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Project: Green Tweed & Co.

Client PO: 09.DP0013.00

Report To: Envirotrac LTD.
400 Corporate Court
Suite E
South Plainfield, NJ 07080

Attn: Ken Hayes

Received Date: 5/24/2018

Report Date: 6/19/2018

Deliverables: PADEP-R

Lab ID: AD04394

Lab Project No: 8052424

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Robin Cousineau - Quality Assurance Director OR **Jean Revolus - Laboratory Director**

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8052424_SUB.pdf

Sample Summary

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD04394-001	SB2_7.0_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-002	SB1_9.0_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-003	SB7_14.5_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-004	SB6_14.5_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-005	SB5_14.5_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-006	DUP01_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-007	SB4_14.5_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-008	SB3_7.0_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-009	SB8_8.0_052318	Soil/Terracore	5/23/2018	5/24/2018
AD04394-010	FB01_052318	Aqueous	5/23/2018	5/24/2018
AD04394-011	TB01_052318	Aqueous	5/23/2018	5/24/2018

HC Case Narrative

Client: Envirotrac LTD
Project: Green Tweed & Co

HC Project: 8052424

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

The Method Blank Spike for batches 70125, 70134, 70140 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 70134, 70140 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

2-Chloroethylvinylether did not recover in the Matrix Spike and Matrix Spike Duplicate in batch 70134 due to acid preservation of sample. 2-Chloroethylvinylether readily decomposes under acidic conditions. The recovery of 2-Chloroethylvinylether is within QC limits in the Laboratory Control Sample. Please refer to the applicable Form 3 for the recoveries.

Base Neutral/Acid Extractable Analysis:

Sample AD04394-004 was analyzed at a dilution due to high concentration of non-target analytes.

The Method Blank Spike for batches WMB68102, SMB68114 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches WMB68102, SMB68114 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Sample AD04391-002 (MSD) has a surrogate recovery outside QC limits. Please refer to the applicable Form 2 for the recoveries.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batches 68501, 68500 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The Post Spike for batch 68493 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 68500. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

Data conforms to method requirements.

Subcontracted Analysis:

Please refer to attached subcontracted laboratory report. Sample AD04394-009 was submitted to TestAmerica for Volatile Organics (EPA 8260C) analysis.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

6/19/2018
Date

HC Executive Summary

Client: Envirotrac LTD.

Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-001 **Sample ID: SB2_7.0_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	170	EPA 6010C
Chromium	mg/kg	5.8	33	EPA 6010C
Lead	mg/kg	5.8	40	EPA 6010C
Arsenic	mg/kg	0.23	6.5	EPA 6020A
Selenium	mg/kg	2.3	2.7	EPA 6020A
cis-1,2-Dichloroethene	mg/kg	0.096	0.17	EPA 8260C
Methyl Acetate	mg/kg	0.096	0.40	EPA 8260C
Tetrachloroethene	mg/kg	0.096	0.81	EPA 8260C
TotalVolatileTic	mg/kg	NA	2J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.039	0.11	EPA 8270D
Benzo[a]pyrene	mg/kg	0.039	0.10	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.039	0.14	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.039	0.078	EPA 8270D
Benzo[k]fluoranthene	mg/kg	0.039	0.042	EPA 8270D
Chrysene	mg/kg	0.039	0.096	EPA 8270D
Fluoranthene	mg/kg	0.039	0.12	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.039	0.065	EPA 8270D
Phenanthrene	mg/kg	0.039	0.059	EPA 8270D
Pyrene	mg/kg	0.039	0.15	EPA 8270D

Lab#: AD04394-002 **Sample ID: SB1_9.0_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	210	EPA 6010C
Chromium	mg/kg	6.0	28	EPA 6010C
Lead	mg/kg	6.0	49	EPA 6010C
Arsenic	mg/kg	0.24	7.9	EPA 6020A
Selenium	mg/kg	2.4	3.3	EPA 6020A
2-Butanone	mg/kg	0.11	0.14	EPA 8260C
Methyl Acetate	mg/kg	0.11	0.40	EPA 8260C
Methylcyclohexane	mg/kg	0.11	0.26	EPA 8260C
Tetrachloroethene	mg/kg	0.11	0.89	EPA 8260C
Toluene	mg/kg	0.11	1.1	EPA 8260C
TotalVolatileTic	mg/kg	NA	2.3J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.040	0.12	EPA 8270D
Benzo[a]pyrene	mg/kg	0.040	0.089	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.040	0.12	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.040	0.067	EPA 8270D
Chrysene	mg/kg	0.040	0.12	EPA 8270D
Fluoranthene	mg/kg	0.040	0.17	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.040	0.052	EPA 8270D
Phenanthrene	mg/kg	0.040	0.10	EPA 8270D
Pyrene	mg/kg	0.040	0.15	EPA 8270D

HC Executive Summary

Client: Envirotrac LTD.

Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-003 **Sample ID: SB7_14.5_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	190	EPA 6010C
Chromium	mg/kg	6.0	27	EPA 6010C
Lead	mg/kg	6.0	47	EPA 6010C
Arsenic	mg/kg	0.24	10	EPA 6020A
cis-1,2-Dichloroethene	mg/kg	0.10	0.17	EPA 8260C
Methyl Acetate	mg/kg	0.10	0.41	EPA 8260C
Methylcyclohexane	mg/kg	0.10	0.26	EPA 8260C
Tetrachloroethene	mg/kg	0.10	0.46	EPA 8260C
Toluene	mg/kg	0.10	2.9	EPA 8260C
TotalVolatileTic	mg/kg	NA	1.5J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.040	0.092	EPA 8270D
Benzo[a]pyrene	mg/kg	0.040	0.068	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.040	0.11	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.040	0.044	EPA 8270D
Chrysene	mg/kg	0.040	0.091	EPA 8270D
Fluoranthene	mg/kg	0.040	0.15	EPA 8270D
Naphthalene	mg/kg	0.010	0.011	EPA 8270D
Phenanthrene	mg/kg	0.040	0.10	EPA 8270D
Pyrene	mg/kg	0.040	0.12	EPA 8270D

Lab#: AD04394-004 **Sample ID: SB6_14.5_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	240	EPA 6010C
Chromium	mg/kg	5.8	43	EPA 6010C
Lead	mg/kg	5.8	65	EPA 6010C
Arsenic	mg/kg	0.23	9.9	EPA 6020A
Selenium	mg/kg	2.3	3.7	EPA 6020A
2-Butanone	mg/kg	0.083	0.19	EPA 8260C
cis-1,2-Dichloroethene	mg/kg	0.083	0.21	EPA 8260C
Methyl Acetate	mg/kg	0.083	0.30	EPA 8260C
Methylcyclohexane	mg/kg	0.083	0.21	EPA 8260C
Tetrachloroethene	mg/kg	0.083	0.35	EPA 8260C
Toluene	mg/kg	0.083	1.8	EPA 8260C
TotalVolatileTic	mg/kg	NA	1.8J	EPA 8260C

HC Executive Summary

Client: Envirotrac LTD.

Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-005 **Sample ID: SB5_14.5_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	170	EPA 6010C
Chromium	mg/kg	6.1	28	EPA 6010C
Lead	mg/kg	6.1	51	EPA 6010C
Arsenic	mg/kg	0.24	22	EPA 6020A
Cadmium	mg/kg	0.49	0.52	EPA 6020A
Selenium	mg/kg	2.4	4.4	EPA 6020A
cis-1,2-Dichloroethene	mg/kg	0.089	0.29	EPA 8260C
m&p-Xylenes	mg/kg	0.089	0.11	EPA 8260C
Methyl Acetate	mg/kg	0.089	0.36	EPA 8260C
Methylcyclohexane	mg/kg	0.089	0.22	EPA 8260C
Tetrachloroethene	mg/kg	0.089	0.48	EPA 8260C
Toluene	mg/kg	0.089	5.2	EPA 8260C
Xylenes (Total)	mg/kg	0.089	0.11	EPA 8260C
TotalVolatileTic	mg/kg	NA	1.5J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.041	0.10	EPA 8270D
Benzo[a]pyrene	mg/kg	0.041	0.087	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.041	0.13	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.041	0.071	EPA 8270D
Benzo[k]fluoranthene	mg/kg	0.041	0.043	EPA 8270D
Chrysene	mg/kg	0.041	0.11	EPA 8270D
Fluoranthene	mg/kg	0.041	0.19	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.041	0.061	EPA 8270D
Naphthalene	mg/kg	0.010	0.014	EPA 8270D
Phenanthrene	mg/kg	0.041	0.11	EPA 8270D
Pyrene	mg/kg	0.041	0.14	EPA 8270D

HC Executive Summary

Client: Envirotrac LTD.

Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-006 **Sample ID: DUP01_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	200	EPA 6010C
Chromium	mg/kg	6.0	41	EPA 6010C
Lead	mg/kg	6.0	51	EPA 6010C
Arsenic	mg/kg	0.24	11	EPA 6020A
Selenium	mg/kg	2.4	2.8	EPA 6020A
2-Butanone	mg/kg	0.086	0.12	EPA 8260C
cis-1,2-Dichloroethene	mg/kg	0.086	0.17	EPA 8260C
m&p-Xylenes	mg/kg	0.086	0.15	EPA 8260C
Methyl Acetate	mg/kg	0.086	0.35	EPA 8260C
Methylcyclohexane	mg/kg	0.086	0.24	EPA 8260C
Tetrachloroethene	mg/kg	0.086	0.31	EPA 8260C
Toluene	mg/kg	0.086	1.7	EPA 8260C
Xylenes (Total)	mg/kg	0.086	0.15	EPA 8260C
TotalVolatileTic	mg/kg	NA	1.7J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.040	0.081	EPA 8270D
Benzo[a]pyrene	mg/kg	0.040	0.065	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.040	0.094	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.040	0.060	EPA 8270D
Chrysene	mg/kg	0.040	0.085	EPA 8270D
Fluoranthene	mg/kg	0.040	0.13	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.040	0.044	EPA 8270D
Phenanthrene	mg/kg	0.040	0.077	EPA 8270D
Pyrene	mg/kg	0.040	0.10	EPA 8270D

HC Executive Summary

Client: Envirotrac LTD.

HC Project #: 8052424

Project: Green Tweed & Co.

Lab#: AD04394-007 **Sample ID: SB4_14.5_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	240	EPA 6010C
Chromium	mg/kg	5.9	49	EPA 6010C
Lead	mg/kg	5.9	72	EPA 6010C
Arsenic	mg/kg	0.24	11	EPA 6020A
Selenium	mg/kg	2.4	3.1	EPA 6020A
2-Butanone	mg/kg	0.095	0.15	EPA 8260C
cis-1,2-Dichloroethene	mg/kg	0.095	0.23	EPA 8260C
m&p-Xylenes	mg/kg	0.095	0.16	EPA 8260C
Methyl Acetate	mg/kg	0.095	0.39	EPA 8260C
Methylcyclohexane	mg/kg	0.095	0.27	EPA 8260C
Tetrachloroethene	mg/kg	0.095	0.38	EPA 8260C
Toluene	mg/kg	0.095	2.2	EPA 8260C
Xylenes (Total)	mg/kg	0.095	0.16	EPA 8260C
TotalVolatileTic	mg/kg	NA	1.1J	EPA 8260C
2-Methylnaphthalene	mg/kg	0.039	0.042	EPA 8270D
Acenaphthene	mg/kg	0.039	0.042	EPA 8270D
Anthracene	mg/kg	0.039	0.10	EPA 8270D
Benzo[a]anthracene	mg/kg	0.039	0.28	EPA 8270D
Benzo[a]pyrene	mg/kg	0.039	0.22	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.039	0.31	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.039	0.14	EPA 8270D
Benzo[k]fluoranthene	mg/kg	0.039	0.12	EPA 8270D
Chrysene	mg/kg	0.039	0.25	EPA 8270D
Dibenzo[a,h]anthracene	mg/kg	0.039	0.041	EPA 8270D
Fluoranthene	mg/kg	0.039	0.54	EPA 8270D
Fluorene	mg/kg	0.039	0.054	EPA 8270D
Naphthalene	mg/kg	0.0098	0.027	EPA 8270D
Phenanthrene	mg/kg	0.039	0.38	EPA 8270D
Pyrene	mg/kg	0.039	0.37	EPA 8270D

HC Executive Summary

Client: Envirotrac LTD.

HC Project #: 8052424

Project: Green Tweed & Co.

Lab#: AD04394-008 **Sample ID: SB3_7.0_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	12	140	EPA 6010C
Chromium	mg/kg	6.0	39	EPA 6010C
Lead	mg/kg	6.0	77	EPA 6010C
Arsenic	mg/kg	0.24	11	EPA 6020A
cis-1,2-Dichloroethene	mg/kg	0.13	0.14	EPA 8260C
Methyl Acetate	mg/kg	0.13	0.48	EPA 8260C
Methylcyclohexane	mg/kg	0.13	0.22	EPA 8260C
Tetrachloroethene	mg/kg	0.13	0.62	EPA 8260C
Toluene	mg/kg	0.13	2.0	EPA 8260C
TotalVolatileTic	mg/kg	NA	2.3J	EPA 8260C
Benzo[a]anthracene	mg/kg	0.040	0.074	EPA 8270D
Benzo[a]pyrene	mg/kg	0.040	0.062	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.040	0.094	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.040	0.049	EPA 8270D
Chrysene	mg/kg	0.040	0.075	EPA 8270D
Fluoranthene	mg/kg	0.040	0.12	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.040	0.043	EPA 8270D
Naphthalene	mg/kg	0.010	0.011	EPA 8270D
Phenanthrene	mg/kg	0.040	0.076	EPA 8270D
Pyrene	mg/kg	0.040	0.095	EPA 8270D

HC Executive Summary

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-009 **Sample ID: SB8_8.0_052318**

Analyte	Units	RL	Result	Analytical Method
Barium	mg/kg	11	83	EPA 6010C
Chromium	mg/kg	5.6	31	EPA 6010C
Lead	mg/kg	5.6	21	EPA 6010C
Arsenic	mg/kg	0.22	1.3	EPA 6020A
1,1,1-Trichloroethane			Attached	EPA 8260C
1,1,2,2-Tetrachloroethane			Attached	EPA 8260C
1,1,2-Trichloro-1,2,2-trifluoroethane			Attached	EPA 8260C
1,1,2-Trichloroethane			Attached	EPA 8260C
1,1-Dichloroethane			Attached	EPA 8260C
1,1-Dichloroethene			Attached	EPA 8260C
1,2,3-Trichlorobenzene			Attached	EPA 8260C
1,2,4-Trichlorobenzene			Attached	EPA 8260C
1,2-Dibromo-3-chloropropane			Attached	EPA 8260C
1,2-Dibromoethane			Attached	EPA 8260C
1,2-Dichlorobenzene			Attached	EPA 8260C
1,2-Dichloroethane			Attached	EPA 8260C
1,2-Dichloropropane			Attached	EPA 8260C
1,3-Dichlorobenzene			Attached	EPA 8260C
1,4-Dichlorobenzene			Attached	EPA 8260C
1,4-Dioxane			Attached	EPA 8260C
2-Butanone			Attached	EPA 8260C
2-Hexanone			Attached	EPA 8260C
4-Methyl-2-pentanone			Attached	EPA 8260C
Acetone			Attached	EPA 8260C
Benzene			Attached	EPA 8260C
Bromochloromethane			Attached	EPA 8260C
Bromodichloromethane			Attached	EPA 8260C
Bromoform			Attached	EPA 8260C
Bromomethane			Attached	EPA 8260C
Carbon disulfide			Attached	EPA 8260C
Carbon tetrachloride			Attached	EPA 8260C
Chlorobenzene			Attached	EPA 8260C
Chloroethane			Attached	EPA 8260C
Chloroform			Attached	EPA 8260C
Chloromethane			Attached	EPA 8260C
cis-1,2-Dichloroethene			Attached	EPA 8260C
cis-1,3-Dichloropropene			Attached	EPA 8260C
Cyclohexane			Attached	EPA 8260C
Dibromochloromethane			Attached	EPA 8260C
Dichlorodifluoromethane			Attached	EPA 8260C
Ethylbenzene			Attached	EPA 8260C
Isopropylbenzene			Attached	EPA 8260C
m&p-Xylenes			Attached	EPA 8260C
Methyl Acetate			Attached	EPA 8260C
Methylcyclohexane			Attached	EPA 8260C
Methylene chloride			Attached	EPA 8260C
Methyl-t-butyl ether			Attached	EPA 8260C
o-Xylene			Attached	EPA 8260C
Styrene			Attached	EPA 8260C
Tetrachloroethene			Attached	EPA 8260C
Toluene			Attached	EPA 8260C
trans-1,2-Dichloroethene			Attached	EPA 8260C

HC Executive Summary

Client: Envirotrac LTD.

HC Project #: 8052424

Project: Green Tweed & Co.

trans-1,3-Dichloropropene	Attached	EPA 8260C
Trichloroethene	Attached	EPA 8260C
Trichlorofluoromethane	Attached	EPA 8260C
Vinyl chloride	Attached	EPA 8260C

HC Report of Analysis

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Sample ID: SB2_7.0_052318
Lab#: AD04394-001
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.039**	**0.11**
Benzo[a]pyrene	**1**	**mg/kg**	**0.039**	**0.10**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.039**	**0.14**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.039**	**0.078**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.039**	**0.042**
Chrysene	**1**	**mg/kg**	**0.039**	**0.096**
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Fluoranthene	**1**	**mg/kg**	**0.039**	**0.12**
Fluorene	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.039**	**0.065**
Naphthalene	1	mg/kg	0.0097	ND
Phenanthrene	**1**	**mg/kg**	**0.039**	**0.059**
Pyrene	**1**	**mg/kg**	**0.039**	**0.15**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**170**
Chromium	**1**	**mg/kg**	**5.8**	**33**
Lead	**1**	**mg/kg**	**5.8**	**40**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.23**	**6.5**
Cadmium	1	mg/kg	0.47	ND
Selenium	**1**	**mg/kg**	**2.3**	**2.7**
Silver	1	mg/kg	0.23	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	82.6	mg/kg	0.096	ND
1,1,2,2-Tetrachloroethane	82.6	mg/kg	0.096	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	82.6	mg/kg	0.096	ND
1,1,2-Trichloroethane	82.6	mg/kg	0.096	ND
1,1-Dichloroethane	82.6	mg/kg	0.096	ND
1,1-Dichloroethene	82.6	mg/kg	0.096	ND
1,2,3-Trichlorobenzene	82.6	mg/kg	0.096	ND
1,2,4-Trichlorobenzene	82.6	mg/kg	0.096	ND

Sample ID: SB2_7.0_052318
Lab#: AD04394-001
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,2-Dibromo-3-chloropropane	82.6	mg/kg	0.096	ND
1,2-Dibromoethane	82.6	mg/kg	0.096	ND
1,2-Dichlorobenzene	82.6	mg/kg	0.096	ND
1,2-Dichloroethane	82.6	mg/kg	0.048	ND
1,2-Dichloropropane	82.6	mg/kg	0.096	ND
1,3-Dichlorobenzene	82.6	mg/kg	0.096	ND
1,4-Dichlorobenzene	82.6	mg/kg	0.096	ND
1,4-Dioxane	82.6	mg/kg	4.8	ND
2-Butanone	82.6	mg/kg	0.096	ND
2-Hexanone	82.6	mg/kg	0.096	ND
4-Methyl-2-pentanone	82.6	mg/kg	0.096	ND
Acetone	82.6	mg/kg	0.48	ND
Benzene	82.6	mg/kg	0.048	ND
Bromochloromethane	82.6	mg/kg	0.096	ND
Bromodichloromethane	82.6	mg/kg	0.096	ND
Bromoform	82.6	mg/kg	0.096	ND
Bromomethane	82.6	mg/kg	0.096	ND
Carbon disulfide	82.6	mg/kg	0.096	ND
Carbon tetrachloride	82.6	mg/kg	0.096	ND
Chlorobenzene	82.6	mg/kg	0.096	ND
Chloroethane	82.6	mg/kg	0.096	ND
Chloroform	82.6	mg/kg	0.096	ND
Chloromethane	82.6	mg/kg	0.096	ND
cis-1,2-Dichloroethene	**82.6**	**mg/kg**	**0.096**	**0.17**
cis-1,3-Dichloropropene	82.6	mg/kg	0.096	ND
Cyclohexane	82.6	mg/kg	0.096	ND
Dibromochloromethane	82.6	mg/kg	0.096	ND
Dichlorodifluoromethane	82.6	mg/kg	0.096	ND
Ethylbenzene	82.6	mg/kg	0.096	ND
Isopropylbenzene	82.6	mg/kg	0.096	ND
m&p-Xylenes	82.6	mg/kg	0.096	ND
Methyl Acetate	**82.6**	**mg/kg**	**0.096**	**0.40**
Methylcyclohexane	82.6	mg/kg	0.096	ND
Methylene chloride	82.6	mg/kg	0.096	ND
Methyl-t-butyl ether	82.6	mg/kg	0.048	ND
o-Xylene	82.6	mg/kg	0.096	ND
Styrene	82.6	mg/kg	0.096	ND
Tetrachloroethene	**82.6**	**mg/kg**	**0.096**	**0.81**
Toluene	82.6	mg/kg	0.096	ND
trans-1,2-Dichloroethene	82.6	mg/kg	0.096	ND
trans-1,3-Dichloropropene	82.6	mg/kg	0.096	ND
Trichloroethene	82.6	mg/kg	0.096	ND
Trichlorofluoromethane	82.6	mg/kg	0.096	ND
Vinyl chloride	82.6	mg/kg	0.096	ND
Xylenes (Total)	82.6	mg/kg	0.096	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**82.6**	**mg/kg**	**2.23**	**2.0J**
TotalVolatileTic	**82.6**	**mg/kg**	**NA**	**2J**

Sample ID: SB1_9.0_052318
Lab#: AD04394-002
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**84**

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.099	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.040**	**0.12**
Benzo[a]pyrene	**1**	**mg/kg**	**0.040**	**0.089**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.040**	**0.12**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.040**	**0.067**
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
Chrysene	**1**	**mg/kg**	**0.040**	**0.12**
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Fluoranthene	**1**	**mg/kg**	**0.040**	**0.17**
Fluorene	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.040**	**0.052**
Naphthalene	1	mg/kg	0.0099	ND
Phenanthrene	**1**	**mg/kg**	**0.040**	**0.10**
Pyrene	**1**	**mg/kg**	**0.040**	**0.15**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**210**
Chromium	**1**	**mg/kg**	**6.0**	**28**
Lead	**1**	**mg/kg**	**6.0**	**49**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.24**	**7.9**
Cadmium	1	mg/kg	0.48	ND
Selenium	**1**	**mg/kg**	**2.4**	**3.3**
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	90.6	mg/kg	0.11	ND
1,1,2,2-Tetrachloroethane	90.6	mg/kg	0.11	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	90.6	mg/kg	0.11	ND
1,1,2-Trichloroethane	90.6	mg/kg	0.11	ND
1,1-Dichloroethane	90.6	mg/kg	0.11	ND
1,1-Dichloroethene	90.6	mg/kg	0.11	ND
1,2,3-Trichlorobenzene	90.6	mg/kg	0.11	ND
1,2,4-Trichlorobenzene	90.6	mg/kg	0.11	ND
1,2-Dibromo-3-chloropropane	90.6	mg/kg	0.11	ND
1,2-Dibromoethane	90.6	mg/kg	0.11	ND
1,2-Dichlorobenzene	90.6	mg/kg	0.11	ND
1,2-Dichloroethane	90.6	mg/kg	0.054	ND
1,2-Dichloropropane	90.6	mg/kg	0.11	ND
1,3-Dichlorobenzene	90.6	mg/kg	0.11	ND

Sample ID: SB1_9.0_052318
Lab#: AD04394-002
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	90.6	mg/kg	0.11	ND
1,4-Dioxane	90.6	mg/kg	5.4	ND
2-Butanone	**90.6**	**mg/kg**	**0.11**	**0.14**
2-Hexanone	90.6	mg/kg	0.11	ND
4-Methyl-2-pentanone	90.6	mg/kg	0.11	ND
Acetone	90.6	mg/kg	0.54	ND
Benzene	90.6	mg/kg	0.054	ND
Bromochloromethane	90.6	mg/kg	0.11	ND
Bromodichloromethane	90.6	mg/kg	0.11	ND
Bromoform	90.6	mg/kg	0.11	ND
Bromomethane	90.6	mg/kg	0.11	ND
Carbon disulfide	90.6	mg/kg	0.11	ND
Carbon tetrachloride	90.6	mg/kg	0.11	ND
Chlorobenzene	90.6	mg/kg	0.11	ND
Chloroethane	90.6	mg/kg	0.11	ND
Chloroform	90.6	mg/kg	0.11	ND
Chloromethane	90.6	mg/kg	0.11	ND
cis-1,2-Dichloroethene	90.6	mg/kg	0.11	ND
cis-1,3-Dichloropropene	90.6	mg/kg	0.11	ND
Cyclohexane	90.6	mg/kg	0.11	ND
Dibromochloromethane	90.6	mg/kg	0.11	ND
Dichlorodifluoromethane	90.6	mg/kg	0.11	ND
Ethylbenzene	90.6	mg/kg	0.11	ND
Isopropylbenzene	90.6	mg/kg	0.11	ND
m&p-Xylenes	90.6	mg/kg	0.11	ND
Methyl Acetate	**90.6**	**mg/kg**	**0.11**	**0.40**
Methylcyclohexane	**90.6**	**mg/kg**	**0.11**	**0.26**
Methylene chloride	90.6	mg/kg	0.11	ND
Methyl-t-butyl ether	90.6	mg/kg	0.054	ND
o-Xylene	90.6	mg/kg	0.11	ND
Styrene	90.6	mg/kg	0.11	ND
Tetrachloroethene	**90.6**	**mg/kg**	**0.11**	**0.89**
Toluene	**90.6**	**mg/kg**	**0.11**	**1.1**
trans-1,2-Dichloroethene	90.6	mg/kg	0.11	ND
trans-1,3-Dichloropropene	90.6	mg/kg	0.11	ND
Trichloroethene	90.6	mg/kg	0.11	ND
Trichlorofluoromethane	90.6	mg/kg	0.11	ND
Vinyl chloride	90.6	mg/kg	0.11	ND
Xylenes (Total)	90.6	mg/kg	0.11	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**90.6**	**mg/kg**	**2.23**	**2.3J**
TotalVolatileTic	**90.6**	**mg/kg**	**NA**	**2.3J**

Sample ID: SB7_14.5_052318
Lab#: AD04394-003
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.040**	**0.092**
Benzo[a]pyrene	**1**	**mg/kg**	**0.040**	**0.068**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.040**	**0.11**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.040**	**0.044**
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
Chrysene	**1**	**mg/kg**	**0.040**	**0.091**
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Fluoranthene	**1**	**mg/kg**	**0.040**	**0.15**
Fluorene	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Naphthalene	**1**	**mg/kg**	**0.010**	**0.011**
Phenanthrene	**1**	**mg/kg**	**0.040**	**0.10**
Pyrene	**1**	**mg/kg**	**0.040**	**0.12**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**190**
Chromium	**1**	**mg/kg**	**6.0**	**27**
Lead	**1**	**mg/kg**	**6.0**	**47**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.24**	**10**
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	86.7	mg/kg	0.10	ND
1,1,2,2-Tetrachloroethane	86.7	mg/kg	0.10	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	86.7	mg/kg	0.10	ND
1,1,2-Trichloroethane	86.7	mg/kg	0.10	ND
1,1-Dichloroethane	86.7	mg/kg	0.10	ND
1,1-Dichloroethene	86.7	mg/kg	0.10	ND
1,2,3-Trichlorobenzene	86.7	mg/kg	0.10	ND
1,2,4-Trichlorobenzene	86.7	mg/kg	0.10	ND
1,2-Dibromo-3-chloropropane	86.7	mg/kg	0.10	ND
1,2-Dibromoethane	86.7	mg/kg	0.10	ND
1,2-Dichlorobenzene	86.7	mg/kg	0.10	ND
1,2-Dichloroethane	86.7	mg/kg	0.052	ND
1,2-Dichloropropane	86.7	mg/kg	0.10	ND
1,3-Dichlorobenzene	86.7	mg/kg	0.10	ND

Sample ID: SB7_14.5_052318
Lab#: AD04394-003
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	86.7	mg/kg	0.10	ND
1,4-Dioxane	86.7	mg/kg	5.2	ND
2-Butanone	86.7	mg/kg	0.10	ND
2-Hexanone	86.7	mg/kg	0.10	ND
4-Methyl-2-pentanone	86.7	mg/kg	0.10	ND
Acetone	86.7	mg/kg	0.52	ND
Benzene	86.7	mg/kg	0.052	ND
Bromochloromethane	86.7	mg/kg	0.10	ND
Bromodichloromethane	86.7	mg/kg	0.10	ND
Bromoform	86.7	mg/kg	0.10	ND
Bromomethane	86.7	mg/kg	0.10	ND
Carbon disulfide	86.7	mg/kg	0.10	ND
Carbon tetrachloride	86.7	mg/kg	0.10	ND
Chlorobenzene	86.7	mg/kg	0.10	ND
Chloroethane	86.7	mg/kg	0.10	ND
Chloroform	86.7	mg/kg	0.10	ND
Chloromethane	86.7	mg/kg	0.10	ND
cis-1,2-Dichloroethene	**86.7**	**mg/kg**	**0.10**	**0.17**
cis-1,3-Dichloropropene	86.7	mg/kg	0.10	ND
Cyclohexane	86.7	mg/kg	0.10	ND
Dibromochloromethane	86.7	mg/kg	0.10	ND
Dichlorodifluoromethane	86.7	mg/kg	0.10	ND
Ethylbenzene	86.7	mg/kg	0.10	ND
Isopropylbenzene	86.7	mg/kg	0.10	ND
m&p-Xylenes	86.7	mg/kg	0.10	ND
Methyl Acetate	**86.7**	**mg/kg**	**0.10**	**0.41**
Methylcyclohexane	**86.7**	**mg/kg**	**0.10**	**0.26**
Methylene chloride	86.7	mg/kg	0.10	ND
Methyl-t-butyl ether	86.7	mg/kg	0.052	ND
o-Xylene	86.7	mg/kg	0.10	ND
Styrene	86.7	mg/kg	0.10	ND
Tetrachloroethene	**86.7**	**mg/kg**	**0.10**	**0.46**
Toluene	**86.7**	**mg/kg**	**0.10**	**2.9**
trans-1,2-Dichloroethene	86.7	mg/kg	0.10	ND
trans-1,3-Dichloropropene	86.7	mg/kg	0.10	ND
Trichloroethene	86.7	mg/kg	0.10	ND
Trichlorofluoromethane	86.7	mg/kg	0.10	ND
Vinyl chloride	86.7	mg/kg	0.10	ND
Xylenes (Total)	86.7	mg/kg	0.10	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**86.7**	**mg/kg**	**2.22**	**1.5J**
TotalVolatileTic	**86.7**	**mg/kg**	**NA**	**1.5J**

Sample ID: SB6_14.5_052318
Lab#: AD04394-004
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	5	mg/kg	0.19	ND
Acenaphthene	5	mg/kg	0.19	ND
Acenaphthylene	5	mg/kg	0.19	ND
Anthracene	5	mg/kg	0.19	ND
Benzo[a]anthracene	5	mg/kg	0.19	ND
Benzo[a]pyrene	5	mg/kg	0.19	ND
Benzo[b]fluoranthene	5	mg/kg	0.19	ND
Benzo[g,h,i]perylene	5	mg/kg	0.19	ND
Benzo[k]fluoranthene	5	mg/kg	0.19	ND
Chrysene	5	mg/kg	0.19	ND
Dibenzo[a,h]anthracene	5	mg/kg	0.19	ND
Fluoranthene	5	mg/kg	0.19	ND
Fluorene	5	mg/kg	0.19	ND
Indeno[1,2,3-cd]pyrene	5	mg/kg	0.19	ND
Naphthalene	5	mg/kg	0.048	ND
Phenanthrene	5	mg/kg	0.19	ND
Pyrene	5	mg/kg	0.19	ND

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**240**
Chromium	**1**	**mg/kg**	**5.8**	**43**
Lead	**1**	**mg/kg**	**5.8**	**65**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.23**	**9.9**
Cadmium	1	mg/kg	0.47	ND
Selenium	**1**	**mg/kg**	**2.3**	**3.7**
Silver	1	mg/kg	0.23	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	71	mg/kg	0.083	ND
1,1,2,2-Tetrachloroethane	71	mg/kg	0.083	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	71	mg/kg	0.083	ND
1,1,2-Trichloroethane	71	mg/kg	0.083	ND
1,1-Dichloroethane	71	mg/kg	0.083	ND
1,1-Dichloroethene	71	mg/kg	0.083	ND
1,2,3-Trichlorobenzene	71	mg/kg	0.083	ND
1,2,4-Trichlorobenzene	71	mg/kg	0.083	ND
1,2-Dibromo-3-chloropropane	71	mg/kg	0.083	ND
1,2-Dibromoethane	71	mg/kg	0.083	ND
1,2-Dichlorobenzene	71	mg/kg	0.083	ND
1,2-Dichloroethane	71	mg/kg	0.041	ND
1,2-Dichloropropane	71	mg/kg	0.083	ND
1,3-Dichlorobenzene	71	mg/kg	0.083	ND

Sample ID: SB6_14.5_052318 **Collection Date: 5/23/2018**
Lab#: AD04394-004 **Receipt Date: 5/24/2018**
Matrix: Soil/Terracore

1,4-Dichlorobenzene	71	mg/kg	0.083	ND
1,4-Dioxane	71	mg/kg	4.1	ND
2-Butanone	**71**	**mg/kg**	**0.083**	**0.19**
2-Hexanone	71	mg/kg	0.083	ND
4-Methyl-2-pentanone	71	mg/kg	0.083	ND
Acetone	71	mg/kg	0.41	ND
Benzene	71	mg/kg	0.041	ND
Bromochloromethane	71	mg/kg	0.083	ND
Bromodichloromethane	71	mg/kg	0.083	ND
Bromoform	71	mg/kg	0.083	ND
Bromomethane	71	mg/kg	0.083	ND
Carbon disulfide	71	mg/kg	0.083	ND
Carbon tetrachloride	71	mg/kg	0.083	ND
Chlorobenzene	71	mg/kg	0.083	ND
Chloroethane	71	mg/kg	0.083	ND
Chloroform	71	mg/kg	0.083	ND
Chloromethane	71	mg/kg	0.083	ND
cis-1,2-Dichloroethene	**71**	**mg/kg**	**0.083**	**0.21**
cis-1,3-Dichloropropene	71	mg/kg	0.083	ND
Cyclohexane	71	mg/kg	0.083	ND
Dibromochloromethane	71	mg/kg	0.083	ND
Dichlorodifluoromethane	71	mg/kg	0.083	ND
Ethylbenzene	71	mg/kg	0.083	ND
Isopropylbenzene	71	mg/kg	0.083	ND
m&p-Xylenes	71	mg/kg	0.083	ND
Methyl Acetate	**71**	**mg/kg**	**0.083**	**0.30**
Methylcyclohexane	**71**	**mg/kg**	**0.083**	**0.21**
Methylene chloride	71	mg/kg	0.083	ND
Methyl-t-butyl ether	71	mg/kg	0.041	ND
o-Xylene	71	mg/kg	0.083	ND
Styrene	71	mg/kg	0.083	ND
Tetrachloroethene	**71**	**mg/kg**	**0.083**	**0.35**
Toluene	**71**	**mg/kg**	**0.083**	**1.8**
trans-1,2-Dichloroethene	71	mg/kg	0.083	ND
trans-1,3-Dichloropropene	71	mg/kg	0.083	ND
Trichloroethene	71	mg/kg	0.083	ND
Trichlorofluoromethane	71	mg/kg	0.083	ND
Vinyl chloride	71	mg/kg	0.083	ND
Xylenes (Total)	71	mg/kg	0.083	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**71**	**mg/kg**	**2.22**	**1.8J**
TotalVolatileTic	**71**	**mg/kg**	**NA**	**1.8J**

Sample ID: SB5_14.5_052318
Lab#: AD04394-005
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.041**	**0.10**
Benzo[a]pyrene	**1**	**mg/kg**	**0.041**	**0.087**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.041**	**0.13**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.041**	**0.071**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.041**	**0.043**
Chrysene	**1**	**mg/kg**	**0.041**	**0.11**
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Fluoranthene	**1**	**mg/kg**	**0.041**	**0.19**
Fluorene	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.041**	**0.061**
Naphthalene	**1**	**mg/kg**	**0.010**	**0.014**
Phenanthrene	**1**	**mg/kg**	**0.041**	**0.11**
Pyrene	**1**	**mg/kg**	**0.041**	**0.14**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**170**
Chromium	**1**	**mg/kg**	**6.1**	**28**
Lead	**1**	**mg/kg**	**6.1**	**51**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.24**	**22**
Cadmium	**1**	**mg/kg**	**0.49**	**0.52**
Selenium	**1**	**mg/kg**	**2.4**	**4.4**
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	73.3	mg/kg	0.089	ND
1,1,2,2-Tetrachloroethane	73.3	mg/kg	0.089	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	73.3	mg/kg	0.089	ND
1,1,2-Trichloroethane	73.3	mg/kg	0.089	ND
1,1-Dichloroethane	73.3	mg/kg	0.089	ND
1,1-Dichloroethene	73.3	mg/kg	0.089	ND
1,2,3-Trichlorobenzene	73.3	mg/kg	0.089	ND
1,2,4-Trichlorobenzene	73.3	mg/kg	0.089	ND
1,2-Dibromo-3-chloropropane	73.3	mg/kg	0.089	ND
1,2-Dibromoethane	73.3	mg/kg	0.089	ND
1,2-Dichlorobenzene	73.3	mg/kg	0.089	ND
1,2-Dichloroethane	73.3	mg/kg	0.045	ND
1,2-Dichloropropane	73.3	mg/kg	0.089	ND
1,3-Dichlorobenzene	73.3	mg/kg	0.089	ND

Sample ID: SB5_14.5_052318 **Collection Date: 5/23/2018**
Lab#: AD04394-005 **Receipt Date: 5/24/2018**
Matrix: Soil/Terracore

1,4-Dichlorobenzene	73.3	mg/kg	0.089	ND
1,4-Dioxane	73.3	mg/kg	4.5	ND
2-Butanone	73.3	mg/kg	0.089	ND
2-Hexanone	73.3	mg/kg	0.089	ND
4-Methyl-2-pentanone	73.3	mg/kg	0.089	ND
Acetone	73.3	mg/kg	0.45	ND
Benzene	73.3	mg/kg	0.045	ND
Bromochloromethane	73.3	mg/kg	0.089	ND
Bromodichloromethane	73.3	mg/kg	0.089	ND
Bromoform	73.3	mg/kg	0.089	ND
Bromomethane	73.3	mg/kg	0.089	ND
Carbon disulfide	73.3	mg/kg	0.089	ND
Carbon tetrachloride	73.3	mg/kg	0.089	ND
Chlorobenzene	73.3	mg/kg	0.089	ND
Chloroethane	73.3	mg/kg	0.089	ND
Chloroform	73.3	mg/kg	0.089	ND
Chloromethane	73.3	mg/kg	0.089	ND
cis-1,2-Dichloroethene	**73.3**	**mg/kg**	**0.089**	**0.29**
cis-1,3-Dichloropropene	73.3	mg/kg	0.089	ND
Cyclohexane	73.3	mg/kg	0.089	ND
Dibromochloromethane	73.3	mg/kg	0.089	ND
Dichlorodifluoromethane	73.3	mg/kg	0.089	ND
Ethylbenzene	73.3	mg/kg	0.089	ND
Isopropylbenzene	73.3	mg/kg	0.089	ND
m&p-Xylenes	**73.3**	**mg/kg**	**0.089**	**0.11**
Methyl Acetate	**73.3**	**mg/kg**	**0.089**	**0.36**
Methylcyclohexane	**73.3**	**mg/kg**	**0.089**	**0.22**
Methylene chloride	73.3	mg/kg	0.089	ND
Methyl-t-butyl ether	73.3	mg/kg	0.045	ND
o-Xylene	73.3	mg/kg	0.089	ND
Styrene	73.3	mg/kg	0.089	ND
Tetrachloroethene	**73.3**	**mg/kg**	**0.089**	**0.48**
Toluene	**73.3**	**mg/kg**	**0.089**	**5.2**
trans-1,2-Dichloroethene	73.3	mg/kg	0.089	ND
trans-1,3-Dichloropropene	73.3	mg/kg	0.089	ND
Trichloroethene	73.3	mg/kg	0.089	ND
Trichlorofluoromethane	73.3	mg/kg	0.089	ND
Vinyl chloride	73.3	mg/kg	0.089	ND
Xylenes (Total)	**73.3**	**mg/kg**	**0.089**	**0.11**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**73.3**	**mg/kg**	**2.23**	**1.5J**
TotalVolatileTic	**73.3**	**mg/kg**	**NA**	**1.5J**

Sample ID: DUP01_052318
Lab#: AD04394-006
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.040**	**0.081**
Benzo[a]pyrene	**1**	**mg/kg**	**0.040**	**0.065**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.040**	**0.094**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.040**	**0.060**
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
Chrysene	**1**	**mg/kg**	**0.040**	**0.085**
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Fluoranthene	**1**	**mg/kg**	**0.040**	**0.13**
Fluorene	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.040**	**0.044**
Naphthalene	1	mg/kg	0.010	ND
Phenanthrene	**1**	**mg/kg**	**0.040**	**0.077**
Pyrene	**1**	**mg/kg**	**0.040**	**0.10**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**200**
Chromium	**1**	**mg/kg**	**6.0**	**41**
Lead	**1**	**mg/kg**	**6.0**	**51**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.24**	**11**
Cadmium	1	mg/kg	0.48	ND
Selenium	**1**	**mg/kg**	**2.4**	**2.8**
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	71.4	mg/kg	0.086	ND
1,1,2,2-Tetrachloroethane	71.4	mg/kg	0.086	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	71.4	mg/kg	0.086	ND
1,1,2-Trichloroethane	71.4	mg/kg	0.086	ND
1,1-Dichloroethane	71.4	mg/kg	0.086	ND
1,1-Dichloroethene	71.4	mg/kg	0.086	ND
1,2,3-Trichlorobenzene	71.4	mg/kg	0.086	ND
1,2,4-Trichlorobenzene	71.4	mg/kg	0.086	ND
1,2-Dibromo-3-chloropropane	71.4	mg/kg	0.086	ND
1,2-Dibromoethane	71.4	mg/kg	0.086	ND
1,2-Dichlorobenzene	71.4	mg/kg	0.086	ND
1,2-Dichloroethane	71.4	mg/kg	0.043	ND
1,2-Dichloropropane	71.4	mg/kg	0.086	ND
1,3-Dichlorobenzene	71.4	mg/kg	0.086	ND

Sample ID: DUP01_052318
Lab#: AD04394-006
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	71.4	mg/kg	0.086	ND
1,4-Dioxane	71.4	mg/kg	4.3	ND
2-Butanone	**71.4**	**mg/kg**	**0.086**	**0.12**
2-Hexanone	71.4	mg/kg	0.086	ND
4-Methyl-2-pentanone	71.4	mg/kg	0.086	ND
Acetone	71.4	mg/kg	0.43	ND
Benzene	71.4	mg/kg	0.043	ND
Bromochloromethane	71.4	mg/kg	0.086	ND
Bromodichloromethane	71.4	mg/kg	0.086	ND
Bromoform	71.4	mg/kg	0.086	ND
Bromomethane	71.4	mg/kg	0.086	ND
Carbon disulfide	71.4	mg/kg	0.086	ND
Carbon tetrachloride	71.4	mg/kg	0.086	ND
Chlorobenzene	71.4	mg/kg	0.086	ND
Chloroethane	71.4	mg/kg	0.086	ND
Chloroform	71.4	mg/kg	0.086	ND
Chloromethane	71.4	mg/kg	0.086	ND
cis-1,2-Dichloroethene	**71.4**	**mg/kg**	**0.086**	**0.17**
cis-1,3-Dichloropropene	71.4	mg/kg	0.086	ND
Cyclohexane	71.4	mg/kg	0.086	ND
Dibromochloromethane	71.4	mg/kg	0.086	ND
Dichlorodifluoromethane	71.4	mg/kg	0.086	ND
Ethylbenzene	71.4	mg/kg	0.086	ND
Isopropylbenzene	71.4	mg/kg	0.086	ND
m&p-Xylenes	**71.4**	**mg/kg**	**0.086**	**0.15**
Methyl Acetate	**71.4**	**mg/kg**	**0.086**	**0.35**
Methylcyclohexane	**71.4**	**mg/kg**	**0.086**	**0.24**
Methylene chloride	71.4	mg/kg	0.086	ND
Methyl-t-butyl ether	71.4	mg/kg	0.043	ND
o-Xylene	71.4	mg/kg	0.086	ND
Styrene	71.4	mg/kg	0.086	ND
Tetrachloroethene	**71.4**	**mg/kg**	**0.086**	**0.31**
Toluene	**71.4**	**mg/kg**	**0.086**	**1.7**
trans-1,2-Dichloroethene	71.4	mg/kg	0.086	ND
trans-1,3-Dichloropropene	71.4	mg/kg	0.086	ND
Trichloroethene	71.4	mg/kg	0.086	ND
Trichlorofluoromethane	71.4	mg/kg	0.086	ND
Vinyl chloride	71.4	mg/kg	0.086	ND
Xylenes (Total)	**71.4**	**mg/kg**	**0.086**	**0.15**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**71.4**	**mg/kg**	**2.23**	**1.7J**
TotalVolatileTic	**71.4**	**mg/kg**	**NA**	**1.7J**

Sample ID: SB4_14.5_052318
Lab#: AD04394-007
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.098	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.039	0.042
Acenaphthene	1	mg/kg	0.039	0.042
Acenaphthylene	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	0.10
Benzo[a]anthracene	1	mg/kg	0.039	0.28
Benzo[a]pyrene	1	mg/kg	0.039	0.22
Benzo[b]fluoranthene	1	mg/kg	0.039	0.31
Benzo[g,h,i]perylene	1	mg/kg	0.039	0.14
Benzo[k]fluoranthene	1	mg/kg	0.039	0.12
Chrysene	1	mg/kg	0.039	0.25
Dibenzo[a,h]anthracene	1	mg/kg	0.039	0.041
Fluoranthene	1	mg/kg	0.039	0.54
Fluorene	1	mg/kg	0.039	0.054
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0098	0.027
Phenanthrene	1	mg/kg	0.039	0.38
Pyrene	1	mg/kg	0.039	0.37

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	1	mg/kg	12	240
Chromium	1	mg/kg	5.9	49
Lead	1	mg/kg	5.9	72

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	1	mg/kg	0.24	11
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.4	3.1
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	81	mg/kg	0.095	ND
1,1,2,2-Tetrachloroethane	81	mg/kg	0.095	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	81	mg/kg	0.095	ND
1,1,2-Trichloroethane	81	mg/kg	0.095	ND
1,1-Dichloroethane	81	mg/kg	0.095	ND
1,1-Dichloroethene	81	mg/kg	0.095	ND
1,2,3-Trichlorobenzene	81	mg/kg	0.095	ND
1,2,4-Trichlorobenzene	81	mg/kg	0.095	ND
1,2-Dibromo-3-chloropropane	81	mg/kg	0.095	ND
1,2-Dibromoethane	81	mg/kg	0.095	ND
1,2-Dichlorobenzene	81	mg/kg	0.095	ND
1,2-Dichloroethane	81	mg/kg	0.048	ND
1,2-Dichloropropane	81	mg/kg	0.095	ND
1,3-Dichlorobenzene	81	mg/kg	0.095	ND

Sample ID: SB4_14.5_052318
Lab#: AD04394-007
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	81	mg/kg	0.095	ND
1,4-Dioxane	81	mg/kg	4.8	ND
2-Butanone	**81**	**mg/kg**	**0.095**	**0.15**
2-Hexanone	81	mg/kg	0.095	ND
4-Methyl-2-pentanone	81	mg/kg	0.095	ND
Acetone	81	mg/kg	0.48	ND
Benzene	81	mg/kg	0.048	ND
Bromochloromethane	81	mg/kg	0.095	ND
Bromodichloromethane	81	mg/kg	0.095	ND
Bromoform	81	mg/kg	0.095	ND
Bromomethane	81	mg/kg	0.095	ND
Carbon disulfide	81	mg/kg	0.095	ND
Carbon tetrachloride	81	mg/kg	0.095	ND
Chlorobenzene	81	mg/kg	0.095	ND
Chloroethane	81	mg/kg	0.095	ND
Chloroform	81	mg/kg	0.095	ND
Chloromethane	81	mg/kg	0.095	ND
cis-1,2-Dichloroethene	**81**	**mg/kg**	**0.095**	**0.23**
cis-1,3-Dichloropropene	81	mg/kg	0.095	ND
Cyclohexane	81	mg/kg	0.095	ND
Dibromochloromethane	81	mg/kg	0.095	ND
Dichlorodifluoromethane	81	mg/kg	0.095	ND
Ethylbenzene	81	mg/kg	0.095	ND
Isopropylbenzene	81	mg/kg	0.095	ND
m&p-Xylenes	**81**	**mg/kg**	**0.095**	**0.16**
Methyl Acetate	**81**	**mg/kg**	**0.095**	**0.39**
Methylcyclohexane	**81**	**mg/kg**	**0.095**	**0.27**
Methylene chloride	81	mg/kg	0.095	ND
Methyl-t-butyl ether	81	mg/kg	0.048	ND
o-Xylene	81	mg/kg	0.095	ND
Styrene	81	mg/kg	0.095	ND
Tetrachloroethene	**81**	**mg/kg**	**0.095**	**0.38**
Toluene	**81**	**mg/kg**	**0.095**	**2.2**
trans-1,2-Dichloroethene	81	mg/kg	0.095	ND
trans-1,3-Dichloropropene	81	mg/kg	0.095	ND
Trichloroethene	81	mg/kg	0.095	ND
Trichlorofluoromethane	81	mg/kg	0.095	ND
Vinyl chloride	81	mg/kg	0.095	ND
Xylenes (Total)	**81**	**mg/kg**	**0.095**	**0.16**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**81**	**mg/kg**	**2.22**	**1.1J**
TotalVolatileTic	**81**	**mg/kg**	**NA**	**1.1J**

Sample ID: SB3_7.0_052318 | **Collection Date: 5/23/2018**
Lab#: AD04394-008 | **Receipt Date: 5/24/2018**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**83**

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.040**	**0.074**
Benzo[a]pyrene	**1**	**mg/kg**	**0.040**	**0.062**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.040**	**0.094**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.040**	**0.049**
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
Chrysene	**1**	**mg/kg**	**0.040**	**0.075**
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Fluoranthene	**1**	**mg/kg**	**0.040**	**0.12**
Fluorene	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.040**	**0.043**
Naphthalene	**1**	**mg/kg**	**0.010**	**0.011**
Phenanthrene	**1**	**mg/kg**	**0.040**	**0.076**
Pyrene	**1**	**mg/kg**	**0.040**	**0.095**

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**12**	**140**
Chromium	**1**	**mg/kg**	**6.0**	**39**
Lead	**1**	**mg/kg**	**6.0**	**77**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.24**	**11**
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	105	mg/kg	0.13	ND
1,1,2,2-Tetrachloroethane	105	mg/kg	0.13	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	105	mg/kg	0.13	ND
1,1,2-Trichloroethane	105	mg/kg	0.13	ND
1,1-Dichloroethane	105	mg/kg	0.13	ND
1,1-Dichloroethene	105	mg/kg	0.13	ND
1,2,3-Trichlorobenzene	105	mg/kg	0.13	ND
1,2,4-Trichlorobenzene	105	mg/kg	0.13	ND
1,2-Dibromo-3-chloropropane	105	mg/kg	0.13	ND
1,2-Dibromoethane	105	mg/kg	0.13	ND
1,2-Dichlorobenzene	105	mg/kg	0.13	ND
1,2-Dichloroethane	105	mg/kg	0.063	ND
1,2-Dichloropropane	105	mg/kg	0.13	ND
1,3-Dichlorobenzene	105	mg/kg	0.13	ND

Sample ID: SB3_7.0_052318
Lab#: AD04394-008
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	105	mg/kg	0.13	ND
1,4-Dioxane	105	mg/kg	6.3	ND
2-Butanone	105	mg/kg	0.13	ND
2-Hexanone	105	mg/kg	0.13	ND
4-Methyl-2-pentanone	105	mg/kg	0.13	ND
Acetone	105	mg/kg	0.63	ND
Benzene	105	mg/kg	0.063	ND
Bromochloromethane	105	mg/kg	0.13	ND
Bromodichloromethane	105	mg/kg	0.13	ND
Bromoform	105	mg/kg	0.13	ND
Bromomethane	105	mg/kg	0.13	ND
Carbon disulfide	105	mg/kg	0.13	ND
Carbon tetrachloride	105	mg/kg	0.13	ND
Chlorobenzene	105	mg/kg	0.13	ND
Chloroethane	105	mg/kg	0.13	ND
Chloroform	105	mg/kg	0.13	ND
Chloromethane	105	mg/kg	0.13	ND
cis-1,2-Dichloroethene	**105**	**mg/kg**	**0.13**	**0.14**
cis-1,3-Dichloropropene	105	mg/kg	0.13	ND
Cyclohexane	105	mg/kg	0.13	ND
Dibromochloromethane	105	mg/kg	0.13	ND
Dichlorodifluoromethane	105	mg/kg	0.13	ND
Ethylbenzene	105	mg/kg	0.13	ND
Isopropylbenzene	105	mg/kg	0.13	ND
m&p-Xylenes	105	mg/kg	0.13	ND
Methyl Acetate	**105**	**mg/kg**	**0.13**	**0.48**
Methylcyclohexane	**105**	**mg/kg**	**0.13**	**0.22**
Methylene chloride	105	mg/kg	0.13	ND
Methyl-t-butyl ether	105	mg/kg	0.063	ND
o-Xylene	105	mg/kg	0.13	ND
Styrene	105	mg/kg	0.13	ND
Tetrachloroethene	**105**	**mg/kg**	**0.13**	**0.62**
Toluene	**105**	**mg/kg**	**0.13**	**2.0**
trans-1,2-Dichloroethene	105	mg/kg	0.13	ND
trans-1,3-Dichloropropene	105	mg/kg	0.13	ND
Trichloroethene	105	mg/kg	0.13	ND
Trichlorofluoromethane	105	mg/kg	0.13	ND
Vinyl chloride	105	mg/kg	0.13	ND
Xylenes (Total)	105	mg/kg	0.13	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**105**	**mg/kg**	**2.22**	**2.3J**
TotalVolatileTic	**105**	**mg/kg**	**NA**	**2.3J**

Sample ID: SB8_8.0_052318
Lab#: AD04394-009
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.094	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	mg/kg	0.037	ND
Acenaphthene	1	mg/kg	0.037	ND
Acenaphthylene	1	mg/kg	0.037	ND
Anthracene	1	mg/kg	0.037	ND
Benzo[a]anthracene	1	mg/kg	0.037	ND
Benzo[a]pyrene	1	mg/kg	0.037	ND
Benzo[b]fluoranthene	1	mg/kg	0.037	ND
Benzo[g,h,i]perylene	1	mg/kg	0.037	ND
Benzo[k]fluoranthene	1	mg/kg	0.037	ND
Chrysene	1	mg/kg	0.037	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.037	ND
Fluoranthene	1	mg/kg	0.037	ND
Fluorene	1	mg/kg	0.037	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.037	ND
Naphthalene	1	mg/kg	0.0094	ND
Phenanthrene	1	mg/kg	0.037	ND
Pyrene	1	mg/kg	0.037	ND

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	**1**	**mg/kg**	**11**	**83**
Chromium	**1**	**mg/kg**	**5.6**	**31**
Lead	**1**	**mg/kg**	**5.6**	**21**

RCRA Metals ICP-MS 6020

Analyte	DF	Units	RL	Result
Arsenic	**1**	**mg/kg**	**0.22**	**1.3**
Cadmium	1	mg/kg	0.45	ND
Selenium	1	mg/kg	2.2	ND
Silver	1	mg/kg	0.22	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	**1**			**Attached**
1,1,2,2-Tetrachloroethane	**1**			**Attached**
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**			**Attached**
1,1,2-Trichloroethane	**1**			**Attached**
1,1-Dichloroethane	**1**			**Attached**
1,1-Dichloroethene	**1**			**Attached**
1,2,3-Trichlorobenzene	**1**			**Attached**
1,2,4-Trichlorobenzene	**1**			**Attached**
1,2-Dibromo-3-chloropropane	**1**			**Attached**
1,2-Dibromoethane	**1**			**Attached**
1,2-Dichlorobenzene	**1**			**Attached**
1,2-Dichloroethane	**1**			**Attached**
1,2-Dichloropropane	**1**			**Attached**
1,3-Dichlorobenzene	**1**			**Attached**

Sample ID: SB8_8.0_052318
Lab#: AD04394-009
Matrix: Soil/Terracore

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

1,4-Dichlorobenzene	1	Attached
1,4-Dioxane	1	Attached
2-Butanone	1	Attached
2-Hexanone	1	Attached
4-Methyl-2-pentanone	1	Attached
Acetone	1	Attached
Benzene	1	Attached
Bromochloromethane	1	Attached
Bromodichloromethane	1	Attached
Bromoform	1	Attached
Bromomethane	1	Attached
Carbon disulfide	1	Attached
Carbon tetrachloride	1	Attached
Chlorobenzene	1	Attached
Chloroethane	1	Attached
Chloroform	1	Attached
Chloromethane	1	Attached
cis-1,2-Dichloroethene	1	Attached
cis-1,3-Dichloropropene	1	Attached
Cyclohexane	1	Attached
Dibromochloromethane	1	Attached
Dichlorodifluoromethane	1	Attached
Ethylbenzene	1	Attached
Isopropylbenzene	1	Attached
m&p-Xylenes	1	Attached
Methyl Acetate	1	Attached
Methylcyclohexane	1	Attached
Methylene chloride	1	Attached
Methyl-t-butyl ether	1	Attached
o-Xylene	1	Attached
Styrene	1	Attached
Tetrachloroethene	1	Attached
Toluene	1	Attached
trans-1,2-Dichloroethene	1	Attached
trans-1,3-Dichloropropene	1	Attached
Trichloroethene	1	Attached
Trichlorofluoromethane	1	Attached
Vinyl chloride	1	Attached

Sample ID: FB01_052318 | **Collection Date: 5/23/2018**
Lab#: AD04394-010 | **Receipt Date: 5/24/2018**
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PAH Compounds 8270

Analyte	DF	Units	RL	Result
2-Methylnaphthalene	1	ug/l	2.0	ND
Acenaphthene	1	ug/l	2.0	ND
Acenaphthylene	1	ug/l	2.0	ND
Anthracene	1	ug/l	2.0	ND
Benzo[a]anthracene	1	ug/l	2.0	ND
Benzo[a]pyrene	1	ug/l	2.0	ND
Benzo[b]fluoranthene	1	ug/l	2.0	ND
Benzo[g,h,i]perylene	1	ug/l	2.0	ND
Benzo[k]fluoranthene	1	ug/l	2.0	ND
Chrysene	1	ug/l	2.0	ND
Dibenzo[a,h]anthracene	1	ug/l	2.0	ND
Fluoranthene	1	ug/l	2.0	ND
Fluorene	1	ug/l	2.0	ND
Indeno[1,2,3-cd]pyrene	1	ug/l	2.0	ND
Naphthalene	1	ug/l	0.50	ND
Phenanthrene	1	ug/l	2.0	ND
Pyrene	1	ug/l	2.0	ND

RCRA Metals 6010

Analyte	DF	Units	RL	Result
Barium	1	ug/l	50	ND
Chromium	1	ug/l	50	ND
Silver	1	ug/l	20	ND

RCRA Metals ICP-MS 200.8

Analyte	DF	Units	RL	Result
Arsenic	1	ug/l	2.0	ND
Cadmium	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND

Sample ID: FB01_052318 **Collection Date: 5/23/2018**
Lab#: AD04394-010 **Receipt Date: 5/24/2018**
Matrix: Aqueous

4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1	ug/l	NA	ND
TotalVolatileTic	1	ug/l	NA	ND

Sample ID: TB01_052318
Lab#: AD04394-011
Matrix: Aqueous

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1	ug/l	1.0	ND
1,1,2,2-Tetrachloroethane	1	ug/l	1.0	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/l	1.0	ND
1,1,2-Trichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethane	1	ug/l	1.0	ND
1,1-Dichloroethene	1	ug/l	1.0	ND
1,2,3-Trichlorobenzene	1	ug/l	1.0	ND
1,2,4-Trichlorobenzene	1	ug/l	1.0	ND
1,2-Dibromo-3-chloropropane	1	ug/l	1.0	ND
1,2-Dibromoethane	1	ug/l	1.0	ND
1,2-Dichlorobenzene	1	ug/l	1.0	ND
1,2-Dichloroethane	1	ug/l	0.50	ND
1,2-Dichloropropane	1	ug/l	1.0	ND
1,3-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dichlorobenzene	1	ug/l	1.0	ND
1,4-Dioxane	1	ug/l	50	ND
2-Butanone	1	ug/l	1.0	ND
2-Hexanone	1	ug/l	1.0	ND
4-Methyl-2-pentanone	1	ug/l	1.0	ND
Acetone	1	ug/l	5.0	ND
Benzene	1	ug/l	0.50	ND
Bromochloromethane	1	ug/l	1.0	ND
Bromodichloromethane	1	ug/l	1.0	ND
Bromoform	1	ug/l	1.0	ND
Bromomethane	1	ug/l	1.0	ND
Carbon disulfide	1	ug/l	1.0	ND
Carbon tetrachloride	1	ug/l	1.0	ND
Chlorobenzene	1	ug/l	1.0	ND
Chloroethane	1	ug/l	1.0	ND
Chloroform	1	ug/l	1.0	ND
Chloromethane	1	ug/l	1.0	ND
cis-1,2-Dichloroethene	1	ug/l	1.0	ND
cis-1,3-Dichloropropene	1	ug/l	1.0	ND
Cyclohexane	1	ug/l	1.0	ND
Dibromochloromethane	1	ug/l	1.0	ND
Dichlorodifluoromethane	1	ug/l	1.0	ND
Ethylbenzene	1	ug/l	1.0	ND
Isopropylbenzene	1	ug/l	1.0	ND
m&p-Xylenes	1	ug/l	1.0	ND
Methyl Acetate	1	ug/l	1.0	ND
Methylcyclohexane	1	ug/l	1.0	ND
Methylene chloride	1	ug/l	1.0	ND
Methyl-t-butyl ether	1	ug/l	0.50	ND
o-Xylene	1	ug/l	1.0	ND
Styrene	1	ug/l	1.0	ND
Tetrachloroethene	1	ug/l	1.0	ND
Toluene	1	ug/l	1.0	ND
trans-1,2-Dichloroethene	1	ug/l	1.0	ND
trans-1,3-Dichloropropene	1	ug/l	1.0	ND
Trichloroethene	1	ug/l	1.0	ND
Trichlorofluoromethane	1	ug/l	1.0	ND
Vinyl chloride	1	ug/l	1.0	ND
Xylenes (Total)	1	ug/l	1.0	ND

Sample ID: TB01_052318
Lab#: AD04394-011
Matrix: Aqueous

Collection Date: 5/23/2018
Receipt Date: 5/24/2018

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	1	ug/l	NA	ND
TotalVolatileTic	1	ug/l	NA	ND

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Laboratory Chronicle

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-001 **Sample ID: SB2_7.0_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:20	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 17:36	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:23	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:06	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 02:10	WP

Lab#: AD04394-002 **Sample ID: SB1_9.0_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:25	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 16:20	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:27	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:12	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 02:32	WP

Lab#: AD04394-003 **Sample ID: SB7_14.5_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:26	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 12:57	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:32	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:18	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 02:55	WP

Lab#: AD04394-004 **Sample ID: SB6_14.5_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:27	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 18:19	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:37	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:23	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 03:18	WP

Laboratory Chronicle

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-005 **Sample ID: SB5_14.5_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:29	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 16:43	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:41	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:29	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 03:40	WP

Lab#: AD04394-006 **Sample ID: DUP01_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:30	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 17:07	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:46	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:35	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 04:03	WP

Lab#: AD04394-007 **Sample ID: SB4_14.5_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:31	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 17:31	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 01:51	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:41	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 04:26	WP

Lab#: AD04394-008 **Sample ID: SB3_7.0_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:33	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 17:55	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 02:17	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 16:46	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/5/18 04:49	WP

Laboratory Chronicle

Client: Envirotrac LTD.
Project: Green Tweed & Co.

HC Project #: 8052424

Lab#: AD04394-009 **Sample ID: SB8_8.0_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	5/25/18 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	05/26/18 03:00	BAdeola	EPA 7471B	5/30/18 13:14	OA
PAH Compounds 8270	3510C/3550C	05/29/18 10:57	lynda	EPA 8270D	5/30/18 09:46	AH/JB
RCRA Metals 6010	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6010C	5/27/18 00:43	OA
RCRA Metals ICP-MS 6020	3005&10/3050	05/26/18 03:00	BAdeola	EPA 6020A	5/29/18 15:09	PC
Volatile Organics + 15 (8260)	EPA5030/5035	06/05/18 22:48		EPA 8260C	6/5/18 23:32	TestAmerica

Lab#: AD04394-010 **Sample ID: FB01_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	05/30/18 09:00	aadewusi	EPA 7470A	6/1/18 12:33	CJA
PAH Compounds 8270	3510C/3550C	05/26/18 12:09	lynda	EPA 8270D	5/28/18 16:41	AH/JB
RCRA Metals 6010	3005&10/3050	05/30/18 09:00	aadewusi	EPA 6010C	6/1/18 15:49	SRB
RCRA Metals ICP-MS 200.8	EPA 200.2	05/30/18 09:00	aadewusi	200.8	5/30/18 19:25	PC
RCRA Metals ICP-MS 200.8	EPA 200.2	05/30/18 09:00	aadewusi	200.8	5/31/18 14:04	PC
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/4/18 14:22	SG

Lab#: AD04394-011 **Sample ID: TB01_052318**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	6/4/18 14:43	SG

Chain of Custody

8052424 0038

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

Project # (Lab Use Only): 8052424

Page 1 of 2

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: ENVIROTRAC LTD
Address: 8133 EASTON RD
SUITE 110 GTTSVILLE PA 18942
1b) Email/Cell/Fax/Ph: kennethh@envirotrac.com
1c) Send Invoice to: kennethh@envirotrac.com
1d) Send Report to: SAME

Project Information

2a) Project: GREEN TWEED & CO
2b) Project Mgr: KENNETH HAYES
2c) Project Location (City/State): NORTH WALES, PA
2d) Quote/PO # (If Applicable): 09.0P0013.00

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY (PA)
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[X] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
(8 Business Days (Stand.))	NY ASP CatA	[X] Region 2 or 5
Other: STD		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD04394

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	VO	% Solids	PAH	RCRA Metals								8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	SB2_7.0_052318	S	5/23/18	0957		X	X	X	X	X								4	1							
002	SB1_9.0_052318	S	S	1015		X	X	X	X	X								4	1							
003	SB7_14.5_052318			1100			X	X	X	X								4	1							
004	SB6_14.5_052318			1113			X	X	X	X								4	1							
005	SB5_14.5_052318			1137			X	X	X	X								4	1							
006	DUP01_052318						X	X	X	X								4	1							
007	SB4_14.5_052318			1157			X	X	X	X								4	1							
008	SB3_7.0_052318			1212			X	X	X	X								4	1							
009	SB8_8.0_052318			1223			X	X	X	X								4	1							
	/ / / / /			/ /																						

10) Relinquished by:	Accepted by:	Date	Time
Kenneth Hayes	[signature]	5/24/18	0905
[signature]	[signature]	5/24/18	300
[signature]	M Elxwell	5/24/18	400

11) Sampler (print name): KENNETH HAYES Date: 5/23/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

8052424 0039

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 8052424

Page 2 of 2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[X] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[X] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: ENVIROTRAC LTD
Address: 8133 EASTON RD
SUITE 110 OTTSVILLE, PA 18942
1b) Email/Cell/Fax/Ph: Kenneth@envirotrac.com
1c) Send Invoice to: Kenneth@envirotrac.com
1d) Send Report to: SAME

Project Information

2a) Project: GLEEN Tweed & Co.
2b) Project Mgr: KEN HAYES
2c) Project Location (City/State): NORTH WALES, PA
2d) Quote/PO # (If Applicable): 09.DP0013.06

FOR LAB USE ONLY ↓

Batch # AJ04394

===> Check If Contingent ===>

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	VOC	PAH	METALS	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
010	FB01-052318	OT	5/23/18	1330			X	X	X	2				3		1		LAB DI H_2O
011	TB01-052318	OT	5/23/18				X							3				LAB DI H_2O

10) Relinquished by:

Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	5/24/18	0905
[signature]	[signature]	5/24/18	2000
[signature]	[signature]	5/24/18	400

11) Sampler (print name): KENNETH HAYES Date: 5/23/18

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

8052424 0040

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:
Hampton-Clarke, Inc.:
Attn:Reporting
175 Route 46 West
Fairfield, New Jersey 07004

Invoice To:
Hampton-Clarke, Inc.:
Attn:Accounting
175 Route 46 West
Fairfield, New Jersey 07004

Project #: 8052424

CocID#: 5865

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: 24 hour **Preliminary Due Date:** 6/6/2018
Report Type: PADEP-R (REDUCED) **Hard Copy Due Date:** 6/19/2018

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AD04394-009	SB8_8.0_052318	Soil/Terr	5/23/2018	12:23:00 PM	TCL VO+15 8260

MD
6/5/18

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
				SAMPLE WILL BE OUT OF HOLD
				6/6/18 @ 12:23
				Cooler Temp:_____

HC Lab Use Only: **Subcontracted Lab Id and Contact:** TA-Edison, Sapna Nyyar, (732) 549-3900, LabID: House, 777 New Durham Road, , Edison, NJ, 08817

8052424 0041

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:
Hampton-Clarke, Inc.:
Attn:Reporting
175 Route 46 West
Fairfield, New Jersey 07004

Invoice To:
Hampton-Clarke, Inc.:
Attn:Accounting
175 Route 46 West
Fairfield, New Jersey 07004

Project #: 8052424

CocID#: 5865

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: 24 hour **Preliminary Due Date:** 6/6/2018
Report Type: PADEP-R (REDUCED) **Hard Copy Due Date:** 6/19/2018

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AD04394-009	SB8_8.0_052318	Soil/Terr	5/23/2018	12:23:00 PM	TCL VO+15 8260

MP 6/5/18

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
				SAMPLE WILL BE OUT OF HOLD 6/6/18 @ 12:23.
				Cooler Temp:_____

HC Lab Use Only: **Subcontracted Lab Id and Contact:** TA-Edison, Sapna Nyyar, (732) 549-3900, LabID: House, 777 New Durham Road, , Edison, NJ, 08817

PROJECT MODIFICATIONS

Client: ENVIROTRAC
Project: Green Tweed & Co.

HC Project #: 8052424

---

melissa192.168.1.13
6/12/2018 12:18:01 PM

Per Quote 5875, Tics are required to be reported for the VOCs.

melissa192.168.1.13
6/12/2018 12:18:09 PM

Sample AD04394-009(SB8_8.0_052318) was subcontracted for TCL VO15 analysis.

CONDITION UPON RECEIPT

Batch Number AD04394

Entered By: maxwell
Date Entered 5/24/2018 4:34:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	NO	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.9
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AD04394

Entered By: maxwell
Date Entered 5/24/2018 4:50:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD04394-001	NA	NA	NA	NA	NA	NA	NA
AD04394-002	NA	NA	NA	NA	NA	NA	NA
AD04394-003	NA	NA	NA	NA	NA	NA	NA
AD04394-004	NA	NA	NA	NA	NA	NA	NA
AD04394-005	NA	NA	NA	NA	NA	NA	NA
AD04394-006	NA	NA	NA	NA	NA	NA	NA
AD04394-007	NA	NA	NA	NA	NA	NA	NA
AD04394-008	NA	NA	NA	NA	NA	NA	NA
AD04394-009	NA	NA	NA	NA	NA	NA	NA
AD04394-010	40ML	G	VO	HCL	189699	1	HC727135
AD04394-010	1L	P	METALS	HNO3	192717	1	HC727135
AD04394-011	40ML	G	VO	HCL	189699	1	HC727135

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD04394-001	05/24/18 16:00	MAXW	0	M	Received
AD04394-001	05/24/18 16:34	MAXW	0	M	Login
AD04394-001	05/25/18 07:47	DP	1	A	%SOLID
AD04394-001	05/25/18 10:02	R12	1	A	NONE
AD04394-001	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-001	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-001	05/29/18 11:00	R12	1	A	NONE
AD04394-001	05/24/18 17:04	R31	2	A	NONE
AD04394-001	05/30/18 17:22	WP	2	A	VOA
AD04394-001	05/30/18 17:45	R31	2	A	NONE
AD04394-001	06/04/18 21:51	WP	2	A	VOA
AD04394-001	06/04/18 21:51	R31	2	A	NONE
AD04394-001	05/24/18 17:05	F18	3	A	NONE
AD04394-001	05/24/18 17:05	F18	4	A	NONE
AD04394-002	05/24/18 16:00	MAXW	0	M	Received
AD04394-002	05/24/18 16:34	MAXW	0	M	Login
AD04394-002	05/25/18 07:47	DP	1	A	%SOLID
AD04394-002	05/25/18 10:02	R12	1	A	NONE
AD04394-002	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-002	05/26/18 09:36	BA	1	A	r12
AD04394-002	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-002	05/29/18 11:00	R12	1	A	NONE
AD04394-002	05/24/18 17:04	R31	2	A	NONE
AD04394-002	05/30/18 17:22	WP	2	A	VOA
AD04394-002	05/30/18 17:45	R31	2	A	NONE
AD04394-002	06/04/18 21:51	WP	2	A	VOA
AD04394-002	06/04/18 21:51	R31	2	A	NONE
AD04394-002	05/24/18 17:05	F18	3	A	NONE
AD04394-002	05/24/18 17:05	F18	4	A	NONE
AD04394-003	05/24/18 16:00	MAXW	0	M	Received
AD04394-003	05/24/18 16:34	MAXW	0	M	Login
AD04394-003	05/25/18 07:47	DP	1	A	%SOLID
AD04394-003	05/25/18 10:02	R12	1	A	NONE
AD04394-003	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-003	05/26/18 09:36	BA	1	A	r12
AD04394-003	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-003	05/29/18 11:00	R12	1	A	NONE
AD04394-003	05/24/18 17:05	F18	2	A	NONE
AD04394-003	05/24/18 17:04	R31	3	A	NONE
AD04394-003	05/30/18 17:22	WP	3	A	VOA
AD04394-003	05/30/18 17:45	R31	3	A	NONE
AD04394-003	06/04/18 21:51	R31	3	A	NONE
AD04394-003	06/04/18 21:51	WP	3	A	VOA
AD04394-003	05/24/18 17:05	F18	4	A	NONE
AD04394-004	05/24/18 16:00	MAXW	0	M	Received
AD04394-004	05/24/18 16:34	MAXW	0	M	Login
AD04394-004	05/25/18 07:47	DP	1	A	%SOLID
AD04394-004	05/25/18 10:02	R12	1	A	NONE
AD04394-004	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-004	05/26/18 09:36	BA	1	A	r12
AD04394-004	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-004	05/29/18 11:00	R12	1	A	NONE
AD04394-004	05/24/18 17:04	R31	2	A	NONE
AD04394-004	05/30/18 17:22	WP	2	A	VOA
AD04394-004	05/30/18 17:45	R31	2	A	NONE
AD04394-004	06/04/18 21:51	R31	2	A	NONE
AD04394-004	06/04/18 21:51	WP	2	A	VOA
AD04394-004	05/24/18 17:05	F18	3	A	NONE
AD04394-004	05/24/18 17:05	F18	4	A	NONE
AD04394-005	05/24/18 16:00	MAXW	0	M	Received
AD04394-005	05/24/18 16:34	MAXW	0	M	Login
AD04394-005	05/25/18 07:47	DP	1	A	%SOLID
AD04394-005	05/25/18 10:02	R12	1	A	NONE
AD04394-005	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-005	05/26/18 09:36	BA	1	A	r12
AD04394-005	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-005	05/29/18 11:00	R12	1	A	NONE
AD04394-005	05/24/18 17:04	R31	2	A	NONE
AD04394-005	05/30/18 17:22	WP	2	A	VOA
AD04394-005	05/30/18 17:45	R31	2	A	NONE
AD04394-005	06/04/18 21:51	WP	2	A	VOA
AD04394-005	06/04/18 21:51	R31	2	A	NONE
AD04394-005	05/24/18 17:05	F18	3	A	NONE
AD04394-005	05/24/18 17:05	F18	4	A	NONE
AD04394-006	05/24/18 16:00	MAXW	0	M	Received
AD04394-006	05/24/18 16:34	MAXW	0	M	Login
AD04394-006	05/25/18 07:47	DP	1	A	%SOLID
AD04394-006	05/25/18 10:02	R12	1	A	NONE
AD04394-006	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-006	05/26/18 09:36	BA	1	A	r12
AD04394-006	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-006	05/29/18 11:00	R12	1	A	NONE
AD04394-006	05/24/18 17:04	R31	2	A	NONE
AD04394-006	05/30/18 17:22	WP	2	A	VOA
AD04394-006	05/30/18 17:45	R31	2	A	NONE
AD04394-006	06/04/18 21:51	WP	2	A	VOA
AD04394-006	06/04/18 21:51	R31	2	A	NONE
AD04394-006	05/24/18 17:05	F18	3	A	NONE
AD04394-006	05/24/18 17:05	F18	4	A	NONE
AD04394-007	05/24/18 16:00	MAXW	0	M	Received
AD04394-007	05/24/18 16:34	MAXW	0	M	Login
AD04394-007	05/25/18 07:47	DP	1	A	%SOLID
AD04394-007	05/25/18 10:02	R12	1	A	NONE
AD04394-007	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-007	05/26/18 09:36	BA	1	A	r12
AD04394-007	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-007	05/29/18 11:00	R12	1	A	NONE
AD04394-007	05/24/18 17:04	R31	2	A	NONE
AD04394-007	05/30/18 17:22	WP	2	A	VOA
AD04394-007	05/30/18 17:45	R31	2	A	NONE
AD04394-007	06/04/18 21:51	R31	2	A	NONE
AD04394-007	06/04/18 21:51	WP	2	A	VOA
AD04394-007	05/24/18 17:05	F18	3	A	NONE
AD04394-007	05/24/18 17:05	F18	4	A	NONE
AD04394-008	05/24/18 16:00	MAXW	0	M	Received
AD04394-008	05/24/18 16:34	MAXW	0	M	Login
AD04394-008	05/25/18 07:47	DP	1	A	%SOLID
AD04394-008	05/25/18 10:02	R12	1	A	NONE
AD04394-008	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-008	05/26/18 09:36	BA	1	A	r12
AD04394-008	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-008	05/29/18 11:00	R12	1	A	NONE
AD04394-008	05/24/18 17:04	R31	2	A	NONE
AD04394-008	05/30/18 17:22	WP	2	A	VOA
AD04394-008	05/30/18 17:45	R31	2	A	NONE
AD04394-008	06/04/18 21:51	R31	2	A	NONE
AD04394-008	06/04/18 21:51	WP	2	A	VOA
AD04394-008	05/24/18 17:05	F18	3	A	NONE
AD04394-008	05/24/18 17:05	F18	4	A	NONE
AD04394-009	05/24/18 16:00	MAXW	0	M	Received
AD04394-009	05/24/18 16:34	MAXW	0	M	Login
AD04394-009	05/25/18 07:47	DP	1	A	%SOLID
AD04394-009	05/25/18 10:02	R12	1	A	NONE
AD04394-009	05/26/18 02:17	BA	1	A	TDSI/HG
AD04394-009	05/26/18 09:36	BA	1	A	r12
AD04394-009	05/29/18 10:57	LV	1	A	BN/BNA
AD04394-009	05/29/18 11:00	R12	1	A	NONE
AD04394-009	05/24/18 17:04	R31	2	A	NONE
AD04394-009	05/30/18 17:22	WP	2	A	VOA
AD04394-009	05/30/18 17:45	R31	2	A	NONE
AD04394-009	05/24/18 17:05	F18	3	A	NONE
AD04394-009	05/24/18 17:05	F18	4	A	NONE
AD04394-010	05/24/18 16:00	MAXW	0	M	Received
AD04394-010	05/24/18 16:34	MAXW	0	M	Login
AD04394-010	05/24/18 17:07	R12	1	A	NONE
AD04394-010	05/30/18 09:49	AM	1	A	tdwi/hg
AD04394-010	05/30/18 09:50	R12	1	A	NONE
AD04394-010	05/24/18 17:07	R12	2	A	NONE
AD04394-010	05/26/18 12:09	LV	2	A	bn/bna
AD04394-010	05/24/18 17:07	R12	7	A	NONE
AD04394-010	05/25/18 10:38	R31	8	A	NONE
AD04394-010	06/01/18 21:38	WP	8	A	VOA
AD04394-010	05/25/18 10:38	R31	9	A	NONE
AD04394-010	05/25/18 10:38	R31	10	A	NONE
AD04394-010	06/04/18 10:44	SG	10	A	VOA
AD04394-011	05/24/18 16:00	MAXW	0	M	Received
AD04394-011	05/24/18 16:34	MAXW	0	M	Login
AD04394-011	05/25/18 10:38	R31	1	A	NONE
AD04394-011	05/25/18 10:38	R31	2	A	NONE
AD04394-011	06/01/18 21:38	WP	2	A	VOA

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD04394-011	05/25/18 10:38	R31	3	A	NONE
AD04394-011	06/04/18 10:44	SG	3	A	VOA

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-001
Client Id: SB2_7.0_052318
Data File: 11M57174.D
Analysis Date: 06/05/18 02:10
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 6.05g:10ml
Final Vol: NA
Dilution: 82.6
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.096	U	56-23-5	Carbon Tetrachloride	0.096	U
79-34-5	1,1,2,2-Tetrachloroethane	0.096	U	108-90-7	Chlorobenzene	0.096	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.096	U	75-00-3	Chloroethane	0.096	U
79-00-5	1,1,2-Trichloroethane	0.096	U	67-66-3	Chloroform	0.096	U
75-34-3	1,1-Dichloroethane	0.096	U	74-87-3	Chloromethane	0.096	U
75-35-4	1,1-Dichloroethene	0.096	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.096**	**0.17**
87-61-6	1,2,3-Trichlorobenzene	0.096	U	10061-01-5	cis-1,3-Dichloropropene	0.096	U
120-82-1	1,2,4-Trichlorobenzene	0.096	U	110-82-7	Cyclohexane	0.096	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.096	U	124-48-1	Dibromochloromethane	0.096	U
106-93-4	1,2-Dibromoethane	0.096	U	75-71-8	Dichlorodifluoromethane	0.096	U
95-50-1	1,2-Dichlorobenzene	0.096	U	100-41-4	Ethylbenzene	0.096	U
107-06-2	1,2-Dichloroethane	0.048	U	98-82-8	Isopropylbenzene	0.096	U
78-87-5	1,2-Dichloropropane	0.096	U	79601-23-1	m&p-Xylenes	0.096	U
541-73-1	1,3-Dichlorobenzene	0.096	U	**79-20-9**	**Methyl Acetate**	**0.096**	**0.40**
106-46-7	1,4-Dichlorobenzene	0.096	U	108-87-2	Methylcyclohexane	0.096	U
123-91-1	1,4-Dioxane	4.8	U	75-09-2	Methylene Chloride	0.096	U
78-93-3	2-Butanone	0.096	U	1634-04-4	Methyl-t-butyl ether	0.048	U
591-78-6	2-Hexanone	0.096	U	95-47-6	o-Xylene	0.096	U
108-10-1	4-Methyl-2-Pentanone	0.096	U	100-42-5	Styrene	0.096	U
67-64-1	Acetone	0.48	U	**127-18-4**	**Tetrachloroethene**	**0.096**	**0.81**
71-43-2	Benzene	0.048	U	108-88-3	Toluene	0.096	U
74-97-5	Bromochloromethane	0.096	U	156-60-5	trans-1,2-Dichloroethene	0.096	U
75-27-4	Bromodichloromethane	0.096	U	10061-02-6	trans-1,3-Dichloropropene	0.096	U
75-25-2	Bromoform	0.096	U	79-01-6	Trichloroethene	0.096	U
74-83-9	Bromomethane	0.096	U	75-69-4	Trichlorofluoromethane	0.096	U
75-15-0	Carbon Disulfide	0.096	U	75-01-4	Vinyl Chloride	0.096	U
1330-20-7	Xylenes (Total)	0.096	U				

Worksheet #: 466231 *Total Target Concentration* 1.4 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-001
Client Id: SB2_7.0_052318
Data File: 11M57174.D
Analysis Date: 06/05/18 02:10
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 6.05g:10ml
Final Vol: NA
Dilution: 82.6
Solids: 86
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.23	2.0 J

Worksheet #: 466231

Total Tentatively Identified Concentration 2

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

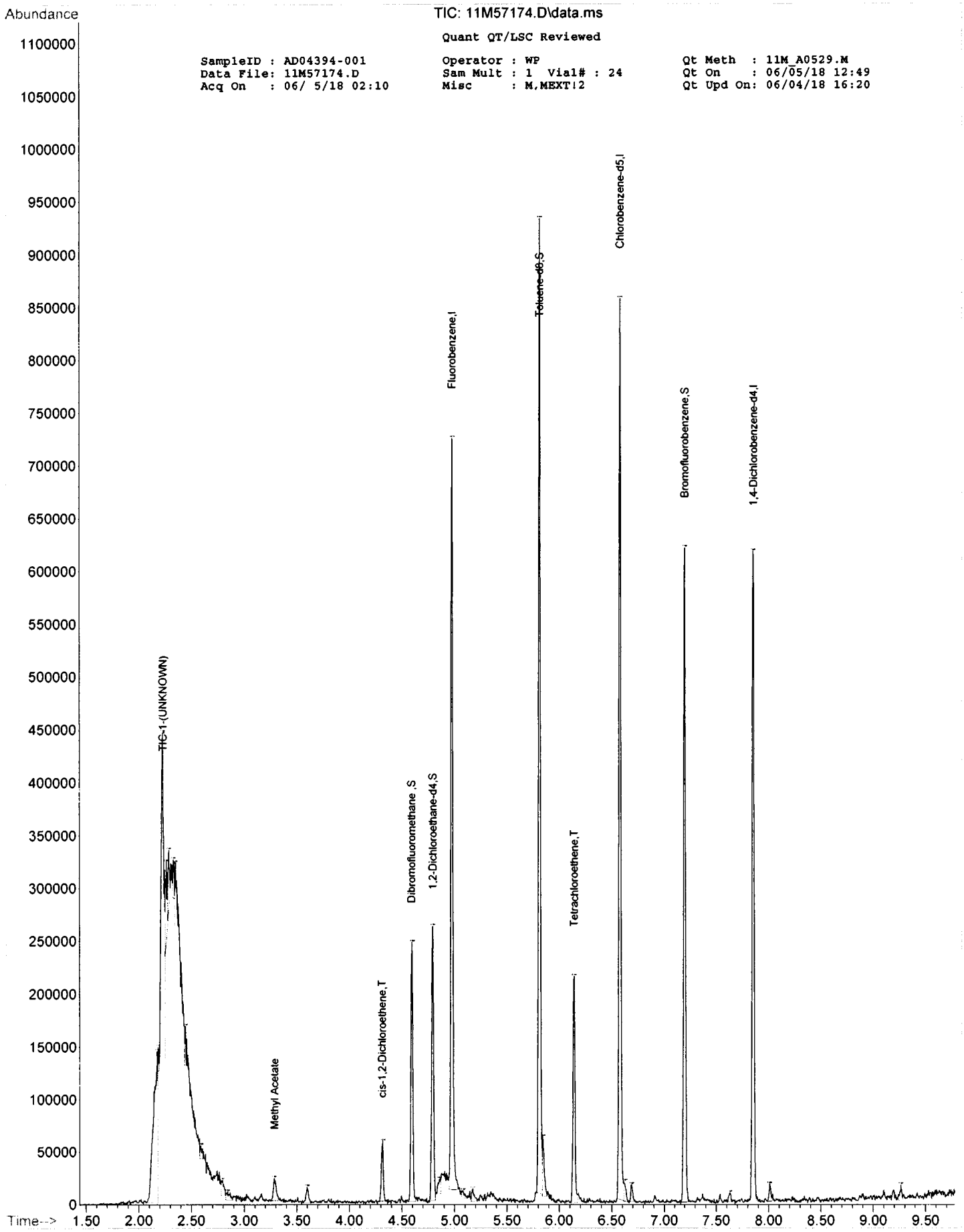
8052424 0050

SampleID : AD04394-001 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57174.D Sam Mult : 1 Vial# : 24 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 02:10 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.974	96	373128	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.575	117	300836	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	111428	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.591	111	93570	31.84	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.13%			
39) 1,2-Dichloroethane-d4	4.794	67	56198	32.61	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.70%			
66) Toluene-d8	5.810	98	387806	28.74	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.80%			
76) Bromofluorobenzene	7.199	174	110668	31.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.53%			
Target Compounds						Qvalue
25) Methyl Acetate	3.286	43	27991	4.2019	ug/l	100
30) cis-1,2-Dichloroethene	4.312	61	18886	1.7311	ug/l	81
65) Tetrachloroethene	6.141	164	31072	8.4781	ug/l	79
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		898956	30.00	ug/l	--
2) Chlorobenzene-d5	6.575		1093450	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.848		778588	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.230		627799	20.95	ug/l	--

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


Abundance
TIC: 11M57174.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD04394-001
Data File: 11M57174.D
Acq On : 06/ 5/18 02:10
Operator : WP
Sam Mult : 1 Vial# : 24
Misc : M,MEXT!2
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20
TIC-1-(UNKNOWN)
Methyl Acetate
cis-1,2-Dichloroethene,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50
1100000 1050000 1000000 950000 900000 850000 800000 750000 700000 650000 600000 550000 500000 450000 400000 350000 300000 250000 200000 150000 100000 50000 0

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-002
Client Id: SB1_9.0_052318
Data File: 11M57175.D
Analysis Date: 06/05/18 02:32
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 5.52g:10ml
Final Vol: NA
Dilution: 90.6
Solids: 84

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.11	U	56-23-5	Carbon Tetrachloride	0.11	U
79-34-5	1,1,2,2-Tetrachloroethane	0.11	U	108-90-7	Chlorobenzene	0.11	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.11	U	75-00-3	Chloroethane	0.11	U
79-00-5	1,1,2-Trichloroethane	0.11	U	67-66-3	Chloroform	0.11	U
75-34-3	1,1-Dichloroethane	0.11	U	74-87-3	Chloromethane	0.11	U
75-35-4	1,1-Dichloroethene	0.11	U	156-59-2	cis-1,2-Dichloroethene	0.11	U
87-61-6	1,2,3-Trichlorobenzene	0.11	U	10061-01-5	cis-1,3-Dichloropropene	0.11	U
120-82-1	1,2,4-Trichlorobenzene	0.11	U	110-82-7	Cyclohexane	0.11	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.11	U	124-48-1	Dibromochloromethane	0.11	U
106-93-4	1,2-Dibromoethane	0.11	U	75-71-8	Dichlorodifluoromethane	0.11	U
95-50-1	1,2-Dichlorobenzene	0.11	U	100-41-4	Ethylbenzene	0.11	U
107-06-2	1,2-Dichloroethane	0.054	U	98-82-8	Isopropylbenzene	0.11	U
78-87-5	1,2-Dichloropropane	0.11	U	79601-23-1	m&p-Xylenes	0.11	U
541-73-1	1,3-Dichlorobenzene	0.11	U	**79-20-9**	**Methyl Acetate**	**0.11**	**0.40**
106-46-7	1,4-Dichlorobenzene	0.11	U	**108-87-2**	**Methylcyclohexane**	**0.11**	**0.26**
123-91-1	1,4-Dioxane	5.4	U	75-09-2	Methylene Chloride	0.11	U
78-93-3	**2-Butanone**	**0.11**	**0.14**	1634-04-4	Methyl-t-butyl ether	0.054	U
591-78-6	2-Hexanone	0.11	U	95-47-6	o-Xylene	0.11	U
108-10-1	4-Methyl-2-Pentanone	0.11	U	100-42-5	Styrene	0.11	U
67-64-1	Acetone	0.54	U	**127-18-4**	**Tetrachloroethene**	**0.11**	**0.89**
71-43-2	Benzene	0.054	U	**108-88-3**	**Toluene**	**0.11**	**1.1**
74-97-5	Bromochloromethane	0.11	U	156-60-5	trans-1,2-Dichloroethene	0.11	U
75-27-4	Bromodichloromethane	0.11	U	10061-02-6	trans-1,3-Dichloropropene	0.11	U
75-25-2	Bromoform	0.11	U	79-01-6	Trichloroethene	0.11	U
74-83-9	Bromomethane	0.11	U	75-69-4	Trichlorofluoromethane	0.11	U
75-15-0	Carbon Disulfide	0.11	U	75-01-4	Vinyl Chloride	0.11	U
1330-20-7	Xylenes (Total)	0.11	U				

Worksheet #: 466231 *Total Target Concentration* 2.8 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-002
Client Id: SB1_9.0_052318
Data File: 11M57175.D
Analysis Date: 06/05/18 02:32
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 5.52g:10ml
Final Vol: NA
Dilution: 90.6
Solids: 84
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.23	2.3 J

Worksheet #: 466231

Total Tentatively Identified Concentration 2.3

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

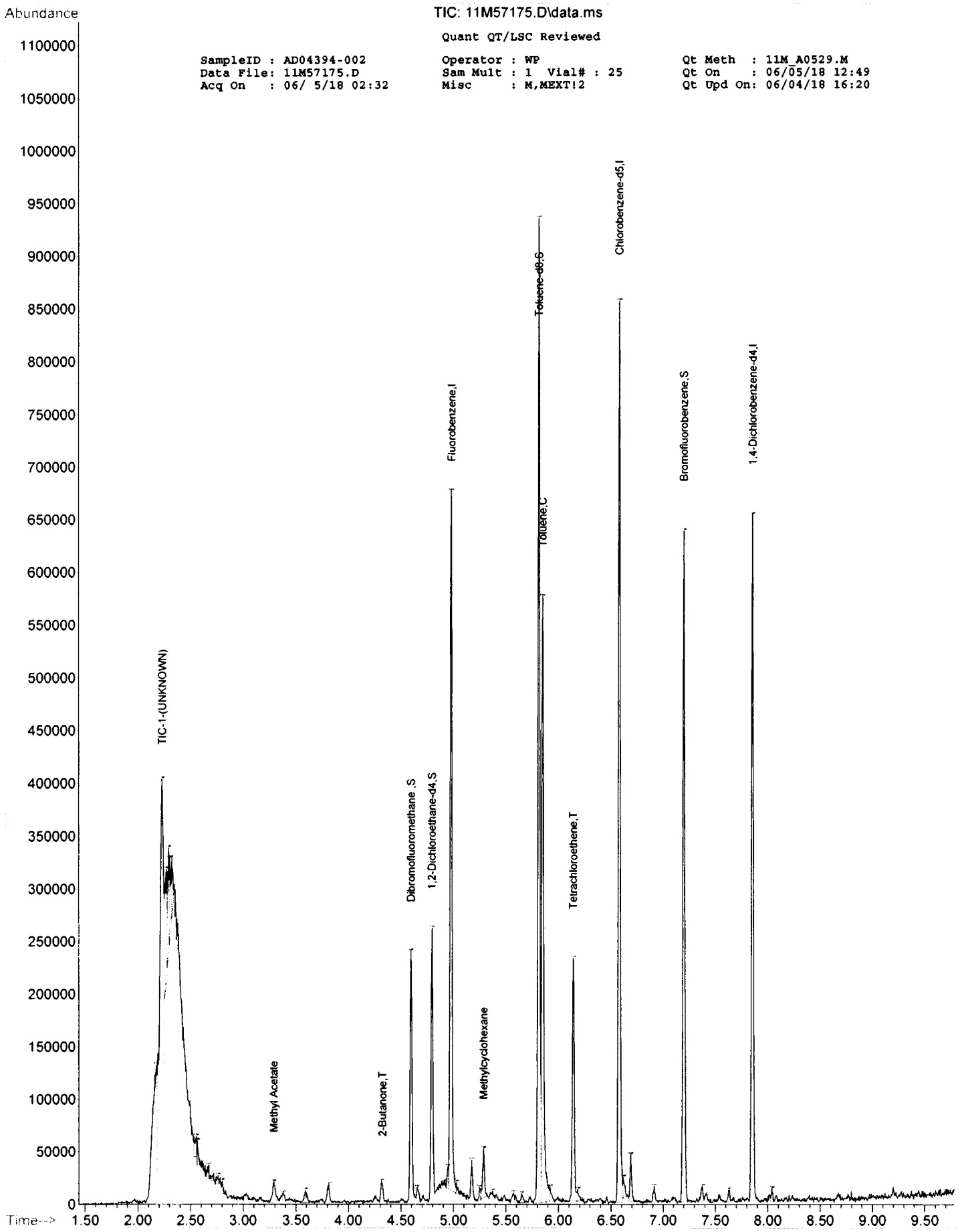
8052424 0054

SampleID : AD04394-002 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57175.D Sam Mult : 1 Vial# : 25 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 02:32 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.977	96	355478	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.575	117	291330	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	107168	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.595	111	85598	30.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.90%			
39) 1,2-Dichloroethane-d4	4.791	67	53337	32.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 108.30%			
66) Toluene-d8	5.810	98	392314	30.02	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.07%			
76) Bromofluorobenzene	7.199	174	105389	31.64	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.47%			
Target Compounds						Qvalue
25) Methyl Acetate	3.289	43	23626	3.7227	ug/l	100
41) 2-Butanone	4.321	43	4075	1.2573	ug/l	89
46) Methylcyclohexane	5.286	83	10371	2.4143	ug/l	96
65) Tetrachloroethene	6.138	164	29346	8.2706	ug/l	94
67) Toluene	5.845	92	147783	10.0594	ug/l	100
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		849436	30.00	ug/l	--
2) Chlorobenzene-d5	6.578		1049090	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		772999	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.230		603479	21.31	ug/l	--

(#) = qualifier out of range (m) = manual integration (+) = signals summed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TIC: 11M57175.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD04394-002
Data File: 11M57175.D
Acq On : 06/ 5/18 02:32
Operator : WP
Sam Mult : 1 Vial# : 25
Misc : M,MEXT!2
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20
TIC-1-(UNKNOWN)
Methyl Acetate
2-Butanone,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Methylcyclohexane
Toluene-d8,S
Toluene,C
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-003
Client Id: SB7_14.5_052318
Data File: 11M57176.D
Analysis Date: 06/05/18 02:55
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 5.77g:10ml
Final Vol: NA
Dilution: 86.7
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.10	U	56-23-5	Carbon Tetrachloride	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	U	108-90-7	Chlorobenzene	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.10	U	75-00-3	Chloroethane	0.10	U
79-00-5	1,1,2-Trichloroethane	0.10	U	67-66-3	Chloroform	0.10	U
75-34-3	1,1-Dichloroethane	0.10	U	74-87-3	Chloromethane	0.10	U
75-35-4	1,1-Dichloroethene	0.10	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.10**	**0.17**
87-61-6	1,2,3-Trichlorobenzene	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.10	U	110-82-7	Cyclohexane	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.10	U	124-48-1	Dibromochloromethane	0.10	U
106-93-4	1,2-Dibromoethane	0.10	U	75-71-8	Dichlorodifluoromethane	0.10	U
95-50-1	1,2-Dichlorobenzene	0.10	U	100-41-4	Ethylbenzene	0.10	U
107-06-2	1,2-Dichloroethane	0.052	U	98-82-8	Isopropylbenzene	0.10	U
78-87-5	1,2-Dichloropropane	0.10	U	79601-23-1	m&p-Xylenes	0.10	U
541-73-1	1,3-Dichlorobenzene	0.10	U	**79-20-9**	**Methyl Acetate**	**0.10**	**0.41**
106-46-7	1,4-Dichlorobenzene	0.10	U	**108-87-2**	**Methylcyclohexane**	**0.10**	**0.26**
123-91-1	1,4-Dioxane	5.2	U	75-09-2	Methylene Chloride	0.10	U
78-93-3	2-Butanone	0.10	U	1634-04-4	Methyl-t-butyl ether	0.052	U
591-78-6	2-Hexanone	0.10	U	95-47-6	o-Xylene	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.10	U	100-42-5	Styrene	0.10	U
67-64-1	Acetone	0.52	U	**127-18-4**	**Tetrachloroethene**	**0.10**	**0.46**
71-43-2	Benzene	0.052	U	**108-88-3**	**Toluene**	**0.10**	**2.9**
74-97-5	Bromochloromethane	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.10	U
75-27-4	Bromodichloromethane	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.10	U
75-25-2	Bromoform	0.10	U	79-01-6	Trichloroethene	0.10	U
74-83-9	Bromomethane	0.10	U	75-69-4	Trichlorofluoromethane	0.10	U
75-15-0	Carbon Disulfide	0.10	U	75-01-4	Vinyl Chloride	0.10	U
1330-20-7	Xylenes (Total)	0.10	U				

Worksheet #: 466231 *Total Target Concentration* 4.2 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-003
Client Id: SB7_14.5_052318
Data File: 11M57176.D
Analysis Date: 06/05/18 02:55
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 5.77g:10ml
Final Vol: NA
Dilution: 86.7
Solids: 83
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.22	1.5J

Worksheet #: 466231

Total Tentatively Identified Concentration 1.5

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

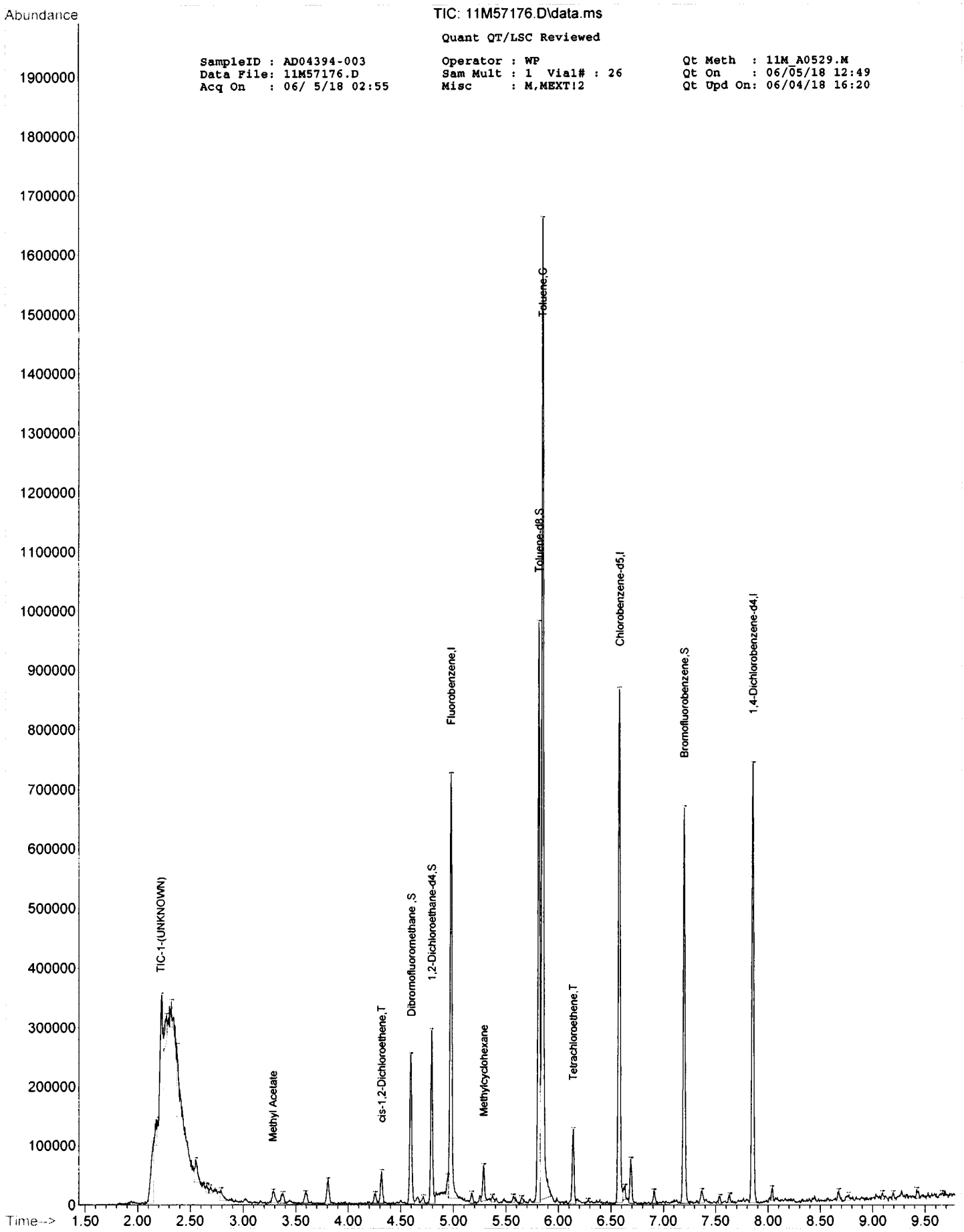
8052424 0058

SampleID : AD04394-003 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57176.D Sam Mult : 1 Vial# : 26 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 02:55 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.974	96	393473	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.578	117	305060	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	125856	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.598	111	90688	29.26	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.53%			
39) 1,2-Dichloroethane-d4	4.791	67	57378	31.58	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.27%			
66) Toluene-d8	5.810	98	405701	29.65	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.83%			
76) Bromofluorobenzene	7.199	174	113624	29.05	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.83%			
Target Compounds						Qvalue
25) Methyl Acetate	3.283	43	27504m	3.9153	ug/l	
30) cis-1,2-Dichloroethene	4.315	61	18452	1.6039	ug/l	73
46) Methylcyclohexane	5.286	83	11853	2.4928	ug/l	87
65) Tetrachloroethene	6.138	164	16260	4.3985	ug/l	72
67) Toluene	5.845	92	429419	27.9145	ug/l	89
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		954052	30.00	ug/l	--
2) Chlorobenzene-d5	6.575		1101980	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		890412	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.220		462124	14.53	ug/l	--

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


Abundance
TIC: 11M57176.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD04394-003
Data File: 11M57176.D
Acq On : 06/ 5/18 02:55
Operator : WP
Sam Mult : 1 Vial# : 26
Misc : M,MEXT!2
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20
TIC-1-(UNKNOWN)
Methyl Acetate
cis-1,2-Dichloroethene,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Methylcyclohexane
Toluene-d8,S
Toluene,C
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1900000
1800000
1700000
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-004
Client Id: SB6_14.5_052318
Data File: 11M57177.D
Analysis Date: 06/05/18 03:18
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 7.04g:10ml
Final Vol: NA
Dilution: 71.0
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.083	U	56-23-5	Carbon Tetrachloride	0.083	U
79-34-5	1,1,2,2-Tetrachloroethane	0.083	U	108-90-7	Chlorobenzene	0.083	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.083	U	75-00-3	Chloroethane	0.083	U
79-00-5	1,1,2-Trichloroethane	0.083	U	67-66-3	Chloroform	0.083	U
75-34-3	1,1-Dichloroethane	0.083	U	74-87-3	Chloromethane	0.083	U
75-35-4	1,1-Dichloroethene	0.083	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.083**	**0.21**
87-61-6	1,2,3-Trichlorobenzene	0.083	U	10061-01-5	cis-1,3-Dichloropropene	0.083	U
120-82-1	1,2,4-Trichlorobenzene	0.083	U	110-82-7	Cyclohexane	0.083	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.083	U	124-48-1	Dibromochloromethane	0.083	U
106-93-4	1,2-Dibromoethane	0.083	U	75-71-8	Dichlorodifluoromethane	0.083	U
95-50-1	1,2-Dichlorobenzene	0.083	U	100-41-4	Ethylbenzene	0.083	U
107-06-2	1,2-Dichloroethane	0.041	U	98-82-8	Isopropylbenzene	0.083	U
78-87-5	1,2-Dichloropropane	0.083	U	79601-23-1	m&p-Xylenes	0.083	U
541-73-1	1,3-Dichlorobenzene	0.083	U	**79-20-9**	**Methyl Acetate**	**0.083**	**0.30**
106-46-7	1,4-Dichlorobenzene	0.083	U	**108-87-2**	**Methylcyclohexane**	**0.083**	**0.21**
123-91-1	1,4-Dioxane	4.1	U	75-09-2	Methylene Chloride	0.083	U
78-93-3	**2-Butanone**	**0.083**	**0.19**	1634-04-4	Methyl-t-butyl ether	0.041	U
591-78-6	2-Hexanone	0.083	U	95-47-6	o-Xylene	0.083	U
108-10-1	4-Methyl-2-Pentanone	0.083	U	100-42-5	Styrene	0.083	U
67-64-1	Acetone	0.41	U	**127-18-4**	**Tetrachloroethene**	**0.083**	**0.35**
71-43-2	Benzene	0.041	U	**108-88-3**	**Toluene**	**0.083**	**1.8**
74-97-5	Bromochloromethane	0.083	U	156-60-5	trans-1,2-Dichloroethene	0.083	U
75-27-4	Bromodichloromethane	0.083	U	10061-02-6	trans-1,3-Dichloropropene	0.083	U
75-25-2	Bromoform	0.083	U	79-01-6	Trichloroethene	0.083	U
74-83-9	Bromomethane	0.083	U	75-69-4	Trichlorofluoromethane	0.083	U
75-15-0	Carbon Disulfide	0.083	U	75-01-4	Vinyl Chloride	0.083	U
1330-20-7	Xylenes (Total)	0.083	U				

Worksheet #: 466231 *Total Target Concentration* 3.1 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-004
Client Id: SB6_14.5_052318
Data File: 11M57177.D
Analysis Date: 06/05/18 03:18
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 7.04g:10ml
Final Vol: NA
Dilution: 71.0
Solids: 86
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.22	1.8J

Worksheet #: 466231

Total Tentatively Identified Concentration 1.8

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

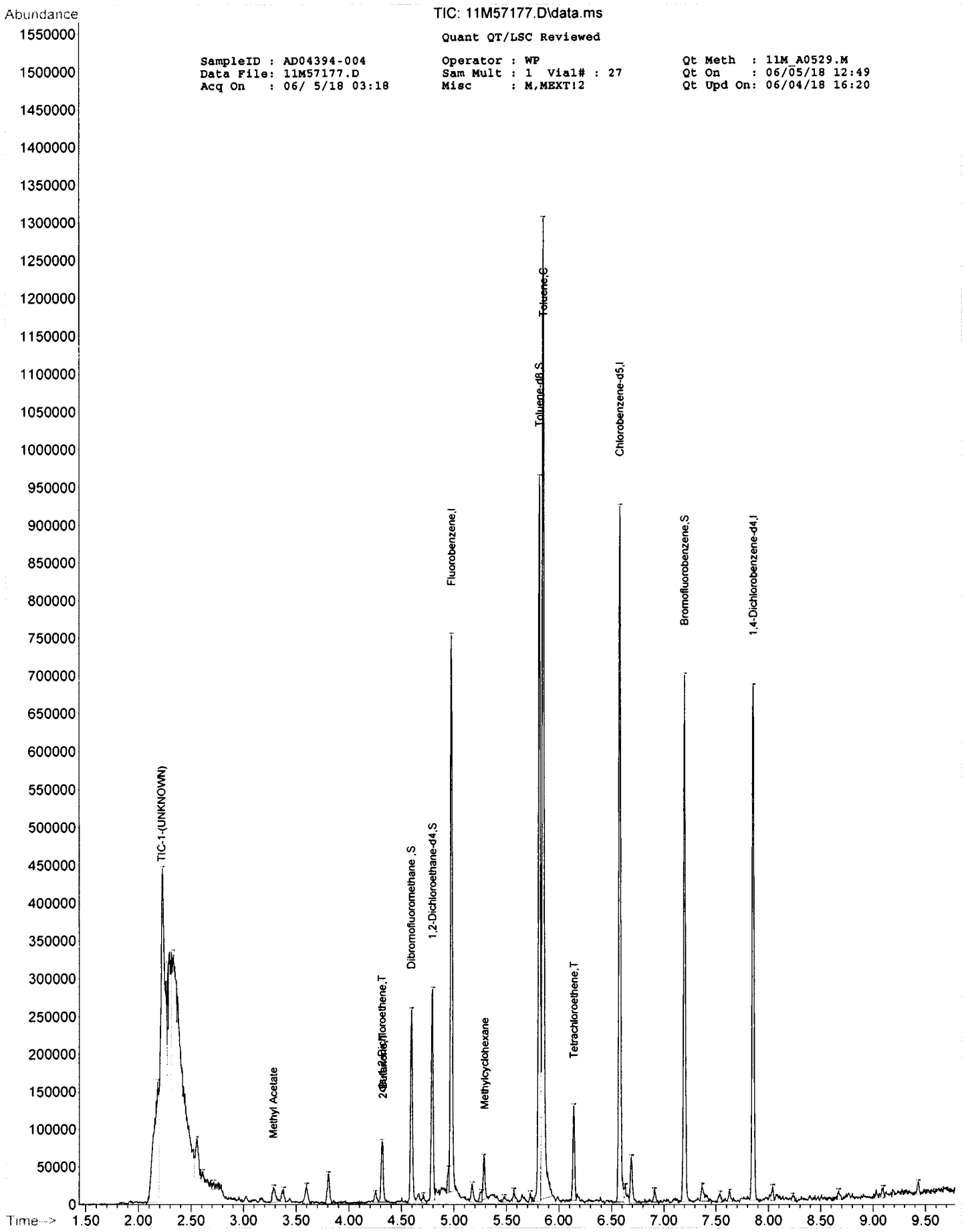
Quantitation Report (QT/LSC Reviewed)

SampleID : AD04394-004 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57177.D Sam Mult : 1 Vial# : 27 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 03:18 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.974	96	403750	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.575	117	318579	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	117314	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.591	111	94492	29.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.03%			
39) 1,2-Dichloroethane-d4	4.794	67	61443	32.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.83%			
66) Toluene-d8	5.810	98	417131	29.19	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.30%			
76) Bromofluorobenzene	7.199	174	111171	30.49	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.63%			
Target Compounds						Qvalue
25) Methyl Acetate	3.283	43	25790m	3.5779	ug/l	
30) cis-1,2-Dichloroethene	4.312	61	30464	2.5806	ug/l	83
41) 2-Butanone	4.321	43	8539	2.3197	ug/l	87
46) Methylcyclohexane	5.289	83	12701	2.6032	ug/l	94
65) Tetrachloroethene	6.141	164	16350	4.2361	ug/l	71
67) Toluene	5.849	92	344454	21.4411	ug/l	95
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		950779	30.00	ug/l	--
2) Chlorobenzene-d5	6.575		1130680	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		824938	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.220		708143	22.34	ug/l	--

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


Abundance
TIC: 11M57177.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD04394-004
Data File: 11M57177.D
Acq On : 06/ 5/18 03:18
Operator : WP
Sam Mult : 1 Vial# : 27
Misc : M,MEXT!2
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20
TIC-1-(UNKNOWN)
Methyl Acetate
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Methylcyclohexane
Toluene-d8,S
Toluene,C
Tetrachloroethene,T
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
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1400000
1350000
1300000
1250000
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1150000
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1050000
1000000
950000
900000
850000
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750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
1.50
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
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7.50
8.00
8.50
9.00
9.50

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-005
Client Id: SB5_14.5_052318
Data File: 11M57178.D
Analysis Date: 06/05/18 03:40
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 6.82g:10ml
Final Vol: NA
Dilution: 73.3
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.089	U	56-23-5	Carbon Tetrachloride	0.089	U
79-34-5	1,1,2,2-Tetrachloroethane	0.089	U	108-90-7	Chlorobenzene	0.089	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.089	U	75-00-3	Chloroethane	0.089	U
79-00-5	1,1,2-Trichloroethane	0.089	U	67-66-3	Chloroform	0.089	U
75-34-3	1,1-Dichloroethane	0.089	U	74-87-3	Chloromethane	0.089	U
75-35-4	1,1-Dichloroethene	0.089	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.089**	**0.29**
87-61-6	1,2,3-Trichlorobenzene	0.089	U	10061-01-5	cis-1,3-Dichloropropene	0.089	U
120-82-1	1,2,4-Trichlorobenzene	0.089	U	110-82-7	Cyclohexane	0.089	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.089	U	124-48-1	Dibromochloromethane	0.089	U
106-93-4	1,2-Dibromoethane	0.089	U	75-71-8	Dichlorodifluoromethane	0.089	U
95-50-1	1,2-Dichlorobenzene	0.089	U	100-41-4	Ethylbenzene	0.089	U
107-06-2	1,2-Dichloroethane	0.045	U	98-82-8	Isopropylbenzene	0.089	U
78-87-5	1,2-Dichloropropane	0.089	U	**79601-23-1**	**m&p-Xylenes**	**0.089**	**0.11**
541-73-1	1,3-Dichlorobenzene	0.089	U	**79-20-9**	**Methyl Acetate**	**0.089**	**0.36**
106-46-7	1,4-Dichlorobenzene	0.089	U	**108-87-2**	**Methylcyclohexane**	**0.089**	**0.22**
123-91-1	1,4-Dioxane	4.5	U	75-09-2	Methylene Chloride	0.089	U
78-93-3	2-Butanone	0.089	U	1634-04-4	Methyl-t-butyl ether	0.045	U
591-78-6	2-Hexanone	0.089	U	95-47-6	o-Xylene	0.089	U
108-10-1	4-Methyl-2-Pentanone	0.089	U	100-42-5	Styrene	0.089	U
67-64-1	Acetone	0.45	U	**127-18-4**	**Tetrachloroethene**	**0.089**	**0.48**
71-43-2	Benzene	0.045	U	**108-88-3**	**Toluene**	**0.089**	**5.2**
74-97-5	Bromochloromethane	0.089	U	156-60-5	trans-1,2-Dichloroethene	0.089	U
75-27-4	Bromodichloromethane	0.089	U	10061-02-6	trans-1,3-Dichloropropene	0.089	U
75-25-2	Bromoform	0.089	U	79-01-6	Trichloroethene	0.089	U
74-83-9	Bromomethane	0.089	U	75-69-4	Trichlorofluoromethane	0.089	U
75-15-0	Carbon Disulfide	0.089	U	75-01-4	Vinyl Chloride	0.089	U
1330-20-7	**Xylenes (Total)**	**0.089**	**0.11**				

Worksheet #: 466231 *Total Target Concentration* 6.7 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-005
Client Id: SB5_14.5_052318
Data File: 11M57178.D
Analysis Date: 06/05/18 03:40
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 6.82g:10ml
Final Vol: NA
Dilution: 73.3
Solids: 82
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.23	1.5J

Worksheet #: 466231

Total Tentatively Identified Concentration 1.5

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : AD04394-005 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57178.D Sam Mult : 1 Vial# : 28 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 03:40 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.971	96	412975	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.575	117	326692	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	127776	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.591	111	93399	28.71	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.70%			
39) 1,2-Dichloroethane-d4	4.794	67	61299	32.14	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.13%			
66) Toluene-d8	5.810	98	433163	29.56	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.53%			
76) Bromofluorobenzene	7.199	174	119584	30.11	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.37%			
Target Compounds						Qvalue
25) Methyl Acetate	3.292	43	30070	4.0784	ug/l	100
30) cis-1,2-Dichloroethene	4.315	61	38766	3.2105	ug/l	92
46) Methylcyclohexane	5.286	83	12136	2.4318	ug/l	83
65) Tetrachloroethene	6.135	164	21168	5.3404	ug/l	84
67) Toluene	5.845	92	961830	58.3840	ug/l	92
78) m&p-Xylenes	6.688	106	12832	1.2528	ug/l	53
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		952496	30.00	ug/l	--
2) Chlorobenzene-d5	6.578		1186240	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		901136	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.230		521807	16.43	ug/l	--

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

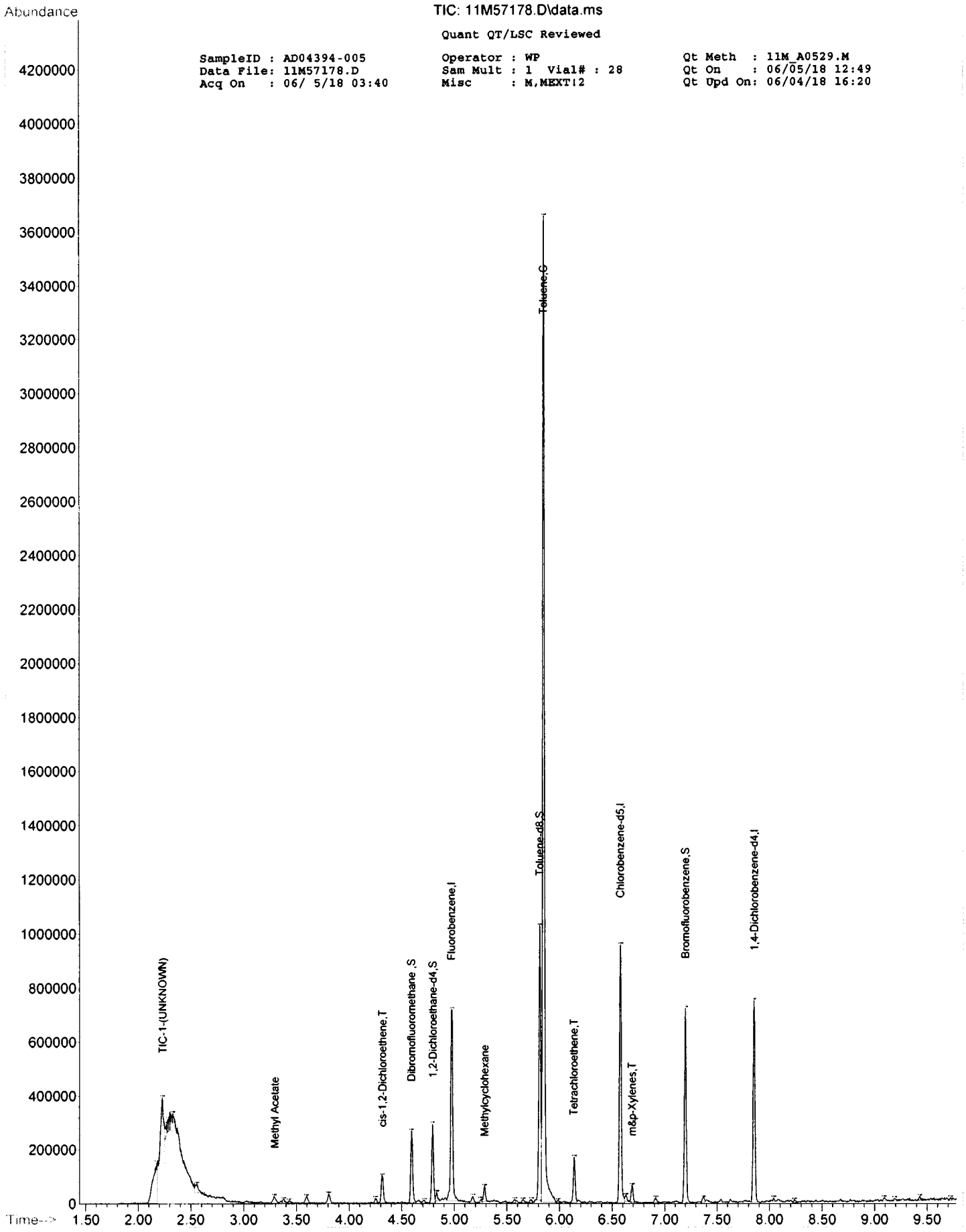
TIC: 11M57178.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD04394-005
Data File: 11M57178.D
Acq On : 06/ 5/18 03:40

Operator : WP
Sam Mult : 1 Vial# : 28
Misc : M,MEXT!2

Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-006
Client Id: DUP01_052318
Data File: 11M57179.D
Analysis Date: 06/05/18 04:03
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 7g:10ml
Final Vol: NA
Dilution: 71.4
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.086	U	56-23-5	Carbon Tetrachloride	0.086	U
79-34-5	1,1,2,2-Tetrachloroethane	0.086	U	108-90-7	Chlorobenzene	0.086	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.086	U	75-00-3	Chloroethane	0.086	U
79-00-5	1,1,2-Trichloroethane	0.086	U	67-66-3	Chloroform	0.086	U
75-34-3	1,1-Dichloroethane	0.086	U	74-87-3	Chloromethane	0.086	U
75-35-4	1,1-Dichloroethene	0.086	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.086**	**0.17**
87-61-6	1,2,3-Trichlorobenzene	0.086	U	10061-01-5	cis-1,3-Dichloropropene	0.086	U
120-82-1	1,2,4-Trichlorobenzene	0.086	U	110-82-7	Cyclohexane	0.086	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.086	U	124-48-1	Dibromochloromethane	0.086	U
106-93-4	1,2-Dibromoethane	0.086	U	75-71-8	Dichlorodifluoromethane	0.086	U
95-50-1	1,2-Dichlorobenzene	0.086	U	100-41-4	Ethylbenzene	0.086	U
107-06-2	1,2-Dichloroethane	0.043	U	98-82-8	Isopropylbenzene	0.086	U
78-87-5	1,2-Dichloropropane	0.086	U	**79601-23-1**	**m&p-Xylenes**	**0.086**	**0.15**
541-73-1	1,3-Dichlorobenzene	0.086	U	**79-20-9**	**Methyl Acetate**	**0.086**	**0.35**
106-46-7	1,4-Dichlorobenzene	0.086	U	**108-87-2**	**Methylcyclohexane**	**0.086**	**0.24**
123-91-1	1,4-Dioxane	4.3	U	75-09-2	Methylene Chloride	0.086	U
78-93-3	**2-Butanone**	**0.086**	**0.12**	1634-04-4	Methyl-t-butyl ether	0.043	U
591-78-6	2-Hexanone	0.086	U	95-47-6	o-Xylene	0.086	U
108-10-1	4-Methyl-2-Pentanone	0.086	U	100-42-5	Styrene	0.086	U
67-64-1	Acetone	0.43	U	**127-18-4**	**Tetrachloroethene**	**0.086**	**0.31**
71-43-2	Benzene	0.043	U	**108-88-3**	**Toluene**	**0.086**	**1.7**
74-97-5	Bromochloromethane	0.086	U	156-60-5	trans-1,2-Dichloroethene	0.086	U
75-27-4	Bromodichloromethane	0.086	U	10061-02-6	trans-1,3-Dichloropropene	0.086	U
75-25-2	Bromoform	0.086	U	79-01-6	Trichloroethene	0.086	U
74-83-9	Bromomethane	0.086	U	75-69-4	Trichlorofluoromethane	0.086	U
75-15-0	Carbon Disulfide	0.086	U	75-01-4	Vinyl Chloride	0.086	U
1330-20-7	**Xylenes (Total)**	**0.086**	**0.15**				

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-006
Client Id: DUP01_052318
Data File: 11M57179.D
Analysis Date: 06/05/18 04:03
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 7g:10ml
Final Vol: NA
Dilution: 71.4
Solids: 83
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.23	1.7J

Worksheet #: 466231

Total Tentatively Identified Concentration 1.7

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

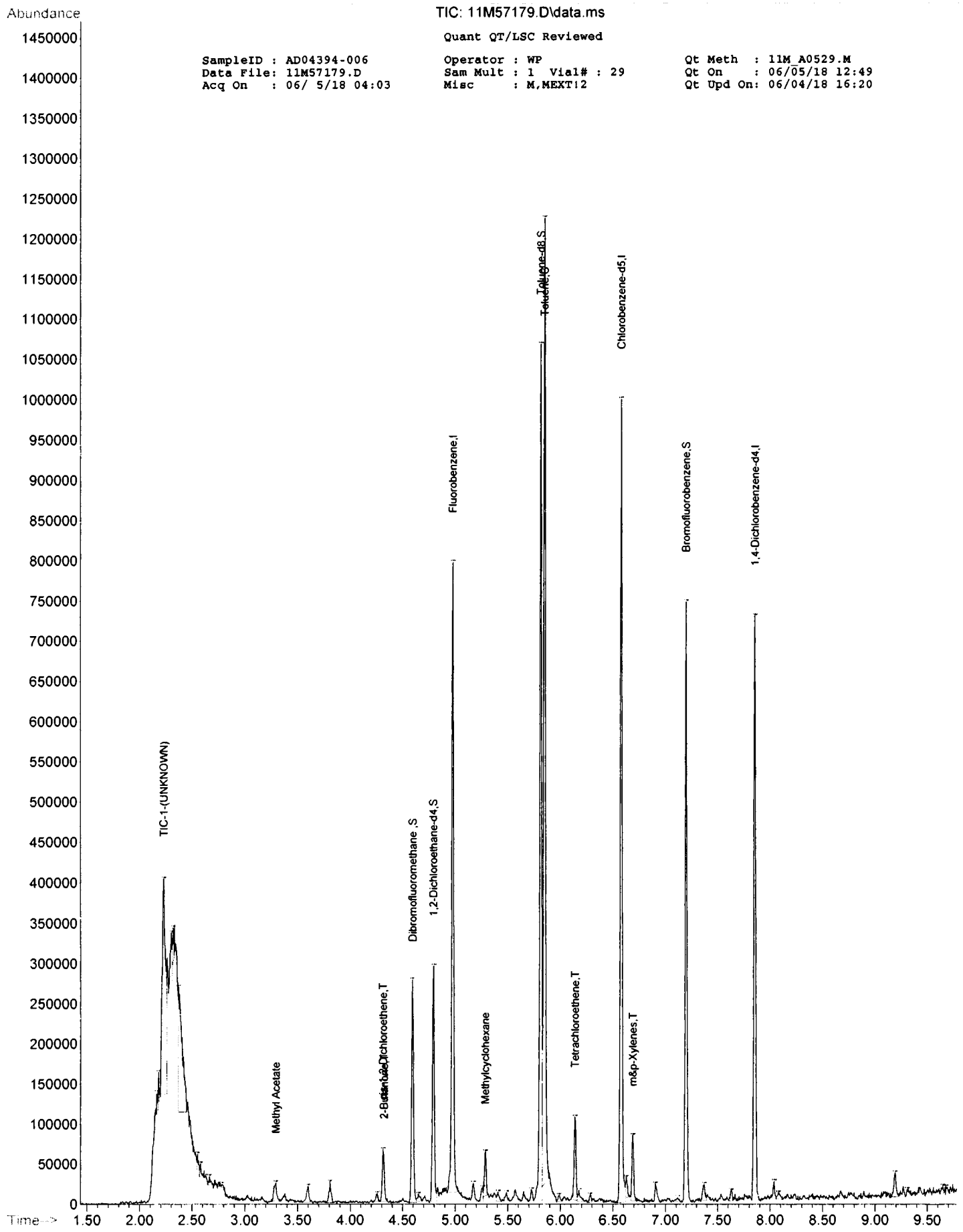
Quantitation Report (QT/LSC Reviewed) **8052424 0070**

SampleID : AD04394-006 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57179.D Sam Mult : 1 Vial# : 29 Qt On : 06/05/18 12:49
Acq On : 06/ 5/18 04:03 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.974	96	416107	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.575	117	329800	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	115817	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.594	111	96577	29.47	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.23%			
39) 1,2-Dichloroethane-d4	4.791	67	65120	33.89	ug/l	0.00
Spiked Amount 30.000			Recovery = 112.97%			
66) Toluene-d8	5.810	98	430625	29.11	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.03%			
76) Bromofluorobenzene	7.199	174	117719	32.70	ug/l	0.00
Spiked Amount 30.000			Recovery = 109.00%			
Target Compounds						Qvalue
25) Methyl Acetate	3.295	43	30417	4.0944	ug/l	100
30) cis-1,2-Dichloroethene	4.312	61	23929	1.9668	ug/l	68
41) 2-Butanone	4.321	43	5430	1.4313	ug/l	83
46) Methylcyclohexane	5.283	83	13944	2.7731	ug/l	81
65) Tetrachloroethene	6.138	164	14179	3.5518	ug/l	92
67) Toluene	5.845	92	323652	19.4608	ug/l	96
78) m&p-Xylenes	6.688	106	15746	1.6960	ug/l	62
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		964905	30.00	ug/l	--
2) Chlorobenzene-d5	6.575		1171580	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		863535	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.230		640951	19.93	ug/l	--

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


Abundance
TIC: 11M57179.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD04394-006
Data File: 11M57179.D
Acq On : 06/ 5/18 04:03
Operator : WP
Sam Mult : 1 Vial# : 29
Misc : M,MEXT!2
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:49
Qt Upd On: 06/04/18 16:20
TIC-1-(UNKNOWN)
Methyl Acetate
2-Butanone,T
Dichloroethene,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Methylcyclohexane
Toluene,T
Toluene-d8,S
Tetrachloroethene,T
Chlorobenzene-d5,I
m&p-Xylenes,T
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-007
Client Id: SB4_14.5_052318
Data File: 11M57180.D
Analysis Date: 06/05/18 04:26
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 6.17g:10ml
Final Vol: NA
Dilution: 81.0
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.095	U	56-23-5	Carbon Tetrachloride	0.095	U
79-34-5	1,1,2,2-Tetrachloroethane	0.095	U	108-90-7	Chlorobenzene	0.095	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.095	U	75-00-3	Chloroethane	0.095	U
79-00-5	1,1,2-Trichloroethane	0.095	U	67-66-3	Chloroform	0.095	U
75-34-3	1,1-Dichloroethane	0.095	U	74-87-3	Chloromethane	0.095	U
75-35-4	1,1-Dichloroethene	0.095	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.095**	**0.23**
87-61-6	1,2,3-Trichlorobenzene	0.095	U	10061-01-5	cis-1,3-Dichloropropene	0.095	U
120-82-1	1,2,4-Trichlorobenzene	0.095	U	110-82-7	Cyclohexane	0.095	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.095	U	124-48-1	Dibromochloromethane	0.095	U
106-93-4	1,2-Dibromoethane	0.095	U	75-71-8	Dichlorodifluoromethane	0.095	U
95-50-1	1,2-Dichlorobenzene	0.095	U	100-41-4	Ethylbenzene	0.095	U
107-06-2	1,2-Dichloroethane	0.048	U	98-82-8	Isopropylbenzene	0.095	U
78-87-5	1,2-Dichloropropane	0.095	U	**79601-23-1**	**m&p-Xylenes**	**0.095**	**0.16**
541-73-1	1,3-Dichlorobenzene	0.095	U	**79-20-9**	**Methyl Acetate**	**0.095**	**0.39**
106-46-7	1,4-Dichlorobenzene	0.095	U	**108-87-2**	**Methylcyclohexane**	**0.095**	**0.27**
123-91-1	1,4-Dioxane	4.8	U	75-09-2	Methylene Chloride	0.095	U
78-93-3	**2-Butanone**	**0.095**	**0.15**	1634-04-4	Methyl-t-butyl ether	0.048	U
591-78-6	2-Hexanone	0.095	U	95-47-6	o-Xylene	0.095	U
108-10-1	4-Methyl-2-Pentanone	0.095	U	100-42-5	Styrene	0.095	U
67-64-1	Acetone	0.48	U	**127-18-4**	**Tetrachloroethene**	**0.095**	**0.38**
71-43-2	Benzene	0.048	U	**108-88-3**	**Toluene**	**0.095**	**2.2**
74-97-5	Bromochloromethane	0.095	U	156-60-5	trans-1,2-Dichloroethene	0.095	U
75-27-4	Bromodichloromethane	0.095	U	10061-02-6	trans-1,3-Dichloropropene	0.095	U
75-25-2	Bromoform	0.095	U	79-01-6	Trichloroethene	0.095	U
74-83-9	Bromomethane	0.095	U	75-69-4	Trichlorofluoromethane	0.095	U
75-15-0	Carbon Disulfide	0.095	U	75-01-4	Vinyl Chloride	0.095	U
1330-20-7	**Xylenes (Total)**	**0.095**	**0.16**				

Worksheet #: 466231 *Total Target Concentration* 3.8 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-007
Client Id: SB4_14.5_052318
Data File: 11M57180.D
Analysis Date: 06/05/18 04:26
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 6.17g:10ml
Final Vol: NA
Dilution: 81.0
Solids: 85
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.22	1.1 J

Worksheet #: 466231

Total Tentatively Identified Concentration 1.1

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed) **8052424 0074**

SampleID : AD04394-007 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57180.D Sam Mult : 1 Vial# : 30 Qt On : 06/05/18 12:50
Acq On : 06/ 5/18 04:26 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
4) Fluorobenzene	4.977	96	420159	30.00 ug/l	0.00
52) Chlorobenzene-d5	6.575	117	324984	30.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	116353	30.00 ug/l	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	4.595	111	95769	28.94 ug/l	0.00
Spiked Amount 30.000			Recovery	= 96.47%	
39) 1,2-Dichloroethane-d4	4.791	67	65028	33.51 ug/l	0.00
Spiked Amount 30.000			Recovery	= 111.70%	
66) Toluene-d8	5.810	98	425303	29.18 ug/l	0.00
Spiked Amount 30.000			Recovery	= 97.27%	
76) Bromofluorobenzene	7.199	174	114264	31.60 ug/l	0.00
Spiked Amount 30.000			Recovery	= 105.33%	
Target Compounds					Qvalue
25) Methyl Acetate	3.279	43	30338	4.0444 ug/l	100
30) cis-1,2-Dichloroethene	4.315	61	29525	2.4033 ug/l	82
41) 2-Butanone	4.321	43	6177	1.6125 ug/l	98
46) Methylcyclohexane	5.289	83	14125	2.7820 ug/l	70
65) Tetrachloroethene	6.141	164	15485	3.9344 ug/l	50
67) Toluene	5.848	92	375078	22.8872 ug/l	99
78) m&p-Xylenes	6.688	106	15171	1.6265 ug/l	90
Library Search Internal Standards TIC Results					
1) Fluorobenzene	4.974		974396	30.00 ug/l	--
2) Chlorobenzene-d5	6.575		1168750	30.00 ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		863147	30.00 ug/l	--
Library Search Compounds					
1) UNKNOWN	2.220		370537	11.41 ug/l	--

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

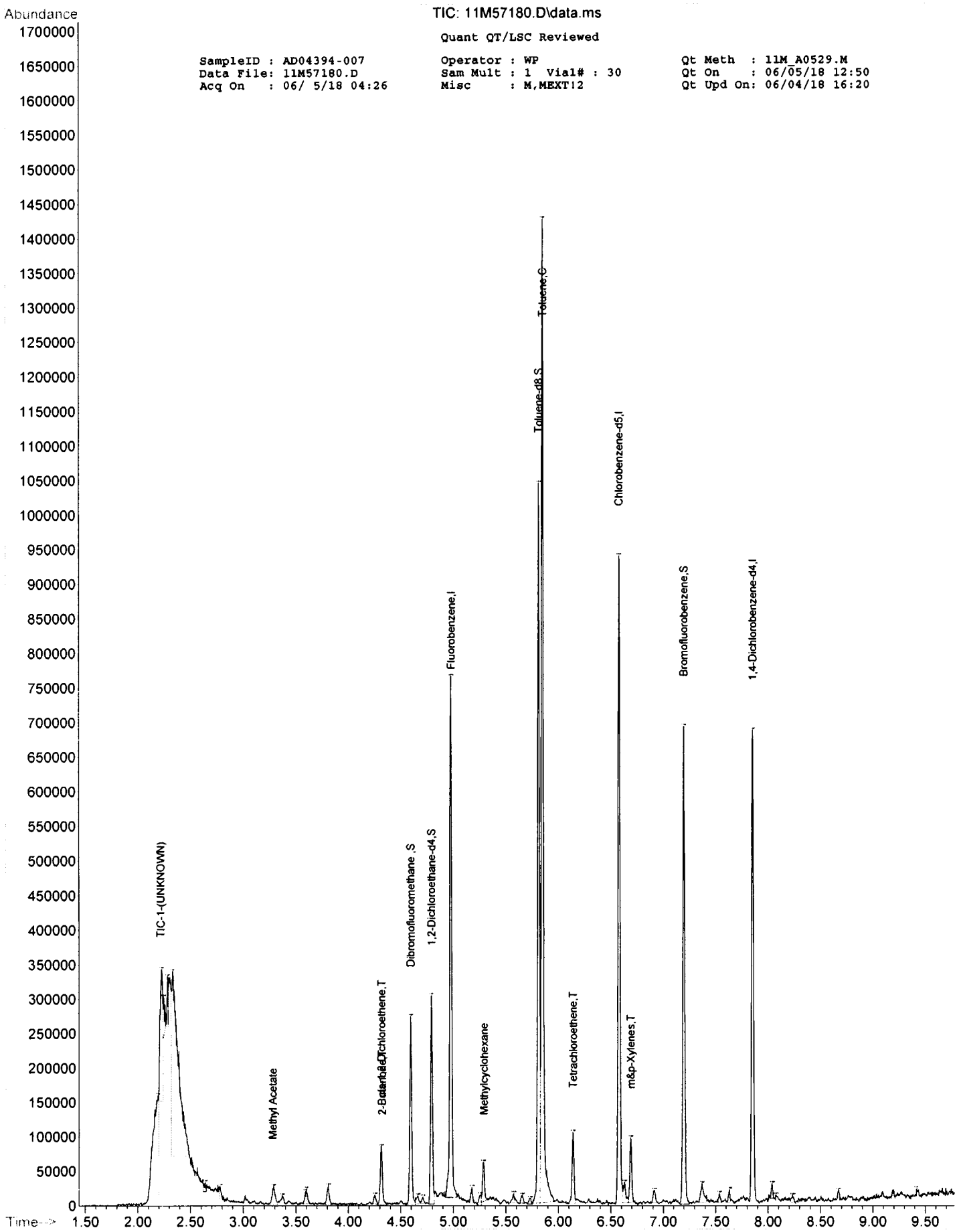
TIC: 11M57180.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD04394-007
Data File: 11M57180.D
Acq On : 06/ 5/18 04:26

Operator : WP
Sam Mult : 1 Vial# : 30
Misc : M,MEXT12

Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:50
Qt Upd On: 06/04/18 16:20



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-008
Client Id: SB3_7.0_052318
Data File: 11M57181.D
Analysis Date: 06/05/18 04:49
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 4.78g:10ml
Final Vol: NA
Dilution: 105
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.13	U	56-23-5	Carbon Tetrachloride	0.13	U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	108-90-7	Chlorobenzene	0.13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.13	U	75-00-3	Chloroethane	0.13	U
79-00-5	1,1,2-Trichloroethane	0.13	U	67-66-3	Chloroform	0.13	U
75-34-3	1,1-Dichloroethane	0.13	U	74-87-3	Chloromethane	0.13	U
75-35-4	1,1-Dichloroethene	0.13	U	**156-59-2**	**cis-1,2-Dichloroethene**	**0.13**	**0.14**
87-61-6	1,2,3-Trichlorobenzene	0.13	U	10061-01-5	cis-1,3-Dichloropropene	0.13	U
120-82-1	1,2,4-Trichlorobenzene	0.13	U	110-82-7	Cyclohexane	0.13	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.13	U	124-48-1	Dibromochloromethane	0.13	U
106-93-4	1,2-Dibromoethane	0.13	U	75-71-8	Dichlorodifluoromethane	0.13	U
95-50-1	1,2-Dichlorobenzene	0.13	U	100-41-4	Ethylbenzene	0.13	U
107-06-2	1,2-Dichloroethane	0.063	U	98-82-8	Isopropylbenzene	0.13	U
78-87-5	1,2-Dichloropropane	0.13	U	79601-23-1	m&p-Xylenes	0.13	U
541-73-1	1,3-Dichlorobenzene	0.13	U	**79-20-9**	**Methyl Acetate**	**0.13**	**0.48**
106-46-7	1,4-Dichlorobenzene	0.13	U	**108-87-2**	**Methylcyclohexane**	**0.13**	**0.22**
123-91-1	1,4-Dioxane	6.3	U	75-09-2	Methylene Chloride	0.13	U
78-93-3	2-Butanone	0.13	U	1634-04-4	Methyl-t-butyl ether	0.063	U
591-78-6	2-Hexanone	0.13	U	95-47-6	o-Xylene	0.13	U
108-10-1	4-Methyl-2-Pentanone	0.13	U	100-42-5	Styrene	0.13	U
67-64-1	Acetone	0.63	U	**127-18-4**	**Tetrachloroethene**	**0.13**	**0.62**
71-43-2	Benzene	0.063	U	**108-88-3**	**Toluene**	**0.13**	**2.0**
74-97-5	Bromochloromethane	0.13	U	156-60-5	trans-1,2-Dichloroethene	0.13	U
75-27-4	Bromodichloromethane	0.13	U	10061-02-6	trans-1,3-Dichloropropene	0.13	U
75-25-2	Bromoform	0.13	U	79-01-6	Trichloroethene	0.13	U
74-83-9	Bromomethane	0.13	U	75-69-4	Trichlorofluoromethane	0.13	U
75-15-0	Carbon Disulfide	0.13	U	75-01-4	Vinyl Chloride	0.13	U
1330-20-7	Xylenes (Total)	0.13	U				

Worksheet #: 466231 *Total Target Concentration* 3.5 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-008
Client Id: SB3_7.0_052318
Data File: 11M57181.D
Analysis Date: 06/05/18 04:49
Date Rec/Extracted: 05/24/18-NA

Matrix: Methanol
Extraction Ratio: 4.78g:10ml
Final Vol: NA
Dilution: 105
Solids: 83
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.22	2.3J

Worksheet #: 466231 *Total Tentatively Identified Concentration* 2.3

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed) **8052424 0078**

SampleID : AD04394-008 Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57181.D Sam Mult : 1 Vial# : 31 Qt On : 06/05/18 12:50
Acq On : 06/ 5/18 04:49 Misc : M,MEXT!2 Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	4.974	96	415396	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.578	117	329811	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	116090	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.591	111	95948	29.33	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.77%			
39) 1,2-Dichloroethane-d4	4.791	67	66416	34.62	ug/l	0.00
Spiked Amount 30.000			Recovery = 115.40%			
66) Toluene-d8	5.813	98	437454	29.57	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.57%			
76) Bromofluorobenzene	7.196	174	120281	33.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.13%			
Target Compounds						Qvalue
25) Methyl Acetate	3.283	43	28194	3.8017	ug/l	100
30) cis-1,2-Dichloroethene	4.312	61	13573	1.1175	ug/l	88
46) Methylcyclohexane	5.279	83	8734	1.7399	ug/l	93
65) Tetrachloroethene	6.138	164	19736	4.9347	ug/l	90
67) Toluene	5.845	92	268265	16.1299	ug/l	87
Library Search Internal Standards TIC Results						
1) Fluorobenzene	4.974		902863	30.00	ug/l	--
2) Chlorobenzene-d5	6.578		1182330	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		856878	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.220		541565	17.99	ug/l	--

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

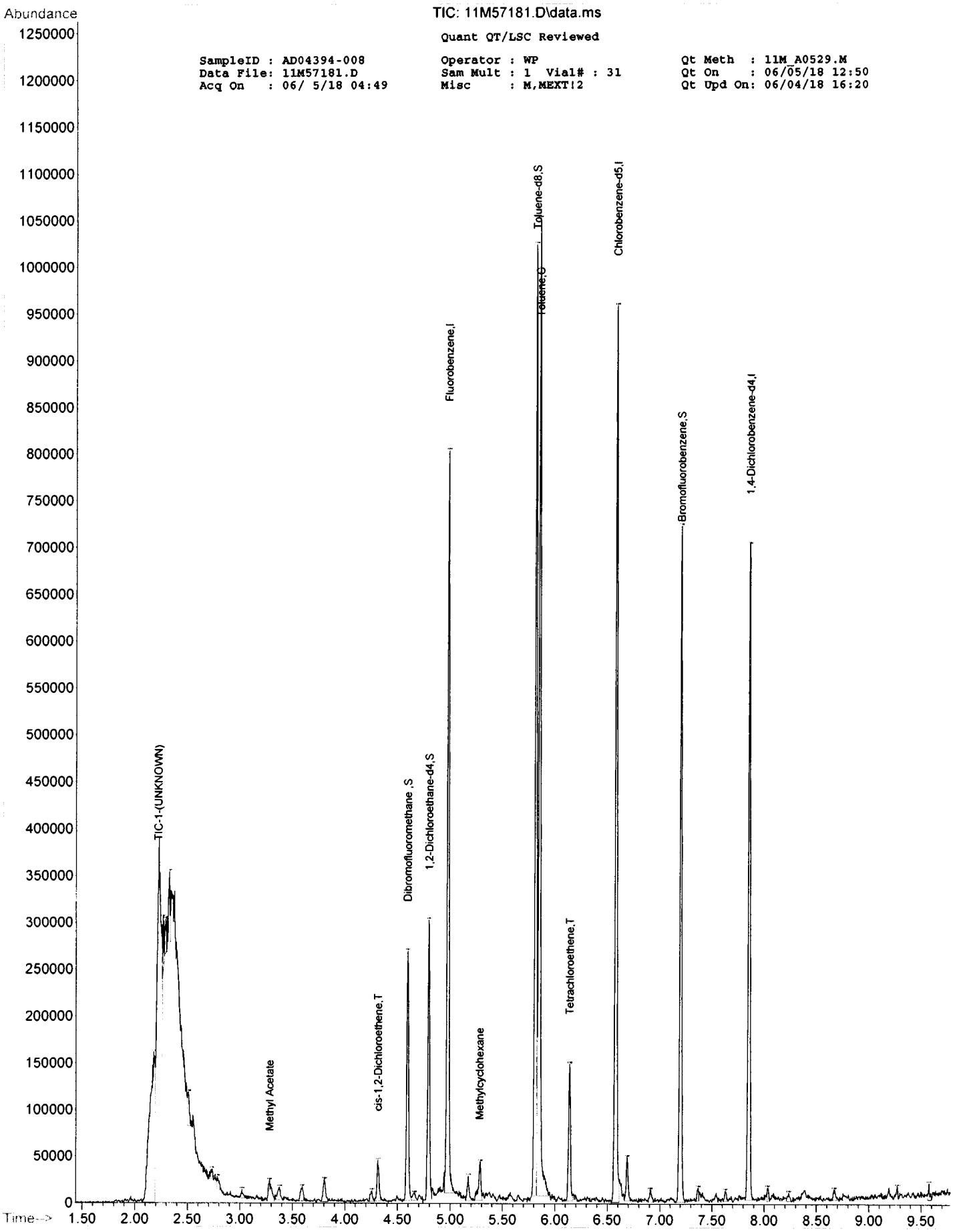
TIC: 11M57181.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD04394-008
Data File: 11M57181.D
Acq On : 06/ 5/18 04:49

Operator : WP
Sam Mult : 1 Vial# : 31
Misc : M,MEXT!2

Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:50
Qt Upd On: 06/04/18 16:20



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-010
Client Id: FB01_052318
Data File: 1M108106.D
Analysis Date: 06/04/18 14:22
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 466231

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-010
Client Id: FB01_052318
Data File: 1M108106.D
Analysis Date: 06/04/18 14:22
Date Rec/Extracted: 05/24/18-NA

Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids:
Method: EPA 8260C

Units: ug/L

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 466231

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

8052424 0082

SampleID : AD04394-010 Operator : SG Qt Meth : 1M_A0601.M
Data File: 1M108106.D Sam Mult : 1 Vial# : 22 Qt On : 06/04/18 14:54
Acq On : 06/04/18 14:22 Misc : A,5ML!10 Qt Upd On: 06/01/18 21:16

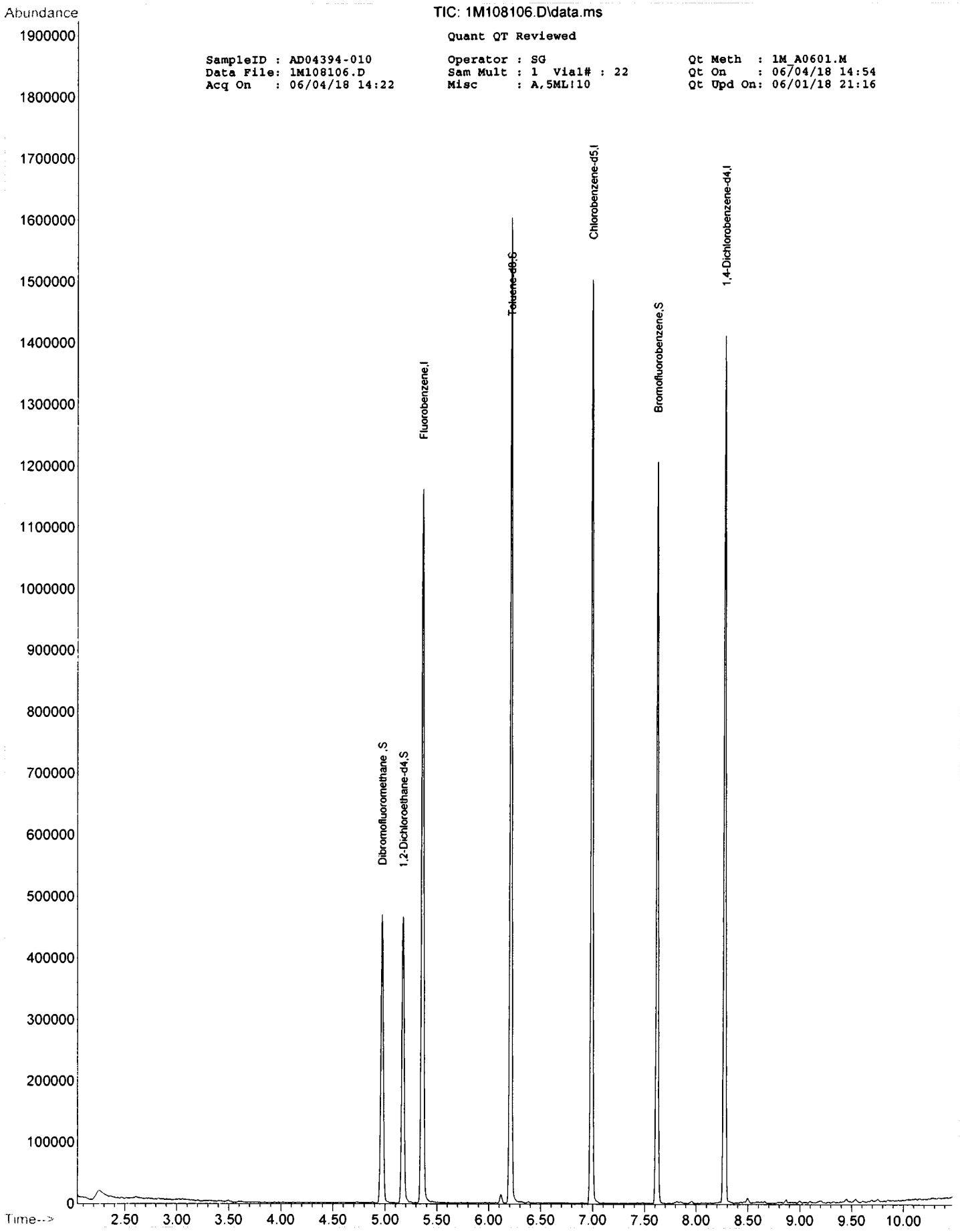
Data Path : G:\GcMsData\2018\GCMS_1\Data\06-04-18\
Qt Path : G:\GcMsData\2018\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.359	96	817475	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.989	117	645172	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.272	152	300626	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.970	111	236105	31.46	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.87%			
39) 1,2-Dichloroethane-d4	5.172	67	136270	30.78	ug/l	0.00
Spiked Amount 30.000			Recovery = 102.60%			
66) Toluene-d8	6.207	98	789751	28.70	ug/l	0.00
Spiked Amount 30.000			Recovery = 95.67%			
76) Bromofluorobenzene	7.616	174	269560	29.96	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.87%			

Target Compounds Qvalue

No Library Search Compounds Found

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


Abundance
TIC: 1M108106.D\data.ms
Quant QT Reviewed
SampleID : AD04394-010
Data File: 1M108106.D
Acq On : 06/04/18 14:22
Operator : SG
Sam Mult : 1 Vial# : 22
Misc : A,5ML!10
Qt Meth : 1M_A0601.M
Qt On : 06/04/18 14:54
Qt Upd On: 06/01/18 21:16
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1900000
1800000
1700000
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD04394-011
Client Id: TB01_052318
Data File: 1M108107.D
Analysis Date: 06/04/18 14:43
Date Rec/Extracted: 05/24/18-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U
1330-20-7	Xylenes (Total)	1.0	U				

Worksheet #: 466231

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD04394-011
Client Id: TB01_052318
Data File: 1M108107.D
Analysis Date: 06/04/18 14:43
Date Rec/Extracted: 05/24/18-NA

Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids:
Method: EPA 8260C

Units: ug/L

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 466231

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

SampleID : AD04394-011 Operator : SG Qt Meth : 1M_A0601.M
Data File: 1M108107.D Sam Mult : 1 Vial# : 23 Qt On : 06/04/18 15:06
Acq On : 06/04/18 14:43 Misc : A,5ML!3 Qt Upd On: 06/01/18 21:16

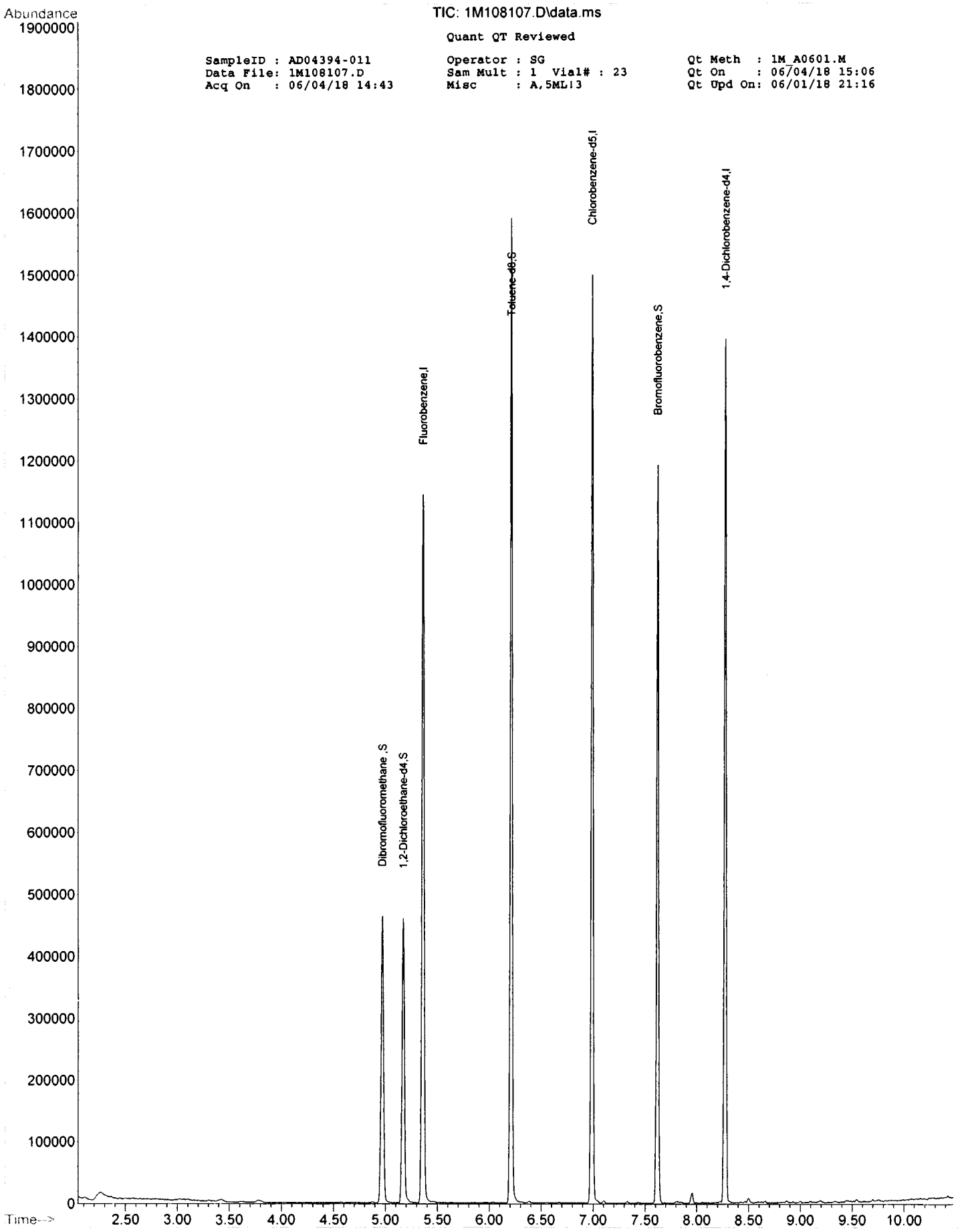
Data Path : G:\GcMsData\2018\GCMS_1\Data\06-04-18\
Qt Path : G:\GcMsData\2018\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.355	96	814167	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.986	117	641373	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.272	152	300928	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.970	111	232668	31.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 103.77%			
39) 1,2-Dichloroethane-d4	5.169	67	134214	30.44	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.47%			
66) Toluene-d8	6.207	98	788202	28.81	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.03%			
76) Bromofluorobenzene	7.616	174	266187	29.55	ug/l	0.00
Spiked Amount 30.000			Recovery = 98.50%			

Target Compounds Qvalue

No Library Search Compounds Found

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


Abundance
TIC: 1M108107.D\data.ms
Quant QT Reviewed
SampleID : AD04394-011
Data File: 1M108107.D
Acq On : 06/04/18 14:43
Operator : SG
Sam Mult : 1 Vial# : 23
Misc : A,5ML13
Qt Meth : 1M_A0601.M
Qt On : 06/04/18 15:06
Qt Upd On: 06/01/18 21:16
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->
1900000
1800000
1700000
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 11M57164.D
Analysis Date: 06/04/18 22:22
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Methanol
Extraction Ratio: 5g:10ml
Final Vol: NA
Dilution: 100
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.10	U	56-23-5	Carbon Tetrachloride	0.10	U
79-34-5	1,1,2,2-Tetrachloroethane	0.10	U	108-90-7	Chlorobenzene	0.10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.10	U	75-00-3	Chloroethane	0.10	U
79-00-5	1,1,2-Trichloroethane	0.10	U	67-66-3	Chloroform	0.10	U
75-34-3	1,1-Dichloroethane	0.10	U	74-87-3	Chloromethane	0.10	U
75-35-4	1,1-Dichloroethene	0.10	U	156-59-2	cis-1,2-Dichloroethene	0.10	U
87-61-6	1,2,3-Trichlorobenzene	0.10	U	10061-01-5	cis-1,3-Dichloropropene	0.10	U
120-82-1	1,2,4-Trichlorobenzene	0.10	U	110-82-7	Cyclohexane	0.10	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.10	U	124-48-1	Dibromochloromethane	0.10	U
106-93-4	1,2-Dibromoethane	0.10	U	75-71-8	Dichlorodifluoromethane	0.10	U
95-50-1	1,2-Dichlorobenzene	0.10	U	100-41-4	Ethylbenzene	0.10	U
107-06-2	1,2-Dichloroethane	0.050	U	98-82-8	Isopropylbenzene	0.10	U
78-87-5	1,2-Dichloropropane	0.10	U	79601-23-1	m&p-Xylenes	0.10	U
541-73-1	1,3-Dichlorobenzene	0.10	U	79-20-9	Methyl Acetate	0.10	U
106-46-7	1,4-Dichlorobenzene	0.10	U	108-87-2	Methylcyclohexane	0.10	U
123-91-1	1,4-Dioxane	5.0	U	75-09-2	Methylene Chloride	0.10	U
78-93-3	2-Butanone	0.10	U	1634-04-4	Methyl-t-butyl ether	0.050	U
591-78-6	2-Hexanone	0.10	U	95-47-6	o-Xylene	0.10	U
108-10-1	4-Methyl-2-Pentanone	0.10	U	100-42-5	Styrene	0.10	U
67-64-1	Acetone	0.50	U	127-18-4	Tetrachloroethene	0.10	U
71-43-2	Benzene	0.050	U	108-88-3	Toluene	0.10	U
74-97-5	Bromochloromethane	0.10	U	156-60-5	trans-1,2-Dichloroethene	0.10	U
75-27-4	Bromodichloromethane	0.10	U	10061-02-6	trans-1,3-Dichloropropene	0.10	U
75-25-2	Bromoform	0.10	U	79-01-6	Trichloroethene	0.10	U
74-83-9	Bromomethane	0.10	U	75-69-4	Trichlorofluoromethane	0.10	U
75-15-0	Carbon Disulfide	0.10	U	75-01-4	Vinyl Chloride	0.10	U

Worksheet #: 466231 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 11M57164.D
Analysis Date: 06/04/18 22:22
Date Rec/Extracted:

Matrix: Methanol
Extraction Ratio: 5g:10ml
Final Vol: NA
Dilution: 100
Solids: 100
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 466231

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

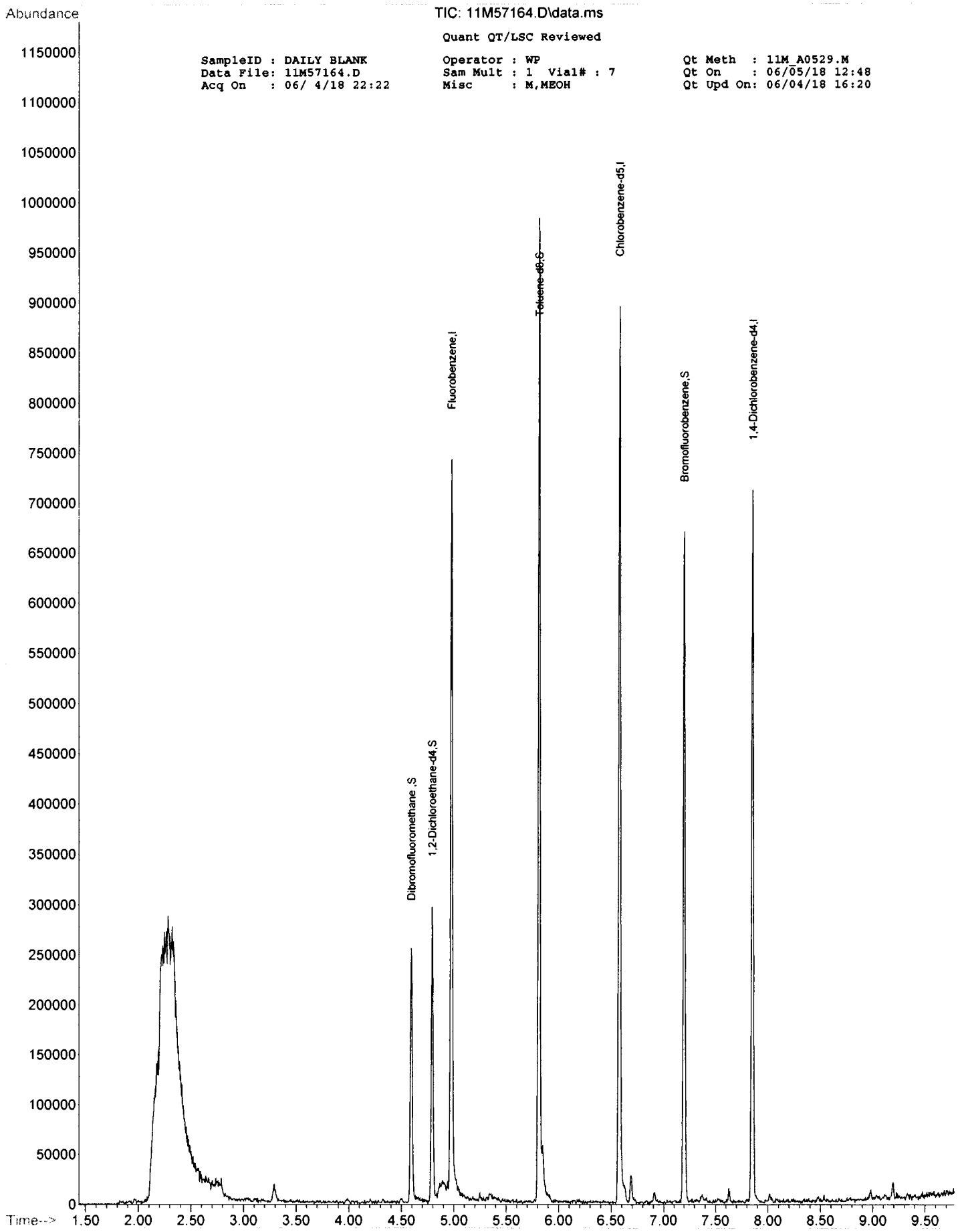
Quantitation Report (QT/LSC Reviewed) **8052424 0090**

SampleID : DAILY BLANK Operator : WP Qt Meth : 11M_A0529.M
Data File: 11M57164.D Sam Mult : 1 Vial# : 7 Qt On : 06/05/18 12:48
Acq On : 06/ 4/18 22:22 Misc : M,MEOH Qt Upd On: 06/04/18 16:20

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Qt Path : G:\GcMsData\2018\GCMS_11\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
4) Fluorobenzene	4.974	96	382208	30.00 ug/l	0.00
52) Chlorobenzene-d5	6.575	117	315013	30.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	7.852	152	115795	30.00 ug/l	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	4.594	111	96174	31.95 ug/l	0.00
Spiked Amount 30.000			Recovery	= 106.50%	
39) 1,2-Dichloroethane-d4	4.791	67	61686	34.95 ug/l	0.00
Spiked Amount 30.000			Recovery	= 116.50%	
66) Toluene-d8	5.810	98	406710	28.78 ug/l	0.00
Spiked Amount 30.000			Recovery	= 95.93%	
76) Bromofluorobenzene	7.199	174	114248	31.75 ug/l	0.00
Spiked Amount 30.000			Recovery	= 105.83%	
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) Fluorobenzene	4.974		921797	30.00 ug/l	--
2) Chlorobenzene-d5	6.575		1131150	30.00 ug/l	--
3) 1,4-Dichlorobenzene-d4	7.852		838810	30.00 ug/l	--
Library Search Compounds					

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


Abundance
TIC: 11M57164.D\data.ms
Quant QT/LSC Reviewed
SampleID : DAILY BLANK
Data File: 11M57164.D
Acq On : 06/ 4/18 22:22
Operator : WP
Sam Mult : 1 Vial# : 7
Misc : M,MEOH
Qt Meth : 11M_A0529.M
Qt On : 06/05/18 12:48
Qt Upd On: 06/04/18 16:20
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 1M108091.D
Analysis Date: 06/04/18 08:57
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	1.0	U	56-23-5	Carbon Tetrachloride	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	108-90-7	Chlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	1.0	U	75-00-3	Chloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U	67-66-3	Chloroform	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U	74-87-3	Chloromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U	156-59-2	cis-1,2-Dichloroethene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U	10061-01-5	cis-1,3-Dichloropropene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U	110-82-7	Cyclohexane	1.0	U
96-12-8	1,2-Dibromo-3-Chloropropa	1.0	U	124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U	75-71-8	Dichlorodifluoromethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U	100-41-4	Ethylbenzene	1.0	U
107-06-2	1,2-Dichloroethane	0.50	U	98-82-8	Isopropylbenzene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U	79601-23-1	m&p-Xylenes	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U	79-20-9	Methyl Acetate	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U	108-87-2	Methylcyclohexane	1.0	U
123-91-1	1,4-Dioxane	50	U	75-09-2	Methylene Chloride	1.0	U
78-93-3	2-Butanone	1.0	U	1634-04-4	Methyl-t-butyl ether	0.50	U
591-78-6	2-Hexanone	1.0	U	95-47-6	o-Xylene	1.0	U
108-10-1	4-Methyl-2-Pentanone	1.0	U	100-42-5	Styrene	1.0	U
67-64-1	Acetone	5.0	U	127-18-4	Tetrachloroethene	1.0	U
71-43-2	Benzene	0.50	U	108-88-3	Toluene	1.0	U
74-97-5	Bromochloromethane	1.0	U	156-60-5	trans-1,2-Dichloroethene	1.0	U
75-27-4	Bromodichloromethane	1.0	U	10061-02-6	trans-1,3-Dichloropropene	1.0	U
75-25-2	Bromoform	1.0	U	79-01-6	Trichloroethene	1.0	U
74-83-9	Bromomethane	1.0	U	75-69-4	Trichlorofluoromethane	1.0	U
75-15-0	Carbon Disulfide	1.0	U	75-01-4	Vinyl Chloride	1.0	U

Worksheet #: 466231 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 1M108091.D
Analysis Date: 06/04/18 08:57
Date Rec/Extracted:

Matrix: Aqueous
Initial Vol: 5ml
Final Vol: NA
Dilution: 1.00
Solids:
Method: EPA 8260C

Units: ug/L

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 466231

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

8052424 0094

SampleID : DAILY BLANK
Data File: 1M108091.D
Acq On : 06/04/18 08:57

Operator : SG
Sam Mult : 1 Vial# : 7
Misc : A,5ML

Qt Meth : 1M_A0601.M
Qt On : 06/04/18 09:29
Qt Upd On: 06/01/18 21:16

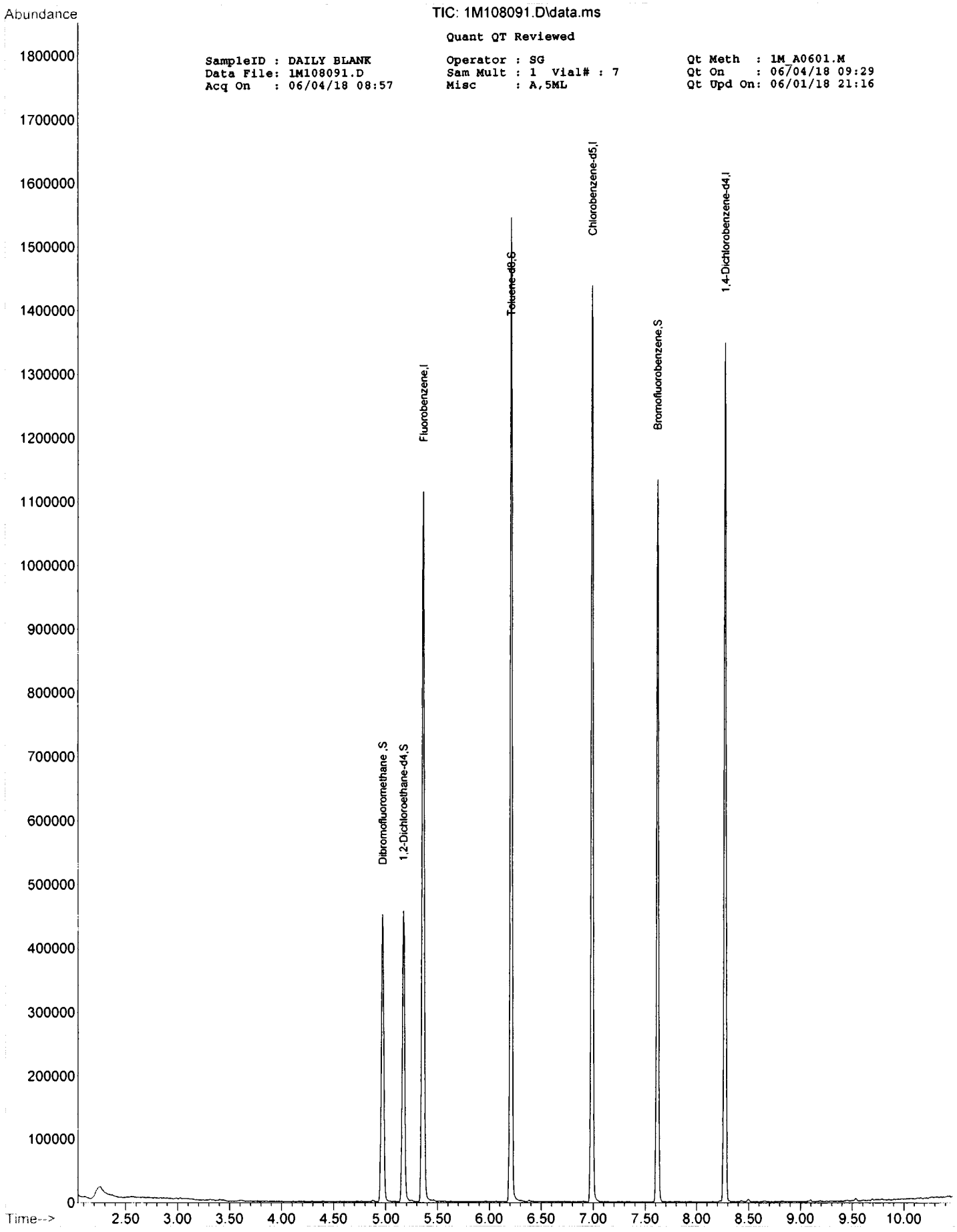
Data Path : G:\GcMsData\2018\GCMS_1\Data\06-04-18\
Qt Path : G:\GcMsData\2018\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
4) Fluorobenzene	5.359	96	793748	30.00 ug/l	0.00
52) Chlorobenzene-d5	6.989	117	625136	30.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.272	152	287194	30.00 ug/l	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	4.969	111	227540	31.23 ug/l	0.00
Spiked Amount 30.000			Recovery	= 104.10%	
39) 1,2-Dichloroethane-d4	5.169	67	135127	31.44 ug/l	0.00
Spiked Amount 30.000			Recovery	= 104.80%	
66) Toluene-d8	6.207	98	765982	28.73 ug/l	0.00
Spiked Amount 30.000			Recovery	= 95.77%	
76) Bromofluorobenzene	7.616	174	257647	29.97 ug/l	0.00
Spiked Amount 30.000			Recovery	= 99.90%	

Target Compounds Qvalue

No Library Search Compounds Found

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


Abundance
TIC: 1M108091.D\data.ms
Quant QT Reviewed
SampleID : DAILY BLANK
Data File: 1M108091.D
Acq On : 06/04/18 08:57
Operator : SG
Sam Mult : 1 Vial# : 7
Misc : A,5ML
Qt Meth : 1M_A0601.M
Qt On : 06/04/18 09:29
Qt Upd On: 06/01/18 21:16
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
11M57164.D	DAILY BLANK	M	06/04/18 22:22	1		106	116	96	106		
1M108056.D	DAILY BLANK	A	06/03/18 20:41	1		103	105	95	98		
1M108091.D	DAILY BLANK	A	06/04/18 08:57	1		104	105	96	100		
11M57174.D	AD04394-001	M	06/05/18 02:10	1		106	109	96	107		
11M57175.D	AD04394-002	M	06/05/18 02:32	1		102	108	100	105		
11M57176.D	AD04394-003	M	06/05/18 02:55	1		98	105	99	97		
11M57177.D	AD04394-004	M	06/05/18 03:18	1		99	110	97	102		
11M57178.D	AD04394-005	M	06/05/18 03:40	1		96	107	99	100		
11M57179.D	AD04394-006	M	06/05/18 04:03	1		98	113	97	109		
11M57180.D	AD04394-007	M	06/05/18 04:26	1		96	112	97	105		
11M57181.D	AD04394-008	M	06/05/18 04:49	1		98	115	99	111		
1M108106.D	AD04394-010	A	06/04/18 14:22	1		105	103	96	100		
1M108107.D	AD04394-011	A	06/04/18 14:43	1		104	101	96	99		
11M57167.D	MBS70140	M	06/04/18 23:31	1		106	108	96	106		
11M57187.D	AD04394-001(MS)	M	06/05/18 07:11	1		108	112	99	107		
11M57190.D	AD04394-001(MSD)	M	06/05/18 08:19	1		107	111	99	99		
1M108057.D	MBS70125	A	06/03/18 21:02	1		98	100	100	101		
1M108067.D	AD04395-008	A	06/04/18 00:36	1		103	103	96	99		
1M108095.D	MBS70134	A	06/04/18 10:22	1		99	97	100	102		
1M108110.D	AD04395-008(MS)	A	06/04/18 15:47	1		99	98	99	99		
1M108111.D	AD04395-009(MSD)	A	06/04/18 16:08	1		97	97	98	101		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	73-131
S2=1,2-Dichloroethane-d4	30	78-128
S3=Toluene-d8	30	79-111
S4=Bromofluorobenzene	30	82-112

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70125

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M108057.D	MBS70125	6/3/2018 9:02:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.9771	0	20	105	50	150
Dichlorodifluoromethane	1	16.6373	0	20	83	50	150
Chloromethane	1	15.7858	0	20	79	50	150
Bromomethane	1	13.7618	0	20	69	50	150
Vinyl Chloride	1	14.095	0	20	70	50	150
Chloroethane	1	15.4691	0	20	77	50	150
Trichlorofluoromethane	1	17.0764	0	20	85	50	150
Ethyl ether	1	15.2138	0	20	76	50	150
Furan	1	16.289	0	20	81	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	22.3156	0	20	112	50	150
Methylene Chloride	1	15.3008	0	20	77	70	130
Acrolein	1	87.5964	0	100	88	50	150
Acrylonitrile	1	16.8318	0	20	84	50	150
Iodomethane	1	10.2061	0	20	51	50	150
Acetone	1	90.5094	0	100	91	50	150
Carbon Disulfide	1	17.5485	0	20	88	50	150
t-Butyl Alcohol	1	79.0327	0	100	79	50	150
n-Hexane	1	26.5745	0	20	133*	70	130
Di-isopropyl-ether	1	15.9308	0	20	80	70	130
1,1-Dichloroethene	1	16.6644	0	20	83	70	130
Methyl Acetate	1	16.5634	0	20	83	50	150
Methyl-t-butyl ether	1	16.7293	0	20	84	70	130
1,1-Dichloroethane	1	15.5371	0	20	78	70	130
trans-1,2-Dichloroethene	1	16.7355	0	20	84	70	130
Ethyl-t-butyl ether	1	14.4922	0	20	72	70	130
cis-1,2-Dichloroethene	1	15.6291	0	20	78	70	130
Bromochloromethane	1	15.1873	0	20	76	70	130
2,2-Dichloropropane	1	18.6411	0	20	93	70	130
Ethyl acetate	1	14.4238	0	20	72	50	150
1,4-Dioxane	1	848.7417	0	1000	85	50	150
1,1-Dichloropropene	1	16.7953	0	20	84	70	130
Chloroform	1	15.5775	0	20	78	70	130
Cyclohexane	1	17.8093	0	20	89	70	130
1,2-Dichloroethane	1	14.5268	0	20	73	70	130
2-Butanone	1	15.7302	0	20	79	50	150
1,1,1-Trichloroethane	1	16.646	0	20	83	70	130
Carbon Tetrachloride	1	17.4682	0	20	87	50	150
Vinyl Acetate	1	15.0108	0	20	75	50	150
Bromodichloromethane	1	14.4293	0	20	72	70	130
Methylcyclohexane	1	17.4799	0	20	87	70	130
Dibromomethane	1	14.6291	0	20	73	70	130
1,2-Dichloropropane	1	15.4766	0	20	77	70	130
Trichloroethene	1	16.1052	0	20	81	70	130
Benzene	1	16.4496	0	20	82	70	130
tert-Amyl methyl ether	1	16.3516	0	20	82	70	130
Iso-propylacetate	1	15.0727	0	20	75	70	130
Methyl methacrylate	1	14.8313	0	20	74	70	130
Dibromochloromethane	1	15.2989	0	20	76	70	130
2-Chloroethylvinylether	1	15.8918	0	20	79	70	130
cis-1,3-Dichloropropene	1	13.527	0	20	68*	70	130
trans-1,3-Dichloropropene	1	13.3618	0	20	67*	70	130
Ethyl methacrylate	1	15.0864	0	20	75	70	130
1,1,2-Trichloroethane	1	15.2534	0	20	76	70	130
1,2-Dibromoethane	1	15.2011	0	20	76	70	130
1,3-Dichloropropane	1	15.3695	0	20	77	70	130
4-Methyl-2-Pentanone	1	15.3972	0	20	77	50	150
2-Hexanone	1	15.6562	0	20	78	50	150
Tetrachloroethene	1	17.0304	0	20	85	50	150
Toluene	1	16.3396	0	20	82	70	130
1,1,1,2-Tetrachloroethane	1	15.5009	0	20	78	70	130
Chlorobenzene	1	15.5199	0	20	78	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70125

n-Butyl acrylate	1	14.3898	0	20	72	70	130
n-Amyl acetate	1	15.2595	0	20	76	70	130
Bromoform	1	14.1106	0	20	71	70	130
Ethylbenzene	1	16.0427	0	20	80	70	130
1,1,2,2-Tetrachloroethane	1	15.0891	0	20	75	70	130
Styrene	1	16.1848	0	20	81	70	130
m&p-Xylenes	1	33.7511	0	40	84	70	130
o-Xylene	1	16.4126	0	20	82	70	130
trans-1,4-Dichloro-2-butene	1	15.48	0	20	77	50	150
1,3-Dichlorobenzene	1	15.7307	0	20	79	70	130
1,4-Dichlorobenzene	1	15.8905	0	20	79	70	130
1,2-Dichlorobenzene	1	15.3582	0	20	77	70	130
Isopropylbenzene	1	17.2054	0	20	86	70	130
Cyclohexanone	1	225.5118	0	100	226 *	50	150
Camphene	1	17.0701	0	20	85	70	130
1,2,3-Trichloropropane	1	14.9984	0	20	75	70	130
2-Chlorotoluene	1	16.974	0	20	85	70	130
p-Ethyltoluene	1	16.4272	0	20	82	70	130
4-Chlorotoluene	1	16.5869	0	20	83	70	130
n-Propylbenzene	1	17.3354	0	20	87	70	130
Bromobenzene	1	15.5404	0	20	78	70	130
1,3,5-Trimethylbenzene	1	17.4141	0	20	87	70	130
Butyl methacrylate	1	14.9519	0	20	75	70	130
t-Butylbenzene	1	16.1356	0	20	81	70	130
1,2,4-Trimethylbenzene	1	16.208	0	20	81	70	130
sec-Butylbenzene	1	17.0855	0	20	85	70	130
4-Isopropyltoluene	1	16.5643	0	20	83	70	130
n-Butylbenzene	1	17.3667	0	20	87	70	130
p-Diethylbenzene	1	16.1084	0	20	81	70	130
1,2,4,5-Tetramethylbenzene	1	10.5015	0	20	53 *	70	130
1,2-Dibromo-3-Chloropropane	1	15.1655	0	20	76	50	150
Camphor	1	109.4713	0	200	55	20	150
Hexachlorobutadiene	1	17.22	0	20	86	50	150
1,2,4-Trichlorobenzene	1	15.9203	0	20	80	70	130
1,2,3-Trichlorobenzene	1	14.9537	0	20	75	70	130
Naphthalene	1	14.909	0	20	75	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M108095.D	MBS70134	6/4/2018 10:22:00 AM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	22.28	0	20	111	50	150
Dichlorodifluoromethane	1	19.5657	0	20	98	50	150
Chloromethane	1	16.5736	0	20	83	50	150
Bromomethane	1	9.848	0	20	49*	50	150
Vinyl Chloride	1	16.737	0	20	84	50	150
Chloroethane	1	17.9431	0	20	90	50	150
Trichlorofluoromethane	1	19.1589	0	20	96	50	150
Ethyl ether	1	17.369	0	20	87	50	150
Furan	1	17.594	0	20	88	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.2472	0	20	126	50	150
Methylene Chloride	1	17.3336	0	20	87	70	130
Acrolein	1	86.1582	0	100	86	50	150
Acrylonitrile	1	18.6473	0	20	93	50	150
Iodomethane	1	9.6084	0	20	48*	50	150
Acetone	1	96.1329	0	100	96	50	150
Carbon Disulfide	1	22.8439	0	20	114	50	150
t-Butyl Alcohol	1	88.5213	0	100	89	50	150
n-Hexane	1	30.194	0	20	151*	70	130
Di-isopropyl-ether	1	17.6173	0	20	88	70	130
1,1-Dichloroethene	1	18.8554	0	20	94	70	130
Methyl Acetate	1	17.7174	0	20	89	50	150
Methyl-t-butyl ether	1	18.5173	0	20	93	70	130
1,1-Dichloroethane	1	17.4538	0	20	87	70	130
trans-1,2-Dichloroethene	1	18.8933	0	20	94	70	130
Ethyl-t-butyl ether	1	16.2389	0	20	81	70	130
cis-1,2-Dichloroethene	1	17.3339	0	20	87	70	130
Bromochloromethane	1	16.2917	0	20	81	70	130
2,2-Dichloropropane	1	20.2432	0	20	101	70	130
Ethyl acetate	1	16.5596	0	20	83	50	150
1,4-Dioxane	1	947.2273	0	1000	95	50	150
1,1-Dichloropropene	1	19.2121	0	20	96	70	130
Chloroform	1	17.3654	0	20	87	70	130
Cyclohexane	1	20.0574	0	20	100	70	130
1,2-Dichloroethane	1	15.9757	0	20	80	70	130
2-Butanone	1	17.2572	0	20	86	50	150
1,1,1-Trichloroethane	1	18.6855	0	20	93	70	130
Carbon Tetrachloride	1	15.3409	0	20	77	50	150
Vinyl Acetate	1	16.439	0	20	82	50	150
Bromodichloromethane	1	15.4563	0	20	77	70	130
Methylcyclohexane	1	19.6721	0	20	98	70	130
Dibromomethane	1	16.4927	0	20	82	70	130
1,2-Dichloropropane	1	17.6289	0	20	88	70	130
Trichloroethene	1	18.2507	0	20	91	70	130
Benzene	1	18.1927	0	20	91	70	130
tert-Amyl methyl ether	1	17.8438	0	20	89	70	130
Iso-propylacetate	1	16.5192	0	20	83	70	130
Methyl methacrylate	1	16.2434	0	20	81	70	130
Dibromochloromethane	1	16.0486	0	20	80	70	130
2-Chloroethylvinylether	1	14.3869	0	20	72	70	130
cis-1,3-Dichloropropene	1	13.4815	0	20	67*	70	130
trans-1,3-Dichloropropene	1	12.8211	0	20	64*	70	130
Ethyl methacrylate	1	16.4381	0	20	82	70	130
1,1,2-Trichloroethane	1	16.4233	0	20	82	70	130
1,2-Dibromoethane	1	16.3392	0	20	82	70	130
1,3-Dichloropropane	1	16.6942	0	20	83	70	130
4-Methyl-2-Pentanone	1	16.8434	0	20	84	50	150
2-Hexanone	1	17.1361	0	20	86	50	150
Tetrachloroethene	1	18.4717	0	20	92	50	150
Toluene	1	17.5876	0	20	88	70	130
1,1,1,2-Tetrachloroethane	1	16.1526	0	20	81	70	130
Chlorobenzene	1	17.0415	0	20	85	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

n-Butyl acrylate	1	15.8652	0	20	79	70	130
n-Amyl acetate	1	16.85	0	20	84	70	130
Bromoform	1	14.5257	0	20	73	70	130
Ethylbenzene	1	17.9352	0	20	90	70	130
1,1,2,2-Tetrachloroethane	1	15.7769	0	20	79	70	130
Styrene	1	17.3917	0	20	87	70	130
m&p-Xylenes	1	37.3334	0	40	93	70	130
o-Xylene	1	17.887	0	20	89	70	130
trans-1,4-Dichloro-2-butene	1	14.9138	0	20	75	50	150
1,3-Dichlorobenzene	1	17.256	0	20	86	70	130
1,4-Dichlorobenzene	1	17.2074	0	20	86	70	130
1,2-Dichlorobenzene	1	16.9035	0	20	85	70	130
Isopropylbenzene	1	18.471	0	20	92	70	130
Cyclohexanone	1	239.1308	0	100	239*	50	150
Camphene	1	18.3838	0	20	92	70	130
1,2,3-Trichloropropane	1	15.5746	0	20	78	70	130
2-Chlorotoluene	1	18.3432	0	20	92	70	130
p-Ethyltoluene	1	17.7628	0	20	89	70	130
4-Chlorotoluene	1	17.689	0	20	88	70	130
n-Propylbenzene	1	18.7638	0	20	94	70	130
Bromobenzene	1	16.619	0	20	83	70	130
1,3,5-Trimethylbenzene	1	18.7957	0	20	94	70	130
Butyl methacrylate	1	15.7053	0	20	79	70	130
t-Butylbenzene	1	17.5571	0	20	88	70	130
1,2,4-Trimethylbenzene	1	17.851	0	20	89	70	130
sec-Butylbenzene	1	18.6377	0	20	93	70	130
4-Isopropyltoluene	1	17.9867	0	20	90	70	130
n-Butylbenzene	1	18.9717	0	20	95	70	130
p-Diethylbenzene	1	17.5982	0	20	88	70	130
1,2,4,5-Tetramethylbenzene	1	11.2324	0	20	56*	70	130
1,2-Dibromo-3-Chloropropane	1	16.4519	0	20	82	50	150
Camphor	1	121.8605	0	200	61	20	150
Hexachlorobutadiene	1	18.6966	0	20	93	50	150
1,2,4-Trichlorobenzene	1	16.6897	0	20	83	70	130
1,2,3-Trichlorobenzene	1	15.8691	0	20	79	70	130
Naphthalene	1	15.7929	0	20	79	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M57167.D	MBS70140	6/4/2018 11:31:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Methanol QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.3622	0	20	97	50	150
Dichlorodifluoromethane	1	12.8666	0	20	64	50	150
Chloromethane	1	9.7046	0	20	49*	50	150
Bromomethane	1	5.8557	0	20	29*	50	150
Vinyl Chloride	1	8.7431	0	20	44*	50	150
Chloroethane	1	1.2459	0	20	6.2*	50	150
Trichlorofluoromethane	1	39.2533	0	20	196*	50	150
Ethyl ether	1	18.2228	0	20	91	50	150
Furan	1	21.9834	0	20	110	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.4541	0	20	117	50	150
Methylene Chloride	1	18.4864	0	20	92	70	130
Acrolein	1	89.1914	0	100	89	50	150
Acrylonitrile	1	21.6236	0	20	108	50	150
Iodomethane	1	0	0	20	0*	50	150
Acetone	1	104.5063	0	100	105	50	150
Carbon Disulfide	1	18.8171	0	20	94	50	150
t-Butyl Alcohol	1	0	0	100	0*	50	150
n-Hexane	1	28.1501	0	20	141*	70	130
Di-isopropyl-ether	1	17.9553	0	20	90	70	130
1,1-Dichloroethene	1	19.9182	0	20	100	70	130
Methyl Acetate	1	23.51	0	20	118	50	150
Methyl-t-butyl ether	1	20.6213	0	20	103	70	130
1,1-Dichloroethane	1	16.4643	0	20	82	70	130
trans-1,2-Dichloroethene	1	15.9531	0	20	80	70	130
Ethyl-t-butyl ether	1	17.3737	0	20	87	70	130
cis-1,2-Dichloroethene	1	16.6792	0	20	83	70	130
Bromochloromethane	1	15.9575	0	20	80	70	130
2,2-Dichloropropane	1	18.3033	0	20	92	70	130
Ethyl acetate	1	26.4761	0	20	132	50	150
1,4-Dioxane	1	372.494	0	1000	37*	50	150
1,1-Dichloropropene	1	16.7176	0	20	84	70	130
Chloroform	1	16.2775	0	20	81	70	130
Cyclohexane	1	18.0443	0	20	90	70	130
1,2-Dichloroethane	1	17.7568	0	20	89	70	130
2-Butanone	1	59.6799	0	20	298*	50	150
1,1,1-Trichloroethane	1	16.2152	0	20	81	70	130
Carbon Tetrachloride	1	14.3701	0	20	72	50	150
Vinyl Acetate	1	16.2821	0	20	81	50	150
Bromodichloromethane	1	14.3545	0	20	72	70	130
Methylcyclohexane	1	18.2747	0	20	91	70	130
Dibromomethane	1	16.2768	0	20	81	70	130
1,2-Dichloropropane	1	16.4097	0	20	82	70	130
Trichloroethene	1	16.3956	0	20	82	70	130
Benzene	1	17.1754	0	20	86	70	130
tert-Amyl methyl ether	1	17.2911	0	20	86	70	130
Iso-propylacetate	1	16.6534	0	20	83	70	130
Methyl methacrylate	1	15.2789	0	20	76	70	130
Dibromochloromethane	1	13.8531	0	20	69*	70	130
2-Chloroethylvinylether	1	21.0668	0	20	105	70	130
cis-1,3-Dichloropropene	1	14.3796	0	20	72	70	130
trans-1,3-Dichloropropene	1	14.3898	0	20	72	70	130
Ethyl methacrylate	1	15.8033	0	20	79	70	130
1,1,2-Trichloroethane	1	15.5057	0	20	78	70	130
1,2-Dibromoethane	1	15.0548	0	20	75	70	130
1,3-Dichloropropane	1	15.2754	0	20	76	70	130
4-Methyl-2-Pentanone	1	17.8252	0	20	89	50	150
2-Hexanone	1	15.7291	0	20	79	50	150
Tetrachloroethene	1	14.3735	0	20	72	50	150
Toluene	1	15.8617	0	20	79	70	130
1,1,1,2-Tetrachloroethane	1	14.7371	0	20	74	70	130
Chlorobenzene	1	15.1586	0	20	76	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

n-Butyl acrylate	1	16.337	0	20	82	70	130
n-Amyl acetate	1	18.0618	0	20	90	70	130
Bromoform	1	12.0545	0	20	60*	70	130
Ethylbenzene	1	14.7024	0	20	74	70	130
1,1,2,2-Tetrachloroethane	1	14.8364	0	20	74	70	130
Styrene	1	15.3371	0	20	77	70	130
m&p-Xylenes	1	30.4452	0	40	76	70	130
o-Xylene	1	14.821	0	20	74	70	130
trans-1,4-Dichloro-2-butene	1	10.675	0	20	53	50	150
1,3-Dichlorobenzene	1	15.2643	0	20	76	70	130
1,4-Dichlorobenzene	1	14.6125	0	20	73	70	130
1,2-Dichlorobenzene	1	14.9338	0	20	75	70	130
Isopropylbenzene	1	15.5813	0	20	78	70	130
Cyclohexanone	1	57.4497	0	100	57	50	150
Camphene	1	16.3492	0	20	82	70	130
1,2,3-Trichloropropane	1	12.828	0	20	64*	70	130
2-Chlorotoluene	1	13.8409	0	20	69*	70	130
p-Ethyltoluene	1	14.6962	0	20	73	70	130
4-Chlorotoluene	1	16.4603	0	20	82	70	130
n-Propylbenzene	1	16.1808	0	20	81	70	130
Bromobenzene	1	14.907	0	20	75	70	130
1,3,5-Trimethylbenzene	1	15.4944	0	20	77	70	130
Butyl methacrylate	1	16.1207	0	20	81	70	130
t-Butylbenzene	1	14.7655	0	20	74	70	130
1,2,4-Trimethylbenzene	1	15.0324	0	20	75	70	130
sec-Butylbenzene	1	15.956	0	20	80	70	130
4-Isopropyltoluene	1	15.2873	0	20	76	70	130
n-Butylbenzene	1	16.5608	0	20	83	70	130
p-Diethylbenzene	1	14.9901	0	20	75	70	130
1,2,4,5-Tetramethylbenzene	1	14.6373	0	20	73	70	130
1,2-Dibromo-3-Chloropropane	1	13.8354	0	20	69	50	150
Camphor	1	175.8934	0	200	88	20	150
Hexachlorobutadiene	1	17.9204	0	20	90	50	150
1,2,4-Trichlorobenzene	1	15.8079	0	20	79	70	130
1,2,3-Trichlorobenzene	1	16.0747	0	20	80	70	130
Naphthalene	1	16.8728	0	20	84	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

Data File	Sample ID:	Analysis Date
Spike or Dup: 1M108110.D	AD04395-008(MS)	6/4/2018 3:47:00 PM
Non Spike(If applicable): 1M108067.D	AD04395-008	6/4/2018 12:36:00 AM
Inst Blank(If applicable):		

Method: 8260C Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.4319	0	20	97	50	150
Dichlorodifluoromethane	1	16.2817	0	20	81	50	150
Chloromethane	1	15.4317	0	20	77	50	150
Bromomethane	1	11.8084	0	20	59	50	150
Vinyl Chloride	1	14.455	0	20	72	50	150
Chloroethane	1	15.7502	0	20	79	50	150
Trichlorofluoromethane	1	18.0084	0	20	90	50	150
Ethyl ether	1	15.6342	0	20	78	50	150
Furan	1	16.673	0	20	83	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.7314	0	20	119	50	150
Methylene Chloride	1	16.4312	0	20	82	70	130
Acrolein	1	71.9003	0	100	72	50	150
Acrylonitrile	1	15.7607	0	20	79	50	150
Iodomethane	1	7.3741	0	20	37*	50	150
Acetone	1	78.8204	0	100	79	50	150
Carbon Disulfide	1	19.8855	0	20	99	50	150
t-Butyl Alcohol	1	62.2128	0	100	62	50	150
n-Hexane	1	28.8555	0	20	144*	70	130
Di-isopropyl-ether	1	16.7774	0	20	84	70	130
1,1-Dichloroethene	1	17.7005	0	20	89	70	130
Methyl Acetate	1	14.8019	0	20	74	50	150
Methyl-t-butyl ether	1	18.2885	0.8876	20	87	70	130
1,1-Dichloroethane	1	16.314	0	20	82	70	130
trans-1,2-Dichloroethene	1	17.8641	0	20	89	70	130
Ethyl-t-butyl ether	1	15.1401	0	20	76	70	130
cis-1,2-Dichloroethene	1	16.6079	0	20	83	70	130
Bromochloromethane	1	15.7186	0	20	79	70	130
2,2-Dichloropropane	1	19.993	0	20	100	70	130
Ethyl acetate	1	14.2967	0	20	71	50	150
1,4-Dioxane	1	506.6463	0	1000	51	50	150
1,1-Dichloropropene	1	18.1716	0	20	91	70	130
Chloroform	1	16.3299	0	20	82	70	130
Cyclohexane	1	19.2105	0	20	96	70	130
1,2-Dichloroethane	1	14.819	0	20	74	70	130
2-Butanone	1	15.2262	0	20	76	50	150
1,1,1-Trichloroethane	1	17.7519	0	20	89	70	130
Carbon Tetrachloride	1	17.199	0	20	86	50	150
Vinyl Acetate	1	15.8403	0	20	79	50	150
Bromodichloromethane	1	15.3201	0	20	77	70	130
Methylcyclohexane	1	19.3461	0	20	97	70	130
Dibromomethane	1	15.0762	0	20	75	70	130
1,2-Dichloropropane	1	16.3586	0	20	82	70	130
Trichloroethene	1	17.1651	0	20	86	70	130
Benzene	1	17.1707	0	20	86	70	130
tert-Amyl methyl ether	1	16.5216	0	20	83	70	130
Iso-propylacetate	1	14.2532	0	20	71	70	130
Methyl methacrylate	1	14.9473	0	20	75	70	130
Dibromochloromethane	1	15.2614	0	20	76	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	12.8504	0	20	64*	70	130
trans-1,3-Dichloropropene	1	12.7095	0	20	64*	70	130
Ethyl methacrylate	1	14.5039	0	20	73	70	130
1,1,2-Trichloroethane	1	14.6227	0	20	73	70	130
1,2-Dibromoethane	1	14.8475	0	20	74	70	130
1,3-Dichloropropane	1	15.3736	0	20	77	70	130
4-Methyl-2-Pentanone	1	14.4768	0	20	72	50	150
2-Hexanone	1	14.1115	0	20	71	50	150
Tetrachloroethene	1	17.5802	0	20	88	50	150
Toluene	1	17.0519	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	15.5722	0	20	78	70	130
Chlorobenzene	1	16.24	0	20	81	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

n-Butyl acrylate	1	14.7335	0	20	74	70	130
n-Amyl acetate	1	16.1682	0	20	81	70	130
Bromoform	1	13.3986	0	20	67*	70	130
Ethylbenzene	1	16.6811	0	20	83	70	130
1,1,2,2-Tetrachloroethane	1	14.2627	0	20	71	70	130
Styrene	1	16.6416	0	20	83	70	130
m&p-Xylenes	1	35.8944	0	40	90	70	130
o-Xylene	1	17.1269	0	20	86	70	130
trans-1,4-Dichloro-2-butene	1	11.631	0	20	58	50	150
1,3-Dichlorobenzene	1	16.3233	0	20	82	70	130
1,4-Dichlorobenzene	1	16.1465	0	20	81	70	130
1,2-Dichlorobenzene	1	15.4937	0	20	77	70	130
Isopropylbenzene	1	18.0292	0	20	90	70	130
Cyclohexanone	1	57.8482	0	100	58	50	150
Camphene	1	12.5389	0	20	63*	70	130
1,2,3-Trichloropropane	1	13.4667	0	20	67*	70	130
2-Chlorotoluene	1	17.2383	0	20	86	70	130
p-Ethyltoluene	1	16.4122	0	20	82	70	130
4-Chlorotoluene	1	17.277	0	20	86	70	130
n-Propylbenzene	1	17.6925	0	20	88	70	130
Bromobenzene	1	15.2136	0	20	76	70	130
1,3,5-Trimethylbenzene	1	18.7048	0	20	94	70	130
Butyl methacrylate	1	15.6796	0	20	78	70	130
t-Butylbenzene	1	17.1849	0	20	86	70	130
1,2,4-Trimethylbenzene	1	16.9542	0	20	85	70	130
sec-Butylbenzene	1	17.9228	0	20	90	70	130
4-Isopropyltoluene	1	17.4347	0	20	87	70	130
n-Butylbenzene	1	18.4999	0	20	92	70	130
p-Diethylbenzene	1	17.288	0	20	86	70	130
1,2,4,5-Tetramethylbenzene	1	11.4591	0	20	57*	70	130
1,2-Dibromo-3-Chloropropane	1	13.6103	0	20	68	50	150
Camphor	1	116.5642	0	200	58	20	150
Hexachlorobutadiene	1	17.5594	0	20	88	50	150
1,2,4-Trichlorobenzene	1	15.5807	0	20	78	70	130
1,2,3-Trichlorobenzene	1	14.4051	0	20	72	70	130
Naphthalene	1	13.8207	0	20	69	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M108111.D	AD04395-009(MSD)	6/4/2018 4:08:00 PM
Non Spike(If applicable):	1M108067.D	AD04395-008	6/4/2018 12:36:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	19.4189	0	20	97	50	150
Dichlorodifluoromethane	1	16.0706	0	20	80	50	150
Chloromethane	1	15.3259	0	20	77	50	150
Bromomethane	1	12.582	0	20	63	50	150
Vinyl Chloride	1	14.1227	0	20	71	50	150
Chloroethane	1	15.6847	0	20	78	50	150
Trichlorofluoromethane	1	17.4866	0	20	87	50	150
Ethyl ether	1	15.3899	0	20	77	50	150
Furan	1	16.5079	0	20	83	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.468	0	20	117	50	150
Methylene Chloride	1	16.052	0	20	80	70	130
Acrolein	1	76.6507	0	100	77	50	150
Acrylonitrile	1	16.2334	0	20	81	50	150
Iodomethane	1	8.549	0	20	43*	50	150
Acetone	1	80.249	0	100	80	50	150
Carbon Disulfide	1	19.8692	0	20	99	50	150
t-Butyl Alcohol	1	68.3177	0	100	68	50	150
n-Hexane	1	27.8535	0	20	139*	70	130
Di-isopropyl-ether	1	16.8102	0	20	84	70	130
1,1-Dichloroethene	1	17.507	0	20	88	70	130
Methyl Acetate	1	15.442	0	20	77	50	150
Methyl-t-butyl ether	1	18.2967	0.8876	20	87	70	130
1,1-Dichloroethane	1	16.2299	0	20	81	70	130
trans-1,2-Dichloroethene	1	17.5029	0	20	88	70	130
Ethyl-t-butyl ether	1	15.1057	0	20	76	70	130
cis-1,2-Dichloroethene	1	16.4916	0	20	82	70	130
Bromochloromethane	1	15.3902	0	20	77	70	130
2,2-Dichloropropane	1	19.6563	0	20	98	70	130
Ethyl acetate	1	14.2265	0	20	71	50	150
1,4-Dioxane	1	590.8759	0	1000	59	50	150
1,1-Dichloropropene	1	18.0803	0	20	90	70	130
Chloroform	1	16.2797	0	20	81	70	130
Cyclohexane	1	19.7788	0	20	99	70	130
1,2-Dichloroethane	1	14.9318	0	20	75	70	130
2-Butanone	1	12.2705	0	20	61	50	150
1,1,1-Trichloroethane	1	17.5586	0	20	88	70	130
Carbon Tetrachloride	1	16.6951	0	20	83	50	150
Vinyl Acetate	1	15.8808	0	20	79	50	150
Bromodichloromethane	1	15.0482	0	20	75	70	130
Methylcyclohexane	1	18.6766	0	20	93	70	130
Dibromomethane	1	14.8816	0	20	74	70	130
1,2-Dichloropropane	1	16.1802	0	20	81	70	130
Trichloroethene	1	17.0025	0	20	85	70	130
Benzene	1	17.1706	0	20	86	70	130
tert-Amyl methyl ether	1	16.796	0	20	84	70	130
Iso-propylacetate	1	14.9044	0	20	75	70	130
Methyl methacrylate	1	14.5582	0	20	73	70	130
Dibromochloromethane	1	15.3096	0	20	77	70	130
2-Chloroethylvinylether	1	0	0	20	0*	70	130
cis-1,3-Dichloropropene	1	12.8955	0	20	64*	70	130
trans-1,3-Dichloropropene	1	12.5341	0	20	63*	70	130
Ethyl methacrylate	1	14.9695	0	20	75	70	130
1,1,2-Trichloroethane	1	15.0458	0	20	75	70	130
1,2-Dibromoethane	1	14.647	0	20	73	70	130
1,3-Dichloropropane	1	15.1829	0	20	76	70	130
4-Methyl-2-Pentanone	1	15.0256	0	20	75	50	150
2-Hexanone	1	15.1398	0	20	76	50	150
Tetrachloroethene	1	17.8641	0	20	89	50	150
Toluene	1	16.9127	0	20	85	70	130
1,1,1,2-Tetrachloroethane	1	15.9072	0	20	80	70	130
Chlorobenzene	1	16.2572	0	20	81	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70134

n-Butyl acrylate	1	15.4911	0	20	77	70	130
n-Amyl acetate	1	16.5905	0	20	83	70	130
Bromoform	1	13.6312	0	20	68*	70	130
Ethylbenzene	1	16.6939	0	20	83	70	130
1,1,2,2-Tetrachloroethane	1	14.3384	0	20	72	70	130
Styrene	1	16.6743	0	20	83	70	130
m&p-Xylenes	1	35.2866	0	40	88	70	130
o-Xylene	1	17.038	0	20	85	70	130
trans-1,4-Dichloro-2-butene	1	11.0558	0	20	55	50	150
1,3-Dichlorobenzene	1	16.3007	0	20	82	70	130
1,4-Dichlorobenzene	1	16.4255	0	20	82	70	130
1,2-Dichlorobenzene	1	15.9379	0	20	80	70	130
Isopropylbenzene	1	18.0799	0	20	90	70	130
Cyclohexanone	1	64.7501	0	100	65	50	150
Camphene	1	9.9291	0	20	50*	70	130
1,2,3-Trichloropropane	1	13.934	0	20	70	70	130
2-Chlorotoluene	1	17.4329	0	20	87	70	130
p-Ethyltoluene	1	17.0065	0	20	85	70	130
4-Chlorotoluene	1	17.1006	0	20	86	70	130
n-Propylbenzene	1	17.8792	0	20	89	70	130
Bromobenzene	1	15.0895	0	20	75	70	130
1,3,5-Trimethylbenzene	1	17.7282	0	20	89	70	130
Butyl methacrylate	1	15.7662	0	20	79	70	130
t-Butylbenzene	1	17.3399	0	20	87	70	130
1,2,4-Trimethylbenzene	1	16.9061	0	20	85	70	130
sec-Butylbenzene	1	18.0493	0	20	90	70	130
4-Isopropyltoluene	1	17.5874	0	20	88	70	130
n-Butylbenzene	1	18.5864	0	20	93	70	130
p-Diethylbenzene	1	17.6547	0	20	88	70	130
1,2,4,5-Tetramethylbenzene	1	11.7506	0	20	59*	70	130
1,2-Dibromo-3-Chloropropane	1	14.2204	0	20	71	50	150
Camphor	1	126.9672	0	200	63	20	150
Hexachlorobutadiene	1	19.2284	0	20	96	50	150
1,2,4-Trichlorobenzene	1	17.0246	0	20	85	70	130
1,2,3-Trichlorobenzene	1	16.1792	0	20	81	70	130
Naphthalene	1	15.5856	0	20	78	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS70134

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M108111.D	AD04395-009(MSD)	6/4/2018 4:08:00 PM
Duplicate(If applicable):	1M108110.D	AD04395-008(MS)	6/4/2018 3:47:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	19.4189	19.4319	0.07	30
Dichlorodifluoromethane	1	16.0706	16.2817	1.3	30
Chloromethane	1	15.3259	15.4317	0.69	30
Bromomethane	1	12.582	11.8084	6.3	30
Vinyl Chloride	1	14.1227	14.455	2.3	40
Chloroethane	1	15.6847	15.7502	0.42	30
Trichlorofluoromethane	1	17.4866	18.0084	2.9	30
Ethyl ether	1	15.3899	15.6342	1.6	30
Furan	1	16.5079	16.673	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	23.468	23.7314	1.1	30
Methylene Chloride	1	16.052	16.4312	2.3	30
Acrolein	1	76.6507	71.9003	6.4	30
Acrylonitrile	1	16.2334	15.7607	3	30
Iodomethane	1	8.549	7.3741	15	30
Acetone	1	80.249	78.8204	1.8	30
Carbon Disulfide	1	19.8692	19.8855	0.08	30
t-Butyl Alcohol	1	68.3177	62.2128	9.4	30
n-Hexane	1	27.8535	28.8555	3.5	30
Di-isopropyl-ether	1	16.8102	16.7774	0.2	30
1,1-Dichloroethene	1	17.507	17.7005	1.1	40
Methyl Acetate	1	15.442	14.8019	4.2	30
Methyl-t-butyl ether	1	18.2967	18.2885	0.04	30
1,1-Dichloroethane	1	16.2299	16.314	0.52	40
trans-1,2-Dichloroethene	1	17.5029	17.8641	2	30
Ethyl-t-butyl ether	1	15.1057	15.1401	0.23	30
cis-1,2-Dichloroethene	1	16.4916	16.6079	0.7	30
Bromochloromethane	1	15.3902	15.7186	2.1	30
2,2-Dichloropropane	1	19.6563	19.993	1.7	30
Ethyl acetate	1	14.2265	14.2967	0.49	30
1,4-Dioxane	1	590.8759	506.6463	15	30
1,1-Dichloropropene	1	18.0803	18.1716	0.5	30
Chloroform	1	16.2797	16.3299	0.31	40
Cyclohexane	1	19.7788	19.2105	2.9	30
1,2-Dichloroethane	1	14.9318	14.819	0.76	40
2-Butanone	1	12.2705	15.2262	21	40
1,1,1-Trichloroethane	1	17.5586	17.7519	1.1	30
Carbon Tetrachloride	1	16.6951	17.199	3	40
Vinyl Acetate	1	15.8808	15.8403	0.26	30
Bromodichloromethane	1	15.0482	15.3201	1.8	30
Methylcyclohexane	1	18.6766	19.3461	3.5	30
Dibromomethane	1	14.8816	15.0762	1.3	30
1,2-Dichloropropane	1	16.1802	16.3586	1.1	30
Trichloroethene	1	17.0025	17.1651	0.95	40
Benzene	1	17.1706	17.1707	0	40
tert-Amyl methyl ether	1	16.796	16.5216	1.6	30
Iso-propylacetate	1	14.9044	14.2532	4.5	30
Methyl methacrylate	1	14.5582	14.9473	2.6	30
Dibromochloromethane	1	15.3096	15.2614	0.32	30
2-Chloroethylvinylether	1	0	0	NA	30
cis-1,3-Dichloropropene	1	12.8955	12.8504	0.35	30
trans-1,3-Dichloropropene	1	12.5341	12.7095	1.4	30
Ethyl methacrylate	1	14.9695	14.5039	3.2	30
1,1,2-Trichloroethane	1	15.0458	14.6227	2.9	30
1,2-Dibromoethane	1	14.647	14.8475	1.4	30
1,3-Dichloropropane	1	15.1829	15.3736	1.2	30
4-Methyl-2-Pentanone	1	15.0256	14.4768	3.7	30
2-Hexanone	1	15.1398	14.1115	7	30
Tetrachloroethene	1	17.8641	17.5802	1.6	40
Toluene	1	16.9127	17.0519	0.82	40
1,1,1,2-Tetrachloroethane	1	15.9072	15.5722	2.1	30
Chlorobenzene	1	16.2572	16.24	0.11	40
n-Butyl acrylate	1	15.4911	14.7335	5	30
n-Amyl acetate	1	16.5905	16.1682	2.6	30

Form3
RPD Data Laboratory Limits
QC Batch: MBS70134

Bromoform	1	13.6312	13.3986	1.7	30
Ethylbenzene	1	16.6939	16.6811	0.08	30
1,1,2,2-Tetrachloroethane	1	14.3384	14.2627	0.53	30
Styrene	1	16.6743	16.6416	0.2	30
m&p-Xylenes	1	35.2866	35.8944	1.7	30
o-Xylene	1	17.038	17.1269	0.52	30
trans-1,4-Dichloro-2-butene	1	11.0558	11.631	5.1	30
1,3-Dichlorobenzene	1	16.3007	16.3233	0.14	30
1,4-Dichlorobenzene	1	16.4255	16.1465	1.7	40
1,2-Dichlorobenzene	1	15.9379	15.4937	2.8	40
Isopropylbenzene	1	18.0799	18.0292	0.28	30
Cyclohexanone	1	64.7501	57.8482	11	30
Camphene	1	9.9291	12.5389	23	30
1,2,3-Trichloropropane	1	13.934	13.4667	3.4	30
2-Chlorotoluene	1	17.4329	17.2383	1.1	30
p-Ethyltoluene	1	17.0065	16.4122	3.6	30
4-Chlorotoluene	1	17.1006	17.277	1	30
n-Propylbenzene	1	17.8792	17.6925	1	40
Bromobenzene	1	15.0895	15.2136	0.82	30
1,3,5-Trimethylbenzene	1	17.7282	18.7048	5.4	30
Butyl methacrylate	1	15.7662	15.6796	0.55	30
t-Butylbenzene	1	17.3399	17.1849	0.9	30
1,2,4-Trimethylbenzene	1	16.9061	16.9542	0.28	30
sec-Butylbenzene	1	18.0493	17.9228	0.7	40
4-Isopropyltoluene	1	17.5874	17.4347	0.87	30
n-Butylbenzene	1	18.5864	18.4999	0.47	30
p-Diethylbenzene	1	17.6547	17.288	2.1	30
1,2,4,5-Tetramethylbenzene	1	11.7506	11.4591	2.5	30
1,2-Dibromo-3-Chloropropane	1	14.2204	13.6103	4.4	30
Camphor	1	126.9672	116.5642	8.5	30
Hexachlorobutadiene	1	19.2284	17.5594	9.1	30
1,2,4-Trichlorobenzene	1	17.0246	15.5807	8.9	30
1,2,3-Trichlorobenzene	1	16.1792	14.4051	12	30
Naphthalene	1	15.5856	13.8207	12	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M57187.D	AD04394-001(MS)	6/5/2018 7:11:00 AM
Non Spike(If applicable):	11M57174.D	AD04394-001	6/5/2018 2:10:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Methanol QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.7689	0	20	109	50	150
Dichlorodifluoromethane	1	15.1091	0	20	76	50	150
Chloromethane	1	9.1595	0	20	46*	50	150
Bromomethane	1	3.4826	0	20	17*	50	150
Vinyl Chloride	1	9.5484	0	20	48*	50	150
Chloroethane	1	4.8199	0	20	24*	50	150
Trichlorofluoromethane	1	33.9582	0	20	170*	50	150
Ethyl ether	1	19.2138	0	20	96	50	150
Furan	1	21.3224	0	20	107	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	24.8065	0	20	124	50	150
Methylene Chloride	1	19.6761	0	20	98	70	130
Acrolein	1	71.8934	0	100	72	50	150
Acrylonitrile	1	22.9195	0	20	115	50	150
Iodomethane	1	1.4501	0	20	7.3*	50	150
Acetone	1	117.5693	0	100	118	50	150
Carbon Disulfide	1	17.7363	0	20	89	50	150
t-Butyl Alcohol	1	0	0	100	0*	50	150
n-Hexane	1	27.6885	0	20	138*	70	130
Di-isopropyl-ether	1	18.9058	0	20	95	70	130
1,1-Dichloroethene	1	19.6711	0	20	98	70	130
Methyl Acetate	1	26.3748	4.2019	20	111	50	150
Methyl-t-butyl ether	1	21.5705	0	20	108	70	130
1,1-Dichloroethane	1	17.8335	0	20	89	70	130
trans-1,2-Dichloroethene	1	17.2488	0	20	86	70	130
Ethyl-t-butyl ether	1	18.7592	0	20	94	70	130
cis-1,2-Dichloroethene	1	16.5562	1.7311	20	74	70	130
Bromochloromethane	1	16.9296	0	20	85	70	130
2,2-Dichloropropane	1	14.7872	0	20	74	70	130
Ethyl acetate	1	22.4004	0	20	112	50	150
1,4-Dioxane	1	321.6316	0	1000	32*	50	150
1,1-Dichloropropene	1	17.7156	0	20	89	70	130
Chloroform	1	17.48	0	20	87	70	130
Cyclohexane	1	18.4478	0	20	92	70	130
1,2-Dichloroethane	1	18.2739	0	20	91	70	130
2-Butanone	1	13.2444	0	20	66	50	150
1,1,1-Trichloroethane	1	17.4283	0	20	87	70	130
Carbon Tetrachloride	1	14.9511	0	20	75	50	150
Vinyl Acetate	1	14.4807	0	20	72	50	150
Bromodichloromethane	1	15.1908	0	20	76	70	130
Methylcyclohexane	1	18.311	0	20	92	70	130
Dibromomethane	1	17.5236	0	20	88	70	130
1,2-Dichloropropane	1	16.9571	0	20	85	70	130
Trichloroethene	1	17.1642	0	20	86	70	130
Benzene	1	17.487	0	20	87	70	130
tert-Amyl methyl ether	1	18.588	0	20	93	70	130
Iso-propylacetate	1	17.4848	0	20	87	70	130
Methyl methacrylate	1	16.7208	0	20	84	70	130
Dibromochloromethane	1	14.7466	0	20	74	70	130
2-Chloroethylvinylether	1	22.1271	0	20	111	70	130
cis-1,3-Dichloropropene	1	14.0836	0	20	70	70	130
trans-1,3-Dichloropropene	1	13.7383	0	20	69*	70	130
Ethyl methacrylate	1	16.1465	0	20	81	70	130
1,1,2-Trichloroethane	1	16.2633	0	20	81	70	130
1,2-Dibromoethane	1	15.902	0	20	80	70	130
1,3-Dichloropropane	1	16.0149	0	20	80	70	130
4-Methyl-2-Pentanone	1	16.5718	0	20	83	50	150
2-Hexanone	1	16.5208	0	20	83	50	150
Tetrachloroethene	1	15.3203	8.4781	20	34*	50	150
Toluene	1	15.7259	0	20	79	70	130
1,1,1,2-Tetrachloroethane	1	14.2705	0	20	71	70	130
Chlorobenzene	1	15.5683	0	20	78	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

n-Butyl acrylate	1	17.2769	0	20	86	70	130
n-Amyl acetate	1	18.1832	0	20	91	70	130
Bromoform	1	13.1793	0	20	66*	70	130
Ethylbenzene	1	16.0073	0	20	80	70	130
1,1,2,2-Tetrachloroethane	1	14.5968	0	20	73	70	130
Styrene	1	15.6465	0	20	78	70	130
m&p-Xylenes	1	31.8358	0	40	80	70	130
o-Xylene	1	15.2807	0	20	76	70	130
trans-1,4-Dichloro-2-butene	1	11.0092	0	20	55	50	150
1,3-Dichlorobenzene	1	14.6503	0	20	73	70	130
1,4-Dichlorobenzene	1	14.519	0	20	73	70	130
1,2-Dichlorobenzene	1	14.9002	0	20	75	70	130
Isopropylbenzene	1	16.759	0	20	84	70	130
Cyclohexanone	1	58.3388	0	100	58	50	150
Camphene	1	16.4317	0	20	82	70	130
1,2,3-Trichloropropane	1	13.9613	0	20	70	70	130
2-Chlorotoluene	1	14.3261	0	20	72	70	130
p-Ethyltoluene	1	15.2835	0	20	76	70	130
4-Chlorotoluene	1	16.729	0	20	84	70	130
n-Propylbenzene	1	17.2189	0	20	86	70	130
Bromobenzene	1	15.4744	0	20	77	70	130
1,3,5-Trimethylbenzene	1	16.1561	0	20	81	70	130
Butyl methacrylate	1	15.3258	0	20	77	70	130
t-Butylbenzene	1	15.5932	0	20	78	70	130
1,2,4-Trimethylbenzene	1	16.4678	0	20	82	70	130
sec-Butylbenzene	1	16.5871	0	20	83	70	130
4-Isopropyltoluene	1	15.7527	0	20	79	70	130
n-Butylbenzene	1	17.298	0	20	86	70	130
p-Diethylbenzene	1	17.3107	0	20	87	70	130
1,2,4,5-Tetramethylbenzene	1	17.4755	0	20	87	70	130
1,2-Dibromo-3-Chloropropane	1	14.8639	0	20	74	50	150
Camphor	1	171.2705	0	200	86	20	150
Hexachlorobutadiene	1	16.8828	0	20	84	50	150
1,2,4-Trichlorobenzene	1	15.3464	0	20	77	70	130
1,2,3-Trichlorobenzene	1	14.3133	0	20	72	70	130
Naphthalene	1	20.4271	0	20	102	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M57190.D	AD04394-001(MSD)	6/5/2018 8:19:00 AM
Non Spike(If applicable):	11M57174.D	AD04394-001	6/5/2018 2:10:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Methanol QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	21.3408	0	20	107	50	150
Dichlorodifluoromethane	1	15.9826	0	20	80	50	150
Chloromethane	1	10.3651	0	20	52	50	150
Bromomethane	1	4.6904	0	20	23*	50	150
Vinyl Chloride	1	10.8952	0	20	54	50	150
Chloroethane	1	4.1201	0	20	21*	50	150
Trichlorofluoromethane	1	30.057	0	20	150	50	150
Ethyl ether	1	18.29	0	20	91	50	150
Furan	1	21.805	0	20	109	50	150
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.0618	0	20	125	50	150
Methylene Chloride	1	20.2149	0	20	101	70	130
Acrolein	1	66.3171	0	100	66	50	150
Acrylonitrile	1	22.0527	0	20	110	50	150
Iodomethane	1	1.1594	0	20	5.8*	50	150
Acetone	1	122.1582	0	100	122	50	150
Carbon Disulfide	1	18.4012	0	20	92	50	150
t-Butyl Alcohol	1	0	0	100	0*	50	150
n-Hexane	1	26.7052	0	20	134*	70	130
Di-isopropyl-ether	1	19.5324	0	20	98	70	130
1,1-Dichloroethene	1	20.4997	0	20	102	70	130
Methyl Acetate	1	26.6337	4.2019	20	112	50	150
Methyl-t-butyl ether	1	22.2559	0	20	111	70	130
1,1-Dichloroethane	1	17.6791	0	20	88	70	130
trans-1,2-Dichloroethene	1	18.0211	0	20	90	70	130
Ethyl-t-butyl ether	1	18.8405	0	20	94	70	130
cis-1,2-Dichloroethene	1	17.1128	1.7311	20	77	70	130
Bromochloromethane	1	18.1039	0	20	91	70	130
2,2-Dichloropropane	1	14.3481	0	20	72	70	130
Ethyl acetate	1	22.9299	0	20	115	50	150
1,4-Dioxane	1	438.5479	0	1000	44*	50	150
1,1-Dichloropropene	1	18.2418	0	20	91	70	130
Chloroform	1	17.2912	0	20	86	70	130
Cyclohexane	1	19.0139	0	20	95	70	130
1,2-Dichloroethane	1	19.8607	0	20	99	70	130
2-Butanone	1	10.8921	0	20	54	50	150
1,1,1-Trichloroethane	1	18.4352	0	20	92	70	130
Carbon Tetrachloride	1	15.7362	0	20	79	50	150
Vinyl Acetate	1	12.5165	0	20	63	50	150
Bromodichloromethane	1	16.161	0	20	81	70	130
Methylcyclohexane	1	19.4199	0	20	97	70	130
Dibromomethane	1	18.4627	0	20	92	70	130
1,2-Dichloropropane	1	17.5864	0	20	88	70	130
Trichloroethene	1	19.107	0	20	96	70	130
Benzene	1	17.8379	0	20	89	70	130
tert-Amyl methyl ether	1	19.5807	0	20	98	70	130
Iso-propylacetate	1	17.8991	0	20	89	70	130
Methyl methacrylate	1	17.6713	0	20	88	70	130
Dibromochloromethane	1	15.2481	0	20	76	70	130
2-Chloroethylvinylether	1	22.8153	0	20	114	70	130
cis-1,3-Dichloropropene	1	14.8081	0	20	74	70	130
trans-1,3-Dichloropropene	1	15.2447	0	20	76	70	130
Ethyl methacrylate	1	17.2873	0	20	86	70	130
1,1,2-Trichloroethane	1	16.5288	0	20	83	70	130
1,2-Dibromoethane	1	17.0111	0	20	85	70	130
1,3-Dichloropropane	1	16.4186	0	20	82	70	130
4-Methyl-2-Pentanone	1	18.1362	0	20	91	50	150
2-Hexanone	1	18.5613	0	20	93	50	150
Tetrachloroethene	1	15.2009	8.4781	20	34*	50	150
Toluene	1	16.5166	0	20	83	70	130
1,1,1,2-Tetrachloroethane	1	15.6597	0	20	78	70	130
Chlorobenzene	1	16.2609	0	20	81	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: MBS70140

n-Butyl acrylate	1	15.3721	0	20	77	70	130
n-Amyl acetate	1	16.2706	0	20	81	70	130
Bromoform	1	12.0639	0	20	60*	70	130
Ethylbenzene	1	12.6322	0	20	63*	70	130
1,1,2,2-Tetrachloroethane	1	11.0802	0	20	55*	70	130
Styrene	1	14.0952	0	20	70	70	130
m&p-Xylenes	1	27.9252	0	40	70	70	130
o-Xylene	1	13.1192	0	20	66*	70	130
trans-1,4-Dichloro-2-butene	1	11.0729	0	20	55	50	150
1,3-Dichlorobenzene	1	13.3048	0	20	67*	70	130
1,4-Dichlorobenzene	1	12.6739	0	20	63*	70	130
1,2-Dichlorobenzene	1	13.2748	0	20	66*	70	130
Isopropylbenzene	1	14.4774	0	20	72	70	130
Cyclohexanone	1	54.3687	0	100	54	50	150
Camphene	1	15.513	0	20	78	70	130
1,2,3-Trichloropropane	1	12.7297	0	20	64*	70	130
2-Chlorotoluene	1	12.6553	0	20	63*	70	130
p-Ethyltoluene	1	13.5998	0	20	68*	70	130
4-Chlorotoluene	1	14.3821	0	20	72	70	130
n-Propylbenzene	1	14.7114	0	20	74	70	130
Bromobenzene	1	14.582	0	20	73	70	130
1,3,5-Trimethylbenzene	1	13.152	0	20	66*	70	130
Butyl methacrylate	1	20.048	0	20	100	70	130
t-Butylbenzene	1	13.7717	0	20	69*	70	130
1,2,4-Trimethylbenzene	1	13.8307	0	20	69*	70	130
sec-Butylbenzene	1	13.7091	0	20	69*	70	130
4-Isopropyltoluene	1	13.4377	0	20	67*	70	130
n-Butylbenzene	1	14.2834	0	20	71	70	130
p-Diethylbenzene	1	0	0	20	0*	70	130
1,2,4,5-Tetramethylbenzene	1	14.5434	0	20	73	70	130
1,2-Dibromo-3-Chloropropane	1	14.7591	0	20	74	50	150
Camphor	1	161.4258	0	200	81	20	150
Hexachlorobutadiene	1	14.4357	0	20	72	50	150
1,2,4-Trichlorobenzene	1	13.8655	0	20	69*	70	130
1,2,3-Trichlorobenzene	1	13.1923	0	20	66*	70	130
Naphthalene	1	15.2693	0	20	76	50	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: MBS70140

	Data File	Sample ID:	Analysis Date
Spike or Dup:	11M57190.D	AD04394-001(MSD)	6/5/2018 8:19:00 AM
Duplicate(If applicable):	11M57187.D	AD04394-001(MS)	6/5/2018 7:11:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Methanol QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	21.3408	21.7689	2	30
Dichlorodifluoromethane	1	15.9826	15.1091	5.6	30
Chloromethane	1	10.3651	9.1595	12	30
Bromomethane	1	4.6904	3.4826	30	30
Vinyl Chloride	1	10.8952	9.5484	13	40
Chloroethane	1	4.1201	4.8199	16	30
Trichlorofluoromethane	1	30.057	33.9582	12	30
Ethyl ether	1	18.29	19.2138	4.9	30
Furan	1	21.805	21.3224	2.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	25.0618	24.8065	1	30
Methylene Chloride	1	20.2149	19.6761	2.7	30
Acrolein	1	66.3171	71.8934	8.1	30
Acrylonitrile	1	22.0527	22.9195	3.9	30
Iodomethane	1	1.1594	1.4501	22	30
Acetone	1	122.1582	117.5693	3.8	30
Carbon Disulfide	1	18.4012	17.7363	3.7	30
t-Butyl Alcohol	1	0	0	NA	30
n-Hexane	1	26.7052	27.6885	3.6	30
Di-isopropyl-ether	1	19.5324	18.9058	3.3	30
1,1-Dichloroethene	1	20.4997	19.6711	4.1	40
Methyl Acetate	1	26.6337	26.3748	0.98	30
Methyl-t-butyl ether	1	22.2559	21.5705	3.1	30
1,1-Dichloroethane	1	17.6791	17.8335	0.87	40
trans-1,2-Dichloroethene	1	18.0211	17.2488	4.4	30
Ethyl-t-butyl ether	1	18.8405	18.7592	0.43	30
cis-1,2-Dichloroethene	1	17.1128	16.5562	3.3	30
Bromochloromethane	1	18.1039	16.9296	6.7	30
2,2-Dichloropropane	1	14.3481	14.7872	3	30
Ethyl acetate	1	22.9299	22.4004	2.3	20
1,4-Dioxane	1	438.5479	321.6316	31 *	30
1,1-Dichloropropene	1	18.2418	17.7156	2.9	30
Chloroform	1	17.2912	17.48	1.1	40
Cyclohexane	1	19.0139	18.4478	3	30
1,2-Dichloroethane	1	19.8607	18.2739	8.3	40
2-Butanone	1	10.8921	13.2444	19	40
1,1,1-Trichloroethane	1	18.4352	17.4283	5.6	30
Carbon Tetrachloride	1	15.7362	14.9511	5.1	40
Vinyl Acetate	1	12.5165	14.4807	15	30
Bromodichloromethane	1	16.161	15.1908	6.2	30
Methylcyclohexane	1	19.4199	18.311	5.9	30
Dibromomethane	1	18.4627	17.5236	5.2	30
1,2-Dichloropropane	1	17.5864	16.9571	3.6	30
Trichloroethene	1	19.107	17.1642	11	40
Benzene	1	17.8379	17.487	2	40
tert-Amyl methyl ether	1	19.5807	18.588	5.2	30
Iso-propylacetate	1	17.8991	17.4848	2.3	30
Methyl methacrylate	1	17.6713	16.7208	5.5	30
Dibromochloromethane	1	15.2481	14.7466	3.3	30
2-Chloroethylvinylether	1	22.8153	22.1271	3.1	30
cis-1,3-Dichloropropene	1	14.8081	14.0836	5	30
trans-1,3-Dichloropropene	1	15.2447	13.7383	10	30
Ethyl methacrylate	1	17.2873	16.1465	6.8	30
1,1,2-Trichloroethane	1	16.5288	16.2633	1.6	30
1,2-Dibromoethane	1	17.0111	15.902	6.7	30
1,3-Dichloropropane	1	16.4186	16.0149	2.5	30
4-Methyl-2-Pentanone	1	18.1362	16.5718	9	30
2-Hexanone	1	18.5613	16.5208	12	30
Tetrachloroethene	1	15.2009	15.3203	0.78	40
Toluene	1	16.5166	15.7259	4.9	40
1,1,1,2-Tetrachloroethane	1	15.6597	14.2705	9.3	30
Chlorobenzene	1	16.2609	15.5683	4.4	40
n-Butyl acrylate	1	15.3721	17.2769	12	30
n-Amyl acetate	1	16.2706	18.1832	11	30

Form3
RPD Data Laboratory Limits
QC Batch: MBS70140

Bromoform	1	12.0639	13.1793	8.8	30
Ethylbenzene	1	12.6322	16.0073	24	30
1,1,2,2-Tetrachloroethane	1	11.0802	14.5968	27	30
Styrene	1	14.0952	15.6465	10	30
m&p-Xylenes	1	27.9252	31.8358	13	30
o-Xylene	1	13.1192	15.2807	15	30
trans-1,4-Dichloro-2-butene	1	11.0729	11.0092	0.58	30
1,3-Dichlorobenzene	1	13.3048	14.6503	9.6	30
1,4-Dichlorobenzene	1	12.6739	14.519	14	40
1,2-Dichlorobenzene	1	13.2748	14.9002	12	40
Isopropylbenzene	1	14.4774	16.759	15	30
Cyclohexanone	1	54.3687	58.3388	7	30
Camphene	1	15.513	16.4317	5.8	30
1,2,3-Trichloropropane	1	12.7297	13.9613	9.2	30
2-Chlorotoluene	1	12.6553	14.3261	12	30
p-Ethyltoluene	1	13.5998	15.2835	12	30
4-Chlorotoluene	1	14.3821	16.729	15	30
n-Propylbenzene	1	14.7114	17.2189	16	40
Bromobenzene	1	14.582	15.4744	5.9	30
1,3,5-Trimethylbenzene	1	13.152	16.1561	21	30
Butyl methacrylate	1	20.048	15.3258	27	30
t-Butylbenzene	1	13.7717	15.5932	12	30
1,2,4-Trimethylbenzene	1	13.8307	16.4678	17	30
sec-Butylbenzene	1	13.7091	16.5871	19	40
4-Isopropyltoluene	1	13.4377	15.7527	16	30
n-Butylbenzene	1	14.2834	17.298	19	30
p-Diethylbenzene	1	0	17.3107	200 *	30
1,2,4,5-Tetramethylbenzene	1	14.5434	17.4755	18	30
1,2-Dibromo-3-Chloropropane	1	14.7591	14.8639	0.71	30
Camphor	1	161.4258	171.2705	5.9	30
Hexachlorobutadiene	1	14.4357	16.8828	16	30
1,2,4-Trichlorobenzene	1	13.8655	15.3464	10	30
1,2,3-Trichlorobenzene	1	13.1923	14.3133	8.2	30
Naphthalene	1	15.2693	20.4271	29	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 1M108056.D
Matrix: Aqueous

Blank Analysis Date: 06/03/18 20:41
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
MBS70125	1M108057.D	06/03/18 21:02
AD04395-008	1M108067.D	06/04/18 00:36

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 1M108091.D
Matrix: Aqueous

Blank Analysis Date: 06/04/18 08:57
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD04394-010	1M108106.D	06/04/18 14:22
AD04394-011	1M108107.D	06/04/18 14:43
AD04395-009(MSD	1M108111.D	06/04/18 16:08
AD04395-008(MS)	1M108110.D	06/04/18 15:47
MBS70134	1M108095.D	06/04/18 10:22

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 11M57164.D
Matrix: Methanol

Blank Analysis Date: 06/04/18 22:22
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD04394-001	11M57174.D	06/05/18 02:10
AD04394-002	11M57175.D	06/05/18 02:32
AD04394-003	11M57176.D	06/05/18 02:55
AD04394-004	11M57177.D	06/05/18 03:18
AD04394-005	11M57178.D	06/05/18 03:40
AD04394-006	11M57179.D	06/05/18 04:03
AD04394-007	11M57180.D	06/05/18 04:26
AD04394-008	11M57181.D	06/05/18 04:49
MBS70140	11M57167.D	06/04/18 23:31
AD04394-001(MS)	11M57187.D	06/05/18 07:11
AD04394-001(MSD	11M57190.D	06/05/18 08:19

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11

Data File: 11M56858.D
Analysis Date: 05/29/18 14:29
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.199 to 7.199 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	22.5	25152	PASS
75	95	30	60	57.8	64776	PASS
95	95	100	100	100.0	112000	PASS
96	95	5	9	6.0	6758	PASS
173	174	0.00	2	2.0	1824	PASS
174	95	50	100	82.1	91976	PASS
175	174	5	9	8.7	8028	PASS
176	174	95	101	96.3	88600	PASS
177	176	5	9	7.1	6268	PASS

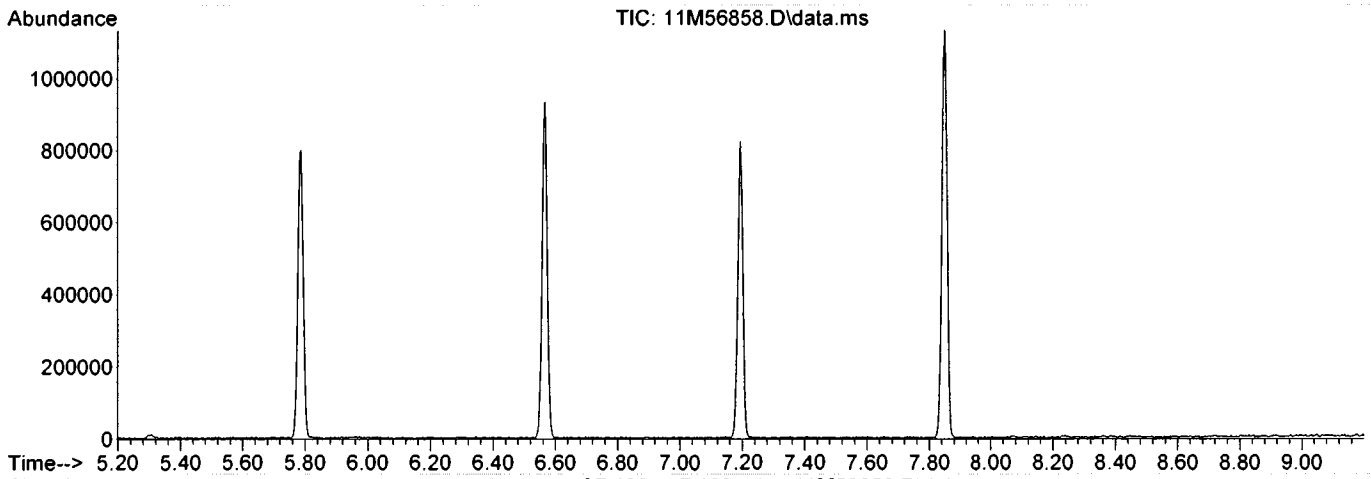
Data File	Sample Number	Analysis Date:
11M56859.D	BLK	05/29/18 14:42
11M56860.D	CAL @ 0.5 PPB	05/29/18 15:04
11M56861.D	CAL @ 1 PPB	05/29/18 15:27
11M56862.D	CAL @ 5 PPB	05/29/18 15:50
11M56863.D	CAL @ 10 PPB	05/29/18 16:12
11M56865.D	CAL @ 20 PPB	05/29/18 20:01
11M56867.D	CAL @ 50 PPB	05/29/18 20:46
11M56869.D	CAL @ 100 PPB	05/29/18 21:31
11M56872.D	CAL @ 250 PPB	05/29/18 22:39
11M56875.D	CAL @ 500 PPB	05/29/18 23:46
11M56880.D	ICV	05/30/18 08:07

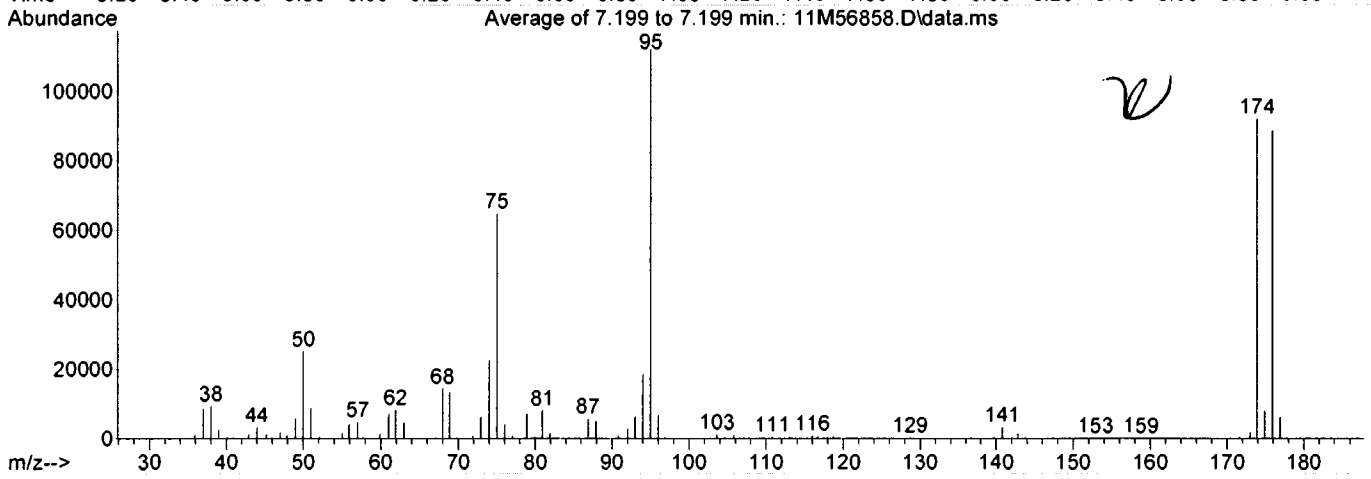
8052424 0119

Data Path : G:\GcMsData\2018\GCMS_11\Data\05-29-18\
Data File : 11M56858.D
Acq On : 29 May 2018 14:29
Operator : JR
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 7 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2018\GCMS_11\MethodQt\11M_A0517.M
Title : @GCMS_11,ug,624,8260
Last Update : Fri May 18 11:45:45 2018





Spectrum Information: Average of 7.199 to 7.199 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5	25152	PASS
75	95	30	60	57.8	64776	PASS
95	95	100	100	100.0	112000	PASS
96	95	5	9	6.0	6758	PASS
173	174	0.00	2	2.0	1824	PASS
174	95	50	100	82.1	91976	PASS
175	174	5	9	8.7	8028	PASS
176	174	95	101	96.3	88600	PASS
177	176	5	9	7.1	6268	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M107946.D
Analysis Date: 06/01/18 10:52
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.613 to 7.625 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.7	37590	PASS
75	95	30	60	50.6	96411	PASS
95	95	100	100	100.0	190672	PASS
96	95	5	9	6.6	12551	PASS
173	174	0.00	2	1.1	1965	PASS
174	95	50	100	93.5	178326	PASS
175	174	5	9	7.2	12851	PASS
176	174	95	101	96.6	172301	PASS
177	176	5	9	6.6	11341	PASS

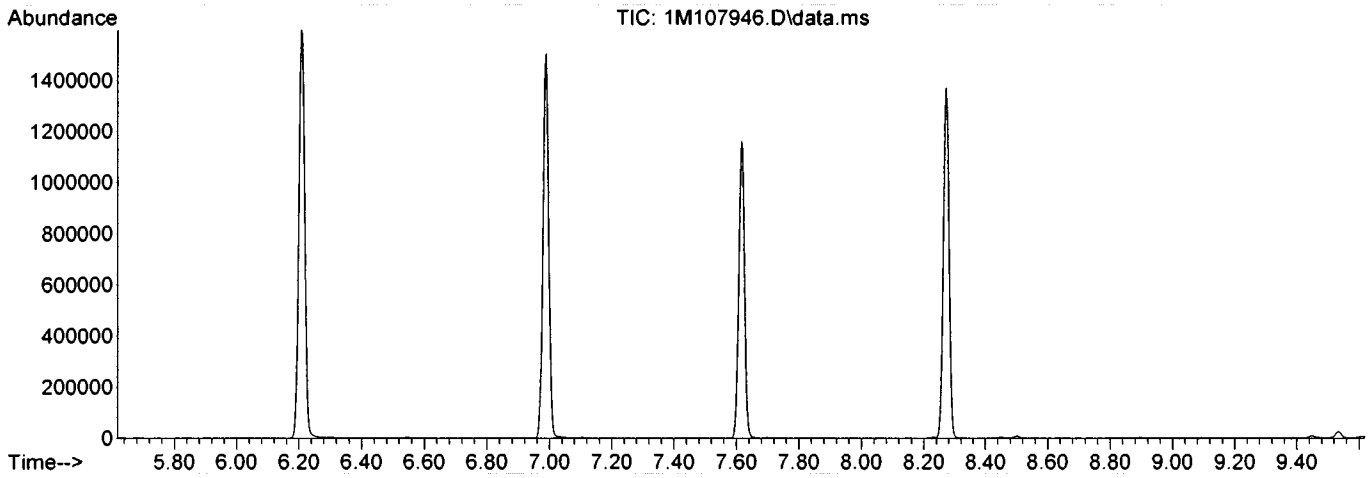
Data File	Sample Number	Analysis Date:
1M107949.D	BLK	06/01/18 11:56
1M107951.D	CAL @ 0.5 PPB	06/01/18 12:39
1M107952.D	CAL @ 1 PPB	06/01/18 13:00
1M107953.D	CAL @ 5 PPB	06/01/18 13:22
1M107954.D	CAL @ 10 PPB	06/01/18 13:44
1M107961.D	CAL @ 20 PPB	06/01/18 16:01
1M107962.D	CAL @ 500 PPB	06/01/18 16:23
1M107965.D	CAL @ 250 PPB	06/01/18 17:27
1M107968.D	CAL @ 100 PPB	06/01/18 18:31
1M107971.D	CAL @ 50 PPB	06/01/18 19:35
1M107974.D	BLK	06/01/18 20:39
1M107975.D	ICV	06/01/18 21:00

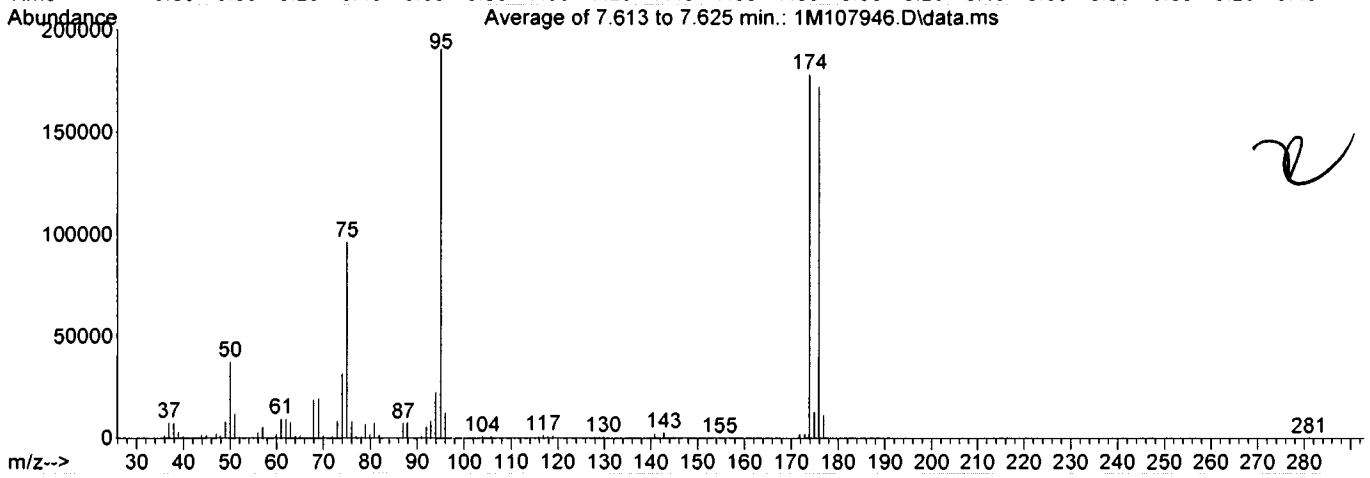
8052424 0121

Data Path : G:\GcMsData\2018\GCMS_1\Data\06-01-18\
Data File : 1M107946.D
Acq On : 01 Jun 2018 10:52
Operator : sg
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2018\GCMS_1\MethodQt\1M_A0531.M
Title : @GCMS_1,ug,624,8260
Last Update : Fri Jun 01 08:12:18 2018





Spectrum Information: Average of 7.613 to 7.625 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	37590	PASS
75	95	30	60	50.6	96411	PASS
95	95	100	100	100.0	190672	PASS
96	95	5	9	6.6	12551	PASS
173	174	0.00	2	1.1	1965	PASS
174	95	50	100	93.5	178326	PASS
175	174	5	9	7.2	12851	PASS
176	174	95	101	96.6	172301	PASS
177	176	5	9	6.6	11341	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1
Data File: 1M108050.D
Analysis Date: 06/03/18 18:39
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.593 to 7.622 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	20.5	11047	PASS
75	95	30	60	51.7	27872	PASS
95	95	100	100	100.0	53887	PASS
96	95	5	9	7.3	3958	PASS
173	174	0.00	2	0.9	448	PASS
174	95	50	100	91.3	49220	PASS
175	174	5	9	7.5	3677	PASS
176	174	95	101	96.3	47418	PASS
177	176	5	9	6.3	3007	PASS

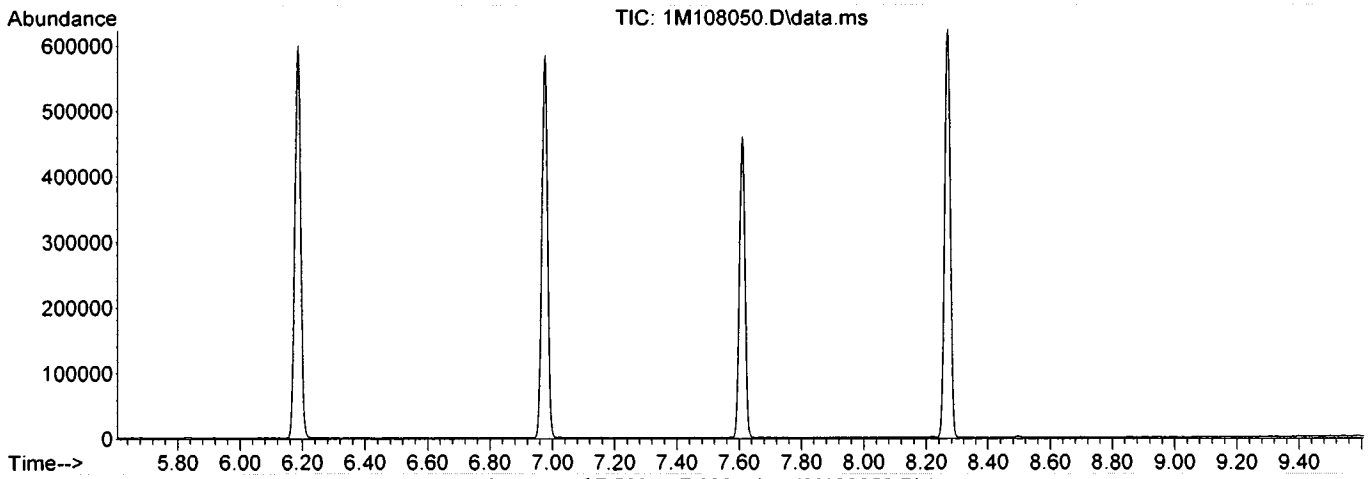
Data File	Sample Number	Analysis Date:
1M108051.D	CAL @ 20 PPB	06/03/18 18:53
1M108055.D	BLK	06/03/18 20:19
1M108056.D	DAILY BLANK	06/03/18 20:41
1M108057.D	MBS70125	06/03/18 21:02
1M108058.D	AD04395-006(MS)	06/03/18 21:23
1M108059.D	AD04395-006(MSD	06/03/18 21:45
1M108060.D	BLK	06/03/18 22:06
1M108061.D	AD04395-001	06/03/18 22:28
1M108062.D	AD04491-001	06/03/18 22:49
1M108063.D	AD04491-002	06/03/18 23:10
1M108064.D	AD04395-014	06/03/18 23:32
1M108065.D	AD04395-002	06/03/18 23:53
1M108066.D	AD04395-006	06/04/18 00:15
1M108067.D	AD04395-008	06/04/18 00:36
1M108068.D	AD04395-010	06/04/18 00:57
1M108069.D	AD04395-012	06/04/18 01:19
1M108070.D	AD04395-004	06/04/18 01:40
1M108071.D	AD04491-006	06/04/18 02:02
1M108072.D	AD04491-009	06/04/18 02:23
1M108073.D	AD04491-010	06/04/18 02:44
1M108074.D	AD04491-011	06/04/18 03:06
1M108075.D	AD04491-012	06/04/18 03:27
1M108076.D	AD04491-004	06/04/18 03:48
1M108077.D	AD04491-005	06/04/18 04:10
1M108078.D	AD04491-008	06/04/18 04:31
1M108079.D	AD04491-007	06/04/18 04:52
1M108080.D	AD04491-003	06/04/18 05:14
1M108081.D	STD	06/04/18 05:35

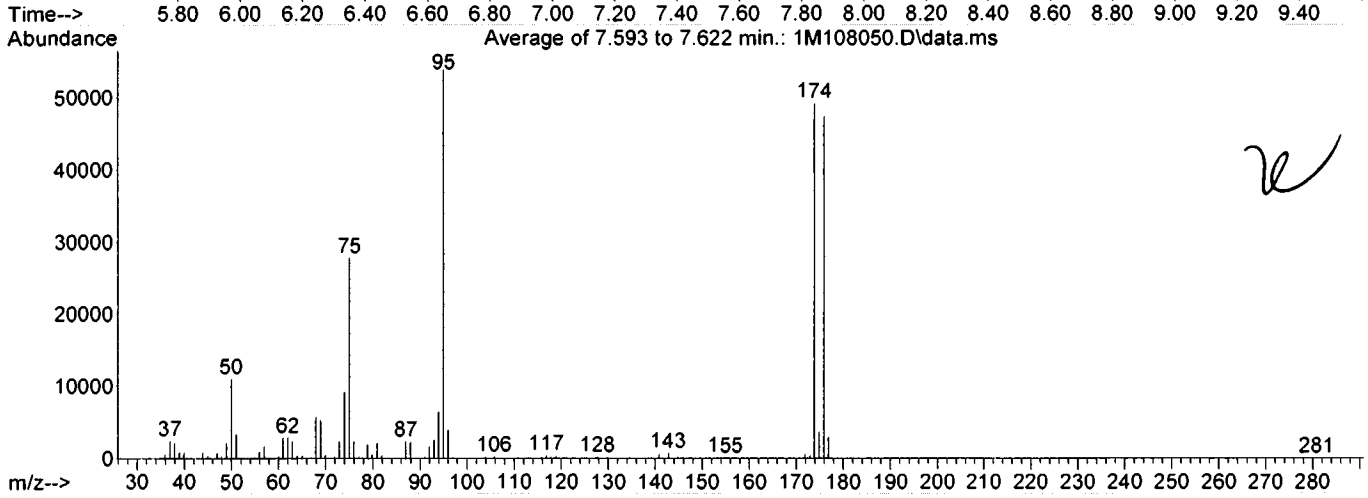
8052424 0123

Data Path : G:\GcMsData\2018\GCMS_1\Data\06-03-18\
Data File : 1M108050.D
Acq On : 03 Jun 2018 18:39
Operator : WP
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2018\GCMS_1\MethodQt\1M_A0601.M
Title : @GCMS_1,ug,624,8260
Last Update : Fri Jun 01 21:16:26 2018





Spectrum Information: Average of 7.593 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	11047	PASS
75	95	30	60	51.7	27872	PASS
95	95	100	100	100.0	53887	PASS
96	95	5	9	7.3	3958	PASS
173	174	0.00	2	0.9	448	PASS
174	95	50	100	91.3	49220	PASS
175	174	5	9	7.5	3677	PASS
176	174	95	101	96.3	47418	PASS
177	176	5	9	6.3	3007	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M108086.D
Analysis Date: 06/04/18 07:17
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.593 to 7.622 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	19.7	12084	PASS
75	95	30	60	48.3	29694	PASS
95	95	100	100	100.0	61484	PASS
96	95	5	9	6.9	4217	PASS
173	174	0.00	2	0.5	265	PASS
174	95	50	100	88.1	54144	PASS
175	174	5	9	7.1	3869	PASS
176	174	95	101	97.9	53027	PASS
177	176	5	9	6.4	3370	PASS

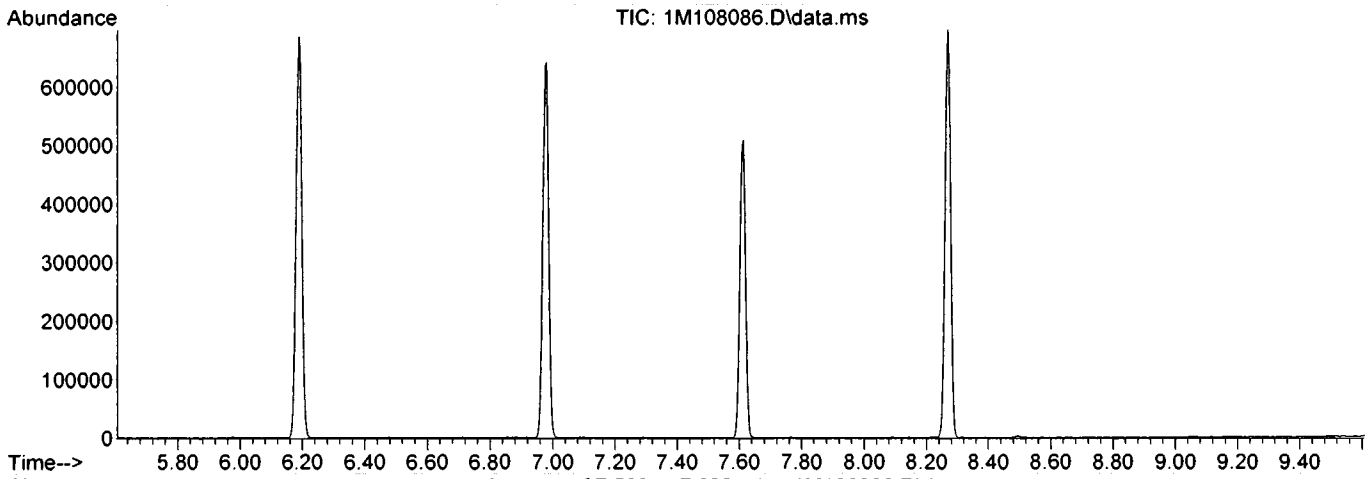
Data File	Sample Number	Analysis Date:
1M108087.D	CAL @ 20 PPB	06/04/18 07:31
1M108090.D	DAILY BLANK	06/04/18 08:35
1M108091.D	DAILY BLANK	06/04/18 08:57
1M108092.D	AD04491-012	06/04/18 09:18
1M108093.D	AD04491-011(10X)	06/04/18 09:40
1M108094.D	AD04491-007(10X)	06/04/18 10:01
1M108095.D	MBS70134	06/04/18 10:22
1M108096.D	AD04363-012	06/04/18 10:44
1M108097.D	AD04363-002	06/04/18 11:05
1M108098.D	AD04423-025	06/04/18 11:27
1M108099.D	AD04302-025(T)	06/04/18 11:49
1M108100.D	AD04302-026(T)	06/04/18 12:10
1M108101.D	AD04302-024(100X	06/04/18 12:31
1M108102.D	MBS70135	06/04/18 12:56
1M108103.D	AD04467-015	06/04/18 13:17
1M108104.D	AD04363-010	06/04/18 13:39
1M108105.D	AD04373-002	06/04/18 14:00
1M108106.D	AD04394-010	06/04/18 14:22
1M108107.D	AD04394-011	06/04/18 14:43
1M108108.D	AD04467-015	06/04/18 15:04
1M108109.D	AD04363-008	06/04/18 15:26
1M108110.D	AD04395-008(MS)	06/04/18 15:47
1M108111.D	AD04395-009(MSD	06/04/18 16:08
1M108112.D	BLK	06/04/18 16:29
1M108113.D	AD04413-011	06/04/18 16:51
1M108114.D	AD04413-012	06/04/18 17:12
1M108115.D	AD04413-005	06/04/18 17:33
1M108116.D	AD04413-009	06/04/18 17:55
1M108117.D	AD04413-014(5X)	06/04/18 18:16
1M108118.D	AD04413-007(5X)	06/04/18 18:37
1M108119.D	AD04413-003(20X)	06/04/18 18:59

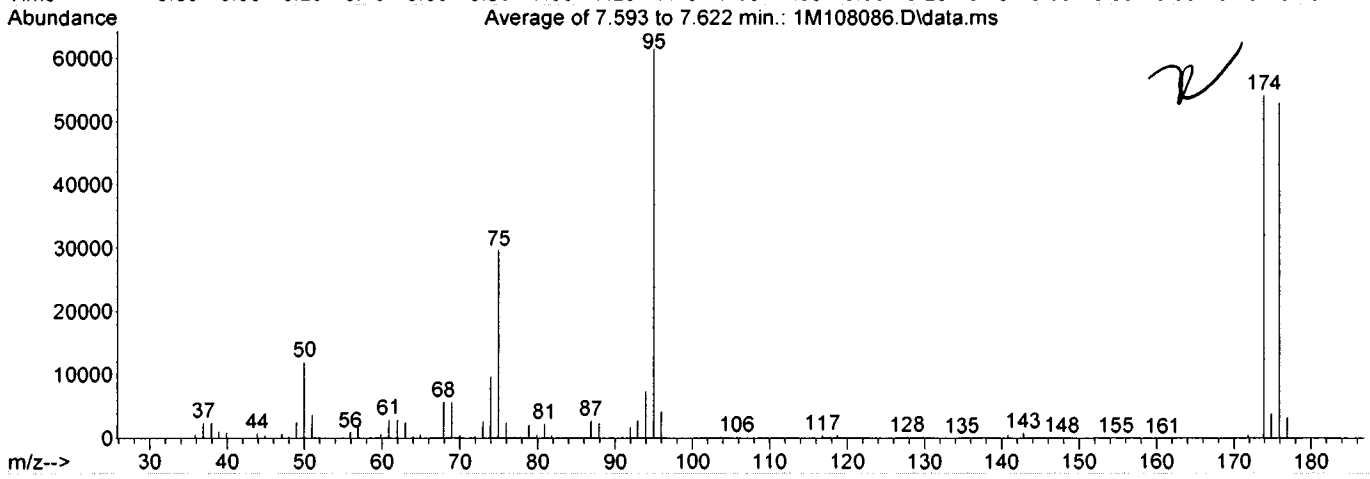
8052424 0125

Data Path : G:\GcMsData\2018\GCMS_1\Data\06-04-18\
Data File : 1M108086.D
Acq On : 04 Jun 2018 07:17
Operator : SG
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2018\GCMS_1\MethodQt\1M_A0601.M
Title : @GCMS_1,ug,624,8260
Last Update : Fri Jun 01 21:16:26 2018





Spectrum Information: Average of 7.593 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	12084	PASS
75	95	30	60	48.3	29694	PASS
95	95	100	100	100.0	61484	PASS
96	95	5	9	6.9	4217	PASS
173	174	0.00	2	0.5	265	PASS
174	95	50	100	88.1	54144	PASS
175	174	5	9	7.1	3869	PASS
176	174	95	101	97.9	53027	PASS
177	176	5	9	6.4	3370	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 11
Data File: 11M57160.D
Analysis Date: 06/04/18 20:28
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.193 to 7.206 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	30.9	26866	PASS
75	95	30	60	57.6	50059	PASS
95	95	100	100	100.0	86946	PASS
96	95	5	9	5.8	5049	PASS
173	174	0.00	2	0.6	379	PASS
174	95	50	100	76.8	66771	PASS
175	174	5	9	7.9	5259	PASS
176	174	95	101	100.2	66880	PASS
177	176	5	9	7.9	5315	PASS

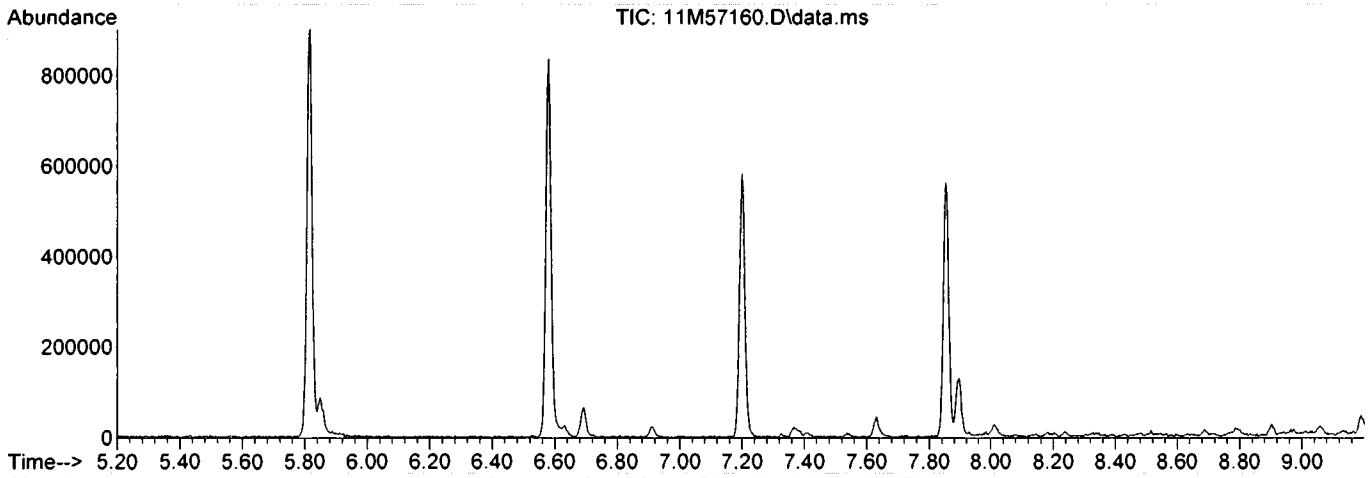
Data File	Sample Number	Analysis Date:
11M57161.D	CAL @ 20 PPB	06/04/18 20:51
11M57162.D	20 PPB	06/04/18 21:37
11M57163.D	BLK	06/04/18 22:00
11M57164.D	DAILY BLANK	06/04/18 22:22
11M57165.D	DAILY BLANK	06/04/18 22:45
11M57166.D	MBS70139	06/04/18 23:08
11M57167.D	MBS70140	06/04/18 23:31
11M57168.D	EF-1-V-280642(053	06/04/18 23:54
11M57169.D	AD04453-001	06/05/18 00:16
11M57170.D	AD04390-001	06/05/18 00:39
11M57171.D	AD04447-011	06/05/18 01:02
11M57172.D	AD04491-013	06/05/18 01:24
11M57173.D	AD04491-014	06/05/18 01:47
11M57174.D	AD04394-001	06/05/18 02:10
11M57175.D	AD04394-002	06/05/18 02:32
11M57176.D	AD04394-003	06/05/18 02:55
11M57177.D	AD04394-004	06/05/18 03:18
11M57178.D	AD04394-005	06/05/18 03:40
11M57179.D	AD04394-006	06/05/18 04:03
11M57180.D	AD04394-007	06/05/18 04:26
11M57181.D	AD04394-008	06/05/18 04:49
11M57182.D	AD04402-012	06/05/18 05:11
11M57183.D	AD04475-001(20X)	06/05/18 05:34
11M57184.D	AD04380-006(80uL	06/05/18 05:56
11M57185.D	AD04380-008	06/05/18 06:19
11M57186.D	AD04380-004(400u	06/05/18 06:48
11M57187.D	AD04394-001(MS)	06/05/18 07:11
11M57188.D	AD04415-001(400u	06/05/18 07:34
11M57189.D	AD04415-005(400u	06/05/18 07:57
11M57190.D	AD04394-001(MSD	06/05/18 08:19
11M57191.D	04364-014	06/05/18 08:42

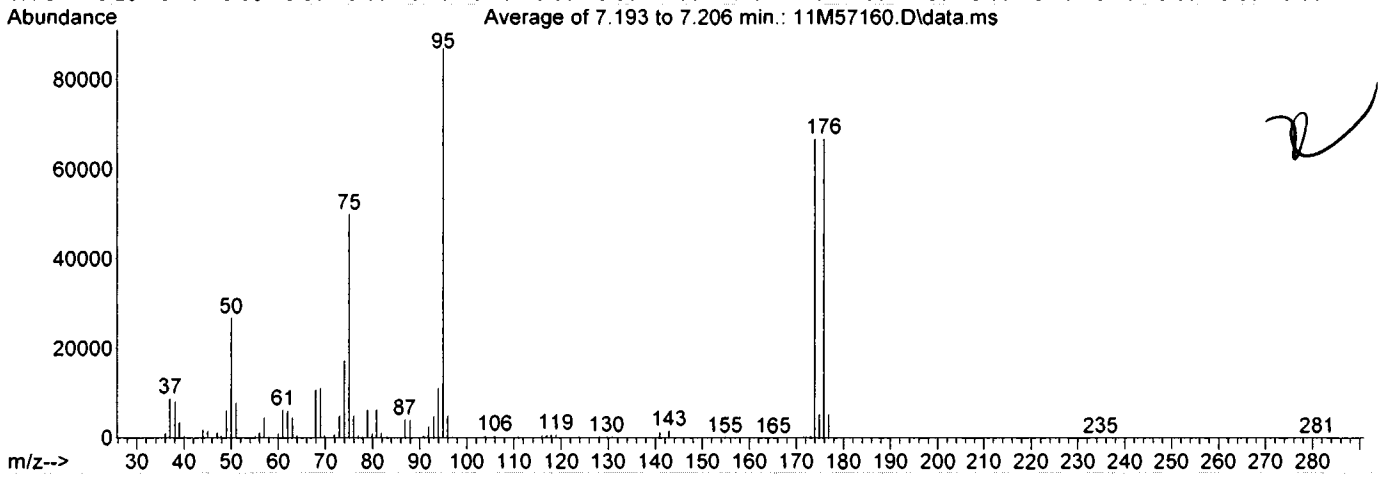
8052424 0127

Data Path : G:\GcMsData\2018\GCMS_11\Data\06-0418\
Data File : 11M57160.D
Acq On : 4 Jun 2018 20:28
Operator : SG
Sample : BFB TUNE
Misc : A,5ML
ALS Vial : 3 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2018\GCMS_11\MethodQt\11M_A0529.M
Title : @GCMS_11,ug,624,8260
Last Update : Wed May 30 11:38:39 2018





Spectrum Information: Average of 7.193 to 7.206 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.9	26866	PASS
75	95	30	60	57.6	50059	PASS
95	95	100	100	100.0	86946	PASS
96	95	5	9	5.8	5049	PASS
173	174	0.00	2	0.6	379	PASS
174	95	50	100	76.8	66771	PASS
175	174	5	9	7.9	5259	PASS
176	174	95	101	100.2	66880	PASS
177	176	5	9	7.9	5315	PASS

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M56865.D	CAL @ 20 PPB	05/29/18 20:01	2	11M56862.D	CAL @ 5 PPB	05/29/18 15:50
3	11M56863.D	CAL @ 10 PPB	05/29/18 16:12	4	11M56867.D	CAL @ 50 PPB	05/29/18 20:46
5	11M56869.D	CAL @ 100 PPB	05/29/18 21:31	6	11M56872.D	CAL @ 250 PPB	05/29/18 22:39
7	11M56875.D	CAL @ 500 PPB	05/29/18 23:46	8	11M56861.D	CAL @ 1 PPB	05/29/18 15:27
9	11M56860.D	CAL @ 0.5 PPB	05/29/18 15:04				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd			Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.6084	0.5420	0.6161	0.6094	0.6209	0.6081	0.6065	0.5560	-----	0.596	1.68	1.00	1.00	5.0	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.4697	0.4018	0.4573	0.4867	0.4802	0.4770	0.4734	0.3981	-----	0.456	1.67	1.00	1.00	7.8	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.6344	0.6487	0.6506	0.6659	0.6297	0.6840	0.7263	0.6344	-----	0.659	1.84	0.999	1.00	4.9	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Qua	0.2425	0.2084	0.2039	0.2671	0.3332	0.5055	0.8328	0.1915	-----	0.348	2.24	0.960	1.00	64	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.6968	0.6650	0.7003	0.6821	0.6798	0.6998	0.6821	0.6950	-----	0.688	1.93	1.00	1.00	1.8	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.4627	0.4587	0.4775	0.4727	0.4176	0.4462	0.4997	0.4244	-----	0.457	2.32	0.997	1.00	6.0	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.8001	0.9545	0.9498	0.8817	0.9094	0.9370	0.9557	0.8787	-----	0.908	2.54	1.00	1.00	5.9	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.4615	0.5142	0.5266	0.5386	0.4900	0.5136	0.5548	0.5685	-----	0.521	2.78	0.998	1.00	6.6	0.50	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	1.1996	1.0300	1.1746	1.1637	1.1031	1.0850	1.2205	1.2430	-----	1.15	2.82	0.997	1.00	6.4	0.50		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.2325	0.2183	0.2399	0.2250	0.2323	0.2501	0.2737	0.1858	-----	0.232	2.98	0.998	1.00	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.4375	0.4611	0.4369	0.4705	0.4308	0.4449	0.4802	0.4252	-----	0.448	3.38	0.999	1.00	4.4	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0869	0.0912	0.0918	0.0879	0.0810	0.0870	0.0928	0.0954	-----	0.0893	2.90	0.999	1.00	5.0			100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.1754	0.1703	0.1941	0.1820	0.1762	0.1822	0.2005	0.1146	-----	0.174	3.58	0.998	1.00	15			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.2332	0.1058	0.1671	0.2982	0.3106	0.3521	0.2705	0.0508	-----	0.224	3.13	0.981	0.997	47			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.1395	0.1394	0.1495	0.1457	0.1445	0.1366	0.1453	0.1783	-----	0.147	3.02	0.999	1.00	8.9	0.10		100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	1.3451	1.2902	1.4183	1.4236	1.3166	1.4290	1.5006	1.3207	-----	1.38	3.19	0.999	1.00	5.3	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0480	0.0464	0.0505	0.0523	0.0491	0.0495	0.0542	0.0496	-----	0.0500	3.45	0.998	1.00	4.8			100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.2286	0.2360	0.2346	0.2263	0.2245	0.2211	0.2244	0.2660	-----	0.233	3.83	1.00	1.00	6.2			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	1.7576	1.6735	1.8013	1.7295	1.7764	1.8895	1.7168	1.7180	-----	1.76	3.96	0.998	0.999	3.8			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.6160	0.6205	0.6500	0.5890	0.6435	0.7171	0.7263	0.5619	-----	0.641	2.98	0.999	1.00	9.0	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.5346	0.5395	0.5538	0.5474	0.5410	0.5153	0.5677	0.4851	-----	0.536	3.29	0.998	1.00	4.7	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	1.0153	0.9661	1.0320	1.0031	1.0478	1.1152	1.2421	0.9114	0.9116	1.03	3.61	0.997	1.00	10	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.8661	0.8096	0.8556	0.8732	0.8256	0.8954	0.9465	0.8384	-----	0.864	3.94	0.999	1.00	5.0	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.4542	0.4142	0.4763	0.4393	0.4461	0.4808	0.5284	0.4459	-----	0.461	3.61	0.998	1.00	7.5	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	1.3936	1.3297	1.4068	1.4209	1.4402	1.4983	1.4328	1.3214	-----	1.41	4.21	1.00	1.00	4.1	0.50		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.8347	0.8421	0.8492	0.8424	0.8421	0.9492	1.0352	0.8221	-----	0.877	4.32	0.998	1.00	8.6	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.4839	0.4441	0.6073	0.5140	0.4540	0.4505	0.3808	0.4263	-----	0.470	4.47	0.993	1.00	14			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Qua	0.5533	0.6339	0.6572	0.5443	0.5680	0.6528	-----	0.6050	-----	0.602	4.33	0.997	1.00	7.9			20.00	5.00	10.00	50.00	100.0	250.0		1.00	
Ethyl acetate	1	0	Avg	0.6011	0.5601	0.6379	0.6070	0.6388	0.6306	0.7309	0.5213	-----	0.616	4.34	0.996	1.00	10			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0055	0.0049	0.0055	0.0058	0.0057	0.0059	0.0067	0.0043	-----	0.00560	5.36	0.996	1.00	13			1000.	250.0	500.0	2500.	5000.	1250	2500	50.00	
1,1-Dichloropropene	1	0	Avg	0.5812	0.5490	0.5886	0.5886	0.5757	0.7022	0.7615	0.5504	-----	0.612	4.72	0.997	1.00	13			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.7841	0.7587	0.8068	0.8241	0.7794	0.8783	0.9460	0.7098	-----	0.811	4.50	0.998	1.00	9.0	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2344	0.2372	0.2317	0.2466	0.2258	0.2435	0.2453	0.2302	0.2316	0.236	4.60	-1	-1	3.1			30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.5186	0.5149	0.5545	0.5282	0.4951	0.5194	0.5538	0.5259	-----	0.526	4.67	0.999	1.00	3.8	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1425	0.1351	0.1421	0.1476	0.1317	-----	-----	0.1383	0.1322	0.139	4.80	-1	-1	4.3			30.00	30.00	30.00	30.00	30.00			30.00	30.00
1,2-Dichloroethane	1	0	Qua	0.5900	0.5359	0.6422	0.6692	0.6474	0.7777	0.9604	0.5193	0.5619	0.656	4.84	0.990	1.00	21	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.2668	0.3117	0.2679	0.2734	0.2277	0.2828	0.3184	0.2391	-----	0.274	4.32	0.995	1.00	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.6350	0.6122	0.6354	0.6700	0.6414	0.7365	0.8277	0.5364	-----	0.662	4.63	0.996	1.00	13	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.5347	0.4762	0.5330	0.5228	0.5420	0.6853	0.8057	0.5139	-----	0.577	4.73	0.993	1.00	19	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	1.3488	1.2852	1.3855	1.3584	1.3662	1.5715	1.6893	1.3076	-----	1.41	3.96	0.998	1.00	10			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.6525	0.5800	0.6478	0.6877	0.6456	0.7091	0.8255	0.5409	-----	0.661	5.43	0.995	1.00	13	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.73
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M56865.D	CAL @ 20 PPB	05/29/18 20:01	2	11M56862.D	CAL @ 5 PPB	05/29/18 15:50
3	11M56863.D	CAL @ 10 PPB	05/29/18 16:12	4	11M56867.D	CAL @ 50 PPB	05/29/18 20:46
5	11M56869.D	CAL @ 100 PPB	05/29/18 21:31	6	11M56872.D	CAL @ 250 PPB	05/29/18 22:39
7	11M56875.D	CAL @ 500 PPB	05/29/18 23:46	8	11M56861.D	CAL @ 1 PPB	05/29/18 15:27
9	11M56860.D	CAL @ 0.5 PPB	05/29/18 15:04				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3766	0.3403	0.3710	0.3552	0.3470	0.3721	0.4049	0.3328	-----	0.363	5.29	0.998	1.00	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Qua	0.2470	0.2323	0.2401	0.2489	0.2623	0.3154	0.3968	0.2286	-----	0.271	5.36	0.989	1.00	21		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.5298	0.5165	0.5334	0.5186	0.5203	0.5451	0.6055	0.5412	-----	0.539	5.30	0.997	1.00	5.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.4198	0.3776	0.4269	0.4511	0.4576	0.4944	0.5719	0.4298	-----	0.454	5.18	0.995	1.00	13	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	1.8789	1.8695	1.9915	2.0082	1.8739	2.1370	1.4796	1.9079	2.0191	1.91	4.84	0.965	0.995	9.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	1.2598	1.1808	1.2865	1.2618	1.2636	1.3817	1.2954	1.1145	-----	1.26	4.87	0.999	0.999	6.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	1.6495	1.6019	1.6548	1.7938	1.8567	1.8198	1.4791	1.5390	-----	1.67	4.83	0.988	1.00	8.2	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.8888	0.8897	0.8726	0.9153	0.8780	0.9228	0.9500	0.6908	-----	0.876	5.32	1.00	1.00	9.0	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.5781	0.4918	0.5389	0.6125	0.6454	0.6785	0.6988	0.5034	-----	0.593	6.27	1.00	1.00	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Avg	0.3016	0.2529	0.3160	0.3337	0.3334	0.3245	0.3355	0.2334	-----	0.304	5.57	1.00	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	1.0756	1.0249	1.0967	1.0372	1.0591	1.0109	0.9969	0.9797	-----	1.04	5.66	1.00	1.00	3.9	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.9050	0.8430	0.9292	0.9010	0.9633	0.8751	0.9475	0.7599	-----	0.891	5.94	0.999	0.999	7.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.8370	0.7746	0.8671	0.8283	0.9508	0.9112	0.9034	0.7144	-----	0.848	5.95	1.00	1.00	9.1	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.5489	0.4832	0.5530	0.5499	0.5429	0.5232	0.5441	0.4084	-----	0.519	6.04	1.00	1.00	9.7	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.5294	0.4777	0.5256	0.5430	0.5301	0.5314	0.5548	0.4877	-----	0.523	6.34	1.00	1.00	5.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.9651	0.9251	1.0190	0.9974	1.0487	1.0587	1.0869	0.9658	-----	1.01	6.14	1.00	1.00	5.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.8044	0.7477	0.8210	0.8433	0.8450	0.8032	0.8049	0.8202	-----	0.811	5.73	1.00	1.00	3.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.5813	0.5412	0.5988	0.6327	0.6689	0.6251	0.6376	0.6035	-----	0.611	6.15	1.00	1.00	6.4	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Qua	0.3545	0.3215	0.3583	0.3869	0.4159	0.4787	0.5994	0.3010	-----	0.402	6.14	0.990	1.00	24	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.4098	1.3655	1.3958	1.3947	1.3636	1.3173	1.1440	1.3445	1.3752	1.35	5.81	-1	-1	6.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	1.5270	1.5565	1.5996	1.5563	1.5671	1.6428	1.3438	1.3092	-----	1.51	5.85	0.990	0.999	8.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Qua	0.5383	0.4834	0.5401	0.5749	0.5964	0.7146	0.9012	0.5002	-----	0.606	6.63	0.989	1.00	23		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	1.5476	1.4886	1.5808	1.5584	1.6032	1.6353	1.3923	1.4550	-----	1.53	6.59	0.993	0.999	5.3	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	3.6538	3.3069	3.9133	3.9520	4.0623	3.6328	2.9429	3.7138	-----	3.65	6.83	0.986	1.00	10	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	4.0553	3.9149	4.3226	4.3881	4.4741	3.8668	3.1384	3.7232	-----	3.99	6.94	0.985	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.9194	0.7269	0.9056	1.0498	1.0639	1.0217	1.1743	0.8904	-----	0.969	7.04	0.996	1.00	14	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	1.5063	1.7951	1.7255	1.8562	1.8652	1.9337	2.1516	1.8888	-----	1.84	6.63	0.998	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	2.0333	1.8743	2.1147	2.1056	2.0346	1.7822	1.7651	2.2030	-----	1.99	7.25	0.999	0.999	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.9194	0.9488	0.9753	0.9611	0.9244	0.7983	0.7743	1.0800	1.0094	0.932	7.20	-1	-1	10		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	4.1851	4.3336	4.6796	4.7005	5.0675	5.0470	3.3405	4.4803	-----	4.48	6.91	0.949	0.997	12	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	2.2591	2.4287	2.5559	2.4561	2.6477	2.6286	1.7564	2.5650	2.3461	2.40	6.69	0.954	0.997	11	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	2.3904	2.4312	2.5873	2.5937	2.7335	2.8083	2.7691	2.3428	-----	2.58	6.91	1.00	1.00	7.0	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.8546	0.8257	0.8357	0.8837	0.8692	0.8427	0.8850	0.7770	-----	0.847	7.28	0.999	1.00	4.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	2.4025	2.3130	2.5857	2.6419	2.6777	2.7436	2.7855	2.3461	-----	2.56	7.82	1.00	1.00	7.2	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	2.4852	2.4371	2.6485	2.7640	2.7288	2.7651	2.7469	3.1877	-----	2.72	7.87	1.00	1.00	8.4	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	2.4090	2.2052	2.4011	2.5228	2.5983	2.5244	2.6844	2.5208	-----	2.48	8.09	0.999	1.00	5.9	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	5.1543	5.0746	5.4395	5.2547	5.3781	5.1466	3.4631	5.5457	-----	5.06	7.10	0.953	0.998	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.2389	0.2481	0.2706	0.2588	0.2415	-----	-----	0.3327	-----	0.265	7.18	0.999	0.999	13		100.0	25.00	50.00	250.0	500.0			5.00	
Camphene	1	0	Avg	1.2544	1.1721	1.2529	1.2021	1.2173	1.1834	1.3277	1.1543	-----	1.22	7.28	0.997	1.00	4.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	2.4490	2.2772	2.5344	2.5514	2.4127	2.2481	2.4757	2.7370	-----	2.46	7.29	0.998	0.999	6.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	3.3625	3.2390	3.6861	3.8959	3.9293	3.8990	-----	4.8087	-----	3.83	7.40	1.00	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0		1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.73
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_11

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	11M56865.D	CAL @ 20 PPB	05/29/18 20:01	2	11M56862.D	CAL @ 5 PPB	05/29/18 15:50
3	11M56863.D	CAL @ 10 PPB	05/29/18 16:12	4	11M56867.D	CAL @ 50 PPB	05/29/18 20:46
5	11M56869.D	CAL @ 100 PPB	05/29/18 21:31	6	11M56872.D	CAL @ 250 PPB	05/29/18 22:39
7	11M56875.D	CAL @ 500 PPB	05/29/18 23:46	8	11M56861.D	CAL @ 1 PPB	05/29/18 15:27
9	11M56860.D	CAL @ 0.5 PPB	05/29/18 15:04				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	5.2067	4.6178	5.5510	5.6277	5.6923	5.5117	3.7848	5.0664	-----	5.13	7.38	0.958	0.998	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	3.4805	3.5620	3.8743	3.9138	3.6527	3.9775	2.1516	4.1015	-----	3.59	7.45	0.884	0.990	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	1	0	Avg	6.2036	5.9817	6.5293	6.3046	6.3069	5.6536	3.6237	6.0055	-----	5.83	7.33	0.936	0.999	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	4.0222	3.7187	4.4510	4.4517	4.0289	3.8205	3.8955	4.1372	-----	4.07	7.30	1.00	1.00	6.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	3.5413	4.0052	3.9716	3.9864	4.3609	4.7134	3.0214	3.8465	-----	3.93	7.41	0.942	0.994	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	2.7923	2.8091	3.0996	3.3116	3.7726	3.4369	3.0333	2.8884	-----	3.14	7.41	0.995	1.00	11	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	3.3417	3.1256	3.5349	3.4866	3.6373	3.4809	3.5449	3.5809	-----	3.47	7.60	1.00	1.00	4.7		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	4.2251	3.9498	4.3345	4.5144	4.5649	4.4908	3.3139	4.1136	-----	4.19	7.63	0.974	0.999	9.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	4.0892	3.8222	4.3730	4.1571	4.3592	4.0876	3.1976	4.1212	-----	4.03	7.73	0.983	1.00	9.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	3.2553	3.0749	3.4272	3.4792	3.5813	3.5120	3.0083	3.2680	-----	3.33	7.80	0.994	1.00	6.3		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	3.8145	3.5220	4.1350	3.8981	4.0812	3.8182	3.4919	3.9592	-----	3.84	8.03	0.998	1.00	6.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	2.0383	2.0306	2.1039	2.1325	2.2131	2.1959	2.3441	1.7728	-----	2.10	8.02	0.999	1.00	8.0		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Avg	3.1217	2.9812	3.3050	3.3345	3.4439	3.3511	3.0331	2.8864	-----	3.18	8.48	0.997	1.00	6.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.2997	0.2793	0.3054	0.3467	0.3385	0.3046	0.3150	0.4544	-----	0.331	8.54	0.999	0.999	16	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Avg	0.1859	0.1750	0.1908	0.1976	0.1964	0.1723	0.2396	0.1682	0.1733	0.189	8.97	0.982	0.997	12		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.3555	0.3363	0.3781	0.3674	0.3793	0.3681	0.4075	0.3349	-----	0.366	9.12	0.998	1.00	6.5		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.9702	0.9193	1.0024	1.0423	1.1201	1.0632	1.2008	1.1368	-----	1.06	9.03	0.997	1.00	8.8	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.8123	0.8479	0.8655	0.9199	0.9527	0.8895	0.9815	0.9768	-----	0.906	9.34	0.998	1.00	6.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	3.3698	3.2297	3.6505	3.7792	3.9724	3.5697	3.1990	3.4910	-----	3.53	9.19	0.996	1.00	7.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.73
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8052424 0131

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M107961.D	CAL @ 20 PPB	06/01/18 16:01	2	1M107953.D	CAL @ 5 PPB	06/01/18 13:22
3	1M107954.D	CAL @ 10 PPB	06/01/18 13:44	4	1M107971.D	CAL @ 50 PPB	06/01/18 19:35
5	1M107968.D	CAL @ 100 PPB	06/01/18 18:31	6	1M107965.D	CAL @ 250 PPB	06/01/18 17:27
7	1M107962.D	CAL @ 500 PPB	06/01/18 16:23	8	1M107952.D	CAL @ 1 PPB	06/01/18 13:00
9	1M107951.D	CAL @ 0.5 PPB	06/01/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd			Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2417	0.3192	0.2896	0.2927	0.2459	0.3601	0.2545	0.3513	-----	0.294	2.14	0.966	0.987	16	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dichlorodifluorometha	1	0	Avg	0.1997	0.2588	0.2302	0.2559	0.2075	0.2740	0.2262	0.2514	-----	0.238	2.14	0.990	0.995	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloromethane	1	0	Avg	0.2505	0.2830	0.2411	0.2625	0.2474	0.2694	0.2525	0.3108	-----	0.265	2.29	0.999	1.00	8.7	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromomethane	1	0	Avg	0.1112	0.1265	0.1122	0.1360	0.1359	0.1744	0.1748	0.1370	-----	0.139	2.68	0.998	0.999	18	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Chloride	1	0	Avg	0.2426	0.2896	0.2657	0.2802	0.2410	0.3009	0.2582	0.3204	-----	0.275	2.40	0.994	0.997	10	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroethane	1	0	Avg	0.1580	0.1875	0.1704	0.1725	0.1569	0.1811	0.1676	0.2301	-----	0.178	2.77	0.998	0.999	13	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichlorofluoromethan	1	0	Avg	0.3148	0.3935	0.3672	0.3952	0.3262	0.4343	0.3440	0.3971	-----	0.372	2.98	0.985	0.994	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl ether	1	0	Avg	0.2402	0.2427	0.2278	0.2431	0.2479	0.2600	0.2589	0.2467	-----	0.246	3.20	1.00	1.00	4.2	0.50	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Furan	1	0	Avg	0.3594	0.4013	0.3774	0.3871	0.3715	0.4073	0.3843	0.4040	-----	0.387	3.24	0.999	0.999	4.4	0.50	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1137	0.1433	0.1332	0.1390	0.1144	0.1549	0.1197	0.1405	-----	0.132	3.39	0.982	0.993	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methylene Chloride	1	0	Avg	0.2438	0.2641	0.2615	0.2445	0.2405	0.2546	0.2538	0.2865	-----	0.256	3.78	1.00	1.00	5.8	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acrolein	1	0	Avg	0.0468	0.0472	0.0469	0.0454	0.0488	0.0517	0.0504	0.0445	-----	0.0478	3.30	1.00	1.00	5.1			100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Acrylonitrile	1	0	Avg	0.0897	0.0892	0.0884	0.0904	0.0930	0.0956	0.0963	0.1000	-----	0.0929	3.96	1.00	1.00	4.4			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iodomethane	1	0	Qua	0.1466	0.0926	0.1074	0.1955	0.2167	0.2515	0.2386	0.0572	-----	0.163	3.54	0.999	0.999	45			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Acetone	1	0	Avg	0.0605	0.0635	0.0596	0.0626	0.0633	0.0651	0.0624	0.0762	-----	0.0642	3.42	1.00	1.00	8.0	0.10	a	100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
Carbon Disulfide	1	0	Avg	0.5783	0.6740	0.6443	0.6761	0.5930	0.7247	0.6310	0.7512	-----	0.659	3.61	0.995	0.997	9.1	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butyl Alcohol	1	0	Avg	0.0184	0.0176	0.0180	0.0196	0.0207	0.0224	0.0224	0.0185	-----	0.0198	3.83	1.00	1.00	9.7			100.0	25.00	50.00	250.0	500.0	1250.	2500.	5.00	
n-Hexane	1	0	Avg	0.0867	0.1004	0.0972	0.1068	0.0953	0.1514	0.1056	0.0901	-----	0.104	4.21	0.962	0.983	19			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Di-isopropyl-ether	1	0	Avg	0.6588	0.6041	0.6288	0.7096	0.7140	0.7507	0.7177	0.5806	-----	0.671	4.34	0.999	1.00	9.2			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethene	1	0	Avg	0.2994	0.3593	0.3422	0.3544	0.3041	0.3771	0.3174	0.3703	-----	0.341	3.40	0.992	0.997	8.8	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl Acetate	1	0	Avg	0.2155	0.2242	0.2091	0.2213	0.2245	0.2305	0.2278	0.2286	-----	0.223	3.68	1.00	1.00	3.2	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl-t-butyl ether	1	0	Avg	0.5383	0.4870	0.5132	0.5798	0.6027	0.6348	0.6180	0.4829	0.4887	0.550	4.00	1.00	1.00	11	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
1,1-Dichloroethane	1	0	Avg	0.4267	0.4649	0.4511	0.4437	0.4267	0.4709	0.4420	0.4793	-----	0.451	4.32	0.999	0.999	4.4	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,2-Dichloroethe	1	0	Avg	0.2167	0.2380	0.2403	0.2402	0.2237	0.2558	0.2323	0.2630	-----	0.239	4.01	0.998	0.999	6.4	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl-t-butyl ether	1	0	Avg	0.6858	0.6317	0.6458	0.7458	0.7714	0.8176	0.7823	0.5848	-----	0.708	4.59	0.999	1.00	12	0.50		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,2-Dichloroethene	1	0	Avg	0.4259	0.4517	0.4398	0.4447	0.4302	0.4822	0.4469	0.4233	-----	0.443	4.70	0.998	0.999	4.3	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromochloromethane	1	0	Avg	0.2596	0.2908	0.2711	0.2628	0.2600	0.2650	0.2547	0.3044	-----	0.271	4.84	1.00	1.00	6.4			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2,2-Dichloropropane	1	0	Avg	0.2472	0.2853	0.2778	0.2687	0.2528	0.3881	0.2819	0.2801	-----	0.285	4.70	0.970	0.986	15			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl acetate	1	0	Avg	0.2287	0.2293	0.2385	0.2622	0.2671	0.2884	0.2527	0.2439	-----	0.251	4.71	0.996	0.999	8.2			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dioxane	1	0	Avg	0.0026	0.0023	0.0023	0.0026	0.0027	0.0028	0.0029	0.0024	-----	0.00262	5.74	0.999	1.00	8.7			1000.	250.0	500.0	2500.	5000.	1250	2500	50.00	
1,1-Dichloropropene	1	0	Avg	0.2584	0.2839	0.2845	0.3107	0.2758	0.3401	0.2883	0.3003	-----	0.293	5.09	0.993	0.997	8.4			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chloroform	1	0	Avg	0.4297	0.4791	0.4585	0.4447	0.4326	0.4664	0.4400	0.4866	-----	0.455	4.88	0.999	1.00	4.7	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromofluoromethan	1	0	Avg	0.2704	0.2763	0.2742	0.2702	0.2698	0.2730	0.2686	0.2884	0.2872	0.275	4.97	-1	-1	2.7			30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.1855	0.2149	0.2096	0.2425	0.2036	0.2837	0.2261	0.2073	-----	0.222	5.05	0.985	0.993	14	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloroethane-d4	1	0	Avg	0.1599	0.1624	0.1617	0.1609	0.1593	0.1605	0.1567	0.1703	0.1699	0.162	5.17	-1	-1	2.9			30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.3906	0.4380	0.4137	0.3996	0.3961	0.4088	0.3881	0.4646	0.4867	0.421	5.21	0.999	1.00	8.3	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
2-Butanone	1	0	Avg	0.0978	0.0973	0.0974	0.0950	0.0984	0.1245	0.1206	0.0689	-----	0.100	4.70	0.998	0.998	17	0.10	a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1-Trichloroethane	1	0	Avg	0.3378	0.3898	0.3736	0.3958	0.3534	0.4275	0.3681	0.3992	-----	0.381	5.00	0.994	0.997	7.5	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Carbon Tetrachloride	1	0	Avg	0.2471	0.2710	0.2708	0.3101	0.2736	0.3520	0.2916	0.2048	-----	0.278	5.10	0.990	0.996	16	0.10		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Vinyl Acetate	1	0	Avg	0.4962	0.4622	0.4813	0.5299	0.5497	0.5844	0.5616	0.4663	-----	0.516	4.34	1.00	1.00	9.0			20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromodichloromethan	1	0	Avg	0.3411	0.3746	0.3621	0.3572	0.3577	0.3833	0.3732	0.3378	-----	0.361	5.82	1.00	1.00	4.4	0.20		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.1
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M107961.D	CAL @ 20 PPB	06/01/18 16:01	2	1M107953.D	CAL @ 5 PPB	06/01/18 13:22
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7	1M107962.D	CAL @ 500 PPB	06/01/18 16:23	8	1M107952.D	CAL @ 1 PPB	06/01/18 13:00
9	1M107951.D	CAL @ 0.5 PPB	06/01/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.1533	0.1762	0.1793	0.2015	0.1754	0.2503	0.1971	0.1665	-----	0.188	5.68	0.984	0.992	16	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromomethane	1	0	Avg	0.1924	0.2072	0.2028	0.1952	0.1954	0.2076	0.2040	0.2183	-----	0.203	5.75	1.00	1.00	4.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.2469	0.2692	0.2616	0.2566	0.2532	0.2766	0.2726	0.2625	-----	0.262	5.68	1.00	1.00	3.8	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Trichloroethene	1	0	Avg	0.2194	0.2680	0.2517	0.2496	0.2326	0.2748	0.2507	0.2685	-----	0.252	5.56	0.998	0.998	7.5	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Benzene	1	0	Avg	0.8871	0.9629	0.9440	0.9360	0.8886	0.9697	0.8713	0.9546	0.9370	0.928	5.22	0.997	0.999	3.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	0.50
tert-Amyl methyl ether	1	0	Avg	0.5824	0.5332	0.5633	0.6278	0.6477	0.6873	0.6613	0.4608	-----	0.595	5.26	1.00	1.00	13		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Iso-propylacetate	1	0	Avg	0.5669	0.5252	0.5428	0.6123	0.6299	0.6438	0.6062	0.4802	-----	0.576	5.20	0.999	1.00	9.9	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Methyl methacrylate	1	0	Avg	0.3290	0.2718	0.3242	0.3452	0.3437	0.3423	0.3621	0.2664	-----	0.323	5.69	0.999	1.00	11	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Dibromochloromethan	1	0	Avg	0.3431	0.3496	0.3546	0.3695	0.3724	0.3977	0.3875	0.3028	-----	0.360	6.67	1.00	1.00	8.2	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chloroethylvinylethe	1	0	Qua	0.0693	0.0463	0.0573	0.1016	0.1219	0.1694	0.1803	0.0438	-----	0.0988	5.95	0.996	0.998	55		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
cis-1,3-Dichloropropen	1	0	Avg	0.4640	0.4381	0.4547	0.5054	0.5098	0.5728	0.5288	0.3968	-----	0.484	6.05	0.998	0.999	12	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,3-Dichloroprop	1	0	Avg	0.4161	0.3934	0.4238	0.4584	0.4742	0.5324	0.4944	0.3501	-----	0.443	6.34	0.998	0.999	13	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethyl methacrylate	1	0	Avg	0.2939	0.2608	0.2804	0.3192	0.3276	0.3324	0.3190	0.2340	-----	0.296	6.36	1.00	1.00	12	0.50 a	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2-Trichloroethane	1	0	Avg	0.3029	0.3271	0.3193	0.3091	0.3069	0.3189	0.3082	0.3520	-----	0.318	6.45	1.00	1.00	5.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromoethane	1	0	Avg	0.3014	0.3130	0.3160	0.3147	0.3177	0.3347	0.3242	0.2943	-----	0.315	6.75	1.00	1.00	4.0	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.5105	0.5380	0.5318	0.5205	0.5161	0.5351	0.5122	0.5093	-----	0.522	6.54	1.00	1.00	2.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Methyl-2-Pentanone	1	0	Avg	0.2600	0.2521	0.2538	0.2870	0.2951	0.3036	0.2982	0.2164	-----	0.271	6.12	1.00	1.00	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Hexanone	1	0	Avg	0.1813	0.1642	0.1751	0.2003	0.2026	0.2088	0.2042	0.1593	-----	0.187	6.55	1.00	1.00	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Tetrachloroethene	1	0	Avg	0.2060	0.2498	0.2452	0.2379	0.2142	0.2599	0.2195	0.2370	-----	0.234	6.54	0.993	0.997	8.0	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Toluene-d8	1	0	Avg	1.2957	1.2874	1.2862	1.3071	1.2893	1.2742	1.2548	1.2708	1.2493	1.28	6.21	-1	-1	1.5		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7156	0.8059	0.7807	0.7824	0.7291	0.8092	0.7225	0.7936	-----	0.767	6.25	0.997	0.999	5.0	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2909	0.3063	0.2978	0.3100	0.3046	0.3322	0.3202	0.2869	-----	0.306	7.04	1.00	1.00	4.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Chlorobenzene	1	0	Avg	0.8142	0.9270	0.8974	0.8759	0.8340	0.9005	0.8143	0.9506	-----	0.877	7.00	0.998	0.999	5.9	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butyl acrylate	1	0	Avg	1.1360	1.0097	1.0603	1.3153	1.4072	1.5048	1.3721	0.8363	-----	1.21	7.25	0.998	0.999	19	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Amyl acetate	1	0	Avg	0.9678	0.8386	0.9476	1.0824	1.1398	1.1961	1.1318	0.6650	-----	0.996	7.36	0.999	1.00	18	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromoform	1	0	Avg	0.4814	0.4599	0.4764	0.5250	0.5479	0.5963	0.5555	0.4517	-----	0.512	7.45	0.999	0.999	10	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Ethylbenzene	1	0	Avg	0.5814	0.6518	0.6498	0.6705	0.6431	0.7371	0.6214	0.6125	-----	0.646	7.05	0.993	0.998	7.1	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.7540	0.7938	0.8040	0.7632	0.7853	0.8140	0.7536	0.8160	-----	0.786	7.67	0.999	1.00	3.3	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromofluorobenzene	1	0	Avg	0.8943	0.8889	0.9098	0.9079	0.9072	0.9070	0.8504	0.9031	0.9125	0.898	7.62	-1	-1	2.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.7180	1.7302	1.8617	1.8895	1.8635	1.9952	1.6667	1.4906	-----	1.78	7.33	0.992	0.999	8.9	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
m&p-Xylenes	1	0	Avg	0.8932	0.9436	0.9997	1.0208	0.9603	1.0644	0.8575	0.8938	0.8894	0.947	7.10	0.989	0.998	7.4	0.10	40.00	10.00	20.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.9262	0.9818	1.0244	1.0347	0.9903	1.0964	0.9546	0.8551	-----	0.983	7.33	0.995	0.999	7.5	0.30	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2193	0.2273	0.2359	0.2694	0.2709	0.3369	0.2795	0.2076	-----	0.256	7.69	0.991	0.996	16		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichlorobenzene	1	0	Avg	1.1001	1.2327	1.1975	1.1778	1.1546	1.2751	1.1342	1.2226	-----	1.19	8.24	0.997	0.999	4.8	0.60	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,4-Dichlorobenzene	1	0	Avg	1.1308	1.3092	1.2340	1.2309	1.1922	1.3201	1.1677	1.2949	-----	1.24	8.28	0.996	0.999	5.6	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichlorobenzene	1	0	Avg	1.1150	1.2373	1.1905	1.1831	1.1749	1.2740	1.1549	1.3073	-----	1.20	8.51	0.998	0.999	5.3	0.40	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Isopropylbenzene	1	0	Avg	1.8291	2.0344	2.0515	2.2094	2.0416	2.3562	1.8314	1.6719	-----	2.00	7.52	0.984	0.997	11	0.10	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Qua	0.0439	0.0477	0.0514	0.0533	0.0357	0.0915	-----	0.0443	-----	0.0526	7.59	0.942	0.995	34		100.0	25.00	50.00	250.0	500.0	1250.		5.00	
Camphene	1	0	Avg	0.5038	0.6205	0.5856	0.6540	0.5627	0.7519	0.5736	0.5640	-----	0.602	7.69	0.980	0.993	12		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichloropropane	1	0	Avg	0.8544	0.8630	0.8856	0.8894	0.9156	1.0110	0.9183	0.9117	-----	0.906	7.71	0.998	0.999	5.4		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
2-Chlorotoluene	1	0	Avg	1.2703	1.4183	1.4235	1.4100	1.3446	1.4720	1.1900	1.3331	-----	1.36	7.81	0.989	0.998	6.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.1
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8052424 0133

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M107961.D	CAL @ 20 PPB	06/01/18 16:01	2	1M107953.D	CAL @ 5 PPB	06/01/18 13:22
3	1M107954.D	CAL @ 10 PPB	06/01/18 13:44	4	1M107971.D	CAL @ 50 PPB	06/01/18 19:35
5	1M107968.D	CAL @ 100 PPB	06/01/18 18:31	6	1M107965.D	CAL @ 250 PPB	06/01/18 17:27
7	1M107962.D	CAL @ 500 PPB	06/01/18 16:23	8	1M107952.D	CAL @ 1 PPB	06/01/18 13:00
9	1M107951.D	CAL @ 0.5 PPB	06/01/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.0257	1.9779	2.2130	2.3103	2.1563	2.4341	1.9741	1.9016	-----	2.12	7.80	0.989	0.998	8.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Chlorotoluene	1	0	Avg	1.2889	1.4622	1.4724	1.4375	1.3829	1.5146	1.2156	1.2827	-----	1.38	7.87	0.988	0.998	7.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Propylbenzene	1	0	Avg	2.1454	2.4073	2.4209	2.4867	2.2908	2.6065	1.9352	2.2053	-----	2.31	7.74	0.976	0.996	9.2		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.4940	1.6391	1.6451	1.6171	1.5774	1.7354	1.5145	1.6854	-----	1.61	7.72	0.996	0.999	5.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,3,5-Trimethylbenzen	1	0	Avg	1.4901	1.6146	1.6726	1.7269	1.6656	1.8839	1.4564	1.4681	-----	1.62	7.83	0.983	0.997	9.1		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.7809	0.7494	0.8020	0.8638	0.8737	0.8985	0.8001	0.6701	-----	0.805	7.83	0.997	1.00	9.3	0.50	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
t-Butylbenzene	1	0	Avg	1.3507	1.4630	1.5111	1.6594	1.5408	1.8396	1.5298	1.4168	-----	1.54	8.03	0.991	0.997	9.9		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.6762	1.7458	1.8255	1.9377	1.8683	2.0699	1.7056	1.5114	-----	1.79	8.05	0.991	0.998	9.6		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	1.5803	1.7733	1.7794	1.9664	1.7871	2.1625	1.6830	1.5992	-----	1.79	8.15	0.984	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	1.3694	1.4101	1.5368	1.7144	1.5961	1.9090	1.5286	1.2127	-----	1.53	8.22	0.987	0.996	14		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	1.5276	1.6351	1.6984	1.8536	1.7188	2.0793	1.6462	1.4827	-----	1.71	8.45	0.986	0.996	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	0.8272	0.8239	0.8785	1.0421	1.0030	1.2334	1.0263	0.8116	-----	0.956	8.44	0.991	0.997	15		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4,5-Tetramethylbe	1	0	Qua	1.1925	1.0729	1.1792	1.5964	1.6339	1.8841	1.5928	1.0211	-----	1.40	8.90	0.993	0.998	23		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dibromo-3-Chloro	1	0	Avg	0.1404	0.1341	0.1391	0.1515	0.1636	0.1771	0.1729	0.1283	-----	0.151	8.96	1.00	1.00	12	0.05	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Camphor	1	0	Qua	0.0493	0.0389	0.0428	0.0645	0.0725	0.0858	0.0922	0.0390	0.0374	0.0581	9.39	0.998	1.00	37		200.0	50.00	100.0	500.0	1000.	2500.	5000.	10.00	5.00
Hexachlorobutadiene	1	0	Avg	0.2813	0.3115	0.3026	0.3225	0.2952	0.3719	0.2860	0.3652	-----	0.317	9.54	0.982	0.994	11		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trichlorobenzen	1	0	Avg	0.5900	0.5951	0.6454	0.6632	0.6654	0.7472	0.6521	0.5849	-----	0.643	9.45	0.995	0.999	8.4	0.20	20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
1,2,3-Trichlorobenzen	1	0	Avg	0.5048	0.5199	0.5385	0.5642	0.5675	0.6255	0.5520	0.5304	-----	0.550	9.75	0.996	0.999	6.8		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	
Naphthalene	1	0	Avg	1.3716	1.1627	1.3205	1.5882	1.6638	1.7866	1.5724	1.0986	-----	1.45	9.61	0.996	0.999	17		20.00	5.00	10.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.1
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 1M108051.D **Instrument:** GCMS 1

Cont Calibration Date/Time 6/3/2018 6:53:00 PM Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.36	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.16	21.18	20	20	0.1	0.294	0.312	5.92	
Dichlorodifluoromethane	1	0		2.13	23.81	20	20	0.1	0.238	0.283	19.03	
Chloromethane	1	0		2.32	22.69	20	20	0.1	0.265	0.300	13.44	
Bromomethane	1	0		2.69	19.30	20	20	0.1	0.139	0.134	3.51	
Vinyl Chloride	1	0		2.39	23.10	20	20	0.1	0.275	0.318	15.51	
Chloroethane	1	0		2.77	21.56	20	20	0.1	0.178	0.192	7.80	
Trichlorofluoromethane	1	0		2.98	23.01	20	20	0.1	0.372	0.427	15.04	
Ethyl ether	1	0		3.20	20.62	20	20	0.5	0.246	0.254	3.10	
Furan	1	0		3.24	20.73	20	20	0.5	0.387	0.401	3.64	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.39	23.52	20	20	0.1	0.132	0.156	17.61	
Methylene Chloride	1	0		3.78	20.24	20	20	0.1	0.256	0.259	1.19	
Acrolein	1	0		3.30	104.47	100	20		0.048	0.050	4.47	
Acrylonitrile	1	0		3.96	20.39	20	20		0.093	0.095	1.94	
Iodomethane	1	0		3.54	11.20	20	20		0.163	0.135	44.01	C1
Acetone	1	0		3.42	107.26	100	20	0.1	0.064	0.069	7.26	
Carbon Disulfide	1	0		3.60	22.12	20	20	0.1	0.659	0.729	10.60	
t-Butyl Alcohol	1	0		3.83	100.97	100	20		0.020	0.020	0.97	
n-Hexane	1	0		4.20	26.13	20	20		0.104	0.136	30.64	C1
Di-isopropyl-ether	1	0		4.34	20.18	20	20		0.671	0.677	0.89	
1,1-Dichloroethene	1	0		3.40	22.24	20	20	0.1	0.341	0.379	11.22	
Methyl Acetate	1	0		3.68	20.41	20	20	0.1	0.223	0.227	2.04	
Methyl-t-butyl ether	1	0		3.99	19.96	20	20	0.1	0.550	0.548	0.21	
1,1-Dichloroethane	1	0		4.31	20.77	20	20	0.2	0.451	0.468	3.86	
trans-1,2-Dichloroethene	1	0		4.00	21.62	20	20	0.1	0.239	0.258	8.09	
Ethyl-t-butyl ether	1	0		4.58	19.53	20	20	0.5	0.708	0.692	2.34	
cis-1,2-Dichloroethene	1	0		4.69	21.32	20	20	0.1	0.443	0.472	6.60	
Bromochloromethane	1	0		4.84	19.66	20	20		0.271	0.266	1.71	
2,2-Dichloropropane	1	0		4.70	25.13	20	20		0.285	0.358	25.65	C1
Ethyl acetate	1	0		4.71	18.23	20	20		0.251	0.229	8.86	
1,4-Dioxane	1	0		5.74	1149.39	1000	20		0.003	0.003	14.94	
1,1-Dichloropropene	1	0		5.09	22.81	20	20		0.293	0.334	14.03	
Chloroform	1	0		4.87	20.43	20	20	0.2	0.455	0.465	2.15	
Dibromofluoromethane	1	0	S	4.97	29.74	30	**		0.275	0.273	0.87	
Cyclohexane	1	0		5.05	23.15	20	20	0.1	0.222	0.257	15.77	
1,2-Dichloroethane-d4	1	0	S	5.17	30.28	30	**		0.162	0.164	0.94	
1,2-Dichloroethane	1	0		5.21	19.07	20	20	0.1	0.421	0.401	4.63	
2-Butanone	1	0		4.70	23.84	20	20	0.1	0.100	0.119	19.20	
1,1,1-Trichloroethane	1	0		5.00	21.26	20	20	0.1	0.381	0.405	6.30	
Carbon Tetrachloride	1	0		5.10	22.85	20	20	0.1	0.278	0.317	14.25	
Vinyl Acetate	1	0		4.34	19.61	20	20		0.517	0.506	1.96	
Bromodichloromethane	1	0		5.82	19.54	20	20	0.2	0.361	0.353	2.29	
Methylcyclohexane	1	0		5.68	22.66	20	20	0.1	0.188	0.212	13.31	
Dibromomethane	1	0		5.75	19.51	20	20		0.203	0.198	2.43	
1,2-Dichloropropane	1	0		5.68	20.06	20	20	0.1	0.262	0.263	0.29	
Trichloroethene	1	0		5.56	21.30	20	20	0.2	0.252	0.268	6.51	
Benzene	1	0		5.21	21.18	20	20	0.5	0.928	0.983	5.92	
tert-Amyl methyl ether	1	0		5.25	19.72	20	20		0.596	0.587	1.38	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.20	19.53	20	20	0.5	0.576	0.562	2.34	
Methyl methacrylate	1	0		5.70	19.97	20	20	0.5	0.323	0.323	0.15	
Dibromochloromethane	1	0		6.67	19.55	20	20	0.1	0.360	0.352	2.26	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 1M108051.D **Instrument:** GCMS 1

Cont Calibration Date/Time 6/3/2018 6:53:00 PM Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.95	20.18	20	20		0.099	0.140	0.91	
cis-1,3-Dichloropropene	1	0		6.05	17.35	20	20	0.2	0.484	0.420	13.24	
trans-1,3-Dichloropropene	1	0		6.34	17.17	20	20	0.1	0.443	0.380	14.14	
Ethyl methacrylate	1	0		6.36	19.88	20	20	0.5	0.296	0.294	0.58	
1,1,2-Trichloroethane	1	0		6.44	19.29	20	20	0.1	0.318	0.307	3.54	
1,2-Dibromoethane	1	0		6.75	18.82	20	20	0.1	0.315	0.296	5.90	
1,3-Dichloropropane	1	0		6.54	19.45	20	20		0.522	0.508	2.73	
4-Methyl-2-Pentanone	1	0		6.11	20.20	20	20	0.1	0.271	0.273	0.99	
2-Hexanone	1	0		6.55	20.78	20	20	0.1	0.187	0.194	3.92	
Tetrachloroethene	1	0		6.54	21.87	20	20	0.2	0.234	0.256	9.37	
Toluene-d8	1	0	S	6.21	29.97	30	**		1.279	1.278	0.09	
Toluene	1	0		6.24	20.44	20	20	0.4	0.767	0.784	2.19	
1,1,1,2-Tetrachloroethane	1	0		7.04	19.27	20	20		0.306	0.295	3.66	
Chlorobenzene	1	0		7.00	20.10	20	20	0.5	0.877	0.881	0.50	
1,4-Dichlorobenzene-d4	1	0	I	8.27	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	19.08	20	20	0.5	1.205	1.150	4.59	
n-Amyl acetate	1	0		7.36	20.33	20	20	0.5	0.996	1.013	1.64	
Bromoform	1	0		7.45	19.01	20	20	0.1	0.512	0.486	4.97	
Ethylbenzene	1	0		7.04	20.47	20	20	0.1	0.646	0.661	2.35	
1,1,2,2-Tetrachloroethane	1	0		7.67	19.43	20	20	0.1	0.786	0.763	2.84	
Bromofluorobenzene	1	0	S	7.62	30.38	30	**		0.898	0.909	1.26	
Styrene	1	0		7.33	20.95	20	20	0.3	1.777	1.861	4.74	
m&p-Xylenes	1	0		7.10	43.80	40	20	0.1	0.947	1.037	9.50	
o-Xylene	1	0		7.33	20.74	20	20	0.3	0.983	1.020	3.72	
trans-1,4-Dichloro-2-butene	1	0		7.69	20.51	20	20		0.256	0.262	2.55	
1,3-Dichlorobenzene	1	0		8.24	20.67	20	20	0.6	1.187	1.227	3.37	
1,4-Dichlorobenzene	1	0		8.28	20.30	20	20	0.5	1.235	1.253	1.48	
1,2-Dichlorobenzene	1	0		8.51	19.99	20	20	0.4	1.205	1.204	0.07	
Isopropylbenzene	1	0		7.52	21.94	20	20	0.1	2.003	2.197	9.69	
Cyclohexanone	1	0		7.59	275.71	100	20		0.053	0.088	175.71	C1
Camphene	1	0		7.69	21.91	20	20		0.602	0.660	9.56	
1,2,3-Trichloropropane	1	0		7.71	19.36	20	20		0.906	0.877	3.18	
2-Chlorotoluene	1	0		7.81	21.72	20	20		1.358	1.474	8.58	
p-Ethyltoluene	1	0		7.80	22.64	20	20		2.124	2.405	13.20	
4-Chlorotoluene	1	0		7.87	21.30	20	20		1.382	1.472	6.51	
n-Propylbenzene	1	0		7.74	22.43	20	20		2.312	2.593	12.15	
Bromobenzene	1	0		7.72	20.22	20	20		1.614	1.631	1.08	
1,3,5-Trimethylbenzene	1	0		7.83	21.49	20	20		1.622	1.743	7.44	
Butyl methacrylate	1	0		7.83	19.03	20	20	0.5	0.805	0.766	4.86	
t-Butylbenzene	1	0		8.03	21.22	20	20		1.539	1.633	6.08	
1,2,4-Trimethylbenzene	1	0		8.05	21.54	20	20		1.793	1.930	7.68	
sec-Butylbenzene	1	0		8.15	22.00	20	20		1.791	1.971	10.02	
4-Isopropyltoluene	1	0		8.22	22.10	20	20		1.535	1.696	10.52	
n-Butylbenzene	1	0		8.46	22.86	20	20		1.705	1.949	14.30	
p-Diethylbenzene	1	0		8.44	21.82	20	20		0.956	1.043	9.12	
1,2,4,5-Tetramethylbenzene	1	0		8.90	14.50	20	20		1.397	1.415	27.51	C1
1,2-Dibromo-3-Chloropropane	1	0		8.95	20.45	20	20	0.05	0.151	0.154	2.25	
Camphor	1	0		9.39	150.63	200	20		0.058	0.056	24.69	C1
Hexachlorobutadiene	1	0		9.54	21.33	20	20		0.317	0.338	6.63	
1,2,4-Trichlorobenzene	1	0		9.45	20.70	20	20	0.2	0.643	0.666	3.52	
1,2,3-Trichlorobenzene	1	0		9.75	19.55	20	20		0.550	0.538	2.23	
Naphthalene	1	0		9.61	20.12	20	20		1.446	1.454	0.60	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 1M108087.D **Instrument:** GCMS 1

Cont Calibration Date/Time 6/4/2018 7:31:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.36	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.16	20.09	20	20	0.1	0.294	0.296	0.45	
Dichlorodifluoromethane	1	0		2.13	22.28	20	20	0.1	0.238	0.265	11.42	
Chloromethane	1	0		2.32	19.47	20	20	0.1	0.265	0.258	2.64	
Bromomethane	1	0		2.69	13.13	20	20	0.1	0.139	0.091	34.33	C1
Vinyl Chloride	1	0		2.39	20.61	20	20	0.1	0.275	0.283	3.07	
Chloroethane	1	0		2.78	18.73	20	20	0.1	0.178	0.167	6.37	
Trichlorofluoromethane	1	0		2.98	20.57	20	20	0.1	0.372	0.382	2.84	
Ethyl ether	1	0		3.20	18.62	20	20	0.5	0.246	0.229	6.89	
Furan	1	0		3.24	18.16	20	20	0.5	0.387	0.351	9.22	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.40	21.22	20	20	0.1	0.132	0.140	6.10	
Methylene Chloride	1	0		3.78	18.03	20	20	0.1	0.256	0.231	9.85	
Acrolein	1	0		3.31	87.78	100	20		0.048	0.042	12.22	
Acrylonitrile	1	0		3.96	18.46	20	20		0.093	0.086	7.71	
Iodomethane	1	0		3.54	10.41	20	20		0.163	0.125	47.97	C1
Acetone	1	0		3.42	92.93	100	20	0.1	0.064	0.060	7.07	
Carbon Disulfide	1	0		3.61	22.88	20	20	0.1	0.659	0.754	14.39	
t-Butyl Alcohol	1	0		3.83	91.36	100	20		0.020	0.018	8.64	
n-Hexane	1	0		4.21	23.80	20	20		0.104	0.124	19.01	
Di-isopropyl-ether	1	0		4.34	18.26	20	20		0.671	0.612	8.69	
1,1-Dichloroethene	1	0		3.40	19.90	20	20	0.1	0.341	0.339	0.52	
Methyl Acetate	1	0		3.68	18.40	20	20	0.1	0.223	0.205	7.99	
Methyl-t-butyl ether	1	0		4.00	18.14	20	20	0.1	0.550	0.498	9.32	
1,1-Dichloroethane	1	0		4.31	18.10	20	20	0.2	0.451	0.408	9.51	
trans-1,2-Dichloroethene	1	0		4.00	18.83	20	20	0.1	0.239	0.225	5.84	
Ethyl-t-butyl ether	1	0		4.58	17.87	20	20	0.5	0.708	0.633	10.63	
cis-1,2-Dichloroethene	1	0		4.70	18.88	20	20	0.1	0.443	0.418	5.61	
Bromochloromethane	1	0		4.84	17.70	20	20		0.271	0.240	11.48	
2,2-Dichloropropane	1	0		4.70	21.77	20	20		0.285	0.311	8.85	
Ethyl acetate	1	0		4.71	16.05	20	20		0.251	0.202	19.77	
1,4-Dioxane	1	0		5.74	1011.09	1000	20		0.003	0.003	1.11	
1,1-Dichloropropene	1	0		5.09	19.61	20	20		0.293	0.287	1.96	
Chloroform	1	0		4.88	18.10	20	20	0.2	0.455	0.411	9.52	
Dibromofluoromethane	1	0	S	4.97	29.32	30	**		0.275	0.269	2.27	
Cyclohexane	1	0		5.05	20.39	20	20	0.1	0.222	0.226	1.96	
1,2-Dichloroethane-d4	1	0	S	5.17	29.43	30	**		0.162	0.159	1.89	
1,2-Dichloroethane	1	0		5.21	17.02	20	20	0.1	0.421	0.358	14.90	
2-Butanone	1	0		4.70	18.59	20	20	0.1	0.100	0.093	7.03	
1,1,1-Trichloroethane	1	0		5.00	18.57	20	20	0.1	0.381	0.353	7.17	
Carbon Tetrachloride	1	0		5.10	15.04	20	20	0.1	0.278	0.209	24.80	C1
Vinyl Acetate	1	0		4.34	17.44	20	20		0.517	0.450	12.82	
Bromodichloromethane	1	0		5.82	16.92	20	20	0.2	0.361	0.305	15.40	
Methylcyclohexane	1	0		5.68	20.74	20	20	0.1	0.188	0.194	3.69	
Dibromomethane	1	0		5.75	18.23	20	20		0.203	0.185	8.87	
1,2-Dichloropropane	1	0		5.68	17.99	20	20	0.1	0.262	0.236	10.06	
Trichloroethene	1	0		5.56	18.96	20	20	0.2	0.252	0.239	5.18	
Benzene	1	0		5.21	19.04	20	20	0.5	0.928	0.883	4.82	
tert-Amyl methyl ether	1	0		5.25	17.97	20	20		0.596	0.535	10.17	
Chlorobenzene-d5	1	0	I	6.99	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.20	17.78	20	20	0.5	0.576	0.512	11.08	
Methyl methacrylate	1	0		5.71	19.37	20	20	0.5	0.323	0.313	3.17	
Dibromochloromethane	1	0		6.67	16.62	20	20	0.1	0.360	0.299	16.91	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 1M108087.D **Instrument:** GCMS 1

Cont Calibration Date/Time 6/4/2018 7:31:00 A Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.95	15.79	20	20		0.099	0.109	21.03	C1
cis-1,3-Dichloropropene	1	0		6.05	14.38	20	20	0.2	0.484	0.348	28.08	C1
trans-1,3-Dichloropropene	1	0		6.34	13.67	20	20	0.1	0.443	0.303	31.67	C1
Ethyl methacrylate	1	0		6.36	17.48	20	20	0.5	0.296	0.259	12.59	
1,1,2-Trichloroethane	1	0		6.45	17.73	20	20	0.1	0.318	0.282	11.34	
1,2-Dibromoethane	1	0		6.75	17.57	20	20	0.1	0.315	0.276	12.13	
1,3-Dichloropropane	1	0		6.54	17.81	20	20		0.522	0.464	10.97	
4-Methyl-2-Pentanone	1	0		6.12	18.22	20	20	0.1	0.271	0.247	8.89	
2-Hexanone	1	0		6.55	18.76	20	20	0.1	0.187	0.175	6.19	
Tetrachloroethene	1	0		6.54	19.07	20	20	0.2	0.234	0.223	4.63	
Toluene-d8	1	0	S	6.21	29.82	30	**		1.279	1.272	0.60	
Toluene	1	0		6.25	18.63	20	20	0.4	0.767	0.715	6.86	
1,1,1,2-Tetrachloroethane	1	0		7.04	16.90	20	20		0.306	0.259	15.49	
Chlorobenzene	1	0		7.00	18.22	20	20	0.5	0.877	0.799	8.90	
1,4-Dichlorobenzene-d4	1	0	I	8.27	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.25	17.27	20	20	0.5	1.205	1.041	13.65	
n-Amyl acetate	1	0		7.36	18.11	20	20	0.5	0.996	0.902	9.44	
Bromoform	1	0		7.45	16.08	20	20	0.1	0.512	0.411	19.61	
Ethylbenzene	1	0		7.05	18.17	20	20	0.1	0.646	0.587	9.15	
1,1,2,2-Tetrachloroethane	1	0		7.67	18.00	20	20	0.1	0.786	0.707	10.00	
Bromofluorobenzene	1	0	S	7.62	30.83	30	**		0.898	0.923	2.78	
Styrene	1	0		7.33	18.77	20	20	0.3	1.777	1.668	6.13	
m&p-Xylenes	1	0		7.10	38.96	40	20	0.1	0.947	0.922	2.60	
o-Xylene	1	0		7.33	18.78	20	20	0.3	0.983	0.923	6.09	
trans-1,4-Dichloro-2-butene	1	0		7.69	16.75	20	20		0.256	0.214	16.25	
1,3-Dichlorobenzene	1	0		8.24	18.47	20	20	0.6	1.187	1.096	7.64	
1,4-Dichlorobenzene	1	0		8.29	18.47	20	20	0.5	1.235	1.140	7.66	
1,2-Dichlorobenzene	1	0		8.51	17.83	20	20	0.4	1.205	1.074	10.86	
Isopropylbenzene	1	0		7.52	19.55	20	20	0.1	2.003	1.959	2.23	
Cyclohexanone	1	0		7.59	257.66	100	20		0.053	0.079	157.66	C1
Camphene	1	0		7.70	19.28	20	20		0.602	0.580	3.60	
1,2,3-Trichloropropane	1	0		7.71	16.92	20	20		0.906	0.767	15.39	
2-Chlorotoluene	1	0		7.82	19.00	20	20		1.358	1.290	5.01	
p-Ethyltoluene	1	0		7.81	19.40	20	20		2.124	2.060	3.01	
4-Chlorotoluene	1	0		7.87	19.06	20	20		1.382	1.317	4.69	
n-Propylbenzene	1	0		7.74	19.84	20	20		2.312	2.293	0.83	
Bromobenzene	1	0		7.72	18.03	20	20		1.614	1.455	9.86	
1,3,5-Trimethylbenzene	1	0		7.83	20.24	20	20		1.622	1.642	1.22	
Butyl methacrylate	1	0		7.84	17.95	20	20	0.5	0.805	0.722	10.24	
t-Butylbenzene	1	0		8.03	18.89	20	20		1.539	1.453	5.56	
1,2,4-Trimethylbenzene	1	0		8.05	19.33	20	20		1.793	1.732	3.36	
sec-Butylbenzene	1	0		8.15	19.91	20	20		1.791	1.783	0.45	
4-Isopropyltoluene	1	0		8.22	19.94	20	20		1.535	1.530	0.32	
n-Butylbenzene	1	0		8.46	20.18	20	20		1.705	1.721	0.90	
p-Diethylbenzene	1	0		8.44	19.49	20	20		0.956	0.931	2.55	
1,2,4,5-Tetramethylbenzene	1	0		8.90	12.60	20	20		1.397	1.230	37.00	C1
1,2-Dibromo-3-Chloropropane	1	0		8.95	17.27	20	20	0.05	0.151	0.130	13.66	
Camphor	1	0		9.39	123.53	200	20		0.058	0.046	38.23	C1
Hexachlorobutadiene	1	0		9.54	19.47	20	20		0.317	0.309	2.65	
1,2,4-Trichlorobenzene	1	0		9.45	18.69	20	20	0.2	0.643	0.601	6.54	
1,2,3-Trichlorobenzene	1	0		9.75	17.54	20	20		0.550	0.483	12.29	
Naphthalene	1	0		9.61	17.65	20	20		1.446	1.276	11.75	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M57161.D **Instrument:** GCMS 11

Cont Calibration Date/Time 6/4/2018 8:51:00 PM Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	4.98	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.68	17.15	20	20	0.1	0.596	0.511	14.27	
Dichlorodifluoromethane	1	0		1.67	16.43	20	20	0.1	0.456	0.374	17.83	
Chloromethane	1	0		1.84	14.83	20	20	0.1	0.659	0.489	25.84	C1
Bromomethane	1	0		2.24	6.82	20	20	0.1	0.348	0.068	65.90	C1
Vinyl Chloride	1	0		1.94	18.90	20	20	0.1	0.688	0.650	5.49	
Chloroethane	1	0		2.33	17.41	20	20	0.1	0.457	0.398	12.94	
Trichlorofluoromethane	1	0		2.55	20.24	20	20	0.1	0.908	0.919	1.21	
Ethyl ether	1	0		2.78	19.37	20	20	0.5	0.521	0.505	3.15	
Furan	1	0		2.82	18.78	20	20	0.5	1.152	1.082	6.08	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		2.98	19.57	20	20	0.1	0.232	0.227	2.16	
Methylene Chloride	1	0		3.39	20.85	20	20	0.1	0.448	0.467	4.22	
Acrolein	1	0		2.89	87.35	100	20		0.089	0.078	12.65	
Acrylonitrile	1	0		3.58	23.68	20	20		0.174	0.207	18.40	
Iodomethane	1	0		3.13	6.60	20	20		0.224	0.127	67.01	C1
Acetone	1	0		3.02	107.48	100	20	0.1	0.147	0.158	7.48	
Carbon Disulfide	1	0		3.20	20.42	20	20	0.1	1.381	1.409	2.08	
t-Butyl Alcohol	1	0		3.45	118.09	100	20		0.050	0.059	18.09	
n-Hexane	1	0		3.83	20.85	20	20		0.233	0.243	4.27	
Di-isopropyl-ether	1	0		3.97	20.47	20	20		1.758	1.799	2.33	
1,1-Dichloroethene	1	0		2.99	19.03	20	20	0.1	0.641	0.609	4.87	
Methyl Acetate	1	0		3.29	22.37	20	20	0.1	0.536	0.599	11.85	
Methyl-t-butyl ether	1	0		3.60	20.38	20	20	0.1	1.027	1.047	1.91	
1,1-Dichloroethane	1	0		3.94	20.37	20	20	0.2	0.864	0.880	1.84	
trans-1,2-Dichloroethene	1	0		3.62	18.44	20	20	0.1	0.461	0.425	7.78	
Ethyl-t-butyl ether	1	0		4.21	21.63	20	20	0.5	1.406	1.520	8.14	
cis-1,2-Dichloroethene	1	0		4.32	19.10	20	20	0.1	0.877	0.838	4.50	
Bromochloromethane	1	0		4.47	22.72	20	20		0.470	0.534	13.58	
2,2-Dichloropropane	1	0		4.33	22.49	20	20		0.602	0.616	12.46	
Ethyl acetate	1	0		4.34	20.43	20	20		0.616	0.629	2.15	
1,4-Dioxane	1	0		5.36	1094.91	1000	20		0.006	0.006	9.49	
1,1-Dichloropropene	1	0		4.72	19.65	20	20		0.612	0.601	1.76	
Chloroform	1	0		4.50	19.69	20	20	0.2	0.811	0.798	1.57	
Dibromofluoromethane	1	0	S	4.60	30.39	30	**		0.236	0.239	1.32	
Cyclohexane	1	0		4.67	20.53	20	20	0.1	0.526	0.540	2.64	
1,2-Dichloroethane-d4	1	0	S	4.80	33.31	30	**		0.139	0.154	11.05	
1,2-Dichloroethane	1	0		4.84	21.78	20	20	0.1	0.656	0.661	8.87	
2-Butanone	1	0		4.33	23.84	20	20	0.1	0.274	0.326	19.19	
1,1,1-Trichloroethane	1	0		4.63	19.42	20	20	0.1	0.662	0.643	2.89	
Carbon Tetrachloride	1	0		4.73	17.59	20	20	0.1	0.577	0.507	12.04	
Vinyl Acetate	1	0		3.96	20.64	20	20		1.414	1.460	3.22	
Bromodichloromethane	1	0		5.44	19.51	20	20	0.2	0.661	0.645	2.43	
Methylcyclohexane	1	0		5.29	19.27	20	20	0.1	0.363	0.349	3.66	
Dibromomethane	1	0		5.37	21.40	20	20		0.271	0.256	7.02	
1,2-Dichloropropane	1	0		5.30	19.98	20	20	0.1	0.539	0.538	0.12	
Trichloroethene	1	0		5.18	20.04	20	20	0.2	0.454	0.454	0.18	
Benzene	1	0		4.84	21.22	20	20	0.5	1.907	2.024	6.10	
tert-Amyl methyl ether	1	0		4.88	20.58	20	20		1.256	1.292	2.91	
Chlorobenzene-d5	1	0	I	6.58	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.83	19.69	20	20	0.5	1.674	1.649	1.53	
Methyl methacrylate	1	0		5.32	19.88	20	20	0.5	0.876	0.871	0.62	
Dibromochloromethane	1	0		6.27	17.52	20	20	0.1	0.593	0.520	12.42	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 20 PPB **Data File:** 11M57161.D **Instrument:** GCMS 11

Cont Calibration Date/Time 6/4/2018 8:51:00 PM Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.57	24.54	20	20		0.304	0.373	22.71	C1
cis-1,3-Dichloropropene	1	0		5.67	17.85	20	20	0.2	1.035	0.924	10.76	
trans-1,3-Dichloropropene	1	0		5.94	18.18	20	20	0.1	0.891	0.810	9.08	
Ethyl methacrylate	1	0		5.96	19.28	20	20	0.5	0.848	0.818	3.60	
1,1,2-Trichloroethane	1	0		6.04	19.19	20	20	0.1	0.519	0.498	4.06	
1,2-Dibromoethane	1	0		6.34	19.47	20	20	0.1	0.523	0.509	2.67	
1,3-Dichloropropane	1	0		6.14	18.66	20	20		1.008	0.941	6.69	
4-Methyl-2-Pentanone	1	0		5.73	20.88	20	20	0.1	0.811	0.847	4.41	
2-Hexanone	1	0		6.15	19.48	20	20	0.1	0.611	0.595	2.60	
Tetrachloroethene	1	0		6.14	19.01	20	20	0.2	0.402	0.352	4.96	
Toluene-d8	1	0	S	5.81	27.46	30	**		1.346	1.232	8.45	
Toluene	1	0		5.85	19.30	20	20	0.4	1.513	1.460	3.48	
1,1,1,2-Tetrachloroethane	1	0		6.63	18.76	20	20		0.606	0.507	6.19	
Chlorobenzene	1	0		6.59	18.95	20	20	0.5	1.533	1.453	5.23	
1,4-Dichlorobenzene-d4	1	0	I	7.85	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		6.83	19.32	20	20	0.5	3.647	3.523	3.41	
n-Amyl acetate	1	0		6.94	20.76	20	20	0.5	3.985	4.136	3.78	
Bromoform	1	0		7.04	15.56	20	20	0.1	0.969	0.754	22.18	C1
Ethylbenzene	1	0		6.63	15.70	20	20	0.1	1.840	1.445	21.50	C1
1,1,2,2-Tetrachloroethane	1	0		7.25	18.62	20	20	0.1	1.989	1.852	6.90	
Bromofluorobenzene	1	0	S	7.20	30.42	30	**		0.932	0.945	1.40	
Styrene	1	0		6.91	17.52	20	20	0.3	4.479	3.925	12.38	
m&p-Xylenes	1	0		6.69	35.62	40	20	0.1	2.405	2.142	10.94	
o-Xylene	1	0		6.91	16.66	20	20	0.3	2.582	2.151	16.68	
trans-1,4-Dichloro-2-butene	1	0		7.27	10.15	20	20		0.847	0.430	49.25	C1
1,3-Dichlorobenzene	1	0		7.82	16.59	20	20	0.6	2.562	2.126	17.03	
1,4-Dichlorobenzene	1	0		7.87	16.30	20	20	0.5	2.720	2.217	18.52	
1,2-Dichlorobenzene	1	0		8.09	17.17	20	20	0.4	2.483	2.132	14.15	
Isopropylbenzene	1	0		7.10	17.14	20	20	0.1	5.057	4.335	14.29	
Cyclohexanone	1	0		7.18	88.28	100	20		0.265	0.234	11.72	
Camphene	1	0		7.27	16.46	20	20		1.221	1.004	17.72	
1,2,3-Trichloropropane	1	0		7.29	14.96	20	20		2.461	1.841	25.18	C1
2-Chlorotoluene	1	0		7.39	16.08	20	20		3.832	3.081	19.60	
p-Ethyltoluene	1	0		7.38	17.50	20	20		5.132	4.491	12.49	
4-Chlorotoluene	1	0		7.45	16.83	20	20		3.589	3.020	15.85	
n-Propylbenzene	1	0		7.32	17.29	20	20		5.826	5.038	13.54	
Bromobenzene	1	0		7.30	16.94	20	20		4.066	3.443	15.31	
1,3,5-Trimethylbenzene	1	0		7.41	16.37	20	20		3.931	3.217	18.16	
Butyl methacrylate	1	0		7.41	17.28	20	20	0.5	3.143	2.715	13.61	
t-Butylbenzene	1	0		7.61	16.84	20	20		3.467	2.919	15.79	
1,2,4-Trimethylbenzene	1	0		7.63	17.24	20	20		4.188	3.611	13.79	
sec-Butylbenzene	1	0		7.73	16.97	20	20		4.026	3.416	15.14	
4-Isopropyltoluene	1	0		7.80	16.96	20	20		3.326	2.820	15.21	
n-Butylbenzene	1	0		8.04	16.99	20	20		3.840	3.262	15.05	
p-Diethylbenzene	1	0		8.02	15.63	20	20		2.104	1.644	21.85	C1
1,2,4,5-Tetramethylbenzene	1	0		8.48	16.45	20	20		3.182	2.617	17.75	
1,2-Dibromo-3-Chloropropane	1	0		8.53	16.65	20	20	0.05	0.331	0.275	16.73	
Camphor	1	0		8.98	198.42	200	20		0.189	0.187	0.79	
Hexachlorobutadiene	1	0		9.12	17.37	20	20		0.366	0.318	13.15	
1,2,4-Trichlorobenzene	1	0		9.03	15.98	20	20	0.2	1.057	0.845	20.08	
1,2,3-Trichlorobenzene	1	0		9.33	16.56	20	20		0.906	0.750	17.21	
Naphthalene	1	0		9.19	18.43	20	20		3.533	3.255	7.87	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

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FORM8

Internal Standard Areas

Evaluation Std Data File: 11M56865.D Method: EPA 8260C

Analysis Date/Time: 05/29/18 20:01

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	488025	4.98	364437	6.58	141993	7.85								
Eval File Area Limit:	244012-976050		182218-728874		70996-283986									
Eval File Rt Limit:	4.48-5.48		6.08-7.08		7.35-8.35									
Data File Sample														
11M56859.D BLK	513379	4.98	381638	6.58	128901	7.85								
11M56860.D CAL @ 0.5 PPB	496849	4.98	367294	6.58	124277	7.85								
11M56861.D CAL @ 1 PPB	482409	4.98	357756	6.58	118485	7.85								
11M56862.D CAL @ 5 PPB	490514	4.98	364473	6.58	137033	7.85								
11M56863.D CAL @ 10 PPB	487809	4.98	358817	6.58	135636	7.85								
11M56865.D CAL @ 20 PPB	488025	4.98	364437	6.58	141993	7.85								
11M56867.D CAL @ 50 PPB	491378	4.98	371440	6.58	142578	7.85								
11M56869.D CAL @ 100 PPB	537702	4.98	389814	6.58	155414	7.85								
11M56872.D CAL @ 250 PPB	556371	4.98	441028	6.58	194848	7.85								
11M56875.D CAL @ 500 PPB	600772	4.98	529485	6.58	233910	7.85								
11M56880.D ICV	523034	4.98	393433	6.58	148837	7.85								

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M107961.D   Method: EPA 8260C

Analysis Date/Time: 06/01/18 16:01

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	873065	5.36	645252	6.99	324628	8.27								
Eval File Area Limit:	436532-1746130		322626-1290504		162314-649256									
Eval File Rt Limit:	4.86-5.86		6.49-7.49		7.77-8.77									

Data File	Sample	I1 Area	I1 RT	I2 Area	I2 RT	I3 Area	I3 RT	I4 Area	I4 RT	I5 Area	I5 RT	I6 Area	I6 RT	I7 Area	I7 RT
1M107949.D	BLK	791811	5.36	613833	6.99	278042	8.27								
1M107951.D	CAL @ 0.5 PPB	792734	5.36	611387	6.99	282377	8.27								
1M107952.D	CAL @ 1 PPB	796096	5.36	608479	6.99	286070	8.27								
1M107953.D	CAL @ 5 PPB	823518	5.36	613100	6.99	304725	8.27								
1M107954.D	CAL @ 10 PPB	844443	5.36	624783	6.99	309695	8.27								
1M107961.D	CAL @ 20 PPB	873065	5.36	645252	6.99	324628	8.27								
1M107962.D	CAL @ 500 PPB	870800	5.36	686423	6.99	365944	8.27								
1M107965.D	CAL @ 250 PPB	905462	5.36	698030	6.99	349564	8.27								
1M107968.D	CAL @ 100 PPB	924075	5.36	695417	6.99	345851	8.27								
1M107971.D	CAL @ 50 PPB	911568	5.36	672521	6.99	340140	8.27								
1M107974.D	BLK	845409	5.36	656836	6.99	301242	8.27								
1M107975.D	ICV	904578	5.36	667695	6.99	337970	8.27								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 1M108051.D Method: EPA 8260C

Analysis Date/Time: 06/03/18 18:53

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	868338	5.36	655393	6.99	331623	8.27								
Eval File Area Limit:	434169-1736676		327696-1310786		165812-663246									
Eval File Rt Limit:	4.86-5.86		6.49-7.49		7.77-8.77									

Data File	Sample																
1M108055.D	BLK	834314	5.36	649836	6.99	299524	8.27										
1M108056.D	DAILY BLANK	809376	5.36	639087	6.99	298783	8.27										
1M108057.D	MBS70125	861818	5.36	643944	6.99	322455	8.27										
1M108058.D	AD04395-006(MS)	878806	5.36	657594	6.99	336901	8.27										
1M108059.D	AD04395-006(MSD)	878781	5.36	654786	6.99	334901	8.27										
1M108060.D	BLK	818899	5.36	639933	6.99	300671	8.27										
1M108061.D	AD04395-001	804430	5.36	633814	6.99	293965	8.27										
1M108062.D	AD04491-001	813431	5.36	641750	6.99	293076	8.27										
1M108063.D	AD04491-002	802558	5.36	629574	6.99	291049	8.27										
1M108064.D	AD04395-014	795593	5.36	624137	6.99	290322	8.27										
1M108065.D	AD04395-002	802980	5.36	628947	6.99	285655	8.27										
1M108066.D	AD04395-006	771953	5.36	606654	6.99	278163	8.27										
1M108067.D	AD04395-008	800098	5.36	622791	6.99	291976	8.27										
1M108068.D	AD04395-010	784926	5.36	609001	6.99	285217	8.27										
1M108069.D	AD04395-012	779757	5.36	610927	6.99	288456	8.27										
1M108070.D	AD04395-004	790981	5.36	628029	6.99	288565	8.27										
1M108071.D	AD04491-006	786917	5.36	617170	6.99	280668	8.27										
1M108072.D	AD04491-009	787613	5.36	613545	6.99	286248	8.27										
1M108073.D	AD04491-010	799552	5.36	625411	6.99	285749	8.27										
1M108074.D	AD04491-011	728890	5.36	574288	6.99	250884	8.27										
1M108075.D	AD04491-012	785914	5.36	615144	6.99	282544	8.27										
1M108076.D	AD04491-004	705452	5.36	544000	6.99	242930	8.27										
1M108077.D	AD04491-005	775930	5.36	604354	6.99	274802	8.27										
1M108078.D	AD04491-008	786182	5.36	621170	6.99	290965	8.27										
1M108079.D	AD04491-007	831339	5.36	636828	6.99	300262	8.27										
1M108080.D	AD04491-003	795419	5.36	609953	6.99	272621	8.27										
1M108081.D	STD	839953	5.36	634044	6.99	315298	8.27										

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 1M108087.D Method: EPA 8260C

Analysis Date/Time: 06/04/18 07:31

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	850059	5.36	642810	6.99	325213	8.27								
Eval File Area Limit:	425030-1700118		321405-1285620		162606-650426									
Eval File Rt Limit:	4.86-5.86		6.49-7.49		7.77-8.77									

Data File	Sample																
1M108090.D	DAILY BLANK	772891	5.36	602755	6.99	281967	8.27										
1M108091.D	DAILY BLANK	793748	5.36	625136	6.99	287194	8.27										
1M108092.D	AD04491-012	798396	5.36	624754	6.99	285440	8.27										
1M108093.D	AD04491-011(10X)	789943	5.36	628400	6.99	286195	8.27										
1M108094.D	AD04491-007(10X)	786955	5.36	618172	6.99	288721	8.27										
1M108095.D	MBS70134	828778	5.36	633273	6.99	319024	8.27										
1M108096.D	AD04363-012	787651	5.36	622165	6.99	278881	8.27										
1M108097.D	AD04363-002	785401	5.36	606628	6.99	274417	8.27										
1M108098.D	AD04423-025	778100	5.36	618225	6.99	276259	8.27										
1M108099.D	AD04302-025(T)	767926	5.36	620337	6.99	313817	8.27										
1M108100.D	AD04302-026(T)	802271	5.36	635588	6.99	321223	8.27										
1M108101.D	AD04302-024(100X)(T	833838	5.36	663696	6.99	324683	8.27										
1M108102.D	MBS70135	859024	5.36	648947	6.99	336297	8.27										
1M108103.D	AD04467-015	842225	5.36	662492	6.99	308768	8.27										
1M108104.D	AD04363-010	832710	5.36	648895	6.99	309454	8.27										
1M108105.D	AD04373-002	815006	5.36	644288	6.99	297456	8.27										
1M108106.D	AD04394-010	817475	5.36	645172	6.99	300626	8.27										
1M108107.D	AD04394-011	814167	5.36	641373	6.99	300928	8.27										
1M108108.D	AD04467-015	801861	5.36	634728	6.99	296225	8.27										
1M108109.D	AD04363-008	831468	5.36	639283	6.99	308544	8.27										
1M108110.D	AD04395-008(MS)	864918	5.36	661608	6.99	333611	8.27										
1M108111.D	AD04395-009(MSD)	869606	5.36	663514	6.99	331753	8.27										
1M108112.D	BLK	827561	5.36	652327	6.99	302455	8.27										
1M108113.D	AD04413-011	814402	5.36	646519	6.99	300816	8.27										
1M108114.D	AD04413-012	807086	5.36	637199	6.99	294227	8.27										
1M108115.D	AD04413-005	802731	5.36	631733	6.99	295001	8.27										
1M108116.D	AD04413-009	804393	5.36	623975	6.99	290472	8.27										
1M108117.D	AD04413-014(5X)	804205	5.36	634206	6.99	285933	8.27										
1M108118.D	AD04413-007(5X)	806001	5.36	626646	6.99	283358	8.27										
1M108119.D	AD04413-003(20X)	803149	5.36	633460	6.99	291209	8.27										

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0144

FORM8

Internal Standard Areas

Evaluation Std Data File: 11M57161.D Method: EPA 8260C

Analysis Date/Time: 06/04/18 20:51

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	397347	4.98	330055	6.58	138553	7.85								
Eval File Area Limit:	198674-794694		165028-660110		69276-277106									
Eval File Rt Limit:	4.48-5.48		6.08-7.08		7.35-8.35									
Data File Sample														
11M57162.D 20 PPB	419225	4.98	336184	6.58	137725	7.85								
11M57163.D BLK	395058	4.98	312587	6.58	115821	7.85								
11M57164.D DAILY BLANK	382208	4.97	315013	6.58	115795	7.85								
11M57165.D DAILY BLANK	379047	4.98	296112	6.58	112934	7.85								
11M57166.D MBS70139	386659	4.98	317784	6.58	124435	7.85								
11M57167.D MBS70140	425608	4.98	347167	6.58	135224	7.85								
11M57168.D EF-1-V-280642(05311	413379	4.98	341585	6.58	121018	7.85								
11M57169.D AD04453-001	384074	4.98	296817	6.58	112806	7.85								
11M57170.D AD04390-001	350972	4.98	283494	6.58	97168	7.85								
11M57171.D AD04447-011	362586	4.98	290541	6.58	110270	7.85								
11M57172.D AD04491-013	350720	4.98	283069	6.58	110217	7.85								
11M57173.D AD04491-014	355897	4.98	283238	6.58	109985	7.85								
11M57174.D AD04394-001	373128	4.97	300836	6.58	111428	7.85								
11M57175.D AD04394-002	355478	4.98	291330	6.58	107168	7.85								
11M57176.D AD04394-003	393473	4.97	305060	6.58	125856	7.85								
11M57177.D AD04394-004	403750	4.97	318579	6.58	117314	7.85								
11M57178.D AD04394-005	412975	4.97	326692	6.58	127776	7.85								
11M57179.D AD04394-006	416107	4.97	329800	6.58	115817	7.85								
11M57180.D AD04394-007	420159	4.98	324984	6.58	116353	7.85								
11M57181.D AD04394-008	415396	4.97	329811	6.58	116090	7.85								
11M57182.D AD04402-012	421440	4.98	334456	6.58	130250	7.85								
11M57183.D AD04475-001(20X)	445527	4.98	379801	6.58	165662	7.85								
11M57184.D AD04380-006(80uL)	465631	4.98	374464	6.58	145257	7.85								
11M57185.D AD04380-008	495842	4.97	403760	6.58	157320	7.85								
11M57186.D AD04380-004(400uL)	484848	4.98	434843	6.58	185635	7.85								
11M57187.D AD04394-001(MS)	564427	4.97	452523	6.58	168805	7.85								
11M57188.D AD04415-001(400uL)	536052	4.98	431847	6.58	191078	7.85								
11M57189.D AD04415-005(400uL)	535939	4.98	449317	6.58	190476	7.85								
11M57190.D AD04394-001(MSD)	611923	4.97	494642	6.58	221068	7.85								
11M57191.D 04364-014	638670	4.97	523238	6.58	246011	7.85								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Base Neutral/Acid Extractable Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-001
Client Id: SB2_7.0_052318
Data File: 7M92031.D
Analysis Date: 05/30/18 17:36
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.039	U	**218-01-9**	**Chrysene**	**0.039**	**0.096**
83-32-9	Acenaphthene	0.039	U	53-70-3	Dibenzo[a,h]anthracene	0.039	U
208-96-8	Acenaphthylene	0.039	U	**206-44-0**	**Fluoranthene**	**0.039**	**0.12**
120-12-7	Anthracene	0.039	U	86-73-7	Fluorene	0.039	U
56-55-3	**Benzo[a]anthracene**	**0.039**	**0.11**	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.039**	**0.065**
50-32-8	**Benzo[a]pyrene**	**0.039**	**0.10**	91-20-3	Naphthalene	0.0097	U
205-99-2	**Benzo[b]fluoranthene**	**0.039**	**0.14**	**85-01-8**	**Phenanthrene**	**0.039**	**0.059**
191-24-2	**Benzo[g,h,i]perylene**	**0.039**	**0.078**	**129-00-0**	**Pyrene**	**0.039**	**0.15**
207-08-9	**Benzo[k]fluoranthene**	**0.039**	**0.042**				

Worksheet #: 466325 ***Total Target Concentration*** 0.96 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

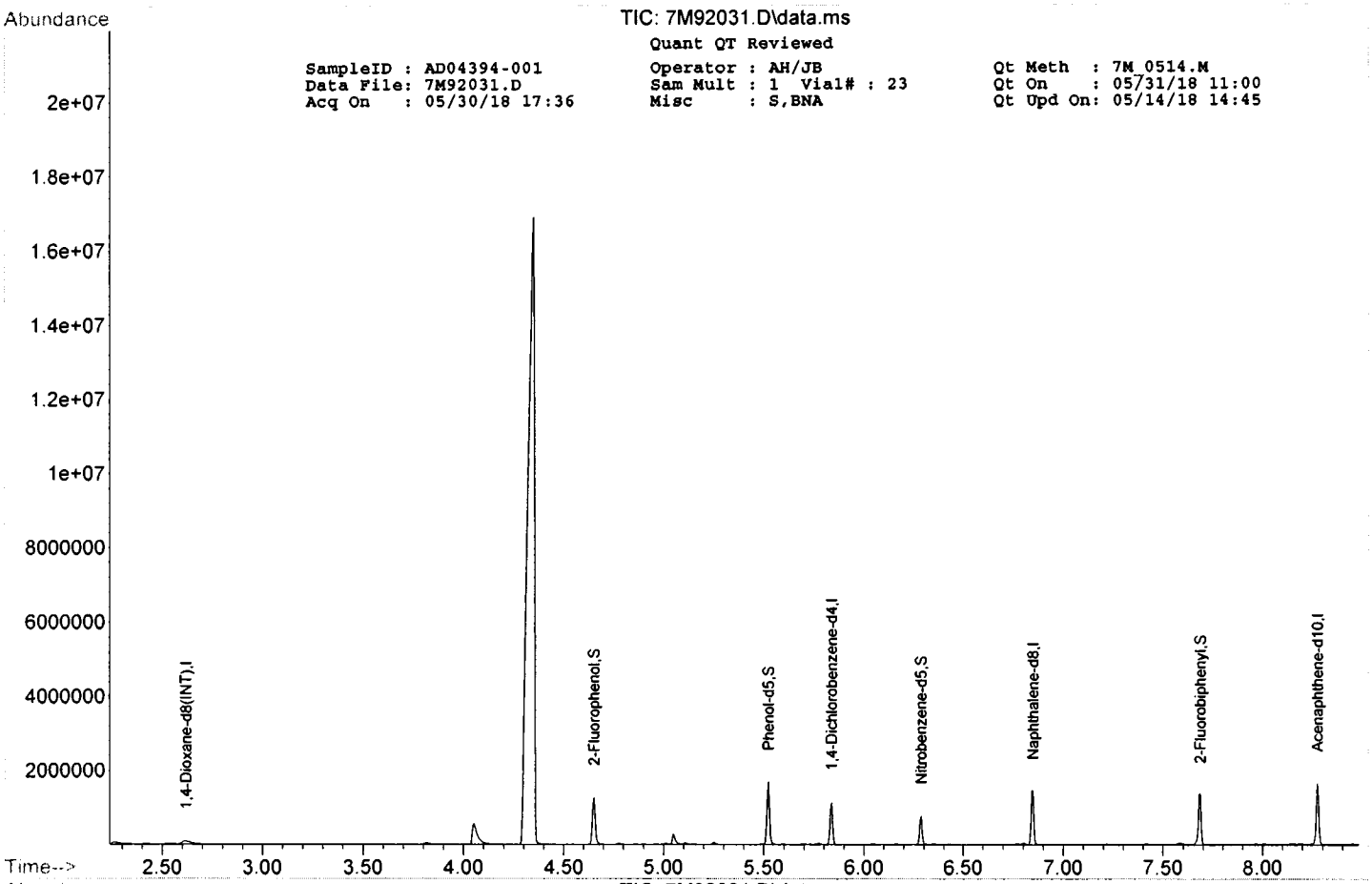
8052424 0147

SampleID : AD04394-001 Operator : AH/JB Qt Meth : 7M_0514.M
Data File: 7M92031.D Sam Mult : 1 Vial# : 23 Qt On : 05/31/18 11:00
Acq On : 05/30/18 17:36 Misc : S,BNA Qt Upd On: 05/14/18 14:45

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-30-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.617	96	75707	40.00	ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.838	152	143428	40.00	ng	0.00
31) Naphthalene-d8	6.848	136	538352	40.00	ng	0.00
50) Acenaphthene-d10	8.274	164	320913	40.00	ng	-0.01
77) Phenanthrene-d10	9.738	188	511624	40.00	ng	-0.02
91) Chrysene-d12	12.799	240	434264	40.00	ng	-0.01
103) Perylene-d12	14.428	264	365884	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.652	112	320396	68.04	ng	0.00
Spiked Amount 100.000			Recovery = 68.04%			
16) Phenol-d5	5.523	99	446395	73.60	ng	0.00
Spiked Amount 100.000			Recovery = 73.60%			
32) Nitrobenzene-d5	6.287	128	82568	35.59	ng	0.00
Spiked Amount 50.000			Recovery = 71.18%			
55) 2-Fluorobiphenyl	7.686	172	380695	34.45	ng	0.00
Spiked Amount 50.000			Recovery = 68.90%			
80) 2,4,6-Tribromophenol	9.017	330	91864	77.20	ng	-0.01
Spiked Amount 100.000			Recovery = 77.20%			
94) Terphenyl-d14	11.549	244	323128	43.48	ng	0.00
Spiked Amount 50.000			Recovery = 86.96%			
Target Compounds						Qvalue
86) Phenanthrene	9.764	178	44433	3.0340	ng	95
90) Fluoranthene	11.100	202	104817	6.4178	ng	89
92) Pyrene	11.367	202	103860	7.7710	ng	87
100) Benzo[a]anthracene	12.788	228	66267	5.4284	ng	94
101) Chrysene	12.831	228	56497	4.9299	ng	96
105) Benzo[b]fluoranthene	14.006	252	81225m	7.2767	ng	
106) Benzo[k]fluoranthene	14.033	252	23488m	2.1627	ng	
107) Benzo[a]pyrene	14.364	252	55074	5.1964	ng	91
108) Indeno[1,2,3-cd]pyrene	15.753	276	35722	3.3301	ng	72
110) Benzo[g,h,i]perylene	16.138	276	36106	4.0264	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed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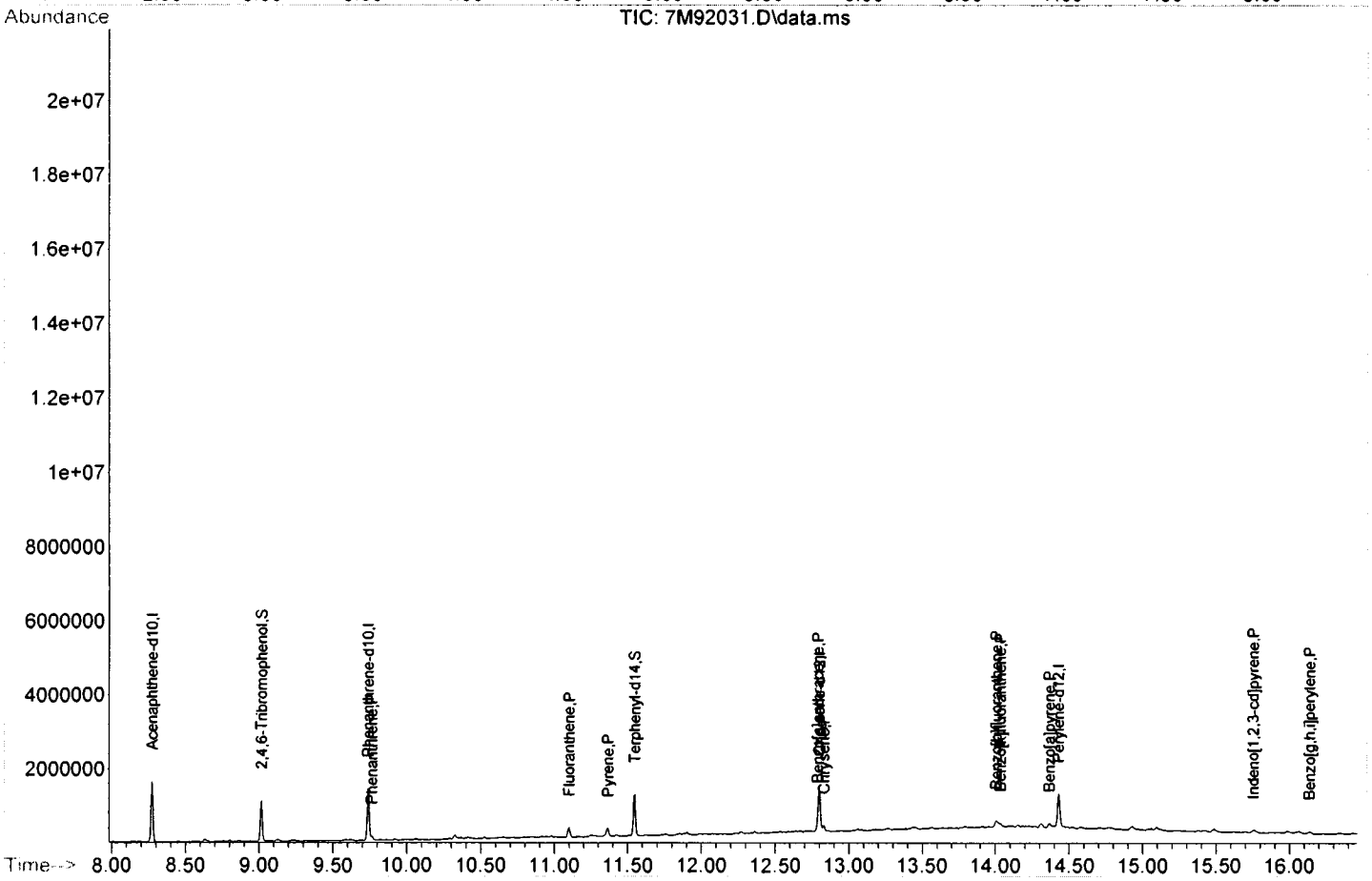
Quant QT Reviewed
SampleID : AD04394-001
Data File: 7M92031.D
Acq On : 05/30/18 17:36
Operator : AH/JB
Sam Mult : 1 Vial# : 23
Misc : S,BNA
Qt Meth : 7M_0514.M
Qt On : 05/31/18 11:00
Qt Upd On: 05/14/18 14:45
2e+07
1.8e+07
1.6e+07
1.4e+07
1.2e+07
1e+07
8000000
6000000
4000000
2000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00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1.6e+07
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1e+07
8000000
6000000
4000000
2000000
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[a]pyrene,P
Perylene-d12,I
Indeno[1,2,3-cd]pyrene,P
Benzo[g,h,i]perylene,P
Time-->
8.00
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-002
Client Id: SB1_9.0_052318
Data File: 9M85648.D
Analysis Date: 05/30/18 16:20
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 84

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.040	U	**218-01-9**	**Chrysene**	**0.040**	**0.12**
83-32-9	Acenaphthene	0.040	U	53-70-3	Dibenzo[a,h]anthracene	0.040	U
208-96-8	Acenaphthylene	0.040	U	**206-44-0**	**Fluoranthene**	**0.040**	**0.17**
120-12-7	Anthracene	0.040	U	86-73-7	Fluorene	0.040	U
56-55-3	**Benzo[a]anthracene**	**0.040**	**0.12**	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.040**	**0.052**
50-32-8	**Benzo[a]pyrene**	**0.040**	**0.089**	91-20-3	Naphthalene	0.0099	U
205-99-2	**Benzo[b]fluoranthene**	**0.040**	**0.12**	**85-01-8**	**Phenanthrene**	**0.040**	**0.10**
191-24-2	**Benzo[g,h,i]perylene**	**0.040**	**0.067**	**129-00-0**	**Pyrene**	**0.040**	**0.15**
207-08-9	Benzo[k]fluoranthene	0.040	U				

Worksheet #: 466325 ***Total Target Concentration*** 0.99 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

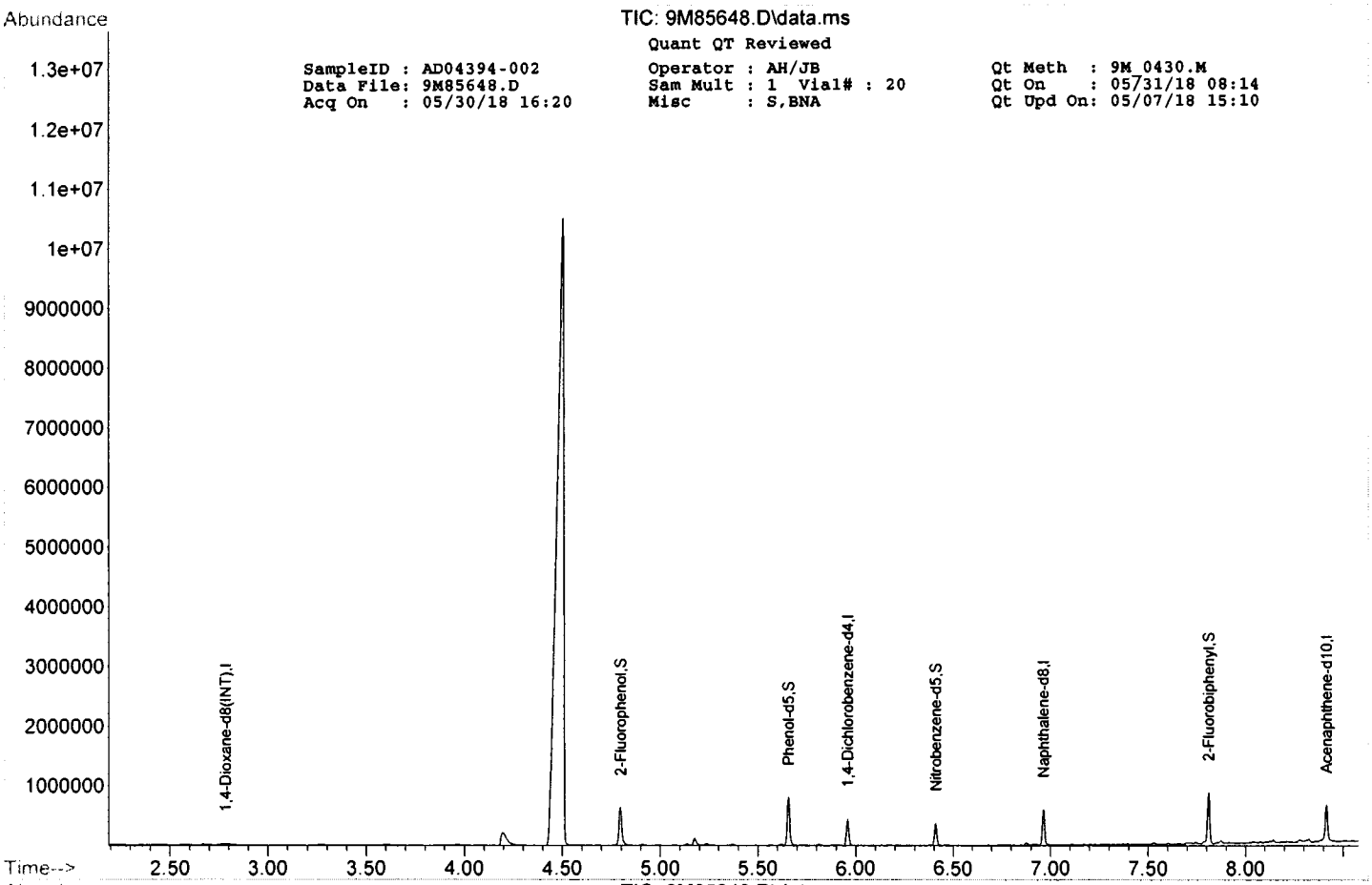
8052424 0150

SampleID : AD04394-002 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85648.D Sam Mult : 1 Vial# : 20 Qt On : 05/31/18 08:14
Acq On : 05/30/18 16:20 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.784	96	29234	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.957	152	52820	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	196602	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	118820	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	216589	40.00	ng	0.00
91) Chrysene-d12	12.990	240	294117	40.00	ng	0.00
103) Perylene-d12	14.658	264	307993	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	157368	89.47	ng	0.01
Spiked Amount 100.000			Recovery = 89.47%			
16) Phenol-d5	5.656	99	202319	90.85	ng	0.01
Spiked Amount 100.000			Recovery = 90.85%			
32) Nitrobenzene-d5	6.406	128	36869	47.02	ng	-0.01
Spiked Amount 50.000			Recovery = 94.04%			
55) 2-Fluorobiphenyl	7.810	172	197402	51.08	ng	-0.02
Spiked Amount 50.000			Recovery = 102.16%			
80) 2,4,6-Tribromophenol	9.171	330	65262	116.42	ng	0.00
Spiked Amount 100.000			Recovery = 116.42%			
94) Terphenyl-d14	11.717	244	251459	56.35	ng	0.00
Spiked Amount 50.000			Recovery = 112.70%			
Target Compounds						Qvalue
86) Phenanthrene	9.930	178	37787	5.2654	ng	97
90) Fluoranthene	11.282	202	64754	8.3633	ng	87
92) Pyrene	11.549	202	68685	7.7525	ng	82
100) Benzo[a]anthracene	12.979	228	51555	5.8293	ng	87
101) Chrysene	13.021	228	53717	6.1398	ng	95
105) Benzo[b]fluoranthene	14.212	252	61474m	6.2058	ng	
107) Benzo[a]pyrene	14.593	252	43919	4.5103	ng	88
108) Indeno[1,2,3-cd]pyrene	16.093	276	27668	2.6406	ng	76
110) Benzo[g,h,i]perylene	16.508	276	29871	3.4005	ng	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed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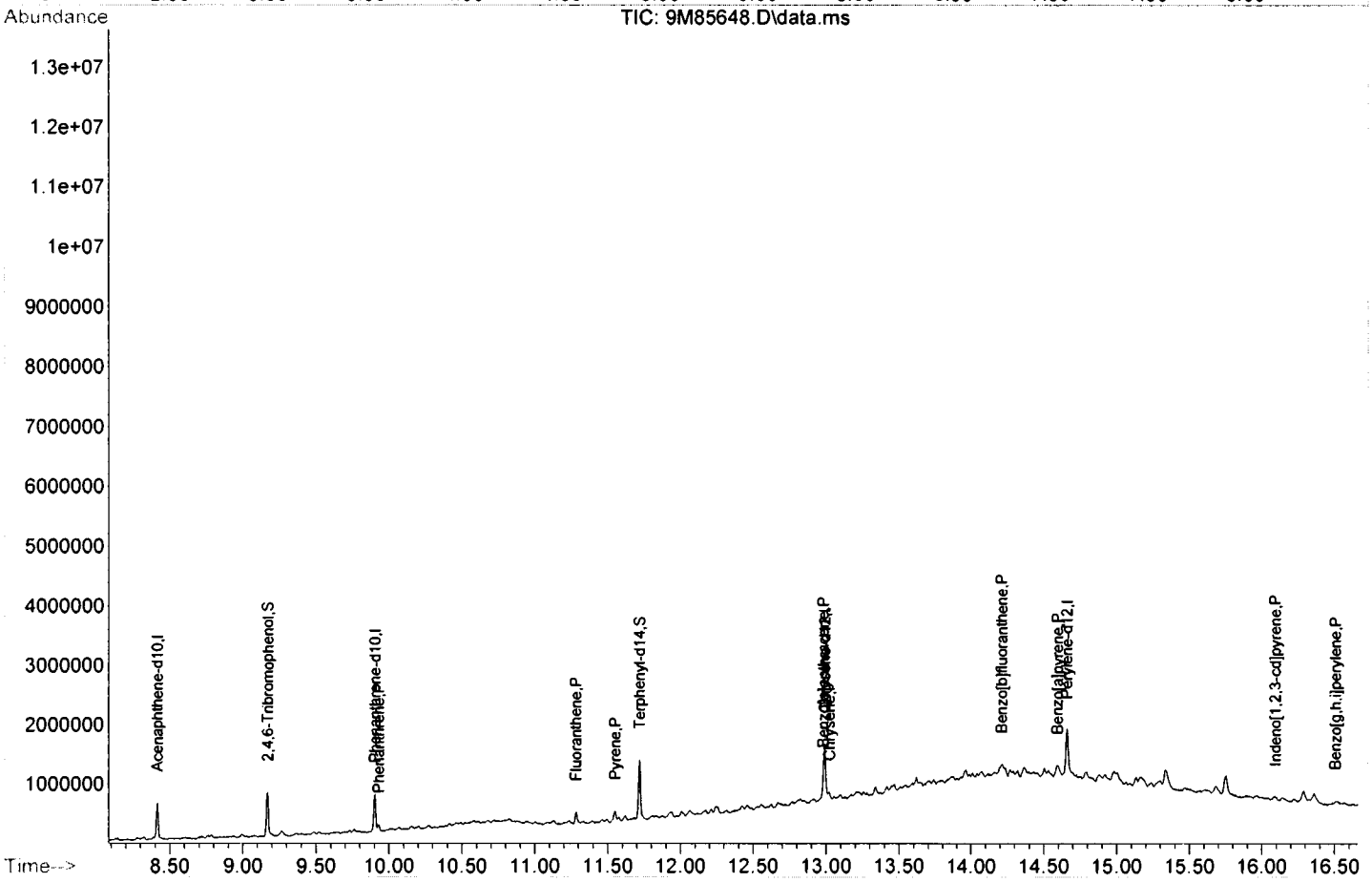
SampleID : AD04394-002
Data File: 9M85648.D
Acq On : 05/30/18 16:20
Operator : AH/JB
Sam Mult : 1 Vial# : 20
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:14
Qt Upd On: 05/07/18 15:10
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00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1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[b]fluoranthene,P
Indeno[1,2,3-cd]pyrene,P
Benzo[g,h,i]perylene,P
Time-->
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-003
Client Id: SB7_14.5_052318
Data File: 9M85640.D
Analysis Date: 05/30/18 12:57
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.040	U	**218-01-9**	**Chrysene**	**0.040**	**0.091**
83-32-9	Acenaphthene	0.040	U	53-70-3	Dibenzo[a,h]anthracene	0.040	U
208-96-8	Acenaphthylene	0.040	U	**206-44-0**	**Fluoranthene**	**0.040**	**0.15**
120-12-7	Anthracene	0.040	U	86-73-7	Fluorene	0.040	U
56-55-3	**Benzo[a]anthracene**	**0.040**	**0.092**	193-39-5	Indeno[1,2,3-cd]pyrene	0.040	U
50-32-8	**Benzo[a]pyrene**	**0.040**	**0.068**	**91-20-3**	**Naphthalene**	**0.010**	**0.011**
205-99-2	**Benzo[b]fluoranthene**	**0.040**	**0.11**	**85-01-8**	**Phenanthrene**	**0.040**	**0.10**
191-24-2	**Benzo[g,h,i]perylene**	**0.040**	**0.044**	**129-00-0**	**Pyrene**	**0.040**	**0.12**
207-08-9	Benzo[k]fluoranthene	0.040	U				

Worksheet #: 466325 *Total Target Concentration* 0.79 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

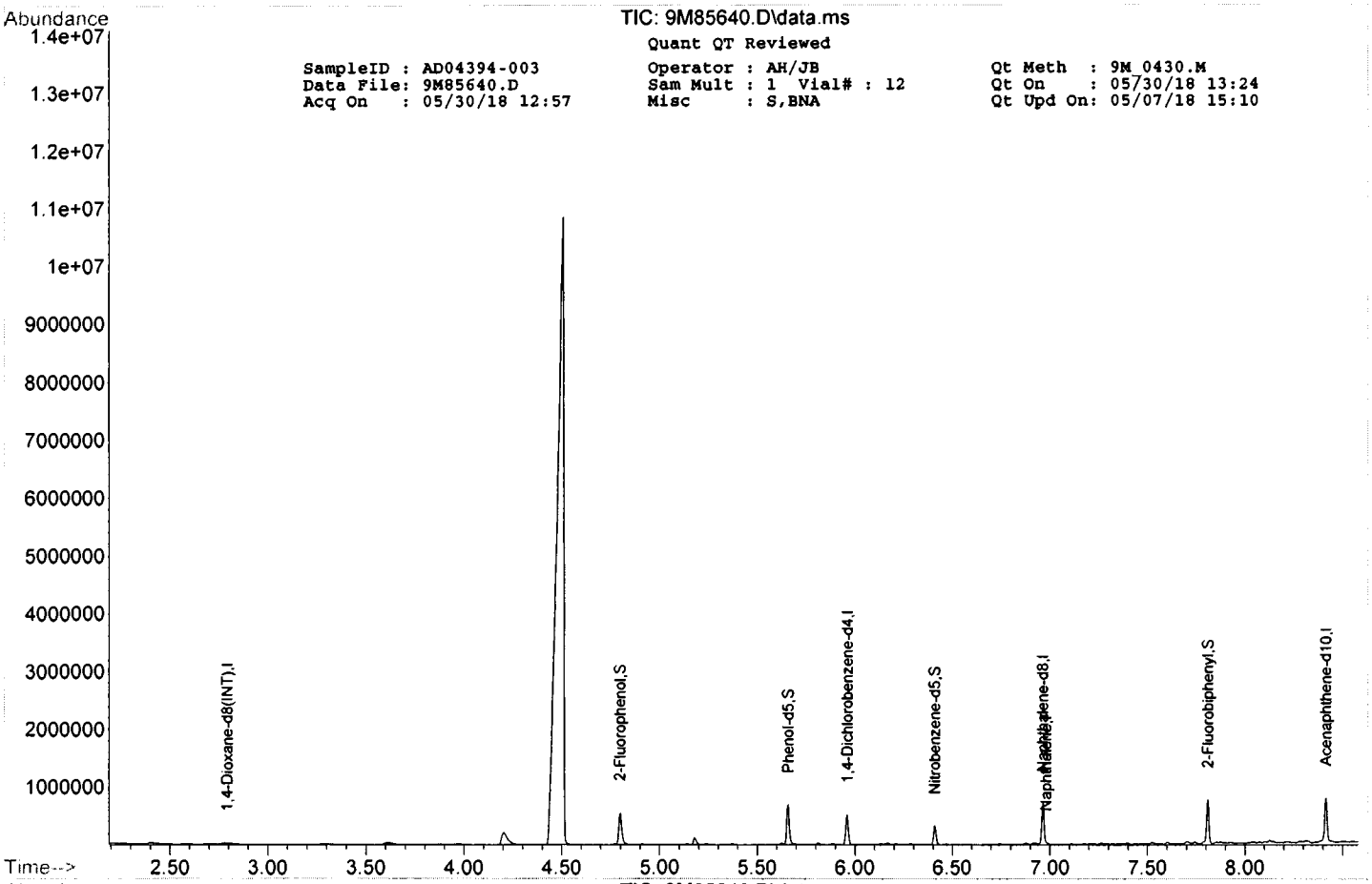
Quantitation Report (QT Reviewed) **8052424 0153**

SampleID : AD04394-003 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85640.D Sam Mult : 1 Vial# : 12 Qt On : 05/30/18 13:24
Acq On : 05/30/18 12:57 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-30-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.792	96	34252	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.960	152	65437	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	247105	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	149938	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	269707	40.00	ng	0.00
91) Chrysene-d12	12.993	240	362274	40.00	ng	0.00
103) Perylene-d12	14.664	264	392059	40.00	ng	0.03
System Monitoring Compounds						
11) 2-Fluorophenol	4.798	112	139103	67.50	ng	0.02
Spiked Amount 100.000			Recovery = 67.50%			
16) Phenol-d5	5.659	99	180280	69.09	ng	0.01
Spiked Amount 100.000			Recovery = 69.09%			
32) Nitrobenzene-d5	6.406	128	33732	34.23	ng	-0.01
Spiked Amount 50.000			Recovery = 68.46%			
55) 2-Fluorobiphenyl	7.810	172	173040	35.48	ng	-0.02
Spiked Amount 50.000			Recovery = 70.96%			
80) 2,4,6-Tribromophenol	9.171	330	53730	76.97	ng	0.00
Spiked Amount 100.000			Recovery = 76.97%			
94) Terphenyl-d14	11.720	244	206659	37.60	ng	0.00
Spiked Amount 50.000			Recovery = 75.20%			
Target Compounds						Qvalue
41) Naphthalene	6.980	128	4238	0.5259	ng	94
86) Phenanthrene	9.930	178	44746	5.0071	ng	99
90) Fluoranthene	11.291	202	70334	7.2949	ng	84
92) Pyrene	11.549	202	64219	5.8847	ng	83
100) Benzo[a]anthracene	12.979	228	49716	4.5638	ng	97
101) Chrysene	13.024	228	49103	4.5565	ng	98
105) Benzo[b]fluoranthene	14.217	252	68995m	5.4716	ng	
107) Benzo[a]pyrene	14.598	252	42162	3.4015	ng	90
110) Benzo[g,h,i]perylene	16.513	276	24615	2.2013	ng	73

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


Abundance
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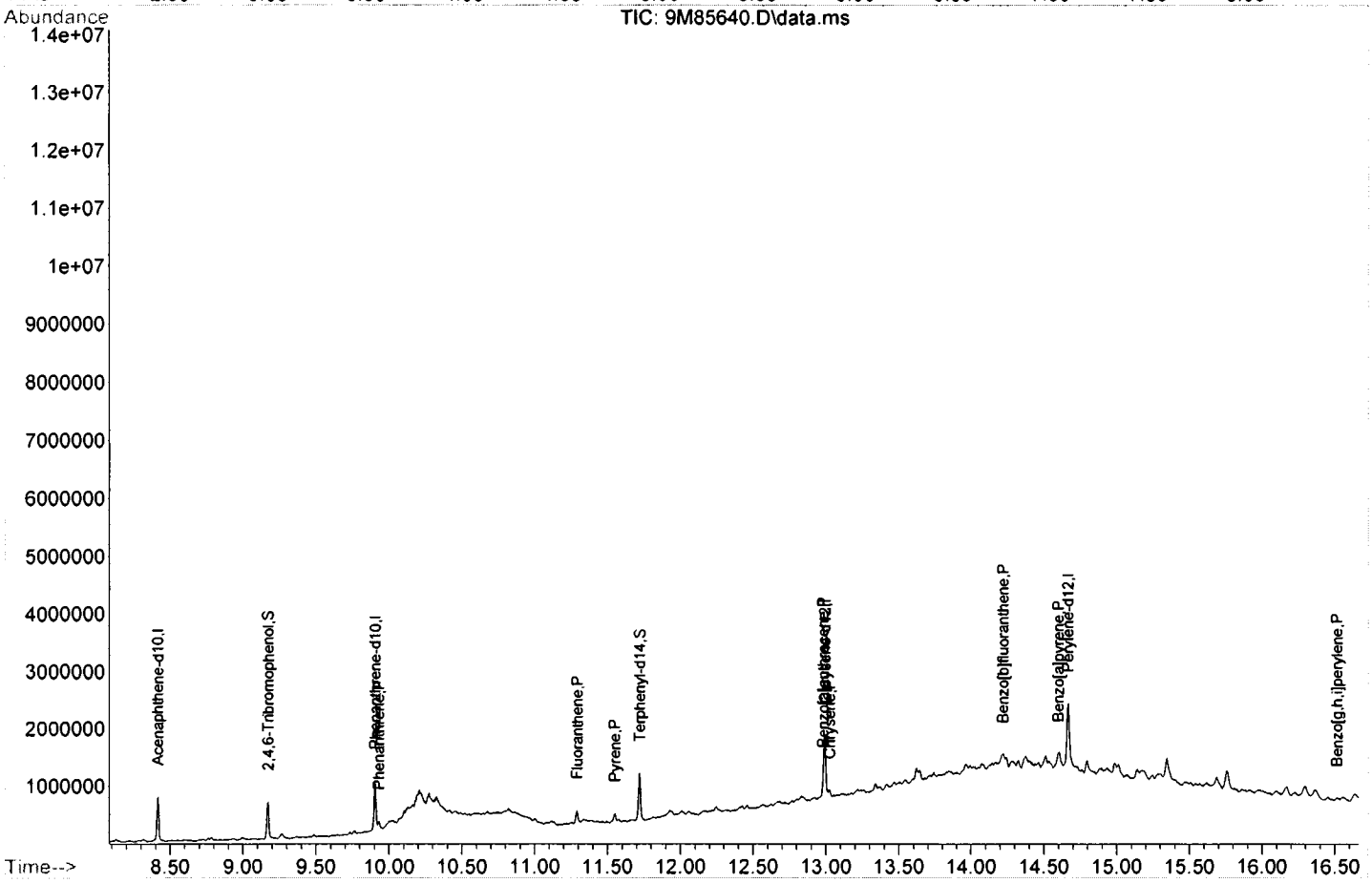
Quant QT Reviewed
SampleID : AD04394-003
Data File: 9M85640.D
Acq On : 05/30/18 12:57
Operator : AH/JB
Sam Mult : 1 Vial# : 12
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/30/18 13:24
Qt Upd On: 05/07/18 15:10
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00


Abundance
TIC: 9M85640.D\data.ms
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
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8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[b]fluoranthene,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-004(5X)
Client Id: SB6_14.5_052318
Data File: 9M85653.D
Analysis Date: 05/30/18 18:19
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 5
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.19	U	218-01-9	Chrysene	0.19	U
83-32-9	Acenaphthene	0.19	U	53-70-3	Dibenzo[a,h]anthracene	0.19	U
208-96-8	Acenaphthylene	0.19	U	206-44-0	Fluoranthene	0.19	U
120-12-7	Anthracene	0.19	U	86-73-7	Fluorene	0.19	U
56-55-3	Benzo[a]anthracene	0.19	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.19	U
50-32-8	Benzo[a]pyrene	0.19	U	91-20-3	Naphthalene	0.048	U
205-99-2	Benzo[b]fluoranthene	0.19	U	85-01-8	Phenanthrene	0.19	U
191-24-2	Benzo[g,h,i]perylene	0.19	U	129-00-0	Pyrene	0.19	U
207-08-9	Benzo[k]fluoranthene	0.19	U				

Worksheet #: 466325 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

8052424 0156

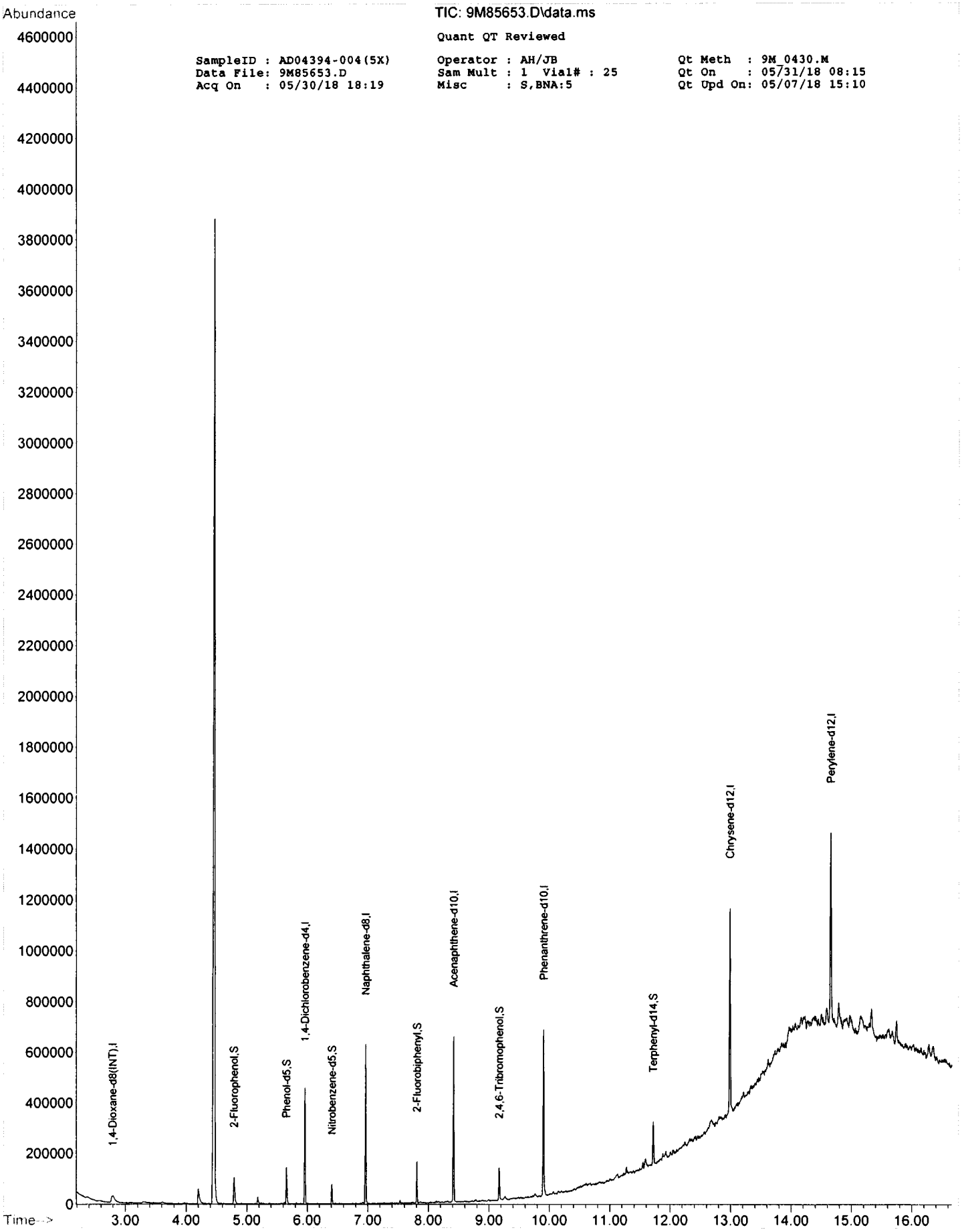
SampleID : AD04394-004(5X) Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85653.D Sam Mult : 1 Vial# : 25 Qt On : 05/31/18 08:15
Acq On : 05/30/18 18:19 Misc : S,BNA:5 Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.792	96	30913	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.960	152	56997	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	215682	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	128853	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	223591	40.00	ng	0.00
91) Chrysene-d12	12.987	240	295826	40.00	ng	0.00
103) Perylene-d12	14.655	264	316726	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.790	112	32583	17.52	ng	0.00
Spiked Amount 100.000			Recovery = 17.52%			
16) Phenol-d5	5.653	99	40716	17.29	ng	0.00
Spiked Amount 100.000			Recovery = 17.29%			
32) Nitrobenzene-d5	6.406	128	7854	9.13	ng	-0.01
Spiked Amount 50.000			Recovery = 18.26%			
55) 2-Fluorobiphenyl	7.810	172	39087	9.33	ng	-0.02
Spiked Amount 50.000			Recovery = 18.66%			
80) 2,4,6-Tribromophenol	9.168	330	10972	18.96	ng	0.00
Spiked Amount 100.000			Recovery = 18.96%			
94) Terphenyl-d14	11.714	244	46342	10.32	ng	0.00
Spiked Amount 50.000			Recovery = 20.64%			

Target Compounds Qvalue

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


Abundance
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Quant QT Reviewed
SampleID : AD04394-004(5X)
Data File: 9M85653.D
Acq On : 05/30/18 18:19
Operator : AH/JB
Sam Mult : 1 Vial# : 25
Misc : S,BNA:5
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:15
Qt Upd On: 05/07/18 15:10
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->
4600000
4400000
4200000
4000000
3800000
3600000
3400000
3200000
3000000
2800000
2600000
2400000
2200000
2000000
1800000
1600000
1400000
1200000
1000000
800000
600000
400000
200000
0
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-005
Client Id: SB5_14.5_052318
Data File: 9M85649.D
Analysis Date: 05/30/18 16:43
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.041	U	**218-01-9**	**Chrysene**	**0.041**	**0.11**
83-32-9	Acenaphthene	0.041	U	53-70-3	Dibenzo[a,h]anthracene	0.041	U
208-96-8	Acenaphthylene	0.041	U	**206-44-0**	**Fluoranthene**	**0.041**	**0.19**
120-12-7	Anthracene	0.041	U	86-73-7	Fluorene	0.041	U
56-55-3	**Benzo[a]anthracene**	**0.041**	**0.10**	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.041**	**0.061**
50-32-8	**Benzo[a]pyrene**	**0.041**	**0.087**	**91-20-3**	**Naphthalene**	**0.010**	**0.014**
205-99-2	**Benzo[b]fluoranthene**	**0.041**	**0.13**	**85-01-8**	**Phenanthrene**	**0.041**	**0.11**
191-24-2	**Benzo[g,h,i]perylene**	**0.041**	**0.071**	**129-00-0**	**Pyrene**	**0.041**	**0.14**
207-08-9	**Benzo[k]fluoranthene**	**0.041**	**0.043**				

Worksheet #: 466325 *Total Target Concentration* 1.1 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

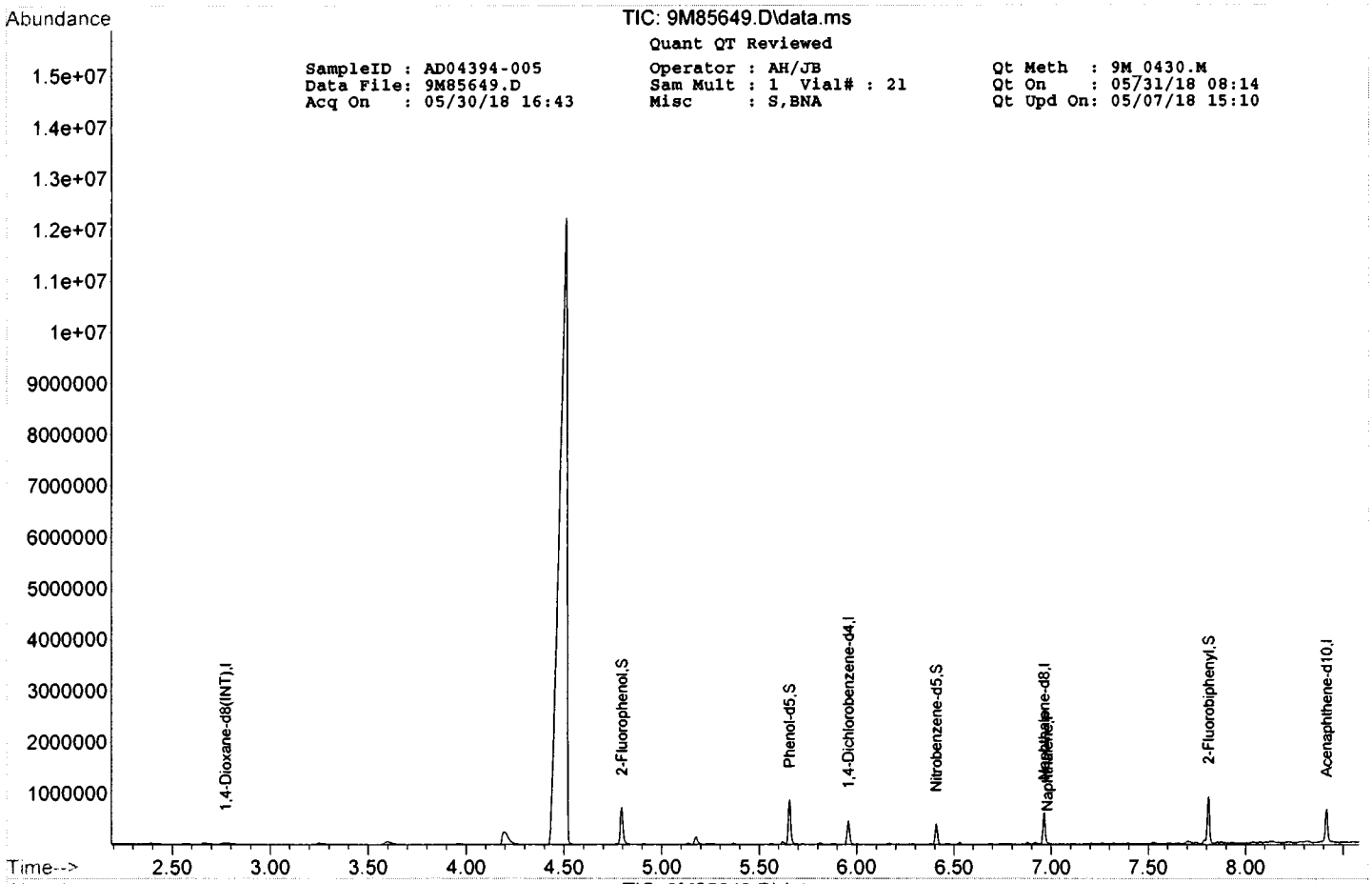
Quantitation Report (QT Reviewed) **8052424 0159**

SampleID : AD04394-005 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85649.D Sam Mult : 1 Vial# : 21 Qt On : 05/31/18 08:14
Acq On : 05/30/18 16:43 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.772	96	30155	40.00	ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.957	152	55678	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	207657	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	124609	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	226019	40.00	ng	0.00
91) Chrysene-d12	12.990	240	329167	40.00	ng	0.00
103) Perylene-d12	14.658	264	343623	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	169253	93.29	ng	0.01
Spiked Amount 100.000			Recovery = 93.29%			
16) Phenol-d5	5.656	99	219570	95.58	ng	0.01
Spiked Amount 100.000			Recovery = 95.58%			
32) Nitrobenzene-d5	6.406	128	40378	48.75	ng	-0.01
Spiked Amount 50.000			Recovery = 97.50%			
55) 2-Fluorobiphenyl	7.810	172	212268	52.37	ng	-0.02
Spiked Amount 50.000			Recovery = 104.74%			
80) 2,4,6-Tribromophenol	9.171	330	67083	114.68	ng	0.00
Spiked Amount 100.000			Recovery = 114.68%			
94) Terphenyl-d14	11.717	244	272666	54.59	ng	0.00
Spiked Amount 50.000			Recovery = 109.18%			
Target Compounds						Qvalue
41) Naphthalene	6.980	128	4527	0.6684	ng	90
86) Phenanthrene	9.930	178	40532	5.4122	ng	96
90) Fluoranthene	11.282	202	76483	9.4660	ng	86
92) Pyrene	11.546	202	67874	6.8452	ng	83
100) Benzo[a]anthracene	12.979	228	50501	5.1021	ng	97
101) Chrysene	13.021	228	51983	5.3089	ng	96
105) Benzo[b]fluoranthene	14.209	252	69014m	6.2445	ng	
106) Benzo[k]fluoranthene	14.237	252	24279m	2.0912	ng	
107) Benzo[a]pyrene	14.592	252	46693	4.2980	ng	86
108) Indeno[1,2,3-cd]pyrene	16.093	276	34829	2.9794	ng	61
110) Benzo[g,h,i]perylene	16.510	276	34421	3.5121	ng	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed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Quant QT Reviewed
SampleID : AD04394-005
Data File: 9M85649.D
Acq On : 05/30/18 16:43
Operator : AH/JB
Sam Mult : 1 Vial# : 21
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:14
Qt Upd On: 05/07/18 15:10
1.5e+07
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->
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4.00
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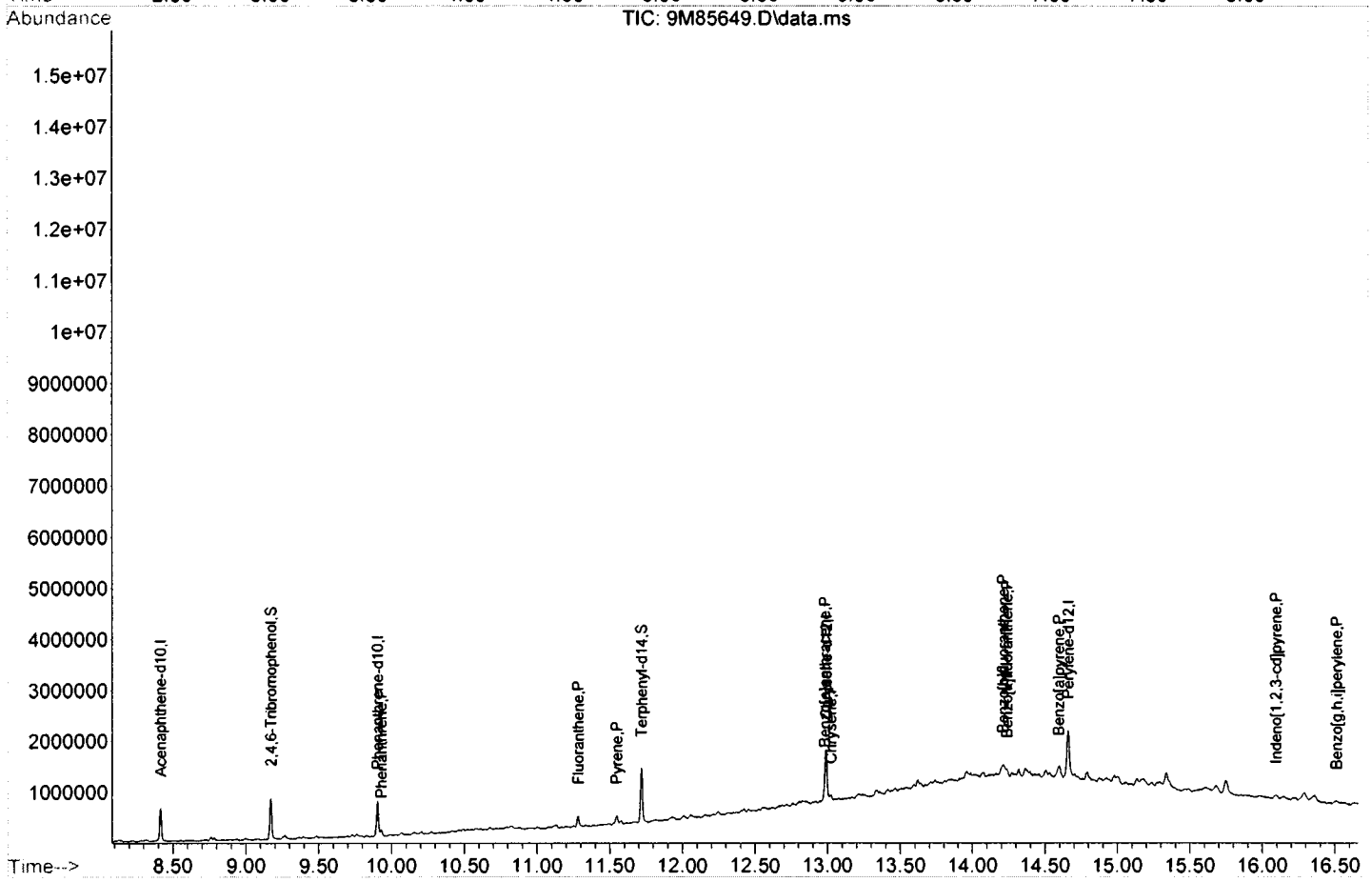
5.00
5.50
6.00
6.50
7.00
7.50
8.00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1.3e+07
1.2e+07
1.1e+07
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3000000
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1000000
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[a]pyrene,P
Perylene-d12,I
Indeno[1,2,3-cd]pyrene,P
Benzo[g,h,i]perylene,P
Time-->
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-006
Client Id: DUP01_052318
Data File: 9M85650.D
Analysis Date: 05/30/18 17:07
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.040	U	**218-01-9**	**Chrysene**	**0.040**	**0.085**
83-32-9	Acenaphthene	0.040	U	53-70-3	Dibenzo[a,h]anthracene	0.040	U
208-96-8	Acenaphthylene	0.040	U	**206-44-0**	**Fluoranthene**	**0.040**	**0.13**
120-12-7	Anthracene	0.040	U	86-73-7	Fluorene	0.040	U
56-55-3	**Benzo[a]anthracene**	**0.040**	**0.081**	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.040**	**0.044**
50-32-8	**Benzo[a]pyrene**	**0.040**	**0.065**	91-20-3	Naphthalene	0.010	U
205-99-2	**Benzo[b]fluoranthene**	**0.040**	**0.094**	**85-01-8**	**Phenanthrene**	**0.040**	**0.077**
191-24-2	**Benzo[g,h,i]perylene**	**0.040**	**0.060**	**129-00-0**	**Pyrene**	**0.040**	**0.10**
207-08-9	Benzo[k]fluoranthene	0.040	U				

Worksheet #: 466325 ***Total Target Concentration*** 0.74 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

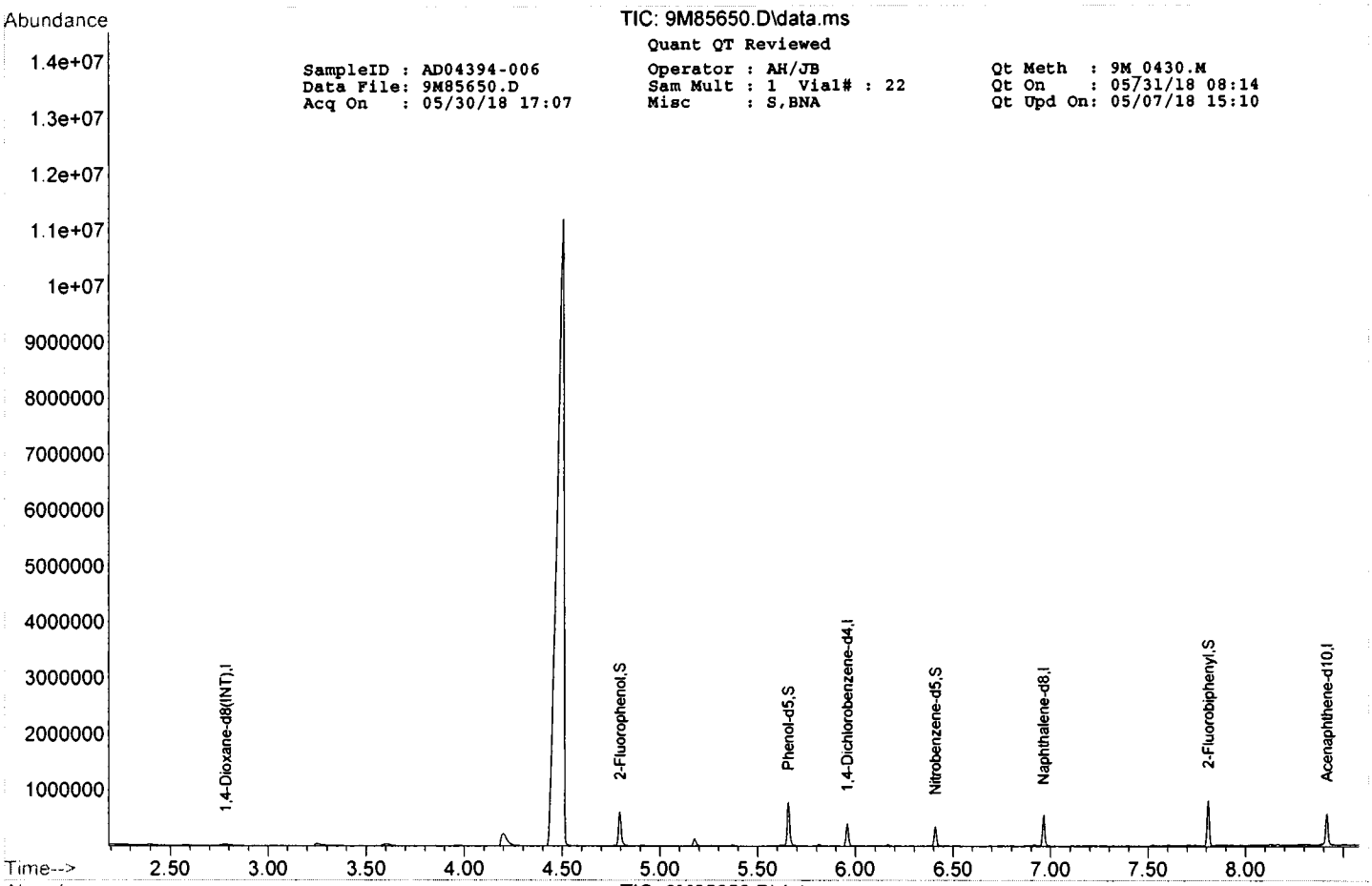
Quantitation Report (QT Reviewed) **8052424 0162**

SampleID : AD04394-006 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85650.D Sam Mult : 1 Vial# : 22 Qt On : 05/31/18 08:14
Acq On : 05/30/18 17:07 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.783	96	27174	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.957	152	48347	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	178929	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	107460	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	196871	40.00	ng	0.00
91) Chrysene-d12	12.990	240	276484	40.00	ng	0.00
103) Perylene-d12	14.658	264	292917	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	147881	90.45	ng	0.01
Spiked Amount 100.000			Recovery = 90.45%			
16) Phenol-d5	5.656	99	193951	93.69	ng	0.01
Spiked Amount 100.000			Recovery = 93.69%			
32) Nitrobenzene-d5	6.406	128	34655	48.56	ng	-0.01
Spiked Amount 50.000			Recovery = 97.12%			
55) 2-Fluorobiphenyl	7.810	172	185244	53.00	ng	-0.02
Spiked Amount 50.000			Recovery = 106.00%			
80) 2,4,6-Tribromophenol	9.171	330	60843	119.41	ng	0.00
Spiked Amount 100.000			Recovery = 119.41%			
94) Terphenyl-d14	11.717	244	253214	60.36	ng	0.00
Spiked Amount 50.000			Recovery = 120.72%			
Target Compounds						Qvalue
86) Phenanthrene	9.930	178	25019	3.8354	ng	95
90) Fluoranthene	11.279	202	47272	6.7169	ng	85
92) Pyrene	11.546	202	43456	5.2177	ng	84
100) Benzo[a]anthracene	12.976	228	33583	4.0394	ng	95
101) Chrysene	13.021	228	34831	4.2350	ng	99
105) Benzo[b]fluoranthene	14.212	252	44311m	4.7034	ng	
107) Benzo[a]pyrene	14.590	252	30161	3.2568	ng	87
108) Indeno[1,2,3-cd]pyrene	16.087	276	21824	2.1900	ng	69
110) Benzo[g,h,i]perylene	16.505	276	24985	2.9906	ng	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed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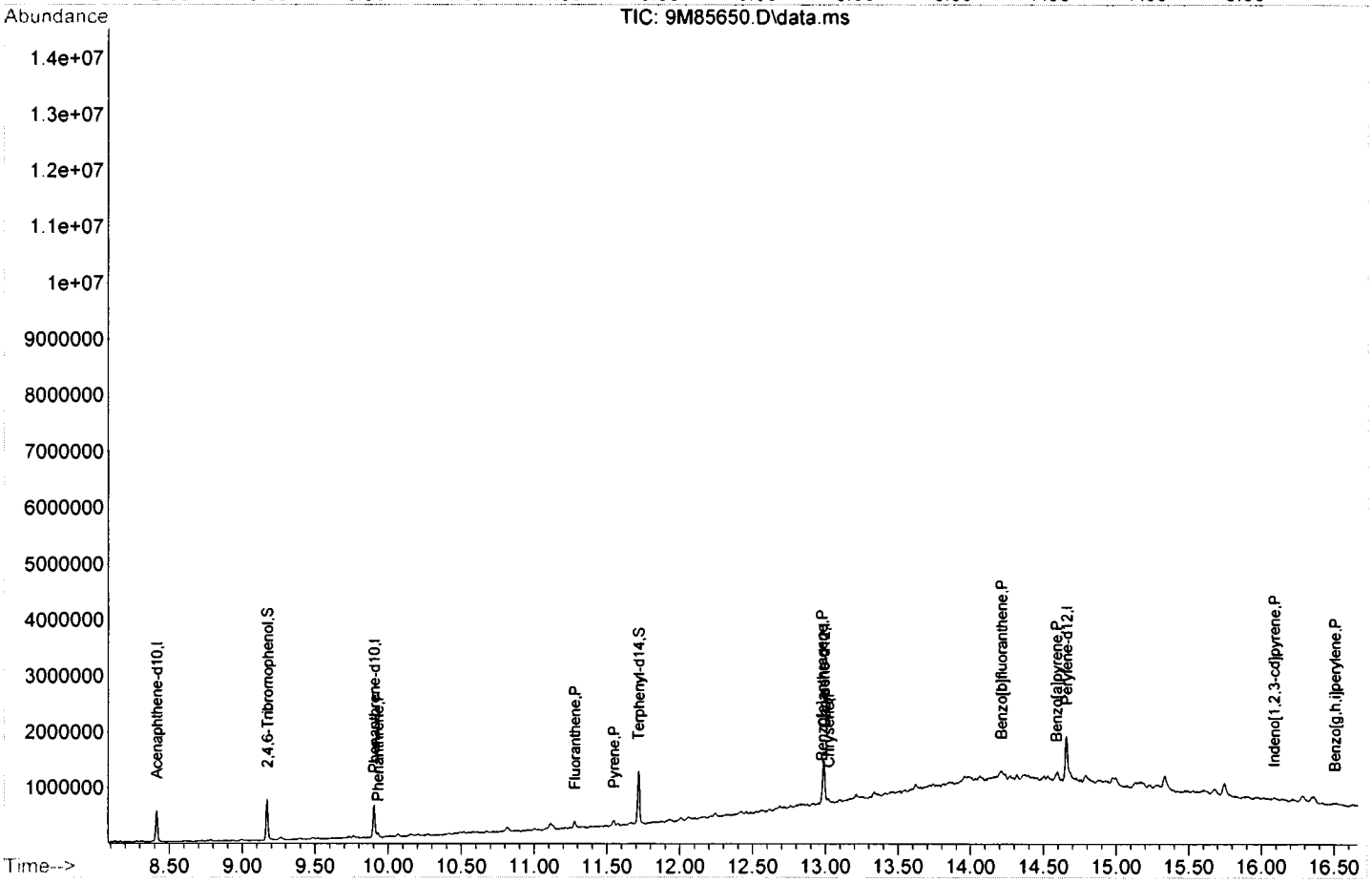
Quant QT Reviewed
SampleID : AD04394-006
Data File: 9M85650.D
Acq On : 05/30/18 17:07
Operator : AH/JB
Sam Mult : 1 Vial# : 22
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:14
Qt Upd On: 05/07/18 15:10
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00


Abundance
TIC: 9M85650.D\data.ms
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[b]fluoranthene,P
Perylene-d12,I
Indeno[1,2,3-cd]pyrene,P
Benzo[g,h,i]perylene,P
Time-->
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-007
Client Id: SB4_14.5_052318
Data File: 9M85651.D
Analysis Date: 05/30/18 17:31
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.039	0.042	218-01-9	Chrysene	0.039	0.25
83-32-9	Acenaphthene	0.039	0.042	53-70-3	Dibenzo[a,h]anthracene	0.039	0.041
208-96-8	Acenaphthylene	0.039	U	206-44-0	Fluoranthene	0.039	0.54
120-12-7	Anthracene	0.039	0.10	86-73-7	Fluorene	0.039	0.054
56-55-3	Benzo[a]anthracene	0.039	0.28	193-39-5	Indeno[1,2,3-cd]pyrene	0.039	U
50-32-8	Benzo[a]pyrene	0.039	0.22	91-20-3	Naphthalene	0.0098	0.027
205-99-2	Benzo[b]fluoranthene	0.039	0.31	85-01-8	Phenanthrene	0.039	0.38
191-24-2	Benzo[g,h,i]perylene	0.039	0.14	129-00-0	Pyrene	0.039	0.37
207-08-9	Benzo[k]fluoranthene	0.039	0.12				

Worksheet #: 466325 *Total Target Concentration* 2.9 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

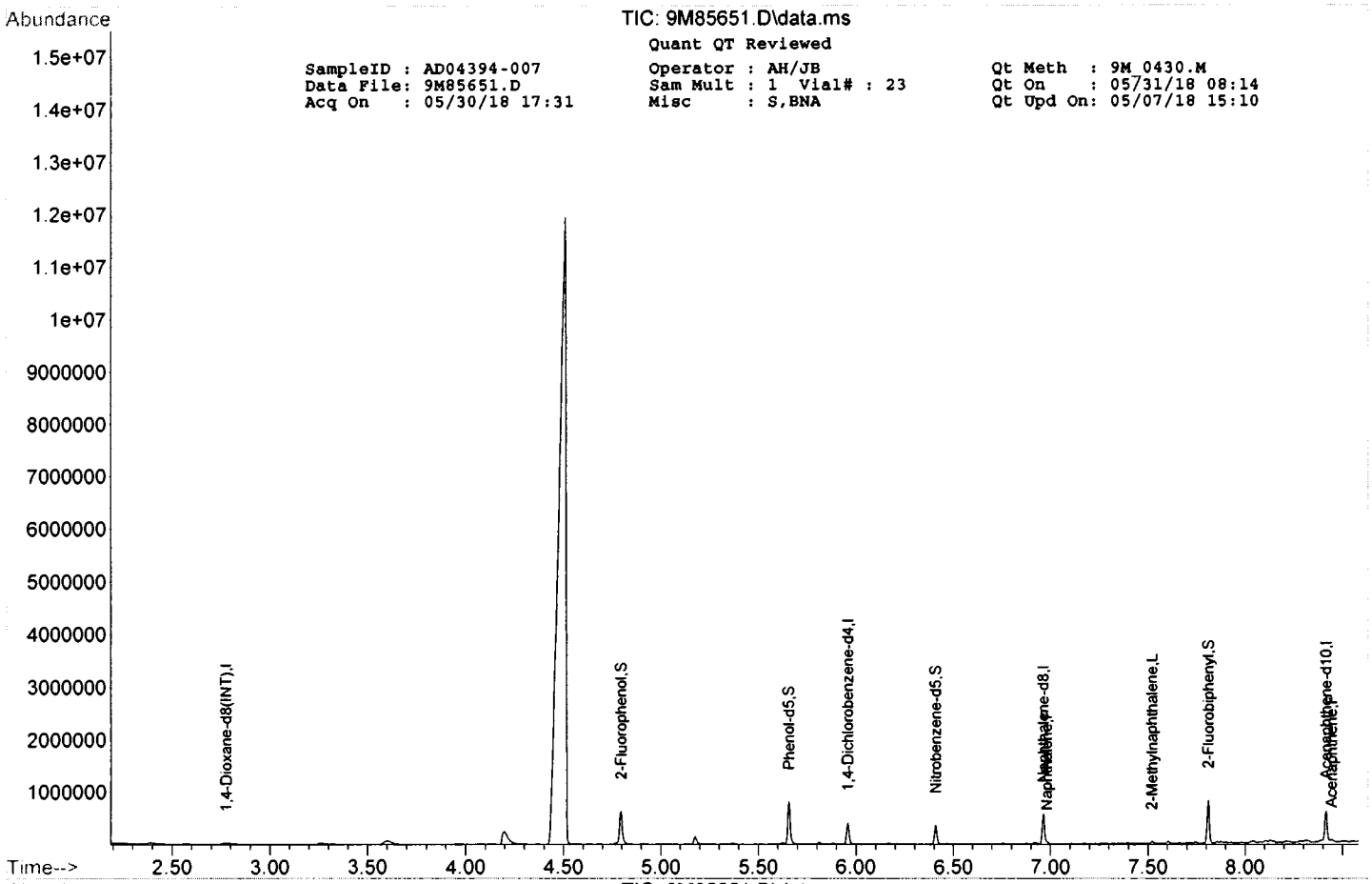
8052424 0165

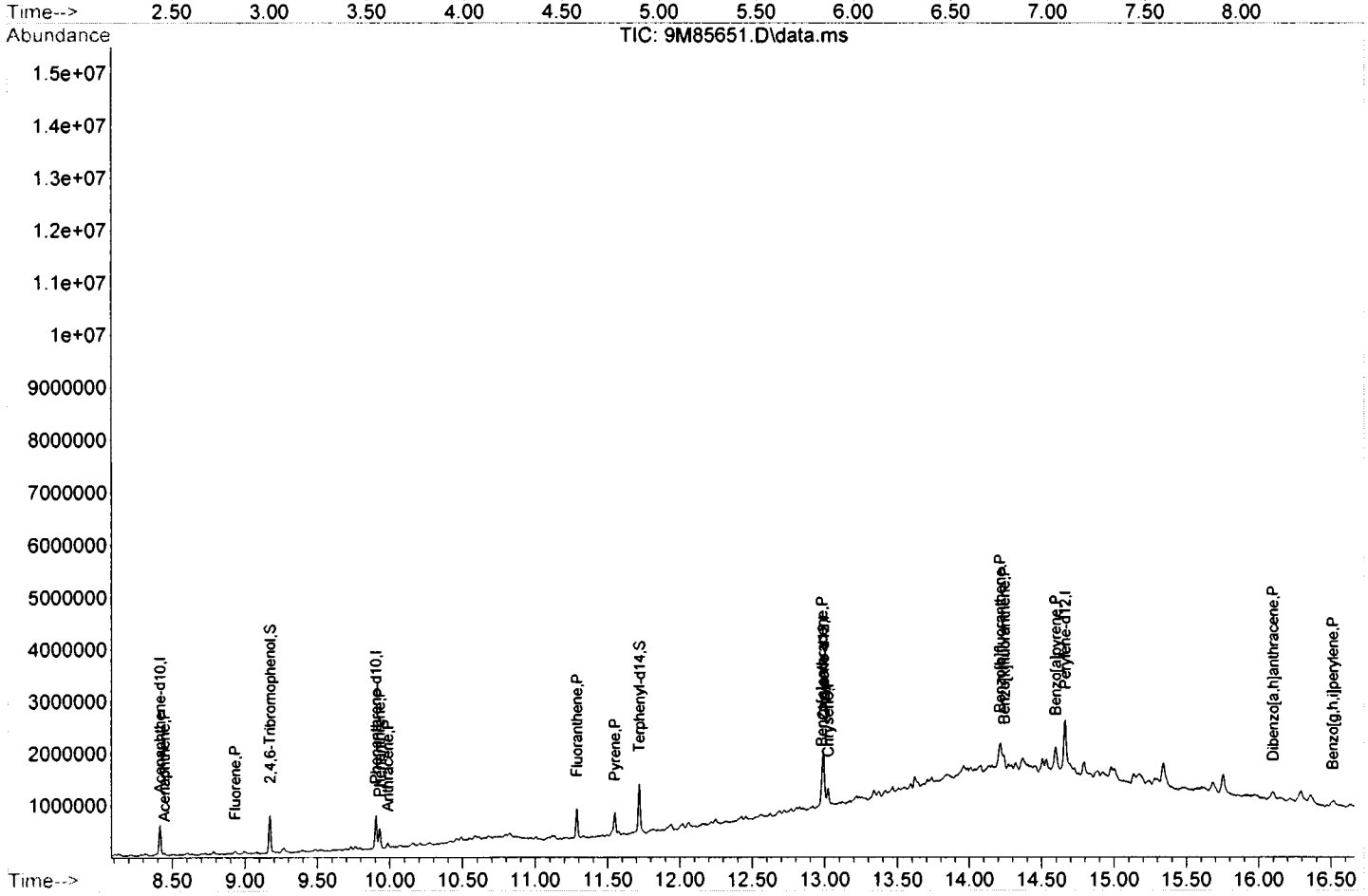
SampleID : AD04394-007 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85651.D Sam Mult : 1 Vial# : 23 Qt On : 05/31/18 08:14
Acq On : 05/30/18 17:31 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.775	96	29756	40.00	ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.957	152	49916	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	189454	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	113024	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	203711	40.00	ng	0.00
91) Chrysene-d12	12.990	240	304751	40.00	ng	0.00
103) Perylene-d12	14.661	264	337351	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	154492	86.29	ng	0.01
Spiked Amount 100.000			Recovery = 86.29%			
16) Phenol-d5	5.656	99	198463	87.55	ng	0.01
Spiked Amount 100.000			Recovery = 87.55%			
32) Nitrobenzene-d5	6.406	128	36605	48.45	ng	-0.01
Spiked Amount 50.000			Recovery = 96.90%			
55) 2-Fluorobiphenyl	7.810	172	190871	51.92	ng	-0.02
Spiked Amount 50.000			Recovery = 103.84%			
80) 2,4,6-Tribromophenol	9.171	330	60979	115.66	ng	0.00
Spiked Amount 100.000			Recovery = 115.66%			
94) Terphenyl-d14	11.720	244	241270	52.18	ng	0.00
Spiked Amount 50.000			Recovery = 104.36%			
Target Compounds						Qvalue
41) Naphthalene	6.980	128	8361	1.3532	ng	96
46) 2-Methylnaphthalene	7.520	142	8627	2.1633	ng	95
65) Acenaphthene	8.444	153	8464	2.1360	ng	82
72) Fluorene	8.932	166	12140	2.7472	ng	90
86) Phenanthrene	9.930	178	131464	19.4767	ng	99
87) Anthracene	9.986	178	36270	5.2318	ng	97
90) Fluoranthene	11.285	202	201955	27.7323	ng	87
92) Pyrene	11.549	202	173830	18.9356	ng	85
100) Benzo[a]anthracene	12.979	228	130789	14.2723	ng	98
101) Chrysene	13.021	228	117063	12.9132	ng	97
105) Benzo[b]fluoranthene	14.212	252	171699m	15.8245	ng	
106) Benzo[k]fluoranthene	14.240	252	67487m	5.9209	ng	
107) Benzo[a]pyrene	14.595	252	119095	11.1663	ng	91
109) Dibenzo[a,h]anthracene	16.098	278	20429m	2.1041	ng	
110) Benzo[g,h,i]perylene	16.510	276	68047	7.0722	ng	68

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


Abundance
TIC: 9M85651.D\data.ms
Quant QT Reviewed
SampleID : AD04394-007
Data File: 9M85651.D
Acq On : 05/30/18 17:31
Operator : AH/JB
Sam Mult : 1 Vial# : 23
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:14
Qt Upd On: 05/07/18 15:10
1.5e+07
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Methylnaphthalene,L
2-Fluorobiphenyl,S
Time-->
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00


Abundance
TIC: 9M85651.D\data.ms
1.5e+07
1.4e+07
1.3e+07
1.2e+07
1.1e+07
1e+07
9000000
8000000
7000000
6000000
5000000
4000000
3000000
2000000
1000000
Fluorene,P
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[a]pyrene,P
Dibenzo[a,h]anthracene,P
Benzo[g,h,i]perylene,P
Time-->
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-008
Client Id: SB3_7.0_052318
Data File: 9M85652.D
Analysis Date: 05/30/18 17:55
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 83

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.040	U	**218-01-9**	**Chrysene**	**0.040**	**0.075**
83-32-9	Acenaphthene	0.040	U	53-70-3	Dibenzo[a,h]anthracene	0.040	U
208-96-8	Acenaphthylene	0.040	U	**206-44-0**	**Fluoranthene**	**0.040**	**0.12**
120-12-7	Anthracene	0.040	U	86-73-7	Fluorene	0.040	U
56-55-3	**Benzo[a]anthracene**	**0.040**	**0.074**	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.040**	**0.043**
50-32-8	**Benzo[a]pyrene**	**0.040**	**0.062**	**91-20-3**	**Naphthalene**	**0.010**	**0.011**
205-99-2	**Benzo[b]fluoranthene**	**0.040**	**0.094**	**85-01-8**	**Phenanthrene**	**0.040**	**0.076**
191-24-2	**Benzo[g,h,i]perylene**	**0.040**	**0.049**	**129-00-0**	**Pyrene**	**0.040**	**0.095**
207-08-9	Benzo[k]fluoranthene	0.040	U				

Worksheet #: 466325 *Total Target Concentration* 0.7 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

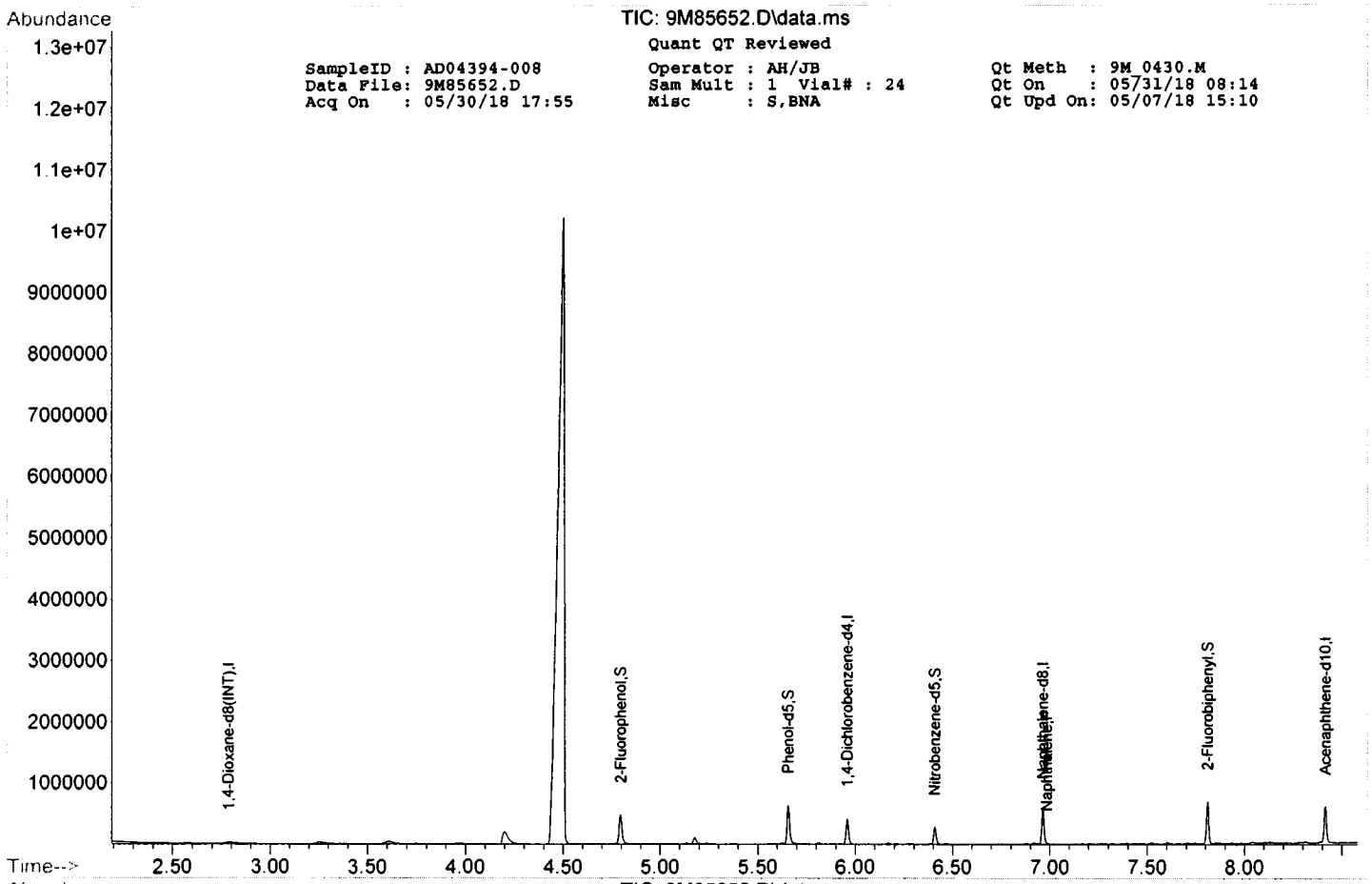
Quantitation Report (QT Reviewed) **8052424 0168**

SampleID : AD04394-008 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85652.D Sam Mult : 1 Vial# : 24 Qt On : 05/31/18 08:14
Acq On : 05/30/18 17:55 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.783	96	29085	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.957	152	51384	40.00	ng	-0.01
31) Naphthalene-d8	6.963	136	191086	40.00	ng	-0.02
50) Acenaphthene-d10	8.415	164	113816	40.00	ng	-0.01
77) Phenanthrene-d10	9.904	188	206879	40.00	ng	0.00
91) Chrysene-d12	12.990	240	282561	40.00	ng	0.00
103) Perylene-d12	14.658	264	306611	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	120348	68.77	ng	0.01
Spiked Amount 100.000			Recovery = 68.77%			
16) Phenol-d5	5.656	99	159179	71.84	ng	0.01
Spiked Amount 100.000			Recovery = 71.84%			
32) Nitrobenzene-d5	6.406	128	29093	38.17	ng	-0.01
Spiked Amount 50.000			Recovery = 76.34%			
55) 2-Fluorobiphenyl	7.810	172	156628	42.31	ng	-0.02
Spiked Amount 50.000			Recovery = 84.62%			
80) 2,4,6-Tribromophenol	9.171	330	50344	94.03	ng	0.00
Spiked Amount 100.000			Recovery = 94.03%			
94) Terphenyl-d14	11.720	244	199350	46.50	ng	0.00
Spiked Amount 50.000			Recovery = 93.00%			
Target Compounds						Qvalue
41) Naphthalene	6.983	128	3335	0.5351	ng	95
86) Phenanthrene	9.930	178	25833	3.7686	ng	98
90) Fluoranthene	11.291	202	44698	6.0439	ng	87
92) Pyrene	11.549	202	40180	4.7206	ng	85
100) Benzo[a]anthracene	12.981	228	31295	3.6832	ng	98
101) Chrysene	13.021	228	31445	3.7411	ng	96
105) Benzo[b]fluoranthene	14.209	252	45987m	4.6633	ng	
107) Benzo[a]pyrene	14.592	252	29754	3.0694	ng	88
108) Indeno[1,2,3-cd]pyrene	16.090	276	22258	2.1338	ng	71
110) Benzo[g,h,i]perylene	16.505	276	21207m	2.4250	ng	

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


Abundance
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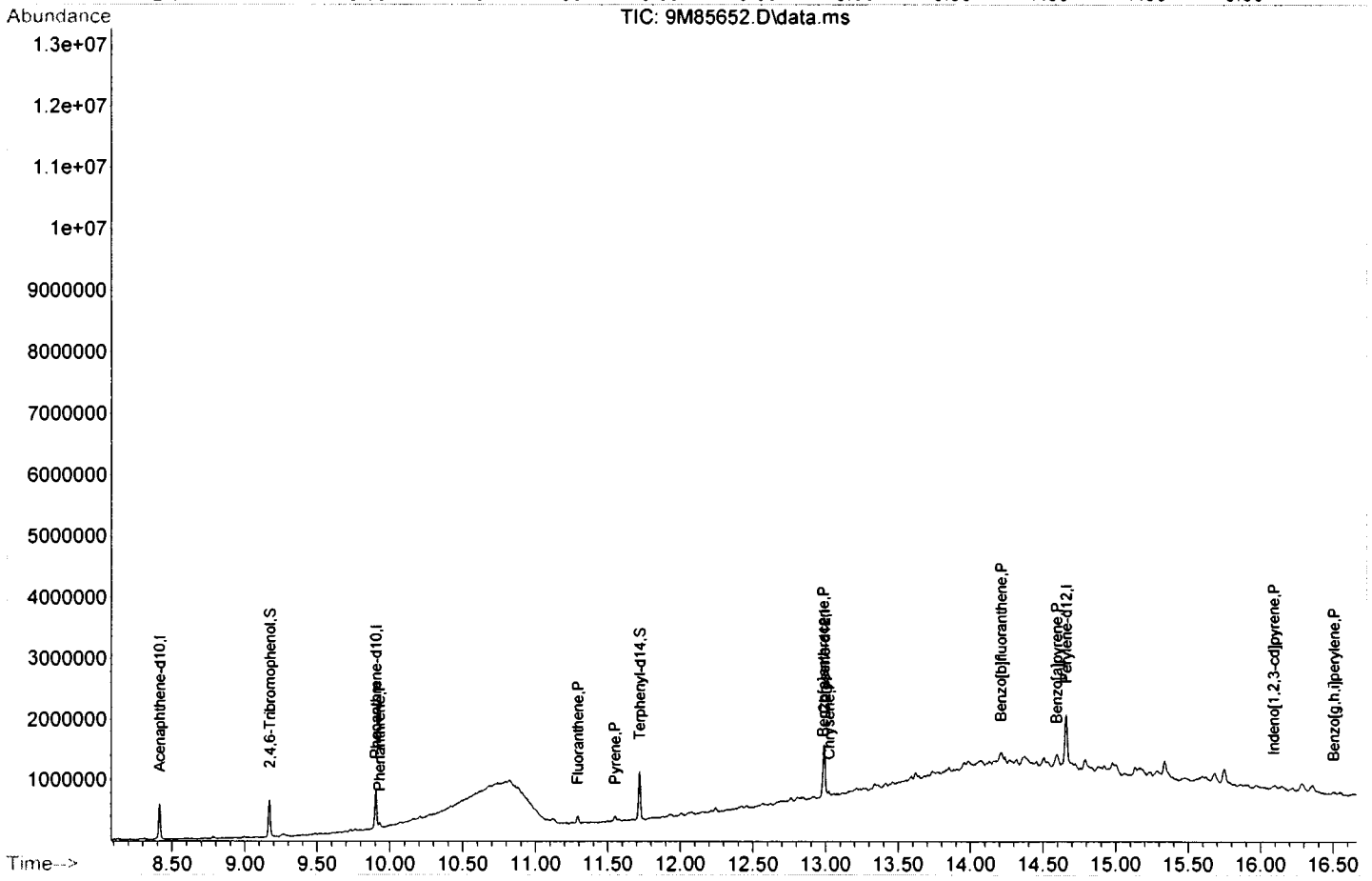
SampleID : AD04394-008
Data File: 9M85652.D
Acq On : 05/30/18 17:55
Operator : AH/JB
Sam Mult : 1 Vial# : 24
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/31/18 08:14
Qt Upd On: 05/07/18 15:10
1.4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Time-->


Abundance
TIC: 9M85652.D\data.ms
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Benzo[b]fluoranthene,P
Indeno[1,2,3-cd]pyrene,P
Benzo[g,h,i]perylene,P
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-009
Client Id: SB8_8.0_052318
Data File: 7M92011.D
Analysis Date: 05/30/18 09:46
Date Rec/Extracted: 05/24/18-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.037	U	218-01-9	Chrysene	0.037	U
83-32-9	Acenaphthene	0.037	U	53-70-3	Dibenzo[a,h]anthracene	0.037	U
208-96-8	Acenaphthylene	0.037	U	206-44-0	Fluoranthene	0.037	U
120-12-7	Anthracene	0.037	U	86-73-7	Fluorene	0.037	U
56-55-3	Benzo[a]anthracene	0.037	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.037	U
50-32-8	Benzo[a]pyrene	0.037	U	91-20-3	Naphthalene	0.0094	U
205-99-2	Benzo[b]fluoranthene	0.037	U	85-01-8	Phenanthrene	0.037	U
191-24-2	Benzo[g,h,i]perylene	0.037	U	129-00-0	Pyrene	0.037	U
207-08-9	Benzo[k]fluoranthene	0.037	U				

Worksheet #: 466325

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

8052424 0171

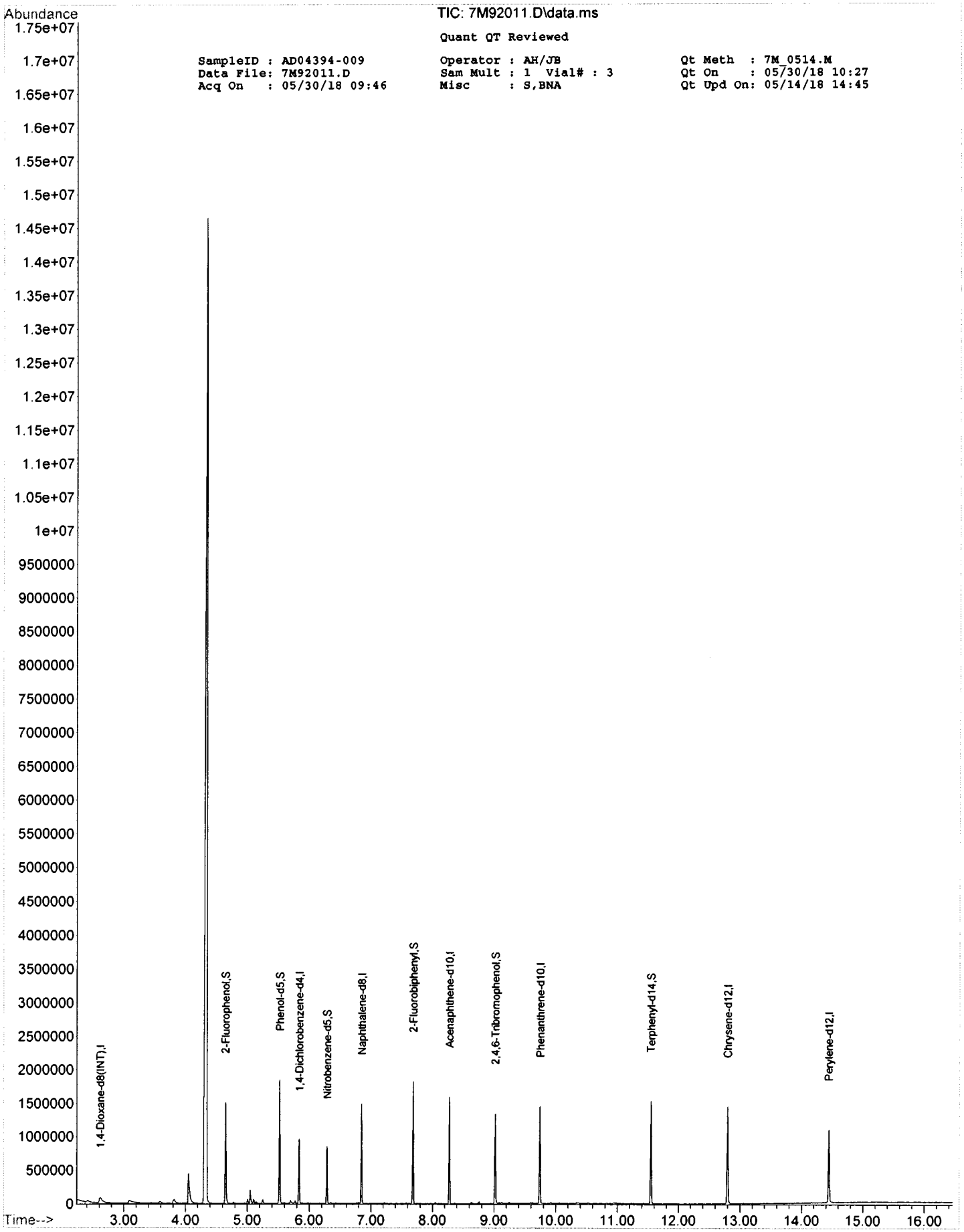
SampleID : AD04394-009 Operator : AH/JB Qt Meth : 7M_0514.M
Data File: 7M92011.D Sam Mult : 1 Vial# : 3 Qt On : 05/30/18 10:27
Acq On : 05/30/18 09:46 Misc : S,BNA Qt Upd On: 05/14/18 14:45

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-30-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.617	96	72596	40.00 ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.838	152	135326	40.00 ng	0.00
31) Naphthalene-d8	6.848	136	518606	40.00 ng	0.00
50) Acenaphthene-d10	8.274	164	326676	40.00 ng	-0.01
77) Phenanthrene-d10	9.743	188	560824	40.00 ng	-0.01
91) Chrysene-d12	12.799	240	550157	40.00 ng	-0.01
103) Perylene-d12	14.444	264	452160	40.00 ng	0.00
System Monitoring Compounds					
11) 2-Fluorophenol	4.647	112	382278	84.66 ng	-0.01
Spiked Amount 100.000			Recovery = 84.66%		
16) Phenol-d5	5.523	99	539219	92.71 ng	0.00
Spiked Amount 100.000			Recovery = 92.71%		
32) Nitrobenzene-d5	6.287	128	94736	42.39 ng	0.00
Spiked Amount 50.000			Recovery = 84.78%		
55) 2-Fluorobiphenyl	7.686	172	458187	40.73 ng	0.00
Spiked Amount 50.000			Recovery = 81.46%		
80) 2,4,6-Tribromophenol	9.017	330	111920	84.95 ng	-0.01
Spiked Amount 100.000			Recovery = 84.95%		
94) Terphenyl-d14	11.544	244	453918	48.21 ng	-0.01
Spiked Amount 50.000			Recovery = 96.42%		

Target Compounds Qvalue

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


Abundance
TIC: 7M92011.D\data.ms
Quant QT Reviewed
SampleID : AD04394-009
Data File: 7M92011.D
Acq On : 05/30/18 09:46
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : S,BNA
Qt Meth : 7M_0514.M
Qt On : 05/30/18 10:27
Qt Upd On: 05/14/18 14:45
1.4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD04394-010
Client Id: FB01_052318
Data File: 7M91980.D
Analysis Date: 05/28/18 16:41
Date Rec/Extracted: 05/24/18-05/26/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	2.0	U	218-01-9	Chrysene	2.0	U
83-32-9	Acenaphthene	2.0	U	53-70-3	Dibenzo[a,h]anthracene	2.0	U
208-96-8	Acenaphthylene	2.0	U	206-44-0	Fluoranthene	2.0	U
120-12-7	Anthracene	2.0	U	86-73-7	Fluorene	2.0	U
56-55-3	Benzo[a]anthracene	2.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U
50-32-8	Benzo[a]pyrene	2.0	U	91-20-3	Naphthalene	0.50	U
205-99-2	Benzo[b]fluoranthene	2.0	U	85-01-8	Phenanthrene	2.0	U
191-24-2	Benzo[g,h,i]perylene	2.0	U	129-00-0	Pyrene	2.0	U
207-08-9	Benzo[k]fluoranthene	2.0	U				

Worksheet #: 466325 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

8052424 0174

SampleID : AD04394-010 Operator : AH/JB Qt Meth : 7M_0514.M
Data File: 7M91980.D Sam Mult : 1 Vial# : 13 Qt On : 05/29/18 07:02
Acq On : 05/28/18 16:41 Misc : A,BNA Qt Upd On: 05/14/18 14:45

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-28-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.622	96	80234	40.00 ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.838	152	155864	40.00 ng	0.00
31) Naphthalene-d8	6.842	136	600662	40.00 ng	-0.01
50) Acenaphthene-d10	8.269	164	378778	40.00 ng	-0.02
77) Phenanthrene-d10	9.738	188	648919	40.00 ng	-0.02
91) Chrysene-d12	12.799	240	655528	40.00 ng	-0.01
103) Perylene-d12	14.428	264	535867	40.00 ng	-0.02
System Monitoring Compounds					
11) 2-Fluorophenol	0.000	112	0	0.00 ng	
Spiked Amount 100.000			Recovery = 0.00%		
16) Phenol-d5	0.000	99	0	0.00 ng	
Spiked Amount 100.000			Recovery = 0.00%		
32) Nitrobenzene-d5	6.287	128	109451	42.29 ng	0.00
Spiked Amount 50.000			Recovery = 84.58%		
55) 2-Fluorobiphenyl	7.681	172	513150	39.34 ng	-0.01
Spiked Amount 50.000			Recovery = 78.68%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00 ng	
Spiked Amount 100.000			Recovery = 0.00%		
94) Terphenyl-d14	11.544	244	581027	51.79 ng	-0.01
Spiked Amount 50.000			Recovery = 103.58%		

Target Compounds Qvalue

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

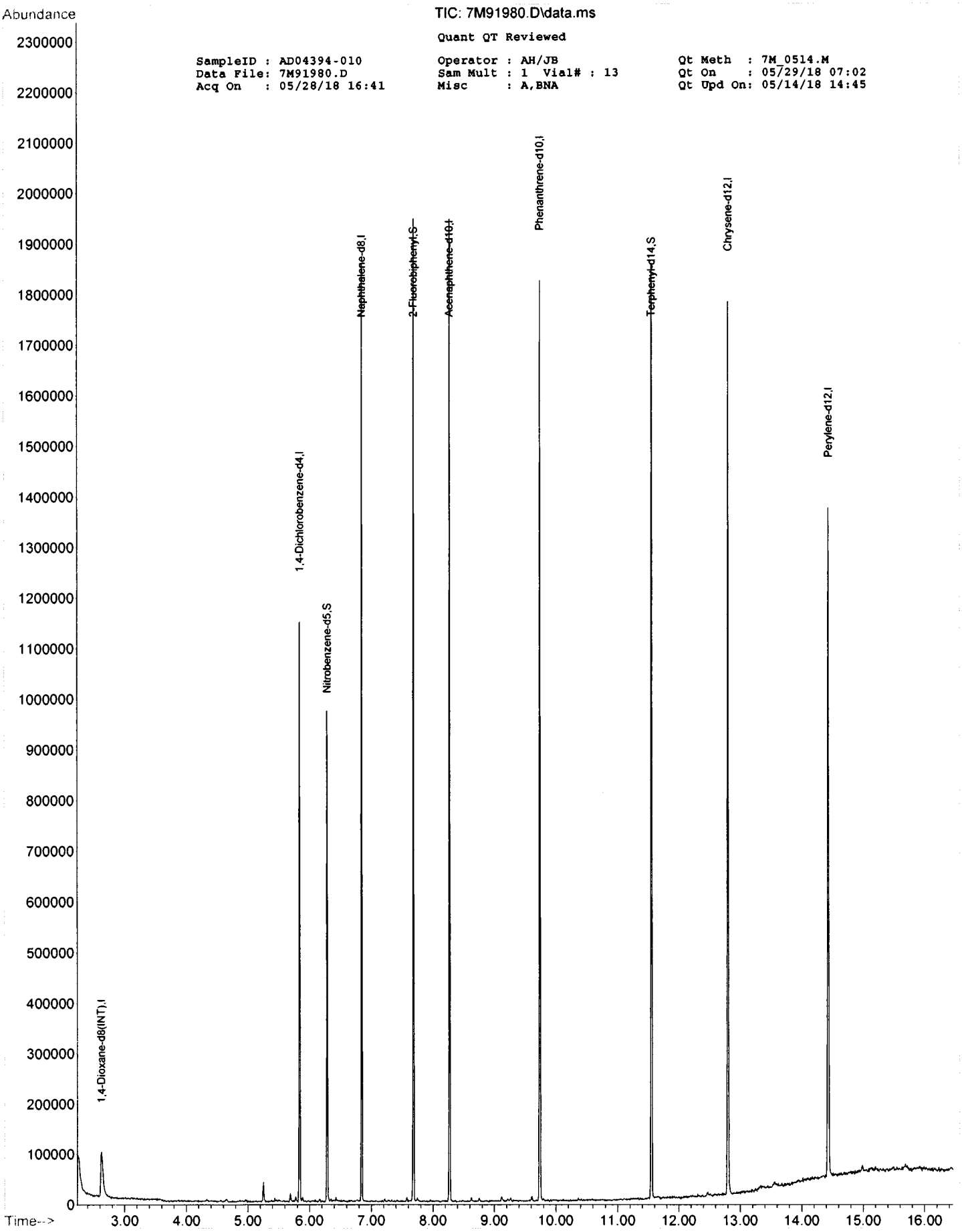
TIC: 7M91980.D\data.ms

Quant QT Reviewed

SampleID : AD04394-010
Data File: 7M91980.D
Acq On : 05/28/18 16:41

Operator : AH/JB
Sam Mult : 1 Vial# : 13
Misc : A,BNA

Qt Meth : 7M_0514.M
Qt On : 05/29/18 07:02
Qt Upd On: 05/14/18 14:45



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB68102
Client Id:
Data File: 7M91970.D
Analysis Date: 05/28/18 12:36
Date Rec/Extracted: NA-05/26/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	2.0	U	218-01-9	Chrysene	2.0	U
83-32-9	Acenaphthene	2.0	U	53-70-3	Dibenzo[a,h]anthracene	2.0	U
208-96-8	Acenaphthylene	2.0	U	206-44-0	Fluoranthene	2.0	U
120-12-7	Anthracene	2.0	U	86-73-7	Fluorene	2.0	U
56-55-3	Benzo[a]anthracene	2.0	U	193-39-5	Indeno[1,2,3-cd]pyrene	2.0	U
50-32-8	Benzo[a]pyrene	2.0	U	91-20-3	Naphthalene	0.50	U
205-99-2	Benzo[b]fluoranthene	2.0	U	85-01-8	Phenanthrene	2.0	U
191-24-2	Benzo[g,h,i]perylene	2.0	U	129-00-0	Pyrene	2.0	U
207-08-9	Benzo[k]fluoranthene	2.0	U				

Worksheet #: 466325 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT/LSC Reviewed) **8052424 0177**

SampleID : WMB68102 Operator : AH/JB Qt Meth : 7M_0514.M
Data File: 7M91970.D Sam Mult : 1 Vial# : 3 Qt On : 05/29/18 07:02
Acq On : 05/28/18 12:36 Misc : A,BNA Qt Upd On: 05/14/18 14:45

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-28-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.606	96	69553	40.00 ng	-0.04
21) 1,4-Dichlorobenzene-d4	5.833	152	138579	40.00 ng	-0.01
31) Naphthalene-d8	6.848	136	518851	40.00 ng	0.00
50) Acenaphthene-d10	8.279	164	328929	40.00 ng	0.00
77) Phenanthrene-d10	9.743	188	576114	40.00 ng	-0.01
91) Chrysene-d12	12.804	240	560851	40.00 ng	0.00
103) Perylene-d12	14.434	264	445743	40.00 ng	-0.01
System Monitoring Compounds					
11) 2-Fluorophenol	4.641	112	314918	72.79 ng	-0.02
Spiked Amount 100.000			Recovery = 72.79%		
16) Phenol-d5	5.518	99	276156	49.56 ng	-0.01
Spiked Amount 100.000			Recovery = 49.56%		
32) Nitrobenzene-d5	6.281	128	116206	51.98 ng	-0.01
Spiked Amount 50.000			Recovery = 103.96%		
55) 2-Fluorobiphenyl	7.686	172	552292	48.76 ng	0.00
Spiked Amount 50.000			Recovery = 97.52%		
80) 2,4,6-Tribromophenol	9.022	330	129607	94.60 ng	0.00
Spiked Amount 100.000			Recovery = 94.60%		
94) Terphenyl-d14	11.554	244	546253	56.91 ng	0.00
Spiked Amount 50.000			Recovery = 113.82%		

Target Compounds Qvalue

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

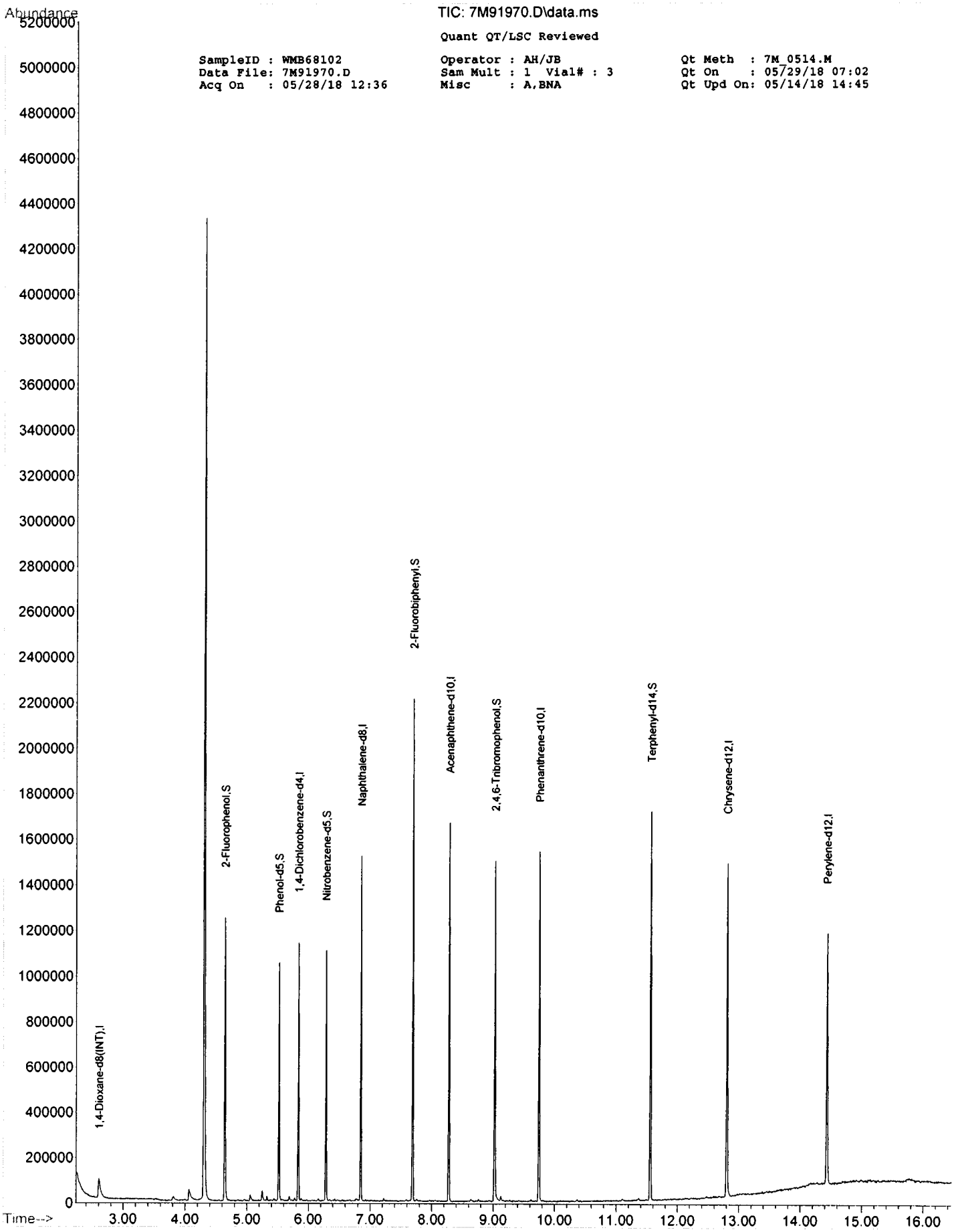
TIC: 7M91970.D\data.ms

Quant QT/LSC Reviewed

SampleID : WMB68102
Data File: 7M91970.D
Acq On : 05/28/18 12:36

Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA

Qt Meth : 7M_0514.M
Qt On : 05/29/18 07:02
Qt Upd On: 05/14/18 14:45



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB68114
Client Id:
Data File: 9M85632.D
Analysis Date: 05/30/18 09:49
Date Rec/Extracted: NA-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
83-32-9	Acenaphthene	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
208-96-8	Acenaphthylene	0.033	U	206-44-0	Fluoranthene	0.033	U
120-12-7	Anthracene	0.033	U	86-73-7	Fluorene	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U	91-20-3	Naphthalene	0.0083	U
205-99-2	Benzo[b]fluoranthene	0.033	U	85-01-8	Phenanthrene	0.033	U
191-24-2	Benzo[g,h,i]perylene	0.033	U	129-00-0	Pyrene	0.033	U
207-08-9	Benzo[k]fluoranthene	0.033	U				

Worksheet #: 466325 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT/LSC Reviewed) **8052424 0180**

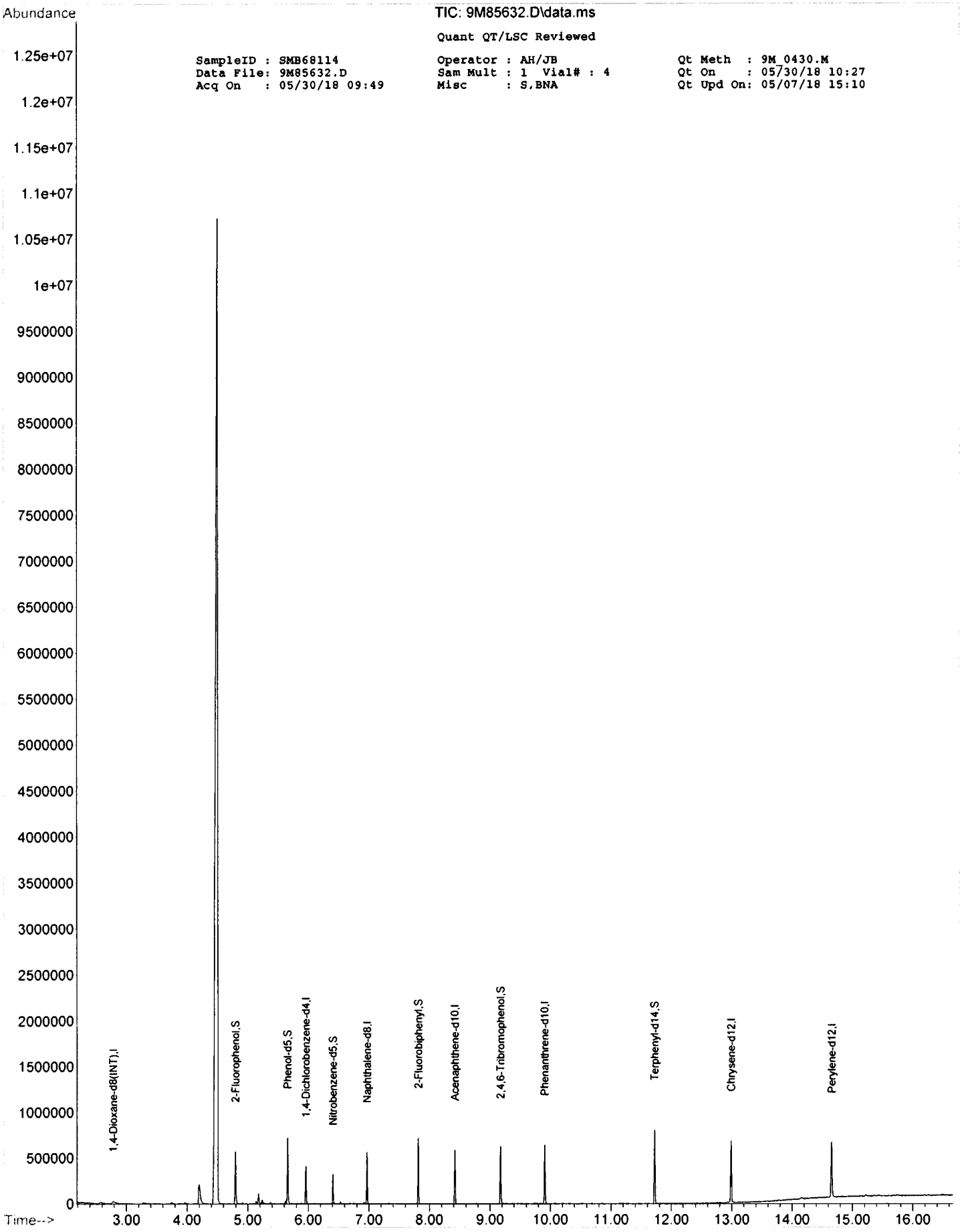
SampleID : SMB68114 Operator : AH/JB Qt Meth : 9M_0430.M
Data File: 9M85632.D Sam Mult : 1 Vial# : 4 Qt On : 05/30/18 10:27
Acq On : 05/30/18 09:49 Misc : S,BNA Qt Upd On: 05/07/18 15:10

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-30-18\
Qt Path : G:\GCMSDATA\2018\GCMS_9\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.783	96	28959	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.960	152	51592	40.00	ng	-0.01
31) Naphthalene-d8	6.969	136	196701	40.00	ng	-0.02
50) Acenaphthene-d10	8.418	164	119418	40.00	ng	-0.01
77) Phenanthrene-d10	9.907	188	217808	40.00	ng	0.00
91) Chrysene-d12	12.990	240	243230	40.00	ng	0.00
103) Perylene-d12	14.658	264	248025	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.795	112	139502	80.07	ng	0.01
Spiked Amount 100.000			Recovery = 80.07%			
16) Phenol-d5	5.656	99	189145	85.74	ng	0.01
Spiked Amount 100.000			Recovery = 85.74%			
32) Nitrobenzene-d5	6.409	128	34021	43.37	ng	0.00
Spiked Amount 50.000			Recovery = 86.74%			
55) 2-Fluorobiphenyl	7.816	172	176160	45.35	ng	-0.01
Spiked Amount 50.000			Recovery = 90.70%			
80) 2,4,6-Tribromophenol	9.177	330	56250	99.79	ng	0.00
Spiked Amount 100.000			Recovery = 99.79%			
94) Terphenyl-d14	11.720	244	220952	59.87	ng	0.00
Spiked Amount 50.000			Recovery = 119.74%			

Target Compounds Qvalue

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


Abundance
TIC: 9M85632.D\data.ms
Quant QT/LSC Reviewed
SampleID : SMB68114
Data File: 9M85632.D
Acq On : 05/30/18 09:49
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : S,BNA
Qt Meth : 9M_0430.M
Qt On : 05/30/18 10:27
Qt Upd On: 05/07/18 15:10
1.25e+07
1.2e+07
1.15e+07
1.1e+07
1.05e+07
1e+07
9500000
9000000
8500000
8000000
7500000
7000000
6500000
6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB68114
Client Id:
Data File: 7M92004.D
Analysis Date: 05/29/18 17:35
Date Rec/Extracted: NA-05/29/18
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
91-57-6	2-Methylnaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
83-32-9	Acenaphthene	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
208-96-8	Acenaphthylene	0.033	U	206-44-0	Fluoranthene	0.033	U
120-12-7	Anthracene	0.033	U	86-73-7	Fluorene	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U	91-20-3	Naphthalene	0.0083	U
205-99-2	Benzo[b]fluoranthene	0.033	U	85-01-8	Phenanthrene	0.033	U
191-24-2	Benzo[g,h,i]perylene	0.033	U	129-00-0	Pyrene	0.033	U
207-08-9	Benzo[k]fluoranthene	0.033	U				

Worksheet #: 466325 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT/LSC Reviewed) **8052424 0183**

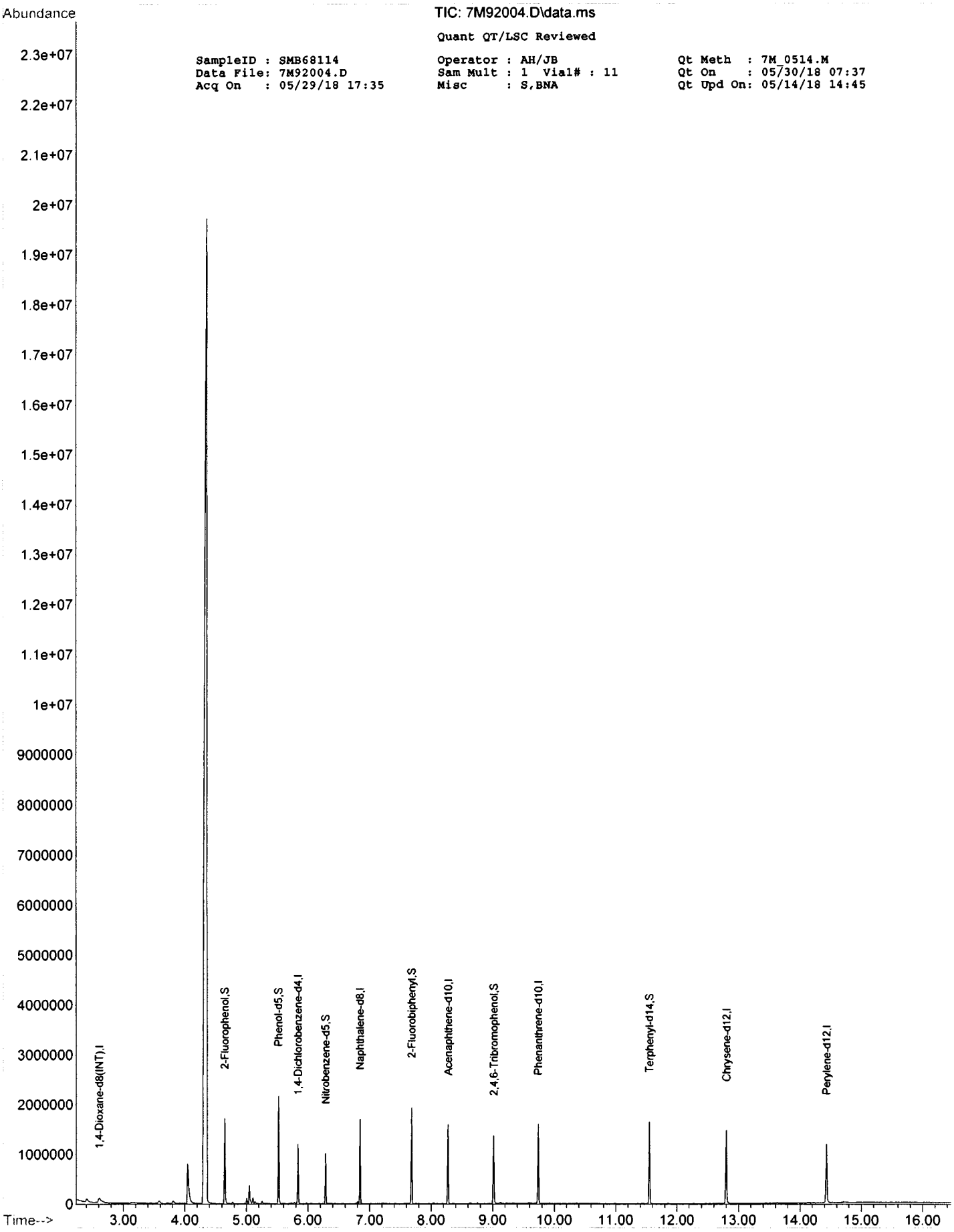
SampleID : SMB68114 Operator : AH/JB Qt Meth : 7M_0514.M
Data File: 7M92004.D Sam Mult : 1 Vial# : 11 Qt On : 05/30/18 07:37
Acq On : 05/29/18 17:35 Misc : S,BNA Qt Upd On: 05/14/18 14:45

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-29-18\
Qt Path : G:\GCMSDATA\2018\GCMS_7\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.611	96	86382	40.00 ng	-0.04
21) 1,4-Dichlorobenzene-d4	5.833	152	148407	40.00 ng	-0.01
31) Naphthalene-d8	6.842	136	552964	40.00 ng	-0.01
50) Acenaphthene-d10	8.274	164	334597	40.00 ng	-0.01
77) Phenanthrene-d10	9.738	188	552583	40.00 ng	-0.02
91) Chrysene-d12	12.799	240	568648	40.00 ng	-0.01
103) Perylene-d12	14.428	264	472548	40.00 ng	-0.02
System Monitoring Compounds					
11) 2-Fluorophenol	4.647	112	405263	75.43 ng	-0.01
Spiked Amount 100.000			Recovery = 75.43%		
16) Phenol-d5	5.517	99	580522	83.88 ng	-0.01
Spiked Amount 100.000			Recovery = 83.88%		
32) Nitrobenzene-d5	6.281	128	104335	43.79 ng	-0.01
Spiked Amount 50.000			Recovery = 87.58%		
55) 2-Fluorobiphenyl	7.681	172	473330	41.08 ng	-0.01
Spiked Amount 50.000			Recovery = 82.16%		
80) 2,4,6-Tribromophenol	9.017	330	114338	87.76 ng	-0.01
Spiked Amount 100.000			Recovery = 87.76%		
94) Terphenyl-d14	11.544	244	477836	49.10 ng	-0.01
Spiked Amount 50.000			Recovery = 98.20%		

Target Compounds Qvalue

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


Abundance
TIC: 7M92004.D\data.ms
Quant QT/LSC Reviewed
SampleID : SMB68114
Data File: 7M92004.D
Acq On : 05/29/18 17:35
Operator : AH/JB
Sam Mult : 1 Vial# : 11
Misc : S,BNA
Qt Meth : 7M_0514.M
Qt On : 05/30/18 07:37
Qt Upd On: 05/14/18 14:45
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

FORM2

Surrogate Recovery Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
7M91970.D	WMB68102	A	05/28/18 12:36	1		NA	NA	104	98	NA	114
9M85632.D	SMB68114	S	05/30/18 09:49	1		NA	NA	87	91	NA	120
7M92031.D	AD04394-001	S	05/30/18 17:36	1		NA	NA	71	69	NA	87
9M85648.D	AD04394-002	S	05/30/18 16:20	1		NA	NA	94	102	NA	113
9M85640.D	AD04394-003	S	05/30/18 12:57	1		NA	NA	68	71	NA	75
9M85653.D	AD04394-004(5X)	S	05/30/18 18:19	5		NA	NA	91	93	NA	103
9M85649.D	AD04394-005	S	05/30/18 16:43	1		NA	NA	98	105	NA	109
9M85650.D	AD04394-006	S	05/30/18 17:07	1		NA	NA	97	106	NA	121
9M85651.D	AD04394-007	S	05/30/18 17:31	1		NA	NA	97	104	NA	104
9M85652.D	AD04394-008	S	05/30/18 17:55	1		NA	NA	76	85	NA	93
7M92011.D	AD04394-009	S	05/30/18 09:46	1		NA	NA	85	81	NA	96
7M91980.D	AD04394-010	A	05/28/18 16:41	1		NA	NA	85	79	NA	104
10M69016.D	WMB68102(MS)	A	05/28/18 12:37	1		NA	NA	104	99	NA	114
10M69018.D	AD04391-002	A	05/28/18 13:22	1		NA	NA	91	89	NA	95
10M69019.D	AD04391-002(MS)	A	05/28/18 13:44	1		NA	NA	143 *	130 *	NA	148 *
10M69020.D	AD04391-002(MSD)	A	05/28/18 14:06	1		NA	NA	105	102	NA	111
7M92003.D	SMB68114(MS)	S	05/29/18 17:11	1		NA	NA	82	78	NA	91
7M92021.D	AD04398-003(5X)	S	05/30/18 13:40	5		NA	NA	91	91	NA	107
7M92022.D	AD04398-004(5X)(MS:A	S	05/30/18 14:04	5		NA	NA	82	84	NA	101
7M92023.D	AD04398-005(5X)(MSD:	S	05/30/18 14:27	5		NA	NA	81	79	NA	93

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

Form3
Recovery Data Laboratory Limits
QC Batch: WMB68102

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M69016.D	WMB68102(MS)	5/28/2018 12:37:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	51.1475	0	100	51	20	160
Pyridine	1	30.7808	0	100	31	5	150
N-Nitrosodimethylamine	1	68.474	0	100	68	50	150
Benzaldehyde	1	5.2807	0	100	5.3*	20	150
Aniline	1	23.7817	0	100	24	20	150
Pentachloroethane	1	90.5697	0	100	91	50	130
bis(2-Chloroethyl)ether	1	89.3525	0	100	89	50	130
N-Decane	1	80.6288	0	100	81	40	130
1,3-Dichlorobenzene	1	85.3949	0	100	85	50	130
1,4-Dichlorobenzene	1	86.2462	0	100	86	50	130
1,2-Dichlorobenzene	1	87.2848	0	100	87	50	130
Benzyl alcohol	1	93.4665	0	100	93	70	130
bis(2-chloroisopropyl)ether	1	82.3377	0	100	82	40	130
Acetophenone	1	109.5887	0	100	110	50	130
Hexachloroethane	1	83.7315	0	100	84	50	130
N-Nitroso-di-n-propylamine	1	90.3249	0	100	90	50	130
Nitrobenzene	1	90.4094	0	100	90	70	130
Isophorone	1	89.7707	0	100	90	70	130
Benzoic Acid	1	51.1204	0	100	51	20	130
bis(2-Chloroethoxy)methane	1	89.9658	0	100	90	70	130
1,2,4-Trichlorobenzene	1	90.2787	0	100	90	50	130
Naphthalene	1	90.754	0	100	91	70	130
4-Chloroaniline	1	21.7108	0	100	22*	50	150
Hexachlorobutadiene	1	88.9256	0	100	89	70	130
Caprolactam	1	59.2359	0	100	59	20	130
2-Methylnaphthalene	1	105.1563	0	100	105	70	130
1-Methylnaphthalene	1	104.2925	0	100	104	70	130
1,1'-Biphenyl	1	93.0991	0	100	93	70	130
1,2,4,5-Tetrachlorobenzene	1	105.8059	0	100	106	70	130
Hexachlorocyclopentadiene	1	88.7191	0	100	89	20	130
2-Chloronaphthalene	1	90.5937	0	100	91	70	130
1,4-Dimethylnaphthalene	1	87.1057	0	100	87	70	130
Diphenyl Ether	1	109.095	0	100	109	70	130
2-Nitroaniline	1	109.3201	0	100	109	50	150
Coumarin	1	97.8432	0	100	98	70	130
Acenaphthylene	1	98.6324	0	100	99	70	130
Dimethylphthalate	1	94.1257	0	100	94	70	130
2,6-Dinitrotoluene	1	97.13	0	100	97	70	130
Acenaphthene	1	93.5809	0	100	94	70	130
3-Nitroaniline	1	24.8122	0	100	25*	50	150
Dibenzofuran	1	109.6046	0	100	110	70	130
2,4-Dinitrotoluene	1	101.3935	0	100	101	40	130
Fluorene	1	95.3195	0	100	95	70	130
4-Chlorophenyl-phenylether	1	95.2927	0	100	95	70	130
Diethylphthalate	1	98.7332	0	100	99	50	130
4-Nitroaniline	1	89.8671	0	100	90	50	150
Atrazine	1	80.7681	0	100	81	50	130
n-Nitrosodiphenylamine	1	63.4491	0	100	63	50	130
1,2-Diphenylhydrazine	1	92.8271	0	100	93	70	130
4-Bromophenyl-phenylether	1	96.8246	0	100	97	70	130
Hexachlorobenzene	1	93.6798	0	100	94	70	130
N-Octadecane	1	94.9936	0	100	95	70	130
Phenanthrene	1	91.7427	0	100	92	70	130
Anthracene	1	90.5329	0	100	91	70	130
Carbazole	1	77.9397	0	100	78	70	130
Di-n-butylphthalate	1	96.7436	0	100	97	70	130
Fluoranthene	1	97.3516	0	100	97	70	130
Pyrene	1	98.4098	0	100	98	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	96.8896	0	100	97	50	130
3,3'-Dichlorobenzidine	1	12.1053	0	100	12	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB68102

Benzo[a]anthracene	1	97.4735	0	100	97	70	130
Chrysene	1	94.8379	0	100	95	50	130
bis(2-Ethylhexyl)phthalate	1	101.4212	0	100	101	70	130
Di-n-octylphthalate	1	112.9267	0	100	113	70	130
Benzo[b]fluoranthene	1	106.5876	0	100	107	70	130
Benzo[k]fluoranthene	1	104.5249	0	100	105	70	130
Benzo[a]pyrene	1	95.8607	0	100	96	70	130
Indeno[1,2,3-cd]pyrene	1	111.3119	0	100	111	70	130
Dibenzo[a,h]anthracene	1	109.1429	0	100	109	70	130
Benzo[g,h,i]perylene	1	99.4672	0	100	99	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M92003.D	SMB68114(MS)	5/29/2018 5:11:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	14.5772	0	50	29	1	150
N-Nitrosodimethylamine	1	30.4858	0	50	61	50	130
Benzaldehyde	1	37.6183	0	50	75	20	150
Aniline	1	10.7947	0	50	22	20	150
Pentachloroethane	1	31.3538	0	50	63	50	130
bis(2-Chloroethyl)ether	1	32.9581	0	50	66	50	130
N-Decane	1	26.1363	0	50	52	20	130
1,3-Dichlorobenzene	1	28.9708	0	50	58*	60	130
1,4-Dichlorobenzene	1	29.9529	0	50	60	60	130
1,2-Dichlorobenzene	1	30.1592	0	50	60	50	130
Benzyl alcohol	1	34.4279	0	50	69	20	130
bis(2-chloroisopropyl)ether	1	28.4119	0	50	57	40	130
Acetophenone	1	38.1343	0	50	76	50	130
Hexachloroethane	1	30.3339	0	50	61	50	130
N-Nitroso-di-n-propylamine	1	32.276	0	50	65	40	130
Nitrobenzene	1	32.7336	0	50	65*	70	130
Isophorone	1	31.7675	0	50	64	60	130
Benzoic Acid	1	71.1583	0	100	71	20	130
bis(2-Chloroethoxy)methane	1	32.2199	0	50	64	60	130
1,2,4-Trichlorobenzene	1	30.7533	0	50	62	50	130
Naphthalene	1	35.1412	0	50	70	50	130
4-Chloroaniline	1	18.7542	0	50	38	10	150
Hexachlorobutadiene	1	30.6928	0	50	61	60	130
Caprolactam	1	48.7859	0	50	98	50	130
2-Methylnaphthalene	1	34.5898	0	50	69*	70	130
1-Methylnaphthalene	1	36.7072	0	50	73	70	130
1,1'-Biphenyl	1	32.7158	0	50	65	60	130
1,2,4,5-Tetrachlorobenzene	1	39.7335	0	50	79	70	130
Hexachlorocyclopentadiene	1	28.2319	0	50	56	20	160
2-Chloronaphthalene	1	32.4384	0	50	65*	70	130
1,4-Dimethylnaphthalene	1	32.0299	0	50	64*	70	130
Diphenyl Ether	1	40.2825	0	50	81	70	130
2-Nitroaniline	1	40.0868	0	50	80	50	130
Coumarin	1	36.1468	0	50	72	70	130
Acenaphthylene	1	35.2037	0	50	70	70	130
Dimethylphthalate	1	34.6715	0	50	69*	70	130
2,6-Dinitrotoluene	1	34.4536	0	50	69*	70	130
Acenaphthene	1	33.4634	0	50	67	50	130
3-Nitroaniline	1	25.1794	0	50	50	10	130
Dibenzofuran	1	40.2007	0	50	80	70	130
2,4-Dinitrotoluene	1	37.0884	0	50	74	40	130
Fluorene	1	34.1194	0	50	68	50	130
4-Chlorophenyl-phenylether	1	33.1569	0	50	66*	70	130
Diethylphthalate	1	36.085	0	50	72	70	130
4-Nitroaniline	1	34.2312	0	50	68	50	130
Atrazine	1	45.7671	0	50	92	50	130
n-Nitrosodiphenylamine	1	29.6829	0	50	59	50	130
1,2-Diphenylhydrazine	1	34.718	0	50	69*	70	130
4-Bromophenyl-phenylether	1	34.8349	0	50	70	70	130
Hexachlorobenzene	1	34.2016	0	50	68*	70	130
N-Octadecane	1	41.8452	0	50	84	70	130
Phenanthrene	1	34.6583	0	50	69*	70	130
Anthracene	1	34.1452	0	50	68*	70	130
Carbazole	1	36.4054	0	50	73	70	130
Di-n-butylphthalate	1	36.7037	0	50	73	70	130
Fluoranthene	1	35.3433	0	50	71	70	130
Pyrene	1	35.4067	0	50	71	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	36.8873	0	50	74	50	130
3,3'-Dichlorobenzidine	1	13.2071	0	50	26	10	130
Benzo[a]anthracene	1	35.2068	0	50	70	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

Chrysene	1	26.2433	0	50	52*	60	130
bis(2-Ethylhexyl)phthalate	1	40.6131	0	50	81	70	130
Di-n-octylphthalate	1	40.2912	0	50	81	70	130
Benzo[b]fluoranthene	1	35.3834	0	50	71	70	130
Benzo[k]fluoranthene	1	36.4194	0	50	73	70	130
Benzo[a]pyrene	1	31.8264	0	50	64*	70	130
Indeno[1,2,3-cd]pyrene	1	35.5525	0	50	71	70	130
Dibenzo[a,h]anthracene	1	30.9656	0	50	62	60	130
Benzo[g,h,i]perylene	1	34.4524	0	50	69*	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB68102

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M69019.D	AD04391-002(MS)	5/28/2018 1:44:00 PM
Non Spike(If applicable):	10M69018.D	AD04391-002	5/28/2018 1:22:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	81.8114	0	100	82	20	160
Pyridine	1	5.0519	0	100	5.1	5	150
N-Nitrosodimethylamine	1	116.6215	0	100	117	50	150
Benzaldehyde	1	43.7005	0	100	44	20	150
Aniline	1	33.7227	0	100	34	20	150
Pentachloroethane	1	124.8627	0	100	125	50	130
bis(2-Chloroethyl)ether	1	124.0381	0	100	124	50	130
N-Decane	1	116.5404	0	100	117	40	130
1,3-Dichlorobenzene	1	121.975	0	100	122	50	130
1,4-Dichlorobenzene	1	109.1904	0	100	109	50	130
1,2-Dichlorobenzene	1	112.8052	0	100	113	50	130
Benzyl alcohol	1	137.4534	0	100	137 *	70	130
bis(2-chloroisopropyl)ether	1	109.5848	0	100	110	40	130
Acetophenone	1	144.0635	0	100	144 *	50	130
Hexachloroethane	1	108.2694	0	100	108	50	130
N-Nitroso-di-n-propylamine	1	115.1227	0	100	115	50	130
Nitrobenzene	1	130.0909	0	100	130	70	130
Isophorone	1	121.835	0	100	122	70	130
Benzoic Acid	1	101.2763	0	100	101	20	130
bis(2-Chloroethoxy)methane	1	121.8074	0	100	122	70	130
1,2,4-Trichlorobenzene	1	123.8738	0	100	124	50	130
Naphthalene	1	125.0111	0	100	125	70	130
4-Chloroaniline	1	41.1334	0	100	41 *	50	150
Hexachlorobutadiene	1	123.219	0	100	123	70	130
Caprolactam	1	130.5766	0	100	131 *	20	130
2-Methylnaphthalene	1	144.864	0	100	145 *	70	130
1-Methylnaphthalene	1	144.1236	0	100	144 *	70	130
1,1'-Biphenyl	1	126.029	0	100	126	70	130
1,2,4,5-Tetrachlorobenzene	1	139.6806	0	100	140 *	70	130
Hexachlorocyclopentadiene	1	114.7559	0	100	115	20	130
2-Chloronaphthalene	1	117.1571	0	100	117	70	130
1,4-Dimethylnaphthalene	1	114.2537	0	100	114	70	130
Diphenyl Ether	1	145.8959	0	100	146 *	70	130
2-Nitroaniline	1	145.0621	0	100	145	50	150
Coumarin	1	129.8443	0	100	130	70	130
Acenaphthylene	1	129.8078	0	100	130	70	130
Dimethylphthalate	1	124.7248	0	100	125	70	130
2,6-Dinitrotoluene	1	130.4638	0	100	130	70	130
Acenaphthene	1	124.9927	0	100	125	70	130
3-Nitroaniline	1	89.5187	0	100	90	50	150
Dibenzofuran	1	142.691	0	100	143 *	70	130
2,4-Dinitrotoluene	1	129.858	0	100	130	40	130
Fluorene	1	126.8997	0	100	127	70	130
4-Chlorophenyl-phenylether	1	124.3912	0	100	124	70	130
Diethylphthalate	1	130.1632	0	100	130	50	130
4-Nitroaniline	1	119.2129	0	100	119	50	150
Atrazine	1	144.4514	0	100	144 *	50	130
n-Nitrosodiphenylamine	1	101.4082	0	100	101	50	130
1,2-Diphenylhydrazine	1	121.5155	0	100	122	70	130
4-Bromophenyl-phenylether	1	128.904	0	100	129	70	130
Hexachlorobenzene	1	125.1715	0	100	125	70	130
N-Octadecane	1	127.1036	0	100	127	70	130
Phenanthrene	1	122.8048	0	100	123	70	130
Anthracene	1	119.2203	0	100	119	70	130
Carbazole	1	126.7796	0	100	127	70	130
Di-n-butylphthalate	1	130.1881	0	100	130	70	130
Fluoranthene	1	131.1797	0	100	131 *	70	130
Pyrene	1	129.3471	0	100	129	70	130
Benzidine	1	0	0	100	0 *	1	130
Butylbenzylphthalate	1	124.2921	0	100	124	50	130
3,3'-Dichlorobenzidine	1	28.5892	0	100	29	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB68102

Benzo[a]anthracene	1	127.5182	0	100	128	70	130
Chrysene	1	124.9541	0	100	125	50	130
bis(2-Ethylhexyl)phthalate	1	129.418	0	100	129	70	130
Di-n-octylphthalate	1	135.6422	0	100	136 *	70	130
Benzo[b]fluoranthene	1	136.9384	0	100	137 *	70	130
Benzo[k]fluoranthene	1	128.9207	0	100	129	70	130
Benzo[a]pyrene	1	117.7838	0	100	118	70	130
Indeno[1,2,3-cd]pyrene	1	134.7389	0	100	135 *	70	130
Dibenzo[a,h]anthracene	1	130.5488	0	100	131 *	70	130
Benzo[g,h,i]perylene	1	117.3119	0	100	117	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB68102

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M69020.D	AD04391-002(MSD)	5/28/2018 2:06:00 PM
Non Spike(If applicable):	10M69018.D	AD04391-002	5/28/2018 1:22:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	73.15	0	100	73	20	160
Pyridine	1	18.6756	0	100	19	5	150
N-Nitrosodimethylamine	1	90.4323	0	100	90	50	150
Benzaldehyde	1	101.7917	0	100	102	20	150
Aniline	1	31.88	0	100	32	20	150
Pentachloroethane	1	88.8551	0	100	89	50	130
bis(2-Chloroethyl)ether	1	86.0562	0	100	86	50	130
N-Decane	1	83.4957	0	100	83	40	130
1,3-Dichlorobenzene	1	83.2283	0	100	83	50	130
1,4-Dichlorobenzene	1	85.6356	0	100	86	50	130
1,2-Dichlorobenzene	1	86.9581	0	100	87	50	130
Benzyl alcohol	1	106.8542	0	100	107	70	130
bis(2-chloroisopropyl)ether	1	84.95	0	100	85	40	130
Acetophenone	1	109.908	0	100	110	50	130
Hexachloroethane	1	83.5176	0	100	84	50	130
N-Nitroso-di-n-propylamine	1	89.6552	0	100	90	50	130
Nitrobenzene	1	96.3977	0	100	96	70	130
Isophorone	1	90.3526	0	100	90	70	130
Benzoic Acid	1	76.9677	0	100	77	20	130
bis(2-Chloroethoxy)methane	1	94.0546	0	100	94	70	130
1,2,4-Trichlorobenzene	1	92.6836	0	100	93	50	130
Naphthalene	1	94.9896	0	100	95	70	130
4-Chloroaniline	1	39.9717	0	100	40*	50	150
Hexachlorobutadiene	1	88.2953	0	100	88	70	130
Caprolactam	1	106.5223	0	100	107	20	130
2-Methylnaphthalene	1	108.2939	0	100	108	70	130
1-Methylnaphthalene	1	107.072	0	100	107	70	130
1,1'-Biphenyl	1	100.3124	0	100	100	70	130
1,2,4,5-Tetrachlorobenzene	1	110.546	0	100	111	70	130
Hexachlorocyclopentadiene	1	89.4487	0	100	89	20	130
2-Chloronaphthalene	1	94.7525	0	100	95	70	130
1,4-Dimethylnaphthalene	1	88.7376	0	100	89	70	130
Diphenyl Ether	1	112.7041	0	100	113	70	130
2-Nitroaniline	1	114.447	0	100	114	50	150
Coumarin	1	100.4585	0	100	100	70	130
Acenaphthylene	1	104.0992	0	100	104	70	130
Dimethylphthalate	1	96.6167	0	100	97	70	130
2,6-Dinitrotoluene	1	97.956	0	100	98	70	130
Acenaphthene	1	97.4025	0	100	97	70	130
3-Nitroaniline	1	55.9154	0	100	56	50	150
Dibenzofuran	1	114.5723	0	100	115	70	130
2,4-Dinitrotoluene	1	102.2279	0	100	102	40	130
Fluorene	1	101.7234	0	100	102	70	130
4-Chlorophenyl-phenylether	1	100.5087	0	100	101	70	130
Diethylphthalate	1	102.7661	0	100	103	50	130
4-Nitroaniline	1	99.9857	0	100	100	50	150
Atrazine	1	117.6205	0	100	118	50	130
n-Nitrosodiphenylamine	1	69.5107	0	100	70	50	130
1,2-Diphenylhydrazine	1	83.2857	0	100	83	70	130
4-Bromophenyl-phenylether	1	84.2712	0	100	84	70	130
Hexachlorobenzene	1	82.4601	0	100	82	70	130
N-Octadecane	1	95.6372	0	100	96	70	130
Phenanthrene	1	91.3344	0	100	91	70	130
Anthracene	1	93.8862	0	100	94	70	130
Carbazole	1	95.5619	0	100	96	70	130
Di-n-butylphthalate	1	96.6056	0	100	97	70	130
Fluoranthene	1	87.9843	0	100	88	70	130
Pyrene	1	96.0997	0	100	96	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	104.85	0	100	105	50	130
3,3'-Dichlorobenzidine	1	47.6688	0	100	48	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB68102

Benzo[a]anthracene	1	98.558	0	100	99	70	130
Chrysene	1	91.7114	0	100	92	50	130
bis(2-Ethylhexyl)phthalate	1	99.6426	0	100	100	70	130
Di-n-octylphthalate	1	100.2134	0	100	100	70	130
Benzo[b]fluoranthene	1	110.3716	0	100	110	70	130
Benzo[k]fluoranthene	1	107.1263	0	100	107	70	130
Benzo[a]pyrene	1	92.4849	0	100	92	70	130
Indeno[1,2,3-cd]pyrene	1	102.5591	0	100	103	70	130
Dibenzo[a,h]anthracene	1	99.8543	0	100	100	70	130
Benzo[g,h,i]perylene	1	91.7365	0	100	92	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB68102

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M69020.D	AD04391-002(MSD)	5/28/2018 2:06:00 PM
Duplicate(If applicable):	10M69019.D	AD04391-002(MS)	5/28/2018 1:44:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	73.15	81.8114	11	20
Pyridine	1	18.6756	5.0519	115*	40
N-Nitrosodimethylamine	1	90.4323	116.6215	25*	20
Benzaldehyde	1	101.7917	43.7005	80*	20
Aniline	1	31.88	33.7227	5.6	20
Pentachloroethane	1	88.8551	124.8627	34*	20
bis(2-Chloroethyl)ether	1	86.0562	124.0381	36*	20
N-Decane	1	83.4957	116.5404	33*	20
1,3-Dichlorobenzene	1	83.2283	121.975	38*	20
1,4-Dichlorobenzene	1	85.6356	109.1904	24	40
1,2-Dichlorobenzene	1	86.9581	112.8052	26*	20
Benzyl alcohol	1	106.8542	137.4534	25*	20
bis(2-chloroisopropyl)ether	1	84.95	109.5848	25*	20
Acetophenone	1	109.908	144.0635	27*	20
Hexachloroethane	1	83.5176	108.2694	26	40
N-Nitroso-di-n-propylamine	1	89.6552	115.1227	25	40
Nitrobenzene	1	96.3977	130.0909	30	40
Isophorone	1	90.3526	121.835	30*	20
Benzoic Acid	1	76.9677	101.2763	27*	20
bis(2-Chloroethoxy)methane	1	94.0546	121.8074	26*	20
1,2,4-Trichlorobenzene	1	92.6836	123.8738	29	40
Naphthalene	1	94.9896	125.0111	27	40
4-Chloroaniline	1	39.9717	41.1334	2.9	20
Hexachlorobutadiene	1	88.2953	123.219	33	40
Caprolactam	1	106.5223	130.5766	20	20
2-Methylnaphthalene	1	108.2939	144.864	29*	20
1-Methylnaphthalene	1	107.072	144.1236	30*	20
1,1'-Biphenyl	1	100.3124	126.029	23*	20
1,2,4,5-Tetrachlorobenzene	1	110.546	139.6806	23*	20
Hexachlorocyclopentadiene	1	89.4487	114.7559	25*	20
2-Chloronaphthalene	1	94.7525	117.1571	21*	20
1,4-Dimethylnaphthalene	1	88.7376	114.2537	25*	20
Diphenyl Ether	1	112.7041	145.8959	26*	20
2-Nitroaniline	1	114.447	145.0621	24*	20
Coumarin	1	100.4585	129.8443	26*	20
Acenaphthylene	1	104.0992	129.8078	22*	20
Dimethylphthalate	1	96.6167	124.7248	25*	20
2,6-Dinitrotoluene	1	97.956	130.4638	28*	20
Acenaphthene	1	97.4025	124.9927	25	40
3-Nitroaniline	1	55.9154	89.5187	46*	20
Dibenzofuran	1	114.5723	142.691	22*	20
2,4-Dinitrotoluene	1	102.2279	129.858	24	40
Fluorene	1	101.7234	126.8997	22	40
4-Chlorophenyl-phenylether	1	100.5087	124.3912	21*	20
Diethylphthalate	1	102.7661	130.1632	24*	20
4-Nitroaniline	1	99.9857	119.2129	18	20
Atrazine	1	117.6205	144.4514	20	20
n-Nitrosodiphenylamine	1	69.5107	101.4082	37*	20
1,2-Diphenylhydrazine	1	83.2857	121.5155	37*	20
4-Bromophenyl-phenylether	1	84.2712	128.904	42*	20
Hexachlorobenzene	1	82.4601	125.1715	41*	40
N-Octadecane	1	95.6372	127.1036	28*	20
Phenanthrene	1	91.3344	122.8048	29*	20
Anthracene	1	93.8862	119.2203	24*	20
Carbazole	1	95.5619	126.7796	28*	20
Di-n-butylphthalate	1	96.6056	130.1881	30*	20
Fluoranthene	1	87.9843	131.1797	39*	20
Pyrene	1	96.0997	129.3471	29	40
Benzidine	1	0	0	NA	20
Butylbenzylphthalate	1	104.85	124.2921	17	40
3,3'-Dichlorobenzidine	1	47.6688	28.5892	50*	20
Benzo[a]anthracene	1	98.558	127.5182	26*	20
Chrysene	1	91.7114	124.9541	31*	20

Form3
RPD Data Laboratory Limits
QC Batch: WMB68102

bis(2-Ethylhexyl)phthalate	1	99.6426	129.418	26 *	20
Di-n-octylphthalate	1	100.2134	135.6422	30 *	20
Benzo[b]fluoranthene	1	110.3716	136.9384	21 *	20
Benzo[k]fluoranthene	1	107.1263	128.9207	18	20
Benzo[a]pyrene	1	92.4849	117.7838	24 *	20
Indeno[1,2,3-cd]pyrene	1	102.5591	134.7389	27 *	20
Dibenzo[a,h]anthracene	1	99.8543	130.5488	27 *	20
Benzo[g,h,i]perylene	1	91.7365	117.3119	24 *	20

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M92022.D	AD04398-004(5X)(MS:AD04398	5/30/2018 2:04:00 PM
Non Spike(If applicable):	7M92021.D	AD04398-003(5X)	5/30/2018 1:40:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	12.922	0	50	26	1	150
N-Nitrosodimethylamine	1	37.2195	0	50	74	50	130
Benzaldehyde	1	49.8135	0	50	100	20	150
Aniline	1	30.9845	0	50	62	20	150
Pentachloroethane	1	39.5405	0	50	79	50	130
bis(2-Chloroethyl)ether	1	42.433	0	50	85	50	130
N-Decane	1	37.0085	0	50	74	20	130
1,3-Dichlorobenzene	1	38.035	0	50	76	60	130
1,4-Dichlorobenzene	1	31.962	0	50	64	60	130
1,2-Dichlorobenzene	1	33.0945	0	50	66	50	130
Benzyl alcohol	1	36.91	0	50	74	20	130
bis(2-chloroisopropyl)ether	1	32.509	0	50	65	40	130
Acetophenone	1	42.937	0	50	86	50	130
Hexachloroethane	1	30.9705	0	50	62	50	130
N-Nitroso-di-n-propylamine	1	36.798	0	50	74	40	130
Nitrobenzene	1	36.798	0	50	74	70	130
Isophorone	1	34.3215	0	50	69	60	130
Benzoic Acid	1	76.1205	0	100	76	20	130
bis(2-Chloroethoxy)methane	1	35.2915	0	50	71	60	130
1,2,4-Trichlorobenzene	1	34.3525	0	50	69	50	130
Naphthalene	1	49.6515	14.101	50	71	50	130
4-Chloroaniline	1	40.0295	0	50	80	10	150
Hexachlorobutadiene	1	35.156	0	50	70	60	130
Caprolactam	1	54.767	0	50	110	50	130
2-Methylnaphthalene	1	43.41	0	50	87	70	130
1-Methylnaphthalene	1	48.591	0	50	97	70	130
1,1'-Biphenyl	1	38.029	0	50	76	60	130
1,2,4,5-Tetrachlorobenzene	1	47.0145	0	50	94	70	130
Hexachlorocyclopentadiene	1	0	0	50	0*	20	160
2-Chloronaphthalene	1	35.749	0	50	71	70	130
1,4-Dimethylnaphthalene	1	42.6755	0	50	85	70	130
Diphenyl Ether	1	45.23	0	50	90	70	130
2-Nitroaniline	1	44.529	0	50	89	50	130
Coumarin	1	39.6475	0	50	79	70	130
Acenaphthylene	1	52.9945	20.342	50	65*	70	130
Dimethylphthalate	1	35.4295	0	50	71	70	130
2,6-Dinitrotoluene	1	35.325	0	50	71	70	130
Acenaphthene	1	66.93	37.202	50	59	50	130
3-Nitroaniline	1	40.622	0	50	81	70	130
Dibenzofuran	1	67.8255	37.514	50	61*	70	130
2,4-Dinitrotoluene	1	38.3895	0	50	77	40	130
Fluorene	1	77.692	58.079	50	39*	50	130
4-Chlorophenyl-phenylether	1	34.4255	0	50	69*	70	130
Diethylphthalate	1	38.208	0	50	76	70	130
4-Nitroaniline	1	40.0245	0	50	80	50	130
Atrazine	1	46.1945	0	50	92	50	130
n-Nitrosodiphenylamine	1	37.718	0	50	75	50	130
1,2-Diphenylhydrazine	1	38.2585	0	50	77	70	130
4-Bromophenyl-phenylether	1	37.832	0	50	76	70	130
Hexachlorobenzene	1	38.0515	0	50	76	70	130
N-Octadecane	1	47.3205	0	50	95	70	130
Phenanthrene	1	332.4185	438.578	50	-210*	70	130
Anthracene	1	102.7005	94.019	50	17*	70	130
Carbazole	1	57.952	33.3055	50	49*	70	130
Di-n-butylphthalate	1	38.785	0	50	78	70	130
Fluoranthene	1	293.792	373.8905	50	-160*	70	130
Pyrene	1	290.8295	364.848	50	-150*	50	130
Benzidine	1	15.0415	0	50	30	1	130
Butylbenzylphthalate	1	44.346	0	50	89	50	130
3,3'-Dichlorobenzidine	1	39.783	0	50	80	10	130
Benzo[a]anthracene	1	153.982	166.1315	50	-24*	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

Chrysene	1	136.3995	151.21	50	-30 *	60	130
bis(2-Ethylhexyl)phthalate	1	50.4395	0	50	101	70	130
Di-n-octylphthalate	1	49.2805	0	50	99	70	130
Benzo[b]fluoranthene	1	138.936	156.7635	50	-36 *	70	130
Benzo[k]fluoranthene	1	88.5835	59.1285	50	59 *	70	130
Benzo[a]pyrene	1	125.418	132.262	50	-14 *	70	130
Indeno[1,2,3-cd]pyrene	1	78.7345	60.3285	50	37 *	70	130
Dibenzo[a,h]anthracene	1	44.156	20.022	50	48 *	60	130
Benzo[g,h,i]perylene	1	83.3475	66.381	50	34 *	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M92023.D	AD04398-005(5X)(MSD:AD043	5/30/2018 2:27:00 PM
Non Spike(If applicable):	7M92021.D	AD04398-003(5X)	5/30/2018 1:40:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	10.658	0	50	21	1	150
N-Nitrosodimethylamine	1	30.5095	0	50	61	50	130
Benzaldehyde	1	41.9315	0	50	84	20	150
Aniline	1	17.56	0	50	35	20	150
Pentachloroethane	1	33.969	0	50	68	50	130
bis(2-Chloroethyl)ether	1	38.2365	0	50	76	50	130
N-Decane	1	26.8195	0	50	54	20	130
1,3-Dichlorobenzene	1	30.7535	0	50	62	60	130
1,4-Dichlorobenzene	1	28.94	0	50	58*	60	130
1,2-Dichlorobenzene	1	28.719	0	50	57	50	130
Benzyl alcohol	1	33.6395	0	50	67	20	130
bis(2-chloroisopropyl)ether	1	30.054	0	50	60	40	130
Acetophenone	1	40.0515	0	50	80	50	130
Hexachloroethane	1	27.298	0	50	55	50	130
N-Nitroso-di-n-propylamine	1	34.9565	0	50	70	40	130
Nitrobenzene	1	32.892	0	50	66*	70	130
Isophorone	1	31.9095	0	50	64	60	130
Benzoic Acid	1	66.4275	0	100	66	20	130
bis(2-Chloroethoxy)methane	1	32.118	0	50	64	60	130
1,2,4-Trichlorobenzene	1	30.442	0	50	61	50	130
Naphthalene	1	43.138	14.101	50	58	50	130
4-Chloroaniline	1	29.002	0	50	58	10	150
Hexachlorobutadiene	1	32.641	0	50	65	60	130
Caprolactam	1	49.9055	0	50	100	50	130
2-Methylnaphthalene	1	37.9725	0	50	76	70	130
1-Methylnaphthalene	1	39.605	0	50	79	70	130
1,1'-Biphenyl	1	34.9205	0	50	70	60	130
1,2,4,5-Tetrachlorobenzene	1	41.6195	0	50	83	70	130
Hexachlorocyclopentadiene	1	0	0	50	0*	20	160
2-Chloronaphthalene	1	34.2955	0	50	69*	70	130
1,4-Dimethylnaphthalene	1	35.929	0	50	72	70	130
Diphenyl Ether	1	42.433	0	50	85	70	130
2-Nitroaniline	1	40.9575	0	50	82	50	130
Coumarin	1	35.948	0	50	72	70	130
Acenaphthylene	1	38.7585	20.342	50	37*	70	130
Dimethylphthalate	1	34.1455	0	50	68*	70	130
2,6-Dinitrotoluene	1	33.255	0	50	67*	70	130
Acenaphthene	1	43.833	37.202	50	13*	50	130
3-Nitroaniline	1	34.703	0	50	69*	70	130
Dibenzofuran	1	49.932	37.514	50	25*	70	130
2,4-Dinitrotoluene	1	36.175	0	50	72	40	130
Fluorene	1	48.0205	58.079	50	-20*	50	130
4-Chlorophenyl-phenylether	1	33.558	0	50	67*	70	130
Diethylphthalate	1	35.0905	0	50	70	70	130
4-Nitroaniline	1	39.2715	0	50	79	50	130
Atrazine	1	43.285	0	50	87	50	130
n-Nitrosodiphenylamine	1	31.8705	0	50	64	50	130
1,2-Diphenylhydrazine	1	36.204	0	50	72	70	130
4-Bromophenyl-phenylether	1	36.764	0	50	74	70	130
Hexachlorobenzene	1	34.3415	0	50	69*	70	130
N-Octadecane	1	46.4555	0	50	93	70	130
Phenanthrene	1	117.318	438.578	50	-640*	70	130
Anthracene	1	58.1115	94.019	50	-72*	70	130
Carbazole	1	41.136	33.3055	50	16*	70	130
Di-n-butylphthalate	1	38.435	0	50	77	70	130
Fluoranthene	1	122.1485	373.8905	50	-500*	70	130
Pyrene	1	121.211	364.848	50	-490*	50	130
Benzidine	1	10.89	0	50	22	1	130
Butylbenzylphthalate	1	42.929	0	50	86	50	130
3,3'-Dichlorobenzidine	1	32.713	0	50	65	10	130
Benzo[a]anthracene	1	81.0985	166.1315	50	-170*	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: SMB68114

Chrysene	1	63.444	151.21	50	-180 *	60	130
bis(2-Ethylhexyl)phthalate	1	47.3985	0	50	95	70	130
Di-n-octylphthalate	1	47.2415	0	50	94	70	130
Benzo[b]fluoranthene	1	83.262	156.7635	50	-150 *	70	130
Benzo[k]fluoranthene	1	50.155	59.1285	50	-18 *	70	130
Benzo[a]pyrene	1	69.1245	132.262	50	-130 *	70	130
Indeno[1,2,3-cd]pyrene	1	53.4195	60.3285	50	-14 *	70	130
Dibenzo[a,h]anthracene	1	36.514	20.022	50	33 *	60	130
Benzo[g,h,i]perylene	1	55.57	66.381	50	-22 *	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: SMB68114

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M92023.D	AD04398-005(5X)(MSD:AD043	5/30/2018 2:27:00 PM
Duplicate(If applicable):	7M92022.D	AD04398-004(5X)(MS:AD04398	5/30/2018 2:04:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	10.658	12.922	19	30
N-Nitrosodimethylamine	1	30.5095	37.2195	20	30
Benzaldehyde	1	41.9315	49.8135	17	30
Aniline	1	17.56	30.9845	55*	30
Pentachloroethane	1	33.969	39.5405	15	30
bis(2-Chloroethyl)ether	1	38.2365	42.433	10	30
N-Decane	1	26.8195	37.0085	32*	30
1,3-Dichlorobenzene	1	30.7535	38.035	21	30
1,4-Dichlorobenzene	1	28.94	31.962	9.9	40
1,2-Dichlorobenzene	1	28.719	33.0945	14	30
Benzyl alcohol	1	33.6395	36.91	9.3	30
bis(2-chloroisopropyl)ether	1	30.054	32.509	7.8	30
Acetophenone	1	40.0515	42.937	7	30
Hexachloroethane	1	27.298	30.9705	13	30
N-Nitroso-di-n-propylamine	1	34.9565	36.798	5.1	40
Nitrobenzene	1	32.892	36.798	11	30
Isophorone	1	31.9095	34.3215	7.3	30
Benzoic Acid	1	66.4275	76.1205	14	30
bis(2-Chloroethoxy)methane	1	32.118	35.2915	9.4	30
1,2,4-Trichlorobenzene	1	30.442	34.3525	12	40
Naphthalene	1	43.138	49.6515	14	40
4-Chloroaniline	1	29.002	40.0295	32*	30
Hexachlorobutadiene	1	32.641	35.156	7.4	30
Caprolactam	1	49.9055	54.767	9.3	30
2-Methylnaphthalene	1	37.9725	43.41	13	30
1-Methylnaphthalene	1	39.605	48.591	20	30
1,1'-Biphenyl	1	34.9205	38.029	8.5	30
1,2,4,5-Tetrachlorobenzene	1	41.6195	47.0145	12	30
Hexachlorocyclopentadiene	1	0	0	NA	30
2-Chloronaphthalene	1	34.2955	35.749	4.2	30
1,4-Dimethylnaphthalene	1	35.929	42.6755	17	30
Diphenyl Ether	1	42.433	45.23	6.4	30
2-Nitroaniline	1	40.9575	44.529	8.4	30
Coumarin	1	35.948	39.6475	9.8	30
Acenaphthylene	1	38.7585	52.9945	31*	30
Dimethylphthalate	1	34.1455	35.4295	3.7	30
2,6-Dinitrotoluene	1	33.255	35.325	6	30
Acenaphthene	1	43.833	66.93	42*	40
3-Nitroaniline	1	34.703	40.622	16	30
Dibenzofuran	1	49.932	67.8255	30	30
2,4-Dinitrotoluene	1	36.175	38.3895	5.9	40
Fluorene	1	48.0205	77.692	47*	40
4-Chlorophenyl-phenylether	1	33.558	34.4255	2.6	30
Diethylphthalate	1	35.0905	38.208	8.5	30
4-Nitroaniline	1	39.2715	40.0245	1.9	30
Atrazine	1	43.285	46.1945	6.5	30
n-Nitrosodiphenylamine	1	31.8705	37.718	17	30
1,2-Diphenylhydrazine	1	36.204	38.2585	5.5	30
4-Bromophenyl-phenylether	1	36.764	37.832	2.9	30
Hexachlorobenzene	1	34.3415	38.0515	10	30
N-Octadecane	1	46.4555	47.3205	1.8	30
Phenanthrene	1	117.318	332.4185	96*	30
Anthracene	1	58.1115	102.7005	55*	30
Carbazole	1	41.136	57.952	34*	30
Di-n-butylphthalate	1	38.435	38.785	0.91	30
Fluoranthene	1	122.1485	293.792	83*	30
Pyrene	1	121.211	290.8295	82*	40
Benzidine	1	10.89	15.0415	32*	30
Butylbenzylphthalate	1	42.929	44.346	3.2	40
3,3'-Dichlorobenzidine	1	32.713	39.783	20	30
Benzo[a]anthracene	1	81.0985	153.982	62*	30
Chrysene	1	63.444	136.3995	73*	30
bis(2-Ethylhexyl)phthalate	1	47.3985	50.4395	6.2	30

Form3
RPD Data Laboratory Limits
QC Batch: SMB68114

Di-n-octylphthalate	1	47.2415	49.2805	4.2	30
Benzo[b]fluoranthene	1	83.262	138.936	50 *	30
Benzo[k]fluoranthene	1	50.155	88.5835	55 *	30
Benzo[a]pyrene	1	69.1245	125.418	58 *	30
Indeno[1,2,3-cd]pyrene	1	53.4195	78.7345	38 *	30
Dibenzo[a,h]anthracene	1	36.514	44.156	19	30
Benzo[g,h,i]perylene	1	55.57	83.3475	40 *	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB68102
Blank Data File: 7M91970.D
Matrix: Aqueous

Blank Analysis Date: 05/28/18 12:36
Blank Extraction Date: 05/26/18
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD04394-010	7M91980.D	05/28/18 16:41
AD04391-002(MSD	10M69020.D	05/28/18 14:06
AD04391-002(MS)	10M69019.D	05/28/18 13:44
AD04391-002	10M69018.D	05/28/18 13:22
WMB68102(MS)	10M69016.D	05/28/18 12:37

FORM 4
Blank Summary

Blank Number: SMB68114
Blank Data File: 7M92004.D
Matrix: Soil

Blank Analysis Date: 05/29/18 17:35
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD04394-009	7M92011.D	05/30/18 09:46

FORM 4
Blank Summary

Blank Number: SMB68114
Blank Data File: 9M85632.D
Matrix: Soil

Blank Analysis Date: 05/30/18 09:49
Blank Extraction Date: 05/29/18
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD04394-001	7M92031.D	05/30/18 17:36
AD04394-002	9M85648.D	05/30/18 16:20
AD04394-003	9M85640.D	05/30/18 12:57
AD04394-004(5X)	9M85653.D	05/30/18 18:19
AD04394-005	9M85649.D	05/30/18 16:43
AD04394-006	9M85650.D	05/30/18 17:07
AD04394-007	9M85651.D	05/30/18 17:31
AD04394-008	9M85652.D	05/30/18 17:55
AD04398-005(5X)(	7M92023.D	05/30/18 14:27
SMB68114(MS)	7M92003.D	05/29/18 17:11
AD04398-003(5X)	7M92021.D	05/30/18 13:40
AD04398-004(5X)(	7M92022.D	05/30/18 14:04

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M84748.D
Analysis Date: 04/30/18 09:05
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.180 to 10.191 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.3	45930	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.1	49226	PASS
70	69	0.00	2	0.6	279	PASS
127	198	40	60	50.6	60597	PASS
197	198	0.00	1	0.1	123	PASS
198	198	100	100	100.0	119816	PASS
199	198	5	9	7.0	8407	PASS
275	198	10	30	25.6	30619	PASS
365	198	1	100	2.9	3489	PASS
441	443	0.01	100	8.2	1381	PASS
442	198	40	100	68.1	81642	PASS
443	442	17	23	20.5	16767	PASS

Data File	Sample Number	Analysis Date:
9M84749.D	CAL BNA@50PPM	04/30/18 09:32
9M84750.D	CAL BNA@10PPM	04/30/18 10:29
9M84751.D	CAL BNA@2PPM	04/30/18 10:52
9M84752.D	CAL BNA@196PP	04/30/18 11:19
9M84753.D	CAL BNA@160PP	04/30/18 11:43
9M84754.D	CAL BNA@120PP	04/30/18 12:06
9M84755.D	CAL BNA@80PPM	04/30/18 12:29
9M84756.D	CAL BNA@20PPM	04/30/18 12:52
9M84757.D	CAL BNA@.5PPM	04/30/18 13:15
9M84758.D	CAL BNA@50PPM	04/30/18 13:39
9M84759.D	ICV BNA@50PPM	04/30/18 14:02

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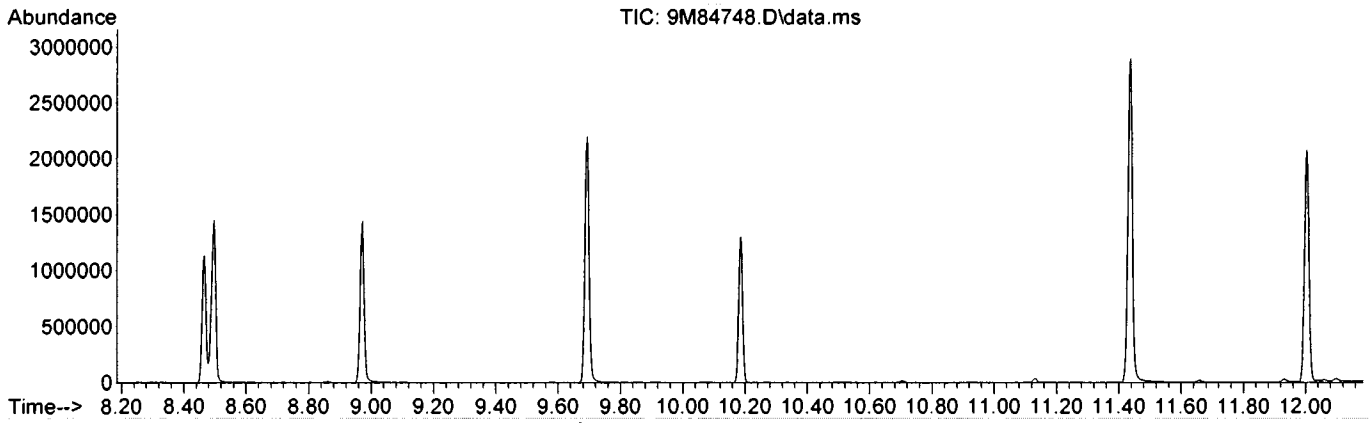
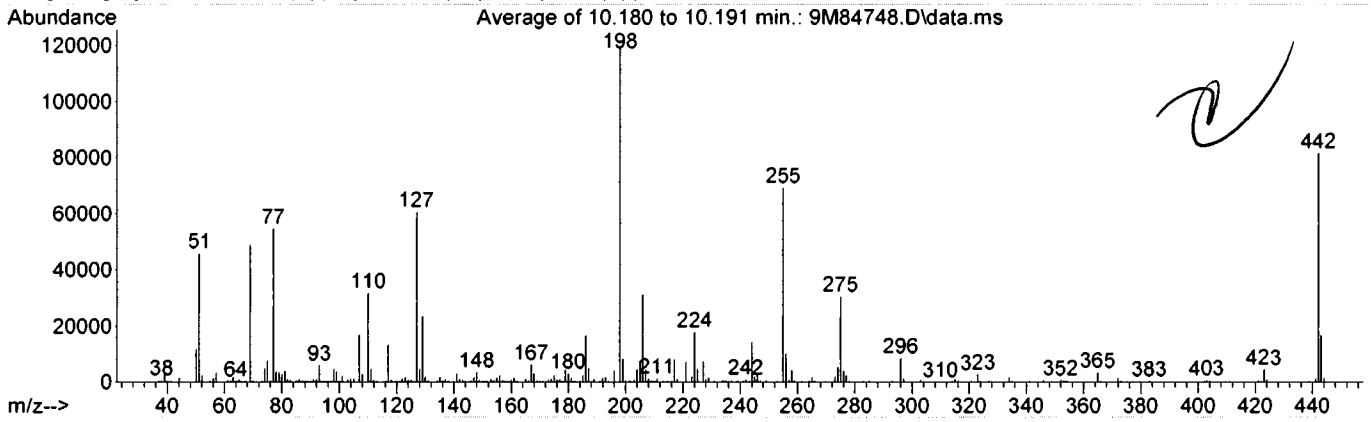
Data Path : G:\GcMsData\2018\GCMS_9\Data\04-30-18\
Data File : 9M84748.D
Acq On : 30 Apr 2018 9:05
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_9\MethodQt\9M_0329.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Mar 29 12:36:47 2018





Spectrum Information: Average of 10.180 to 10.191 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	45930	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.1	49226	PASS
70	69	0.00	2	0.6	279	PASS
127	198	40	60	50.6	60597	PASS
197	198	0.00	1	0.1	123	PASS
198	198	100	100	100.0	119816	PASS
199	198	5	9	7.0	8407	PASS
275	198	10	30	25.6	30619	PASS
365	198	1	100	2.9	3489	PASS
441	443	0.01	100	8.2	1381	PASS
442	198	40	100	68.1	81642	PASS
443	442	17	23	20.5	16767	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 10M68764.D
Instrument: GCMS 10 **Analysis Date:** 05/14/18 08:23
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.172 to 10.183 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	46.0	12454	PASS
68	69	0.00	2	1.8	199	PASS
69	198	0.00	100	40.9	11078	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.2	13054	PASS
197	198	0.00	1	0.3	73	PASS
198	198	100	100	100.0	27066	PASS
199	198	5	9	6.3	1702	PASS
275	198	10	30	24.5	6643	PASS
365	198	1	100	3.8	1025	PASS
441	443	0.01	100	72.3	3330	PASS
442	198	40	100	86.8	23482	PASS
443	442	17	23	19.6	4607	PASS

Data File	Sample Number	Analysis Date:
10M68765.D	CAL BNA@10PPM	05/14/18 09:32
10M68766.D	CAL BNA@2PPM	05/14/18 10:01
10M68767.D	CAL BNA@196PP	05/14/18 10:27
10M68768.D	CAL BNA@160PP	05/14/18 10:49
10M68769.D	CAL BNA@120PP	05/14/18 11:11
10M68770.D	CAL BNA@80PPM	05/14/18 11:34
10M68771.D	CAL BNA@20PPM	05/14/18 11:56
10M68772.D	CAL BNA@0.5PP	05/14/18 12:18
10M68773.D	CAL BNA@50PPM	05/14/18 12:40
10M68774.D	ICV BNA@50PPM	05/14/18 13:18

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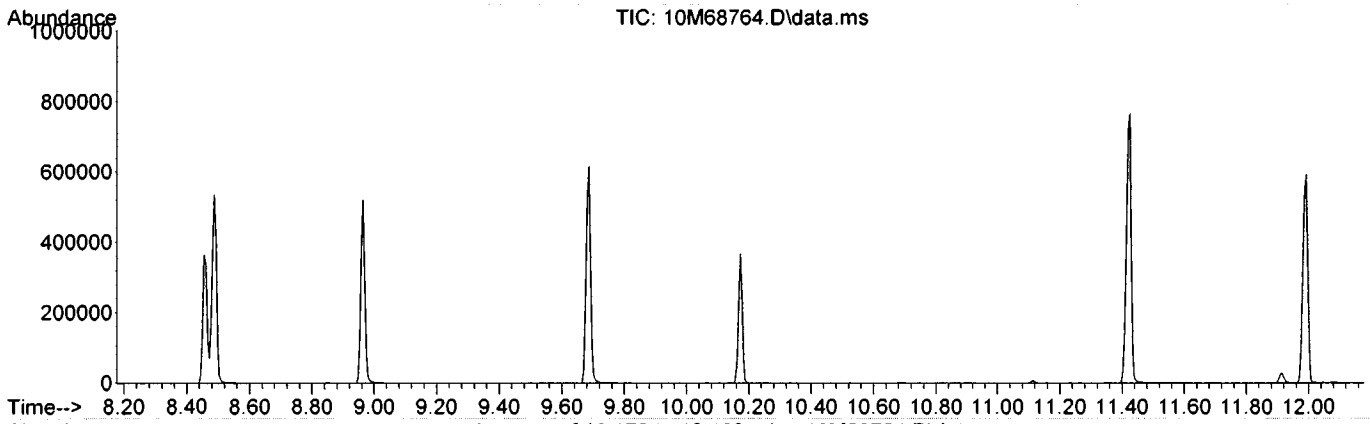
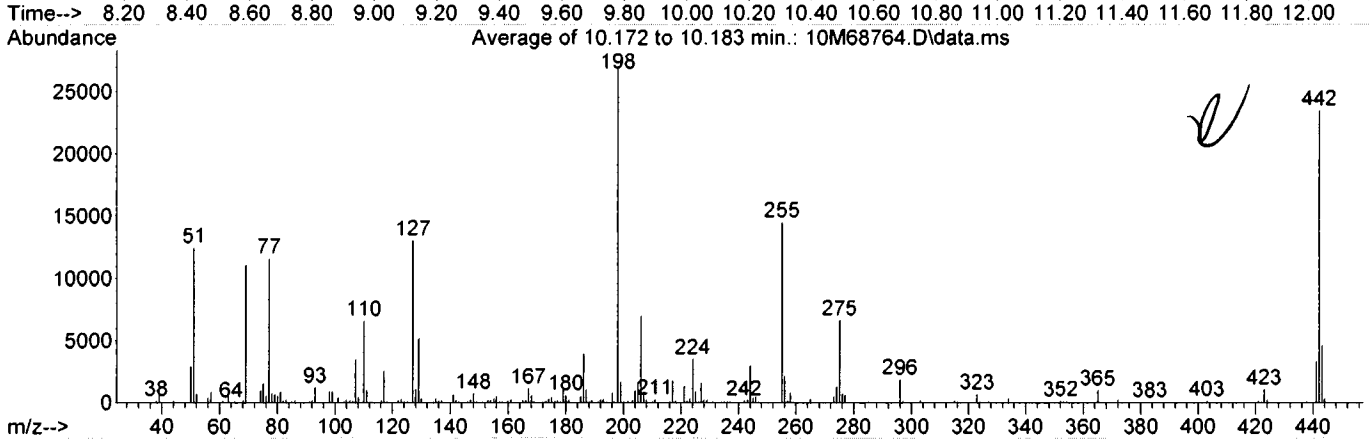
Data Path : G:\GcMsData\2018\GCMS_10\Data\05-14-18\
Data File : 10M68764.D
Acq On : 14 May 2018 8:23
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_0504.M
Title : @GCMS_10,mg,625,8270
Last Update : Thu Apr 26 14:12:00 2018





Spectrum Information: Average of 10.172 to 10.183 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.0	12454	PASS
68	69	0.00	2	1.8	199	PASS
69	198	0.00	100	40.9	11078	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	48.2	13054	PASS
197	198	0.00	1	0.3	73	PASS
198	198	100	100	100.0	27066	PASS
199	198	5	9	6.3	1702	PASS
275	198	10	30	24.5	6643	PASS
365	198	1	100	3.8	1025	PASS
441	443	0.01	100	72.3	3330	PASS
442	198	40	100	86.8	23482	PASS
443	442	17	23	19.6	4607	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M91666.D
Analysis Date: 05/14/18 08:26
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.026 to 10.037 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	43.2	51737	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	57101	PASS
70	69	0.00	2	0.3	167	PASS
127	198	40	60	47.3	56725	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	119880	PASS
199	198	5	9	6.6	7923	PASS
275	198	10	30	23.1	27735	PASS
365	198	1	100	3.2	3810	PASS
441	443	0.01	100	78.7	11715	PASS
442	198	40	100	64.3	77136	PASS
443	442	17	23	19.3	14891	PASS

Data File	Sample Number	Analysis Date:
7M91667.D	CAL BNA@10PPM	05/14/18 08:56
7M91668.D	CAL BNA@50PPM	05/14/18 09:40
7M91669.D	CAL BNA@2PPM	05/14/18 10:09
7M91670.D	CAL BNA@196PP	05/14/18 10:44
7M91671.D	CAL BNA@160PP	05/14/18 11:07
7M91672.D	CAL BNA@120PP	05/14/18 11:30
7M91673.D	CAL BNA@80PPM	05/14/18 11:53
7M91674.D	CAL BNA@20PPM	05/14/18 12:16
7M91675.D	CAL BNA@0.5PP	05/14/18 12:39
7M91676.D	CAL BNA@50PPM	05/14/18 13:03
7M91677.D	ICV BNA@50PPM	05/14/18 13:26

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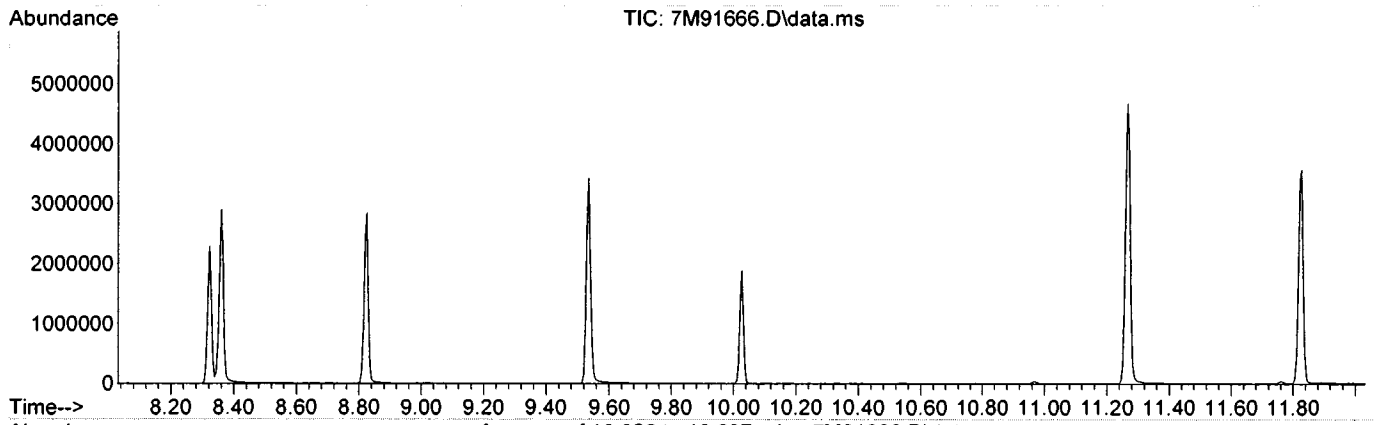
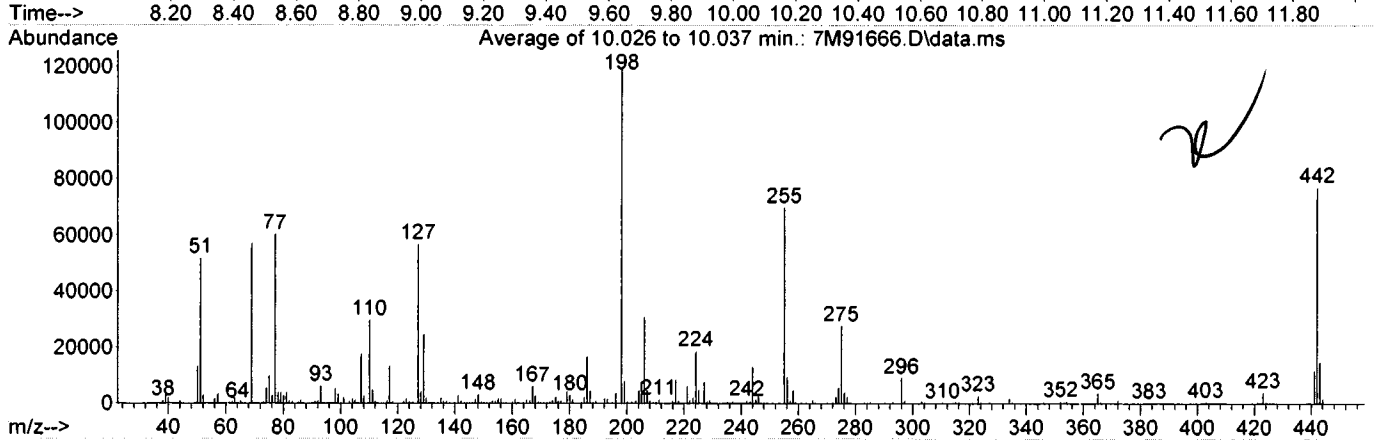
Data Path : G:\GcMsData\2018\GCMS_7\Data\05-14-18\
Data File : 7M91666.D
Acq On : 14 May 2018 8:26
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_0426.M
Title : @GCMS_7,mg,625,8270
Last Update : Thu Apr 26 13:36:16 2018





Spectrum Information: Average of 10.026 to 10.037 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.2	51737	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	57101	PASS
70	69	0.00	2	0.3	167	PASS
127	198	40	60	47.3	56725	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	119880	PASS
199	198	5	9	6.6	7923	PASS
275	198	10	30	23.1	27735	PASS
365	198	1	100	3.2	3810	PASS
441	443	0.01	100	78.7	11715	PASS
442	198	40	100	64.3	77136	PASS
443	442	17	23	19.3	14891	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M91968.D
Analysis Date: 05/28/18 10:47
Method: EPA 8270D

Tune Scan/Time Range: Scan 1458

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	41.6	74416	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.9	78640	PASS
70	69	0.00	2	0.6	473	PASS
127	198	40	60	48.6	86952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	179008	PASS
199	198	5	9	6.4	11523	PASS
275	198	10	30	24.5	43912	PASS
365	198	1	100	3.5	6217	PASS
441	443	0.01	100	70.5	17144	PASS
442	198	40	100	61.3	109800	PASS
443	442	17	23	22.2	24328	PASS

Data File	Sample Number	Analysis Date:
7M91969.D	CAL BNA@50PPM	05/28/18 11:21
7M91970.D	WMB68102	05/28/18 12:36
7M91971.D	OMB68099	05/28/18 13:12
7M91972.D	SMB68100	05/28/18 13:35
7M91973.D	OMB68099(MS)	05/28/18 13:58
7M91974.D	AD04345-001	05/28/18 14:21
7M91975.D	AD04345-001(MS)	05/28/18 14:44
7M91976.D	AD04345-001(MSD	05/28/18 15:08
7M91977.D	AD04424-001	05/28/18 15:31
7M91978.D	AD04403-001	05/28/18 15:54
7M91979.D	AD04390-001	05/28/18 16:17
7M91980.D	AD04394-010	05/28/18 16:41
7M91981.D	AD04395-002	05/28/18 17:04
7M91982.D	AD04395-004	05/28/18 17:27
7M91983.D	AD04395-006	05/28/18 17:50
7M91984.D	AD04395-008	05/28/18 18:13
7M91985.D	AD04395-010	05/28/18 18:37
7M91986.D	AD04395-012	05/28/18 19:00
7M91987.D	AD04395-014	05/28/18 19:23
7M91988.D	AD04164-003(T)	05/28/18 19:46
7M91989.D	AD04164-009(T)	05/28/18 20:10
7M91990.D	AD04164-012(T)	05/28/18 20:33
7M91991.D	AD04191-005(T)	05/28/18 20:56
7M91992.D	AD04191-007(T)	05/28/18 21:19
7M91993.D	EF-SPLP V-280045	05/28/18 21:43

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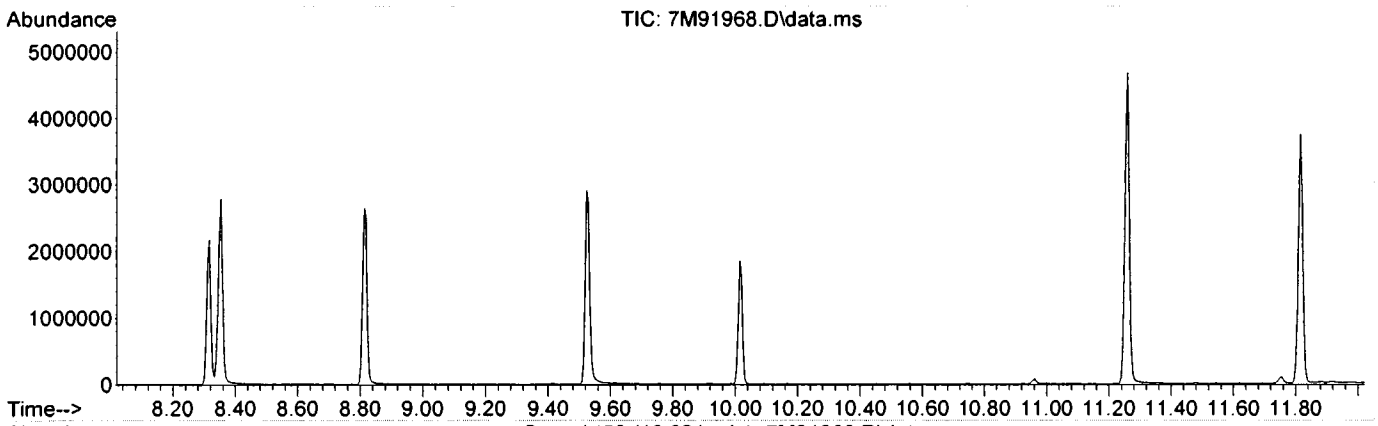
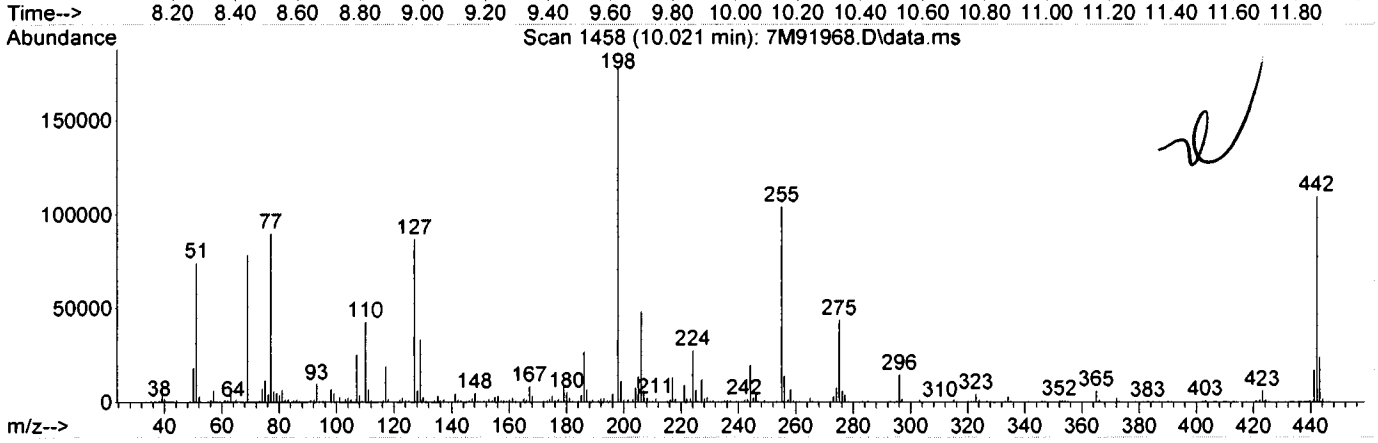
Data Path : G:\GcMsData\2018\GCMS_7\Data\05-28-18\
Data File : 7M91968.D
Acq On : 28 May 2018 10:47
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_0514.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon May 14 14:40:22 2018





Spectrum Information: Scan 1458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.6	74416	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.9	78640	PASS
70	69	0.00	2	0.6	473	PASS
127	198	40	60	48.6	86952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	179008	PASS
199	198	5	9	6.4	11523	PASS
275	198	10	30	24.5	43912	PASS
365	198	1	100	3.5	6217	PASS
441	443	0.01	100	70.5	17144	PASS
442	198	40	100	61.3	109800	PASS
443	442	17	23	22.2	24328	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10

Data File: 10M69014.D
Analysis Date: 05/28/18 10:52
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.172 to 10.178 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	41.8	15228	PASS
68	69	0.00	2	1.8	239	PASS
69	198	0.00	100	36.0	13113	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	44.0	16009	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	36416	PASS
199	198	5	9	6.6	2412	PASS
275	198	10	30	24.6	8947	PASS
365	198	1	100	4.2	1521	PASS
441	443	0.01	100	77.4	5033	PASS
442	198	40	100	96.1	34980	PASS
443	442	17	23	18.6	6506	PASS

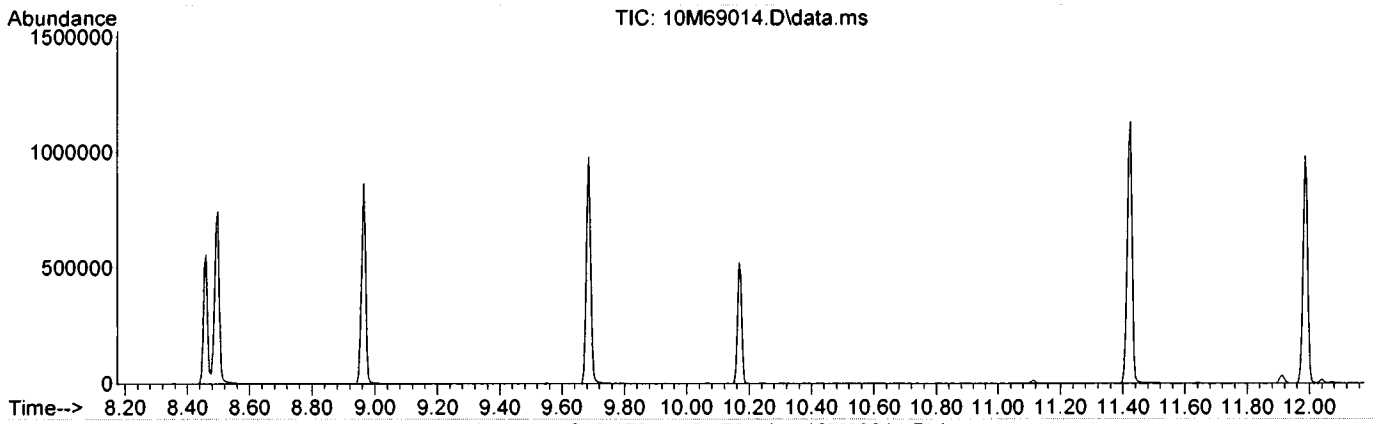
Data File	Sample Number	Analysis Date:
10M69015.D	CAL BNA@50PPM	05/28/18 11:17
10M69016.D	WMB68102(MS)	05/28/18 12:37
10M69017.D	WMB68102	05/28/18 12:59
10M69018.D	AD04391-002	05/28/18 13:22
10M69019.D	AD04391-002(MS)	05/28/18 13:44
10M69020.D	AD04391-002(MSD	05/28/18 14:06
10M69021.D	AD04164-002(MS)(	05/28/18 14:29
10M69022.D	AD04164-002(MSD	05/28/18 14:51
10M69023.D	68102(MS)	05/28/18 15:13
10M69024.D	AD04391-001	05/28/18 15:35
10M69025.D	AD04391-003	05/28/18 15:58
10M69026.D	AD04391-004	05/28/18 16:20
10M69027.D	AD04391-005	05/28/18 16:42
10M69028.D	AD04391-006	05/28/18 17:04
10M69029.D	AD04306-007(R)	05/28/18 17:27
10M69030.D	AD04403-002	05/28/18 17:49
10M69031.D	AD04403-003	05/28/18 18:11

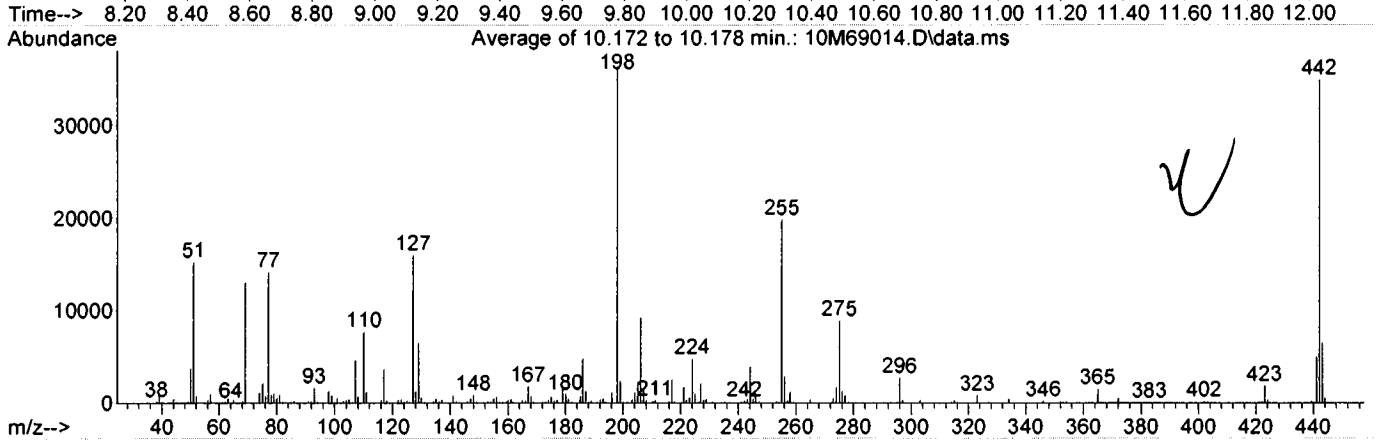
8052424 0214

Data Path : G:\GcMsData\2018\GCMS_10\Data\05-28-18\
Data File : 10M69014.D
Acq On : 28 May 2018 10:52
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_10\MethodQt\10M_0514.M
Title : @GCMS_10,mg,625,8270
Last Update : Mon May 14 13:21:12 2018





Spectrum Information: Average of 10.172 to 10.178 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.8	15228	PASS
68	69	0.00	2	1.8	239	PASS
69	198	0.00	100	36.0	13113	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	44.0	16009	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	36416	PASS
199	198	5	9	6.6	2412	PASS
275	198	10	30	24.6	8947	PASS
365	198	1	100	4.2	1521	PASS
441	443	0.01	100	77.4	5033	PASS
442	198	40	100	96.1	34980	PASS
443	442	17	23	18.6	6506	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M91994.D
Analysis Date: 05/29/18 07:30
Method: EPA 8270D

Tune Scan/Time Range: Scan 1457

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.9	108400	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.8	117024	PASS
70	69	0.00	2	0.6	653	PASS
127	198	40	60	52.9	119680	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	226112	PASS
199	198	5	9	6.5	14673	PASS
275	198	10	30	22.9	51816	PASS
365	198	1	100	2.6	5984	PASS
441	443	0.01	100	79.2	16896	PASS
442	198	40	100	46.8	105800	PASS
443	442	17	23	20.2	21344	PASS

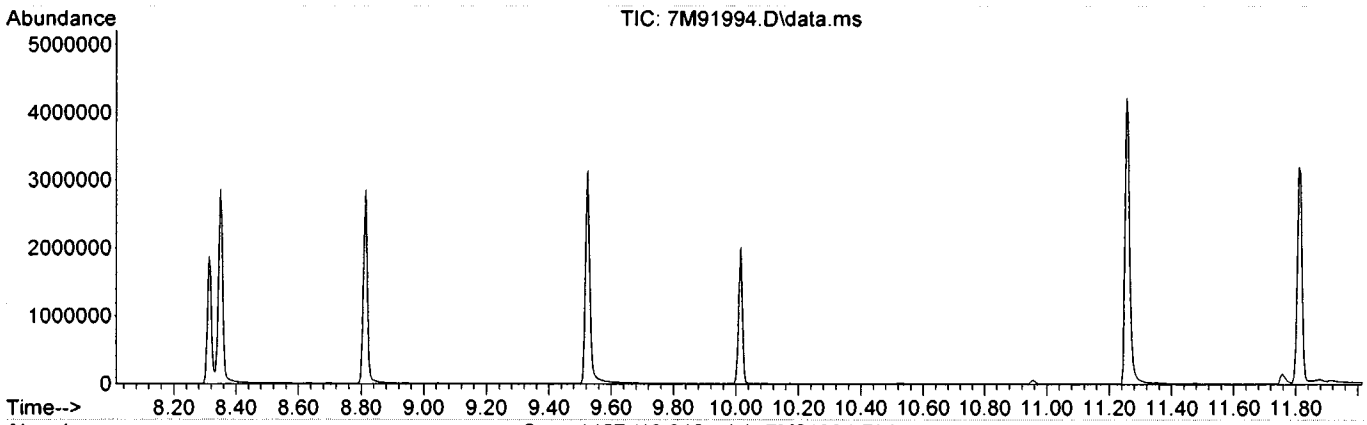
Data File	Sample Number	Analysis Date:
7M91995.D	CAL BNA@50PPM	05/29/18 08:03
7M91996.D	SMB68100(MS)	05/29/18 09:11
7M91997.D	SMB68112(MS)	05/29/18 14:48
7M91998.D	SMB68113(MS)	05/29/18 15:12
7M91999.D	SMB68112	05/29/18 15:35
7M92000.D	SMB68113	05/29/18 15:59
7M92001.D	WMB68111	05/29/18 16:23
7M92002.D	AD04423-025	05/29/18 16:47
7M92003.D	SMB68114(MS)	05/29/18 17:11
7M92004.D	SMB68114	05/29/18 17:35
7M92005.D	AD04398-003	05/29/18 17:59
7M92006.D	AD04384-001	05/29/18 18:23
7M92007.D	AD04384-001(MS)	05/29/18 18:48
7M92008.D	AD04384-001(MSD	05/29/18 19:11

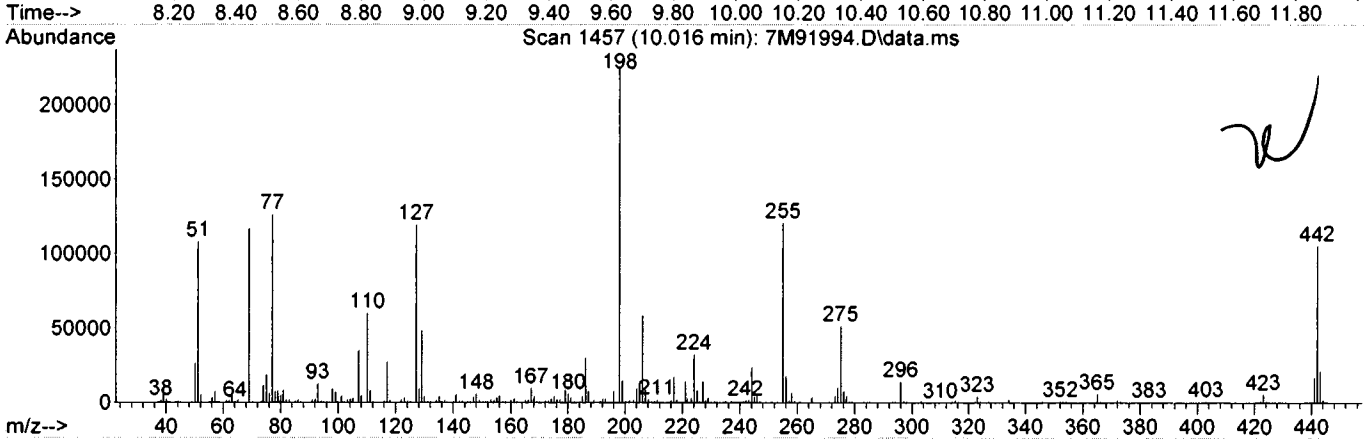
8052424 0216

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-29-18\
Data File : 7M91994.D
Acq On : 29 May 2018 7:30
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_0514.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon May 14 14:40:22 2018





Spectrum Information: Scan 1457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.9	108400	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.8	117024	PASS
70	69	0.00	2	0.6	653	PASS
127	198	40	60	52.9	119680	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	226112	PASS
199	198	5	9	6.5	14673	PASS
275	198	10	30	22.9	51816	PASS
365	198	1	100	2.6	5984	PASS
441	443	0.01	100	79.2	16896	PASS
442	198	40	100	46.8	105800	PASS
443	442	17	23	20.2	21344	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M85629.D
Instrument: GCMS 9 **Analysis Date:** 05/30/18 08:23
Method: EPA 8270D
Tune Scan/Time Range: Average of 10.171 to 10.185 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	49.6	32045	PASS
68	69	0.00	2	0.1	47	PASS
69	198	0.00	100	52.0	33559	PASS
70	69	0.00	2	0.8	278	PASS
127	198	40	60	54.2	35016	PASS
197	198	0.00	1	0.2	153	PASS
198	198	100	100	100.0	64565	PASS
199	198	5	9	6.8	4400	PASS
275	198	10	30	29.5	19063	PASS
365	198	1	100	5.3	3398	PASS
441	443	0.01	100	61.8	5016	PASS
442	198	40	100	65.4	42222	PASS
443	442	17	23	19.2	8114	PASS

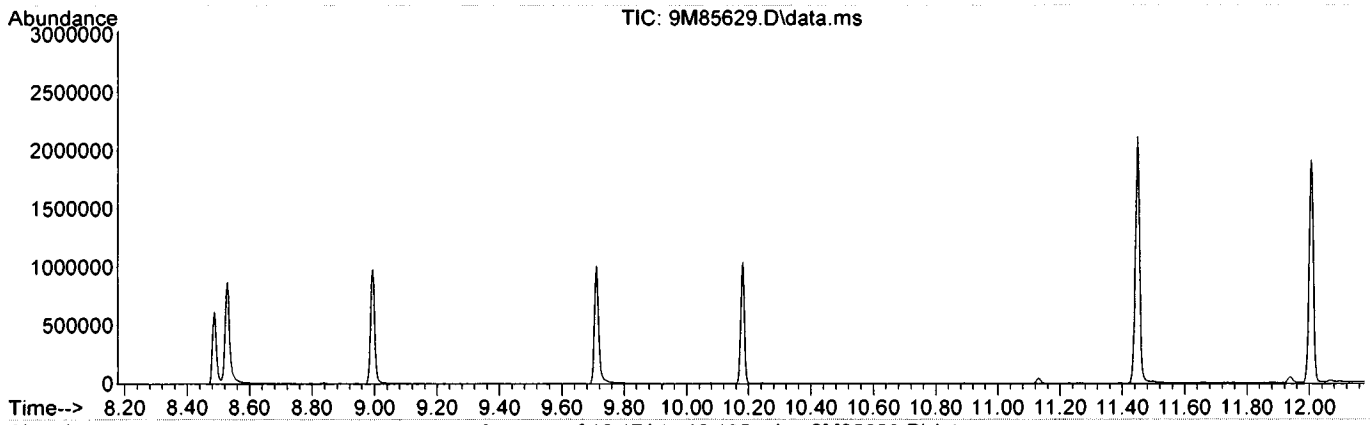
Data File	Sample Number	Analysis Date:
9M85630.D	CAL BNA@50PPM	05/30/18 08:50
9M85631.D	BNA@50PPM	05/30/18 09:16
9M85632.D	SMB68114	05/30/18 09:49
9M85633.D	AD04423-002	05/30/18 10:12
9M85634.D	AD04423-004	05/30/18 10:36
9M85635.D	AD04423-006	05/30/18 10:59
9M85636.D	AD04398-002	05/30/18 11:23
9M85637.D	AD04398-006	05/30/18 11:46
9M85638.D	AD04398-007	05/30/18 12:10
9M85639.D	AD04398-008	05/30/18 12:33
9M85640.D	AD04394-003	05/30/18 12:57
9M85641.D	AD04420-002	05/30/18 13:21
9M85642.D	AD04420-002(MS)	05/30/18 13:44
9M85643.D	AD04420-002(MSD	05/30/18 14:08
9M85644.D	AD04420-004	05/30/18 14:32

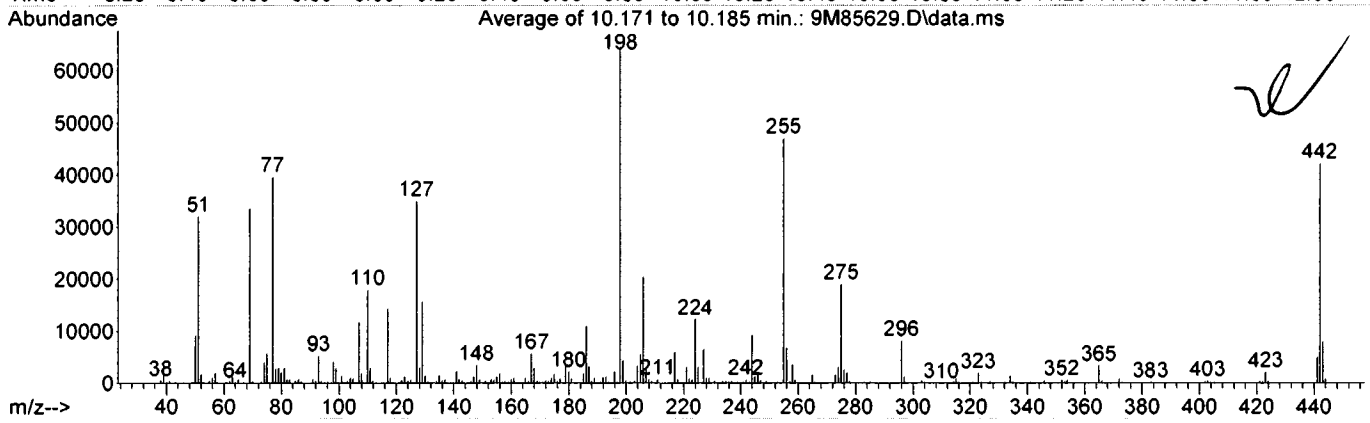
8052424 0218

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-30-18\
Data File : 9M85629.D
Acq On : 30 May 2018 8:23
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_9\MethodQt\9M_0430.M
Title : @GCMS_9,mg,625,8270
Last Update : Mon Apr 30 14:32:47 2018





Spectrum Information: Average of 10.171 to 10.185 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.6	32045	PASS
68	69	0.00	2	0.1	47	PASS
69	198	0.00	100	52.0	33559	PASS
70	69	0.00	2	0.8	278	PASS
127	198	40	60	54.2	35016	PASS
197	198	0.00	1	0.2	153	PASS
198	198	100	100	100.0	64565	PASS
199	198	5	9	6.8	4400	PASS
275	198	10	30	29.5	19063	PASS
365	198	1	100	5.3	3398	PASS
441	443	0.01	100	61.8	5016	PASS
442	198	40	100	65.4	42222	PASS
443	442	17	23	19.2	8114	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M92009.D
Instrument: GCMS 7 **Analysis Date:** 05/30/18 08:24
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.015 to 10.021 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	45.4	109888	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.8	120432	PASS
70	69	0.00	2	0.6	728	PASS
127	198	40	60	50.9	123084	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	242016	PASS
199	198	5	9	6.5	15725	PASS
275	198	10	30	24.3	58888	PASS
365	198	1	100	2.9	7066	PASS
441	443	0.01	100	71.1	20372	PASS
442	198	40	100	56.8	137528	PASS
443	442	17	23	20.8	28640	PASS

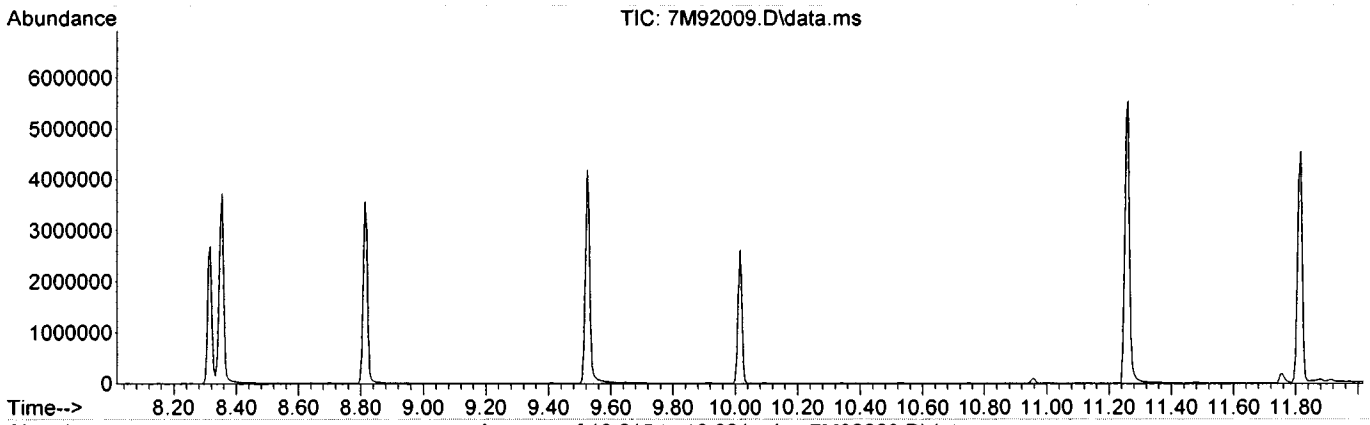
Data File	Sample Number	Analysis Date:
7M92010.D	CAL BNA@50PPM	05/30/18 08:48
7M92011.D	AD04394-009	05/30/18 09:46
7M92012.D	AD04398-001	05/30/18 10:10
7M92013.D	SMB68120(MS)	05/30/18 10:33
7M92014.D	SMB68120	05/30/18 10:56
7M92015.D	AD04371-001	05/30/18 11:19
7M92016.D	AD04371-002	05/30/18 11:43
7M92017.D	AD04371-003	05/30/18 12:06
7M92018.D	AD04373-007	05/30/18 12:30
7M92019.D	AD04373-008	05/30/18 12:53
7M92020.D	AD04373-009	05/30/18 13:17
7M92021.D	AD04398-003(5X)	05/30/18 13:40
7M92022.D	AD04398-004(5X)(	05/30/18 14:04
7M92023.D	AD04398-005(5X)(	05/30/18 14:27
7M92024.D	AD04371-004	05/30/18 14:51
7M92025.D	AD04371-005	05/30/18 15:15
7M92026.D	AD04371-006	05/30/18 15:38
7M92027.D	AD04371-007	05/30/18 16:02
7M92028.D	AD04372-002	05/30/18 16:25
7M92029.D	AD04372-004	05/30/18 16:49
7M92030.D	AD04372-006	05/30/18 17:12
7M92031.D	AD04394-001	05/30/18 17:36
7M92032.D	AD04378-003	05/30/18 17:59
7M92033.D	AD04378-004	05/30/18 18:23
7M92034.D	AD04327-004(R)	05/30/18 18:46
7M92035.D	AD04398-002(5X)	05/30/18 19:10
7M92036.D	AD04368-012(5X)(	05/30/18 19:33

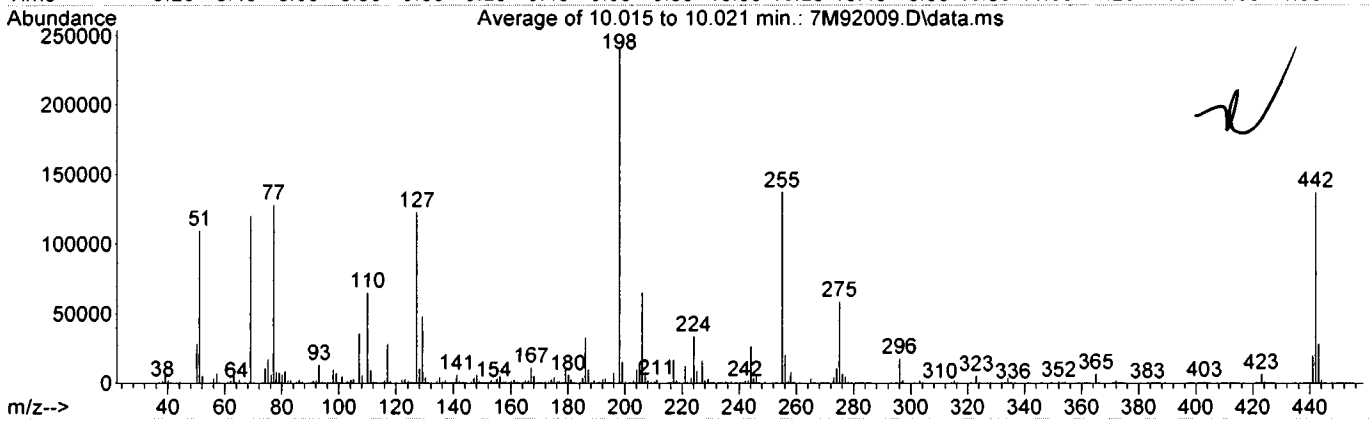
8052424 0220

Data Path : G:\GcMsData\2018\GCMS_7\Data\05-30-18\
Data File : 7M92009.D
Acq On : 30 May 2018 8:24
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_7\MethodQt\7M_0514.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon May 14 14:40:22 2018





Spectrum Information: Average of 10.015 to 10.021 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.4	109888	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.8	120432	PASS
70	69	0.00	2	0.6	728	PASS
127	198	40	60	50.9	123084	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	242016	PASS
199	198	5	9	6.5	15725	PASS
275	198	10	30	24.3	58888	PASS
365	198	1	100	2.9	7066	PASS
441	443	0.01	100	71.1	20372	PASS
442	198	40	100	56.8	137528	PASS
443	442	17	23	20.8	28640	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M85645.D
Instrument: GCMS 9 **Analysis Date:** 05/30/18 15:08
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.163 to 10.166 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	46.2	43324	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.4	48160	PASS
70	69	0.00	2	0.6	300	PASS
127	198	40	60	53.3	49984	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93712	PASS
199	198	5	9	6.9	6449	PASS
275	198	10	30	29.0	27192	PASS
365	198	1	100	5.2	4829	PASS
441	443	0.01	100	99.1	11292	PASS
442	198	40	100	63.6	59588	PASS
443	442	17	23	19.1	11394	PASS

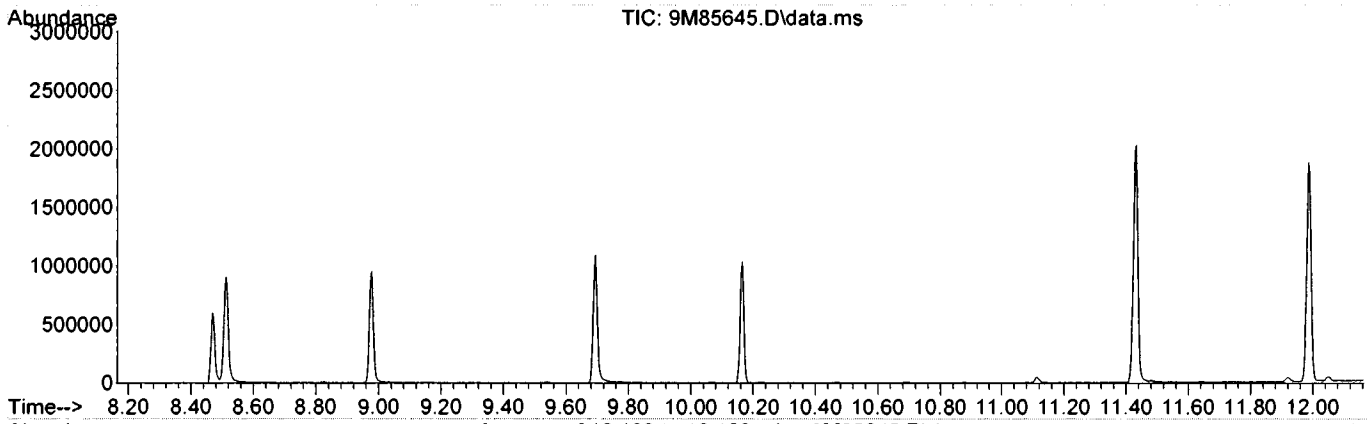
Data File	Sample Number	Analysis Date:
9M85646.D	CAL BNA@50PPM	05/30/18 15:31
9M85647.D	SMB68120	05/30/18 15:56
9M85648.D	AD04394-002	05/30/18 16:20
9M85649.D	AD04394-005	05/30/18 16:43
9M85650.D	AD04394-006	05/30/18 17:07
9M85651.D	AD04394-007	05/30/18 17:31
9M85652.D	AD04394-008	05/30/18 17:55
9M85653.D	AD04394-004(5X)	05/30/18 18:19
9M85654.D	AD04349-015(3X)	05/30/18 18:43
9M85655.D	AD04423-010(3X)	05/30/18 19:06
9M85656.D	AD04423-012(3X)	05/30/18 19:30
9M85657.D	AD04423-014(3X)	05/30/18 19:54
9M85658.D	AD04423-016(3X)	05/30/18 20:17
9M85659.D	AD04423-018(3X)	05/30/18 20:41
9M85660.D	AD04423-020(3X)	05/30/18 21:05
9M85661.D	AD04423-022(3X)	05/30/18 21:28
9M85662.D	AD04423-024	05/30/18 21:52
9M85663.D	AD04423-008	05/30/18 22:15
9M85664.D	AD04420-006	05/30/18 22:38
9M85665.D	AD04420-008	05/30/18 23:02
9M85666.D	AD04420-010	05/30/18 23:25
9M85667.D	AD04420-012	05/30/18 23:48
9M85668.D	AD04420-014	05/31/18 00:11
9M85669.D	AD04420-016	05/31/18 00:35
9M85670.D	AD04420-018	05/31/18 00:58
9M85671.D	AD04420-020	05/31/18 01:21
9M85672.D	AD04420-022	05/31/18 01:44
9M85673.D	AD04420-024	05/31/18 02:08
9M85674.D	AD04420-026	05/31/18 02:31
9M85675.D	AD04420-028	05/31/18 02:54

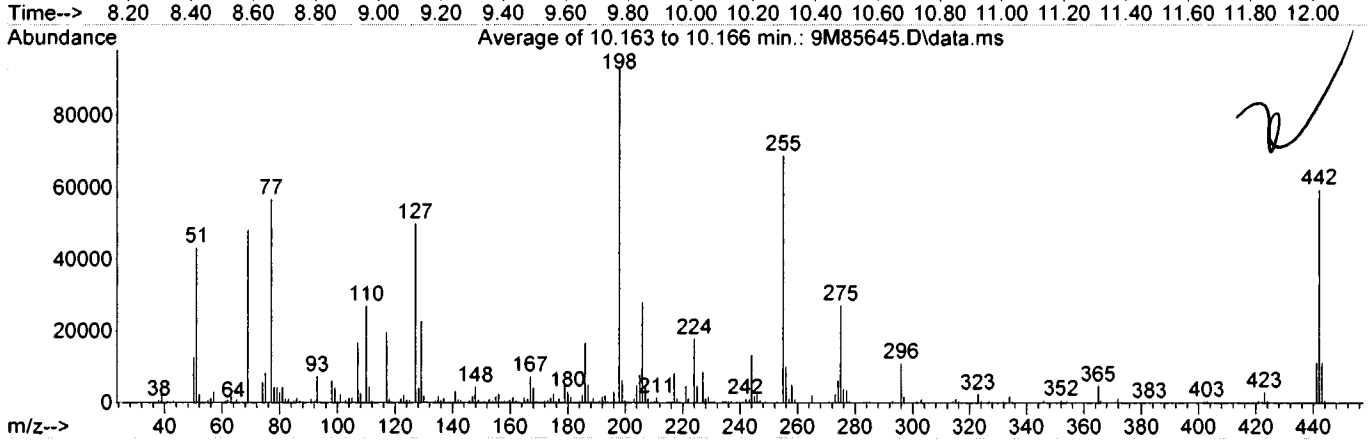
8052424 0222

Data Path : G:\GcMsData\2018\GCMS_9\Data\05-3018\
Data File : 9M85645.D
Acq On : 30 May 2018 15:08
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2018\GCMS_9\MethodQt\9M_0430.M
Title : @GCMS_9,mg,625,8270
Last Update : Mon Apr 30 14:32:47 2018





Spectrum Information: Average of 10.163 to 10.166 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.2	43324	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.4	48160	PASS
70	69	0.00	2	0.6	300	PASS
127	198	40	60	53.3	49984	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93712	PASS
199	198	5	9	6.9	6449	PASS
275	198	10	30	29.0	27192	PASS
365	198	1	100	5.2	4829	PASS
441	443	0.01	100	99.1	11292	PASS
442	198	40	100	63.6	59588	PASS
443	442	17	23	19.1	11394	PASS

8052424 0223

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M84758.D	CAL BNA@50PPM	04/30/18 13:39	2	9M84751.D	CAL BNA@2PPM	04/30/18 10:52
3	9M84750.D	CAL BNA@10PPM	04/30/18 10:29	4	9M84756.D	CAL BNA@20PPM	04/30/18 12:52
5	9M84755.D	CAL BNA@80PPM	04/30/18 12:29	6	9M84754.D	CAL BNA@120PPM	04/30/18 12:06
7	9M84753.D	CAL BNA@160PPM	04/30/18 11:43	8	9M84752.D	CAL BNA@196PPM	04/30/18 11:19
9	9M84757.D	CAL BNA@.5PPM	04/30/18 13:15				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	1.0156	0.8723	1.0671	1.0104	1.0347	0.9659	1.0062	1.0998	0.7752	0.983	2.85	0.998	0.998	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	3.1440	3.0640	3.1609	3.1862	3.3362	3.2299	3.3407	3.5838	-----	3.26	3.31	0.996	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.7560	1.5994	1.7282	1.7422	1.8484	1.7946	1.8446	1.9744	-----	1.79	3.25	0.998	0.999	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.3120	2.4228	2.2782	2.3073	2.4359	2.3689	2.4523	2.6752	-----	2.41	4.78	0.995	0.999	5.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	1.7083	1.7297	1.9832	2.0507	1.6139	1.3900	1.3663	1.5009	-----	1.67	5.60	0.992	0.992	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	4.0865	3.1375	2.8144	3.9445	4.2691	4.0749	4.2247	4.5638	4.3950	3.95	5.69	0.996	0.998	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.8373	0.8775	0.8441	0.8458	0.8999	0.8704	0.9011	0.9874	-----	0.883	5.74	0.994	0.998	5.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	2.7536	2.7906	2.6273	2.7228	2.9008	2.7943	2.8959	3.1994	4.3178	3.00	5.75	0.994	0.998	17	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.9592	3.0722	2.8619	2.9335	3.1108	2.9883	3.1007	3.3506	-----	3.05	5.64	0.996	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.6671	3.7548	3.4820	3.5954	3.8688	3.7844	3.8957	4.3112	-----	3.79	5.66	0.994	0.998	6.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.9950	2.9053	2.7928	2.8753	3.1032	3.0626	3.1616	3.4903	-----	3.05	5.79	0.994	0.998	7.1	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.7319	2.9154	2.6606	2.7438	2.8276	2.7439	2.8201	3.0155	-----	2.81	5.83	0.997	0.999	4.1	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	3.2658	3.3721	3.1073	3.1973	3.4109	3.3051	3.4583	3.7772	-----	3.36	5.92	0.994	0.998	6.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.7123	1.8913	1.7460	1.7275	1.8058	1.7565	1.7936	1.9454	-----	1.80	5.99	0.996	0.999	4.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.6203	1.6616	1.6081	1.6695	1.7024	1.6749	1.7061	1.8648	-----	1.69	6.11	0.995	0.998	4.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	1.0361	0.9250	1.0392	1.0610	1.0927	1.0697	1.0767	1.1826	-----	1.06	6.08	0.998	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.9387	2.1104	2.0195	2.0056	2.0587	2.0066	1.9795	2.1526	-----	2.03	6.19	0.997	0.998	3.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.4246	1.4274	1.4093	1.4253	1.5055	1.4529	1.4684	1.6365	1.9952	1.53	6.16	0.994	0.998	12	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.9372	1.8968	1.8667	1.9358	2.0168	1.9663	1.9843	2.1506	-----	1.97	6.30	0.998	0.999	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6501	0.6501	0.6507	0.6569	0.6843	0.6749	0.6738	0.7438	-----	0.673	6.39	0.995	0.998	4.7	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.1128	1.0513	1.1112	1.1051	1.1718	1.1324	1.1240	1.2172	1.4565	1.16	6.30	0.999	0.999	10	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.5496	1.4776	1.5128	1.5547	1.6129	1.5974	1.6158	1.7444	2.1966	1.65	6.29	0.997	0.999	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1546	0.1456	0.1541	0.1539	0.1630	0.1617	0.1656	0.1773	-----	0.160	6.42	0.997	0.999	6.0		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3986	0.4074	0.3935	0.4012	0.4189	0.4033	0.4178	0.4417	-----	0.410	6.43	0.997	0.999	3.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.7084	0.6878	0.7186	0.7182	0.7602	0.7300	0.7489	0.7955	-----	0.733	6.62	0.997	0.999	4.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2055	0.1831	0.2039	0.2081	0.2230	0.2190	0.2277	0.2432	-----	0.214	6.68	0.997	0.999	8.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.4033	0.4031	0.4025	0.4070	0.4237	0.4133	0.4248	0.4494	0.5570	0.432	6.70	0.998	0.999	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2417	-----	0.1503	0.1974	0.2978	0.3078	0.3234	0.3406	-----	0.266	6.77	0.997	0.999	27		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4352	0.4396	0.4421	0.4370	0.4685	0.4523	0.4623	0.4876	-----	0.453	6.78	0.998	0.999	4.1	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3225	0.3120	0.3283	0.3225	0.3437	0.3397	0.3510	0.3785	0.4503	0.350	6.86	0.996	0.999	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3507	0.3856	0.3611	0.3586	0.3742	0.3692	0.3852	0.4085	-----	0.374	6.93	0.997	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.1873	1.2324	1.1823	1.1955	1.2516	1.2157	1.2540	1.3288	1.8932	1.30	6.99	0.998	0.999	17	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4543	0.3391	0.3214	0.4281	0.4577	0.4027	0.3747	0.3455	0.4843	0.401	7.03	0.988	0.996	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1997	0.2152	0.2059	0.2037	0.2144	0.2136	0.2254	0.2402	-----	0.215	7.08	0.995	1.00	6.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1052	0.0728	0.1008	0.1053	0.1114	0.1082	0.1231	0.1329	-----	0.108	7.30	0.989	0.998	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3359	0.3221	0.3322	0.3327	0.3589	0.3538	0.3591	0.3946	-----	0.349	7.39	0.995	0.998	6.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.8095	0.8102	0.8121	0.8052	0.8559	0.8459	0.8673	0.9292	-----	0.842	7.54	0.997	0.999	5.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.7819	0.7679	0.7731	0.7795	0.8232	0.8114	0.8359	0.8967	-----	0.809	7.62	0.996	0.999	5.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Avg	0.7959	0.7890	0.7925	0.7914	0.8395	0.8285	0.8524	0.9137	-----	0.825	7.54	0.997	0.999	5.3		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8558	0.8752	0.8554	0.8497	0.9140	0.9023	0.9338	0.9973	-----	0.898	7.92	0.997	0.999	5.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5448	0.5738	0.5500	0.5502	0.5914	0.5847	0.6083	0.6649	-----	0.584	7.67	0.994	0.999	6.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8052424 0224

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M84758.D	CAL BNA@50PPM	04/30/18 13:39	2	9M84751.D	CAL BNA@2PPM	04/30/18 10:52
3	9M84750.D	CAL BNA@10PPM	04/30/18 10:29	4	9M84756.D	CAL BNA@20PPM	04/30/18 12:52
5	9M84755.D	CAL BNA@80PPM	04/30/18 12:29	6	9M84754.D	CAL BNA@120PPM	04/30/18 12:06
7	9M84753.D	CAL BNA@160PPM	04/30/18 11:43	8	9M84752.D	CAL BNA@196PPM	04/30/18 11:19
9	9M84757.D	CAL BNA@.5PPM	04/30/18 13:15				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.3576	0.2699	0.3309	0.3310	0.4121	0.4144	0.4424	0.4839	-----	0.380	7.66	0.992	0.999	18	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3777	0.3517	0.3952	0.3737	0.4144	0.4094	0.4327	0.4699	-----	0.403	7.76	0.994	0.999	9.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.4092	0.3644	0.4203	0.4093	0.4471	0.4430	0.4689	0.5027	-----	0.433	7.79	0.996	0.999	9.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2280	1.2522	1.2831	1.2472	1.3237	1.2826	1.3437	1.4474	-----	1.30	7.83	0.997	0.999	5.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.2017	1.2522	1.2677	1.2095	1.2899	1.2618	1.3335	1.4489	-----	1.28	7.94	0.996	0.999	6.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8858	0.9151	0.9096	0.8925	0.9843	0.9694	1.0097	1.0785	-----	0.956	8.22	0.996	0.999	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8858	0.9151	0.9096	0.8925	0.9843	0.9694	1.0097	1.0785	-----	0.956	8.22	0.996	0.999	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7737	0.7964	0.7945	0.7802	0.8471	0.8199	0.8582	0.9426	-----	0.827	8.00	0.993	0.998	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4278	0.3744	0.4273	0.4243	0.4631	0.4454	0.4577	0.4960	-----	0.440	8.01	0.996	0.998	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4239	0.4412	0.4443	0.4307	0.4690	0.4598	0.4895	0.5361	-----	0.462	8.21	0.992	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.8516	1.8168	1.8855	1.8325	2.0056	1.9584	2.0385	2.2296	-----	1.95	8.30	0.996	0.999	7.1	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3671	1.3969	1.4176	1.3876	1.4674	1.4549	1.5105	1.6489	-----	1.46	8.16	0.994	0.999	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3184	0.2817	0.3306	0.3212	0.3624	0.3598	0.3775	0.4097	-----	0.345	8.22	0.994	0.999	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.3131	1.3682	1.3397	1.3086	1.4363	1.4208	1.4638	1.5680	-----	1.40	8.46	0.996	0.999	6.3	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3493	0.2809	0.3192	0.3408	0.3671	0.3395	0.3261	0.3391	-----	0.333	8.37	0.998	0.998	7.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1845	-----	0.1297	0.1491	0.2296	0.2370	0.2579	0.2821	-----	0.210	8.46	0.990	0.999	27	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.7461	1.8104	1.8165	1.7674	1.8929	1.8479	1.9602	2.1246	2.7905	1.97	8.62	0.994	0.999	17	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4230	0.3225	0.4124	0.4154	0.4603	0.4466	0.4727	0.5093	-----	0.433	8.58	0.995	0.999	13	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2858	0.2101	0.2787	0.2857	0.2935	0.2843	0.2939	0.3196	-----	0.282	8.49	0.995	0.998	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3725	0.3313	0.3827	0.3818	0.4120	0.4111	0.4391	0.4790	-----	0.401	8.72	0.992	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.4770	1.4427	1.4743	1.4446	1.6154	1.5854	1.6720	1.7998	-----	1.56	8.94	0.996	0.999	8.2	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.7016	0.7242	0.7083	0.6956	0.7642	0.7715	0.8112	0.8909	-----	0.758	8.93	0.994	0.999	8.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3660	1.3320	1.3897	1.3689	1.4633	1.4237	1.5033	1.6353	-----	1.44	8.80	0.994	0.999	6.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.4146	0.3278	0.3830	0.4029	0.4573	0.4379	0.4553	0.4927	-----	0.421	8.95	0.996	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3828	0.3322	0.3781	0.3775	0.4202	0.4078	0.4346	0.4674	-----	0.400	9.57	0.995	0.999	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1357	-----	0.1073	0.1194	0.1587	0.1626	0.1721	0.1894	-----	0.149	8.97	0.992	0.999	20	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.7355	0.7180	0.7254	0.7110	0.7853	0.7852	0.8199	0.8761	-----	0.770	9.04	0.996	1.00	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.0958	0.0753	0.0903	0.0927	0.1097	0.1120	0.1209	0.1309	-----	0.104	9.18	0.992	1.00	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.8208	0.7605	0.8299	0.8250	0.8740	0.8674	0.8850	0.9375	-----	0.850	9.09	0.998	1.00	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2366	0.2262	0.2294	0.2319	0.2595	0.2605	0.2787	0.2995	-----	0.253	9.42	0.994	1.00	10	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2434	0.2559	0.2559	0.2483	0.2728	0.2753	0.2915	0.3159	-----	0.270	9.49	0.992	0.999	9.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4430	0.4044	0.4513	0.4371	0.4777	0.4700	0.4693	0.4995	-----	0.457	9.75	0.998	0.999	6.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1536	-----	0.1424	0.1392	0.1802	0.1846	0.2005	0.2196	-----	0.174	9.69	0.990	0.999	17	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.2489	1.2883	1.2692	1.2491	1.3434	1.3411	1.3817	1.4810	-----	1.33	9.94	0.996	0.999	6.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.2907	1.2526	1.2958	1.2886	1.3876	1.3883	1.4380	1.5483	-----	1.36	9.99	0.996	0.999	7.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.1638	1.1240	1.1677	1.1509	1.2537	1.2407	1.2774	1.3800	-----	1.22	10.16	0.996	0.999	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.3244	1.1795	1.3081	1.3374	1.4485	1.4436	1.4997	1.6011	1.5625	1.41	10.53	0.996	1.00	9.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.3692	1.2802	1.3394	1.3490	1.4879	1.4636	1.5259	1.6239	-----	1.43	11.28	0.996	0.999	8.0	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1624	1.1471	1.1935	1.2062	1.2485	1.2342	1.2272	1.2200	-----	1.20	11.55	1.00	1.00	2.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.3914	0.1213	0.1541	0.3675	0.4015	0.3505	0.3292	0.3191	-----	0.304	11.43	0.988	0.998	35		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.5803	0.5705	0.6108	0.5991	0.6172	0.6206	0.6226	0.6338	-----	0.607	11.72	1.00	1.00	3.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M84758.D	CAL BNA@50PPM	04/30/18 13:39	2	9M84751.D	CAL BNA@2PPM	04/30/18 10:52
3	9M84750.D	CAL BNA@10PPM	04/30/18 10:29	4	9M84756.D	CAL BNA@20PPM	04/30/18 12:52
5	9M84755.D	CAL BNA@80PPM	04/30/18 12:29	6	9M84754.D	CAL BNA@120PPM	04/30/18 12:06
7	9M84753.D	CAL BNA@160PPM	04/30/18 11:43	8	9M84752.D	CAL BNA@196PPM	04/30/18 11:19
9	9M84757.D	CAL BNA@.5PPM	04/30/18 13:15				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.1928	0.1785	0.1963	0.1974	0.2111	0.2104	0.2119	0.2137	-----	0.202	11.66	1.00	1.00	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3241	0.2577	0.3175	0.3264	0.3530	0.3550	0.3566	0.3593	-----	0.331	12.06	0.999	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.4914	0.4041	0.4831	0.4995	0.5329	0.5227	0.5262	0.5249	-----	0.498	12.31	1.00	1.00	8.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.2876	0.1849	0.2556	0.2763	0.3160	0.3177	0.3239	0.3286	-----	0.286	12.42	0.999	1.00	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.2916	0.2081	0.2427	0.2566	0.2978	0.2627	0.2494	0.2244	-----	0.254	12.94	0.982	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1622	1.1564	1.1934	1.1955	1.2434	1.2138	1.2265	1.2308	-----	1.20	12.97	1.00	1.00	2.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1497	1.1748	1.1671	1.1680	1.2348	1.2050	1.2065	1.2126	-----	1.19	13.02	1.00	1.00	2.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7267	0.5662	0.6967	0.7158	0.7859	0.7810	0.7894	0.7949	-----	0.732	13.00	1.00	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.2490	0.8179	1.1527	1.1847	1.4251	1.4475	1.5242	1.5874	-----	1.30	13.76	0.997	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1884	1.0972	1.2088	1.1807	1.3509	1.3562	1.4404	1.4691	-----	1.29	14.19	0.997	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.3158	1.1912	1.2250	1.2802	1.4057	1.4231	1.4445	1.5259	-----	1.35	14.23	0.998	1.00	8.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.2146	1.0794	1.1594	1.1665	1.3318	1.3345	1.3878	1.4428	-----	1.26	14.57	0.998	1.00	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.2950	1.1791	1.2461	1.2815	1.4193	1.4326	1.4848	1.5477	-----	1.36	16.04	0.998	1.00	9.4	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.0924	0.9624	1.0434	1.0641	1.1968	1.2173	1.2846	1.3486	-----	1.15	16.06	0.996	1.00	11	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0855	1.0588	1.0742	1.0885	1.1813	1.1692	1.2026	1.2663	-----	1.14	16.45	0.998	1.00	6.5	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.87
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M68773.D	CAL BNA@50PPM	05/14/18 12:40	2	10M68766.D	CAL BNA@2PPM	05/14/18 10:01
3	10M68765.D	CAL BNA@10PPM	05/14/18 09:32	4	10M68771.D	CAL BNA@20PPM	05/14/18 11:56
5	10M68770.D	CAL BNA@80PPM	05/14/18 11:34	6	10M68769.D	CAL BNA@120PPM	05/14/18 11:11
7	10M68768.D	CAL BNA@160PPM	05/14/18 10:49	8	10M68767.D	CAL BNA@196PPM	05/14/18 10:27
9	10M68772.D	CAL BNA@0.5PPM	05/14/18 12:18				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	0.9481	0.9713	0.8967	0.9374	0.9653	0.9696	0.9797	1.0218	0.4274	0.902	2.89	0.999	1.00	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	2.6720	2.4439	2.1252	2.6050	2.8091	2.8383	2.8845	2.9723	-----	2.67	3.36	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.4559	1.2398	1.1388	1.4111	1.5591	1.5621	1.5719	1.6366	-----	1.45	3.30	0.999	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.2897	2.5726	1.6424	2.1930	2.3630	2.4030	2.3847	2.5221	-----	2.30	4.80	0.997	0.999	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	1.8153	1.9605	1.4824	1.9413	1.5752	1.4504	1.3249	1.3323	-----	1.61	5.61	0.990	0.996	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	3.6774	2.8467	1.8900	3.3241	3.5070	3.5527	3.6338	3.7353	3.5737	3.30	5.70	0.999	0.999	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.8561	0.9858	0.6012	0.7702	0.8312	0.8714	0.8546	0.8955	-----	0.833	5.74	0.999	0.999	13	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.5075	2.8579	1.7283	2.2576	2.3553	2.4063	2.4055	2.4956	4.2069	2.58	5.75	0.999	0.999	26	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.9857	3.3089	2.1157	2.7241	3.0698	2.8270	3.0696	3.2219	-----	2.92	5.65	0.996	0.998	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.4195	3.5550	2.4087	3.1662	3.3331	3.1830	3.4586	3.5980	-----	3.27	5.66	0.996	0.998	12	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.6977	2.9306	1.7879	2.4273	2.5559	2.6014	2.7176	2.8035	-----	2.57	5.80	0.998	0.999	14	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	3.5828	4.1973	2.4978	3.3307	3.3816	3.3416	3.4098	3.4967	-----	3.40	5.83	0.999	0.999	14	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.9826	3.2339	2.1282	2.8554	2.8381	2.9434	2.9700	3.0921	-----	2.88	5.93	0.999	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5574	1.9345	1.3787	1.5216	1.5089	1.6038	1.5485	1.5501	-----	1.58	5.99	0.999	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4656	1.7816	1.3071	1.4476	1.4595	1.4878	1.4866	1.4863	-----	1.49	6.11	1.00	1.00	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8825	0.8059	0.7247	0.8234	0.8791	0.9156	0.9163	0.9192	-----	0.858	6.08	0.999	1.00	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	2.6365	3.2095	2.3929	2.5836	2.5640	2.6137	2.5404	2.6511	-----	2.65	6.19	0.999	0.999	9.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Qua	1.2195	1.4478	0.9962	1.1338	1.2007	1.2439	1.2182	1.2558	2.1239	1.32	6.17	0.999	1.00	25	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.6733	1.9045	1.5158	1.6585	1.6611	1.6736	1.7083	1.7064	-----	1.69	6.30	1.00	1.00	6.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5791	0.6718	0.4987	0.5190	0.5883	0.6824	0.5876	0.6220	-----	0.594	6.39	0.993	0.994	11	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Qua	0.9501	1.0475	0.8217	0.9080	0.9210	0.9171	0.9475	0.9529	1.4451	0.990	6.29	1.00	1.00	18	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Qua	1.2595	1.3784	1.1071	1.2243	1.2372	1.2526	1.2664	1.2569	1.9188	1.32	6.28	1.00	1.00	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1659	0.1390	0.1318	0.1678	0.1741	0.1950	0.1716	0.1831	-----	0.166	6.42	0.995	0.995	13		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3649	0.4451	0.3105	0.3803	0.3845	0.4037	0.3723	0.3913	-----	0.382	6.43	0.998	0.998	9.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6542	0.6980	0.5347	0.6666	0.6655	0.6898	0.6596	0.6888	-----	0.657	6.62	0.999	0.999	7.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1893	0.1838	0.1424	0.1807	0.2038	0.2084	0.1993	0.2112	-----	0.190	6.68	0.998	0.999	12	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Qua	0.3513	0.3997	0.3006	0.3633	0.3650	0.3709	0.3612	0.3831	0.5495	0.383	6.70	0.999	0.999	18	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2229	-----	0.0787	0.1628	0.2544	0.2788	0.2882	0.3025	-----	0.227	6.76	0.998	1.00	36		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.3981	0.4587	0.3440	0.3643	0.3985	0.4011	0.3984	0.4113	-----	0.397	6.77	0.999	1.00	8.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2937	0.3008	0.2397	0.2637	0.3022	0.3119	0.3076	0.3202	0.4232	0.307	6.86	0.999	1.00	16	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3320	0.4010	0.2896	0.2860	0.3306	0.3338	0.3291	0.3491	-----	0.331	6.93	0.998	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.0797	1.2449	1.0405	1.0952	1.0811	1.0541	1.0609	1.1085	2.0654	1.20	7.00	0.999	0.999	27	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Avg	0.4175	0.3645	0.3933	0.4027	0.3988	0.3725	0.3228	0.3080	0.5068	0.387	7.02	0.983	0.999	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1662	0.2184	0.1557	0.1593	0.1689	0.1737	0.1666	0.1805	-----	0.174	7.08	0.997	0.998	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1005	0.0700	0.0722	0.0884	0.1010	0.1069	0.1109	0.1215	-----	0.0965	7.29	0.994	0.999	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3002	0.3024	0.2454	0.2885	0.2994	0.3097	0.3099	0.3261	-----	0.298	7.38	0.998	1.00	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7353	0.8410	0.6141	0.6512	0.6845	0.7470	0.6867	0.7348	-----	0.712	7.53	0.997	0.997	9.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.7055	0.8268	0.5985	0.7188	0.6665	0.7220	0.6747	0.7200	-----	0.704	7.61	0.998	0.998	9.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Avg	0.7156	0.8339	0.6063	0.6811	0.6755	0.7355	0.6759	0.7257	-----	0.706	7.53	0.997	0.997	9.3		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8802	1.0146	0.7741	0.8937	0.8040	0.9317	0.8187	0.8970	-----	0.877	7.91	0.994	0.994	8.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.4692	0.5763	0.4543	0.5499	0.4802	0.4686	0.4539	0.5187	-----	0.496	7.66	0.996	0.997	9.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M68773.D	CAL BNA@50PPM	05/14/18 12:40	2	10M68766.D	CAL BNA@2PPM	05/14/18 10:01
3	10M68765.D	CAL BNA@10PPM	05/14/18 09:32	4	10M68771.D	CAL BNA@20PPM	05/14/18 11:56
5	10M68770.D	CAL BNA@80PPM	05/14/18 11:34	6	10M68769.D	CAL BNA@120PPM	05/14/18 11:11
7	10M68768.D	CAL BNA@160PPM	05/14/18 10:49	8	10M68767.D	CAL BNA@196PPM	05/14/18 10:27
9	10M68772.D	CAL BNA@0.5PPM	05/14/18 12:18				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.2722	0.2661	0.2327	0.2797	0.2977	0.2925	0.2874	0.3349	-----	0.283	7.65	0.989	0.995	10	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3510	0.3112	0.2788	0.3940	0.3513	0.3313	0.3364	0.3855	-----	0.342	7.75	0.990	0.994	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3387	0.3112	0.2986	0.4021	0.3671	0.3529	0.3564	0.4238	-----	0.356	7.78	0.984	0.993	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3093	1.6192	1.1276	1.4810	1.3073	1.2347	1.3025	1.4753	-----	1.36	7.82	0.994	0.996	12		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0471	1.3092	0.9949	1.2585	1.0392	1.1164	1.0832	1.2018	-----	1.13	7.94	0.994	0.998	10	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8557	1.0801	0.7921	0.9664	0.8335	0.8311	0.7632	0.8588	-----	0.873	8.22	0.997	0.997	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8557	1.0801	0.7921	0.9664	0.8335	0.8311	0.7632	0.8588	-----	0.873	8.22	0.997	0.997	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7200	0.8806	0.6668	0.8646	0.7415	0.7355	0.7010	0.7924	-----	0.763	8.00	0.993	0.995	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4205	0.4353	0.3622	0.4798	0.4335	0.4356	0.4179	0.4804	-----	0.433	8.01	0.992	0.995	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4268	0.4628	0.3938	0.4783	0.4240	0.4168	0.3832	0.4364	-----	0.428	8.20	0.993	0.994	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.6369	1.8715	1.4826	1.7944	1.5700	1.6361	1.4747	1.7589	-----	1.65	8.30	0.994	0.995	8.8	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2295	1.4627	1.1341	1.3952	1.2368	1.2625	1.1658	1.3487	-----	1.28	8.15	0.991	0.994	8.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2810	0.2831	0.2466	0.3178	0.2875	0.2844	0.2555	0.2880	-----	0.281	8.21	0.993	0.994	7.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0783	1.4261	0.9819	1.0776	1.0758	1.0574	1.0562	1.1691	-----	1.12	8.46	0.995	0.998	12	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3148	0.2461	0.2415	0.3124	0.3021	0.2948	0.2611	0.2950	-----	0.284	8.36	0.992	0.992	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1504	-----	0.0654	0.1119	0.1713	0.1840	0.1885	0.2128	-----	0.155	8.46	0.993	0.999	33	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.5497	2.0038	1.4047	1.5721	1.5736	1.5041	1.5394	1.6630	2.9173	1.75	8.61	0.997	0.998	27	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.3885	0.3264	0.3077	0.3665	0.4011	0.3940	0.4094	0.4500	-----	0.380	8.57	0.994	0.998	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2820	0.1428	0.2246	0.2637	0.2847	0.2827	0.2935	0.3295	-----	0.263	8.48	0.992	0.998	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.2769	0.2507	0.2352	0.2753	0.2943	0.2807	0.2941	0.3154	-----	0.278	8.71	0.997	0.999	9.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2562	1.4663	1.1329	1.2013	1.2003	1.1650	1.1995	1.3244	-----	1.24	8.94	0.994	0.997	8.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5844	0.6767	0.5434	0.5768	0.5747	0.5518	0.5751	0.6363	-----	0.590	8.92	0.993	0.997	7.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2377	1.3517	1.1399	1.2220	1.2772	1.2121	1.2494	1.3538	-----	1.26	8.79	0.996	0.998	5.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3550	0.2788	0.2833	0.3246	0.3502	0.3501	0.3482	0.3943	-----	0.336	8.94	0.993	0.997	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3499	0.2970	0.2749	0.3389	0.3534	0.3389	0.3354	0.3792	-----	0.333	9.56	0.993	0.996	9.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1194	-----	0.0650	0.1041	0.1417	0.1341	0.1415	0.1483	-----	0.122	8.96	0.997	0.998	24	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6481	0.7279	0.5628	0.6592	0.6766	0.6448	0.6516	0.6638	-----	0.654	9.03	0.999	0.999	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0920	0.0664	0.0615	0.0913	0.1011	0.0976	0.1008	0.1062	-----	0.0896	9.17	0.998	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7484	0.8388	0.6705	0.7591	0.7807	0.7342	0.7439	0.7929	-----	0.759	9.08	0.999	0.999	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.1785	0.1834	0.1535	0.1808	0.1853	0.1769	0.1870	0.1823	-----	0.179	9.42	0.999	0.999	6.0	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.1849	0.2236	0.1706	0.1946	0.1916	0.1829	0.1889	0.1938	-----	0.191	9.49	0.997	0.998	7.9	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.5838	0.5915	0.4938	0.5974	0.5786	0.5650	0.5710	0.5804	-----	0.570	9.74	1.00	1.00	5.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1138	-----	0.0728	0.1014	0.1308	0.1298	0.1360	0.1347	-----	0.117	9.69	0.999	0.999	20	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0858	1.3165	0.9983	1.1521	1.1042	1.0677	1.0737	1.1135	-----	1.11	9.93	0.999	0.999	8.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1123	1.2008	0.9647	1.1674	1.1085	1.0923	1.1056	1.1656	-----	1.11	9.99	0.998	0.999	6.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0010	1.0786	0.9186	1.0630	1.0834	1.0471	1.0280	1.0272	-----	1.03	10.15	0.999	1.00	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1897	1.1405	1.0270	1.1944	1.3011	1.2343	1.2333	1.2717	1.6458	1.25	10.53	0.999	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.0301	1.2397	0.9670	1.1000	1.1540	1.1051	1.1655	1.1590	-----	1.12	11.27	0.999	0.999	7.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.4106	1.4313	1.0245	1.1922	1.4043	1.2703	1.4522	1.4208	-----	1.33	11.54	0.996	0.996	11	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.6767	0.1495	0.1997	0.5115	0.6012	0.4983	0.5210	0.4960	-----	0.457	11.42	0.986	0.993	41		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.7349	0.7808	0.5346	0.6375	0.7519	0.6961	0.7948	0.7925	-----	0.715	11.71	0.995	0.998	13		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M68773.D	CAL BNA@50PPM	05/14/18 12:40	2	10M68766.D	CAL BNA@2PPM	05/14/18 10:01
3	10M68765.D	CAL BNA@10PPM	05/14/18 09:32	4	10M68771.D	CAL BNA@20PPM	05/14/18 11:56
5	10M68770.D	CAL BNA@80PPM	05/14/18 11:34	6	10M68769.D	CAL BNA@120PPM	05/14/18 11:11
7	10M68768.D	CAL BNA@160PPM	05/14/18 10:49	8	10M68767.D	CAL BNA@196PPM	05/14/18 10:27
9	10M68772.D	CAL BNA@0.5PPM	05/14/18 12:18				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2357	0.2360	0.2103	0.2054	0.2424	0.2240	0.2582	0.2495	-----	0.233	11.64	0.996	0.997	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3943	0.3503	0.3296	0.3432	0.4038	0.4177	0.4346	0.4277	-----	0.388	12.04	0.998	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.6125	0.4951	0.4271	0.5299	0.6313	0.6292	0.7034	0.6957	-----	0.591	12.30	0.997	0.999	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3408	0.2471	0.2830	0.2910	0.3537	0.3388	0.3778	0.3930	-----	0.328	12.40	0.995	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3403	0.2473	0.2292	0.3408	0.3296	0.3129	0.2992	0.2895	-----	0.299	12.92	0.996	1.00	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0994	1.1832	0.9149	1.0394	1.0961	1.1307	1.1403	1.2301	-----	1.10	12.95	0.997	0.999	8.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0715	1.2548	0.9356	1.0246	1.0633	1.0687	1.0961	1.1673	-----	1.09	13.00	0.997	0.999	8.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.8641	0.7085	0.6415	0.8129	0.8885	0.8898	0.9060	0.9812	-----	0.837	12.98	0.997	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.5050	1.0607	1.1000	1.6143	1.6392	1.7166	1.6969	1.8228	-----	1.52	13.73	0.997	0.999	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.2435	1.2317	0.9548	1.1248	1.2467	1.0973	1.2412	1.2023	-----	1.17	14.17	0.997	0.997	8.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.2162	1.2695	1.0164	1.1437	1.1931	1.1530	1.1722	1.2975	-----	1.18	14.21	0.994	0.997	7.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0775	1.1448	0.8977	1.0607	1.1214	1.1344	1.1403	1.2454	-----	1.10	14.55	0.996	0.999	9.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1468	1.1085	0.9724	1.1269	1.1785	1.1890	1.2192	1.2969	-----	1.15	16.02	0.998	1.00	8.2	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9562	0.9430	0.8063	0.9517	0.9860	0.9872	1.0311	1.0840	-----	0.968	16.05	0.997	1.00	8.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9601	1.1094	0.9147	1.0003	1.0086	0.9502	1.0883	1.1363	-----	1.02	16.43	0.992	0.998	8.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 11.9
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M91676.D	CAL BNA@50PPM	05/14/18 13:03	2	7M91669.D	CAL BNA@2PPM	05/14/18 10:09
3	7M91667.D	CAL BNA@10PPM	05/14/18 08:56	4	7M91674.D	CAL BNA@20PPM	05/14/18 12:16
5	7M91673.D	CAL BNA@80PPM	05/14/18 11:53	6	7M91672.D	CAL BNA@120PPM	05/14/18 11:30
7	7M91671.D	CAL BNA@160PPM	05/14/18 11:07	8	7M91670.D	CAL BNA@196PPM	05/14/18 10:44
9	7M91675.D	CAL BNA@0.5PPM	05/14/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	0.9462	1.5664	1.0570	0.9553	1.0147	0.9865	0.9869	1.0567	0.8725	1.05	2.68	0.998	0.999	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	2.8301	3.8102	3.4004	2.9596	3.0817	3.0494	3.0217	3.0865	-----	3.15	3.17	0.999	1.00	9.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.6830	1.9889	1.8874	1.7090	1.8582	1.8579	1.8661	1.8942	-----	1.84	3.09	0.999	1.00	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.3077	2.7513	2.1684	2.4391	2.6126	2.5458	2.5338	2.5451	-----	2.49	4.66	0.995	0.997	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.0389	2.4324	2.3286	2.5943	2.0220	1.7197	1.5311	-----	-----	2.10	5.47	0.977	0.998	18	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0		
Aniline	1	0	Avg	3.5430	3.1163	4.1261	3.9100	3.7953	3.6116	3.5189	3.4605	4.7736	3.76	5.57	0.999	1.00	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7792	0.9751	0.7484	0.7904	0.8443	0.8184	0.7977	0.7907	-----	0.818	5.61	0.999	1.00	8.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.4585	3.3963	2.7999	2.7566	2.6505	2.5552	2.5041	2.4676	4.5401	2.90	5.62	0.999	1.00	23	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.0408	3.4279	2.7881	3.2453	3.3497	3.2867	3.2596	3.2396	-----	3.20	5.53	0.999	1.00	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.4438	4.3679	3.9174	3.7056	3.7587	3.6484	3.6409	3.6049	-----	3.76	5.54	1.00	1.00	7.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.2134	2.9161	2.4339	2.4092	2.4497	2.3752	2.3411	2.3064	-----	2.43	5.67	0.999	0.999	8.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.8144	4.0511	2.9691	3.1234	3.0481	2.9573	2.8683	2.8294	-----	3.08	5.70	0.999	0.999	13	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.5141	3.2039	2.7834	2.6875	2.7503	2.6568	2.6039	2.5907	-----	2.72	5.80	0.999	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5174	1.8604	1.7530	1.5690	1.5516	1.6028	1.6390	1.6654	-----	1.64	5.86	0.999	1.00	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4417	1.7305	1.6660	1.4837	1.4919	1.4993	1.5499	1.5551	-----	1.55	5.98	0.999	1.00	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9479	1.0660	1.0044	0.9260	0.9887	1.0165	1.0603	1.0762	-----	1.01	5.96	0.998	1.00	5.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	2.1904	2.8948	2.4993	2.2563	2.1839	2.2084	2.2515	2.2787	-----	2.35	6.07	0.999	1.00	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Qua	1.2790	1.4324	1.4338	1.3166	1.3487	1.3748	1.4157	1.4536	2.2317	1.48	6.05	0.999	1.00	20	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.9108	2.2182	2.0418	1.9362	1.9740	2.0219	2.0923	2.1232	-----	2.04	6.17	0.999	1.00	5.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6163	0.7536	0.7046	0.6076	0.6393	0.6557	0.6650	0.6657	-----	0.664	6.25	0.999	1.00	7.2	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Qua	1.1810	1.3675	1.3481	1.2200	1.2310	1.2419	1.2692	1.2789	2.3271	1.39	6.17	0.999	1.00	26	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Qua	1.3452	1.5430	1.5522	1.3771	1.4325	1.4940	1.5410	1.5689	2.3454	1.58	6.17	0.998	1.00	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1710	0.1694	0.1539	0.1568	0.1800	0.1775	0.1769	0.1932	-----	0.172	6.29	0.996	0.998	7.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4853	0.5863	0.5599	0.4706	0.4866	0.4877	0.4950	0.5218	-----	0.512	6.31	0.998	1.00	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.8412	0.9033	0.9525	0.8059	0.8601	0.8730	0.8760	0.9193	-----	0.879	6.49	0.998	1.00	5.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Qua	0.1902	0.1808	0.2038	0.1827	0.2015	0.2055	0.2066	0.2166	-----	0.199	6.56	0.998	1.00	6.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Qua	0.4135	0.4454	0.4681	0.3984	0.4080	0.4155	0.4220	0.4449	0.5995	0.446	6.58	0.998	1.00	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1842	-----	0.0780	0.1282	0.2615	0.2756	0.2999	0.3121	-----	0.220	6.64	0.990	0.998	41		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4688	0.5938	0.5518	0.4702	0.4779	0.4859	0.4922	0.5149	-----	0.507	6.66	0.998	1.00	8.8	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Qua	0.3160	0.3013	0.3339	0.3028	0.3170	0.3217	0.3195	0.3436	0.4661	0.336	6.74	0.998	0.999	15	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3289	0.4368	0.3896	0.3305	0.3461	0.3484	0.3501	0.3669	-----	0.362	6.80	0.998	1.00	9.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.0486	1.3491	1.2242	1.0206	1.0599	1.1039	1.1022	1.1975	2.0532	1.24	6.87	0.996	0.999	26	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Avg	0.3931	0.3462	0.4754	0.3967	0.3930	0.3690	0.3394	0.3082	0.4640	0.387	6.91	0.987	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1893	0.2168	0.2188	0.1818	0.1943	0.1973	0.2031	0.2105	-----	0.202	6.95	0.998	1.00	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1115	0.0760	0.0983	0.1015	0.1185	0.1201	0.1223	0.1381	-----	0.111	7.17	0.992	0.998	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3491	0.3619	0.3797	0.3228	0.3561	0.3625	0.3661	0.3893	-----	0.361	7.27	0.997	0.999	5.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7061	0.8482	0.8196	0.6960	0.7355	0.7457	0.7518	0.7906	-----	0.762	7.41	0.998	1.00	7.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6955	0.8698	0.8015	0.6777	0.7080	0.7187	0.7224	0.7647	-----	0.745	7.49	0.998	1.00	8.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Avg	0.7006	0.8589	0.8084	0.6862	0.7213	0.7316	0.7373	0.7795	-----	0.753	7.49	0.998	1.00	7.8		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8683	1.0440	0.8939	0.8441	0.8806	0.8865	0.9042	0.9663	-----	0.911	7.78	0.997	0.999	7.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5214	0.6036	0.5602	0.5030	0.5219	0.5268	0.5285	0.5541	-----	0.540	7.54	0.999	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.94
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M91676.D	CAL BNA@50PPM	05/14/18 13:03	2	7M91669.D	CAL BNA@2PPM	05/14/18 10:09
3	7M91667.D	CAL BNA@10PPM	05/14/18 08:56	4	7M91674.D	CAL BNA@20PPM	05/14/18 12:16
5	7M91673.D	CAL BNA@80PPM	05/14/18 11:53	6	7M91672.D	CAL BNA@120PPM	05/14/18 11:30
7	7M91671.D	CAL BNA@160PPM	05/14/18 11:07	8	7M91670.D	CAL BNA@196PPM	05/14/18 10:44
9	7M91675.D	CAL BNA@0.5PPM	05/14/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.2835	0.1586	0.2624	0.2528	0.3196	0.3299	0.3441	0.3657	-----	0.290	7.53	0.996	1.00	23	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3521	0.3060	0.3746	0.3259	0.3648	0.3720	0.3793	0.3969	-----	0.359	7.63	0.998	1.00	8.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3677	0.3483	0.3956	0.3566	0.3955	0.3947	0.4027	0.4202	-----	0.385	7.66	0.998	1.00	6.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3272	1.5777	1.3145	1.2895	1.3379	1.3554	1.3669	1.4492	-----	1.38	7.69	0.998	1.00	6.8		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0966	1.3602	1.2614	1.0804	1.0992	1.1049	1.1212	1.1806	-----	1.16	7.80	0.998	1.00	8.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8566	1.0554	0.8891	0.8530	0.8583	0.8740	0.8994	0.9601	-----	0.906	8.09	0.998	1.00	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8566	1.0554	0.8891	0.8530	0.8583	0.8740	0.8994	0.9601	-----	0.906	8.09	0.998	1.00	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7435	0.9479	0.8194	0.7497	0.7539	0.7525	0.7663	0.8168	-----	0.794	7.87	0.997	0.999	8.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.5092	0.5043	0.5571	0.4738	0.5115	0.5100	0.5126	0.5415	-----	0.515	7.88	0.998	0.999	4.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4424	0.5222	0.4603	0.4368	0.4403	0.4504	0.4627	0.4844	-----	0.462	8.07	0.998	1.00	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.6284	1.9351	1.9252	1.6056	1.6513	1.6663	1.6966	1.7857	-----	1.74	8.16	0.998	0.999	7.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3118	1.4753	1.5086	1.2513	1.3086	1.3165	1.3391	1.4118	-----	1.37	8.02	0.998	1.00	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2937	0.3120	0.3521	0.2836	0.2967	0.2993	0.3103	0.3298	-----	0.310	8.08	0.996	1.00	7.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0788	1.3725	1.2714	1.0418	1.1100	1.1179	1.1405	1.2112	-----	1.17	8.32	0.997	1.00	9.4	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3080	0.2597	0.3398	0.2940	0.3052	0.2926	0.2826	0.2924	-----	0.297	8.24	0.999	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1174	-----	0.0654	0.0795	0.1510	0.1668	0.1809	0.1963	-----	0.137	8.33	0.991	1.00	37	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.5585	1.8682	1.7974	1.5403	1.5664	1.5864	1.6291	1.7106	2.9737	1.80	8.47	0.998	1.00	25	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Qua	0.3937	0.3345	0.4297	0.3778	0.4087	0.4124	0.4181	0.4439	-----	0.402	8.45	0.998	1.00	8.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.3261	0.2083	0.3097	0.2779	0.3420	0.3397	0.3521	0.3849	-----	0.318	8.36	0.995	0.999	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Qua	0.3189	0.2518	0.3313	0.2797	0.3368	0.3342	0.3454	0.3662	-----	0.321	8.58	0.997	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2799	1.4989	1.4664	1.2600	1.2903	1.3045	1.3381	1.4361	-----	1.36	8.79	0.996	0.999	6.9	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6277	0.7016	0.7112	0.6045	0.6424	0.6502	0.6699	0.7167	-----	0.666	8.78	0.996	0.999	6.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3198	1.3921	1.4893	1.2577	1.3248	1.3210	1.3582	1.4513	-----	1.36	8.66	0.997	0.999	5.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3339	0.2799	0.3731	0.3329	0.3458	0.3451	0.3499	0.3700	-----	0.341	8.80	0.998	0.999	8.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3826	0.3403	0.3655	0.3660	0.3881	0.3903	0.3982	0.4193	-----	0.381	9.42	0.998	1.00	6.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1013	-----	0.1012	0.0813	0.1185	0.1233	0.1306	0.1403	-----	0.114	8.83	0.994	0.999	18	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6297	0.7001	0.6986	0.6228	0.6429	0.6373	0.6600	0.7074	-----	0.662	8.89	0.998	0.999	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0854	0.0718	0.0747	0.0840	0.0967	0.0995	0.1007	0.1080	-----	0.0901	9.03	0.996	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.9157	1.1415	1.0364	0.9958	0.9280	0.9125	1.0123	0.9937	-----	0.992	8.94	0.998	0.999	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2018	0.2337	0.2223	0.1990	0.2114	0.2126	0.2184	0.2352	-----	0.217	9.27	0.996	0.999	6.2	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2021	0.2356	0.2220	0.1969	0.2088	0.2095	0.2116	0.2303	-----	0.215	9.34	0.997	0.998	6.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.5766	0.5467	0.5580	0.5541	0.5734	0.5662	0.5731	0.6089	-----	0.570	9.60	0.998	0.999	3.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1082	-----	0.0869	0.0970	0.1370	0.1410	0.1468	0.1589	-----	0.125	9.54	0.994	0.999	22	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0766	1.2599	1.2457	1.0600	1.0955	1.0932	1.1205	1.2080	-----	1.14	9.78	0.997	0.999	7.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1143	1.2211	1.2303	1.0731	1.1257	1.1337	1.1420	1.2375	-----	1.16	9.83	0.996	0.999	5.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0079	1.0398	1.1116	0.9813	1.0322	1.0362	1.0573	1.1273	-----	1.05	10.00	0.997	0.999	4.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.2635	1.0790	1.3238	1.1925	1.3364	1.3357	1.3478	1.4521	1.5838	1.32	10.37	0.997	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.2330	1.2516	1.3453	1.1493	1.2669	1.2721	1.3045	1.3922	-----	1.28	11.11	0.997	0.999	5.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1709	1.2251	1.3083	1.1045	1.2078	1.2521	1.2500	1.3294	-----	1.23	11.37	0.998	0.999	5.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.4131	0.1204	0.4099	0.3956	0.3942	0.3663	0.3481	0.3640	-----	0.352	11.27	0.997	0.997	27		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6780	0.6707	0.6272	0.6241	0.6909	0.7078	0.7028	0.7748	-----	0.685	11.55	0.995	0.998	7.0		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.94
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

8052424 0231

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M91676.D	CAL BNA@50PPM	05/14/18 13:03	2	7M91669.D	CAL BNA@2PPM	05/14/18 10:09
3	7M91667.D	CAL BNA@10PPM	05/14/18 08:56	4	7M91674.D	CAL BNA@20PPM	05/14/18 12:16
5	7M91673.D	CAL BNA@80PPM	05/14/18 11:53	6	7M91672.D	CAL BNA@120PPM	05/14/18 11:30
7	7M91671.D	CAL BNA@160PPM	05/14/18 11:07	8	7M91670.D	CAL BNA@196PPM	05/14/18 10:44
9	7M91675.D	CAL BNA@0.5PPM	05/14/18 12:39				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2276	0.2448	0.2150	0.2224	0.2335	0.2380	0.2418	0.2575	-----	0.235	11.49	0.997	1.00	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3892	0.3613	0.3473	0.3594	0.4055	0.4197	0.4217	0.4516	-----	0.395	11.89	0.997	1.00	9.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.5392	0.4313	0.5153	0.4763	0.5742	0.5937	0.5912	0.6355	-----	0.545	12.14	0.997	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3128	0.2717	0.2800	0.2906	0.3282	0.3408	0.3480	0.3735	-----	0.318	12.25	0.996	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3526	0.2298	0.2895	0.3214	0.3517	0.3338	0.3118	0.3130	-----	0.313	12.77	0.996	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0613	1.1792	1.1794	1.0186	1.0887	1.1325	1.1272	1.2081	-----	1.12	12.80	0.997	0.999	5.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9728	1.2029	1.1449	0.9666	0.9949	1.0084	1.0434	1.1104	-----	1.06	12.84	0.996	1.00	8.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.7123	0.5934	0.7254	0.6388	0.7311	0.7671	0.7762	0.8403	-----	0.723	12.84	0.996	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.3841	0.9438	1.2680	1.2417	1.5017	1.5337	1.5782	1.6898	-----	1.39	13.59	0.996	1.00	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1973	1.2151	1.2407	1.1159	1.1728	1.2441	1.2305	1.3458	-----	1.22	14.02	0.997	0.999	5.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0852	1.2677	1.2335	1.0883	1.1906	1.1497	1.2171	1.2661	-----	1.19	14.05	0.997	0.999	6.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0970	1.1457	1.1776	1.0199	1.1558	1.1755	1.2039	1.2936	-----	1.16	14.38	0.996	0.999	6.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1174	1.1526	1.1538	1.0423	1.1746	1.1849	1.2349	1.3209	-----	1.17	15.78	0.996	1.00	7.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9231	0.9677	0.9840	0.8472	0.9522	0.9711	1.0143	1.0920	-----	0.969	15.80	0.995	0.999	7.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9264	1.0043	1.0144	0.8600	0.9646	0.9859	1.0119	1.0749	-----	0.980	16.16	0.997	1.00	6.6	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.94
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M69015.D **Instrument:** GCMS 10

Cont Calibration Date/Time 5/28/2018 11:17:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.83	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.87	51.40	50	**		0.902	0.961	2.80	
Pyridine	1	0		3.35	48.14	50	**		2.669	2.570	3.71	
N-Nitrosodimethylamine	1	0		3.28	51.75	50	**		1.447	1.498	3.51	
2-Fluorophenol	1	0	S	4.80	51.47	50	**		2.296	2.364	2.94	
Benzaldehyde	1	0		5.60	50.78	50	20	0.01	1.610	1.635	1.56	
Aniline	1	0		5.70	51.56	50	**		3.305	3.562	3.12	
Pentachloroethane	1	0		5.74	50.81	50	**	0.05	0.833	0.847	1.62	
bis(2-Chloroethyl)ether	1	0		5.75	53.40	50	20	0.7	2.580	2.505	6.80	
Phenol-d5	1	0	S	5.65	50.41	50	**		2.915	2.939	0.81	
Phenol	1	0		5.66	51.38	50	20	0.8	3.265	3.356	2.77	
2-Chlorophenol	1	0		5.80	54.74	50	20	0.8	2.565	2.809	9.48	
N-Decane	1	0		5.83	56.06	50	**	0.05	3.405	3.817	12.11	
1,3-Dichlorobenzene	1	0		5.93	52.72	50	**		2.881	3.037	5.45	
1,4-Dichlorobenzene-d4	1	0	I	5.97	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.98	48.96	50	20		1.575	1.543	2.08	
1,2-Dichlorobenzene	1	0		6.11	49.66	50	**		1.490	1.480	0.68	
Benzyl alcohol	1	0		6.08	50.98	50	**		0.858	0.875	1.96	
bis(2-chloroisopropyl)ether	1	0		6.19	53.43	50	20	0.01	2.649	2.831	6.85	
2-Methylphenol	1	0		6.17	49.29	50	20	0.7	1.316	1.181	1.43	
Acetophenone	1	0		6.29	50.49	50	20	0.01	1.688	1.704	0.99	
Hexachloroethane	1	0		6.38	46.74	50	20	0.3	0.594	0.555	6.51	
N-Nitroso-di-n-propylamine	1	0		6.29	53.65	50	20	0.5	0.990	0.981	7.29	
3&4-Methylphenol	1	0		6.29	50.13	50	20		1.322	1.249	0.26	
Naphthalene-d8	1	0	I	6.97	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.42	23.57	25	**		0.166	0.157	5.73	
Nitrobenzene	1	0		6.43	46.53	50	20	0.2	0.382	0.355	6.95	
Isophorone	1	0		6.62	48.11	50	20	0.4	0.657	0.632	3.77	
2-Nitrophenol	1	0		6.68	49.74	50	20	0.1	0.190	0.189	0.51	
2,4-Dimethylphenol	1	0		6.70	48.29	50	20	0.2	0.383	0.341	3.43	
Benzoic Acid	1	0		6.75	41.82	50	**		0.227	0.196	16.36	
bis(2-Chloroethoxy)methane	1	0		6.77	49.09	50	20	0.3	0.397	0.390	1.82	
2,4-Dichlorophenol	1	0		6.86	49.23	50	20	0.2	0.307	0.302	1.54	
1,2,4-Trichlorobenzene	1	0		6.93	48.04	50	**		0.331	0.318	3.92	
Naphthalene	1	0		6.99	50.85	50	20	0.7	1.203	1.063	1.71	
4-Chloroaniline	1	0		7.02	52.59	50	20	0.01	0.387	0.408	5.18	
Hexachlorobutadiene	1	0		7.08	48.69	50	20	0.01	0.174	0.169	2.62	
Caprolactam	1	0		7.30	50.49	50	20	0.01	0.096	0.096	0.98	
4-Chloro-3-methylphenol	1	0		7.39	50.36	50	20	0.2	0.298	0.300	0.73	
2-Methylnaphthalene	1	0		7.53	48.53	50	**	0.4	0.712	0.691	2.95	
1-Methylnaphthalene	1	0		7.61	47.58	50	**	0.4	0.704	0.670	4.84	
Methylnaphthalenes	1	0		7.53	96.02	100	**			0.678	3.98	
1,1'-Biphenyl	1	0		7.90	47.72	50	20	0.01	0.877	0.837	4.57	
Acenaphthene-d10	1	0	I	8.42	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.66	44.93	50	20	0.01	0.496	0.446	10.14	
Hexachlorocyclopentadiene	1	0		7.65	40.53	50	20	0.05	0.283	0.211	18.95	
2,4,6-Trichlorophenol	1	0		7.75	48.48	50	20	0.2	0.342	0.332	3.05	
2,4,5-Trichlorophenol	1	0		7.78	49.21	50	20	0.2	0.356	0.351	1.59	
2-Fluorobiphenyl	1	0	S	7.82	23.36	25	**		1.357	1.268	6.58	
2-Chloronaphthalene	1	0		7.93	49.81	50	20	0.8	1.131	1.127	0.39	
1,4-Dimethylnaphthalene	1	0		8.21	54.07	50	**		0.873	0.944	8.14	
Dimethylnaphthalenes	1	0		8.21	54.07	50	20			0.944	8.14	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M69015.D **Instrument:** GCMS 10

Cont Calibration Date/Time 5/28/2018 11:17:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.99	47.21	50	**		0.763	0.720	5.57	
2-Nitroaniline	1	0		8.01	54.26	50	20	0.01	0.433	0.470	8.52	
Coumarin	1	0		8.20	55.02		**		0.428			
Acenaphthylene	1	0		8.30	53.09	50	20	0.9	1.653	1.755	6.17	
Dimethylphthalate	1	0		8.15	53.89	50	20	0.01	1.279	1.379	7.79	
2,6-Dinitrotoluene	1	0		8.21	56.72	50	20	0.2	0.281	0.318	13.43	
Acenaphthene	1	0		8.45	48.08	50	20	0.9	1.115	1.072	3.84	
3-Nitroaniline	1	0		8.37	56.79	50	20	0.01	0.284	0.332	13.57	
2,4-Dinitrophenol	1	0		8.46	45.65	50	20	0.01	0.155	0.130	8.70	
Dibenzofuran	1	0		8.61	51.48	50	20	0.8	1.748	1.513	2.96	
2,4-Dinitrotoluene	1	0		8.57	49.84	50	20	0.2	0.381	0.379	0.32	
4-Nitrophenol	1	0		8.49	49.50	50	20	0.01	0.263	0.256	1.00	
2,3,4,6-Tetrachlorophenol	1	0		8.71	47.36	50	20	0.01	0.278	0.263	5.28	
Fluorene	1	0		8.94	49.65	50	20	0.9	1.243	1.235	0.69	
4-Chlorophenyl-phenylether	1	0		8.92	49.24	50	20	0.4	0.590	0.581	1.53	
Diethylphthalate	1	0		8.79	49.27	50	20	0.01	1.256	1.237	1.47	
4-Nitroaniline	1	0		8.94	50.52	50	20	0.01	0.336	0.339	1.05	
Atrazine	1	0		9.56	50.53	50	20	0.01	0.333	0.337	1.06	
Phenanthrene-d10	1	0	I	9.90	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.96	44.09	50	20	0.01	0.122	0.110	11.82	
n-Nitrosodiphenylamine	1	0		9.03	49.61	50	20	0.01	0.654	0.649	0.77	
2,4,6-Tribromophenol	1	0	S	9.17	46.94	50	**		0.090	0.087	6.12	
1,2-Diphenylhydrazine	1	0		9.08	48.86	50	**		0.759	0.741	2.29	
4-Bromophenyl-phenylether	1	0		9.41	49.95	50	20	0.1	0.179	0.178	0.10	
Hexachlorobenzene	1	0		9.48	46.97	50	20	0.1	0.191	0.180	6.07	
N-Octadecane	1	0		9.74	54.33	50	**	0.05	0.570	0.620	8.67	
Pentachlorophenol	1	0		9.69	41.52	50	20	0.05	0.117	0.102	16.95	
Phenanthrene	1	0		9.93	47.18	50	20	0.7	1.114	1.051	5.65	
Anthracene	1	0		9.99	48.78	50	20	0.7	1.115	1.088	2.43	
Carbazole	1	0		10.15	54.56	50	20	0.01	1.031	1.125	9.13	
Di-n-butylphthalate	1	0		10.52	48.09	50	20	0.01	1.249	1.201	3.83	
Fluoranthene	1	0		11.27	47.21	50	20	0.6	1.115	1.053	5.59	
Chrysene-d12	1	0	I	12.97	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.54	46.51	50	20	0.6	1.326	1.233	6.97	
Benzidine	1	0		11.42	34.15	50	**		0.457	0.408	31.71	
Terphenyl-d14	1	0	S	11.71	23.65	25	**		0.715	0.677	5.39	
4,4'-DDE	1	0		11.64	51.11		**		0.233			
4,4'-DDD	1	0		12.04	49.20		**		0.388			
Butylbenzylphthalate	1	0		12.29	55.12	50	20	0.01	0.591	0.669	10.23	
4,4'-DDT	1	0		12.40	53.93		**		0.328			
3,3'-Dichlorobenzidine	1	0		12.92	55.77	50	20	0.01	0.299	0.372	11.54	
Benzo[a]anthracene	1	0		12.95	48.44	50	20	0.8	1.104	1.070	3.11	
Chrysene	1	0		13.00	48.37	50	20	0.7	1.085	1.050	3.25	
bis(2-Ethylhexyl)phthalate	1	0		12.97	52.53	50	20	0.01	0.837	0.876	5.06	
Perylene-d12	1	0	I	14.62	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.72	57.68	50	20	0.01	1.519	1.813	15.36	
Benzo[b]fluoranthene	1	0		14.17	54.22	50	20	0.7	1.168	1.266	8.43	
Benzo[k]fluoranthene	1	0		14.21	53.81	50	20	0.7	1.183	1.273	7.61	
Benzo[a]pyrene	1	0		14.55	50.15	50	20	0.7	1.103	1.106	0.29	
Indeno[1,2,3-cd]pyrene	1	0		16.02	48.68	50	20	0.5	1.155	1.124	2.65	
Dibenzo[a,h]anthracene	1	0		16.04	48.97	50	20	0.4	0.968	0.948	2.06	
Benzo[g,h,i]perylene	1	0		16.43	46.49	50	20	0.5	1.021	0.949	7.02	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M69015.D **Instrument:** GCMS 10

Cont Calibration Date/Time 5/28/2018 11:17:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.873	0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.706	0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91969.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/28/2018 11:21:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.64	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.67	45.99	50	**		1.049	0.965	8.02	
Pyridine	1	0		3.15	48.12	50	**		3.155	3.037	3.75	
N-Nitrosodimethylamine	1	0		3.08	50.72	50	**		1.843	1.870	1.45	
2-Fluorophenol	1	0	S	4.64	52.30	50	**		2.488	2.603	4.61	
Benzaldehyde	1	0		5.46	51.35	50	20	0.01	2.095	2.152	2.69	
Aniline	1	0		5.55	53.39	50	**		3.762	4.017	6.77	
Pentachloroethane	1	0		5.60	53.58	50	**	0.05	0.818	0.877	7.15	
bis(2-Chloroethyl)ether	1	0		5.61	53.09	50	20	0.7	2.903	2.780	6.17	
Phenol-d5	1	0	S	5.52	53.21	50	**		3.205	3.410	6.41	
Phenol	1	0		5.53	52.55	50	20	0.8	3.761	3.952	5.09	
2-Chlorophenol	1	0		5.66	52.92	50	20	0.8	2.431	2.573	5.84	
N-Decane	1	0		5.69	51.44	50	**	0.05	3.083	3.171	2.88	
1,3-Dichlorobenzene	1	0		5.78	51.61	50	**		2.724	2.811	3.21	
1,4-Dichlorobenzene-d4	1	0	I	5.84	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.85	45.62	50	20		1.645	1.501	8.75	
1,2-Dichlorobenzene	1	0		5.97	45.87	50	**		1.552	1.424	8.26	
Benzyl alcohol	1	0		5.95	47.40	50	**		1.011	0.958	5.20	
bis(2-chloroisopropyl)ether	1	0		6.06	48.52	50	20	0.01	2.345	2.276	2.96	
2-Methylphenol	1	0		6.04	50.77	50	20	0.7	1.476	1.329	1.53	
Acetophenone	1	0		6.16	47.53	50	20	0.01	2.040	1.939	4.94	
Hexachloroethane	1	0		6.25	47.18	50	20	0.3	0.664	0.626	5.64	
N-Nitroso-di-n-propylamine	1	0		6.16	51.00	50	20	0.5	1.385	1.236	2.01	
3&4-Methylphenol	1	0		6.16	49.92	50	20		1.578	1.399	0.16	
Naphthalene-d8	1	0	I	6.85	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.29	25.79	25	**		0.172	0.178	3.17	
Nitrobenzene	1	0		6.30	48.03	50	20	0.2	0.512	0.492	3.94	
Isophorone	1	0		6.48	48.87	50	20	0.4	0.879	0.859	2.26	
2-Nitrophenol	1	0		6.55	51.69	50	20	0.1	0.199	0.200	3.37	
2,4-Dimethylphenol	1	0		6.58	52.67	50	20	0.2	0.446	0.419	5.35	
Benzoic Acid	1	0		6.63	41.49	50	**		0.220	0.162	17.01	
bis(2-Chloroethoxy)methane	1	0		6.65	47.02	50	20	0.3	0.507	0.477	5.95	
2,4-Dichlorophenol	1	0		6.74	51.93	50	20	0.2	0.336	0.317	3.87	
1,2,4-Trichlorobenzene	1	0		6.80	46.24	50	**		0.362	0.335	7.52	
Naphthalene	1	0		6.86	53.51	50	20	0.7	1.240	1.093	7.01	
4-Chloroaniline	1	0		6.90	52.85	50	20	0.01	0.387	0.409	5.70	
Hexachlorobutadiene	1	0		6.95	47.63	50	20	0.01	0.202	0.192	4.74	
Caprolactam	1	0		7.16	52.29	50	20	0.01	0.111	0.112	4.58	
4-Chloro-3-methylphenol	1	0		7.26	48.75	50	20	0.2	0.361	0.352	2.50	
2-Methylnaphthalene	1	0		7.40	47.75	50	**	0.4	0.762	0.727	4.50	
1-Methylnaphthalene	1	0		7.48	46.97	50	**	0.4	0.745	0.700	6.06	
Methylnaphthalenes	1	0		7.40	94.72	100	**			0.713	5.28	
1,1'-Biphenyl	1	0		7.77	47.44	50	20	0.01	0.911	0.864	5.12	
Acenaphthene-d10	1	0	I	8.28	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.53	46.74	50	20	0.01	0.540	0.505	6.52	
Hexachlorocyclopentadiene	1	0		7.52	34.39	50	20	0.05	0.290	0.198	31.22	C1
2,4,6-Trichlorophenol	1	0		7.62	48.22	50	20	0.2	0.359	0.346	3.56	
2,4,5-Trichlorophenol	1	0		7.65	49.36	50	20	0.2	0.385	0.380	1.27	
2-Fluorobiphenyl	1	0	S	7.69	23.81	25	**		1.377	1.312	4.76	
2-Chloronaphthalene	1	0		7.80	46.13	50	20	0.8	1.163	1.073	7.74	
1,4-Dimethylnaphthalene	1	0		8.08	46.57	50	**		0.906	0.844	6.86	
Dimethylnaphthalenes	1	0		8.08	46.57	50	20			0.844	6.86	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91969.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/28/2018 11:21:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.86	46.48	50	**		0.794	0.738	7.05	
2-Nitroaniline	1	0		7.87	49.46	50	20	0.01	0.515	0.510	1.08	
Coumarin	1	0		8.07	47.58		**		0.462			
Acenaphthylene	1	0		8.16	45.94	50	20	0.9	1.737	1.596	8.12	
Dimethylphthalate	1	0		8.02	48.02	50	20	0.01	1.365	1.311	3.96	
2,6-Dinitrotoluene	1	0		8.08	46.89	50	20	0.2	0.310	0.290	6.21	
Acenaphthene	1	0		8.31	46.30	50	20	0.9	1.168	1.082	7.39	
3-Nitroaniline	1	0		8.23	54.48	50	20	0.01	0.297	0.326	8.96	
2,4-Dinitrophenol	1	0		8.32	54.06	50	20	0.01	0.137	0.144	8.12	
Dibenzofuran	1	0		8.47	51.27	50	20	0.8	1.803	1.555	2.54	
2,4-Dinitrotoluene	1	0		8.44	51.54	50	20	0.2	0.402	0.402	3.08	
4-Nitrophenol	1	0		8.36	53.93	50	20	0.01	0.318	0.339	7.87	
2,3,4,6-Tetrachlorophenol	1	0		8.57	50.77	50	20	0.01	0.321	0.320	1.53	
Fluorene	1	0		8.79	46.57	50	20	0.9	1.359	1.266	6.87	
4-Chlorophenyl-phenylether	1	0		8.78	47.28	50	20	0.4	0.666	0.629	5.44	
Diethylphthalate	1	0		8.65	48.86	50	20	0.01	1.364	1.333	2.29	
4-Nitroaniline	1	0		8.80	50.09	50	20	0.01	0.341	0.342	0.19	
Atrazine	1	0		9.42	51.15	50	20	0.01	0.381	0.390	2.30	
Phenanthrene-d10	1	0	I	9.75	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.82	53.43	50	20	0.01	0.114	0.115	6.85	
n-Nitrosodiphenylamine	1	0		8.89	47.20	50	20	0.01	0.662	0.625	5.59	
2,4,6-Tribromophenol	1	0	S	9.02	49.04	50	**		0.090	0.088	1.93	
1,2-Diphenylhydrazine	1	0		8.93	45.63	50	**		0.992	0.905	8.73	
4-Bromophenyl-phenylether	1	0		9.27	47.41	50	20	0.1	0.217	0.206	5.18	
Hexachlorobenzene	1	0		9.33	46.69	50	20	0.1	0.215	0.200	6.62	
N-Octadecane	1	0		9.59	50.92	50	**	0.05	0.570	0.580	1.83	
Pentachlorophenol	1	0		9.53	44.70	50	20	0.05	0.125	0.107	10.60	
Phenanthrene	1	0		9.77	46.89	50	20	0.7	1.145	1.074	6.22	
Anthracene	1	0		9.83	47.00	50	20	0.7	1.160	1.090	6.00	
Carbazole	1	0		9.99	48.60	50	20	0.01	1.049	1.020	2.80	
Di-n-butylphthalate	1	0		10.37	48.95	50	20	0.01	1.324	1.296	2.11	
Fluoranthene	1	0		11.11	48.03	50	20	0.6	1.277	1.226	3.95	
Chrysene-d12	1	0	I	12.80	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.37	48.08	50	20	0.6	1.231	1.184	3.84	
Benzidine	1	0		11.26	48.75	50	**		0.352	0.377	2.51	
Terphenyl-d14	1	0	S	11.55	25.13	25	**		0.685	0.688	0.53	
4,4'-DDE	1	0		11.48	48.36		**		0.235			
4,4'-DDD	1	0		11.89	49.83		**		0.395			
Butylbenzylphthalate	1	0		12.14	52.79	50	20	0.01	0.545	0.575	5.57	
4,4'-DDT	1	0		12.24	51.40		**		0.318			
3,3'-Dichlorobenzidine	1	0		12.77	55.28	50	20	0.01	0.313	0.385	10.55	
Benzo[a]anthracene	1	0		12.79	48.84	50	20	0.8	1.124	1.098	2.32	
Chrysene	1	0		12.84	45.89	50	20	0.7	1.056	0.969	8.22	
bis(2-Ethylhexyl)phthalate	1	0		12.83	53.44	50	20	0.01	0.723	0.746	6.87	
Perylene-d12	1	0	I	14.44	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.58	53.69	50	20	0.01	1.393	1.506	7.37	
Benzo[b]fluoranthene	1	0		14.02	49.52	50	20	0.7	1.220	1.209	0.95	
Benzo[k]fluoranthene	1	0		14.04	48.01	50	20	0.7	1.187	1.140	3.98	
Benzo[a]pyrene	1	0		14.37	46.61	50	20	0.7	1.159	1.080	6.78	
Indeno[1,2,3-cd]pyrene	1	0		15.77	45.61	50	20	0.5	1.173	1.070	8.77	
Dibenzo[a,h]anthracene	1	0		15.79	45.97	50	20	0.4	0.969	0.891	8.06	
Benzo[g,h,i]perylene	1	0		16.15	45.38	50	20	0.5	0.980	0.890	9.25	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91969.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/28/2018 11:21:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.753	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.906	0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91995.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/29/2018 8:03:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.64	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.68	45.69	50	**		1.049	0.959	8.61	
Pyridine	1	0		3.20	27.36	50	**		3.155	1.726	45.28	
N-Nitrosodimethylamine	1	0		3.08	45.68	50	**		1.843	1.684	8.65	
2-Fluorophenol	1	0	S	4.64	44.79	50	**		2.488	2.229	10.41	
Benzaldehyde	1	0		5.46	43.92	50	20	0.01	2.095	1.840	12.17	
Aniline	1	0		5.56	41.02	50	**		3.762	3.086	17.95	
Pentachloroethane	1	0		5.60	47.40	50	**	0.05	0.818	0.776	5.20	
bis(2-Chloroethyl)ether	1	0		5.61	54.64	50	20	0.7	2.903	2.860	9.28	
Phenol-d5	1	0	S	5.52	45.78	50	**		3.205	2.935	8.43	
Phenol	1	0		5.53	45.45	50	20	0.8	3.761	3.419	9.10	
2-Chlorophenol	1	0		5.66	46.03	50	20	0.8	2.431	2.237	7.95	
N-Decane	1	0		5.69	47.30	50	**	0.05	3.083	2.916	5.41	
1,3-Dichlorobenzene	1	0		5.78	45.47	50	**		2.724	2.477	9.06	
1,4-Dichlorobenzene-d4	1	0	I	5.83	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.85	46.83	50	20		1.645	1.541	6.34	
1,2-Dichlorobenzene	1	0		5.97	46.24	50	**		1.552	1.435	7.53	
Benzyl alcohol	1	0		5.95	46.98	50	**		1.011	0.950	6.04	
bis(2-chloroisopropyl)ether	1	0		6.06	51.58	50	20	0.01	2.345	2.420	3.17	
2-Methylphenol	1	0		6.04	51.31	50	20	0.7	1.476	1.343	2.61	
Acetophenone	1	0		6.16	47.25	50	20	0.01	2.040	1.928	5.50	
Hexachloroethane	1	0		6.25	47.42	50	20	0.3	0.664	0.629	5.17	
N-Nitroso-di-n-propylamine	1	0		6.16	52.37	50	20	0.5	1.385	1.270	4.75	
3&4-Methylphenol	1	0		6.16	50.05	50	20		1.578	1.403	0.10	
Naphthalene-d8	1	0	I	6.85	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.29	25.72	25	**		0.172	0.177	2.89	
Nitrobenzene	1	0		6.30	48.68	50	20	0.2	0.512	0.498	2.64	
Isophorone	1	0		6.48	48.44	50	20	0.4	0.879	0.852	3.12	
2-Nitrophenol	1	0		6.55	51.21	50	20	0.1	0.199	0.198	2.42	
2,4-Dimethylphenol	1	0		6.58	51.51	50	20	0.2	0.446	0.410	3.03	
Benzoic Acid	1	0		6.63	33.33	50	**		0.220	0.126	33.35	
bis(2-Chloroethoxy)methane	1	0		6.65	47.67	50	20	0.3	0.507	0.483	4.66	
2,4-Dichlorophenol	1	0		6.74	50.28	50	20	0.2	0.336	0.307	0.55	
1,2,4-Trichlorobenzene	1	0		6.80	46.68	50	**		0.362	0.338	6.64	
Naphthalene	1	0		6.87	52.52	50	20	0.7	1.240	1.072	5.05	
4-Chloroaniline	1	0		6.91	52.84	50	20	0.01	0.387	0.409	5.68	
Hexachlorobutadiene	1	0		6.95	47.26	50	20	0.01	0.202	0.190	5.48	
Caprolactam	1	0		7.17	50.07	50	20	0.01	0.111	0.107	0.13	
4-Chloro-3-methylphenol	1	0		7.27	48.86	50	20	0.2	0.361	0.353	2.27	
2-Methylnaphthalene	1	0		7.41	48.34	50	**	0.4	0.762	0.736	3.31	
1-Methylnaphthalene	1	0		7.49	46.93	50	**	0.4	0.745	0.699	6.14	
Methylnaphthalenes	1	0		7.41	95.27	100	**			0.717	4.73	
1,1'-Biphenyl	1	0		7.78	47.54	50	20	0.01	0.911	0.866	4.91	
Acenaphthene-d10	1	0	I	8.29	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.54	48.41	50	20	0.01	0.540	0.523	3.18	
Hexachlorocyclopentadiene	1	0		7.53	34.78	50	20	0.05	0.290	0.200	30.44	C1
2,4,6-Trichlorophenol	1	0		7.63	50.10	50	20	0.2	0.359	0.360	0.19	
2,4,5-Trichlorophenol	1	0		7.66	47.80	50	20	0.2	0.385	0.368	4.39	
2-Fluorobiphenyl	1	0	S	7.70	23.86	25	**		1.377	1.315	4.55	
2-Chloronaphthalene	1	0		7.81	47.74	50	20	0.8	1.163	1.111	4.52	
1,4-Dimethylnaphthalene	1	0		8.09	47.81	50	**		0.906	0.866	4.39	
Dimethylnaphthalenes	1	0		8.09	47.81	50	20			0.866	4.39	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91995.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/29/2018 8:03:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.87	47.20	50	**		0.794	0.749	5.60	
2-Nitroaniline	1	0		7.88	51.02	50	20	0.01	0.515	0.526	2.05	
Coumarin	1	0		8.07	47.34		**		0.462			
Acenaphthylene	1	0		8.17	47.83	50	20	0.9	1.737	1.662	4.33	
Dimethylphthalate	1	0		8.03	48.31	50	20	0.01	1.365	1.319	3.38	
2,6-Dinitrotoluene	1	0		8.09	49.31	50	20	0.2	0.310	0.305	1.39	
Acenaphthene	1	0		8.32	48.10	50	20	0.9	1.168	1.124	3.80	
3-Nitroaniline	1	0		8.24	54.95	50	20	0.01	0.297	0.329	9.90	
2,4-Dinitrophenol	1	0		8.33	51.63	50	20	0.01	0.137	0.136	3.27	
Dibenzofuran	1	0		8.47	53.40	50	20	0.8	1.803	1.622	6.79	
2,4-Dinitrotoluene	1	0		8.44	51.90	50	20	0.2	0.402	0.405	3.79	
4-Nitrophenol	1	0		8.36	52.46	50	20	0.01	0.318	0.329	4.92	
2,3,4,6-Tetrachlorophenol	1	0		8.58	50.14	50	20	0.01	0.321	0.316	0.29	
Fluorene	1	0		8.80	48.38	50	20	0.9	1.359	1.315	3.24	
4-Chlorophenyl-phenylether	1	0		8.79	47.44	50	20	0.4	0.666	0.632	5.11	
Diethylphthalate	1	0		8.66	49.78	50	20	0.01	1.364	1.358	0.43	
4-Nitroaniline	1	0		8.80	51.55	50	20	0.01	0.341	0.352	3.11	
Atrazine	1	0		9.42	47.32	50	20	0.01	0.381	0.361	5.36	
Phenanthrene-d10	1	0	I	9.75	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.83	51.56	50	20	0.01	0.114	0.111	3.12	
n-Nitrosodiphenylamine	1	0		8.89	47.83	50	20	0.01	0.662	0.634	4.35	
2,4,6-Tribromophenol	1	0	S	9.03	47.46	50	**		0.090	0.085	5.09	
1,2-Diphenylhydrazine	1	0		8.94	52.67	50	**		0.992	1.045	5.34	
4-Bromophenyl-phenylether	1	0		9.27	46.10	50	20	0.1	0.217	0.200	7.80	
Hexachlorobenzene	1	0		9.34	45.97	50	20	0.1	0.215	0.197	8.06	
N-Octadecane	1	0		9.60	52.89	50	**	0.05	0.570	0.603	5.77	
Pentachlorophenol	1	0		9.54	45.21	50	20	0.05	0.125	0.108	9.57	
Phenanthrene	1	0		9.78	47.58	50	20	0.7	1.145	1.090	4.84	
Anthracene	1	0		9.83	48.48	50	20	0.7	1.160	1.124	3.04	
Carbazole	1	0		10.00	49.06	50	20	0.01	1.049	1.029	1.88	
Di-n-butylphthalate	1	0		10.37	48.61	50	20	0.01	1.324	1.287	2.79	
Fluoranthene	1	0		11.11	48.26	50	20	0.6	1.277	1.232	3.48	
Chrysene-d12	1	0	I	12.80	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.37	48.37	50	20	0.6	1.231	1.191	3.25	
Benzidine	1	0		11.27	40.04	50	**		0.352	0.311	19.92	
Terphenyl-d14	1	0	S	11.55	24.50	25	**		0.685	0.671	2.02	
4,4'-DDE	1	0		11.48	48.45		**		0.235			
4,4'-DDD	1	0		11.89	47.23		**		0.395			
Butylbenzylphthalate	1	0		12.14	50.34	50	20	0.01	0.545	0.547	0.68	
4,4'-DDT	1	0		12.24	50.36		**		0.318			
3,3'-Dichlorobenzidine	1	0		12.77	51.88	50	20	0.01	0.313	0.363	3.77	
Benzo[a]anthracene	1	0		12.79	48.42	50	20	0.8	1.124	1.089	3.16	
Chrysene	1	0		12.84	47.15	50	20	0.7	1.056	0.996	5.69	
bis(2-Ethylhexyl)phthalate	1	0		12.83	53.49	50	20	0.01	0.723	0.747	6.98	
Perylene-d12	1	0	I	14.45	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.59	52.51	50	20	0.01	1.393	1.470	5.02	
Benzo[b]fluoranthene	1	0		14.03	50.51	50	20	0.7	1.220	1.233	1.03	
Benzo[k]fluoranthene	1	0		14.05	47.52	50	20	0.7	1.187	1.128	4.96	
Benzo[a]pyrene	1	0		14.39	48.66	50	20	0.7	1.159	1.128	2.68	
Indeno[1,2,3-cd]pyrene	1	0		15.79	48.37	50	20	0.5	1.173	1.134	3.27	
Dibenzo[a,h]anthracene	1	0		15.81	48.40	50	20	0.4	0.969	0.938	3.19	
Benzo[g,h,i]perylene	1	0		16.17	48.59	50	20	0.5	0.980	0.953	2.81	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M91995.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/29/2018 8:03:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.753	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.906	0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M92010.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/30/2018 8:48:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.64	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.68	48.45	50	**		1.049	1.017	3.10	
Pyridine	1	0		3.17	39.19	50	**		3.155	2.473	21.62	
N-Nitrosodimethylamine	1	0		3.08	49.80	50	**		1.843	1.836	0.39	
2-Fluorophenol	1	0	S	4.65	48.86	50	**		2.488	2.431	2.28	
Benzaldehyde	1	0		5.46	31.50	50	20	0.01	2.095	1.320	37.00	C1
Aniline	1	0		5.56	44.95	50	**		3.762	3.382	10.09	
Pentachloroethane	1	0		5.60	49.80	50	**	0.05	0.818	0.815	0.41	
bis(2-Chloroethyl)ether	1	0		5.61	49.60	50	20	0.7	2.903	2.602	0.79	
Phenol-d5	1	0	S	5.52	50.07	50	**		3.205	3.209	0.14	
Phenol	1	0		5.53	47.97	50	20	0.8	3.761	3.608	4.06	
2-Chlorophenol	1	0		5.66	48.29	50	20	0.8	2.431	2.347	3.42	
N-Decane	1	0		5.69	49.51	50	**	0.05	3.083	3.052	0.98	
1,3-Dichlorobenzene	1	0		5.79	47.75	50	**		2.724	2.601	4.50	
1,4-Dichlorobenzene-d4	1	0	I	5.84	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.85	46.31	50	20		1.645	1.524	7.38	
1,2-Dichlorobenzene	1	0		5.98	47.10	50	**		1.552	1.462	5.79	
Benzyl alcohol	1	0		5.95	47.10	50	**		1.011	0.952	5.79	
bis(2-chloroisopropyl)ether	1	0		6.06	49.88	50	20	0.01	2.345	2.340	0.24	
2-Methylphenol	1	0		6.04	50.26	50	20	0.7	1.476	1.315	0.53	
Acetophenone	1	0		6.16	47.66	50	20	0.01	2.040	1.944	4.69	
Hexachloroethane	1	0		6.25	46.84	50	20	0.3	0.664	0.622	6.32	
N-Nitroso-di-n-propylamine	1	0		6.16	50.05	50	20	0.5	1.385	1.212	0.10	
3&4-Methylphenol	1	0		6.16	49.34	50	20		1.578	1.382	1.33	
Naphthalene-d8	1	0	I	6.84	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.29	24.80	25	**		0.172	0.171	0.79	
Nitrobenzene	1	0		6.30	47.23	50	20	0.2	0.512	0.483	5.55	
Isophorone	1	0		6.48	47.72	50	20	0.4	0.879	0.839	4.56	
2-Nitrophenol	1	0		6.55	51.17	50	20	0.1	0.199	0.198	2.34	
2,4-Dimethylphenol	1	0		6.57	51.19	50	20	0.2	0.446	0.407	2.38	
Benzoic Acid	1	0		6.64	49.81	50	**		0.220	0.202	0.39	
bis(2-Chloroethoxy)methane	1	0		6.64	47.08	50	20	0.3	0.507	0.477	5.85	
2,4-Dichlorophenol	1	0		6.73	50.27	50	20	0.2	0.336	0.307	0.54	
1,2,4-Trichlorobenzene	1	0		6.80	45.69	50	**		0.362	0.331	8.63	
Naphthalene	1	0		6.86	51.36	50	20	0.7	1.240	1.047	2.73	
4-Chloroaniline	1	0		6.90	50.27	50	20	0.01	0.387	0.389	0.53	
Hexachlorobutadiene	1	0		6.94	46.03	50	20	0.01	0.202	0.186	7.93	
Caprolactam	1	0		7.17	53.17	50	20	0.01	0.111	0.114	6.34	
4-Chloro-3-methylphenol	1	0		7.26	48.76	50	20	0.2	0.361	0.352	2.48	
2-Methylnaphthalene	1	0		7.39	47.15	50	**	0.4	0.762	0.718	5.70	
1-Methylnaphthalene	1	0		7.47	46.36	50	**	0.4	0.745	0.691	7.28	
Methylnaphthalenes	1	0		7.39	93.47	100	**			0.704	6.53	
1,1'-Biphenyl	1	0		7.77	47.49	50	20	0.01	0.911	0.865	5.02	
Acenaphthene-d10	1	0	I	8.27	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.53	46.78	50	20	0.01	0.540	0.505	6.44	
Hexachlorocyclopentadiene	1	0		7.52	45.31	50	20	0.05	0.290	0.265	9.38	
2,4,6-Trichlorophenol	1	0		7.62	48.61	50	20	0.2	0.359	0.349	2.77	
2,4,5-Trichlorophenol	1	0		7.65	48.86	50	20	0.2	0.385	0.376	2.28	
2-Fluorobiphenyl	1	0	S	7.68	23.72	25	**		1.377	1.307	5.13	
2-Chloronaphthalene	1	0		7.79	46.27	50	20	0.8	1.163	1.076	7.46	
1,4-Dimethylnaphthalene	1	0		8.07	46.08	50	**		0.906	0.835	7.84	
Dimethylnaphthalenes	1	0		8.07	46.08	50	20			0.835	7.84	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M92010.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/30/2018 8:48:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.85	46.10	50	**		0.794	0.732	7.79	
2-Nitroaniline	1	0		7.87	50.23	50	20	0.01	0.515	0.517	0.46	
Coumarin	1	0		8.05	47.41		**		0.462			
Acenaphthylene	1	0		8.15	46.83	50	20	0.9	1.737	1.627	6.34	
Dimethylphthalate	1	0		8.01	47.22	50	20	0.01	1.365	1.289	5.57	
2,6-Dinitrotoluene	1	0		8.07	46.96	50	20	0.2	0.310	0.291	6.07	
Acenaphthene	1	0		8.31	45.59	50	20	0.9	1.168	1.065	8.82	
3-Nitroaniline	1	0		8.23	51.05	50	20	0.01	0.297	0.306	2.09	
2,4-Dinitrophenol	1	0		8.32	53.06	50	20	0.01	0.137	0.141	6.12	
Dibenzofuran	1	0		8.46	51.76	50	20	0.8	1.803	1.570	3.51	
2,4-Dinitrotoluene	1	0		8.43	52.61	50	20	0.2	0.402	0.411	5.22	
4-Nitrophenol	1	0		8.35	53.18	50	20	0.01	0.318	0.334	6.37	
2,3,4,6-Tetrachlorophenol	1	0		8.56	51.17	50	20	0.01	0.321	0.323	2.34	
Fluorene	1	0		8.78	47.03	50	20	0.9	1.359	1.279	5.93	
4-Chlorophenyl-phenylether	1	0		8.77	45.41	50	20	0.4	0.666	0.605	9.17	
Diethylphthalate	1	0		8.65	47.99	50	20	0.01	1.364	1.310	4.02	
4-Nitroaniline	1	0		8.79	49.87	50	20	0.01	0.341	0.340	0.25	
Atrazine	1	0		9.41	49.83	50	20	0.01	0.381	0.380	0.35	
Phenanthrene-d10	1	0	I	9.74	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.82	53.84	50	20	0.01	0.114	0.116	7.68	
n-Nitrosodiphenylamine	1	0		8.88	46.57	50	20	0.01	0.662	0.617	6.86	
2,4,6-Tribromophenol	1	0	S	9.02	48.54	50	**		0.090	0.087	2.92	
1,2-Diphenylhydrazine	1	0		8.93	46.03	50	**		0.992	0.913	7.93	
4-Bromophenyl-phenylether	1	0		9.26	45.72	50	20	0.1	0.217	0.198	8.56	
Hexachlorobenzene	1	0		9.33	45.57	50	20	0.1	0.215	0.196	8.86	
N-Octadecane	1	0		9.59	51.27	50	**	0.05	0.570	0.584	2.53	
Pentachlorophenol	1	0		9.53	49.20	50	20	0.05	0.125	0.119	1.61	
Phenanthrene	1	0		9.76	45.44	50	20	0.7	1.145	1.041	9.11	
Anthracene	1	0		9.82	46.83	50	20	0.7	1.160	1.086	6.35	
Carbazole	1	0		9.99	47.55	50	20	0.01	1.049	0.998	4.90	
Di-n-butylphthalate	1	0		10.36	47.98	50	20	0.01	1.324	1.270	4.05	
Fluoranthene	1	0		11.10	46.86	50	20	0.6	1.277	1.197	6.29	
Chrysene-d12	1	0	I	12.80	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.37	47.88	50	20	0.6	1.231	1.179	4.24	
Benzidine	1	0		11.26	37.51	50	**		0.352	0.292	24.98	
Terphenyl-d14	1	0	S	11.54	24.18	25	**		0.685	0.662	3.28	
4,4'-DDE	1	0		11.48	48.12		**		0.235			
4,4'-DDD	1	0		11.88	49.15		**		0.395			
Butylbenzylphthalate	1	0		12.14	52.04	50	20	0.01	0.545	0.566	4.07	
4,4'-DDT	1	0		12.24	50.68		**		0.318			
3,3'-Dichlorobenzidine	1	0		12.76	51.60	50	20	0.01	0.313	0.361	3.20	
Benzo[a]anthracene	1	0		12.79	48.28	50	20	0.8	1.124	1.086	3.44	
Chrysene	1	0		12.83	45.83	50	20	0.7	1.056	0.968	8.33	
bis(2-Ethylhexyl)phthalate	1	0		12.83	53.56	50	20	0.01	0.723	0.748	7.13	
Perylene-d12	1	0	I	14.44	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.58	53.14	50	20	0.01	1.393	1.489	6.27	
Benzo[b]fluoranthene	1	0		14.02	46.68	50	20	0.7	1.220	1.139	6.65	
Benzo[k]fluoranthene	1	0		14.04	46.70	50	20	0.7	1.187	1.109	6.59	
Benzo[a]pyrene	1	0		14.37	47.63	50	20	0.7	1.159	1.104	4.73	
Indeno[1,2,3-cd]pyrene	1	0		15.77	47.15	50	20	0.5	1.173	1.106	5.70	
Dibenzo[a,h]anthracene	1	0		15.79	46.74	50	20	0.4	0.969	0.906	6.51	
Benzo[g,h,i]perylene	1	0		16.15	47.25	50	20	0.5	0.980	0.926	5.50	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M92010.D **Instrument:** GCMS 7

Cont Calibration Date/Time 5/30/2018 8:48:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.906	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.753	0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M85630.D **Instrument:** GCMS 9

Cont Calibration Date/Time 5/30/2018 8:50:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.80	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.84	55.29	50	**		0.983	1.087	10.59	
Pyridine	1	0		3.32	49.10	50	**		3.256	3.197	1.80	
N-Nitrosodimethylamine	1	0		3.26	55.39	50	**		1.786	1.979	10.79	
2-Fluorophenol	1	0	S	4.79	47.98	50	**		2.407	2.309	4.04	
Benzaldehyde	1	0		5.59	33.07	50	20	0.01	1.668	1.103	33.87	C1
Aniline	1	0		5.68	47.20	50	**		3.946	3.725	5.59	
Pentachloroethane	1	0		5.72	51.79	50	**	0.05	0.883	0.915	3.57	
bis(2-Chloroethyl)ether	1	0		5.74	49.64	50	20	0.7	3.000	2.979	0.72	
Phenol-d5	1	0	S	5.66	48.59	50	**		3.047	2.962	2.81	
Phenol	1	0		5.67	54.51	50	20	0.8	3.795	4.137	9.02	
2-Chlorophenol	1	0		5.79	48.56	50	20	0.8	3.048	2.960	2.88	
N-Decane	1	0		5.81	47.45	50	**	0.05	2.807	2.664	5.10	
1,3-Dichlorobenzene	1	0		5.91	48.26	50	**		3.362	3.245	3.47	
1,4-Dichlorobenzene-d4	1	0	I	5.96	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.97	49.08	50	20		1.797	1.764	1.83	
1,2-Dichlorobenzene	1	0		6.10	49.05	50	**		1.689	1.656	1.91	
Benzyl alcohol	1	0		6.07	49.33	50	**		1.060	1.046	1.34	
bis(2-chloroisopropyl)ether	1	0		6.18	52.34	50	20	0.01	2.034	2.129	4.67	
2-Methylphenol	1	0		6.16	50.82	50	20	0.7	1.527	1.552	1.64	
Acetophenone	1	0		6.29	57.35	50	20	0.01	1.969	2.259	14.69	
Hexachloroethane	1	0		6.37	57.90	50	20	0.3	0.673	0.779	15.79	
N-Nitroso-di-n-propylamine	1	0		6.28	65.10	50	20	0.5	1.165	1.516	30.20	C1
3&4-Methylphenol	1	0		6.29	52.98	50	20		1.651	1.750	5.97	
Naphthalene-d8	1	0	I	6.97	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.41	25.13	25	**		0.160	0.160	0.51	
Nitrobenzene	1	0		6.43	65.03	50	20	0.2	0.410	0.534	30.05	C1
Isophorone	1	0		6.61	61.61	50	20	0.4	0.733	0.904	23.22	C1
2-Nitrophenol	1	0		6.67	53.44	50	20	0.1	0.214	0.229	6.88	
2,4-Dimethylphenol	1	0		6.70	55.38	50	20	0.2	0.432	0.478	10.75	
Benzoic Acid	1	0		6.77	29.42	50	**		0.266	0.152	41.16	
bis(2-Chloroethoxy)methane	1	0		6.76	56.45	50	20	0.3	0.453	0.512	12.90	
2,4-Dichlorophenol	1	0		6.86	51.16	50	20	0.2	0.350	0.358	2.32	
1,2,4-Trichlorobenzene	1	0		6.92	54.87	50	**		0.374	0.411	9.74	
Naphthalene	1	0		6.98	47.77	50	20	0.7	1.305	1.246	4.47	
4-Chloroaniline	1	0		7.02	52.12	50	20	0.01	0.401	0.460	4.23	
Hexachlorobutadiene	1	0		7.06	63.61	50	20	0.01	0.215	0.273	27.22	C1
Caprolactam	1	0		7.30	51.15	50	20	0.01	0.108	0.110	2.30	
4-Chloro-3-methylphenol	1	0		7.39	55.50	50	20	0.2	0.349	0.387	11.00	
2-Methylnaphthalene	1	0		7.53	51.35	50	**	0.4	0.842	0.865	2.69	
1-Methylnaphthalene	1	0		7.61	51.66	50	**	0.4	0.809	0.836	3.32	
Methylnaphthalenes	1	0		7.53	102.90	100	**			0.849	2.90	
1,1'-Biphenyl	1	0		7.90	49.95	50	20	0.01	0.898	0.897	0.10	
Acenaphthene-d10	1	0	I	8.42	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.66	52.62	50	20	0.01	0.584	0.614	5.24	
Hexachlorocyclopentadiene	1	0		7.64	0.64	50	20	0.05	0.380	0.004	98.72	C1
2,4,6-Trichlorophenol	1	0		7.75	54.38	50	20	0.2	0.403	0.438	8.77	
2,4,5-Trichlorophenol	1	0		7.79	54.47	50	20	0.2	0.433	0.472	8.95	
2-Fluorobiphenyl	1	0	S	7.81	25.23	25	**		1.301	1.313	0.92	
2-Chloronaphthalene	1	0		7.93	50.99	50	20	0.8	1.283	1.309	1.98	
1,4-Dimethylnaphthalene	1	0		8.21	52.86	50	**		0.956	1.010	5.72	
Dimethylnaphthalenes	1	0		8.21	52.86	50	20			1.010	5.72	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M85630.D **Instrument:** GCMS 9

Cont Calibration Date/Time 5/30/2018 8:50:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.99	52.00	50	**		0.827	0.860	3.99	
2-Nitroaniline	1	0		8.01	53.44	50	20	0.01	0.440	0.470	6.89	
Coumarin	1	0		8.20	50.65		**		0.462			
Acenaphthylene	1	0		8.30	49.47	50	20	0.9	1.952	1.932	1.05	
Dimethylphthalate	1	0		8.15	54.30	50	20	0.01	1.456	1.582	8.60	
2,6-Dinitrotoluene	1	0		8.21	55.72	50	20	0.2	0.345	0.385	11.44	
Acenaphthene	1	0		8.45	48.39	50	20	0.9	1.402	1.357	3.21	
3-Nitroaniline	1	0		8.37	52.00	50	20	0.01	0.333	0.346	4.00	
2,4-Dinitrophenol	1	0		8.48	37.92	50	20	0.01	0.210	0.139	24.16	C1
Dibenzofuran	1	0		8.61	49.01	50	20	0.8	1.973	1.934	1.99	
2,4-Dinitrotoluene	1	0		8.59	53.76	50	20	0.2	0.433	0.465	7.53	
4-Nitrophenol	1	0		8.51	52.35	50	20	0.01	0.282	0.295	4.70	
2,3,4,6-Tetrachlorophenol	1	0		8.72	48.14	50	20	0.01	0.401	0.386	3.72	
Fluorene	1	0		8.94	50.27	50	20	0.9	1.564	1.572	0.54	
4-Chlorophenyl-phenylether	1	0		8.92	53.91	50	20	0.4	0.759	0.818	7.82	
Diethylphthalate	1	0		8.79	56.30	50	20	0.01	1.435	1.616	12.59	
4-Nitroaniline	1	0		8.95	47.87	50	20	0.01	0.421	0.404	4.26	
Atrazine	1	0		9.57	42.36	50	20	0.01	0.400	0.339	15.29	
Phenanthrene-d10	1	0	I	9.91	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.98	44.36	50	20	0.01	0.149	0.123	11.27	
n-Nitrosodiphenylamine	1	0		9.03	49.43	50	20	0.01	0.770	0.761	1.14	
2,4,6-Tribromophenol	1	0	S	9.18	51.20	50	**		0.104	0.106	2.40	
1,2-Diphenylhydrazine	1	0		9.08	62.13	50	**		0.850	1.056	24.26	
4-Bromophenyl-phenylether	1	0		9.41	54.20	50	20	0.1	0.253	0.274	8.40	
Hexachlorobenzene	1	0		9.49	55.46	50	20	0.1	0.270	0.299	10.91	
N-Octadecane	1	0		9.73	50.77	50	**	0.05	0.457	0.464	1.53	
Pentachlorophenol	1	0		9.70	35.84	50	20	0.05	0.174	0.109	28.31	C1
Phenanthrene	1	0		9.94	48.02	50	20	0.7	1.325	1.273	3.96	
Anthracene	1	0		9.99	47.82	50	20	0.7	1.361	1.302	4.36	
Carbazole	1	0		10.16	48.54	50	20	0.01	1.220	1.184	2.91	
Di-n-butylphthalate	1	0		10.52	52.96	50	20	0.01	1.412	1.495	5.92	
Fluoranthene	1	0		11.28	51.60	50	20	0.6	1.430	1.476	3.20	
Chrysene-d12	1	0	I	12.99	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.55	43.86	50	20	0.6	1.205	1.057	12.28	
Benzidine	1	0		11.43	26.93	50	**		0.304	0.217	46.14	
Terphenyl-d14	1	0	S	11.72	21.90	25	**		0.607	0.532	12.41	
4,4'-DDE	1	0		11.65	50.92		**		0.202			
4,4'-DDD	1	0		12.06	48.01		**		0.331			
Butylbenzylphthalate	1	0		12.30	47.75	50	20	0.01	0.498	0.476	4.50	
4,4'-DDT	1	0		12.41	46.80		**		0.286			
3,3'-Dichlorobenzidine	1	0		12.94	49.90	50	20	0.01	0.254	0.301	0.19	
Benzo[a]anthracene	1	0		12.98	54.09	50	20	0.8	1.203	1.301	8.19	
Chrysene	1	0		13.03	44.01	50	20	0.7	1.190	1.047	11.97	
bis(2-Ethylhexyl)phthalate	1	0		12.98	60.79	50	20	0.01	0.732	0.890	21.57	C1
Perylene-d12	1	0	I	14.66	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.74	56.25	50	20	0.01	1.299	1.461	12.49	
Benzo[b]fluoranthene	1	0		14.21	51.96	50	20	0.7	1.287	1.337	3.91	
Benzo[k]fluoranthene	1	0		14.24	50.84	50	20	0.7	1.351	1.374	1.69	
Benzo[a]pyrene	1	0		14.60	52.14	50	20	0.7	1.265	1.319	4.28	
Indeno[1,2,3-cd]pyrene	1	0		16.10	61.59	50	20	0.5	1.361	1.676	23.19	C1
Dibenzo[a,h]anthracene	1	0		16.10	60.15	50	20	0.4	1.151	1.385	20.30	
Benzo[g,h,i]perylene	1	0		16.51	58.01	50	20	0.5	1.141	1.324	16.01	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M85646.D **Instrument:** GCMS 9

Cont Calibration Date/Time 5/30/2018 3:31:00 P Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.79	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.83	52.93	50	**		0.983	1.041	5.86	
Pyridine	1	0		3.32	51.63	50	**		3.256	3.362	3.26	
N-Nitrosodimethylamine	1	0		3.25	54.16	50	**		1.786	1.935	8.32	
2-Fluorophenol	1	0	S	4.79	47.58	50	**		2.407	2.290	4.84	
Benzaldehyde	1	0		5.59	33.42	50	20	0.01	1.668	1.115	33.15	C1
Aniline	1	0		5.68	45.86	50	**		3.946	3.619	8.28	
Pentachloroethane	1	0		5.72	51.61	50	**	0.05	0.883	0.911	3.22	
bis(2-Chloroethyl)ether	1	0		5.74	49.19	50	20	0.7	3.000	2.952	1.62	
Phenol-d5	1	0	S	5.65	48.53	50	**		3.047	2.958	2.94	
Phenol	1	0		5.66	54.28	50	20	0.8	3.795	4.120	8.57	
2-Chlorophenol	1	0		5.78	48.44	50	20	0.8	3.048	2.953	3.13	
N-Decane	1	0		5.81	46.99	50	**	0.05	2.807	2.638	6.02	
1,3-Dichlorobenzene	1	0		5.91	47.02	50	**		3.362	3.161	5.96	
1,4-Dichlorobenzene-d4	1	0	I	5.96	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.97	49.07	50	20		1.797	1.764	1.86	
1,2-Dichlorobenzene	1	0		6.10	49.34	50	**		1.689	1.666	1.32	
Benzyl alcohol	1	0		6.07	51.05	50	**		1.060	1.083	2.10	
bis(2-chloroisopropyl)ether	1	0		6.18	52.17	50	20	0.01	2.034	2.122	4.34	
2-Methylphenol	1	0		6.16	51.29	50	20	0.7	1.527	1.567	2.57	
Acetophenone	1	0		6.28	56.96	50	20	0.01	1.969	2.243	13.92	
Hexachloroethane	1	0		6.37	57.80	50	20	0.3	0.673	0.778	15.59	
N-Nitroso-di-n-propylamine	1	0		6.28	65.03	50	20	0.5	1.165	1.515	30.06	C1
3&4-Methylphenol	1	0		6.29	53.50	50	20		1.651	1.767	7.01	
Naphthalene-d8	1	0	I	6.97	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.41	25.81	25	**		0.160	0.165	3.24	
Nitrobenzene	1	0		6.42	65.14	50	20	0.2	0.410	0.535	30.28	C1
Isophorone	1	0		6.61	62.66	50	20	0.4	0.733	0.919	25.31	C1
2-Nitrophenol	1	0		6.67	54.52	50	20	0.1	0.214	0.234	9.05	
2,4-Dimethylphenol	1	0		6.70	55.16	50	20	0.2	0.432	0.476	10.32	
Benzoic Acid	1	0		6.77	32.78	50	**		0.266	0.170	34.44	
bis(2-Chloroethoxy)methane	1	0		6.76	57.33	50	20	0.3	0.453	0.520	14.67	
2,4-Dichlorophenol	1	0		6.86	52.49	50	20	0.2	0.350	0.367	4.99	
1,2,4-Trichlorobenzene	1	0		6.92	55.81	50	**		0.374	0.418	11.63	
Naphthalene	1	0		6.98	48.40	50	20	0.7	1.305	1.263	3.21	
4-Chloroaniline	1	0		7.02	53.31	50	20	0.01	0.401	0.469	6.61	
Hexachlorobutadiene	1	0		7.06	63.70	50	20	0.01	0.215	0.274	27.41	C1
Caprolactam	1	0		7.30	52.19	50	20	0.01	0.108	0.112	4.38	
4-Chloro-3-methylphenol	1	0		7.39	55.98	50	20	0.2	0.349	0.390	11.95	
2-Methylnaphthalene	1	0		7.52	50.79	50	**	0.4	0.842	0.855	1.59	
1-Methylnaphthalene	1	0		7.61	52.49	50	**	0.4	0.809	0.849	4.97	
Methylnaphthalenes	1	0		7.52	103.31	100	**			0.853	3.31	
1,1'-Biphenyl	1	0		7.90	50.85	50	20	0.01	0.898	0.913	1.69	
Acenaphthene-d10	1	0	I	8.42	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.66	53.37	50	20	0.01	0.584	0.623	6.74	
Hexachlorocyclopentadiene	1	0		0.00	0.00	50	20	0.05	0.380	0.002	100.00	C1
2,4,6-Trichlorophenol	1	0		7.75	54.57	50	20	0.2	0.403	0.440	9.15	
2,4,5-Trichlorophenol	1	0		7.79	54.02	50	20	0.2	0.433	0.468	8.04	
2-Fluorobiphenyl	1	0	S	7.81	24.78	25	**		1.301	1.290	0.88	
2-Chloronaphthalene	1	0		7.93	50.74	50	20	0.8	1.283	1.302	1.47	
1,4-Dimethylnaphthalene	1	0		8.21	52.19	50	**		0.956	0.997	4.38	
Dimethylnaphthalenes	1	0		8.21	52.19	50	20			0.997	4.38	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M85646.D **Instrument:** GCMS 9

Cont Calibration Date/Time 5/30/2018 3:31:00 P Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.98	51.94	50	**		0.827	0.859	3.88	
2-Nitroaniline	1	0		8.01	52.67	50	20	0.01	0.440	0.463	5.35	
Coumarin	1	0		8.20	51.22		**		0.462			
Acenaphthylene	1	0		8.30	49.19	50	20	0.9	1.952	1.921	1.62	
Dimethylphthalate	1	0		8.15	54.20	50	20	0.01	1.456	1.579	8.41	
2,6-Dinitrotoluene	1	0		8.21	55.81	50	20	0.2	0.345	0.385	11.62	
Acenaphthene	1	0		8.45	48.40	50	20	0.9	1.402	1.358	3.20	
3-Nitroaniline	1	0		8.37	53.04	50	20	0.01	0.333	0.353	6.07	
2,4-Dinitrophenol	1	0		8.47	35.10	50	20	0.01	0.210	0.127	29.79	C1
Dibenzofuran	1	0		8.61	48.49	50	20	0.8	1.973	1.913	3.02	
2,4-Dinitrotoluene	1	0		8.58	53.21	50	20	0.2	0.433	0.461	6.42	
4-Nitrophenol	1	0		8.51	51.30	50	20	0.01	0.282	0.289	2.60	
2,3,4,6-Tetrachlorophenol	1	0		8.72	47.95	50	20	0.01	0.401	0.385	4.10	
Fluorene	1	0		8.93	49.41	50	20	0.9	1.564	1.546	1.18	
4-Chlorophenyl-phenylether	1	0		8.92	54.22	50	20	0.4	0.759	0.823	8.45	
Diethylphthalate	1	0		8.78	55.21	50	20	0.01	1.435	1.585	10.42	
4-Nitroaniline	1	0		8.95	48.00	50	20	0.01	0.421	0.405	4.00	
Atrazine	1	0		9.56	42.12	50	20	0.01	0.400	0.337	15.75	
Phenanthrene-d10	1	0	I	9.90	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.98	41.94	50	20	0.01	0.149	0.115	16.12	
n-Nitrosodiphenylamine	1	0		9.03	49.06	50	20	0.01	0.770	0.755	1.88	
2,4,6-Tribromophenol	1	0	S	9.17	50.88	50	**		0.104	0.105	1.77	
1,2-Diphenylhydrazine	1	0		9.07	61.69	50	**		0.850	1.049	23.39	
4-Bromophenyl-phenylether	1	0		9.41	53.79	50	20	0.1	0.253	0.272	7.58	
Hexachlorobenzene	1	0		9.49	55.66	50	20	0.1	0.270	0.300	11.31	
N-Octadecane	1	0		9.73	51.47	50	**	0.05	0.457	0.470	2.95	
Pentachlorophenol	1	0		9.69	34.08	50	20	0.05	0.174	0.103	31.85	C1
Phenanthrene	1	0		9.93	47.82	50	20	0.7	1.325	1.268	4.35	
Anthracene	1	0		9.99	48.20	50	20	0.7	1.361	1.312	3.60	
Carbazole	1	0		10.16	48.25	50	20	0.01	1.220	1.177	3.51	
Di-n-butylphthalate	1	0		10.52	52.88	50	20	0.01	1.412	1.493	5.77	
Fluoranthene	1	0		11.28	51.88	50	20	0.6	1.430	1.484	3.75	
Chrysene-d12	1	0	I	12.99	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.55	43.64	50	20	0.6	1.205	1.052	12.72	
Benzidine	1	0		11.43	26.03	50	**		0.304	0.210	47.93	
Terphenyl-d14	1	0	S	11.72	21.72	25	**		0.607	0.527	13.10	
4,4'-DDE	1	0		11.65	50.58		**		0.202			
4,4'-DDD	1	0		12.05	48.27		**		0.331			
Butylbenzylphthalate	1	0		12.30	49.36	50	20	0.01	0.498	0.492	1.29	
4,4'-DDT	1	0		12.41	44.71		**		0.286			
3,3'-Dichlorobenzidine	1	0		12.94	52.75	50	20	0.01	0.254	0.317	5.51	
Benzo[a]anthracene	1	0		12.98	53.24	50	20	0.8	1.203	1.281	6.48	
Chrysene	1	0		13.02	44.58	50	20	0.7	1.190	1.061	10.83	
bis(2-Ethylhexyl)phthalate	1	0		12.98	59.46	50	20	0.01	0.732	0.871	18.92	
Perylene-d12	1	0	I	14.66	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.74	56.52	50	20	0.01	1.299	1.468	13.03	
Benzo[b]fluoranthene	1	0		14.21	51.46	50	20	0.7	1.287	1.324	2.92	
Benzo[k]fluoranthene	1	0		14.24	50.35	50	20	0.7	1.351	1.361	0.70	
Benzo[a]pyrene	1	0		14.59	51.61	50	20	0.7	1.265	1.305	3.21	
Indeno[1,2,3-cd]pyrene	1	0		16.09	60.15	50	20	0.5	1.361	1.637	20.31	
Dibenzo[a,h]anthracene	1	0		16.10	59.16	50	20	0.4	1.151	1.362	18.33	
Benzo[g,h,i]perylene	1	0		16.51	56.36	50	20	0.5	1.141	1.286	12.71	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M85646.D **Instrument:** GCMS 9

Cont Calibration Date/Time 5/30/2018 3:31:00 P Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.825	0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.956	0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

8052424 0249

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M84758.D Method: EPA 8270D

Analysis Date/Time: 04/30/18 13:39

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	52375	2.80	101734	5.97	406239	6.98	245390	8.43	421587	9.91	507818	12.98	450456	14.64
Eval File Area Limit:	26188-104750		50867-203468		203120-812478		122695-490780		210794-843174		253909-1015636		225228-900912	
Eval File Rt Limit:	2.3-3.3		5.47-6.47		6.48-7.48		7.93-8.93		9.41-10.41		12.48-13.48		14.14-15.14	

Data File	Sample														
9M84750.D	CAL BNA@10PPM	59457	2.81	109063	5.97	428256	6.98	249275	8.43	430906	9.91	502418	12.99	463417	14.64
9M84751.D	CAL BNA@2PPM	53557	2.80	102138	5.97	406254	6.98	240754	8.43	420855	9.91	486706	12.98	453035	14.64
9M84752.D	CAL BNA@196PPM	50091	2.80	100555	5.97	413369	6.98	249378	8.44	434261	9.92	595663	13.00	475045	14.64
9M84753.D	CAL BNA@160PPM	56159	2.80	112159	5.97	443171	6.98	269160	8.43	461569	9.91	586637	12.99	482555	14.64
9M84754.D	CAL BNA@120PPM	54477	2.81	104934	5.97	419672	6.98	253476	8.43	431431	9.91	525646	12.99	447500	14.64
9M84755.D	CAL BNA@80PPM	53350	2.82	103635	5.97	412231	6.98	245360	8.43	422671	9.91	515794	12.99	450397	14.64
9M84756.D	CAL BNA@20PPM	55105	2.80	102373	5.97	413767	6.98	247320	8.43	424730	9.91	490323	12.98	447901	14.64
9M84757.D	CAL BNA@.5PPM	54898	2.80	104851	5.97	414066	6.98	246121	8.43	429617	9.91	487118	12.98	452148	14.64
9M84758.D	CAL BNA@50PPM	52375	2.80	101734	5.97	406239	6.98	245390	8.43	421587	9.91	507818	12.98	450456	14.64
9M84759.D	ICV BNA@50PPM	49856	2.80	96797	5.97	384450	6.98	228031	8.43	396495	9.91	478349	12.98	420539	14.64

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0250

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M68773.D Method: EPA 8270D

Analysis Date/Time: 05/14/18 12:40

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	19893	2.86	39217	5.98	151537	6.98	98127	8.42	165999	9.91	120200	12.97	116351	14.62
Eval File Area Limit:	9946-39786		19608-78434		75768-303074		49064-196254		83000-331998		60100-240400		58176-232702	
Eval File Rt Limit:	2.36-3.36		5.48-6.48		6.48-7.48		7.92-8.92		9.41-10.41		12.47-13.47		14.12-15.12	

Data File	Sample														
10M68765.D	CAL BNA@10PPM	18855	2.84	29860	5.97	116457	6.97	71130	8.42	117912	9.90	114904	12.96	102190	14.62
10M68766.D	CAL BNA@2PPM	17873	2.86	34024	5.97	125129	6.97	77691	8.42	132152	9.90	118391	12.96	114183	14.62
10M68767.D	CAL BNA@196PPM	17831	2.84	36168	5.98	139764	6.98	84578	8.43	148167	9.90	125315	12.98	115648	14.62
10M68768.D	CAL BNA@160PPM	19114	2.84	36719	5.98	146756	6.98	93660	8.43	152839	9.90	127522	12.98	120072	14.62
10M68769.D	CAL BNA@120PPM	18434	2.86	33830	5.98	134194	6.98	88987	8.42	145916	9.90	130376	12.98	121354	14.62
10M68770.D	CAL BNA@80PPM	20946	2.86	39880	5.98	150042	6.98	90715	8.42	148717	9.90	135380	12.97	120820	14.62
10M68771.D	CAL BNA@20PPM	20657	2.86	39523	5.98	138333	6.97	78911	8.42	130102	9.91	129266	12.96	109099	14.62
10M68772.D	CAL BNA@0.5PPM	20214	2.85	36648	5.97	138740	6.97	85172	8.42	127160	9.90	117053	12.96	103522	14.61
10M68773.D	CAL BNA@50PPM	19893	2.86	39217	5.98	151537	6.98	98127	8.42	165999	9.91	120200	12.97	116351	14.62
10M68774.D	ICV BNA@50PPM	21015	2.86	42544	5.98	165153	6.98	103710	8.42	175817	9.90	157463	12.97	122978	14.62

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0251

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M91676.D Method: EPA 8270D

Analysis Date/Time: 05/14/18 13:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	74513	2.65	123394	5.84	451640	6.85	276677	8.28	483277	9.75	502896	12.81	437170	14.44
Eval File Area Limit:	37256-149026		61697-246788		225820-903280		138338-553354		241638-966554		251448-1005792		218585-874340	
Eval File Rt Limit:	2.15-3.15		5.34-6.34		6.35-7.35		7.78-8.78		9.25-10.25		12.31-13.31		13.94-14.94	

Data File	Sample														
7M91667.D	CAL BNA@10PPM	92817	2.64	154142	5.84	562048	6.86	346456	8.30	598615	9.75	635619	12.81	543780	14.46
7M91669.D	CAL BNA@2PPM	79721	2.63	146334	5.84	540665	6.86	337800	8.30	584052	9.76	625182	12.81	527776	14.48
7M91670.D	CAL BNA@196PPM	86336	2.63	133843	5.84	493300	6.87	306652	8.32	532505	9.78	544668	12.83	472074	14.50
7M91671.D	CAL BNA@160PPM	82634	2.64	132300	5.84	510213	6.86	314877	8.30	552748	9.75	564610	12.82	490249	14.49
7M91672.D	CAL BNA@120PPM	81453	2.64	136122	5.84	512236	6.86	318568	8.31	557020	9.76	564191	12.81	496193	14.46
7M91673.D	CAL BNA@80PPM	82191	2.64	144142	5.84	539200	6.85	331053	8.28	574610	9.75	592781	12.81	511650	14.44
7M91674.D	CAL BNA@20PPM	82954	2.64	146434	5.84	564203	6.85	345585	8.28	594884	9.75	634271	12.80	538144	14.44
7M91675.D	CAL BNA@0.5PPM	87011	2.64	157651	5.84	590322	6.85	374103	8.28	643056	9.75	669609	12.80	563282	14.44
7M91676.D	CAL BNA@50PPM	74513	2.65	123394	5.84	451640	6.85	276677	8.28	483277	9.75	502896	12.81	437170	14.44
7M91677.D	ICV BNA@50PPM	70647	2.65	133263	5.84	506887	6.85	310116	8.28	548641	9.75	574546	12.81	483413	14.45

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0252

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M91969.D Method: EPA 8270D

Analysis Date/Time: 05/28/18 11:21

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	68190	2.64	127838	5.84	474517	6.85	297132	8.28	522211	9.75	536790	12.80	465189	14.44
Eval File Area Limit:	34095-136380		63919-255676		237258-949034		148566-594264		261106-1044422		268395-1073580		232594-930378	
Eval File Rt Limit:	2.14-3.14		5.34-6.34		6.35-7.35		7.78-8.78		9.25-10.25		12.3-13.3		13.94-14.94	
Data File Sample														
7M91970.D WMB68102	69553	2.61	138579	5.83	518851	6.85	328929	8.28	576114	9.74	560851	12.80	445743	14.43
7M91971.D OMB68099	71313	2.63	139039	5.83	514921	6.84	317844	8.27	544881	9.74	548825	12.80	443051	14.43
7M91972.D SMB68100	79003	2.61	144186	5.83	532486	6.84	323751	8.27	554005	9.74	560080	12.80	471398	14.43
7M91973.D OMB68099(MS)	67763	2.63	138303	5.84	509060	6.84	319075	8.27	554143	9.74	570062	12.80	475544	14.43
7M91974.D AD04345-001	73958	2.62	144065	5.84	535325	6.84	328751	8.27	530573	9.74	553763	12.80	468850	14.43
7M91975.D AD04345-001(MS)	78151	2.63	156735	5.84	580850	6.84	350850	8.27	601991	9.74	620064	12.80	531005	14.43
7M91976.D AD04345-001(MSD)	77658	2.62	142636	5.84	523114	6.84	316602	8.27	529398	9.74	555616	12.80	472463	14.43
7M91979.D AD04390-001	76061	2.63	140881	5.84	462011	6.84	269666	8.27	448636	9.74	482093	12.80	440956	14.43
7M91980.D AD04394-010	80234	2.62	155864	5.84	600662	6.84	378778	8.27	648919	9.74	655528	12.80	535867	14.43
7M91981.D AD04395-002	79739	2.62	150903	5.84	567257	6.84	350539	8.27	601621	9.74	603050	12.80	504497	14.43
7M91982.D AD04395-004	77771	2.63	140675	5.84	526120	6.84	317707	8.27	542635	9.74	543592	12.80	448111	14.43
7M91983.D AD04395-006	84212	2.63	157627	5.83	594234	6.84	367696	8.27	613102	9.74	612608	12.80	506918	14.43
7M91984.D AD04395-008	88414	2.63	159947	5.84	582827	6.84	348567	8.27	585088	9.74	598690	12.80	509430	14.43
7M91985.D AD04395-010	87174	2.62	160609	5.83	594595	6.84	361711	8.27	608040	9.74	612267	12.80	512553	14.43
7M91986.D AD04395-012	82696	2.63	156675	5.83	575159	6.84	338233	8.27	548692	9.74	590287	12.80	504455	14.43
7M91987.D AD04395-014	82066	2.62	151791	5.83	568009	6.84	351769	8.27	589366	9.74	589348	12.80	490397	14.43
7M91988.D AD04164-003(T)	79148	2.62	142201	5.84	520856	6.84	311480	8.27	531189	9.74	552396	12.80	465923	14.43
7M91989.D AD04164-009(T)	92638	2.62	163509	5.83	594380	6.84	336084	8.27	552404	9.74	592253	12.80	518326	14.43
7M91990.D AD04164-012(T)	80854	2.62	151075	5.83	551610	6.84	327757	8.27	547035	9.74	568704	12.80	489210	14.43
7M91991.D AD04191-005(T)	85096	2.63	161661	5.83	582270	6.84	351259	8.27	596448	9.74	608720	12.80	506473	14.43
7M91992.D AD04191-007(T)	84752	2.62	154267	5.84	573860	6.84	345824	8.27	585942	9.74	589180	12.80	491454	14.43
7M91993.D EF-SPLP V-280045(5/	76479	2.62	137576	5.83	512732	6.84	310856	8.27	533279	9.74	535516	12.80	451564	14.43

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0253

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M69015.D Method: EPA 8270D

Analysis Date/Time: 05/28/18 11:17

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	17397	2.83	35142	5.97	141161	6.97	91624	8.42	156280	9.90	138492	12.97	120441	14.62
Eval File Area Limit:	8698-34794		17571-70284		70580-282322		45812-183248		78140-312560		69246-276984		60220-240882	
Eval File Rt Limit:	2.33-3.33		5.47-6.47		6.47-7.47		7.92-8.92		9.4-10.4		12.47-13.47		14.12-15.12	

Data File	Sample														
10M69016.D	WMB68102(MS)	21652	2.82	40470	5.97	158122	6.97	100803	8.42	172580	9.90	146363	12.97	117690	14.62
10M69017.D	WMB68102	18333	2.82	32102	5.97	114072	6.97	71776	8.42	127317	9.90	117960	12.96	114279	14.62
10M69018.D	AD04391-002	17549	2.82	30412	5.97	113814	6.97	78163	8.42	130001	9.90	119820	12.96	109889	14.61
10M69019.D	AD04391-002(MS)	14454	2.82	30054	5.97	113868	6.97	76171	8.42	128670	9.90	112990	12.97	97353	14.62
10M69020.D	AD04391-002(MSD)	20703	2.83	38151	5.97	147734	6.97	92789	8.42	183129	9.90	143497	12.97	128212	14.62
10M69021.D	AD04164-002(MS)(T)	20208	2.83	41267	5.97	156131	6.97	98187	8.42	166556	9.91	142240	12.98	131337	14.62
10M69022.D	AD04164-002(MSD)(T	17643	2.83	35992	5.97	134777	6.97	85742	8.42	143784	9.91	128150	12.98	112278	14.62
10M69023.D	68102(MS)	19971	2.82	39379	5.97	149784	6.97	100204	8.42	163832	9.90	139105	12.97	78585	14.62
10M69024.D	AD04391-001	19241	2.82	35091	5.97	124733	6.97	78039	8.42	129971	9.90	115680	12.96	117896	14.62
10M69025.D	AD04391-003	18033	2.82	31383	5.97	116497	6.97	82719	8.42	144317	9.90	128529	12.96	118686	14.62
10M69026.D	AD04391-004	18475	2.82	34797	5.97	125753	6.97	79570	8.42	152799	9.90	133836	12.96	126270	14.62
10M69027.D	AD04391-005	21513	2.82	41093	5.97	152607	6.97	98525	8.42	170334	9.90	160199	12.96	141200	14.62
10M69028.D	AD04391-006	19344	2.84	36655	5.97	139735	6.97	89972	8.42	153908	9.90	143797	12.96	128035	14.62
10M69029.D	AD04306-007(R)	20095	2.83	38796	5.97	145626	6.97	92452	8.42	158914	9.90	144272	12.96	130068	14.62

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0254

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M91995.D Method: EPA 8270D

Analysis Date/Time: 05/29/18 08:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	61488	2.64	98910	5.83	367689	6.85	221796	8.29	391237	9.75	403228	12.80	340995	14.45
Eval File Area Limit:	30744-122976		49455-197820		183844-735378		110898-443592		195618-782474		201614-806456		170498-681990	
Eval File Rt Limit:	2.14-3.14		5.33-6.33		6.35-7.35		7.79-8.79		9.25-10.25		12.3-13.3		13.95-14.95	

Data File	Sample														
7M91996.D	SMB68100(MS)	74345	2.61	135652	5.83	495503	6.84	314345	8.27	550415	9.74	565017	12.80	470021	14.43
7M91997.D	SMB68112(MS)	78424	2.60	135228	5.83	490495	6.86	309837	8.32	526946	9.77	540250	12.83	466993	14.55
7M91998.D	SMB68113(MS)	79458	2.61	133826	5.83	493121	6.85	300381	8.29	509712	9.75	527358	12.80	454351	14.46
7M91999.D	SMB68112	79023	2.60	141076	5.83	539526	6.85	341346	8.28	594890	9.75	607445	12.80	514941	14.47
7M92000.D	SMB68113	79711	2.61	132092	5.83	493828	6.85	297261	8.28	501260	9.74	514947	12.80	437885	14.45
7M92001.D	WMB68111	87492	2.62	152805	5.83	580138	6.85	351856	8.29	606524	9.75	614731	12.80	531944	14.43
7M92002.D	AD04423-025	95643	2.63	161202	5.83	599680	6.84	362300	8.27	620321	9.74	624174	12.80	548053	14.46
7M92003.D	SMB68114(MS)	82852	2.61	135214	5.83	501721	6.85	311968	8.28	530757	9.74	562535	12.80	477898	14.45
7M92004.D	SMB68114	86382	2.61	148407	5.83	552964	6.84	334597	8.27	552583	9.74	568648	12.80	472548	14.43
7M92005.D	AD04398-003	86456	2.61	149384	5.83	568600	6.84	329550	8.27	541822	9.74	510001	12.81	435372	14.44
7M92006.D	AD04384-001	73689	2.61	137203	5.83	537195	6.84	325218	8.27	532507	9.74	475614	12.80	406492	14.43
7M92007.D	AD04384-001(MS)	85582	2.60	148164	5.83	545866	6.84	328868	8.27	541241	9.74	508624	12.80	434885	14.44
7M92008.D	AD04384-001(MSD)	74986	2.61	139228	5.83	517988	6.84	312670	8.27	523616	9.74	475238	12.80	402000	14.43

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0255

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M85630.D Method: EPA 8270D

Analysis Date/Time: 05/30/18 08:50

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	32590	2.80	61011	5.96	234134	6.97	144196	8.42	254438	9.91	359181	12.99	325734	14.66
Eval File Area Limit:	16295-65180		30506-122022		117067-468268		72098-288392		127219-508876		179590-718362		162867-651468	
Eval File Rt Limit:	2.3-3.3		5.46-6.46		6.47-7.47		7.92-8.92		9.41-10.41		12.49-13.49		14.16-15.16	

Data File	Sample														
9M85631.D	BNA@50PPM	31511	2.80	57107	5.96	223128	6.97	136519	8.42	241407	9.91	327439	12.99	308024	14.65
9M85632.D	SMB68114	28959	2.78	51592	5.96	196701	6.97	119418	8.42	217808	9.91	243230	12.99	248025	14.66
9M85633.D	AD04423-002	34292	2.79	61675	5.96	235057	6.97	140653	8.41	247727	9.90	296243	12.99	295951	14.65
9M85634.D	AD04423-004	29586	2.79	53927	5.96	202184	6.96	121279	8.42	210857	9.90	273909	12.99	271975	14.66
9M85635.D	AD04423-006	33753	2.79	61157	5.96	229788	6.96	139298	8.42	242909	9.90	316829	12.99	310560	14.65
9M85636.D	AD04398-002	36492	2.78	65809	5.96	253780	6.96	150809	8.42	266785	9.91	412075	13.00	332253	14.67
9M85637.D	AD04398-006	35871	2.78	67185	5.96	251567	6.97	151785	8.42	273467	9.91	425411	13.00	389340	14.67
9M85638.D	AD04398-007	31932	2.79	60158	5.96	226978	6.97	135900	8.42	240096	9.90	293116	12.99	286970	14.65
9M85639.D	AD04398-008	33813	2.78	62577	5.96	237251	6.97	143616	8.42	254835	9.91	293912	12.99	290948	14.65
9M85640.D	AD04394-003	34252	2.79	65437	5.96	247105	6.96	149938	8.42	269707	9.90	362274	12.99	392059	14.66
9M85641.D	AD04420-002	30611	2.80	56242	5.96	212942	6.96	125907	8.42	218270	9.90	283291	12.99	283058	14.66
9M85642.D	AD04420-002(MS)	30003	2.78	52882	5.96	196869	6.97	117078	8.42	201891	9.91	282184	12.99	259126	14.67
9M85643.D	AD04420-002(MSD)	30953	2.79	56151	5.96	209488	6.97	123892	8.42	213892	9.91	280701	12.99	264329	14.65
9M85644.D	AD04420-004	28832	2.79	51903	5.96	196475	6.97	117282	8.42	203031	9.90	257891	12.99	248400	14.66

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0256

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M92010.D Method: EPA 8270D

Analysis Date/Time: 05/30/18 08:48

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	92524	2.64	157991	5.84	589014	6.84	358671	8.27	634858	9.74	639150	12.80	560745	14.44
Eval File Area Limit:	46262-185048		78996-315982		294507-1178028		179336-717342		317429-1269716		319575-1278300		280372-1121490	
Eval File Rt Limit:	2.14-3.14		5.34-6.34		6.34-7.34		7.77-8.77		9.24-10.24		12.3-13.3		13.94-14.94	

Data File	Sample														
7M92011.D	AD04394-009	72596	2.62	135326	5.84	518606	6.85	326676	8.27	560824	9.74	550157	12.80	452160	14.44
7M92012.D	AD04398-001	88290	2.62	149586	5.84	578224	6.85	363050	8.29	611730	9.75	602920	12.80	492783	14.47
7M92013.D	SMB68120(MS)	88369	2.61	151576	5.84	569065	6.85	355455	8.28	609756	9.75	621664	12.80	511381	14.47
7M92014.D	SMB68120	89121	2.61	156841	5.83	595882	6.85	371183	8.28	635930	9.75	641520	12.80	532268	14.47
7M92015.D	AD04371-001	75760	2.62	132337	5.84	517551	6.85	317154	8.28	541662	9.75	514773	12.81	425467	14.51
7M92016.D	AD04371-002	93102	2.62	165504	5.84	635752	6.86	390693	8.31	664418	9.76	639718	12.81	517277	14.52
7M92017.D	AD04371-003	79812	2.61	143633	5.84	549672	6.86	334295	8.30	535689	9.76	477238	12.81	405760	14.50
7M92018.D	AD04373-007	76322	2.61	141961	5.84	529257	6.85	318143	8.28	514153	9.74	449133	12.80	367082	14.49
7M92019.D	AD04373-008	72124	2.61	136668	5.84	513089	6.85	304924	8.28	448689	9.75	434251	12.81	361324	14.49
7M92020.D	AD04373-009	69263	2.61	129802	5.84	498398	6.85	293255	8.29	442951	9.75	421576	12.81	352104	14.50
7M92021.D	AD04398-003(5X)	78143	2.63	154937	5.84	577629	6.85	347680	8.29	565750	9.75	510422	12.82	419150	14.54
7M92022.D	AD04398-004(5X)(MS:	80620	2.63	155644	5.84	572802	6.86	347019	8.31	568938	9.76	519947	12.83	440409	14.54
7M92023.D	AD04398-005(5X)(MS	85142	2.63	157854	5.84	582915	6.85	350034	8.29	577110	9.75	548437	12.80	440233	14.47
7M92024.D	AD04371-004	68734	2.61	127313	5.84	471146	6.85	287370	8.29	473835	9.75	452465	12.80	366369	14.48
7M92025.D	AD04371-005	71883	2.61	127822	5.84	491757	6.85	294797	8.30	496292	9.75	456669	12.80	370009	14.46
7M92026.D	AD04371-006	73097	2.62	134432	5.84	498343	6.86	297729	8.30	497240	9.76	449833	12.80	356431	14.44
7M92027.D	AD04371-007	62474	2.61	120991	5.84	453726	6.85	270470	8.28	443890	9.75	398324	12.80	329583	14.46
7M92028.D	AD04372-002	64788	2.61	118564	5.84	452481	6.85	273239	8.28	461967	9.74	439186	12.80	351392	14.43
7M92029.D	AD04372-004	72398	2.61	128923	5.84	494667	6.85	304010	8.28	495077	9.74	456484	12.80	373504	14.43
7M92030.D	AD04372-006	65273	2.62	119891	5.84	456937	6.84	277884	8.27	469704	9.74	420115	12.80	330754	14.43
7M92031.D	AD04394-001	75707	2.62	143428	5.84	538352	6.85	320913	8.27	511624	9.74	434264	12.80	365884	14.43
7M92032.D	AD04378-003	71642	2.61	139472	5.84	529176	6.84	316044	8.27	518671	9.74	436425	12.80	357216	14.43
7M92033.D	AD04378-004	69462	2.61	135335	5.84	515715	6.84	312531	8.27	510236	9.74	442100	12.80	357155	14.43
7M92034.D	AD04327-004(R)	58790	2.62	119366	5.84	441543	6.84	268995	8.27	446180	9.74	402139	12.80	318023	14.43
7M92035.D	AD04398-002(5X)	85750	2.63	166937	5.84	616701	6.84	366739	8.27	594626	9.74	525193	12.80	443352	14.43
7M92036.D	AD04368-012(5X)(R)	88651	2.63	170471	5.84	624012	6.84	377727	8.27	616911	9.74	552512	12.80	449133	14.43

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

8052424 0257

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M85646.D Method: EPA 8270D

Analysis Date/Time: 05/30/18 15:31

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	30850	2.79	57209	5.96	218656	6.97	137746	8.42	244536	9.90	345943	12.99	308020	14.66
Eval File Area Limit:	15425-61700		28604-114418		109328-437312		68873-275492		122268-489072		172972-691886		154010-616040	
Eval File Rt Limit:	2.29-3.29		5.46-6.46		6.47-7.47		7.92-8.92		9.4-10.4		12.49-13.49		14.16-15.16	

Data File	Sample														
9M85647.D	SMB68120	30209	2.76	54661	5.96	200935	6.96	126038	8.42	227226	9.90	268790	12.98	261292	14.65
9M85648.D	AD04394-002	29234	2.78	52820	5.96	196602	6.96	118820	8.42	216589	9.90	294117	12.99	307993	14.66
9M85649.D	AD04394-005	30155	2.77	55678	5.96	207657	6.96	124609	8.42	226019	9.90	329167	12.99	343623	14.66
9M85650.D	AD04394-006	27174	2.78	48347	5.96	178929	6.96	107460	8.42	196871	9.90	276484	12.99	292917	14.66
9M85651.D	AD04394-007	29756	2.77	49916	5.96	189454	6.96	113024	8.42	203711	9.90	304751	12.99	337351	14.66
9M85652.D	AD04394-008	29085	2.78	51384	5.96	191086	6.96	113816	8.42	206879	9.90	282561	12.99	306611	14.66
9M85653.D	AD04394-004(5X)	30913	2.79	56997	5.96	215682	6.96	128853	8.42	223591	9.90	295826	12.99	316726	14.66
9M85654.D	AD04349-015(3X)	35415	2.79	61077	5.96	234017	6.96	138675	8.42	242118	9.90	313835	12.99	327713	14.65
9M85655.D	AD04423-010(3X)	31257	2.80	55798	5.96	208626	6.97	123458	8.42	214750	9.90	287049	12.99	277876	14.65
9M85656.D	AD04423-012(3X)	30015	2.78	54204	5.96	204035	6.96	122180	8.42	208595	9.90	252528	12.99	248750	14.65
9M85657.D	AD04423-014(3X)	29862	2.80	53590	5.96	200869	6.96	120911	8.42	206885	9.90	241247	12.99	241142	14.65
9M85658.D	AD04423-016(3X)	29668	2.79	54458	5.96	204422	6.96	121777	8.42	206590	9.90	242829	12.99	236924	14.65
9M85659.D	AD04423-018(3X)	31111	2.78	57310	5.96	210720	6.96	125569	8.42	221343	9.90	247417	12.98	243258	14.65
9M85660.D	AD04423-020(3X)	27936	2.79	53024	5.96	199604	6.96	119212	8.42	204102	9.90	250741	12.99	227487	14.65
9M85661.D	AD04423-022(3X)	29341	2.79	54318	5.96	199966	6.96	119075	8.42	207082	9.90	245142	12.99	234363	14.65
9M85662.D	AD04423-024	25446	2.76	46523	5.96	172661	6.96	103384	8.42	176119	9.90	211430	12.99	192144	14.65
9M85663.D	AD04423-008	26551	2.77	49434	5.96	179595	6.96	106513	8.42	189172	9.90	241449	12.99	220816	14.65
9M85664.D	AD04420-006	28494	2.78	51944	5.96	195844	6.96	113873	8.42	198005	9.90	249218	12.99	224321	14.65
9M85665.D	AD04420-008	26954	2.77	50570	5.96	188478	6.96	112243	8.42	191562	9.90	239178	12.99	214541	14.65
9M85666.D	AD04420-010	27111	2.76	52026	5.95	191411	6.96	113878	8.42	198378	9.90	233853	12.99	212385	14.65
9M85667.D	AD04420-012	27127	2.79	51108	5.96	186992	6.96	110107	8.42	191799	9.90	243847	12.99	222422	14.65
9M85668.D	AD04420-014	28509	2.77	51351	5.96	192236	6.96	114719	8.42	194836	9.90	247536	12.99	207043	14.65
9M85669.D	AD04420-016	26926	2.78	49979	5.96	188369	6.96	111896	8.42	186582	9.90	238032	12.99	195935	14.66
9M85670.D	AD04420-018	26147	2.77	47185	5.96	175648	6.96	104105	8.42	180697	9.90	211327	12.99	182348	14.65
9M85671.D	AD04420-020	26417	2.77	48067	5.96	180604	6.96	107795	8.42	181387	9.90	214420	12.99	181903	14.65
9M85672.D	AD04420-022	27807	2.77	50237	5.96	187677	6.96	111438	8.42	189365	9.90	268892	12.99	198308	14.65
9M85673.D	AD04420-024	26776	2.78	49089	5.96	182768	6.96	110558	8.42	182723	9.90	224396	12.99	179981	14.65
9M85674.D	AD04420-026	25868	2.78	47867	5.96	174918	6.96	104005	8.42	175613	9.90	230531	12.99	176837	14.66
9M85675.D	AD04420-028	26005	2.78	49082	5.96	181752	6.96	107111	8.42	183215	9.90	244163	12.99	177963	14.65

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-001	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB2_7.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	6.5	1	0.5	100	05/29/18	68501	S052918B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	0.47	ND	1	0.5	100	05/29/18	68501	S052918B	30	MS	MS2_7500SWA
7782-49-2	Selenium	2.3	2.7	1	0.5	100	05/29/18	68501	S052918B	30	MS	MS2_7500SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	05/29/18	68501	S052918B	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-001	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB2_7.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	170	1	0.5	50	05/27/18	68500	S22619A4	24	P	PEICP4A
7440-47-3	Chromium	5.8	33	1	0.5	50	05/27/18	68500	S22619A4	24	P	PEICP4A
7439-92-1	Lead	5.8	40	1	0.5	50	05/27/18	68500	S22619A4	24	P	PEICP4A
7439-97-6	Mercury	0.097	ND	1	0.15	25	05/30/18	68500	H22619S	20	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-002	% Solid:	84	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB1_9.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	7.9	1	0.5	100	05/29/18	68501	S052918B	31	MS	MS2_7500SWA
7440-43-9	Cadmium	0.48	ND	1	0.5	100	05/29/18	68501	S052918B	31	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	3.3	1	0.5	100	05/29/18	68501	S052918B	31	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	31	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-002	% Solid:	84	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB1_9.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	210	1	0.5	50	05/27/18	68500	S22619A4	25	P	PEICP4A
7440-47-3	Chromium	6.0	28	1	0.5	50	05/27/18	68500	S22619A4	25	P	PEICP4A
7439-92-1	Lead	6.0	49	1	0.5	50	05/27/18	68500	S22619A4	25	P	PEICP4A
7439-97-6	Mercury	0.099	ND	1	0.15	25	05/30/18	68500	H22619S	23	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-003	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB7_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	10	1	0.5	100	05/29/18	68501	S052918B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	0.48	ND	1	0.5	100	05/29/18	68501	S052918B	32	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	05/29/18	68501	S052918B	32	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	32	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-003	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB7_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	190	1	0.5	50	05/27/18	68500	S22619A4	26	P	PEICP4A
7440-47-3	Chromium	6.0	27	1	0.5	50	05/27/18	68500	S22619A4	26	P	PEICP4A
7439-92-1	Lead	6.0	47	1	0.5	50	05/27/18	68500	S22619A4	26	P	PEICP4A
7439-97-6	Mercury	0.10	ND	1	0.15	25	05/30/18	68500	H22619S	24	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB6_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.23	9.9	1	0.5	100	05/29/18	68501	S052918B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	0.47	ND	1	0.5	100	05/29/18	68501	S052918B	33	MS	MS2_7500SWA
7782-49-2	Selenium	2.3	3.7	1	0.5	100	05/29/18	68501	S052918B	33	MS	MS2_7500SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	05/29/18	68501	S052918B	33	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-004	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB6_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	240	1	0.5	50	05/27/18	68500	S22619A4	27	P	PEICP4A
7440-47-3	Chromium	5.8	43	1	0.5	50	05/27/18	68500	S22619A4	27	P	PEICP4A
7439-92-1	Lead	5.8	65	1	0.5	50	05/27/18	68500	S22619A4	27	P	PEICP4A
7439-97-6	Mercury	0.097	ND	1	0.15	25	05/30/18	68500	H22619S	25	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-005	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB5_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	22	1	0.5	100	05/29/18	68501	S052918B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	0.49	0.52	1	0.5	100	05/29/18	68501	S052918B	34	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	4.4	1	0.5	100	05/29/18	68501	S052918B	34	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	34	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-005	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB5_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	170	1	0.5	50	05/27/18	68500	S22619A4	28	P	PEICP4A
7440-47-3	Chromium	6.1	28	1	0.5	50	05/27/18	68500	S22619A4	28	P	PEICP4A
7439-92-1	Lead	6.1	51	1	0.5	50	05/27/18	68500	S22619A4	28	P	PEICP4A
7439-97-6	Mercury	0.10	ND	1	0.15	25	05/30/18	68500	H22619S	26	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-006	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DUP01_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	11	1	0.5	100	05/29/18	68501	S052918B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	0.48	ND	1	0.5	100	05/29/18	68501	S052918B	35	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	2.8	1	0.5	100	05/29/18	68501	S052918B	35	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	35	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-006	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DUP01_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	200	1	0.5	50	05/27/18	68500	S22619A4	29	P	PEICP4A
7440-47-3	Chromium	6.0	41	1	0.5	50	05/27/18	68500	S22619A4	29	P	PEICP4A
7439-92-1	Lead	6.0	51	1	0.5	50	05/27/18	68500	S22619A4	29	P	PEICP4A
7439-97-6	Mercury	0.10	ND	1	0.15	25	05/30/18	68500	H22619S	27	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-007	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB4_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	11	1	0.5	100	05/29/18	68501	S052918B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	0.47	ND	1	0.5	100	05/29/18	68501	S052918B	36	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	3.1	1	0.5	100	05/29/18	68501	S052918B	36	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	36	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-007	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB4_14.5_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	240	1	0.5	50	05/27/18	68500	S22619A4	30	P	PEICP4A
7440-47-3	Chromium	5.9	49	1	0.5	50	05/27/18	68500	S22619A4	30	P	PEICP4A
7439-92-1	Lead	5.9	72	1	0.5	50	05/27/18	68500	S22619A4	30	P	PEICP4A
7439-97-6	Mercury	0.098	ND	1	0.15	25	05/30/18	68500	H22619S	28	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-008	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB3_7.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.24	11	1	0.5	100	05/29/18	68501	S052918B	37	MS	MS2_7500SWA
7440-43-9	Cadmium	0.48	ND	1	0.5	100	05/29/18	68501	S052918B	37	MS	MS2_7500SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	05/29/18	68501	S052918B	37	MS	MS2_7500SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	05/29/18	68501	S052918B	37	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-008	% Solid:	83	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB3_7.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	12	140	1	0.5	50	05/27/18	68500	S22619A4	36	P	PEICP4A
7440-47-3	Chromium	6.0	39	1	0.5	50	05/27/18	68500	S22619A4	36	P	PEICP4A
7439-92-1	Lead	6.0	77	1	0.5	50	05/27/18	68500	S22619A4	36	P	PEICP4A
7439-97-6	Mercury	0.10	ND	1	0.15	25	05/30/18	68500	H22619S	29	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-009	% Solid:	89	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB8_8.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	0.22	1.3	1	0.5	100	05/29/18	68501	S052918B	20	MS	MS2_7500SWA
7440-43-9	Cadmium	0.45	ND	1	0.5	100	05/29/18	68501	S052918B	20	MS	MS2_7500SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	05/29/18	68501	S052918B	20	MS	MS2_7500SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	05/29/18	68501	S052918B	20	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-009	% Solid:	89	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SB8_8.0_052318	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	11	83	1	1	100	05/27/18	68500	S22619A4	15	P	PEICP4A
7440-47-3	Chromium	5.6	31	1	1	100	05/27/18	68500	S22619A4	15	P	PEICP4A
7439-92-1	Lead	5.6	21	1	1	100	05/27/18	68500	S22619A4	15	P	PEICP4A
7439-97-6	Mercury	0.094	ND	1	0.15	25	05/30/18	68500	H22619S	16	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB01_052318	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-38-2	Arsenic	2.0	ND	1	50	100	05/30/18	68493	A053018A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	05/30/18	68493	A053018A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	05/31/18	68493	A053118A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	05/30/18	68493	A053018A	32	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD04394-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	FB01_052318	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	5/25/2018	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-39-3	Barium	50	ND	1	50	50	06/01/18	68493	W22613E2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	06/01/18	68493	W22613E2	27	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	06/01/18	68493	H22613SW	22	CV	HGCV3A
7440-22-4	Silver	20	ND	1	50	50	06/01/18	68493	W22613E2	27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 68501
Client Id: MB 68501
Matrix: SOIL
Level: LOW

% Solid: 0
Units: MG/KG

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-36-0	Antimony	0.80	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-38-2	Arsenic	0.20	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-39-3	Barium	1.0	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-41-7	Beryllium	0.20	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-43-9	Cadmium	0.40	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-70-2	Calcium	100	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-47-3	Chromium	0.40	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-48-4	Cobalt	0.40	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-50-8	Copper	2.0	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7439-89-6	Iron	100	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7439-92-1	Lead	0.40	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7439-95-4	Magnesium	100	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7439-96-5	Manganese	1.2	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-02-0	Nickel	0.60	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-09-7	Potassium	100	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7782-49-2	Selenium	2.0	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-22-4	Silver	0.20	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-23-5	Sodium	60	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-28-0	Thallium	0.40	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-62-2	Vanadium	0.20	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA
7440-66-6	Zinc	4.0	ND	1	0.5	100	05/29/18	68501	S052918B	17	MS	MS2_7500SWA

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 68493
Client Id: MB 68493
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	05/31/18	68493	A053118A	17	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	05/30/18	68493	A053018A	17	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 68500 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 68500 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-36-0	Antimony	4.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-38-2	Arsenic	4.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-39-3	Barium	10	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-41-7	Beryllium	1.2	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-43-9	Cadmium	1.2	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-70-2	Calcium	1000	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-47-3	Chromium	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-50-8	Copper	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7439-89-6	Iron	200	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7439-92-1	Lead	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7439-95-4	Magnesium	500	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7439-96-5	Manganese	10	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-02-0	Nickel	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7782-49-2	Selenium	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-22-4	Silver	1.5	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-28-0	Thallium	5.0	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-31-5	Tin	20	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-32-6	Titanium	10	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-62-2	Vanadium	10	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A
7440-66-6	Zinc	10	ND	1	0.5	50	05/27/18	68500	S22619A4	12	P	PEICP4A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 68493 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 68493 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	06/01/18	68493	H22613SW	11	CV	HGCV3A
7439-98-7	Molybdenum	20	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	05/31/18	68493	SW22613B3	11	P	PEICPRAD3A
7440-22-4	Silver	20	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	05/31/18	68493	SW22613A3	11	P	PEICPRAD3A
7440-31-5	Tin	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	06/01/18	68493	SW22613E2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 68500 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 68500 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	05/30/18	68500	H22619S	11	CV	HGCV3A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 05/29/18
Data File: S052918B
Prep Batch: 68501
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-280494-8	Rec	CCV V-280498-14	Rec	CCV V-280498-27	Rec	CCV V-280498-40	Rec	CCV V-280498-50	Rec		Rec		Rec		Rec
Antimony	50/50	46.86000	94	47.93000	96	48.41000	97	45.66000	91	45.94000	92						
Arsenic	50/50	48.98000	98	50.39000	101	50.39000	101	47.67000	95	47.36000	95						
Beryllium	50/50	49.40000	99	51.48000	103	51.24000	102	50.54000	101	47.71000	95						
Cadmium	50/50	49.17000	98	49.07000	98	49.44000	99	47.65000	95	47.97000	96						
Selenium	50/250	50.59000	101	249.10000	100	253.90000	102	243.00000	97	243.60000	97						
Silver	10/50	9.42900	94	49.99000	100	49.76000	100	49.14000	98	49.17000	98						
Thallium	50/50	48.96000	98	50.77000	102	50.30000	101	49.90000	100	49.94000	100						

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(LLICV/LLCCV Summary)

Date Analyzed: 05/29/18
Data File: S052918B
Prep Batch: 68501
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SPEX

Analyte	LLICV/ LLCCV Amt	LLICV V-280499-9	Rec	LLCCV V-280499-15	Rec	LLCCV V-280499-28	Rec	LLCCV V-280499-41	Rec	LLCCV V-280499-51	Rec		Rec		Rec		Rec
Antimony	4/4	3.783	95	3.730	93	3.749	94	3.551	89	3.604	90						
Arsenic	1/1	1.003	100	9.801E-01	98	9.893E-01	99	9.304E-01	93	9.091E-01	91						
Beryllium	1/1	9.353E-01	94	9.468E-01	95	9.598E-01	96	9.290E-01	93	8.920E-01	89						
Cadmium	2/2	1.860	93	1.868	93	1.867	93	1.784	89	1.803	90						
Selenium	10/10	10.43	104	9.769	98	10.10	101	9.996	100	10.26	103						
Silver	1/1	8.940E-01	89	9.048E-01	90	8.972E-01	90	8.875E-01	89	8.932E-01	89						
Thallium	2/2	1.780	89	1.759	88	1.726	86	1.714	86	1.685	84						

Notes: a-indicates analyte failed the LLICV limits for 6010C, 6020A
c-indicates analyte failed the LLCCV limits for 6010C, 6020A

Qc Limits: LLCCV- 6010C/6020A (70-130)
LLICV - 6010C/6020A (70-130)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 05/30/18
Data File: A053018A
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-280494-8	Rec	CCV V-280498-14	Rec	CCV V-280498-27	Rec	CCV V-280498-40	Rec	CCV V-280498-52	Rec		Rec		Rec		Rec
Antimony	50/50	47.95000	96	48.27000	97	48.27000	97	47.66000	95	47.54000	95						
Arsenic	50/50	50.07000	100	50.56000	101	48.99000	98	48.20000	96	48.62000	97						
Beryllium	50/50	50.75000	102	50.87000	102	50.30000	101	50.26000	101	50.15000	100						
Cadmium	50/50	50.72000	101	50.38000	101	49.95000	100	49.33000	99	49.36000	99						
Cobalt	50/50	50.43000	101	49.64000	99	47.93000	96	47.85000	96	48.00000	96						
Selenium	50/250	49.79000	100	253.10000	101	248.00000	99	246.30000	99	245.20000	98						
Thallium	50/50	50.85000	102	51.11000	102	50.60000	101	51.06000	102	50.15000	100						

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(LLICV/LLCCV Summary)

Date Analyzed: 05/30/18
Data File: A053018A
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SPEX

Analyte	LLICV/ LLCCV Amt	LLICV V-280500-9	Rec	LLCCV V-280500-15	Rec	LLCCV V-280500-28	Rec	LLCCV V-280500-41	Rec	LLCCV V-280500-53	Rec		Rec		Rec		Rec
Antimony	1.5/1.5	1.485	99	1.457	97	1.460	97	1.473	98	1.437	96						
Arsenic	1/1	1.036	104	9.916E-01	99	1.026	103	9.630E-01	96	9.805E-01	98						
Beryllium	0.5/0.5	5.075E-01	102	5.106E-01	102	5.128E-01	103	4.950E-01	99	5.093E-01	102						
Cadmium	1/1	9.898E-01	99	9.911E-01	99	9.709E-01	97	9.949E-01	99	9.626E-01	96						
Cobalt	1/1	9.843E-01	98	1.001	100	9.626E-01	96	9.589E-01	96	9.344E-01	93						
Selenium	5/5	5.996	120	5.613	112	5.656	113	5.468	109	5.629	113						
Thallium	1/1	9.242E-01	92	9.178E-01	92	9.443E-01	94	9.251E-01	93	8.955E-01	90						

Notes: a-indicates analyte failed the LLICV limits for 6010C, 6020A
c-indicates analyte failed the LLCCV limits for 6010C, 6020A

Qc Limits: LLCCV- 6010C/6020A (70-130)
LLICV - 6010C/6020A (70-130)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 05/31/18
Data File: A053118A
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-280494-8	Rec	CCV V-280498-14	Rec	CCV V-280498-27	Rec	CCV V-280498-40	Rec	CCV V-280498-53	Rec	CCV V-280498-57	Rec		Rec		Rec
Beryllium	50/50	51.49000	103	51.80000	104	51.89000	104	49.52000	99	49.44000	99	49.00000	98				
Cobalt	50/50	49.21000	98	50.23000	100	48.16000	96	46.89000	94	48.07000	96	46.40000	93				
Lead	50/50	48.01000	96	49.88000	100	48.33000	97	47.42000	95	47.01000	94	46.83000	94				

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(LLICV/LLCCV Summary)

Date Analyzed: 05/31/18
Data File: A053118A
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SPEX

Analyte	LLICV/ LLCCV Amt	LLICV V-280500-9	Rec	LLCCV V-280500-15	Rec	LLCCV V-280500-28	Rec	LLCCV V-280500-41	Rec	LLCCV V-280500-54	Rec	LLCCV V-280500-58	Rec		Rec		Rec
Beryllium	0.5/0.5	5.006E-01	100	4.966E-01	99	4.965E-01	99	4.779E-01	96	4.603E-01	92	4.742E-01	95				
Cobalt	1/1	9.712E-01	97	9.413E-01	94	9.149E-01	91	9.043E-01	90	9.204E-01	92	9.009E-01	90				
Lead	1.5/1.5	1.456	97	1.454	97	1.401	93	1.451	97	1.508	101	1.519	101				

Notes: a-indicates analyte failed the LLICV limits for 6010C, 6020A
c-indicates analyte failed the LLCCV limits for 6010C, 6020A

Qc Limits: LLCCV- 6010C/6020A (70-130)
LLICV - 6010C/6020A (70-130)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 05/27/18
Data File: S22619A4
Prep Batch: 68500
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-279599-7	Rec	CCV V-279599-20	Rec	CCV V-279599-33	Rec	CCV V-279599-45	Rec		Rec		Rec		Rec		Rec
Aluminum	5/5	4.94100	99	4.94568	99	4.91891	98	4.82125	96								
Barium	.5/.5	0.49317	99	0.49331	99	0.48881	98	0.47780	96								
Chromium	.5/.5	0.50658	101	0.50390	101	0.49601	99	0.47762	96								
Cobalt	.5/.5	0.49370	99	0.48935	98	0.48062	96	0.47256	95								
Copper	.5/.5	0.49248	98	0.49183	98	0.49097	98	0.48275	97								
Lead	.5/.5	0.49759	100	0.49312	99	0.48050	96	0.47895	96								
Manganese	.5/.5	0.50039	100	0.49954	100	0.49493	99	0.48317	97								
Nickel	.5/.5	0.51500	103	0.51122	102	0.50855	102	0.50314	101								
Vanadium	.5/.5	0.51885	104	0.51831	104	0.51269	103	0.50205	100								
Zinc	.5/.5	0.49558	99	0.49323	99	0.48397	97	0.47402	95								

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(LLICV/LLCCV Summary)

Date Analyzed: 05/27/18
Data File: S22619A4
Prep Batch: 68500
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SPEX

Analyte	LLICV/ LLCCV Amt	LLICV [soil] V-280410-8	Rec	LLCCV [soil] V-280410-21	Rec	LLCCV [soil] V-280410-34	Rec	LLCCV [soil] V-280410-46	Rec		Rec		Rec		Rec		Rec
Aluminum	2.0/2	1.89578	95	1.87452	94	1.86030	93	1.81313	91								
Barium	0.1/0.1	0.0978577	98	0.0980527	98	0.0962859	96	0.0946895	95								
Chromium	0.05/0.05	0.0504644	101	0.0494494	99	0.0482217	96	0.0487514	98								
Cobalt	0.025/0.025	0.0250642	100	0.0251465	101	0.0251689	101	0.0250735	100								
Copper	0.05/0.05	0.0480786	96	0.0473002	95	0.0464935	93	0.0459118	92								
Lead	0.05/0.05	0.0542782	109	0.0508304	102	0.0537764	108	0.0499075	100								
Manganese	0.1/0.1	0.0995767	100	0.0987142	99	0.0968263	97	0.0957249	96								
Nickel	0.05/0.05	0.0434659	87	0.0432994	87	0.0438568	88	0.0426976	85								
Vanadium	0.1/0.1	0.100951	101	0.100154	100	0.0983264	98	0.0957314	96								
Zinc	0.1/0.1	0.0969888	97	0.0965776	97	0.0943843	94	0.0914580	91								

Notes: a-indicates analyte failed the LLICV limits for 6010C, 6020A
c-indicates analyte failed the LLCCV limits for 6010C, 6020A

Qc Limits: LLCCV- 6010C/6020A (70-130)
LLICV - 6010C/6020A (70-130)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 06/01/18
Data File: SW22613E2
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-279599-7	Rec	CCV V-279599-12	Rec	CCV V-279599-24	Rec	CCV V-279599-34	Rec	CCV V-279599-46	Rec		Rec		Rec		Rec
Aluminum	5/5	4.92998	99	4.92736	99	4.98646	100	4.95143	99	5.03716	101						
Barium	.5/.5	0.48769	98	0.48551	97	0.49186	98	0.48730	97	0.49369	99						
Calcium	50/50	51.41330	103	51.47670	103	51.37180	103	51.41090	103	51.56380	103						
Chromium	.5/.5	0.49642	99	0.49379	99	0.49859	100	0.49286	99	0.49772	100						
Copper	.5/.5	0.49357	99	0.49760	100	0.50630	101	0.50205	100	0.50985	102						
Iron	5/5	4.85896	97	4.84703	97	4.89270	98	4.84187	97	4.91191	98						
Magnesium	50/50	51.38570	103	51.63290	103	51.64280	103	51.86640	104	52.04520	104						
Manganese	.5/.5	0.49205	98	0.49331	99	0.49300	99	0.49381	99	0.49593	99						
Nickel	.5/.5	0.49682	99	0.49195	98	0.49833	100	0.49146	98	0.49593	99						
Silver	0.1/0.1	0.09690	97	0.09659	97	0.09774	98	0.09714	97	0.09847	98						
Vanadium	.5/.5	0.48587	97	0.48448	97	0.48970	98	0.48514	97	0.49098	98						
Zinc	.5/.5	0.49062	98	0.49069	98	0.49658	99	0.49012	98	0.49749	99						

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)

ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(LLICV/LLCCV Summary)

Date Analyzed: 06/01/18
Data File: SW22613E2
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SPEX

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V-280094-8	Rec	LLCCV [aq] V-280094-13	Rec	LLCCV [aq] V-280094-25	Rec	LLCCV [aq] V-280094-35	Rec	LLCCV [aq] V-280094-47	Rec		Rec		Rec		Rec
Aluminum	0.2/0.2	0.234358	117	0.236714	118	0.235057	118	0.239271	120	0.237562	119						
Barium	0.05/0.05	0.0531505	106	0.0530814	106	0.0527738	106	0.0532620	107	0.0530800	106						
Calcium	5.0/5	5.07226	101	5.08184	102	5.07854	102	5.07993	102	5.09579	102						
Chromium	0.05/0.05	0.0532408	106	0.0534037	107	0.0528101	106	0.0530332	106	0.0530453	106						
Copper	0.05/0.05	0.0543897	109	0.0543063	109	0.0540898	108	0.0540966	108	0.0542319	108						
Iron	0.3/0.3	0.279089	93	0.278854	93	0.275948	92	0.279651	93	0.278487	93						
Magnesium	5.0/5	5.18188	104	5.17430	103	5.14500	103	5.19487	104	5.17246	103						
Manganese	0.04/0.04	0.0442801	111	0.0441380	110	0.0439929	110	0.0443465	111	0.0442269	111						
Nickel	0.05/0.05	0.0510695	102	0.0513675	103	0.0512104	102	0.0517126	103	0.0503705	101						
Silver	0.02/0.02	0.0213045	107	0.0212660	106	0.0213079	107	0.0216506	108	0.0214942	107						
Vanadium	0.05/0.05	0.0542397	108	0.0542187	108	0.0537246	107	0.0541745	108	0.0538725	108						
Zinc	0.05/0.05	0.0497085	99	0.0500080	100	0.0494616	99	0.0501651	100	0.0495586	99						

Notes: a-indicates analyte failed the LLICV limits for 6010C, 6020A
c-indicates analyte failed the LLCCV limits for 6010C, 6020A

Qc Limits: LLCCV- 6010C/6020A (70-130)
LLICV - 6010C/6020A (70-130)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 05/30/18
Data File: H22619S
Prep Batch: 68500
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-21	Rec	CCV-33	Rec	CCV-38	Rec		Rec		Rec		Rec		Rec
Mercury	20/10	21.81000	109	10.57000	106	10.56000	106	10.56000	106								

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 06/01/18
Data File: H22613SW
Prep Batch: 68493
Analytical Method: 6010C/7470A,7471B,6020A
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-20	Rec	CCV-31	Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	20.16000	101	9.86500	99	9.84600	98										

Notes:
a-indicates analyte failed the ICV limits for 6010C, 6020A
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020A Except Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105)
CCV- 200.7/200.8/6010C/245.1 (90-110) Except Hg 7470A/ 7471B (80-120)
ICV - 6010C/6020A/200.8 (90-110)
ICP ICV/CCV (90-110)
Hg ICV/CCV (80-120)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/29/18
Data File: S052918B
Prep Batch: 68501
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-280495-10	CCB V-280495-16	CCB V-280495-29	CCB V-280495-42	CCB V-280495-52	MB 68501-17		
Antimony	4 U	4 U	4 U	4 U	4 U	800 U		
Arsenic	1 U	1 U	1 U	1 U	1 U	200 U		
Beryllium	1 U	1 U	1 U	1 U	1 U	200 U		
Cadmium	2 U	2 U	2 U	2 U	2 U	400 U		
Selenium	10 U	10 U	10 U	10 U	10 U	2000 U		
Silver	1 U	1 U	1 U	1 U	1 U	200 U		
Thallium	2 U	2 U	2 U	2 U	2 U	400 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/30/18
Data File: A053018A
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-280495-10	CCB V-280495-16	CCB V-280495-29	CCB V-280495-42	CCB V-280495-54	MB 68493-17
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U
Selenium	5 U	5 U	5 U	5 U	5 U	10 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/31/18
Data File: A053118A
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-280495-10	CCB V-280495-16	CCB V-280495-29	CCB V-280495-42	CCB V-280495-55	CCB V-280495-59	MB 68493-17
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cobalt	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/27/18
Data File: S22619A4
Prep Batch: 68500
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-279884-9	CCB V-279884-22	CCB V-279884-35	CCB V-279884-47	MB 68500 (100)-12		
Aluminum	2 U	2 U	2 U	2 U	200 U		
Barium	.1 U	.1 U	.1 U	.1 U	10 U		
Chromium	.05 U	.05 U	.05 U	.05 U	5 U		
Cobalt	.025 U	.025 U	.025 U	.025 U	2.5 U		
Copper	.05 U	.05 U	.05 U	.05 U	5 U		
Lead	.05 U	.05 U	.05 U	.05 U	5 U		
Manganese	.1 U	.1 U	.1 U	.1 U	10 U		
Nickel	.05 U	.05 U	.05 U	.05 U	5 U		
Vanadium	.1 U	.1 U	.1 U	.1 U	10 U		
Zinc	.1 U	.1 U	.1 U	.1 U	10 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 06/01/18
Data File: SW22613E2
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-279884-9	CCB V-279884-14	CCB V-279884-26	CCB V-279884-36	CCB V-279884-48	MB 68493 (1)-15
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Calcium	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U
Magnesium	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 05/30/18
Data File: H22619S
Prep Batch: 68500
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-39	MB 68500 (167)-11
Mercury	.5 U	.5 U	.5 U	.5 U	83 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 06/01/18
Data File: H22613SW
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-32	MB 68493 (1)-11
Mercury	.5 U	.5 U	.5 U	.5 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 05/29/18
Data File: S052918B
Prep Batch: 68501
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-280496-11	Rec	ICSAB V-280497-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	43990	88	46860.00000	94						
Antimony	0	U		0.32760							
Arsenic	100	U		104.00000	104						
Beryllium	0	U		-0.02886							
Cadmium	100	U		96.28000	96						
Calcium	150000	138500	92	47400.00000	98						
Iron	125000	108300	87	14800.00000	92						
Magnesium	50000	44150	88	47020.00000	94						
Selenium	100	U		100.30000	100						
Silver	50	U		47.24000	94						
Thallium	0	U		-0.04932							

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 05/30/18
Data File: A053018A
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-280496-11	Rec	ICSAB V-280497-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	43930	88	46630.00000	93						
Antimony	0	U		0.34670							
Arsenic	100	U		106.60000	107						
Beryllium	0	U		0.00631							
Cadmium	100	U		98.56000	99						
Calcium	150000	139800	93	49000.00000	99						
Cobalt	200	U		197.90000	99						
Iron	125000	112300	90	17700.00000	94						
Magnesium	50000	44880	90	47120.00000	94						
Selenium	100	U		105.00000	105						
Thallium	0	U		-0.00220							

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 05/31/18
Data File: A053118A
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-280496-11	Rec	ICSAB V-280497-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	43790	88	46420.00000	93						
Beryllium	0	U		-0.02849							
Calcium	150000	140800	94	48900.00000	99						
Cobalt	200	U		197.50000	99						
Iron	125000	109400	88	17100.00000	94						
Lead	0	U		-0.00066							
Magnesium	50000	43910	88	47310.00000	95						

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 05/27/18
Data File: S22619A4
Prep Batch: 68500
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-279601-10	Rec	ICSAB V-279602-11	Rec	ICSA V-279601-31	Rec	ICSAB V-279602-32	Rec	ICSA V-279601-43	Rec	ICSAB V-279602-44	Rec		Rec		Rec
Aluminum	500	531.011	106	509.62000	102	521.198	104	499.37900	100	515.322	103	493.07500	99				
Barium	.5	U		0.50274	101	U		0.49178	98	U		0.48243	96				
Calcium	500	496.956	99	480.65500	96	488.868	98	469.62300	94	482.477	96	464.13100	93				
Chromium	.5	U		0.49155	98	U		0.48316	97	U		0.46843	94				
Cobalt	.5	U		0.44959	90	U		0.43727	87	U		0.43134	86				
Copper	.5	U		0.54552	109	U		0.53032	106	U		0.52381	105				
Iron	200	188.155	94	180.45400	90	183.648	92	175.79500	88	180.244	90	173.15000	87				
Lead	1	U		0.93430	93	U		0.91383	91	U		0.89919	90				
Magnesium	500	543.232	109	517.44200	103	528.171	106	503.14700	101	519.581	104	496.11000	99				
Manganese	.5	U		0.47017	94	U		0.45924	92	U		0.45159	90				
Nickel	1	U		0.94016	94	U		0.91461	91	U		0.91942	92				
Vanadium	.5	U		0.51214	102	U		0.49937	100	U		0.49135	98				
Zinc	1	U		0.92384	92	U		0.88998	89	U		0.87736	88				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 06/01/18
Data File: SW22613E2
Prep Batch: 68493
Reporting Limits Used: 6010C/7470A,7471B,6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 8052424

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-279601-10	Rec	ICSAB V-279602-11	Rec	ICSA V-279601-32	Rec	ICSAB V-279602-33	Rec	ICSA V-279601-44	Rec	ICSAB V-279602-45	Rec	Rec	Rec
Aluminum	500	521.384	104	526.61700	105	521.294	104	528.75300	106	526.485	105	530.70700	106		
Barium	.5	U		0.51555	103	U		0.52120	104	U		0.52769	106		
Calcium	500	507.309	101	512.06000	102	505.439	101	512.59400	103	509.219	102	512.86600	103		
Chromium	.5	U		0.49275	99	U		0.49631	99	U		0.49982	100		
Copper	.5	U		0.54624	109	U		0.55567	111	U		0.55851	112		
Iron	200	192.05	96	195.24100	98	192.873	96	194.68900	97	192.649	96	196.31000	98		
Magnesium	500	524.436	105	530.13100	106	525.868	105	533.49200	107	531.13	106	535.46500	107		
Manganese	.5	U		0.50408	101	U		0.50999	102	U		0.51432	103		
Nickel	1	U		0.92932	93	U		0.92873	93	U		0.93078	93		
Silver	1	U		1.10181	110	U		1.11173	111	U		1.11930	112		
Vanadium	.5	U		0.49066	98	U		0.49658	99	U		0.50040	100		
Zinc	1	U		0.95993	96	U		0.96940	97	U		0.97925	98		

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68501

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 68501

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68501	1	S052918B	19	142.5000	153	93		82	118
Cadmium	68501	1	S052918B	19	260.9000	273	96		82	118
Selenium	68501	1	S052918B	19	101.1000	106	95		78	123
Silver	68501	1	S052918B	19	49.9200	53.3	94		78	122

TxtQcType: LCS Matrix: SOIL SampleID: LCS 68501

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68501	1	S052918B	18	146.2000	153	96		82	118
Cadmium	68501	1	S052918B	18	269.5000	273	99		82	118
Selenium	68501	1	S052918B	18	104.5000	106	99		78	123
Silver	68501	1	S052918B	18	50.8300	53.3	95		78	122

TxtQcType: MSD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68501	1	S052918B	24	S052918B	20	204.4000	5.7860	250	79		75	125
Cadmium	68501	1	S052918B	24	S052918B	20	242.6000	2U	250	97		75	125
Selenium	68501	1	S052918B	24	S052918B	20	158.6000	10U	250	63	a	75	125
Silver	68501	1	S052918B	24	S052918B	20	45.5000	1U	50	91		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68501	1	S052918B	23	S052918B	20	192.3000	5.7860	250	75		75	125
Cadmium	68501	1	S052918B	23	S052918B	20	225.7000	2U	250	90		75	125
Selenium	68501	1	S052918B	23	S052918B	20	149.3000	10U	250	60	a	75	125
Silver	68501	1	S052918B	23	S052918B	20	42.0900	1U	50	84		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68501

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD04394-009

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	S052918B	25	S052918B	20	52.9300	5.7860	50	94		80	120
Cadmium	1	S052918B	25	S052918B	20	47.0400	2U	50	94		80	120
Selenium	1	S052918B	25	S052918B	20	241.8000	10U	250	97		80	120
Silver	1	S052918B	25	S052918B	20	47.8700	1U	50	96		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68493

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 68493

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68493	1	A053018A	18	268.0000	250	107		80	120
Cadmium	68493	1	A053018A	18	271.1000	250	108		80	120
Lead	68493	1	A053118A	18	253.9000	250	102		80	120
Selenium	68493	1	A053018A	18	266.4000	250	107		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 68493

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68493	1	A053018A	19	263.8000	250	106		80	120
Cadmium	68493	1	A053018A	19	265.3000	250	106		80	120
Lead	68493	1	A053118A	19	246.3000	250	99		80	120
Selenium	68493	1	A053018A	19	257.9000	250	103		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68493	1	A053018A	23	A053018A	20	260.4000	1.4480	250	104		75	125
Cadmium	68493	1	A053018A	23	A053018A	20	260.6000	1U	250	104		75	125
Lead	68493	1	A053118A	23	A053118A	20	243.8000	1.5U	250	98		75	125
Selenium	68493	1	A053018A	23	A053018A	20	255.7000	5U	250	102		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	68493	1	A053018A	24	A053018A	20	253.8000	1.4480	250	101		75	125
Cadmium	68493	1	A053018A	24	A053018A	20	256.4000	1U	250	103		75	125
Lead	68493	1	A053118A	24	A053118A	20	236.4000	1.5U	250	95		75	125
Selenium	68493	1	A053018A	24	A053018A	20	251.0000	5U	250	100		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68493

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD04391-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Arsenic	1	A053018A	25	A053018A	20	50.6300	1.4480	50	98		80	120
Cadmium	1	A053018A	25	A053018A	20	48.7300	1U	50	97		80	120
Lead	1	A053118A	25	A053118A	20	48.1900	1.5U	50	96		80	120
Selenium	1	A053018A	25	A053018A	20	246.4000	5U	250	99		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68493

Instrument Type: ICP/HG

Analytical Method(s):6010C/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 68493

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68493	1	SW22613	16	0.5246	0.500	105		80	120
Chromium	68493	1	SW22613	16	0.5234	0.500	105		80	120
Mercury	68493	1	H22613S	12	10.0200	10	100		80	120
Silver	68493	1	SW22613	16	0.1038	0.100	104		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 68493

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68493	1	SW22613	17	0.5272	0.500	105		80	120
Chromium	68493	1	SW22613	17	0.5242	0.500	105		80	120
Mercury	68493	1	H22613S	13	9.8900	10	99		80	120
Silver	68493	1	SW22613	17	0.1036	0.100	104		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68493	1	SW22613	20	SW22613	18	0.5643	0.05U	0.50	113		75	125
Chromium	68493	1	SW22613	20	SW22613	18	0.5211	0.05U	0.50	104		75	125
Mercury	68493	1	H22613S	16	H22613S	14	9.9080	0.50U	10	99		75	125
Silver	68493	1	SW22613	20	SW22613	18	0.1042	0.02U	.100	104		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68493	1	SW22613	21	SW22613	18	0.5646	0.05U	0.50	113		75	125
Chromium	68493	1	SW22613	21	SW22613	18	0.5208	0.05U	0.50	104		75	125
Mercury	68493	1	H22613S	17	H22613S	14	9.7180	0.50U	10	97		75	125
Silver	68493	1	SW22613	21	SW22613	18	0.1047	0.02U	0.100	105		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68500

Instrument Type: ICP/HG

Analytical Method(s):6010C/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 68500

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68500	1	S22619A4	14	2.5240	2.65	95		82	119
Chromium	68500	1	S22619A4	14	2.3628	2.45	96		81	119
Lead	68500	1	S22619A4	14	0.9339	0.994	94		82	119
Mercury	68500	5	H22619S	15	14.5800	75	97		60	140

TxtQcType: LCS Matrix: SOIL SampleID: LCS 68500

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68500	1	S22619A4	13	2.4254	2.65	92		82	119
Chromium	68500	1	S22619A4	13	2.2955	2.45	94		81	119
Lead	68500	1	S22619A4	13	0.9035	0.994	91		82	119
Mercury	68500	5	H22619S	14	13.5900	75	91		60	140

TxtQcType: MSD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68500	1	S22619A4	18	S22619A4	15	1.0853	0.7428	0.5	69	a	75	125
Chromium	68500	1	S22619A4	18	S22619A4	15	0.6874	0.2744	0.5	83		75	125
Lead	68500	1	S22619A4	18	S22619A4	15	0.5764	0.1873	0.5	78		75	125
Mercury	68500	1	H22619S	19	H22619S	16	10.8900	.5U	10	109		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	68500	1	S22619A4	17	S22619A4	15	1.2527	0.7428	0.5	102		75	125
Chromium	68500	1	S22619A4	17	S22619A4	15	0.6891	0.2744	0.5	83		75	125
Lead	68500	1	S22619A4	17	S22619A4	15	0.5856	0.1873	0.5	80		75	125
Mercury	68500	1	H22619S	18	H22619S	16	10.8900	.5U	10	109		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 68500

Instrument Type: ICP/HG

Analytical Method(s):6010C/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD04394-009

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	1	S22619A4	19	S22619A4	15	1.1646	0.7428	0.50	84		80	120
Chromium	1	S22619A4	19	S22619A4	15	0.7200	0.2744	0.50	89		80	120
Lead	1	S22619A4	19	S22619A4	15	0.6211	0.1873	0.50	87		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 68493

Instrument Type: ICP/HG
Analytical Method(s):6010C/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD04391-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Barium	1	SW22613	22	SW22613	18	0.5575	0.05U	.5	112		80	120
Chromium	1	SW22613	22	SW22613	18	0.5171	0.05U	.5000	103		80	120
Silver	1	SW22613	22	SW22613	18	0.0782	0.02U	0.100	78	a	80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 68501

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 68501

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68501	S052918B	19	S052918B	18	142.5000	146.2000	2.6	20
Cadmium	68501	S052918B	19	S052918B	18	260.9000	269.5000	3.2	20
Selenium	68501	S052918B	19	S052918B	18	101.1000	104.5000	3.3	20
Silver	68501	S052918B	19	S052918B	18	49.9200	50.8300	1.8	20

TxtQcType: MR Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68501	S052918B	21	S052918B	20	5.3840	5.7860	7.2	20
Cadmium	68501	S052918B	21	S052918B	20	2U	2U	---	20
Selenium	68501	S052918B	21	S052918B	20	10U	10U	---	20
Silver	68501	S052918B	21	S052918B	20	1U	1U	---	20

TxtQcType: MSD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68501	S052918B	24	S052918B	23	204.4000	192.3000	6.1	20
Cadmium	68501	S052918B	24	S052918B	23	242.6000	225.7000	7.2	20
Selenium	68501	S052918B	24	S052918B	23	158.6000	149.3000	6	20
Silver	68501	S052918B	24	S052918B	23	45.5000	42.0900	7.8	20

TxtQcType: SD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Arsenic	68501	S052918B	22	S052918B	20	5	1.1230	5.7860	3	10
Cadmium	68501	S052918B	22	S052918B	20	5	0.0087	0.1477	---	10
Selenium	68501	S052918B	22	S052918B	20	5	1.6180	8.1780	1.1	10
Silver	68501	S052918B	22	S052918B	20	5	-0.0005	0.0541	---	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 68493

Instrument Type: ICPMS

Analytical Method(s):6020A/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 68493

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68493	A053018A	19	A053018A	18	263.8000	268.0000	1.6	20
Cadmium	68493	A053018A	19	A053018A	18	265.3000	271.1000	2.2	20
Lead	68493	A053118A	19	A053118A	18	246.3000	253.9000	3	20
Selenium	68493	A053018A	19	A053018A	18	257.9000	266.4000	3.2	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68493	A053018A	21	A053018A	20	1.2700	1.4480	13	20
Cadmium	68493	A053018A	21	A053018A	20	1U	1U	---	20
Lead	68493	A053118A	21	A053118A	20	1.5U	1.5U	---	20
Selenium	68493	A053018A	21	A053018A	20	5U	5U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Arsenic	68493	A053018A	24	A053018A	23	253.8000	260.4000	2.6	20
Cadmium	68493	A053018A	24	A053018A	23	256.4000	260.6000	1.6	20
Lead	68493	A053118A	24	A053118A	23	236.4000	243.8000	3.1	20
Selenium	68493	A053018A	24	A053018A	23	251.0000	255.7000	1.9	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Arsenic	68493	A053018A	22	A053018A	20	5	0.2933	1.4480	1.3		10
Cadmium	68493	A053018A	22	A053018A	20	5	0.0421	0.1025	105	c	10
Lead	68493	A053118A	22	A053118A	20	5	0.1289	0.3880	---		10
Selenium	68493	A053018A	22	A053018A	20	5	0.5566	2.4510	14	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 68500

Instrument Type: ICP/HG

Analytical Method(s):6010C/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 68500

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	68500	S22619A4	14	S22619A4	13	2.5240	2.4254	4		20
Chromium	68500	S22619A4	14	S22619A4	13	2.3628	2.2955	2.9		20
Lead	68500	S22619A4	14	S22619A4	13	0.9339	0.9035	3.3		20
Mercury	68500	H22619S	15	H22619S	14	14.5800	13.5900	7		20

TxtQcType: MR Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Barium	68500	S22619A4	16	S22619A4	15	0.9568	0.7428	25	a	20
Chromium	68500	S22619A4	16	S22619A4	15	0.2658	0.2744	3.2		20
Lead	68500	S22619A4	16	S22619A4	15	0.1947	0.1873	3.9		20
Mercury	68500	H22619S	17	H22619S	16	.5U	.5U	---		20

TxtQcType: MSD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	68500	S22619A4	18	S22619A4	17	1.0853	1.2527	14	20
Chromium	68500	S22619A4	18	S22619A4	17	0.6874	0.6891	.25	20
Lead	68500	S22619A4	18	S22619A4	17	0.5764	0.5856	1.6	20
Mercury	68500	H22619S	19	H22619S	18	10.8900	10.8900	0	20

TxtQcType: SD Matrix: SOIL SampleID: AD04394-009

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Barium	68500	S22619A4	23	S22619A4	15	5	0.1547	0.7428	4.1	10
Chromium	68500	S22619A4	23	S22619A4	15	5	0.0592	0.2744	7.8	10
Lead	68500	S22619A4	23	S22619A4	15	5	0.0398	0.1873	6.1	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 68493

Instrument Type: ICP/HG

Analytical Method(s):6010C/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 68493

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	68493	SW22613	17	SW22613	16	0.5272	0.5246	.49	20
Chromium	68493	SW22613	17	SW22613	16	0.5242	0.5234	.15	20
Mercury	68493	H22613S	13	H22613S	12	9.8900	10.0200	1.3	20
Silver	68493	SW22613	17	SW22613	16	0.1036	0.1038	.18	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	68493	SW22613	19	SW22613	18	0.05U	0.05U	---	20
Chromium	68493	SW22613	19	SW22613	18	0.05U	0.05U	---	20
Mercury	68493	H22613S	15	H22613S	14	0.50U	0.50U	---	20
Silver	68493	SW22613	19	SW22613	18	0.02U	0.02U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Barium	68493	SW22613	21	SW22613	20	0.5646	0.5643	.066	20
Chromium	68493	SW22613	21	SW22613	20	0.5208	0.5211	.054	20
Mercury	68493	H22613S	17	H22613S	16	9.7180	9.9080	1.9	20
Silver	68493	SW22613	21	SW22613	20	0.1047	0.1042	.46	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD04391-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Barium	68493	SW22613	23	SW22613	18	5	0.0086	0.0381	13	c	10
Chromium	68493	SW22613	23	SW22613	18	5	0.0022	0.0037	---		10
Silver	68493	SW22613	23	SW22613	18	5	0.0013	0.0010	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 22620 Analyst: BA

QC Number: 62501 Prep Date: 5/26/18

Matrix: 802804 Reviewed By: R

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	5ml	25ml	50ml		–	
LCS	0.19					–	
LCSD	"					–	
1. AD 04394-009	0.5						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 04394-009							
MS 04394-009							Balance used: B-033
MSD 04394-009							Pipettes used: 149, 152
2. -001							
3. -002							Hot Block used: 5
4. -003							
5. -004							
6. -005							
7. -006							
8. -007							
9. -008							
10. 04418-009							
11. -012							
12. -013							
13. -017							
14. 04434-001							
15. -002	"	"	"	"			
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 82.2 C (90-95° C) Start Time: 13:00 End Time: 19:00

	Volume mL	Lot #
LCS, LCSD	0.19	V- 11320
LLLCS, LLLCSD		V-
MS, MSD	0.5ml	V- 11596, 11346
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2ml	V- 11509
HCl		V-
H_2O_2	1.5ml	V- 11145

Acid	Vol mL	Lot#
1:1 HNO_3	5ml	V-277263
1:1 HCl		V-

Relinquished By BA Date 5/26/18

Received By R Date 5/26/18

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Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 22619 Analyst: BA

QC Number: 68580 Prep Date: 5/26/18

Matrix: Soil Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	5mL	50mL				--	
LCS	0.5g					--	
LCSD						--	
1. AD 04394-009							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 04394-009							
MS 04394-009							Balance used: B-033
MSD 04394-009							Pipettes used: NS,152
2. -001							
3. -002							Hot Block used: 4
4. -003							
5. -004							
6. -005							
7. -006							
8. -007							
9. -008							
10. 04418-007							
11. -012							
12. -013							
13. -017							
14. 04434-001							
15. -002							
16. 04439-001							NOT required
17. -002							
18.							
19.							
20.							

Hot Plate Temperature: 93.2 C (90-95° C) Start Time: 15:00 End Time: 19:00

	Volume mL	Lot #
LCS, LCSD	0.5g	V- 11320
LLLCS, LLLCSD		V-
MS, MSD	0.5g	V- 11596/11348
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5mL	V- 11509
HCl	5mL	V- 11445
H_2O_2	1.5mL	V- 11145

Acid	Vol mL	Lot#
1:1 HNO_3	5mL	V-279783
1:1 HCl		V-

Relinquished By BA Date 5/26/18

Received By [illegible] Date 05/26/2018

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 22613 Analyst: lm

QC Number: 68493 Prep Date: 5/30/18

Matrix: SW846 Reviewed By: m

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50 ml	10ml	20ml		–	
LCS						–	
LCSD						–	
1. 004391-001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 04391-001							
MS 04391-001							Balance used: N/A
MSD 04391-001							Pipettes used: 149
2. 04391-005							
3. -006							Hot Block used: 9
4. 04394-010							(FB)
5. 04373-001							
6. -002							
7. -003							
8. -004							
9. -005							
10. 04423-025							(FB)
11. 04428-010							
12. -011							
13. -012							
14. -013							
15. -014							
16. 04406-001							
17. -002							
18. 04408-001							
19.							
20.							

Hot Plate Temperature: 93.6 C (90-95° C) Start Time: 9:00 End Time: 12:26

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-11505, 11506
LLLCS, LLLCSD		V-
MS, MSD	0.25ml	V-11505, 11506
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	3ml	V-11509
HCl		V-
H_2O_2		V-

Acid	Vol mL	Lot#
1:1 HNO_3		V-
1:1 HCl	5 ml	V-280043

Relinquished By m Date 5/30/18

Received By m Date 5/30/18

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Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A (7471B) OTHER_____

Batch No.:* 22619

QC Number: 68500

Matrix: Soil

Analyst: BA

Prep Date: 5/26/18

Review By: [illegible]

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 280462
LCS	0.159			
LCSD				STD 0.2 ppb V- 280463
1 AD 04394-005				STD 0.5 ppb V- 280464
MR 04394-005				STD 1.0 ppb V- 280465
MS 04394-005				STD 2.0 ppb V- 280466
MSD 04394-005				STD 5.0 ppb V- 280467
2 04418-008				STD 10.0 ppb V- 280468
3 -012				STD 25.0 ppb V- 280469
4 -013				ICV 10.0 ppb V- 280460
5 04238-017				CCV 20.0 ppb V- 280461
6 04434-001				
7 04289-002				
8 04394-008	25ml	25ml		Balance used: B-033
9 -002				Pipettes used: 121, 152, 135
10 -003				
11 -004				Hot Block used: 7
12 -005				
13 -006				
14 -007				
15 -008				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KMnO_4$: V- 278334	3.75ml	HNO3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 278336	1.5ml	H2SO4		V-
		Aqua Regia	1.25ml	V- 280459

**Block Temp.: °C	92.5
Time In Block:	1530
Time Out of Block:	16:00

Spike Volume & Lot #

☐ LCS V- 11320 (0.15x / 0.25 ml)

☐ MS V- 280413 0.250 ml

☐ Standards/Control Batch B- 25107

Start time: 15:00 End Time: 16:00

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: BA

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 (7470A) 7471B OTHER_____

Batch No.:* 22613

QC Number: 68493

Matrix: SW846

Analyst: [illegible]

Prep Date: 5/30/18

Review By: [illegible]

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25ml	25ml		CAL CURVE BLK 0ppb V- 280660
LCS				
LCSD				STD 0.2 ppb V- 280661
1 04391-001				STD 0.5 ppb V- 280662
MR 04391-001				STD 1.0 ppb V- 280663
MS 04391-001				STD 2.0 ppb V- 280664
MSD 04391-001				STD 5.0 ppb V- 280665
2 04391-005				STD 10.0 ppb V- 280666
3 -006				STD 25.0 ppb V- 280667
4 04394-010			FR	ICV 10.0 ppb V- 280658
5 04373-001				CCV 20.0 ppb V- 280659
6 -002				
7 -003				
8 5/30/18 -004				Balance used: N/A
9 -005				Pipettes used: 121, 150, 135
10 04423-025			FR	
11 04438-010				Hot Block used: 7
12 04438-011				
13 -012				
14 -013				
15 -014				
16 04406-001				
17 -002				
18 04408-001				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 278834	3.75ml	HNO3	0.625ml	V- 11508
$K_2S_2O_8$: V- 278835	2ml	HCl		V-
NH_2OH: V- 278836	1.5ml	H2SO4	1.25ml	V- 11491
		Aqua Regia		V-

**Block Temp. °C	93.7
Time In Block	10:00
Time Out of Block	12:00

Spike Volume & Lot #

☐ LCS V- 280657 0.15g / 0.25 ml

☐ MS V- 280657 0.250 ml

☐ Standards/Control Batch B- 25130

Start time: 9:00 End Time: 12:00

**Temperature 245.1 / 7470A: 90-95C 7471B : 92-98C

Relinquished By: [illegible]

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\S052918B.b\S052918B.TXT

Analysis Date: 05/29/18

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	13:20	1	MET-5-6020	SOIL	SOIL	SW846	68501		0
CalBlk V-280488	1	ISBLK	13:26	2		SOIL	SOIL				V-280488(Cal Blk WARNING)
CalStd1 V-280489	1	CAL	13:32	3							V-280489(Cal Std-1 WARNING)
CalStd2 V-280490	1	CAL	13:38	4							V-280490(Cal Std-2 WARNING)
CalStd3 V-280491	1	CAL	13:44	5							V-280491(Cal Std-3 WARNING)
CalStd4 V-280492	1	CAL	13:49	6							V-280492(Cal Std-4 WARNING)
CalStd5 V-280493	1	CAL	13:55	7							V-280493(Cal Std-5 WARNING)
ICV V-280494	1	ICV	14:01	8							V-280494(ICV WARNING)
LLICV V-280499	1	LLICV	14:07	9	MET-5-6020	SOIL	SOIL	SW846	68501		V-280499(LL-ICV/CCV SOIL WARNING)
ICB V-280495	1	ICB	14:13	10							V-280495(ICB/CCB WARNING)
ICSA V-280496	1	ICSA	14:18	11							V-280496(ICSA WARNING)
ICSAB V-280497	1	ICSAB	14:24	12							V-280497(ICSAB WARNING)
RINSE	1	NA	14:30	13	MET-5-6020	SOIL	SOIL	SW846	68501		0
CCV V-280498	1	CCV	14:35	14							V-280498(CCV WARNING)
LLCCV V-280499	1	LLCCV	14:41	15	MET-5-6020	SOIL	SOIL	SW846	68501		V-280499(LL-ICV/CCV SOIL WARNING)
CCB V-280495	1	CCB	14:47	16							V-280495(ICB/CCB WARNING)
MB 68501	1	MB	14:53	17	MET-5-6020	SOIL	SOIL	SW846	68501		0
LCS 68501	1	LCS	14:58	18	MET-5-6020	SOIL	SOIL	SW846	68501		0
LCS MR 68501	1	LCS	15:04	19	MET-5-6020	SOIL	SOIL	SW846	68501		0
AD04394-009	1	SMP	15:09	20	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-009	1	MR	15:15	21	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-009	5	SD	15:21	22	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-009	1	MS	15:26	23	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-009	1	MSD	15:32	24	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-009	1	PS	15:38	25	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
RINSE	1	NA	15:44	26	MET-5-6020	SOIL	SOIL	SW846	68501		0
CCV V-280498	1	CCV	15:49	27							V-280498(CCV WARNING)
LLCCV V-280499	1	LLCCV	15:55	28	MET-5-6020	SOIL	SOIL	SW846	68501		V-280499(LL-ICV/CCV SOIL WARNING)
CCB V-280495	1	CCB	16:01	29							V-280495(ICB/CCB WARNING)
AD04394-001	1	SMP	16:06	30	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-002	1	SMP	16:12	31	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-003	1	SMP	16:18	32	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-004	1	SMP	16:23	33	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-005	1	SMP	16:29	34	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-006	1	SMP	16:35	35	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-007	1	SMP	16:41	36	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04394-008	1	SMP	16:46	37	MET-RCRA-MS	SOIL	SOIL	SW846	68501		0
AD04418-008	1	SMP	16:52	38	MET-5-6020	SOIL	SOIL	SW846	68501		0
RINSE	1	NA	16:58	39	MET-5-6020	SOIL	SOIL	SW846	68501		0
CCV V-280498	1	CCV	17:04	40							V-280498(CCV WARNING)
LLCCV V-280499	1	LLCCV	17:10	41	MET-5-6020	SOIL	SOIL	SW846	68501		V-280499(LL-ICV/CCV SOIL WARNING)
CCB V-280495	1	CCB	17:15	42							V-280495(ICB/CCB WARNING)
AD04418-012	1	SMP	17:21	43	MET-5-6020	SOIL	SOIL	SW846	68501	Rerun Be.	0
AD04418-013	1	SMP	17:27	44	MET-5-6020	SOIL	SOIL	SW846	68501		0
AD04418-017	1	SMP	17:32	45	MET-5-6020	SOIL	SOIL	SW846	68501		0
AD04434-001	1	SMP	17:38	46	MET-1-6020	SOIL	SOIL	SW846	68501		0
AD04434-002	1	SMP	17:44	47	MET-1-6020	SOIL	SOIL	SW846	68501		0
AD04327-002	3	SMP	17:49	48	MET-TAL6020S	SOIL	SOIL	SW846	68491	Report Be.	0
RINSE	1	NA	17:55	49	MET-5-6020	SOIL	SOIL	SW846	68501		0
CCV V-280498	1	CCV	18:01	50							V-280498(CCV WARNING)
LLCCV V-280499	1	LLCCV	18:07	51	MET-5-6020	SOIL	SOIL	SW846	68501		V-280499(LL-ICV/CCV SOIL WARNING)
CCB V-280495	1	CCB	18:13	52							V-280495(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.38 5/30/2018 11:13:00 AM

B-22611 Report Be for 04327-002.
B-22620 Run ok. Report Ag, As, Be, Cd,
Sb, Se, Tl. Rerun Be for 04418-012 (int. std. 45 fail). PC.

[illegible] 5/31/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 5/21/18

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\A053018A.b\A053018A.TXT

Analysis Date: 05/30/18

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	16:24	1	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
CalBlk V-280488	1	ISBLK	16:30	2		AOUEO	AOUEO				V-280488(Cal Blk WARNING)
CalStd1 V-280489	1	CAL	16:36	3							V-280489(Cal Std-1 WARNING)
CalStd2 V-280490	1	CAL	16:41	4							V-280490(Cal Std-2 WARNING)
CalStd3 V-280491	1	CAL	16:47	5							V-280491(Cal Std-3 WARNING)
CalStd4 V-280492	1	CAL	16:53	6							V-280492(Cal Std-4 WARNING)
CalStd5 V-280493	1	CAL	16:59	7							V-280493(Cal Std-5 WARNING)
ICV V-280494	1	ICV	17:05	8							V-280494(ICV WARNING)
LLICV V-280500	1	LLICV	17:11	9	MET-1-6020	AOUEO	AOUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
ICB V-280495	1	ICB	17:17	10							V-280495(ICB/CCB WARNING)
ICSA V-280496	1	ICSA	17:22	11							V-280496(ICSA WARNING)
ICSAB V-280497	1	ICSAB	17:28	12							V-280497(ICSAB WARNING)
RINSE	1	NA	17:34	13	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
CCV V-280498	1	CCV	17:40	14							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	17:46	15	MET-1-6020	AOUEO	AOUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	17:52	16							V-280495(ICB/CCB WARNING)
MB 68493	1	MB	17:57	17	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
LCSW 68493	1	LCS	18:03	18	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
LCSW MR 68493	1	LCS	18:09	19	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04391-001	1	SMP	18:15	20	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-001	1	MR	18:20	21	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-001	5	SD	18:26	22	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-001	1	MS	18:32	23	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-001	1	MSD	18:38	24	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-001	1	PS	18:44	25	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
RINSE	1	NA	18:50	26	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
CCV V-280498	1	CCV	18:55	27							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	19:01	28	MET-1-6020	AOUEO	AOUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	19:07	29							V-280495(ICB/CCB WARNING)
AD04391-005	1	SMP	19:13	30	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04391-006	1	SMP	19:19	31	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04394-010	1	SMP	19:25	32	Met-RCRA-MSW	AOUEO	AOUEO	SW846	68493		()
AD04373-001	1	NA	19:31	33	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04373-002	1	NA	19:36	34	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04373-003	1	NA	19:42	35	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04373-004	1	NA	19:48	36	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04373-005	1	NA	19:54	37	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
AD04423-025	1	SMP	20:00	38	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
RINSE	1	NA	20:06	39	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
CCV V-280498	1	CCV	20:12	40							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	20:18	41	MET-1-6020	AOUEO	AOUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	20:24	42							V-280495(ICB/CCB WARNING)
AD04438-010	1	SMP	20:29	43	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04438-011	1	SMP	20:35	44	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04438-012	1	SMP	20:41	45	MET-TAL6020W	AOUEO	AOUEO	SW846	68493	Rerun Be, Co.	()
AD04438-013	1	SMP	20:47	46	MET-TAL6020W	AOUEO	AOUEO	SW846	68493	Rerun Co.	()
AD04438-014	1	SMP	20:52	47	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04406-001	1	SMP	20:58	48	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04406-002	1	SMP	21:04	49	MET-TAL6020W	AOUEO	AOUEO	SW846	68493		()
AD04408-001	1	SMP	21:10	50	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
RINSE	1	NA	21:16	51	MET-1-6020	AOUEO	AOUEO	SW846	68493		()
CCV V-280498	1	CCV	21:22	52							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	21:28	53	MET-1-6020	AOUEO	AOUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	21:34	54							V-280495(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.38 5/31/2018 12:30:27 PM

Run ok. Report As, be, cd, Co, Sb, Se, Tl. Rerun Pb (LLICV/CCV fail).
Rerun Be, Co for 04438-012. Rerun Co for 04438-013 (int. std. 45 fail. PC.

6/1/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2e 5/30/18

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\A053118A.b\A053118A.TXT

Analysis Date: 05/31/18

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	10:55	1	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CalBlk V-280488	1	ISBLK	11:07	2		AQUEO	AQUEO				V-280488(Cal Blk WARNING)
CalStd1 V-280489	1	CAL	11:13	3							V-280489(Cal Std-1 WARNING)
CalStd2 V-280490	1	CAL	11:19	4							V-280490(Cal Std-2 WARNING)
CalStd3 V-280491	1	CAL	11:25	5							V-280491(Cal Std-3 WARNING)
CalStd4 V-280492	1	CAL	11:31	6							V-280492(Cal Std-4 WARNING)
CalStd5 V-280493	1	CAL	11:36	7							V-280493(Cal Std-5 WARNING)
ICV V-280494	1	ICV	11:42	8							V-280494(ICV WARNING)
LLICV V-280500	1	LLICV	11:48	9	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
ICB V-280495	1	ICB	11:54	10							V-280495(ICB/CCB WARNING)
ICSA V-280496	1	ICSA	12:00	11							V-280496(ICSA WARNING)
ICSAB V-280497	1	ICSAB	12:06	12							V-280497(ICSAB WARNING)
RINSE	1	NA	12:12	13	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CCV V-280498	1	CCV	12:19	14							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	12:24	15	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	12:30	16							V-280495(ICB/CCB WARNING)
MB 68493	1	MB	12:36	17	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
LCSW 68493	1	LCS	12:42	18	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
LCSW MR 68493	1	LCS	12:48	19	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	1	SMP	12:53	20	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	1	MR	12:59	21	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	5	SD	13:05	22	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	1	MS	13:11	23	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	1	MSD	13:17	24	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-001	1	PS	13:22	25	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
RINSE	1	NA	13:28	26	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CCV V-280498	1	CCV	13:34	27							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	13:40	28	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	13:46	29							V-280495(ICB/CCB WARNING)
AD04391-005	1	SMP	13:52	30	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04391-006	1	SMP	13:58	31	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04394-010	1	SMP	14:04	32	Met-RCRA-MSW	AQUEO	AQUEO	SW846	68493		()
AD04373-001	1	SMP	14:09	33	MET-1-6020	AQUEO	AQUEO	SW846	68493		()
AD04373-002	1	SMP	14:15	34	MET-1-6020	AQUEO	AQUEO	SW846	68493		()
AD04373-003	1	SMP	14:21	35	MET-1-6020	AQUEO	AQUEO	SW846	68493		()
AD04373-004	1	SMP	14:27	36	MET-1-6020	AQUEO	AQUEO	SW846	68493		()
AD04373-005	1	SMP	14:33	37	MET-1-6020	AQUEO	AQUEO	SW846	68493		()
AD04423-025	1	SMP	14:39	38	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
RINSE	1	NA	14:45	39	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CCV V-280498	1	CCV	14:51	40							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	14:57	41	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	15:02	42							V-280495(ICB/CCB WARNING)
AD04438-010	1	SMP	15:08	43	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04438-011	1	SMP	15:14	44	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04438-012	1	SMP	15:20	45	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04438-013	1	SMP	15:25	46	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04438-014	1	SMP	15:31	47	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04406-001	1	SMP	15:37	48	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04406-002	1	SMP	15:43	49	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
AD04438-012	3	SMP	15:49	50	MET-TAL6020W	AQUEO	AQUEO	SW846	68493	Report Be, Co.	()
AD04438-013	2	SMP	15:54	51	MET-TAL6020W	AQUEO	AQUEO	SW846	68493	Report Co.	()
RINSE	1	NA	16:01	52	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CCV V-280498	1	CCV	16:06	53							V-280498(CCV WARNING)
LLCCV V-280500	1	LLCCV	16:12	54	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	16:18	55							V-280495(ICB/CCB WARNING)
RINSE	1	NA	16:24	56	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		()
CCV V-280498	1	CCV	16:30	57							V-280498(CCV WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.38 6/1/2018 11:47:23 AM

Run ok. Report Pb.
Report Be, Co for 04438-012 (3x). Report Co fpr 04438-013 (2x). Pc.

6/1/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 5/30/18

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\A053118A.b\A053118A.TXT

Analysis Date: 05/31/18

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
LLCCV V-280500	1	LLCCV	16:36	58	MET-TAL6020W	AQUEO	AQUEO	SW846	68493		V-280500(LL-ICV/CCV AQ. WARNING)
CCB V-280495	1	CCB	16:42	59							V-280495(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.38 6/1/2018 11:47:23 AM

Run ok. Report Pb.
Report Be, Co for 04438-012 (3x). Report Co fpr 04438-013 (2x). Pc.

6/1/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 5/20 v

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP4A\S22619A4.txt

Analysis Date: 05/26/18 **Instrument:** PEICP4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-279884	1	CAL	23:45	1							V-279884(ICB/CCB)
CALST1 V-279502	1	CAL	23:48	2							V-279502(ICS1 Lowest std)
CALST2 V-279604	1	CAL	23:52	3							V-279604(ICS2- Low Std)
CALST3 V-280105	1	CAL	23:55	4							V-280105(ICS3 - Middle Std)
CALST4 V-279606	1	CAL	00:00	5							V-279606(ICS4 High std)
ICS3 V-280105	1	ICS	00:04	6							V-280105(ICS3 - Middle Std)
ICV V-279599	1	ICV	00:09	7							V-279599(CCV)
LLICV [soil] V-280410	1	LLICV	00:14	8		SOIL	SOIL	SW846	68500		V-280410(LLICV/LLCCV soil)
ICB V-279884	1	ICB	00:17	9							V-279884(ICB/CCB)
ICSA V-279601	1	ICSA	00:21	10							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	00:26	11							V-279602(ICSAB)
MB 68500 (100)	1	MB	00:30	12		SOIL	SOIL	SW846	68500		()
LCS 68500	1	LCS	00:34	13		SOIL	SOIL	SW846	68500		()
LCS MR 68500	1	LCS	00:39	14		SOIL	SOIL	SW846	68500		()
AD04394-009	1	SMP	00:43	15	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-009	1	MR	00:48	16	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-009	1	MS	00:52	17	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-009	1	MSD	00:57	18	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-009	1	PS	01:02	19	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
CCV V-279599	1	CCV	01:06	20							V-279599(CCV)
LLCCV [soil] V-280410	1	LLCCV	01:11	21		SOIL	SOIL	SW846	68500		V-280410(LLICV/LLCCV soil)
CCB V-279884	1	CCB	01:15	22							V-279884(ICB/CCB)
AD04394-009	5	SD	01:18	23	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-001	1	SMP	01:23	24	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-002	1	SMP	01:27	25	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-003	1	SMP	01:32	26	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-004	1	SMP	01:37	27	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-005	1	SMP	01:41	28	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-006	1	SMP	01:46	29	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04394-007	1	SMP	01:51	30	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
ICSA V-279601	1	ICSA	01:56	31							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	02:00	32							V-279602(ICSAB)
CCV V-279599	1	CCV	02:05	33							V-279599(CCV)
LLCCV [soil] V-280410	1	LLCCV	02:10	34		SOIL	SOIL	SW846	68500		V-280410(LLICV/LLCCV soil)
CCB V-279884	1	CCB	02:13	35							V-279884(ICB/CCB)
AD04394-008	1	SMP	02:17	36	MET-RCRA-S	SOIL	SOIL	SW846	68500		()
AD04418-008	1	SMP	02:22	37	SRSMETALS-S	SOIL	SOIL	SW846	68500		()
AD04418-012	1	SMP	02:26	38	SRSMETALS-S	SOIL	SOIL	SW846	68500		()
AD04418-013	1	SMP	02:31	39	SRSMETALS-S	SOIL	SOIL	SW846	68500		()
AD04418-017	1	SMP	02:36	40	SRSMETALS-S	SOIL	SOIL	SW846	68500		()
AD04434-001	1	SMP	02:40	41	PB-SOIL	SOIL	SOIL	SW846	68500		()
AD04434-002	1	SMP	02:45	42	PB-SOIL	SOIL	SOIL	SW846	68500		()
ICSA V-279601	1	ICSA	02:49	43							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	02:54	44							V-279602(ICSAB)
CCV V-279599	1	CCV	02:59	45							V-279599(CCV)
LLCCV [soil] V-280410	1	LLCCV	03:04	46		SOIL	SOIL	SW846	68500		V-280410(LLICV/LLCCV soil)
CCB V-279884	1	CCB	03:07	47							V-279884(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.76 5/29/2018 3:20:30 PM

RUN IS OK
All elements reported

8/29/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW22613E2.txt

Analysis Date: 06/01/18

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-279884	1	CAL	13:52	1							V-279884(ICB/CCB)
CALST1 V-279502	1	CAL	14:01	2							V-279502(ICS1 Lowest std)
CALST2 V-279604	1	CAL	14:04	3							V-279604(ICS2- Low Std)
CALST3 V-280105	1	CAL	14:08	4							V-280105(ICS3 - Middle Std)
CALST4 V-279606	1	CAL	14:13	5							V-279606(ICS4 High std)
ICS3 V-280105	1	ICS	14:18	6							V-280105(ICS3 - Middle Std)
ICV V-279599	1	ICV	14:23	7							V-279599(CCV)
LLICV [aq] V-280094	1	LLICV	14:28	8		AQUEO	AQUEO	SW846	68493		V-280094(LLICV/LLCCV aq)
ICB V-279884	1	ICB	14:31	9							V-279884(ICB/CCB)
ICSA V-279601	1	ICSA	14:35	10							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	14:40	11							V-279602(ICSAB)
CCV V-279599	1	CCV	14:46	12							V-279599(CCV)
LLCCV [aq] V-280094	1	LLCCV	14:51	13		AQUEO	AQUEO	SW846	68493		V-280094(LLICV/LLCCV aq)
CCB V-279884	1	CCB	14:54	14							V-279884(ICB/CCB)
MB 68493 (1)	1	MB	14:58	15		AQUEO	AQUEO	SW846	68493		0
LCSW 68493	1	LCS	15:01	16		AQUEO	AQUEO	SW846	68493		0
LCSW MR 68493	1	LCS	15:06	17		AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	SMP	15:11	18	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MR	15:15	19	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MS	15:18	20	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MSD	15:23	21	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	PS	15:28	22	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-001	5	SD	15:33	23	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
CCV V-279599	1	CCV	15:37	24							V-279599(CCV)
LLCCV [aq] V-280094	1	LLCCV	15:42	25		AQUEO	AQUEO	SW846	68493		V-280094(LLICV/LLCCV aq)
CCB V-279884	1	CCB	15:45	26							V-279884(ICB/CCB)
AD04394-010	1	SMP	15:49	27	MET-RCRA-S	AQUEO	AQUEO	SW846	68493		0
AD04423-025	1	SMP	15:52	28	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-005	1	SMP	15:56	29	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04391-006	1	SMP	16:00	30	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04438-010	1	SMP	16:03	31	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
ICSA V-279601	1	ICSA	16:08	32							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	16:14	33							V-279602(ICSAB)
CCV V-279599	1	CCV	16:20	34							V-279599(CCV)
LLCCV [aq] V-280094	1	LLCCV	16:25	35		AQUEO	AQUEO	SW846	68493		V-280094(LLICV/LLCCV aq)
CCB V-279884	1	CCB	16:28	36							V-279884(ICB/CCB)
AD04438-011	1	SMP	16:31	37	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04438-012	1	SMP	16:37	38	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04438-013	1	SMP	16:42	39	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04438-014	1	SMP	16:47	40	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04406-001	1	SMP	16:53	41	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04406-002	1	SMP	16:56	42	MET-TAL6010W	AQUEO	AQUEO	SW846	68493		0
AD04408-001	1	SMP	17:00	43	MET-1-SOIL	AQUEO	AQUEO	SW846	68493		0
ICSA V-279601	1	ICSA	17:04	44							V-279601(ICSA)
ICSAB V-279602	1	ICSAB	17:09	45							V-279602(ICSAB)
CCV V-279599	1	CCV	17:15	46							V-279599(CCV)
LLCCV [aq] V-280094	1	LLCCV	17:20	47		AQUEO	AQUEO	SW846	68493		V-280094(LLICV/LLCCV aq)
CCB V-279884	1	CCB	17:23	48							V-279884(ICB/CCB)

Comments/Reviewedby:

sean
192.168.1.89 6/4/2018 10:37:17 AM

OK

6/4/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H22619S.txt

Analysis Date: 05/30/18

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:51	1							0
.2 PPB	1	CAL	12:53	2							0
.5 PPB	1	CAL	12:54	3							0
1 PPB	1	CAL	12:55	4							0
2 PPB	1	CAL	12:57	5							0
5 PPB	1	CAL	12:58	6							0
10 PPB	1	CAL	12:59	7							0
25 PPB	1	CAL	13:01	8							0
ICV (2)	1	ICV	13:03	9							0
ICB	1	ICB	13:04	10							0
MB 68500 (167)	1	MB	13:06	11		SOIL	SOIL	SW846	68500		0
LCS 68500	1	NA	13:07	12		SOIL	SOIL	SW846	68500		0
LCS MR 68500	1	NA	13:09	13		SOIL	SOIL	SW846	68500		0
LCS 5D	5	LCS	13:11	14		SOIL	SOIL	SW846	68500		0
LCS MR 5D	5	LCS	13:12	15		SOIL	SOIL	SW846	68500		0
AD04394-009	1	SMP	13:14	16	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-009	1	MR	13:15	17	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-009	1	MS	13:17	18	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-009	1	MSD	13:19	19	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-001	1	SMP	13:20	20	HG-SOIL	SOIL	SOIL	SW846	68500		0
CCV	1	CCV	13:22	21							0
CCB	1	CCB	13:23	22							0
AD04394-002	1	SMP	13:25	23	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-003	1	SMP	13:26	24	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-004	1	SMP	13:27	25	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-005	1	SMP	13:29	26	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-006	1	SMP	13:30	27	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-007	1	SMP	13:31	28	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04394-008	1	SMP	13:33	29	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04418-008	1	SMP	13:34	30	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04418-012	1	SMP	13:35	31	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04418-013	1	SMP	13:37	32	HG-SOIL	SOIL	SOIL	SW846	68500		0
CCV	1	CCV	13:38	33							0
CCB	1	CCB	13:40	34							0
AD04418-017	1	SMP	13:41	35	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04289-001	1	SMP	13:42	36	HG-SOIL	SOIL	SOIL	SW846	68500		0
AD04289-002	1	SMP	13:44	37	HG-SOIL	SOIL	SOIL	SW846	68500		0
CCV	1	CCV	13:45	38							0
CCB	1	CCB	13:47	39							0

Comments/Reviewedby:

olufemi
192.168.1.37 5/30/2018 2:32:16 PM

RUN IS OK

5/30/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-280712

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H22613SW.txt

Analysis Date: 06/01/18

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	12:02	1							0
.2 PPB	1	CAL	12:03	2							0
.5 PPB	1	CAL	12:05	3							0
1 PPB	1	CAL	12:06	4							0
2 PPB	1	CAL	12:07	5							0
5 PPB	1	CAL	12:09	6							0
10 PPB	1	CAL	12:10	7							0
25 PPB	1	CAL	12:12	8							0
ICV (2)	1	ICV	12:14	9							0
ICB	1	ICB	12:15	10							0
MB 68493 (1)	1	MB	12:17	11	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
LCS 68493	1	LCS	12:18	12	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
LCS MR 68493	1	LCS	12:20	13	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	SMP	12:21	14	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MR	12:23	15	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MS	12:24	16	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-001	1	MSD	12:26	17	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-005	1	SMP	12:28	18	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04391-006	1	SMP	12:29	19	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
CCV	1	CCV	12:30	20							0
CCB	1	CCB	12:32	21							0
AD04394-010	1	SMP	12:33	22	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04423-025	1	SMP	12:35	23	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04438-010	1	SMP	12:36	24	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04438-011	1	SMP	12:37	25	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04438-012	1	SMP	12:39	26	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04438-013	1	SMP	12:40	27	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04438-014	1	SMP	12:41	28	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04406-001	1	SMP	12:43	29	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
AD04406-002	1	SMP	12:44	30	HG-W-7470	AQUEO	AQUEO	SW846	68493		0
CCV	1	CCV	12:45	31							0
CCB	1	CCB	12:47	32							0

Comments/Reviewedby:

carmela
192 168 1 70 6/1/2018 1:05:42 PM

OK

6/1/18

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-280845

ICPMS Internal Standard Summary Report

8052424 0333

TuneID: 1

Batch/FileID: S052918B Sample ID: CalBlk V-280488 Sample Date 05/29/18 Sample Time: 13:26

IS ID:	Area	Area Limit		
Ho-1	1784011	1248807.7	-	2677800.511
In-1	863320.3	604324.21	-	1295843.7703
Sc-1	205918.1	144142.67	-	309083.0681
Tb-1	1780102	1246071.4	-	2671933.102

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area		Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	1784011	863320.3	205918.1		1780102				
SMP	Rinse	1	1642988	758102.1	184623.5		1656606				
CAL	CalStd1 V-28048	3	1819369	875082.4	210139.1		1823443				
CAL	CalStd2 V-28049	4	1817939	874980.9	214902.3		1835124				
CAL	CalStd3 V-28049	5	1821914	876084.2	214099.9		1821662				
CAL	CalStd4 V-28049	6	1794037	872525.9	221181.1		1809097				
CAL	CalStd5 V-28049	7	1776929	847145.8	220530.7		1805401				
ICV	ICV V-280494	8	1795722	864067.7	214825.5		1801452				
LLICV	LLICV V-280499	9	1790871	877230.9	217787.7		1811472				
ICB	ICB V-280495	10	1783653	869557.2	209932.5		1799844				
ICSA	ICSA V-280496	11	1725581	793649.8	230475.5		1743879				
ICSAB	ICSAB V-280497	12	1744549	803582.1	217610.1		1762554				
SMP	RINSE	13	1940495	935147.6	225971.9		1946826				
CCV	CCV V-280498	14	1920728	907291.3	230442.4		1935849				
LLCCV	LLCCV V-280499	15	1937183	921068.5	230937.7		1946728				
CCB	CCB V-280495	16	1896553	914483.4	221897.2		1910737				
MB	MB 68501	17	1846929	895841.4	225356.6		1852613				
LCS	LCS 68501	18	1841220	874667.2	240131.4		1849185				
MR	LCS MR 68501	19	1846382	882064.8	233879.6		1850053				
SMP	AD04394-009	20	1899661	859100.2	323246.7	*	1934119				
MR	AD04394-009	21	1906693	866785.9	294654.5		1930232				
SD	AD04394-009	22	1924971	929834.4	250755.8		1942423				
MS	AD04394-009	23	1861921	839837.9	307173.5		1886660				
MSD	AD04394-009	24	1871604	841897.7	314421.3	*	1876828				
PS	AD04394-009	25	1897694	864296.6	319863.2	*	1919222				
SMP	RINSE	26	1920844	944433.4	226437.2		1936315				
CCV	CCV V-280498	27	1922327	922684.8	234804.7		1936465				
LLCCV	LLCCV V-280499	28	1902382	931447.4	229991.9		1935296				
CCB	CCB V-280495	29	1875787	933699.7	226431.7		1907758				
SMP	AD04394-001	30	1833612	811945.1	355987.1	*	1847904				
SMP	AD04394-002	31	1961245	858777.1	380804.4	*	1965757				
SMP	AD04394-003	32	1871181	843995.8	315738.5	*	1858488				
SMP	AD04394-004	33	1963132	842025.2	357435.5	*	1995557				
SMP	AD04394-005	34	1902626	818970.6	403113.5	*	1901667				
SMP	AD04394-006	35	1891743	841968.2	338186.8	*	1897930				
SMP	AD04394-007	36	1849506	813118.8	345290.0	*	1865286				
SMP	AD04394-008	37	1935389	880151.7	325488.2	*	1954834				
SMP	AD04418-008	38	1972329	911029.7	253917.7		1979299				
SMP	RINSE	39	1983623	957158.7	231309.4		1995279				
CCV	CCV V-280498	40	1978853	961124.3	239174.6		1976896				
LLCCV	LLCCV V-280499	41	1985070	963632.6	235351.6		1997127				
CCB	CCB V-280495	42	1984021	957140.1	231429.9		1984778				
SMP	AD04418-012	43	1991815	863291.9	548513.3	*	1986572				
SMP	AD04418-013	44	1912669	891895.9	319353.3	*	1914123				
SMP	AD04418-017	45	1921047	892267.4	246847.4		1935312				
SMP	AD04434-001	46	1940969	909604.9	251871.8		1949721				
SMP	AD04434-002	47	1920311	894109.4	268370.3		1940662				
SMP	AD04327-002	48	1981155	940423.9	315429.2	*	1983545				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	RINSE	49	2002674	987292.3	234993.5	2007864
CCV	CCV V-280498	50	1979369	964859.9	238891.7	2006294
LLCCV	LLCCV V-280499	51	1979453	970142.6	236469.4	1983809
CCB	CCB V-280495	52	1958147	962466.5	227600.1	1978570

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

8052424 0335

TuneID: 2

Batch/FileID: S052918B Sample ID: CalBlk V-280488 Sample Date 05/29/18 Sample Time: 13:26

IS ID:	Area	Area Limit
Ho-2	4009027	2806318.9 - 6017549.527
In-2	3173031	2221121.7 - 4762719.531
Sc-2	2354065	1647845.5 - 3533451.565
Tb-2	4091229	2863860.3 - 6140934.729

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	4009027	3173031	2354065	4091229				
SMP	Rinse	1	3972123	3106774	2341340	3998546				
CAL	CalStd1 V-28048	3	4068650	3181289	2383976	4134130				
CAL	CalStd2 V-28049	4	4083649	3186279	2394015	4175685				
CAL	CalStd3 V-28049	5	4023288	3093798	2378447	4118479				
CAL	CalStd4 V-28049	6	4030210	3092326	2433156	4118610				
CAL	CalStd5 V-28049	7	3949493	2979385	2343618	4011293				
ICV	ICV V-280494	8	3955928	3036915	2319173	4029102				
LLICV	LLICV V-280499	9	4030095	3133767	2345489	4108355				
ICB	ICB V-280495	10	3944073	3060983	2280681	4021122				
ICSA	ICSA V-280496	11	3774050	2851815	2371374	3835713				
ICSAB	ICSAB V-280497	12	3819649	2839370	2330083	3871317				
SMP	RINSE	13	4350343	3377808	2508137	4419198				
CCV	CCV V-280498	14	4214362	3277793	2540167	4323301				
LLCCV	LLCCV V-280499	15	4280646	3332133	2526592	4389651				
CCB	CCB V-280495	16	4207783	3271441	2422136	4299754				
MB	MB 68501	17	4155023	3159808	2425220	4224604				
LCS	LCS 68501	18	4056677	3092278	2483077	4134696				
MR	LCS MR 68501	19	4089329	3155519	2487159	4157596				
SMP	AD04394-009	20	4220461	3036190	3371524	4298331				
MR	AD04394-009	21	4200892	3079298	3142522	4328276				
SD	AD04394-009	22	4274426	3252845	2674758	4364587				
MS	AD04394-009	23	4098087	2977169	3240713	4170556				
MSD	AD04394-009	24	4118805	2944970	3308475	4171099				
PS	AD04394-009	25	4225556	3039841	3377201	4349116				
SMP	RINSE	26	4345055	3337573	2471858	4445355				
CCV	CCV V-280498	27	4227370	3276559	2545524	4342025				
LLCCV	LLCCV V-280499	28	4319571	3293953	2494959	4379241				
CCB	CCB V-280495	29	4208897	3276850	2455217	4357684				
SMP	AD04394-001	30	4243260	3055748	3739405	* 4327679				
SMP	AD04394-002	31	4257714	3043160	3956291	* 4364362				
SMP	AD04394-003	32	4115052	2938078	3305493	4179319				
SMP	AD04394-004	33	4292750	2971543	3722951	* 4363361				
SMP	AD04394-005	34	4147326	2936705	4185949	* 4214090				
SMP	AD04394-006	35	4210731	2987264	3535204	* 4245171				
SMP	AD04394-007	36	4063574	2916732	3684940	* 4170009				
SMP	AD04394-008	37	4306788	3151363	3431213	4380639				
SMP	AD04418-008	38	4310688	3251157	2692621	4348906				
SMP	RINSE	39	4413029	3383741	2557079	4526083				
CCV	CCV V-280498	40	4427891	3428868	2568081	4485350				
LLCCV	LLCCV V-280499	41	4496550	3495885	2599819	4543999				
CCB	CCB V-280495	42	4389025	3430239	2545933	4503791				
SMP	AD04418-012	43	4376751	3136672	5717656	* 4425010				
SMP	AD04418-013	44	4256378	3195833	3405906	4337748				
SMP	AD04418-017	45	4260873	3164228	2652111	4335187				
SMP	AD04434-001	46	4285049	3201389	2689099	4359224				
SMP	AD04434-002	47	4243903	3209878	2835749	4287525				
SMP	AD04327-002	48	4439931	3359900	3378560	4509197				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	RINSE	49	4525113	3466164	2541467	4597496
CCV	CCV V-280498	50	4362879	3394077	2574792	4482334
LLCCV	LLCCV V-280499	51	4520714	3462634	2568536	4555045
CCB	CCB V-280495	52	4436815	3428394	2514030	4506430

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: A053018A Sample ID: CalBlk V-280488 Sample Date 05/30/18 Sample Time: 16:30

IS ID:	Area	Area Limit		
Ho-1	1575280	1102696	-	2364495.28
In-1	750707.9	525495.53	-	1126812.5579
Sc-1	182606.8	127824.76	-	274092.8068
Tb-1	1579569	1105698.3	-	2370933.069

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	1575280	750707.9	182606.8	1579569				
SMP	Rinse	1	1485486	689299.8	174318.7	1472486				
CAL	CalStd1 V-28048	3	1625836	764854.6	188982.0	1619258				
CAL	CalStd2 V-28049	4	1611143	774283.0	191054.1	1629852				
CAL	CalStd3 V-28049	5	1582724	757327.5	188687.7	1605256				
CAL	CalStd4 V-28049	6	1606525	770989.8	200313.3	1606033				
CAL	CalStd5 V-28049	7	1563947	748574.6	196306.6	1576356				
ICV	ICV V-280494	8	1591666	751428.6	186477.4	1597699				
LLICV	LLICV V-280500	9	1600882	774755.3	192265.8	1618530				
ICB	ICB V-280495	10	1592417	770427.2	186385.1	1599747				
ICSA	ICSA V-280496	11	1450916	655685.6	190866.4	1462391				
ICSAB	ICSAB V-280497	12	1484037	673389.2	185396.8	1484776				
SMP	RINSE	13	1672647	803178.5	192956.4	1680845				
CCV	CCV V-280498	14	1671167	786654.8	203576.1	1664676				
LLCCV	LLCCV V-280500	15	1629244	787953.2	194700.4	1655493				
CCB	CCB V-280495	16	1623450	779381.9	188966.6	1628086				
MB	MB 68493	17	1537222	730854.0	183658.4	1571473				
LCS	LCSW 68493	18	1471360	678908.8	181914.1	1488693				
MR	LCSW MR 68493	19	1516914	697545.7	181794.8	1517947				
SMP	AD04391-001	20	1569414	738665.7	187596.3	1586750				
MR	AD04391-001	21	1564423	721532.8	181374.6	1572573				
SD	AD04391-001	22	1626932	775264.0	187434.8	1641115				
MS	AD04391-001	23	1509569	674648.5	185336.3	1515680				
MSD	AD04391-001	24	1504865	690861.0	182010.1	1512956				
PS	AD04391-001	25	1559315	709465.0	186030.6	1556983				
SMP	RINSE	26	1647607	784571.7	185616.0	1654328				
CCV	CCV V-280498	27	1618064	769528.8	197109.6	1638515				
LLCCV	LLCCV V-280500	28	1622573	777463.6	191820.1	1622753				
CCB	CCB V-280495	29	1623293	782875.1	190042.0	1632010				
SMP	AD04391-005	30	1488332	677398.9	181594.6	1493289				
SMP	AD04391-006	31	1516031	685426.6	185929.6	1519268				
SMP	AD04394-010	32	1544855	719552.8	182559.7	1559582				
SMP	AD04373-001	33	1560628	724140.5	182907.4	1561430				
SMP	AD04373-002	34	1547954	714878.9	182988.9	1554092				
SMP	AD04373-003	35	1513209	693729.5	181644.4	1514480				
SMP	AD04373-004	36	1577217	732401.4	179201.3	1585043				
SMP	AD04373-005	37	1499950	697293.4	180358.1	1518267				
SMP	AD04423-025	38	1512780	715481.3	181251.7	1540144				
SMP	RINSE	39	1599246	771410.3	186242.8	1623612				
CCV	CCV V-280498	40	1566603	749052.3	187601.4	1578227				
LLCCV	LLCCV V-280500	41	1561760	749697.9	182731.5	1579669				
CCB	CCB V-280495	42	1545232	744502.3	181154.5	1566168				
SMP	AD04438-010	43	1512260	687404.0	188090.8	1523884				
SMP	AD04438-011	44	1532921	677700.9	216198.0	1540413				
SMP	AD04438-012	45	1631396	674021.1	330008.1 *	1653334				
SMP	AD04438-013	46	1557612	660025.8	274581.1 *	1586282				
SMP	AD04438-014	47	1526664	675733.6	220657.1	1550937				
SMP	AD04406-001	48	1510896	684937.1	169293.6	1509930				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	AD04406-002	49	1470443	666420.7	170559.0	1481075
SMP	AD04408-001	50	1509172	706638.4	180817.2	1535755
SMP	RINSE	51	1611426	781315.0	182986.4	1623419
CCV	CCV V-280498	52	1555127	743526.9	188261.2	1584538
LLCCV	LLCCV V-280500	53	1555293	753638.9	185084.8	1574304
CCB	CCB V-280495	54	1549260	748327.5	181305.1	1572500

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: A053018A Sample ID: CalBlk V-280488 Sample Date 05/30/18 Sample Time: 16:30

IS ID:	Area	Area Limit		
Ho-2	3586879	2510815.3	-	5383905.379
In-2	2839997	1987997.9	-	4262835.497
Sc-2	2129384	1490568.8	-	3196205.384
Tb-2	3660245	2562171.5	-	5494027.745

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	3586879	2839997	2129384	3660245				
SMP	Rinse	1	3521568	2804100	2092120	3616676				
CAL	CalStd1 V-28048	3	3572428	2845296	2139781	3660695				
CAL	CalStd2 V-28049	4	3588474	2896626	2144112	3702753				
CAL	CalStd3 V-28049	5	3599368	2843085	2152330	3709342				
CAL	CalStd4 V-28049	6	3599062	2793964	2160197	3699980				
CAL	CalStd5 V-28049	7	3517530	2752821	2152203	3592425				
ICV	ICV V-280494	8	3541906	2779131	2105479	3646781				
LLICV	LLICV V-280500	9	3592077	2847153	2070506	3674637				
ICB	ICB V-280495	10	3558322	2796305	2091680	3659304				
ICSA	ICSA V-280496	11	3241494	2469039	2013393	3307063				
ICSAB	ICSAB V-280497	12	3262726	2505171	1987861	3355572				
SMP	RINSE	13	3763328	2973453	2177819	3869119				
CCV	CCV V-280498	14	3689333	2866385	2201530	3752463				
LLCCV	LLCCV V-280500	15	3692408	2901814	2144340	3761640				
CCB	CCB V-280495	16	3606482	2887751	2137018	3692280				
MB	MB 68493	17	3413285	2668493	1974219	3551615				
LCS	LCSW 68493	18	3300261	2475504	1952983	3355278				
MR	LCSW MR 68493	19	3426212	2540472	2022893	3475379				
SMP	AD04391-001	20	3455721	2650290	2001030	3521427				
MR	AD04391-001	21	3460028	2616171	1984237	3515926				
SD	AD04391-001	22	3596930	2792672	2050328	3683776				
MS	AD04391-001	23	3305768	2479458	1989303	3376032				
MSD	AD04391-001	24	3349201	2540162	1963182	3411025				
PS	AD04391-001	25	3408912	2574539	1990938	3482899				
SMP	RINSE	26	3706992	2919904	2110232	3770232				
CCV	CCV V-280498	27	3601708	2796484	2158685	3692460				
LLCCV	LLCCV V-280500	28	3652296	2878147	2120602	3757714				
CCB	CCB V-280495	29	3601001	2847119	2105334	3718579				
SMP	AD04391-005	30	3317203	2500471	1972838	3392864				
SMP	AD04391-006	31	3346782	2516552	1991979	3414761				
SMP	AD04394-010	32	3433334	2636226	1945200	3485914				
SMP	AD04373-001	33	3451893	2679146	2026911	3495775				
SMP	AD04373-002	34	3408450	2616837	1983827	3459966				
SMP	AD04373-003	35	3358710	2538883	1971161	3416560				
SMP	AD04373-004	36	3494028	2691060	1973789	3543565				
SMP	AD04373-005	37	3341937	2520087	1949244	3391734				
SMP	AD04423-025	38	3404878	2601998	1974095	3502082				
SMP	RINSE	39	3575922	2801350	2045697	3639323				
CCV	CCV V-280498	40	3427775	2703461	2042747	3483515				
LLCCV	LLCCV V-280500	41	3473974	2681407	2002287	3557665				
CCB	CCB V-280495	42	3454422	2715676	2002951	3524688				
SMP	AD04438-010	43	3381944	2481727	2042348	3414880				
SMP	AD04438-011	44	3387023	2486695	2431767	3428887				
SMP	AD04438-012	45	3652457	2483912	3715168	* 3779204				
SMP	AD04438-013	46	3437538	2459403	3131634	3501726				
SMP	AD04438-014	47	3347944	2512882	2524232	3424275				
SMP	AD04406-001	48	3350179	2516505	1878590	3374606				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	AD04406-002	49	3257022	2444779	1866201	3312396
SMP	AD04408-001	50	3362665	2574608	1983214	3387660
SMP	RINSE	51	3624933	2789016	2038652	3685552
CCV	CCV V-280498	52	3476219	2696459	2034476	3549683
LLCCV	LLCCV V-280500	53	3541918	2763764	2023341	3638647
CCB	CCB V-280495	54	3472565	2731291	1984801	3546910

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: A053118A Sample ID: CalBlk V-280488 Sample Date 05/31/18 Sample Time: 11:07

IS ID:	Area	Area Limit		
Ho-1	1352343	946640.1	-	2029866.843
In-1	630252.5	441176.75	-	946009.0025
Sc-1	148599.5	104019.65	-	223047.8495
Tb-1	1365460	955822	-	2049555.46

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	1352343	630252.5	148599.5	1365460				
SMP	Rinse	1	1256793	572564.8	137517.3	1257664				
CAL	CalStd1 V-28048	3	1358011	629710.8	147201.8	1367048				
CAL	CalStd2 V-28049	4	1425395	671918.8	158372.9	1434015				
CAL	CalStd3 V-28049	5	1428064	666373.2	157024.5	1441622				
CAL	CalStd4 V-28049	6	1430904	668448.8	161159.0	1434555				
CAL	CalStd5 V-28049	7	1433023	663449.2	162860.7	1436493				
ICV	ICV V-280494	8	1427022	657808.9	155753.4	1435607				
LLICV	LLICV V-280500	9	1442530	669104.2	153566.8	1455635				
ICB	ICB V-280495	10	1446005	681200.3	158740.5	1451976				
ICSA	ICSA V-280496	11	1369832	604476.5	172315.2	1374582				
ICSAB	ICSAB V-280497	12	1380957	601890.4	156954.8	1388033				
SMP	RINSE	13	1514868	698442.6	160055.4	1516039				
CCV	CCV V-280498	14	1505803	681975.9	163044.8	1504203				
LLCCV	LLCCV V-280500	15	1491529	684650.9	160729.6	1503728				
CCB	CCB V-280495	16	1462847	674635.6	155579.1	1474934				
MB	MB 68493	17	1422014	648121.3	153484.1	1437902				
LCS	LCSW 68493	18	1365853	594420.2	148192.9	1362461				
MR	LCSW MR 68493	19	1363051	589308.1	143312.2	1361823				
SMP	AD04391-001	20	1397453	622210.4	147492.0	1390963				
MR	AD04391-001	21	1408598	626675.4	148189.3	1413933				
SD	AD04391-001	22	1483458	672913.6	153433.2	1495633				
MS	AD04391-001	23	1366911	601792.2	153687.5	1377457				
MSD	AD04391-001	24	1379635	603159.8	151927.9	1380169				
PS	AD04391-001	25	1397822	620960.5	153117.0	1398303				
SMP	RINSE	26	1487149	688040.7	153099.7	1489641				
CCV	CCV V-280498	27	1468689	679851.5	162425.5	1478512				
LLCCV	LLCCV V-280500	28	1475569	686573.4	158998.9	1488958				
CCB	CCB V-280495	29	1488550	704326.8	165262.4	1496248				
SMP	AD04391-005	30	1409962	624271.6	162205.0	1407352				
SMP	AD04391-006	31	1393473	617238.8	159748.5	1388894				
SMP	AD04394-010	32	1397022	651189.1	158302.6	1418719				
SMP	AD04373-001	33	1403521	649100.9	158984.2	1423408				
SMP	AD04373-002	34	1410285	653324.1	161127.2	1420020				
SMP	AD04373-003	35	1386511	622477.8	158048.9	1388092				
SMP	AD04373-004	36	1402285	647080.9	150599.9	1424744				
SMP	AD04373-005	37	1377205	624866.7	155747.3	1388166				
SMP	AD04423-025	38	1392332	638944.9	152245.4	1404381				
SMP	RINSE	39	1467541	686552.0	154461.5	1484943				
CCV	CCV V-280498	40	1424515	665945.0	162975.3	1438162				
LLCCV	LLCCV V-280500	41	1417042	671703.2	156907.3	1440868				
CCB	CCB V-280495	42	1435646	673695.4	156813.8	1449389				
SMP	AD04438-010	43	1421960	637155.6	166635.4	1433741				
SMP	AD04438-011	44	1435116	630815.2	190436.8	1441095				
SMP	AD04438-012	45	1541979	629485.9	284866.3 *	1550156				
SMP	AD04438-013	46	1445010	605847.6	236981.9 *	1463155				
SMP	AD04438-014	47	1424048	617360.9	189221.9	1431789				
SMP	AD04406-001	48	1393052	622304.4	146536.0	1409627				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	AD04406-002	49	1372273	600620.2	146416.6	1389986
SMP	AD04438-012	50	1520567	663864.1	205711.9	1537441
SMP	AD04438-013	51	1496051	649452.0	203672.3	1495239
SMP	RINSE	52	1472790	684160.4	153303.6	1475617
CCV	CCV V-280498	53	1438548	670767.3	159367.2	1453658
LLCCV	LLCCV V-280500	54	1442228	677679.6	156470.8	1469928
CCB	CCB V-280495	55	1444514	686643.3	157022.0	1455870
SMP	RINSE	56	1476129	702520.1	160801.9	1493377
CCV	CCV V-280498	57	1445790	682267.9	166696.2	1465621
LLCCV	LLCCV V-280500	58	1446030	688544.7	159342.5	1464126
CCB	CCB V-280495	59	1442964	686599.1	157860.1	1465264

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

8052424 0343

TuneID: 2

Batch/FileID: A053118A Sample ID: CalBlk V-280488 Sample Date 05/31/18 Sample Time: 11:07

IS ID:	Area	Area Limit		
Ho-2	3132203	2192542.1	-	4701436.703
In-2	2496072	1747250.4	-	3746604.072
Sc-2	1802622	1261835.4	-	2705735.622
Tb-2	3178587	2225010.9	-	4771059.087

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-280488	2	3132203	2496072	1802622	3178587				
SMP	Rinse	1	3154133	2558171	1818870	3221754				
CAL	CalStd1 V-28048	3	3159263	2476981	1798501	3237068				
CAL	CalStd2 V-28049	4	3307030	2591091	1911600	3380289				
CAL	CalStd3 V-28049	5	3249658	2560395	1885319	3365985				
CAL	CalStd4 V-28049	6	3301600	2579688	1944614	3357181				
CAL	CalStd5 V-28049	7	3280952	2497857	1900473	3327920				
ICV	ICV V-280494	8	3291328	2572684	1837810	3374139				
LLICV	LLICV V-280500	9	3351716	2630764	1861799	3426045				
ICB	ICB V-280495	10	3299791	2597857	1864995	3395031				
ICSA	ICSA V-280496	11	3113766	2323477	1892425	3193669				
ICSAB	ICSAB V-280497	12	3126110	2359228	1873406	3199990				
SMP	RINSE	13	3474503	2663759	1925788	3514093				
CCV	CCV V-280498	14	3405170	2621759	1956459	3469465				
LLCCV	LLCCV V-280500	15	3395590	2660982	1903219	3481599				
CCB	CCB V-280495	16	3385510	2651215	1924281	3506197				
MB	MB 68493	17	3231421	2445736	1795412	3305492				
LCS	LCSW 68493	18	3136294	2280917	1738276	3174844				
MR	LCSW MR 68493	19	3145300	2319342	1734663	3221945				
SMP	AD04391-001	20	3194387	2376995	1763984	3231526				
MR	AD04391-001	21	3245758	2374617	1784176	3289800				
SD	AD04391-001	22	3354111	2577874	1849377	3431025				
MS	AD04391-001	23	3136251	2299709	1786617	3177923				
MSD	AD04391-001	24	3202344	2296809	1776385	3236143				
PS	AD04391-001	25	3169445	2362552	1792196	3240218				
SMP	RINSE	26	3382949	2584228	1830272	3465997				
CCV	CCV V-280498	27	3353064	2558827	1911234	3425282				
LLCCV	LLCCV V-280500	28	3338795	2598518	1872270	3422899				
CCB	CCB V-280495	29	3345362	2611356	1881481	3404709				
SMP	AD04391-005	30	3122902	2340718	1816986	3178695				
SMP	AD04391-006	31	3133426	2344822	1839392	3189751				
SMP	AD04394-010	32	3121209	2441117	1759781	3231195				
SMP	AD04373-001	33	3170023	2453487	1819036	3251719				
SMP	AD04373-002	34	3157997	2408226	1816108	3235422				
SMP	AD04373-003	35	3067092	2328228	1787776	3151798				
SMP	AD04373-004	36	3207517	2460302	1769689	3279310				
SMP	AD04373-005	37	3090728	2347796	1766486	3183035				
SMP	AD04423-025	38	3142927	2380294	1769975	3228262				
SMP	RINSE	39	3333417	2565592	1809986	3377350				
CCV	CCV V-280498	40	3251108	2500268	1894139	3328695				
LLCCV	LLCCV V-280500	41	3274900	2547873	1828241	3316814				
CCB	CCB V-280495	42	3276739	2572157	1872669	3371912				
SMP	AD04438-010	43	3245087	2425953	1950607	3286317				
SMP	AD04438-011	44	3263335	2379394	2287767	3313077				
SMP	AD04438-012	45	3429206	2379327	3330101	* 3536842				
SMP	AD04438-013	46	3276167	2326584	2835828	* 3344568				
SMP	AD04438-014	47	3173521	2330422	2280920	3296451				
SMP	AD04406-001	48	3161529	2362137	1702988	3202332				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	AD04406-002	49	3065017	2285080	1702335	3121882
SMP	AD04438-012	50	3452667	2521094	2446151	3546196
SMP	AD04438-013	51	3303763	2426510	2405396	3409317
SMP	RINSE	52	3341291	2593972	1834644	3394206
CCV	CCV V-280498	53	3275134	2536915	1849116	3377329
LLCCV	LLCCV V-280500	54	3320746	2599395	1833113	3402517
CCB	CCB V-280495	55	3329397	2574916	1851996	3402417
SMP	RINSE	56	3354294	2634815	1899233	3434530
CCV	CCV V-280498	57	3265437	2539916	1879421	3355571
LLCCV	LLCCV V-280500	58	3282486	2574494	1849662	3369900
CCB	CCB V-280495	59	3285752	2585950	1819823	3403919

* Indicates Internal Standard Area outside of limits

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 8052424**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD04394-001	SB2_7.0_052318	Soil/Terracore	1	86	Percent			05/25/18	05/24/18	05/23/18
AD04394-002	SB1_9.0_052318	Soil/Terracore	1	84	Percent			05/25/18	05/24/18	05/23/18
AD04394-003	SB7_14.5_052318	Soil/Terracore	1	83	Percent			05/25/18	05/24/18	05/23/18
AD04394-004	SB6_14.5_052318	Soil/Terracore	1	86	Percent			05/25/18	05/24/18	05/23/18
AD04394-005	SB5_14.5_052318	Soil/Terracore	1	82	Percent			05/25/18	05/24/18	05/23/18
AD04394-006	DUP01_052318	Soil/Terracore	1	83	Percent			05/25/18	05/24/18	05/23/18
AD04394-007	SB4_14.5_052318	Soil/Terracore	1	85	Percent			05/25/18	05/24/18	05/23/18
AD04394-008	SB3_7.0_052318	Soil/Terracore	1	83	Percent			05/25/18	05/24/18	05/23/18
AD04394-009	SB8_8.0_052318	Soil/Terracore	1	89	Percent			05/25/18	05/24/18	05/23/18

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-7954

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD04388-001	89	88.88889	Percent	1.35	13.41	12.07	05/25/18	jessica	0.098	5
Sample	AD04380-002	93	92.91480	Percent	1.34	12.49	11.70	05/25/18	jessica		
Sample	AD04380-003	85	85.00000	Percent	1.34	12.94	11.20	05/25/18	jessica		
Sample	AD04380-004	91	90.51447	Percent	1.36	13.80	12.62	05/25/18	jessica		
Sample	AD04380-005	84	83.80952	Percent	1.35	15.00	12.79	05/25/18	jessica		
Sample	AD04380-006	84	84.44778	Percent	1.36	14.67	12.60	05/25/18	jessica		
Sample	AD04380-007	80	79.67146	Percent	1.35	11.09	9.11	05/25/18	jessica		
Sample	AD04380-008	78	78.11951	Percent	1.35	12.73	10.24	05/25/18	jessica		
Sample	AD04384-001	93	92.99171	Percent	1.34	14.61	13.68	05/25/18	jessica		
Sample	AD04384-002	94	93.96186	Percent	1.35	10.79	10.23	05/25/18	jessica		
Sample	AD04384-003	93	92.62106	Percent	1.35	14.36	13.40	05/25/18	jessica		
Sample	AD04386-001	90	90.49347	Percent	1.35	15.13	13.82	05/25/18	jessica		
Sample	AD04386-003	85	84.77612	Percent	1.35	14.75	12.71	05/25/18	jessica		
Sample	AD04386-004	91	90.93117	Percent	1.35	13.70	12.59	05/25/18	jessica		
Sample	AD04386-005	90	90.05925	Percent	1.35	16.54	15.01	05/25/18	jessica		
Sample	AD04386-006	90	89.94039	Percent	1.35	14.77	13.42	05/25/18	jessica		
Sample	AD04388-001	89	88.80188	Percent	1.36	14.13	12.70	05/25/18	jessica		
Sample	AD04388-002	87	86.74330	Percent	1.35	14.40	12.67	05/25/18	jessica		
Sample	AD04388-003	69	69.46565	Percent	1.35	14.45	10.44	05/25/18	jessica		
Sample	AD04394-008	83	83.29787	Percent	1.34	10.74	9.17	05/25/18	jessica		
Sample	AD04394-009	89	88.73096	Percent	1.36	11.21	10.11	05/25/18	jessica		

* - Indicates Failed Rpd Criteria

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-7955

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD04393-001	86	85.63273	Percent	1.36	11.87	10.36	05/25/18	jessica	0.69	5
Sample	AD04386-007	91	90.73011	Percent	1.34	13.53	12.40	05/25/18	jessica		
Sample	AD04386-008	88	88.44589	Percent	1.35	13.64	12.23	05/25/18	jessica		
Sample	AD04386-009	93	92.58312	Percent	1.36	13.09	12.21	05/25/18	jessica		
Sample	AD04386-010	83	82.96659	Percent	1.36	13.63	11.54	05/25/18	jessica		
Sample	AD04386-011	89	89.41685	Percent	1.34	15.23	13.76	05/25/18	jessica		
Sample	AD04386-012	78	78.08321	Percent	1.36	14.82	11.87	05/25/18	jessica		
Sample	AD04387-001	91	91.05485	Percent	1.36	13.21	12.15	05/25/18	jessica		
Sample	AD04389-001	75	75.12148	Percent	1.34	11.63	9.08	05/25/18	jessica		
Sample	AD04393-001	86	86.22190	Percent	1.36	15.15	13.25	05/25/18	jessica		
Sample	AD04393-002	87	86.54573	Percent	1.36	14.59	12.81	05/25/18	jessica		
Sample	AD04393-003	84	83.66606	Percent	1.34	12.36	10.56	05/25/18	jessica		
Sample	AD04393-004	87	87.48232	Percent	1.35	15.49	13.72	05/25/18	jessica		
Sample	AD04393-005	84	84.10078	Percent	1.35	12.86	11.04	05/25/18	jessica		
Sample	AD04394-001	86	85.56612	Percent	1.36	12.93	11.26	05/25/18	jessica		
Sample	AD04394-002	84	84.30745	Percent	1.36	13.85	11.89	05/25/18	jessica		
Sample	AD04394-003	83	82.66200	Percent	1.35	12.77	10.79	05/25/18	jessica		
Sample	AD04394-004	86	85.61525	Percent	1.36	12.90	11.24	05/25/18	jessica		
Sample	AD04394-005	82	82.40081	Percent	1.35	11.18	9.45	05/25/18	jessica		
Sample	AD04394-006	83	83.15451	Percent	1.37	10.69	9.11	05/25/18	jessica		
Sample	AD04394-007	85	84.59384	Percent	1.35	12.06	10.41	05/25/18	jessica		

* - Indicates Failed Rpd Criteria

Subcontracted Data

This is the last page of the data generated by Hampton-Clarke.
The following pages were submitted to HC by subcontracted laboratories.

ANALYTICAL REPORT

Job Number: 460-157553-1

Job Description: 8052424

For:
Hampton-Clarke Veritech
175 Rt 46 West
Fairfield, NJ 07004

Attention: Sub Data Results

Approved for release.
Elizabeth J Flannery
Project Manager I
6/7/2018 2:17 PM

Designee for
Marie A Meidhof, Senior Project Manager
777 New Durham Road, Edison, NJ, 08817
marie.meidhof@testamericainc.com
06/07/2018

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LAO00132

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CASE NARRATIVE

Client: Hampton-Clarke Veritech

Project: 8052424

Report Number: 460-157553-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes or interferences which exceed the calibration range of the instrument.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The sample was received on 6/5/2018 6:55 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3º C.

Receipt Exceptions
Vial tare weights and %solids measurement provided by the client for the following sample: AD04394-009 (460-157553-1).

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample AD04394-009 (460-157553-1) was analyzed for Volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260C DKQP. The samples were prepared and analyzed on 06/05/2018.

The continuing calibration verification (CCV) analyzed in batch 460-525350 was outside the method criteria for the following analyte: Acrolein. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 460-525350 recovered outside control limits for the following analyte: Acrolein.

Acetone and Methylene Chloride were detected in method blank MB 460-525350/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Refer to the QC report for details.

No other difficulties were encountered during the volatiles analysis.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS/PERCENT MOISTURE
Percent solids information provided by HCV; their laboratory certification is different from that of the facility issuing the final report.

Sample Summary

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-157553-1	AD04394-009	Solid	05/23/18 12:23	06/05/18 18:55

Detection Summary

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Client Sample ID: AD04394-009 — Lab Sample ID: 460-157553-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.00028	J B	0.00099	0.00016	mg/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
Moisture	Percent Moisture	EPA	TAL EDI
5035	Closed System Purge and Trap	SW846	TAL EDI

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Client Sample Results

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Client Sample ID: AD04394-009

Date Collected: 05/23/18 12:23
Date Received: 06/05/18 18:55

Lab Sample ID: 460-157553-1

Matrix: Solid
Percent Solids: 88.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.00023	U	0.00099	0.00023	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,1,2,2-Tetrachloroethane	0.00021	U	0.00099	0.00021	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.00030	U	0.00099	0.00030	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,1,2-Trichloroethane	0.00018	U	0.00099	0.00018	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,1-Dichloroethane	0.00020	U	0.00099	0.00020	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,1-Dichloroethene	0.00022	U	0.00099	0.00022	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2,3-Trichlorobenzene	0.00018	U	0.00099	0.00018	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2,4-Trichlorobenzene	0.000091	U	0.00099	0.000091	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2-Dibromo-3-Chloropropane	0.00045	U	0.00099	0.00045	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2-Dibromoethane	0.00018	U	0.00099	0.00018	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2-Dichlorobenzene	0.00014	U	0.00099	0.00014	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2-Dichloroethane	0.00029	U	0.00099	0.00029	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,2-Dichloropropane	0.00042	U	0.00099	0.00042	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,3-Dichlorobenzene	0.00016	U	0.00099	0.00016	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,4-Dichlorobenzene	0.000099	U	0.00099	0.000099	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
1,4-Dioxane	0.0091	U	0.020	0.0091	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
2-Butanone (MEK)	0.0011	U	0.0049	0.0011	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
2-Hexanone	0.00077	U	0.0049	0.00077	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
4-Methyl-2-pentanone (MIBK)	0.00066	U	0.0049	0.00066	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Acetone	0.0037	U	0.0049	0.0037	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Acrolein	0.028	U *	0.099	0.028	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Acrylonitrile	0.0016	U	0.0099	0.0016	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Benzene	0.00026	U	0.00099	0.00026	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Bromochloromethane	0.00028	U	0.00099	0.00028	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Bromodichloromethane	0.00025	U	0.00099	0.00025	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Bromoform	0.00042	U	0.00099	0.00042	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Bromomethane	0.00047	U	0.00099	0.00047	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Carbon disulfide	0.00026	U	0.00099	0.00026	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Carbon tetrachloride	0.00018	U	0.00099	0.00018	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Chlorobenzene	0.00017	U	0.00099	0.00017	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Chloroethane	0.00052	U	0.00099	0.00052	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Chloroform	0.00032	U	0.00099	0.00032	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Chloromethane	0.00043	U	0.00099	0.00043	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
cis-1,2-Dichloroethene	0.00015	U	0.00099	0.00015	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
cis-1,3-Dichloropropene	0.00027	U	0.00099	0.00027	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Cyclohexane	0.00022	U	0.00099	0.00022	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Dibromochloromethane	0.00019	U	0.00099	0.00019	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Dichlorodifluoromethane	0.00033	U	0.00099	0.00033	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Ethylbenzene	0.00020	U	0.00099	0.00020	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Isopropylbenzene	0.00012	U	0.00099	0.00012	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Methyl acetate	0.0043	U	0.0049	0.0043	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Methyl tert-butyl ether	0.00012	U	0.00099	0.00012	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Methylcyclohexane	0.00016	U	0.00099	0.00016	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Methylene Chloride	**0.00028**	**J B**	0.00099	0.00016	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
m-Xylene & p-Xylene	0.00017	U	0.00099	0.00017	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
o-Xylene	0.000094	U	0.00099	0.000094	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Styrene	0.00012	U	0.00099	0.00012	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Tetrachloroethene	0.00014	U	0.00099	0.00014	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Toluene	0.00062	U	0.00099	0.00062	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1

Client Sample Results

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Client Sample ID: AD04394-009

Date Collected: 05/23/18 12:23
Date Received: 06/05/18 18:55

Lab Sample ID: 460-157553-1

Matrix: Solid
Percent Solids: 88.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.00024	U	0.00099	0.00024	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
trans-1,3-Dichloropropene	0.00026	U	0.00099	0.00026	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Trichloroethene	0.00014	U	0.00099	0.00014	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Trichlorofluoromethane	0.00040	U	0.00099	0.00040	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Vinyl chloride	0.00054	U	0.00099	0.00054	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1
Xylenes, Total	0.00025	U	0.0020	0.00025	mg/Kg	☼	06/05/18 22:48	06/05/18 23:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*mg/Kg*	☼			*06/05/18 22:48*	*06/05/18 23:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*	*06/05/18 22:48*	*06/05/18 23:32*	*1*
4-Bromofluorobenzene	*91*		*70 - 130*	*06/05/18 22:48*	*06/05/18 23:32*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*	*06/05/18 22:48*	*06/05/18 23:32*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*	*06/05/18 22:48*	*06/05/18 23:32*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Lab Chronicle

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Client Sample ID: AD04394-009
Lab Sample ID: 460-157553-1

Date Collected: 05/23/18 12:23
Matrix: Solid
Date Received: 06/05/18 18:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	525409	06/05/18 23:13	JLD	TAL EDI

Client Sample ID: AD04394-009
Lab Sample ID: 460-157553-1

Date Collected: 05/23/18 12:23
Matrix: Solid
Date Received: 06/05/18 18:55
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			525404	06/05/18 22:48	AVM	TAL EDI
Total/NA	Analysis	8260C		1	525350	06/05/18 23:32	EMM	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Hampton-Clarke Veritech
Project/Site: 8052424

TestAmerica Job ID: 460-157553-1

Laboratory: TestAmerica Edison

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	1,1,1-Trichloroethane
8260C	5035	Solid	1,1,2,2-Tetrachloroethane
8260C	5035	Solid	1,1,2-Trichloro-1,2,2-trifluoroethane
8260C	5035	Solid	1,1,2-Trichloroethane
8260C	5035	Solid	1,1-Dichloroethane
8260C	5035	Solid	1,1-Dichloroethene
8260C	5035	Solid	1,2,3-Trichlorobenzene
8260C	5035	Solid	1,2,4-Trichlorobenzene
8260C	5035	Solid	1,2-Dibromo-3-Chloropropane
8260C	5035	Solid	1,2-Dibromoethane
8260C	5035	Solid	1,2-Dichlorobenzene
8260C	5035	Solid	1,2-Dichloroethane
8260C	5035	Solid	1,2-Dichloropropane
8260C	5035	Solid	1,3-Dichlorobenzene
8260C	5035	Solid	1,4-Dichlorobenzene
8260C	5035	Solid	1,4-Dioxane
8260C	5035	Solid	2-Butanone (MEK)
8260C	5035	Solid	2-Hexanone
8260C	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260C	5035	Solid	Acetone
8260C	5035	Solid	Acrolein
8260C	5035	Solid	Acrylonitrile
8260C	5035	Solid	Benzene
8260C	5035	Solid	Bromochloromethane
8260C	5035	Solid	Bromodichloromethane
8260C	5035	Solid	Bromoform
8260C	5035	Solid	Bromomethane
8260C	5035	Solid	Carbon disulfide
8260C	5035	Solid	Carbon tetrachloride
8260C	5035	Solid	Chlorobenzene
8260C	5035	Solid	Chloroethane
8260C	5035	Solid	Chloroform
8260C	5035	Solid	Chloromethane
8260C	5035	Solid	cis-1,2-Dichloroethene
8260C	5035	Solid	cis-1,3-Dichloropropene
8260C	5035	Solid	Cyclohexane
8260C	5035	Solid	Dibromochloromethane
8260C	5035	Solid	Dichlorodifluoromethane
8260C	5035	Solid	Ethylbenzene
8260C	5035	Solid	Isopropylbenzene
8260C	5035	Solid	Methyl acetate
8260C	5035	Solid	Methyl tert-butyl ether
8260C	5035	Solid	Methylcyclohexane
8260C	5035	Solid	Methylene Chloride
8260C	5035	Solid	m-Xylene & p-Xylene
8260C	5035	Solid	o-Xylene

Laboratory: TestAmerica Edison (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Pennsylvania	NELAP	3	68-00522	02-28-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035	Solid	Styrene
8260C	5035	Solid	Tetrachloroethene
8260C	5035	Solid	Toluene
8260C	5035	Solid	trans-1,2-Dichloroethene
8260C	5035	Solid	trans-1,3-Dichloropropene
8260C	5035	Solid	Trichloroethene
8260C	5035	Solid	Trichlorofluoromethane
8260C	5035	Solid	Vinyl chloride
8260C	5035	Solid	Xylenes, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: CVOAMS4 Analysis Batch Number: 521982

Lab Sample ID: STD20 460-521982/6 ICIS Client Sample ID:

Date Analyzed: 05/24/18 03:17 Lab File ID: D50570.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.59	Peak assignment corrected	delpolitov	05/24/18 14:27
Acetonitrile	3.53	Peak Tail	delpolitov	05/24/18 14:49
p-Diethylbenzene	11.39	Peak assignment corrected	delpolitov	05/24/18 14:27

Lab Sample ID: STD50 460-521982/7 IC Client Sample ID:

Date Analyzed: 05/24/18 03:41 Lab File ID: D50571.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.58	Peak assignment corrected	delpolitov	05/24/18 14:30
Acetonitrile	3.53	Peak Tail	delpolitov	05/24/18 14:49

Lab Sample ID: STD200 460-521982/8 IC Client Sample ID:

Date Analyzed: 05/24/18 04:06 Lab File ID: D50572.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.58	Peak assignment corrected	delpolitov	05/24/18 14:31
Acetonitrile	3.53	Peak Tail	delpolitov	05/24/18 14:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: CVOAMS4 Analysis Batch Number: 521982

Lab Sample ID: STD500 460-521982/9 IC Client Sample ID:

Date Analyzed: 05/24/18 04:30 Lab File ID: D50573.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.58	Peak assignment corrected	delpolitov	05/24/18 14:34
Acetonitrile	3.53	Peak Tail	delpolitov	05/24/18 14:50
2-Butanone-d5	4.90	Peak assignment corrected	delpolitov	05/24/18 14:34
1,4-Dioxane-d8	7.10	Peak assignment corrected	delpolitov	05/24/18 14:34

Lab Sample ID: STD1 460-521982/14 IC Client Sample ID:

Date Analyzed: 05/24/18 06:33 Lab File ID: D50578.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.56	Peak assignment corrected	delpolitov	05/24/18 14:35
Acetonitrile	3.53	Peak Tail	delpolitov	05/24/18 14:48
Methyl acrylate	5.04	Peak assignment corrected	delpolitov	05/24/18 14:35

Lab Sample ID: STD5 460-521982/15 IC Client Sample ID:

Date Analyzed: 05/24/18 06:58 Lab File ID: D50579.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.58	Peak assignment corrected	delpolitov	05/24/18 14:43
Acetonitrile	3.53	Incomplete Integration	delpolitov	05/24/18 14:47

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: CVOAMS4 Analysis Batch Number: 525350

Lab Sample ID: CCVIS 460-525350/2 Client Sample ID:

Date Analyzed: 06/05/18 19:09 Lab File ID: D51177.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorotrifluoroethene	1.61	Peak assignment corrected	delpolitov	06/06/18 12:05

Lab Sample ID: 460-157553-1 Client Sample ID: AD04394-009

Date Analyzed: 06/05/18 23:32 Lab File ID: D51186.D GC Column: Rtx-624 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	martineze	06/06/18 09:24

8260C_DKQP

Volatile Organic Compounds by GC/MS

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rtx-624 ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
AD04394-009	460-157553-1	100	104	108	91
	MB 460-525350/7	97	100	103	91
	LCS 460-525350/3	100	102	108	90
	LCSD 460-525350/4	99	100	108	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	70-130
DCA = 1,2-Dichloroethane-d4 (Surr)	70-130
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene	70-130

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D51178.D

Lab ID: LCS 460-525350/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0211	106	70-130	
1,1,2,2-Tetrachloroethane	0.0200	0.0206	103	70-130	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0238	119	70-130	
1,1,2-Trichloroethane	0.0200	0.0210	105	70-130	
1,1-Dichloroethane	0.0200	0.0215	108	70-130	
1,1-Dichloroethene	0.0200	0.0221	111	70-130	
1,2,3-Trichlorobenzene	0.0200	0.0199	100	70-130	
1,2,4-Trichlorobenzene	0.0200	0.0204	102	70-130	
1,2-Dibromo-3-Chloropropane	0.0200	0.0182	91	40-160	
1,2-Dibromoethane	0.0200	0.0201	100	70-130	
1,2-Dichlorobenzene	0.0200	0.0209	104	70-130	
1,2-Dichloroethane	0.0200	0.0197	98	70-130	
1,2-Dichloropropane	0.0200	0.0208	104	70-130	
1,3-Dichlorobenzene	0.0200	0.0211	105	70-130	
1,4-Dichlorobenzene	0.0200	0.0212	106	70-130	
1,4-Dioxane	0.400	0.413	103	40-160	
2-Butanone (MEK)	0.100	0.0947	95	40-160	
2-Hexanone	0.100	0.0982	98	40-160	
4-Methyl-2-pentanone (MIBK)	0.100	0.105	105	40-160	
Acetone	0.100	0.0947	95	40-160	
Benzene	0.0200	0.0229	115	70-130	
Bromochloromethane	0.0200	0.0195	97	70-130	
Bromodichloromethane	0.0200	0.0194	97	70-130	
Bromoform	0.0200	0.0190	95	70-130	
Bromomethane	0.0200	0.0170	85	40-160	
Carbon disulfide	0.0200	0.0216	108	40-160	
Carbon tetrachloride	0.0200	0.0207	104	70-130	
Chlorobenzene	0.0200	0.0210	105	70-130	
Chloroethane	0.0200	0.0179	89	40-160	
Chloroform	0.0200	0.0206	103	70-130	
Chloromethane	0.0200	0.0164	82	40-160	
cis-1,2-Dichloroethene	0.0200	0.0194	97	70-130	
cis-1,3-Dichloropropene	0.0200	0.0219	109	70-130	
Cyclohexane	0.0200	0.0224	112	70-130	
Dibromochloromethane	0.0200	0.0203	101	70-130	
Dichlorodifluoromethane	0.0200	0.0179	89	40-160	
Ethylbenzene	0.0200	0.0215	108	70-130	
Isopropylbenzene	0.0200	0.0216	108	70-130	
Methyl acetate	0.0400	0.0388	97	70-130	
Methyl tert-butyl ether	0.0200	0.0208	104	70-130	
Methylcyclohexane	0.0200	0.0218	109	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D51178.D

Lab ID: LCS 460-525350/3 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0207	104	70-130	
m-Xylene & p-Xylene	0.0200	0.0212	106	70-130	
o-Xylene	0.0200	0.0219	110	70-130	
Styrene	0.0200	0.0214	107	70-130	
Tetrachloroethene	0.0200	0.0216	108	70-130	
Toluene	0.0200	0.0216	108	70-130	
trans-1,2-Dichloroethene	0.0200	0.0206	103	70-130	
trans-1,3-Dichloropropene	0.0200	0.0207	104	70-130	
Trichloroethene	0.0200	0.0196	98	70-130	
Trichlorofluoromethane	0.0200	0.0174	87	40-160	
Vinyl chloride	0.0200	0.0175	87	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D51179.D

Lab ID: LCSD 460-525350/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	0.0200	0.0194	97	8	30	70-130	
1,1,2,2-Tetrachloroethane	0.0200	0.0203	101	2	30	70-130	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0200	0.0214	107	11	30	70-130	
1,1,2-Trichloroethane	0.0200	0.0196	98	7	30	70-130	
1,1-Dichloroethane	0.0200	0.0198	99	8	30	70-130	
1,1-Dichloroethene	0.0200	0.0200	100	10	30	70-130	
1,2,3-Trichlorobenzene	0.0200	0.0191	96	4	30	70-130	
1,2,4-Trichlorobenzene	0.0200	0.0200	100	2	30	70-130	
1,2-Dibromo-3-Chloropropane	0.0200	0.0180	90	1	30	40-160	
1,2-Dibromoethane	0.0200	0.0192	96	5	30	70-130	
1,2-Dichlorobenzene	0.0200	0.0204	102	2	30	70-130	
1,2-Dichloroethane	0.0200	0.0183	91	7	30	70-130	
1,2-Dichloropropane	0.0200	0.0192	96	8	30	70-130	
1,3-Dichlorobenzene	0.0200	0.0207	103	2	30	70-130	
1,4-Dichlorobenzene	0.0200	0.0208	104	2	30	70-130	
1,4-Dioxane	0.400	0.385	96	7	30	40-160	
2-Butanone (MEK)	0.100	0.0913	91	4	30	40-160	
2-Hexanone	0.100	0.0973	97	1	30	40-160	
4-Methyl-2-pentanone (MIBK)	0.100	0.102	102	3	30	40-160	
Acetone	0.100	0.0925	93	2	30	40-160	
Benzene	0.0200	0.0211	105	8	30	70-130	
Bromochloromethane	0.0200	0.0184	92	6	30	70-130	
Bromodichloromethane	0.0200	0.0181	91	7	30	70-130	
Bromoform	0.0200	0.0185	93	3	30	70-130	
Bromomethane	0.0200	0.0170	85	0	30	40-160	
Carbon disulfide	0.0200	0.0199	99	8	30	40-160	
Carbon tetrachloride	0.0200	0.0193	97	7	30	70-130	
Chlorobenzene	0.0200	0.0197	99	6	30	70-130	
Chloroethane	0.0200	0.0177	89	1	30	40-160	
Chloroform	0.0200	0.0191	96	7	30	70-130	
Chloromethane	0.0200	0.0162	81	1	30	40-160	
cis-1,2-Dichloroethene	0.0200	0.0181	90	7	30	70-130	
cis-1,3-Dichloropropene	0.0200	0.0201	101	8	30	70-130	
Cyclohexane	0.0200	0.0213	107	5	30	70-130	
Dibromochloromethane	0.0200	0.0188	94	7	30	70-130	
Dichlorodifluoromethane	0.0200	0.0174	87	3	30	40-160	
Ethylbenzene	0.0200	0.0210	105	3	30	70-130	
Isopropylbenzene	0.0200	0.0213	106	1	30	70-130	
Methyl acetate	0.0400	0.0381	95	2	30	70-130	
Methyl tert-butyl ether	0.0200	0.0191	95	9	30	70-130	
Methylcyclohexane	0.0200	0.0213	106	2	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: D51179.D

Lab ID: LCSD 460-525350/4 Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCSD CONCENTRATION (mg/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylene Chloride	0.0200	0.0186	93	11	30	70-130	
m-Xylene & p-Xylene	0.0200	0.0205	103	3	30	70-130	
o-Xylene	0.0200	0.0211	105	4	30	70-130	
Styrene	0.0200	0.0207	103	4	30	70-130	
Tetrachloroethene	0.0200	0.0207	104	4	30	70-130	
Toluene	0.0200	0.0204	102	6	30	70-130	
trans-1,2-Dichloroethene	0.0200	0.0196	98	5	30	70-130	
trans-1,3-Dichloropropene	0.0200	0.0194	97	7	30	70-130	
Trichloroethene	0.0200	0.0183	91	7	30	70-130	
Trichlorofluoromethane	0.0200	0.0175	87	0	30	40-160	
Vinyl chloride	0.0200	0.0172	86	2	30	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab File ID: D51182.D Lab Sample ID: MB 460-525350/7

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: CVOAMS4 Date Analyzed: 06/05/2018 21:22

GC Column: Rtx-624 ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 460-525350/3	D51178.D	06/05/2018 19:36
	LCSD 460-525350/4	D51179.D	06/05/2018 20:09
AD04394-009	460-157553-1	D51186.D	06/05/2018 23:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab File ID: D50565.D BFB Injection Date: 05/24/2018

Instrument ID: CVOAMS4 BFB Injection Time: 00:37

Analysis Batch No.: 521982

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	95.9	
175	5.0 - 9.0 % of mass 174	7.1	(7.4) 1
176	95.0 - 101.0 % of mass 174	92.4	(96.3) 1
177	5.0 - 9.0 % of mass 176	6.0	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD20 460-521982/6	D50570.D	05/24/2018	03:17
	STD50 460-521982/7	D50571.D	05/24/2018	03:41
	STD200 460-521982/8	D50572.D	05/24/2018	04:06
	STD500 460-521982/9	D50573.D	05/24/2018	04:30
	STD1 460-521982/14	D50578.D	05/24/2018	06:33
	STD5 460-521982/15	D50579.D	05/24/2018	06:58

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab File ID: D51176.D BFB Injection Date: 06/05/2018

Instrument ID: CVOAMS4 BFB Injection Time: 18:44

Analysis Batch No.: 525350

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.0	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	91.4	
175	5.0 - 9.0 % of mass 174	7.1	(7.8) 1
176	95.0 - 101.0 % of mass 174	89.0	(97.4) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 460-525350/2	D51177.D	06/05/2018	19:09
	LCS 460-525350/3	D51178.D	06/05/2018	19:36
	LCSD 460-525350/4	D51179.D	06/05/2018	20:09
	MB 460-525350/7	D51182.D	06/05/2018	21:22
AD04394-009	460-157553-1	D51186.D	06/05/2018	23:32

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Sample No.: CCVIS 460-525350/2 Date Analyzed: 06/05/2018 19:09

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D51177.D Heated Purge: (Y/N) Y

Calibration ID: 68782

		TBAd9		BUT		FB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		440950	3.63	388547	4.92	795165	6.28
UPPER LIMIT		881900	4.13	777094	5.42	1590330	6.78
LOWER LIMIT		220475	3.13	194274	4.42	397583	5.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-525350/3		436121	3.62	369559	4.91	743872	6.27
LCSD 460-525350/4		458929	3.62	380667	4.92	744259	6.28
MB 460-525350/7		414822	3.62	355718	4.92	753386	6.27
460-157553-1	AD04394-009	471597	3.61	384665	4.90	725668	6.26

TBAd9 = TBA-d9 (IS)
BUT = 2-Butanone-d5
FB = Fluorobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Sample No.: CCVIS 460-525350/2 Date Analyzed: 06/05/2018 19:09

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm)

Lab File ID (Standard): D51177.D Heated Purge: (Y/N) Y

Calibration ID: 68782

		DXE		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		39664	7.12	536970	9.38	312771	11.20
UPPER LIMIT		79328	7.62	1073940	9.88	625542	11.70
LOWER LIMIT		19832	6.62	268485	8.88	156386	10.70
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 460-525350/3		36946	7.11	496581	9.37	291670	11.20
LCSD 460-525350/4		38724	7.12	499997	9.37	293038	11.20
MB 460-525350/7		35142	7.11	512826	9.37	298554	11.20
460-157553-1	AD04394-009	31774	7.11	459684	9.37	277218	11.20

DXE = 1,4-Dioxane-d8
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: AD04394-009 | Lab Sample ID: 460-157553-1

Matrix: Solid | Lab File ID: D51186.D

Analysis Method: 8260C | Date Collected: 05/23/2018 12:23

Sample wt/vol: 5.70(g) | Date Analyzed: 06/05/2018 23:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.3 | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00023	U	0.00099	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.00021	U	0.00099	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00030	U	0.00099	0.00030
79-00-5	1,1,2-Trichloroethane	0.00018	U	0.00099	0.00018
75-34-3	1,1-Dichloroethane	0.00020	U	0.00099	0.00020
75-35-4	1,1-Dichloroethene	0.00022	U	0.00099	0.00022
87-61-6	1,2,3-Trichlorobenzene	0.00018	U	0.00099	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.000091	U	0.00099	0.000091
96-12-8	1,2-Dibromo-3-Chloropropane	0.00045	U	0.00099	0.00045
106-93-4	1,2-Dibromoethane	0.00018	U	0.00099	0.00018
95-50-1	1,2-Dichlorobenzene	0.00014	U	0.00099	0.00014
107-06-2	1,2-Dichloroethane	0.00029	U	0.00099	0.00029
78-87-5	1,2-Dichloropropane	0.00042	U	0.00099	0.00042
541-73-1	1,3-Dichlorobenzene	0.00016	U	0.00099	0.00016
106-46-7	1,4-Dichlorobenzene	0.000099	U	0.00099	0.000099
123-91-1	1,4-Dioxane	0.0091	U	0.020	0.0091
78-93-3	2-Butanone (MEK)	0.0011	U	0.0049	0.0011
591-78-6	2-Hexanone	0.00077	U	0.0049	0.00077
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00066	U	0.0049	0.00066
67-64-1	Acetone	0.0037	U	0.0049	0.0037
107-02-8	Acrolein	0.028	U *	0.099	0.028
107-13-1	Acrylonitrile	0.0016	U	0.0099	0.0016
71-43-2	Benzene	0.00026	U	0.00099	0.00026
74-97-5	Bromochloromethane	0.00028	U	0.00099	0.00028
75-27-4	Bromodichloromethane	0.00025	U	0.00099	0.00025
75-25-2	Bromoform	0.00042	U	0.00099	0.00042
74-83-9	Bromomethane	0.00047	U	0.00099	0.00047
75-15-0	Carbon disulfide	0.00026	U	0.00099	0.00026
56-23-5	Carbon tetrachloride	0.00018	U	0.00099	0.00018
108-90-7	Chlorobenzene	0.00017	U	0.00099	0.00017
75-00-3	Chloroethane	0.00052	U	0.00099	0.00052
67-66-3	Chloroform	0.00032	U	0.00099	0.00032
74-87-3	Chloromethane	0.00043	U	0.00099	0.00043
156-59-2	cis-1,2-Dichloroethene	0.00015	U	0.00099	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00027	U	0.00099	0.00027

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: AD04394-009 | Lab Sample ID: 460-157553-1

Matrix: Solid | Lab File ID: D51186.D

Analysis Method: 8260C | Date Collected: 05/23/2018 12:23

Sample wt/vol: 5.70(g) | Date Analyzed: 06/05/2018 23:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.3 | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
110-82-7	Cyclohexane	0.00022	U	0.00099	0.00022
124-48-1	Dibromochloromethane	0.00019	U	0.00099	0.00019
75-71-8	Dichlorodifluoromethane	0.00033	U	0.00099	0.00033
100-41-4	Ethylbenzene	0.00020	U	0.00099	0.00020
98-82-8	Isopropylbenzene	0.00012	U	0.00099	0.00012
79-20-9	Methyl acetate	0.0043	U	0.0049	0.0043
1634-04-4	Methyl tert-butyl ether	0.00012	U	0.00099	0.00012
108-87-2	Methylcyclohexane	0.00016	U	0.00099	0.00016
75-09-2	Methylene Chloride	0.00028	J B	0.00099	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00017	U	0.00099	0.00017
95-47-6	o-Xylene	0.000094	U	0.00099	0.000094
100-42-5	Styrene	0.00012	U	0.00099	0.00012
127-18-4	Tetrachloroethene	0.00014	U	0.00099	0.00014
108-88-3	Toluene	0.00062	U	0.00099	0.00062
156-60-5	trans-1,2-Dichloroethene	0.00024	U	0.00099	0.00024
10061-02-6	trans-1,3-Dichloropropene	0.00026	U	0.00099	0.00026
79-01-6	Trichloroethene	0.00014	U	0.00099	0.00014
75-69-4	Trichlorofluoromethane	0.00040	U	0.00099	0.00040
75-01-4	Vinyl chloride	0.00054	U	0.00099	0.00054
1330-20-7	Xylenes, Total	0.00025	U	0.0020	0.00025

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-130
460-00-4	4-Bromofluorobenzene	91		70-130
1868-53-7	Dibromofluoromethane (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	108		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Client Sample ID: AD04394-009 Lab Sample ID: 460-157553-1

Matrix: Solid Lab File ID: D51186.D

Analysis Method: 8260C Date Collected: 05/23/2018 12:23

Sample wt/vol: 5.70(g) Date Analyzed: 06/05/2018 23:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: 11.3 Level: (low/med) Low

Analysis Batch No.: 525350 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51186.D
Lims ID: 460-157553-A-1-A
Client ID: AD04394-009
Sample Type: Client
Inject. Date: 05-Jun-2018 23:32:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 460-157553-A-1-A
Misc. Info.: 460-0073248-011
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 06-Jun-2018 10:27:29 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: martineze Date: 06-Jun-2018 09:24:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
26 Methylene Chloride	84	3.588	3.618	-0.030	29	1261	0.2812	
* 27 TBA-d9 (IS)	65	3.606	3.630	-0.024	40	471597	1000.0	
* 38 2-Butanone-d5	46	4.904	4.923	-0.019	0	384665	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.496	5.508	-0.012	98	214930	49.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.923	5.941	-0.018	96	194858	52.1	
* 61 Fluorobenzene	96	6.264	6.276	-0.012	99	725668	50.0	
* 67 1,4-Dioxane-d8	96	7.105	7.124	-0.019	0	31774	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.038	8.044	-0.006	99	660973	54.2	
* 89 Chlorobenzene-d5	117	9.373	9.379	-0.006	85	459684	50.0	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	219870	45.4	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	94	277218	50.0	

Reagents:

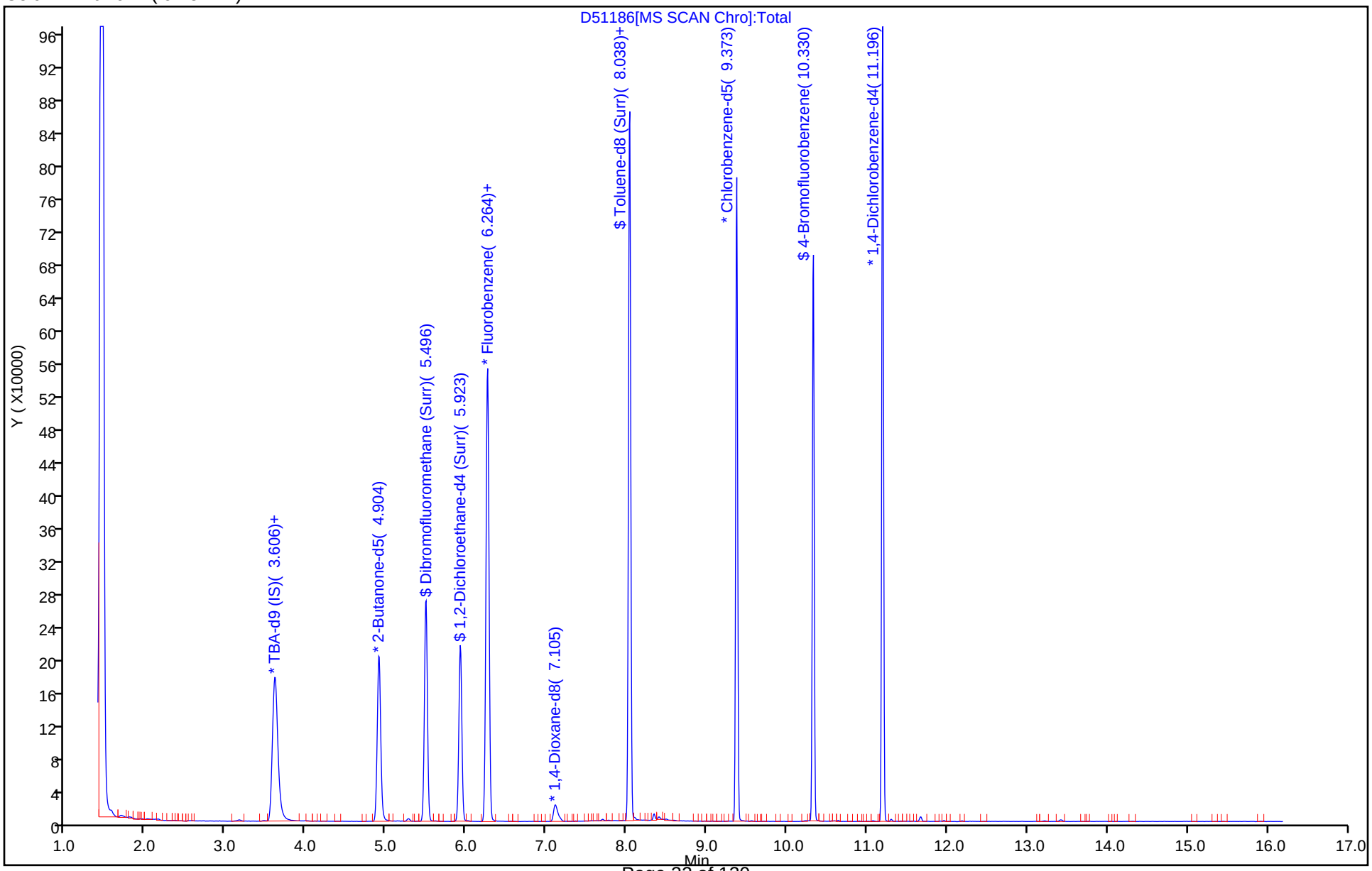
8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00175 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 06-Jun-2018 10:27:30 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51186.D				
Injection Date:	05-Jun-2018 23:32:30	Instrument ID:	CVOAMS4	Operator ID:	
Lims ID:	460-157553-A-1-A	Lab Sample ID:	460-157553-1	Worklist Smp#:	11
Client ID:	AD04394-009				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260S_4	Limit Group:	VOA - 8260C DKQP Water and Solid		

Column: Rtx-624 (0.25 mm)



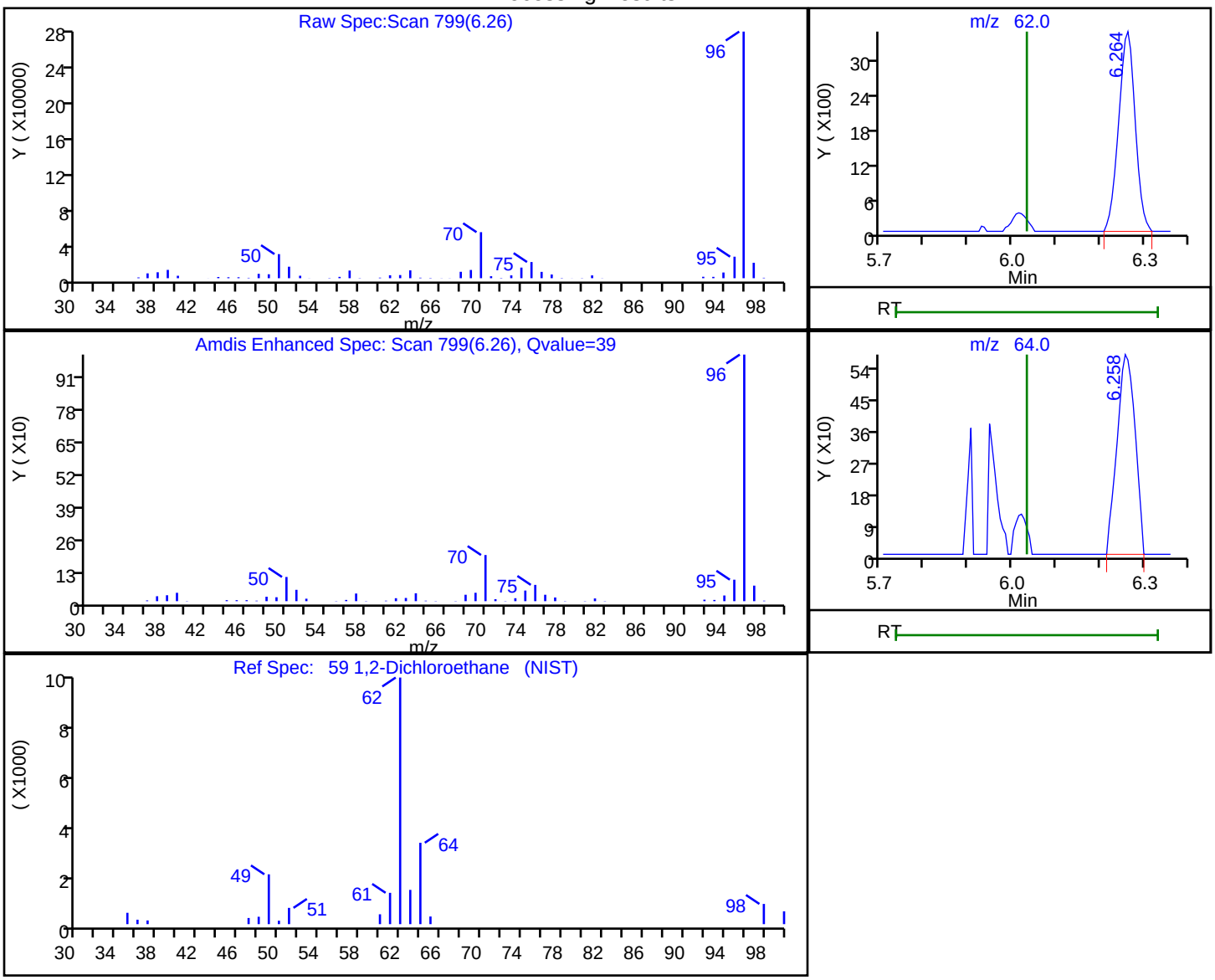
User Disabled Compound Report

TestAmerica Edison

Data File:	\\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51186.D				
Injection Date:	05-Jun-2018 23:32:30	Instrument ID:	CVOAMS4		
Lims ID:	460-157553-A-1-A	Lab Sample ID:	460-157553-1		
Client ID:	AD04394-009				
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260S_4	Limit Group:	VOA - 8260C DKQP Water and Solid		
Column:	Rtx-624 (0.25 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
6.26	62.00	9146	2.080749
6.26	64.00	1653	

Reviewer: martineze, 06-Jun-2018 09:24:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-521982/14	D50578.D
Level 2	STD5 460-521982/15	D50579.D
Level 3	STD20 460-521982/6	D50570.D
Level 4	STD50 460-521982/7	D50571.D
Level 5	STD200 460-521982/8	D50572.D
Level 6	STD500 460-521982/9	D50573.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorotrifluoroethene	0.1349 0.2519	0.1870	0.2182	0.2279	0.2526	Lin2	-0.105	0.2345							0.9940		0.9900
Dichlorodifluoromethane	0.2770 0.4826	0.3921	0.4683	0.4867	0.4893	Ave		0.4327			0.1000	19.6		20.0			
Chloromethane	0.3499 0.3742	0.3459	0.3615	0.3694	0.3778	Ave		0.3631			0.1000	3.6		20.0			
Butadiene	0.2000 +++++	0.2675	0.3094	0.3141	0.3139	Ave		0.2810				17.5		20.0			
Vinyl chloride	0.2891 0.3243	0.2998	0.3238	0.3314	0.3307	Ave		0.3165			0.1000	5.6		20.0			
Bromomethane	0.2342 0.2098	0.2556	0.2541	0.2399	0.2413	Ave		0.2392			0.1000	7.0		20.0			
Chloroethane	0.1635 0.1614	0.1906	0.1858	0.1723	0.1745	Ave		0.1747			0.1000	6.7		20.0			
Dichlorofluoromethane	0.4658 0.4756	0.5053	0.5123	0.5087	0.4932	Ave		0.4935				3.9		20.0			
Pentane	0.0428 0.0456	0.0457	0.0497	0.0487	0.0457	Ave		0.0464				5.4		20.0			
Trichlorofluoromethane	0.3009 0.4061	0.3733	0.4362	0.4272	0.4243	Ave		0.3947			0.1000	12.9		20.0			
Ethyl ether	0.2139 0.1642	0.1940	0.1865	0.1811	0.1770	Ave		0.1861				9.1		20.0			
Ethanol	0.0438 0.0423	0.0456	0.0466	0.0427	0.0415	Ave		0.0437				4.5		20.0			
2-Methyl-1,3-butadiene	0.1668 0.1996	0.2028	0.2210	0.2212	0.2053	Ave		0.2028				9.8		20.0			
1,2-Dichloro-1,1,2-trifluoroethane	0.2107 0.2408	0.2403	0.2628	0.2590	0.2485	Ave		0.2437				7.6		20.0			
Acrolein	0.9483 1.1801	1.0005	1.1207	1.0775	1.1893	Ave		1.0861				8.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1908 0.2928	0.2550	0.2960	0.2988	0.2950	Ave		0.2714			0.1000	15.8		20.0			
1,1-Dichloroethene	0.2350 0.2705	0.2563	0.2672	0.2689	0.2692	Ave		0.2612			0.1000	5.3		20.0			
Acetone	0.9245 0.5766	0.6901	0.6212	0.6087	0.5909	Ave		0.6687			0.0500	19.6		20.0			
Iodomethane	0.6092 0.6131	0.6294	0.6173	0.6207	0.6263	Ave		0.6193				1.2		20.0			
Carbon disulfide	0.8101 1.0135	0.8963	0.8978	0.9192	0.9846	Ave		0.9202			0.1000	7.8		20.0			
Isopropyl alcohol	0.7263 0.6055	0.6058	0.5631	0.5438	0.5656	Ave		0.6017				11.0		20.0			
3-Chloro-1-propene	0.1478 0.1595	0.1563	0.1539	0.1592	0.1591	Ave		0.1560				2.9		20.0			
Cyclopentene	0.4638 0.5912	0.5758	0.6192	0.6240	0.5806	Ave		0.5758				10.1		20.0			
Methyl acetate	0.2169 0.1456	0.1940	0.1597	0.1577	0.1436	Ave		0.1696			0.1000	17.3		20.0			
Acetonitrile	0.7526 0.4337	0.5706	0.4409	0.4324	0.4203	QuaF		0.4149	0.0000037						1.0000		0.9900
Methylene Chloride	0.3800 0.2788	0.3209	0.2968	0.2934	0.2838	Ave		0.3090			0.1000	12.2		20.0			
2-Methyl-2-propanol	1.4111 1.0105	1.0911	1.0259	0.9914	1.0041	Ave		1.0890				14.8		20.0			
Methyl tert-butyl ether	0.7194 0.6460	0.7149	0.6826	0.6837	0.6681	Ave		0.6858			0.1000	4.1		20.0			
trans-1,2-Dichloroethene	0.2839 0.2781	0.2943	0.2886	0.2865	0.2823	Ave		0.2856			0.1000	1.9		20.0			
Acrylonitrile	2.5369 2.5041	2.4724	2.5692	2.4794	2.5030	Ave		2.5108				1.5		20.0			
Hexane	0.2561 0.3542	0.3048	0.3645	0.3650	0.3594	Ave		0.3340				13.3		20.0			
Isopropyl ether	0.7568 0.6569	0.7625	0.7134	0.7081	0.6703	Ave		0.7113				6.1		20.0			
1,1-Dichloroethane	0.4358 0.4170	0.4617	0.4511	0.4471	0.4291	Ave		0.4403			0.2000	3.7		20.0			
Vinyl acetate	0.0433 0.0480	0.0475	0.0462	0.0465	0.0487	Ave		0.0467				4.1		20.0			
2-Chloro-1,3-butadiene	0.2009 0.2345	0.2456	0.2421	0.2569	0.2345	Ave		0.2357				8.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tert-butyl ethyl ether	0.7095 0.6566	0.7089	0.6884	0.6841	0.6653	Ave		0.6855				3.2		20.0			
2,2-Dichloropropane	0.1317 0.1198	0.1188	0.1240	0.1241	0.1210	Ave		0.1232				3.8		20.0			
cis-1,2-Dichloroethene	0.3917 0.3021	0.3325	0.3218	0.3161	0.3079	Ave		0.3287			0.1000	9.9		20.0			
2-Butanone (MEK)	0.2884 0.2742	0.2652	0.2708	0.2663	0.2728	Ave		0.2730			0.0500	3.1		20.0			
Ethyl acetate	0.1861 0.2496	0.2109	0.2329	0.2409	0.2488	Ave		0.2282				11.0		20.0			
Methyl acrylate	0.2118 0.1752	0.2124	0.1872	0.1872	0.1838	Ave		0.1930				8.0		20.0			
Propionitrile	0.0418 0.0297	0.0384	0.0315	0.0319	0.0288	Ave		0.0337				15.5		20.0			
Tetrahydrofuran	0.3233 0.3009	0.2918	0.3193	0.3182	0.3000	Ave		0.3089				4.2		20.0			
Bromochloromethane	0.1713 0.1545	0.1639	0.1630	0.1642	0.1606	Ave		0.1629				3.4		20.0			
Methacrylonitrile	0.1041 0.0882	0.1014	0.0901	0.0888	0.0858	Ave		0.0931				8.2		20.0			
Chloroform	0.4500 0.4341	0.4368	0.4445	0.4443	0.4388	Ave		0.4414			0.2000	1.3		20.0			
Cyclohexane	0.2724 0.4111	0.3473	0.3984	0.4070	0.4045	Ave		0.3735			0.1000	14.7		20.0			
1,1,1-Trichloroethane	0.3324 0.3934	0.3694	0.3822	0.3883	0.3895	Ave		0.3758			0.1000	6.1		20.0			
Carbon tetrachloride	0.2696 0.3605	0.3139	0.3380	0.3507	0.3524	Ave		0.3308			0.1000	10.3		20.0			
1,1-Dichloropropene	0.3102 0.3688	0.3274	0.3490	0.3542	0.3588	Ave		0.3447				6.3		20.0			
Isobutyl alcohol	0.4214 0.6285	0.4826	0.5648	0.5547	0.5977	Ave		0.5416				14.1		20.0			
Benzene	1.4370 1.1724	1.4064	1.3468	1.3395	1.2449	Ave		1.3245			0.5000	7.5		20.0			
Isopropyl acetate	0.7610 0.6274	0.6952	0.6352	0.6483	0.6340	Ave		0.6668				7.8		20.0			
Tert-amyl methyl ether	0.2179 0.2204	0.2102	0.2162	0.2195	0.2189	Ave		0.2172				1.7		20.0			
1,2-Dichloroethane	0.3455 0.2871	0.3106	0.2941	0.2866	0.2933	Ave		0.3029			0.1000	7.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
n-Heptane	0.1295 +++++	0.1687	0.1998	0.2067	0.2059	Ave		0.1821				18.3		20.0			
n-Butanol	0.1933 0.2657	0.2023	0.2161	0.2163	0.2468	Ave		0.2234				12.3		20.0			
Trichloroethene	0.2729 0.2676	0.2545	0.2616	0.2620	0.2659	Ave		0.2641			0.2000	2.4		20.0			
Methylcyclohexane	0.3416 0.5056	0.3968	0.4744	0.4894	0.4938	Ave		0.4503			0.1000	14.6		20.0			
Ethyl acrylate	0.0133 0.0204	0.0179	0.0158	0.0173	0.0200	Ave		0.0174				15.2		20.0			
1,2-Dichloropropane	0.2157 0.2401	0.2281	0.2308	0.2348	0.2393	Ave		0.2315			0.1000	3.9		20.0			
Methyl methacrylate	0.0484 0.0654	0.0580	0.0568	0.0593	0.0625	Ave		0.0584				10.0		20.0			
1,4-Dioxane	1.1032 0.9981	1.1666	1.1311	1.0325	0.9962	Ave		1.0713				6.8		20.0			
Dibromomethane	0.1688 0.1607	0.1589	0.1524	0.1545	0.1602	Ave		0.1593				3.6		20.0			
n-Propyl acetate	0.2955 0.3013	0.2880	0.2650	0.2707	0.2819	Ave		0.2837				5.0		20.0			
Bromodichloromethane	0.2776 0.3376	0.2716	0.2927	0.2980	0.3276	Ave		0.3008			0.2000	8.8		20.0			
2-Nitropropane	0.0670 0.0511	0.0478	0.0428	0.0455	0.0477	Ave		0.0503				17.2		20.0			
2-Chloroethyl vinyl ether	0.0670 0.0907	0.0736	0.0727	0.0732	0.0827	Ave		0.0766				11.2		20.0			
Epichlorohydrin	0.1859 0.2191	0.1807	0.1983	0.1989	0.2126	Ave		0.1992				7.4		20.0			
cis-1,3-Dichloropropene	0.4063 0.4599	0.4336	0.4582	0.4643	0.4776	Ave		0.4500			0.2000	5.7		20.0			
4-Methyl-2-pentanone (MIBK)	1.7966 1.9378	1.8059	1.9550	2.0164	2.0090	Ave		1.9201			0.0500	5.0		20.0			
Toluene	1.5444 1.2789	1.4075	1.3597	1.3734	1.3285	Ave		1.3821			0.4000	6.6		20.0			
trans-1,3-Dichloropropene	0.3805 0.3893	0.3509	0.3708	0.3746	0.3920	Ave		0.3764			0.1000	4.0		20.0			
Ethyl methacrylate	0.2265 0.2762	0.2456	0.2404	0.2525	0.2660	Ave		0.2512				7.1		20.0			
1,1,2-Trichloroethane	0.2425 0.2110	0.2272	0.2181	0.2159	0.2156	Ave		0.2217			0.1000	5.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.3757 0.4154	0.4072	0.4219	0.4347	0.4305	Ave		0.4142			0.2000	5.2		20.0			
1,3-Dichloropropane	0.4050 0.4137	0.4075	0.4012	0.4016	0.4157	Ave		0.4075				1.5		20.0			
2-Hexanone	1.1641 1.3476	1.1671	1.2176	1.2235	1.2983	Ave		1.2363			0.0500	5.9		20.0			
n-Butyl acetate	0.0746 0.0668	0.0771	0.0692	0.0715	0.0668	Ave		0.0710				5.9		20.0			
Dibromochloromethane	0.2838 0.3350	0.2889	0.3044	0.3142	0.3346	Ave		0.3102			0.1000	7.1		20.0			
1,2-Dibromoethane	0.2741 0.2746	0.2598	0.2592	0.2571	0.2688	Ave		0.2656			0.1000	3.0		20.0			
Chlorobenzene	0.9642 0.8833	0.9109	0.8959	0.9042	0.8950	Ave		0.9089			0.5000	3.2		20.0			
Ethylbenzene	0.4680 0.4825	0.4900	0.4879	0.5001	0.4913	Ave		0.4866			0.1000	2.2		20.0			
1,1,1,2-Tetrachloroethane	0.3191 0.3402	0.3435	0.3539	0.3659	0.3660	Ave		0.3481				5.1		20.0			
m-Xylene & p-Xylene	0.5861 0.6032	0.6059	0.5996	0.6169	0.6163	Ave		0.6047			0.1000	1.9		20.0			
n-Butyl acrylate	0.1868 0.1793	0.1942	0.1864	0.1947	0.1845	Ave		0.1877				3.1		20.0			
o-Xylene	0.5541 0.5746	0.5996	0.6008	0.6290	0.6007	Ave		0.5931			0.3000	4.3		20.0			
Styrene	0.9217 0.9610	0.9076	0.9634	0.9761	0.9803	Ave		0.9517			0.3000	3.1		20.0			
Amyl acetate (mixed isomers)	0.7438 0.6887	0.7764	0.7398	0.7399	0.6786	Ave		0.7279				5.1		20.0			
Bromoform	0.1863 0.2343	0.2029	0.2075	0.2211	0.2316	Ave		0.2140			0.1000	8.6		20.0			
Isopropylbenzene	1.4368 1.6080	1.5396	1.5910	1.6719	1.6333	Ave		1.5801			0.1000	5.2		20.0			
Bromobenzene	0.7754 0.7130	0.7139	0.7205	0.7055	0.7003	Ave		0.7214				3.8		20.0			
1,1,2,2-Tetrachloroethane	0.6610 0.6416	0.6348	0.6113	0.6173	0.6173	Ave		0.6306			0.3000	3.0		20.0			
N-Propylbenzene	2.8018 3.2208	2.9145	3.0748	3.1257	3.1638	Ave		3.0502				5.3		20.0			
1,2,3-Trichloropropane	0.1896 0.1820	0.2006	0.1787	0.1803	0.1791	Ave		0.1851				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
trans-1,4-Dichloro-2-butene	0.1539 0.1429	0.1441	0.1442	0.1406	0.1423	Ave		0.1447				3.3		20.0			
4-Ethyltoluene	2.3904 2.6183	2.5381	2.6764	2.6991	2.6721	Ave		2.5991				4.5		20.0			
2-Chlorotoluene	1.9715 2.1234	1.9532	2.0665	2.0927	2.1525	Ave		2.0600				3.9		20.0			
1,3,5-Trimethylbenzene	1.9158 2.4385	2.0730	2.2980	2.3418	2.4686	Ave		2.2559				9.6		20.0			
4-Chlorotoluene	1.7764 1.7927	1.6791	1.7391	1.7337	1.7753	Ave		1.7494				2.4		20.0			
Butyl Methacrylate	0.6044 0.7160	0.6142	0.6790	0.7164	0.7246	Ave		0.6758				8.0		20.0			
tert-Butylbenzene	1.4685 2.1245	1.7101	1.9583	2.0300	2.1254	Ave		1.9028				13.8		20.0			
1,2,4-Trimethylbenzene	2.1079 2.3972	2.1425	2.3053	2.3286	2.4173	Ave		2.2831				5.7		20.0			
sec-Butylbenzene	2.3705 3.1958	2.7117	2.9349	3.0531	3.1621	Ave		2.9047				10.8		20.0			
4-Isopropyltoluene	2.1944 2.7103	2.3822	2.6528	2.7085	2.7369	Ave		2.5642				8.7		20.0			
1,3-Dichlorobenzene	1.4950 1.2690	1.2906	1.3746	1.3615	1.3610	Ave		1.3586			0.6000	5.8		20.0			
1,4-Dichlorobenzene	1.5549 1.2141	1.3538	1.3946	1.3594	1.3512	Ave		1.3713			0.5000	8.0		20.0			
Benzyl chloride	0.1755 0.2461	0.1715	0.2316	0.2414	0.2460	Ave		0.2187				16.2		20.0			
Indan	1.0706 1.2026	1.0707	1.1117	1.1498	1.2062	Ave		1.1353				5.4		20.0			
p-Diethylbenzene	1.4689 1.5124	1.4965	1.5989	1.6400	1.6125	Ave		1.5549				4.6		20.0			
n-Butylbenzene	1.1677 1.2944	1.2397	1.3555	1.3449	1.3491	Ave		1.2919				5.8		20.0			
1,2-Dichlorobenzene	1.4753 1.2831	1.3096	1.3533	1.3544	1.3669	Ave		1.3571			0.4000	4.9		20.0			
1,2,4,5-Tetramethylbenzene	2.0358 2.4799	2.1352	2.3402	2.3809	2.4284	Ave		2.3001				7.6		20.0			
1,2-Dibromo-3-Chloropropane	0.1569 0.1742	0.1627	0.1555	0.1652	0.1664	Ave		0.1635			0.0500	4.2		20.0			
1,3,5-Trichlorobenzene	1.2906 1.1024	1.1171	1.1925	1.1872	1.1268	Ave		1.1695				6.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	1.2810 0.9997	1.0096	1.0595	1.0717	1.0061	Ave		1.0713			0.2000	10.0		20.0			
Hexachlorobutadiene	0.5421 0.5769	0.4814	0.5328	0.5391	0.5465	Ave		0.5365				5.8		20.0			
Naphthalene	2.9703 2.3573	2.3431	2.2418	2.3229	2.3106	Ave		2.4243				11.2		20.0			
1,2,3-Trichlorobenzene	1.2847 0.9814	1.0259	1.0194	1.0312	0.9930	Ave		1.0559				10.8		20.0			
Dibromofluoromethane (Surr)	0.2860 0.2986	0.2904	0.3011	0.3018	0.3019	Ave		0.2966				2.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2483 0.2809	0.2481	0.2534	0.2531	0.2622	Ave		0.2577				4.8		20.0			
Toluene-d8 (Surr)	1.2847 1.2796	1.3158	1.3734	1.3747	1.3272	Ave		1.3259				3.1		20.0			
4-Bromofluorobenzene	0.8322 0.9003	0.8473	0.8985	0.8860	0.8758	Ave		0.8734				3.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-521982/14	D50578.D
Level 2	STD5 460-521982/15	D50579.D
Level 3	STD20 460-521982/6	D50570.D
Level 4	STD50 460-521982/7	D50571.D
Level 5	STD200 460-521982/8	D50572.D
Level 6	STD500 460-521982/9	D50573.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Chlorotrifluoroethene	FB	Lin2	1452 1604210	10215	51840	129716	629546	1.00 500	5.00	20.0	50.0	200
Dichlorodifluoromethane	FB	Ave	2981 3072813	21420	111276	277031	1219507	1.00 500	5.00	20.0	50.0	200
Chloromethane	FB	Ave	3766 2382616	18900	85888	210267	941546	1.00 500	5.00	20.0	50.0	200
Butadiene	FB	Ave	2153 +++++	14615	73505	178770	782370	1.00 +++++	5.00	20.0	50.0	200
Vinyl chloride	FB	Ave	3111 2064698	16377	76948	188664	824215	1.00 500	5.00	20.0	50.0	200
Bromomethane	FB	Ave	2521 1335908	13965	60378	136540	601386	1.00 500	5.00	20.0	50.0	200
Chloroethane	FB	Ave	1760 1027571	10411	44153	98106	434877	1.00 500	5.00	20.0	50.0	200
Dichlorofluoromethane	FB	Ave	5013 3028144	27607	121719	289595	1229327	1.00 500	5.00	20.0	50.0	200
Pentane	FB	Ave	921 580308	4991	23629	55423	227851	2.00 1000	10.0	40.0	100	400
Trichlorofluoromethane	FB	Ave	3238 2585959	20393	103642	243157	1057489	1.00 500	5.00	20.0	50.0	200
Ethyl ether	FB	Ave	2302 1045436	10599	44318	103110	441241	1.00 500	5.00	20.0	50.0	200
Ethanol	TBAd 9	Ave	807 332609	3914	13992	32110	124145	40.0 20000	200	800	2000	8000
2-Methyl-1,3-butadiene	FB	Ave	1795 1270947	11082	52508	125885	511747	1.00 500	5.00	20.0	50.0	200
1,2-Dichloro-1,1,2-trifluoroethane	FB	Ave	2268 1533409	13130	62451	147431	619337	1.00 500	5.00	20.0	50.0	200
Acrolein	TBAd 9	Ave	43660 278170	85949	126294	162199	222352	100 600	200	300	400	500
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	2053 1864500	13930	70324	170113	735194	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1-Dichloroethene	FB	Ave	2529 1722609	14004	63488	153076	670994	1.00 500	5.00	20.0	50.0	200
Acetone	BUT	Ave	6097 1833937	22328	73772	174367	709888	5.00 2500	25.0	100	250	1000
Iodomethane	FB	Ave	6557 3903922	34388	146663	353315	1560915	1.00 500	5.00	20.0	50.0	200
Carbon disulfide	FB	Ave	8719 6453101	48967	213322	523214	2453996	1.00 500	5.00	20.0	50.0	200
Isopropyl alcohol	TBAd 9	Ave	3344 1189444	13010	42304	102326	422976	10.0 5000	50.0	200	500	2000
3-Chloro-1-propene	FB	Ave	1591 1015606	8537	36557	90626	396543	1.00 500	5.00	20.0	50.0	200
Cyclopentene	FB	Ave	4992 3764201	31459	147132	355222	1447012	1.00 500	5.00	20.0	50.0	200
Methyl acetate	FB	Ave	4669 1853592	21199	75883	179511	716046	2.00 1000	10.0	40.0	100	400
Acetonitrile	TBAd 9	QuaF	3465 851927	12253	33124	81361	314331	10.0 5000	50.0	200	500	2000
Methylene Chloride	FB	Ave	4090 1775251	17533	70526	166987	707346	1.00 500	5.00	20.0	50.0	200
2-Methyl-2-propanol	TBAd 9	Ave	6497 1984893	23431	77074	186550	750932	10.0 5000	50.0	200	500	2000
Methyl tert-butyl ether	FB	Ave	7743 4113411	39055	162185	389198	1665068	1.00 500	5.00	20.0	50.0	200
trans-1,2-Dichloroethene	FB	Ave	3056 1770727	16076	68575	163066	703473	1.00 500	5.00	20.0	50.0	200
Acrylonitrile	TBAd 9	Ave	11680 4918651	53097	193011	466544	1871876	10.0 5000	50.0	200	500	2000
Hexane	FB	Ave	2756 2255500	16654	86599	207772	895853	1.00 500	5.00	20.0	50.0	200
Isopropyl ether	FB	Ave	8145 4182777	41659	169496	403060	1670715	1.00 500	5.00	20.0	50.0	200
1,1-Dichloroethane	FB	Ave	4690 2655194	25223	107176	254520	1069581	1.00 500	5.00	20.0	50.0	200
Vinyl acetate	FB	Ave	931 611050	5195	21933	52912	242928	2.00 1000	10.0	40.0	100	400
2-Chloro-1,3-butadiene	FB	Ave	2162 1493075	13420	57521	146245	584417	1.00 500	5.00	20.0	50.0	200
Tert-butyl ethyl ether	FB	Ave	7636 4180508	38729	163578	389422	1658142	1.00 500	5.00	20.0	50.0	200
2,2-Dichloropropane	FB	Ave	1417 762596	6491	29456	70627	301478	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
cis-1,2-Dichloroethene	FB	Ave	4216 1923602	18164	76464	179955	767468	1.00 500	5.00	20.0	50.0	200
2-Butanone (MEK)	BUT	Ave	1902 872234	8582	32154	76285	327751	5.00 2500	25.0	100	250	1000
Ethyl acetate	BUT	Ave	491 317610	2729	11063	27602	119580	2.00 1000	10.0	40.0	100	400
Methyl acrylate	FB	Ave	2280 1115826	11603	44482	106586	458185	1.00 500	5.00	20.0	50.0	200
Propionitrile	FB	Ave	4504 1891359	20956	74923	181499	717215	10.0 5000	50.0	200	500	2000
Tetrahydrofuran	BUT	Ave	853 382795	3776	15167	36463	144158	2.00 1000	10.0	40.0	100	400
Bromochloromethane	FB	Ave	1844 983947	8957	38728	93465	400329	1.00 500	5.00	20.0	50.0	200
Methacrylonitrile	FB	Ave	11200 5619082	55422	214037	505392	2138694	10.0 5000	50.0	200	500	2000
Chloroform	FB	Ave	4843 2763821	23865	105604	252925	1093579	1.00 500	5.00	20.0	50.0	200
Cyclohexane	FB	Ave	2932 2617813	18977	94650	231691	1008217	1.00 500	5.00	20.0	50.0	200
1,1,1-Trichloroethane	FB	Ave	3577 2504752	20180	90801	221031	970750	1.00 500	5.00	20.0	50.0	200
Carbon tetrachloride	FB	Ave	2902 2295302	17152	80300	199618	878242	1.00 500	5.00	20.0	50.0	200
1,1-Dichloropropene	FB	Ave	3339 2348154	17885	82919	201599	894255	1.00 500	5.00	20.0	50.0	200
Isobutyl alcohol	TBAd 9	Ave	4850 3086249	25909	106069	260942	1117461	25.0 12500	125	500	1250	5000
Benzene	CBNZ d5	Ave	10921 6239816	54291	230801	553633	2435679	1.00 500	5.00	20.0	50.0	200
Isopropyl acetate	FB	Ave	8190 3994549	37983	150922	369010	1580271	1.00 500	5.00	20.0	50.0	200
Tert-amyl methyl ether	FB	Ave	2345 1403274	11483	51376	124945	545486	1.00 500	5.00	20.0	50.0	200
1,2-Dichloroethane	FB	Ave	3718 1827823	16971	69869	163158	731084	1.00 500	5.00	20.0	50.0	200
n-Heptane	FB	Ave	1394 +++++	9214	47482	117681	513182	1.00 +++++	5.00	20.0	50.0	200
n-Butanol	TBAd 9	Ave	2225 1304803	10859	40577	101741	461341	25.0 12500	125	500	1250	5000
Trichloroethene	FB	Ave	2937 1704102	13905	62149	149164	662608	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methylcyclohexane	FB	Ave	3677 3219589	21680	112721	278598	1230752	1.00 500	5.00	20.0	50.0	200
Ethyl acrylate	FB	Ave	143 129838	978	3759	9831	49782	1.00 500	5.00	20.0	50.0	200
1,2-Dichloropropane	FB	Ave	2322 1528900	12463	54846	133646	596439	1.00 500	5.00	20.0	50.0	200
Methyl methacrylate	FB	Ave	1042 832987	6340	26999	67515	311645	2.00 1000	10.0	40.0	100	400
1,4-Dioxane	DXE	Ave	820 408607	3986	14499	33070	145311	20.0 10000	100	400	1000	4000
Dibromomethane	FB	Ave	1817 1023468	8683	36202	87933	399314	1.00 500	5.00	20.0	50.0	200
n-Propyl acetate	FB	Ave	3180 1918559	15736	62968	154104	702666	1.00 500	5.00	20.0	50.0	200
Bromodichloromethane	FB	Ave	2988 2149454	14837	69546	169643	816495	1.00 500	5.00	20.0	50.0	200
2-Nitropropane	FB	Ave	1443 650742	5228	20333	51808	237598	2.00 1000	10.0	40.0	100	400
2-Chloroethyl vinyl ether	FB	Ave	721 577619	4020	17272	41650	206212	1.00 500	5.00	20.0	50.0	200
Epichlorohydrin	BUT	Ave	4903 2788038	23382	94212	227850	1021667	20.0 10000	100	400	1000	4000
cis-1,3-Dichloropropene	CBNZ d5	Ave	3088 2447658	16738	78527	191905	934401	1.00 500	5.00	20.0	50.0	200
4-Methyl-2-pentanone (MIBK)	BUT	Ave	11849 6163448	58429	232160	577590	2413688	5.00 2500	25.0	100	250	1000
Toluene	CBNZ d5	Ave	11737 6806967	54332	233000	567644	2599312	1.00 500	5.00	20.0	50.0	200
trans-1,3-Dichloropropene	CBNZ d5	Ave	2892 2072032	13547	63544	154816	767053	1.00 500	5.00	20.0	50.0	200
Ethyl methacrylate	FB	Ave	2438 1758531	13419	57128	143758	662948	1.00 500	5.00	20.0	50.0	200
1,1,2-Trichloroethane	CBNZ d5	Ave	1843 1122821	8771	37373	89244	421830	1.00 500	5.00	20.0	50.0	200
Tetrachloroethene	CBNZ d5	Ave	2855 2210758	15718	72304	179645	842226	1.00 500	5.00	20.0	50.0	200
1,3-Dichloropropane	CBNZ d5	Ave	3078 2201800	15732	68760	166001	813291	1.00 500	5.00	20.0	50.0	200
2-Hexanone	BUT	Ave	7677 4286307	37761	144587	350447	1559833	5.00 2500	25.0	100	250	1000
n-Butyl acetate	CBNZ d5	Ave	567 355682	2977	11858	29542	130742	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromochloromethane	CBNZ d5	Ave	2157 1783151	11152	52162	129840	654699	1.00 500	5.00	20.0	50.0	200
1,2-Dibromoethane	CBNZ d5	Ave	2083 1461643	10029	44423	106273	525835	1.00 500	5.00	20.0	50.0	200
Chlorobenzene	CBNZ d5	Ave	7328 4701074	35162	153529	373708	1751197	1.00 500	5.00	20.0	50.0	200
Ethylbenzene	CBNZ d5	Ave	3557 2568007	18916	83605	206672	961271	1.00 500	5.00	20.0	50.0	200
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2425 1810623	13259	60652	151225	716022	1.00 500	5.00	20.0	50.0	200
m-Xylene & p-Xylene	CBNZ d5	Ave	4454 3210701	23389	102751	254964	1205750	1.00 500	5.00	20.0	50.0	200
n-Butyl acrylate	CBNZ d5	Ave	1420 954402	7496	31946	80461	360912	1.00 500	5.00	20.0	50.0	200
o-Xylene	CBNZ d5	Ave	4211 3058126	23145	102964	259960	1175273	1.00 500	5.00	20.0	50.0	200
Styrene	CBNZ d5	Ave	7005 5114906	35033	165089	403437	1918055	1.00 500	5.00	20.0	50.0	200
Amyl acetate (mixed isomers)	DCBd 4	Ave	3484 2068795	18448	74883	183657	777457	1.00 500	5.00	20.0	50.0	200
Bromoform	CBNZ d5	Ave	1416 1247173	7832	35555	91375	453168	1.00 500	5.00	20.0	50.0	200
Isopropylbenzene	CBNZ d5	Ave	10919 8558364	59433	272647	691012	3195648	1.00 500	5.00	20.0	50.0	200
Bromobenzene	DCBd 4	Ave	3632 2141920	16962	72930	175116	802321	1.00 500	5.00	20.0	50.0	200
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3096 1927334	15084	61877	153232	707134	1.00 500	5.00	20.0	50.0	200
N-Propylbenzene	DCBd 4	Ave	13123 9674966	69248	311248	775883	3624487	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichloropropane	DCBd 4	Ave	888 546729	4767	18086	44762	205203	1.00 500	5.00	20.0	50.0	200
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	721 429306	3423	14593	34907	163062	1.00 500	5.00	20.0	50.0	200
4-Ethyltoluene	DCBd 4	Ave	11196 7865293	60306	270918	669986	3061164	1.00 500	5.00	20.0	50.0	200
2-Chlorotoluene	DCBd 4	Ave	9234 6378583	46408	209179	519444	2465942	1.00 500	5.00	20.0	50.0	200
1,3,5-Trimethylbenzene	DCBd 4	Ave	8973 7325045	49254	232614	581299	2827991	1.00 500	5.00	20.0	50.0	200
4-Chlorotoluene	DCBd 4	Ave	8320 5385073	39896	176041	430354	2033741	1.00 500	5.00	20.0	50.0	200

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Butyl Methacrylate	DCBd 4	Ave	2831 2150871	14593	68737	177837	830131	1.00 500	5.00	20.0	50.0	200
tert-Butylbenzene	DCBd 4	Ave	6878 6381980	40633	198234	503905	2434819	1.00 500	5.00	20.0	50.0	200
1,2,4-Trimethylbenzene	DCBd 4	Ave	9873 7201053	50905	233361	578022	2769308	1.00 500	5.00	20.0	50.0	200
sec-Butylbenzene	DCBd 4	Ave	11103 9600067	64430	297086	757849	3622519	1.00 500	5.00	20.0	50.0	200
4-Isopropyltoluene	DCBd 4	Ave	10278 8141552	56601	268528	672322	3135406	1.00 500	5.00	20.0	50.0	200
1,3-Dichlorobenzene	DCBd 4	Ave	7002 3811943	30665	139141	337951	1559212	1.00 500	5.00	20.0	50.0	200
1,4-Dichlorobenzene	DCBd 4	Ave	7283 3647047	32166	141165	337445	1547892	1.00 500	5.00	20.0	50.0	200
Benzyl chloride	DCBd 4	Ave	822 739377	4075	23449	59910	281849	1.00 500	5.00	20.0	50.0	200
Indan	FB	Ave	11523 7657134	58495	264155	654487	3006315	1.00 500	5.00	20.0	50.0	200
p-Diethylbenzene	DCBd 4	Ave	6880 4543152	35557	161848	407096	1847274	1.00 500	5.00	20.0	50.0	200
n-Butylbenzene	DCBd 4	Ave	5469 3888448	29456	137209	333846	1545582	1.00 500	5.00	20.0	50.0	200
1,2-Dichlorobenzene	DCBd 4	Ave	6910 3854350	31116	136985	336193	1565915	1.00 500	5.00	20.0	50.0	200
1,2,4,5-Tetramethylbenzene	DCBd 4	Ave	9535 7449481	50732	236888	590989	2782042	1.00 500	5.00	20.0	50.0	200
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	735 523145	3865	15742	40999	190634	1.00 500	5.00	20.0	50.0	200
1,3,5-Trichlorobenzene	DCBd 4	Ave	6045 3311631	26543	120717	294702	1290906	1.00 500	5.00	20.0	50.0	200
1,2,4-Trichlorobenzene	DCBd 4	Ave	6000 3003150	23988	107248	266010	1152610	1.00 500	5.00	20.0	50.0	200
Hexachlorobutadiene	DCBd 4	Ave	2539 1733099	11439	53936	133828	626054	1.00 500	5.00	20.0	50.0	200
Naphthalene	DCBd 4	Ave	13912 7081073	55673	226926	576586	2647090	1.00 500	5.00	20.0	50.0	200
1,2,3-Trichlorobenzene	DCBd 4	Ave	6017 2948041	24375	103192	255969	1137586	1.00 500	5.00	20.0	50.0	200
Dibromofluoromethane (Surr)	FB	Ave	153885 190134	158651	178870	171783	188133	50.0 50.0	50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	133643 178843	135570	150505	144092	163380	50.0 50.0	50.0	50.0	50.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Edison Job No.: 460-157553-1 Analy Batch No.: 521982

SDG No.:

Instrument ID: CVOAMS4 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/24/2018 03:17 Calibration End Date: 05/24/2018 06:58 Calibration ID: 68782

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toluene-d8 (Surr)	CBNZ d5	Ave	488171 681058	507902	588372	568154	649194	50.0 50.0	50.0	50.0	50.0	50.0
4-Bromofluorobenzene	DCBd 4	Ave	194881 270442	201320	227389	219928	250845	50.0 50.0	50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50570.D
Lims ID: STD20
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 24-May-2018 03:17:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD20
Misc. Info.: 460-0072566-006
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:15:46 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 24-May-2018 14:23:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.588	1.588	0.000	88	51840	20.0	19.1	a
2 Dichlorodifluoromethane	85	1.618	1.618	0.000	99	111276	20.0	21.6	
3 Chloromethane	50	1.832	1.832	0.000	97	85888	20.0	19.9	
5 Butadiene	54	1.929	1.929	0.000	99	73505	20.0	22.0	
4 Vinyl chloride	62	1.935	1.935	0.000	96	76948	20.0	20.5	
6 Bromomethane	94	2.271	2.271	0.000	99	60378	20.0	21.3	
7 Chloroethane	64	2.338	2.338	0.000	99	44153	20.0	21.3	
8 Dichlorofluoromethane	67	2.576	2.576	0.000	88	121719	20.0	20.8	
10 Pentane	72	2.576	2.576	0.000	95	23629	40.0	42.9	
9 Trichlorofluoromethane	101	2.582	2.582	0.000	97	103642	20.0	22.1	
11 Ethyl ether	59	2.807	2.807	0.000	90	44318	20.0	20.0	
12 Ethanol	46	2.813	2.813	0.000	89	13992	800.0	851.6	
13 2-Methyl-1,3-butadiene	53	2.826	2.826	0.000	97	52508	20.0	21.8	
14 1,2-Dichloro-1,1,2-trifluo	117	2.905	2.905	0.000	91	62451	20.0	21.6	
16 Acrolein	56	3.015	3.015	0.000	98	126294	300.0	309.6	
15 1,1,2-Trichloro-1,2,2-trif	101	3.051	3.051	0.000	96	70324	20.0	21.8	
17 1,1-Dichloroethene	96	3.057	3.057	0.000	97	63488	20.0	20.5	
18 Acetone	43	3.161	3.161	0.000	87	73772	100.0	92.9	
19 Iodomethane	142	3.234	3.234	0.000	97	146663	20.0	19.9	
20 Carbon disulfide	76	3.271	3.271	0.000	99	213322	20.0	19.5	
21 Isopropyl alcohol	45	3.289	3.289	0.000	98	42304	200.0	187.2	
22 3-Chloro-1-propene	76	3.435	3.435	0.000	91	36557	20.0	19.7	
24 Methyl acetate	43	3.453	3.453	0.000	66	75883	40.0	37.7	
23 Cyclopentene	67	3.453	3.453	0.000	89	147132	20.0	21.5	
25 Acetonitrile	40	3.527	3.527	0.000	93	33124	200.0	212.2	M
26 Methylene Chloride	84	3.594	3.594	0.000	90	70526	20.0	19.2	
* 27 TBA-d9 (IS)	65	3.606	3.606	0.000	37	375623	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.691	3.691	0.000	97	77074	200.0	188.4	
29 Methyl tert-butyl ether	73	3.795	3.795	0.000	96	162185	20.0	19.9	
30 trans-1,2-Dichloroethene	96	3.819	3.819	0.000	93	68575	20.0	20.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.911	3.911	0.000	94	193011	200.0	204.7	
32 Hexane	57	4.008	4.008	0.000	93	86599	20.0	21.8	
33 Isopropyl ether	45	4.276	4.276	0.000	94	169496	20.0	20.1	
34 1,1-Dichloroethane	63	4.301	4.301	0.000	99	107176	20.0	20.5	
35 Vinyl acetate	86	4.331	4.331	0.000	99	21933	40.0	39.5	
36 2-Chloro-1,3-butadiene	88	4.356	4.356	0.000	90	57521	20.0	20.5	
37 Tert-butyl ethyl ether	59	4.667	4.667	0.000	90	163578	20.0	20.1	
* 38 2-Butanone-d5	46	4.898	4.898	0.000	0	296875	250.0	250.0	
39 2,2-Dichloropropane	79	4.910	4.910	0.000	87	29456	20.0	20.1	
40 cis-1,2-Dichloroethene	96	4.941	4.941	0.000	97	76464	20.0	19.6	
41 2-Butanone (MEK)	72	4.965	4.965	0.000	97	32154	100.0	99.2	
42 Ethyl acetate	70	4.984	4.984	0.000	96	11063	40.0	40.8	
43 Methyl acrylate	55	5.045	5.045	0.000	100	44482	20.0	19.4	
44 Propionitrile	54	5.130	5.130	0.000	98	74923	200.0	187.2	
45 Tetrahydrofuran	72	5.215	5.215	0.000	92	15167	40.0	41.3	
46 Chlorobromomethane	128	5.221	5.221	0.000	79	38728	20.0	20.0	
47 Methacrylonitrile	67	5.252	5.252	0.000	92	214037	200.0	193.6	
48 Chloroform	83	5.295	5.295	0.000	99	105604	20.0	20.1	
49 Cyclohexane	84	5.441	5.441	0.000	89	94650	20.0	21.3	
50 1,1,1-Trichloroethane	97	5.465	5.465	0.000	99	90801	20.0	20.3	
$ 51 Dibromofluoromethane (Surr	113	5.484	5.484	0.000	98	178870	50.0	50.8	
52 Carbon tetrachloride	117	5.605	5.605	0.000	96	80300	20.0	20.4	
53 1,1-Dichloropropene	75	5.648	5.648	0.000	97	82919	20.0	20.2	
54 Isobutyl alcohol	43	5.837	5.837	0.000	94	106069	500.0	521.4	
55 Benzene	78	5.886	5.886	0.000	97	230801	20.0	20.3	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.910	5.910	0.000	96	150505	50.0	49.2	
57 Tert-amyl methyl ether	87	5.983	5.983	0.000	92	51376	20.0	19.9	
58 Isopropyl acetate	43	5.983	5.983	0.000	98	150922	20.0	19.1	
59 1,2-Dichloroethane	62	6.008	6.008	0.000	97	69869	20.0	19.4	
60 n-Heptane	57	6.099	6.099	0.000	90	47482	20.0	21.9	
* 61 Fluorobenzene	96	6.252	6.252	0.000	99	594011	50.0	50.0	
62 n-Butanol	56	6.660	6.660	0.000	86	40577	500.0	483.6	
63 Trichloroethene	95	6.691	6.691	0.000	95	62149	20.0	19.8	
64 Methylcyclohexane	83	6.837	6.837	0.000	93	112721	20.0	21.1	
65 Ethyl acrylate	73	6.855	6.855	0.000	98	3759	20.0	18.1	
66 1,2-Dichloropropane	63	7.026	7.026	0.000	92	54846	20.0	19.9	
* 67 1,4-Dioxane-d8	96	7.093	7.093	0.000	0	32046	1000.0	1000.0	
68 Methyl methacrylate	100	7.123	7.123	0.000	86	26999	40.0	38.9	
69 1,4-Dioxane	88	7.154	7.154	0.000	84	14499	400.0	422.3	
70 Dibromomethane	93	7.166	7.166	0.000	90	36202	20.0	19.1	
71 n-Propyl acetate	43	7.191	7.191	0.000	98	62968	20.0	18.7	
72 Dichlorobromomethane	83	7.331	7.331	0.000	99	69546	20.0	19.5	
73 2-Nitropropane	41	7.660	7.660	0.000	99	20333	40.0	34.0	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	95	17272	20.0	19.0	
75 Epichlorohydrin	57	7.757	7.757	0.000	98	94212	400.0	398.2	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	89	78527	20.0	20.4	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	96	232160	100.0	101.8	
$ 78 Toluene-d8 (Surr)	98	8.026	8.026	0.000	99	588372	50.0	51.8	
79 Toluene	91	8.087	8.087	0.000	93	233000	20.0	19.7	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	98	63544	20.0	19.7	
81 Ethyl methacrylate	69	8.404	8.404	0.000	89	57128	20.0	19.1	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	37373	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.580	8.580	0.000	96	72304	20.0	20.4	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	90	68760	20.0	19.7	
85 2-Hexanone	43	8.751	8.751	0.000	96	144587	100.0	98.5	
86 n-Butyl acetate	73	8.830	8.830	0.000	98	11858	20.0	19.5	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	52162	20.0	19.6	
88 Ethylene Dibromide	107	8.989	8.989	0.000	99	44423	20.0	19.5	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	84	428419	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	97	153529	20.0	19.7	
91 Ethylbenzene	106	9.446	9.446	0.000	98	83605	20.0	20.1	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	96	60652	20.0	20.3	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	100	102751	20.0	19.8	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	31946	20.0	19.9	
95 o-Xylene	106	9.873	9.873	0.000	95	102964	20.0	20.3	
96 Styrene	104	9.891	9.891	0.000	96	165089	20.0	20.2	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	74883	20.0	20.3	
98 Bromoform	173	10.068	10.068	0.000	99	35555	20.0	19.4	
99 Isopropylbenzene	105	10.153	10.153	0.000	95	272647	20.0	20.1	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	227389	50.0	51.4	
101 Bromobenzene	156	10.428	10.428	0.000	88	72930	20.0	20.0	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	98	61877	20.0	19.4	
103 N-Propylbenzene	91	10.470	10.470	0.000	100	311248	20.0	20.2	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	97	18086	20.0	19.3	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	80	14593	20.0	19.9	
106 4-Ethyltoluene	105	10.556	10.556	0.000	99	270918	20.0	20.6	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	209179	20.0	20.1	
108 1,3,5-Trimethylbenzene	105	10.604	10.604	0.000	94	232614	20.0	20.4	
109 4-Chlorotoluene	91	10.653	10.653	0.000	95	176041	20.0	19.9	
110 Butyl Methacrylate	87	10.659	10.659	0.000	89	68737	20.0	20.1	
111 tert-Butylbenzene	119	10.842	10.842	0.000	96	198234	20.0	20.6	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	97	233361	20.0	20.2	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	297086	20.0	20.2	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	98	268528	20.0	20.7	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	99	139141	20.0	20.2	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	94	253065	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	96	141165	20.0	20.3	
118 Benzyl chloride	126	11.299	11.299	0.000	100	23449	20.0	21.2	
119 2,3-Dihydroindene	117	11.360	11.360	0.000	94	264155	20.0	19.6	
120 p-Diethylbenzene	119	11.385	11.385	0.000	94	161848	20.0	20.6	a
121 n-Butylbenzene	92	11.403	11.403	0.000	93	137209	20.0	21.0	
122 1,2-Dichlorobenzene	146	11.482	11.482	0.000	98	136985	20.0	19.9	
123 1,2,4,5-Tetramethylbenzene	119	12.019	12.019	0.000	98	236888	20.0	20.3	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	91	15742	20.0	19.0	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	97	120717	20.0	20.4	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	107248	20.0	19.8	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	97	53936	20.0	19.9	
128 Naphthalene	128	13.195	13.195	0.000	99	226926	20.0	18.5	
129 1,2,3-Trichlorobenzene	180	13.488	13.488	0.000	95	103192	20.0	19.3	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.8	
S 131 1,3-Dichloropropene, Total	100				0		40.0	40.1	
S 132 Xylenes, Total	100				0		40.0	40.1	
S 133 Total BTEX	1				0		100.0	100.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	3.00	Units: uL	
GASES Li_00261	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:15:53 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50570.D

Injection Date: 24-May-2018 03:17:30 Instrument ID: CVOAMS4 Operator ID:

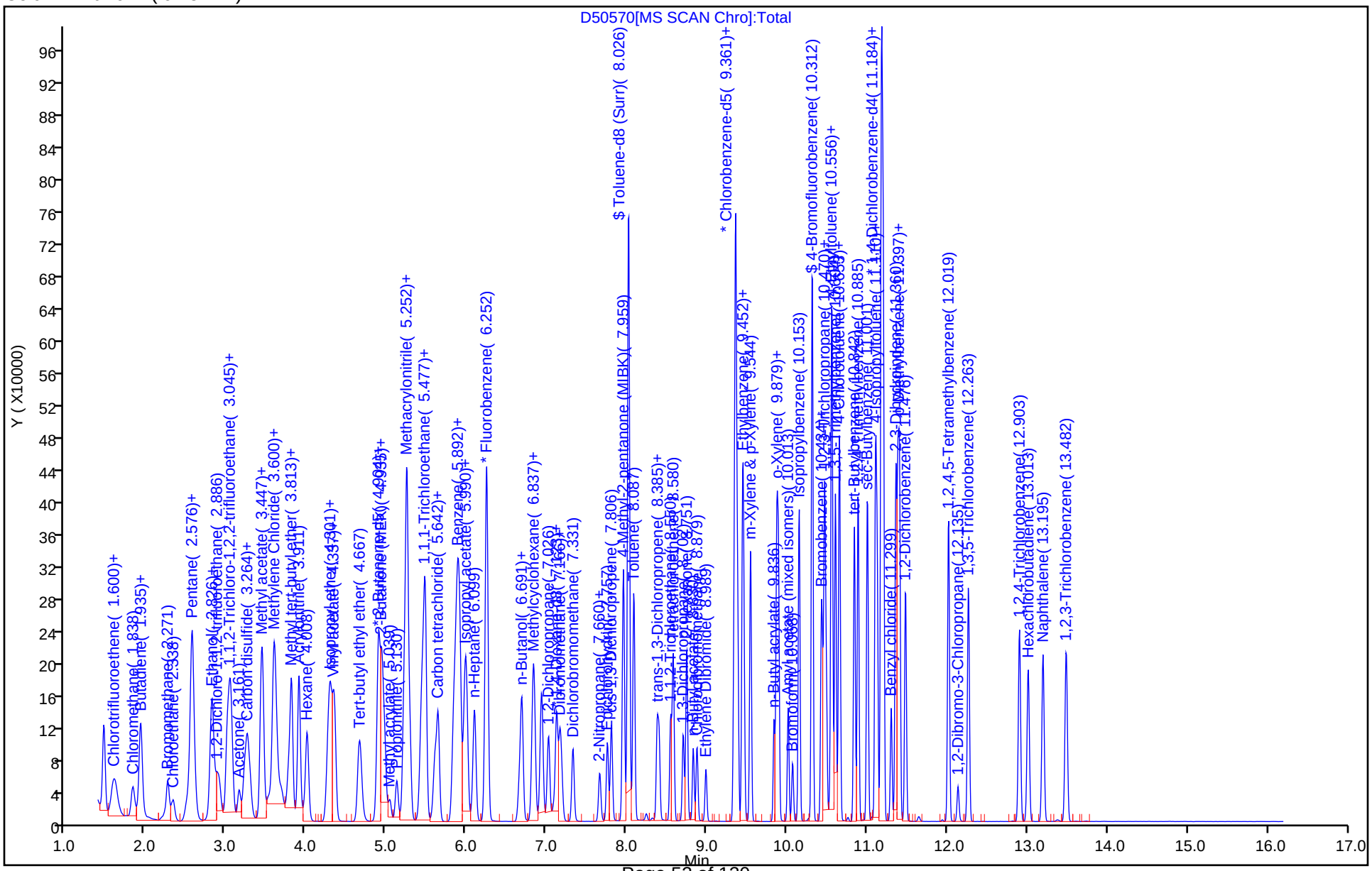
Lims ID: STD20 Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50571.D
Lims ID: STD50
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-May-2018 03:41:30 ALS Bottle#: 8 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD50
Misc. Info.: 460-0072566-007
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:16:03 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 24-May-2018 14:31:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.576	1.588	-0.012	88	129716	50.0	49.0	a
2 Dichlorodifluoromethane	85	1.612	1.618	-0.006	99	277031	50.0	56.2	
3 Chloromethane	50	1.820	1.832	-0.012	98	210267	50.0	50.9	
5 Butadiene	54	1.917	1.929	-0.012	99	178770	50.0	55.9	
4 Vinyl chloride	62	1.923	1.935	-0.012	97	188664	50.0	52.4	
6 Bromomethane	94	2.252	2.271	-0.019	99	136540	50.0	50.1	
7 Chloroethane	64	2.326	2.338	-0.012	99	98106	50.0	49.3	
10 Pentane	72	2.563	2.576	-0.013	96	55423	100.0	105.0	
8 Dichlorofluoromethane	67	2.557	2.576	-0.019	98	289595	50.0	51.5	
9 Trichlorofluoromethane	101	2.569	2.582	-0.013	98	243157	50.0	54.1	
11 Ethyl ether	59	2.801	2.807	-0.006	90	103110	50.0	48.7	
12 Ethanol	46	2.807	2.813	-0.006	93	32110	2000.0	1950.7	
13 2-Methyl-1,3-butadiene	53	2.819	2.826	-0.007	97	125885	50.0	54.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.886	2.905	-0.019	83	147431	50.0	53.1	
16 Acrolein	56	3.008	3.015	-0.006	96	162199	400.0	396.8	
15 1,1,2-Trichloro-1,2,2-trif	101	3.039	3.051	-0.012	96	170113	50.0	55.1	
17 1,1-Dichloroethene	96	3.045	3.057	-0.012	96	153076	50.0	51.5	
18 Acetone	43	3.161	3.161	0.000	87	174367	250.0	227.6	
19 Iodomethane	142	3.222	3.234	-0.012	98	353315	50.0	50.1	
20 Carbon disulfide	76	3.258	3.271	-0.013	99	523214	50.0	49.9	
21 Isopropyl alcohol	45	3.295	3.289	0.006	99	102326	500.0	451.9	
22 3-Chloro-1-propene	76	3.429	3.435	-0.006	90	90626	50.0	51.0	
23 Cyclopentene	67	3.447	3.453	-0.006	95	355222	50.0	54.2	
24 Methyl acetate	43	3.453	3.453	0.000	99	179511	100.0	93.0	
25 Acetonitrile	40	3.527	3.527	0.000	98	81361	500.0	518.7	M
26 Methylene Chloride	84	3.588	3.594	-0.006	89	166987	50.0	47.5	
* 27 TBA-d9 (IS)	65	3.612	3.606	0.006	37	376337	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.691	3.691	0.000	99	186550	500.0	455.2	
29 Methyl tert-butyl ether	73	3.789	3.795	-0.006	98	389198	50.0	49.9	
30 trans-1,2-Dichloroethene	96	3.813	3.819	-0.006	93	163066	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.905	3.911	-0.006	94	466544	500.0	493.7	
32 Hexane	57	4.008	4.008	0.000	92	207772	50.0	54.6	
33 Isopropyl ether	45	4.276	4.276	0.000	92	403060	50.0	49.8	
34 1,1-Dichloroethane	63	4.301	4.301	0.000	99	254520	50.0	50.8	
35 Vinyl acetate	86	4.331	4.331	0.000	99	52912	100.0	99.5	
36 2-Chloro-1,3-butadiene	88	4.356	4.356	0.000	89	146245	50.0	54.5	
37 Tert-butyl ethyl ether	59	4.661	4.667	-0.006	90	389422	50.0	49.9	
* 38 2-Butanone-d5	46	4.898	4.898	0.000	0	286440	250.0	250.0	
39 2,2-Dichloropropane	79	4.910	4.910	0.000	90	70627	50.0	50.4	
40 cis-1,2-Dichloroethene	96	4.941	4.941	0.000	98	179955	50.0	48.1	
41 2-Butanone (MEK)	72	4.965	4.965	0.000	98	76285	250.0	243.9	
42 Ethyl acetate	70	4.984	4.984	0.000	96	27602	100.0	105.6	
43 Methyl acrylate	55	5.045	5.045	0.000	100	106586	50.0	48.5	
44 Propionitrile	54	5.130	5.130	0.000	98	181499	500.0	473.3	
45 Tetrahydrofuran	72	5.215	5.215	0.000	92	36463	100.0	103.0	
46 Chlorobromomethane	128	5.215	5.221	-0.006	78	93465	50.0	50.4	
47 Methacrylonitrile	67	5.252	5.252	0.000	92	505392	500.0	477.0	
48 Chloroform	83	5.288	5.295	-0.007	99	252925	50.0	50.3	
49 Cyclohexane	84	5.441	5.441	0.000	89	231691	50.0	54.5	
50 1,1,1-Trichloroethane	97	5.459	5.465	-0.006	98	221031	50.0	51.7	
$ 51 Dibromofluoromethane (Surr	113	5.484	5.484	0.000	99	171783	50.0	50.9	
52 Carbon tetrachloride	117	5.605	5.605	0.000	97	199618	50.0	53.0	
53 1,1-Dichloropropene	75	5.642	5.648	-0.006	97	201599	50.0	51.4	
54 Isobutyl alcohol	43	5.843	5.837	0.006	93	260942	1250.0	1280.2	
55 Benzene	78	5.886	5.886	0.000	96	553633	50.0	50.6	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.910	5.910	0.000	97	144092	50.0	49.1	
58 Isopropyl acetate	43	5.983	5.983	0.000	98	369010	50.0	48.6	
57 Tert-amyl methyl ether	87	5.983	5.983	0.000	91	124945	50.0	50.5	
59 1,2-Dichloroethane	62	6.008	6.008	0.000	97	163158	50.0	47.3	
60 n-Heptane	57	6.099	6.099	0.000	90	117681	50.0	56.8	
* 61 Fluorobenzene	96	6.252	6.252	0.000	99	569229	50.0	50.0	
62 n-Butanol	56	6.660	6.660	0.000	87	101741	1250.0	1210.2	
63 Trichloroethene	95	6.691	6.691	0.000	95	149164	50.0	49.6	
64 Methylcyclohexane	83	6.831	6.837	-0.006	93	278598	50.0	54.3	
65 Ethyl acrylate	73	6.855	6.855	0.000	97	9831	50.0	49.5	
66 1,2-Dichloropropane	63	7.026	7.026	0.000	92	133646	50.0	50.7	
* 67 1,4-Dioxane-d8	96	7.099	7.093	0.006	0	32030	1000.0	1000.0	
68 Methyl methacrylate	100	7.123	7.123	0.000	85	67515	100.0	101.5	
69 1,4-Dioxane	88	7.160	7.154	0.006	86	33070	1000.0	963.8	
70 Dibromomethane	93	7.166	7.166	0.000	90	87933	50.0	48.5	
71 n-Propyl acetate	43	7.191	7.191	-0.001	98	154104	50.0	47.7	
72 Dichlorobromomethane	83	7.331	7.331	0.000	99	169643	50.0	49.5	
73 2-Nitropropane	41	7.660	7.660	0.000	98	51808	100.0	90.4	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	93	41650	50.0	47.7	
75 Epichlorohydrin	57	7.757	7.757	0.000	99	227850	1000.0	998.1	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	89	191905	50.0	51.6	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	96	577590	250.0	262.5	
$ 78 Toluene-d8 (Surr)	98	8.026	8.026	0.000	99	568154	50.0	51.8	
79 Toluene	91	8.087	8.087	0.000	93	567644	50.0	49.7	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	98	154816	50.0	49.8	
81 Ethyl methacrylate	69	8.404	8.404	0.000	89	143758	50.0	50.3	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	89244	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.580	8.580	0.000	97	179645	50.0	52.5	
84 1,3-Dichloropropane	76	8.702	8.702	0.000	90	166001	50.0	49.3	
85 2-Hexanone	43	8.745	8.751	-0.006	96	350447	250.0	247.4	
86 n-Butyl acetate	73	8.830	8.830	0.000	99	29542	50.0	50.3	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	129840	50.0	50.6	
88 Ethylene Dibromide	107	8.989	8.989	0.000	98	106273	50.0	48.4	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	84	413301	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	97	373708	50.0	49.7	
91 Ethylbenzene	106	9.446	9.446	0.000	98	206672	50.0	51.4	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	96	151225	50.0	52.6	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	100	254964	50.0	51.0	
94 n-Butyl acrylate	73	9.836	9.836	0.000	97	80461	50.0	51.9	
95 o-Xylene	106	9.873	9.873	0.000	95	259960	50.0	53.0	
96 Styrene	104	9.891	9.891	0.000	96	403437	50.0	51.3	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	183657	50.0	50.8	
98 Bromoform	173	10.068	10.068	0.000	99	91375	50.0	51.7	
99 Isopropylbenzene	105	10.153	10.153	0.000	95	691012	50.0	52.9	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	219928	50.0	50.7	
101 Bromobenzene	156	10.428	10.428	0.000	95	175116	50.0	48.9	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	98	153232	50.0	49.0	
103 N-Propylbenzene	91	10.470	10.470	0.000	100	775883	50.0	51.2	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	97	44762	50.0	48.7	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	80	34907	50.0	48.6	
106 4-Ethyltoluene	105	10.556	10.556	0.000	98	669986	50.0	51.9	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	519444	50.0	50.8	
108 1,3,5-Trimethylbenzene	105	10.604	10.604	0.000	94	581299	50.0	51.9	
109 4-Chlorotoluene	91	10.653	10.653	0.000	96	430354	50.0	49.6	
110 Butyl Methacrylate	87	10.659	10.659	0.000	88	177837	50.0	53.0	
111 tert-Butylbenzene	119	10.842	10.842	0.000	96	503905	50.0	53.3	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	97	578022	50.0	51.0	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	757849	50.0	52.6	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	98	672322	50.0	52.8	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	99	337951	50.0	50.1	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	92	248223	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	95	337445	50.0	49.6	
118 Benzyl chloride	126	11.299	11.299	0.000	100	59910	50.0	55.2	
119 2,3-Dihydroindene	117	11.360	11.360	0.000	94	654487	50.0	50.6	
120 p-Diethylbenzene	119	11.385	11.385	0.000	95	407096	50.0	52.7	
121 n-Butylbenzene	92	11.403	11.403	0.000	96	333846	50.0	52.1	
122 1,2-Dichlorobenzene	146	11.482	11.482	0.000	99	336193	50.0	49.9	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.019	-0.006	98	590989	50.0	51.8	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	90	40999	50.0	50.5	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	97	294702	50.0	50.8	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	266010	50.0	50.0	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	97	133828	50.0	50.2	
128 Naphthalene	128	13.195	13.195	0.000	99	576586	50.0	47.9	
129 1,2,3-Trichlorobenzene	180	13.482	13.488	-0.006	96	255969	50.0	48.8	
S 130 1,2-Dichloroethene, Total	100				0		100.0	98.2	
S 131 1,3-Dichloropropene, Total	100				0		100.0	101.4	
S 132 Xylenes, Total	100				0		100.0	104.0	
S 133 Total BTEX	1				0		250.0	255.7	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	4.00	Units: uL	
GASES Li_00261	Amount Added:	5.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	5.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:16:05 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50571.D

Injection Date: 24-May-2018 03:41:30 Instrument ID: CVOAMS4 Operator ID:

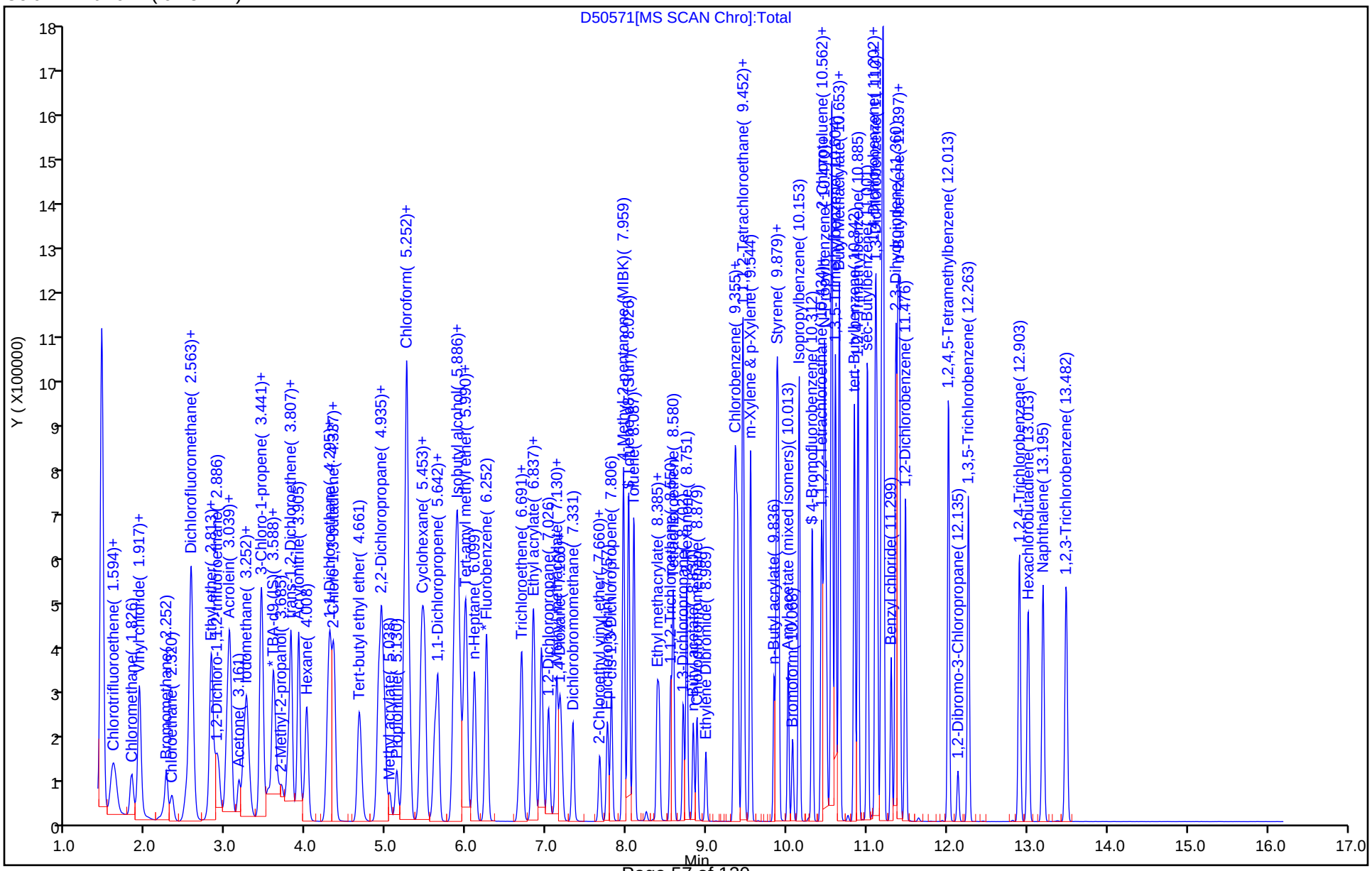
Lims ID: STD50 Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50572.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-May-2018 04:06:30 ALS Bottle#: 9 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Misc. Info.: 460-0072566-008
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:16:18 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 24-May-2018 14:32:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.582	1.588	-0.006	88	629546	200.0	215.9	a
2 Dichlorodifluoromethane	85	1.618	1.618	0.000	99	1219507	200.0	226.2	
3 Chloromethane	50	1.826	1.832	-0.006	97	941546	200.0	208.1	
5 Butadiene	54	1.923	1.929	-0.006	98	782370	200.0	223.4	
4 Vinyl chloride	62	1.935	1.935	0.000	97	824215	200.0	209.0	
6 Bromomethane	94	2.265	2.271	-0.006	99	601386	200.0	201.8	
7 Chloroethane	64	2.332	2.338	-0.006	99	434877	200.0	199.8	
8 Dichlorofluoromethane	67	2.569	2.576	-0.007	99	1229327	200.0	199.9	
10 Pentane	72	2.569	2.576	-0.007	96	227851	400.0	394.4	
9 Trichlorofluoromethane	101	2.576	2.582	-0.006	98	1057489	200.0	215.0	
11 Ethyl ether	59	2.801	2.807	-0.006	97	441241	200.0	190.2	
12 Ethanol	46	2.807	2.813	-0.006	81	124145	8000.0	7590.4	
13 2-Methyl-1,3-butadiene	53	2.826	2.826	0.000	97	511747	200.0	202.5	
14 1,2-Dichloro-1,1,2-trifluo	117	2.899	2.905	-0.006	88	619337	200.0	203.9	
16 Acrolein	56	3.008	3.015	-0.006	96	222352	500.0	547.5	
15 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.051	-0.006	97	735194	200.0	217.4	
17 1,1-Dichloroethene	96	3.057	3.057	0.000	97	670994	200.0	206.1	
18 Acetone	43	3.155	3.161	-0.006	90	709888	1000.0	883.6	
19 Iodomethane	142	3.234	3.234	0.000	97	1560915	200.0	202.2	
20 Carbon disulfide	76	3.264	3.271	-0.007	99	2453996	200.0	214.0	
21 Isopropyl alcohol	45	3.289	3.289	0.000	99	422976	2000.0	1880.0	
22 3-Chloro-1-propene	76	3.429	3.435	-0.006	89	396543	200.0	204.0	
24 Methyl acetate	43	3.453	3.453	0.000	96	716046	400.0	338.8	
23 Cyclopentene	67	3.453	3.453	0.000	91	1447012	200.0	201.7	
25 Acetonitrile	40	3.527	3.527	0.000	97	314331	2000.0	1990.5	M
26 Methylene Chloride	84	3.594	3.594	0.000	89	707346	200.0	183.7	
* 27 TBA-d9 (IS)	65	3.612	3.606	0.006	39	373926	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.691	3.691	0.000	99	750932	2000.0	1844.1	
29 Methyl tert-butyl ether	73	3.789	3.795	-0.006	96	1665068	200.0	194.8	
30 trans-1,2-Dichloroethene	96	3.813	3.819	-0.006	93	703473	200.0	197.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.905	3.911	-0.006	94	1871876	2000.0	1993.8	
32 Hexane	57	4.008	4.008	0.000	92	895853	200.0	215.2	
33 Isopropyl ether	45	4.276	4.276	0.000	94	1670715	200.0	188.5	
34 1,1-Dichloroethane	63	4.301	4.301	0.000	99	1069581	200.0	194.9	
35 Vinyl acetate	86	4.331	4.331	0.000	99	242928	400.0	417.5	
36 2-Chloro-1,3-butadiene	88	4.356	4.356	0.000	89	584417	200.0	198.9	
37 Tert-butyl ethyl ether	59	4.667	4.667	0.000	90	1658142	200.0	194.1	
* 38 2-Butanone-d5	46	4.898	4.898	0.000	0	300360	250.0	250.0	
39 2,2-Dichloropropane	79	4.917	4.910	0.007	93	301478	200.0	196.4	
40 cis-1,2-Dichloroethene	96	4.941	4.941	0.000	98	767468	200.0	187.4	
41 2-Butanone (MEK)	72	4.965	4.965	0.000	99	327751	1000.0	999.4	
42 Ethyl acetate	70	4.984	4.984	0.000	97	119580	400.0	436.1	
43 Methyl acrylate	55	5.038	5.045	-0.007	100	458185	200.0	190.5	
44 Propionitrile	54	5.130	5.130	0.000	98	717215	2000.0	1708.6	
45 Tetrahydrofuran	72	5.209	5.215	-0.006	94	144158	400.0	388.4	
46 Chlorobromomethane	128	5.221	5.221	0.000	79	400329	200.0	197.2	
47 Methacrylonitrile	67	5.258	5.252	0.006	91	2138694	2000.0	1844.0	
48 Chloroform	83	5.295	5.295	0.000	99	1093579	200.0	198.8	
49 Cyclohexane	84	5.441	5.441	0.000	89	1008217	200.0	216.6	
50 1,1,1-Trichloroethane	97	5.465	5.465	0.000	98	970750	200.0	207.3	
$ 51 Dibromofluoromethane (Surr	113	5.484	5.484	0.000	99	188133	50.0	50.9	
52 Carbon tetrachloride	117	5.605	5.605	0.000	97	878242	200.0	213.0	
53 1,1-Dichloropropene	75	5.642	5.648	-0.006	97	894255	200.0	208.2	
54 Isobutyl alcohol	43	5.837	5.837	0.000	92	1117461	5000.0	5517.9	
55 Benzene	78	5.886	5.886	0.000	96	2435679	200.0	188.0	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.910	5.910	0.000	97	163380	50.0	50.9	
57 Tert-amyl methyl ether	87	5.983	5.983	0.000	91	545486	200.0	201.6	
58 Isopropyl acetate	43	5.983	5.983	0.000	97	1580271	200.0	190.2	
59 1,2-Dichloroethane	62	6.008	6.008	0.000	96	731084	200.0	193.7	
60 n-Heptane	57	6.099	6.099	0.000	90	513182	200.0	226.1	
* 61 Fluorobenzene	96	6.252	6.252	0.000	99	623089	50.0	50.0	
62 n-Butanol	56	6.660	6.660	0.000	86	461341	5000.0	5522.9	
63 Trichloroethene	95	6.691	6.691	0.000	95	662608	200.0	201.3	
64 Methylcyclohexane	83	6.837	6.837	0.000	93	1230752	200.0	219.3	
65 Ethyl acrylate	73	6.855	6.855	0.000	98	49782	200.0	229.0	
66 1,2-Dichloropropane	63	7.026	7.026	0.000	92	596439	200.0	206.8	
* 67 1,4-Dioxane-d8	96	7.093	7.093	0.000	0	36465	1000.0	1000.0	
68 Methyl methacrylate	100	7.130	7.123	0.007	86	311645	400.0	428.1	
69 1,4-Dioxane	88	7.160	7.154	0.006	86	145311	4000.0	3719.7	
70 Dibromomethane	93	7.166	7.166	0.000	90	399314	200.0	201.2	
71 n-Propyl acetate	43	7.191	7.191	-0.001	98	702666	200.0	198.7	
72 Dichlorobromomethane	83	7.331	7.331	0.000	99	816495	200.0	217.8	
73 2-Nitropropane	41	7.660	7.660	0.000	98	237598	400.0	378.9	
74 2-Chloroethyl vinyl ether	63	7.666	7.666	0.000	94	206212	200.0	215.9	
75 Epichlorohydrin	57	7.764	7.757	0.007	98	1021667	4000.0	4268.0	
76 cis-1,3-Dichloropropene	75	7.812	7.806	0.006	89	934401	200.0	212.3	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	95	2413688	1000.0	1046.3	
$ 78 Toluene-d8 (Surr)	98	8.026	8.026	0.000	99	649194	50.0	50.0	
79 Toluene	91	8.093	8.087	0.006	93	2599312	200.0	192.2	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	97	767053	200.0	208.3	
81 Ethyl methacrylate	69	8.404	8.404	0.000	91	662948	200.0	211.8	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	421830	200.0	194.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.580	8.580	0.000	97	842226	200.0	207.8	
84 1,3-Dichloropropane	76	8.709	8.702	0.006	90	813291	200.0	204.0	
85 2-Hexanone	43	8.745	8.751	-0.006	95	1559833	1000.0	1050.1	
86 n-Butyl acetate	73	8.830	8.830	0.000	99	130742	200.0	188.2	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	654699	200.0	215.8	
88 Ethylene Dibromide	107	8.989	8.989	0.000	99	525835	200.0	202.4	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	87	489144	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	97	1751197	200.0	196.9	
91 Ethylbenzene	106	9.446	9.446	0.000	98	961271	200.0	201.9	
92 1,1,1,2-Tetrachloroethane	131	9.458	9.458	0.000	97	716022	200.0	210.3	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	100	1205750	200.0	203.8	
94 n-Butyl acrylate	73	9.836	9.836	0.000	98	360912	200.0	196.6	
95 o-Xylene	106	9.873	9.873	0.000	95	1175273	200.0	202.5	
96 Styrene	104	9.897	9.891	0.006	97	1918055	200.0	206.0	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	777457	200.0	186.5	
98 Bromoform	173	10.068	10.068	0.000	99	453168	200.0	216.5	
99 Isopropylbenzene	105	10.153	10.153	0.000	95	3195648	200.0	206.7	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	250845	50.0	50.1	
101 Bromobenzene	156	10.428	10.428	0.000	88	802321	200.0	194.2	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	98	707134	200.0	195.8	
103 N-Propylbenzene	91	10.470	10.470	0.000	100	3624487	200.0	207.4	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	97	205203	200.0	193.6	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	89	163062	200.0	196.8	
106 4-Ethyltoluene	105	10.556	10.556	0.000	99	3061164	200.0	205.6	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	2465942	200.0	209.0	
108 1,3,5-Trimethylbenzene	105	10.604	10.604	0.000	94	2827991	200.0	218.8	
109 4-Chlorotoluene	91	10.653	10.653	0.000	96	2033741	200.0	203.0	
110 Butyl Methacrylate	87	10.659	10.659	0.000	89	830131	200.0	214.5	
111 tert-Butylbenzene	119	10.842	10.842	0.000	96	2434819	200.0	223.4	
112 1,2,4-Trimethylbenzene	105	10.891	10.885	0.006	96	2769308	200.0	211.8	
113 sec-Butylbenzene	105	11.007	11.001	0.006	99	3622519	200.0	217.7	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	98	3135406	200.0	213.5	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	98	1559212	200.0	200.4	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	90	286402	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	97	1547892	200.0	197.1	
118 Benzyl chloride	126	11.299	11.299	0.000	100	281849	200.0	225.0	
119 2,3-Dihydroindene	117	11.360	11.360	0.000	94	3006315	200.0	212.5	
120 p-Diethylbenzene	119	11.385	11.385	0.000	94	1847274	200.0	207.4	
121 n-Butylbenzene	92	11.403	11.403	0.000	96	1545582	200.0	208.9	
122 1,2-Dichlorobenzene	146	11.482	11.482	0.000	98	1565915	200.0	201.4	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.019	-0.006	98	2782042	200.0	211.2	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	91	190634	200.0	203.6	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	97	1290906	200.0	192.7	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	1152610	200.0	187.8	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	96	626054	200.0	203.7	
128 Naphthalene	128	13.195	13.195	0.000	99	2647090	200.0	190.6	
129 1,2,3-Trichlorobenzene	180	13.482	13.488	-0.006	96	1137586	200.0	188.1	
S 130 1,2-Dichloroethene, Total	100				0		400.0	385.0	
S 131 1,3-Dichloropropene, Total	100				0		400.0	420.6	
S 132 Xylenes, Total	100				0		400.0	406.4	
S 133 Total BTEX	1				0		1000.0	988.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	5.00	Units: uL	
GASES Li_00261	Amount Added:	20.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	20.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:16:20 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50572.D

Injection Date: 24-May-2018 04:06:30 Instrument ID: CVOAMS4 Operator ID:

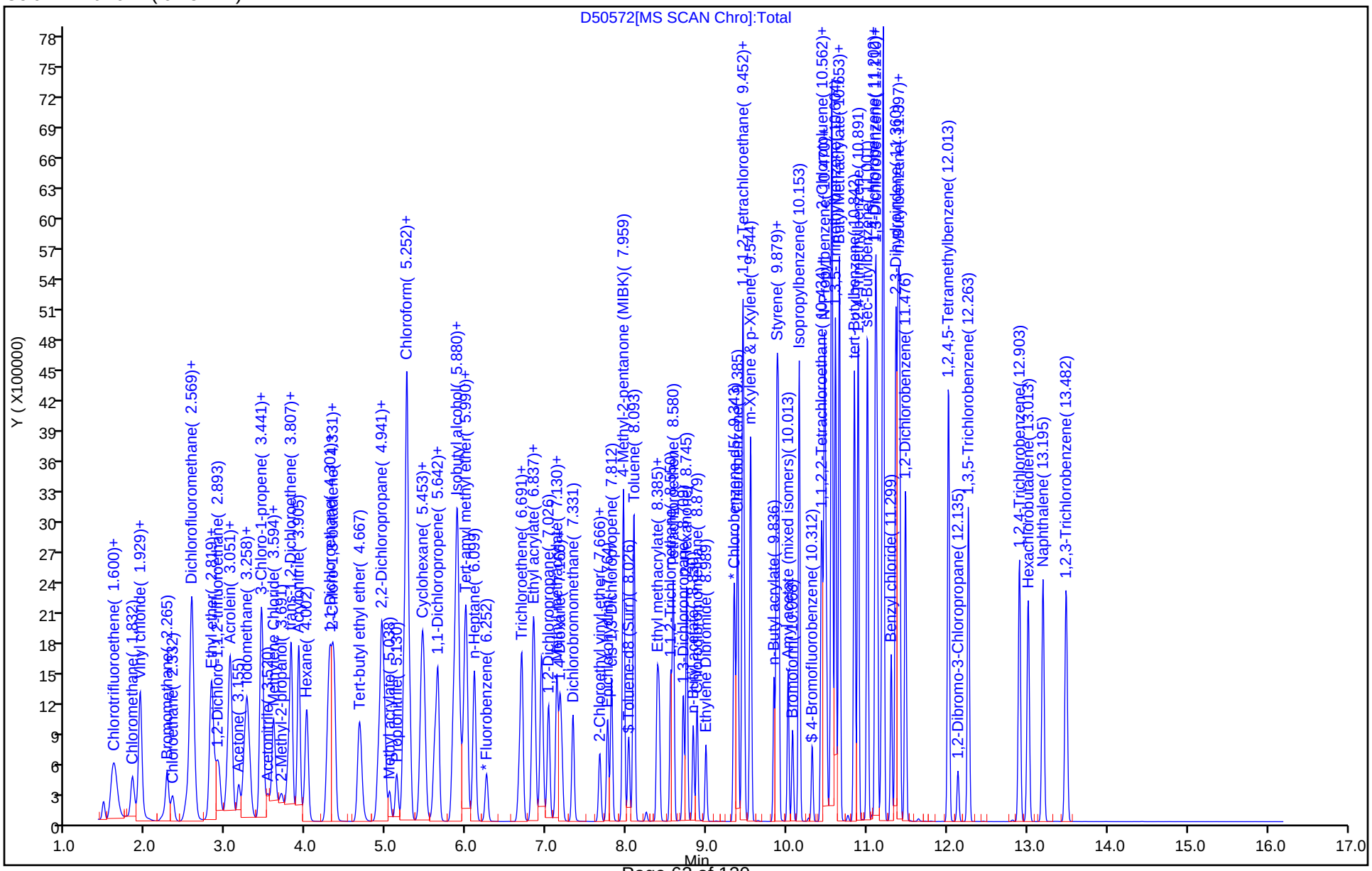
Lims ID: STD200 Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50573.D
Lims ID: STD500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-May-2018 04:30:30 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD500
Misc. Info.: 460-0072566-009
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:16:35 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: starzecm Date: 24-May-2018 12:09:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.582	1.588	-0.006	89	1604210	500.0	537.6	a
2 Dichlorodifluoromethane	85	1.612	1.618	-0.006	99	3072813	500.0	557.7	
3 Chloromethane	50	1.826	1.832	-0.006	97	2382616	500.0	515.3	
5 Butadiene	54	1.929	1.929	0.000	99	1977175	500.0	552.6	
4 Vinyl chloride	62	1.929	1.935	-0.006	97	2064698	500.0	512.2	
6 Bromomethane	94	2.259	2.271	-0.012	98	1335908	500.0	438.6	
7 Chloroethane	64	2.332	2.338	-0.006	99	1027571	500.0	461.9	
10 Pentane	72	2.582	2.576	0.006	96	580308	1000.0	983.0	
8 Dichlorofluoromethane	67	2.570	2.576	-0.006	99	3028144	500.0	481.9	
9 Trichlorofluoromethane	101	2.576	2.582	-0.006	97	2585959	500.0	514.5	
11 Ethyl ether	59	2.801	2.807	-0.006	91	1045436	500.0	441.1	
12 Ethanol	46	2.807	2.813	-0.006	97	332609	20000	19356	
13 2-Methyl-1,3-butadiene	53	2.826	2.826	0.000	97	1270947	500.0	492.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.905	2.905	0.000	86	1533409	500.0	494.1	
16 Acrolein	56	3.015	3.015	0.001	96	278170	600.0	652.0	
15 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.051	-0.006	97	1864500	500.0	539.5	
17 1,1-Dichloroethene	96	3.063	3.057	0.006	97	1722609	500.0	517.9	
18 Acetone	43	3.155	3.161	-0.006	87	1833937	2500.0	2155.7	
19 Iodomethane	142	3.240	3.234	0.006	99	3903922	500.0	495.0	
20 Carbon disulfide	76	3.277	3.271	0.006	99	6453101	500.0	550.7	
21 Isopropyl alcohol	45	3.295	3.289	0.006	99	1189444	5000.0	5032.0	
22 3-Chloro-1-propene	76	3.429	3.435	-0.006	90	1015606	500.0	511.4	
23 Cyclopentene	67	3.454	3.453	0.001	93	3764201	500.0	513.4	
24 Methyl acetate	43	3.447	3.453	-0.006	98	1853592	1000.0	858.3	
25 Acetonitrile	40	3.527	3.527	0.000	99	851927	5000.0	5001.3	M
26 Methylene Chloride	84	3.594	3.594	0.000	88	1775251	500.0	451.2	
* 27 TBA-d9 (IS)	65	3.618	3.606	0.012	32	392853	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.697	3.691	0.006	99	1984893	5000.0	4639.5	
29 Methyl tert-butyl ether	73	3.789	3.795	-0.006	97	4113411	500.0	471.0	
30 trans-1,2-Dichloroethene	96	3.813	3.819	-0.006	93	1770727	500.0	486.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.911	3.911	0.000	96	4918651	5000.0	4986.5	
32 Hexane	57	4.002	4.008	-0.006	93	2255500	500.0	530.3	
33 Isopropyl ether	45	4.277	4.276	0.001	94	4182777	500.0	461.8	
34 1,1-Dichloroethane	63	4.301	4.301	0.000	99	2655194	500.0	473.5	
35 Vinyl acetate	86	4.331	4.331	0.000	99	611050	1000.0	1027.7	
36 2-Chloro-1,3-butadiene	88	4.356	4.356	0.000	89	1493075	500.0	497.3	
37 Tert-butyl ethyl ether	59	4.667	4.667	0.000	90	4180508	500.0	478.9	
* 38 2-Butanone-d5	46	4.898	4.898	0.000	0	318069	250.0	250.0	a
39 2,2-Dichloropropane	79	4.923	4.910	0.013	94	762596	500.0	486.0	
40 cis-1,2-Dichloroethene	96	4.941	4.941	0.000	98	1923602	500.0	459.6	
41 2-Butanone (MEK)	72	4.965	4.965	0.000	99	872234	2500.0	2511.6	
42 Ethyl acetate	70	4.984	4.984	0.000	97	317610	1000.0	1093.9	
43 Methyl acrylate	55	5.039	5.045	-0.006	100	1115826	500.0	454.1	
44 Propionitrile	54	5.130	5.130	0.000	98	1891359	5000.0	4409.2	
45 Tetrahydrofuran	72	5.209	5.215	-0.006	86	382795	1000.0	974.0	
46 Chlorobromomethane	128	5.221	5.221	0.000	78	983947	500.0	474.2	
47 Methacrylonitrile	67	5.264	5.252	0.012	91	5619082	5000.0	4740.9	
48 Chloroform	83	5.295	5.295	0.000	99	2763821	500.0	491.7	
49 Cyclohexane	84	5.447	5.441	0.006	92	2617813	500.0	550.4	
50 1,1,1-Trichloroethane	97	5.465	5.465	0.000	98	2504752	500.0	523.3	
$ 51 Dibromofluoromethane (Surr	113	5.484	5.484	0.000	99	190134	50.0	50.3	
52 Carbon tetrachloride	117	5.612	5.605	0.007	97	2295302	500.0	544.8	
53 1,1-Dichloropropene	75	5.642	5.648	-0.006	97	2348154	500.0	534.9	
54 Isobutyl alcohol	43	5.843	5.837	0.006	92	3086249	12500	14505	
55 Benzene	78	5.886	5.886	0.000	96	6239816	500.0	442.6	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.910	5.910	0.000	89	178843	50.0	54.5	
58 Isopropyl acetate	43	5.990	5.983	0.007	95	3994549	500.0	470.4	
57 Tert-amyl methyl ether	87	5.990	5.983	0.007	84	1403274	500.0	507.4	
59 1,2-Dichloroethane	62	6.008	6.008	0.000	97	1827823	500.0	473.9	
60 n-Heptane	57	6.099	6.099	0.000	90	1332635	500.0	574.6	
* 61 Fluorobenzene	96	6.252	6.252	0.000	99	636731	50.0	50.0	
62 n-Butanol	56	6.666	6.660	0.006	86	1304803	12500	14868	
63 Trichloroethene	95	6.691	6.691	0.000	95	1704102	500.0	506.7	
64 Methylcyclohexane	83	6.837	6.837	0.000	91	3219589	500.0	561.5	
65 Ethyl acrylate	73	6.855	6.855	0.000	98	129838	500.0	584.6	
66 1,2-Dichloropropane	63	7.026	7.026	0.000	93	1528900	500.0	518.6	
* 67 1,4-Dioxane-d8	96	7.099	7.093	0.006	0	40937	1000.0	1000.0	a
68 Methyl methacrylate	100	7.130	7.123	0.007	86	832987	1000.0	1119.8	
69 1,4-Dioxane	88	7.160	7.154	0.006	86	408607	10000	9317.0	
70 Dibromomethane	93	7.166	7.166	0.000	91	1023468	500.0	504.6	
71 n-Propyl acetate	43	7.191	7.191	0.000	98	1918559	500.0	531.0	
72 Dichlorobromomethane	83	7.331	7.331	0.000	99	2149454	500.0	561.0	
73 2-Nitropropane	41	7.660	7.660	0.000	97	650742	1000.0	1015.4	
74 2-Chloroethyl vinyl ether	63	7.672	7.666	0.006	93	577619	500.0	591.8	
75 Epichlorohydrin	57	7.764	7.757	0.007	98	2788038	10000	10999	
76 cis-1,3-Dichloropropene	75	7.812	7.806	0.006	89	2447658	500.0	511.0	
77 4-Methyl-2-pentanone (MIBK	43	7.959	7.959	0.000	95	6163448	2500.0	2523.0	
$ 78 Toluene-d8 (Surr)	98	8.026	8.026	0.000	99	681058	50.0	48.3	
79 Toluene	91	8.093	8.087	0.006	93	6806967	500.0	462.7	
80 trans-1,3-Dichloropropene	75	8.379	8.379	0.000	98	2072032	500.0	517.2	
81 Ethyl methacrylate	69	8.404	8.404	0.000	91	1758531	500.0	549.7	
82 1,1,2-Trichloroethane	83	8.550	8.550	0.000	96	1122821	500.0	475.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.581	8.580	0.001	96	2210758	500.0	501.4	
84 1,3-Dichloropropane	76	8.709	8.702	0.007	89	2201800	500.0	507.6	
85 2-Hexanone	43	8.751	8.751	0.000	95	4286307	2500.0	2725.0	
86 n-Butyl acetate	73	8.831	8.830	0.001	99	355682	500.0	470.6	
87 Chlorodibromomethane	129	8.879	8.879	0.000	98	1783151	500.0	540.1	
88 Ethylene Dibromide	107	8.989	8.989	0.000	98	1461643	500.0	517.0	
* 89 Chlorobenzene-d5	117	9.361	9.361	0.000	85	532238	50.0	50.0	
90 Chlorobenzene	112	9.385	9.385	0.000	97	4701074	500.0	485.9	
91 Ethylbenzene	106	9.446	9.446	0.000	98	2568007	500.0	495.7	
92 1,1,1,2-Tetrachloroethane	131	9.465	9.458	0.007	97	1810623	500.0	488.7	
93 m-Xylene & p-Xylene	106	9.550	9.544	0.006	100	3210701	500.0	498.8	
94 n-Butyl acrylate	73	9.836	9.836	0.000	98	954402	500.0	477.8	
95 o-Xylene	106	9.873	9.873	0.000	95	3058126	500.0	484.4	
96 Styrene	104	9.897	9.891	0.006	97	5114906	500.0	504.9	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	92	2068795	500.0	473.1	
98 Bromoform	173	10.074	10.068	0.006	99	1247173	500.0	547.6	
99 Isopropylbenzene	105	10.153	10.153	0.000	95	8558364	500.0	508.8	
$ 100 4-Bromofluorobenzene	174	10.318	10.318	0.000	0	270442	50.0	51.5	
101 Bromobenzene	156	10.434	10.428	0.006	91	2141920	500.0	494.2	
102 1,1,2,2-Tetrachloroethane	83	10.446	10.446	0.000	99	1927334	500.0	508.8	
103 N-Propylbenzene	91	10.470	10.470	0.000	100	9674966	500.0	528.0	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	98	546729	500.0	491.7	
105 trans-1,4-Dichloro-2-buten	53	10.495	10.495	0.000	89	429306	500.0	493.9	
106 4-Ethyltoluene	105	10.556	10.556	0.000	99	7865293	500.0	503.7	
107 2-Chlorotoluene	91	10.562	10.562	0.000	96	6378583	500.0	515.4	
108 1,3,5-Trimethylbenzene	105	10.605	10.604	0.001	93	7325045	500.0	540.5	
109 4-Chlorotoluene	91	10.653	10.653	0.000	96	5385073	500.0	512.4	
110 Butyl Methacrylate	87	10.659	10.659	0.000	88	2150871	500.0	529.8	
111 tert-Butylbenzene	119	10.842	10.842	0.000	94	6381980	500.0	558.3	
112 1,2,4-Trimethylbenzene	105	10.891	10.885	0.006	96	7201053	500.0	525.0	
113 sec-Butylbenzene	105	11.007	11.001	0.006	99	9600067	500.0	550.1	
114 4-Isopropyltoluene	119	11.104	11.104	0.000	98	8141552	500.0	528.5	
115 1,3-Dichlorobenzene	146	11.129	11.129	0.000	98	3811943	500.0	467.0	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	89	300394	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	96	3647047	500.0	442.7	
118 Benzyl chloride	126	11.300	11.299	0.001	100	739377	500.0	562.7	
119 2,3-Dihydroindene	117	11.361	11.360	0.001	94	7657134	500.0	529.6	
120 p-Diethylbenzene	119	11.385	11.385	0.000	94	4543152	500.0	486.3	
121 n-Butylbenzene	92	11.409	11.403	0.006	97	3888448	500.0	501.0	
122 1,2-Dichlorobenzene	146	11.482	11.482	0.000	98	3854350	500.0	472.7	
123 1,2,4,5-Tetramethylbenzene	119	12.019	12.019	0.000	97	7449481	500.0	539.1	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	95	523145	500.0	532.7	
125 1,3,5-Trichlorobenzene	180	12.269	12.263	0.006	98	3311631	500.0	471.3	
126 1,2,4-Trichlorobenzene	180	12.903	12.903	0.000	94	3003150	500.0	466.6	
127 Hexachlorobutadiene	225	13.013	13.013	0.000	95	1733099	500.0	537.7	
128 Naphthalene	128	13.196	13.195	0.001	99	7081073	500.0	486.2	
129 1,2,3-Trichlorobenzene	180	13.488	13.488	0.000	96	2948041	500.0	464.7	
S 130 1,2-Dichloroethene, Total	100				0		1000.0	946.4	
S 131 1,3-Dichloropropene, Total	100				0		1000.0	1028.2	
S 132 Xylenes, Total	100				0		1000.0	983.2	
S 133 Total BTEX	1				0		2500.0	2384.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	6.00	Units: uL	
GASES Li_00261	Amount Added:	50.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	50.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:16:37 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50573.D

Injection Date: 24-May-2018 04:30:30 Instrument ID: CVOAMS4 Operator ID:

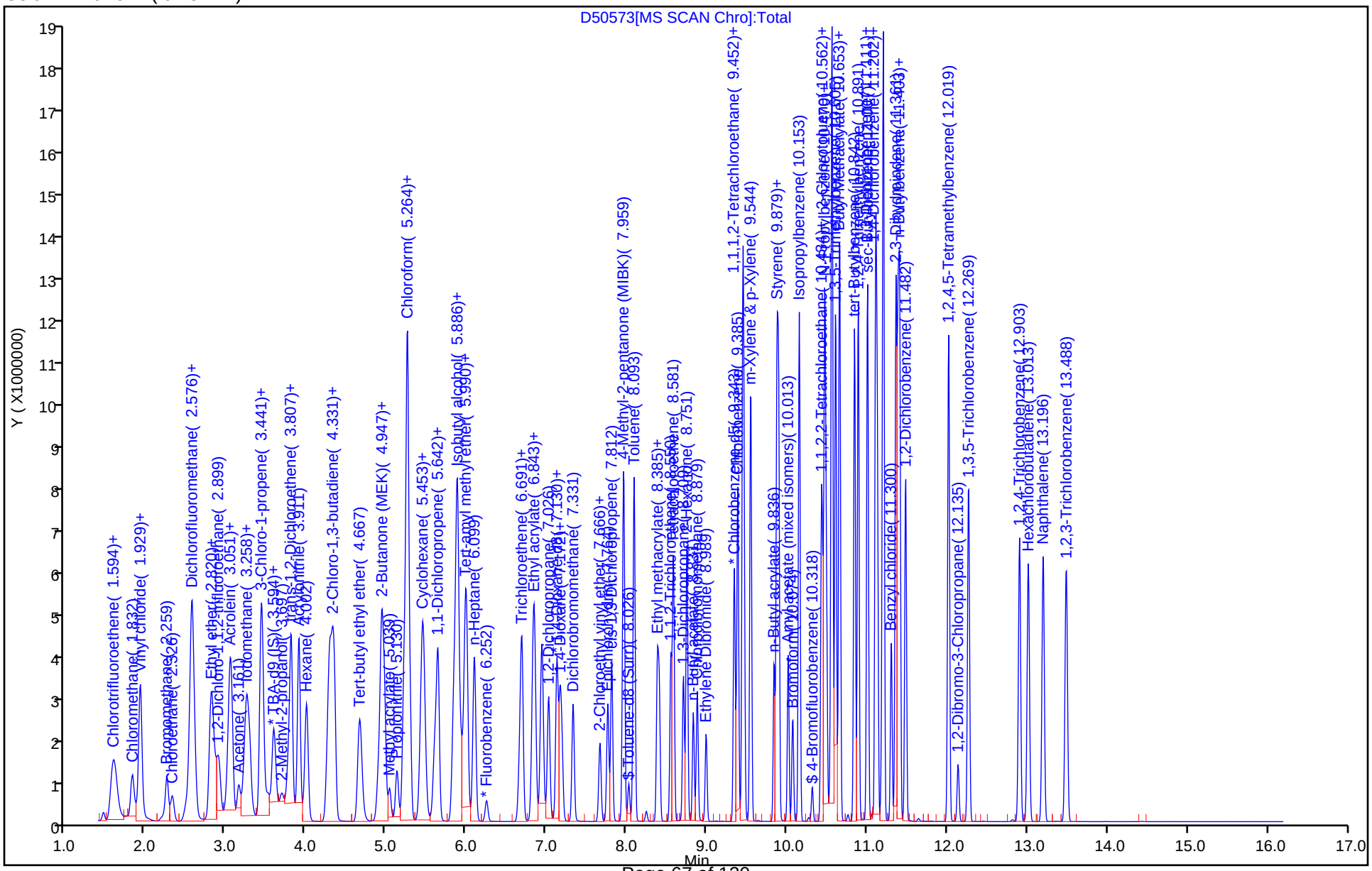
Lims ID: STD500 Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 10

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50578.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-May-2018 06:33:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 460-0072566-014
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:16:51 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 24-May-2018 14:36:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.564	1.588	-0.024	85	1452	1.00	1.02	a
2 Dichlorodifluoromethane	85	1.613	1.618	-0.006	96	2981	1.00	0.6402	
3 Chloromethane	50	1.820	1.832	-0.012	97	3766	1.00	0.9636	
5 Butadiene	54	1.917	1.929	-0.012	94	2153	1.00	0.7120	
4 Vinyl chloride	62	1.923	1.935	-0.012	94	3111	1.00	0.9133	
6 Bromomethane	94	2.265	2.271	-0.006	98	2521	1.00	0.9794	
7 Chloroethane	64	2.326	2.338	-0.012	98	1760	1.00	0.9361	
8 Dichlorofluoromethane	67	2.557	2.576	-0.019	94	5013	1.00	0.9438	
10 Pentane	72	2.570	2.576	-0.006	95	921	2.00	1.85	
9 Trichlorofluoromethane	101	2.570	2.582	-0.012	92	3238	1.00	0.7623	
11 Ethyl ether	59	2.795	2.807	-0.012	93	2302	1.00	1.15	
12 Ethanol	46	2.820	2.813	0.007	69	807	40.0	40.1	
13 2-Methyl-1,3-butadiene	53	2.813	2.826	-0.013	94	1795	1.00	0.8225	
14 1,2-Dichloro-1,1,2-trifluo	117	2.887	2.905	-0.018	69	2268	1.00	0.8647	
16 Acrolein	56	3.002	3.015	-0.012	96	43660	100.0	87.3	
15 1,1,2-Trichloro-1,2,2-trif	101	3.039	3.051	-0.012	64	2053	1.00	0.7029	
17 1,1-Dichloroethene	96	3.045	3.057	-0.012	95	2529	1.00	0.8996	
18 Acetone	43	3.155	3.161	-0.006	88	6097	5.00	6.91	
19 Iodomethane	142	3.228	3.234	-0.006	97	6557	1.00	0.9837	
20 Carbon disulfide	76	3.259	3.271	-0.012	99	8719	1.00	0.8803	
21 Isopropyl alcohol	45	3.277	3.289	-0.012	97	3344	10.0	12.1	
22 3-Chloro-1-propene	76	3.429	3.435	-0.006	97	1591	1.00	0.9479	
24 Methyl acetate	43	3.448	3.453	-0.005	96	4669	2.00	2.56	
23 Cyclopentene	67	3.448	3.453	-0.005	94	4992	1.00	0.8056	
25 Acetonitrile	40	3.533	3.527	0.006	77	3465	10.0	18.1	Ma
26 Methylene Chloride	84	3.582	3.594	-0.012	94	4090	1.00	1.23	
* 27 TBA-d9 (IS)	65	3.600	3.606	-0.006	69	460407	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.679	3.691	-0.012	91	6497	10.0	13.0	
29 Methyl tert-butyl ether	73	3.783	3.795	-0.012	95	7743	1.00	1.05	
30 trans-1,2-Dichloroethene	96	3.807	3.819	-0.012	94	3056	1.00	0.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.899	3.911	-0.012	95	11680	10.0	10.1	
32 Hexane	57	3.996	4.008	-0.012	91	2756	1.00	0.7667	
33 Isopropyl ether	45	4.264	4.276	-0.012	86	8145	1.00	1.06	
34 1,1-Dichloroethane	63	4.295	4.301	-0.006	98	4690	1.00	0.9897	
35 Vinyl acetate	86	4.325	4.331	-0.006	99	931	2.00	1.85	
36 2-Chloro-1,3-butadiene	88	4.350	4.356	-0.006	89	2162	1.00	0.8521	
37 Tert-butyl ethyl ether	59	4.655	4.667	-0.012	90	7636	1.00	1.04	
* 38 2-Butanone-d5	46	4.892	4.898	-0.006	0	329753	250.0	250.0	
39 2,2-Dichloropropane	79	4.905	4.910	-0.005	47	1417	1.00	1.07	
40 cis-1,2-Dichloroethene	96	4.935	4.941	-0.006	98	4216	1.00	1.19	
41 2-Butanone (MEK)	72	4.953	4.965	-0.012	97	1902	5.00	5.28	
42 Ethyl acetate	70	4.990	4.984	0.006	95	491	2.00	1.63	
43 Methyl acrylate	55	5.039	5.045	-0.006	97	2280	1.00	1.10	a
44 Propionitrile	54	5.124	5.130	-0.006	96	4504	10.0	12.4	
45 Tetrahydrofuran	72	5.209	5.215	-0.006	65	853	2.00	2.09	
46 Chlorobromomethane	128	5.215	5.221	-0.006	89	1844	1.00	1.05	
47 Methacrylonitrile	67	5.252	5.252	0.000	92	11200	10.0	11.2	
48 Chloroform	83	5.283	5.295	-0.012	98	4843	1.00	1.02	
49 Cyclohexane	84	5.435	5.441	-0.006	92	2932	1.00	0.7294	
50 1,1,1-Trichloroethane	97	5.453	5.465	-0.012	97	3577	1.00	0.8843	
$ 51 Dibromofluoromethane (Surr	113	5.478	5.484	-0.006	98	153885	50.0	48.2	
52 Carbon tetrachloride	117	5.600	5.605	-0.005	93	2902	1.00	0.8150	
53 1,1-Dichloropropene	75	5.636	5.648	-0.012	94	3339	1.00	0.9000	
54 Isobutyl alcohol	43	5.837	5.837	0.000	93	4850	25.0	19.5	
55 Benzene	78	5.880	5.886	-0.006	96	10921	1.00	1.08	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.904	5.910	-0.006	98	133643	50.0	48.2	
57 Tert-amyl methyl ether	87	5.978	5.983	-0.005	90	2345	1.00	1.00	
58 Isopropyl acetate	43	5.978	5.983	-0.005	93	8190	1.00	1.14	
59 1,2-Dichloroethane	62	5.996	6.008	-0.012	95	3718	1.00	1.14	
60 n-Heptane	57	6.093	6.099	-0.006	88	1394	1.00	0.7112	
* 61 Fluorobenzene	96	6.246	6.252	-0.006	99	538132	50.0	50.0	
62 n-Butanol	56	6.654	6.660	-0.006	90	2225	25.0	21.6	
63 Trichloroethene	95	6.685	6.691	-0.006	96	2937	1.00	1.03	
64 Methylcyclohexane	83	6.825	6.837	-0.012	94	3677	1.00	0.7587	
65 Ethyl acrylate	73	6.849	6.855	-0.006	96	143	1.00	0.7618	
66 1,2-Dichloropropane	63	7.014	7.026	-0.012	86	2322	1.00	0.9320	
* 67 1,4-Dioxane-d8	96	7.087	7.093	-0.006	0	37163	1000.0	1000.0	
68 Methyl methacrylate	100	7.124	7.123	0.001	92	1042	2.00	1.66	
69 1,4-Dioxane	88	7.154	7.154	0.000	36	820	20.0	20.6	
70 Dibromomethane	93	7.154	7.166	-0.012	86	1817	1.00	1.06	
71 n-Propyl acetate	43	7.185	7.191	-0.006	97	3180	1.00	1.04	
72 Dichlorobromomethane	83	7.325	7.331	-0.006	98	2988	1.00	0.9228	
73 2-Nitropropane	41	7.654	7.660	-0.006	90	1443	2.00	2.66	
74 2-Chloroethyl vinyl ether	63	7.660	7.666	-0.006	61	721	1.00	0.8740	
75 Epichlorohydrin	57	7.758	7.757	0.001	99	4903	20.0	18.7	
76 cis-1,3-Dichloropropene	75	7.800	7.806	-0.006	92	3088	1.00	0.9030	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.959	-0.006	96	11849	5.00	4.68	
$ 78 Toluene-d8 (Surr)	98	8.020	8.026	-0.006	100	488171	50.0	48.4	
79 Toluene	91	8.087	8.087	0.000	93	11737	1.00	1.12	
80 trans-1,3-Dichloropropene	75	8.373	8.379	-0.006	94	2892	1.00	1.01	
81 Ethyl methacrylate	69	8.398	8.404	-0.006	91	2438	1.00	0.9017	
82 1,1,2-Trichloroethane	83	8.544	8.550	-0.006	96	1843	1.00	1.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.575	8.580	-0.005	95	2855	1.00	0.9070	
84 1,3-Dichloropropane	76	8.703	8.702	0.001	93	3078	1.00	0.99	
85 2-Hexanone	43	8.745	8.751	-0.006	97	7677	5.00	4.71	
86 n-Butyl acetate	73	8.831	8.830	0.001	97	567	1.00	1.05	
87 Chlorodibromomethane	129	8.873	8.879	-0.006	98	2157	1.00	0.9151	
88 Ethylene Dibromide	107	8.983	8.989	-0.006	95	2083	1.00	1.03	
* 89 Chlorobenzene-d5	117	9.355	9.361	-0.006	86	379988	50.0	50.0	
90 Chlorobenzene	112	9.379	9.385	-0.006	97	7328	1.00	1.06	
91 Ethylbenzene	106	9.440	9.446	-0.006	98	3557	1.00	0.9618	
92 1,1,1,2-Tetrachloroethane	131	9.459	9.458	0.001	95	2425	1.00	0.9167	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	99	4454	1.00	0.9693	
94 n-Butyl acrylate	73	9.837	9.836	0.000	98	1420	1.00	1.00	
95 o-Xylene	106	9.873	9.873	0.000	95	4211	1.00	0.9342	
96 Styrene	104	9.891	9.891	0.000	98	7005	1.00	0.9685	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	94	3484	1.00	1.02	
98 Bromoform	173	10.068	10.068	0.000	93	1416	1.00	0.8709	
99 Isopropylbenzene	105	10.147	10.153	-0.006	95	10919	1.00	0.9093	
$ 100 4-Bromofluorobenzene	174	10.312	10.318	-0.006	0	194881	50.0	47.6	
101 Bromobenzene	156	10.428	10.428	0.000	86	3632	1.00	1.07	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.446	-0.006	98	3096	1.00	1.05	
103 N-Propylbenzene	91	10.464	10.470	-0.006	99	13123	1.00	0.9186	
104 1,2,3-Trichloropropane	110	10.483	10.489	-0.006	97	888	1.00	1.02	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.495	-0.006	83	721	1.00	1.06	
106 4-Ethyltoluene	105	10.556	10.556	0.000	98	11196	1.00	0.9197	
107 2-Chlorotoluene	91	10.562	10.562	0.000	98	9234	1.00	0.9571	
108 1,3,5-Trimethylbenzene	105	10.605	10.604	0.001	94	8973	1.00	0.8492	
109 4-Chlorotoluene	91	10.647	10.653	-0.006	97	8320	1.00	1.02	
110 Butyl Methacrylate	87	10.660	10.659	0.001	91	2831	1.00	0.8944	
111 tert-Butylbenzene	119	10.842	10.842	0.000	96	6878	1.00	0.7717	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	96	9873	1.00	0.9233	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	11103	1.00	0.8161	
114 4-Isopropyltoluene	119	11.105	11.104	0.001	98	10278	1.00	0.8558	
115 1,3-Dichlorobenzene	146	11.123	11.129	-0.006	97	7002	1.00	1.10	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	93	234188	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	92	7283	1.00	1.13	
118 Benzyl chloride	126	11.300	11.299	0.001	99	822	1.00	0.8025	
119 2,3-Dihydroindene	117	11.355	11.360	-0.006	94	11523	1.00	0.9431	
120 p-Diethylbenzene	119	11.385	11.385	0.000	95	6880	1.00	0.9447	
121 n-Butylbenzene	92	11.403	11.403	0.000	97	5469	1.00	0.9038	
122 1,2-Dichlorobenzene	146	11.476	11.482	-0.006	97	6910	1.00	1.09	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.019	-0.006	99	9535	1.00	0.8851	
124 1,2-Dibromo-3-Chloropropan	157	12.129	12.135	-0.006	92	735	1.00	0.9600	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	96	6045	1.00	1.10	
126 1,2,4-Trichlorobenzene	180	12.897	12.903	-0.006	95	6000	1.00	1.20	
127 Hexachlorobutadiene	225	13.007	13.013	-0.006	96	2539	1.00	1.01	
128 Naphthalene	128	13.190	13.195	-0.005	99	13912	1.00	1.23	
129 1,2,3-Trichlorobenzene	180	13.482	13.488	-0.006	93	6017	1.00	1.22	
S 130 1,2-Dichloroethene, Total	100				0		2.00	2.19	
S 131 1,3-Dichloropropene, Total	100				0		2.00	1.91	
S 132 Xylenes, Total	100				0		2.00	1.90	
S 133 Total BTEX	1				0		5.00	5.07	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	10.00	Units: uL	
GASES Li_00261	Amount Added:	1.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	1.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:16:59 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50578.D

Injection Date: 24-May-2018 06:33:30 Instrument ID: CVOAMS4 Operator ID:

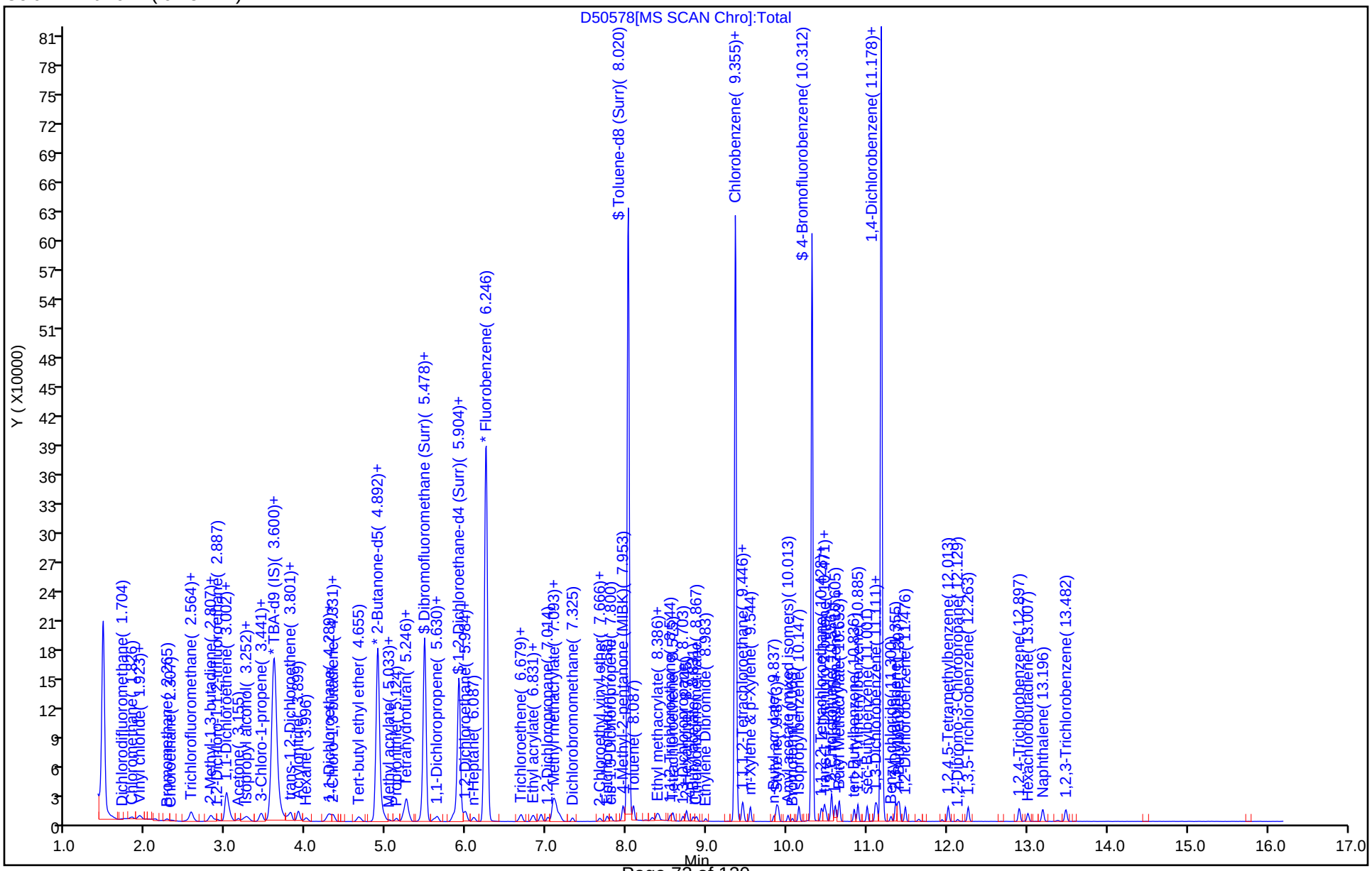
Lims ID: STD1 Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-May-2018 06:58:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 460-0072566-015
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 24-May-2018 15:17:09 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: delpolitov Date: 24-May-2018 14:44:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.576	1.588	-0.012	88	10215	5.00	4.44	a
2 Dichlorodifluoromethane	85	1.619	1.618	0.001	98	21420	5.00	4.53	
3 Chloromethane	50	1.826	1.832	-0.006	99	18900	5.00	4.76	
5 Butadiene	54	1.917	1.929	-0.012	97	14615	5.00	4.76	
4 Vinyl chloride	62	1.930	1.935	-0.005	96	16377	5.00	4.74	
6 Bromomethane	94	2.265	2.271	-0.006	98	13965	5.00	5.34	
7 Chloroethane	64	2.332	2.338	-0.006	99	10411	5.00	5.45	
10 Pentane	72	2.564	2.576	-0.012	96	4991	10.0	9.85	
8 Dichlorofluoromethane	67	2.564	2.576	-0.012	99	27607	5.00	5.12	
9 Trichlorofluoromethane	101	2.576	2.582	-0.006	96	20393	5.00	4.73	
11 Ethyl ether	59	2.795	2.807	-0.012	88	10599	5.00	5.21	
12 Ethanol	46	2.795	2.813	-0.018	81	3914	200.0	208.3	
13 2-Methyl-1,3-butadiene	53	2.820	2.826	-0.006	95	11082	5.00	5.00	
14 1,2-Dichloro-1,1,2-trifluo	117	2.887	2.905	-0.018	92	13130	5.00	4.93	
16 Acrolein	56	3.002	3.015	-0.012	97	85949	200.0	184.2	
15 1,1,2-Trichloro-1,2,2-trif	101	3.045	3.051	-0.006	66	13930	5.00	4.70	
17 1,1-Dichloroethene	96	3.045	3.057	-0.012	97	14004	5.00	4.91	
18 Acetone	43	3.155	3.161	-0.006	87	22328	25.0	25.8	
19 Iodomethane	142	3.222	3.234	-0.012	96	34388	5.00	5.08	
20 Carbon disulfide	76	3.259	3.271	-0.012	99	48967	5.00	4.87	
21 Isopropyl alcohol	45	3.283	3.289	-0.006	98	13010	50.0	50.3	
22 3-Chloro-1-propene	76	3.423	3.435	-0.012	89	8537	5.00	5.01	
23 Cyclopentene	67	3.441	3.453	-0.012	89	31459	5.00	5.00	
24 Methyl acetate	43	3.448	3.453	-0.005	98	21199	10.0	11.4	
25 Acetonitrile	40	3.527	3.527	0.000	97	12253	50.0	68.7	M
26 Methylene Chloride	84	3.588	3.594	-0.006	90	17533	5.00	5.19	
* 27 TBA-d9 (IS)	65	3.600	3.606	-0.006	37	429511	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.679	3.691	-0.012	99	23431	50.0	50.1	
29 Methyl tert-butyl ether	73	3.783	3.795	-0.012	96	39055	5.00	5.21	
30 trans-1,2-Dichloroethene	96	3.807	3.819	-0.012	92	16076	5.00	5.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.899	3.911	-0.012	94	53097	50.0	49.2	
32 Hexane	57	4.002	4.008	-0.006	94	16654	5.00	4.56	
33 Isopropyl ether	45	4.271	4.276	-0.005	94	41659	5.00	5.36	
34 1,1-Dichloroethane	63	4.295	4.301	-0.006	99	25223	5.00	5.24	
35 Vinyl acetate	86	4.325	4.331	-0.006	99	5195	10.0	10.2	
36 2-Chloro-1,3-butadiene	88	4.350	4.356	-0.006	88	13420	5.00	5.21	
37 Tert-butyl ethyl ether	59	4.655	4.667	-0.012	90	38729	5.00	5.17	
* 38 2-Butanone-d5	46	4.892	4.898	-0.006	0	323552	250.0	250.0	
39 2,2-Dichloropropane	79	4.911	4.910	0.001	47	6491	5.00	4.82	
40 cis-1,2-Dichloroethene	96	4.935	4.941	-0.006	98	18164	5.00	5.06	
41 2-Butanone (MEK)	72	4.966	4.965	0.001	97	8582	25.0	24.3	
42 Ethyl acetate	70	4.972	4.984	-0.012	95	2729	10.0	9.24	
43 Methyl acrylate	55	5.039	5.045	-0.006	100	11603	5.00	5.50	
44 Propionitrile	54	5.124	5.130	-0.006	98	20956	50.0	56.9	
45 Tetrahydrofuran	72	5.215	5.215	0.000	61	3776	10.0	9.44	
46 Chlorobromomethane	128	5.215	5.221	-0.006	79	8957	5.00	5.03	
47 Methacrylonitrile	67	5.246	5.252	-0.006	92	55422	50.0	54.5	
48 Chloroform	83	5.283	5.295	-0.013	97	23865	5.00	4.95	
49 Cyclohexane	84	5.429	5.441	-0.012	89	18977	5.00	4.65	
50 1,1,1-Trichloroethane	97	5.459	5.465	-0.006	99	20180	5.00	4.91	
$ 51 Dibromofluoromethane (Surr	113	5.478	5.484	-0.006	99	158651	50.0	48.9	
52 Carbon tetrachloride	117	5.600	5.605	-0.005	96	17152	5.00	4.74	
53 1,1-Dichloropropene	75	5.636	5.648	-0.012	96	17885	5.00	4.75	
54 Isobutyl alcohol	43	5.831	5.837	-0.006	92	25909	125.0	111.4	
55 Benzene	78	5.880	5.886	-0.006	95	54291	5.00	5.31	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.904	5.910	-0.006	96	135570	50.0	48.1	
58 Isopropyl acetate	43	5.978	5.983	-0.005	97	37983	5.00	5.21	
57 Tert-amyl methyl ether	87	5.978	5.983	-0.005	90	11483	5.00	4.84	
59 1,2-Dichloroethane	62	5.996	6.008	-0.012	97	16971	5.00	5.13	
60 n-Heptane	57	6.093	6.099	-0.006	92	9214	5.00	4.63	
* 61 Fluorobenzene	96	6.246	6.252	-0.006	99	546337	50.0	50.0	
62 n-Butanol	56	6.660	6.660	0.000	88	10859	125.0	113.2	
63 Trichloroethene	95	6.685	6.691	-0.006	95	13905	5.00	4.82	
64 Methylcyclohexane	83	6.825	6.837	-0.012	94	21680	5.00	4.41	
65 Ethyl acrylate	73	6.849	6.855	-0.006	97	978	5.00	5.13	
66 1,2-Dichloropropane	63	7.014	7.026	-0.012	91	12463	5.00	4.93	
* 67 1,4-Dioxane-d8	96	7.087	7.093	-0.006	0	34167	1000.0	1000.0	
68 Methyl methacrylate	100	7.124	7.123	0.001	91	6340	10.0	9.93	
69 1,4-Dioxane	88	7.148	7.154	-0.006	44	3986	100.0	108.9	
70 Dibromomethane	93	7.160	7.166	-0.006	91	8683	5.00	4.99	
71 n-Propyl acetate	43	7.185	7.191	-0.006	97	15736	5.00	5.08	
72 Dichlorobromomethane	83	7.325	7.331	-0.006	97	14837	5.00	4.51	
73 2-Nitropropane	41	7.654	7.660	-0.006	92	5228	10.0	9.51	
74 2-Chloroethyl vinyl ether	63	7.660	7.666	-0.006	83	4020	5.00	4.80	
75 Epichlorohydrin	57	7.752	7.757	-0.005	99	23382	100.0	90.7	
76 cis-1,3-Dichloropropene	75	7.806	7.806	0.000	87	16738	5.00	4.82	
77 4-Methyl-2-pentanone (MIBK	43	7.953	7.959	-0.006	96	58429	25.0	23.5	
$ 78 Toluene-d8 (Surr)	98	8.020	8.026	-0.006	99	507902	50.0	49.6	
79 Toluene	91	8.081	8.087	-0.006	93	54332	5.00	5.09	
80 trans-1,3-Dichloropropene	75	8.373	8.379	-0.006	98	13547	5.00	4.66	
81 Ethyl methacrylate	69	8.398	8.404	-0.006	89	13419	5.00	4.89	
82 1,1,2-Trichloroethane	83	8.544	8.550	-0.006	96	8771	5.00	5.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.575	8.580	-0.005	94	15718	5.00	4.92	
84 1,3-Dichloropropane	76	8.703	8.702	0.001	90	15732	5.00	5.00	
85 2-Hexanone	43	8.745	8.751	-0.006	97	37761	25.0	23.6	
86 n-Butyl acetate	73	8.831	8.830	0.001	99	2977	5.00	5.43	
87 Chlorodibromomethane	129	8.873	8.879	-0.006	98	11152	5.00	4.66	
88 Ethylene Dibromide	107	8.983	8.989	-0.006	98	10029	5.00	4.89	
* 89 Chlorobenzene-d5	117	9.355	9.361	-0.006	84	386017	50.0	50.0	
90 Chlorobenzene	112	9.379	9.385	-0.006	97	35162	5.00	5.01	
91 Ethylbenzene	106	9.440	9.446	-0.006	98	18916	5.00	5.03	
92 1,1,1,2-Tetrachloroethane	131	9.459	9.458	0.001	95	13259	5.00	4.93	
93 m-Xylene & p-Xylene	106	9.544	9.544	0.000	99	23389	5.00	5.01	
94 n-Butyl acrylate	73	9.837	9.836	0.000	98	7496	5.00	5.17	
95 o-Xylene	106	9.867	9.873	-0.006	95	23145	5.00	5.05	
96 Styrene	104	9.891	9.891	0.000	97	35033	5.00	4.77	
97 Amyl acetate (mixed isomer	43	10.013	10.013	0.000	91	18448	5.00	5.33	
98 Bromoform	173	10.068	10.068	0.000	97	7832	5.00	4.74	
99 Isopropylbenzene	105	10.147	10.153	-0.006	95	59433	5.00	4.87	
$ 100 4-Bromofluorobenzene	174	10.312	10.318	-0.006	0	201320	50.0	48.5	
101 Bromobenzene	156	10.428	10.428	0.000	89	16962	5.00	4.95	
102 1,1,2,2-Tetrachloroethane	83	10.440	10.446	-0.006	98	15084	5.00	5.03	
103 N-Propylbenzene	91	10.464	10.470	-0.006	99	69248	5.00	4.78	
104 1,2,3-Trichloropropane	110	10.489	10.489	0.000	98	4767	5.00	5.42	
105 trans-1,4-Dichloro-2-buten	53	10.489	10.495	-0.006	75	3423	5.00	4.98	
106 4-Ethyltoluene	105	10.550	10.556	-0.006	99	60306	5.00	4.88	
107 2-Chlorotoluene	91	10.562	10.562	0.000	97	46408	5.00	4.74	
108 1,3,5-Trimethylbenzene	105	10.605	10.604	0.001	94	49254	5.00	4.59	
109 4-Chlorotoluene	91	10.647	10.653	-0.006	96	39896	5.00	4.80	
110 Butyl Methacrylate	87	10.660	10.659	0.001	91	14593	5.00	4.54	
111 tert-Butylbenzene	119	10.836	10.842	-0.006	96	40633	5.00	4.49	
112 1,2,4-Trimethylbenzene	105	10.885	10.885	0.000	96	50905	5.00	4.69	
113 sec-Butylbenzene	105	11.001	11.001	0.000	99	64430	5.00	4.67	
114 4-Isopropyltoluene	119	11.105	11.104	0.001	98	56601	5.00	4.65	
115 1,3-Dichlorobenzene	146	11.123	11.129	-0.006	97	30665	5.00	4.75	
* 116 1,4-Dichlorobenzene-d4	152	11.178	11.178	0.000	93	237601	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.196	11.196	0.000	95	32166	5.00	4.94	
118 Benzyl chloride	126	11.300	11.299	0.001	99	4075	5.00	3.92	
119 2,3-Dihydroindene	117	11.354	11.360	-0.006	93	58495	5.00	4.72	
120 p-Diethylbenzene	119	11.379	11.385	-0.006	95	35557	5.00	4.81	
121 n-Butylbenzene	92	11.403	11.403	0.000	95	29456	5.00	4.80	
122 1,2-Dichlorobenzene	146	11.476	11.482	-0.006	98	31116	5.00	4.82	
123 1,2,4,5-Tetramethylbenzene	119	12.013	12.019	-0.006	98	50732	5.00	4.64	
124 1,2-Dibromo-3-Chloropropan	157	12.135	12.135	0.000	91	3865	5.00	4.98	
125 1,3,5-Trichlorobenzene	180	12.263	12.263	0.000	97	26543	5.00	4.78	
126 1,2,4-Trichlorobenzene	180	12.897	12.903	-0.006	93	23988	5.00	4.71	
127 Hexachlorobutadiene	225	13.007	13.013	-0.006	96	11439	5.00	4.49	
128 Naphthalene	128	13.190	13.195	-0.005	99	55673	5.00	4.83	
129 1,2,3-Trichlorobenzene	180	13.482	13.488	-0.006	95	24375	5.00	4.86	
S 130 1,2-Dichloroethene, Total	100				0		10.0	10.2	
S 131 1,3-Dichloropropene, Total	100				0		10.0	9.48	
S 132 Xylenes, Total	100				0		10.0	10.1	
S 133 Total BTEX	1				0		25.0	25.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

GASES Li_00261	Amount Added:	0.50	Units: uL	
8260MIX1COMB_00080	Amount Added:	0.50	Units: uL	
ACROLEIN W_00077	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 24-May-2018 15:17:19 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Injection Date: 24-May-2018 06:58:30 Instrument ID: CVOAMS4 Operator ID:

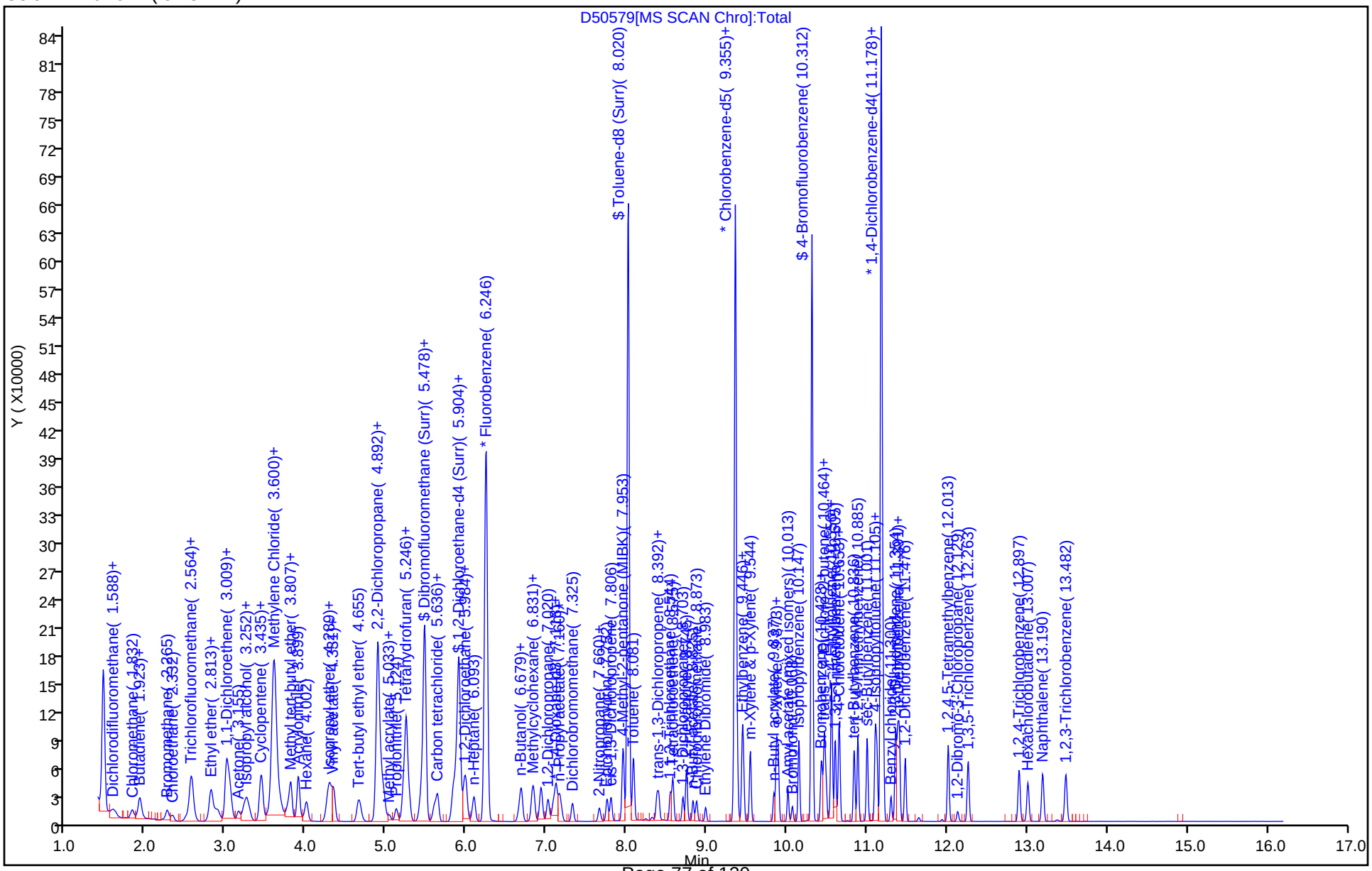
Lims ID: STD5 Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 16

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab Sample ID: CCVIS 460-525350/2 Calibration Date: 06/05/2018 19:09

Instrument ID: CVOAMS4 Calib Start Date: 05/24/2018 03:17

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 05/24/2018 06:58

Lab File ID: D51177.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorotrifluoroethene	Lin2		0.2143		18.7	20.0	-6.4	20.0
Dichlorodifluoromethane	Ave	0.4327	0.3925	0.1000	18.1	20.0	-9.3	20.0
Chloromethane	Ave	0.3631	0.3202	0.1000	17.6	20.0	-11.8	20.0
Butadiene	Ave	0.2810	0.2572		18.3	20.0	-8.5	20.0
Vinyl chloride	Ave	0.3165	0.3031	0.1000	19.2	20.0	-4.2	20.0
Bromomethane	Ave	0.2392	0.2119	0.1000	17.7	20.0	-11.4	20.0
Chloroethane	Ave	0.1747	0.1686	0.1000	19.3	20.0	-3.5	20.0
Pentane	Ave	0.0464	0.0493		42.6	40.0	6.4	20.0
Dichlorofluoromethane	Ave	0.4935	0.4627		18.8	20.0	-6.2	20.0
Trichlorofluoromethane	Ave	0.3947	0.3705	0.1000	18.8	20.0	-6.1	20.0
Ethanol	Ave	0.0437	0.0495		905	800	13.2	20.0
Ethyl ether	Ave	0.1861	0.1935		20.8	20.0	3.9	20.0
2-Methyl-1,3-butadiene	Ave	0.2028	0.2456		24.2	20.0	21.1*	20.0
1,2-Dichloro-1,1,2-trifluoro ethane	Ave	0.2437	0.2689		22.1	20.0	10.3	20.0
Acrolein	Ave	1.086	0.7469		206	300	-31.2*	20.0
1,1-Dichloroethene	Ave	0.2612	0.2793	0.1000	21.4	20.0	6.9	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.2714	0.2996	0.1000	22.1	20.0	10.4	20.0
Acetone	Ave	0.6687	0.6132	0.0500	91.7	100	-8.3	20.0
Iodomethane	Ave	0.6193	0.5874		19.0	20.0	-5.2	20.0
Carbon disulfide	Ave	0.9202	0.9686	0.1000	21.1	20.0	5.3	20.0
Isopropyl alcohol	Ave	0.6017	0.5774		192	200	-4.0	20.0
3-Chloro-1-propene	Ave	0.1560	0.1570		20.1	20.0	0.7	20.0
Cyclopentene	Ave	0.5758	0.6587		22.9	20.0	14.4	20.0
Acetonitrile	QuaF		0.5572		268	200	34.0*	20.0
Methylene Chloride	Ave	0.3090	0.2946	0.1000	19.1	20.0	-4.6	20.0
2-Methyl-2-propanol	Ave	1.089	1.032		190	200	-5.2	20.0
Methyl tert-butyl ether	Ave	0.6858	0.6405	0.1000	18.7	20.0	-6.6	20.0
trans-1,2-Dichloroethene	Ave	0.2856	0.2932	0.1000	20.5	20.0	2.7	20.0
Acrylonitrile	Ave	2.511	2.813		224	200	12.0	20.0
Hexane	Ave	0.3340	0.3867		23.2	20.0	15.8	20.0
Isopropyl ether	Ave	0.7113	0.7540		21.2	20.0	6.0	20.0
1,1-Dichloroethane	Ave	0.4403	0.4613	0.2000	21.0	20.0	4.8	20.0
Vinyl acetate	Ave	0.0467	0.0427		36.6	40.0	-8.6	20.0
2-Chloro-1,3-butadiene	Ave	0.2357	0.2567		21.8	20.0	8.9	20.0
Tert-butyl ethyl ether	Ave	0.6855	0.6716		19.6	20.0	-2.0	20.0
2,2-Dichloropropane	Ave	0.1232	0.1220		19.8	20.0	-0.9	20.0
cis-1,2-Dichloroethene	Ave	0.3287	0.3063	0.1000	18.6	20.0	-6.8	20.0
2-Butanone (MEK)	Ave	0.2730	0.2494	0.0500	91.4	100	-8.6	20.0
Ethyl acetate	Ave	0.2282	0.2185		38.3	40.0	-4.3	20.0
Methyl acrylate	Ave	0.1930	0.1683		17.4	20.0	-12.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab Sample ID: CCVIS 460-525350/2 Calibration Date: 06/05/2018 19:09

Instrument ID: CVOAMS4 Calib Start Date: 05/24/2018 03:17

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 05/24/2018 06:58

Lab File ID: D51177.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Propionitrile	Ave	0.0337	0.0293		174	200	-13.2	20.0
Tetrahydrofuran	Ave	0.3089	0.2778		36.0	40.0	-10.1	20.0
Bromochloromethane	Ave	0.1629	0.1483		18.2	20.0	-9.0	20.0
Methacrylonitrile	Ave	0.0931	0.0826		178	200	-11.2	20.0
Chloroform	Ave	0.4414	0.4318	0.2000	19.6	20.0	-2.2	20.0
Cyclohexane	Ave	0.3735	0.4054	0.1000	21.7	20.0	8.5	20.0
1,1,1-Trichloroethane	Ave	0.3758	0.3785	0.1000	20.1	20.0	0.7	20.0
Carbon tetrachloride	Ave	0.3308	0.3347	0.1000	20.2	20.0	1.2	20.0
1,1-Dichloropropene	Ave	0.3447	0.3526		20.5	20.0	2.3	20.0
Isobutyl alcohol	Ave	0.5416	0.6058		559	500	11.9	20.0
Benzene	Ave	1.325	1.449	0.5000	21.9	20.0	9.4	20.0
Tert-amyl methyl ether	Ave	0.2172	0.1938		17.8	20.0	-10.8	20.0
Isopropyl acetate	Ave	0.6668	0.6274		18.8	20.0	-5.9	20.0
1,2-Dichloroethane	Ave	0.3029	0.2761	0.1000	18.2	20.0	-8.9	20.0
n-Heptane	Ave	0.1821	0.2126		23.3	20.0	16.7	20.0
n-Butanol	Ave	0.2234	0.2037		456	500	-8.8	20.0
Trichloroethene	Ave	0.2641	0.2508	0.2000	19.0	20.0	-5.0	20.0
Methylcyclohexane	Ave	0.4503	0.4744	0.1000	21.1	20.0	5.3	20.0
Ethyl acrylate	Ave	0.0174	0.0149		17.1	20.0	-14.7	20.0
1,2-Dichloropropane	Ave	0.2315	0.2288	0.1000	19.8	20.0	-1.2	20.0
Methyl methacrylate	Ave	0.0584	0.0511		35.0	40.0	-12.5	20.0
1,4-Dioxane	Ave	1.071	1.021		381	400	-4.7	20.0
Dibromomethane	Ave	0.1593	0.1391		17.5	20.0	-12.7	20.0
n-Propyl acetate	Ave	0.2837	0.2534		17.9	20.0	-10.7	20.0
Bromodichloromethane	Ave	0.3008	0.2733	0.2000	18.2	20.0	-9.1	20.0
2-Nitropropane	Ave	0.0503	0.0366		29.1	40.0	-27.3*	20.0
2-Chloroethyl vinyl ether	Ave	0.0766	0.0691		18.0	20.0	-9.9	20.0
Epichlorohydrin	Ave	0.1992	0.1820		365	400	-8.7	20.0
cis-1,3-Dichloropropene	Ave	0.4500	0.4621	0.2000	20.5	20.0	2.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.920	1.918	0.0500	99.9	100	-0.1	20.0
Toluene	Ave	1.382	1.457	0.4000	21.1	20.0	5.4	20.0
trans-1,3-Dichloropropene	Ave	0.3764	0.3642	0.1000	19.4	20.0	-3.2	20.0
Ethyl methacrylate	Ave	0.2512	0.2242		17.8	20.0	-10.8	20.0
1,1,2-Trichloroethane	Ave	0.2217	0.2173	0.1000	19.6	20.0	-2.0	20.0
Tetrachloroethene	Ave	0.4142	0.4357	0.2000	21.0	20.0	5.2	20.0
1,3-Dichloropropane	Ave	0.4075	0.3988		19.6	20.0	-2.1	20.0
2-Hexanone	Ave	1.236	1.175	0.0500	95.0	100	-5.0	20.0
n-Butyl acetate	Ave	0.0710	0.0689		19.4	20.0	-2.9	20.0
Dibromochloromethane	Ave	0.3102	0.2884	0.1000	18.6	20.0	-7.0	20.0
1,2-Dibromoethane	Ave	0.2656	0.2472	0.1000	18.6	20.0	-6.9	20.0
Chlorobenzene	Ave	0.9089	0.9135	0.5000	20.1	20.0	0.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Lab Sample ID: CCVIS 460-525350/2 Calibration Date: 06/05/2018 19:09

Instrument ID: CVOAMS4 Calib Start Date: 05/24/2018 03:17

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 05/24/2018 06:58

Lab File ID: D51177.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethylbenzene	Ave	0.4866	0.5140	0.1000	21.1	20.0	5.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3481	0.3400		19.5	20.0	-2.3	20.0
m-Xylene & p-Xylene	Ave	0.6047	0.6132	0.1000	20.3	20.0	1.4	20.0
n-Butyl acrylate	Ave	0.1877	0.1831		19.5	20.0	-2.4	20.0
o-Xylene	Ave	0.5931	0.6133	0.3000	20.7	20.0	3.4	20.0
Styrene	Ave	0.9517	0.9755	0.3000	20.5	20.0	2.5	20.0
Bromoform	Ave	0.2140	0.1905	0.1000	17.8	20.0	-10.9	20.0
Isopropylbenzene	Ave	1.580	1.628	0.1000	20.6	20.0	3.0	20.0
Bromobenzene	Ave	0.7214	0.7133		19.8	20.0	-1.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6306	0.5939	0.3000	18.8	20.0	-5.8	20.0
N-Propylbenzene	Ave	3.050	3.275		21.5	20.0	7.4	20.0
1,2,3-Trichloropropane	Ave	0.1851	0.1701		18.4	20.0	-8.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1447	0.1510		20.9	20.0	4.3	20.0
4-Ethyltoluene	Ave	2.599	2.821		21.7	20.0	8.5	20.0
2-Chlorotoluene	Ave	2.060	2.191		21.3	20.0	6.4	20.0
1,3,5-Trimethylbenzene	Ave	2.256	2.328		20.6	20.0	3.2	20.0
4-Chlorotoluene	Ave	1.749	1.827		20.9	20.0	4.4	20.0
Butyl Methacrylate	Ave	0.6758	0.6665		19.7	20.0	-1.4	20.0
tert-Butylbenzene	Ave	1.903	1.961		20.6	20.0	3.0	20.0
1,2,4-Trimethylbenzene	Ave	2.283	2.344		20.5	20.0	2.7	20.0
sec-Butylbenzene	Ave	2.905	3.032		20.9	20.0	4.4	20.0
4-Isopropyltoluene	Ave	2.564	2.665		20.8	20.0	3.9	20.0
1,3-Dichlorobenzene	Ave	1.359	1.379	0.6000	20.3	20.0	1.5	20.0
1,4-Dichlorobenzene	Ave	1.371	1.408	0.5000	20.5	20.0	2.7	20.0
Benzyl chloride	Ave	0.2187	0.2218		20.3	20.0	1.4	20.0
Indan	Ave	1.135	1.012		17.8	20.0	-10.9	20.0
p-Diethylbenzene	Ave	1.555	1.666		21.4	20.0	7.1	20.0
n-Butylbenzene	Ave	1.292	1.415		21.9	20.0	9.5	20.0
1,2-Dichlorobenzene	Ave	1.357	1.318	0.4000	19.4	20.0	-2.9	20.0
1,2,4,5-Tetramethylbenzene	Ave	2.300	2.234		19.4	20.0	-2.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1635	0.1369	0.0500	16.8	20.0	-16.2	20.0
1,2,4-Trichlorobenzene	Ave	1.071	0.999	0.2000	18.6	20.0	-6.8	20.0
Hexachlorobutadiene	Ave	0.5365	0.5124		19.1	20.0	-4.5	20.0
Naphthalene	Ave	2.424	1.985		16.4	20.0	-18.1	20.0
1,2,3-Trichlorobenzene	Ave	1.056	0.9197		17.4	20.0	-12.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2966	0.2913		49.1	50.0	-1.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2577	0.2572		49.9	50.0	-0.2	20.0
Toluene-d8 (Surr)	Ave	1.326	1.438		54.2	50.0	8.4	20.0
4-Bromofluorobenzene	Ave	0.8734	0.8089		46.3	50.0	-7.4	20.0

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51177.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Jun-2018 19:09:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 460-0073248-002
Operator ID: Instrument ID: CVOAMS4
Sublist: chrom-8260S_4*sub35

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 06-Jun-2018 12:06:30 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: delpolitov Date: 06-Jun-2018 12:06:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.606	1.606	0.000	89	68174	20.0	18.7	a
2 Dichlorodifluoromethane	85	1.637	1.637	0.000	99	124829	20.0	18.1	
3 Chloromethane	50	1.856	1.856	0.000	99	101839	20.0	17.6	
5 Butadiene	54	1.948	1.948	0.000	97	81816	20.0	18.3	
4 Vinyl chloride	62	1.960	1.960	0.000	96	96418	20.0	19.2	
6 Bromomethane	94	2.295	2.295	0.000	98	67384	20.0	17.7	
7 Chloroethane	64	2.356	2.356	0.000	99	53629	20.0	19.3	
10 Pentane	72	2.588	2.588	0.000	97	31385	40.0	42.6	
8 Dichlorofluoromethane	67	2.594	2.594	0.000	97	147155	20.0	18.8	
9 Trichlorofluoromethane	101	2.606	2.606	0.000	98	117836	20.0	18.8	
12 Ethanol	46	2.826	2.826	0.000	83	17464	800.0	905.5	
11 Ethyl ether	59	2.826	2.826	0.000	90	61533	20.0	20.8	
13 2-Methyl-1,3-butadiene	53	2.844	2.844	0.000	97	78127	20.0	24.2	
14 1,2-Dichloro-1,1,2-trifluo	117	2.917	2.917	0.000	88	85527	20.0	22.1	
16 Acrolein	56	3.039	3.039	0.000	97	98799	300.0	206.3	
17 1,1-Dichloroethene	96	3.070	3.070	0.000	97	88833	20.0	21.4	
15 1,1,2-Trichloro-1,2,2-trif	101	3.076	3.076	0.000	66	95293	20.0	22.1	
18 Acetone	43	3.185	3.185	0.000	86	95305	100.0	91.7	
19 Iodomethane	142	3.252	3.252	0.000	97	186816	20.0	19.0	
20 Carbon disulfide	76	3.289	3.289	0.000	99	308069	20.0	21.1	
21 Isopropyl alcohol	45	3.313	3.313	0.000	99	50924	200.0	191.9	
22 3-Chloro-1-propene	76	3.454	3.454	0.000	90	49949	20.0	20.1	
23 Cyclopentene	67	3.478	3.478	0.000	94	209500	20.0	22.9	
24 Methyl acetate	43	3.478	3.478	0.000	98	100187	40.0	37.1	
25 Acetonitrile	40	3.551	3.551	0.000	99	49138	200.0	268.0	
26 Methylene Chloride	84	3.618	3.618	0.000	91	93709	20.0	19.1	
* 27 TBA-d9 (IS)	65	3.630	3.630	0.000	58	440950	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.716	3.716	0.000	99	91047	200.0	189.6	
29 Methyl tert-butyl ether	73	3.813	3.813	0.000	97	203716	20.0	18.7	
30 trans-1,2-Dichloroethene	96	3.838	3.838	0.000	94	93250	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
31 Acrylonitrile	53	3.935	3.935	0.000	94	248060	200.0	224.1	
32 Hexane	57	4.033	4.033	0.000	94	122980	20.0	23.2	
33 Isopropyl ether	45	4.301	4.301	0.000	94	239817	20.0	21.2	
34 1,1-Dichloroethane	63	4.325	4.325	0.000	99	146712	20.0	21.0	
35 Vinyl acetate	86	4.356	4.356	0.000	100	27148	40.0	36.6	
36 2-Chloro-1,3-butadiene	88	4.380	4.380	0.000	90	81631	20.0	21.8	
37 Tert-butyl ethyl ether	59	4.691	4.691	0.000	90	213603	20.0	19.6	
* 38 2-Butanone-d5	46	4.923	4.923	0.000	0	388547	250.0	250.0	
39 2,2-Dichloropropane	79	4.941	4.941	0.000	94	38817	20.0	19.8	
40 cis-1,2-Dichloroethene	96	4.966	4.966	0.000	99	97436	20.0	18.6	
41 2-Butanone (MEK)	72	4.996	4.996	0.000	100	38757	100.0	91.4	
42 Ethyl acetate	70	5.008	5.008	0.000	97	13584	40.0	38.3	
43 Methyl acrylate	55	5.069	5.069	0.000	99	53517	20.0	17.4	
44 Propionitrile	54	5.155	5.155	0.000	98	93024	200.0	173.7	
45 Tetrahydrofuran	72	5.240	5.240	0.000	76	17271	40.0	36.0	
46 Chlorobromomethane	128	5.246	5.246	0.000	87	47183	20.0	18.2	
47 Methacrylonitrile	67	5.283	5.283	0.000	93	262778	200.0	177.5	
48 Chloroform	83	5.319	5.319	0.000	99	137338	20.0	19.6	
49 Cyclohexane	84	5.472	5.472	0.000	91	128927	20.0	21.7	
50 1,1,1-Trichloroethane	97	5.490	5.490	0.000	99	120385	20.0	20.1	
$ 51 Dibromofluoromethane (Surr	113	5.508	5.508	0.000	98	231594	50.0	49.1	
52 Carbon tetrachloride	117	5.636	5.636	0.000	97	106443	20.0	20.2	
53 1,1-Dichloropropene	75	5.673	5.673	0.000	96	112158	20.0	20.5	
54 Isobutyl alcohol	43	5.868	5.868	0.000	92	133565	500.0	559.3	
55 Benzene	78	5.917	5.917	0.000	97	311278	20.0	21.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.941	5.941	0.000	97	204503	50.0	49.9	
57 Tert-amyl methyl ether	87	6.008	6.008	0.000	95	61624	20.0	17.8	
58 Isopropyl acetate	43	6.014	6.014	0.000	97	199564	20.0	18.8	
59 1,2-Dichloroethane	62	6.032	6.032	0.000	97	87801	20.0	18.2	
60 n-Heptane	57	6.130	6.130	0.000	93	67612	20.0	23.3	
* 61 Fluorobenzene	96	6.276	6.276	0.000	99	795165	50.0	50.0	
62 n-Butanol	56	6.685	6.685	0.000	89	44902	500.0	455.8	
63 Trichloroethene	95	6.715	6.715	0.000	96	79783	20.0	19.0	
64 Methylcyclohexane	83	6.862	6.862	0.000	93	150879	20.0	21.1	
65 Ethyl acrylate	73	6.880	6.880	0.000	98	4734	20.0	17.1	
66 1,2-Dichloropropane	63	7.050	7.050	0.000	93	72758	20.0	19.8	
* 67 1,4-Dioxane-d8	96	7.124	7.124	0.000	0	39664	1000.0	1000.0	
68 Methyl methacrylate	100	7.148	7.148	0.000	90	32496	40.0	35.0	
69 1,4-Dioxane	88	7.179	7.179	0.000	89	16197	400.0	381.2	
70 Dibromomethane	93	7.191	7.191	0.000	91	44244	20.0	17.5	
71 n-Propyl acetate	43	7.209	7.209	0.000	98	80604	20.0	17.9	
72 Dichlorobromomethane	83	7.349	7.349	0.000	99	86937	20.0	18.2	
73 2-Nitropropane	41	7.678	7.678	0.000	98	23273	40.0	29.1	
74 2-Chloroethyl vinyl ether	63	7.685	7.685	0.000	95	21976	20.0	18.0	
75 Epichlorohydrin	57	7.782	7.782	0.000	100	113136	400.0	365.4	
76 cis-1,3-Dichloropropene	75	7.831	7.831	0.000	90	99257	20.0	20.5	
77 4-Methyl-2-pentanone (MIBK	43	7.977	7.977	0.000	97	298028	100.0	99.9	
$ 78 Toluene-d8 (Surr)	98	8.044	8.044	0.000	99	772065	50.0	54.2	
79 Toluene	91	8.111	8.111	0.000	93	313015	20.0	21.1	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	99	78231	20.0	19.4	
81 Ethyl methacrylate	69	8.422	8.422	0.000	90	71309	20.0	17.8	
82 1,1,2-Trichloroethane	83	8.568	8.568	0.000	96	46671	20.0	19.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 Tetrachloroethene	166	8.599	8.599	0.000	96	93577	20.0	21.0	
84 1,3-Dichloropropane	76	8.721	8.721	0.000	91	85655	20.0	19.6	
85 2-Hexanone	43	8.764	8.764	0.000	96	182592	100.0	95.0	
86 n-Butyl acetate	73	8.849	8.849	0.000	99	14802	20.0	19.4	
87 Chlorodibromomethane	129	8.898	8.898	0.000	98	61937	20.0	18.6	
88 Ethylene Dibromide	107	9.007	9.007	0.000	98	53090	20.0	18.6	
* 89 Chlorobenzene-d5	117	9.379	9.379	0.000	85	536970	50.0	50.0	
90 Chlorobenzene	112	9.404	9.404	0.000	97	196198	20.0	20.1	
91 Ethylbenzene	106	9.465	9.465	0.000	98	110393	20.0	21.1	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	96	73034	20.0	19.5	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	100	131708	20.0	20.3	
94 n-Butyl acrylate	73	9.855	9.855	0.000	97	39331	20.0	19.5	
95 o-Xylene	106	9.891	9.891	0.000	95	131733	20.0	20.7	
96 Styrene	104	9.910	9.910	0.000	97	209518	20.0	20.5	
97 Amyl acetate (mixed isomer	43	10.032	10.032	0.000	91	97606	20.0	21.4	
98 Bromoform	173	10.086	10.086	0.000	98	40924	20.0	17.8	
99 Isopropylbenzene	105	10.166	10.166	0.000	95	349575	20.0	20.6	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	252999	50.0	46.3	
101 Bromobenzene	156	10.446	10.446	0.000	90	89241	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.464	10.464	0.000	98	74305	20.0	18.8	
103 N-Propylbenzene	91	10.489	10.489	0.000	99	409723	20.0	21.5	
104 1,2,3-Trichloropropane	110	10.507	10.507	0.000	98	21286	20.0	18.4	
105 trans-1,4-Dichloro-2-buten	53	10.513	10.513	0.000	88	18885	20.0	20.9	
106 4-Ethyltoluene	105	10.574	10.574	0.000	98	352911	20.0	21.7	
107 2-Chlorotoluene	91	10.580	10.580	0.000	97	274160	20.0	21.3	
108 1,3,5-Trimethylbenzene	105	10.623	10.623	0.000	94	291221	20.0	20.6	
109 4-Chlorotoluene	91	10.666	10.666	0.000	96	228570	20.0	20.9	
110 Butyl Methacrylate	87	10.678	10.678	0.000	92	83389	20.0	19.7	
111 tert-Butylbenzene	119	10.861	10.861	0.000	96	245305	20.0	20.6	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	97	293251	20.0	20.5	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	379315	20.0	20.9	
114 4-Isopropyltoluene	119	11.123	11.123	0.000	98	333402	20.0	20.8	
115 1,3-Dichlorobenzene	146	11.147	11.147	0.000	98	172488	20.0	20.3	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	93	312771	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.214	11.214	0.000	96	176139	20.0	20.5	
118 Benzyl chloride	126	11.324	11.324	0.000	99	27743	20.0	20.3	
119 2,3-Dihydroindene	117	11.379	11.379	0.000	94	321814	20.0	17.8	
120 p-Diethylbenzene	119	11.403	11.403	0.000	95	208372	20.0	21.4	
121 n-Butylbenzene	92	11.428	11.428	0.000	99	177000	20.0	21.9	
122 1,2-Dichlorobenzene	146	11.501	11.501	0.000	98	164882	20.0	19.4	
123 1,2,4,5-Tetramethylbenzene	119	12.043	12.043	0.000	98	279460	20.0	19.4	
124 1,2-Dibromo-3-Chloropropan	157	12.159	12.159	0.000	93	17130	20.0	16.8	
125 1,3,5-Trichlorobenzene	180	12.293	12.293	0.000	97	144181	20.0	19.7	
126 1,2,4-Trichlorobenzene	180	12.933	12.933	0.000	94	124970	20.0	18.6	
127 Hexachlorobutadiene	225	13.043	13.043	0.000	97	64105	20.0	19.1	
128 Naphthalene	128	13.232	13.232	0.000	99	248324	20.0	16.4	
129 1,2,3-Trichlorobenzene	180	13.525	13.525	0.000	95	115067	20.0	17.4	
S 130 1,2-Dichloroethene, Total	100				0		40.0	39.2	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.9	
S 132 Xylenes, Total	100				0		40.0	41.0	
S 133 Total BTEX	1				0		100.0	105.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	3.00	Units: uL	
GASES Li_00262	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 06-Jun-2018 12:06:37 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51177.D

Injection Date: 05-Jun-2018 19:09:30 Instrument ID: CVOAMS4 Operator ID:

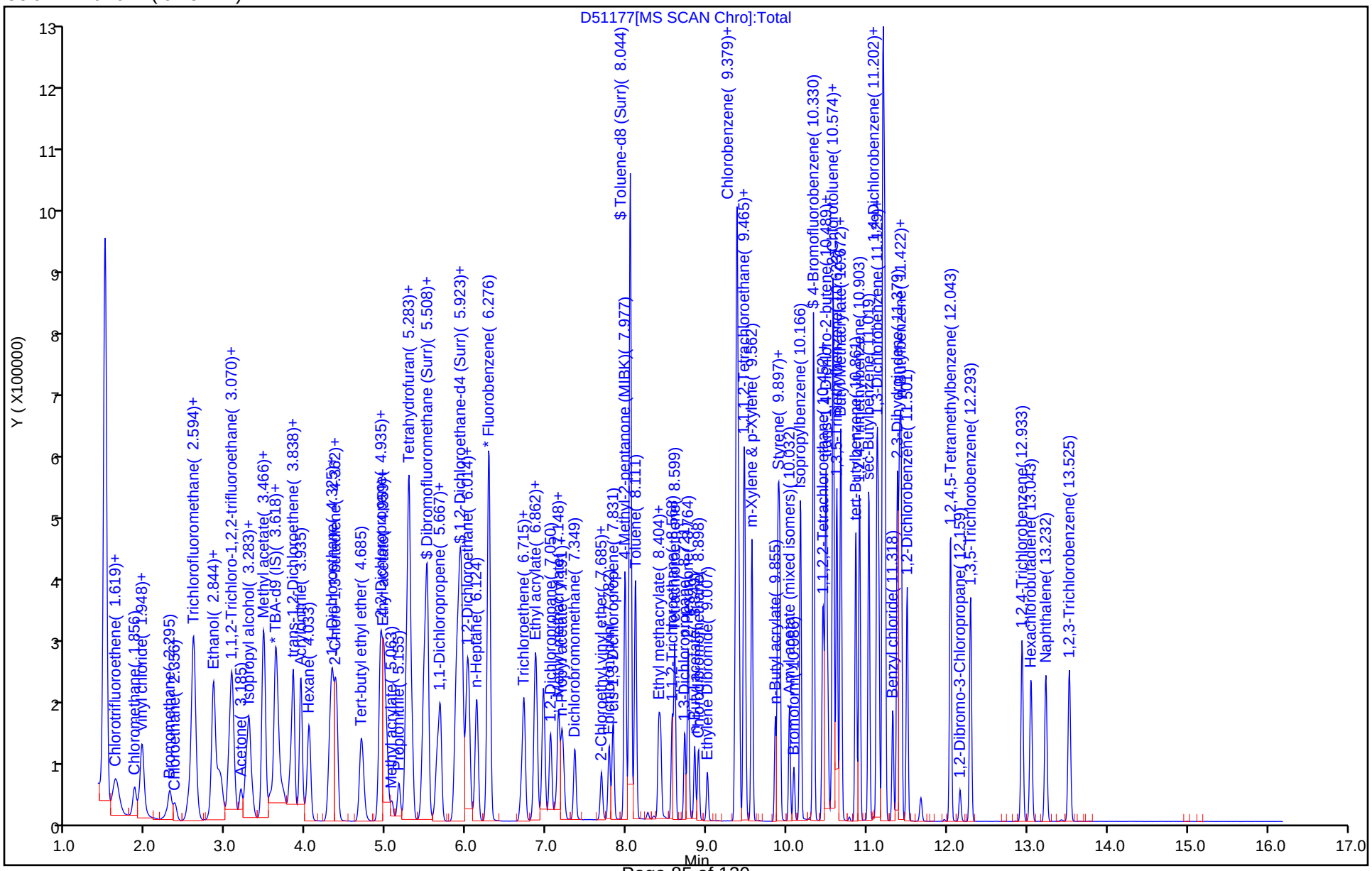
Lims ID: CCVIS Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-525350/7

Matrix: Solid | Lab File ID: D51182.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/05/2018 21:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.00023	U	0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.00021	U	0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00030	U	0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.00018	U	0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.00021	U	0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.00023	U	0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.00018	U	0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.000092	U	0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.00046	U	0.0010	0.00046
106-93-4	1,2-Dibromoethane	0.00018	U	0.0010	0.00018
95-50-1	1,2-Dichlorobenzene	0.00014	U	0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.00030	U	0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.00042	U	0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.00016	U	0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.00010	U	0.0010	0.00010
123-91-1	1,4-Dioxane	0.0092	U	0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0011	U	0.0050	0.0011
591-78-6	2-Hexanone	0.00078	U	0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.00066	U	0.0050	0.00066
67-64-1	Acetone	0.00474	J	0.0050	0.0038
107-02-8	Acrolein	0.028	U	0.10	0.028
107-13-1	Acrylonitrile	0.0016	U	0.010	0.0016
71-43-2	Benzene	0.00026	U	0.0010	0.00026
74-97-5	Bromochloromethane	0.00028	U	0.0010	0.00028
75-27-4	Bromodichloromethane	0.00026	U	0.0010	0.00026
75-25-2	Bromoform	0.00043	U	0.0010	0.00043
74-83-9	Bromomethane	0.00047	U	0.0010	0.00047
75-15-0	Carbon disulfide	0.00027	U	0.0010	0.00027
56-23-5	Carbon tetrachloride	0.00018	U	0.0010	0.00018
108-90-7	Chlorobenzene	0.00018	U	0.0010	0.00018
75-00-3	Chloroethane	0.00052	U	0.0010	0.00052
67-66-3	Chloroform	0.00032	U	0.0010	0.00032
74-87-3	Chloromethane	0.00044	U	0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.00015	U	0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.00027	U	0.0010	0.00027

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 460-525350/7

Matrix: Solid | Lab File ID: D51182.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/05/2018 21:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
110-82-7	Cyclohexane	0.00022	U	0.0010	0.00022
124-48-1	Dibromochloromethane	0.00019	U	0.0010	0.00019
75-71-8	Dichlorodifluoromethane	0.00034	U	0.0010	0.00034
100-41-4	Ethylbenzene	0.00020	U	0.0010	0.00020
98-82-8	Isopropylbenzene	0.00013	U	0.0010	0.00013
79-20-9	Methyl acetate	0.0043	U	0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.00013	U	0.0010	0.00013
108-87-2	Methylcyclohexane	0.00016	U	0.0010	0.00016
75-09-2	Methylene Chloride	0.000282	J	0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.00017	U	0.0010	0.00017
95-47-6	o-Xylene	0.000095	U	0.0010	0.000095
100-42-5	Styrene	0.00012	U	0.0010	0.00012
127-18-4	Tetrachloroethene	0.00014	U	0.0010	0.00014
108-88-3	Toluene	0.00063	U	0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.00025	U	0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.00027	U	0.0010	0.00027
79-01-6	Trichloroethene	0.00014	U	0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.00041	U	0.0010	0.00041
75-01-4	Vinyl chloride	0.00055	U	0.0010	0.00055
1330-20-7	Xylenes, Total	0.00025	U	0.0020	0.00025

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
460-00-4	4-Bromofluorobenzene	91		70-130
1868-53-7	Dibromofluoromethane (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	103		70-130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 460-525350/7

Matrix: Solid Lab File ID: D51182.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 06/05/2018 21:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 525350 Units: mg/Kg

Number TICs Found: 0 TIC Result Total: 4.14

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I-TIC 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Edison
Job No.: 460-157553-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 460-525350/7
Matrix: Solid
Lab File ID: D51182.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/05/2018 21:22
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: Rtx-624 ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 525350
Units: ug/Kg
Number TICs Found: 1
TIC Result Total: 4.14

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
75-65-0	2-Methyl-2-propanol	3.70	4.14	J	93%

FORM I-TIC 8260C

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51182.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Jun-2018 21:22:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 460-0073248-007
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 06-Jun-2018 11:59:35 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK021

First Level Reviewer: delpolitov Date: 06-Jun-2018 11:59:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
18 Acetone	43	3.179	3.185	-0.006	89	4508		4.74	
26 Methylene Chloride	84	3.612	3.618	-0.006	61	1314		0.2823	
* 27 TBA-d9 (IS)	65	3.618	3.630	-0.012	55	414822	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.704	3.716	-0.012	93	1869		4.14	
* 38 2-Butanone-d5	46	4.917	4.923	-0.006	0	355718	250.0	250.0	
$ 51 Dibromofluoromethane (Surr	113	5.502	5.508	-0.006	98	217842	50.0	48.7	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.929	5.941	-0.012	96	194886	50.0	50.2	
* 61 Fluorobenzene	96	6.270	6.276	-0.006	99	753386	50.0	50.0	
* 67 1,4-Dioxane-d8	96	7.111	7.124	-0.013	0	35142	1000.0	1000.0	
$ 78 Toluene-d8 (Surr)	98	8.038	8.044	-0.006	100	699439	50.0	51.4	
* 89 Chlorobenzene-d5	117	9.373	9.379	-0.006	85	512826	50.0	50.0	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	236186	50.0	45.3	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	93	298554	50.0	50.0	

Reagents:

8260ISNEW_00119 Amount Added: 1.00 Units: uL Run Reagent
8260SURR250_00175 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 06-Jun-2018 11:59:36 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51182.D

Injection Date: 05-Jun-2018 21:22:30 Instrument ID: CVOAMS4 Operator ID:

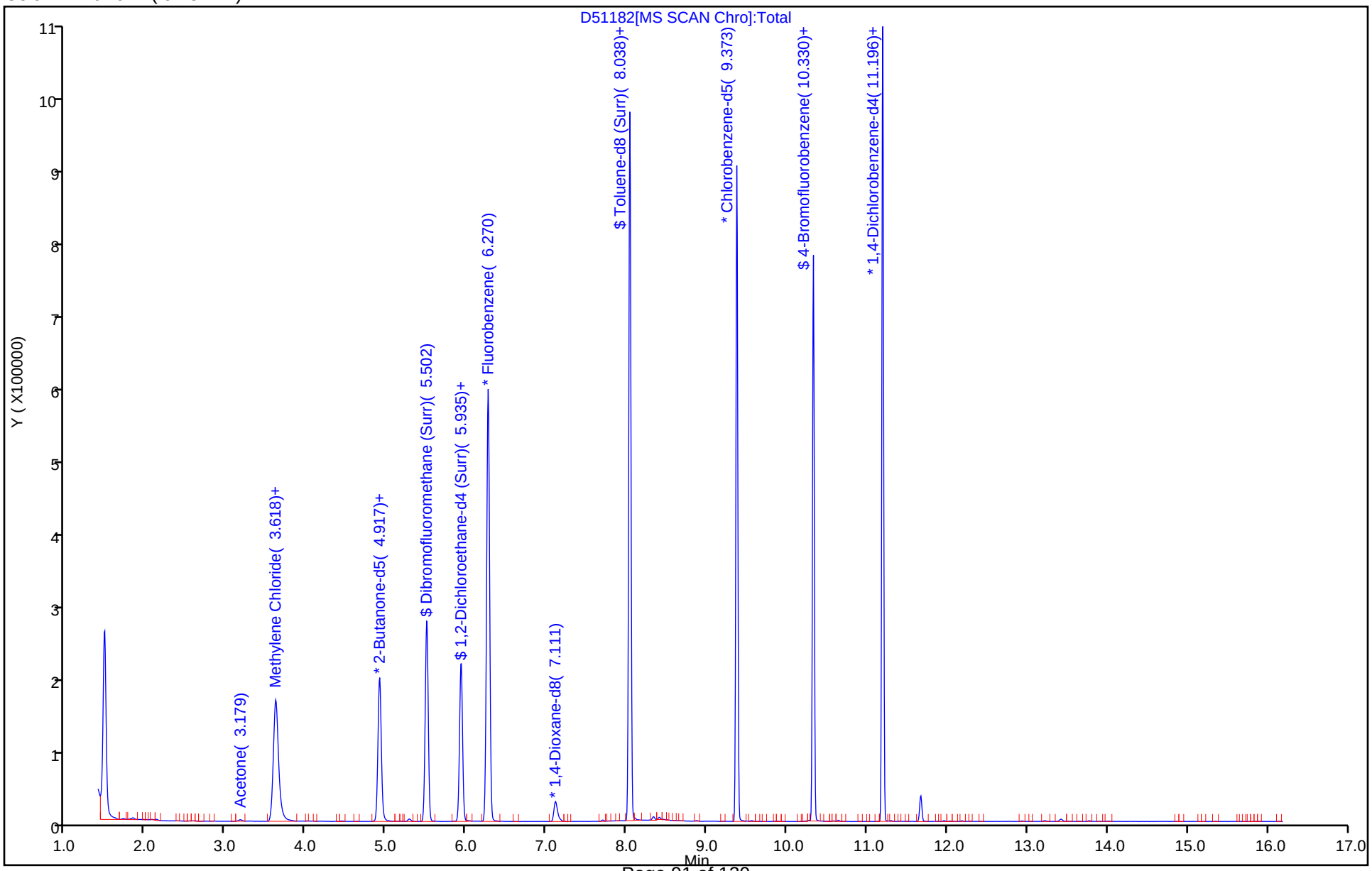
Lims ID: MB Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 460-525350/3

Matrix: Solid | Lab File ID: D51178.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/05/2018 19:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0211		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0206		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0238		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0210		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0215		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0221		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0199		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0204		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0182		0.0010	0.00046
106-93-4	1,2-Dibromoethane	0.0201		0.0010	0.00018
95-50-1	1,2-Dichlorobenzene	0.0209		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0197		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0208		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0211		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0212		0.0010	0.00010
123-91-1	1,4-Dioxane	0.413		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0947		0.0050	0.0011
591-78-6	2-Hexanone	0.0982		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.105		0.0050	0.00066
67-64-1	Acetone	0.0947		0.0050	0.0038
107-02-8	Acrolein	0.189		0.10	0.028
107-13-1	Acrylonitrile	0.222		0.010	0.0016
71-43-2	Benzene	0.0229		0.0010	0.00026
74-97-5	Bromochloromethane	0.0195		0.0010	0.00028
75-27-4	Bromodichloromethane	0.0194		0.0010	0.00026
75-25-2	Bromoform	0.0190		0.0010	0.00043
74-83-9	Bromomethane	0.0170		0.0010	0.00047
75-15-0	Carbon disulfide	0.0216		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0207		0.0010	0.00018
108-90-7	Chlorobenzene	0.0210		0.0010	0.00018
75-00-3	Chloroethane	0.0179		0.0010	0.00052
67-66-3	Chloroform	0.0206		0.0010	0.00032
74-87-3	Chloromethane	0.0164		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0194		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0219		0.0010	0.00027

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-157553-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 460-525350/3
Matrix: Solid
Lab File ID: D51178.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/05/2018 19:36
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: Rtx-624 ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 525350
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
110-82-7	Cyclohexane	0.0224		0.0010	0.00022
124-48-1	Dibromochloromethane	0.0203		0.0010	0.00019
75-71-8	Dichlorodifluoromethane	0.0179		0.0010	0.00034
100-41-4	Ethylbenzene	0.0215		0.0010	0.00020
98-82-8	Isopropylbenzene	0.0216		0.0010	0.00013
79-20-9	Methyl acetate	0.0388		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0208		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0218		0.0010	0.00016
75-09-2	Methylene Chloride	0.0207		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0212		0.0010	0.00017
95-47-6	o-Xylene	0.0219		0.0010	0.000095
100-42-5	Styrene	0.0214		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0216		0.0010	0.00014
108-88-3	Toluene	0.0216		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0206		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0207		0.0010	0.00027
79-01-6	Trichloroethene	0.0196		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0174		0.0010	0.00041
75-01-4	Vinyl chloride	0.0175		0.0010	0.00055
1330-20-7	Xylenes, Total	0.0431		0.0020	0.00025

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-130
460-00-4	4-Bromofluorobenzene	90		70-130
1868-53-7	Dibromofluoromethane (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	108		70-130

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51178.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2018 19:36:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 460-0073248-003
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 06-Jun-2018 09:21:44 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: colladox Date: 05-Jun-2018 21:19:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.582	1.606	-0.024	93	68670	20.0	20.1	a
2 Dichlorodifluoromethane	85	1.619	1.637	-0.018	98	115048	20.0	17.9	
3 Chloromethane	50	1.826	1.856	-0.030	97	88866	20.0	16.4	
5 Butadiene	54	1.930	1.948	-0.018	98	71771	20.0	17.2	
4 Vinyl chloride	62	1.936	1.960	-0.024	96	82190	20.0	17.5	
6 Bromomethane	94	2.271	2.295	-0.024	97	60493	20.0	17.0	
7 Chloroethane	64	2.344	2.356	-0.012	99	46405	20.0	17.9	
10 Pentane	72	2.582	2.588	-0.006	96	29636	40.0	43.0	
8 Dichlorofluoromethane	67	2.576	2.594	-0.018	98	131686	20.0	17.9	
9 Trichlorofluoromethane	101	2.582	2.606	-0.024	98	102096	20.0	17.4	
12 Ethanol	46	2.820	2.826	-0.006	89	17275	800.0	905.6	
11 Ethyl ether	59	2.814	2.826	-0.012	91	59088	20.0	21.3	
13 2-Methyl-1,3-butadiene	53	2.832	2.844	-0.012	97	71616	20.0	23.7	
14 1,2-Dichloro-1,1,2-trifluo	117	2.905	2.917	-0.012	77	82149	20.0	22.7	
16 Acrolein	56	3.021	3.039	-0.018	96	89346	300.0	188.6	
17 1,1-Dichloroethene	96	3.063	3.070	-0.007	97	85952	20.0	22.1	
15 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.076	-0.019	98	96153	20.0	23.8	
18 Acetone	43	3.167	3.185	-0.018	87	93654	100.0	94.7	
19 Iodomethane	142	3.240	3.252	-0.012	97	186082	20.0	20.2	
20 Carbon disulfide	76	3.277	3.289	-0.012	99	295743	20.0	21.6	
21 Isopropyl alcohol	45	3.301	3.313	-0.012	99	49398	200.0	188.2	
22 3-Chloro-1-propene	76	3.441	3.454	-0.013	93	48439	20.0	20.9	
23 Cyclopentene	67	3.466	3.478	-0.012	90	195071	20.0	22.8	
24 Methyl acetate	43	3.466	3.478	-0.012	67	97772	40.0	38.8	
25 Acetonitrile	40	3.539	3.551	-0.012	97	44018	200.0	242.8	
26 Methylene Chloride	84	3.606	3.618	-0.012	91	95269	20.0	20.7	
* 27 TBA-d9 (IS)	65	3.618	3.630	-0.012	37	436121	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.704	3.716	-0.012	98	93306	200.0	196.5	
29 Methyl tert-butyl ether	73	3.801	3.813	-0.012	97	212332	20.0	20.8	
30 trans-1,2-Dichloroethene	96	3.826	3.838	-0.012	93	87593	20.0	20.6	
31 Acrylonitrile	53	3.917	3.935	-0.018	94	243271	200.0	222.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	4.021	4.033	-0.012	93	115137	20.0	23.2	
33 Isopropyl ether	45	4.289	4.301	-0.012	96	239931	20.0	22.7	
34 1,1-Dichloroethane	63	4.313	4.325	-0.012	99	140912	20.0	21.5	
35 Vinyl acetate	86	4.344	4.356	-0.012	100	27260	40.0	39.2	
36 2-Chloro-1,3-butadiene	88	4.368	4.380	-0.012	89	74888	20.0	21.4	
37 Tert-butyl ethyl ether	59	4.679	4.691	-0.012	89	217677	20.0	21.3	
* 38 2-Butanone-d5	46	4.911	4.923	-0.012	0	369559	250.0	250.0	
39 2,2-Dichloropropane	79	4.929	4.941	-0.012	97	37327	20.0	20.4	
40 cis-1,2-Dichloroethene	96	4.953	4.966	-0.013	99	94963	20.0	19.4	
41 2-Butanone (MEK)	72	4.984	4.996	-0.012	97	38194	100.0	94.7	
42 Ethyl acetate	70	4.996	5.008	-0.012	96	13127	40.0	38.9	
43 Methyl acrylate	55	5.057	5.069	-0.012	100	53599	20.0	18.7	
44 Propionitrile	54	5.142	5.155	-0.013	98	94333	200.0	188.2	
45 Tetrahydrofuran	72	5.228	5.240	-0.012	94	17375	40.0	38.0	
46 Chlorobromomethane	128	5.234	5.246	-0.012	83	47217	20.0	19.5	
47 Methacrylonitrile	67	5.270	5.283	-0.013	92	261603	200.0	188.9	
48 Chloroform	83	5.307	5.319	-0.012	98	135051	20.0	20.6	
49 Cyclohexane	84	5.459	5.472	-0.013	90	124313	20.0	22.4	
50 1,1,1-Trichloroethane	97	5.478	5.490	-0.012	99	118128	20.0	21.1	
$ 51 Dibromofluoromethane (Surr	113	5.502	5.508	-0.006	98	219788	50.0	49.8	
52 Carbon tetrachloride	117	5.624	5.636	-0.012	96	101914	20.0	20.7	
53 1,1-Dichloropropene	75	5.661	5.673	-0.012	97	108359	20.0	21.1	
54 Isobutyl alcohol	43	5.856	5.868	-0.012	92	135722	500.0	574.6	
55 Benzene	78	5.904	5.917	-0.013	97	301623	20.0	22.9	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.929	5.941	-0.012	96	194660	50.0	50.8	
57 Tert-amyl methyl ether	87	6.002	6.008	-0.006	90	64654	20.0	20.0	
58 Isopropyl acetate	43	6.002	6.014	-0.012	97	195739	20.0	19.7	
59 1,2-Dichloroethane	62	6.026	6.032	-0.006	97	88638	20.0	19.7	
60 n-Heptane	57	6.118	6.130	-0.012	92	63572	20.0	23.5	
* 61 Fluorobenzene	96	6.270	6.276	-0.006	99	743872	50.0	50.0	
62 n-Butanol	56	6.679	6.685	-0.006	90	45688	500.0	468.9	
63 Trichloroethene	95	6.709	6.715	-0.006	95	76901	20.0	19.6	
64 Methylcyclohexane	83	6.849	6.862	-0.013	94	145833	20.0	21.8	
65 Ethyl acrylate	73	6.874	6.880	-0.006	97	4878	20.0	18.8	
66 1,2-Dichloropropane	63	7.038	7.050	-0.012	92	71762	20.0	20.8	
* 67 1,4-Dioxane-d8	96	7.111	7.124	-0.013	0	36946	1000.0	1000.0	
68 Methyl methacrylate	100	7.142	7.148	-0.006	90	31920	40.0	36.7	
69 1,4-Dioxane	88	7.172	7.179	-0.006	88	16352	400.0	413.1	
70 Dibromomethane	93	7.179	7.191	-0.012	92	44674	20.0	18.9	
71 n-Propyl acetate	43	7.203	7.209	-0.006	98	80218	20.0	19.0	
72 Dichlorobromomethane	83	7.343	7.349	-0.006	99	87028	20.0	19.4	
73 2-Nitropropane	41	7.672	7.678	-0.006	97	23235	40.0	31.0	
74 2-Chloroethyl vinyl ether	63	7.685	7.685	0.001	95	21727	20.0	19.1	
75 Epichlorohydrin	57	7.776	7.782	-0.006	98	109586	400.0	372.1	
76 cis-1,3-Dichloropropene	75	7.825	7.831	-0.006	90	97669	20.0	21.9	
77 4-Methyl-2-pentanone (MIBK	43	7.971	7.977	-0.006	96	298765	100.0	105.3	
$ 78 Toluene-d8 (Surr)	98	8.038	8.044	-0.006	99	708442	50.0	53.8	
79 Toluene	91	8.105	8.111	-0.006	93	296506	20.0	21.6	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	99	77416	20.0	20.7	
81 Ethyl methacrylate	69	8.416	8.422	-0.006	89	70874	20.0	19.0	
82 1,1,2-Trichloroethane	83	8.562	8.568	-0.006	96	46205	20.0	21.0	
83 Tetrachloroethene	166	8.593	8.599	-0.006	95	88961	20.0	21.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.721	8.721	0.000	91	85739	20.0	21.2	
85 2-Hexanone	43	8.764	8.764	0.000	96	179423	100.0	98.2	
86 n-Butyl acetate	73	8.843	8.849	-0.006	99	14550	20.0	20.6	
87 Chlorodibromomethane	129	8.892	8.898	-0.006	98	62463	20.0	20.3	
88 Ethylene Dibromide	107	9.001	9.007	-0.006	99	53014	20.0	20.1	
* 89 Chlorobenzene-d5	117	9.373	9.379	-0.006	84	496581	50.0	50.0	
90 Chlorobenzene	112	9.398	9.404	-0.006	98	189803	20.0	21.0	
91 Ethylbenzene	106	9.459	9.465	-0.006	98	104115	20.0	21.5	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	95	74447	20.0	21.5	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	100	127101	20.0	21.2	
94 n-Butyl acrylate	73	9.849	9.855	-0.006	97	39465	20.0	21.2	
95 o-Xylene	106	9.885	9.891	-0.006	95	129114	20.0	21.9	
96 Styrene	104	9.910	9.910	0.000	96	202454	20.0	21.4	
97 Amyl acetate (mixed isomer	43	10.026	10.032	-0.006	91	99419	20.0	23.4	
98 Bromoform	173	10.086	10.086	0.000	98	40454	20.0	19.0	
99 Isopropylbenzene	105	10.166	10.166	0.000	95	338907	20.0	21.6	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	230060	50.0	45.2	
101 Bromobenzene	156	10.446	10.446	0.000	90	86290	20.0	20.5	
102 1,1,2,2-Tetrachloroethane	83	10.458	10.464	-0.006	98	75800	20.0	20.6	
103 N-Propylbenzene	91	10.483	10.489	-0.006	100	391699	20.0	22.0	
104 1,2,3-Trichloropropane	110	10.501	10.507	-0.006	98	21083	20.0	19.5	
105 trans-1,4-Dichloro-2-buten	53	10.507	10.513	-0.006	87	18492	20.0	21.9	
106 4-Ethyltoluene	105	10.568	10.574	-0.006	99	330452	20.0	21.8	
107 2-Chlorotoluene	91	10.574	10.580	-0.006	97	260098	20.0	21.6	
108 1,3,5-Trimethylbenzene	105	10.617	10.623	-0.006	96	293015	20.0	22.3	
109 4-Chlorotoluene	91	10.666	10.666	0.000	96	219283	20.0	21.5	
110 Butyl Methacrylate	87	10.678	10.678	0.000	91	86086	20.0	21.8	
111 tert-Butylbenzene	119	10.855	10.861	-0.006	96	238265	20.0	21.5	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	96	289508	20.0	21.7	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	370362	20.0	21.9	
114 4-Isopropyltoluene	119	11.123	11.123	0.000	98	326734	20.0	21.8	
115 1,3-Dichlorobenzene	146	11.141	11.147	-0.006	98	166912	20.0	21.1	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	95	291670	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.214	11.214	0.000	96	169941	20.0	21.2	
118 Benzyl chloride	126	11.318	11.324	-0.006	99	27736	20.0	21.7	
119 2,3-Dihydroindene	117	11.373	11.379	-0.006	94	322172	20.0	19.1	
120 p-Diethylbenzene	119	11.403	11.403	0.000	95	204837	20.0	22.6	
121 n-Butylbenzene	92	11.422	11.428	-0.006	96	172407	20.0	22.9	
122 1,2-Dichlorobenzene	146	11.495	11.501	-0.006	99	165082	20.0	20.9	
123 1,2,4,5-Tetramethylbenzene	119	12.037	12.043	-0.006	98	284129	20.0	21.2	
124 1,2-Dibromo-3-Chloropropan	157	12.159	12.159	0.000	92	17391	20.0	18.2	
125 1,3,5-Trichlorobenzene	180	12.287	12.293	-0.006	97	143039	20.0	21.0	
126 1,2,4-Trichlorobenzene	180	12.934	12.933	0.001	94	127775	20.0	20.4	
127 Hexachlorobutadiene	225	13.043	13.043	0.000	96	63114	20.0	20.2	
128 Naphthalene	128	13.226	13.232	-0.006	99	265738	20.0	18.8	
129 1,2,3-Trichlorobenzene	180	13.519	13.525	-0.006	95	122614	20.0	19.9	
S 130 1,2-Dichloroethene, Total	100				0		40.0	40.0	
S 131 1,3-Dichloropropene, Total	100				0		40.0	42.6	
S 132 Xylenes, Total	100				0		40.0	43.1	
S 133 Total BTEX	1				0		100.0	109.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

GASES Li_00262	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	2.00	Units: uL	
ACROLEIN W_00077	Amount Added:	3.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 06-Jun-2018 09:22:06 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51178.D

Injection Date: 05-Jun-2018 19:36:30 Instrument ID: CVOAMS4 Operator ID:

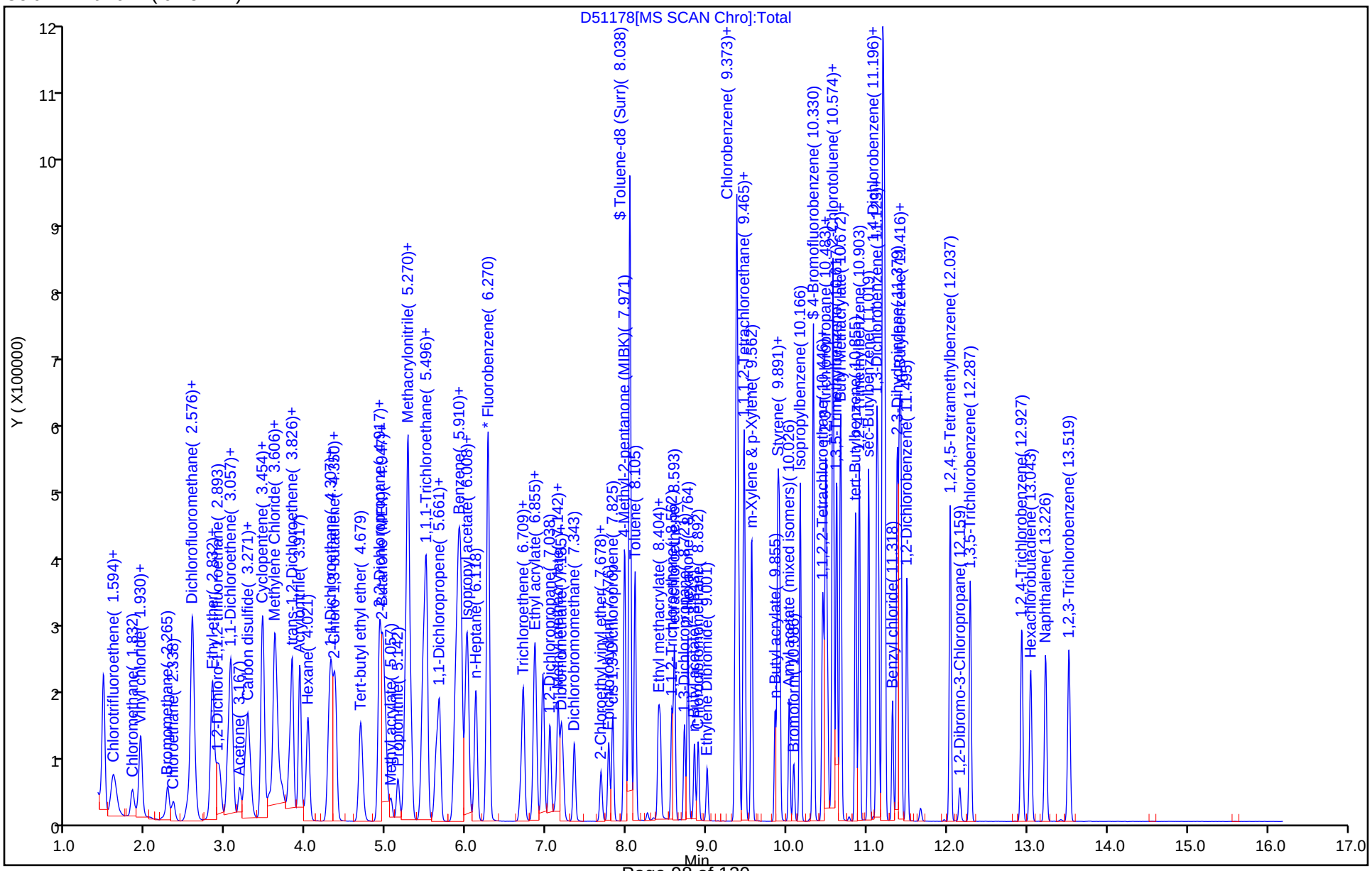
Lims ID: LCS Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison | Job No.: 460-157553-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 460-525350/4

Matrix: Solid | Lab File ID: D51179.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 06/05/2018 20:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 525350 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	0.0194		0.0010	0.00023
79-34-5	1,1,2,2-Tetrachloroethane	0.0203		0.0010	0.00021
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0214		0.0010	0.00030
79-00-5	1,1,2-Trichloroethane	0.0196		0.0010	0.00018
75-34-3	1,1-Dichloroethane	0.0198		0.0010	0.00021
75-35-4	1,1-Dichloroethene	0.0200		0.0010	0.00023
87-61-6	1,2,3-Trichlorobenzene	0.0191		0.0010	0.00018
120-82-1	1,2,4-Trichlorobenzene	0.0200		0.0010	0.000092
96-12-8	1,2-Dibromo-3-Chloropropane	0.0180		0.0010	0.00046
106-93-4	1,2-Dibromoethane	0.0192		0.0010	0.00018
95-50-1	1,2-Dichlorobenzene	0.0204		0.0010	0.00014
107-06-2	1,2-Dichloroethane	0.0183		0.0010	0.00030
78-87-5	1,2-Dichloropropane	0.0192		0.0010	0.00042
541-73-1	1,3-Dichlorobenzene	0.0207		0.0010	0.00016
106-46-7	1,4-Dichlorobenzene	0.0208		0.0010	0.00010
123-91-1	1,4-Dioxane	0.385		0.020	0.0092
78-93-3	2-Butanone (MEK)	0.0913		0.0050	0.0011
591-78-6	2-Hexanone	0.0973		0.0050	0.00078
108-10-1	4-Methyl-2-pentanone (MIBK)	0.102		0.0050	0.00066
67-64-1	Acetone	0.0925		0.0050	0.0038
107-02-8	Acrolein	0.191		0.10	0.028
107-13-1	Acrylonitrile	0.208		0.010	0.0016
71-43-2	Benzene	0.0211		0.0010	0.00026
74-97-5	Bromochloromethane	0.0184		0.0010	0.00028
75-27-4	Bromodichloromethane	0.0181		0.0010	0.00026
75-25-2	Bromoform	0.0185		0.0010	0.00043
74-83-9	Bromomethane	0.0170		0.0010	0.00047
75-15-0	Carbon disulfide	0.0199		0.0010	0.00027
56-23-5	Carbon tetrachloride	0.0193		0.0010	0.00018
108-90-7	Chlorobenzene	0.0197		0.0010	0.00018
75-00-3	Chloroethane	0.0177		0.0010	0.00052
67-66-3	Chloroform	0.0191		0.0010	0.00032
74-87-3	Chloromethane	0.0162		0.0010	0.00044
156-59-2	cis-1,2-Dichloroethene	0.0181		0.0010	0.00015
10061-01-5	cis-1,3-Dichloropropene	0.0201		0.0010	0.00027

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison
Job No.: 460-157553-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 460-525350/4
Matrix: Solid
Lab File ID: D51179.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 06/05/2018 20:09
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: Rtx-624 ID: 0.25(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 525350
Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
110-82-7	Cyclohexane	0.0213		0.0010	0.00022
124-48-1	Dibromochloromethane	0.0188		0.0010	0.00019
75-71-8	Dichlorodifluoromethane	0.0174		0.0010	0.00034
100-41-4	Ethylbenzene	0.0210		0.0010	0.00020
98-82-8	Isopropylbenzene	0.0213		0.0010	0.00013
79-20-9	Methyl acetate	0.0381		0.0050	0.0043
1634-04-4	Methyl tert-butyl ether	0.0191		0.0010	0.00013
108-87-2	Methylcyclohexane	0.0213		0.0010	0.00016
75-09-2	Methylene Chloride	0.0186		0.0010	0.00016
179601-23-1	m-Xylene & p-Xylene	0.0205		0.0010	0.00017
95-47-6	o-Xylene	0.0211		0.0010	0.000095
100-42-5	Styrene	0.0207		0.0010	0.00012
127-18-4	Tetrachloroethene	0.0207		0.0010	0.00014
108-88-3	Toluene	0.0204		0.0010	0.00063
156-60-5	trans-1,2-Dichloroethene	0.0196		0.0010	0.00025
10061-02-6	trans-1,3-Dichloropropene	0.0194		0.0010	0.00027
79-01-6	Trichloroethene	0.0183		0.0010	0.00014
75-69-4	Trichlorofluoromethane	0.0175		0.0010	0.00041
75-01-4	Vinyl chloride	0.0172		0.0010	0.00055
1330-20-7	Xylenes, Total	0.0416		0.0020	0.00025

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
460-00-4	4-Bromofluorobenzene	92		70-130
1868-53-7	Dibromofluoromethane (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	108		70-130

TestAmerica Edison
Target Compound Quantitation Report

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51179.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 05-Jun-2018 20:09:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCSD
Misc. Info.: 460-0073248-004
Operator ID: Instrument ID: CVOAMS4

Method: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\8260S_4.m
Limit Group: VOA - 8260C DKQP Water and Solid
Last Update: 06-Jun-2018 09:21:44 Calib Date: 24-May-2018 06:58:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Edison\ChromData\CVOAMS4\20180524-72566.b\D50579.D

Column 1 : Rtx-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: martineze Date: 06-Jun-2018 09:21:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116	1.588	1.606	-0.018	91	63065	20.0	18.5	a
2 Dichlorodifluoromethane	85	1.618	1.637	-0.019	99	112013	20.0	17.4	
3 Chloromethane	50	1.826	1.856	-0.030	97	87761	20.0	16.2	
5 Butadiene	54	1.929	1.948	-0.019	99	70975	20.0	17.0	
4 Vinyl chloride	62	1.935	1.960	-0.025	97	80995	20.0	17.2	
6 Bromomethane	94	2.271	2.295	-0.024	99	60413	20.0	17.0	
7 Chloroethane	64	2.338	2.356	-0.018	99	46062	20.0	17.7	
10 Pentane	72	2.576	2.588	-0.012	96	27584	40.0	40.0	
8 Dichlorofluoromethane	67	2.576	2.594	-0.018	98	129424	20.0	17.6	
9 Trichlorofluoromethane	101	2.582	2.606	-0.024	96	102514	20.0	17.5	
12 Ethanol	46	2.825	2.826	-0.001	82	17695	800.0	881.5	
11 Ethyl ether	59	2.813	2.826	-0.013	89	55697	20.0	20.1	
13 2-Methyl-1,3-butadiene	53	2.832	2.844	-0.012	97	66569	20.0	22.1	
14 1,2-Dichloro-1,1,2-trifluo	117	2.905	2.917	-0.012	75	75404	20.0	20.8	
16 Acrolein	56	3.021	3.039	-0.018	96	95336	300.0	191.3	
17 1,1-Dichloroethene	96	3.057	3.070	-0.013	97	77728	20.0	20.0	
15 1,1,2-Trichloro-1,2,2-trif	101	3.057	3.076	-0.019	98	86403	20.0	21.4	
18 Acetone	43	3.173	3.185	-0.012	86	94230	100.0	92.5	
19 Iodomethane	142	3.240	3.252	-0.012	97	168945	20.0	18.3	
20 Carbon disulfide	76	3.277	3.289	-0.012	99	272033	20.0	19.9	
21 Isopropyl alcohol	45	3.307	3.313	-0.006	99	52276	200.0	189.3	
22 3-Chloro-1-propene	76	3.447	3.454	-0.007	90	46063	20.0	19.8	
23 Cyclopentene	67	3.466	3.478	-0.012	94	182160	20.0	21.3	
24 Methyl acetate	43	3.466	3.478	-0.012	99	96202	40.0	38.1	
25 Acetonitrile	40	3.539	3.551	-0.012	98	45787	200.0	240.0	
26 Methylene Chloride	84	3.606	3.618	-0.012	92	85332	20.0	18.6	
* 27 TBA-d9 (IS)	65	3.624	3.630	-0.006	56	458929	1000.0	1000.0	
28 2-Methyl-2-propanol	59	3.709	3.716	-0.007	98	96329	200.0	192.7	
29 Methyl tert-butyl ether	73	3.801	3.813	-0.012	97	194783	20.0	19.1	
30 trans-1,2-Dichloroethene	96	3.831	3.838	-0.007	93	83523	20.0	19.6	
31 Acrylonitrile	53	3.923	3.935	-0.012	94	239789	200.0	208.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Hexane	57	4.026	4.033	-0.007	93	112951	20.0	22.7	
33 Isopropyl ether	45	4.295	4.301	-0.006	94	219595	20.0	20.7	
34 1,1-Dichloroethane	63	4.319	4.325	-0.006	99	129693	20.0	19.8	
35 Vinyl acetate	86	4.350	4.356	-0.006	100	25498	40.0	36.7	
36 2-Chloro-1,3-butadiene	88	4.374	4.380	-0.006	90	69620	20.0	19.8	
37 Tert-butyl ethyl ether	59	4.679	4.691	-0.012	89	199772	20.0	19.6	
* 38 2-Butanone-d5	46	4.923	4.923	0.000	0	380667	250.0	250.0	
39 2,2-Dichloropropane	79	4.935	4.941	-0.006	87	34554	20.0	18.8	
40 cis-1,2-Dichloroethene	96	4.959	4.966	-0.007	99	88396	20.0	18.1	
41 2-Butanone (MEK)	72	4.990	4.996	-0.006	97	37946	100.0	91.3	
42 Ethyl acetate	70	5.002	5.008	-0.006	96	13204	40.0	38.0	
43 Methyl acrylate	55	5.063	5.069	-0.006	100	51609	20.0	18.0	
44 Propionitrile	54	5.148	5.155	-0.007	98	92325	200.0	184.1	
45 Tetrahydrofuran	72	5.234	5.240	-0.006	77	17819	40.0	37.9	
46 Chlorobromomethane	128	5.240	5.246	-0.006	83	44603	20.0	18.4	
47 Methacrylonitrile	67	5.276	5.283	-0.007	92	256051	200.0	184.8	
48 Chloroform	83	5.313	5.319	-0.006	99	125612	20.0	19.1	
49 Cyclohexane	84	5.459	5.472	-0.013	93	118492	20.0	21.3	
50 1,1,1-Trichloroethane	97	5.484	5.490	-0.006	99	108624	20.0	19.4	
$ 51 Dibromofluoromethane (Surr	113	5.502	5.508	-0.006	98	218189	50.0	49.4	
52 Carbon tetrachloride	117	5.630	5.636	-0.006	97	95255	20.0	19.3	
53 1,1-Dichloropropene	75	5.666	5.673	-0.007	97	100980	20.0	19.7	
54 Isobutyl alcohol	43	5.861	5.868	-0.007	93	136703	500.0	550.0	
55 Benzene	78	5.910	5.917	-0.007	97	279348	20.0	21.1	
$ 56 1,2-Dichloroethane-d4 (Sur	65	5.935	5.941	-0.006	96	191954	50.0	50.0	
57 Tert-amyl methyl ether	87	6.002	6.008	-0.006	91	60704	20.0	18.8	
58 Isopropyl acetate	43	6.008	6.014	-0.006	98	190713	20.0	19.2	
59 1,2-Dichloroethane	62	6.026	6.032	-0.006	97	82429	20.0	18.3	
60 n-Heptane	57	6.124	6.130	-0.006	93	63639	20.0	23.5	
* 61 Fluorobenzene	96	6.276	6.276	0.000	99	744259	50.0	50.0	
62 n-Butanol	56	6.684	6.685	-0.001	89	46702	500.0	455.5	
63 Trichloroethene	95	6.715	6.715	0.000	95	71833	20.0	18.3	
64 Methylcyclohexane	83	6.855	6.862	-0.007	94	142514	20.0	21.3	
65 Ethyl acrylate	73	6.873	6.880	-0.007	97	4845	20.0	18.7	
66 1,2-Dichloropropane	63	7.044	7.050	-0.006	92	66271	20.0	19.2	
* 67 1,4-Dioxane-d8	96	7.117	7.124	-0.007	0	38724	1000.0	1000.0	
68 Methyl methacrylate	100	7.148	7.148	0.000	89	31676	40.0	36.4	
69 1,4-Dioxane	88	7.178	7.179	0.000	87	15965	400.0	384.8	
70 Dibromomethane	93	7.184	7.191	-0.007	91	42095	20.0	17.8	
71 n-Propyl acetate	43	7.209	7.209	0.000	98	77736	20.0	18.4	
72 Dichlorobromomethane	83	7.349	7.349	0.000	99	81139	20.0	18.1	
73 2-Nitropropane	41	7.678	7.678	0.000	95	23463	40.0	31.3	
74 2-Chloroethyl vinyl ether	63	7.684	7.685	0.000	85	20648	20.0	18.1	
75 Epichlorohydrin	57	7.776	7.782	-0.006	100	109503	400.0	360.9	
76 cis-1,3-Dichloropropene	75	7.825	7.831	-0.006	90	90602	20.0	20.1	
77 4-Methyl-2-pentanone (MIBK	43	7.977	7.977	0.000	96	298196	100.0	102.0	
$ 78 Toluene-d8 (Surr)	98	8.038	8.044	-0.006	99	716249	50.0	54.0	
79 Toluene	91	8.105	8.111	-0.006	93	281518	20.0	20.4	
80 trans-1,3-Dichloropropene	75	8.398	8.398	0.000	98	72991	20.0	19.4	
81 Ethyl methacrylate	69	8.422	8.422	0.000	90	68919	20.0	18.4	
82 1,1,2-Trichloroethane	83	8.562	8.568	-0.006	96	43502	20.0	19.6	
83 Tetrachloroethene	166	8.599	8.599	0.000	96	85791	20.0	20.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 1,3-Dichloropropane	76	8.721	8.721	0.000	91	81405	20.0	20.0	
85 2-Hexanone	43	8.763	8.764	-0.001	96	183090	100.0	97.3	
86 n-Butyl acetate	73	8.849	8.849	0.000	99	14363	20.0	20.2	
87 Chlorodibromomethane	129	8.891	8.898	-0.007	98	58417	20.0	18.8	
88 Ethylene Dibromide	107	9.007	9.007	0.000	99	50989	20.0	19.2	
* 89 Chlorobenzene-d5	117	9.373	9.379	-0.006	85	499997	50.0	50.0	
90 Chlorobenzene	112	9.397	9.404	-0.007	97	179378	20.0	19.7	
91 Ethylbenzene	106	9.464	9.465	-0.001	98	102093	20.0	21.0	
92 1,1,1,2-Tetrachloroethane	131	9.477	9.477	0.000	96	69343	20.0	19.9	
93 m-Xylene & p-Xylene	106	9.562	9.562	0.000	100	124153	20.0	20.5	
94 n-Butyl acrylate	73	9.855	9.855	0.000	98	39268	20.0	20.9	
95 o-Xylene	106	9.885	9.891	-0.006	95	124987	20.0	21.1	
96 Styrene	104	9.909	9.910	-0.001	97	196578	20.0	20.7	
97 Amyl acetate (mixed isomer	43	10.031	10.032	-0.001	91	97907	20.0	23.0	
98 Bromoform	173	10.086	10.086	0.000	98	39622	20.0	18.5	
99 Isopropylbenzene	105	10.166	10.166	0.000	95	336346	20.0	21.3	
$ 100 4-Bromofluorobenzene	174	10.330	10.330	0.000	0	236544	50.0	46.2	
101 Bromobenzene	156	10.446	10.446	0.000	90	83531	20.0	19.8	
102 1,1,2,2-Tetrachloroethane	83	10.458	10.464	-0.006	98	74927	20.0	20.3	
103 N-Propylbenzene	91	10.483	10.489	-0.006	99	391654	20.0	21.9	
104 1,2,3-Trichloropropane	110	10.507	10.507	0.000	99	21332	20.0	19.7	
105 trans-1,4-Dichloro-2-buten	53	10.513	10.513	0.000	79	18161	20.0	21.4	
106 4-Ethyltoluene	105	10.574	10.574	0.000	98	335682	20.0	22.0	
107 2-Chlorotoluene	91	10.580	10.580	0.000	97	260241	20.0	21.6	
108 1,3,5-Trimethylbenzene	105	10.623	10.623	0.000	94	279555	20.0	21.1	
109 4-Chlorotoluene	91	10.665	10.666	-0.001	96	216116	20.0	21.1	
110 Butyl Methacrylate	87	10.678	10.678	0.000	91	83641	20.0	21.1	
111 tert-Butylbenzene	119	10.861	10.861	-0.001	96	229724	20.0	20.6	
112 1,2,4-Trimethylbenzene	105	10.903	10.903	0.000	97	280763	20.0	21.0	
113 sec-Butylbenzene	105	11.019	11.019	0.000	99	365722	20.0	21.5	
114 4-Isopropyltoluene	119	11.123	11.123	0.000	98	323972	20.0	21.6	
115 1,3-Dichlorobenzene	146	11.141	11.147	-0.006	97	164660	20.0	20.7	
* 116 1,4-Dichlorobenzene-d4	152	11.196	11.196	0.000	93	293038	50.0	50.0	
117 1,4-Dichlorobenzene	146	11.214	11.214	0.000	96	167552	20.0	20.8	
118 Benzyl chloride	126	11.318	11.324	-0.006	99	26556	20.0	20.7	
119 2,3-Dihydroindene	117	11.379	11.379	0.000	94	318229	20.0	18.8	
120 p-Diethylbenzene	119	11.403	11.403	0.000	95	202321	20.0	22.2	
121 n-Butylbenzene	92	11.421	11.428	-0.007	97	171222	20.0	22.6	
122 1,2-Dichlorobenzene	146	11.501	11.501	0.000	99	162278	20.0	20.4	
123 1,2,4,5-Tetramethylbenzene	119	12.037	12.043	-0.006	98	279126	20.0	20.7	
124 1,2-Dibromo-3-Chloropropan	157	12.159	12.159	0.000	93	17229	20.0	18.0	
125 1,3,5-Trichlorobenzene	180	12.287	12.293	-0.006	98	142279	20.0	20.8	
126 1,2,4-Trichlorobenzene	180	12.933	12.933	0.000	94	125817	20.0	20.0	
127 Hexachlorobutadiene	225	13.043	13.043	0.000	97	62607	20.0	19.9	
128 Naphthalene	128	13.232	13.232	0.000	99	266330	20.0	18.7	
129 1,2,3-Trichlorobenzene	180	13.525	13.525	0.000	95	118403	20.0	19.1	
S 130 1,2-Dichloroethene, Total	100				0		40.0	37.7	
S 131 1,3-Dichloropropene, Total	100				0		40.0	39.5	
S 132 Xylenes, Total	100				0		40.0	41.6	
S 133 Total BTEX	1				0		100.0	104.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

ACROLEIN W_00077	Amount Added:	3.00	Units: uL	
GASES Li_00262	Amount Added:	2.00	Units: uL	
8260MIX1COMB_00080	Amount Added:	2.00	Units: uL	
8260ISNEW_00119	Amount Added:	1.00	Units: uL	Run Reagent
8260SURR250_00175	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 06-Jun-2018 09:22:12 Chrom Revision: 2.2 11-May-2018 08:54:46

TestAmerica Edison

Data File: \\ChromNA\Edison\ChromData\CVOAMS4\20180605-73248.b\D51179.D

Injection Date: 05-Jun-2018 20:09:30 Instrument ID: CVOAMS4 Operator ID:

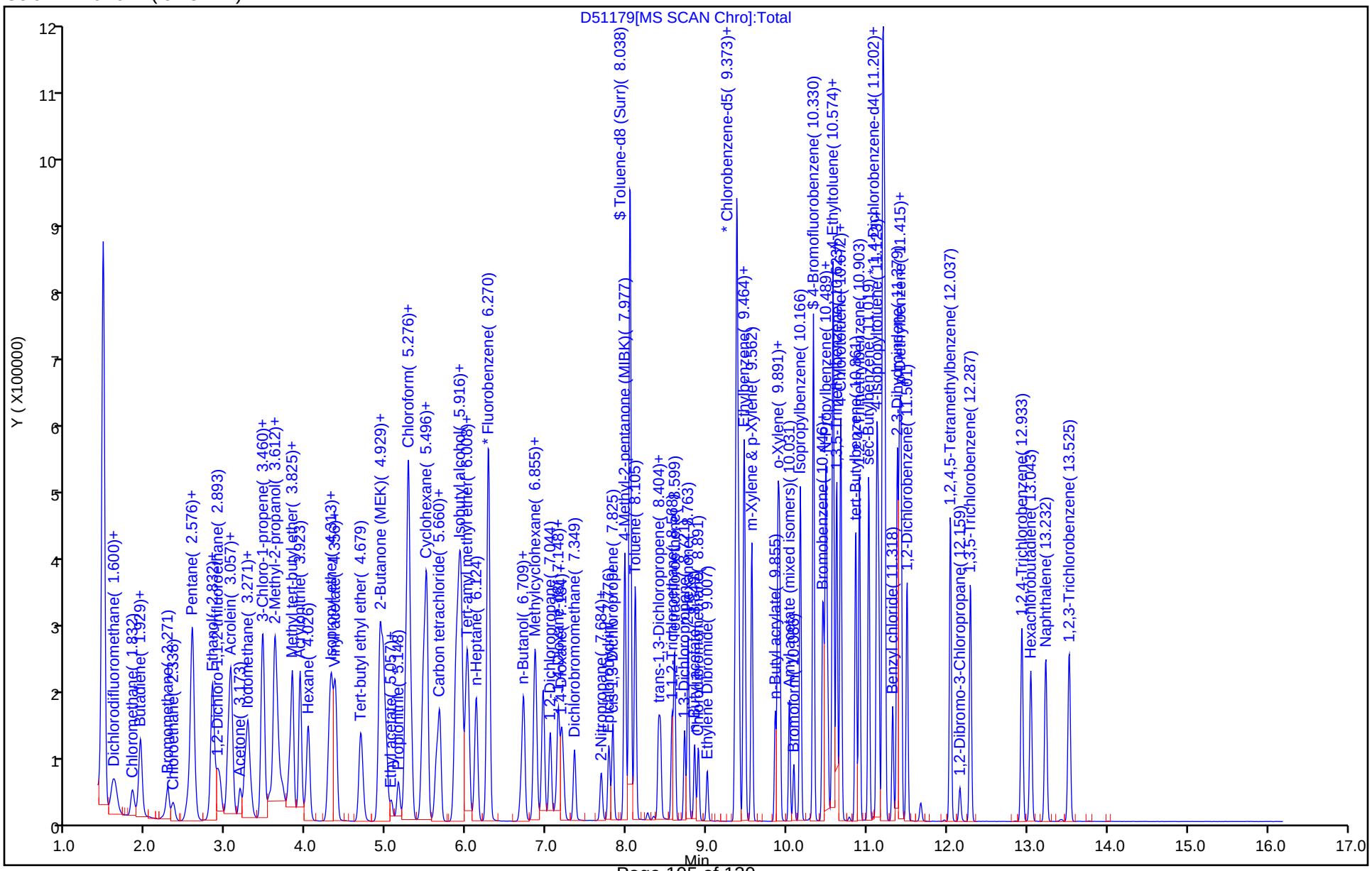
Lims ID: LCSD Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260S_4 Limit Group: VOA - 8260C DKQP Water and Solid

Column: Rtx-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 05/24/2018 00:37

Analysis Batch Number: 521982 End Date: 05/24/2018 07:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-521982/1		05/24/2018 00:37	1	D50565.D	Rtx-624 0.25(mm)
STD20 460-521982/6 ICIS		05/24/2018 03:17	1	D50570.D	Rtx-624 0.25(mm)
STD50 460-521982/7 IC		05/24/2018 03:41	1	D50571.D	Rtx-624 0.25(mm)
STD200 460-521982/8 IC		05/24/2018 04:06	1	D50572.D	Rtx-624 0.25(mm)
STD500 460-521982/9 IC		05/24/2018 04:30	1	D50573.D	Rtx-624 0.25(mm)
STD1 460-521982/14 IC		05/24/2018 06:33	1	D50578.D	Rtx-624 0.25(mm)
STD5 460-521982/15 IC		05/24/2018 06:58	1	D50579.D	Rtx-624 0.25(mm)
ICV 460-521982/16		05/24/2018 07:22	1		Rtx-624 0.25(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: CVOAMS4 Start Date: 06/05/2018 18:44

Analysis Batch Number: 525350 End Date: 06/05/2018 23:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 460-525350/1		06/05/2018 18:44	1	D51176.D	Rtx-624 0.25(mm)
CCVIS 460-525350/2		06/05/2018 19:09	1	D51177.D	Rtx-624 0.25(mm)
LCS 460-525350/3		06/05/2018 19:36	1	D51178.D	Rtx-624 0.25(mm)
LCSD 460-525350/4		06/05/2018 20:09	1	D51179.D	Rtx-624 0.25(mm)
MB 460-525350/7		06/05/2018 21:22	1	D51182.D	Rtx-624 0.25(mm)
ZZZZZ		06/05/2018 22:01	1		Rtx-624 0.25(mm)
ZZZZZ		06/05/2018 22:29	1		Rtx-624 0.25(mm)
460-157553-1		06/05/2018 23:32	1	D51186.D	Rtx-624 0.25(mm)
ZZZZZ		06/05/2018 23:56	1		Rtx-624 0.25(mm)

8260C

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Batch Number: 525404 Batch Start Date: 06/05/18 22:36 Batch Analyst: Malata, Andrew V

Batch Method: 5035 Batch End Date: 06/05/18 23:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
460-157553-A-1	AD04394-009	5035, 8260C	T	5.70 g	5 mL				

Batch Notes	
Balance ID	weight of the Samples was based from the information given

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-157553-1

SDG No.:

Project: 8052424

Client Sample ID	Lab Sample ID
AD04394-009	460-157553-1

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-157553-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 02/15/2007 17:07

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		1	
Percent Solids		1	

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job Number: 460-157553-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/01/2007 16:49

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		1	
Percent Solids		1	

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Edison Job No.: 460-157553-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 06/05/2018 23:13 End Date: 06/05/2018 23:13

Lab Sample ID	D/F	Type	Time	Analytes																			
				% Sol	Moist																		
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
ZZZZZZ			23:13																				
460-157553-1	1	T	23:13	X	X																		
ZZZZZZ			23:13																				
460-157545-A-5 DU	1	T	23:13	X	X																		

Prep Types
T = Total/NA

Shipping and Receiving Documents

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:
Hampton-Clarke, Inc.:
Attn:Reporting
175 Route 46 West
Fairfield, New Jersey 07004

Invoice To:
Hampton-Clarke, Inc.:
Attn:Accounting
175 Route 46 West
Fairfield, New Jersey 07004

Project #: 8052424

CocID#: 5865

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: 24 hour **Preliminary Due Date:** 6/6/2018
Report Type: PADEP-R (REDUCED) **Hard Copy Due Date:** 6/19/2018

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
4D04394-009	SB8_8.0_052318	Soil/Terr	5/23/2018	12:23:00 PM	TCL VO+15 8260

460-157553 Chain of Custody

1-Day RUSH

MP 6/5/18

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
		6/5/18	18:55	SAMPLE WILL BE OUT OF HOLD 6/6/18 @ 12:23.
				Cooler Temp: 0-3°C

HC Lab Use Only: **Subcontracted Lab Id and Contact:** TA-Edison, Sapna Nyyar, (732) 549-3900, LabID: House, 777 New Durham Road, , Edison, NJ, 08817

Analysis Type: SOLIDS-SS

Batch Number: SOLIDS-SS-7954 **Units:** Percent

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
DUP	AD04388-001	NA	NA	5	88.8888889	NA	0.098	

Sam #	Type	MB	Result	Mdl	Per Sol	Raw Result	Tare Wt	Tare Wet	Tare Dry1	Tare Dry2	% Diff	Prep Date	Prep By	Anal Date	Anal By
AD04388-001	DUP		89			88.889	1.35	13.41	12.07	12.07	0			05/25/18	jessica
AD04380-002	Sample		93			92.915	1.34	12.49	11.7	11.7	0			05/25/18	jessica
AD04380-003	Sample		85			85	1.34	12.94	11.2	11.2	0			05/25/18	jessica
AD04380-004	Sample		91			90.514	1.36	13.8	12.62	12.62	0			05/25/18	jessica
AD04380-005	Sample		84			83.81	1.35	15	12.79	12.79	0			05/25/18	jessica
AD04380-006	Sample		84			84.448	1.36	14.67	12.6	12.6	0			05/25/18	jessica
AD04380-007	Sample		80			79.671	1.35	11.09	9.11	9.11	0			05/25/18	jessica
AD04380-008	Sample		78			78.12	1.35	12.73	10.24	10.24	0			05/25/18	jessica
AD04384-001	Sample		93			92.992	1.34	14.61	13.68	13.68	0			05/25/18	jessica
AD04384-002	Sample		94			93.962	1.35	10.79	10.23	10.22	0.0978			05/25/18	jessica
AD04384-003	Sample		93			92.621	1.35	14.36	13.4	13.4	0			05/25/18	jessica
AD04386-001	Sample		90			90.493	1.35	15.13	13.82	13.82	0			05/25/18	jessica
AD04386-003	Sample		85			84.776	1.35	14.75	12.71	12.71	0			05/25/18	jessica
AD04386-004	Sample		91			90.931	1.35	13.7	12.59	12.58	0.0795			05/25/18	jessica
AD04386-005	Sample		90			90.059	1.35	16.54	15.01	15.03	0.133			05/25/18	jessica
AD04386-006	Sample		90			89.94	1.35	14.77	13.42	13.42	0			05/25/18	jessica
AD04388-001	Sample		89			88.802	1.36	14.13	12.7	12.7	0			05/25/18	jessica
AD04388-002	Sample		87			86.743	1.35	14.4	12.67	12.67	0			05/25/18	jessica
AD04388-003	Sample		69			69.466	1.35	14.45	10.44	10.45	0.0957			05/25/18	jessica
AD04394-008	Sample		83			83.298	1.34	10.74	9.17	9.17	0			05/25/18	jessica
AD04394-009	Sample		89			88.731	1.36	11.21	10.11	10.1	0.099			05/25/18	jessica

Sample weights.
Vial 119753 = 5.7
Vial 119754 = 6.82

Flag Codes: Ra - Recovery failed specified criteria (PVS/MBS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.
Na - Not Applicable Nc - Not Checked ..either one or both values =ND

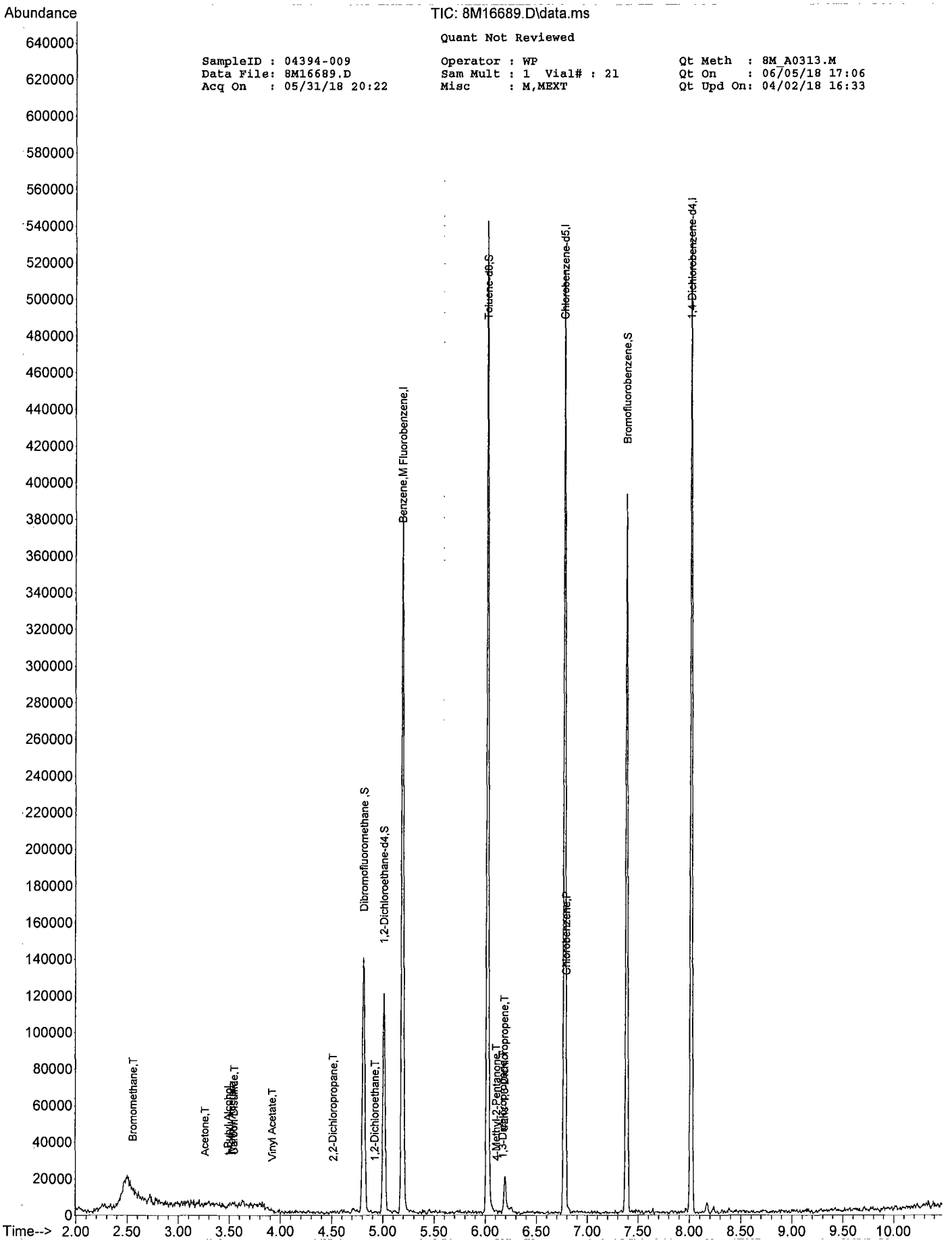
Quantitation Report (Not Reviewed)

SampleID : 04394-009 Operator : WP Qt Meth : 8M_A0313.M
Data File: 8M16689.D Sam Mult : 1 Vial# : 21 Qt On : 06/05/18 17:06
Acq On : 05/31/18 20:22 Misc : M,MEXT Qt Upd On: 04/02/18 16:33

Data Path : G:\GCMSDATA\2018\GCMS_8\DATA\05-31-18\
Qt Path : G:\GcMsData\2018\GCMS_8\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.190	96	275655	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.775	117	218035	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.016	152	108375	30.00	ug/l	-0.02
System Monitoring Compounds						
37) Dibromofluoromethane	4.813	111	66681	29.11	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.03%			
39) 1,2-Dichloroethane-d4	5.010	67	32178	28.86	ug/l	0.00
Spiked Amount 30.000			Recovery = 96.20%			
66) Toluene-d8	6.022	98	274985	31.88	ug/l	0.00
Spiked Amount 30.000			Recovery = 106.27%			
76) Bromofluorobenzene	7.386	174	84413	29.56	ug/l	-0.01
Spiked Amount 30.000			Recovery = 98.53%			
Target Compounds						Qvalue
8) Bromomethane	2.556	94	112	0.0844	ug/l	94
19) Acetone	3.260	43	588	1.2220	ug/l	55
20) Carbon Disulfide	3.543	76	129	0.0220	ug/l	100
21) t-Butyl Alcohol	3.489	59	126	0.6384	ug/l	50
25) Methyl Acetate	3.524	43	508	0.2564	ug/l	100
32) 2,2-Dichloropropane	4.511	77	121	0.0446	ug/l	50
40) 1,2-Dichloroethane	4.919	62	129	0.0545	ug/l	39
44) Vinyl Acetate	3.916	43	135	0.1211	ug/l	100
50) Benzene	5.186	78	537	0.0705	ug/l	100
58) trans-1,3-Dichloropropene	6.186	75	111	0.0434	ug/l	44
62) 1,3-Dichloropropane	6.170	76	105	0.0387	ug/l	41
63) 4-Methyl-2-Pentanone	6.106	43	145	0.0923	ug/l	43
69) Chlorobenzene	6.791	112	226	0.0436	ug/l	44

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



8M_A0313.M Tue Jun 05 17:06:46 2018 HC\USERORG Page: 1

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 157553

Number of Coolers: 1 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	0.3 °C	0.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: C Date: 06/05/18

Login Sample Receipt Checklist

Client: Hampton-Clarke Veritech

Job Number: 460-157553-1

Login Number: 157553
List Number: 1
Creator: DiGuardia, Joseph L

List Source: TestAmerica Edison

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	