



**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

3 grab and 1 composite samples for the purpose of approving up to 200 cubic yards of material from the source. Grabs were analyzed for TCL VOCs and each composite was analyzed for TCL SVOCs, Pesticides and PCBs, TAL Metals, Cyanide, 1,4-Dioxane, and PFAS (21 List).

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Acetone was detected in each of the grab samples. None of the acetone detections were above Unrestricted Use SCOs. Suspect these compounds were introduced in the laboratory.
Metals were not detected above Unrestricted Use SCOs in the sample collected.
SVOCs, PCBs, Pesticides, Cyanide, and PFAS were not detected in the grab sample.

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

R.J. Valente Quarry (NYSDEC Mine ID#40693)

Location where fill was obtained:

Quarry located at 3349 Rt. 2 Cropseyville, New York

Identification of any state or local approvals as a fill source:

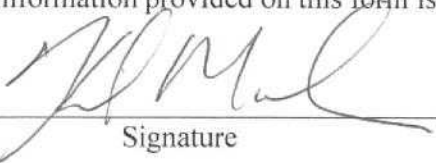
NYSDEC Mine ID#40693

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

Analytical Laboratory Report from Alpha Analytical for 3 grabs and 1 composite samples collected on 5/29/2019.

The information provided on this form is accurate and complete.



Signature

06-17-2019

Date

Kirk Moline

Print Name

C.T. Male Associates

Firm



**NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

3 grab and 1 composite samples for the purpose of approving up to 200 cubic yards of material from the source. Grabs were analyzed for TCL VOCs and each composite was analyzed for TCL SVOCs, Pesticides and PCBs, TAL Metals, Cyanide, 1,4-Dioxane, and PFAS (21 List).

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Acetone was detected in one of the grab samples. The acetone detection was not above Unrestricted Use SCOs. Suspect these compounds were introduced in the laboratory.
Metals were not detected above Unrestricted Use SCOs in the sample collected.
SVOCs, PCBs, Pesticides, Cyanide, and PFAS were not detected in the grab sample.

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Hammersmith Gravel Mine (NYSDEC Mine ID#40843)

Location where fill was obtained:

Quarry located at 52 Watson Road, Petersburg, New York

Identification of any state or local approvals as a fill source:

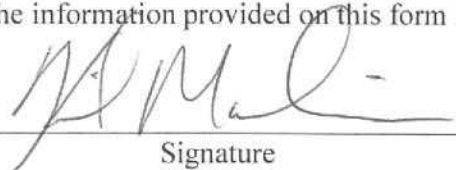
NYSDEC Mine ID#40843

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

Analytical Laboratory Report from Alpha Analytical for 3 grabs and 1 composite samples collected on 5/29/2019.

The information provided on this form is accurate and complete.

A handwritten signature in dark ink, appearing to read 'K. Moline', written over a horizontal line.

Signature

06-17-2019

Date

Kirk Moline

Print Name

C.T. Male Associates

Firm



ANALYTICAL REPORT

Lab Number:	L1922677
Client:	C.T. Male Associates 50 Century Hill Drive Latham, NY 12210
ATTN:	Kirk Moline
Phone:	(518) 786-7400
Project Name:	SGPP- MCAFFREY
Project Number:	14.4756
Report Date:	06/14/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1922677-01	SG1-IRM-CRUSHER_RUN-G1	SOIL	HOOSICK FALLS, NY	05/29/19 08:20	05/29/19
L1922677-02	SG1-IRM-CRUSHER_RUN-G2	SOIL	HOOSICK FALLS, NY	05/29/19 08:22	05/29/19
L1922677-03	SG1-IRM-CRUSHER_RUN-G3	SOIL	HOOSICK FALLS, NY	05/29/19 08:25	05/29/19
L1922677-04	SG1-IRM-CRUSHER_RUN-C1	SOLID	HOOSICK FALLS, NY	05/29/19 08:30	05/29/19
L1922677-05	SG1-IRM-SAND-G1	SOIL	HOOSICK FALLS, NY	05/29/19 10:00	05/29/19
L1922677-06	SG1-IRM-SAND-G2	SOIL	HOOSICK FALLS, NY	05/29/19 10:02	05/29/19
L1922677-07	SG1-IRM-SAND-G3	SOIL	HOOSICK FALLS, NY	05/29/19 10:05	05/29/19
L1922677-08	SG1-IRM-SAND-C1	SOIL	HOOSICK FALLS, NY	05/29/19 10:10	05/29/19
L1922677-09	FIELD BLANK-190529	WATER	HOOSICK FALLS, NY	05/29/19 10:30	05/29/19
L1922677-10	TRIP BLANK-190529	WATER	HOOSICK FALLS, NY	05/29/19 00:00	05/29/19

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

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: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Case Narrative (continued)

Report Submission

June 14, 2019: This final report includes the results of all requested analyses.

June 12, 2019: This is a preliminary report.

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

Perfluorinated Alkyl Acids by Isotope Dilution

WG1245723-1: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1246484-1: The continuing calibration standard, associated with L1922677 and QC, had the response for the extracted internal standard Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

WG1246484-3: The continuing calibration standard, associated with L1922677 and QC, had the response for Perfluorooctanesulfonic Acid-Branched (br-PFOS) outside of acceptance criteria. The response for Perfluorooctanesulfonic Acid (PFOS) was within acceptance criteria; therefore, no further action was taken.

WG1246484-2: The continuing calibration standard, associated with L1922677 and QC, had the response for the extracted internal standard Perfluoro[13C8]Octanesulfonamide (M8FOSA) outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

Total Metals

L1922677-04 and -08: 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 WG1245437-1 Method Blank, associated with L1922677-04 and -08, has a concentration above the reporting limit for iron. Since the associated sample concentrations are greater than 10x the blank

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Case Narrative (continued)

concentration for this analyte, no corrective action is required.

Cyanide, Total

The WG1242655-2 LCS recovery (70%), associated with L1922677-04 and -08, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 06/14/19

ORGANICS

VOLATILES

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-01
 Client ID: SG1-IRM-CRUSHER_RUN-G1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:20
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 14:39
 Analyst: MV
 Percent Solids: 95%

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

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-01
 Client ID: SG1-IRM-CRUSHER_RUN-G1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:20
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	8.3	J	ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.65	1
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Methyl Acetate	ND		ug/kg	4.0	0.95	1
Cyclohexane	ND		ug/kg	10	0.54	1
1,4-Dioxane	ND		ug/kg	80	35.	1
Freon-113	ND		ug/kg	4.0	0.69	1
Methyl cyclohexane	ND		ug/kg	4.0	0.60	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-01**Date Collected:** 05/29/19 08:20**Client ID:** SG1-IRM-CRUSHER_RUN-G1**Date Received:** 05/29/19**Sample Location:** HOOSICK FALLS, 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	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	96		70-130

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-02
 Client ID: SG1-IRM-CRUSHER_RUN-G2
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:22
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 15:05
 Analyst: MV
 Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.2	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.0	0.24	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.28	1
Tetrachloroethene	ND		ug/kg	0.52	0.20	1
Chlorobenzene	ND		ug/kg	0.52	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.73	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	0.52	0.18	1
Bromodichloromethane	ND		ug/kg	0.52	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.29	1
cis-1,3-Dichloropropene	ND		ug/kg	0.52	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.52	0.16	1
Bromoform	ND		ug/kg	4.2	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.52	0.17	1
Benzene	ND		ug/kg	0.52	0.17	1
Toluene	ND		ug/kg	1.0	0.57	1
Ethylbenzene	ND		ug/kg	1.0	0.15	1
Chloromethane	ND		ug/kg	4.2	0.98	1
Bromomethane	ND		ug/kg	2.1	0.61	1
Vinyl chloride	ND		ug/kg	1.0	0.35	1
Chloroethane	ND		ug/kg	2.1	0.47	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.14	1
Trichloroethene	ND		ug/kg	0.52	0.14	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-02
 Client ID: SG1-IRM-CRUSHER_RUN-G2
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:22
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	2.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	2.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.1	0.18	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.21	1
p/m-Xylene	ND		ug/kg	2.1	0.59	1
o-Xylene	ND		ug/kg	1.0	0.30	1
Xylenes, Total	ND		ug/kg	1.0	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.96	1
Acetone	10		ug/kg	10	5.0	1
Carbon disulfide	ND		ug/kg	10	4.8	1
2-Butanone	ND		ug/kg	10	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.1	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.29	1
n-Butylbenzene	ND		ug/kg	1.0	0.18	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.1	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.1	1.0	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.2	0.68	1
n-Propylbenzene	ND		ug/kg	1.0	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.1	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.1	0.28	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.1	0.20	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.1	0.35	1
Methyl Acetate	ND		ug/kg	4.2	1.0	1
Cyclohexane	ND		ug/kg	10	0.57	1
1,4-Dioxane	ND		ug/kg	84	37.	1
Freon-113	ND		ug/kg	4.2	0.73	1
Methyl cyclohexane	ND		ug/kg	4.2	0.63	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-02**Date Collected:** 05/29/19 08:22**Client ID:** SG1-IRM-CRUSHER_RUN-G2**Date Received:** 05/29/19**Sample Location:** HOOSICK FALLS, 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	97		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-03
 Client ID: SG1-IRM-CRUSHER_RUN-G3
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:25
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 15:31
 Analyst: MV
 Percent Solids: 96%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.2	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.84	0.12	1
Chloroform	ND		ug/kg	1.2	0.12	1
Carbon tetrachloride	ND		ug/kg	0.84	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.84	0.10	1
Dibromochloromethane	ND		ug/kg	0.84	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.84	0.22	1
Tetrachloroethene	ND		ug/kg	0.42	0.16	1
Chlorobenzene	ND		ug/kg	0.42	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.4	0.58	1
1,2-Dichloroethane	ND		ug/kg	0.84	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.42	0.14	1
Bromodichloromethane	ND		ug/kg	0.42	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.84	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.42	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.42	0.13	1
Bromoform	ND		ug/kg	3.4	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.42	0.14	1
Benzene	ND		ug/kg	0.42	0.14	1
Toluene	ND		ug/kg	0.84	0.46	1
Ethylbenzene	ND		ug/kg	0.84	0.12	1
Chloromethane	ND		ug/kg	3.4	0.78	1
Bromomethane	ND		ug/kg	1.7	0.49	1
Vinyl chloride	ND		ug/kg	0.84	0.28	1
Chloroethane	ND		ug/kg	1.7	0.38	1
1,1-Dichloroethene	ND		ug/kg	0.84	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1
Trichloroethene	ND		ug/kg	0.42	0.11	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-03
 Client ID: SG1-IRM-CRUSHER_RUN-G3
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:25
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.47	1
o-Xylene	ND		ug/kg	0.84	0.24	1
Xylenes, Total	ND		ug/kg	0.84	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.84	0.15	1
1,2-Dichloroethene, Total	ND		ug/kg	0.84	0.11	1
Styrene	ND		ug/kg	0.84	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.4	0.77	1
Acetone	8.5		ug/kg	8.4	4.0	1
Carbon disulfide	ND		ug/kg	8.4	3.8	1
2-Butanone	ND		ug/kg	8.4	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.4	1.1	1
2-Hexanone	ND		ug/kg	8.4	0.99	1
Bromochloromethane	ND		ug/kg	1.7	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.84	0.23	1
n-Butylbenzene	ND		ug/kg	0.84	0.14	1
sec-Butylbenzene	ND		ug/kg	0.84	0.12	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.5	0.84	1
Isopropylbenzene	ND		ug/kg	0.84	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.84	0.09	1
Naphthalene	ND		ug/kg	3.4	0.54	1
n-Propylbenzene	ND		ug/kg	0.84	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.28	1
Methyl Acetate	ND		ug/kg	3.4	0.80	1
Cyclohexane	ND		ug/kg	8.4	0.46	1
1,4-Dioxane	ND		ug/kg	67	29.	1
Freon-113	ND		ug/kg	3.4	0.58	1
Methyl cyclohexane	ND		ug/kg	3.4	0.50	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-03**Date Collected:** 05/29/19 08:25**Client ID:** SG1-IRM-CRUSHER_RUN-G3**Date Received:** 05/29/19**Sample Location:** HOOSICK FALLS, 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	96		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	97		70-130

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-05
 Client ID: SG1-IRM-SAND-G1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:00
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 15:57
 Analyst: MV
 Percent Solids: 94%

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	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	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	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	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	0.96	0.52	1
Ethylbenzene	ND		ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	ND		ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	ND		ug/kg	0.48	0.13	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-05
 Client ID: SG1-IRM-SAND-G1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:00
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
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	0.54	1
o-Xylene	ND		ug/kg	0.96	0.28	1
Xylenes, Total	ND		ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.96	0.13	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	8.1	J	ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
n-Butylbenzene	ND		ug/kg	0.96	0.16	1
sec-Butylbenzene	ND		ug/kg	0.96	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Isopropylbenzene	ND		ug/kg	0.96	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.96	0.10	1
Naphthalene	ND		ug/kg	3.8	0.62	1
n-Propylbenzene	ND		ug/kg	0.96	0.16	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
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1
Methyl Acetate	ND		ug/kg	3.8	0.91	1
Cyclohexane	ND		ug/kg	9.6	0.52	1
1,4-Dioxane	ND		ug/kg	77	34.	1
Freon-113	ND		ug/kg	3.8	0.67	1
Methyl cyclohexane	ND		ug/kg	3.8	0.58	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-05

Date Collected: 05/29/19 10:00

Client ID: SG1-IRM-SAND-G1

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, 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	95		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-06
 Client ID: SG1-IRM-SAND-G2
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:02
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 16:23
 Analyst: MV
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.23	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.92	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1
Trichloroethene	ND		ug/kg	0.49	0.13	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-06
 Client ID: SG1-IRM-SAND-G2
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:02
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.29	1
Xylenes, Total	ND		ug/kg	0.98	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	ND		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.5	1
2-Butanone	ND		ug/kg	9.8	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.98	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
p-Isopropyltoluene	ND		ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
n-Propylbenzene	ND		ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
Methyl Acetate	ND		ug/kg	3.9	0.93	1
Cyclohexane	ND		ug/kg	9.8	0.54	1
1,4-Dioxane	ND		ug/kg	79	34.	1
Freon-113	ND		ug/kg	3.9	0.68	1
Methyl cyclohexane	ND		ug/kg	3.9	0.59	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-06

Date Collected: 05/29/19 10:02

Client ID: SG1-IRM-SAND-G2

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, 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	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	99		70-130

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-07
 Client ID: SG1-IRM-SAND-G3
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:05
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 06/06/19 16:49
 Analyst: MV
 Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.2	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.83	0.12	1
Chloroform	ND		ug/kg	1.2	0.12	1
Carbon tetrachloride	ND		ug/kg	0.83	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.83	0.10	1
Dibromochloromethane	ND		ug/kg	0.83	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.83	0.22	1
Tetrachloroethene	ND		ug/kg	0.42	0.16	1
Chlorobenzene	ND		ug/kg	0.42	0.10	1
Trichlorofluoromethane	ND		ug/kg	3.3	0.58	1
1,2-Dichloroethane	ND		ug/kg	0.83	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.42	0.14	1
Bromodichloromethane	ND		ug/kg	0.42	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.83	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.42	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.42	0.13	1
Bromoform	ND		ug/kg	3.3	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.42	0.14	1
Benzene	ND		ug/kg	0.42	0.14	1
Toluene	ND		ug/kg	0.83	0.45	1
Ethylbenzene	ND		ug/kg	0.83	0.12	1
Chloromethane	ND		ug/kg	3.3	0.77	1
Bromomethane	ND		ug/kg	1.7	0.48	1
Vinyl chloride	ND		ug/kg	0.83	0.28	1
Chloroethane	ND		ug/kg	1.7	0.38	1
1,1-Dichloroethene	ND		ug/kg	0.83	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1
Trichloroethene	ND		ug/kg	0.42	0.11	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-07
 Client ID: SG1-IRM-SAND-G3
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:05
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,3-Dichlorobenzene	ND		ug/kg	1.7	0.12	1
1,4-Dichlorobenzene	ND		ug/kg	1.7	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.46	1
o-Xylene	ND		ug/kg	0.83	0.24	1
Xylenes, Total	ND		ug/kg	0.83	0.24	1
cis-1,2-Dichloroethene	ND		ug/kg	0.83	0.14	1
1,2-Dichloroethene, Total	ND		ug/kg	0.83	0.11	1
Styrene	ND		ug/kg	0.83	0.16	1
Dichlorodifluoromethane	ND		ug/kg	8.3	0.76	1
Acetone	ND		ug/kg	8.3	4.0	1
Carbon disulfide	ND		ug/kg	8.3	3.8	1
2-Butanone	ND		ug/kg	8.3	1.8	1
4-Methyl-2-pentanone	ND		ug/kg	8.3	1.1	1
2-Hexanone	ND		ug/kg	8.3	0.98	1
Bromochloromethane	ND		ug/kg	1.7	0.17	1
1,2-Dibromoethane	ND		ug/kg	0.83	0.23	1
n-Butylbenzene	ND		ug/kg	0.83	0.14	1
sec-Butylbenzene	ND		ug/kg	0.83	0.12	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.5	0.83	1
Isopropylbenzene	ND		ug/kg	0.83	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.83	0.09	1
Naphthalene	ND		ug/kg	3.3	0.54	1
n-Propylbenzene	ND		ug/kg	0.83	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.28	1
Methyl Acetate	ND		ug/kg	3.3	0.79	1
Cyclohexane	ND		ug/kg	8.3	0.45	1
1,4-Dioxane	ND		ug/kg	66	29.	1
Freon-113	ND		ug/kg	3.3	0.58	1
Methyl cyclohexane	ND		ug/kg	3.3	0.50	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-07

Date Collected: 05/29/19 10:05

Client ID: SG1-IRM-SAND-G3

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, 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	98		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/19 08:09
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03,05-07 Batch: WG1245399-5					
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
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,1,2-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	1.3	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

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/06/19 08:09
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03,05-07 Batch: WG1245399-5					
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
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
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
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
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/06/19 08:09
 Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-03,05-07 Batch: WG1245399-5					
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

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05-07 Batch: WG1245399-3 WG1245399-4								
Methylene chloride	95		90		70-130	5		30
1,1-Dichloroethane	94		90		70-130	4		30
Chloroform	100		95		70-130	5		30
Carbon tetrachloride	97		92		70-130	5		30
1,2-Dichloropropane	98		92		70-130	6		30
Dibromochloromethane	107		104		70-130	3		30
1,1,2-Trichloroethane	102		97		70-130	5		30
Tetrachloroethene	91		89		70-130	2		30
Chlorobenzene	97		94		70-130	3		30
Trichlorofluoromethane	72		68	Q	70-139	6		30
1,2-Dichloroethane	102		96		70-130	6		30
1,1,1-Trichloroethane	95		91		70-130	4		30
Bromodichloromethane	102		97		70-130	5		30
trans-1,3-Dichloropropene	105		101		70-130	4		30
cis-1,3-Dichloropropene	102		97		70-130	5		30
Bromoform	108		103		70-130	5		30
1,1,2,2-Tetrachloroethane	98		96		70-130	2		30
Benzene	96		91		70-130	5		30
Toluene	97		94		70-130	3		30
Ethylbenzene	96		92		70-130	4		30
Chloromethane	80		76		52-130	5		30
Bromomethane	84		76		57-147	10		30
Vinyl chloride	66	Q	63	Q	67-130	5		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05-07 Batch: WG1245399-3 WG1245399-4								
Chloroethane	56		53		50-151	6		30
1,1-Dichloroethene	84		80		65-135	5		30
trans-1,2-Dichloroethene	90		85		70-130	6		30
Trichloroethene	96		92		70-130	4		30
1,2-Dichlorobenzene	101		98		70-130	3		30
1,3-Dichlorobenzene	100		96		70-130	4		30
1,4-Dichlorobenzene	99		96		70-130	3		30
Methyl tert butyl ether	104		100		66-130	4		30
p/m-Xylene	93		90		70-130	3		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	93		89		70-130	4		30
Styrene	94		91		70-130	3		30
Dichlorodifluoromethane	97		92		30-146	5		30
Acetone	88		80		54-140	10		30
Carbon disulfide	88		83		59-130	6		30
2-Butanone	81		80		70-130	1		30
4-Methyl-2-pentanone	97		93		70-130	4		30
2-Hexanone	86		82		70-130	5		30
Bromochloromethane	103		96		70-130	7		30
1,2-Dibromoethane	103		100		70-130	3		30
n-Butylbenzene	96		94		70-130	2		30
sec-Butylbenzene	98		93		70-130	5		30
tert-Butylbenzene	99		95		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-03,05-07 Batch: WG1245399-3 WG1245399-4								
1,2-Dibromo-3-chloropropane	105		102		68-130	3		30
Isopropylbenzene	100		95		70-130	5		30
p-Isopropyltoluene	99		95		70-130	4		30
Naphthalene	102		100		70-130	2		30
n-Propylbenzene	98		94		70-130	4		30
1,2,3-Trichlorobenzene	104		100		70-130	4		30
1,2,4-Trichlorobenzene	106		104		70-130	2		30
1,3,5-Trimethylbenzene	102		98		70-130	4		30
1,2,4-Trimethylbenzene	102		98		70-130	4		30
Methyl Acetate	78		78		51-146	0		30
Cyclohexane	87		84		59-142	4		30
1,4-Dioxane	104		89		65-136	16		30
Freon-113	90		87		50-139	3		30
Methyl cyclohexane	92		88		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	102		103		70-130
4-Bromofluorobenzene	109		109		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Solid
 Analytical Method: 1,8270D
 Analytical Date: 06/09/19 15:08
 Analyst: RC
 Percent Solids: 98%

Extraction Method: EPA 3540C
 Extraction Date: 06/06/19 11:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	19.	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
Fluoranthene	ND		ug/kg	100	19.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Hexachloroethane	ND		ug/kg	140	27.	1
Isophorone	ND		ug/kg	150	22.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	150	25.	1
NDPA/DPA	ND		ug/kg	140	19.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	59.	1
Butyl benzyl phthalate	ND		ug/kg	170	43.	1
Di-n-butylphthalate	ND		ug/kg	170	32.	1
Di-n-octylphthalate	ND		ug/kg	170	58.	1
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	19.	1
Benzo(a)pyrene	ND		ug/kg	140	41.	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	ND		ug/kg	100	28.	1
Benzo(k)fluoranthene	ND		ug/kg	100	27.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	390	39.	1
4-Chloroaniline	ND		ug/kg	170	31.	1
2-Nitroaniline	ND		ug/kg	170	33.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	56.	1
2-Nitrophenol	ND		ug/kg	360	64.	1
4-Nitrophenol	ND		ug/kg	240	69.	1
2,4-Dinitrophenol	ND		ug/kg	810	79.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	81.	1
Pentachlorophenol	ND		ug/kg	140	37.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Carbazole	ND		ug/kg	170	16.	1
Atrazine	ND		ug/kg	140	59.	1
Benzaldehyde	ND		ug/kg	220	46.	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 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	170	52.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	34.	1
1,4-Dioxane	ND		ug/kg	25	7.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	106		23-120
2-Fluorobiphenyl	90		30-120
2,4,6-Tribromophenol	78		10-136
4-Terphenyl-d14	95		18-120

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Solid
 Analytical Method: 122,537(M)
 Analytical Date: 06/14/19 12:43
 Analyst: AJ
 Percent Solids: 98%

Extraction Method: EPA 537(M)
 Extraction Date: 06/12/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.02	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.02	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.02	0.040	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.02	0.054	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.02	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.02	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.02	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.02	0.183	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.02	0.139	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.02	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.02	0.132	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.02	0.068	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.02	0.292	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.02	0.205	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.02	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.02	0.156	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.02	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.02	0.086	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.02	0.071	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.02	0.208	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.02	0.055	1
PFOA/PFOS, Total	ND		ug/kg	1.02	0.043	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 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)	90		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	87		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	68		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		26-160

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 06/11/19 08:33
 Analyst: RC
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 06/05/19 16:33

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	170	17.	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	46.	1
2,4-Dinitrotoluene	ND		ug/kg	170	35.	1
2,6-Dinitrotoluene	ND		ug/kg	170	30.	1
Fluoranthene	ND		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	17.	1
Hexachlorobutadiene	ND		ug/kg	170	25.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	170	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	60.	1
Butyl benzyl phthalate	ND		ug/kg	170	44.	1
Di-n-butylphthalate	ND		ug/kg	170	33.	1
Di-n-octylphthalate	ND		ug/kg	170	59.	1
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	36.	1
Benzo(a)anthracene	ND		ug/kg	100	20.	1
Benzo(a)pyrene	ND		ug/kg	140	42.	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	ND		ug/kg	100	29.	1
Benzo(k)fluoranthene	ND		ug/kg	100	28.	1
Chrysene	ND		ug/kg	100	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	100	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	20.	1
Fluorene	ND		ug/kg	170	17.	1
Phenanthrene	ND		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	24.	1
Pyrene	ND		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	400	40.	1
4-Chloroaniline	ND		ug/kg	170	32.	1
2-Nitroaniline	ND		ug/kg	170	34.	1
3-Nitroaniline	ND		ug/kg	170	33.	1
4-Nitroaniline	ND		ug/kg	170	72.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	170	26.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	170	57.	1
2-Nitrophenol	ND		ug/kg	380	65.	1
4-Nitrophenol	ND		ug/kg	240	71.	1
2,4-Dinitrophenol	ND		ug/kg	840	81.	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	84.	1
Pentachlorophenol	ND		ug/kg	140	38.	1
Phenol	ND		ug/kg	170	26.	1
2-Methylphenol	ND		ug/kg	170	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	27.	1
2,4,5-Trichlorophenol	ND		ug/kg	170	33.	1
Carbazole	ND		ug/kg	170	17.	1
Atrazine	ND		ug/kg	140	61.	1
Benzaldehyde	ND		ug/kg	230	47.	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 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	170	53.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	170	35.	1
1,4-Dioxane	ND		ug/kg	26	8.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	82		18-120

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 122,537(M)
 Analytical Date: 06/11/19 17:55
 Analyst: AJ
 Percent Solids: 94%

Extraction Method: EPA 537(M)
 Extraction Date: 06/07/19 23:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	1.02	0.023	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.02	0.047	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.02	0.040	1
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.02	0.054	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.02	0.046	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.02	0.062	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.02	0.043	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.02	0.184	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.02	0.140	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.02	0.077	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.02	0.133	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.02	0.069	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.02	0.294	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.02	0.206	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.02	0.048	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.02	0.157	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.02	0.100	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.02	0.087	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.02	0.072	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.02	0.210	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.02	0.055	1
PFOA/PFOS, Total	ND		ug/kg	1.02	0.043	1

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 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)	84		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	78		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	116		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	105		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	94		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	109		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	84		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	56		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	77		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	86		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	56		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	54		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	90		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	52		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	51		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	70		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	58		26-160

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-09
 Client ID: FIELD BLANK-190529
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 06/10/19 14:25
 Analyst: AJ

Extraction Method: EPA 537
 Extraction Date: 06/07/19 09:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.377	J	ng/l	1.83	0.374	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.83	0.363	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.83	0.218	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.83	0.300	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.83	0.206	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.83	0.344	1
Perfluorooctanoic Acid (PFOA)	0.608	J	ng/l	1.83	0.216	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.83	1.22	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.83	0.630	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.83	0.286	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.83	0.462	1
Perfluorodecanoic Acid (PFDA)	0.689	J	ng/l	1.83	0.278	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.83	1.11	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.83	0.593	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.83	0.238	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.83	0.897	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.83	0.531	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.83	0.736	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.83	0.341	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.83	0.300	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.83	0.227	1
PFOA/PFOS, Total	0.608	J	ng/l	1.83	0.216	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-09
 Client ID: FIELD BLANK-190529
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:30
 Date Received: 05/29/19
 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)	98		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	105		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	130		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	120		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	105		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	120		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	53		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	67		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	59		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	62		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	53		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	70		33-143

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-10
 Client ID: TRIP BLANK-190529
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 00:00
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 06/10/19 14:42
 Analyst: AJ

Extraction Method: EPA 537
 Extraction Date: 06/07/19 09:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	1.78	0.363	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	1.78	0.352	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	1.78	0.212	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	1.78	0.292	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	1.78	0.200	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	0.334	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	1.78	0.210	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	1.78	1.18	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	0.612	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	1.78	0.278	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	1.78	0.448	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	0.270	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	1.08	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	0.576	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	0.231	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	0.872	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	0.516	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	0.715	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	0.331	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	0.291	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	0.221	1
PFOA/PFOS, Total	ND		ng/l	1.78	0.210	1

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-10
 Client ID: TRIP BLANK-190529
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 00:00
 Date Received: 05/29/19
 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)	99		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	111		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	132		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	119		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	109		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	124		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	57		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	99		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	61		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	76		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	77		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	35		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	65		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	47		33-143

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/06/19 08:21
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/05/19 11:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1244818-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
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	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
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	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/06/19 08:21
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/05/19 11:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1244818-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
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	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/06/19 08:21
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 06/05/19 11:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG1244818-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	87		30-120
2,4,6-Tribromophenol	107		10-136
4-Terphenyl-d14	95		18-120

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/19 13:52
Analyst: RC

Extraction Method: EPA 3540C
Extraction Date: 06/06/19 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1245310-1					
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: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/19 13:52
Analyst: RC

Extraction Method: EPA 3540C
Extraction Date: 06/06/19 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1245310-1					
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: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 06/09/19 13:52
Analyst: RC

Extraction Method: EPA 3540C
Extraction Date: 06/06/19 11:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1245310-1					
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.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	103		23-120
2-Fluorobiphenyl	93		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	107		18-120

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/10/19 11:39
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 06/07/19 08:59

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 09-10 Batch: WG1245723-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	ND		ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/10/19 11:39
Analyst: AJ

Extraction Method: EPA 537
Extraction Date: 06/07/19 08:59

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 09-10 Batch: WG1245723-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	107		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	172	Q	31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	136		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	118		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	135		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	101		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	70		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	91		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	110		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	74		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	54		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	59		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	79		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		33-143

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/10/19 19:40
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 06/07/19 23:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 08 Batch: WG1245923-1					
Perfluorobutanoic Acid (PFBA)	0.059	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/10/19 19:40
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 06/07/19 23:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 08 Batch: WG1245923-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	90		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	121		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	109		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	102		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	128		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	52		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	88		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	58		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	58		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NetFOSAA)	50		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	82		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		26-160

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/14/19 11:36
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 06/12/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 04 Batch: WG1247575-1					
Perfluorobutanoic Acid (PFBA)	0.074	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 06/14/19 11:36
Analyst: AJ

Extraction Method: EPA 537(M)
Extraction Date: 06/12/19 16:00

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 04 Batch: WG1247575-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	81		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	83		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	83		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	83		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	90		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	97		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	98		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NetFOSAA)	73		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	95		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	96		26-160

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1244818-2 WG1244818-3								
Acenaphthene	90		97		31-137	7		50
Hexachlorobenzene	94		103		40-140	9		50
Bis(2-chloroethyl)ether	84		89		40-140	6		50
2-Chloronaphthalene	91		98		40-140	7		50
3,3'-Dichlorobenzidine	77		89		40-140	14		50
2,4-Dinitrotoluene	104		114		40-132	9		50
2,6-Dinitrotoluene	112		119		40-140	6		50
Fluoranthene	92		101		40-140	9		50
4-Chlorophenyl phenyl ether	92		100		40-140	8		50
4-Bromophenyl phenyl ether	94		100		40-140	6		50
Bis(2-chloroisopropyl)ether	88		93		40-140	6		50
Bis(2-chloroethoxy)methane	93		100		40-117	7		50
Hexachlorobutadiene	84		87		40-140	4		50
Hexachlorocyclopentadiene	84		90		40-140	7		50
Hexachloroethane	83		86		40-140	4		50
Isophorone	91		99		40-140	8		50
Naphthalene	85		91		40-140	7		50
Nitrobenzene	102		110		40-140	8		50
NDPA/DPA	96		104		36-157	8		50
n-Nitrosodi-n-propylamine	92		98		32-121	6		50
Bis(2-ethylhexyl)phthalate	114		126		40-140	10		50
Butyl benzyl phthalate	103		113		40-140	9		50
Di-n-butylphthalate	101		110		40-140	9		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1244818-2 WG1244818-3								
Di-n-octylphthalate	113		123		40-140	8		50
Diethyl phthalate	96		105		40-140	9		50
Dimethyl phthalate	97		103		40-140	6		50
Benzo(a)anthracene	94		104		40-140	10		50
Benzo(a)pyrene	102		118		40-140	15		50
Benzo(b)fluoranthene	100		107		40-140	7		50
Benzo(k)fluoranthene	99		113		40-140	13		50
Chrysene	93		103		40-140	10		50
Acenaphthylene	95		103		40-140	8		50
Anthracene	92		102		40-140	10		50
Benzo(ghi)perylene	101		104		40-140	3		50
Fluorene	92		100		40-140	8		50
Phenanthrene	89		100		40-140	12		50
Dibenzo(a,h)anthracene	99		103		40-140	4		50
Indeno(1,2,3-cd)pyrene	98		104		40-140	6		50
Pyrene	92		104		35-142	12		50
Biphenyl	94		102		54-104	8		50
4-Chloroaniline	75		91		40-140	19		50
2-Nitroaniline	110		119		47-134	8		50
3-Nitroaniline	90		99		26-129	10		50
4-Nitroaniline	117		129	Q	41-125	10		50
Dibenzofuran	90		99		40-140	10		50
2-Methylnaphthalene	88		95		40-140	8		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1244818-2 WG1244818-3								
1,2,4,5-Tetrachlorobenzene	88		96		40-117	9		50
Acetophenone	94		100		14-144	6		50
2,4,6-Trichlorophenol	102		112		30-130	9		50
p-Chloro-m-cresol	104	Q	114	Q	26-103	9		50
2-Chlorophenol	91		97		25-102	6		50
2,4-Dichlorophenol	101		109		30-130	8		50
2,4-Dimethylphenol	102		110		30-130	8		50
2-Nitrophenol	122		132	Q	30-130	8		50
4-Nitrophenol	108		118	Q	11-114	9		50
2,4-Dinitrophenol	120		136	Q	4-130	13		50
4,6-Dinitro-o-cresol	133	Q	148	Q	10-130	11		50
Pentachlorophenol	94		103		17-109	9		50
Phenol	92	Q	100	Q	26-90	8		50
2-Methylphenol	95		103		30-130	8		50
3-Methylphenol/4-Methylphenol	98		104		30-130	6		50
2,4,5-Trichlorophenol	103		113		30-130	9		50
Carbazole	94		101		54-128	7		50
Atrazine	109		120		40-140	10		50
Benzaldehyde	89		92		40-140	3		50
Caprolactam	118		129		15-130	9		50
2,3,4,6-Tetrachlorophenol	100		110		40-140	10		50
1,4-Dioxane	68		70		40-140	3		50

Lab Control Sample Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG1244818-2 WG1244818-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	95		101		25-120
Phenol-d6	93		102		10-120
Nitrobenzene-d5	114		121	Q	23-120
2-Fluorobiphenyl	96		102		30-120
2,4,6-Tribromophenol	115		127		10-136
4-Terphenyl-d14	100		111		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1245310-2 WG1245310-3								
Acenaphthene	104		110		31-137	6		50
Hexachlorobenzene	99		102		40-140	3		50
Bis(2-chloroethyl)ether	97		102		40-140	5		50
2-Chloronaphthalene	103		108		40-140	5		50
3,3'-Dichlorobenzidine	71		72		40-140	1		50
2,4-Dinitrotoluene	115		121		40-132	5		50
2,6-Dinitrotoluene	113		120		40-140	6		50
Fluoranthene	111		116		40-140	4		50
4-Chlorophenyl phenyl ether	106		111		40-140	5		50
4-Bromophenyl phenyl ether	110		114		40-140	4		50
Bis(2-chloroisopropyl)ether	99		105		40-140	6		50
Bis(2-chloroethoxy)methane	109		115		40-117	5		50
Hexachlorobutadiene	89		96		40-140	8		50
Hexachlorocyclopentadiene	88		99		40-140	12		50
Hexachloroethane	92		98		40-140	6		50
Isophorone	116		122		40-140	5		50
Naphthalene	94		100		40-140	6		50
Nitrobenzene	120		127		40-140	6		50
NDPA/DPA	113		118		36-157	4		50
n-Nitrosodi-n-propylamine	116		124	Q	32-121	7		50
Bis(2-ethylhexyl)phthalate	127		135		40-140	6		50
Butyl benzyl phthalate	116		121		40-140	4		50
Di-n-butylphthalate	122		128		40-140	5		50

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1245310-2 WG1245310-3								
Di-n-octylphthalate	126		130		40-140	3		50
Diethyl phthalate	119		123		40-140	3		50
Dimethyl phthalate	109		114		40-140	4		50
Benzo(a)anthracene	113		118		40-140	4		50
Benzo(a)pyrene	119		123		40-140	3		50
Benzo(b)fluoranthene	115		118		40-140	3		50
Benzo(k)fluoranthene	113		118		40-140	4		50
Chrysene	108		112		40-140	4		50
Acenaphthylene	112		118		40-140	5		50
Anthracene	106		112		40-140	6		50
Benzo(ghi)perylene	114		119		40-140	4		50
Fluorene	110		116		40-140	5		50
Phenanthrene	104		109		40-140	5		50
Dibenzo(a,h)anthracene	109		116		40-140	6		50
Indeno(1,2,3-cd)pyrene	118		124		40-140	5		50
Pyrene	109		114		35-142	4		50
Biphenyl	111	Q	116	Q	54-104	4		50
4-Chloroaniline	99		99		40-140	0		50
2-Nitroaniline	132		140	Q	47-134	6		50
3-Nitroaniline	95		95		26-129	0		50
4-Nitroaniline	125		130	Q	41-125	4		50
Dibenzofuran	108		113		40-140	5		50
2-Methylnaphthalene	100		107		40-140	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1245310-2 WG1245310-3								
1,2,4,5-Tetrachlorobenzene	101		105		40-117	4		50
Acetophenone	111		117		14-144	5		50
2,4,6-Trichlorophenol	118		124		30-130	5		50
p-Chloro-m-cresol	129	Q	136	Q	26-103	5		50
2-Chlorophenol	102		109	Q	25-102	7		50
2,4-Dichlorophenol	115		122		30-130	6		50
2,4-Dimethylphenol	111		119		30-130	7		50
2-Nitrophenol	123		133	Q	30-130	8		50
4-Nitrophenol	128	Q	131	Q	11-114	2		50
2,4-Dinitrophenol	114		123		4-130	8		50
4,6-Dinitro-o-cresol	124		129		10-130	4		50
Pentachlorophenol	108		110	Q	17-109	2		50
Phenol	119	Q	124	Q	26-90	4		50
2-Methylphenol	110		116		30-130	5		50
3-Methylphenol/4-Methylphenol	116		123		30-130	6		50
2,4,5-Trichlorophenol	122		129		30-130	6		50
Carbazole	112		118		54-128	5		50
Atrazine	111		111		40-140	0		50
Benzaldehyde	102		104		40-140	2		50
Caprolactam	149	Q	160	Q	15-130	7		50
2,3,4,6-Tetrachlorophenol	112		117		40-140	4		50
1,4-Dioxane	64		65		40-140	2		50

Lab Control Sample Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1245310-2 WG1245310-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	86		90		25-120
Phenol-d6	88		94		10-120
Nitrobenzene-d5	106		112		23-120
2-Fluorobiphenyl	87		90		30-120
2,4,6-Tribromophenol	90		94		10-136
4-Terphenyl-d14	84		88		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09-10 Batch: WG1245723-2 WG1245723-3								
Perfluorobutanoic Acid (PFBA)	103		110		67-148	7		30
Perfluoropentanoic Acid (PFPeA)	103		110		63-161	7		30
Perfluorobutanesulfonic Acid (PFBS)	107		114		65-157	6		30
Perfluorohexanoic Acid (PFHxA)	116		124		69-168	7		30
Perfluoroheptanoic Acid (PFHpA)	107		114		58-159	6		30
Perfluorohexanesulfonic Acid (PFHxS)	104		121		69-177	15		30
Perfluorooctanoic Acid (PFOA)	104		114		63-159	9		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	102		93		49-187	9		30
Perfluoroheptanesulfonic Acid (PFHpS)	106		136		61-179	25		30
Perfluorononanoic Acid (PFNA)	110		120		68-171	9		30
Perfluorooctanesulfonic Acid (PFOS)	90		108		52-151	18		30
Perfluorodecanoic Acid (PFDA)	103		118		63-171	14		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	88		94		56-173	7		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	101		101		60-166	0		30
Perfluoroundecanoic Acid (PFUnA)	95		99		60-153	4		30
Perfluorodecanesulfonic Acid (PFDS)	102		102		38-156	0		30
Perfluorooctanesulfonamide (FOSA)	95		109		46-170	14		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	101		107		45-170	6		30
Perfluorododecanoic Acid (PFDoA)	113		112		67-153	1		30
Perfluorotridecanoic Acid (PFTrDA)	109		100		48-158	9		30
Perfluorotetradecanoic Acid (PFTA)	122		135		59-182	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 09-10 Batch: WG1245723-2 WG1245723-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	102		105		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		98		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	145		147		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	126		128		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	107		111		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	119		118		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		98		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	60		71		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	86		89		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	103		102		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	94		95		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	65		72		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	58		62		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	94		91		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	36		56		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	58		51		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		79		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	68		51		33-143

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 08 Batch: WG1245923-2 WG1245923-3								
Perfluorobutanoic Acid (PFBA)	104		101		71-135	3		30
Perfluoropentanoic Acid (PFPeA)	98		97		69-132	1		30
Perfluorobutanesulfonic Acid (PFBS)	100		97		72-128	3		30
Perfluorohexanoic Acid (PFHxA)	119		114		70-132	4		30
Perfluoroheptanoic Acid (PFHpA)	110		107		71-131	3		30
Perfluorohexanesulfonic Acid (PFHxS)	97		98		67-130	1		30
Perfluorooctanoic Acid (PFOA)	109		107		69-133	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	94		101		64-140	7		30
Perfluoroheptanesulfonic Acid (PFHpS)	110		117		70-132	6		30
Perfluorononanoic Acid (PFNA)	113		111		72-129	2		30
Perfluorooctanesulfonic Acid (PFOS)	88		94		68-136	7		30
Perfluorodecanoic Acid (PFDA)	118		109		69-133	8		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	91		96		65-137	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	106		92		63-144	14		30
Perfluoroundecanoic Acid (PFUnA)	100		95		64-136	5		30
Perfluorodecanesulfonic Acid (PFDS)	123		127		59-134	3		30
Perfluorooctanesulfonamide (FOSA)	100		100		67-137	0		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	101		87		61-139	15		30
Perfluorododecanoic Acid (PFDoA)	110		118		69-135	7		30
Perfluorotridecanoic Acid (PFTrDA)	110		116		66-139	5		30
Perfluorotetradecanoic Acid (PFTA)	131		123		69-133	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 08 Batch: WG1245923-2 WG1245923-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	92		85		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	123		118		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	110		107		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	100		97		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	128		122		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	90		89		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	59		56		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	87		84		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	106		99		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		94		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	62		62		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	64		65		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	99		94		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		6		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	61		58		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	89		79		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	67		63		26-160

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 Batch: WG1247575-2 WG1247575-3								
Perfluorobutanoic Acid (PFBA)	94		94		71-135	0		30
Perfluoropentanoic Acid (PFPeA)	93		92		69-132	1		30
Perfluorobutanesulfonic Acid (PFBS)	98		96		72-128	2		30
Perfluorohexanoic Acid (PFHxA)	103		102		70-132	1		30
Perfluoroheptanoic Acid (PFHpA)	92		93		71-131	1		30
Perfluorohexanesulfonic Acid (PFHxS)	98		99		67-130	1		30
Perfluorooctanoic Acid (PFOA)	90		88		69-133	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	87		100		64-140	14		30
Perfluoroheptanesulfonic Acid (PFHpS)	93		95		70-132	2		30
Perfluorononanoic Acid (PFNA)	98		99		72-129	1		30
Perfluorooctanesulfonic Acid (PFOS)	86		77		68-136	11		30
Perfluorodecanoic Acid (PFDA)	96		98		69-133	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	93		97		65-137	4		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	86		92		63-144	7		30
Perfluoroundecanoic Acid (PFUnA)	82		86		64-136	5		30
Perfluorodecanesulfonic Acid (PFDS)	106		104		59-134	2		30
Perfluorooctanesulfonamide (FOSA)	92		68		67-137	30		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	95		96		61-139	1		30
Perfluorododecanoic Acid (PFDoA)	91		91		69-135	0		30
Perfluorotridecanoic Acid (PFTrDA)	99		106		66-139	7		30
Perfluorotetradecanoic Acid (PFTA)	104		109		69-133	5		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 Batch: WG1247575-2 WG1247575-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	85		77		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	96		93		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		85		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	96		94		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		91		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	105		86		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	96		95		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		96		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	96		93		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	108		94		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	83		83		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	103		98		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	5		3		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	71		80		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		93		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99		91		26-160

Lab Duplicate Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1247575-4 QC Sample: L1922677-04 Client ID: SG1-IRM-CRUSHER_RUN-C1						
Perfluorobutanoic Acid (PFBA)	ND	ND	ug/kg	NC		30
Perfluoropentanoic Acid (PFPeA)	ND	ND	ug/kg	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ug/kg	NC		30
Perfluorohexanoic Acid (PFHxA)	ND	ND	ug/kg	NC		30
Perfluoroheptanoic Acid (PFHpA)	ND	ND	ug/kg	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ug/kg	NC		30
Perfluorooctanoic Acid (PFOA)	ND	ND	ug/kg	NC		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ug/kg	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ug/kg	NC		30
Perfluorononanoic Acid (PFNA)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonic Acid (PFOS)	ND	ND	ug/kg	NC		30
Perfluorodecanoic Acid (PFDA)	ND	ND	ug/kg	NC		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ug/kg	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ug/kg	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ug/kg	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ug/kg	NC		30
Perfluorooctanesulfonamide (FOSA)	ND	ND	ug/kg	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ug/kg	NC		30
Perfluorododecanoic Acid (PFDoA)	ND	ND	ug/kg	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ug/kg	NC		30

Lab Duplicate Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1247575-4 QC Sample: L1922677-04 Client ID: SG1-IRM-CRUSHER_RUN-C1						
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ug/kg	NC		30
PFOA/PFOS, Total	ND	ND	ug/kg	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	90		66		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	98		74		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	98		94		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	85		69		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	87		74		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	95		91		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	92		81		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	87		83		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	95		82		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		96		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		88		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	113		91		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	73		51		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	102		92		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	7		8		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	68		44		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	98		85		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	95		79		26-160

PCBS

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Solid
 Analytical Method: 1,8082A
 Analytical Date: 06/08/19 02:31
 Analyst: AWS
 Percent Solids: 98%

Extraction Method: EPA 3540C
 Extraction Date: 06/06/19 11:15
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/07/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/06/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	99.7	8.85	1	A
Aroclor 1221	ND		ug/kg	99.7	9.99	1	A
Aroclor 1232	ND		ug/kg	99.7	21.1	1	A
Aroclor 1242	ND		ug/kg	99.7	13.4	1	A
Aroclor 1248	ND		ug/kg	99.7	15.0	1	A
Aroclor 1254	ND		ug/kg	99.7	10.9	1	A
Aroclor 1260	ND		ug/kg	99.7	18.4	1	A
Aroclor 1262	ND		ug/kg	99.7	12.6	1	A
Aroclor 1268	ND		ug/kg	99.7	10.3	1	A
PCBs, Total	ND		ug/kg	99.7	8.85	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 06/07/19 18:38
 Analyst: AWS
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 06/05/19 17:31
 Cleanup Method: EPA 3665A
 Cleanup Date: 06/07/19
 Cleanup Method: EPA 3660B
 Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.1	3.12	1	A
Aroclor 1221	ND		ug/kg	35.1	3.52	1	A
Aroclor 1232	ND		ug/kg	35.1	7.44	1	A
Aroclor 1242	ND		ug/kg	35.1	4.73	1	A
Aroclor 1248	ND		ug/kg	35.1	5.26	1	A
Aroclor 1254	ND		ug/kg	35.1	3.84	1	A
Aroclor 1260	ND		ug/kg	35.1	6.48	1	A
Aroclor 1262	ND		ug/kg	35.1	4.46	1	A
Aroclor 1268	ND		ug/kg	35.1	3.64	1	A
PCBs, Total	ND		ug/kg	35.1	3.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	86		30-150	B

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/06/19 21:51
Analyst: WR

Extraction Method: EPA 3540C
Extraction Date: 06/05/19 12:15
Cleanup Method: EPA 3665A
Cleanup Date: 06/06/19
Cleanup Method: EPA 3660B
Cleanup Date: 06/06/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04 Batch: WG1244820-1						
Aroclor 1016	ND		ug/kg	91.7	8.15	A
Aroclor 1221	ND		ug/kg	91.7	9.19	A
Aroclor 1232	ND		ug/kg	91.7	19.4	A
Aroclor 1242	ND		ug/kg	91.7	12.4	A
Aroclor 1248	ND		ug/kg	91.7	13.8	A
Aroclor 1254	ND		ug/kg	91.7	10.0	A
Aroclor 1260	ND		ug/kg	91.7	17.0	A
Aroclor 1262	ND		ug/kg	91.7	11.6	A
Aroclor 1268	ND		ug/kg	91.7	9.50	A
PCBs, Total	ND		ug/kg	91.7	8.15	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	109		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	117		30-150	B

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 06/07/19 22:18
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 06/05/19 17:31
Cleanup Method: EPA 3665A
Cleanup Date: 06/07/19
Cleanup Method: EPA 3660B
Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 08 Batch: WG1244979-1						
Aroclor 1016	ND		ug/kg	32.5	2.89	A
Aroclor 1221	ND		ug/kg	32.5	3.26	A
Aroclor 1232	ND		ug/kg	32.5	6.90	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.88	A
Aroclor 1254	ND		ug/kg	32.5	3.56	A
Aroclor 1260	ND		ug/kg	32.5	6.01	A
Aroclor 1262	ND		ug/kg	32.5	4.13	A
Aroclor 1268	ND		ug/kg	32.5	3.37	A
PCBs, Total	ND		ug/kg	32.5	2.89	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	95		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	101		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04 Batch: WG1244820-2 WG1244820-3									
Aroclor 1016	80		82		40-140	2		50	A
Aroclor 1260	83		84		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		85		30-150	A
Decachlorobiphenyl	98		98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		87		30-150	B
Decachlorobiphenyl	108		105		30-150	B

Lab Control Sample Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 08 Batch: WG1244979-2 WG1244979-3									
Aroclor 1016	74		74		40-140	0		50	A
Aroclor 1260	76		78		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		83		30-150	A
Decachlorobiphenyl	98		98		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		87		30-150	B
Decachlorobiphenyl	104		104		30-150	B

PESTICIDES

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Solid
 Analytical Method: 1,8081B
 Analytical Date: 06/13/19 04:01
 Analyst: SL
 Percent Solids: 98%

Extraction Method: EPA 3540C
 Extraction Date: 06/06/19 11:15
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	4.76	0.933	1	A
Lindane	ND		ug/kg	1.98	0.888	1	A
Alpha-BHC	ND		ug/kg	1.98	0.564	1	A
Beta-BHC	ND		ug/kg	4.76	1.81	1	A
Heptachlor	ND		ug/kg	2.38	1.07	1	A
Aldrin	ND		ug/kg	4.76	1.68	1	A
Heptachlor epoxide	ND		ug/kg	8.94	2.68	1	A
Endrin	ND		ug/kg	1.98	0.814	1	A
Endrin aldehyde	ND		ug/kg	5.96	2.08	1	A
Endrin ketone	ND		ug/kg	4.76	1.23	1	A
Dieldrin	ND		ug/kg	2.98	1.49	1	A
4,4'-DDE	ND		ug/kg	4.76	1.10	1	A
4,4'-DDD	ND		ug/kg	4.76	1.70	1	A
4,4'-DDT	ND		ug/kg	8.94	3.83	1	A
Endosulfan I	ND		ug/kg	4.76	1.12	1	A
Endosulfan II	ND		ug/kg	4.76	1.59	1	A
Endosulfan sulfate	ND		ug/kg	1.98	0.945	1	A
Methoxychlor	ND		ug/kg	8.94	2.78	1	A
Toxaphene	ND		ug/kg	89.4	25.0	1	A
cis-Chlordane	ND		ug/kg	5.96	1.66	1	A
trans-Chlordane	ND		ug/kg	5.96	1.57	1	A
Chlordane	ND		ug/kg	38.7	15.8	1	A

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04
 Client ID: SG1-IRM-CRUSHER_RUN-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:30
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	80		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	78		30-150	A

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08
 Client ID: SG1-IRM-SAND-C1
 Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10
 Date Received: 05/29/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 06/08/19 05:59
 Analyst: SL
 Percent Solids: 94%

Extraction Method: EPA 3546
 Extraction Date: 06/05/19 18:14
 Cleanup Method: EPA 3620B
 Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.69	0.331	1	A
Lindane	ND		ug/kg	0.704	0.315	1	A
Alpha-BHC	ND		ug/kg	0.704	0.200	1	A
Beta-BHC	ND		ug/kg	1.69	0.641	1	A
Heptachlor	ND		ug/kg	0.845	0.379	1	A
Aldrin	ND		ug/kg	1.69	0.595	1	A
Heptachlor epoxide	ND		ug/kg	3.17	0.951	1	A
Endrin	ND		ug/kg	0.704	0.289	1	A
Endrin aldehyde	ND		ug/kg	2.11	0.739	1	A
Endrin ketone	ND		ug/kg	1.69	0.435	1	A
Dieldrin	ND		ug/kg	1.06	0.528	1	A
4,4'-DDE	ND		ug/kg	1.69	0.391	1	A
4,4'-DDD	ND		ug/kg	1.69	0.603	1	A
4,4'-DDT	ND		ug/kg	3.17	1.36	1	A
Endosulfan I	ND		ug/kg	1.69	0.399	1	A
Endosulfan II	ND		ug/kg	1.69	0.565	1	A
Endosulfan sulfate	ND		ug/kg	0.704	0.335	1	A
Methoxychlor	ND		ug/kg	3.17	0.986	1	A
Toxaphene	ND		ug/kg	31.7	8.87	1	A
cis-Chlordane	ND		ug/kg	2.11	0.589	1	A
trans-Chlordane	ND		ug/kg	2.11	0.558	1	A
Chlordane	ND		ug/kg	13.7	5.60	1	A

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-08**Date Collected:** 05/29/19 10:10**Client ID:** SG1-IRM-SAND-C1**Date Received:** 05/29/19**Sample Location:** HOOSICK FALLS, 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	83		30-150	B
Decachlorobiphenyl	105		30-150	B
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	77		30-150	A

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/06/19 12:45
Analyst: AMC

Extraction Method: EPA 3546
Extraction Date: 06/05/19 09:09
Cleanup Method: EPA 3620B
Cleanup Date: 06/06/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 08 Batch: WG1244725-1						
Delta-BHC	ND		ug/kg	1.58	0.310	A
Lindane	ND		ug/kg	0.660	0.295	A
Alpha-BHC	ND		ug/kg	0.660	0.187	A
Beta-BHC	ND		ug/kg	1.58	0.600	A
Heptachlor	ND		ug/kg	0.792	0.355	A
Aldrin	ND		ug/kg	1.58	0.557	A
Heptachlor epoxide	ND		ug/kg	2.97	0.890	A
Endrin	ND		ug/kg	0.660	0.270	A
Endrin aldehyde	ND		ug/kg	1.98	0.693	A
Endrin ketone	ND		ug/kg	1.58	0.408	A
Dieldrin	ND		ug/kg	0.989	0.495	A
4,4'-DDE	ND		ug/kg	1.58	0.366	A
4,4'-DDD	ND		ug/kg	1.58	0.565	A
4,4'-DDT	ND		ug/kg	2.97	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.374	A
Endosulfan II	ND		ug/kg	1.58	0.529	A
Endosulfan sulfate	ND		ug/kg	0.660	0.314	A
Methoxychlor	ND		ug/kg	2.97	0.923	A
Toxaphene	ND		ug/kg	29.7	8.31	A
cis-Chlordane	ND		ug/kg	1.98	0.551	A
trans-Chlordane	ND		ug/kg	1.98	0.522	A
Chlordane	ND		ug/kg	12.9	5.24	A

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/06/19 12:45
Analyst: AMC

Extraction Method: EPA 3546
Extraction Date: 06/05/19 09:09
Cleanup Method: EPA 3620B
Cleanup Date: 06/06/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 08 Batch: WG1244725-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	80		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	88		30-150	A

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/13/19 03:48
Analyst: SL

Extraction Method: EPA 3540C
Extraction Date: 06/06/19 11:15
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04 Batch: WG1245309-1						
Delta-BHC	ND		ug/kg	4.40	0.861	A
Lindane	ND		ug/kg	1.83	0.819	A
Alpha-BHC	ND		ug/kg	1.83	0.520	A
Beta-BHC	ND		ug/kg	4.40	1.67	A
Heptachlor	ND		ug/kg	2.20	0.985	A
Aldrin	ND		ug/kg	4.40	1.55	A
Heptachlor epoxide	ND		ug/kg	8.24	2.47	A
Endrin	ND		ug/kg	1.83	0.751	A
Endrin aldehyde	ND		ug/kg	5.49	1.92	A
Endrin ketone	ND		ug/kg	4.40	1.13	A
Dieldrin	ND		ug/kg	2.75	1.37	A
4,4'-DDE	ND		ug/kg	4.40	1.02	A
4,4'-DDD	ND		ug/kg	4.40	1.57	A
4,4'-DDT	ND		ug/kg	8.24	3.53	A
Endosulfan I	ND		ug/kg	4.40	1.04	A
Endosulfan II	ND		ug/kg	4.40	1.47	A
Endosulfan sulfate	ND		ug/kg	1.83	0.872	A
Methoxychlor	ND		ug/kg	8.24	2.56	A
Toxaphene	ND		ug/kg	82.4	23.1	A
cis-Chlordane	ND		ug/kg	5.49	1.53	A
trans-Chlordane	ND		ug/kg	5.49	1.45	A
Chlordane	ND		ug/kg	35.7	14.6	A

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 06/13/19 03:48
Analyst: SL

Extraction Method: EPA 3540C
Extraction Date: 06/06/19 11:15
Cleanup Method: EPA 3620B
Cleanup Date: 06/07/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04 Batch: WG1245309-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	80		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	79		30-150	A

Lab Control Sample Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG1244725-2 WG1244725-3									
Delta-BHC	81		56		30-150	36	Q	30	A
Lindane	84		62		30-150	30		30	A
Alpha-BHC	90		68		30-150	28		30	A
Beta-BHC	75		57		30-150	27		30	A
Heptachlor	88		70		30-150	23		30	A
Aldrin	82		64		30-150	25		30	A
Heptachlor epoxide	51		38		30-150	29		30	A
Endrin	93		70		30-150	28		30	A
Endrin aldehyde	78		41		30-150	62	Q	30	A
Endrin ketone	97		55		30-150	55	Q	30	A
Dieldrin	95		71		30-150	29		30	A
4,4'-DDE	87		67		30-150	26		30	A
4,4'-DDD	96		70		30-150	31	Q	30	A
4,4'-DDT	99		75		30-150	28		30	A
Endosulfan I	81		62		30-150	27		30	A
Endosulfan II	91		60		30-150	41	Q	30	A
Endosulfan sulfate	79		43		30-150	59	Q	30	A
Methoxychlor	87		58		30-150	40	Q	30	A
cis-Chlordane	68		52		30-150	27		30	A
trans-Chlordane	75		58		30-150	26		30	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 08 Batch: WG1244725-2 WG1244725-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		67		30-150	B
Decachlorobiphenyl	96		78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	73		61		30-150	A
Decachlorobiphenyl	112		81		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG1245309-2 WG1245309-3									
Delta-BHC	79		76		30-150	4		30	A
Lindane	78		73		30-150	7		30	A
Alpha-BHC	83		77		30-150	8		30	A
Beta-BHC	70		66		30-150	6		30	A
Heptachlor	74		71		30-150	4		30	A
Aldrin	77		72		30-150	7		30	A
Heptachlor epoxide	78		74		30-150	5		30	A
Endrin	86		79		30-150	8		30	A
Endrin aldehyde	50		46		30-150	8		30	A
Endrin ketone	66		60		30-150	10		30	A
Dieldrin	80		75		30-150	6		30	A
4,4'-DDE	73		70		30-150	4		30	A
4,4'-DDD	71		66		30-150	7		30	A
4,4'-DDT	78		74		30-150	5		30	A
Endosulfan I	69		65		30-150	6		30	A
Endosulfan II	72		69		30-150	4		30	A
Endosulfan sulfate	56		50		30-150	11		30	A
Methoxychlor	65		61		30-150	6		30	A
cis-Chlordane	57		50		30-150	13		30	A
trans-Chlordane	65		62		30-150	5		30	A

Lab Control Sample Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG1245309-2 WG1245309-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		66		30-150	B
Decachlorobiphenyl	68		61		30-150	B
2,4,5,6-Tetrachloro-m-xylene	72		68		30-150	A
Decachlorobiphenyl	67		62		30-150	A

METALS

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-04

Date Collected: 05/29/19 08:30

Client ID: SG1-IRM-CRUSHER_RUN-C1

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Solid

Percent Solids: 98%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9520		mg/kg	8.12	2.19	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Antimony, Total	0.966	J	mg/kg	4.06	0.308	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Arsenic, Total	3.42		mg/kg	0.812	0.169	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Barium, Total	40.2		mg/kg	0.812	0.141	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Beryllium, Total	0.455		mg/kg	0.406	0.027	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Cadmium, Total	0.446	J	mg/kg	0.812	0.080	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Calcium, Total	2190		mg/kg	8.12	2.84	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Chromium, Total	17.9		mg/kg	0.812	0.078	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Cobalt, Total	9.01		mg/kg	1.62	0.135	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Copper, Total	7.33		mg/kg	0.812	0.209	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Iron, Total	18300		mg/kg	4.06	0.733	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Lead, Total	2.05	J	mg/kg	4.06	0.218	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Magnesium, Total	6580		mg/kg	8.12	1.25	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Manganese, Total	399		mg/kg	0.812	0.129	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.076	0.050	1	06/06/19 16:00	06/06/19 18:38	EPA 7471B	1,7471B	EA
Nickel, Total	12.8		mg/kg	2.03	0.196	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Potassium, Total	474		mg/kg	203	11.7	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Selenium, Total	0.260	J	mg/kg	1.62	0.209	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.812	0.230	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Sodium, Total	54.0	J	mg/kg	162	2.56	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.62	0.256	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Vanadium, Total	17.6		mg/kg	0.812	0.165	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC
Zinc, Total	38.6		mg/kg	4.06	0.238	2	06/06/19 17:25	06/10/19 10:00	EPA 3050B	1,6010D	LC



Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**SAMPLE RESULTS**

Lab ID: L1922677-08

Date Collected: 05/29/19 10:10

Client ID: SG1-IRM-SAND-C1

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9280		mg/kg	8.08	2.18	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Antimony, Total	1.00	J	mg/kg	4.04	0.307	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Arsenic, Total	6.70		mg/kg	0.808	0.168	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Barium, Total	22.0		mg/kg	0.808	0.140	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Beryllium, Total	0.234	J	mg/kg	0.404	0.027	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Cadmium, Total	0.541	J	mg/kg	0.808	0.079	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Calcium, Total	2920		mg/kg	8.08	2.83	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Chromium, Total	9.72		mg/kg	0.808	0.078	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Cobalt, Total	10.4		mg/kg	1.62	0.134	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Copper, Total	25.1		mg/kg	0.808	0.208	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Iron, Total	20700		mg/kg	4.04	0.729	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Lead, Total	10.1		mg/kg	4.04	0.216	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Magnesium, Total	4490		mg/kg	8.08	1.24	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Manganese, Total	511		mg/kg	0.808	0.128	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.080	0.052	1	06/06/19 16:00	06/06/19 18:40	EPA 7471B	1,7471B	EA
Nickel, Total	19.2		mg/kg	2.02	0.195	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Potassium, Total	270		mg/kg	202	11.6	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Selenium, Total	0.557	J	mg/kg	1.62	0.208	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.808	0.228	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Sodium, Total	13.0	J	mg/kg	162	2.54	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.62	0.254	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Vanadium, Total	9.89		mg/kg	0.808	0.164	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC
Zinc, Total	50.0		mg/kg	4.04	0.237	2	06/06/19 17:25	06/10/19 10:05	EPA 3050B	1,6010D	LC



Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

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): 04,08 Batch: WG1245437-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Chromium, Total	0.060	J	mg/kg	0.400	0.038	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Iron, Total	3.11		mg/kg	2.00	0.361	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	06/06/19 17:25	06/07/19 13:11	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 04,08 Batch: WG1245447-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	06/06/19 16:00	06/06/19 18:24	1,7471B	EA



Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04,08 Batch: WG1245437-2 SRM Lot Number: D105-540								
Aluminum, Total	73		-		51-149	-		
Antimony, Total	169		-		19-249	-		
Arsenic, Total	106		-		70-130	-		
Barium, Total	100		-		75-125	-		
Beryllium, Total	102		-		75-125	-		
Cadmium, Total	99		-		75-125	-		
Calcium, Total	92		-		73-127	-		
Chromium, Total	100		-		70-130	-		
Cobalt, Total	99		-		75-125	-		
Copper, Total	100		-		75-125	-		
Iron, Total	95		-		38-162	-		
Lead, Total	98		-		71-128	-		
Magnesium, Total	87		-		63-137	-		
Manganese, Total	95		-		76-124	-		
Nickel, Total	100		-		70-131	-		
Potassium, Total	85		-		60-140	-		
Selenium, Total	103		-		63-137	-		
Silver, Total	103		-		69-131	-		
Sodium, Total	99		-		37-162	-		
Thallium, Total	100		-		68-132	-		
Vanadium, Total	101		-		65-135	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04,08 Batch: WG1245437-2 SRM Lot Number: D105-540					
Zinc, Total	102	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 04,08 Batch: WG1245447-2 SRM Lot Number: D105-540					
Mercury, Total	104	-	60-141	-	

Matrix Spike Analysis **Batch Quality Control**

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

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): 04,08 QC Batch ID: WG1245437-3 WG1245437-4 QC Sample: L1923831-05 Client ID: MS Sample												
Aluminum, Total	8760	190	11400	1380	Q	10600	1000	Q	75-125	7		20
Antimony, Total	ND	47.6	34.9	73	Q	32.8	71	Q	75-125	6		20
Arsenic, Total	1.80	11.4	10.8	79		10.5	79		75-125	3		20
Barium, Total	42.2	190	197	81		184	77		75-125	7		20
Beryllium, Total	0.082J	4.76	3.88	81		3.63	79		75-125	7		20
Cadmium, Total	0.755	4.86	4.57	78		4.34	76		75-125	5		20
Calcium, Total	1800	953	2330	56	Q	2090	32	Q	75-125	11		20
Chromium, Total	26.8	19	38.0	59	Q	36.8	54	Q	75-125	3		20
Cobalt, Total	7.94	47.6	43.4	74	Q	41.8	74	Q	75-125	4		20
Copper, Total	40.9	23.8	56.6	66	Q	53.0	53	Q	75-125	7		20
Iron, Total	15700B	95.3	15700	0	Q	16400	761	Q	75-125	4		20
Lead, Total	57.2	48.6	75.7	38	Q	69.1	25	Q	75-125	9		20
Magnesium, Total	1740	953	2280	57	Q	2260	56	Q	75-125	1		20
Manganese, Total	404	47.6	320	0	Q	395	0	Q	75-125	21	Q	20
Nickel, Total	10.1	47.6	45.5	74	Q	43.3	72	Q	75-125	5		20
Potassium, Total	225	953	1050	86		981	82		75-125	7		20
Selenium, Total	0.672J	11.4	9.54	83		9.12	83		75-125	5		20
Silver, Total	ND	28.6	25.2	88		23.5	85		75-125	7		20
Sodium, Total	591	953	1460	91		1300	77		75-125	12		20
Thallium, Total	ND	11.4	7.03	61	Q	6.61	60	Q	75-125	6		20
Vanadium, Total	44.5	47.6	84.3	84		84.3	86		75-125	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

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): 04,08 QC Batch ID: WG1245437-3 WG1245437-4 QC Sample: L1923831-05 Client ID: MS Sample									
Zinc, Total	137	47.6	173	76	156	41	Q 75-125	10	20
Total Metals - Mansfield Lab Associated sample(s): 04,08 QC Batch ID: WG1245447-3 QC Sample: L1923651-02 Client ID: MS Sample									
Mercury, Total	ND	0.191	0.189	99	-	-	80-120	-	20

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04,08 QC Batch ID: WG1245447-4 QC Sample: L1923651-02 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS & MISCELLANEOUS

Project Name: SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-01**Client ID:** SG1-IRM-CRUSHER_RUN-G1**Sample Location:** HOOSICK FALLS, NY**Date Collected:** 05/29/19 08:20**Date Received:** 05/29/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.3		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-02

Client ID: SG1-IRM-CRUSHER_RUN-G2

Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:22

Date Received: 05/29/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.5		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-03

Client ID: SG1-IRM-CRUSHER_RUN-G3

Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 08:25

Date Received: 05/29/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.0		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-04

Date Collected: 05/29/19 08:30

Client ID: SG1-IRM-CRUSHER_RUN-C1

Date Received: 05/29/19

Sample Location: HOOSICK FALLS, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	97.6		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI
Cyanide, Total	ND		mg/kg	0.94	0.20	1	05/30/19 12:35	05/30/19 15:27	1,9010C/9012B	LH



Project Name: SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-05**Client ID:** SG1-IRM-SAND-G1**Sample Location:** HOOSICK FALLS, NY**Date Collected:** 05/29/19 10:00**Date Received:** 05/29/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.9		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-06**Client ID:** SG1-IRM-SAND-G2**Sample Location:** HOOSICK FALLS, NY**Date Collected:** 05/29/19 10:02**Date Received:** 05/29/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.1		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19**SAMPLE RESULTS****Lab ID:** L1922677-07**Client ID:** SG1-IRM-SAND-G3**Sample Location:** HOOSICK FALLS, NY**Date Collected:** 05/29/19 10:05**Date Received:** 05/29/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.0		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI



Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

SAMPLE RESULTS

Lab ID: L1922677-08

Client ID: SG1-IRM-SAND-C1

Sample Location: HOOSICK FALLS, NY

Date Collected: 05/29/19 10:10

Date Received: 05/29/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.8		%	0.100	NA	1	-	05/30/19 13:34	121,2540G	RI
Cyanide, Total	ND		mg/kg	0.99	0.21	1	05/30/19 12:35	05/30/19 15:30	1,9010C/9012B	LH



Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

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): 04,08 Batch: WG1242655-1										
Cyanide, Total	ND		mg/kg	0.84	0.18	1	05/30/19 12:35	05/30/19 14:54	1,9010C/9012B	LH

Lab Control Sample Analysis

Batch Quality Control

Project Name: SGPP- MCAFFREY

Project Number: 14.4756

Lab Number: L1922677

Report Date: 06/14/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04,08 Batch: WG1242655-2 WG1242655-3								
Cyanide, Total	70	Q	82		80-120	25		35

Matrix Spike Analysis Batch Quality Control

Project Name: SGPP- MCAFFREY

Lab Number: L1922677

Project Number: 14.4756

Report Date: 06/14/19

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): 04,08 QC Batch ID: WG1242655-4 WG1242655-5 QC Sample: L1921978-07 Client ID: MS Sample												
Cyanide, Total	ND	11	12	110		10	95		75-125	18		35

Lab Duplicate Analysis
*Batch Quality Control***Project Name:** SGPP- MCAFFREY**Project Number:** 14.4756**Lab Number:** L1922677**Report Date:** 06/14/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1242749-1 QC Sample: L1922567-01 Client ID: DUP Sample						
Solids, Total	77.2	76.7	%	1		20

Project Name: SGPP- MCAFFREY**Lab Number:** L1922677**Project Number:** 14.4756**Report Date:** 06/14/19**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(*)
L1922677-01A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-01B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-01C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-01D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-02A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-02B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-02C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-02D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-03A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-03B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-03C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-03D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-04A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.0	Y	Absent		-
L1922677-04B	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		NYTCL-8082-3540C(14)
L1922677-04C	Plastic 8oz unpreserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(28)
L1922677-04D	Plastic 8oz unpreserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(28)
L1922677-05A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-05B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-05C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-05D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-06A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-06B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Serial_No:06141917:55
Lab Number: L1922677
Report Date: 06/14/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1922677-06C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-06D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-07A	Vial MeOH preserved	A	NA		4.0	Y	Absent		NYTCL-8260HLW-R2(14)
L1922677-07B	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-07C	Vial water preserved	A	NA		4.0	Y	Absent	30-MAY-19 07:20	NYTCL-8260HLW-R2(14)
L1922677-07D	Plastic 2oz unpreserved for TS	A	NA		4.0	Y	Absent		TS(7)
L1922677-08A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.0	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)
L1922677-08B	Glass 250ml/8oz unpreserved	A	NA		4.0	Y	Absent		HOLD-CONTINGENCY(14),NYTCL-8270(14),TCN-9010(14),TS(7),NYTCL-8081(14),NYTCL-8082(14)
L1922677-08C	Plastic 8oz unpreserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(28)
L1922677-08D	Plastic 8oz unpreserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(28)
L1922677-09A	Plastic 250ml Trizma preserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1922677-10A	Plastic 250ml Trizma preserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)
L1922677-10B	Plastic 250ml Trizma preserved	B	NA		3.2	Y	Absent		A2-NY-537-ISOTOPE(14)

Project Name: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

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.
LCS D	- 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: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

- 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.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

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: SGPP- MCAFFREY
Project Number: 14.4756

Lab Number: L1922677
Report Date: 06/14/19

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 Perfluorinated 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 its 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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

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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, SM4500CI-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 Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		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 5/30/19		ALPHA Job # L1922477																																																																																																																																																					
		Project Information Project Name: <u>SGP - Mc Caffrey</u> Project Location: <u>Hawick Falls, NY</u> Project # <u>14.4756</u> (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☒ ASP-B ☐ EQUIS (1 File) ☒ EQUIS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO # <u>14.4756</u>																																																																																																																																																							
Client Information Client: <u>CT Male Associates</u> Address: <u>50 Century Hill Dr</u> <u>Lotham, NY 12110</u> Phone: <u>518-786-7400</u> Fax: <u>518-786-7295</u> Email: <u>K.malone@ctmale.com</u>		Project Manager: <u>Kirk Malone / Nancy Garry</u> ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:		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: <u>Send Results To : n.garry@ctmale.com</u>		ANALYSIS		Sample Filtration ☐ Done ☐ Lab to do ☐ Lab to do (Please Specify below) Sample Specific Comments		Total Bottles																																																																																																																																																							
Please specify Metals or TAL.		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>ALPHA Lab ID (Lab Use Only)</th> <th>Sample ID</th> <th>Collection Date</th> <th>Time</th> <th>Sample Matrix</th> <th>Sampler's Initials</th> <th>TCL VOC</th> <th>TCL SVOC</th> <th>TCL PAHs</th> <th>TCL PCB</th> <th>TAL Metals</th> <th>Total CN</th> <th>21 PFAS / 21 SPLP</th> <th>1,4 Dioxene</th> </tr> </thead> <tbody> <tr> <td>22677 -01</td> <td>SG1-IRM-CRUSHER-RUN-G1</td> <td>5/21/19</td> <td>0920</td> <td>Soil</td> <td>CB</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-02</td> <td>SG1-IRM-CRUSHER-RUN-G2</td> <td></td> <td>0822</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-03</td> <td>SG1-IRM-CRUSHER-RUN-G3</td> <td></td> <td>0825</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-04</td> <td>SG1-IRM-CRUSHER-RUN-G1</td> <td></td> <td>0830</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>-05</td> <td>SG1-IRM-SAND-G1</td> <td></td> <td>1000</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-06</td> <td>SG1-IRM-SAND-G2</td> <td></td> <td>1002</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-07</td> <td>SG1-IRM-SAND-G3</td> <td></td> <td>1005</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-08</td> <td>SG1-IRM-SAND-G1</td> <td></td> <td>1010</td> <td>Soil</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>-09</td> <td>FIELD BLANK - 190529</td> <td></td> <td>1030</td> <td>Rinse Water</td> <td>CB</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>-10</td> <td>TRIP BLANK - 190529</td> <td>5/29/19</td> <td></td> <td>Rinse Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>		ALPHA Lab ID (Lab Use Only)	Sample ID			Collection Date	Time	Sample Matrix	Sampler's Initials	TCL VOC	TCL SVOC	TCL PAHs	TCL PCB	TAL Metals	Total CN	21 PFAS / 21 SPLP	1,4 Dioxene	22677 -01	SG1-IRM-CRUSHER-RUN-G1	5/21/19	0920	Soil	CB	X								-02	SG1-IRM-CRUSHER-RUN-G2		0822			X								-03	SG1-IRM-CRUSHER-RUN-G3		0825			X								-04	SG1-IRM-CRUSHER-RUN-G1		0830				X	X	X	X	X	X	X	-05	SG1-IRM-SAND-G1		1000			X								-06	SG1-IRM-SAND-G2		1002			X								-07	SG1-IRM-SAND-G3		1005			X								-08	SG1-IRM-SAND-G1		1010	Soil			X	X	X	X	X	X	X	-09	FIELD BLANK - 190529		1030	Rinse Water	CB							X		-10	TRIP BLANK - 190529	5/29/19		Rinse Water							
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