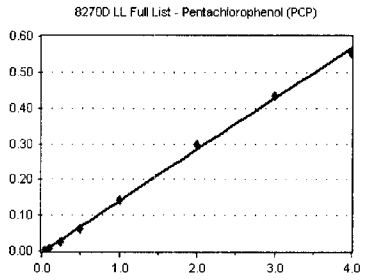
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Pentachlorophenol (PCP)

Curve Fit: **QUADRATIC: Weighting: (1/a), Origin: Ignore**

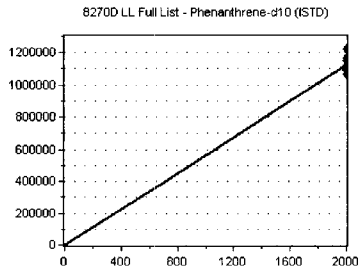


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~1000~~	~~8.692~~	~~10.94~~
~~9I19035-CAL2~~	~~50~~	~~1392~~	~~5.118~~	~~10.94~~
9I19035-CAL3	100	4341	7.762	10.94
9I19035-CAL4	200	7638	6.956	10.94
9I19035-CAL5	500	30348	0.108	10.94
9I19035-CAL6	1000	65122	0.122	10.94
9I19035-CAL7	2000	154858	0.142	10.94
9I19035-CAL8	4000	363768	0.148	10.94
9I19035-CAL9	6000	500914	0.145	10.95
9I19035-CALA	8000	646595	0.138	10.95

AVE RF **0.119** RF RSD **26.11** AVE RT **10.94**

Phenanthrene-d10 (ISTD)

Curve Fit: **AVERAGE RF**

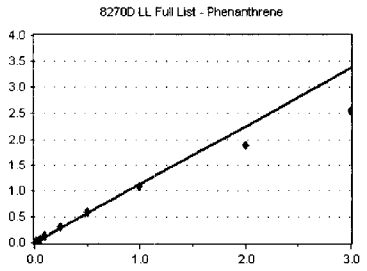


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1150535	575.268	11.13
9I19035-CAL2	2000	1087898	543.949	11.13
9I19035-CAL3	2000	1118597	559.298	11.13
9I19035-CAL4	2000	1098102	549.051	11.13
9I19035-CAL5	2000	1123094	561.547	11.13
9I19035-CAL6	2000	1065192	532.596	11.14
9I19035-CAL7	2000	1091855	545.928	11.14
9I19035-CAL8	2000	1224924	612.462	11.14
9I19035-CAL9	2000	1148482	574.241	11.14
9I19035-CALA	2000	1167219	583.609	11.14

AVE RF **563.795** RF RSD **4.15** AVE RT **11.13**

Phenanthrene

Curve Fit: **AVERAGE RF**

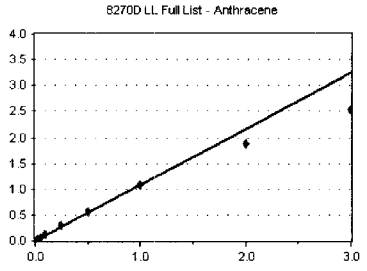


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	13749	1.195	11.16
9I19035-CAL2	50	32566	1.197	11.16
9I19035-CAL3	100	68493	1.225	11.15
9I19035-CAL4	200	134878	1.228	11.15
9I19035-CAL5	500	343840	1.225	11.16
9I19035-CAL6	1000	610421	1.146	11.16
9I19035-CAL7	2000	1191270	1.091	11.16
9I19035-CAL8	4000	2302690	0.940	11.16
9I19035-CAL9	6000	2932288	0.851	11.17
~~9I19035-CALA~~	~~8000~~	~~3584429~~	~~0.768~~	~~11.17~~

AVE RF **1.122** RF RSD **12.26** AVE RT **11.16**

Anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11450	0.995	11.21
9I19035-CAL2	50	30636	1.126	11.21
9I19035-CAL3	100	65192	1.166	11.21
9I19035-CAL4	200	132343	1.205	11.21
9I19035-CAL5	500	335865	1.196	11.21
9I19035-CAL6	1000	608748	1.143	11.21
9I19035-CAL7	2000	1187408	1.088	11.21
9I19035-CAL8	4000	2312152	0.944	11.22
9I19035-CAL9	6000	2907155	0.844	11.22
~~9I19035-CALA~~	~~8000~~	~~3477728~~	~~0.745~~	~~11.22~~

AVE RF **1.079** RF RSD **11.55** AVE RT **11.21**

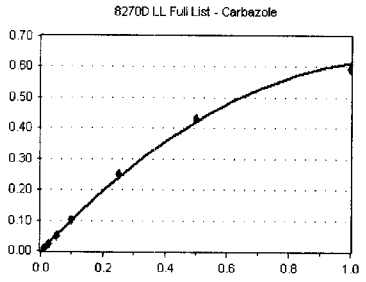
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Carbazole

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

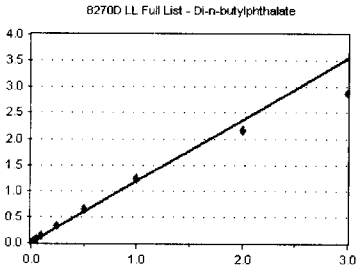


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9186	0.798	11.37
9I19035-CAL2	50	24489	0.900	11.37
9I19035-CAL3	100	54742	0.979	11.37
9I19035-CAL4	200	110985	1.011	11.37
9I19035-CAL5	500	281210	1.002	11.37
9I19035-CAL6	1000	458747	0.861	11.37
9I19035-CAL7	2000	646631	0.592	11.37
~~9I19035-CAL8~~	~~4000~~	~~858655~~	~~0.350~~	~~11.37~~
~~9I19035-CAL9~~	~~6000~~	~~1156567~~	~~0.336~~	~~11.37~~
~~9I19035-CALA~~	~~8000~~	~~1165062~~	~~0.250~~	~~11.37~~

AVE RF **0.878** RF RSD **16.89** AVE RT **11.37**

Di-n-butylphthalate

Curve Fit: **AVERAGE RF**

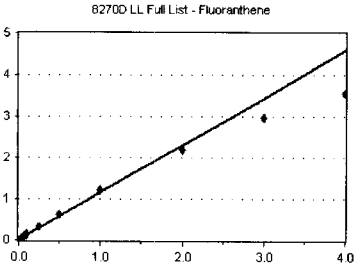


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~11697~~	~~1.017~~	~~11.72~~
9I19035-CAL2	50	29117	1.071	11.72
9I19035-CAL3	100	70280	1.257	11.72
9I19035-CAL4	200	138215	1.259	11.72
9I19035-CAL5	500	369981	1.318	11.72
9I19035-CAL6	1000	683398	1.283	11.72
9I19035-CAL7	2000	1348435	1.235	11.72
9I19035-CAL8	4000	2651399	1.082	11.72
9I19035-CAL9	6000	3301933	0.958	11.73
~~9I19035-CALA~~	~~8000~~	~~4037361~~	~~0.865~~	~~11.72~~

AVE RF **1.183** RF RSD **10.85** AVE RT **11.72**

Fluoranthene

Curve Fit: **AVERAGE RF**

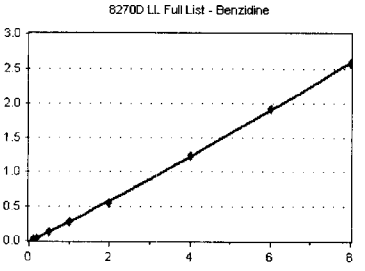


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12248	1.065	12.43
9I19035-CAL2	50	31166	1.146	12.42
9I19035-CAL3	100	70234	1.256	12.42
9I19035-CAL4	200	138551	1.262	12.42
9I19035-CAL5	500	369455	1.316	12.43
9I19035-CAL6	1000	669325	1.257	12.42
9I19035-CAL7	2000	1341415	1.229	12.43
9I19035-CAL8	4000	2665095	1.088	12.44
9I19035-CAL9	6000	3417993	0.992	12.44
9I19035-CALA	8000	4158773	0.891	12.44

AVE RF **1.150** RF RSD **12.02** AVE RT **12.43**

Benzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~3398~~	~~0.148~~	~~12.58~~
~~9I19035-CAL2~~	~~100~~	~~5652~~	~~0.104~~	~~12.58~~
9I19035-CAL3	200	12748	0.114	12.58
9I19035-CAL4	400	43242	0.197	12.58
9I19035-CAL5	1000	152022	0.271	12.58
9I19035-CAL6	2000	302104	0.284	12.58
9I19035-CAL7	4000	601547	0.275	12.59
9I19035-CAL8	8000	1506619	0.307	12.60
9I19035-CAL9	12000	2204013	0.320	12.60
9I19035-CALA	16000	3017555	0.323	12.60

AVE RF **0.261** RF RSD **27.45** AVE RT **12.59**

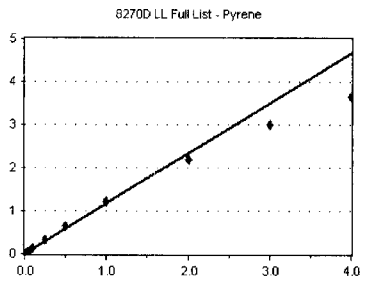
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Pyrene

Curve Fit: **AVERAGE RF**

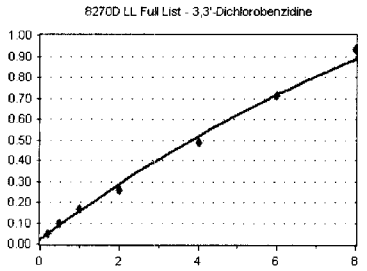


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	12641	1.099	12.71
9I19035-CAL2	50	32717	1.203	12.71
9I19035-CAL3	100	69474	1.242	12.71
9I19035-CAL4	200	143586	1.308	12.71
9I19035-CAL5	500	375136	1.336	12.71
9I19035-CAL6	1000	683508	1.283	12.71
9I19035-CAL7	2000	1337637	1.225	12.72
9I19035-CAL8	4000	2681088	1.094	12.73
9I19035-CAL9	6000	3436590	0.997	12.74
9I19035-CALA	8000	4271888	0.915	12.73

AVE RF **1.170** RF RSD **11.89** AVE RT **12.72**

3,3'-Dichlorobenzidine

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

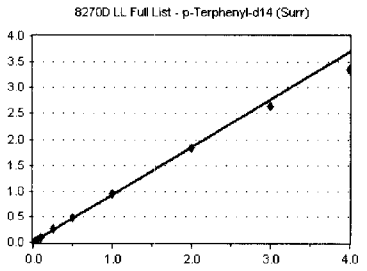


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~40~~	~~3617~~	~~0.156~~	~~0.00~~
~~9I19035-CAL2~~	~~100~~	~~11318~~	~~0.203~~	~~0.00~~
~~9I19035-CAL3~~	~~200~~	~~24584~~	~~0.219~~	~~14.85~~
9I19035-CAL4	400	53778	0.241	14.86
9I19035-CAL5	1000	110907	0.193	14.86
9I19035-CAL6	2000	174855	0.167	14.86
9I19035-CAL7	4000	281736	0.129	14.86
9I19035-CAL8	8000	555604	0.122	14.88
9I19035-CAL9	12000	730056	0.119	14.89
9I19035-CALA	16000	945543	0.117	0.00

AVE RF **0.155** RF RSD **30.50** AVE RT **12.74**

p-Terphenyl-d14 (Surr)

Curve Fit: **AVERAGE RF**

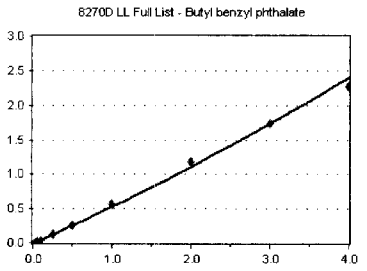


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9512	0.821	12.92
9I19035-CAL2	50	25113	0.902	12.92
9I19035-CAL3	100	54871	0.977	12.92
9I19035-CAL4	200	107135	0.959	12.92
9I19035-CAL5	500	285146	0.995	12.92
9I19035-CAL6	1000	507926	0.969	12.92
9I19035-CAL7	2000	1038865	0.953	12.93
9I19035-CAL8	4000	2102593	0.924	12.94
9I19035-CAL9	6000	2699067	0.880	12.94
9I19035-CALA	8000	3392009	0.837	12.93

AVE RF **0.922** RF RSD **6.53** AVE RT **12.93**

Butyl benzyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2535~~	~~0.219~~	~~13.73~~
9I19035-CAL2	50	6765	0.243	13.74
9I19035-CAL3	100	18774	0.334	13.74
9I19035-CAL4	200	42397	0.380	13.74
9I19035-CAL5	500	139695	0.487	13.74
9I19035-CAL6	1000	279356	0.533	13.74
9I19035-CAL7	2000	621242	0.570	13.74
9I19035-CAL8	4000	1344154	0.590	13.75
9I19035-CAL9	6000	1779167	0.580	13.76
9I19035-CALA	8000	2308181	0.569	13.75

AVE RF **0.476** RF RSD **26.60** AVE RT **13.74**

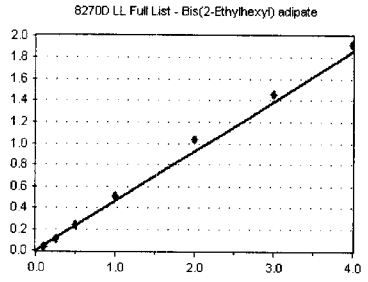
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Bis(2-Ethylhexyl) adipate

Curve Fit: **AVERAGE RF**

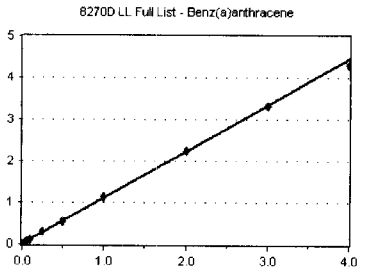


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2762~~	~~0.238~~	~~13.91~~
~~9I19035-CAL2~~	~~50~~	~~6924~~	~~0.249~~	~~13.91~~
~~9I19035-CAL3~~	~~100~~	~~18358~~	~~0.327~~	~~13.91~~
9I19035-CAL4	200	37581	0.336	13.91
9I19035-CAL5	500	126449	0.441	13.91
9I19035-CAL6	1000	247877	0.473	13.91
9I19035-CAL7	2000	551677	0.506	13.92
9I19035-CAL8	4000	1183408	0.520	13.92
9I19035-CAL9	6000	1497303	0.488	13.93
9I19035-CALA	8000	1955106	0.482	13.92

AVE RF **0.464** RF RSD **13.26** AVE RT **13.92**

Benz(a)anthracene

Curve Fit: **AVERAGE RF**

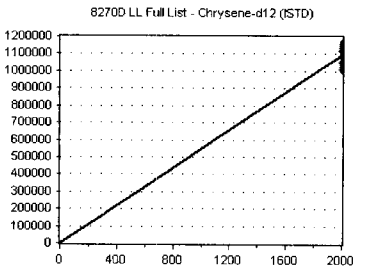


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	13459	1.161	14.89
9I19035-CAL2	50	29779	1.070	14.89
9I19035-CAL3	100	64818	1.154	14.89
9I19035-CAL4	200	124472	1.114	14.89
9I19035-CAL5	500	327557	1.143	14.89
9I19035-CAL6	1000	577553	1.102	14.89
9I19035-CAL7	2000	1225586	1.125	14.90
9I19035-CAL8	4000	2538581	1.115	14.91
9I19035-CAL9	6000	3394067	1.107	14.92
9I19035-CALA	8000	4360504	1.076	14.91

AVE RF **1.117** RF RSD **2.72** AVE RT **14.90**

Chrysene-d12 (ISTD)

Curve Fit: **AVERAGE RF**

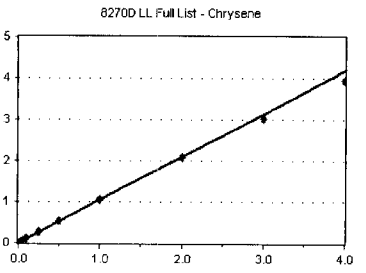


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1159268	579.634	14.91
9I19035-CAL2	2000	1113286	556.643	14.91
9I19035-CAL3	2000	1122909	561.454	14.91
9I19035-CAL4	2000	1116848	558.424	14.91
9I19035-CAL5	2000	1146727	573.363	14.92
9I19035-CAL6	2000	1048464	524.232	14.92
9I19035-CAL7	2000	1089712	544.856	14.92
9I19035-CAL8	2000	1138264	569.132	14.94
9I19035-CAL9	2000	1022230	511.115	14.94
9I19035-CALA	2000	1013392	506.696	14.93

AVE RF **548.555** RF RSD **4.74** AVE RT **14.92**

Chrysene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	11530	0.995	14.97
9I19035-CAL2	50	29254	1.051	14.96
9I19035-CAL3	100	61418	1.094	14.97
9I19035-CAL4	200	120574	1.080	14.97
9I19035-CAL5	500	313539	1.094	14.97
9I19035-CAL6	1000	556735	1.062	14.98
9I19035-CAL7	2000	1148470	1.054	14.98
9I19035-CAL8	4000	2370714	1.041	15.00
9I19035-CAL9	6000	3095456	1.009	15.01
9I19035-CALA	8000	3992263	0.985	15.00

AVE RF **1.046** RF RSD **3.74** AVE RT **14.98**

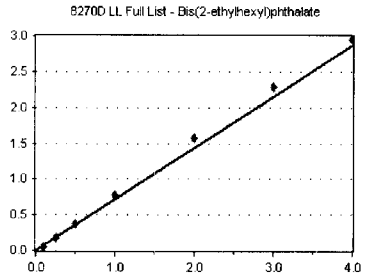
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Bis(2-ethylhexyl)phthalate

Curve Fit: **AVERAGE RF**

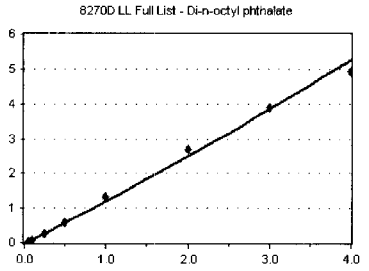


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~2659~~	~~0.229~~	~~15.08~~
~~9I19035-CAL2~~	~~50~~	~~8694~~	~~0.312~~	~~15.07~~
~~9I19035-CAL3~~	~~100~~	~~26668~~	~~0.475~~	~~15.07~~
9I19035-CAL4	200	58143	0.521	15.07
9I19035-CAL5	500	202494	0.706	15.08
9I19035-CAL6	1000	389483	0.743	15.07
9I19035-CAL7	2000	846014	0.776	15.08
9I19035-CAL8	4000	1799096	0.790	15.09
9I19035-CAL9	6000	2338505	0.763	15.09
9I19035-CALA	8000	2986931	0.737	15.08

AVE RF **0.719** RF RSD **12.78** AVE RT **15.08**

Di-n-octyl phthalate

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

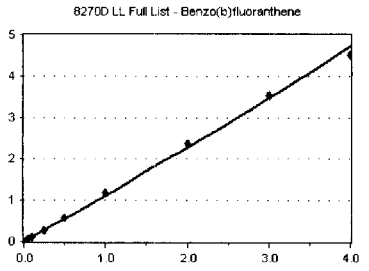


Standard	Concentration	Response	Response Factor	RT
~~9I19035-CAL1~~	~~20~~	~~3334~~	~~0.288~~	~~16.74~~
~~9I19035-CAL2~~	~~50~~	~~9861~~	~~0.359~~	~~16.74~~
9I19035-CAL3	100	33665	0.597	16.74
9I19035-CAL4	200	75567	0.694	16.74
9I19035-CAL5	500	281414	0.979	16.75
9I19035-CAL6	1000	592055	1.136	16.75
9I19035-CAL7	2000	1439135	1.337	16.75
9I19035-CAL8	4000	3203842	1.352	16.76
9I19035-CAL9	6000	4149203	1.295	16.77
9I19035-CALA	8000	5450180	1.229	16.75

AVE RF **1.077** RF RSD **27.27** AVE RT **16.75**

Benzo(b)fluoranthene

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

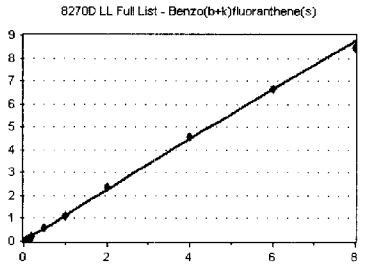


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8297	0.716	17.46
9I19035-CAL2	50	21819	0.795	17.47
9I19035-CAL3	100	57260	1.016	17.47
9I19035-CAL4	200	113080	1.038	17.48
9I19035-CAL5	500	318669	1.109	17.48
9I19035-CAL6	1000	578435	1.109	17.48
9I19035-CAL7	2000	1267321	1.178	17.49
9I19035-CAL8	4000	2803227	1.183	17.52
9I19035-CAL9	6000	3768759	1.177	17.52
9I19035-CALA	8000	5003892	1.128	17.52

AVE RF **1.045** RF RSD **15.65** AVE RT **17.49**

Benzo(b+k)fluoranthene(s)

Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	40	17019	0.734	17.46
9I19035-CAL2	100	47809	0.871	17.47
9I19035-CAL3	200	120376	1.068	17.54
9I19035-CAL4	400	234995	1.079	17.48
9I19035-CAL5	1000	653019	1.136	17.54
9I19035-CAL6	2000	1182652	1.134	17.55
9I19035-CAL7	4000	2563432	1.191	17.55
9I19035-CAL8	8000	5439284	1.148	17.59
9I19035-CAL9	12000	7129046	1.113	17.60
9I19035-CALA	16000	9407940	1.060	17.59

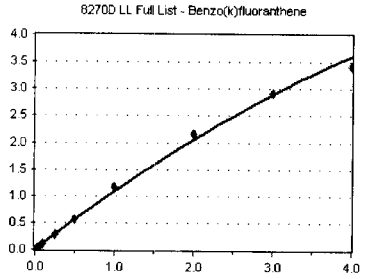
AVE RF **1.053** RF RSD **13.45** AVE RT **17.54**

Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Benzo(k)fluoranthene

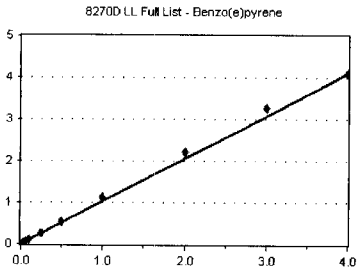


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8174	0.705	17.54
9I19035-CAL2	50	23687	0.864	17.54
9I19035-CAL3	100	58523	1.038	17.54
9I19035-CAL4	200	115987	1.065	17.54
9I19035-CAL5	500	321918	1.120	17.54
9I19035-CAL6	1000	582389	1.117	17.55
9I19035-CAL7	2000	1256906	1.168	17.55
9I19035-CAL8	4000	2555733	1.078	17.59
9I19035-CAL9	6000	3115398	0.973	17.60
9I19035-CALA	8000	3789489	0.854	17.59

AVE RF **0.998** RF RSD **14.77** AVE RT **17.56**

Benzo(e)pyrene

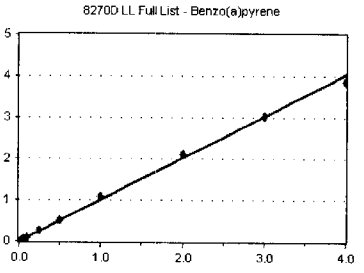


Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8657	0.747	18.13
9I19035-CAL2	50	24570	0.896	18.12
9I19035-CAL3	100	58165	1.032	18.12
9I19035-CAL4	200	113143	1.039	18.13
9I19035-CAL5	500	316818	1.102	18.13
9I19035-CAL6	1000	576088	1.105	18.14
9I19035-CAL7	2000	1218818	1.133	18.14
9I19035-CAL8	4000	2630004	1.110	18.17
9I19035-CAL9	6000	3489142	1.089	18.19
9I19035-CALA	8000	4556103	1.027	18.17

AVE RF **1.028** RF RSD **11.67** AVE RT **18.14**

Benzo(a)pyrene

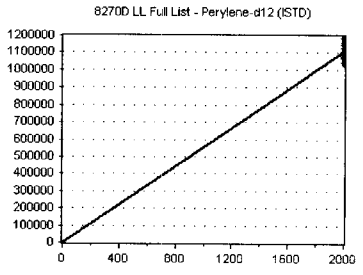


Curve Fit: **QUADRATIC: Weighting: (1/a^2), Origin: Ignore**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	6648	0.574	18.24
9I19035-CAL2	50	18583	0.677	18.24
9I19035-CAL3	100	50114	0.889	18.24
9I19035-CAL4	200	99882	0.917	18.24
9I19035-CAL5	500	295305	1.028	18.25
9I19035-CAL6	1000	535317	1.027	18.25
9I19035-CAL7	2000	1174506	1.091	18.26
9I19035-CAL8	4000	2485829	1.049	18.29
9I19035-CAL9	6000	3235783	1.010	18.31
9I19035-CALA	8000	4292201	0.968	18.30

AVE RF **0.923** RF RSD **18.38** AVE RT **18.26**

Perylene-d12 (ISTD)



Curve Fit: **AVERAGE RF**

Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	1158997	579.498	18.39
9I19035-CAL2	2000	1097209	548.604	18.39
9I19035-CAL3	2000	1127380	563.690	18.39
9I19035-CAL4	2000	1089238	544.619	18.40
9I19035-CAL5	2000	1149483	574.742	18.40
9I19035-CAL6	2000	1042709	521.354	18.40
9I19035-CAL7	2000	1076142	538.071	18.40
9I19035-CAL8	2000	1185024	592.512	18.42
9I19035-CAL9	2000	1067597	533.798	18.43
9I19035-CALA	2000	1108960	554.480	18.41

AVE RF **555.137** RF RSD **4.02** AVE RT **18.40**

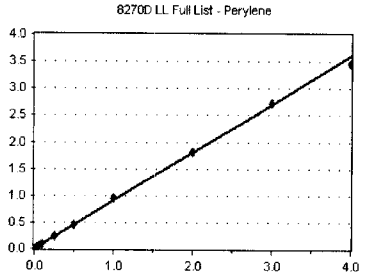
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

Perylene

Curve Fit: **AVERAGE RF**

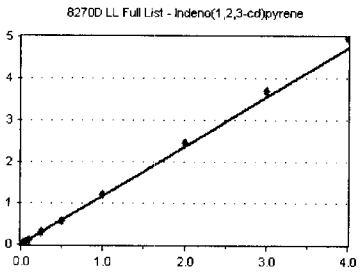


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	9278	0.801	18.45
9I19035-CAL2	50	24689	0.900	18.45
9I19035-CAL3	100	50289	0.892	18.45
9I19035-CAL4	200	100217	0.920	18.45
9I19035-CAL5	500	273199	0.951	18.45
9I19035-CAL6	1000	476752	0.914	18.46
9I19035-CAL7	2000	1026574	0.954	18.47
9I19035-CAL8	4000	2164033	0.913	18.50
9I19035-CAL9	6000	2908580	0.908	18.51
9I19035-CALA	8000	3844220	0.867	18.50

AVE RF **0.902** RF RSD **4.87** AVE RT **18.47**

Indeno(1,2,3-cd)pyrene

Curve Fit: **AVERAGE RF**

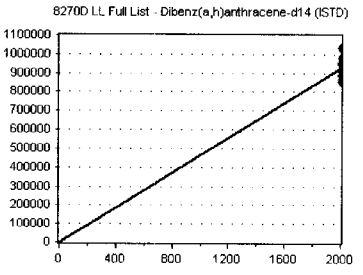


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	10072	1.102	20.77
9I19035-CAL2	50	25006	1.169	20.78
9I19035-CAL3	100	52504	1.176	20.78
9I19035-CAL4	200	100411	1.156	20.78
9I19035-CAL5	500	279363	1.171	20.78
9I19035-CAL6	1000	510691	1.152	20.79
9I19035-CAL7	2000	1143875	1.205	20.80
9I19035-CAL8	4000	2539375	1.224	20.84
9I19035-CAL9	6000	3489319	1.230	20.85
9I19035-CALA	8000	4879339	1.241	20.84

AVE RF **1.183** RF RSD **3.60** AVE RT **20.80**

Dibenz(a,h)anthracene-d14 (ISTD)

Curve Fit: **AVERAGE RF**

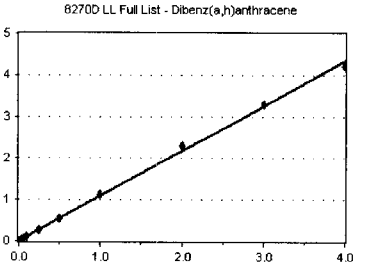


Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	2000	913932	456.966	20.80
9I19035-CAL2	2000	855339	427.669	20.79
9I19035-CAL3	2000	892958	446.479	20.79
9I19035-CAL4	2000	868590	434.295	20.80
9I19035-CAL5	2000	954508	477.254	20.80
9I19035-CAL6	2000	886236	443.118	20.80
9I19035-CAL7	2000	949148	474.574	20.80
9I19035-CAL8	2000	1037191	518.596	20.83
9I19035-CAL9	2000	945822	472.911	20.84
9I19035-CALA	2000	982889	491.444	20.82

AVE RF **464.331** RF RSD **6.05** AVE RT **20.80**

Dibenz(a,h)anthracene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	8754	0.958	20.85
9I19035-CAL2	50	21791	1.019	20.85
9I19035-CAL3	100	48705	1.091	20.85
9I19035-CAL4	200	95316	1.097	20.85
9I19035-CAL5	500	270778	1.135	20.86
9I19035-CAL6	1000	489557	1.105	20.87
9I19035-CAL7	2000	1087002	1.145	20.88
9I19035-CAL8	4000	2389624	1.152	20.90
9I19035-CAL9	6000	3129173	1.103	20.91
9I19035-CALA	8000	4143300	1.054	20.90

AVE RF **1.086** RF RSD **5.57** AVE RT **20.87**

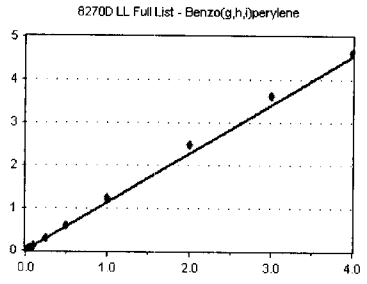
Element Calibration Review Sheet

Calibration ID: **A9I2405** Instrument: **SV-GCMS10** Calibration Date: **09/24/2019**

Analysis: **8270D LL Full List** Instrument Cal ID: **A9I2405**

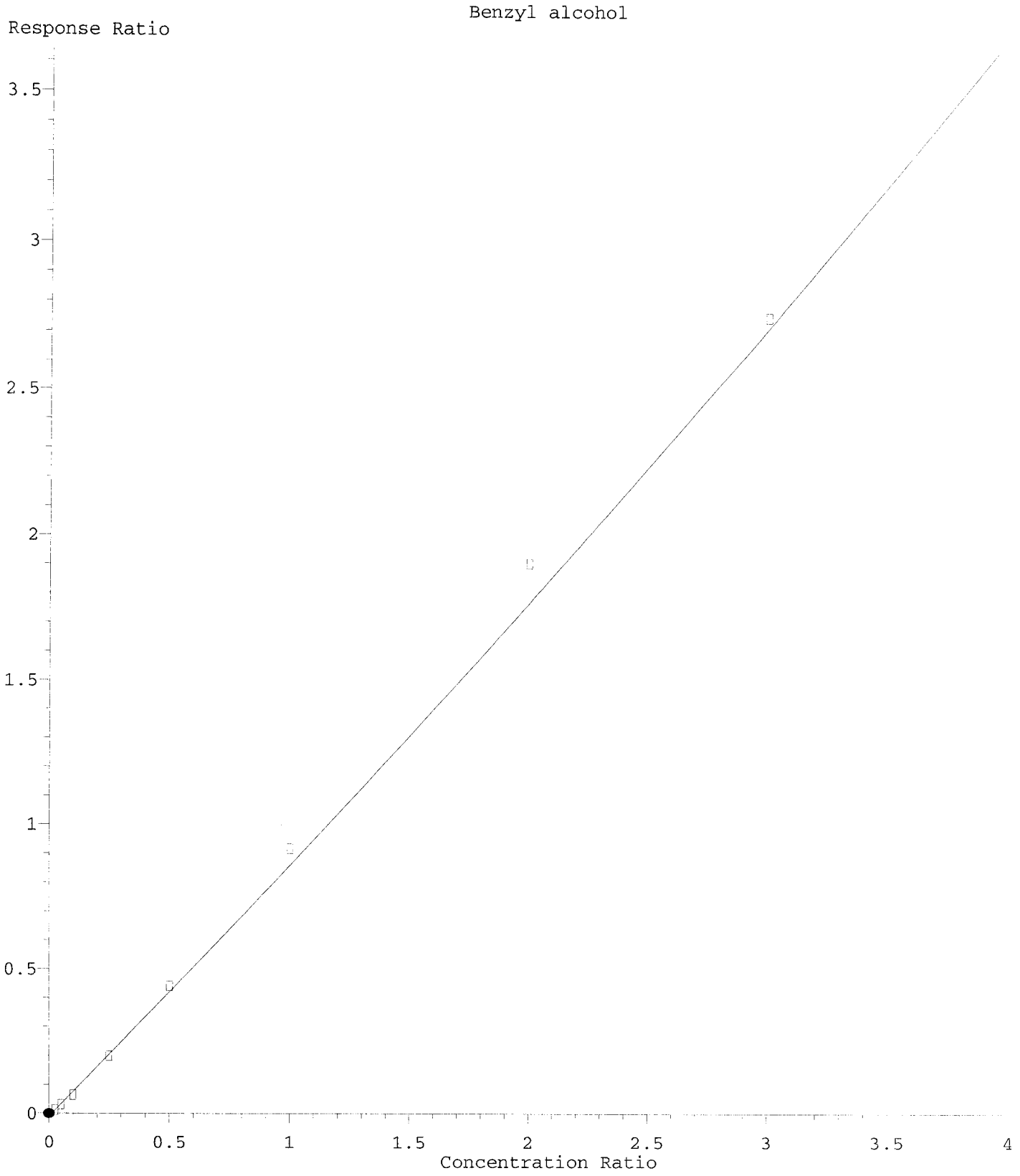
Benzo(g,h,i)perylene

Curve Fit: **AVERAGE RF**



Standard	Concentration	Response	Response Factor	RT
9I19035-CAL1	20	7772	0.850	21.32
9I19035-CAL2	50	20181	0.944	21.31
9I19035-CAL3	100	49447	1.107	21.31
9I19035-CAL4	200	101188	1.165	21.32
9I19035-CAL5	500	291609	1.222	21.33
9I19035-CAL6	1000	538150	1.214	21.33
9I19035-CAL7	2000	1186793	1.250	21.34
9I19035-CAL8	4000	2579448	1.243	21.38
9I19035-CAL9	6000	3417702	1.204	21.39
9I19035-CALA	8000	4554601	1.158	21.38

AVE RF **1.136** RF RSD **11.87** AVE RT **21.34**

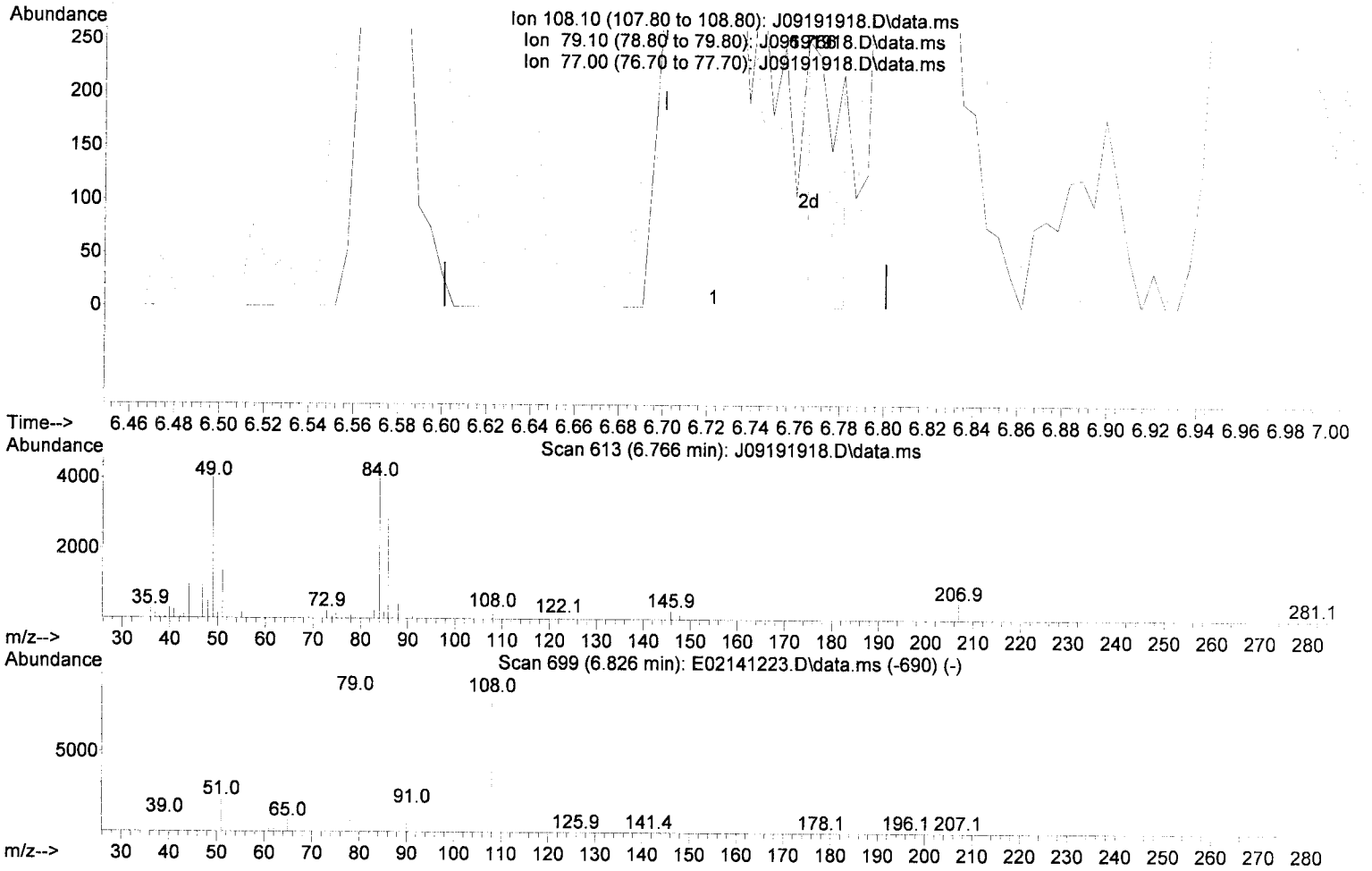


R = 1.89e-002 A*A + 8.51e-001 A - 1.04e-002
Coef of Det (r^2) = 0.894 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



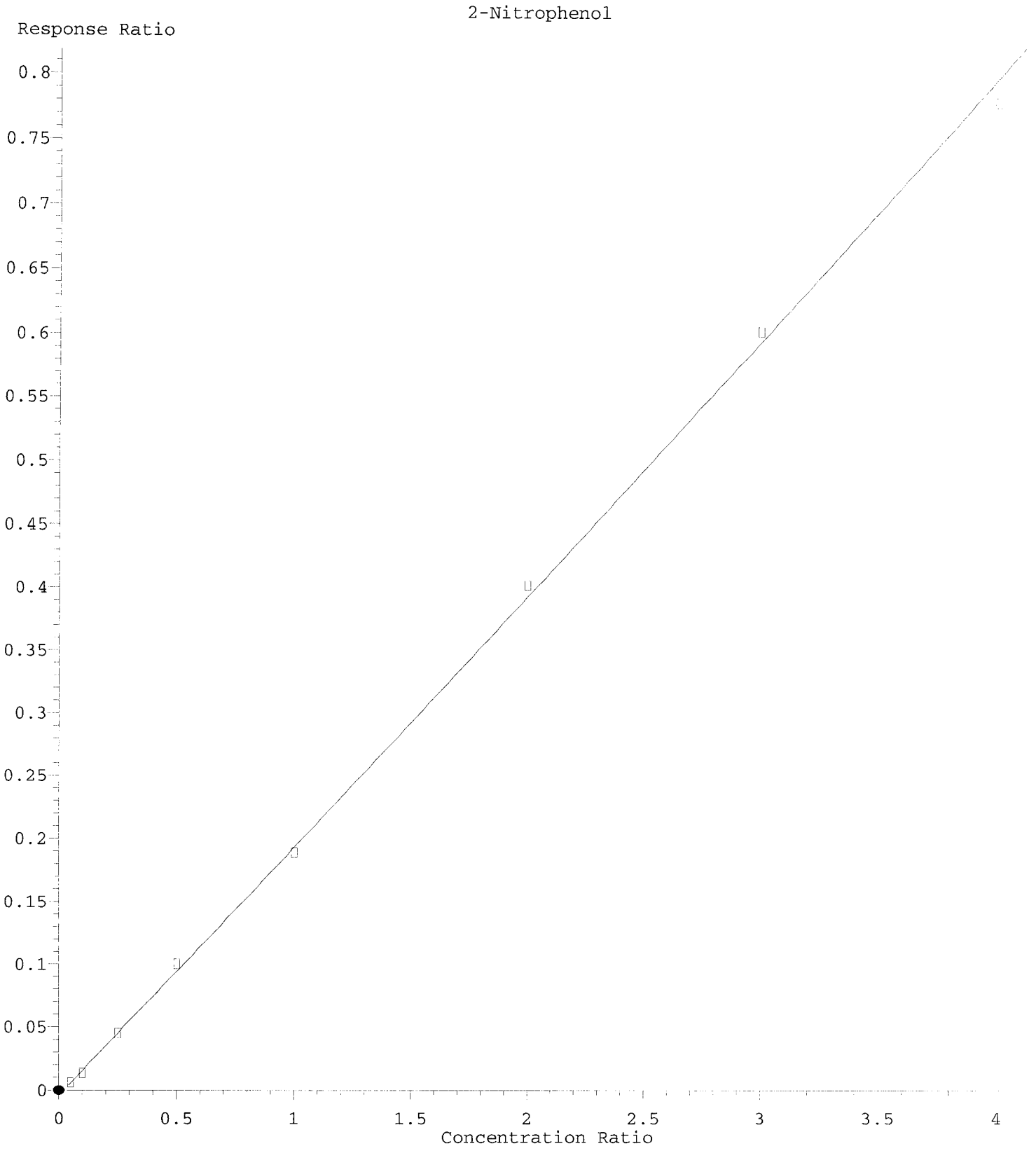
TIC: J09191918.D\data.ms

(12) Benzyl alcohol (T)

6.766min (+ 0.065) 26.03 ng/ml m

response 193

Ion	Exp%	Act%
108.10	100.00	100.00
79.10	108.60	31.35#
77.00	68.40	50.40
0.00	0.00	0.00

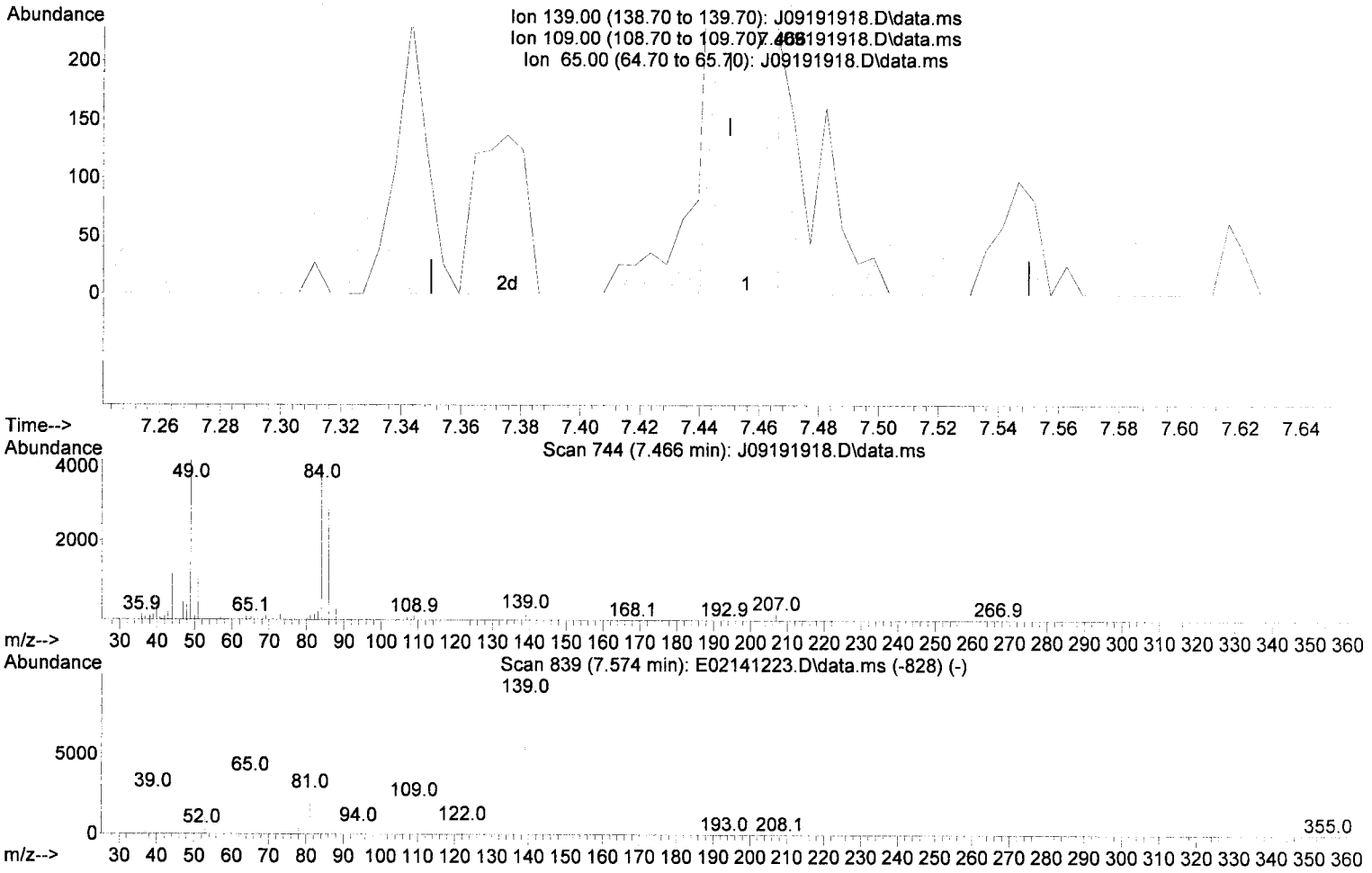


R = 1.05e-003 A*A + 1.96e-001 A - 4.15e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



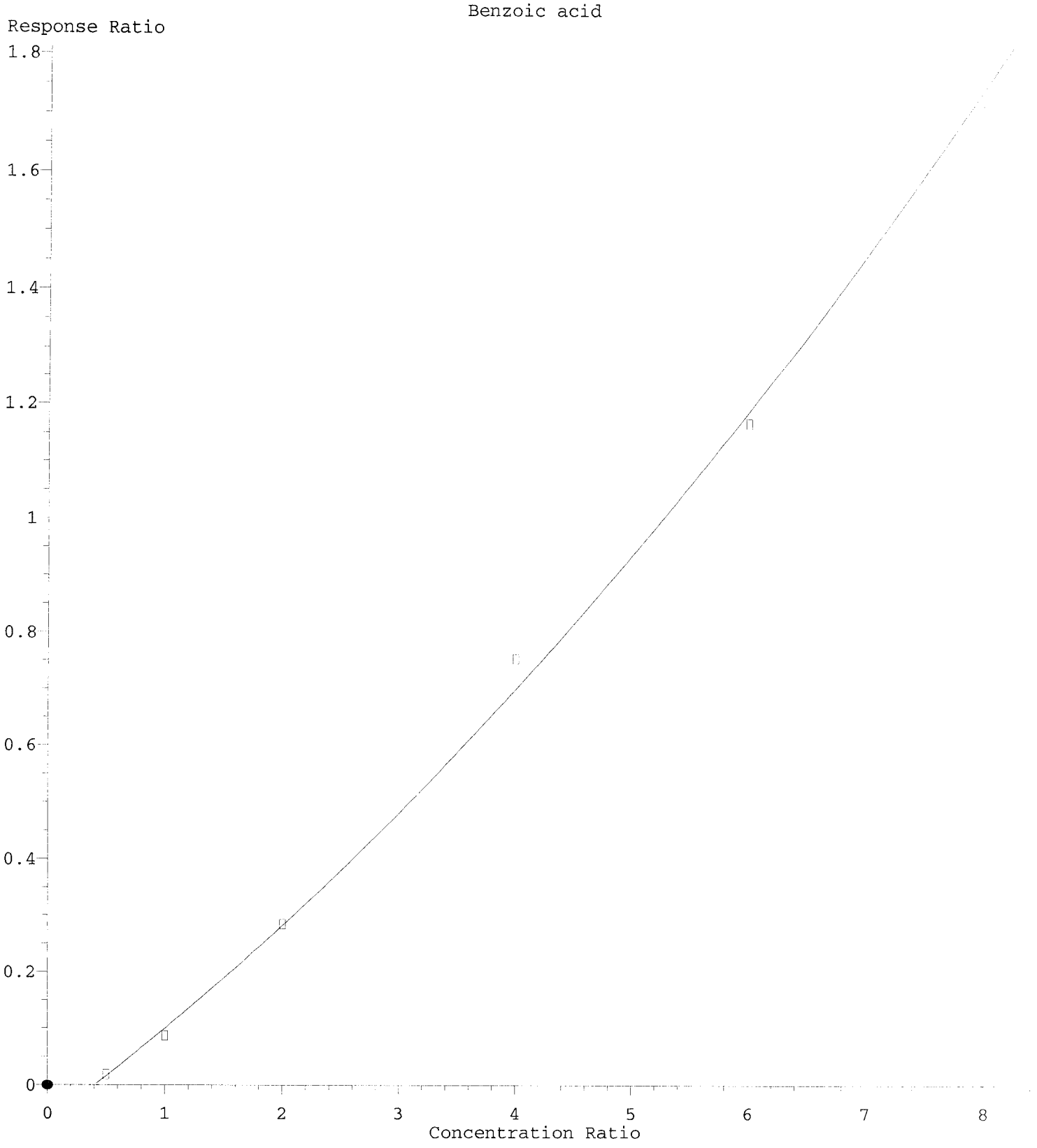
TIC: J09191918.D\data.ms

(23) 2-Nitrophenol (T)

7.466min (+ 0.016) 43.56 ng/ml m

response 151

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	25.20	53.85
65.00	38.40	58.82
0.00	0.00	0.00

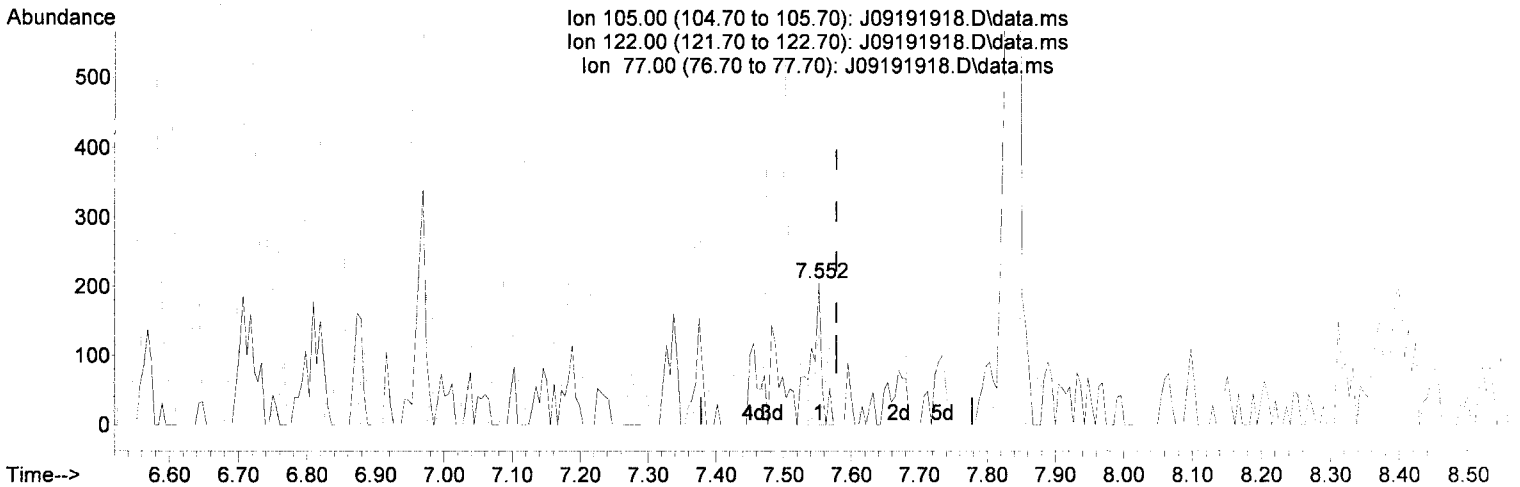


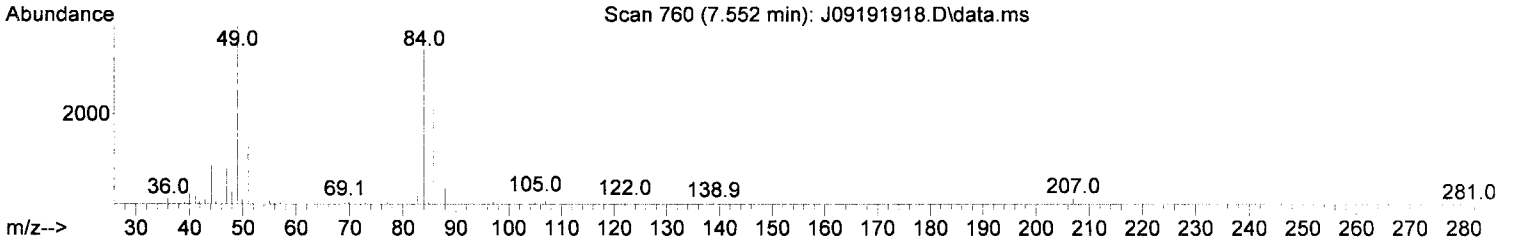
R = 8.94e-003 A*A + 1.55e-001 A - 6.40e-002
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/x^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

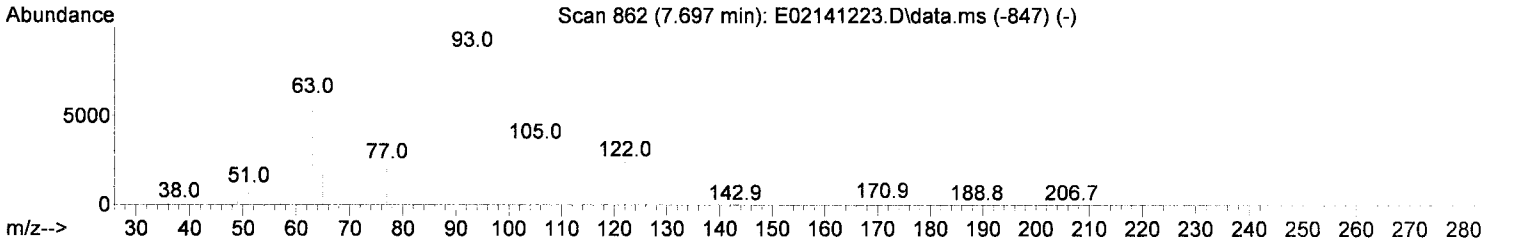
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







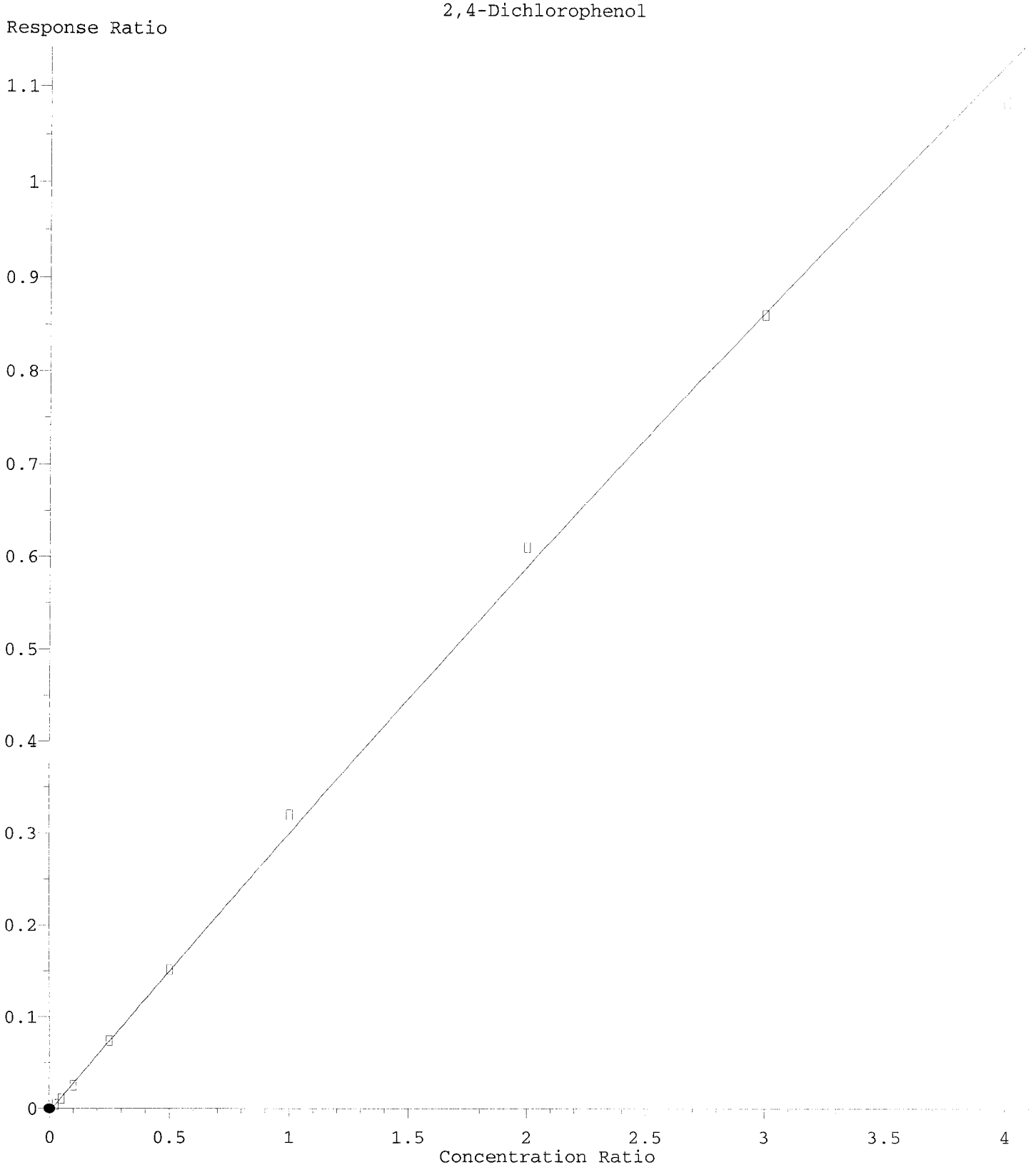
TIC: J09191918.D\data.ms

(26) Benzoic acid (T)

7.552min (-0.026) 807.68 ng/ml m

response 164

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	63.41
77.00	72.00	38.05#
0.00	0.00	0.00

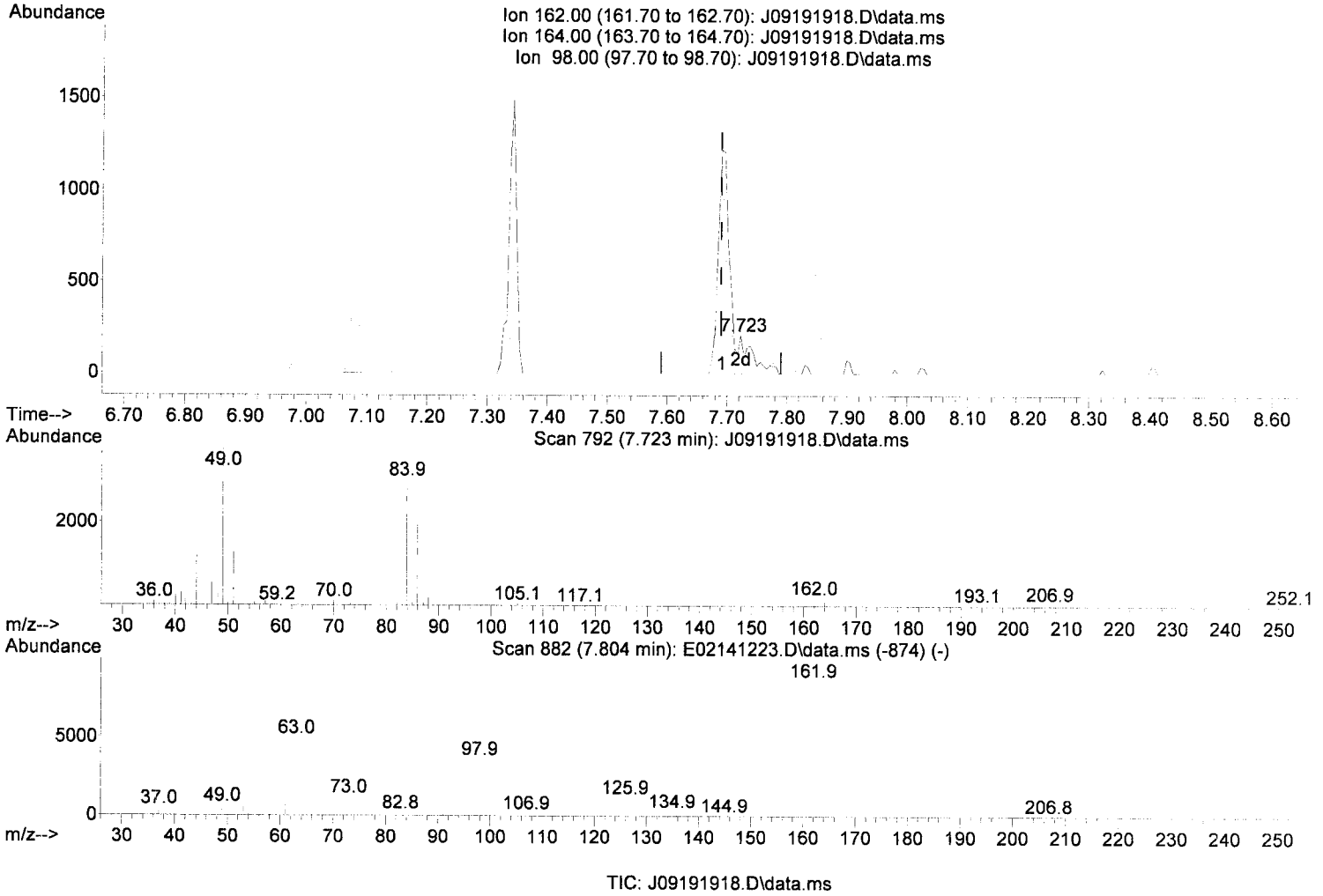


R = -7.18e-003 A*A + 3.11e-001 A - 3.87e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



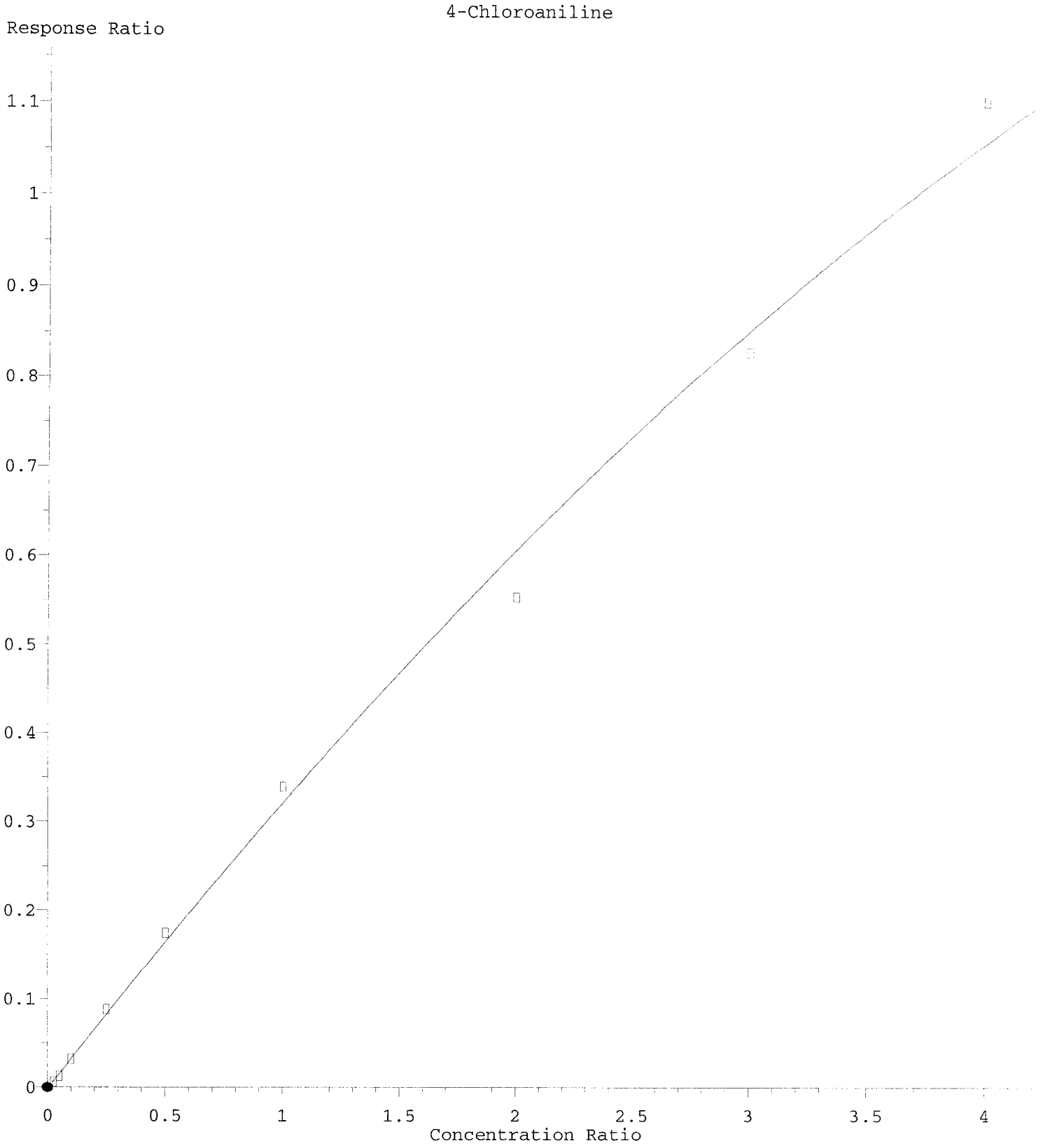
TIC: J09191918.D\data.ms

(27) 2,4-Dichlorophenol (T)

7.723min (+ 0.033) 25.85 ng/ml m

response 177

Ion	Exp%	Act%
162.00	100.00	100.00
164.00	64.50	62.20
98.00	33.60	0.00#
0.00	0.00	0.00

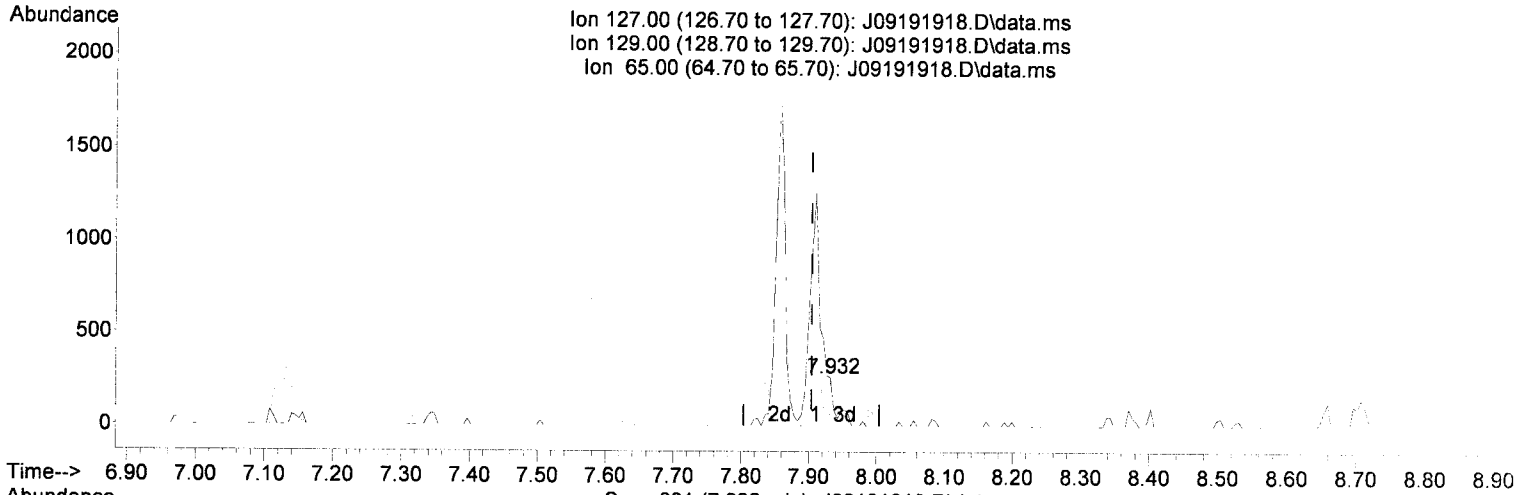


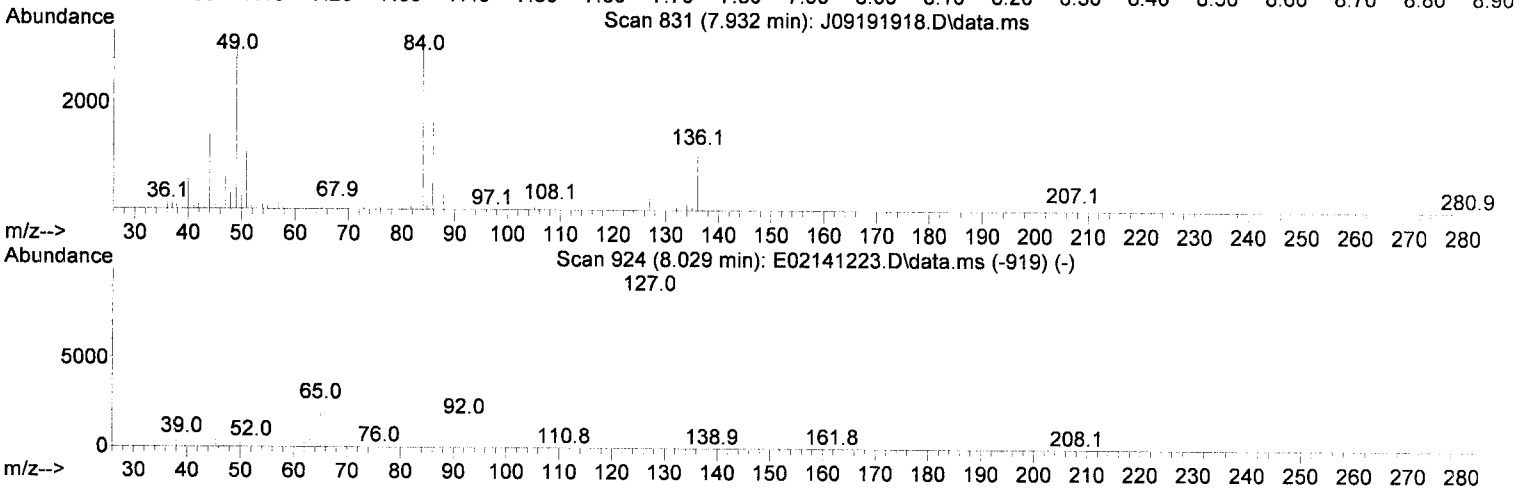
R = -1.94e-002 A*A + 3.43e-001 A - 2.27e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





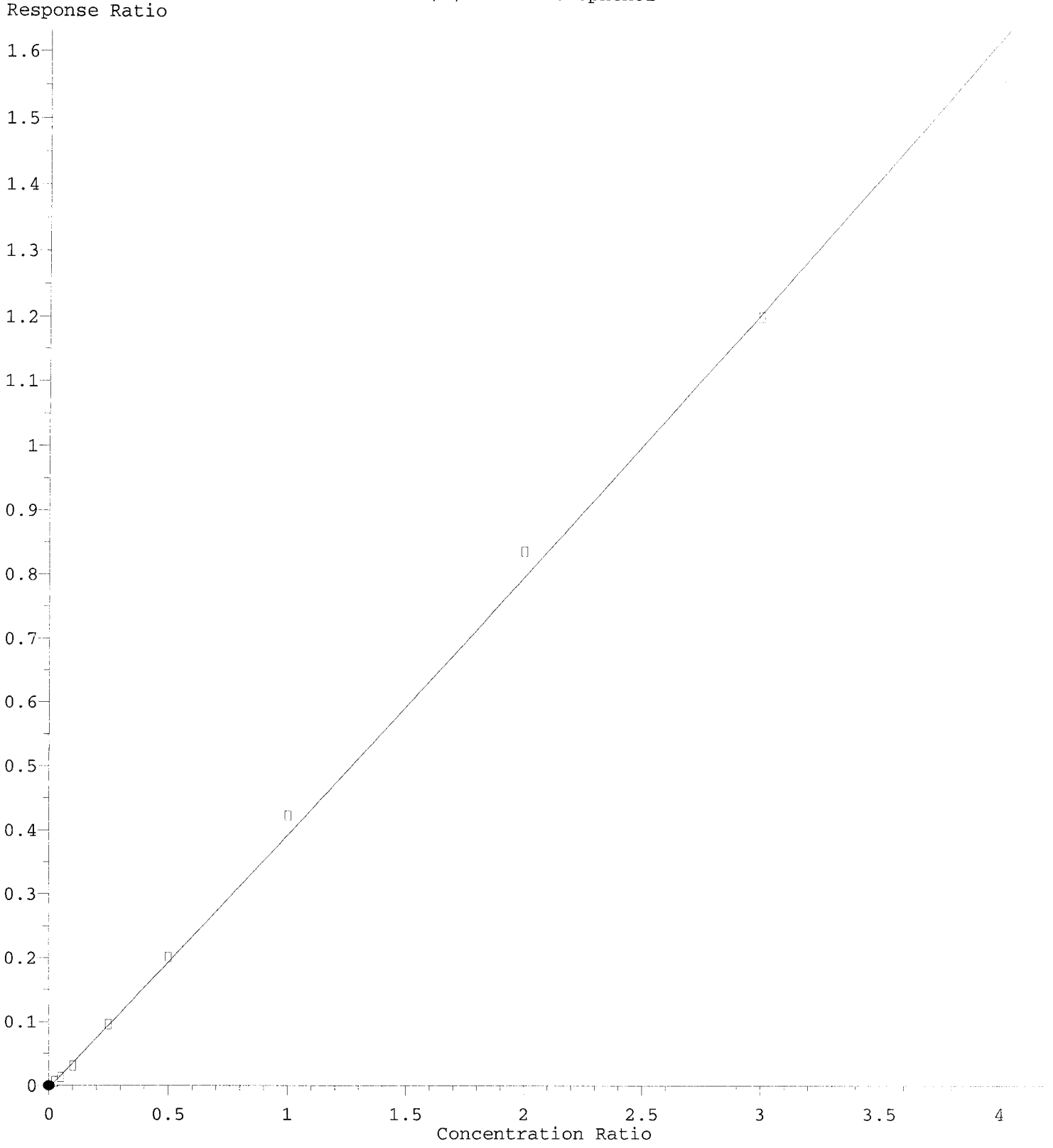
TIC: J09191918.D\data.ms

(30) 4-Chloroaniline (T)

7.932min (+ 0.028) 14.02 ng/ml m

response 160

Ion	Exp%	Act%
127.00	100.00	100.00
129.00	33.00	0.00#
65.00	23.50	18.01
0.00	0.00	0.00

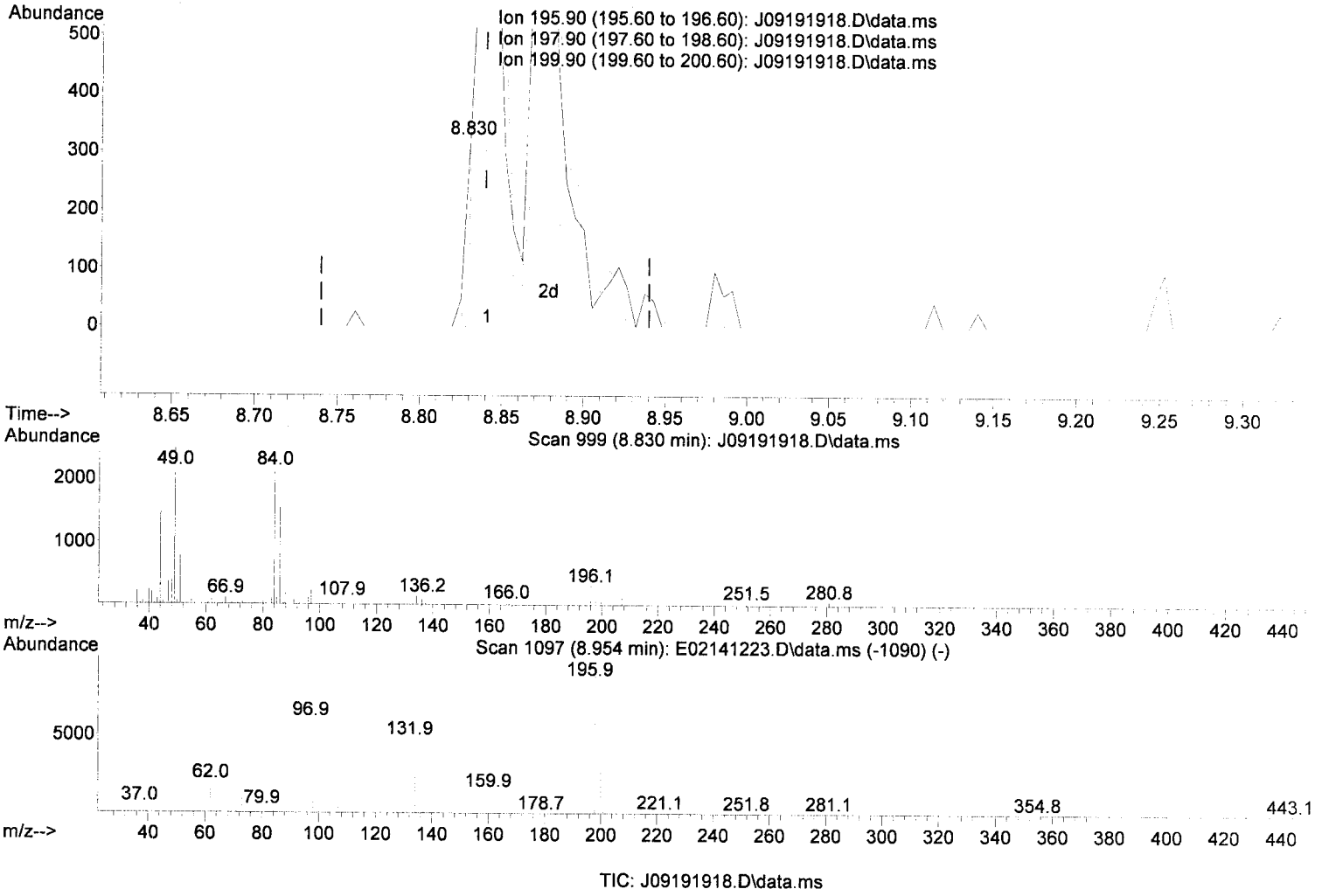


R = 3.29e-003 A*A + 3.94e-001 A - 4.68e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



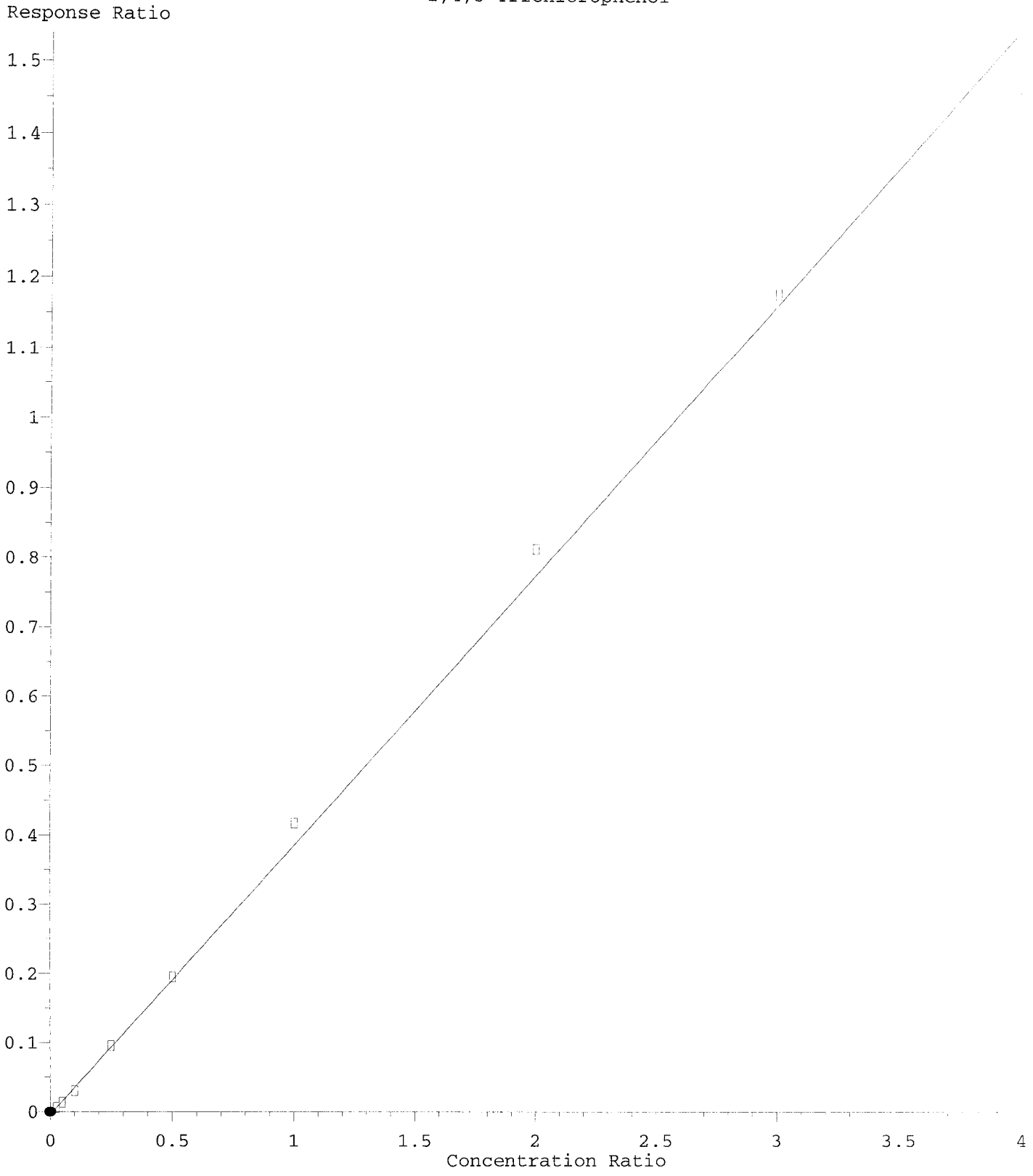
TIC: J09191918.D\data.ms

(37) 2,4,6-Trichlorophenol (T)

8.830min (-0.010) 24.69 ng/ml m

response 119

Ion	Exp%	Act%
195.90	100.00	100.00
197.90	94.40	61.61#
199.90	29.80	21.67
0.00	0.00	0.00

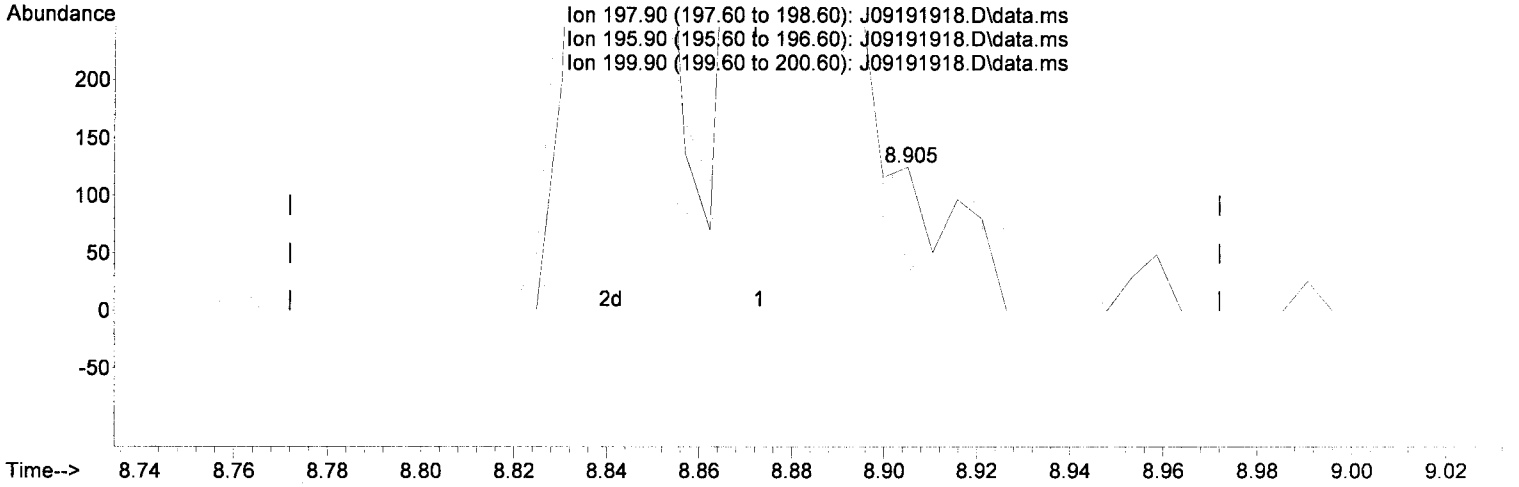


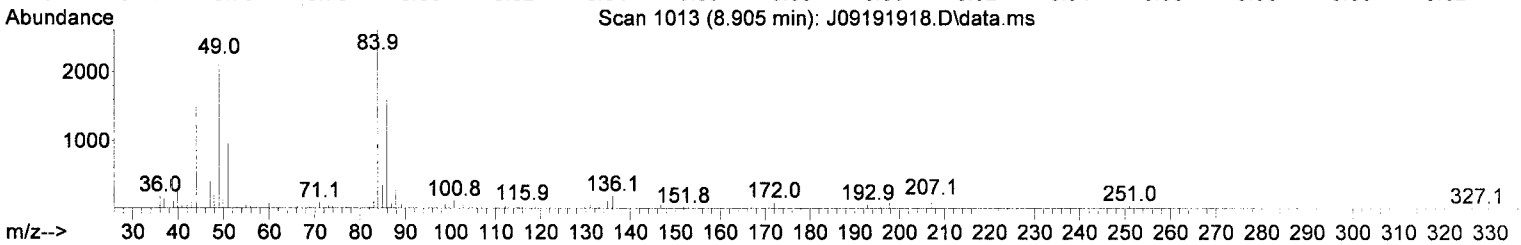
R = -3.95e-004 A*A + 3.91e-001 A - 4.45e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic, 1/(1/x^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

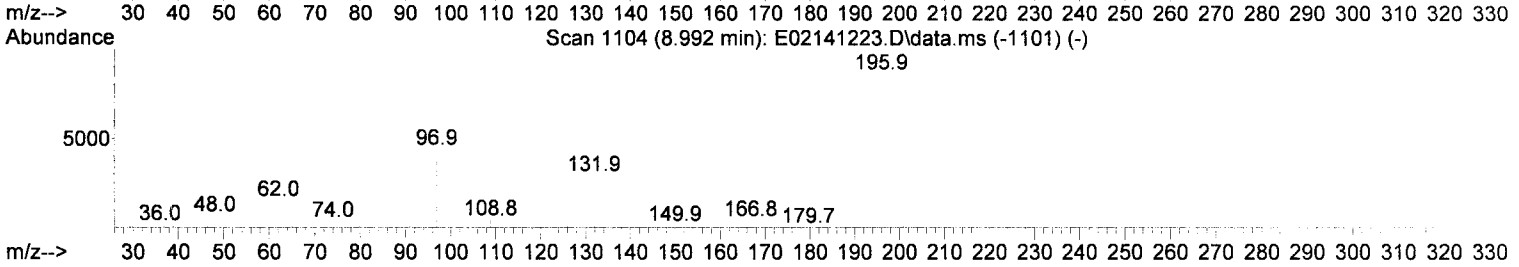
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







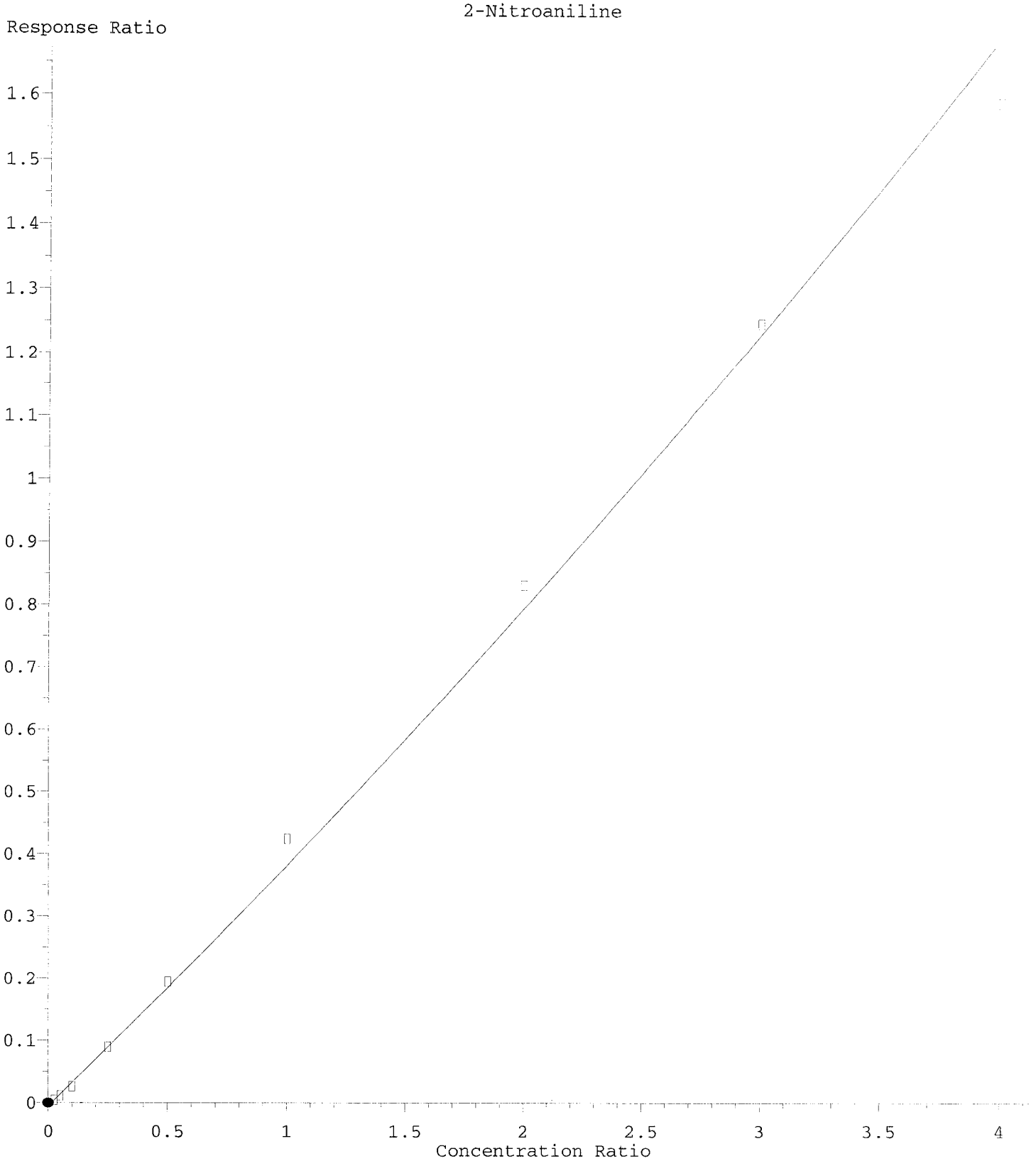
TIC: J09191918.D\data.ms

(38) 2,4,5-Trichlorophenol (T)

8.905min (+ 0.033) 23.67 ng/ml m

response 113

Ion	Exp%	Act%
197.90	100.00	100.00
195.90	103.40	26.40#
199.90	32.90	21.60
0.00	0.00	0.00

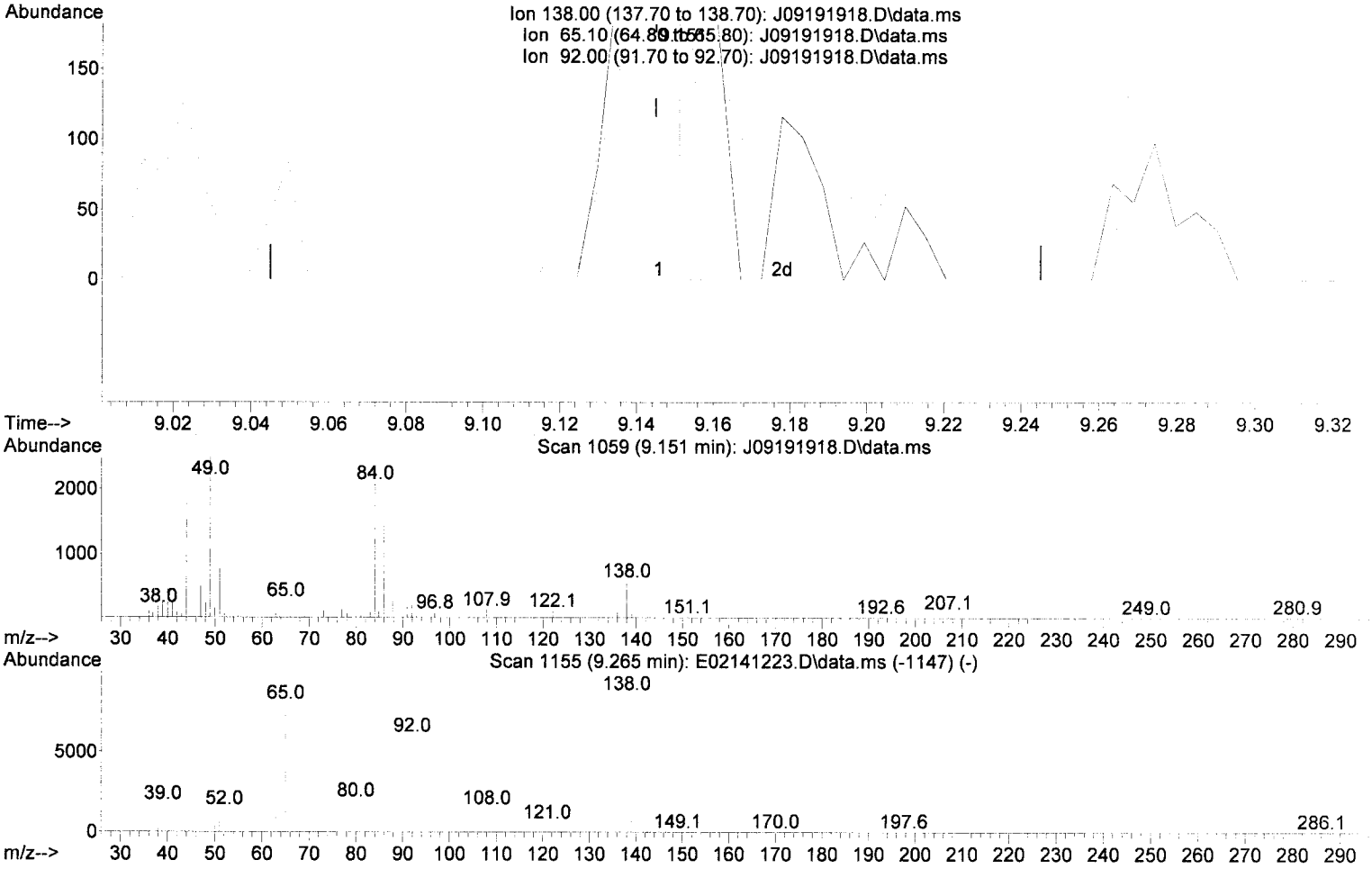


R = 1.23e-002 A*A + 3.75e-001 A - 5.72e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/x^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



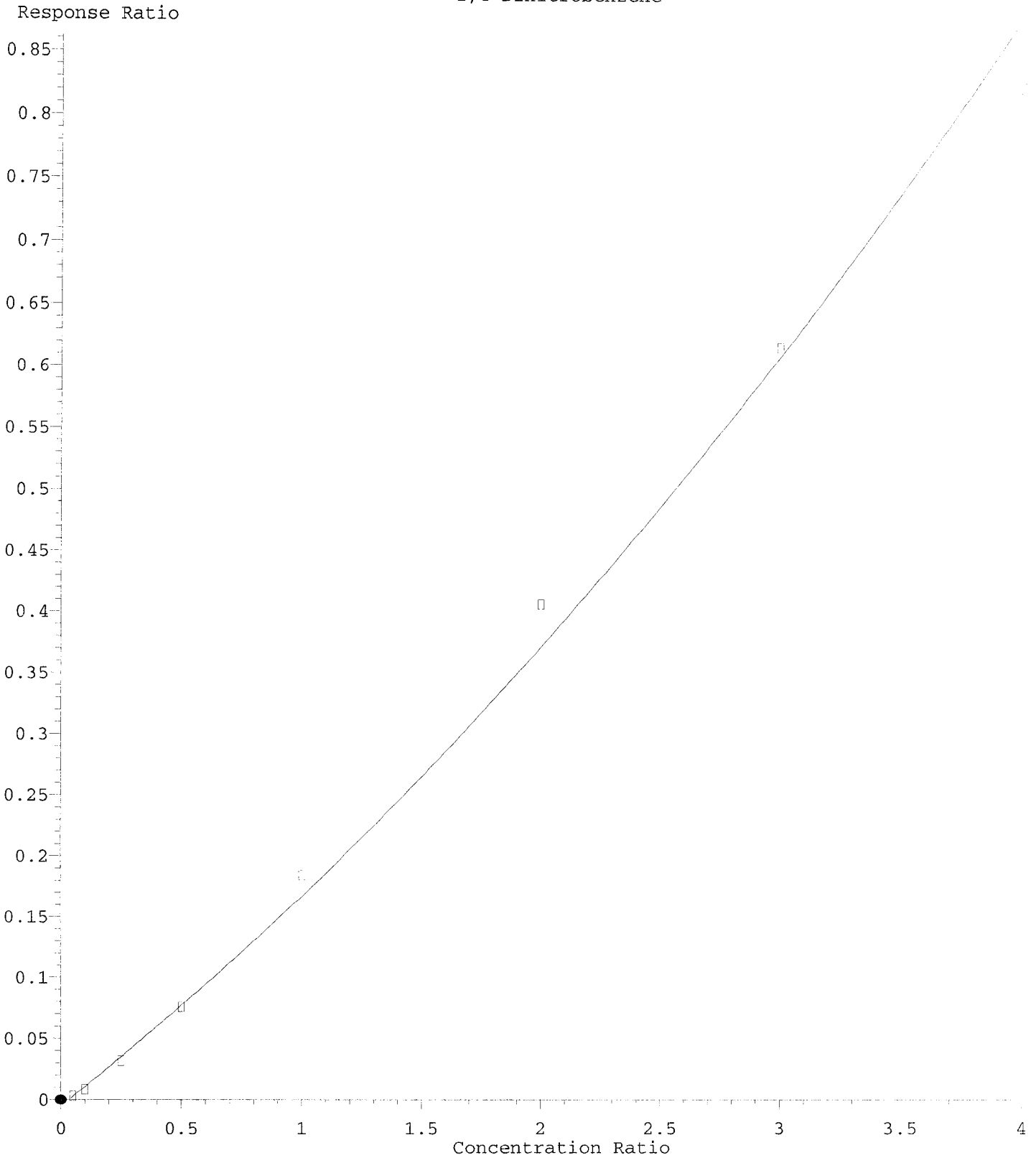
TIC: J09191918.D\data.ms

(42) 2-Nitroaniline (T)

9.151min (+ 0.006) 31.75 ng/ml m

response 155

Ion	Exp%	Act%
138.00	100.00	100.00
65.10	69.90	48.28
92.00	55.20	48.97
0.00	0.00	0.00

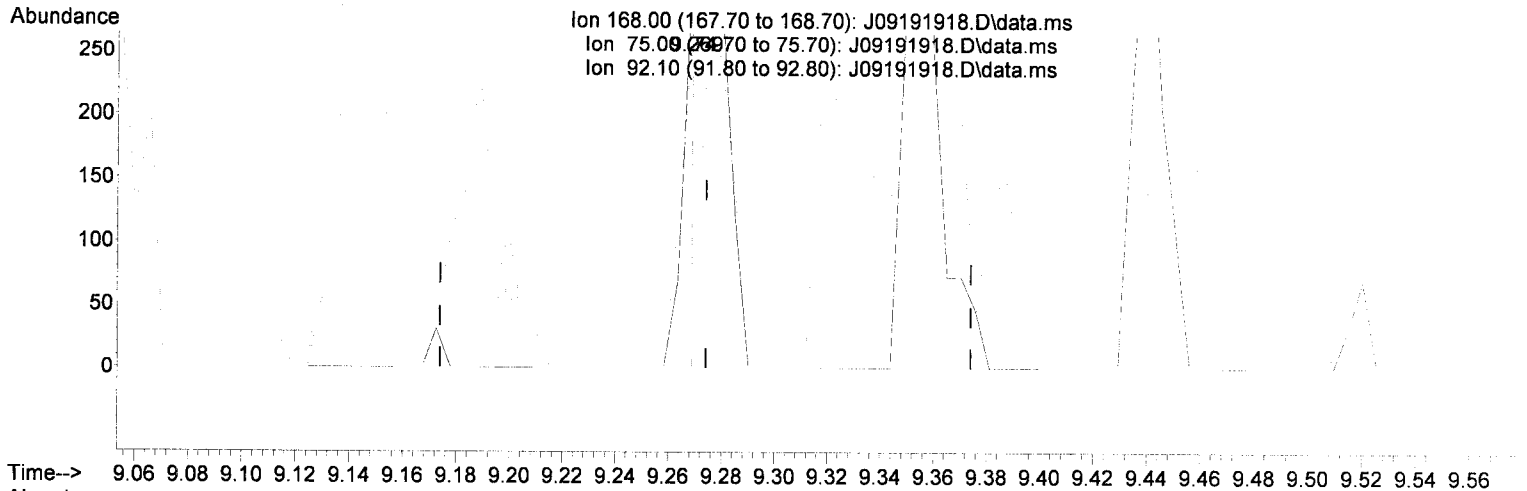


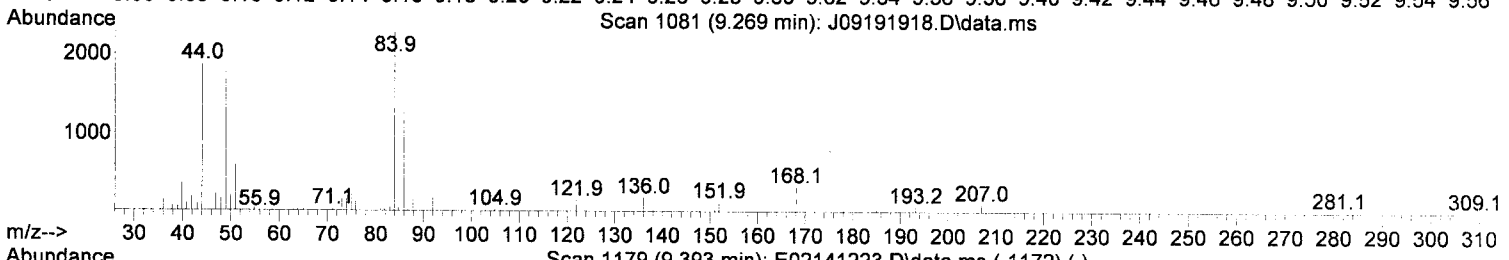
R = 1.61e-002 A*A + 1.56e-001 A - 5.19e-003
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w/(1/x^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

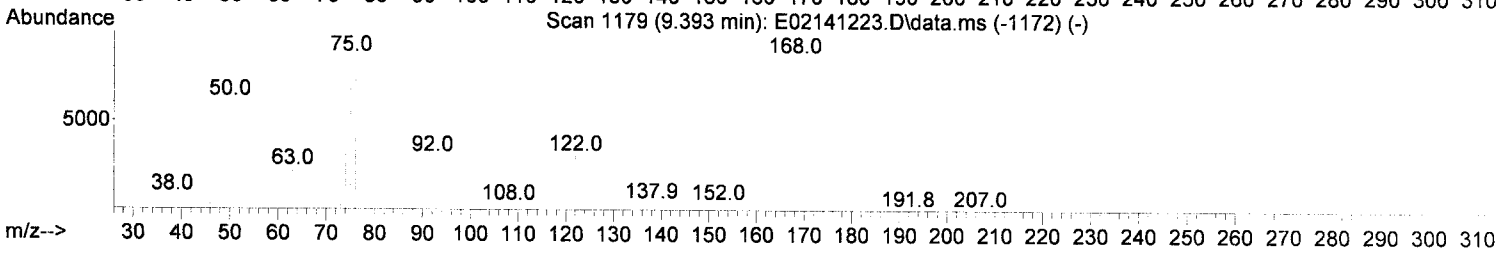
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







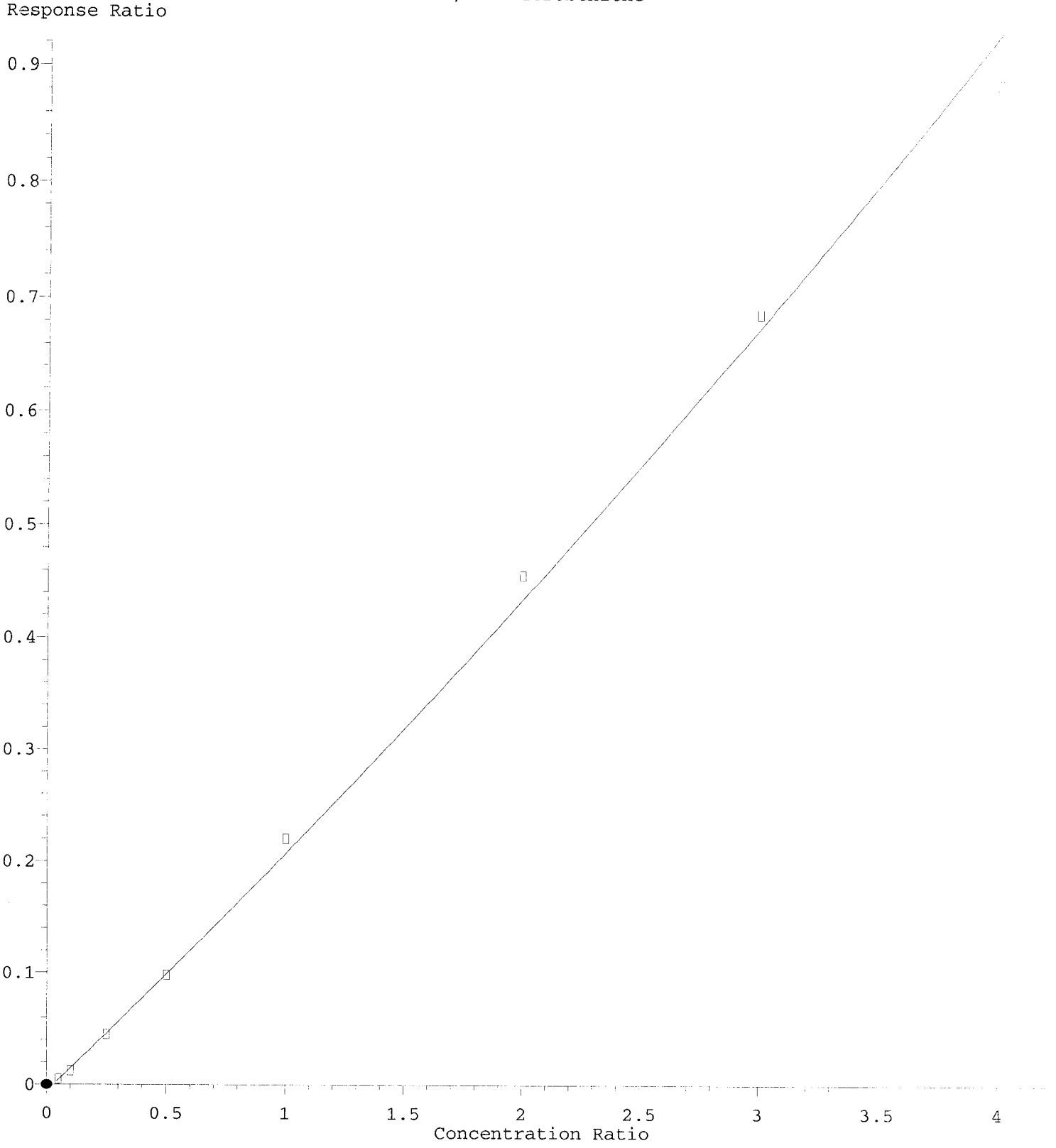
TIC: J09191918.D\data.ms

(44) 1,4-Dinitrobenzene (T)

9.269min (-0.005) 68.86 ng/ml m

response 130

Ion	Exp%	Act%
168.00	100.00	100.00
75.00	102.70	80.36
92.10	34.10	55.06
0.00	0.00	0.00

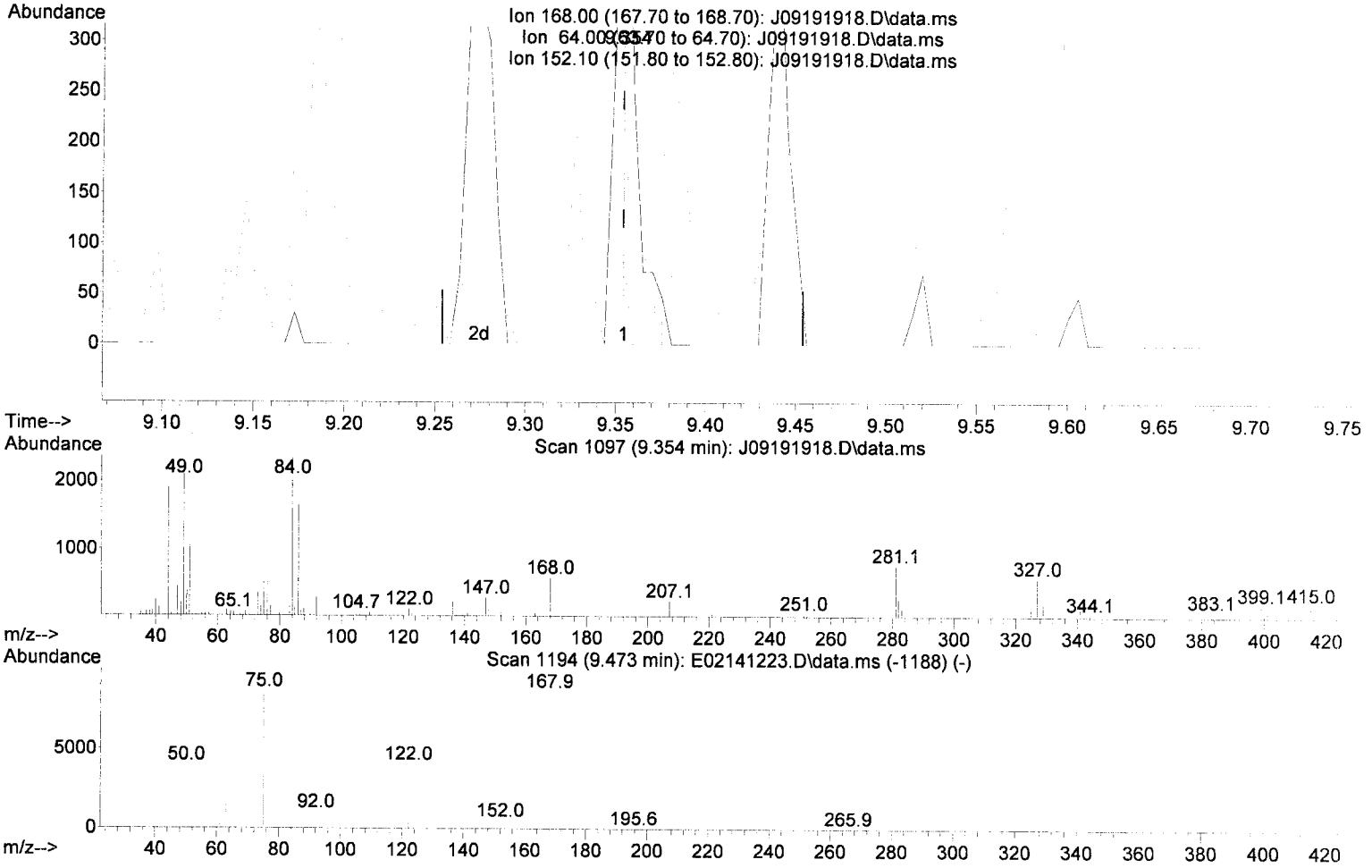


R = 6.81e-003 A*A + 2.06e-001 A - 5.98e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919-M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



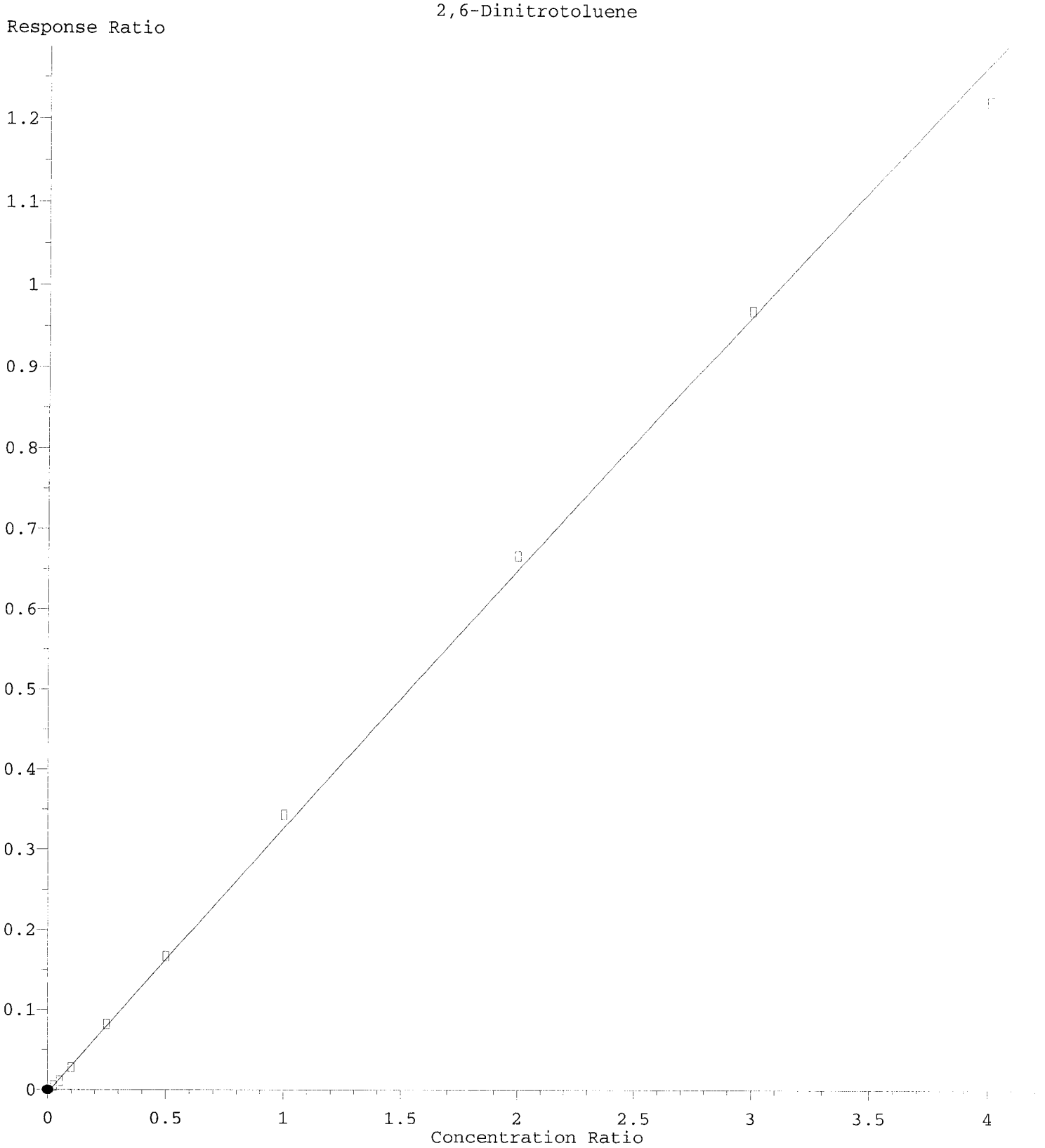
TIC: J09191918.D\data.ms

(46) 1,3-Dinitrobenzene (T)

9.354min (+ 0.000) 60.01 ng/ml m

response 141

Ion	Exp%	Act%
168.00	100.00	100.00
64.00	23.30	14.38
152.10	9.60	34.76
0.00	0.00	0.00

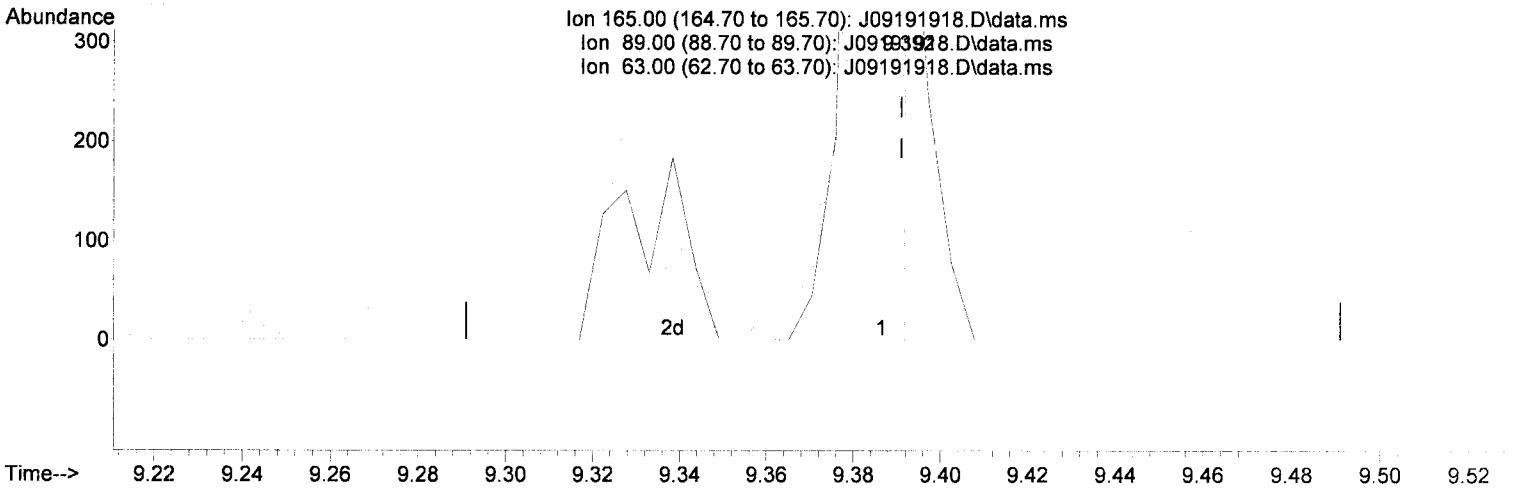


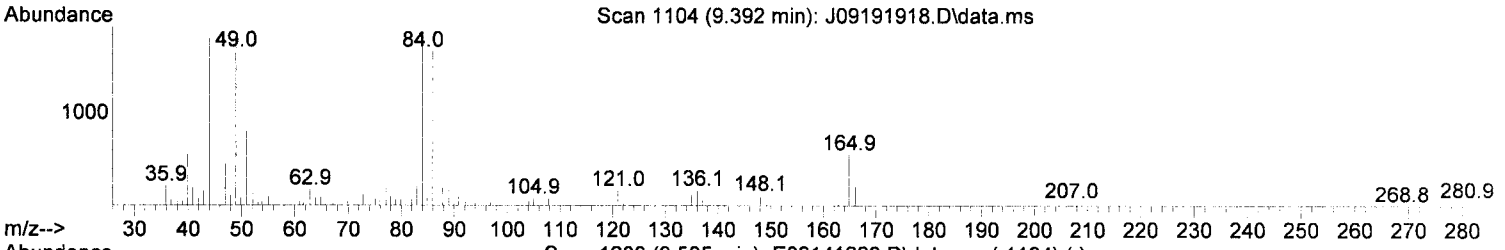
R = -4.24e-003 A*A + 3.35e-001 A - 4.20e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919-M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

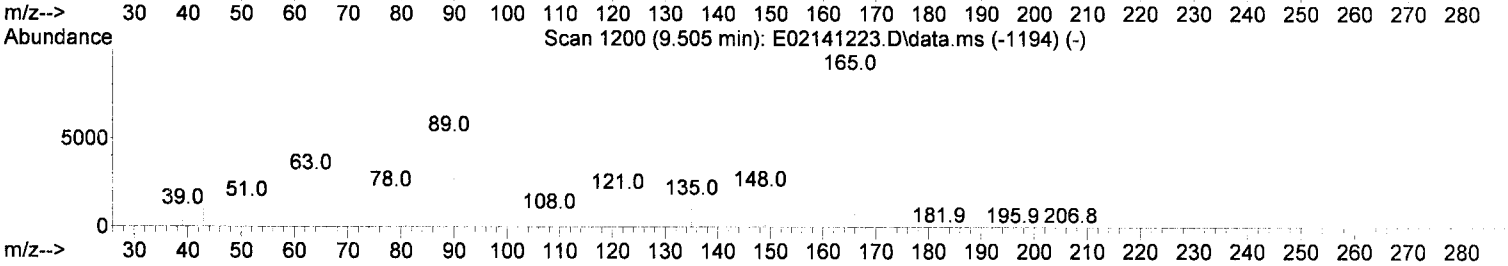
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







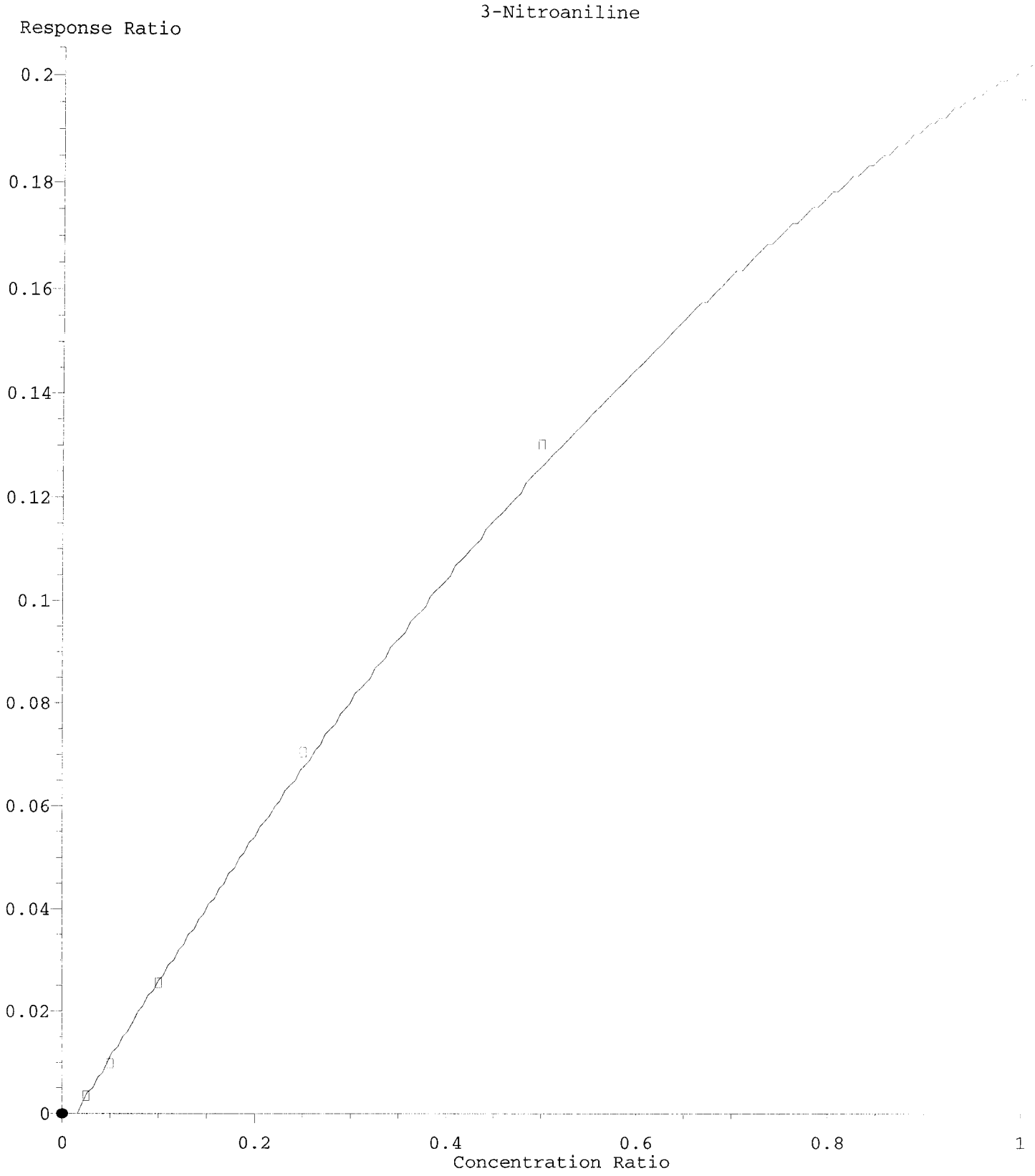
TIC: J09191918.D\data.ms

(47) 2,6-Dinitrotoluene (T)

9.392min (+ 0.001) 26.03 ng/ml m

response 103

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	46.30	43.52
63.00	36.80	34.46
0.00	0.00	0.00

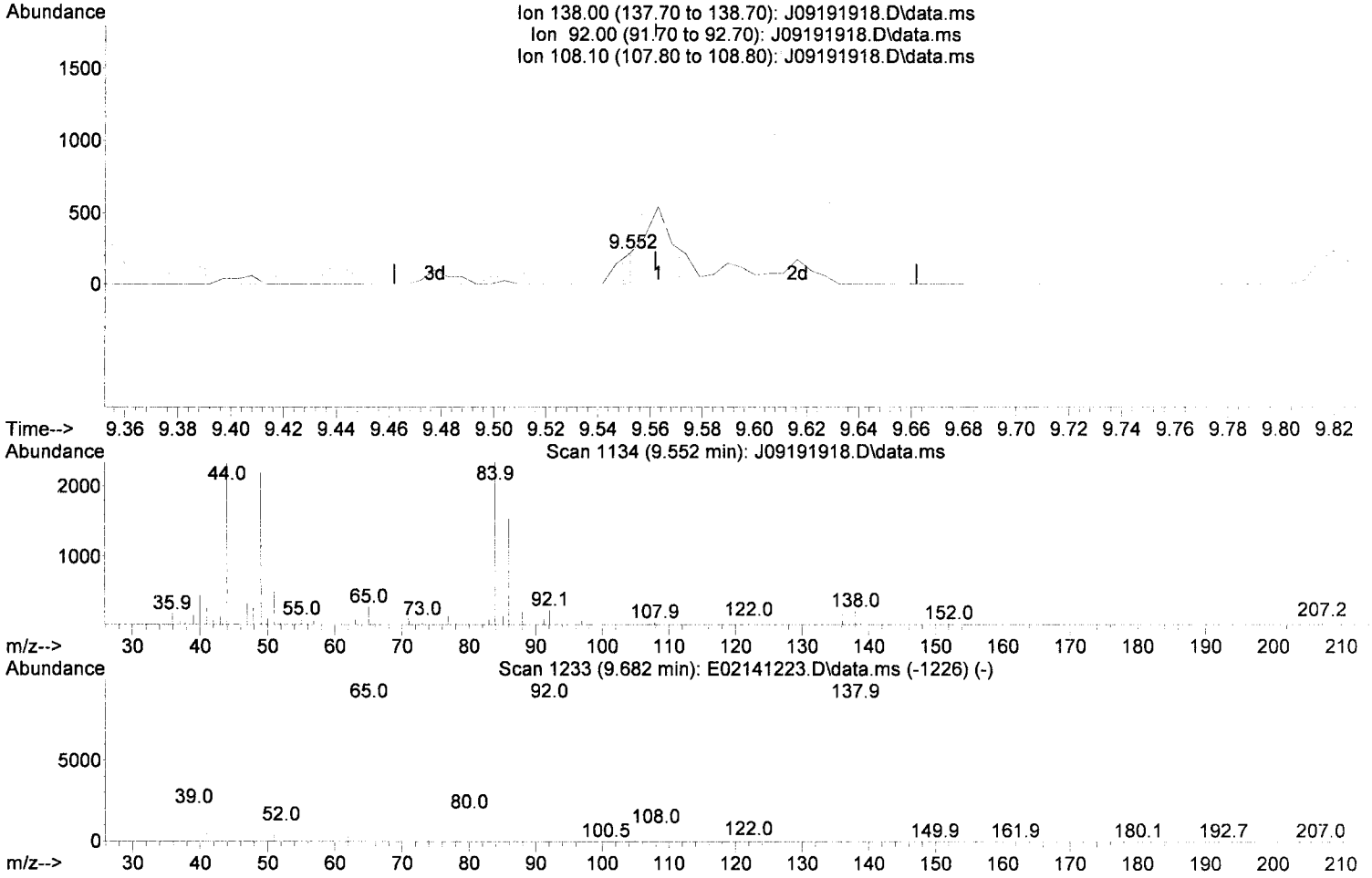


R = -1.10e-001 A*A + 3.17e-001 A - 4.68e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

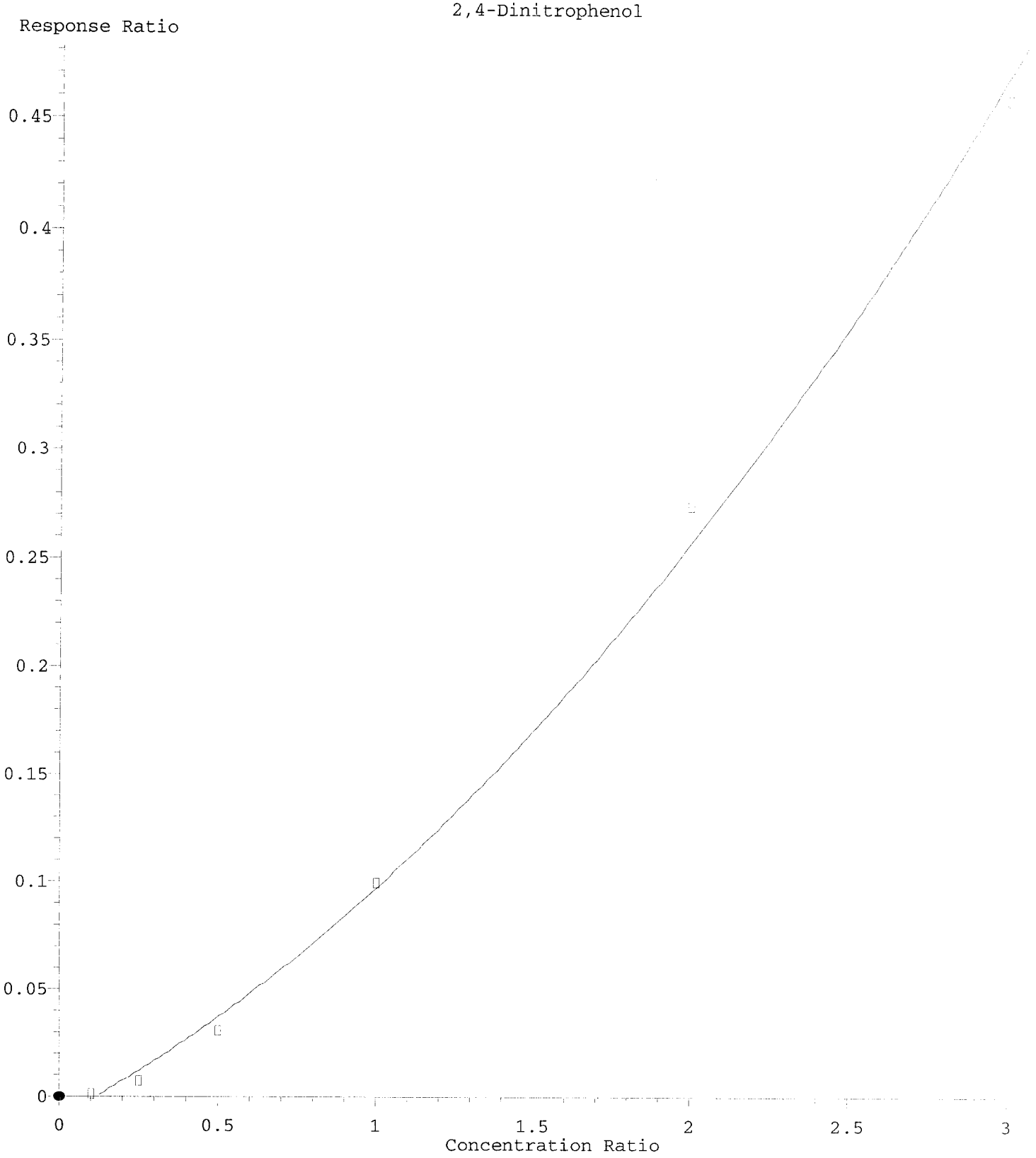
(50) 3-Nitroaniline (T)

9.552min (-0.010) 30.87 ng/ml m

response 116

J

Ion	Exp%	Act%
138.00	100.00	100.00
92.00	100.10	107.34
108.10	10.00	24.31
0.00	0.00	0.00

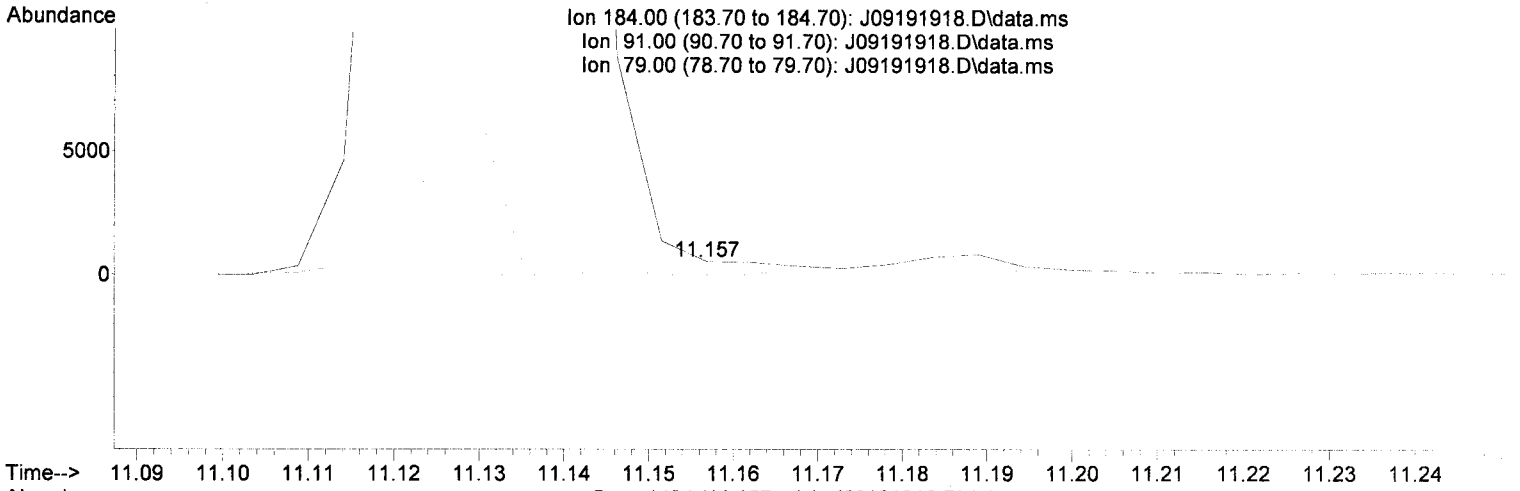


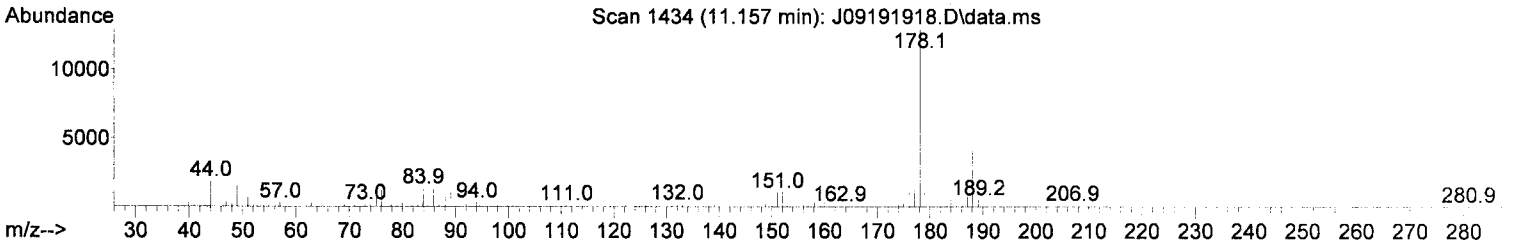
R = 2.65e-002 A*A + 8.01e-002 A - 9.46e-003
Coef of Det (r^2) = 0.896 Curve Fit: Quadratic w/(1/a)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

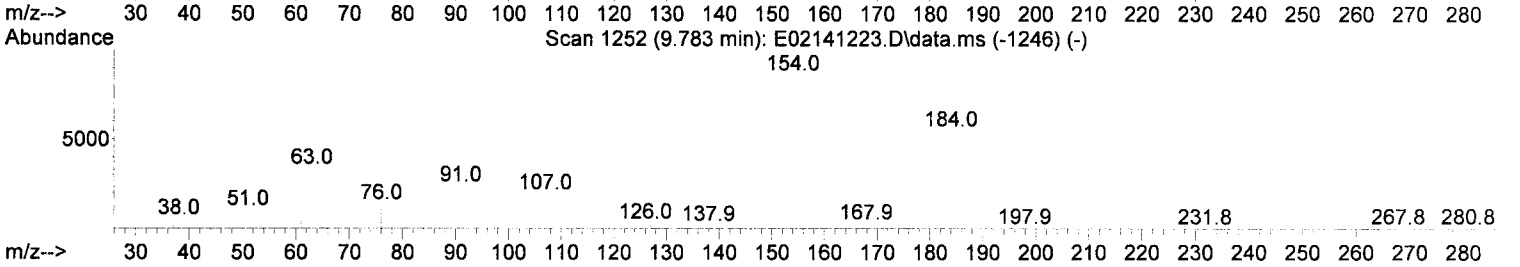
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 12:58:40 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







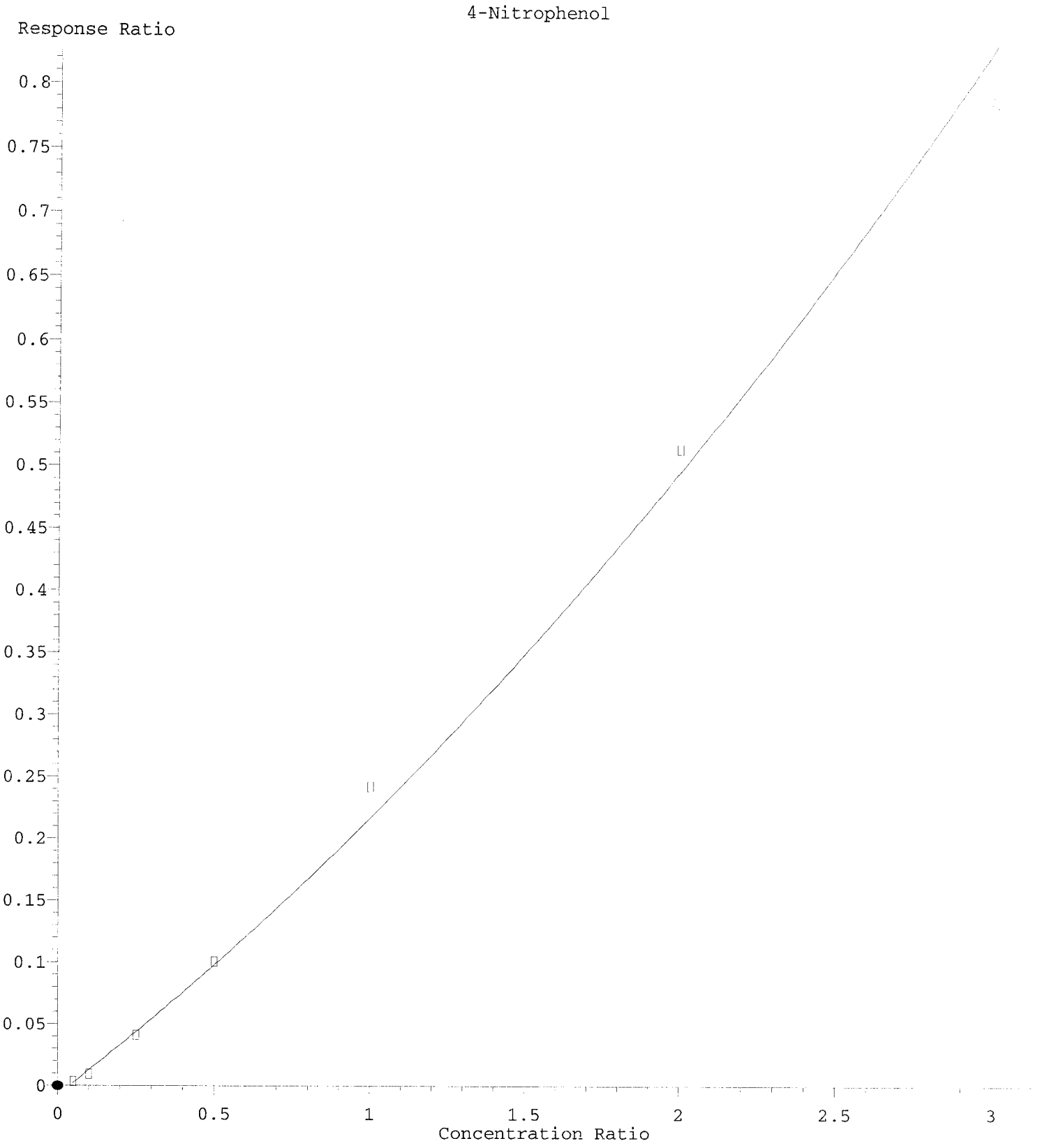
TIC: J09191918.D\data.ms

(52) 2,4-Dinitrophenol (T)

11.157min (+ 1.493) 233.65 ng/ml m

response 166

Ion	Exp%	Act%
184.00	100.00	100.00
91.00	42.80	6.68#
79.00	26.10	17.15
0.00	0.00	0.00

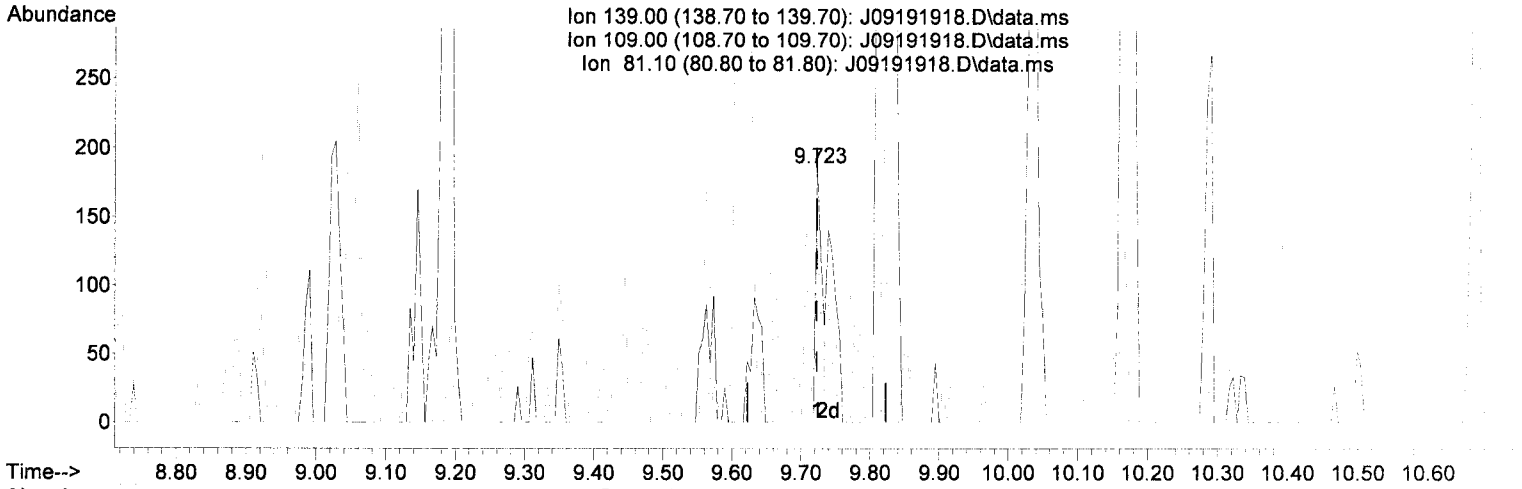


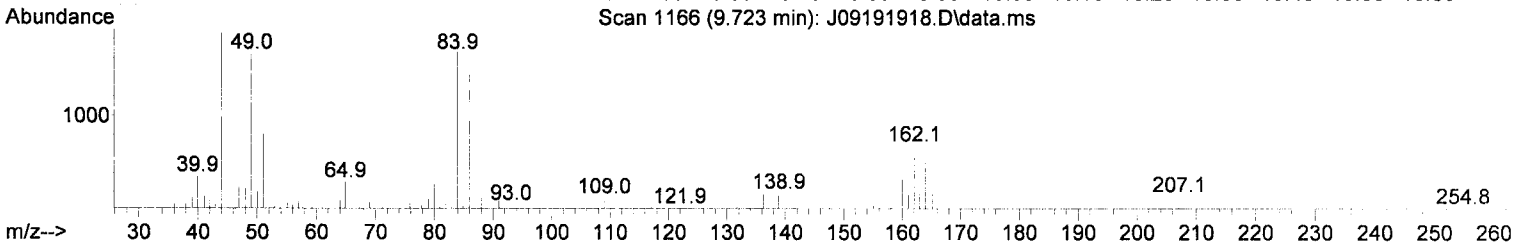
R = 2.73e-002 A*A + 1.97e-001 A - 7.29e-003
Coef of Det (r^2) = 0.991 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919-M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

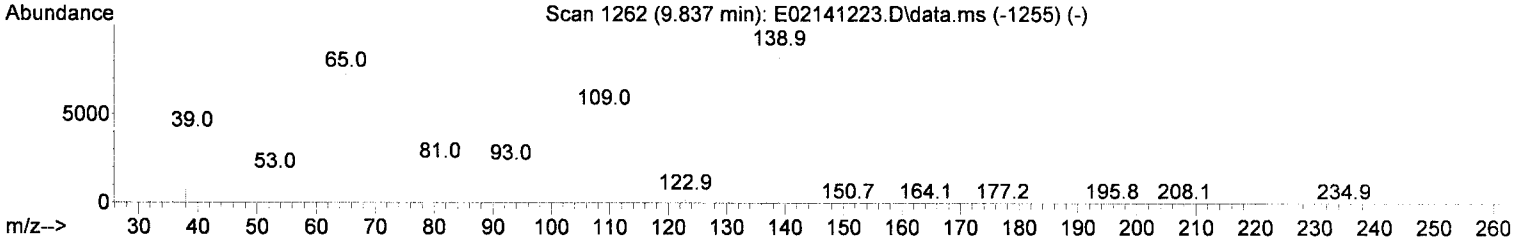
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10







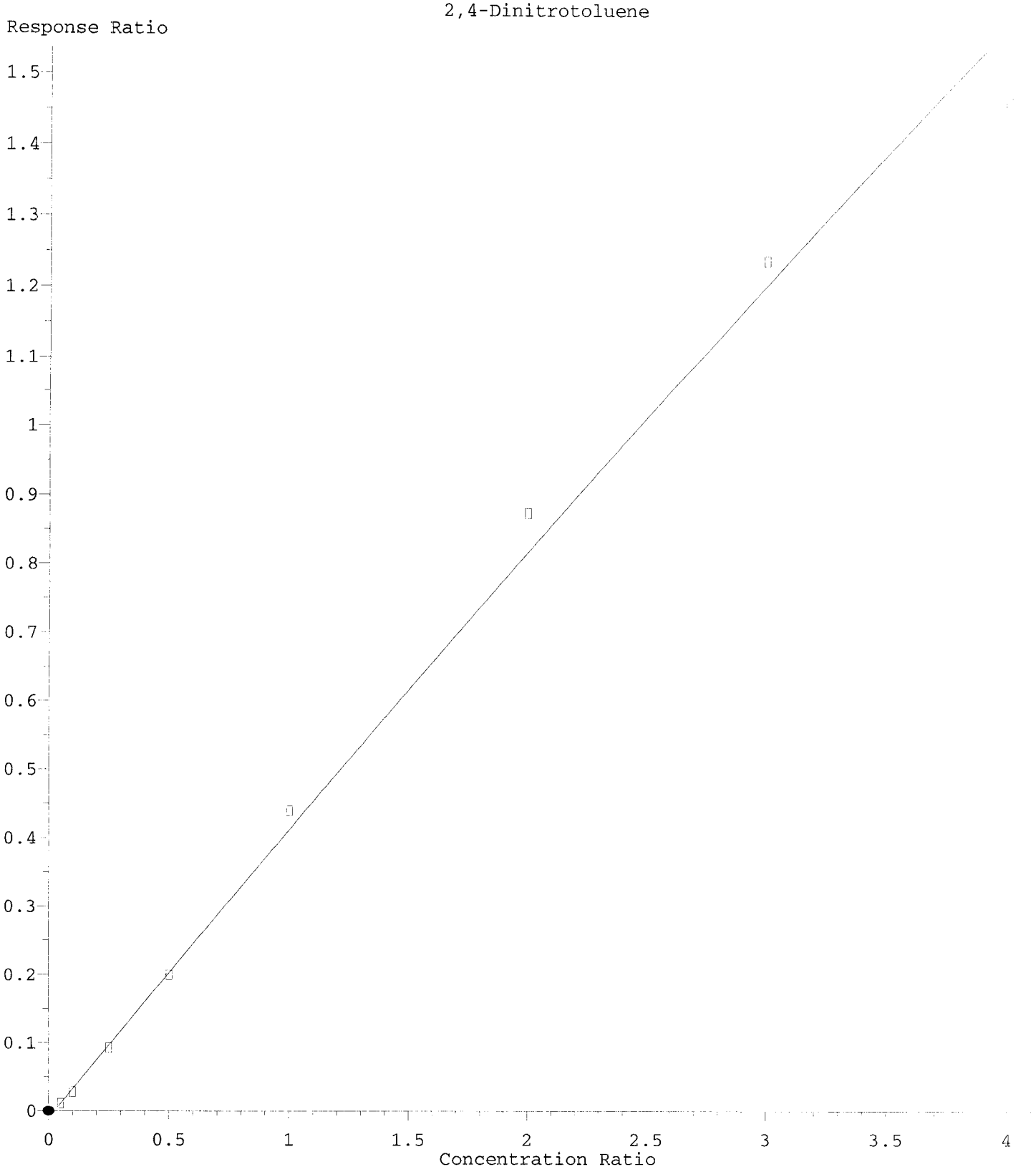
TIC: J09191918.D\data.ms

(53) 4-Nitrophenol (T)

9.723min (+ 0.000) 75.63 ng/ml

response 120

Ion	Exp%	Act%
139.00	100.00	100.00
109.00	58.50	72.04
81.10	23.90	27.42
0.00	0.00	0.00

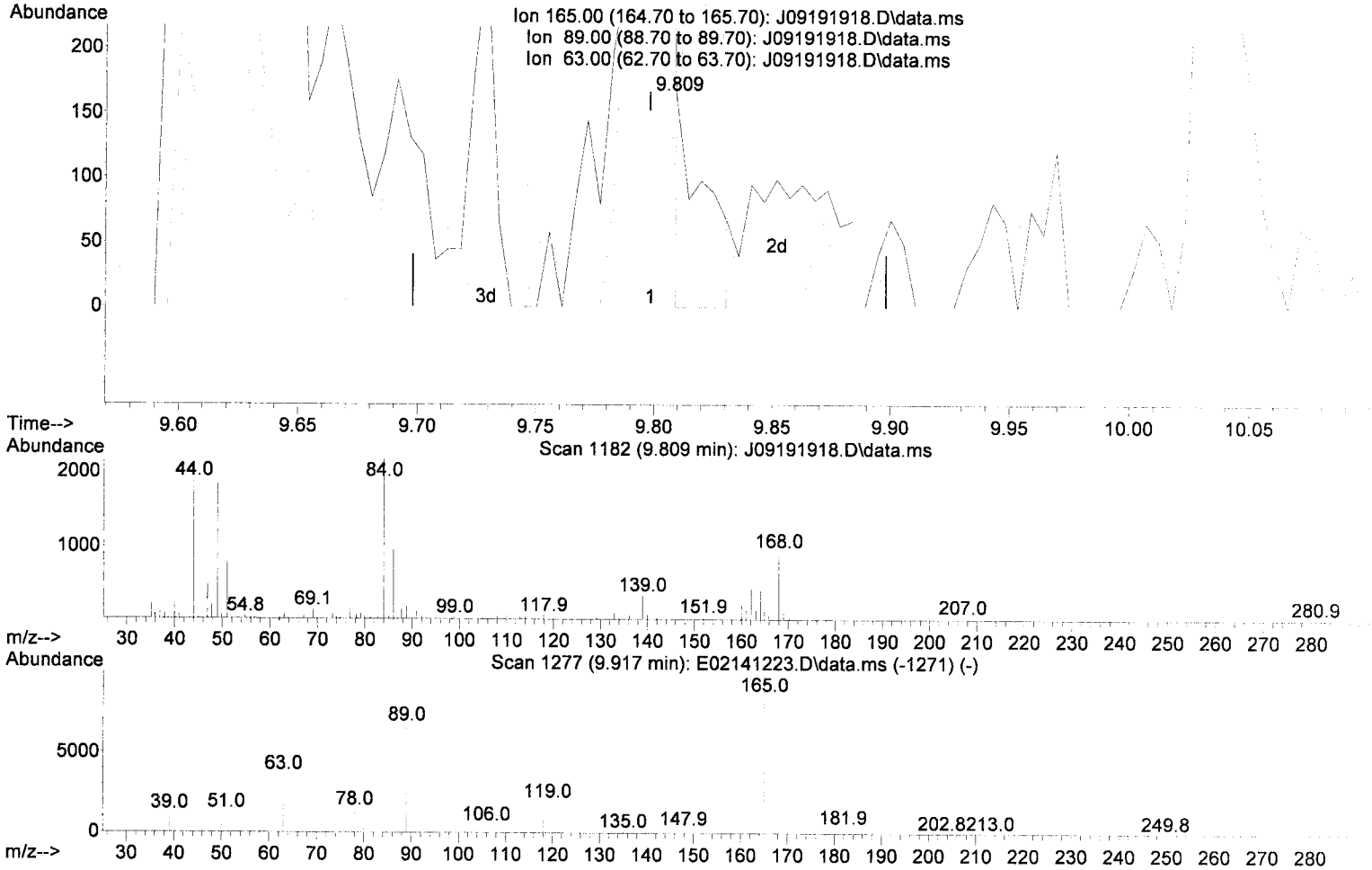


R = -9.39e-003 A*A + 4.33e-001 A - 1.16e-002
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



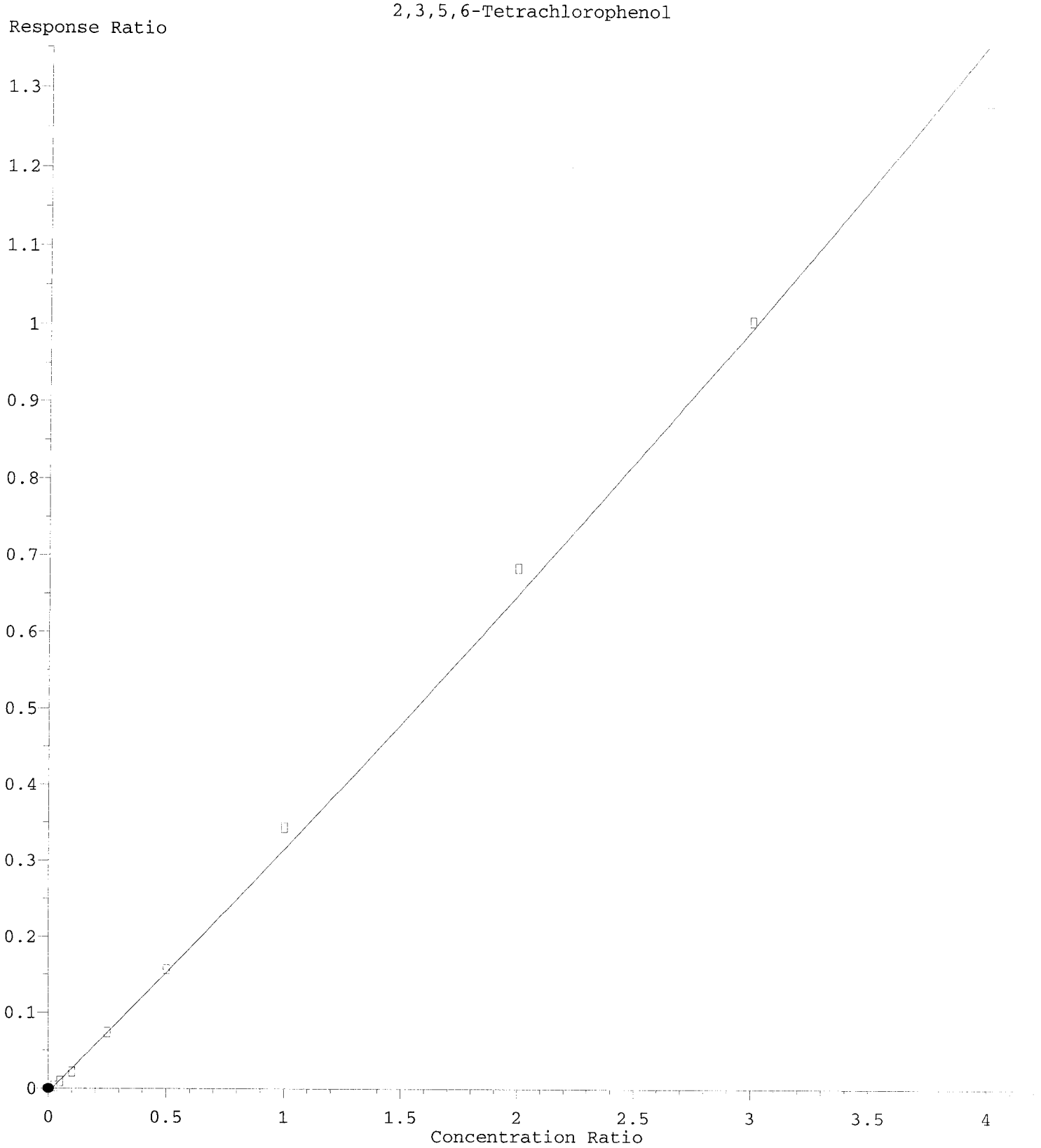
TIC: J09191918.D\data.ms

(54) 2,4-Dinitrotoluene (T)

9.809min (+ 0.011) 54.53 ng/ml m

response 109

Ion	Exp%	Act%
165.00	100.00	100.00
89.00	61.80	135.76#
63.00	32.90	55.76
0.00	0.00	0.00

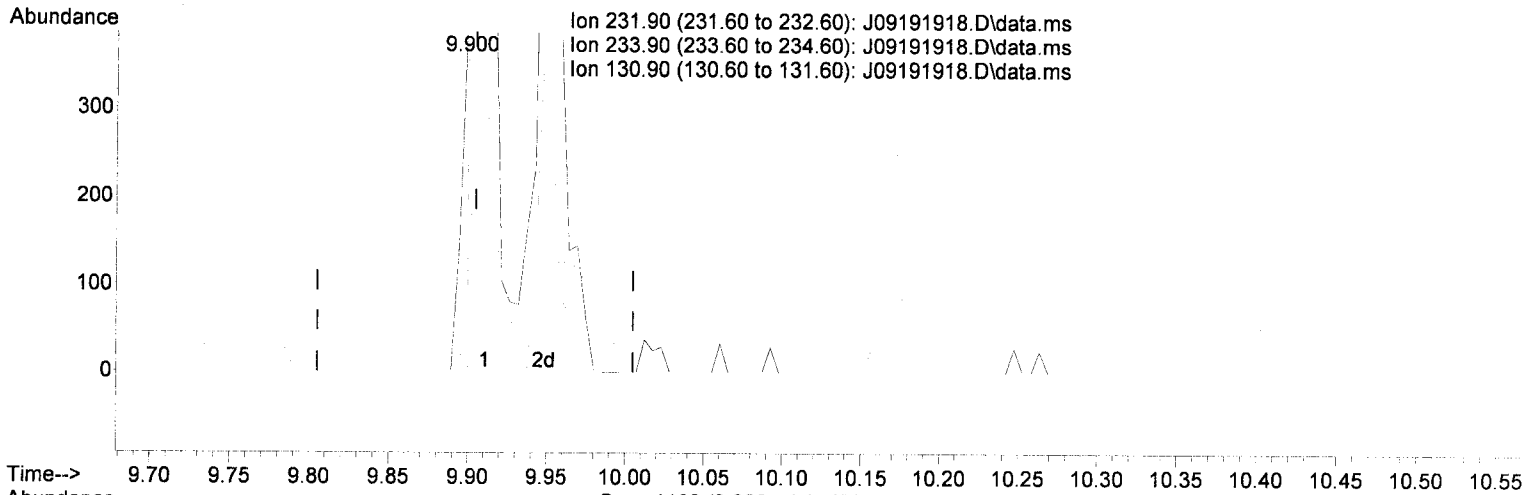


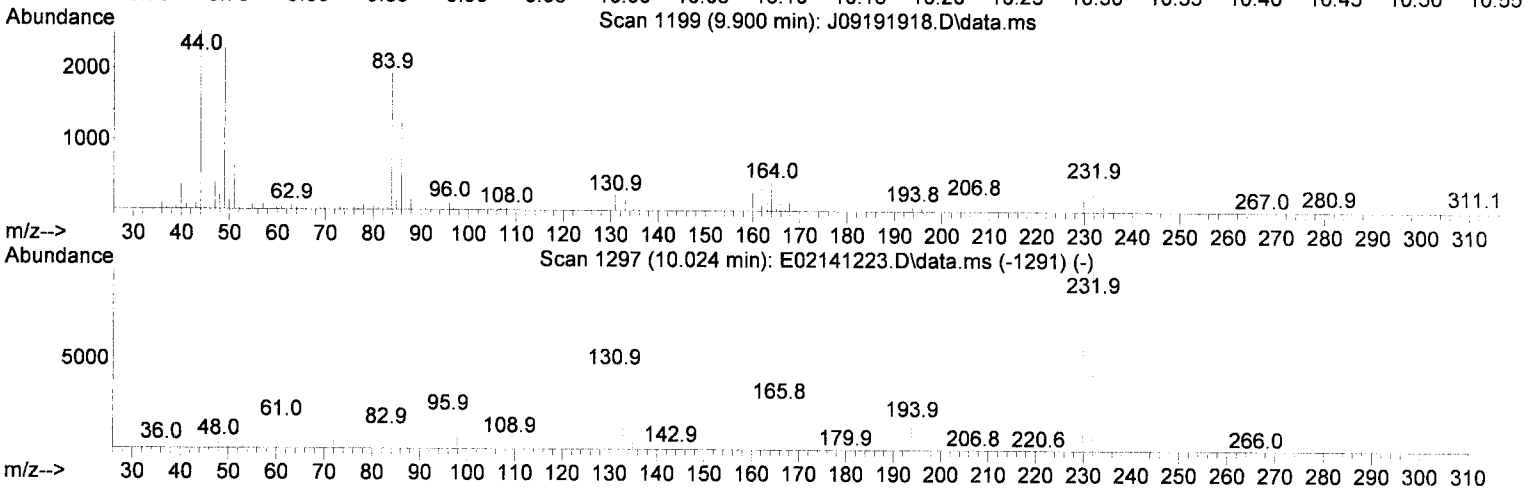
R = 6.93e-003 A*A + 3.13e-001 A - 5.57e-003
Coef of Det (r^2) = 0.994 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919-M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





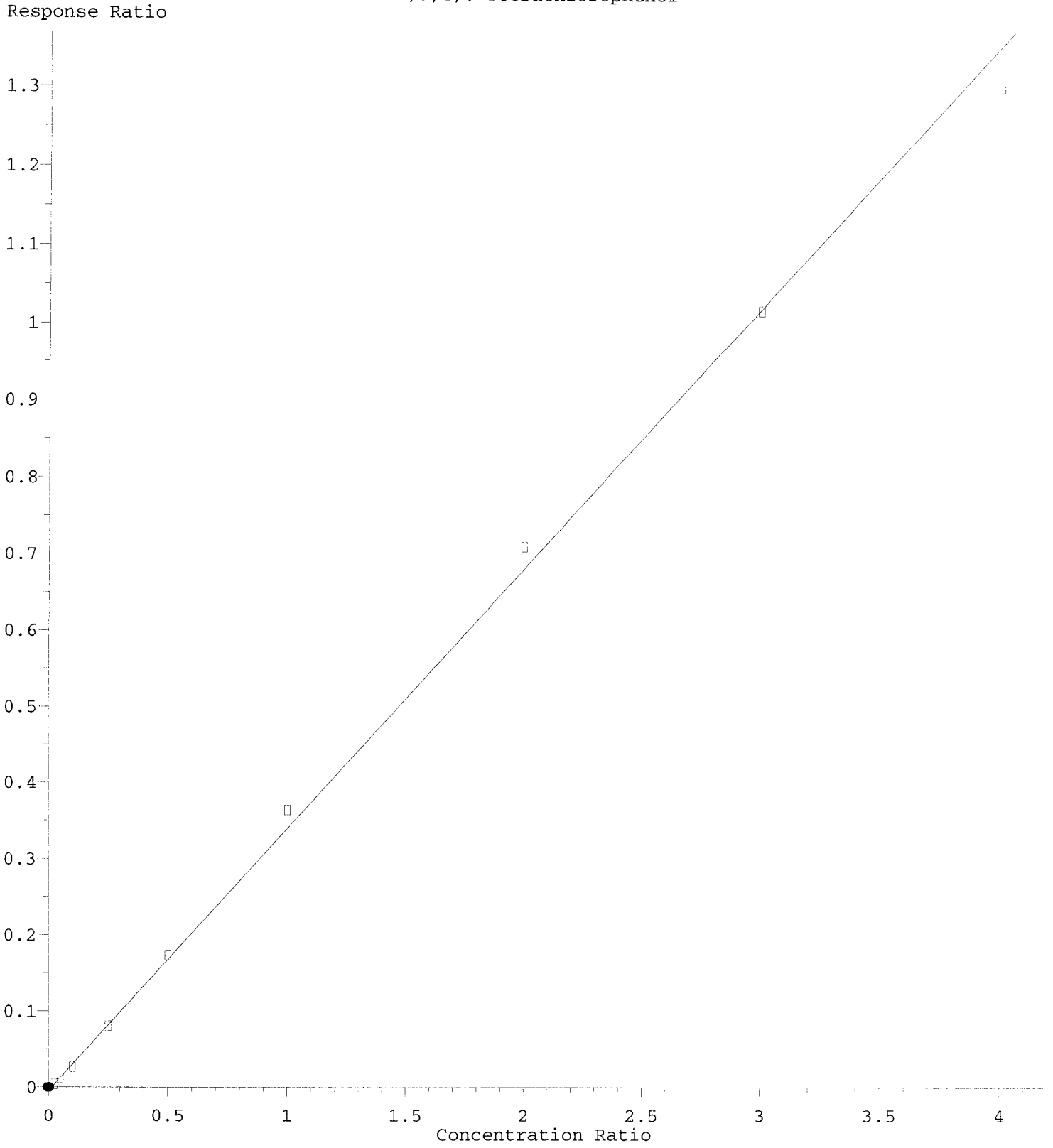
TIC: J09191918.D\data.ms

(56) 2,3,5,6-Tetrachlorophenol (T)

9.900min (-0.005) 37.40 ng/ml m

response 188

Ion	Exp%	Act%
231.90	100.00	100.00
233.90	48.30	24.72
130.90	40.60	55.10
0.00	0.00	0.00

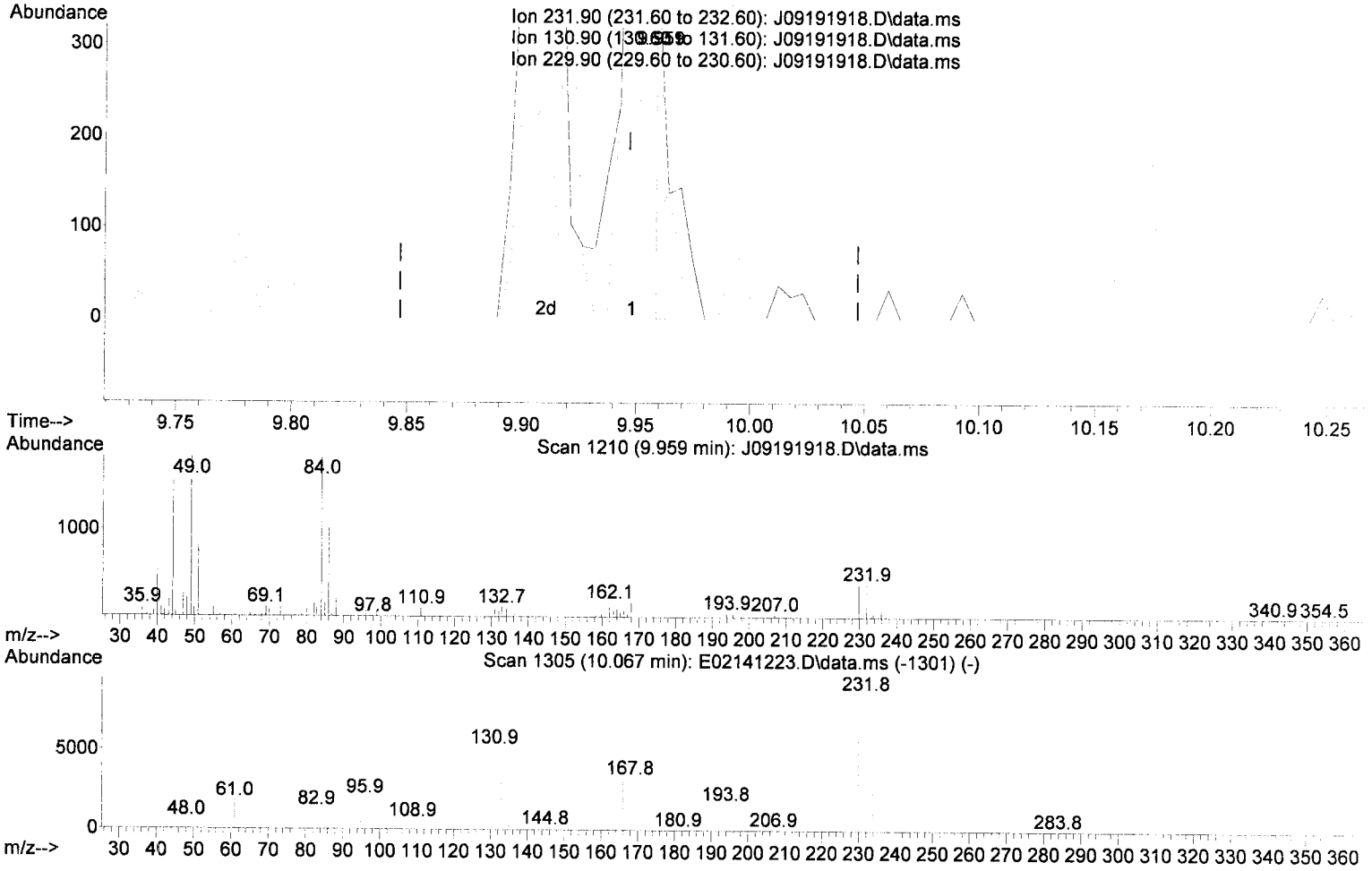


R = -1.57e-003 A*A + 3.46e-001 A - 4.91e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



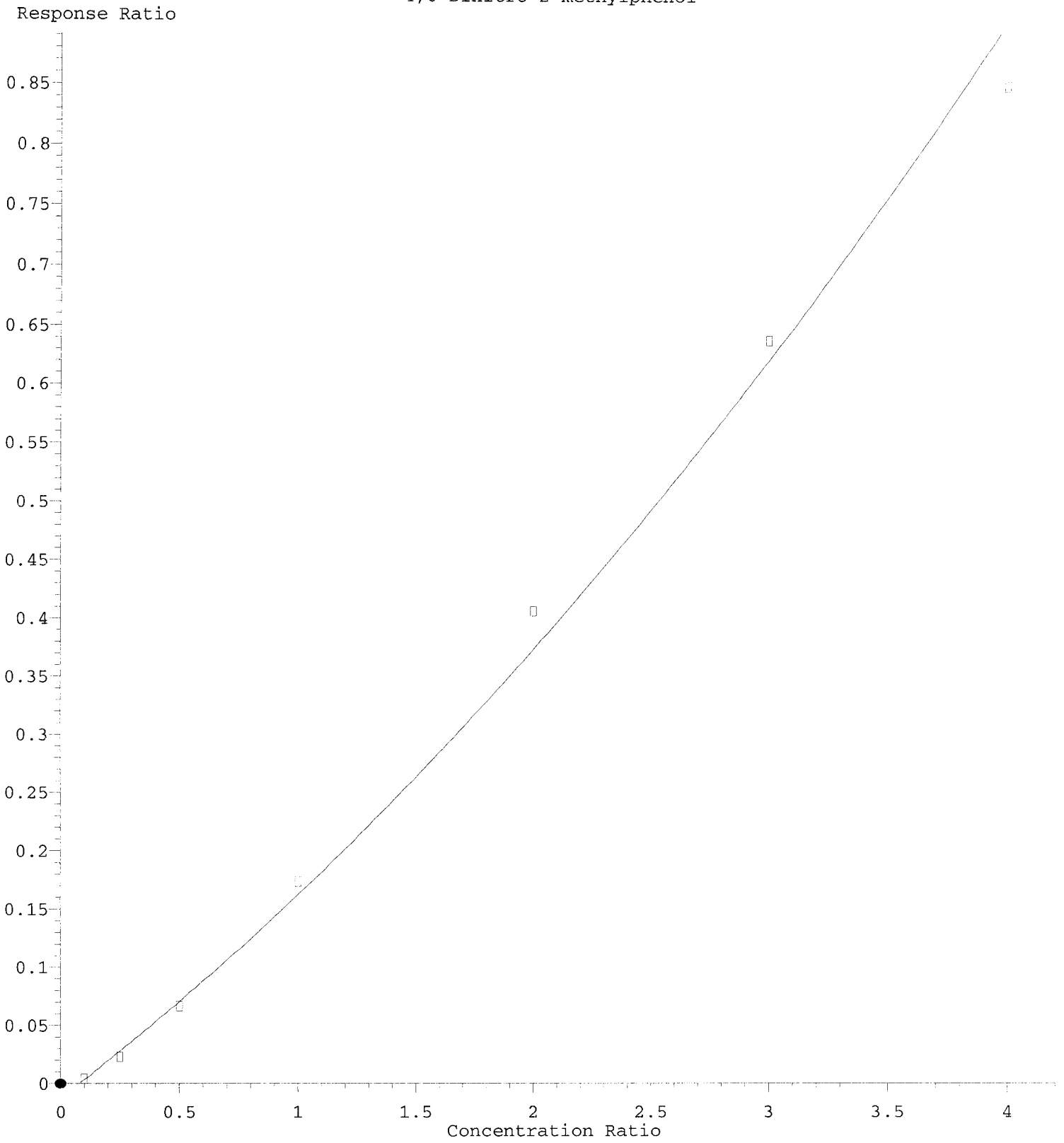
TIC: J09191918.D\data.ms

(57) 2,3,4,6-Tetrachlorophenol (T)

9.959min (+ 0.012) 29.40 ng/ml m

response 112

Ion	Exp%	Act%
231.90	100.00	100.00
130.90	45.50	28.97
229.90	77.80	98.74
0.00	0.00	0.00

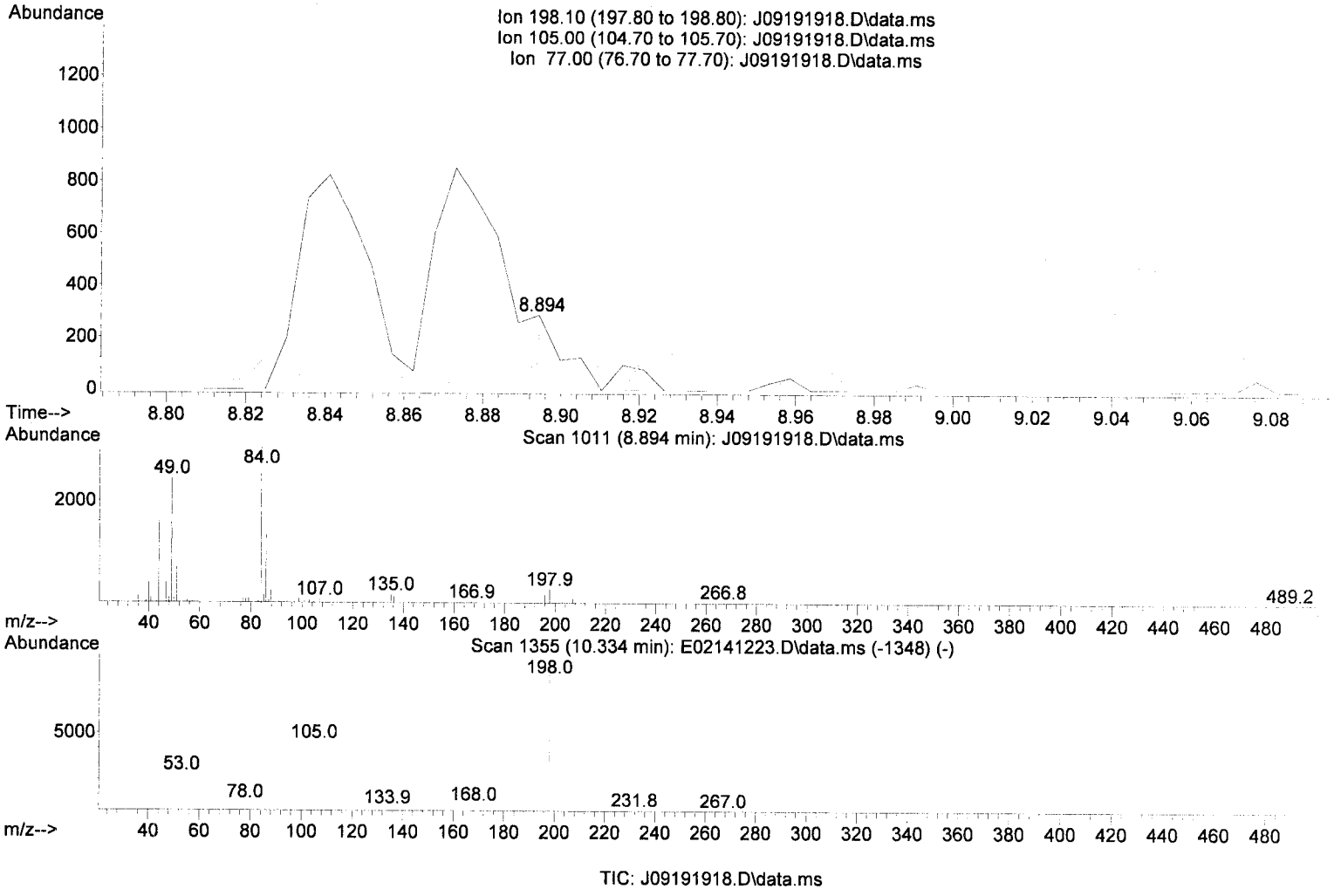


R = 1.79e-002 A*A + 1.57e-001 A - 1.26e-002
Coef of Det (r^2) = 0.993 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



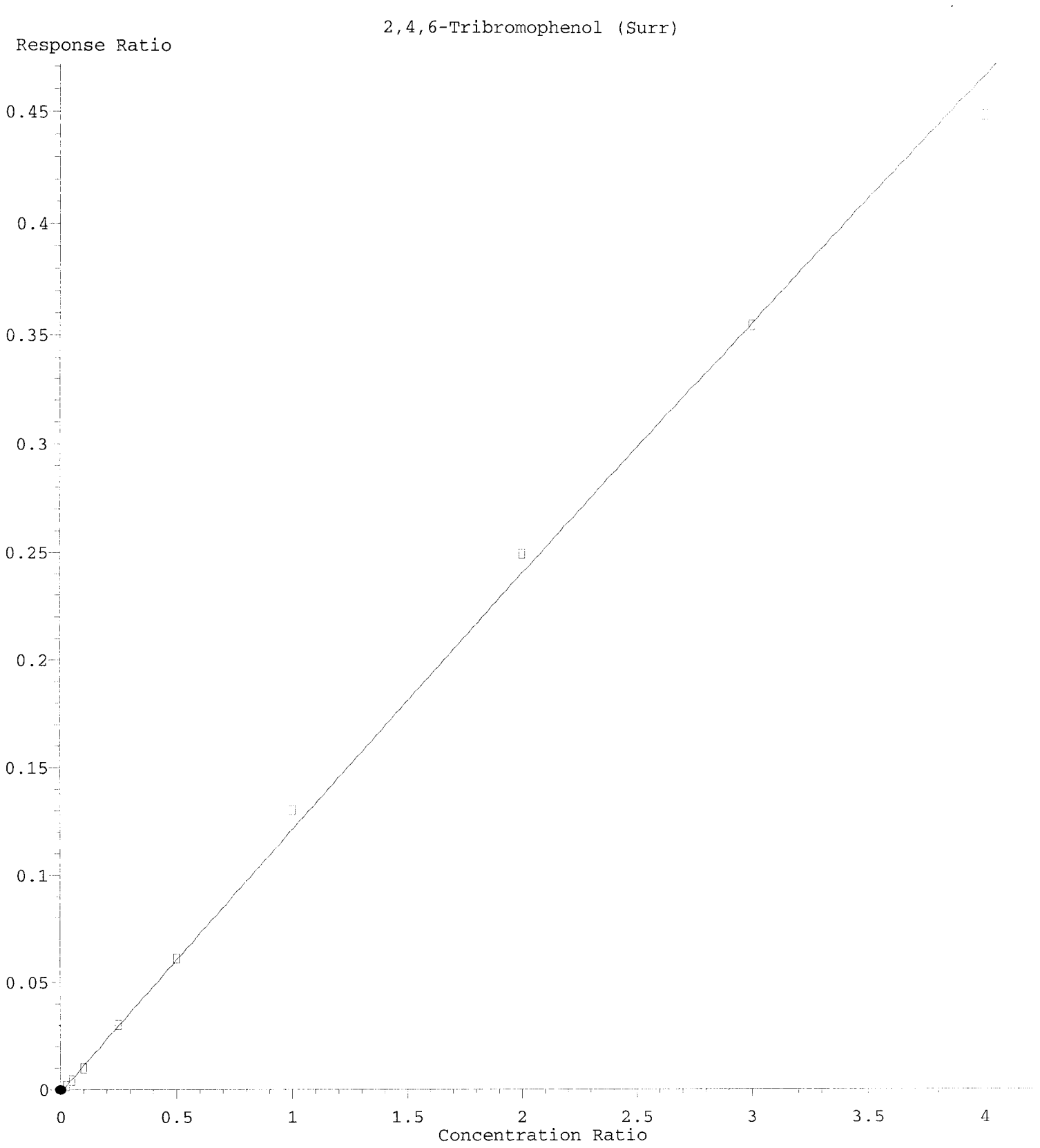
TIC: J09191918.D\data.ms

(63) 4,6-Dinitro-2-methylphenol (T)

8.894min (-1.321) 161.35 ng/ml m

response 134

Ion	Exp%	Act%
198.10	100.00	100.00
105.00	40.70	9.00#
77.00	20.00	37.37
0.00	0.00	0.00

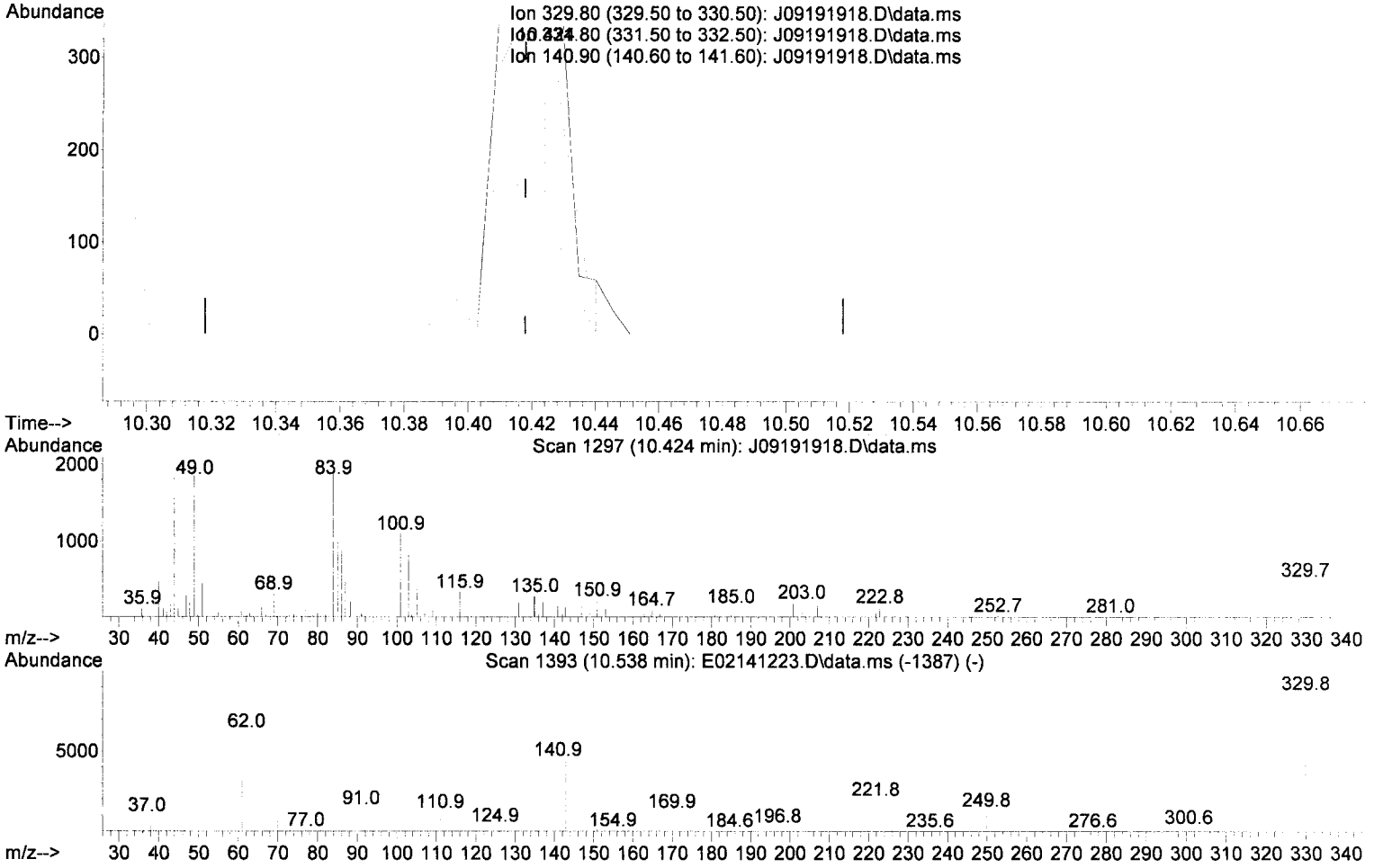


R = -1.82e-003 A*A + 1.24e-001 A - 1.50e-003
Coef of Det (r^2) = 0.996 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



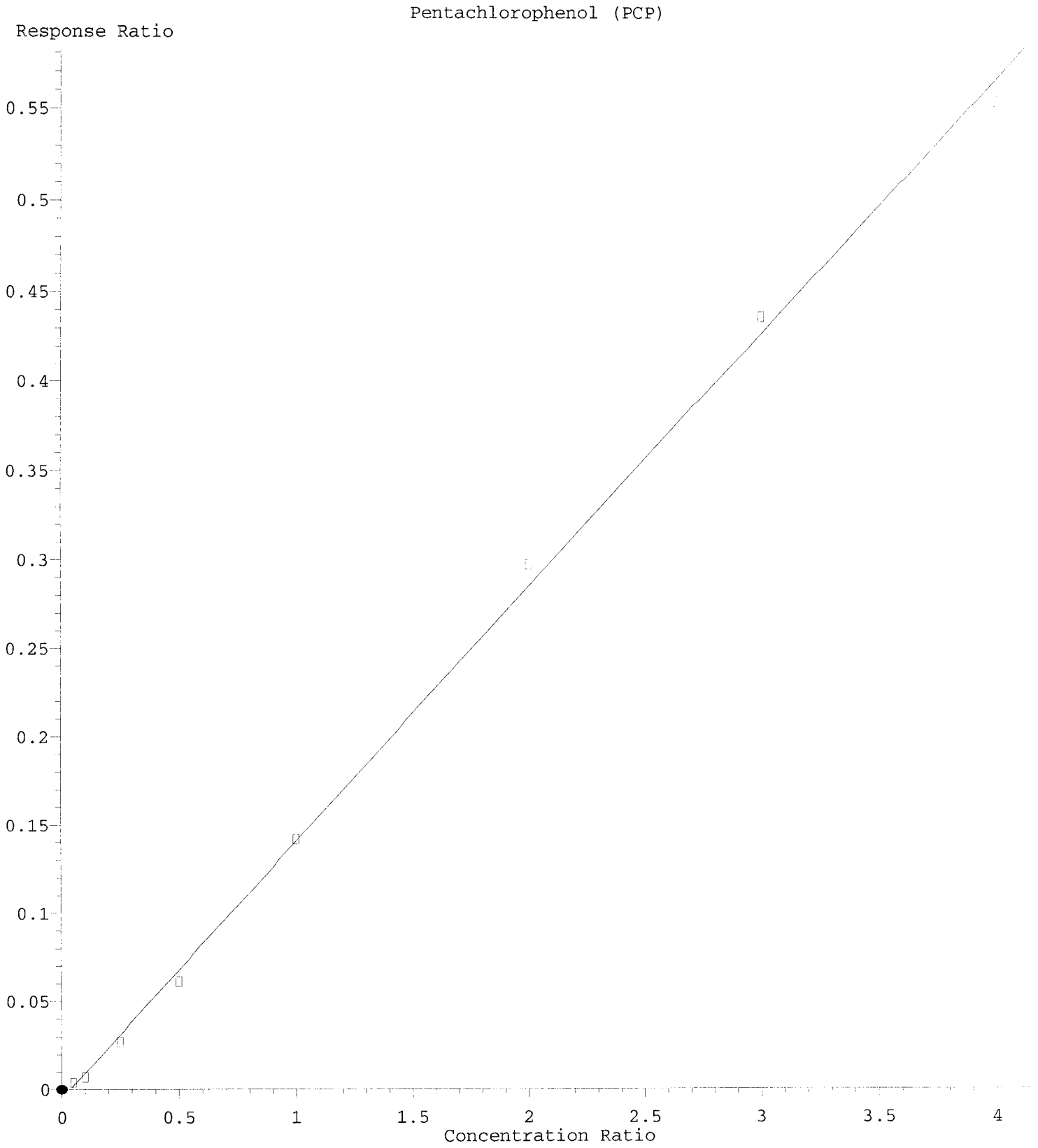
TIC: J09191918.D\data.ms

(67) 2,4,6-Tribromophenol (Surr) (S)

10.424min (+ 0.006) 26.15 ng/ml m

response 151

Ion	Exp%	Act%
329.80	100.00	100.00
331.80	97.00	81.25
140.90	32.90	37.90
0.00	0.00	0.00

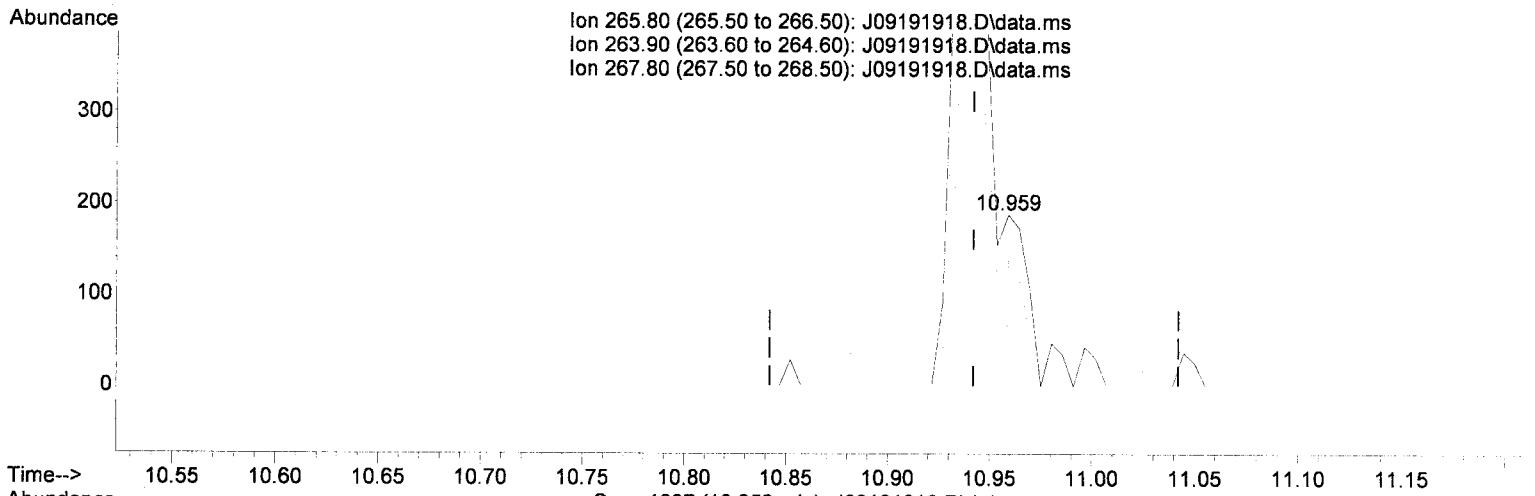


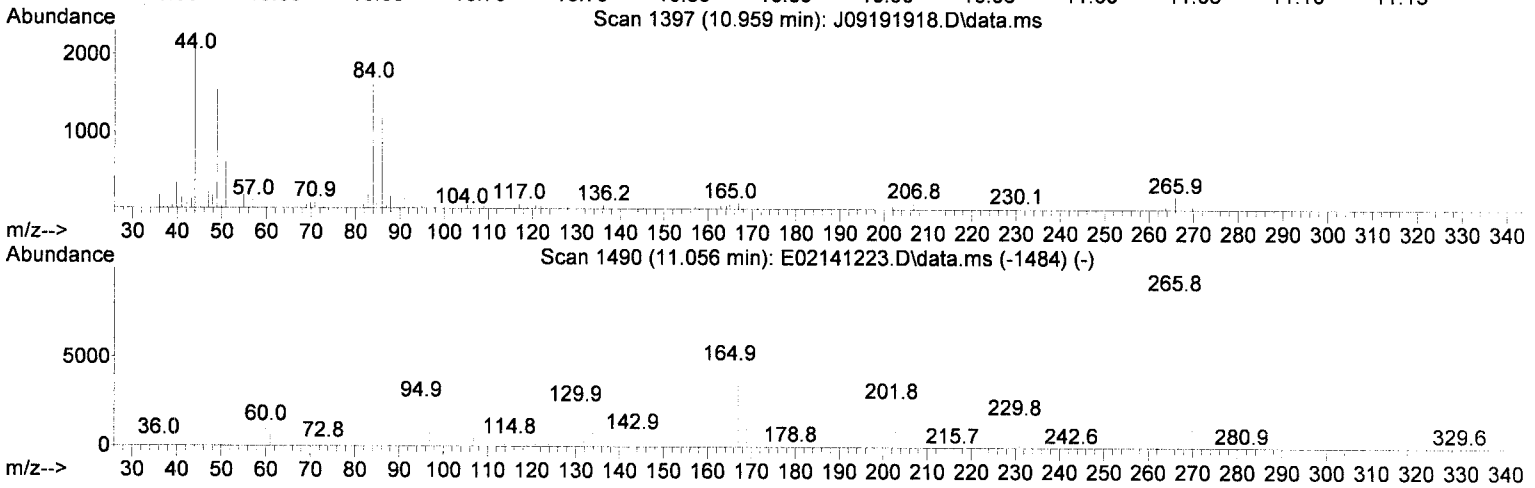
R = -1.05e-003 A*A + 1.47e-001 A - 5.64e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/(1/a)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





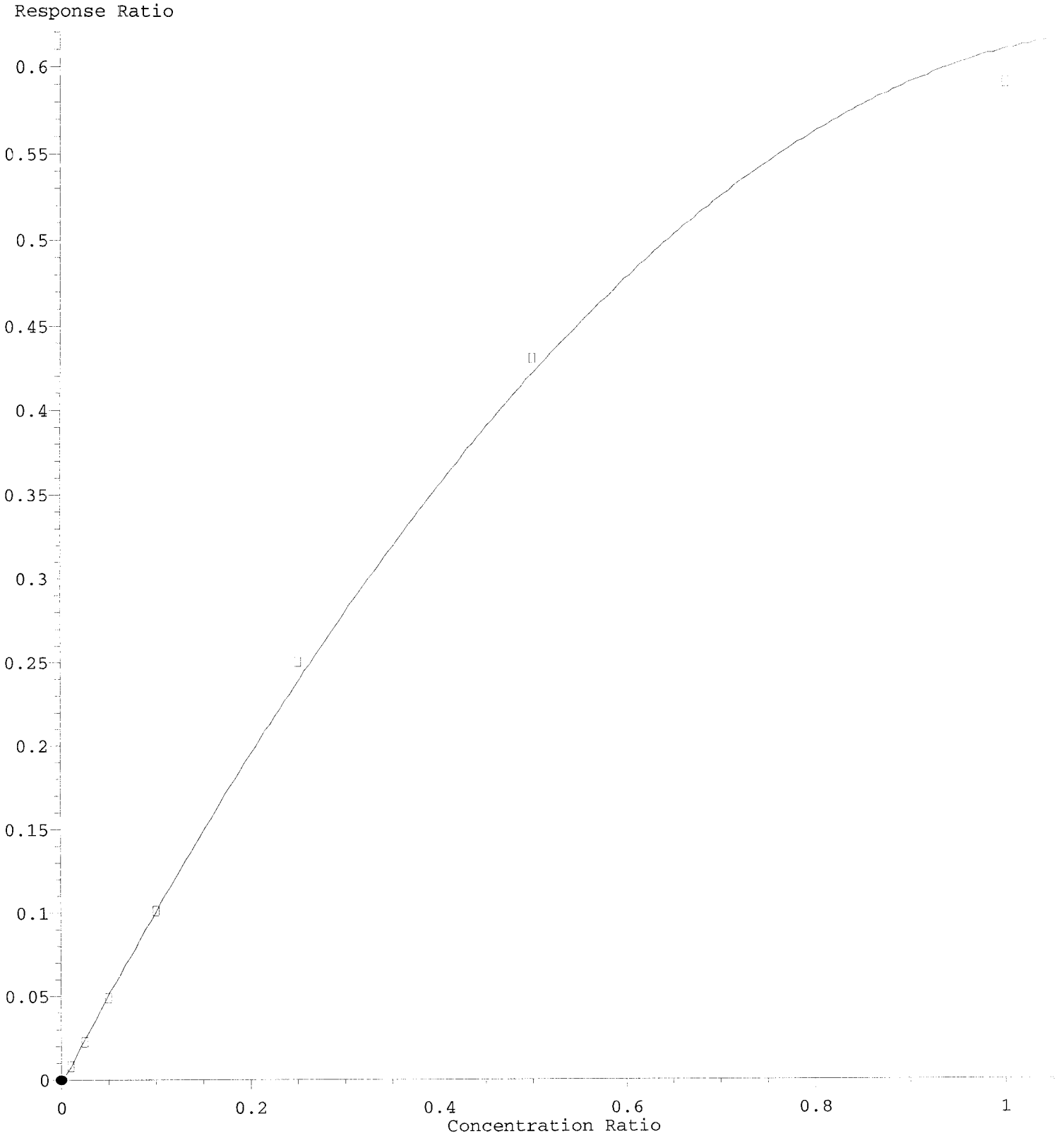
TIC: J09191918.D\data.ms

(70) Pentachlorophenol (PCP) (T)

10.959min (+ 0.017) 77.97 ng/ml m

response 116

Ion	Exp%	Act%
265.80	100.00	100.00
263.90	63.30	32.28#
267.80	64.70	0.00#
0.00	0.00	0.00

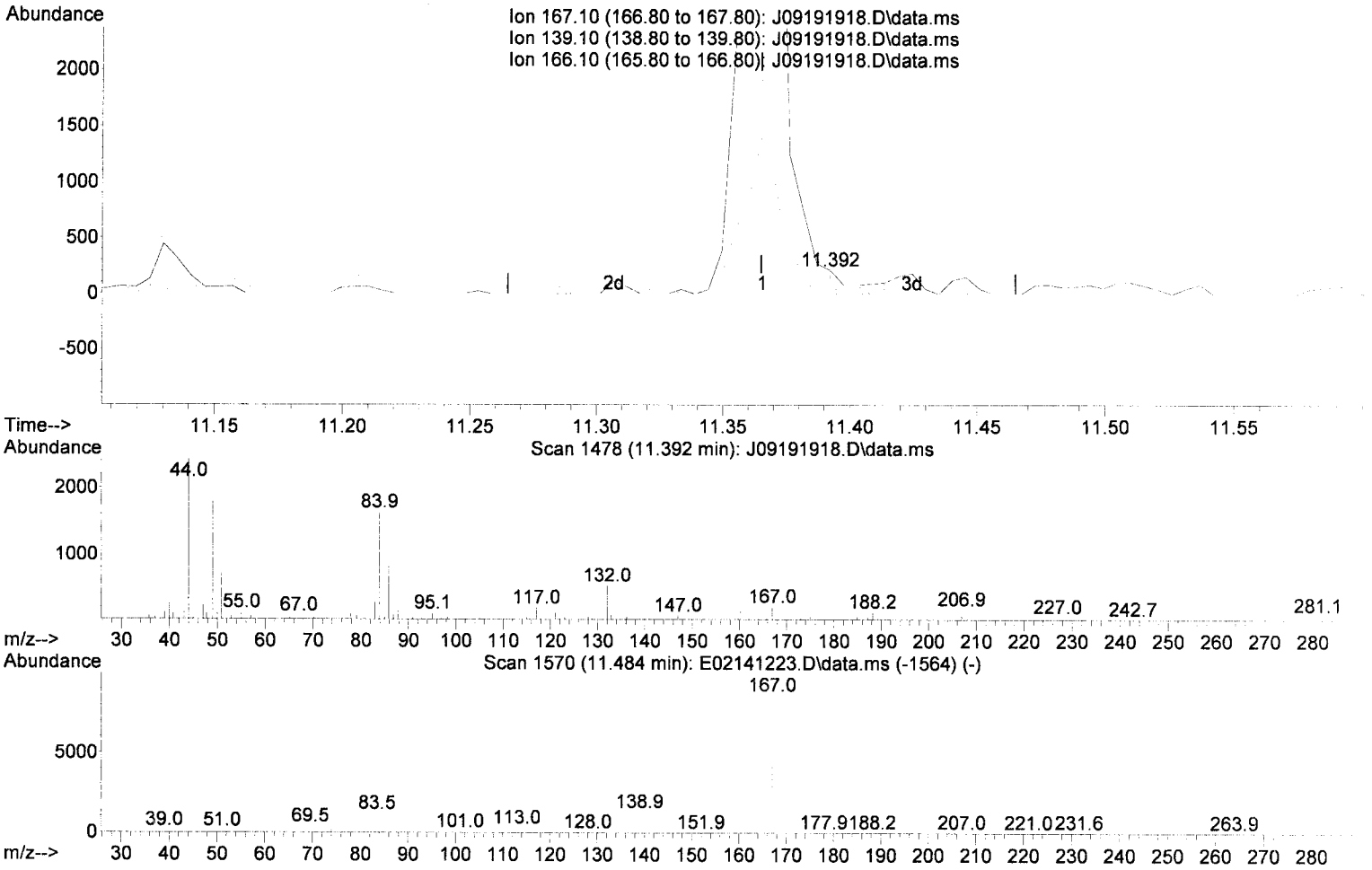


R = -4.70e-001 A*A + 1.08e+000 A - 3.03e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



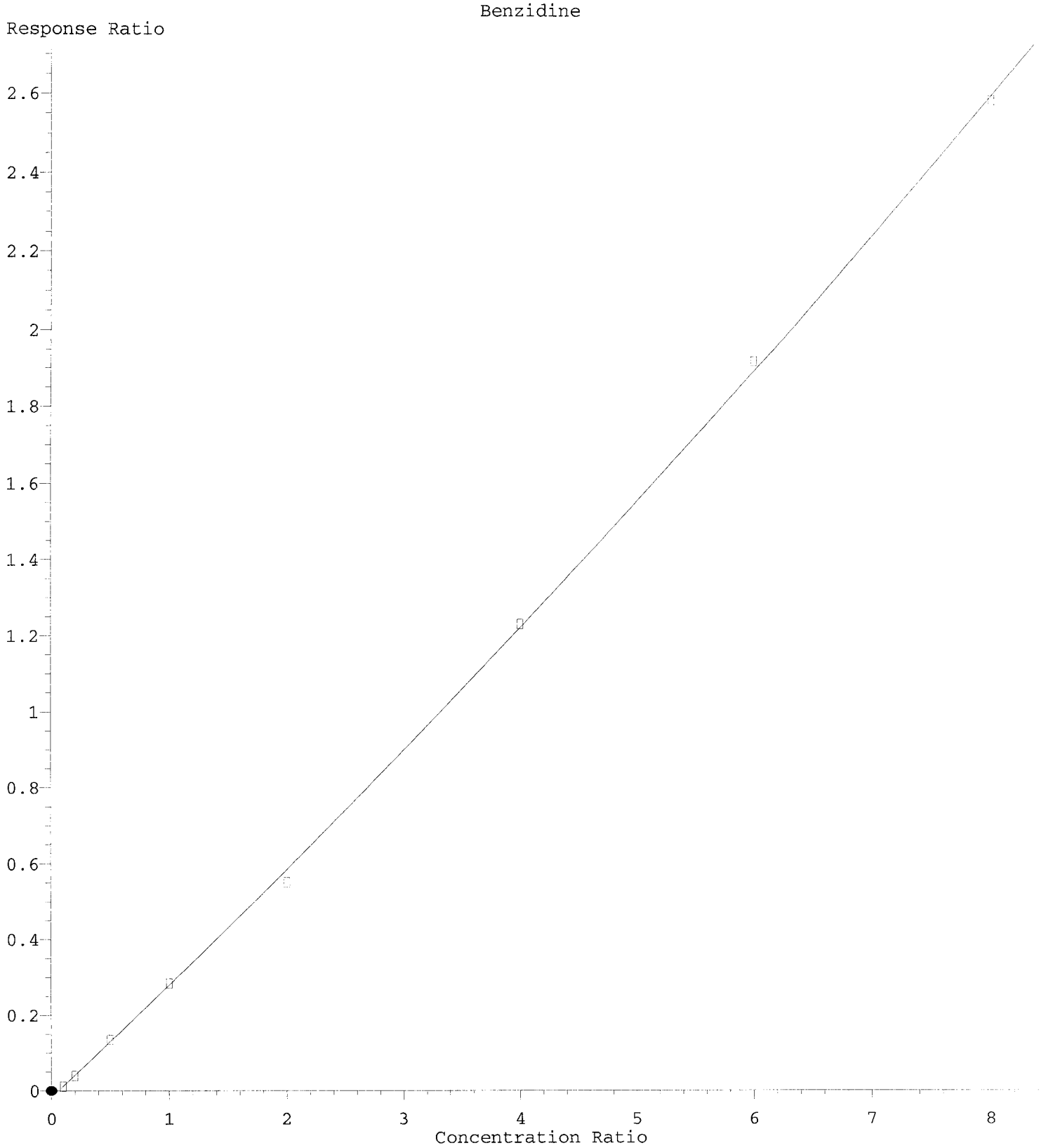
TIC: J09191918.D\data.ms

(73) Carbazole (T)

11.392min (+ 0.027) 5.78 ng/ml m

response 115

Ion	Exp%	Act%
167.10	100.00	100.00
139.10	12.90	18.22
166.10	20.90	15.42
0.00	0.00	0.00

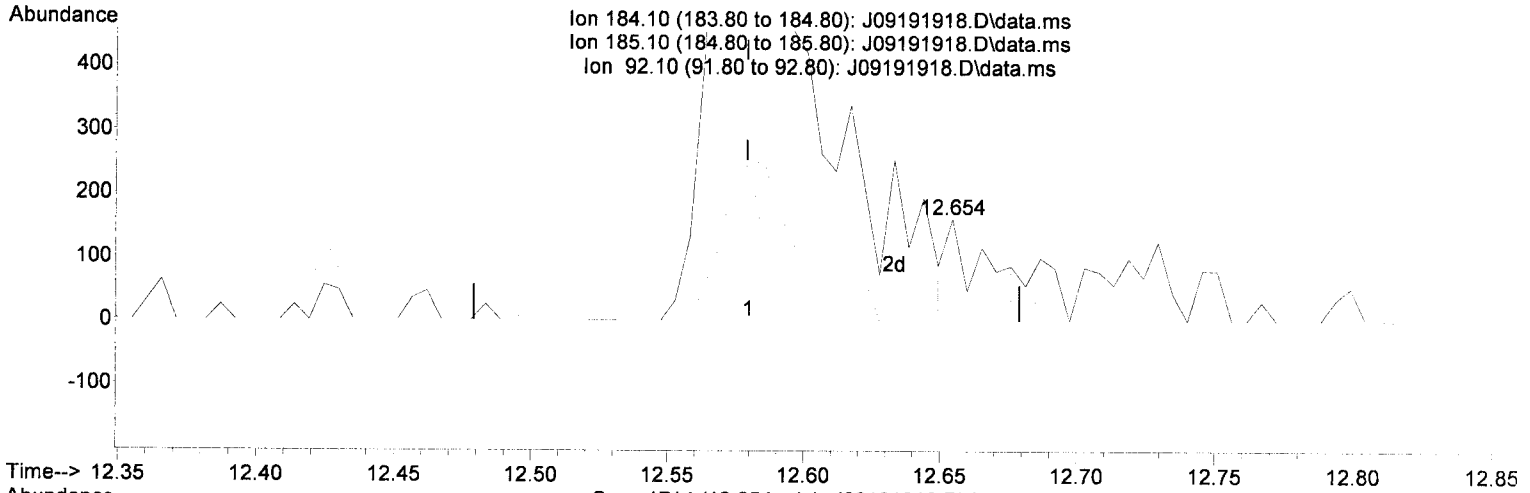


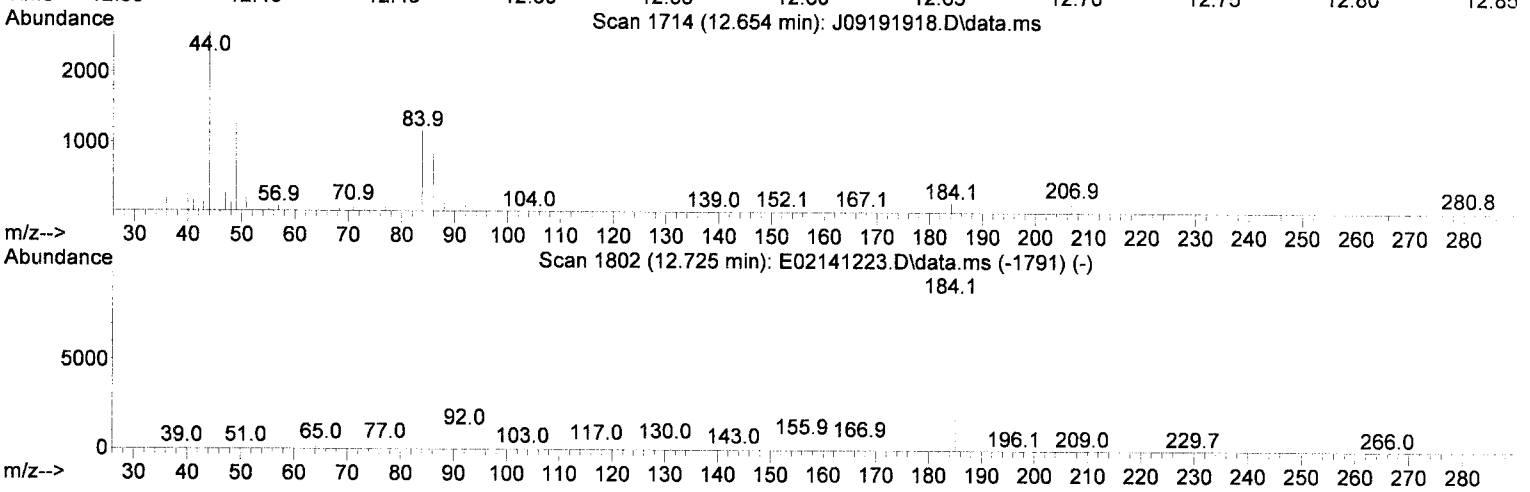
R = 4.30e-003 A*A + 2.93e-001 A - 1.80e-002
Coef of Det (r^2) = 0.999 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10





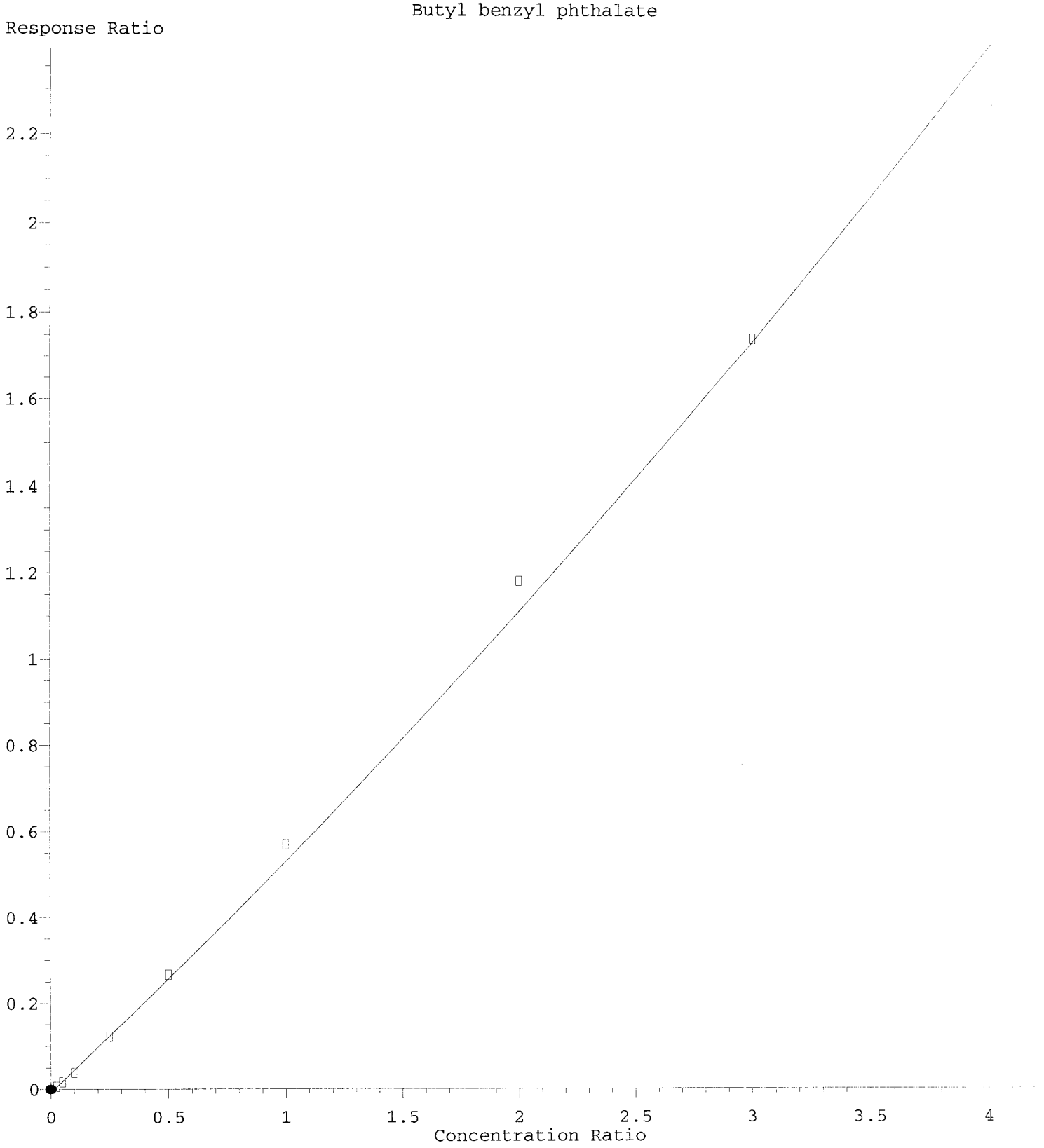
TIC: J09191918.D\data.ms

(76) Benzidine (T)

12.654min (+ 0.075) 123.93 ng/ml m

response 158

Ion	Exp%	Act%
184.10	100.00	100.00
185.10	15.50	0.00
92.10	9.10	70.99#
0.00	0.00	0.00

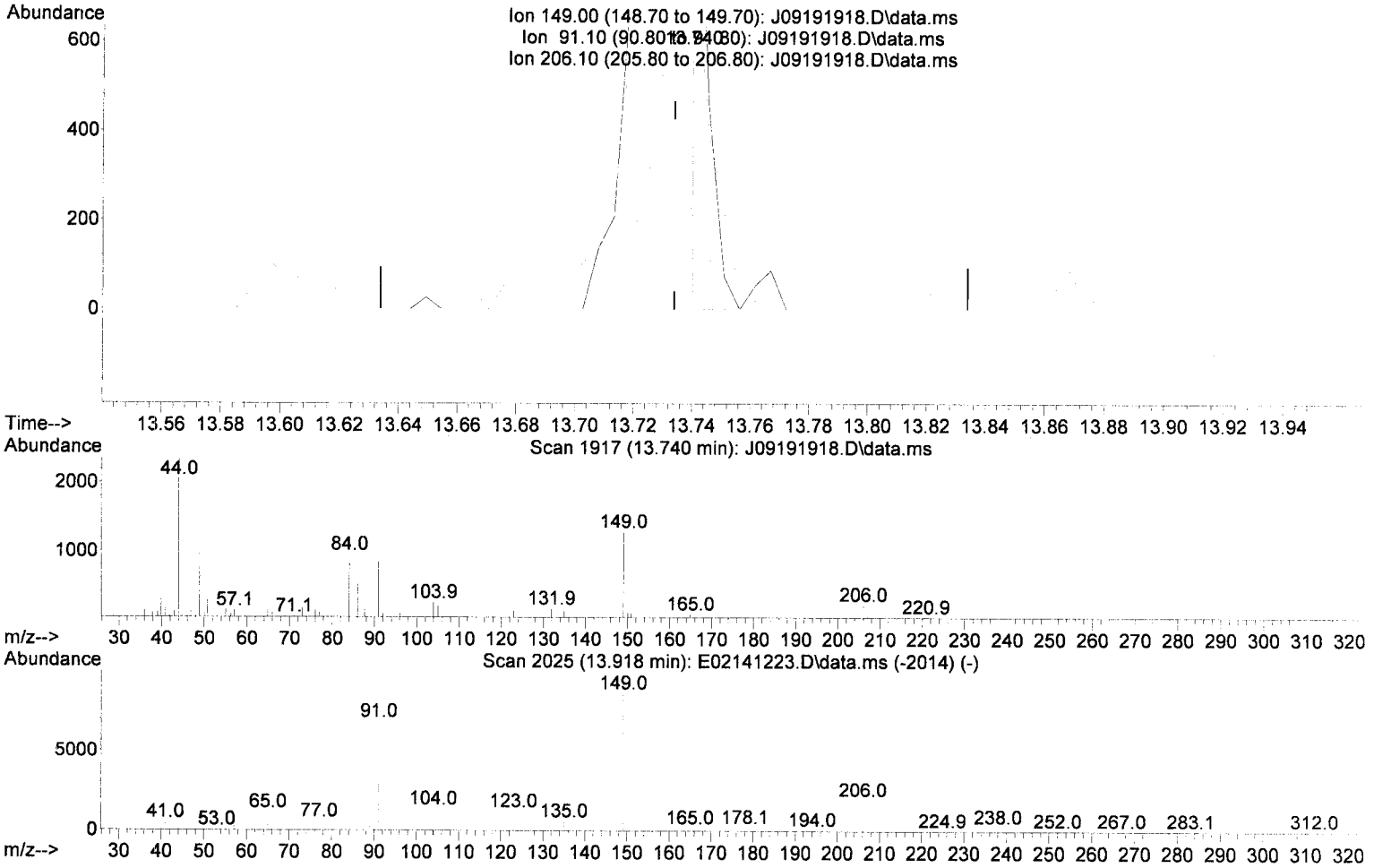


R = 2.13e-002 A*A + 5.16e-001 A - 7.58e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w/(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



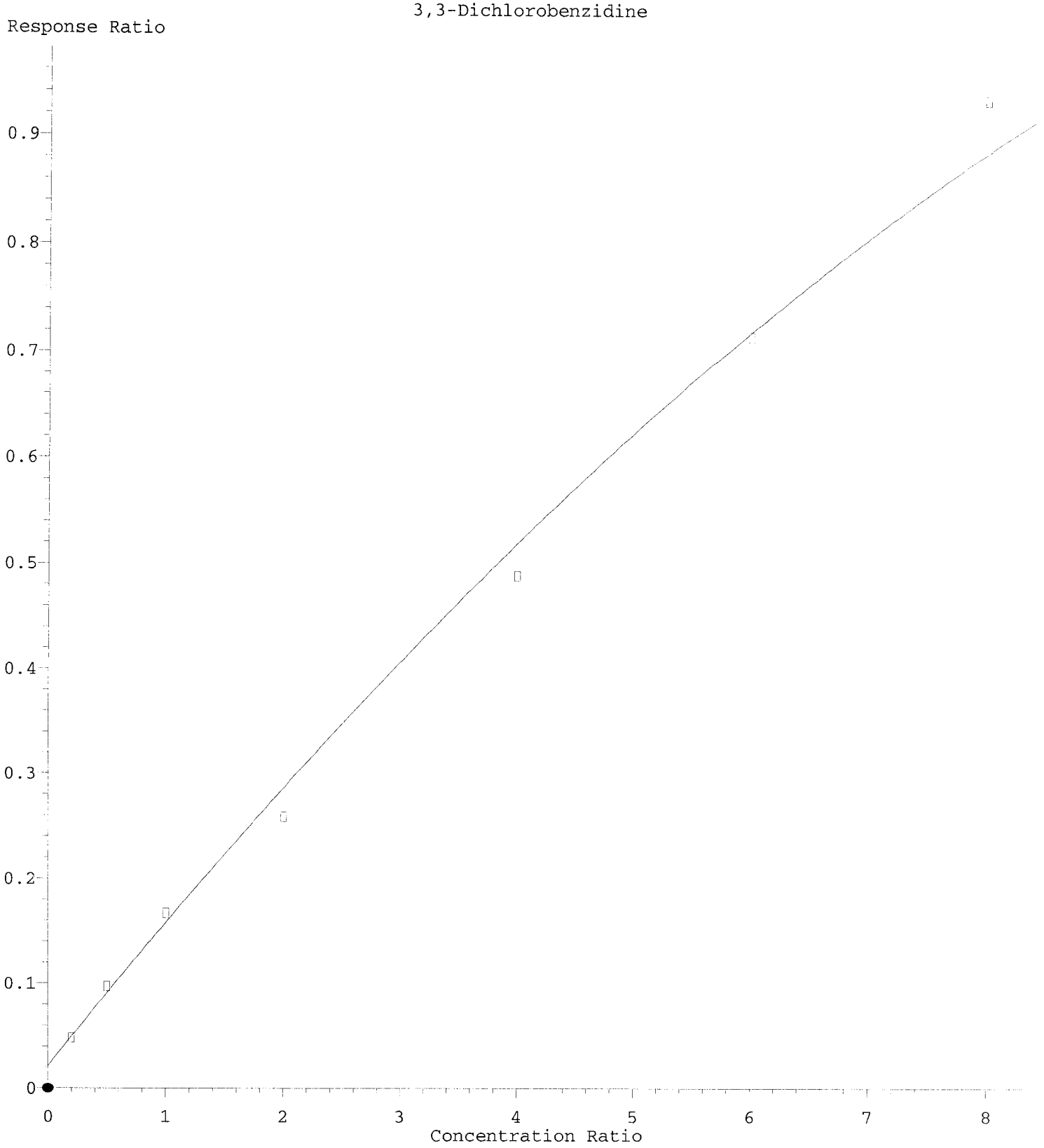
TIC: J09191918.D\data.ms

(80) Butyl benzyl phthalate (T)

13.740min (+ 0.006) 29.98 ng/ml m

response 188

Ion	Exp%	Act%
149.00	100.00	100.00
91.10	64.60	66.02
206.10	20.40	16.13
0.00	0.00	0.00

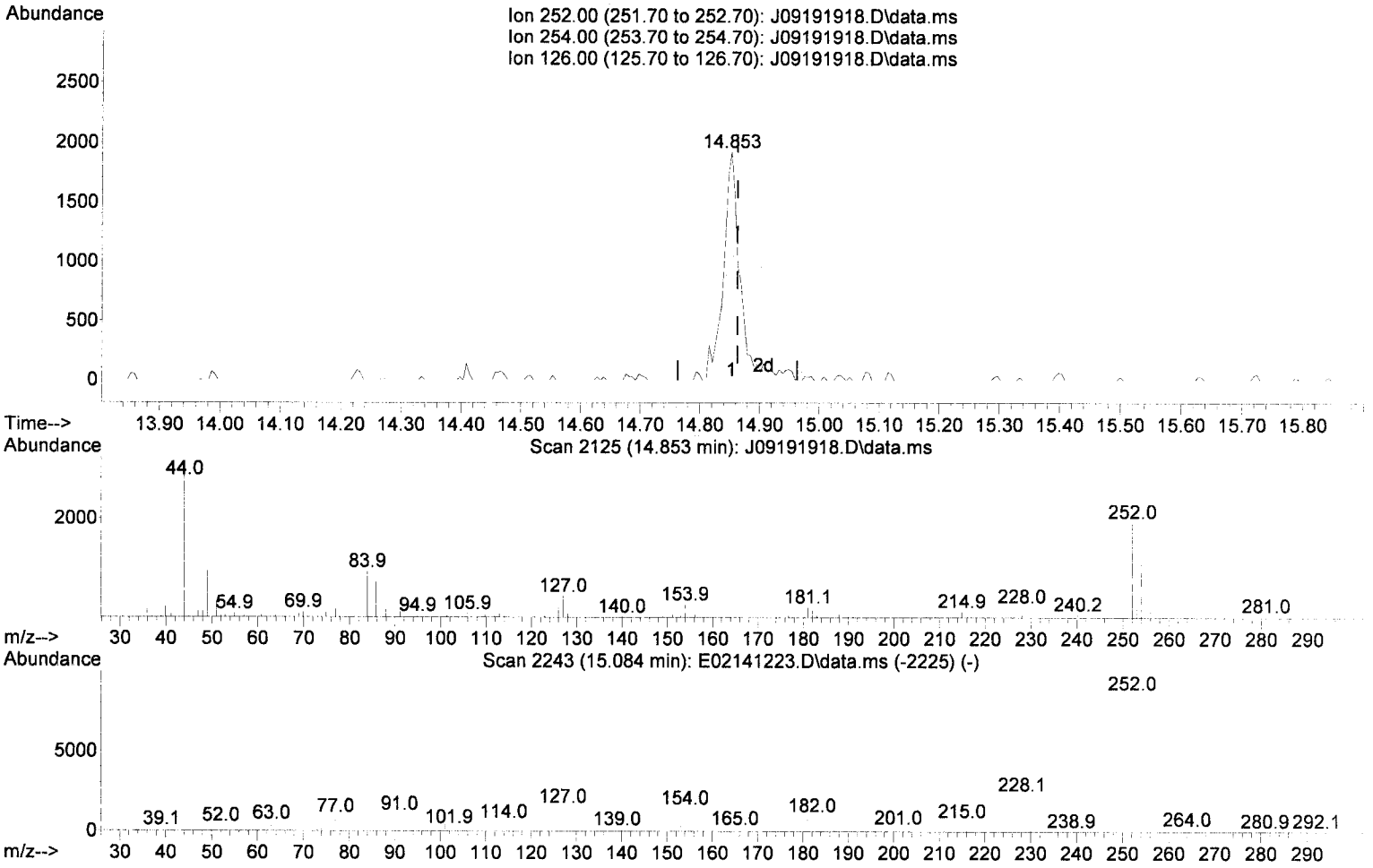


R = -4.11e-003 A*A + 1.41e-001 A + 2.12e-002
Coef of Det (r^2) = 0.992 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



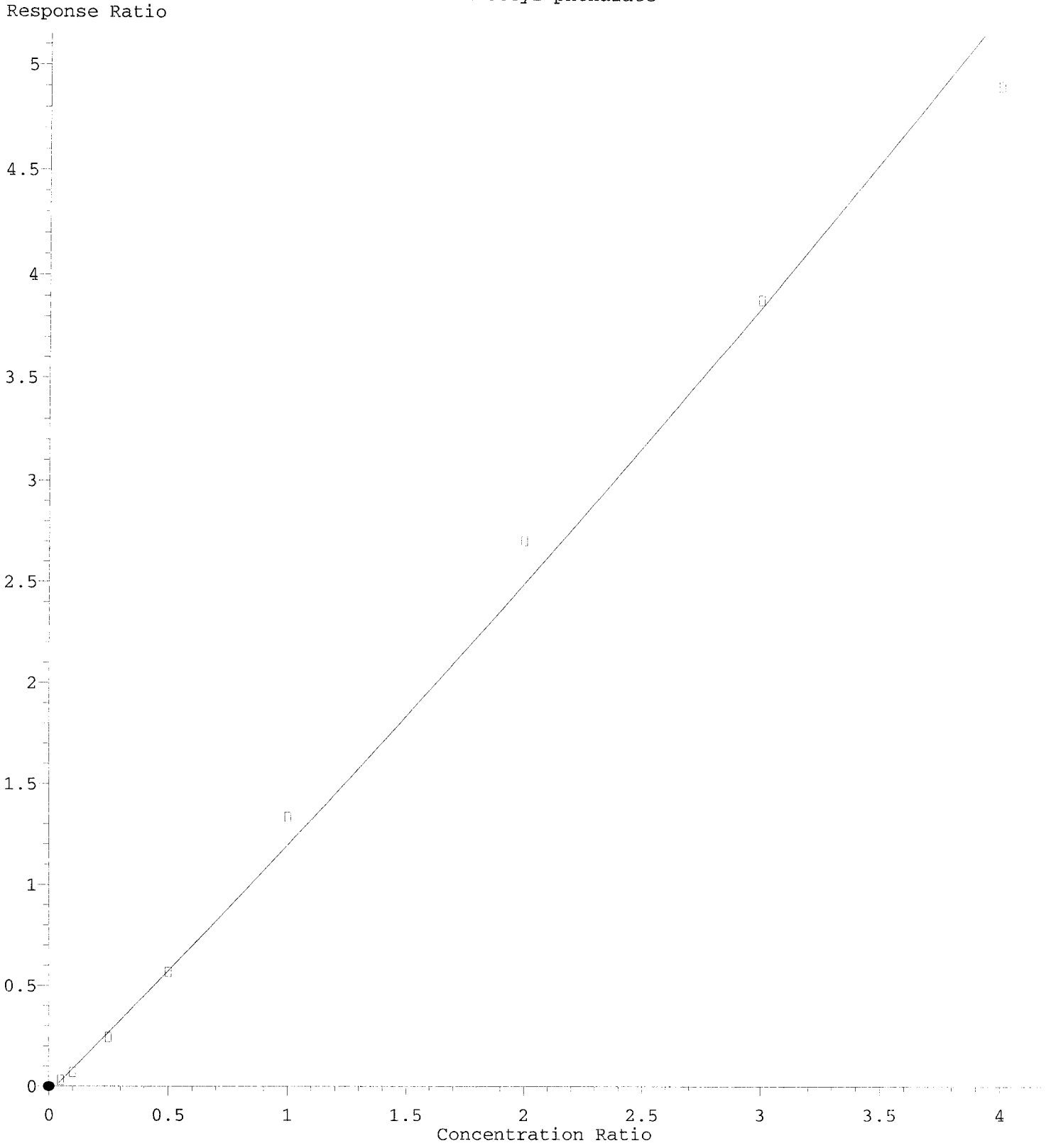
TIC: J09191918.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.853min (-0.010) -1.00 ng/ml m

response 3954

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	62.09
126.00	12.00	11.91
0.00	0.00	0.00

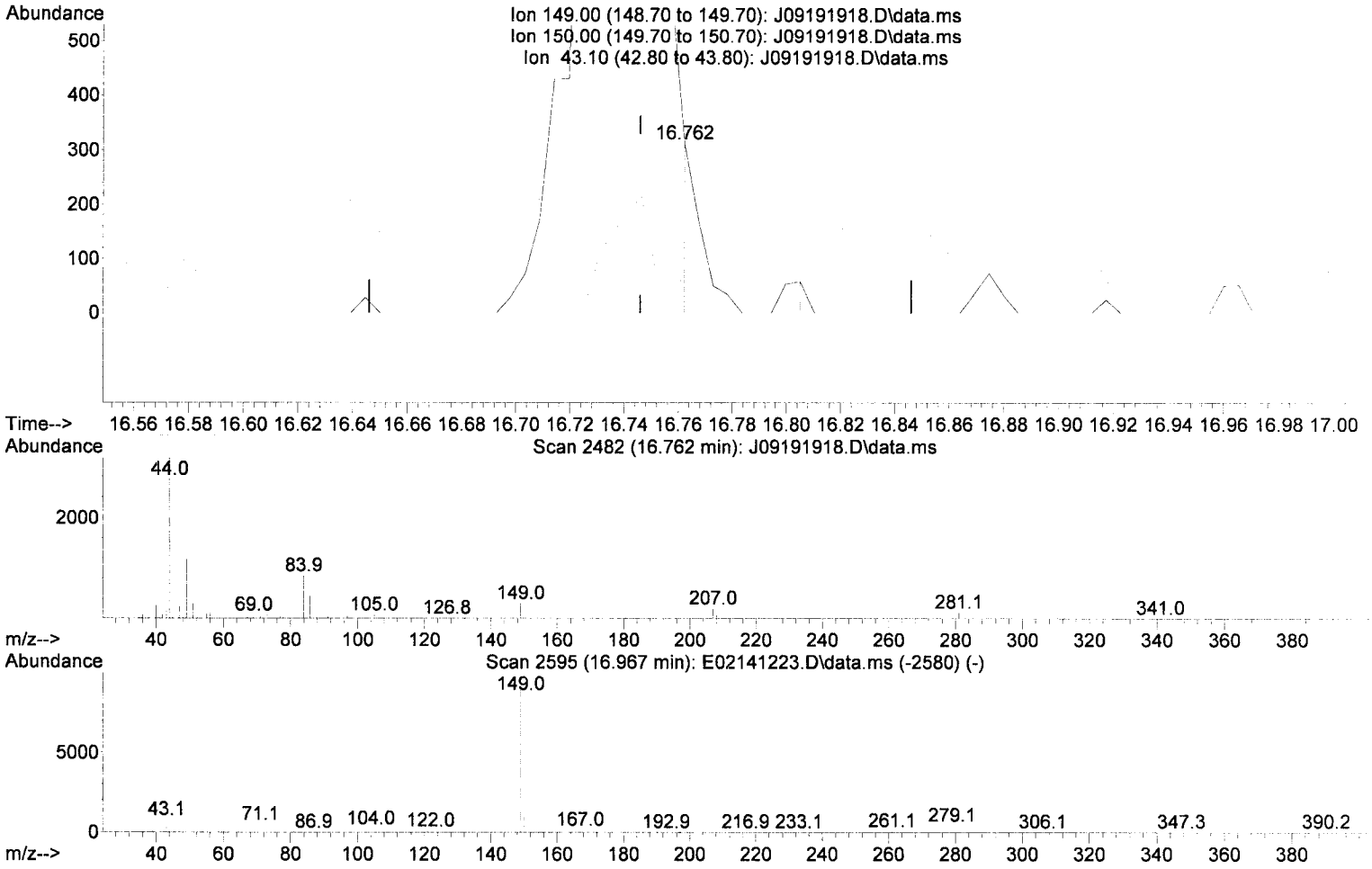


R = 3.12e-002 A*A + 1.20e+000 A - 3.48e-002
Coef of Det (r^2) = 0.890 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



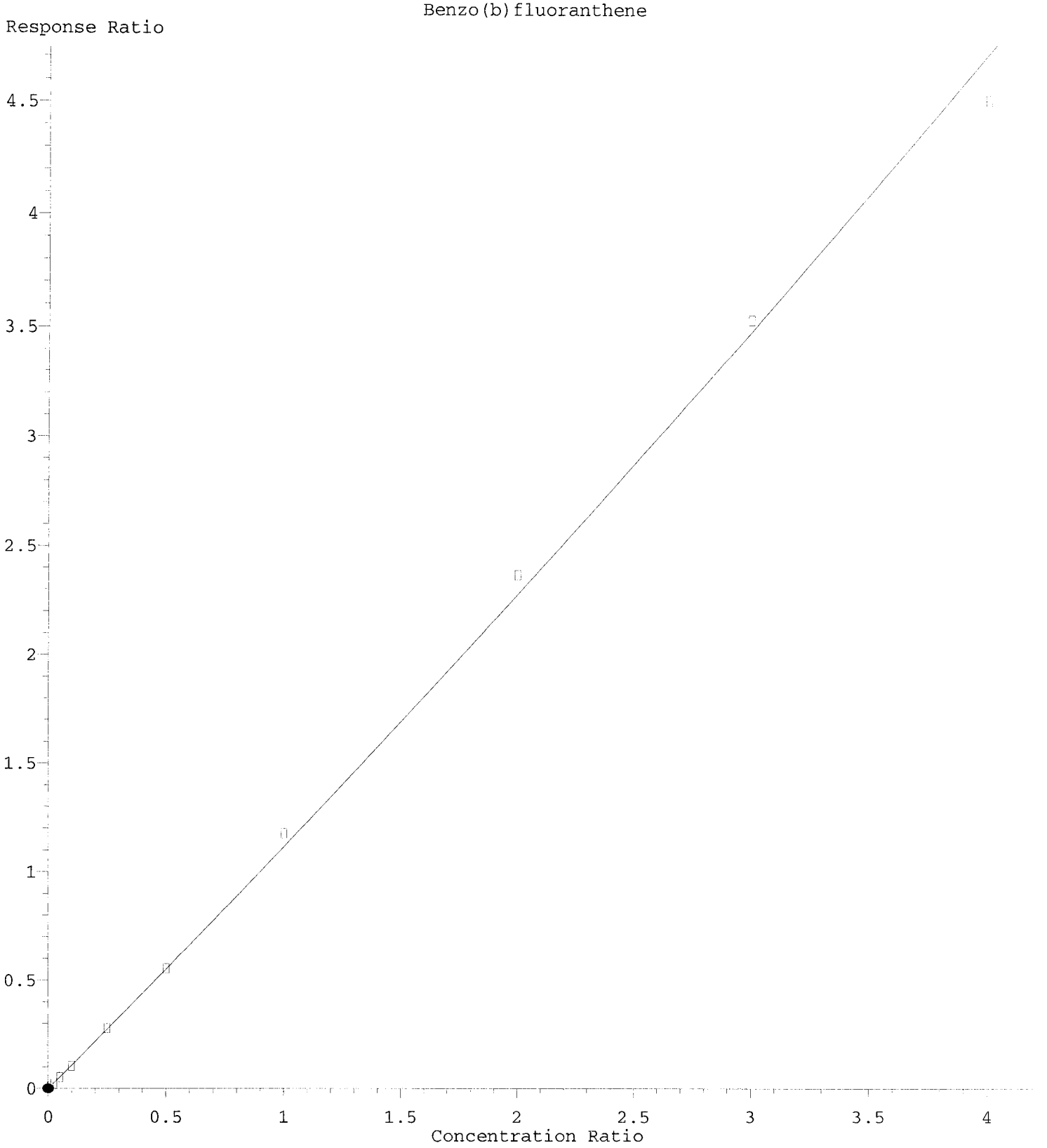
TIC: J09191918.D\data.ms

(87) Di-n-octyl phthalate (T)

16.762min (+ 0.016) 58.11 ng/ml m ✓

response 117

Ion	Exp%	Act%
149.00	100.00	100.00
150.00	9.90	19.81
43.10	5.60	52.08#
0.00	0.00	0.00

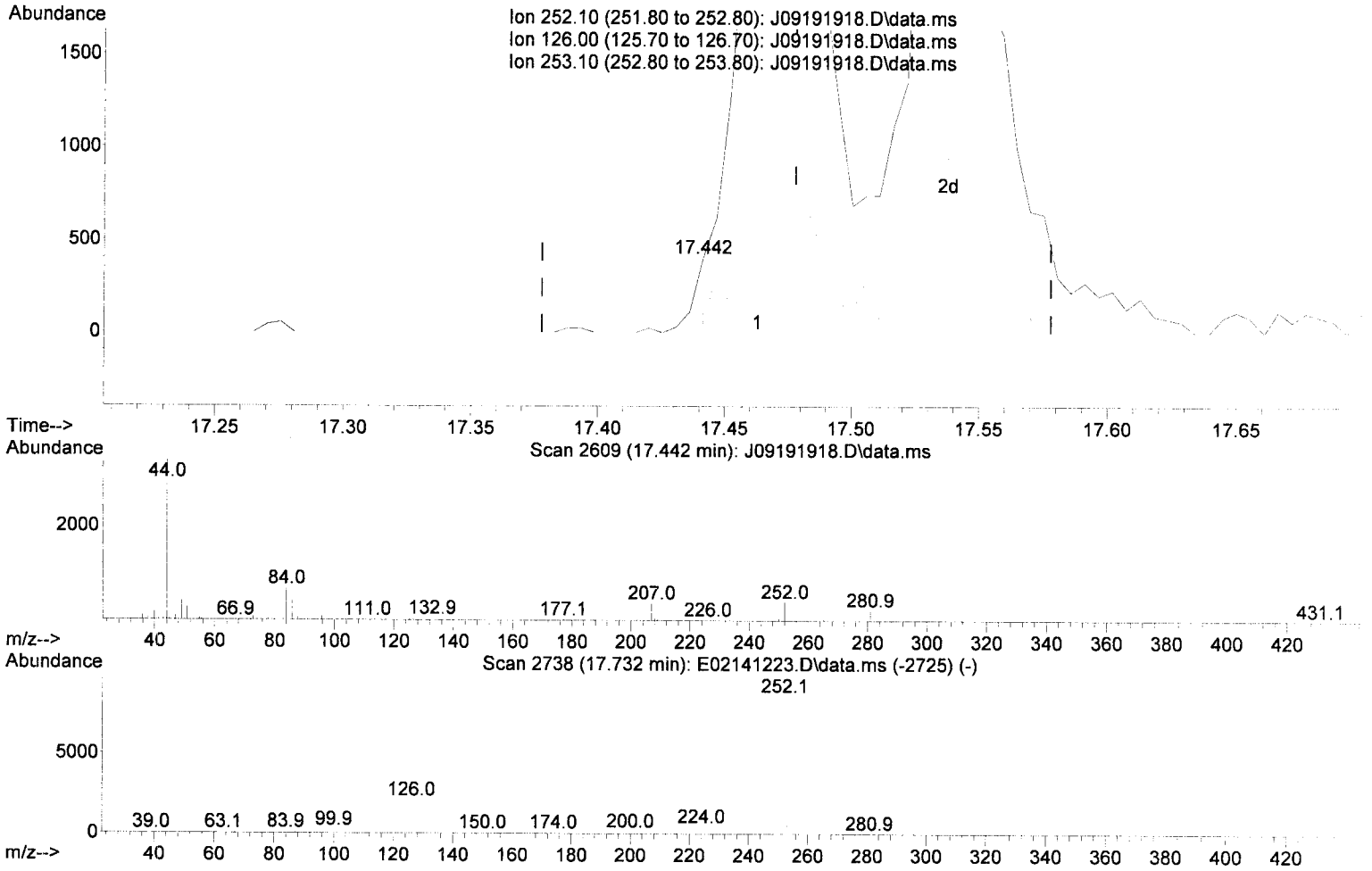


R = 1.98e-002 A*A + 1.10e+000 A - 4.38e-003
Coef of Det (r^2) = 0.997 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(88) Benzo(b)fluoranthene (T)

17.442min (-0.036) 8.23 ng/ml m

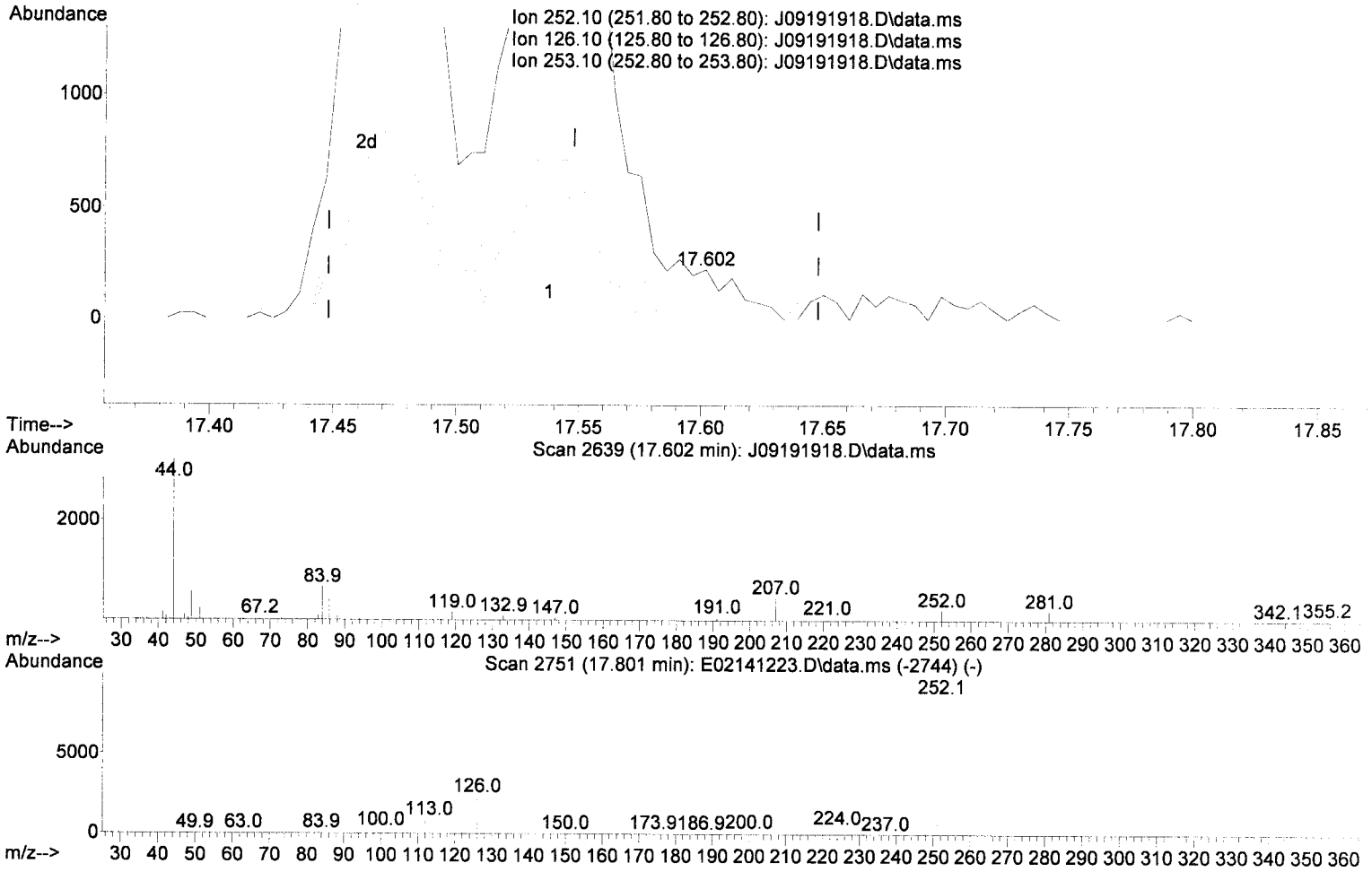
response 176

Ion	Exp%	Act%
252.10	100.00	100.00
126.00	16.50	12.07
253.10	21.90	8.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



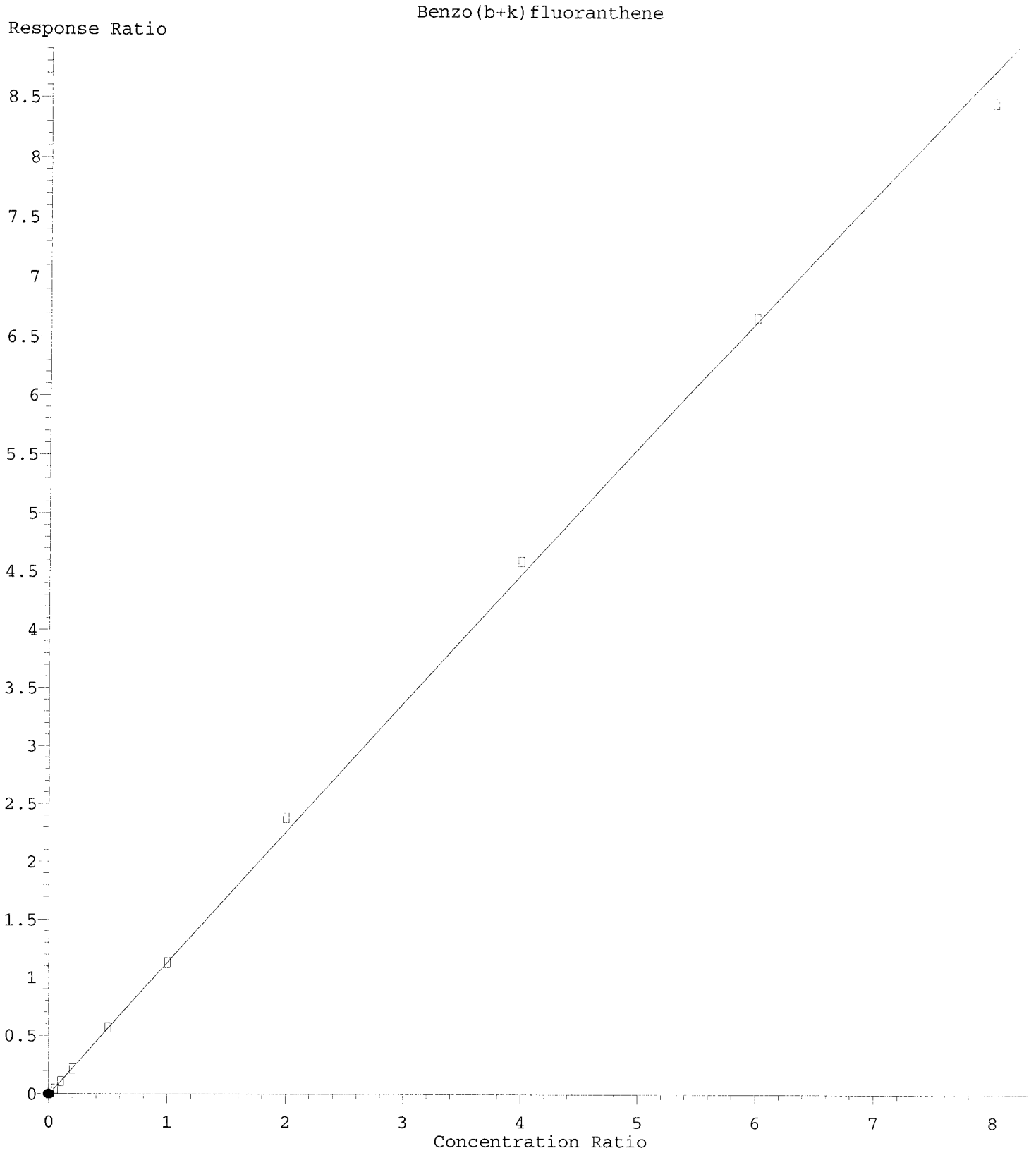
TIC: J09191918.D\data.ms

(89) Benzo(k)fluoranthene (T)

17.602min (+ 0.054) 8.71 ng/ml m J

response 154

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	0.00
253.10	22.00	0.00
0.00	0.00	0.00

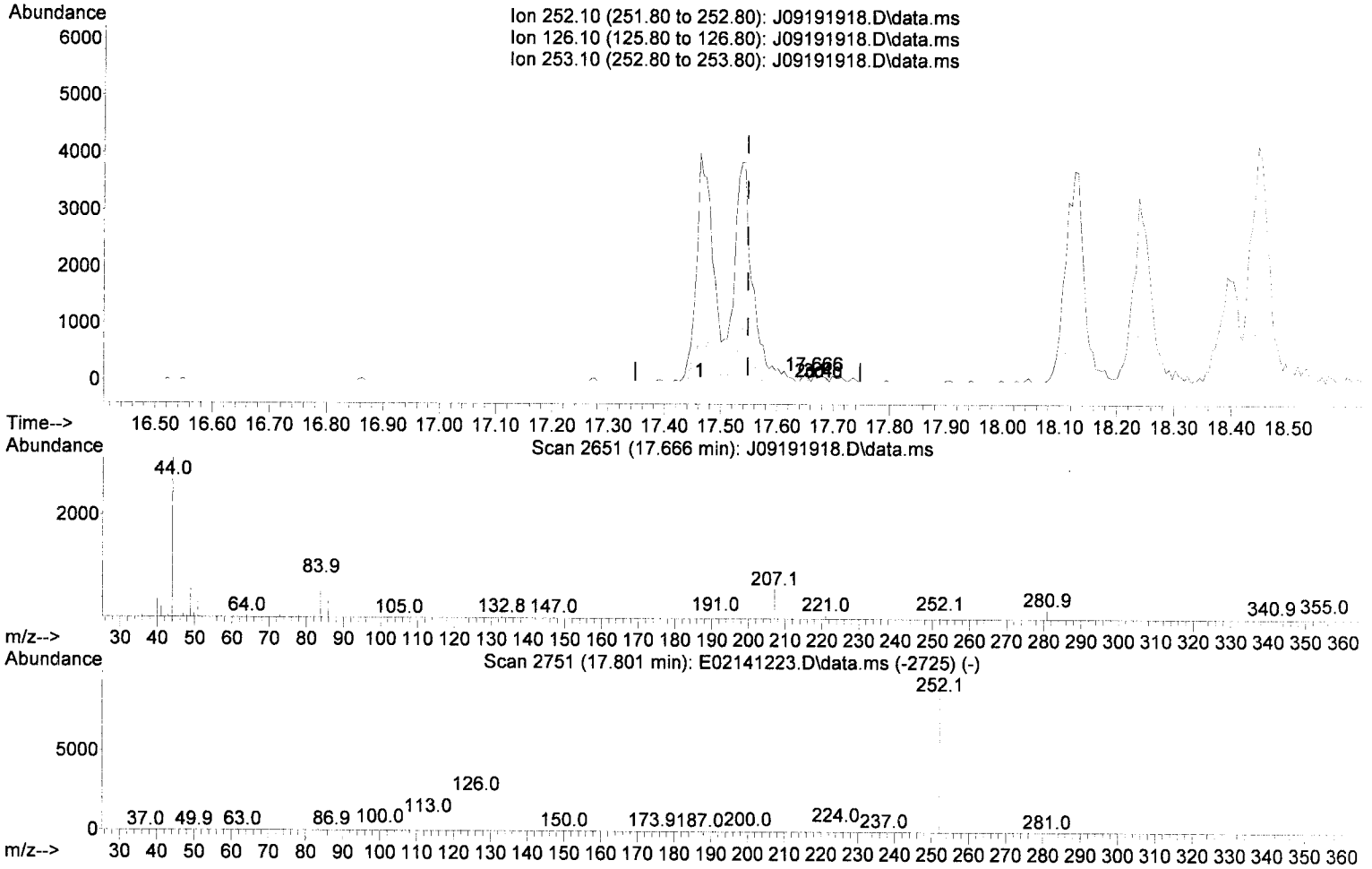


R = -6.69e-003 A*A + 1.15e+000 A - 9.04e-003
Coef of Det (r^2) = 0.998 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919-M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



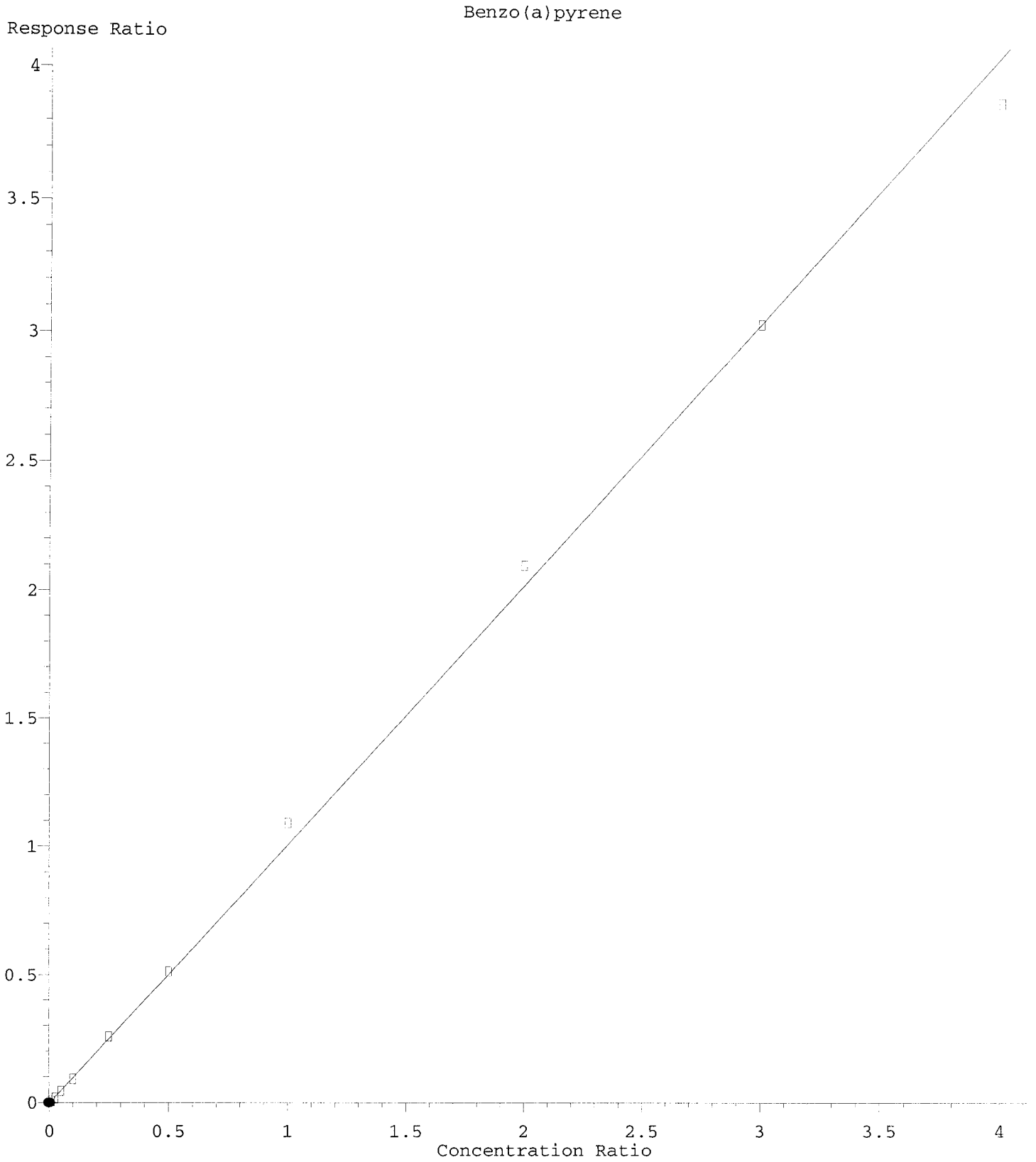
TIC: J09191918.D\data.ms

(90) Benzo(b+k)fluoranthene (T)

17.666min (+ 0.118) 15.95 ng/ml m

response 140

Ion	Exp%	Act%
252.10	100.00	100.00
126.10	16.90	0.00
253.10	22.00	0.00
0.00	0.00	0.00

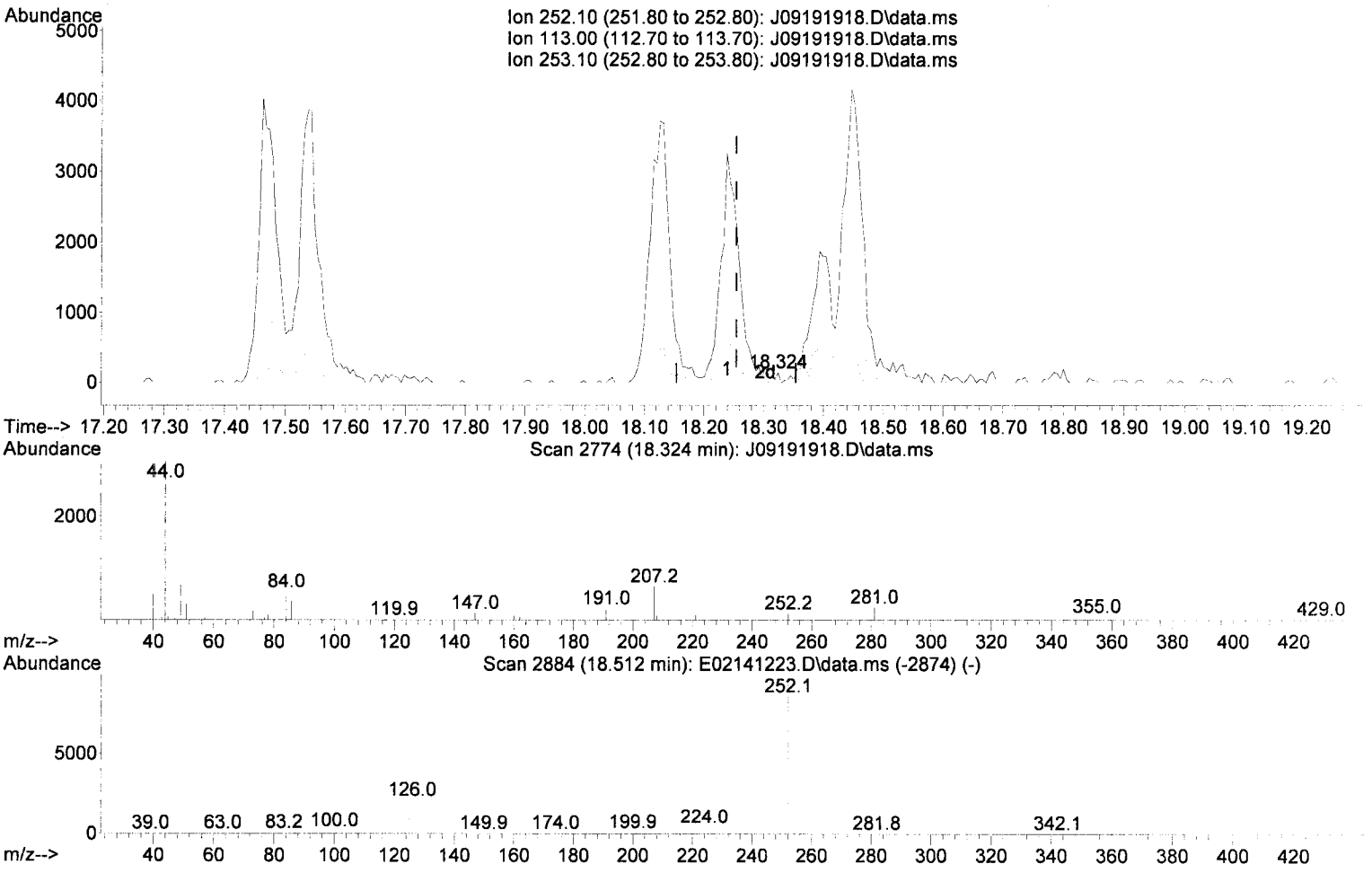


R = 4.44e-004 A*A + 1.01e+000 A - 4.97e-003
Coef of Det (r^2) = 0.995 Curve Fit: Quadratic w(1/a^2)
Method Name: C:\msdchem\1\methods\SV10_091919.M
Calibration Table Last Updated: Fri Sep 20 13:01:57 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\REQUANT\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 13:02:03 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(92) Benzo(a)pyrene (T)

18.324min (+ 0.070) 10.04 ng/ml m ✓

response 116

Ion	Exp%	Act%
252.10	100.00	100.00
113.00	9.90	0.00
253.10	22.50	0.00
0.00	0.00	0.00

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9I19035

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9I19035-TUN1	MS Tune	Soil	A19I165	A19I086	9/20/2019 12:22:00AM
9I19035-ICB1	Initial Cal Blank	Soil		A19I086	9/20/2019 12:49:00AM
9I19035-CAL1	Cal Standard	Soil	A19G238	"	9/20/2019 1:24:00AM
9I19035-CAL2	Cal Standard	Soil	A19G239	"	9/20/2019 1:59:00AM
9I19035-CAL3	Cal Standard	Soil	A19G240	"	9/20/2019 2:34:00AM
9I19035-CAL4	Cal Standard	Soil	A19G241	"	9/20/2019 3:09:00AM
9I19035-CAL5	Cal Standard	Soil	A19G242	"	9/20/2019 3:44:00AM
9I19035-CAL6	Cal Standard	Soil	A19G243	"	9/20/2019 4:19:00AM
9I19035-CAL7	Cal Standard	Soil	A19G244	"	9/20/2019 4:54:00AM
9I19035-CAL8	Cal Standard	Soil	A19G245	"	9/20/2019 5:29:00AM
9I19035-CAL9	Cal Standard	Soil	A19G246	"	9/20/2019 6:04:00AM
9I19035-CALA	Cal Standard	Soil	A19G247	"	9/20/2019 6:39:00AM
9I19035-ICV1	Initial Cal Check	Soil	A19I254	"	9/20/2019 7:50:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Soil**

9I19035-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

Compounds listed above have recalculated recoveries outside 70-130% of the true values, and the calibration levels are above the reporting level. If no compounds are listed, all are OK. Please see the next section for quadatic fit compounds.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9I19035

Analytes With Quadratic Curve Fits

Qualifier	iMDL	iMRL	Spike Amt	%Difference	OK?	Raise MRL to ?
				———	☐	☐ ———

Analytes listed above have quadratic curve fits. If they are using a weighting otpion, they must be checked against the requanted curve points to determine if the recalculated results are within limits (70-130 or as specified).

ICV RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Soil**

9I19035-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

Compounds listed above have Initial Calibration Verification standard recoveries outside 70-130% of the true values. If no compounds are listed, all have passing recoveries.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9I19035

Analysis Included
8270D LL Full List

INSTRUMENT SEQUENCE LOG

SampleID	SampleName	Matrix	STDID	ISTD_ID	Analyzed
9I19035-TUN1	MS Tune	Water	A19I165	A19I086	9/20/2019 12:22:00AM
9I19035-ICB1	Initial Cal Blank	Water		A19I086	9/20/2019 12:49:00AM
9I19035-CAL1	Cal Standard	Water	A19G238	"	9/20/2019 1:24:00AM
9I19035-CAL2	Cal Standard	Water	A19G239	"	9/20/2019 1:59:00AM
9I19035-CAL3	Cal Standard	Water	A19G240	"	9/20/2019 2:34:00AM
9I19035-CAL4	Cal Standard	Water	A19G241	"	9/20/2019 3:09:00AM
9I19035-CAL5	Cal Standard	Water	A19G242	"	9/20/2019 3:44:00AM
9I19035-CAL6	Cal Standard	Water	A19G243	"	9/20/2019 4:19:00AM
9I19035-CAL7	Cal Standard	Water	A19G244	"	9/20/2019 4:54:00AM
9I19035-CAL8	Cal Standard	Water	A19G245	"	9/20/2019 5:29:00AM
9I19035-CAL9	Cal Standard	Water	A19G246	"	9/20/2019 6:04:00AM
9I19035-CALA	Cal Standard	Water	A19G247	"	9/20/2019 6:39:00AM
9I19035-ICV1	Initial Cal Check	Water	A19I254	"	9/20/2019 7:50:00AM

CALIBRATION STANDARD RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Water**

9I19035-CAL1	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL2	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL3	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL4	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL5	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL6	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL7	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL8	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CAL9	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual
9I19035-CALA	Inst. MRL	Recalc Res.	Cal Level	%Rec.	Qual

Compounds listed above have recalculated recoveries outside 70-130% of the true values, and the calibration levels are above the reporting level. If no compounds are listed, all are OK. Please see the next section for quadatic fit compounds.

CALIBRATION SEQUENCE REVIEW SHEET

SEQUENCE: 9I19035

Analytes With Quadratic Curve Fits

Qualifier	iMDL	iMRL	Spike Amt	%Difference	OK?	Raise MRL to ?
				———	☐	☐ ———

Analytes listed above have quadratic curve fits. If they are using a weighting otpion, they must be checked against the requanted curve points to determine if the recalculated results are within limits (70-130 or as specified).

ICV RECOVERIES

Calibration: **A9I2405** Instrument: **SV-GCMS10**

8270D LL Full List Sequence: **9I19035** Matrix: **Water**

9I19035-ICV1	Inst. MRL	ICV Level	Result	%Rec.	Qual

Compounds listed above have Initial Calibration Verification standard recoveries outside 70-130% of the true values. If no compounds are listed, all have passing recoveries.

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/23/19

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4 (IST	2000.000	2000.000	0.0	106	0.00
2	TG	N-Nitrosodimethylamine	1000.000	1045.350	-4.5	114	0.09
3	TG	Pyridine	1000.000	896.190	10.4	96	0.10
4	S	2-Fluorophenol (Surr)	1000.000	981.272	1.9	100	0.03
5	S	Phenol-d6(Surr)	1000.000	1015.692	-1.6	99	0.00
6	T	Phenol	1000.000	989.661	1.0	97	0.01
7	T	Aniline	1000.000	836.204	16.4	97	0.02
8	T	Bis(2-chloroethyl) ether	1000.000	1091.651	-9.2	106	0.00
9	T	2-Chlorophenol	1000.000	1008.898	-0.9	100	0.00
10	T	1,3-Dichlorobenzene	1000.000	1009.723	-1.0	105	0.00
11	T	1,4-Dichlorobenzene	1000.000	1002.987	-0.3	102	0.00
12	T	Benzyl alcohol	1000.000	910.785	8.9	91	0.00
13	T	1,2-Dichlorobenzene	1000.000	1024.110	-2.4	104	0.00
14	T	2-Methylphenol	1000.000	1052.523	-5.3	100	0.00
15	T	2,2'-Oxybis(1-Chloropropane	1000.000	970.278	3.0	97	0.00
16	T	N-Nitrosodi-n-propylamine	1000.000	1043.262	-4.3	102	0.00
17	T	3+4-Methylphenol	1000.000	1067.423	-6.7	99	0.00
18	T	Hexachloroethane	1000.000	1040.964	-4.1	109	0.00
19	S	Nitrobenzene-d5 (Surr)	1000.000	1065.680	-6.6	103	0.00
20	T	Nitrobenzene	1000.000	1058.009	-5.8	103	0.00
21	I	Naphthalene-d8 (ISTD)	2000.000	2000.000	0.0	102	0.00
22	T	Isophorone	1000.000	1048.414	-4.8	103	0.00
23	T	2-Nitrophenol	1000.000	968.550	3.1	93	0.00
24	T	2,4-Dimethylphenol	1000.000	967.663	3.2	92	0.00
25	T	Bis(2-chloroethoxy) methane	1000.000	1057.133	-5.7	101	0.00
26	T	Benzoic acid	2000.000	1974.824	1.3	115	0.00
27	T	2,4-Dichlorophenol	1000.000	968.833	3.1	98	0.00
28	T	1,2,4-Trichlorobenzene	1000.000	999.393	0.1	99	0.00
29	T	Naphthalene	1000.000	1048.170	-4.8	101	0.00
30	T	4-Chloroaniline	1000.000	939.273	6.1	90	0.00
31	T	Hexachlorobutadiene	1000.000	1037.179	-3.7	101	0.00
32	T	4-Chloro-3-methylphenol	1000.000	1056.418	-5.6	101	0.00
33	T	2-Methylnaphthalene	1000.000	1097.134	-9.7	104	0.00
34	T	1-Methylnaphthalene	1000.000	1073.196	-7.3	104	0.00
35	I	Acenaphthene-d10 (ISTD)	2000.000	2000.000	0.0	105	0.00
36	T	Hexachlorocyclopentadiene	1000.000	1072.195	-7.2	102	0.00
37	T	2,4,6-Trichlorophenol	1000.000	1033.651	-3.4	105	0.00
38	T	2,4,5-Trichlorophenol	1000.000	1048.469	-4.8	108	0.00
39	T	1,1'-Biphenyl	1000.000	1032.434	-3.2	102	0.00
40	S	2-Fluorobiphenyl (Surr)	1000.000	1062.096	-6.2	106	0.00
41	T	2-Chloronaphthalene	1000.000	1056.535	-5.7	104	0.00
42	T	2-Nitroaniline	1000.000	1106.583	-10.7	111	0.00
43	T	2,6-Dimethylnaphthalene	1000.000	1034.190	-3.4	103	0.00
44	T	1,4-Dinitrobenzene	1000.000	1114.508	-11.5	121	0.00
45	T	Dimethyl phthalate	1000.000	1061.398	-6.1	105	0.00
46	T	1,3-Dinitrobenzene	1000.000	1081.705	-8.2	115	0.00
47	T	2,6-Dinitrotoluene	1000.000	1043.999	-4.4	107	0.00
48	T	1,2-Dinitrobenzene	1000.000	1063.484	-6.3	106	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49	T	Acenaphthylene	1000.000	1059.382	-5.9	104	0.00
50	T	3-Nitroaniline	1000.000	1060.772	-6.1	107	0.00
51	T	Acenaphthene	1000.000	1001.616	-0.2	103	0.00
52	T	2,4-Dinitrophenol	1000.000	972.001	2.8	122	0.00
53	T	4-Nitrophenol	1000.000	1106.887	-10.7	115	0.00
54	T	2,4-Dinitrotoluene	1000.000	1048.405	-4.8	113	0.00
55	T	Dibenzofuran	1000.000	1071.222	-7.1	106	0.00
56	T	2,3,5,6-Tetrachlorophenol	1000.000	1077.305	-7.7	111	0.00
57	T	2,3,4,6-Tetrachlorophenol	1000.000	1013.999	-1.4	103	0.00
58	T	Diethyl phthalate	1000.000	1087.436	-8.7	104	0.00
59	T	2,3,5-Trimethylnaphthalene	1000.000	1037.334	-3.7	102	0.00
60	T	Fluorene	1000.000	1045.897	-4.6	106	0.00
61	T	4-Chlorophenyl phenyl ether	1000.000	1051.565	-5.2	105	0.00
62	T	4-Nitroaniline	1000.000	1080.738	-8.1	113	0.00
63	T	4,6-Dinitro-2-methylphenol	1000.000	1157.716	-15.8	133	0.00
64	I	Phenanthrene-d10 (ISTD)	2000.000	2000.000	0.0	108	0.00
65	T	N-Nitrosodiphenylamine	1000.000	1064.375	-6.4	108	0.00
66	T	Azobenzene (1,2-DPH)	1000.000	1037.259	-3.7	105	0.00
67	S	2,4,6-Tribromophenol (Surr)	1000.000	1040.672	-4.1	111	0.00
68	T	4-Bromophenyl phenyl ether	1000.000	1032.582	-3.3	107	0.00
69	T	Hexachlorobenzene	1000.000	1010.042	-1.0	104	0.00
70	T	Pentachlorophenol (PCP)	1000.000	975.756	2.4	117	0.00
71	T	Phenanthrene	1000.000	1015.497	-1.5	108	0.00
72	T	Anthracene	1000.000	1058.253	-5.8	108	0.00
73	T	Carbazole	1000.000	964.910	3.5	103	0.00
74	T	Di-n-butyl phthalate	1000.000	1057.534	-5.8	106	0.00
75	T	Fluoranthene	1000.000	1088.446	-8.8	108	0.00
76	T	Benzidine	2000.000	1842.776	7.9	97	0.00
77	T	Pyrene	1000.000	1070.616	-7.1	106	0.00
78	I	Chrysene-d12 (ISTD)	2000.000	2000.000	0.0	109	-0.01
79	S	Terphenyl-d14 (Surr)	1000.000	1060.782	-6.1	110	0.00
80	T	Butyl benzyl phthalate	1000.000	1003.995	-0.4	105	0.00
81	T	Bis(2-ethylhexyl) adipate	1000.000	1058.578	-5.9	113	-0.01
82	T	3,3-Dichlorobenzidine	2000.000	2062.773	-3.1	106	-0.01
83	T	Benz(a)anthracene	1000.000	1029.118	-2.9	114	-0.01
84	T	Chrysene	1000.000	1009.528	-1.0	108	-0.01
85	T	Bis(2-ethylhexyl) phthalate	1000.000	1039.182	-3.9	110	0.00
86	I	Perylene-d12 (ISTD)	2000.000	2000.000	0.0	111	-0.01
87	T	Di-n-octyl phthalate	1000.000	1013.796	-1.4	114	-0.02
88	T	Benzo(b)fluoranthene	1000.000	1008.508	-0.9	112	-0.02
89	T	Benzo(k)fluoranthene	1000.000	992.118	0.8	110	-0.02
90	T	Benzo(b+k)fluoranthene	2000.000	1987.636	0.6	111	-0.02
91	T	Benzo(e)pyrene	1000.000	1042.799	-4.3	108	-0.02
92	T	Benzo(a)pyrene	1000.000	971.420	2.9	105	-0.02
93	T	Perylene	1000.000	1215.264	-21.5	134	-0.02
94	I	Dibenz(a,h)Anthrcene-d14 (I	2000.000	2000.000	0.0	113	-0.02

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
95 T	Indeno(1,2,3-cd)pyrene	1000.000	973.509	2.6	113	-0.02
96 T	Dibenz(a,h)anthracene	1000.000	1019.307	-1.9	113	-0.02
97 T	Benzo(g,h,i)perylene	1000.000	1054.879	-5.5	111	-0.02

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.600	150	134967	2.00	ug/mL	0.00
2) Naphthalene-d8	7.867	136	357596	2.00	ug/mL	0.00
3) Acenaphthene-d10	9.648	162	174398	2.00	ug/mL	0.00
5) Phenanthrene-d10	11.162	188	269663	2.00	ug/mL	0.00
11) Chrysene-d12	14.885	240	230198	2.00	ug/mL	0.00
12) Perylene-d12	17.126	264	213465	2.00	ug/mL	#-0.03
Target Compounds						Qvalue
4) Pentachlorophenol	10.975	266	684363	41.56	ug/mL	84
6) DFTPP	11.456	442	746382	34.29	ug/mL	85
7) Benzidine	12.628	184	2478643	25.84	ug/mL	98
8) 4,4-DDE	12.890	TIC	40067	No Calib		
9) 4,4-DDD	13.403	TIC	23267	No Calib		
10) 4,4-DDT	13.975	TIC	9144669	33.07	ug/mL	95

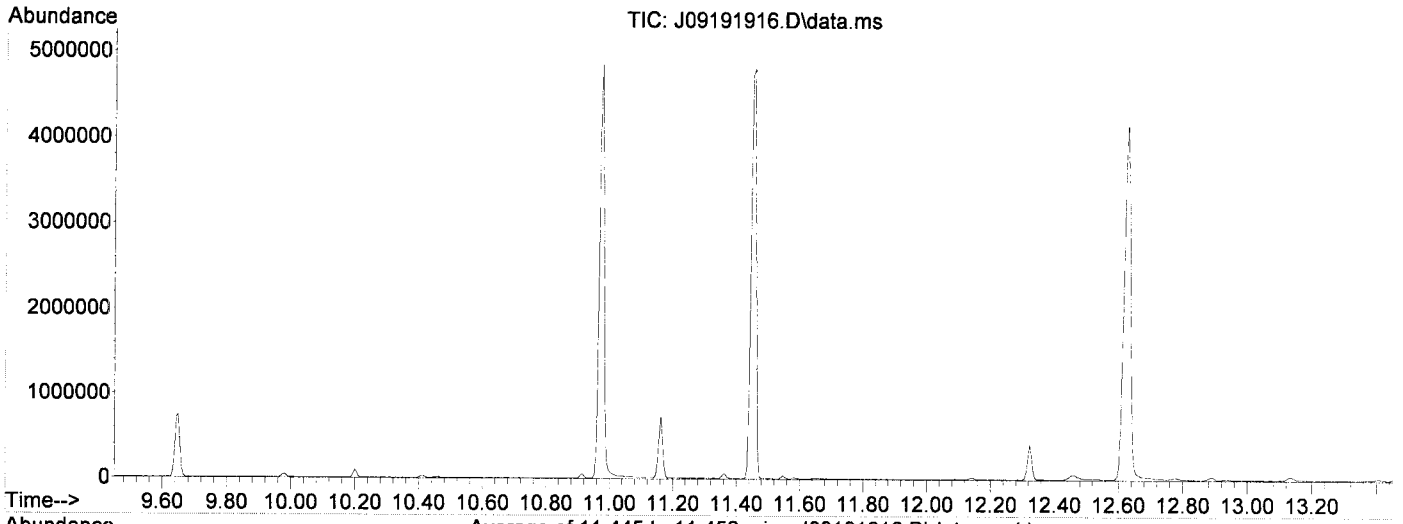
(#) = qualifier out of range (m) = manual integration (+) = signals summed

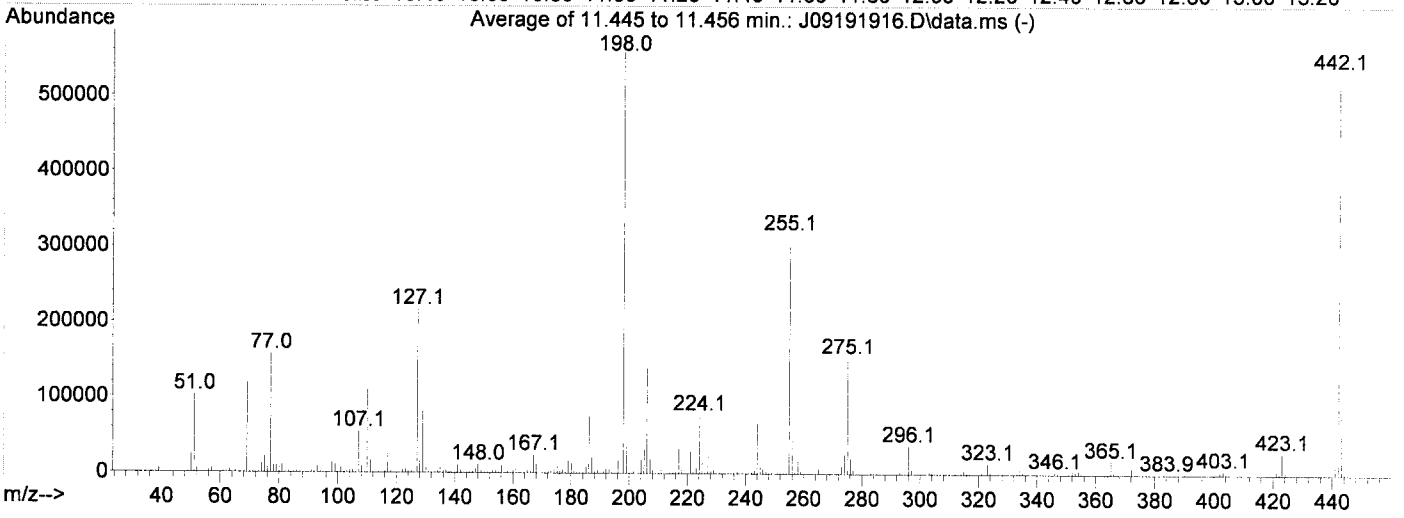
Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\DFTPP.M
Title : 8270 DFTPP Tune Method
Last Update : Thu Sep 19 15:09:10 2019

JK 9/20/19





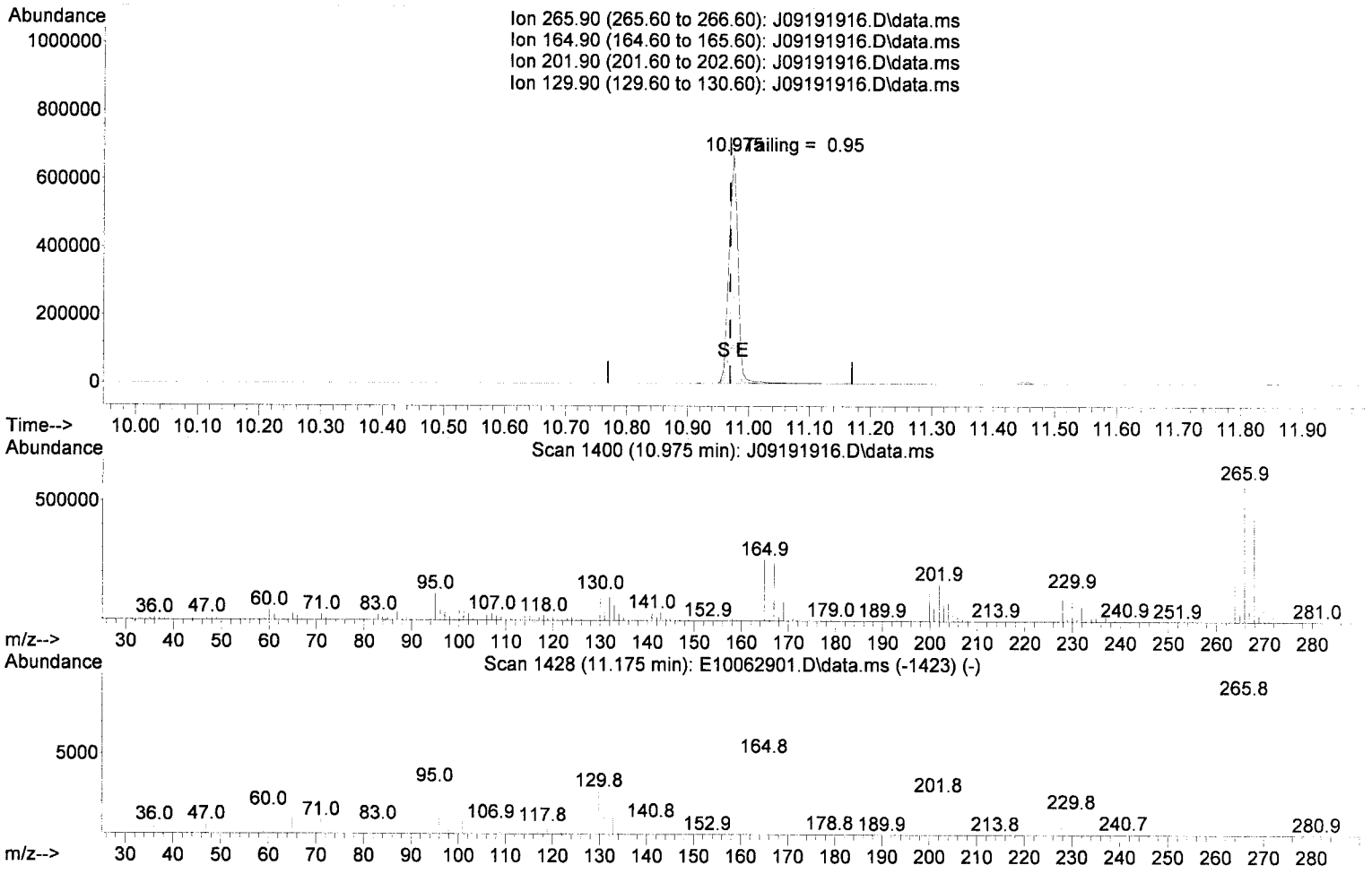
AutoFind: Scans 1488, 1489, 1490; Background Corrected with Scan 1483

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	1.6	1920	PASS
69	198	0.01	100	21.3	118967	PASS
70	69	0.00	2	0.5	611	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	557760	PASS
199	198	5	9	6.9	38464	PASS
365	198	1	100	3.2	17707	PASS
441	443	0.01	150	73.9	77592	PASS
442	198	0.10	200	95.5	532779	PASS
443	442	15	24	19.7	104995	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191916.D\data.ms

(4) Pentachlorophenol

10.975min (+ 0.005) 41.56 ug/mL

response 684363

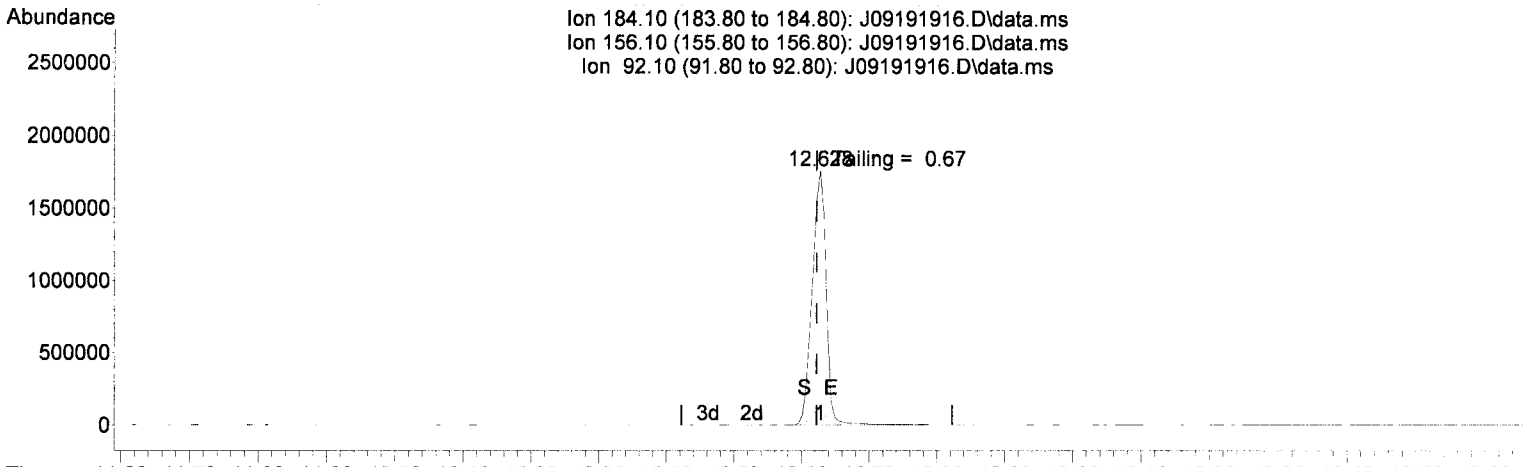
Ion	Exp%	Act%
265.90	100.00	100.00
164.90	50.60	38.07
201.90	25.80	22.85
129.90	27.30	16.90

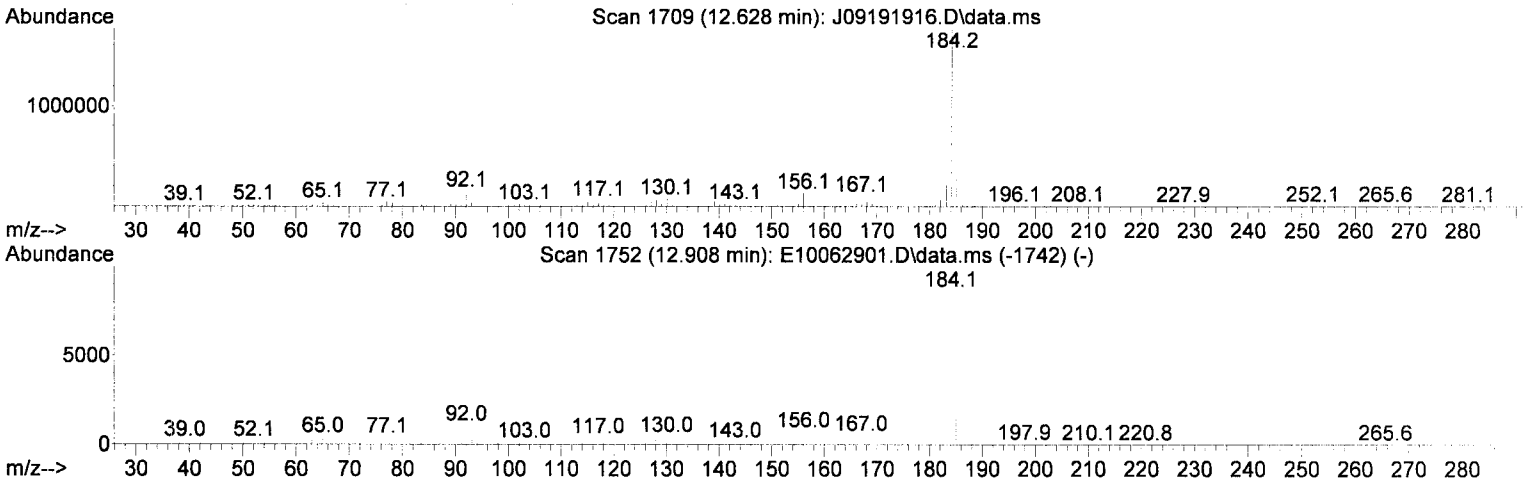
9/20/19

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191916.D\data.ms

(7) Benzidine

12.628min (+ 0.005) 25.84 ug/mL

response 2478643

Ion	Exp%	Act%
184.10	100.00	100.00
156.10	8.50	7.27
92.10	8.20	8.38
0.00	0.00	0.00

JK 9/20/19

DDT Breakdown Check (Validated 5/1/2013)

From:
9I19035-TUN1
SV-GCMS10

First Column Area Counts		Percent Breakdown	
DDE	40067		
DDD	23267		
DDT	9144669	**0.69**	**PASS**

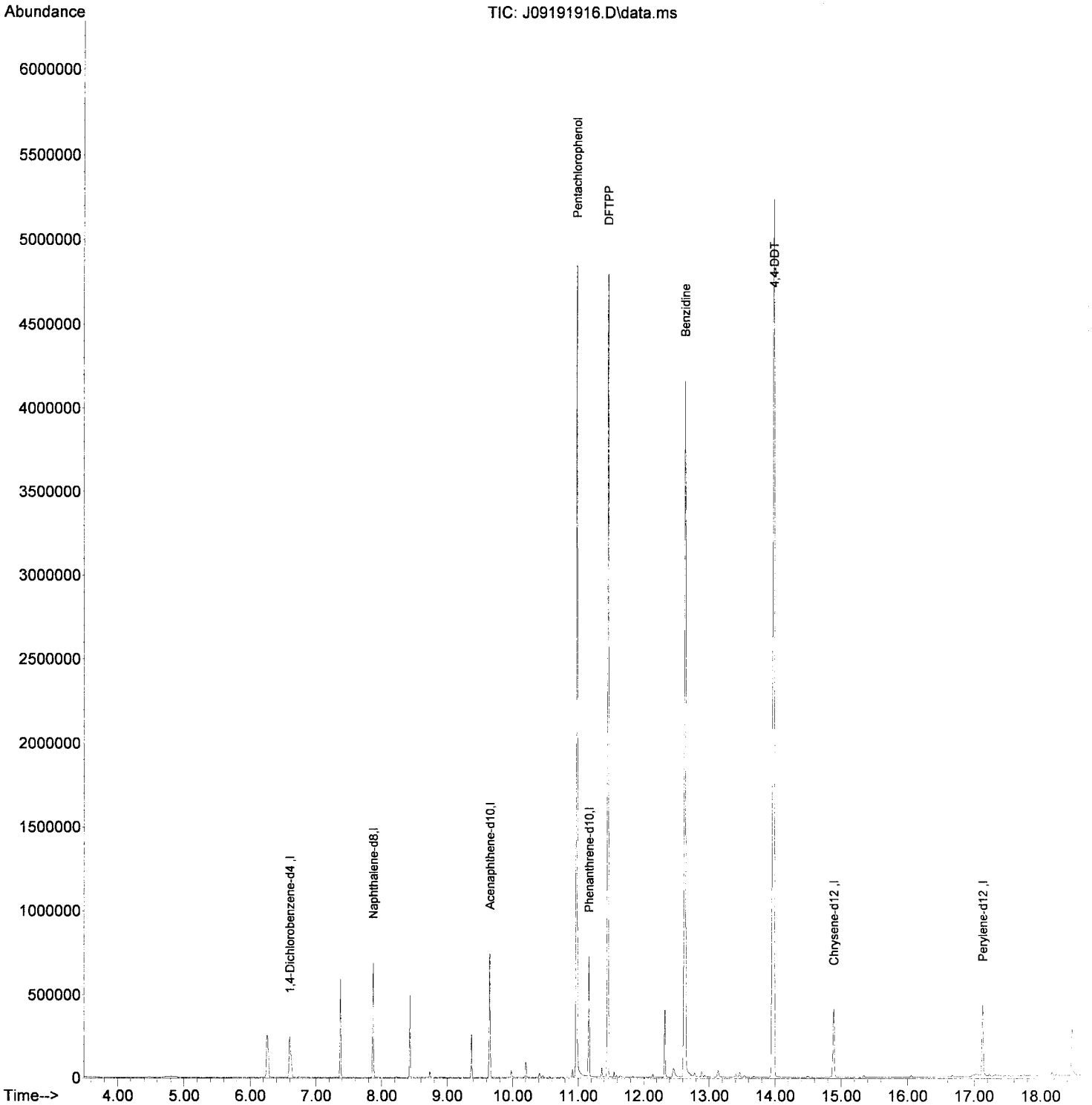
Breakdown must be less than 20% to accept sample data.

9/d 9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191916.D
Acq On : 20 Sep 2019 12:22 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-TUN1
Misc : 1x, A19I165 DFTPP@45
ALS Vial : 1 Sample Multiplier: 1
DataAcq Meth:DFTPP.M

Quant Time: Sep 20 09:40:00 2019
Quant Method : C:\msdchem\1\methods\DFTPP.M
Quant Title : 8270 DFTPP Tune Method
QLast Update : Thu Sep 19 15:09:10 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JR 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	263426	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1245077	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	634026	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1140103	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1131801	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1099318	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	879454	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	67	0.37	ng/ml	0.11
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.129	82	88	0.42	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.947	79	261	N.D.		
6) Phenol	6.215	94	79	N.D.		
7) Aniline	6.284	93	59	N.D.		
8) Bis(2-chloroethyl) ether	6.306	93	72	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	6.744	108	78	N.D.		
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.819	107	109	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.814	45	64	N.D.		
16) N-Nitrosodi-n-propylamine	7.028	70	172	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.086	77	108	N.D.		
22) Isophorone	7.370	82	96	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	7.563	105	152	305.02	ng/ml#	28
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.392	107	91	N.D.		
33) 2-Methylnaphthalene	8.557	142	100	N.D.		
34) 1-Methylnaphthalene	8.659	142	61	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

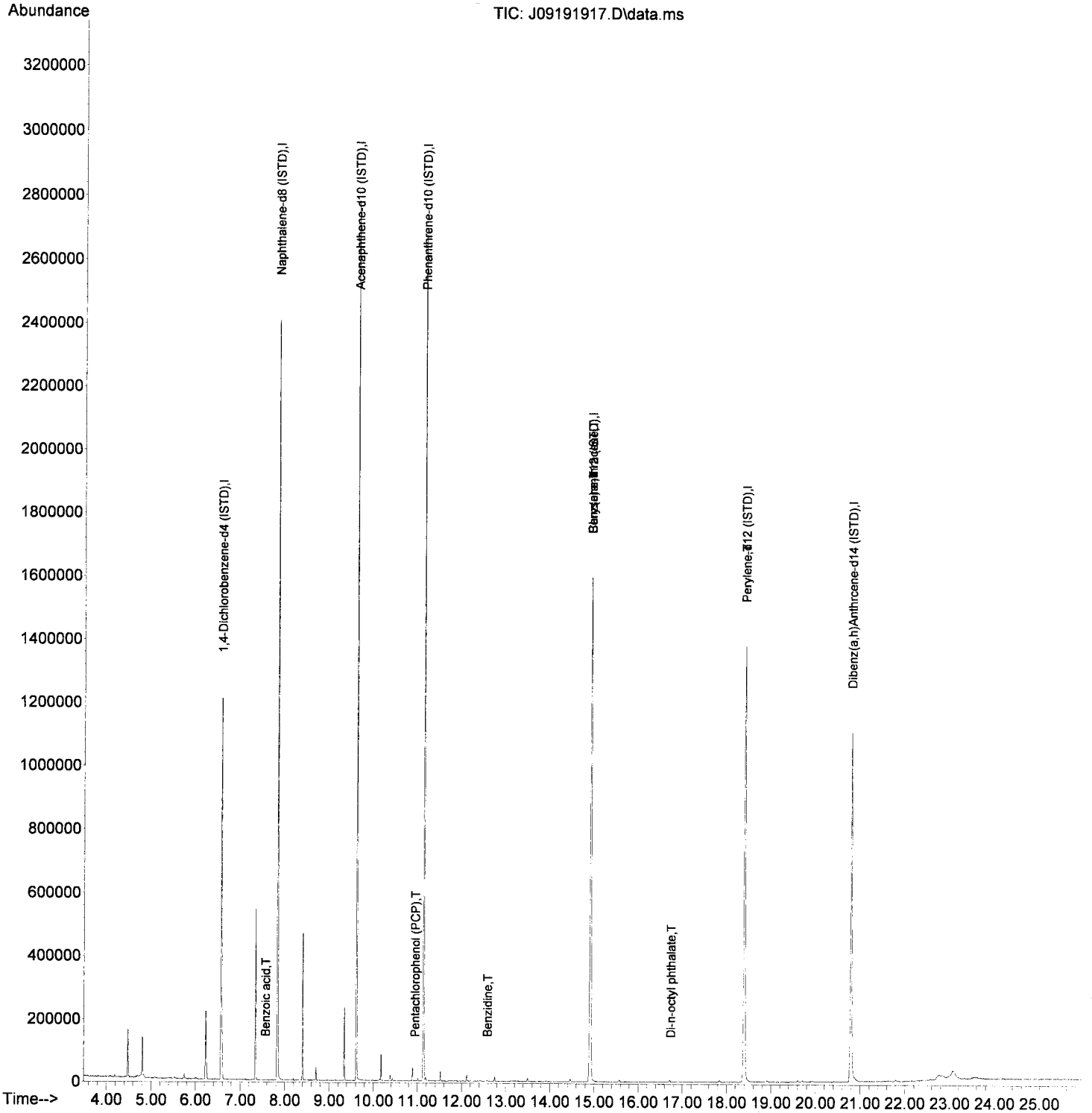
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.344	163	194	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.483	152	84	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.648	153	78	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.777	165	228	N.D.	
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	10.039	149	103	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.146	170	164	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.338	77	165	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.938	266	325	35.51 ng/ml	76
71) Phenanthrene	11.135	178	418	N.D.	
72) Anthracene	11.135	178	418	N.D.	
73) Carbazole	11.381	167	91	N.D.	
74) Di-n-butyl phthalate	11.718	149	81	N.D.	
75) Fluoranthene	12.414	202	105	N.D.	
76) Benzidine	12.580	184	2179	68.20 ng/ml	91
77) Pyrene	12.724	202	64	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.906	129	791	N.D.	
82) 3,3-Dichlorobenzidine	14.863	252	271	Below Cal #	25
83) Benz(a)anthracene	14.912	228	2854	4.30 ng/ml	67
84) Chrysene	14.912	228	2826	4.62 ng/ml	66
85) Bis(2-ethylhexyl) phth...	15.067	149	83	N.D.	
87) Di-n-octyl phthalate	16.735	149	81	30.90 ng/ml#	1
88) Benzo(b)fluoranthene	17.468	252	54	N.D.	
89) Benzo(k)fluoranthene	17.538	252	89	N.D.	
90) Benzo(b+k)fluoranthene	17.538	252	89	N.D.	
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.399	252	3568	6.28 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.790	276	464	N.D.	
96) Dibenz(a,h)anthracene	20.790	278	242	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:06 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Reqmnt
9/27/19

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	263426	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1245077	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	634026	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1140103	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1131801	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1099318	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	879454	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.402	112	67	0.42	ng/ml	0.11
5) Phenol-d6(Surr)	0.000	99	0	0.00	ng/ml	
19) Nitrobenzene-d5 (Surr)	7.129	82	88	0.55	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	0.000	172	0	0.00	ng/ml	
67) 2,4,6-Tribromophenol (...	0.000	330	0	0.00	ng/ml	
79) Terphenyl-d14 (Surr)	0.000	244	0	0.00	ng/ml	
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	0.000		0	N.D.		
3) Pyridine	3.947	79	261	N.D.		
6) Phenol	6.215	94	79	N.D.		
7) Aniline	6.284	93	59	N.D.		
8) Bis(2-chloroethyl) ether	6.306	93	72	N.D.		
9) 2-Chlorophenol	0.000		0	N.D.		
10) 1,3-Dichlorobenzene	0.000		0	N.D.		
11) 1,4-Dichlorobenzene	0.000		0	N.D.		
12) Benzyl alcohol	6.744	108	78	25.17	ng/ml#	41
13) 1,2-Dichlorobenzene	0.000		0	N.D.		
14) 2-Methylphenol	6.819	107	109	N.D.		
15) 2,2'-Oxybis(1-Chloropr...	6.814	45	64	N.D.		
16) N-Nitrosodi-n-propylamine	7.028	70	172	N.D.		
17) 3+4-Methylphenol	0.000		0	N.D.		
18) Hexachloroethane	0.000		0	N.D.		
20) Nitrobenzene	7.086	77	108	N.D.		
22) Isophorone	7.370	82	96	N.D.		
23) 2-Nitrophenol	0.000		0	N.D.		
24) 2,4-Dimethylphenol	0.000		0	N.D.		
25) Bis(2-chloroethoxy) me...	0.000		0	N.D.		
26) Benzoic acid	7.563	105	152	807.53	ng/ml#	28
27) 2,4-Dichlorophenol	0.000		0	N.D.		
28) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
29) Naphthalene	0.000		0	N.D.		
30) 4-Chloroaniline	0.000		0	N.D.		
31) Hexachlorobutadiene	0.000		0	N.D.		
32) 4-Chloro-3-methylphenol	8.392	107	91	N.D.		
33) 2-Methylnaphthalene	8.557	142	100	N.D.		
34) 1-Methylnaphthalene	8.659	142	61	N.D.		
36) Hexachlorocyclopentadiene	0.000		0	N.D.		
37) 2,4,6-Trichlorophenol	0.000		0	N.D.		
38) 2,4,5-Trichlorophenol	0.000		0	N.D.		
39) 1,1'-Biphenyl	0.000		0	N.D.		
41) 2-Chloronaphthalene	0.000		0	N.D.		
42) 2-Nitroaniline	0.000		0	N.D.		
43) 2,6-Dimethylnaphthalene	0.000		0	N.D.		

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

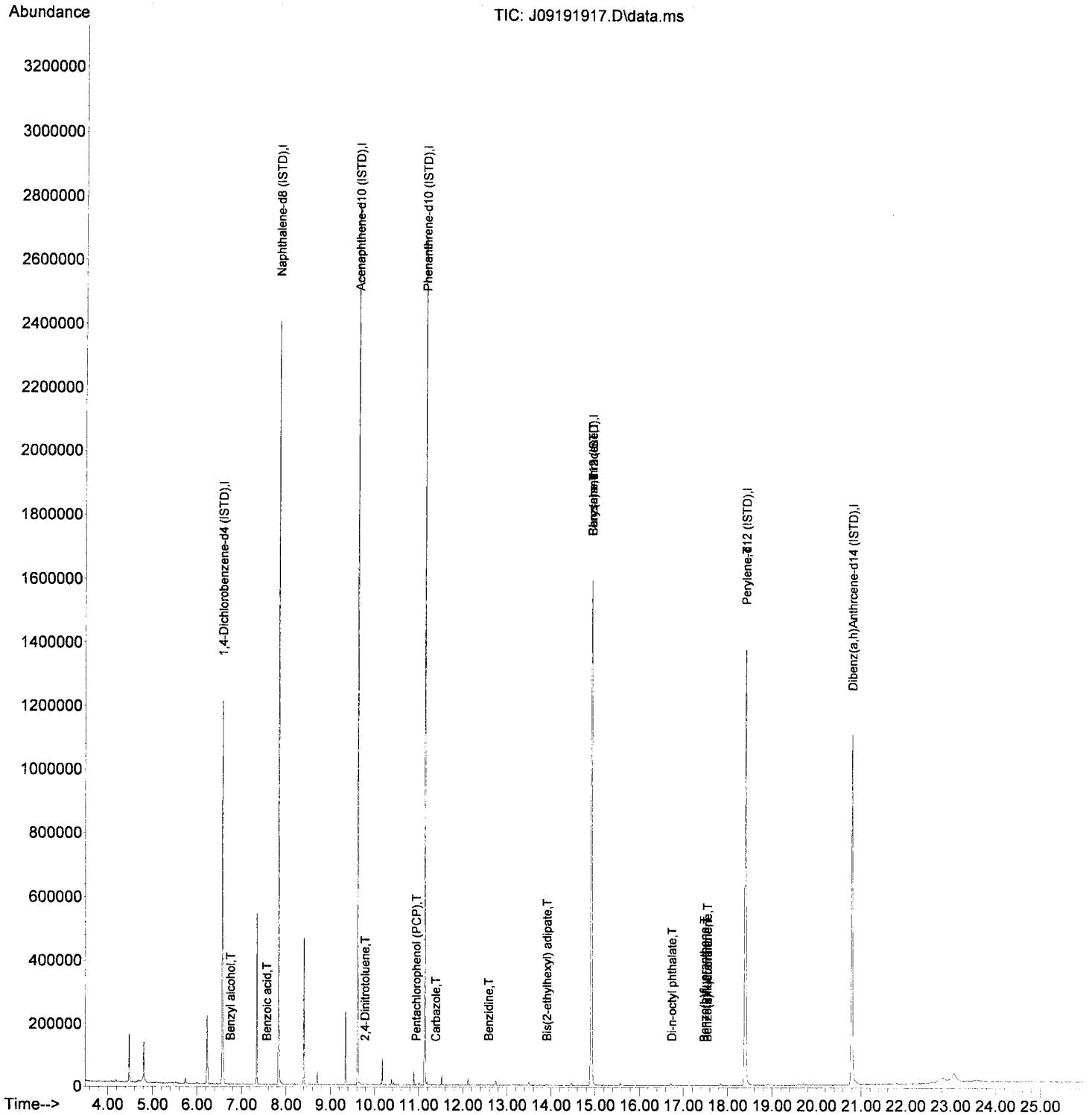
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	0.000		0	N.D.	
45) Dimethyl phthalate	9.344	163	194	N.D.	
46) 1,3-Dinitrobenzene	0.000		0	N.D.	
47) 2,6-Dinitrotoluene	0.000		0	N.D.	
48) 1,2-Dinitrobenzene	0.000		0	N.D.	
49) Acenaphthylene	9.483	152	84	N.D.	
50) 3-Nitroaniline	0.000		0	N.D.	
51) Acenaphthene	9.648	153	78	N.D.	
52) 2,4-Dinitrophenol	0.000		0	N.D.	
53) 4-Nitrophenol	0.000		0	N.D.	
54) 2,4-Dinitrotoluene	9.777	165	228	55.41 ng/ml#	54
55) Dibenzofuran	0.000		0	N.D.	
56) 2,3,5,6-Tetrachlorophenol	0.000		0	N.D.	
57) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.	
58) Diethyl phthalate	10.039	149	103	N.D.	
59) 2,3,5-Trimethylnaphtha...	10.146	170	164	N.D.	
60) Fluorene	0.000		0	N.D.	
61) 4-Chlorophenyl phenyl ...	0.000		0	N.D.	
62) 4-Nitroaniline	0.000		0	N.D.	
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.	
65) N-Nitrosodiphenylamine	0.000		0	N.D.	
66) Azobenzene (1,2-DPH)	10.338	77	165	N.D.	
68) 4-Bromophenyl phenyl e...	0.000		0	N.D.	
69) Hexachlorobenzene	0.000		0	N.D.	
70) Pentachlorophenol (PCP)	10.938	266	325	80.48 ng/ml	76
71) Phenanthrene	11.135	178	418	N.D.	
72) Anthracene	11.135	178	418	N.D.	
73) Carbazole	11.381	167	91	5.75 ng/ml	60
74) Di-n-butyl phthalate	11.718	149	81	N.D.	
75) Fluoranthene	12.414	202	105	N.D.	
76) Benzidine	12.580	184	2179	136.03 ng/ml	91
77) Pyrene	12.724	202	64	N.D.	
80) Butyl benzyl phthalate	0.000		0	N.D.	
81) Bis(2-ethylhexyl) adipate	13.906	129	791	3.01 ng/ml	88
82) 3,3-Dichlorobenzidine	14.863	252	271	Below Cal #	25
83) Benz(a)anthracene	14.912	228	2854	4.52 ng/ml	67
84) Chrysene	14.912	228	2826	4.77 ng/ml	66
85) Bis(2-ethylhexyl) phth...	15.067	149	83	N.D.	
87) Di-n-octyl phthalate	16.735	149	81	58.06 ng/ml#	1
88) Benzo(b)fluoranthene	17.468	252	54	8.05 ng/ml	57
89) Benzo(k)fluoranthene	17.538	252	89	8.62 ng/ml	57
90) Benzo(b+k)fluoranthene	17.538	252	89	15.88 ng/ml	57
91) Benzo(e)pyrene	0.000		0	N.D.	
92) Benzo(a)pyrene	0.000		0	N.D.	
93) Perylene	18.399	252	3568	7.20 ng/ml	70
95) Indeno(1,2,3-cd)pyrene	20.790	276	464	N.D.	
96) Dibenz(a,h)anthracene	20.790	278	242	N.D.	
97) Benzo(g,h,i)perylene	0.000		0	N.D.	

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191917.D
Acq On : 20 Sep 2019 12:49 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICB1
Misc : 1x, DCM + ISTD
ALS Vial : 2 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:22:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	291746	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1221708	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	640527	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1150535	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1159268	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.394	264	1158997	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	913932	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	2742	13.86	ng/ml	0.03
5) Phenol-d6(Surr)	6.204	99	3493	13.74	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	2861	12.28	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	9460	20.11	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.413	330	762	14.12	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	9512	16.78	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	~~0.000~~		~~0~~	N.D.		
3) Pyridine	~~3.840~~	~~79~~	~~55~~	N.D.		
6) Phenol	6.220	94	4498	15.57	ng/ml	89
7) Aniline	6.252	93	2038	7.89	ng/ml	96
8) Bis(2-chloroethyl) ether	6.311	93	4110	15.97	ng/ml	98
9) 2-Chlorophenol	6.370	128	3591	17.25	ng/ml	95
10) 1,3-Dichlorobenzene	6.520	146	4452	19.78	ng/ml	92
11) 1,4-Dichlorobenzene	6.589	146	4492	20.57	ng/ml	93
12) Benzyl alcohol	6.723	108	1506	11.29	ng/ml	96
13) 1,2-Dichlorobenzene	6.744	146	4176	19.02	ng/ml	90
14) 2-Methylphenol	6.808	107	2712	16.21	ng/ml	89
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	4376	13.18	ng/ml	93
16) N-Nitrosodi-n-propylamine	6.964	70	2691	15.96	ng/ml	91
17) 3+4-Methylphenol	6.958	107	3108	15.07	ng/ml	89
18) Hexachloroethane	7.081	201	1267	21.07	ng/ml	89
20) Nitrobenzene	7.135	77	3138	13.45	ng/ml	95
22) Isophorone	7.370	82	6954	15.68	ng/ml	93
23) 2-Nitrophenol	7.456	139	1053	38.03	ng/ml	91
24) 2,4-Dimethylphenol	7.488	122	2375	14.05	ng/ml	83
25) Bis(2-chloroethoxy) me...	7.579	93	4738	19.18	ng/ml	96
26) Benzoic acid	7.552	105	229	305.92	ng/ml#	66
27) 2,4-Dichlorophenol	7.691	162	1603	10.94	ng/ml	76
28) 1,2,4-Trichlorobenzene	7.782	180	4361	24.59	ng/ml	82
29) Naphthalene	7.857	128	14004	22.32	ng/ml	100
30) 4-Chloroaniline	7.910	127	1531	18.26	ng/ml	90
31) Hexachlorobutadiene	7.990	225	2247	23.76	ng/ml	84
32) 4-Chloro-3-methylphenol	8.392	107	1917	10.87	ng/ml#	53
33) 2-Methylnaphthalene	8.552	142	8620	20.12	ng/ml	94
34) 1-Methylnaphthalene	8.654	142	9000	21.86	ng/ml	91
36) Hexachlorocyclopentadiene	8.723	237	1303	12.86	ng/ml	74
37) 2,4,6-Trichlorophenol	8.841	196	1119	20.94	ng/ml	79
38) 2,4,5-Trichlorophenol	8.873	198	1218	11.18	ng/ml	91
39) 1,1'-Biphenyl	9.028	154	10205	19.18	ng/ml	95
41) 2-Chloronaphthalene	9.050	162	7646	19.58	ng/ml	99
42) 2-Nitroaniline	9.146	138	939	7.22	ng/ml	82
43) 2,6-Dimethylnaphthalene	9.189	156	7097	17.82	ng/ml	96

See MJ
See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

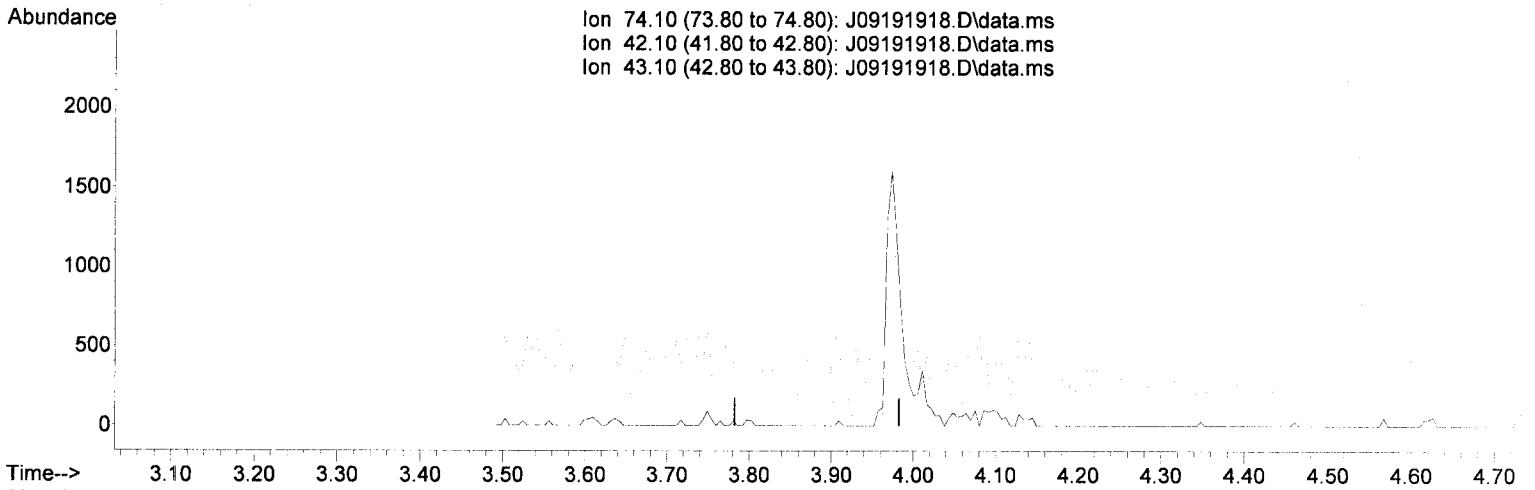
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	381	6.28	ng/ml#	63
45) Dimethyl phthalate	9.328	163	9190	20.06	ng/ml	91
46) 1,3-Dinitrobenzene	9.354	168	417	5.99	ng/ml	67
47) 2,6-Dinitrotoluene	9.386	165	1042	10.58	ng/ml	99
48) 1,2-Dinitrobenzene	9.440	168	304	6.59	ng/ml#	34
49) Acenaphthylene	9.472	152	12450	19.89	ng/ml	95
50) 3-Nitroaniline	9.563	138	592	27.61	ng/ml	93
51) Acenaphthene	9.649	153	8885	21.89	ng/ml	96
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.723	139	120	34.89	ng/ml	85
54) 2,4-Dinitrotoluene	9.798	165	1027	8.10	ng/ml#	60
55) Dibenzofuran	9.825	168	11668	21.08	ng/ml	90
56) 2,3,5,6-Tetrachlorophenol	9.911	232	774	34.62	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.948	232	856	19.53	ng/ml	77
58) Diethyl phthalate	10.044	149	8035	18.39	ng/ml	97
59) 2,3,5-Trimethylnaphtha...	10.034	170	7629	21.57	ng/ml	95
60) Fluorene	10.173	166	9113	20.91	ng/ml	94
61) 4-Chlorophenyl phenyl ...	10.167	204	4548	22.45	ng/ml	95
62) 4-Nitroaniline	10.183	138	719	8.15	ng/ml	91
63) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
65) N-Nitrosodiphenylamine	10.285	169	5957	16.84	ng/ml	88
66) Azobenzene (1,2-DPH)	10.328	77	6853	14.60	ng/ml	95
68) 4-Bromophenyl phenyl e...	10.670	248	2390	20.18	ng/ml	86
69) Hexachlorobenzene	10.745	284	3454	25.35	ng/ml	83
70) Pentachlorophenol (PCP)	10.938	266	1000	46.06	ng/ml	93
71) Phenanthrene	11.157	178	13749	21.85	ng/ml	98
72) Anthracene	11.205	178	11450	18.50	ng/ml	96
73) Carbazole	11.365	167	9186	17.97	ng/ml	96
74) Di-n-butyl phthalate	11.718	149	11697	16.31	ng/ml	94
75) Fluoranthene	12.425	202	12248	18.61	ng/ml	96
76) Benzidine	12.580	184	3398	75.33	ng/ml	91
77) Pyrene	12.708	202	12641	19.23	ng/ml	93
80) Butyl benzyl phthalate	13.730	149	2535	6.98	ng/ml	75
81) Bis(2-ethylhexyl) adipate	13.906	129	2762	8.49	ng/ml	94
82) 3,3-Dichlorobenzidine	14.853	252	3617	Below	Cal	95
83) Benz(a)anthracene	14.890	228	13459	19.80	ng/ml	92
84) Chrysene	14.970	228	11530	18.39	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.077	149	2659	5.54	ng/ml	99
87) Di-n-octyl phthalate	16.741	149	3334	34.72	ng/ml	97
88) Benzo(b)fluoranthene	17.463	252	8297	11.82	ng/ml	98
89) Benzo(k)fluoranthene	17.538	252	8174	12.27	ng/ml	92
90) Benzo(b+k)fluoranthene	17.463	252	17019	24.40	ng/ml	98
91) Benzo(e)pyrene	18.126	252	8657	12.60	ng/ml	95
92) Benzo(a)pyrene	18.238	252	6648	10.53	ng/ml	84
93) Perylene	18.447	252	9278	15.50	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.774	276	10072	19.60	ng/ml	76
96) Dibenz(a,h)anthracene	20.854	278	8754	19.00	ng/ml	94
97) Benzo(g,h,i)perylene	21.319	276	7772	15.71	ng/ml	96

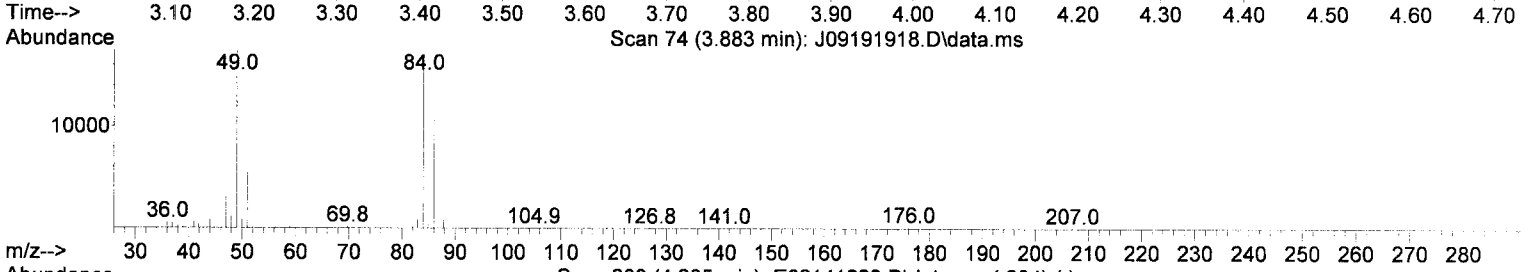
(#) = qualifier out of range (m) = manual integration (+) = signals summed

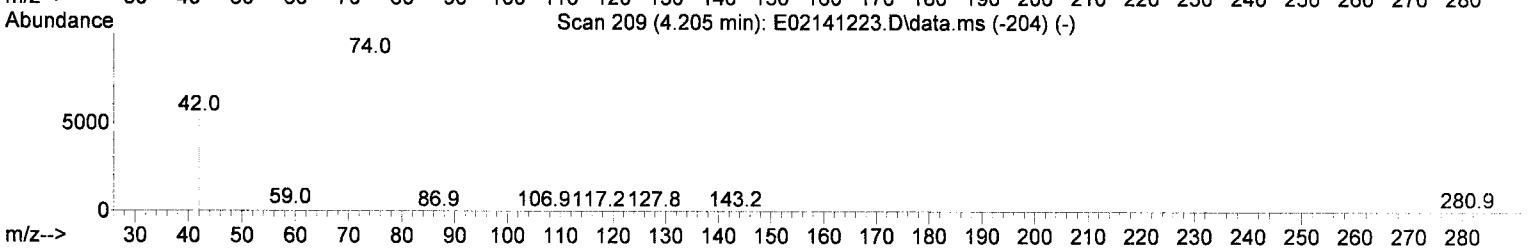
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191918.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.883min (-3.883) 0.00 ng/ml

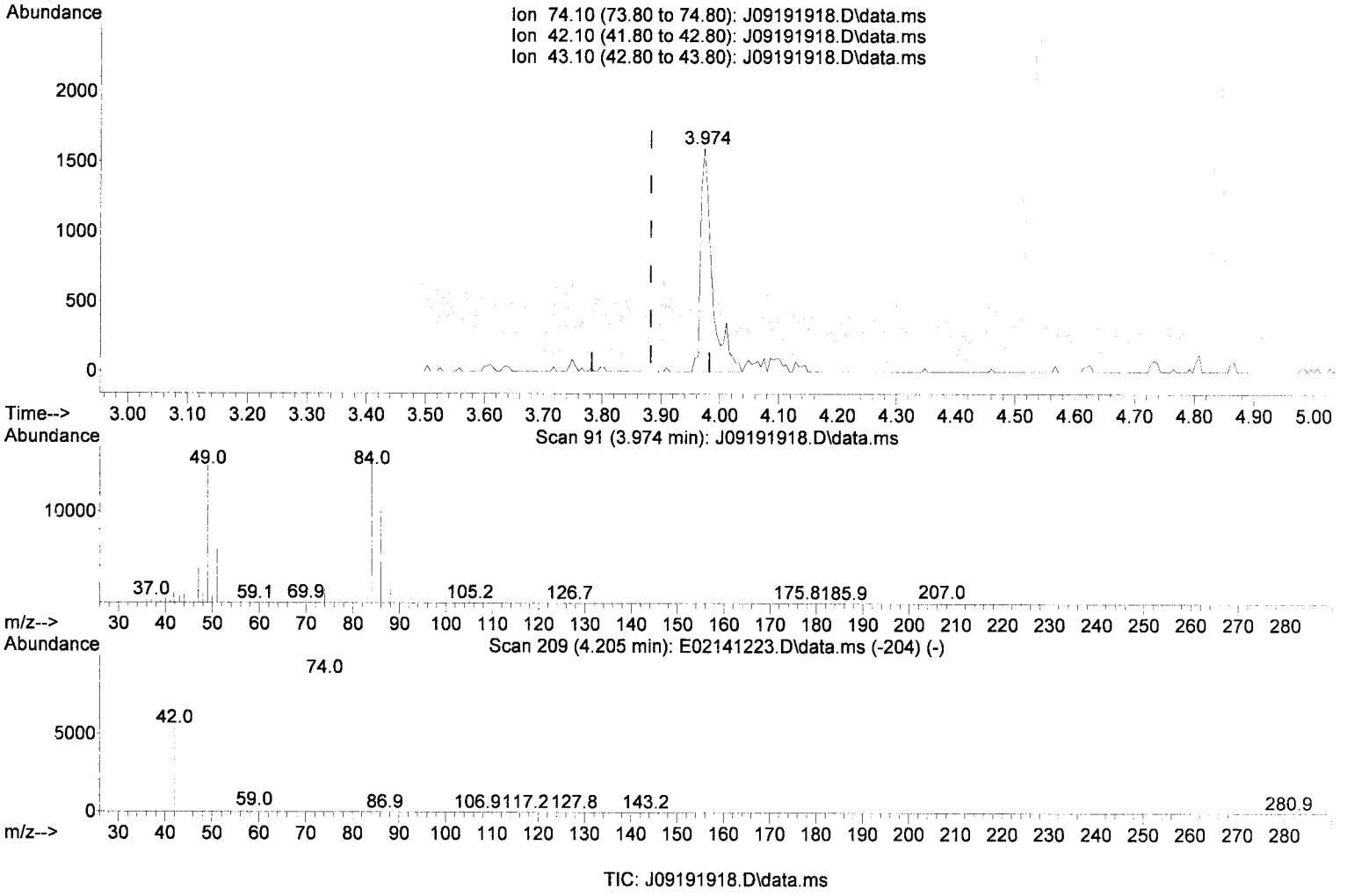
response 0

Ion	Exp%	Act%
74.10	100.00	0.00
42.10	49.40	0.00#
43.10	22.20	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.974min (+ 0.091) 16.33 ng/ml (m)

response 2214

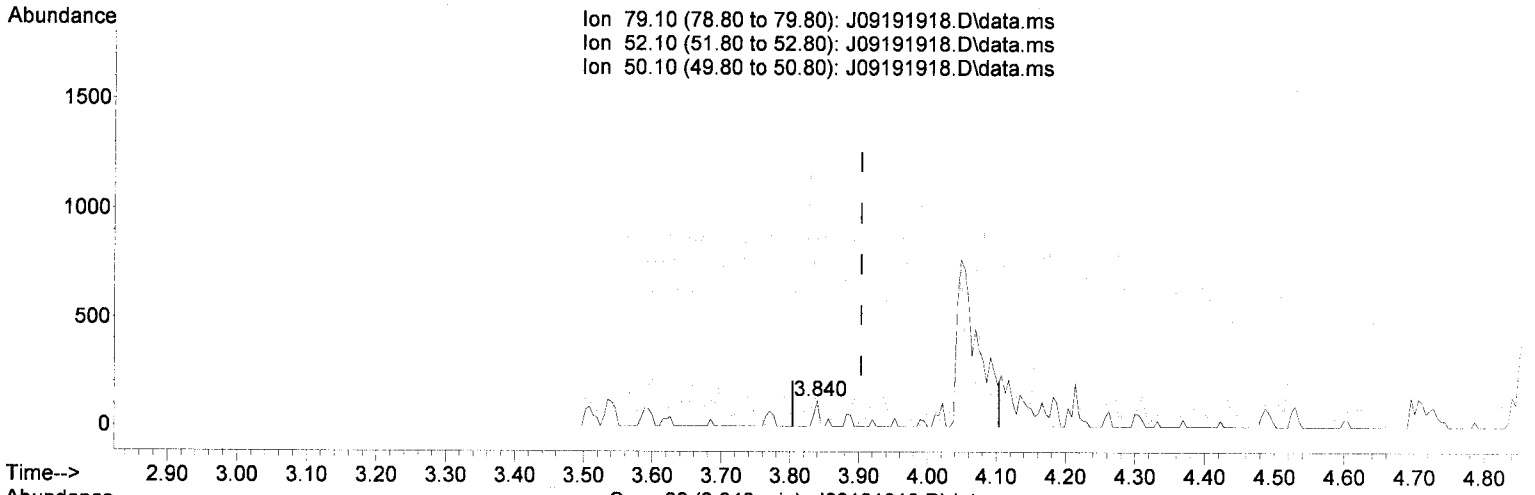
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	66.21
43.10	22.20	47.47
0.00	0.00	0.00

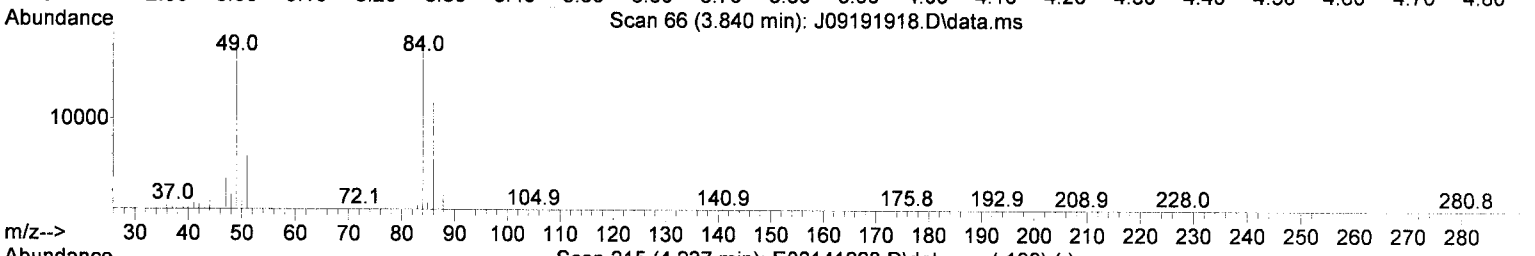
9/20/19

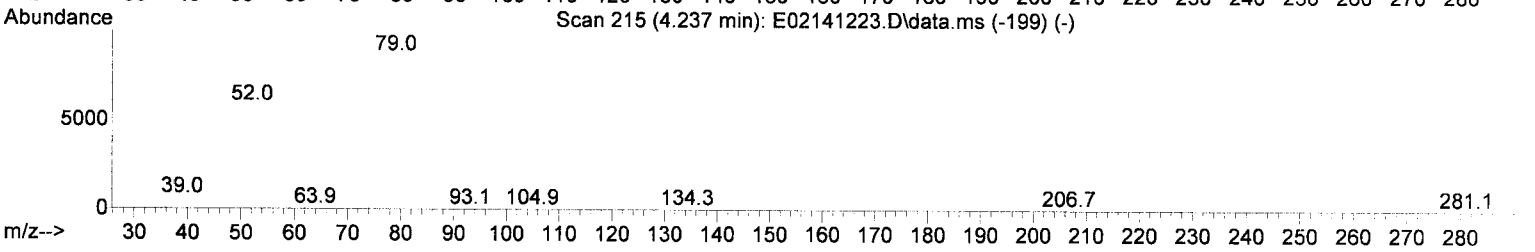
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191918.D\data.ms

(3) Pyridine (TG)

3.840min (-0.064) 0.24 ng/ml

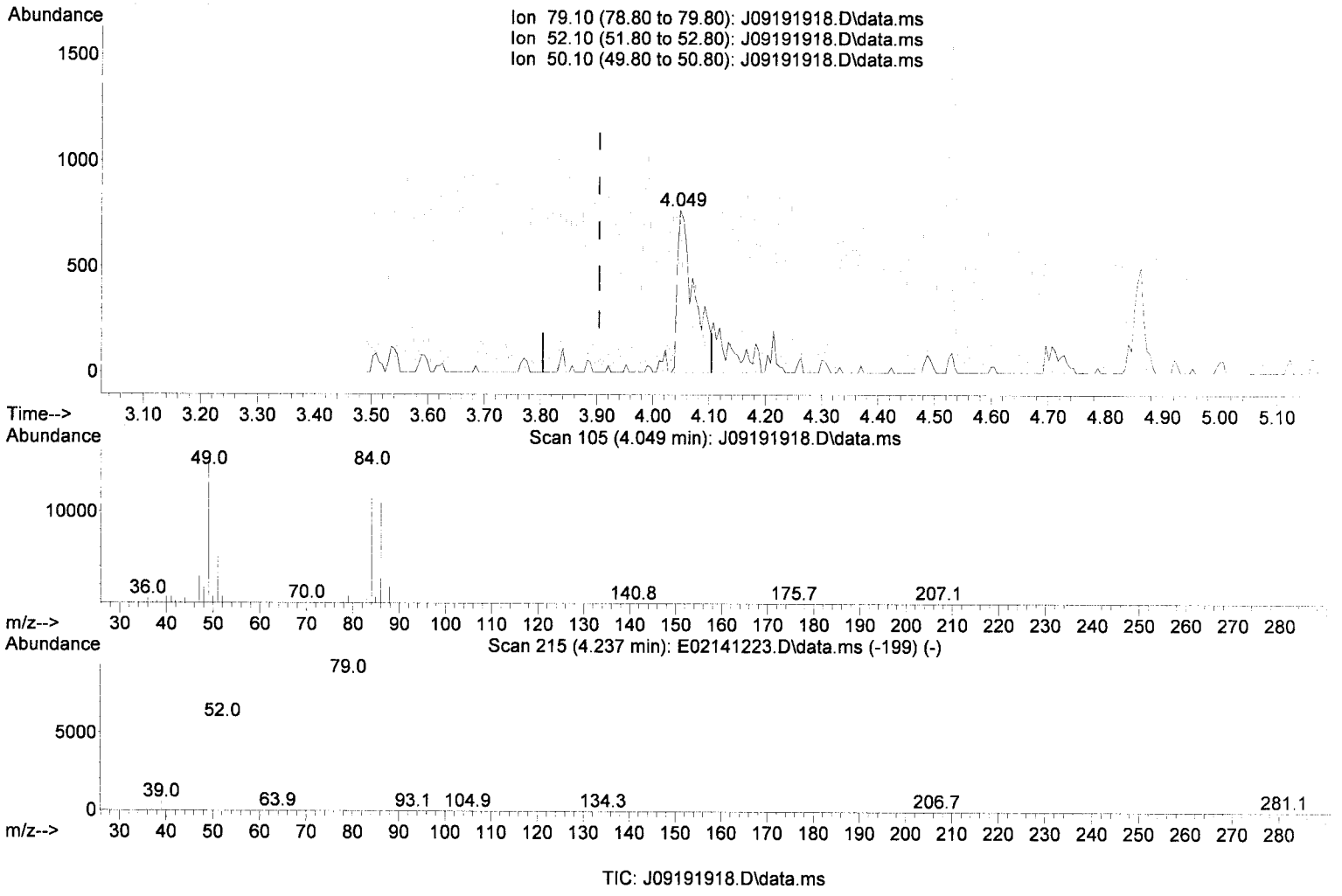
response 55

Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	81.20#
50.10	18.70	146.15#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191918.D\data.ms

(3) Pyridine (TG)

4.049min (+ 0.145) 9.55 ng/ml m

response 2206

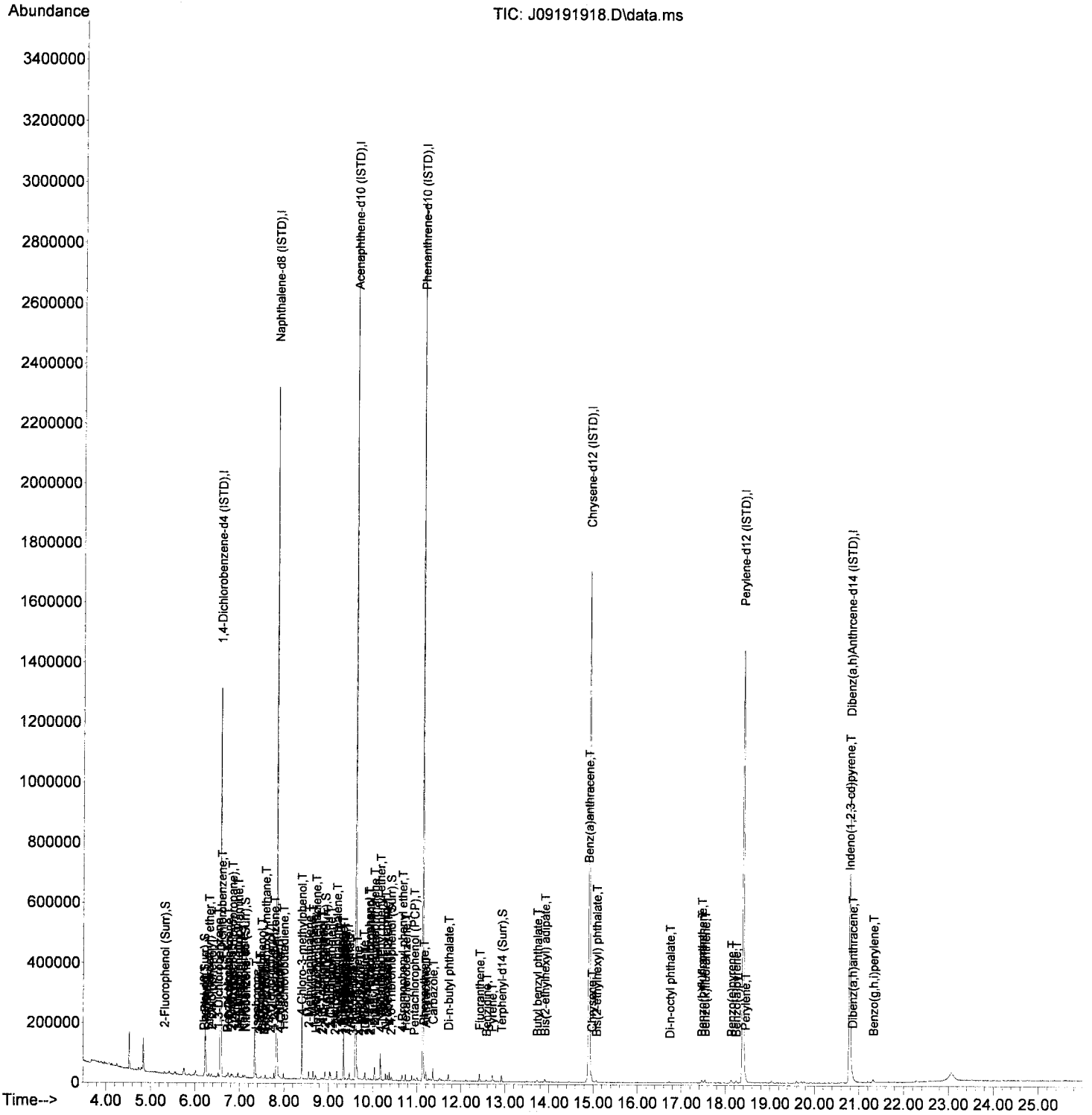
Ion	Exp%	Act%
79.10	100.00	100.00
52.10	50.80	96.24#
50.10	18.70	93.39#
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191918.D
Acq On : 20 Sep 2019 1:24 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL1
Misc : 1x, A19G238@20
ALS Vial : 3 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:20 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	291253	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1195757	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	616226	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1087898	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1113286	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.393	264	1097209	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	855339	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.311	112	7611	38.53	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	9501	37.44	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	7903	33.99	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	24802	54.81	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	1929	37.79	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	25113	46.14	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	~~3.952~~	~~74~~	~~4569~~	~~33.76~~	~~ng/ml~~	93
3) Pyridine	4.000	79	7667m	33.23	ng/ml#	
6) Phenol	6.215	94	11373	39.43	ng/ml	93
7) Aniline	6.252	93	10955	42.49	ng/ml	95
8) Bis(2-chloroethyl) ether	6.306	93	10198	39.70	ng/ml	95
9) 2-Chlorophenol	6.364	128	9461	45.54	ng/ml	88
10) 1,3-Dichlorobenzene	6.519	146	11576	51.52	ng/ml	97
11) 1,4-Dichlorobenzene	6.589	146	12059	55.30	ng/ml	94
12) Benzyl alcohol	6.707	108	3460	25.97	ng/ml	94
13) 1,2-Dichlorobenzene	6.739	146	12229	55.79	ng/ml	98
14) 2-Methylphenol	6.808	107	6405	38.35	ng/ml	90
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	10585	31.94	ng/ml	90
16) N-Nitrosodi-n-propylamine	6.963	70	6538	38.84	ng/ml	98
17) 3+4-Methylphenol	6.958	107	8248	40.07	ng/ml	95
18) Hexachloroethane	7.076	201	3313	55.18	ng/ml	93
20) Nitrobenzene	7.135	77	8614	36.98	ng/ml	95
22) Isophorone	7.370	82	18082	41.67	ng/ml	97
23) 2-Nitrophenol	7.455	139	3400	54.77	ng/ml	93
24) 2,4-Dimethylphenol	7.488	122	5922	35.79	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.579	93	11523	47.66	ng/ml	92
26) Benzoic acid	7.573	105	200	305.64	ng/ml#	58
27) 2,4-Dichlorophenol	7.691	162	5068	35.35	ng/ml	91
28) 1,2,4-Trichlorobenzene	7.776	180	11103	63.97	ng/ml	92
29) Naphthalene	7.857	128	34402	56.01	ng/ml	99
30) 4-Chloroaniline	7.905	127	7306	53.73	ng/ml	92
31) Hexachlorobutadiene	7.990	225	5972	64.52	ng/ml	97
32) 4-Chloro-3-methylphenol	8.392	107	5211	30.18	ng/ml	82
33) 2-Methylnaphthalene	8.557	142	23135	55.17	ng/ml	94
34) 1-Methylnaphthalene	8.654	142	23006	57.09	ng/ml	92
36) Hexachlorocyclopentadiene	8.723	237	3356	34.42	ng/ml	95
37) 2,4,6-Trichlorophenol	8.835	196	3644	44.63	ng/ml	82
38) 2,4,5-Trichlorophenol	8.873	198	3657	34.90	ng/ml	96
39) 1,1'-Biphenyl	9.028	154	28683	56.03	ng/ml	96
41) 2-Chloronaphthalene	9.049	162	19450	51.76	ng/ml	98
42) 2-Nitroaniline	9.146	138	2728	21.81	ng/ml	70
43) 2,6-Dimethylnaphthalene	9.188	156	20566	53.66	ng/ml	99

See mJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

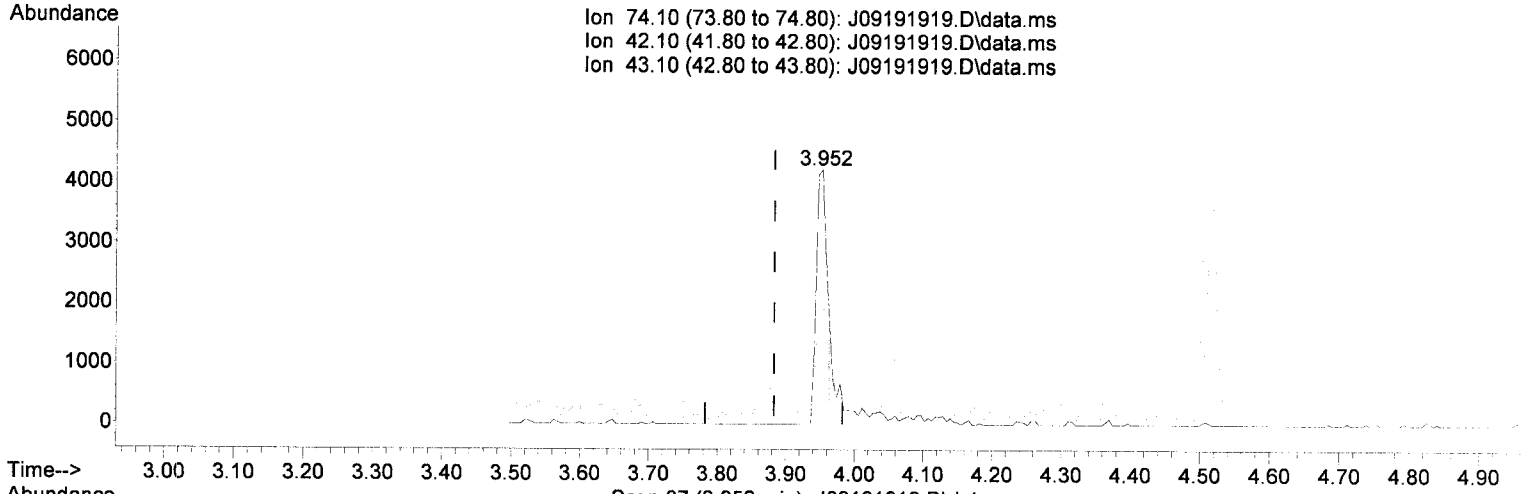
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	915	15.67	ng/ml#	75
45) Dimethyl phthalate	9.328	163	22486	51.02	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	1390	20.76	ng/ml	79
47) 2,6-Dinitrotoluene	9.386	165	2915	30.76	ng/ml	88
48) 1,2-Dinitrobenzene	9.440	168	1349	30.38	ng/ml	98
49) Acenaphthylene	9.472	152	32192	53.45	ng/ml	98
50) 3-Nitroaniline	9.563	138	2106	41.58	ng/ml#	68
51) Acenaphthene	9.648	153	22572	57.81	ng/ml	99
52) 2,4-Dinitrophenol	0.000		0	N.D.		
53) 4-Nitrophenol	9.723	139	699	42.87	ng/ml	71
54) 2,4-Dinitrotoluene	9.798	165	2508	20.56	ng/ml	84
55) Dibenzofuran	9.825	168	29377	55.18	ng/ml	94
56) 2,3,5,6-Tetrachlorophenol	9.905	232	1678	45.25	ng/ml	83
57) 2,3,4,6-Tetrachlorophenol	9.948	232	2513	38.75	ng/ml	86
58) Diethyl phthalate	10.044	149	21378	50.87	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.034	170	19066	56.02	ng/ml	97
60) Fluorene	10.173	166	22247	53.06	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.167	204	11449	58.75	ng/ml	94
62) 4-Nitroaniline	10.178	138	2192	25.82	ng/ml	87
63) 4,6-Dinitro-2-methylph...	10.215	198	206	74.51	ng/ml#	65
65) N-Nitrosodiphenylamine	10.285	169	16461	49.20	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	17404	39.22	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.665	248	6326	56.49	ng/ml	91
69) Hexachlorobenzene	10.745	284	7615	59.10	ng/ml	98
70) Pentachlorophenol (PCP)	10.937	266	1392	53.47	ng/ml#	61
71) Phenanthrene	11.157	178	32566	54.75	ng/ml	95
72) Anthracene	11.205	178	30636	52.34	ng/ml	98
73) Carbazole	11.365	167	24489	50.68	ng/ml	93
74) Di-n-butyl phthalate	11.718	149	29117	42.93	ng/ml	99
75) Fluoranthene	12.424	202	31166	50.09	ng/ml	93
76) Benzidine	12.579	184	5652	90.66	ng/ml	93
77) Pyrene	12.713	202	32717	52.64	ng/ml	98
80) Butyl benzyl phthalate	13.735	149	6765	19.40	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.911	129	6924	22.16	ng/ml	92
82) 3,3-Dichlorobenzidine	14.847	252	11318	Below Cal		86
83) Benz(a)anthracene	14.890	228	29779	45.62	ng/ml	97
84) Chrysene	14.960	228	29254	48.57	ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.072	149	8694	18.85	ng/ml	93
87) Di-n-octyl phthalate	16.735	149	9861	43.05	ng/ml	94
88) Benzo(b)fluoranthene	17.468	252	21819	32.83	ng/ml	93
89) Benzo(k)fluoranthene	17.543	252	23687	37.57	ng/ml	95
90) Benzo(b+k)fluoranthene	17.468	252	47809	72.40	ng/ml	93
91) Benzo(e)pyrene	18.121	252	24570	37.78	ng/ml	95
92) Benzo(a)pyrene	18.238	252	18583	31.08	ng/ml	97
93) Perylene	18.447	252	24689	43.56	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.779	276	25006	52.00	ng/ml	88
96) Dibenz(a,h)anthracene	20.848	278	21791	50.52	ng/ml	94
97) Benzo(g,h,i)perylene	21.308	276	20181	43.59	ng/ml	97

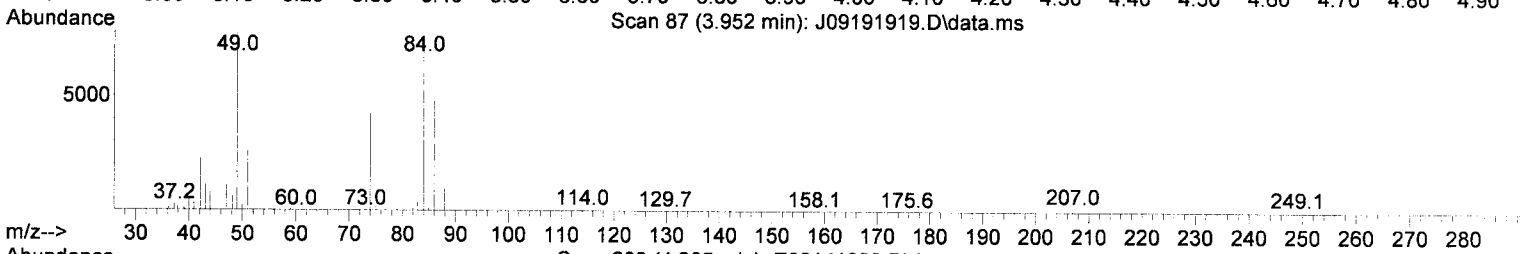
(#) = qualifier out of range (m) = manual integration (+) = signals summed

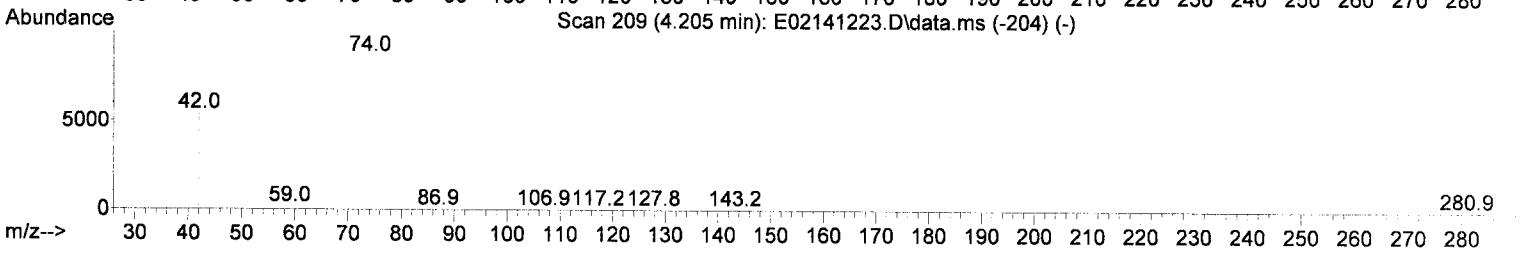
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191919.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 33.76 ng/ml

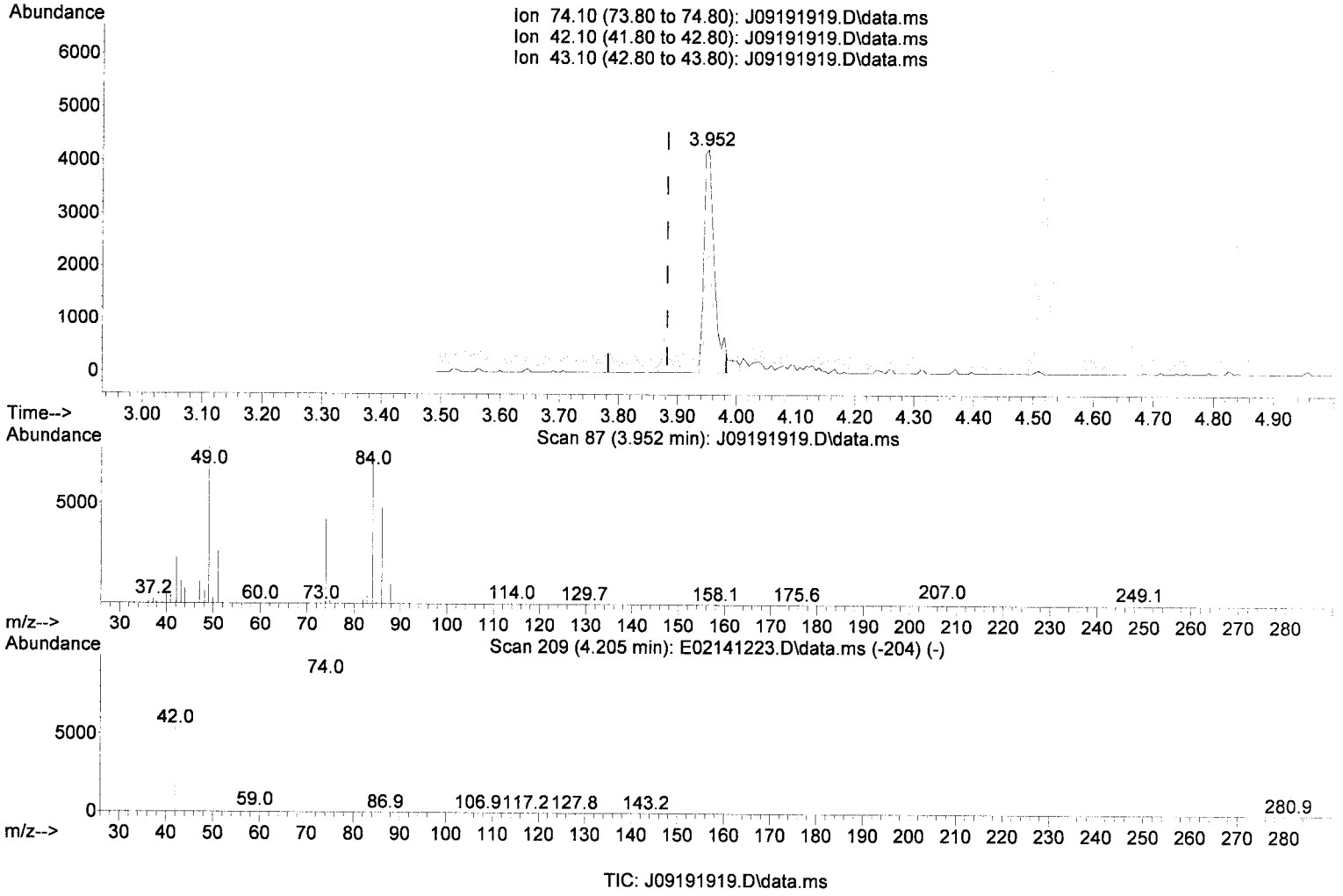
response 4569

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	53.59
43.10	22.20	26.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191919.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 40.76 ng/ml m 9/20/19

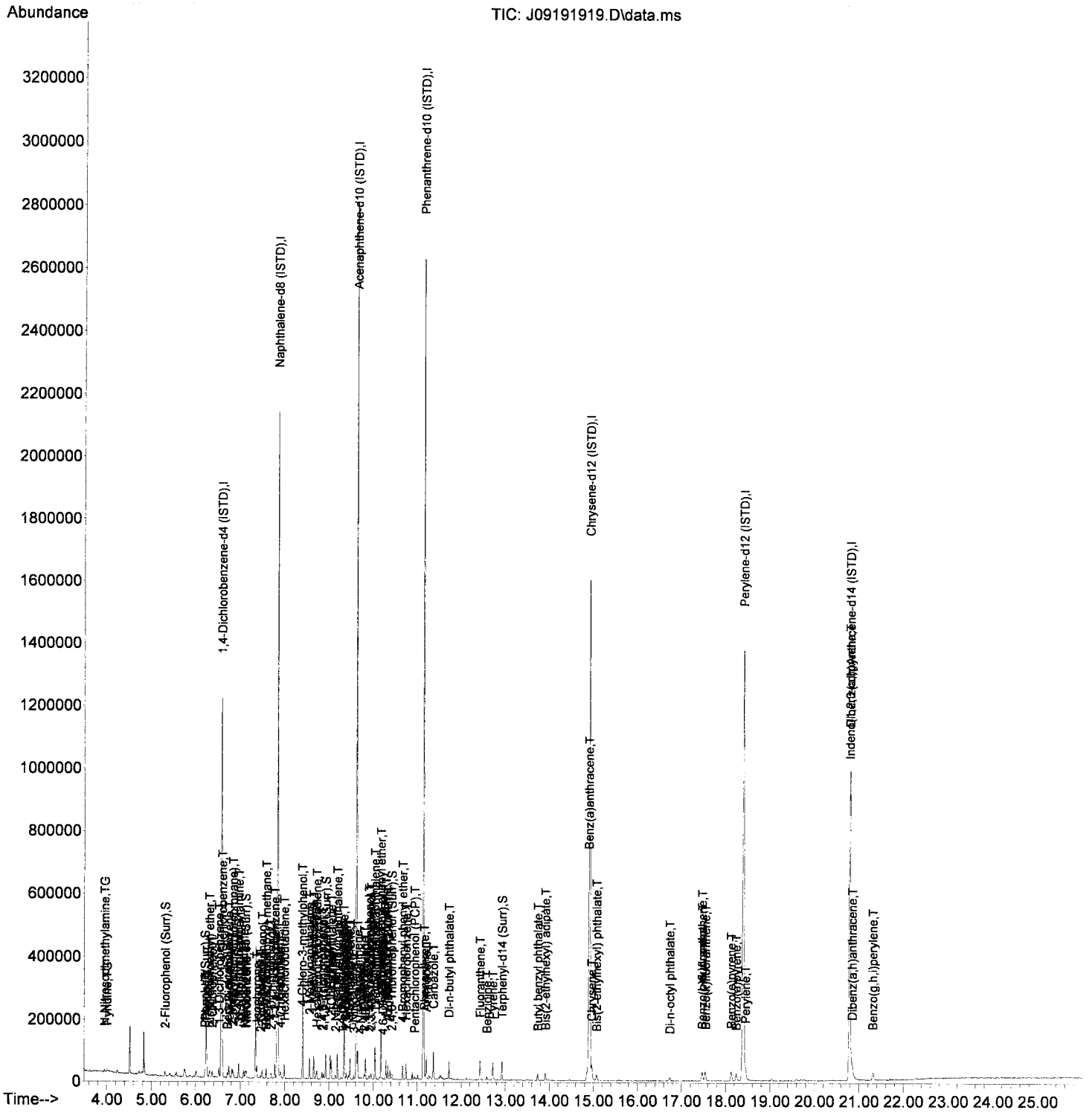
response 5516

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	53.59
43.10	22.20	26.52
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191919.D
Acq On : 20 Sep 2019 1:59 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL2
Misc : 1x, A19G239@50
ALS Vial : 4 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	290594	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1186873	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	615111	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1118597	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1122909	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.394	264	1127380	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.790	292	892958	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.311	112	13834	70.19	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	21003	82.96	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	16492	71.09	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	53353	118.12	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	4809	91.63	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	54871	99.96	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.952	74	9178	67.07	ng/ml	91
3) Pyridine	3.990	79	18548m	80.58	ng/ml#	
6) Phenol	6.220	94	23364	81.19	ng/ml	97
7) Aniline	6.252	93	23125	89.89	ng/ml	94
8) Bis(2-chloroethyl) ether	6.311	93	21464	83.74	ng/ml	93
9) 2-Chlorophenol	6.370	128	19462	93.88	ng/ml	97
10) 1,3-Dichlorobenzene	6.520	146	23840	106.35	ng/ml	98
11) 1,4-Dichlorobenzene	6.589	146	23338	107.27	ng/ml	92
12) Benzyl alcohol	6.707	108	8907	67.02	ng/ml	96
13) 1,2-Dichlorobenzene	6.739	146	23746	108.58	ng/ml	95
14) 2-Methylphenol	6.808	107	14254	85.54	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	21848	66.08	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.963	70	13631	81.17	ng/ml	98
17) 3+4-Methylphenol	6.958	107	16854	82.07	ng/ml	89
18) Hexachloroethane	7.076	201	6562	109.55	ng/ml	86
20) Nitrobenzene	7.135	77	17280	74.35	ng/ml	100
22) Isophorone	7.370	82	37997	88.22	ng/ml	97
23) 2-Nitrophenol	7.450	139	7240	82.31	ng/ml	87
24) 2,4-Dimethylphenol	7.488	122	14806	90.15	ng/ml	90
25) Bis(2-chloroethoxy) me...	7.579	93	23395	97.49	ng/ml	95
26) Benzoic acid	7.605	105	129	304.84	ng/ml#	68
27) 2,4-Dichlorophenol	7.691	162	12689	89.17	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.776	180	21292	123.58	ng/ml	98
29) Naphthalene	7.857	128	69263	113.61	ng/ml	96
30) 4-Chloroaniline	7.905	127	15139	102.27	ng/ml	96
31) Hexachlorobutadiene	7.990	225	11598	126.23	ng/ml	93
32) 4-Chloro-3-methylphenol	8.386	107	11698	68.25	ng/ml	89
33) 2-Methylnaphthalene	8.557	142	46039	110.62	ng/ml	99
34) 1-Methylnaphthalene	8.659	142	46134	115.33	ng/ml	98
36) Hexachlorocyclopentadiene	8.723	237	8031	82.51	ng/ml	94
37) 2,4,6-Trichlorophenol	8.841	196	7912	84.10	ng/ml	95
38) 2,4,5-Trichlorophenol	8.873	198	8310	79.46	ng/ml	93
39) 1,1'-Biphenyl	9.028	154	58168	113.83	ng/ml	98
41) 2-Chloronaphthalene	9.049	162	41705	111.19	ng/ml	97
42) 2-Nitroaniline	9.146	138	6877	55.07	ng/ml	89
43) 2,6-Dimethylnaphthalene	9.189	156	43362	113.35	ng/ml	96

See MJ

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

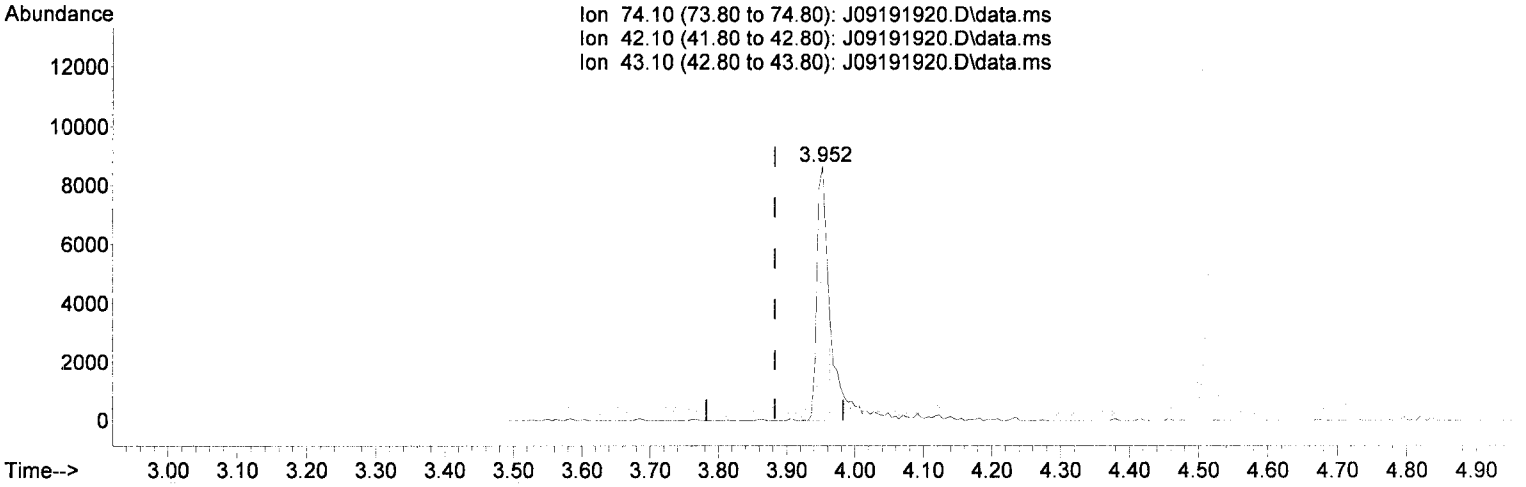
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	2006	34.41	ng/ml	84
45) Dimethyl phthalate	9.328	163	49089	111.58	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	3033	45.87	ng/ml	81
47) 2,6-Dinitrotoluene	9.386	165	6526	68.97	ng/ml	84
48) 1,2-Dinitrobenzene	9.445	168	2742	61.87	ng/ml	83
49) Acenaphthylene	9.472	152	68008	113.12	ng/ml	97
50) 3-Nitroaniline	9.558	138	6036	77.71	ng/ml	97
51) Acenaphthene	9.649	153	44425	113.99	ng/ml	98
52) 2,4-Dinitrophenol	9.670	184	169	146.81	ng/ml	80
53) 4-Nitrophenol	9.723	139	2106	62.15	ng/ml	64
54) 2,4-Dinitrotoluene	9.798	165	6812	55.94	ng/ml	98
55) Dibenzofuran	9.825	168	62656	117.90	ng/ml	96
56) 2,3,5,6-Tetrachlorophenol	9.905	232	5673	90.84	ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.948	232	7263	92.88	ng/ml	95
58) Diethyl phthalate	10.044	149	47870	114.11	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.034	170	38608	113.65	ng/ml	97
60) Fluorene	10.173	166	48968	116.99	ng/ml	96
61) 4-Chlorophenyl phenyl ...	10.167	204	23837	122.54	ng/ml	99
62) 4-Nitroaniline	10.178	138	5563	65.64	ng/ml	90
63) 4,6-Dinitro-2-methylph...	10.210	198	761	84.48	ng/ml	74
65) N-Nitrosodiphenylamine	10.285	169	36899	107.27	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	37821	82.88	ng/ml	96
68) 4-Bromophenyl phenyl e...	10.665	248	13242	115.00	ng/ml	94
69) Hexachlorobenzene	10.745	284	16314	123.13	ng/ml	97
70) Pentachlorophenol (PCP)	10.938	266	4341	100.38	ng/ml	92
71) Phenanthrene	11.151	178	68493	111.98	ng/ml	98
72) Anthracene	11.205	178	65192	108.32	ng/ml	98
73) Carbazole	11.365	167	54742	110.17	ng/ml	98
74) Di-n-butyl phthalate	11.718	149	70280	100.78	ng/ml	99
75) Fluoranthene	12.424	202	70234	109.79	ng/ml	96
76) Benzidine	12.580	184	12748	133.02	ng/ml	98
77) Pyrene	12.713	202	69474	108.72	ng/ml	98
80) Butyl benzyl phthalate	13.735	149	18774	53.39	ng/ml	97
81) Bis(2-ethylhexyl) adipate	13.911	129	18358	58.24	ng/ml	95
82) 3,3-Dichlorobenzidine	14.853	252	24584	98.99	ng/ml	93
83) Benz(a)anthracene	14.885	228	64818	98.44	ng/ml	99
84) Chrysene	14.965	228	61418	101.11	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.072	149	26668	57.33	ng/ml	98
87) Di-n-octyl phthalate	16.741	149	33665	71.49	ng/ml	95
88) Benzo(b)fluoranthene	17.468	252	57260	83.86	ng/ml	95
89) Benzo(k)fluoranthene	17.538	252	58523	90.33	ng/ml	99
90) Benzo(b+k)fluoranthene	17.538	252	120376	177.42	ng/ml	99
91) Benzo(e)pyrene	18.121	252	58165	87.04	ng/ml	93
92) Benzo(a)pyrene	18.244	252	50114	81.58	ng/ml	96
93) Perylene	18.447	252	50289	86.35	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.779	276	52504	104.59	ng/ml	97
96) Dibenz(a,h)anthracene	20.854	278	48705	108.17	ng/ml	97
97) Benzo(g,h,i)perylene	21.309	276	49447	102.31	ng/ml	98

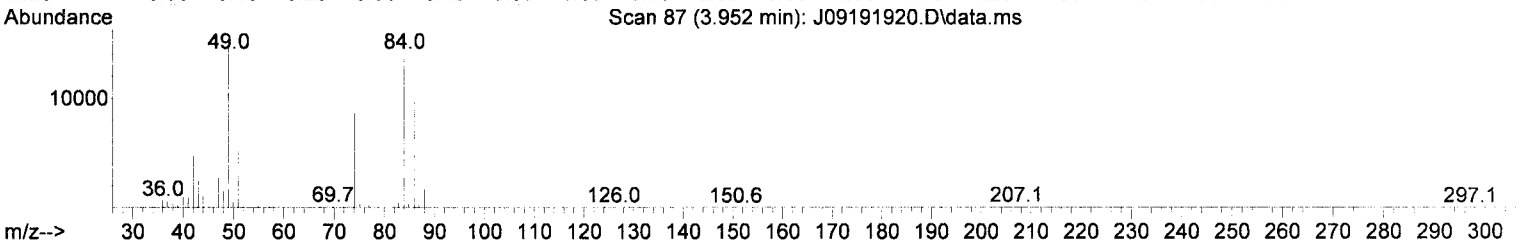
(#) = qualifier out of range (m) = manual integration (+) = signals summed

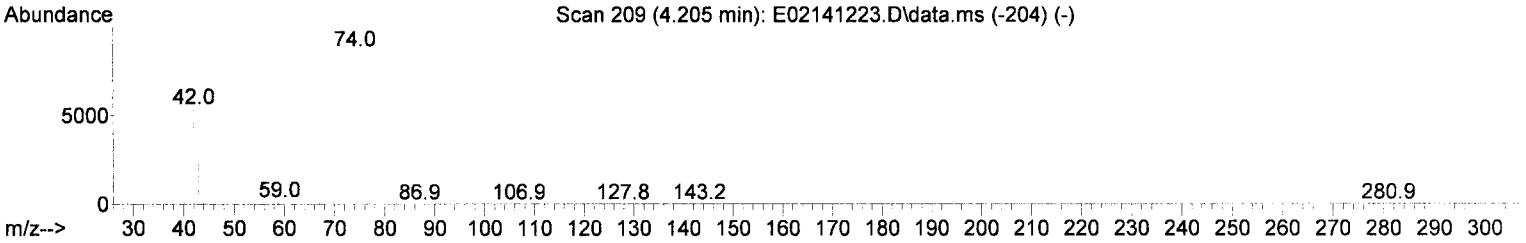
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 67.97 ng/ml

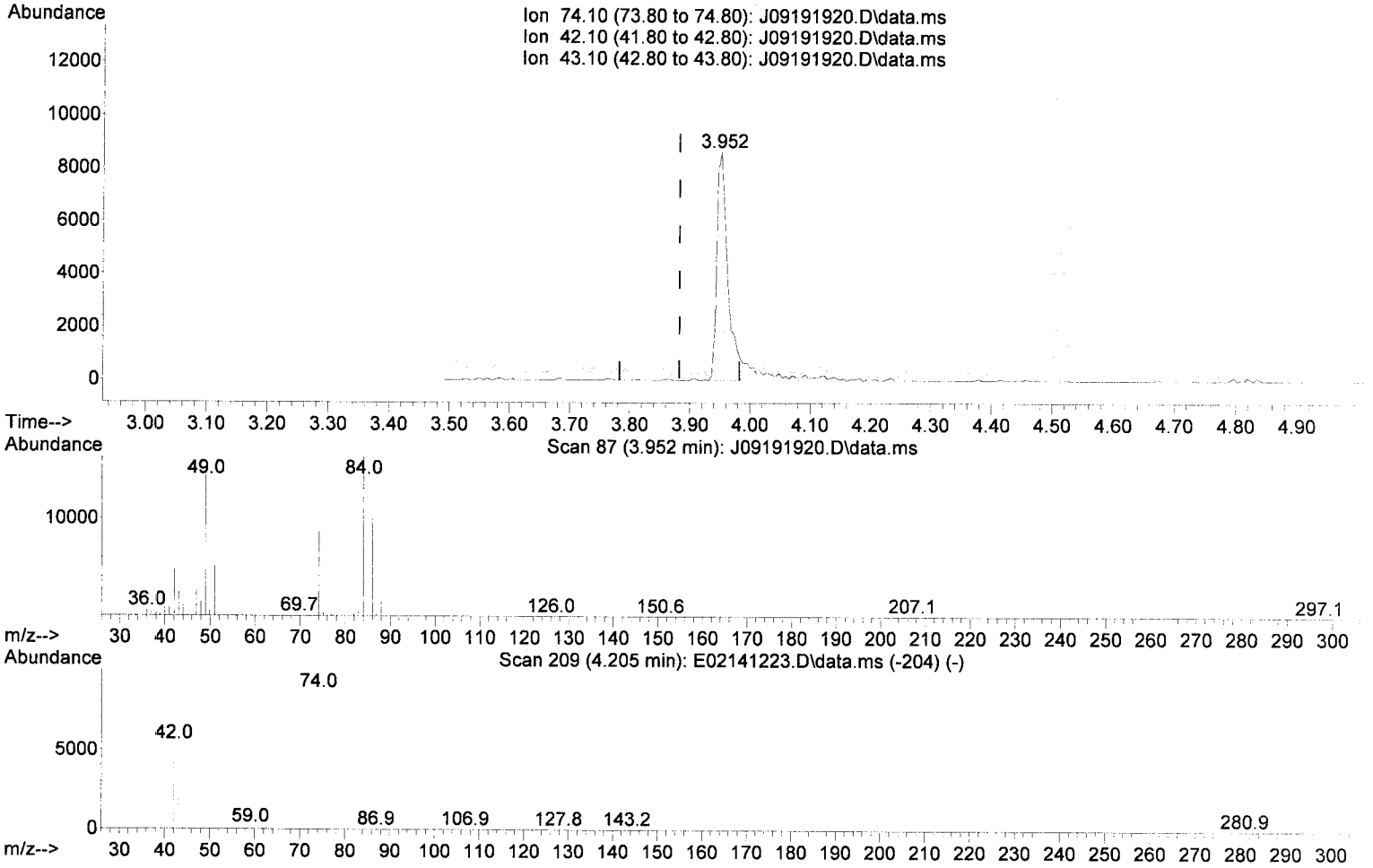
response 9178

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	55.00
43.10	22.20	27.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191920.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.952min (+ 0.070) 86.90 ng/ml (m)

response 11734

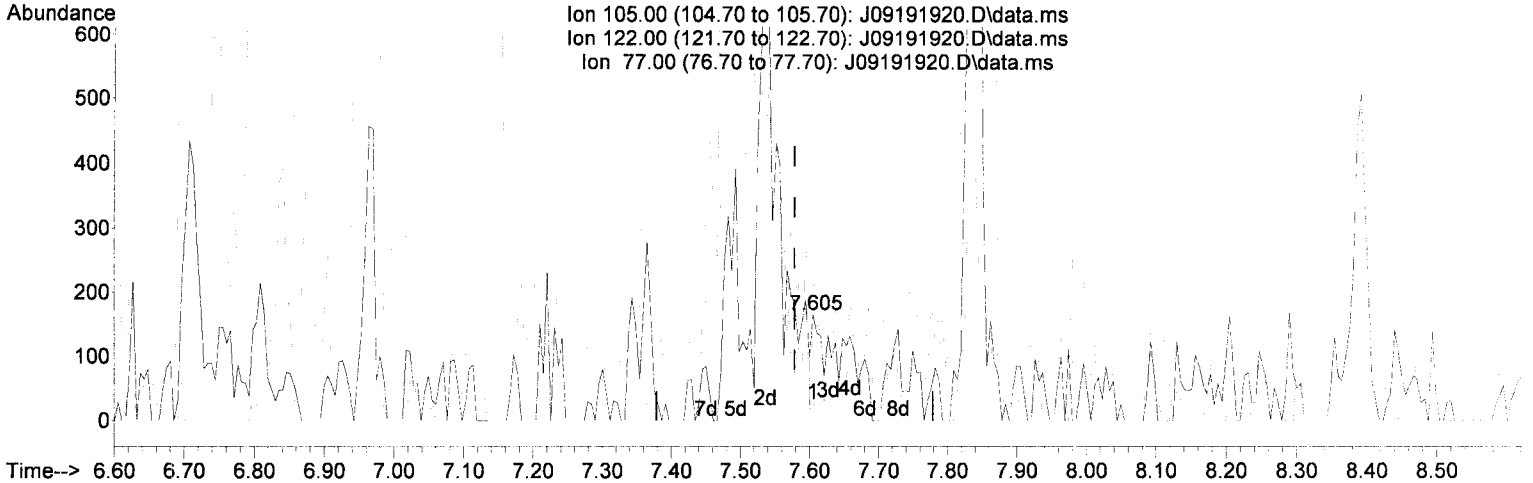
Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	55.00
43.10	22.20	27.95
0.00	0.00	0.00

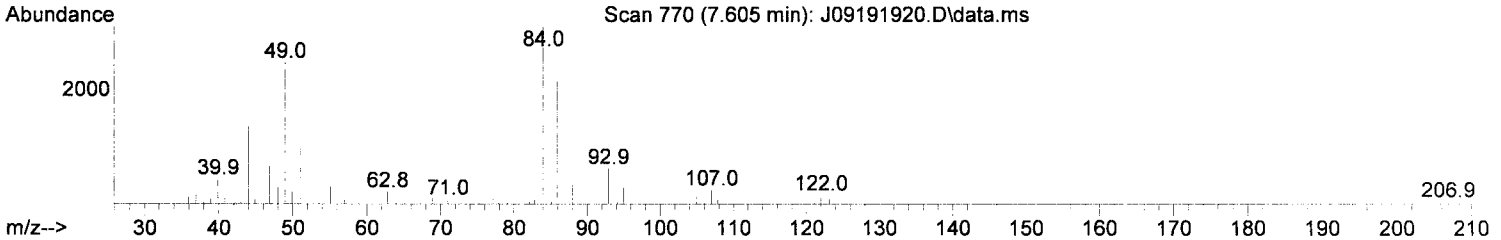
9/20/19

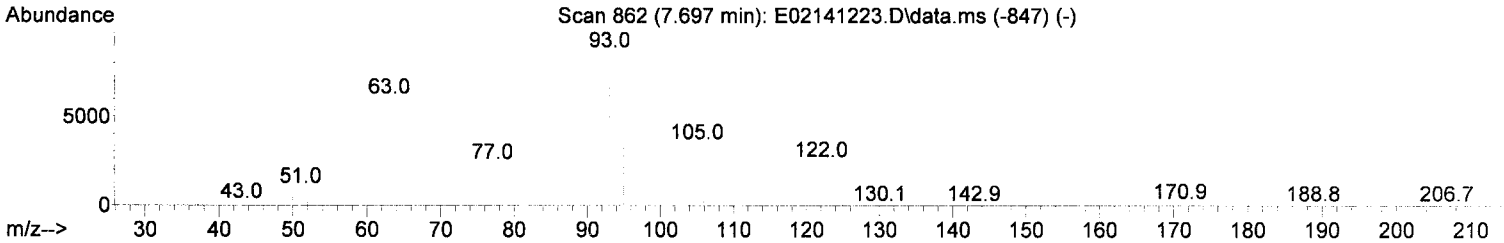
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191920.D\data.ms

(26) Benzoic acid (T)

7.605min (+ 0.027) 304.84 ng/ml

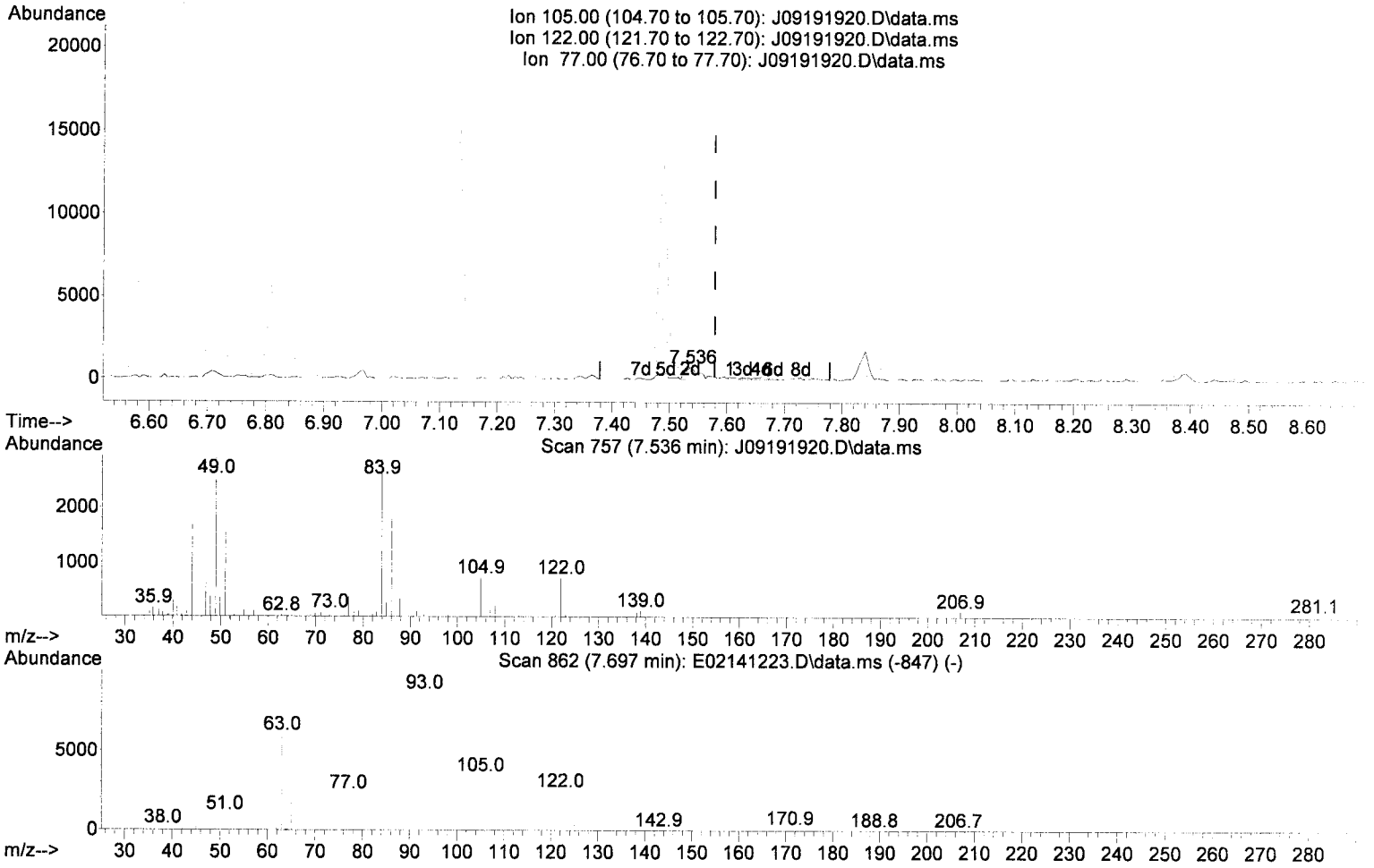
response 129

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	108.48
77.00	72.00	113.33#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191920.D\data.ms

(26) Benzoic acid (T)

7.536min (-0.043) 327.42 ng/ml m 9/20/19

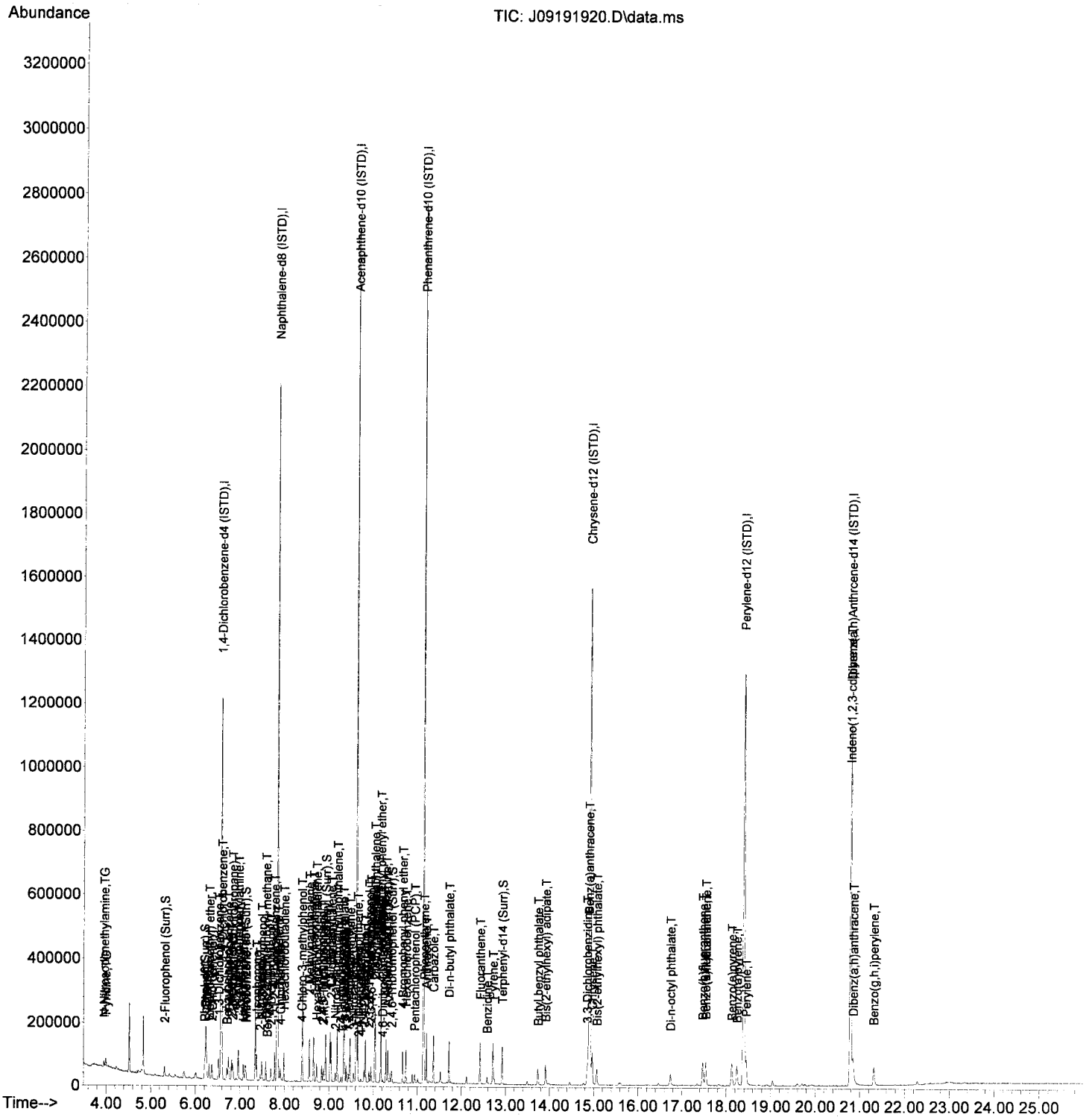
response 2086

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	99.19
77.00	72.00	54.47
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191920.D
Acq On : 20 Sep 2019 2:34 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL3
Misc : 1x, A19G240@100
ALS Vial : 5 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:30 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	286105	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1204364	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	611745	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1098102	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.912	240	1116848	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1089238	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	868590	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.300	112	34817	179.42	ng/ml	0.01
5) Phenol-d6(Surr)	6.204	99	45844	183.93	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	34591	151.44	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	107137	238.50	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	10829	210.19	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	107135	196.23	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.915	74	19941	150.00	ng/ml	98
3) Pyridine	3.947	79	38499m	169.88	ng/ml#	
6) Phenol	6.215	94	51417	181.47	ng/ml	97
7) Aniline	6.247	93	49031	193.59	ng/ml	96
8) Bis(2-chloroethyl) ether	6.306	93	42595	168.79	ng/ml	93
9) 2-Chlorophenol	6.364	128	42160	206.57	ng/ml	96
10) 1,3-Dichlorobenzene	6.514	146	48050	217.71	ng/ml	98
11) 1,4-Dichlorobenzene	6.584	146	46724	218.13	ng/ml	96
12) Benzyl alcohol	6.701	108	18281	139.70	ng/ml	91
13) 1,2-Dichlorobenzene	6.739	146	47924	222.58	ng/ml	95
14) 2-Methylphenol	6.808	107	30801	187.74	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	44401	136.40	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.963	70	28365	171.56	ng/ml	98
17) 3+4-Methylphenol	6.958	107	38484	190.34	ng/ml	97
18) Hexachloroethane	7.076	201	13490	228.75	ng/ml	98
20) Nitrobenzene	7.129	77	37240	162.74	ng/ml	98
22) Isophorone	7.365	82	78525	179.67	ng/ml	96
23) 2-Nitrophenol	7.450	139	16298	145.34	ng/ml	96
24) 2,4-Dimethylphenol	7.488	122	31880	191.29	ng/ml	96
25) Bis(2-chloroethoxy) me...	7.579	93	49149	201.85	ng/ml	96
26) Benzoic acid	7.573	105	338	307.20	ng/ml	78
27) 2,4-Dichlorophenol	7.691	162	30346	210.14	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.776	180	45007	257.44	ng/ml	95
29) Naphthalene	7.857	128	141239	228.31	ng/ml	99
30) 4-Chloroaniline	7.905	127	38526	242.70	ng/ml	98
31) Hexachlorobutadiene	7.990	225	24136	258.88	ng/ml	95
32) 4-Chloro-3-methylphenol	8.386	107	26469	152.19	ng/ml	98
33) 2-Methylnaphthalene	8.557	142	98607	233.48	ng/ml	98
34) 1-Methylnaphthalene	8.654	142	95459	235.18	ng/ml	99
36) Hexachlorocyclopentadiene	8.729	237	17504	180.83	ng/ml	95
37) 2,4,6-Trichlorophenol	8.841	196	18771	185.20	ng/ml	90
38) 2,4,5-Trichlorophenol	8.873	198	18422	177.11	ng/ml	88
39) 1,1'-Biphenyl	9.028	154	117826	231.84	ng/ml	99
41) 2-Chloronaphthalene	9.049	162	86117	230.86	ng/ml	100
42) 2-Nitroaniline	9.146	138	16161	130.13	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.188	156	87215	229.24	ng/ml	96

See MI

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

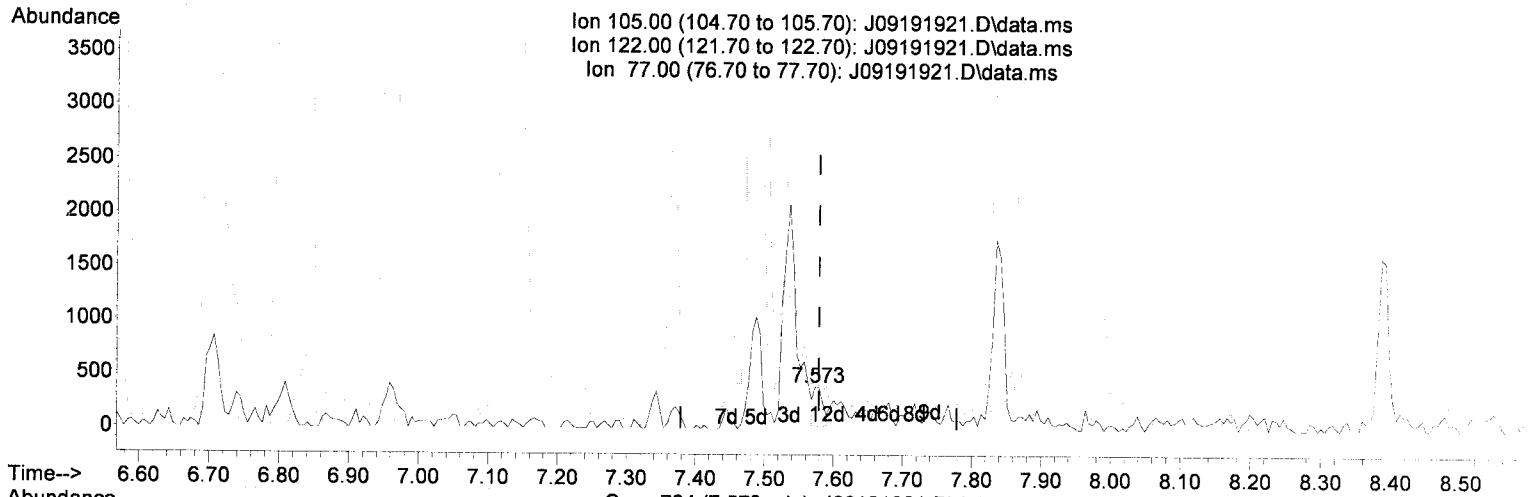
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	5164	89.07	ng/ml	88
45) Dimethyl phthalate	9.328	163	96043	219.51	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	7621	114.64	ng/ml	85
47) 2,6-Dinitrotoluene	9.386	165	16812	178.66	ng/ml	87
48) 1,2-Dinitrobenzene	9.440	168	7269	164.92	ng/ml	83
49) Acenaphthylene	9.472	152	136163	227.72	ng/ml	99
50) 3-Nitroaniline	9.558	138	15637	168.60	ng/ml	93
51) Acenaphthene	9.648	153	89211	230.16	ng/ml	98
52) 2,4-Dinitrophenol	9.665	184	796	162.82	ng/ml	85
53) 4-Nitrophenol	9.723	139	5790	112.91	ng/ml	91
54) 2,4-Dinitrotoluene	9.798	165	16915	139.67	ng/ml	99
55) Dibenzofuran	9.825	168	123476	233.62	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	13193	177.32	ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.948	232	16040	193.66	ng/ml	99
58) Diethyl phthalate	10.044	149	92047	220.62	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	78195	231.45	ng/ml	96
60) Fluorene	10.173	166	95574	229.60	ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.167	204	45790	236.70	ng/ml	98
62) 4-Nitroaniline	10.178	138	12832	152.25	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.215	198	2504	115.96	ng/ml	91
65) N-Nitrosodiphenylamine	10.285	169	77183	228.56	ng/ml	96
66) Azobenzene (1,2-DPH)	10.328	77	76676	171.16	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.670	248	26212	231.88	ng/ml	97
69) Hexachlorobenzene	10.745	284	30519	234.65	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	7638	155.67	ng/ml	93
71) Phenanthrene	11.151	178	134878	224.63	ng/ml	96
72) Anthracene	11.205	178	132343	224.01	ng/ml	97
73) Carbazole	11.365	167	110985	227.54	ng/ml	99
74) Di-n-butyl phthalate	11.718	149	138215	201.89	ng/ml	98
75) Fluoranthene	12.424	202	138551	220.63	ng/ml	99
76) Benzidine	12.580	184	43242	323.12	ng/ml	97
77) Pyrene	12.713	202	143586	228.88	ng/ml	99
80) Butyl benzyl phthalate	13.735	149	42397	121.22	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.911	129	37581	119.87	ng/ml	98
82) 3,3-Dichlorobenzidine	14.858	252	53778	529.15	ng/ml	97
83) Benz(a)anthracene	14.885	228	124472	190.07	ng/ml	97
84) Chrysene	14.965	228	120574	199.57	ng/ml	98
85) Bis(2-ethylhexyl) phth...	15.072	149	58143	125.67	ng/ml	100
87) Di-n-octyl phthalate	16.741	149	75567	125.21	ng/ml	98
88) Benzo(b)fluoranthene	17.479	252	113080	171.41	ng/ml	95
89) Benzo(k)fluoranthene	17.538	252	115987	185.29	ng/ml	97
90) Benzo(b+k)fluoranthene	17.479	252	234995	358.49	ng/ml	95
91) Benzo(e)pyrene	18.126	252	113143	175.23	ng/ml	91
92) Benzo(a)pyrene	18.244	252	99882	168.29	ng/ml	97
93) Perylene	18.447	252	100217	178.11	ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.784	276	100411	205.68	ng/ml	96
96) Dibenz(a,h)anthracene	20.854	278	95316	217.63	ng/ml	99
97) Benzo(g,h,i)perylene	21.319	276	101188	215.24	ng/ml	98

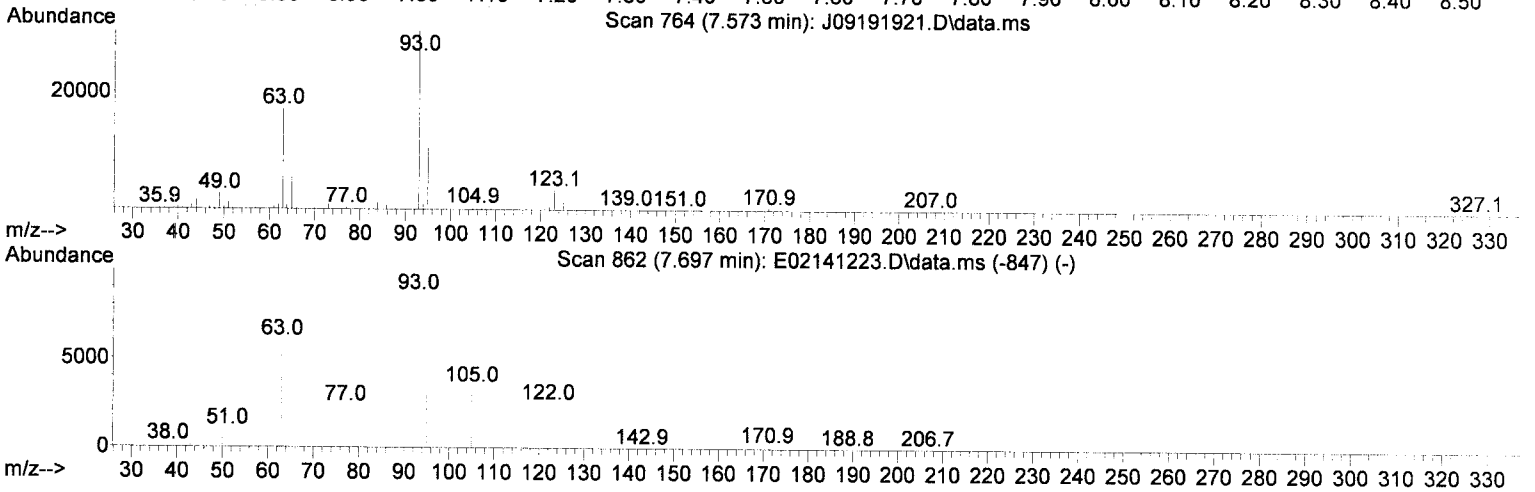
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191921.D\data.ms

(26) Benzoic acid (T)

7.573min (-0.005) 307.20 ng/ml

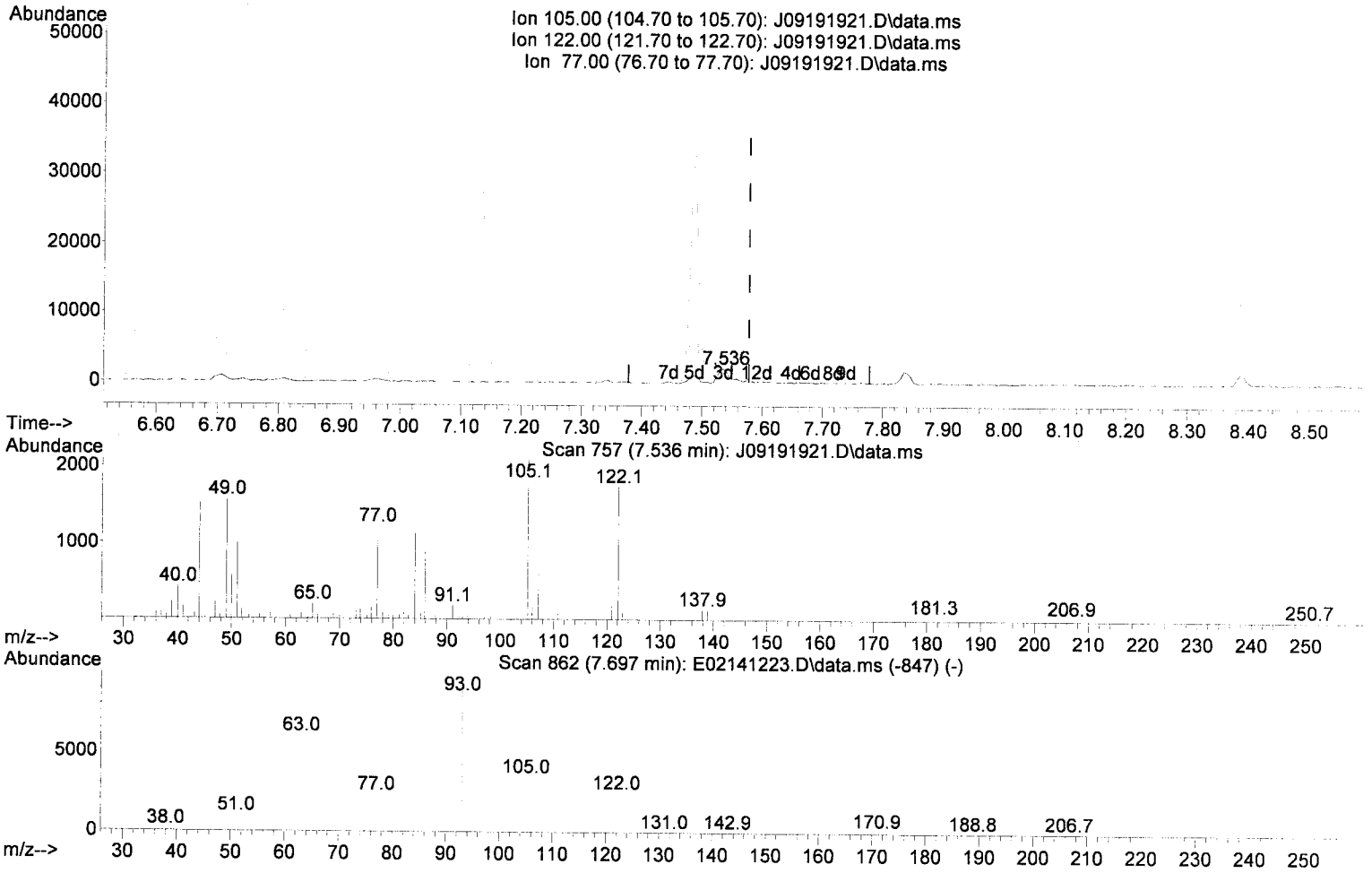
response 338

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	119.23
77.00	72.00	82.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191921.D\data.ms

(26) Benzoic acid (T)

7.536min (-0.043) 341.24 ng/ml m

response 3335

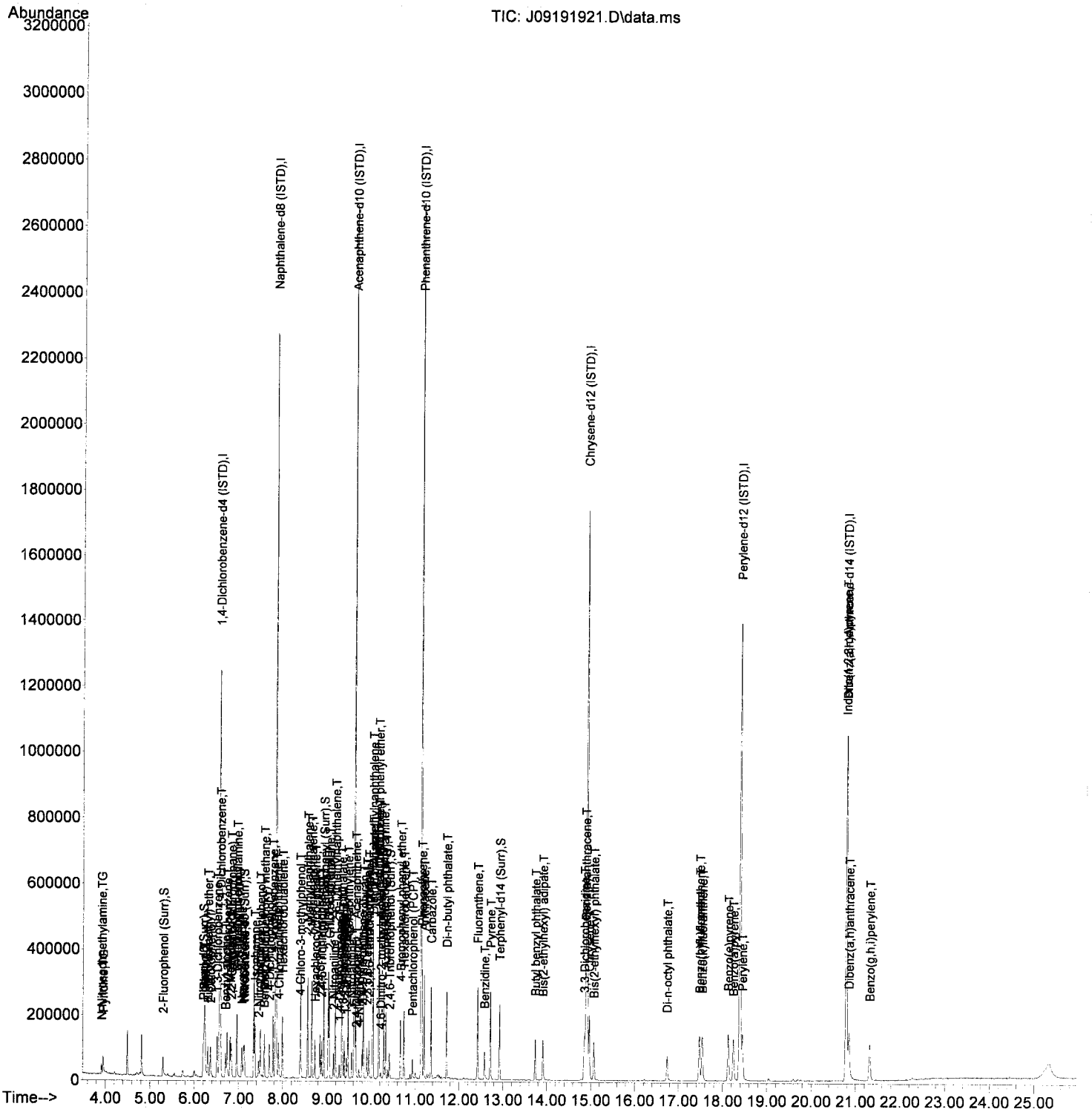
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	83.48
77.00	72.00	58.50
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191921.D
Acq On : 20 Sep 2019 3:09 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL4
Misc : 1x, A19G241@200
ALS Vial : 6 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:34 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	299020	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1217422	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	625555	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1123094	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.917	240	1146727	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1149483	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	954508	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.306	112	95687	471.80	ng/ml	0.02
5) Phenol-d6(Surr)	6.204	99	124621	478.38	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	98184	411.28	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	272047	592.23	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	33701	639.58	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	285146	508.67	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.931	74	52485m	377.75	ng/ml#	
3) Pyridine	3.958	79	83583	352.88	ng/ml	96
6) Phenol	6.215	94	136576	461.22	ng/ml	97
7) Aniline	6.247	93	124901	471.84	ng/ml	97
8) Bis(2-chloroethyl) ether	6.306	93	115667	438.55	ng/ml	97
9) 2-Chlorophenol	6.365	128	113634	532.72	ng/ml	95
10) 1,3-Dichlorobenzene	6.514	146	126152	546.89	ng/ml	98
11) 1,4-Dichlorobenzene	6.589	146	123497	551.64	ng/ml	99
12) Benzyl alcohol	6.702	108	59263	433.38	ng/ml	97
13) 1,2-Dichlorobenzene	6.739	146	124976	555.38	ng/ml	99
14) 2-Methylphenol	6.808	107	86329	503.48	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	112933	331.95	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.964	70	74700	432.29	ng/ml	99
17) 3+4-Methylphenol	6.958	107	107685	509.59	ng/ml	99
18) Hexachloroethane	7.076	201	36961	599.67	ng/ml	99
20) Nitrobenzene	7.129	77	100238	419.13	ng/ml	95
22) Isophorone	7.370	82	207804	470.36	ng/ml	99
23) 2-Nitrophenol	7.450	139	54694	414.23	ng/ml	98
24) 2,4-Dimethylphenol	7.488	122	86093	511.06	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.579	93	131344	533.62	ng/ml	98
26) Benzoic acid	7.605	105	979	314.37	ng/ml#	66
27) 2,4-Dichlorophenol	7.691	162	89833	615.41	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.777	180	113367	641.50	ng/ml	99
29) Naphthalene	7.857	128	361018	577.32	ng/ml	99
30) 4-Chloroaniline	7.905	127	106945	650.30	ng/ml	98
31) Hexachlorobutadiene	7.991	225	61063	647.92	ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	84667	481.59	ng/ml	100
33) 2-Methylnaphthalene	8.557	142	253485	593.76	ng/ml	98
34) 1-Methylnaphthalene	8.659	142	244797	596.63	ng/ml	99
36) Hexachlorocyclopentadiene	8.723	237	51180	517.04	ng/ml	98
37) 2,4,6-Trichlorophenol	8.841	196	59985	553.45	ng/ml	98
38) 2,4,5-Trichlorophenol	8.873	198	59608	560.44	ng/ml	98
39) 1,1'-Biphenyl	9.028	154	300735	578.68	ng/ml	99
41) 2-Chloronaphthalene	9.050	162	223930	587.06	ng/ml	97
42) 2-Nitroaniline	9.146	138	55795	439.35	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	219677	564.67	ng/ml	99

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

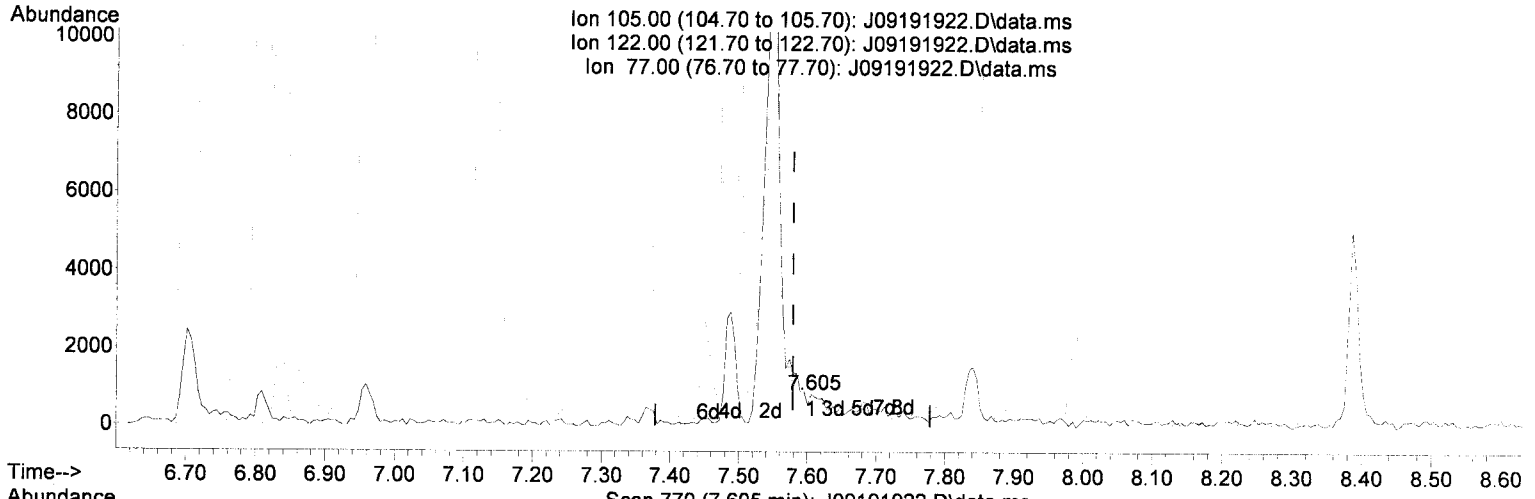
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	19841	334.66	ng/ml	93
45) Dimethyl phthalate	9.328	163	250192	559.21	ng/ml	100
46) 1,3-Dinitrobenzene	9.354	168	28132	413.82	ng/ml	96
47) 2,6-Dinitrotoluene	9.387	165	51160	531.66	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	22807	506.03	ng/ml	94
49) Acenaphthylene	9.472	152	361152	590.67	ng/ml	99
50) 3-Nitroaniline	9.558	138	44178	446.02	ng/ml	100
51) Acenaphthene	9.649	153	224540	566.51	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	4568	255.77	ng/ml	95
53) 4-Nitrophenol	9.723	139	25654	375.44	ng/ml	94
54) 2,4-Dinitrotoluene	9.798	165	57760	466.41	ng/ml	98
55) Dibenzofuran	9.825	168	310051	573.66	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.905	232	46260	542.89	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	9.948	232	50476	572.73	ng/ml	99
58) Diethyl phthalate	10.044	149	232776	545.61	ng/ml	99
59) 2,3,5-Trimethylnaphtha...	10.034	170	199252	576.75	ng/ml	99
60) Fluorene	10.173	166	244304	573.93	ng/ml	97
61) 4-Chlorophenyl phenyl ...	10.167	204	117369	593.31	ng/ml	99
62) 4-Nitroaniline	10.178	138	36541	423.99	ng/ml	96
63) 4,6-Dinitro-2-methylph...	10.216	198	14208	319.68	ng/ml	90
65) N-Nitrosodiphenylamine	10.285	169	197334	571.35	ng/ml	99
66) Azobenzene (1,2-DPH)	10.328	77	199437	435.30	ng/ml	99
68) 4-Bromophenyl phenyl e...	10.670	248	66857	578.28	ng/ml	97
69) Hexachlorobenzene	10.745	284	82813	622.55	ng/ml	99
70) Pentachlorophenol (PCP)	10.938	266	30348	512.59	ng/ml	94
71) Phenanthrene	11.157	178	343840	559.91	ng/ml	98
72) Anthracene	11.205	178	335865	555.84	ng/ml	99
73) Carbazole	11.366	167	281210	563.69	ng/ml	99
74) Di-n-butyl phthalate	11.719	149	369981	528.41	ng/ml	99
75) Fluoranthene	12.425	202	369455	575.22	ng/ml	98
76) Benzidine	12.580	184	152022	962.70	ng/ml	100
77) Pyrene	12.713	202	375136	584.68	ng/ml	99
80) Butyl benzyl phthalate	13.735	149	139695	388.99	ng/ml	98
81) Bis(2-ethylhexyl) adipate	13.911	129	126449	392.82	ng/ml	98
82) 3,3-Dichlorobenzidine	14.858	252	110907	1341.90	ng/ml	97
83) Benz(a)anthracene	14.890	228	327557	487.16	ng/ml	98
84) Chrysene	14.970	228	313539	505.43	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.077	149	202494	426.28	ng/ml	96
87) Di-n-octyl phthalate	16.746	149	281414	361.89	ng/ml	98
88) Benzo(b)fluoranthene	17.479	252	318669	457.74	ng/ml	99
89) Benzo(k)fluoranthene	17.543	252	321918	487.31	ng/ml	99
90) Benzo(b+k)fluoranthene	17.543	252	653019	943.99	ng/ml	99
91) Benzo(e)pyrene	18.132	252	316818	464.95	ng/ml	99
92) Benzo(a)pyrene	18.249	252	295305	471.49	ng/ml	97
93) Perylene	18.452	252	273199	460.10	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.784	276	279363	520.62	ng/ml	99
96) Dibenz(a,h)anthracene	20.859	278	270778	562.60	ng/ml	97
97) Benzo(g,h,i)perylene	21.325	276	291609	564.45	ng/ml	96

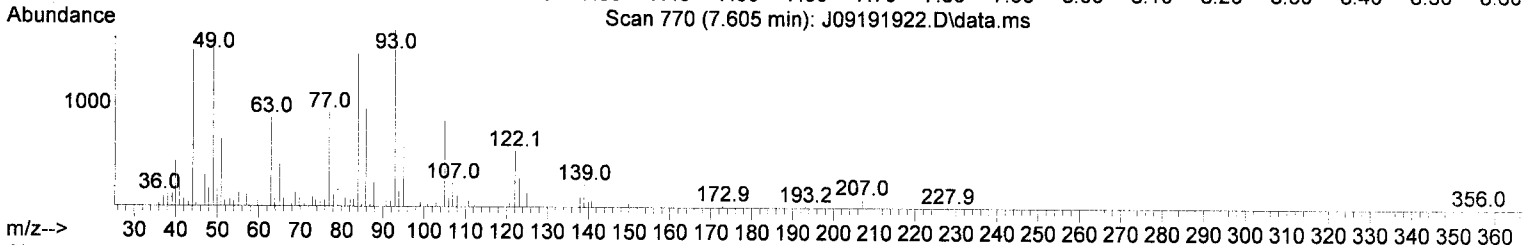
(#) = qualifier out of range (m) = manual integration (+) = signals summed

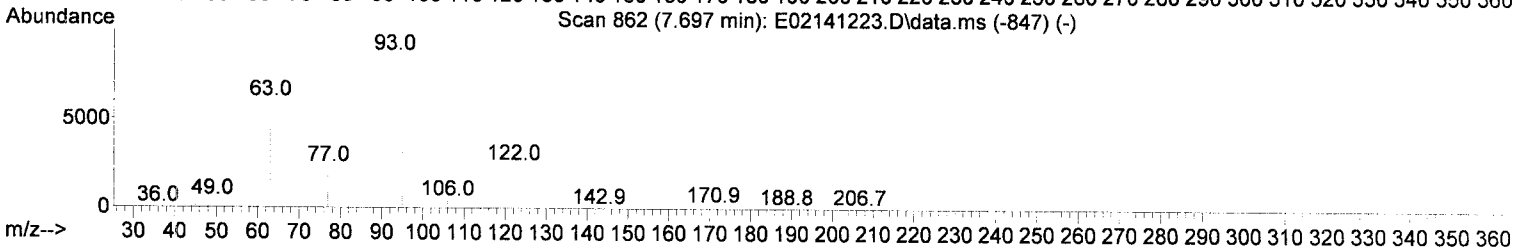
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191922.D\data.ms

(26) Benzoic acid (T)

7.605min (+ 0.027) 314.37 ng/ml

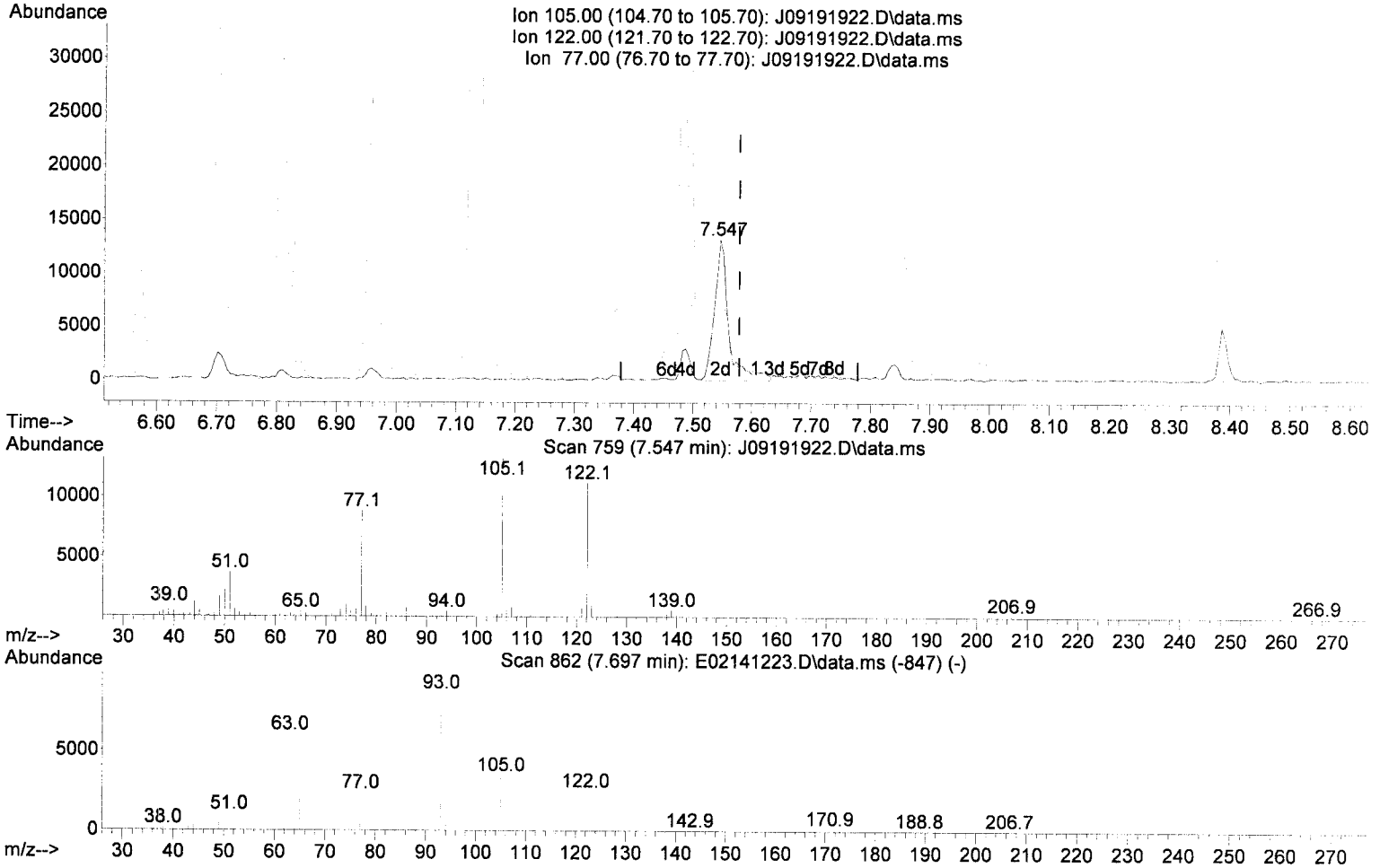
response 979

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	66.67
77.00	72.00	109.78#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191922.D\data.ms

(26) Benzoic acid (T)

7.547min (-0.032) 552.34 ng/ml m

response 22389

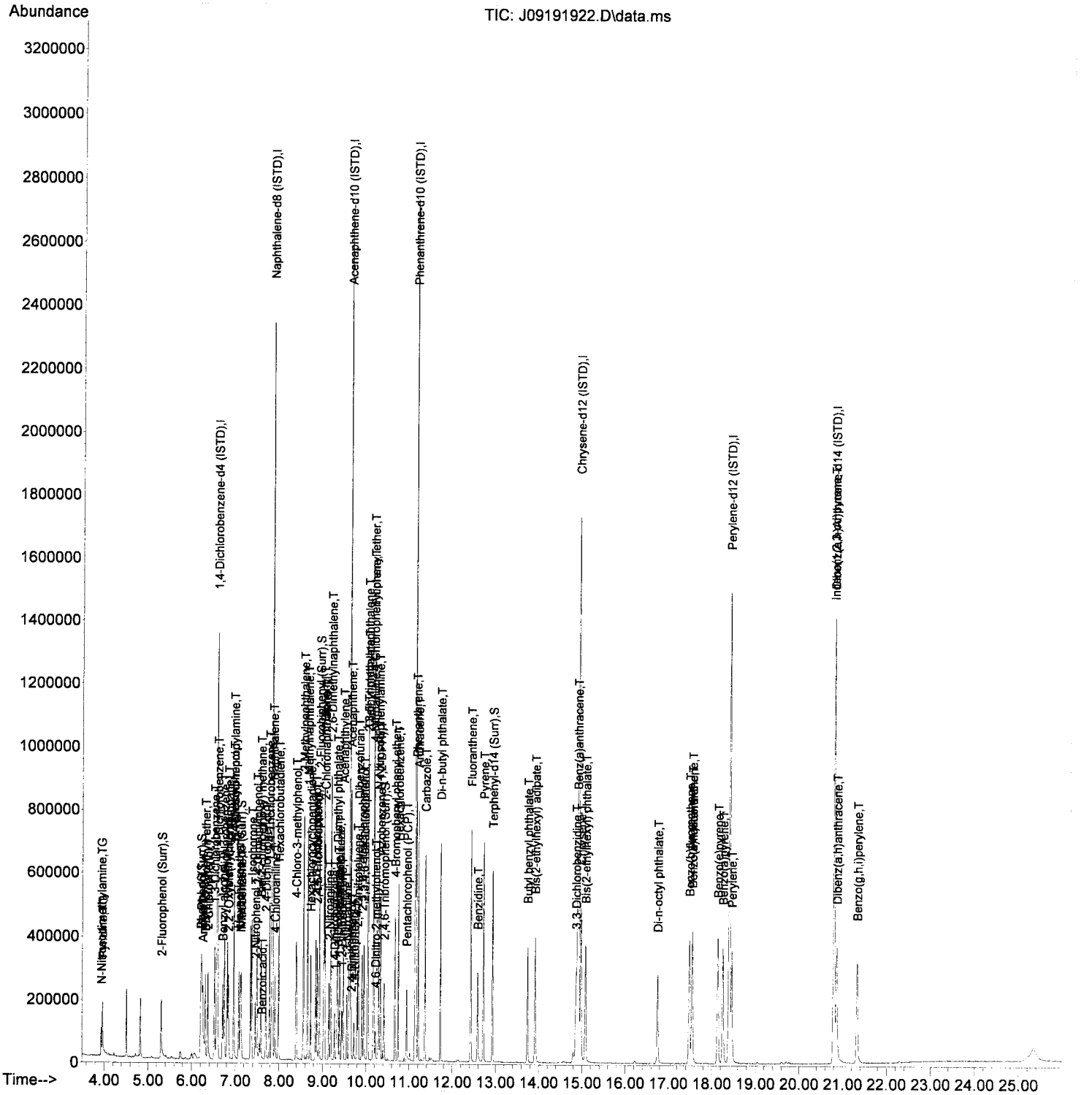
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	83.94
77.00	72.00	66.43
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191922.D
Acq On : 20 Sep 2019 3:44 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL5
Misc : 1x, A19G242@500
ALS Vial : 7 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:39 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	283511	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.835	136	1143968	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.616	162	583825	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1065192	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.917	240	1048464	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.399	264	1042709	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.795	292	886236	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.289	112	179108	931.44	ng/ml	0.00
5) Phenol-d6(Surr)	6.204	99	238398	965.20	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	187377	827.84	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	482290	1124.97	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	65055	1301.74	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.922	244	507926	991.00	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.883	74	104763m	795.26	ng/ml	
3) Pyridine	3.904	79	182180	811.23	ng/ml	100
6) Phenol	6.215	94	261231	930.43	ng/ml	100
7) Aniline	6.241	93	189393	754.62	ng/ml	100
8) Bis(2-chloroethyl) ether	6.306	93	237931	951.45	ng/ml	100
9) 2-Chlorophenol	6.364	128	213396	1055.12	ng/ml	100
10) 1,3-Dichlorobenzene	6.514	146	230358	1053.27	ng/ml	100
11) 1,4-Dichlorobenzene	6.584	146	229877	1082.99	ng/ml	100
12) Benzyl alcohol	6.701	108	124850	962.84	ng/ml	100
13) 1,2-Dichlorobenzene	6.739	146	227139	1064.59	ng/ml	100
14) 2-Methylphenol	6.808	107	162716	1000.89	ng/ml	100
15) 2,2'-Oxybis(1-Chloropr...	6.835	45	204366	633.56	ng/ml	100
16) N-Nitrosodi-n-propylamine	6.963	70	136460	832.90	ng/ml	100
17) 3+4-Methylphenol	6.958	107	206745	1031.88	ng/ml	100
18) Hexachloroethane	7.076	201	68545	1172.94	ng/ml	100
20) Nitrobenzene	7.129	77	188065	829.39	ng/ml	100
22) Isophorone	7.370	82	377941	910.39	ng/ml	100
23) 2-Nitrophenol	7.450	139	114845	900.33	ng/ml	100
24) 2,4-Dimethylphenol	7.488	122	164250	1037.61	ng/ml	100
25) Bis(2-chloroethoxy) me...	7.579	93	236290	1021.63	ng/ml	100
26) Benzoic acid	7.579	105	99342	1429.28	ng/ml	100
27) 2,4-Dichlorophenol	7.691	162	173249	1263.07	ng/ml	100
28) 1,2,4-Trichlorobenzene	7.782	180	206953	1246.26	ng/ml	100
29) Naphthalene	7.857	128	638989	1087.45	ng/ml	100
30) 4-Chloroaniline	7.905	127	199585	1281.62	ng/ml	100
31) Hexachlorobutadiene	7.990	225	113762	1284.60	ng/ml	100
32) 4-Chloro-3-methylphenol	8.386	107	162469	983.46	ng/ml	100
33) 2-Methylnaphthalene	8.557	142	453493	1130.47	ng/ml	100
34) 1-Methylnaphthalene	8.659	142	430139	1115.66	ng/ml	100
36) Hexachlorocyclopentadiene	8.728	237	99801	1080.30	ng/ml	100
37) 2,4,6-Trichlorophenol	8.841	196	117480	1142.89	ng/ml	100
38) 2,4,5-Trichlorophenol	8.873	198	113799	1146.42	ng/ml	100
39) 1,1'-Biphenyl	9.028	154	533233	1099.40	ng/ml	100
41) 2-Chloronaphthalene	9.049	162	386877	1086.74	ng/ml	100
42) 2-Nitroaniline	9.146	138	113482	957.47	ng/ml	100
43) 2,6-Dimethylnaphthalene	9.188	156	389863	1073.75	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

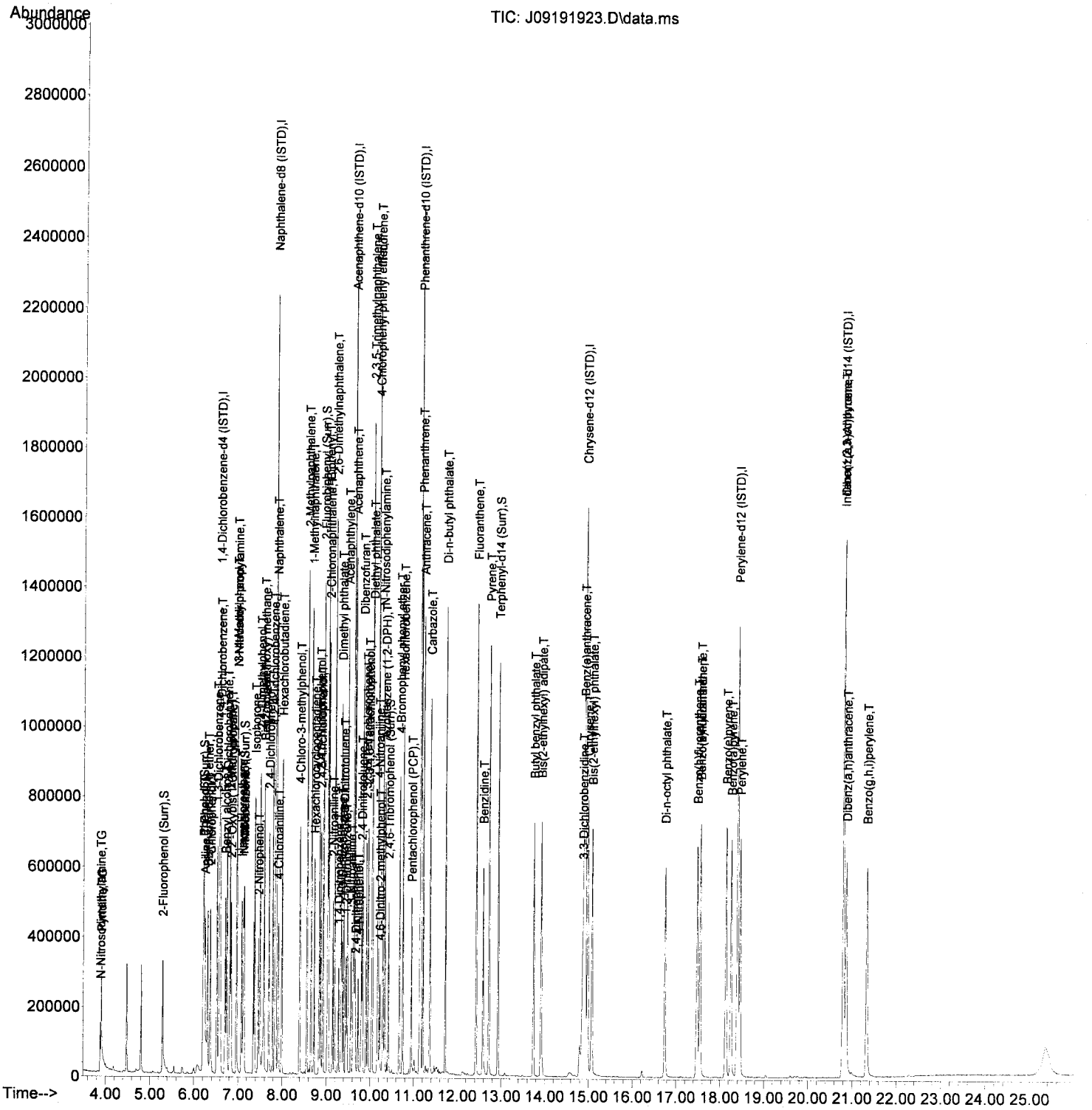
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	44207	798.94	ng/ml	100
45) Dimethyl phthalate	9.333	163	449574	1076.67	ng/ml	100
46) 1,3-Dinitrobenzene	9.354	168	57342	903.80	ng/ml	100
47) 2,6-Dinitrotoluene	9.392	165	97373	1084.24	ng/ml	100
48) 1,2-Dinitrobenzene	9.445	168	45222	1075.08	ng/ml	100
49) Acenaphthylene	9.472	152	637470	1117.11	ng/ml	100
50) 3-Nitroaniline	9.563	138	76212	868.39	ng/ml	100
51) Acenaphthene	9.648	153	399993	1081.31	ng/ml	100
52) 2,4-Dinitrophenol	9.664	184	18042	611.46	ng/ml	100
53) 4-Nitrophenol	9.723	139	58727	860.32	ng/ml	100
54) 2,4-Dinitrotoluene	9.798	165	116247	1005.79	ng/ml	100
55) Dibenzofuran	9.825	168	550893	1092.13	ng/ml	100
56) 2,3,5,6-Tetrachlorophenol	9.905	232	91879	1120.36	ng/ml	100
57) 2,3,4,6-Tetrachlorophenol	9.948	232	101167	1210.65	ng/ml	100
58) Diethyl phthalate	10.050	149	426259	1070.54	ng/ml	100
59) 2,3,5-Trimethylnaphtha...	10.039	170	355247	1101.79	ng/ml	100
60) Fluorene	10.173	166	426158	1072.71	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	209713	1135.90	ng/ml	100
62) 4-Nitroaniline	10.183	138	63138	784.97	ng/ml	100
63) 4,6-Dinitro-2-methylph...	10.215	198	38878	789.70	ng/ml	100
65) N-Nitrosodiphenylamine	10.285	169	350586	1070.25	ng/ml	100
66) Azobenzene (1,2-DPH)	10.328	77	355316	817.68	ng/ml	100
68) 4-Bromophenyl phenyl e...	10.670	248	125621	1145.62	ng/ml	100
69) Hexachlorobenzene	10.745	284	152211	1206.46	ng/ml	100
70) Pentachlorophenol (PCP)	10.943	266	65122	1104.57	ng/ml	100
71) Phenanthrene	11.157	178	610421	1048.04	ng/ml	100
72) Anthracene	11.210	178	608748	1062.21	ng/ml	100
73) Carbazole	11.365	167	458747	969.56	ng/ml	100
74) Di-n-butyl phthalate	11.718	149	683398	1029.09	ng/ml	100
75) Fluoranthene	12.424	202	669325	1098.75	ng/ml	100
76) Benzidine	12.579	184	302104	1915.60	ng/ml	100
77) Pyrene	12.713	202	683508	1123.21	ng/ml	100
80) Butyl benzyl phthalate	13.735	149	279356	850.79	ng/ml	100
81) Bis(2-ethylhexyl) adipate	13.911	129	247877	842.20	ng/ml	100
82) 3,3-Dichlorobenzidine	14.863	252	174855	2557.16	ng/ml	100
83) Benz(a)anthracene	14.890	228	577553	939.46	ng/ml	100
84) Chrysene	14.976	228	556735	981.53	ng/ml	100
85) Bis(2-ethylhexyl) phth...	15.072	149	389483	896.77	ng/ml	100
87) Di-n-octyl phthalate	16.746	149	592055	790.12	ng/ml	100
88) Benzo(b)fluoranthene	17.479	252	578435	915.96	ng/ml	100
89) Benzo(k)fluoranthene	17.548	252	582389	971.88	ng/ml	100
90) Benzo(b+k)fluoranthene	17.548	252	1182652	1884.67	ng/ml	100
91) Benzo(e)pyrene	18.137	252	576088	932.03	ng/ml	100
92) Benzo(a)pyrene	18.254	252	535317	942.21	ng/ml	100
93) Perylene	18.458	252	476752	885.12	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.790	276	510691	1025.03	ng/ml	100
96) Dibenz(a,h)anthracene	20.865	278	489557	1095.51	ng/ml	100
97) Benzo(g,h,i)perylene	21.325	276	538150	1121.91	ng/ml	100

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191923.D
Acq On : 20 Sep 2019 4:19 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL6
Misc : 1x, A19G243@1000
ALS Vial : 8 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:43 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	285023	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1095362	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	586466	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1091855	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.922	240	1089712	2000.00	ng/ml	0.00
86) Perylene-d12 (ISTD)	18.404	264	1076142	2000.00	ng/ml	0.00
94) Dibenz(a,h)Anthrcene-d...	20.800	292	949148	2000.00	ng/ml	0.00
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.305	112	379802	1964.65	ng/ml	0.02
5) Phenol-d6(Surr)	6.209	99	477001	1920.99	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	365358	1605.60	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.926	172	917452	2130.37	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.424	330	142266	2777.20	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.927	244	1038865	1950.18	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.941	74	217151	1639.66	ng/ml	99
3) Pyridine	3.958	79	392152m	1736.94	ng/ml	
6) Phenol	6.220	94	506313	1793.78	ng/ml	98
7) Aniline	6.252	93	321662	1274.83	ng/ml	97
8) Bis(2-chloroethyl) ether	6.311	93	501220	1993.67	ng/ml	99
9) 2-Chlorophenol	6.370	128	423147	2081.13	ng/ml	99
10) 1,3-Dichlorobenzene	6.519	146	464902	2114.40	ng/ml	99
11) 1,4-Dichlorobenzene	6.589	146	453326	2124.37	ng/ml	99
12) Benzyl alcohol	6.707	108	261354	2004.87	ng/ml	98
13) 1,2-Dichlorobenzene	6.744	146	442316	2062.13	ng/ml	99
14) 2-Methylphenol	6.814	107	318341	1947.77	ng/ml	96
15) 2,2'-Oxybis(1-Chloropr...	6.840	45	366117	1128.98	ng/ml	97
16) N-Nitrosodi-n-propylamine	6.969	70	256713	1558.56	ng/ml	99
17) 3+4-Methylphenol	6.963	107	399183	1981.79	ng/ml	98
18) Hexachloroethane	7.076	201	143490	2442.36	ng/ml	97
20) Nitrobenzene	7.135	77	365107	1601.63	ng/ml	98
22) Isophorone	7.375	82	734609	1848.05	ng/ml	100
23) 2-Nitrophenol	7.456	139	207149	1710.18	ng/ml	94
24) 2,4-Dimethylphenol	7.493	122	333523	2200.44	ng/ml	97
25) Bis(2-chloroethoxy) me...	7.584	93	449978	2031.87	ng/ml	99
26) Benzoic acid	7.611	105	311714	3637.31	ng/ml	96
27) 2,4-Dichlorophenol	7.691	162	350635	2669.74	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	388384	2442.61	ng/ml	100
29) Naphthalene	7.862	128	1178988	2095.46	ng/ml	99
30) 4-Chloroaniline	7.915	127	372183	2483.94	ng/ml	99
31) Hexachlorobutadiene	7.990	225	208693	2461.13	ng/ml	98
32) 4-Chloro-3-methylphenol	8.392	107	338452	2139.63	ng/ml	97
33) 2-Methylnaphthalene	8.557	142	857631	2232.77	ng/ml	98
34) 1-Methylnaphthalene	8.659	142	810434	2195.32	ng/ml	99
36) Hexachlorocyclopentadiene	8.723	237	213088	2296.19	ng/ml	97
37) 2,4,6-Trichlorophenol	8.841	196	248218	2364.26	ng/ml	100
38) 2,4,5-Trichlorophenol	8.873	198	245074	2457.78	ng/ml	99
39) 1,1'-Biphenyl	9.028	154	1010736	2074.51	ng/ml	98
41) 2-Chloronaphthalene	9.049	162	759926	2125.02	ng/ml	100
42) 2-Nitroaniline	9.151	138	248865	2090.27	ng/ml	95
43) 2,6-Dimethylnaphthalene	9.188	156	740663	2030.74	ng/ml	100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

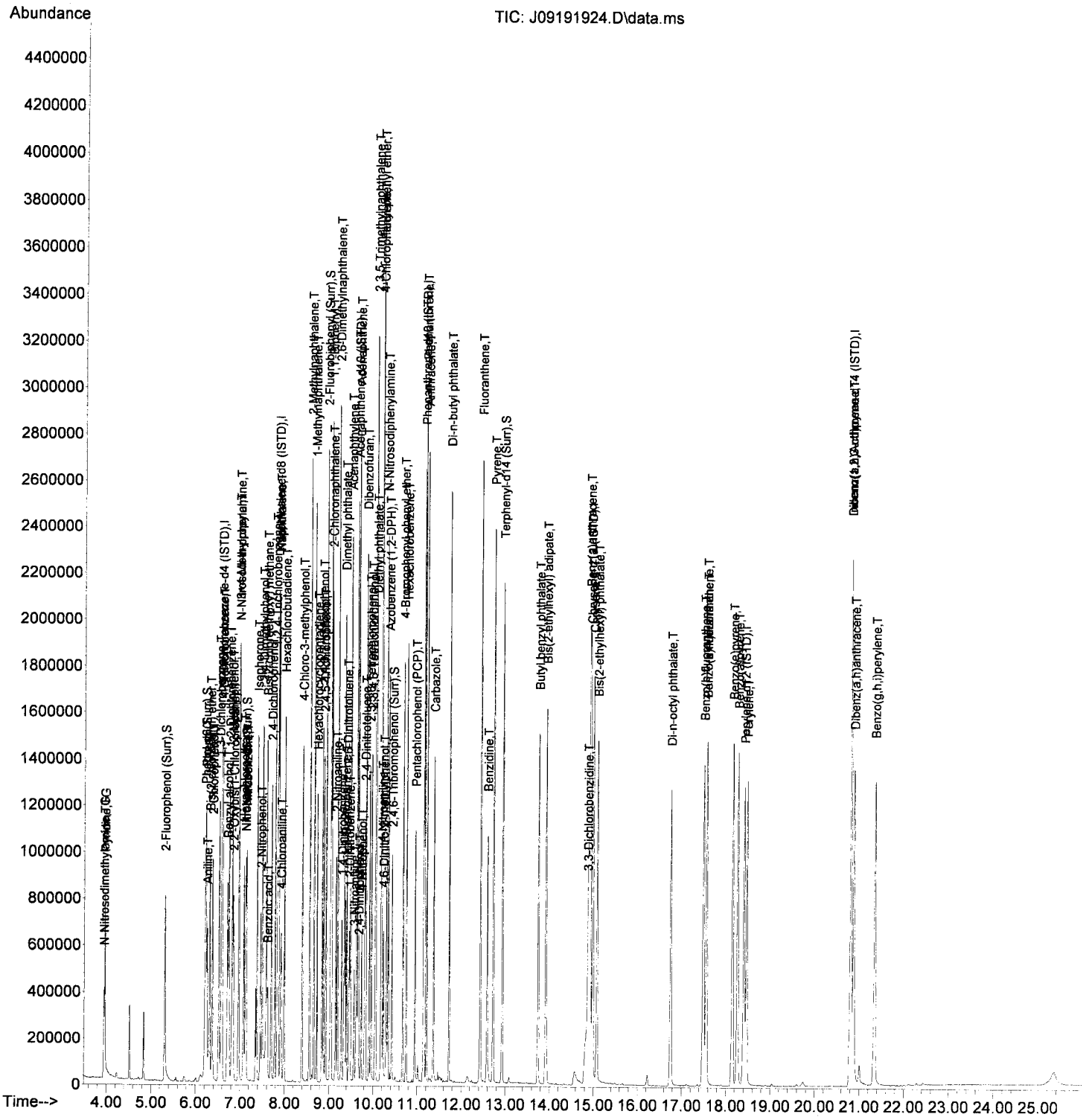
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.279	168	108019	1943.39	ng/ml	94
45) Dimethyl phthalate	9.338	163	868820	2071.34	ng/ml	99
46) 1,3-Dinitrobenzene	9.360	168	128986	2023.86	ng/ml	95
47) 2,6-Dinitrotoluene	9.392	165	201552	2234.16	ng/ml	96
48) 1,2-Dinitrobenzene	9.451	168	94079	2226.50	ng/ml	97
49) Acenaphthylene	9.477	152	1211941	2114.25	ng/ml	99
50) 3-Nitroaniline	9.563	138	114743	1447.64	ng/ml	96
51) Acenaphthene	9.654	153	770675	2074.00	ng/ml	99
52) 2,4-Dinitrophenol	9.670	184	58400	1570.56	ng/ml	93
53) 4-Nitrophenol	9.729	139	141903	1959.29	ng/ml	98
54) 2,4-Dinitrotoluene	9.804	165	257547	2218.31	ng/ml	97
55) Dibenzofuran	9.825	168	1086183	2143.62	ng/ml	98
56) 2,3,5,6-Tetrachlorophenol	9.905	232	201504	2389.21	ng/ml	99
57) 2,3,4,6-Tetrachlorophenol	9.953	232	213539	2500.78	ng/ml	97
58) Diethyl phthalate	10.055	149	811497	2028.87	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	685050	2115.10	ng/ml	99
60) Fluorene	10.178	166	812478	2035.94	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.173	204	412942	2226.61	ng/ml	94
62) 4-Nitroaniline	10.189	138	129234	1599.47	ng/ml	95
63) 4,6-Dinitro-2-methylph...	10.221	198	101854	1883.45	ng/ml	99
65) N-Nitrosodiphenylamine	10.290	169	659355	1963.69	ng/ml	97
66) Azobenzene (1,2-DPH)	10.333	77	684303	1536.31	ng/ml	93
68) 4-Bromophenyl phenyl e...	10.670	248	256334	2280.59	ng/ml	96
69) Hexachlorobenzene	10.750	284	304969	2358.22	ng/ml	98
70) Pentachlorophenol (PCP)	10.943	266	154858	2438.76	ng/ml	99
71) Phenanthrene	11.157	178	1191270	1995.35	ng/ml	99
72) Anthracene	11.210	178	1187408	2021.38	ng/ml	98
73) Carbazole	11.365	167	646631	1333.27	ng/ml	99
74) Di-n-butyl phthalate	11.718	149	1348435	1980.94	ng/ml	100
75) Fluoranthene	12.430	202	1341415	2148.26	ng/ml	98
76) Benzidine	12.585	184	601547	3540.61	ng/ml	100
77) Pyrene	12.719	202	1337637	2144.45	ng/ml	98
80) Butyl benzyl phthalate	13.740	149	621242	1820.39	ng/ml	96
81) Bis(2-ethylhexyl) adipate	13.917	129	551677	1803.46	ng/ml	99
82) 3,3-Dichlorobenzidine	14.863	252	281736	4236.61	ng/ml	94
83) Benz(a)anthracene	14.895	228	1225586	1918.11	ng/ml	99
84) Chrysene	14.981	228	1148470	1948.23	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.077	149	846014	1874.18	ng/ml	98
87) Di-n-octyl phthalate	16.746	149	1439135	1774.42	ng/ml	99
88) Benzo(b)fluoranthene	17.490	252	1267321	1944.46	ng/ml	99
89) Benzo(k)fluoranthene	17.554	252	1256906	2032.34	ng/ml	98
90) Benzo(b+k)fluoranthene	17.554	252	2563432	3958.17	ng/ml	98
91) Benzo(e)pyrene	18.142	252	1218818	1910.61	ng/ml	98
92) Benzo(a)pyrene	18.260	252	1174506	2003.02	ng/ml	99
93) Perylene	18.468	252	1026574	1846.69	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.800	276	1143875	2143.74	ng/ml	99
96) Dibenz(a,h)anthracene	20.875	278	1087002	2271.22	ng/ml	97
97) Benzo(g,h,i)perylene	21.341	276	1186793	2310.18	ng/ml	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191924.D
Acq On : 20 Sep 2019 4:54 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL7
Misc : 1x, A19G244@2000
ALS Vial : 9 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:48 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	305814	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1197569	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	636039	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.135	188	1224924	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.938	240	1138264	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.420	264	1185024	2000.00	ng/ml	0.02
94) Dibenz(a,h)Anthrcene-d...	20.827	292	1037191	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.305	112	844515	4071.54	ng/ml	0.02
5) Phenol-d6(Surr)	6.215	99	1043086	3915.14	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.124	82	786633	3221.91	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	8.932	172	1718307	3679.02	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.429	330	305471	5315.35	ng/ml	0.01
79) Terphenyl-d14 (Surr)	12.938	244	2102593	3778.67	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.925	74	480484	3381.37	ng/ml	99
3) Pyridine	3.942	79	866960	3578.93	ng/ml	99
6) Phenol	6.231	94	1097096	3622.58	ng/ml	98
7) Aniline	6.252	93	840844	3105.93	ng/ml	96
8) Bis(2-chloroethyl) ether	6.316	93	962255	3567.28	ng/ml	99
9) 2-Chlorophenol	6.370	128	902056	4134.88	ng/ml	98
10) 1,3-Dichlorobenzene	6.520	146	965051	4090.70	ng/ml	99
11) 1,4-Dichlorobenzene	6.589	146	926647	4047.22	ng/ml	99
12) Benzyl alcohol	6.712	108	581465	4157.22	ng/ml	99
13) 1,2-Dichlorobenzene	6.744	146	906070	3937.01	ng/ml	99
14) 2-Methylphenol	6.814	107	646688	3687.77	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.840	45	739481	2125.28	ng/ml	94
16) N-Nitrosodi-n-propylamine	6.980	70	504346	2853.83	ng/ml	95
17) 3+4-Methylphenol	6.969	107	797964	3692.25	ng/ml	97
18) Hexachloroethane	7.076	201	311702	4944.82	ng/ml	98
20) Nitrobenzene	7.140	77	754990	3086.77	ng/ml	95
22) Isophorone	7.381	82	1524753	3508.45	ng/ml	100
23) 2-Nitrophenol	7.456	139	481353	3856.12	ng/ml	95
24) 2,4-Dimethylphenol	7.498	122	686286	4141.39	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.589	93	900203	3717.94	ng/ml	99
26) Benzoic acid	~~7.498~~	~~105~~	~~22439~~	~~556.08~~	~~ng/ml#~~	1
27) 2,4-Dichlorophenol	7.702	162	731346	5093.24	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	805154	4631.57	ng/ml	99
29) Naphthalene	7.862	128	2214900	3600.66	ng/ml	97
30) 4-Chloroaniline	7.926	127	663200	4035.49	ng/ml	99
31) Hexachlorobutadiene	7.990	225	442903	4777.41	ng/ml	97
32) 4-Chloro-3-methylphenol	8.392	107	698064	4036.41	ng/ml	97
33) 2-Methylnaphthalene	8.563	142	1625949	3871.75	ng/ml	97
34) 1-Methylnaphthalene	8.664	142	1521185	3768.94	ng/ml	99
36) Hexachlorocyclopentadiene	8.729	237	417829	4151.52	ng/ml	96
37) 2,4,6-Trichlorophenol	8.846	196	532499	4570.85	ng/ml	99
38) 2,4,5-Trichlorophenol	8.878	198	516958	4780.35	ng/ml	99
39) 1,1'-Biphenyl	9.033	154	1845876	3493.33	ng/ml	96
41) 2-Chloronaphthalene	9.055	162	1467799	3784.57	ng/ml	99
42) 2-Nitroaniline	9.156	138	528406	4092.28	ng/ml	94
43) 2,6-Dimethylnaphthalene	9.194	156	1385514	3502.70	ng/ml	97

See MS

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.285	168	258106	4281.72	ng/ml	92
45) Dimethyl phthalate	9.349	163	1712764	3765.11	ng/ml	98
46) 1,3-Dinitrobenzene	9.370	168	289563	4189.29	ng/ml	93
47) 2,6-Dinitrotoluene	9.402	165	424265	4336.35	ng/ml	97
48) 1,2-Dinitrobenzene	9.467	168	202294	4414.41	ng/ml	92
49) Acenaphthylene	9.483	152	2224222	3577.77	ng/ml	97
50) 3-Nitroaniline	9.574	138	123216	1427.55	ng/ml	97
51) Acenaphthene	9.659	153	1433796	3557.81	ng/ml	99
52) 2,4-Dinitrophenol	9.675	184	174238	3652.38	ng/ml	99
53) 4-Nitrophenol	9.739	139	326661	3903.35	ng/ml	98
54) 2,4-Dinitrotoluene	9.814	165	555824	4414.31	ng/ml	93
55) Dibenzofuran	9.830	168	2040744	3713.59	ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	9.911	232	434819	4639.23	ng/ml	97
57) 2,3,4,6-Tetrachlorophenol	9.959	232	451267	4758.24	ng/ml	95
58) Diethyl phthalate	10.060	149	1534521	3537.53	ng/ml	96
59) 2,3,5-Trimethylnaphtha...	10.044	170	1276533	3634.12	ng/ml	98
60) Fluorene	10.183	166	1464263	3383.22	ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.173	204	786385	3909.75	ng/ml	95
62) 4-Nitroaniline	10.199	138	281600	3213.60	ng/ml	99
63) 4,6-Dinitro-2-methylph...	10.232	198	258196	4046.65	ng/ml	96
65) N-Nitrosodiphenylamine	10.296	169	1182676	3139.61	ng/ml	98
66) Azobenzene (1,2-DPH)	10.338	77	1316342	2634.24	ng/ml	87
68) 4-Bromophenyl phenyl e...	10.675	248	546207	4331.66	ng/ml	97
69) Hexachlorobenzene	10.750	284	617226	4254.30	ng/ml	98
70) Pentachlorophenol (PCP)	10.943	266	363768	4791.33	ng/ml	99
71) Phenanthrene	11.162	178	2302690	3437.96	ng/ml	97
72) Anthracene	11.216	178	2312152	3508.40	ng/ml	96
73) Carbazole	11.371	167	858655	1578.11	ng/ml	99
74) Di-n-butyl phthalate	11.724	149	2651399	3471.94	ng/ml	98
75) Fluoranthene	12.435	202	2665095	3804.46	ng/ml	97
76) Benzidine	12.596	184	1506619	7251.57	ng/ml	99
77) Pyrene	12.729	202	2681088	3831.29	ng/ml	95
80) Butyl benzyl phthalate	13.751	149	1344154	3770.70	ng/ml	94
81) Bis(2-ethylhexyl) adipate	13.922	129	1183408	3703.61	ng/ml	99
82) 3,3-Dichlorobenzidine	~~14.879~~	~~252~~	~~448650~~	~~6944.09~~	~~ng/ml~~	~~96~~
83) Benz(a)anthracene	14.912	228	2538581	3803.56	ng/ml	99
84) Chrysene	15.003	228	2370714	3850.07	ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.088	149	1799096	3815.54	ng/ml	97
87) Di-n-octyl phthalate	16.762	149	3203842	3414.68	ng/ml	99
88) Benzo(b)fluoranthene	17.516	252	2803227	3905.83	ng/ml	98
89) Benzo(k)fluoranthene	17.586	252	2555733	3752.77	ng/ml	99
90) Benzo(b+k)fluoranthene	17.586	252	5439284	7627.06	ng/ml	99
91) Benzo(e)pyrene	18.174	252	2630004	3743.97	ng/ml	99
92) Benzo(a)pyrene	18.292	252	2485829	3849.85	ng/ml	99
93) Perylene	18.500	252	2164033	3535.17	ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.838	276	2539375	4355.08	ng/ml	98
96) Dibenz(a,h)anthracene	20.902	278	2389624	4569.13	ng/ml	98
97) Benzo(g,h,i)perylene	21.378	276	2579448	4594.87	ng/ml	98

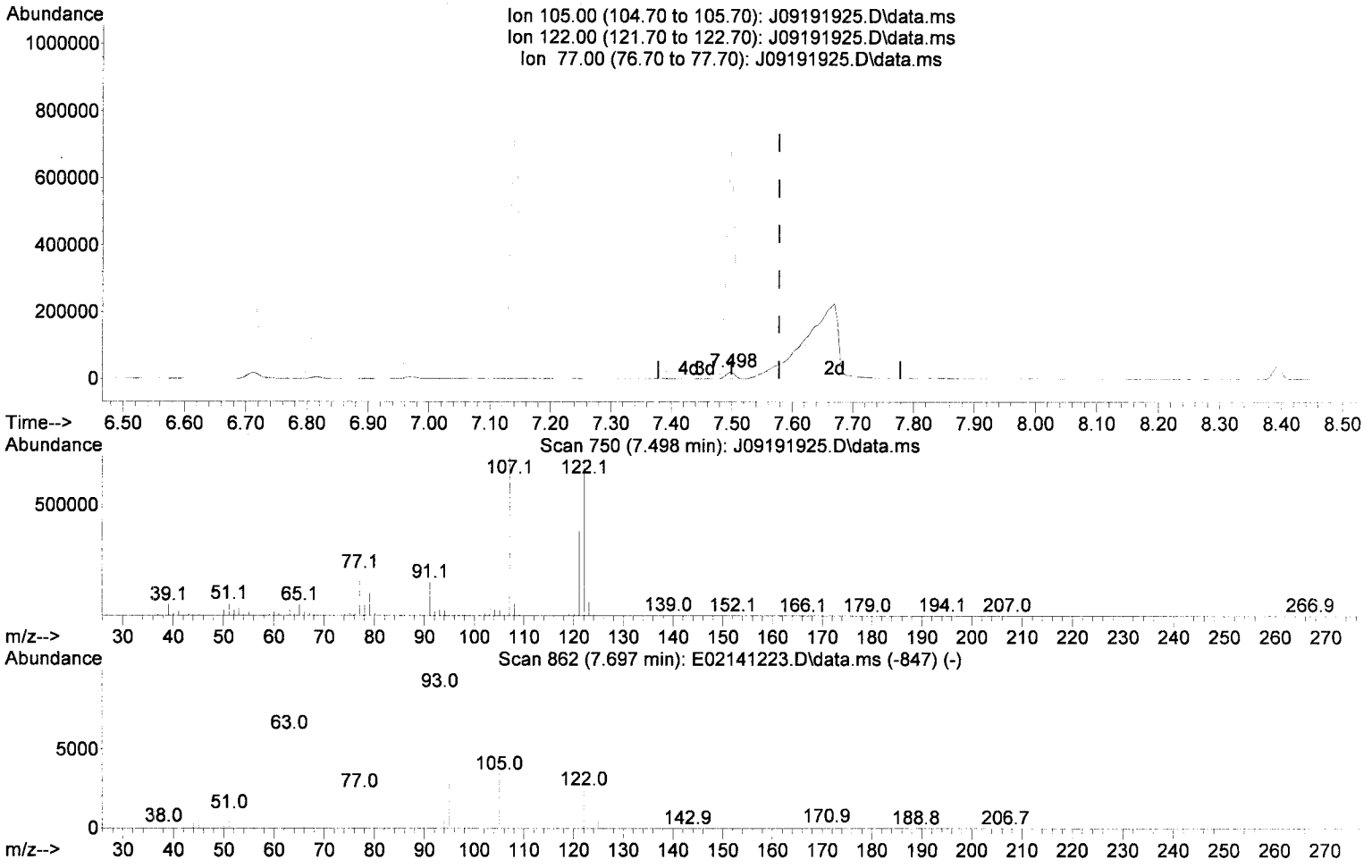
See MJ

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191925.D\data.ms

(26) Benzoic acid (T)

7.498min (-0.080) 556.98 ng/ml

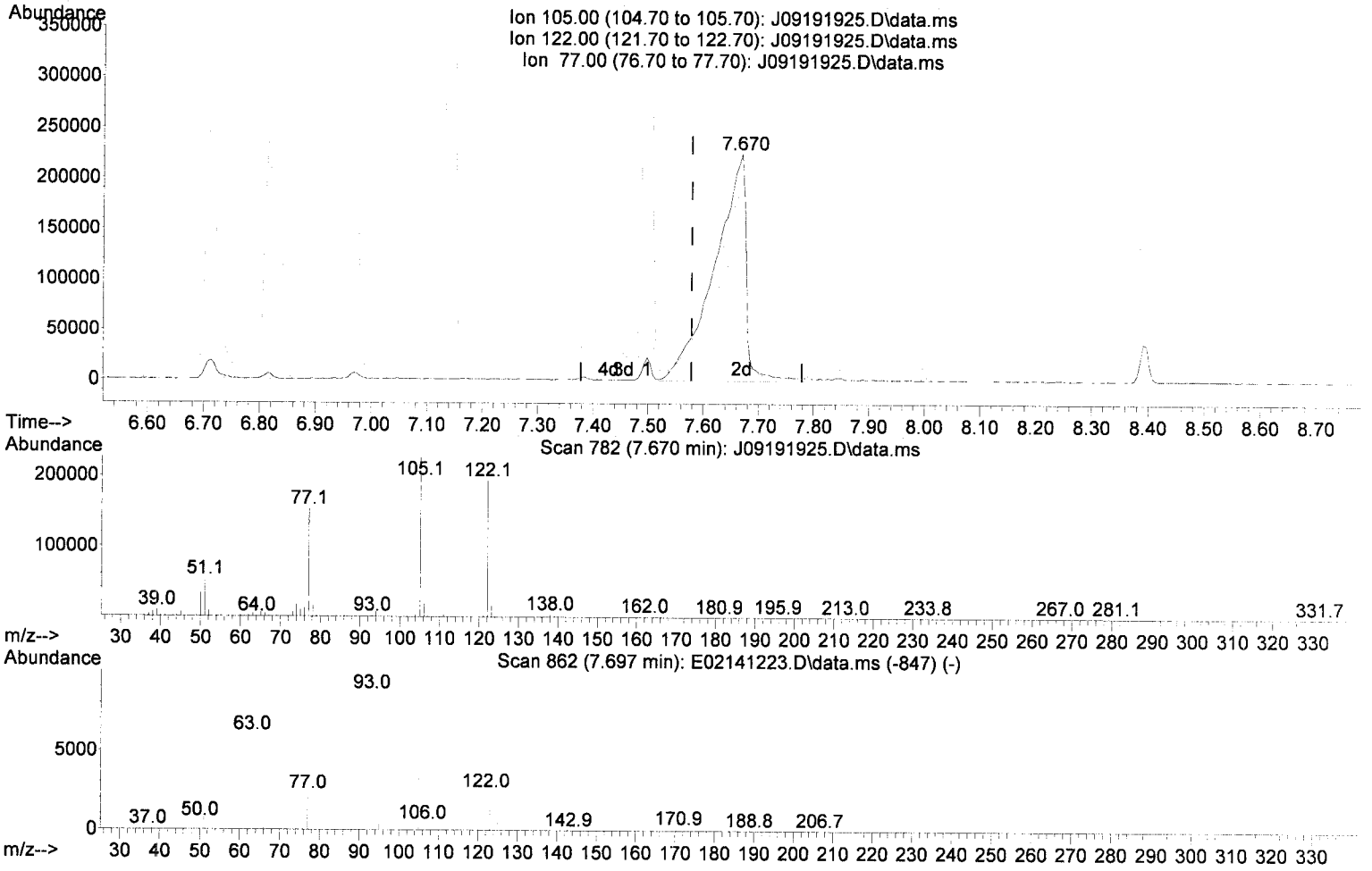
response 22439

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	2944.12#
77.00	72.00	841.49#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191925.D\data.ms

(26) Benzoic acid (T)

7.670min (+ 0.091) 7780.16 ng/ml m 9/20/19

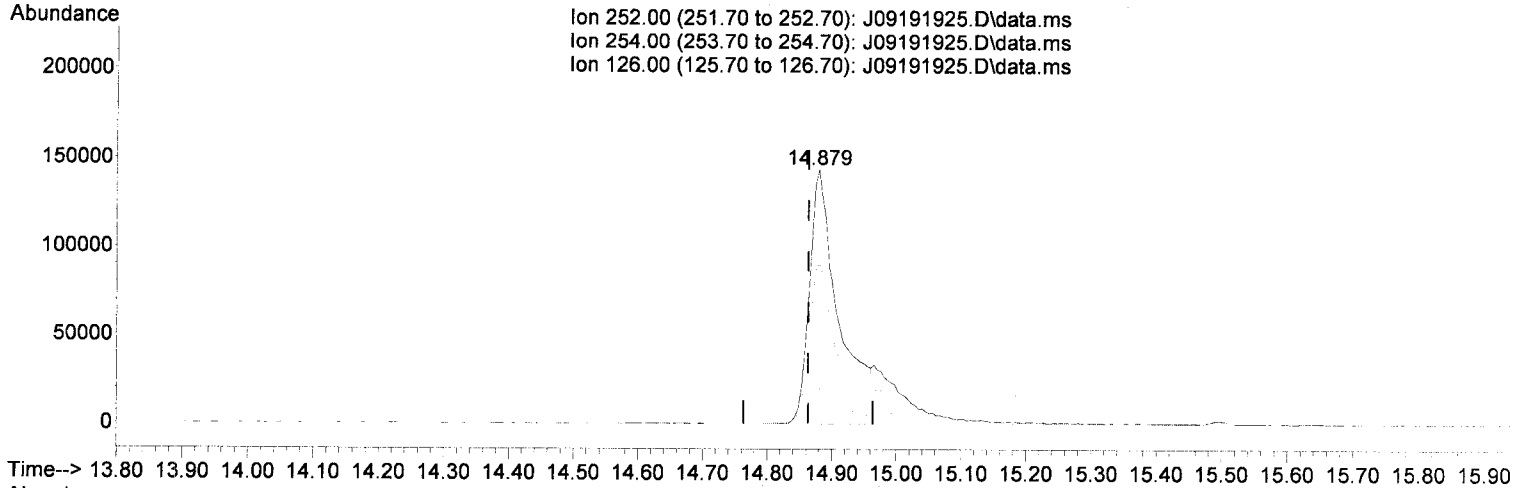
response 902544

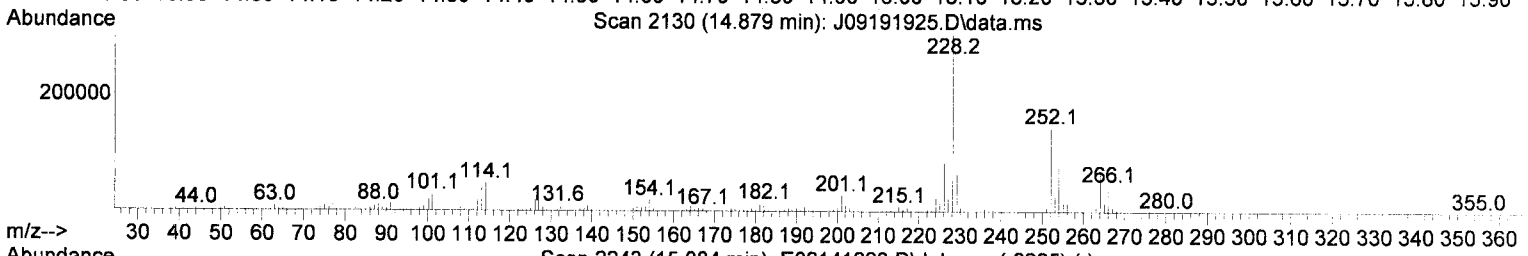
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	85.67
77.00	72.00	68.01
0.00	0.00	0.00

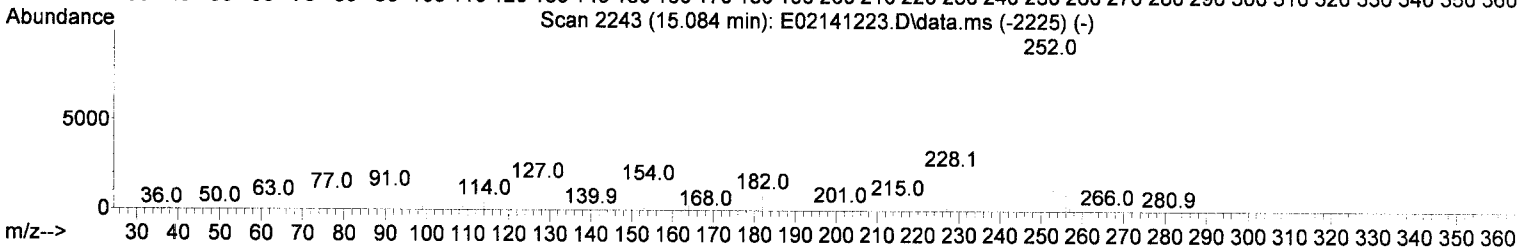
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191925.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.879min (+ 0.016) 6944.09 ng/ml

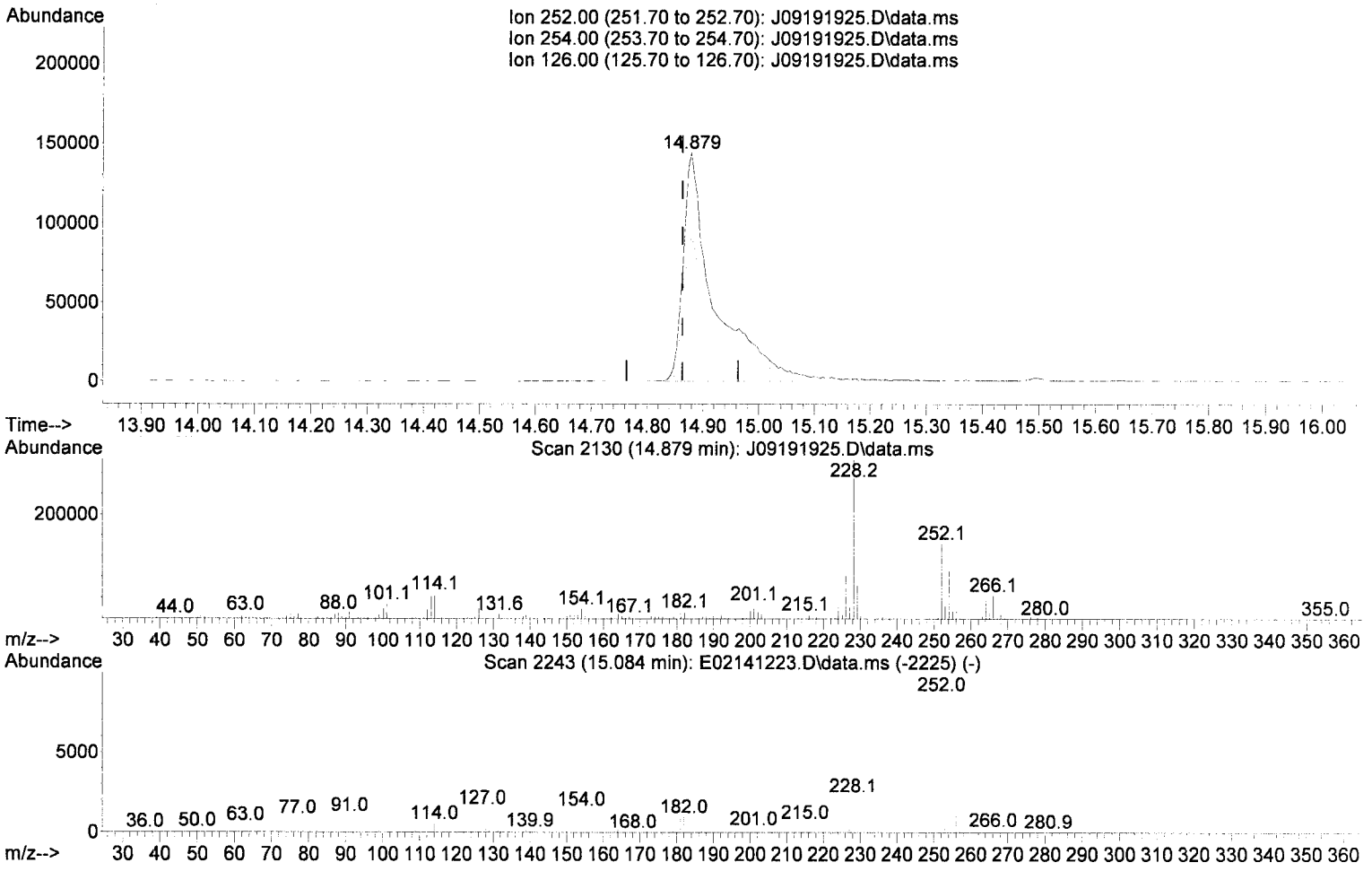
response 448650

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.38
126.00	12.00	13.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191925.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.879min (+ 0.016) 9026.86 ng/ml

response 555604

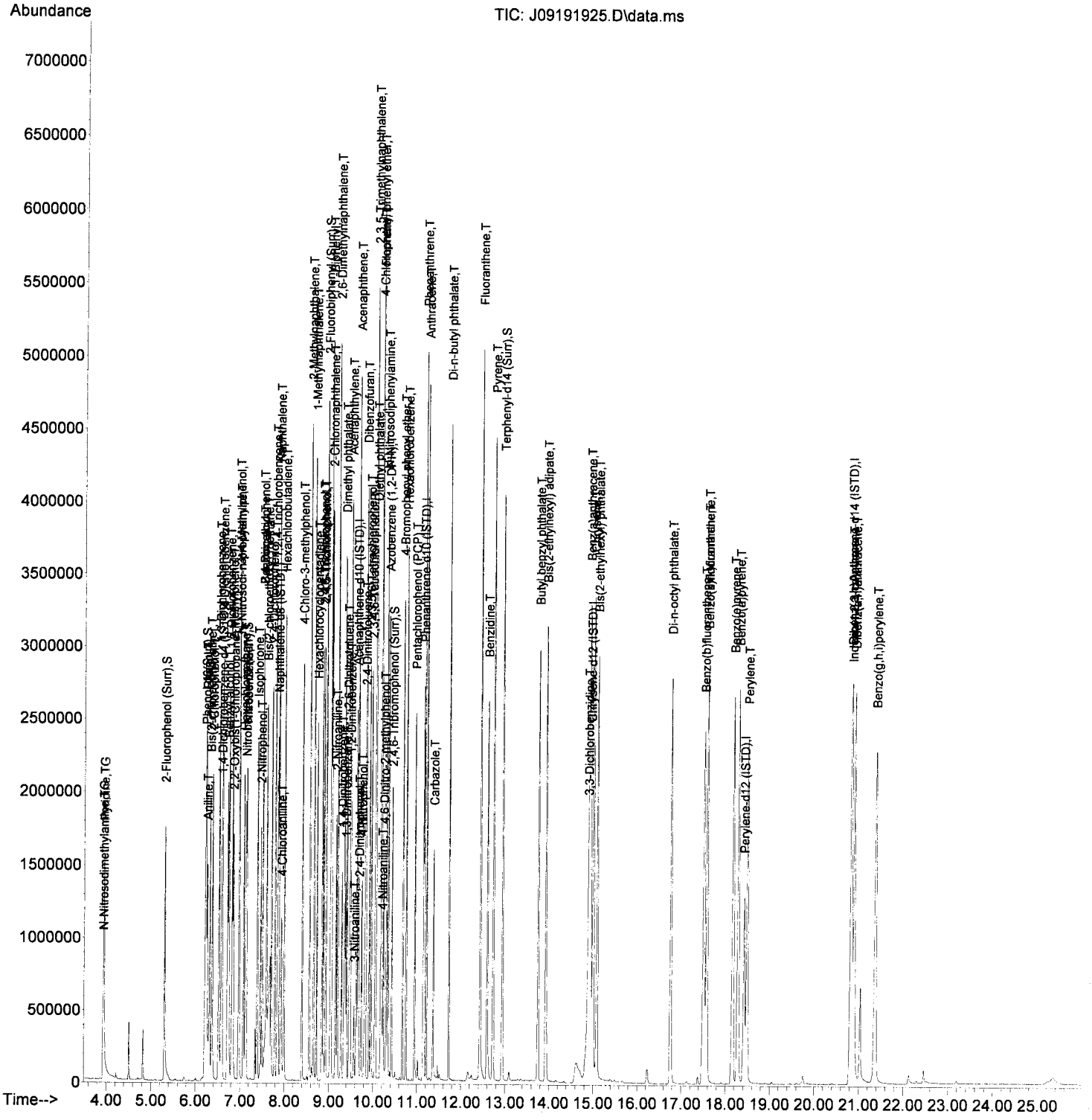
Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.38
126.00	12.00	13.81
0.00	0.00	0.00

9/20/19

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191925.D
Acq On : 20 Sep 2019 5:29 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL8
Misc : 1x, A19G245@4000
ALS Vial : 10 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:52 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.568	152	279602	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1094080	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.622	162	593235	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.141	188	1148482	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.944	240	1022230	2000.00	ng/ml	0.03
86) Perylene-d12 (ISTD)	18.426	264	1067597	2000.00	ng/ml	0.03
94) Dibenz(a,h)Anthrcene-d...	20.838	292	945822	2000.00	ng/ml	0.04
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.295	112	1150405	6066.23	ng/ml	0.00
5) Phenol-d6(Surr)	6.215	99	1391310	5711.74	ng/ml	0.01
19) Nitrobenzene-d5 (Surr)	7.124	82	1045001	4681.89	ng/ml	0.01
40) 2-Fluorobiphenyl (Surr)	8.932	172	2148364	4931.70	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.429	330	407389	7560.59	ng/ml	0.01
79) Terphenyl-d14 (Surr)	12.938	244	2699067	5401.22	ng/ml	0.02
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.883	74	674636m	5192.78	ng/ml	
3) Pyridine	3.893	79	1210013m	5463.38	ng/ml	
6) Phenol	6.231	94	1432862	5174.81	ng/ml	98
7) Aniline	6.252	93	1316393	5318.37	ng/ml	95
8) Bis(2-chloroethyl) ether	6.316	93	1158478	4697.35	ng/ml	99
9) 2-Chlorophenol	6.370	128	1211719	6075.04	ng/ml	99
10) 1,3-Dichlorobenzene	6.520	146	1260484	5843.89	ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	1202300	5743.45	ng/ml	99
12) Benzyl alcohol	6.712	108	768204	6007.21	ng/ml	98
13) 1,2-Dichlorobenzene	6.739	146	1159865	5512.26	ng/ml	99
14) 2-Methylphenol	6.819	107	839569	5236.51	ng/ml	98
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	943818	2966.84	ng/ml	91
16) N-Nitrosodi-n-propylamine	6.985	70	644101	3986.31	ng/ml	94
17) 3+4-Methylphenol	6.974	107	997248	5046.94	ng/ml	99
18) Hexachloroethane	7.076	201	419784	7283.73	ng/ml	95
20) Nitrobenzene	7.145	77	977466	4371.02	ng/ml	92
22) Isophorone	7.386	82	2075603	5227.70	ng/ml	100
23) 2-Nitrophenol	7.461	139	659170	6267.15	ng/ml	93
24) 2,4-Dimethylphenol	7.504	122	932922	6162.23	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.589	93	1142883	5166.72	ng/ml	98
26) Benzoic acid	7.579	105	96795	1449.32	ng/ml	96
27) 2,4-Dichlorophenol	7.702	162	943067	7188.94	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.787	180	1041502	6557.84	ng/ml	100
29) Naphthalene	7.867	128	2711030	4824.07	ng/ml	95
30) 4-Chloroaniline	7.926	127	906180	6017.35	ng/ml	100
31) Hexachlorobutadiene	7.996	225	570722	6738.45	ng/ml	98
32) 4-Chloro-3-methylphenol	8.397	107	912303	5774.18	ng/ml	93
33) 2-Methylnaphthalene	8.563	142	2034929	5303.97	ng/ml	97
34) 1-Methylnaphthalene	8.664	142	1893325	5134.69	ng/ml	98
36) Hexachlorocyclopentadiene	8.729	237	601203	6404.52	ng/ml	95
37) 2,4,6-Trichlorophenol	8.846	196	713503	6449.67	ng/ml	99
38) 2,4,5-Trichlorophenol	8.884	198	699105	6931.12	ng/ml	99
39) 1,1'-Biphenyl	9.039	154	2268485	4602.89	ng/ml	95
41) 2-Chloronaphthalene	9.060	162	1860060	5142.02	ng/ml	98
42) 2-Nitroaniline	9.162	138	739914	6143.79	ng/ml	93
43) 2,6-Dimethylnaphthalene	9.199	156	1742370	4722.69	ng/ml	98

See MJ

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.290	168	365105	6493.74 ng/ml	88
45) Dimethyl phthalate	9.354	163	2223667	5240.92 ng/ml	97
46) 1,3-Dinitrobenzene	9.381	168	407082	6314.46 ng/ml	91
47) 2,6-Dinitrotoluene	9.408	165	575872	6310.58 ng/ml	96
48) 1,2-Dinitrobenzene	9.472	168	266233	6228.85 ng/ml	93
49) Acenaphthylene	9.483	152	2704211	4663.72 ng/ml	95
50) 3-Nitroaniline	9.579	138	180797	Below Cal	97
51) Acenaphthene	9.659	153	1803278	4797.51 ng/ml	99
52) 2,4-Dinitrophenol	9.681	184	272053	5508.37 ng/ml	97
53) 4-Nitrophenol	9.745	139	467183	5690.24 ng/ml	97
54) 2,4-Dinitrotoluene	9.820	165	734363	6253.07 ng/ml	93
55) Dibenzofuran	9.836	168	2531005	4938.04 ng/ml	95
56) 2,3,5,6-Tetrachlorophenol	9.916	232	597064	6702.12 ng/ml	95
57) 2,3,4,6-Tetrachlorophenol	9.959	232	603345	6692.46 ng/ml	96
58) Diethyl phthalate	10.066	149	1916805	4737.64 ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.050	170	1592300	4860.15 ng/ml	97
60) Fluorene	10.189	166	1824399	4519.48 ng/ml	98
61) 4-Chlorophenyl phenyl ...	10.178	204	992417	5290.11 ng/ml	95
62) 4-Nitroaniline	10.205	138	385746	4719.73 ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.237	198	377769	5981.86 ng/ml	95
65) N-Nitrosodiphenylamine	10.301	169	1569352	4443.39 ng/ml	97
66) Azobenzene (1,2-DPH)	10.339	77	1601806	3418.86 ng/ml	88
68) 4-Bromophenyl phenyl e...	10.681	248	726568	6145.51 ng/ml	92
69) Hexachlorobenzene	10.756	284	795928	5851.17 ng/ml	98
70) Pentachlorophenol (PCP)	10.948	266	500914	6716.78 ng/ml	99
71) Phenanthrene	11.168	178	2932288	4669.35 ng/ml	96
72) Anthracene	11.221	178	2907155	4704.86 ng/ml	96
73) Carbazole	11.371	167	1156567	2267.12 ng/ml	99
74) Di-n-butyl phthalate	11.729	149	3301933	4611.59 ng/ml	97
75) Fluoranthene	12.441	202	3417993	5203.99 ng/ml	96
76) Benzidine	12.601	184	2204013	10575.22 ng/ml	99
77) Pyrene	12.735	202	3436590	5237.78 ng/ml	95
80) Butyl benzyl phthalate	13.756	149	1779167	5557.56 ng/ml	93
81) Bis(2-ethylhexyl) adipate	13.933	129	1497303	5217.89 ng/ml	99
82) 3,3-Dichlorobenzidine	~~14.890~~	~~252~~	~~494238~~	~~8919.45 ng/ml~~	97
83) Benz(a)anthracene	14.917	228	3394067	5662.58 ng/ml	99
84) Chrysene	15.013	228	3095456	5597.68 ng/ml	97
85) Bis(2-ethylhexyl) phth...	15.093	149	2338505	5522.48 ng/ml	96
87) Di-n-octyl phthalate	16.773	149	4149203	4742.46 ng/ml	99
88) Benzo(b)fluoranthene	17.522	252	3768759	5828.72 ng/ml	99
89) Benzo(k)fluoranthene	17.602	252	3115398	5077.74 ng/ml	99
90) Benzo(b+k)fluoranthene	17.602	252	7129046	11096.00 ng/ml	99
91) Benzo(e)pyrene	18.185	252	3489142	5513.34 ng/ml	99
92) Benzo(a)pyrene	18.308	252	3235783	5562.53 ng/ml	100
93) Perylene	18.511	252	2908580	5274.09 ng/ml	99
95) Indeno(1,2,3-cd)pyrene	20.854	276	3489319	6562.35 ng/ml	97
96) Dibenz(a,h)anthracene	20.913	278	3129173	6561.19 ng/ml	99
97) Benzo(g,h,i)perylene	21.389	276	3417702	6676.22 ng/ml	97

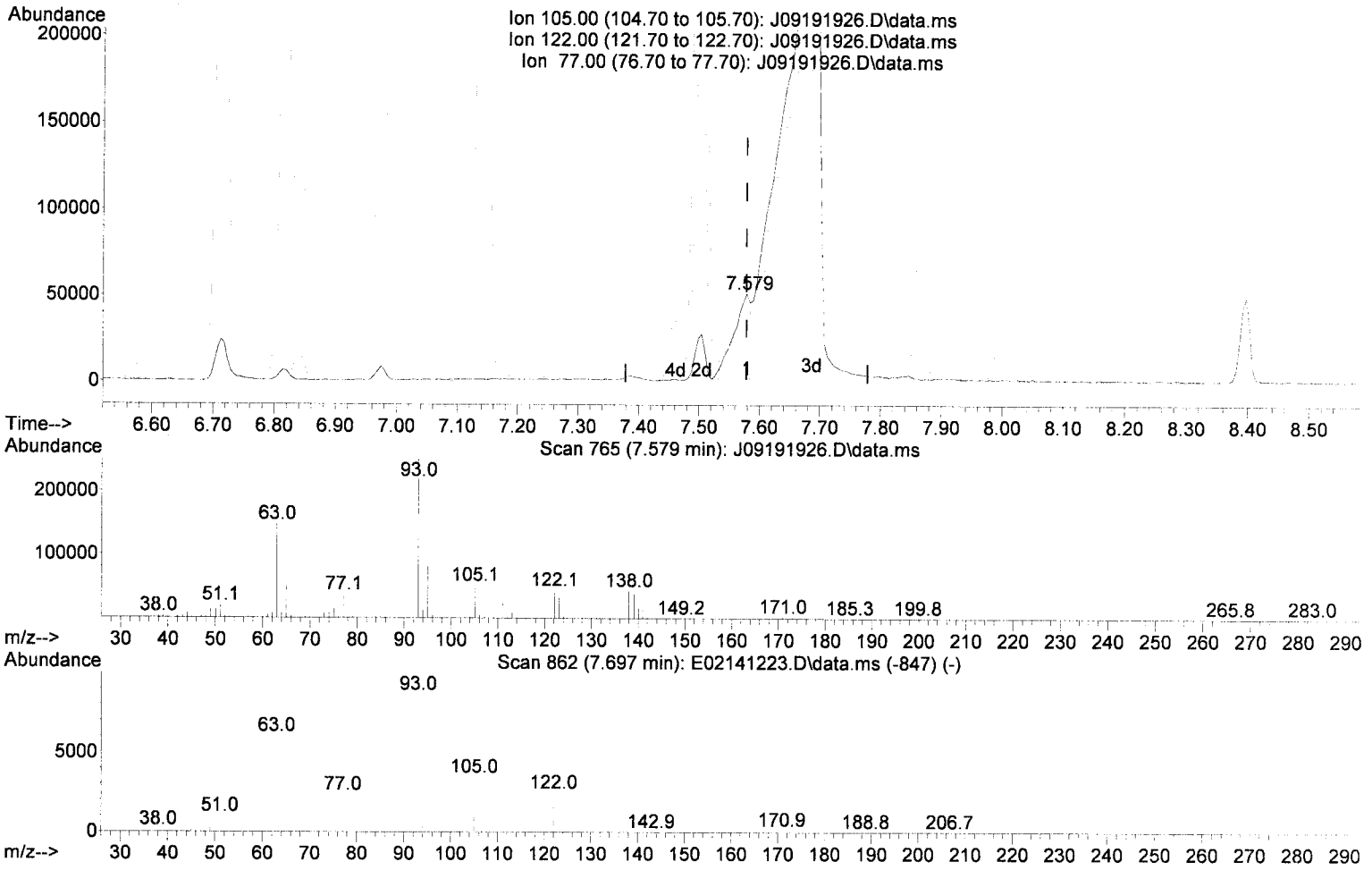
See MS

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

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191926.D\data.ms

(26) Benzoic acid (T)

7.579min (+ 0.000) 1449.32 ng/ml

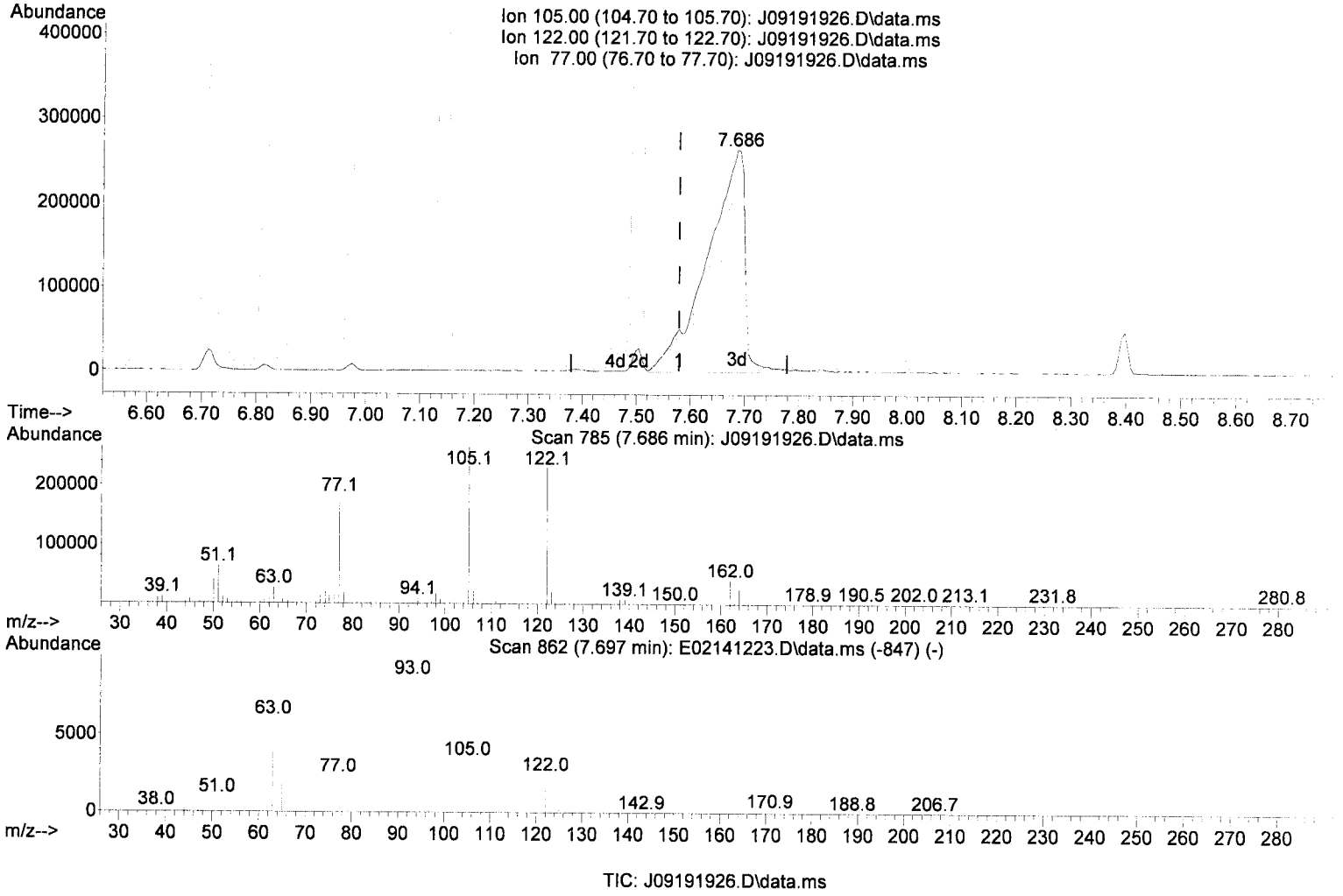
response 96795

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	84.66
77.00	72.00	72.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191926.D\data.ms

(26) Benzoic acid (T)

7.686min (+ 0.107) 10743.23 ng/ml m 9/20/19

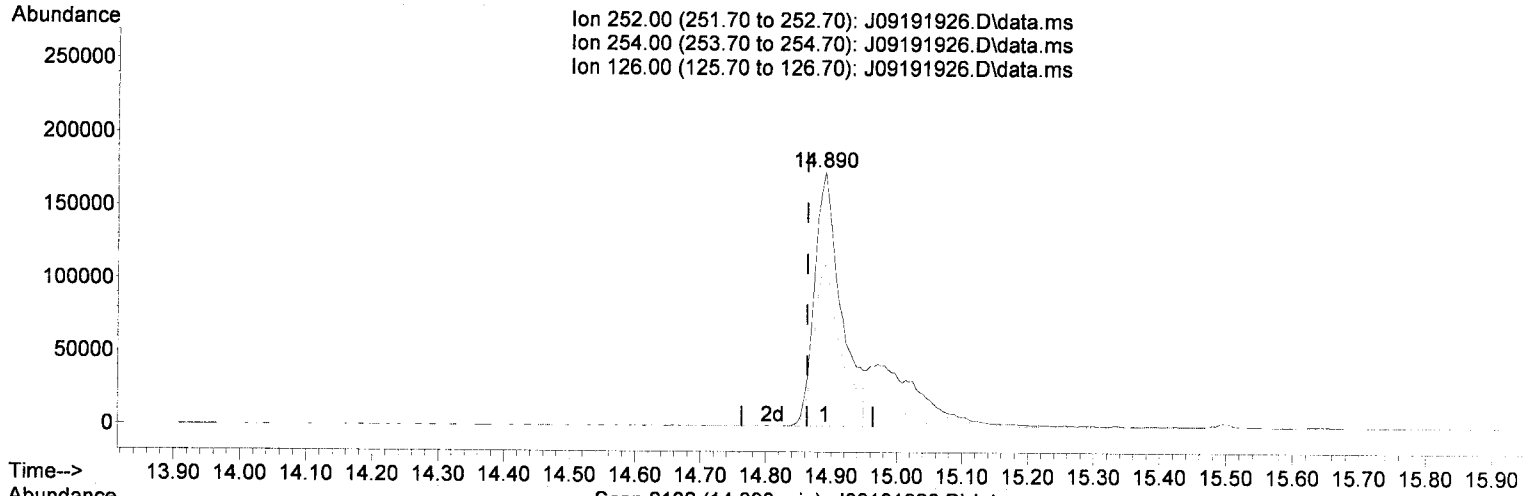
response 1277463

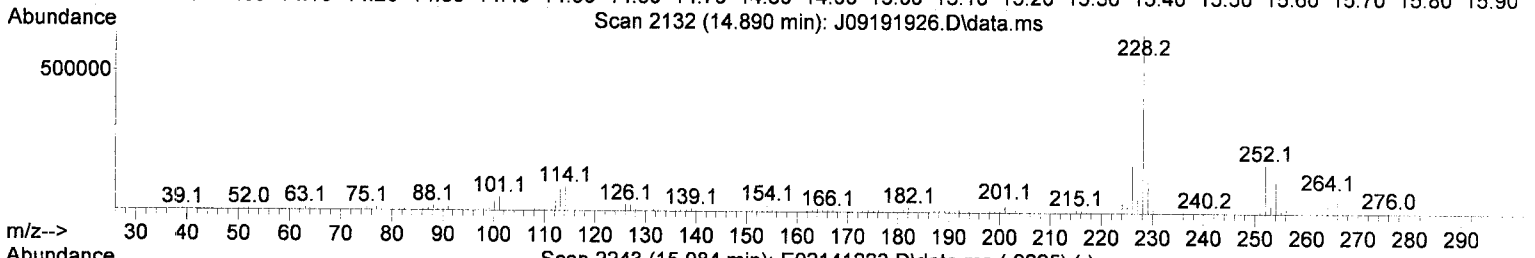
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	87.13
77.00	72.00	68.78
0.00	0.00	0.00

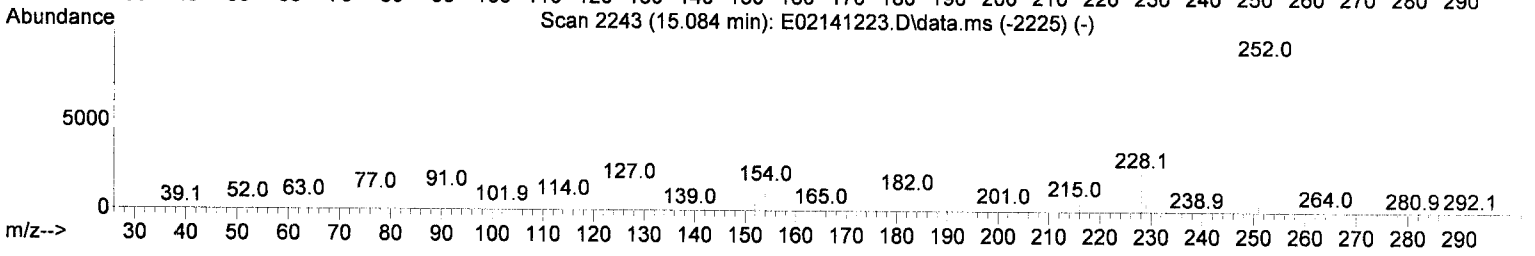
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191926.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.890min (+ 0.027) 8919.45 ng/ml

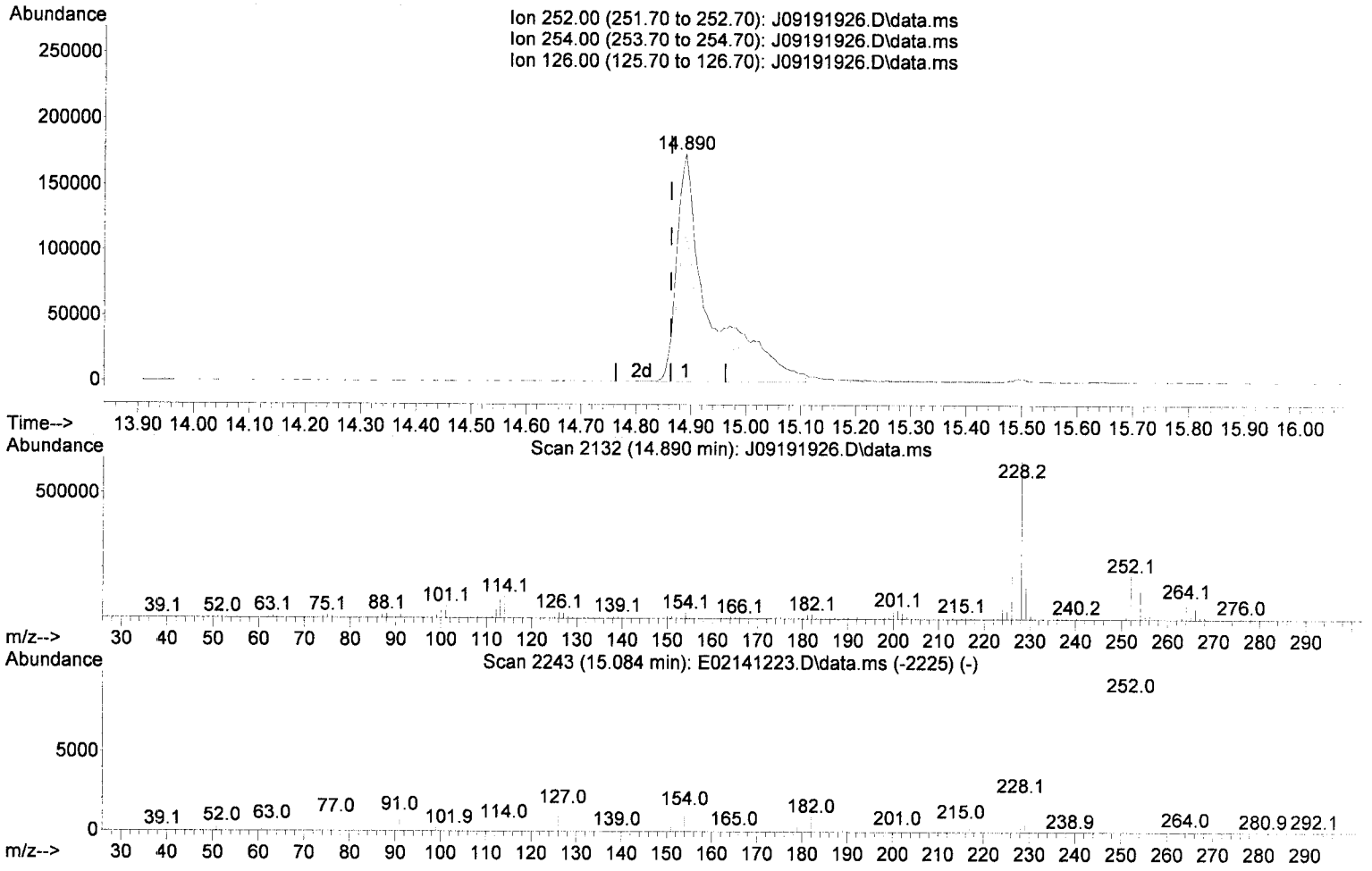
response 494238

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.96
126.00	12.00	13.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191926.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.890min (+ 0.027) 15215.95 ng/ml 9/20/19

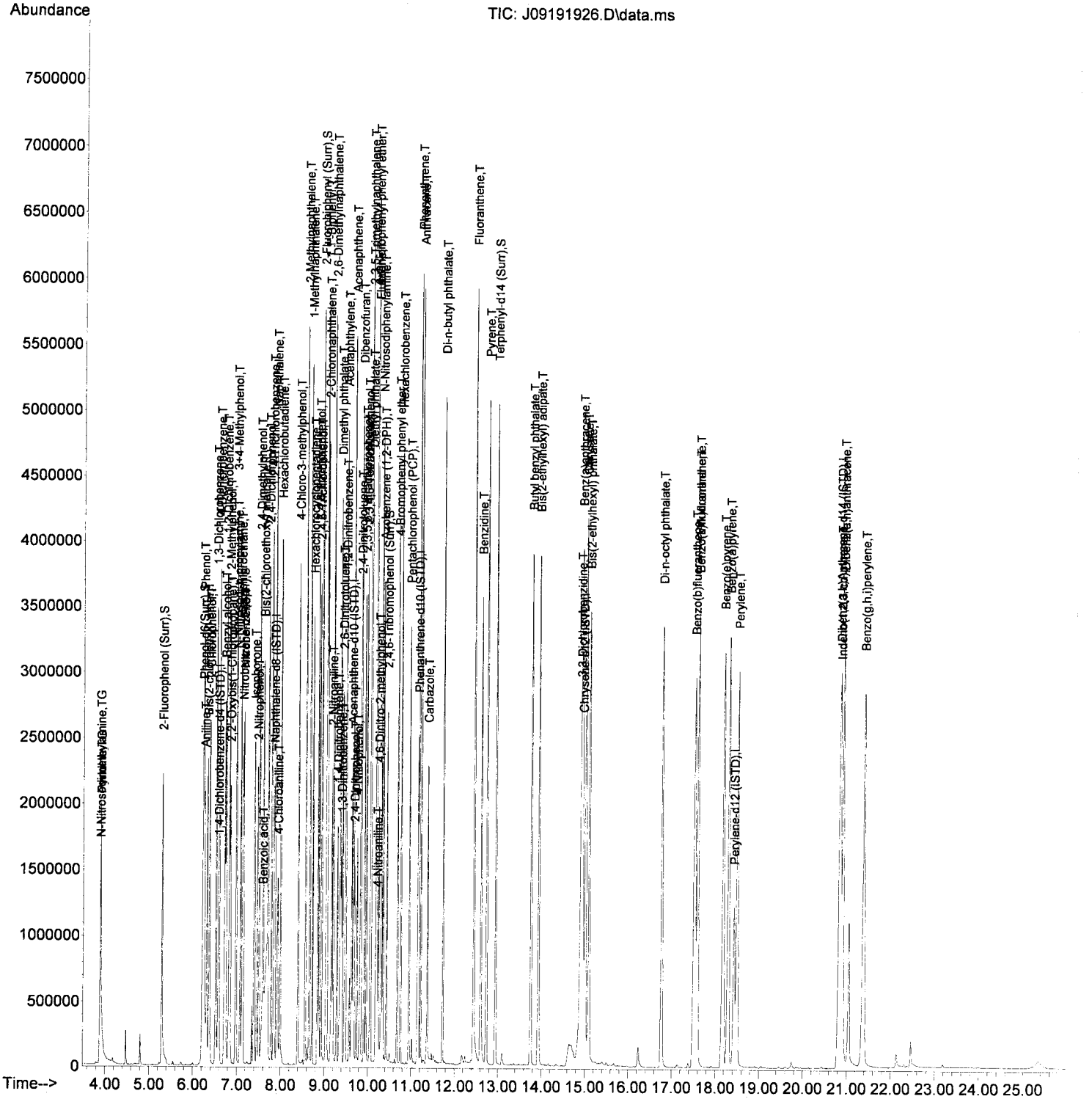
response 730056

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	63.96
126.00	12.00	13.33
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191926.D
Acq On : 20 Sep 2019 6:04 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CAL9
Misc : 1x, A19G246@6000
ALS Vial : 11 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:46:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

GJL 9/20/19

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.578	152	269345	2000.00	ng/ml	0.01
21) Naphthalene-d8 (ISTD)	7.846	136	1074761	2000.00	ng/ml	0.01
35) Acenaphthene-d10 (ISTD)	9.627	162	593771	2000.00	ng/ml	0.01
64) Phenanthrene-d10 (ISTD)	11.135	188	1167219	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.933	240	1013392	2000.00	ng/ml	0.02
86) Perylene-d12 (ISTD)	18.409	264	1108960	2000.00	ng/ml	0.01
94) Dibenz(a,h)Anthrcene-d...	20.822	292	982889	2000.00	ng/ml	0.03
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	1458990	7986.41	ng/ml	0.03
5) Phenol-d6(Surr)	6.225	99	1721904	7338.12	ng/ml	0.02
19) Nitrobenzene-d5 (Surr)	7.129	82	1284804	5974.84	ng/ml	0.02
40) 2-Fluorobiphenyl (Surr)	8.937	172	2595271	5952.22	ng/ml	0.01
67) 2,4,6-Tribromophenol (...	10.435	330	524653	9580.55	ng/ml	0.02
79) Terphenyl-d14 (Surr)	12.932	244	3392009	6847.09	ng/ml	0.01
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.957	74	799031	6384.48	ng/ml	95
3) Pyridine	3.963	79	1480958m	6941.37	ng/ml#	
6) Phenol	6.247	94	1750392	6562.31	ng/ml	93
7) Aniline	6.263	93	1480736	6210.15	ng/ml	95
8) Bis(2-chloroethyl) ether	6.322	93	1435010	6040.20	ng/ml	98
9) 2-Chlorophenol	6.375	128	1496104	7786.46	ng/ml	98
10) 1,3-Dichlorobenzene	6.525	146	1570022	7556.17	ng/ml	99
11) 1,4-Dichlorobenzene	6.594	146	1504749	7462.00	ng/ml	99
12) Benzyl alcohol	6.723	108	932774	7571.89	ng/ml	99
13) 1,2-Dichlorobenzene	6.744	146	1419977	7005.43	ng/ml	100
14) 2-Methylphenol	6.824	107	1030806	6674.12	ng/ml	99
15) 2,2'-Oxybis(1-Chloropr...	6.846	45	1103589	3601.18	ng/ml	87
16) N-Nitrosodi-n-propylamine	6.995	70	803148	5159.93	ng/ml	94
17) 3+4-Methylphenol	6.985	107	1205305	6332.18	ng/ml	99
18) Hexachloroethane	7.081	201	541884	9760.36	ng/ml	92
20) Nitrobenzene	7.151	77	1198679	5564.36	ng/ml	91
22) Isophorone	7.397	82	2693969	6907.11	ng/ml	99
23) 2-Nitrophenol	7.461	139	838038	8987.28	ng/ml	94
24) 2,4-Dimethylphenol	7.509	122	1099526	7393.25	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.595	93	1380842	6354.69	ng/ml	98
26) Benzoic acid	7.509	105	38011	776.83	ng/ml#	1
27) 2,4-Dichlorophenol	7.707	162	1167761	9061.78	ng/ml	97
28) 1,2,4-Trichlorobenzene	7.787	180	1277566	8188.82	ng/ml	99
29) Naphthalene	7.867	128	3240737	5870.30	ng/ml	95
30) 4-Chloroaniline	7.931	127	1186251	7997.52	ng/ml	100
31) Hexachlorobutadiene	7.996	225	701350	8429.61	ng/ml	98
32) 4-Chloro-3-methylphenol	8.397	107	1141605	7355.36	ng/ml	93
33) 2-Methylnaphthalene	8.563	142	2448839	6497.55	ng/ml	98
34) 1-Methylnaphthalene	8.664	142	2286875	6313.48	ng/ml	98
36) Hexachlorocyclopentadiene	8.728	237	759063	8078.87	ng/ml	96
37) 2,4,6-Trichlorophenol	8.851	196	922776	8200.21	ng/ml	98
38) 2,4,5-Trichlorophenol	8.884	198	870124	8618.86	ng/ml	98
39) 1,1'-Biphenyl	9.039	154	2706900	5487.50	ng/ml	95
41) 2-Chloronaphthalene	9.060	162	2240055	6186.91	ng/ml	98
42) 2-Nitroaniline	9.167	138	944974	7839.40	ng/ml	90
43) 2,6-Dimethylnaphthalene	9.199	156	2089018	5657.17	ng/ml	98

See MI

See MI

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.295	168	488295	8676.95 ng/ml	84
45) Dimethyl phthalate	9.360	163	2768841	6519.94 ng/ml	96
46) 1,3-Dinitrobenzene	9.386	168	525829	8149.05 ng/ml	91
47) 2,6-Dinitrotoluene	9.413	165	727325	7963.06 ng/ml	93
48) 1,2-Dinitrobenzene	9.477	168	322227	7532.10 ng/ml	94
49) Acenaphthylene	9.488	152	3146686	5421.92 ng/ml	95
50) 3-Nitroaniline	9.584	138	174843	Below Cal	96
51) Acenaphthene	9.664	153	2204696	5860.16 ng/ml	99
52) 2,4-Dinitrophenol	9.686	184	388560	7229.26 ng/ml	93
53) 4-Nitrophenol	9.755	139	610739	7150.14 ng/ml	97
54) 2,4-Dinitrotoluene	9.825	165	868405	7387.76 ng/ml	92
55) Dibenzofuran	9.836	168	3003141	5853.90 ng/ml	93
56) 2,3,5,6-Tetrachlorophenol	9.916	232	763806	8438.44 ng/ml	96
57) 2,3,4,6-Tetrachlorophenol	9.964	232	773723	8433.64 ng/ml	95
58) Diethyl phthalate	10.066	149	2319061	5726.69 ng/ml	94
59) 2,3,5-Trimethylnaphtha...	10.050	170	1931750	5890.92 ng/ml	99
60) Fluorene	10.189	166	2171368	5374.15 ng/ml	99
61) 4-Chlorophenyl phenyl ...	10.178	204	1192807	6352.55 ng/ml	94
62) 4-Nitroaniline	10.210	138	523369	6397.82 ng/ml	97
63) 4,6-Dinitro-2-methylph...	10.242	198	504056	7617.61 ng/ml	93
65) N-Nitrosodiphenylamine	10.306	169	1760214	4903.79 ng/ml	97
66) Azobenzene (1,2-DPH)	10.344	77	1950077	4095.39 ng/ml	78
68) 4-Bromophenyl phenyl e...	10.681	248	926306	7709.18 ng/ml	93
69) Hexachlorobenzene	10.756	284	1001688	7245.58 ng/ml	98
70) Pentachlorophenol (PCP)	10.948	266	646595	8238.97 ng/ml	98
71) Phenanthrene	11.167	178	3584429	5616.19 ng/ml	96
72) Anthracene	11.221	178	3477728	5537.91 ng/ml	95
73) Carbazole	11.371	167	1165062	2247.11 ng/ml	99
74) Di-n-butyl phthalate	11.724	149	4037361	5548.19 ng/ml	96
75) Fluoranthene	12.435	202	4158773	6230.20 ng/ml	95
76) Benzidine	12.595	184	3017555	13485.44 ng/ml	99
77) Pyrene	12.729	202	4271888	6406.36 ng/ml	95
80) Butyl benzyl phthalate	13.745	149	2308181	7272.91 ng/ml	91
81) Bis(2-ethylhexyl) adipate	13.917	129	1955106	6872.69 ng/ml	99
82) 3,3-Dichlorobenzidine	14.874	252	572542	10901.24 ng/ml	98
83) Benz(a)anthracene	14.906	228	4360504	7338.40 ng/ml	98
84) Chrysene	15.002	228	3992263	7282.39 ng/ml	96
85) Bis(2-ethylhexyl) phth...	15.083	149	2986931	7115.28 ng/ml	95
87) Di-n-octyl phthalate	16.751	149	5450180	5838.44 ng/ml	98
88) Benzo(b)fluoranthene	17.522	252	5003892	7450.31 ng/ml	98
89) Benzo(k)fluoranthene	17.591	252	3789489	5946.05 ng/ml	98
90) Benzo(b+k)fluoranthene	17.591	252	9407940	14096.81 ng/ml	98
91) Benzo(e)pyrene	18.174	252	4556103	6930.76 ng/ml	96
92) Benzo(a)pyrene	18.302	252	4292201	7103.37 ng/ml	100
93) Perylene	18.500	252	3844220	6710.68 ng/ml	98
95) Indeno(1,2,3-cd)pyrene	20.838	276	4879339	8830.49 ng/ml	97
96) Dibenz(a,h)anthracene	20.902	278	4143300	8359.97 ng/ml	98
97) Benzo(g,h,i)perylene	21.383	276	4554601	8561.53 ng/ml	98

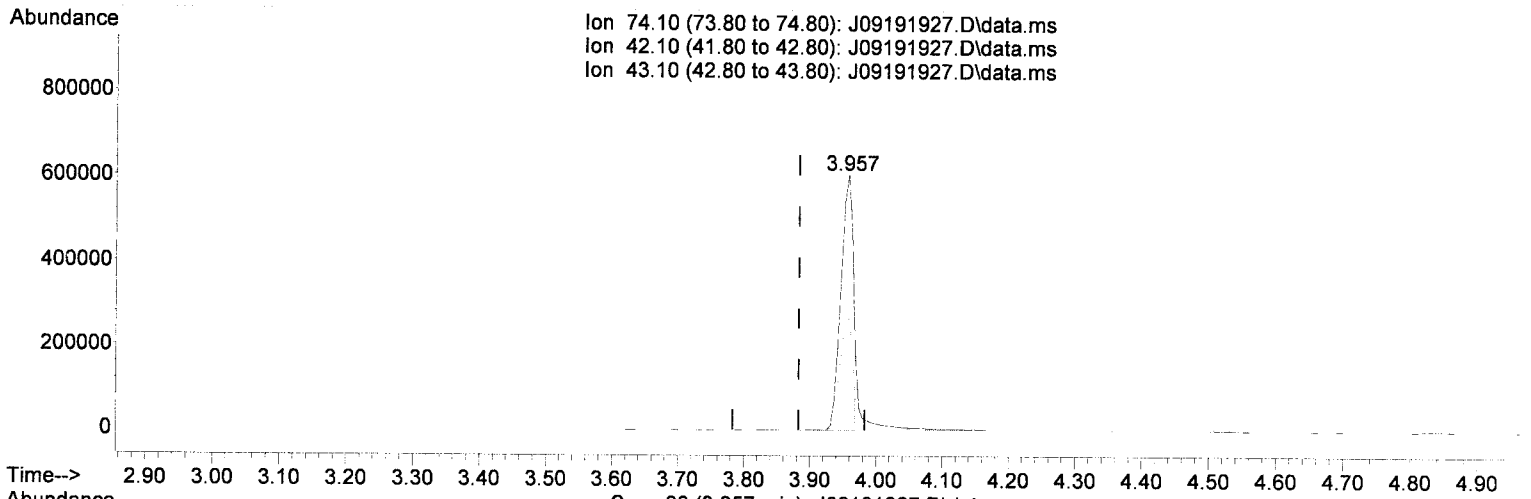
See MS

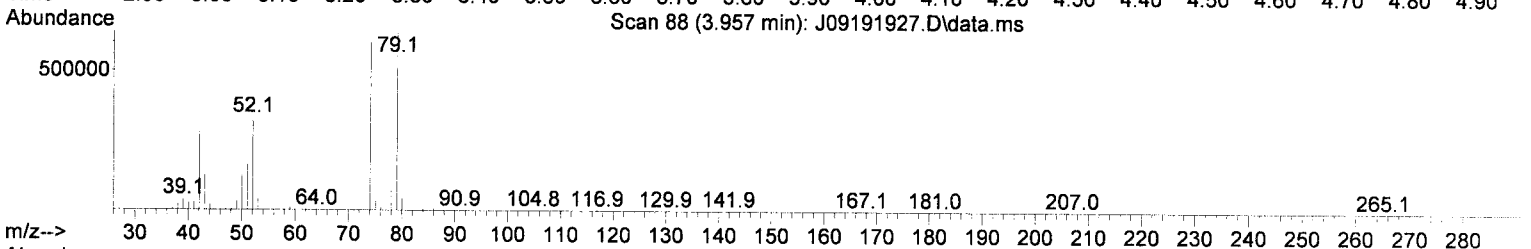
(#) = qualifier out of range (m) = manual integration (+) = signals summed

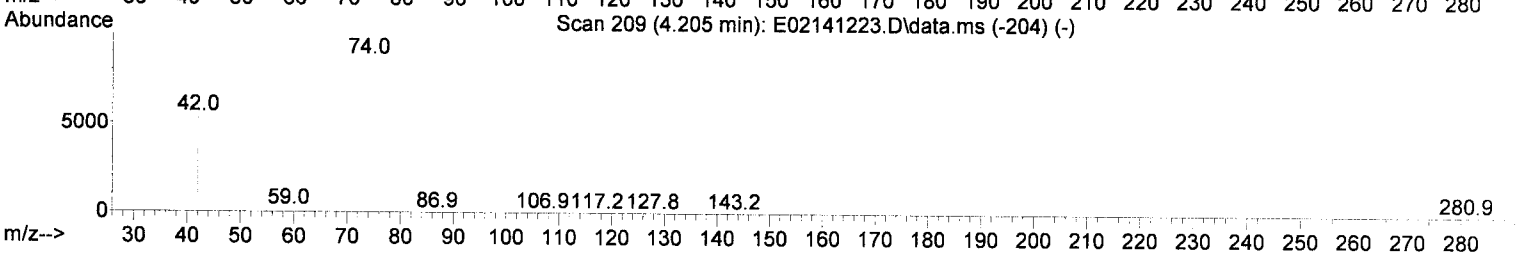
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191927.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.957min (+ 0.075) 6384.48 ng/ml

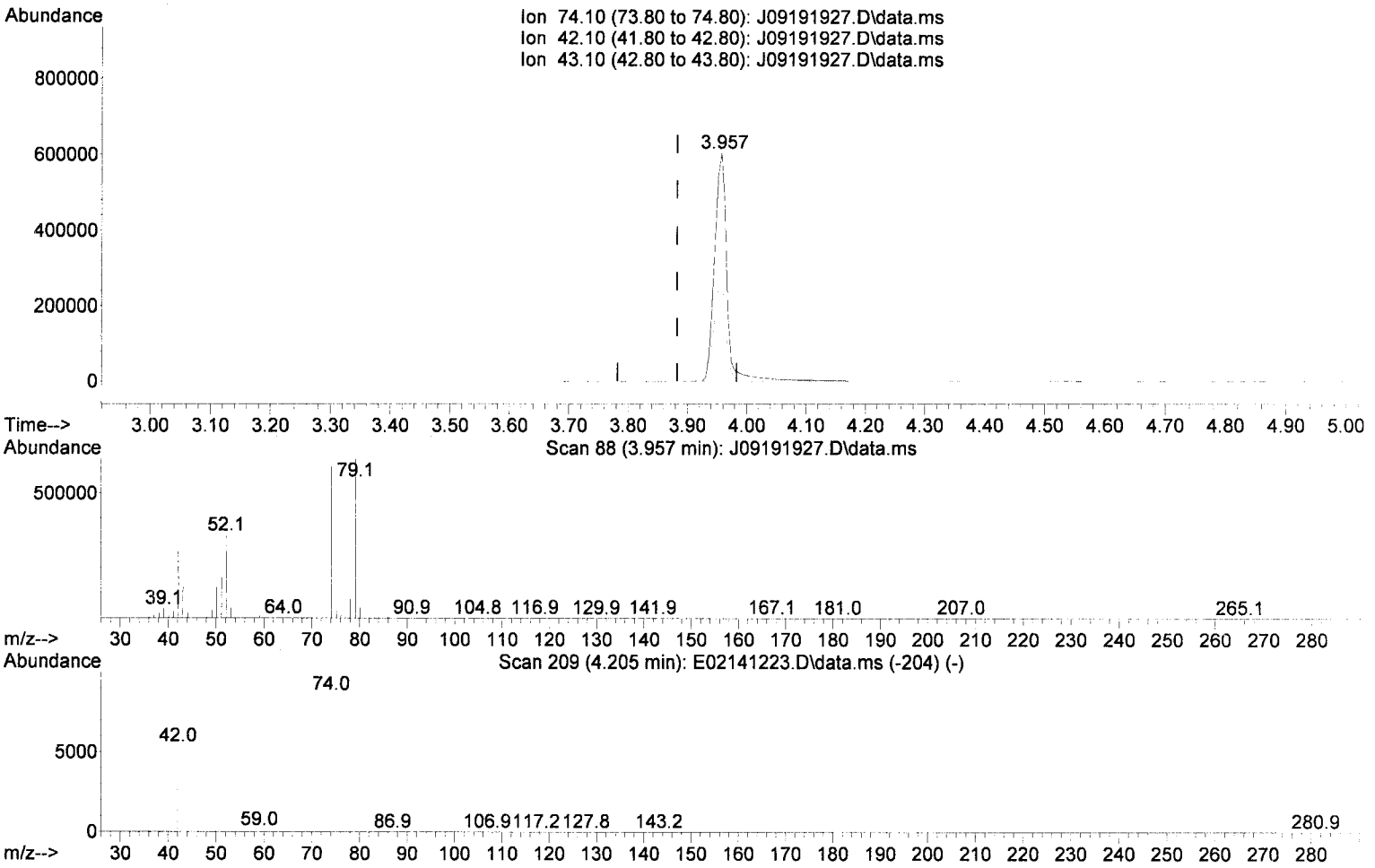
response 799081

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	45.78
43.10	22.20	20.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.957min (+ 0.075) 6923.78 ng/ml m 9/20/19

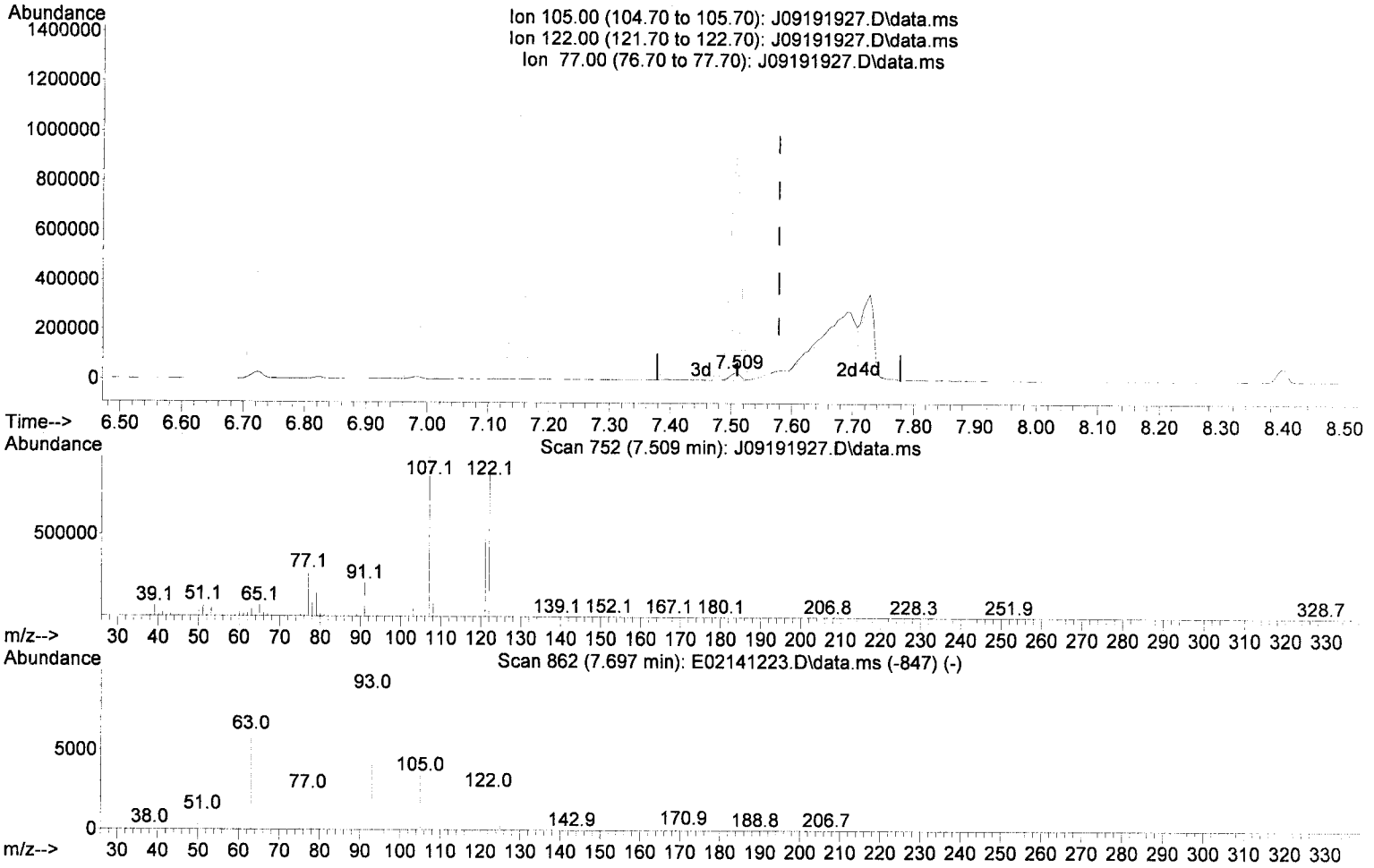
response 866525

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	45.78
43.10	22.20	20.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(26) Benzoic acid (T)

7.509min (-0.070) 776.83 ng/ml

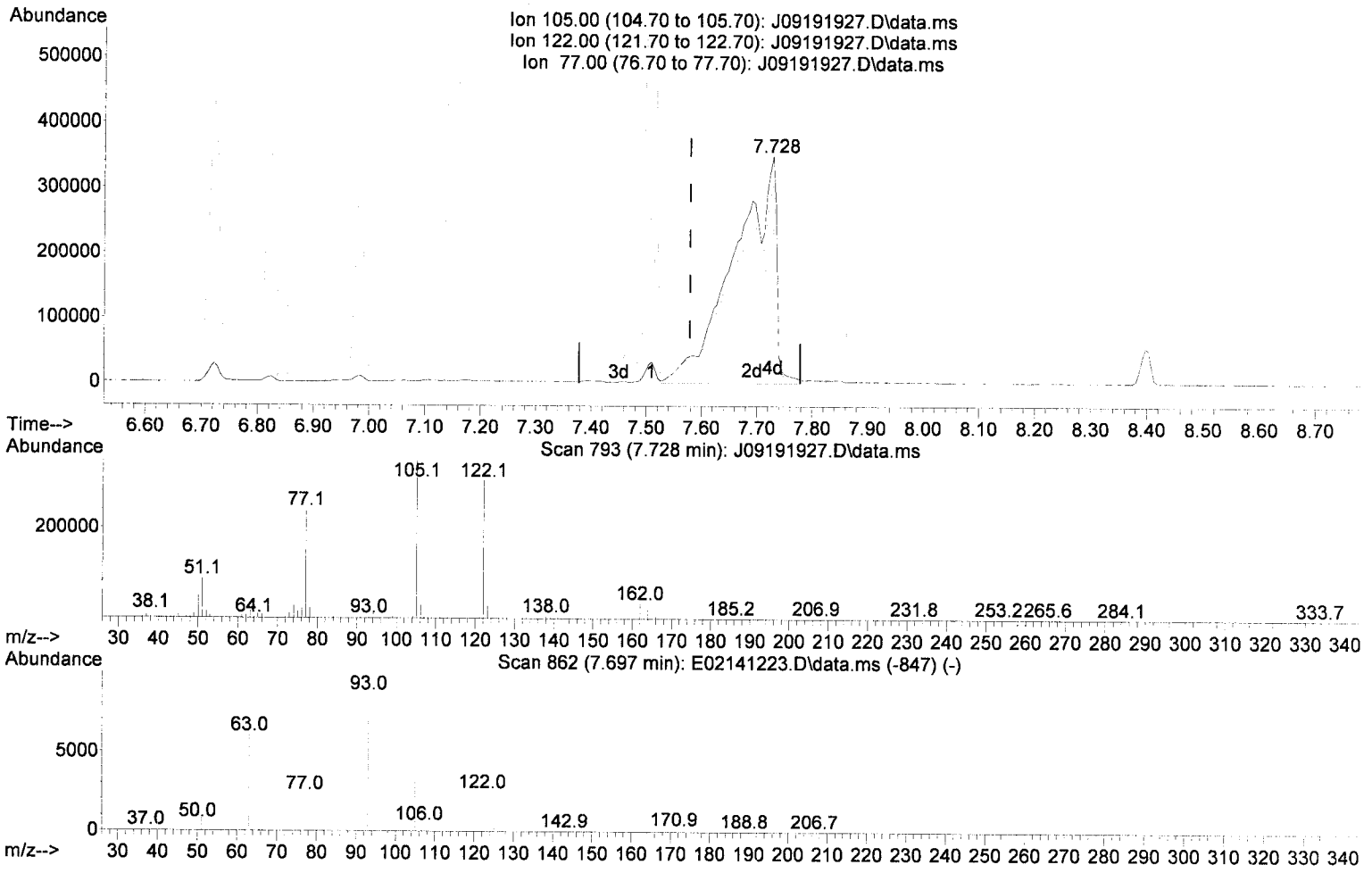
response 38011

Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	2797.37#
77.00	72.00	828.09#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(26) Benzoic acid (T)

7.728min (+ 0.150) 14150.47 ng/ml m

9/20/19

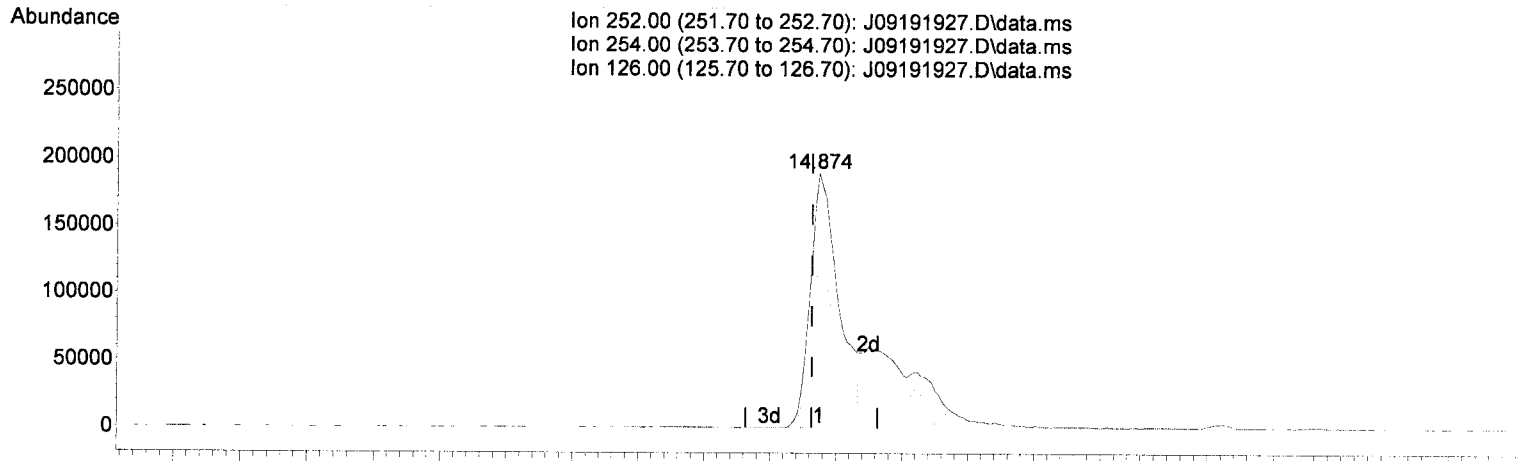
response 1853462

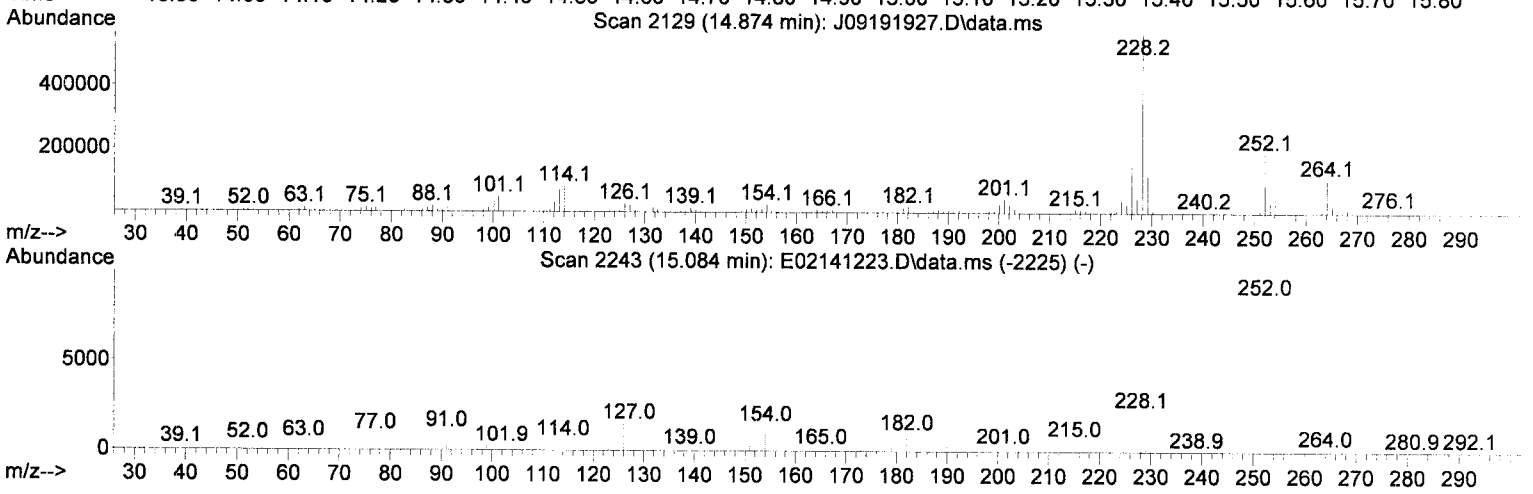
Ion	Exp%	Act%
105.00	100.00	100.00
122.00	90.90	87.13
77.00	72.00	68.18
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.874min (+ 0.011) 10901.24 ng/ml

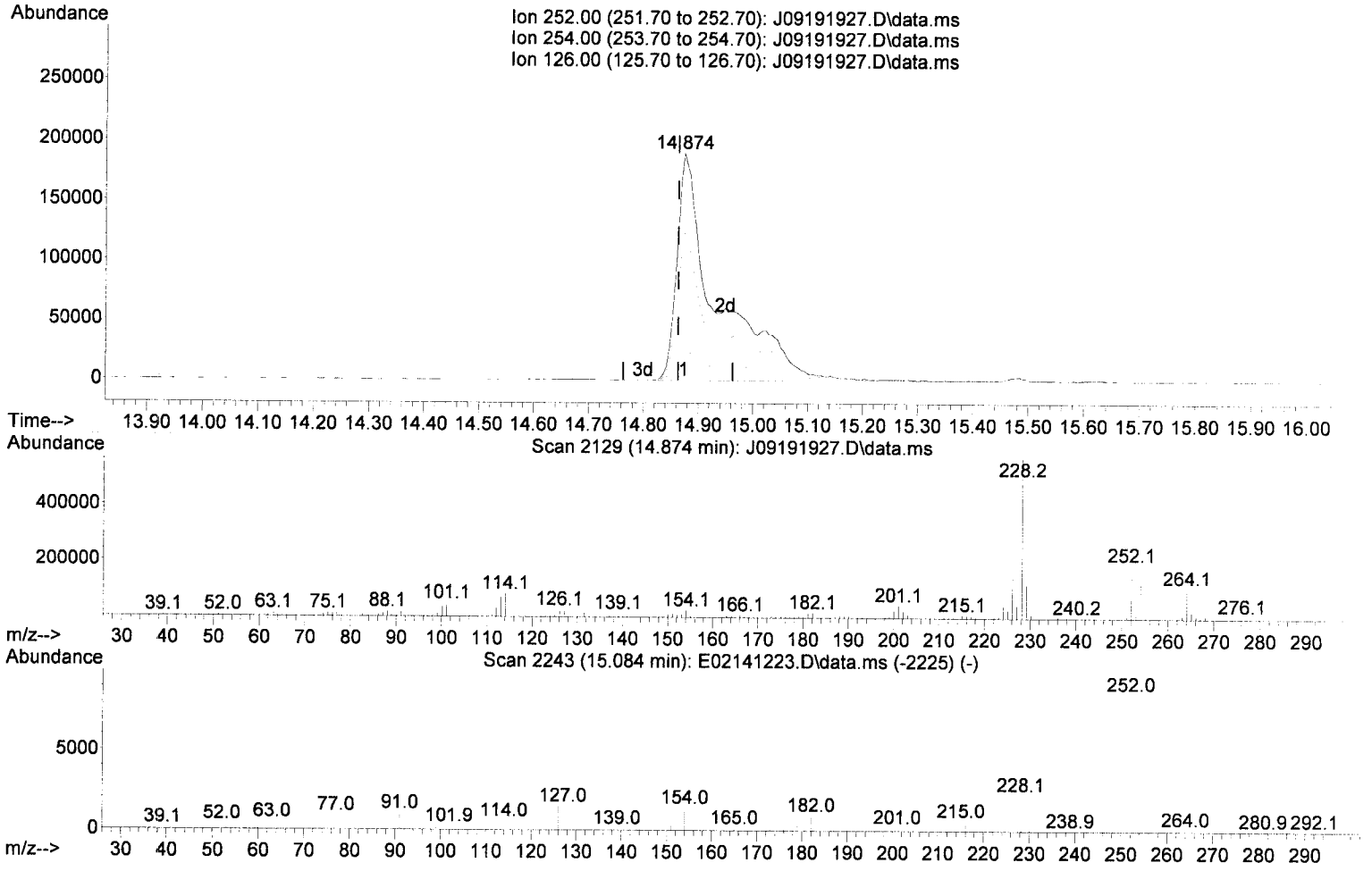
response 572542

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	64.83
126.00	12.00	13.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



TIC: J09191927.D\data.ms

(82) 3,3-Dichlorobenzidine (T)

14.874min (+ 0.011) -2000.00 ng/ml m

9/20/19

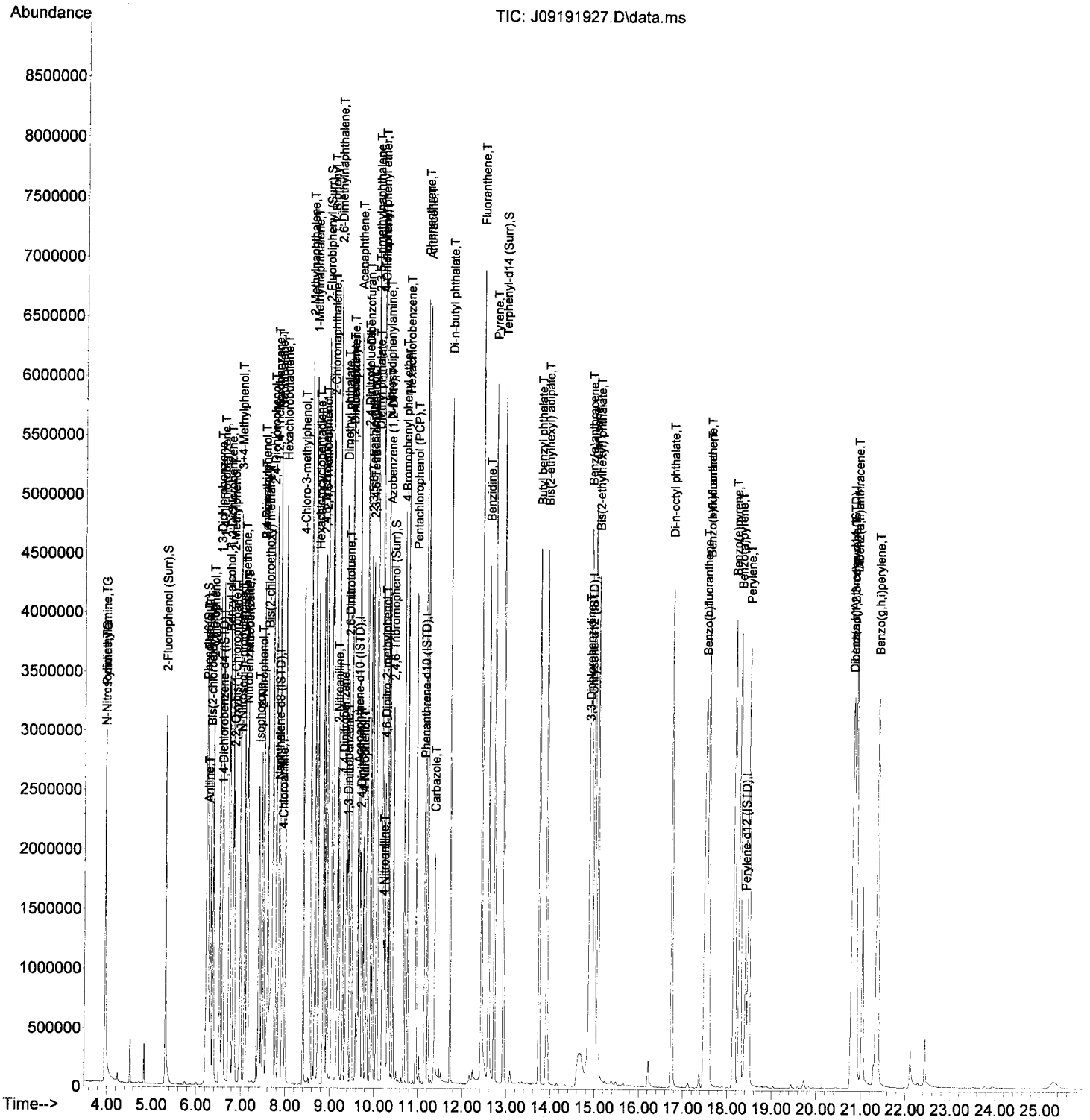
response 945543

Ion	Exp%	Act%
252.00	100.00	100.00
254.00	66.30	64.83
126.00	12.00	13.82
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191927.D
Acq On : 20 Sep 2019 6:39 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-CALA
Misc : 1x, A19G247@8000
ALS Vial : 12 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:02 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

JK 9/20/19

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4...	6.573	152	299574	2000.00 ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1168153	2000.00 ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	615222	2000.00 ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1152828	2000.00 ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1141161	2000.00 ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.388	264	1161309	2000.00 ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.774	292	999067	2000.00 ng/ml	-0.02
System Monitoring Compounds					
4) 2-Fluorophenol (Surr)	5.316	112	178387	877.95 ng/ml	0.03
5) Phenol-d6(Surr)	6.209	99	236341	905.57 ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	192375	804.35 ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	511376	1131.94 ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	72353	1337.71 ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.917	244	557856	1000.00 ng/ml	0.00
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	~~0.000~~		0	N.D.	See MS
3) Pyridine	4.000	79	174343m	734.70 ng/ml#	
6) Phenol	6.225	94	253216	853.53 ng/ml	99
7) Aniline	6.258	93	184591	696.05 ng/ml	95
8) Bis(2-chloroethyl) ether	6.311	93	252838	956.85 ng/ml	98
9) 2-Chlorophenol	6.370	128	214007	1001.41 ng/ml	96
10) 1,3-Dichlorobenzene	6.520	146	240742	1041.72 ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	235033	1047.91 ng/ml	99
12) Benzyl alcohol	6.707	108	114114	832.86 ng/ml	97
13) 1,2-Dichlorobenzene	6.744	146	236669	1049.78 ng/ml	100
14) 2-Methylphenol	6.814	107	162406	945.42 ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	197724	580.10 ng/ml	98
16) N-Nitrosodi-n-propylamine	6.969	70	139865	807.91 ng/ml	99
17) 3+4-Methylphenol	6.964	107	204231	964.68 ng/ml	99
18) Hexachloroethane	7.081	201	74950	1213.77 ng/ml	97
20) Nitrobenzene	7.135	77	193505	807.62 ng/ml	99
22) Isophorone	7.370	82	390447	921.04 ng/ml	96
23) 2-Nitrophenol	7.456	139	106480	818.33 ng/ml	95
24) 2,4-Dimethylphenol	7.488	122	151555	937.59 ng/ml	98
25) Bis(2-chloroethoxy) me...	7.584	93	239341	1013.40 ng/ml	99
26) Benzoic acid	7.579	105	114401	1564.85 ng/ml	97
27) 2,4-Dichlorophenol	7.691	162	169468	1209.93 ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	204325	1204.96 ng/ml	98
29) Naphthalene	7.857	128	644117	1073.48 ng/ml	100
30) 4-Chloroaniline	7.910	127	180562	1136.69 ng/ml	98
31) Hexachlorobutadiene	7.991	225	114587	1267.13 ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	163749	970.69 ng/ml	98
33) 2-Methylnaphthalene	8.557	142	471069	1149.97 ng/ml	99
34) 1-Methylnaphthalene	8.659	142	446075	1133.04 ng/ml	100
36) Hexachlorocyclopentadiene	8.723	237	102004	1047.80 ng/ml	99
37) 2,4,6-Trichlorophenol	8.841	196	122991	1135.59 ng/ml	99
38) 2,4,5-Trichlorophenol	8.873	198	123145	1177.26 ng/ml	99
39) 1,1'-Biphenyl	9.028	154	545943	1068.16 ng/ml	99
41) 2-Chloronaphthalene	9.050	162	403493	1075.57 ng/ml	98
42) 2-Nitroaniline	9.146	138	126470	1012.60 ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	401191	1048.56 ng/ml	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10

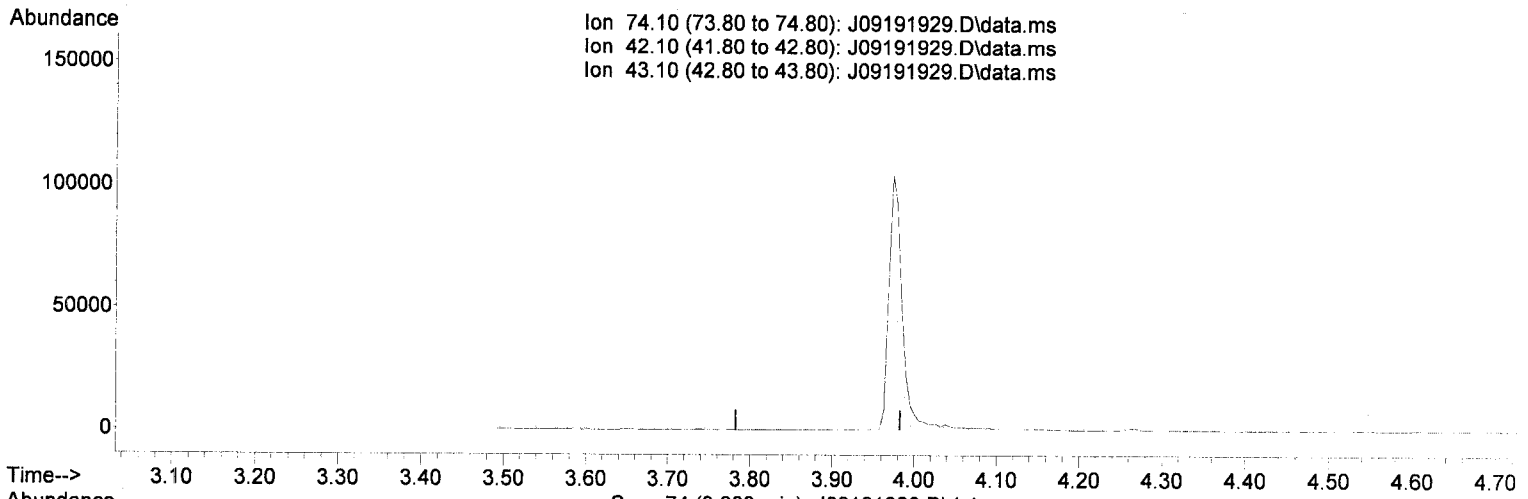
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	53357	915.09	ng/ml	94
45) Dimethyl phthalate	9.333	163	471576	1071.73	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	66203	990.21	ng/ml	96
47) 2,6-Dinitrotoluene	9.392	165	104413	1103.30	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	47869	1079.93	ng/ml	96
49) Acenaphthylene	9.472	152	662544	1101.80	ng/ml	98
50) 3-Nitroaniline	9.563	138	81403	882.15	ng/ml	95
51) Acenaphthene	9.649	153	411344	1055.24	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	21975	682.22	ng/ml	97
53) 4-Nitrophenol	9.723	139	67638	935.18	ng/ml	99
54) 2,4-Dinitrotoluene	9.798	165	130952	1075.20	ng/ml	96
55) Dibenzofuran	9.825	168	586441	1103.27	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	101694	1174.90	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	9.948	232	104694	1189.35	ng/ml	98
58) Diethyl phthalate	10.050	149	444740	1059.95	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	361627	1064.34	ng/ml	98
60) Fluorene	10.173	166	450597	1076.35	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	220862	1135.24	ng/ml	98
62) 4-Nitroaniline	10.183	138	71452	843.00	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.216	198	51879	975.85	ng/ml	99
65) N-Nitrosodiphenylamine	10.285	169	378338	1067.17	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	373113	793.36	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.665	248	134322	1131.85	ng/ml	95
69) Hexachlorobenzene	10.745	284	157623	1154.38	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	76022	1186.58	ng/ml	99
71) Phenanthrene	11.157	178	656765	1041.88	ng/ml	99
72) Anthracene	11.205	178	657889	1060.69	ng/ml	100
73) Carbazole	11.366	167	473433	924.53	ng/ml	100
74) Di-n-butyl phthalate	11.713	149	721001	1003.18	ng/ml	100
75) Fluoranthene	12.419	202	721487	1094.34	ng/ml	99
76) Benzidine	12.574	184	294532	1737.87	ng/ml	98
77) Pyrene	12.708	202	722196	1096.56	ng/ml	100
80) Butyl benzyl phthalate	13.724	149	293237	820.52	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.901	129	280177	874.62	ng/ml	98
82) 3,3-Dichlorobenzidine	14.853	252	184897	2473.10	ng/ml	97
83) Benz(a)anthracene	14.880	228	655689	979.93	ng/ml	98
84) Chrysene	14.965	228	602768	976.42	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.061	149	426572	902.38	ng/ml	98
87) Di-n-octyl phthalate	16.730	149	675629	808.44	ng/ml	100
88) Benzo(b)fluoranthene	17.463	252	645650	917.98	ng/ml	99
89) Benzo(k)fluoranthene	17.532	252	640735	960.05	ng/ml	99
90) Benzo(b+k)fluoranthene	17.532	252	1307403	1870.70	ng/ml	99
91) Benzo(e)pyrene	18.115	252	622430	904.16	ng/ml	100
92) Benzo(a)pyrene	18.238	252	564640	892.33	ng/ml	98
93) Perylene	18.442	252	636474	1060.98	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.774	276	575136	1024.01	ng/ml	100
96) Dibenz(a,h)anthracene	20.843	278	552893	1097.51	ng/ml	99
97) Benzo(g,h,i)perylene	21.309	276	598608	1107.02	ng/ml	98

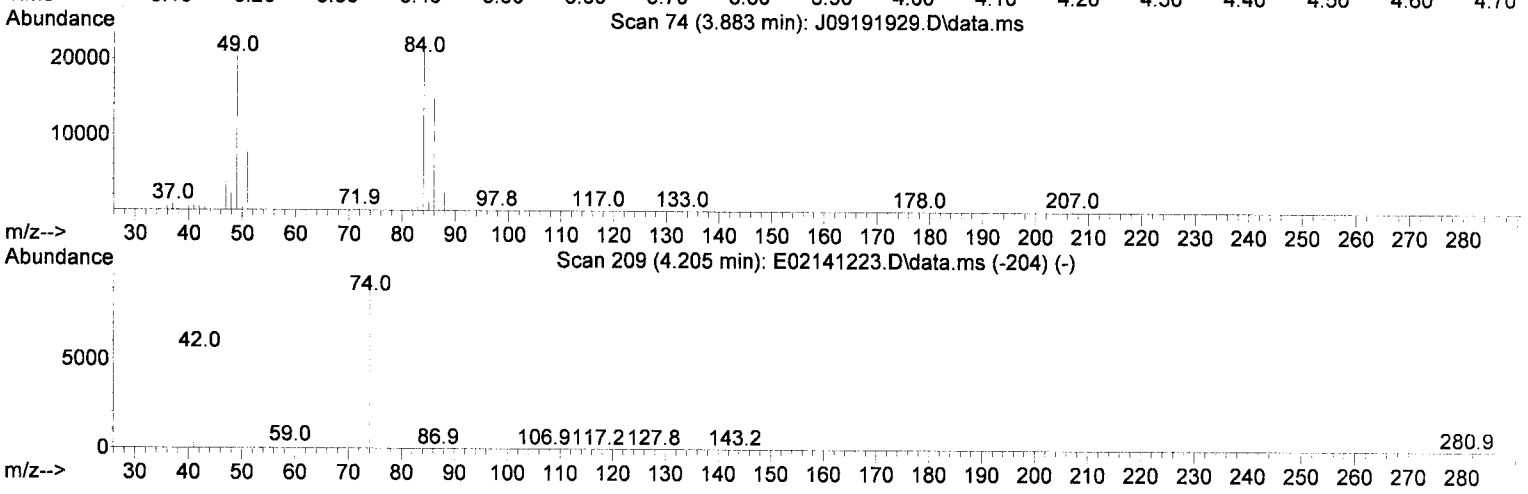
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10





TIC: J09191929.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.883min (-3.883) 0.00 ng/ml

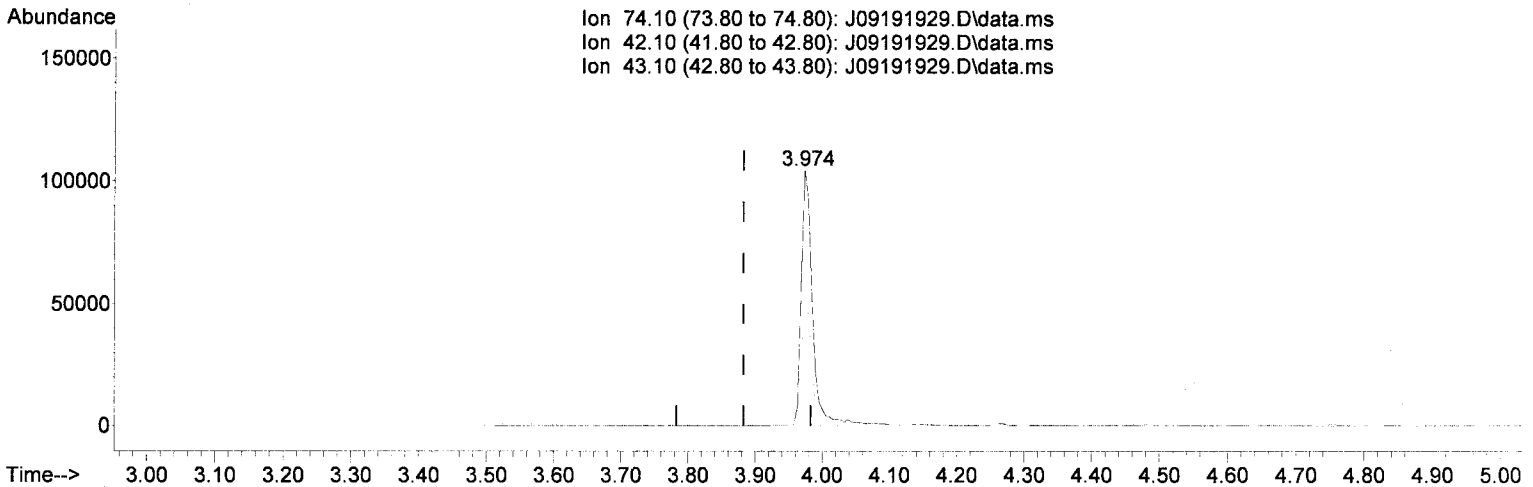
response 0

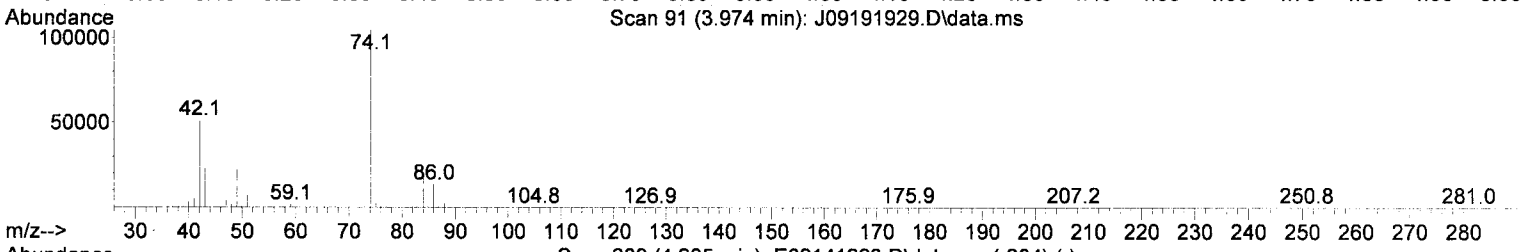
Ion	Exp%	Act%
74.10	100.00	0.00
42.10	49.40	0.00#
43.10	22.20	0.00
0.00	0.00	0.00

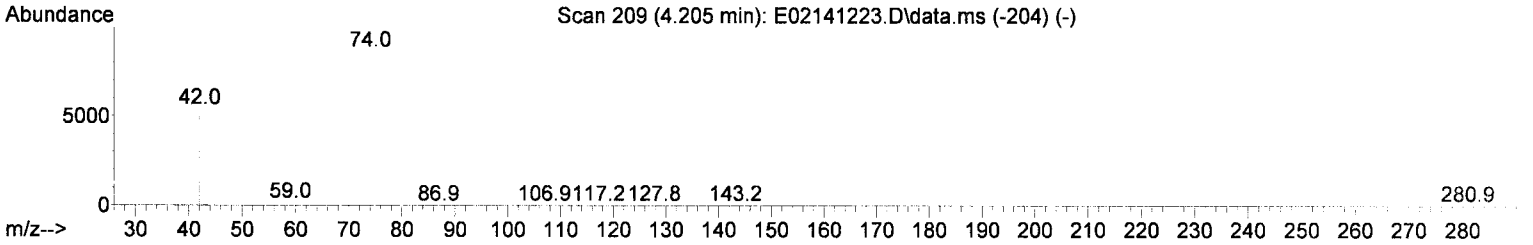
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10







TIC: J09191929.D\data.ms

(2) N-Nitrosodimethylamine (TG)

3.974min (+ 0.091) 856.94 ng/ml m JK 9/20/19

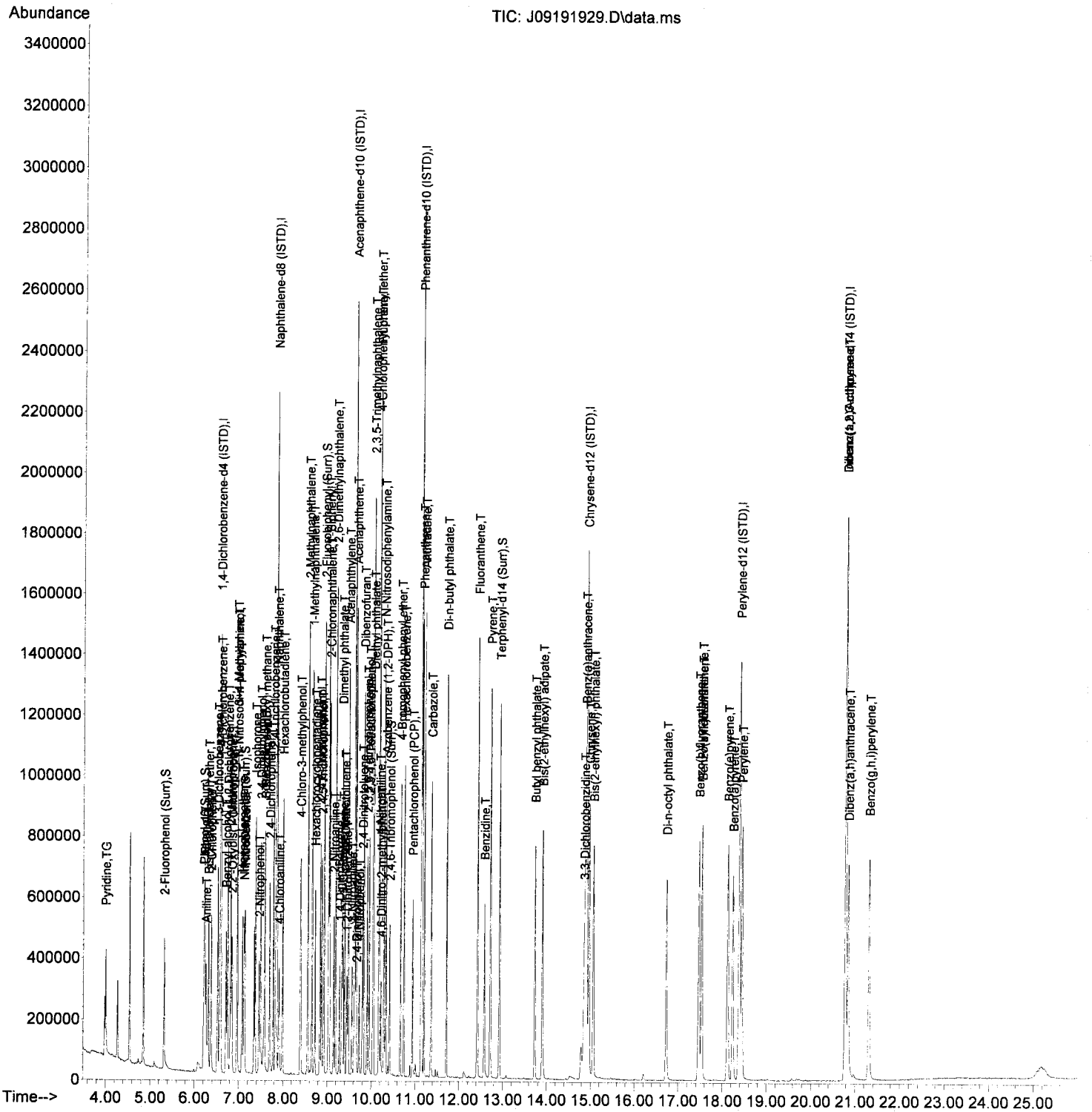
response 119285

Ion	Exp%	Act%
74.10	100.00	100.00
42.10	49.40	49.08
43.10	22.20	22.06
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 09:47:25 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 09:45:16 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Final Reagent
9/23/19

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4...	6.573	152	299574	2000.00	ng/ml	0.00
21) Naphthalene-d8 (ISTD)	7.841	136	1168153	2000.00	ng/ml	0.00
35) Acenaphthene-d10 (ISTD)	9.617	162	615222	2000.00	ng/ml	0.00
64) Phenanthrene-d10 (ISTD)	11.130	188	1152828	2000.00	ng/ml	0.00
78) Chrysene-d12 (ISTD)	14.906	240	1141161	2000.00	ng/ml	-0.01
86) Perylene-d12 (ISTD)	18.388	264	1161309	2000.00	ng/ml	-0.01
94) Dibenz(a,h)Anthrcene-d...	20.774	292	999067	2000.00	ng/ml	-0.02
System Monitoring Compounds						
4) 2-Fluorophenol (Surr)	5.316	112	178387	981.27	ng/ml	0.03
5) Phenol-d6(Surr)	6.209	99	236341	1015.69	ng/ml	0.00
19) Nitrobenzene-d5 (Surr)	7.113	82	192375	1065.68	ng/ml	0.00
40) 2-Fluorobiphenyl (Surr)	8.927	172	511376	1062.10	ng/ml	0.00
67) 2,4,6-Tribromophenol (...	10.419	330	72353	1040.67	ng/ml	0.00
79) Terphenyl-d14 (Surr)	12.917	244	557856	1060.78	ng/ml	0.00
Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.974	74	119285m	1045.35	ng/ml	
3) Pyridine	4.000	79	174343m	896.19	ng/ml#	
6) Phenol	6.225	94	253216	989.66	ng/ml	99
7) Aniline	6.258	93	184591	836.20	ng/ml	95
8) Bis(2-chloroethyl) ether	6.311	93	252077	1091.65	ng/ml	98
9) 2-Chlorophenol	6.370	128	214007	1008.90	ng/ml	96
10) 1,3-Dichlorobenzene	6.520	146	240742	1009.72	ng/ml	100
11) 1,4-Dichlorobenzene	6.589	146	235033	1002.99	ng/ml	99
12) Benzyl alcohol	6.707	108	114114	910.79	ng/ml	97
13) 1,2-Dichlorobenzene	6.744	146	236669	1024.11	ng/ml	100
14) 2-Methylphenol	6.814	107	162406	1052.52	ng/ml	97
15) 2,2'-Oxybis(1-Chloropr...	6.841	45	197724	970.28	ng/ml	98
16) N-Nitrosodi-n-propylamine	6.969	70	139865	1043.26	ng/ml	99
17) 3+4-Methylphenol	6.964	107	204231	1067.42	ng/ml	99
18) Hexachloroethane	7.081	201	74950	1040.96	ng/ml	97
20) Nitrobenzene	7.135	77	193505	1058.01	ng/ml	99
22) Isophorone	7.370	82	390447	1048.41	ng/ml	96
23) 2-Nitrophenol	7.456	139	106480	968.55	ng/ml	95
24) 2,4-Dimethylphenol	7.488	122	151555	967.66	ng/ml	98
25) Bis(2-chloroethoxy) me...	7.584	93	239341	1057.13	ng/ml	99
26) Benzoic acid	7.579	105	114401	1974.82	ng/ml	97
27) 2,4-Dichlorophenol	7.691	162	169468	968.83	ng/ml	98
28) 1,2,4-Trichlorobenzene	7.782	180	204325	999.39	ng/ml	98
29) Naphthalene	7.857	128	644117	1048.17	ng/ml	100
30) 4-Chloroaniline	7.910	127	180562	939.27	ng/ml	98
31) Hexachlorobutadiene	7.991	225	114587	1037.18	ng/ml	98
32) 4-Chloro-3-methylphenol	8.386	107	163749	1056.42	ng/ml	98
33) 2-Methylnaphthalene	8.557	142	471069	1097.13	ng/ml	99
34) 1-Methylnaphthalene	8.659	142	446075	1073.20	ng/ml	100
36) Hexachlorocyclopentadiene	8.723	237	102004	1072.19	ng/ml	99
37) 2,4,6-Trichlorophenol	8.841	196	122991	1033.65	ng/ml	99
38) 2,4,5-Trichlorophenol	8.873	198	123145	1048.47	ng/ml	99
39) 1,1'-Biphenyl	9.028	154	545943	1032.43	ng/ml	99
41) 2-Chloronaphthalene	9.050	162	403493	1056.54	ng/ml	98
42) 2-Nitroaniline	9.146	138	126470	1106.58	ng/ml	98
43) 2,6-Dimethylnaphthalene	9.189	156	401191	1034.19	ng/ml	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10

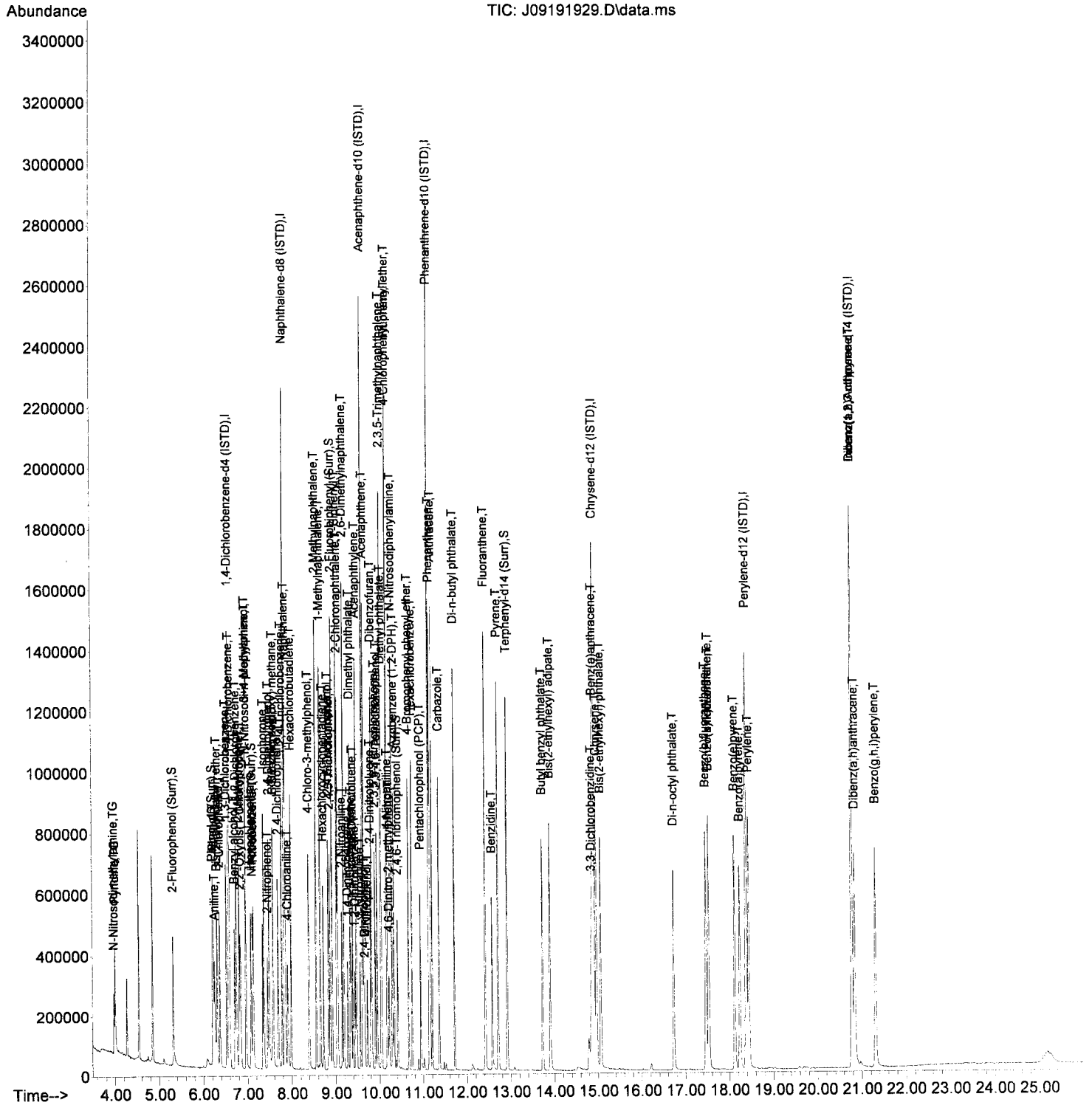
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,4-Dinitrobenzene	9.274	168	53357	1114.51	ng/ml	94
45) Dimethyl phthalate	9.333	163	471576	1061.40	ng/ml	99
46) 1,3-Dinitrobenzene	9.354	168	66203	1081.70	ng/ml	96
47) 2,6-Dinitrotoluene	9.392	165	104413	1044.00	ng/ml	94
48) 1,2-Dinitrobenzene	9.445	168	47869	1063.48	ng/ml	96
49) Acenaphthylene	9.472	152	662544	1059.38	ng/ml	98
50) 3-Nitroaniline	9.563	138	81403	1060.77	ng/ml	95
51) Acenaphthene	9.649	153	411344	1001.62	ng/ml	99
52) 2,4-Dinitrophenol	9.665	184	21975	972.00	ng/ml	97
53) 4-Nitrophenol	9.723	139	67638	1106.89	ng/ml	99
54) 2,4-Dinitrotoluene	9.798	165	130952	1048.40	ng/ml	96
55) Dibenzofuran	9.825	168	586441	1071.22	ng/ml	99
56) 2,3,5,6-Tetrachlorophenol	9.905	232	101694	1077.31	ng/ml	98
57) 2,3,4,6-Tetrachlorophenol	9.948	232	104694	1014.00	ng/ml	98
58) Diethyl phthalate	10.050	149	444740	1087.44	ng/ml	98
59) 2,3,5-Trimethylnaphtha...	10.039	170	361627	1037.33	ng/ml	98
60) Fluorene	10.173	166	450597	1045.90	ng/ml	100
61) 4-Chlorophenyl phenyl ...	10.167	204	220862	1051.57	ng/ml	98
62) 4-Nitroaniline	10.183	138	71452	1080.74	ng/ml	94
63) 4,6-Dinitro-2-methylph...	10.216	198	51879	1157.72	ng/ml	99
65) N-Nitrosodiphenylamine	10.285	169	378338	1064.38	ng/ml	97
66) Azobenzene (1,2-DPH)	10.328	77	373113	1037.26	ng/ml	97
68) 4-Bromophenyl phenyl e...	10.665	248	134322	1032.58	ng/ml	95
69) Hexachlorobenzene	10.745	284	157623	1010.04	ng/ml	96
70) Pentachlorophenol (PCP)	10.938	266	76022	975.76	ng/ml	99
71) Phenanthrene	11.157	178	656765	1015.50	ng/ml	99
72) Anthracene	11.205	178	657889	1058.25	ng/ml	100
73) Carbazole	11.366	167	473433	964.91	ng/ml	100
74) Di-n-butyl phthalate	11.713	149	721001	1057.53	ng/ml	100
75) Fluoranthene	12.419	202	721487	1088.45	ng/ml	99
76) Benzidine	12.574	184	294175	1842.78	ng/ml	98
77) Pyrene	12.708	202	722196	1070.62	ng/ml	100
80) Butyl benzyl phthalate	13.724	149	293237	1004.00	ng/ml	99
81) Bis(2-ethylhexyl) adipate	13.901	129	280177	1058.58	ng/ml	98
82) 3,3-Dichlorobenzidine	14.853	252	184897	2062.77	ng/ml	97
83) Benz(a)anthracene	14.880	228	655689	1029.12	ng/ml	98
84) Chrysene	14.965	228	602768	1009.53	ng/ml	99
85) Bis(2-ethylhexyl) phth...	15.061	149	426572	1039.18	ng/ml	98
87) Di-n-octyl phthalate	16.730	149	675629	1013.80	ng/ml	100
88) Benzo(b)fluoranthene	17.463	252	645650	1008.51	ng/ml	99
89) Benzo(k)fluoranthene	17.532	252	640735	992.12	ng/ml	99
90) Benzo(b+k)fluoranthene	17.532	252	1307403	1987.64	ng/ml	99
91) Benzo(e)pyrene	18.115	252	622430	1042.80	ng/ml	100
92) Benzo(a)pyrene	18.238	252	564640	971.42	ng/ml	98
93) Perylene	18.442	252	636474	1215.26	ng/ml	100
95) Indeno(1,2,3-cd)pyrene	20.774	276	575136	973.51	ng/ml	100
96) Dibenz(a,h)anthracene	20.843	278	552893	1019.31	ng/ml	99
97) Benzo(g,h,i)perylene	21.309	276	598608	1054.88	ng/ml	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2019-09\9I19035\
Data File : J09191929.D
Acq On : 20 Sep 2019 7:50 am
Operator : JK/ AMS/ DTH
Sample : 9I19035-ICV1
Misc : 1x, A19I254@1000
ALS Vial : 13 Sample Multiplier: 1
DataAcq Meth:SV10_AQUISITION.M

Quant Time: Sep 20 14:32:58 2019
Quant Method : C:\msdchem\1\methods\SV10_091919.M
Quant Title : EPA 8270D: Semivolatile Organics
QLast Update : Fri Sep 20 10:41:03 2019
Response via : Initial Calibration
InstName : SV-GCMS10



Total Metals by EPA 6020A (ICPMS)
Benchsheet Data and Analysis (Including Calibration)

Batch 9100506
Sequence 9J02063 (A9I0887-01)

APEX LABORATORIES

Ag (Silver) - 6020 - Total
Ag (Silver) - 200.8 - Total
Al (Aluminum) - 6020 - Total
As (Arsenic) - 6020 - Total
As (Arsenic) - 200.8 - Total
Ba (Barium) - 6020 - Total
Cd (Cadmium) - 6020 - Total
Cd (Cadmium) - 200.8 - Total

PREPARATION BENCH SHEET

9100506

Apex Laboratories
BATCH #: 9100506 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments
9100506-BLK1		10/01/19 14:22	45	50	QC Sample		
9100506-BS1		10/01/19 14:22	45	50	QC Sample		
	Spike 1: 500 uL of A19I253	Spike 2: 50 uL of A19I359					
A9I0877-01	10/10/19	10/01/19 14:22	45	50	Anchor QEA LLC	RB 20190926140400	6020A As Cd Cu Pb Hg Zn
☐ As (Arsenic) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cu (Copper) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Zn (Zinc) - 6020 - Total							
A9I0892-01	10/10/19	10/01/19 14:22	45	50		WW Q3	MDL Cr Zn
☐ Cr (Chromium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0899-01	10/07/19	10/01/19 14:22	45	50		EGW-17	
☐ Pb (Lead) - 200.8 - Total							
A9I0899-02	10/07/19	10/01/19 14:22	45	50		DGW-13	Added for BatchQC in 9100506
☐ Pb (Lead) - 200.8 - Total							
Batch QC:							
☐ Ag (Silver) - 6020 - Total ☐ Ag (Silver) - 200.8 - Total ☐ Al (Aluminum) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ As (Arsenic) - 200:8 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total							
☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 6020 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total							
☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 6020 - Total ☐ Zn (Zinc) - 200.8 - Total							
9100506-DUP1		10/01/19 14:22	45	50	QC Sample		
	Source: A9I0899-02						
9100506-MS1		10/01/19 14:22	45	50	QC Sample		
	Source: A9I0899-02	Spike 1: 500 uL of A19I253	Spike 2: 50 uL of A19I359				
A9I0899-03	10/07/19	10/01/19 14:22	45	50		DGW-11s	
☐ Pb (Lead) - 200.8 - Total							
A9I0899-04	10/07/19	10/01/19 14:22	45	50		DGW-15	
☐ Pb (Lead) - 200.8 - Total							
A9I0899-05	10/07/19	10/01/19 14:22	45	50		DGW-14	
☐ Pb (Lead) - 200.8 - Total							
A9I0899-06	10/07/19	10/01/19 14:22	45	50		AGW-3	
☐ Pb (Lead) - 200.8 - Total							
A9I0928-01	10/11/19	10/01/19 14:22	45	50		WI-930	
☐ Mn (Manganese) - 6020 - Total							
A9I0929-01	10/09/19	10/01/19 14:22	45	50		BLD69-P1	ICP 10 Metals
☐ Ag (Silver) - 200.8 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							

CRL 10/1/19
Prepared By: Date

James S. Johnson 10/04/19
Reviewed By: Date

APEX LABORATORIES

Apex Laboratories
BATCH #: 9100506 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments
A9I0929-02	10/09/19	10/01/19 14:22	45	50		BLD69-P2	ICP 10 Metals
☐ Ag (Silver) - 200.8 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0929-03	10/09/19	10/01/19 14:22	45	50		BLD69-P3	ICP 10 Metals
☐ Ag (Silver) - 200.8 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0929-04	10/09/19	10/01/19 14:22	45	50		BLD69-P4	ICP 10 Metals
☐ Ag (Silver) - 200.8 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0929-05	10/09/19	10/01/19 14:22	45	50		BLD69-P5	ICP 10 Metals
☐ Ag (Silver) - 200.8 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0945-02	10/08/19	10/01/19 14:22	45	50		Bi-Monthly Composite	Jan July Jan Mar May Jul Sep Nov
☐ Ag (Silver) - 200.8 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
A9I0955-01	10/09/19	10/01/19 14:22	45	50		H3PO4	
☐ Ag (Silver) - 6020 - Total ☐ Al (Aluminum) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A9I0956-01	10/09/19	10/01/19 14:22	45	50		H3PO4	
☐ Ag (Silver) - 6020 - Total ☐ Al (Aluminum) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A9I0959-01	10/09/19	10/01/19 14:22	45	50		BT4787	
☐ Ag (Silver) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total							
A9J0014-01	10/07/19	10/01/19 14:22	45	50		Semi-Annual	Added for Batch QC in 9100506
☐ Pb (Lead) - 200.8 - Total ☐ Zn (Zinc) - 200.8 - Total							
Batch QC:							
☐ Ag (Silver) - 6020 - Total ☐ Ag (Silver) - 200.8 - Total ☐ Al (Aluminum) - 6020 - Total ☐ As (Arsenic) - 6020 - Total ☐ As (Arsenic) - 200.8 - Total ☐ Ba (Barium) - 6020 - Total ☐ Cd (Cadmium) - 6020 - Total ☐ Cd (Cadmium) - 200.8 - Total ☐ Cr (Chromium) - 6020 - Total ☐ Cr (Chromium) - 200.8 - Total ☐ Cu (Copper) - 6020 - Total ☐ Cu (Copper) - 200.8 - Total ☐ Hg (Mercury) - 6020 - Total ☐ Mn (Manganese) - 6020 - Total ☐ Mo (Molybdenum) - 200.8 - Tota ☐ Ni (Nickel) - 200.8 - Total ☐ Pb (Lead) - 6020 - Total ☐ Se (Selenium) - 6020 - Total ☐ Se (Selenium) - 200.8 - Total ☐ Zn (Zinc) - 6020 - Total							
9100506-MS2		10/01/19 14:22	45	50	QC Sample		

Source: A9J0014-01 Spike 1: 500 uL of A19I253 Spike 2: 50 uL of A19I359

CRL 10/1/19
Prepared By: Date

Reviewed By: Date

APEX LABORATORIES

Apex Laboratories
BATCH #: 9100506 (Water)
Prep Method: EPA 3015A

Lab Number	Due	Prepared	Initial (mL)	Final (mL)	Client	ClientID / Sample	Extraction Comments

Standards/Reagents

Reagent(s)

Std ID	Exp. Date	Description
A13L213	11/30/23	Metals Prep Balance 2
A15E001	05/01/20	Mars-1 Microwave
A19F120	06/12/20	Conc. HCl - Omnitrace
A19I106	03/08/20	Conc. HNO3 - Omnitrace

Analyte Spike(s)

Std ID	Exp. Date	Description
A19I253	12/11/19	**Combo Spike** A+B+C
A19I359	03/08/20	Hg Spiking Standard

CRL 10/1/19

A) A19I 210 - 250 µL (123) CRL 10/1/19
B) A19I ~~124~~ (CRL 10/1/19) - 125 µL
C) A19I ~~123~~ (124) - 125 µL

Digestion time and temperature achieved? yes
Initials: CRL

CRL 10/1/19
Prepared By: Date

Reviewed By: Date

Batch #: 9100506

If observed weight loss < 0.2g Digestion is within control limits

If observed weight loss > 0.2g Enter data in to electronic VWW. Acceptance limit 1.0% sample loss.

Date: 10/01/19 Prepared by: CRL

#	Mars Tube ID	Sample ID	Pre-digestion Vessel + Sample Wt. (g)	Post-digestion Vessel + Sample Wt. (g)	Sample Wt. Loss (%)* *Formula only used if sample loss >0.2g*
1	W98	9100506-BLK1	207.59	207.56	n/a
2	W14	9100506-BS1	211.05	211.02	n/a
3	W16	A9I0877-01	212.09	212.08	n/a
4	W68	A9I0892-01	212.54	212.53	n/a
5	W70	A9I0899-01	209.49	209.48	n/a
6	W76	A9I0899-02	210.29	210.27	n/a
7	W93	9100506-DUP1	208.95	208.94	n/a
8	W34	9100506-MS1	209.66	209.65	n/a
9	W107	A9I0899-03	210.16	210.14	n/a
10	W52	A9I0899-04	206.76	206.74	n/a
11	W99	A9I0899-05	210.49	210.48	n/a
12	W39	A9I0899-06	210.60	210.58	n/a
13	W18	A9I0928-01	208.55	208.54	n/a
14	W2	A9I0929-01	206.51	206.49	n/a
15	W105	A9I0929-02	211.13	211.12	n/a
16	W9	A9I0929-03	210.16	210.14	n/a
17	W40	A9I0929-04	207.75	207.75	n/a
18	W82	A9I0929-05	210.06	210.04	n/a
19	W62	A9I0945-02	207.22	207.21	n/a
20	W8	A9I0955-01	209.27	209.26	n/a
21	W116	A9I0956-01	215.98	215.97	n/a
22	W71	A9I0959-01	209.82	209.81	n/a
23	W19	A9J0014-01	207.04	207.03	n/a
24	W15	9100506-MS2	213.70	213.66	n/a
					n/a

*Example Calculation: (Pre(g) – Post(g))/(Post(g) – 159.32g) This represents the mean weight of the empty digestion vessels. By factoring in the mean digestion vessel weight, we observe weight loss from only the sample, rather than as a percentage of the sample+vessel weight.

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: 9J02063 Instrument: ICPMS6

Date: 10/02/19 18:22 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J02063-CAL1	Water	QC	QC			A19J003	A19I097
2	9J02063-CAL2	Water	QC	QC			A19J003	A19I098
3	9J02063-CAL3	Water	QC	QC			A19J003	A19I099
4	9J02063-CAL4	Water	QC	QC			A19J003	A19I100
5	9J02063-CAL5	Water	QC	QC			A19J003	A19I224
6	9J02063-CAL6	Water	QC	QC			A19J003	A19I101
7	9J02063-CAL7	Water	QC	QC			A19J003	A19I225
8	9J02063-CAL8	Water	QC	QC			A19J003	A19I054
9	9J02063-CAL9	Water	QC	QC			A19J003	A19I053
10	9J02063-ICV1	Water	QC	QC			A19J003	A19I385
11	9J02063-ICB1	Water	QC	QC			A19J003	
12	9J02063-CRL1	Water	QC	QC			A19J003	A19I097
13	9J02063-CRL2	Water	QC	QC			A19J003	A19I098
14	9J02063-CRL3	Water	QC	QC			A19J003	A19I099
15	9J02063-CRL4	Water	QC	QC			A19J003	A19I100
16	9J02063-IFA1	Water	QC	QC			A19J003	A19I356
17	9J02063-IFB1	Water	QC	QC			A19J003	A19I357
18	9100506-BLK1	Water	QC	QC		9100506	A19J003	
19	9100506-BS1	Water	QC	QC		9100506	A19J003	
20	A9I0928-01RE1	Water	Mn (Manganese) - 6020 - Total		10/11/19	9100506	A19J003	
21	A9I0929-01RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
22	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
23	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
24	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
25	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
26	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
27	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
28	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
29	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
30	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
31	A9I0929-02RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
32	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
33	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
34	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
35	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
36	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
37	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
38	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
39	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
40	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
41	A9I0929-03RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
42	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
43	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
44	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
45	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
46	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
47	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
48	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
49	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
50	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
51	A9I0929-04RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	

Sequence: 9J02063 Instrument: ICPMS6

Date: 10/02/19 18:22 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
53	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
54	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
55	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
56	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
57	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
58	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
59	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
60	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
61	A9I0929-05RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
62	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
63	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
64	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
65	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
66	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
67	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
68	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
69	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
70	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
71	A9I0945-02	Water	Ag (Silver) - 200.8 - Total		10/08/19	9100506	A19J003	
72	"	Water	Cd (Cadmium) - 200.8 - Total		10/08/19	9100506	A19J003	
73	"	Water	Cr (Chromium) - 200.8 - Total		10/08/19	9100506	A19J003	
74	"	Water	Cu (Copper) - 200.8 - Total		10/08/19	9100506	A19J003	
75	"	Water	Ni (Nickel) - 200.8 - Total		10/08/19	9100506	A19J003	
76	"	Water	Pb (Lead) - 200.8 - Total		10/08/19	9100506	A19J003	
77	"	Water	Zn (Zinc) - 200.8 - Total		10/08/19	9100506	A19J003	
78	A9I0955-01	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
79	"	Water	Al (Aluminum) - 6020 - Total		10/09/19	9100506	A19J003	
80	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
81	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
82	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
83	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
84	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
85	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
86	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
87	9J02063-CCV1	Water	QC	QC			A19J003	A19I385
88	9J02063-CCB1	Water	QC	QC			A19J003	
89	A9I0956-01	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
90	"	Water	Al (Aluminum) - 6020 - Total		10/09/19	9100506	A19J003	
91	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
92	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
93	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
94	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
95	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
96	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
97	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
98	A9I0959-01RE1	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
99	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
100	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
101	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
102	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
103	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
104	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
105	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
106	A9J0014-01RE1	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	

Sequence: 9J02063 Instrument: ICPMS6

Date: 10/02/19 18:22 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
107	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
108	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
109	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
110	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
111	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
112	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
113	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
114	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
115	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
116	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
117	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
118	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
119	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
120	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
121	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
122	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
123	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
124	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
125	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
126	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
127	"	Water	Zn (Zinc) - 200.8 - Total	"	10/07/19	9100506	A19J003	
128	A9I0877-01	Water	As (Arsenic) - 6020 - Total	Anchor QEA, LLC	10/10/19	9100506	A19J003	
129	"	Water	Cd (Cadmium) - 6020 - Total	"	10/10/19	9100506	A19J003	
130	"	Water	Cu (Copper) - 6020 - Total	"	10/10/19	9100506	A19J003	
131	"	Water	Hg (Mercury) - 6020 - Total	"	10/10/19	9100506	A19J003	
132	"	Water	Pb (Lead) - 6020 - Total	"	10/10/19	9100506	A19J003	
133	"	Water	Zn (Zinc) - 6020 - Total	"	10/10/19	9100506	A19J003	
134	A9I0892-01	Water	Cr (Chromium) - 200.8 - Total		10/10/19	9100506	A19J003	
135	"	Water	Zn (Zinc) - 200.8 - Total		10/10/19	9100506	A19J003	
136	A9I0899-01	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
137	A9I0899-02	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	
138	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
139	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
140	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
141	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
142	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
143	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
144	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
145	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
146	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
147	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
148	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
149	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
150	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
151	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
152	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
153	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
154	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
155	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
156	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
157	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
158	"	Water	Zn (Zinc) - 200.8 - Total	(QC Source)		9100506	A19J003	
159	9100506-DUP1	Water	QC	QC		9100506	A19J003	
160	9100506-MS1	Water	QC	QC		9100506	A19J003	
161	9J02063-CCV2	Water	QC	QC			A19J003	A19I385

Sequence: 9J02063 Instrument: ICPMS6

Date: 10/02/19 18:22 Calibration: UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
162	9J02063-CCB2	Water	QC	QC			A19J003	
163	A9I0899-03	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
164	A9I0899-04	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
165	A9I0899-05	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
166	A9I0899-06	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
167	A9I0928-01	Water	Mn (Manganese) - 6020 - Total		10/11/19	9100506	A19J003	
168	A9I0929-01	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
169	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
170	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
171	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
172	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
173	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
174	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
175	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
176	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
177	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
178	A9I0929-02	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
179	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
180	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
181	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
182	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
183	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
184	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
185	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
186	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
187	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
188	A9I0929-03	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
189	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
190	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
191	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
192	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
193	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
194	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
195	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
196	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
197	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
198	A9I0929-04	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
199	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
200	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
201	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
202	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
203	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
204	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
205	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
206	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
207	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
208	A9I0929-05	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
209	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
210	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
211	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
212	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
213	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
214	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
215	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
216	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
217	"	Water	Zn (Zinc) - 200.8 - Total	"	10/09/19	9100506	A19J003	
218	9J02063-CCV3	Water	QC	QC			A19J003	A19I385
219	9J02063-CCB3	Water	QC	QC			A19J003	
220	A9I0959-01	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
221	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
222	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
223	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
224	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
225	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
226	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
227	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
228	A9J0014-01	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	
229	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
230	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
231	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
232	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
233	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
234	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
235	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
236	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
237	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
238	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
239	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
240	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
241	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
242	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
243	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
244	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
245	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
246	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
247	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
248	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
249	"	Water	Zn (Zinc) - 200.8 - Total	"	10/07/19	9100506	A19J003	
250	9100506-MS2	Water	QC	QC		9100506	A19J003	
251	A9I0871-01RE1	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9091386	A19J003	
252	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9091386	A19J003	
253	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9091386	A19J003	
254	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9091386	A19J003	
255	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9091386	A19J003	
256	"	Water	Cu (Copper) - 200.8 - Total	"	10/10/19	9091386	A19J003	
257	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9091386	A19J003	
258	"	Water	Pb (Lead) - 200.8 - Total	(QC Source)		9091386	A19J003	
259	"	Water	Zn (Zinc) - 200.8 - Total	"	10/10/19	9091386	A19J003	
260	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		9091386	A19J003	
261	9091386-MS3	Water	QC	QC		9091386	A19J003	
262	9J02063-CCV4	Water	QC	QC			A19J003	A19I385
263	9J02063-CCB4	Water	QC	QC			A19J003	
264	9J02063-CRL5	Water	QC	QC			A19J003	A19I097
265	9J02063-CRL6	Water	QC	QC			A19J003	A19I098
266	9J02063-CRL7	Water	QC	QC			A19J003	A19I099
267	9J02063-CRL8	Water	QC	QC			A19J003	A19I100
268	9100496-BLK2	Solid	QC	QC		9100496	A19J003	
269	9100496-BS2	Solid	QC	QC		9100496	A19J003	
270	A9I0847-01RE1	Solid	Cd (Cadmium) - 6020 - Total		10/07/19	9100496	A19J003	
271	"	Solid	Cr (Chromium) - 6020 - Total		10/07/19	9100496	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
272	"	Solid	Pb (Lead) - 6020 - Total		10/07/19	9100496	A19J003	
273	A9I0847-02RE1	Solid	Cd (Cadmium) - 6020 - Total		10/07/19	9100496	A19J003	
274	"	Solid	Cr (Chromium) - 6020 - Total		10/07/19	9100496	A19J003	
275	"	Solid	Pb (Lead) - 6020 - Total		10/07/19	9100496	A19J003	
276	A9I0951-01RE1	Solid	Ag (Silver) - 6020 - Total		10/02/19	9100496	A19J003	
277	"	Solid	As (Arsenic) - 6020 - Total		10/02/19	9100496	A19J003	
278	"	Solid	Ba (Barium) - 6020 - Total		10/02/19	9100496	A19J003	
279	"	Solid	Cd (Cadmium) - 6020 - Total		10/02/19	9100496	A19J003	
280	"	Solid	Cr (Chromium) - 6020 - Total		10/02/19	9100496	A19J003	
281	"	Solid	Hg (Mercury) - 6020 - Total		10/02/19	9100496	A19J003	
282	"	Solid	Pb (Lead) - 6020 - Total		10/02/19	9100496	A19J003	
283	"	Solid	Se (Selenium) - 6020 - Total		10/02/19	9100496	A19J003	
284	A9I0947-01RE1	Solid	Mo (Molybdenum) - 6020 - Total		10/03/19	9100496	A19J003	
285	A9I0951-01RE1	Solid	Mo (Molybdenum) - 6020 - Total	(QC Source)		9100496	A19J003	
286	9100496-DUP3	Solid	QC	QC		9100496	A19J003	
287	9100496-MS3	Solid	QC	QC		9100496	A19J003	
288	9100496-MSD3	Solid	QC	QC		9100496	A19J003	
289	9100517-BLK1	Sediment	QC	QC		9100517	A19J003	
290	9J02063-CCV5	Water	QC	QC			A19J003	A19I385
291	9J02063-CCB5	Water	QC	QC			A19J003	
292	9100517-BS1	Sediment	QC	QC		9100517	A19J003	
293	A9I0822-02	Sediment	Ag (Silver) - 6020 - Total		10/08/19	9100517	A19J003	
294	"	Sediment	As (Arsenic) - 6020 - Total		10/08/19	9100517	A19J003	
295	"	Sediment	Cd (Cadmium) - 6020 - Total		10/08/19	9100517	A19J003	
296	"	Sediment	Cr (Chromium) - 6020 - Total		10/08/19	9100517	A19J003	
297	"	Sediment	Cu (Copper) - 6020 - Total		10/08/19	9100517	A19J003	
298	"	Sediment	Pb (Lead) - 6020 - Total		10/08/19	9100517	A19J003	
299	"	Sediment	Se (Selenium) - 6020 - Total		10/08/19	9100517	A19J003	
300	"	Sediment	Zn (Zinc) - 6020 - Total		10/08/19	9100517	A19J003	
301	"	Sediment	Ni (Nickel) - 6020 - Total		10/08/19	9100517	A19J003	
302	9100517-MS1	Sediment	QC	QC		9100517	A19J003	
303	9100517-MSD1	Sediment	QC	QC		9100517	A19J003	
304	9100516-BLK1	Soil	QC	QC		9100516	A19J003	
305	9100516-BLK2	Soil	QC	QC		9100516	A19J003	
306	9100516-BS1	Soil	QC	QC		9100516	A19J003	
307	A9I0844-02	Soil	Ag (Silver) - 6020 - Total		10/08/19	9100516	A19J003	
308	"	Soil	As (Arsenic) - 6020 - Total		10/08/19	9100516	A19J003	
309	"	Soil	Ba (Barium) - 6020 - Total		10/08/19	9100516	A19J003	
310	"	Soil	Cd (Cadmium) - 6020 - Total		10/08/19	9100516	A19J003	
311	"	Soil	Cr (Chromium) - 6020 - Total		10/08/19	9100516	A19J003	
312	"	Soil	Cu (Copper) - 6020 - Total	(QC Source)		9100516	A19J003	
313	"	Soil	Hg (Mercury) - 6020 - Total	"	10/08/19	9100516	A19J003	
314	"	Soil	Pb (Lead) - 6020 - Total	"	10/08/19	9100516	A19J003	
315	"	Soil	Se (Selenium) - 6020 - Total	"	10/08/19	9100516	A19J003	
316	"	Soil	Zn (Zinc) - 6020 - Total	(QC Source)		9100516	A19J003	
317	"	Soil	Ni (Nickel) - 6020 - Total	(QC Source)		9100516	A19J003	
318	"	Soil	Be (Beryllium) - 6020 - Total	(QC Source)		9100516	A19J003	
319	"	Soil	Co (Cobalt) - 6020 - Total	(QC Source)		9100516	A19J003	
320	"	Soil	Tl (Thallium) - 6020 - Total	(QC Source)		9100516	A19J003	
321	"	Soil	Sb (Antimony) - 6020 - Total	(QC Source)		9100516	A19J003	
322	"	Soil	V (Vanadium) - 6020 - Total	(QC Source)		9100516	A19J003	
323	"	Soil	Mo (Molybdenum) - 6020 - Total	(QC Source)		9100516	A19J003	
324	9J02063-CCV6	Water	QC	QC			A19J003	A19I385
325	9J02063-CCB6	Water	QC	QC			A19J003	
326	9100516-DUP1	Soil	QC	QC		9100516	A19J003	

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
327	9100516-MS1	Soil	QC	QC		9100516	A19J003	
328	A9I0958-01	Soil	Ag (Silver) - 6020 - Total		10/09/19	9100516	A19J003	
329	"	Soil	Ba (Barium) - 6020 - Total		10/09/19	9100516	A19J003	
330	"	Soil	As (Arsenic) - 6020 - Total		10/09/19	9100516	A19J003	
331	"	Soil	Cd (Cadmium) - 6020 - Total		10/09/19	9100516	A19J003	
332	"	Soil	Cr (Chromium) - 6020 - Total		10/09/19	9100516	A19J003	
333	"	Soil	Cu (Copper) - 6020 - Total		10/09/19	9100516	A19J003	
334	"	Soil	Hg (Mercury) - 6020 - Total		10/09/19	9100516	A19J003	
335	"	Soil	Pb (Lead) - 6020 - Total		10/09/19	9100516	A19J003	
336	"	Soil	Se (Selenium) - 6020 - Total		10/09/19	9100516	A19J003	
337	"	Soil	Zn (Zinc) - 6020 - Total		10/09/19	9100516	A19J003	
338	"	Soil	Ni (Nickel) - 6020 - Total		10/09/19	9100516	A19J003	
339	"	Soil	Be (Beryllium) - 6020 - Total		10/09/19	9100516	A19J003	
340	"	Soil	Co (Cobalt) - 6020 - Total		10/09/19	9100516	A19J003	
341	"	Soil	Tl (Thallium) - 6020 - Total		10/09/19	9100516	A19J003	
342	"	Soil	V (Vanadium) - 6020 - Total		10/09/19	9100516	A19J003	
343	"	Soil	Sb (Antimony) - 6020 - Total		10/09/19	9100516	A19J003	
344	"	Soil	Mo (Molybdenum) - 6020 - Total		10/09/19	9100516	A19J003	
345	A9J0011-01	Soil	Ag (Silver) - 6020 - Total		10/04/19	9100516	A19J003	
346	"	Soil	As (Arsenic) - 6020 - Total		10/04/19	9100516	A19J003	
347	"	Soil	Ba (Barium) - 6020 - Total		10/04/19	9100516	A19J003	
348	"	Soil	Cd (Cadmium) - 6020 - Total		10/04/19	9100516	A19J003	
349	"	Soil	Cr (Chromium) - 6020 - Total		10/04/19	9100516	A19J003	
350	"	Soil	Hg (Mercury) - 6020 - Total		10/04/19	9100516	A19J003	
351	"	Soil	Pb (Lead) - 6020 - Total		10/04/19	9100516	A19J003	
352	"	Soil	Se (Selenium) - 6020 - Total		10/04/19	9100516	A19J003	
353	9J02063-CCV7	Water	QC	QC			A19J003	A19I385
354	9J02063-CCB7	Water	QC	QC			A19J003	
355	9J02063-CRL9	Water	QC	QC			A19J003	A19I097
356	9J02063-CRLA	Water	QC	QC			A19J003	A19I098
357	9J02063-CRLB	Water	QC	QC			A19J003	A19I099
358	9J02063-CRLC	Water	QC	QC			A19J003	A19I100
359	9100528-BLK1	Water	QC	QC		9100528	A19J003	
360	9100528-BS1	Water	QC	QC		9100528	A19J003	
361	A9J0018-01	Water	Ag (Silver) - 6020 - Total		10/07/19	9100528	A19J003	
362	"	Water	As (Arsenic) - 6020 - Total		10/07/19	9100528	A19J003	
363	"	Water	Ba (Barium) - 6020 - Total		10/07/19	9100528	A19J003	
364	"	Water	Cd (Cadmium) - 6020 - Total		10/07/19	9100528	A19J003	
365	"	Water	Cr (Chromium) - 6020 - Total		10/07/19	9100528	A19J003	
366	"	Water	Hg (Mercury) - 6020 - Total		10/07/19	9100528	A19J003	
367	"	Water	Pb (Lead) - 6020 - Total		10/07/19	9100528	A19J003	
368	"	Water	Se (Selenium) - 6020 - Total		10/07/19	9100528	A19J003	
369	A9J0018-02	Water	Ag (Silver) - 6020 - Total		10/07/19	9100528	A19J003	
370	"	Water	As (Arsenic) - 6020 - Total		10/07/19	9100528	A19J003	
371	"	Water	Ba (Barium) - 6020 - Total		10/07/19	9100528	A19J003	
372	"	Water	Cd (Cadmium) - 6020 - Total		10/07/19	9100528	A19J003	
373	"	Water	Cr (Chromium) - 6020 - Total		10/07/19	9100528	A19J003	
374	"	Water	Hg (Mercury) - 6020 - Total		10/07/19	9100528	A19J003	
375	"	Water	Pb (Lead) - 6020 - Total		10/07/19	9100528	A19J003	
376	"	Water	Se (Selenium) - 6020 - Total		10/07/19	9100528	A19J003	
377	9100528-DUP1	Water	QC	QC		9100528	A19J003	
378	9100528-MS1	Water	QC	QC		9100528	A19J003	
379	9J02063-CCV8	Water	QC	QC			A19J003	A19I385
380	9J02063-CCB8	Water	QC	QC			A19J003	
381	9J02063-CRLD	Water	QC	QC			A19J003	A19I097

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
382	9J02063-CRLE	Water	QC	QC			A19J003	A19I098
383	9J02063-CRLF	Water	QC	QC			A19J003	A19I099
384	9J02063-CRLG	Water	QC	QC			A19J003	A19I100

Data Entered By: ESS 10/7/19 Comments:

Data Reviewed By: JG 10/07/19

ELEMENT SEQUENCE LOG

Apex Laboratories

Sequence: **9J02063** Instrument: **ICPMS6**

Date: **10/02/19 18:22** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
1	9J02063-CAL1	Water	QC	QC			A19J003	A19I097
2	9J02063-CAL2	Water	QC	QC			A19J003	A19I098
3	9J02063-CAL3	Water	QC	QC			A19J003	A19I099
4	9J02063-CAL4	Water	QC	QC			A19J003	A19I100
5	9J02063-CAL5	Water	QC	QC			A19J003	A19I224
6	9J02063-CAL6	Water	QC	QC			A19J003	A19I101
7	9J02063-CAL7	Water	QC	QC			A19J003	A19I225
8	9J02063-CAL8	Water	QC	QC			A19J003	A19I054
9	9J02063-CAL9	Water	QC	QC			A19J003	A19I053
10	9J02063-ICV1	Water	QC	QC			A19J003	A19I385
11	9J02063-ICB1	Water	QC	QC			A19J003	
12	9J02063-CRL1	Water	QC	QC			A19J003	A19I097
13	9J02063-CRL2	Water	QC	QC			A19J003	A19I098
14	9J02063-CRL3	Water	QC	QC			A19J003	A19I099
15	9J02063-CRL4	Water	QC	QC			A19J003	A19I100
16	9J02063-IFA1	Water	QC	QC			A19J003	A19I356
17	9J02063-IFB1	Water	QC	QC			A19J003	A19I357
18	9100506-BLK1	Water	QC	QC		9100506	A19J003	
19	9100506-BS1	Water	QC	QC		9100506	A19J003	
20	A9I0928-01RE1	Water	Mn (Manganese) - 6020 - Total		10/11/19	9100506	A19J003	
21	A9I0929-01RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
22	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
23	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
24	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
25	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
26	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
27	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
28	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
29	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
30	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
31	A9I0929-02RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
32	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
33	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
34	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
35	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
36	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
37	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
38	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
39	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
40	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
41	A9I0929-03RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
42	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
43	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
44	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
45	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
46	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
47	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
48	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
49	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
50	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
51	A9I0929-04RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	

Sequence: **9J02063** Instrument: **ICPMS6**

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
52	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
53	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
54	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
55	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
56	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
57	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
58	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
59	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
60	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
61	A9I0929-05RE1	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
62	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
63	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
64	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
65	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
66	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
67	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
68	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
69	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
70	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
71	A9I0945-02RE1	Water	Ag (Silver) - 200.8 - Total		10/08/19	9100506	A19J003	
72	"	Water	Cd (Cadmium) - 200.8 - Total		10/08/19	9100506	A19J003	
73	"	Water	Cr (Chromium) - 200.8 - Total		10/08/19	9100506	A19J003	
74	"	Water	Cu (Copper) - 200.8 - Total		10/08/19	9100506	A19J003	
75	"	Water	Ni (Nickel) - 200.8 - Total		10/08/19	9100506	A19J003	
76	"	Water	Pb (Lead) - 200.8 - Total		10/08/19	9100506	A19J003	
77	"	Water	Zn (Zinc) - 200.8 - Total		10/08/19	9100506	A19J003	
78	A9I0955-01RE1	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
79	"	Water	Al (Aluminum) - 6020 - Total		10/09/19	9100506	A19J003	
80	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
81	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
82	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
83	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
84	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
85	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
86	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
87	9J02063-CCV1	Water	QC	QC			A19J003	A19I385
88	9J02063-CCB1	Water	QC	QC			A19J003	
89	A9I0956-01RE1	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
90	"	Water	Al (Aluminum) - 6020 - Total		10/09/19	9100506	A19J003	
91	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
92	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
93	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
94	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
95	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
96	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
97	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
98	A9I0959-01RE1	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
99	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
100	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
101	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
102	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
103	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
104	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
105	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
106	A9J0014-01RE1	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	

Sequence: **9J02063** Instrument: **ICPMS6**

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
107	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
108	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
109	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
110	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
111	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
112	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
113	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
114	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
115	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
116	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
117	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
118	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
119	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
120	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
121	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
122	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
123	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
124	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
125	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
126	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
127	"	Water	Zn (Zinc) - 200.8 - Total	"	10/07/19	9100506	A19J003	
128	A9I0877-01	Water	As (Arsenic) - 6020 - Total		10/10/19	9100506	A19J003	
129	"	Water	Cd (Cadmium) - 6020 - Total		10/10/19	9100506	A19J003	
130	"	Water	Cu (Copper) - 6020 - Total		10/10/19	9100506	A19J003	
131	"	Water	Hg (Mercury) - 6020 - Total		10/10/19	9100506	A19J003	
132	"	Water	Pb (Lead) - 6020 - Total		10/10/19	9100506	A19J003	
133	"	Water	Zn (Zinc) - 6020 - Total		10/10/19	9100506	A19J003	
134	A9I0892-01	Water	Cr (Chromium) - 200.8 - Total		10/10/19	9100506	A19J003	
135	"	Water	Zn (Zinc) - 200.8 - Total		10/10/19	9100506	A19J003	
136	A9I0899-01	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
137	A9I0899-02	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	
138	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
139	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
140	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
141	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
142	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
143	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
144	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
145	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
146	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
147	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
148	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
149	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
150	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
151	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
152	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
153	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
154	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
155	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
156	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
157	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
158	"	Water	Zn (Zinc) - 200.8 - Total	(QC Source)		9100506	A19J003	
159	9100506-DUP1	Water	QC	QC		9100506	A19J003	
160	9100506-MS1	Water	QC	QC		9100506	A19J003	
161	9J02063-CCV2	Water	QC	QC			A19J003	A19I385

Sequence: **9J02063** Instrument: **ICPMS6**

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#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
162	9J02063-CCB2	Water	QC	QC			A19J003	
163	A9I0899-03	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
164	A9I0899-04	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
165	A9I0899-05	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
166	A9I0899-06	Water	Pb (Lead) - 200.8 - Total		10/07/19	9100506	A19J003	
167	A9I0928-01	Water	Mn (Manganese) - 6020 - Total		10/11/19	9100506	A19J003	
168	A9I0929-01	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
169	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
170	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
171	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
172	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
173	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
174	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
175	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
176	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
177	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
178	A9I0929-02	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
179	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
180	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
181	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
182	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
183	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
184	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
185	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
186	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
187	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
188	A9I0929-03	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
189	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
190	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
191	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
192	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
193	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
194	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
195	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
196	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
197	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
198	A9I0929-04	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
199	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
200	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
201	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
202	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
203	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
204	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
205	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
206	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	
207	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
208	A9I0929-05	Water	Ag (Silver) - 200.8 - Total		10/09/19	9100506	A19J003	
209	"	Water	As (Arsenic) - 200.8 - Total		10/09/19	9100506	A19J003	
210	"	Water	Cd (Cadmium) - 200.8 - Total		10/09/19	9100506	A19J003	
211	"	Water	Cr (Chromium) - 200.8 - Total		10/09/19	9100506	A19J003	
212	"	Water	Cu (Copper) - 200.8 - Total		10/09/19	9100506	A19J003	
213	"	Water	Mo (Molybdenum) - 200.8 - Total		10/09/19	9100506	A19J003	
214	"	Water	Ni (Nickel) - 200.8 - Total		10/09/19	9100506	A19J003	
215	"	Water	Pb (Lead) - 200.8 - Total		10/09/19	9100506	A19J003	
216	"	Water	Se (Selenium) - 200.8 - Total		10/09/19	9100506	A19J003	

Sequence: **9J02063** Instrument: **ICPMS6**

Date: **10/02/19 18:22** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
217	"	Water	Zn (Zinc) - 200.8 - Total		10/09/19	9100506	A19J003	
218	9J02063-CCV3	Water	QC	QC			A19J003	A19I385
219	9J02063-CCB3	Water	QC	QC			A19J003	
220	A9I0959-01	Water	Ag (Silver) - 6020 - Total		10/09/19	9100506	A19J003	
221	"	Water	As (Arsenic) - 6020 - Total		10/09/19	9100506	A19J003	
222	"	Water	Ba (Barium) - 6020 - Total		10/09/19	9100506	A19J003	
223	"	Water	Cd (Cadmium) - 6020 - Total		10/09/19	9100506	A19J003	
224	"	Water	Cr (Chromium) - 6020 - Total		10/09/19	9100506	A19J003	
225	"	Water	Hg (Mercury) - 6020 - Total		10/09/19	9100506	A19J003	
226	"	Water	Pb (Lead) - 6020 - Total		10/09/19	9100506	A19J003	
227	"	Water	Se (Selenium) - 6020 - Total		10/09/19	9100506	A19J003	
228	A9J0014-01	Water	Ag (Silver) - 6020 - Total	(QC Source)		9100506	A19J003	
229	"	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9100506	A19J003	
230	"	Water	Al (Aluminum) - 6020 - Total	(QC Source)		9100506	A19J003	
231	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9100506	A19J003	
232	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9100506	A19J003	
233	"	Water	Ba (Barium) - 6020 - Total	(QC Source)		9100506	A19J003	
234	"	Water	Cd (Cadmium) - 6020 - Total	(QC Source)		9100506	A19J003	
235	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9100506	A19J003	
236	"	Water	Cr (Chromium) - 6020 - Total	(QC Source)		9100506	A19J003	
237	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9100506	A19J003	
238	"	Water	Cu (Copper) - 6020 - Total	(QC Source)		9100506	A19J003	
239	"	Water	Cu (Copper) - 200.8 - Total	(QC Source)		9100506	A19J003	
240	"	Water	Hg (Mercury) - 6020 - Total	(QC Source)		9100506	A19J003	
241	"	Water	Mn (Manganese) - 6020 - Total	(QC Source)		9100506	A19J003	
242	"	Water	Mo (Molybdenum) - 200.8 - Total	(QC Source)		9100506	A19J003	
243	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9100506	A19J003	
244	"	Water	Pb (Lead) - 6020 - Total	(QC Source)		9100506	A19J003	
245	"	Water	Pb (Lead) - 200.8 - Total	"	10/07/19	9100506	A19J003	
246	"	Water	Se (Selenium) - 6020 - Total	(QC Source)		9100506	A19J003	
247	"	Water	Se (Selenium) - 200.8 - Total	(QC Source)		9100506	A19J003	
248	"	Water	Zn (Zinc) - 6020 - Total	(QC Source)		9100506	A19J003	
249	"	Water	Zn (Zinc) - 200.8 - Total	"	10/07/19	9100506	A19J003	
250	9100506-MS2	Water	QC	QC		9100506	A19J003	
251	A9I0871-01RE1	Water	Ag (Silver) - 200.8 - Total	(QC Source)		9091386	A19J003	
252	"	Water	As (Arsenic) - 6020 - Total	(QC Source)		9091386	A19J003	
253	"	Water	As (Arsenic) - 200.8 - Total	(QC Source)		9091386	A19J003	
254	"	Water	Cd (Cadmium) - 200.8 - Total	(QC Source)		9091386	A19J003	
255	"	Water	Cr (Chromium) - 200.8 - Total	(QC Source)		9091386	A19J003	
256	"	Water	Cu (Copper) - 200.8 - Total	"	10/10/19	9091386	A19J003	
257	"	Water	Ni (Nickel) - 200.8 - Total	(QC Source)		9091386	A19J003	
258	"	Water	Pb (Lead) - 200.8 - Total	(QC Source)		9091386	A19J003	
259	"	Water	Zn (Zinc) - 200.8 - Total	"	10/10/19	9091386	A19J003	
260	"	Water	Fe (Iron) - 200.8 - Total	(QC Source)		9091386	A19J003	
261	9091386-MS3	Water	QC	QC		9091386	A19J003	
262	9J02063-CCV4	Water	QC	QC			A19J003	A19I385
263	9J02063-CCB4	Water	QC	QC			A19J003	
264	9J02063-CRL5	Water	QC	QC			A19J003	A19I097
265	9J02063-CRL6	Water	QC	QC			A19J003	A19I098
266	9J02063-CRL7	Water	QC	QC			A19J003	A19I099
267	9J02063-CRL8	Water	QC	QC			A19J003	A19I100
268	9100496-BLK2	Solid	QC	QC		9100496	A19J003	
269	9100496-BS2	Solid	QC	QC		9100496	A19J003	
270	A9I0847-01RE1	Solid	Cd (Cadmium) - 6020 - Total		10/07/19	9100496	A19J003	
271	"	Solid	Cr (Chromium) - 6020 - Total		10/07/19	9100496	A19J003	

Sequence: **9J02063** Instrument: **ICPMS6**

Date: **10/02/19 18:22** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
272	"	Solid	Pb (Lead) - 6020 - Total		10/07/19	9100496	A19J003	
273	A9I0847-02RE1	Solid	Cd (Cadmium) - 6020 - Total		10/07/19	9100496	A19J003	
274	"	Solid	Cr (Chromium) - 6020 - Total		10/07/19	9100496	A19J003	
275	"	Solid	Pb (Lead) - 6020 - Total		10/07/19	9100496	A19J003	
276	A9I0951-01RE1	Solid	Ag (Silver) - 6020 - Total		10/02/19	9100496	A19J003	
277	"	Solid	As (Arsenic) - 6020 - Total		10/02/19	9100496	A19J003	
278	"	Solid	Ba (Barium) - 6020 - Total		10/02/19	9100496	A19J003	
279	"	Solid	Cd (Cadmium) - 6020 - Total		10/02/19	9100496	A19J003	
280	"	Solid	Cr (Chromium) - 6020 - Total		10/02/19	9100496	A19J003	
281	"	Solid	Hg (Mercury) - 6020 - Total		10/02/19	9100496	A19J003	
282	"	Solid	Pb (Lead) - 6020 - Total		10/02/19	9100496	A19J003	
283	"	Solid	Se (Selenium) - 6020 - Total		10/02/19	9100496	A19J003	
284	A9I0947-01RE1	Solid	Mo (Molybdenum) - 6020 - Total		10/03/19	9100496	A19J003	
285	A9I0951-01RE1	Solid	Mo (Molybdenum) - 6020 - Total	(QC Source)		9100496	A19J003	
286	9100496-DUP3	Solid	QC	QC		9100496	A19J003	
287	9100496-MS3	Solid	QC	QC		9100496	A19J003	
288	9100496-MSD3	Solid	QC	QC		9100496	A19J003	
289	9100517-BLK1	Sediment	QC	QC		9100517	A19J003	
290	9J02063-CCV5	Water	QC	QC			A19J003	A19I385
291	9J02063-CCB5	Water	QC	QC			A19J003	
292	9100517-BS1	Sediment	QC	QC		9100517	A19J003	
293	9100517-MS1	Sediment	QC	QC		9100517	A19J003	
294	9100517-MSD1	Sediment	QC	QC		9100517	A19J003	
295	A9I0822-02	Sediment	Ag (Silver) - 6020 - Total		10/08/19	9100517	A19J003	
296	"	Sediment	As (Arsenic) - 6020 - Total		10/08/19	9100517	A19J003	
297	"	Sediment	Cd (Cadmium) - 6020 - Total		10/08/19	9100517	A19J003	
298	"	Sediment	Cr (Chromium) - 6020 - Total		10/08/19	9100517	A19J003	
299	"	Sediment	Cu (Copper) - 6020 - Total		10/08/19	9100517	A19J003	
300	"	Sediment	Pb (Lead) - 6020 - Total		10/08/19	9100517	A19J003	
301	"	Sediment	Se (Selenium) - 6020 - Total		10/08/19	9100517	A19J003	
302	"	Sediment	Zn (Zinc) - 6020 - Total		10/08/19	9100517	A19J003	
303	"	Sediment	Ni (Nickel) - 6020 - Total		10/08/19	9100517	A19J003	
304	9100516-BLK1	Soil	QC	QC		9100516	A19J003	
305	9100516-BLK2	Soil	QC	QC		9100516	A19J003	
306	9100516-BS1	Soil	QC	QC		9100516	A19J003	
307	A9I0844-02	Soil	Ag (Silver) - 6020 - Total		10/08/19	9100516	A19J003	
308	"	Soil	As (Arsenic) - 6020 - Total		10/08/19	9100516	A19J003	
309	"	Soil	Ba (Barium) - 6020 - Total		10/08/19	9100516	A19J003	
310	"	Soil	Cd (Cadmium) - 6020 - Total		10/08/19	9100516	A19J003	
311	"	Soil	Cr (Chromium) - 6020 - Total		10/08/19	9100516	A19J003	
312	"	Soil	Cu (Copper) - 6020 - Total	(QC Source)		9100516	A19J003	
313	"	Soil	Hg (Mercury) - 6020 - Total	"	10/08/19	9100516	A19J003	
314	"	Soil	Pb (Lead) - 6020 - Total	"	10/08/19	9100516	A19J003	
315	"	Soil	Se (Selenium) - 6020 - Total	"	10/08/19	9100516	A19J003	
316	"	Soil	Zn (Zinc) - 6020 - Total	(QC Source)		9100516	A19J003	
317	"	Soil	Ni (Nickel) - 6020 - Total	(QC Source)		9100516	A19J003	
318	"	Soil	Be (Beryllium) - 6020 - Total	(QC Source)		9100516	A19J003	
319	"	Soil	Co (Cobalt) - 6020 - Total	(QC Source)		9100516	A19J003	
320	"	Soil	Tl (Thallium) - 6020 - Total	(QC Source)		9100516	A19J003	
321	"	Soil	Sb (Antimony) - 6020 - Total	(QC Source)		9100516	A19J003	
322	"	Soil	V (Vanadium) - 6020 - Total	(QC Source)		9100516	A19J003	
323	9J02063-CCV6	Water	QC	QC			A19J003	A19I385
324	9J02063-CCB6	Water	QC	QC			A19J003	
325	9100516-DUP1	Soil	QC	QC		9100516	A19J003	
326	9100516-MS1	Soil	QC	QC		9100516	A19J003	

10/04/19

Sequence: **9J02063** Instrument: **ICPMS6**

Date: **10/02/19 18:22** Calibration: **UNASSIGNED**

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
327	A9I0958-01	Soil	Ag (Silver) - 6020 - Total		10/09/19	9100516	A19J003	
328	"	Soil	Ba (Barium) - 6020 - Total		10/09/19	9100516	A19J003	
329	"	Soil	As (Arsenic) - 6020 - Total		10/09/19	9100516	A19J003	
330	"	Soil	Cd (Cadmium) - 6020 - Total		10/09/19	9100516	A19J003	
331	"	Soil	Cr (Chromium) - 6020 - Total		10/09/19	9100516	A19J003	
332	"	Soil	Cu (Copper) - 6020 - Total		10/09/19	9100516	A19J003	
333	"	Soil	Hg (Mercury) - 6020 - Total		10/09/19	9100516	A19J003	
334	"	Soil	Pb (Lead) - 6020 - Total		10/09/19	9100516	A19J003	
335	"	Soil	Se (Selenium) - 6020 - Total		10/09/19	9100516	A19J003	
336	"	Soil	Zn (Zinc) - 6020 - Total		10/09/19	9100516	A19J003	
337	"	Soil	Ni (Nickel) - 6020 - Total		10/09/19	9100516	A19J003	
338	"	Soil	Be (Beryllium) - 6020 - Total		10/09/19	9100516	A19J003	
339	"	Soil	Co (Cobalt) - 6020 - Total		10/09/19	9100516	A19J003	
340	"	Soil	Tl (Thallium) - 6020 - Total		10/09/19	9100516	A19J003	
341	"	Soil	V (Vanadium) - 6020 - Total		10/09/19	9100516	A19J003	
342	"	Soil	Sb (Antimony) - 6020 - Total		10/09/19	9100516	A19J003	
343	A9J0011-01	Soil	Ag (Silver) - 6020 - Total		10/04/19	9100516	A19J003	
344	"	Soil	As (Arsenic) - 6020 - Total		10/04/19	9100516	A19J003	
345	"	Soil	Ba (Barium) - 6020 - Total		10/04/19	9100516	A19J003	
346	"	Soil	Cd (Cadmium) - 6020 - Total		10/04/19	9100516	A19J003	
347	"	Soil	Cr (Chromium) - 6020 - Total		10/04/19	9100516	A19J003	
348	"	Soil	Hg (Mercury) - 6020 - Total		10/04/19	9100516	A19J003	
349	"	Soil	Pb (Lead) - 6020 - Total		10/04/19	9100516	A19J003	
350	"	Soil	Se (Selenium) - 6020 - Total		10/04/19	9100516	A19J003	
351	9J02063-CCV7	Water	QC	QC			A19J003	A19I385
352	9J02063-CCB7	Water	QC	QC			A19J003	
353	9J02063-CRL9	Water	QC	QC			A19J003	A19I097
354	9J02063-CRLA	Water	QC	QC			A19J003	A19I098
355	9J02063-CRLB	Water	QC	QC			A19J003	A19I099
356	9J02063-CRLC	Water	QC	QC			A19J003	A19I100
357	9100528-BLK1	Water	QC	QC		9100528	A19J003	
358	9100528-BS1	Water	QC	QC		9100528	A19J003	
359	A9J0018-01	Water	Ag (Silver) - 6020 - Total		10/07/19	9100528	A19J003	
360	"	Water	As (Arsenic) - 6020 - Total		10/07/19	9100528	A19J003	
361	"	Water	Ba (Barium) - 6020 - Total		10/07/19	9100528	A19J003	
362	"	Water	Cd (Cadmium) - 6020 - Total		10/07/19	9100528	A19J003	
363	"	Water	Cr (Chromium) - 6020 - Total		10/07/19	9100528	A19J003	
364	"	Water	Hg (Mercury) - 6020 - Total		10/07/19	9100528	A19J003	
365	"	Water	Pb (Lead) - 6020 - Total		10/07/19	9100528	A19J003	
366	"	Water	Se (Selenium) - 6020 - Total		10/07/19	9100528	A19J003	
367	A9J0018-02	Water	Ag (Silver) - 6020 - Total		10/07/19	9100528	A19J003	
368	"	Water	As (Arsenic) - 6020 - Total		10/07/19	9100528	A19J003	
369	"	Water	Ba (Barium) - 6020 - Total		10/07/19	9100528	A19J003	
370	"	Water	Cd (Cadmium) - 6020 - Total		10/07/19	9100528	A19J003	
371	"	Water	Cr (Chromium) - 6020 - Total		10/07/19	9100528	A19J003	
372	"	Water	Hg (Mercury) - 6020 - Total		10/07/19	9100528	A19J003	
373	"	Water	Pb (Lead) - 6020 - Total		10/07/19	9100528	A19J003	
374	"	Water	Se (Selenium) - 6020 - Total		10/07/19	9100528	A19J003	
375	9100528-DUP1	Water	QC	QC		9100528	A19J003	
376	9100528-MS1	Water	QC	QC		9100528	A19J003	
377	9J02063-CCV8	Water	QC	QC			A19J003	A19I385
378	9J02063-CCB8	Water	QC	QC			A19J003	
379	9J02063-CRLD	Water	QC	QC			A19J003	A19I097
380	9J02063-CRLE	Water	QC	QC			A19J003	A19I098
381	9J02063-CRLF	Water	QC	QC			A19J003	A19I099

Sequence:	9J02063	Instrument:	ICPMS6
Date:	10/02/19 18:22	Calibration:	UNASSIGNED

#	Lab Number	Matrix	Analysis	Client	Due	Batch	ISTD ID	STD ID
382	9J02063-CRLG	Water	QC	QC			A19J003	A19I100

R-11 Cu = 4.7 - 9.8 pm

R-11 Ni + Zn = 3.4

Data Entered By: 10/04/19

Data Reviewed By: 10/04/19

Comments: Most of sequence reviewed 10/04/19

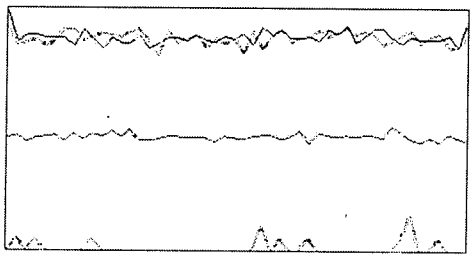
Standard Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9J02045.b
Acq. Date-Time	10/02/2019 15:30:54
Report Comment	9J02045 EPA Multi-Mode Tune Report Std ID A19I052
Instrument Name	ICPMS6 JP17412047

Seq
9502045
9J02063
yp 10/2/19.

[No Gas]

Sensitivity



Sampling Period [sec] 0.413
Integration Time [sec] 0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
7	5000	2366	23659.72	5000.00	
89	10000	8805	88046.25	10000.00	
205	10000	8848	88484.29	10000.00	
102	20	0			

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
7		-	
89		-	
205		-	
102		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
7	2.895	5.000	
89	3.087	5.000	
205	3.202	5.000	
102	246.288		

Mass	Background	Background (Required)	Background (Flag)
7			
89			
205			
102			

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.702 %
Doubly Charged	69 / 138 1.899 %

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min

Standard Tune Check Report ICPMS6

RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		
Lens Parameters					
Extract 1	0.0 V	Omega Lens	6.0 V	Deflect	11.6 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-30 V
Omega Bias	-105 V	Cell Exit	-60 V		
Cell Parameters					
Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		
QP Parameters					
Mass Gain	129	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	-0.02		
Hardware Settings					
Torch					
Torch H	-0.5 mm	Torch V	0.6 mm		
EM					
Discriminator	4.9 mV	Analog HV	2252 V	Pulse HV	1655 V

EPA Tune Check Report ICPMS6

Operator Name	ICPMS Analyst
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\9J02045.b
Acq. Date-Time	10/02/2019 15:39:17
Report Comment	9J02045 EPA Multi-Mode Tune Report Std ID A19I052
Instrument Name	ICPMS6 JP17412047

[No Gas]

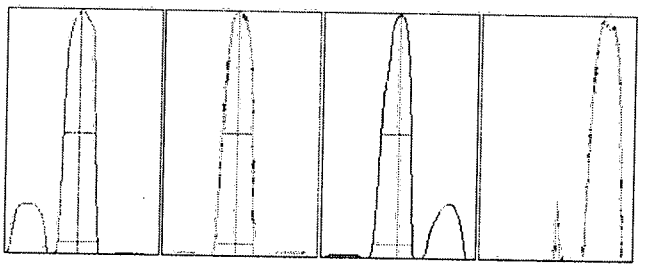
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
7	1.00	1445	14447.15	5000.00	0.577		5.000	
89	1.00	5073	50726.97	10000.00	0.932		5.000	
205	1.00	4871	48709.04	10000.00	0.811		5.000	
102		2	22.17		195.987			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	1453	1444	1435	1454	1438
89	5053	5042	5093	5145	5029
205	4834	4849	4921	4845	4905
102	10	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
7	2354.29	6.95	6.90 - 7.10		0.63	0.779	0.900	
89	8905.60	88.95	88.90 - 89.10		0.59	0.738	0.900	
205	8805.49	205.00	204.90 - 205.10		0.58	0.762	0.900	
102	1.20	102.15	-		0.09	0.627		

Integration Time [sec] 0.1
Acquisition Time [sec] 135.3
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min

EPA Tune Check Report ICPMS6

RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	6.0 V	Deflect	11.6 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-30 V
Omega Bias	-105 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.6 mm		

EM

Discriminator	4.9 mV	Analog HV	2252 V	Pulse HV	1655 V

[He]

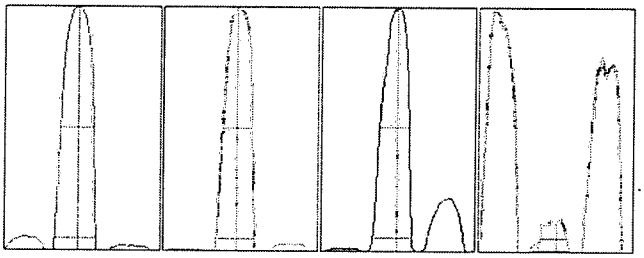
Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	815	8150.57	1000.00	0.540		5.000	
89	1.00	788	7875.24	2000.00	1.593		5.000	
205	1.00	3201	32012.12	1000.00	1.154		5.000	
75		1	10.60		23.443			

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	818	813	809	814	821
89	782	784	772	803	797
205	3189	3172	3165	3231	3249
75	1	1	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



EPA Tune Check Report ICPMS6

Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
59	1333.05	58.95	58.90 - 59.10		0.63	0.781	0.900	
89	1385.97	88.95	88.90 - 89.10		0.59	0.736	0.900	
205	5774.86	205.00	204.90 - 205.10		0.58	0.764	0.900	
75	1.80	75.05	-		0.53	0.736		

Integration Time [sec]	0.1
Acquisition Time [sec]	134.8
Y Axis	Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	6.0 V	Deflect	2.0 V
Extract 2	-135.0 V	Cell Entrance	-40 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.7 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9995	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.6 mm

EM

Discriminator	4.9 mV	Analog HV	2252 V	Pulse HV	1655 V

[HEHe]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Req) [cps/ug/l]	RSD%	Resp (Flag)	RSD% (Req)	RSD% (Flag)
59	1.00	712	7116.61	1000.00	1.572		5.000	
89	1.00	1308	13081.45	2000.00	0.543		5.000	
78		0	3.70		20.494			

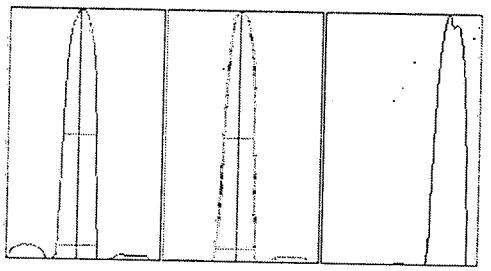
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	715	723	720	696	705
89	1310	1314	1312	1309	1296

EPA Tune Check Report ICPMS6

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
78	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Ht	Axis	Axis (Req)	Axis (Flag)	W-50%	W-5%	W-X% (Req)	W-5% (Flag)
59	1143.54	58.90	58.90 - 59.10		0.65	0.785	0.900	
89	2268.75	88.95	88.90 - 89.10		0.60	0.749	0.900	
78			-					

Integration Time [sec] 0.1
Acquisition Time [sec] 100.35
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.95 L/min	Makeup Gas	0.00 L/min
RF Power	1550 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.5 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	6.0 V	Deflect	-80.0 V
Extract 2	-135.0 V	Cell Entrance	-130 V	Plate Bias	-150 V
Omega Bias	-105 V	Cell Exit	-150 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	10.0 mL/min	OctP Bias	-100.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	129	Axis Gain	0.9995	QP Bias	-96.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	-0.5 mm	Torch V	0.6 mm		

EM

Discriminator	4.9 mV	Analog HV	2252 V	Pulse HV	1655 V

P/A Factor Tuning Report

========== Current Sample ==========
Sample Name: A9J0014-01RE1
Data File: 036SMPL.d
Acquired: 10/02/2019 21:04:35

========= Detector Parameters and P/A Factors =========
Discriminator: 4.9 mV
AnalogHV: 2252 V
PulseHV: 1655 V

Acquired: 10/02/2019 16:38:58

Mass[u]	Element	P/A Factor
6	Li	0.090795
23	Na	0.101574
24	Mg	0.104921
27	Al	0.108388
39	K	0.113029
44	Ca	0.112862
45	Sc	0.117545
47	Ti	0.111310
51	V	0.119498
52	Cr	0.123269
55	Mn	0.121066
56	Fe	0.123537
59	Co	0.128722
60	Ni	0.129941
65	Cu	0.131368
66	Zn	0.133302
74	Ge	0.128823
75	As	0.128635
95	Mo	0.121649
103	Rh	0.129831
109	Ag	0.136525
111	Cd	0.135596
123	Sb	0.133808
137	Ba	0.137306
138	Ba	0.135239
159	Tb	0.135006
186	W	0.131670
205	Tl	0.148082
206	[Pb]	0.144279
207	[Pb]	0.145870
208	Pb	0.147227
209	Bi	0.141814
7	[Li]	Signal too low
9	Be	Signal too low
78	Se	Signal too low

106	[Cd]	Signal too low
108	[Cd]	Signal too low
201	Hg	Signal too low

=== Independent Detector Parameters and P/A Factors ===

Tune Mode Name: No Gas
Discriminator: 4.9 mV
AnalogHV: 2252 V
PulseHV: 1655 V

Acquired: 10/02/2019 16:38:09

Mass[u]	Element	P/A Factor
6	Li	0.091776
9	Be	0.099600
65	Cu	0.128758
74	Ge	0.126206
103	Rh	0.128485
106	[Cd]	0.134925
109	Ag	0.133266
111	Cd	0.131339
123	Sb	0.131763
159	Tb	0.132380
186	W	0.136101
205	Tl	0.141825
206	[Pb]	0.142557
207	[Pb]	0.143682
208	Pb	0.142957
209	Bi	0.136814
7	[Li]	Signal too low
108	[Cd]	Signal too low
201	Hg	Signal too low

Tune Mode Name: He
Discriminator: 4.9 mV
AnalogHV: 2252 V
PulseHV: 1655 V

Acquired: 10/02/2019 19:16:44

Mass[u]	Element	P/A Factor
23	Na	0.102371
24	Mg	0.106902
27	Al	0.110188
39	K	0.114708
44	Ca	0.115238
51	V	0.117286
52	Cr	0.120161
55	Mn	0.120877

56	Fe	0.122941
59	Co	0.124156
60	Ni	0.125712
65	Cu	0.127896
66	Zn	0.126467
103	Rh	0.128774
111	Cd	0.131962
138	Ba	0.131358
159	Tb	0.132921
45	Sc	Signal too low
47	Ti	Signal too low
74	Ge	Signal too low
75	As	Signal too low
95	Mo	Signal too low

Tune Mode Name: HEHe
Discriminator: 4.9 mV
AnalogHV: 2252 V
PulseHV: 1655 V

Acquired: 10/02/2019 18:50:05

Mass[u]	Element	P/A Factor
56	Fe	0.121106
74	Ge	Signal too low
78	Se	Signal too low

Created: 10/03/2019 14:55:38

Sample Report ICPMS6

Sample Name	**rinse**	**Sample Type**	Rinse
File Name	001RINS.d	**Vial #**	1
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:25:19	**Sample QC Pass/Fail**	Pass
Comment	rinse - stabilize I.S.	**ISTD Ref FileName**	---

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	654363	2.1	0		70	120	
Sc	45	He	175279	0.4	0		70	120	
Ge	74	No Gas	1006663	2.3	0		70	120	
Ge	74	He	169717	1.6	0		70	120	
Ge	74	HEHe	221413	1.5	0		70	120	
Rh	103	No Gas	1136122	2.2	0		70	120	
Rh	103	He	661501	0.9	0		70	120	
Tb	159	No Gas	2950116	0.9	0		70	120	
Tb	159	He	1533366	1.7	0		70	120	
[Bi]	209	No Gas	1791046	2.9	0		70	120	

Sample Report ICPMS6

Sample Name	rinse	**Sample Type**	Rinse
File Name	002RINS.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:29:59	**Sample QC Pass/Fail**	Pass
Comment	rinse - stabilize I.S.	**ISTD Ref FileName**	---

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	675145	1.0	0		70	120	
Sc	45	He	172979	1.4	0		70	120	
Ge	74	No Gas	1029700	0.5	0		70	120	
Ge	74	He	171004	0.8	0		70	120	
Ge	74	HEHe	219612	0.4	0		70	120	
Rh	103	No Gas	1168065	1.5	0		70	120	
Rh	103	He	665584	0.5	0		70	120	
Tb	159	No Gas	3003147	0.2	0		70	120	
Tb	159	He	1497853	1.3	0		70	120	
[Bi]	209	No Gas	1877586	2.1	0		70	120	

Calibration Blank Report ICPMS6

Sample Name	9J02063-CAL0	**Sample Type**	CalBlk
File Name	003CALB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:34:31	**Sample QC Pass/Fail**	Fail
Comment	Cal Blank Ni in Blk, from Cone?	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Be	9	6	No Gas	17	20.0
Na	23	45	He	4860	2.7
Mg	24	45	He	545	7.2
Al	27	45	He	38	71.8
K	39	45	He	15586	3.0
Ca	44	45	He	122	30.8
Ti	47	45	He	1	173.2
V	51	74	He	424	5.3
Cr	52	74	He	2236	2.9
Mn	55	74	He	309	17.2
Fe	56	74	He	15127	3.1
Co	59	74	He	97	6.0
Ni	60	74	He	2659	4.0
Cu	65	74	He	620	4.3
[Cu]	65	74	No Gas	1561	6.2
Zn	66	74	He	94	14.3
As	75	74	He	18	11.3
Se	78	74	HEHe	2	37.7
Mo	95	103	He	230	10.5
[Cd]	106	103	No Gas	8	49.5
Ag	109	103	No Gas	30	19.2
Cd	111	103	He	9	57.3
[Cd]	111	103	No Gas	2	455.9
Sb	123	103	No Gas	173	8.4
Ba	138	159	He	264	9.6
W	186	159	No Gas	147	14.2
Hg	201	159	No Gas	19	15.1
Tl	205	159	No Gas	198	25.3
Pb	208	159	No Gas	2612	2.3

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	683413	1.7
Ge	74	No Gas	1027391	1.0
Rh	103	No Gas	1163511	1.8
Tb	159	No Gas	3079736	2.3
[Bi]	209	No Gas	1949588	1.7
Sc	45	He	169523	2.5
Ge	74	He	167213	1.8
Rh	103	He	648079	1.2
Tb	159	He	1485824	1.5
Ge	74	HEHe	215481	0.2

Calibration Blank Report ICPMS6

Sample Name	**9J02063-CAL0**	**Sample Type**	CalBlk
File Name	003CALB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:34:31	**Sample QC Pass/Fail**	Pass
Comment	Cal Blank Ni in Blk, from Cone?	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Na	23	45	He	4860	2.7
K	39	45	He	15586	3.0
V	51	74	He	424	5.3
Cr	52	74	He	2236	2.9
Fe	56	74	He	15127	3.1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Li	6	No Gas	683413	1.7
Ge	74	No Gas	1027391	1.0
Rh	103	No Gas	1163511	1.8
Tb	159	No Gas	3079736	2.3
[Bi]	209	No Gas	1949588	1.7
Sc	45	He	169523	2.5
Ge	74	He	167213	1.8
Rh	103	He	648079	1.2
Tb	159	He	1485824	1.5
Ge	74	HEHe	215481	0.2

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL1	**Sample Type**	CalStd
File Name	004CALS.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:39:00	**Sample QC Pass/Fail**	Fail
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.18	ug/l	794	2.1	3	0.3000	
Na	23	45	He	22.141	ug/l	28884	1.8	3	0.2001	
Mg	24	45	He	9.73	ug/l	6098	4.2	3	0.2001	
Al	27	45	He	10.474	ug/l	2479	2.3	3	0.2001	
K	39	45	He	22.096	ug/l	25095	1.3	3	0.2001	
Ca	44	45	He	18.016	ug/l	545	6.4	3	0.2001	
Ti	47	45	He	0.186	ug/l	28	30.2	3	0.3000	RSD Warning
V	51	74	He	0.202	ug/l	1355	2.2	3	0.3000	
Cr	52	74	He	-0.066	ug/l	1862	2.0	3	0.3000	
Mn	55	74	He	0.158	ug/l	881	6.3	3	0.3000	
Fe	56	74	He	8.803	ug/l	61567	1.1	3	0.3000	
Co	59	74	He	0.169	ug/l	1631	7.4	3	0.3000	
Ni	60	74	He	-0.456	ug/l	1576	2.5	3	0.3000	
Cu	65	74	He	0.461	ug/l	2179	4.0	3	0.3000	
[Cu]	65	74	No Gas	0.486	ug/l	4752	2.0	3	0.3000	
Zn	66	74	He	0.828	ug/l	1006	2.8	3	0.3000	
As	75	74	He	0.18	ug/l	144	2.4	3	2.0001	
Se	78	74	HEHe	0.204	ug/l	35	12.3	3	3.0000	
Mo	95	103	He	0.155	ug/l	882	6.3	3	0.3000	
[Cd]	106	103	No Gas	0.174	ug/l	106	13.1	3	0.3000	
Ag	109	103	No Gas	0.193	ug/l	4599	1.5	3	0.3000	
Cd	111	103	He	0.164	ug/l	401	1.7	3	0.3000	
[Cd]	111	103	No Gas	0.187	ug/l	1166	2.1	3	0.3000	
Sb	123	103	No Gas	0.183	ug/l	3430	4.2	3	0.3000	
Ba	138	159	He	0.29	ug/l	4292	1.7	3	0.3000	
W	186	159	No Gas	-0.001	ug/l	93	27.0	3	0.0999	RSD Warning
Hg	201	159	No Gas	5.544	ng/l	43	13.7	3	2.0001	
Tl	205	159	No Gas	0.181	ug/l	14379	1.7	3	0.3000	
Pb	208	159	No Gas	0.21	ug/l	25649	2.4	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	678425	0.9	3	683413.09	99.27	70	120	
Sc	45	He	172759	1.9	3	169523	101.91	70	120	
Ge	74	No Gas	1012983	1.0	3	1027391.35	98.6	70	120	
Ge	74	He	168228	0.7	3	167213.36	100.61	70	120	
Ge	74	HEHe	220370	0.8	3	215480.59	102.27	70	120	
Rh	103	No Gas	1127493	0.6	3	1163511.07	96.9	70	120	
Rh	103	He	654190	0.8	3	648079.08	100.94	70	120	
Tb	159	No Gas	2988335	1.3	3	3079736.27	97.03	70	120	
Tb	159	He	1481145	2.7	3	1485823.76	99.69	70	120	
[Bi]	209	No Gas	1861826	1.1	3	1949588.49	95.5	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL1	**Sample Type**	CalStd
File Name	004CALS.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:39:00	**Sample QC Pass/Fail**	Pass
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.18	ug/l	794	2.1	3	0.3000	
Na	23	45	He	22.141	ug/l	28884	1.8	3	0.2001	
Mg	24	45	He	9.73	ug/l	6098	4.2	3	0.2001	
Al	27	45	He	10.474	ug/l	2479	2.3	3	0.2001	
K	39	45	He	22.096	ug/l	25095	1.3	3	0.2001	
V	51	74	He	0.202	ug/l	1355	2.2	3	0.3000	
Cr	52	74	He	-0.066	ug/l	1862	2.0	3	0.3000	
Fe	56	74	He	8.803	ug/l	61567	1.1	3	0.3000	
Co	59	74	He	0.169	ug/l	1631	7.4	3	0.3000	
As	75	74	He	0.18	ug/l	144	2.4	3	2.0001	
Ag	109	103	No Gas	0.193	ug/l	4599	1.5	3	0.3000	
Cd	111	103	He	0.164	ug/l	401	1.7	3	0.3000	
[Cd]	111	103	No Gas	0.187	ug/l	1166	2.1	3	0.3000	
Sb	123	103	No Gas	0.183	ug/l	3430	4.2	3	0.3000	
Ba	138	159	He	0.29	ug/l	4292	1.7	3	0.3000	
Tl	205	159	No Gas	0.181	ug/l	14379	1.7	3	0.3000	
Pb	208	159	No Gas	0.21	ug/l	25649	2.4	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	678425	0.9	3	683413.09	99.27	70	120	
Sc	45	He	172759	1.9	3	169523	101.91	70	120	
Ge	74	No Gas	1012983	1.0	3	1027391.35	98.6	70	120	
Ge	74	He	168228	0.7	3	167213.36	100.61	70	120	
Ge	74	HEHe	220370	0.8	3	215480.59	102.27	70	120	
Rh	103	No Gas	1127493	0.6	3	1163511.07	96.9	70	120	
Rh	103	He	654190	0.8	3	648079.08	100.94	70	120	
Tb	159	No Gas	2988335	1.3	3	3079736.27	97.03	70	120	
Tb	159	He	1481145	2.7	3	1485823.76	99.69	70	120	
[Bi]	209	No Gas	1861826	1.1	3	1949588.49	95.5	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL2**	**Sample Type**	CalStd
File Name	005CALS.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:43:41	**Sample QC Pass/Fail**	Fail
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.919	ug/l	4010	3.1	3	0.3000	
Na	23	45	He	56.479	ug/l	66273	1.4	3	0.2001	
Mg	24	45	He	46.401	ug/l	27091	2.1	3	0.2001	
Al	27	45	He	46.205	ug/l	10852	0.5	3	0.2001	
K	39	45	He	51.552	ug/l	37562	2.6	3	0.2001	
Ca	44	45	He	49.753	ug/l	1293	7.2	3	0.2001	
Ti	47	45	He	0.858	ug/l	124	21.5	3	0.3000	RSD Warning
V	51	74	He	0.844	ug/l	4282	1.7	3	0.3000	
Cr	52	74	He	0.628	ug/l	5911	2.5	3	0.3000	
Mn	55	74	He	0.859	ug/l	3394	1.4	3	0.3000	
Fe	56	74	He	44.453	ug/l	247641	0.7	3	0.3000	
Co	59	74	He	0.926	ug/l	8475	2.5	3	0.3000	
Ni	60	74	He	0.245	ug/l	3245	4.2	3	0.3000	
Cu	65	74	He	1.145	ug/l	4460	2.8	3	0.3000	
[Cu]	65	74	No Gas	1.165	ug/l	9064	1.8	3	0.3000	
Zn	66	74	He	1.632	ug/l	1877	2.1	3	0.3000	
As	75	74	He	0.884	ug/l	634	9.8	3	2.0001	
Se	78	74	HEHe	0.921	ug/l	140	8.4	3	3.0000	
Mo	95	103	He	0.855	ug/l	3829	1.7	3	0.3000	
[Cd]	106	103	No Gas	1.001	ug/l	567	7.6	3	0.3000	
Ag	109	103	No Gas	0.959	ug/l	22520	3.0	3	0.3000	
Cd	111	103	He	0.887	ug/l	2142	2.7	3	0.3000	
[Cd]	111	103	No Gas	0.925	ug/l	5727	4.5	3	0.3000	
Sb	123	103	No Gas	0.938	ug/l	16766	2.4	3	0.3000	
Ba	138	159	He	0.965	ug/l	13747	1.0	3	0.3000	
W	186	159	No Gas	-0.001	ug/l	117	47.2	3	0.0999	RSD Warning
Hg	201	159	No Gas	37.282	ng/l	183	3.4	3	2.0001	
Tl	205	159	No Gas	0.919	ug/l	70701	0.7	3	0.3000	
Pb	208	159	No Gas	0.965	ug/l	106441	0.8	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	680665	1.9	3	683413.09	99.6	70	120	
Sc	45	He	173539	2.1	3	169523	102.37	70	120	
Ge	74	No Gas	994288	3.0	3	1027391.35	96.78	70	120	
Ge	74	He	167164	1.1	3	167213.36	99.97	70	120	
Ge	74	HEHe	209159	2.3	3	215480.59	97.07	70	120	
Rh	103	No Gas	1119951	3.0	3	1163511.07	96.26	70	120	
Rh	103	He	657440	3.0	3	648079.08	101.44	70	120	
Tb	159	No Gas	2931171	4.3	3	3079736.27	95.18	70	120	
Tb	159	He	1489098	3.5	3	1485823.76	100.22	70	120	
[Bi]	209	No Gas	1819405	2.9	3	1949588.49	93.32	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL2**	**Sample Type**	CalStd
File Name	005CALS.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:43:41	**Sample QC Pass/Fail**	Pass
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.919	ug/l	4010	3.1	3	0.3000	
Na	23	45	He	56.479	ug/l	66273	1.4	3	0.2001	
Mg	24	45	He	46.401	ug/l	27091	2.1	3	0.2001	
Al	27	45	He	46.205	ug/l	10852	0.5	3	0.2001	
K	39	45	He	51.552	ug/l	37562	2.6	3	0.2001	
Ca	44	45	He	49.753	ug/l	1293	7.2	3	0.2001	
V	51	74	He	0.844	ug/l	4282	1.7	3	0.3000	
Cr	52	74	He	0.628	ug/l	5911	2.5	3	0.3000	
Mn	55	74	He	0.859	ug/l	3394	1.4	3	0.3000	
Fe	56	74	He	44.453	ug/l	247641	0.7	3	0.3000	
Co	59	74	He	0.926	ug/l	8475	2.5	3	0.3000	
Cu	65	74	He	1.145	ug/l	4460	2.8	3	0.3000	
[Cu]	65	74	No Gas	1.165	ug/l	9064	1.8	3	0.3000	
As	75	74	He	0.884	ug/l	634	9.8	3	2.0001	
Se	78	74	HEHe	0.921	ug/l	140	8.4	3	3.0000	
Ag	109	103	No Gas	0.959	ug/l	22520	3.0	3	0.3000	
Cd	111	103	He	0.887	ug/l	2142	2.7	3	0.3000	
[Cd]	111	103	No Gas	0.925	ug/l	5727	4.5	3	0.3000	
Sb	123	103	No Gas	0.938	ug/l	16766	2.4	3	0.3000	
Ba	138	159	He	0.965	ug/l	13747	1.0	3	0.3000	
Hg	201	159	No Gas	37.282	ng/l	183	3.4	3	2.0001	
Tl	205	159	No Gas	0.919	ug/l	70701	0.7	3	0.3000	
Pb	208	159	No Gas	0.965	ug/l	106441	0.8	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	680665	1.9	3	683413.09	99.6	70	120	
Sc	45	He	173539	2.1	3	169523	102.37	70	120	
Ge	74	No Gas	994288	3.0	3	1027391.35	96.78	70	120	
Ge	74	He	167164	1.1	3	167213.36	99.97	70	120	
Ge	74	HEHe	209159	2.3	3	215480.59	97.07	70	120	
Rh	103	No Gas	1119951	3.0	3	1163511.07	96.26	70	120	
Rh	103	He	657440	3.0	3	648079.08	101.44	70	120	
Tb	159	No Gas	2931171	4.3	3	3079736.27	95.18	70	120	
Tb	159	He	1489098	3.5	3	1485823.76	100.22	70	120	
[Bi]	209	No Gas	1819405	2.9	3	1949588.49	93.32	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL3**	**Sample Type**	CalStd
File Name	006CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:48:20	**Sample QC Pass/Fail**	Fail
Comment	A19I099 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.818	ug/l	7939	0.9	3	0.3000	
Na	23	45	He	95.505	ug/l	105565	0.2	3	0.2001	
Mg	24	45	He	96.264	ug/l	54043	0.1	3	0.2001	
Al	27	45	He	96.607	ug/l	22010	1.3	3	0.2001	
K	39	45	He	94.789	ug/l	54094	1.8	3	0.2001	
Ca	44	45	He	89.501	ug/l	2161	6.6	3	0.2001	
Ti	47	45	He	1.841	ug/l	259	10.7	3	0.3000	
V	51	74	He	1.765	ug/l	8355	0.8	3	0.3000	
Cr	52	74	He	1.621	ug/l	11540	1.5	3	0.3000	
Mn	55	74	He	1.766	ug/l	6547	3.9	3	0.3000	
Fe	56	74	He	91.237	ug/l	484789	0.5	3	0.3000	
Co	59	74	He	1.844	ug/l	16521	0.8	3	0.3000	
Ni	60	74	He	1.272	ug/l	5620	3.5	3	0.3000	
Cu	65	74	He	1.847	ug/l	6712	2.4	3	0.3000	
[Cu]	65	74	No Gas	1.873	ug/l	13778	0.1	3	0.3000	
Zn	66	74	He	2.14	ug/l	2394	3.0	3	0.3000	
As	75	74	He	1.798	ug/l	1252	0.3	3	2.0001	
Se	78	74	HEHe	1.763	ug/l	276	4.0	3	3.0000	
Mo	95	103	He	1.777	ug/l	7499	1.3	3	0.3000	
[Cd]	106	103	No Gas	1.781	ug/l	1020	10.2	3	0.3000	
Ag	109	103	No Gas	1.864	ug/l	44377	0.7	3	0.3000	
Cd	111	103	He	1.751	ug/l	4107	1.7	3	0.3000	
[Cd]	111	103	No Gas	1.817	ug/l	11408	2.2	3	0.3000	
Sb	123	103	No Gas	1.81	ug/l	32671	0.4	3	0.3000	
Ba	138	159	He	1.948	ug/l	26535	2.9	3	0.3000	
W	186	159	No Gas	-0.001	ug/l	107	30.1	3	0.0999	RSD Warning
Hg	201	159	No Gas	77.041	ng/l	359	2.2	3	2.0001	
Tl	205	159	No Gas	1.795	ug/l	137871	1.4	3	0.3000	
Pb	208	159	No Gas	1.792	ug/l	195531	0.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	682240	0.8	3	683413.09	99.83	70	120	
Sc	45	He	168605	1.6	3	169523	99.46	70	120	
Ge	74	No Gas	1003127	1.7	3	1027391.35	97.64	70	120	
Ge	74	He	164662	2.6	3	167213.36	98.47	70	120	
Ge	74	HEHe	216649	1.0	3	215480.59	100.54	70	120	
Rh	103	No Gas	1136254	2.3	3	1163511.07	97.66	70	120	
Rh	103	He	639498	2.6	3	648079.08	98.68	70	120	
Tb	159	No Gas	2928344	1.7	3	3079736.27	95.08	70	120	
Tb	159	He	1435740	3.0	3	1485823.76	96.63	70	120	
[Bi]	209	No Gas	1833347	2.2	3	1949588.49	94.04	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL3**	**Sample Type**	CalStd
File Name	006CALS.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:48:20	**Sample QC Pass/Fail**	Pass
Comment	A19I099 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	1.818	ug/l	7939	0.9	3	0.3000	
Na	23	45	He	95.505	ug/l	105565	0.2	3	0.2001	
Mg	24	45	He	96.264	ug/l	54043	0.1	3	0.2001	
Al	27	45	He	96.607	ug/l	22010	1.3	3	0.2001	
K	39	45	He	94.789	ug/l	54094	1.8	3	0.2001	
Ca	44	45	He	89.501	ug/l	2161	6.6	3	0.2001	
Ti	47	45	He	1.841	ug/l	259	10.7	3	0.3000	
V	51	74	He	1.765	ug/l	8355	0.8	3	0.3000	
Cr	52	74	He	1.621	ug/l	11540	1.5	3	0.3000	
Mn	55	74	He	1.766	ug/l	6547	3.9	3	0.3000	
Fe	56	74	He	91.237	ug/l	484789	0.5	3	0.3000	
Co	59	74	He	1.844	ug/l	16521	0.8	3	0.3000	
Ni	60	74	He	1.272	ug/l	5620	3.5	3	0.3000	
Cu	65	74	He	1.847	ug/l	6712	2.4	3	0.3000	
[Cu]	65	74	No Gas	1.873	ug/l	13778	0.1	3	0.3000	
As	75	74	He	1.798	ug/l	1252	0.3	3	2.0001	
Se	78	74	HEHe	1.763	ug/l	276	4.0	3	3.0000	
Mo	95	103	He	1.777	ug/l	7499	1.3	3	0.3000	
[Cd]	106	103	No Gas	1.781	ug/l	1020	10.2	3	0.3000	
Ag	109	103	No Gas	1.864	ug/l	44377	0.7	3	0.3000	
Cd	111	103	He	1.751	ug/l	4107	1.7	3	0.3000	
[Cd]	111	103	No Gas	1.817	ug/l	11408	2.2	3	0.3000	
Sb	123	103	No Gas	1.81	ug/l	32671	0.4	3	0.3000	
Ba	138	159	He	1.948	ug/l	26535	2.9	3	0.3000	
Hg	201	159	No Gas	77.041	ng/l	359	2.2	3	2.0001	
Tl	205	159	No Gas	1.795	ug/l	137871	1.4	3	0.3000	
Pb	208	159	No Gas	1.792	ug/l	195531	0.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	682240	0.8	3	683413.09	99.83	70	120	
Sc	45	He	168605	1.6	3	169523	99.46	70	120	
Ge	74	No Gas	1003127	1.7	3	1027391.35	97.64	70	120	
Ge	74	He	164662	2.6	3	167213.36	98.47	70	120	
Ge	74	HEHe	216649	1.0	3	215480.59	100.54	70	120	
Rh	103	No Gas	1136254	2.3	3	1163511.07	97.66	70	120	
Rh	103	He	639498	2.6	3	648079.08	98.68	70	120	
Tb	159	No Gas	2928344	1.7	3	3079736.27	95.08	70	120	
Tb	159	He	1435740	3.0	3	1485823.76	96.63	70	120	
[Bi]	209	No Gas	1833347	2.2	3	1949588.49	94.04	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL4	**Sample Type**	CalStd
File Name	007CALS.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:53:01	**Sample QC Pass/Fail**	Fail
Comment	A19I100 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	3.578	ug/l	15608	1.1	3	0.3000	
Na	23	45	He	183.307	ug/l	209617	0.3	3	0.2001	
Mg	24	45	He	185.564	ug/l	109658	1.1	3	0.2001	
Al	27	45	He	184.658	ug/l	44461	1.0	3	0.2001	
K	39	45	He	182.181	ug/l	94852	1.9	3	0.2001	
Ca	44	45	He	179.749	ug/l	4464	7.1	3	0.2001	
Ti	47	45	He	3.474	ug/l	516	3.1	3	0.3000	
V	51	74	He	3.583	ug/l	17244	0.9	3	0.3000	
Cr	52	74	He	3.384	ug/l	22626	1.7	3	0.3000	
Mn	55	74	He	3.504	ug/l	13234	0.4	3	0.3000	
Fe	56	74	He	180.658	ug/l	985981	0.4	3	0.3000	
Co	59	74	He	3.72	ug/l	34658	2.2	3	0.3000	
Ni	60	74	He	3.005	ug/l	10130	2.4	3	0.3000	
Cu	65	74	He	3.6	ug/l	13036	0.9	3	0.3000	
[Cu]	65	74	No Gas	3.713	ug/l	26826	2.1	3	0.3000	
Zn	66	74	He	3.72	ug/l	4269	5.2	3	0.3000	
As	75	74	He	3.584	ug/l	2584	1.1	3	2.0001	
Se	78	74	HEHe	3.644	ug/l	584	1.6	3	3.0000	
Mo	95	103	He	3.475	ug/l	15169	0.5	3	0.3000	
[Cd]	106	103	No Gas	3.557	ug/l	2090	2.7	3	0.3000	
Ag	109	103	No Gas	3.701	ug/l	90880	1.1	3	0.3000	
Cd	111	103	He	3.52	ug/l	8657	3.4	3	0.3000	
[Cd]	111	103	No Gas	3.649	ug/l	23624	1.6	3	0.3000	
Sb	123	103	No Gas	3.633	ug/l	67495	0.7	3	0.3000	
Ba	138	159	He	3.834	ug/l	55393	1.6	3	0.3000	
W	186	159	No Gas	0	ug/l	133	15.6	3	0.0999	RSD Warning
Hg	201	159	No Gas	150.185	ng/l	703	2.7	3	2.0001	
Tl	205	159	No Gas	3.554	ug/l	280445	1.6	3	0.3000	
Pb	208	159	No Gas	3.52	ug/l	392335	1.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	682079	0.7	3	683413.09	99.8	70	120	
Sc	45	He	178333	1.4	3	169523	105.2	70	120	
Ge	74	No Gas	1042105	1.6	3	1027391.35	101.43	70	120	
Ge	74	He	171674	1.2	3	167213.36	102.67	70	120	
Ge	74	HEHe	222841	1.6	3	215480.59	103.42	70	120	
Rh	103	No Gas	1172014	1.5	3	1163511.07	100.73	70	120	
Rh	103	He	671106	1.0	3	648079.08	103.55	70	120	
Tb	159	No Gas	3009884	1.2	3	3079736.27	97.73	70	120	
Tb	159	He	1530732	2.7	3	1485823.76	103.02	70	120	
[Bi]	209	No Gas	1852573	1.3	3	1949588.49	95.02	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL4**	**Sample Type**	CalStd
File Name	007CALS.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:53:01	**Sample QC Pass/Fail**	Pass
Comment	A19I100 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	3.578	ug/l	15608	1.1	3	0.3000	
Na	23	45	He	183.307	ug/l	209617	0.3	3	0.2001	
Mg	24	45	He	185.564	ug/l	109658	1.1	3	0.2001	
Al	27	45	He	184.658	ug/l	44461	1.0	3	0.2001	
K	39	45	He	182.181	ug/l	94852	1.9	3	0.2001	
Ca	44	45	He	179.749	ug/l	4464	7.1	3	0.2001	
Ti	47	45	He	3.474	ug/l	516	3.1	3	0.3000	
V	51	74	He	3.583	ug/l	17244	0.9	3	0.3000	
Cr	52	74	He	3.384	ug/l	22626	1.7	3	0.3000	
Mn	55	74	He	3.504	ug/l	13234	0.4	3	0.3000	
Fe	56	74	He	180.658	ug/l	985981	0.4	3	0.3000	
Co	59	74	He	3.72	ug/l	34658	2.2	3	0.3000	
Ni	60	74	He	3.005	ug/l	10130	2.4	3	0.3000	
Cu	65	74	He	3.6	ug/l	13036	0.9	3	0.3000	
[Cu]	65	74	No Gas	3.713	ug/l	26826	2.1	3	0.3000	
Zn	66	74	He	3.72	ug/l	4269	5.2	3	0.3000	
As	75	74	He	3.584	ug/l	2584	1.1	3	2.0001	
Se	78	74	HEHe	3.644	ug/l	584	1.6	3	3.0000	
Mo	95	103	He	3.475	ug/l	15169	0.5	3	0.3000	
[Cd]	106	103	No Gas	3.557	ug/l	2090	2.7	3	0.3000	
Ag	109	103	No Gas	3.701	ug/l	90880	1.1	3	0.3000	
Cd	111	103	He	3.52	ug/l	8657	3.4	3	0.3000	
[Cd]	111	103	No Gas	3.649	ug/l	23624	1.6	3	0.3000	
Sb	123	103	No Gas	3.633	ug/l	67495	0.7	3	0.3000	
Ba	138	159	He	3.834	ug/l	55393	1.6	3	0.3000	
Hg	201	159	No Gas	150.185	ng/l	703	2.7	3	2.0001	
Tl	205	159	No Gas	3.554	ug/l	280445	1.6	3	0.3000	
Pb	208	159	No Gas	3.52	ug/l	392335	1.1	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	682079	0.7	3	683413.09	99.8	70	120	
Sc	45	He	178333	1.4	3	169523	105.2	70	120	
Ge	74	No Gas	1042105	1.6	3	1027391.35	101.43	70	120	
Ge	74	He	171674	1.2	3	167213.36	102.67	70	120	
Ge	74	HEHe	222841	1.6	3	215480.59	103.42	70	120	
Rh	103	No Gas	1172014	1.5	3	1163511.07	100.73	70	120	
Rh	103	He	671106	1.0	3	648079.08	103.55	70	120	
Tb	159	No Gas	3009884	1.2	3	3079736.27	97.73	70	120	
Tb	159	He	1530732	2.7	3	1485823.76	103.02	70	120	
[Bi]	209	No Gas	1852573	1.3	3	1949588.49	95.02	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL5	**Sample Type**	CalStd
File Name	008CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:57:41	**Sample QC Pass/Fail**	Fail
Comment	A19I224 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	10.104	ug/l	43939	1.9	3	0.3000	
Na	23	45	He	434.581	ug/l	487311	0.7	3	0.2001	
Mg	24	45	He	412.907	ug/l	241994	0.3	3	0.2001	
Al	27	45	He	416.436	ug/l	99675	1.0	3	0.2001	
K	39	45	He	419.442	ug/l	195923	0.6	3	0.2001	
Ca	44	45	He	419.512	ug/l	10194	1.5	3	0.2001	
Ti	47	45	He	20.602	ug/l	3035	5.2	3	0.3000	
V	51	74	He	19.576	ug/l	93408	0.9	3	0.3000	
Cr	52	74	He	19.818	ug/l	122877	0.2	3	0.3000	
Mn	55	74	He	19.779	ug/l	74138	1.2	3	0.3000	
Fe	56	74	He	407.432	ug/l	2231722	2.0	3	0.3000	
Co	59	74	He	20.332	ug/l	191320	1.3	3	0.3000	
Ni	60	74	He	20.289	ug/l	53336	1.5	3	0.3000	
Cu	65	74	He	20.927	ug/l	73621	0.1	3	0.3000	
[Cu]	65	74	No Gas	21.602	ug/l	147914	2.3	3	0.3000	
Zn	66	74	He	25.261	ug/l	28780	1.1	3	0.3000	
As	75	74	He	20.162	ug/l	14628	0.5	3	2.0001	
Se	78	74	HEHe	10.223	ug/l	1618	0.8	3	3.0000	
Mo	95	103	He	9.89	ug/l	42938	1.4	3	0.3000	
[Cd]	106	103	No Gas	19.771	ug/l	11608	0.9	3	0.3000	
Ag	109	103	No Gas	10.213	ug/l	251208	2.1	3	0.3000	
Cd	111	103	He	19.518	ug/l	48195	1.3	3	0.3000	
[Cd]	111	103	No Gas	20.078	ug/l	130270	1.6	3	0.3000	
Sb	123	103	No Gas	10.139	ug/l	188421	1.7	3	0.3000	
Ba	138	159	He	20.861	ug/l	300200	1.0	3	0.3000	
W	186	159	No Gas	0.002	ug/l	224	17.0	3	0.0999	RSD Warning
Hg	201	159	No Gas	410.377	ng/l	1878	2.2	3	2.0001	
Tl	205	159	No Gas	9.96	ug/l	780704	1.3	3	0.3000	
Pb	208	159	No Gas	19.689	ug/l	2169576	1.0	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	680480	1.0	3	683413.09	99.57	70	120	
Sc	45	He	177359	0.9	3	169523	104.62	70	120	
Ge	74	No Gas	1038748	2.1	3	1027391.35	101.11	70	120	
Ge	74	He	173804	1.4	3	167213.36	103.94	70	120	
Ge	74	HEHe	220514	0.8	3	215480.59	102.34	70	120	
Rh	103	No Gas	1174326	1.1	3	1163511.07	100.93	70	120	
Rh	103	He	674437	1.7	3	648079.08	104.07	70	120	
Tb	159	No Gas	2991245	0.7	3	3079736.27	97.13	70	120	
Tb	159	He	1530592	1.8	3	1485823.76	103.01	70	120	
[Bi]	209	No Gas	1841070	1.3	3	1949588.49	94.43	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL5**	**Sample Type**	CalStd
File Name	008CALS.d	**Vial #**	2105
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 18:57:41	**Sample QC Pass/Fail**	Pass
Comment	A19I224 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	10.104	ug/l	43939	1.9	3	0.3000	
Na	23	45	He	434.581	ug/l	487311	0.7	3	0.2001	
Mg	24	45	He	412.907	ug/l	241994	0.3	3	0.2001	
Al	27	45	He	416.436	ug/l	99675	1.0	3	0.2001	
K	39	45	He	419.442	ug/l	195923	0.6	3	0.2001	
Ca	44	45	He	419.512	ug/l	10194	1.5	3	0.2001	
Ti	47	45	He	20.602	ug/l	3035	5.2	3	0.3000	
V	51	74	He	19.576	ug/l	93408	0.9	3	0.3000	
Cr	52	74	He	19.818	ug/l	122877	0.2	3	0.3000	
Mn	55	74	He	19.779	ug/l	74138	1.2	3	0.3000	
Fe	56	74	He	407.432	ug/l	2231722	2.0	3	0.3000	
Co	59	74	He	20.332	ug/l	191320	1.3	3	0.3000	
Ni	60	74	He	20.289	ug/l	53336	1.5	3	0.3000	
Cu	65	74	He	20.927	ug/l	73621	0.1	3	0.3000	
[Cu]	65	74	No Gas	21.602	ug/l	147914	2.3	3	0.3000	
Zn	66	74	He	25.261	ug/l	28780	1.1	3	0.3000	
As	75	74	He	20.162	ug/l	14628	0.5	3	2.0001	
Se	78	74	HEHe	10.223	ug/l	1618	0.8	3	3.0000	
Mo	95	103	He	9.89	ug/l	42938	1.4	3	0.3000	
[Cd]	106	103	No Gas	19.771	ug/l	11608	0.9	3	0.3000	
Ag	109	103	No Gas	10.213	ug/l	251208	2.1	3	0.3000	
Cd	111	103	He	19.518	ug/l	48195	1.3	3	0.3000	
[Cd]	111	103	No Gas	20.078	ug/l	130270	1.6	3	0.3000	
Sb	123	103	No Gas	10.139	ug/l	188421	1.7	3	0.3000	
Ba	138	159	He	20.861	ug/l	300200	1.0	3	0.3000	
Hg	201	159	No Gas	410.377	ng/l	1878	2.2	3	2.0001	
Tl	205	159	No Gas	9.96	ug/l	780704	1.3	3	0.3000	
Pb	208	159	No Gas	19.689	ug/l	2169576	1.0	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	680480	1.0	3	683413.09	99.57	70	120	
Sc	45	He	177359	0.9	3	169523	104.62	70	120	
Ge	74	No Gas	1038748	2.1	3	1027391.35	101.11	70	120	
Ge	74	He	173804	1.4	3	167213.36	103.94	70	120	
Ge	74	HEHe	220514	0.8	3	215480.59	102.34	70	120	
Rh	103	No Gas	1174326	1.1	3	1163511.07	100.93	70	120	
Rh	103	He	674437	1.7	3	648079.08	104.07	70	120	
Tb	159	No Gas	2991245	0.7	3	3079736.27	97.13	70	120	
Tb	159	He	1530592	1.8	3	1485823.76	103.01	70	120	
[Bi]	209	No Gas	1841070	1.3	3	1949588.49	94.43	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL6	**Sample Type**	CalStd
File Name	009CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:02:22	**Sample QC Pass/Fail**	Fail
Comment	A19I101	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	51.131	ug/l	227134	1.0	3	0.3000	
Na	23	45	He	2490.303	ug/l	2804681	2.3	3	0.2001	
Mg	24	45	He	2518.081	ug/l	1491836	0.6	3	0.2001	
Al	27	45	He	2531.368	ug/l	613510	0.9	3	0.2001	
K	39	45	He	2535.341	ug/l	1116510	2.3	3	0.2001	
Ca	44	45	He	2506.52	ug/l	61061	1.2	3	0.2001	
Ti	47	45	He	50.019	ug/l	7465	2.3	3	0.3000	
V	51	74	He	49.405	ug/l	235985	2.4	3	0.3000	
Cr	52	74	He	48.821	ug/l	300472	2.5	3	0.3000	
Mn	55	74	He	48.827	ug/l	183198	0.3	3	0.3000	
Fe	56	74	He	2425.916	ug/l	13254646	0.8	3	0.3000	
Co	59	74	He	49.993	ug/l	471919	0.6	3	0.3000	
Ni	60	74	He	49.76	ug/l	127225	1.1	3	0.3000	
Cu	65	74	He	50.833	ug/l	178543	0.6	3	0.3000	
[Cu]	65	74	No Gas	52.142	ug/l	361493	0.7	3	0.3000	
Zn	66	74	He	51.846	ug/l	59196	2.1	3	0.3000	
As	75	74	He	49.263	ug/l	35845	0.4	3	2.0001	
Se	78	74	HEHe	51.299	ug/l	8082	1.3	3	3.0000	
Mo	95	103	He	50.56	ug/l	218920	2.2	3	0.3000	
[Cd]	106	103	No Gas	50.328	ug/l	29624	1.5	3	0.3000	
Ag	109	103	No Gas	50.921	ug/l	1256199	1.2	3	0.3000	
Cd	111	103	He	48.241	ug/l	119330	2.3	3	0.3000	
[Cd]	111	103	No Gas	50.955	ug/l	331592	1.5	3	0.3000	
Sb	123	103	No Gas	51.041	ug/l	950696	1.6	3	0.3000	
Ba	138	159	He	52.21	ug/l	740431	1.2	3	0.3000	
W	186	159	No Gas	0.01	ug/l	497	19.8	3	0.0999	RSD Warning
Hg	201	159	No Gas	2027.63	ng/l	9448	0.6	3	2.0001	
Tl	205	159	No Gas	51.225	ug/l	4120760	2.3	3	0.3000	
Pb	208	159	No Gas	50.153	ug/l	5666950	1.0	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	695237	1.4	3	683413.09	101.73	70	120	
Sc	45	He	179665	1.8	3	169523	105.98	70	120	
Ge	74	No Gas	1058196	2.1	3	1027391.35	103	70	120	
Ge	74	He	174446	1.9	3	167213.36	104.33	70	120	
Ge	74	HEHe	219774	1.1	3	215480.59	101.99	70	120	
Rh	103	No Gas	1177866	2.2	3	1163511.07	101.23	70	120	
Rh	103	He	675637	2.0	3	648079.08	104.25	70	120	
Tb	159	No Gas	3071231	2.9	3	3079736.27	99.72	70	120	
Tb	159	He	1509300	2.1	3	1485823.76	101.58	70	120	
[Bi]	209	No Gas	1906160	1.6	3	1949588.49	97.77	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL6**	**Sample Type**	CalStd
File Name	009CALS.d	**Vial #**	2106
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:02:22	**Sample QC Pass/Fail**	Pass
Comment	A19I101	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	51.131	ug/l	227134	1.0	3	0.3000	
Na	23	45	He	2490.303	ug/l	2804681	2.3	3	0.2001	
Mg	24	45	He	2518.081	ug/l	1491836	0.6	3	0.2001	
Al	27	45	He	2531.368	ug/l	613510	0.9	3	0.2001	
K	39	45	He	2535.341	ug/l	1116510	2.3	3	0.2001	
Ca	44	45	He	2506.52	ug/l	61061	1.2	3	0.2001	
Ti	47	45	He	50.019	ug/l	7465	2.3	3	0.3000	
V	51	74	He	49.405	ug/l	235985	2.4	3	0.3000	
Cr	52	74	He	48.821	ug/l	300472	2.5	3	0.3000	
Mn	55	74	He	48.827	ug/l	183198	0.3	3	0.3000	
Fe	56	74	He	2425.916	ug/l	13254646	0.8	3	0.3000	
Co	59	74	He	49.993	ug/l	471919	0.6	3	0.3000	
Ni	60	74	He	49.76	ug/l	127225	1.1	3	0.3000	
Cu	65	74	He	50.833	ug/l	178543	0.6	3	0.3000	
[Cu]	65	74	No Gas	52.142	ug/l	361493	0.7	3	0.3000	
Zn	66	74	He	51.846	ug/l	59196	2.1	3	0.3000	
As	75	74	He	49.263	ug/l	35845	0.4	3	2.0001	
Se	78	74	HEHe	51.299	ug/l	8082	1.3	3	3.0000	
Mo	95	103	He	50.56	ug/l	218920	2.2	3	0.3000	
[Cd]	106	103	No Gas	50.328	ug/l	29624	1.5	3	0.3000	
Ag	109	103	No Gas	50.921	ug/l	1256199	1.2	3	0.3000	
Cd	111	103	He	48.241	ug/l	119330	2.3	3	0.3000	
[Cd]	111	103	No Gas	50.955	ug/l	331592	1.5	3	0.3000	
Sb	123	103	No Gas	51.041	ug/l	950696	1.6	3	0.3000	
Ba	138	159	He	52.21	ug/l	740431	1.2	3	0.3000	
Hg	201	159	No Gas	2027.63	ng/l	9448	0.6	3	2.0001	
Tl	205	159	No Gas	51.225	ug/l	4120760	2.3	3	0.3000	
Pb	208	159	No Gas	50.153	ug/l	5666950	1.0	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	695237	1.4	3	683413.09	101.73	70	120	
Sc	45	He	179665	1.8	3	169523	105.98	70	120	
Ge	74	No Gas	1058196	2.1	3	1027391.35	103	70	120	
Ge	74	He	174446	1.9	3	167213.36	104.33	70	120	
Ge	74	HEHe	219774	1.1	3	215480.59	101.99	70	120	
Rh	103	No Gas	1177866	2.2	3	1163511.07	101.23	70	120	
Rh	103	He	675637	2.0	3	648079.08	104.25	70	120	
Tb	159	No Gas	3071231	2.9	3	3079736.27	99.72	70	120	
Tb	159	He	1509300	2.1	3	1485823.76	101.58	70	120	
[Bi]	209	No Gas	1906160	1.6	3	1949588.49	97.77	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL7	**Sample Type**	CalStd
File Name	010CALS.d	**Vial #**	2107
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:06:59	**Sample QC Pass/Fail**	Pass
Comment	A18I225	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	99.425	ug/l	439860	0.9	3	0.3000	
Na	23	45	He	4059.752	ug/l	4373632	1.7	3	0.2001	
Mg	24	45	He	4122.199	ug/l	2338030	2.1	3	0.2001	
Al	27	45	He	4089.929	ug/l	949005	1.8	3	0.2001	
K	39	45	He	4135.603	ug/l	1733419	2.1	3	0.2001	
Ca	44	45	He	3978.93	ug/l	92722	1.2	3	0.2001	
Ti	47	45	He	199.646	ug/l	28520	1.1	3	0.3000	
V	51	74	He	196.742	ug/l	907011	1.1	3	0.3000	
Cr	52	74	He	200.315	ug/l	1184735	3.7	3	0.3000	
Mn	55	74	He	196.66	ug/l	712436	1.5	3	0.3000	
Fe	56	74	He	3950.185	ug/l	20859406	1.6	3	0.3000	
Co	59	74	He	205.493	ug/l	1875053	1.4	3	0.3000	
Ni	60	74	He	199.591	ug/l	485289	0.6	3	0.3000	
Cu	65	74	He	200.66	ug/l	679532	0.6	3	0.3000	
[Cu]	65	74	No Gas	203.187	ug/l	1389587	2.3	3	0.3000	
Zn	66	74	He	202.804	ug/l	223535	0.8	3	0.3000	
As	75	74	He	197.73	ug/l	139046	1.6	3	2.0001	
Se	78	74	HEHe	99.327	ug/l	15200	0.6	3	3.0000	
Mo	95	103	He	99.737	ug/l	415377	1.2	3	0.3000	
[Cd]	106	103	No Gas	193.667	ug/l	113926	1.0	3	0.3000	
Ag	109	103	No Gas	99.513	ug/l	2453760	0.9	3	0.3000	
Cd	111	103	He	195.877	ug/l	466182	0.4	3	0.3000	
[Cd]	111	103	No Gas	194.905	ug/l	1267668	1.0	3	0.3000	
Sb	123	103	No Gas	99.464	ug/l	1851280	1.9	3	0.3000	
Ba	138	159	He	207.883	ug/l	2900971	1.1	3	0.3000	
W	186	159	No Gas	0.022	ug/l	888	12.8	3	0.0999	
Hg	201	159	No Gas	3984.822	ng/l	18483	1.1	3	2.0001	
Tl	205	159	No Gas	99.393	ug/l	7963738	1.5	3	0.3000	
Pb	208	159	No Gas	195.248	ug/l	21974493	1.5	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	693611	4.9	3	683413.09	101.49	70	120	
Sc	45	He	171986	1.0	3	169523	101.45	70	120	
Ge	74	No Gas	1048714	4.9	3	1027391.35	102.08	70	120	
Ge	74	He	168615	1.1	3	167213.36	100.84	70	120	
Ge	74	HEHe	213540	1.8	3	215480.59	99.1	70	120	
Rh	103	No Gas	1179151	4.7	3	1163511.07	101.34	70	120	
Rh	103	He	650185	1.4	3	648079.08	100.32	70	120	
Tb	159	No Gas	3064571	4.9	3	3079736.27	99.51	70	120	
Tb	159	He	1485766	2.4	3	1485823.76	100	70	120	
[Bi]	209	No Gas	1922840	6.3	3	1949588.49	98.63	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL7**	**Sample Type**	CalStd
File Name	010CALS.d	**Vial #**	2107
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:06:59	**Sample QC Pass/Fail**	Pass
Comment	A18I225	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	99.425	ug/l	439860	0.9	3	0.3000	
Na	23	45	He	4059.752	ug/l	4373632	1.7	3	0.2001	
Mg	24	45	He	4122.199	ug/l	2338030	2.1	3	0.2001	
Al	27	45	He	4089.929	ug/l	949005	1.8	3	0.2001	
K	39	45	He	4135.603	ug/l	1733419	2.1	3	0.2001	
Ca	44	45	He	3978.93	ug/l	92722	1.2	3	0.2001	
Ti	47	45	He	199.646	ug/l	28520	1.1	3	0.3000	
V	51	74	He	196.742	ug/l	907011	1.1	3	0.3000	
Cr	52	74	He	200.315	ug/l	1184735	3.7	3	0.3000	
Mn	55	74	He	196.66	ug/l	712436	1.5	3	0.3000	
Fe	56	74	He	3950.185	ug/l	20859406	1.6	3	0.3000	
Co	59	74	He	205.493	ug/l	1875053	1.4	3	0.3000	
Ni	60	74	He	199.591	ug/l	485289	0.6	3	0.3000	
Cu	65	74	He	200.66	ug/l	679532	0.6	3	0.3000	
[Cu]	65	74	No Gas	203.187	ug/l	1389587	2.3	3	0.3000	
Zn	66	74	He	202.804	ug/l	223535	0.8	3	0.3000	
As	75	74	He	197.73	ug/l	139046	1.6	3	2.0001	
Se	78	74	HEHe	99.327	ug/l	15200	0.6	3	3.0000	
Mo	95	103	He	99.737	ug/l	415377	1.2	3	0.3000	
[Cd]	106	103	No Gas	193.667	ug/l	113926	1.0	3	0.3000	
Ag	109	103	No Gas	99.513	ug/l	2453760	0.9	3	0.3000	
Cd	111	103	He	195.877	ug/l	466182	0.4	3	0.3000	
[Cd]	111	103	No Gas	194.905	ug/l	1267668	1.0	3	0.3000	
Sb	123	103	No Gas	99.464	ug/l	1851280	1.9	3	0.3000	
Ba	138	159	He	207.883	ug/l	2900971	1.1	3	0.3000	
Hg	201	159	No Gas	3984.822	ng/l	18483	1.1	3	2.0001	
Tl	205	159	No Gas	99.393	ug/l	7963738	1.5	3	0.3000	
Pb	208	159	No Gas	195.248	ug/l	21974493	1.5	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	693611	4.9	3	683413.09	101.49	70	120	
Sc	45	He	171986	1.0	3	169523	101.45	70	120	
Ge	74	No Gas	1048714	4.9	3	1027391.35	102.08	70	120	
Ge	74	He	168615	1.1	3	167213.36	100.84	70	120	
Ge	74	HEHe	213540	1.8	3	215480.59	99.1	70	120	
Rh	103	No Gas	1179151	4.7	3	1163511.07	101.34	70	120	
Rh	103	He	650185	1.4	3	648079.08	100.32	70	120	
Tb	159	No Gas	3064571	4.9	3	3079736.27	99.51	70	120	
Tb	159	He	1485766	2.4	3	1485823.76	100	70	120	
[Bi]	209	No Gas	1922840	6.3	3	1949588.49	98.63	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL8**	**Sample Type**	CalStd
File Name	011CALS.d	**Vial #**	2108
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:11:27	**Sample QC Pass/Fail**	Fail
Comment	A19I054	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.021	ug/l	103	34.0	3	0.3000	RSD Warning
Na	23	45	He	10166.128	ug/l	10611789	1.9	3	0.2001	
Mg	24	45	He	10146.246	ug/l	5579897	0.5	3	0.2001	
Al	27	45	He	10242.468	ug/l	2304353	1.6	3	0.2001	
K	39	45	He	10008.057	ug/l	4045836	0.9	3	0.2001	
Ca	44	45	He	9934.092	ug/l	224337	0.1	3	0.2001	
Ti	47	45	He	499.58	ug/l	69214	0.5	3	0.3000	
V	51	74	He	501.38	ug/l	2221707	0.3	3	0.3000	
Cr	52	74	He	502.535	ug/l	2853744	0.6	3	0.3000	
Mn	55	74	He	504.101	ug/l	1755183	2.0	3	0.3000	
Fe	56	74	He	9926.402	ug/l	50370341	0.9	3	0.3000	
Co	59	74	He	497.789	ug/l	4366726	0.2	3	0.3000	
Ni	60	74	He	500.182	ug/l	1165412	0.2	3	0.3000	
Cu	65	74	He	506.304	ug/l	1647573	1.0	3	0.3000	
[Cu]	65	74	No Gas	515.302	ug/l	3250106	2.0	3	0.3000	
Zn	66	74	He	512.52	ug/l	542982	0.5	3	0.3000	
As	75	74	He	500.976	ug/l	338654	0.8	3	2.0001	
Se	78	74	HEHe	0.056	ug/l	10	8.8	3	3.0000	
Mo	95	103	He	0.01	ug/l	263	6.3	3	0.3000	
[Cd]	106	103	No Gas	513.186	ug/l	276088	1.6	3	0.3000	
Ag	109	103	No Gas	0.014	ug/l	347	10.0	3	0.3000	
Cd	111	103	He	491.096	ug/l	1128406	1.1	3	0.3000	
[Cd]	111	103	No Gas	519.46	ug/l	3089624	1.0	3	0.3000	
Sb	123	103	No Gas	0.05	ug/l	1016	9.6	3	0.3000	
Ba	138	159	He	511.462	ug/l	6913589	0.9	3	0.3000	
W	186	159	No Gas	100	ug/l	3217224	0.3	3	0.0999	
Hg	201	159	No Gas	127.256	ng/l	569	2.1	3	2.0001	
Tl	205	159	No Gas	0.09	ug/l	6914	4.8	3	0.3000	
Pb	208	159	No Gas	501.899	ug/l	52866142	0.2	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	649177	2.1	3	683413.09	94.99	70	120	
Sc	45	He	166844	2.0	3	169523	98.42	70	120	
Ge	74	No Gas	966518	2.0	3	1027391.35	94.07	70	120	
Ge	74	He	162117	0.7	3	167213.36	96.95	70	120	
Ge	74	HEHe	197465	6.9	3	215480.59	91.64	70	120	
Rh	103	No Gas	1076598	2.0	3	1163511.07	92.53	70	120	
Rh	103	He	627793	1.3	3	648079.08	96.87	70	120	
Tb	159	No Gas	2863483	2.3	3	3079736.27	92.98	70	120	
Tb	159	He	1439291	2.0	3	1485823.76	96.87	70	120	
[Bi]	209	No Gas	1763359	2.0	3	1949588.49	90.45	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL8**	**Sample Type**	CalStd
File Name	011CALS.d	**Vial #**	2108
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:11:27	**Sample QC Pass/Fail**	Pass
Comment	A19I054	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Na	23	45	He	10166.128	ug/l	10611789	1.9	3	0.2001	
Mg	24	45	He	10146.246	ug/l	5579897	0.5	3	0.2001	
Al	27	45	He	10242.468	ug/l	2304353	1.6	3	0.2001	
K	39	45	He	10008.057	ug/l	4045836	0.9	3	0.2001	
Ca	44	45	He	9934.092	ug/l	224337	0.1	3	0.2001	
Ti	47	45	He	499.58	ug/l	69214	0.5	3	0.3000	
V	51	74	He	501.38	ug/l	2221707	0.3	3	0.3000	
Cr	52	74	He	502.535	ug/l	2853744	0.6	3	0.3000	
Mn	55	74	He	504.101	ug/l	1755183	2.0	3	0.3000	
Fe	56	74	He	9926.402	ug/l	50370341	0.9	3	0.3000	
Co	59	74	He	497.789	ug/l	4366726	0.2	3	0.3000	
Ni	60	74	He	500.182	ug/l	1165412	0.2	3	0.3000	
Cu	65	74	He	506.304	ug/l	1647573	1.0	3	0.3000	
[Cu]	65	74	No Gas	515.302	ug/l	3250106	2.0	3	0.3000	
Zn	66	74	He	512.52	ug/l	542982	0.5	3	0.3000	
As	75	74	He	500.976	ug/l	338654	0.8	3	2.0001	
[Cd]	106	103	No Gas	513.186	ug/l	276088	1.6	3	0.3000	
Cd	111	103	He	491.096	ug/l	1128406	1.1	3	0.3000	
[Cd]	111	103	No Gas	519.46	ug/l	3089624	1.0	3	0.3000	
Ba	138	159	He	511.462	ug/l	6913589	0.9	3	0.3000	
W	186	159	No Gas	100	ug/l	3217224	0.3	3	0.0999	
Hg	201	159	No Gas	127.256	ng/l	569	2.1	3	2.0001	
Pb	208	159	No Gas	501.899	ug/l	52866142	0.2	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	649177	2.1	3	683413.09	94.99	70	120	
Sc	45	He	166844	2.0	3	169523	98.42	70	120	
Ge	74	No Gas	966518	2.0	3	1027391.35	94.07	70	120	
Ge	74	He	162117	0.7	3	167213.36	96.95	70	120	
Ge	74	HEHe	197465	6.9	3	215480.59	91.64	70	120	
Rh	103	No Gas	1076598	2.0	3	1163511.07	92.53	70	120	
Rh	103	He	627793	1.3	3	648079.08	96.87	70	120	
Tb	159	No Gas	2863483	2.3	3	3079736.27	92.98	70	120	
Tb	159	He	1439291	2.0	3	1485823.76	96.87	70	120	
[Bi]	209	No Gas	1763359	2.0	3	1949588.49	90.45	70	120	

Calibration Standard Report ICPMS6

Sample Name	9J02063-CAL9	**Sample Type**	CalStd
File Name	012CALS.d	**Vial #**	2109
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:15:53	**Sample QC Pass/Fail**	Fail
Comment	A19I053	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Be	9	6	No Gas	0.009	ug/l	51	19.9	3	0.3000	RSD Warning
Na	23	45	He	49962.17	ug/l	52489769	2.4	3	0.2001	
Mg	24	45	He	49959.935	ug/l	27656451	1.4	3	0.2001	
Al	27	45	He	49942.583	ug/l	11312924	0.7	3	0.2001	
K	39	45	He	49985.596	ug/l	20281640	1.6	3	0.2001	
Ca	44	45	He	50014.383	ug/l	1136424	1.9	3	0.2001	
Ti	47	45	He	2500.107	ug/l	348682	0.5	3	0.3000	
V	51	74	He	0.079	ug/l	740	3.2	3	0.3000	
Cr	52	74	He	998.734	ug/l	5503109	1.5	3	0.3000	
Mn	55	74	He	2499.472	ug/l	8445576	0.9	3	0.3000	
Fe	56	74	He	50022.345	ug/l	246321961	1.4	3	0.3000	
Co	59	74	He	0.2	ug/l	1797	5.7	3	0.3000	
Ni	60	74	He	1007.479	ug/l	2275803	1.1	3	0.3000	
Cu	65	74	He	996.655	ug/l	3147529	2.2	3	0.3000	
[Cu]	65	74	No Gas	991.572	ug/l	6160313	2.4	3	0.3000	
Zn	66	74	He	2497.192	ug/l	2567468	1.9	3	0.3000	
As	75	74	He	0.093	ug/l	78	12.8	3	2.0001	
Se	78	74	HEHe	0.084	ug/l	15	13.7	3	3.0000	
Mo	95	103	He	0.049	ug/l	398	9.2	3	0.3000	
[Cd]	106	103	No Gas	994.662	ug/l	516132	3.2	3	0.3000	
Ag	109	103	No Gas	0.025	ug/l	574	0.9	3	0.3000	
Cd	111	103	He	1005.375	ug/l	2194638	0.5	3	0.3000	
[Cd]	111	103	No Gas	991.239	ug/l	5686631	2.0	3	0.3000	
Sb	123	103	No Gas	0.037	ug/l	758	8.0	3	0.3000	
Ba	138	159	He	2497.025	ug/l	33481515	1.1	3	0.3000	
W	186	159	No Gas	0.302	ug/l	9814	4.7	3	0.0999	
Hg	201	159	No Gas	35.873	ng/l	172	4.0	3	2.0001	
Tl	205	159	No Gas	0.028	ug/l	2244	2.8	3	0.3000	
Pb	208	159	No Gas	0.105	ug/l	13401	3.0	3	0.3000	

QC ISTD Table

Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	647731	0.7	3	683413.09	94.78	70	120	
Sc	45	He	167923	0.7	3	169523	99.06	70	120	
Ge	74	No Gas	952026	1.4	3	1027391.35	92.66	70	120	
Ge	74	He	157356	1.7	3	167213.36	94.1	70	120	
Ge	74	HEHe	210451	0.4	3	215480.59	97.67	70	120	
Rh	103	No Gas	1038351	2.3	3	1163511.07	89.24	70	120	
Rh	103	He	596321	1.0	3	648079.08	92.01	70	120	
Tb	159	No Gas	2853693	1.4	3	3079736.27	92.66	70	120	
Tb	159	He	1427467	1.8	3	1485823.76	96.07	70	120	
[Bi]	209	No Gas	1685138	1.3	3	1949588.49	86.44	70	120	

Calibration Standard Report ICPMS6

Sample Name	**9J02063-CAL9**	**Sample Type**	CalStd
File Name	012CALS.d	**Vial #**	2109
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:15:53	**Sample QC Pass/Fail**	Pass
Comment	A19I053	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Raw Conc.	Units	CPS	CPS RSD	Rep	Int. sec	QC Flag
Na	23	45	He	49962.17	ug/l	52489769	2.4	3	0.2001	
Mg	24	45	He	49959.935	ug/l	27656451	1.4	3	0.2001	
Al	27	45	He	49942.583	ug/l	11312924	0.7	3	0.2001	
K	39	45	He	49985.596	ug/l	20281640	1.6	3	0.2001	
Ca	44	45	He	50014.383	ug/l	1136424	1.9	3	0.2001	
Ti	47	45	He	2500.107	ug/l	348682	0.5	3	0.3000	
V	51	74	He	0.079	ug/l	740	3.2	3	0.3000	
Cr	52	74	He	998.734	ug/l	5503109	1.5	3	0.3000	
Mn	55	74	He	2499.472	ug/l	8445576	0.9	3	0.3000	
Fe	56	74	He	50022.345	ug/l	246321961	1.4	3	0.3000	
Co	59	74	He	0.2	ug/l	1797	5.7	3	0.3000	
Ni	60	74	He	1007.479	ug/l	2275803	1.1	3	0.3000	
Cu	65	74	He	996.655	ug/l	3147529	2.2	3	0.3000	
[Cu]	65	74	No Gas	991.572	ug/l	6160313	2.4	3	0.3000	
Zn	66	74	He	2497.192	ug/l	2567468	1.9	3	0.3000	
[Cd]	106	103	No Gas	994.662	ug/l	516132	3.2	3	0.3000	
Cd	111	103	He	1005.375	ug/l	2194638	0.5	3	0.3000	
[Cd]	111	103	No Gas	991.239	ug/l	5686631	2.0	3	0.3000	
Ba	138	159	He	2497.025	ug/l	33481515	1.1	3	0.3000	
W	186	159	No Gas	0.302	ug/l	9814	4.7	3	0.0999	
Hg	201	159	No Gas	35.873	ng/l	172	4.0	3	2.0001	
Pb	208	159	No Gas	0.105	ug/l	13401	3.0	3	0.3000	

QC ISTD Table

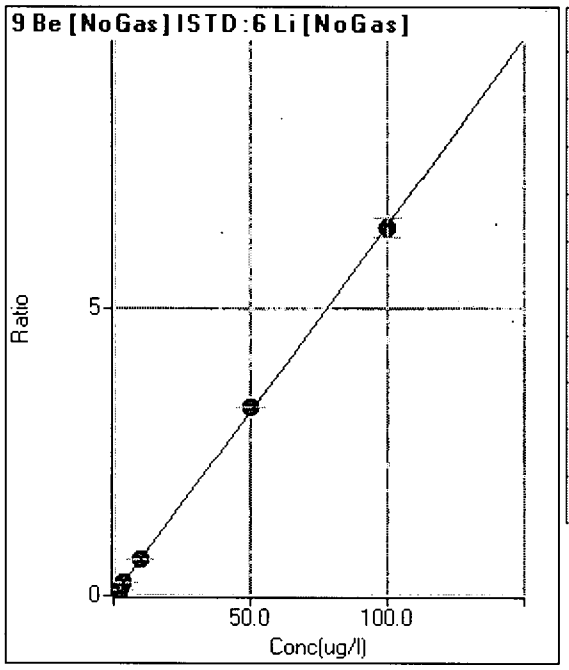
Name	Mass	Tune	CPS	CPS RSD	Rep	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	647731	0.7	3	683413.09	94.78	70	120	
Sc	45	He	167923	0.7	3	169523	99.06	70	120	
Ge	74	No Gas	952026	1.4	3	1027391.35	92.66	70	120	
Ge	74	He	157356	1.7	3	167213.36	94.1	70	120	
Ge	74	HEHe	210451	0.4	3	215480.59	97.67	70	120	
Rh	103	No Gas	1038351	2.3	3	1163511.07	89.24	70	120	
Rh	103	He	596321	1.0	3	648079.08	92.01	70	120	
Tb	159	No Gas	2853693	1.4	3	3079736.27	92.66	70	120	
Tb	159	He	1427467	1.8	3	1485823.76	96.07	70	120	
[Bi]	209	No Gas	1685138	1.3	3	1949588.49	86.44	70	120	

Calibration for 036SMPL.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\9J02063.b\
Analysis File: 9J02063.batch.bin
DA Date-Time: 10/03/2019 14:00:57
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	9J02063-CAL0	10/02/2019 18:34:31
2	004CALS.d	9J02063-CAL1	10/02/2019 18:39:00
3	005CALS.d	9J02063-CAL2	10/02/2019 18:43:41
4	006CALS.d	9J02063-CAL3	10/02/2019 18:48:20
5	007CALS.d	9J02063-CAL4	10/02/2019 18:53:01
6	008CALS.d	9J02063-CAL5	10/02/2019 18:57:41
7	009CALS.d	9J02063-CAL6	10/02/2019 19:02:22
8	010CALS.d	9J02063-CAL7	10/02/2019 19:06:59
9	011CALS.d	9J02063-CAL8	10/02/2019 19:11:27
10	012CALS.d	9J02063-CAL9	10/02/2019 19:15:53

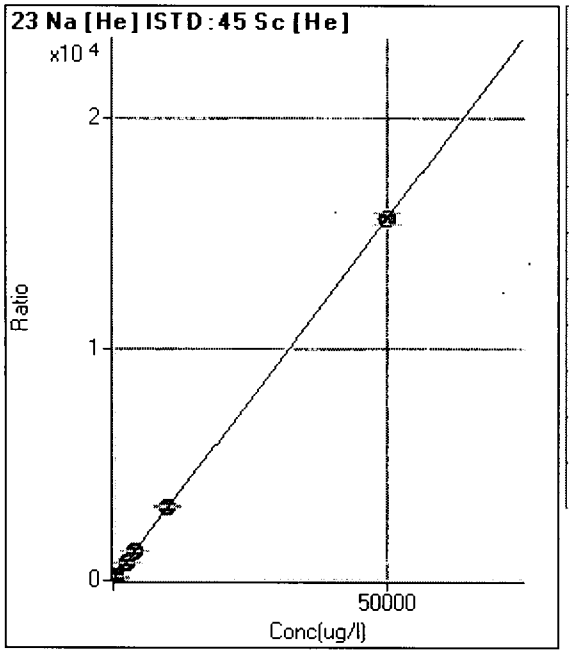
Calibration for 036SMPL.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17	0.000	P	19.2
2	☐	0.180	0.180	794	0.012	P	2.9
3	☐	0.900	0.919	4010	0.059	P	4.9
4	☐	1.800	1.818	7939	0.116	P	1.7
5	☐	3.600	3.578	15608	0.229	P	1.8
6	☐	10.000	10.104	43939	0.646	P	2.8
7	☐	50.000	51.131	227134	3.267	P	0.6
8	☐	100.000	99.425	439860	6.353	P	5.4
9	☐			103	0.002	P	32.1
10	☐			51	0.001	P	19.5

y = 0.0639 * x + 2.4369E-004
R = 0.9999
DL = 0.002199
BEC = 0.003814

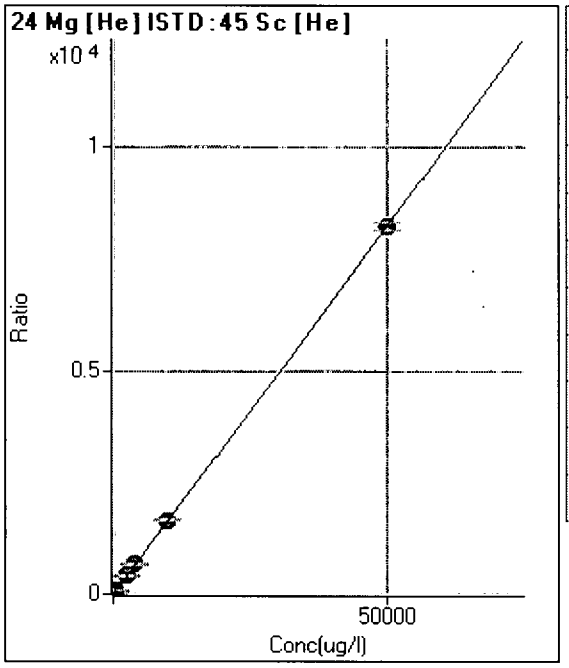
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4860	1.434	P	2.3
2	☐			28884	8.360	P	1.2
3	☐	45.000	56.479	66273	19.102	P	3.1
4	☐	90.000	95.505	105565	31.311	P	1.7
5	☐	180.000	183.307	209617	58.779	P	1.3
6	☐	400.000	434.581	487311	137.386	P	0.9
7	☐	2500.000	2490.303	2804681	780.487	A	0.8
8	☐	4000.000	4059.752	4373632	1,271.465	A	0.9
9	☐	10000.000	10166.128	10611789	3,181.752	A	3.9
10	☐	50000.000	49962.170	52489769	15,631.338	A	3.1

y = 0.3128 * x + 1.4337
R = 1.0000
DL = 0.3224
BEC = 4.583

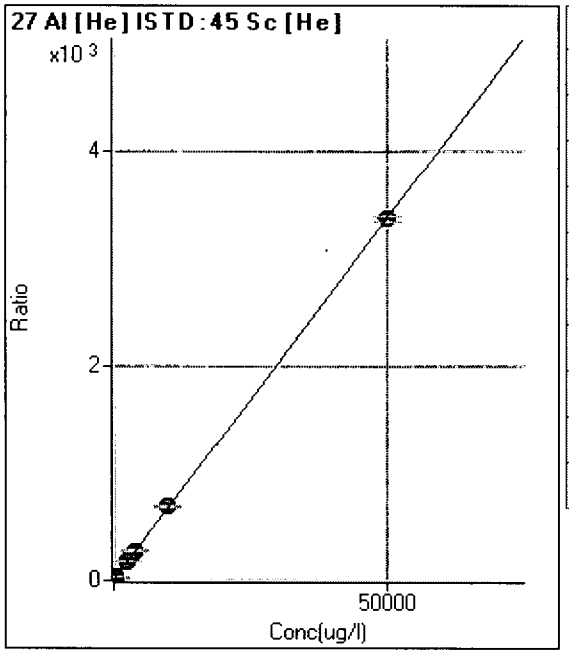
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	545	0.161	P	9.3
2	☐			6098	1.765	P	3.4
3	☐	45.000	46.401	27091	7.810	P	4.0
4	☐	90.000	96.264	54043	16.029	P	1.6
5	☐	180.000	185.564	109658	30.749	P	1.8
6	☐	400.000	412.907	241994	68.225	P	0.8
7	☐	2500.000	2518.081	1491836	415.243	A	1.5
8	☐	4000.000	4122.199	2338030	679.666	A	1.2
9	☐	10000.000	10146.246	5579897	1,672.673	A	2.3
10	☐	50000.000	49959.935	27656451	8,235.581	A	2.0

y = 0.1648 * x + 0.1609
R = 1.0000
DL = 0.2723
BEC = 0.9761

Weight: <None>
Min Conc: <None>

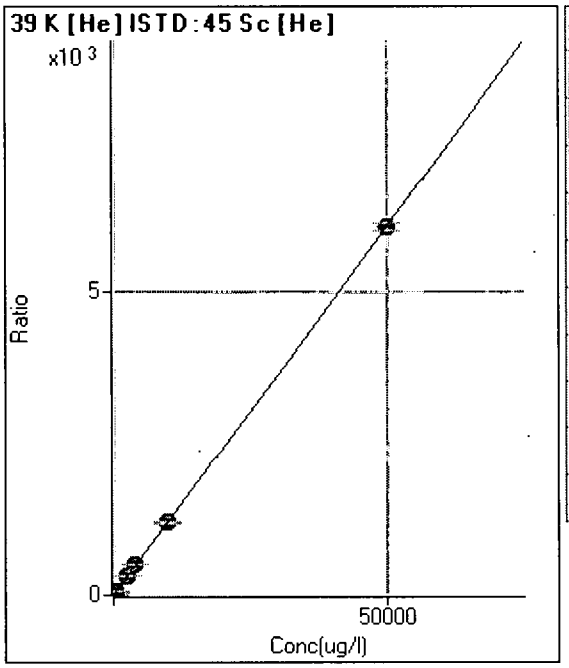


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38	0.011	P	71.9
2	☐			2479	0.718	P	3.9
3	☐	45.000	46.205	10852	3.128	P	2.6
4	☐	90.000	96.607	22010	6.528	P	1.2
5	☐	180.000	184.658	44461	12.467	P	1.1
6	☐	400.000	416.436	99675	28.100	P	0.9
7	☐	2500.000	2531.368	613510	170.755	P	0.9
8	☐	4000.000	4089.929	949005	275.882	P	0.8
9	☐	10000.000	10242.468	2304353	690.877	A	3.5
10	☐	50000.000	49942.583	11312924	3,368.695	A	1.3

y = 0.0675 * x + 0.0113
R = 1.0000
DL = 0.3623
BEC = 0.1679

Weight: <None>
Min Conc: <None>

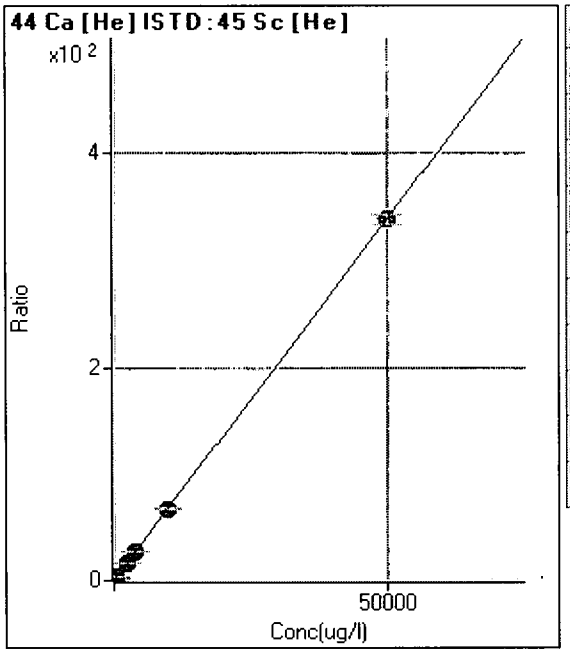
Calibration for 036SMPL.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15586	4.597	P	1.9
2	☐			25095	7.265	P	2.4
3	☐	45.000	51.552	37562	10.821	P	0.6
4	☐	90.000	94.789	54094	16.042	P	0.8
5	☐	180.000	182.181	94852	26.593	P	0.5
6	☐	400.000	419.442	195923	55.239	P	1.6
7	☐	2500.000	2535.341	1116510	310.702	A	0.6
8	☐	4000.000	4135.603	1733419	503.911	A	1.2
9	☐	10000.000	10008.057	4045836	1,212.923	A	2.9
10	☐	50000.000	49985.596	20281640	6,039.624	A	2.3

y = 0.1207 * x + 4.5972
R = 1.0000
DL = 2.172
BEC = 38.08

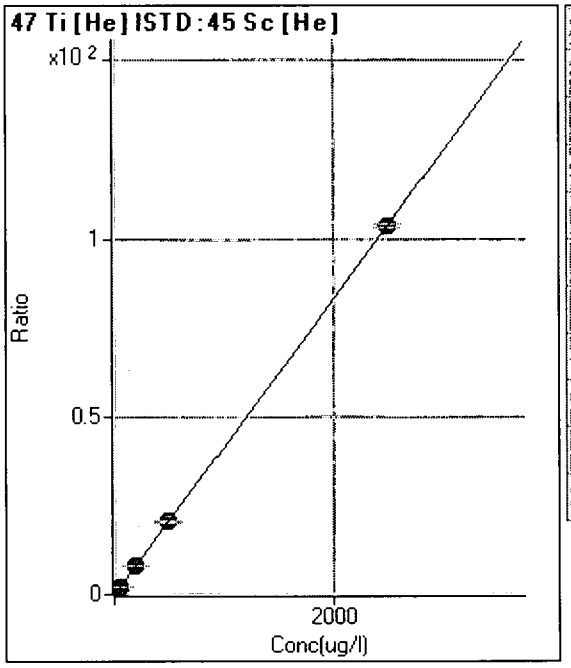
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	122	0.036	P	29.2
2	☐			545	0.158	P	6.1
3	☐	45.000	49.753	1293	0.372	P	6.3
4	☐	90.000	89.501	2161	0.641	P	8.1
5	☐	180.000	179.749	4464	1.252	P	7.7
6	☐	400.000	419.512	10194	2.874	P	2.1
7	☐	2500.000	2506.520	61061	16.994	P	0.5
8	☐	4000.000	3978.930	92722	26.956	P	0.3
9	☐	10000.000	9934.092	224337	67.247	P	2.0
10	☐	50000.000	50014.383	1136424	338.418	A	2.6

y = 0.0068 * x + 0.0358
R = 1.0000
DL = 4.632
BEC = 5.288

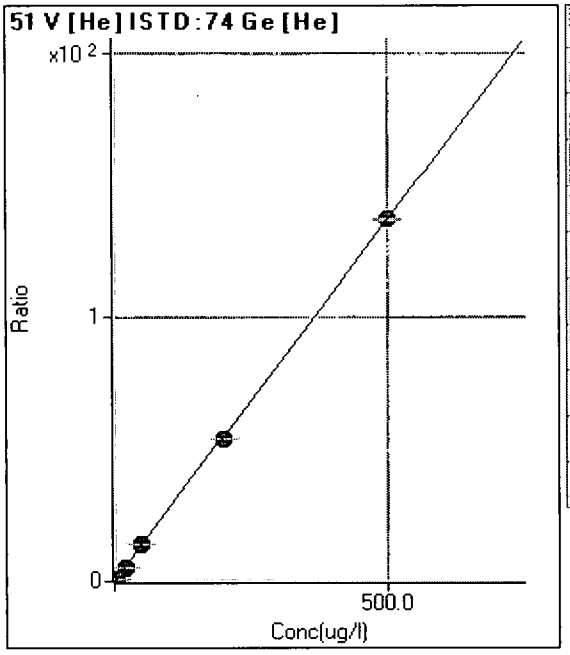
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1	0.000	P	173.2
2	☐			28	0.008	P	30.2
3	☐			124	0.036	P	23.2
4	☐	1.800	1.841	259	0.077	P	10.8
5	☐	3.600	3.474	516	0.145	P	3.8
6	☐	20.000	20.602	3035	0.856	P	6.2
7	☐	50.000	50.019	7465	2.078	P	1.3
8	☐	200.000	199.646	28520	8.291	P	0.1
9	☐	500.000	499.580	69214	20.747	P	2.0
10	☐	2500.000	2500.107	348682	103.827	P	1.1

y = 0.0415 * x + 3.1912E-004
R = 1.0000
DL = 0.03993
BEC = 0.007684

Weight: <None>
Min Conc: <None>

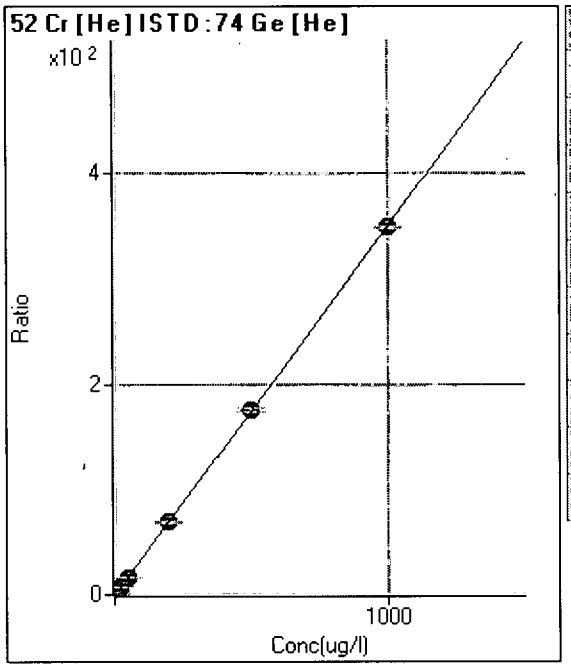


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	424	0.025	P	4.0
2	☐	0.180	0.202	1355	0.081	P	2.5
3	☐	0.900	0.844	4282	0.256	P	1.1
4	☐	1.800	1.765	8355	0.508	P	3.2
5	☐	3.600	3.583	17244	1.005	P	2.0
6	☐	20.000	19.576	93408	5.375	P	2.1
7	☐	50.000	49.405	235985	13.527	P	0.8
8	☐	200.000	196.742	907011	53.793	P	0.8
9	☐	500.000	501.380	2221707	137.048	A	0.7
10	☐			740	0.047	P	3.3

y = 0.2733 * x + 0.0254
R = 1.0000
DL = 0.01113
BEC = 0.09286

Weight: <None>
Min Conc: <None>

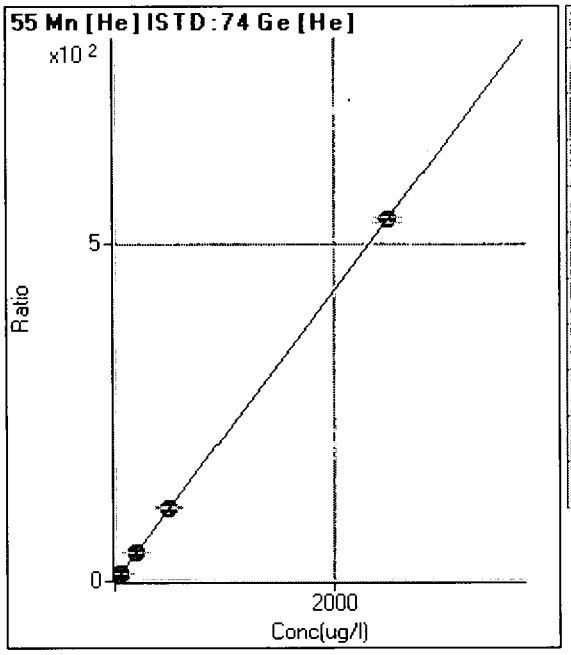
Calibration for 036SMPL.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2236	0.134	P	3.6
2	☐	0.180	-0.066	1862	0.111	P	2.7
3	☐	0.900	0.628	5911	0.354	P	3.6
4	☐	1.800	1.621	11540	0.701	P	1.4
5	☐	3.600	3.384	22626	1.318	P	2.6
6	☐	20.000	19.818	122877	7.071	P	1.6
7	☐	50.000	48.821	300472	17.223	P	0.6
8	☐	200.000	200.315	1184735	70.252	A	2.8
9	☐	500.000	502.535	2853744	176.041	A	1.4
10	☐	1000.000	998.734	5503109	349.731	A	0.3

y = 0.3500 * x + 0.1337
R = 1.0000
DL = 0.04118
BEC = 0.3821

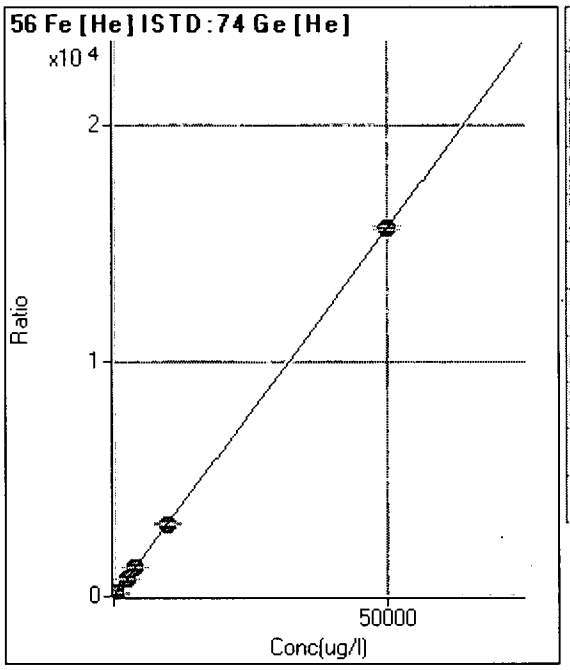
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	309	0.019	P	19.0
2	☐	0.180	0.158	881	0.052	P	6.5
3	☐	0.900	0.859	3394	0.203	P	0.8
4	☐	1.800	1.766	6547	0.398	P	4.9
5	☐	3.600	3.504	13234	0.771	P	0.8
6	☐	20.000	19.779	74138	4.266	P	1.9
7	☐	50.000	48.827	183198	10.504	P	2.0
8	☐	200.000	196.660	712436	42.252	P	1.0
9	☐	500.000	504.101	1755183	108.277	A	2.6
10	☐	2500.000	2499.472	8445576	536.795	A	1.5

y = 0.2148 * x + 0.0185
R = 1.0000
DL = 0.04923
BEC = 0.0862

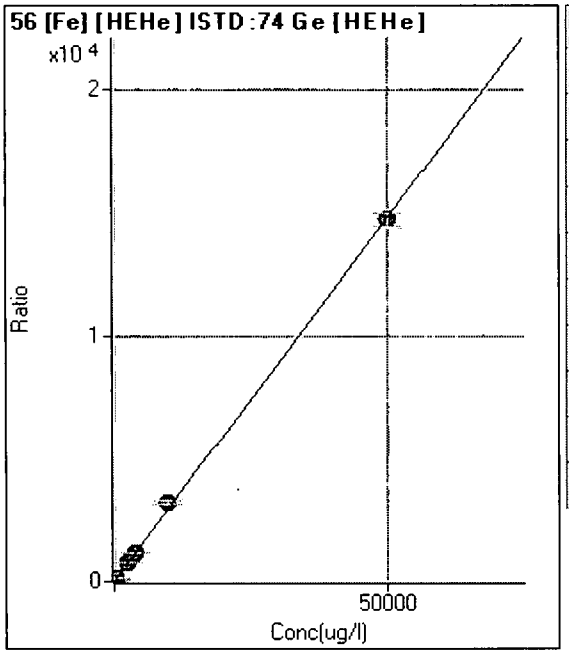
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15127	0.905	P	4.4
2	☐	9.000	8.803	61567	3.660	P	1.4
3	☐	45.000	44.453	247641	14.816	P	1.7
4	☐	90.000	91.237	484789	29.457	P	3.1
5	☐	180.000	180.658	985981	57.440	P	1.5
6	☐	400.000	407.432	2231722	128.407	A	1.7
7	☐	2500.000	2425.916	13254646	760.073	A	2.7
8	☐	4000.000	3950.185	20859406	1,237.078	A	0.9
9	☐	10000.000	9926.402	50370341	3,107.280	A	1.6
10	☐	50000.000	50022.345	246321961	15,654.929	A	1.1

y = 0.3129 * x + 0.9051
R = 1.0000
DL = 0.3815
BEC = 2.892

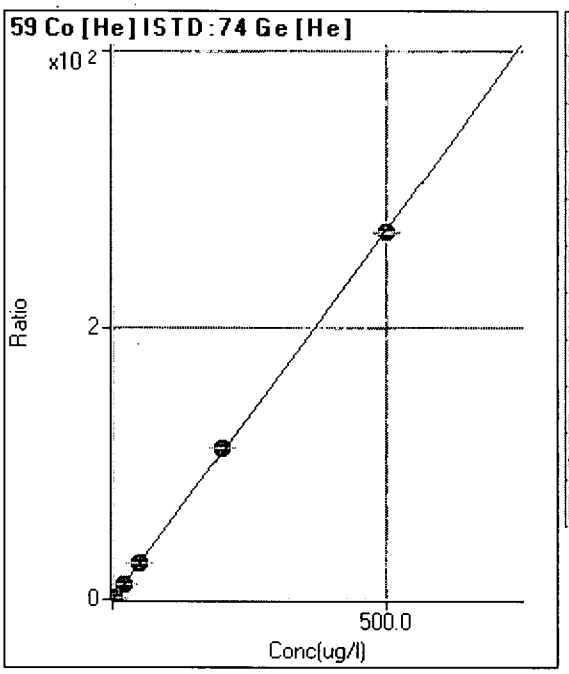
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	17093	0.793	P	6.0
2	☐	9.000	9.436	79029	3.586	P	1.9
3	☐	45.000	48.626	317565	15.188	P	2.4
4	☐	90.000	94.394	622562	28.737	P	0.6
5	☐	180.000	187.624	1255295	56.336	A	1.4
6	☐	400.000	410.668	2698177	122.363	A	1.3
7	☐	2500.000	2592.881	16886244	768.366	A	0.4
8	☐	4000.000	4063.105	25699552	1,203.597	A	0.7
9	☐	10000.000	10803.543	63008254	3,198.974	A	5.5
10	☐	50000.000	49829.475	310426916	14,751.849	A	3.5

y = 0.2960 * x + 0.7932
R = 0.9999
DL = 0.4862
BEC = 2.679

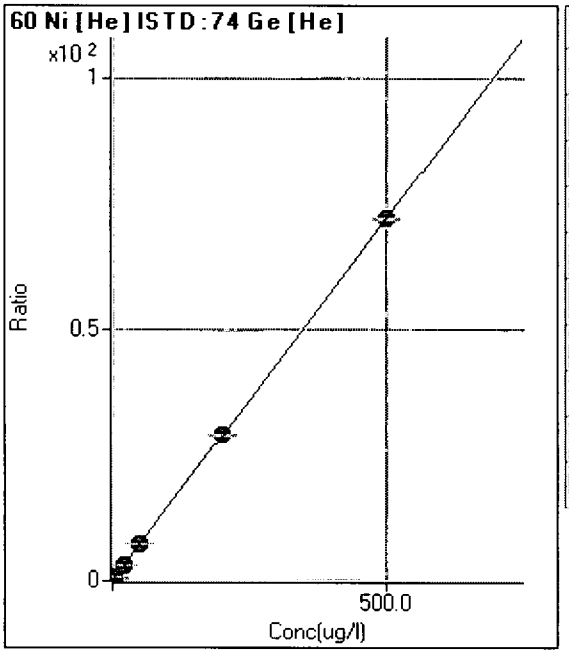
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97	0.006	P	4.9
2	☐	0.180	0.169	1631	0.097	P	7.4
3	☐	0.900	0.926	8475	0.507	P	3.3
4	☐	1.800	1.844	16521	1.004	P	2.1
5	☐	3.600	3.720	34658	2.019	P	1.0
6	☐	20.000	20.332	191320	11.008	P	0.4
7	☐	50.000	49.993	471919	27.058	P	1.5
8	☐	200.000	205.493	1875053	111.201	A	0.3
9	☐	500.000	497.789	4366726	269.367	A	0.8
10	☐			1797	0.114	P	6.2

y = 0.5411 * x + 0.0058
R = 0.9999
DL = 0.001572
BEC = 0.01068

Weight: <None>
Min Conc: <None>

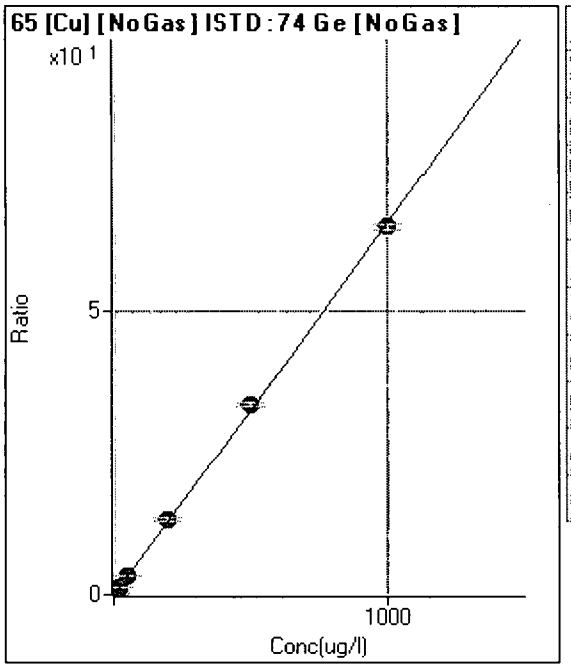


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2659	0.159	P	4.9
2	☐			1576	0.094	P	3.0
3	☐			3245	0.194	P	4.8
4	☐	1.800	1.272	5620	0.342	P	5.2
5	☐	3.600	3.005	10130	0.590	P	1.4
6	☐	20.000	20.289	53336	3.069	P	0.6
7	☐	50.000	49.760	127225	7.295	P	2.4
8	☐	200.000	199.591	485289	28.782	P	0.5
9	☐	500.000	500.182	1165412	71.889	P	0.6
10	☐			2275803	144.640	A	0.9

y = 0.1434 * x + 0.1591
R = 1.0000
DL = 0.1639
BEC = 1.109

Weight: <None>
Min Conc: <None>

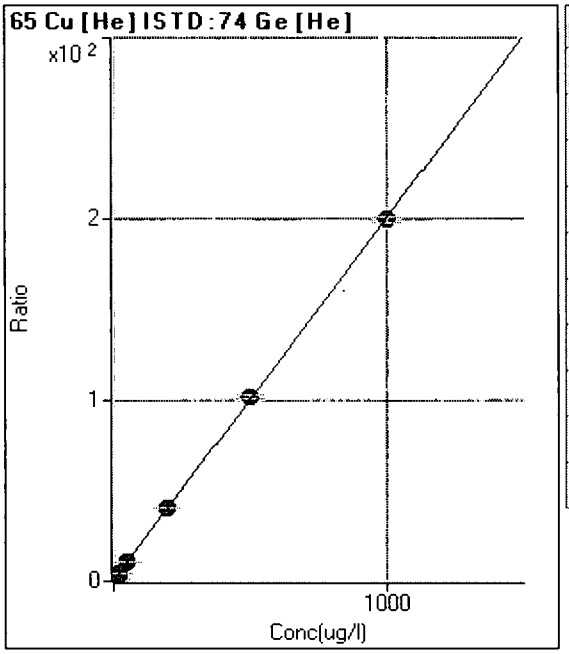
Calibration for 036SMPL.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1561	0.015	P	7.3
2	☐	0.180	0.486	4752	0.047	P	1.3
3	☐	0.900	1.165	9064	0.091	P	1.1
4	☐	1.800	1.873	13778	0.137	P	1.8
5	☐	3.600	3.713	26826	0.257	P	1.7
6	☐	20.000	21.602	147914	1.424	P	3.3
7	☐	50.000	52.142	361493	3.417	P	1.6
8	☐	200.000	203.187	1389587	13.271	A	5.2
9	☐	500.000	515.302	3250106	33.633	A	2.2
10	☐	1000.000	991.572	6160313	64.704	A	1.4

y = 0.0652 * x + 0.0152
R = 0.9998
DL = 0.05088
BEC = 0.233

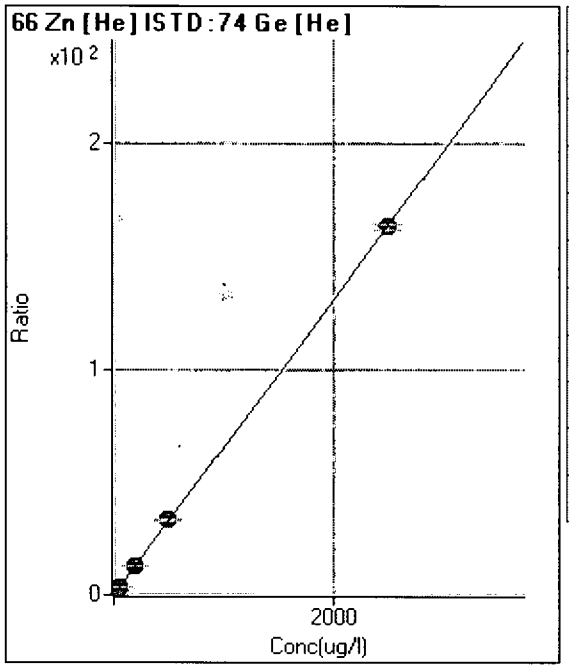
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	620	0.037	P	2.7
2	☐	0.180	0.461	2179	0.130	P	3.8
3	☐	0.900	1.145	4460	0.267	P	3.7
4	☐	1.800	1.847	6712	0.408	P	1.8
5	☐	3.600	3.600	13036	0.759	P	1.9
6	☐	20.000	20.927	73621	4.236	P	1.5
7	☐	50.000	50.833	178543	10.237	P	2.1
8	☐	200.000	200.660	679532	40.302	P	0.6
9	☐	500.000	506.304	1647573	101.635	A	1.5
10	☐	1000.000	996.655	3147529	200.031	A	1.6

y = 0.2007 * x + 0.0371
R = 1.0000
DL = 0.01482
BEC = 0.1847

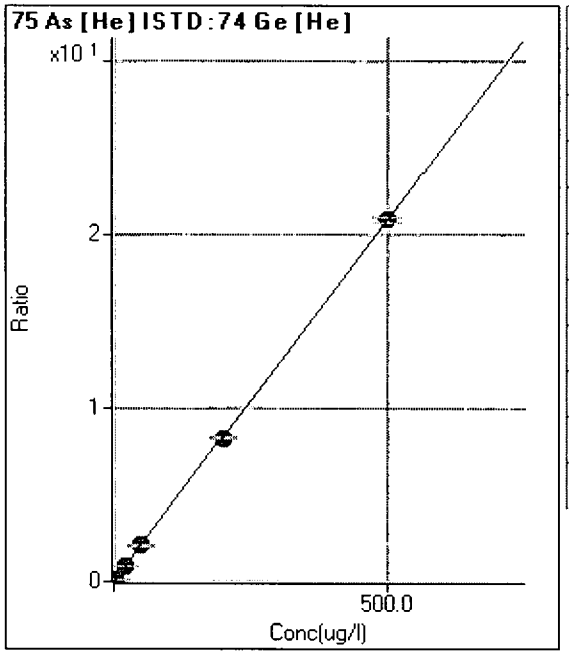
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	94	0.006	P	13.8
2	☐			1006	0.060	P	2.6
3	☐	0.900	1.632	1877	0.112	P	1.8
4	☐	1.800	2.140	2394	0.145	P	4.9
5	☐	3.600	3.720	4269	0.249	P	6.3
6	☐	20.000	25.261	28780	1.656	P	2.5
7	☐	50.000	51.846	59196	3.393	P	0.9
8	☐	200.000	202.804	223535	13.257	P	0.4
9	☐	500.000	512.520	542982	33.495	P	1.2
10	☐	2500.000	2497.192	2567468	163.179	A	1.9

y = 0.0653 * x + 0.0056
R = 1.0000
DL = 0.03573
BEC = 0.08641

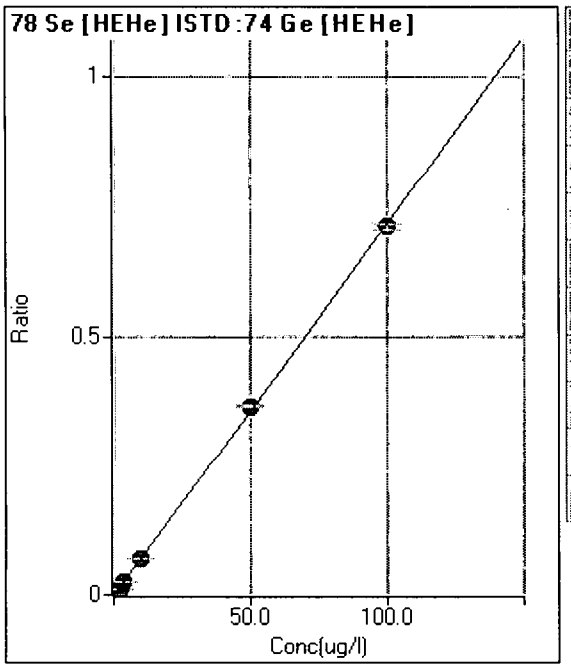
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18	0.001	P	11.5
2	☐	0.180	0.180	144	0.009	P	2.7
3	☐	0.900	0.884	634	0.038	P	9.3
4	☐	1.800	1.798	1252	0.076	P	2.9
5	☐	3.600	3.584	2584	0.151	P	2.2
6	☐	20.000	20.162	14628	0.842	P	1.9
7	☐	50.000	49.263	35845	2.055	P	1.6
8	☐	200.000	197.730	139046	8.246	P	0.6
9	☐	500.000	500.976	338654	20.891	P	1.5
10	☐			78	0.005	P	13.0

y = 0.0417 * x + 0.0011
R = 1.0000
DL = 0.008819
BEC = 0.02558

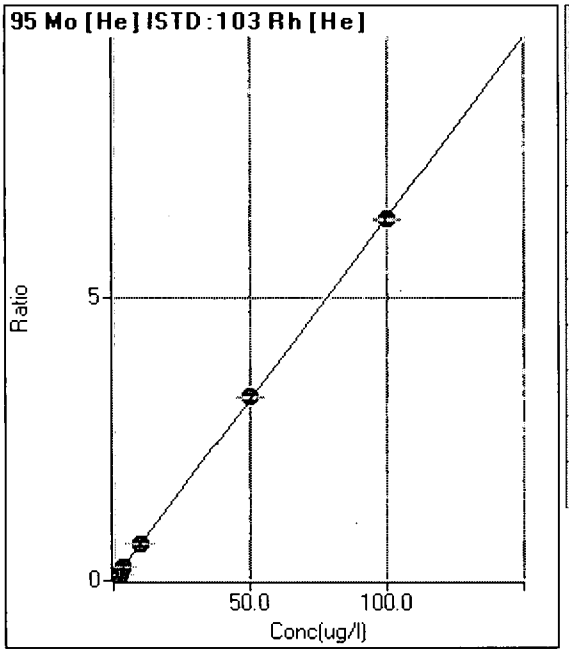
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2	0.000	P	37.5
2	☐	0.180	0.204	35	0.002	P	12.9
3	☐	0.900	0.921	140	0.007	P	8.3
4	☐	1.800	1.763	276	0.013	P	3.6
5	☐	3.600	3.644	584	0.026	P	1.4
6	☐	10.000	10.223	1618	0.073	P	0.3
7	☐	50.000	51.299	8082	0.368	P	0.2
8	☐	100.000	99.327	15200	0.712	P	1.4
9	☐			10	0.001	P	2.8
10	☐			15	0.001	P	13.9

y = 0.0072 * x + 1.0824E-004
R = 0.9999
DL = 0.01698
BEC = 0.0151

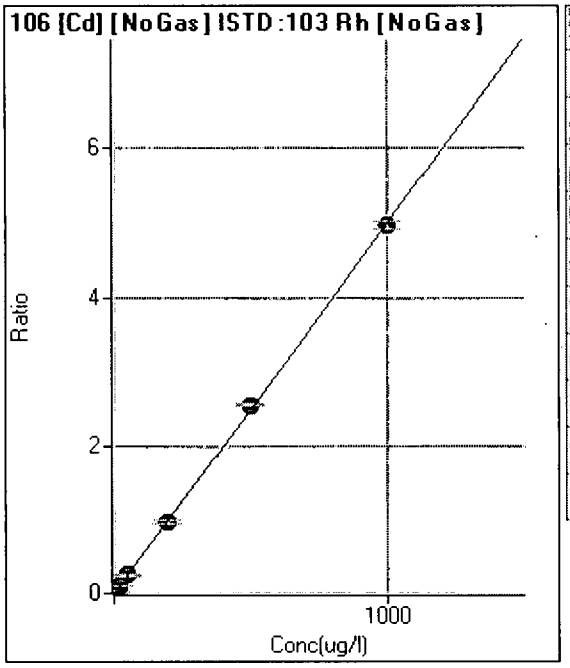
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	230	0.004	P	10.7
2	☐	0.180	0.155	882	0.013	P	7.1
3	☐	0.900	0.855	3829	0.058	P	4.2
4	☐	1.800	1.777	7499	0.117	P	1.3
5	☐	3.600	3.475	15169	0.226	P	1.4
6	☐	10.000	9.890	42938	0.637	P	1.0
7	☐	50.000	50.560	218920	3.240	P	1.6
8	☐	100.000	99.737	415377	6.389	P	0.3
9	☐			263	0.004	P	6.7
10	☐			398	0.007	P	9.1

y = 0.0640 * x + 0.0036
R = 1.0000
DL = 0.01788
BEC = 0.05545

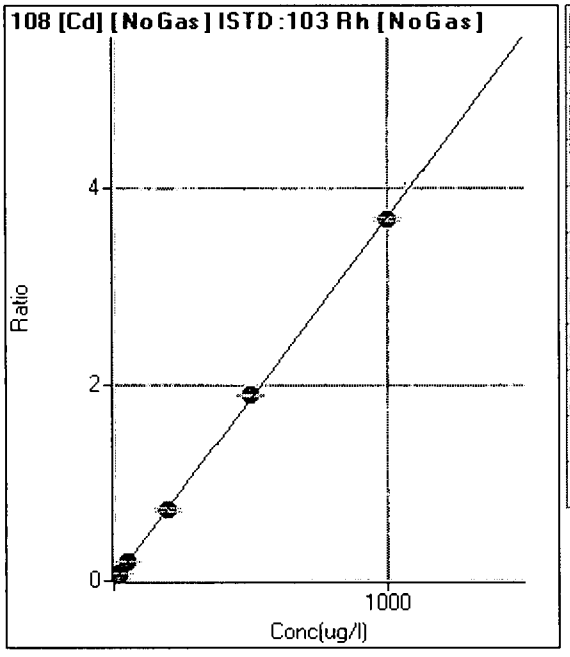
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8	0.000	P	48.5
2	☐	0.180	0.174	106	0.001	P	13.3
3	☐	0.900	1.001	567	0.005	P	10.1
4	☐	1.800	1.781	1020	0.009	P	7.8
5	☐	3.600	3.557	2090	0.018	P	4.2
6	☐	20.000	19.771	11608	0.099	P	1.9
7	☐	50.000	50.328	29624	0.252	P	2.2
8	☐	200.000	193.667	113926	0.968	P	5.6
9	☐	500.000	513.186	276088	2.565	P	0.6
10	☐	1000.000	994.662	516132	4.971	P	2.1

y = 0.0050 * x + 6.6444E-005
R = 0.9999
DL = 0.01934
BEC = 0.0133

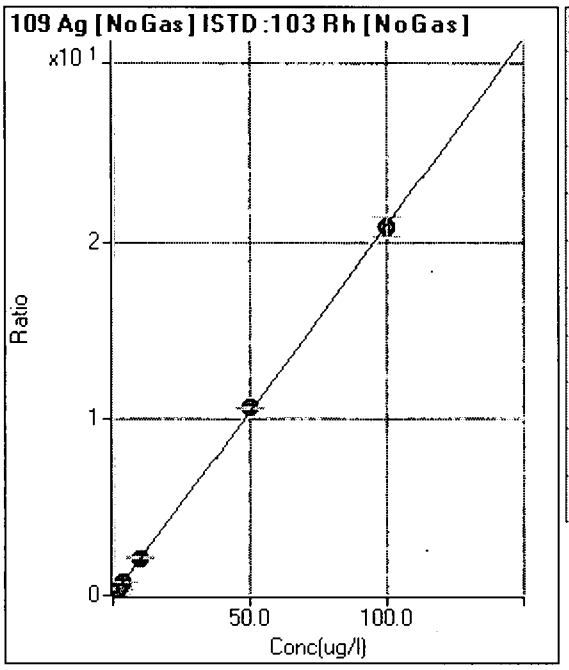
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11	0.000	P	74.7
2	☐	0.180	0.216	101	0.001	P	16.3
3	☐	0.900	0.983	418	0.004	P	9.2
4	☐	1.800	1.837	783	0.007	P	5.0
5	☐	3.600	3.467	1517	0.013	P	3.3
6	☐	20.000	19.605	8538	0.073	P	4.4
7	☐	50.000	51.321	22406	0.190	P	1.2
8	☐	200.000	195.580	85298	0.725	P	6.0
9	☐	500.000	510.071	203461	1.890	P	0.9
10	☐	1000.000	995.791	383082	3.690	P	1.1

y = 0.0037 * x + 9.4746E-005
R = 0.9999
DL = 0.0573
BEC = 0.02557

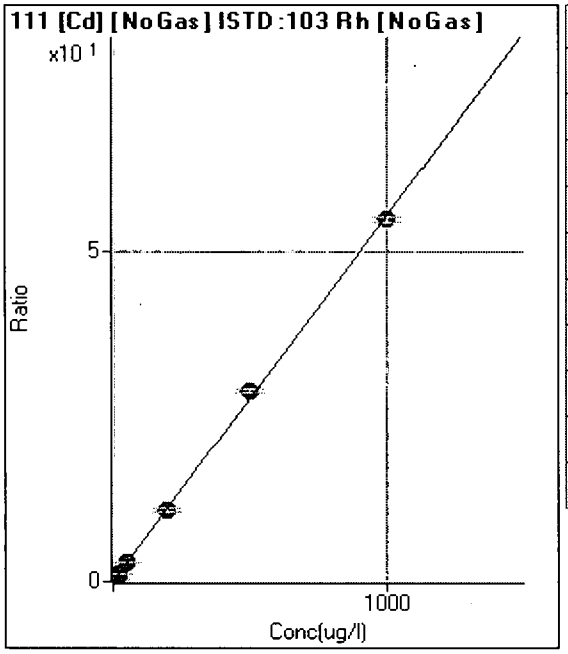
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30	0.000	P	17.6
2	☐	0.180	0.193	4599	0.041	P	1.8
3	☐	0.900	0.959	22520	0.201	P	2.9
4	☐	1.800	1.864	44377	0.391	P	2.2
5	☐	3.600	3.701	90880	0.775	P	1.1
6	☐	10.000	10.213	251208	2.140	P	2.9
7	☐	50.000	50.921	1256199	10.667	A	1.1
8	☐	100.000	99.513	2453760	20.845	A	5.5
9	☐			347	0.003	P	11.3
10	☐			574	0.006	P	3.3

y = 0.2095 * x + 2.5726E-004
R = 0.9999
DL = 0.00065
BEC = 0.001228

Weight: <None>
Min Conc: <None>

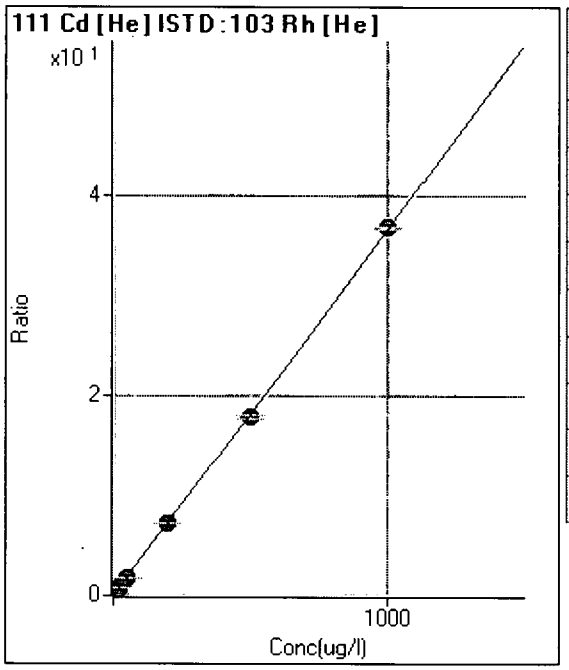


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2	0.000	P	437.6
2	☐	0.180	0.187	1166	0.010	P	2.6
3	☐	0.900	0.925	5727	0.051	P	3.9
4	☐	1.800	1.817	11408	0.100	P	1.2
5	☐	3.600	3.649	23624	0.202	P	3.1
6	☐	20.000	20.078	130270	1.109	P	2.4
7	☐	50.000	50.955	331592	2.816	P	1.4
8	☐	200.000	194.905	1267668	10.770	A	5.7
9	☐	500.000	519.460	3089624	28.704	A	1.7
10	☐	1000.000	991.239	5686631	54.773	A	1.5

y = 0.0553 * x + 1.6184E-005
R = 0.9998
DL = 0.003845
BEC = 0.0002929

Weight: <None>
Min Conc: <None>

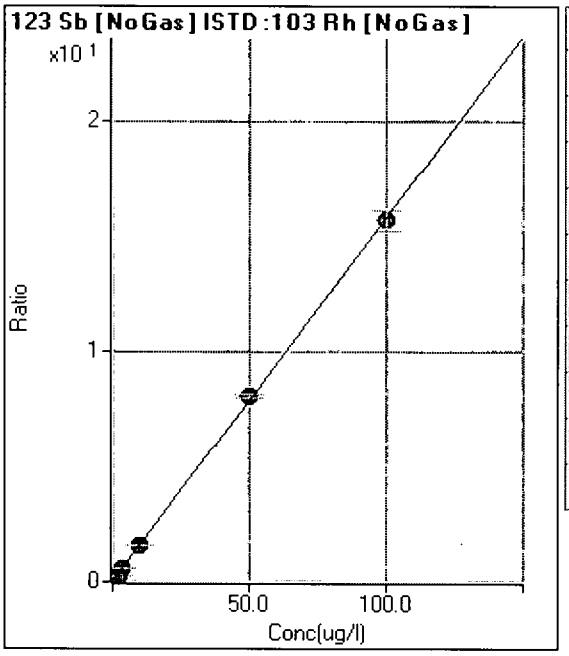
Calibration for 036SMPL.d



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9	0.000	P	56.7
2	☐	0.180	0.164	401	0.006	P	1.7
3	☐	0.900	0.887	2142	0.033	P	2.1
4	☐	1.800	1.751	4107	0.064	P	0.9
5	☐	3.600	3.520	8657	0.129	P	2.7
6	☐	20.000	19.518	48195	0.715	P	1.0
7	☐	50.000	48.241	119330	1.766	P	0.5
8	☐	200.000	195.877	466182	7.171	P	1.0
9	☐	500.000	491.096	1128406	17.978	P	2.4
10	☐	1000.000	1005.375	2194638	36.804	A	0.7

y = 0.0366 * x + 1.3655E-004
R = 0.9999
DL = 0.006348
BEC = 0.00373

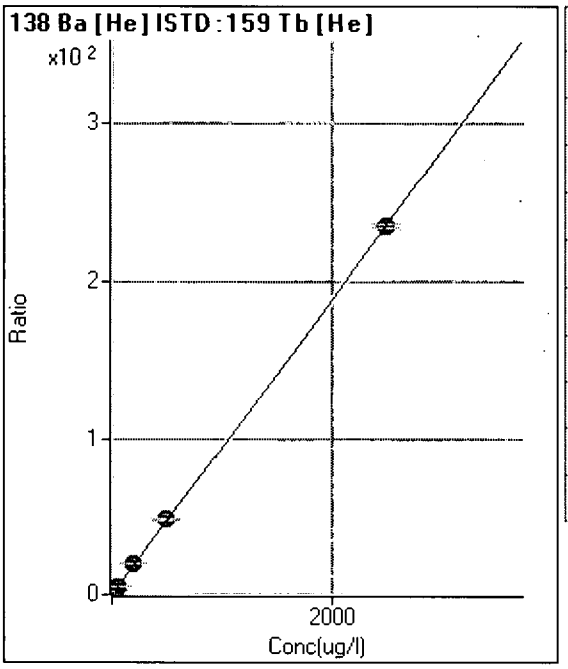
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	173	0.001	P	7.9
2	☐	0.180	0.183	3430	0.030	P	4.5
3	☐	0.900	0.938	16766	0.150	P	2.1
4	☐	1.800	1.810	32671	0.288	P	2.7
5	☐	3.600	3.633	67495	0.576	P	1.3
6	☐	10.000	10.139	188421	1.605	P	2.5
7	☐	50.000	51.041	950696	8.073	P	1.6
8	☐	100.000	99.464	1851280	15.730	A	6.1
9	☐			1016	0.009	P	8.7
10	☐			758	0.007	P	6.3

y = 0.1581 * x + 0.0015
R = 0.9999
DL = 0.002239
BEC = 0.00942

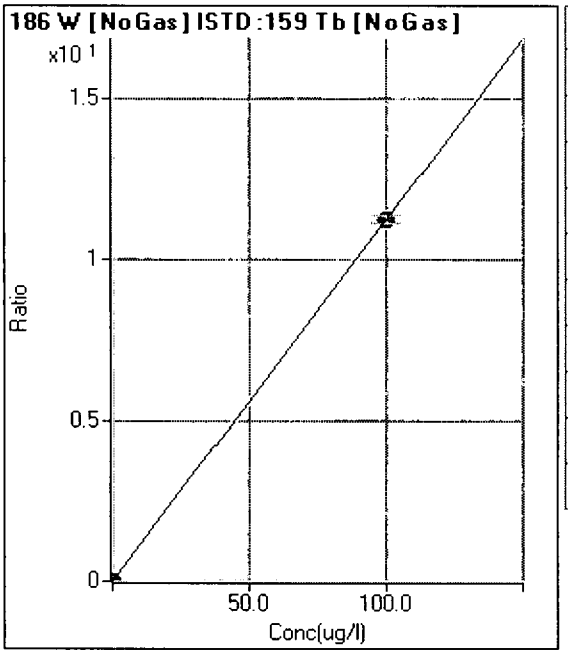
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	264	0.002	P	10.9
2	☐	0.180	0.290	4292	0.029	P	2.0
3	☐	0.900	0.965	13747	0.092	P	4.5
4	☐	1.800	1.948	26535	0.185	P	0.2
5	☐	3.600	3.834	55393	0.362	P	2.1
6	☐	20.000	20.861	300200	1.962	P	1.0
7	☐	50.000	52.210	740431	4.907	P	1.2
8	☐	200.000	207.883	2900971	19.531	A	2.1
9	☐	500.000	511.462	6913589	48.050	A	2.5
10	☐	2500.000	2497.025	33481515	234.578	A	1.1

y = 0.0939 * x + 0.0018
R = 1.0000
DL = 0.006215
BEC = 0.01896

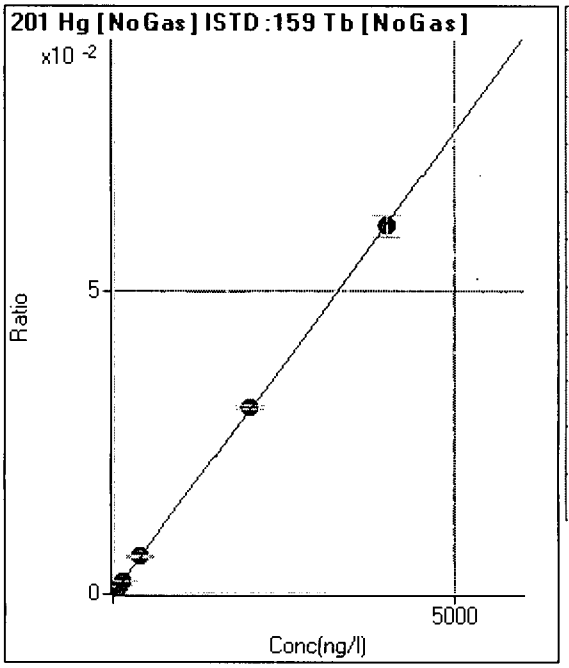
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	147	0.000	P	14.4
2	☐			93	0.000	P	26.3
3	☐			117	0.000	P	51.8
4	☐			107	0.000	P	28.8
5	☐			133	0.000	P	16.7
6	☐			224	0.001	P	17.0
7	☐			497	0.002	P	20.2
8	☐			888	0.003	P	11.5
9	☐	100.000	100.000	3217224	11.239	A	2.2
10	☐			9814	0.034	P	3.9

y = 0.1124 * x + 4.7698E-004
R = 1.0000
DL = 0.001834
BEC = 0.004244

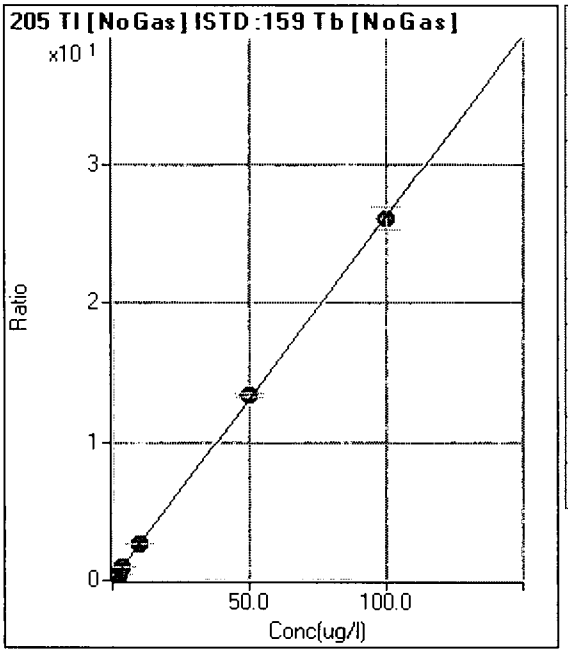
Weight: <None>
Min Conc: <None>



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19	0.000	P	13.7
2	☐			43	0.000	P	14.1
3	☐	36.000	37.282	183	0.001	P	6.5
4	☐	72.000	77.041	359	0.001	P	3.9
5	☐	144.000	150.185	703	0.002	P	2.5
6	☐	400.000	410.377	1878	0.006	P	1.8
7	☐	2000.000	2027.630	9448	0.031	P	2.6
8	☐	4000.000	3984.822	18483	0.060	P	5.8
9	☐			569	0.002	P	0.2
10	☐			172	0.001	P	4.2

y = 1.5149E-005 * x + 6.1093E-005
R = 1.0000
DL = 1.66
BEC = 4.033

Weight: <None>
Min Conc: <None>

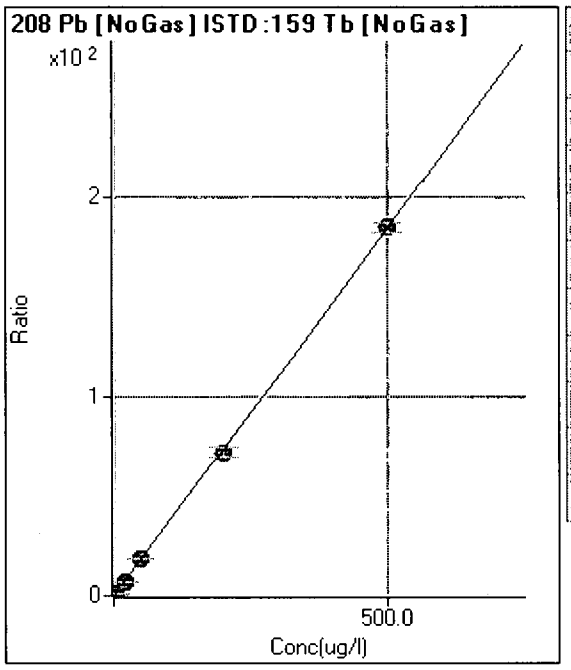


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	198	0.001	P	23.2
2	☐	0.180	0.181	14379	0.048	P	1.8
3	☐	0.900	0.919	70701	0.241	P	4.1
4	☐	1.800	1.795	137871	0.471	P	1.4
5	☐	3.600	3.554	280445	0.932	P	1.8
6	☐	10.000	9.960	780704	2.610	P	1.2
7	☐	50.000	51.225	4120760	13.421	A	2.0
8	☐	100.000	99.393	7963738	26.039	A	6.2
9	☐			6914	0.024	P	4.2
10	☐			2244	0.008	P	2.6

y = 0.2620 * x + 6.3996E-004
R = 0.9999
DL = 0.0017
BEC = 0.002443

Weight: <None>
Min Conc: <None>

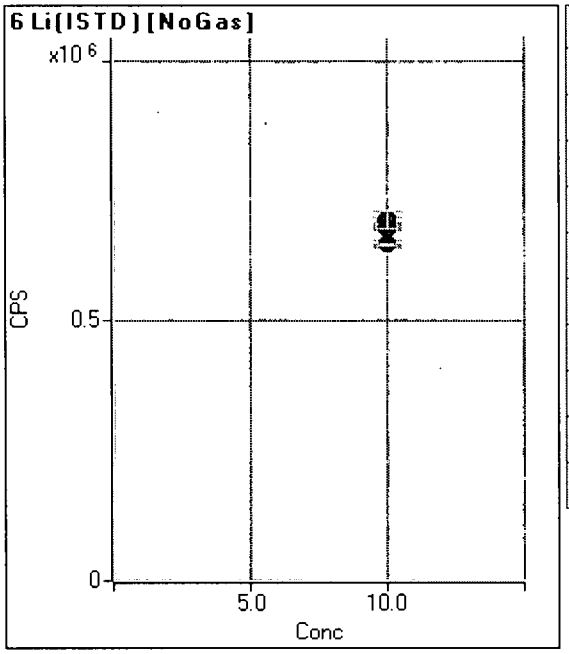
Calibration for 036SMPL.d



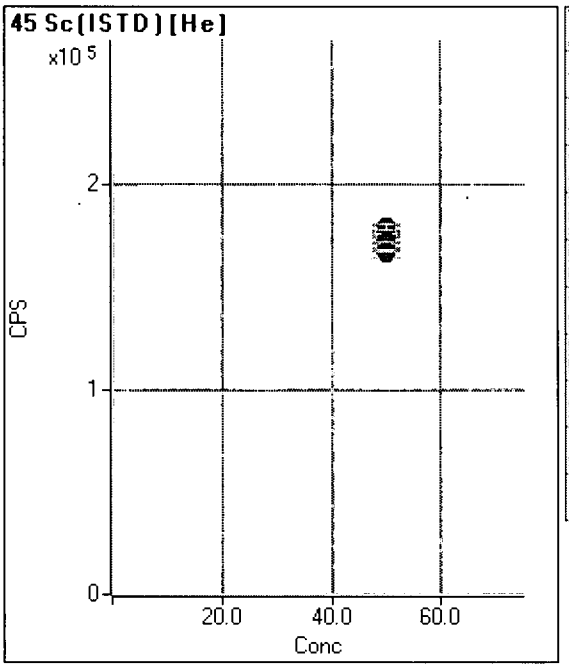
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2612	0.008	P	1.2
2	☐	0.180	0.210	25649	0.086	P	1.4
3	☐	0.900	0.965	106441	0.364	P	4.0
4	☐	1.800	1.792	195531	0.668	P	1.8
5	☐	3.600	3.520	392335	1.304	P	1.8
6	☐	20.000	19.689	2169576	7.253	P	0.9
7	☐	50.000	50.153	5666950	18.463	A	3.2
8	☐	200.000	195.248	21974493	71.853	A	6.3
9	☐	500.000	501.899	52866142	184.690	A	2.4
10	☐			13401	0.047	P	2.5

y = 0.3680 * x + 0.0085
R = 0.9999
DL = 0.00083
BEC = 0.02305

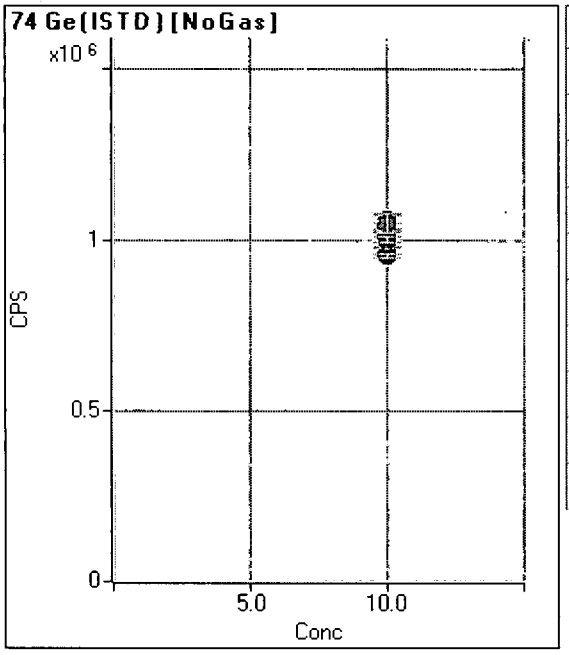
Weight: <None>
Min Conc: <None>



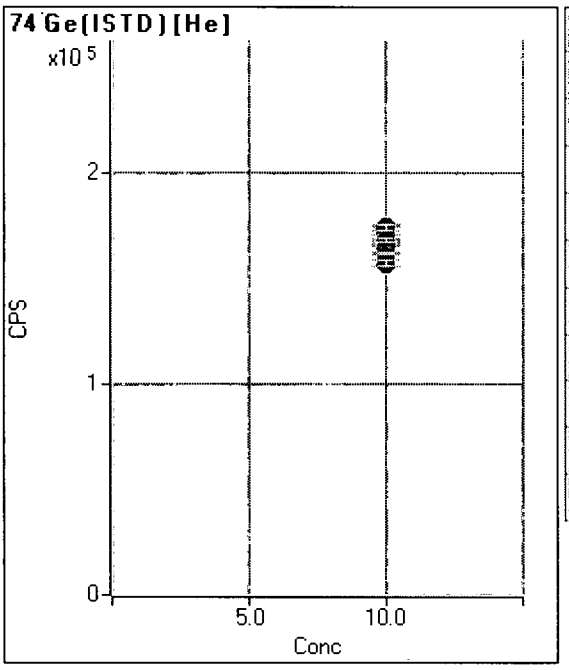
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		683413		P	1.7
2	☐	10.000		678425		P	0.9
3	☐	10.000		680665		P	1.9
4	☐	10.000		682240		P	0.8
5	☐	10.000		682079		P	0.7
6	☐	10.000		680480		P	1.0
7	☐	10.000		695237		P	1.4
8	☐	10.000		693611		P	4.9
9	☐	10.000		649177		P	2.1
10	☐	10.000		647731		P	0.7



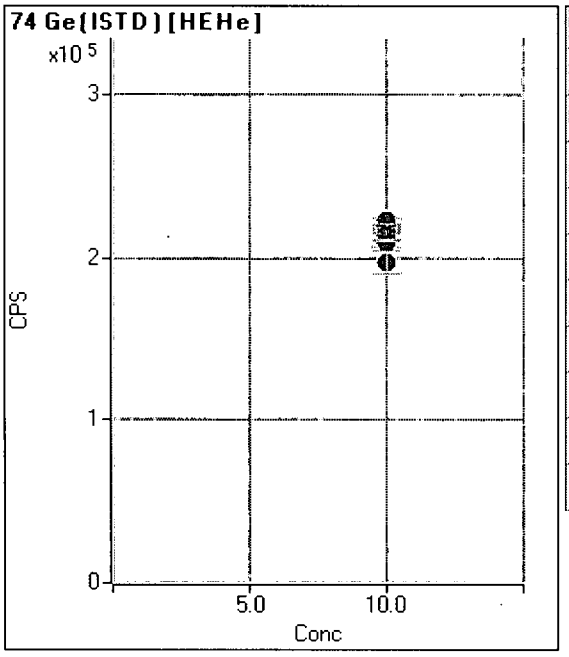
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	50.000		169523		P	2.5
2	☐	50.000		172759		P	1.9
3	☐	50.000		173539		P	2.1
4	☐	50.000		168605		P	1.6
5	☐	50.000		178333		P	1.4
6	☐	50.000		177359		P	0.9
7	☐	50.000		179665		P	1.8
8	☐	50.000		171986		P	1.0
9	☐	50.000		166844		P	2.0
10	☐	50.000		167923		P	0.7



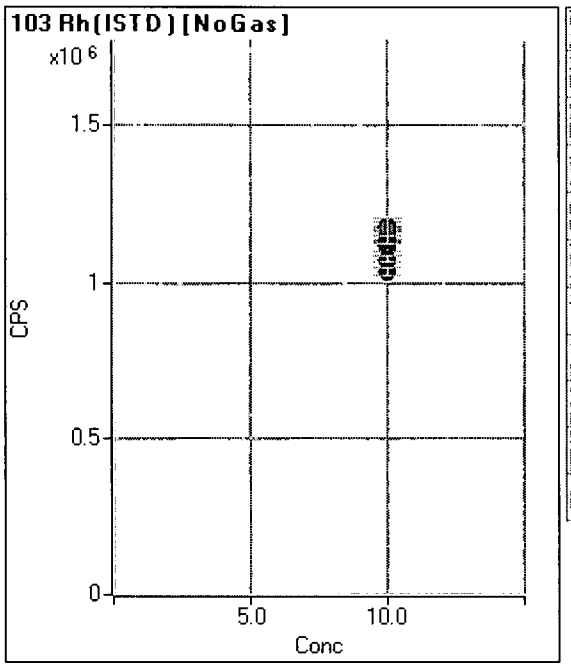
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		1027391		P	1.0
2	☐	10.000		1012983		P	1.0
3	☐	10.000		994288		P	3.0
4	☐	10.000		1003127		P	1.7
5	☐	10.000		1042105		P	1.6
6	☐	10.000		1038748		P	2.1
7	☐	10.000		1058196		P	2.1
8	☐	10.000		1048714		M	4.9
9	☐	10.000		966518		P	2.0
10	☐	10.000		952026		P	1.4



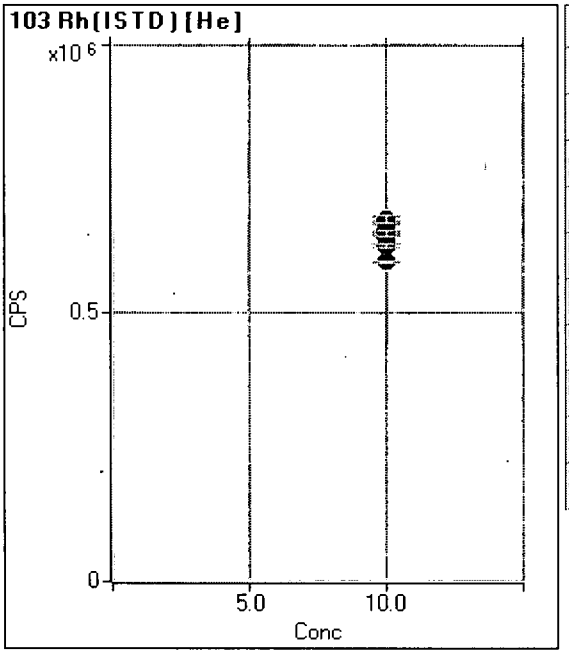
	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		167213		P	1.8
2	☐	10.000		168228		P	0.7
3	☐	10.000		167164		P	1.1
4	☐	10.000		164662		P	2.6
5	☐	10.000		171674		P	1.2
6	☐	10.000		173804		P	1.4
7	☐	10.000		174446		P	1.9
8	☐	10.000		168615		P	1.1
9	☐	10.000		162117		P	0.7
10	☐	10.000		157356		P	1.7



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		215481		P	0.2
2	☐	10.000		220370		P	0.8
3	☐	10.000		209159		P	2.3
4	☐	10.000		216649		P	1.0
5	☐	10.000		222841		P	1.6
6	☐	10.000		220514		P	0.8
7	☐	10.000		219774		P	1.1
8	☐	10.000		213540		P	1.8
9	☐	10.000		197465		P	6.9
10	☐	10.000		210451		P	0.4

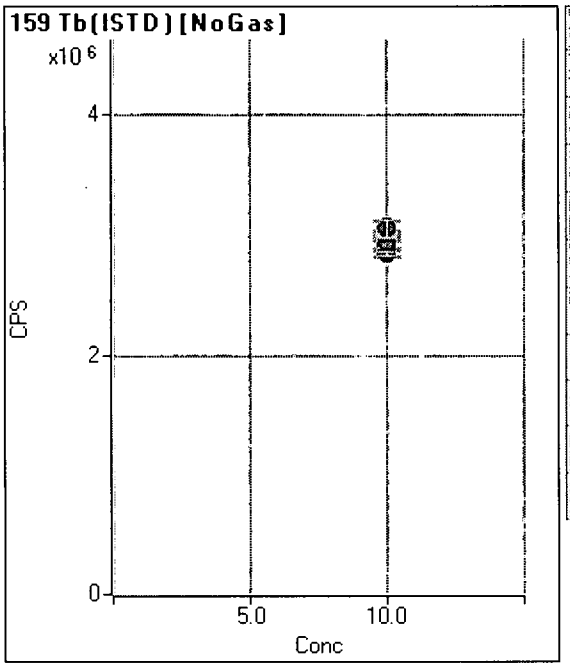


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		1163511		P	1.8
2	☐	10.000		1127493		M	0.6
3	☐	10.000		1119951		P	3.0
4	☐	10.000		1136254		P	2.3
5	☐	10.000		1172014		P	1.5
6	☐	10.000		1174326		P	1.1
7	☐	10.000		1177866		P	2.2
8	☐	10.000		1179151		M	4.7
9	☐	10.000		1076598		P	2.0
10	☐	10.000		1038351		P	2.3

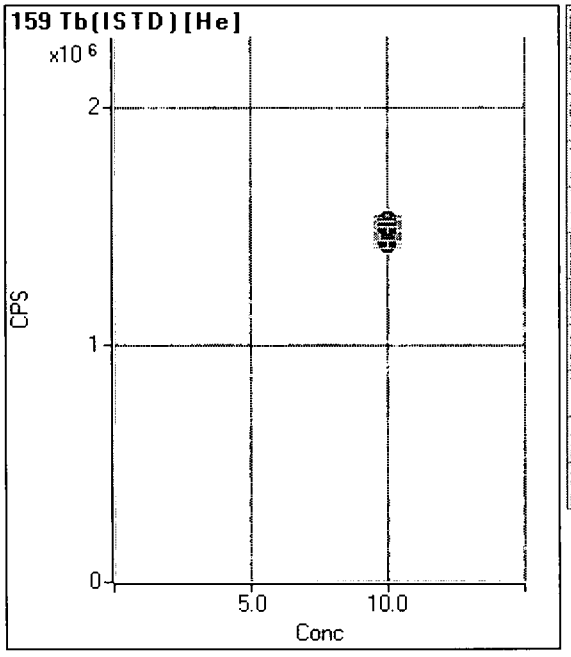


	Rjct	Conc.	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		648079		P	1.2
2	☐	10.000		654190		P	0.8
3	☐	10.000		657440		P	3.0
4	☐	10.000		639498		P	2.6
5	☐	10.000		671106		P	1.0
6	☐	10.000		674437		P	1.7
7	☐	10.000		675637		P	2.0
8	☐	10.000		650185		P	1.4
9	☐	10.000		627793		P	1.3
10	☐	10.000		596321		P	1.0

Calibration for 036SMPL.d

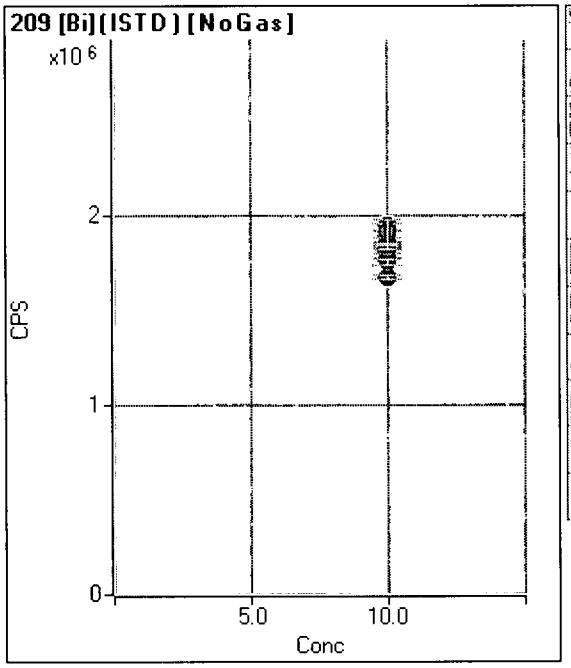


	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		3079736		A	2.3
2	☐	10.000		2988335		A	1.3
3	☐	10.000		2931171		A	4.3
4	☐	10.000		2928344		A	1.7
5	☐	10.000		3009884		A	1.2
6	☐	10.000		2991245		A	0.7
7	☐	10.000		3071231		A	2.9
8	☐	10.000		3064571		A	4.9
9	☐	10.000		2863483		A	2.3
10	☐	10.000		2853693		A	1.4



	Rjct	Conc	Calc Conc	CPS	Ratio	Det	RSD
1	☐	10.000		1485824		A	1.5
2	☐	10.000		1481145		A	2.7
3	☐	10.000		1489098		A	3.5
4	☐	10.000		1435740		A	3.0
5	☐	10.000		1530732		A	2.7
6	☐	10.000		1530592		A	1.8
7	☐	10.000		1509300		A	2.1
8	☐	10.000		1485766		A	2.4
9	☐	10.000		1439291		A	2.0
10	☐	10.000		1427467		A	1.8

Calibration for 036SMPL.d



	Rjct	Conc	CalcConc	CPS	Ratio	Det	RSD
1	☐	10.000		1949588		A	1.7
2	☐	10.000		1861826		A	1.1
3	☐	10.000		1819405		A	2.9
4	☐	10.000		1833347		A	2.2
5	☐	10.000		1852573		A	1.3
6	☐	10.000		1841070		A	1.3
7	☐	10.000		1906160		A	1.6
8	☐	10.000		1922840		A	6.3
9	☐	10.000		1763359		A	2.0
10	☐	10.000		1685138		A	1.3

Initial Calibration Verification (ICV) Report ICPMS6

Sample Name	**9J02063-ICV1**	**Sample Type**	ICV
File Name	013_ICV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:20:25	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	ExpValue	% Rec	%QC Low	%QC High	QC Flag
Be	9	6	No Gas	40.340	ug/l	1.7	168495	40	100.85	90	110	
Na	23	45	He	7791.243	ug/l	1.2	8719957	8000	97.39	90	110	
Mg	24	45	He	8065.608	ug/l	1.3	4753993	8000	100.82	90	110	
Al	27	45	He	7876.286	ug/l	1.8	1899472	8000	98.45	90	110	
K	39	45	He	7795.392	ug/l	1.7	3381301	8000	97.44	90	110	
Ca	44	45	He	7852.381	ug/l	1.0	190070	8000	98.15	90	110	
Ti	47	45	He	99.205	ug/l	2.1	14730	100	99.2	90	110	
V	51	74	He	97.142	ug/l	2.2	456411	100	97.14	90	110	
Cr	52	74	He	97.932	ug/l	1.3	591087	100	97.93	90	110	
Mn	55	74	He	100.154	ug/l	0.8	369752	100	100.15	90	110	
Fe	56	74	He	7867.283	ug/l	1.5	42302071	8000	98.34	90	110	
Co	59	74	He	102.580	ug/l	0.8	953500	100	102.58	90	110	
Ni	60	74	He	102.195	ug/l	0.8	254459	100	102.2	90	110	
Cu	65	74	He	100.765	ug/l	1.0	347935	100	100.76	90	110	
[Cu]	65	74	No Gas	104.681	ug/l	1.3	683038	100	104.68	90	110	
Zn	66	74	He	100.324	ug/l	0.4	112697	100	100.32	90	110	
As	75	74	He	95.681	ug/l	0.4	68548	100	95.68	90	110	
Se	78	74	HEHe	39.444	ug/l	0.8	6313	40	98.61	90	110	
Mo	95	103	He	39.972	ug/l	0.8	168874	40	99.93	90	110	
Ag	109	103	No Gas	41.234	ug/l	1.6	955590	40	103.08	90	110	
Cd	111	103	He	95.682	ug/l	0.5	230832	100	95.68	90	110	
[Cd]	111	103	No Gas	99.002	ug/l	1.3	605232	100	99	90	110	
Sb	123	103	No Gas	40.694	ug/l	2.0	712046	40	101.74	90	110	
Ba	138	159	He	104.126	ug/l	0.9	1482894	100	104.13	90	110	
Hg	201	159	No Gas	795.761	ng/l	1.4	3539	800	99.47	90	110	
Tl	205	159	No Gas	40.448	ug/l	0.5	3095948	40	101.12	90	110	
Pb	208	159	No Gas	98.555	ug/l	1.1	10596552	100	98.56	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	653780	1.6	683413.09	95.66	70	120	
Ge	74	No Gas	998054	1.3	1027391.35	97.14	70	120	
Rh	103	No Gas	1106499	1.5	1163511.07	95.1	70	120	
Tb	159	No Gas	2921574	1.4	3079736.27	94.86	70	120	
[Bi]	209	No Gas	1797788	2.7	1949588.49	92.21	70	120	
Sc	45	He	178768	0.5	169523	105.45	70	120	
Ge	74	He	171766	0.5	167213.36	102.72	70	120	
Rh	103	He	658996	0.3	648079.08	101.68	70	120	
Tb	159	He	1515790	1.0	1485823.76	102.02	70	120	
Ge	74	HEHe	223255	0.1	215480.59	103.61	70	120	

Initial Calibration Blank (ICB) Report ICPMS6

Sample Name	**9J02063-ICB1**	**Sample Type**	ICB
File Name	014_ICB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:24:49	**Sample QC Pass/Fail**	Pass
Comment	ICB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.010	ug/l	24.8	58	0.09	
Na	23	45	He	0.851	ug/l	21.3	5853	45	
Mg	24	45	He	0.460	ug/l	38.7	815	45	
Al	27	45	He	0.456	ug/l	9.5	145	22.5	
K	39	45	He	0.349	ug/l	499.7	15976	45	
Ca	44	45	He	1.081	ug/l	87.4	148	45	
Ti	47	45	He	0.055	ug/l	25.5	9	1.8	
V	51	74	He	-0.015	ug/l	N/A	354	0.45	
Cr	52	74	He	0.050	ug/l	66.5	2513	0.45	
Mn	55	74	He	0.038	ug/l	13.9	443	0.45	
Fe	56	74	He	0.543	ug/l	15.9	17855	22.5	
Co	59	74	He	0.004	ug/l	62.1	131	0.09	
Ni	60	74	He	0.035	ug/l	202.4	2725	0.45	
Cu	65	74	He	0.133	ug/l	10.4	1060	0.45	
[Cu]	65	74	No Gas	0.205	ug/l	15.7	2900	0.45	
Zn	66	74	He	0.057	ug/l	54.8	156	1.8	
As	75	74	He	0.013	ug/l	21.7	27	0.45	
Se	78	74	HEHe	0.012	ug/l	55.1	4	0.45	
Mo	95	103	He	0.019	ug/l	40.2	308	0.45	
Ag	109	103	No Gas	0.002	ug/l	19.4	79	0.09	
Cd	111	103	He	0.010	ug/l	53.6	32	0.09	
[Cd]	111	103	No Gas	0.016	ug/l	5.6	106	0.09	
Sb	123	103	No Gas	0.079	ug/l	6.6	1609	0.45	
Ba	138	159	He	0.032	ug/l	14.1	710	0.45	
Hg	201	159	No Gas	2.584	ng/l	49.6	30	36	
Tl	205	159	No Gas	0.016	ug/l	11.7	1440	0.09	
Pb	208	159	No Gas	0.007	ug/l	16.0	3329	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	672931	0.8	683413.09	98.47	70	120	
Ge	74	No Gas	1015886	1.2	1027391.35	98.88	70	120	
Rh	103	No Gas	1153915	1.9	1163511.07	99.18	70	120	
Tb	159	No Gas	3031226	1.8	3079736.27	98.42	70	120	
[Bi]	209	No Gas	1869993	1.6	1949588.49	95.92	70	120	
Sc	45	He	172182	0.9	169523	101.57	70	120	
Ge	74	He	166082	0.3	167213.36	99.32	70	120	
Rh	103	He	647000	0.6	648079.08	99.83	70	120	
Tb	159	He	1478444	0.9	1485823.76	99.5	70	120	
Ge	74	HEHe	214291	1.0	215480.59	99.45	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL1**	**Sample Type**	CRL1
File Name	015CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:29:32	**Sample QC Pass/Fail**	Fail
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.189	ug/l	4.0	812	105	70	130	
Na	23	45	He	21.792	ug/l	1.3	28246	242.13	70	130	CRL1 R-11
Mg	24	45	He	10.139	ug/l	0.9	6273	112.66	70	130	
Al	27	45	He	10.315	ug/l	9.2	2421	114.61	70	130	
K	39	45	He	23.895	ug/l	7.5	25609	265.5	70	130	CRL1 R-11
Ca	44	45	He	22.562	ug/l	14.2	645	250.69	70	130	CRL1 R-11
Ti	47	45	He	0.203	ug/l	23.2	30	112.78	70	130	
V	51	74	He	0.159	ug/l	13.0	1140	88.33	70	130	
Cr	52	74	He	-0.045	ug/l	N/A	1952	-25	70	130	CRL1 R-11
Mn	55	74	He	0.146	ug/l	18.3	827	81.11	70	130	
Fe	56	74	He	8.966	ug/l	3.7	61405	99.62	70	130	
Co	59	74	He	0.191	ug/l	3.2	1806	106.11	70	130	
Ni	60	74	He	-0.457	ug/l	N/A	1549	-253.89	70	130	CRL1 R-11
Cu	65	74	He	0.520	ug/l	6.6	2338	288.89	70	130	CRL1 R-11
[Cu]	65	74	No Gas	0.592	ug/l	0.4	5261	328.89	70	130	CRL1 R-11
Zn	66	74	He	0.867	ug/l	7.3	1031	481.67	70	130	CRL1 R-11
As	75	74	He	0.174	ug/l	8.1	138	96.67	70	130	
Se	78	74	HEHe	0.301	ug/l	55.6	50	167.22	70	130	CRL1 R-11
Mo	95	103	He	0.141	ug/l	6.6	816	78.33	70	130	
Ag	109	103	No Gas	0.190	ug/l	1.8	4457	105.56	70	130	
Cd	111	103	He	0.170	ug/l	9.0	412	94.44	70	130	
[Cd]	111	103	No Gas	0.189	ug/l	6.0	1165	105	70	130	
Sb	123	103	No Gas	0.211	ug/l	10.0	3863	117.22	70	130	
Ba	138	159	He	0.320	ug/l	5.5	4670	177.78	70	130	CRL1 R-11
Tl	205	159	No Gas	0.188	ug/l	2.4	14551	104.44	70	130	
Pb	208	159	No Gas	0.212	ug/l	2.6	25223	117.78	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	660644	1.8	683413.09	96.67	70	120	
Ge	74	No Gas	977686	2.4	1027391.35	95.16	70	120	
Rh	103	No Gas	1110643	1.8	1163511.07	95.46	70	120	
Tb	159	No Gas	2918656	1.2	3079736.27	94.77	70	120	
[Bi]	209	No Gas	1791095	2.9	1949588.49	91.87	70	120	
Sc	45	He	171184	1.5	169523	100.98	70	120	
Ge	74	He	165502	1.1	167213.36	98.98	70	120	
Rh	103	He	648422	1.4	648079.08	100.05	70	120	
Tb	159	He	1468723	2.3	1485823.76	98.85	70	120	
Ge	74	HEHe	219460	2.1	215480.59	101.85	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL2**	**Sample Type**	CRL2
File Name	016_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:34:06	**Sample QC Pass/Fail**	Fail
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.918	ug/l	2.5	3942	102	70	130	
Na	23	45	He	55.595	ug/l	4.6	65661	123.54	70	130	
Mg	24	45	He	47.458	ug/l	4.3	27847	105.46	70	130	
Al	27	45	He	46.723	ug/l	5.9	11027	103.83	70	130	
K	39	45	He	52.070	ug/l	7.0	37963	115.71	70	130	
Ca	44	45	He	51.077	ug/l	4.0	1331	113.5	70	130	
Ti	47	45	He	0.845	ug/l	12.9	123	93.89	70	130	
V	51	74	He	0.874	ug/l	6.2	4444	97.11	70	130	
Cr	52	74	He	0.638	ug/l	2.1	6010	70.89	70	130	
Mn	55	74	He	0.884	ug/l	2.7	3507	98.22	70	130	
Fe	56	74	He	45.378	ug/l	2.9	254204	100.84	70	130	
Co	59	74	He	0.912	ug/l	1.5	8399	101.33	70	130	
Ni	60	74	He	0.279	ug/l	11.9	3350	31	70	130	CRL2 R-11
Cu	65	74	He	1.175	ug/l	4.2	4590	130.56	70	130	CRL2 R-11
[Cu]	65	74	No Gas	1.247	ug/l	4.9	9530	138.56	70	130	CRL2 R-11
Zn	66	74	He	1.642	ug/l	4.3	1900	182.44	70	130	CRL2 R-11
As	75	74	He	0.902	ug/l	4.2	651	100.22	70	130	
Se	78	74	HEHe	0.957	ug/l	4.5	148	106.33	70	130	
Mo	95	103	He	0.883	ug/l	2.1	3967	98.11	70	130	
Ag	109	103	No Gas	0.954	ug/l	2.1	22237	106	70	130	
Cd	111	103	He	0.866	ug/l	7.5	2101	96.22	70	130	
[Cd]	111	103	No Gas	0.936	ug/l	2.7	5748	104	70	130	
Sb	123	103	No Gas	0.943	ug/l	1.7	16725	104.78	70	130	
Ba	138	159	He	0.960	ug/l	1.6	13992	106.67	70	130	
Hg	201	159	No Gas	39.794	ng/l	8.3	196	110.54	70	130	
Tl	205	159	No Gas	0.909	ug/l	1.2	70412	101	70	130	
Pb	208	159	No Gas	0.946	ug/l	1.0	105091	105.11	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	669244	2.0	683413.09	97.93	70	120	
Ge	74	No Gas	987259	1.3	1027391.35	96.09	70	120	
Rh	103	No Gas	1110845	1.8	1163511.07	95.47	70	120	
Tb	159	No Gas	2947536	0.8	3079736.27	95.71	70	120	
[Bi]	209	No Gas	1806651	0.7	1949588.49	92.67	70	120	
Sc	45	He	174608	4.4	169523	103	70	120	
Ge	74	He	168340	2.5	167213.36	100.67	70	120	
Rh	103	He	660453	2.8	648079.08	101.91	70	120	
Tb	159	He	1521361	2.8	1485823.76	102.39	70	120	
Ge	74	HEHe	213064	2.7	215480.59	98.88	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL3**	**Sample Type**	CRL3
File Name	017CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:38:40	**Sample QC Pass/Fail**	Fail
Comment	A19I099 mp 1002 Cu 1.8	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.753	ug/l	2.2	7747	97.39	70	130	
Na	23	45	He	93.680	ug/l	2.2	104763	104.09	70	130	
Mg	24	45	He	93.864	ug/l	2.8	53272	104.29	70	130	
Al	27	45	He	93.675	ug/l	3.2	21568	104.08	70	130	
K	39	45	He	92.806	ug/l	1.0	53859	103.12	70	130	
Ca	44	45	He	89.494	ug/l	1.4	2186	99.44	70	130	
Ti	47	45	He	1.694	ug/l	14.0	241	94.11	70	130	
V	51	74	He	1.746	ug/l	1.7	8277	97	70	130	
Cr	52	74	He	1.567	ug/l	2.0	11240	87.06	70	130	
Mn	55	74	He	1.771	ug/l	1.7	6567	98.39	70	130	
Fe	56	74	He	90.038	ug/l	1.1	478928	100.04	70	130	
Co	59	74	He	1.849	ug/l	1.8	16575	102.72	70	130	
Ni	60	74	He	1.249	ug/l	2.3	5570	69.39	70	130	CRL3 R-11
Cu	65	74	He	1.858	ug/l	2.6	6753	103.22	70	130	
[Cu]	65	74	No Gas	1.894	ug/l	0.4	14185	105.22	70	130	
Zn	66	74	He	2.134	ug/l	1.7	2389	118.56	70	130	
As	75	74	He	1.811	ug/l	0.7	1261	100.61	70	130	
Se	78	74	HEHe	1.774	ug/l	0.6	278	98.56	70	130	
Mo	95	103	He	1.783	ug/l	2.5	7549	99.06	70	130	
Ag	109	103	No Gas	1.826	ug/l	1.0	44084	101.44	70	130	
Cd	111	103	He	1.729	ug/l	4.1	4066	96.06	70	130	
[Cd]	111	103	No Gas	1.789	ug/l	1.3	11389	99.39	70	130	
Sb	123	103	No Gas	1.786	ug/l	1.1	32700	99.22	70	130	
Ba	138	159	He	1.866	ug/l	0.6	25854	103.67	70	130	
Hg	201	159	No Gas	73.384	ng/l	2.2	354	101.92	70	130	
Tl	205	159	No Gas	1.738	ug/l	1.7	137725	96.56	70	130	
Pb	208	159	No Gas	1.736	ug/l	1.2	195456	96.44	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	690449	1.2	683413.09	101.03	70	120	
Ge	74	No Gas	1022392	0.3	1027391.35	99.51	70	120	
Rh	103	No Gas	1151983	0.6	1163511.07	99.01	70	120	
Tb	159	No Gas	3020186	0.8	3079736.27	98.07	70	120	
[Bi]	209	No Gas	1860003	1.7	1949588.49	95.4	70	120	
Sc	45	He	170417	1.4	169523	100.53	70	120	
Ge	74	He	164697	1.2	167213.36	98.5	70	120	
Rh	103	He	641326	1.3	648079.08	98.96	70	120	
Tb	159	He	1460355	1.4	1485823.76	98.29	70	120	
Ge	74	HEHe	216914	1.0	215480.59	100.67	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL4**	**Sample Type**	CRL4
File Name	018CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:43:12	**Sample QC Pass/Fail**	Pass
Comment	A19I100 mp 1002 Ni 3.6	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.594	ug/l	1.0	15728	99.83	70	130	
Na	23	45	He	186.235	ug/l	0.9	201231	103.46	70	130	
Mg	24	45	He	189.414	ug/l	0.7	105807	105.23	70	130	
Al	27	45	He	187.020	ug/l	0.8	42566	103.9	70	130	
K	39	45	He	186.020	ug/l	0.8	91215	103.34	70	130	
Ca	44	45	He	180.109	ug/l	4.8	4229	100.06	70	130	
Ti	47	45	He	3.437	ug/l	1.2	482	95.47	70	130	
V	51	74	He	3.528	ug/l	1.8	16158	98	70	130	
Cr	52	74	He	3.241	ug/l	1.7	20716	90.03	70	130	
Mn	55	74	He	3.528	ug/l	1.5	12676	98	70	130	
Fe	56	74	He	179.164	ug/l	1.1	930448	99.54	70	130	
Co	59	74	He	3.607	ug/l	1.3	31969	100.19	70	130	
Ni	60	74	He	3.035	ug/l	2.0	9710	84.31	70	130	
Cu	65	74	He	3.664	ug/l	0.3	12614	101.78	70	130	
[Cu]	65	74	No Gas	3.695	ug/l	1.5	25645	102.64	70	130	
Zn	66	74	He	3.860	ug/l	1.6	4211	107.22	70	130	
As	75	74	He	3.549	ug/l	1.0	2434	98.58	70	130	
Se	78	74	HEHe	3.658	ug/l	0.8	562	101.61	70	130	
Mo	95	103	He	3.529	ug/l	2.7	14546	98.03	70	130	
Ag	109	103	No Gas	3.689	ug/l	1.0	87406	102.47	70	130	
Cd	111	103	He	3.426	ug/l	1.5	7959	95.17	70	130	
[Cd]	111	103	No Gas	3.652	ug/l	1.8	22818	101.44	70	130	
Sb	123	103	No Gas	3.631	ug/l	1.7	65093	100.86	70	130	
Ba	138	159	He	3.749	ug/l	1.1	51599	104.14	70	130	
Hg	201	159	No Gas	143.451	ng/l	0.8	670	99.62	70	130	
Tl	205	159	No Gas	3.489	ug/l	0.6	274480	96.92	70	130	
Pb	208	159	No Gas	3.431	ug/l	0.5	381455	95.31	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	684154	1.0	683413.09	100.11	70	120	
Ge	74	No Gas	1000779	0.4	1027391.35	97.41	70	120	
Rh	103	No Gas	1130768	0.4	1163511.07	97.19	70	120	
Tb	159	No Gas	3001147	0.7	3079736.27	97.45	70	120	
[Bi]	209	No Gas	1839247	1.5	1949588.49	94.34	70	120	
Sc	45	He	168566	1.5	169523	99.44	70	120	
Ge	74	He	163336	2.3	167213.36	97.68	70	120	
Rh	103	He	633985	2.3	648079.08	97.83	70	120	
Tb	159	He	1457803	1.1	1485823.76	98.11	70	120	
Ge	74	HEHe	213390	0.5	215480.59	99.03	70	120	

Interference Check Solution A (ICS-A) Report ICPMS6

Sample Name	**9J02063-IFA1**	**Sample Type**	ICSA
File Name	019ICSA.d	**Vial #**	2110
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:47:44	**Sample QC Pass/Fail**	Fail
Comment	A19I036	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	ExpValue	QC Flag
Be	9	6	No Gas	0.007	ug/l	70.4	41	0.18	
Na	23	45	He	257836.314	ug/l	1.0	227754116	250000	
Mg	24	45	He	102325.403	ug/l	0.8	47627177	100000	
Al	27	45	He	103693.750	ug/l	1.3	19748695	100000	
K	39	45	He	102888.476	ug/l	1.3	35087940	100000	
Ca	44	45	He	299291.321	ug/l	1.5	5717489	300000	
Ti	47	45	He	2062.345	ug/l	0.2	241841	2000	
V	51	74	He	0.230	ug/l	5.5	1171	0.9	
Cr	52	74	He	1.537	ug/l	1.9	8926	0.9	
Mn	55	74	He	1.084	ug/l	1.4	3338	0.9	
Fe	56	74	He	250480.350	ug/l	0.3	1041579069	250000	
Co	59	74	He	0.891	ug/l	2.9	6485	0.18	ICSA Warning
Ni	60	74	He	-0.505	ug/l	N/A	1152	0.9	
Cu	65	74	He	0.452	ug/l	8.6	1699	0.9	
[Cu]	65	74	No Gas	5.268	ug/l	1.8	29203	0.9	ICSA Warning
Zn	66	74	He	2.545	ug/l	1.7	2285	3.6	
As	75	74	He	0.230	ug/l	7.4	142	0.9	
Se	78	74	HEHe	0.247	ug/l	5.3	33	0.9	
Mo	95	103	He	2229.162	ug/l	0.8	7012635	2000	
Cd	111	103	He	1.550	ug/l	2.8	2795	0.18	ICSA Warning
[Cd]	111	103	No Gas	0.649	ug/l	11.6	3094	0.18	ICSA Warning
Sb	123	103	No Gas	0.155	ug/l	1.9	2238	0.9	
Ba	138	159	He	1.756	ug/l	1.9	20182	0.9	
W	186	159	No Gas	69.111	ug/l	3.7	1940902	100	ICSA Warning
Hg	201	159	No Gas	101.721	ng/l	2.2	400	72	
Tl	205	159	No Gas	0.018	ug/l	5.2	1333	0.18	
Pb	208	159	No Gas	0.812	ug/l	2.6	76769	0.18	ICSA Warning

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572544	2.1	683413.09	83.78	70	120	
Ge	74	No Gas	813881	2.1	1027391.35	79.22	70	120	
Rh	103	No Gas	862050	2.8	1163511.07	74.09	70	120	
Tb	159	No Gas	2500489	2.9	3079736.27	81.19	70	120	
[Bi]	209	No Gas	1485178	2.9	1949588.49	76.18	70	120	
Sc	45	He	141185	0.7	169523	83.28	70	120	
Ge	74	He	132878	0.7	167213.36	79.47	70	120	
Rh	103	He	491374	0.4	648079.08	75.82	70	120	
Tb	159	He	1210678	1.8	1485823.76	81.48	70	120	
Ge	74	HEHe	175302	1.1	215480.59	81.35	70	120	

Interference Check Solution AB (ICS-AB) Report ICPMS6

Sample Name	**9J02063-IFB1**	**Sample Type**	ICSB
File Name	020ICSB.d	**Vial #**	2111
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 19:52:18	**Sample QC Pass/Fail**	Fail
Comment	A19I037	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	ExpValue	Flag
Be	9	6	No Gas	0.007	ug/l	34.7	38	0.18	
Na	23	45	He	253661.328	ug/l	2.1	223682474	250000	
Mg	24	45	He	101534.774	ug/l	2.0	47181214	100000	
Al	27	45	He	100741.883	ug/l	2.0	19155053	100000	
K	39	45	He	101035.877	ug/l	2.0	34398962	100000	
Ca	44	45	He	297966.010	ug/l	2.1	5682471	300000	
Ti	47	45	He	2041.567	ug/l	3.0	238934	2000	
V	51	74	He	205.195	ug/l	1.7	740946	200	
Cr	52	74	He	200.245	ug/l	2.1	927439	200	
Mn	55	74	He	204.720	ug/l	1.7	580881	200	
Fe	56	74	He	248255.644	ug/l	1.2	1026110891	250000	
Co	59	74	He	204.623	ug/l	0.9	1462806	200	
Ni	60	74	He	193.796	ug/l	1.4	369233	200	
Cu	65	74	He	192.196	ug/l	0.7	509901	200	
[Cu]	65	74	No Gas	196.450	ug/l	1.1	1040478	200	
Zn	66	74	He	96.891	ug/l	1.6	83689	100	
As	75	74	He	102.589	ug/l	0.8	56516	100	
Se	78	74	HEHe	106.963	ug/l	0.7	13616	100	
Mo	95	103	He	2192.563	ug/l	1.9	6930182	2000	
Ag	109	103	No Gas	51.759	ug/l	1.7	947340	50	
Cd	111	103	He	97.896	ug/l	3.3	176884	100	
[Cd]	111	103	No Gas	100.256	ug/l	1.7	484047	100	
Sb	123	103	No Gas	0.150	ug/l	7.6	2205	0.9	
Ba	138	159	He	2.694	ug/l	3.3	31042	100	ICSB Warning
W	186	159	No Gas	68.335	ug/l	0.7	1961030	100	
Hg	201	159	No Gas	2107.099	ng/l	1.3	8165	2000	
Tl	205	159	No Gas	0.010	ug/l	7.4	842	0.18	
Pb	208	159	No Gas	0.794	ug/l	0.7	76800	0.18	ICSB Warning

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	559543	1.0	683413.09	81.87	70	120	
Ge	74	No Gas	810925	0.6	1027391.35	78.93	70	120	
Rh	103	No Gas	873911	1.6	1163511.07	75.11	70	120	
Tb	159	No Gas	2553267	1.0	3079736.27	82.91	70	120	
[Bi]	209	No Gas	1512465	1.2	1949588.49	77.58	70	120	
Sc	45	He	141014	4.0	169523	83.18	70	120	
Ge	74	He	132092	1.6	167213.36	79	70	120	
Rh	103	He	493873	3.0	648079.08	76.21	70	120	
Tb	159	He	1218907	4.0	1485823.76	82.04	70	120	
Ge	74	HEHe	177601	0.5	215480.59	82.42	70	120	

Sample Report ICPMS6

Sample Name	**9100506-BLK1**	**Sample Type**	Sample
File Name	022SMPL.d	**Vial #**	3103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 20:01:22	**Sample QC Pass/Fail**	Pass
Comment	9100506 w	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.001	204.1	19	53.9	100	
Na	23	45	He	ug/l	17.934	0.7	19979	1.4	50000	
Mg	24	45	He	ug/l	19.001	1.3	9340	2.1	50000	
Al	27	45	He	ug/l	3.35	4.5	673	4.7	50000	
K	39	45	He	ug/l	2.631	46.3	13939	2.7	50000	
Ca	44	45	He	ug/l	85.79	0.8	1748	0.3	50000	
Ti	47	45	He	ug/l	0.096	44.3	12	41.7	2500	
V	51	74	He	ug/l	0.024	34.7	443	6.7	500	
Cr	52	74	He	ug/l	-0.342	N/A	196	7.1	1000	
Mn	55	74	He	ug/l	-0.047	N/A	118	15.6	2500	
Fe	56	74	He	ug/l	3.038	17.4	25672	9.5	50000	
Co	59	74	He	ug/l	-0.001	N/A	72	11.6	500	
Ni	60	74	He	ug/l	-1.005	N/A	207	26.7	500	
Cu	65	74	He	ug/l	0.097	6.4	781	1.6	1000	
[Cu]	65	74	No Gas	ug/l	0.208	4.5	2289	4.2	1000	
Zn	66	74	He	ug/l	0.218	7.2	276	6.0	2500	
As	75	74	He	ug/l	0.001	399.9	15	15.4	500	
Se	78	74	HEHe	ug/l	0.003	110.9	3	19.9	100	
Mo	95	103	He	ug/l	0.104	7.4	567	4.1	100	
Ag	109	103	No Gas	ug/l	0.002	43.9	56	27.1	100	
Cd	111	103	He	ug/l	0	N/A	7	50.0	1000	
[Cd]	111	103	No Gas	ug/l	0.005	28.1	25	25.3	1000	
Sb	123	103	No Gas	ug/l	0.003	122.5	178	27.6	100	
Ba	138	159	He	ug/l	0.1	8.7	1486	7.6	2500	
W	186	159	No Gas	ug/l	0.022	10.9	794	10.1	40	
Hg	201	159	No Gas	ng/l	1.82	61.7	24	19.0	4000	
Tl	205	159	No Gas	ug/l	0.004	14.2	436	9.7	100	
Pb	208	159	No Gas	ug/l	0.038	9.7	6043	6.9	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	570131	1.2	683413.09	83.42	70	120	
Sc	45	He	141810	0.9	169523	83.65	70	120	
Ge	74	No Gas	796055	2.1	1027391.35	77.48	70	120	
Ge	74	He	138286	0.9	167213.36	82.7	70	120	
Ge	74	HEHe	193032	0.5	215480.59	89.58	70	120	
Rh	103	No Gas	924674	2.2	1163511.07	79.47	70	120	
Rh	103	He	553585	1.3	648079.08	85.42	70	120	
Tb	159	No Gas	2688206	1.1	3079736.27	87.29	70	120	
Tb	159	He	1330478	1.5	1485823.76	89.54	70	120	
[Bi]	209	No Gas	1703808	0.9	1949588.49	87.39	70	120	

Sample Report ICPMS6

Sample Name	**9100506-Bs1**	**Sample Type**	Sample
File Name	023SMPL.d	**Vial #**	3104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 20:05:51	**Sample QC Pass/Fail**	Pass
Comment	9100506 w	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	24.378	1.4	89498	1.4	100	
Na	23	45	He	ug/l	2569.366	6.4	2306867	1.8	50000	
Mg	24	45	He	ug/l	2582.32	6.1	1220072	1.4	50000	
Al	27	45	He	ug/l	2531.642	4.7	489543	1.2	50000	
K	39	45	He	ug/l	2497.999	4.0	878041	2.2	50000	
Ca	44	45	He	ug/l	2485.969	4.0	48330	1.9	50000	
Ti	47	45	He	ug/l	48.35	5.2	5757	2.4	2500	
V	51	74	He	ug/l	47.402	4.0	178756	2.6	500	
Cr	52	74	He	ug/l	47.36	5.9	230100	4.3	1000	
Mn	55	74	He	ug/l	46.969	5.5	139137	3.8	2500	
Fe	56	74	He	ug/l	2457.315	5.7	10600721	4.1	50000	
Co	59	74	He	ug/l	48.834	2.9	364036	1.5	500	
Ni	60	74	He	ug/l	48.304	0.7	97634	2.2	500	
Cu	65	74	He	ug/l	49.849	3.2	138380	5.0	1000	
[Cu]	65	74	No Gas	ug/l	50.773	0.6	262113	2.0	1000	
Zn	66	74	He	ug/l	48.946	1.3	44149	3.1	2500	
As	75	74	He	ug/l	45.395	3.2	26085	1.6	500	
Se	78	74	HEHe	ug/l	23.975	3.0	3207	0.8	100	
Mo	95	103	He	ug/l	24.287	2.0	86375	4.6	100	
Ag	109	103	No Gas	ug/l	27.074	1.0	512235	1.9	100	
Cd	111	103	He	ug/l	46.511	4.0	94278	1.0	1000	
[Cd]	111	103	No Gas	ug/l	50.894	0.9	253986	1.4	1000	
Sb	123	103	No Gas	ug/l	25.987	0.5	371261	1.2	100	
Ba	138	159	He	ug/l	47.756	1.6	573724	4.5	2500	
W	186	159	No Gas	ug/l	0.019	7.2	701	4.3	40	
Hg	201	159	No Gas	ng/l	979.716	0.7	3932	1.4	4000	
Tl	205	159	No Gas	ug/l	26.77	1.6	1850345	1.6	100	
Pb	208	159	No Gas	ug/l	50.801	2.7	4933324	2.0	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	574505	0.3	683413.09	84.06	70	120	
Sc	45	He	143589	5.8	169523	84.7	70	120	
Ge	74	No Gas	787655	1.4	1027391.35	76.67	70	120	
Ge	74	He	137776	1.8	167213.36	82.4	70	120	
Ge	74	HEHe	186629	2.5	215480.59	86.61	70	120	
Rh	103	No Gas	903136	1.0	1163511.07	77.62	70	120	
Rh	103	He	554123	3.1	648079.08	85.5	70	120	
Tb	159	No Gas	2638567	2.1	3079736.27	85.68	70	120	
Tb	159	He	1278543	4.8	1485823.76	86.05	70	120	
[Bi]	209	No Gas	1691440	2.7	1949588.49	86.76	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV1**	**Sample Type**	CCV
File Name	032_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 20:46:45	**Sample QC Pass/Fail**	Pass
Comment	A19l385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	41.710	ug/l	5.6	156346	40	104.28	90	110	
Na	23	45	He	7928.120	ug/l	1.0	7500514	8000	99.1	90	110	
Mg	24	45	He	8286.092	ug/l	1.6	4127963	8000	103.58	90	110	
Al	27	45	He	7846.605	ug/l	2.0	1599285	8000	98.08	90	110	
K	39	45	He	7759.676	ug/l	1.4	2845156	8000	97	90	110	
Ca	44	45	He	7761.047	ug/l	2.4	158773	8000	97.01	90	110	
Ti	47	45	He	96.855	ug/l	2.0	12159	100	96.86	90	110	
V	51	74	He	97.152	ug/l	0.8	396880	100	97.15	90	110	
Cr	52	74	He	97.686	ug/l	0.7	512643	100	97.69	90	110	
Mn	55	74	He	98.592	ug/l	0.9	316466	100	98.59	90	110	
Fe	56	74	He	7899.552	ug/l	0.7	36931291	8000	98.74	90	110	
Co	59	74	He	102.019	ug/l	0.6	824489	100	102.02	90	110	
Ni	60	74	He	102.425	ug/l	0.4	221742	100	102.42	90	110	
Cu	65	74	He	100.470	ug/l	0.6	301644	100	100.47	90	110	
[Cu]	65	74	No Gas	103.124	ug/l	5.5	585080	100	103.12	90	110	
Zn	66	74	He	100.859	ug/l	1.2	98505	100	100.86	90	110	
As	75	74	He	94.805	ug/l	0.5	59052	100	94.8	90	110	
Se	78	74	HEHe	39.578	ug/l	2.2	5783	40	98.94	90	110	
Mo	95	103	He	39.419	ug/l	0.6	147317	40	98.55	90	110	
Ag	109	103	No Gas	42.342	ug/l	7.2	860616	40	105.85	90	110	
Cd	111	103	He	95.101	ug/l	1.5	202944	100	95.1	90	110	
[Cd]	111	103	No Gas	104.184	ug/l	7.2	558587	100	104.18	90	110	
Sb	123	103	No Gas	42.906	ug/l	9.0	657905	40	107.26	90	110	
Ba	138	159	He	98.413	ug/l	2.8	1297282	100	98.41	90	110	
Hg	201	159	No Gas	832.076	ng/l	5.7	3517	800	104.01	90	110	
Tl	205	159	No Gas	42.848	ug/l	5.0	3117751	40	107.12	90	110	
Pb	208	159	No Gas	104.742	ug/l	6.3	10700740	100	104.74	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587751	5.2	683413.09	86	70	120	
Ge	74	No Gas	869413	5.4	1027391.35	84.62	70	120	
Rh	103	No Gas	973483	6.9	1163511.07	83.67	70	120	
Tb	159	No Gas	2782708	5.9	3079736.27	90.36	70	120	
[Bi]	209	No Gas	1766297	6.5	1949588.49	90.6	70	120	
Sc	45	He	151126	2.2	169523	89.15	70	120	
Ge	74	He	149343	0.9	167213.36	89.31	70	120	
Rh	103	He	582937	0.8	648079.08	89.95	70	120	
Tb	159	He	1403390	2.3	1485823.76	94.45	70	120	
Ge	74	HEHe	203850	1.7	215480.59	94.6	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB1**	**Sample Type**	CCB
File Name	033_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 20:51:06	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.005	ug/l	42.2	36	0.09	
Na	23	45	He	1.553	ug/l	9.6	5875	45	
Mg	24	45	He	0.647	ug/l	33.4	820	45	
Al	27	45	He	0.267	ug/l	36.6	90	22.5	
K	39	45	He	0.111	ug/l	839.1	14107	45	
Ca	44	45	He	-0.077	ug/l	N/A	108	45	
Ti	47	45	He	0.098	ug/l	72.1	13	1.8	
V	51	74	He	0.028	ug/l	29.5	494	0.45	
Cr	52	74	He	0.005	ug/l	428.5	2034	0.45	
Mn	55	74	He	0.013	ug/l	102.3	318	0.45	
Fe	56	74	He	1.324	ug/l	16.2	19783	22.5	
Co	59	74	He	0.006	ug/l	66.5	136	0.09	
Ni	60	74	He	0.085	ug/l	99.4	2567	0.45	
Cu	65	74	He	0.132	ug/l	35.8	953	0.45	
[Cu]	65	74	No Gas	0.174	ug/l	15.6	2391	0.45	
Zn	66	74	He	0.046	ug/l	68.4	130	1.8	
As	75	74	He	0.034	ug/l	5.1	37	0.45	
Se	78	74	HEHe	0.012	ug/l	48.7	4	0.45	
Mo	95	103	He	0.023	ug/l	24.7	299	0.45	
Ag	109	103	No Gas	0.002	ug/l	21.2	80	0.09	
Cd	111	103	He	0.002	ug/l	322.4	12	0.09	
[Cd]	111	103	No Gas	0.006	ug/l	18.3	38	0.09	
Sb	123	103	No Gas	0.079	ug/l	6.4	1431	0.45	
Ba	138	159	He	0.009	ug/l	47.9	366	0.45	
Hg	201	159	No Gas	1.953	ng/l	26.1	26	36	
Tl	205	159	No Gas	0.009	ug/l	12.2	848	0.09	
Pb	208	159	No Gas	0.006	ug/l	5.1	3010	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	631429	1.7	683413.09	92.39	70	120	
Ge	74	No Gas	900772	1.3	1027391.35	87.68	70	120	
Rh	103	No Gas	1027487	1.0	1163511.07	88.31	70	120	
Tb	159	No Gas	2861289	3.6	3079736.27	92.91	70	120	
[Bi]	209	No Gas	1822620	1.8	1949588.49	93.49	70	120	
Sc	45	He	153014	1.7	169523	90.26	70	120	
Ge	74	He	149906	1.0	167213.36	89.65	70	120	
Rh	103	He	594497	1.5	648079.08	91.73	70	120	
Tb	159	He	1400752	1.9	1485823.76	94.27	70	120	
Ge	74	HEHe	208375	1.5	215480.59	96.7	70	120	

Sample Report ICPMS6

Sample Name	**A9I0877-01**	**Sample Type**	Sample
File Name	038SMPL.d	**Vial #**	3105
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 21:13:34	**Sample QC Pass/Fail**	Pass
Comment	9100506 w	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Units	Raw Conc.	Conc RSD	CPS	CPS RSD	LDR	QC Flag
Be	9	6	No Gas	ug/l	0.001	300.4	19	66.8	100	
Na	23	45	He	ug/l	312.772	3.7	296863	0.3	50000	
Mg	24	45	He	ug/l	9.083	3.9	4964	5.5	50000	
Al	27	45	He	ug/l	7.87	6.0	1621	4.2	50000	
K	39	45	He	ug/l	10.464	21.8	17521	1.9	50000	
Ca	44	45	He	ug/l	99.742	8.5	2124	6.4	50000	
Ti	47	45	He	ug/l	0.19	32.2	24	28.4	2500	
V	51	74	He	ug/l	0.103	3.8	777	2.0	500	
Cr	52	74	He	ug/l	-0.296	N/A	438	8.5	1000	
Mn	55	74	He	ug/l	-0.013	N/A	229	5.5	2500	
Fe	56	74	He	ug/l	-0.328	N/A	11624	1.3	50000	
Co	59	74	He	ug/l	-0.004	N/A	54	46.0	500	
Ni	60	74	He	ug/l	-1.06	N/A	102	27.2	500	
Cu	65	74	He	ug/l	0.097	32.2	819	11.1	1000	
[Cu]	65	74	No Gas	ug/l	0.09	21.9	1815	5.2	1000	
Zn	66	74	He	ug/l	0.462	3.8	519	0.7	2500	
As	75	74	He	ug/l	0.028	19.9	32	7.8	500	
Se	78	74	HEHe	ug/l	0.014	9.6	4	4.6	100	
Mo	95	103	He	ug/l	-0.041	N/A	56	9.2	100	
Ag	109	103	No Gas	ug/l	0.001	121.8	38	39.8	100	
Cd	111	103	He	ug/l	-0.002	N/A	3	100.1	1000	
[Cd]	111	103	No Gas	ug/l	0.004	24.3	24	22.8	1000	
Sb	123	103	No Gas	ug/l	0.029	1.1	604	0.8	100	
Ba	138	159	He	ug/l	0.165	3.5	2441	2.5	2500	
W	186	159	No Gas	ug/l	0.002	74.6	207	26.7	40	
Hg	201	159	No Gas	ng/l	1.301	50.3	23	10.9	4000	
Tl	205	159	No Gas	ug/l	0.002	13.5	337	7.7	100	
Pb	208	159	No Gas	ug/l	0.024	1.7	4888	2.3	500	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602248	1.4	683413.09	88.12	70	120	
Sc	45	He	149645	3.8	169523	88.27	70	120	
Ge	74	No Gas	861841	1.3	1027391.35	83.89	70	120	
Ge	74	He	144897	2.8	167213.36	86.65	70	120	
Ge	74	HEHe	195596	0.1	215480.59	90.77	70	120	
Rh	103	No Gas	984449	0.5	1163511.07	84.61	70	120	
Rh	103	He	582489	2.3	648079.08	89.88	70	120	
Tb	159	No Gas	2849657	1.5	3079736.27	92.53	70	120	
Tb	159	He	1412449	2.9	1485823.76	95.06	70	120	
[Bi]	209	No Gas	1841933	1.5	1949588.49	94.48	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV2**	**Sample Type**	CCV
File Name	044_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 21:40:09	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.452	ug/l	2.4	169602	40	98.63	90	110	
Na	23	45	He	7878.583	ug/l	1.5	8275127	8000	98.48	90	110	
Mg	24	45	He	8150.153	ug/l	2.2	4508446	8000	101.88	90	110	
Al	27	45	He	7919.541	ug/l	1.5	1792483	8000	98.99	90	110	
K	39	45	He	7820.750	ug/l	3.6	3183582	8000	97.76	90	110	
Ca	44	45	He	7776.111	ug/l	1.0	176649	8000	97.2	90	110	
Ti	47	45	He	98.505	ug/l	3.9	13729	100	98.5	90	110	
V	51	74	He	97.556	ug/l	2.2	436170	100	97.56	90	110	
Cr	52	74	He	97.843	ug/l	2.8	561939	100	97.84	90	110	
Mn	55	74	He	98.245	ug/l	3.1	345126	100	98.24	90	110	
Fe	56	74	He	7875.883	ug/l	4.0	40294748	8000	98.45	90	110	
Co	59	74	He	102.105	ug/l	3.0	903086	100	102.1	90	110	
Ni	60	74	He	101.126	ug/l	2.8	239624	100	101.13	90	110	
Cu	65	74	He	100.379	ug/l	3.1	329803	100	100.38	90	110	
[Cu]	65	74	No Gas	99.708	ug/l	3.0	629845	100	99.71	90	110	
Zn	66	74	He	100.326	ug/l	2.9	107233	100	100.33	90	110	
As	75	74	He	94.851	ug/l	2.9	64658	100	94.85	90	110	
Se	78	74	HEHe	39.401	ug/l	1.1	6339	40	98.5	90	110	
Mo	95	103	He	39.440	ug/l	3.0	159162	40	98.6	90	110	
Ag	109	103	No Gas	40.531	ug/l	2.1	904356	40	101.33	90	110	
Cd	111	103	He	94.221	ug/l	2.6	217113	100	94.22	90	110	
[Cd]	111	103	No Gas	99.207	ug/l	2.7	583768	100	99.21	90	110	
Sb	123	103	No Gas	40.745	ug/l	1.5	686495	40	101.86	90	110	
Ba	138	159	He	103.663	ug/l	3.2	1415762	100	103.66	90	110	
Hg	201	159	No Gas	789.775	ng/l	3.6	3531	800	98.72	90	110	
Tl	205	159	No Gas	40.598	ug/l	4.9	3122784	40	101.5	90	110	
Pb	208	159	No Gas	98.263	ug/l	4.0	10619400	100	98.26	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	672949	1.9	683413.09	98.47	70	120	
Ge	74	No Gas	966438	3.2	1027391.35	94.07	70	120	
Rh	103	No Gas	1065540	3.3	1163511.07	91.58	70	120	
Tb	159	No Gas	2938122	2.5	3079736.27	95.4	70	120	
[Bi]	209	No Gas	1830849	1.0	1949588.49	93.91	70	120	
Sc	45	He	167771	0.8	169523	98.97	70	120	
Ge	74	He	163456	0.7	167213.36	97.75	70	120	
Rh	103	He	629496	0.7	648079.08	97.13	70	120	
Tb	159	He	1453467	0.2	1485823.76	97.82	70	120	
Ge	74	HEHe	224412	0.6	215480.59	104.14	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB2**	**Sample Type**	CCB
File Name	045_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 21:44:29	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	10.9	47	0.09	
Na	23	45	He	1.413	ug/l	13.3	6403	45	
Mg	24	45	He	0.791	ug/l	10.9	995	45	
Al	27	45	He	0.266	ug/l	5.9	100	22.5	
K	39	45	He	0.627	ug/l	260.6	15951	45	
Ca	44	45	He	0.478	ug/l	35.5	133	45	
Ti	47	45	He	0.008	ug/l	335.9	2	1.8	
V	51	74	He	0.025	ug/l	41.4	539	0.45	
Cr	52	74	He	0.002	ug/l	519.7	2261	0.45	
Mn	55	74	He	0.078	ug/l	9.0	593	0.45	
Fe	56	74	He	0.410	ug/l	22.4	17363	22.5	
Co	59	74	He	0.002	ug/l	93.3	117	0.09	
Ni	60	74	He	0.048	ug/l	91.6	2789	0.45	
Cu	65	74	He	0.065	ug/l	40.6	844	0.45	
[Cu]	65	74	No Gas	0.058	ug/l	15.4	1929	0.45	
Zn	66	74	He	0.015	ug/l	68.4	111	1.8	
As	75	74	He	0.021	ug/l	4.6	32	0.45	
Se	78	74	HEHe	0.019	ug/l	44.4	6	0.45	
Mo	95	103	He	0.015	ug/l	41.0	294	0.45	
Ag	109	103	No Gas	0.003	ug/l	37.3	89	0.09	
Cd	111	103	He	0.000	ug/l	18.8	10	0.09	
[Cd]	111	103	No Gas	0.006	ug/l	47.5	38	0.09	
Sb	123	103	No Gas	0.085	ug/l	1.2	1687	0.45	
Ba	138	159	He	0.010	ug/l	14.8	408	0.45	
Hg	201	159	No Gas	1.141	ng/l	84.7	24	36	
Tl	205	159	No Gas	0.017	ug/l	8.1	1558	0.09	
Pb	208	159	No Gas	0.005	ug/l	16.7	3156	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	678390	0.3	683413.09	99.26	70	120	
Ge	74	No Gas	1016971	0.4	1027391.35	98.99	70	120	
Rh	103	No Gas	1131509	1.1	1163511.07	97.25	70	120	
Tb	159	No Gas	3050227	2.6	3079736.27	99.04	70	120	
[Bi]	209	No Gas	1908066	2.7	1949588.49	97.87	70	120	
Sc	45	He	170748	1.4	169523	100.72	70	120	
Ge	74	He	168050	1.6	167213.36	100.5	70	120	
Rh	103	He	654034	2.0	648079.08	100.92	70	120	
Tb	159	He	1487271	3.5	1485823.76	100.1	70	120	
Ge	74	HEHe	227301	0.6	215480.59	105.49	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV3**	**Sample Type**	CCV
File Name	056_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 22:33:22	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	38.736	ug/l	5.9	163088	40	96.84	90	110	
Na	23	45	He	7900.119	ug/l	2.7	7980647	8000	98.75	90	110	
Mg	24	45	He	8281.555	ug/l	3.1	4406071	8000	103.52	90	110	
Al	27	45	He	7856.547	ug/l	2.4	1710317	8000	98.21	90	110	
K	39	45	He	7758.314	ug/l	4.1	3037698	8000	96.98	90	110	
Ca	44	45	He	7766.148	ug/l	3.6	169675	8000	97.08	90	110	
Ti	47	45	He	95.887	ug/l	3.7	12852	100	95.89	90	110	
V	51	74	He	95.557	ug/l	2.9	410529	100	95.56	90	110	
Cr	52	74	He	96.876	ug/l	2.7	534682	100	96.88	90	110	
Mn	55	74	He	99.004	ug/l	2.5	334222	100	99	90	110	
Fe	56	74	He	7907.914	ug/l	2.2	38883903	8000	98.85	90	110	
Co	59	74	He	102.224	ug/l	1.7	868961	100	102.22	90	110	
Ni	60	74	He	101.093	ug/l	2.5	230192	100	101.09	90	110	
Cu	65	74	He	98.540	ug/l	2.1	311160	100	98.54	90	110	
[Cu]	65	74	No Gas	97.934	ug/l	5.4	613425	100	97.93	90	110	
Zn	66	74	He	98.438	ug/l	3.1	101111	100	98.44	90	110	
As	75	74	He	94.106	ug/l	2.7	61645	100	94.11	90	110	
Se	78	74	HEHe	39.909	ug/l	2.3	6015	40	99.77	90	110	
Mo	95	103	He	39.163	ug/l	2.0	151558	40	97.91	90	110	
Ag	109	103	No Gas	40.755	ug/l	5.1	903545	40	101.89	90	110	
Cd	111	103	He	95.412	ug/l	2.6	210824	100	95.41	90	110	
[Cd]	111	103	No Gas	98.861	ug/l	5.6	578113	100	98.86	90	110	
Sb	123	103	No Gas	40.733	ug/l	6.1	681868	40	101.83	90	110	
Ba	138	159	He	100.702	ug/l	2.4	1369291	100	100.7	90	110	
Hg	201	159	No Gas	770.404	ng/l	3.3	3538	800	96.3	90	110	
Tl	205	159	No Gas	40.308	ug/l	6.8	3183202	40	100.77	90	110	
Pb	208	159	No Gas	97.428	ug/l	5.5	10811622	100	97.43	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	659599	2.8	683413.09	96.52	70	120	
Ge	74	No Gas	958900	3.3	1027391.35	93.33	70	120	
Rh	103	No Gas	1059071	2.5	1163511.07	91.02	70	120	
Tb	159	No Gas	3017888	2.7	3079736.27	97.99	70	120	
[Bi]	209	No Gas	1856680	2.0	1949588.49	95.23	70	120	
Sc	45	He	161401	1.3	169523	95.21	70	120	
Ge	74	He	157107	1.9	167213.36	93.96	70	120	
Rh	103	He	603843	2.7	648079.08	93.17	70	120	
Tb	159	He	1447658	2.1	1485823.76	97.43	70	120	
Ge	74	HEHe	210260	1.2	215480.59	97.58	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB3**	**Sample Type**	CCB
File Name	057_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 22:37:42	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.008	ug/l	24.7	49	0.09	
Na	23	45	He	0.983	ug/l	26.5	5563	45	
Mg	24	45	He	0.627	ug/l	20.9	845	45	
Al	27	45	He	0.303	ug/l	63.2	102	22.5	
K	39	45	He	1.696	ug/l	53.6	15344	45.	
Ca	44	45	He	0.332	ug/l	278.4	122	45	
Ti	47	45	He	0.026	ug/l	56.0	4	1.8	
V	51	74	He	0.010	ug/l	111.5	439	0.45	
Cr	52	74	He	0.002	ug/l	607.8	2101	0.45	
Mn	55	74	He	0.020	ug/l	5.6	358	0.45	
Fe	56	74	He	0.074	ug/l	239.3	14496	22.5	
Co	59	74	He	0.001	ug/l	530.1	96	0.09	
Ni	60	74	He	0.005	ug/l	1023.5	2499	0.45	
Cu	65	74	He	0.045	ug/l	37.8	721	0.45	
[Cu]	65	74	No Gas	0.041	ug/l	28.9	1686	0.45	
Zn	66	74	He	0.028	ug/l	67.2	117	1.8	
As	75	74	He	0.014	ug/l	29.6	26	0.45	
Se	78	74	HEHe	0.013	ug/l	68.2	4	0.45	
Mo	95	103	He	0.028	ug/l	9.1	326	0.45	
Ag	109	103	No Gas	0.002	ug/l	23.7	61	0.09	
Cd	111	103	He	0.001	ug/l	836.3	10	0.09	
[Cd]	111	103	No Gas	0.004	ug/l	13.6	26	0.09	
Sb	123	103	No Gas	0.086	ug/l	1.1	1597	0.45	
Ba	138	159	He	0.010	ug/l	27.3	396	0.45	
Hg	201	159	No Gas	1.117	ng/l	82.7	23	36	
Tl	205	159	No Gas	0.007	ug/l	9.0	707	0.09	
Pb	208	159	No Gas	0.003	ug/l	22.5	2842	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	656358	1.0	683413.09	96.04	70	120	
Ge	74	No Gas	943430	0.9	1027391.35	91.83	70	120	
Rh	103	No Gas	1063144	0.7	1163511.07	91.37	70	120	
Tb	159	No Gas	2969217	0.1	3079736.27	96.41	70	120	
[Bi]	209	No Gas	1868428	1.5	1949588.49	95.84	70	120	
Sc	45	He	159788	0.8	169523	94.26	70	120	
Ge	74	He	156288	1.6	167213.36	93.47	70	120	
Rh	103	He	606668	1.1	648079.08	93.61	70	120	
Tb	159	He	1435983	1.8	1485823.76	96.65	70	120	
Ge	74	HEHe	208974	1.0	215480.59	96.98	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV4**	**Sample Type**	CCV
File Name	063_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:04:20	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.392	ug/l	2.4	171834	40	100.98	90	110	
Na	23	45	He	7851.015	ug/l	0.5	8045612	8000	98.14	90	110	
Mg	24	45	He	8250.041	ug/l	1.0	4453070	8000	103.13	90	110	
Al	27	45	He	7902.500	ug/l	0.8	1745119	8000	98.78	90	110	
K	39	45	He	7732.040	ug/l	0.5	3071273	8000	96.65	90	110	
Ca	44	45	He	7779.562	ug/l	1.0	172429	8000	97.24	90	110	
Ti	47	45	He	95.193	ug/l	1.5	12943	100	95.19	90	110	
V	51	74	He	96.238	ug/l	1.7	413695	100	96.24	90	110	
Cr	52	74	He	97.636	ug/l	1.5	539145	100	97.64	90	110	
Mn	55	74	He	98.836	ug/l	2.0	333819	100	98.84	90	110	
Fe	56	74	He	7852.092	ug/l	2.8	38624396	8000	98.15	90	110	
Co	59	74	He	102.793	ug/l	1.6	874129	100	102.79	90	110	
Ni	60	74	He	102.574	ug/l	1.1	233652	100	102.57	90	110	
Cu	65	74	He	100.014	ug/l	1.1	315954	100	100.01	90	110	
[Cu]	65	74	No Gas	101.932	ug/l	2.0	636655	100	101.93	90	110	
Zn	66	74	He	99.362	ug/l	0.4	102117	100	99.36	90	110	
As	75	74	He	92.342	ug/l	1.2	60523	100	92.34	90	110	
Se	78	74	HEHe	39.179	ug/l	6.0	5900	40	97.95	90	110	
Mo	95	103	He	39.168	ug/l	1.5	151562	40	97.92	90	110	
Ag	109	103	No Gas	41.778	ug/l	2.0	922834	40	104.44	90	110	
Cd	111	103	He	95.080	ug/l	1.1	210083	100	95.08	90	110	
[Cd]	111	103	No Gas	102.117	ug/l	1.4	595039	100	102.12	90	110	
Sb	123	103	No Gas	41.570	ug/l	0.9	693413	40	103.92	90	110	
Ba	138	159	He	101.080	ug/l	1.3	1359840	100	101.08	90	110	
Hg	201	159	No Gas	787.743	ng/l	2.3	3537	800	98.47	90	110	
Tl	205	159	No Gas	41.274	ug/l	3.1	3188578	40	103.18	90	110	
Pb	208	159	No Gas	100.539	ug/l	2.6	10912607	100	100.54	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	665941	1.8	683413.09	97.44	70	120	
Ge	74	No Gas	955398	1.6	1027391.35	92.99	70	120	
Rh	103	No Gas	1054652	1.2	1163511.07	90.64	70	120	
Tb	159	No Gas	2950489	3.0	3079736.27	95.8	70	120	
[Bi]	209	No Gas	1817290	1.1	1949588.49	93.21	70	120	
Sc	45	He	163696	0.8	169523	96.56	70	120	
Ge	74	He	157149	0.7	167213.36	93.98	70	120	
Rh	103	He	603574	0.6	648079.08	93.13	70	120	
Tb	159	He	1431886	0.8	1485823.76	96.37	70	120	
Ge	74	HEHe	210334	3.5	215480.59	97.61	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB4**	**Sample Type**	CCB
File Name	064_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:08:41	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	47.1	47	0.09	
Na	23	45	He	2.573	ug/l	16.2	7028	45	
Mg	24	45	He	0.748	ug/l	4.2	893	45	
Al	27	45	He	0.203	ug/l	40.4	78	22.5	
K	39	45	He	4.771	ug/l	18.2	16253	45	
Ca	44	45	He	0.729	ug/l	142.4	128	45	
Ti	47	45	He	0.018	ug/l	5.6	3	1.8	
V	51	74	He	0.020	ug/l	40.1	476	0.45	
Cr	52	74	He	0.003	ug/l	453.5	2080	0.45	
Mn	55	74	He	0.008	ug/l	63.4	312	0.45	
Fe	56	74	He	0.139	ug/l	47.5	14624	22.5	
Co	59	74	He	0.004	ug/l	96.2	121	0.09	
Ni	60	74	He	0.041	ug/l	194.5	2542	0.45	
Cu	65	74	He	0.059	ug/l	8.6	753	0.45	
[Cu]	65	74	No Gas	0.070	ug/l	11.6	1865	0.45	
Zn	66	74	He	0.024	ug/l	84.3	111	1.8	
As	75	74	He	0.035	ug/l	21.8	39	0.45	
Se	78	74	HEHe	0.017	ug/l	27.6	5	0.45	
Mo	95	103	He	0.023	ug/l	27.5	302	0.45	
Ag	109	103	No Gas	0.003	ug/l	15.1	99	0.09	
Cd	111	103	He	0.002	ug/l	69.9	13	0.09	
[Cd]	111	103	No Gas	0.005	ug/l	15.9	29	0.09	
Sb	123	103	No Gas	0.102	ug/l	1.1	1871	0.45	
Ba	138	159	He	0.013	ug/l	23.3	413	0.45	
Hg	201	159	No Gas	1.432	ng/l	52.4	24	36	
Tl	205	159	No Gas	0.012	ug/l	2.5	1116	0.09	
Pb	208	159	No Gas	0.006	ug/l	14.4	3139	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	666018	0.4	683413.09	97.45	70	120	
Ge	74	No Gas	943969	0.3	1027391.35	91.88	70	120	
Rh	103	No Gas	1063056	0.9	1163511.07	91.37	70	120	
Tb	159	No Gas	2898985	1.1	3079736.27	94.13	70	120	
[Bi]	209	No Gas	1834570	1.6	1949588.49	94.1	70	120	
Sc	45	He	157158	4.0	169523	92.71	70	120	
Ge	74	He	154214	2.3	167213.36	92.23	70	120	
Rh	103	He	601487	3.1	648079.08	92.81	70	120	
Tb	159	He	1392807	2.2	1485823.76	93.74	70	120	
Ge	74	HEHe	214964	2.8	215480.59	99.76	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL5**	**Sample Type**	CRL1
File Name	065CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:13:10	**Sample QC Pass/Fail**	Fail
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.178	ug/l	2.6	779	98.89	70	130	
Na	23	45	He	23.796	ug/l	3.0	29071	264.4	70	130	CRL1 R-11
Mg	24	45	He	10.318	ug/l	1.9	6097	114.64	70	130	
Al	27	45	He	9.663	ug/l	5.3	2171	107.37	70	130	
K	39	45	He	24.583	ug/l	4.2	24775	273.14	70	130	CRL1 R-11
Ca	44	45	He	21.552	ug/l	14.9	595	239.47	70	130	CRL1 R-11
Ti	47	45	He	0.294	ug/l	16.7	41	163.33	70	130	CRL1 R-11
V	51	74	He	0.199	ug/l	1.5	1268	110.56	70	130	
Cr	52	74	He	-0.059	ug/l	N/A	1795	-32.78	70	130	CRL1 R-11
Mn	55	74	He	0.166	ug/l	8.7	860	92.22	70	130	
Fe	56	74	He	8.613	ug/l	5.4	57169	95.7	70	130	
Co	59	74	He	0.180	ug/l	7.5	1636	100	70	130	
Ni	60	74	He	-0.497	ug/l	N/A	1396	-276.11	70	130	CRL1 R-11
Cu	65	74	He	0.476	ug/l	2.2	2105	264.44	70	130	CRL1 R-11
[Cu]	65	74	No Gas	0.482	ug/l	2.3	4464	267.78	70	130	CRL1 R-11
Zn	66	74	He	0.915	ug/l	5.3	1039	508.33	70	130	CRL1 R-11
As	75	74	He	0.178	ug/l	4.2	135	98.89	70	130	
Se	78	74	HEHe	0.201	ug/l	9.9	33	111.67	70	130	
Mo	95	103	He	0.129	ug/l	4.6	730	71.67	70	130	
Ag	109	103	No Gas	0.190	ug/l	5.4	4317	105.56	70	130	
Cd	111	103	He	0.179	ug/l	13.2	413	99.44	70	130	
[Cd]	111	103	No Gas	0.184	ug/l	6.5	1094	102.22	70	130	
Sb	123	103	No Gas	0.231	ug/l	2.2	4096	128.33	70	130	
Ba	138	159	He	0.313	ug/l	1.1	4535	173.89	70	130	CRL1 R-11
Tl	205	159	No Gas	0.170	ug/l	1.9	13591	94.44	70	130	
Pb	208	159	No Gas	0.202	ug/l	2.5	24874	112.22	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	671190	0.5	683413.09	98.21	70	120	
Ge	74	No Gas	957338	0.4	1027391.35	93.18	70	120	
Rh	103	No Gas	1075613	0.7	1163511.07	92.45	70	120	
Tb	159	No Gas	3001529	2.3	3079736.27	97.46	70	120	
[Bi]	209	No Gas	1865497	1.1	1949588.49	95.69	70	120	
Sc	45	He	163766	1.4	169523	96.6	70	120	
Ge	74	He	158807	0.5	167213.36	94.97	70	120	
Rh	103	He	619773	1.7	648079.08	95.63	70	120	
Tb	159	He	1454227	1.3	1485823.76	97.87	70	120	
Ge	74	HEHe	212808	1.1	215480.59	98.76	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL6**	**Sample Type**	CRL2
File Name	066_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:17:38	**Sample QC Pass/Fail**	Fail
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.902	ug/l	2.5	3912	100.22	70	130	
Na	23	45	He	59.231	ug/l	3.0	66020	131.62	70	130	CRL2 R-11
Mg	24	45	He	48.271	ug/l	2.6	26849	107.27	70	130	
Al	27	45	He	47.603	ug/l	3.3	10656	105.78	70	130	
K	39	45	He	55.347	ug/l	3.6	37308	122.99	70	130	
Ca	44	45	He	55.730	ug/l	6.3	1364	123.84	70	130	
Ti	47	45	He	0.896	ug/l	12.5	124	99.56	70	130	
V	51	74	He	0.903	ug/l	5.0	4371	100.33	70	130	
Cr	52	74	He	0.643	ug/l	2.3	5759	71.44	70	130	
Mn	55	74	He	0.857	ug/l	2.0	3252	95.22	70	130	
Fe	56	74	He	44.664	ug/l	0.9	238969	99.25	70	130	
Co	59	74	He	0.910	ug/l	1.0	8002	101.11	70	130	
Ni	60	74	He	0.247	ug/l	10.2	3124	27.44	70	130	CRL2 R-11
Cu	65	74	He	1.117	ug/l	3.3	4193	124.11	70	130	
[Cu]	65	74	No Gas	1.154	ug/l	4.3	8685	128.22	70	130	
Zn	66	74	He	1.695	ug/l	2.2	1869	188.33	70	130	CRL2 R-11
As	75	74	He	0.925	ug/l	4.6	636	102.78	70	130	
Se	78	74	HEHe	0.929	ug/l	6.2	146	103.22	70	130	
Mo	95	103	He	0.855	ug/l	4.4	3669	95	70	130	
Ag	109	103	No Gas	0.946	ug/l	1.0	21422	105.11	70	130	
Cd	111	103	He	0.879	ug/l	2.5	2035	97.67	70	130	
[Cd]	111	103	No Gas	0.935	ug/l	0.1	5579	103.89	70	130	
Sb	123	103	No Gas	0.977	ug/l	1.6	16836	108.56	70	130	
Ba	138	159	He	0.963	ug/l	3.2	13375	107	70	130	
Hg	201	159	No Gas	38.713	ng/l	13.0	194	107.54	70	130	
Tl	205	159	No Gas	0.854	ug/l	1.6	67253	94.89	70	130	
Pb	208	159	No Gas	0.895	ug/l	0.6	101292	99.44	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	675704	0.5	683413.09	98.87	70	120	
Ge	74	No Gas	959529	0.2	1027391.35	93.39	70	120	
Rh	103	No Gas	1079142	0.8	1163511.07	92.75	70	120	
Tb	159	No Gas	2998590	0.2	3079736.27	97.37	70	120	
[Bi]	209	No Gas	1867643	1.3	1949588.49	95.8	70	120	
Sc	45	He	165450	3.1	169523	97.6	70	120	
Ge	74	He	160582	1.2	167213.36	96.03	70	120	
Rh	103	He	629444	1.7	648079.08	97.12	70	120	
Tb	159	He	1450768	4.0	1485823.76	97.64	70	120	
Ge	74	HEHe	215008	0.8	215480.59	99.78	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL7**	**Sample Type**	CRL3
File Name	067CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:22:06	**Sample QC Pass/Fail**	Fail
Comment	A19I099 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.770	ug/l	0.9	7630	98.33	70	130	
Na	23	45	He	94.597	ug/l	2.7	103090	105.11	70	130	
Mg	24	45	He	93.244	ug/l	3.1	51603	103.6	70	130	
Al	27	45	He	92.802	ug/l	2.3	20837	103.11	70	130	
K	39	45	He	91.808	ug/l	6.0	52094	102.01	70	130	
Ca	44	45	He	93.994	ug/l	8.8	2231	104.44	70	130	
Ti	47	45	He	1.767	ug/l	15.6	244	98.17	70	130	
V	51	74	He	1.761	ug/l	1.1	8169	97.83	70	130	
Cr	52	74	He	1.490	ug/l	4.1	10570	82.78	70	130	
Mn	55	74	He	1.731	ug/l	6.3	6289	96.17	70	130	
Fe	56	74	He	86.535	ug/l	2.9	451239	96.15	70	130	
Co	59	74	He	1.759	ug/l	2.5	15437	97.72	70	130	
Ni	60	74	He	1.174	ug/l	8.2	5278	65.22	70	130	CRL3 R-11
Cu	65	74	He	1.815	ug/l	3.1	6470	100.83	70	130	
[Cu]	65	74	No Gas	1.862	ug/l	2.5	13256	103.44	70	130	
Zn	66	74	He	2.147	ug/l	4.3	2352	119.28	70	130	
As	75	74	He	1.729	ug/l	4.3	1180	96.06	70	130	
Se	78	74	HEHe	1.841	ug/l	3.5	283	102.28	70	130	
Mo	95	103	He	1.730	ug/l	2.6	7132	96.11	70	130	
Ag	109	103	No Gas	1.809	ug/l	0.7	41754	100.5	70	130	
Cd	111	103	He	1.724	ug/l	2.1	3947	95.78	70	130	
[Cd]	111	103	No Gas	1.756	ug/l	2.7	10682	97.56	70	130	
Sb	123	103	No Gas	1.825	ug/l	1.1	31942	101.39	70	130	
Ba	138	159	He	1.811	ug/l	1.1	24808	100.61	70	130	
Hg	201	159	No Gas	75.151	ng/l	4.7	352	104.38	70	130	
Tl	205	159	No Gas	1.727	ug/l	1.6	132887	95.94	70	130	
Pb	208	159	No Gas	1.728	ug/l	2.9	188996	96	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	673326	1.1	683413.09	98.52	70	120	
Ge	74	No Gas	970024	1.3	1027391.35	94.42	70	120	
Rh	103	No Gas	1101081	0.9	1163511.07	94.63	70	120	
Tb	159	No Gas	2933636	1.3	3079736.27	95.26	70	120	
[Bi]	209	No Gas	1863439	1.3	1949588.49	95.58	70	120	
Sc	45	He	166187	2.1	169523	98.03	70	120	
Ge	74	He	161285	1.9	167213.36	96.45	70	120	
Rh	103	He	624210	2.9	648079.08	96.32	70	120	
Tb	159	He	1443214	2.1	1485823.76	97.13	70	120	
Ge	74	HEHe	212463	2.3	215480.59	98.6	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL8**	**Sample Type**	CRL4
File Name	068CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/02/2019 23:26:35	**Sample QC Pass/Fail**	Pass
Comment	A19I100 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.513	ug/l	1.3	15031	97.58	70	130	
Na	23	45	He	189.526	ug/l	1.6	195982	105.29	70	130	
Mg	24	45	He	189.981	ug/l	1.6	101591	105.54	70	130	
Al	27	45	He	184.021	ug/l	3.6	40090	102.23	70	130	
K	39	45	He	185.219	ug/l	3.3	87003	102.9	70	130	
Ca	44	45	He	180.953	ug/l	2.8	4067	100.53	70	130	
Ti	47	45	He	3.395	ug/l	14.3	456	94.31	70	130	
V	51	74	He	3.544	ug/l	3.1	15379	98.44	70	130	
Cr	52	74	He	3.285	ug/l	2.0	19860	91.25	70	130	
Mn	55	74	He	3.521	ug/l	1.5	11989	97.81	70	130	
Fe	56	74	He	177.614	ug/l	1.4	874076	98.67	70	130	
Co	59	74	He	3.631	ug/l	0.9	30490	100.86	70	130	
Ni	60	74	He	3.007	ug/l	2.4	9134	83.53	70	130	
Cu	65	74	He	3.511	ug/l	0.9	11475	97.53	70	130	
[Cu]	65	74	No Gas	3.620	ug/l	0.5	23359	100.56	70	130	
Zn	66	74	He	3.682	ug/l	4.2	3811	102.28	70	130	
As	75	74	He	3.583	ug/l	1.5	2329	99.53	70	130	
Se	78	74	HEHe	3.577	ug/l	4.9	540	99.36	70	130	
Mo	95	103	He	3.546	ug/l	1.1	13892	98.5	70	130	
Ag	109	103	No Gas	3.643	ug/l	1.0	80167	101.19	70	130	
Cd	111	103	He	3.412	ug/l	1.8	7532	94.78	70	130	
[Cd]	111	103	No Gas	3.595	ug/l	2.6	20863	99.86	70	130	
Sb	123	103	No Gas	3.708	ug/l	0.5	61736	103	70	130	
Ba	138	159	He	3.699	ug/l	1.1	49339	102.75	70	130	
Hg	201	159	No Gas	147.259	ng/l	3.9	659	102.26	70	130	
Tl	205	159	No Gas	3.460	ug/l	1.2	260799	96.11	70	130	
Pb	208	159	No Gas	3.448	ug/l	1.2	367180	95.78	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	669013	0.1	683413.09	97.89	70	120	
Ge	74	No Gas	929266	0.4	1027391.35	90.45	70	120	
Rh	103	No Gas	1050143	0.9	1163511.07	90.26	70	120	
Tb	159	No Gas	2874953	0.8	3079736.27	93.35	70	120	
[Bi]	209	No Gas	1784574	2.0	1949588.49	91.54	70	120	
Sc	45	He	161390	1.1	169523	95.2	70	120	
Ge	74	He	154743	0.4	167213.36	92.54	70	120	
Rh	103	He	602476	1.0	648079.08	92.96	70	120	
Tb	159	He	1412425	1.4	1485823.76	95.06	70	120	
Ge	74	HEHe	209853	2.2	215480.59	97.39	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV5**	**Sample Type**	CCV
File Name	079_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 00:15:45	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	40.115	ug/l	1.2	179240	40	100.29	90	110	
Na	23	45	He	8134.233	ug/l	1.9	8761881	8000	101.68	90	110	
Mg	24	45	He	8340.530	ug/l	1.7	4731905	8000	104.26	90	110	
Al	27	45	He	8052.837	ug/l	2.4	1869150	8000	100.66	90	110	
K	39	45	He	7923.817	ug/l	3.1	3307459	8000	99.05	90	110	
Ca	44	45	He	7970.292	ug/l	2.8	185684	8000	99.63	90	110	
Ti	47	45	He	98.542	ug/l	1.3	14086	100	98.54	90	110	
V	51	74	He	98.286	ug/l	1.4	448063	100	98.29	90	110	
Cr	52	74	He	98.798	ug/l	1.3	578582	100	98.8	90	110	
Mn	55	74	He	99.715	ug/l	2.1	357149	100	99.72	90	110	
Fe	56	74	He	7857.909	ug/l	2.9	40988001	8000	98.22	90	110	
Co	59	74	He	102.853	ug/l	2.4	927485	100	102.85	90	110	
Ni	60	74	He	103.574	ug/l	3.1	250137	100	103.57	90	110	
Cu	65	74	He	101.265	ug/l	2.1	339230	100	101.26	90	110	
[Cu]	65	74	No Gas	101.041	ug/l	1.5	667675	100	101.04	90	110	
Zn	66	74	He	100.842	ug/l	2.4	109913	100	100.84	90	110	
As	75	74	He	96.138	ug/l	1.1	66827	100	96.14	90	110	
Se	78	74	HEHe	39.857	ug/l	0.9	6210	40	99.64	90	110	
Mo	95	103	He	40.386	ug/l	0.9	163781	40	100.97	90	110	
Ag	109	103	No Gas	41.178	ug/l	1.4	953106	40	102.94	90	110	
Cd	111	103	He	96.341	ug/l	0.9	223110	100	96.34	90	110	
[Cd]	111	103	No Gas	99.222	ug/l	0.5	605919	100	99.22	90	110	
Sb	123	103	No Gas	40.393	ug/l	1.0	705997	40	100.98	90	110	
Ba	138	159	He	104.505	ug/l	2.1	1437134	100	104.51	90	110	
Hg	201	159	No Gas	769.374	ng/l	2.4	3553	800	96.17	90	110	
Tl	205	159	No Gas	40.698	ug/l	1.9	3234388	40	101.74	90	110	
Pb	208	159	No Gas	98.584	ug/l	2.0	11005998	100	98.58	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	699350	2.0	683413.09	102.33	70	120	
Ge	74	No Gas	1010792	2.3	1027391.35	98.38	70	120	
Rh	103	No Gas	1105258	3.2	1163511.07	94.99	70	120	
Tb	159	No Gas	3034527	3.4	3079736.27	98.53	70	120	
[Bi]	209	No Gas	1843620	4.1	1949588.49	94.56	70	120	
Sc	45	He	172105	2.0	169523	101.52	70	120	
Ge	74	He	166681	1.9	167213.36	99.68	70	120	
Rh	103	He	632639	1.3	648079.08	97.62	70	120	
Tb	159	He	1463720	0.7	1485823.76	98.51	70	120	
Ge	74	HEHe	217367	1.3	215480.59	100.88	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB5**	**Sample Type**	CCB
File Name	080_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 00:20:05	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	41.8	47	0.09	
Na	23	45	He	-0.442	ug/l	N/A	4452	45	
Mg	24	45	He	0.277	ug/l	64.5	708	45	
Al	27	45	He	0.162	ug/l	25.3	77	22.5	
K	39	45	He	2.612	ug/l	60.3	16872	45	
Ca	44	45	He	0.331	ug/l	419.0	132	45	
Ti	47	45	He	0.016	ug/l	7.0	3	1.8	
V	51	74	He	0.018	ug/l	28.1	502	0.45	
Cr	52	74	He	-0.008	ug/l	N/A	2170	0.45	
Mn	55	74	He	-0.004	ug/l	N/A	293	0.45	
Fe	56	74	He	-0.223	ug/l	N/A	13829	22.5	
Co	59	74	He	0.003	ug/l	83.4	121	0.09	
Ni	60	74	He	0.004	ug/l	1105.1	2645	0.45	
Cu	65	74	He	0.038	ug/l	59.3	738	0.45	
[Cu]	65	74	No Gas	0.030	ug/l	44.2	1662	0.45	
Zn	66	74	He	0.030	ug/l	46.6	127	1.8	
As	75	74	He	0.012	ug/l	49.7	26	0.45	
Se	78	74	HEHe	0.010	ug/l	50.1	4	0.45	
Mo	95	103	He	0.004	ug/l	252.9	243	0.45	
Ag	109	103	No Gas	0.002	ug/l	20.5	73	0.09	
Cd	111	103	He	0.000	ug/l	N/A	8	0.09	
[Cd]	111	103	No Gas	0.006	ug/l	21.0	36	0.09	
Sb	123	103	No Gas	0.072	ug/l	2.2	1393	0.45	
Ba	138	159	He	0.012	ug/l	8.5	423	0.45	
Hg	201	159	No Gas	0.592	ng/l	123.4	21	36	
Tl	205	159	No Gas	0.012	ug/l	11.1	1081	0.09	
Pb	208	159	No Gas	0.005	ug/l	17.4	2989	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	675510	6.4	683413.09	98.84	70	120	
Ge	74	No Gas	968603	6.3	1027391.35	94.28	70	120	
Rh	103	No Gas	1086469	6.4	1163511.07	93.38	70	120	
Tb	159	No Gas	2925778	6.0	3079736.27	95	70	120	
[Bi]	209	No Gas	1830653	5.8	1949588.49	93.9	70	120	
Sc	45	He	171924	4.6	169523	101.42	70	120	
Ge	74	He	165854	4.5	167213.36	99.19	70	120	
Rh	103	He	642250	4.7	648079.08	99.1	70	120	
Tb	159	He	1474006	5.2	1485823.76	99.2	70	120	
Ge	74	HEHe	218553	2.5	215480.59	101.43	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV6**	**Sample Type**	CCV
File Name	091_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:08:53	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.472	ug/l	1.3	183444	40	98.68	90	110	
Na	23	45	He	7950.657	ug/l	2.3	8912613	8000	99.38	90	110	
Mg	24	45	He	8407.692	ug/l	4.2	4962052	8000	105.1	90	110	
Al	27	45	He	7995.882	ug/l	3.2	1931175	8000	99.95	90	110	
K	39	45	He	7935.140	ug/l	2.0	3447755	8000	99.19	90	110	
Ca	44	45	He	7890.934	ug/l	3.9	191266	8000	98.64	90	110	
Ti	47	45	He	97.836	ug/l	4.0	14549	100	97.84	90	110	
V	51	74	He	98.263	ug/l	2.0	463898	100	98.26	90	110	
Cr	52	74	He	99.015	ug/l	2.0	600466	100	99.02	90	110	
Mn	55	74	He	99.739	ug/l	2.0	369982	100	99.74	90	110	
Fe	56	74	He	7928.097	ug/l	1.1	42837457	8000	99.1	90	110	
Co	59	74	He	103.420	ug/l	1.9	965954	100	103.42	90	110	
Ni	60	74	He	103.363	ug/l	1.1	258592	100	103.36	90	110	
Cu	65	74	He	100.814	ug/l	2.1	349777	100	100.81	90	110	
[Cu]	65	74	No Gas	100.963	ug/l	1.0	696391	100	100.96	90	110	
Zn	66	74	He	99.078	ug/l	3.0	111817	100	99.08	90	110	
As	75	74	He	96.261	ug/l	1.3	69296	100	96.26	90	110	
Se	78	74	HEHe	39.867	ug/l	1.8	6426	40	99.67	90	110	
Mo	95	103	He	40.370	ug/l	3.8	170003	40	100.92	90	110	
Ag	109	103	No Gas	40.364	ug/l	1.2	976909	40	100.91	90	110	
Cd	111	103	He	94.719	ug/l	2.1	227816	100	94.72	90	110	
[Cd]	111	103	No Gas	97.253	ug/l	1.7	620877	100	97.25	90	110	
Sb	123	103	No Gas	39.812	ug/l	1.6	727602	40	99.53	90	110	
Ba	138	159	He	105.388	ug/l	3.0	1489605	100	105.39	90	110	
Hg	201	159	No Gas	772.961	ng/l	1.4	3617	800	96.62	90	110	
Tl	205	159	No Gas	40.562	ug/l	3.8	3264171	40	101.4	90	110	
Pb	208	159	No Gas	98.347	ug/l	3.1	11119302	100	98.35	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	727394	1.4	683413.09	106.44	70	120	
Ge	74	No Gas	1054878	1.5	1027391.35	102.68	70	120	
Rh	103	No Gas	1155492	1.2	1163511.07	99.31	70	120	
Tb	159	No Gas	3073108	2.1	3079736.27	99.78	70	120	
[Bi]	209	No Gas	1908042	0.6	1949588.49	97.87	70	120	
Sc	45	He	179137	2.8	169523	105.67	70	120	
Ge	74	He	172614	1.4	167213.36	103.23	70	120	
Rh	103	He	657203	2.4	648079.08	101.41	70	120	
Tb	159	He	1505010	2.3	1485823.76	101.29	70	120	
Ge	74	HEHe	224884	1.6	215480.59	104.36	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB6**	**Sample Type**	CCB
File Name	092_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:13:13	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	6.9	51	0.09	
Na	23	45	He	-0.543	ug/l	N/A	4430	45	
Mg	24	45	He	0.120	ug/l	21.7	633	45	
Al	27	45	He	0.240	ug/l	32.5	97	22.5	
K	39	45	He	2.146	ug/l	61.6	17017	45	
Ca	44	45	He	0.774	ug/l	199.9	143	45	
Ti	47	45	He	0.031	ug/l	44.5	6	1.8	
V	51	74	He	0.009	ug/l	113.8	471	0.45	
Cr	52	74	He	-0.010	ug/l	N/A	2201	0.45	
Mn	55	74	He	0.009	ug/l	40.2	347	0.45	
Fe	56	74	He	0.000	ug/l	11619.7	15316	22.5	
Co	59	74	He	0.001	ug/l	606.2	102	0.09	
Ni	60	74	He	0.076	ug/l	85.6	2877	0.45	
Cu	65	74	He	0.018	ug/l	37.7	689	0.45	
[Cu]	65	74	No Gas	0.032	ug/l	35.9	1755	0.45	
Zn	66	74	He	0.026	ug/l	14.9	124	1.8	
As	75	74	He	0.009	ug/l	69.5	25	0.45	
Se	78	74	HEHe	0.014	ug/l	44.3	5	0.45	
Mo	95	103	He	0.006	ug/l	84.5	257	0.45	
Ag	109	103	No Gas	0.001	ug/l	68.9	63	0.09	
Cd	111	103	He	0.000	ug/l	12.1	10	0.09	
[Cd]	111	103	No Gas	0.004	ug/l	45.5	30	0.09	
Sb	123	103	No Gas	0.076	ug/l	5.3	1536	0.45	
Ba	138	159	He	0.013	ug/l	15.5	443	0.45	
Hg	201	159	No Gas	2.939	ng/l	62.4	32	36	
Tl	205	159	No Gas	0.017	ug/l	10.5	1526	0.09	
Pb	208	159	No Gas	0.003	ug/l	7.7	2968	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	713045	0.9	683413.09	104.34	70	120	
Ge	74	No Gas	1014985	0.8	1027391.35	98.79	70	120	
Rh	103	No Gas	1132837	1.9	1163511.07	97.36	70	120	
Tb	159	No Gas	3038398	1.6	3079736.27	98.66	70	120	
[Bi]	209	No Gas	1871069	0.2	1949588.49	95.97	70	120	
Sc	45	He	175291	2.2	169523	103.4	70	120	
Ge	74	He	169231	1.3	167213.36	101.21	70	120	
Rh	103	He	653362	1.3	648079.08	100.82	70	120	
Tb	159	He	1472241	1.1	1485823.76	99.09	70	120	
Ge	74	HEHe	221679	0.7	215480.59	102.88	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	9J02063-CCV7	**Sample Type**	CCV
File Name	098_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:39:55	**Sample QC Pass/Fail**	Fail
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.970	ug/l	2.1	186256	40	99.92	90	110	
Na	23	45	He	7533.781	ug/l	4.8	8726142	8000	94.17	90	110	
Mg	24	45	He	8025.877	ug/l	5.5	4895274	8000	100.32	90	110	
Al	27	45	He	7631.316	ug/l	6.1	1903834	8000	95.39	90	110	
K	39	45	He	7533.734	ug/l	4.5	3383097	8000	94.17	90	110	
Ca	44	45	He	7469.349	ug/l	6.0	187051	8000	93.37	90	110	
Ti	47	45	He	93.552	ug/l	5.0	14376	100	93.55	90	110	
V	51	74	He	94.109	ug/l	6.6	460794	100	94.11	90	110	
Cr	52	74	He	94.634	ug/l	6.2	595426	100	94.63	90	110	
Mn	55	74	He	95.286	ug/l	5.8	366730	100	95.29	90	110	
Fe	56	74	He	7591.523	ug/l	5.8	42553243	8000	94.89	90	110	
Co	59	74	He	99.179	ug/l	6.4	960781	100	99.18	90	110	
Ni	60	74	He	99.208	ug/l	8.1	257348	100	99.21	90	110	
Cu	65	74	He	96.730	ug/l	7.3	348019	100	96.73	90	110	
[Cu]	65	74	No Gas	101.239	ug/l	2.3	701312	100	101.24	90	110	
Zn	66	74	He	95.526	ug/l	6.4	111838	100	95.53	90	110	
As	75	74	He	92.221	ug/l	6.3	68862	100	92.22	90	110	
Se	78	74	HEHe	41.143	ug/l	6.0	6426	40	102.86	90	110	
Mo	95	103	He	37.755	ug/l	8.2	165012	40	94.39	90	110	
Ag	109	103	No Gas	40.238	ug/l	3.7	985825	40	100.59	90	110	
Cd	111	103	He	89.386	ug/l	6.1	223308	100	89.39	90	110	> +/- 10%
[Cd]	111	103	No Gas	95.161	ug/l	3.9	614953	100	95.16	90	110	
Sb	123	103	No Gas	39.137	ug/l	3.2	724099	40	97.84	90	110	
Ba	138	159	He	100.169	ug/l	4.6	1452570	100	100.17	90	110	
Hg	201	159	No Gas	772.882	ng/l	2.4	3595	800	96.61	90	110	
Tl	205	159	No Gas	40.292	ug/l	4.1	3223776	40	100.73	90	110	
Pb	208	159	No Gas	97.486	ug/l	4.0	10956104	100	97.49	90	110	

Q-1c1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	729619	3.5	683413.09	106.76	70	120	
Ge	74	No Gas	1059919	3.4	1027391.35	103.17	70	120	
Rh	103	No Gas	1170863	4.6	1163511.07	100.63	70	120	
Tb	159	No Gas	3056814	4.1	3079736.27	99.26	70	120	
[Bi]	209	No Gas	1887261	3.7	1949588.49	96.8	70	120	
Sc	45	He	185314	5.1	169523	109.31	70	120	
Ge	74	He	179496	6.5	167213.36	107.35	70	120	
Rh	103	He	684175	6.8	648079.08	105.57	70	120	
Tb	159	He	1545870	5.5	1485823.76	104.04	70	120	
Ge	74	HEHe	218295	5.2	215480.59	101.31	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB7**	**Sample Type**	CCB
File Name	099_CCB.d	**Vial #**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:44:16	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.007	ug/l	39.1	52	0.09	
Na	23	45	He	-0.675	ug/l	N/A	4375	45	
Mg	24	45	He	0.134	ug/l	89.6	655	45	
Al	27	45	He	0.343	ug/l	19.0	123	22.5	
K	39	45	He	1.832	ug/l	86.1	17256	45	
Ca	44	45	He	0.262	ug/l	726.5	133	45	
Ti	47	45	He	0.008	ug/l	339.6	2	1.8	
V	51	74	He	-0.003	ug/l	N/A	433	0.45	
Cr	52	74	He	0.004	ug/l	812.0	2380	0.45	
Mn	55	74	He	0.015	ug/l	50.7	384	0.45	
Fe	56	74	He	0.157	ug/l	51.7	16824	22.5	
Co	59	74	He	0.003	ug/l	22.3	132	0.09	
Ni	60	74	He	0.002	ug/l	890.1	2810	0.45	
Cu	65	74	He	0.034	ug/l	11.7	774	0.45	
[Cu]	65	74	No Gas	0.024	ug/l	36.7	1818	0.45	
Zn	66	74	He	0.011	ug/l	142.9	112	1.8	
As	75	74	He	0.010	ug/l	41.6	26	0.45	
Se	78	74	HEHe	0.023	ug/l	35.3	6	0.45	
Mo	95	103	He	0.010	ug/l	69.0	279	0.45	
Ag	109	103	No Gas	0.002	ug/l	30.3	91	0.09	
Cd	111	103	He	0.000	ug/l	359.4	10	0.09	
[Cd]	111	103	No Gas	0.004	ug/l	11.2	31	0.09	
Sb	123	103	No Gas	0.076	ug/l	4.7	1633	0.45	
Ba	138	159	He	0.013	ug/l	33.7	454	0.45	
Hg	201	159	No Gas	1.649	ng/l	38.9	27	36	
Tl	205	159	No Gas	0.014	ug/l	1.0	1376	0.09	
Pb	208	159	No Gas	0.005	ug/l	30.8	3237	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	726494	0.0	683413.09	106.3	70	120	
Ge	74	No Gas	1082455	0.3	1027391.35	105.36	70	120	
Rh	103	No Gas	1214398	1.9	1163511.07	104.37	70	120	
Tb	159	No Gas	3158708	1.2	3079736.27	102.56	70	120	
[Bi]	209	No Gas	1922336	0.9	1949588.49	98.6	70	120	
Sc	45	He	179275	4.5	169523	105.75	70	120	
Ge	74	He	176390	2.4	167213.36	105.49	70	120	
Rh	103	He	666147	2.7	648079.08	102.79	70	120	
Tb	159	He	1537811	4.4	1485823.76	103.5	70	120	
Ge	74	HEHe	228301	1.2	215480.59	105.95	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRL9**	**Sample Type**	CRL1
File Name	100CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:48:44	**Sample QC Pass/Fail**	Fail
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.179	ug/l	6.9	847	99.44	70	130	
Na	23	45	He	21.583	ug/l	1.5	29655	239.81	70	130	CRL1 R-11
Mg	24	45	He	9.469	ug/l	4.1	6237	105.21	70	130	
Al	27	45	He	9.898	ug/l	5.2	2459	109.98	70	130	
K	39	45	He	24.320	ug/l	3.0	27293	270.22	70	130	CRL1 R-11
Ca	44	45	He	20.201	ug/l	16.1	625	224.46	70	130	CRL1 R-11
Ti	47	45	He	0.229	ug/l	28.7	36	127.22	70	130	
V	51	74	He	0.168	ug/l	10.9	1225	93.33	70	130	
Cr	52	74	He	-0.068	ug/l	N/A	1895	-37.78	70	130	CRL1 R-11
Mn	55	74	He	0.150	ug/l	13.2	872	83.33	70	130	
Fe	56	74	He	8.671	ug/l	1.0	62295	96.34	70	130	
Co	59	74	He	0.169	ug/l	3.6	1672	93.89	70	130	
Ni	60	74	He	-0.479	ug/l	N/A	1556	-266.11	70	130	CRL1 R-11
Cu	65	74	He	0.465	ug/l	4.0	2244	258.33	70	130	CRL1 R-11
[Cu]	65	74	No Gas	0.427	ug/l	7.1	4541	237.22	70	130	CRL1 R-11
Zn	66	74	He	0.853	ug/l	5.2	1057	473.89	70	130	CRL1 R-11
As	75	74	He	0.177	ug/l	3.2	145	98.33	70	130	
Se	78	74	HEHe	0.181	ug/l	6.1	32	100.56	70	130	
Mo	95	103	He	0.144	ug/l	3.4	864	80	70	130	
Ag	109	103	No Gas	0.184	ug/l	4.0	4630	102.22	70	130	
Cd	111	103	He	0.182	ug/l	11.0	461	101.11	70	130	
[Cd]	111	103	No Gas	0.186	ug/l	9.1	1229	103.33	70	130	
Sb	123	103	No Gas	0.203	ug/l	0.3	4007	112.78	70	130	
Ba	138	159	He	0.316	ug/l	2.4	4802	175.56	70	130	CRL1 R-11
Tl	205	159	No Gas	0.176	ug/l	1.6	14620	97.78	70	130	
Pb	208	159	No Gas	0.199	ug/l	0.9	25542	110.56	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	725797	1.3	683413.09	106.2	70	120	
Ge	74	No Gas	1055150	1.4	1027391.35	102.7	70	120	
Rh	103	No Gas	1195193	2.5	1163511.07	102.72	70	120	
Tb	159	No Gas	3122104	0.8	3079736.27	101.38	70	120	
[Bi]	209	No Gas	1933391	1.6	1949588.49	99.17	70	120	
Sc	45	He	181154	1.1	169523	106.86	70	120	
Ge	74	He	172154	1.0	167213.36	102.95	70	120	
Rh	103	He	677120	1.0	648079.08	104.48	70	120	
Tb	159	He	1526393	0.9	1485823.76	102.73	70	120	
Ge	74	HEHe	228804	1.0	215480.59	106.18	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLA**	**Sample Type**	CRL2
File Name	101_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:53:12	**Sample QC Pass/Fail**	Fail
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.962	ug/l	11.3	4105	106.89	70	130	
Na	23	45	He	56.908	ug/l	0.8	67794	126.46	70	130	
Mg	24	45	He	47.612	ug/l	2.2	28226	105.8	70	130	
Al	27	45	He	49.096	ug/l	0.7	11711	109.1	70	130	
K	39	45	He	55.873	ug/l	0.8	39977	124.16	70	130	
Ca	44	45	He	55.021	ug/l	5.8	1438	122.27	70	130	
Ti	47	45	He	0.812	ug/l	16.7	120	90.22	70	130	
V	51	74	He	0.874	ug/l	2.6	4505	97.11	70	130	
Cr	52	74	He	0.664	ug/l	2.2	6242	73.78	70	130	
Mn	55	74	He	0.845	ug/l	5.2	3412	93.89	70	130	
Fe	56	74	He	44.749	ug/l	0.3	254176	99.44	70	130	
Co	59	74	He	0.937	ug/l	1.0	8745	104.11	70	130	
Ni	60	74	He	0.318	ug/l	6.9	3489	35.33	70	130	CRL2 R-11
Cu	65	74	He	1.145	ug/l	3.4	4550	127.22	70	130	
[Cu]	65	74	No Gas	1.258	ug/l	13.5	9432	139.78	70	130	CRL2 R-11
Zn	66	74	He	1.586	ug/l	4.1	1862	176.22	70	130	CRL2 R-11
As	75	74	He	0.900	ug/l	1.8	658	100	70	130	
Se	78	74	HEHe	0.942	ug/l	4.0	150	104.67	70	130	
Mo	95	103	He	0.850	ug/l	4.4	3814	94.44	70	130	
Ag	109	103	No Gas	0.992	ug/l	13.6	22807	110.22	70	130	
Cd	111	103	He	0.870	ug/l	6.2	2104	96.67	70	130	
[Cd]	111	103	No Gas	0.966	ug/l	12.0	5860	107.33	70	130	
Sb	123	103	No Gas	1.000	ug/l	14.9	17485	111.11	70	130	
Ba	138	159	He	0.982	ug/l	0.7	14064	109.11	70	130	
Hg	201	159	No Gas	39.474	ng/l	10.3	190	109.65	70	130	
Tl	205	159	No Gas	0.921	ug/l	10.7	69805	102.33	70	130	
Pb	208	159	No Gas	0.960	ug/l	12.1	104204	106.67	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	670817	11.2	683413.09	98.16	70	120	
Ge	74	No Gas	977701	10.6	1027391.35	95.16	70	120	
Rh	103	No Gas	1108485	12.0	1163511.07	95.27	70	120	
Tb	159	No Gas	2905892	10.6	3079736.27	94.36	70	120	
[Bi]	209	No Gas	1778075	11.6	1949588.49	91.2	70	120	
Sc	45	He	176221	0.8	169523	103.95	70	120	
Ge	74	He	170488	0.7	167213.36	101.96	70	120	
Rh	103	He	657694	0.8	648079.08	101.48	70	120	
Tb	159	He	1495501	0.8	1485823.76	100.65	70	120	
Ge	74	HEHe	218905	2.9	215480.59	101.59	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLB**	**Sample Type**	CRL3
File Name	102CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 01:57:41	**Sample QC Pass/Fail**	Fail
Comment	A19I099 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.842	ug/l	2.1	8279	102.33	70	130	
Na	23	45	He	92.396	ug/l	2.9	107358	102.66	70	130	
Mg	24	45	He	92.144	ug/l	1.5	54327	102.38	70	130	
Al	27	45	He	91.235	ug/l	3.7	21813	101.37	70	130	
K	39	45	He	93.029	ug/l	4.9	56008	103.37	70	130	
Ca	44	45	He	89.433	ug/l	2.8	2269	99.37	70	130	
Ti	47	45	He	1.852	ug/l	2.5	273	102.89	70	130	
V	51	74	He	1.780	ug/l	2.9	8760	98.89	70	130	
Cr	52	74	He	1.472	ug/l	2.7	11105	81.78	70	130	
Mn	55	74	He	1.702	ug/l	1.0	6571	94.56	70	130	
Fe	56	74	He	87.159	ug/l	1.1	482215	96.84	70	130	
Co	59	74	He	1.803	ug/l	2.8	16794	100.17	70	130	
Ni	60	74	He	1.195	ug/l	3.4	5655	66.39	70	130	CRL3 R-11
Cu	65	74	He	1.796	ug/l	0.9	6801	99.78	70	130	
[Cu]	65	74	No Gas	1.863	ug/l	4.4	13818	103.5	70	130	
Zn	66	74	He	2.037	ug/l	4.0	2374	113.17	70	130	
As	75	74	He	1.778	ug/l	2.4	1288	98.78	70	130	
Se	78	74	HEHe	1.725	ug/l	1.5	281	95.83	70	130	
Mo	95	103	He	1.705	ug/l	1.4	7402	94.72	70	130	
Ag	109	103	No Gas	1.874	ug/l	2.4	44422	104.11	70	130	
Cd	111	103	He	1.742	ug/l	1.8	4198	96.78	70	130	
[Cd]	111	103	No Gas	1.842	ug/l	2.2	11516	102.33	70	130	
Sb	123	103	No Gas	1.869	ug/l	1.2	33605	103.83	70	130	
Ba	138	159	He	1.834	ug/l	4.9	25891	101.89	70	130	
Hg	201	159	No Gas	75.175	ng/l	3.6	364	104.41	70	130	
Tl	205	159	No Gas	1.717	ug/l	1.6	136576	95.39	70	130	
Pb	208	159	No Gas	1.693	ug/l	1.6	191519	94.06	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	701824	1.1	683413.09	102.69	70	120	
Ge	74	No Gas	1010966	2.2	1027391.35	98.4	70	120	
Rh	103	No Gas	1131276	2.1	1163511.07	97.23	70	120	
Tb	159	No Gas	3032421	0.8	3079736.27	98.46	70	120	
[Bi]	209	No Gas	1856988	2.9	1949588.49	95.25	70	120	
Sc	45	He	176983	1.9	169523	104.4	70	120	
Ge	74	He	171126	1.1	167213.36	102.34	70	120	
Rh	103	He	657045	2.8	648079.08	101.38	70	120	
Tb	159	He	1489354	4.7	1485823.76	100.24	70	120	
Ge	74	HEHe	225704	0.9	215480.59	104.74	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLC**	**Sample Type**	CRL4
File Name	103CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:02:10	**Sample QC Pass/Fail**	Pass
Comment	A19I100 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.563	ug/l	1.3	16202	98.97	70	130	
Na	23	45	He	182.661	ug/l	2.9	211888	101.48	70	130	
Mg	24	45	He	182.611	ug/l	2.8	109468	101.45	70	130	
Al	27	45	He	181.336	ug/l	2.5	44287	100.74	70	130	
K	39	45	He	178.674	ug/l	3.4	94661	99.26	70	130	
Ca	44	45	He	178.153	ug/l	1.2	4490	98.97	70	130	
Ti	47	45	He	3.466	ug/l	16.8	522	96.28	70	130	
V	51	74	He	3.470	ug/l	1.2	17058	96.39	70	130	
Cr	52	74	He	3.245	ug/l	0.7	22247	90.14	70	130	
Mn	55	74	He	3.348	ug/l	0.7	12922	93	70	130	
Fe	56	74	He	173.602	ug/l	2.4	967566	96.45	70	130	
Co	59	74	He	3.572	ug/l	2.5	33958	99.22	70	130	
Ni	60	74	He	2.996	ug/l	2.0	10316	83.22	70	130	
Cu	65	74	He	3.539	ug/l	4.1	13086	98.31	70	130	
[Cu]	65	74	No Gas	3.649	ug/l	2.5	26340	101.36	70	130	
Zn	66	74	He	3.681	ug/l	3.7	4312	102.25	70	130	
As	75	74	He	3.462	ug/l	2.1	2548	96.17	70	130	
Se	78	74	HEHe	3.687	ug/l	1.8	590	102.42	70	130	
Mo	95	103	He	3.375	ug/l	4.2	14820	93.75	70	130	
Ag	109	103	No Gas	3.683	ug/l	2.9	89168	102.31	70	130	
Cd	111	103	He	3.366	ug/l	2.5	8327	93.5	70	130	
[Cd]	111	103	No Gas	3.580	ug/l	2.4	22861	99.44	70	130	
Sb	123	103	No Gas	3.655	ug/l	3.0	66944	101.53	70	130	
Ba	138	159	He	3.704	ug/l	2.7	53453	102.89	70	130	
Hg	201	159	No Gas	139.431	ng/l	4.1	669	96.83	70	130	
Tl	205	159	No Gas	3.379	ug/l	3.7	272463	93.86	70	130	
Pb	208	159	No Gas	3.363	ug/l	3.1	383299	93.42	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	710945	0.4	683413.09	104.03	70	120	
Ge	74	No Gas	1040321	2.0	1027391.35	101.26	70	120	
Rh	103	No Gas	1156068	2.9	1163511.07	99.36	70	120	
Tb	159	No Gas	3077889	2.7	3079736.27	99.94	70	120	
[Bi]	209	No Gas	1866824	0.8	1949588.49	95.75	70	120	
Sc	45	He	180921	1.7	169523	106.72	70	120	
Ge	74	He	175243	2.2	167213.36	104.8	70	120	
Rh	103	He	675405	3.3	648079.08	104.22	70	120	
Tb	159	He	1529105	2.9	1485823.76	102.91	70	120	
Ge	74	HEHe	222280	1.3	215480.59	103.16	70	120	

Continuing Calibration Verification (CCV) Report ICPMS6

Sample Name	**9J02063-CCV8**	**Sample Type**	CCV
File Name	111_CCV.d	**Vial #**	1102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:37:41	**Sample QC Pass/Fail**	Pass
Comment	A19I385 mp 1002	**ISTD Ref FileName**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	Low	High	Flag
Be	9	6	No Gas	39.159	ug/l	0.8	179454	40	97.9	90	110	
Na	23	45	He	7845.401	ug/l	1.4	8723772	8000	98.07	90	110	
Mg	24	45	He	8277.435	ug/l	1.2	4847269	8000	103.47	90	110	
Al	27	45	He	8079.772	ug/l	0.4	1935930	8000	101	90	110	
K	39	45	He	7951.666	ug/l	0.8	3426740	8000	99.4	90	110	
Ca	44	45	He	7865.404	ug/l	0.7	189154	8000	98.32	90	110	
Ti	47	45	He	97.047	ug/l	2.3	14316	100	97.05	90	110	
V	51	74	He	98.341	ug/l	0.7	455412	100	98.34	90	110	
Cr	52	74	He	98.756	ug/l	0.2	587484	100	98.76	90	110	
Mn	55	74	He	99.840	ug/l	0.4	363291	100	99.84	90	110	
Fe	56	74	He	7925.995	ug/l	0.5	42005147	8000	99.07	90	110	
Co	59	74	He	103.521	ug/l	0.3	948415	100	103.52	90	110	
Ni	60	74	He	103.745	ug/l	1.9	254544	100	103.74	90	110	
Cu	65	74	He	101.224	ug/l	1.1	344476	100	101.22	90	110	
[Cu]	65	74	No Gas	100.565	ug/l	0.7	702109	100	100.56	90	110	
Zn	66	74	He	99.946	ug/l	1.0	110650	100	99.95	90	110	
As	75	74	He	95.997	ug/l	0.7	67781	100	96	90	110	
Se	78	74	HEHe	39.001	ug/l	0.9	6412	40	97.5	90	110	
Mo	95	103	He	39.425	ug/l	1.2	164908	40	98.56	90	110	
Ag	109	103	No Gas	40.321	ug/l	0.7	987888	40	100.8	90	110	
Cd	111	103	He	94.440	ug/l	1.2	225565	100	94.44	90	110	
[Cd]	111	103	No Gas	96.904	ug/l	0.9	626288	100	96.9	90	110	
Sb	123	103	No Gas	39.309	ug/l	1.8	727215	40	98.27	90	110	
Ba	138	159	He	104.005	ug/l	1.7	1457641	100	104	90	110	
Hg	201	159	No Gas	746.828	ng/l	2.4	3612	800	93.35	90	110	
Tl	205	159	No Gas	39.627	ug/l	2.2	3297046	40	99.07	90	110	
Pb	208	159	No Gas	95.883	ug/l	2.0	11207528	100	95.88	90	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	717183	0.2	683413.09	104.94	70	120	
Ge	74	No Gas	1067722	0.8	1027391.35	103.93	70	120	
Rh	103	No Gas	1169604	0.5	1163511.07	100.52	70	120	
Tb	159	No Gas	3176097	1.1	3079736.27	103.13	70	120	
[Bi]	209	No Gas	1926479	1.4	1949588.49	98.81	70	120	
Sc	45	He	177611	0.7	169523	104.77	70	120	
Ge	74	He	169294	1.0	167213.36	101.24	70	120	
Rh	103	He	652478	1.0	648079.08	100.68	70	120	
Tb	159	He	1491831	1.7	1485823.76	100.4	70	120	
Ge	74	HEHe	229349	1.9	215480.59	106.44	70	120	

Continuing Calibration Blank (CCB) Report ICPMS6

Sample Name	**9J02063-CCB8**	**Sample Type**	CCB
File Name	112_CCB.d	**Vial #.**	1101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:42:01	**Sample QC Pass/Fail**	Pass
Comment	CCB	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	Limit	QC Flag
Be	9	6	No Gas	0.012	ug/l	27.1	72	0.09	
Na	23	45	He	0.090	ug/l	213.2	5042	45	
Mg	24	45	He	0.834	ug/l	9.3	1030	45	
Al	27	45	He	1.036	ug/l	15.9	280	22.5	
K	39	45	He	2.251	ug/l	26.2	16795	45	
Ca	44	45	He	0.135	ug/l	157.1	127	45	
Ti	47	45	He	0.085	ug/l	27.7	13	1.8	
V	51	74	He	0.007	ug/l	23.3	458	0.45	
Cr	52	74	He	-0.010	ug/l	N/A	2180	0.45	
Mn	55	74	He	0.033	ug/l	17.1	428	0.45	
Fe	56	74	He	1.771	ug/l	9.5	24423	22.5	
Co	59	74	He	0.009	ug/l	29.6	179	0.09	
Ni	60	74	He	0.050	ug/l	55.3	2785	0.45	
Cu	65	74	He	0.037	ug/l	37.3	747	0.45	
[Cu]	65	74	No Gas	0.063	ug/l	32.7	1969	0.45	
Zn	66	74	He	0.026	ug/l	18.9	123	1.8	
As	75	74	He	0.013	ug/l	22.1	27	0.45	
Se	78	74	HEHe	0.007	ug/l	49.9	3	0.45	
Mo	95	103	He	0.015	ug/l	21.9	290	0.45	
Ag	109	103	No Gas	0.004	ug/l	14.3	127	0.09	
Cd	111	103	He	0.005	ug/l	40.3	21	0.09	
[Cd]	111	103	No Gas	0.009	ug/l	40.2	58	0.09	
Sb	123	103	No Gas	0.086	ug/l	6.0	1713	0.45	
Ba	138	159	He	0.018	ug/l	23.8	519	0.45	
Hg	201	159	No Gas	3.404	ng/l	18.5	34	36	
Tl	205	159	No Gas	0.021	ug/l	2.9	1839	0.09	
Pb	208	159	No Gas	0.013	ug/l	9.1	4011	0.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	698474	0.1	683413.09	102.2	70	120	
Ge	74	No Gas	1021010	0.8	1027391.35	99.38	70	120	
Rh	103	No Gas	1135216	1.3	1163511.07	97.57	70	120	
Tb	159	No Gas	3031997	0.4	3079736.27	98.45	70	120	
[Bi]	209	No Gas	1856438	1.3	1949588.49	95.22	70	120	
Sc	45	He	172487	0.9	169523	101.75	70	120	
Ge	74	He	167420	1.6	167213.36	100.12	70	120	
Rh	103	He	646544	0.7	648079.08	99.76	70	120	
Tb	159	He	1479656	1.5	1485823.76	99.58	70	120	
Ge	74	HEHe	218119	1.9	215480.59	101.22	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLD**	**Sample Type**	CRL1
File Name	113CRL.d	**Vial #**	2101
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:46:30	**Sample QC Pass/Fail**	Fail
Comment	A19I097 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.179	ug/l	4.8	812	99.44	70	130	
Na	23	45	He	21.967	ug/l	3.8	28586	244.08	70	130	CRL1 R-11
Mg	24	45	He	9.600	ug/l	3.3	6000	106.67	70	130	
Al	27	45	He	9.881	ug/l	9.2	2331	109.79	70	130	
K	39	45	He	24.612	ug/l	5.7	26051	273.47	70	130	CRL1 R-11
Ca	44	45	He	20.015	ug/l	19.9	588	222.39	70	130	CRL1 R-11
Ti	47	45	He	0.187	ug/l	38.5	28	103.89	70	130	
V	51	74	He	0.189	ug/l	5.0	1281	105	70	130	
Cr	52	74	He	-0.065	ug/l	N/A	1845	-36.11	70	130	CRL1 R-11
Mn	55	74	He	0.168	ug/l	9.6	906	93.33	70	130	
Fe	56	74	He	9.193	ug/l	2.6	62789	102.14	70	130	
Co	59	74	He	0.180	ug/l	1.5	1716	100	70	130	
Ni	60	74	He	-0.459	ug/l	N/A	1550	-255	70	130	CRL1 R-11
Cu	65	74	He	0.478	ug/l	3.7	2206	265.56	70	130	CRL1 R-11
[Cu]	65	74	No Gas	0.488	ug/l	4.9	4699	271.11	70	130	CRL1 R-11
Zn	66	74	He	0.856	ug/l	2.4	1022	475.56	70	130	CRL1 R-11
As	75	74	He	0.184	ug/l	3.3	145	102.22	70	130	
Se	78	74	HEHe	0.197	ug/l	1.9	34	109.44	70	130	
Mo	95	103	He	0.149	ug/l	5.9	843	82.78	70	130	
Ag	109	103	No Gas	0.191	ug/l	2.9	4530	106.11	70	130	
Cd	111	103	He	0.170	ug/l	4.7	411	94.44	70	130	
[Cd]	111	103	No Gas	0.183	ug/l	8.0	1138	101.67	70	130	
Sb	123	103	No Gas	0.204	ug/l	4.5	3794	113.33	70	130	
Ba	138	159	He	0.316	ug/l	0.6	4680	175.56	70	130	CRL1 R-11
Tl	205	159	No Gas	0.180	ug/l	0.6	14470	100	70	130	
Pb	208	159	No Gas	0.203	ug/l	1.2	25092	112.78	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	695873	0.6	683413.09	101.82	70	120	
Ge	74	No Gas	999245	0.7	1027391.35	97.26	70	120	
Rh	103	No Gas	1124425	0.2	1163511.07	96.64	70	120	
Tb	159	No Gas	3019668	0.9	3079736.27	98.05	70	120	
[Bi]	209	No Gas	1866172	1.5	1949588.49	95.72	70	120	
Sc	45	He	172151	2.2	169523	101.55	70	120	
Ge	74	He	166042	2.6	167213.36	99.3	70	120	
Rh	103	He	644862	2.3	648079.08	99.5	70	120	
Tb	159	He	1485002	1.4	1485823.76	99.94	70	120	
Ge	74	HEHe	223129	0.8	215480.59	103.55	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLE**	**Sample Type**	CRL2
File Name	114_CRL.d	**Vial #**	2102
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:50:59	**Sample QC Pass/Fail**	Fail
Comment	A19I098 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	0.886	ug/l	2.1	4028	98.44	70	130	
Na	23	45	He	57.735	ug/l	2.8	67279	128.3	70	130	
Mg	24	45	He	48.934	ug/l	0.2	28395	108.74	70	130	
Al	27	45	He	48.244	ug/l	1.9	11269	107.21	70	130	
K	39	45	He	56.177	ug/l	2.2	39274	124.84	70	130	
Ca	44	45	He	50.943	ug/l	6.0	1313	113.21	70	130	
Ti	47	45	He	0.961	ug/l	17.1	139	106.78	70	130	
V	51	74	He	0.901	ug/l	3.5	4522	100.11	70	130	
Cr	52	74	He	0.689	ug/l	5.7	6242	76.56	70	130	
Mn	55	74	He	0.910	ug/l	1.8	3561	101.11	70	130	
Fe	56	74	He	47.093	ug/l	3.3	260358	104.65	70	130	
Co	59	74	He	0.931	ug/l	3.6	8482	103.44	70	130	
Ni	60	74	He	0.255	ug/l	36.7	3255	28.33	70	130	CRL2 R-11
Cu	65	74	He	1.144	ug/l	6.7	4440	127.11	70	130	
[Cu]	65	74	No Gas	1.135	ug/l	0.6	9060	126.11	70	130	
Zn	66	74	He	1.737	ug/l	4.5	1982	193	70	130	CRL2 R-11
As	75	74	He	0.919	ug/l	1.3	656	102.11	70	130	
Se	78	74	HEHe	0.979	ug/l	5.8	156	108.78	70	130	
Mo	95	103	He	0.889	ug/l	3.6	3896	98.78	70	130	
Ag	109	103	No Gas	0.920	ug/l	1.6	22032	102.22	70	130	
Cd	111	103	He	0.869	ug/l	3.8	2060	96.56	70	130	
[Cd]	111	103	No Gas	0.899	ug/l	1.4	5671	99.89	70	130	
Sb	123	103	No Gas	0.921	ug/l	0.8	16802	102.33	70	130	
Ba	138	159	He	0.972	ug/l	1.6	13886	108	70	130	
Hg	201	159	No Gas	36.218	ng/l	5.2	188	100.61	70	130	
Tl	205	159	No Gas	0.855	ug/l	0.8	69097	95	70	130	
Pb	208	159	No Gas	0.887	ug/l	2.4	103011	98.56	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	708654	0.3	683413.09	103.69	70	120	
Ge	74	No Gas	1015180	0.6	1027391.35	98.81	70	120	
Rh	103	No Gas	1141658	1.0	1163511.07	98.12	70	120	
Tb	159	No Gas	3077589	0.1	3079736.27	99.93	70	120	
[Bi]	209	No Gas	1887407	0.5	1949588.49	96.81	70	120	
Sc	45	He	172564	0.5	169523	101.79	70	120	
Ge	74	He	166498	1.7	167213.36	99.57	70	120	
Rh	103	He	644774	1.7	648079.08	99.49	70	120	
Tb	159	He	1491622	1.5	1485823.76	100.39	70	120	
Ge	74	HEHe	219188	1.6	215480.59	101.72	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLF**	**Sample Type**	CRL3
File Name	115CRL_.d	**Vial #**	2103
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:55:27	**Sample QC Pass/Fail**	Fail
Comment	A19I099 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	1.757	ug/l	3.0	7923	97.61	70	130	
Na	23	45	He	92.212	ug/l	1.9	103752	102.46	70	130	
Mg	24	45	He	92.872	ug/l	1.8	53006	103.19	70	130	
Al	27	45	He	90.709	ug/l	3.5	20999	100.79	70	130	
K	39	45	He	92.978	ug/l	1.8	54217	103.31	70	130	
Ca	44	45	He	85.997	ug/l	4.2	2116	95.55	70	130	
Ti	47	45	He	1.804	ug/l	3.1	258	100.22	70	130	
V	51	74	He	1.709	ug/l	2.7	8137	94.94	70	130	
Cr	52	74	He	1.495	ug/l	3.6	10860	83.06	70	130	
Mn	55	74	He	1.748	ug/l	4.2	6511	97.11	70	130	
Fe	56	74	He	87.710	ug/l	2.2	468595	97.46	70	130	
Co	59	74	He	1.781	ug/l	1.2	16024	98.94	70	130	
Ni	60	74	He	1.079	ug/l	3.1	5187	59.94	70	130	CRL3 R-11
Cu	65	74	He	1.798	ug/l	0.4	6577	99.89	70	130	
[Cu]	65	74	No Gas	1.765	ug/l	1.2	13031	98.06	70	130	
Zn	66	74	He	1.994	ug/l	6.4	2246	110.78	70	130	
As	75	74	He	1.768	ug/l	0.8	1236	98.22	70	130	
Se	78	74	HEHe	1.697	ug/l	0.9	273	94.28	70	130	
Mo	95	103	He	1.716	ug/l	1.3	7269	95.33	70	130	
Ag	109	103	No Gas	1.784	ug/l	1.9	41829	99.11	70	130	
Cd	111	103	He	1.710	ug/l	2.2	4022	95	70	130	
[Cd]	111	103	No Gas	1.769	ug/l	4.8	10938	98.28	70	130	
Sb	123	103	No Gas	1.794	ug/l	1.4	31902	99.67	70	130	
Ba	138	159	He	1.806	ug/l	2.9	25316	100.33	70	130	
Hg	201	159	No Gas	71.891	ng/l	5.3	347	99.85	70	130	
Tl	205	159	No Gas	1.675	ug/l	1.5	132430	93.06	70	130	
Pb	208	159	No Gas	1.670	ug/l	1.7	187813	92.78	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	704254	0.9	683413.09	103.05	70	120	
Ge	74	No Gas	999670	0.3	1027391.35	97.3	70	120	
Rh	103	No Gas	1118440	0.9	1163511.07	96.13	70	120	
Tb	159	No Gas	3014426	0.5	3079736.27	97.88	70	120	
[Bi]	209	No Gas	1857610	0.4	1949588.49	95.28	70	120	
Sc	45	He	171348	1.6	169523	101.08	70	120	
Ge	74	He	165289	1.4	167213.36	98.85	70	120	
Rh	103	He	641115	1.8	648079.08	98.93	70	120	
Tb	159	He	1476615	1.1	1485823.76	99.38	70	120	
Ge	74	HEHe	222381	3.1	215480.59	103.2	70	120	

CRL Verification ICPMS6

Sample Name	**9J02063-CRLG**	**Sample Type**	CRL4
File Name	116CRL4.d	**Vial #**	2104
Data Path Name	D:\Agilent\ICPMH\1\DATA\9J02063.b	**Total Dilution**	1.0000
Acq Time	10/03/2019 02:59:56	**Sample QC Pass/Fail**	Pass
Comment	A19I100 mp 1002	**ISTD Ref File**	003CALB.d

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	RSD	CPS	% Rec	%QC Low	%QC High	Flag
Be	9	6	No Gas	3.592	ug/l	1.2	16059	99.78	70	130	
Na	23	45	He	186.510	ug/l	1.7	208351	103.62	70	130	
Mg	24	45	He	187.982	ug/l	0.9	108567	104.43	70	130	
Al	27	45	He	186.598	ug/l	3.5	43896	103.67	70	130	
K	39	45	He	185.477	ug/l	4.0	94052	103.04	70	130	
Ca	44	45	He	180.909	ug/l	0.9	4392	100.5	70	130	
Ti	47	45	He	3.394	ug/l	2.4	492	94.28	70	130	
V	51	74	He	3.523	ug/l	1.5	16632	97.86	70	130	
Cr	52	74	He	3.303	ug/l	0.7	21705	91.75	70	130	
Mn	55	74	He	3.475	ug/l	0.9	12871	96.53	70	130	
Fe	56	74	He	178.619	ug/l	0.2	955890	99.23	70	130	
Co	59	74	He	3.653	ug/l	0.9	33362	101.47	70	130	
Ni	60	74	He	2.930	ug/l	2.4	9747	81.39	70	130	
Cu	65	74	He	3.574	ug/l	0.2	12693	99.28	70	130	
[Cu]	65	74	No Gas	3.642	ug/l	1.6	26005	101.17	70	130	
Zn	66	74	He	3.659	ug/l	2.9	4118	101.64	70	130	
As	75	74	He	3.577	ug/l	1.2	2528	99.36	70	130	
Se	78	74	HEHe	3.500	ug/l	9.6	574	97.22	70	130	
Mo	95	103	He	3.526	ug/l	3.2	14922	97.94	70	130	
Ag	109	103	No Gas	3.611	ug/l	2.8	87044	100.31	70	130	
Cd	111	103	He	3.349	ug/l	2.1	7989	93.03	70	130	
[Cd]	111	103	No Gas	3.642	ug/l	1.3	23160	101.17	70	130	
Sb	123	103	No Gas	3.620	ug/l	1.8	66047	100.56	70	130	
Ba	138	159	He	3.768	ug/l	0.5	53141	104.67	70	130	
Hg	201	159	No Gas	138.210	ng/l	2.9	654	95.98	70	130	
Tl	205	159	No Gas	3.430	ug/l	0.9	272757	95.28	70	130	
Pb	208	159	No Gas	3.393	ug/l	1.4	381345	94.25	70	130	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	698878	1.0	683413.09	102.26	70	120	
Ge	74	No Gas	1028870	2.4	1027391.35	100.14	70	120	
Rh	103	No Gas	1150777	1.4	1163511.07	98.91	70	120	
Tb	159	No Gas	3033383	0.5	3079736.27	98.49	70	120	
[Bi]	209	No Gas	1845391	1.5	1949588.49	94.66	70	120	
Sc	45	He	174297	2.0	169523	102.82	70	120	
Ge	74	He	168285	0.8	167213.36	100.64	70	120	
Rh	103	He	651008	1.4	648079.08	100.45	70	120	
Tb	159	He	1493915	1.4	1485823.76	100.54	70	120	
Ge	74	HEHe	228968	6.6	215480.59	106.26	70	120	

Metals IFA/IFB Metals Internal Standards Recovery Summary

A19I356 IFA
A19I357 IFB
A9I0877 (I.S Tables)

APEX LABORATORIES

Analytical Standard Record

Apex Laboratories

A19I356

Description:	ICSA working std	Expires:	12/03/19
Standard Type:	Calibration Standa	Prepared:	09/26/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Emily S. Stefansson
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	10/08/19 13:18 by jsj

Analyte	CAS Number	Concentration	Units
Aluminum	7429-90-5	100	ug/mL
Calcium	7440-70-2	300	ug/mL
Carbon	7440-44-0	200	ug/mL
Chlorine	7782-50-5	2000	ug/mL
Iron	7439-89-6	250	ug/mL
Magnesium	7439-95-4	100	ug/mL
Molybdenum	7439-98-7	2	ug/mL
Phosphorus	7723-14-0	100	ug/mL
Potassium	7440-09-7	100	ug/mL
Sodium	7440-23-5	250	ug/mL
Sulfur	7704-34-9	100	ug/mL
Titanium	7440-32-6	2	ug/mL
Tungsten	7440-33-7	0.1	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
A18L138	6020A ICS Interferents A	12/11/18	John P. Beck	12/03/19	07/23/19 16:48 by arf	5
A19H277	1 W 10 ppm	08/16/19	Marshall Pattee	02/16/20	08/28/19 17:45 by jsj	0.5
A19H398	Conc. HCl - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:38 by jsj	0.2
A19H400	Conc. HNO3 - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:39 by jsj	1.75

Reviewed By Date

Analytical Standard Record

Apex Laboratories

A19I357

Description:	ICSA+B working std	Expires:	10/12/19
Standard Type:	Calibration Standa	Prepared:	09/26/19
Solvent:	3.5% HNO3 + 0.4% HCl	Prepared By:	Emily S. Stefansson
Final Volume (mls):	50	Department:	Metals
Vials:	1	Last Edit:	10/08/19 13:18 by jsj

Analyte	CAS Number	Concentration	Units
Aluminum	7429-90-5	100	ug/mL
Arsenic	7440-38-2	0.1	ug/mL
Cadmium	7440-43-9	0.1	ug/mL
Calcium	7440-70-2	300	ug/mL
Carbon	7440-44-0	200	ug/mL
Chlorine	7782-50-5	2000	ug/mL
Chromium	7440-47-3	0.2	ug/mL
Cobalt	7440-48-4	0.2	ug/mL
Copper	7440-50-8	0.2	ug/mL
Iron	7439-89-6	250	ug/mL
Magnesium	7439-95-4	100	ug/mL
Manganese	7439-96-5	0.2	ug/mL
Mercury	7439-97-6	0.002	ug/mL
Molybdenum	7439-98-7	2	ug/mL
Nickel	7440-02-0	0.2	ug/mL
Phosphorus	7723-14-0	100	ug/mL
Potassium	7440-09-7	100	ug/mL
Selenium	7782-49-2	0.1	ug/mL
Silver	7440-22-4	0.05	ug/mL
Sodium	7440-23-5	250	ug/mL
Sulfur	7704-34-9	100	ug/mL
Titanium	7440-32-6	2	ug/mL
Tungsten	7440-33-7	0.1	ug/mL
Vanadium	7440-62-2	0.2	ug/mL
Zinc	7440-66-6	0.1	ug/mL

Reviewed By Date

Analytical Standard Record

Apex Laboratories

A19I357

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
A18L138	6020A ICS Interferents A	12/11/18	John P. Beck	12/03/19	07/23/19 16:48 by arf	5
A18L139	6020A & CLP-M ICS Analytes B	12/11/18	John P. Beck	12/03/19	12/18/18 13:34 by jsj	0.5
A19D217	Hg Stock 1.00ppm Std Primary	04/15/19	Emily S. Stefansson	10/12/19	08/14/19 13:25 by jsj	0.1
A19H277	1 W 10 ppm	08/16/19	Marshall Pattee	02/16/20	08/28/19 17:45 by jsj	0.5
A19H398	Conc. HCl - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:38 by jsj	0.2
A19H400	Conc. HNO3 - Omnitrace	08/23/19	Kevin Taucher	08/23/21	08/29/19 11:39 by jsj	1.75

Reviewed By Date

		6 Li (ISTD) [No Gas]	45 Sc (ISTD) [He]	74 Ge (ISTD) [No Gas]	74 Ge (ISTD) [He]	74 Ge (ISTD) [HEHe]	103 Rh (ISTD) [No Gas]	103 Rh (ISTD) [He]	159 Tb (ISTD) [No Gas]	159 Tb (ISTD) [He]	209 [Bi] (ISTD) [No Gas]
Acq. Date-Time	Sample Name	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value	QC Measured Value
10/2/2019 18:25	rinse										
10/2/2019 18:29	rinse										
10/2/2019 18:34	9J02063-CAL0	100	100	100	100	100	100	100	100	100	100
10/2/2019 18:39	9J02063-CAL1	99.2701447	101.9089445	98.59761846	100.6068295	102.2690397	96.9043294	100.9429374	97.03217856	99.68509208	95.49838985
10/2/2019 18:43	9J02063-CAL2	99.59792449	102.3691534	96.77796489	99.97019776	97.06644725	96.25619633	101.4444035	95.1760246	100.2203485	93.32251341
10/2/2019 18:48	9J02063-CAL3	99.82840344	99.45850809	97.63826576	98.47415302	100.5422499	97.65737051	98.67595736	95.08423049	96.62925232	94.03764347
10/2/2019 18:53	9J02063-CAL4	99.80481059	105.196754	101.4320924	102.6677434	103.4158452	100.7308004	103.5531754	97.73186531	103.022428	95.02378251
10/2/2019 18:57	9J02063-CAL5	99.5707779	104.622592	101.1053824	103.9416348	102.3360403	100.9294972	104.0671163	97.12664585	103.0129971	94.43378399
10/2/2019 19:02	9J02063-CAL6	101.7301015	105.9825353	102.9983527	104.3252485	101.9923806	101.2337823	104.252176	99.72384464	101.5799992	97.77244923
10/2/2019 19:06	9J02063-CAL7	101.4921712	101.4528215	102.0754026	100.8379952	99.09937594	101.3442133	100.3249778	99.50758673	99.996144	98.62800106
10/2/2019 19:11	9J02063-CAL8	94.9904008	98.41988796	94.07491572	96.95226905	91.63921588	92.53008595	96.86977295	92.97819702	96.86823917	90.4477305
10/2/2019 19:15	9J02063-CAL9	94.77890549	99.05593735	92.66442821	94.10468358	97.66566133	89.24287241	92.01360632	92.66030356	96.07242877	86.43556894
10/2/2019 19:20	9J0263-ICV1	95.66401291	105.4536946	97.14448735	102.7223921	103.6077929	95.09995722	101.6845635	94.86443699	102.0168094	92.21369942
10/2/2019 19:24	9J02063-ICB1	98.46619561	101.5686013	98.88017356	99.32336946	99.4480338	99.17524406	99.83353318	98.42486415	99.50334195	95.91733929
10/2/2019 19:29	9J02063-CRL1	96.66839227	100.9796429	95.16196206	98.97635572	101.8469197	95.45616326	100.0529899	94.76968212	98.8490858	91.87040458
10/2/2019 19:34	9J02063-CRL2	97.92668736	102.9993511	96.09373812	100.6736623	98.8783599	95.47352995	101.9092469	95.70740679	102.3917534	92.66830851
10/2/2019 19:38	9J02063-CRL3	101.0295462	100.5270829	99.51339121	98.49502456	100.6650731	99.00918977	98.95791678	98.06637837	98.28587993	95.40489234
10/2/2019 19:43	9J02063-CRL4	100.1083683	99.43533719	97.40969171	97.68143526	99.03002708	97.18585516	97.82519596	97.4481684	98.11411797	94.34026408
10/2/2019 19:47	9J02063-IFA1	83.77721835	83.28396737	79.21818367	79.46588518	81.35382064	74.09043209	75.82011082	81.19165065	81.48193592	76.17907545
10/2/2019 19:52	9J02063-IFB1	81.87472626	83.18287981	78.93046923	78.99621378	82.4208402	75.10980529	76.20568877	82.90538246	82.03579546	77.57866191
10/2/2019 19:56	rinse	83.17356735	83.82451939	81.88557457	82.65049914	90.32652068	83.03927664	86.0516086	90.03015194	89.1820665	90.10258638
10/2/2019 20:01	9100506-BLK1	83.42412005	83.65223795	77.48316777	82.70012436	89.58207001	79.47276021	85.419427	87.28690211	89.54480378	87.39323617
10/2/2019 20:05	9100506-Bs1	84.06404195	84.70149577	76.66548	82.39504507	86.61060201	77.62159632	85.50231298	85.67509159	86.04941772	86.75881955
10/2/2019 20:10	A9I0928-01RE1	83.68089399	83.76944525	78.02075227	82.54489952	86.39794248	78.12211899	84.62229743	84.49446041	87.64122494	88.40646828
10/2/2019 20:14	A9I0929-01RE1	85.59502618	82.60172759	79.92532544	81.30477732	89.58671544	80.51461536	84.07125357	88.9773251	89.150506	90.68722463
10/2/2019 20:19	A9I0929-02RE1	85.39377406	88.04197464	83.01874289	87.30198552	90.49141256	82.98059563	88.82938792	89.87674649	93.5809388	90.10080806
10/2/2019 20:23	A9I0929-03RE1	86.46786772	90.96822457	82.2144035	88.71120107	91.34052385	82.71748282	89.82119435	89.36857949	93.84708948	91.3760594
10/2/2019 20:28	A9I0929-04RE1	79.33353701	88.00877757	77.03432485	87.02324184	92.96084616	77.9224495	88.15430004	83.00863968	91.34892196	83.73724652
10/2/2019 20:33	A9I0929-05RE1	86.95837828	89.28549912	84.78707651	87.43493742	90.43326192	84.82610078	89.19775655	89.08478615	92.96398788	89.84707725
10/2/2019 20:37	A9I0945-02	87.17167485	88.45335834	85.22904344	86.58721608	89.5894303	83.72343085	86.97011739	91.64549697	91.28262944	90.0585205
10/2/2019 20:42	A9I0955-01	84.15583611	80.74334653	81.50102977	82.49797345	87.77287222	82.92309725	85.3821476	91.11383067	90.08127162	96.34766805
10/2/2019 20:46	9J02063-CCV1	86.00232889	89.14785604	84.62333787	89.31284358	94.60241554	83.66772675	89.94843654	90.35539733	94.4520125	90.59843256
10/2/2019 20:51	9J02063-CCB1	92.39353268	90.26129394	87.67567555	89.64946541	96.70259081	88.30913254	91.73216896	92.90693929	94.274456	93.48740393
10/2/2019 20:55	A9I0956-01	83.36622584	81.5106898	79.80215329	81.0647347	87.15951921	80.19147648	84.35516028	90.97341561	90.76038648	93.19037903
10/2/2019 21:00	A9I0959-01RE1	86.54300676	82.43419477	80.81918086	82.70598912	90.88642726	81.32104001	86.28089183	90.3463248	90.17873136	93.04213663
10/2/2019 21:04	A9J0014-01RE1	89.4010122	87.63728816	83.63427172	87.0245057	95.62051963	83.87908157	89.22200924	93.63260673	93.50268322	95.31476666
10/2/2019 21:09	9100506-MS3	87.72511366	82.19507677	81.18993637	81.246341	92.42362993	81.52313435	84.09292788	88.09099099	86.58568971	92.55699186
10/2/2019 21:13	A9I0877-01	88.12356326	88.27433446	83.88633341	86.65424421	90.77197766	84.6102054	89.8792526	92.52925197	95.06170886	94.47806325
10/2/2019 21:18	A9I0892-01	86.1845525	84.55910997	80.48021169	81.41336115	88.65300565	79.22112186	81.73972792	89.8259284	87.26386031	89.32561678
10/2/2019 21:22	A9I0899-01	89.88635556	108.7928147	85.42509304	88.82107666	98.00601527	84.02945344	89.04268545	94.61245481	96.72817702	89.890351
10/2/2019 21:26	A9I0899-02	91.21525265	95.05107075	87.16035423	91.61946948	98.76054573	86.59743503	93.60403517	94.09626266	97.45349005	92.94891936
10/2/2019 21:31	9100506-dup1	93.12398352	96.10961738	90.28347377	93.23516574	97.42995409	88.85692163	94.25922014	95.42027116	97.43653447	95.25547876
10/2/2019 21:35	9100506-ms1	92.52639132	96.02570939	87.24174613	93.00643003	96.86861969	85.94574319	93.11881353	93.82221431	95.00376748	91.50971461
10/2/2019 21:40	9J02063-CCV2	94.46884944	98.96647063	94.06722116	97.75275333	104.1449349	91.57973716	97.13256393	95.40173938	97.82232204	93.90951352
10/2/2019 21:44	9J02063-CCB2	99.26494092	100.7225922	98.98576785	100.5003009	105.4856017	97.24952251	100.9187922	99.04182943	100.0974301	97.87018627
10/2/2019 21:48	A9I0899-03	93.12689245	94.16453028	89.89070815	93.32148659	97.23549419	89.20613217	94.18432855	95.59927838	96.82942321	95.74889006
10/2/2019 21:53	A9I0899-04	93.26320435	91.49625715	88.21302418	88.01099585	94.48753434	87.06117163	89.44511216	94.29905211	90.556767	92.86165068
10/2/2019 21:57	A9I0899-05	91.14254943	89.15836789	83.69009271	85.60452147	93.35893461	82.70446876	87.33592666	91.48941748	92.1478312	91.16751966
10/2/2019 22:02	A9I0899-06	89.21386868	86.09187741	84.05341937	84.63604423	91.46450254	82.1848407	84.08377056	91.37421876	87.79286338	88.8043425
10/2/2019 22:06	A9I0928-01	91.18009236	88.51502156	84.95101891	86.2212505	95.99311158	84.61116084	87.04297938	92.75974281	91.3735902	93.38896538
10/2/2019 22:11	A9I0929-01	88.67421216	88.16335836	82.86228807	85.71837402	92.69224191	81.31386975	85.69011773	91.18327319	91.59223884	90.41192944
10/2/2019 22:15	A9I0929-02	86.90709938	92.52522863	85.53543886	88.9571842	92.35755438	84.77712803	90.48018852	92.07772759	95.80480932	91.73909174
10/2/2019 22:20	A9I0929-03	90.08427636	88.33122546	85.35859193	86.48534224	93.55424068	84.10817322	88.29052621	93.05948666	93.18782376	92.50351169
10/2/2019 22:24	A9I0929-04	90.40550228	88.64757781	83.12832528	86.68616152	91.98338455	82.22339727	88.04252664	90.64654336	92.44785691	91.1082805
10/2/2019 22:28	A9I0929-05	91.57786788	89.10568477	84.75799087	85.4198572	94.19912631	84.33449251	87.41367077	92.2574012	91.00636967	92.98935763
10/2/2019 22:33	9J02063-CCV3	96.51542183	95.20903752	93.33350756	93.95608301	97.5772744	91.02371151	93.17428515	97.99177555	97.43132457	95.23445176
10/2/2019 22:37	9J02063-CCB3	96.04111036	94.25718044	91.82766625	93.46636736	96.98035288	91.37378496	93.61017074	96.41139023	96.64560599	95.83707038
10/2/2019 22:42	A9I0959-01	92.07185998	87.26885437	88.39429785	91.72086688	97.34584443	88.50760537	90.79971691	94.54807462	97.95106409	94.50374987
10/2/2019 22:46	A9J0014-01	91.89849827	88.17803877	85.97653627	86.07512382	92.2741037	83.73913074	85.50668296	93.51654917	93.15247861	91.01588322
10/2/2019 22:51	9100506-MS2	92.40939229	91.59234833	86.67962603	89.06768773	95.87764256	85.29813554	88.00560728	93.82995198	95.16164399	92.12233142
10/2/2019 22:55	A9I0871-01RE1	94.58843552	94.84368886	90.35467514	92.61547243	98.39515009	90.55544809	94.45746189	95.99559088	96.52017276	96.00458539
10/2/2019 22:59	9100506-MS3	94.82237749	93.51715893	88.91844443	90.65302557	97.3071619	87.66029299	91.64689079	94.10533736	95.07194425	93.42401859
10/2/2019 23:04	9J02063-CCV4	97.44334816	96.56247432	92.99264816	93.98124847	97.61154663	90.64390735	93.13272129	95.80330699	96.36986243	93.2140059
10/2/2019 23:08	9J02063-CCB4	97.4546405	92.7061323	91.88020612	92.22570693	99.76007738	91.36623998	92.81071275	94.13093706	93.73969024	94.10034901
10/2/2019 23:13	9J02063-CRL5	98.21151753	96.60382957	93.18139707	94.97290767	98.75971039	92.44540376	95.63225268	97.46058721	97.87347211	95.68672071
10/2/2019 23:17	9J02063-CRL6	98.87203653	97.59709302	93.39473026	96.03409879	99.78065773	92.74872246	97.12458547	97.36516281	97.64063023	95.79677248
10/2/2019 23:22	9J02063-CRL7	98.52404154	98.03231813	94.41618003	96.45487059	98.59969907	94.63432177	96.31689289	95.25607172	97.13223279	95.5811415
10/2/2019 23:26	9J02063-CRL8	97.89295764	95.20216529	90.44908966	92.54205924	97.38857217	90.25636742	92.96327026	93.35063139	95.06003907	91.53593912
10/2/2019 23:31	9100496-blk2	100.3986662	96.66328266	92.40670656	94.46890089	96.97130643	91.86472199	95.7763066	96.40537197	96.87344817	94.74834764
10/2/2019 23:35	9100496-bs2	99.99836068	96.12667898	92.80211122	95.05288732	98.62389769	92.16747831	95.15112621	95.82967105	96.00633995	93.48316594
10/2/2019 23:39	A9I0847-01RE1	101.2733299	98.29978233	94.98597264	96.50513173	99.45243791	93.8839748	96.58586933	96.33297107	100.4610729	95.78162398
10/2/2019 23:44	A9I0847-02RE1	101.8834543	100.6600658	97.87914248	97.87373449	100.9652455	97.46433152	98.76831235	98.3394695	99.43372333	98.42794038
10/2/2019 23:48	A9I0947-01RE1	101.2489123	96.93577666	92.9178675	95.70924237	96.60907427	92.2145396	96.56679449	96.74953358	95.92431475	97.49944838
10/2/2019 23:53	A9I0951-01RE1	100.4711499	102.6290159	92.97322096	100.2102523	101.0136613	92.71564098	101.4938609	95.4930577	102.3258911	95.52564569
10/2/2019 23:57	9100496-dup2	103.7858372	100.5654493	95.91093274	97.60425443	98.79810209	94.90175369	98.71330157	99.21777793	99.59440277	98.76161097
10/3/2019 00:02	9100496-ms2	103.1870822	97.21975189	97.70911899	95.41163457	101.4976879	96.76751764	95.57560218	100.173652	94.82524833	99.39621412
10/3/2019 00:06	9100496-msd2	102.4073195	101.3930243	96.07288044	99.69468947	100.7048756	95.74010355	100.1820719	97.91325833	100.4360923	97.68038126
10/3/2019 00:11	9100517-blk1	100.0081454	99.16973311	93.57432232	95.63770901	97.60903287	93.83910172	97.9614998	98.02549511	99.76697842	94.27413816
10/3/2019 00:15	9J02063-CCV5	102.3319756	101.5231758	98.38432745	99.68140903	100.8754988	94.99334085	97.61749857	98.53203751	98.51233254	94.56458356
10/3/2019 00:20	9J02063-CCB5	98.8436057	101.416561	94.27794287	99.18700475	101.4257557	93.37847266	99.10049043	95.00093504	99.20461855	93.89944507
10/3/2019 00:24	9100496-bs1	99.69089803	98.93526739	93.55371965	96.35299077	99.92868499	92.59840273	96.89024216	96.57492112	98.05392039	92.86064397
10/3/2019 00:28	A9I0822-02	101.3768032	110.9196648	97.51198314	100.1324356	105.2912036	95.11594676	100.8709148	97.90236725	101.5855566	94.62337921
10/3/2019 00:33	9100496-ms1	102.7612928	109.1708008	100.1068561	100.1489016	106.057695	97.69924635	100.474745	103.4726391	101.590305	98.48568317
10/3/2019 00:37	9100496-msd1	103.2845235	109.9399786	99.99265973	100.5773781	102.7309189	98.36620233	101.5268955	104.3338533	102.9592334	98.43470677
10/3/2019 00:42	9100496-ms2	102.5454151	108.5785842	100.1006553	98.87597698	104.7257761	98.16557682	99.48057162	103.8912096	102.4160068	100.3165819
10/3/2019 00:46	9100496-msd2	104.0092057	103.6165574	101.5721653	103.022418	102.8287653	99.67136339	103.191054	100.9315103	101.6418349	99.54134235
10/3/2019 00:51	9100516-BLK1	100.9883222	98.74686424	96.08623011	96.95602273	100.0483632	95.78489298	97.88195344	98.28435331	97.5642616	95.38581002
10/3/2019 00:55	9100516-BLK2	101.6223975	100.9730086	97.39235103	97.33658642	101.5317374	96.56817904	98.01435703	97.5803676	101.2921481	99.23928459
10/3/2019 01:00	9100516-BS1	101.502529	98.86349738	97.55704841	94.75575995	101.8273912	96.1634489	95.63526568	98.42887564	95.58131602	96.70807812
10/3/2019 01:04	A9I0844-02	105.9332968	112.7852995	102.6181461	105.8377991	105.6702587	100.9223072	106.1926913	101.2856035	107.0326528	97.5011118
10/3/2019 01:08	9J02063-CCV6	106.4354338	105.6712894	102.675383	103.2300091	104.3638193	99.31078782	101.4078333	99.78478839	101.2913151	97.86896704
10/3/2019 01:13	9J02063-CCB6	104.3359095	103.4025845	98.79243776	101.2064427	102.8767062	97.36370363	100.8152333	98.65774275	99.08586399	95.97250614
10/3/2019 01:17	9100516-dup1	104.7756089	108.4129823	102.6699268	99.12947546	107.5804261	100.4544867	98.417331	100.3998439	102.9085085	97.31540475
10/3/2019 01:22	9100516-ms1	105.31578	113.2539223	103.6279252	105.7022019	107.648061	99.68683524	104.8411361	102.8846164	105.7093608	97.69007373
10/3/2019 01:26	A9I0958-01	109.3828112	124.1495018	108.8042526	112.46463	113.2635444	104.7938226	109.7523891	105.9618978	109.4610745	100.0867357
10/3/2019 01:31	A9J0011-01	107.653972	116.2306452	104.0646176	108.1242252	107.3080273	100.9762551	106.7792102	102.6994962	108.3333506	100.3519854
10/3/2019 01:35	9100516-msd1	105.3729543	107.2482711	101.4649001	103.208689	104.4657016	99.33632833	102.9334301	99.2510205	101.544724	98.79968465
10/3/2019 01:39	9J02063-CCV7	106.7610114	109.3149327	103.1660156	107.3452823	101.3059274	100.6319146	105.5696511	99.25570055	104.0412823	96.80302637
10/3/2019 01:44	9J02063-CCB7	106.3037384	105.7526668	105.3595529	105.4877952	105.9495584	104.3735983	102.7878614	102.5642394	103.4988517	98.60215168
10/3/2019 01:48	9J02063-CRL9	106.2017513	106.8608507	102.701873	102.9545466	106.1830148	102.7229536	104.4811044	101.3756805	102.7303956	99.16917903
10/3/2019 01:53	9J02063-CRLA	98.15688683	103.9510037	95.16343699	101.9582327	101.5892367	95.27069732	101.4836034	94.35522012	100.6512825	91.20259681
10/3/2019 01:57	9J02063-CRLB	102.6939963	104.4004511	98.40130216	102.3399366	104.7445403	97.22948202	101.3834469	98.46364583	100.2376031	95.25023389
10/3/2019 02:02	9J02063-CRLC	104.0285703	106.7235518	101.2584546	104.8023037	103.1553686	99.36027052	104.2164736	99.94000774	102.9129217	95.75478943
10/3/2019 02:06	9100528-BLK1	105.6704108	105.3693619	103.1928794	102.7479921	101.1021967	101.1635291	101.9125336	100.4705299	101.7839067	99.03781883
10/3/2019 02:11	9100528-BS1	104.0556647	102.1684157	99.98555662	98.85357247	101.2339271	100.3531501	100.6797226	101.0637107	100.1323982	95.72809559
10/3/2019 02:15	A9J0018-01	107.019309	108.693023	102.5471186	103.8061891	101.7846248	102.8223198	104.1705137	103.4645193	105.3429138	98.75486579
10/3/2019 02:19	A9J0018-02	104.7936517	118.6639551	106.8267666	107.8527956	109.5924156	103.3542569	106.9292691	104.8276895	106.2002138	98.76147128
10/3/2019 02:24	9100528-DUP1	104.5564018	112.2344775	103.0185359	102.9945255	105.664139	102.1792825	101.6159216	104.5681627	103.7632942	97.57037548
10/3/2019 02:28	9100528-MS1	101.7445632	114.3188299	101.2446705	103.0315999	106.2967962	98.3256707	103.1526204	103.224477	103.5150627	97.53216092
10/3/2019 02:33	9100528-MSD1	102.3039657	109.2438627	102.7396042	106.5582937	108.5368356	100.4069043	106.1401735	100.6867855	103.4745386	98.50984844
10/3/2019 02:37	9J02063-CCV8	104.9413189	104.7711776	103.9255291	101.2441291	106.436139	100.5236449	100.678769	103.1288598	100.4043059	98.81466917
10/3/2019 02:42	9J02063-CCB8	102.2037262	101.7484687	99.3789014	100.1233016	101.2243114	97.5681552	99.7631395	98.44989097	99.58488931	95.22204093
10/3/2019 02:46	9J02063-CRLD	101.8232228	101.5501672	97.2603919	99.29932632	103.549404	96.64063702	99.50356521	98.04956492	99.94469241	95.72135212
10/3/2019 02:50	9J02063-CRLE	103.6933328	101.7938864	98.81139905	99.57201785	101.7207119	98.12181818	99.49009463	99.93026329	100.3902612	96.8105206
10/3/2019 02:55	9J02063-CRLF	103.0495363	101.0766917	97.3017734	98.84906525	103.2021307	96.12631503	98.92546138	97.8793471	99.38020487	95.28217243
10/3/2019 02:59	9J02063-CRLG	102.2628817	102.8162609	100.1439046	100.6405967	106.2591424	98.90550934	100.4519592	98.49488162	100.5445482	94.65543538
10/3/2019 03:04	Final Rinse	104.4884937	103.0738307	100.0404744	101.03226	103.2718833	98.84129393	101.1990584	100.8768734	102.6255299	97.92525909
10/3/2019 03:08	Final Rinse	104.8232063	105.9297716	100.0830508	102.1387525	103.5081351	98.56571741	104.6736081	100.641034	104.6267122	97.86259852