APPENDIX I

ANALYTICAL REPORTS

(SURFACE SOIL)

ANALYTICAL REPORT

Lab Number:	L1912447
Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
ATTN:	Kirk Moline
Phone:	(518) 786-7400
Project Name:	HAMILTON HILL II, TA1
Project Number:	16.6334
Report Date:	04/10/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1912447-01	RISS1	SOIL	SCHENECTADY, NY	03/27/19 14:10	03/28/19
L1912447-02	RISS2	SOIL	SCHENECTADY, NY	03/27/19 15:15	03/28/19
L1912447-03	RISS3	SOIL	SCHENECTADY, NY	03/27/19 15:45	03/28/19
L1912447-04	RISS4	SOIL	SCHENECTADY, NY	03/27/19 16:20	03/28/19
L1912447-05	FD01_190327	SOIL	SCHENECTADY, NY	03/27/19 00:00	03/28/19
L1912447-06	LTB01_190327	WATER	SCHENECTADY, NY	03/27/19 00:00	03/28/19
L1912447-07	FTB01_190327	WATER	SCHENECTADY, NY	03/27/19 14:50	03/28/19
L1912447-08	RISS5	SOIL	SCHENECTADY, NY	03/28/19 14:15	03/28/19
L1912447-09	RISS6	SOIL	SCHENECTADY, NY	03/28/19 14:30	03/28/19
L1912447-10	EB01_190328	WATER	SCHENECTADY, NY	03/28/19 08:45	03/28/19

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of 1,4-Dioxane was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Semivolatile Organics

L1912447-03, -05, and -08: The sample has elevated detection limits due to the dilution required by the sample matrix.

Perfluorinated Alkyl Acids by Isotope Dilution

L1912447-01, -03, -05, -09, WG1221639-1, WG1221639-2/-3 and WG1221639-4/-5: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1221639-4/-5 MS/MSD RPDs, performed on L1912447-01, are outside the acceptance criteria for n-methyl perfluorooctanesulfonamidoacetic acid (nmefosaa) (31%) and perfluorotridecanoic acid (pftrda) (31%).

The continuing calibration standard, associated with WG1222048-2, had the response for the extracted internal standards N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA), Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA) and N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

The continuing calibration standard, associated with WG1222048-1, had the response for the extracted internal standard N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

Case Narrative (continued)

Total Metals

L1912447-01, -02, -03, -04, -05, -08 and -09: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1221307-3/-4 MS/MSD recoveries, performed on L1912447-01, are outside the acceptance criteria for mercury (128%/366%). A post digestion spike was performed and was within acceptance criteria.

The WG1221307-3/-4 MS/MSD RPD for mercury (51%), performed on L1912447-01, is above the acceptance criteria.

The WG1222233-3/-4 MS/MSD recoveries for aluminum (368%/356%), calcium (MS 366%), iron (745%/2150%) and lead (52%/32%), performed on L1912447-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1222233-3/-4 MS/MSD recoveries, performed on L1912447-01, are outside the acceptance criteria for magnesium (202%/60%). A post digestion spike was performed and was within acceptance criteria.

The WG1222233-3/-4 MS/MSD RPDs for calcium (29%) and magnesium (32%), performed on L1912447-01, are above the acceptance criteria.

Cyanide, Total

The WG1221115-2/-3 LCS/LCSD recoveries (70%/76%), associated with L1912447-01, -02, -03, -04, -05, -08, and -09, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

The WG1221115-5 MSD recovery (73%), performed on L1912447-01, is outside the acceptance criteria; however, the associated LCS recovery is within criteria. No further action was taken.

Hexavalent Chromium

The WG1221228-4 Insoluble MS/MSD recoveries (43%/39%), performed on L1912447-01, are below the acceptance criteria. The Soluble MS recovery (74%) was also below criteria. This has been attributed to matrix interference. A post-spike was performed with an acceptable recovery (96%).

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Melissa Cripps

Title: Technical Director/Representative Date: 04/10/19

ORGANICS

VOLATILES

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10
Client ID: RISS1 Date Received: 03/28/19
Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 22:31
Analyst: NLK
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.5	3.4	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.22	1
Chloroform	ND		ug/kg	2.2	0.21	1
Carbon tetrachloride	ND		ug/kg	1.5	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.19	1
Dibromochloromethane	ND		ug/kg	1.5	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.40	1
Tetrachloroethene	ND		ug/kg	0.75	0.29	1
Chlorobenzene	ND		ug/kg	0.75	0.19	1
Trichlorofluoromethane	ND		ug/kg	6.0	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.75	0.25	1
Bromodichloromethane	ND		ug/kg	0.75	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.41	1
cis-1,3-Dichloropropene	ND		ug/kg	0.75	0.24	1
Bromoform	ND		ug/kg	6.0	0.37	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.75	0.25	1
Benzene	ND		ug/kg	0.75	0.25	1
Toluene	ND		ug/kg	1.5	0.81	1
Ethylbenzene	ND		ug/kg	1.5	0.21	1
Chloromethane	ND		ug/kg	6.0	1.4	1
Bromomethane	ND		ug/kg	3.0	0.87	1
Vinyl chloride	ND		ug/kg	1.5	0.50	1
Chloroethane	ND		ug/kg	3.0	0.68	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1
Trichloroethene	ND		ug/kg	0.75	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	3.0	0.22	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	3.0	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	3.0	0.26	1
Methyl tert butyl ether	ND		ug/kg	3.0	0.30	1
p/m-Xylene	ND		ug/kg	3.0	0.84	1
o-Xylene	ND		ug/kg	1.5	0.44	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.26	1
Styrene	ND		ug/kg	1.5	0.29	1
Dichlorodifluoromethane	ND		ug/kg	15	1.4	1
Acetone	ND		ug/kg	15	7.2	1
Carbon disulfide	ND		ug/kg	15	6.8	1
2-Butanone	ND		ug/kg	15	3.3	1
4-Methyl-2-pentanone	ND		ug/kg	15	1.9	1
2-Hexanone	ND		ug/kg	15	1.8	1
Bromochloromethane	ND		ug/kg	3.0	0.31	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.42	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	1.5	1
Isopropylbenzene	ND		ug/kg	1.5	0.16	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.0	0.48	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.0	0.41	1
Methyl Acetate	ND		ug/kg	6.0	1.4	1
Cyclohexane	ND		ug/kg	15	0.82	1
1,4-Dioxane	ND		ug/kg	120	53.	1
Freon-113	ND		ug/kg	6.0	1.0	1
Methyl cyclohexane	ND		ug/kg	6.0	0.90	1

Tentatively Identified Compounds					
Total TIC Compounds	8.11	J	ug/kg		1
Unknown	8.11	J	ug/kg		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	106		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02
Client ID: RISS2
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 04:04
Analyst: NLK
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.9	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.59	0.23	1
Chlorobenzene	ND		ug/kg	0.59	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.82	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.59	0.20	1
Bromodichloromethane	ND		ug/kg	0.59	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.59	0.19	1
Bromoform	ND		ug/kg	4.7	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.59	0.20	1
Benzene	ND		ug/kg	0.59	0.20	1
Toluene	ND		ug/kg	1.2	0.64	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.7	1.1	1
Bromomethane	ND		ug/kg	2.4	0.68	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.4	0.53	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1
Trichloroethene	ND		ug/kg	0.59	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02 Date Collected: 03/27/19 15:15

Client ID: RISS2 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.66	1
o-Xylene	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
Methyl Acetate	ND		ug/kg	4.7	1.1	1
Cyclohexane	ND		ug/kg	12	0.64	1
1,4-Dioxane	ND		ug/kg	94	41.	1
Freon-113	ND		ug/kg	4.7	0.82	1
Methyl cyclohexane	ND		ug/kg	4.7	0.71	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	102		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 04:32
Analyst: NLK
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.4	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	6.2		ug/kg	0.54	0.21	1
Chlorobenzene	ND		ug/kg	0.54	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.76	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.54	0.18	1
Bromodichloromethane	ND		ug/kg	0.54	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.54	0.17	1
Bromoform	ND		ug/kg	4.3	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.54	0.18	1
Benzene	ND		ug/kg	0.54	0.18	1
Toluene	ND		ug/kg	1.1	0.59	1
Ethylbenzene	ND		ug/kg	1.1	0.15	1
Chloromethane	ND		ug/kg	4.3	1.0	1
Bromomethane	ND		ug/kg	2.2	0.63	1
Vinyl chloride	ND		ug/kg	1.1	0.36	1
Chloroethane	ND		ug/kg	2.2	0.49	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.15	1
Trichloroethene	ND		ug/kg	0.54	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 Date Collected: 03/27/19 15:45

Client ID: RISS3 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.61	1
o-Xylene	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
Styrene	ND		ug/kg	1.1	0.21	1
Dichlorodifluoromethane	ND		ug/kg	11	0.99	1
Acetone	ND		ug/kg	11	5.2	1
Carbon disulfide	ND		ug/kg	11	4.9	1
2-Butanone	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.30	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.35	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
Methyl Acetate	ND		ug/kg	4.3	1.0	1
Cyclohexane	ND		ug/kg	11	0.59	1
1,4-Dioxane	ND		ug/kg	87	38.	1
Freon-113	ND		ug/kg	4.3	0.75	1
Methyl cyclohexane	ND		ug/kg	4.3	0.66	1

Tentatively Identified Compounds				
Total TIC Compounds	52.1	J	ug/kg	1
Unknown Alkene	6.60	J	ug/kg	1
Unknown	4.70	J	ug/kg	1
Unknown Alkane	3.56	J	ug/kg	1
Unknown Alkene	25.1	J	ug/kg	1
Unknown	5.13	J	ug/kg	1
Unknown	7.00	J	ug/kg	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 Date Collected: 03/27/19 15:45

Client ID: RISS3 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	103		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04
Client ID: RISS4
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 16:20
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 05:00
Analyst: NLK
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.7	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.57	0.22	1
Chlorobenzene	ND		ug/kg	0.57	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.79	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.57	0.19	1
Bromodichloromethane	ND		ug/kg	0.57	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.57	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.57	0.19	1
Benzene	ND		ug/kg	0.57	0.19	1
Toluene	ND		ug/kg	1.1	0.62	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.3	0.66	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.3	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1
Trichloroethene	ND		ug/kg	0.57	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.16	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04 Date Collected: 03/27/19 16:20

Client ID: RISS4 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.64	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.5	1
Carbon disulfide	ND		ug/kg	11	5.2	1
2-Butanone	ND		ug/kg	11	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
Methyl Acetate	ND		ug/kg	4.5	1.1	1
Cyclohexane	ND		ug/kg	11	0.62	1
1,4-Dioxane	ND		ug/kg	91	40.	1
Freon-113	ND		ug/kg	4.5	0.79	1
Methyl cyclohexane	ND		ug/kg	4.5	0.68	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	102		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/05/19 10:11
Analyst: JC
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	3.2		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
Bromodichloromethane	ND		ug/kg	0.63	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.1	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Benzene	ND		ug/kg	0.63	0.21	1
Toluene	ND		ug/kg	1.3	0.69	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 Date Collected: 03/27/19 00:00

Client ID: FD01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.26	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
Methyl Acetate	ND		ug/kg	5.1	1.2	1
Cyclohexane	ND		ug/kg	13	0.69	1
1,4-Dioxane	ND		ug/kg	100	44.	1
Freon-113	ND		ug/kg	5.1	0.88	1
Methyl cyclohexane	ND		ug/kg	5.1	0.76	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	108		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-06 Date Collected: 03/27/19 00:00
Client ID: LTB01_190327 Date Received: 03/28/19
Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/02/19 12:41
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-06 Date Collected: 03/27/19 00:00

Client ID: LTB01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 05:28
Analyst: NLK
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.5	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.35	1
Tetrachloroethene	ND		ug/kg	0.65	0.26	1
Chlorobenzene	ND		ug/kg	0.65	0.17	1
Trichlorofluoromethane	9.6		ug/kg	5.2	0.91	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.65	0.22	1
Bromodichloromethane	ND		ug/kg	0.65	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
cis-1,3-Dichloropropene	ND		ug/kg	0.65	0.21	1
Bromoform	ND		ug/kg	5.2	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.65	0.22	1
Benzene	ND		ug/kg	0.65	0.22	1
Toluene	ND		ug/kg	1.3	0.71	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.2	1.2	1
Bromomethane	ND		ug/kg	2.6	0.76	1
Vinyl chloride	ND		ug/kg	1.3	0.44	1
Chloroethane	ND		ug/kg	2.6	0.59	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1
Trichloroethene	ND		ug/kg	0.65	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.19	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 Date Collected: 03/28/19 14:15

Client ID: RISS5 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.73	1
o-Xylene	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.3	1
Carbon disulfide	ND		ug/kg	13	6.0	1
2-Butanone	ND		ug/kg	13	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.36	1
Methyl Acetate	ND		ug/kg	5.2	1.2	1
Cyclohexane	ND		ug/kg	13	0.71	1
1,4-Dioxane	ND		ug/kg	100	46.	1
Freon-113	ND		ug/kg	5.2	0.91	1
Methyl cyclohexane	ND		ug/kg	5.2	0.79	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	101		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/04/19 05:56
Analyst: NLK
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	1.0	J	ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	ND		ug/kg	0.95	0.52	1
Ethylbenzene	ND		ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.89	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	ND		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.53	1
o-Xylene	ND		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.17	1
Styrene	ND		ug/kg	0.95	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	ND		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	ND		ug/kg	9.5	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.95	1
Isopropylbenzene	ND		ug/kg	0.95	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
Methyl Acetate	ND		ug/kg	3.8	0.90	1
Cyclohexane	ND		ug/kg	9.5	0.52	1
1,4-Dioxane	ND		ug/kg	76	33.	1
Freon-113	ND		ug/kg	3.8	0.66	1
Methyl cyclohexane	ND		ug/kg	3.8	0.57	1

Tentatively Identified Compounds

Total TIC Compounds	2.17	J	ug/kg		1
Unknown	2.17	J	ug/kg		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	106		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/02/19 13:11
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.2	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/02/19 09:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06,10 Batch: WG1222152-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/02/19 09:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06,10 Batch: WG1222152-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/02/19 09:43
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06,10 Batch: WG1222152-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/03/19 22:45
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,08-09 Batch: WG1222985-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/03/19 22:45
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,08-09 Batch: WG1222985-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/03/19 22:45
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04,08-09 Batch: WG1222985-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/05/19 08:04
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1223426-12					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.92	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/05/19 08:04
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1223426-12					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Tentatively Identified Compounds			
Total TIC Compounds	2.86	J	ug/kg
Unknown	2.86	J	ug/kg

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/05/19 08:04
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1223426-12					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/04/19 17:00
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1223426-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/04/19 17:00
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1223426-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Tentatively Identified Compounds		
No Tentatively Identified Compounds	ND	ug/kg

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/04/19 17:00
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1223426-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,10 Batch: WG1222152-3 WG1222152-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	120		120		70-130	0		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	110		110		75-130	0		20
Trichlorofluoromethane	98		99		62-150	1		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	100		100		70-130	0		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
Bromoform	110		110		54-136	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	95		96		64-130	1		20
Bromomethane	67		64		39-139	5		20
Vinyl chloride	110		110		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,10 Batch: WG1222152-3 WG1222152-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	110		110		70-130	0		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		115		70-130	4		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	110		110		70-130	0		20
Dichlorodifluoromethane	140		140		36-147	0		20
Acetone	110		110		58-148	0		20
Carbon disulfide	120		120		51-130	0		20
2-Butanone	80		81		63-138	1		20
4-Methyl-2-pentanone	120		120		59-130	0		20
2-Hexanone	97		97		57-130	0		20
Bromochloromethane	120		120		70-130	0		20
1,2-Dibromoethane	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	110		110		41-144	0		20
Isopropylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	110		110		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06,10 Batch: WG1222152-3 WG1222152-4								
1,2,4-Trichlorobenzene	110		110		70-130	0		20
Methyl Acetate	82		85		70-130	4		20
Cyclohexane	120		120		70-130	0		20
1,4-Dioxane	132		124		56-162	6		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	99		97		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,08-09 Batch: WG1222985-3 WG1222985-4								
Methylene chloride	99		103		70-130	4		30
1,1-Dichloroethane	108		113		70-130	5		30
Chloroform	106		112		70-130	6		30
Carbon tetrachloride	91		97		70-130	6		30
1,2-Dichloropropane	108		113		70-130	5		30
Dibromochloromethane	90		94		70-130	4		30
1,1,2-Trichloroethane	106		105		70-130	1		30
Tetrachloroethene	96		98		70-130	2		30
Chlorobenzene	97		101		70-130	4		30
Trichlorofluoromethane	119		123		70-139	3		30
1,2-Dichloroethane	124		127		70-130	2		30
1,1,1-Trichloroethane	100		104		70-130	4		30
Bromodichloromethane	103		109		70-130	6		30
trans-1,3-Dichloropropene	106		105		70-130	1		30
cis-1,3-Dichloropropene	102		108		70-130	6		30
Bromoform	85		95		70-130	11		30
1,1,2,2-Tetrachloroethane	100		104		70-130	4		30
Benzene	103		107		70-130	4		30
Toluene	101		105		70-130	4		30
Ethylbenzene	102		106		70-130	4		30
Chloromethane	109		112		52-130	3		30
Bromomethane	128		137		57-147	7		30
Vinyl chloride	116		122		67-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,08-09 Batch: WG1222985-3 WG1222985-4								
Chloroethane	122		127		50-151	4		30
1,1-Dichloroethene	113		97		65-135	15		30
trans-1,2-Dichloroethene	96		100		70-130	4		30
Trichloroethene	104		108		70-130	4		30
1,2-Dichlorobenzene	99		101		70-130	2		30
1,3-Dichlorobenzene	101		103		70-130	2		30
1,4-Dichlorobenzene	99		100		70-130	1		30
Methyl tert butyl ether	100		106		66-130	6		30
p/m-Xylene	103		104		70-130	1		30
o-Xylene	104		106		70-130	2		30
cis-1,2-Dichloroethene	101		101		70-130	0		30
Styrene	102		108		70-130	6		30
Dichlorodifluoromethane	87		88		30-146	1		30
Acetone	134		116		54-140	14		30
Carbon disulfide	97		96		59-130	1		30
2-Butanone	103		115		70-130	11		30
4-Methyl-2-pentanone	104		109		70-130	5		30
2-Hexanone	114		110		70-130	4		30
Bromochloromethane	99		99		70-130	0		30
1,2-Dibromoethane	101		103		70-130	2		30
1,2-Dibromo-3-chloropropane	86		88		68-130	2		30
Isopropylbenzene	96		100		70-130	4		30
1,2,3-Trichlorobenzene	104		107		70-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04,08-09 Batch: WG1222985-3 WG1222985-4								
1,2,4-Trichlorobenzene	108		112		70-130	4		30
Methyl Acetate	120		126		51-146	5		30
Cyclohexane	110		115		59-142	4		30
1,4-Dioxane	96		93		65-136	3		30
Freon-113	99		100		50-139	1		30
Methyl cyclohexane	97		100		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	122		119		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	102		106		70-130
Dibromofluoromethane	102		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1223426-10 WG1223426-11								
Methylene chloride	80		77		70-130	4		30
1,1-Dichloroethane	83		81		70-130	2		30
Chloroform	89		87		70-130	2		30
Carbon tetrachloride	91		89		70-130	2		30
1,2-Dichloropropane	81		80		70-130	1		30
Dibromochloromethane	89		88		70-130	1		30
1,1,2-Trichloroethane	87		86		70-130	1		30
Tetrachloroethene	88		83		70-130	6		30
Chlorobenzene	86		85		70-130	1		30
Trichlorofluoromethane	94		90		70-139	4		30
1,2-Dichloroethane	86		86		70-130	0		30
1,1,1-Trichloroethane	89		86		70-130	3		30
Bromodichloromethane	86		86		70-130	0		30
trans-1,3-Dichloropropene	87		87		70-130	0		30
cis-1,3-Dichloropropene	84		84		70-130	0		30
Bromoform	90		89		70-130	1		30
1,1,2,2-Tetrachloroethane	84		86		70-130	2		30
Benzene	84		82		70-130	2		30
Toluene	87		84		70-130	4		30
Ethylbenzene	87		84		70-130	4		30
Chloromethane	71		68		52-130	4		30
Bromomethane	141		131		57-147	7		30
Vinyl chloride	78		74		67-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1223426-10 WG1223426-11								
Chloroethane	86		82		50-151	5		30
1,1-Dichloroethene	83		80		65-135	4		30
trans-1,2-Dichloroethene	86		82		70-130	5		30
Trichloroethene	83		82		70-130	1		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	90		87		70-130	3		30
1,4-Dichlorobenzene	88		87		70-130	1		30
Methyl tert butyl ether	87		87		66-130	0		30
p/m-Xylene	86		84		70-130	2		30
o-Xylene	86		84		70-130	2		30
cis-1,2-Dichloroethene	85		84		70-130	1		30
Styrene	86		84		70-130	2		30
Dichlorodifluoromethane	71		68		30-146	4		30
Acetone	89		85		54-140	5		30
Carbon disulfide	81		78		59-130	4		30
2-Butanone	79		83		70-130	5		30
4-Methyl-2-pentanone	78		78		70-130	0		30
2-Hexanone	77		79		70-130	3		30
Bromochloromethane	90		89		70-130	1		30
1,2-Dibromoethane	86		86		70-130	0		30
1,2-Dibromo-3-chloropropane	88		90		68-130	2		30
Isopropylbenzene	86		83		70-130	4		30
1,2,3-Trichlorobenzene	87		88		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1223426-10 WG1223426-11								
1,2,4-Trichlorobenzene	89		86		70-130	3		30
Methyl Acetate	77		78		51-146	1		30
Cyclohexane	74		71		59-142	4		30
1,4-Dioxane	87		93		65-136	7		30
Freon-113	88		84		50-139	5		30
Methyl cyclohexane	80		77		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		107		70-130
Toluene-d8	102		100		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	104		104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1223426-3 WG1223426-4								
Methylene chloride	88		86		70-130	2		30
1,1-Dichloroethane	90		87		70-130	3		30
Chloroform	95		94		70-130	1		30
Carbon tetrachloride	100		98		70-130	2		30
1,2-Dichloropropane	85		84		70-130	1		30
Dibromochloromethane	86		85		70-130	1		30
1,1,2-Trichloroethane	83		84		70-130	1		30
Tetrachloroethene	88		85		70-130	3		30
Chlorobenzene	85		84		70-130	1		30
Trichlorofluoromethane	103		100		70-139	3		30
1,2-Dichloroethane	91		90		70-130	1		30
1,1,1-Trichloroethane	96		94		70-130	2		30
Bromodichloromethane	91		90		70-130	1		30
trans-1,3-Dichloropropene	86		84		70-130	2		30
cis-1,3-Dichloropropene	88		87		70-130	1		30
Bromoform	87		85		70-130	2		30
1,1,2,2-Tetrachloroethane	81		80		70-130	1		30
Benzene	90		88		70-130	2		30
Toluene	87		84		70-130	4		30
Ethylbenzene	87		85		70-130	2		30
Chloromethane	76		75		52-130	1		30
Bromomethane	135		135		57-147	0		30
Vinyl chloride	84		81		67-130	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1223426-3 WG1223426-4								
Chloroethane	94		91		50-151	3		30
1,1-Dichloroethene	90		88		65-135	2		30
trans-1,2-Dichloroethene	92		88		70-130	4		30
Trichloroethene	90		88		70-130	2		30
1,2-Dichlorobenzene	84		84		70-130	0		30
1,3-Dichlorobenzene	87		85		70-130	2		30
1,4-Dichlorobenzene	86		83		70-130	4		30
Methyl tert butyl ether	90		89		66-130	1		30
p/m-Xylene	85		84		70-130	1		30
o-Xylene	86		84		70-130	2		30
cis-1,2-Dichloroethene	91		87		70-130	4		30
Styrene	84		82		70-130	2		30
Dichlorodifluoromethane	78		78		30-146	0		30
Acetone	94		93		54-140	1		30
Carbon disulfide	89		86		59-130	3		30
2-Butanone	84		90		70-130	7		30
4-Methyl-2-pentanone	78		78		70-130	0		30
2-Hexanone	78		79		70-130	1		30
Bromochloromethane	93		92		70-130	1		30
1,2-Dibromoethane	84		84		70-130	0		30
1,2-Dibromo-3-chloropropane	86		87		68-130	1		30
Isopropylbenzene	86		84		70-130	2		30
1,2,3-Trichlorobenzene	84		82		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1223426-3 WG1223426-4								
1,2,4-Trichlorobenzene	84		83		70-130	1		30
Methyl Acetate	83		84		51-146	1		30
Cyclohexane	81		80		59-142	1		30
1,4-Dioxane	92		95		65-136	3		30
Freon-113	95		92		50-139	3		30
Methyl cyclohexane	88		87		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		101		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	102		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 QC Batch ID: WG1223426-6 WG1223426-7 QC Sample: L1912447-01 Client ID: RISS1												
Methylene chloride	ND	170	160	93		180	85		70-130	12		30
1,1-Dichloroethane	ND	170	160	95		180	86		70-130	11		30
Chloroform	ND	170	160	96		190	90		70-130	14		30
Carbon tetrachloride	ND	170	170	102		210	100		70-130	19		30
1,2-Dichloropropane	ND	170	150	86		170	79		70-130	12		30
Dibromochloromethane	ND	170	150	86		180	88		70-130	23		30
1,1,2-Trichloroethane	ND	170	150	89		180	86		70-130	18		30
Tetrachloroethene	ND	170	150	85		190	89		70-130	25		30
Chlorobenzene	ND	170	130	75		160	77		70-130	23		30
Trichlorofluoromethane	ND	170	190	113		220	107		70-139	15		30
1,2-Dichloroethane	ND	170	150	86		180	84		70-130	18		30
1,1,1-Trichloroethane	ND	170	170	101		200	96		70-130	16		30
Bromodichloromethane	ND	170	150	87		180	84		70-130	18		30
trans-1,3-Dichloropropene	ND	170	130	74		160	78		70-130	26		30
cis-1,3-Dichloropropene	ND	170	120	71		150	72		70-130	21		30
Bromoform	ND	170	150	88		210	101		70-130	**34**	Q	30
1,1,2,2-Tetrachloroethane	ND	170	140	84		200	94		70-130	**32**	Q	30
Benzene	ND	170	150	90		170	82		70-130	12		30
Toluene	ND	170	150	90		180	88		70-130	18		30
Ethylbenzene	ND	170	140	83		180	84		70-130	22		30
Chloromethane	ND	170	140	82		160	75		52-130	12		30
Bromomethane	ND	170	230	132		250	119		57-147	10		30
Vinyl chloride	ND	170	160	94		180	84		67-130	10		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 QC Batch ID: WG1223426-6 WG1223426-7 QC Sample: L1912447-01 Client ID: RISS1												
Chloroethane	ND	170	170	100		180	87		50-151	7		30
1,1-Dichloroethene	ND	170	170	99		190	90		65-135	11		30
trans-1,2-Dichloroethene	ND	170	150	87		170	83		70-130	16		30
Trichloroethene	ND	170	140	84		170	81		70-130	17		30
1,2-Dichlorobenzene	ND	170	100	**59**	Q	160	74		70-130	**43**	Q	30
1,3-Dichlorobenzene	ND	170	110	**62**	Q	160	77		70-130	**43**	Q	30
1,4-Dichlorobenzene	ND	170	98	**58**	Q	150	73		70-130	**44**	Q	30
Methyl tert butyl ether	ND	170	160	96		180	87		66-130	10		30
p/m-Xylene	ND	341	270	80		340	82		70-130	23		30
o-Xylene	ND	341	270	79		340	81		70-130	23		30
cis-1,2-Dichloroethene	ND	170	150	86		170	80		70-130	14		30
Styrene	ND	341	230	**67**	Q	300	71		70-130	27		30
Dichlorodifluoromethane	ND	170	150	87		170	82		30-146	14		30
Acetone	ND	170	150	87		170	82		54-140	15		30
Carbon disulfide	ND	170	140	80		160	78		59-130	19		30
2-Butanone	ND	170	120	**69**	Q	140	**69**	Q	70-130	21		30
4-Methyl-2-pentanone	ND	170	130	74		160	74		70-130	20		30
2-Hexanone	ND	170	96	**56**	Q	120	**58**	Q	70-130	24		30
Bromochloromethane	ND	170	150	88		170	83		70-130	15		30
1,2-Dibromoethane	ND	170	140	80		170	80		70-130	21		30
1,2-Dibromo-3-chloropropane	ND	170	130	79		190	91		68-130	**35**	Q	30
Isopropylbenzene	ND	170	150	87		210	102		70-130	**36**	Q	30
1,2,3-Trichlorobenzene	ND	170	54	**32**	Q	91	**43**	Q	70-130	**51**	Q	30

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01,05 QC Batch ID: WG1223426-6 WG1223426-7 QC Sample: L1912447-01 Client ID: RISS1												
1,2,4-Trichlorobenzene	ND	170	59	**34**	Q	100	**49**	Q	70-130	**54**	Q	30
Methyl Acetate	ND	170	130	76		170	81		51-146	27		30
Cyclohexane	ND	170	130	77		170	80		59-142	25		30
1,4-Dioxane	ND	8520	8200	97		11000	102		65-136	26		30
Freon-113	ND	170	170	101		200	96		50-139	15		30
Methyl cyclohexane	ND	170	120	**68**	Q	170	79		70-130	**35**	Q	30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		109		70-130
4-Bromofluorobenzene	107		112		70-130
Dibromofluoromethane	104		104		70-130
Toluene-d8	106		107		70-130

SEMIVOLATILES

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01
Client ID: RISS1
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 14:10
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 18:29
Analyst: RC
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	58	J	ug/kg	170	22.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	57.	1
2,4-Dinitrotoluene	ND		ug/kg	210	43.	1
2,6-Dinitrotoluene	ND		ug/kg	210	37.	1
Fluoranthene	1200		ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	21.	1
Hexachlorobutadiene	ND		ug/kg	210	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	610	190	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	49	J	ug/kg	210	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Bis(2-ethylhexyl)phthalate	320		ug/kg	210	74.	1
Butyl benzyl phthalate	ND		ug/kg	210	54.	1
Di-n-butylphthalate	70	J	ug/kg	210	41.	1
Di-n-octylphthalate	ND		ug/kg	210	73.	1
Diethyl phthalate	ND		ug/kg	210	20.	1
Dimethyl phthalate	ND		ug/kg	210	45.	1
Benzo(a)anthracene	600		ug/kg	130	24.	1
Benzo(a)pyrene	530		ug/kg	170	52.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	750		ug/kg	130	36.	1
Benzo(k)fluoranthene	270		ug/kg	130	34.	1
Chrysene	670		ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	100	J	ug/kg	130	42.	1
Benzo(ghi)perylene	330		ug/kg	170	25.	1
Fluorene	55	J	ug/kg	210	21.	1
Phenanthrene	830		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	79	J	ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	340		ug/kg	170	30.	1
Pyrene	1000		ug/kg	130	21.	1
Biphenyl	ND		ug/kg	490	50.	1
4-Chloroaniline	ND		ug/kg	210	39.	1
2-Nitroaniline	ND		ug/kg	210	41.	1
3-Nitroaniline	ND		ug/kg	210	40.	1
4-Nitroaniline	ND		ug/kg	210	89.	1
Dibenzofuran	46	J	ug/kg	210	20.	1
2-Methylnaphthalene	38	J	ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	210	32.	1
2-Chlorophenol	ND		ug/kg	210	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	210	71.	1
2-Nitrophenol	ND		ug/kg	460	81.	1
4-Nitrophenol	ND		ug/kg	300	88.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1
2,4,5-Trichlorophenol	ND		ug/kg	210	41.	1
Carbazole	85	J	ug/kg	210	21.	1
Atrazine	ND		ug/kg	170	75.	1
Benzaldehyde	ND		ug/kg	280	58.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	210	65.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	210	43.	1
Tentatively Identified Compounds						
Total TIC Compounds	1330	J	ug/kg			1
Unknown PAH	357	J	ug/kg			1
Unknown PAH	183	J	ug/kg			1
Unknown	186	J	ug/kg			1
Unknown	330	J	ug/kg			1
Unknown PAH	274	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	94		25-120
Phenol-d6	92		10-120
Nitrobenzene-d5	107		23-120
2-Fluorobiphenyl	94		30-120
2,4,6-Tribromophenol	113		10-136
4-Terphenyl-d14	71		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01
Client ID: RISS1
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 14:10
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 04/02/19 12:18
Analyst: AJ
Percent Solids: 77%

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.208	J	ng/g	1.01	0.022	1
Perfluoropentanoic Acid (PFPeA)	0.102	J	ng/g	1.01	0.011	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	1.01	0.064	1
Perfluorohexanoic Acid (PFHxA)	0.102	J	ng/g	1.01	0.065	1
Perfluoroheptanoic Acid (PFHpA)	0.121	J	ng/g	1.01	0.065	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	1.01	0.058	1
Perfluorooctanoic Acid (PFOA)	0.516	J	ng/g	1.01	0.042	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	1.01	0.200	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	1.01	0.137	1
Perfluorononanoic Acid (PFNA)	0.272	J	ng/g	1.01	0.084	1
Perfluorooctanesulfonic Acid (PFOS)	2.85		ng/g	1.01	0.122	1
Perfluorodecanoic Acid (PFDA)	0.244	J	ng/g	1.01	0.073	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	1.01	0.278	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	1.01	0.104	1
Perfluoroundecanoic Acid (PFUnA)	0.148	J	ng/g	1.01	0.057	1
Perfluorodecanesulfonic Acid (PFDS)	0.099	J	ng/g	1.01	0.098	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	1.01	0.104	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.135	J	ng/g	1.01	0.091	1
Perfluorododecanoic Acid (PFDoA)	0.106	J	ng/g	1.01	0.087	1
Perfluorotridecanoic Acid (PFTrDA)	0.066	J	ng/g	1.01	0.063	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	1.01	0.071	1
PFOA/PFOS, Total	3.37	J	ng/g	1.01	0.042	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	121		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	118		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	109		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	111		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	121		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	112		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	98		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	113		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	126		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	111		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**325**	Q	50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	103		50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**7**	Q	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	92		50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	94		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	102		50-150

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02
Client ID: RISS2
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 17:17
Analyst: RC
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	69	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	46	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02 Date Collected: 03/27/19 15:15

Client ID: RISS2 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	70	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	53	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	36	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	29	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	36	J	ug/kg	160	27.	1
Pyrene	61	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	ND		ug/kg	200	19.	1
Atrazine	ND		ug/kg	160	69.	1
Benzaldehyde	ND		ug/kg	260	53.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02 Date Collected: 03/27/19 15:15

Client ID: RISS2 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	200	60.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	40.	1
Tentatively Identified Compounds						
Total TIC Compounds	2440	J	ug/kg			1
Unknown	998	J	ug/kg			1
Unknown	1440	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	104		25-120
Phenol-d6	98		10-120
Nitrobenzene-d5	117		23-120
2-Fluorobiphenyl	95		30-120
2,4,6-Tribromophenol	103		10-136
4-Terphenyl-d14	62		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 04/02/19 13:08
Analyst: AJ
Percent Solids: 85%

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.162	J	ng/g	0.996	0.021	1
Perfluoropentanoic Acid (PFPeA)	0.106	J	ng/g	0.996	0.010	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.996	0.063	1
Perfluorohexanoic Acid (PFHxA)	0.075	J	ng/g	0.996	0.064	1
Perfluoroheptanoic Acid (PFHpA)	0.080	J	ng/g	0.996	0.064	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.996	0.057	1
Perfluorooctanoic Acid (PFOA)	0.311	J	ng/g	0.996	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.996	0.197	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.996	0.135	1
Perfluorononanoic Acid (PFNA)	0.146	J	ng/g	0.996	0.083	1
Perfluorooctanesulfonic Acid (PFOS)	2.19		ng/g	0.996	0.120	1
Perfluorodecanoic Acid (PFDA)	0.157	J	ng/g	0.996	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.996	0.274	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.996	0.103	1
Perfluoroundecanoic Acid (PFUnA)	0.110	J	ng/g	0.996	0.056	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.996	0.097	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.996	0.102	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.207	J	ng/g	0.996	0.090	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.996	0.086	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.996	0.062	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.996	0.070	1
PFOA/PFOS, Total	2.50	J	ng/g	0.996	0.041	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 Date Collected: 03/27/19 15:45

Client ID: RISS3 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	117		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	113		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	109		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	113		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	102		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	115		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	120		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	114		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	136		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	**180**	Q	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	147		50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**21**	Q	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	**154**	Q	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	120		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	111		50-150

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 D
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 20:29
Analyst: RC
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	760	99.	5
Hexachlorobenzene	ND		ug/kg	570	110	5
Bis(2-chloroethyl)ether	ND		ug/kg	860	130	5
2-Chloronaphthalene	ND		ug/kg	960	95.	5
3,3'-Dichlorobenzidine	ND		ug/kg	960	250	5
2,4-Dinitrotoluene	ND		ug/kg	960	190	5
2,6-Dinitrotoluene	ND		ug/kg	960	160	5
Fluoranthene	1200		ug/kg	570	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	960	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	960	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	96.	5
Hexachlorobutadiene	ND		ug/kg	960	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2700	870	5
Hexachloroethane	ND		ug/kg	760	150	5
Isophorone	ND		ug/kg	860	120	5
Naphthalene	ND		ug/kg	960	120	5
Nitrobenzene	ND		ug/kg	860	140	5
NDPA/DPA	ND		ug/kg	760	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	960	150	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	960	330	5
Butyl benzyl phthalate	ND		ug/kg	960	240	5
Di-n-butylphthalate	ND		ug/kg	960	180	5
Di-n-octylphthalate	ND		ug/kg	960	320	5
Diethyl phthalate	ND		ug/kg	960	88.	5
Dimethyl phthalate	ND		ug/kg	960	200	5
Benzo(a)anthracene	630		ug/kg	570	110	5
Benzo(a)pyrene	600	J	ug/kg	760	230	5

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 D
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	840		ug/kg	570	160	5
Benzo(k)fluoranthene	340	J	ug/kg	570	150	5
Chrysene	730		ug/kg	570	99.	5
Acenaphthylene	ND		ug/kg	760	150	5
Anthracene	ND		ug/kg	570	190	5
Benzo(ghi)perylene	370	J	ug/kg	760	110	5
Fluorene	ND		ug/kg	960	93.	5
Phenanthrene	500	J	ug/kg	570	120	5
Dibenzo(a,h)anthracene	ND		ug/kg	570	110	5
Indeno(1,2,3-cd)pyrene	380	J	ug/kg	760	130	5
Pyrene	940		ug/kg	570	95.	5
Biphenyl	ND		ug/kg	2200	220	5
4-Chloroaniline	ND		ug/kg	960	170	5
2-Nitroaniline	ND		ug/kg	960	180	5
3-Nitroaniline	ND		ug/kg	960	180	5
4-Nitroaniline	ND		ug/kg	960	400	5
Dibenzofuran	ND		ug/kg	960	90.	5
2-Methylnaphthalene	ND		ug/kg	1100	120	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	960	100	5
Acetophenone	ND		ug/kg	960	120	5
2,4,6-Trichlorophenol	ND		ug/kg	570	180	5
p-Chloro-m-cresol	ND		ug/kg	960	140	5
2-Chlorophenol	ND		ug/kg	960	110	5
2,4-Dichlorophenol	ND		ug/kg	860	150	5
2,4-Dimethylphenol	ND		ug/kg	960	320	5
2-Nitrophenol	ND		ug/kg	2100	360	5
4-Nitrophenol	ND		ug/kg	1300	390	5
2,4-Dinitrophenol	ND		ug/kg	4600	440	5
4,6-Dinitro-o-cresol	ND		ug/kg	2500	460	5
Pentachlorophenol	ND		ug/kg	760	210	5
Phenol	ND		ug/kg	960	140	5
2-Methylphenol	ND		ug/kg	960	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5
2,4,5-Trichlorophenol	ND		ug/kg	960	180	5
Carbazole	ND		ug/kg	960	93.	5
Atrazine	ND		ug/kg	760	330	5
Benzaldehyde	ND		ug/kg	1300	260	5

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 D
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	960	290	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	960	190	5
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/kg			5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	99		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	65		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04
Client ID: RISS4
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 16:20
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/05/19 10:44
Analyst: IM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	440		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	220		ug/kg	110	21.	1
Benzo(a)pyrene	220		ug/kg	150	45.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04 Date Collected: 03/27/19 16:20

Client ID: RISS4 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	340		ug/kg	110	31.	1
Benzo(k)fluoranthene	94	J	ug/kg	110	29.	1
Chrysene	240		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	130	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	160		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	28	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	150	26.	1
Pyrene	340		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	ND		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	64.	1
Benzaldehyde	ND		ug/kg	240	49.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04 Date Collected: 03/27/19 16:20

Client ID: RISS4 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1
Tentatively Identified Compounds						
Total TIC Compounds	836	J	ug/kg			1
Unknown	386	J	ug/kg			1
Unknown	450	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	100		25-120
Phenol-d6	97		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	134		10-136
4-Terphenyl-d14	92		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 04/02/19 13:25
Analyst: AJ
Percent Solids: 86%

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.103	J	ng/g	1.00	0.021	1
Perfluoropentanoic Acid (PFPeA)	0.072	J	ng/g	1.00	0.010	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	1.00	0.064	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	1.00	0.064	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	1.00	0.064	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	1.00	0.057	1
Perfluorooctanoic Acid (PFOA)	0.208	J	ng/g	1.00	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	1.00	0.199	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	1.00	0.136	1
Perfluorononanoic Acid (PFNA)	0.101	J	ng/g	1.00	0.083	1
Perfluorooctanesulfonic Acid (PFOS)	1.84		ng/g	1.00	0.121	1
Perfluorodecanoic Acid (PFDA)	0.118	J	ng/g	1.00	0.072	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	1.00	0.276	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	1.00	0.103	1
Perfluoroundecanoic Acid (PFUnA)	0.078	J	ng/g	1.00	0.056	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	1.00	0.097	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	1.00	0.103	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.148	J	ng/g	1.00	0.090	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	1.00	0.086	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	1.00	0.062	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	1.00	0.070	1
PFOA/PFOS, Total	2.05	J	ng/g	1.00	0.041	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 Date Collected: 03/27/19 00:00

Client ID: FD01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	114		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	119		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	107		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	109		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	111		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	115		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	114		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	116		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	112		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	112		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	110		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	**188**	Q	50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	**153**	Q	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	53		50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	**176**	Q	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	128		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	122		50-150

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 D
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 20:53
Analyst: RC
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	750	98.	5
Hexachlorobenzene	ND		ug/kg	570	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	850	130	5
2-Chloronaphthalene	ND		ug/kg	940	94.	5
3,3'-Dichlorobenzidine	ND		ug/kg	940	250	5
2,4-Dinitrotoluene	ND		ug/kg	940	190	5
2,6-Dinitrotoluene	ND		ug/kg	940	160	5
Fluoranthene	1200		ug/kg	570	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	940	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	940	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	94.	5
Hexachlorobutadiene	ND		ug/kg	940	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2700	850	5
Hexachloroethane	ND		ug/kg	750	150	5
Isophorone	ND		ug/kg	850	120	5
Naphthalene	ND		ug/kg	940	110	5
Nitrobenzene	ND		ug/kg	850	140	5
NDPA/DPA	ND		ug/kg	750	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	940	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	940	330	5
Butyl benzyl phthalate	ND		ug/kg	940	240	5
Di-n-butylphthalate	300	J	ug/kg	940	180	5
Di-n-octylphthalate	ND		ug/kg	940	320	5
Diethyl phthalate	ND		ug/kg	940	87.	5
Dimethyl phthalate	ND		ug/kg	940	200	5
Benzo(a)anthracene	590		ug/kg	570	110	5
Benzo(a)pyrene	540	J	ug/kg	750	230	5

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 D
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	780		ug/kg	570	160	5
Benzo(k)fluoranthene	270	J	ug/kg	570	150	5
Chrysene	690		ug/kg	570	98.	5
Acenaphthylene	ND		ug/kg	750	140	5
Anthracene	ND		ug/kg	570	180	5
Benzo(ghi)perylene	340	J	ug/kg	750	110	5
Fluorene	ND		ug/kg	940	92.	5
Phenanthrene	530	J	ug/kg	570	110	5
Dibenzo(a,h)anthracene	ND		ug/kg	570	110	5
Indeno(1,2,3-cd)pyrene	350	J	ug/kg	750	130	5
Pyrene	920		ug/kg	570	94.	5
Biphenyl	ND		ug/kg	2200	220	5
4-Chloroaniline	ND		ug/kg	940	170	5
2-Nitroaniline	ND		ug/kg	940	180	5
3-Nitroaniline	ND		ug/kg	940	180	5
4-Nitroaniline	ND		ug/kg	940	390	5
Dibenzofuran	ND		ug/kg	940	89.	5
2-Methylnaphthalene	ND		ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	940	98.	5
Acetophenone	ND		ug/kg	940	120	5
2,4,6-Trichlorophenol	ND		ug/kg	570	180	5
p-Chloro-m-cresol	ND		ug/kg	940	140	5
2-Chlorophenol	ND		ug/kg	940	110	5
2,4-Dichlorophenol	ND		ug/kg	850	150	5
2,4-Dimethylphenol	ND		ug/kg	940	310	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4500	440	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	450	5
Pentachlorophenol	ND		ug/kg	750	210	5
Phenol	ND		ug/kg	940	140	5
2-Methylphenol	ND		ug/kg	940	150	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1400	150	5
2,4,5-Trichlorophenol	ND		ug/kg	940	180	5
Carbazole	ND		ug/kg	940	92.	5
Atrazine	ND		ug/kg	750	330	5
Benzaldehyde	ND		ug/kg	1200	250	5

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 D
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	940	290	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	940	190	5
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/kg			5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	62		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-06
Client ID: LTB01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 04/01/19 11:47
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 03/29/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.77	0.331	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.77	0.411	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.77	0.337	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.77	0.436	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.77	0.330	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.77	0.386	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.77	0.408	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.77	0.172	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.77	0.461	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.77	0.386	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.77	0.496	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.77	0.550	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.77	0.258	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.77	0.222	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.77	0.376	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.77	0.342	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.77	0.493	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.77	0.330	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.77	0.525	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.77	0.278	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.77	0.876	1
PFOA/PFOS, Total	ND		ng/l	1.77	0.408	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-06 Date Collected: 03/27/19 00:00

Client ID: LTB01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	51		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	63		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	52		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	58		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	93		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	67		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	67		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	70		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	82		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	64		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	66		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	51		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	67		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	2		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	47		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	63		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	85		33-143

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-07
Client ID: FTB01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 14:50
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 04/01/19 12:03
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 03/29/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.92	0.357	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.92	0.444	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.92	0.364	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.92	0.471	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.92	0.356	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.92	0.418	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.92	0.441	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.92	0.186	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.92	0.498	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.92	0.418	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.92	0.536	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.92	0.594	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.92	0.278	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.92	0.240	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.92	0.406	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.92	0.370	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.92	0.532	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.92	0.357	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.92	0.567	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.92	0.301	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.92	0.946	1
PFOA/PFOS, Total	ND		ng/l	1.92	0.441	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-07 Date Collected: 03/27/19 14:50

Client ID: FTB01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	104		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	109		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	111		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	99		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	104		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	104		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	105		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	109		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	103		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	82		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	88		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	105		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	47		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	90		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	96		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	109		33-143

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 D
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 20:05
Analyst: RC
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	72	J	ug/kg	300	39.	2
Hexachlorobenzene	ND		ug/kg	220	42.	2
Bis(2-chloroethyl)ether	ND		ug/kg	340	50.	2
2-Chloronaphthalene	ND		ug/kg	370	37.	2
3,3'-Dichlorobenzidine	ND		ug/kg	370	99.	2
2,4-Dinitrotoluene	ND		ug/kg	370	74.	2
2,6-Dinitrotoluene	ND		ug/kg	370	64.	2
Fluoranthene	1900		ug/kg	220	43.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	370	40.	2
4-Bromophenyl phenyl ether	ND		ug/kg	370	57.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	450	64.	2
Bis(2-chloroethoxy)methane	ND		ug/kg	400	37.	2
Hexachlorobutadiene	ND		ug/kg	370	54.	2
Hexachlorocyclopentadiene	ND		ug/kg	1100	340	2
Hexachloroethane	ND		ug/kg	300	60.	2
Isophorone	ND		ug/kg	340	48.	2
Naphthalene	ND		ug/kg	370	45.	2
Nitrobenzene	ND		ug/kg	340	55.	2
NDPA/DPA	ND		ug/kg	300	42.	2
n-Nitrosodi-n-propylamine	ND		ug/kg	370	58.	2
Bis(2-ethylhexyl)phthalate	330	J	ug/kg	370	130	2
Butyl benzyl phthalate	ND		ug/kg	370	94.	2
Di-n-butylphthalate	ND		ug/kg	370	71.	2
Di-n-octylphthalate	ND		ug/kg	370	130	2
Diethyl phthalate	ND		ug/kg	370	34.	2
Dimethyl phthalate	ND		ug/kg	370	78.	2
Benzo(a)anthracene	980		ug/kg	220	42.	2
Benzo(a)pyrene	860		ug/kg	300	91.	2

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 D
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	1300		ug/kg	220	63.	2
Benzo(k)fluoranthene	380		ug/kg	220	60.	2
Chrysene	970		ug/kg	220	39.	2
Acenaphthylene	ND		ug/kg	300	58.	2
Anthracene	200	J	ug/kg	220	73.	2
Benzo(ghi)perylene	550		ug/kg	300	44.	2
Fluorene	88	J	ug/kg	370	36.	2
Phenanthrene	940		ug/kg	220	45.	2
Dibenzo(a,h)anthracene	120	J	ug/kg	220	43.	2
Indeno(1,2,3-cd)pyrene	560		ug/kg	300	52.	2
Pyrene	1500		ug/kg	220	37.	2
Biphenyl	ND		ug/kg	850	86.	2
4-Chloroaniline	ND		ug/kg	370	68.	2
2-Nitroaniline	ND		ug/kg	370	72.	2
3-Nitroaniline	ND		ug/kg	370	70.	2
4-Nitroaniline	ND		ug/kg	370	150	2
Dibenzofuran	42	J	ug/kg	370	35.	2
2-Methylnaphthalene	ND		ug/kg	450	45.	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	370	39.	2
Acetophenone	ND		ug/kg	370	46.	2
2,4,6-Trichlorophenol	ND		ug/kg	220	71.	2
p-Chloro-m-cresol	ND		ug/kg	370	56.	2
2-Chlorophenol	ND		ug/kg	370	44.	2
2,4-Dichlorophenol	ND		ug/kg	340	60.	2
2,4-Dimethylphenol	ND		ug/kg	370	120	2
2-Nitrophenol	ND		ug/kg	800	140	2
4-Nitrophenol	ND		ug/kg	520	150	2
2,4-Dinitrophenol	ND		ug/kg	1800	170	2
4,6-Dinitro-o-cresol	ND		ug/kg	970	180	2
Pentachlorophenol	ND		ug/kg	300	82.	2
Phenol	ND		ug/kg	370	56.	2
2-Methylphenol	ND		ug/kg	370	58.	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	540	58.	2
2,4,5-Trichlorophenol	ND		ug/kg	370	71.	2
Carbazole	120	J	ug/kg	370	36.	2
Atrazine	ND		ug/kg	300	130	2
Benzaldehyde	ND		ug/kg	490	100	2

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 D
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	370	110	2
2,3,4,6-Tetrachlorophenol	ND		ug/kg	370	75.	2
Tentatively Identified Compounds						
Total TIC Compounds	1360	J	ug/kg			2
Unknown	379	J	ug/kg			2
Unknown PAH	636	J	ug/kg			2
Unknown	340	J	ug/kg			2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	68		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/03/19 17:41
Analyst: RC
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	260		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	160		ug/kg	110	21.	1
Benzo(a)pyrene	160		ug/kg	150	45.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	210		ug/kg	110	31.	1
Benzo(k)fluoranthene	86	J	ug/kg	110	30.	1
Chrysene	180		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	110	J	ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	120		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	23	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	110	J	ug/kg	150	26.	1
Pyrene	220		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	18	J	ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1
Tentatively Identified Compounds						
Total TIC Compounds	1480	J	ug/kg			1
Unknown	596	J	ug/kg			1
Unknown	358	J	ug/kg			1
Unknown Ketone	170	J	ug/kg			1
Unknown Organic Acid	173	J	ug/kg			1
Unknown	182	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	114		25-120
Phenol-d6	109		10-120
Nitrobenzene-d5	**128**	Q	23-120
2-Fluorobiphenyl	114		30-120
2,4,6-Tribromophenol	119		10-136
4-Terphenyl-d14	87		18-120

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 122,537(M)
Analytical Date: 04/02/19 13:41
Analyst: AJ
Percent Solids: 89%

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.081	J	ng/g	0.859	0.018	1
Perfluoropentanoic Acid (PFPeA)	0.079	J	ng/g	0.859	0.009	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.859	0.055	1
Perfluorohexanoic Acid (PFHxA)	0.067	J	ng/g	0.859	0.055	1
Perfluoroheptanoic Acid (PFHpA)	0.093	J	ng/g	0.859	0.055	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.859	0.049	1
Perfluorooctanoic Acid (PFOA)	0.273	J	ng/g	0.859	0.035	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.859	0.170	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.859	0.117	1
Perfluorononanoic Acid (PFNA)	0.085	J	ng/g	0.859	0.071	1
Perfluorooctanesulfonic Acid (PFOS)	1.12		ng/g	0.859	0.104	1
Perfluorodecanoic Acid (PFDA)	0.104	J	ng/g	0.859	0.062	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.859	0.236	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.859	0.089	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.859	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.859	0.083	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.859	0.088	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.859	0.077	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.859	0.074	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.859	0.053	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.859	0.060	1
PFOA/PFOS, Total	1.39	J	ng/g	0.859	0.035	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	112		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	115		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	111		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	116		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	117		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	120		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	115		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	117		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	116		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	111		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	136		50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	**174**	Q	50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**4**	Q	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	**187**	Q	50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	129		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	118		50-150

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/03/19 12:29
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 04/02/19 07:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1
Tentatively Identified Compounds						
Total TIC Compounds	32.7	J	ug/l			1
Unknown Siloxane	2.33	J	ug/l			1
Aldol Condensates	23.3	J	ug/l			1
Unknown Phenol	7.09	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	60		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	90		41-149

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/02/19 17:42
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	93		41-149

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/02/19 18:57
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 03/31/19 11:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	144	32.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	17		15-110

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 122,537(M)
Analytical Date: 04/01/19 12:20
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 03/29/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.86	0.347	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.86	0.431	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.86	0.353	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.86	0.457	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.86	0.346	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.86	0.405	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.86	0.428	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.86	0.180	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.86	0.483	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.86	0.405	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.86	0.520	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.86	0.576	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.86	0.270	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.86	0.233	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.86	0.394	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.86	0.359	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.86	0.517	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.86	0.346	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.86	0.550	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.86	0.292	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.86	0.918	1
PFOA/PFOS, Total	ND		ng/l	1.86	0.428	1

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	64		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	82		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	61		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	68		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	76		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	63		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	82		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	67		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	12		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	69		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	91		33-143

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 04/02/19 12:02
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 03/29/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06-07,10 Batch: WG1221124-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.373
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.464
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.380
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.492
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.372
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.436
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.460
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	0.194
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.520
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.436
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.560
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.620
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	0.291
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	0.548	J	ng/l	2.00	0.250
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.424
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.386
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.556
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.392	J	ng/l	2.00	0.373
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.592
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.314
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.988
PFOA/PFOS, Total	ND		ng/l	2.00	0.460

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 04/02/19 12:02
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 03/29/19 14:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 06-07,10 Batch: WG1221124-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	88		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	89		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	93		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	83		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	85		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	85		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	69		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	85		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	84		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	80		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	71		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	77		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	82		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	77		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	76		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		33-143

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/02/19 17:11
Analyst: MA

Extraction Method: EPA 3510C
Extraction Date: 03/31/19 11:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 10 Batch: WG1221483-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 04/02/19 10:56
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01,03,05,09 Batch: WG1221639-1					
Perfluorobutanoic Acid (PFBA)	0.065	J	ng/g	1.00	0.021
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	1.00	0.010
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	1.00	0.064
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	1.00	0.064
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	1.00	0.064
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	1.00	0.057
Perfluorooctanoic Acid (PFOA)	ND		ng/g	1.00	0.041
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	1.00	0.198
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ng/g	1.00	0.083
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	1.00	0.120
Perfluorodecanoic Acid (PFDA)	ND		ng/g	1.00	0.072
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	1.00	0.275
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	1.00	0.103
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	1.00	0.056
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	1.00	0.097
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	1.00	0.102
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	1.00	0.090
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	1.00	0.086
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	1.00	0.062
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	1.00	0.070
PFOA/PFOS, Total	ND		ng/g	1.00	0.041

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 04/02/19 10:56
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 04/01/19 08:54

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01,03,05,09 Batch: WG1221639-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	105		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	109		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	113		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	106		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	108		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	110		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	108		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	78		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	103		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	90		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	91		50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	125		50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**3**	Q	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	117		50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	112		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	93		50-150

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/02/19 10:19
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 10 Batch: WG1221791-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/02/19 10:19
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 10 Batch: WG1221791-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	87		41-149

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 06:26
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 04/02/19 07:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1222029-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 06:26
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 04/02/19 07:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1222029-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Tentatively Identified Compounds

Total TIC Compounds	22.0	J	ug/l
Aldol Condensates	20.0	J	ug/l
Unknown	1.96	J	ug/l

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 06:26
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 04/02/19 07:58

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 10 Batch: WG1222029-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	93		41-149

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 18:05
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1222060-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 18:05
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1222060-1					
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/03/19 18:05
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 04/02/19 09:19

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1222060-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	58.
Benzaldehyde	ND		ug/kg	220	45.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	101		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	93		30-120
2,4,6-Tribromophenol	121		10-136
4-Terphenyl-d14	105		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-07,10 Batch: WG1221124-2 WG1221124-3								
Perfluorobutanoic Acid (PFBA)	86		95		67-148	10		30
Perfluoropentanoic Acid (PFPeA)	83		91		63-161	9		30
Perfluorobutanesulfonic Acid (PFBS)	76		84		65-157	10		30
Perfluorohexanoic Acid (PFHxA)	87		95		69-168	9		30
Perfluoroheptanoic Acid (PFHpA)	80		86		58-159	7		30
Perfluorohexanesulfonic Acid (PFHxS)	87		92		69-177	6		30
Perfluorooctanoic Acid (PFOA)	79		88		63-159	11		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	84		86		49-187	2		30
Perfluoroheptanesulfonic Acid (PFHpS)	89		93		61-179	4		30
Perfluorononanoic Acid (PFNA)	87		96		68-171	10		30
Perfluorooctanesulfonic Acid (PFOS)	67		76		52-151	13		30
Perfluorodecanoic Acid (PFDA)	84		86		63-171	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	85		110		56-173	26		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	85		82		60-166	4		30
Perfluoroundecanoic Acid (PFUnA)	78		82		60-153	5		30
Perfluorodecanesulfonic Acid (PFDS)	89		88		38-156	1		30
Perfluorooctanesulfonamide (FOSA)	79		74		46-170	7		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	76		73		45-170	4		30
Perfluorododecanoic Acid (PFDoA)	82		82		67-153	0		30
Perfluorotridecanoic Acid (PFTrDA)	76		74		48-158	3		30
Perfluorotetradecanoic Acid (PFTA)	91		85		59-182	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 06-07,10 Batch: WG1221124-2 WG1221124-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	91		94		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		96		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	100		103		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	88		92		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		93		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89		97		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		94		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	81		91		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		92		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		95		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		91		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	93		86		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	77		83		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	91		95		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	31		39		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	85		89		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		85		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	92		97		33-143

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 10 Batch: WG1221483-2 WG1221483-3								
1,4-Dioxane	135		133		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	16		23		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05,09 Batch: WG1221639-2 WG1221639-3								
Perfluorobutanoic Acid (PFBA)	109		109		50-150	0		30
Perfluoropentanoic Acid (PFPeA)	112		113		50-150	1		30
Perfluorobutanesulfonic Acid (PFBS)	102		102		50-150	0		30
Perfluorohexanoic Acid (PFHxA)	120		118		50-150	2		30
Perfluoroheptanoic Acid (PFHpA)	108		106		50-150	2		30
Perfluorohexanesulfonic Acid (PFHxS)	112		110		50-150	2		30
Perfluorooctanoic Acid (PFOA)	108		108		50-150	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	120		116		50-150	3		30
Perfluoroheptanesulfonic Acid (PFHpS)	122		112		50-150	9		30
Perfluorononanoic Acid (PFNA)	118		120		50-150	2		30
Perfluorooctanesulfonic Acid (PFOS)	99		93		50-150	6		30
Perfluorodecanoic Acid (PFDA)	112		114		50-150	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	101		109		50-150	8		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	116		116		50-150	0		30
Perfluoroundecanoic Acid (PFUnA)	106		104		50-150	2		30
Perfluorodecanesulfonic Acid (PFDS)	123		125		50-150	2		30
Perfluorooctanesulfonamide (FOSA)	126		129		50-150	2		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	117		109		50-150	7		30
Perfluorododecanoic Acid (PFDoA)	109		106		50-150	3		30
Perfluorotridecanoic Acid (PFTrDA)	116		126		50-150	8		30
Perfluorotetradecanoic Acid (PFTA)	117		118		50-150	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05,09 Batch: WG1221639-2 WG1221639-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	111		109		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	114		112		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	118		113		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	110		110		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	114		115		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	118		113		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	113		116		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		92		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	116		128		50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	114		113		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	111		112		50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**151**	Q	131		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	112		90		50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	115		126		50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**4**	Q	**1**	Q	50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	112		129		50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	111		114		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	113		130		50-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 10 Batch: WG1221791-2 WG1221791-3								
Acenaphthene	86		85		40-140	1		40
2-Chloronaphthalene	86		83		40-140	4		40
Fluoranthene	89		94		40-140	5		40
Hexachlorobutadiene	85		82		40-140	4		40
Naphthalene	78		78		40-140	0		40
Benzo(a)anthracene	92		95		40-140	3		40
Benzo(a)pyrene	84		77		40-140	9		40
Benzo(b)fluoranthene	84		75		40-140	11		40
Benzo(k)fluoranthene	89		82		40-140	8		40
Chrysene	94		96		40-140	2		40
Acenaphthylene	98		87		40-140	12		40
Anthracene	87		89		40-140	2		40
Benzo(ghi)perylene	90		75		40-140	18		40
Fluorene	92		92		40-140	0		40
Phenanthrene	85		84		40-140	1		40
Dibenzo(a,h)anthracene	94		85		40-140	10		40
Indeno(1,2,3-cd)pyrene	94		85		40-140	10		40
Pyrene	89		91		40-140	2		40
2-Methylnaphthalene	82		80		40-140	2		40
Pentachlorophenol	86		97		40-140	12		40
Hexachlorobenzene	90		88		40-140	2		40
Hexachloroethane	76		71		40-140	7		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 10 Batch: WG1221791-2 WG1221791-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	61		63		21-120
Phenol-d6	46		45		10-120
Nitrobenzene-d5	83		78		23-120
2-Fluorobiphenyl	79		76		15-120
2,4,6-Tribromophenol	89		94		10-120
4-Terphenyl-d14	82		81		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1222029-2 WG1222029-3								
Bis(2-chloroethyl)ether	65		79		40-140	19		30
3,3'-Dichlorobenzidine	42		52		40-140	21		30
2,4-Dinitrotoluene	77		89		48-143	14		30
2,6-Dinitrotoluene	76		94		40-140	21		30
4-Chlorophenyl phenyl ether	72		80		40-140	11		30
4-Bromophenyl phenyl ether	77		87		40-140	12		30
Bis(2-chloroisopropyl)ether	66		82		40-140	22		30
Bis(2-chloroethoxy)methane	69		83		40-140	18		30
Hexachlorocyclopentadiene	63		76		40-140	19		30
Isophorone	74		87		40-140	16		30
Nitrobenzene	73		84		40-140	14		30
NDPA/DPA	72		86		40-140	18		30
n-Nitrosodi-n-propylamine	74		89		29-132	18		30
Bis(2-ethylhexyl)phthalate	69		87		40-140	23		30
Butyl benzyl phthalate	75		92		40-140	20		30
Di-n-butylphthalate	72		86		40-140	18		30
Di-n-octylphthalate	67		87		40-140	26		30
Diethyl phthalate	76		86		40-140	12		30
Dimethyl phthalate	65		78		40-140	18		30
Biphenyl	77		90		40-140	16		30
4-Chloroaniline	60		70		40-140	15		30
2-Nitroaniline	68		80		52-143	16		30
3-Nitroaniline	56		72		25-145	25		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1222029-2 WG1222029-3								
4-Nitroaniline	68		81		51-143	17		30
Dibenzofuran	68		80		40-140	16		30
1,2,4,5-Tetrachlorobenzene	72		84		2-134	15		30
Acetophenone	75		90		39-129	18		30
2,4,6-Trichlorophenol	67		84		30-130	23		30
p-Chloro-m-cresol	73		88		23-97	19		30
2-Chlorophenol	62		75		27-123	19		30
2,4-Dichlorophenol	73		85		30-130	15		30
2,4-Dimethylphenol	68		81		30-130	17		30
2-Nitrophenol	66		81		30-130	20		30
4-Nitrophenol	74		**84**	Q	10-80	13		30
2,4-Dinitrophenol	71		78		20-130	9		30
4,6-Dinitro-o-cresol	69		82		20-164	17		30
Phenol	57		66		12-110	15		30
3-Methylphenol/4-Methylphenol	70		83		30-130	17		30
2,4,5-Trichlorophenol	70		86		30-130	21		30
Carbazole	77		88		55-144	13		30
Atrazine	87		105		40-140	19		30
Benzaldehyde	76		85		40-140	11		30
Caprolactam	47		51		10-130	8		30
2,3,4,6-Tetrachlorophenol	72		87		40-140	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 10 Batch: WG1222029-2 WG1222029-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	62		71		21-120
Phenol-d6	48		58		10-120
Nitrobenzene-d5	71		83		23-120
2-Fluorobiphenyl	66		80		15-120
2,4,6-Tribromophenol	76		95		10-120
4-Terphenyl-d14	79		85		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222060-2 WG1222060-3								
Acenaphthene	91		89		31-137	2		50
Hexachlorobenzene	95		95		40-140	0		50
Bis(2-chloroethyl)ether	82		73		40-140	12		50
2-Chloronaphthalene	94		95		40-140	1		50
3,3'-Dichlorobenzidine	98		75		40-140	27		50
2,4-Dinitrotoluene	110		113		40-132	3		50
2,6-Dinitrotoluene	110		113		40-140	3		50
Fluoranthene	92		94		40-140	2		50
4-Chlorophenyl phenyl ether	87		89		40-140	2		50
4-Bromophenyl phenyl ether	95		93		40-140	2		50
Bis(2-chloroisopropyl)ether	76		67		40-140	13		50
Bis(2-chloroethoxy)methane	87		82		40-117	6		50
Hexachlorobutadiene	88		89		40-140	1		50
Hexachlorocyclopentadiene	80		86		40-140	7		50
Hexachloroethane	82		78		40-140	5		50
Isophorone	91		85		40-140	7		50
Naphthalene	88		87		40-140	1		50
Nitrobenzene	88		81		40-140	8		50
NDPA/DPA	93		93		36-157	0		50
n-Nitrosodi-n-propylamine	94		85		32-121	10		50
Bis(2-ethylhexyl)phthalate	101		95		40-140	6		50
Butyl benzyl phthalate	102		99		40-140	3		50
Di-n-butylphthalate	107		102		40-140	5		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222060-2 WG1222060-3								
Di-n-octylphthalate	105		94		40-140	11		50
Diethyl phthalate	96		95		40-140	1		50
Dimethyl phthalate	100		105		40-140	5		50
Benzo(a)anthracene	94		93		40-140	1		50
Benzo(a)pyrene	102		91		40-140	11		50
Benzo(b)fluoranthene	99		90		40-140	10		50
Benzo(k)fluoranthene	99		92		40-140	7		50
Chrysene	89		86		40-140	3		50
Acenaphthylene	98		102		40-140	4		50
Anthracene	97		94		40-140	3		50
Benzo(ghi)perylene	95		62		40-140	42		50
Fluorene	94		94		40-140	0		50
Phenanthrene	92		89		40-140	3		50
Dibenzo(a,h)anthracene	95		70		40-140	30		50
Indeno(1,2,3-cd)pyrene	98		84		40-140	15		50
Pyrene	90		90		35-142	0		50
Biphenyl	102		102		54-104	0		50
4-Chloroaniline	79		60		40-140	27		50
2-Nitroaniline	110		113		47-134	3		50
3-Nitroaniline	95		76		26-129	22		50
4-Nitroaniline	97		92		41-125	5		50
Dibenzofuran	91		92		40-140	1		50
2-Methylnaphthalene	92		92		40-140	0		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222060-2 WG1222060-3								
1,2,4,5-Tetrachlorobenzene	93		100		40-117	7		50
Acetophenone	97		90		14-144	7		50
2,4,6-Trichlorophenol	102		110		30-130	8		50
p-Chloro-m-cresol	103		102		26-103	1		50
2-Chlorophenol	96		88		25-102	9		50
2,4-Dichlorophenol	102		104		30-130	2		50
2,4-Dimethylphenol	97		94		30-130	3		50
2-Nitrophenol	108		102		30-130	6		50
4-Nitrophenol	97		90		11-114	7		50
2,4-Dinitrophenol	92		91		4-130	1		50
4,6-Dinitro-o-cresol	91		96		10-130	5		50
Pentachlorophenol	87		89		17-109	2		50
Phenol	83		75		26-90	10		50
2-Methylphenol	91		89		30-130.	2		50
3-Methylphenol/4-Methylphenol	93		91		30-130	2		50
2,4,5-Trichlorophenol	100		109		30-130	9		50
Carbazole	99		96		54-128	3		50
Atrazine	118		117		40-140	1		50
Benzaldehyde	89		76		40-140	16		50
Caprolactam	112		102		15-130	9		50
2,3,4,6-Tetrachlorophenol	99		102		40-140	3		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222060-2 WG1222060-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	90		**132**	Q	25-120
Phenol-d6	91		84		10-120
Nitrobenzene-d5	92		85		23-120
2-Fluorobiphenyl	97		96		30-120
2,4,6-Tribromophenol	108		112		10-136
4-Terphenyl-d14	92		94		18-120

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05,09 QC Batch ID: WG1221639-4 WG1221639-5 QC Sample: L1912447-01 Client ID: RISS1												
Perfluorobutanoic Acid (PFBA)	0.208J	4.7	5.44	116		6.60	112		50-150	19		30
Perfluoropentanoic Acid (PFPeA)	0.102J	4.7	5.56	118		6.77	115		50-150	20		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.7	4.92	105		6.04	103		50-150	20		30
Perfluorohexanoic Acid (PFHxA)	0.102J	4.7	5.88	125		7.11	121		50-150	19		30
Perfluoroheptanoic Acid (PFHpA)	0.121J	4.7	5.35	114		6.56	112		50-150	20		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.7	5.50	117		6.85	117		50-150	22		30
Perfluorooctanoic Acid (PFOA)	0.516J	4.7	5.90	125		7.02	119		50-150	17		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	4.7	5.73	122		7.17	122		50-150	22		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	4.7	5.36	114		6.47	110		50-150	19		30
Perfluorononanoic Acid (PFNA)	0.272J	4.7	6.03	128		7.55	128		50-150	22		30
Perfluorooctanesulfonic Acid (PFOS)	2.85	4.7	7.68	103		8.56	97		50-150	11		30
Perfluorodecanoic Acid (PFDA)	0.244J	4.7	5.85	124		7.30	124		50-150	22		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	4.7	5.11	109		6.22	106		50-150	20		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	4.7	4.79	102		6.58	112		50-150	**31**	Q	30
Perfluoroundecanoic Acid (PFUnA)	0.148J	4.7	5.24	111		6.39	109		50-150	20		30
Perfluorodecanesulfonic Acid (PFDS)	0.099J	4.7	6.49	138		7.59	129		50-150	16		30
Perfluorooctanesulfonamide (FOSA)	ND	4.7	4.97	106		6.49	110		50-150	27		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	0.135J	4.7	5.81	123		6.95	118		50-150	18		30
Perfluorododecanoic Acid (PFDoA)	0.106J	4.7	5.11	109		6.80	116		50-150	28		30
Perfluorotridecanoic Acid (PFTrDA)	0.066J	4.7	5.79	123		7.89	134		50-150	**31**	Q	30
Perfluorotetradecanoic Acid (PFTA)	ND	4.7	6.15	131		7.36	125		50-150	18		30

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1 ***Lab Number:*** L1912447

Project Number: 16.6334 ***Report Date:*** 04/10/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01,03,05,09 QC Batch ID: WG1221639-4 WG1221639-5 QC Sample: L1912447-01 Client ID: RISS1

Surrogate (Extracted Internal Standard)	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	**253**	Q	**231**	Q	50-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	96		91		50-150
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	91		103		50-150
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	99		109		50-150
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	101		109		50-150
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	108		109		50-150
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	104		108		50-150
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		110		50-150
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		121		50-150
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	101		98		50-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	103		105		50-150
Perfluoro[13C4]Butanoic Acid (MPFBA)	110		111		50-150
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	113		116		50-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	**6**	Q	**14**	Q	50-150
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	119		123		50-150
Perfluoro[13C8]Octanoic Acid (M8PFOA)	110		112		50-150
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	109		110		50-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	114		116		50-150

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222060-4 WG1222060-5 QC Sample: L1912447-01 Client ID: RISS1												
Acenaphthene	58J	1690	1600	95		1900	110		31-137	17		50
Hexachlorobenzene	ND	1690	1700	100		1900	110		40-140	11		50
Bis(2-chloroethyl)ether	ND	1690	2800	**170**	Q	2000	120		40-140	33		50
2-Chloronaphthalene	ND	1690	1700	100		2000	120		40-140	16		50
3,3'-Dichlorobenzidine	ND	1690	510	**30**	Q	1200	70		40-140	**81**	Q	50
2,4-Dinitrotoluene	ND	1690	1800	110		2000	120		40-132	11		50
2,6-Dinitrotoluene	ND	1690	1900	110		2200	130		40-140	15		50
Fluoranthene	1200	1690	2100	53		2400	70		40-140	13		50
4-Chlorophenyl phenyl ether	ND	1690	1800	110		2100	120		40-140	15		50
4-Bromophenyl phenyl ether	ND	1690	1800	110		2000	120		40-140	11		50
Bis(2-chloroisopropyl)ether	ND	1690	2000	120		2200	130		40-140	10		50
Bis(2-chloroethoxy)methane	ND	1690	1800	110		2000	**120**	Q	40-117	11		50
Hexachlorobutadiene	ND	1690	1700	100		2000	120		40-140	16		50
Hexachlorocyclopentadiene	ND	1690	680	40		660	**38**	Q	40-140	3		50
Hexachloroethane	ND	1690	1500	89		1700	99		40-140	13		50
Isophorone	ND	1690	1800	110		2100	120		40-140	15		50
Naphthalene	49J	1690	1700	100		1900	110		40-140	11		50
Nitrobenzene	ND	1690	2100	120		2200	130		40-140	5		50
NDPA/DPA	ND	1690	1700	100		2000	120		36-157	16		50
n-Nitrosodi-n-propylamine	ND	1690	1800	110		2100	120		32-121	15		50
Bis(2-ethylhexyl)phthalate	320	1690	2300	120		3400	**180**	Q	40-140	39		50
Butyl benzyl phthalate	ND	1690	1600	95		1800	100		40-140	12		50
Di-n-butylphthalate	70J	1690	1500	89		1800	100		40-140	18		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Client ID: RISS1	Associated sample(s): 01-05,08-09		QC Batch ID: WG1222060-4			WG1222060-5			QC Sample: L1912447-01			
Di-n-octylphthalate	ND	1690	1800	110		2100	120		40-140	15		50
Diethyl phthalate	ND	1690	1800	110		2000	120		40-140	11		50
Dimethyl phthalate	ND	1690	1800	110		2100	120		40-140	15		50
Benzo(a)anthracene	600	1690	1900	77		2200	93		40-140	15		50
Benzo(a)pyrene	530	1690	1800	75		2200	97		40-140	20		50
Benzo(b)fluoranthene	750	1690	2000	74		2400	96		40-140	18		50
Benzo(k)fluoranthene	270	1690	1700	85		2000	100		40-140	16		50
Chrysene	670	1690	2000	79		2300	95		40-140	14		50
Acenaphthylene	ND	1690	1800	110		2000	120		40-140	11		50
Anthracene	100J	1690	1500	89		1700	99		40-140	13		50
Benzo(ghi)perylene	330	1690	1600	75		1800	85		40-140	12		50
Fluorene	55J	1690	1700	100		2000	120		40-140	16		50
Phenanthrene	830	1690	1600	46		1900	62		40-140	17		50
Dibenzo(a,h)anthracene	79J	1690	1400	83		1700	99		40-140	19		50
Indeno(1,2,3-cd)pyrene	340	1690	1600	75		1900	91		40-140	17		50
Pyrene	1000	1690	2000	59		2300	76		35-142	14		50
Biphenyl	ND	1690	1800	**110**	Q	2000	**120**	Q	54-104	11		50
4-Chloroaniline	ND	1690	1300	77		1100	64		40-140	17		50
2-Nitroaniline	ND	1690	2200	130		2400	**140**	Q	47-134	9		50
3-Nitroaniline	ND	1690	870	52		1600	93		26-129	**59**	Q	50
4-Nitroaniline	ND	1690	1100	65		1600	93		41-125	37		50
Dibenzofuran	46J	1690	1700	100		2000	120		40-140	16		50
2-Methylnaphthalene	38J	1690	1600	95		1900	110		40-140	17		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Client ID: RISS1	Associated sample(s): 01-05,08-09		QC Batch ID: WG1222060-4			WG1222060-5			QC Sample: L1912447-01			
1,2,4,5-Tetrachlorobenzene	ND	1690	2000	**120**	Q	2200	**130**	Q	40-117	10		50
Acetophenone	ND	1690	1700	100		1900	110		14-144	11		50
2,4,6-Trichlorophenol	ND	1690	2000	120		2300	130		30-130	14		50
p-Chloro-m-cresol	ND	1690	1900	**110**	Q	2200	**130**	Q	26-103	15		50
2-Chlorophenol	ND	1690	1800	**110**	Q	2000	**120**	Q	25-102	11		50
2,4-Dichlorophenol	ND	1690	1900	110		2200	130		30-130	15		50
2,4-Dimethylphenol	ND	1690	1800	110		2100	120		30-130	15		50
2-Nitrophenol	ND	1690	2300	**140**	Q	2500	**150**	Q	30-130	8		50
4-Nitrophenol	ND	1690	2300	**140**	Q	2600	**150**	Q	11-114	12		50
2,4-Dinitrophenol	ND	1690	300J	18		290J	17		4-130	3		50
4,6-Dinitro-o-cresol	ND	1690	640	38		610	35		10-130	5		50
Pentachlorophenol	ND	1690	1800	**110**	Q	1900	**110**	Q	17-109	5		50
Phenol	ND	1690	1700	**100**	Q	1900	**110**	Q	26-90	11		50
2-Methylphenol	ND	1690	1700	100		1900	110		30-130.	11		50
3-Methylphenol/4-Methylphenol	ND	1690	1700	100		2000	120		30-130	16		50
2,4,5-Trichlorophenol	ND	1690	2100	120		2400	**140**	Q	30-130	13		50
Carbazole	85J	1690	1500	89		1800	100		54-128	18		50
Atrazine	ND	1690	1900	110		2200	130		40-140	15		50
Benzaldehyde	ND	1690	1500	89		1800	100		40-140	18		50
Caprolactam	ND	1690	2000	120		2400	**140**	Q	15-130	18		50
2,3,4,6-Tetrachlorophenol	ND	1690	2000	120		2300	130		40-140	14		50

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1 ***Lab Number:*** L1912447

Project Number: 16.6334 ***Report Date:*** 04/10/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222060-4 WG1222060-5 QC Sample: L1912447-01 Client ID: RISS1												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
2,4,6-Tribromophenol	111		123		10-136
2-Fluorobiphenyl	97		109		30-120
2-Fluorophenol	104		112		25-120
4-Terphenyl-d14	74		80		18-120
Nitrobenzene-d5	**121**	Q	**131**	Q	23-120
Phenol-d6	99		110		10-120

PCBS

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01
Client ID: RISS1
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 14:10
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 22:20
Analyst: WR
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	40.9	3.63	1	A
Aroclor 1221	ND		ug/kg	40.9	4.10	1	A
Aroclor 1232	ND		ug/kg	40.9	8.67	1	A
Aroclor 1242	ND		ug/kg	40.9	5.51	1	A
Aroclor 1248	ND		ug/kg	40.9	6.13	1	A
Aroclor 1254	16.2	J	ug/kg	40.9	4.47	1	A
Aroclor 1260	15.0	J	ug/kg	40.9	7.56	1	B
Aroclor 1262	ND		ug/kg	40.9	5.19	1	A
Aroclor 1268	ND		ug/kg	40.9	4.24	1	A
PCBs, Total	31.2	J	ug/kg	40.9	3.63	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	39		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02
Client ID: RISS2
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 22:57
Analyst: WR
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	3.35	1	A
Aroclor 1221	ND		ug/kg	37.7	3.78	1	A
Aroclor 1232	ND		ug/kg	37.7	7.99	1	A
Aroclor 1242	ND		ug/kg	37.7	5.08	1	A
Aroclor 1248	ND		ug/kg	37.7	5.66	1	A
Aroclor 1254	42.1		ug/kg	37.7	4.12	1	B
Aroclor 1260	ND		ug/kg	37.7	6.97	1	A
Aroclor 1262	ND		ug/kg	37.7	4.79	1	A
Aroclor 1268	ND		ug/kg	37.7	3.90	1	A
PCBs, Total	42.1		ug/kg	37.7	3.35	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 21:18
Analyst: WR
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.1	3.47	1	A
Aroclor 1221	ND		ug/kg	39.1	3.91	1	A
Aroclor 1232	ND		ug/kg	39.1	8.28	1	A
Aroclor 1242	ND		ug/kg	39.1	5.27	1	A
Aroclor 1248	ND		ug/kg	39.1	5.86	1	A
Aroclor 1254	ND		ug/kg	39.1	4.27	1	A
Aroclor 1260	ND		ug/kg	39.1	7.22	1	A
Aroclor 1262	ND		ug/kg	39.1	4.96	1	A
Aroclor 1268	28.8	J	ug/kg	39.1	4.05	1	B
PCBs, Total	28.8	J	ug/kg	39.1	3.47	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	76		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04
Client ID: RISS4
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 16:20
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 21:55
Analyst: WR
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.2	3.12	1	A
Aroclor 1221	ND		ug/kg	35.2	3.52	1	A
Aroclor 1232	ND		ug/kg	35.2	7.45	1	A
Aroclor 1242	ND		ug/kg	35.2	4.74	1	A
Aroclor 1248	ND		ug/kg	35.2	5.27	1	A
Aroclor 1254	ND		ug/kg	35.2	3.85	1	A
Aroclor 1260	ND		ug/kg	35.2	6.50	1	A
Aroclor 1262	ND		ug/kg	35.2	4.46	1	A
Aroclor 1268	ND		ug/kg	35.2	3.64	1	A
PCBs, Total	ND		ug/kg	35.2	3.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 21:30
Analyst: WR
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.4	3.41	1	A
Aroclor 1221	ND		ug/kg	38.4	3.85	1	A
Aroclor 1232	ND		ug/kg	38.4	8.15	1	A
Aroclor 1242	ND		ug/kg	38.4	5.18	1	A
Aroclor 1248	ND		ug/kg	38.4	5.76	1	A
Aroclor 1254	ND		ug/kg	38.4	4.20	1	A
Aroclor 1260	ND		ug/kg	38.4	7.10	1	A
Aroclor 1262	ND		ug/kg	38.4	4.88	1	A
Aroclor 1268	25.3	J	ug/kg	38.4	3.98	1	B
PCBs, Total	25.3	J	ug/kg	38.4	3.41	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	82		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 21:42
Analyst: WR
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.9	3.19	1	A
Aroclor 1221	ND		ug/kg	35.9	3.60	1	A
Aroclor 1232	ND		ug/kg	35.9	7.61	1	A
Aroclor 1242	ND		ug/kg	35.9	4.84	1	A
Aroclor 1248	ND		ug/kg	35.9	5.38	1	A
Aroclor 1254	ND		ug/kg	35.9	3.92	1	A
Aroclor 1260	ND		ug/kg	35.9	6.63	1	A
Aroclor 1262	ND		ug/kg	35.9	4.56	1	A
Aroclor 1268	ND		ug/kg	35.9	3.72	1	A
PCBs, Total	ND		ug/kg	35.9	3.19	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	53		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/04/19 22:07
Analyst: WR
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 08:50
Cleanup Method: EPA 3665A
Cleanup Date: 04/03/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.3	3.22	1	A
Aroclor 1221	ND		ug/kg	36.3	3.64	1	A
Aroclor 1232	ND		ug/kg	36.3	7.70	1	A
Aroclor 1242	ND		ug/kg	36.3	4.89	1	A
Aroclor 1248	ND		ug/kg	36.3	5.45	1	A
Aroclor 1254	4.81	J	ug/kg	36.3	3.97	1	B
Aroclor 1260	7.01	J	ug/kg	36.3	6.71	1	B
Aroclor 1262	ND		ug/kg	36.3	4.61	1	A
Aroclor 1268	ND		ug/kg	36.3	3.76	1	A
PCBs, Total	11.8	J	ug/kg	36.3	3.22	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	52		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 04/03/19 04:58
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 03/31/19 19:12
Cleanup Method: EPA 3665A
Cleanup Date: 04/01/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/01/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.082	0.034	1	A
Aroclor 1221	ND		ug/l	0.082	0.066	1	A
Aroclor 1232	ND		ug/l	0.082	0.045	1	A
Aroclor 1242	ND		ug/l	0.082	0.038	1	A
Aroclor 1248	ND		ug/l	0.082	0.048	1	A
Aroclor 1254	ND		ug/l	0.082	0.039	1	A
Aroclor 1260	ND		ug/l	0.082	0.032	1	A
Aroclor 1262	ND		ug/l	0.082	0.034	1	A
Aroclor 1268	ND		ug/l	0.082	0.033	1	A
PCBs, Total	ND		ug/l	0.082	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 04/03/19 02:02
Analyst: AWS

Extraction Method: EPA 3510C
Extraction Date: 03/31/19 15:29
Cleanup Method: EPA 3665A
Cleanup Date: 03/31/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/01/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 10 Batch: WG1221547-1						
Aroclor 1016	ND		ug/l	0.082	0.034	A
Aroclor 1221	ND		ug/l	0.082	0.066	A
Aroclor 1232	ND		ug/l	0.082	0.045	A
Aroclor 1242	ND		ug/l	0.082	0.038	A
Aroclor 1248	ND		ug/l	0.082	0.048	A
Aroclor 1254	ND		ug/l	0.082	0.039	A
Aroclor 1260	ND		ug/l	0.082	0.032	A
Aroclor 1262	ND		ug/l	0.082	0.034	A
Aroclor 1268	ND		ug/l	0.082	0.033	A
PCBs, Total	ND		ug/l	0.082	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	88		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 04/02/19 10:15
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 04/01/19 22:31
Cleanup Method: EPA 3665A
Cleanup Date: 04/02/19
Cleanup Method: EPA 3660B
Cleanup Date: 04/02/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1221900-1						
Aroclor 1016	ND		ug/kg	31.5	2.79	A
Aroclor 1221	ND		ug/kg	31.5	3.15	A
Aroclor 1232	ND		ug/kg	31.5	6.67	A
Aroclor 1242	ND		ug/kg	31.5	4.24	A
Aroclor 1248	ND		ug/kg	31.5	4.72	A
Aroclor 1254	ND		ug/kg	31.5	3.44	A
Aroclor 1260	ND		ug/kg	31.5	5.81	A
Aroclor 1262	ND		ug/kg	31.5	4.00	A
Aroclor 1268	ND		ug/kg	31.5	3.26	A
PCBs, Total	ND		ug/kg	31.5	2.79	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	54		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 10 Batch: WG1221547-2 WG1221547-3									
Aroclor 1016	73		75		40-140	1		50	A
Aroclor 1260	68		71		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		75		30-150	A
Decachlorobiphenyl	80		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		71		30-150	B
Decachlorobiphenyl	86		87		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1221900-2 WG1221900-3									
Aroclor 1016	102		100		40-140	2		50	A
Aroclor 1260	97		98		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		88		30-150	A
Decachlorobiphenyl	76		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		84		30-150	B
Decachlorobiphenyl	59		59		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221900-4 WG1221900-5 QC Sample: L1912447-01 Client ID: RISS1													
Aroclor 1016	ND	259	271	105		248	92		40-140	9		50	A
Aroclor 1260	15.0J	259	212	82		207	77		40-140	2		50	B

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		75		30-150	A
Decachlorobiphenyl	62		57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		75		30-150	B
Decachlorobiphenyl	56		53		30-150	B

PESTICIDES

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01
Client ID: RISS1
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 14:10
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 12:54
Analyst: BM
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.97	0.385	1	A
Lindane	ND		ug/kg	0.819	0.366	1	A
Alpha-BHC	ND		ug/kg	0.819	0.233	1	A
Beta-BHC	ND		ug/kg	1.97	0.746	1	A
Heptachlor	ND		ug/kg	0.983	0.441	1	A
Aldrin	ND		ug/kg	1.97	0.692	1	A
Heptachlor epoxide	ND		ug/kg	3.69	1.11	1	A
Endrin	ND		ug/kg	0.819	0.336	1	A
Endrin aldehyde	ND		ug/kg	2.46	0.860	1	A
Endrin ketone	ND		ug/kg	1.97	0.506	1	A
Dieldrin	ND		ug/kg	1.23	0.614	1	A
4,4'-DDE	3.48		ug/kg	1.97	0.455	1	A
4,4'-DDD	ND		ug/kg	1.97	0.701	1	A
4,4'-DDT	1.92	JIP	ug/kg	3.69	1.58	1	A
Endosulfan I	ND		ug/kg	1.97	0.464	1	A
Endosulfan II	ND		ug/kg	1.97	0.657	1	A
Endosulfan sulfate	ND		ug/kg	0.819	0.390	1	A
Methoxychlor	ND		ug/kg	3.69	1.15	1	A
Toxaphene	ND		ug/kg	36.9	10.3	1	A
cis-Chlordane	0.714	JIP	ug/kg	2.46	0.685	1	B
trans-Chlordane	0.814	JIP	ug/kg	2.46	0.649	1	B
Chlordane	ND		ug/kg	16.0	6.51	1	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	74		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02
Client ID: RISS2
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 13:31
Analyst: BM
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.364	1	A
Lindane	ND		ug/kg	0.775	0.346	1	A
Alpha-BHC	ND		ug/kg	0.775	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.705	1	A
Heptachlor	ND		ug/kg	0.930	0.417	1	A
Aldrin	ND		ug/kg	1.86	0.655	1	A
Heptachlor epoxide	ND		ug/kg	3.49	1.05	1	A
Endrin	ND		ug/kg	0.775	0.318	1	A
Endrin aldehyde	ND		ug/kg	2.32	0.814	1	A
Endrin ketone	ND		ug/kg	1.86	0.479	1	A
Dieldrin	ND		ug/kg	1.16	0.581	1	A
4,4'-DDE	1.06	J	ug/kg	1.86	0.430	1	A
4,4'-DDD	ND		ug/kg	1.86	0.664	1	A
4,4'-DDT	ND		ug/kg	3.49	1.50	1	A
Endosulfan I	ND		ug/kg	1.86	0.440	1	A
Endosulfan II	ND		ug/kg	1.86	0.622	1	A
Endosulfan sulfate	ND		ug/kg	0.775	0.369	1	A
Methoxychlor	ND		ug/kg	3.49	1.08	1	A
Toxaphene	ND		ug/kg	34.9	9.77	1	A
cis-Chlordane	ND		ug/kg	2.32	0.648	1	A
trans-Chlordane	0.989	JIP	ug/kg	2.32	0.614	1	B
Chlordane	ND		ug/kg	15.1	6.16	1	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02 Date Collected: 03/27/19 15:15

Client ID: RISS2 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	92		30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	86		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03
Client ID: RISS3
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 13:44
Analyst: BM
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	0.678	J	ug/kg	1.84	0.359	1	A
Lindane	ND		ug/kg	0.765	0.342	1	A
Alpha-BHC	ND		ug/kg	0.765	0.217	1	A
Beta-BHC	ND		ug/kg	1.84	0.696	1	A
Heptachlor	ND		ug/kg	0.918	0.411	1	A
Aldrin	ND		ug/kg	1.84	0.646	1	A
Heptachlor epoxide	2.00	JIP	ug/kg	3.44	1.03	1	B
Endrin	ND		ug/kg	0.765	0.314	1	A
Endrin aldehyde	ND		ug/kg	2.29	0.803	1	A
Endrin ketone	ND		ug/kg	1.84	0.472	1	A
Dieldrin	3.67	IP	ug/kg	1.15	0.573	1	A
4,4'-DDE	4.09		ug/kg	1.84	0.424	1	B
4,4'-DDD	ND		ug/kg	1.84	0.654	1	A
4,4'-DDT	13.8	P	ug/kg	3.44	1.48	1	B
Endosulfan I	ND		ug/kg	1.84	0.434	1	A
Endosulfan II	ND		ug/kg	1.84	0.613	1	A
Endosulfan sulfate	ND		ug/kg	0.765	0.364	1	A
Methoxychlor	ND		ug/kg	3.44	1.07	1	A
Toxaphene	ND		ug/kg	34.4	9.63	1	A
cis-Chlordane	28.2	P	ug/kg	2.29	0.639	1	A
trans-Chlordane	18.4	P	ug/kg	2.29	0.606	1	A
Chlordane	118		ug/kg	14.9	6.08	1	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 Date Collected: 03/27/19 15:45

Client ID: RISS3 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	121		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	103		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04
Client ID: RISS4
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 16:20
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 13:56
Analyst: BM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.72	0.336	1	A
Lindane	ND		ug/kg	0.716	0.320	1	A
Alpha-BHC	ND		ug/kg	0.716	0.203	1	A
Beta-BHC	ND		ug/kg	1.72	0.651	1	A
Heptachlor	ND		ug/kg	0.859	0.385	1	A
Aldrin	ND		ug/kg	1.72	0.605	1	A
Heptachlor epoxide	ND		ug/kg	3.22	0.966	1	A
Endrin	ND		ug/kg	0.716	0.293	1	A
Endrin aldehyde	ND		ug/kg	2.15	0.752	1	A
Endrin ketone	ND		ug/kg	1.72	0.442	1	A
Dieldrin	ND		ug/kg	1.07	0.537	1	A
4,4'-DDE	0.502	JIP	ug/kg	1.72	0.397	1	A
4,4'-DDD	ND		ug/kg	1.72	0.613	1	A
4,4'-DDT	ND		ug/kg	3.22	1.38	1	B
Endosulfan I	ND		ug/kg	1.72	0.406	1	A
Endosulfan II	ND		ug/kg	1.72	0.574	1	A
Endosulfan sulfate	ND		ug/kg	0.716	0.341	1	A
Methoxychlor	ND		ug/kg	3.22	1.00	1	A
Toxaphene	ND		ug/kg	32.2	9.02	1	A
cis-Chlordane	ND		ug/kg	2.15	0.598	1	A
trans-Chlordane	ND		ug/kg	2.15	0.567	1	A
Chlordane	ND		ug/kg	14.0	5.69	1	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04 Date Collected: 03/27/19 16:20

Client ID: RISS4 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	68		30-150	B
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	65		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY

Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 14:09
Analyst: BM
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.85	0.362	1	A
Lindane	ND		ug/kg	0.769	0.344	1	A
Alpha-BHC	ND		ug/kg	0.769	0.218	1	A
Beta-BHC	ND		ug/kg	1.85	0.700	1	A
Heptachlor	ND		ug/kg	0.923	0.414	1	A
Aldrin	ND		ug/kg	1.85	0.650	1	A
Heptachlor epoxide	1.79	JIP	ug/kg	3.46	1.04	1	B
Endrin	ND		ug/kg	0.769	0.315	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.808	1	A
Endrin ketone	ND		ug/kg	1.85	0.475	1	A
Dieldrin	3.58	IP	ug/kg	1.15	0.577	1	A
4,4'-DDE	3.00		ug/kg	1.85	0.427	1	B
4,4'-DDD	ND		ug/kg	1.85	0.658	1	A
4,4'-DDT	9.72		ug/kg	3.46	1.48	1	B
Endosulfan I	ND		ug/kg	1.85	0.436	1	A
Endosulfan II	ND		ug/kg	1.85	0.617	1	A
Endosulfan sulfate	ND		ug/kg	0.769	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.69	1	A
cis-Chlordane	16.2	IP	ug/kg	2.31	0.643	1	B
trans-Chlordane	11.9	IP	ug/kg	2.31	0.609	1	B
Chlordane	108		ug/kg	15.0	6.12	1	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 Date Collected: 03/27/19 00:00

Client ID: FD01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	96		30-150	B
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	92		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08
Client ID: RISS5
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 14:21
Analyst: BM
Percent Solids: 87%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.742	0.332	1	A
Alpha-BHC	ND		ug/kg	0.742	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.675	1	A
Heptachlor	1.59		ug/kg	0.891	0.399	1	B
Aldrin	ND		ug/kg	1.78	0.627	1	A
Heptachlor epoxide	ND		ug/kg	3.34	1.00	1	A
Endrin	ND		ug/kg	0.742	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.779	1	A
Endrin ketone	ND		ug/kg	1.78	0.459	1	A
Dieldrin	23.6		ug/kg	1.11	0.557	1	B
4,4'-DDE	22.8		ug/kg	1.78	0.412	1	B
4,4'-DDD	16.1		ug/kg	1.78	0.635	1	B
4,4'-DDT	128		ug/kg	3.34	1.43	1	B
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.595	1	A
Endosulfan sulfate	ND		ug/kg	0.742	0.353	1	A
Methoxychlor	ND		ug/kg	3.34	1.04	1	A
Toxaphene	ND		ug/kg	33.4	9.35	1	A
cis-Chlordane	11.2	IP	ug/kg	2.23	0.620	1	B
trans-Chlordane	16.1		ug/kg	2.23	0.588	1	A
Chlordane	105		ug/kg	14.5	5.90	1	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 Date Collected: 03/28/19 14:15

Client ID: RISS5 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	67		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	51		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/04/19 14:34
Analyst: BM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 04/02/19 10:45
Cleanup Method: EPA 3620B
Cleanup Date: 04/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.350	1	A
Lindane	ND		ug/kg	0.745	0.333	1	A
Alpha-BHC	ND		ug/kg	0.745	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.678	1	A
Heptachlor	ND		ug/kg	0.894	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.629	1	A
Heptachlor epoxide	ND		ug/kg	3.35	1.00	1	A
Endrin	ND		ug/kg	0.745	0.305	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.782	1	A
Endrin ketone	ND		ug/kg	1.79	0.460	1	A
Dieldrin	1.76	IP	ug/kg	1.12	0.559	1	A
4,4'-DDE	1.36	JIP	ug/kg	1.79	0.413	1	A
4,4'-DDD	ND		ug/kg	1.79	0.638	1	A
4,4'-DDT	7.73		ug/kg	3.35	1.44	1	B
Endosulfan I	ND		ug/kg	1.79	0.422	1	A
Endosulfan II	ND		ug/kg	1.79	0.597	1	A
Endosulfan sulfate	ND		ug/kg	0.745	0.354	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.38	1	A
cis-Chlordane	1.05	JIP	ug/kg	2.23	0.623	1	B
trans-Chlordane	0.961	JIP	ug/kg	2.23	0.590	1	B
Chlordane	ND		ug/kg	14.5	5.92	1	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	66		30-150	B
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	59		30-150	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY

Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 04/02/19 11:51
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 08:12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/19 11:05
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 08:12

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 10 Batch: WG1221645-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/19 11:05
Analyst: BM

Extraction Method: EPA 3510C
Extraction Date: 04/01/19 08:12

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 10 Batch: WG1221645-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/19 21:54
Analyst: SL

Extraction Method: EPA 3546
Extraction Date: 04/02/19 06:28
Cleanup Method: EPA 3620B
Cleanup Date: 04/02/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1222001-1						
Delta-BHC	ND		ug/kg	1.55	0.304	A
Lindane	ND		ug/kg	0.648	0.290	A
Alpha-BHC	ND		ug/kg	0.648	0.184	A
Beta-BHC	ND		ug/kg	1.55	0.589	A
Heptachlor	ND		ug/kg	0.777	0.348	A
Aldrin	ND		ug/kg	1.55	0.547	A
Heptachlor epoxide	ND		ug/kg	2.91	0.874	A
Endrin	ND		ug/kg	0.648	0.266	A
Endrin aldehyde	ND		ug/kg	1.94	0.680	A
Endrin ketone	ND		ug/kg	1.55	0.400	A
Dieldrin	ND		ug/kg	0.972	0.486	A
4,4'-DDE	ND		ug/kg	1.55	0.359	A
4,4'-DDD	ND		ug/kg	1.55	0.554	A
4,4'-DDT	ND		ug/kg	2.91	1.25	A
Endosulfan I	ND		ug/kg	1.55	0.367	A
Endosulfan II	ND		ug/kg	1.55	0.519	A
Endosulfan sulfate	ND		ug/kg	0.648	0.308	A
Methoxychlor	ND		ug/kg	2.91	0.907	A
Toxaphene	ND		ug/kg	29.1	8.16	A
cis-Chlordane	ND		ug/kg	1.94	0.541	A
trans-Chlordane	ND		ug/kg	1.94	0.513	A
Chlordane	ND		ug/kg	12.6	5.15	A

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/02/19 21:54
Analyst: SL

Extraction Method: EPA 3546
Extraction Date: 04/02/19 06:28
Cleanup Method: EPA 3620B
Cleanup Date: 04/02/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1222001-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	106		30-150	B
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	100		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 10 Batch: WG1221645-2 WG1221645-3									
Delta-BHC	50		59		30-150	17		20	A
Lindane	53		57		30-150	6		20	A
Alpha-BHC	56		61		30-150	8		20	A
Beta-BHC	50		53		30-150	7		20	A
Heptachlor	52		55		30-150	7		20	A
Aldrin	53		55		30-150	4		20	A
Heptachlor epoxide	50		53		30-150	5		20	A
Endrin	58		62		30-150	6		20	A
Endrin aldehyde	51		59		30-150	13		20	A
Endrin ketone	65		71		30-150	9		20	A
Dieldrin	60		62		30-150	4		20	A
4,4'-DDE	56		58		30-150	3		20	A
4,4'-DDD	59		62		30-150	6		20	A
4,4'-DDT	59		63		30-150	6		20	A
Endosulfan I	53		55		30-150	4		20	A
Endosulfan II	55		59		30-150	8		20	A
Endosulfan sulfate	59		67		30-150	12		20	A
Methoxychlor	57		60		30-150	6		20	A
cis-Chlordane	49		50		30-150	3		20	A
trans-Chlordane	52		54		30-150	3		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 10 Batch: WG1221645-2 WG1221645-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48		50		30-150	A
Decachlorobiphenyl	65		67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		49		30-150	B
Decachlorobiphenyl	52		55		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222001-2 WG1222001-3									
Delta-BHC	114		116		30-150	2		30	A
Lindane	117		122		30-150	4		30	A
Alpha-BHC	115		125		30-150	8		30	A
Beta-BHC	112		116		30-150	4		30	A
Heptachlor	85		85		30-150	0		30	A
Aldrin	102		119		30-150	15		30	A
Heptachlor epoxide	114		128		30-150	12		30	A
Endrin	114		114		30-150	0		30	A
Endrin aldehyde	84		80		30-150	5		30	A
Endrin ketone	101		101		30-150	0		30	A
Dieldrin	116		116		30-150	0		30	A
4,4'-DDE	107		106		30-150	1		30	A
4,4'-DDD	112		112		30-150	0		30	A
4,4'-DDT	113		110		30-150	3		30	A
Endosulfan I	98		99		30-150	1		30	A
Endosulfan II	111		110		30-150	1		30	A
Endosulfan sulfate	83		84		30-150	1		30	A
Methoxychlor	112		109		30-150	3		30	A
cis-Chlordane	80		80		30-150	0		30	A
trans-Chlordane	109		126		30-150	14		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1222001-2 WG1222001-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		85		30-150	B
Decachlorobiphenyl	111		108		30-150	B
2,4,5,6-Tetrachloro-m-xylene	82		85		30-150	A
Decachlorobiphenyl	100		97		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222001-4 WG1222001-5 QC Sample: L1912447-01 Client ID: RISS1													
Delta-BHC	ND	41.4	12.1	**29**	Q	28.6	70		30-150	**81**	Q	50	A
Lindane	ND	41.4	15.0	36		31.8	77		30-150	**72**	Q	50	A
Alpha-BHC	ND	41.4	17.0	41		31.1	76		30-150	**59**	Q	50	A
Beta-BHC	ND	41.4	26.0	63		36.1P	88		30-150	33		50	A
Heptachlor	ND	41.4	10.2	**25**	Q	21.6	53		30-150	**72**	Q	50	A
Aldrin	ND	41.4	21.6	52		29.9	73		30-150	32		50	A
Heptachlor epoxide	ND	41.4	24.4	59		32.1	78		30-150	27		50	A
Endrin	ND	41.4	21.2	51		32.4	79		30-150	42		50	A
Endrin aldehyde	ND	41.4	18.9	46		28.2	69		30-150	39		50	A
Endrin ketone	ND	41.4	18.5	45		30.2	74		30-150	48		50	A
Dieldrin	ND	41.4	24.0	58		31.9	78		30-150	28		50	A
4,4'-DDE	3.48	41.4	26.0	54		33.2	72		30-150	24		50	A
4,4'-DDD	ND	41.4	24.8	60		31.1	76		30-150	23		50	A
4,4'-DDT	1.92JIP	41.4	11.8	**29**	Q	33.4	81		30-150	**96**	Q	50	A
Endosulfan I	ND	41.4	18.5	45		27.4	67		30-150	39		50	A
Endosulfan II	ND	41.4	18.0	44		30.1	73		30-150	50		50	A
Endosulfan sulfate	ND	41.4	7.78	**19**	Q	20.0	49		30-150	**88**	Q	50	A
Methoxychlor	ND	41.4	12.8	31		31.0	76		30-150	**83**	Q	50	A
cis-Chlordane	0.714JIP	41.4	26.3	64		32.0	78		30-150	20		50	B
trans-Chlordane	0.814JIP	41.4	22.5	54		27.8	68		30-150	21		50	B

Matrix Spike Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1 ***Lab Number:*** L1912447

Project Number: 16.6334 ***Report Date:*** 04/10/19

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222001-4 WG1222001-5 QC Sample: L1912447-01 Client ID: RISS1												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*	*Column*
2,4,5,6-Tetrachloro-m-xylene	59		68		30-150	B
Decachlorobiphenyl	76		86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	45		62		30-150	A
Decachlorobiphenyl	65		74		30-150	A

METALS

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01 Date Collected: 03/27/19 14:10

Client ID: RISS1 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3880		mg/kg	9.76	2.64	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Antimony, Total	1.25	J	mg/kg	4.88	0.371	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Arsenic, Total	4.92		mg/kg	0.976	0.203	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Barium, Total	81.9		mg/kg	0.976	0.170	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Beryllium, Total	0.244	J	mg/kg	0.488	0.032	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Cadmium, Total	0.547	J	mg/kg	0.976	0.096	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Calcium, Total	7570		mg/kg	9.76	3.42	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Chromium, Total	8.67		mg/kg	0.976	0.094	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Cobalt, Total	3.43		mg/kg	1.95	0.162	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Copper, Total	34.6		mg/kg	0.976	0.252	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Iron, Total	9000		mg/kg	4.88	0.882	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Lead, Total	365		mg/kg	4.88	0.262	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Magnesium, Total	3200		mg/kg	9.76	1.50	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Manganese, Total	201		mg/kg	0.976	0.155	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Mercury, Total	0.361		mg/kg	0.081	0.017	1	03/30/19 08:00	04/01/19 15:55	EPA 7471B	1,7471B	GD
Nickel, Total	9.78		mg/kg	2.44	0.236	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Potassium, Total	254		mg/kg	244	14.1	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Selenium, Total	0.957	J	mg/kg	1.95	0.252	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.976	0.276	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Sodium, Total	43.8	J	mg/kg	195	3.08	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.95	0.308	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Vanadium, Total	13.6		mg/kg	0.976	0.198	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB
Zinc, Total	204		mg/kg	4.88	0.286	2	04/02/19 19:30	04/03/19 19:15	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02 Date Collected: 03/27/19 15:15

Client ID: RISS2 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3190		mg/kg	9.10	2.46	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Antimony, Total	0.801	J	mg/kg	4.55	0.346	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Arsenic, Total	3.23		mg/kg	0.910	0.189	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Barium, Total	38.8		mg/kg	0.910	0.158	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Beryllium, Total	0.164	J	mg/kg	0.455	0.030	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.910	0.089	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Calcium, Total	3420		mg/kg	9.10	3.19	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Chromium, Total	5.21		mg/kg	0.910	0.087	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Cobalt, Total	3.09		mg/kg	1.82	0.151	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Copper, Total	15.7		mg/kg	0.910	0.235	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Iron, Total	8730		mg/kg	4.55	0.822	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Lead, Total	119		mg/kg	4.55	0.244	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Magnesium, Total	1230		mg/kg	9.10	1.40	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Manganese, Total	182		mg/kg	0.910	0.145	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Mercury, Total	0.359		mg/kg	0.075	0.016	1	03/30/19 08:00	04/01/19 16:33	EPA 7471B	1,7471B	GD
Nickel, Total	6.46		mg/kg	2.28	0.220	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Potassium, Total	225	J	mg/kg	228	13.1	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Selenium, Total	0.401	J	mg/kg	1.82	0.235	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.910	0.258	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Sodium, Total	21.7	J	mg/kg	182	2.87	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.82	0.287	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Vanadium, Total	11.1		mg/kg	0.910	0.185	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB
Zinc, Total	105		mg/kg	4.55	0.267	2	04/02/19 19:30	04/03/19 20:09	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03 Date Collected: 03/27/19 15:45

Client ID: RISS3 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3070		mg/kg	9.05	2.44	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Antimony, Total	0.552	J	mg/kg	4.52	0.344	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Arsenic, Total	4.48		mg/kg	0.905	0.188	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Barium, Total	62.3		mg/kg	0.905	0.157	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Beryllium, Total	0.118	J	mg/kg	0.452	0.030	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Cadmium, Total	0.534	J	mg/kg	0.905	0.089	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Calcium, Total	66500		mg/kg	90.5	31.7	20	04/02/19 19:30	04/03/19 20:56	EPA 3050B	1,6010D	AB
Chromium, Total	7.13		mg/kg	0.905	0.087	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Cobalt, Total	3.41		mg/kg	1.81	0.150	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Copper, Total	18.2		mg/kg	0.905	0.233	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Iron, Total	9890		mg/kg	4.52	0.817	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Lead, Total	116		mg/kg	4.52	0.242	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Magnesium, Total	24900		mg/kg	9.05	1.39	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Manganese, Total	228		mg/kg	0.905	0.144	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Mercury, Total	0.253		mg/kg	0.074	0.016	1	03/30/19 08:00	04/01/19 16:35	EPA 7471B	1,7471B	GD
Nickel, Total	9.26		mg/kg	2.26	0.219	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Potassium, Total	355		mg/kg	226	13.0	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Selenium, Total	0.733	J	mg/kg	1.81	0.233	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.905	0.256	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Sodium, Total	68.4	J	mg/kg	181	2.85	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.81	0.285	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Vanadium, Total	14.8		mg/kg	0.905	0.184	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB
Zinc, Total	110		mg/kg	4.52	0.265	2	04/02/19 19:30	04/03/19 20:13	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04 Date Collected: 03/27/19 16:20

Client ID: RISS4 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4000		mg/kg	8.68	2.34	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Antimony, Total	0.582	J	mg/kg	4.34	0.330	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Arsenic, Total	2.60		mg/kg	0.868	0.181	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Barium, Total	18.2		mg/kg	0.868	0.151	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Beryllium, Total	0.217	J	mg/kg	0.434	0.029	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.868	0.085	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Calcium, Total	1190		mg/kg	8.68	3.04	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Chromium, Total	5.03		mg/kg	0.868	0.083	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Cobalt, Total	3.07		mg/kg	1.74	0.144	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Copper, Total	8.14		mg/kg	0.868	0.224	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Iron, Total	9010		mg/kg	4.34	0.784	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Lead, Total	58.2		mg/kg	4.34	0.233	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Magnesium, Total	1300		mg/kg	8.68	1.34	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Manganese, Total	144		mg/kg	0.868	0.138	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Mercury, Total	0.173		mg/kg	0.070	0.015	1	03/30/19 08:00	04/01/19 16:37	EPA 7471B	1,7471B	GD
Nickel, Total	6.37		mg/kg	2.17	0.210	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Potassium, Total	223		mg/kg	217	12.5	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Selenium, Total	0.417	J	mg/kg	1.74	0.224	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.868	0.246	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Sodium, Total	18.9	J	mg/kg	174	2.74	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.274	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Vanadium, Total	11.2		mg/kg	0.868	0.176	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB
Zinc, Total	48.5		mg/kg	4.34	0.254	2	04/02/19 19:30	04/03/19 20:18	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05 Date Collected: 03/27/19 00:00

Client ID: FD01_190327 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3900		mg/kg	8.98	2.42	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Antimony, Total	0.916	J	mg/kg	4.49	0.341	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Arsenic, Total	4.50		mg/kg	0.898	0.187	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Barium, Total	57.4		mg/kg	0.898	0.156	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Beryllium, Total	0.153	J	mg/kg	0.449	0.030	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Cadmium, Total	0.610	J	mg/kg	0.898	0.088	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Calcium, Total	30900		mg/kg	8.98	3.14	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Chromium, Total	8.21		mg/kg	0.898	0.086	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Cobalt, Total	3.81		mg/kg	1.80	0.149	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Copper, Total	21.1		mg/kg	0.898	0.232	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Iron, Total	11300		mg/kg	4.49	0.811	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Lead, Total	124		mg/kg	4.49	0.241	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Magnesium, Total	12800		mg/kg	8.98	1.38	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Manganese, Total	204		mg/kg	0.898	0.143	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Mercury, Total	0.166		mg/kg	0.074	0.016	1	03/30/19 08:00	04/01/19 16:39	EPA 7471B	1,7471B	GD
Nickel, Total	11.8		mg/kg	2.24	0.217	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Potassium, Total	433		mg/kg	224	12.9	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Selenium, Total	0.808	J	mg/kg	1.80	0.232	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.898	0.254	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Sodium, Total	58.8	J	mg/kg	180	2.83	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.80	0.283	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Vanadium, Total	14.0		mg/kg	0.898	0.182	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB
Zinc, Total	112		mg/kg	4.49	0.263	2	04/02/19 19:30	04/03/19 20:22	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08 Date Collected: 03/28/19 14:15

Client ID: RISS5 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6400		mg/kg	8.68	2.34	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Antimony, Total	0.599	J	mg/kg	4.34	0.330	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Arsenic, Total	4.61		mg/kg	0.868	0.180	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Barium, Total	82.0		mg/kg	0.868	0.151	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Beryllium, Total	0.191	J	mg/kg	0.434	0.029	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.868	0.085	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Calcium, Total	91800		mg/kg	86.8	30.4	20	04/02/19 19:30	04/03/19 21:00	EPA 3050B	1,6010D	AB
Chromium, Total	10.6		mg/kg	0.868	0.083	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Cobalt, Total	4.44		mg/kg	1.74	0.144	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Copper, Total	17.0		mg/kg	0.868	0.224	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Iron, Total	12200		mg/kg	4.34	0.784	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Lead, Total	75.7		mg/kg	4.34	0.233	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Magnesium, Total	11300		mg/kg	8.68	1.34	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Manganese, Total	276		mg/kg	0.868	0.138	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Mercury, Total	0.089		mg/kg	0.073	0.015	1	03/30/19 08:00	04/01/19 16:41	EPA 7471B	1,7471B	GD
Nickel, Total	10.5		mg/kg	2.17	0.210	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Potassium, Total	687		mg/kg	217	12.5	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Selenium, Total	0.720	J	mg/kg	1.74	0.224	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.868	0.246	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Sodium, Total	259		mg/kg	174	2.73	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.74	0.273	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Vanadium, Total	16.3		mg/kg	0.868	0.176	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB
Zinc, Total	104		mg/kg	4.34	0.254	2	04/02/19 19:30	04/03/19 20:26	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09 Date Collected: 03/28/19 14:30

Client ID: RISS6 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	6300		mg/kg	8.90	2.40	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Antimony, Total	0.943	J	mg/kg	4.45	0.338	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Arsenic, Total	4.84		mg/kg	0.890	0.185	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Barium, Total	46.0		mg/kg	0.890	0.155	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Beryllium, Total	0.258	J	mg/kg	0.445	0.029	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.890	0.087	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Calcium, Total	12900		mg/kg	8.90	3.11	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Chromium, Total	11.0		mg/kg	0.890	0.085	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Cobalt, Total	6.00		mg/kg	1.78	0.148	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Copper, Total	20.1		mg/kg	0.890	0.230	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Iron, Total	15200		mg/kg	4.45	0.803	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Lead, Total	63.5		mg/kg	4.45	0.238	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Magnesium, Total	4490		mg/kg	8.90	1.37	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Manganese, Total	335		mg/kg	0.890	0.141	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Mercury, Total	0.059	J	mg/kg	0.071	0.015	1	03/30/19 08:00	04/01/19 16:42	EPA 7471B	1,7471B	GD
Nickel, Total	12.6		mg/kg	2.22	0.215	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Potassium, Total	485		mg/kg	222	12.8	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Selenium, Total	0.694	J	mg/kg	1.78	0.230	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.890	0.252	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Sodium, Total	43.5	J	mg/kg	178	2.80	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Vanadium, Total	13.9		mg/kg	0.890	0.181	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB
Zinc, Total	68.3		mg/kg	4.45	0.261	2	04/02/19 19:30	04/03/19 20:30	EPA 3050B	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10 Date Collected: 03/28/19 08:45

Client ID: EB01_190328 Date Received: 03/28/19

Sample Location: SCHENECTADY, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00730	J	mg/l	0.0100	0.00327	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Barium, Total	0.00017	J	mg/l	0.00050	0.00017	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Calcium, Total	0.174		mg/l	0.100	0.0394	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Chromium, Total	0.00048	J	mg/l	0.00100	0.00017	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Iron, Total	0.0350	J	mg/l	0.0500	0.0191	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Magnesium, Total	0.0247	J	mg/l	0.0700	0.0242	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/01/19 11:29	04/01/19 21:45	EPA 7470A	1,7470A	EA
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Potassium, Total	0.0787	J	mg/l	0.100	0.0309	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Sodium, Total	0.318		mg/l	0.100	0.0293	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/01/19 09:39	04/01/19 15:48	EPA 3005A	1,6020B	AM

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05,08-09 Batch: WG1221307-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	03/30/19 08:00	04/01/19 15:51	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 10 Batch: WG1221659-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Antimony, Total	0.00043	J	mg/l	0.00400	0.00042	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Thallium, Total	0.00018	J	mg/l	0.00050	0.00014	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/01/19 09:39	04/01/19 13:19	1,6020B	AM

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 10 Batch: WG1221708-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/01/19 11:29	04/01/19 21:34	1,7470A	EA

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-05,08-09 Batch: WG1222233-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Sodium, Total	2.01	J	mg/kg	80.0	1.26	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Vanadium, Total	ND	mg/kg	0.400	0.081	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	04/02/19 19:30	04/03/19 19:05	1,6010D	AB

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 Batch: WG1221307-2 SRM Lot Number: D101-540								
Mercury, Total	110		-		65-135	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1221659-2					
Aluminum, Total	104	-	80-120	-	
Antimony, Total	100	-	80-120	-	
Arsenic, Total	96	-	80-120	-	
Barium, Total	100	-	80-120	-	
Beryllium, Total	99	-	80-120	-	
Cadmium, Total	102	-	80-120	-	
Calcium, Total	102	-	80-120	-	
Chromium, Total	95	-	80-120	-	
Cobalt, Total	98	-	80-120	-	
Copper, Total	92	-	80-120	-	
Iron, Total	100	-	80-120	-	
Lead, Total	102	-	80-120	-	
Magnesium, Total	108	-	80-120	-	
Manganese, Total	97	-	80-120	-	
Nickel, Total	98	-	80-120	-	
Potassium, Total	103	-	80-120	-	
Selenium, Total	102	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	103	-	80-120	-	
Thallium, Total	98	-	80-120	-	
Vanadium, Total	95	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1221659-2					
Zinc, Total	102	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 10 Batch: WG1221708-2					
Mercury, Total	105	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 Batch: WG1222233-2 SRM Lot Number: D101-540					
Aluminum, Total	63	-	50-151	-	
Antimony, Total	145	-	3-196	-	
Arsenic, Total	91	-	83-117	-	
Barium, Total	94	-	83-118	-	
Beryllium, Total	84	-	83-117	-	
Cadmium, Total	88	-	83-117	-	
Calcium, Total	90	-	81-119	-	
Chromium, Total	83	-	81-118	-	
Cobalt, Total	88	-	84-116	-	
Copper, Total	85	-	83-116	-	
Iron, Total	80	-	62-138	-	
Lead, Total	84	-	83-117	-	
Magnesium, Total	81	-	76-124	-	
Manganese, Total	92	-	82-118	-	
Nickel, Total	89	-	82-117	-	
Potassium, Total	84	-	71-130	-	
Selenium, Total	91	-	79-121	-	
Silver, Total	81	-	80-120	-	
Sodium, Total	86	-	72-127	-	
Thallium, Total	90	-	81-119	-	
Vanadium, Total	86	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 Batch: WG1222233-2 SRM Lot Number: D101-540					
Zinc, Total	88	-	81-119	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221307-3 WG1221307-4 QC Sample: L1912447-01 Client ID: RISS1												
Mercury, Total	0.361	0.163	0.570	**128**	Q	0.956	**366**	Q	80-120	**51**	Q	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1221659-3 WG1221659-4 QC Sample: L1912250-03 Client ID: MS Sample											
Aluminum, Total	0.0735	2	2.19	106		2.22	107		75-125	1	20
Antimony, Total	0.00367J	0.5	0.5950	119		0.5922	118		75-125	0	20
Arsenic, Total	0.00023J	0.12	0.1258	105		0.1264	105		75-125	0	20
Barium, Total	0.09457	2	2.170	104		2.179	104		75-125	0	20
Beryllium, Total	ND	0.05	0.05361	107		0.05558	111		75-125	4	20
Cadmium, Total	ND	0.051	0.05217	102		0.05251	103		75-125	1	20
Calcium, Total	192.	10	201	90		206	**140**	Q	75-125	2	20
Chromium, Total	0.00140	0.2	0.2017	100		0.2040	101		75-125	1	20
Cobalt, Total	0.00018J	0.5	0.5169	103		0.5225	104		75-125	1	20
Copper, Total	0.00091J	0.25	0.2444	98		0.2581	103		75-125	5	20
Iron, Total	0.318	1	1.64	**132**	Q	1.46	114		75-125	12	20
Lead, Total	ND	0.51	0.5464	107		0.5323	104		75-125	3	20
Magnesium, Total	53.2	10	65.0	118		67.0	**138**	Q	75-125	3	20
Manganese, Total	0.03114	0.5	0.5548	105		0.5557	105		75-125	0	20
Nickel, Total	0.00099J	0.5	0.5116	102		0.5220	104		75-125	2	20
Potassium, Total	6.35	10	17.2	108		17.6	112		75-125	2	20
Selenium, Total	0.00588	0.12	0.127	101		0.128	102		75-125	1	20
Silver, Total	ND	0.05	0.05345	107		0.05161	103		75-125	4	20
Sodium, Total	127.	10	139	120		143	**160**	Q	75-125	3	20
Thallium, Total	0.00019J	0.12	0.1209	101		0.1211	101		75-125	0	20
Vanadium, Total	ND	0.5	0.5030	101		0.5161	103		75-125	3	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1221659-3 WG1221659-4 QC Sample: L1912250-03 Client ID: MS Sample									
Zinc, Total	0.00427J	0.5	0.5270	105	0.5420	108	75-125	3	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10 QC Batch ID: WG1221659-7 WG1221659-8 QC Sample: L1912478-04 Client ID: MS Sample											
Aluminum, Total	1.47	2	3.75	114		3.70	112		75-125	1	20
Antimony, Total	0.0014J	0.5	0.6062	121		0.5816	116		75-125	4	20
Arsenic, Total	0.0028	0.12	0.1258	102		0.1281	104		75-125	2	20
Barium, Total	0.2567	2	2.340	104		2.325	103		75-125	1	20
Beryllium, Total	ND	0.05	0.05455	109		0.05754	115		75-125	5	20
Cadmium, Total	0.0001J	0.051	0.05526	108		0.05274	103		75-125	5	20
Calcium, Total	102.	10	117	**150**	Q	118	**160**	Q	75-125	1	20
Chromium, Total	0.0035	0.2	0.2071	102		0.2066	102		75-125	0	20
Cobalt, Total	0.0013	0.5	0.5104	102		0.5079	101		75-125	0	20
Copper, Total	0.0021	0.25	0.2455	97		0.2477	98		75-125	1	20
Iron, Total	6.57	1	7.45	88		7.30	**73**	Q	75-125	2	20
Lead, Total	0.0013	0.51	0.5308	104		0.5259	103		75-125	1	20
Magnesium, Total	31.9	10	44.6	**127**	Q	45.4	**135**	Q	75-125	2	20
Manganese, Total	0.3999	0.5	0.9193	104		0.9159	103		75-125	0	20
Nickel, Total	0.0035	0.5	0.5182	103		0.5160	102		75-125	0	20
Potassium, Total	7.85	10	18.9	110		18.8	110		75-125	1	20
Selenium, Total	ND	0.12	0.120	100		0.128	107		75-125	6	20
Silver, Total	ND	0.05	0.05228	104		0.05002	100		75-125	4	20
Sodium, Total	31.8	10	43.7	119		43.9	121		75-125	0	20
Thallium, Total	ND	0.12	0.1212	101		0.1193	99		75-125	2	20
Vanadium, Total	0.0044J	0.5	0.5030	101		0.5029	100		75-125	0	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 10	QC Batch ID: WG1221659-7				WG1221659-8		QC Sample: L1912478-04	Client ID:	MS Sample
Zinc, Total	0.0080J	0.5	0.5411	108	0.5380	108	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 10	QC Batch ID: WG1221708-3				WG1221708-4		QC Sample: L1912755-01	Client ID:	MS Sample
Mercury, Total	ND	0.005	0.00510	102	0.00511	102	75-125	0	20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222233-3 WG1222233-4 QC Sample: L1912447-01 Client ID: RISS1												
Aluminum, Total	3880	204	4630	**368**	Q	4610	**356**	Q	75-125	0		20
Antimony, Total	1.25J	51	43.4	85		43.0	84		75-125	1		20
Arsenic, Total	4.92	12.2	15.9	90		16.3	92		75-125	2		20
Barium, Total	81.9	204	268	91		261	87		75-125	3		20
Beryllium, Total	0.244J	5.1	4.58	90		4.54	88		75-125	1		20
Cadmium, Total	0.547J	5.2	5.10	98		5.04	96		75-125	1		20
Calcium, Total	7570	1020	11300	**366**	Q	8460	87		75-125	**29**	Q	20
Chromium, Total	8.67	20.4	27.0	90		27.6	92		75-125	2		20
Cobalt, Total	3.43	51	45.9	83		46.1	83		75-125	0		20
Copper, Total	34.6	25.5	56.8	87		57.5	89		75-125	1		20
Iron, Total	9000	102	9760	**745**	Q	11200	**2150**	Q	75-125	14		20
Lead, Total	365	52	392	**52**	Q	382	**32**	Q	75-125	3		20
Magnesium, Total	3200	1020	5260	**202**	Q	3810	**60**	Q	75-125	**32**	Q	20
Manganese, Total	201	51	250	96		248	92		75-125	1		20
Nickel, Total	9.78	51	52.6	84		52.9	84		75-125	1		20
Potassium, Total	254	1020	1160	89		1140	86		75-125	2		20
Selenium, Total	0.957J	12.2	11.6	95		11.4	93		75-125	2		20
Silver, Total	ND	30.6	28.7	94		28.6	93		75-125	0		20
Sodium, Total	43.8J	1020	967	95		955	93		75-125	1		20
Thallium, Total	ND	12.2	9.68	79		9.66	78		75-125	0		20
Vanadium, Total	13.6	51	61.8	94		60.6	92		75-125	2		20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1222233-3 WG1222233-4 QC Sample: L1912447-01 Client ID: RISS1									
Zinc, Total	204	51	255	100	254	98	75-125	0	20

INORGANICS
&
MISCELLANEOUS

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-01
Client ID: RISS1
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil
Date Collected: 03/27/19 14:10
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.0		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.26	1	03/29/19 14:35	04/01/19 14:38	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	1.04	0.208	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-02
Client ID: RISS2
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil

Date Collected: 03/27/19 15:15
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.1		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	03/29/19 14:35	04/01/19 14:41	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.951	0.190	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-03
Client ID: RISS3
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil
Date Collected: 03/27/19 15:45
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.7		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	03/29/19 14:35	04/01/19 14:42	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.944	0.189	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-04
Client ID: RISS4
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil

Date Collected: 03/27/19 16:20
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.3		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	03/29/19 14:35	04/01/19 14:45	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.886	0.177	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-05
Client ID: FD01_190327
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil
Date Collected: 03/27/19 00:00
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.2		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	03/29/19 14:35	04/01/19 14:46	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.928	0.186	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-08
Client ID: RISS5
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil
Date Collected: 03/28/19 14:15
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	03/29/19 14:35	04/01/19 14:47	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.917	0.183	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-09
Client ID: RISS6
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Soil
Date Collected: 03/28/19 14:30
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.5		%	0.100	NA	1	-	03/29/19 12:46	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	03/29/19 14:35	04/01/19 14:48	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/kg	0.904	0.181	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

SAMPLE RESULTS

Lab ID: L1912447-10
Client ID: EB01_190328
Sample Location: SCHENECTADY, NY
Sample Depth:
Matrix: Water
Date Collected: 03/28/19 08:45
Date Received: 03/28/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/31/19 14:35	04/01/19 13:26	1,9010C/9012B	LH
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/29/19 06:00	03/29/19 06:41	1,7196A	JW

Project Name: HAMILTON HILL II, TA1 **Lab Number:** L1912447

Project Number: 16.6334 **Report Date:** 04/10/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 10 Batch: WG1220933-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	03/29/19 06:00	03/29/19 06:40	1,7196A	JW
General Chemistry - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1221115-1										
Cyanide, Total	ND		mg/kg	0.94	0.20	1	03/29/19 14:35	04/01/19 14:33	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-05,08-09 Batch: WG1221228-1										
Chromium, Hexavalent	ND		mg/kg	0.800	0.160	1	03/29/19 19:00	04/01/19 21:20	1,7196A	AJ
General Chemistry - Westborough Lab for sample(s): 10 Batch: WG1221512-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	03/31/19 14:35	04/01/19 12:48	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 10 Batch: WG1220933-2								
Chromium, Hexavalent	91		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1221115-2 WG1221115-3								
Cyanide, Total	**70**	Q	**76**	Q	80-120	13		35
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 Batch: WG1221228-2								
Chromium, Hexavalent	91		-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 10 Batch: WG1221512-2 WG1221512-3								
Cyanide, Total	102		101		85-115	1		20

Matrix Spike Analysis
Batch Quality Control

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334
Lab Number: L1912447
Report Date: 04/10/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1220933-4 QC Sample: L1912447-10 Client ID: EB01_190328												
Chromium, Hexavalent	ND	0.1	0.096	96		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221115-4 WG1221115-5 QC Sample: L1912447-01 Client ID: RISS1												
Cyanide, Total	ND	13	12	93		9.0	**73**	Q	75-125	29		35
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221228-4 WG1221228-5 QC Sample: L1912447-01 Client ID: RISS1												
Chromium, Hexavalent	ND	1300	553	**43**	Q	481	**39**	Q	75-125	14		20
General Chemistry - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1221512-4 WG1221512-5 QC Sample: L1912575-03 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.203	102		0.112	**56**	Q	80-120	**58**	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: HAMILTON HILL II, TA1

Project Number: 16.6334

Lab Number: L1912447

Report Date: 04/10/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 10 QC Batch ID: WG1220933-3 QC Sample: L1912447-10 Client ID: EB01_190328						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221022-1 QC Sample: L1912447-01 Client ID: RISS1						
Solids, Total	77.0	77.0	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-05,08-09 QC Batch ID: WG1221228-7 QC Sample: L1912447-01 Client ID: RISS1						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1912447-01A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-01A1	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-01A2	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-01B	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01B1	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01B2	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01C	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01C1	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01C2	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-01D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01D1	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01D2	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01D3	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01D4	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01D5	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-01E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-01E1	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1912447-01E2	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-01F	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-01F1	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-01F2	Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-01G	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		SUB-8270()
L1912447-01G1	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		SUB-8270()
L1912447-01G2	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		SUB-8270()
L1912447-01H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-01H1	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-01H2	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-01I	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-01I1	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-01I2	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-02A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-02B	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-02C	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-02D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-02E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-02F	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-02G	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-03A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1912447-03B	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-03C	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-03D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-03E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-03F	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-03G	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-03H	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		SUB-8270()
L1912447-03I	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-03J	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-04A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-04B	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-04C	Vial water preserved	B	NA		4.6	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-04D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-04F	Glass 120ml/4oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-04G	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-05A	Vial MeOH preserved	B	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-05B	Vial water preserved	B	NA		4.6	Y	Absent	**29-MAR-19 07:07**	NYTCL-8260HLW-R2(14)
L1912447-05C	Vial water preserved	B	NA		4.6	Y	Absent	**29-MAR-19 07:07**	NYTCL-8260HLW-R2(14)
L1912447-05D	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1912447-05E	Plastic 2oz unpreserved for TS	B	NA		4.6	Y	Absent		TS(7)
L1912447-05F	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-05G	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-05H	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		SUB-8270()
L1912447-05I	Glass 250ml/8oz unpreserved	B	NA		4.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-05J	Plastic 8oz unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-06A	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1912447-06B	Vial HCl preserved	B	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1912447-06C	Plastic 250ml unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1912447-07A	Plastic 250ml unpreserved	B	NA		4.6	Y	Absent		A2-NY-537-ISOTOPE(14)
L1912447-08A	Vial MeOH preserved	A	NA		4.4	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-08B	Vial water preserved	A	NA		4.4	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-08C	Vial water preserved	A	NA		4.4	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-08D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L1912447-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-08F	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-08G	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-09A	Vial MeOH preserved	A	NA		4.4	Y	Absent		NYTCL-8260HLW-R2(14)
L1912447-09B	Vial water preserved	A	NA		4.4	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)
L1912447-09C	Vial water preserved	A	NA		4.4	Y	Absent	29-MAR-19 07:07	NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1912447-09D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L1912447-09E	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		TS(7)
L1912447-09F	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-09G	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1912447-09H	Plastic 8oz unpreserved	A	NA		4.4	Y	Absent		A2-NY-537-ISOTOPE(28)
L1912447-09I	Glass 120ml/4oz unpreserved	A	NA		4.4	Y	Absent		SUB-8270()
L1912447-09J	Glass 250ml/8oz unpreserved	A	NA		4.4	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14),HEXCR-7196(30)
L1912447-10A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1912447-10B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1912447-10C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1912447-10D	Plastic 250ml unpreserved	A	7	7	4.4	Y	Absent		HEXCR-7196(1)
L1912447-10E	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1912447-10F	Plastic 250ml NaOH preserved	A	>12	>12	4.4	Y	Absent		TCN-9010(14)
L1912447-10G	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1912447-10H	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1912447-10I	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(7)
L1912447-10J	Amber 120ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-LVI(7)
L1912447-10K	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1912447-10L	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

*Values in parentheses indicate holding time in days

Project Name: HAMILTON HILL II, TA1
Project Number: 16.6334

Lab Number: L1912447
Report Date: 04/10/19

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L1912447-10M	Amber 500ml unpreserved	A	7	7	4.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1912447-10N	Amber 500ml unpreserved	A	7	7	4.4	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L1912447-10O	Plastic 250ml unpreserved	A	NA		4.4	Y	Absent		A2-NY-537-ISOTOPE(14)
L1912447-10P	Plastic 250ml unpreserved	A	NA		4.4	Y	Absent		A2-NY-537-ISOTOPE(14)

*Values in parentheses indicate holding time in days

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	HAMILTON HILL II, TA1	**Lab Number:**	L1912447
Project Number:	16.6334	**Report Date:**	04/10/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

122 Determination of Selected Perfluorintated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page: 1 of 1

Date Rec'd in Lab: 3/29/19

ALPHA Job #: L1912447

Client Information
Client: C.T. Male Associates
Address: 50 Century Hill Dr
Latham NY 12110
Phone: 518 786 7400
Fax: A.Smith@CTMale.com
Email: K.Moline@CTMale.com

Project Information
Project Name: Hamilton Hill I, TA1
Project Location: Schenectady, NY
Project #: 16.6334
(Use Project name as Project #) ☐
Project Manager: Kirk Moline
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOC+TIC	TCL SVOC+TIC	TCL Pest	TCL PCB	TAL Metals	Incl. mercury, hex.chrom, cyanide	PFAS (21)	1,4-dioxane	Sample Specific Comments	Total Bottle
12447-01	RISS1	3/27/19	1410	So.1	RL	X	X	X	X	X	X	X	X	ms/MSD here	30
-02	RISS2		1515		RL	X	X	X	X	X	X	~~X~~			7
-03	RISS3		1545		RL	X	X	X	X	X	X	X	X		10
-04	RISS4		1620		RL	X	X	X	X	X	X				7 (DA)
-05	FD01=190327		—	↓	RL	X	X	X	X	X	X	X	X		~~10~~ 10
-06	LTB01_190327		—	Blank Water	—	X						X			3
-07	FTB01_190327	↓	1450	Blank Water	RL							X			1
-08	RISS5	3/28/19	1415	So.1	RL	X	X	X	X	X	X				7
-09	RISS6	↓	1430	So.1	RL	X	X	X	X	X	X	X	X		16
-10	EB01_190328	3/28/19	0845	Water	RL	X	X	X	X	X	X	X	X		16

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	VA	A	A	A	A/G	A/F	P	A
Preservative	F/D	A	A	A	A/C	A/E	A/Trizma	A

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	3/29/19 1525	[signature] CARL	3/28/19 1525
[signature]	3/28/19 1530	[signature] Wendy Mahoney	3/29/19 00:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL
L1912447
SM3011

KATAHDIN ANALYTICAL SERVICES
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

Katahdin ANALYTICAL SERVICES

NH ELAP Lab ID 2001 (DW, NPW, SCM)
NYSDOH ELAP Lab ID 11121 (AE - T015)

TABLE OF CONTENTS

Total number of pages: 135

SAMPLE DATA PACKAGE		0000001		
Narrative	----------	0000002	to	0000003
Supporting Documents	----------	0000004	to	0000010
Chain of Custody Record	----------	0000011	to	0000011
Login Report	----------	0000012	to	0000012
SAMPLE DATA SUMMARY				
Report of Analytical Results	----------	A0000001	to	A0000025
SIM SEMIVOLATILES DATA		1000001		
QC Summary	----------	1000002	to	1000008
Sample Data	----------	1000009	to	1000023
Standards Data	----------	1000024	to	1000066
Raw QC Data	----------	1000067	to	1000078
Logbooks and Supporting Documents	----------	1000079	to	1000084
CONVENTIONAL AND PHYSICAL ANALYTICAL DATA		5000001		
QC Summary	----------	5000002	to	5000005
Sample Data	----------	5000006	to	5000011
Raw Data	----------	5000012	to	5000014

SAMPLE DATA PACKAGE

Katahdin
ANALYTICAL SERVICES

NH ELAP Lab ID 2001 (DW, NPW, SCM)
NYSDOH ELAP Lab ID 11121 (AE - T015)

NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ALPHA ANALYTICAL
L1912447
SM3011

Sample Receipt

The following samples were received on March 29, 2019 and were logged in under Katahdin Analytical Services work order number SM3011 for a hardcopy due date of April 05, 2019.

KATAHDIN Sample No.	ALPHA ANALYTICAL Sample Identification
SM3011-1	RISS1
SM3011-2	RISS3
SM3011-3	FD01_190327
SM3011-4	RISS6

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAP standards unless otherwise noted in this narrative or in the Report of Analysis.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Heather Manz**. This narrative is an integral part of the Report of Analysis.

Reissue 04/10/2019

This report is being reissued to correct the field identification for Katahdin Sample Number SM3011-3.

Reissue 04/09/2019

This report is being reissued to correct the field identification for Katahdin Sample Number SM3011-3.

Organics Analysis

The samples of Work Order SM3011 were analyzed in accordance with Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis.

Sample SM3011-1 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as per client request.

8270D SIM Analysis

Katahdin
ANALYTICAL SERVICES

NH ELAP Lab ID 2001 (DW, NPW, SCM)
NYSDOH ELAP Lab ID 11121 (AE - TO15)

Sample SM3011-3 had a high recovery for one surrogate, which was outside of the laboratory established acceptance limits. Since this surrogate is not associated the target analyte 1,4-dioxane, no further action was taken.

Samples SM3011-2, 3, 4, the MS/MSD WG249738-5 and 6 had low responses for one or two internal standards that resulted in %D's which were outside the laboratory acceptance limit of -50% to +100% of the response of the internal standard of the daily calibration verification standard. Since no target analytes are associated with these internal standards, the samples were not reanalyzed.

There were no other protocol deviations or observations noted by the organics laboratory staff.

Wet Chemistry Analysis

The samples of Work Order SM3011 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846, Third Edition, Final Updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), and V (2015), Office of Solid Waste and Emergency Response, U.S. EPA.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Practical Quantitation Limit (PQL) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U PQL", where "PQL" is the numerical value of the Practical Quantitation Limit.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Quality Assurance Officer, or their designee, as verified by the following signature.

Edward G Mangan for 04-10-19

Leslie Dimond
Quality Assurance Officer

P.O. Box 540, Scarborough, ME 04070 Tel: (207) 874-2400 Fax: (207) 775-4029 600 Technology Way, Scarborough, ME 04074
www.katahdinlab.com

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: Alpha	KAS PM: ~~GN~~ HM	Sampled By: Client
Project:	KIMS Entry By: SO	Delivered By: Client
KAS Work Order#: SM3011	KIMS Review By: SV	Received By: SJC
SDG #:	Cooler: 1 of 1	Date/Time Rec.: 3/29/19 13:19

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 1.3
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				✓	
Soil/Sediment:					
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
Air: Refer to KAS COC for canister/flow controller requirements.	√ if air included				
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				✓	
Sulfide - >9				✓	
Cyanide – pH >12				✓	

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Sara Colby

From: Candace Fox [cfox@alphalab.com]
Sent: Monday, April 01, 2019 2:44 PM
To: Sara Colby
Cc: Greg Lull; Leslie Dimond; MFlanders@katahdinlab.com; Heather Manz
Subject: Re: 1,4-D soils SM3011

Hi Sara,

Would you mind changing this one to a 5 day TAT?

Thank you,
Candy

On Mon, Apr 1, 2019 at 2:32 PM Sara Colby <scolby@katahdinlab.com> wrote:

> Good Afternoon Candace,
>
> Attached is the login work order for an additional set of samples received on Friday afternoon. Please let me know if you have any corrections.
>
> Thank you,
>
> Sara

Project Manager

Katahdin Analytical Services

A Small Business Enterprise

DoD ELAP Accredited
600 Technology Way
Scarborough, Maine 04074
Office - 207.874.2400 x20
Fax - 207.775.4029

www.katahdinlab.com

Heather Manz

From: Jenn Klecha [jklecha@alphalab.com]
Sent: Monday, April 08, 2019 1:22 PM
To: Heather Manz
Cc: Subcontracted Data; Candace Fox; Caitlin Walukevich; Michael Chang; Disha Desai
Subject: Re: Report for L1912447 (SM3011)

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Reissue

Good Afternoon,

After further review of our client's COC the ID for SM3011-3 should be FD01_190327 not RD01_19032. Can we get a revision to reflect this change? My apologies for the trouble.

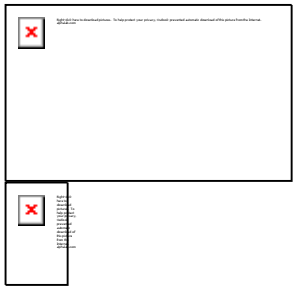
Jenn Klecha
Project Manager Assistant

Email: jklecha@alphalab.com

Direct: 201-812-9019
Main: 201-847-9100 ext. 219

www.alphalab.com

Give Us Feedback



On Fri, Apr 5, 2019 at 5:05 PM Data Management <datamanagement@katahdinlab.com> wrote:

> Good Afternoon,

Attached please find the EDD and PDF for Katahdin Work Order SM3011.

If you have any questions, please contact your project manager, Ms. Heather Manz (hmanz@katahdinlab.com).

Thank you,

Ed Morgan

Data Management

Katahdin Analytical Services

600 Technology Way

Scarborough, ME 04074

207-874-2400

Heather Manz

From: Jenn Klecha [jklecha@alphalab.com]
Sent: Tuesday, April 09, 2019 4:36 PM
To: Ed Morgan; Heather Manz
Cc: cfox@alphalab.com; subreports@alphalab.com
Subject: Re: Revised Report for L1912447 (SM3011)

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Reissue

Good Afternoon,

Thank you for the revision, however, the "7" at the end of the ID is still missing.

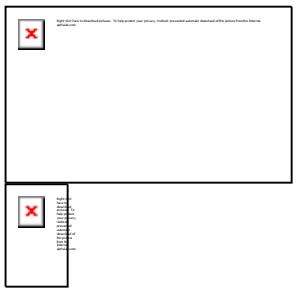
Jenn Klecha
Project Manager Assistant

Email: jklecha@alphalab.com

Direct: 201-812-9019
Main: 201-847-9100 ext. 219

www.alphalab.com

Give Us Feedback



On Tue, Apr 9, 2019 at 3:55 PM Ed Morgan <emorgan@katahdinlab.com> wrote:

> Good Afternoon,
>
> Please find attached the revised PDF and EDD for work order SM3011.

If you have any questions or comments concerning your report please contact your project manager, Heather Manz at hmanz@katahdinlab.com .

Thank you,

Ed Morgan

Data Management

Katahdin Analytical Services

600 Technology Way

Scarborough, ME 04074

emorgan@katahdinlab.com

207-874-2400

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Katahdin Analytical Services, Inc.
600 Technology Way
Scarborough, ME 04074

Alpha Job Number
L1912447

Client Information	Project Information	Regulatory Requirements/Report Limits
Client: Alpha Analytical Labs Address: Eight Walkup Drive Westborough, MA 01581-1019 Phone: 716-427-5223 Email: cfox@alphalab.com	Project Location: NY Project Manager: Candace Fox **Turnaround & Deliverables Information** Due Date: 04/04/19 Deliverables:	State/Federal Program: Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L1912447

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com RISS1 MS/MSD ASP Category B

SM3011

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	RISS1	03-27-19 14:10	SOIL	8270	MS;MSD
	RISS3	03-27-19 15:45	SOIL	8270	
	FD01_19032	03-27-19 00:00	SOIL	8270	
	RISS6	03-28-19 14:30	SOIL	8270	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
	AM	3/29/19 0745	D.Bamba	3.29.19 0745
	D.Bamba	3.29.19	TH AAL	3.29.19 1000
	TH AAL	3-29-19 1319		3/29/19 1319

Form No: AL_subcoc

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Apr. 10, 2019
09:46 AM

Quote/Incoming:

Login Number: SM3011

Account: ALPHA001 NoWeb
Alpha Analytical

Project: ALPHA-14D

Primary Report Address:
Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive

Westborough,MA 01581
ap@alphalab.com

Primary Invoice Address:
Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive

Westborough,MA 01581

Report CC Addresses:
Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	1,4-D only. 3550/8270D SIM. ND to PQL with J flags to MDL. Summary needs all forms. Need final report on verbal date.
CHECK NO.	:	
CLIENT PO#	:	
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	1.3
DELIVERY SERVICES	:	Client
EDD FORMAT	:	KAS136QC-CSV
LOGIN INITIALS	:	SO
PM	:	HHM
PROJECT NAME	:	L1912447
QC LEVEL	:	IV
REPORT INSTRUCTIONS	:	Summary needs all forms. email invoice to ap@alphalab.com, email pdf to subreports@alphalab.com and cfox@alphalab.com
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SM3011-1	RISS1	27-MAR-19 14:10	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	10-APR-19	100g Glass		**MS/MSD**
Solid	S	TS	10-APR-19			

SM3011-2	RISS3	27-MAR-19 15:45	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	10-APR-19	100g Glass		
Solid	S	TS	10-APR-19			

SM3011-3	FD01_190327	27-MAR-19 00:00	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	10-APR-19	100g Glass		
Solid	S	TS	10-APR-19			

SM3011-4	RISS6	28-MAR-19 14:30	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	11-APR-19	100g Glass		
Solid	S	TS	11-APR-19			

SM3011-5	RISS1MSCHARGE	27-MAR-19 14:10	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	10-APR-19	100g Glass		**MS charge, not a sample**
Solid	S	TS	10-APR-19			

SM3011-6	RISS1MSDCHARGE	27-MAR-19 14:10	29-MAR-19		**05-APR-19**	05-APR-19	05-APR-19

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW8270SIM-S	10-APR-19	100g Glass		**MSD charge, not a sample**
Solid	S	TS	10-APR-19			

Total Samples: ***6*** ***Total Analyses:*** ***12***

SAMPLE DATA SUMMARY PACKAGE

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-1
Client ID: RISS1
Project: L1912447
SDG: SM3011
Lab File ID: N2940.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 78.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	130	ug/Kgdrywt	1	100	130	1.4
2-Methylnaphthalene-D10		66.5	%				
Fluorene-D10		67.5	%				
Pyrene-D10		70.5	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-2
Client ID: RISS3
Project: L1912447
SDG: SM3011
Lab File ID: N2941.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 89.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.2
2-Methylnaphthalene-D10		66.5	%				
Fluorene-D10		66.0	%				
Pyrene-D10		115.	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-3
Client ID: FD01_190327
Project: L1912447
SDG: SM3011
Lab File ID: N2942.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 86.
Report Date: 10-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.3
2-Methylnaphthalene-D10		68.5	%				
Fluorene-D10		70.5	%				
Pyrene-D10	*	153.	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-4
Client ID: RISS6
Project: L1912447
SDG: SM3011
Lab File ID: N2943.D

Sample Date: 28-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 90.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.2
2-Methylnaphthalene-D10		64.0	%				
Fluorene-D10		71.0	%				
Pyrene-D10		90.5	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client:
Lab ID: WG249738-1
Client ID: Method Blank Sample
Project:
SDG: SM3011
Lab File ID: N2928.D

Sample Date:
Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: NA
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	100	ug/Kgdrywt	1	100	100	1.1
2-Methylnaphthalene-D10		74.7	%				
Fluorene-D10		72.2	%				
Pyrene-D10		84.3	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** L1912447 **Matrix:** SL
Lab Code: KAS **SDG:** SM3011

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
RISS1	SM3011-1		66.5		67.5		70.5	
RISS3	SM3011-2		66.5		66.0		115.	
FD01_190327	SM3011-3		68.5		70.5		153.	*
RISS6	SM3011-4		64.0		71.0		90.5	
Method Blank Sample	WG249738-1		74.7		72.2		84.3	
Laboratory Control S	WG249738-2		74.7		71.4		83.5	
Matrix Spike	WG249738-5		60.9		56.8		72.6	
Matrix Spike Duplica	WG249738-6		66.2		62.2		74.0	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Client:
Lab ID: WG249738-2
Client ID: LCS
Project:
SDG: SM3011
LCS File ID: N2929.D

Sample Date:
Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: NA
Report Date: 04-APR-19

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,4-Dioxane	33.9	66.7	22.6	ug/Kgdrywt	30-150
2-Methylnaphthalene-D10	74.7				19-94
Fluorene-D10	71.4				20-96
Pyrene-D10	83.5				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG249738-5
MSD ID: WG249738-6
Sample ID: SM3011-1
Client ID: RISS1
Project:
SDG: SM3011
MS File ID: N2944.D

Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738
Report Date: 04-APR-19
MSD File ID: N2945.D

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 78.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
1,4-Dioxane	83.7	83.2	ug/Kgdrywt	U130	26.	28.	31.5	34.0	7	50	30-150
2-Methylnaphthalene-D10							60.9	66.2			19-94
Fluorene-D10							56.8	62.2			20-96
Pyrene-D10							72.6	74.0			31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : N2928.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SM3011
Lab Sample ID : WG249738-1
Date Extracted : 02-APR-19
Date Analyzed : 03-APR-19
Time Analyzed : 14:43

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG249738-2	N2929.D	04/03/19	15:14
RISS1	SM3011-1	N2940.D	04/03/19	21:25
RISS3	SM3011-2	N2941.D	04/03/19	22:00
FD01_190327	SM3011-3	N2942.D	04/03/19	22:36
RISS6	SM3011-4	N2943.D	04/03/19	23:11
Matrix Spike	WG249738-5	N2944.D	04/03/19	23:47
Matrix Spike Duplica	WG249738-6	N2945.D	04/04/19	00:23

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : ND721.D
Instrument ID : GCMS-N

SDG : SM3011
Date Analyzed : 01-APR-19
Time Analyzed : 13:27

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.6		
68	Less than 2.0% of mass 69	0.3	0.77	1
69	Less than 100.0% of mass 198	45.1		
70	Less than 2.0% of mass 69	0.4	0.81	1
127	40.0 - 60.0% of mass 198	56.9		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	22.7		
365	1.0 - 100.0% of mass 198	3.0		
441	0.0 - 100.0% of mass 443	8.8	73.60	2
442	40.0 - 100.0% of mass 198	62.5		
443	17.0 - 23.0% of mass 442	12.0	19.20	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG249502-4	N2875.D	04/01/19	13:45
Initial Calibration	WG249502-2	N2876.D	04/01/19	14:18
Initial Calibration	WG249502-3	N2877.D	04/01/19	14:49
Initial Calibration	WG249502-5	N2878.D	04/01/19	15:21
Initial Calibration	WG249502-6	N2879.D	04/01/19	15:52
Initial Calibration	WG249502-7	N2880.D	04/01/19	16:24
Independent Source	WG249502-8	N2881.D	04/01/19	16:56

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : ND723.D
Instrument ID : GCMS-N

SDG : SM3011
Date Analyzed : 03-APR-19
Time Analyzed : 13:53

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.7		
68	Less than 2.0% of mass 69	0.9	1.90	1
69	Less than 100.0% of mass 198	45.8		
70	Less than 2.0% of mass 69	0.2	0.43	1
127	40.0 - 60.0% of mass 198	57.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	22.2		
365	1.0 - 100.0% of mass 198	2.9		
441	0.0 - 100.0% of mass 443	8.2	70.63	2
442	40.0 - 100.0% of mass 198	61.7		
443	17.0 - 23.0% of mass 442	11.6	18.87	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG249824-2	N2927.D	04/03/19	14:11
Method Blank Sample	WG249738-1	N2928.D	04/03/19	14:43
Laboratory Control S	WG249738-2	N2929.D	04/03/19	15:14
RISS1	SM3011-1	N2940.D	04/03/19	21:25
RISS3	SM3011-2	N2941.D	04/03/19	22:00
FD01_190327	SM3011-3	N2942.D	04/03/19	22:36
RISS6	SM3011-4	N2943.D	04/03/19	23:11
Matrix Spike	WG249738-5	N2944.D	04/03/19	23:47
Matrix Spike Duplica	WG249738-6	N2945.D	04/04/19	00:23
Continuing Calibrati	WG249824-3	N2946.D	04/04/19	00:59

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services
SDG: SM3011
Project : L1912447
Instrument ID: GCMS-N
Lab File IDs : N2876.D N2877.D N2875.D N2878.D N2879.D N2880.D
Column ID:
Calibration Date(s): 01-APR-19 13:45, 01-APR-19 16:24

	Level 1 0.200000(	Level 2 0.500000(	Level 3 2.0000	Level 4 7.0000	Level 5 10.0000	Level 6 15.0000	Crv New	b	m1	m2	%RSD	Max %RSD	
1,4-Dioxane	0.42385	0.48628	0.43402	0.51541	0.45510	0.41808	AVG		0.45546		8.44641	15.00000	O
2-Methylnaphthalene-D10	0.43967	0.49028	0.48320	0.55851	0.46412	0.44008	AVG		0.47931		9.21299	15.00000	
Fluorene-D10	0.89574	1.00018	0.92173	1.04484	0.86557	0.86280	AVG		0.93181		8.03154	15.00000	
Pyrene-D10	1.41917	1.46718	1.27357	1.65770	1.27523	1.34778	AVG		1.40677		10.31567	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : L1912447 **SDG:** SM3011
Lab ID : WG249824-2 **Analytical Date:** 04/03/19 14:11
Lab File ID : N2927.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 04/01/19 13:45 04/01/19 16:24 **Column ID:**

Compound	RRF/Amount	RF2	CCAL RRF2	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
2 1,4-Dioxane	0.45546	0.44064	0.44064	0.010	-3.25343	20.00000	Averaged
32 2-Methylnaphthalene-D10	0.47931	0.49339	0.49339	0.010	2.93734	20.00000	Averaged
55 Fluorene-D10	0.93181	0.95768	0.95768	0.010	2.77618	20.00000	Averaged
71 Pyrene-D10	1.40677	1.44011	1.44011	0.010	2.37015	20.00000	Averaged

*** = Compound out of QC criteria**

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab ID : WG249824-2
Lab File ID : N2927.D

SDG: SM3011
Analytical Date: 04/03/19 14:11
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	27835		6.89		97477		8.54		44808		10.87	
	Upper Limit	55670		7.06		194954		8.71		89616		11.04	
	Lower Limit	13917.5		6.72		48738.5		8.37		22404		10.70	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG249738-1	25510		6.89		78828		8.59		37162		10.88	
Laboratory Control S	WG249738-2	29540		6.89		90426		8.55		43369		10.87	
RISS1	SM3011-1	23525		6.89		72924		8.54		35222		10.87	
RISS3	SM3011-2	38284		6.88		121484		8.54		49394		10.87	
FD01_190327	SM3011-3	41160		6.89		124289		8.53		50861		10.87	
RISS6	SM3011-4	29217		6.89		94973		8.54		38749		10.87	
Matrix Spike	WG249738-5	29687		6.89		89716		8.54		37223		10.87	
Matrix Spike Duplica	WG249738-6	24953		6.89		74295		8.54		31104		10.87	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab ID : WG249824-2
Lab File ID : N2927.D

SDG: SM3011
Analytical Date: 04/03/19 14:11
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	66713		12.86		26594		16.49		16129		19.30	
	Upper Limit	133426		13.03		53188		16.65		32258		19.47	
	Lower Limit	33356.5		12.69		13297		16.32		8064.5		19.13	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG249738-1	56798		12.87		19522		16.52		12614		19.30	
Laboratory Control S	WG249738-2	73918		12.85		23933		16.50		13310		19.29	
RISS1	SM3011-1	49650		12.85		20588		16.49		9418		19.27	
RISS3	SM3011-2	60444		12.85		8915	*	16.49		4405	*	19.27	
FD01_190327	SM3011-3	60759		12.85		5811	*	16.49		2516	*	19.28	
RISS6	SM3011-4	55638		12.85		14624		16.49		6536	*	19.28	
Matrix Spike	WG249738-5	50420		12.85		13217	*	16.49		6953	*	19.29	
Matrix Spike Duplica	WG249738-6	41241		12.85		13154	*	16.49		6220	*	19.29	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-1
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS1	SL	27-MAR-19 14:10:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	78. %	1		SW3540C	WG249741	03-APR-19 09:23:40	SW3540C	02-APR-19	BP		

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-2
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS3	SL	27-MAR-19 15:45:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	89. %	1		SW3540C	WG249741	03-APR-19 09:23:55	SW3540C	02-APR-19	BP		

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-3
Report Date: 10-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
FD01_190327	SL	27-MAR-19 00:00:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	86. %	1		SW3540C	WG249741	03-APR-19 09:24:15	SW3540C	02-APR-19	BP		

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-4
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS6	SL	28-MAR-19 14:30:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	90. %	1		SW3540C	WG249741	03-APR-19 09:24:29	SW3540C	02-APR-19	BP		

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG249741	SW3540C	03-APR-19	02-APR-19	100 %	1 %

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG249741-2	LCS	WG249741	03-APR-19	02-APR-19	%	90	89.	99	90-110	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG249741-3	SM3011-1	WG249741	03-APR-19	%	78.	79.	0	20

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

SIM SEMIVOLATILES DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Form 2
System Monitoring Compound Recovery

Lab Name: Katahdin Analytical Services **Project:** L1912447 **Matrix:** SL
Lab Code: KAS **SDG:** SM3011

Client Sample ID	Lab Sample ID	Col. ID	2MN	#	FLO	#	PYR	#
RISS1	SM3011-1		66.5		67.5		70.5	
RISS3	SM3011-2		66.5		66.0		115.	
FD01_190327	SM3011-3		68.5		70.5		153.	*
RISS6	SM3011-4		64.0		71.0		90.5	
Method Blank Sample	WG249738-1		74.7		72.2		84.3	
Laboratory Control S	WG249738-2		74.7		71.4		83.5	
Matrix Spike	WG249738-5		60.9		56.8		72.6	
Matrix Spike Duplica	WG249738-6		66.2		62.2		74.0	

		QC Limits
PYR	PYRENE-D10	31-128
FLO	FLUORENE-D10	20-96
2MN	2-METHYLNAPHTHALENE-D10	19-94

= Column to be used to flag recovery limits.
* = Values outside of contract required QC limits.
D= System Monitoring Compound diluted out.

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Method Blank Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : N2928.D
Instrument ID : GCMS-N
Matrix : SL

SDG : SM3011
Lab Sample ID : WG249738-1
Date Extracted : 02-APR-19
Date Analyzed : 03-APR-19
Time Analyzed : 14:43

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG249738-2	N2929.D	04/03/19	15:14
RISS1	SM3011-1	N2940.D	04/03/19	21:25
RISS3	SM3011-2	N2941.D	04/03/19	22:00
FD01_190327	SM3011-3	N2942.D	04/03/19	22:36
RISS6	SM3011-4	N2943.D	04/03/19	23:11
Matrix Spike	WG249738-5	N2944.D	04/03/19	23:47
Matrix Spike Duplica	WG249738-6	N2945.D	04/04/19	00:23

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : ND721.D
Instrument ID : GCMS-N

SDG : SM3011
Date Analyzed : 01-APR-19
Time Analyzed : 13:27

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.6		
68	Less than 2.0% of mass 69	0.3	0.77	1
69	Less than 100.0% of mass 198	45.1		
70	Less than 2.0% of mass 69	0.4	0.81	1
127	40.0 - 60.0% of mass 198	56.9		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	22.7		
365	1.0 - 100.0% of mass 198	3.0		
441	0.0 - 100.0% of mass 443	8.8	73.60	2
442	40.0 - 100.0% of mass 198	62.5		
443	17.0 - 23.0% of mass 442	12.0	19.20	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Initial Calibration	WG249502-4	N2875.D	04/01/19	13:45
Initial Calibration	WG249502-2	N2876.D	04/01/19	14:18
Initial Calibration	WG249502-3	N2877.D	04/01/19	14:49
Initial Calibration	WG249502-5	N2878.D	04/01/19	15:21
Initial Calibration	WG249502-6	N2879.D	04/01/19	15:52
Initial Calibration	WG249502-7	N2880.D	04/01/19	16:24
Independent Source	WG249502-8	N2881.D	04/01/19	16:56

Form 5
Semivolatile Organic Instrument Performance Check

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab File ID : ND723.D
Instrument ID : GCMS-N

SDG : SM3011
Date Analyzed : 03-APR-19
Time Analyzed : 13:53

m/e	Ion Abundance Criteria	% Relative Abundance		
51	30.0 - 60.0% of mass 198	35.7		
68	Less than 2.0% of mass 69	0.9	1.90	1
69	Less than 100.0% of mass 198	45.8		
70	Less than 2.0% of mass 69	0.2	0.43	1
127	40.0 - 60.0% of mass 198	57.6		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100		
199	5.0 - 9.0% of mass 198	6.7		
275	10.0 - 30.0% of mass 198	22.2		
365	1.0 - 100.0% of mass 198	2.9		
441	0.0 - 100.0% of mass 443	8.2	70.63	2
442	40.0 - 100.0% of mass 198	61.7		
443	17.0 - 23.0% of mass 442	11.6	18.87	3

1-Value is % mass 69
2-Value is % mass 443
3-Value is % mass 442

This check applies to the following samples, LCS, MS, MSD and standards:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Continuing Calibrati	WG249824-2	N2927.D	04/03/19	14:11
Method Blank Sample	WG249738-1	N2928.D	04/03/19	14:43
Laboratory Control S	WG249738-2	N2929.D	04/03/19	15:14
RISS1	SM3011-1	N2940.D	04/03/19	21:25
RISS3	SM3011-2	N2941.D	04/03/19	22:00
FD01_190327	SM3011-3	N2942.D	04/03/19	22:36
RISS6	SM3011-4	N2943.D	04/03/19	23:11
Matrix Spike	WG249738-5	N2944.D	04/03/19	23:47
Matrix Spike Duplica	WG249738-6	N2945.D	04/04/19	00:23
Continuing Calibrati	WG249824-3	N2946.D	04/04/19	00:59

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab ID : WG249824-2
Lab File ID : N2927.D

SDG: SM3011
Analytical Date: 04/03/19 14:11
Instrument ID: GCMS-N

		1,4-DICHLOROBENZENE-D4			NAPHTHALENE-D8			ACENAPHTHENE-D10		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	27835		6.89		97477		8.54		44808		10.87	
	Upper Limit	55670		7.06		194954		8.71		89616		11.04	
	Lower Limit	13917.5		6.72		48738.5		8.37		22404		10.70	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG249738-1	25510		6.89		78828		8.59		37162		10.88	
Laboratory Control S	WG249738-2	29540		6.89		90426		8.55		43369		10.87	
RISS1	SM3011-1	23525		6.89		72924		8.54		35222		10.87	
RISS3	SM3011-2	38284		6.88		121484		8.54		49394		10.87	
FD01_190327	SM3011-3	41160		6.89		124289		8.53		50861		10.87	
RISS6	SM3011-4	29217		6.89		94973		8.54		38749		10.87	
Matrix Spike	WG249738-5	29687		6.89		89716		8.54		37223		10.87	
Matrix Spike Duplica	WG249738-6	24953		6.89		74295		8.54		31104		10.87	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Form 8
Internal Standard Area and RT Summary

Lab Name : Katahdin Analytical Services
Project : L1912447
Lab ID : WG249824-2
Lab File ID : N2927.D

SDG: SM3011
Analytical Date: 04/03/19 14:11
Instrument ID: GCMS-N

		PHENANTHRENE-D10			CHRYSENE-D12			PERYLENE-D12		
		Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
	Std .	66713		12.86		26594		16.49		16129		19.30	
	Upper Limit	133426		13.03		53188		16.65		32258		19.47	
	Lower Limit	33356.5		12.69		13297		16.32		8064.5		19.13	
Client Sample ID	Lab Sample ID												
Method Blank Sample	WG249738-1	56798		12.87		19522		16.52		12614		19.30	
Laboratory Control S	WG249738-2	73918		12.85		23933		16.50		13310		19.29	
RISS1	SM3011-1	49650		12.85		20588		16.49		9418		19.27	
RISS3	SM3011-2	60444		12.85		8915	*	16.49		4405	*	19.27	
FD01_190327	SM3011-3	60759		12.85		5811	*	16.49		2516	*	19.28	
RISS6	SM3011-4	55638		12.85		14624		16.49		6536	*	19.28	
Matrix Spike	WG249738-5	50420		12.85		13217	*	16.49		6953	*	19.29	
Matrix Spike Duplica	WG249738-6	41241		12.85		13154	*	16.49		6220	*	19.29	

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area
RT Upper Limit = + 10 seconds of internal standard RT
RT Lower Limit = - 10 seconds of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

Sample Data Section

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

* Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.

D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.

B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.

C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).

L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.

M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.

N Presumptive evidence of a compound based on a mass spectral library search.

A Indicates that a tentatively identified compound is a suspected aldol-condensation product.

P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Katahdin Analytical Services, Inc.

Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-1
Client ID: RISS1
Project: L1912447
SDG: SM3011
Lab File ID: N2940.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 78.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	130	ug/Kgdrywt	1	100	130	1.4
2-Methylnaphthalene-D10		66.5	%				
Fluorene-D10		67.5	%				
Pyrene-D10		70.5	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2940.D
Report Date: 04-Apr-2019 09:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2940.D
Lab Smp Id: SM3011-1 Client Smp ID: RISS1
Inj Date : 03-APR-2019 21:25
Operator : JCG Inst ID: gcms-n.i
Smp Info : SM3011-1
Misc Info : WG249824,WG249738,WG249824-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

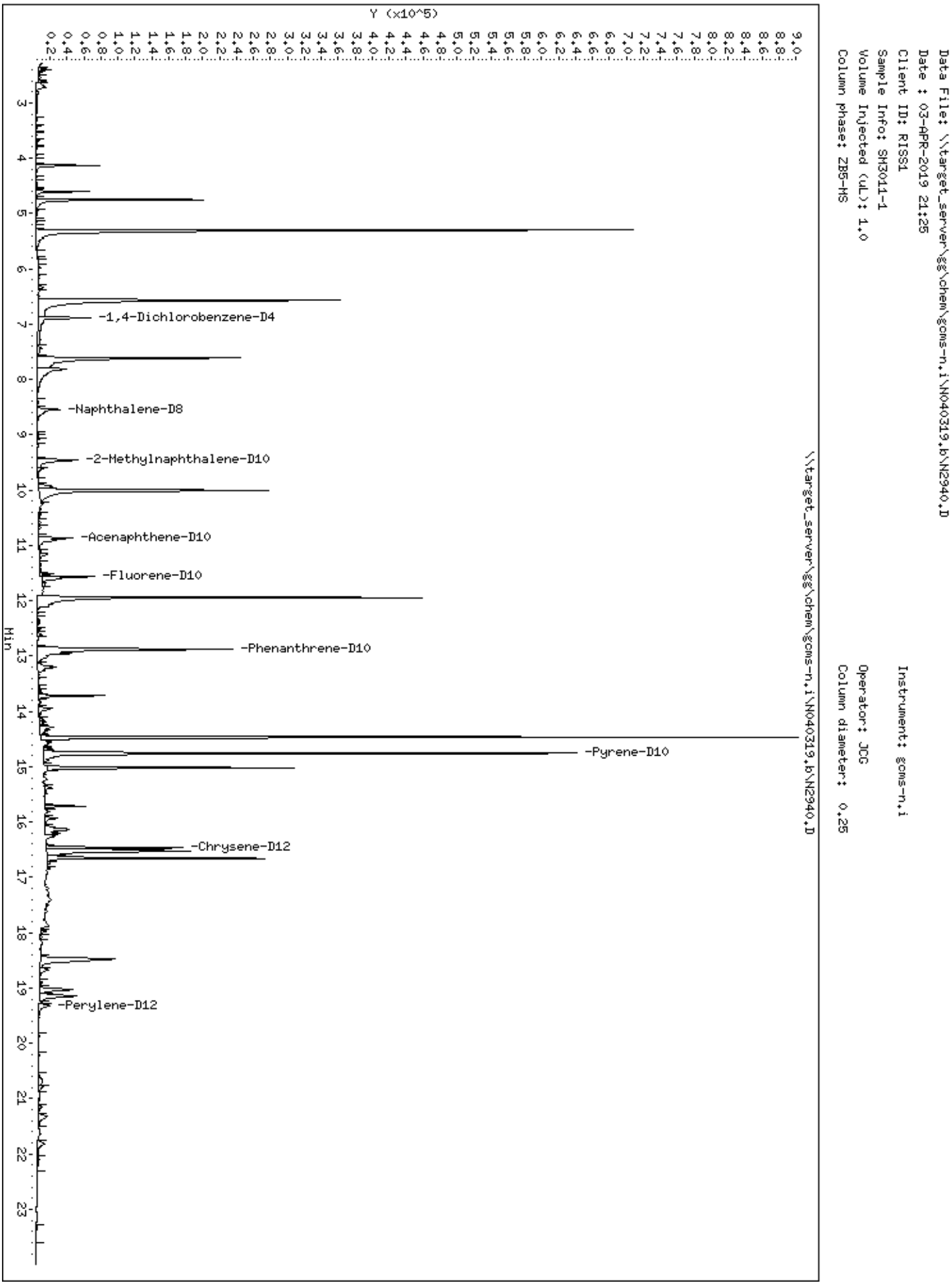
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03040	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	21.696	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	23525	0.80000	(Q)	
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	72924	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.107)	58268	1.33363	56.0	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	35222	0.80000		
$	55 Fluorene-D10	174	11.568	11.600	(1.064)	55347	1.34910	56.7	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	49650	0.80000		
$	71 Pyrene-D10	212	14.733	14.778	(0.894)	50983	1.40824	59.2	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	20588	0.80000		
*	83 Perylene-D12	264	19.267	19.346	(1.000)	9418	0.80000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2940.D
Date : 03-APR-2019 21:25
Client ID: RISS1
Sample Info: SM3011-1
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2940.D
Y (x10^5)
Min
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-2
Client ID: RISS3
Project: L1912447
SDG: SM3011
Lab File ID: N2941.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 89.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.2
2-Methylnaphthalene-D10		66.5	%				
Fluorene-D10		66.0	%				
Pyrene-D10		115.	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2941.D
Report Date: 04-Apr-2019 09:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2941.D
Lab Smp Id: SM3011-2 Client Smp ID: RISS3
Inj Date : 03-APR-2019 22:00
Operator : JCG Inst ID: gcms-n.i
Smp Info : SM3011-2
Misc Info : WG249824,WG249738,WG249824-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

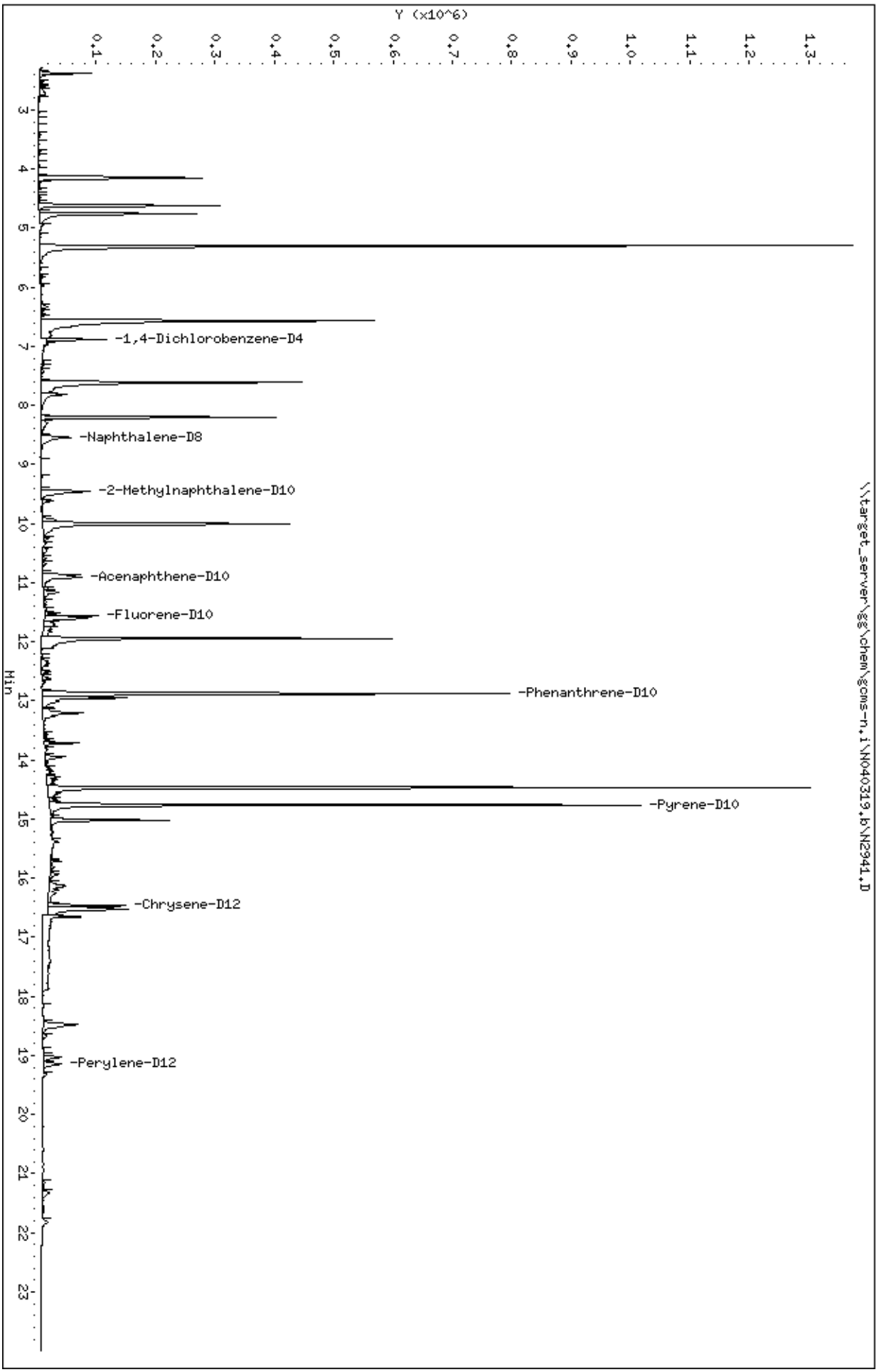
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03120	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	10.901	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
*	10 1,4-Dichlorobenzene-D4	152	6.879	6.920	(1.000)	38284	0.80000	(Q)	
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	121484	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.107)	96675	1.32822	47.8	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	49394	0.80000		
$	55 Fluorene-D10	174	11.568	11.600	(1.064)	76050	1.32187	47.6	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	60444	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	36004	2.29666	82.6	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	8915	0.80000		
*	83 Perylene-D12	264	19.267	19.346	(1.000)	4405	0.80000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2941.D
Date : 03-APR-2019 22:00
Client ID: RISS3
Sample Info: SM3011-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2941.D
Y (x10^6)
Min
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-3
Client ID: FD01_190327
Project: L1912447
SDG: SM3011
Lab File ID: N2942.D

Sample Date: 27-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 86.
Report Date: 10-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.3
2-Methylnaphthalene-D10		68.5	%				
Fluorene-D10		70.5	%				
Pyrene-D10	*	153.	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2942.D
Report Date: 04-Apr-2019 09:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2942.D
Lab Smp Id: SM3011-3 Client Smp ID: RD01_19032
Inj Date : 03-APR-2019 22:36
Operator : JCG Inst ID: gcms-n.i
Smp Info : SM3011-3
Misc Info : WG249824,WG249738,WG249824-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

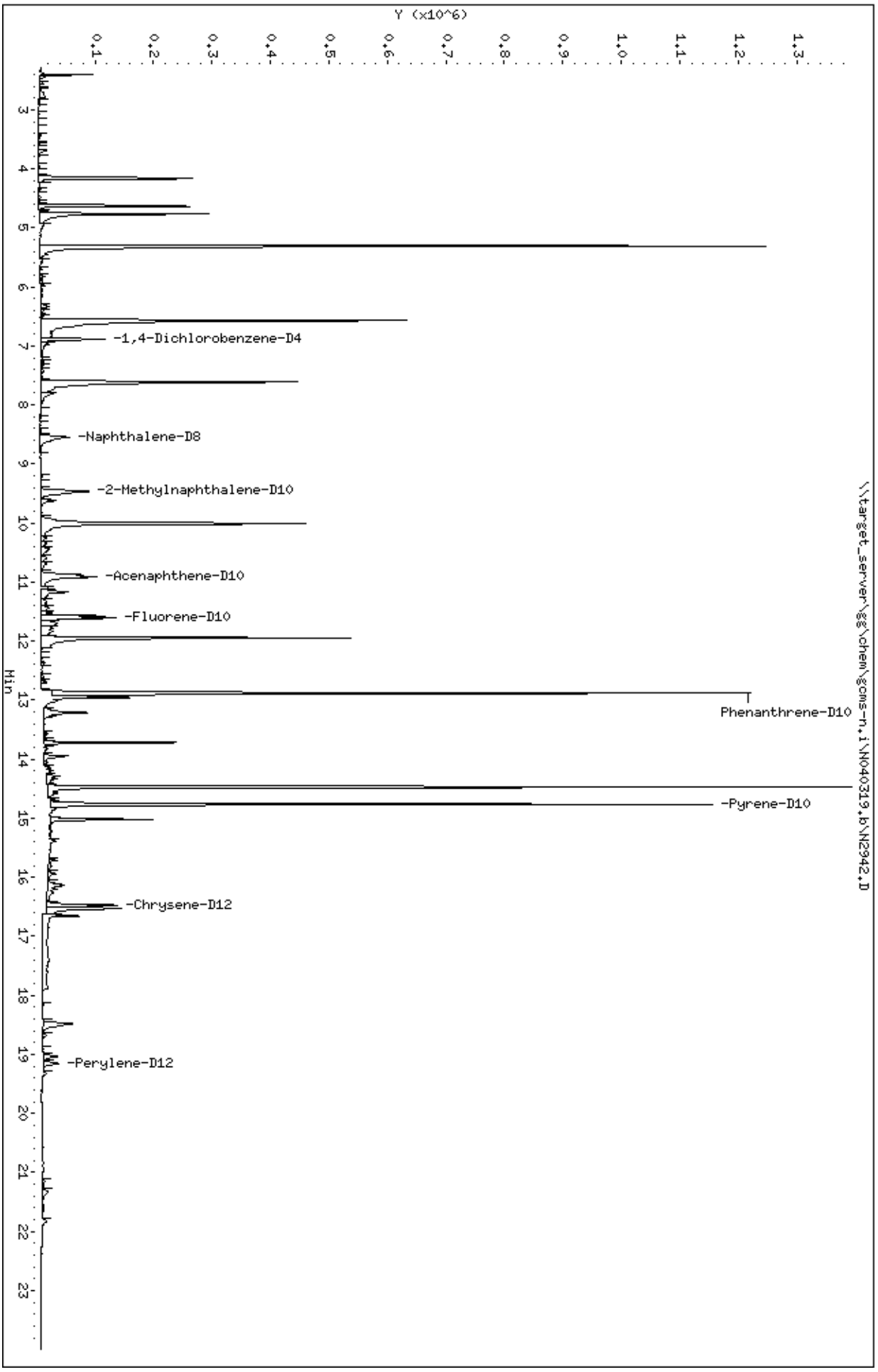
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03060	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	14.447	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	41160	0.80000	(Q)	
*	26 Naphthalene-D8	136	8.530	8.570	(1.000)	124289	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.109)	101852	1.36776	52.2	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	50861	0.80000		
$	55 Fluorene-D10	174	11.579	11.600	(1.065)	83345	1.40688	53.7	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	60759	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(1.000)	31293	3.06241	117(R)	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	5811	0.80000	(QM)	M6
*	83 Perylene-D12	264	19.279	19.346	(1.000)	2516	0.80000	(M)	M6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2942,D
Date : 03-APR-2019 22:36
Client ID: RD01_19032
Sample Info: SH3011-3
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2942,D
Y (x10^6)
Min
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Alpha Analytical
Lab ID: SM3011-4
Client ID: RISS6
Project: L1912447
SDG: SM3011
Lab File ID: N2943.D

Sample Date: 28-MAR-19
Received Date: 29-MAR-19
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 90.
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	110	ug/Kgdrywt	1	100	110	1.2
2-Methylnaphthalene-D10		64.0	%				
Fluorene-D10		71.0	%				
Pyrene-D10		90.5	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2943.D
Report Date: 04-Apr-2019 09:45

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2943.D
Lab Smp Id: SM3011-4 Client Smp ID: RISS6
Inj Date : 03-APR-2019 23:11
Operator : JCG Inst ID: gcms-n.i
Smp Info : SM3011-4
Misc Info : WG249824,WG249738,WG249824-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

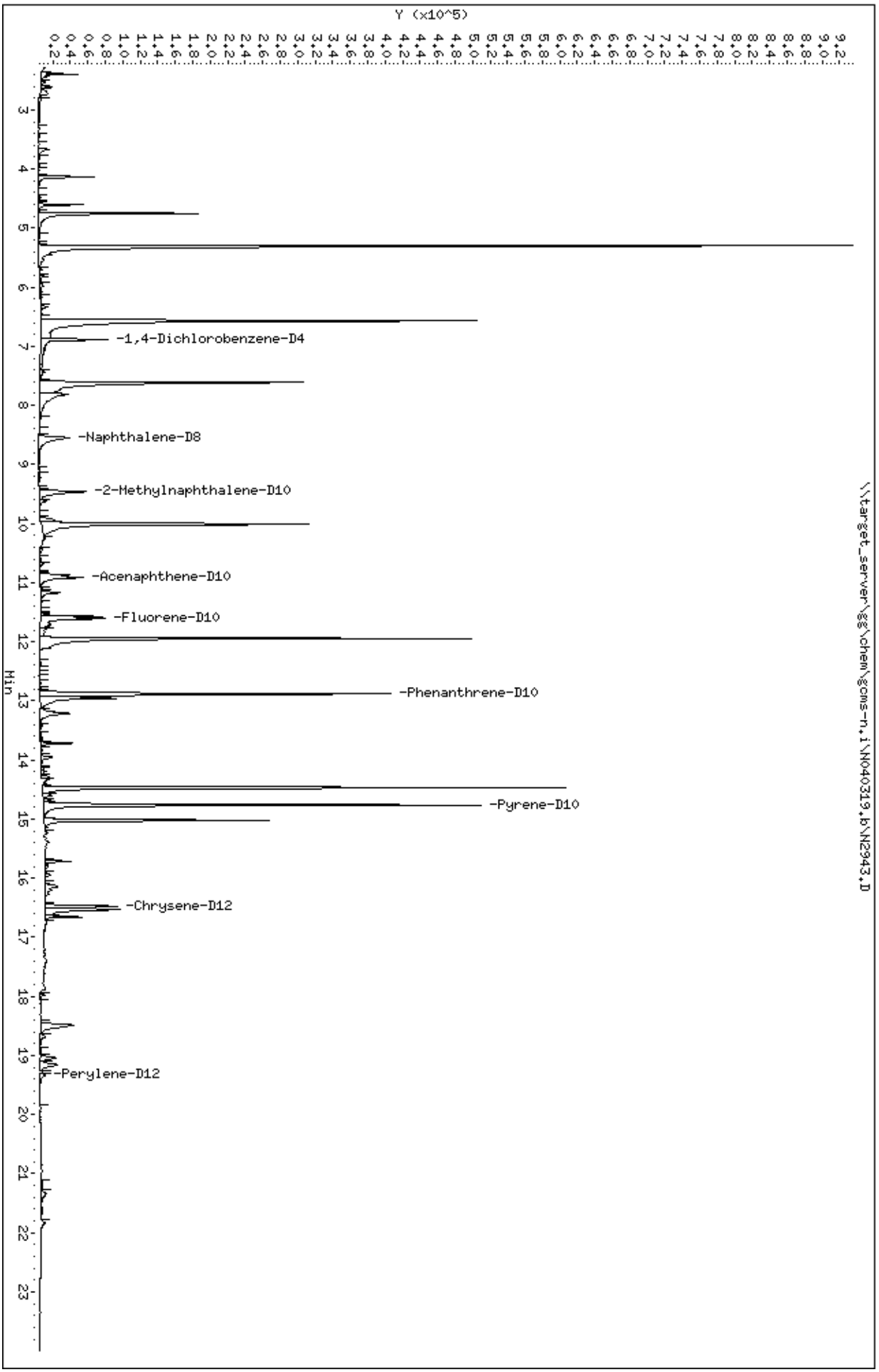
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03090	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	10.036	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	29217	0.80000	(Q)	
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	94973	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.107)	73150	1.28555	46.2	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	38749	0.80000		
$	55 Fluorene-D10	174	11.578	11.600	(1.065)	64055	1.41924	51.0	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	55638	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	46509	1.80858	65.0	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	14624	0.80000		
*	83 Perylene-D12	264	19.279	19.346	(1.000)	6536	0.80000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2943.D
Date : 03-APR-2019 23:11
Client ID: RISS6
Sample Info: SM3011-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2943.D
Y (x10^5)
Min
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Standards Data Section

Form 6
Initial Calibration Summary

Lab Name : Katahdin Analytical Services
SDG: SM3011
Project : L1912447
Instrument ID: GCMS-N
Lab File IDs : N2876.D N2877.D N2875.D N2878.D N2879.D N2880.D
Column ID:
Calibration Date(s): 01-APR-19 13:45, 01-APR-19 16:24

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Crv					Max	
	0.200000(	0.500000(	2.0000	7.0000	10.0000	15.0000	New	b	m1	m2	%RSD	%RSD	
1,4-Dioxane	0.42385	0.48628	0.43402	0.51541	0.45510	0.41808	AVG		0.45546		8.44641	15.00000	O
2-Methylnaphthalene-D10	0.43967	0.49028	0.48320	0.55851	0.46412	0.44008	AVG		0.47931		9.21299	15.00000	
Fluorene-D10	0.89574	1.00018	0.92173	1.04484	0.86557	0.86280	AVG		0.93181		8.03154	15.00000	
Pyrene-D10	1.41917	1.46718	1.27357	1.65770	1.27523	1.34778	AVG		1.40677		10.31567	15.00000	

Legend: O = Kept Original Curve
Y = Failed Minimum RF
W = Failed %RSD Value

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Report Date: 05-Apr-2019 10:59

Katahdin Analytical Services

RECOVERY REPORT

Client Name: Client SDG: 021497
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: WG249502-8
Level: LOW Operator: JCG
Data Type: MS DATA SampleType: INDCHECK
SpikeList File: SIM_IND_CHK5.spk Quant Type: ISTD
Sublist File: all.sub
Method File: \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Misc Info: WG249502,WG249502,WG249502-4

SPIKE	COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
2	1,4-Dioxane	5.00	5.49	109.75	80-120
3	N-Nitrosodimethyla	5.00	5.63	112.59	80-120
4	Pyridine	5.00	4.66	93.25	80-120
5	Benzaldehyde	5.00	5.10	102.05	80-120
7	Bis(2-Chloroethyl)	5.00	4.76	95.26	80-120
6	Phenol	5.00	4.89	97.87	80-120
8	2-Chlorophenol	5.00	4.95	98.97	80-120
9	1,3-Dichlorobenzen	5.00	4.41	88.17	80-120
11	1,4-Dichlorobenzen	5.00	5.21	104.14	80-120
12	1,2-Dichlorobenzen	5.00	5.00	100.03	80-120
14	2,2'-Oxybis(1-chlo	5.00	3.01	60.18*	80-120
13	2-Methylphenol	5.00	5.28	105.63	80-120
15	Acetophenone	5.00	4.25	85.02	80-120
16	N-Nitroso-di-n-pro	5.00	3.98	79.54*	80-120
18	Hexachloroethane	5.00	4.43	88.61	80-120
17	3&4-Methylphenol	5.00	4.40	87.95	80-120
19	Nitrobenzene	5.00	5.21	104.21	80-120
20	Isophorone	5.00	4.14	82.72	80-120
21	2-Nitrophenol	5.00	5.31	106.25	80-120
22	2,4-Dimethylphenol	5.00	5.10	102.06	80-120
23	bis(2-Chloroethoxy	5.00	4.60	92.03	80-120
24	2,4-Dichlorophenol	5.00	5.63	112.62	80-120
25	1,2,4-Trichloroben	5.00	5.50	109.96	80-120
27	Naphthalene	5.00	5.19	103.83	80-120
28	4-Chloroaniline	5.00	4.78	95.54	80-120
29	Hexachlorobutadien	5.00	5.21	104.29	80-120
30	Caprolactam	5.00	4.60	92.04	80-120
33	2-Methylnaphthalen	5.00	5.40	107.92	80-120
31	4-Chloro-3-Methylp	5.00	4.87	97.43	80-120
34	1-Methylnaphthalen	5.00	4.93	98.53	80-120
35	1,2,4,5-Tetrachlor	5.00	5.54	110.92	80-120
36	Hexachlorocyclopen	5.00	3.46	69.19*	80-120
38	2,4,6-Trichlorophe	5.00	4.99	99.77	80-120
39	2,4,5-Trichlorophe	5.00	4.74	94.86	80-120
41	2-Chloronaphthalen	5.00	5.09	101.79	80-120
40	1,1'-Biphenyl	5.00	5.41	108.16	80-120
42	2-Nitroaniline	5.00	5.32	106.35	80-120
43	Dimethyl Phthalate	5.00	4.90	97.91	80-120
45	Acenaphthylene	5.00	4.57	91.48	80-120
44	2,6-Dinitrotoluene	5.00	4.73	94.59	80-120

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Report Date: 05-Apr-2019 10:59

SPIKE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
48 Acenaphthene	5.00	5.18	103.52	80-120
46 3-Nitroaniline	5.00	5.66	113.23	80-120
49 2,4-Dinitrophenol	5.00	4.34	86.89	80-120
52 Dibenzofuran	5.00	5.21	104.23	80-120
51 2,4-Dinitrotoluene	5.00	4.12	82.38	80-120
53 2,3,4,6-Tetrachlor	5.00	4.04	80.72	80-120
50 4-Nitrophenol	5.00	1.95	39.08*	80-120
54 Diethylphthalate	5.00	4.42	88.38	80-120
56 Fluorene	5.00	4.93	98.56	80-120
57 4-Chlorophenyl-phe	5.00	5.06	101.15	80-120
59 4,6-Dinitro-2-Meth	5.00	4.74	94.91	80-120
58 4-Nitroaniline	5.00	6.13	122.67*	80-120
60 N-Nitrosodiphenyla	5.00	4.30	85.93	80-120
61 4-Bromophenyl-phen	5.00	5.18	103.60	80-120
62 Hexachlorobenzene	5.00	4.55	91.09	80-120
63 Atrazine	5.00	3.42	68.51*	80-120
64 Pentachlorophenol	5.00	4.64	92.78	80-120
66 Phenanthrene	5.00	5.00	100.11	80-120
67 Anthracene	5.00	4.65	93.08	80-120
68 Carbazole	5.00	5.06	101.12	80-120
69 Di-n-butylphthalat	5.00	4.74	94.71	80-120
70 Fluoranthene	5.00	4.93	98.57	80-120
72 Pyrene	5.00	4.72	94.39	80-120
73 Butylbenzylphthala	5.00	4.68	93.64	80-120
75 Benzo(a)anthracene	5.00	5.24	104.84	80-120
77 Chrysene	5.00	4.50	90.01	80-120
74 3,3'-Dichlorobenzi	5.00	5.50	109.97	80-120
78 bis(2-Ethylhexyl)p	5.00	4.71	94.19	80-120
79 Di-n-octylphthalat	5.00	4.73	94.70	80-120
80 Benzo(b)fluoranthe	5.00	4.80	95.93	80-120
81 Benzo(k)fluoranthe	5.00	5.46	109.30	80-120
82 Benzo(a)pyrene	5.00	4.47	89.45	80-120
84 Indeno(1,2,3-cd)py	5.00	3.95	78.93*	80-120
85 Dibenzo(a,h)anthra	5.00	4.59	91.87	80-120
86 Benzo(g,h,i)peryle	5.00	4.46	89.26	80-120

SURROGATE COMPOUND	CONC ADDED ug/Kgdrywt	CONC RECOVERED ug/Kgdrywt	% RECOVERED	LIMITS
$ 1 1,4-Dioxane-d8	2.00	0.000	*	30-150
$ 32 2-Methylnaphthale	2.00	0.000	*	19-94
$ 37 2,4-Dibromophenol	4.00	0.000	*	20-116
$ 55 Fluorene-D10	2.00	0.000	*	20-96
$ 71 Pyrene-D10	2.00	0.000	*	31-128

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2875.D
Report Date: 03-Apr-2019 12:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2875.D
Lab Smp Id: WG249502-4
Inj Date : 01-APR-2019 13:45
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-4
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date : 18-MAR-2019 16:58   Cal File: N2804.D
Als bottle: 2   Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.517	2.496	(0.364)	23146	2.00000	2.02	
	2 1,4-Dioxane	88	2.549	2.538	(0.368)	25631	2.00000	1.90	
	3 N-Nitrosodimethylamine	74	3.136	3.063	(0.453)	26465	2.00000	1.58	
	4 Pyridine	79	3.189	3.084	(0.461)	39176	2.00000	1.26	
	5 Benzaldehyde	77	6.356	6.346	(0.919)	33083	2.00000	1.59	
	6 Phenol	94	6.648	6.628	(0.961)	172245	4.50000	4.20	
	7 Bis(2-Chloroethyl)ether	93	6.618	6.608	(0.956)	82160	2.00000	1.93	
	8 2-Chlorophenol	128	6.698	6.688	(0.968)	168465	4.50000	4.49	
	9 1,3-Dichlorobenzene	146	6.849	6.839	(0.990)	74332	2.00000	1.64	
*	10 1,4-Dichlorobenzene-D4	152	6.919	6.920	(1.000)	23622	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.940	6.940	(1.003)	78525	2.00000	1.89	
	12 1,2-Dichlorobenzene	146	7.141	7.131	(1.032)	74844	2.00000	1.80	
	13 2-Methylphenol	108	7.382	7.372	(1.067)	139079	4.50000	4.47	
	14 2,2'-Oxybis(1-chloropropane)	45	7.322	7.312	(1.058)	58997	2.00000	1.61	
	15 Acetophenone	105	7.473	7.463	(0.871)	78827	2.00000	1.42	
	16 N-Nitroso-di-n-propylamine	70	7.493	7.483	(1.083)	49060	2.00000	1.65	
	17 3&4-Methylphenol	108	7.594	7.594	(1.097)	149542	4.50000	4.56	
	18 Hexachloroethane	117	7.564	7.564	(1.093)	29606	2.00000	1.63	
	19 Nitrobenzene	77	7.674	7.664	(0.894)	85287	2.00000	1.95	
	20 Isophorone	82	7.996	7.997	(0.932)	107970	2.00000	1.56	
	21 2-Nitrophenol	139	8.107	8.097	(0.945)	84680	4.50000	4.44	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2875.D
Report Date: 03-Apr-2019 12:38

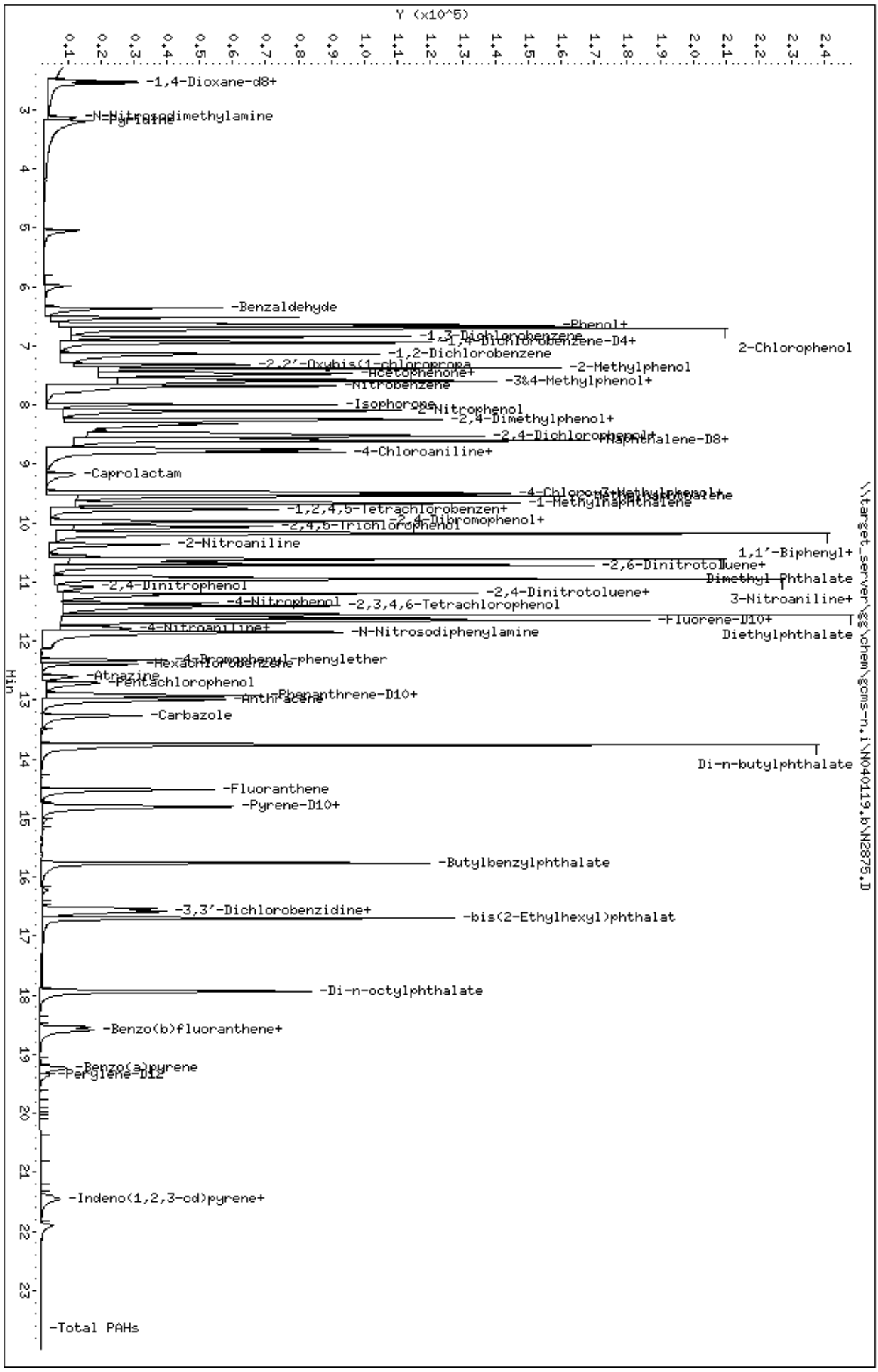
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.248	8.238	(0.961)	149342	4.50000	4.46	
	23 bis(2-Chloroethoxy)methane	93	8.319	8.309	(0.969)	72181	2.00000	1.62	
	24 2,4-Dichlorophenol	162	8.500	8.470	(0.991)	124730	4.50000	4.84	
	25 1,2,4-Trichlorobenzene	180	8.520	8.520	(0.993)	59603	2.00000	2.00	
*	26 Naphthalene-D8	136	8.580	8.570	(1.000)	76184	0.80000	(a)	
	27 Naphthalene	128	8.600	8.601	(1.002)	174653	2.00000	1.87	
	28 4-Chloroaniline	127	8.741	8.721	(1.019)	63983	2.00000	1.60	
	29 Hexachlorobutadiene	225	8.802	8.802	(1.026)	34849	2.00000	1.85	
	30 Caprolactam	113	9.173	9.173	(1.069)	16187	2.00000	1.66(Q)	
	31 4-Chloro-3-Methylphenol	107	9.468	9.458	(1.103)	116156	4.50000	4.34	
$	32 2-Methylnaphthalene-D10	152	9.498	9.488	(1.107)	92030	2.00000	2.02	
	33 2-Methylnaphthalene	115	9.537	9.527	(1.111)	42452	2.00000	1.97(Q)	
	34 1-Methylnaphthalene	142	9.665	9.655	(1.126)	128955	2.00000	1.80	
	35 1,2,4,5-Tetrachlorobenzene	216	9.783	9.773	(0.897)	51484	2.00000	2.02	
	36 Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	18467	2.00000	1.70	
$	37 2,4-Dibromophenol	252	9.960	9.941	(0.914)	33623	2.00000	2.05	
	38 2,4,6-Trichlorophenol	196	9.970	9.960	(0.914)	75666	4.50000	4.68	
	39 2,4,5-Trichlorophenol	196	10.064	10.053	(0.923)	92152	4.50000	4.56	
	40 1,1'-Biphenyl	154	10.173	10.162	(0.933)	137506	2.00000	2.04	
	41 2-Chloronaphthalene	164	10.173	10.173	(0.933)	36477	2.00000	2.00	
	42 2-Nitroaniline	65	10.358	10.347	(0.950)	28450	2.00000	1.99	
	43 Dimethyl Phthalate	163	10.609	10.609	(0.973)	278790	4.50000	4.54	
	44 2,6-Dinitrotoluene	165	10.685	10.674	(0.980)	25990	2.00000	1.97	
	45 Acenaphthylene	152	10.718	10.707	(0.983)	163549	2.00000	2.01	
	46 3-Nitroaniline	138	10.925	10.903	(1.002)	20628	2.00000	1.88	
*	47 Acenaphthene-D10	164	10.903	10.903	(1.000)	31707	0.80000	(a)	
	48 Acenaphthene	153	10.946	10.946	(1.004)	101254	2.00000	2.04	
	49 2,4-Dinitrophenol	184	11.088	11.055	(1.017)	20994	4.50000	4.14	
	50 4-Nitrophenol	109	11.350	11.328	(1.041)	11417	4.50000	2.44(Q)	
	51 2,4-Dinitrotoluene	165	11.241	10.674	(1.031)	28492	2.00000	1.87	
	52 Dibenzofuran	168	11.197	11.186	(1.027)	135871	2.00000	1.98	
	53 2,3,4,6-Tetrachlorophenol	232	11.415	11.404	(1.047)	66214	4.50000	4.58	
	54 Diethylphthalate	149	11.557	11.557	(1.060)	294884	4.50000	4.56	
$	55 Fluorene-D10	174	11.611	11.600	(1.065)	73063	2.00000	1.98	
	56 Fluorene	166	11.644	11.644	(1.068)	99942	2.00000	2.01	
	57 4-Chlorophenyl-phenylether	204	11.676	11.666	(1.071)	54709	2.00000	2.02	
	58 4-Nitroaniline	138	11.753	11.731	(1.078)	19715	2.00000	2.40	
	59 4,6-Dinitro-2-Methylphenol	198	11.796	11.775	(0.915)	27265	4.50000	4.31	
	60 N-Nitrosodiphenylamine	169	11.851	11.840	(0.919)	81732	2.00000	2.00	
	61 4-Bromophenyl-phenylether	248	12.326	12.315	(0.956)	28262	2.00000	2.03	
	62 Hexachlorobenzene	284	12.401	12.390	(0.962)	22254	2.00000	1.67	
	63 Atrazine	200	12.593	12.593	(0.977)	18117	2.00000	1.64	
	64 Pentachlorophenol	266	12.710	12.700	(0.986)	27740	4.50000	4.68	
*	65 Phenanthrene-D10	188	12.892	12.881	(1.000)	40408	0.80000	(a)	
	66 Phenanthrene	178	12.924	12.913	(1.002)	94059	2.00000	1.90	
	67 Anthracene	178	12.998	12.988	(1.008)	131388	2.00000	1.95	
	68 Carbazole	167	13.268	13.245	(1.029)	88234	2.00000	1.99	
	69 Di-n-butylphthalate	149	13.756	13.756	(1.067)	366702	4.50000	4.40	
	70 Fluoranthene	202	14.511	14.511	(1.126)	82817	2.00000	2.01	
$	71 Pyrene-D10	212	14.789	14.778	(0.894)	51067	2.00000	1.81	
	72 Pyrene	202	14.811	14.800	(0.895)	85077	2.00000	1.81	
	73 Butylbenzylphthalate	149	15.755	15.755	(0.952)	104942	4.50000	4.17	
	74 3,3'-Dichlorobenzidine	252	16.554	16.543	(1.001)	16012	2.00000	1.95	
	75 Benzo(a)anthracene	228	16.521	16.510	(0.999)	38531	2.00000	1.86	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2875.D
Report Date: 03-Apr-2019 12:38

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
*	76 Chrysene-D12	240	16.543	16.532	(1.000)	16039	0.80000	(a)	
	77 Chrysene	228	16.576	16.565	(1.002)	67610	2.00000	1.65	
	78 bis(2-Ethylhexyl)phthalate	149	16.698	16.699	(1.009)	146385	4.50000	4.23	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.084)	200605	4.50000	4.43	
	80 Benzo(b)fluoranthene	252	18.537	18.526	(0.958)	25163	2.00000	1.73	
	81 Benzo(k)fluoranthene	252	18.594	18.582	(0.961)	50776	2.00000	1.95(H)	
	82 Benzo(a)pyrene	252	19.234	19.211	(0.994)	29387	2.00000	1.80	
*	83 Perylene-D12	264	19.357	19.346	(1.000)	9127	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.400	21.389	(1.294)	19217	2.00000	1.70	
	85 Dibenzo(a,h)anthracene	278	21.457	21.445	(1.108)	15223	2.00000	1.83	
	86 Benzo(g,h,i)perylene	276	21.894	21.883	(1.131)	16218	2.00000	1.85	
M	87 Total PAHs	100				1366271	36.0000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Y (x10^5)
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4
Min
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine
-Benzaldehyde
-Phenol+
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
2-Chlorophenol
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa
-2-Methylphenol
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
Dimethyl Phthalate
-2,4-Dinitrophenol
-2,4-Dinitrotoluene+
3-Nitroaniline+
-4-Nitrophenol
-2,3,4,6-Tetrachlorophenol
-Fluorene-D10+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Total PAHs
\\target_server\gg\chem\gcms-n,i\N040119,b\N2875,D
Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2875,D
Date : 01-APR-2019 13:45
Client ID:
Sample Info: WG249502-4
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2876.D
Report Date: 03-Apr-2019 12:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2876.D
Lab Smp Id: WG249502-2
Inj Date : 01-APR-2019 14:18
Operator : JCG Inst ID: gcms-n.i
Smp Info : WG249502-2
Misc Info :
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 14:18 Cal File: N2876.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

JCG
11:02 am, Apr 04, 2019

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.528	2.496	(0.364)	1805	0.20000	0.169(a)	
	2 1,4-Dioxane	88	2.570	2.538	(0.370)	2335	0.20000	0.186(a)	
	3 N-Nitrosodimethylamine	74	3.262	3.063	(0.469)	1720	0.20000	0.204(M)	
	4 Pyridine	79	3.588	3.084	(0.516)	2274	0.20000	0.387(M)	M6
	5 Benzaldehyde	77	6.436	6.346	(0.926)	2245	0.20000	0.279(Q)	
	6 Phenol	94	6.698	6.628	(0.964)	36420	1.00000	0.952(a)	
	7 Bis(2-Chloroethyl)ether	93	6.718	6.608	(0.967)	9509	0.20000	0.239(QM)	M6
	8 2-Chlorophenol	128	6.738	6.688	(0.970)	32523	1.00000	0.929(a)	
	9 1,3-Dichlorobenzene	146	6.869	6.839	(0.988)	5013	0.20000	0.256	
*	10 1,4-Dichlorobenzene-D4	152	6.950	6.920	(1.000)	22036	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.970	6.940	(1.003)	7642	0.20000	0.198(aM)	M9
	12 1,2-Dichlorobenzene	146	7.151	7.131	(1.029)	9608	0.20000	0.248(M)	M9
	13 2-Methylphenol	108	7.413	7.372	(1.067)	23511	1.00000	0.811(a)	
	14 2,2'-Oxybis(1-chloropropane)	45	7.332	7.312	(1.055)	3481	0.20000	0.259	
	15 Acetophenone	105	7.523	7.463	(0.876)	6918	0.20000	0.362(QMH)	M9
	16 N-Nitroso-di-n-propylamine	70	7.523	7.483	(1.083)	3284	0.20000	0.239(M)	M9
	17 3&4-Methylphenol	108	7.664	7.594	(1.103)	27357	1.00000	0.893(a)	
	18 Hexachloroethane	117	7.564	7.564	(1.088)	4120	0.20000	0.320(Q)	
	19 Nitrobenzene	77	7.715	7.664	(0.898)	7885	0.20000	0.189(aM)	
	20 Isophorone	82	8.007	7.997	(0.932)	6703	0.20000	0.291	
	21 2-Nitrophenol	139	8.137	8.097	(0.947)	16021	1.00000	0.881(a)	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2876.D
Report Date: 03-Apr-2019 12:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
22	2,4-Dimethylphenol	107	8.309	8.238	(0.967)	28333	1.00000	0.886	
23	bis(2-Chloroethoxy)methane	93	8.419	8.309	(0.980)	4839	0.20000	0.286(Q)	
24	2,4-Dichlorophenol	162	8.570	8.470	(0.998)	22778	1.00000	0.926	
25	1,2,4-Trichlorobenzene	180	8.570	8.520	(0.998)	5003	0.20000	0.176(a)	
* 26	Naphthalene-D8	136	8.591	8.570	(1.000)	72746	0.80000	(a)	
27	Naphthalene	128	8.621	8.601	(1.004)	19130	0.20000	0.214	
28	4-Chloroaniline	127	8.822	8.721	(1.027)	4851	0.20000	0.281(a)	
29	Hexachlorobutadiene	225	8.802	8.802	(1.025)	4366	0.20000	0.242	
30	Caprolactam	113	9.252	9.173	(1.077)	988	0.20000	0.275(QMH)	M9
31	4-Chloro-3-Methylphenol	107	9.517	9.458	(1.108)	23491	1.00000	0.918(aQ)	
$ 32	2-Methylnaphthalene-D10	152	9.537	9.488	(1.110)	7996	0.20000	0.183(a)	
33	2-Methylnaphthalene	115	9.586	9.527	(1.116)	3125	0.20000	0.152(aQ)	
34	1-Methylnaphthalene	142	9.685	9.655	(1.127)	15319	0.20000	0.231	
35	1,2,4,5-Tetrachlorobenzene	216	9.813	9.773	(0.899)	4673	0.20000	0.190(a)	
36	Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	1001	0.20000	0.292(Q)	
$ 37	2,4-Dibromophenol	252	10.009	9.941	(0.917)	2922	0.20000	0.184(a)	
38	2,4,6-Trichlorophenol	196	9.990	9.960	(0.915)	12232	1.00000	0.782(a)	
39	2,4,5-Trichlorophenol	196	10.118	10.053	(0.927)	22118	1.00000	1.13	
40	1,1'-Biphenyl	154	10.206	10.162	(0.935)	12660	0.20000	0.194(a)	
41	2-Chloronaphthalene	164	10.206	10.173	(0.935)	3397	0.20000	0.192(a)	
42	2-Nitroaniline	65	10.424	10.347	(0.955)	2272	0.20000	0.164(a)	
43	Dimethyl Phthalate	163	10.631	10.609	(0.974)	56236	1.00000	0.946(a)	
44	2,6-Dinitrotoluene	165	10.718	10.674	(0.982)	2068	0.20000	0.162(a)	
45	Acenaphthylene	152	10.729	10.707	(0.983)	14993	0.20000	0.190(a)	
46	3-Nitroaniline	138	11.001	10.903	(1.008)	1874	0.20000	0.177(a)	
* 47	Acenaphthene-D10	164	10.914	10.903	(1.000)	30701	0.80000	(a)	
48	Acenaphthene	153	10.957	10.946	(1.004)	9314	0.20000	0.194(a)	
49	2,4-Dinitrophenol	184	11.175	11.055	(1.024)	1651	1.00000	0.845(a)	
50	4-Nitrophenol	109	11.448	11.328	(1.049)	4871	1.00000	1.08(Q)	
51	2,4-Dinitrotoluene	165	10.914	10.674	(1.000)	3867	0.20000	0.322(Q)	
52	Dibenzofuran	168	11.219	11.186	(1.028)	12684	0.20000	0.191(a)	
53	2,3,4,6-Tetrachlorophenol	232	11.437	11.404	(1.048)	11907	1.00000	0.852(a)	
54	Diethylphthalate	149	11.568	11.557	(1.060)	63476	1.00000	1.01	
$ 55	Fluorene-D10	174	11.633	11.600	(1.066)	6875	0.20000	0.192(aQ)	
56	Fluorene	166	11.666	11.644	(1.069)	8746	0.20000	0.181(a)	
57	4-Chlorophenyl-phenylether	204	11.698	11.666	(1.072)	5013	0.20000	0.191(a)	
58	4-Nitroaniline	138	11.873	11.731	(1.088)	1528	0.20000	(aQM)	M6
59	4,6-Dinitro-2-Methylphenol	198	11.851	11.775	(0.919)	3160	1.00000	0.804(a)	
60	N-Nitrosodiphenylamine	169	11.884	11.840	(0.921)	6769	0.20000	0.169(aQ)	
61	4-Bromophenyl-phenylether	248	12.337	12.315	(0.956)	2596	0.20000	0.191(aQM)	M3
62	Hexachlorobenzene	284	12.401	12.390	(0.961)	2423	0.20000	0.213	
63	Atrazine	200	12.625	12.593	(0.978)	1490	0.20000	0.280	
64	Pentachlorophenol	266	12.742	12.700	(0.988)	4919	1.00000	0.848(a)	
* 65	Phenanthrene-D10	188	12.903	12.881	(1.000)	39579	0.80000	(a)	
66	Phenanthrene	178	12.935	12.913	(1.002)	9054	0.20000	0.187(a)	
67	Anthracene	178	13.020	12.988	(1.009)	14439	0.20000	0.219	
68	Carbazole	167	13.301	13.245	(1.031)	8323	0.20000	0.191(a)	
69	Di-n-butylphthalate	149	13.756	13.756	(1.066)	79697	1.00000	0.975(a)	
70	Fluoranthene	202	14.533	14.511	(1.126)	8030	0.20000	0.199(a)	
$ 71	Pyrene-D10	212	14.800	14.778	(0.894)	4745	0.20000	0.202(a)	
72	Pyrene	202	14.822	14.800	(0.895)	8194	0.20000	0.209	
73	Butylbenzylphthalate	149	15.766	15.755	(0.952)	20574	1.00000	0.980(a)	
74	3,3'-Dichlorobenzidine	252	16.576	16.543	(1.001)	1237	0.20000	0.181(aM)	M6
75	Benzo(a)anthracene	228	16.543	16.510	(0.999)	3078	0.20000	0.179(a)	

11:02 am, Apr 04, 2019

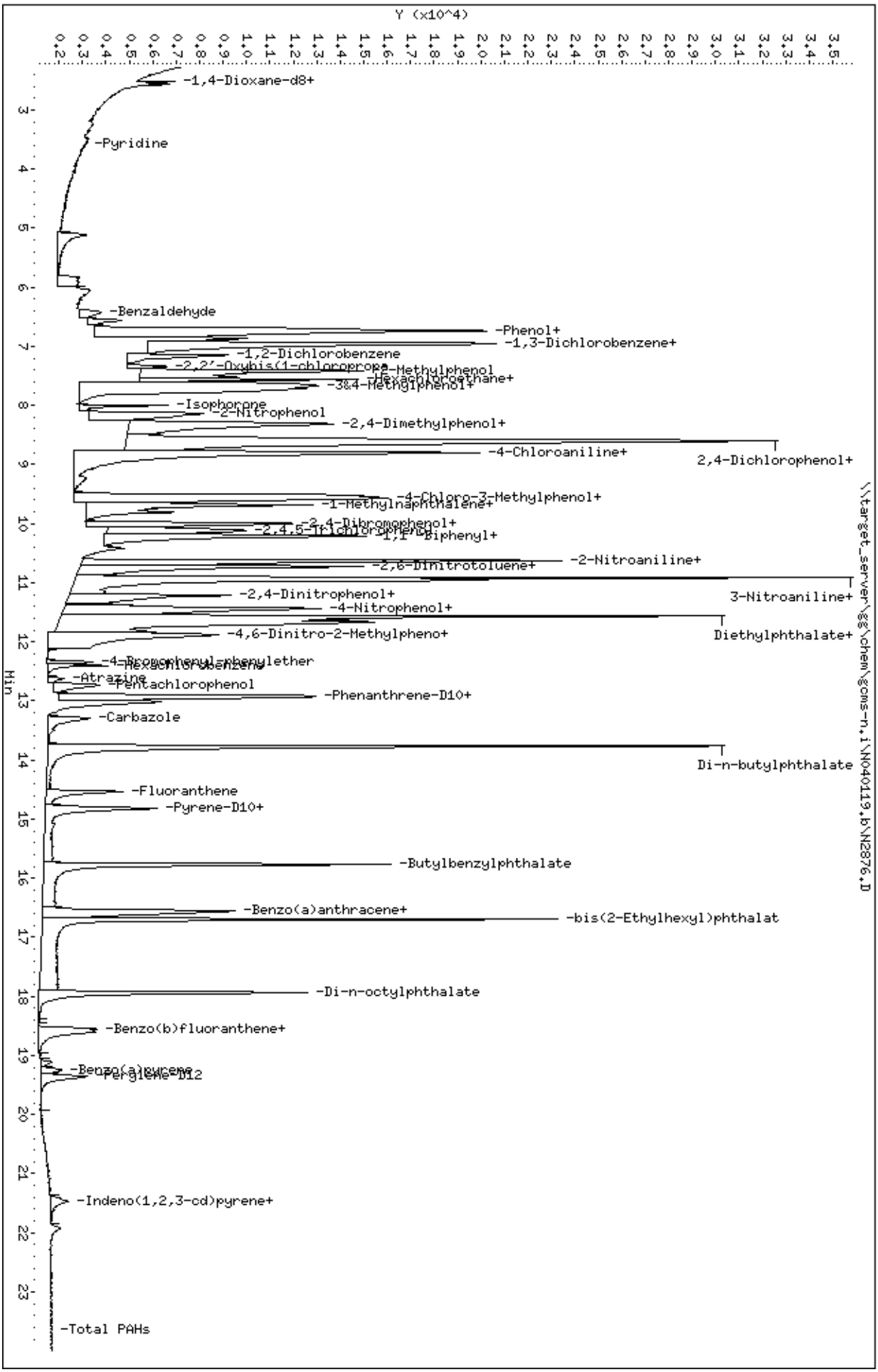
Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2876.D
Report Date: 03-Apr-2019 12:38

			QUANT SIG					AMOUNTS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
*	76	Chrysene-D12	240	16.554	16.532	(1.000)	13374	0.80000	(a)	
	77	Chrysene	228	16.599	16.565	(1.003)	7419	0.20000	0.280	
	78	bis(2-Ethylhexyl)phthalate	149	16.699	16.699	(1.009)	29457	1.00000	1.02	
	79	Di-n-octylphthalate	149	17.931	17.931	(1.083)	36163	1.00000	0.958(a)	
	80	Benzo(b)fluoranthene	252	18.560	18.526	(0.959)	4000	0.20000	0.319(M)	M3
	81	Benzo(k)fluoranthene	252	18.605	18.582	(0.961)	10130	0.20000	0.220(MH)	M6
	82	Benzo(a)pyrene	252	19.245	19.211	(0.994)	4638	0.20000	0.300	
*	83	Perylene-D12	264	19.357	19.346	(1.000)	7820	0.80000	(a)	
	84	Indeno(1,2,3-cd)pyrene	276	21.423	21.389	(1.294)	2532	0.20000	0.269	
	85	Dibenzo(a,h)anthracene	278	21.479	21.445	(1.110)	1904	0.20000	0.241	
	86	Benzo(g,h,i)perylene	276	21.917	21.883	(1.132)	2302	0.20000	0.265	
M	87	Total PAHs	100				146347	3.60000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

11:02 am, Apr 04, 2019


Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2876,D
Date : 01-APR-2019 14:18
Client ID:
Sample Info: WG249502-2
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2876,D
Y (x10^4)
Min
-1,4-Dioxane-d8+
-Pyridine
-Benzaldehyde
-Phenol+
-1,3-Dichlorobenzene+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa
-Hexachloroethane+
-3&4-Methylphenol+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-4-Chloroaniline+
2,4-Dichlorophenol+
-4-Chloro-3-Methylphenol+
-1-Methylnaphthalene+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline+
-2,6-Dinitrotoluene+
-2,4-Dinitrophenol+
3-Nitroaniline+
-4-Nitrophenol+
-4,6-Dinitro-2-Methylpheno+
Diethylphthalate+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Carbazole
Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2877.D
Report Date: 03-Apr-2019 12:38

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2877.D
Lab Smp Id: WG249502-3
Inj Date : 01-APR-2019 14:49
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-3
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date : 01-APR-2019 14:49   Cal File: N2877.D
Als bottle: 4   Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

JCG

11:02 am, Apr 04, 2019

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.528	2.496	(0.365)	5238	0.50000	0.486(a)	
	2 1,4-Dioxane	88	2.570	2.538	(0.371)	6748	0.50000	0.534(a)	
	3 N-Nitrosodimethylamine	74	3.199	3.063	(0.462)	4491	0.50000	0.368	
	4 Pyridine	79	3.357	3.084	(0.484)	9254	0.50000	0.558(M)	M9
	5 Benzaldehyde	77	6.376	6.346	(0.920)	6934	0.50000	0.485(Q)	
	6 Phenol	94	6.668	6.628	(0.962)	81451	2.00000	2.11(Q)	
	7 Bis(2-Chloroethyl)ether	93	6.658	6.608	(0.961)	23585	0.50000	0.589(Q)	
	8 2-Chlorophenol	128	6.718	6.688	(0.970)	69384	2.00000	1.97	
	9 1,3-Dichlorobenzene	146	6.859	6.839	(0.990)	16814	0.50000	0.500	
*	10 1,4-Dichlorobenzene-D4	152	6.930	6.920	(1.000)	22203	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.950	6.940	(1.003)	18392	0.50000	0.472	
	12 1,2-Dichlorobenzene	146	7.141	7.131	(1.030)	17986	0.50000	0.460	
	13 2-Methylphenol	108	7.393	7.372	(1.067)	58357	2.00000	2.00	
	14 2,2'-Oxybis(1-chloropropane)	45	7.332	7.312	(1.058)	13070	0.50000	0.498	
	15 Acetophenone	105	7.493	7.463	(0.873)	14389	0.50000	0.460(Q)	
	16 N-Nitroso-di-n-propylamine	70	7.503	7.483	(1.083)	12436	0.50000	0.527	
	17 3&4-Methylphenol	108	7.614	7.594	(1.099)	64080	2.00000	2.08	
	18 Hexachloroethane	117	7.564	7.564	(1.091)	7369	0.50000	0.492(Q)	
	19 Nitrobenzene	77	7.694	7.664	(0.897)	27419	0.50000	0.619	
	20 Isophorone	82	7.996	7.997	(0.932)	22410	0.50000	0.471	
	21 2-Nitrophenol	139	8.117	8.097	(0.946)	36708	2.00000	1.90	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2877.D
Report Date: 03-Apr-2019 12:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.278	8.238	(0.965)	64635	2.00000	1.90	
	23 bis(2-Chloroethoxy)methane	93	8.389	8.309	(0.978)	16453	0.50000	0.500(Q)	
	24 2,4-Dichlorophenol	162	8.540	8.470	(0.995)	52878	2.00000	2.02	
	25 1,2,4-Trichlorobenzene	180	8.530	8.520	(0.994)	14511	0.50000	0.481	
*	26 Naphthalene-D8	136	8.580	8.570	(1.000)	77256	0.80000	(a)	
	27 Naphthalene	128	8.611	8.601	(1.004)	44750	0.50000	0.473	
	28 4-Chloroaniline	127	8.782	8.721	(1.023)	14888	0.50000	0.492(a)	
	29 Hexachlorobutadiene	225	8.802	8.802	(1.026)	8971	0.50000	0.469(Q)	
	30 Caprolactam	113	9.212	9.173	(1.074)	2826	0.50000	0.431(Q)	
	31 4-Chloro-3-Methylphenol	107	9.488	9.458	(1.106)	52749	2.00000	1.94	
$	32 2-Methylnaphthalene-D10	152	9.517	9.488	(1.109)	23673	0.50000	0.511(a)	
	33 2-Methylnaphthalene	115	9.557	9.527	(1.114)	10532	0.50000	0.482(Q)	
	34 1-Methylnaphthalene	142	9.675	9.655	(1.128)	39870	0.50000	0.539	
	35 1,2,4,5-Tetrachlorobenzene	216	9.793	9.773	(0.897)	12892	0.50000	0.487	
	36 Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	3548	0.50000	0.485(Q)	
$	37 2,4-Dibromophenol	252	9.980	9.941	(0.914)	7749	0.50000	0.454(a)	
	38 2,4,6-Trichlorophenol	196	9.980	9.960	(0.914)	31073	2.00000	1.85	
	39 2,4,5-Trichlorophenol	196	10.097	10.053	(0.925)	43373	2.00000	2.07	
	40 1,1'-Biphenyl	154	10.184	10.162	(0.933)	34587	0.50000	0.494	
	41 2-Chloronaphthalene	164	10.195	10.173	(0.934)	9368	0.50000	0.494	
	42 2-Nitroaniline	65	10.391	10.347	(0.952)	6529	0.50000	0.439	
	43 Dimethyl Phthalate	163	10.620	10.609	(0.973)	123866	2.00000	1.94	
	44 2,6-Dinitrotoluene	165	10.696	10.674	(0.980)	6353	0.50000	0.463	
	45 Acenaphthylene	152	10.718	10.707	(0.982)	40932	0.50000	0.485	
	46 3-Nitroaniline	138	10.968	10.903	(1.005)	5293	0.50000	0.466	
*	47 Acenaphthene-D10	164	10.914	10.903	(1.000)	32938	0.80000	(a)	
	48 Acenaphthene	153	10.957	10.946	(1.004)	25345	0.50000	0.491	
	49 2,4-Dinitrophenol	184	11.143	11.055	(1.021)	6406	2.00000	1.62	
	50 4-Nitrophenol	109	11.415	11.328	(1.046)	13694	2.00000	2.82	
	51 2,4-Dinitrotoluene	165	10.914	10.674	(1.000)	4428	0.50000	0.339(Q)	
	52 Dibenzofuran	168	11.208	11.186	(1.027)	33910	0.50000	0.477	
	53 2,3,4,6-Tetrachlorophenol	232	11.426	11.404	(1.047)	26851	2.00000	1.79	
	54 Diethylphthalate	149	11.557	11.557	(1.059)	136227	2.00000	2.03	
$	55 Fluorene-D10	174	11.611	11.600	(1.064)	20590	0.50000	0.537(a)	
	56 Fluorene	166	11.655	11.644	(1.068)	25584	0.50000	0.494	
	57 4-Chlorophenyl-phenylether	204	11.687	11.666	(1.071)	13134	0.50000	0.466	
	58 4-Nitroaniline	138	11.807	11.731	(1.082)	6081	0.50000	0.529(Q)	
	59 4,6-Dinitro-2-Methylphenol	198	11.818	11.775	(0.916)	10073	2.00000	1.81	
	60 N-Nitrosodiphenylamine	169	11.862	11.840	(0.919)	20218	0.50000	0.497(Q)	
	61 4-Bromophenyl-phenylether	248	12.337	12.315	(0.956)	7459	0.50000	0.538(Q)	
	62 Hexachlorobenzene	284	12.401	12.390	(0.961)	8518	0.50000	0.647	
	63 Atrazine	200	12.614	12.593	(0.978)	3809	0.50000	0.466	
	64 Pentachlorophenol	266	12.721	12.700	(0.986)	12122	2.00000	2.05	
*	65 Phenanthrene-D10	188	12.902	12.881	(1.000)	40313	0.80000	(a)	
	66 Phenanthrene	178	12.934	12.913	(1.002)	22467	0.50000	0.455	
	67 Anthracene	178	13.020	12.988	(1.009)	35876	0.50000	0.535	
	68 Carbazole	167	13.290	13.245	(1.030)	21456	0.50000	0.484	
	69 Di-n-butylphthalate	149	13.756	13.756	(1.066)	167239	2.00000	2.01	
	70 Fluoranthene	202	14.522	14.511	(1.126)	19698	0.50000	0.479	
$	71 Pyrene-D10	212	14.800	14.778	(0.894)	12074	0.50000	0.521(a)	
	72 Pyrene	202	14.822	14.800	(0.895)	20623	0.50000	0.535	
	73 Butylbenzylphthalate	149	15.755	15.755	(0.952)	43583	2.00000	2.11	
	74 3,3'-Dichlorobenzidine	252	16.565	16.543	(1.001)	3249	0.50000	0.482	
	75 Benzo(a)anthracene	228	16.543	16.510	(0.999)	7700	0.50000	0.454	

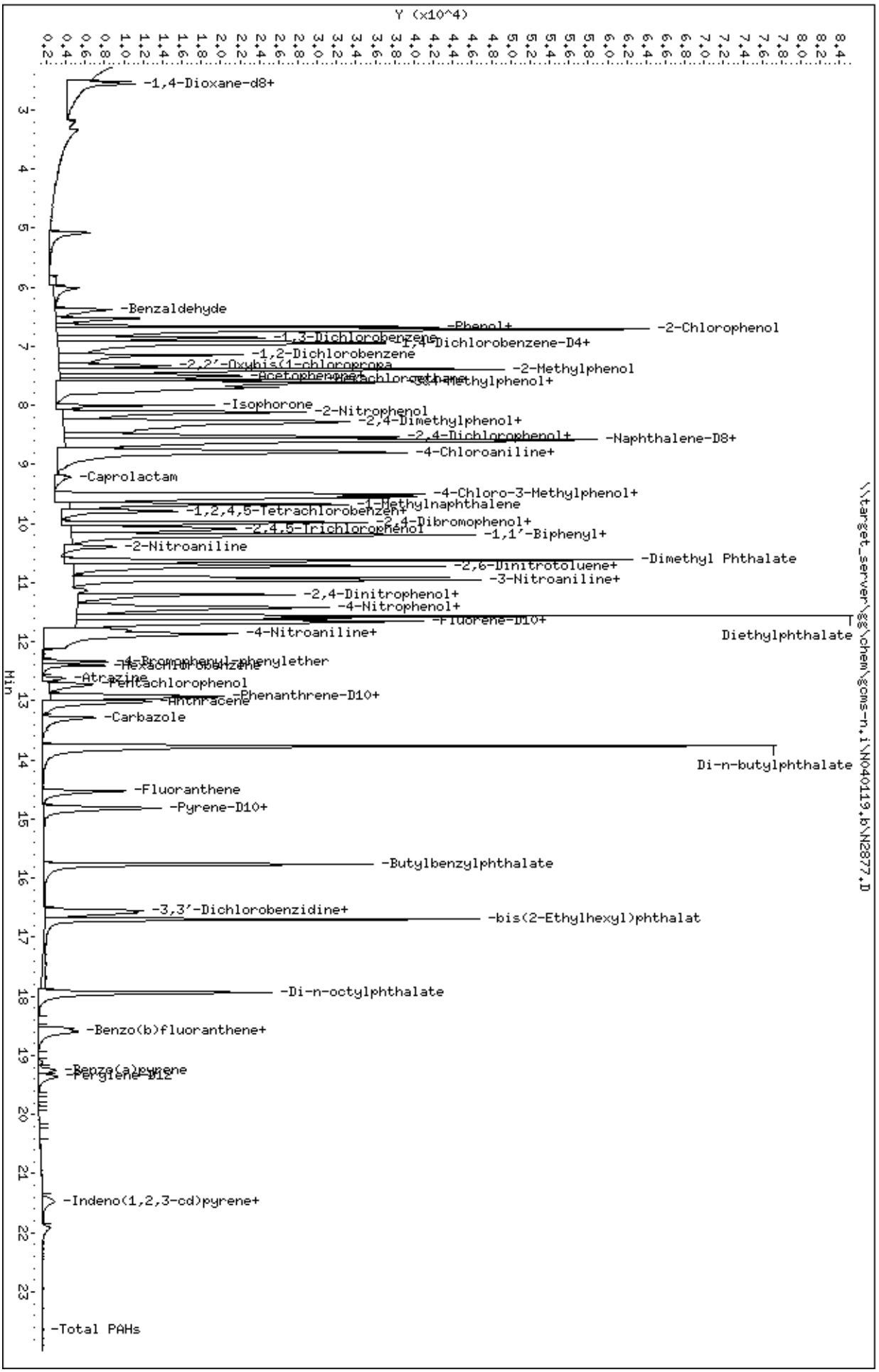
Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2877.D
Report Date: 03-Apr-2019 12:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
*	76 Chrysene-D12	240	16.554	16.532	(1.000)	13167	0.80000	(a)	
	77 Chrysene	228	16.587	16.565	(1.002)	16577	0.50000	0.528	
	78 bis(2-Ethylhexyl)phthalate	149	16.699	16.699	(1.009)	59512	2.00000	2.09	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.083)	73850	2.00000	1.99	
	80 Benzo(b)fluoranthene	252	18.549	18.526	(0.958)	6573	0.50000	0.532	
	81 Benzo(k)fluoranthene	252	18.594	18.582	(0.960)	14623	0.50000	0.464(M)	M6
	82 Benzo(a)pyrene	252	19.245	19.211	(0.994)	7707	0.50000	0.529	
*	83 Perylene-D12	264	19.368	19.346	(1.000)	7705	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.423	21.389	(1.294)	4702	0.50000	0.507	
	85 Dibenzo(a,h)anthracene	278	21.479	21.445	(1.109)	4070	0.50000	0.558	
	86 Benzo(g,h,i)perylene	276	21.906	21.883	(1.131)	4256	0.50000	0.540	
M	87 Total PAHs	100				351885	9.00000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

11:02 am, Apr 04, 2019


Y (x10^4)
Min
-1,4-Dioxane-d8+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa
-2-Methylphenol
-Acetophenone2
-3&4-Methylphenol+
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-3-Nitroaniline+
-2,4-Dinitrophenol+
-4-Nitrophenol+
-Fluorene-D10+
-4-Nitroaniline+
Diethylphthalate
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Total PAHs
Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2877.D
Date : 01-APR-2019 14:49
Client ID:
Sample Info: WG249502-3
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2877.D

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2878.D
Report Date: 03-Apr-2019 12:39

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2878.D
Lab Smp Id: WG249502-5
Inj Date : 01-APR-2019 15:21
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-5
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date : 01-APR-2019 15:21   Cal File: N2878.D
Als bottle: 5   Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.496	2.496	(0.361)	93097	7.00000	8.55	
	2 1,4-Dioxane	88	2.538	2.538	(0.367)	101255	7.00000	7.92	
	3 N-Nitrosodimethylamine	74	3.084	3.063	(0.446)	128394	7.00000	7.68(Q)	
	4 Pyridine	79	3.105	3.084	(0.449)	230346	7.00000	7.20	
	5 Benzaldehyde	77	6.346	6.346	(0.917)	144434	7.00000	7.67	
	6 Phenol	94	6.638	6.628	(0.959)	312934	7.00000	8.03	
	7 Bis(2-Chloroethyl)ether	93	6.618	6.608	(0.956)	303873	7.00000	7.51(Q)	
	8 2-Chlorophenol	128	6.698	6.688	(0.968)	283825	7.00000	7.96	
	9 1,3-Dichlorobenzene	146	6.839	6.839	(0.988)	311933	7.00000	7.64	
*	10 1,4-Dichlorobenzene-D4	152	6.920	6.920	(1.000)	22452	0.80000	(a)	
	11 1,4-Dichlorobenzene	146	6.940	6.940	(1.003)	319703	7.00000	8.12	
	12 1,2-Dichlorobenzene	146	7.141	7.131	(1.032)	305254	7.00000	7.73	
	13 2-Methylphenol	108	7.373	7.372	(1.065)	250204	7.00000	8.47	
	14 2,2'-Oxybis(1-chloropropane)	45	7.312	7.312	(1.057)	254455	7.00000	7.85	
	15 Acetophenone	105	7.463	7.463	(0.871)	381984	7.00000	7.64(Q)	
	16 N-Nitroso-di-n-propylamine	70	7.483	7.483	(1.081)	200952	7.00000	7.81	
	17 3&4-Methylphenol	108	7.594	7.594	(1.097)	229896	7.00000	7.37	
	18 Hexachloroethane	117	7.564	7.564	(1.093)	121571	7.00000	7.78	
	19 Nitrobenzene	77	7.674	7.664	(0.895)	309498	7.00000	7.40	
	20 Isophorone	82	7.997	7.997	(0.933)	476843	7.00000	7.72	
	21 2-Nitrophenol	139	8.097	8.097	(0.945)	150243	7.00000	8.24	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2878.D
Report Date: 03-Apr-2019 12:39

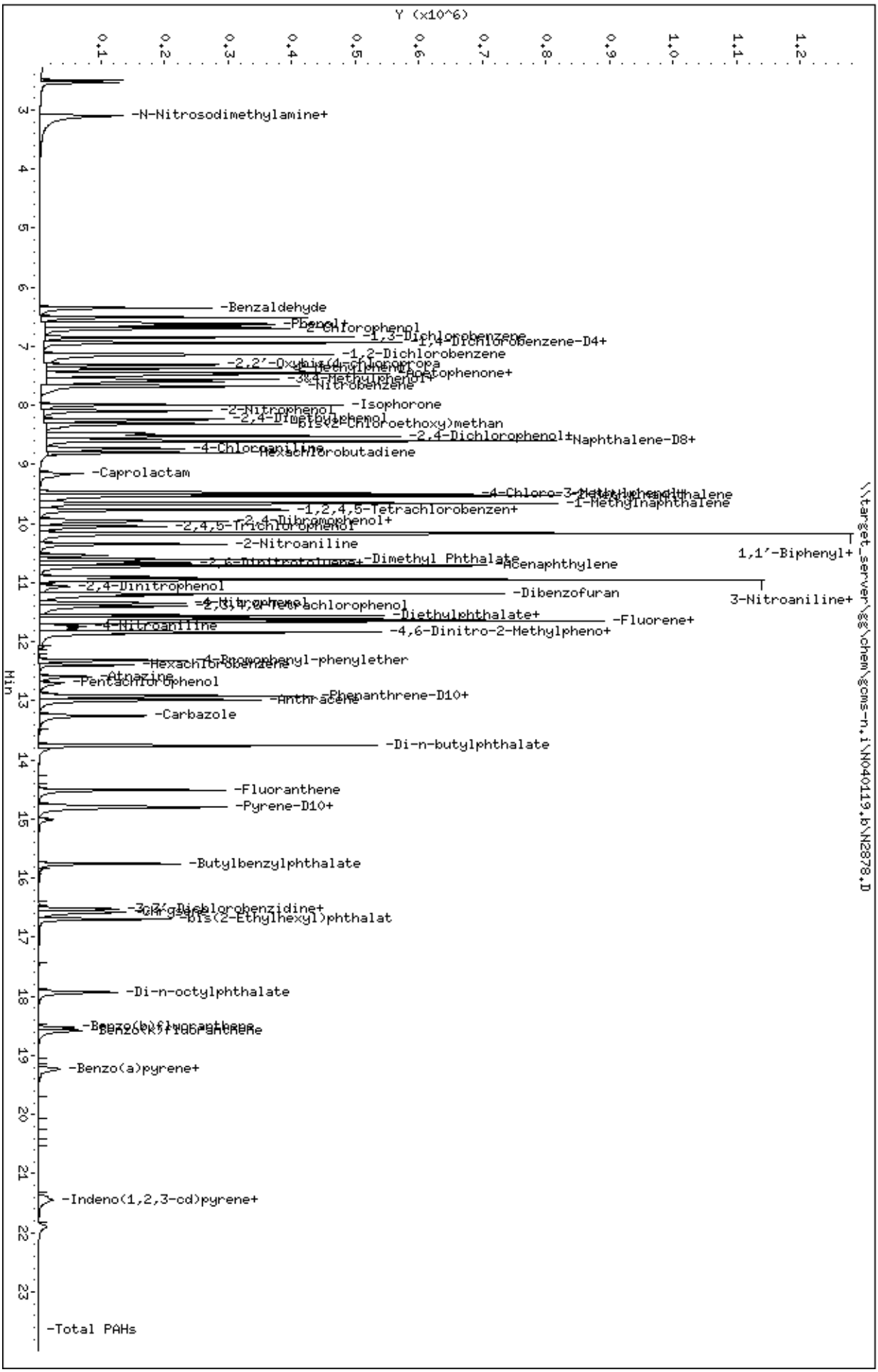
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.238	8.238	(0.961)	266773	7.00000	8.32	
	23 bis(2-Chloroethoxy)methane	93	8.309	8.309	(0.969)	284207	7.00000	6.98(Q)	
	24 2,4-Dichlorophenol	162	8.480	8.470	(0.989)	172588	7.00000	7.00	
	25 1,2,4-Trichlorobenzene	180	8.520	8.520	(0.994)	238695	7.00000	8.38	
*	26 Naphthalene-D8	136	8.570	8.570	(1.000)	72921	0.80000	(a)	
	27 Naphthalene	128	8.601	8.601	(1.004)	713425	7.00000	7.98	
	28 4-Chloroaniline	127	8.731	8.721	(1.019)	292439	7.00000	7.66	
	29 Hexachlorobutadiene	225	8.802	8.802	(1.027)	140580	7.00000	7.79	
	30 Caprolactam	113	9.153	9.173	(1.068)	72644	7.00000	7.86	
	31 4-Chloro-3-Methylphenol	107	9.468	9.458	(1.105)	214057	7.00000	8.35(Q)	
$	32 2-Methylnaphthalene-D10	152	9.488	9.488	(1.107)	356365	7.00000	8.16	
	33 2-Methylnaphthalene	115	9.527	9.527	(1.112)	179247	7.00000	8.70(Q)	
	34 1-Methylnaphthalene	142	9.655	9.655	(1.127)	447119	7.00000	7.62	
	35 1,2,4,5-Tetrachlorobenzene	216	9.773	9.773	(0.896)	211432	7.00000	7.99	
	36 Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	90798	7.00000	7.29	
$	37 2,4-Dibromophenol	252	9.950	9.941	(0.913)	139783	7.00000	8.19	
	38 2,4,6-Trichlorophenol	196	9.960	9.960	(0.914)	144340	7.00000	8.60	
	39 2,4,5-Trichlorophenol	196	10.053	10.053	(0.922)	153419	7.00000	7.31	
	40 1,1'-Biphenyl	154	10.162	10.162	(0.932)	552433	7.00000	7.88	
	41 2-Chloronaphthalene	164	10.173	10.173	(0.933)	150117	7.00000	7.92	
	42 2-Nitroaniline	65	10.347	10.347	(0.949)	128450	7.00000	8.63	
	43 Dimethyl Phthalate	163	10.609	10.609	(0.973)	518211	7.00000	8.12	
	44 2,6-Dinitrotoluene	165	10.674	10.674	(0.979)	117924	7.00000	8.59	
	45 Acenaphthylene	152	10.718	10.707	(0.983)	689306	7.00000	8.16	
	46 3-Nitroaniline	138	10.903	10.903	(1.000)	95686	7.00000	8.41	
*	47 Acenaphthene-D10	164	10.903	10.903	(1.000)	32962	0.80000	(a)	
	48 Acenaphthene	153	10.947	10.946	(1.004)	416345	7.00000	8.06	
	49 2,4-Dinitrophenol	184	11.066	11.055	(1.015)	45978	7.00000	7.86	
	50 4-Nitrophenol	109	11.339	11.328	(1.040)	34575	7.00000	7.12(Q)	
	51 2,4-Dinitrotoluene	165	10.674	10.674	(0.979)	117924	7.00000	7.74	
	52 Dibenzofuran	168	11.186	11.186	(1.026)	580412	7.00000	8.15	
	53 2,3,4,6-Tetrachlorophenol	232	11.404	11.404	(1.046)	129268	7.00000	8.61	
	54 Diethylphthalate	149	11.557	11.557	(1.060)	526332	7.00000	7.82	
$	55 Fluorene-D10	174	11.600	11.600	(1.064)	301350	7.00000	7.85	
	56 Fluorene	166	11.644	11.644	(1.068)	424995	7.00000	8.20	
	57 4-Chlorophenyl-phenylether	204	11.666	11.666	(1.070)	230593	7.00000	8.18	
	58 4-Nitroaniline	138	11.731	11.731	(1.076)	59040	7.00000	7.41(Q)	
	59 4,6-Dinitro-2-Methylphenol	198	11.786	11.775	(0.915)	53116	7.00000	7.74	
	60 N-Nitrosodiphenylamine	169	11.840	11.840	(0.919)	354776	7.00000	8.33	
	61 4-Bromophenyl-phenylether	248	12.315	12.315	(0.956)	112740	7.00000	7.76	
	62 Hexachlorobenzene	284	12.390	12.390	(0.962)	96479	7.00000	7.76	
	63 Atrazine	200	12.593	12.593	(0.978)	88860	7.00000	7.75	
	64 Pentachlorophenol	266	12.700	12.700	(0.986)	49172	7.00000	7.94	
*	65 Phenanthrene-D10	188	12.881	12.881	(1.000)	42219	0.80000	(a)	
	66 Phenanthrene	178	12.913	12.913	(1.002)	429551	7.00000	8.31	
	67 Anthracene	178	12.988	12.988	(1.008)	533831	7.00000	7.60	
	68 Carbazole	167	13.245	13.245	(1.028)	369824	7.00000	7.97	
	69 Di-n-butylphthalate	149	13.756	13.756	(1.068)	703283	7.00000	8.07	
	70 Fluoranthene	202	14.511	14.511	(1.127)	332155	7.00000	7.71	
$	71 Pyrene-D10	212	14.778	14.778	(0.894)	198862	7.00000	8.25	
	72 Pyrene	202	14.800	14.800	(0.895)	326519	7.00000	8.14	
	73 Butylbenzylphthalate	149	15.755	15.755	(0.953)	177708	7.00000	8.26	
	74 3,3'-Dichlorobenzidine	252	16.543	16.543	(1.001)	56788	7.00000	8.10	
	75 Benzo(a)anthracene	228	16.521	16.510	(0.999)	144071	7.00000	8.16	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2878.D
Report Date: 03-Apr-2019 12:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
*	76 Chrysene-D12	240	16.532	16.532	(1.000)	13710	0.80000	(a)	
	77 Chrysene	228	16.576	16.565	(1.003)	228800	7.00000	7.80	
	78 bis(2-Ethylhexyl)phthalate	149	16.699	16.699	(1.010)	235899	7.00000	7.97	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.085)	307448	7.00000	7.95	
	80 Benzo(b)fluoranthene	252	18.526	18.526	(0.957)	100682	7.00000	8.01	
	81 Benzo(k)fluoranthene	252	18.583	18.582	(0.960)	159877	7.00000	7.67(H)	
	82 Benzo(a)pyrene	252	19.222	19.211	(0.993)	104239	7.00000	7.64	
*	83 Perylene-D12	264	19.357	19.346	(1.000)	8147	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.389	21.389	(1.294)	72247	7.00000	7.48	
	85 Dibenzo(a,h)anthracene	278	21.445	21.445	(1.108)	57479	7.00000	7.84	
	86 Benzo(g,h,i)perylene	276	21.895	21.883	(1.131)	60305	7.00000	7.92	
M	87 Total PAHs	100				5420193	126.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2878.D
Date : 01-APR-2019 15:21
Client ID:
Sample Info: WG249502-5
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2878.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol+
-Naphthalene-D8+
-Caprolactam
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
-Dimethyl Phthalate
-Acenaphthylene
1,1'-Biphenyl+
-2,4-Dinitrophenol
-Dibenzofuran
3-Nitroaniline+
-Diethylphthalate+
-Fluorene+
-4-Nitroaniline
-4,6-Dinitro-2-Methylpheno+
-Hexachlorobenzene
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2879.D
Report Date: 03-Apr-2019 12:39

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2879.D
Lab Smp Id: WG249502-6
Inj Date : 01-APR-2019 15:52
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-6
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date : 01-APR-2019 15:52   Cal File: N2879.D
Als bottle: 6   Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.496	2.496	(0.361)	118109	10.0000	10.5	
	2 1,4-Dioxane	88	2.538	2.538	(0.367)	131957	10.0000	9.99	
	3 N-Nitrosodimethylamine	74	3.073	3.063	(0.444)	177913	10.0000	10.3	
	4 Pyridine	79	3.094	3.084	(0.447)	316256	10.0000	10.0	
	5 Benzaldehyde	77	6.346	6.346	(0.917)	178539	10.0000	9.44	
	6 Phenol	94	6.638	6.628	(0.959)	385909	10.0000	9.58	
	7 Bis(2-Chloroethyl)ether	93	6.607	6.608	(0.955)	334689	10.0000	8.00	
	8 2-Chlorophenol	128	6.698	6.688	(0.968)	361995	10.0000	9.82	
	9 1,3-Dichlorobenzene	146	6.839	6.839	(0.988)	387701	10.0000	9.45	
*	10 1,4-Dichlorobenzene-D4	152	6.919	6.920	(1.000)	23196	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.940	6.940	(1.003)	402669	10.0000	9.89	
	12 1,2-Dichlorobenzene	146	7.131	7.131	(1.031)	375920	10.0000	9.21	
	13 2-Methylphenol	108	7.372	7.372	(1.065)	305325	10.0000	10.0	
	14 2,2'-Oxybis(1-chloropropane)	45	7.312	7.312	(1.057)	302159	10.0000	9.26	
	15 Acetophenone	105	7.463	7.463	(0.871)	451198	10.0000	9.54	
	16 N-Nitroso-di-n-propylamine	70	7.483	7.483	(1.081)	240227	10.0000	9.29	
	17 3&4-Methylphenol	108	7.594	7.594	(1.097)	322967	10.0000	10.0	
	18 Hexachloroethane	117	7.564	7.564	(1.093)	146339	10.0000	9.32	
	19 Nitrobenzene	77	7.664	7.664	(0.894)	377182	10.0000	9.15	
	20 Isophorone	82	7.996	7.997	(0.933)	554552	10.0000	9.41	
	21 2-Nitrophenol	139	8.097	8.097	(0.945)	182726	10.0000	10.2	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2879.D
Report Date: 03-Apr-2019 12:39

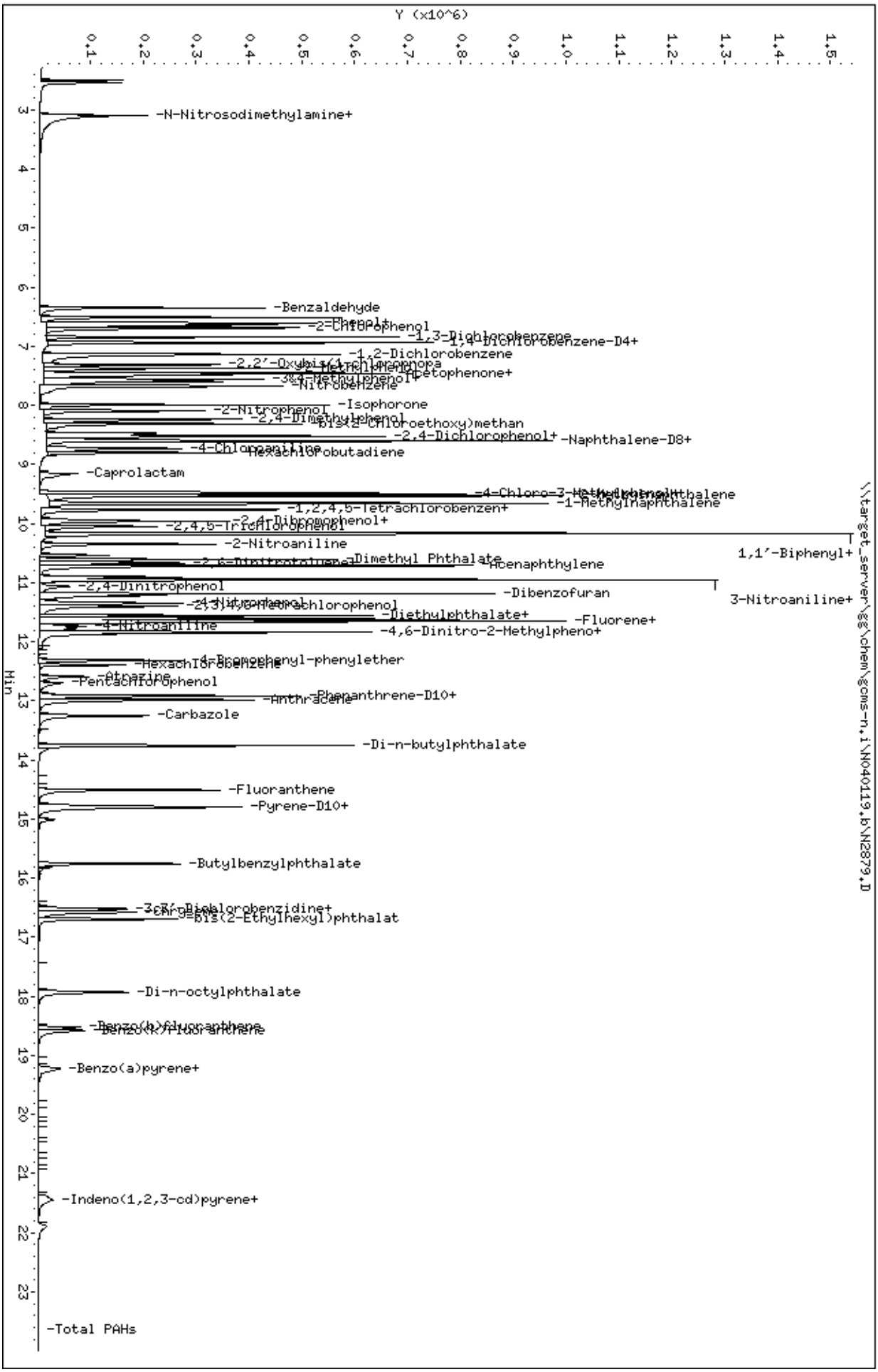
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	AMOUNTS ON-COL (ug/ml)	REVIEW CODE
	22 2,4-Dimethylphenol	107	8.238	8.238	(0.961)	318743	10.0000	10.1	
	23 bis(2-Chloroethoxy)methane	93	8.308	8.309	(0.969)	388269	10.0000	10.2	
	24 2,4-Dichlorophenol	162	8.480	8.470	(0.989)	268272	10.0000	11.0	
	25 1,2,4-Trichlorobenzene	180	8.520	8.520	(0.994)	287863	10.0000	10.2	
*	26 Naphthalene-D8	136	8.570	8.570	(1.000)	71903	0.80000	(a)	
	27 Naphthalene	128	8.600	8.601	(1.004)	862429	10.0000	9.79	
	28 4-Chloroaniline	127	8.731	8.721	(1.019)	348776	10.0000	9.45	
	29 Hexachlorobutadiene	225	8.802	8.802	(1.027)	167800	10.0000	9.43	
	30 Caprolactam	113	9.153	9.173	(1.068)	82909	10.0000	9.23	
	31 4-Chloro-3-Methylphenol	107	9.468	9.458	(1.105)	247878	10.0000	9.81	
$	32 2-Methylnaphthalene-D10	152	9.488	9.488	(1.107)	417143	10.0000	9.68	
	33 2-Methylnaphthalene	115	9.527	9.527	(1.112)	209522	10.0000	10.3	
	34 1-Methylnaphthalene	142	9.655	9.655	(1.127)	523854	10.0000	9.41	
	35 1,2,4,5-Tetrachlorobenzene	216	9.773	9.773	(0.896)	245382	10.0000	9.71	
	36 Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	114337	10.0000	9.55	
$	37 2,4-Dibromophenol	252	9.941	9.941	(0.912)	160711	10.0000	9.87	
	38 2,4,6-Trichlorophenol	196	9.960	9.960	(0.914)	163074	10.0000	10.2	
	39 2,4,5-Trichlorophenol	196	10.053	10.053	(0.922)	179337	10.0000	8.95	
	40 1,1'-Biphenyl	154	10.162	10.162	(0.932)	647508	10.0000	9.68	
	41 2-Chloronaphthalene	164	10.173	10.173	(0.933)	175364	10.0000	9.69	
	42 2-Nitroaniline	65	10.347	10.347	(0.949)	146956	10.0000	10.3	
	43 Dimethyl Phthalate	163	10.609	10.609	(0.973)	581712	10.0000	9.55	
	44 2,6-Dinitrotoluene	165	10.674	10.674	(0.979)	132817	10.0000	10.1	
	45 Acenaphthylene	152	10.718	10.707	(0.983)	786294	10.0000	9.75	
	46 3-Nitroaniline	138	10.903	10.903	(1.000)	109707	10.0000	10.1	
*	47 Acenaphthene-D10	164	10.903	10.903	(1.000)	31461	0.80000	(a)	
	48 Acenaphthene	153	10.947	10.946	(1.004)	468591	10.0000	9.50	
	49 2,4-Dinitrophenol	184	11.066	11.055	(1.015)	54521	10.0000	9.48	
	50 4-Nitrophenol	109	11.339	11.328	(1.040)	41103	10.0000	8.87	
	51 2,4-Dinitrotoluene	165	10.674	10.674	(0.979)	132817	10.0000	9.27	
	52 Dibenzofuran	168	11.186	11.186	(1.026)	660176	10.0000	9.71	
	53 2,3,4,6-Tetrachlorophenol	232	11.404	11.404	(1.046)	144762	10.0000	10.1	
	54 Diethylphthalate	149	11.557	11.557	(1.060)	589763	10.0000	9.19	
$	55 Fluorene-D10	174	11.600	11.600	(1.064)	340395	10.0000	9.29	
	56 Fluorene	166	11.644	11.644	(1.068)	475291	10.0000	9.61	
	57 4-Chlorophenyl-phenylether	204	11.666	11.666	(1.070)	262736	10.0000	9.76	
	58 4-Nitroaniline	138	11.731	11.731	(1.076)	74221	10.0000	9.84	
	59 4,6-Dinitro-2-Methylphenol	198	11.786	11.775	(0.915)	61831	10.0000	9.47	
	60 N-Nitrosodiphenylamine	169	11.840	11.840	(0.919)	398167	10.0000	9.92	
	61 4-Bromophenyl-phenylether	248	12.315	12.315	(0.956)	126501	10.0000	9.24	
	62 Hexachlorobenzene	284	12.390	12.390	(0.962)	106129	10.0000	9.30	
	63 Atrazine	200	12.593	12.593	(0.978)	99488	10.0000	9.34	
	64 Pentachlorophenol	266	12.700	12.700	(0.986)	56228	10.0000	9.64	
*	65 Phenanthrene-D10	188	12.881	12.881	(1.000)	39793	0.80000	(a)	
	66 Phenanthrene	178	12.913	12.913	(1.002)	489497	10.0000	10.0	
	67 Anthracene	178	12.988	12.988	(1.008)	599424	10.0000	9.06	
	68 Carbazole	167	13.245	13.245	(1.028)	429824	10.0000	9.82	
	69 Di-n-butylphthalate	149	13.756	13.756	(1.068)	778564	10.0000	9.48	
	70 Fluoranthene	202	14.511	14.511	(1.127)	403415	10.0000	9.94	
$	71 Pyrene-D10	212	14.778	14.778	(0.894)	246278	10.0000	9.06	
	72 Pyrene	202	14.800	14.800	(0.895)	397794	10.0000	8.80	
	73 Butylbenzylphthalate	149	15.755	15.755	(0.953)	216771	10.0000	8.94	
	74 3,3'-Dichlorobenzidine	252	16.543	16.543	(1.001)	79239	10.0000	10.0	
	75 Benzo(a)anthracene	228	16.510	16.510	(0.999)	202774	10.0000	10.2	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2879.D
Report Date: 03-Apr-2019 12:39

							AMOUNTS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
*	76 Chrysene-D12	240	16.532	16.532	(1.000)	15450	0.80000	(a)	
	77 Chrysene	228	16.577	16.565	(1.003)	296003	10.0000	9.30	
	78 bis(2-Ethylhexyl)phthalate	149	16.699	16.699	(1.010)	301284	10.0000	9.04	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.085)	413630	10.0000	9.49	
	80 Benzo(b)fluoranthene	252	18.526	18.526	(0.957)	119003	10.0000	9.05	
	81 Benzo(k)fluoranthene	252	18.583	18.582	(0.960)	221094	10.0000	10.2(H)	
	82 Benzo(a)pyrene	252	19.223	19.211	(0.993)	132604	10.0000	9.38	
*	83 Perylene-D12	264	19.357	19.346	(1.000)	8571	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.389	21.389	(1.294)	88342	10.0000	8.12	
	85 Dibenzo(a,h)anthracene	278	21.445	21.445	(1.108)	70726	10.0000	9.18	
	86 Benzo(g,h,i)perylene	276	21.895	21.883	(1.131)	72631	10.0000	9.09	
M	87 Total PAHs	100				6419288	180.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2879,D
Date : 01-APR-2019 15:52
Client ID:
Sample Info: WG249502-6
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2879,D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol+
-Naphthalene-D8+
-Hexachlorobutadiene
-Caprolactam
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-Acenaphthylene
-2,4-Dinitrophenol
-Dibenzofuran
3-Nitroaniline+
-Diethylphthalate+
-Fluorene+
-4-Nitroaniline
-4,6-Dinitro-2-Methylpheno+
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-Chrysene
-Bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+
-Total PAHs

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2880.D
Report Date: 03-Apr-2019 12:39

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2880.D
Lab Smp Id: WG249502-7
Inj Date : 01-APR-2019 16:24
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-7
Misc Info :
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date : 01-APR-2019 16:24   Cal File: N2880.D
Als bottle: 7   Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * Uf*(Vt/Vo*Vi)*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Correction Factor
Vt	0.00100	Final Volume (L)
Vo	1.000	Sample Volume (L)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
$	1 1,4-Dioxane-d8	96	2.496	2.496	(0.361)	159650	15.0000	13.5	
	2 1,4-Dioxane	88	2.538	2.538	(0.367)	190905	15.0000	13.8	
	3 N-Nitrosodimethylamine	74	3.063	3.063	(0.443)	264740	15.0000	14.5	
	4 Pyridine	79	3.084	3.084	(0.446)	456978	15.0000	14.9	
	5 Benzaldehyde	77	6.346	6.346	(0.917)	275465	15.0000	15.0(A)	
	6 Phenol	94	6.628	6.628	(0.958)	605194	15.0000	14.3	
	7 Bis(2-Chloroethyl)ether	93	6.608	6.608	(0.955)	517513	15.0000	11.8	
	8 2-Chlorophenol	128	6.688	6.688	(0.967)	562906	15.0000	14.6	
	9 1,3-Dichlorobenzene	146	6.839	6.839	(0.988)	599680	15.0000	15.0(A)	
*	10 1,4-Dichlorobenzene-D4	152	6.920	6.920	(1.000)	24353	0.80000	(aQ)	
	11 1,4-Dichlorobenzene	146	6.940	6.940	(1.003)	622903	15.0000	14.6	
	12 1,2-Dichlorobenzene	146	7.131	7.131	(1.031)	587153	15.0000	13.7	
	13 2-Methylphenol	108	7.372	7.372	(1.065)	473864	15.0000	14.8	
	14 2,2'-Oxybis(1-chloropropane)	45	7.312	7.312	(1.057)	470312	15.0000	15.0(A)	
	15 Acetophenone	105	7.463	7.463	(0.871)	697129	15.0000	15.0(A)	
	16 N-Nitroso-di-n-propylamine	70	7.483	7.483	(1.081)	372145	15.0000	15.0(A)	
	17 3&4-Methylphenol	108	7.594	7.594	(1.097)	508195	15.0000	15.0(A)	
	18 Hexachloroethane	117	7.564	7.564	(1.093)	227219	15.0000	15.0(A)	
	19 Nitrobenzene	77	7.664	7.664	(0.894)	583611	15.0000	13.0	
	20 Isophorone	82	7.997	7.997	(0.933)	874869	15.0000	15.0(A)	
	21 2-Nitrophenol	139	8.097	8.097	(0.945)	289932	15.0000	14.8	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2880.D
Report Date: 03-Apr-2019 12:39

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
22	2,4-Dimethylphenol	107	8.238	8.238	(0.961)	503332	15.0000	14.6	
23	bis(2-Chloroethoxy)methane	93	8.309	8.309	(0.969)	571079	15.0000	14.9	
24	2,4-Dichlorophenol	162	8.470	8.470	(0.988)	348673	15.0000	13.2	
25	1,2,4-Trichlorobenzene	180	8.520	8.520	(0.994)	428740	15.0000	14.0	
* 26	Naphthalene-D8	136	8.570	8.570	(1.000)	78228	0.80000	(a)	
27	Naphthalene	128	8.601	8.601	(1.004)	1332729	15.0000	13.9	
28	4-Chloroaniline	127	8.721	8.721	(1.018)	570323	15.0000	15.0(A)	
29	Hexachlorobutadiene	225	8.802	8.802	(1.027)	252753	15.0000	13.0	
30	Caprolactam	113	9.173	9.173	(1.070)	138176	15.0000	15.0(A)	
31	4-Chloro-3-Methylphenol	107	9.458	9.458	(1.104)	401418	15.0000	14.6	
$ 32	2-Methylnaphthalene-D10	152	9.488	9.488	(1.107)	645501	15.0000	13.8	
33	2-Methylnaphthalene	115	9.527	9.527	(1.112)	336701	15.0000	15.2(A)	
34	1-Methylnaphthalene	142	9.655	9.655	(1.127)	825722	15.0000	15.1(A)	
35	1,2,4,5-Tetrachlorobenzene	216	9.773	9.773	(1.000)	394086	15.0000	14.3	
36	Hexachlorocyclopentadiene	237	9.763	9.763	(1.000)	199600	15.0000	15.2(A)	
$ 37	2,4-Dibromophenol	252	9.941	9.941	(1.000)	263202	15.0000	14.8	
38	2,4,6-Trichlorophenol	196	9.960	9.960	(1.000)	262771	15.0000	15.0(A)	
39	2,4,5-Trichlorophenol	196	10.053	10.053	(1.000)	288682	15.0000	13.2	
40	1,1'-Biphenyl	154	10.162	10.162	(1.000)	1015382	15.0000	13.9	
41	2-Chloronaphthalene	164	10.173	10.173	(1.000)	280200	15.0000	14.2	
42	2-Nitroaniline	65	10.347	10.347	(1.000)	241179	15.0000	15.6(A)	
43	Dimethyl Phthalate	163	10.609	10.609	(1.000)	951517	15.0000	14.3	
44	2,6-Dinitrotoluene	165	10.674	10.674	(1.000)	222984	15.0000	15.6(A)	
45	Acenaphthylene	152	10.707	10.707	(1.000)	1229765	15.0000	14.0	
46	3-Nitroaniline	138	10.903	10.903	(1.000)	182572	15.0000	15.4(A)	
* 47	Acenaphthene-D10	164	10.903	10.903	(1.000)	34263	0.80000	(aM)	M6
48	Acenaphthene	153	10.946	10.946	(1.000)	749996	15.0000	14.0	
49	2,4-Dinitrophenol	184	11.055	11.055	(1.000)	102200	15.0000	15.0(A)	
50	4-Nitrophenol	109	11.328	11.328	(1.000)	80335	15.0000	15.9(A)	
51	2,4-Dinitrotoluene	165	10.674	10.674	(1.000)	222984	15.0000	15.1(A)	
52	Dibenzofuran	168	11.186	11.186	(1.000)	1068525	15.0000	14.4	
53	2,3,4,6-Tetrachlorophenol	232	11.404	11.404	(1.000)	232618	15.0000	14.9	
54	Diethylphthalate	149	11.557	11.557	(1.000)	969161	15.0000	13.9	
$ 55	Fluorene-D10	174	11.600	11.600	(1.000)	554289	15.0000	13.9(A)	
56	Fluorene	166	11.644	11.644	(1.000)	781693	15.0000	14.5	
57	4-Chlorophenyl-phenylether	204	11.666	11.666	(1.000)	422936	15.0000	14.4	
58	4-Nitroaniline	138	11.731	11.731	(1.000)	120730	15.0000	14.8	
59	4,6-Dinitro-2-Methylphenol	198	11.775	11.775	(0.914)	111602	15.0000	15.0(A)	
60	N-Nitrosodiphenylamine	169	11.840	11.840	(0.919)	656360	15.0000	14.6	
61	4-Bromophenyl-phenylether	248	12.315	12.315	(0.956)	211936	15.0000	13.8	
62	Hexachlorobenzene	284	12.390	12.390	(0.962)	176442	15.0000	15.1(A)	
63	Atrazine	200	12.593	12.593	(0.978)	169702	15.0000	15.0(A)	
64	Pentachlorophenol	266	12.700	12.700	(0.986)	96541	15.0000	14.8	
* 65	Phenanthrene-D10	188	12.881	12.881	(1.000)	44483	0.80000	(a)	
66	Phenanthrene	178	12.913	12.913	(1.002)	827554	15.0000	15.2(A)	
67	Anthracene	178	12.988	12.988	(1.008)	958685	15.0000	13.0	
68	Carbazole	167	13.245	13.245	(1.028)	705112	15.0000	14.4	
69	Di-n-butylphthalate	149	13.756	13.756	(1.068)	1299288	15.0000	14.1	
70	Fluoranthene	202	14.511	14.511	(1.127)	644739	15.0000	14.2	
$ 71	Pyrene-D10	212	14.778	14.778	(0.894)	385279	15.0000	14.4(A)	
72	Pyrene	202	14.800	14.800	(0.895)	626167	15.0000	14.0	
73	Butylbenzylphthalate	149	15.755	15.755	(0.953)	347067	15.0000	14.5	
74	3,3'-Dichlorobenzidine	252	16.543	16.543	(1.001)	116475	15.0000	14.9	
75	Benzo(a)anthracene	228	16.510	16.510	(0.999)	319021	15.0000	16.2(A)	

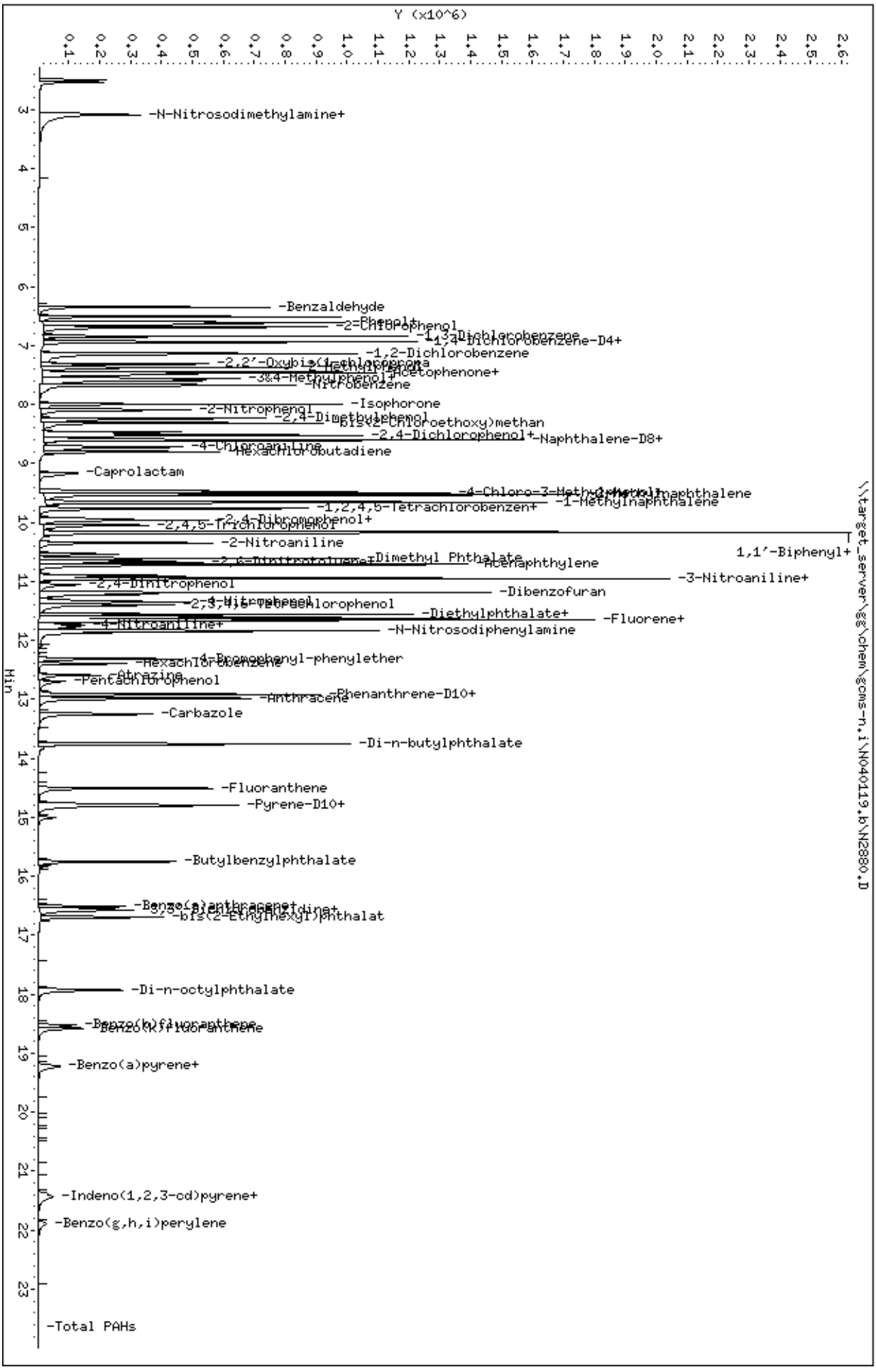
11:02 am, Apr 04, 2019

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2880.D
Report Date: 03-Apr-2019 12:39

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/ml)	(ug/ml)	REVIEW CODE
*	76 Chrysene-D12	240	16.532	16.532	(1.000)	15246	0.80000	(a)	
	77 Chrysene	228	16.565	16.565	(1.002)	420073	15.0000	15.0(A)	
	78 bis(2-Ethylhexyl)phthalate	149	16.699	16.699	(1.010)	468723	15.0000	14.2	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.085)	631779	15.0000	14.7	
	80 Benzo(b)fluoranthene	252	18.526	18.526	(0.958)	195616	15.0000	15.1(A)	
	81 Benzo(k)fluoranthene	252	18.582	18.582	(0.961)	318227	15.0000	14.5(H)	
	82 Benzo(a)pyrene	252	19.211	19.211	(0.993)	207210	15.0000	15.1(A)	
*	83 Perylene-D12	264	19.346	19.346	(1.000)	8720	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.389	21.389	(1.294)	146792	15.0000	13.7	
	85 Dibenzo(a,h)anthracene	278	21.445	21.445	(1.109)	117986	15.0000	15.1(A)	
	86 Benzo(g,h,i)perylene	276	21.883	21.883	(1.131)	121301	15.0000	15.1(A)	
M	87 Total PAHs	100				10159977	270.000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2880.D
Date : 01-APR-2019 16:24
Client ID:
Sample Info: WG249502-7
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2880.D
Y (x10^6)
Min
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa
-2-Methylphenol
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-Bis(2-Chloroethoxy)methan
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-2,6-Dinitrotoluene+
Dimethyl Phthalate
-Acenaphthylene
-3-Nitroaniline+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
-2,3,4,6-Tetrachlorophenol
-Diethylphthalate+
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-Benzo(a)anthracene+
-Chrysene+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Report Date: 05-Apr-2019 10:59

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Lab Smp Id: WG249502-8
Inj Date : 01-APR-2019 16:56
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249502-8
Misc Info : WG249502,WG249502,WG249502-4
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040119.b\NSPSIM58.m
Meth Date : 02-Apr-2019 07:37 cgomez   Quant Type: ISTD
Cal Date :   Cal File:
Als bottle: 8   QC Sample: INDCHECK
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.12

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.01000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
2	1,4-Dioxane	88	2.549	2.538	(0.368)	69146	5.48743	5.49	
3	N-Nitrosodimethylamine	74	3.094	3.063	(0.447)	92369	5.62972	5.63	
4	Pyridine	79	3.126	3.084	(0.452)	152985	4.66229	4.66	
5	Benzaldehyde	77	6.356	6.346	(0.919)	98687	5.10272	5.10	
6	Phenol	94	6.648	6.628	(0.961)	188073	4.89345	4.89	
7	Bis(2-Chloroethyl)ether	93	6.618	6.608	(0.956)	190001	4.76291	4.76	
8	2-Chlorophenol	128	6.698	6.688	(0.968)	173973	4.94844	4.95	
9	1,3-Dichlorobenzene	146	6.839	6.839	(0.988)	186304	4.40854	4.41	
* 10	1,4-Dichlorobenzene-D4	152	6.919	6.920	(1.000)	22133	0.80000	(aQ)	
11	1,4-Dichlorobenzene	146	6.940	6.940	(1.003)	202215	5.20681	5.21	
12	1,2-Dichlorobenzene	146	7.141	7.131	(1.032)	194734	5.00160	5.00	
13	2-Methylphenol	108	7.382	7.372	(1.067)	153818	5.28163	5.28	
14	2,2'-Oxybis(1-chloropropane)	45	7.312	7.312	(1.057)	104487	3.00920	3.01(R)	
15	Acetophenone	105	7.463	7.463	(0.870)	207849	4.25086	4.25	
16	N-Nitroso-di-n-propylamine	70	7.483	7.483	(1.081)	108843	3.97705	3.98(R)	
17	3&4-Methylphenol	108	7.594	7.594	(1.097)	135246	4.39737	4.40(Q)	
18	Hexachloroethane	117	7.564	7.564	(1.093)	72697	4.43069	4.43	
19	Nitrobenzene	77	7.674	7.664	(0.894)	197239	5.21065	5.21	
20	Isophorone	82	7.986	7.997	(0.931)	248757	4.13582	4.14	
21	2-Nitrophenol	139	8.097	8.097	(0.944)	87712	5.31244	5.31	
22	2,4-Dimethylphenol	107	8.248	8.238	(0.961)	148162	5.10324	5.10	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Report Date: 05-Apr-2019 10:59

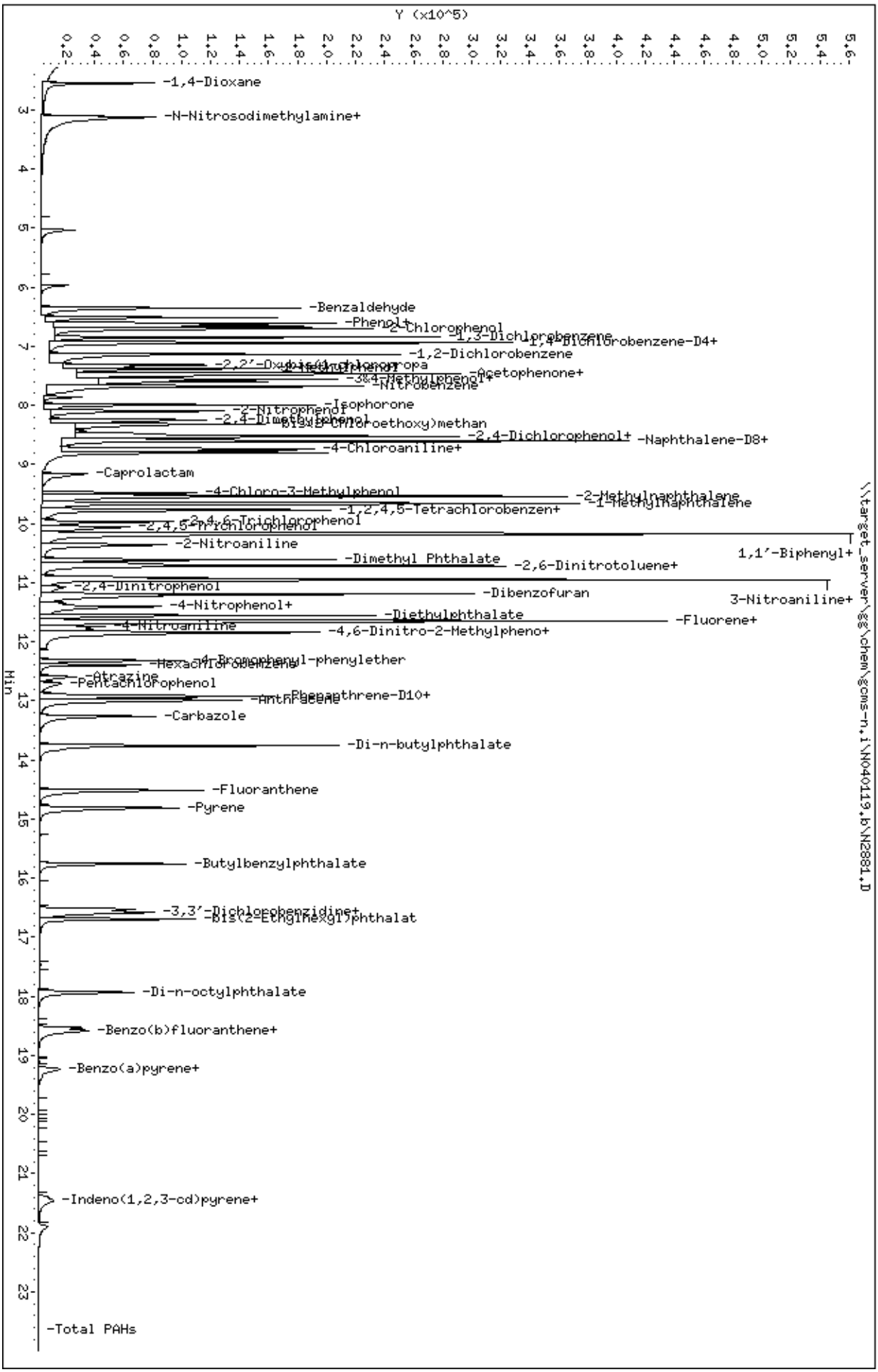
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	23 bis(2-Chloroethoxy)methane	93	8.319	8.309	(0.969)	176938	4.60146	4.60	
	24 2,4-Dichlorophenol	162	8.500	8.470	(0.991)	125642	5.63116	5.63	
	25 1,2,4-Trichlorobenzene	180	8.520	8.520	(0.993)	141817	5.49783	5.50	
*	26 Naphthalene-D8	136	8.580	8.570	(1.000)	66027	0.80000	(a)	
	27 Naphthalene	128	8.600	8.601	(1.002)	420036	5.19140	5.19	
	28 4-Chloroaniline	127	8.741	8.721	(1.019)	169730	4.77688	4.78	
	29 Hexachlorobutadiene	225	8.802	8.802	(1.026)	85227	5.21455	5.21	
	30 Caprolactam	113	9.163	9.173	(1.068)	39788	4.60191	4.60	
	31 4-Chloro-3-Methylphenol	107	9.478	9.458	(1.105)	113071	4.87125	4.87	
	33 2-Methylnaphthalene	115	9.537	9.527	(1.111)	100686	5.39621	5.40(Q)	
	34 1-Methylnaphthalene	142	9.655	9.655	(1.125)	279417	4.92646	4.93	
	35 1,2,4,5-Tetrachlorobenzene	216	9.773	9.773	(0.896)	130536	5.54588	5.54	
	36 Hexachlorocyclopentadiene	237	9.763	9.763	(0.895)	37084	3.45965	3.46(R)	
	38 2,4,6-Trichlorophenol	196	9.970	9.960	(0.914)	74451	4.98829	4.99	
	39 2,4,5-Trichlorophenol	196	10.064	10.053	(0.923)	88528	4.74291	4.74	
	40 1,1'-Biphenyl	154	10.162	10.162	(0.932)	337019	5.40803	5.41	
	41 2-Chloronaphthalene	164	10.173	10.173	(0.933)	85776	5.08938	5.09	
	42 2-Nitroaniline	65	10.358	10.347	(0.950)	70343	5.31770	5.32	
	43 Dimethyl Phthalate	163	10.609	10.609	(0.973)	277673	4.89549	4.90	
	44 2,6-Dinitrotoluene	165	10.685	10.674	(0.980)	57742	4.72951	4.73	
	45 Acenaphthylene	152	10.718	10.707	(0.983)	343729	4.57380	4.57	
	46 3-Nitroaniline	138	10.914	10.903	(1.001)	57257	5.66144	5.66	
*	47 Acenaphthene-D10	164	10.903	10.903	(1.000)	29307	0.80000	(a)	
	48 Acenaphthene	153	10.946	10.946	(1.004)	237797	5.17600	5.18	
	49 2,4-Dinitrophenol	184	11.077	11.055	(1.016)	20562	4.34464	4.34	
	50 4-Nitrophenol	109	11.360	11.328	(1.042)	8430	1.95376	1.95(QR)	
	51 2,4-Dinitrotoluene	165	10.685	10.674	(0.980)	57742	4.11884	4.12	
	52 Dibenzofuran	168	11.197	11.186	(1.027)	329905	5.21139	5.21	
	53 2,3,4,6-Tetrachlorophenol	232	11.415	11.404	(1.047)	53869	4.03607	4.04	
	54 Diethylphthalate	149	11.557	11.557	(1.060)	264287	4.41921	4.42	
	56 Fluorene	166	11.644	11.644	(1.068)	226916	4.92775	4.93	
	57 4-Chlorophenyl-phenylether	204	11.676	11.666	(1.071)	126833	5.05766	5.06	
	58 4-Nitroaniline	138	11.742	11.731	(1.077)	43762	6.13336	6.13(R)	
	59 4,6-Dinitro-2-Methylphenol	198	11.796	11.775	(0.915)	26832	4.74553	4.74	
	60 N-Nitrosodiphenylamine	169	11.840	11.840	(0.918)	155476	4.29643	4.30	
	61 4-Bromophenyl-phenylether	248	12.315	12.315	(0.955)	63929	5.18014	5.18	
	62 Hexachlorobenzene	284	12.401	12.390	(0.962)	51084	4.55449	4.55	
	63 Atrazine	200	12.593	12.593	(0.977)	34420	3.42565	3.42(R)	
	64 Pentachlorophenol	266	12.710	12.700	(0.986)	24388	4.63891	4.64	
*	65 Phenanthrene-D10	188	12.892	12.881	(1.000)	35863	0.80000	(a)	
	66 Phenanthrene	178	12.913	12.913	(1.002)	219792	5.00562	5.00	
	67 Anthracene	178	12.988	12.988	(1.007)	277590	4.65386	4.65	
	68 Carbazole	167	13.256	13.245	(1.028)	199337	5.05607	5.06	
	69 Di-n-butylphthalate	149	13.756	13.756	(1.067)	350639	4.73547	4.74	
	70 Fluoranthene	202	14.511	14.511	(1.126)	180307	4.92875	4.93	
	72 Pyrene	202	14.811	14.800	(0.895)	181931	4.71956	4.72	
	73 Butylbenzylphthalate	149	15.755	15.755	(0.952)	96798	4.68194	4.68	
	74 3,3'-Dichlorobenzidine	252	16.554	16.543	(1.001)	37039	5.49863	5.50	
	75 Benzo(a)anthracene	228	16.521	16.510	(0.999)	88940	5.24213	5.24	
*	76 Chrysene-D12	240	16.543	16.532	(1.000)	13169	0.80000	(a)	
	77 Chrysene	228	16.576	16.565	(1.002)	139370	4.50038	4.50	
	78 bis(2-Ethylhexyl)phthalate	149	16.698	16.699	(1.009)	133841	4.70949	4.71	
	79 Di-n-octylphthalate	149	17.931	17.931	(1.084)	175951	4.73482	4.73	
	80 Benzo(b)fluoranthene	252	18.537	18.526	(0.958)	53263	4.79644	4.80	

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\N2881.D
Report Date: 05-Apr-2019 10:59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	81 Benzo(k)fluoranthene	252	18.582	18.582	(0.960)	100479	5.46478	5.46(H)	
	82 Benzo(a)pyrene	252	19.234	19.211	(0.994)	54642	4.47228	4.47	
*	83 Perylene-D12	264	19.357	19.346	(1.000)	7075	0.80000	(a)	
	84 Indeno(1,2,3-cd)pyrene	276	21.400	21.389	(1.294)	36607	3.94634	3.95(R)	
	85 Dibenzo(a,h)anthracene	278	21.457	21.445	(1.108)	29320	4.59363	4.59	
	86 Benzo(g,h,i)perylene	276	21.894	21.883	(1.131)	29778	4.46308	4.46	
M	87 Total PAHs	100				3000600	86.9785	87.0	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.


Data File: \\target_server\gg\chem\gcms-n,i\N040119,b\N2881.D
Date : 01-APR-2019 16:56
Client ID:
Sample Info: WG249502-8
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040119,b\N2881.D
Y (x10^5)
Min
-1,4-Dioxane
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Acetophenone+
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline+
-Caprolactam
-4-Chloro-3-Methylphenol
-2-Methylnaphthalene
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4,6-Trichlorophenol
-2,4,5-Trichlorophenol
-2-Nitroaniline
1,1'-Biphenyl+
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-2,4-Dinitrophenol
-Dibenzofuran
3-Nitroaniline+
-4-Nitrophenol+
-Diethylphthalate
-Fluorene+
-4-Nitroaniline
-4,6-Dinitro-2-Methylpheno+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-Bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene+
-Benzo(a)pyrene+
-Indeno(1,2,3-cd)pyrene+
-Total PAHs

Form 7
Calibration Verification Summary

Lab Name : Katahdin Analytical Services
Project : L1912447 **SDG:** SM3011
Lab ID : WG249824-2 **Analytical Date:** 04/03/19 14:11
Lab File ID : N2927.D **Instrument ID:** GCMS-N
Initial Calibration Date(s): 04/01/19 13:45 04/01/19 16:24 **Column ID:**

Compound	RRF/Amount	RF2	CCAL RRF2	Min	%D/ %Drift	Max %D/ %Drift	Curve Type
2 1,4-Dioxane	0.45546	0.44064	0.44064	0.010	-3.25343	20.00000	Averaged
32 2-Methylnaphthalene-D10	0.47931	0.49339	0.49339	0.010	2.93734	20.00000	Averaged
55 Fluorene-D10	0.93181	0.95768	0.95768	0.010	2.77618	20.00000	Averaged
71 Pyrene-D10	1.40677	1.44011	1.44011	0.010	2.37015	20.00000	Averaged

*** = Compound out of QC criteria**

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2927.D
Report Date: 04-Apr-2019 09:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2927.D
Lab Smp Id: WG249824-2
Inj Date : 03-APR-2019 14:11
Operator : JCG   Inst ID: gcms-n.i
Smp Info : WG249824-2,SM3011
Misc Info : WG249824,WG249824,WG249502-4,SM3011-2
Comment   :
Method   : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez   Quant Type: ISTD
Cal Date : 01-APR-2019 16:24   Cal File: N2880.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: KATHADIN-50E985

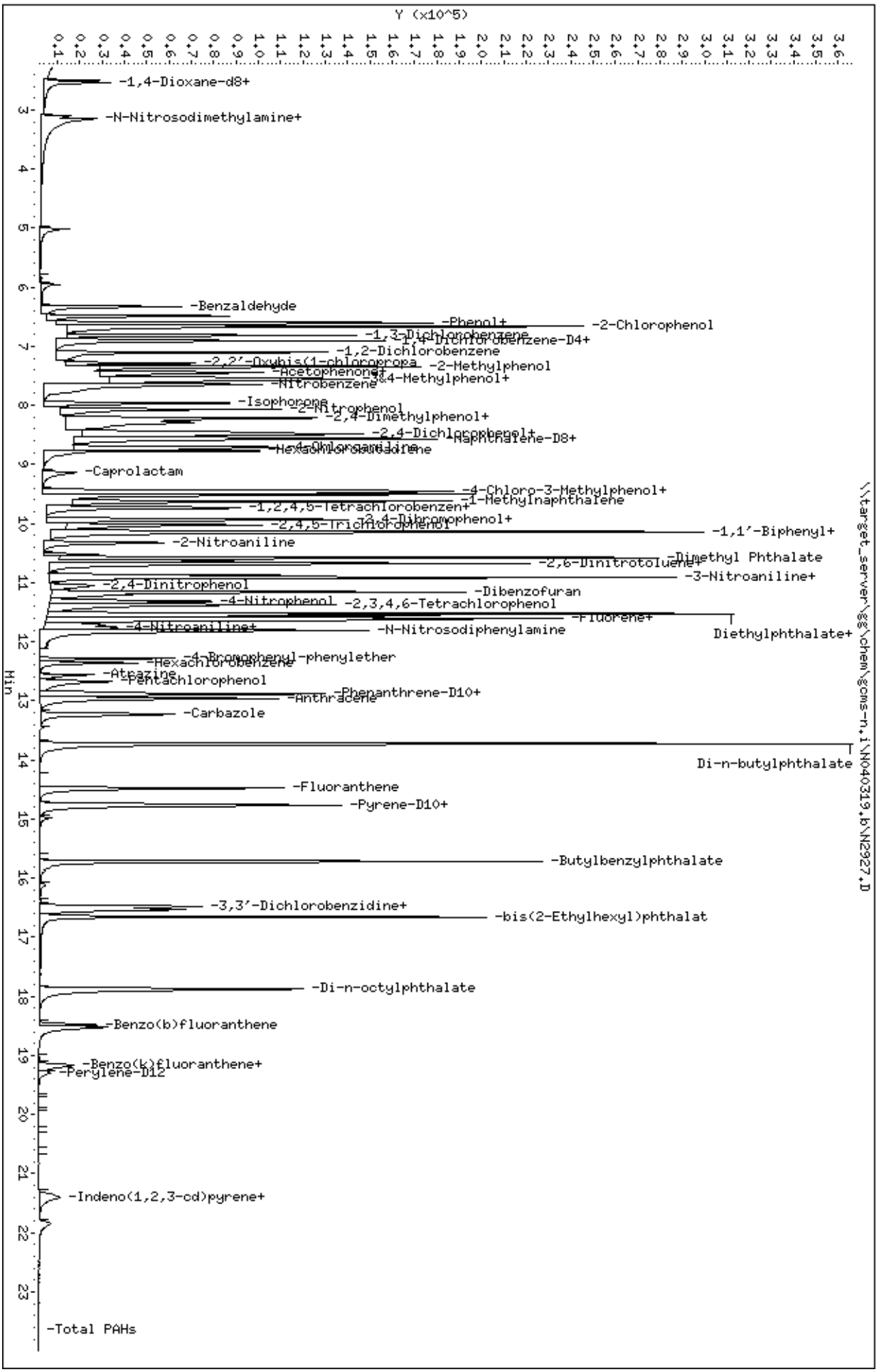
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.01000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/ml)	ON-COL (ug/ml)	REVIEW CODE
	2 1,4-Dioxane	88	2.549	2.538	(0.370)	30663	2.00000	1.93	
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	27835	0.80000	(a)	
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	97477	0.80000	(a)	
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.107)	120235	2.00000	2.06	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	44808	0.80000	(a)	
$	55 Fluorene-D10	174	11.568	11.600	(1.064)	107279	2.00000	2.06	
*	65 Phenanthrene-D10	188	12.860	12.881	(1.000)	66713	0.80000	(a)	
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	95746	2.00000	2.05	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	26594	0.80000	(a)	
*	83 Perylene-D12	264	19.301	19.346	(1.000)	16129	0.80000	(a)	

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).


Y (x10^5)
Min
-1,4-Dioxane-d8+
-N-Nitrosodimethylamine+
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-2,2'-Oxybis(1-chloropropa
-Acetophenone
-2-Methylphenol
-3&4-Methylphenol+
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-2,4-Dichlorophenol+
-Naphthalene-D8+
-4-Chloroaniline
-Hexachlorobutadiene
-Caprolactam
-4-Chloro-3-Methylphenol+
-1-Methylnaphthalene
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-2,6-Dinitrotoluene+
-3-Nitroaniline+
-2,4-Dinitrophenol
-Dibenzofuran
-4-Nitrophenol
-2,3,4,6-Tetrachlorophenol
-Fluorene+
-4-Nitroaniline+
-N-Nitrosodiphenylamine
Diethylphthalate+
-4-Bromophenyl-phenylether
-Hexachlorobenzene
-Atrazine
-Pentachlorophenol
-Phenanthrene-D10+
-Anthracene
-Carbazole
Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene+
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Total PAHs
\\target_server\gg\chem\gcms-n,i\N040319,b\N2927.D
Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2927.D
Date : 03-APR-2019 14:11
Client ID:
Sample Info: WG249824-2,SM3011
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\ND721.D

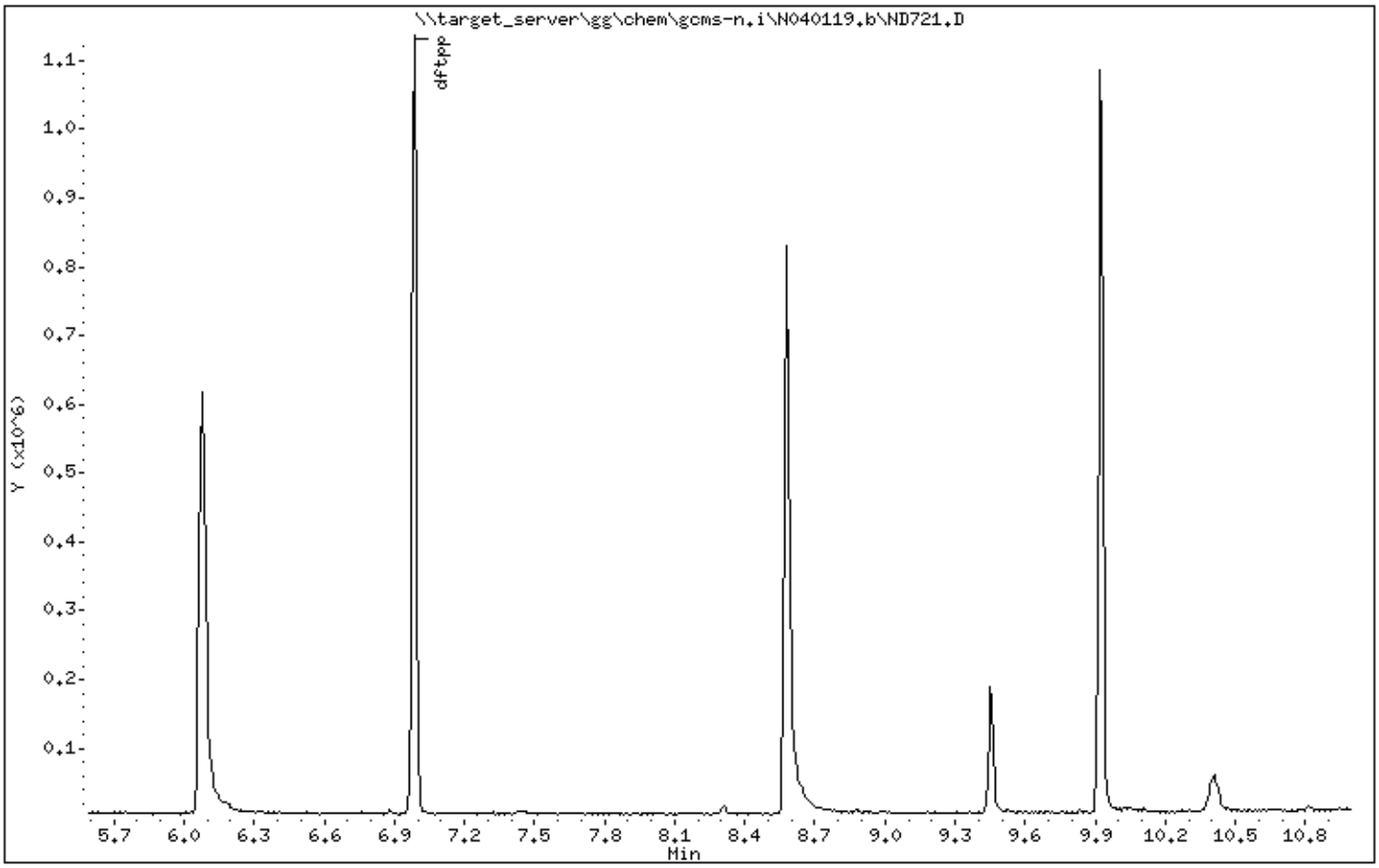
Date : 01-APR-2019 13:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249502-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\ND721.D

Date : 01-APR-2019 13:27

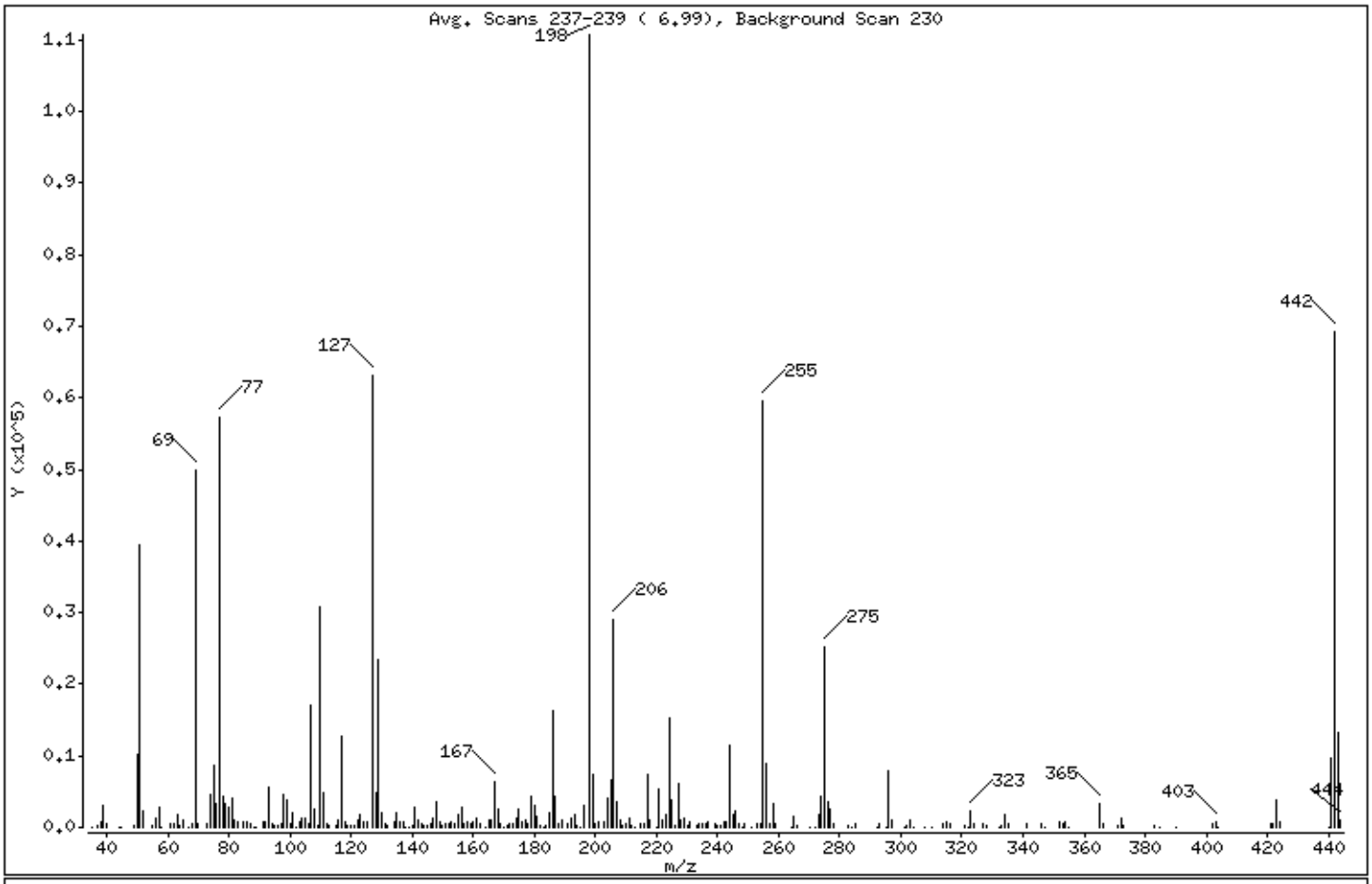
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249502-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.57
68	Less than 2.00% of mass 69	0.35 (0.77)
69	Less than 100.00% of mass 198	45.14
70	Less than 2.00% of mass 69	0.37 (0.81)
127	40.00 - 60.00% of mass 198	56.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	22.74
365	1.00 - 100.00% of mass 198	2.98
441	0.01 - 100.00% of mass 443	8.84 (73.60)
442	40.00 - 100.00% of mass 198	62.54
443	17.00 - 23.00% of mass 442	12.01 (19.20)

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\ND721.D

Date : 01-APR-2019 13:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249502-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND721.D
Spectrum: Avg. Scans 237-239 (6.99), Background Scan 230
Location of Maximum: 198.00
Number of points: 261

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	73	118.00	777	187.00	4244	266.00	270
37.00	179	119.00	252	188.00	562	270.00	79
38.00	668	120.00	326	189.00	897	272.00	117
39.00	3009	121.00	162	191.00	611	273.00	1836
40.00	420	122.00	1088	192.00	1279	274.00	4434
44.00	41	123.00	1712	193.00	1817	275.00	25176
45.00	54	124.00	688	194.00	366	276.00	3458
49.00	280	125.00	867	195.00	110	277.00	2438
50.00	10278	127.00	63040	196.00	3157	278.00	398
51.00	39384	128.00	4954	198.00	110720	283.00	348
52.00	2276	129.00	23320	199.00	7401	284.00	101
55.00	319	130.00	1948	200.00	626	285.00	401
56.00	1224	131.00	389	201.00	638	292.00	50
57.00	2758	132.00	205	203.00	765	293.00	415
58.00	114	134.00	838	204.00	4177	295.00	51
61.00	513	135.00	1982	205.00	6712	296.00	7916
62.00	581	136.00	871	206.00	29000	297.00	983
63.00	1883	137.00	834	207.00	3684	301.00	75
64.00	146	138.00	123	208.00	1095	302.00	171
65.00	955	139.00	109	209.00	275	303.00	913
67.00	64	140.00	354	210.00	460	304.00	58
68.00	383	141.00	2695	211.00	1306	308.00	68
69.00	49984	142.00	1024	212.00	175	310.00	56
70.00	406	143.00	602	213.00	61	314.00	435
73.00	446	144.00	258	215.00	422	315.00	642
74.00	4626	145.00	221	216.00	590	316.00	481
75.00	8569	146.00	434	217.00	7462	321.00	356
76.00	3193	147.00	1251	218.00	914	322.00	69
77.00	57352	148.00	3534	220.00	70	323.00	2317
78.00	4216	149.00	874	221.00	5341	324.00	533
79.00	3332	150.00	147	222.00	938	327.00	390
80.00	2896	151.00	559	223.00	1808	328.00	138
81.00	4026	152.00	383	224.00	15270	332.00	127
82.00	1038	153.00	795	225.00	3872	333.00	358
83.00	887	154.00	584	226.00	262	334.00	1717

Data File: \\target_server\gg\chem\gcms-n.i\N040119.b\ND721.D

Date : 01-APR-2019 13:27

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249502-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND721.D
Spectrum: Avg. Scans 237-239 (6.99), Background Scan 230
Location of Maximum: 198.00
Number of points: 261

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	666	155.00	1810	227.00	6116	335.00	468
86.00	883	156.00	2810	228.00	1139	341.00	391
87.00	432	157.00	519	229.00	1147	346.00	560
88.00	67	158.00	689	230.00	342	347.00	51
89.00	60	159.00	538	231.00	742	352.00	743
91.00	687	160.00	748	233.00	186	353.00	570
92.00	765	161.00	1226	234.00	454	354.00	641
93.00	5651	162.00	410	235.00	604	355.00	122
94.00	427	164.00	72	236.00	409	365.00	3304
95.00	169	165.00	1054	237.00	659	366.00	484
96.00	296	166.00	1092	239.00	563	371.00	175
97.00	413	167.00	6384	240.00	173	372.00	1189
98.00	4556	168.00	2511	241.00	204	373.00	276
99.00	3728	169.00	544	242.00	670	383.00	341
100.00	390	170.00	67	243.00	832	385.00	72
101.00	2032	171.00	209	244.00	11468	390.00	61
102.00	99	172.00	429	245.00	1662	402.00	613
103.00	834	173.00	561	246.00	2244	403.00	648
104.00	1304	174.00	1222	247.00	505	404.00	125
105.00	1371	175.00	2467	248.00	125	421.00	575
106.00	439	176.00	660	249.00	468	422.00	443
107.00	17096	177.00	978	251.00	68	423.00	3882
108.00	2644	178.00	606	253.00	399	424.00	884
109.00	152	179.00	4237	254.00	483	440.00	84
110.00	30816	180.00	3125	255.00	59528	441.00	9785
111.00	4798	181.00	1436	256.00	8837	442.00	69240
112.00	629	182.00	263	257.00	509	443.00	13295
113.00	142	183.00	58	258.00	3396	444.00	1117
115.00	181	184.00	250	259.00	615		
116.00	1068	185.00	2039	264.00	86		
117.00	12652	186.00	16179	265.00	1537		

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\ND723.D

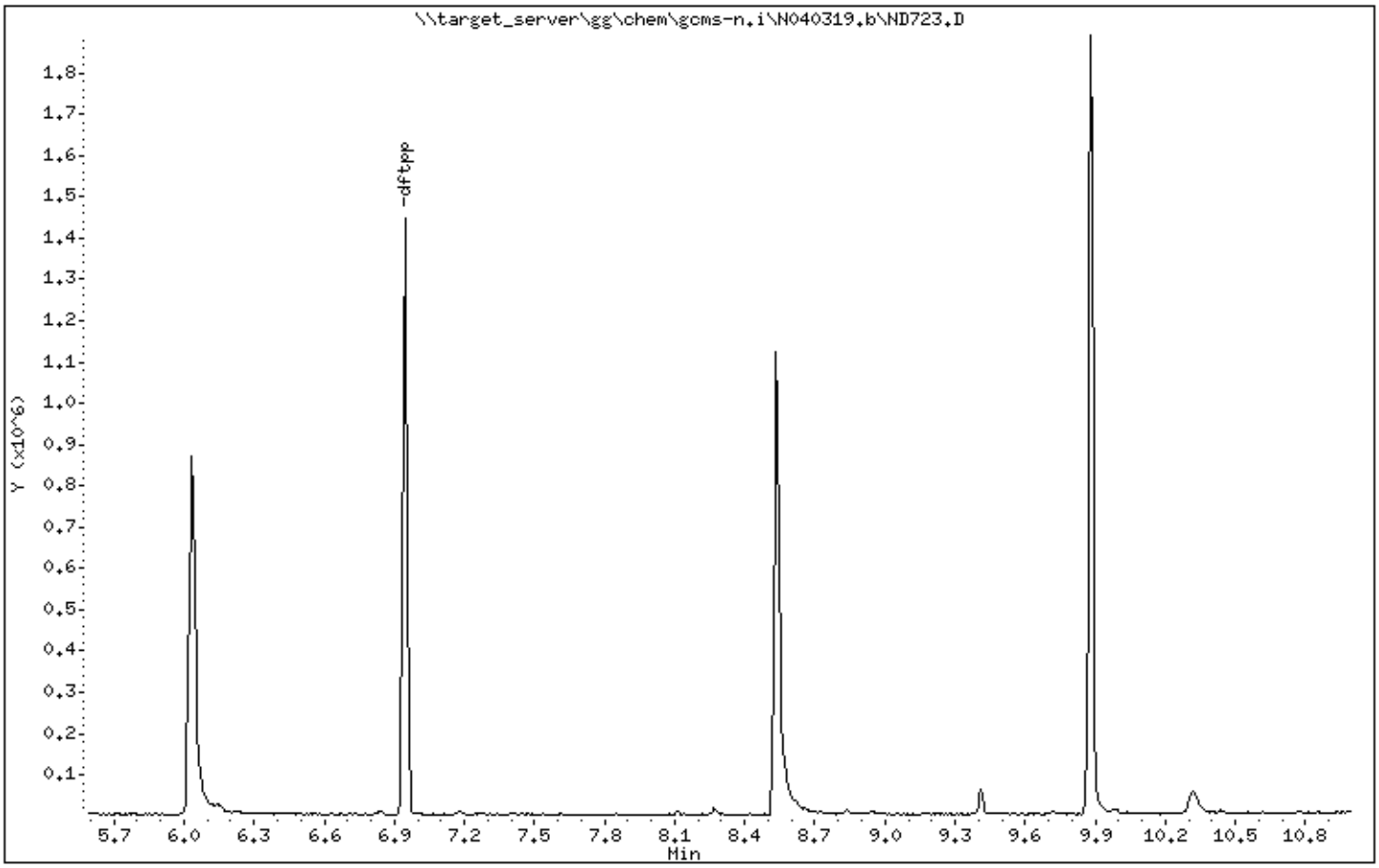
Date : 03-APR-2019 13:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249824-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25



Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\ND723.D

Date : 03-APR-2019 13:53

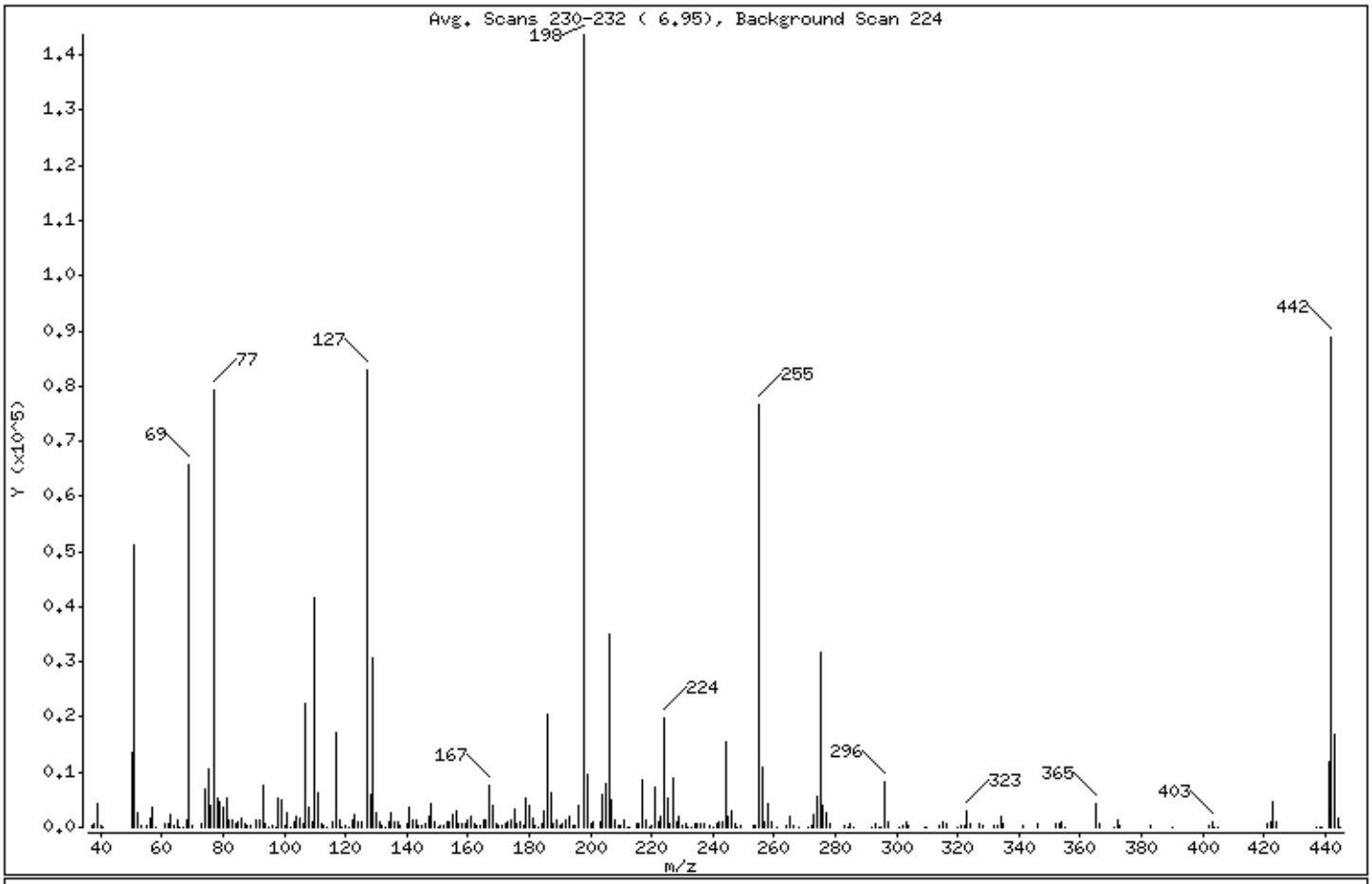
Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249824-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.67
68	Less than 2.00% of mass 69	0.87 (1.90)
69	Less than 100.00% of mass 198	45.79
70	Less than 2.00% of mass 69	0.20 (0.43)
127	40.00 - 60.00% of mass 198	57.59
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 30.00% of mass 198	22.15
365	1.00 - 100.00% of mass 198	2.93
441	0.01 - 100.00% of mass 443	8.23 (70.63)
442	40.00 - 100.00% of mass 198	61.74
443	17.00 - 23.00% of mass 442	11.65 (18.87)

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\ND723.D

Date : 03-APR-2019 13:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249824-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND723.D
Spectrum: Avg. Scans 230-232 (6.95), Background Scan 224
Location of Maximum: 198.00
Number of points: 271

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	307	120.00	412	190.00	307	271.00	121
38.00	699	121.00	141	191.00	647	272.00	265
39.00	4159	122.00	1456	192.00	1434	273.00	2448
40.00	433	123.00	2190	193.00	2089	274.00	5606
41.00	147	124.00	832	194.00	487	275.00	31832
50.00	13506	125.00	1117	195.00	288	276.00	3999
51.00	51256	127.00	82752	196.00	3990	277.00	2754
52.00	2615	128.00	5836	198.00	143680	278.00	498
53.00	182	129.00	30592	199.00	9646	283.00	252
55.00	298	130.00	2520	200.00	649	284.00	156
56.00	1628	131.00	898	201.00	961	285.00	610
57.00	3582	132.00	356	203.00	1013	286.00	57
58.00	91	133.00	60	204.00	5979	292.00	127
61.00	668	134.00	947	205.00	7819	293.00	579
62.00	722	135.00	2610	206.00	35000	294.00	154
63.00	2417	136.00	928	207.00	4846	295.00	153
64.00	475	137.00	1015	208.00	1165	296.00	8117
65.00	1176	138.00	327	209.00	377	297.00	1151
66.00	127	140.00	594	210.00	378	301.00	50
67.00	53	141.00	3653	211.00	1385	302.00	169
68.00	1247	142.00	1332	212.00	65	303.00	995
69.00	65792	143.00	1330	213.00	67	304.00	306
70.00	281	144.00	287	215.00	511	309.00	79
73.00	676	145.00	204	216.00	771	310.00	74
74.00	6855	146.00	545	217.00	8750	314.00	435
75.00	10732	147.00	1905	218.00	1207	315.00	925
76.00	4107	148.00	4220	219.00	98	316.00	532
77.00	79416	149.00	1090	220.00	181	320.00	52
78.00	5208	150.00	84	221.00	7260	321.00	357
79.00	4522	151.00	487	222.00	904	322.00	224
80.00	3597	152.00	432	223.00	2135	323.00	2824
81.00	5311	153.00	1109	224.00	19936	324.00	719
82.00	1383	154.00	1016	225.00	5397	327.00	670
83.00	1246	155.00	2247	226.00	754	328.00	277
84.00	506	156.00	2874	227.00	8937	332.00	183

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\ND723.D

Date : 03-APR-2019 13:53

Client ID: DFTPP02 Instrument: gcms-n.i

Sample Info: WG249824-1,SM3011

Operator: JCG

Column phase: RTX-5SILMS Column diameter: 0.25

Data File: ND723.D
Spectrum: Avg. Scans 230-232 (6.95), Background Scan 224
Location of Maximum: 198.00
Number of points: 271

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	1124	157.00	634	228.00	946	333.00	322
86.00	1551	158.00	653	229.00	1904	334.00	2090
87.00	811	159.00	663	230.00	210	335.00	707
88.00	439	160.00	1179	231.00	819	341.00	334
89.00	214	161.00	2119	232.00	142	346.00	778
91.00	1458	162.00	506	233.00	95	352.00	687
92.00	1240	163.00	300	234.00	539	353.00	559
93.00	7585	164.00	220	235.00	531	354.00	1074
94.00	624	165.00	1411	236.00	585	355.00	105
95.00	14	166.00	1393	237.00	761	365.00	4217
96.00	473	167.00	7526	239.00	304	366.00	590
97.00	57	168.00	3818	240.00	164	371.00	55
98.00	5314	169.00	675	241.00	719	372.00	1404
99.00	4970	170.00	226	242.00	1141	373.00	417
100.00	401	171.00	374	243.00	932	383.00	430
101.00	2683	172.00	665	244.00	15659	390.00	81
102.00	53	173.00	832	245.00	1960	402.00	410
103.00	894	174.00	1439	246.00	3121	403.00	883
104.00	1883	175.00	3218	247.00	642	404.00	142
105.00	1621	176.00	745	248.00	62	405.00	56
106.00	769	177.00	1080	249.00	481	421.00	627
107.00	22600	178.00	486	253.00	460	422.00	851
108.00	3626	179.00	5344	254.00	486	423.00	4566
109.00	848	180.00	3966	255.00	76552	424.00	914
110.00	41776	181.00	1724	256.00	10959	437.00	92
111.00	6132	182.00	369	257.00	827	438.00	107
112.00	675	183.00	153	258.00	4173	439.00	120
113.00	256	184.00	536	259.00	1008	441.00	11821
114.00	71	185.00	2912	261.00	71	442.00	88704
116.00	1047	186.00	20616	264.00	256	443.00	16736
117.00	17248	187.00	6149	265.00	2097	444.00	1739
118.00	1414	188.00	745	266.00	418	445.00	132
119.00	151	189.00	1249	268.00	90		

Raw QC Data Section

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client:
Lab ID: WG249738-1
Client ID: Method Blank Sample
Project:
SDG: SM3011
Lab File ID: N2928.D

Sample Date:
Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: NA
Report Date: 05-APR-19

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,4-Dioxane	U	100	ug/Kgdrywt	1	100	100	1.1
2-Methylnaphthalene-D10		74.7	%				
Fluorene-D10		72.2	%				
Pyrene-D10		84.3	%				

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2928.D
Report Date: 04-Apr-2019 09:44

Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2928.D
Lab Smp Id: WG249738-1 Client Smp ID: WG249738-Blank
Inj Date : 03-APR-2019 14:43
Operator : JCG Inst ID: gcms-n.i
Smp Info : WG249738-1,SM3011
Misc Info : WG249824,WG249738,WG249824-2,SM3011-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

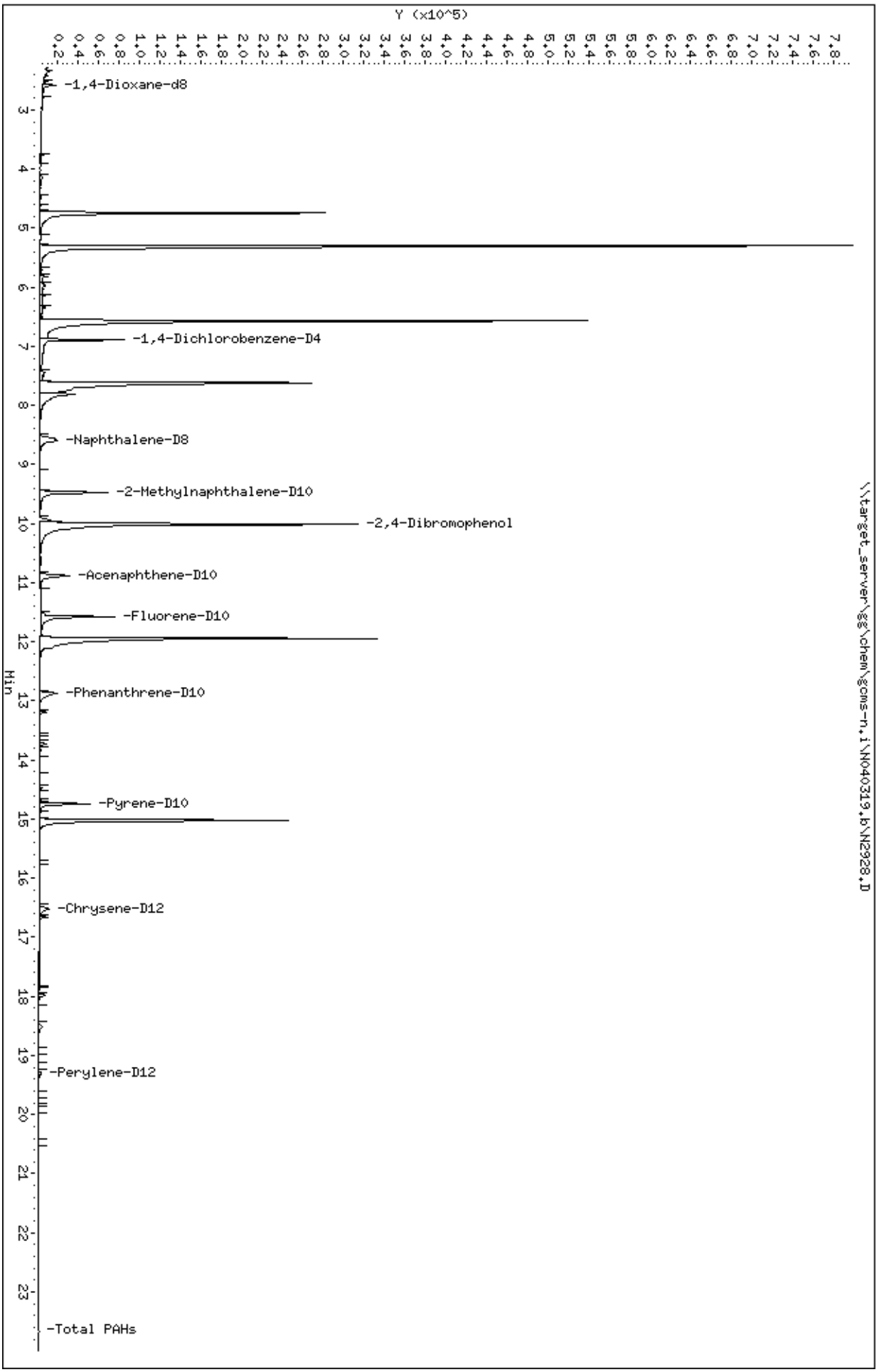
Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	25510	0.80000	(Q)	
*	26 Naphthalene-D8	136	8.590	8.570	(1.000)	78828	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.468	9.488	(1.102)	70536	1.49350	49.8	
*	47 Acenaphthene-D10	164	10.881	10.903	(1.000)	37162	0.80000		
$	55 Fluorene-D10	174	11.578	11.600	(1.064)	62479	1.44344	48.1	
*	65 Phenanthrene-D10	188	12.870	12.881	(1.000)	56798	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.892)	57890	1.68634	56.2	
*	76 Chrysene-D12	240	16.521	16.532	(1.000)	19522	0.80000		
*	83 Perylene-D12	264	19.301	19.346	(1.000)	12614	0.80000		

QC Flag Legend

Q - Qualifier signal failed the ratio test.


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2928.D
Date : 03-APR-2019 14:43
Client ID: WG249738-Blank
Sample Info: WG249738-1,SM3011
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2928.D
Y (x10^5)
Min
-1,4-Dioxane-d8
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-2,4-Dibromophenol
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12
-Total PAHs

Katahdin
ANALYTICAL SERVICES

LCS Recovery Report

Client:
Lab ID: WG249738-2
Client ID: LCS
Project:
SDG: SM3011
LCS File ID: N2929.D

Sample Date:
Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: NA
Report Date: 04-APR-19

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
1,4-Dioxane	33.9	66.7	22.6	ug/Kgdrywt	30-150
2-Methylnaphthalene-D10	74.7				19-94
Fluorene-D10	71.4				20-96
Pyrene-D10	83.5				31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2929.D
Report Date: 04-Apr-2019 09:45

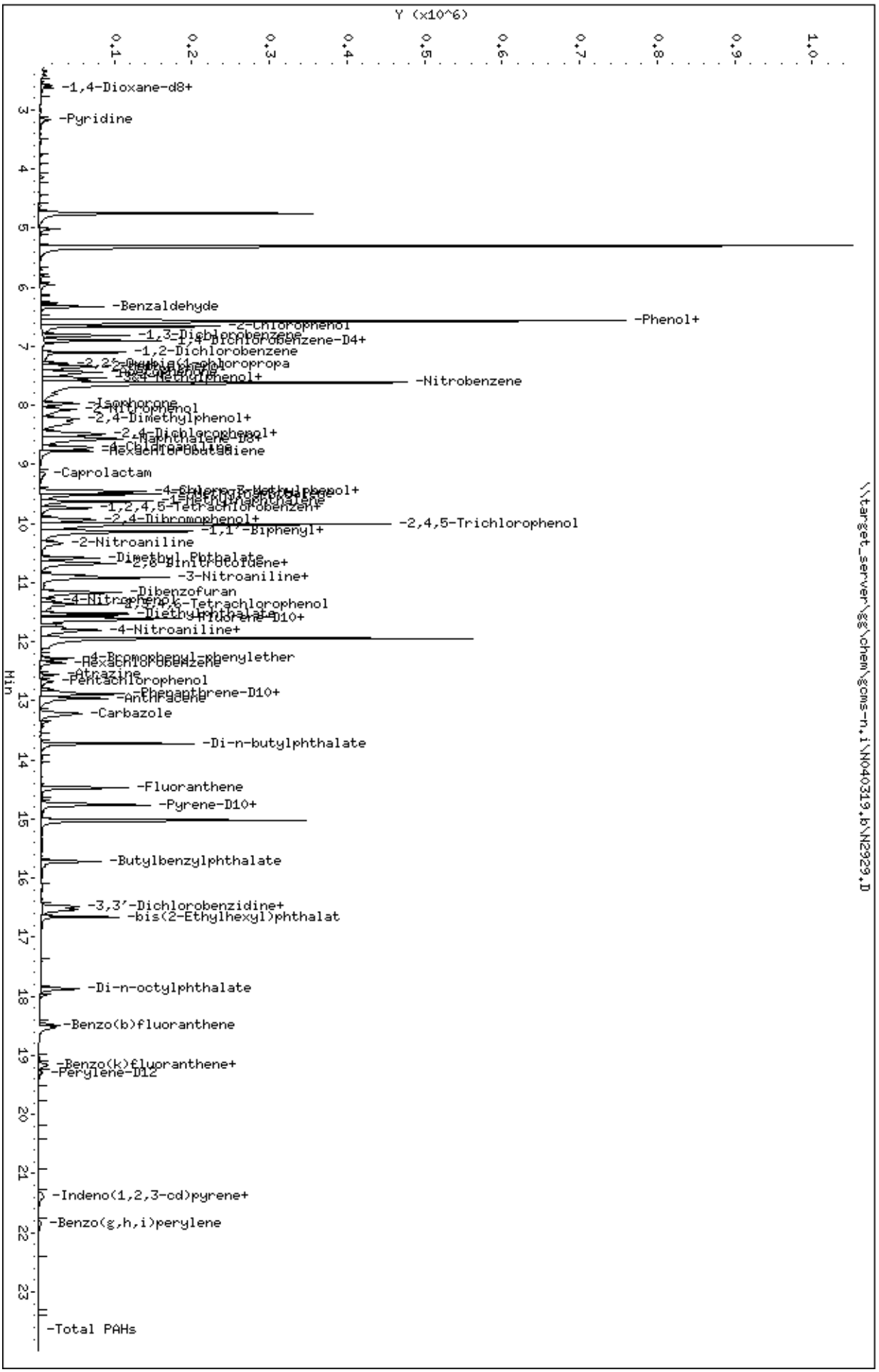
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2929.D
Lab Smp Id: WG249738-2 Client Smp ID: WG249738-LCS
Inj Date : 03-APR-2019 15:14
Operator : JCG Inst ID: gcms-n.i
Smp Info : WG249738-2,SM3011
Misc Info : WG249824,WG249738,WG249824-2,SM3011-2
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03000	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	2 1,4-Dioxane	88	2.622	2.538	(0.381)	11420	0.67904	22.6	
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	29540	0.80000		
*	26 Naphthalene-D8	136	8.550	8.570	(1.000)	90426	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.106)	80941	1.49400	49.8	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	43369	0.80000		
$	55 Fluorene-D10	174	11.568	11.600	(1.064)	72099	1.42729	47.6	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	73918	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	70324	1.67099	55.7	
*	76 Chrysene-D12	240	16.499	16.532	(1.000)	23933	0.80000		
*	83 Perylene-D12	264	19.290	19.346	(1.000)	13310	0.80000		


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2929.D
Date : 03-APR-2019 15:14
Client ID: WG249738-LCS
Sample Info: WG249738-2,SM3011
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2929.D
Y (x10^6)
Min
-1,4-Dioxane-d8+
-Pyridine
-Benzaldehyde
-Phenol+
-2-Chlorophenol
-1,3-Dichlorobenzene
-1,4-Dichlorobenzene-D4+
-1,2-Dichlorobenzene
-Nitrobenzene
-Isophorone
-2-Nitrophenol
-2,4-Dimethylphenol+
-2,4-Dichlorophenol+
-Caprolactam
-1,2,4,5-Tetrachlorobenzen+
-2,4-Dibromophenol+
-2,4,5-Trichlorophenol
-1,1'-Biphenyl+
-2-Nitroaniline
-Dimethyl Phthalate
-3-Nitroaniline+
-Dibenzofuran
-Diethylphthalate
-4-Nitroaniline+
-Atrazine
-Pentachlorophenol
-Anthracene
-Carbazole
-Di-n-butylphthalate
-Fluoranthene
-Pyrene-D10+
-Butylbenzylphthalate
-3,3'-Dichlorobenzidine+
-bis(2-Ethylhexyl)phthalat
-Di-n-octylphthalate
-Benzo(b)fluoranthene
-Benzo(k)fluoranthene+
-Perylene-D12
-Indeno(1,2,3-cd)pyrene+
-Benzo(g,h,i)perylene
-Total PAHs

Katahdin
ANALYTICAL SERVICES

MS/MSD Recovery Report

MS ID: WG249738-5
MSD ID: WG249738-6
Sample ID: SM3011-1
Client ID: RISS1
Project:
SDG: SM3011
MS File ID: N2944.D

Received Date:
Extract Date: 02-APR-19
Extracted By: KM
Extraction Method: SW846 3550C
Lab Prep Batch: WG249738
Report Date: 04-APR-19
MSD File ID: N2945.D

Analysis Date: 03-APR-19
Analyst: JCG
Analysis Method: SW846 M8270D SIM
Matrix: SL
% Solids: 78.

Compound	MS Spike	MSD Spike	Conc Units	Samp Conc	MS Conc	MSD Conc	MS Rec (%)	MSD Rec (%)	RPD (%)	RPD Limit	Limits
1,4-Dioxane	83.7	83.2	ug/Kgdrywt	U130	26.	28.	31.5	34.0	7	50	30-150
2-Methylnaphthalene-D10							60.9	66.2			19-94
Fluorene-D10							56.8	62.2			20-96
Pyrene-D10							72.6	74.0			31-128

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://www.katahdinlab.com

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2944.D
Report Date: 04-Apr-2019 09:45

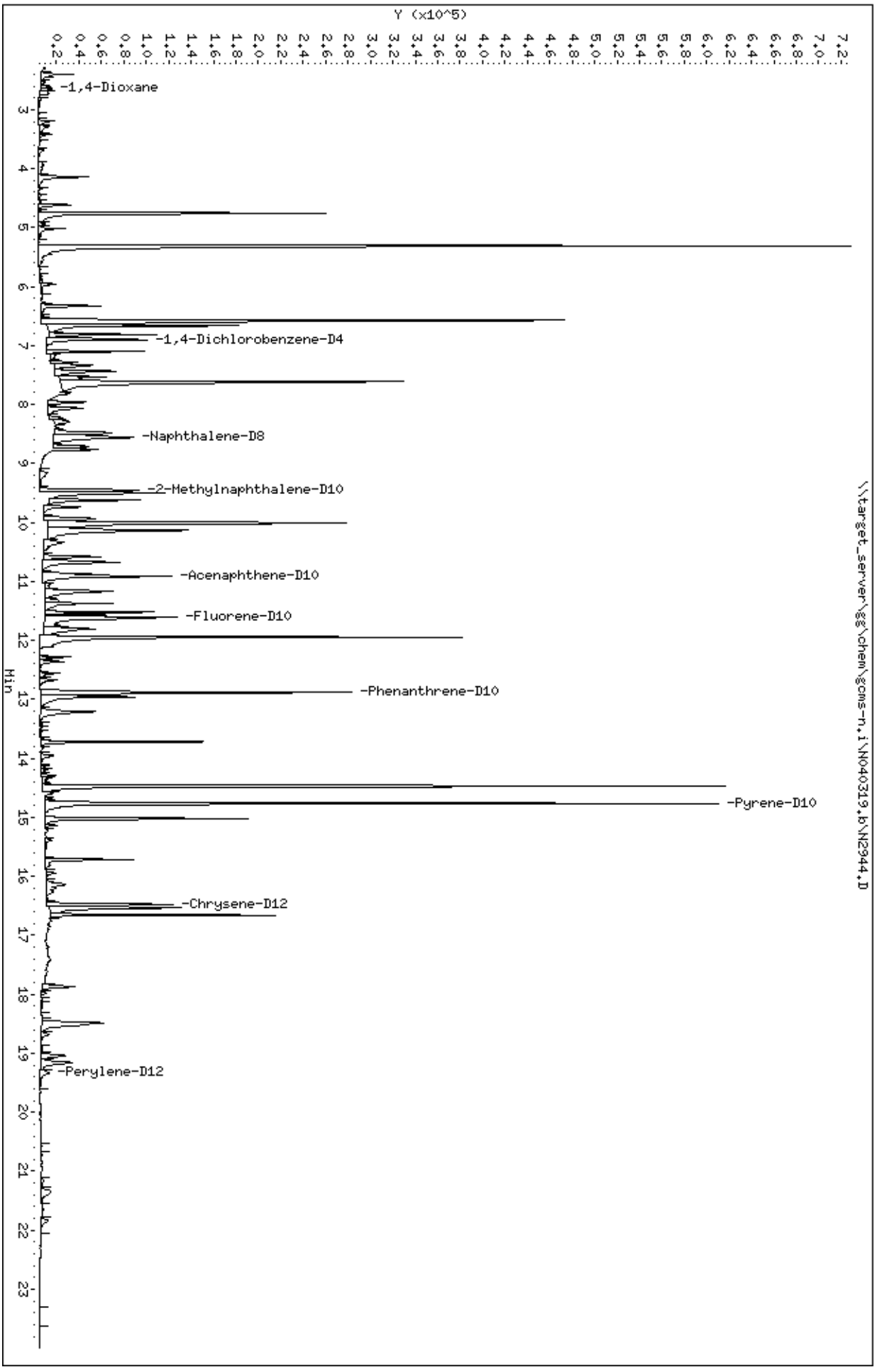
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2944.D
Lab Smp Id: WG249738-5 Client Smp ID: RISS1MS
Inj Date : 03-APR-2019 23:47
Operator : JCG Inst ID: gcms-n.i
Smp Info : WG249738-5,SM3011
Misc Info : WG249824,WG249738,WG249824-2,SM3011-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 19 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03050	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	21.696	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	2 1,4-Dioxane	88	2.653	2.538	(0.385)	10647	0.62995	26.4	
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	29687	0.80000		
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	89716	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.458	9.488	(1.107)	65448	1.21759	51.0	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	37223	0.80000		
$	55 Fluorene-D10	174	11.578	11.600	(1.065)	49208	1.13498	47.5	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	50420	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	33736	1.45153	60.8	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	13217	0.80000		
*	83 Perylene-D12	264	19.290	19.346	(1.000)	6953	0.80000		


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2944.D
Date : 03-APR-2019 23:47
Client ID: RISS4MS
Sample Info: WG249738-5,SM3011
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2944.D
Y (x10^5)
Min
-1,4-Dioxane
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Data File: \\target_server\gg\chem\gcms-n.i\N040319.b\N2945.D
Report Date: 04-Apr-2019 09:45

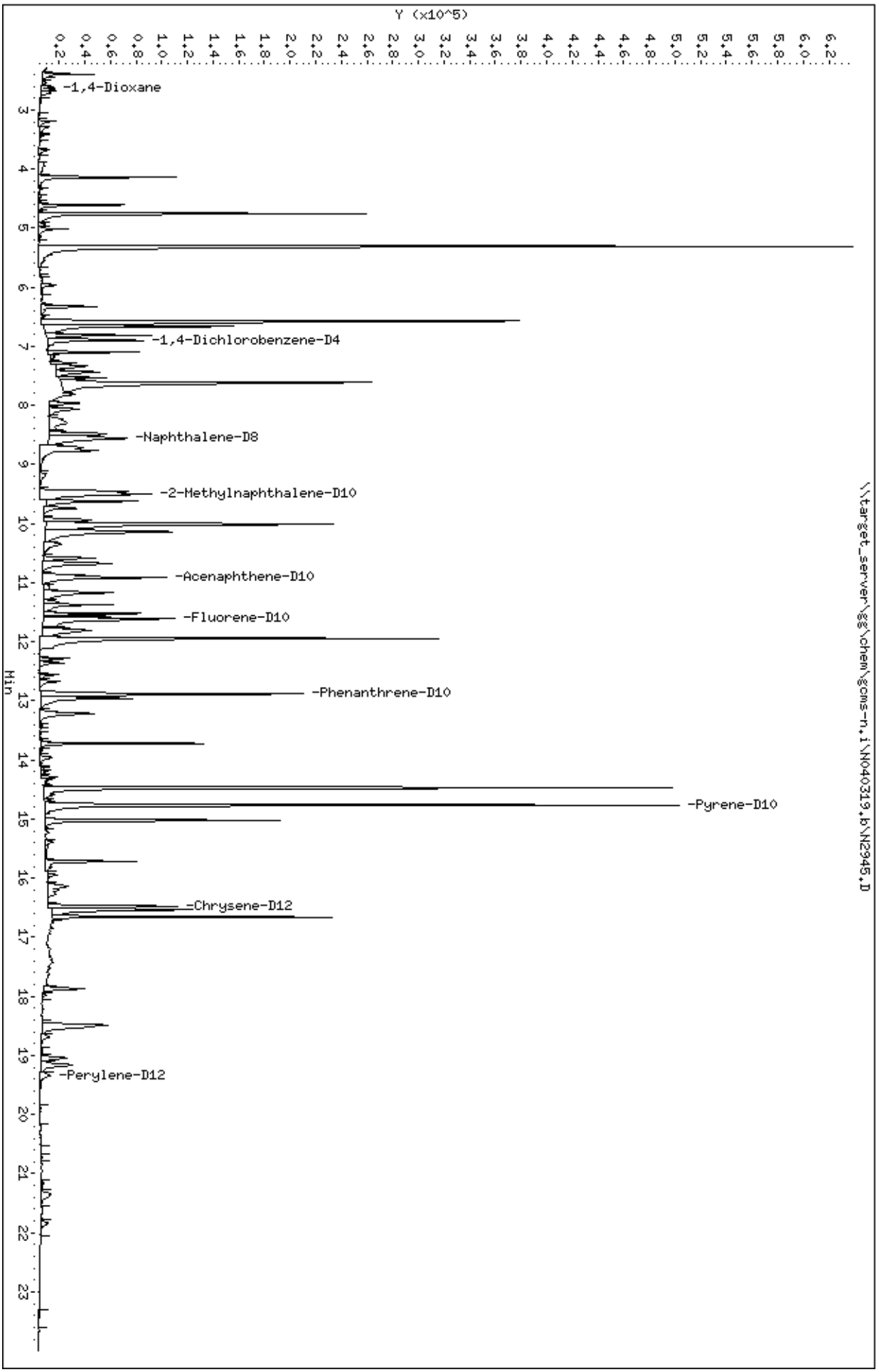
Katahdin Analytical Services

Data file : \\target_server\gg\chem\gcms-n.i\N040319.b\N2945.D
Lab Smp Id: WG249738-6 Client Smp ID: RISS1MSD
Inj Date : 04-APR-2019 00:23
Operator : JCG Inst ID: gcms-n.i
Smp Info : WG249738-6,SM3011
Misc Info : WG249824,WG249738,WG249824-2,SM3011-1
Comment :
Method : \\target_server\gg\chem\gcms-n.i\N040319.b\NSPSIM58.m
Meth Date : 04-Apr-2019 09:03 cgomez Quant Type: ISTD
Cal Date : 01-APR-2019 16:24 Cal File: N2880.D
Als bottle: 20 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dioxane_sl.sub
Target Version: 4.12
Processing Host: V200T4

Concentration Formula: Amt * DF * (Vt/Ws*Vi)*(100/(100-M))*1000 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Ws	0.03070	Weight of Sample (Kg)
Vi	1.000	Volume injected (uL)
M	21.696	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/ml)	FINAL (ug/Kgdrywt)	REVIEW COD
	2 1,4-Dioxane	88	2.653	2.538	(0.385)	9664	0.68026	28.3	
*	10 1,4-Dichlorobenzene-D4	152	6.889	6.920	(1.000)	24953	0.80000		
*	26 Naphthalene-D8	136	8.540	8.570	(1.000)	74295	0.80000		
$	32 2-Methylnaphthalene-D10	152	9.468	9.488	(1.109)	58938	1.32407	55.1	
*	47 Acenaphthene-D10	164	10.870	10.903	(1.000)	31104	0.80000		
$	55 Fluorene-D10	174	11.579	11.600	(1.065)	45127	1.24561	51.8	
*	65 Phenanthrene-D10	188	12.849	12.881	(1.000)	41241	0.80000		
$	71 Pyrene-D10	212	14.744	14.778	(0.894)	34238	1.48019	61.6	
*	76 Chrysene-D12	240	16.488	16.532	(1.000)	13154	0.80000		
*	83 Perylene-D12	264	19.290	19.346	(1.000)	6220	0.80000		


Data File: \\target_server\gg\chem\gcms-n,i\N040319,b\N2945.D
Date : 04-APR-2019 00:23
Client ID: RISS4HSD
Sample Info: WG249738-6,SM3011
Volume Injected (uL): 1.0
Column phase: ZB5-MS
Instrument: gcms-n,i
Operator: JCG
Column diameter: 0.25
\\target_server\gg\chem\gcms-n,i\N040319,b\N2945.D
Y (x10^5)
Min
-1,4-Dioxane
-1,4-Dichlorobenzene-D4
-Naphthalene-D8
-2-Methylnaphthalene-D10
-Acenaphthene-D10
-Fluorene-D10
-Phenanthrene-D10
-Pyrene-D10
-Chrysene-D12
-Perylene-D12

Logbooks and Supporting Documents

SIM SON

KATAHDIN ANALYTICAL SERVICES, LLC
ORGANIC EXTRACTIONS LOG - SOIL SEMIVOLATILE

Extraction Method:	SW846 3550: ✓	SW846 3540:	SW846 3545:	SW846 3546:	SW846 3580:
Analytical Method:	SW846 8270: ✓	OTHER:			
Standards	Surrogate ID (1): SV2901		Spike ID (1): SV2900		Spike ID (3): —
	Surrogate ID (2): —		Spike ID (2): —		—
Solvents / Chemicals / Consumables	Solvent Lot # (MeCl2): DV671-US		Solvent Lot # (Acetone): 182573		Sodium Sulfate (granular) Lot #: 27969001
	Filter Paper Lot # (SON): 168043339		Filter Paper Lot # (KD): 16915343		Sodium Sulfate (powder) Lot #: 27978003
Misc.	Nitrogen Bath Temperature: 36°	Sonicator Horns Tuned: 40%		Balance ID: BAL10	Vial Lot ID: 123225
Prep Start Time: 11:45	Prep Stop Time: 14:30	Sox Start Time: —		Sox End Date: —	Sox End Time: —

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SOIN	Fraction SIN	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Post-GPC Tray Loc. SV429	Comments
4-2-19	KM	WG249738-1	29.97	1.00	NR		✓	4-2-19	LR	5mL	4-3-19	LR	1mL	E6	R505033
		-2	30.03		1.00									E7	
		-3	30.96											8	SM2831-4BEMS
		-4	31.14											9	↓ MSD
		-5	30.51											10	SM3011-1B
↓	↓	↓ -6	30.72	↓	↓		↓	↓	↓	↓				SV425 A1	↓
								GPC Blank						L2	

EX-008 – Revision 3 – 01/25/2016 QAEX378 0000012

Ext. Date	Ext. Init.	Sample ID	Initial Weight (g)	Surr. Vol. (mL)	Spk. Vol. (mL)	Fraction SOIN	Fraction SIN	Pre-GPC Date Conc.	Pre-GPC Conc. Init.	Pre-GPC Final Vol. (mL)	Post-GPC Date Conc.	Post-GPC Conc. Init.	Post-GPC Final Vol. (mL)	Tray Loc. SV425	Comments
4-2-19	KM	SM2934-1A	30.76	1.00	NR		✓	4-2-19	LR	5mL	4-3-19	LR	1mL	A3	
		-2A	30.10											4	
		-3EA	30.64											5	
		-4A	30.44											6	
		-5	30.82											7	
		-6	30.34											8	
		-7	30.45											9	
		-8	31.11											10	
		-9	30.79											B1	
		↓ -10	30.86											2	
		SM3011-1C	30.37											3	MS/MSD
		-2A	31.23											4	
		-3	30.62											5	
↓	↓	↓ -4	30.87	↓	↓		↓	↓	↓	↓	↓	↓	↓	6	

Reviewed By_____ Date_____ 000001

EX-008 – Revision 3 – 01/25/2016 QAEX378

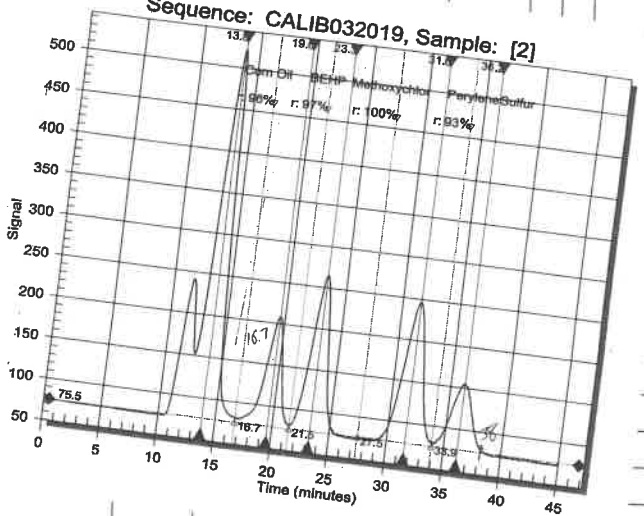
Katahdin Analytical Services
GPC02 Logbook

Analytical Method: (check one)	SW846 8081 ~	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: DV6711-03	Filter Lot #: —	Room Temperature (beginning):	19.1	Room Temperature (ending):	19.1
Flow Rate: 5.0	Flow Rate Set at: 4.8	GPC Dump Time:	45mL	GPC Collect Time:	—
Time to fill 50 mL: 9.50	Column Pressure: 0				

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
1	Rinse	~	2	MS	3-28-19	5mL	✓	✓	
2	GPC Calib	~	2	J	↓	✓	✓	✓	
3	STD B151								
4	0.25mL - 0.10mL								
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

Katahdin Analytical Services
GPC02 Logbook

Tray Pos. No.	S	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									



P/P
dump 21.5
collect 12.4

SV
dump 16.7
collect ~~21.8~~ 22.3
AC 3-28-19

Katahdin Analytical Services
GPC02 Logbook

Analytical Method: (check one)	SW846 8081 ✓	SW846 8082 ✓		SW846 8270 ✓	
MeCl2 Lot #: OV671-US	Filter Lot #:	Room Temperature (beginning):	19.0	Room Temperature (ending):	21.4
Flow Rate: 5.0	Flow Rate Set at: 4.8	GPC Dump Time:	SS 14.7 DP 12.4	GPC Collect Time:	SS 22.3 DP ~~22.5~~ 22.4
Time to fill 50 mL: 9.50	Column Pressure: 0				

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
1	GPC Blank S/S	—	—	KM	4-2-19	5mL	✓		
2	WG249738-1	4-2-19	5mL	↓	↓	↓	↓		
3	-2	↓	↓						
4	-3								
5	-4								
6	-5								
7	-6								
8	SM2934-1								
9	-2								
10	-3								
11	-4								
12	-5								
13	-6								
14	-7								
15	-8								
16	-9								
17	-10								
18	SM3011-1								
19	-2								
20	-3								
21	-4	↓	↓				↓		
22	GPC Blank P/P	—	—	↓	↓	↓		✓	

Katahdin Analytical Services
GPC02 Logbook

Tray Pos. No.	Sample Identification	Date Extracted	Extract Volume	GPC Analyst	Date GPC Started	GPC Initial Volume	S V	P P	Comments
23	WG249735 WG249736-1	4-2-19	10mL	KM	4-2-19	5mL		✓	
24	WG249735-2	↓	↓	↓	↓	↓		↓	restarted next pass
25	↓ -3								
26	WG249736-2								
27	SM2865-1								
28	SM2945-1								
29	-2								
30	-3								
31	SM3089-1								
32	SM2893-1								
33	-2								
34	-3								
35	-4								
36	-5								
37									
38									
39									
40									
41									
42									
43									
44									
45									

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 040119

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG249502-4	50 ng DFTPP	ND721	1	1	DFTPP5M	2.0	JCL	OK
-4	SSTD 2.0 N0401	N2875		2	N5P5M58			✓
-2	0.2	76		3				✓
-3	0.5	77		4				✓
-5	1.0	78		5				✓
-6	10	79		6				✓
-7	15	80		7				✓
-8	IND	81		8				OK
	WG249402-2	82		9				OK
	↓ -1	83		10				OK
	SM2824-1	84		11				OK
	-2	85		12				OK
	-3	86		13				OK
	-4	87		14				OK
	-5	88		15				OK
	-6	89		16				OK
	SM2835-1	90		17				OK
	-2	91		18				OK
	↓ -3	92		19				OK
	WG249498-3	93		20				OK
	↓ -4	94		21				OK
	SM2835-4	95		22				OK
-9	SSTD 2.0 N0401	96		23				OK
-10	↓	97		↓				-
-11	↓	98	↓	↓	↓	↓	↓	-
	SM2694-12	99		24				EPH
	-13	N2900		25				↓
	↓ -14	↓ 01	↓	26	↓	↓	↓	↓

STANDARD	CODE
DFTPP	53228
CAL. STD.	53208 53225
ICV. STD.	53226
IS MIX	53220

REVIEWED AND APPROVED BY: _____
DATE: _____

KATAHDIN ANALYTICAL SERVICES
GC/MS SVOA INJ LOG INSTRUMENT: 5975B - N

DATE OF DFTPP INJECTION: 040319

JOB	SAMPLE	DATAFILE	DF	VIAL #	METHOD	UL INJ	CHEMIST	COMMENTS
WG249824-1	50ng DFTPP	ND723	1	1	DFTPPSIM	2.0	JLL	OK
-2	SSTD 2.0 ND403	N2927		2	NSPSIMSF			OK
	WG249738-1	28		3				OK
	L -2	29		4				OK
	SM2934-1	30		5				OK
	-2	31		6				OK
	-3	32		7				OK
	-4	33		8				OK
	-5	34		9				OK
	-6	35		10				15CL
	-7	36		11				OK
	-8	37		12				OK
	-9	38		13				OK
	-10	39		14				OK
	SM3011-1	40		15				OK
	-2	41		16				15CL
	-3	42		17				15CL SS3T
	-4	43		18				OK
	WG249738-5	44		19				OK
	L -6	45		20				OK
-3	SSTD 2.0 ND403	46		21				—
4		47						—
5		48						

STANDARD	CODE
DFTPP	53228
CAL. STD.	53205 53225
ICV. STD.	—
IS MIX	53220

REVIEWED AND APPROVED BY: _____
DATE: _____

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Blank Sample Summary Report

Total Solids

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL
MBLANK	WG249741	SW3540C	03-APR-19	02-APR-19	100 %	1 %

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Laboratory Control Sample Summary Report

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG249741-2	LCS	WG249741	03-APR-19	02-APR-19	%	90	89.	99	90-110	

Katahdin
ANALYTICAL SERVICES

Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG249741-3	SM3011-1	WG249741	03-APR-19	%	78.	79.	0	20

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

http://katahdinlab.com
sales@katahdinlab.com

Sample Data Section

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-1
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS1	SL	27-MAR-19 14:10:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	78. %	1		SW3540C	WG249741	03-APR-19 09:23:40	SW3540C	02-APR-19	BP		

600 Technology Way
P.O. Box 540, Scarborough, ME 04070

http://katahdinlab.com
sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-2
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS3	SL	27-MAR-19 15:45:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	89. %	1		SW3540C	WG249741	03-APR-19 09:23:55	SW3540C	02-APR-19	BP		

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-3
Report Date: 10-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
FD01_190327	SL	27-MAR-19 00:00:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	86. %	1		SW3540C	WG249741	03-APR-19 09:24:15	SW3540C	02-APR-19	BP		

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: Accounts Payable
Alpha Woods Hole Labs
Eight Walkup Drive
Westborough,MA 01581

Lab Sample ID: SM3011-4
Report Date: 05-APR-19
Client PO:
Project: L1912447
SDG: SM3011

Sample Description	Matrix	Date Sampled	Date Received
RISS6	SL	28-MAR-19 14:30:00	29-MAR-19

Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC Batch	Analysis Date	Prep. Method	Prep. Date	Analyst	Footnotes	RPD/RSD
Total Solids	90. %	1		SW3540C	WG249741	03-APR-19 09:24:29	SW3540C	02-APR-19	BP		

Raw Data Section

TOTAL SOLIDS BATCH REPORT
Apr 03 2019, 09:27 am
Batch: WG249741

Sample	Matrix	Type	Prep Date	Tare	Initial	Final1	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SM2694-21	SL	SAMP	02-APR-19	1.3 g	25.6304 g	23.7821 g	23.7821 g	BP	03-APR-19	92.4030	92. %		
SM2694-22	SL	SAMP	02-APR-19	1.3 g	38.0771 g	35.6054 g	35.6054 g	BP	03-APR-19	93.2790	93. %		
SM2694-23	SL	SAMP	02-APR-19	1.3 g	35.1005 g	32.6985 g	32.6985 g	BP	03-APR-19	92.8940	93. %		
SM2700-18	SL	SAMP	02-APR-19	1.3 g	15.4018 g	6.2784 g	6.2784 g	BP	03-APR-19	35.3030	35. %		
SM2700-28	SL	SAMP	02-APR-19	1.3 g	21.8961 g	7.8335 g	7.8335 g	BP	03-APR-19	31.7220	32. %		
SM2752-21	SL	SAMP	02-APR-19	1.3 g	17.051 g	15.8561 g	15.8561 g	BP	03-APR-19	92.4140	92. %		
SM2752-22	SL	SAMP	02-APR-19	1.3 g	20.3482 g	17.9205 g	17.9205 g	BP	03-APR-19	87.2550	87. %		
SM2752-23	SL	SAMP	02-APR-19	1.3 g	22.4064 g	22.091 g	22.091 g	BP	03-APR-19	98.5060	98. %		
SM2752-24	SL	SAMP	02-APR-19	1.3 g	20.4687 g	18.403 g	18.403 g	BP	03-APR-19	89.2240	89. %		
SM2752-25	SL	SAMP	02-APR-19	1.3 g	15.8699 g	14.405 g	14.405 g	BP	03-APR-19	89.9460	90. %		
SM2752-26	SL	SAMP	02-APR-19	1.3 g	13.1366 g	11.7349 g	11.7349 g	BP	03-APR-19	88.1580	88. %		
SM2930-1	SL	SAMP	02-APR-19	1.3 g	26.0934 g	22.549 g	22.549 g	BP	03-APR-19	85.7040	86. %		
SM2930-2	SL	SAMP	02-APR-19	1.3 g	34.5686 g	27.8497 g	27.8497 g	BP	03-APR-19	79.8040	80. %		
SM2980-1	SL	SAMP	02-APR-19	1.3 g	23.7585 g	19.2611 g	19.2611 g	BP	03-APR-19	79.9750	80. %		
SM2980-2	SL	SAMP	02-APR-19	1.3 g	24.1502 g	19.4398 g	19.4398 g	BP	03-APR-19	79.3860	79. %		
SM3011-1	SL	SAMP	02-APR-19	1.3 g	17.1012 g	13.6729 g	13.6729 g	BP	03-APR-19	78.3040	78. %		
SM3011-2	SL	SAMP	02-APR-19	1.3 g	24.6794 g	22.1309 g	22.1309 g	BP	03-APR-19	89.0990	89. %		
SM3011-3	SL	SAMP	02-APR-19	1.3 g	22.1431 g	19.1319 g	19.1319 g	BP	03-APR-19	85.5530	86. %		
SM3011-4	SL	SAMP	02-APR-19	1.3 g	19.6222 g	17.7834 g	17.7834 g	BP	03-APR-19	89.9640	90. %		
SM3058-1	SL	SAMP	02-APR-19	1.3 g	9.1831 g	9.0599 g	9.0599 g	BP	03-APR-19	98.4370	98. %		
WG249741-1	SL	MBLANK	02-APR-19	1.3 g	5.7202 g	5.7184 g	5.7184 g	BP	03-APR-19	99.9590	100 %		
WG249741-2	SL	LCS	02-APR-19	1.3 g	6.1916 g	5.6647 g	5.6647 g	BP	03-APR-19	89.2280	89. %	99	
WG249741-3	SL	DUP	02-APR-19	1.3 g	17.7792 g	14.2614 g	14.2614 g	BP	03-APR-19	78.6530	79. %		0
WG249741-4	SL	DUP	02-APR-19	1.3 g	29.1274 g	27.4297 g	27.4297 g	BP	03-APR-19	93.8990	94. %		1

Comments:

SM2930-1	VOA: 2 vials leaked
SM3011-1	MS/MSD
WG249741-1	SM3011-1
WG249741-2	SM3011-1
WG249741-3	SM3011-1
WG249741-4	SM2694-22

Entered by: BP Date: 4-3-19 Accepted by: Date: 04/03/19

Katahdin ANALYTICAL SERVICES

Katahdin Analytical Services

Work Group Report (wk02)

02-APR-19 12:27 PM

Work Group: WG249741
Department: 100 Wetlab Prep

Operator:

Created: 02-APR-19
Due:

Tin	Sample	Account Name	Product	Matrix	Status	UA	Workdate	PR Location
25	SM2694-21	[redacted]	TS	Solid	WIP	U	04-APR-19	
26	SM2694-22		TS	Solid	WIP	U	04-APR-19	
27	SM2694-23		TS	Solid	WIP	U	04-APR-19	
28	SM2700-18		TS	Solid	WIP	U	04-APR-19	
29	SM2700-28		TS	Solid	WIP	U	04-APR-19	
30	SM2752-21		TS	Solid	WIP	U	01-APR-19	
31	SM2752-22		TS	Solid	WIP	U	01-APR-19	
32	SM2752-23		TS	Solid	WIP	U	01-APR-19	
33	SM2752-24		TS	Solid	WIP	U	01-APR-19	
34	SM2752-25		TS	Solid	WIP	U	03-APR-19	
35	SM2752-26		TS	Solid	WIP	U	03-APR-19	
36	SM2930-1		TS	Solid	WIP	U	09-APR-19	4oz Glass
37	SM2930-2		TS	Solid	WIP	U	09-APR-19	4oz Glass
38	SM2980-1		TS	Solid	WIP	U	09-APR-19	
39	SM2980-2		TS	Solid	WIP	U	09-APR-19	
40	SM3011-1		TS	Solid	WIP	U	05-APR-19	
41	SM3011-2		TS	Solid	WIP	U	05-APR-19	
42	SM3011-3		TS	Solid	WIP	U	05-APR-19	
43	SM3011-4		TS	Solid	WIP	U	05-APR-19	
44	SM3058-1		TS	Solid	WIP	U	11-APR-19	
45	WG249741-1	MBLANK	TS	Solid	WIP	U	02-APR-19	
46	WG249741-2	LCS	TS	Solid	WIP	U	02-APR-19	
47	WG249741-3	DUP	TS	Solid	WIP	U	02-APR-19	
48	WG249741-4	DUP	TS	Solid	WIP	U	02-APR-19	

Comments:

SM2930-1	VOA: 2 vials leaked
SM3011-1	MS/MSD
WG249741-1	SM3011-1
WG249741-2	SM3011-1
WG249741-3	SM3011-1
WG249741-4	SM2694-22

Total Solids: SM2540 G / ASTM D2216			PQL: 0.10%	Oven ID: 107N0042		Balance Calibrated?
TS	In 1	In 2	TS	Out 1	Out 2	(Y) / N
ANALYST IN:	BP		ANALYST OUT:	BP		In: ✓
DATE IN:	4-3-19		DATE OUT:	4-3-19		Out (TS):
TIME IN:	1345		TIME OUT:	0720		Balance ID: Bal 01
TEMP IN:	104		TEMP OUT:	104		S/N 1124016031