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: Restricted Residential Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 10,000

SECTION 2 – MATERIAL OTHER THAN SOIL

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

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

Is this virgin material from a permitted mine or quarry? Choose an item

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

SECTION 3 - SAMPLING

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

Samples were collected from the No. 4 pile at Brewer's Pit (see attached map). 25 discrete samples were collected and analyzed for VOCs. 11 composite samples were collected and analyzed for inorganics, SVOCs, PCBs and pesticides.

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):

See attached table of sampling results. No constituents were detected above allowable levels for Restricted Residential use presented in DER-10, Appendix 5.

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:

Edger Enterprises

Location where fill was obtained:

Brewer's Pit located in Horseheads NY

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

NYSDEC Facility ID 8-0734-00150

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 Reports
Data Validation Reports

The information provided on this form is accurate and complete.



Signature

4 June 2018

Date

Aron Krasnopoler

Print Name

Beech and Bonaparte, P.C.

Firm



DRAFT

Samples collected 4/26/2018-4-27/2018 by AR+EB

Prepared by Ashwin Ranna

TABLE 1

Request to Import Fill - Brewer's Pit, Horsehead, NY
Former Sperry Remington Site - North Portion
Elmira, New York

	VOCs																														
	1,1,1-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,2,4-trimethylbenzene	1,2-dichlorobenzene	1,2-dichloroethane	1,3,5-trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	1,4-Dioxane	Acetone	Benzene	Carbon tetrachloride	Chlorobenzene	Chloroform	cis-1,2-dichloroethene	Dichloromethane	Ethylbenzene	Methyl Ethyl Ketone	Methyl-tert-butyl ether	n-butylbenzene	n-propylbenzene	sec-butylbenzene	tert-butylbenzene	Tetrachloroethene	Toluene	trans-1,2-dichloroethene	Trichloroethene	Vinyl chloride	Xylene Total
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0024	0.0017	0.0028	0.0013	0.0039	0.0014	0.0017	0.0015	0.00099	0.011	0.003	0.0019	0.0032	0.0015	0.002	0.0015	0.0023	0.0021	0.0028	0.0036	0.0037	0.002	0.0024	0.0018	0.0019	0.0016	0.0025	0.0015	0.0035	0.0042
DER-10 Appendix 5 Restricted - Residential Imported Fill	0.68	0.27	0.33	3.6	1.1	0.02	8.4	2.4	1.8	0.1	0.05	0.06	0.76	1.1	0.37	0.25	0.05	1	0.12	0.93	12	3.9	11	5.9	1.3	0.7	0.19	0.47	0.02	1.6
Field_ID																														
BP-SC-101	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-102	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-103	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-104	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0041U	<0.0015U	<0.0018U	<0.0016U	<0.001U	<0.038U	<0.0032U	<0.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	<0.0024U	<0.0022U	<0.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U	<0.0017U	<0.0026U	<0.0015U	<0.0038U	<0.0044U
BP-SC-105	<0.0028U	<.002U	<0.0032U	<0.0015U	<0.0045U	<0.0016U	<0.0019U	<0.0018U	<0.0011U	<0.041U	<0.0035U	<0.0022U	<0.0037U	<0.0018U	<0.0024U	<0.0018U	<0.0026U	<0.0024U	<0.0032U	<0.0041U	<0.0042U	<0.0024U	<0.0027U	<0.0021U	<0.0022U	<0.0019U	<0.0028U	<0.0017U	<0.0041U	<0.0048U
BP-SC-106	<0.0027U	<0.0019U	<0.003U	<0.0014U	<0.0043U	<0.0016U	<0.0018U	<0.0017U	<0.0011U	<0.039U	<0.0034U	<0.0021U	<0.0035U	<0.0017U	<0.0023U	<0.0017U	<0.0025U	<0.0023U	<0.0031U	<0.0039U	<0.0041U	<0.0023U	<0.0026U	<.002U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0046U
BP-SC-107	<0.0025U	<0.0018U	<0.0029U	<0.0014U	<.004U	<0.0015U	<0.0017U	<0.0016U	<0.001U	<0.037U	<0.0032U	<.002U	<0.0033U	<0.0016U	<0.0021U	<0.0016U	<0.0024U	<0.0022U	<0.0029U	<0.0037U	<0.0038U	<0.0021U	<0.0025U	<0.0018U	<.002U	<0.0017U	<0.0026U	<0.0015U	<0.0037U	<0.0043U
BP-SC-108	<0.0025U	<0.0018U	<0.0029U	<0.0014U	<.004U	<0.0015U	<0.0017U	<0.0016U	<0.001U	<0.037U	<0.0032U	<.002U	<0.0033U	<0.0016U	<0.0021U	<0.0016U	<0.0024U	<0.0022U	<0.0029U	<0.0037U	<0.0038U	<0.0021U	<0.0024U	<0.0018U	<.002U	<0.0017U	<0.0025U	<0.0015U	<0.0037U	<0.0043U
BP-SC-109	<0.0026U	<0.0019U	<0.003U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0017U	<0.0011U	<0.038U	<0.0033U	<0.0021U	<0.0035U	<0.0017U	<0.0022U	<0.0017U	<0.0025U	<0.0023U	<0.003U	<0.0039U	<.004U	<0.0022U	<0.0026U	<0.0019U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0038U	<0.0045U
BP-SC-110	<0.0026U	<0.0019U	<0.003U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0017U	<0.0011U	<0.038U	<0.0033U	<.002U	<0.0035U	<0.0016U	<0.0022U	<0.0016U	<0.0025U	<0.0022U	<0.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U	<0.0018U	<0.0026U	<0.0016U	<0.0038U	<0.0045U
BP-SC-111	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-112	<0.0024U	<0.0018U	<0.0028U	<0.0013U	<0.0039U	<0.0014U	<0.0017U	<0.0016U	<0.00099U	<0.036U	<0.0031U	<0.0019U	<0.0032U	<0.0015U	<0.0021U	<0.0015U	0.0029J	<0.0021U	<0.0028U	<0.0036U	<0.0037U	<0.0021U	<0.0024U	<0.0018U	<0.0019U	<0.0016U	<0.0025U	<0.0015U	<0.0036U	<0.0042U
BP-SC-113	<0.0026U	<0.0019U	<0.003U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0017U	<0.0011U	<0.038U	<0.0033U	<0.0021U	<0.0035U	<0.0017U	<0.0022U	<0.0017U	0.0029J	<0.0023U	<.003U	<0.0039U	<.004U	<0.0022U	<0.0026U	<0.0019U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0045U
BP-SC-114	<0.0027U	<0.0019U	<0.0031U	<0.0014U	<0.0043U	<0.0016U	<0.0018U	<0.0017U	<0.0011U	<0.039U	<0.0034U	<0.0021U	<0.0036U	<0.0017U	<0.0023U	<0.0017U	0.0031J	<0.0023U	<0.0031U	<0.0039U	<0.0041U	<0.0023U	<0.0026U	<.002U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0046U
BP-SC-115	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-116	<0.0024U	<0.0017U	<0.0028U	<0.0013U	<0.0039U	<0.0014U	<0.0017U	<0.0015U	<0.00099U	<0.035U	<.003U	<0.0019U	<0.0032U	<0.0015U	<.002U	<0.0015U	<0.0023U	<0.0021U	<0.0028U	<0.0036U	<0.0037U	<.002U	<0.0024U	<0.0018U	<0.0019U	<0.0016U	<0.0025U	<0.0015U	<0.0035U	<0.0042U
BP-SC-117	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0016U	<0.0011U	<0.038U	<0.0033U	<.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	<0.0024U	<0.0022U	<.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U	<0.0017U	<0.0026U	<0.0016U	<0.0038U	<0.0044U
BP-SC-118	<0.0025U	<0.0018U	<0.0029U	<0.0014U	<.004U	<0.0015U	<0.0017U	<0.0016U	<0.001U	<0.037U	<0.0032U	<.002U	<0.0033U	<0.0016U	<0.0021U	<0.0016U	0.0026J	<0.0022U	<0.0029U	<0.0037U	<0.0038U	<0.0021U	<0.0024U	<0.0018U	<.002U	<0.0017U	<0.0025U	<0.0015U	<0.0037U	<0.0043U
BP-SC-119	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-120	<0.0025U	<0.0018U	<0.0029U	<0.0014U	<0.0041U	<0.0015U	<0.0017U	<0.0016U	<0.001U	<0.037U	<0.0032U	<.002U	<0.0034U	<0.0016U	<0.0021U	<0.0016U	0.0026J	<0.0022U	<0.0029U	<0.0037U	<0.0038U	<0.0021U	<0.0025U	<0.0019U	<.002U	<0.0017U	<0.0026U	<0.0015U	<0.0037U	<0.0044U
BP-SC-121	<0.0024U	<0.0018U	<0.0028U	<0.0013U	<0.0039U	<0.0014U	<0.0017U	<0.0015U	<0.00099U	<0.036U	<0.0031U	<0.0019U	<0.0032U	<0.0015U	<0.0021U	<0.0015U	0.0026J	<0.0021U	<0.0028U	<0.0036U	<0.0037U	<.002U	<0.0024U	<0.0018U	<0.0019U	<0.0016U	<0.0025U	<0.0015U	<0.0036U	<0.0042U
BP-SC-122	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0041U	<0.0015U	<0.0018U	<0.0016U	<0.001U	<0.037U	<0.0032U	<.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	0.0025J	<0.0022U	<.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<.002U	<0.0017U	<0.0026U	<0.0015U	<0.0038U	<0.0044U
BP-SC-123	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-124	<0.0026U	<0.0019U	<.003U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0017U	<0.0011U	<0.038U	<0.0033U	<0.0021U	<0.0035U	<0.0017U	<0.0022U	<0.0017U	0.0028J	<0.0023U	<.003U	<0.0039U	<.004U	<0.0022U	<0.0026U	<0.0019U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0045U
BP-SC-125	<0.061U	<.044U	<0.069U	<.033U	<0.097U	<.035U	<.042U	<.038U	<.025U	<.88U	<.076U	<.047U	<.08U	<.038U	<.051U	<.038U	<.057U	<.052U	<.07U	<.089U	<.092U	<.051U	<.059U	<.044U	<.048U	<.041U	<.061U	<.036U	<.089U	<.1U
BP-SC-126	<0.0026U	<0.0019U	<.003U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0017U	<0.0011U	<0.038U	<0.0033U	<0.0021U	<0.0035U	<0.0017U	<0.0022U	<0.0017U	0.0027J	<0.0023U	<.003U	<0.0039U	<.004U	<0.0022U	<0.0026U	<0.0019U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0045U
BP-SC-127	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-128	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0042U	<0.0015U	<0.0018U	<0.0016U	<0.0011U	<0.038U	<0.0033U	<.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	<0.0024U	<0.0022U	<0.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U	<0.0017U	<0.0026U	<0.0016U	<0.0038U	<0.0045U
BP-SC-129	<0.0024U	<0.0018U	<0.0028U	<0.0013U	<0.0039U	<0.0014U	<0.0017U	<0.0016U	<0.00099U	<0.036U	<0.0031U	<0.0019U	<0.0032U	<0.0015U	<0.0021U	<0.0015U	0.0023J	<0.0021U	<0.0028U	<0.0036U	<0.0037U	<0.0021U	<0.0024U	<0.0018U	<0.0019U	<0.0016U	<0.0025U	<0.0015U	<0.0036U	<0.0042U
BP-SC-130	<0.0027U	<.002U	<0.0031U	<0.0015U	<0.0044U	<0.0016U	<0.0019U	<0.0017U	<0.0011U	<.04U	<0.0035U	<0.0021U	<0.0036U	<0.0017U	<0.0023U	<0.0017U	<0.0026U	<0.0024U	<0.0032U	<.004U	<0.0042U	<0.0023U	<0.0027U	<.002U	<0.0022U	<0.0018U	<0.0028U	<0.0016U	<.004U	<0.0047U
BP-SC-131	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-132	<0.0027U	<0.0019U	<0.0031U	<0.0014U	<0.0043U	<0.0016U	<0.0018U	<0.0017U	<0.0011U	<0.039U	0.0053J	<0.0021U	<0.0036U	<0.0017U	<0.0023U	<0.0017U	<0.0025U	<0.0023U	<0.0031U	<.004U	<0.0041U	<0.0023U	<0.0026U	<.002U	<0.0021U	<0.0018U	<0.0027U	<0.0016U	<0.0039U	<0.0046U
BP-SC-133	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0041U	<0.0015U	<0.0018U	<0.0016U	<0.0011U	<0.038U	0.005J	<.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	<0.0024U	<0.0022U	<.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U	<0.0017U	<0.0026U	<0.0015U	<0.0038U	<0.0044U
BP-SC-134	<0.0026U	<0.0019U	<0.0029U	<0.0014U	<0.0041U	<0.0015U	<0.0018U	<0.0016U	<0.0011U	<0.038U	<0.0032U	<.002U	<0.0034U	<0.0016U	<0.0022U	<0.0016U	0.0024J	<0.0022U	<.003U	<0.0038U	<0.0039U	<0.0022U	<0.0025U	<0.0019U	<0.0021U,F1	<0.0017U	<0.0026U	<0.0015U,F1	<0.0038U	<0.0044U
BP-SC-135	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-136	-	-	-	-	-	-	-	-	-	<0.011U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTES:
J - estimated value
U - non detect
mg/kg - milligram/kilogram
Concentrations detected above soil criteria for restricted residential imported fill [DER10] are shaded dark grey

TABLE 1

Request to Import Fill - Brewer's Pit, Horsehead, NY
Former Sperry Remington Site - North Portion
Elmira, New York

	Metals														Pesticides														
	Arsenic	Barium	Beryllium	Cadmium	Chromium (III+VI)	Copper	Cyanide Total	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Zinc	2,4,5-TP (Silvex)	4,4-DDE	a-BHC	Aldrin	b-BHC	Chlordane (cis)	d-BHC	DDD	DDT	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	g-BHC (Lindane)	Heptachlor
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	1	20	0.4	0.5	0.5	2.5	0.24	1	1.5	0.027	4	1	0.11	2	0.0069	0.00034	0.00042	0.00053	0.00043	0.00042	0.00054	0.00045	0.00064	0.00042	0.00046	0.00037	0.00044	0.00066	0.00058	0.00053
DER-10 Appendix 5 Restricted - Residential Imported Fill	16	400	47	4.3	19	270	27	400	2000	0.73	130	4	8.3	2480	3.8	8.9	0.02	0.097	0.09	2.9	0.25	13	7.9	0.1	24	24	24	0.06	0.1	0.38
Field_ID																														
BP-SC-101	5.1	52	0.28J	0.15J	9.3	27	<0.25U	7.1	450	0.014J	18	0.98J	<0.11U	71	<0.007U	<0.00036U	<0.00043U	<0.00055U	<0.00045U	<0.00044U	<0.00056U	<0.00047U	<0.00067U	<0.00044U	<0.00048U	<0.00039U	<0.00046U	<0.00068U	<0.0006U	<0.00055U
BP-SC-102	4.7	47	0.28J	0.15J	9.8	25	<0.25U	6.5	390	0.014J	19	0.64J	0.14J	69	<0.007U	<0.00035U	<0.00043U	<0.00054U	<0.00045U	<0.00044U	<0.00055U	<0.00047U	<0.00066U	<0.00044U	<0.00047U	<0.00038U	<0.00045U	<0.00068U	<0.00059U	<0.00054U
BP-SC-103	5.2	54	0.32J	0.19J	9.9	30	<0.25U	7.9	580	0.016J	21	1.2	<0.11U	82	<0.007U	<0.00036U	<0.00043U	<0.00054U	<0.00045U	<0.00044U	<0.00055U	<0.00047U	<0.00067U	<0.00044U	<0.00047U	<0.00039U	<0.00046U	<0.00068U	<0.0006U	<0.00055U
BP-SC-104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-111	4.9	50	0.34J	0.15J	10	32	<0.28U	6.9	410	0.0096J	21	0.81J	<0.11U	77	<0.0069U	<0.00035U	<0.00042U	<0.00054U	<0.00044U	<0.00043U	<0.00055U	<0.00046U	<0.00066U	<0.00043U	<0.00047U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U
BP-SC-112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-115	4.5	46	0.27J	0.15J	8.9	23	<0.24U	6	410	0.0099J	18	0.94J	<0.11U	61	<0.0069U	<0.00035U	<0.00042U	<0.00053U	<0.00044U	<0.00043U	<0.00054U	<0.00046U	<0.00065U	<0.00043U	<0.00046U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U
BP-SC-116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-119	4.7	46	0.27J	0.45J	9.1	26	<0.24U	6	320	0.0095J	17	1.2	<0.11U	63	<0.0069U	<0.00034U	<0.00042U	<0.00053U	<0.00043U	<0.00042U	<0.00054U	<0.00045U	<0.00064U	<0.00042U	<0.00046U	<0.00037U	<0.00044U	<0.00066U	<0.00058U	<0.00053U
BP-SC-120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-123	3.7	41	0.25J	0.12J	8.4	23	<0.25U	5.3	520	0.011J	17	0.79J	<0.11U	60	<0.0069U	<0.00035U	<0.00042U	<0.00054U	<0.00044U	<0.00043U	<0.00055U	<0.00046U	<0.00066U	<0.00043U	<0.00047U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U
BP-SC-124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-127	3.8	35	0.21J	0.12J	6.9	20	<0.28U	4.9	330	0.0089J	14	1.4	<0.11U	51	<0.007U	<0.00035U	<0.00042U	<0.00053U	<0.00044U	<0.00043U	<0.00054U	<0.00046U	<0.00065U	<0.00043U	<0.00047U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U
BP-SC-128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-131	4.8	49	0.29J	0.2J	9.7	24	<0.26U	6.4	600	0.01J	21	1.1	<0.11U	70	<0.0069U	<0.00036U	<0.00043U	<0.00055U	<0.00045U	<0.00044U	<0.00056U	<0.00047U	<0.00067U	<0.00044U	<0.00048U	<0.00039U	<0.00046U	<0.00069U	<0.0006U	<0.00055U
BP-SC-132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-135	4.5	36	0.24J	0.13J	8.3	28	-	5.5	290	0.01J	16	0.69J	<0.11U	56	<0.007U	<0.00035U	<0.00042U	<0.00053U	<0.00044U	<0.00043U	<0.00054U	<0.00046U	<0.00065U	<0.00043U	<0.00047U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U
BP-SC-136	5.1	75	0.34J	0.22J	12	33	<0.27U	7.7	690	0.0082J	23	0.61J	<0.11U	81	<0.0069U	<0.00035U	<0.00042U	<0.00054U	<0.00044U	<0.00043U	<0.00055U	<0.00046U	<0.00066U	<0.00043U	<0.00047U	<0.00038U	<0.00045U	<0.00067U	<0.00059U	<0.00054U

NOTES:
J - estimated value
U - non detect
mg/kg - milligram/kilogram
Concentrations detected above soil criteria for restricted residential imported fill [DER10] are shaded dark grey

TABLE 1

Request to Import Fill - Brewer's Pit, Horsehead, NY
Former Sperry Remington Site - North Portion
Elmira, New York

	Polychlorinated Biphenyls										SVOCs																					
	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	Arochlor 1268	Arochlor 1262	Total PCBs	2-methylphenol	4-methylphenol	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Hexachlorobenzene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0055	0.011	0.01	0.01	0.013	0.012	0.0048	0.0082	0.012		0.0097	0.0099	0.002	0.0015	0.0018	0.0013	0.0015	0.0017	0.0015	0.002	0.0013	0.0015	0.0015	0.0018	0.0013	0.0024	0.0014	0.0013	0.054	0.0018	0.01	0.0016
DER-10 Appendix 5 Restricted - Residential Imported Fill										1			98	100	100	1	1	1	100	1.7	1	0.33	59	100	100	1.2	0.5	12	0.8	100	0.33	100
Field_ID																																
BP-SC-101	<0.0057U	<0.011U	<0.01U	<0.011U	<0.014U	<0.012U	<0.005U	<0.0085U	<0.012U	<0.0892	<0.01U	<0.01U	<0.002U	0.0038J	0.019	0.0018J	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0016U	<0.0015U	0.0019J	0.0028J	<0.0025U	<0.0014U	<0.0014U	<0.056U	0.0036J	<0.011U	<0.0017U
BP-SC-102	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0084U	<0.012U	<0.0879	<0.01U	<0.01U	<0.002U	0.0019J	0.0023J	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0016U	<0.0015U	<0.0018U	<0.0014U	<0.0025U	<0.0014U	<0.0014U	<0.056U	0.0024J	<0.011U	<0.0016U
BP-SC-103	<0.0057U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.005U	<0.0085U	<0.012U	<0.0882	<0.01U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0016U	<0.0015U	<0.0019U	<0.0014U	<0.0025U	<0.0014U	<0.0014U	<0.057U	<0.0019U	<0.011U	<0.0017U
BP-SC-104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-111	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0084U	<0.012U	<0.0879	<0.0097U	<0.0099U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.002U	<0.0013U	<0.0015U	<0.0015U	<0.0018U	<0.0013U	<0.0024U	<0.0014U	<0.0013U	<0.054U	<0.0018U	<0.01U	<0.0016U
BP-SC-112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-115	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0083U	<0.012U	<0.0878	<0.0099U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0015U	<0.0015U	<0.0018UJ	<0.0014U	<0.0025U	<0.0014U	<0.0013U	<0.055U	<0.0019UJ	<0.01U	<0.0016U
BP-SC-116	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-117	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-118	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-119	<0.0055U	<0.011U	<0.01U	<0.01U	<0.013U	<0.012U	<0.0048U	<0.0082U	<0.012U	<0.0865	<0.0098U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0013U	<0.0015U	<0.0015U	<0.0018U	<0.0013U	<0.0025U	<0.0014U	<0.0013U	<0.055U	<0.0018U	<0.01U	<0.0016U
BP-SC-120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-121	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-122	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-123	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0084U	<0.012U	<0.0879	<0.0097U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.002U	<0.0013U	<0.0015U	<0.0015U	<0.0018U	<0.0013U	<0.0024U	<0.0014U	<0.0013U	<0.055U	<0.0018U	<0.01U	<0.0016U
BP-SC-124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-126	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-127	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0083U	<0.012U	<0.0878	<0.01U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0016U	<0.0015U	<0.0018U	<0.0014U	<0.0025U	<0.0014U	<0.0014U	<0.056U	<0.0019U	<0.011U	<0.0017U
BP-SC-128	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-129	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-131	<0.0057U	<0.011U	<0.01U	<0.011U	<0.014U	<0.012U	<0.005U	<0.0086U	<0.012U	<0.0893	<0.0098U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0013U	<0.0015U	<0.0015U	<0.0018U	<0.0013U	<0.0025U	<0.0014U	<0.0013U	<0.055U	<0.0018U	<0.01U	<0.0016U
BP-SC-132	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BP-SC-135	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0083U	<0.012U	<0.0878	<0.01U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0014U	<0.0016U	<0.0015U	<0.0019U	<0.0014U	<0.0025U	<0.0014U	<0.0014U	<0.056U	<0.0019U	<0.011U	<0.0017U
BP-SC-136	<0.0056U	<0.011U	<0.01U	<0.01U	<0.014U	<0.012U	<0.0049U	<0.0084U	<0.012U	<0.0879	<0.0098U	<0.01U	<0.002U	<0.0015U	<0.0018U	<0.0013U	<0.0015U	<0.0017U	<0.0015U	<0.0021U	<0.0013U	<0.0015U	<0.0015U	<0.0018U	<0.0013U	<0.0025U	<0.0014U	<0.0013U	<0.055U	<0.0018U	<0.01U	<0.0016U

NOTES:
J - estimated value
U - non detect
mg/kg - milligram/kilogram
Concentrations detected above soil criteria for restricted residential imported fill [DER10] are shaded dark grey

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-77198-1
Client Project/Site: Former Sperry Remington Site-Brewers Pit

For:
Geosyntec Consultants, Inc.
10211 Wincopin Circle
4'th Floor
Columbia, Maryland 21044

Attn: Mr. Aron Krasnopoler

Authorized for release by:
5/11/2018 10:08:33 AM

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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Job ID: 180-77198-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-77198-1

Receipt
The samples were received on 4/27/2018 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for batch 180-243465 recovered above the control limits for tetrachloroethene. As the recovery was high and tetrachlorethene was not detected in the associated samples, the results were reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243465 was above criteria for the following analytes: acetone and tetrachloroethene. As these analytes were biased high in the CCV and were not detected in the associated samples, the results were reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243560 was below criteria for the following analytes: methyl tert-butyl ether and 1,4-dioxane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243560 was above criteria for or the following analyte: acetone. As acetone was biased high in the CCV and was not detected in the associated samples, the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: The continuing calibration verification (CCV) analyzed in batch 180-244390 was below criteria on column MR-1 for endrin. The results were reported from column MR-2 which met criteria.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-244397 (CCV 180-244397/5) was above criteria for 1 peak for aroclor 1016 on column RTX-CLP1. As the CCV was high and aroclor1016 was not detected in the associated samples, the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 180-77198-1
Project/Site: Former Sperry Remington Site-Brewers Pit

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11182	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
EPA 8270D LL	3541	Solid	1,4-Dioxane

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-77198-1	BP-SC-101	Solid	04/26/18 16:20	04/27/18 08:50
180-77198-2	BP-SC-102	Solid	04/26/18 16:25	04/27/18 08:50
180-77198-3	BP-SC-103	Solid	04/26/18 16:30	04/27/18 08:50
180-77198-4	BP-SC-104	Solid	04/26/18 16:35	04/27/18 08:50
180-77198-5	BP-SC-105	Solid	04/26/18 16:40	04/27/18 08:50
180-77198-6	BP-SC-106	Solid	04/26/18 16:45	04/27/18 08:50
180-77198-7	BP-SC-107	Solid	04/26/18 16:50	04/27/18 08:50
180-77198-8	BP-SC-108	Solid	04/26/18 16:55	04/27/18 08:50
180-77198-9	BP-SC-109	Solid	04/26/18 17:00	04/27/18 08:50
180-77198-10	BP-SC-110	Solid	04/26/18 17:05	04/27/18 08:50
180-77198-11	DUP-01	Solid	04/26/18 00:00	04/27/18 08:50

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 8151A	Herbicides (GC)	SW846	TAL PIT
EPA 6010C	Metals (ICP)	SW846	TAL PIT
EPA 7471B	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
5035	Closed System Purge and Trap	SW846	TAL PIT
7471B	Preparation, Mercury	SW846	TAL PIT
8151A	Extraction (Herbicides)	SW846	TAL PIT
9010C	Cyanide, Distillation	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-101
Date Collected: 04/26/18 16:20
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-101
Date Collected: 04/26/18 16:20
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-1
Matrix: Solid
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	244105	05/07/18 05:22	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244254	05/08/18 14:21	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 15:29	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 18:25	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/08/18 22:23	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.97 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 14:36	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.61 g	100 mL	243479	04/30/18 08:14	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243608	05/01/18 08:50	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.13 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:27	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-102
Date Collected: 04/26/18 16:25
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-102

Lab Sample ID: 180-77198-2
Date Collected: 04/26/18 16:25
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	0.5 mL	244105	05/07/18 05:22	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244254	05/08/18 14:48	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 15:44	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 18:47	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/08/18 22:48	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.05 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 14:41	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.66 g	100 mL	243479	04/30/18 08:14	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243608	05/01/18 08:57	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.16 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:29	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-103

Lab Sample ID: 180-77198-3
Date Collected: 04/26/18 16:30
Matrix: Solid
Date Received: 04/27/18 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-103

Lab Sample ID: 180-77198-3
Date Collected: 04/26/18 16:30
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	244105	05/07/18 05:22	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244254	05/08/18 15:16	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:21	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 16:00	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:21	BAP	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-103

Lab Sample ID: 180-77198-3
Date Collected: 04/26/18 16:30
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 19:08	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/08/18 23:12	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.02 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 14:46	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.66 g	100 mL	243479	04/30/18 08:14	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243608	05/01/18 08:59	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.17 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:30	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-104

Lab Sample ID: 180-77198-4
Date Collected: 04/26/18 16:35
Matrix: Solid
Date Received: 04/27/18 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-104

Lab Sample ID: 180-77198-4
Date Collected: 04/26/18 16:35
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0792 g	5 mL	243470	04/30/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243465	04/30/18 16:41	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-105

Lab Sample ID: 180-77198-5
Date Collected: 04/26/18 16:40
Matrix: Solid
Date Received: 04/27/18 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-105
Date Collected: 04/26/18 16:40
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-5
Matrix: Solid
Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.6661 g	5 mL	243470	04/30/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243465	04/30/18 17:04	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-106
Date Collected: 04/26/18 16:45
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-106
Date Collected: 04/26/18 16:45
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-6
Matrix: Solid
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9681 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 10:13	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-107
Date Collected: 04/26/18 16:50
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-107
Date Collected: 04/26/18 16:50
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-7
Matrix: Solid
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2699 g	5 mL	243470	04/30/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243465	04/30/18 17:52	KLG	TAL PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-108
Date Collected: 04/26/18 16:55
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-108
Date Collected: 04/26/18 16:55
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-8
Matrix: Solid
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3093 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 10:36	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-109
Date Collected: 04/26/18 17:00
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-109
Date Collected: 04/26/18 17:00
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-9
Matrix: Solid
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0366 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 10:59	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-110
Date Collected: 04/26/18 17:05
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-110
Date Collected: 04/26/18 17:05
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-10
Matrix: Solid
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0411 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Client Sample ID: BP-SC-110

Lab Sample ID: 180-77198-10
Date Collected: 04/26/18 17:05
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 11:23	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: DUP-01

Lab Sample ID: 180-77198-11
Date Collected: 04/26/18 00:00
Matrix: Solid
Date Received: 04/27/18 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243526	04/30/18 13:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01

Lab Sample ID: 180-77198-11
Date Collected: 04/26/18 00:00
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	0.5 mL	244105	05/07/18 05:22	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244254	05/08/18 15:44	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:21	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 16:15	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:21	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 19:29	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/08/18 23:37	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.97 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 14:51	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.76 g	100 mL	243479	04/30/18 08:14	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243608	05/01/18 09:01	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.16 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:32	JAS	TAL PIT
	Instrument ID: SEAL2									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

Analyst References:

Lab: TAL PIT

Batch Type: Cleanup

JMO = John Oravec

Batch Type: Prep

BAP = Brian Pino

CBY = Charles Yushinski

JAS = Joshua Schmidt

KA = Kayla Kalamasz

KLG = Kathy Gordon

RJR = Ron Rosenbaum

Batch Type: Analysis

DFE = David Eppinger

DLF = Donald Ferguson

JAS = Joshua Schmidt

JBF = Joshua Fritsch

JMO = John Oravec

KLG = Kathy Gordon

RJG = Rob Good

RJR = Ron Rosenbaum

TAM = Tessa Mastalski

Client Sample ID: BP-SC-101
Date Collected: 04/26/18 16:20
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-1
Matrix: Solid
Percent Solids: 94.4

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.0	2.0	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Acenaphthylene	**3.8**	**J**	7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Anthracene	**19**		7.0	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Benzo[a]anthracene	**1.8**	**J**	7.0	1.3	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Benzo[a]pyrene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Benzo[b]fluoranthene	ND		7.0	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Benzo[g,h,i]perylene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Benzo[k]fluoranthene	ND		7.0	2.1	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Chrysene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Dibenz(a,h)anthracene	ND		7.0	1.6	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Dibenzofuran	ND		35	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
1,4-Dioxane	ND		70	11	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Fluoranthene	**1.9**	**J**	7.0	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Fluorene	**2.8**	**J**	7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Hexachlorobenzene	ND		7.0	2.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Indeno[1,2,3-cd]pyrene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
2-Methylphenol	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Methylphenol, 3 & 4	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Naphthalene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Pentachlorophenol	ND		180	56	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Phenanthrene	**3.6**	**J**	7.0	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Phenol	ND		35	11	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1
Pyrene	ND		7.0	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*34 - 100*	*05/07/18 05:22*	*05/08/18 14:21*	*1*
2-Fluorophenol (Surr)	*75*		*27 - 100*	*05/07/18 05:22*	*05/08/18 14:21*	*1*
Nitrobenzene-d5 (Surr)	*89*		*33 - 100*	*05/07/18 05:22*	*05/08/18 14:21*	*1*
Phenol-d5 (Surr)	*84*		*27 - 100*	*05/07/18 05:22*	*05/08/18 14:21*	*1*
Terphenyl-d14 (Surr)	*100*		*30 - 100*	*05/07/18 05:22*	*05/08/18 14:21*	*1*
2,4,6-Tribromophenol (Surr)	*84*		*20 - 107*	*05/07/18 05:22*	*05/08/18 14:21*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
alpha-BHC	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
beta-BHC	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
cis-Chlordane	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
4,4'-DDD	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
4,4'-DDE	ND		1.8	0.36	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
4,4'-DDT	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
delta-BHC	ND		1.8	0.56	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Endosulfan I	ND		1.8	0.48	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Endosulfan II	ND		1.8	0.39	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Endosulfan sulfate	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Endrin	ND		1.8	0.68	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
gamma-BHC (Lindane)	ND		1.8	0.60	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1
Heptachlor	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 15:29	1

Client Sample ID: BP-SC-101

Date Collected: 04/26/18 16:20
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-1

Matrix: Solid
Percent Solids: 94.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	86		40 - 150	05/09/18 03:17	05/09/18 15:29	1
DCB Decachlorobiphenyl (Surr)	84		40 - 150	05/09/18 03:17	05/09/18 15:29	1
Tetrachloro-m-xylene	89		44 - 133	05/09/18 03:17	05/09/18 15:29	1
Tetrachloro-m-xylene	92		44 - 133	05/09/18 03:17	05/09/18 15:29	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0057	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1221	ND		0.018	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1232	ND		0.018	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1242	ND		0.018	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1248	ND		0.018	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1254	ND		0.018	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1260	ND		0.018	0.0050	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1262	ND		0.018	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1
PCB-1268	ND		0.018	0.0085	mg/Kg	☼	05/09/18 03:17	05/09/18 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		33 - 137	05/09/18 03:17	05/09/18 18:25	1
DCB Decachlorobiphenyl (Surr)	85		33 - 137	05/09/18 03:17	05/09/18 18:25	1
Tetrachloro-m-xylene (Surr)	85		44 - 114	05/09/18 03:17	05/09/18 18:25	1
Tetrachloro-m-xylene (Surr)	77		44 - 114	05/09/18 03:17	05/09/18 18:25	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/08/18 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	75		29 - 100	05/04/18 14:05	05/08/18 22:23	1
2,4-Dichlorophenylacetic acid	77		29 - 100	05/04/18 14:05	05/08/18 22:23	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**		1.1	0.30	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Barium	**52**		22	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Beryllium	**0.28**	**J**	0.44	0.025	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Cadmium	**0.15**	**J**	0.55	0.040	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Chromium	**9.3**		0.55	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Copper	**27**		2.7	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Lead	**7.1**		1.1	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Manganese	**450**		1.6	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Nickel	**18**		4.4	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Selenium	**0.98**	**J**	1.1	0.56	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Silver	ND		0.55	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1
Zinc	**71**		2.2	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 14:36	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.034	0.0077	mg/Kg	☼	04/30/18 08:14	05/01/18 08:50	1

Client Sample ID: BP-SC-101 — Lab Sample ID: 180-77198-1

Date Collected: 04/26/18 16:20 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 94.4**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.6**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**94.4**		0.1	0.1	%			04/30/18 13:37	1
Cyanide, Total	ND		0.47	0.25	mg/Kg	☼	05/01/18 12:20	05/02/18 12:27	1

Client Sample ID: BP-SC-102 — Lab Sample ID: 180-77198-2

Date Collected: 04/26/18 16:25 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 94.2**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.0	2.0	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Acenaphthylene	**1.9**	**J**	7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Anthracene	**2.3**	**J**	7.0	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Benzo[a]anthracene	ND		7.0	1.3	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Benzo[a]pyrene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Benzo[b]fluoranthene	ND		7.0	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Benzo[g,h,i]perylene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Benzo[k]fluoranthene	ND		7.0	2.1	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Chrysene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Dibenz(a,h)anthracene	ND		7.0	1.6	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
1,4-Dioxane	ND		69	11	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Fluoranthene	ND		7.0	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Fluorene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Hexachlorobenzene	ND		7.0	2.5	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Indeno[1,2,3-cd]pyrene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
2-Methylphenol	ND		34	10	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Naphthalene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Pentachlorophenol	ND		180	56	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Phenanthrene	**2.4**	**J**	7.0	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Phenol	ND		34	11	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1
Pyrene	ND		7.0	1.6	ug/Kg	☼	05/07/18 05:22	05/08/18 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 100*	*05/07/18 05:22*	*05/08/18 14:48*	*1*
2-Fluorophenol (Surr)	*58*		*27 - 100*	*05/07/18 05:22*	*05/08/18 14:48*	*1*
Nitrobenzene-d5 (Surr)	*72*		*33 - 100*	*05/07/18 05:22*	*05/08/18 14:48*	*1*
Phenol-d5 (Surr)	*66*		*27 - 100*	*05/07/18 05:22*	*05/08/18 14:48*	*1*
Terphenyl-d14 (Surr)	*77*		*30 - 100*	*05/07/18 05:22*	*05/08/18 14:48*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*20 - 107*	*05/07/18 05:22*	*05/08/18 14:48*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
alpha-BHC	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
beta-BHC	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
cis-Chlordane	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
4,4'-DDD	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1

Client Sample ID: BP-SC-102 **Lab Sample ID: 180-77198-2**
Date Collected: 04/26/18 16:25 **Matrix: Solid**
Date Received: 04/27/18 08:50 **Percent Solids: 94.2**

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	ND		1.8	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Endrin	ND		1.8	0.68	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*40 - 150*	*05/09/18 03:17*	*05/09/18 15:44*	*1*
DCB Decachlorobiphenyl (Surr)	*83*		*40 - 150*	*05/09/18 03:17*	*05/09/18 15:44*	*1*
Tetrachloro-m-xylene	*90*		*44 - 133*	*05/09/18 03:17*	*05/09/18 15:44*	*1*
Tetrachloro-m-xylene	*93*		*44 - 133*	*05/09/18 03:17*	*05/09/18 15:44*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1
PCB-1268	ND		0.017	0.0084	mg/Kg	☼	05/09/18 03:17	05/09/18 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 137*	*05/09/18 03:17*	*05/09/18 18:47*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*33 - 137*	*05/09/18 03:17*	*05/09/18 18:47*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*44 - 114*	*05/09/18 03:17*	*05/09/18 18:47*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*44 - 114*	*05/09/18 03:17*	*05/09/18 18:47*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/08/18 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*55*		*29 - 100*	*05/04/18 14:05*	*05/08/18 22:48*	*1*
2,4-Dichlorophenylacetic acid	*59*		*29 - 100*	*05/04/18 14:05*	*05/08/18 22:48*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Barium	**47**		20	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Beryllium	**0.28**	**J**	0.40	0.023	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Cadmium	**0.15**	**J**	0.51	0.037	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Chromium	**9.8**		0.51	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Copper	**25**		2.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Lead	**6.5**		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1

Client Sample ID: BP-SC-102

Lab Sample ID: 180-77198-2
Date Collected: 04/26/18 16:25
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.2

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	390		1.5	0.16	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Nickel	19		4.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Selenium	0.64	J	1.0	0.52	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Silver	0.14	J	0.51	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1
Zinc	69		2.0	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 14:41	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.032	0.0071	mg/Kg	☼	04/30/18 08:14	05/01/18 08:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.8		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	94.2		0.1	0.1	%			04/30/18 13:37	1
Cyanide, Total	ND		0.46	0.25	mg/Kg	☼	05/01/18 12:20	05/02/18 12:29	1

Client Sample ID: BP-SC-103

Lab Sample ID: 180-77198-3
Date Collected: 04/26/18 16:30
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.6

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.1	2.0	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Acenaphthylene	ND		7.1	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Anthracene	ND		7.1	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Benzo[a]anthracene	ND		7.1	1.3	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Benzo[a]pyrene	ND		7.1	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Benzo[b]fluoranthene	ND		7.1	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Benzo[g,h,i]perylene	ND		7.1	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Benzo[k]fluoranthene	ND		7.1	2.1	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Chrysene	ND		7.1	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Dibenz(a,h)anthracene	ND		7.1	1.6	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Dibenzofuran	ND		35	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
1,4-Dioxane	ND		70	11	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Fluoranthene	ND		7.1	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Fluorene	ND		7.1	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Hexachlorobenzene	ND		7.1	2.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Indeno[1,2,3-cd]pyrene	ND		7.1	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
2-Methylphenol	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Methylphenol, 3 & 4	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Naphthalene	ND		7.1	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Pentachlorophenol	ND		180	57	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Phenanthrene	ND		7.1	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Phenol	ND		35	11	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1
Pyrene	ND		7.1	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 100*	*05/07/18 05:22*	*05/08/18 15:16*	*1*
2-Fluorophenol (Surr)	*62*		*27 - 100*	*05/07/18 05:22*	*05/08/18 15:16*	*1*
Nitrobenzene-d5 (Surr)	*74*		*33 - 100*	*05/07/18 05:22*	*05/08/18 15:16*	*1*

Client Sample ID: BP-SC-103 **Lab Sample ID: 180-77198-3**
Date Collected: 04/26/18 16:30 **Matrix: Solid**
Date Received: 04/27/18 08:50 **Percent Solids: 94.6**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	*71*		*27 - 100*	*05/07/18 05:22*	*05/08/18 15:16*	*1*
Terphenyl-d14 (Surr)	*98*		*30 - 100*	*05/07/18 05:22*	*05/08/18 15:16*	*1*
2,4,6-Tribromophenol (Surr)	*78*		*20 - 107*	*05/07/18 05:22*	*05/08/18 15:16*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
alpha-BHC	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
beta-BHC	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
cis-Chlordane	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
4,4'-DDD	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
4,4'-DDE	ND		1.8	0.36	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
4,4'-DDT	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Endosulfan II	ND		1.8	0.39	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Endosulfan sulfate	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Endrin	ND		1.8	0.68	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
gamma-BHC (Lindane)	ND		1.8	0.60	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1
Heptachlor	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:21	05/09/18 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:21*	*05/09/18 16:00*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*40 - 150*	*05/09/18 03:21*	*05/09/18 16:00*	*1*
Tetrachloro-m-xylene	*95*		*44 - 133*	*05/09/18 03:21*	*05/09/18 16:00*	*1*
Tetrachloro-m-xylene	*100*		*44 - 133*	*05/09/18 03:21*	*05/09/18 16:00*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0057	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1260	ND		0.017	0.0050	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1
PCB-1268	ND		0.017	0.0085	mg/Kg	☼	05/09/18 03:21	05/09/18 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*	*05/09/18 03:21*	*05/09/18 19:08*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*33 - 137*	*05/09/18 03:21*	*05/09/18 19:08*	*1*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*	*05/09/18 03:21*	*05/09/18 19:08*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*44 - 114*	*05/09/18 03:21*	*05/09/18 19:08*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/08/18 23:12	1

Client Sample ID: BP-SC-103

Date Collected: 04/26/18 16:30
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-3
Matrix: Solid
Percent Solids: 94.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*29 - 100*	*05/04/18 14:05*	*05/08/18 23:12*	*1*
2,4-Dichlorophenylacetic acid	*73*		*29 - 100*	*05/04/18 14:05*	*05/08/18 23:12*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.2**		1.0	0.29	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Barium	**54**		21	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Beryllium	**0.32**	**J**	0.41	0.024	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Cadmium	**0.19**	**J**	0.52	0.038	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Chromium	**9.9**		0.52	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Copper	**30**		2.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Lead	**7.9**		1.0	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Manganese	**580**		1.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Nickel	**21**		4.1	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Selenium	**1.2**		1.0	0.53	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Silver	ND		0.52	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1
Zinc	**82**		2.1	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 14:46	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.032	0.0071	mg/Kg	☼	04/30/18 08:14	05/01/18 08:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.4**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**94.6**		0.1	0.1	%			04/30/18 13:37	1
Cyanide, Total	ND		0.45	0.25	mg/Kg	☼	05/01/18 12:20	05/02/18 12:30	1

Client Sample ID: BP-SC-104

Date Collected: 04/26/18 16:35
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-4
Matrix: Solid
Percent Solids: 95.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0032	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Benzene	ND		0.0051	0.0020	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
2-Butanone (MEK)	ND		0.0051	0.0030	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Carbon tetrachloride	ND		0.0051	0.0034	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Chlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Chloroform	ND		0.0051	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
cis-1,2-Dichloroethene	ND		0.0051	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,2-Dichlorobenzene	ND		0.0051	0.0041	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,3-Dichlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,4-Dichlorobenzene	ND		0.0051	0.0010	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,1-Dichloroethane	ND		0.0051	0.0019	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,1-Dichloroethene	ND		0.0051	0.0029	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Ethylbenzene	ND		0.0051	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Methylene Chloride	ND		0.0051	0.0024	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Methyl tert-butyl ether	ND		0.0051	0.0038	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1

Client Sample ID: BP-SC-104

Date Collected: 04/26/18 16:35
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-4
Matrix: Solid
Percent Solids: 95.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.0051	0.0039	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
N-Propylbenzene	ND		0.0051	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
tert-Butylbenzene	ND		0.0051	0.0019	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Tetrachloroethene	ND	*	0.0051	0.0021	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Toluene	ND		0.0051	0.0017	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
trans-1,2-Dichloroethene	ND		0.0051	0.0026	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,1,1-Trichloroethane	ND		0.0051	0.0026	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Trichloroethene	ND		0.0051	0.0015	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0014	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Vinyl chloride	ND		0.0051	0.0038	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	04/30/18 06:15	04/30/18 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*	*04/30/18 06:15*	*04/30/18 16:41*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 116*	*04/30/18 06:15*	*04/30/18 16:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 118*	*04/30/18 06:15*	*04/30/18 16:41*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*	*04/30/18 06:15*	*04/30/18 16:41*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.3**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**95.7**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-105

Date Collected: 04/26/18 16:40
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-5
Matrix: Solid
Percent Solids: 95.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0035	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Benzene	ND		0.0056	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
2-Butanone (MEK)	ND		0.0056	0.0032	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Carbon tetrachloride	ND		0.0056	0.0037	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Chlorobenzene	ND		0.0056	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Chloroform	ND		0.0056	0.0024	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
cis-1,2-Dichloroethene	ND		0.0056	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,2-Dichlorobenzene	ND		0.0056	0.0045	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,3-Dichlorobenzene	ND		0.0056	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,4-Dichlorobenzene	ND		0.0056	0.0011	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,1-Dichloroethane	ND		0.0056	0.0020	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,2-Dichloroethane	ND		0.0056	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,1-Dichloroethene	ND		0.0056	0.0032	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,4-Dioxane	ND		1100	41	ug/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Ethylbenzene	ND		0.0056	0.0024	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Methylene Chloride	ND		0.0056	0.0026	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Methyl tert-butyl ether	ND		0.0056	0.0041	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
n-Butylbenzene	ND		0.0056	0.0042	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
N-Propylbenzene	ND		0.0056	0.0024	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1

Client Sample ID: BP-SC-105

Date Collected: 04/26/18 16:40
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-5
Matrix: Solid
Percent Solids: 95.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.0056	0.0027	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
tert-Butylbenzene	ND		0.0056	0.0021	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Tetrachloroethene	ND	*	0.0056	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Toluene	ND		0.0056	0.0019	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
trans-1,2-Dichloroethene	ND		0.0056	0.0028	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,1,1-Trichloroethane	ND		0.0056	0.0028	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Trichloroethene	ND		0.0056	0.0017	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,2,4-Trimethylbenzene	ND		0.0056	0.0015	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
1,3,5-Trimethylbenzene	ND		0.0056	0.0019	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Vinyl chloride	ND		0.0056	0.0041	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1
Xylenes, Total	ND		0.011	0.0048	mg/Kg	☼	04/30/18 06:15	04/30/18 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*	*04/30/18 06:15*	*04/30/18 17:04*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 116*	*04/30/18 06:15*	*04/30/18 17:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 118*	*04/30/18 06:15*	*04/30/18 17:04*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*	*04/30/18 06:15*	*04/30/18 17:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.4**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**95.6**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-106

Date Collected: 04/26/18 16:45
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-6
Matrix: Solid
Percent Solids: 94.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Benzene	ND		0.0054	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
2-Butanone (MEK)	ND		0.0054	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Carbon tetrachloride	ND		0.0054	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Chlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Chloroform	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
cis-1,2-Dichloroethene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,2-Dichlorobenzene	ND		0.0054	0.0043	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,3-Dichlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,4-Dichlorobenzene	ND		0.0054	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,1-Dichloroethane	ND		0.0054	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,1-Dichloroethene	ND		0.0054	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,4-Dioxane	ND		1100	39	ug/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Ethylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Methylene Chloride	ND		0.0054	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Methyl tert-butyl ether	ND		0.0054	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
n-Butylbenzene	ND		0.0054	0.0041	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
N-Propylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
tert-Butylbenzene	ND		0.0054	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1

Client Sample ID: BP-SC-106 — Lab Sample ID: 180-77198-6

Date Collected: 04/26/18 16:45 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 94.1**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.0054	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Toluene	ND		0.0054	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
trans-1,2-Dichloroethene	ND		0.0054	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,1,1-Trichloroethane	ND		0.0054	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Trichloroethene	ND		0.0054	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1
Xylenes, Total	ND		0.011	0.0046	mg/Kg	☼	05/01/18 06:15	05/01/18 10:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*76 - 111*	*05/01/18 06:15*	*05/01/18 10:13*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 116*	*05/01/18 06:15*	*05/01/18 10:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*62 - 118*	*05/01/18 06:15*	*05/01/18 10:13*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/01/18 06:15*	*05/01/18 10:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.9**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**94.1**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-107 — Lab Sample ID: 180-77198-7

Date Collected: 04/26/18 16:50 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 94.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Benzene	ND		0.0050	0.0020	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Chloroform	ND		0.0050	0.0021	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,4-Dioxane	ND		1000	37	ug/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Tetrachloroethene	ND	*	0.0050	0.0020	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Toluene	ND		0.0050	0.0017	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1

Client Sample ID: BP-SC-107

Date Collected: 04/26/18 16:50
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-7
Matrix: Solid
Percent Solids: 94.4

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.0050	0.0026	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0014	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg	☼	04/30/18 06:15	04/30/18 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*76 - 111*	*04/30/18 06:15*	*04/30/18 17:52*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 116*	*04/30/18 06:15*	*04/30/18 17:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 118*	*04/30/18 06:15*	*04/30/18 17:52*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*	*04/30/18 06:15*	*04/30/18 17:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.6**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**94.4**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-108

Date Collected: 04/26/18 16:55
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-8
Matrix: Solid
Percent Solids: 93.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Benzene	ND		0.0050	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Chloroform	ND		0.0050	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,4-Dioxane	ND		1000	37	ug/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Toluene	ND		0.0050	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1

Client Sample ID: BP-SC-108

Lab Sample ID: 180-77198-8
Date Collected: 04/26/18 16:55
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 93.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0050	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg	☼	05/01/18 06:15	05/01/18 10:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/01/18 06:15*	*05/01/18 10:36*	*1*
Dibromofluoromethane (Surr)	*91*		*72 - 116*	*05/01/18 06:15*	*05/01/18 10:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 118*	*05/01/18 06:15*	*05/01/18 10:36*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*	*05/01/18 06:15*	*05/01/18 10:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.2**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**93.8**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-109

Lab Sample ID: 180-77198-9
Date Collected: 04/26/18 17:00
Matrix: Solid
Date Received: 04/27/18 08:50
Percent Solids: 94.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Benzene	ND		0.0052	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Carbon tetrachloride	ND		0.0052	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Chlorobenzene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
cis-1,2-Dichloroethene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,2-Dichlorobenzene	ND		0.0052	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,3-Dichlorobenzene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,1-Dichloroethene	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Ethylbenzene	ND		0.0052	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Methylene Chloride	ND		0.0052	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Methyl tert-butyl ether	ND		0.0052	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
n-Butylbenzene	ND		0.0052	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
sec-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Toluene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
trans-1,2-Dichloroethene	ND		0.0052	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1

Client Sample ID: BP-SC-109

Date Collected: 04/26/18 17:00
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-9

Matrix: Solid
Percent Solids: 94.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1
Xylenes, Total	ND		0.010	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*	*05/01/18 06:15*	*05/01/18 10:59*	*1*
Dibromofluoromethane (Surr)	*89*		*72 - 116*	*05/01/18 06:15*	*05/01/18 10:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*	*05/01/18 06:15*	*05/01/18 10:59*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/01/18 06:15*	*05/01/18 10:59*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.4**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**94.6**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: BP-SC-110

Date Collected: 04/26/18 17:05
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-10

Matrix: Solid
Percent Solids: 95.2

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Carbon tetrachloride	ND		0.0052	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,2-Dichlorobenzene	ND		0.0052	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,3-Dichlorobenzene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,1-Dichloroethene	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Ethylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Methylene Chloride	ND		0.0052	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Toluene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
trans-1,2-Dichloroethene	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1

Client Sample ID: BP-SC-110 — Lab Sample ID: 180-77198-10

Date Collected: 04/26/18 17:05 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 95.2**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.010	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*76 - 111*	*05/01/18 06:15*	*05/01/18 11:23*	*1*
Dibromofluoromethane (Surr)	*87*		*72 - 116*	*05/01/18 06:15*	*05/01/18 11:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*62 - 118*	*05/01/18 06:15*	*05/01/18 11:23*	*1*
Toluene-d8 (Surr)	*102*		*80 - 129*	*05/01/18 06:15*	*05/01/18 11:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.8**		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	**95.2**		0.1	0.1	%			04/30/18 13:37	1

Client Sample ID: DUP-01 — Lab Sample ID: 180-77198-11

Date Collected: 04/26/18 00:00 — **Matrix: Solid**
Date Received: 04/27/18 08:50 — **Percent Solids: 94.2**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.0	2.0	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Acenaphthylene	**1.6**	**J**	7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Anthracene	ND		7.0	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Benzo[a]anthracene	ND		7.0	1.3	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Benzo[a]pyrene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Benzo[b]fluoranthene	ND		7.0	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Benzo[g,h,i]perylene	ND		7.0	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Benzo[k]fluoranthene	ND		7.0	2.1	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Chrysene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Dibenz(a,h)anthracene	ND		7.0	1.6	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Dibenzofuran	ND		35	1.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
1,4-Dioxane	ND		70	11	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Fluoranthene	ND		7.0	1.8	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Fluorene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Hexachlorobenzene	ND		7.0	2.5	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Indeno[1,2,3-cd]pyrene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
2-Methylphenol	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Methylphenol, 3 & 4	ND		35	10	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Naphthalene	ND		7.0	1.4	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Pentachlorophenol	ND		180	56	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Phenanthrene	**3.1**	**J**	7.0	1.9	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Phenol	ND		35	11	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1
Pyrene	ND		7.0	1.7	ug/Kg	☼	05/07/18 05:22	05/08/18 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 100*	*05/07/18 05:22*	*05/08/18 15:44*	*1*
2-Fluorophenol (Surr)	*69*		*27 - 100*	*05/07/18 05:22*	*05/08/18 15:44*	*1*
Nitrobenzene-d5 (Surr)	*79*		*33 - 100*	*05/07/18 05:22*	*05/08/18 15:44*	*1*
Phenol-d5 (Surr)	*74*		*27 - 100*	*05/07/18 05:22*	*05/08/18 15:44*	*1*
Terphenyl-d14 (Surr)	*85*		*30 - 100*	*05/07/18 05:22*	*05/08/18 15:44*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*20 - 107*	*05/07/18 05:22*	*05/08/18 15:44*	*1*

Client Sample ID: DUP-01
Date Collected: 04/26/18 00:00
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-11
Matrix: Solid
Percent Solids: 94.2

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
alpha-BHC	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
beta-BHC	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
cis-Chlordane	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
4,4'-DDD	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
4,4'-DDE	ND		1.8	0.36	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
4,4'-DDT	ND		1.8	0.66	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Endosulfan II	ND		1.8	0.39	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Endrin	ND		1.8	0.68	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
gamma-BHC (Lindane)	ND		1.8	0.60	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1
Heptachlor	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:21	05/09/18 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:21*	*05/09/18 16:15*	*1*
DCB Decachlorobiphenyl (Surr)	*83*		*40 - 150*	*05/09/18 03:21*	*05/09/18 16:15*	*1*
Tetrachloro-m-xylene	*89*		*44 - 133*	*05/09/18 03:21*	*05/09/18 16:15*	*1*
Tetrachloro-m-xylene	*94*		*44 - 133*	*05/09/18 03:21*	*05/09/18 16:15*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0057	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1260	ND		0.017	0.0050	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1
PCB-1268	ND		0.017	0.0085	mg/Kg	☼	05/09/18 03:21	05/09/18 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*33 - 137*	*05/09/18 03:21*	*05/09/18 19:29*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*	*05/09/18 03:21*	*05/09/18 19:29*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*44 - 114*	*05/09/18 03:21*	*05/09/18 19:29*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*44 - 114*	*05/09/18 03:21*	*05/09/18 19:29*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/08/18 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*29 - 100*	*05/04/18 14:05*	*05/08/18 23:37*	*1*
2,4-Dichlorophenylacetic acid	*72*		*29 - 100*	*05/04/18 14:05*	*05/08/18 23:37*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.0**		1.1	0.30	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1

Client Sample ID: DUP-01
Date Collected: 04/26/18 00:00
Date Received: 04/27/18 08:50

Lab Sample ID: 180-77198-11
Matrix: Solid
Percent Solids: 94.2

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	45		22	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Beryllium	0.27	J	0.44	0.025	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Cadmium	0.15	J	0.55	0.040	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Chromium	9.2		0.55	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Copper	23		2.7	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Lead	7.3		1.1	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Manganese	410		1.6	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Nickel	18		4.4	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Selenium	1.5		1.1	0.56	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Silver	ND		0.55	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1
Zinc	61		2.2	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 14:51	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.028	0.0062	mg/Kg	☼	04/30/18 08:14	05/01/18 09:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.8		0.1	0.1	%			04/30/18 13:37	1
Percent Solids	94.2		0.1	0.1	%			04/30/18 13:37	1
Cyanide, Total	ND		0.46	0.25	mg/Kg	☼	05/01/18 12:20	05/02/18 12:32	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-243465/7
Matrix: Solid
Analysis Batch: 243465

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			04/30/18 09:40	1
Benzene	ND		0.0050	0.0020	mg/Kg			04/30/18 09:40	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			04/30/18 09:40	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			04/30/18 09:40	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			04/30/18 09:40	1
Chloroform	ND		0.0050	0.0021	mg/Kg			04/30/18 09:40	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			04/30/18 09:40	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			04/30/18 09:40	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			04/30/18 09:40	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			04/30/18 09:40	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			04/30/18 09:40	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			04/30/18 09:40	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			04/30/18 09:40	1
1,4-Dioxane	ND		1000	37	ug/Kg			04/30/18 09:40	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			04/30/18 09:40	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			04/30/18 09:40	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			04/30/18 09:40	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			04/30/18 09:40	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			04/30/18 09:40	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			04/30/18 09:40	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			04/30/18 09:40	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			04/30/18 09:40	1
Toluene	ND		0.0050	0.0017	mg/Kg			04/30/18 09:40	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			04/30/18 09:40	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			04/30/18 09:40	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			04/30/18 09:40	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			04/30/18 09:40	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			04/30/18 09:40	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			04/30/18 09:40	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			04/30/18 09:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*76 - 111*		*04/30/18 09:40*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 116*		*04/30/18 09:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 118*		*04/30/18 09:40*	*1*
Toluene-d8 (Surr)	*106*		*80 - 129*		*04/30/18 09:40*	*1*

Lab Sample ID: LCS 180-243465/3
Matrix: Solid
Analysis Batch: 243465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0440		mg/Kg		110	36 - 150
Benzene	0.0400	0.0434		mg/Kg		108	78 - 118
2-Butanone (MEK)	0.0400	0.0367		mg/Kg		92	30 - 150
Carbon tetrachloride	0.0400	0.0420		mg/Kg		105	60 - 137
Chlorobenzene	0.0400	0.0454		mg/Kg		113	78 - 118
Chloroform	0.0400	0.0410		mg/Kg		102	68 - 124

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-243465/3
Matrix: Solid
Analysis Batch: 243465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	0.0400	0.0435		mg/Kg		109	71 - 120
1,2-Dichlorobenzene	0.0400	0.0416		mg/Kg		104	78 - 118
1,3-Dichlorobenzene	0.0400	0.0449		mg/Kg		112	78 - 118
1,4-Dichlorobenzene	0.0400	0.0441		mg/Kg		110	78 - 118
1,1-Dichloroethane	0.0400	0.0404		mg/Kg		101	67 - 129
1,2-Dichloroethane	0.0400	0.0380		mg/Kg		95	67 - 123
1,1-Dichloroethene	0.0400	0.0367		mg/Kg		92	59 - 128
1,4-Dioxane	800	544	J	ug/Kg		68	51 - 138
Ethylbenzene	0.0400	0.0455		mg/Kg		114	78 - 118
Methylene Chloride	0.0400	0.0400		mg/Kg		100	68 - 120
Methyl tert-butyl ether	0.0400	0.0347		mg/Kg		87	73 - 121
n-Butylbenzene	0.0400	0.0440		mg/Kg		110	71 - 132
N-Propylbenzene	0.0400	0.0474		mg/Kg		118	72 - 126
sec-Butylbenzene	0.0400	0.0453		mg/Kg		113	80 - 126
tert-Butylbenzene	0.0400	0.0460		mg/Kg		115	80 - 122
Tetrachloroethene	0.0400	0.0487	*	mg/Kg		122	78 - 118
Toluene	0.0400	0.0444		mg/Kg		111	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0427		mg/Kg		107	71 - 123
1,1,1-Trichloroethane	0.0400	0.0421		mg/Kg		105	69 - 135
Trichloroethene	0.0400	0.0463		mg/Kg		116	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0436		mg/Kg		109	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0446		mg/Kg		111	78 - 122
Vinyl chloride	0.0400	0.0384		mg/Kg		96	53 - 148
Xylenes, Total	0.0800	0.0908		mg/Kg		114	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*
Dibromofluoromethane (Surr)	*102*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 118*
Toluene-d8 (Surr)	*108*		*80 - 129*

Lab Sample ID: MB 180-243560/7
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			05/01/18 09:26	1
Benzene	ND		0.0050	0.0020	mg/Kg			05/01/18 09:26	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			05/01/18 09:26	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			05/01/18 09:26	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
Chloroform	ND		0.0050	0.0021	mg/Kg			05/01/18 09:26	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			05/01/18 09:26	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			05/01/18 09:26	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			05/01/18 09:26	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			05/01/18 09:26	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-243560/7
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			05/01/18 09:26	1
1,4-Dioxane	ND		1000	37	ug/Kg			05/01/18 09:26	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			05/01/18 09:26	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			05/01/18 09:26	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			05/01/18 09:26	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			05/01/18 09:26	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			05/01/18 09:26	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			05/01/18 09:26	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			05/01/18 09:26	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			05/01/18 09:26	1
Toluene	ND		0.0050	0.0017	mg/Kg			05/01/18 09:26	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			05/01/18 09:26	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			05/01/18 09:26	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			05/01/18 09:26	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			05/01/18 09:26	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			05/01/18 09:26	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			05/01/18 09:26	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			05/01/18 09:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*76 - 111*		*05/01/18 09:26*	*1*
Dibromofluoromethane (Surr)	*88*		*72 - 116*		*05/01/18 09:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*		*05/01/18 09:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*		*05/01/18 09:26*	*1*

Lab Sample ID: LCS 180-243560/3
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0443		mg/Kg		111	36 - 150
Benzene	0.0400	0.0394		mg/Kg		98	78 - 118
2-Butanone (MEK)	0.0400	0.0307		mg/Kg		77	30 - 150
Carbon tetrachloride	0.0400	0.0375		mg/Kg		94	60 - 137
Chlorobenzene	0.0400	0.0408		mg/Kg		102	78 - 118
Chloroform	0.0400	0.0373		mg/Kg		93	68 - 124
cis-1,2-Dichloroethene	0.0400	0.0396		mg/Kg		99	71 - 120
1,2-Dichlorobenzene	0.0400	0.0370		mg/Kg		93	78 - 118
1,3-Dichlorobenzene	0.0400	0.0387		mg/Kg		97	78 - 118
1,4-Dichlorobenzene	0.0400	0.0374		mg/Kg		93	78 - 118
1,1-Dichloroethane	0.0400	0.0384		mg/Kg		96	67 - 129
1,2-Dichloroethane	0.0400	0.0345		mg/Kg		86	67 - 123
1,1-Dichloroethene	0.0400	0.0396		mg/Kg		99	59 - 128
1,4-Dioxane	800	602	J	ug/Kg		75	51 - 138
Ethylbenzene	0.0400	0.0408		mg/Kg		102	78 - 118
Methylene Chloride	0.0400	0.0360		mg/Kg		90	68 - 120
Methyl tert-butyl ether	0.0400	0.0306		mg/Kg		77	73 - 121
n-Butylbenzene	0.0400	0.0383		mg/Kg		96	71 - 132

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-243560/3
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	0.0400	0.0401		mg/Kg		100	72 - 126
sec-Butylbenzene	0.0400	0.0389		mg/Kg		97	80 - 126
tert-Butylbenzene	0.0400	0.0392		mg/Kg		98	80 - 122
Tetrachloroethene	0.0400	0.0430		mg/Kg		108	78 - 118
Toluene	0.0400	0.0400		mg/Kg		100	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0404		mg/Kg		101	71 - 123
1,1,1-Trichloroethane	0.0400	0.0380		mg/Kg		95	69 - 135
Trichloroethene	0.0400	0.0414		mg/Kg		103	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0380		mg/Kg		95	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0384		mg/Kg		96	78 - 122
Vinyl chloride	0.0400	0.0372		mg/Kg		93	53 - 148
Xylenes, Total	0.0800	0.0781		mg/Kg		98	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*
Dibromofluoromethane (Surr)	*95*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 118*
Toluene-d8 (Surr)	*103*		*80 - 129*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-244105/1-A
Matrix: Solid
Analysis Batch: 244254

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.7	1.9	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Acenaphthylene	ND		6.7	1.5	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Anthracene	ND		6.7	1.7	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Benzo[a]anthracene	ND		6.7	1.3	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Benzo[a]pyrene	ND		6.7	1.5	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Benzo[b]fluoranthene	ND		6.7	1.6	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Benzo[g,h,i]perylene	ND		6.7	1.4	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Benzo[k]fluoranthene	ND		6.7	2.0	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Chrysene	ND		6.7	1.3	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Dibenz(a,h)anthracene	ND		6.7	1.5	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Dibenzofuran	ND		33	1.5	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
1,4-Dioxane	ND		67	10	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Fluoranthene	ND		6.7	1.8	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Fluorene	ND		6.7	1.3	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Hexachlorobenzene	ND		6.7	2.4	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Indeno[1,2,3-cd]pyrene	ND		6.7	1.4	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
2-Methylphenol	ND		33	9.6	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Methylphenol, 3 & 4	ND		33	9.8	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Naphthalene	ND		6.7	1.3	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Pentachlorophenol	ND		170	54	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Phenanthrene	ND		6.7	1.8	ug/Kg		05/07/18 05:22	05/08/18 12:02	1
Phenol	ND		33	10	ug/Kg		05/07/18 05:22	05/08/18 12:02	1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 180-244105/1-A
Matrix: Solid
Analysis Batch: 244254

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		6.7	1.6	ug/Kg		05/07/18 05:22	05/08/18 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 100*	*05/07/18 05:22*	*05/08/18 12:02*	*1*
2-Fluorophenol (Surr)	*64*		*27 - 100*	*05/07/18 05:22*	*05/08/18 12:02*	*1*
Nitrobenzene-d5 (Surr)	*70*		*33 - 100*	*05/07/18 05:22*	*05/08/18 12:02*	*1*
Phenol-d5 (Surr)	*67*		*27 - 100*	*05/07/18 05:22*	*05/08/18 12:02*	*1*
Terphenyl-d14 (Surr)	*85*		*30 - 100*	*05/07/18 05:22*	*05/08/18 12:02*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*20 - 107*	*05/07/18 05:22*	*05/08/18 12:02*	*1*

Lab Sample ID: LCS 180-244105/2-A
Matrix: Solid
Analysis Batch: 244254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	507		ug/Kg		76	43 - 100
Acenaphthylene	667	537		ug/Kg		81	43 - 100
Anthracene	667	538		ug/Kg		81	48 - 100
Benzo[a]anthracene	667	532		ug/Kg		80	46 - 100
Benzo[a]pyrene	667	542		ug/Kg		81	46 - 100
Benzo[b]fluoranthene	667	467		ug/Kg		70	42 - 100
Benzo[g,h,i]perylene	667	538		ug/Kg		81	45 - 100
Benzo[k]fluoranthene	667	521		ug/Kg		78	45 - 100
Chrysene	667	496		ug/Kg		74	47 - 100
Dibenz(a,h)anthracene	667	520		ug/Kg		78	47 - 100
Dibenzofuran	667	505		ug/Kg		76	48 - 100
1,4-Dioxane	667	491		ug/Kg		74	40 - 115
Fluoranthene	667	549		ug/Kg		82	47 - 100
Fluorene	667	502		ug/Kg		75	45 - 100
Hexachlorobenzene	667	510		ug/Kg		76	45 - 104
Indeno[1,2,3-cd]pyrene	667	529		ug/Kg		79	46 - 100
2-Methylphenol	667	514		ug/Kg		77	46 - 100
Methylphenol, 3 & 4	667	495		ug/Kg		74	46 - 100
Naphthalene	667	485		ug/Kg		73	46 - 100
Pentachlorophenol	1330	863		ug/Kg		65	25 - 114
Phenanthrene	667	522		ug/Kg		78	46 - 100
Phenol	667	496		ug/Kg		74	46 - 100
Pyrene	667	540		ug/Kg		81	41 - 100

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*34 - 100*
2-Fluorophenol (Surr)	*71*		*27 - 100*
Nitrobenzene-d5 (Surr)	*75*		*33 - 100*
Phenol-d5 (Surr)	*72*		*27 - 100*
Terphenyl-d14 (Surr)	*82*		*30 - 100*
2,4,6-Tribromophenol (Surr)	*74*		*20 - 107*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-244340/1-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.52	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
alpha-BHC	ND		1.7	0.41	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
beta-BHC	ND		1.7	0.43	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
cis-Chlordane	ND		1.7	0.42	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDD	ND		1.7	0.45	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDE	ND		1.7	0.34	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDT	ND		1.7	0.63	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
delta-BHC	ND		1.7	0.53	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Dieldrin	ND		1.7	0.42	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan I	ND		1.7	0.45	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan II	ND		1.7	0.37	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan sulfate	ND		1.7	0.43	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endrin	ND		1.7	0.65	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
gamma-BHC (Lindane)	ND		1.7	0.57	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Heptachlor	ND		1.7	0.52	ug/Kg		05/09/18 03:17	05/09/18 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*40 - 150*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
Tetrachloro-m-xylene	*92*		*44 - 133*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
Tetrachloro-m-xylene	*98*		*44 - 133*	*05/09/18 03:17*	*05/09/18 12:24*	*1*

Lab Sample ID: LCS 180-244340/2-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	33.3	35.7		ug/Kg		107	58 - 131
alpha-BHC	33.3	31.4		ug/Kg		94	61 - 120
beta-BHC	33.3	35.0		ug/Kg		105	55 - 119
cis-Chlordane	33.3	35.9		ug/Kg		108	51 - 130
4,4'-DDD	33.3	37.6		ug/Kg		113	69 - 135
4,4'-DDE	33.3	35.2		ug/Kg		106	67 - 137
4,4'-DDT	33.3	29.4		ug/Kg		88	47 - 140
delta-BHC	33.3	17.0		ug/Kg		51	19 - 106
Dieldrin	33.3	33.7		ug/Kg		101	69 - 136
Endosulfan I	33.3	36.2		ug/Kg		109	51 - 133
Endosulfan II	33.3	34.0		ug/Kg		102	71 - 128
Endosulfan sulfate	33.3	29.2		ug/Kg		87	62 - 119
Endrin	33.3	32.1		ug/Kg		96	71 - 132
gamma-BHC (Lindane)	33.3	32.7		ug/Kg		98	59 - 123
Heptachlor	33.3	35.2		ug/Kg		105	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*100*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*96*		*40 - 150*
Tetrachloro-m-xylene	*99*		*44 - 133*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-244340/2-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*104*		*44 - 133*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-244340/1-C
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1221	ND		0.017	0.011	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1232	ND		0.017	0.0099	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1242	ND		0.017	0.010	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1248	ND		0.017	0.013	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1254	ND		0.017	0.011	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1260	ND		0.017	0.0047	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1262	ND		0.017	0.012	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1268	ND		0.017	0.0081	mg/Kg		05/09/18 03:17	05/09/18 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*33 - 137*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
DCB Decachlorobiphenyl (Surr)	*113*		*33 - 137*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*100*		*44 - 114*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*91*		*44 - 114*	*05/09/18 03:17*	*05/09/18 13:48*	*1*

Lab Sample ID: LCS 180-244340/5-C
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.23		mg/Kg		92	46 - 122
PCB-1260	1.33	1.25		mg/Kg		94	51 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*107*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*95*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*87*		*44 - 114*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-244037/1-A
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244037

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.0066	mg/Kg		05/04/18 14:05	05/08/18 21:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	61		29 - 100	05/04/18 14:05	05/08/18 21:34	1

Lab Sample ID: LCS 180-244037/2-A
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244037

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	0.100	0.0738		mg/Kg		74	36 - 109

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	74		29 - 100
2,4-Dichlorophenylacetic acid	77		29 - 100

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-243761/1-A
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.28	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Barium	ND		20	1.1	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Beryllium	ND		0.40	0.023	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Cadmium	ND		0.50	0.036	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Chromium	ND		0.50	0.12	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Copper	ND		2.5	0.17	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Lead	ND		1.0	0.25	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Manganese	ND		1.5	0.16	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Nickel	ND		4.0	0.25	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Selenium	ND		1.0	0.52	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Silver	ND		0.50	0.11	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Zinc	ND		2.0	1.1	mg/Kg		05/02/18 13:44	05/06/18 13:25	1

Lab Sample ID: LCS 180-243761/2-A
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.2		mg/Kg		96	80 - 120
Barium	200	193		mg/Kg		96	80 - 120
Beryllium	5.00	4.87		mg/Kg		97	80 - 120
Cadmium	5.00	4.86		mg/Kg		97	80 - 120
Chromium	20.0	18.4		mg/Kg		92	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Lead	50.0	45.0		mg/Kg		90	80 - 120
Manganese	50.0	47.0		mg/Kg		94	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	5.00	4.76		mg/Kg		95	80 - 120
Zinc	50.0	47.0		mg/Kg		94	80 - 120

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-243479/1-A
Matrix: Solid
Analysis Batch: 243608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.0074	mg/Kg		04/30/18 08:14	05/01/18 08:04	1

Lab Sample ID: LCS 180-243479/2-A
Matrix: Solid
Analysis Batch: 243608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.448		mg/Kg		108	80 - 120

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-243597/4-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		05/01/18 12:20	05/02/18 12:08	1

Lab Sample ID: HLCS 180-243597/2-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.247		mg/Kg		99	90 - 110

Lab Sample ID: LCS 180-243597/3-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	41.7	29.9		mg/Kg		72	38 - 162

Lab Sample ID: LLCS 180-243597/1-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0488		mg/Kg		98	90 - 110

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

GC/MS VOA

Analysis Batch: 243465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-4	BP-SC-104	Total/NA	Solid	EPA 8260C	243470
180-77198-5	BP-SC-105	Total/NA	Solid	EPA 8260C	243470
180-77198-7	BP-SC-107	Total/NA	Solid	EPA 8260C	243470
MB 180-243465/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-243465/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	

Prep Batch: 243470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-4	BP-SC-104	Total/NA	Solid	5035	
180-77198-5	BP-SC-105	Total/NA	Solid	5035	
180-77198-7	BP-SC-107	Total/NA	Solid	5035	

Analysis Batch: 243560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-6	BP-SC-106	Total/NA	Solid	EPA 8260C	243566
180-77198-8	BP-SC-108	Total/NA	Solid	EPA 8260C	243566
180-77198-9	BP-SC-109	Total/NA	Solid	EPA 8260C	243566
180-77198-10	BP-SC-110	Total/NA	Solid	EPA 8260C	243566
MB 180-243560/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-243560/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	

Prep Batch: 243566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-6	BP-SC-106	Total/NA	Solid	5035	
180-77198-8	BP-SC-108	Total/NA	Solid	5035	
180-77198-9	BP-SC-109	Total/NA	Solid	5035	
180-77198-10	BP-SC-110	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 244105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	3541	
180-77198-2	BP-SC-102	Total/NA	Solid	3541	
180-77198-3	BP-SC-103	Total/NA	Solid	3541	
180-77198-11	DUP-01	Total/NA	Solid	3541	
MB 180-244105/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-244105/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 244254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 8270D LL	244105
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 8270D LL	244105
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 8270D LL	244105
180-77198-11	DUP-01	Total/NA	Solid	EPA 8270D LL	244105
MB 180-244105/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	244105
LCS 180-244105/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	244105

GC Semi VOA

Prep Batch: 244037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	8151A	
180-77198-2	BP-SC-102	Total/NA	Solid	8151A	
180-77198-3	BP-SC-103	Total/NA	Solid	8151A	
180-77198-11	DUP-01	Total/NA	Solid	8151A	
MB 180-244037/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-244037/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 244334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 8151A	244037
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 8151A	244037
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 8151A	244037
180-77198-11	DUP-01	Total/NA	Solid	EPA 8151A	244037
MB 180-244037/1-A	Method Blank	Total/NA	Solid	EPA 8151A	244037
LCS 180-244037/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	244037

Prep Batch: 244340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	3541	
180-77198-2	BP-SC-102	Total/NA	Solid	3541	
180-77198-3	BP-SC-103	Total/NA	Solid	3541	
180-77198-11	DUP-01	Total/NA	Solid	3541	
MB 180-244340/1-A	Method Blank	Total/NA	Solid	3541	
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-244340/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 244390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 8081B	244340
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 8081B	244340
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 8081B	244340
180-77198-11	DUP-01	Total/NA	Solid	EPA 8081B	244340
MB 180-244340/1-A	Method Blank	Total/NA	Solid	EPA 8081B	244340
LCS 180-244340/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	244340

Cleanup Batch: 244391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	3665A	244340
180-77198-2	BP-SC-102	Total/NA	Solid	3665A	244340
180-77198-3	BP-SC-103	Total/NA	Solid	3665A	244340
180-77198-11	DUP-01	Total/NA	Solid	3665A	244340
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3665A	244340
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3665A	244340

Cleanup Batch: 244392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	3660B	244391
180-77198-2	BP-SC-102	Total/NA	Solid	3660B	244391
180-77198-3	BP-SC-103	Total/NA	Solid	3660B	244391
180-77198-11	DUP-01	Total/NA	Solid	3660B	244391

GC Semi VOA (Continued)

Cleanup Batch: 244392 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3660B	244391
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3660B	244391

Analysis Batch: 244397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 8082A	244392
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 8082A	244392
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 8082A	244392
180-77198-11	DUP-01	Total/NA	Solid	EPA 8082A	244392
MB 180-244340/1-C	Method Blank	Total/NA	Solid	EPA 8082A	244392
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	244392

Metals

Prep Batch: 243479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	7471B	
180-77198-2	BP-SC-102	Total/NA	Solid	7471B	
180-77198-3	BP-SC-103	Total/NA	Solid	7471B	
180-77198-11	DUP-01	Total/NA	Solid	7471B	
MB 180-243479/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-243479/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 243608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 7471B	243479
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 7471B	243479
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 7471B	243479
180-77198-11	DUP-01	Total/NA	Solid	EPA 7471B	243479
MB 180-243479/1-A	Method Blank	Total/NA	Solid	EPA 7471B	243479
LCS 180-243479/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	243479

Prep Batch: 243761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	3050B	
180-77198-2	BP-SC-102	Total/NA	Solid	3050B	
180-77198-3	BP-SC-103	Total/NA	Solid	3050B	
180-77198-11	DUP-01	Total/NA	Solid	3050B	
MB 180-243761/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-243761/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 244106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 6010C	243761
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 6010C	243761
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 6010C	243761
180-77198-11	DUP-01	Total/NA	Solid	EPA 6010C	243761
MB 180-243761/1-A	Method Blank	Total/NA	Solid	EPA 6010C	243761
LCS 180-243761/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	243761

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77198-1

General Chemistry

Analysis Batch: 243526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	2540G	
180-77198-2	BP-SC-102	Total/NA	Solid	2540G	
180-77198-3	BP-SC-103	Total/NA	Solid	2540G	
180-77198-4	BP-SC-104	Total/NA	Solid	2540G	
180-77198-5	BP-SC-105	Total/NA	Solid	2540G	
180-77198-6	BP-SC-106	Total/NA	Solid	2540G	
180-77198-7	BP-SC-107	Total/NA	Solid	2540G	
180-77198-8	BP-SC-108	Total/NA	Solid	2540G	
180-77198-9	BP-SC-109	Total/NA	Solid	2540G	
180-77198-10	BP-SC-110	Total/NA	Solid	2540G	
180-77198-11	DUP-01	Total/NA	Solid	2540G	

Prep Batch: 243597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	9010C	
180-77198-2	BP-SC-102	Total/NA	Solid	9010C	
180-77198-3	BP-SC-103	Total/NA	Solid	9010C	
180-77198-11	DUP-01	Total/NA	Solid	9010C	
MB 180-243597/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-243597/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-243597/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-243597/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 243758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77198-1	BP-SC-101	Total/NA	Solid	EPA 9014	243597
180-77198-2	BP-SC-102	Total/NA	Solid	EPA 9014	243597
180-77198-3	BP-SC-103	Total/NA	Solid	EPA 9014	243597
180-77198-11	DUP-01	Total/NA	Solid	EPA 9014	243597
MB 180-243597/4-A	Method Blank	Total/NA	Solid	EPA 9014	243597
HLCS 180-243597/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597
LCS 180-243597/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597
LLCS 180-243597/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

180-77198 Chain of Custody

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Client Information	Sampler: Ashwin Ranna	Lab PM: Dunlap, David A	Page: Page 1 of 1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-552-4758	E-Mail: david.dunlap@testamericainc.com	
Company: Geosyntec Consultants, Inc.		Analysis Requested	Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Columbia	TAT Requested (days): Standard		
State, Zip: MD, 21044			
Phone: 410-381-4333	PO #: MN0832A		Other:
Email: akrasnopoler@geosyntec.com	WO #:		
Project Name: Former Sperry Remington Site-North	Project #: 18013464		
Site: Brewers Pit Quarry NO	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PCBs	SVOCs NYSDEC	METALS DER-10	CYANIDE 1164	Total Chromium	Pesticides	VOCs NYSDEC DER-10	Total Number of containers	Special Instructions/Note:
			Preservation Code:												
BP-SC-101	04.26.2018	16:20	C	Solid	N	N	X	X	X	X	X	X		3	
BP-SC-102	04.26.2018	16:25	C	Solid	N	N	X	X	X	X	X	X		3	
BP-SC-103	04.26.2018	16:30	C	Solid	N	N	X	X	X	X	X	X		3	
BP-SC-104	04.26.2018	16:35	G	Solid	N	N							X	4	
BP-SC-105	04.26.2018	16:40	G	Solid	N	N							X	4	
BP-SC-106	04.26.2018	16:45	G	Solid	N	N							X	4	
BP-SC-107	04.26.18	16:50	G	Solid	N	N							X	4	
BP-SC-108	04.26.18	16:55	G	Solid	N	N							X	4	
BP-SC-109	04.26.18	17:00	G	Solid	N	N							X	4	
BP-SC-110	04.26.18	17:05	G	Solid	N	N							X	4	
~~DUP-01~~ DUP-01	04.26.2018	-	C	Solid	N	N	X	X	X	X	X	X		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Ashwin Ranna	4/26/2018 1900	Geosyntec Consultants	[signature]	4-27-18	TAL PIT
				7:50	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-77198-1

Login Number: 77198
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-77199-1
Client Project/Site: Former Sperry Remington Site-Brewers Pit

For:
Geosyntec Consultants, Inc.
10211 Wincopin Circle
4'th Floor
Columbia, Maryland 21044

Attn: Mr. Aron Krasnopoler

Authorized for release by:
5/11/2018 10:54:23 AM

David Dunlap, Senior Project Manager
(412)963-2432
david.dunlap@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Job ID: 180-77199-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-77199-1

Receipt
The samples were received on 4/28/2018 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 4.2º C, 4.5º C and 4.9º C.

GC/MS VOA
Method(s) 8260C: The matrix spike/matrix spike duplicate (MS/MSD) of sample BP-SC-128 (180-77199-19) recovered above the control limits for several analytes. The recoveries of the laboratory control sample (LCS) were within the control limits.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243560 was below criteria for the following analytes: methyl tert-butyl ether and 1,4-dioxane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243560 was above criteria for or the following analyte: acetone. As acetone was biased high in the CCV and was not detected in the associated samples, the results were reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-243688 was above criteria for or the following analyte: acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D LL: the recovery of surrogate terphenyl-d14 was above the control limits for sample BP-SC-111 (180-77199-1), BP-SC-127 (180-77199-18), and BP-SC-136 (180-77199-27). As the recoveries were high and there were no target analytes detected in the samples, the results were reported.

Method(s) 8270D LL: The matrix spike/matrix spike duplicate (MS/MSD) of sample BP-SC-123 (180-77199-14) recovered above the control limits for various analytes. The recoveries of the laboratory control sample (LCS) were within the control limits.

Method(s) 8270D LL: The continuing calibration verification (CCV) analyzed in batch 180-244525 was below criteria for the following analyte: pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: The continuing calibration verification (CCV) analyzed in batch 180-244390 was below criteria on column MR-1 for endrin. The results were reported from column MR-2 which met criteria.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-244397 (CCV 180-244397/5) was above criteria for 1 peak for aroclor 1016 on column RTX-CLP1. As the CCV was high and aroclor1016 was not detected in the associated samples, the results were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Job ID: 180-77199-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

Method(s) 9014: The matrix spike (MS) of sample BP-SC-123 (180-77199-14) recovered below the control limits for cyanide. The RPD between the spikes and the recoveries of the laboratory control samples (LCSs) were within the control limits.

Method(s) 9014: The matrix spike/matrix spike duplicate (MS/MSD) of sample BP-SC-135 (180-77199-26) did not recover for cyanide. The recoveries of the laboratory control samples (LCSs) were within the control limits. The possibility spiking solution was not added to the matrix spikes exists.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 180-77199-1
Project/Site: Former Sperry Remington Site-Brewers Pit

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11182	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
EPA 8270D LL	3541	Solid	1,4-Dioxane

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-77199-1	BP-SC-111	Solid	04/27/18 08:20	04/28/18 10:30
180-77199-2	BP-SC-112	Solid	04/27/18 08:25	04/28/18 10:30
180-77199-3	BP-SC-113	Solid	04/27/18 08:30	04/28/18 10:30
180-77199-4	BP-SC-114	Solid	04/27/18 08:35	04/28/18 10:30
180-77199-5	BP-SC-115	Solid	04/27/18 08:40	04/28/18 10:30
180-77199-6	BP-SC-116	Solid	04/27/18 08:45	04/28/18 10:30
180-77199-7	BP-SC-117	Solid	04/27/18 09:00	04/28/18 10:30
180-77199-8	BP-SC-118	Solid	04/27/18 09:05	04/28/18 10:30
180-77199-9	BP-SC-119	Solid	04/27/18 09:10	04/28/18 10:30
180-77199-10	BP-SC-120	Solid	04/27/18 09:15	04/28/18 10:30
180-77199-11	BP-SC-121	Solid	04/27/18 09:20	04/28/18 10:30
180-77199-12	DUP-2	Solid	04/27/18 00:00	04/28/18 10:30
180-77199-13	BP-SC-122	Solid	04/27/18 09:25	04/28/18 10:30
180-77199-14	BP-SC-123	Solid	04/27/18 09:30	04/28/18 10:30
180-77199-15	BP-SC-124	Solid	04/27/18 09:35	04/28/18 10:30
180-77199-16	BP-SC-125	Solid	04/27/18 09:40	04/28/18 10:30
180-77199-17	BP-SC-126	Solid	04/27/18 09:45	04/28/18 10:30
180-77199-18	BP-SC-127	Solid	04/27/18 11:20	04/28/18 10:30
180-77199-19	BP-SC-128	Solid	04/27/18 11:25	04/28/18 10:30
180-77199-20	BP-SC-129	Solid	04/27/18 11:30	04/28/18 10:30
180-77199-21	BP-SC-130	Solid	04/27/18 11:35	04/28/18 10:30
180-77199-22	BP-SC-131	Solid	04/27/18 11:40	04/28/18 10:30
180-77199-23	BP-SC-132	Solid	04/27/18 11:45	04/28/18 10:30
180-77199-24	BP-SC-133	Solid	04/27/18 11:50	04/28/18 10:30
180-77199-25	BP-SC-134	Solid	04/27/18 11:55	04/28/18 10:30
180-77199-26	BP-SC-135	Solid	04/27/18 12:00	04/28/18 10:30
180-77199-27	BP-SC-136	Solid	04/27/18 12:05	04/28/18 10:30
180-77199-28	DUP 3	Solid	04/27/18 00:00	04/28/18 10:30
180-77199-29	DUP 4	Solid	04/27/18 00:00	04/28/18 10:30
180-77199-30	DUP 5	Solid	04/27/18 00:00	04/28/18 10:30

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 8151A	Herbicides (GC)	SW846	TAL PIT
EPA 6010C	Metals (ICP)	SW846	TAL PIT
EPA 7471B	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
5035	Closed System Purge and Trap	SW846	TAL PIT
7471B	Preparation, Mercury	SW846	TAL PIT
8151A	Extraction (Herbicides)	SW846	TAL PIT
9010C	Cyanide, Distillation	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-111
Date Collected: 04/27/18 08:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-111
Date Collected: 04/27/18 08:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-1
Matrix: Solid
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.4 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 13:48	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 12:40	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 14:29	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 00:02	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.03 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:07	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.68 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 09:44	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.02 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:34	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-112
Date Collected: 04/27/18 08:25
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-112
Date Collected: 04/27/18 08:25
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-2
Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3727 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 12:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-113
Date Collected: 04/27/18 08:30
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-113
Date Collected: 04/27/18 08:30
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-3
Matrix: Solid
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9839 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 12:57	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-114
Date Collected: 04/27/18 08:35
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-114
Date Collected: 04/27/18 08:35
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-4
Matrix: Solid
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.8635 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 13:20	KLG	TAL PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-115

Date Collected: 04/27/18 08:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-115

Date Collected: 04/27/18 08:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-5

Matrix: Solid
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 14:43	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 12:55	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 14:51	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.1 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 00:26	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.01 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:12	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.74 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 09:46	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.18 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:36	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-116

Date Collected: 04/27/18 08:45
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-116
Date Collected: 04/27/18 08:45
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-6
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4555 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 13:43	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-117
Date Collected: 04/27/18 09:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-117
Date Collected: 04/27/18 09:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-7
Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0551 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 14:07	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-118
Date Collected: 04/27/18 09:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-118
Date Collected: 04/27/18 09:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-8
Matrix: Solid
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3002 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 14:30	KLG	TAL PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-119

Date Collected: 04/27/18 09:10
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-119

Date Collected: 04/27/18 09:10
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-9

Matrix: Solid
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 15:38	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.4 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 13:10	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.4 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 15:12	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 00:50	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.00 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:17	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.70 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 09:48	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.17 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:37	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-120

Date Collected: 04/27/18 09:15
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-120
Date Collected: 04/27/18 09:15
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-10
Matrix: Solid
Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1286 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 14:53	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-121
Date Collected: 04/27/18 09:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-121
Date Collected: 04/27/18 09:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-11
Matrix: Solid
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3851 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 15:17	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: DUP-2
Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2
Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-12
Matrix: Solid
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244525	05/10/18 12:38	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 13:26	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: DUP-2

Lab Sample ID: 180-77199-12
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 15:34	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 01:15	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.95 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:22	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.73 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 09:50	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.03 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:39	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-122

Lab Sample ID: 180-77199-13
Date Collected: 04/27/18 09:25
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-122

Lab Sample ID: 180-77199-13
Date Collected: 04/27/18 09:25
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1504 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 15:41	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-123

Lab Sample ID: 180-77199-14
Date Collected: 04/27/18 09:30
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-123

Lab Sample ID: 180-77199-14
Date Collected: 04/27/18 09:30
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 11:58	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 13:41	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 15:56	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 02:04	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.03 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 13:35	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.62 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 09:52	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.12 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:45	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-124

Lab Sample ID: 180-77199-15
Date Collected: 04/27/18 09:35
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-124

Lab Sample ID: 180-77199-15
Date Collected: 04/27/18 09:35
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9561 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 16:04	KLG	TAL PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-125
Date Collected: 04/27/18 09:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-125
Date Collected: 04/27/18 09:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-16
Matrix: Solid
Percent Solids: 96.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			0.2142 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 11:47	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-126
Date Collected: 04/27/18 09:45
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-126
Date Collected: 04/27/18 09:45
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-17
Matrix: Solid
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9849 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 12:10	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-127
Date Collected: 04/27/18 11:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-127
Date Collected: 04/27/18 11:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-18
Matrix: Solid
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-127

Lab Sample ID: 180-77199-18
Date Collected: 04/27/18 11:20
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 17:28	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 14:27	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.3 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 17:00	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 03:17	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.02 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:27	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.71 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 10:03	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.01 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:49	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-128

Lab Sample ID: 180-77199-19
Date Collected: 04/27/18 11:25
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243535	04/30/18 14:37	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-128

Lab Sample ID: 180-77199-19
Date Collected: 04/27/18 11:25
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1959 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 09:49	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-129
Date Collected: 04/27/18 11:30
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-129
Date Collected: 04/27/18 11:30
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-20
Matrix: Solid
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4427 g	5 mL	243566	05/01/18 06:15	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243560	05/01/18 16:27	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-130
Date Collected: 04/27/18 11:35
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-130
Date Collected: 04/27/18 11:35
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-21
Matrix: Solid
Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9172 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 11:23	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-131
Date Collected: 04/27/18 11:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-131
Date Collected: 04/27/18 11:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-22
Matrix: Solid
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.4 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-131

Lab Sample ID: 180-77199-22
Date Collected: 04/27/18 11:40
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 20:13	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.0 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 14:43	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.0 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 17:21	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.1 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 03:42	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.05 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:33	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.69 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 10:05	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.10 g	50 mL	243597	05/01/18 12:20	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243758	05/02/18 12:51	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-132

Lab Sample ID: 180-77199-23
Date Collected: 04/27/18 11:45
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-132

Lab Sample ID: 180-77199-23
Date Collected: 04/27/18 11:45
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9108 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 11:47	KLG	TAL PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-133
Date Collected: 04/27/18 11:50
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-133
Date Collected: 04/27/18 11:50
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-24
Matrix: Solid
Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1025 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 12:10	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-134
Date Collected: 04/27/18 11:55
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-134
Date Collected: 04/27/18 11:55
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-25
Matrix: Solid
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0648 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 09:49	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-135
Date Collected: 04/27/18 12:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-135
Date Collected: 04/27/18 12:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-26
Matrix: Solid
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-135

Date Collected: 04/27/18 12:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-26

Matrix: Solid
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 20:40	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.4 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 14:58	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.4 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 17:42	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 04:06	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.00 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:38	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.77 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 10:07	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.07 g	50 mL	243864	05/03/18 12:02	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243967	05/03/18 16:49	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-136

Date Collected: 04/27/18 12:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-136

Date Collected: 04/27/18 12:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-27

Matrix: Solid
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	0.5 mL	244339	05/09/18 03:15	BAP	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	244385	05/09/18 21:08	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Analysis	EPA 8081B		1			244390	05/09/18 15:13	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.2 g	20.0 mL	244340	05/09/18 03:17	BAP	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	244391	05/09/18 09:47	JMO	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: BP-SC-136

Lab Sample ID: 180-77199-27
Date Collected: 04/27/18 12:05
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Cleanup	3660B			2 mL	2 mL	244392	05/09/18 09:48	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			244397	05/09/18 18:04	JMO	TAL PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.0 g	40.0 mL	244037	05/04/18 14:05	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			244334	05/09/18 04:30	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.05 g	100 mL	243761	05/02/18 13:44	KA	TAL PIT
Total/NA	Analysis	EPA 6010C		1			244106	05/06/18 15:43	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.62 g	100 mL	243713	05/02/18 09:39	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			243873	05/03/18 10:09	RJR	TAL PIT
	Instrument ID: K									
Total/NA	Prep	9010C			1.05 g	50 mL	243864	05/03/18 12:02	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			243967	05/03/18 16:54	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: DUP 3

Lab Sample ID: 180-77199-28
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP 3

Lab Sample ID: 180-77199-28
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4746 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 10:12	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: DUP 4

Lab Sample ID: 180-77199-29
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Client Sample ID: DUP 4

Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-29
Matrix: Solid
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0719 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 10:36	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: DUP 5

Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			243624	05/01/18 12:51	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP 5

Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-30
Matrix: Solid
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2735 g	5 mL	243693	05/02/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	243688	05/02/18 11:00	KLG	TAL PIT
	Instrument ID: CHHP3									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-77199-1

Analyst References:

Lab: TAL PIT

Batch Type: Cleanup

JMO = John Oravec

Batch Type: Prep

BAP = Brian Pino

CBY = Charles Yushinski

JAS = Joshua Schmidt

KA = Kayla Kalamasz

KLG = Kathy Gordon

RJR = Ron Rosenbaum

Batch Type: Analysis

DFE = David Eppinger

DLF = Donald Ferguson

JAS = Joshua Schmidt

JBF = Joshua Fritsch

JMO = John Oravec

KLG = Kathy Gordon

RJG = Rob Good

RJR = Ron Rosenbaum

TAM = Tessa Mastalski

Client Sample ID: BP-SC-111
Date Collected: 04/27/18 08:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-1
Matrix: Solid
Percent Solids: 95.9

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.8	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Acenaphthylene	ND		6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Anthracene	ND		6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Benzo[a]anthracene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Benzo[a]pyrene	ND		6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Benzo[b]fluoranthene	ND		6.8	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Benzo[g,h,i]perylene	ND		6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Benzo[k]fluoranthene	ND		6.8	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Chrysene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Dibenz(a,h)anthracene	ND		6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
1,4-Dioxane	ND		68	11	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Fluoranthene	ND		6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Fluorene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Hexachlorobenzene	ND		6.8	2.4	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Indeno[1,2,3-cd]pyrene	ND		6.8	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
2-Methylphenol	ND		34	9.7	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Methylphenol, 3 & 4	ND		34	9.9	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Naphthalene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Pentachlorophenol	ND		170	54	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Phenanthrene	ND		6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1
Pyrene	ND		6.8	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*34 - 100*	*05/09/18 03:15*	*05/09/18 13:48*	*1*
2-Fluorophenol (Surr)	*79*		*27 - 100*	*05/09/18 03:15*	*05/09/18 13:48*	*1*
Nitrobenzene-d5 (Surr)	*92*		*33 - 100*	*05/09/18 03:15*	*05/09/18 13:48*	*1*
Phenol-d5 (Surr)	*82*		*27 - 100*	*05/09/18 03:15*	*05/09/18 13:48*	*1*
Terphenyl-d14 (Surr)	*106*	*X*	*30 - 100*	*05/09/18 03:15*	*05/09/18 13:48*	*1*
2,4,6-Tribromophenol (Surr)	*82*		*20 - 107*	*05/09/18 03:15*	*05/09/18 13:48*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
alpha-BHC	ND		1.8	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
beta-BHC	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
cis-Chlordane	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
4,4'-DDD	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
4,4'-DDT	ND		1.8	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Endrin	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 12:40	1

Client Sample ID: BP-SC-111

Date Collected: 04/27/18 08:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-1

Matrix: Solid
Percent Solids: 95.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	104		40 - 150	05/09/18 03:17	05/09/18 12:40	1
DCB Decachlorobiphenyl (Surr)	99		40 - 150	05/09/18 03:17	05/09/18 12:40	1
Tetrachloro-m-xylene	100		44 - 133	05/09/18 03:17	05/09/18 12:40	1
Tetrachloro-m-xylene	103		44 - 133	05/09/18 03:17	05/09/18 12:40	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1
PCB-1268	ND		0.017	0.0084	mg/Kg	☼	05/09/18 03:17	05/09/18 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	97		33 - 137	05/09/18 03:17	05/09/18 14:29	1
DCB Decachlorobiphenyl (Surr)	107		33 - 137	05/09/18 03:17	05/09/18 14:29	1
Tetrachloro-m-xylene (Surr)	93		44 - 114	05/09/18 03:17	05/09/18 14:29	1
Tetrachloro-m-xylene (Surr)	88		44 - 114	05/09/18 03:17	05/09/18 14:29	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	72		29 - 100	05/04/18 14:05	05/09/18 00:02	1
2,4-Dichlorophenylacetic acid	75		29 - 100	05/04/18 14:05	05/09/18 00:02	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.9**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Barium	**50**		20	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Beryllium	**0.34**	**J**	0.40	0.023	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Cadmium	**0.15**	**J**	0.51	0.037	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Chromium	**10**		0.51	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Copper	**32**		2.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Lead	**6.9**		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Manganese	**410**		1.5	0.16	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Nickel	**21**		4.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Selenium	**0.81**	**J**	1.0	0.52	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Silver	ND		0.51	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1
Zinc	**77**		2.0	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:07	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0096**	**J**	0.030	0.0068	mg/Kg	☼	05/02/18 09:39	05/03/18 09:44	1

Client Sample ID: BP-SC-111 — Lab Sample ID: 180-77199-1

Date Collected: 04/27/18 08:20 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.9**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.1**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**95.9**		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.51	0.28	mg/Kg	☼	05/01/18 12:20	05/02/18 12:34	1

Client Sample ID: BP-SC-112 — Lab Sample ID: 180-77199-2

Date Collected: 04/27/18 08:25 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.7**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Benzene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
2-Butanone (MEK)	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Carbon tetrachloride	ND		0.0049	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Chlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Chloroform	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
cis-1,2-Dichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,2-Dichlorobenzene	ND		0.0049	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,3-Dichlorobenzene	ND		0.0049	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,4-Dichlorobenzene	ND		0.0049	0.00099	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,1-Dichloroethane	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,2-Dichloroethane	ND		0.0049	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,1-Dichloroethene	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,4-Dioxane	ND		970	36	ug/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Ethylbenzene	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Methylene Chloride	**0.0029**	**J**	0.0049	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Methyl tert-butyl ether	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
n-Butylbenzene	ND		0.0049	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
N-Propylbenzene	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
sec-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
tert-Butylbenzene	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Tetrachloroethene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Toluene	ND		0.0049	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
trans-1,2-Dichloroethene	ND		0.0049	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,1,1-Trichloroethane	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Trichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,2,4-Trimethylbenzene	ND		0.0049	0.0013	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
1,3,5-Trimethylbenzene	ND		0.0049	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Vinyl chloride	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1
Xylenes, Total	ND		0.0097	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*	*05/01/18 06:15*	*05/01/18 12:33*	*1*
Dibromofluoromethane (Surr)	*85*		*72 - 116*	*05/01/18 06:15*	*05/01/18 12:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*62 - 118*	*05/01/18 06:15*	*05/01/18 12:33*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*	*05/01/18 06:15*	*05/01/18 12:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.3**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-112 — Lab Sample ID: 180-77199-2

Date Collected: 04/27/18 08:25 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.7**

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	95.7		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-113 — Lab Sample ID: 180-77199-3

Date Collected: 04/27/18 08:30 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.5**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Benzene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
2-Butanone (MEK)	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Carbon tetrachloride	ND		0.0053	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Chlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Chloroform	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
cis-1,2-Dichloroethene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,2-Dichlorobenzene	ND		0.0053	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,3-Dichlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,4-Dichlorobenzene	ND		0.0053	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,1-Dichloroethane	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,1-Dichloroethene	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,4-Dioxane	ND		1100	38	ug/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Ethylbenzene	ND		0.0053	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Methylene Chloride	0.0029	J	0.0053	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Methyl tert-butyl ether	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
n-Butylbenzene	ND		0.0053	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
N-Propylbenzene	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
tert-Butylbenzene	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Toluene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
trans-1,2-Dichloroethene	ND		0.0053	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,1,1-Trichloroethane	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Trichloroethene	ND		0.0053	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Vinyl chloride	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1
Xylenes, Total	ND		0.011	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*76 - 111*	*05/01/18 06:15*	*05/01/18 12:57*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 116*	*05/01/18 06:15*	*05/01/18 12:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 118*	*05/01/18 06:15*	*05/01/18 12:57*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/01/18 06:15*	*05/01/18 12:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.5		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	95.5		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-114 — Lab Sample ID: 180-77199-4

Date Collected: 04/27/18 08:35 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 96.0**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Benzene	ND		0.0054	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
2-Butanone (MEK)	ND		0.0054	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Carbon tetrachloride	ND		0.0054	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Chlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Chloroform	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
cis-1,2-Dichloroethene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,2-Dichlorobenzene	ND		0.0054	0.0043	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,3-Dichlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,4-Dichlorobenzene	ND		0.0054	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,1-Dichloroethane	ND		0.0054	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,1-Dichloroethene	ND		0.0054	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,4-Dioxane	ND		1100	39	ug/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Ethylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Methylene Chloride	**0.0031**	**J**	0.0054	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Methyl tert-butyl ether	ND		0.0054	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
n-Butylbenzene	ND		0.0054	0.0041	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
N-Propylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
tert-Butylbenzene	ND		0.0054	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Tetrachloroethene	ND		0.0054	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Toluene	ND		0.0054	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
trans-1,2-Dichloroethene	ND		0.0054	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,1,1-Trichloroethane	ND		0.0054	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Trichloroethene	ND		0.0054	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1
Xylenes, Total	ND		0.011	0.0046	mg/Kg	☼	05/01/18 06:15	05/01/18 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*	*05/01/18 06:15*	*05/01/18 13:20*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 116*	*05/01/18 06:15*	*05/01/18 13:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 118*	*05/01/18 06:15*	*05/01/18 13:20*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/01/18 06:15*	*05/01/18 13:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.0**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**96.0**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-115 — Lab Sample ID: 180-77199-5

Date Collected: 04/27/18 08:40 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.9	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Acenaphthylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1

Client Sample ID: BP-SC-115
Date Collected: 04/27/18 08:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-5
Matrix: Solid
Percent Solids: 95.4

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Benzo[a]anthracene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Benzo[a]pyrene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Benzo[b]fluoranthene	ND		6.9	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Benzo[g,h,i]perylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Benzo[k]fluoranthene	ND		6.9	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Chrysene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Dibenz(a,h)anthracene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
1,4-Dioxane	ND		69	11	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Fluoranthene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Fluorene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Hexachlorobenzene	ND		6.9	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Indeno[1,2,3-cd]pyrene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
2-Methylphenol	ND		34	9.9	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Naphthalene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Pentachlorophenol	ND		180	55	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Phenanthrene	ND		6.9	1.9	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1
Pyrene	ND		6.9	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 100*	*05/09/18 03:15*	*05/09/18 14:43*	*1*
2-Fluorophenol (Surr)	*79*		*27 - 100*	*05/09/18 03:15*	*05/09/18 14:43*	*1*
Nitrobenzene-d5 (Surr)	*89*		*33 - 100*	*05/09/18 03:15*	*05/09/18 14:43*	*1*
Phenol-d5 (Surr)	*83*		*27 - 100*	*05/09/18 03:15*	*05/09/18 14:43*	*1*
Terphenyl-d14 (Surr)	*96*		*30 - 100*	*05/09/18 03:15*	*05/09/18 14:43*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*20 - 107*	*05/09/18 03:15*	*05/09/18 14:43*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
alpha-BHC	ND		1.7	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
beta-BHC	ND		1.7	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
cis-Chlordane	ND		1.7	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
4,4'-DDD	ND		1.7	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
4,4'-DDE	ND		1.7	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
4,4'-DDT	ND		1.7	0.65	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
delta-BHC	ND		1.7	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Dieldrin	ND		1.7	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Endosulfan I	ND		1.7	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Endosulfan II	ND		1.7	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Endosulfan sulfate	ND		1.7	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Endrin	ND		1.7	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
gamma-BHC (Lindane)	ND		1.7	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1
Heptachlor	ND		1.7	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:17*	*05/09/18 12:55*	*1*

Client Sample ID: BP-SC-115
Date Collected: 04/27/18 08:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-5
Matrix: Solid
Percent Solids: 95.4

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		40 - 150	05/09/18 03:17	05/09/18 12:55	1
Tetrachloro-m-xylene	90		44 - 133	05/09/18 03:17	05/09/18 12:55	1
Tetrachloro-m-xylene	93		44 - 133	05/09/18 03:17	05/09/18 12:55	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1
PCB-1268	ND		0.017	0.0083	mg/Kg	☼	05/09/18 03:17	05/09/18 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		33 - 137	05/09/18 03:17	05/09/18 14:51	1
DCB Decachlorobiphenyl (Surr)	93		33 - 137	05/09/18 03:17	05/09/18 14:51	1
Tetrachloro-m-xylene (Surr)	88		44 - 114	05/09/18 03:17	05/09/18 14:51	1
Tetrachloro-m-xylene (Surr)	81		44 - 114	05/09/18 03:17	05/09/18 14:51	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	67		29 - 100	05/04/18 14:05	05/09/18 00:26	1
2,4-Dichlorophenylacetic acid	71		29 - 100	05/04/18 14:05	05/09/18 00:26	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.5**		1.0	0.29	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Barium	**46**		21	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Beryllium	**0.27**	**J**	0.42	0.024	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Cadmium	**0.15**	**J**	0.52	0.038	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Chromium	**8.9**		0.52	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Copper	**23**		2.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Lead	**6.0**		1.0	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Manganese	**410**		1.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Nickel	**18**		4.2	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Selenium	**0.94**	**J**	1.0	0.53	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Silver	ND		0.52	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1
Zinc	**61**		2.1	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:12	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0099**	**J**	0.028	0.0063	mg/Kg	☼	05/02/18 09:39	05/03/18 09:46	1

Client Sample ID: BP-SC-115 — Lab Sample ID: 180-77199-5

Date Collected: 04/27/18 08:40 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.4**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.6**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**95.4**		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.44	0.24	mg/Kg	☼	05/01/18 12:20	05/02/18 12:36	1

Client Sample ID: BP-SC-116 — Lab Sample ID: 180-77199-6

Date Collected: 04/27/18 08:45 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 94.8**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Benzene	ND		0.0048	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
2-Butanone (MEK)	ND		0.0048	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Carbon tetrachloride	ND		0.0048	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Chlorobenzene	ND		0.0048	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Chloroform	ND		0.0048	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
cis-1,2-Dichloroethene	ND		0.0048	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,2-Dichlorobenzene	ND		0.0048	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,3-Dichlorobenzene	ND		0.0048	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,4-Dichlorobenzene	ND		0.0048	0.00099	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,1-Dichloroethane	ND		0.0048	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,2-Dichloroethane	ND		0.0048	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,1-Dichloroethene	ND		0.0048	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,4-Dioxane	ND		970	35	ug/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Ethylbenzene	ND		0.0048	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Methylene Chloride	ND		0.0048	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Methyl tert-butyl ether	ND		0.0048	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
n-Butylbenzene	ND		0.0048	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
N-Propylbenzene	ND		0.0048	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
sec-Butylbenzene	ND		0.0048	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
tert-Butylbenzene	ND		0.0048	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Tetrachloroethene	ND		0.0048	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Toluene	ND		0.0048	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
trans-1,2-Dichloroethene	ND		0.0048	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,1,1-Trichloroethane	ND		0.0048	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Trichloroethene	ND		0.0048	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,2,4-Trimethylbenzene	ND		0.0048	0.0013	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
1,3,5-Trimethylbenzene	ND		0.0048	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Vinyl chloride	ND		0.0048	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1
Xylenes, Total	ND		0.0097	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/01/18 06:15*	*05/01/18 13:43*	*1*
Dibromofluoromethane (Surr)	*91*		*72 - 116*	*05/01/18 06:15*	*05/01/18 13:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*	*05/01/18 06:15*	*05/01/18 13:43*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/01/18 06:15*	*05/01/18 13:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.2**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-116

Lab Sample ID: 180-77199-6
Date Collected: 04/27/18 08:45
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.8

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94.8		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-117

Lab Sample ID: 180-77199-7
Date Collected: 04/27/18 09:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Carbon tetrachloride	ND		0.0052	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,2-Dichlorobenzene	ND		0.0052	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,3-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,1-Dichloroethene	ND		0.0052	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Ethylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Methylene Chloride	ND		0.0052	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Toluene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
trans-1,2-Dichloroethene	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/01/18 06:15	05/01/18 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*76 - 111*	*05/01/18 06:15*	*05/01/18 14:07*	*1*
Dibromofluoromethane (Surr)	*90*		*72 - 116*	*05/01/18 06:15*	*05/01/18 14:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*62 - 118*	*05/01/18 06:15*	*05/01/18 14:07*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/01/18 06:15*	*05/01/18 14:07*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.3		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	95.7		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-118

Date Collected: 04/27/18 09:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-8
Matrix: Solid
Percent Solids: 94.2

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Benzene	ND		0.0050	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Chloroform	ND		0.0050	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,4-Dioxane	ND		1000	37	ug/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Methylene Chloride	**0.0026**	**J**	0.0050	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Toluene	ND		0.0050	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg	☼	05/01/18 06:15	05/01/18 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*76 - 111*	*05/01/18 06:15*	*05/01/18 14:30*	*1*
Dibromofluoromethane (Surr)	*94*		*72 - 116*	*05/01/18 06:15*	*05/01/18 14:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 118*	*05/01/18 06:15*	*05/01/18 14:30*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*	*05/01/18 06:15*	*05/01/18 14:30*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.8**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**94.2**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-119

Date Collected: 04/27/18 09:10
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-9
Matrix: Solid
Percent Solids: 96.1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.9	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Acenaphthylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1

Client Sample ID: BP-SC-119
Date Collected: 04/27/18 09:10
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-9
Matrix: Solid
Percent Solids: 96.1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Benzo[a]anthracene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Benzo[a]pyrene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Benzo[b]fluoranthene	ND		6.9	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Benzo[g,h,i]perylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Benzo[k]fluoranthene	ND		6.9	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Chrysene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Dibenz(a,h)anthracene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
1,4-Dioxane	ND		69	11	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Fluoranthene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Fluorene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Hexachlorobenzene	ND		6.9	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Indeno[1,2,3-cd]pyrene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
2-Methylphenol	ND		34	9.8	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Naphthalene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Pentachlorophenol	ND		170	55	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Phenanthrene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1
Pyrene	ND		6.9	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 100*	*05/09/18 03:15*	*05/09/18 15:38*	*1*
2-Fluorophenol (Surr)	*62*		*27 - 100*	*05/09/18 03:15*	*05/09/18 15:38*	*1*
Nitrobenzene-d5 (Surr)	*79*		*33 - 100*	*05/09/18 03:15*	*05/09/18 15:38*	*1*
Phenol-d5 (Surr)	*68*		*27 - 100*	*05/09/18 03:15*	*05/09/18 15:38*	*1*
Terphenyl-d14 (Surr)	*90*		*30 - 100*	*05/09/18 03:15*	*05/09/18 15:38*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*20 - 107*	*05/09/18 03:15*	*05/09/18 15:38*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
alpha-BHC	ND		1.7	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
beta-BHC	ND		1.7	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
cis-Chlordane	ND		1.7	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
4,4'-DDD	ND		1.7	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
4,4'-DDE	ND		1.7	0.34	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
4,4'-DDT	ND		1.7	0.64	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
delta-BHC	ND		1.7	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Dieldrin	ND		1.7	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Endosulfan I	ND		1.7	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Endosulfan II	ND		1.7	0.37	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Endosulfan sulfate	ND		1.7	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Endrin	ND		1.7	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
gamma-BHC (Lindane)	ND		1.7	0.58	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1
Heptachlor	ND		1.7	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*40 - 150*	*05/09/18 03:17*	*05/09/18 13:10*	*1*

Client Sample ID: BP-SC-119

Date Collected: 04/27/18 09:10
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-9

Matrix: Solid
Percent Solids: 96.1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	90		40 - 150	05/09/18 03:17	05/09/18 13:10	1
Tetrachloro-m-xylene	98		44 - 133	05/09/18 03:17	05/09/18 13:10	1
Tetrachloro-m-xylene	99		44 - 133	05/09/18 03:17	05/09/18 13:10	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0055	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1248	ND		0.017	0.013	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1260	ND		0.017	0.0048	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1
PCB-1268	ND		0.017	0.0082	mg/Kg	☼	05/09/18 03:17	05/09/18 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		33 - 137	05/09/18 03:17	05/09/18 15:12	1
DCB Decachlorobiphenyl (Surr)	98		33 - 137	05/09/18 03:17	05/09/18 15:12	1
Tetrachloro-m-xylene (Surr)	92		44 - 114	05/09/18 03:17	05/09/18 15:12	1
Tetrachloro-m-xylene (Surr)	86		44 - 114	05/09/18 03:17	05/09/18 15:12	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	73		29 - 100	05/04/18 14:05	05/09/18 00:50	1
2,4-Dichlorophenylacetic acid	72		29 - 100	05/04/18 14:05	05/09/18 00:50	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0	0.29	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Barium	**46**		21	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Beryllium	**0.27**	**J**	0.42	0.024	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Cadmium	**0.45**	**J**	0.52	0.038	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Chromium	**9.1**		0.52	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Copper	**26**		2.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Lead	**6.0**		1.0	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Manganese	**320**		1.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Nickel	**17**		4.2	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Selenium	**1.2**		1.0	0.54	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Silver	ND		0.52	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1
Zinc	**63**		2.1	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:17	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0095**	**J**	0.029	0.0066	mg/Kg	☼	05/02/18 09:39	05/03/18 09:48	1

Client Sample ID: BP-SC-119 — Lab Sample ID: 180-77199-9

Date Collected: 04/27/18 09:10 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 96.1**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.9**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**96.1**		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.44	0.24	mg/Kg	☼	05/01/18 12:20	05/02/18 12:37	1

Client Sample ID: BP-SC-120 — Lab Sample ID: 180-77199-10

Date Collected: 04/27/18 09:15 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 96.2**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Benzene	ND		0.0051	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
2-Butanone (MEK)	ND		0.0051	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Carbon tetrachloride	ND		0.0051	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Chlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Chloroform	ND		0.0051	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
cis-1,2-Dichloroethene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,2-Dichlorobenzene	ND		0.0051	0.0041	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,3-Dichlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,4-Dichlorobenzene	ND		0.0051	0.0010	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,1-Dichloroethane	ND		0.0051	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,1-Dichloroethene	ND		0.0051	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,4-Dioxane	ND		1000	37	ug/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Ethylbenzene	ND		0.0051	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Methylene Chloride	**0.0026**	**J**	0.0051	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Methyl tert-butyl ether	ND		0.0051	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
n-Butylbenzene	ND		0.0051	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
N-Propylbenzene	ND		0.0051	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
tert-Butylbenzene	ND		0.0051	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Tetrachloroethene	ND		0.0051	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Toluene	ND		0.0051	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
trans-1,2-Dichloroethene	ND		0.0051	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,1,1-Trichloroethane	ND		0.0051	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Trichloroethene	ND		0.0051	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Vinyl chloride	ND		0.0051	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/01/18 06:15	05/01/18 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*76 - 111*	*05/01/18 06:15*	*05/01/18 14:53*	*1*
Dibromofluoromethane (Surr)	*89*		*72 - 116*	*05/01/18 06:15*	*05/01/18 14:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 118*	*05/01/18 06:15*	*05/01/18 14:53*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/01/18 06:15*	*05/01/18 14:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.8**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-120 — Lab Sample ID: 180-77199-10

Date Collected: 04/27/18 09:15 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 96.2**

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	96.2		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-121 — Lab Sample ID: 180-77199-11

Date Collected: 04/27/18 09:20 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.5**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Benzene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
2-Butanone (MEK)	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Carbon tetrachloride	ND		0.0049	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Chlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Chloroform	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
cis-1,2-Dichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,2-Dichlorobenzene	ND		0.0049	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,3-Dichlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,4-Dichlorobenzene	ND		0.0049	0.00099	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,1-Dichloroethane	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,2-Dichloroethane	ND		0.0049	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,1-Dichloroethene	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,4-Dioxane	ND		970	36	ug/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Ethylbenzene	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Methylene Chloride	0.0026	J	0.0049	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Methyl tert-butyl ether	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
n-Butylbenzene	ND		0.0049	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
N-Propylbenzene	ND		0.0049	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
sec-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
tert-Butylbenzene	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Tetrachloroethene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Toluene	ND		0.0049	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
trans-1,2-Dichloroethene	ND		0.0049	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,1,1-Trichloroethane	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Trichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,2,4-Trimethylbenzene	ND		0.0049	0.0013	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
1,3,5-Trimethylbenzene	ND		0.0049	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Vinyl chloride	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1
Xylenes, Total	ND		0.0097	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*	*05/01/18 06:15*	*05/01/18 15:17*	*1*
Dibromofluoromethane (Surr)	*90*		*72 - 116*	*05/01/18 06:15*	*05/01/18 15:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 118*	*05/01/18 06:15*	*05/01/18 15:17*	*1*
Toluene-d8 (Surr)	*102*		*80 - 129*	*05/01/18 06:15*	*05/01/18 15:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.5		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	95.5		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: DUP-2 **Lab Sample ID: 180-77199-12**
Date Collected: 04/27/18 00:00 **Matrix: Solid**
Date Received: 04/28/18 10:30 **Percent Solids: 96.8**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.9	2.0	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Acenaphthylene	**7.5**		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Anthracene	**4.4**	**J**	6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Benzo[a]anthracene	**7.3**		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Benzo[a]pyrene	**3.9**	**J**	6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Benzo[b]fluoranthene	**5.7**	**J**	6.9	1.7	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Benzo[g,h,i]perylene	**2.2**	**J**	6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Benzo[k]fluoranthene	ND		6.9	2.1	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Chrysene	**5.7**	**J**	6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Dibenz(a,h)anthracene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Dibenzofuran	**2.4**	**J**	34	1.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
1,4-Dioxane	ND		68	11	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Fluoranthene	**14**		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Fluorene	**5.6**	**J**	6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Hexachlorobenzene	ND		6.9	2.5	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Indeno[1,2,3-cd]pyrene	**2.0**	**J**	6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
2-Methylphenol	ND		34	9.8	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Naphthalene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Pentachlorophenol	ND		170	55	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Phenanthrene	**20**		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1
Pyrene	**9.8**		6.9	1.6	ug/Kg	☼	05/09/18 03:15	05/10/18 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 100*	*05/09/18 03:15*	*05/10/18 12:38*	*1*
2-Fluorophenol (Surr)	*67*		*27 - 100*	*05/09/18 03:15*	*05/10/18 12:38*	*1*
Nitrobenzene-d5 (Surr)	*80*		*33 - 100*	*05/09/18 03:15*	*05/10/18 12:38*	*1*
Phenol-d5 (Surr)	*73*		*27 - 100*	*05/09/18 03:15*	*05/10/18 12:38*	*1*
Terphenyl-d14 (Surr)	*87*		*30 - 100*	*05/09/18 03:15*	*05/10/18 12:38*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*20 - 107*	*05/09/18 03:15*	*05/10/18 12:38*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
alpha-BHC	ND		1.7	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
beta-BHC	ND		1.7	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
cis-Chlordane	ND		1.7	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
4,4'-DDD	ND		1.7	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
4,4'-DDE	ND		1.7	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
4,4'-DDT	ND		1.7	0.65	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
delta-BHC	ND		1.7	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Dieldrin	ND		1.7	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Endosulfan I	ND		1.7	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Endosulfan II	ND		1.7	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Endosulfan sulfate	ND		1.7	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Endrin	ND		1.7	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
gamma-BHC (Lindane)	ND		1.7	0.58	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1
Heptachlor	ND		1.7	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 13:26	1

Client Sample ID: DUP-2

Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-12

Matrix: Solid
Percent Solids: 96.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	103		40 - 150	05/09/18 03:17	05/09/18 13:26	1
DCB Decachlorobiphenyl (Surr)	95		40 - 150	05/09/18 03:17	05/09/18 13:26	1
Tetrachloro-m-xylene	96		44 - 133	05/09/18 03:17	05/09/18 13:26	1
Tetrachloro-m-xylene	101		44 - 133	05/09/18 03:17	05/09/18 13:26	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0055	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1248	ND		0.017	0.013	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1260	ND		0.017	0.0048	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1
PCB-1268	ND		0.017	0.0082	mg/Kg	☼	05/09/18 03:17	05/09/18 15:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	92		33 - 137	05/09/18 03:17	05/09/18 15:34	1
DCB Decachlorobiphenyl (Surr)	101		33 - 137	05/09/18 03:17	05/09/18 15:34	1
Tetrachloro-m-xylene (Surr)	101		44 - 114	05/09/18 03:17	05/09/18 15:34	1
Tetrachloro-m-xylene (Surr)	90		44 - 114	05/09/18 03:17	05/09/18 15:34	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0068	mg/Kg	☼	05/04/18 14:05	05/09/18 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	54		29 - 100	05/04/18 14:05	05/09/18 01:15	1
2,4-Dichlorophenylacetic acid	58		29 - 100	05/04/18 14:05	05/09/18 01:15	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.1**		1.1	0.30	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Barium	**41**		22	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Beryllium	**0.25**	**J**	0.43	0.025	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Cadmium	**0.12**	**J**	0.54	0.040	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Chromium	**8.8**		0.54	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Copper	**21**		2.7	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Lead	**6.0**		1.1	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Manganese	**310**		1.6	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Nickel	**17**		4.3	0.27	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Selenium	**1.0**	**J**	1.1	0.56	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Silver	ND		0.54	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1
Zinc	**57**		2.2	1.2	mg/Kg	☼	05/02/18 13:44	05/06/18 15:22	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.028	0.0063	mg/Kg	☼	05/02/18 09:39	05/03/18 09:50	1

Client Sample ID: DUP-2 — Lab Sample ID: 180-77199-12

Date Collected: 04/27/18 00:00 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 96.8**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.2**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**96.8**		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.50	0.27	mg/Kg	☼	05/01/18 12:20	05/02/18 12:39	1

Client Sample ID: BP-SC-122 — Lab Sample ID: 180-77199-13

Date Collected: 04/27/18 09:25 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 94.8**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Benzene	ND		0.0051	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
2-Butanone (MEK)	ND		0.0051	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Carbon tetrachloride	ND		0.0051	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Chlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Chloroform	ND		0.0051	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
cis-1,2-Dichloroethene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,2-Dichlorobenzene	ND		0.0051	0.0041	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,3-Dichlorobenzene	ND		0.0051	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,4-Dichlorobenzene	ND		0.0051	0.0010	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,1-Dichloroethane	ND		0.0051	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,1-Dichloroethene	ND		0.0051	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,4-Dioxane	ND		1000	37	ug/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Ethylbenzene	ND		0.0051	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Methylene Chloride	**0.0025**	**J**	0.0051	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Methyl tert-butyl ether	ND		0.0051	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
n-Butylbenzene	ND		0.0051	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
N-Propylbenzene	ND		0.0051	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
tert-Butylbenzene	ND		0.0051	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Tetrachloroethene	ND		0.0051	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Toluene	ND		0.0051	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
trans-1,2-Dichloroethene	ND		0.0051	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,1,1-Trichloroethane	ND		0.0051	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Trichloroethene	ND		0.0051	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Vinyl chloride	ND		0.0051	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/01/18 06:15	05/01/18 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/01/18 06:15*	*05/01/18 15:41*	*1*
Dibromofluoromethane (Surr)	*89*		*72 - 116*	*05/01/18 06:15*	*05/01/18 15:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*62 - 118*	*05/01/18 06:15*	*05/01/18 15:41*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/01/18 06:15*	*05/01/18 15:41*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.2**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-122 — Lab Sample ID: 180-77199-13

Date Collected: 04/27/18 09:25 — Matrix: Solid
Date Received: 04/28/18 10:30 — Percent Solids: 94.8

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	94.8		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-123 — Lab Sample ID: 180-77199-14

Date Collected: 04/27/18 09:30 — Matrix: Solid
Date Received: 04/28/18 10:30 — Percent Solids: 96.1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	F1	6.8	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Acenaphthylene	ND	F1	6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Anthracene	ND	F1	6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Benzo[a]anthracene	ND	F1	6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Benzo[a]pyrene	ND	F1	6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Benzo[b]fluoranthene	ND		6.8	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Benzo[g,h,i]perylene	ND	F1	6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Benzo[k]fluoranthene	ND		6.8	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Chrysene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Dibenz(a,h)anthracene	ND	F1	6.8	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Dibenzofuran	ND	F1	34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
1,4-Dioxane	ND		68	11	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Fluoranthene	ND	F1	6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Fluorene	ND	F1	6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Hexachlorobenzene	ND		6.8	2.4	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Indeno[1,2,3-cd]pyrene	ND	F1	6.8	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
2-Methylphenol	ND		34	9.7	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Naphthalene	ND		6.8	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Pentachlorophenol	ND		170	55	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Phenanthrene	ND	F1	6.8	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1
Pyrene	ND	F1	6.8	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 100*	*05/09/18 03:15*	*05/09/18 11:58*	*1*
2-Fluorophenol (Surr)	*73*		*27 - 100*	*05/09/18 03:15*	*05/09/18 11:58*	*1*
Nitrobenzene-d5 (Surr)	*85*		*33 - 100*	*05/09/18 03:15*	*05/09/18 11:58*	*1*
Phenol-d5 (Surr)	*75*		*27 - 100*	*05/09/18 03:15*	*05/09/18 11:58*	*1*
Terphenyl-d14 (Surr)	*94*		*30 - 100*	*05/09/18 03:15*	*05/09/18 11:58*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*20 - 107*	*05/09/18 03:15*	*05/09/18 11:58*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
alpha-BHC	ND		1.8	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
beta-BHC	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
cis-Chlordane	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
4,4'-DDD	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
4,4'-DDT	ND		1.8	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1

Client Sample ID: BP-SC-123
Date Collected: 04/27/18 09:30
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-14
Matrix: Solid
Percent Solids: 96.1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
Endrin	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*40 - 150*	*05/09/18 03:17*	*05/09/18 13:41*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*40 - 150*	*05/09/18 03:17*	*05/09/18 13:41*	*1*
Tetrachloro-m-xylene	*98*		*44 - 133*	*05/09/18 03:17*	*05/09/18 13:41*	*1*
Tetrachloro-m-xylene	*98*		*44 - 133*	*05/09/18 03:17*	*05/09/18 13:41*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1
PCB-1268	ND		0.017	0.0084	mg/Kg	☼	05/09/18 03:17	05/09/18 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*	*05/09/18 03:17*	*05/09/18 15:56*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*33 - 137*	*05/09/18 03:17*	*05/09/18 15:56*	*1*
Tetrachloro-m-xylene (Surr)	*100*		*44 - 114*	*05/09/18 03:17*	*05/09/18 15:56*	*1*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*	*05/09/18 03:17*	*05/09/18 15:56*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 02:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*29 - 100*	*05/04/18 14:05*	*05/09/18 02:04*	*1*
2,4-Dichlorophenylacetic acid	*71*		*29 - 100*	*05/04/18 14:05*	*05/09/18 02:04*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.7**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Barium	**41**		20	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Beryllium	**0.25**	**J**	0.40	0.023	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Cadmium	**0.12**	**J**	0.50	0.037	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Chromium	**8.4**		0.50	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Copper	**23**		2.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Lead	**5.3**		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Manganese	**520**		1.5	0.16	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Nickel	**17**		4.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1

Client Sample ID: BP-SC-123

Lab Sample ID: 180-77199-14
Date Collected: 04/27/18 09:30
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 96.1

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.79**	**J**	1.0	0.52	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Silver	ND		0.50	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1
Zinc	**60**		2.0	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 13:35	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.033	0.0074	mg/Kg	☼	05/02/18 09:39	05/03/18 09:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.9**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**96.1**		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.46	0.25	mg/Kg	☼	05/01/18 12:20	05/02/18 12:45	1

Client Sample ID: BP-SC-124

Lab Sample ID: 180-77199-15
Date Collected: 04/27/18 09:35
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Benzene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
2-Butanone (MEK)	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Carbon tetrachloride	ND		0.0053	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Chlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Chloroform	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
cis-1,2-Dichloroethene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,2-Dichlorobenzene	ND		0.0053	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,3-Dichlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,4-Dichlorobenzene	ND		0.0053	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,1-Dichloroethane	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,1-Dichloroethene	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,4-Dioxane	ND		1100	38	ug/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Ethylbenzene	ND		0.0053	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Methylene Chloride	**0.0028**	**J**	0.0053	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Methyl tert-butyl ether	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
n-Butylbenzene	ND		0.0053	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
N-Propylbenzene	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
tert-Butylbenzene	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Toluene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
trans-1,2-Dichloroethene	ND		0.0053	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,1,1-Trichloroethane	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Trichloroethene	ND		0.0053	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Vinyl chloride	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1
Xylenes, Total	ND		0.011	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 16:04	1

Client Sample ID: BP-SC-124

Lab Sample ID: 180-77199-15
Date Collected: 04/27/18 09:35
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*76 - 111*	*05/01/18 06:15*	*05/01/18 16:04*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 116*	*05/01/18 06:15*	*05/01/18 16:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 118*	*05/01/18 06:15*	*05/01/18 16:04*	*1*
Toluene-d8 (Surr)	*108*		*80 - 129*	*05/01/18 06:15*	*05/01/18 16:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.1**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**95.9**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-125

Lab Sample ID: 180-77199-16
Date Collected: 04/27/18 09:40
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 96.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.48	0.076	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Benzene	ND		0.12	0.047	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
2-Butanone (MEK)	ND		0.12	0.070	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Carbon tetrachloride	ND		0.12	0.080	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Chlorobenzene	ND		0.12	0.038	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Chloroform	ND		0.12	0.051	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
cis-1,2-Dichloroethene	ND		0.12	0.038	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,2-Dichlorobenzene	ND		0.12	0.097	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,3-Dichlorobenzene	ND		0.12	0.038	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,4-Dichlorobenzene	ND		0.12	0.025	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,1-Dichloroethane	ND		0.12	0.044	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,2-Dichloroethane	ND		0.12	0.035	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,1-Dichloroethene	ND		0.12	0.069	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,4-Dioxane	ND		24000	880	ug/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Ethylbenzene	ND		0.12	0.052	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Methylene Chloride	ND		0.12	0.057	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Methyl tert-butyl ether	ND		0.12	0.089	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
n-Butylbenzene	ND		0.12	0.092	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
N-Propylbenzene	ND		0.12	0.051	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
sec-Butylbenzene	ND		0.12	0.059	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
tert-Butylbenzene	ND		0.12	0.044	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Tetrachloroethene	ND		0.12	0.048	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Toluene	ND		0.12	0.041	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
trans-1,2-Dichloroethene	ND		0.12	0.061	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,1,1-Trichloroethane	ND		0.12	0.061	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Trichloroethene	ND		0.12	0.036	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,2,4-Trimethylbenzene	ND		0.12	0.033	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
1,3,5-Trimethylbenzene	ND		0.12	0.042	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Vinyl chloride	ND		0.12	0.089	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1
Xylenes, Total	ND		0.24	0.10	mg/Kg	☼	05/01/18 06:15	05/01/18 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/01/18 06:15*	*05/01/18 11:47*	*1*
Dibromofluoromethane (Surr)	*91*		*72 - 116*	*05/01/18 06:15*	*05/01/18 11:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*	*05/01/18 06:15*	*05/01/18 11:47*	*1*

Client Sample ID: BP-SC-125

Lab Sample ID: 180-77199-16
Date Collected: 04/27/18 09:40
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 96.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 129*	*05/01/18 06:15*	*05/01/18 11:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**3.4**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**96.6**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-126

Lab Sample ID: 180-77199-17
Date Collected: 04/27/18 09:45
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.4

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Benzene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
2-Butanone (MEK)	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Carbon tetrachloride	ND		0.0053	0.0035	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Chlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Chloroform	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
cis-1,2-Dichloroethene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,2-Dichlorobenzene	ND		0.0053	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,3-Dichlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,4-Dichlorobenzene	ND		0.0053	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,1-Dichloroethane	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,1-Dichloroethene	ND		0.0053	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,4-Dioxane	ND		1100	38	ug/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Ethylbenzene	ND		0.0053	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Methylene Chloride	**0.0027**	**J**	0.0053	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Methyl tert-butyl ether	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
n-Butylbenzene	ND		0.0053	0.0040	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
N-Propylbenzene	ND		0.0053	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
tert-Butylbenzene	ND		0.0053	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Toluene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
trans-1,2-Dichloroethene	ND		0.0053	0.0027	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,1,1-Trichloroethane	ND		0.0053	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Trichloroethene	ND		0.0053	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Vinyl chloride	ND		0.0053	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1
Xylenes, Total	ND		0.011	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*94*		*76 - 111*	*05/01/18 06:15*	*05/01/18 12:10*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 116*	*05/01/18 06:15*	*05/01/18 12:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 118*	*05/01/18 06:15*	*05/01/18 12:10*	*1*
Toluene-d8 (Surr)	*108*		*80 - 129*	*05/01/18 06:15*	*05/01/18 12:10*	*1*

Client Sample ID: BP-SC-126 — Lab Sample ID: 180-77199-17

Date Collected: 04/27/18 09:45 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.4**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.6		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	95.4		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-127 — Lab Sample ID: 180-77199-18

Date Collected: 04/27/18 11:20 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 95.2**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.0	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Acenaphthylene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Anthracene	ND		7.0	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Benzo[a]anthracene	ND		7.0	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Benzo[a]pyrene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Benzo[b]fluoranthene	ND		7.0	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Benzo[g,h,i]perylene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Benzo[k]fluoranthene	ND		7.0	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Chrysene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Dibenz(a,h)anthracene	ND		7.0	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Dibenzofuran	ND		35	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
1,4-Dioxane	ND		70	11	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Fluoranthene	ND		7.0	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Fluorene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Hexachlorobenzene	ND		7.0	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Indeno[1,2,3-cd]pyrene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
2-Methylphenol	ND		35	10	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Methylphenol, 3 & 4	ND		35	10	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Naphthalene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Pentachlorophenol	ND		180	56	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Phenanthrene	ND		7.0	1.9	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Phenol	ND		35	11	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1
Pyrene	ND		7.0	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*34 - 100*	*05/09/18 03:15*	*05/09/18 17:28*	*1*
2-Fluorophenol (Surr)	*79*		*27 - 100*	*05/09/18 03:15*	*05/09/18 17:28*	*1*
Nitrobenzene-d5 (Surr)	*97*		*33 - 100*	*05/09/18 03:15*	*05/09/18 17:28*	*1*
Phenol-d5 (Surr)	*86*		*27 - 100*	*05/09/18 03:15*	*05/09/18 17:28*	*1*
Terphenyl-d14 (Surr)	*103*	*X*	*30 - 100*	*05/09/18 03:15*	*05/09/18 17:28*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*20 - 107*	*05/09/18 03:15*	*05/09/18 17:28*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
alpha-BHC	ND		1.8	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
beta-BHC	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
cis-Chlordane	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
4,4'-DDD	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
4,4'-DDT	ND		1.8	0.65	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1

Client Sample ID: BP-SC-127

Date Collected: 04/27/18 11:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-18

Matrix: Solid
Percent Solids: 95.2

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Endrin	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 14:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:27*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:27*	*1*
Tetrachloro-m-xylene	*98*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:27*	*1*
Tetrachloro-m-xylene	*104*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:27*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1
PCB-1268	ND		0.017	0.0083	mg/Kg	☼	05/09/18 03:17	05/09/18 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:00*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:00*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:00*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:00*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/09/18 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*29 - 100*	*05/04/18 14:05*	*05/09/18 03:17*	*1*
2,4-Dichlorophenylacetic acid	*69*		*29 - 100*	*05/04/18 14:05*	*05/09/18 03:17*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.8**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Barium	**35**		21	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Beryllium	**0.21**	**J**	0.41	0.024	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Cadmium	**0.12**	**J**	0.51	0.037	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Chromium	**6.9**		0.51	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Copper	**20**		2.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Lead	**4.9**		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Manganese	**330**		1.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1

Client Sample ID: BP-SC-127

Date Collected: 04/27/18 11:20
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-18

Matrix: Solid
Percent Solids: 95.2

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	14		4.1	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Selenium	1.4		1.0	0.53	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Silver	ND		0.51	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1
Zinc	51		2.1	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:27	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0089	J	0.029	0.0066	mg/Kg	☼	05/02/18 09:39	05/03/18 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.8		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	95.2		0.1	0.1	%			04/30/18 14:37	1
Cyanide, Total	ND		0.52	0.28	mg/Kg	☼	05/01/18 12:20	05/02/18 12:49	1

Client Sample ID: BP-SC-128

Date Collected: 04/27/18 11:25
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-19

Matrix: Solid
Percent Solids: 93.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Carbon tetrachloride	ND		0.0052	0.0034	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,2-Dichlorobenzene	ND		0.0052	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,3-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,1-Dichloroethene	ND		0.0052	0.0029	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Ethylbenzene	ND	F1	0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Methylene Chloride	ND		0.0052	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
tert-Butylbenzene	ND	F1	0.0052	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Tetrachloroethene	ND	F1	0.0052	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Toluene	ND		0.0052	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
trans-1,2-Dichloroethene	ND	F1	0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Trichloroethene	ND	F1	0.0052	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1

Client Sample ID: BP-SC-128 — Lab Sample ID: 180-77199-19

Date Collected: 04/27/18 11:25 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 93.0**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.010	0.0045	mg/Kg	☼	05/01/18 06:15	05/01/18 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*	*05/01/18 06:15*	*05/01/18 09:49*	*1*
Dibromofluoromethane (Surr)	*92*		*72 - 116*	*05/01/18 06:15*	*05/01/18 09:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*	*05/01/18 06:15*	*05/01/18 09:49*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/01/18 06:15*	*05/01/18 09:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.0**		0.1	0.1	%			04/30/18 14:37	1
Percent Solids	**93.0**		0.1	0.1	%			04/30/18 14:37	1

Client Sample ID: BP-SC-129 — Lab Sample ID: 180-77199-20

Date Collected: 04/27/18 11:30 — **Matrix: Solid**
Date Received: 04/28/18 10:30 — **Percent Solids: 94.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0031	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Benzene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
2-Butanone (MEK)	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Carbon tetrachloride	ND		0.0049	0.0032	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Chlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Chloroform	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
cis-1,2-Dichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,2-Dichlorobenzene	ND		0.0049	0.0039	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,3-Dichlorobenzene	ND		0.0049	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,4-Dichlorobenzene	ND		0.0049	0.00099	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,1-Dichloroethane	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,2-Dichloroethane	ND		0.0049	0.0014	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,1-Dichloroethene	ND		0.0049	0.0028	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,4-Dioxane	ND		970	36	ug/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Ethylbenzene	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Methylene Chloride	**0.0023**	**J**	0.0049	0.0023	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Methyl tert-butyl ether	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
n-Butylbenzene	ND		0.0049	0.0037	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
N-Propylbenzene	ND		0.0049	0.0021	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
sec-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
tert-Butylbenzene	ND		0.0049	0.0018	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Tetrachloroethene	ND		0.0049	0.0019	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Toluene	ND		0.0049	0.0016	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
trans-1,2-Dichloroethene	ND		0.0049	0.0025	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,1,1-Trichloroethane	ND		0.0049	0.0024	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Trichloroethene	ND		0.0049	0.0015	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,2,4-Trimethylbenzene	ND		0.0049	0.0013	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
1,3,5-Trimethylbenzene	ND		0.0049	0.0017	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Vinyl chloride	ND		0.0049	0.0036	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1
Xylenes, Total	ND		0.0097	0.0042	mg/Kg	☼	05/01/18 06:15	05/01/18 16:27	1

Client Sample ID: BP-SC-129

Lab Sample ID: 180-77199-20
Date Collected: 04/27/18 11:30
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*76 - 111*	*05/01/18 06:15*	*05/01/18 16:27*	*1*
Dibromofluoromethane (Surr)	*90*		*72 - 116*	*05/01/18 06:15*	*05/01/18 16:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 118*	*05/01/18 06:15*	*05/01/18 16:27*	*1*
Toluene-d8 (Surr)	*102*		*80 - 129*	*05/01/18 06:15*	*05/01/18 16:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.6**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**94.4**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: BP-SC-130

Lab Sample ID: 180-77199-21
Date Collected: 04/27/18 11:35
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 92.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0035	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Benzene	ND		0.0055	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
2-Butanone (MEK)	ND		0.0055	0.0032	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Carbon tetrachloride	ND		0.0055	0.0036	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Chlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Chloroform	ND		0.0055	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,2-Dichlorobenzene	ND		0.0055	0.0044	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,3-Dichlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,4-Dichlorobenzene	ND		0.0055	0.0011	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,1-Dichloroethane	ND		0.0055	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,1-Dichloroethene	ND		0.0055	0.0031	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,4-Dioxane	ND		1100	40	ug/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Ethylbenzene	ND		0.0055	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Methylene Chloride	ND		0.0055	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Methyl tert-butyl ether	ND		0.0055	0.0040	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
n-Butylbenzene	ND		0.0055	0.0042	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
N-Propylbenzene	ND		0.0055	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
tert-Butylbenzene	ND		0.0055	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Toluene	ND		0.0055	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
trans-1,2-Dichloroethene	ND		0.0055	0.0028	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,1,1-Trichloroethane	ND		0.0055	0.0027	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Trichloroethene	ND		0.0055	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Vinyl chloride	ND		0.0055	0.0040	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1
Xylenes, Total	ND		0.011	0.0047	mg/Kg	☼	05/02/18 06:00	05/02/18 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/02/18 06:00*	*05/02/18 11:23*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 116*	*05/02/18 06:00*	*05/02/18 11:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 118*	*05/02/18 06:00*	*05/02/18 11:23*	*1*

Client Sample ID: BP-SC-130 — Lab Sample ID: 180-77199-21

Date Collected: 04/27/18 11:35 — Matrix: Solid
Date Received: 04/28/18 10:30 — Percent Solids: 92.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/02/18 06:00*	*05/02/18 11:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.2**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**92.8**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: BP-SC-131 — Lab Sample ID: 180-77199-22

Date Collected: 04/27/18 11:40 — Matrix: Solid
Date Received: 04/28/18 10:30 — Percent Solids: 94.6

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.9	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Acenaphthylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Anthracene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Benzo[a]anthracene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Benzo[a]pyrene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Benzo[b]fluoranthene	ND		6.9	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Benzo[g,h,i]perylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Benzo[k]fluoranthene	ND		6.9	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Chrysene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Dibenz(a,h)anthracene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
1,4-Dioxane	ND		69	11	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Fluoranthene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Fluorene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Hexachlorobenzene	ND		6.9	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Indeno[1,2,3-cd]pyrene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
2-Methylphenol	ND		34	9.8	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Naphthalene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Pentachlorophenol	ND		180	55	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Phenanthrene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1
Pyrene	ND		6.9	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*86*		*34 - 100*	*05/09/18 03:15*	*05/09/18 20:13*	*1*
2-Fluorophenol (Surr)	*77*		*27 - 100*	*05/09/18 03:15*	*05/09/18 20:13*	*1*
Nitrobenzene-d5 (Surr)	*89*		*33 - 100*	*05/09/18 03:15*	*05/09/18 20:13*	*1*
Phenol-d5 (Surr)	*83*		*27 - 100*	*05/09/18 03:15*	*05/09/18 20:13*	*1*
Terphenyl-d14 (Surr)	*94*		*30 - 100*	*05/09/18 03:15*	*05/09/18 20:13*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*20 - 107*	*05/09/18 03:15*	*05/09/18 20:13*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
alpha-BHC	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
beta-BHC	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1

Client Sample ID: BP-SC-131
Date Collected: 04/27/18 11:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-22
Matrix: Solid
Percent Solids: 94.6

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
4,4'-DDD	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
4,4'-DDE	ND		1.8	0.36	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
4,4'-DDT	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
delta-BHC	ND		1.8	0.56	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Dieldrin	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Endosulfan I	ND		1.8	0.48	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Endosulfan II	ND		1.8	0.39	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Endosulfan sulfate	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Endrin	ND		1.8	0.69	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
gamma-BHC (Lindane)	ND		1.8	0.60	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1
Heptachlor	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:43*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:43*	*1*
Tetrachloro-m-xylene	*93*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:43*	*1*
Tetrachloro-m-xylene	*97*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:43*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0057	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1221	ND		0.018	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1232	ND		0.018	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1242	ND		0.018	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1248	ND		0.018	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1254	ND		0.018	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1260	ND		0.018	0.0050	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1262	ND		0.018	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1
PCB-1268	ND		0.018	0.0086	mg/Kg	☼	05/09/18 03:17	05/09/18 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:21*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:21*	*1*
Tetrachloro-m-xylene (Surr)	*87*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:21*	*1*
Tetrachloro-m-xylene (Surr)	*82*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:21*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*64*		*29 - 100*	*05/04/18 14:05*	*05/09/18 03:42*	*1*
2,4-Dichlorophenylacetic acid	*71*		*29 - 100*	*05/04/18 14:05*	*05/09/18 03:42*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Barium	**49**		20	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Beryllium	**0.29**	**J**	0.40	0.023	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Cadmium	**0.20**	**J**	0.50	0.037	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1

Client Sample ID: BP-SC-131

Date Collected: 04/27/18 11:40
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-22

Matrix: Solid
Percent Solids: 94.6

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	9.7		0.50	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Copper	24		2.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Lead	6.4		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Manganese	600		1.5	0.16	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Nickel	21		4.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Selenium	1.1		1.0	0.52	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Silver	ND		0.50	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1
Zinc	70		2.0	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:33	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.030	0.0068	mg/Kg	☼	05/02/18 09:39	05/03/18 10:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	94.6		0.1	0.1	%			05/01/18 12:51	1
Cyanide, Total	ND		0.48	0.26	mg/Kg	☼	05/01/18 12:20	05/02/18 12:51	1

Client Sample ID: BP-SC-132

Date Collected: 04/27/18 11:45
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-23

Matrix: Solid
Percent Solids: 94.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0053	J	0.021	0.0034	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Benzene	ND		0.0054	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
2-Butanone (MEK)	ND		0.0054	0.0031	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Carbon tetrachloride	ND		0.0054	0.0036	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Chlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Chloroform	ND		0.0054	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
cis-1,2-Dichloroethene	ND		0.0054	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,2-Dichlorobenzene	ND		0.0054	0.0043	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,3-Dichlorobenzene	ND		0.0054	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,4-Dichlorobenzene	ND		0.0054	0.0011	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,1-Dichloroethane	ND		0.0054	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,1-Dichloroethene	ND		0.0054	0.0031	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,4-Dioxane	ND		1100	39	ug/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Ethylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Methylene Chloride	ND		0.0054	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Methyl tert-butyl ether	ND		0.0054	0.0040	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
n-Butylbenzene	ND		0.0054	0.0041	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
N-Propylbenzene	ND		0.0054	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
tert-Butylbenzene	ND		0.0054	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Tetrachloroethene	ND		0.0054	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Toluene	ND		0.0054	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
trans-1,2-Dichloroethene	ND		0.0054	0.0027	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,1,1-Trichloroethane	ND		0.0054	0.0027	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1

Client Sample ID: BP-SC-132

Lab Sample ID: 180-77199-23
Date Collected: 04/27/18 11:45
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.0054	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1
Xylenes, Total	ND		0.011	0.0046	mg/Kg	☼	05/02/18 06:00	05/02/18 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*	*05/02/18 06:00*	*05/02/18 11:47*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 116*	*05/02/18 06:00*	*05/02/18 11:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 118*	*05/02/18 06:00*	*05/02/18 11:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/02/18 06:00*	*05/02/18 11:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.1**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**94.9**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: BP-SC-133

Lab Sample ID: 180-77199-24
Date Collected: 04/27/18 11:50
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0050**	**J**	0.021	0.0033	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Carbon tetrachloride	ND		0.0052	0.0034	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,2-Dichlorobenzene	ND		0.0052	0.0041	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,3-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,1-Dichloroethene	ND		0.0052	0.0029	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Ethylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Methylene Chloride	ND		0.0052	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Toluene	ND		0.0052	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
trans-1,2-Dichloroethene	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Trichloroethene	ND		0.0052	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1

Client Sample ID: BP-SC-133

Date Collected: 04/27/18 11:50
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-24
Matrix: Solid
Percent Solids: 95.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/02/18 06:00	05/02/18 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*	*05/02/18 06:00*	*05/02/18 12:10*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 116*	*05/02/18 06:00*	*05/02/18 12:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 118*	*05/02/18 06:00*	*05/02/18 12:10*	*1*
Toluene-d8 (Surr)	*105*		*80 - 129*	*05/02/18 06:00*	*05/02/18 12:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.0**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.0**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: BP-SC-134

Date Collected: 04/27/18 11:55
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-25
Matrix: Solid
Percent Solids: 95.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0032	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Carbon tetrachloride	ND		0.0052	0.0034	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,2-Dichlorobenzene	ND		0.0052	0.0041	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,3-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,1-Dichloroethene	ND		0.0052	0.0029	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Ethylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Methylene Chloride	**0.0024**	**J**	0.0052	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Tetrachloroethene	ND	F1	0.0052	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Toluene	ND		0.0052	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
trans-1,2-Dichloroethene	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Trichloroethene	ND	F1	0.0052	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1

Client Sample ID: BP-SC-134

Lab Sample ID: 180-77199-25
Date Collected: 04/27/18 11:55
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/02/18 06:00	05/02/18 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*	*05/02/18 06:00*	*05/02/18 09:49*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 116*	*05/02/18 06:00*	*05/02/18 09:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 118*	*05/02/18 06:00*	*05/02/18 09:49*	*1*
Toluene-d8 (Surr)	*106*		*80 - 129*	*05/02/18 06:00*	*05/02/18 09:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.2**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.8**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: BP-SC-135

Lab Sample ID: 180-77199-26
Date Collected: 04/27/18 12:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 94.5

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		7.0	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Acenaphthylene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Anthracene	ND		7.0	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Benzo[a]anthracene	ND		7.0	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Benzo[a]pyrene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Benzo[b]fluoranthene	ND		7.0	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Benzo[g,h,i]perylene	ND		7.0	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Benzo[k]fluoranthene	ND		7.0	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Chrysene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Dibenz(a,h)anthracene	ND		7.0	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Dibenzofuran	ND		35	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
1,4-Dioxane	ND		70	11	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Fluoranthene	ND		7.0	1.9	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Fluorene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Hexachlorobenzene	ND		7.0	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Indeno[1,2,3-cd]pyrene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
2-Methylphenol	ND		35	10	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Methylphenol, 3 & 4	ND		35	10	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Naphthalene	ND		7.0	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Pentachlorophenol	ND		180	56	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Phenanthrene	ND		7.0	1.9	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Phenol	ND		35	11	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1
Pyrene	ND		7.0	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 100*	*05/09/18 03:15*	*05/09/18 20:40*	*1*
2-Fluorophenol (Surr)	*80*		*27 - 100*	*05/09/18 03:15*	*05/09/18 20:40*	*1*
Nitrobenzene-d5 (Surr)	*91*		*33 - 100*	*05/09/18 03:15*	*05/09/18 20:40*	*1*
Phenol-d5 (Surr)	*83*		*27 - 100*	*05/09/18 03:15*	*05/09/18 20:40*	*1*
Terphenyl-d14 (Surr)	*93*		*30 - 100*	*05/09/18 03:15*	*05/09/18 20:40*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*20 - 107*	*05/09/18 03:15*	*05/09/18 20:40*	*1*

Client Sample ID: BP-SC-135
Date Collected: 04/27/18 12:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-26
Matrix: Solid
Percent Solids: 94.5

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.53	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
alpha-BHC	ND		1.8	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
beta-BHC	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
cis-Chlordane	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
4,4'-DDD	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
4,4'-DDT	ND		1.8	0.65	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
delta-BHC	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Endrin	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:58*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*40 - 150*	*05/09/18 03:17*	*05/09/18 14:58*	*1*
Tetrachloro-m-xylene	*93*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:58*	*1*
Tetrachloro-m-xylene	*97*		*44 - 133*	*05/09/18 03:17*	*05/09/18 14:58*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1
PCB-1268	ND		0.017	0.0083	mg/Kg	☼	05/09/18 03:17	05/09/18 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:42*	*1*
DCB Decachlorobiphenyl (Surr)	*100*		*33 - 137*	*05/09/18 03:17*	*05/09/18 17:42*	*1*
Tetrachloro-m-xylene (Surr)	*90*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:42*	*1*
Tetrachloro-m-xylene (Surr)	*82*		*44 - 114*	*05/09/18 03:17*	*05/09/18 17:42*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	05/04/18 14:05	05/09/18 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*66*		*29 - 100*	*05/04/18 14:05*	*05/09/18 04:06*	*1*
2,4-Dichlorophenylacetic acid	*70*		*29 - 100*	*05/04/18 14:05*	*05/09/18 04:06*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.5**		1.1	0.29	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1

Client Sample ID: BP-SC-135

Date Collected: 04/27/18 12:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-26

Matrix: Solid
Percent Solids: 94.5

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	36		21	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Beryllium	0.24	J	0.42	0.024	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Cadmium	0.13	J	0.53	0.039	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Chromium	8.3		0.53	0.13	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Copper	28		2.6	0.18	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Lead	5.5		1.1	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Manganese	290		1.6	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Nickel	16		4.2	0.26	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Selenium	0.69	J	1.1	0.55	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Silver	ND		0.53	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1
Zinc	56		2.1	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:38	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.027	0.0061	mg/Kg	☼	05/02/18 09:39	05/03/18 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.5		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	94.5		0.1	0.1	%			05/01/18 12:51	1
Cyanide, Total	ND	F1	0.49	0.27	mg/Kg	☼	05/03/18 12:02	05/03/18 16:49	1

Client Sample ID: BP-SC-136

Date Collected: 04/27/18 12:05
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-27

Matrix: Solid
Percent Solids: 95.4

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.9	2.0	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Acenaphthylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Anthracene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Benzo[a]anthracene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Benzo[a]pyrene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Benzo[b]fluoranthene	ND		6.9	1.7	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Benzo[g,h,i]perylene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Benzo[k]fluoranthene	ND		6.9	2.1	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Chrysene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Dibenz(a,h)anthracene	ND		6.9	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Dibenzofuran	ND		34	1.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
1,4-Dioxane	ND		69	11	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Fluoranthene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Fluorene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Hexachlorobenzene	ND		6.9	2.5	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Indeno[1,2,3-cd]pyrene	ND		6.9	1.4	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
2-Methylphenol	ND		34	9.8	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Methylphenol, 3 & 4	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Naphthalene	ND		6.9	1.3	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Pentachlorophenol	ND		170	55	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Phenanthrene	ND		6.9	1.8	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1
Phenol	ND		34	10	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1

Client Sample ID: BP-SC-136 **Lab Sample ID: 180-77199-27**
Date Collected: 04/27/18 12:05 **Matrix: Solid**
Date Received: 04/28/18 10:30 **Percent Solids: 95.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		6.9	1.6	ug/Kg	☼	05/09/18 03:15	05/09/18 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 100*	*05/09/18 03:15*	*05/09/18 21:08*	*1*
2-Fluorophenol (Surr)	*72*		*27 - 100*	*05/09/18 03:15*	*05/09/18 21:08*	*1*
Nitrobenzene-d5 (Surr)	*92*		*33 - 100*	*05/09/18 03:15*	*05/09/18 21:08*	*1*
Phenol-d5 (Surr)	*82*		*27 - 100*	*05/09/18 03:15*	*05/09/18 21:08*	*1*
Terphenyl-d14 (Surr)	*107*	*X*	*30 - 100*	*05/09/18 03:15*	*05/09/18 21:08*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*20 - 107*	*05/09/18 03:15*	*05/09/18 21:08*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
alpha-BHC	ND		1.8	0.42	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
beta-BHC	ND		1.8	0.44	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
cis-Chlordane	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
4,4'-DDD	ND		1.8	0.46	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
4,4'-DDE	ND		1.8	0.35	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
4,4'-DDT	ND		1.8	0.66	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
delta-BHC	ND		1.8	0.55	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Dieldrin	ND		1.8	0.43	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Endosulfan I	ND		1.8	0.47	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Endosulfan II	ND		1.8	0.38	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Endosulfan sulfate	ND		1.8	0.45	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Endrin	ND		1.8	0.67	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
gamma-BHC (Lindane)	ND		1.8	0.59	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1
Heptachlor	ND		1.8	0.54	ug/Kg	☼	05/09/18 03:17	05/09/18 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*40 - 150*	*05/09/18 03:17*	*05/09/18 15:13*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*40 - 150*	*05/09/18 03:17*	*05/09/18 15:13*	*1*
Tetrachloro-m-xylene	*85*		*44 - 133*	*05/09/18 03:17*	*05/09/18 15:13*	*1*
Tetrachloro-m-xylene	*89*		*44 - 133*	*05/09/18 03:17*	*05/09/18 15:13*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0056	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1
PCB-1268	ND		0.017	0.0084	mg/Kg	☼	05/09/18 03:17	05/09/18 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*33 - 137*	*05/09/18 03:17*	*05/09/18 18:04*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*33 - 137*	*05/09/18 03:17*	*05/09/18 18:04*	*1*
Tetrachloro-m-xylene (Surr)	*79*		*44 - 114*	*05/09/18 03:17*	*05/09/18 18:04*	*1*
Tetrachloro-m-xylene (Surr)	*71*		*44 - 114*	*05/09/18 03:17*	*05/09/18 18:04*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0069	mg/Kg	☼	05/04/18 14:05	05/09/18 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*60*		*29 - 100*	*05/04/18 14:05*	*05/09/18 04:30*	*1*
2,4-Dichlorophenylacetic acid	*62*		*29 - 100*	*05/04/18 14:05*	*05/09/18 04:30*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**		1.0	0.28	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Barium	**75**		20	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Beryllium	**0.34**	**J**	0.40	0.023	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Cadmium	**0.22**	**J**	0.50	0.036	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Chromium	**12**		0.50	0.12	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Copper	**33**		2.5	0.17	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Lead	**7.7**		1.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Manganese	**690**		1.5	0.16	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Nickel	**23**		4.0	0.25	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Selenium	**0.61**	**J**	1.0	0.51	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Silver	ND		0.50	0.11	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1
Zinc	**81**		2.0	1.1	mg/Kg	☼	05/02/18 13:44	05/06/18 15:43	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0082**	**J**	0.033	0.0075	mg/Kg	☼	05/02/18 09:39	05/03/18 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.6**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.4**		0.1	0.1	%			05/01/18 12:51	1
Cyanide, Total	ND		0.50	0.27	mg/Kg	☼	05/03/18 12:02	05/03/18 16:54	1

Client Sample ID: DUP 3 **Lab Sample ID: 180-77199-28**
Date Collected: 04/27/18 00:00 **Matrix: Solid**
Date Received: 04/28/18 10:30 **Percent Solids: 95.9**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.013**	**J**	0.019	0.0030	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Benzene	ND		0.0048	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
2-Butanone (MEK)	ND		0.0048	0.0028	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Carbon tetrachloride	ND		0.0048	0.0032	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Chlorobenzene	ND		0.0048	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Chloroform	ND		0.0048	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
cis-1,2-Dichloroethene	ND		0.0048	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,2-Dichlorobenzene	ND		0.0048	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,3-Dichlorobenzene	ND		0.0048	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,4-Dichlorobenzene	ND		0.0048	0.00097	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,1-Dichloroethane	ND		0.0048	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,2-Dichloroethane	ND		0.0048	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,1-Dichloroethene	ND		0.0048	0.0027	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,4-Dioxane	ND		950	35	ug/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Ethylbenzene	ND		0.0048	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Methylene Chloride	**0.0023**	**J**	0.0048	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Methyl tert-butyl ether	ND		0.0048	0.0035	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1

Client Sample ID: DUP 3

Lab Sample ID: 180-77199-28

Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.0048	0.0036	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
N-Propylbenzene	ND		0.0048	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
sec-Butylbenzene	ND		0.0048	0.0023	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
tert-Butylbenzene	ND		0.0048	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Tetrachloroethene	ND		0.0048	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Toluene	ND		0.0048	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
trans-1,2-Dichloroethene	ND		0.0048	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,1,1-Trichloroethane	ND		0.0048	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Trichloroethene	ND		0.0048	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,2,4-Trimethylbenzene	ND		0.0048	0.0013	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
1,3,5-Trimethylbenzene	ND		0.0048	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Vinyl chloride	ND		0.0048	0.0035	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1
Xylenes, Total	ND		0.0095	0.0041	mg/Kg	☼	05/02/18 06:00	05/02/18 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/02/18 06:00*	*05/02/18 10:12*	*1*
Dibromofluoromethane (Surr)	*90*		*72 - 116*	*05/02/18 06:00*	*05/02/18 10:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 118*	*05/02/18 06:00*	*05/02/18 10:12*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*	*05/02/18 06:00*	*05/02/18 10:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.1**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.9**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: DUP 4

Lab Sample ID: 180-77199-29

Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0033	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Benzene	ND		0.0052	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
2-Butanone (MEK)	ND		0.0052	0.0030	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Carbon tetrachloride	ND		0.0052	0.0034	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Chlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Chloroform	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,2-Dichlorobenzene	ND		0.0052	0.0042	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,3-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,4-Dichlorobenzene	ND		0.0052	0.0011	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,1-Dichloroethane	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,1-Dichloroethene	ND		0.0052	0.0029	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,4-Dioxane	ND		1000	38	ug/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Ethylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Methylene Chloride	ND		0.0052	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Methyl tert-butyl ether	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
n-Butylbenzene	ND		0.0052	0.0039	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
N-Propylbenzene	ND		0.0052	0.0022	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1

Client Sample ID: DUP 4

Lab Sample ID: 180-77199-29
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.0052	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
tert-Butylbenzene	ND		0.0052	0.0019	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Toluene	ND		0.0052	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
trans-1,2-Dichloroethene	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,1,1-Trichloroethane	ND		0.0052	0.0026	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1
Xylenes, Total	ND		0.010	0.0044	mg/Kg	☼	05/02/18 06:00	05/02/18 10:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*	*05/02/18 06:00*	*05/02/18 10:36*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 116*	*05/02/18 06:00*	*05/02/18 10:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*62 - 118*	*05/02/18 06:00*	*05/02/18 10:36*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*	*05/02/18 06:00*	*05/02/18 10:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.5**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.5**		0.1	0.1	%			05/01/18 12:51	1

Client Sample ID: DUP 5

Lab Sample ID: 180-77199-30
Date Collected: 04/27/18 00:00
Matrix: Solid
Date Received: 04/28/18 10:30
Percent Solids: 95.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0053**	**J**	0.020	0.0031	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Benzene	ND		0.0050	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Chloroform	ND		0.0050	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,1-Dichloroethene	ND		0.0050	0.0028	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,4-Dioxane	ND		1000	36	ug/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Ethylbenzene	ND		0.0050	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Methylene Chloride	**0.0031**	**J**	0.0050	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1

Client Sample ID: DUP 5
Date Collected: 04/27/18 00:00
Date Received: 04/28/18 10:30

Lab Sample ID: 180-77199-30
Matrix: Solid
Percent Solids: 95.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Toluene	ND		0.0050	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg	☼	05/02/18 06:00	05/02/18 11:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*76 - 111*	*05/02/18 06:00*	*05/02/18 11:00*	*1*
Dibromofluoromethane (Surr)	*92*		*72 - 116*	*05/02/18 06:00*	*05/02/18 11:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*62 - 118*	*05/02/18 06:00*	*05/02/18 11:00*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*	*05/02/18 06:00*	*05/02/18 11:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.9**		0.1	0.1	%			05/01/18 12:51	1
Percent Solids	**95.1**		0.1	0.1	%			05/01/18 12:51	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-243560/7
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			05/01/18 09:26	1
Benzene	ND		0.0050	0.0020	mg/Kg			05/01/18 09:26	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			05/01/18 09:26	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			05/01/18 09:26	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
Chloroform	ND		0.0050	0.0021	mg/Kg			05/01/18 09:26	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			05/01/18 09:26	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			05/01/18 09:26	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			05/01/18 09:26	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			05/01/18 09:26	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			05/01/18 09:26	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			05/01/18 09:26	1
1,4-Dioxane	ND		1000	37	ug/Kg			05/01/18 09:26	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			05/01/18 09:26	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			05/01/18 09:26	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			05/01/18 09:26	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			05/01/18 09:26	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			05/01/18 09:26	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			05/01/18 09:26	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			05/01/18 09:26	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			05/01/18 09:26	1
Toluene	ND		0.0050	0.0017	mg/Kg			05/01/18 09:26	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			05/01/18 09:26	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			05/01/18 09:26	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			05/01/18 09:26	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			05/01/18 09:26	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			05/01/18 09:26	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			05/01/18 09:26	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			05/01/18 09:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*76 - 111*		*05/01/18 09:26*	*1*
Dibromofluoromethane (Surr)	*88*		*72 - 116*		*05/01/18 09:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*		*05/01/18 09:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*		*05/01/18 09:26*	*1*

Lab Sample ID: LCS 180-243560/3
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0443		mg/Kg		111	36 - 150
Benzene	0.0400	0.0394		mg/Kg		98	78 - 118
2-Butanone (MEK)	0.0400	0.0307		mg/Kg		77	30 - 150
Carbon tetrachloride	0.0400	0.0375		mg/Kg		94	60 - 137
Chlorobenzene	0.0400	0.0408		mg/Kg		102	78 - 118
Chloroform	0.0400	0.0373		mg/Kg		93	68 - 124

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-243560/3
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	0.0400	0.0396		mg/Kg		99	71 - 120
1,2-Dichlorobenzene	0.0400	0.0370		mg/Kg		93	78 - 118
1,3-Dichlorobenzene	0.0400	0.0387		mg/Kg		97	78 - 118
1,4-Dichlorobenzene	0.0400	0.0374		mg/Kg		93	78 - 118
1,1-Dichloroethane	0.0400	0.0384		mg/Kg		96	67 - 129
1,2-Dichloroethane	0.0400	0.0345		mg/Kg		86	67 - 123
1,1-Dichloroethene	0.0400	0.0396		mg/Kg		99	59 - 128
1,4-Dioxane	800	602	J	ug/Kg		75	51 - 138
Ethylbenzene	0.0400	0.0408		mg/Kg		102	78 - 118
Methylene Chloride	0.0400	0.0360		mg/Kg		90	68 - 120
Methyl tert-butyl ether	0.0400	0.0306		mg/Kg		77	73 - 121
n-Butylbenzene	0.0400	0.0383		mg/Kg		96	71 - 132
N-Propylbenzene	0.0400	0.0401		mg/Kg		100	72 - 126
sec-Butylbenzene	0.0400	0.0389		mg/Kg		97	80 - 126
tert-Butylbenzene	0.0400	0.0392		mg/Kg		98	80 - 122
Tetrachloroethene	0.0400	0.0430		mg/Kg		108	78 - 118
Toluene	0.0400	0.0400		mg/Kg		100	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0404		mg/Kg		101	71 - 123
1,1,1-Trichloroethane	0.0400	0.0380		mg/Kg		95	69 - 135
Trichloroethene	0.0400	0.0414		mg/Kg		103	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0380		mg/Kg		95	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0384		mg/Kg		96	78 - 122
Vinyl chloride	0.0400	0.0372		mg/Kg		93	53 - 148
Xylenes, Total	0.0800	0.0781		mg/Kg		98	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*76 - 111*
Dibromofluoromethane (Surr)	*95*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*80*		*62 - 118*
Toluene-d8 (Surr)	*103*		*80 - 129*

Lab Sample ID: 180-77199-19 MS
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: BP-SC-128
Prep Type: Total/NA
Prep Batch: 243566

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		0.0395	0.0431		mg/Kg	☼	109	36 - 150
Benzene	ND		0.0395	0.0450		mg/Kg	☼	114	78 - 118
2-Butanone (MEK)	ND		0.0395	0.0285		mg/Kg	☼	72	30 - 150
Carbon tetrachloride	ND		0.0395	0.0471		mg/Kg	☼	119	60 - 137
Chlorobenzene	ND		0.0395	0.0451		mg/Kg	☼	114	78 - 118
Chloroform	ND		0.0395	0.0441		mg/Kg	☼	112	68 - 124
cis-1,2-Dichloroethene	ND		0.0395	0.0473		mg/Kg	☼	120	71 - 120
1,2-Dichlorobenzene	ND		0.0395	0.0405		mg/Kg	☼	103	78 - 118
1,3-Dichlorobenzene	ND		0.0395	0.0448		mg/Kg	☼	113	78 - 118
1,4-Dichlorobenzene	ND		0.0395	0.0434		mg/Kg	☼	110	78 - 118
1,1-Dichloroethane	ND		0.0395	0.0443		mg/Kg	☼	112	67 - 129
1,2-Dichloroethane	ND		0.0395	0.0348		mg/Kg	☼	88	67 - 123

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-77199-19 MS
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: BP-SC-128
Prep Type: Total/NA
Prep Batch: 243566

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		0.0395	0.0495		mg/Kg	☼	125	59 - 128
1,4-Dioxane	ND		790	517	J	ug/Kg	☼	65	51 - 138
Ethylbenzene	ND	F1	0.0395	0.0465		mg/Kg	☼	118	78 - 118
Methylene Chloride	ND		0.0395	0.0423		mg/Kg	☼	107	68 - 120
Methyl tert-butyl ether	ND		0.0395	0.0307		mg/Kg	☼	78	73 - 121
n-Butylbenzene	ND		0.0395	0.0458		mg/Kg	☼	116	71 - 132
N-Propylbenzene	ND		0.0395	0.0477		mg/Kg	☼	121	72 - 126
sec-Butylbenzene	ND		0.0395	0.0469		mg/Kg	☼	119	80 - 126
tert-Butylbenzene	ND	F1	0.0395	0.0469		mg/Kg	☼	119	80 - 122
Tetrachloroethene	ND	F1	0.0395	0.0492	F1	mg/Kg	☼	125	78 - 118
Toluene	ND		0.0395	0.0437		mg/Kg	☼	111	79 - 121
trans-1,2-Dichloroethene	ND	F1	0.0395	0.0492	F1	mg/Kg	☼	125	71 - 123
1,1,1-Trichloroethane	ND		0.0395	0.0457		mg/Kg	☼	116	69 - 135
Trichloroethene	ND	F1	0.0395	0.0479	F1	mg/Kg	☼	121	76 - 120
1,2,4-Trimethylbenzene	ND		0.0395	0.0451		mg/Kg	☼	114	77 - 122
1,3,5-Trimethylbenzene	ND		0.0395	0.0458		mg/Kg	☼	116	78 - 122
Vinyl chloride	ND		0.0395	0.0445		mg/Kg	☼	113	53 - 148
Xylenes, Total	ND		0.0790	0.0916		mg/Kg	☼	116	78 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*76 - 111*
Dibromofluoromethane (Surr)	*99*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*76*		*62 - 118*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: 180-77199-19 MSD
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: BP-SC-128
Prep Type: Total/NA
Prep Batch: 243566

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		0.0408	0.0464		mg/Kg	☼	114	36 - 150	7	35
Benzene	ND		0.0408	0.0465		mg/Kg	☼	114	78 - 118	3	15
2-Butanone (MEK)	ND		0.0408	0.0344		mg/Kg	☼	84	30 - 150	19	35
Carbon tetrachloride	ND		0.0408	0.0469		mg/Kg	☼	115	60 - 137	1	21
Chlorobenzene	ND		0.0408	0.0472		mg/Kg	☼	115	78 - 118	4	15
Chloroform	ND		0.0408	0.0442		mg/Kg	☼	108	68 - 124	0	15
cis-1,2-Dichloroethene	ND		0.0408	0.0459		mg/Kg	☼	112	71 - 120	3	15
1,2-Dichlorobenzene	ND		0.0408	0.0430		mg/Kg	☼	105	78 - 118	6	15
1,3-Dichlorobenzene	ND		0.0408	0.0466		mg/Kg	☼	114	78 - 118	4	15
1,4-Dichlorobenzene	ND		0.0408	0.0457		mg/Kg	☼	112	78 - 118	5	15
1,1-Dichloroethane	ND		0.0408	0.0447		mg/Kg	☼	110	67 - 129	1	15
1,2-Dichloroethane	ND		0.0408	0.0364		mg/Kg	☼	89	67 - 123	4	15
1,1-Dichloroethene	ND		0.0408	0.0459		mg/Kg	☼	112	59 - 128	7	17
1,4-Dioxane	ND		817	503	J	ug/Kg	☼	62	51 - 138	3	35
Ethylbenzene	ND	F1	0.0408	0.0486	F1	mg/Kg	☼	119	78 - 118	4	15
Methylene Chloride	ND		0.0408	0.0403		mg/Kg	☼	99	68 - 120	5	19
Methyl tert-butyl ether	ND		0.0408	0.0323		mg/Kg	☼	79	73 - 121	5	24
n-Butylbenzene	ND		0.0408	0.0454		mg/Kg	☼	111	71 - 132	1	16

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-77199-19 MSD
Matrix: Solid
Analysis Batch: 243560

Client Sample ID: BP-SC-128
Prep Type: Total/NA
Prep Batch: 243566

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Propylbenzene	ND		0.0408	0.0516		mg/Kg	☼	126	72 - 126	8	24
sec-Butylbenzene	ND		0.0408	0.0487		mg/Kg	☼	119	80 - 126	4	18
tert-Butylbenzene	ND	F1	0.0408	0.0508	F1	mg/Kg	☼	124	80 - 122	8	19
Tetrachloroethene	ND	F1	0.0408	0.0520	F1	mg/Kg	☼	127	78 - 118	5	20
Toluene	ND		0.0408	0.0480		mg/Kg	☼	118	79 - 121	9	18
trans-1,2-Dichloroethene	ND	F1	0.0408	0.0478		mg/Kg	☼	117	71 - 123	3	15
1,1,1-Trichloroethane	ND		0.0408	0.0460		mg/Kg	☼	113	69 - 135	1	22
Trichloroethene	ND	F1	0.0408	0.0502	F1	mg/Kg	☼	123	76 - 120	5	15
1,2,4-Trimethylbenzene	ND		0.0408	0.0479		mg/Kg	☼	117	77 - 122	6	16
1,3,5-Trimethylbenzene	ND		0.0408	0.0490		mg/Kg	☼	120	78 - 122	7	17
Vinyl chloride	ND		0.0408	0.0397		mg/Kg	☼	97	53 - 148	11	35
Xylenes, Total	ND		0.0817	0.0961		mg/Kg	☼	118	78 - 118	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*76 - 111*
Dibromofluoromethane (Surr)	*97*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*78*		*62 - 118*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: MB 180-243688/7
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			05/02/18 09:26	1
Benzene	ND		0.0050	0.0020	mg/Kg			05/02/18 09:26	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			05/02/18 09:26	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			05/02/18 09:26	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			05/02/18 09:26	1
Chloroform	ND		0.0050	0.0021	mg/Kg			05/02/18 09:26	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			05/02/18 09:26	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			05/02/18 09:26	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			05/02/18 09:26	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			05/02/18 09:26	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			05/02/18 09:26	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			05/02/18 09:26	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			05/02/18 09:26	1
1,4-Dioxane	ND		1000	37	ug/Kg			05/02/18 09:26	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			05/02/18 09:26	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			05/02/18 09:26	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			05/02/18 09:26	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			05/02/18 09:26	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			05/02/18 09:26	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			05/02/18 09:26	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			05/02/18 09:26	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			05/02/18 09:26	1
Toluene	ND		0.0050	0.0017	mg/Kg			05/02/18 09:26	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			05/02/18 09:26	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-243688/7
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			05/02/18 09:26	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			05/02/18 09:26	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			05/02/18 09:26	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			05/02/18 09:26	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			05/02/18 09:26	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			05/02/18 09:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*76 - 111*		*05/02/18 09:26*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 116*		*05/02/18 09:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*62 - 118*		*05/02/18 09:26*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*		*05/02/18 09:26*	*1*

Lab Sample ID: LCS 180-243688/21
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0547		mg/Kg		137	36 - 150
Benzene	0.0400	0.0423		mg/Kg		106	78 - 118
2-Butanone (MEK)	0.0400	0.0384		mg/Kg		96	30 - 150
Carbon tetrachloride	0.0400	0.0374		mg/Kg		94	60 - 137
Chlorobenzene	0.0400	0.0430		mg/Kg		107	78 - 118
Chloroform	0.0400	0.0396		mg/Kg		99	68 - 124
cis-1,2-Dichloroethene	0.0400	0.0421		mg/Kg		105	71 - 120
1,2-Dichlorobenzene	0.0400	0.0387		mg/Kg		97	78 - 118
1,3-Dichlorobenzene	0.0400	0.0418		mg/Kg		104	78 - 118
1,4-Dichlorobenzene	0.0400	0.0411		mg/Kg		103	78 - 118
1,1-Dichloroethane	0.0400	0.0399		mg/Kg		100	67 - 129
1,2-Dichloroethane	0.0400	0.0365		mg/Kg		91	67 - 123
1,1-Dichloroethene	0.0400	0.0410		mg/Kg		103	59 - 128
1,4-Dioxane	800	611	J	ug/Kg		76	51 - 138
Ethylbenzene	0.0400	0.0433		mg/Kg		108	78 - 118
Methylene Chloride	0.0400	0.0375		mg/Kg		94	68 - 120
Methyl tert-butyl ether	0.0400	0.0344		mg/Kg		86	73 - 121
n-Butylbenzene	0.0400	0.0394		mg/Kg		98	71 - 132
N-Propylbenzene	0.0400	0.0442		mg/Kg		110	72 - 126
sec-Butylbenzene	0.0400	0.0416		mg/Kg		104	80 - 126
tert-Butylbenzene	0.0400	0.0427		mg/Kg		107	80 - 122
Tetrachloroethene	0.0400	0.0452		mg/Kg		113	78 - 118
Toluene	0.0400	0.0426		mg/Kg		106	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0430		mg/Kg		108	71 - 123
1,1,1-Trichloroethane	0.0400	0.0400		mg/Kg		100	69 - 135
Trichloroethene	0.0400	0.0428		mg/Kg		107	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0414		mg/Kg		104	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0417		mg/Kg		104	78 - 122
Vinyl chloride	0.0400	0.0355		mg/Kg		89	53 - 148
Xylenes, Total	0.0800	0.0847		mg/Kg		106	78 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*94*		*76 - 111*
Dibromofluoromethane (Surr)	*100*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*89*		*62 - 118*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: 180-77199-25 MS
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: BP-SC-134
Prep Type: Total/NA
Prep Batch: 243693

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		0.0415	0.0534		mg/Kg	☼	129	36 - 150
Benzene	ND		0.0415	0.0474		mg/Kg	☼	114	78 - 118
2-Butanone (MEK)	ND		0.0415	0.0368		mg/Kg	☼	89	30 - 150
Carbon tetrachloride	ND		0.0415	0.0464		mg/Kg	☼	112	60 - 137
Chlorobenzene	ND		0.0415	0.0483		mg/Kg	☼	117	78 - 118
Chloroform	ND		0.0415	0.0450		mg/Kg	☼	108	68 - 124
cis-1,2-Dichloroethene	ND		0.0415	0.0483		mg/Kg	☼	116	71 - 120
1,2-Dichlorobenzene	ND		0.0415	0.0445		mg/Kg	☼	107	78 - 118
1,3-Dichlorobenzene	ND		0.0415	0.0473		mg/Kg	☼	114	78 - 118
1,4-Dichlorobenzene	ND		0.0415	0.0460		mg/Kg	☼	111	78 - 118
1,1-Dichloroethane	ND		0.0415	0.0449		mg/Kg	☼	108	67 - 129
1,2-Dichloroethane	ND		0.0415	0.0389		mg/Kg	☼	94	67 - 123
1,1-Dichloroethene	ND		0.0415	0.0475		mg/Kg	☼	115	59 - 128
1,4-Dioxane	ND		829	700	J	ug/Kg	☼	84	51 - 138
Ethylbenzene	ND		0.0415	0.0489		mg/Kg	☼	118	78 - 118
Methylene Chloride	0.0024	J	0.0415	0.0435		mg/Kg	☼	105	68 - 120
Methyl tert-butyl ether	ND		0.0415	0.0349		mg/Kg	☼	84	73 - 121
n-Butylbenzene	ND		0.0415	0.0470		mg/Kg	☼	113	71 - 132
N-Propylbenzene	ND		0.0415	0.0496		mg/Kg	☼	120	72 - 126
sec-Butylbenzene	ND		0.0415	0.0481		mg/Kg	☼	116	80 - 126
tert-Butylbenzene	ND		0.0415	0.0493		mg/Kg	☼	119	80 - 122
Tetrachloroethene	ND	F1	0.0415	0.0515	F1	mg/Kg	☼	124	78 - 118
Toluene	ND		0.0415	0.0474		mg/Kg	☼	114	79 - 121
trans-1,2-Dichloroethene	ND		0.0415	0.0481		mg/Kg	☼	116	71 - 123
1,1,1-Trichloroethane	ND		0.0415	0.0468		mg/Kg	☼	113	69 - 135
Trichloroethene	ND	F1	0.0415	0.0503	F1	mg/Kg	☼	121	76 - 120
1,2,4-Trimethylbenzene	ND		0.0415	0.0471		mg/Kg	☼	114	77 - 122
1,3,5-Trimethylbenzene	ND		0.0415	0.0471		mg/Kg	☼	114	78 - 122
Vinyl chloride	ND		0.0415	0.0435		mg/Kg	☼	105	53 - 148
Xylenes, Total	ND		0.0829	0.0957		mg/Kg	☼	115	78 - 118

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*95*		*76 - 111*
Dibromofluoromethane (Surr)	*101*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*84*		*62 - 118*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: 180-77199-25 MSD
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: BP-SC-134
Prep Type: Total/NA
Prep Batch: 243693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		0.0414	0.0497		mg/Kg	☼	120	36 - 150	7	35

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-77199-25 MSD
Matrix: Solid
Analysis Batch: 243688

Client Sample ID: BP-SC-134
Prep Type: Total/NA
Prep Batch: 243693

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0414	0.0470		mg/Kg	☼	113	78 - 118	1	15
2-Butanone (MEK)	ND		0.0414	0.0355		mg/Kg	☼	86	30 - 150	3	35
Carbon tetrachloride	ND		0.0414	0.0463		mg/Kg	☼	112	60 - 137	0	21
Chlorobenzene	ND		0.0414	0.0477		mg/Kg	☼	115	78 - 118	1	15
Chloroform	ND		0.0414	0.0446		mg/Kg	☼	108	68 - 124	1	15
cis-1,2-Dichloroethene	ND		0.0414	0.0467		mg/Kg	☼	113	71 - 120	3	15
1,2-Dichlorobenzene	ND		0.0414	0.0429		mg/Kg	☼	104	78 - 118	4	15
1,3-Dichlorobenzene	ND		0.0414	0.0469		mg/Kg	☼	113	78 - 118	1	15
1,4-Dichlorobenzene	ND		0.0414	0.0464		mg/Kg	☼	112	78 - 118	1	15
1,1-Dichloroethane	ND		0.0414	0.0461		mg/Kg	☼	111	67 - 129	3	15
1,2-Dichloroethane	ND		0.0414	0.0377		mg/Kg	☼	91	67 - 123	3	15
1,1-Dichloroethene	ND		0.0414	0.0476		mg/Kg	☼	115	59 - 128	0	17
1,4-Dioxane	ND		829	555	J	ug/Kg	☼	67	51 - 138	23	35
Ethylbenzene	ND		0.0414	0.0488		mg/Kg	☼	118	78 - 118	0	15
Methylene Chloride	0.0024	J	0.0414	0.0423		mg/Kg	☼	102	68 - 120	3	19
Methyl tert-butyl ether	ND		0.0414	0.0342		mg/Kg	☼	83	73 - 121	2	24
n-Butylbenzene	ND		0.0414	0.0464		mg/Kg	☼	112	71 - 132	1	16
N-Propylbenzene	ND		0.0414	0.0513		mg/Kg	☼	124	72 - 126	3	24
sec-Butylbenzene	ND		0.0414	0.0485		mg/Kg	☼	117	80 - 126	1	18
tert-Butylbenzene	ND		0.0414	0.0501		mg/Kg	☼	121	80 - 122	1	19
Tetrachloroethene	ND	F1	0.0414	0.0528	F1	mg/Kg	☼	128	78 - 118	3	20
Toluene	ND		0.0414	0.0481		mg/Kg	☼	116	79 - 121	1	18
trans-1,2-Dichloroethene	ND		0.0414	0.0490		mg/Kg	☼	118	71 - 123	2	15
1,1,1-Trichloroethane	ND		0.0414	0.0470		mg/Kg	☼	113	69 - 135	0	22
Trichloroethene	ND	F1	0.0414	0.0503	F1	mg/Kg	☼	121	76 - 120	0	15
1,2,4-Trimethylbenzene	ND		0.0414	0.0473		mg/Kg	☼	114	77 - 122	0	16
1,3,5-Trimethylbenzene	ND		0.0414	0.0477		mg/Kg	☼	115	78 - 122	1	17
Vinyl chloride	ND		0.0414	0.0424		mg/Kg	☼	102	53 - 148	3	35
Xylenes, Total	ND		0.0829	0.0955		mg/Kg	☼	115	78 - 118	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*76 - 111*
Dibromofluoromethane (Surr)	*101*		*72 - 116*
1,2-Dichloroethane-d4 (Surr)	*82*		*62 - 118*
Toluene-d8 (Surr)	*108*		*80 - 129*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-244339/1-A
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		6.7	1.9	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Acenaphthylene	ND		6.7	1.5	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Anthracene	ND		6.7	1.7	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Benzo[a]anthracene	ND		6.7	1.3	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Benzo[a]pyrene	ND		6.7	1.5	ug/Kg		05/09/18 03:15	05/09/18 11:03	1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 180-244339/1-A
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244339

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		6.7	1.6	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Benzo[g,h,i]perylene	ND		6.7	1.4	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Benzo[k]fluoranthene	ND		6.7	2.0	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Chrysene	ND		6.7	1.3	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Dibenz(a,h)anthracene	ND		6.7	1.5	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Dibenzofuran	ND		33	1.5	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
1,4-Dioxane	ND		67	10	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Fluoranthene	ND		6.7	1.8	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Fluorene	ND		6.7	1.3	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Hexachlorobenzene	ND		6.7	2.4	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Indeno[1,2,3-cd]pyrene	ND		6.7	1.4	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
2-Methylphenol	ND		33	9.6	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Methylphenol, 3 & 4	ND		33	9.8	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Naphthalene	ND		6.7	1.3	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Pentachlorophenol	ND		170	54	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Phenanthrene	ND		6.7	1.8	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Phenol	ND		33	10	ug/Kg		05/09/18 03:15	05/09/18 11:03	1
Pyrene	ND		6.7	1.6	ug/Kg		05/09/18 03:15	05/09/18 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 100*	*05/09/18 03:15*	*05/09/18 11:03*	*1*
2-Fluorophenol (Surr)	*67*		*27 - 100*	*05/09/18 03:15*	*05/09/18 11:03*	*1*
Nitrobenzene-d5 (Surr)	*74*		*33 - 100*	*05/09/18 03:15*	*05/09/18 11:03*	*1*
Phenol-d5 (Surr)	*69*		*27 - 100*	*05/09/18 03:15*	*05/09/18 11:03*	*1*
Terphenyl-d14 (Surr)	*89*		*30 - 100*	*05/09/18 03:15*	*05/09/18 11:03*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*20 - 107*	*05/09/18 03:15*	*05/09/18 11:03*	*1*

Lab Sample ID: LCS 180-244339/2-A
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244339

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	516		ug/Kg		77	43 - 100
Acenaphthylene	667	543		ug/Kg		82	43 - 100
Anthracene	667	557		ug/Kg		84	48 - 100
Benzo[a]anthracene	667	552		ug/Kg		83	46 - 100
Benzo[a]pyrene	667	572		ug/Kg		86	46 - 100
Benzo[b]fluoranthene	667	503		ug/Kg		75	42 - 100
Benzo[g,h,i]perylene	667	564		ug/Kg		85	45 - 100
Benzo[k]fluoranthene	667	536		ug/Kg		80	45 - 100
Chrysene	667	502		ug/Kg		75	47 - 100
Dibenz(a,h)anthracene	667	558		ug/Kg		84	47 - 100
Dibenzofuran	667	516		ug/Kg		77	48 - 100
1,4-Dioxane	667	448		ug/Kg		67	40 - 115
Fluoranthene	667	580		ug/Kg		87	47 - 100
Fluorene	667	515		ug/Kg		77	45 - 100
Hexachlorobenzene	667	536		ug/Kg		80	45 - 104
Indeno[1,2,3-cd]pyrene	667	563		ug/Kg		85	46 - 100

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 180-244339/2-A
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244339

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Methylphenol			667	489		ug/Kg		73	46 - 100		
Methylphenol, 3 & 4			667	498		ug/Kg		75	46 - 100		
Naphthalene			667	487		ug/Kg		73	46 - 100		
Pentachlorophenol			1330	1030		ug/Kg		77	25 - 114		
Phenanthrene			667	535		ug/Kg		80	46 - 100		
Phenol			667	474		ug/Kg		71	46 - 100		
Pyrene			667	560		ug/Kg		84	41 - 100		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 100*
2-Fluorophenol (Surr)	*69*		*27 - 100*
Nitrobenzene-d5 (Surr)	*77*		*33 - 100*
Phenol-d5 (Surr)	*70*		*27 - 100*
Terphenyl-d14 (Surr)	*85*		*30 - 100*
2,4,6-Tribromophenol (Surr)	*74*		*20 - 107*

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244339

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acenaphthene	ND	F1	689	711	F1	ug/Kg	☼	103	43 - 100		
Acenaphthylene	ND	F1	689	757	F1	ug/Kg	☼	110	43 - 100		
Anthracene	ND	F1	689	727	F1	ug/Kg	☼	106	48 - 100		
Benzo[a]anthracene	ND	F1	689	708	F1	ug/Kg	☼	103	46 - 100		
Benzo[a]pyrene	ND	F1	689	738	F1	ug/Kg	☼	107	46 - 100		
Benzo[b]fluoranthene	ND		689	644		ug/Kg	☼	94	42 - 100		
Benzo[g,h,i]perylene	ND	F1	689	730	F1	ug/Kg	☼	106	45 - 100		
Benzo[k]fluoranthene	ND		689	673		ug/Kg	☼	98	45 - 100		
Chrysene	ND		689	664		ug/Kg	☼	96	47 - 100		
Dibenz(a,h)anthracene	ND	F1	689	722	F1	ug/Kg	☼	105	47 - 100		
Dibenzofuran	ND	F1	689	697	F1	ug/Kg	☼	101	48 - 100		
1,4-Dioxane	ND		689	570		ug/Kg	☼	83	40 - 115		
Fluoranthene	ND	F1	689	727	F1	ug/Kg	☼	106	47 - 100		
Fluorene	ND	F1	689	718	F1	ug/Kg	☼	104	45 - 100		
Hexachlorobenzene	ND		689	679		ug/Kg	☼	99	45 - 104		
Indeno[1,2,3-cd]pyrene	ND	F1	689	732	F1	ug/Kg	☼	106	46 - 100		
2-Methylphenol	ND		689	635		ug/Kg	☼	92	46 - 100		
Methylphenol, 3 & 4	ND		689	647		ug/Kg	☼	94	46 - 100		
Naphthalene	ND		689	651		ug/Kg	☼	95	46 - 100		
Pentachlorophenol	ND		1380	1150		ug/Kg	☼	84	25 - 114		
Phenanthrene	ND	F1	689	715	F1	ug/Kg	☼	104	46 - 100		
Phenol	ND		689	656		ug/Kg	☼	95	46 - 100		
Pyrene	ND	F1	689	693	F1	ug/Kg	☼	101	41 - 100		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*34 - 100*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244339

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol (Surr)	*87*		*27 - 100*
Nitrobenzene-d5 (Surr)	*99*		*33 - 100*
Phenol-d5 (Surr)	*93*		*27 - 100*
Terphenyl-d14 (Surr)	*103*	*X*	*30 - 100*
2,4,6-Tribromophenol (Surr)	*94*		*20 - 107*

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244385

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244339

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND	F1	680	645		ug/Kg	☼	95	43 - 100	10	27
Acenaphthylene	ND	F1	680	684	F1	ug/Kg	☼	101	43 - 100	10	27
Anthracene	ND	F1	680	688	F1	ug/Kg	☼	101	48 - 100	6	31
Benzo[a]anthracene	ND	F1	680	667		ug/Kg	☼	98	46 - 100	6	31
Benzo[a]pyrene	ND	F1	680	687	F1	ug/Kg	☼	101	46 - 100	7	29
Benzo[b]fluoranthene	ND		680	576		ug/Kg	☼	85	42 - 100	11	31
Benzo[g,h,i]perylene	ND	F1	680	683		ug/Kg	☼	100	45 - 100	7	38
Benzo[k]fluoranthene	ND		680	643		ug/Kg	☼	95	45 - 100	5	28
Chrysene	ND		680	600		ug/Kg	☼	88	47 - 100	10	31
Dibenz(a,h)anthracene	ND	F1	680	681		ug/Kg	☼	100	47 - 100	6	35
Dibenzofuran	ND	F1	680	646		ug/Kg	☼	95	48 - 100	8	21
1,4-Dioxane	ND		680	552		ug/Kg	☼	81	40 - 115	3	18
Fluoranthene	ND	F1	680	694	F1	ug/Kg	☼	102	47 - 100	5	30
Fluorene	ND	F1	680	632		ug/Kg	☼	93	45 - 100	13	29
Hexachlorobenzene	ND		680	641		ug/Kg	☼	94	45 - 104	6	21
Indeno[1,2,3-cd]pyrene	ND	F1	680	684	F1	ug/Kg	☼	101	46 - 100	7	35
2-Methylphenol	ND		680	575		ug/Kg	☼	85	46 - 100	10	15
Methylphenol, 3 & 4	ND		680	598		ug/Kg	☼	88	46 - 100	8	17
Naphthalene	ND		680	605		ug/Kg	☼	89	46 - 100	7	19
Pentachlorophenol	ND		1360	1030		ug/Kg	☼	76	25 - 114	11	40
Phenanthrene	ND	F1	680	669		ug/Kg	☼	98	46 - 100	7	32
Phenol	ND		680	596		ug/Kg	☼	88	46 - 100	10	15
Pyrene	ND	F1	680	662		ug/Kg	☼	97	41 - 100	5	34

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	*88*		*34 - 100*
2-Fluorophenol (Surr)	*81*		*27 - 100*
Nitrobenzene-d5 (Surr)	*95*		*33 - 100*
Phenol-d5 (Surr)	*86*		*27 - 100*
Terphenyl-d14 (Surr)	*98*		*30 - 100*
2,4,6-Tribromophenol (Surr)	*89*		*20 - 107*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-244340/1-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7	0.52	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
alpha-BHC	ND		1.7	0.41	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
beta-BHC	ND		1.7	0.43	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
cis-Chlordane	ND		1.7	0.42	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDD	ND		1.7	0.45	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDE	ND		1.7	0.34	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
4,4'-DDT	ND		1.7	0.63	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
delta-BHC	ND		1.7	0.53	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Dieldrin	ND		1.7	0.42	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan I	ND		1.7	0.45	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan II	ND		1.7	0.37	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endosulfan sulfate	ND		1.7	0.43	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Endrin	ND		1.7	0.65	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
gamma-BHC (Lindane)	ND		1.7	0.57	ug/Kg		05/09/18 03:17	05/09/18 12:24	1
Heptachlor	ND		1.7	0.52	ug/Kg		05/09/18 03:17	05/09/18 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*40 - 150*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
DCB Decachlorobiphenyl (Surr)	*91*		*40 - 150*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
Tetrachloro-m-xylene	*92*		*44 - 133*	*05/09/18 03:17*	*05/09/18 12:24*	*1*
Tetrachloro-m-xylene	*98*		*44 - 133*	*05/09/18 03:17*	*05/09/18 12:24*	*1*

Lab Sample ID: LCS 180-244340/2-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	33.3	35.7		ug/Kg		107	58 - 131
alpha-BHC	33.3	31.4		ug/Kg		94	61 - 120
beta-BHC	33.3	35.0		ug/Kg		105	55 - 119
cis-Chlordane	33.3	35.9		ug/Kg		108	51 - 130
4,4'-DDD	33.3	37.6		ug/Kg		113	69 - 135
4,4'-DDE	33.3	35.2		ug/Kg		106	67 - 137
4,4'-DDT	33.3	29.4		ug/Kg		88	47 - 140
delta-BHC	33.3	17.0		ug/Kg		51	19 - 106
Dieldrin	33.3	33.7		ug/Kg		101	69 - 136
Endosulfan I	33.3	36.2		ug/Kg		109	51 - 133
Endosulfan II	33.3	34.0		ug/Kg		102	71 - 128
Endosulfan sulfate	33.3	29.2		ug/Kg		87	62 - 119
Endrin	33.3	32.1		ug/Kg		96	71 - 132
gamma-BHC (Lindane)	33.3	32.7		ug/Kg		98	59 - 123
Heptachlor	33.3	35.2		ug/Kg		105	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*100*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*96*		*40 - 150*
Tetrachloro-m-xylene	*99*		*44 - 133*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-244340/2-A
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	104		44 - 133

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		34.2	38.0		ug/Kg	☼	111	58 - 131
alpha-BHC	ND		34.2	32.9		ug/Kg	☼	96	61 - 120
beta-BHC	ND		34.2	36.4		ug/Kg	☼	106	55 - 119
cis-Chlordane	ND		34.2	38.4		ug/Kg	☼	112	51 - 130
4,4'-DDD	ND		34.2	34.6		ug/Kg	☼	101	69 - 135
4,4'-DDE	ND		34.2	34.3		ug/Kg	☼	100	67 - 137
4,4'-DDT	ND		34.2	30.8		ug/Kg	☼	90	47 - 140
delta-BHC	ND		34.2	17.9		ug/Kg	☼	52	19 - 106
Dieldrin	ND		34.2	35.4		ug/Kg	☼	103	69 - 136
Endosulfan I	ND		34.2	37.6		ug/Kg	☼	110	51 - 133
Endosulfan II	ND		34.2	34.7		ug/Kg	☼	102	71 - 128
Endosulfan sulfate	ND		34.2	29.5		ug/Kg	☼	86	62 - 119
Endrin	ND		34.2	32.5		ug/Kg	☼	95	71 - 132
gamma-BHC (Lindane)	ND		34.2	33.3		ug/Kg	☼	97	59 - 123
Heptachlor	ND		34.2	36.5		ug/Kg	☼	107	57 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	103		40 - 150
DCB Decachlorobiphenyl (Surr)	93		40 - 150
Tetrachloro-m-xylene	96		44 - 133
Tetrachloro-m-xylene	102		44 - 133

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND		34.4	36.8		ug/Kg	☼	107	58 - 131	3	21
alpha-BHC	ND		34.4	31.4		ug/Kg	☼	91	61 - 120	4	20
beta-BHC	ND		34.4	33.7		ug/Kg	☼	98	55 - 119	8	23
cis-Chlordane	ND		34.4	37.8		ug/Kg	☼	110	51 - 130	2	22
4,4'-DDD	ND		34.4	36.1		ug/Kg	☼	105	69 - 135	4	22
4,4'-DDE	ND		34.4	34.3		ug/Kg	☼	99	67 - 137	0	16
4,4'-DDT	ND		34.4	30.8		ug/Kg	☼	89	47 - 140	0	18
delta-BHC	ND		34.4	16.9		ug/Kg	☼	49	19 - 106	6	23
Dieldrin	ND		34.4	35.6		ug/Kg	☼	103	69 - 136	1	15
Endosulfan I	ND		34.4	36.2		ug/Kg	☼	105	51 - 133	4	22
Endosulfan II	ND		34.4	35.2		ug/Kg	☼	102	71 - 128	1	17
Endosulfan sulfate	ND		34.4	29.6		ug/Kg	☼	86	62 - 119	0	17
Endrin	ND		34.4	32.7		ug/Kg	☼	95	71 - 132	1	16
gamma-BHC (Lindane)	ND		34.4	32.0		ug/Kg	☼	93	59 - 123	4	21

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244390

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Heptachlor	ND		34.4	36.0		ug/Kg	☼	104	57 - 136	1	22

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*89*		*40 - 150*
Tetrachloro-m-xylene	*94*		*44 - 133*
Tetrachloro-m-xylene	*96*		*44 - 133*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-244340/1-C
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1221	ND		0.017	0.011	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1232	ND		0.017	0.0099	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1242	ND		0.017	0.010	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1248	ND		0.017	0.013	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1254	ND		0.017	0.011	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1260	ND		0.017	0.0047	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1262	ND		0.017	0.012	mg/Kg		05/09/18 03:17	05/09/18 13:48	1
PCB-1268	ND		0.017	0.0081	mg/Kg		05/09/18 03:17	05/09/18 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*33 - 137*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
DCB Decachlorobiphenyl (Surr)	*113*		*33 - 137*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*100*		*44 - 114*	*05/09/18 03:17*	*05/09/18 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*91*		*44 - 114*	*05/09/18 03:17*	*05/09/18 13:48*	*1*

Lab Sample ID: LCS 180-244340/5-C
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244340

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.33	1.23		mg/Kg		92	46 - 122		
PCB-1260			1.33	1.25		mg/Kg		94	51 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*107*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*95*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*87*		*44 - 114*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		1.39	1.14		mg/Kg	☼	82	46 - 122
PCB-1260	ND		1.39	1.11		mg/Kg	☼	80	51 - 119

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*79*		*44 - 114*

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244397

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1.36	1.04		mg/Kg	☼	76	46 - 122	9	23
PCB-1260	ND		1.36	1.09		mg/Kg	☼	80	51 - 119	2	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*84*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*75*		*44 - 114*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-244037/1-A
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 244037

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.0066	mg/Kg		05/04/18 14:05	05/08/18 21:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*61*		*29 - 100*	*05/04/18 14:05*	*05/08/18 21:34*	*1*

Lab Sample ID: LCS 180-244037/2-A
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 244037

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)			0.100	0.0738		mg/Kg		74	36 - 109

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*74*		*29 - 100*
2,4-Dichlorophenylacetic acid	*77*		*29 - 100*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244037

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	ND		0.104	0.0744		mg/Kg	☼	72	36 - 109

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*72*		*29 - 100*
2,4-Dichlorophenylacetic acid	*73*		*29 - 100*

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244334

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 244037

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	ND		0.104	0.0745		mg/Kg	☼	72	36 - 109	0	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*75*		*29 - 100*
2,4-Dichlorophenylacetic acid	*73*		*29 - 100*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-243761/1-A
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.28	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Barium	ND		20	1.1	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Beryllium	ND		0.40	0.023	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Cadmium	ND		0.50	0.036	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Chromium	ND		0.50	0.12	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Copper	ND		2.5	0.17	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Lead	ND		1.0	0.25	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Manganese	ND		1.5	0.16	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Nickel	ND		4.0	0.25	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Selenium	ND		1.0	0.52	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Silver	ND		0.50	0.11	mg/Kg		05/02/18 13:44	05/06/18 13:25	1
Zinc	ND		2.0	1.1	mg/Kg		05/02/18 13:44	05/06/18 13:25	1

Lab Sample ID: LCS 180-243761/2-A
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.2		mg/Kg		96	80 - 120
Barium	200	193		mg/Kg		96	80 - 120
Beryllium	5.00	4.87		mg/Kg		97	80 - 120
Cadmium	5.00	4.86		mg/Kg		97	80 - 120
Chromium	20.0	18.4		mg/Kg		92	80 - 120

Method: EPA 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-243761/2-A
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	25.0	23.8		mg/Kg		95	80 - 120
Lead	50.0	45.0		mg/Kg		90	80 - 120
Manganese	50.0	47.0		mg/Kg		94	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	47.5		mg/Kg		95	80 - 120
Silver	5.00	4.76		mg/Kg		95	80 - 120
Zinc	50.0	47.0		mg/Kg		94	80 - 120

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.7		54.2	58.0		mg/Kg	☼	100	75 - 125
Barium	41		217	238		mg/Kg	☼	91	75 - 125
Beryllium	0.25	J	5.42	4.99		mg/Kg	☼	87	75 - 125
Cadmium	0.12	J	5.42	4.98		mg/Kg	☼	90	75 - 125
Chromium	8.4		21.7	29.2		mg/Kg	☼	96	75 - 125
Copper	23		27.1	51.8		mg/Kg	☼	105	75 - 125
Lead	5.3		54.2	57.8		mg/Kg	☼	97	75 - 125
Manganese	520		54.2	506	4	mg/Kg	☼	-32	75 - 125
Nickel	17		54.2	70.5		mg/Kg	☼	98	75 - 125
Selenium	0.79	J	54.2	47.3		mg/Kg	☼	86	75 - 125
Silver	ND		5.42	4.92		mg/Kg	☼	91	75 - 125
Zinc	60		54.2	111		mg/Kg	☼	95	75 - 125

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 244106

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.7		51.0	49.9		mg/Kg	☼	91	75 - 125	15	20
Barium	41		204	222		mg/Kg	☼	88	75 - 125	7	20
Beryllium	0.25	J	5.10	4.71		mg/Kg	☼	88	75 - 125	6	20
Cadmium	0.12	J	5.10	4.73		mg/Kg	☼	90	75 - 125	5	20
Chromium	8.4		20.4	27.3		mg/Kg	☼	93	75 - 125	6	20
Copper	23		25.5	48.7		mg/Kg	☼	100	75 - 125	6	20
Lead	5.3		51.0	50.6		mg/Kg	☼	89	75 - 125	13	20
Manganese	520		51.0	427	4	mg/Kg	☼	-188	75 - 125	17	20
Nickel	17		51.0	65.6		mg/Kg	☼	95	75 - 125	7	20
Selenium	0.79	J	51.0	45.0		mg/Kg	☼	87	75 - 125	5	20
Silver	ND		5.10	4.64		mg/Kg	☼	91	75 - 125	6	20
Zinc	60		51.0	105		mg/Kg	☼	89	75 - 125	6	20

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-243713/1-A
Matrix: Solid
Analysis Batch: 243873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.0074	mg/Kg		05/02/18 09:39	05/03/18 09:38	1

Lab Sample ID: LCS 180-243713/2-A
Matrix: Solid
Analysis Batch: 243873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243713

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.417	0.454		mg/Kg		109	80 - 120		

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 243873

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.011	J	0.163	0.201		mg/Kg	☼	117	80 - 120		

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 243873

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.011	J	0.163	0.207		mg/Kg	☼	120	80 - 120	3	20

Method: 2540G - SM 2540G

Lab Sample ID: 180-77199-1 DU
Matrix: Solid
Analysis Batch: 243535

Client Sample ID: BP-SC-111
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	4.1			3.6		%				14	20
Percent Solids	95.9			96.4		%				0.5	20

Lab Sample ID: 180-77199-22 DU
Matrix: Solid
Analysis Batch: 243624

Client Sample ID: BP-SC-131
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	5.4			5.1		%				6	20
Percent Solids	94.6			94.9		%				0.3	20

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-243597/4-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		05/01/18 12:20	05/02/18 12:08	1

Lab Sample ID: HLCS 180-243597/2-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.247		mg/Kg		99	90 - 110

Lab Sample ID: LCS 180-243597/3-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	41.7	29.9		mg/Kg		72	38 - 162

Lab Sample ID: LLCS 180-243597/1-A
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0488		mg/Kg		98	90 - 110

Lab Sample ID: 180-77199-14 MS
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		4.60	3.87		mg/Kg	☼	84	75 - 125

Lab Sample ID: 180-77199-14 MSD
Matrix: Solid
Analysis Batch: 243758

Client Sample ID: BP-SC-123
Prep Type: Total/NA
Prep Batch: 243597

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		4.64	4.27		mg/Kg	☼	92	75 - 125	10	20

Lab Sample ID: MB 180-243864/4-A
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243864

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		05/03/18 12:02	05/03/18 16:48	1

Lab Sample ID: HLCS 180-243864/2-A
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243864

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.245		mg/Kg		98	90 - 110

Lab Sample ID: LCS 180-243864/3-A
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243864

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	41.7	27.8		mg/Kg		67	38 - 162

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: LLCS 180-243864/1-A
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243864

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0465		mg/Kg		93	90 - 110

Lab Sample ID: 180-77199-26 MS
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: BP-SC-135
Prep Type: Total/NA
Prep Batch: 243864

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND	F1	4.81	ND	F1	mg/Kg	☼	0	75 - 125

Lab Sample ID: 180-77199-26 MSD
Matrix: Solid
Analysis Batch: 243967

Client Sample ID: BP-SC-135
Prep Type: Total/NA
Prep Batch: 243864

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND	F1	4.90	ND	F1	mg/Kg	☼	0	75 - 125	NC	20

GC/MS VOA

Analysis Batch: 243560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-2	BP-SC-112	Total/NA	Solid	EPA 8260C	243566
180-77199-3	BP-SC-113	Total/NA	Solid	EPA 8260C	243566
180-77199-4	BP-SC-114	Total/NA	Solid	EPA 8260C	243566
180-77199-6	BP-SC-116	Total/NA	Solid	EPA 8260C	243566
180-77199-7	BP-SC-117	Total/NA	Solid	EPA 8260C	243566
180-77199-8	BP-SC-118	Total/NA	Solid	EPA 8260C	243566
180-77199-10	BP-SC-120	Total/NA	Solid	EPA 8260C	243566
180-77199-11	BP-SC-121	Total/NA	Solid	EPA 8260C	243566
180-77199-13	BP-SC-122	Total/NA	Solid	EPA 8260C	243566
180-77199-15	BP-SC-124	Total/NA	Solid	EPA 8260C	243566
180-77199-16	BP-SC-125	Total/NA	Solid	EPA 8260C	243566
180-77199-17	BP-SC-126	Total/NA	Solid	EPA 8260C	243566
180-77199-19	BP-SC-128	Total/NA	Solid	EPA 8260C	243566
180-77199-20	BP-SC-129	Total/NA	Solid	EPA 8260C	243566
MB 180-243560/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-243560/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
180-77199-19 MS	BP-SC-128	Total/NA	Solid	EPA 8260C	243566
180-77199-19 MSD	BP-SC-128	Total/NA	Solid	EPA 8260C	243566

Prep Batch: 243566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-2	BP-SC-112	Total/NA	Solid	5035	
180-77199-3	BP-SC-113	Total/NA	Solid	5035	
180-77199-4	BP-SC-114	Total/NA	Solid	5035	
180-77199-6	BP-SC-116	Total/NA	Solid	5035	
180-77199-7	BP-SC-117	Total/NA	Solid	5035	
180-77199-8	BP-SC-118	Total/NA	Solid	5035	
180-77199-10	BP-SC-120	Total/NA	Solid	5035	
180-77199-11	BP-SC-121	Total/NA	Solid	5035	
180-77199-13	BP-SC-122	Total/NA	Solid	5035	
180-77199-15	BP-SC-124	Total/NA	Solid	5035	
180-77199-16	BP-SC-125	Total/NA	Solid	5035	
180-77199-17	BP-SC-126	Total/NA	Solid	5035	
180-77199-19	BP-SC-128	Total/NA	Solid	5035	
180-77199-20	BP-SC-129	Total/NA	Solid	5035	
180-77199-19 MS	BP-SC-128	Total/NA	Solid	5035	
180-77199-19 MSD	BP-SC-128	Total/NA	Solid	5035	

Analysis Batch: 243688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-21	BP-SC-130	Total/NA	Solid	EPA 8260C	243693
180-77199-23	BP-SC-132	Total/NA	Solid	EPA 8260C	243693
180-77199-24	BP-SC-133	Total/NA	Solid	EPA 8260C	243693
180-77199-25	BP-SC-134	Total/NA	Solid	EPA 8260C	243693
180-77199-28	DUP 3	Total/NA	Solid	EPA 8260C	243693
180-77199-29	DUP 4	Total/NA	Solid	EPA 8260C	243693
180-77199-30	DUP 5	Total/NA	Solid	EPA 8260C	243693
MB 180-243688/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-243688/21	Lab Control Sample	Total/NA	Solid	EPA 8260C	
180-77199-25 MS	BP-SC-134	Total/NA	Solid	EPA 8260C	243693
180-77199-25 MSD	BP-SC-134	Total/NA	Solid	EPA 8260C	243693

Prep Batch: 243693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-21	BP-SC-130	Total/NA	Solid	5035	
180-77199-23	BP-SC-132	Total/NA	Solid	5035	
180-77199-24	BP-SC-133	Total/NA	Solid	5035	
180-77199-25	BP-SC-134	Total/NA	Solid	5035	
180-77199-28	DUP 3	Total/NA	Solid	5035	
180-77199-29	DUP 4	Total/NA	Solid	5035	
180-77199-30	DUP 5	Total/NA	Solid	5035	
180-77199-25 MS	BP-SC-134	Total/NA	Solid	5035	
180-77199-25 MSD	BP-SC-134	Total/NA	Solid	5035	

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Prep Batch: 244339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	3541	
180-77199-5	BP-SC-115	Total/NA	Solid	3541	
180-77199-9	BP-SC-119	Total/NA	Solid	3541	
180-77199-12	DUP-2	Total/NA	Solid	3541	
180-77199-14	BP-SC-123	Total/NA	Solid	3541	
180-77199-18	BP-SC-127	Total/NA	Solid	3541	
180-77199-22	BP-SC-131	Total/NA	Solid	3541	
180-77199-26	BP-SC-135	Total/NA	Solid	3541	
180-77199-27	BP-SC-136	Total/NA	Solid	3541	
MB 180-244339/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-244339/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3541	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3541	

Analysis Batch: 244385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 8270D LL	244339
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 8270D LL	244339
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 8270D LL	244339
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 8270D LL	244339
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 8270D LL	244339
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 8270D LL	244339
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 8270D LL	244339
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 8270D LL	244339
MB 180-244339/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	244339
LCS 180-244339/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	244339
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 8270D LL	244339
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 8270D LL	244339

Analysis Batch: 244525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-12	DUP-2	Total/NA	Solid	EPA 8270D LL	244339

GC Semi VOA

Prep Batch: 244037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	8151A	

GC Semi VOA (Continued)

Prep Batch: 244037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-5	BP-SC-115	Total/NA	Solid	8151A	
180-77199-9	BP-SC-119	Total/NA	Solid	8151A	
180-77199-12	DUP-2	Total/NA	Solid	8151A	
180-77199-14	BP-SC-123	Total/NA	Solid	8151A	
180-77199-18	BP-SC-127	Total/NA	Solid	8151A	
180-77199-22	BP-SC-131	Total/NA	Solid	8151A	
180-77199-26	BP-SC-135	Total/NA	Solid	8151A	
180-77199-27	BP-SC-136	Total/NA	Solid	8151A	
MB 180-244037/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-244037/2-A	Lab Control Sample	Total/NA	Solid	8151A	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	8151A	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	8151A	

Analysis Batch: 244334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 8151A	244037
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 8151A	244037
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 8151A	244037
180-77199-12	DUP-2	Total/NA	Solid	EPA 8151A	244037
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 8151A	244037
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 8151A	244037
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 8151A	244037
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 8151A	244037
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 8151A	244037
MB 180-244037/1-A	Method Blank	Total/NA	Solid	EPA 8151A	244037
LCS 180-244037/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	244037
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 8151A	244037
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 8151A	244037

Prep Batch: 244340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	3541	
180-77199-5	BP-SC-115	Total/NA	Solid	3541	
180-77199-9	BP-SC-119	Total/NA	Solid	3541	
180-77199-12	DUP-2	Total/NA	Solid	3541	
180-77199-14	BP-SC-123	Total/NA	Solid	3541	
180-77199-18	BP-SC-127	Total/NA	Solid	3541	
180-77199-22	BP-SC-131	Total/NA	Solid	3541	
180-77199-26	BP-SC-135	Total/NA	Solid	3541	
180-77199-27	BP-SC-136	Total/NA	Solid	3541	
MB 180-244340/1-A	Method Blank	Total/NA	Solid	3541	
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-244340/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3541	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3541	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3541	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3541	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Analysis Batch: 244390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 8081B	244340
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 8081B	244340
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 8081B	244340
180-77199-12	DUP-2	Total/NA	Solid	EPA 8081B	244340
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 8081B	244340
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 8081B	244340
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 8081B	244340
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 8081B	244340
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 8081B	244340
MB 180-244340/1-A	Method Blank	Total/NA	Solid	EPA 8081B	244340
LCS 180-244340/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	244340
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 8081B	244340
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 8081B	244340

Cleanup Batch: 244391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	3665A	244340
180-77199-5	BP-SC-115	Total/NA	Solid	3665A	244340
180-77199-9	BP-SC-119	Total/NA	Solid	3665A	244340
180-77199-12	DUP-2	Total/NA	Solid	3665A	244340
180-77199-14	BP-SC-123	Total/NA	Solid	3665A	244340
180-77199-18	BP-SC-127	Total/NA	Solid	3665A	244340
180-77199-22	BP-SC-131	Total/NA	Solid	3665A	244340
180-77199-26	BP-SC-135	Total/NA	Solid	3665A	244340
180-77199-27	BP-SC-136	Total/NA	Solid	3665A	244340
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3665A	244340
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3665A	244340
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3665A	244340
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3665A	244340

Cleanup Batch: 244392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	3660B	244391
180-77199-5	BP-SC-115	Total/NA	Solid	3660B	244391
180-77199-9	BP-SC-119	Total/NA	Solid	3660B	244391
180-77199-12	DUP-2	Total/NA	Solid	3660B	244391
180-77199-14	BP-SC-123	Total/NA	Solid	3660B	244391
180-77199-18	BP-SC-127	Total/NA	Solid	3660B	244391
180-77199-22	BP-SC-131	Total/NA	Solid	3660B	244391
180-77199-26	BP-SC-135	Total/NA	Solid	3660B	244391
180-77199-27	BP-SC-136	Total/NA	Solid	3660B	244391
MB 180-244340/1-C	Method Blank	Total/NA	Solid	3660B	244391
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	3660B	244391
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3660B	244391
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3660B	244391

Analysis Batch: 244397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 8082A	244392
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 8082A	244392
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 8082A	244392

GC Semi VOA (Continued)

Analysis Batch: 244397 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-12	DUP-2	Total/NA	Solid	EPA 8082A	244392
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 8082A	244392
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 8082A	244392
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 8082A	244392
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 8082A	244392
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 8082A	244392
MB 180-244340/1-C	Method Blank	Total/NA	Solid	EPA 8082A	244392
LCS 180-244340/5-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	244392
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 8082A	244392
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 8082A	244392

Metals

Prep Batch: 243713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	7471B	
180-77199-5	BP-SC-115	Total/NA	Solid	7471B	
180-77199-9	BP-SC-119	Total/NA	Solid	7471B	
180-77199-12	DUP-2	Total/NA	Solid	7471B	
180-77199-14	BP-SC-123	Total/NA	Solid	7471B	
180-77199-18	BP-SC-127	Total/NA	Solid	7471B	
180-77199-22	BP-SC-131	Total/NA	Solid	7471B	
180-77199-26	BP-SC-135	Total/NA	Solid	7471B	
180-77199-27	BP-SC-136	Total/NA	Solid	7471B	
MB 180-243713/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-243713/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	7471B	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	7471B	

Prep Batch: 243761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	3050B	
180-77199-5	BP-SC-115	Total/NA	Solid	3050B	
180-77199-9	BP-SC-119	Total/NA	Solid	3050B	
180-77199-12	DUP-2	Total/NA	Solid	3050B	
180-77199-14	BP-SC-123	Total/NA	Solid	3050B	
180-77199-18	BP-SC-127	Total/NA	Solid	3050B	
180-77199-22	BP-SC-131	Total/NA	Solid	3050B	
180-77199-26	BP-SC-135	Total/NA	Solid	3050B	
180-77199-27	BP-SC-136	Total/NA	Solid	3050B	
MB 180-243761/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-243761/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	3050B	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	3050B	

Analysis Batch: 243873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 7471B	243713
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 7471B	243713
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 7471B	243713

Metals (Continued)

Analysis Batch: 243873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-12	DUP-2	Total/NA	Solid	EPA 7471B	243713
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 7471B	243713
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 7471B	243713
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 7471B	243713
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 7471B	243713
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 7471B	243713
MB 180-243713/1-A	Method Blank	Total/NA	Solid	EPA 7471B	243713
LCS 180-243713/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	243713
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 7471B	243713
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 7471B	243713

Analysis Batch: 244106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 6010C	243761
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 6010C	243761
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 6010C	243761
180-77199-12	DUP-2	Total/NA	Solid	EPA 6010C	243761
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 6010C	243761
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 6010C	243761
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 6010C	243761
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 6010C	243761
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 6010C	243761
MB 180-243761/1-A	Method Blank	Total/NA	Solid	EPA 6010C	243761
LCS 180-243761/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	243761
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 6010C	243761
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 6010C	243761

General Chemistry

Analysis Batch: 243535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	2540G	
180-77199-2	BP-SC-112	Total/NA	Solid	2540G	
180-77199-3	BP-SC-113	Total/NA	Solid	2540G	
180-77199-4	BP-SC-114	Total/NA	Solid	2540G	
180-77199-5	BP-SC-115	Total/NA	Solid	2540G	
180-77199-6	BP-SC-116	Total/NA	Solid	2540G	
180-77199-7	BP-SC-117	Total/NA	Solid	2540G	
180-77199-8	BP-SC-118	Total/NA	Solid	2540G	
180-77199-9	BP-SC-119	Total/NA	Solid	2540G	
180-77199-10	BP-SC-120	Total/NA	Solid	2540G	
180-77199-11	BP-SC-121	Total/NA	Solid	2540G	
180-77199-12	DUP-2	Total/NA	Solid	2540G	
180-77199-13	BP-SC-122	Total/NA	Solid	2540G	
180-77199-14	BP-SC-123	Total/NA	Solid	2540G	
180-77199-15	BP-SC-124	Total/NA	Solid	2540G	
180-77199-16	BP-SC-125	Total/NA	Solid	2540G	
180-77199-17	BP-SC-126	Total/NA	Solid	2540G	
180-77199-18	BP-SC-127	Total/NA	Solid	2540G	
180-77199-19	BP-SC-128	Total/NA	Solid	2540G	

General Chemistry (Continued)

Analysis Batch: 243535 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1 DU	BP-SC-111	Total/NA	Solid	2540G	

Prep Batch: 243597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	9010C	
180-77199-5	BP-SC-115	Total/NA	Solid	9010C	
180-77199-9	BP-SC-119	Total/NA	Solid	9010C	
180-77199-12	DUP-2	Total/NA	Solid	9010C	
180-77199-14	BP-SC-123	Total/NA	Solid	9010C	
180-77199-18	BP-SC-127	Total/NA	Solid	9010C	
180-77199-22	BP-SC-131	Total/NA	Solid	9010C	
MB 180-243597/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-243597/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-243597/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-243597/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-77199-14 MS	BP-SC-123	Total/NA	Solid	9010C	
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	9010C	

Analysis Batch: 243624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-20	BP-SC-129	Total/NA	Solid	2540G	
180-77199-21	BP-SC-130	Total/NA	Solid	2540G	
180-77199-22	BP-SC-131	Total/NA	Solid	2540G	
180-77199-23	BP-SC-132	Total/NA	Solid	2540G	
180-77199-24	BP-SC-133	Total/NA	Solid	2540G	
180-77199-25	BP-SC-134	Total/NA	Solid	2540G	
180-77199-26	BP-SC-135	Total/NA	Solid	2540G	
180-77199-27	BP-SC-136	Total/NA	Solid	2540G	
180-77199-28	DUP 3	Total/NA	Solid	2540G	
180-77199-29	DUP 4	Total/NA	Solid	2540G	
180-77199-30	DUP 5	Total/NA	Solid	2540G	
180-77199-22 DU	BP-SC-131	Total/NA	Solid	2540G	

Analysis Batch: 243758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-1	BP-SC-111	Total/NA	Solid	EPA 9014	243597
180-77199-5	BP-SC-115	Total/NA	Solid	EPA 9014	243597
180-77199-9	BP-SC-119	Total/NA	Solid	EPA 9014	243597
180-77199-12	DUP-2	Total/NA	Solid	EPA 9014	243597
180-77199-14	BP-SC-123	Total/NA	Solid	EPA 9014	243597
180-77199-18	BP-SC-127	Total/NA	Solid	EPA 9014	243597
180-77199-22	BP-SC-131	Total/NA	Solid	EPA 9014	243597
MB 180-243597/4-A	Method Blank	Total/NA	Solid	EPA 9014	243597
HLCS 180-243597/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597
LCS 180-243597/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597
LLCS 180-243597/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243597
180-77199-14 MS	BP-SC-123	Total/NA	Solid	EPA 9014	243597
180-77199-14 MSD	BP-SC-123	Total/NA	Solid	EPA 9014	243597

General Chemistry (Continued)

Prep Batch: 243864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-26	BP-SC-135	Total/NA	Solid	9010C	
180-77199-27	BP-SC-136	Total/NA	Solid	9010C	
MB 180-243864/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-243864/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-243864/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-243864/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-77199-26 MS	BP-SC-135	Total/NA	Solid	9010C	
180-77199-26 MSD	BP-SC-135	Total/NA	Solid	9010C	

Analysis Batch: 243967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-77199-26	BP-SC-135	Total/NA	Solid	EPA 9014	243864
180-77199-27	BP-SC-136	Total/NA	Solid	EPA 9014	243864
MB 180-243864/4-A	Method Blank	Total/NA	Solid	EPA 9014	243864
HLCS 180-243864/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243864
LCS 180-243864/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243864
LLCS 180-243864/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	243864
180-77199-26 MS	BP-SC-135	Total/NA	Solid	EPA 9014	243864
180-77199-26 MSD	BP-SC-135	Total/NA	Solid	EPA 9014	243864

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑Other:

Client Contact	Project Manager: Aron Krasnopoler	Site Contact: Ashwin Ranna	Date: 04.27.2018	COC No:
Geosyntec Consultants	Tel/Fax: 401-381-4333	Lab Contact: Dave Dunlap	Carrier: FedEx	1 of 3 COCs
10211 Wincopin Circle, 4th Floor	Analysis Turnaround Time			Sampler:
Columbia, MD 21044	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
410-381-4333 Phone	TAT if different from Below _____			Walk-in Client:
410-381-4499 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Former Sperry Remington Site - North	☐ 1 week			Job / SDG No.:
Site: Elmira	☐ 2 days			
P O # MN0832B	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C	8270D	6010C	7471B	9014	8151A	8081B	8082A	Sample Specific Notes:
BP-SC-111	04.27.18	8:20	C	S	3				X	X	X	X	X	X	X	
BP-SC-112	04.27.18	8:25	G	S	4			X								
BP-SC-113	04.27.18	8:30	G	S	4			X								
BP-SC-114	04.27.18	8:35	G	S	4			X								
BP-SC-115	04.27.18	8:40	C	S	3				X	X	X	X	X	X	X	
BP-SC-116	04.27.18	8:45	G	S	4			X								
BP-SC-117	04.27.18	9:00	G	S	4			X								
BP-SC-118	04.27.18	9:05	G	S	4			X								
BP-SC-119	04.27.18	9:10	C	S	3				X	X	X	X	X	X	X	
BP-SC-120	04.27.18	9:15	G	S	4			X								
BP-SC-121	04.27.18	9:20	G	S	4			X								
DUP-2	04.27.18	—	C	S	3				X	X	X	X	X	X	X	

180-77199 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ashwin Ranna	Geosyntec	4/27/2018 1700	Hillie Watson	TAPitt	4-28-18 10:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

5/11/2018

TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2468

Chain of Custody Record

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THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☑Other:

Client Contact	Project Manager: Aron Krasnopoler	Site Contact: Ashwin Ranna	Date: 04.27.2018	COC No:
Geosyntec Consultants	Tel/Fax: 401-381-4333	Lab Contact: Dave Dunlap	Carrier: FedEx	2 of 3 COCs
10211 Wincopin Circle, 4th Floor	**Analysis Turnaround Time**			Sampler:
Columbia, MD 21044	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
410-381-4333 Phone	TAT if different from Below _____			Walk-in Client:
410-381-4499 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Former Sperry Remington Site - North	☐ 1 week			
Site: Elmira	☐ 2 days			Job / SDG No.:
P O # MN0832B	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C	8270D	6010C	7471B	9014	8151A	8081B	8082A	Sample Specific Notes:
BP-SC-122	04.27.18	9:25	G	S	4			X								
BP-SC-123	04.27.18	9:30	C	S	9				X	X	X	X	X	X	X	BP-MS/MSD 1
BP-SC-124	04.27.18	9:35	G	S	4			X								
BP-SC-125	04.27.18	9:40	G	S	4			X								
BP-SC-126	04.27.18	9:45	G	S	4			X								
BP-SC-127	04.27.18	11:20	C	S	3				X	X	X	X	X	X	X	
BP-SC-128	04.27.18	11:25	G	S	12			X								BP-MS/MSD 2
BP-SC-129	04.27.18	11:30	G	S	4			X								
BP-SC-130	04.27.18	11:35	G	S	4			X								
BP-SC-131	04.27.18	11:40	C	S	3				X	X	X	X	X	X	X	
BP-SC-132	04.27.18	11:45	G	S	4			X								
BP-SC-133	04.27.18	11:50	G	S	4			X								

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☑Disposal by Lab ☐Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ | Therm ID No.:_____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ashwin Ranna	Geosyntec	4/27/2018 1700	DeMarco Watson	PAPitt	4-28-18 10:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

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10211 Wincopin Circle, 4th Floor	Analysis Turnaround Time			Sampler:
Columbia, MD 21044	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
410-381-4333 Phone	TAT if different from Below _____			Walk-in Client:
410-381-4499 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Former Sperry Remington Site - North	☐ 1 week			
Site: Elmira	☐ 2 days			Job / SDG No.:
P O # MN0832B	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C	8270D	6010C	7471B	9014	8151A	8081B	8082A	Sample Specific Notes:
BP-SC-134	04.27.18	11:55	G	S	12			X								BP-MS/MSD-03
BP-SC-135	04.27.18	12:00	C	S	3				X	X	X	X	X	X	X	
BP-SC-136	04.27.18	12:05	C	S	3				X	X	X	X	X	X	X	
DUP 3	04.27.18	-	G	S	4			X								
DUP 4	04.27.18	-	G	S	~~3~~ 4			X	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	GRAB SAMPLE (8260C ONLY) ~~COMPOSITE (3 JARS)~~ EKB
DUP 5	04.27.18	-	G	S	~~3~~ 4			X	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	GRAB 8260C ~~COMPOSITE (3 JARS)~~ EKB

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑Non-Hazard ☐Flammable ☐Skin Irritant ☐Poison B ☐Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐Return to Client ☑Disposal by Lab ☐Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ashwin Ranna	Geosyntec	4/27/2018 1700	Debbie Watson	TAPT	4-28-18 10:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-77199-1

Login Number: 77199
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Geosyntec consultants

180A Market Place Blvd.
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	29 May 2018
To:	Aron Krasnopler
From:	Mary Tyler
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverable – TestAmerica Job ID 180-77198-1**

SITE: Former Sperry Remington Site-Brewers Pit

INTRODUCTION

This report summarizes the findings of the Stage 4 data validation of ten solid samples and one field duplicate sample, collected on April 26, 2018, as part of the Former Sperry Remington Site-Brewers Pit sampling event. TestAmerica Pittsburgh, Pennsylvania, analyzed the samples. The samples were analyzed for the following tests:

- EPA Methods 5035/8260C - Volatile Organic Compounds (VOCs)
- EPA Methods 3541/8270D - Semivolatile Organic Compounds (SVOCs)
- EPA Methods 3541/8081B – Organochlorine Pesticides
- EPA Methods 3541/8082A – Polychlorinated Biphenyls (PCBs)
- EPA Method 8151A- Chlorinated Herbicide Silvex (2,4,5-TP)
- EPA Methods 3050B/6010C – Metals
- EPA Method 7471B – Mercury
- EPA Methods 9010C/9014 – Cyanide
- Standard Method 2540G - Percent Moisture/Solids

EXECUTIVE SUMMARY

The samples were handled, prepared, and measured in the same manner under similar prescribed conditions.

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below, the data are usable for meeting project objectives.

The data were reviewed based on the following documents and professional and technical judgment:

- Quality Assurance Project Plan for Former Sperry Remington Facility Industrial Outfall Site, Elmira, New York, NYSDEC SITE I.D. # 808043, (hereafter referred to as the QAPP), NY09-2480-04, July 7, 2010, Revised November 11, 2010, USEPA Region II;
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, January 2017 (EPA-540-R-2017-002);
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2017 (EPA-540-R-2017-001); and,
- The pertinent methods referenced by the data package.

The following samples were analyzed and validated at a Stage 2A level in the data set:

Laboratory ID	Client ID
180-77198-1	BP-SC-101
180-77198-2	BP-SC-102
180-77198-3	BP-SC-103
180-77198-4	BP-SC-104
180-77198-5	BP-SC-105
180-77198-6	BP-SC-106

Laboratory ID	Client ID
180-77198-7	BP-SC-107
180-77198-8	BP-SC-108
180-77198-9	BP-SC-109
180-77198-10	BP-SC-110
180-77198-11	DUP-01

The samples were received at the laboratory at 3.9^{o}C, within the QAPP criteria of 4 $\pm$ 2°C. No sample preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the chain of custody (COC). The proper procedure of a single strike-through correction and initials and date of the person making the correction was not followed.

No collection times were documented on the COC for the field duplicate. The laboratory assigned a collection time of 00:00.

It was noted that the sample IDs in the electronic data deliverable (EDD) included the date and time of laboratory receipt in the prefix; this prefix was not listed on the COC.

The solids data, used to report the samples on a dry weight bases, were not validated.

1.0 VOLATILE ORGANIC COMPOUNDS

The samples were analyzed for VOCs by EPA methods 5035/8260B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Trip Blank
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

1.1 Overall Assessment

The VOC data reported in this package are considered usable for meeting project objectives. The analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative noted the following issues with the continuing calibration verification (CCV) standards:

- The percent differences (%Ds) in the CCV in batch 243465 were above the method specified acceptance criteria for acetone and tetrachloroethene, with high biases. Since acetone and tetrachloroethene were not detected in the associated samples, no qualifications were applied to the data.

- The %Ds in the CCV in batch 243560 were above the method specified acceptance criteria for methyl tert-butyl ether and 1,4-dioxane, with low biases (23.4%D and 21.4%D, respectively). Since the %Ds were within the validation specified acceptance criteria, no qualifications were applied to the data.

- The %D in the CCV in batch 243560 was above the method specified acceptance criteria for acetone, with a high bias. Since acetone was not detected in the associated samples, no qualifications were applied to the data

1.2 Holding Times

The holding times for the VOC analysis of a solid sample collected using a Terracore are 48 hours from collection to laboratory receipt (water preserved are frozen upon receipt) then 14 days from sample collection to analysis. Methanol preserved Terracores are 14 days from collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 243465 and 243560). VOCs were not detected in the method blanks above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported with the sample set.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of tetrachloroethene was high and outside the laboratory specified acceptance criteria in batch 243465. Since tetrachloroethene was not detected in the associated samples, no qualifications were applied to the data.

1.6 Surrogates

Acceptable surrogate recoveries were reported.

1.7 Trip Blank

A trip blank did not accompany the samples.

1.8 Field Duplicate

One field duplicate was collected with the sample set, but not analyzed for VOCs.

1.9 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

1.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

2.0 SEMIVOLATILE ORGANIC COMPOUNDS

The samples were analyzed for SVOCs per EPA Methods 3541/8270D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Blanks
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

2.1 Overall Assessment

The SVOC data reported in this package are considered to be usable for meeting project objectives. The results are considered to be valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to

the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

2.2 Holding Times

The holding times for the SVOC analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

2.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244105). SVOCs were not detected in the method blank above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery results were within the laboratory specified acceptance criteria.

2.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

2.7 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision [relative percent difference (RPD) <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-103.

2.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

2.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

3.0 ORGANOCHLORINE PESTICIDES

The samples were analyzed for organochlorine pesticides per EPA Methods 3541/8081B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

3.1 Overall Assessment

The organochlorine pesticides data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative noted the following issue with the CCV standard in batch 244390: The %D on gas chromatography (GC) column MR-1 was above the method specified acceptance criteria for endrin, with a low bias. Since the results for endrin were reported from the other GC column which had an acceptable result, no qualifications were applied to the data.

3.2 Holding Times

The holding times for the organochlorine pesticide analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244340). The organochlorine pesticides were not detected in the method blank above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

3.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

3.7 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

3.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in

the laboratory report. No other discrepancies were identified between the level II report and the EDD.

4.0 PCB

The samples were analyzed for PCBs per EPA Methods 3541/8082A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

4.1 Overall Assessment

The PCB (Aroclor) data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for the project is 100%.

The narrative noted the following issue with the CCV standard in batch 244397: The %D for one peak in the PCB 1016 CCV on GC column RTX-CLP-1 was above the method specified acceptance criteria, with a high bias. Since the average %D for PCB 1016 was within the method specified acceptance criteria and PCB 1016 was not detected in the associated samples, no qualifications were applied to the data.

4.2 Holding Times

The holding times for the PCB analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244340). PCBs were not detected in the method blank above the MDLs.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

4.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

4.7 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

4.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

4.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample

date and time were added to the sample IDs in the EDD and were not add to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

5.0 SILVEX

The samples were analyzed for chlorinated herbicide silvex (2,4,5-TP) per EPA Method 8151A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

5.1 Overall Assessment

The silvex data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

5.2 Holding Times

The holding times for the silvex analysis of a solid are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

5.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244037). Silvex was not detected in the method blank above the MDL.

5.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

5.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

5.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

5.7 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

5.8 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

5.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

6.0 METALS

The samples were analyzed for metals per EPA Methods 3050B/6010C (Mercury evaluated separately in Section 7.0, below).

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Field Duplicate
- ✓ Sensitivity
- ⊗ Electronic Data Deliverable Review

6.1 Overall Assessment

The metals data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

6.2 Holding Time

The holding time for metals analysis of a solid is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

6.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 243761). Metals were not detected in the method blank above the MDLs.

6.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

6.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery results were within the laboratory specified acceptance criteria.

6.6 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

6.7 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

6.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

7.0 MERCURY

The samples were analyzed for mercury per EPA Method 7471B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ⊗ Electronic Data Deliverable Review

7.1 Overall Assessment

The mercury data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of

valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

7.2 Holding Time

The holding time for the mercury analysis of a solid is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

7.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 243479). Mercury was not detected in the method blank above the MDL.

7.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

7.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery result was within the laboratory specified acceptance criteria.

7.6 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

7.7 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

7.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in

the laboratory report. No other discrepancies were identified between the level II report and the EDD.

8.0 CYANIDE

The samples were analyzed for cyanide by EPA Methods 9010C/9014.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

8.1 Overall Assessment

The cyanide data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

8.2 Holding Time

The holding time for the cyanide analysis of a solid sample is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

8.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 243597). Cyanide was not detected in the method blank above the MDL.

8.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

8.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

8.6 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-01. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-103.

8.7 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

8.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not add to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

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Memorandum

Date:	29 May 2018
To:	Aron Krasnopler
From:	Mary Tyler
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level II Data Deliverable – TestAmerica Job ID 180-77199-1**

SITE: Former Sperry Remington Site-Brewers Pit

INTRODUCTION

This report summarizes the findings of the Stage 4 data validation of twenty-six solid samples, including three samples for matrix spike/matrix spike duplicate (MS/MSD) analyses, and four field duplicate samples, collected on April 27, 2018, as part of the Former Sperry Remington Site-Brewers Pit sampling event. TestAmerica, Pittsburgh, Pennsylvania, analyzed the samples. The samples were analyzed for the following tests:

- EPA Methods 5035/8260C - Volatile Organic Compounds (VOCs)
- EPA Methods 3541/8270D - Semivolatile Organic Compounds (SVOCs)
- EPA Methods 3541/8081B – Organochlorine Pesticides
- EPA Methods 3541/8082A – Polychlorinated Biphenyls (PCBs)
- EPA Method 8151A- Chlorinated Herbicide Silvex (2,4,5-TP)
- EPA Methods 3050B/6010C – Metals
- EPA Method 7471B – Mercury
- EPA Methods 9010C/9014 – Cyanide
- Standard Method 2540G - Percent Moisture/Solids

EXECUTIVE SUMMARY

The samples were handled, prepared, and measured in the same manner under similar prescribed conditions.

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below, the data are as qualified usable for meeting project objectives, with the following exception.

There were no cyanide recoveries (0%) in the MS/MSD pair using sample BP-SC-135. Therefore, the nondetect cyanide result in sample BP-SC-135 was R qualified as rejected.

The remaining qualified data should be used within the limitations of the qualifications.

The data were reviewed based on the following documents and professional and technical judgment:

- Quality Assurance Project Plan for Former Sperry Remington Facility Industrial Outfall Site, Elmira, New York, NYSDEC SITE I.D. # 808043, (hereafter referred to as the QAPP), NY09-2480-04, July 7, 2010, Revised November 11, 2010, USEPA Region II
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, January 2017 (EPA-540-R-2017-002)
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, January 2017 (EPA-540-R-2017-001)
- The pertinent methods referenced by the data package.

The following samples were analyzed and validated at a Stage 2A level in the data set:

Laboratory ID	Client ID
180-77199-1	BP-SC-111
180-77199-2	BP-SC-112
180-77199-3	BP-SC-113
180-77199-4	BP-SC-114
180-77199-5	BP-SC-115
180-77199-6	BP-SC-116
180-77199-7	BP-SC-117
180-77199-8	BP-SC-118
180-77199-9	BP-SC-119
180-77199-10	BP-SC-120
180-77199-11	BP-SC-121
180-77199-12	DUP-2
180-77199-13	BP-SC-122
180-77199-14	BP-SC-123
180-77199-14 MS	BP-SC-123 MS
180-77199-14 MSD	BP-SC-123 MSD
180-77199-15	BP-SC-124
180-77199-16	BP-SC-125

Laboratory ID	Client ID
180-77199-17	BP-SC-126
180-77199-18	BP-SC-127
180-77199-19	BP-SC-128
180-77199-19 MS	BP-SC-128 MS
180-77199-19 MSD	BP-SC-128 MSD
180-77199-20	BP-SC-129
180-77199-21	BP-SC-130
180-77199-22	BP-SC-131
180-77199-23	BP-SC-132
180-77199-24	BP-SC-133
180-77199-25	BP-SC-134
180-77199-25 MS	BP-SC-134 MS
180-77199-25 MSD	BP-SC-134 MSD
180-77199-26	BP-SC-135
180-77199-27	BP-SC-136
180-77199-28	DUP 3
180-77199-29	DUP 4
180-77199-30	DUP 5

The samples were received at the laboratory at 4.2°C, 4.5°C and 4.9°C, within the QAPP criteria of 4 ± 2°C. No sample preservation issues were noted by the laboratory.

Incorrect error corrections were observed on the chain of custody (COC). The proper procedure of a single strike-through correction and initials and date of the person making the correction was not followed.

No collection times were documented on the COC for the field duplicate samples. The laboratory assigned collection times of 00:00.

It was noted that the sample IDs in the electronic data deliverable (EDD) included the date and time of laboratory receipt in the prefix; this prefix was not listed on the COC.

The solids data, used to report the samples on a dry weight bases, were not validated.

1.0 VOLATILE ORGANIC COMPOUNDS

The samples were analyzed for VOCs by EPA methods 5035/8260B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Trip Blank
✓ Field Duplicate
⊗ Sensitivity
⊗ Electronic Data Deliverable Review

1.1 Overall Assessment

The VOC data reported in this package are considered usable for meeting project objectives. The analytical completeness defined as the ratio of the number of valid analytical results (valid

analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative noted the following issues with the continuing calibration verification (CCV) standards:

- The %Ds in the CCV in batch 243560 were above the method specified acceptance criteria for methyl tert-butyl ether and 1,4-dioxane, with low biases (23.4%D and 21.4%D, respectively). Since the %Ds were within the validation specified acceptance criteria, no qualifications were applied to the data.

- The %D in the CCV in batch 243560 was above the method specified acceptance criteria for acetone, with a high bias. Since acetone was not detected in the associated samples, no qualifications were applied to the data.

- The %D in the CCV in batch 243688 was above the method specified acceptance criteria for acetone, with a high bias. Therefore, the acetone concentrations in the associated samples were J qualified as estimated.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Validation Concentration (mg/kg)	Validation Qualifier*	Reason Code**
BP-SC-132	Acetone	0.0053	J	0.0053	J	9
BP-SC-133	Acetone	0.0050	J	0.0050	J	9
DUP 3	Acetone	0.013	J	0.013	J	9
DUP 5	Acetone	0.0053	J	0.0053	J	9

mg/kg-milligram per kilogram
J- the result is less than the reporting limit (RL) but greater than or equal to the method detection limit (MDL) and the concentration is an approximate value
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Times

The holding times for the VOC analysis of a solid sample collected using a Terracore are 48 hours from collection to laboratory receipt, water preserved Terracores are frozen upon receipt, and 14 days from sample collection to analysis. The methanol preserved Terracore holding time is 14 days from collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 243560 and 243688). VOCs were not detected in the method blanks above the MDLs.

1.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two sample set specific MS/MSD pairs were reported, using samples BP-SC-128 and BP-SC-134. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

One or both of the recoveries of tetrachloroethene, ethylbenzene, trans-1,2-dichloroethene, tert-butylbenzene and trichloroethene were high and outside the laboratory specified acceptance criteria in the MS/MSD pair using sample BP-SC-128. Since these five compounds were not detected in sample BP-SC-128, no qualifications were applied to the data.

The recoveries of tetrachloroethene and trichloroethene were high and outside the laboratory specified acceptance criteria in the MS/MSD pair using sample BP-SC-134. Since these two compounds were not detected in sample BP-SC-134, no qualifications were applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

1.6 Surrogates

Acceptable surrogate recoveries were reported.

1.7 Trip Blank

A trip blank did not accompany the samples.

1.8 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate samples DUP 3, DUP 4 and DUP 5 were analyzed for VOCs. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was

demonstrated between the field duplicates and the original samples, BP-SC-112, BP-SC-118 and BP-SC-124.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported for sample BP-SC-125 due to the amount of sample extracted (0.2142 grams, compared to the nominal amount of 5 grams).

1.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

2.0 SEMIVOLATILE ORGANIC COMPOUNDS

The samples were analyzed for SVOCs per EPA Methods 3541/8270D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Blanks
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
⊗ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

2.1 Overall Assessment

The SVOC data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of

valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative noted that the %D in the CCV in batch 244525 was above the method specified acceptance criteria for pentachlorophenol, with a low bias (30.8%D). Since the %D was within the validation specified acceptance criteria, no qualifications were applied to the data.

2.2 Holding Times

The holding times for the SVOC analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

2.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244339). SVOCs were not detected in the method blank above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

One or both of the recoveries of the following compounds were high and outside the laboratory specified acceptance criteria: Acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[g,h,i]perylene, dibenz(a,h)anthracene, dibenzofuran, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene. Since these compounds were not detected in sample BP-SC-123, no qualifications were applied to the data.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery results were within the laboratory specified acceptance criteria.

2.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria, with the following exceptions.

The terphenyl-d14 recoveries in samples BP-SC-111, BP-SC-127, BP-SC-136 and the MS using sample BP-SC-123 were high and outside the laboratory specified acceptance criteria. Since the other five SVOC surrogates in these samples were acceptable and based on professional and technical judgment, no qualifications were applied to the data.

2.7 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for SVOCs. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115, with the following exceptions.

Fluoranthene and phenanthrene were detected in the field duplicate sample at estimated concentrations greater than RLs; these two compounds were not detected in the original sample. Since the concentrations in the field duplicate were less than five times the RL (6.9 mg/kg) and the differences (between the concentrations and the nondetect results at the MDL) were greater than two times the RL and based on professional and technical judgment, the fluoranthene and phenanthrene concentrations in the field duplicate sample were J qualified as estimated and the nondetect results in sample BP-SC-115 were UJ qualified as estimated less than the MDLs.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Difference (mg/kg)	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BP-SC-115	Fluoranthene	1.8	U	14	1.8	UJ	7
DUP-2	Fluoranthene	14	NA		14	J	7
BP-SC-115	Phenanthrene	1.9	U	20	1.9	UJ	7
DUP-2	Phenanthrene	20	NA		20	J	7

mg/kg-milligram per kilogram
U- not detected at the MDL
NA-not applicable

2.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

2.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not add to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

3.0 ORGANOCHLORINE PESTICIDES

The samples were analyzed for organochlorine pesticides per EPA Methods 3541/8081B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

3.1 Overall Assessment

The organochlorine pesticides data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative noted the following issue with the CCV standard in batch 244390: The %D on gas chromatography (GC) column MR-1 was above the method specified acceptance criteria for endrin, with a low bias. Since the results for endrin were reported from the other GC column which had an acceptable result, no qualifications were applied to the data.

3.2 Holding Times

The holding times for the organochlorine pesticide analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244340). The organochlorine pesticides were not detected in the method blank above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

3.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

3.7 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for organochlorine pesticides. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

3.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

4.0 PCB

The samples were analyzed for PCBs per EPA Methods 3541/8082A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

4.1 Overall Assessment

The PCB (Aroclor) data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for the project is 100%.

The narrative noted the following issue with the CCV standard in batch 244397: The %D for one peak in the PCB 1016 CCV on GC column RTX-CLP-1 was above the method specified acceptance criteria, with a high bias. Since the average %D for PCB 1016 within the method specified acceptance criteria and PCB 1016 was not detected in the associated samples, no qualifications were applied to the data.

4.2 Holding Times

The holding times for the PCB analysis of a solid sample are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244340). PCBs were not detected in the method blank above the MDLs.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

4.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

4.7 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for PCBs. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

4.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

4.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

5.0 SILVEX

The samples were analyzed for chlorinated herbicide silvex (2,4,5-TP) per EPA Method 8151A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

5.1 Overall Assessment

The silvex data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

5.2 Holding Times

The holding times for the silvex analysis of a solid are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

5.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 244037). Silvex was not detected in the method blank above the MDL.

5.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria.

5.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

5.6 Surrogate

The surrogate recoveries were within the laboratory specified acceptance criteria.

5.7 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for silvex. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

5.8 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

5.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

6.0 METALS

The samples were analyzed for metals per EPA Methods 3050B/6010C (Mercury evaluated separately in Section 7.0, below).

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Time
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Field Duplicate
✓ Sensitivity
⊗ Electronic Data Deliverable Review

6.1 Overall Assessment

The metals data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

6.2 Holding Time

The holding time for metals analysis of a solid is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

6.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 243761). Metals were not detected in the method blank above the MDLs.

6.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exception.

The recoveries of manganese were flagged with '4', indicating that the recovery limits did not apply since the sample concentration was greater than four times the matrix spike concentration. No qualifications were applied to the manganese data.

6.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery results were within the laboratory specified acceptance criteria.

6.6 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for metals. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

6.7 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

6.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

7.0 MERCURY

The samples were analyzed for mercury per EPA Method 7471B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ⊗ Electronic Data Deliverable Review

7.1 Overall Assessment

The mercury data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

7.2 Holding Time

The holding time for the mercury analysis of a solid is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

7.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 243713). Mercury was not detected in the method blank above the MDL.

7.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-123. The recovery and RPD results were within the laboratory specified acceptance criteria.

7.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was analyzed. The recovery result was within the laboratory specified acceptance criteria.

7.6 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for mercury. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

7.7 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

7.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

8.0 CYANIDE

The samples were analyzed for cyanide by EPA Methods 9010C/9014.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Time
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Field Duplicate

✓ Sensitivity
⊗ Electronic Data Deliverable Review

8.1 Overall Assessment

The cyanide data reported in this package are considered to be usable for meeting project objectives, with the following exception. The nondetect cyanide result in sample BP-SC-135 was R qualified as rejected due to no recoveries (0%) in the MS/MSD pair using sample BP-SC-135. Therefore, the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 88.9%

8.2 Holding Time

The holding time for the cyanide analysis of a solid sample is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

8.3 Method Blanks

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 243597 and 243864). Cyanide was not detected in the method blanks above the MDL.

8.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two sample set specific MS/MSD pairs were reported, using samples BP-SC-123 and BP-SC-135. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exception.

There were no cyanide recoveries (0%) in the MS/MSD pair using sample BP-SC-135. Therefore, the nondetect cyanide result in sample BP-SC-135 was R qualified as rejected.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BP-SC-135	Cyanide, Total	0.27	U,F1	0.27	R	4

mg/kg-milligram per kilogram
U- not detected at the MDL
F1-laboratory flag indicating the MS and/or MSD recovery is outside acceptance limits

8.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Six LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

8.6 Field Duplicate

Four field duplicate samples were collected with the sample set; field duplicate sample DUP 2 was analyzed for cyanide. Acceptable precision (RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL) was demonstrated between the field duplicate and the original sample, BP-SC-115.

8.7 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

8.8 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. The sample date and time were added to the sample IDs in the EDD and were not added to the sample IDs in the laboratory report. No other discrepancies were identified between the level II report and the EDD.

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ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

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: Restricted Residential Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 10,000

SECTION 2 – MATERIAL OTHER THAN SOIL

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

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

Is this virgin material from a permitted mine or quarry? Choose an item

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

SECTION 3 - SAMPLING

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

Samples were collected from the No. 4 pile at Brewer's Pit (see attached map). 25 discrete samples were collected and analyzed for VOCs. 11 composite samples were collected and analyzed for inorganics, SVOCs, PCBs and pesticides.

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):

See attached table of sampling results. No constituents were detected above allowable levels for Restricted Residential use presented in DER-10, Appendix 5.

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:

Edger Enterprises

Location where fill was obtained:

Brewer's Pit located in Horseheads NY

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

NYSDEC Facility ID 8-0734-00150

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 Reports
Data Validation Reports

The information provided on this form is accurate and complete.

Signature

4 June 2018

Date

Aron Krasnopoler

Print Name

Beech and Bonaparte, P.C.

Firm

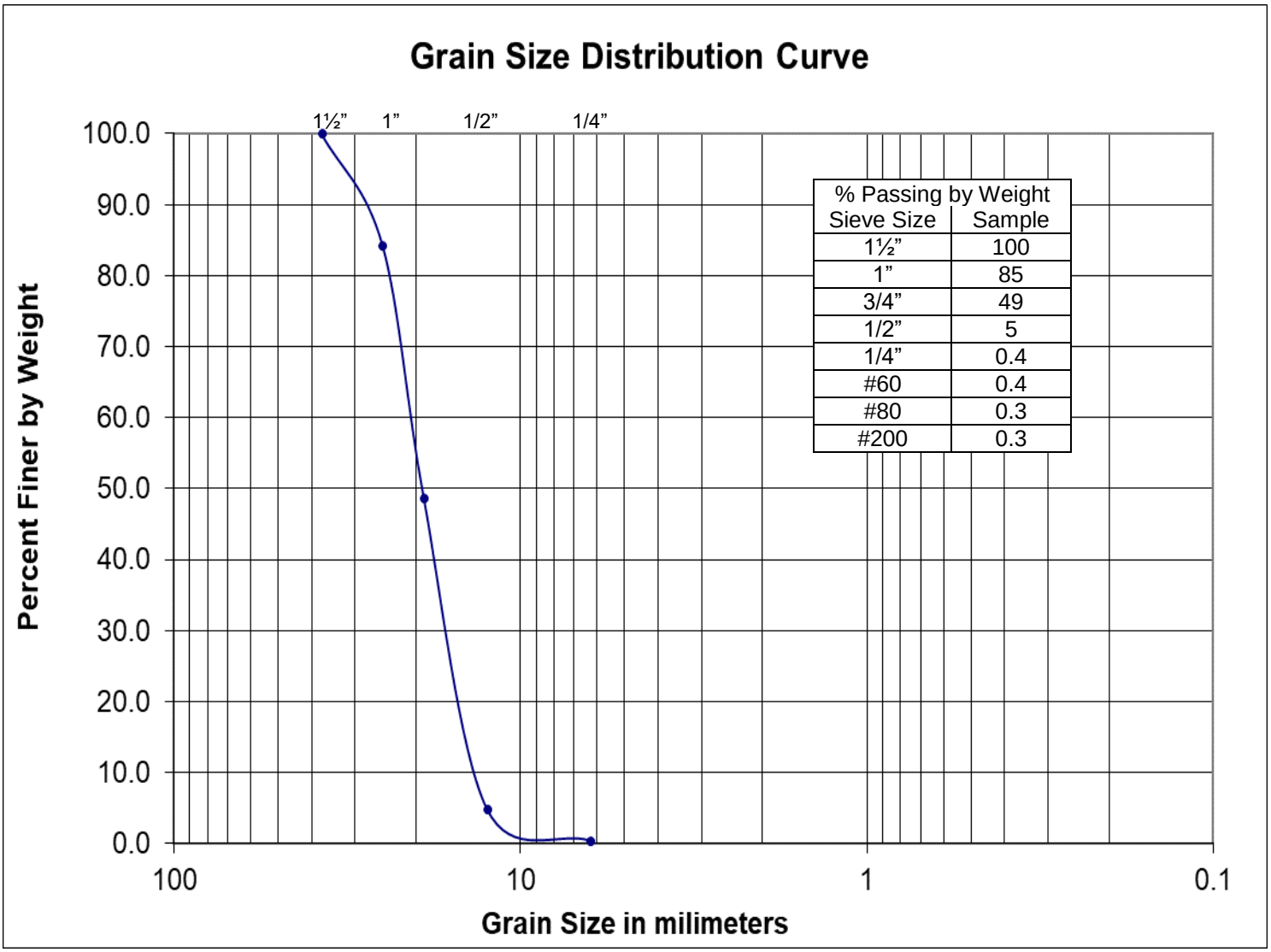
CME Associates, Inc.

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Horseheads, New York 14845
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(607) 739-4085 (Fax)

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LABORATORY TEST REPORT

CLIENT: Edger Enterprises, Inc. **PROJECT:** 2018 Material Testing, Brewer Pit
REPORT NO.: 29969L-04**R**-0618 **SAMPLE NO.:** EL – 3292 **DATE DELIVERED:** 06/15/2018
SAMPLE LOCATION: By Client. **SAMPLE SOURCE:** Brewer Pit.
SOIL CLASSIFICATION: Crushed #1 and #2 Stone.



% Passing by Weight	
Sieve Size	Sample
1½"	100
1"	85
3/4"	49
1/2"	5
1/4"	0.4
#60	0.4
#80	0.3
#200	0.3

No grain size specifications were provided for this material.

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: Restricted Residential Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 10,000

SECTION 2 – MATERIAL OTHER THAN SOIL

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

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

Is this virgin material from a permitted mine or quarry? Choose an item

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

SECTION 3 - SAMPLING

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

Samples were collected from the No. 4 pile at Brewer's Pit (see attached map). 25 discrete samples were collected and analyzed for VOCs. 11 composite samples were collected and analyzed for inorganics, SVOCs, PCBs and pesticides.

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):

See attached table of sampling results. No constituents were detected above allowable levels for Restricted Residential use presented in DER-10, Appendix 5.

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:

Edger Enterprises

Location where fill was obtained:

Brewer's Pit located in Horseheads NY

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

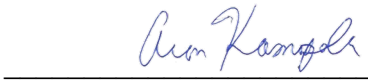
NYSDEC Facility ID 8-0734-00150

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 Reports
Data Validation Reports

The information provided on this form is accurate and complete.



Signature

4 June 2018

Date

Aron Krasnopoler

Print Name

Beech and Bonaparte, P.C.

Firm

TABLE 1

Request for Import - Summary of Analytical Results
Former Sperry Remington Site - North Portion
Elmira, New York

				Field_ID	BP-SC-209	BP-SC-210	BP-SC-211	BP-SC-212	DUP-02-08242018	BP-SC-201	BP-SC-202	BP-SC-203	BP-SC-204	BP-SC-205	BP-SC-206	BP-SC-207	BP-SC-208	DUP-01-08242018
				Sample Date	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018
				Lab Report Number	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1
				NYSDEC DER10 App 5 Constituent Levels for Imported Fill or Soil Restricted Residential Use May 2010														
Group	**Constituent**	**Units**	**EQL**															
PCBs	Arochlor 1016	mg/kg	0.0057		<0.0057U	<0.0063U	<0.0058U	<0.0057U	<0.0057U	-	-	-	-	-	-	-	-	-
	Arochlor 1221	mg/kg	0.011		<0.011U	<0.012U	<0.012U	<0.011U	<0.011U	-	-	-	-	-	-	-	-	-
	Arochlor 1232	mg/kg	0.01		<0.01U	<0.011U	<0.011U	<0.01U	<0.01U	-	-	-	-	-	-	-	-	-
	Arochlor 1242	mg/kg	0.01		<0.01U	<0.012U	<0.011U	<0.01U	<0.011U	-	-	-	-	-	-	-	-	-
	Arochlor 1248	mg/kg	0.014		<0.014U	<0.015U	<0.014U	<0.014U	<0.014U	-	-	-	-	-	-	-	-	-
	Arochlor 1254	mg/kg	0.012		<0.012U	<0.013U	<0.012U	<0.012U	<0.012U	-	-	-	-	-	-	-	-	-
	Arochlor 1260	mg/kg	0.0049		<0.005U	<0.0055U	<0.0051U	<0.0049U	<0.005U	-	-	-	-	-	-	-	-	-
	Arochlor 1268	mg/kg	0.0084		<0.0085U	<0.0093U	<0.0086U	<0.0084U	<0.0085U	-	-	-	-	-	-	-	-	-
	Arochlor 1262	mg/kg	0.012		<0.012U	<0.014U	<0.012U	<0.012U	<0.012U	-	-	-	-	-	-	-	-	-
	Total PCBs	mg/kg		1	<0.0882	<0.0981	<0.0915	<0.088	<0.0892	-	-	-	-	-	-	-	-	-
SVOCs	1,4-Dioxane	mg/kg	0.011	0.1	<0.011U	<0.012U	<0.011U	<0.011U	<0.011U	-	-	-	-	-	-	-	-	-
	2-methylphenol	mg/kg	0.01	0.33	<0.01U	<0.011U	<0.01U	<0.01U	<0.01U	-	-	-	-	-	-	-	-	-
	4-methylphenol	mg/kg	0.01	0.33	<0.01U	<0.011U	<0.011U	<0.01U	<0.011U	-	-	-	-	-	-	-	-	-
	Acenaphthene	mg/kg	0.0021	98	0.012	0.012	0.0088	0.0059J	<0.0021U	-	-	-	-	-	-	-	-	-
	Acenaphthylene	mg/kg	0.0016	100	0.0045J	0.0029J	0.0026J	0.0018J	<0.0016U	-	-	-	-	-	-	-	-	-
	Anthracene	mg/kg	0.0018	100	<0.0019U	<0.0019U	<0.0019U	<0.0018U	<0.0019U	-	-	-	-	-	-	-	-	-
	Benz(a)anthracene	mg/kg	0.0013	1	<0.0014U	<0.0014U	<0.0014U	<0.0013U	<0.0014U	-	-	-	-	-	-	-	-	-
	Benzo(a) pyrene	mg/kg	0.0015	1	<0.0016U	<0.0016U	<0.0016U	<0.0015U	<0.0016U	-	-	-	-	-	-	-	-	-
	Benzo(b)fluoranthene	mg/kg	0.0017	1	<0.0018U	<0.0018U	<0.0018U	<0.0017U	<0.0018U	-	-	-	-	-	-	-	-	-
	Benzo(g,h,i)perylene	mg/kg	0.0015	100	0.0028J	<0.0016U	<0.0015U	<0.0015U	<0.0016U	-	-	-	-	-	-	-	-	-
	Benzo(k)fluoranthene	mg/kg	0.0021	1.7	<0.0021U	<0.0022U	<0.0021U	<0.0021U	<0.0022U	-	-	-	-	-	-	-	-	-
	Chrysene	mg/kg	0.0014	1	<0.0014U	<0.0015U	<0.0014U	0.0015J	0.0015J	-	-	-	-	-	-	-	-	-
	Dibenz(a,h)anthracene	mg/kg	0.0016	0.33	<0.0016U	<0.0017U	<0.0016U	<0.0016U	<0.0016U	-	-	-	-	-	-	-	-	-
	Dibenzofuran	mg/kg	0.0015	59	<0.0016U	<0.0016U	<0.0016U	<0.0015U	<0.0016U	-	-	-	-	-	-	-	-	-
	Fluoranthene	mg/kg	0.0019	100	<0.0019U	0.0021J	<0.0019U	0.0019J	0.0019J	-	-	-	-	-	-	-	-	-
	Fluorene	mg/kg	0.0014	100	0.0048J	0.0051J	0.0036J	0.0025J	<0.0014U	-	-	-	-	-	-	-	-	-
	Hexachlorobenzene	mg/kg	0.0025	1.2	<0.0026U	<0.0027U	<0.0026U	<0.0025U	<0.0026U	-	-	-	-	-	-	-	-	-
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.0014	0.5	<0.0014U	<0.0015U	<0.0014U	<0.0014U	<0.0015U	-	-	-	-	-	-	-	-	-
	Naphthalene	mg/kg	0.0071	12	0.22	0.19	0.14	0.11J	0.028J	-	-	-	-	-	-	-	-	-
	Pentachlorophenol	mg/kg	0.057	0.8	<0.057U	<0.06U	<0.057U	<0.057U	<0.058U	-	-	-	-	-	-	-	-	-
	Phenanthrene	mg/kg	0.0071	100	0.0046J	0.0084	0.0042J	0.0035J	0.0025J	-	-	-	-	-	-	-	-	-
	Phenol	mg/kg	0.011	0.33	<0.011U	<0.011U	<0.011U	<0.011U	<0.011U	-	-	-	-	-	-	-	-	-
	Pyrene	mg/kg	0.0017	100	<0.0017U	0.0025J	<0.0017U	0.0017J	<0.0017U	-	-	-	-	-	-	-	-	-
Pesticides	4,4-DDE	mg/kg	0.00035	8.9	<0.00036U	<0.00039U	<0.00036U	<0.00035U	<0.00036U	-	-	-	-	-	-	-	-	-
	a-BHC	mg/kg	0.00043	0.02	<0.00043U	<0.00047U	<0.00044U	<0.00043U	<0.00043U	-	-	-	-	-	-	-	-	-
	Aldrin	mg/kg	0.00054	0.097	<0.00054U	<0.0006U	<0.00055U	<0.00054U	<0.00055U	-	-	-	-	-	-	-	-	-
	b-BHC	mg/kg	0.00045	0.09	<0.00045U	<0.00049U	<0.00046U	<0.00045U	<0.00045U	-	-	-	-	-	-	-	-	-
	Chlordane (cis)	mg/kg	0.00044		<0.00044U	<0.00048U	<0.00045U	<0.00044U	<0.00044U	-	-	-	-	-	-	-	-	-
	d-BHC	mg/kg	0.00055	0.25	<0.00056U	<0.00061U	<0.00056U	<0.00055U	<0.00056U	-	-	-	-	-	-	-	-	-
	DDD	mg/kg	0.00047	13	<0.00047U	<0.00052U	<0.00048U	<0.00047U	<0.00047U	-	-	-	-	-	-	-	-	-
	DDT	mg/kg	0.00066	7.9	<0.00067U	0.002	<0.00068U	<0.00066U	<0.00067U	-	-	-	-	-	-	-	-	-
	Dieldrin	mg/kg	0.00044	0.1	<0.00044U	<0.00048U	<0.00045U	<0.00044U	<0.00044U	-	-	-	-	-	-	-	-	-
	Endosulfan I	mg/kg	0.00047	24	<0.00048U	<0.00052U	<0.00048U	<0.00047U	<0.00048U	-	-	-	-	-	-	-	-	-
	Endosulfan II	mg/kg	0.00038	24	<0.00039U	<0.00042U	<0.00039U	<0.00038U	<0.00039U	-	-	-	-	-	-	-	-	-
	Endosulfan sulphate	mg/kg	0.00045	24	<0.00046U	<0.0005U	<0.00046U	<0.00045U	<0.00046U	-	-	-	-	-	-	-	-	-
	Endrin	mg/kg	0.00068	0.06	<0.00068U	<0.00075U	<0.00069U	<0.00068U	<0.00069U	-	-	-	-	-	-	-	-	-
	g-BHC (Lindane)	mg/kg	0.00059	0.1	<0.0006U	<0.00066U	<0.00061U	<0.00059U	<0.0006U	-	-	-	-	-	-	-	-	-
	Heptachlor	mg/kg	0.00054	0.38	<0.00055U	<0.0006U	<0.00056U	<0.00054U	<0.00055U	-	-	-	-	-	-	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.007	3.8	<0.007U	<0.0076U	<0.0071U	<0.0071U	<0.0071U	-	-	-	-	-	-	-	-	-
Inorganics	Cyanide Total	mg/kg	0.25	27	<0.26U	<0.29U	<0.26U	<0.25U	<0.27U	-	-	-	-	-	-	-	-	-
	Arsenic	mg/kg	1	16	4.2	5.3	4.7	4.9	3.9	-	-	-	-	-	-	-	-	-
	Barium	mg/kg	21	400	36J	51	55	46	41	-	-	-	-	-	-	-	-	-
	Beryllium	mg/kg	0.41	47	0.23J	0.31J	0.28J	0.27J	0.24J	-	-	-	-	-	-	-	-	-
	Cadmium	mg/kg	0.52	4.3	0.16J	0.16J	0.15J	0.18J	0.16J	-	-	-	-	-	-	-	-	-
	Chromium (III+VI)	mg/kg	0.52	19	9.3	10	9.8	9.2	9.9	-	-	-	-	-	-	-	-	-
	Copper	mg/kg	2.6	270	29J-	28	27	26	25	-	-	-	-	-	-	-	-	-
	Lead	mg/kg	1	400	3.9	8.4	49	7	6.1	-	-	-	-	-	-	-	-	-
	Manganese	mg/kg	1.5	2000	710	340	410	470	340	-	-	-	-	-	-	-	-	-
	Nickel	mg/kg	4.1	130	17	19	18	18	17	-	-	-	-	-	-	-	-	-
	Selenium	mg/kg	0.62	4	0.78J	<0.62U	0.75J	0.87J	0.77J	-	-	-	-	-	-	-	-	-
	Silver	mg/kg	0.11	8.3	<0.12U	<0.13U	<0.11U	<0.11U	<0.11U	-	-	-	-	-	-	-	-	-
	Zinc	mg/kg	2.1	2480	58J-	77	68	71	63	-	-	-	-	-	-	-	-	-
	Mercury	mg/kg	0.028	0.73	0.01J	0.0087J	0.011J	0.012J	0.011J	-	-	-	-	-	-	-	-	-

TABLE 1

Request for Import - Summary of Analytical Results
Former Sperry Remington Site - North Portion
Elmira, New York

				Field_ID	BP-SC-209	BP-SC-210	BP-SC-211	BP-SC-212	DUP-02-08242018	BP-SC-201	BP-SC-202	BP-SC-203	BP-SC-204	BP-SC-205	BP-SC-206	BP-SC-207	BP-SC-208	DUP-01-08242018
				Sample Date	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018	8/24/2018
				Lab Report Number	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1	180-81262-1
				NYSDEC DER10 App 5 Constituent Levels for Imported Fill or Soil Restricted Residential Use May 2010														
Group	**Constituent**	**Units**	**EQL**															
VOCs	1,1,1-trichloroethane	mg/kg	0.0026	0.68	-	-	-	-	-	<0.0028U	<0.0028U	<0.0028U	<0.0029U	<0.0027U	<0.0028U	<0.0027U	<0.0028U	<0.0026U
	1,1-dichloroethane	mg/kg	0.0019	0.27	-	-	-	-	-	<0.002U	<0.002U	<0.002U	<0.0021U	<0.0019U	<0.002U	<0.002U	<0.002U	<0.0019U
	1,1-dichloroethene	mg/kg	0.003	0.33	-	-	-	-	-	<0.0031U	<0.0031U	<0.0032U	<0.0033U	<0.003U	<0.0031U	<0.0031U	<0.0032U	<0.003U
	1,2,4-trimethylbenzene	mg/kg	0.0014	3.6	-	-	-	-	-	<0.0015U	<0.0015U	<0.0015U	<0.0016U	<0.0014U	<0.0015U	<0.0015U	<0.0015U	<0.0014U
	1,2-dichlorobenzene	mg/kg	0.0042	1.1	-	-	-	-	-	<0.0044U	<0.0044U	<0.0045U	<0.0047U	<0.0043U	<0.0044U	<0.0044U	<0.0045U	<0.0042U
	1,2-dichloroethane	mg/kg	0.0015	0.02	-	-	-	-	-	<0.0016U	<0.0016U	<0.0016U	<0.0017U	<0.0015U	<0.0016U	<0.0016U	<0.0016U	<0.0015U
	1,3,5-trimethylbenzene	mg/kg	0.0018	8.4	-	-	-	-	-	<0.0019U	<0.0019U	<0.0019U	<0.002U	<0.0018U	<0.0019U	<0.0019U	<0.0019U	<0.0018U
	1,3-dichlorobenzene	mg/kg	0.0017	2.4	-	-	-	-	-	<0.0018U	<0.0017U	<0.0018U	<0.0019U	<0.0017U	<0.0018U	<0.0017U	<0.0018U	<0.0017U
	1,4-dichlorobenzene	mg/kg	0.0011	1.8	-	-	-	-	-	<0.0011U	<0.0011U	<0.0012U	<0.0012U	<0.0011U	<0.0011U	<0.0011U	<0.0012U	<0.0011U
	1,4-Dioxane	mg/kg	0.039	0.1	-	-	-	-	-	<0.04U	<0.04U	<0.041U	<0.043U	<0.039U	<0.04U	<0.04U	<0.041U	<0.039U
	Methyl Ethyl Ketone	mg/kg	0.0031	0.12	-	-	-	-	-	<0.0032U	<0.0032U	<0.0033U	<0.0034U	<0.0031U	<0.0032U	<0.0032U	<0.0033U	<0.0031U
	Acetone	mg/kg	0.0035	0.05	-	-	-	-	-	<0.0035U	<0.0035U	<0.0036U	<0.0037U	0.013J	0.014J	0.0046J	0.022J	0.0034J
	Benzene	mg/kg	0.0021	0.06	-	-	-	-	-	<0.0022U	<0.0022U	<0.0022U	<0.0023U	<0.0021U	<0.0022U	<0.0021U	<0.0022U	<0.0021U
	Carbon tetrachloride	mg/kg	0.0035	0.76	-	-	-	-	-	<0.0037U	<0.0036U	<0.0037U	<0.0039U	<0.0035U	<0.0037U	<0.0036U	<0.0037U	<0.0035U
	Chlorobenzene	mg/kg	0.0017	1.1	-	-	-	-	-	<0.0017U	<0.0017U	<0.0018U	<0.0018U	<0.0017U	<0.0017U	<0.0017U	<0.0018U	<0.0017U
	Chloroform	mg/kg	0.0022	0.37	-	-	-	-	-	<0.0023U	<0.0023U	<0.0024U	<0.0025U	<0.0022U	<0.0023U	<0.0023U	<0.0024U	<0.0022U
	cis-1,2-dichloroethene	mg/kg	0.0017	0.25	-	-	-	-	-	<0.0017U	<0.0017U	<0.0018U	<0.0018U	<0.0017U	<0.0017U	<0.0017U	<0.0018U	<0.0017U
	Dichloromethane	mg/kg	0.0025	0.05	-	-	-	-	-	<0.0026U	<0.0026U	<0.0027U	<0.0028U	<0.0025U	<0.0026U	<0.0026U	<0.0027U	<0.0025U
	Ethylbenzene	mg/kg	0.0023	1	-	-	-	-	-	<0.0024U	<0.0024U	<0.0024U	<0.0025U	<0.0023U	<0.0024U	<0.0024U	<0.0024U	<0.0023U
	Methyl-tert-butyl ether	mg/kg	0.0039	0.93	-	-	-	-	-	<0.0041U	<0.004U	<0.0042U	<0.0043U	<0.0039U	<0.0041U	<0.004U	<0.0042U	<0.0039U
	n-butylbenzene	mg/kg	0.004	12	-	-	-	-	-	<0.0042U	<0.0042U	<0.0043U	<0.0044U	<0.004U	<0.0042U	<0.0042U	<0.0043U	<0.004U
	n-propylbenzene	mg/kg	0.0022	3.9	-	-	-	-	-	<0.0023U	<0.0023U	<0.0024U	<0.0025U	<0.0022U	<0.0023U	<0.0023U	<0.0024U	<0.0022U
	sec-butylbenzene	mg/kg	0.0026	11	-	-	-	-	-	<0.0027U	<0.0027U	<0.0028U	<0.0028U	<0.0026U	<0.0027U	<0.0027U	<0.0028U	<0.0026U
	Trichloroethene	mg/kg	0.0016	0.47	-	-	-	-	-	<0.0017U	<0.0016U	<0.0017U	<0.0018U	<0.0016U	<0.0017U	<0.0016U	<0.0017U	<0.0016U
	tert-butylbenzene	mg/kg	0.0019	5.9	-	-	-	-	-	<0.002U	<0.002U	<0.0021U	<0.0021U	<0.0019U	<0.002U	<0.002U	<0.0021U	<0.0019U
	Tetrachloroethene	mg/kg	0.0021	1.3	-	-	-	-	-	<0.0022U	<0.0022U	<0.0023U	<0.0023U	<0.0021U	<0.0022U	0.0055U	0.0057U	0.0053U
	Toluene	mg/kg	0.0018	0.7	-	-	-	-	-	<0.0019U	<0.0018U	<0.0019U	<0.002U	<0.0018U	<0.0019U	<0.0018U	<0.0019U	<0.0018U
	trans-1,2-dichloroethene	mg/kg	0.0027	0.19	-	-	-	-	-	<0.0028U	<0.0028U	<0.0029U	<0.003U	<0.0027U	<0.0028U	<0.0028U	<0.0029U	<0.0027U
	Vinyl chloride	mg/kg	0.0039	0.02	-	-	-	-	-	<0.0041U	<0.004U	<0.0041U	<0.0043U	<0.0039U	<0.004U	<0.004U	<0.0041U	<0.0039U
	Xylene Total	mg/kg	0.0045	1.6	-	-	-	-	-	<0.0048U	<0.0047U	<0.0049U	<0.005U	<0.0046U	<0.0047U	<0.0047U	<0.0049U	<0.0045U

DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
J-	The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-81262-1
Client Project/Site: Former Sperry Remington Site-Brewers Pit

For:
Geosyntec Consultants, Inc.
10211 Wincopin Circle
4'th Floor
Columbia, Maryland 21044

Attn: Mr. Aron Krasnopoler

Authorized for release by:
9/12/2018 2:49:25 PM

David Dunlap, Senior Project Manager
(412)963-2432
david.dunlap@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

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Job ID: 180-81262-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-81262-1

Receipt
The samples were received on 8/25/2018 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 3.8º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255184 was above criteria for the following analyte: tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255184 was below criteria for the following analytes: acetone and 2-butanone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255317 was below criteria for the following analyte: acetone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255182 was below criteria for the following analytes: 1,4-dioxane, 2-butanone, and n-butylbenzene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 180-255182 recovered slightly below the control limits for the following analytes: sec-butylbenzene and toluene. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the associated samples, the results were reported.

Method(s) 8270D: The matrix spike/matrix spike duplicate (MS/MSD) of sample BP-SC-201 (180-81262-1) had the recoveries for acetone above the control limits. The RPD between the spikes and the recovery of the laboratory control sample were within the control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: The continuing calibration verification (CCV) analyzed in batch 180-255343 was below criteria for 4,4'-DDT on column MR-1. The associated sample results for 4,4'-DDT were reported from column MR-2 which met criteria.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-255305 (CCV 180-255305/4) was above criteria for 2 peaks for aroclor 1248 on column RTX-CLP1. As the CCV was high and aroclor 1248 was not detected in the associated samples, the results were reported.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-255305 (CCVIS 180-255305/5) was above criteria for 1 peak for aroclor 1016 on column RTX-CLP1. As the CCV was high and aroclor 1016 was not detected in the associated samples, the results were reported.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-255305 (CCVIS 180-255305/5) was above criteria for 1 peak for aroclor 1260 on column RTX-CLP1. As the CCV was high and aroclor 1260 was not detected in the associated samples, the results were reported.

Job ID: 180-81262-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The matrix spike/matrix spike duplicate (MS/MSD) of sample BP-SC-209 (180-81262-9) had the recoveries of barium, copper, and/or zinc outside of the control limits. The RPD between the spikes was above the control limits for barium. The recoveries of the laboratory control sample were within the control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 180-81262-1
Project/Site: Former Sperry Remington Site-Brewers Pit

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11182	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
EPA 8270D LL	3541	Solid	1,4-Dioxane

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-81262-1	BP-SC-201	Solid	08/24/18 13:00	08/25/18 09:25
180-81262-2	BP-SC-202	Solid	08/24/18 13:05	08/25/18 09:25
180-81262-3	BP-SC-203	Solid	08/24/18 13:10	08/25/18 09:25
180-81262-4	BP-SC-204	Solid	08/24/18 13:15	08/25/18 09:25
180-81262-5	BP-SC-205	Solid	08/24/18 13:20	08/25/18 09:25
180-81262-6	BP-SC-206	Solid	08/24/18 13:25	08/25/18 09:25
180-81262-7	BP-SC-207	Solid	08/24/18 13:30	08/25/18 09:25
180-81262-8	BP-SC-208	Solid	08/24/18 13:35	08/25/18 09:25
180-81262-9	BP-SC-209	Solid	08/24/18 13:55	08/25/18 09:25
180-81262-10	BP-SC-210	Solid	08/24/18 14:00	08/25/18 09:25
180-81262-11	BP-SC-211	Solid	08/24/18 14:10	08/25/18 09:25
180-81262-12	BP-SC-212	Solid	08/24/18 14:20	08/25/18 09:25
180-81262-13	DUP-01-08242018	Solid	08/24/18 00:00	08/25/18 09:25
180-81262-14	DUP-02-08242018	Solid	08/24/18 00:00	08/25/18 09:25
180-81262-15	TRIP BLANK TB-16	Water	08/24/18 00:00	08/25/18 09:25

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 8151A	Herbicides (GC)	SW846	TAL PIT
EPA 6010C	Metals (ICP)	SW846	TAL PIT
EPA 7471B	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
5030C	Purge and Trap	SW846	TAL PIT
5035	Closed System Purge and Trap	SW846	TAL PIT
7471B	Preparation, Mercury	SW846	TAL PIT
8151A	Extraction (Herbicides)	SW846	TAL PIT
9010C	Cyanide, Distillation	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-201
Date Collected: 08/24/18 13:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-201
Date Collected: 08/24/18 13:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-1
Matrix: Solid
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0471 g	5 mL	255328	08/29/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255317	08/29/18 11:37	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-202
Date Collected: 08/24/18 13:05
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-202
Date Collected: 08/24/18 13:05
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-2
Matrix: Solid
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0887 g	5 mL	255328	08/29/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255317	08/29/18 13:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-203
Date Collected: 08/24/18 13:10
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-203
Date Collected: 08/24/18 13:10
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-3
Matrix: Solid
Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.025 g	5 mL	255328	08/29/18 06:00	KLG	TAL PIT

Client Sample ID: BP-SC-203 — Lab Sample ID: 180-81262-3

Date Collected: 08/24/18 13:10 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 93.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255317	08/29/18 13:57	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-204 — Lab Sample ID: 180-81262-4

Date Collected: 08/24/18 13:15 — **Matrix: Solid**
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-204 — Lab Sample ID: 180-81262-4

Date Collected: 08/24/18 13:15 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 94.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.7489 g	5 mL	255328	08/29/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255317	08/29/18 14:21	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-205 — Lab Sample ID: 180-81262-5

Date Collected: 08/24/18 13:20 — **Matrix: Solid**
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-205 — Lab Sample ID: 180-81262-5

Date Collected: 08/24/18 13:20 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 94.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2652 g	5 mL	255328	08/29/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255317	08/29/18 14:44	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-206 — Lab Sample ID: 180-81262-6

Date Collected: 08/24/18 13:25 — **Matrix: Solid**
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-206
Date Collected: 08/24/18 13:25
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-206
Date Collected: 08/24/18 13:25
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-6
Matrix: Solid
Percent Solids: 93.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2046 g	5 mL	255193	08/28/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255184	08/28/18 14:35	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-207
Date Collected: 08/24/18 13:30
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-207
Date Collected: 08/24/18 13:30
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-7
Matrix: Solid
Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9661 g	5 mL	255193	08/28/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255184	08/28/18 16:56	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-208
Date Collected: 08/24/18 13:35
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-208
Date Collected: 08/24/18 13:35
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-8
Matrix: Solid
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1746 g	5 mL	255193	08/28/18 06:00	KLG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-208

Date Collected: 08/24/18 13:35
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-8

Matrix: Solid
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255184	08/28/18 16:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BP-SC-209

Date Collected: 08/24/18 13:55
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-209

Date Collected: 08/24/18 13:55
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-9

Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	255161	08/27/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1			255373	08/29/18 22:13	VVP	TAL PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.4 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			255343	08/29/18 17:29	JMO	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.4 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	255297	08/29/18 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	255298	08/29/18 05:14	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			255305	08/29/18 12:01	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.2 g	40.0 mL	256133	09/06/18 11:30	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/12/18 06:45	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.98 g	100 mL	255157	08/27/18 15:05	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			255307	08/28/18 13:43	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.67 g	100 mL	255103	08/27/18 10:24	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			255242	08/28/18 11:34	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.14 g	50 mL	255350	08/29/18 10:47	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			255415	08/29/18 14:37	JAS	TAL PIT
	Instrument ID: SEAL2									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-210

Date Collected: 08/24/18 14:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-210

Date Collected: 08/24/18 14:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-10

Matrix: Solid
Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.5 g	0.5 mL	255161	08/27/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1			255373	08/29/18 22:42	VVP	TAL PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.1 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			255343	08/29/18 18:15	JMO	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	255297	08/29/18 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	255298	08/29/18 05:14	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			255305	08/29/18 12:57	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.1 g	40.0 mL	256133	09/06/18 11:30	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/12/18 07:08	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.96 g	100 mL	255157	08/27/18 15:05	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			255307	08/28/18 14:09	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.63 g	100 mL	255103	08/27/18 10:24	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			255242	08/28/18 11:35	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.08 g	50 mL	255350	08/29/18 10:47	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			255415	08/29/18 14:42	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-211

Date Collected: 08/24/18 14:10
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-211

Date Collected: 08/24/18 14:10
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-11

Matrix: Solid
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	255161	08/27/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1			255373	08/29/18 23:11	VVP	TAL PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.1 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			255343	08/29/18 18:31	JMO	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	255297	08/29/18 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	255298	08/29/18 05:14	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			255305	08/29/18 13:16	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256133	09/06/18 11:30	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/12/18 07:31	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.04 g	100 mL	255157	08/27/18 15:05	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			255307	08/28/18 14:14	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.62 g	100 mL	255103	08/27/18 10:24	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			255242	08/28/18 11:36	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.14 g	50 mL	255350	08/29/18 10:47	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			255415	08/29/18 14:43	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BP-SC-212

Date Collected: 08/24/18 14:20
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BP-SC-212

Date Collected: 08/24/18 14:20
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-12

Matrix: Solid
Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	0.5 mL	255161	08/27/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1			255373	08/29/18 23:40	VVP	TAL PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.5 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			255343	08/29/18 18:46	JMO	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.5 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: BP-SC-212

Lab Sample ID: 180-81262-12
Date Collected: 08/24/18 14:20
Matrix: Solid
Date Received: 08/25/18 09:25
Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Cleanup	3665A			2 mL	2 mL	255297	08/29/18 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	255298	08/29/18 05:14	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			255305	08/29/18 13:35	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256133	09/06/18 11:30	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/12/18 07:55	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.01 g	100 mL	255157	08/27/18 15:05	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			255307	08/28/18 14:19	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.77 g	100 mL	255103	08/27/18 10:24	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			255242	08/28/18 11:37	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.15 g	50 mL	255350	08/29/18 10:47	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			255415	08/29/18 14:45	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: DUP-01-08242018

Lab Sample ID: 180-81262-13
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01-08242018

Lab Sample ID: 180-81262-13
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:25
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3521 g	5 mL	255193	08/28/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255184	08/28/18 16:10	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: DUP-02-08242018

Lab Sample ID: 180-81262-14
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255094	08/27/18 09:42	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: DUP-02-08242018

Lab Sample ID: 180-81262-14
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:25
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	255161	08/27/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1			255373	08/30/18 00:10	VVP	TAL PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.3 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			255343	08/29/18 19:02	JMO	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.3 g	20.0 mL	255160	08/27/18 16:18	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	255297	08/29/18 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	255298	08/29/18 05:14	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			255305	08/29/18 13:53	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.1 g	40.0 mL	256133	09/06/18 11:30	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/12/18 08:16	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.04 g	100 mL	255157	08/27/18 15:05	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			255307	08/28/18 14:25	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.72 g	100 mL	255103	08/27/18 10:24	RJR	TAL PIT
Total/NA	Analysis	EPA 7471B		1			255242	08/28/18 11:40	RJR	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.10 g	50 mL	255350	08/29/18 10:47	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			255415	08/29/18 14:47	JAS	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: TRIP BLANK TB-16

Lab Sample ID: 180-81262-15
Date Collected: 08/24/18 00:00
Matrix: Water
Date Received: 08/25/18 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255182	08/28/18 17:47	PJJ	TAL PIT
	Instrument ID: CHHP10									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Cleanup

JMO = John Oravec

Batch Type: Prep

CBY = Charles Yushinski

JAS = Joshua Schmidt

KLG = Kathy Gordon

NAM = Nicole Marfisi

RJR = Ron Rosenbaum

SAC = Shawn Clemente

Batch Type: Analysis

AVS = Abbey Smith

JAS = Joshua Schmidt

JBF = Joshua Fritsch

JMO = John Oravec

KLG = Kathy Gordon

PJJ = Patrick Journet

RJG = Rob Good

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

Client Sample ID: BP-SC-201

Date Collected: 08/24/18 13:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-1
Matrix: Solid
Percent Solids: 94.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1	0.022	0.0035	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Benzene	ND		0.0055	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
2-Butanone (MEK)	ND		0.0055	0.0032	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Carbon tetrachloride	ND		0.0055	0.0037	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Chlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Chloroform	ND		0.0055	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,2-Dichlorobenzene	ND		0.0055	0.0044	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,3-Dichlorobenzene	ND		0.0055	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,4-Dichlorobenzene	ND		0.0055	0.0011	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,1-Dichloroethane	ND		0.0055	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,1-Dichloroethene	ND		0.0055	0.0031	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,4-Dioxane	ND		1.1	0.040	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Ethylbenzene	ND		0.0055	0.0024	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Methylene Chloride	ND		0.0055	0.0026	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Methyl tert-butyl ether	ND		0.0055	0.0041	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
n-Butylbenzene	ND		0.0055	0.0042	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
N-Propylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
tert-Butylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Toluene	ND		0.0055	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
trans-1,2-Dichloroethene	ND		0.0055	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,1,1-Trichloroethane	ND		0.0055	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Trichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0015	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Vinyl chloride	ND		0.0055	0.0041	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1
Xylenes, Total	ND		0.011	0.0048	mg/Kg	☼	08/29/18 06:00	08/29/18 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 110*	*08/29/18 06:00*	*08/29/18 11:37*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*	*08/29/18 06:00*	*08/29/18 11:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*69 - 110*	*08/29/18 06:00*	*08/29/18 11:37*	*1*
Toluene-d8 (Surr)	*94*		*83 - 124*	*08/29/18 06:00*	*08/29/18 11:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.4**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**94.6**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-202

Date Collected: 08/24/18 13:05
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-2
Matrix: Solid
Percent Solids: 94.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0035	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Benzene	ND		0.0055	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1

Client Sample ID: BP-SC-202 — Lab Sample ID: 180-81262-2

Date Collected: 08/24/18 13:05 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 94.5**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.0055	0.0032	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Carbon tetrachloride	ND		0.0055	0.0036	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Chlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Chloroform	ND		0.0055	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,2-Dichlorobenzene	ND		0.0055	0.0044	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,3-Dichlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,4-Dichlorobenzene	ND		0.0055	0.0011	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,1-Dichloroethane	ND		0.0055	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,1-Dichloroethene	ND		0.0055	0.0031	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,4-Dioxane	ND		1.1	0.040	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Ethylbenzene	ND		0.0055	0.0024	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Methylene Chloride	ND		0.0055	0.0026	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Methyl tert-butyl ether	ND		0.0055	0.0040	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
n-Butylbenzene	ND		0.0055	0.0042	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
N-Propylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
tert-Butylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Toluene	ND		0.0055	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
trans-1,2-Dichloroethene	ND		0.0055	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,1,1-Trichloroethane	ND		0.0055	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Trichloroethene	ND		0.0055	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0015	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Vinyl chloride	ND		0.0055	0.0040	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1
Xylenes, Total	ND		0.011	0.0047	mg/Kg	☼	08/29/18 06:00	08/29/18 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 110*	*08/29/18 06:00*	*08/29/18 13:33*	*1*
Dibromofluoromethane (Surr)	*87*		*74 - 114*	*08/29/18 06:00*	*08/29/18 13:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*69 - 110*	*08/29/18 06:00*	*08/29/18 13:33*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*	*08/29/18 06:00*	*08/29/18 13:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.5**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**94.5**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-203 — Lab Sample ID: 180-81262-3

Date Collected: 08/24/18 13:10 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 93.7**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.023	0.0036	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Benzene	ND		0.0056	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
2-Butanone (MEK)	ND		0.0056	0.0033	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Carbon tetrachloride	ND		0.0056	0.0037	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1

Client Sample ID: BP-SC-203

Date Collected: 08/24/18 13:10
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-3
Matrix: Solid
Percent Solids: 93.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0056	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Chloroform	ND		0.0056	0.0024	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
cis-1,2-Dichloroethene	ND		0.0056	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,2-Dichlorobenzene	ND		0.0056	0.0045	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,3-Dichlorobenzene	ND		0.0056	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,4-Dichlorobenzene	ND		0.0056	0.0012	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,1-Dichloroethane	ND		0.0056	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,2-Dichloroethane	ND		0.0056	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,1-Dichloroethene	ND		0.0056	0.0032	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,4-Dioxane	ND		1.1	0.041	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Ethylbenzene	ND		0.0056	0.0024	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Methylene Chloride	ND		0.0056	0.0027	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Methyl tert-butyl ether	ND		0.0056	0.0042	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
n-Butylbenzene	ND		0.0056	0.0043	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
N-Propylbenzene	ND		0.0056	0.0024	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
sec-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
tert-Butylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Tetrachloroethene	ND		0.0056	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Toluene	ND		0.0056	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
trans-1,2-Dichloroethene	ND		0.0056	0.0029	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,1,1-Trichloroethane	ND		0.0056	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Trichloroethene	ND		0.0056	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,2,4-Trimethylbenzene	ND		0.0056	0.0015	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
1,3,5-Trimethylbenzene	ND		0.0056	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Vinyl chloride	ND		0.0056	0.0041	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1
Xylenes, Total	ND		0.011	0.0049	mg/Kg	☼	08/29/18 06:00	08/29/18 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 110*	*08/29/18 06:00*	*08/29/18 13:57*	*1*
Dibromofluoromethane (Surr)	*90*		*74 - 114*	*08/29/18 06:00*	*08/29/18 13:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*69 - 110*	*08/29/18 06:00*	*08/29/18 13:57*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*	*08/29/18 06:00*	*08/29/18 13:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.3**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**93.7**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-204

Date Collected: 08/24/18 13:15
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-4
Matrix: Solid
Percent Solids: 94.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.023	0.0037	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Benzene	ND		0.0058	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
2-Butanone (MEK)	ND		0.0058	0.0034	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Carbon tetrachloride	ND		0.0058	0.0039	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Chlorobenzene	ND		0.0058	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Chloroform	ND		0.0058	0.0025	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1

Client Sample ID: BP-SC-204

Date Collected: 08/24/18 13:15
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-4
Matrix: Solid
Percent Solids: 94.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.0058	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,2-Dichlorobenzene	ND		0.0058	0.0047	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,3-Dichlorobenzene	ND		0.0058	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,4-Dichlorobenzene	ND		0.0058	0.0012	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,1-Dichloroethane	ND		0.0058	0.0021	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,2-Dichloroethane	ND		0.0058	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,1-Dichloroethene	ND		0.0058	0.0033	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,4-Dioxane	ND		1.2	0.043	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Ethylbenzene	ND		0.0058	0.0025	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Methylene Chloride	ND		0.0058	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Methyl tert-butyl ether	ND		0.0058	0.0043	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
n-Butylbenzene	ND		0.0058	0.0044	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
N-Propylbenzene	ND		0.0058	0.0025	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
sec-Butylbenzene	ND		0.0058	0.0028	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
tert-Butylbenzene	ND		0.0058	0.0021	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Tetrachloroethene	ND		0.0058	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Toluene	ND		0.0058	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
trans-1,2-Dichloroethene	ND		0.0058	0.0030	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,1,1-Trichloroethane	ND		0.0058	0.0029	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Trichloroethene	ND		0.0058	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,2,4-Trimethylbenzene	ND		0.0058	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
1,3,5-Trimethylbenzene	ND		0.0058	0.0020	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Vinyl chloride	ND		0.0058	0.0043	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1
Xylenes, Total	ND		0.012	0.0050	mg/Kg	☼	08/29/18 06:00	08/29/18 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 110*	*08/29/18 06:00*	*08/29/18 14:21*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*	*08/29/18 06:00*	*08/29/18 14:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*69 - 110*	*08/29/18 06:00*	*08/29/18 14:21*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*	*08/29/18 06:00*	*08/29/18 14:21*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.3**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**94.7**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-205

Date Collected: 08/24/18 13:20
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-5
Matrix: Solid
Percent Solids: 94.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.013**	**J**	0.021	0.0034	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Benzene	ND		0.0053	0.0021	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
2-Butanone (MEK)	ND		0.0053	0.0031	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Carbon tetrachloride	ND		0.0053	0.0035	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Chlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Chloroform	ND		0.0053	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
cis-1,2-Dichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,2-Dichlorobenzene	ND		0.0053	0.0043	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1

Client Sample ID: BP-SC-205

Date Collected: 08/24/18 13:20
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-5

Matrix: Solid
Percent Solids: 94.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,4-Dichlorobenzene	ND		0.0053	0.0011	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,1-Dichloroethane	ND		0.0053	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,1-Dichloroethene	ND		0.0053	0.0030	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,4-Dioxane	ND		1.1	0.039	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Ethylbenzene	ND		0.0053	0.0023	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Methylene Chloride	ND		0.0053	0.0025	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Methyl tert-butyl ether	ND		0.0053	0.0039	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
n-Butylbenzene	ND		0.0053	0.0040	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
N-Propylbenzene	ND		0.0053	0.0022	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
tert-Butylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Toluene	ND		0.0053	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
trans-1,2-Dichloroethene	ND		0.0053	0.0027	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,1,1-Trichloroethane	ND		0.0053	0.0027	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Trichloroethene	ND		0.0053	0.0016	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0014	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Vinyl chloride	ND		0.0053	0.0039	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1
Xylenes, Total	ND		0.011	0.0046	mg/Kg	☼	08/29/18 06:00	08/29/18 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 110*	*08/29/18 06:00*	*08/29/18 14:44*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*08/29/18 06:00*	*08/29/18 14:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*08/29/18 06:00*	*08/29/18 14:44*	*1*
Toluene-d8 (Surr)	*89*		*83 - 124*	*08/29/18 06:00*	*08/29/18 14:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.5**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**94.5**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-206

Date Collected: 08/24/18 13:25
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-6

Matrix: Solid
Percent Solids: 93.3

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.014**	**J**	0.022	0.0035	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Benzene	ND		0.0055	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
2-Butanone (MEK)	ND		0.0055	0.0032	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Carbon tetrachloride	ND		0.0055	0.0037	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Chlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Chloroform	ND		0.0055	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,2-Dichlorobenzene	ND		0.0055	0.0044	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,3-Dichlorobenzene	ND		0.0055	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,4-Dichlorobenzene	ND		0.0055	0.0011	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1

Client Sample ID: BP-SC-206

Date Collected: 08/24/18 13:25
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-6

Matrix: Solid
Percent Solids: 93.3

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.0055	0.0020	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,1-Dichloroethene	ND		0.0055	0.0031	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,4-Dioxane	ND		1.1	0.040	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Ethylbenzene	ND		0.0055	0.0024	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Methylene Chloride	ND		0.0055	0.0026	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Methyl tert-butyl ether	ND		0.0055	0.0041	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
n-Butylbenzene	ND		0.0055	0.0042	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
N-Propylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
tert-Butylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Toluene	ND		0.0055	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
trans-1,2-Dichloroethene	ND		0.0055	0.0028	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,1,1-Trichloroethane	ND		0.0055	0.0028	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Trichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0015	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Vinyl chloride	ND		0.0055	0.0040	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1
Xylenes, Total	ND		0.011	0.0047	mg/Kg	☼	08/28/18 06:00	08/28/18 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 110*	*08/28/18 06:00*	*08/28/18 14:35*	*1*
Dibromofluoromethane (Surr)	*88*		*74 - 114*	*08/28/18 06:00*	*08/28/18 14:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*69 - 110*	*08/28/18 06:00*	*08/28/18 14:35*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*	*08/28/18 06:00*	*08/28/18 14:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.7**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**93.3**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-207

Date Collected: 08/24/18 13:30
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-7

Matrix: Solid
Percent Solids: 95.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0046**	**J**	0.022	0.0035	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Benzene	ND		0.0055	0.0021	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
2-Butanone (MEK)	ND		0.0055	0.0032	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Carbon tetrachloride	ND		0.0055	0.0036	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Chlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Chloroform	ND		0.0055	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,2-Dichlorobenzene	ND		0.0055	0.0044	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,3-Dichlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,4-Dichlorobenzene	ND		0.0055	0.0011	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,1-Dichloroethane	ND		0.0055	0.0020	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1

Client Sample ID: BP-SC-207

Date Collected: 08/24/18 13:30
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-7
Matrix: Solid
Percent Solids: 95.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0055	0.0031	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,4-Dioxane	ND		1.1	0.040	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Ethylbenzene	ND		0.0055	0.0024	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Methylene Chloride	ND		0.0055	0.0026	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Methyl tert-butyl ether	ND		0.0055	0.0040	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
n-Butylbenzene	ND		0.0055	0.0042	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
N-Propylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
tert-Butylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Tetrachloroethene	**0.0022**	**J B**	0.0055	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Toluene	ND		0.0055	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
trans-1,2-Dichloroethene	ND		0.0055	0.0028	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,1,1-Trichloroethane	ND		0.0055	0.0027	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Trichloroethene	ND		0.0055	0.0016	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0015	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Vinyl chloride	ND		0.0055	0.0040	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1
Xylenes, Total	ND		0.011	0.0047	mg/Kg	☼	08/28/18 06:00	08/28/18 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 110*	*08/28/18 06:00*	*08/28/18 16:56*	*1*
Dibromofluoromethane (Surr)	*88*		*74 - 114*	*08/28/18 06:00*	*08/28/18 16:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*08/28/18 06:00*	*08/28/18 16:56*	*1*
Toluene-d8 (Surr)	*91*		*83 - 124*	*08/28/18 06:00*	*08/28/18 16:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**4.2**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**95.8**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-208

Date Collected: 08/24/18 13:35
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-8
Matrix: Solid
Percent Solids: 92.3

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.022**	**J**	0.023	0.0036	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Benzene	ND		0.0057	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
2-Butanone (MEK)	ND		0.0057	0.0033	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Carbon tetrachloride	ND		0.0057	0.0037	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Chlorobenzene	ND		0.0057	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Chloroform	ND		0.0057	0.0024	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
cis-1,2-Dichloroethene	ND		0.0057	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,2-Dichlorobenzene	ND		0.0057	0.0045	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,3-Dichlorobenzene	ND		0.0057	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,4-Dichlorobenzene	ND		0.0057	0.0012	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,1-Dichloroethane	ND		0.0057	0.0020	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,2-Dichloroethane	ND		0.0057	0.0016	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,1-Dichloroethene	ND		0.0057	0.0032	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,4-Dioxane	ND		1.1	0.041	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1

Client Sample ID: BP-SC-208 — Lab Sample ID: 180-81262-8

Date Collected: 08/24/18 13:35 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 92.3**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.0057	0.0024	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Methylene Chloride	ND		0.0057	0.0027	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Methyl tert-butyl ether	ND		0.0057	0.0042	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
n-Butylbenzene	ND		0.0057	0.0043	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
N-Propylbenzene	ND		0.0057	0.0024	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
sec-Butylbenzene	ND		0.0057	0.0028	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
tert-Butylbenzene	ND		0.0057	0.0021	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Tetrachloroethene	**0.0027**	**J B**	0.0057	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Toluene	ND		0.0057	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
trans-1,2-Dichloroethene	ND		0.0057	0.0029	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,1,1-Trichloroethane	ND		0.0057	0.0028	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Trichloroethene	ND		0.0057	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,2,4-Trimethylbenzene	ND		0.0057	0.0015	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
1,3,5-Trimethylbenzene	ND		0.0057	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Vinyl chloride	ND		0.0057	0.0041	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1
Xylenes, Total	ND		0.011	0.0049	mg/Kg	☼	08/28/18 06:00	08/28/18 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 110*	*08/28/18 06:00*	*08/28/18 16:33*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*08/28/18 06:00*	*08/28/18 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*08/28/18 06:00*	*08/28/18 16:33*	*1*
Toluene-d8 (Surr)	*95*		*83 - 124*	*08/28/18 06:00*	*08/28/18 16:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.7**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**92.3**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-209 — Lab Sample ID: 180-81262-9

Date Collected: 08/24/18 13:55 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 92.6**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.012**		0.0072	0.0021	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Acenaphthylene	**0.0045**	**J**	0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Anthracene	ND		0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Benzo[a]anthracene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Benzo[a]pyrene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Benzo[b]fluoranthene	ND		0.0072	0.0018	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Benzo[g,h,i]perylene	**0.0028**	**J**	0.0072	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Benzo[k]fluoranthene	ND		0.0072	0.0021	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Chrysene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Dibenz(a,h)anthracene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Dibenzofuran	ND		0.035	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
1,4-Dioxane	ND		0.072	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Fluoranthene	ND		0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Fluorene	**0.0048**	**J**	0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Hexachlorobenzene	ND		0.0072	0.0026	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Indeno[1,2,3-cd]pyrene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1

Client Sample ID: BP-SC-209 **Lab Sample ID: 180-81262-9**
Date Collected: 08/24/18 13:55 **Matrix: Solid**
Date Received: 08/25/18 09:25 **Percent Solids: 92.6**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Naphthalene	**0.22**		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Phenanthrene	**0.0046**	**J**	0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Phenol	ND		0.035	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1
Pyrene	ND		0.0072	0.0017	mg/Kg	☼	08/27/18 17:00	08/29/18 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*39 - 105*	*08/27/18 17:00*	*08/29/18 22:13*	*1*
2-Fluorophenol (Surr)	*53*		*35 - 105*	*08/27/18 17:00*	*08/29/18 22:13*	*1*
Nitrobenzene-d5 (Surr)	*59*		*39 - 105*	*08/27/18 17:00*	*08/29/18 22:13*	*1*
Phenol-d5 (Surr)	*60*		*42 - 105*	*08/27/18 17:00*	*08/29/18 22:13*	*1*
Terphenyl-d14 (Surr)	*62*		*28 - 148*	*08/27/18 17:00*	*08/29/18 22:13*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*44 - 105*	*08/27/18 17:00*	*08/29/18 22:13*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00054	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
alpha-BHC	ND		0.0018	0.00043	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
beta-BHC	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
cis-Chlordane	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
4,4'-DDD	ND		0.0018	0.00047	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
4,4'-DDT	ND		0.0018	0.00067	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Dieldrin	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Endosulfan sulfate	ND		0.0018	0.00046	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Endrin	ND		0.0018	0.00068	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
gamma-BHC (Lindane)	ND		0.0018	0.00060	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1
Heptachlor	ND		0.0018	0.00055	mg/Kg	☼	08/27/18 16:18	08/29/18 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*40 - 150*	*08/27/18 16:18*	*08/29/18 17:29*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*40 - 150*	*08/27/18 16:18*	*08/29/18 17:29*	*1*
Tetrachloro-m-xylene	*95*		*44 - 133*	*08/27/18 16:18*	*08/29/18 17:29*	*1*
Tetrachloro-m-xylene	*94*		*44 - 133*	*08/27/18 16:18*	*08/29/18 17:29*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0057	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1221	ND		0.018	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1232	ND		0.018	0.010	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1242	ND		0.018	0.010	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1248	ND		0.018	0.014	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1254	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1260	ND		0.018	0.0050	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1
PCB-1262	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1

Client Sample ID: BP-SC-209

Date Collected: 08/24/18 13:55
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-9
Matrix: Solid
Percent Solids: 92.6

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	ND		0.018	0.0085	mg/Kg	☼	08/27/18 16:18	08/29/18 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 137*	*08/27/18 16:18*	*08/29/18 12:01*	*1*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 137*	*08/27/18 16:18*	*08/29/18 12:01*	*1*
Tetrachloro-m-xylene (Surr)	*76*		*44 - 114*	*08/27/18 16:18*	*08/29/18 12:01*	*1*
Tetrachloro-m-xylene (Surr)	*87*		*44 - 114*	*08/27/18 16:18*	*08/29/18 12:01*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0070	mg/Kg	☼	09/06/18 11:30	09/12/18 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*73*		*29 - 100*	*09/06/18 11:30*	*09/12/18 06:45*	*1*
2,4-Dichlorophenylacetic acid	*80*		*29 - 100*	*09/06/18 11:30*	*09/12/18 06:45*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**		1.1	0.43	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Barium	**36**	**F2 F1**	22	1.2	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Beryllium	**0.23**	**J**	0.44	0.025	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Cadmium	**0.16**	**J**	0.55	0.040	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Chromium	**9.3**		0.55	0.15	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Copper	**29**	**F1**	2.8	0.28	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Lead	**3.9**		1.1	0.56	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Manganese	**710**		1.7	0.18	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Nickel	**17**		4.4	0.27	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Selenium	**0.78**	**J**	1.1	0.57	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Silver	ND		0.55	0.12	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1
Zinc	**58**	**F1**	2.2	1.2	mg/Kg	☼	08/27/18 15:05	08/28/18 13:43	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.032	0.0071	mg/Kg	☼	08/27/18 10:24	08/28/18 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.4**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**92.6**		0.1	0.1	%			08/27/18 09:42	1
Cyanide, Total	ND		0.47	0.26	mg/Kg	☼	08/29/18 10:47	08/29/18 14:37	1

Client Sample ID: BP-SC-210

Date Collected: 08/24/18 14:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-10
Matrix: Solid
Percent Solids: 86.1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.012**		0.0075	0.0022	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Acenaphthylene	**0.0029**	**J**	0.0075	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Anthracene	ND		0.0075	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Benzo[a]anthracene	ND		0.0075	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1

Client Sample ID: BP-SC-210 **Lab Sample ID: 180-81262-10**
Date Collected: 08/24/18 14:00 **Matrix: Solid**
Date Received: 08/25/18 09:25 **Percent Solids: 86.1**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.0075	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Benzo[b]fluoranthene	ND		0.0075	0.0018	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Benzo[g,h,i]perylene	ND		0.0075	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Benzo[k]fluoranthene	ND		0.0075	0.0022	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Chrysene	ND		0.0075	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Dibenz(a,h)anthracene	ND		0.0075	0.0017	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Dibenzofuran	ND		0.037	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
1,4-Dioxane	ND		0.075	0.012	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Fluoranthene	**0.0021**	**J**	0.0075	0.0020	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Fluorene	**0.0051**	**J**	0.0075	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Hexachlorobenzene	ND		0.0075	0.0027	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Indeno[1,2,3-cd]pyrene	ND		0.0075	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
2-Methylphenol	ND		0.037	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Methylphenol, 3 & 4	ND		0.037	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Naphthalene	**0.19**		0.0075	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Pentachlorophenol	ND		0.19	0.060	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Phenanthrene	**0.0084**		0.0075	0.0020	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Phenol	ND		0.037	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1
Pyrene	**0.0025**	**J**	0.0075	0.0018	mg/Kg	☼	08/27/18 17:00	08/29/18 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*39 - 105*	*08/27/18 17:00*	*08/29/18 22:42*	*1*
2-Fluorophenol (Surr)	*61*		*35 - 105*	*08/27/18 17:00*	*08/29/18 22:42*	*1*
Nitrobenzene-d5 (Surr)	*67*		*39 - 105*	*08/27/18 17:00*	*08/29/18 22:42*	*1*
Phenol-d5 (Surr)	*68*		*42 - 105*	*08/27/18 17:00*	*08/29/18 22:42*	*1*
Terphenyl-d14 (Surr)	*72*		*28 - 148*	*08/27/18 17:00*	*08/29/18 22:42*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*44 - 105*	*08/27/18 17:00*	*08/29/18 22:42*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
alpha-BHC	ND		0.0020	0.00047	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
beta-BHC	ND		0.0020	0.00049	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
cis-Chlordane	ND		0.0020	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
4,4'-DDD	ND		0.0020	0.00052	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
4,4'-DDE	ND		0.0020	0.00039	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
4,4'-DDT	**0.0020**		0.0020	0.00073	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Endosulfan II	ND		0.0020	0.00042	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Endosulfan sulfate	ND		0.0020	0.00050	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Endrin	ND		0.0020	0.00075	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
gamma-BHC (Lindane)	ND		0.0020	0.00066	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	08/27/18 16:18	08/29/18 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*40 - 150*	*08/27/18 16:18*	*08/29/18 18:15*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*40 - 150*	*08/27/18 16:18*	*08/29/18 18:15*	*1*
Tetrachloro-m-xylene	*91*		*44 - 133*	*08/27/18 16:18*	*08/29/18 18:15*	*1*

Client Sample ID: BP-SC-210 **Lab Sample ID: 180-81262-10**
Date Collected: 08/24/18 14:00 **Matrix: Solid**
Date Received: 08/25/18 09:25 **Percent Solids: 86.1**

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*44 - 133*	*08/27/18 16:18*	*08/29/18 18:15*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0063	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1221	ND		0.019	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1232	ND		0.019	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1242	ND		0.019	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1262	ND		0.019	0.014	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1
PCB-1268	ND		0.019	0.0093	mg/Kg	☼	08/27/18 16:18	08/29/18 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 137*	*08/27/18 16:18*	*08/29/18 12:57*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*33 - 137*	*08/27/18 16:18*	*08/29/18 12:57*	*1*
Tetrachloro-m-xylene (Surr)	*71*		*44 - 114*	*08/27/18 16:18*	*08/29/18 12:57*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*44 - 114*	*08/27/18 16:18*	*08/29/18 12:57*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0076	mg/Kg	☼	09/06/18 11:30	09/12/18 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*50*		*29 - 100*	*09/06/18 11:30*	*09/12/18 07:08*	*1*
2,4-Dichlorophenylacetic acid	*52*		*29 - 100*	*09/06/18 11:30*	*09/12/18 07:08*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**		1.2	0.47	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Barium	**51**		24	1.3	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Beryllium	**0.31**	**J**	0.48	0.028	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Cadmium	**0.16**	**J**	0.61	0.044	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Chromium	**10**		0.61	0.16	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Copper	**28**		3.0	0.31	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Lead	**8.4**		1.2	0.62	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Manganese	**340**		1.8	0.20	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Nickel	**19**		4.8	0.30	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Selenium	ND		1.2	0.62	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Silver	ND		0.61	0.13	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1
Zinc	**77**		2.4	1.3	mg/Kg	☼	08/27/18 15:05	08/28/18 14:09	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0087**	**J**	0.037	0.0082	mg/Kg	☼	08/27/18 10:24	08/28/18 11:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.9**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**86.1**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: BP-SC-210 — Lab Sample ID: 180-81262-10

Date Collected: 08/24/18 14:00 — Matrix: Solid
Date Received: 08/25/18 09:25 — Percent Solids: 86.1

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.54	0.29	mg/Kg	☼	08/29/18 10:47	08/29/18 14:42	1

Client Sample ID: BP-SC-211 — Lab Sample ID: 180-81262-11

Date Collected: 08/24/18 14:10 — Matrix: Solid
Date Received: 08/25/18 09:25 — Percent Solids: 93.2

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0088**		0.0072	0.0021	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Acenaphthylene	**0.0026**	**J**	0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Anthracene	ND		0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Benzo[a]anthracene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Benzo[a]pyrene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Benzo[b]fluoranthene	ND		0.0072	0.0018	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Benzo[g,h,i]perylene	ND		0.0072	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Benzo[k]fluoranthene	ND		0.0072	0.0021	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Chrysene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Dibenz(a,h)anthracene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Dibenzofuran	ND		0.035	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
1,4-Dioxane	ND		0.072	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Fluoranthene	ND		0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Fluorene	**0.0036**	**J**	0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Hexachlorobenzene	ND		0.0072	0.0026	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Indeno[1,2,3-cd]pyrene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Methylphenol, 3 & 4	ND		0.035	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Naphthalene	**0.14**		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Phenanthrene	**0.0042**	**J**	0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Phenol	ND		0.035	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1
Pyrene	ND		0.0072	0.0017	mg/Kg	☼	08/27/18 17:00	08/29/18 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*39 - 105*	*08/27/18 17:00*	*08/29/18 23:11*	*1*
2-Fluorophenol (Surr)	*55*		*35 - 105*	*08/27/18 17:00*	*08/29/18 23:11*	*1*
Nitrobenzene-d5 (Surr)	*62*		*39 - 105*	*08/27/18 17:00*	*08/29/18 23:11*	*1*
Phenol-d5 (Surr)	*62*		*42 - 105*	*08/27/18 17:00*	*08/29/18 23:11*	*1*
Terphenyl-d14 (Surr)	*73*		*28 - 148*	*08/27/18 17:00*	*08/29/18 23:11*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*44 - 105*	*08/27/18 17:00*	*08/29/18 23:11*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
beta-BHC	ND		0.0018	0.00046	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
4,4'-DDD	ND		0.0018	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
4,4'-DDT	ND		0.0018	0.00068	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1

Client Sample ID: BP-SC-211 **Lab Sample ID: 180-81262-11**
Date Collected: 08/24/18 14:10 **Matrix: Solid**
Date Received: 08/25/18 09:25 **Percent Solids: 93.2**

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
Endosulfan sulfate	ND		0.0018	0.00046	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
Endrin	ND		0.0018	0.00069	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
gamma-BHC (Lindane)	ND		0.0018	0.00061	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	08/27/18 16:18	08/29/18 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*40 - 150*	*08/27/18 16:18*	*08/29/18 18:31*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*40 - 150*	*08/27/18 16:18*	*08/29/18 18:31*	*1*
Tetrachloro-m-xylene	*87*		*44 - 133*	*08/27/18 16:18*	*08/29/18 18:31*	*1*
Tetrachloro-m-xylene	*90*		*44 - 133*	*08/27/18 16:18*	*08/29/18 18:31*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0058	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1221	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1232	ND		0.018	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1242	ND		0.018	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1248	ND		0.018	0.014	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1254	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1260	ND		0.018	0.0051	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1262	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1
PCB-1268	ND		0.018	0.0086	mg/Kg	☼	08/27/18 16:18	08/29/18 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*33 - 137*	*08/27/18 16:18*	*08/29/18 13:16*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*33 - 137*	*08/27/18 16:18*	*08/29/18 13:16*	*1*
Tetrachloro-m-xylene (Surr)	*70*		*44 - 114*	*08/27/18 16:18*	*08/29/18 13:16*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*44 - 114*	*08/27/18 16:18*	*08/29/18 13:16*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0071	mg/Kg	☼	09/06/18 11:30	09/12/18 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*29*		*29 - 100*	*09/06/18 11:30*	*09/12/18 07:31*	*1*
2,4-Dichlorophenylacetic acid	*32*		*29 - 100*	*09/06/18 11:30*	*09/12/18 07:31*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.7**		1.0	0.40	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Barium	**55**		21	1.1	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Beryllium	**0.28**	**J**	0.41	0.024	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Cadmium	**0.15**	**J**	0.52	0.038	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Chromium	**9.8**		0.52	0.14	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Copper	**27**		2.6	0.26	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Lead	**49**		1.0	0.53	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Manganese	**410**		1.5	0.17	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Nickel	**18**		4.1	0.26	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1

Client Sample ID: BP-SC-211 — Lab Sample ID: 180-81262-11

Date Collected: 08/24/18 14:10 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 93.2**

Method: EPA 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	**0.75**	**J**	1.0	0.53	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Silver	ND		0.52	0.11	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1
Zinc	**68**		2.1	1.1	mg/Kg	☼	08/27/18 15:05	08/28/18 14:14	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.034	0.0077	mg/Kg	☼	08/27/18 10:24	08/28/18 11:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.8**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**93.2**		0.1	0.1	%			08/27/18 09:42	1
Cyanide, Total	ND		0.47	0.26	mg/Kg	☼	08/29/18 10:47	08/29/18 14:43	1

Client Sample ID: BP-SC-212 — Lab Sample ID: 180-81262-12

Date Collected: 08/24/18 14:20 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 92.8**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0059**	**J**	0.0071	0.0020	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Acenaphthylene	**0.0018**	**J**	0.0071	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Benzo[a]anthracene	ND		0.0071	0.0013	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Benzo[a]pyrene	ND		0.0071	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Chrysene	**0.0015**	**J**	0.0071	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Dibenz(a,h)anthracene	ND		0.0071	0.0016	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Dibenzofuran	ND		0.035	0.0015	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
1,4-Dioxane	ND		0.070	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Fluoranthene	**0.0019**	**J**	0.0071	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Fluorene	**0.0025**	**J**	0.0071	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Naphthalene	**0.11**		0.0071	0.0014	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Phenanthrene	**0.0035**	**J**	0.0071	0.0019	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Phenol	ND		0.035	0.011	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1
Pyrene	**0.0017**	**J**	0.0071	0.0017	mg/Kg	☼	08/27/18 17:00	08/29/18 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*39 - 105*	*08/27/18 17:00*	*08/29/18 23:40*	*1*
2-Fluorophenol (Surr)	*59*		*35 - 105*	*08/27/18 17:00*	*08/29/18 23:40*	*1*
Nitrobenzene-d5 (Surr)	*65*		*39 - 105*	*08/27/18 17:00*	*08/29/18 23:40*	*1*
Phenol-d5 (Surr)	*64*		*42 - 105*	*08/27/18 17:00*	*08/29/18 23:40*	*1*
Terphenyl-d14 (Surr)	*68*		*28 - 148*	*08/27/18 17:00*	*08/29/18 23:40*	*1*

Client Sample ID: BP-SC-212
Date Collected: 08/24/18 14:20
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-12
Matrix: Solid
Percent Solids: 92.8

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	56		44 - 105	08/27/18 17:00	08/29/18 23:40	1

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00054	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
alpha-BHC	ND		0.0018	0.00043	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
beta-BHC	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
cis-Chlordane	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
4,4'-DDD	ND		0.0018	0.00047	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
4,4'-DDE	ND		0.0018	0.00035	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
4,4'-DDT	ND		0.0018	0.00066	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
delta-BHC	ND		0.0018	0.00055	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Dieldrin	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Endosulfan I	ND		0.0018	0.00047	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Endosulfan II	ND		0.0018	0.00038	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Endosulfan sulfate	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Endrin	ND		0.0018	0.00068	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
gamma-BHC (Lindane)	ND		0.0018	0.00059	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1
Heptachlor	ND		0.0018	0.00054	mg/Kg	☼	08/27/18 16:18	08/29/18 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	94		40 - 150	08/27/18 16:18	08/29/18 18:46	1
DCB Decachlorobiphenyl (Surr)	100		40 - 150	08/27/18 16:18	08/29/18 18:46	1
Tetrachloro-m-xylene	88		44 - 133	08/27/18 16:18	08/29/18 18:46	1
Tetrachloro-m-xylene	88		44 - 133	08/27/18 16:18	08/29/18 18:46	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0057	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1221	ND		0.017	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1232	ND		0.017	0.010	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1242	ND		0.017	0.010	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1248	ND		0.017	0.014	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1254	ND		0.017	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1260	ND		0.017	0.0049	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1262	ND		0.017	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1
PCB-1268	ND		0.017	0.0084	mg/Kg	☼	08/27/18 16:18	08/29/18 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	83		33 - 137	08/27/18 16:18	08/29/18 13:35	1
DCB Decachlorobiphenyl (Surr)	76		33 - 137	08/27/18 16:18	08/29/18 13:35	1
Tetrachloro-m-xylene (Surr)	64		44 - 114	08/27/18 16:18	08/29/18 13:35	1
Tetrachloro-m-xylene (Surr)	75		44 - 114	08/27/18 16:18	08/29/18 13:35	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.022	0.0071	mg/Kg	☼	09/06/18 11:30	09/12/18 07:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	75		29 - 100	09/06/18 11:30	09/12/18 07:55	1

Client Sample ID: BP-SC-212

Lab Sample ID: 180-81262-12
Date Collected: 08/24/18 14:20
Matrix: Solid
Date Received: 08/25/18 09:25
Percent Solids: 92.8

Method: EPA 8151A - Herbicides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	84		29 - 100	09/06/18 11:30	09/12/18 07:55	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.9**		1.1	0.42	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Barium	**46**		21	1.1	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Beryllium	**0.27**	**J**	0.43	0.024	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Cadmium	**0.18**	**J**	0.53	0.039	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Chromium	**9.2**		0.53	0.14	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Copper	**26**		2.7	0.27	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Lead	**7.0**		1.1	0.55	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Manganese	**470**		1.6	0.17	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Nickel	**18**		4.3	0.27	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Selenium	**0.87**	**J**	1.1	0.55	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Silver	ND		0.53	0.11	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1
Zinc	**71**		2.1	1.2	mg/Kg	☼	08/27/18 15:05	08/28/18 14:19	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.028	0.0062	mg/Kg	☼	08/27/18 10:24	08/28/18 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.2**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**92.8**		0.1	0.1	%			08/27/18 09:42	1
Cyanide, Total	ND		0.47	0.25	mg/Kg	☼	08/29/18 10:47	08/29/18 14:45	1

Client Sample ID: DUP-01-08242018

Lab Sample ID: 180-81262-13
Date Collected: 08/24/18 00:00
Matrix: Solid
Date Received: 08/25/18 09:25
Percent Solids: 94.1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0034**	**J**	0.021	0.0033	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Benzene	ND		0.0053	0.0021	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
2-Butanone (MEK)	ND		0.0053	0.0031	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Carbon tetrachloride	ND		0.0053	0.0035	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Chlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Chloroform	ND		0.0053	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
cis-1,2-Dichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,2-Dichlorobenzene	ND		0.0053	0.0042	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,3-Dichlorobenzene	ND		0.0053	0.0017	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,4-Dichlorobenzene	ND		0.0053	0.0011	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,1-Dichloroethane	ND		0.0053	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,1-Dichloroethene	ND		0.0053	0.0030	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,4-Dioxane	ND		1.1	0.039	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Ethylbenzene	ND		0.0053	0.0023	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Methylene Chloride	ND		0.0053	0.0025	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Methyl tert-butyl ether	ND		0.0053	0.0039	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1

Client Sample ID: DUP-01-08242018 — Lab Sample ID: 180-81262-13

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 94.1**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.0053	0.0040	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
N-Propylbenzene	ND		0.0053	0.0022	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
tert-Butylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Tetrachloroethene	**0.0032**	**J B**	0.0053	0.0021	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Toluene	ND		0.0053	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
trans-1,2-Dichloroethene	ND		0.0053	0.0027	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,1,1-Trichloroethane	ND		0.0053	0.0026	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Trichloroethene	ND		0.0053	0.0016	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0014	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Vinyl chloride	ND		0.0053	0.0039	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1
Xylenes, Total	ND		0.011	0.0045	mg/Kg	☼	08/28/18 06:00	08/28/18 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 110*	*08/28/18 06:00*	*08/28/18 16:10*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*08/28/18 06:00*	*08/28/18 16:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*69 - 110*	*08/28/18 06:00*	*08/28/18 16:10*	*1*
Toluene-d8 (Surr)	*93*		*83 - 124*	*08/28/18 06:00*	*08/28/18 16:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.9**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**94.1**		0.1	0.1	%			08/27/18 09:42	1

Client Sample ID: DUP-02-08242018 — Lab Sample ID: 180-81262-14

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 92.9**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0072	0.0021	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Acenaphthylene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Anthracene	ND		0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Benzo[a]anthracene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Benzo[a]pyrene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Benzo[b]fluoranthene	ND		0.0072	0.0018	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Benzo[g,h,i]perylene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Benzo[k]fluoranthene	ND		0.0072	0.0022	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Chrysene	**0.0015**	**J**	0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Dibenz(a,h)anthracene	ND		0.0072	0.0016	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Dibenzofuran	ND		0.036	0.0016	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
1,4-Dioxane	ND		0.072	0.011	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Fluoranthene	**0.0019**	**J**	0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Fluorene	ND		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Hexachlorobenzene	ND		0.0072	0.0026	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Indeno[1,2,3-cd]pyrene	ND		0.0072	0.0015	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
2-Methylphenol	ND		0.036	0.010	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Methylphenol, 3 & 4	ND		0.036	0.011	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Naphthalene	**0.028**		0.0072	0.0014	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1

Client Sample ID: DUP-02-08242018 **Lab Sample ID: 180-81262-14**
Date Collected: 08/24/18 00:00 **Matrix: Solid**
Date Received: 08/25/18 09:25 **Percent Solids: 92.9**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		0.18	0.058	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Phenanthrene	**0.0025**	**J**	0.0072	0.0019	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Phenol	ND		0.036	0.011	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1
Pyrene	ND		0.0072	0.0017	mg/Kg	☼	08/27/18 17:00	08/30/18 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*39 - 105*	*08/27/18 17:00*	*08/30/18 00:10*	*1*
2-Fluorophenol (Surr)	*55*		*35 - 105*	*08/27/18 17:00*	*08/30/18 00:10*	*1*
Nitrobenzene-d5 (Surr)	*63*		*39 - 105*	*08/27/18 17:00*	*08/30/18 00:10*	*1*
Phenol-d5 (Surr)	*62*		*42 - 105*	*08/27/18 17:00*	*08/30/18 00:10*	*1*
Terphenyl-d14 (Surr)	*66*		*28 - 148*	*08/27/18 17:00*	*08/30/18 00:10*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*44 - 105*	*08/27/18 17:00*	*08/30/18 00:10*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
alpha-BHC	ND		0.0018	0.00043	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
beta-BHC	ND		0.0018	0.00045	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
cis-Chlordane	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
4,4'-DDD	ND		0.0018	0.00047	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
4,4'-DDT	ND		0.0018	0.00067	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Dieldrin	ND		0.0018	0.00044	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Endosulfan sulfate	ND		0.0018	0.00046	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Endrin	ND		0.0018	0.00069	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
gamma-BHC (Lindane)	ND		0.0018	0.00060	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1
Heptachlor	ND		0.0018	0.00055	mg/Kg	☼	08/27/18 16:18	08/29/18 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*40 - 150*	*08/27/18 16:18*	*08/29/18 19:02*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*40 - 150*	*08/27/18 16:18*	*08/29/18 19:02*	*1*
Tetrachloro-m-xylene	*82*		*44 - 133*	*08/27/18 16:18*	*08/29/18 19:02*	*1*
Tetrachloro-m-xylene	*83*		*44 - 133*	*08/27/18 16:18*	*08/29/18 19:02*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.018	0.0057	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1221	ND		0.018	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1232	ND		0.018	0.010	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1242	ND		0.018	0.011	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1248	ND		0.018	0.014	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1254	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1260	ND		0.018	0.0050	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1262	ND		0.018	0.012	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1
PCB-1268	ND		0.018	0.0085	mg/Kg	☼	08/27/18 16:18	08/29/18 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 137*	*08/27/18 16:18*	*08/29/18 13:53*	*1*

Client Sample ID: DUP-02-08242018 — Lab Sample ID: 180-81262-14

Date Collected: 08/24/18 00:00 — **Matrix: Solid**
Date Received: 08/25/18 09:25 — **Percent Solids: 92.9**

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*33 - 137*	*08/27/18 16:18*	*08/29/18 13:53*	*1*
Tetrachloro-m-xylene (Surr)	*68*		*44 - 114*	*08/27/18 16:18*	*08/29/18 13:53*	*1*
Tetrachloro-m-xylene (Surr)	*77*		*44 - 114*	*08/27/18 16:18*	*08/29/18 13:53*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.0071	mg/Kg	☼	09/06/18 11:30	09/12/18 08:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*54*		*29 - 100*	*09/06/18 11:30*	*09/12/18 08:16*	*1*
2,4-Dichlorophenylacetic acid	*60*		*29 - 100*	*09/06/18 11:30*	*09/12/18 08:16*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.9**		1.0	0.40	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Barium	**41**		21	1.1	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Beryllium	**0.24**	**J**	0.41	0.024	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Cadmium	**0.16**	**J**	0.52	0.038	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Chromium	**9.9**		0.52	0.14	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Copper	**25**		2.6	0.26	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Lead	**6.1**		1.0	0.53	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Manganese	**340**		1.6	0.17	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Nickel	**17**		4.1	0.26	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Selenium	**0.77**	**J**	1.0	0.53	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Silver	ND		0.52	0.11	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1
Zinc	**63**		2.1	1.1	mg/Kg	☼	08/27/18 15:05	08/28/18 14:25	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.030	0.0066	mg/Kg	☼	08/27/18 10:24	08/28/18 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.1**		0.1	0.1	%			08/27/18 09:42	1
Percent Solids	**92.9**		0.1	0.1	%			08/27/18 09:42	1
Cyanide, Total	ND		0.49	0.27	mg/Kg	☼	08/29/18 10:47	08/29/18 14:47	1

Client Sample ID: TRIP BLANK TB-16 — Lab Sample ID: 180-81262-15

Date Collected: 08/24/18 00:00 — **Matrix: Water**
Date Received: 08/25/18 09:25

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	3.2	ug/L			08/28/18 17:47	1
Benzene	ND		5.0	2.0	ug/L			08/28/18 17:47	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			08/28/18 17:47	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			08/28/18 17:47	1
Chlorobenzene	ND		5.0	1.6	ug/L			08/28/18 17:47	1
Chloroform	ND		5.0	2.1	ug/L			08/28/18 17:47	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			08/28/18 17:47	1

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Brewers Pit

TestAmerica Job ID: 180-81262-1

Client Sample ID: TRIP BLANK TB-16
Date Collected: 08/24/18 00:00
Date Received: 08/25/18 09:25

Lab Sample ID: 180-81262-15
Matrix: Water

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			08/28/18 17:47	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			08/28/18 17:47	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			08/28/18 17:47	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			08/28/18 17:47	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			08/28/18 17:47	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			08/28/18 17:47	1
1,4-Dioxane	ND		1000	37	ug/L			08/28/18 17:47	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/28/18 17:47	1
Methylene Chloride	ND		5.0	2.4	ug/L			08/28/18 17:47	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			08/28/18 17:47	1
n-Butylbenzene	ND		5.0	3.8	ug/L			08/28/18 17:47	1
N-Propylbenzene	ND		5.0	2.1	ug/L			08/28/18 17:47	1
sec-Butylbenzene	ND	*	5.0	2.4	ug/L			08/28/18 17:47	1
tert-Butylbenzene	ND		5.0	1.8	ug/L			08/28/18 17:47	1
Tetrachloroethene	ND		5.0	2.0	ug/L			08/28/18 17:47	1
Toluene	ND	*	5.0	1.7	ug/L			08/28/18 17:47	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			08/28/18 17:47	1
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			08/28/18 17:47	1
Trichloroethene	ND		5.0	1.5	ug/L			08/28/18 17:47	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/L			08/28/18 17:47	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/L			08/28/18 17:47	1
Vinyl chloride	ND		5.0	3.7	ug/L			08/28/18 17:47	1
Xylenes, Total	ND		10	4.3	ug/L			08/28/18 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*61 - 123*		*08/28/18 17:47*	*1*
Dibromofluoromethane (Surr)	*128*		*68 - 128*		*08/28/18 17:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*73 - 143*		*08/28/18 17:47*	*1*
Toluene-d8 (Surr)	*88*		*75 - 124*		*08/28/18 17:47*	*1*

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-255182/6
Matrix: Water
Analysis Batch: 255182

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	3.2	ug/L			08/28/18 08:50	1
Benzene	ND		5.0	2.0	ug/L			08/28/18 08:50	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			08/28/18 08:50	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			08/28/18 08:50	1
Chlorobenzene	ND		5.0	1.6	ug/L			08/28/18 08:50	1
Chloroform	ND		5.0	2.1	ug/L			08/28/18 08:50	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			08/28/18 08:50	1
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			08/28/18 08:50	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			08/28/18 08:50	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			08/28/18 08:50	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			08/28/18 08:50	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			08/28/18 08:50	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			08/28/18 08:50	1
1,4-Dioxane	ND		1000	37	ug/L			08/28/18 08:50	1
Ethylbenzene	ND		5.0	2.2	ug/L			08/28/18 08:50	1
Methylene Chloride	ND		5.0	2.4	ug/L			08/28/18 08:50	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			08/28/18 08:50	1
n-Butylbenzene	ND		5.0	3.8	ug/L			08/28/18 08:50	1
N-Propylbenzene	ND		5.0	2.1	ug/L			08/28/18 08:50	1
sec-Butylbenzene	ND		5.0	2.4	ug/L			08/28/18 08:50	1
tert-Butylbenzene	ND		5.0	1.8	ug/L			08/28/18 08:50	1
Tetrachloroethene	ND		5.0	2.0	ug/L			08/28/18 08:50	1
Toluene	ND		5.0	1.7	ug/L			08/28/18 08:50	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			08/28/18 08:50	1
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			08/28/18 08:50	1
Trichloroethene	ND		5.0	1.5	ug/L			08/28/18 08:50	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/L			08/28/18 08:50	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/L			08/28/18 08:50	1
Vinyl chloride	ND		5.0	3.7	ug/L			08/28/18 08:50	1
Xylenes, Total	ND		10	4.3	ug/L			08/28/18 08:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*61 - 123*		*08/28/18 08:50*	*1*
Dibromofluoromethane (Surr)	*117*		*68 - 128*		*08/28/18 08:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*73 - 143*		*08/28/18 08:50*	*1*
Toluene-d8 (Surr)	*87*		*75 - 124*		*08/28/18 08:50*	*1*

Lab Sample ID: LCS 180-255182/11
Matrix: Water
Analysis Batch: 255182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	48.4		ug/L		121	36 - 150
Benzene	40.0	34.3		ug/L		86	78 - 118
2-Butanone (MEK)	40.0	31.2		ug/L		78	30 - 150
Carbon tetrachloride	40.0	40.1		ug/L		100	60 - 137
Chlorobenzene	40.0	35.7		ug/L		89	78 - 118
Chloroform	40.0	37.1		ug/L		93	68 - 124

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-255182/11
Matrix: Water
Analysis Batch: 255182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	40.0	37.2		ug/L		93	71 - 120
1,2-Dichlorobenzene	40.0	35.0		ug/L		88	78 - 118
1,3-Dichlorobenzene	40.0	35.4		ug/L		88	78 - 118
1,4-Dichlorobenzene	40.0	35.4		ug/L		89	78 - 118
1,1-Dichloroethane	40.0	34.2		ug/L		85	67 - 129
1,2-Dichloroethane	40.0	39.3		ug/L		98	67 - 123
1,1-Dichloroethene	40.0	44.1		ug/L		110	59 - 128
1,4-Dioxane	800	472	J	ug/L		59	51 - 138
Ethylbenzene	40.0	34.5		ug/L		86	78 - 118
Methylene Chloride	40.0	37.9		ug/L		95	68 - 120
Methyl tert-butyl ether	40.0	36.8		ug/L		92	73 - 121
n-Butylbenzene	40.0	28.8		ug/L		72	71 - 132
N-Propylbenzene	40.0	31.4		ug/L		78	72 - 126
sec-Butylbenzene	40.0	30.2	*	ug/L		76	80 - 126
tert-Butylbenzene	40.0	32.9		ug/L		82	80 - 122
Tetrachloroethene	40.0	37.7		ug/L		94	78 - 118
Toluene	40.0	31.3	*	ug/L		78	79 - 121
trans-1,2-Dichloroethene	40.0	38.0		ug/L		95	71 - 123
1,1,1-Trichloroethane	40.0	39.2		ug/L		98	69 - 135
Trichloroethene	40.0	43.1		ug/L		108	76 - 120
1,2,4-Trimethylbenzene	40.0	32.5		ug/L		81	77 - 122
1,3,5-Trimethylbenzene	40.0	31.1		ug/L		78	78 - 122
Vinyl chloride	40.0	34.3		ug/L		86	53 - 148
Xylenes, Total	80.0	70.0		ug/L		88	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*61 - 123*
Dibromofluoromethane (Surr)	*113*		*68 - 128*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 143*
Toluene-d8 (Surr)	*85*		*75 - 124*

Lab Sample ID: MB 180-255184/7
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			08/28/18 09:06	1
Benzene	ND		0.0050	0.0020	mg/Kg			08/28/18 09:06	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			08/28/18 09:06	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			08/28/18 09:06	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			08/28/18 09:06	1
Chloroform	ND		0.0050	0.0021	mg/Kg			08/28/18 09:06	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			08/28/18 09:06	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			08/28/18 09:06	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			08/28/18 09:06	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			08/28/18 09:06	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			08/28/18 09:06	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			08/28/18 09:06	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-255184/7
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			08/28/18 09:06	1
1,4-Dioxane	ND		1.0	0.037	mg/Kg			08/28/18 09:06	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			08/28/18 09:06	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			08/28/18 09:06	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			08/28/18 09:06	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			08/28/18 09:06	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			08/28/18 09:06	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			08/28/18 09:06	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			08/28/18 09:06	1
Tetrachloroethene	0.00317	J	0.0050	0.0020	mg/Kg			08/28/18 09:06	1
Toluene	ND		0.0050	0.0017	mg/Kg			08/28/18 09:06	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			08/28/18 09:06	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			08/28/18 09:06	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			08/28/18 09:06	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			08/28/18 09:06	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/28/18 09:06	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			08/28/18 09:06	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			08/28/18 09:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 110*		*08/28/18 09:06*	*1*
Dibromofluoromethane (Surr)	*85*		*74 - 114*		*08/28/18 09:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*69 - 110*		*08/28/18 09:06*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*		*08/28/18 09:06*	*1*

Lab Sample ID: LCS 180-255184/4
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0482		mg/Kg		121	36 - 150
Benzene	0.0400	0.0381		mg/Kg		95	78 - 118
2-Butanone (MEK)	0.0400	0.0396		mg/Kg		99	30 - 150
Carbon tetrachloride	0.0400	0.0378		mg/Kg		95	60 - 137
Chlorobenzene	0.0400	0.0380		mg/Kg		95	78 - 118
Chloroform	0.0400	0.0386		mg/Kg		97	68 - 124
cis-1,2-Dichloroethene	0.0400	0.0382		mg/Kg		95	71 - 120
1,2-Dichlorobenzene	0.0400	0.0372		mg/Kg		93	78 - 118
1,3-Dichlorobenzene	0.0400	0.0378		mg/Kg		94	78 - 118
1,4-Dichlorobenzene	0.0400	0.0376		mg/Kg		94	78 - 118
1,1-Dichloroethane	0.0400	0.0390		mg/Kg		98	67 - 129
1,2-Dichloroethane	0.0400	0.0363		mg/Kg		91	67 - 123
1,1-Dichloroethene	0.0400	0.0395		mg/Kg		99	59 - 128
1,4-Dioxane	0.800	0.713	J	mg/Kg		89	51 - 138
Ethylbenzene	0.0400	0.0379		mg/Kg		95	78 - 118
Methylene Chloride	0.0400	0.0360		mg/Kg		90	68 - 120
Methyl tert-butyl ether	0.0400	0.0358		mg/Kg		90	73 - 121
n-Butylbenzene	0.0400	0.0381		mg/Kg		95	71 - 132

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-255184/4
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	0.0400	0.0386		mg/Kg		97	72 - 126
sec-Butylbenzene	0.0400	0.0389		mg/Kg		97	80 - 126
tert-Butylbenzene	0.0400	0.0396		mg/Kg		99	80 - 122
Tetrachloroethene	0.0400	0.0455		mg/Kg		114	78 - 118
Toluene	0.0400	0.0382		mg/Kg		96	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0395		mg/Kg		99	71 - 123
1,1,1-Trichloroethane	0.0400	0.0415		mg/Kg		104	69 - 135
Trichloroethene	0.0400	0.0400		mg/Kg		100	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0385		mg/Kg		96	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0391		mg/Kg		98	78 - 122
Vinyl chloride	0.0400	0.0323		mg/Kg		81	53 - 148
Xylenes, Total	0.0800	0.0759		mg/Kg		95	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 110*
Dibromofluoromethane (Surr)	*88*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*85*		*69 - 110*
Toluene-d8 (Surr)	*87*		*83 - 124*

Lab Sample ID: LCSD 180-255184/5
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0400	0.0413		mg/Kg		103	36 - 150	15	35
Benzene	0.0400	0.0389		mg/Kg		97	78 - 118	2	15
2-Butanone (MEK)	0.0400	0.0360		mg/Kg		90	30 - 150	10	35
Carbon tetrachloride	0.0400	0.0392		mg/Kg		98	60 - 137	4	21
Chlorobenzene	0.0400	0.0398		mg/Kg		100	78 - 118	5	15
Chloroform	0.0400	0.0396		mg/Kg		99	68 - 124	2	15
cis-1,2-Dichloroethene	0.0400	0.0393		mg/Kg		98	71 - 120	3	15
1,2-Dichlorobenzene	0.0400	0.0381		mg/Kg		95	78 - 118	2	15
1,3-Dichlorobenzene	0.0400	0.0390		mg/Kg		98	78 - 118	3	15
1,4-Dichlorobenzene	0.0400	0.0388		mg/Kg		97	78 - 118	3	15
1,1-Dichloroethane	0.0400	0.0402		mg/Kg		100	67 - 129	3	15
1,2-Dichloroethane	0.0400	0.0376		mg/Kg		94	67 - 123	3	15
1,1-Dichloroethene	0.0400	0.0398		mg/Kg		99	59 - 128	1	17
1,4-Dioxane	0.800	0.677	J	mg/Kg		85	51 - 138	5	35
Ethylbenzene	0.0400	0.0408		mg/Kg		102	78 - 118	8	15
Methylene Chloride	0.0400	0.0378		mg/Kg		95	68 - 120	5	19
Methyl tert-butyl ether	0.0400	0.0364		mg/Kg		91	73 - 121	1	24
n-Butylbenzene	0.0400	0.0395		mg/Kg		99	71 - 132	3	16
N-Propylbenzene	0.0400	0.0399		mg/Kg		100	72 - 126	3	24
sec-Butylbenzene	0.0400	0.0400		mg/Kg		100	80 - 126	3	18
tert-Butylbenzene	0.0400	0.0410		mg/Kg		103	80 - 122	4	19
Tetrachloroethene	0.0400	0.0462		mg/Kg		116	78 - 118	2	20
Toluene	0.0400	0.0401		mg/Kg		100	79 - 121	5	18
trans-1,2-Dichloroethene	0.0400	0.0399		mg/Kg		100	71 - 123	1	15

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-255184/5
Matrix: Solid
Analysis Batch: 255184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			0.0400	0.0414		mg/Kg		103	69 - 135	0	22
Trichloroethene			0.0400	0.0410		mg/Kg		103	76 - 120	3	15
1,2,4-Trimethylbenzene			0.0400	0.0404		mg/Kg		101	77 - 122	5	16
1,3,5-Trimethylbenzene			0.0400	0.0405		mg/Kg		101	78 - 122	3	17
Vinyl chloride			0.0400	0.0358		mg/Kg		89	53 - 148	10	35
Xylenes, Total			0.0800	0.0805		mg/Kg		101	78 - 118	6	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 110*
Dibromofluoromethane (Surr)	*90*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*83*		*69 - 110*
Toluene-d8 (Surr)	*89*		*83 - 124*

Lab Sample ID: MB 180-255317/5
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			08/29/18 11:14	1
Benzene	ND		0.0050	0.0020	mg/Kg			08/29/18 11:14	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			08/29/18 11:14	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			08/29/18 11:14	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			08/29/18 11:14	1
Chloroform	ND		0.0050	0.0021	mg/Kg			08/29/18 11:14	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			08/29/18 11:14	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			08/29/18 11:14	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			08/29/18 11:14	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			08/29/18 11:14	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			08/29/18 11:14	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			08/29/18 11:14	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			08/29/18 11:14	1
1,4-Dioxane	ND		1.0	0.037	mg/Kg			08/29/18 11:14	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			08/29/18 11:14	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			08/29/18 11:14	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			08/29/18 11:14	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			08/29/18 11:14	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			08/29/18 11:14	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			08/29/18 11:14	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			08/29/18 11:14	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/29/18 11:14	1
Toluene	ND		0.0050	0.0017	mg/Kg			08/29/18 11:14	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			08/29/18 11:14	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			08/29/18 11:14	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			08/29/18 11:14	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			08/29/18 11:14	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/29/18 11:14	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			08/29/18 11:14	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			08/29/18 11:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*89*		*70 - 110*		*08/29/18 11:14*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*		*08/29/18 11:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*69 - 110*		*08/29/18 11:14*	*1*
Toluene-d8 (Surr)	*93*		*83 - 124*		*08/29/18 11:14*	*1*

Lab Sample ID: LCS 180-255317/3
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0293		mg/Kg		73	36 - 150
Benzene	0.0400	0.0403		mg/Kg		101	78 - 118
2-Butanone (MEK)	0.0400	0.0309		mg/Kg		77	30 - 150
Carbon tetrachloride	0.0400	0.0408		mg/Kg		102	60 - 137
Chlorobenzene	0.0400	0.0399		mg/Kg		100	78 - 118
Chloroform	0.0400	0.0414		mg/Kg		104	68 - 124
cis-1,2-Dichloroethene	0.0400	0.0412		mg/Kg		103	71 - 120
1,2-Dichlorobenzene	0.0400	0.0368		mg/Kg		92	78 - 118
1,3-Dichlorobenzene	0.0400	0.0384		mg/Kg		96	78 - 118
1,4-Dichlorobenzene	0.0400	0.0369		mg/Kg		92	78 - 118
1,1-Dichloroethane	0.0400	0.0410		mg/Kg		102	67 - 129
1,2-Dichloroethane	0.0400	0.0393		mg/Kg		98	67 - 123
1,1-Dichloroethene	0.0400	0.0407		mg/Kg		102	59 - 128
1,4-Dioxane	0.800	0.646	J	mg/Kg		81	51 - 138
Ethylbenzene	0.0400	0.0398		mg/Kg		99	78 - 118
Methylene Chloride	0.0400	0.0402		mg/Kg		100	68 - 120
Methyl tert-butyl ether	0.0400	0.0377		mg/Kg		94	73 - 121
n-Butylbenzene	0.0400	0.0370		mg/Kg		92	71 - 132
N-Propylbenzene	0.0400	0.0379		mg/Kg		95	72 - 126
sec-Butylbenzene	0.0400	0.0379		mg/Kg		95	80 - 126
tert-Butylbenzene	0.0400	0.0385		mg/Kg		96	80 - 122
Tetrachloroethene	0.0400	0.0439		mg/Kg		110	78 - 118
Toluene	0.0400	0.0388		mg/Kg		97	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0411		mg/Kg		103	71 - 123
1,1,1-Trichloroethane	0.0400	0.0420		mg/Kg		105	69 - 135
Trichloroethene	0.0400	0.0415		mg/Kg		104	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0384		mg/Kg		96	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0387		mg/Kg		97	78 - 122
Vinyl chloride	0.0400	0.0386		mg/Kg		96	53 - 148
Xylenes, Total	0.0800	0.0792		mg/Kg		99	78 - 118

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*90*		*70 - 110*
Dibromofluoromethane (Surr)	*96*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*91*		*69 - 110*
Toluene-d8 (Surr)	*90*		*83 - 124*

Lab Sample ID: 180-81262-1 MS
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: BP-SC-201
Prep Type: Total/NA
Prep Batch: 255328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	F1	0.0412	0.0666	F1	mg/Kg	☼	161	36 - 150

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-81262-1 MS
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: BP-SC-201
Prep Type: Total/NA
Prep Batch: 255328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0412	0.0402		mg/Kg	☼	98	78 - 118
2-Butanone (MEK)	ND		0.0412	0.0536		mg/Kg	☼	130	30 - 150
Carbon tetrachloride	ND		0.0412	0.0413		mg/Kg	☼	100	60 - 137
Chlorobenzene	ND		0.0412	0.0396		mg/Kg	☼	96	78 - 118
Chloroform	ND		0.0412	0.0412		mg/Kg	☼	100	68 - 124
cis-1,2-Dichloroethene	ND		0.0412	0.0403		mg/Kg	☼	98	71 - 120
1,2-Dichlorobenzene	ND		0.0412	0.0377		mg/Kg	☼	92	78 - 118
1,3-Dichlorobenzene	ND		0.0412	0.0391		mg/Kg	☼	95	78 - 118
1,4-Dichlorobenzene	ND		0.0412	0.0388		mg/Kg	☼	94	78 - 118
1,1-Dichloroethane	ND		0.0412	0.0411		mg/Kg	☼	100	67 - 129
1,2-Dichloroethane	ND		0.0412	0.0386		mg/Kg	☼	94	67 - 123
1,1-Dichloroethene	ND		0.0412	0.0407		mg/Kg	☼	99	59 - 128
1,4-Dioxane	ND		0.825	0.812	J	mg/Kg	☼	99	51 - 138
Ethylbenzene	ND		0.0412	0.0401		mg/Kg	☼	97	78 - 118
Methylene Chloride	ND		0.0412	0.0409		mg/Kg	☼	99	68 - 120
Methyl tert-butyl ether	ND		0.0412	0.0372		mg/Kg	☼	90	73 - 121
n-Butylbenzene	ND		0.0412	0.0389		mg/Kg	☼	94	71 - 132
N-Propylbenzene	ND		0.0412	0.0387		mg/Kg	☼	94	72 - 126
sec-Butylbenzene	ND		0.0412	0.0389		mg/Kg	☼	94	80 - 126
tert-Butylbenzene	ND		0.0412	0.0397		mg/Kg	☼	96	80 - 122
Tetrachloroethene	ND		0.0412	0.0418		mg/Kg	☼	101	78 - 118
Toluene	ND		0.0412	0.0390		mg/Kg	☼	95	79 - 121
trans-1,2-Dichloroethene	ND		0.0412	0.0410		mg/Kg	☼	99	71 - 123
1,1,1-Trichloroethane	ND		0.0412	0.0424		mg/Kg	☼	103	69 - 135
Trichloroethene	ND		0.0412	0.0416		mg/Kg	☼	101	76 - 120
1,2,4-Trimethylbenzene	ND		0.0412	0.0399		mg/Kg	☼	97	77 - 122
1,3,5-Trimethylbenzene	ND		0.0412	0.0398		mg/Kg	☼	97	78 - 122
Vinyl chloride	ND		0.0412	0.0377		mg/Kg	☼	91	53 - 148
Xylenes, Total	ND		0.0825	0.0791		mg/Kg	☼	96	78 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 110*
Dibromofluoromethane (Surr)	*96*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*90*		*69 - 110*
Toluene-d8 (Surr)	*89*		*83 - 124*

Lab Sample ID: 180-81262-1 MSD
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: BP-SC-201
Prep Type: Total/NA
Prep Batch: 255328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	F1	0.0426	0.0719	F1	mg/Kg	☼	169	36 - 150	8	35
Benzene	ND		0.0426	0.0435		mg/Kg	☼	102	78 - 118	8	15
2-Butanone (MEK)	ND		0.0426	0.0546		mg/Kg	☼	128	30 - 150	2	35
Carbon tetrachloride	ND		0.0426	0.0470		mg/Kg	☼	110	60 - 137	13	21
Chlorobenzene	ND		0.0426	0.0429		mg/Kg	☼	101	78 - 118	8	15
Chloroform	ND		0.0426	0.0441		mg/Kg	☼	103	68 - 124	7	15
cis-1,2-Dichloroethene	ND		0.0426	0.0439		mg/Kg	☼	103	71 - 120	8	15

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-81262-1 MSD
Matrix: Solid
Analysis Batch: 255317

Client Sample ID: BP-SC-201
Prep Type: Total/NA
Prep Batch: 255328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		0.0426	0.0416		mg/Kg	☼	98	78 - 118	10	15
1,3-Dichlorobenzene	ND		0.0426	0.0436		mg/Kg	☼	102	78 - 118	11	15
1,4-Dichlorobenzene	ND		0.0426	0.0424		mg/Kg	☼	100	78 - 118	9	15
1,1-Dichloroethane	ND		0.0426	0.0445		mg/Kg	☼	104	67 - 129	8	15
1,2-Dichloroethane	ND		0.0426	0.0416		mg/Kg	☼	98	67 - 123	8	15
1,1-Dichloroethene	ND		0.0426	0.0445		mg/Kg	☼	104	59 - 128	9	17
1,4-Dioxane	ND		0.852	0.722	J	mg/Kg	☼	85	51 - 138	12	35
Ethylbenzene	ND		0.0426	0.0429		mg/Kg	☼	101	78 - 118	7	15
Methylene Chloride	ND		0.0426	0.0445		mg/Kg	☼	104	68 - 120	8	19
Methyl tert-butyl ether	ND		0.0426	0.0399		mg/Kg	☼	94	73 - 121	7	24
n-Butylbenzene	ND		0.0426	0.0432		mg/Kg	☼	101	71 - 132	10	16
N-Propylbenzene	ND		0.0426	0.0430		mg/Kg	☼	101	72 - 126	11	24
sec-Butylbenzene	ND		0.0426	0.0425		mg/Kg	☼	100	80 - 126	9	18
tert-Butylbenzene	ND		0.0426	0.0435		mg/Kg	☼	102	80 - 122	9	19
Tetrachloroethene	ND		0.0426	0.0455		mg/Kg	☼	107	78 - 118	9	20
Toluene	ND		0.0426	0.0418		mg/Kg	☼	98	79 - 121	7	18
trans-1,2-Dichloroethene	ND		0.0426	0.0438		mg/Kg	☼	103	71 - 123	7	15
1,1,1-Trichloroethane	ND		0.0426	0.0476		mg/Kg	☼	112	69 - 135	12	22
Trichloroethene	ND		0.0426	0.0465		mg/Kg	☼	109	76 - 120	11	15
1,2,4-Trimethylbenzene	ND		0.0426	0.0439		mg/Kg	☼	103	77 - 122	9	16
1,3,5-Trimethylbenzene	ND		0.0426	0.0433		mg/Kg	☼	102	78 - 122	8	17
Vinyl chloride	ND		0.0426	0.0425		mg/Kg	☼	100	53 - 148	12	35
Xylenes, Total	ND		0.0852	0.0865		mg/Kg	☼	101	78 - 118	9	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 110*
Dibromofluoromethane (Surr)	*90*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*84*		*69 - 110*
Toluene-d8 (Surr)	*85*		*83 - 124*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-255161/1-A
Matrix: Solid
Analysis Batch: 255373

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Anthracene	ND		0.0067	0.0017	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Benzo[a]anthracene	ND		0.0067	0.0013	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Benzo[a]pyrene	ND		0.0067	0.0015	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Chrysene	ND		0.0067	0.0013	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Dibenz(a,h)anthracene	ND		0.0067	0.0015	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Dibenzofuran	ND		0.033	0.0015	mg/Kg		08/27/18 17:00	08/29/18 13:48	1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 180-255161/1-A
Matrix: Solid
Analysis Batch: 255373

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.067	0.010	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Fluorene	ND		0.0067	0.0013	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0014	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Phenol	ND		0.033	0.010	mg/Kg		08/27/18 17:00	08/29/18 13:48	1
Pyrene	ND		0.0067	0.0016	mg/Kg		08/27/18 17:00	08/29/18 13:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*39 - 105*	*08/27/18 17:00*	*08/29/18 13:48*	*1*
2-Fluorophenol (Surr)	*65*		*35 - 105*	*08/27/18 17:00*	*08/29/18 13:48*	*1*
Nitrobenzene-d5 (Surr)	*63*		*39 - 105*	*08/27/18 17:00*	*08/29/18 13:48*	*1*
Phenol-d5 (Surr)	*67*		*42 - 105*	*08/27/18 17:00*	*08/29/18 13:48*	*1*
Terphenyl-d14 (Surr)	*62*		*28 - 148*	*08/27/18 17:00*	*08/29/18 13:48*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*44 - 105*	*08/27/18 17:00*	*08/29/18 13:48*	*1*

Lab Sample ID: LCS 180-255161/2-A
Matrix: Solid
Analysis Batch: 255373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.463		mg/Kg		69	46 - 100
Acenaphthylene	0.667	0.441		mg/Kg		66	44 - 100
Anthracene	0.667	0.474		mg/Kg		71	46 - 102
Benzo[a]anthracene	0.667	0.468		mg/Kg		70	47 - 100
Benzo[a]pyrene	0.667	0.492		mg/Kg		74	47 - 100
Benzo[b]fluoranthene	0.667	0.465		mg/Kg		70	41 - 100
Benzo[g,h,i]perylene	0.667	0.304		mg/Kg		46	43 - 101
Benzo[k]fluoranthene	0.667	0.466		mg/Kg		70	44 - 100
Chrysene	0.667	0.474		mg/Kg		71	45 - 100
Dibenz(a,h)anthracene	0.667	0.499		mg/Kg		75	45 - 102
Dibenzofuran	0.667	0.487		mg/Kg		73	46 - 100
1,4-Dioxane	0.667	0.428		mg/Kg		64	27 - 112
Fluoranthene	0.667	0.510		mg/Kg		76	47 - 101
Fluorene	0.667	0.482		mg/Kg		72	47 - 100
Hexachlorobenzene	0.667	0.458		mg/Kg		69	43 - 105
Indeno[1,2,3-cd]pyrene	0.667	0.507		mg/Kg		76	45 - 102
2-Methylphenol	0.667	0.489		mg/Kg		73	39 - 100
Methylphenol, 3 & 4	0.667	0.473		mg/Kg		71	39 - 100
Naphthalene	0.667	0.480		mg/Kg		72	45 - 100
Pentachlorophenol	1.33	0.937		mg/Kg		70	35 - 105
Phenanthrene	0.667	0.460		mg/Kg		69	45 - 100
Phenol	0.667	0.464		mg/Kg		70	32 - 100

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 180-255161/2-A
Matrix: Solid
Analysis Batch: 255373

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255161

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	0.667	0.424		mg/Kg		64	40 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*39 - 105*
2-Fluorophenol (Surr)	*72*		*35 - 105*
Nitrobenzene-d5 (Surr)	*69*		*39 - 105*
Phenol-d5 (Surr)	*71*		*42 - 105*
Terphenyl-d14 (Surr)	*70*		*28 - 148*
2,4,6-Tribromophenol (Surr)	*80*		*44 - 105*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-255160/1-A
Matrix: Solid
Analysis Batch: 255343

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
beta-BHC	ND		0.0017	0.00043	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
4,4'-DDD	ND		0.0017	0.00045	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
4,4'-DDT	ND		0.0017	0.00063	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Endosulfan sulfate	ND		0.0017	0.00043	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Endrin	ND		0.0017	0.00065	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
gamma-BHC (Lindane)	ND		0.0017	0.00057	mg/Kg		08/27/18 16:18	08/29/18 16:58	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		08/27/18 16:18	08/29/18 16:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*120*		*40 - 150*	*08/27/18 16:18*	*08/29/18 16:58*	*1*
DCB Decachlorobiphenyl (Surr)	*106*		*40 - 150*	*08/27/18 16:18*	*08/29/18 16:58*	*1*
Tetrachloro-m-xylene	*87*		*44 - 133*	*08/27/18 16:18*	*08/29/18 16:58*	*1*
Tetrachloro-m-xylene	*93*		*44 - 133*	*08/27/18 16:18*	*08/29/18 16:58*	*1*

Lab Sample ID: LCS 180-255160/2-A
Matrix: Solid
Analysis Batch: 255343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.0333	0.0365		mg/Kg		110	58 - 131
alpha-BHC	0.0333	0.0312		mg/Kg		94	61 - 120
beta-BHC	0.0333	0.0332		mg/Kg		100	55 - 119

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-255160/2-A
Matrix: Solid
Analysis Batch: 255343

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-Chlordane	0.0333	0.0372		mg/Kg		112	51 - 130
4,4'-DDD	0.0333	0.0317		mg/Kg		95	69 - 135
4,4'-DDE	0.0333	0.0321		mg/Kg		96	67 - 137
4,4'-DDT	0.0333	0.0299		mg/Kg		90	47 - 140
delta-BHC	0.0333	0.0180		mg/Kg		54	19 - 106
Dieldrin	0.0333	0.0318		mg/Kg		95	69 - 136
Endosulfan I	0.0333	0.0371		mg/Kg		111	51 - 133
Endosulfan II	0.0333	0.0309		mg/Kg		93	71 - 128
Endosulfan sulfate	0.0333	0.0279		mg/Kg		84	62 - 119
Endrin	0.0333	0.0317		mg/Kg		95	71 - 132
gamma-BHC (Lindane)	0.0333	0.0322		mg/Kg		97	59 - 123
Heptachlor	0.0333	0.0353		mg/Kg		106	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*106*		*40 - 150*
Tetrachloro-m-xylene	*87*		*44 - 133*
Tetrachloro-m-xylene	*91*		*44 - 133*

Lab Sample ID: 180-81262-9 MS
Matrix: Solid
Analysis Batch: 255343

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		0.0350	0.0380		mg/Kg	☼	108	58 - 131
alpha-BHC	ND		0.0350	0.0327		mg/Kg	☼	93	61 - 120
beta-BHC	ND		0.0350	0.0355		mg/Kg	☼	101	55 - 119
cis-Chlordane	ND		0.0350	0.0390		mg/Kg	☼	111	51 - 130
4,4'-DDD	ND		0.0350	0.0346		mg/Kg	☼	99	69 - 135
4,4'-DDE	ND		0.0350	0.0331		mg/Kg	☼	94	67 - 137
4,4'-DDT	ND		0.0350	0.0341		mg/Kg	☼	97	47 - 140
delta-BHC	ND		0.0350	0.0192		mg/Kg	☼	55	19 - 106
Dieldrin	ND		0.0350	0.0327		mg/Kg	☼	93	69 - 136
Endosulfan I	ND		0.0350	0.0393		mg/Kg	☼	112	51 - 133
Endosulfan II	ND		0.0350	0.0332		mg/Kg	☼	95	71 - 128
Endosulfan sulfate	ND		0.0350	0.0288		mg/Kg	☼	82	62 - 119
Endrin	ND		0.0350	0.0352		mg/Kg	☼	100	71 - 132
gamma-BHC (Lindane)	ND		0.0350	0.0336		mg/Kg	☼	96	59 - 123
Heptachlor	ND		0.0350	0.0362		mg/Kg	☼	103	57 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*102*		*40 - 150*
Tetrachloro-m-xylene	*95*		*44 - 133*
Tetrachloro-m-xylene	*92*		*44 - 133*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-81262-9 MSD
Matrix: Solid
Analysis Batch: 255343

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND		0.0357	0.0387		mg/Kg	☼	108	58 - 131	2	21
alpha-BHC	ND		0.0357	0.0327		mg/Kg	☼	92	61 - 120	0	20
beta-BHC	ND		0.0357	0.0360		mg/Kg	☼	101	55 - 119	2	23
cis-Chlordane	ND		0.0357	0.0393		mg/Kg	☼	110	51 - 130	1	22
4,4'-DDD	ND		0.0357	0.0340		mg/Kg	☼	95	69 - 135	2	22
4,4'-DDE	ND		0.0357	0.0328		mg/Kg	☼	92	67 - 137	1	16
4,4'-DDT	ND		0.0357	0.0328		mg/Kg	☼	92	47 - 140	4	18
delta-BHC	ND		0.0357	0.0194		mg/Kg	☼	54	19 - 106	1	23
Dieldrin	ND		0.0357	0.0320		mg/Kg	☼	90	69 - 136	2	15
Endosulfan I	ND		0.0357	0.0392		mg/Kg	☼	110	51 - 133	0	22
Endosulfan II	ND		0.0357	0.0331		mg/Kg	☼	92	71 - 128	0	17
Endosulfan sulfate	ND		0.0357	0.0283		mg/Kg	☼	79	62 - 119	2	17
Endrin	ND		0.0357	0.0334		mg/Kg	☼	93	71 - 132	5	16
gamma-BHC (Lindane)	ND		0.0357	0.0337		mg/Kg	☼	94	59 - 123	0	21
Heptachlor	ND		0.0357	0.0372		mg/Kg	☼	104	57 - 136	3	22

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*87*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*96*		*40 - 150*
Tetrachloro-m-xylene	*89*		*44 - 133*
Tetrachloro-m-xylene	*91*		*44 - 133*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-255160/1-C
Matrix: Solid
Analysis Batch: 255305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255160

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1221	ND		0.017	0.011	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1232	ND		0.017	0.0099	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1242	ND		0.017	0.010	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1248	ND		0.017	0.013	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1254	ND		0.017	0.011	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1260	ND		0.017	0.0047	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1262	ND		0.017	0.012	mg/Kg		08/27/18 16:18	08/29/18 07:47	1
PCB-1268	ND		0.017	0.0081	mg/Kg		08/27/18 16:18	08/29/18 07:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*33 - 137*	*08/27/18 16:18*	*08/29/18 07:47*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*33 - 137*	*08/27/18 16:18*	*08/29/18 07:47*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*44 - 114*	*08/27/18 16:18*	*08/29/18 07:47*	*1*
Tetrachloro-m-xylene (Surr)	*92*		*44 - 114*	*08/27/18 16:18*	*08/29/18 07:47*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 180-255160/3-C
Matrix: Solid
Analysis Batch: 255305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.19		mg/Kg		89	46 - 122
PCB-1260	1.33	1.23		mg/Kg		92	51 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*84*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*76*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*

Lab Sample ID: 180-81262-9 MS
Matrix: Solid
Analysis Batch: 255305

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		1.41	1.23		mg/Kg	☼	87	46 - 122
PCB-1260	ND		1.41	1.27		mg/Kg	☼	90	51 - 119

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*68*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*80*		*44 - 114*

Lab Sample ID: 180-81262-9 MSD
Matrix: Solid
Analysis Batch: 255305

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1.39	1.29		mg/Kg	☼	93	46 - 122	5	23
PCB-1260	ND		1.39	1.25		mg/Kg	☼	90	51 - 119	2	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*87*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*74*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*85*		*44 - 114*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-256133/1-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.0066	mg/Kg		09/06/18 11:30	09/12/18 00:18	1

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 180-256133/1-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256133

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	38		29 - 100	09/06/18 11:30	09/12/18 00:18	1
2,4-Dichlorophenylacetic acid	41		29 - 100	09/06/18 11:30	09/12/18 00:18	1

Lab Sample ID: LCS 180-256133/2-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256133

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)			0.100	0.0646		mg/Kg		65	36 - 109		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	58		29 - 100
2,4-Dichlorophenylacetic acid	62		29 - 100

Lab Sample ID: LCSD 180-256133/3-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 256133

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)			0.100	0.0648		mg/Kg		65	36 - 109	0	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	49		29 - 100
2,4-Dichlorophenylacetic acid	55		29 - 100

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-255157/1-A
Matrix: Solid
Analysis Batch: 255307

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.39	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Barium	ND		20	1.1	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Beryllium	ND		0.40	0.023	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Cadmium	ND		0.50	0.036	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Chromium	ND		0.50	0.14	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Copper	ND		2.5	0.25	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Lead	ND		1.0	0.51	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Manganese	ND		1.5	0.16	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Nickel	ND		4.0	0.25	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Selenium	ND		1.0	0.52	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Silver	ND		0.50	0.11	mg/Kg		08/27/18 15:05	08/28/18 13:23	1
Zinc	ND		2.0	1.1	mg/Kg		08/27/18 15:05	08/28/18 13:23	1

Method: EPA 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-255157/2-A
Matrix: Solid
Analysis Batch: 255307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	48.6		mg/Kg		97	80 - 120
Barium	200	206		mg/Kg		103	80 - 120
Beryllium	5.00	5.18		mg/Kg		104	80 - 120
Cadmium	5.00	5.14		mg/Kg		103	80 - 120
Chromium	20.0	19.4		mg/Kg		97	80 - 120
Copper	25.0	24.7		mg/Kg		99	80 - 120
Lead	50.0	47.1		mg/Kg		94	80 - 120
Manganese	50.0	48.9		mg/Kg		98	80 - 120
Nickel	50.0	49.8		mg/Kg		100	80 - 120
Selenium	50.0	50.4		mg/Kg		101	80 - 120
Silver	5.00	4.87		mg/Kg		97	80 - 120
Zinc	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: 180-81262-9 MS
Matrix: Solid
Analysis Batch: 255307

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255157

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.2		54.0	47.7		mg/Kg	☼	81	75 - 125
Barium	36	F2 F1	216	216		mg/Kg	☼	84	75 - 125
Beryllium	0.23	J	5.40	4.70		mg/Kg	☼	83	75 - 125
Cadmium	0.16	J	5.40	4.76		mg/Kg	☼	85	75 - 125
Chromium	9.3		21.6	26.1		mg/Kg	☼	78	75 - 125
Copper	29	F1	27.0	49.1		mg/Kg	☼	75	75 - 125
Lead	3.9		54.0	51.6		mg/Kg	☼	88	75 - 125
Manganese	710		54.0	393	4	mg/Kg	☼	-581	75 - 125
Nickel	17		54.0	62.3		mg/Kg	☼	83	75 - 125
Selenium	0.78	J	54.0	45.8		mg/Kg	☼	83	75 - 125
Silver	ND		5.40	4.72		mg/Kg	☼	88	75 - 125
Zinc	58	F1	54.0	97.2	F1	mg/Kg	☼	72	75 - 125

Lab Sample ID: 180-81262-9 MSD
Matrix: Solid
Analysis Batch: 255307

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.2		56.2	52.2		mg/Kg	☼	85	75 - 125	9	20
Barium	36	F2 F1	225	346	F1 F2	mg/Kg	☼	138	75 - 125	46	20
Beryllium	0.23	J	5.62	5.13		mg/Kg	☼	87	75 - 125	9	20
Cadmium	0.16	J	5.62	5.21		mg/Kg	☼	90	75 - 125	9	20
Chromium	9.3		22.5	27.8		mg/Kg	☼	82	75 - 125	6	20
Copper	29	F1	28.1	49.1	F1	mg/Kg	☼	72	75 - 125	0	20
Lead	3.9		56.2	58.1		mg/Kg	☼	96	75 - 125	12	20
Manganese	710		56.2	424	4	mg/Kg	☼	-503	75 - 125	8	20
Nickel	17		56.2	68.4		mg/Kg	☼	91	75 - 125	9	20
Selenium	0.78	J	56.2	49.8		mg/Kg	☼	87	75 - 125	8	20
Silver	ND		5.62	5.14		mg/Kg	☼	91	75 - 125	8	20
Zinc	58	F1	56.2	103		mg/Kg	☼	80	75 - 125	6	20

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-255103/1-A
Matrix: Solid
Analysis Batch: 255242

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255103

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.032	0.0073	mg/Kg		08/27/18 10:24	08/28/18 11:19	1

Lab Sample ID: LCS 180-255103/2-A
Matrix: Solid
Analysis Batch: 255242

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.446		mg/Kg		107	80 - 120

Method: 2540G - SM 2540G

Lab Sample ID: 180-81262-1 DU
Matrix: Solid
Analysis Batch: 255094

Client Sample ID: BP-SC-201
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	5.4		5.9		%		8	20
Percent Solids	94.6		94.1		%		0.5	20

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-255350/4-A
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		08/29/18 10:47	08/29/18 14:16	1

Lab Sample ID: HLCS 180-255350/2-A
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255350

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.254		mg/Kg		101	90 - 110

Lab Sample ID: LCS 180-255350/3-A
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	41.7	25.6		mg/Kg		61	38 - 162

Lab Sample ID: LLCS 180-255350/1-A
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255350

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0503		mg/Kg		101	90 - 110

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: 180-81262-9 MS
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		4.54	4.53		mg/Kg	☼	100	75 - 125

Lab Sample ID: 180-81262-9 MSD
Matrix: Solid
Analysis Batch: 255415

Client Sample ID: BP-SC-209
Prep Type: Total/NA
Prep Batch: 255350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		4.54	4.62		mg/Kg	☼	102	75 - 125	2	20

GC/MS VOA

Analysis Batch: 255182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-15	TRIP BLANK TB-16	Total/NA	Water	EPA 8260C	
MB 180-255182/6	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-255182/11	Lab Control Sample	Total/NA	Water	EPA 8260C	

Analysis Batch: 255184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-6	BP-SC-206	Total/NA	Solid	EPA 8260C	255193
180-81262-7	BP-SC-207	Total/NA	Solid	EPA 8260C	255193
180-81262-8	BP-SC-208	Total/NA	Solid	EPA 8260C	255193
180-81262-13	DUP-01-08242018	Total/NA	Solid	EPA 8260C	255193
MB 180-255184/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-255184/4	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-255184/5	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 255193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-6	BP-SC-206	Total/NA	Solid	5035	
180-81262-7	BP-SC-207	Total/NA	Solid	5035	
180-81262-8	BP-SC-208	Total/NA	Solid	5035	
180-81262-13	DUP-01-08242018	Total/NA	Solid	5035	

Analysis Batch: 255317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-1	BP-SC-201	Total/NA	Solid	EPA 8260C	255328
180-81262-2	BP-SC-202	Total/NA	Solid	EPA 8260C	255328
180-81262-3	BP-SC-203	Total/NA	Solid	EPA 8260C	255328
180-81262-4	BP-SC-204	Total/NA	Solid	EPA 8260C	255328
180-81262-5	BP-SC-205	Total/NA	Solid	EPA 8260C	255328
MB 180-255317/5	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-255317/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
180-81262-1 MS	BP-SC-201	Total/NA	Solid	EPA 8260C	255328
180-81262-1 MSD	BP-SC-201	Total/NA	Solid	EPA 8260C	255328

Prep Batch: 255328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-1	BP-SC-201	Total/NA	Solid	5035	
180-81262-2	BP-SC-202	Total/NA	Solid	5035	
180-81262-3	BP-SC-203	Total/NA	Solid	5035	
180-81262-4	BP-SC-204	Total/NA	Solid	5035	
180-81262-5	BP-SC-205	Total/NA	Solid	5035	
180-81262-1 MS	BP-SC-201	Total/NA	Solid	5035	
180-81262-1 MSD	BP-SC-201	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 255161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	3541	
180-81262-10	BP-SC-210	Total/NA	Solid	3541	
180-81262-11	BP-SC-211	Total/NA	Solid	3541	

GC/MS Semi VOA (Continued)

Prep Batch: 255161 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-12	BP-SC-212	Total/NA	Solid	3541	
180-81262-14	DUP-02-08242018	Total/NA	Solid	3541	
MB 180-255161/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-255161/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 255373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 8270D LL	255161
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 8270D LL	255161
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 8270D LL	255161
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 8270D LL	255161
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 8270D LL	255161
MB 180-255161/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	255161
LCS 180-255161/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	255161

GC Semi VOA

Prep Batch: 255160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	3541	
180-81262-10	BP-SC-210	Total/NA	Solid	3541	
180-81262-11	BP-SC-211	Total/NA	Solid	3541	
180-81262-12	BP-SC-212	Total/NA	Solid	3541	
180-81262-14	DUP-02-08242018	Total/NA	Solid	3541	
MB 180-255160/1-A	Method Blank	Total/NA	Solid	3541	
MB 180-255160/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-255160/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-255160/3-C	Lab Control Sample	Total/NA	Solid	3541	
180-81262-9 MS	BP-SC-209	Total/NA	Solid	3541	
180-81262-9 MS	BP-SC-209	Total/NA	Solid	3541	
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	3541	
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	3541	

Cleanup Batch: 255297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	3665A	255160
180-81262-10	BP-SC-210	Total/NA	Solid	3665A	255160
180-81262-11	BP-SC-211	Total/NA	Solid	3665A	255160
180-81262-12	BP-SC-212	Total/NA	Solid	3665A	255160
180-81262-14	DUP-02-08242018	Total/NA	Solid	3665A	255160
MB 180-255160/1-C	Method Blank	Total/NA	Solid	3665A	255160
LCS 180-255160/3-C	Lab Control Sample	Total/NA	Solid	3665A	255160
180-81262-9 MS	BP-SC-209	Total/NA	Solid	3665A	255160
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	3665A	255160

Cleanup Batch: 255298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	3660B	255297
180-81262-10	BP-SC-210	Total/NA	Solid	3660B	255297
180-81262-11	BP-SC-211	Total/NA	Solid	3660B	255297

GC Semi VOA (Continued)

Cleanup Batch: 255298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-12	BP-SC-212	Total/NA	Solid	3660B	255297
180-81262-14	DUP-02-08242018	Total/NA	Solid	3660B	255297
MB 180-255160/1-C	Method Blank	Total/NA	Solid	3660B	255297
LCS 180-255160/3-C	Lab Control Sample	Total/NA	Solid	3660B	255297
180-81262-9 MS	BP-SC-209	Total/NA	Solid	3660B	255297
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	3660B	255297

Analysis Batch: 255305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 8082A	255298
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 8082A	255298
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 8082A	255298
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 8082A	255298
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 8082A	255298
MB 180-255160/1-C	Method Blank	Total/NA	Solid	EPA 8082A	255298
LCS 180-255160/3-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	255298
180-81262-9 MS	BP-SC-209	Total/NA	Solid	EPA 8082A	255298
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	EPA 8082A	255298

Analysis Batch: 255343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 8081B	255160
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 8081B	255160
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 8081B	255160
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 8081B	255160
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 8081B	255160
MB 180-255160/1-A	Method Blank	Total/NA	Solid	EPA 8081B	255160
LCS 180-255160/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	255160
180-81262-9 MS	BP-SC-209	Total/NA	Solid	EPA 8081B	255160
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	EPA 8081B	255160

Prep Batch: 256133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	8151A	
180-81262-10	BP-SC-210	Total/NA	Solid	8151A	
180-81262-11	BP-SC-211	Total/NA	Solid	8151A	
180-81262-12	BP-SC-212	Total/NA	Solid	8151A	
180-81262-14	DUP-02-08242018	Total/NA	Solid	8151A	
MB 180-256133/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-256133/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-256133/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 256412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 8151A	256133
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 8151A	256133
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 8151A	256133
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 8151A	256133
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 8151A	256133
MB 180-256133/1-A	Method Blank	Total/NA	Solid	EPA 8151A	256133
LCS 180-256133/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	256133

GC Semi VOA (Continued)

Analysis Batch: 256412 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-256133/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	256133

Metals

Prep Batch: 255103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	7471B	
180-81262-10	BP-SC-210	Total/NA	Solid	7471B	
180-81262-11	BP-SC-211	Total/NA	Solid	7471B	
180-81262-12	BP-SC-212	Total/NA	Solid	7471B	
180-81262-14	DUP-02-08242018	Total/NA	Solid	7471B	
MB 180-255103/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-255103/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 255157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	3050B	
180-81262-10	BP-SC-210	Total/NA	Solid	3050B	
180-81262-11	BP-SC-211	Total/NA	Solid	3050B	
180-81262-12	BP-SC-212	Total/NA	Solid	3050B	
180-81262-14	DUP-02-08242018	Total/NA	Solid	3050B	
MB 180-255157/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-255157/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-81262-9 MS	BP-SC-209	Total/NA	Solid	3050B	
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	3050B	

Analysis Batch: 255242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 7471B	255103
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 7471B	255103
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 7471B	255103
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 7471B	255103
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 7471B	255103
MB 180-255103/1-A	Method Blank	Total/NA	Solid	EPA 7471B	255103
LCS 180-255103/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	255103

Analysis Batch: 255307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 6010C	255157
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 6010C	255157
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 6010C	255157
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 6010C	255157
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 6010C	255157
MB 180-255157/1-A	Method Blank	Total/NA	Solid	EPA 6010C	255157
LCS 180-255157/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	255157
180-81262-9 MS	BP-SC-209	Total/NA	Solid	EPA 6010C	255157
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	EPA 6010C	255157

General Chemistry

Analysis Batch: 255094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-1	BP-SC-201	Total/NA	Solid	2540G	
180-81262-2	BP-SC-202	Total/NA	Solid	2540G	
180-81262-3	BP-SC-203	Total/NA	Solid	2540G	
180-81262-4	BP-SC-204	Total/NA	Solid	2540G	
180-81262-5	BP-SC-205	Total/NA	Solid	2540G	
180-81262-6	BP-SC-206	Total/NA	Solid	2540G	
180-81262-7	BP-SC-207	Total/NA	Solid	2540G	
180-81262-8	BP-SC-208	Total/NA	Solid	2540G	
180-81262-9	BP-SC-209	Total/NA	Solid	2540G	
180-81262-10	BP-SC-210	Total/NA	Solid	2540G	
180-81262-11	BP-SC-211	Total/NA	Solid	2540G	
180-81262-12	BP-SC-212	Total/NA	Solid	2540G	
180-81262-13	DUP-01-08242018	Total/NA	Solid	2540G	
180-81262-14	DUP-02-08242018	Total/NA	Solid	2540G	
180-81262-1 DU	BP-SC-201	Total/NA	Solid	2540G	

Prep Batch: 255350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	9010C	
180-81262-10	BP-SC-210	Total/NA	Solid	9010C	
180-81262-11	BP-SC-211	Total/NA	Solid	9010C	
180-81262-12	BP-SC-212	Total/NA	Solid	9010C	
180-81262-14	DUP-02-08242018	Total/NA	Solid	9010C	
MB 180-255350/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-255350/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-255350/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-255350/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-81262-9 MS	BP-SC-209	Total/NA	Solid	9010C	
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	9010C	

Analysis Batch: 255415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81262-9	BP-SC-209	Total/NA	Solid	EPA 9014	255350
180-81262-10	BP-SC-210	Total/NA	Solid	EPA 9014	255350
180-81262-11	BP-SC-211	Total/NA	Solid	EPA 9014	255350
180-81262-12	BP-SC-212	Total/NA	Solid	EPA 9014	255350
180-81262-14	DUP-02-08242018	Total/NA	Solid	EPA 9014	255350
MB 180-255350/4-A	Method Blank	Total/NA	Solid	EPA 9014	255350
HLCS 180-255350/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	255350
LCS 180-255350/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	255350
LLCS 180-255350/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	255350
180-81262-9 MS	BP-SC-209	Total/NA	Solid	EPA 9014	255350
180-81262-9 MSD	BP-SC-209	Total/NA	Solid	EPA 9014	255350

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ashwin Ranna + Lauren Dunkel	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: Brewers Pit Sal
Client Contact: Aron Krasnopoler	Phone: 412-552-4758	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle, Floor 4	Due Date Requested:			
City: Columbia, MD	TAT Requested (days): 3days			
State, Zip: MD, 21044				
Phone: (202) 550-7724	PO #: MN0832D			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site - North IRM	Project #:			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOA-Select List	6010C, 7471B, 9014 - Select ICP Metals, Mercury, Cyanide	8082A, 8270D, PCBs, Select BNA	8260C - VOA-Select List (Trip Blanks only)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	A	X	
BP-SC-201	8/24/2018	1300	G	Solid	N	Y	X				12	Perform MS/MSD
BP-SC-202	8/24/2018	1305	G	Solid	N	N	X				4	
BP-SC-203		1310	G	Solid	N	N	X				4	
BP-SC-204		1315	G	Solid	N	N	X				4	
BP-SC-205		1320	G	Solid	N	N	X				4	
BP-SC-206		1325	G	Solid	N	N	X				4	
BP-SC-207		1330	G	Solid	N	N	X				4	
BP-SC-208		1335	G	Solid	N	N	X				4	
BP-SC-209		1355	C	Solid	N	N		X	X		2	
BP-SC-210		1400	C	Solid	N	N		X	X		2	
BP-SC-211	↓	1410	C	Solid	N	N		X	X		2	

180-81262 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer tha
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ashwin Ranna	08/24/2018 / 1400	Geosyntec	Dulla Watson	8-25-18	TAPIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 925	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Pittsburgh
101 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ashwin Ranna tLQ	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: Brewers Pit Soil
Client Contact: Aron Krasnopoler	Phone: 4125524758	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle, Floor 4	Due Date Requested:			
City: Columbia, MD	TAT Requested (days): 3 days			
State, Zip: MD, 21044	PO #: MN0832D			
Phone: (202) 550-7724	WO #:			
Email: akrasnopoler@geosyntec.com	Project #:			
Project Name: Former Sperry Remington Site - North IRM	SSOW#:			
Site:				

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOA-Select List	6010C, 7471B, 9014 - Select ICP Metals, Mercury, Cyanide	8082A, 8270D, PCBs, Select BNA	8260C - VOA-Select List (Trip Blanks only)	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	A	X	
BP-SC-212	8/24/2018	1420	C	Solid	N	N		X	X		2	
DUP-01-08242018	8/24/2018	—	G	Solid	N	N	X				4	
DUP-02-08242018	8/24/2018	—	C	Solid	N	N		X	X		2	
TRIP Blank (AR) TB-16	—	—		Solid	N					X	2	
				Solid	N							
				Solid	N							
				Solid	N							
				Solid	N							
				Solid	N							
				Solid	N							
				Solid	N							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Ashwin Ranna	08/24/2018 1900	Geosyntec		8-25-18 9:25	TAPIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

9/12/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-81262-1

Login Number: 81262
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Geosyntec consultants

180A Market Place Blvd.
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	13 September 2018
To:	Aron Krasnopoler
From:	Mary Tyler
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level IV Data Deliverable, TestAmerica Job ID 180-81262-1**

SITE: Former Sperry Remington Site-Brewers Pit

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twelve solid samples, including one sample for matrix spike/matrix spike duplicate (MS/MSD) analyses, two field duplicate samples and one trip blank, collected August 24, 2018, as part of the Former Sperry Remington Site-Breesport project. The analyses were performed at TestAmerica Laboratories, Inc., Pittsburgh, Pennsylvania. The samples were analyzed for the following tests:

- Volatile Organic Compounds (VOCs) by EPA Methods 5035/8260C and 5030C/8260C
- Semivolatile Organic Compounds (SVOCs) by EPA Methods 3541/8270D
- Organochlorine Pesticides by EPA Methods 3541/8081B
- Polychlorinated Biphenyls (PCBs) by EPA Methods 3541/8082A
- Silvex (2,4,5-TP) by EPA Method 8151A
- Metals by EPA Methods 3050B/6010C
- Mercury by EPA Method 7471B
- Total Cyanide by EPA Methods 9010C/9014
- Total Solids by Standard Method 2540G

EXECUTIVE SUMMARY

Based on this Stage 2A data validation covering the quality control (QC) parameters listed below, the data as qualified are usable for meeting project objectives. The qualified data should be used within the limitations of the qualifications.

The data were validated using the Quality Assurance Project Plan (QAPP) for Former Sperry Remington Facility Industrial Outfall Site, Elmira, New York, NYSDEC Site I.D. # 808043, NY09-2480-04, July 7, 2010, Revised November 11, 2010, USEPA Contract Laboratory Program

National Functional Guidelines for Superfund Organic Methods Data Review, January 2017 (EPA 540-R-2017-002), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (EPA 540-R-2017-001), the pertinent methods referenced by the laboratory report and professional and technical judgment.

The following samples were analyzed and validated at a Stage 2A level in the data set:

Laboratory ID	Client ID
180-81262-1	BP-SC-201
180-81262-1 MS	BP-SC-201 MS
180-81262-1 MSD	BP-SC-201 MSD
180-81262-2	BP-SC-202
180-81262-3	BP-SC-203
180-81262-4	BP-SC-204
180-81262-5	BP-SC-205
180-81262-6	BP-SC-206
180-81262-7	BP-SC-207

Laboratory ID	Client ID
180-81262-8	BP-SC-208
180-81262-9	BP-SC-209
180-81262-10	BP-SC-210
180-81262-11	BP-SC-211
180-81262-12	BP-SC-212
180-81262-13	DUP-01-08242018
180-81262-14	DUP-02-08242018
180-81262-15	TRIP BLANK TB-16

The samples were received at the laboratory within the criteria of 0-6°C. No sample preservation issues were noted by the laboratory.

The following issues were noted with the chain of custody (COC):

- The collection dates and times were not documented on the COC for the field duplicate samples. The laboratory logged both samples with collection dates and times of 8/24/18, 00:00.

- The collection time was not documented on the COC for the trip blank. The laboratory logged the trip blank with a collection time of 00:00.

- The COC did not list herbicide or organochlorine pesticide analyses. The samples were analyzed for the herbicide silvex and organochlorine pesticides per instructions from the client.

The solids data, used to report the samples on a dry weight basis, were not validated.

1.0 VOLATILE ORGANIC COMPOUNDS

The samples were analyzed for VOCs by EPA methods 5035/8260C and 5030C/8260C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues

were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
⊗ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
⊗ Laboratory Control Sample
✓ Surrogates
✓ Trip Blank
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The VOC data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this sample set is 100%.

The narrative indicated that the percent difference (%D) for tetrachloroethene in the continuing calibration verification (CCV) in batch 255184 was high and outside the method specified acceptance criteria with a high bias. Since the tetrachloroethene was not detected in the associated samples BP-SC-206 and BP-SC-208 and based on professional and technical judgment, no qualifications were applied to the data in these two samples. Tetrachloroethene was detected in the other two associated samples, BP-SC-207 and DUP-01-08242018, at estimated concentrations greater than the method detection limit (MDL) and less than the reporting limit (RL). However, since the estimated tetrachloroethene concentrations in samples BP-SC-207 and DUP-01-08242018 were U qualified as not detected at the RL due to the method blank contamination, no additional qualifications were applied to the tetrachloroethene data in these two samples.

The narrative indicated that the %Ds for acetone and 2-butanone in the CCV in batch 255184 and acetone in batch 255317 were high and outside the method specified acceptance criteria, with low biases. Since the %Ds were within the validation guidance acceptance criteria of 40%D, and based on professional and technical judgment, no qualifications were applied to the data.

The narrative indicated that the %Ds for 1,4-dioxane, 2-butanone and n-butylbenzene in the CCV in batch 255182 were high and outside the method specified acceptance criteria with low biases. Since the %Ds for 2-butanone and n-butylbenzene were within the validation guidance acceptance

criteria of 40%D, and based on professional and technical judgment, no qualifications were applied to the 2-butanone and n-butylbenzene data. However, the nondetect 1,4-dioxane result in the associated sample was UJ qualified as estimated less than the MDL.

Sample ID	Compound	Laboratory Concentration (µg/L)	Laboratory Flag	Validation Concentration (µg/L)	Validation Qualifier*	Reason Code**
TRIP BLANK TB-16	1,4-Dioxane	37	U	37	UJ	9

µg/L-micrograms per liter
U-the analyte was analyzed for but not detected
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

1.2 Holding Times

The holding times for the VOC analysis of a preserved solid sample collected as a terracore are 48 hours until laboratory receipt and 14 days from sample collection to analysis. The holding time for the VOC analysis of a preserved water sample is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported (batches 255182, 255184 and 255317). VOCs were not detected in the method blanks above the MDLs, with the following exception.

Tetrachloroethene was detected at an estimated concentration greater than the MDL and less than the reporting limit (RL) in the method blank in batch 255184. Therefore, the estimated tetrachloroethene concentrations in the associated samples were U qualified as not detected at the RL.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BP-SC-207	Tetrachloroethene	0.0022	J,B	0.0055	U	3
BP-SC-208	Tetrachloroethene	0.0027	J,B	0.0057	U	3
DUP-01-08242018	Tetrachloroethene	0.0032	J,B	0.0053	U	3

mg/kg-milligrams per kilogram
J-the result is less than the reporting limit (RL) but greater than the method detection limit (MDL) and the concentration is an approximate value
B-laboratory flag indicating the compound was found in the blank and sample

1.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported, using sample BP-SC-201. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exception.

The recoveries of acetone were high and outside the laboratory specified acceptance criteria. Since acetone was not detected in sample BP-SC-201, no qualifications were applied to the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs and one LCS/LCS duplicate (LCSD) pair were reported. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of sec-butylbenzene and toluene were low and outside the laboratory specified acceptance criteria in batch 255182. Therefore, the nondetect sec-butylbenzene and toluene results in the associated sample were UJ qualified as estimated less than the MDLs.

Sample ID	Compound	Laboratory Concentration (µg/L)	Laboratory Flag	Validation Concentration (µg/L)	Validation Qualifier	Reason Code
TRIP BLANK TB-16	sec-Butylbenzene	2.4	U,*	2.4	UJ	5
TRIP BLANK TB-16	Toluene	1.7	U,*	1.7	UJ	5

µg/L-micrograms per liter
U-the analyte was analyzed for but not detected
*-laboratory flag indicating the LCS or LCSD is outside acceptance limits

1.6 Surrogates

Acceptable surrogate recoveries were reported.

1.7 Trip Blank

A trip blank accompanied the samples, TRIP BLANK TB-16. VOCs were not detected in the trip blank above the MDLs.

1.8 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for VOCs, DUP-01-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-202.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the amount of sample extracted.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

2.0 SEMIVOLATILE ORGANIC COMPOUNDS

The samples were analyzed for SVOCs by EPA methods 3541/8270D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The SVOC data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid

analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

2.2 Holding Times

The holding times for SVOC analysis of solid samples are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255161). SVOCs were not detected in the method blank above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Surrogates

Acceptable surrogate recoveries were reported.

2.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for SVOCs, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212, with the following exception.

The concentrations of naphthalene were both greater than (BP-SC-212) and less than (DUP-02-08242018) five times the RLs and the RPD and difference between the original sample and field duplicate were greater than the acceptance criteria. Therefore, the concentrations of naphthalene in the field duplicate pair were J qualified as estimated.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	RPD	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BP-SC-212	Naphthalene	0.11	NA	119	0.11	J	7
DUP-02-08242018	Naphthalene	0.028	NA		0.028	J	7

mg/kg-milligrams per kilogram
NA-not applicable

2.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

2.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

3.0 ORGANOCHLORINE PESTICIDES

The samples were analyzed for organochlorine pesticides by EPA Methods 3541/8081B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The organochlorine pesticides data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio

of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

The %D for 4,4'-DDT in batch 255343 on gas chromatography (GC) column MR-1 was high and outside the method specified acceptance criteria, with a low bias. Since the 4,4'-DDT results were reported from the other GC column which had acceptable results, no qualifications were applied to the data.

3.2 Holding Times

The holding times for the organochlorine pesticides analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255343). The organochlorine pesticides were not detected in the method blank above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-209. The recovery and RPD results were within the laboratory specified acceptance criteria.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

3.6 Surrogates

Acceptable surrogate recoveries were reported.

3.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for organochlorine pesticides, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

3.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

4.0 POLYCHLORINATED BIPHENYLS

The samples were analyzed for PCBs by EPA Methods 3541/8082A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

4.1 Overall Assessment

The PCB data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid

analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

The narrative indicated the following. The %Ds for two peaks in the PCB 1248 CCV on GC column CLP-1 in batch 255305 were high and outside the method specified acceptance criteria, with high biases. The %Ds for one peak each in the PCB 1016 and 1260 CCV on GC column CLP-1 in batch 255305 were high and outside the method specified acceptance criteria, with high biases. Based on professional and technical judgment and because the average CCV PCB 1248, PCB 1016 and PCB 1260 %Ds were acceptable, no qualifications were applied to the data.

4.2 Holding Times

The holding times for the PCB analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255160). PCBs were not detected in the method blank above the MDLs.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-209. The recovery and RPD results were within the laboratory specified acceptance criteria.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

4.6 Surrogates

Acceptable surrogate recoveries were reported.

4.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for PCBs, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

4.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

4.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

5.0 SILVEX

The samples were analyzed for the herbicide silvex (2,4,5-TP) by EPA Method 8151A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

5.1 Overall Assessment

The silvex data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid

analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

5.2 Holding Times

The holding times for the herbicide analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

5.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 256133). Silvex was not detected in the method blank above the MDL.

5.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

5.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS/LCSD pair was reported. The recovery and RPD results were within the laboratory specified acceptance criteria.

5.6 Surrogates

Acceptable surrogate recoveries were reported.

5.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for silvex, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

5.8 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

5.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

6.0 METALS

The samples were analyzed for metals by EPA methods 3050B/6010C (Mercury evaluated separately in Section 7.0, below).

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Laboratory Duplicate
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

6.1 Overall Assessment

The metals data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

6.2 Holding Times

The holding time for metals analysis of solid samples is 180 days from sample collection to analysis. The holding time was met for the sample analyses.

6.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255868). The metals were not detected in the method blank above the MDLs.

6.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-209. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of manganese were high and outside the laboratory specified acceptance criteria. Since the concentration of manganese in sample BP-SC-209 was more than four times the spike amount, no qualifications were applied to the data based on professional and technical judgment.

The MS recoveries of zinc were low, the MSD recovery and RPD of barium were high and the MSD recovery of copper was low, outside the laboratory specified acceptance criteria. Therefore, the concentrations of zinc and copper in sample BP-SC-209 were J- qualified as estimated with low biases and the concentration of barium was J qualified as estimated.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BP-SC-209	Barium	36	F2,F1	36	J	4
BP-SC-209	Copper	29	F1	29	J-	4
BP-SC-209	Zinc	58	F1	58	J-	4

mg/kg-milligrams per kilogram
F1- laboratory flag indicating the MS and/or MSD was outside acceptance criteria
F2- laboratory flag indicating the MS/MSD RPD exceeds control limits

6.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

6.6 Laboratory Duplicate

A laboratory duplicate was not reported.

6.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for metals, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

6.8 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

6.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

7.0 MERCURY

The samples were analyzed for mercury by EPA method 7471B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

7.1 Overall Assessment

The mercury data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total

number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

7.2 Holding Times

The holding time for the mercury analysis of solid samples is 28 days from sample collection to analysis. The holding time was met for the sample analyses.

7.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255103). Mercury was not detected in the method blank above the MDL.

7.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

7.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

7.6 Laboratory Duplicate

A laboratory duplicate was not reported.

7.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for mercury, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

7.8 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

7.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

8.0 TOTAL CYANIDE

The samples were analyzed for total cyanide by EPA Methods 9010C/9014.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Equipment Blank
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

8.1 Overall Assessment

The cyanide data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

8.2 Holding Times

The holding time for the cyanide analysis of solid samples is 14 days from sample collection to analysis. The holding time was met for the sample analyses.

8.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255350). Cyanide was not detected in the method blank above the MDL.

8.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BP-SC-209. The recovery and RPD results were within the laboratory specified acceptance criteria.

8.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

8.6 Laboratory Duplicate

A laboratory duplicate was not reported.

8.7 Field Duplicate

Two field duplicate samples were collected with the sample set. One field duplicate was analyzed for cyanide, DUP-02-08242018. Acceptable precision [RPD <40% for results greater than five times the RL and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicate and the original sample, BP-SC-212.

8.8 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

8.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

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: Restricted Residential Use

Have Ecological Resources been identified? no

Is this soil originating from the site? no

How many cubic yards of soil will be imported/reused? >1000

If greater than 1000 cubic yards will be imported, enter volume to be imported: 10,000

SECTION 2 – MATERIAL OTHER THAN SOIL

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

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

Is this virgin material from a permitted mine or quarry? Choose an item

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

SECTION 3 - SAMPLING

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

Samples were collected from the No. 4 pile at Brewer's Pit (see attached map). 25 discrete samples were collected and analyzed for VOCs. 11 composite samples were collected and analyzed for inorganics, SVOCs, PCBs and pesticides.

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):

See attached table of sampling results. No constituents were detected above allowable levels for Restricted Residential use presented in DER-10, Appendix 5.

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:

Edger Enterprises

Location where fill was obtained:

Brewer's Pit located in Horseheads NY

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

NYSDEC Facility ID 8-0734-00150

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 Reports
Data Validation Reports

The information provided on this form is accurate and complete.



Signature

4 June 2018

Date

Aron Krasnopoler

Print Name

Beech and Bonaparte, P.C.

Firm

TABLE 1

Request for Import - Summary of Analytical Results
Former Sperry Remington Site - North Portion
Elmira, New York

				Field_ID	BR-SC-101	BR-SC-102	BR-SC-103	BR-SC-104	BR-SC-105	BR-SC-106	BR-SC-107	BR-SC-108	BR-SC-109	BR-SC-110	BR-SC-111	BR-SC-112	BR-SC-113
				Sample Date	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018
				Lab Report Number	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1
				NYSDEC DER10 App 5 Constituent Levels for Imported Fill or Soil Restricted Residential Use May 2010													
Group	**Constituent**	**Units**	**EQL**														
VOCs	1,1,1-trichloroethane	mg/kg	0.0031	0.68	<0.0033U	<0.0031U	<0.0031U	<0.0033U	<0.0032U	<0.0033U	<0.0033U	<0.0036U	<0.0035U	<0.0034U	<0.0033U	<0.0032U	<0.0041U
	1,1-dichloroethane	mg/kg	0.0022	0.27	<0.0024U	<0.0023U	<0.0022U	<0.0024U	<0.0023U	<0.0024U	<0.0024U	<0.0026U	<0.0025U	<0.0024U	<0.0024U	<0.0023U	<0.003U
	1,1-dichloroethene	mg/kg	0.0035	0.33	<0.0038U	<0.0036U	<0.0035U	<0.0037U	<0.0036U	<0.0038U	<0.0037U	<0.004U	<0.004U	<0.0038U	<0.0038U	<0.0036U	<0.0047U
	1,2,4-trimethylbenzene	mg/kg	0.0017	3.6	<0.0018U	<0.0017U	<0.0017U	<0.0018U	<0.0017U	<0.0018U	<0.0018U	<0.0019U	<0.0019U	<0.0018U	<0.0018U	<0.0017U	<0.0022U
	1,2-dichlorobenzene	mg/kg	0.005	1.1	<0.0053U	<0.005U	<0.005U	<0.0053U	<0.0051U	<0.0053U	<0.0053U	<0.0057U	<0.0056U	<0.0054U	<0.0054U	<0.0051U	<0.0066U
	1,2-dichloroethane	mg/kg	0.0018	0.02	<0.0019U	<0.0018U	<0.0018U	<0.0019U	<0.0019U	<0.0019U	<0.0019U	<0.0021U	<0.002U	<0.002U	<0.0019U	<0.0018U	<0.0024U
	1,3,5-trimethylbenzene	mg/kg	0.0021	8.4	<0.0023U	<0.0022U	<0.0021U	<0.0022U	<0.0022U	<0.0023U	<0.0023U	<0.0024U	<0.0024U	<0.0023U	<0.0023U	<0.0022U	<0.0028U
	1,3-dichlorobenzene	mg/kg	0.002	2.4	<0.0021U	<0.002U	<0.002U	<0.0021U	<0.002U	<0.0021U	<0.0021U	<0.0023U	<0.0022U	<0.0021U	<0.0021U	<0.002U	<0.0026U
	1,4-dichlorobenzene	mg/kg	0.0013	1.8	<0.0013U	<0.0013U	<0.0013U	<0.0013U	<0.0013U	<0.0013U	<0.0013U	<0.0014U	<0.0014U	<0.0014U	<0.0014U	<0.0013U	<0.0017U
	1,4-Dioxane	mg/kg	0.045	0.1	<0.048U	<0.046U	<0.045U	<0.048U	<0.047U	<0.048U	<0.048U	<0.052U	<0.051U	<0.049U	<0.049U	<0.046U	<0.06U
	Methyl Ethyl Ketone	mg/kg	0.0036	0.12	<0.0038U	<0.0036U	<0.0036U	<0.0038U	<0.0037U	<0.0038U	<0.0038U	<0.0041U	<0.004U	<0.0039U	<0.0039U	<0.0037U	<0.0047U
	Acetone	mg/kg	0.0039	0.05	0.015J	<0.0039U	0.016J	<0.0041U	<0.004U	0.0061J	<0.0041U	<0.0045U	<0.0044U	<0.0042U	<0.0042U	<0.004U	<0.0052U
	Benzene	mg/kg	0.0024	0.06	<0.0026U	<0.0025U	<0.0024U	<0.0026U	<0.0025U	<0.0026U	<0.0026U	<0.0028U	<0.0027U	<0.0026U	<0.0026U	<0.0025U	<0.0032U
	Carbon tetrachloride	mg/kg	0.0041	0.76	<0.0044U	<0.0042U	<0.0041U	<0.0043U	<0.0042U	<0.0044U	<0.0043U	<0.0047U	<0.0046U	<0.0045U	<0.0044U	<0.0042U	<0.0054U
	Chlorobenzene	mg/kg	0.0019	1.1	<0.0021U	<0.002U	<0.0019U	<0.0021U	<0.002U	<0.0021U	<0.0021U	<0.0022U	<0.0022U	<0.0021U	<0.0021U	<0.002U	<0.0026U
	Chloroform	mg/kg	0.0026	0.37	<0.0028U	<0.0026U	<0.0026U	<0.0028U	<0.0027U	<0.0028U	<0.0028U	<0.003U	<0.0029U	<0.0028U	<0.0028U	<0.0027U	<0.0035U
	cis-1,2-dichloroethene	mg/kg	0.0019	0.25	<0.0021U	<0.002U	<0.0019U	<0.0021U	<0.002U	<0.0021U	<0.0021U	<0.0022U	<0.0022U	<0.0021U	<0.0021U	<0.002U	<0.0026U
	Dichloromethane	mg/kg	0.0029	0.05	<0.0031U	<0.003U	<0.0029U	<0.0031U	<0.003U	<0.0031U	<0.0031U	<0.0033U	<0.0033U	<0.0032U	<0.0031U	<0.003U	<0.0039U
	Ethylbenzene	mg/kg	0.0026	1	<0.0028U	<0.0027U	<0.0026U	<0.0028U	<0.0027U	<0.0028U	<0.0028U	<0.0031U	<0.003U	<0.0029U	<0.0029U	<0.0027U	<0.0035U
	Methyl-tert-butyl ether	mg/kg	0.0045	0.93	<0.0049U	<0.0046U	<0.0045U	<0.0048U	<0.0047U	<0.0049U	<0.0048U	<0.0052U	<0.0051U	<0.005U	<0.0049U	<0.0047U	<0.006U
	n-butylbenzene	mg/kg	0.0047	12	<0.005U	<0.0047U	<0.0047U	<0.0049U	<0.0048U	<0.005U	<0.005U	<0.0054U	<0.0053U	<0.0051U	<0.005U	<0.0048U	<0.0062U
	n-propylbenzene	mg/kg	0.0026	3.9	<0.0028U	<0.0026U	<0.0026U	<0.0028U	<0.0027U	<0.0028U	<0.0028U	<0.003U	<0.0029U	<0.0028U	<0.0028U	<0.0027U	<0.0035U
	sec-butylbenzene	mg/kg	0.003	11	<0.0032U	<0.0031U	<0.003U	<0.0032U	<0.0031U	<0.0032U	<0.0032U	<0.0035U	<0.0034U	<0.0033U	<0.0032U	<0.0031U	<0.004U
	Trichloroethene	mg/kg	0.0018	0.47	<0.002U	<0.0019U	<0.0018U	<0.002U	<0.0019U	<0.002U	<0.002U	<0.0021U	<0.0021U	<0.002U	<0.002U	<0.0019U	<0.0025U
	tert-butylbenzene	mg/kg	0.0023	5.9	<0.0024U	<0.0023U	<0.0023U	<0.0024U	<0.0023U	<0.0024U	<0.0024U	<0.0026U	<0.0026U	<0.0025U	<0.0024U	<0.0023U	<0.003U
	Tetrachloroethene	mg/kg	0.0025	1.3	<0.0026U	<0.0025U	<0.0025U	<0.0026U	<0.0026U	<0.0026U	<0.0026U	<0.0028U	<0.0028U	<0.0027U	<0.0027U	<0.0025U	<0.0033U
	Toluene	mg/kg	0.0021	0.7	<0.0022U	<0.0021U	<0.0021U	<0.0022U	<0.0022U	<0.0022U	<0.0022U	<0.0024U	<0.0024U	<0.0023U	<0.0022U	<0.0021U	<0.0028U
	trans-1,2-dichloroethene	mg/kg	0.0031	0.19	<0.0034U	<0.0032U	<0.0031U	<0.0033U	<0.0032U	<0.0033U	<0.0033U	<0.0036U	<0.0035U	<0.0034U	<0.0034U	<0.0032U	<0.0042U
	Vinyl chloride	mg/kg	0.0045	0.02	<0.0048U	<0.0046U	<0.0045U	<0.0048U	<0.0047U	<0.0048U	<0.0048U	<0.0052U	<0.0051U	<0.0049U	<0.0049U	<0.0047U	<0.006U
	Xylene Total	mg/kg	0.0053	1.6	<0.0057U	<0.0054U	<0.0053U	<0.0056U	<0.0055U	<0.0057U	<0.0056U	<0.0061U	<0.006U	<0.0058U	<0.0057U	<0.0055U	<0.0071U

DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
J-	The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
UJ	The analyte was not detected

TABLE 1

Request for Import - Summary of Analytical Results
Former Sperry Remington Site - North Portion
Elmira, New York

				Field_ID	BR-SC-114	BR-SC-115	BR-SC-116	BR-SC-117	BR-SC-118	DUP-01-08302	DUP-02-08302
				Sample Date	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018
				Lab Report Number	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1
				NYSDEC DER10 App 5 Constituent Levels for Imported Fill or Soil Restricted Residential Use May 2010							
Group	**Constituent**	**Units**	**EQL**								
PCBs	Arochlor 1016	mg/kg	0.0061		<0.0062U	<0.0063U	<0.0063U	<0.0061U	<0.0064U	<0.0064U	<0.0061U
	Arochlor 1221	mg/kg	0.012		<0.012U	<0.013U	<0.013U	<0.012U	<0.013U	<0.013U	<0.012U
	Arochlor 1232	mg/kg	0.011		<0.011U	<0.011U	<0.012U	<0.011U	<0.012U	<0.012U	<0.011U
	Arochlor 1242	mg/kg	0.011		<0.011U	<0.012U	<0.012U	<0.011U	<0.012U	<0.012U	<0.011U
	Arochlor 1248	mg/kg	0.015		<0.015U	<0.015U	<0.015U	<0.015U	<0.016U	<0.016U	<0.015U
	Arochlor 1254	mg/kg	0.013		<0.013U	<0.013U	<0.013U	<0.013U	<0.014U	<0.014U	<0.013U
	Arochlor 1260	mg/kg	0.0053		<0.0055U	<0.0055U	0.0093J	<0.0053U	<0.0056U	<0.0056U	<0.0054U
	Arochlor 1268	mg/kg	0.0091		<0.0093U	<0.0094U	<0.0094U	<0.0091U	<0.0096U	<0.0096U	<0.0091U
	Arochlor 1262	mg/kg	0.013		<0.013U	<0.014U	<0.014U	<0.013U	<0.014U	<0.014U	<0.013U
	Total PCBs	mg/kg		1	<0.096	<0.0992	0.05665	<0.0955	<0.1026	<0.1026	<0.0956
SVOCs	1,4-Dioxane	mg/kg	0.012	0.1	<0.012U	<0.024U	<0.012U	0.047J	<0.012U	<0.012U	<0.012U
	2-methylphenol	mg/kg	0.011	0.33	<0.011U	<0.022U	<0.011U	<0.011U	<0.011U	<0.011U	<0.011U
	4-methylphenol	mg/kg	0.011	0.33	<0.011U	<0.022U	<0.012U	<0.011U	<0.012U	<0.011U	<0.011U
	Acenaphthene	mg/kg	0.0022	98	0.0026J	<0.0044U	0.003J	<0.0022U	<0.0023U	<0.0022U	0.0046J
	Acenaphthylene	mg/kg	0.0033	100	0.0028J	<0.0033U	0.0027J	0.0029J	0.0031J	0.0017J	0.0037J
	Anthracene	mg/kg	0.0039	100	0.0061J	<0.0039U	0.01	0.0053J	0.0063J	0.0021J	0.024J
	Benz(a)anthracene	mg/kg	0.0076	1	0.019	0.014J	0.037	0.02J	0.031J	0.0083J	0.16J
	Benzo(a) pyrene	mg/kg	0.0076	1	0.024	0.018	0.043	0.022J	0.034J	0.011J	0.17J
	Benzo(b)fluoranthene	mg/kg	0.0076	1	0.03	0.02	0.05	0.029J	0.045J	0.013J	0.22J
	Benzo(g,h,i)perylene	mg/kg	0.0076	100	0.021	0.017	0.034	0.017J	0.024	0.01	0.13J
	Benzo(k)fluoranthene	mg/kg	0.0076	1.7	0.01	0.01J	0.022	0.008J	0.016	0.0065J	0.09J
	Chrysene	mg/kg	0.0076	1	0.025	0.019	0.045	0.023J	0.039J	0.012J	0.22J
	Dibenz(a,h)anthracene	mg/kg	0.0034	0.33	0.0034J	<0.0034U	0.0078J	0.0039J	0.0063J	0.0018J	0.028J
	Dibenzofuran	mg/kg	0.0017	59	<0.0017U	<0.0033U	0.0019J	0.0017J	<0.0017U	<0.0017U	0.0027J
	Fluoranthene	mg/kg	0.0076	100	0.046	0.028	0.085	0.039J	0.06J	0.017J	0.4J
	Fluorene	mg/kg	0.0015	100	0.0029J	<0.003U	0.0034J	0.0026J	0.0021J	<0.0015U	0.0064J
	Hexachlorobenzene	mg/kg	0.0027	1.2	<0.0027U	<0.0054U	<0.0028U	<0.0027U	<0.0028U	<0.0028U	<0.0027U
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.0076	0.5	0.015	0.012J	0.027	0.015J	0.022	0.0083	0.11J
	Naphthalene	mg/kg	0.0015	12	<0.0015U	<0.003U	0.0016J	<0.0015U	<0.0015U	<0.0015U	0.0016J
	Pentachlorophenol	mg/kg	0.06	0.8	<0.061U	<0.12U	<0.063U	<0.062U	<0.064U	<0.063U	<0.06U
	Phenanthrene	mg/kg	0.0076	100	0.026	0.015	0.043	0.021J	0.03J	0.01J	0.16J
	Phenol	mg/kg	0.011	0.33	<0.011U	<0.023U	<0.012U	<0.012U	<0.012U	<0.012U	<0.011U
	Pyrene	mg/kg	0.0076	100	0.035	0.023	0.064	0.032J	0.05J	0.014J	0.28J

TABLE 1

Request for Import - Summary of Analytical Results
Former Sperry Remington Site - North Portion
Elmira, New York

				Field_ID	BR-SC-114	BR-SC-115	BR-SC-116	BR-SC-117	BR-SC-118	DUP-01-08302	DUP-02-08302
				Sample Date	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018	8/30/2018
				Lab Report Number	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1	180-81524-1
				NYSDEC DER10 App 5 Constituent Levels for Imported Fill or Soil Restricted Residential Use May 2010							
Group	**Constituent**	**Units**	**EQL**								
Pesticides	4,4-DDE	mg/kg	0.00038	8.9	<0.00039U	<0.00039U	<0.0004U	<0.00038U	<0.0004U	<0.0004U	<0.00038U
	a-BHC	mg/kg	0.00046	0.02	<0.00047U	<0.00048U	<0.00048U	<0.00046U	<0.00049U	<0.00049U	<0.00046U
	Aldrin	mg/kg	0.00058	0.097	<0.0006U	<0.0006U	<0.0006U	<0.00058U	<0.00061U	<0.00061U	<0.00058U
	b-BHC	mg/kg	0.00048	0.09	<0.00049U	<0.0005U	<0.0005U	<0.00048U	<0.00051U	<0.00051U	<0.00048U
	Chlordane (cis)	mg/kg	0.0019		0.002J	0.0025J	0.0034J	0.0015J	0.00098J	0.0015J	0.003J
	d-BHC	mg/kg	0.00059	0.25	<0.00061U	<0.00061U	<0.00061U	<0.00059U	<0.00063U	<0.00063U	<0.0006U
	DDD	mg/kg	0.0005	13	<0.00052U	<0.00052U	<0.00052U	<0.0005U	<0.00053U	<0.00053U	<0.00051U
	DDT	mg/kg	0.00071	7.9	<0.00073U	<0.00073U	<0.00074U	<0.00071U	<0.00075U	<0.00075U	<0.00072U
	Dieldrin	mg/kg	0.00047	0.1	<0.00048U	<0.00048U	<0.00049U	<0.00047U	<0.0005U	<0.0005U	<0.00047U
	Endosulfan I	mg/kg	0.00051	24	<0.00052U	<0.00052U	<0.00053U	<0.00051U	<0.00054U	<0.00054U	<0.00051U
	Endosulfan II	mg/kg	0.00041	24	<0.00042U	<0.00043U	<0.00043U	<0.00041U	<0.00044U	<0.00044U	<0.00042U
	Endosulfan sulphate	mg/kg	0.00049	24	<0.0005U	<0.0005U	<0.00051U	<0.00049U	<0.00051U	<0.00052U	<0.00049U
	Endrin	mg/kg	0.00073	0.06	<0.00075U	<0.00075U	<0.00076U	<0.00073U	<0.00077U	<0.00077U	<0.00073U
	g-BHC (Lindane)	mg/kg	0.00064	0.1	<0.00066U	<0.00066U	<0.00066U	<0.00064U	<0.00068U	<0.00068U	<0.00064U
	Heptachlor	mg/kg	0.00058	0.38	<0.0006U	<0.0006U	<0.00061U	<0.00058U	<0.00062U	<0.00062U	<0.00059U
	2,4,5-TP (Silvex)	mg/kg	0.0077	3.8	<0.0077U	<0.0077U	<0.0077U	<0.0077U	<0.0078U	<0.0079U	<0.0077U
Inorganics	Cyanide Total	mg/kg	0.27	27	<0.3U	<0.3U	<0.29U	<0.27U	<0.3U	<0.31U	<0.27U
	Arsenic	mg/kg	1.1	16	5.4	6.4	6.7	4.9	6.5	6.3	5.3
	Barium	mg/kg	22	400	65	62	65	62	73	73	62
	Beryllium	mg/kg	0.45	47	0.43J	0.44J	0.42J	0.41J	0.42J	0.44J	0.41J
	Cadmium	mg/kg	0.041	4.3	<0.043U	<0.042U	<0.044U	<0.043U	<0.043U	<0.045U	<0.041U
	Chromium (III+VI)	mg/kg	0.56	19	13	15	13	12	13	14	13
	Copper	mg/kg	2.8	270	16	16	18	14	20	19	19
	Lead	mg/kg	1.1	400	13	14	14	13	15	13	13
	Manganese	mg/kg	1.7	2000	440	410	460	500	520	520	450
	Nickel	mg/kg	4.5	130	17	17	18	16	18	19	18
	Selenium	mg/kg	0.58	4	<0.6U	<0.59U	<0.62U	<0.61U	<0.6U	<0.63U	<0.58U
	Silver	mg/kg	0.12	8.3	<0.12U	<0.12U	<0.13U	<0.13U	<0.12U	<0.13U	<0.12U
	Zinc	mg/kg	2.2	2480	55	52	55	52	60	63	54
	Mercury	mg/kg	0.036	0.73	0.018J	0.019J	0.024J	0.023J	0.021J	0.022J	0.022J

DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively
J-	The analyte was positively
UJ	The analyte was not detected

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

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TestAmerica Job ID: 180-81524-1
Client Project/Site: Former Sperry Remington Site-Breesport P

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9/12/2018 12:25:51 PM

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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

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Job ID: 180-81524-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-81524-1

Receipt
The samples were received on 9/1/2018 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.3º C, 2.7º C and 4.9º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255768 was above criteria for the following analyte: 1,4-dioxane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-255768 was below criteria for the following analytes: acetone and 2-butanone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 180-256028 was above criteria for the following analyte: acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D LL: The following sample was diluted due to the nature of the sample matrix: BR-SC-115 (180-81524-15). Elevated reporting limits (RLs) are provided.

Method(s) 8270D LL: The continuing calibration verification (CCV) analyzed in batch 180-256177 was below criteria for the following analyte: pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 8081B: The continuing calibration verification (CCV) analyzed in batch 180-256318 (CCVIS 180-256318/5) was above criteria for aldrin, cis-chlordane, and endosulfan I on column MR-2. As the CCV was high and these analytes were not detected or detected at concnetrations below the reporting limit, the results were reported. Samples where cis-chlordane was detected above the reporting limit were reanalyzed for this analyte.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-256258 (CCV 180-256258/4) was above criteria for 3 peaks for aroclor 1248 on column RTX-CLP1. As the CCV was high and aroclor 1248 was not detected in the associated samples, the results were reported.

Method(s) 8082A: The continuing calibration verification (CCV) analyzed in batch 180-256258 (CCVIS 180-256258/5) was above criteria for 1 peak for aroclor 1016 on column RTX-CLP1. As the CCV was high and aroclor 1016 was not detected in the associated samples, the results were reported.

Method(s) 8082A: The RPD between the matrix spike/matrix spike duplicate (MS/MSD) of sample BR-SC-118 (180-81524-18) was above the control limits for aroclor1260. The recoveries were within the control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Job ID: 180-81524-1 (Continued)

Laboratory: TestAmerica Pittsburgh (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. TestAmerica Job ID: 180-81524-1
Project/Site: Former Sperry Remington Site-Breesport P

Laboratory: TestAmerica Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11182	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
2540G		Solid	Percent Moisture
2540G		Solid	Percent Solids
EPA 8270D LL	3541	Solid	1,4-Dioxane

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-81524-1	BR-SC-101	Solid	08/30/18 10:10	09/01/18 10:00
180-81524-2	BR-SC-102	Solid	08/30/18 10:15	09/01/18 10:00
180-81524-3	BR-SC-103	Solid	08/30/18 10:20	09/01/18 10:00
180-81524-4	BR-SC-104	Solid	08/30/18 10:25	09/01/18 10:00
180-81524-5	BR-SC-105	Solid	08/30/18 10:30	09/01/18 10:00
180-81524-6	BR-SC-106	Solid	08/30/18 10:35	09/01/18 10:00
180-81524-7	BR-SC-107	Solid	08/30/18 10:40	09/01/18 10:00
180-81524-8	BR-SC-108	Solid	08/30/18 10:45	09/01/18 10:00
180-81524-9	BR-SC-109	Solid	08/30/18 10:50	09/01/18 10:00
180-81524-10	BR-SC-110	Solid	08/30/18 10:55	09/01/18 10:00
180-81524-11	BR-SC-111	Solid	08/30/18 11:00	09/01/18 10:00
180-81524-12	BR-SC-112	Solid	08/30/18 11:05	09/01/18 10:00
180-81524-13	BR-SC-113	Solid	08/30/18 11:10	09/01/18 10:00
180-81524-14	BR-SC-114	Solid	08/30/18 09:45	09/01/18 10:00
180-81524-15	BR-SC-115	Solid	08/30/18 09:50	09/01/18 10:00
180-81524-16	BR-SC-116	Solid	08/30/18 09:55	09/01/18 10:00
180-81524-17	BR-SC-117	Solid	08/30/18 10:00	09/01/18 10:00
180-81524-18	BR-SC-118	Solid	08/30/18 10:05	09/01/18 10:00
180-81524-19	DUP-01-08302018	Solid	08/30/18 00:00	09/01/18 10:00
180-81524-20	DUP-02-08302018	Solid	08/30/18 00:00	09/01/18 10:00
180-81524-21	TRIP BLANK-1	Water	08/30/18 00:00	09/01/18 10:00

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	TAL PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PIT
EPA 8151A	Herbicides (GC)	SW846	TAL PIT
EPA 6010C	Metals (ICP)	SW846	TAL PIT
EPA 7471B	Mercury (CVAA)	SW846	TAL PIT
2540G	SM 2540G	SM22	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3541	Automated Soxhlet Extraction	SW846	TAL PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	TAL PIT
3660B	Sulfur Cleanup	SW846	TAL PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	TAL PIT
5030C	Purge and Trap	SW846	TAL PIT
5035	Closed System Purge and Trap	SW846	TAL PIT
7471B	Preparation, Mercury	SW846	TAL PIT
8151A	Extraction (Herbicides)	SW846	TAL PIT
9010C	Cyanide, Distillation	SW846	TAL PIT

Protocol References:

SM22 = Standard Methods For The Examination Of Water And Wastewater, 22nd Edition

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-101
Date Collected: 08/30/18 10:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-101
Date Collected: 08/30/18 10:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-1
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1686 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 10:09	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-102
Date Collected: 08/30/18 10:15
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-102
Date Collected: 08/30/18 10:15
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-2
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4127 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 10:33	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-103
Date Collected: 08/30/18 10:20
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-103
Date Collected: 08/30/18 10:20
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-3
Matrix: Solid
Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2261 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-103
Date Collected: 08/30/18 10:20
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-3
Matrix: Solid
Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 10:56	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-104
Date Collected: 08/30/18 10:25
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-104
Date Collected: 08/30/18 10:25
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-4
Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2954 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 11:19	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-105
Date Collected: 08/30/18 10:30
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-105
Date Collected: 08/30/18 10:30
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-5
Matrix: Solid
Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1469 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 11:43	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-106
Date Collected: 08/30/18 10:35
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-106
Date Collected: 08/30/18 10:35
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-106
Date Collected: 08/30/18 10:35
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-6
Matrix: Solid
Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1677 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 12:06	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-107
Date Collected: 08/30/18 10:40
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-107
Date Collected: 08/30/18 10:40
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-7
Matrix: Solid
Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0825 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 12:29	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-108
Date Collected: 08/30/18 10:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-108
Date Collected: 08/30/18 10:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-8
Matrix: Solid
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.6782 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-108
Date Collected: 08/30/18 10:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-8
Matrix: Solid
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 12:53	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-109
Date Collected: 08/30/18 10:50
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-109
Date Collected: 08/30/18 10:50
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-9
Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.8939 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 13:16	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-110
Date Collected: 08/30/18 10:55
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-110
Date Collected: 08/30/18 10:55
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-10
Matrix: Solid
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9457 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 13:40	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-111
Date Collected: 08/30/18 11:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT

Client Sample ID: BR-SC-111
Date Collected: 08/30/18 11:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-111
Date Collected: 08/30/18 11:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-11
Matrix: Solid
Percent Solids: 84.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2228 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 14:03	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-112
Date Collected: 08/30/18 11:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-112
Date Collected: 08/30/18 11:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-12
Matrix: Solid
Percent Solids: 87.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0725 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 14:26	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-113
Date Collected: 08/30/18 11:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-113
Date Collected: 08/30/18 11:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-13
Matrix: Solid
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.2187 g	5 mL	255794	09/04/18 06:00	KLG	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-113

Date Collected: 08/30/18 11:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-13

Matrix: Solid
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	255768	09/04/18 14:50	KLG	TAL PIT
	Instrument ID: CHHP3									

Client Sample ID: BR-SC-114

Date Collected: 08/30/18 09:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-114

Date Collected: 08/30/18 09:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-14

Matrix: Solid
Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256050	09/06/18 12:48	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 12:03	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541	RA		15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B	RA	1			256421	09/11/18 12:22	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 08:06	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 19:05	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.99 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:02	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.60 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:22	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.06 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 16:49	BSH	TAL PIT
	Instrument ID: SEAL2									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-115

Date Collected: 08/30/18 09:50
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-115

Date Collected: 08/30/18 09:50
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-15

Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.4 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		2	1 mL	1 mL	256050	09/06/18 13:16	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 12:18	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541	RA		15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B	RA	1			256421	09/11/18 12:37	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 08:24	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 19:29	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.02 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:07	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.59 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:23	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.05 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 16:51	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BR-SC-116

Date Collected: 08/30/18 09:55
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-116

Date Collected: 08/30/18 09:55
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-16

Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256050	09/06/18 13:44	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.2 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 12:33	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541	RA		15.2 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B	RA	1			256421	09/11/18 12:53	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.2 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 08:43	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.1 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 19:52	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.98 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:13	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.63 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:24	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.11 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 16:56	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BR-SC-117

Date Collected: 08/30/18 10:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-117

Date Collected: 08/30/18 10:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-17

Matrix: Solid
Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256050	09/06/18 14:12	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.5 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: BR-SC-117

Date Collected: 08/30/18 10:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-17

Matrix: Solid
Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 12:49	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.5 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 09:02	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 20:15	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.97 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:18	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.63 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:25	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.17 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 16:58	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: BR-SC-118

Date Collected: 08/30/18 10:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: BR-SC-118

Date Collected: 08/30/18 10:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-18

Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	256076	09/06/18 12:15	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256177	09/07/18 11:45	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.0 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 13:04	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.0 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 09:20	JMO	TAL PIT
	Instrument ID: CHGC10									

Client Sample ID: BR-SC-118

Lab Sample ID: 180-81524-18
Date Collected: 08/30/18 10:05
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			10.1 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 20:39	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.01 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 15:26	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.61 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:26	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.06 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 17:00	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: DUP-01-08302018

Lab Sample ID: 180-81524-19
Date Collected: 08/30/18 00:00
Matrix: Solid
Date Received: 09/01/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-01-08302018

Lab Sample ID: 180-81524-19
Date Collected: 08/30/18 00:00
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256050	09/06/18 14:40	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.0 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 13:50	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.0 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 10:16	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 22:10	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.97 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:23	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.60 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT

Client Sample ID: DUP-01-08302018

Lab Sample ID: 180-81524-19
Date Collected: 08/30/18 00:00
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:31	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.04 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 17:05	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: DUP-02-08302018

Lab Sample ID: 180-81524-20
Date Collected: 08/30/18 00:00
Matrix: Solid
Date Received: 09/01/18 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540G		1			255805	09/04/18 09:39	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-02-08302018

Lab Sample ID: 180-81524-20
Date Collected: 08/30/18 00:00
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.5 g	0.5 mL	255870	09/04/18 17:58	SAC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	256050	09/06/18 15:08	DLF	TAL PIT
	Instrument ID: CH71									
Total/NA	Prep	3541			15.5 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			256318	09/10/18 14:06	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541	RA		15.5 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Analysis	EPA 8081B	RA	1			256421	09/11/18 13:08	DFE	TAL PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.5 g	20.0 mL	256123	09/06/18 17:00	SAC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	256229	09/07/18 14:38	DFE	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	256230	09/07/18 14:39	DFE	TAL PIT
Total/NA	Analysis	EPA 8082A		1			256258	09/08/18 10:35	JMO	TAL PIT
	Instrument ID: CHGC10									
Total/NA	Prep	8151A			10.0 g	40.0 mL	256239	09/07/18 12:00	CBY	TAL PIT
Total/NA	Analysis	EPA 8151A		1			256412	09/11/18 22:32	JBF	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.04 g	100 mL	255868	09/04/18 17:23	NAM	TAL PIT
Total/NA	Analysis	EPA 6010C		1			256140	09/06/18 16:28	RJR	TAL PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.58 g	100 mL	255992	09/05/18 15:42	KA	TAL PIT
Total/NA	Analysis	EPA 7471B		1			256083	09/06/18 11:32	KA	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	9010C			1.16 g	50 mL	256068	09/06/18 11:17	JAS	TAL PIT

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: DUP-02-08302018

Date Collected: 08/30/18 00:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-20

Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9014		1			256129	09/06/18 17:06	BSH	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: TRIP BLANK-1

Date Collected: 08/30/18 00:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	256028	09/06/18 10:42	PJJ	TAL PIT
	Instrument ID: CHHP11									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Cleanup

DFE = David Eppinger

Batch Type: Prep

CBY = Charles Yushinski

JAS = Joshua Schmidt

KA = Kayla Kalamasz

KLG = Kathy Gordon

NAM = Nicole Marfisi

SAC = Shawn Clemente

Batch Type: Analysis

AVS = Abbey Smith

BSH = Brandon Hough

DFE = David Eppinger

DLF = Donald Ferguson

JBF = Joshua Fritsch

JMO = John Oravec

KA = Kayla Kalamasz

KLG = Kathy Gordon

PJJ = Patrick Journet

RJR = Ron Rosenbaum

Client Sample ID: BR-SC-101

Date Collected: 08/30/18 10:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-1
Matrix: Solid
Percent Solids: 84.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.015**	**J**	0.026	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Benzene	ND		0.0066	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
2-Butanone (MEK)	ND		0.0066	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Carbon tetrachloride	ND		0.0066	0.0044	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Chlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Chloroform	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
cis-1,2-Dichloroethene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,2-Dichlorobenzene	ND		0.0066	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,3-Dichlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,4-Dichlorobenzene	ND		0.0066	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,1-Dichloroethane	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,2-Dichloroethane	ND		0.0066	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,1-Dichloroethene	ND		0.0066	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,4-Dioxane	ND		1.3	0.048	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Ethylbenzene	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Methylene Chloride	ND		0.0066	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Methyl tert-butyl ether	ND		0.0066	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
n-Butylbenzene	ND		0.0066	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
N-Propylbenzene	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
sec-Butylbenzene	ND		0.0066	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
tert-Butylbenzene	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Tetrachloroethene	ND		0.0066	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Toluene	ND		0.0066	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
trans-1,2-Dichloroethene	ND		0.0066	0.0034	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,1,1-Trichloroethane	ND		0.0066	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Trichloroethene	ND		0.0066	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,2,4-Trimethylbenzene	ND		0.0066	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
1,3,5-Trimethylbenzene	ND		0.0066	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Vinyl chloride	ND		0.0066	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1
Xylenes, Total	ND		0.013	0.0057	mg/Kg	☼	09/04/18 06:00	09/04/18 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 110*	*09/04/18 06:00*	*09/04/18 10:09*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*	*09/04/18 06:00*	*09/04/18 10:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*69 - 110*	*09/04/18 06:00*	*09/04/18 10:09*	*1*
Toluene-d8 (Surr)	*91*		*83 - 124*	*09/04/18 06:00*	*09/04/18 10:09*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.3**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.7**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-102

Date Collected: 08/30/18 10:15
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-2
Matrix: Solid
Percent Solids: 85.4

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Benzene	ND		0.0063	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1

Client Sample ID: BR-SC-102

Date Collected: 08/30/18 10:15
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-2
Matrix: Solid
Percent Solids: 85.4

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.0063	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Carbon tetrachloride	ND		0.0063	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Chlorobenzene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Chloroform	ND		0.0063	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
cis-1,2-Dichloroethene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,2-Dichlorobenzene	ND		0.0063	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,3-Dichlorobenzene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,4-Dichlorobenzene	ND		0.0063	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,1-Dichloroethane	ND		0.0063	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,2-Dichloroethane	ND		0.0063	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,1-Dichloroethene	ND		0.0063	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,4-Dioxane	ND		1.3	0.046	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Ethylbenzene	ND		0.0063	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Methylene Chloride	ND		0.0063	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Methyl tert-butyl ether	ND		0.0063	0.0046	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
n-Butylbenzene	ND		0.0063	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
N-Propylbenzene	ND		0.0063	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
sec-Butylbenzene	ND		0.0063	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
tert-Butylbenzene	ND		0.0063	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Tetrachloroethene	ND		0.0063	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Toluene	ND		0.0063	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
trans-1,2-Dichloroethene	ND		0.0063	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,1,1-Trichloroethane	ND		0.0063	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Trichloroethene	ND		0.0063	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,2,4-Trimethylbenzene	ND		0.0063	0.0017	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
1,3,5-Trimethylbenzene	ND		0.0063	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Vinyl chloride	ND		0.0063	0.0046	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1
Xylenes, Total	ND		0.013	0.0054	mg/Kg	☼	09/04/18 06:00	09/04/18 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 110*	*09/04/18 06:00*	*09/04/18 10:33*	*1*
Dibromofluoromethane (Surr)	*92*		*74 - 114*	*09/04/18 06:00*	*09/04/18 10:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*69 - 110*	*09/04/18 06:00*	*09/04/18 10:33*	*1*
Toluene-d8 (Surr)	*94*		*83 - 124*	*09/04/18 06:00*	*09/04/18 10:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**85.4**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-103

Date Collected: 08/30/18 10:20
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-3
Matrix: Solid
Percent Solids: 87.7

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.016**	**J**	0.025	0.0039	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Benzene	ND		0.0062	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
2-Butanone (MEK)	ND		0.0062	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Carbon tetrachloride	ND		0.0062	0.0041	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1

Client Sample ID: BR-SC-103 — Lab Sample ID: 180-81524-3

Date Collected: 08/30/18 10:20 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 87.7**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0062	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Chloroform	ND		0.0062	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
cis-1,2-Dichloroethene	ND		0.0062	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,2-Dichlorobenzene	ND		0.0062	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,3-Dichlorobenzene	ND		0.0062	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,4-Dichlorobenzene	ND		0.0062	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,1-Dichloroethane	ND		0.0062	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,2-Dichloroethane	ND		0.0062	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,1-Dichloroethene	ND		0.0062	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,4-Dioxane	ND		1.2	0.045	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Ethylbenzene	ND		0.0062	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Methylene Chloride	ND		0.0062	0.0029	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Methyl tert-butyl ether	ND		0.0062	0.0045	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
n-Butylbenzene	ND		0.0062	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
N-Propylbenzene	ND		0.0062	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
sec-Butylbenzene	ND		0.0062	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
tert-Butylbenzene	ND		0.0062	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Tetrachloroethene	ND		0.0062	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Toluene	ND		0.0062	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
trans-1,2-Dichloroethene	ND		0.0062	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,1,1-Trichloroethane	ND		0.0062	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Trichloroethene	ND		0.0062	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,2,4-Trimethylbenzene	ND		0.0062	0.0017	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
1,3,5-Trimethylbenzene	ND		0.0062	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Vinyl chloride	ND		0.0062	0.0045	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1
Xylenes, Total	ND		0.012	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 10:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 110*	*09/04/18 06:00*	*09/04/18 10:56*	*1*
Dibromofluoromethane (Surr)	*90*		*74 - 114*	*09/04/18 06:00*	*09/04/18 10:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*69 - 110*	*09/04/18 06:00*	*09/04/18 10:56*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*	*09/04/18 06:00*	*09/04/18 10:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.3**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**87.7**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-104 — Lab Sample ID: 180-81524-4

Date Collected: 08/30/18 10:25 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.026	0.0041	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Benzene	ND		0.0065	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
2-Butanone (MEK)	ND		0.0065	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Carbon tetrachloride	ND		0.0065	0.0043	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Chlorobenzene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Chloroform	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1

Client Sample ID: BR-SC-104 — Lab Sample ID: 180-81524-4

Date Collected: 08/30/18 10:25 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,2-Dichlorobenzene	ND		0.0065	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,3-Dichlorobenzene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,4-Dichlorobenzene	ND		0.0065	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,1-Dichloroethane	ND		0.0065	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,2-Dichloroethane	ND		0.0065	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,1-Dichloroethene	ND		0.0065	0.0037	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,4-Dioxane	ND		1.3	0.048	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Ethylbenzene	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Methylene Chloride	ND		0.0065	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Methyl tert-butyl ether	ND		0.0065	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
n-Butylbenzene	ND		0.0065	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
N-Propylbenzene	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
sec-Butylbenzene	ND		0.0065	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
tert-Butylbenzene	ND		0.0065	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Tetrachloroethene	ND		0.0065	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Toluene	ND		0.0065	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
trans-1,2-Dichloroethene	ND		0.0065	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,1,1-Trichloroethane	ND		0.0065	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Trichloroethene	ND		0.0065	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,2,4-Trimethylbenzene	ND		0.0065	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
1,3,5-Trimethylbenzene	ND		0.0065	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Vinyl chloride	ND		0.0065	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1
Xylenes, Total	ND		0.013	0.0056	mg/Kg	☼	09/04/18 06:00	09/04/18 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 110*	*09/04/18 06:00*	*09/04/18 11:19*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*	*09/04/18 06:00*	*09/04/18 11:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*69 - 110*	*09/04/18 06:00*	*09/04/18 11:19*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*	*09/04/18 06:00*	*09/04/18 11:19*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.4**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-105 — Lab Sample ID: 180-81524-5

Date Collected: 08/30/18 10:30 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 86.6**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.026	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Benzene	ND		0.0064	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
2-Butanone (MEK)	ND		0.0064	0.0037	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Carbon tetrachloride	ND		0.0064	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Chlorobenzene	ND		0.0064	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Chloroform	ND		0.0064	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
cis-1,2-Dichloroethene	ND		0.0064	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,2-Dichlorobenzene	ND		0.0064	0.0051	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1

Client Sample ID: BR-SC-105

Date Collected: 08/30/18 10:30
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-5
Matrix: Solid
Percent Solids: 86.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0064	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,4-Dichlorobenzene	ND		0.0064	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,1-Dichloroethane	ND		0.0064	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,2-Dichloroethane	ND		0.0064	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,1-Dichloroethene	ND		0.0064	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,4-Dioxane	ND		1.3	0.047	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Ethylbenzene	ND		0.0064	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Methylene Chloride	ND		0.0064	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Methyl tert-butyl ether	ND		0.0064	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
n-Butylbenzene	ND		0.0064	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
N-Propylbenzene	ND		0.0064	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
sec-Butylbenzene	ND		0.0064	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
tert-Butylbenzene	ND		0.0064	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Tetrachloroethene	ND		0.0064	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Toluene	ND		0.0064	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
trans-1,2-Dichloroethene	ND		0.0064	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,1,1-Trichloroethane	ND		0.0064	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Trichloroethene	ND		0.0064	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,2,4-Trimethylbenzene	ND		0.0064	0.0017	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
1,3,5-Trimethylbenzene	ND		0.0064	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Vinyl chloride	ND		0.0064	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1
Xylenes, Total	ND		0.013	0.0055	mg/Kg	☼	09/04/18 06:00	09/04/18 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 110*	*09/04/18 06:00*	*09/04/18 11:43*	*1*
Dibromofluoromethane (Surr)	*89*		*74 - 114*	*09/04/18 06:00*	*09/04/18 11:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*69 - 110*	*09/04/18 06:00*	*09/04/18 11:43*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*	*09/04/18 06:00*	*09/04/18 11:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.4**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**86.6**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-106

Date Collected: 08/30/18 10:35
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-6
Matrix: Solid
Percent Solids: 84.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0061**	**J**	0.026	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Benzene	ND		0.0066	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
2-Butanone (MEK)	ND		0.0066	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Carbon tetrachloride	ND		0.0066	0.0044	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Chlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Chloroform	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
cis-1,2-Dichloroethene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,2-Dichlorobenzene	ND		0.0066	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,3-Dichlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,4-Dichlorobenzene	ND		0.0066	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1

Client Sample ID: BR-SC-106

Lab Sample ID: 180-81524-6
Date Collected: 08/30/18 10:35
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 84.9

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,2-Dichloroethane	ND		0.0066	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,1-Dichloroethene	ND		0.0066	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,4-Dioxane	ND		1.3	0.048	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Ethylbenzene	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Methylene Chloride	ND		0.0066	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Methyl tert-butyl ether	ND		0.0066	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
n-Butylbenzene	ND		0.0066	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
N-Propylbenzene	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
sec-Butylbenzene	ND		0.0066	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
tert-Butylbenzene	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Tetrachloroethene	ND		0.0066	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Toluene	ND		0.0066	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
trans-1,2-Dichloroethene	ND		0.0066	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,1,1-Trichloroethane	ND		0.0066	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Trichloroethene	ND		0.0066	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,2,4-Trimethylbenzene	ND		0.0066	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
1,3,5-Trimethylbenzene	ND		0.0066	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Vinyl chloride	ND		0.0066	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1
Xylenes, Total	ND		0.013	0.0057	mg/Kg	☼	09/04/18 06:00	09/04/18 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 110*	*09/04/18 06:00*	*09/04/18 12:06*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*09/04/18 06:00*	*09/04/18 12:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*69 - 110*	*09/04/18 06:00*	*09/04/18 12:06*	*1*
Toluene-d8 (Surr)	*90*		*83 - 124*	*09/04/18 06:00*	*09/04/18 12:06*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.1**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.9**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-107

Lab Sample ID: 180-81524-7
Date Collected: 08/30/18 10:40
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 86.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.026	0.0041	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Benzene	ND		0.0065	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
2-Butanone (MEK)	ND		0.0065	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Carbon tetrachloride	ND		0.0065	0.0043	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Chlorobenzene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Chloroform	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
cis-1,2-Dichloroethene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,2-Dichlorobenzene	ND		0.0065	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,3-Dichlorobenzene	ND		0.0065	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,4-Dichlorobenzene	ND		0.0065	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,1-Dichloroethane	ND		0.0065	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,2-Dichloroethane	ND		0.0065	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1

Client Sample ID: BR-SC-107

Lab Sample ID: 180-81524-7
Date Collected: 08/30/18 10:40
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 86.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0065	0.0037	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,4-Dioxane	ND		1.3	0.048	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Ethylbenzene	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Methylene Chloride	ND		0.0065	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Methyl tert-butyl ether	ND		0.0065	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
n-Butylbenzene	ND		0.0065	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
N-Propylbenzene	ND		0.0065	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
sec-Butylbenzene	ND		0.0065	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
tert-Butylbenzene	ND		0.0065	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Tetrachloroethene	ND		0.0065	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Toluene	ND		0.0065	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
trans-1,2-Dichloroethene	ND		0.0065	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,1,1-Trichloroethane	ND		0.0065	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Trichloroethene	ND		0.0065	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,2,4-Trimethylbenzene	ND		0.0065	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
1,3,5-Trimethylbenzene	ND		0.0065	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Vinyl chloride	ND		0.0065	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1
Xylenes, Total	ND		0.013	0.0056	mg/Kg	☼	09/04/18 06:00	09/04/18 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 110*	*09/04/18 06:00*	*09/04/18 12:29*	*1*
Dibromofluoromethane (Surr)	*93*		*74 - 114*	*09/04/18 06:00*	*09/04/18 12:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*69 - 110*	*09/04/18 06:00*	*09/04/18 12:29*	*1*
Toluene-d8 (Surr)	*91*		*83 - 124*	*09/04/18 06:00*	*09/04/18 12:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.0**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**86.0**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-108

Lab Sample ID: 180-81524-8
Date Collected: 08/30/18 10:45
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 85.6

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.028	0.0045	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Benzene	ND		0.0071	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
2-Butanone (MEK)	ND		0.0071	0.0041	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Carbon tetrachloride	ND		0.0071	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Chlorobenzene	ND		0.0071	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Chloroform	ND		0.0071	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
cis-1,2-Dichloroethene	ND		0.0071	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,2-Dichlorobenzene	ND		0.0071	0.0057	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,3-Dichlorobenzene	ND		0.0071	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,4-Dichlorobenzene	ND		0.0071	0.0014	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,1-Dichloroethane	ND		0.0071	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,2-Dichloroethane	ND		0.0071	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,1-Dichloroethene	ND		0.0071	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,4-Dioxane	ND		1.4	0.052	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1

Client Sample ID: BR-SC-108 — Lab Sample ID: 180-81524-8

Date Collected: 08/30/18 10:45 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.6**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.0071	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Methylene Chloride	ND		0.0071	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Methyl tert-butyl ether	ND		0.0071	0.0052	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
n-Butylbenzene	ND		0.0071	0.0054	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
N-Propylbenzene	ND		0.0071	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
sec-Butylbenzene	ND		0.0071	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
tert-Butylbenzene	ND		0.0071	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Tetrachloroethene	ND		0.0071	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Toluene	ND		0.0071	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
trans-1,2-Dichloroethene	ND		0.0071	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,1,1-Trichloroethane	ND		0.0071	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Trichloroethene	ND		0.0071	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,2,4-Trimethylbenzene	ND		0.0071	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
1,3,5-Trimethylbenzene	ND		0.0071	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Vinyl chloride	ND		0.0071	0.0052	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1
Xylenes, Total	ND		0.014	0.0061	mg/Kg	☼	09/04/18 06:00	09/04/18 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 110*	*09/04/18 06:00*	*09/04/18 12:53*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*09/04/18 06:00*	*09/04/18 12:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 12:53*	*1*
Toluene-d8 (Surr)	*93*		*83 - 124*	*09/04/18 06:00*	*09/04/18 12:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.4**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**85.6**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-109 — Lab Sample ID: 180-81524-9

Date Collected: 08/30/18 10:50 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.028	0.0044	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Benzene	ND		0.0070	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
2-Butanone (MEK)	ND		0.0070	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Carbon tetrachloride	ND		0.0070	0.0046	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Chlorobenzene	ND		0.0070	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Chloroform	ND		0.0070	0.0029	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
cis-1,2-Dichloroethene	ND		0.0070	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,2-Dichlorobenzene	ND		0.0070	0.0056	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,3-Dichlorobenzene	ND		0.0070	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,4-Dichlorobenzene	ND		0.0070	0.0014	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,1-Dichloroethane	ND		0.0070	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,2-Dichloroethane	ND		0.0070	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,1-Dichloroethene	ND		0.0070	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,4-Dioxane	ND		1.4	0.051	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Ethylbenzene	ND		0.0070	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Methylene Chloride	ND		0.0070	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1

Client Sample ID: BR-SC-109 — Lab Sample ID: 180-81524-9

Date Collected: 08/30/18 10:50 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.4**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.0070	0.0051	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
n-Butylbenzene	ND		0.0070	0.0053	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
N-Propylbenzene	ND		0.0070	0.0029	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
sec-Butylbenzene	ND		0.0070	0.0034	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
tert-Butylbenzene	ND		0.0070	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Tetrachloroethene	ND		0.0070	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Toluene	ND		0.0070	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
trans-1,2-Dichloroethene	ND		0.0070	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,1,1-Trichloroethane	ND		0.0070	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Trichloroethene	ND		0.0070	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,2,4-Trimethylbenzene	ND		0.0070	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
1,3,5-Trimethylbenzene	ND		0.0070	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Vinyl chloride	ND		0.0070	0.0051	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1
Xylenes, Total	ND		0.014	0.0060	mg/Kg	☼	09/04/18 06:00	09/04/18 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 110*	*09/04/18 06:00*	*09/04/18 13:16*	*1*
Dibromofluoromethane (Surr)	*92*		*74 - 114*	*09/04/18 06:00*	*09/04/18 13:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 13:16*	*1*
Toluene-d8 (Surr)	*93*		*83 - 124*	*09/04/18 06:00*	*09/04/18 13:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.4**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-110 — Lab Sample ID: 180-81524-10

Date Collected: 08/30/18 10:55 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.6**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.027	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Benzene	ND		0.0067	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
2-Butanone (MEK)	ND		0.0067	0.0039	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Carbon tetrachloride	ND		0.0067	0.0045	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Chlorobenzene	ND		0.0067	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Chloroform	ND		0.0067	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
cis-1,2-Dichloroethene	ND		0.0067	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,2-Dichlorobenzene	ND		0.0067	0.0054	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,3-Dichlorobenzene	ND		0.0067	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,4-Dichlorobenzene	ND		0.0067	0.0014	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,1-Dichloroethane	ND		0.0067	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,2-Dichloroethane	ND		0.0067	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,1-Dichloroethene	ND		0.0067	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,4-Dioxane	ND		1.3	0.049	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Ethylbenzene	ND		0.0067	0.0029	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Methylene Chloride	ND		0.0067	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Methyl tert-butyl ether	ND		0.0067	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
n-Butylbenzene	ND		0.0067	0.0051	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1

Client Sample ID: BR-SC-110 — Lab Sample ID: 180-81524-10

Date Collected: 08/30/18 10:55 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.6**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		0.0067	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
sec-Butylbenzene	ND		0.0067	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
tert-Butylbenzene	ND		0.0067	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Tetrachloroethene	ND		0.0067	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Toluene	ND		0.0067	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
trans-1,2-Dichloroethene	ND		0.0067	0.0034	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,1,1-Trichloroethane	ND		0.0067	0.0034	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Trichloroethene	ND		0.0067	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,2,4-Trimethylbenzene	ND		0.0067	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
1,3,5-Trimethylbenzene	ND		0.0067	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Vinyl chloride	ND		0.0067	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1
Xylenes, Total	ND		0.013	0.0058	mg/Kg	☼	09/04/18 06:00	09/04/18 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 110*	*09/04/18 06:00*	*09/04/18 13:40*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*	*09/04/18 06:00*	*09/04/18 13:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 13:40*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*	*09/04/18 06:00*	*09/04/18 13:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.4**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**85.6**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-111 — Lab Sample ID: 180-81524-11

Date Collected: 08/30/18 11:00 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.0**

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.027	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Benzene	ND		0.0066	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
2-Butanone (MEK)	ND		0.0066	0.0039	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Carbon tetrachloride	ND		0.0066	0.0044	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Chlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Chloroform	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
cis-1,2-Dichloroethene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,2-Dichlorobenzene	ND		0.0066	0.0054	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,3-Dichlorobenzene	ND		0.0066	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,4-Dichlorobenzene	ND		0.0066	0.0014	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,1-Dichloroethane	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,2-Dichloroethane	ND		0.0066	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,1-Dichloroethene	ND		0.0066	0.0038	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,4-Dioxane	ND		1.3	0.049	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Ethylbenzene	ND		0.0066	0.0029	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Methylene Chloride	ND		0.0066	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Methyl tert-butyl ether	ND		0.0066	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
n-Butylbenzene	ND		0.0066	0.0050	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
N-Propylbenzene	ND		0.0066	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
sec-Butylbenzene	ND		0.0066	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1

Client Sample ID: BR-SC-111

Lab Sample ID: 180-81524-11
Date Collected: 08/30/18 11:00
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 84.0

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		0.0066	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Tetrachloroethene	ND		0.0066	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Toluene	ND		0.0066	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
trans-1,2-Dichloroethene	ND		0.0066	0.0034	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,1,1-Trichloroethane	ND		0.0066	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Trichloroethene	ND		0.0066	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,2,4-Trimethylbenzene	ND		0.0066	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
1,3,5-Trimethylbenzene	ND		0.0066	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Vinyl chloride	ND		0.0066	0.0049	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1
Xylenes, Total	ND		0.013	0.0057	mg/Kg	☼	09/04/18 06:00	09/04/18 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 110*	*09/04/18 06:00*	*09/04/18 14:03*	*1*
Dibromofluoromethane (Surr)	*90*		*74 - 114*	*09/04/18 06:00*	*09/04/18 14:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 14:03*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*	*09/04/18 06:00*	*09/04/18 14:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.0**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.0**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-112

Lab Sample ID: 180-81524-12
Date Collected: 08/30/18 11:05
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 87.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Benzene	ND		0.0063	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
2-Butanone (MEK)	ND		0.0063	0.0037	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Carbon tetrachloride	ND		0.0063	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Chlorobenzene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Chloroform	ND		0.0063	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
cis-1,2-Dichloroethene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,2-Dichlorobenzene	ND		0.0063	0.0051	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,3-Dichlorobenzene	ND		0.0063	0.0020	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,4-Dichlorobenzene	ND		0.0063	0.0013	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,1-Dichloroethane	ND		0.0063	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,2-Dichloroethane	ND		0.0063	0.0018	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,1-Dichloroethene	ND		0.0063	0.0036	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,4-Dioxane	ND		1.3	0.046	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Ethylbenzene	ND		0.0063	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Methylene Chloride	ND		0.0063	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Methyl tert-butyl ether	ND		0.0063	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
n-Butylbenzene	ND		0.0063	0.0048	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
N-Propylbenzene	ND		0.0063	0.0027	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
sec-Butylbenzene	ND		0.0063	0.0031	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
tert-Butylbenzene	ND		0.0063	0.0023	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Tetrachloroethene	ND		0.0063	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1

Client Sample ID: BR-SC-112

Lab Sample ID: 180-81524-12
Date Collected: 08/30/18 11:05
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 87.5

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.0063	0.0021	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
trans-1,2-Dichloroethene	ND		0.0063	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,1,1-Trichloroethane	ND		0.0063	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Trichloroethene	ND		0.0063	0.0019	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,2,4-Trimethylbenzene	ND		0.0063	0.0017	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
1,3,5-Trimethylbenzene	ND		0.0063	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Vinyl chloride	ND		0.0063	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1
Xylenes, Total	ND		0.013	0.0055	mg/Kg	☼	09/04/18 06:00	09/04/18 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 110*	*09/04/18 06:00*	*09/04/18 14:26*	*1*
Dibromofluoromethane (Surr)	*89*		*74 - 114*	*09/04/18 06:00*	*09/04/18 14:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 14:26*	*1*
Toluene-d8 (Surr)	*89*		*83 - 124*	*09/04/18 06:00*	*09/04/18 14:26*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.5**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**87.5**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-113

Lab Sample ID: 180-81524-13
Date Collected: 08/30/18 11:10
Matrix: Solid
Date Received: 09/01/18 10:00
Percent Solids: 82.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.033	0.0052	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Benzene	ND		0.0082	0.0032	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
2-Butanone (MEK)	ND		0.0082	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Carbon tetrachloride	ND		0.0082	0.0054	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Chlorobenzene	ND		0.0082	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Chloroform	ND		0.0082	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
cis-1,2-Dichloroethene	ND		0.0082	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,2-Dichlorobenzene	ND		0.0082	0.0066	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,3-Dichlorobenzene	ND		0.0082	0.0026	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,4-Dichlorobenzene	ND		0.0082	0.0017	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,1-Dichloroethane	ND		0.0082	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,2-Dichloroethane	ND		0.0082	0.0024	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,1-Dichloroethene	ND		0.0082	0.0047	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,4-Dioxane	ND		1.6	0.060	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Ethylbenzene	ND		0.0082	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Methylene Chloride	ND		0.0082	0.0039	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Methyl tert-butyl ether	ND		0.0082	0.0060	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
n-Butylbenzene	ND		0.0082	0.0062	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
N-Propylbenzene	ND		0.0082	0.0035	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
sec-Butylbenzene	ND		0.0082	0.0040	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
tert-Butylbenzene	ND		0.0082	0.0030	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Tetrachloroethene	ND		0.0082	0.0033	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Toluene	ND		0.0082	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
trans-1,2-Dichloroethene	ND		0.0082	0.0042	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1

Client Sample ID: BR-SC-113

Date Collected: 08/30/18 11:10
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-13

Matrix: Solid
Percent Solids: 82.8

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0082	0.0041	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Trichloroethene	ND		0.0082	0.0025	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,2,4-Trimethylbenzene	ND		0.0082	0.0022	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
1,3,5-Trimethylbenzene	ND		0.0082	0.0028	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Vinyl chloride	ND		0.0082	0.0060	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1
Xylenes, Total	ND		0.016	0.0071	mg/Kg	☼	09/04/18 06:00	09/04/18 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 110*	*09/04/18 06:00*	*09/04/18 14:50*	*1*
Dibromofluoromethane (Surr)	*90*		*74 - 114*	*09/04/18 06:00*	*09/04/18 14:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*69 - 110*	*09/04/18 06:00*	*09/04/18 14:50*	*1*
Toluene-d8 (Surr)	*91*		*83 - 124*	*09/04/18 06:00*	*09/04/18 14:50*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.2**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**82.8**		0.1	0.1	%			09/04/18 09:39	1

Client Sample ID: BR-SC-114

Date Collected: 08/30/18 09:45
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-14

Matrix: Solid
Percent Solids: 86.4

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0026**	**J**	0.0076	0.0022	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Acenaphthylene	**0.0028**	**J**	0.0076	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Anthracene	**0.0061**	**J**	0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Benzo[a]anthracene	**0.019**		0.0076	0.0014	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Benzo[a]pyrene	**0.024**		0.0076	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Benzo[b]fluoranthene	**0.030**		0.0076	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Benzo[g,h,i]perylene	**0.021**		0.0076	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Benzo[k]fluoranthene	**0.010**		0.0076	0.0023	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Chrysene	**0.025**		0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Dibenz(a,h)anthracene	**0.0034**	**J**	0.0076	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Dibenzofuran	ND		0.037	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
1,4-Dioxane	ND		0.076	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Fluoranthene	**0.046**		0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Fluorene	**0.0029**	**J**	0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Hexachlorobenzene	ND		0.0076	0.0027	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Indeno[1,2,3-cd]pyrene	**0.015**		0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
2-Methylphenol	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Methylphenol, 3 & 4	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Naphthalene	ND		0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Pentachlorophenol	ND		0.19	0.061	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Phenanthrene	**0.026**		0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Phenol	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1
Pyrene	**0.035**		0.0076	0.0018	mg/Kg	☼	09/04/18 17:58	09/06/18 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*39 - 105*	*09/04/18 17:58*	*09/06/18 12:48*	*1*

Client Sample ID: BR-SC-114 **Lab Sample ID: 180-81524-14**
Date Collected: 08/30/18 09:45 **Matrix: Solid**
Date Received: 09/01/18 10:00 **Percent Solids: 86.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*74*		*35 - 105*	*09/04/18 17:58*	*09/06/18 12:48*	*1*
Nitrobenzene-d5 (Surr)	*76*		*39 - 105*	*09/04/18 17:58*	*09/06/18 12:48*	*1*
Phenol-d5 (Surr)	*82*		*42 - 105*	*09/04/18 17:58*	*09/06/18 12:48*	*1*
Terphenyl-d14 (Surr)	*86*		*28 - 148*	*09/04/18 17:58*	*09/06/18 12:48*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*44 - 105*	*09/04/18 17:58*	*09/06/18 12:48*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
alpha-BHC	ND		0.0020	0.00047	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
beta-BHC	ND		0.0020	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
4,4'-DDD	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
4,4'-DDE	ND		0.0020	0.00039	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
4,4'-DDT	ND		0.0020	0.00073	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Endosulfan II	ND		0.0020	0.00042	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Endosulfan sulfate	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Endrin	ND		0.0020	0.00075	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
gamma-BHC (Lindane)	ND		0.0020	0.00066	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:03*	*1*
DCB Decachlorobiphenyl (Surr)	*108*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:03*	*1*
Tetrachloro-m-xylene	*97*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:03*	*1*
Tetrachloro-m-xylene	*89*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:03*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	**0.0020**	**p**	0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/11/18 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:22*	*1*
DCB Decachlorobiphenyl (Surr)	*111*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:22*	*1*
Tetrachloro-m-xylene	*93*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:22*	*1*
Tetrachloro-m-xylene	*88*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:22*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0062	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1221	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1232	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1242	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1262	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1
PCB-1268	ND		0.019	0.0093	mg/Kg	☼	09/06/18 17:00	09/08/18 08:06	1

Client Sample ID: BR-SC-114 — Lab Sample ID: 180-81524-14

Date Collected: 08/30/18 09:45 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 86.4**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		33 - 137	09/06/18 17:00	09/08/18 08:06	1
DCB Decachlorobiphenyl (Surr)	86		33 - 137	09/06/18 17:00	09/08/18 08:06	1
Tetrachloro-m-xylene (Surr)	82		44 - 114	09/06/18 17:00	09/08/18 08:06	1
Tetrachloro-m-xylene (Surr)	81		44 - 114	09/06/18 17:00	09/08/18 08:06	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0077	mg/Kg	☼	09/07/18 12:00	09/11/18 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	84		29 - 100	09/07/18 12:00	09/11/18 19:05	1
2,4-Dichlorophenylacetic acid	98		29 - 100	09/07/18 12:00	09/11/18 19:05	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.4**		1.2	0.46	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Barium	**65**		23	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Beryllium	**0.43**	**J**	0.47	0.027	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Cadmium	ND		0.58	0.043	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Chromium	**13**		0.58	0.16	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Copper	**16**		2.9	0.29	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Lead	**13**		1.2	0.60	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Manganese	**440**		1.8	0.19	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Nickel	**17**		4.7	0.29	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Selenium	ND		1.2	0.60	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Silver	ND		0.58	0.12	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1
Zinc	**55**		2.3	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:02	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.038	0.0086	mg/Kg	☼	09/05/18 15:42	09/06/18 11:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**86.4**		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.55	0.30	mg/Kg	☼	09/06/18 11:17	09/06/18 16:49	1

Client Sample ID: BR-SC-115 — Lab Sample ID: 180-81524-15

Date Collected: 08/30/18 09:50 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.7**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.015	0.0044	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Acenaphthylene	ND		0.015	0.0033	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Anthracene	ND		0.015	0.0039	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Benzo[a]anthracene	**0.014**	**J**	0.015	0.0029	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Benzo[a]pyrene	**0.018**		0.015	0.0033	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Benzo[b]fluoranthene	**0.020**		0.015	0.0037	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Benzo[g,h,i]perylene	**0.017**		0.015	0.0033	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2

Client Sample ID: BR-SC-115 **Lab Sample ID: 180-81524-15**
Date Collected: 08/30/18 09:50 **Matrix: Solid**
Date Received: 09/01/18 10:00 **Percent Solids: 85.7**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	**0.010**	**J**	0.015	0.0045	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Chrysene	**0.019**		0.015	0.0030	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Dibenz(a,h)anthracene	ND		0.015	0.0034	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Dibenzofuran	ND		0.075	0.0033	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
1,4-Dioxane	ND		0.15	0.024	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Fluoranthene	**0.028**		0.015	0.0040	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Fluorene	ND		0.015	0.0030	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Hexachlorobenzene	ND		0.015	0.0054	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Indeno[1,2,3-cd]pyrene	**0.012**	**J**	0.015	0.0031	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
2-Methylphenol	ND		0.075	0.022	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Methylphenol, 3 & 4	ND		0.075	0.022	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Naphthalene	ND		0.015	0.0030	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Pentachlorophenol	ND		0.39	0.12	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Phenanthrene	**0.015**		0.015	0.0041	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Phenol	ND		0.075	0.023	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2
Pyrene	**0.023**		0.015	0.0036	mg/Kg	☼	09/04/18 17:58	09/06/18 13:16	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*39 - 105*	*09/04/18 17:58*	*09/06/18 13:16*	*2*
2-Fluorophenol (Surr)	*69*		*35 - 105*	*09/04/18 17:58*	*09/06/18 13:16*	*2*
Nitrobenzene-d5 (Surr)	*74*		*39 - 105*	*09/04/18 17:58*	*09/06/18 13:16*	*2*
Phenol-d5 (Surr)	*76*		*42 - 105*	*09/04/18 17:58*	*09/06/18 13:16*	*2*
Terphenyl-d14 (Surr)	*85*		*28 - 148*	*09/04/18 17:58*	*09/06/18 13:16*	*2*
2,4,6-Tribromophenol (Surr)	*66*		*44 - 105*	*09/04/18 17:58*	*09/06/18 13:16*	*2*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
beta-BHC	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
4,4'-DDD	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
4,4'-DDE	ND		0.0020	0.00039	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
4,4'-DDT	ND		0.0020	0.00073	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Endosulfan sulfate	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Endrin	ND		0.0020	0.00075	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
gamma-BHC (Lindane)	ND		0.0020	0.00066	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:18*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:18*	*1*
Tetrachloro-m-xylene	*91*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:18*	*1*
Tetrachloro-m-xylene	*82*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:18*	*1*

Client Sample ID: BR-SC-115

Date Collected: 08/30/18 09:50
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-15

Matrix: Solid
Percent Solids: 85.7

Method: EPA 8081B - Organochlorine Pesticides (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	**0.0025**	**p**	0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/11/18 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*96*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:37*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:37*	*1*
Tetrachloro-m-xylene	*83*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:37*	*1*
Tetrachloro-m-xylene	*76*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:37*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0063	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1221	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1232	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1242	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1262	ND		0.019	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1
PCB-1268	ND		0.019	0.0094	mg/Kg	☼	09/06/18 17:00	09/08/18 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*33 - 137*	*09/06/18 17:00*	*09/08/18 08:24*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*33 - 137*	*09/06/18 17:00*	*09/08/18 08:24*	*1*
Tetrachloro-m-xylene (Surr)	*75*		*44 - 114*	*09/06/18 17:00*	*09/08/18 08:24*	*1*
Tetrachloro-m-xylene (Surr)	*76*		*44 - 114*	*09/06/18 17:00*	*09/08/18 08:24*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0077	mg/Kg	☼	09/07/18 12:00	09/11/18 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*78*		*29 - 100*	*09/07/18 12:00*	*09/11/18 19:29*	*1*
2,4-Dichlorophenylacetic acid	*89*		*29 - 100*	*09/07/18 12:00*	*09/11/18 19:29*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.4**		1.1	0.45	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Barium	**62**		23	1.2	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Beryllium	**0.44**	**J**	0.46	0.026	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Cadmium	ND		0.57	0.042	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Chromium	**15**		0.57	0.15	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Copper	**16**		2.9	0.29	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Lead	**14**		1.1	0.58	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Manganese	**410**		1.7	0.19	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Nickel	**17**		4.6	0.28	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Selenium	ND		1.1	0.59	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Silver	ND		0.57	0.12	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1
Zinc	**52**		2.3	1.2	mg/Kg	☼	09/04/18 17:23	09/06/18 16:07	1

Client Sample ID: BR-SC-115 — Lab Sample ID: 180-81524-15

Date Collected: 08/30/18 09:50 — Matrix: Solid
Date Received: 09/01/18 10:00 — Percent Solids: 85.7

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.039	0.0088	mg/Kg	☼	09/05/18 15:42	09/06/18 11:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	85.7		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.56	0.30	mg/Kg	☼	09/06/18 11:17	09/06/18 16:51	1

Client Sample ID: BR-SC-116 — Lab Sample ID: 180-81524-16

Date Collected: 08/30/18 09:55 — Matrix: Solid
Date Received: 09/01/18 10:00 — Percent Solids: 84.8

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0030	J	0.0079	0.0023	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Acenaphthylene	0.0027	J	0.0079	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Anthracene	0.010		0.0079	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Benzo[a]anthracene	0.037		0.0079	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Benzo[a]pyrene	0.043		0.0079	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Benzo[b]fluoranthene	0.050		0.0079	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Benzo[g,h,i]perylene	0.034		0.0079	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Benzo[k]fluoranthene	0.022		0.0079	0.0024	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Chrysene	0.045		0.0079	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Dibenz(a,h)anthracene	0.0078	J	0.0079	0.0018	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Dibenzofuran	0.0019	J	0.039	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
1,4-Dioxane	ND		0.079	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Fluoranthene	0.085		0.0079	0.0021	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Fluorene	0.0034	J	0.0079	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Hexachlorobenzene	ND		0.0079	0.0028	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Indeno[1,2,3-cd]pyrene	0.027		0.0079	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Methylphenol, 3 & 4	ND		0.039	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Naphthalene	0.0016	J	0.0079	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Pentachlorophenol	ND		0.20	0.063	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Phenanthrene	0.043		0.0079	0.0021	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Phenol	ND		0.039	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1
Pyrene	0.064		0.0079	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*39 - 105*	*09/04/18 17:58*	*09/06/18 13:44*	*1*
2-Fluorophenol (Surr)	*67*		*35 - 105*	*09/04/18 17:58*	*09/06/18 13:44*	*1*
Nitrobenzene-d5 (Surr)	*71*		*39 - 105*	*09/04/18 17:58*	*09/06/18 13:44*	*1*
Phenol-d5 (Surr)	*71*		*42 - 105*	*09/04/18 17:58*	*09/06/18 13:44*	*1*
Terphenyl-d14 (Surr)	*73*		*28 - 148*	*09/04/18 17:58*	*09/06/18 13:44*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*44 - 105*	*09/04/18 17:58*	*09/06/18 13:44*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1

Client Sample ID: BR-SC-116
Date Collected: 08/30/18 09:55
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-16
Matrix: Solid
Percent Solids: 84.8

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
4,4'-DDD	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
4,4'-DDT	ND		0.0020	0.00074	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Dieldrin	ND		0.0020	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Endosulfan I	ND		0.0020	0.00053	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Endosulfan sulfate	ND		0.0020	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Endrin	ND		0.0020	0.00076	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
gamma-BHC (Lindane)	ND		0.0020	0.00066	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1
Heptachlor	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*112*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:33*	*1*
DCB Decachlorobiphenyl (Surr)	*112*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:33*	*1*
Tetrachloro-m-xylene	*97*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:33*	*1*
Tetrachloro-m-xylene	*88*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:33*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	**0.0034**	**p**	0.0020	0.00049	mg/Kg	☼	09/06/18 17:00	09/11/18 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*110*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:53*	*1*
DCB Decachlorobiphenyl (Surr)	*115*		*40 - 150*	*09/06/18 17:00*	*09/11/18 12:53*	*1*
Tetrachloro-m-xylene	*92*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:53*	*1*
Tetrachloro-m-xylene	*89*		*44 - 133*	*09/06/18 17:00*	*09/11/18 12:53*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0063	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1221	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1232	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1242	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1260	**0.0093**	**J**	0.019	0.0055	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1262	ND		0.019	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1
PCB-1268	ND		0.019	0.0094	mg/Kg	☼	09/06/18 17:00	09/08/18 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*33 - 137*	*09/06/18 17:00*	*09/08/18 08:43*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*33 - 137*	*09/06/18 17:00*	*09/08/18 08:43*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*44 - 114*	*09/06/18 17:00*	*09/08/18 08:43*	*1*
Tetrachloro-m-xylene (Surr)	*83*		*44 - 114*	*09/06/18 17:00*	*09/08/18 08:43*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0077	mg/Kg	☼	09/07/18 12:00	09/11/18 19:52	1

Client Sample ID: BR-SC-116 — Lab Sample ID: 180-81524-16

Date Collected: 08/30/18 09:55 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.8**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	83		29 - 100	09/07/18 12:00	09/11/18 19:52	1
2,4-Dichlorophenylacetic acid	93		29 - 100	09/07/18 12:00	09/11/18 19:52	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		1.2	0.47	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Barium	65		24	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Beryllium	0.42	J	0.48	0.028	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Cadmium	ND		0.60	0.044	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Chromium	13		0.60	0.16	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Copper	18		3.0	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Lead	14		1.2	0.62	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Manganese	460		1.8	0.20	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Nickel	18		4.8	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Selenium	ND		1.2	0.62	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Silver	ND		0.60	0.13	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1
Zinc	55		2.4	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:13	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	J	0.037	0.0083	mg/Kg	☼	09/05/18 15:42	09/06/18 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.2		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	84.8		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.53	0.29	mg/Kg	☼	09/06/18 11:17	09/06/18 16:56	1

Client Sample ID: BR-SC-117 — Lab Sample ID: 180-81524-17

Date Collected: 08/30/18 10:00 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 86.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0077	0.0022	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Acenaphthylene	0.0029	J	0.0077	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Anthracene	0.0053	J	0.0077	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Benzo[a]anthracene	0.020		0.0077	0.0014	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Benzo[a]pyrene	0.022		0.0077	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Benzo[b]fluoranthene	0.029		0.0077	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Benzo[g,h,i]perylene	0.017		0.0077	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Benzo[k]fluoranthene	0.0080		0.0077	0.0023	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Chrysene	0.023		0.0077	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Dibenz(a,h)anthracene	0.0039	J	0.0077	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Dibenzofuran	0.0017	J	0.038	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
1,4-Dioxane	0.047	J	0.077	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Fluoranthene	0.039		0.0077	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Fluorene	0.0026	J	0.0077	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Hexachlorobenzene	ND		0.0077	0.0027	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Indeno[1,2,3-cd]pyrene	0.015		0.0077	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
2-Methylphenol	ND		0.038	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1

Client Sample ID: BR-SC-117 **Lab Sample ID: 180-81524-17**
Date Collected: 08/30/18 10:00 **Matrix: Solid**
Date Received: 09/01/18 10:00 **Percent Solids: 86.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylphenol, 3 & 4	ND		0.038	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Naphthalene	ND		0.0077	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Pentachlorophenol	ND		0.20	0.062	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Phenanthrene	**0.021**		0.0077	0.0021	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Phenol	ND		0.038	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1
Pyrene	**0.032**		0.0077	0.0018	mg/Kg	☼	09/04/18 17:58	09/06/18 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*39 - 105*	*09/04/18 17:58*	*09/06/18 14:12*	*1*
2-Fluorophenol (Surr)	*65*		*35 - 105*	*09/04/18 17:58*	*09/06/18 14:12*	*1*
Nitrobenzene-d5 (Surr)	*67*		*39 - 105*	*09/04/18 17:58*	*09/06/18 14:12*	*1*
Phenol-d5 (Surr)	*69*		*42 - 105*	*09/04/18 17:58*	*09/06/18 14:12*	*1*
Terphenyl-d14 (Surr)	*74*		*28 - 148*	*09/04/18 17:58*	*09/06/18 14:12*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*44 - 105*	*09/04/18 17:58*	*09/06/18 14:12*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0019	0.00058	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
alpha-BHC	ND		0.0019	0.00046	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
beta-BHC	ND		0.0019	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
cis-Chlordane	**0.0015**	**J p**	0.0019	0.00047	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
4,4'-DDD	ND		0.0019	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
4,4'-DDE	ND		0.0019	0.00038	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
4,4'-DDT	ND		0.0019	0.00071	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
delta-BHC	ND		0.0019	0.00059	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Dieldrin	ND		0.0019	0.00047	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Endosulfan I	ND		0.0019	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Endosulfan II	ND		0.0019	0.00041	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Endosulfan sulfate	ND		0.0019	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Endrin	ND		0.0019	0.00073	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
gamma-BHC (Lindane)	ND		0.0019	0.00064	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1
Heptachlor	ND		0.0019	0.00058	mg/Kg	☼	09/06/18 17:00	09/10/18 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*96*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:49*	*1*
DCB Decachlorobiphenyl (Surr)	*100*		*40 - 150*	*09/06/18 17:00*	*09/10/18 12:49*	*1*
Tetrachloro-m-xylene	*83*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:49*	*1*
Tetrachloro-m-xylene	*77*		*44 - 133*	*09/06/18 17:00*	*09/10/18 12:49*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0061	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1221	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1232	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1242	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1260	ND		0.019	0.0053	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1262	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1
PCB-1268	ND		0.019	0.0091	mg/Kg	☼	09/06/18 17:00	09/08/18 09:02	1

Client Sample ID: BR-SC-117

Date Collected: 08/30/18 10:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-17
Matrix: Solid
Percent Solids: 86.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 137*	*09/06/18 17:00*	*09/08/18 09:02*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*33 - 137*	*09/06/18 17:00*	*09/08/18 09:02*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*44 - 114*	*09/06/18 17:00*	*09/08/18 09:02*	*1*
Tetrachloro-m-xylene (Surr)	*67*		*44 - 114*	*09/06/18 17:00*	*09/08/18 09:02*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0077	mg/Kg	☼	09/07/18 12:00	09/11/18 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*73*		*29 - 100*	*09/07/18 12:00*	*09/11/18 20:15*	*1*
2,4-Dichlorophenylacetic acid	*85*		*29 - 100*	*09/07/18 12:00*	*09/11/18 20:15*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.9**		1.2	0.47	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Barium	**62**		24	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Beryllium	**0.41**	**J**	0.48	0.027	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Cadmium	ND		0.60	0.043	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Chromium	**12**		0.60	0.16	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Copper	**14**		3.0	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Lead	**13**		1.2	0.61	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Manganese	**500**		1.8	0.19	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Nickel	**16**		4.8	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Selenium	ND		1.2	0.61	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Silver	ND		0.60	0.13	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1
Zinc	**52**		2.4	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:18	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**	**J**	0.036	0.0081	mg/Kg	☼	09/05/18 15:42	09/06/18 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**86.4**		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.49	0.27	mg/Kg	☼	09/06/18 11:17	09/06/18 16:58	1

Client Sample ID: BR-SC-118

Date Collected: 08/30/18 10:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-18
Matrix: Solid
Percent Solids: 84.4

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0079	0.0023	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Acenaphthylene	**0.0031**	**J**	0.0079	0.0017	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Anthracene	**0.0063**	**J**	0.0079	0.0021	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Benzo[a]anthracene	**0.031**		0.0079	0.0015	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Benzo[a]pyrene	**0.034**		0.0079	0.0017	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Benzo[b]fluoranthene	**0.045**		0.0079	0.0019	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Benzo[g,h,i]perylene	**0.024**		0.0079	0.0017	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1

Client Sample ID: BR-SC-118 **Lab Sample ID: 180-81524-18**
Date Collected: 08/30/18 10:05 **Matrix: Solid**
Date Received: 09/01/18 10:00 **Percent Solids: 84.4**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	**0.016**		0.0079	0.0024	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Chrysene	**0.039**		0.0079	0.0016	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Dibenz(a,h)anthracene	**0.0063**	**J**	0.0079	0.0018	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Dibenzofuran	ND		0.039	0.0017	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
1,4-Dioxane	ND		0.079	0.012	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Fluoranthene	**0.060**		0.0079	0.0021	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Fluorene	**0.0021**	**J**	0.0079	0.0016	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Hexachlorobenzene	ND		0.0079	0.0028	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Indeno[1,2,3-cd]pyrene	**0.022**		0.0079	0.0016	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Methylphenol, 3 & 4	ND		0.039	0.012	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Naphthalene	ND		0.0079	0.0015	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Pentachlorophenol	ND		0.20	0.064	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Phenanthrene	**0.030**		0.0079	0.0021	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Phenol	ND		0.039	0.012	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1
Pyrene	**0.050**		0.0079	0.0019	mg/Kg	☼	09/06/18 12:15	09/07/18 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*39 - 105*	*09/06/18 12:15*	*09/07/18 11:45*	*1*
2-Fluorophenol (Surr)	*67*		*35 - 105*	*09/06/18 12:15*	*09/07/18 11:45*	*1*
Nitrobenzene-d5 (Surr)	*71*		*39 - 105*	*09/06/18 12:15*	*09/07/18 11:45*	*1*
Phenol-d5 (Surr)	*69*		*42 - 105*	*09/06/18 12:15*	*09/07/18 11:45*	*1*
Terphenyl-d14 (Surr)	*82*		*28 - 148*	*09/06/18 12:15*	*09/07/18 11:45*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*44 - 105*	*09/06/18 12:15*	*09/07/18 11:45*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
beta-BHC	ND		0.0020	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
cis-Chlordane	**0.00098**	**J p**	0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
4,4'-DDD	ND		0.0020	0.00053	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
4,4'-DDT	ND		0.0020	0.00075	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Endosulfan sulfate	ND		0.0020	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Endrin	ND		0.0020	0.00077	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
gamma-BHC (Lindane)	ND		0.0020	0.00068	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	09/06/18 17:00	09/10/18 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*105*		*40 - 150*	*09/06/18 17:00*	*09/10/18 13:04*	*1*
DCB Decachlorobiphenyl (Surr)	*107*		*40 - 150*	*09/06/18 17:00*	*09/10/18 13:04*	*1*
Tetrachloro-m-xylene	*89*		*44 - 133*	*09/06/18 17:00*	*09/10/18 13:04*	*1*
Tetrachloro-m-xylene	*78*		*44 - 133*	*09/06/18 17:00*	*09/10/18 13:04*	*1*

Client Sample ID: BR-SC-118

Date Collected: 08/30/18 10:05
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-18

Matrix: Solid
Percent Solids: 84.4

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0064	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1221	ND		0.020	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1232	ND		0.020	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1242	ND		0.020	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1248	ND		0.020	0.016	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1254	ND		0.020	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1260	ND	F2	0.020	0.0056	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1262	ND		0.020	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1
PCB-1268	ND		0.020	0.0096	mg/Kg	☼	09/06/18 17:00	09/08/18 09:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 137*	*09/06/18 17:00*	*09/08/18 09:20*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*33 - 137*	*09/06/18 17:00*	*09/08/18 09:20*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*44 - 114*	*09/06/18 17:00*	*09/08/18 09:20*	*1*
Tetrachloro-m-xylene (Surr)	*74*		*44 - 114*	*09/06/18 17:00*	*09/08/18 09:20*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0078	mg/Kg	☼	09/07/18 12:00	09/11/18 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*74*		*29 - 100*	*09/07/18 12:00*	*09/11/18 20:39*	*1*
2,4-Dichlorophenylacetic acid	*85*		*29 - 100*	*09/07/18 12:00*	*09/11/18 20:39*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.5**		1.2	0.46	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Barium	**73**		23	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Beryllium	**0.42**	**J**	0.47	0.027	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Cadmium	ND		0.59	0.043	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Chromium	**13**		0.59	0.16	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Copper	**20**		2.9	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Lead	**15**		1.2	0.60	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Manganese	**520**		1.8	0.19	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Nickel	**18**		4.7	0.29	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Selenium	ND		1.2	0.60	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Silver	ND		0.59	0.12	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1
Zinc	**60**		2.3	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 15:26	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**	**J**	0.038	0.0086	mg/Kg	☼	09/05/18 15:42	09/06/18 11:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.6**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.4**		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.56	0.30	mg/Kg	☼	09/06/18 11:17	09/06/18 17:00	1

Client Sample ID: DUP-01-08302018 **Lab Sample ID: 180-81524-19**
Date Collected: 08/30/18 00:00 **Matrix: Solid**
Date Received: 09/01/18 10:00 **Percent Solids: 84.2**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0078	0.0022	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Acenaphthylene	**0.0017**	**J**	0.0078	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Anthracene	**0.0021**	**J**	0.0078	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Benzo[a]anthracene	**0.0083**		0.0078	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Benzo[a]pyrene	**0.011**		0.0078	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Benzo[b]fluoranthene	**0.013**		0.0078	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Benzo[g,h,i]perylene	**0.010**		0.0078	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Benzo[k]fluoranthene	**0.0065**	**J**	0.0078	0.0023	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Chrysene	**0.012**		0.0078	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Dibenz(a,h)anthracene	**0.0018**	**J**	0.0078	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Dibenzofuran	ND		0.039	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
1,4-Dioxane	ND		0.078	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Fluoranthene	**0.017**		0.0078	0.0021	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Fluorene	ND		0.0078	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Hexachlorobenzene	ND		0.0078	0.0028	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Indeno[1,2,3-cd]pyrene	**0.0083**		0.0078	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Methylphenol, 3 & 4	ND		0.039	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Naphthalene	ND		0.0078	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Pentachlorophenol	ND		0.20	0.063	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Phenanthrene	**0.010**		0.0078	0.0021	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Phenol	ND		0.039	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1
Pyrene	**0.014**		0.0078	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*39 - 105*	*09/04/18 17:58*	*09/06/18 14:40*	*1*
2-Fluorophenol (Surr)	*64*		*35 - 105*	*09/04/18 17:58*	*09/06/18 14:40*	*1*
Nitrobenzene-d5 (Surr)	*71*		*39 - 105*	*09/04/18 17:58*	*09/06/18 14:40*	*1*
Phenol-d5 (Surr)	*70*		*42 - 105*	*09/04/18 17:58*	*09/06/18 14:40*	*1*
Terphenyl-d14 (Surr)	*77*		*28 - 148*	*09/04/18 17:58*	*09/06/18 14:40*	*1*
2,4,6-Tribromophenol (Surr)	*66*		*44 - 105*	*09/04/18 17:58*	*09/06/18 14:40*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00061	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
beta-BHC	ND		0.0020	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
cis-Chlordane	**0.0015**	**J p**	0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
4,4'-DDD	ND		0.0020	0.00053	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
4,4'-DDT	ND		0.0020	0.00075	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Endosulfan sulfate	ND		0.0020	0.00052	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Endrin	ND		0.0020	0.00077	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
gamma-BHC (Lindane)	ND		0.0020	0.00068	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	09/06/18 17:00	09/10/18 13:50	1

Client Sample ID: DUP-01-08302018

Date Collected: 08/30/18 00:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-19

Matrix: Solid
Percent Solids: 84.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	101		40 - 150	09/06/18 17:00	09/10/18 13:50	1
DCB Decachlorobiphenyl (Surr)	102		40 - 150	09/06/18 17:00	09/10/18 13:50	1
Tetrachloro-m-xylene	85		44 - 133	09/06/18 17:00	09/10/18 13:50	1
Tetrachloro-m-xylene	81		44 - 133	09/06/18 17:00	09/10/18 13:50	1

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0064	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1221	ND		0.020	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1232	ND		0.020	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1242	ND		0.020	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1248	ND		0.020	0.016	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1254	ND		0.020	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1260	ND		0.020	0.0056	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1262	ND		0.020	0.014	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1
PCB-1268	ND		0.020	0.0096	mg/Kg	☼	09/06/18 17:00	09/08/18 10:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	100		33 - 137	09/06/18 17:00	09/08/18 10:16	1
DCB Decachlorobiphenyl (Surr)	93		33 - 137	09/06/18 17:00	09/08/18 10:16	1
Tetrachloro-m-xylene (Surr)	77		44 - 114	09/06/18 17:00	09/08/18 10:16	1
Tetrachloro-m-xylene (Surr)	84		44 - 114	09/06/18 17:00	09/08/18 10:16	1

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.0079	mg/Kg	☼	09/07/18 12:00	09/11/18 22:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	51		29 - 100	09/07/18 12:00	09/11/18 22:10	1
2,4-Dichlorophenylacetic acid	60		29 - 100	09/07/18 12:00	09/11/18 22:10	1

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.3**		1.2	0.48	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Barium	**73**		24	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Beryllium	**0.44**	**J**	0.49	0.028	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Cadmium	ND		0.61	0.045	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Chromium	**14**		0.61	0.17	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Copper	**19**		3.1	0.31	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Lead	**13**		1.2	0.63	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Manganese	**520**		1.8	0.20	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Nickel	**19**		4.9	0.30	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Selenium	ND		1.2	0.63	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Silver	ND		0.61	0.13	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1
Zinc	**63**		2.4	1.3	mg/Kg	☼	09/04/18 17:23	09/06/18 16:23	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**J**	0.039	0.0088	mg/Kg	☼	09/05/18 15:42	09/06/18 11:31	1

Client Sample ID: DUP-01-08302018 — Lab Sample ID: 180-81524-19

Date Collected: 08/30/18 00:00 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 84.2**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.8**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**84.2**		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.57	0.31	mg/Kg	☼	09/06/18 11:17	09/06/18 17:05	1

Client Sample ID: DUP-02-08302018 — Lab Sample ID: 180-81524-20

Date Collected: 08/30/18 00:00 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.7**

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0046**	**J**	0.0076	0.0022	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Acenaphthylene	**0.0037**	**J**	0.0076	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Anthracene	**0.024**		0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Benzo[a]anthracene	**0.16**		0.0076	0.0014	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Benzo[a]pyrene	**0.17**		0.0076	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Benzo[b]fluoranthene	**0.22**		0.0076	0.0019	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Benzo[g,h,i]perylene	**0.13**		0.0076	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Benzo[k]fluoranthene	**0.090**		0.0076	0.0023	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Chrysene	**0.22**		0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Dibenz(a,h)anthracene	**0.028**		0.0076	0.0017	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Dibenzofuran	**0.0027**	**J**	0.037	0.0016	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
1,4-Dioxane	ND		0.075	0.012	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Fluoranthene	**0.40**		0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Fluorene	**0.0064**	**J**	0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Hexachlorobenzene	ND		0.0076	0.0027	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Indeno[1,2,3-cd]pyrene	**0.11**		0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
2-Methylphenol	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Methylphenol, 3 & 4	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Naphthalene	**0.0016**	**J**	0.0076	0.0015	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Pentachlorophenol	ND		0.19	0.060	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Phenanthrene	**0.16**		0.0076	0.0020	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Phenol	ND		0.037	0.011	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1
Pyrene	**0.28**		0.0076	0.0018	mg/Kg	☼	09/04/18 17:58	09/06/18 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*39 - 105*	*09/04/18 17:58*	*09/06/18 15:08*	*1*
2-Fluorophenol (Surr)	*61*		*35 - 105*	*09/04/18 17:58*	*09/06/18 15:08*	*1*
Nitrobenzene-d5 (Surr)	*69*		*39 - 105*	*09/04/18 17:58*	*09/06/18 15:08*	*1*
Phenol-d5 (Surr)	*69*		*42 - 105*	*09/04/18 17:58*	*09/06/18 15:08*	*1*
Terphenyl-d14 (Surr)	*77*		*28 - 148*	*09/04/18 17:58*	*09/06/18 15:08*	*1*
2,4,6-Tribromophenol (Surr)	*66*		*44 - 105*	*09/04/18 17:58*	*09/06/18 15:08*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0019	0.00058	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
alpha-BHC	ND		0.0019	0.00046	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
beta-BHC	ND		0.0019	0.00048	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
4,4'-DDD	ND		0.0019	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
4,4'-DDE	ND		0.0019	0.00038	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
4,4'-DDT	ND		0.0019	0.00072	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1

Client Sample ID: DUP-02-08302018
Date Collected: 08/30/18 00:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-20
Matrix: Solid
Percent Solids: 85.7

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
delta-BHC	ND		0.0019	0.00060	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Dieldrin	ND		0.0019	0.00047	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Endosulfan I	ND		0.0019	0.00051	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Endosulfan II	ND		0.0019	0.00042	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Endosulfan sulfate	ND		0.0019	0.00049	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Endrin	ND		0.0019	0.00073	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
gamma-BHC (Lindane)	ND		0.0019	0.00064	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1
Heptachlor	ND		0.0019	0.00059	mg/Kg	☼	09/06/18 17:00	09/10/18 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*40 - 150*	*09/06/18 17:00*	*09/10/18 14:06*	*1*
DCB Decachlorobiphenyl (Surr)	*103*		*40 - 150*	*09/06/18 17:00*	*09/10/18 14:06*	*1*
Tetrachloro-m-xylene	*87*		*44 - 133*	*09/06/18 17:00*	*09/10/18 14:06*	*1*
Tetrachloro-m-xylene	*81*		*44 - 133*	*09/06/18 17:00*	*09/10/18 14:06*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-Chlordane	**0.0030**	**p**	0.0019	0.00047	mg/Kg	☼	09/06/18 17:00	09/11/18 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*40 - 150*	*09/06/18 17:00*	*09/11/18 13:08*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*40 - 150*	*09/06/18 17:00*	*09/11/18 13:08*	*1*
Tetrachloro-m-xylene	*77*		*44 - 133*	*09/06/18 17:00*	*09/11/18 13:08*	*1*
Tetrachloro-m-xylene	*74*		*44 - 133*	*09/06/18 17:00*	*09/11/18 13:08*	*1*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0061	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1221	ND		0.019	0.012	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1232	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1242	ND		0.019	0.011	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1248	ND		0.019	0.015	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1254	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1260	ND		0.019	0.0054	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1262	ND		0.019	0.013	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1
PCB-1268	ND		0.019	0.0091	mg/Kg	☼	09/06/18 17:00	09/08/18 10:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*33 - 137*	*09/06/18 17:00*	*09/08/18 10:35*	*1*
DCB Decachlorobiphenyl (Surr)	*73*		*33 - 137*	*09/06/18 17:00*	*09/08/18 10:35*	*1*
Tetrachloro-m-xylene (Surr)	*62*		*44 - 114*	*09/06/18 17:00*	*09/08/18 10:35*	*1*
Tetrachloro-m-xylene (Surr)	*66*		*44 - 114*	*09/06/18 17:00*	*09/08/18 10:35*	*1*

Method: EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.0077	mg/Kg	☼	09/07/18 12:00	09/11/18 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*51*		*29 - 100*	*09/07/18 12:00*	*09/11/18 22:32*	*1*
2,4-Dichlorophenylacetic acid	*57*		*29 - 100*	*09/07/18 12:00*	*09/11/18 22:32*	*1*

Client Sample ID: DUP-02-08302018 — Lab Sample ID: 180-81524-20

Date Collected: 08/30/18 00:00 — **Matrix: Solid**
Date Received: 09/01/18 10:00 — **Percent Solids: 85.7**

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**		1.1	0.44	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Barium	**62**		22	1.2	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Beryllium	**0.41**	**J**	0.45	0.026	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Cadmium	ND		0.56	0.041	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Chromium	**13**		0.56	0.15	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Copper	**19**		2.8	0.28	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Lead	**13**		1.1	0.57	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Manganese	**450**		1.7	0.18	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Nickel	**18**		4.5	0.28	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Selenium	ND		1.1	0.58	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Silver	ND		0.56	0.12	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1
Zinc	**54**		2.2	1.2	mg/Kg	☼	09/04/18 17:23	09/06/18 16:28	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**J**	0.040	0.0089	mg/Kg	☼	09/05/18 15:42	09/06/18 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.3**		0.1	0.1	%			09/04/18 09:39	1
Percent Solids	**85.7**		0.1	0.1	%			09/04/18 09:39	1
Cyanide, Total	ND		0.50	0.27	mg/Kg	☼	09/06/18 11:17	09/06/18 17:06	1

Client Sample ID: TRIP BLANK-1 — Lab Sample ID: 180-81524-21

Date Collected: 08/30/18 00:00 — **Matrix: Water**
Date Received: 09/01/18 10:00

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	3.2	ug/L			09/06/18 10:42	1
Benzene	ND		5.0	2.0	ug/L			09/06/18 10:42	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			09/06/18 10:42	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			09/06/18 10:42	1
Chlorobenzene	ND		5.0	1.6	ug/L			09/06/18 10:42	1
Chloroform	ND		5.0	2.1	ug/L			09/06/18 10:42	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			09/06/18 10:42	1
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/06/18 10:42	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			09/06/18 10:42	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			09/06/18 10:42	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			09/06/18 10:42	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			09/06/18 10:42	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			09/06/18 10:42	1
1,4-Dioxane	ND		1000	37	ug/L			09/06/18 10:42	1
Ethylbenzene	ND		5.0	2.2	ug/L			09/06/18 10:42	1
Methylene Chloride	ND		5.0	2.4	ug/L			09/06/18 10:42	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			09/06/18 10:42	1
n-Butylbenzene	ND		5.0	3.8	ug/L			09/06/18 10:42	1
N-Propylbenzene	ND		5.0	2.1	ug/L			09/06/18 10:42	1
sec-Butylbenzene	ND		5.0	2.4	ug/L			09/06/18 10:42	1
tert-Butylbenzene	ND		5.0	1.8	ug/L			09/06/18 10:42	1

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington Site-Breesport P

TestAmerica Job ID: 180-81524-1

Client Sample ID: TRIP BLANK-1
Date Collected: 08/30/18 00:00
Date Received: 09/01/18 10:00

Lab Sample ID: 180-81524-21
Matrix: Water

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	2.0	ug/L			09/06/18 10:42	1
Toluene	ND		5.0	1.7	ug/L			09/06/18 10:42	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			09/06/18 10:42	1
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			09/06/18 10:42	1
Trichloroethene	ND		5.0	1.5	ug/L			09/06/18 10:42	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/L			09/06/18 10:42	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/L			09/06/18 10:42	1
Vinyl chloride	ND		5.0	3.7	ug/L			09/06/18 10:42	1
Xylenes, Total	ND		10	4.3	ug/L			09/06/18 10:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*61 - 123*		*09/06/18 10:42*	*1*
Dibromofluoromethane (Surr)	*99*		*68 - 128*		*09/06/18 10:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*73 - 143*		*09/06/18 10:42*	*1*
Toluene-d8 (Surr)	*101*		*75 - 124*		*09/06/18 10:42*	*1*

Method: EPA 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 180-255768/6
Matrix: Solid
Analysis Batch: 255768

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0032	mg/Kg			09/04/18 09:22	1
Benzene	ND		0.0050	0.0020	mg/Kg			09/04/18 09:22	1
2-Butanone (MEK)	ND		0.0050	0.0029	mg/Kg			09/04/18 09:22	1
Carbon tetrachloride	ND		0.0050	0.0033	mg/Kg			09/04/18 09:22	1
Chlorobenzene	ND		0.0050	0.0016	mg/Kg			09/04/18 09:22	1
Chloroform	ND		0.0050	0.0021	mg/Kg			09/04/18 09:22	1
cis-1,2-Dichloroethene	ND		0.0050	0.0016	mg/Kg			09/04/18 09:22	1
1,2-Dichlorobenzene	ND		0.0050	0.0040	mg/Kg			09/04/18 09:22	1
1,3-Dichlorobenzene	ND		0.0050	0.0016	mg/Kg			09/04/18 09:22	1
1,4-Dichlorobenzene	ND		0.0050	0.0010	mg/Kg			09/04/18 09:22	1
1,1-Dichloroethane	ND		0.0050	0.0018	mg/Kg			09/04/18 09:22	1
1,2-Dichloroethane	ND		0.0050	0.0015	mg/Kg			09/04/18 09:22	1
1,1-Dichloroethene	ND		0.0050	0.0029	mg/Kg			09/04/18 09:22	1
1,4-Dioxane	ND		1.0	0.037	mg/Kg			09/04/18 09:22	1
Ethylbenzene	ND		0.0050	0.0022	mg/Kg			09/04/18 09:22	1
Methylene Chloride	ND		0.0050	0.0024	mg/Kg			09/04/18 09:22	1
Methyl tert-butyl ether	ND		0.0050	0.0037	mg/Kg			09/04/18 09:22	1
n-Butylbenzene	ND		0.0050	0.0038	mg/Kg			09/04/18 09:22	1
N-Propylbenzene	ND		0.0050	0.0021	mg/Kg			09/04/18 09:22	1
sec-Butylbenzene	ND		0.0050	0.0024	mg/Kg			09/04/18 09:22	1
tert-Butylbenzene	ND		0.0050	0.0018	mg/Kg			09/04/18 09:22	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			09/04/18 09:22	1
Toluene	ND		0.0050	0.0017	mg/Kg			09/04/18 09:22	1
trans-1,2-Dichloroethene	ND		0.0050	0.0025	mg/Kg			09/04/18 09:22	1
1,1,1-Trichloroethane	ND		0.0050	0.0025	mg/Kg			09/04/18 09:22	1
Trichloroethene	ND		0.0050	0.0015	mg/Kg			09/04/18 09:22	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0013	mg/Kg			09/04/18 09:22	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			09/04/18 09:22	1
Vinyl chloride	ND		0.0050	0.0037	mg/Kg			09/04/18 09:22	1
Xylenes, Total	ND		0.010	0.0043	mg/Kg			09/04/18 09:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 110*		*09/04/18 09:22*	*1*
Dibromofluoromethane (Surr)	*91*		*74 - 114*		*09/04/18 09:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*69 - 110*		*09/04/18 09:22*	*1*
Toluene-d8 (Surr)	*92*		*83 - 124*		*09/04/18 09:22*	*1*

Lab Sample ID: LCS 180-255768/3
Matrix: Solid
Analysis Batch: 255768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0275		mg/Kg		69	36 - 150
Benzene	0.0400	0.0394		mg/Kg		98	78 - 118
2-Butanone (MEK)	0.0400	0.0304		mg/Kg		76	30 - 150
Carbon tetrachloride	0.0400	0.0429		mg/Kg		107	60 - 137
Chlorobenzene	0.0400	0.0393		mg/Kg		98	78 - 118
Chloroform	0.0400	0.0413		mg/Kg		103	68 - 124

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-255768/3
Matrix: Solid
Analysis Batch: 255768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	0.0400	0.0402		mg/Kg		101	71 - 120
1,2-Dichlorobenzene	0.0400	0.0394		mg/Kg		99	78 - 118
1,3-Dichlorobenzene	0.0400	0.0404		mg/Kg		101	78 - 118
1,4-Dichlorobenzene	0.0400	0.0395		mg/Kg		99	78 - 118
1,1-Dichloroethane	0.0400	0.0411		mg/Kg		103	67 - 129
1,2-Dichloroethane	0.0400	0.0380		mg/Kg		95	67 - 123
1,1-Dichloroethene	0.0400	0.0407		mg/Kg		102	59 - 128
1,4-Dioxane	0.800	0.737	J	mg/Kg		92	51 - 138
Ethylbenzene	0.0400	0.0393		mg/Kg		98	78 - 118
Methylene Chloride	0.0400	0.0403		mg/Kg		101	68 - 120
Methyl tert-butyl ether	0.0400	0.0354		mg/Kg		88	73 - 121
n-Butylbenzene	0.0400	0.0406		mg/Kg		102	71 - 132
N-Propylbenzene	0.0400	0.0401		mg/Kg		100	72 - 126
sec-Butylbenzene	0.0400	0.0406		mg/Kg		102	80 - 126
tert-Butylbenzene	0.0400	0.0410		mg/Kg		103	80 - 122
Tetrachloroethene	0.0400	0.0413		mg/Kg		103	78 - 118
Toluene	0.0400	0.0385		mg/Kg		96	79 - 121
trans-1,2-Dichloroethene	0.0400	0.0402		mg/Kg		100	71 - 123
1,1,1-Trichloroethane	0.0400	0.0438		mg/Kg		110	69 - 135
Trichloroethene	0.0400	0.0408		mg/Kg		102	76 - 120
1,2,4-Trimethylbenzene	0.0400	0.0417		mg/Kg		104	77 - 122
1,3,5-Trimethylbenzene	0.0400	0.0411		mg/Kg		103	78 - 122
Vinyl chloride	0.0400	0.0377		mg/Kg		94	53 - 148
Xylenes, Total	0.0800	0.0783		mg/Kg		98	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 110*
Dibromofluoromethane (Surr)	*96*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*90*		*69 - 110*
Toluene-d8 (Surr)	*91*		*83 - 124*

Lab Sample ID: LCSD 180-255768/4
Matrix: Solid
Analysis Batch: 255768

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0400	0.0283		mg/Kg		71	36 - 150	3	35
Benzene	0.0400	0.0376		mg/Kg		94	78 - 118	5	15
2-Butanone (MEK)	0.0400	0.0321		mg/Kg		80	30 - 150	5	35
Carbon tetrachloride	0.0400	0.0395		mg/Kg		99	60 - 137	8	21
Chlorobenzene	0.0400	0.0377		mg/Kg		94	78 - 118	4	15
Chloroform	0.0400	0.0395		mg/Kg		99	68 - 124	5	15
cis-1,2-Dichloroethene	0.0400	0.0389		mg/Kg		97	71 - 120	3	15
1,2-Dichlorobenzene	0.0400	0.0380		mg/Kg		95	78 - 118	4	15
1,3-Dichlorobenzene	0.0400	0.0392		mg/Kg		98	78 - 118	3	15
1,4-Dichlorobenzene	0.0400	0.0381		mg/Kg		95	78 - 118	3	15
1,1-Dichloroethane	0.0400	0.0385		mg/Kg		96	67 - 129	7	15
1,2-Dichloroethane	0.0400	0.0383		mg/Kg		96	67 - 123	1	15

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 180-255768/4
Matrix: Solid
Analysis Batch: 255768

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			0.0400	0.0372		mg/Kg		93	59 - 128	9	17
1,4-Dioxane			0.800	0.835	J	mg/Kg		104	51 - 138	12	35
Ethylbenzene			0.0400	0.0381		mg/Kg		95	78 - 118	3	15
Methylene Chloride			0.0400	0.0376		mg/Kg		94	68 - 120	7	19
Methyl tert-butyl ether			0.0400	0.0369		mg/Kg		92	73 - 121	4	24
n-Butylbenzene			0.0400	0.0389		mg/Kg		97	71 - 132	4	16
N-Propylbenzene			0.0400	0.0384		mg/Kg		96	72 - 126	4	24
sec-Butylbenzene			0.0400	0.0386		mg/Kg		97	80 - 126	5	18
tert-Butylbenzene			0.0400	0.0395		mg/Kg		99	80 - 122	4	19
Tetrachloroethene			0.0400	0.0394		mg/Kg		99	78 - 118	5	20
Toluene			0.0400	0.0370		mg/Kg		92	79 - 121	4	18
trans-1,2-Dichloroethene			0.0400	0.0385		mg/Kg		96	71 - 123	4	15
1,1,1-Trichloroethane			0.0400	0.0412		mg/Kg		103	69 - 135	6	22
Trichloroethene			0.0400	0.0394		mg/Kg		98	76 - 120	4	15
1,2,4-Trimethylbenzene			0.0400	0.0396		mg/Kg		99	77 - 122	5	16
1,3,5-Trimethylbenzene			0.0400	0.0391		mg/Kg		98	78 - 122	5	17
Vinyl chloride			0.0400	0.0358		mg/Kg		90	53 - 148	5	35
Xylenes, Total			0.0800	0.0754		mg/Kg		94	78 - 118	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 110*
Dibromofluoromethane (Surr)	*95*		*74 - 114*
1,2-Dichloroethane-d4 (Surr)	*92*		*69 - 110*
Toluene-d8 (Surr)	*90*		*83 - 124*

Lab Sample ID: MB 180-256028/5
Matrix: Water
Analysis Batch: 256028

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	3.2	ug/L			09/06/18 09:21	1
Benzene	ND		5.0	2.0	ug/L			09/06/18 09:21	1
2-Butanone (MEK)	ND		5.0	2.9	ug/L			09/06/18 09:21	1
Carbon tetrachloride	ND		5.0	3.3	ug/L			09/06/18 09:21	1
Chlorobenzene	ND		5.0	1.6	ug/L			09/06/18 09:21	1
Chloroform	ND		5.0	2.1	ug/L			09/06/18 09:21	1
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			09/06/18 09:21	1
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			09/06/18 09:21	1
1,3-Dichlorobenzene	ND		5.0	1.6	ug/L			09/06/18 09:21	1
1,4-Dichlorobenzene	ND		5.0	1.0	ug/L			09/06/18 09:21	1
1,1-Dichloroethane	ND		5.0	1.8	ug/L			09/06/18 09:21	1
1,2-Dichloroethane	ND		5.0	1.5	ug/L			09/06/18 09:21	1
1,1-Dichloroethene	ND		5.0	2.9	ug/L			09/06/18 09:21	1
1,4-Dioxane	ND		1000	37	ug/L			09/06/18 09:21	1
Ethylbenzene	ND		5.0	2.2	ug/L			09/06/18 09:21	1
Methylene Chloride	ND		5.0	2.4	ug/L			09/06/18 09:21	1
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			09/06/18 09:21	1
n-Butylbenzene	ND		5.0	3.8	ug/L			09/06/18 09:21	1

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 180-256028/5
Matrix: Water
Analysis Batch: 256028

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		5.0	2.1	ug/L			09/06/18 09:21	1
sec-Butylbenzene	ND		5.0	2.4	ug/L			09/06/18 09:21	1
tert-Butylbenzene	ND		5.0	1.8	ug/L			09/06/18 09:21	1
Tetrachloroethene	ND		5.0	2.0	ug/L			09/06/18 09:21	1
Toluene	ND		5.0	1.7	ug/L			09/06/18 09:21	1
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			09/06/18 09:21	1
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			09/06/18 09:21	1
Trichloroethene	ND		5.0	1.5	ug/L			09/06/18 09:21	1
1,2,4-Trimethylbenzene	ND		5.0	1.3	ug/L			09/06/18 09:21	1
1,3,5-Trimethylbenzene	ND		5.0	1.7	ug/L			09/06/18 09:21	1
Vinyl chloride	ND		5.0	3.7	ug/L			09/06/18 09:21	1
Xylenes, Total	ND		10	4.3	ug/L			09/06/18 09:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*61 - 123*		*09/06/18 09:21*	*1*
Dibromofluoromethane (Surr)	*90*		*68 - 128*		*09/06/18 09:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 143*		*09/06/18 09:21*	*1*
Toluene-d8 (Surr)	*96*		*75 - 124*		*09/06/18 09:21*	*1*

Lab Sample ID: LCS 180-256028/9
Matrix: Water
Analysis Batch: 256028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	22.5		ug/L		112	36 - 150
Benzene	10.0	9.94		ug/L		99	78 - 118
2-Butanone (MEK)	20.0	18.5		ug/L		92	30 - 150
Carbon tetrachloride	10.0	9.50		ug/L		95	60 - 137
Chlorobenzene	10.0	9.63		ug/L		96	78 - 118
Chloroform	10.0	9.81		ug/L		98	68 - 124
cis-1,2-Dichloroethene	10.0	9.61		ug/L		96	71 - 120
1,2-Dichlorobenzene	10.0	9.24		ug/L		92	78 - 118
1,3-Dichlorobenzene	10.0	9.34		ug/L		93	78 - 118
1,4-Dichlorobenzene	10.0	9.38		ug/L		94	78 - 118
1,1-Dichloroethane	10.0	10.0		ug/L		100	67 - 129
1,2-Dichloroethane	10.0	10.3		ug/L		103	67 - 123
1,1-Dichloroethene	10.0	9.15		ug/L		92	59 - 128
1,4-Dioxane	200	155	J	ug/L		77	51 - 138
Ethylbenzene	10.0	9.86		ug/L		99	78 - 118
Methylene Chloride	10.0	9.57		ug/L		96	68 - 120
Methyl tert-butyl ether	10.0	9.65		ug/L		97	73 - 121
n-Butylbenzene	10.0	10.1		ug/L		101	71 - 132
N-Propylbenzene	10.0	9.55		ug/L		95	72 - 126
sec-Butylbenzene	10.0	9.88		ug/L		99	80 - 126
tert-Butylbenzene	10.0	9.50		ug/L		95	80 - 122
Tetrachloroethene	10.0	9.59		ug/L		96	78 - 118
Toluene	10.0	9.86		ug/L		99	79 - 121
trans-1,2-Dichloroethene	10.0	9.38		ug/L		94	71 - 123

Method: EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 180-256028/9
Matrix: Water
Analysis Batch: 256028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.49		ug/L		95	69 - 135
Trichloroethene	10.0	9.68		ug/L		97	76 - 120
1,2,4-Trimethylbenzene	10.0	9.92		ug/L		99	77 - 122
1,3,5-Trimethylbenzene	10.0	9.79		ug/L		98	78 - 122
Vinyl chloride	10.0	10.1		ug/L		101	53 - 148
Xylenes, Total	20.0	19.4		ug/L		97	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*61 - 123*
Dibromofluoromethane (Surr)	*88*		*68 - 128*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 143*
Toluene-d8 (Surr)	*88*		*75 - 124*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-255870/1-A
Matrix: Solid
Analysis Batch: 256050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255870

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Anthracene	ND		0.0067	0.0017	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Benzo[a]anthracene	ND		0.0067	0.0013	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Benzo[a]pyrene	ND		0.0067	0.0015	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Chrysene	ND		0.0067	0.0013	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Dibenz(a,h)anthracene	ND		0.0067	0.0015	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Dibenzofuran	ND		0.033	0.0015	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
1,4-Dioxane	ND		0.067	0.010	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Fluorene	ND		0.0067	0.0013	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0014	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Phenol	ND		0.033	0.010	mg/Kg		09/04/18 17:58	09/06/18 10:55	1
Pyrene	ND		0.0067	0.0016	mg/Kg		09/04/18 17:58	09/06/18 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*39 - 105*	*09/04/18 17:58*	*09/06/18 10:55*	*1*
2-Fluorophenol (Surr)	*60*		*35 - 105*	*09/04/18 17:58*	*09/06/18 10:55*	*1*

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 180-255870/1-A
Matrix: Solid
Analysis Batch: 256050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255870

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	59		39 - 105	09/04/18 17:58	09/06/18 10:55	1
Phenol-d5 (Surr)	62		42 - 105	09/04/18 17:58	09/06/18 10:55	1
Terphenyl-d14 (Surr)	66		28 - 148	09/04/18 17:58	09/06/18 10:55	1
2,4,6-Tribromophenol (Surr)	55		44 - 105	09/04/18 17:58	09/06/18 10:55	1

Lab Sample ID: LCS 180-255870/2-A
Matrix: Solid
Analysis Batch: 256050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255870

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.523		mg/Kg		78	46 - 100
Acenaphthylene	0.667	0.514		mg/Kg		77	44 - 100
Anthracene	0.667	0.594		mg/Kg		89	46 - 102
Benzo[a]anthracene	0.667	0.529		mg/Kg		79	47 - 100
Benzo[a]pyrene	0.667	0.575		mg/Kg		86	47 - 100
Benzo[b]fluoranthene	0.667	0.496		mg/Kg		74	41 - 100
Benzo[g,h,i]perylene	0.667	0.575		mg/Kg		86	43 - 101
Benzo[k]fluoranthene	0.667	0.572		mg/Kg		86	44 - 100
Chrysene	0.667	0.536		mg/Kg		80	45 - 100
Dibenz(a,h)anthracene	0.667	0.561		mg/Kg		84	45 - 102
Dibenzofuran	0.667	0.522		mg/Kg		78	46 - 100
1,4-Dioxane	0.667	0.453		mg/Kg		68	27 - 112
Fluoranthene	0.667	0.533		mg/Kg		80	47 - 101
Fluorene	0.667	0.531		mg/Kg		80	47 - 100
Hexachlorobenzene	0.667	0.486		mg/Kg		73	43 - 105
Indeno[1,2,3-cd]pyrene	0.667	0.556		mg/Kg		83	45 - 102
2-Methylphenol	0.667	0.463		mg/Kg		69	39 - 100
Methylphenol, 3 & 4	0.667	0.488		mg/Kg		73	39 - 100
Naphthalene	0.667	0.459		mg/Kg		69	45 - 100
Pentachlorophenol	1.33	0.842		mg/Kg		63	35 - 105
Phenanthrene	0.667	0.580		mg/Kg		87	45 - 100
Phenol	0.667	0.457		mg/Kg		69	32 - 100
Pyrene	0.667	0.504		mg/Kg		76	40 - 105

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	67		39 - 105
2-Fluorophenol (Surr)	65		35 - 105
Nitrobenzene-d5 (Surr)	65		39 - 105
Phenol-d5 (Surr)	68		42 - 105
Terphenyl-d14 (Surr)	76		28 - 148
2,4,6-Tribromophenol (Surr)	68		44 - 105

Lab Sample ID: MB 180-256076/1-A
Matrix: Solid
Analysis Batch: 256177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		09/06/18 12:15	09/07/18 10:50	1

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 180-256076/1-A
Matrix: Solid
Analysis Batch: 256177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Anthracene	ND		0.0067	0.0017	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Benzo[a]anthracene	ND		0.0067	0.0013	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Benzo[a]pyrene	ND		0.0067	0.0015	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Chrysene	ND		0.0067	0.0013	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Dibenz(a,h)anthracene	ND		0.0067	0.0015	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Dibenzofuran	ND		0.033	0.0015	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
1,4-Dioxane	ND		0.067	0.010	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Fluorene	ND		0.0067	0.0013	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0014	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Phenol	ND		0.033	0.010	mg/Kg		09/06/18 12:15	09/07/18 10:50	1
Pyrene	ND		0.0067	0.0016	mg/Kg		09/06/18 12:15	09/07/18 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*39 - 105*	*09/06/18 12:15*	*09/07/18 10:50*	*1*
2-Fluorophenol (Surr)	*70*		*35 - 105*	*09/06/18 12:15*	*09/07/18 10:50*	*1*
Nitrobenzene-d5 (Surr)	*71*		*39 - 105*	*09/06/18 12:15*	*09/07/18 10:50*	*1*
Phenol-d5 (Surr)	*74*		*42 - 105*	*09/06/18 12:15*	*09/07/18 10:50*	*1*
Terphenyl-d14 (Surr)	*83*		*28 - 148*	*09/06/18 12:15*	*09/07/18 10:50*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*44 - 105*	*09/06/18 12:15*	*09/07/18 10:50*	*1*

Lab Sample ID: LCS 180-256076/2-A
Matrix: Solid
Analysis Batch: 256177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.556		mg/Kg		83	46 - 100
Acenaphthylene	0.667	0.533		mg/Kg		80	44 - 100
Anthracene	0.667	0.616		mg/Kg		92	46 - 102
Benzo[a]anthracene	0.667	0.561		mg/Kg		84	47 - 100
Benzo[a]pyrene	0.667	0.583		mg/Kg		87	47 - 100
Benzo[b]fluoranthene	0.667	0.518		mg/Kg		78	41 - 100
Benzo[g,h,i]perylene	0.667	0.562		mg/Kg		84	43 - 101
Benzo[k]fluoranthene	0.667	0.556		mg/Kg		83	44 - 100
Chrysene	0.667	0.561		mg/Kg		84	45 - 100
Dibenz(a,h)anthracene	0.667	0.568		mg/Kg		85	45 - 102
Dibenzofuran	0.667	0.544		mg/Kg		82	46 - 100
1,4-Dioxane	0.667	0.403		mg/Kg		60	27 - 112

Method: EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 180-256076/2-A
Matrix: Solid
Analysis Batch: 256177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256076

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoranthene			0.667	0.543		mg/Kg		81	47 - 101		
Fluorene			0.667	0.549		mg/Kg		82	47 - 100		
Hexachlorobenzene			0.667	0.522		mg/Kg		78	43 - 105		
Indeno[1,2,3-cd]pyrene			0.667	0.553		mg/Kg		83	45 - 102		
2-Methylphenol			0.667	0.485		mg/Kg		73	39 - 100		
Methylphenol, 3 & 4			0.667	0.492		mg/Kg		74	39 - 100		
Naphthalene			0.667	0.502		mg/Kg		75	45 - 100		
Pentachlorophenol			1.33	0.605		mg/Kg		45	35 - 105		
Phenanthrene			0.667	0.589		mg/Kg		88	45 - 100		
Phenol			0.667	0.478		mg/Kg		72	32 - 100		
Pyrene			0.667	0.549		mg/Kg		82	40 - 105		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*39 - 105*
2-Fluorophenol (Surr)	*72*		*35 - 105*
Nitrobenzene-d5 (Surr)	*78*		*39 - 105*
Phenol-d5 (Surr)	*77*		*42 - 105*
Terphenyl-d14 (Surr)	*87*		*28 - 148*
2,4,6-Tribromophenol (Surr)	*75*		*44 - 105*

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256177

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acenaphthene	ND		0.765	0.609		mg/Kg	☼	80	46 - 100		
Acenaphthylene	0.0031	J	0.765	0.602		mg/Kg	☼	78	44 - 100		
Anthracene	0.0063	J	0.765	0.653		mg/Kg	☼	85	46 - 102		
Benzo[a]anthracene	0.031		0.765	0.615		mg/Kg	☼	76	47 - 100		
Benzo[a]pyrene	0.034		0.765	0.650		mg/Kg	☼	81	47 - 100		
Benzo[b]fluoranthene	0.045		0.765	0.568		mg/Kg	☼	68	41 - 100		
Benzo[g,h,i]perylene	0.024		0.765	0.659		mg/Kg	☼	83	43 - 101		
Benzo[k]fluoranthene	0.016		0.765	0.611		mg/Kg	☼	78	44 - 100		
Chrysene	0.039		0.765	0.610		mg/Kg	☼	75	45 - 100		
Dibenz(a,h)anthracene	0.0063	J	0.765	0.640		mg/Kg	☼	83	45 - 102		
Dibenzofuran	ND		0.765	0.612		mg/Kg	☼	80	46 - 100		
1,4-Dioxane	ND		0.765	0.464		mg/Kg	☼	61	27 - 112		
Fluoranthene	0.060		0.765	0.597		mg/Kg	☼	70	47 - 101		
Fluorene	0.0021	J	0.765	0.604		mg/Kg	☼	79	47 - 100		
Hexachlorobenzene	ND		0.765	0.542		mg/Kg	☼	71	43 - 105		
Indeno[1,2,3-cd]pyrene	0.022		0.765	0.634		mg/Kg	☼	80	45 - 102		
2-Methylphenol	ND		0.765	0.495		mg/Kg	☼	65	39 - 100		
Methylphenol, 3 & 4	ND		0.765	0.518		mg/Kg	☼	68	39 - 100		
Naphthalene	ND		0.765	0.535		mg/Kg	☼	70	45 - 100		
Pentachlorophenol	ND		1.53	0.809		mg/Kg	☼	53	35 - 105		
Phenanthrene	0.030		0.765	0.636		mg/Kg	☼	79	45 - 100		
Phenol	ND		0.765	0.496		mg/Kg	☼	65	32 - 100		
Pyrene	0.050		0.765	0.598		mg/Kg	☼	72	40 - 105		

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	*69*		*39 - 105*
2-Fluorophenol (Surr)	*64*		*35 - 105*
Nitrobenzene-d5 (Surr)	*68*		*39 - 105*
Phenol-d5 (Surr)	*66*		*42 - 105*
Terphenyl-d14 (Surr)	*76*		*28 - 148*
2,4,6-Tribromophenol (Surr)	*66*		*44 - 105*

Lab Sample ID: 180-81524-18 MSD — **Client Sample ID: BR-SC-118**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 256177 — **Prep Batch: 256076**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		0.790	0.647		mg/Kg	☼	82	46 - 100	6	20
Acenaphthylene	0.0031	J	0.790	0.626		mg/Kg	☼	79	44 - 100	4	20
Anthracene	0.0063	J	0.790	0.703		mg/Kg	☼	88	46 - 102	7	19
Benzo[a]anthracene	0.031		0.790	0.666		mg/Kg	☼	80	47 - 100	8	17
Benzo[a]pyrene	0.034		0.790	0.707		mg/Kg	☼	85	47 - 100	8	17
Benzo[b]fluoranthene	0.045		0.790	0.619		mg/Kg	☼	73	41 - 100	9	17
Benzo[g,h,i]perylene	0.024		0.790	0.726		mg/Kg	☼	89	43 - 101	10	19
Benzo[k]fluoranthene	0.016		0.790	0.666		mg/Kg	☼	82	44 - 100	9	15
Chrysene	0.039		0.790	0.671		mg/Kg	☼	80	45 - 100	9	19
Dibenz(a,h)anthracene	0.0063	J	0.790	0.686		mg/Kg	☼	86	45 - 102	7	18
Dibenzofuran	ND		0.790	0.635		mg/Kg	☼	80	46 - 100	4	16
1,4-Dioxane	ND		0.790	0.498		mg/Kg	☼	63	27 - 112	7	22
Fluoranthene	0.060		0.790	0.681		mg/Kg	☼	79	47 - 101	13	17
Fluorene	0.0021	J	0.790	0.639		mg/Kg	☼	81	47 - 100	6	19
Hexachlorobenzene	ND		0.790	0.590		mg/Kg	☼	75	43 - 105	8	16
Indeno[1,2,3-cd]pyrene	0.022		0.790	0.702		mg/Kg	☼	86	45 - 102	10	18
2-Methylphenol	ND		0.790	0.554		mg/Kg	☼	70	39 - 100	11	16
Methylphenol, 3 & 4	ND		0.790	0.567		mg/Kg	☼	72	39 - 100	9	16
Naphthalene	ND		0.790	0.598		mg/Kg	☼	76	45 - 100	11	15
Pentachlorophenol	ND		1.58	0.816		mg/Kg	☼	52	35 - 105	1	17
Phenanthrene	0.030		0.790	0.716		mg/Kg	☼	87	45 - 100	12	17
Phenol	ND		0.790	0.537		mg/Kg	☼	68	32 - 100	8	18
Pyrene	0.050		0.790	0.659		mg/Kg	☼	77	40 - 105	10	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	*72*		*39 - 105*
2-Fluorophenol (Surr)	*70*		*35 - 105*
Nitrobenzene-d5 (Surr)	*74*		*39 - 105*
Phenol-d5 (Surr)	*70*		*42 - 105*
Terphenyl-d14 (Surr)	*78*		*28 - 148*
2,4,6-Tribromophenol (Surr)	*70*		*44 - 105*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-256123/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 256318 — **Prep Batch: 256123**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		09/06/18 17:00	09/10/18 11:47	1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-256123/1-A
Matrix: Solid
Analysis Batch: 256318

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
beta-BHC	ND		0.0017	0.00043	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
4,4'-DDD	ND		0.0017	0.00045	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
4,4'-DDT	ND		0.0017	0.00063	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Endosulfan sulfate	ND		0.0017	0.00043	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Endrin	ND		0.0017	0.00065	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
gamma-BHC (Lindane)	ND		0.0017	0.00057	mg/Kg		09/06/18 17:00	09/10/18 11:47	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		09/06/18 17:00	09/10/18 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*111*		*40 - 150*	*09/06/18 17:00*	*09/10/18 11:47*	*1*
DCB Decachlorobiphenyl (Surr)	*118*		*40 - 150*	*09/06/18 17:00*	*09/10/18 11:47*	*1*
Tetrachloro-m-xylene	*94*		*44 - 133*	*09/06/18 17:00*	*09/10/18 11:47*	*1*
Tetrachloro-m-xylene	*97*		*44 - 133*	*09/06/18 17:00*	*09/10/18 11:47*	*1*

Lab Sample ID: LCS 180-256123/2-A
Matrix: Solid
Analysis Batch: 256318

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256123

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.0333	0.0388		mg/Kg		116	58 - 131
alpha-BHC	0.0333	0.0342		mg/Kg		103	61 - 120
beta-BHC	0.0333	0.0344		mg/Kg		103	55 - 119
cis-Chlordane	0.0333	0.0395		mg/Kg		118	51 - 130
4,4'-DDD	0.0333	0.0339		mg/Kg		102	69 - 135
4,4'-DDE	0.0333	0.0322		mg/Kg		97	67 - 137
4,4'-DDT	0.0333	0.0349		mg/Kg		105	47 - 140
delta-BHC	0.0333	0.0186		mg/Kg		56	19 - 106
Dieldrin	0.0333	0.0354		mg/Kg		106	69 - 136
Endosulfan I	0.0333	0.0392		mg/Kg		118	51 - 133
Endosulfan II	0.0333	0.0360		mg/Kg		108	71 - 128
Endosulfan sulfate	0.0333	0.0322		mg/Kg		97	62 - 119
Endrin	0.0333	0.0357		mg/Kg		107	71 - 132
gamma-BHC (Lindane)	0.0333	0.0346		mg/Kg		104	59 - 123
Heptachlor	0.0333	0.0383		mg/Kg		115	57 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*117*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*122*		*40 - 150*
Tetrachloro-m-xylene	*97*		*44 - 133*
Tetrachloro-m-xylene	*94*		*44 - 133*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256318

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		0.0395	0.0392		mg/Kg	☼	99	58 - 131
alpha-BHC	ND		0.0395	0.0342		mg/Kg	☼	87	61 - 120
beta-BHC	ND		0.0395	0.0344		mg/Kg	☼	87	55 - 119
cis-Chlordane	0.00098	J p	0.0395	0.0430		mg/Kg	☼	106	51 - 130
4,4'-DDD	ND		0.0395	0.0333		mg/Kg	☼	84	69 - 135
4,4'-DDE	ND		0.0395	0.0333		mg/Kg	☼	84	67 - 137
4,4'-DDT	ND		0.0395	0.0354		mg/Kg	☼	90	47 - 140
delta-BHC	ND		0.0395	0.0171		mg/Kg	☼	43	19 - 106
Dieldrin	ND		0.0395	0.0350		mg/Kg	☼	88	69 - 136
Endosulfan I	ND		0.0395	0.0400		mg/Kg	☼	101	51 - 133
Endosulfan II	ND		0.0395	0.0330		mg/Kg	☼	84	71 - 128
Endosulfan sulfate	ND		0.0395	0.0278		mg/Kg	☼	70	62 - 119
Endrin	ND		0.0395	0.0355		mg/Kg	☼	90	71 - 132
gamma-BHC (Lindane)	ND		0.0395	0.0369		mg/Kg	☼	93	59 - 123
Heptachlor	ND		0.0395	0.0392		mg/Kg	☼	99	57 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*104*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*104*		*40 - 150*
Tetrachloro-m-xylene	*93*		*44 - 133*
Tetrachloro-m-xylene	*73*		*44 - 133*

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256318

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND		0.0390	0.0411		mg/Kg	☼	105	58 - 131	5	21
alpha-BHC	ND		0.0390	0.0362		mg/Kg	☼	93	61 - 120	6	20
beta-BHC	ND		0.0390	0.0357		mg/Kg	☼	92	55 - 119	4	23
cis-Chlordane	0.00098	J p	0.0390	0.0458		mg/Kg	☼	115	51 - 130	6	22
4,4'-DDD	ND		0.0390	0.0352		mg/Kg	☼	90	69 - 135	6	22
4,4'-DDE	ND		0.0390	0.0344		mg/Kg	☼	88	67 - 137	3	16
4,4'-DDT	ND		0.0390	0.0384		mg/Kg	☼	99	47 - 140	8	18
delta-BHC	ND		0.0390	0.0171		mg/Kg	☼	44	19 - 106	0	23
Dieldrin	ND		0.0390	0.0375		mg/Kg	☼	96	69 - 136	7	15
Endosulfan I	ND		0.0390	0.0421		mg/Kg	☼	108	51 - 133	5	22
Endosulfan II	ND		0.0390	0.0360		mg/Kg	☼	92	71 - 128	9	17
Endosulfan sulfate	ND		0.0390	0.0296		mg/Kg	☼	76	62 - 119	6	17
Endrin	ND		0.0390	0.0373		mg/Kg	☼	96	71 - 132	5	16
gamma-BHC (Lindane)	ND		0.0390	0.0381		mg/Kg	☼	98	59 - 123	3	21
Heptachlor	ND		0.0390	0.0404		mg/Kg	☼	104	57 - 136	3	22

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*106*		*40 - 150*
DCB Decachlorobiphenyl (Surr)	*105*		*40 - 150*
Tetrachloro-m-xylene	*91*		*44 - 133*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256318

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*44 - 133*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-256123/1-A
Matrix: Solid
Analysis Batch: 256258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256123

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1221	ND		0.017	0.011	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1232	ND		0.017	0.0099	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1242	ND		0.017	0.010	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1248	ND		0.017	0.013	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1254	ND		0.017	0.011	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1260	ND		0.017	0.0047	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1262	ND		0.017	0.012	mg/Kg		09/06/18 17:00	09/08/18 07:47	1
PCB-1268	ND		0.017	0.0081	mg/Kg		09/06/18 17:00	09/08/18 07:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*99*		*33 - 137*	*09/06/18 17:00*	*09/08/18 07:47*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*33 - 137*	*09/06/18 17:00*	*09/08/18 07:47*	*1*
Tetrachloro-m-xylene (Surr)	*79*		*44 - 114*	*09/06/18 17:00*	*09/08/18 07:47*	*1*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*	*09/06/18 17:00*	*09/08/18 07:47*	*1*

Lab Sample ID: LCS 180-256123/3-A
Matrix: Solid
Analysis Batch: 256258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256123

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.33	1.22		mg/Kg		91	46 - 122		
PCB-1260			1.33	1.28		mg/Kg		96	51 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*98*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*91*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*89*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*90*		*44 - 114*

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256258

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND		1.54	1.06		mg/Kg	☼	69	46 - 122		
PCB-1260	ND	F2	1.54	0.942		mg/Kg	☼	61	51 - 119		

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256258

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*67*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*64*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*68*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*67*		*44 - 114*

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256258

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256123

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		1.57	1.29		mg/Kg	☼	82	46 - 122	20	23
PCB-1260	ND	F2	1.57	1.24	F2	mg/Kg	☼	79	51 - 119	28	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*87*		*33 - 137*
DCB Decachlorobiphenyl (Surr)	*79*		*33 - 137*
Tetrachloro-m-xylene (Surr)	*67*		*44 - 114*
Tetrachloro-m-xylene (Surr)	*69*		*44 - 114*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-256239/1-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256239

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.0066	mg/Kg		09/07/18 12:00	09/11/18 17:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*59*		*29 - 100*	*09/07/18 12:00*	*09/11/18 17:08*	*1*
2,4-Dichlorophenylacetic acid	*63*		*29 - 100*	*09/07/18 12:00*	*09/11/18 17:08*	*1*

Lab Sample ID: LCS 180-256239/2-A
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256239

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	0.100	0.0798		mg/Kg		80	36 - 109

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*68*		*29 - 100*
2,4-Dichlorophenylacetic acid	*76*		*29 - 100*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256239

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silvex (2,4,5-TP)	ND		0.117	0.0779		mg/Kg	☼	66	36 - 109

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*58*		*29 - 100*
2,4-Dichlorophenylacetic acid	*59*		*29 - 100*

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256412

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256239

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)	ND		0.117	0.0650		mg/Kg	☼	55	36 - 109	18	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*46*		*29 - 100*
2,4-Dichlorophenylacetic acid	*47*		*29 - 100*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-255868/1-A
Matrix: Solid
Analysis Batch: 256140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255868

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.39	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Barium	ND		20	1.1	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Beryllium	ND		0.40	0.023	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Cadmium	ND		0.50	0.036	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Chromium	ND		0.50	0.14	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Copper	ND		2.5	0.25	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Lead	ND		1.0	0.51	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Manganese	ND		1.5	0.16	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Nickel	ND		4.0	0.25	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Selenium	ND		1.0	0.52	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Silver	ND		0.50	0.11	mg/Kg		09/04/18 17:23	09/06/18 15:16	1
Zinc	ND		2.0	1.1	mg/Kg		09/04/18 17:23	09/06/18 15:16	1

Lab Sample ID: LCS 180-255868/2-A
Matrix: Solid
Analysis Batch: 256140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255868

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	50.0	49.4		mg/Kg		99	80 - 120
Barium	200	210		mg/Kg		105	80 - 120
Beryllium	5.00	5.13		mg/Kg		103	80 - 120
Cadmium	5.00	5.05		mg/Kg		101	80 - 120
Chromium	20.0	20.5		mg/Kg		103	80 - 120

Method: EPA 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 180-255868/2-A
Matrix: Solid
Analysis Batch: 256140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255868

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	25.0	26.0		mg/Kg		104	80 - 120
Lead	50.0	48.8		mg/Kg		98	80 - 120
Manganese	50.0	49.6		mg/Kg		99	80 - 120
Nickel	50.0	50.0		mg/Kg		100	80 - 120
Selenium	50.0	51.1		mg/Kg		102	80 - 120
Silver	5.00	5.06		mg/Kg		101	80 - 120
Zinc	50.0	51.3		mg/Kg		103	80 - 120

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256140

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 255868

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.5		62.4	61.6		mg/Kg	☼	88	75 - 125
Barium	73		249	319		mg/Kg	☼	98	75 - 125
Beryllium	0.42	J	6.24	6.10		mg/Kg	☼	91	75 - 125
Cadmium	ND		6.24	5.09		mg/Kg	☼	82	75 - 125
Chromium	13		24.9	38.7		mg/Kg	☼	105	75 - 125
Copper	20		31.2	48.9		mg/Kg	☼	93	75 - 125
Lead	15		62.4	73.0		mg/Kg	☼	93	75 - 125
Manganese	520		62.4	646	4	mg/Kg	☼	195	75 - 125
Nickel	18		62.4	80.6		mg/Kg	☼	101	75 - 125
Selenium	ND		62.4	56.3		mg/Kg	☼	90	75 - 125
Silver	ND		6.24	5.77		mg/Kg	☼	93	75 - 125
Zinc	60		62.4	130		mg/Kg	☼	112	75 - 125

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256140

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 255868

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	6.5		61.7	61.6		mg/Kg	☼	89	75 - 125	0	20
Barium	73		247	310		mg/Kg	☼	96	75 - 125	3	20
Beryllium	0.42	J	6.17	6.05		mg/Kg	☼	91	75 - 125	1	20
Cadmium	ND		6.17	5.14		mg/Kg	☼	83	75 - 125	1	20
Chromium	13		24.7	37.2		mg/Kg	☼	100	75 - 125	4	20
Copper	20		30.9	46.9		mg/Kg	☼	87	75 - 125	4	20
Lead	15		61.7	71.4		mg/Kg	☼	91	75 - 125	2	20
Manganese	520		61.7	564	4	mg/Kg	☼	64	75 - 125	14	20
Nickel	18		61.7	78.8		mg/Kg	☼	99	75 - 125	2	20
Selenium	ND		61.7	55.8		mg/Kg	☼	90	75 - 125	1	20
Silver	ND		6.17	5.65		mg/Kg	☼	92	75 - 125	2	20
Zinc	60		61.7	120		mg/Kg	☼	97	75 - 125	8	20

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-255992/1-A
Matrix: Solid
Analysis Batch: 256083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 255992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.0074	mg/Kg		09/05/18 15:42	09/06/18 11:02	1

Lab Sample ID: LCS 180-255992/2-A
Matrix: Solid
Analysis Batch: 256083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 255992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.413		mg/Kg		99	80 - 120

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256083

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 255992

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.021	J	0.191	0.209		mg/Kg	☼	98	80 - 120

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256083

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 255992

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.021	J	0.188	0.205		mg/Kg	☼	98	80 - 120	2	20

Method: 2540G - SM 2540G

Lab Sample ID: 180-81524-3 DU
Matrix: Solid
Analysis Batch: 255805

Client Sample ID: BR-SC-103
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	12.3		12.5		%		2	20
Percent Solids	87.7		87.5		%		0.3	20

Lab Sample ID: 180-81524-20 DU
Matrix: Solid
Analysis Batch: 255805

Client Sample ID: DUP-02-08302018
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	14.3		14.1		%		1	20
Percent Solids	85.7		85.9		%		0.2	20

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-256068/4-A
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 256068

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		09/06/18 11:17	09/06/18 16:41	1

Lab Sample ID: HLCS 180-256068/2-A
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256068

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.243		mg/Kg		97	90 - 110

Lab Sample ID: LCS 180-256068/3-A
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256068

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	43.8	28.2		mg/Kg		64	38 - 162

Lab Sample ID: LLCS 180-256068/1-A
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 256068

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0470		mg/Kg		94	90 - 110

Lab Sample ID: 180-81524-18 MS
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256068

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	ND		5.11	4.99		mg/Kg	☼	98	75 - 125

Lab Sample ID: 180-81524-18 MSD
Matrix: Solid
Analysis Batch: 256129

Client Sample ID: BR-SC-118
Prep Type: Total/NA
Prep Batch: 256068

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	ND		5.54	5.64		mg/Kg	☼	102	75 - 125	12	20

GC/MS VOA

Analysis Batch: 255768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-1	BR-SC-101	Total/NA	Solid	EPA 8260C	255794
180-81524-2	BR-SC-102	Total/NA	Solid	EPA 8260C	255794
180-81524-3	BR-SC-103	Total/NA	Solid	EPA 8260C	255794
180-81524-4	BR-SC-104	Total/NA	Solid	EPA 8260C	255794
180-81524-5	BR-SC-105	Total/NA	Solid	EPA 8260C	255794
180-81524-6	BR-SC-106	Total/NA	Solid	EPA 8260C	255794
180-81524-7	BR-SC-107	Total/NA	Solid	EPA 8260C	255794
180-81524-8	BR-SC-108	Total/NA	Solid	EPA 8260C	255794
180-81524-9	BR-SC-109	Total/NA	Solid	EPA 8260C	255794
180-81524-10	BR-SC-110	Total/NA	Solid	EPA 8260C	255794
180-81524-11	BR-SC-111	Total/NA	Solid	EPA 8260C	255794
180-81524-12	BR-SC-112	Total/NA	Solid	EPA 8260C	255794
180-81524-13	BR-SC-113	Total/NA	Solid	EPA 8260C	255794
MB 180-255768/6	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-255768/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-255768/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 255794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-1	BR-SC-101	Total/NA	Solid	5035	
180-81524-2	BR-SC-102	Total/NA	Solid	5035	
180-81524-3	BR-SC-103	Total/NA	Solid	5035	
180-81524-4	BR-SC-104	Total/NA	Solid	5035	
180-81524-5	BR-SC-105	Total/NA	Solid	5035	
180-81524-6	BR-SC-106	Total/NA	Solid	5035	
180-81524-7	BR-SC-107	Total/NA	Solid	5035	
180-81524-8	BR-SC-108	Total/NA	Solid	5035	
180-81524-9	BR-SC-109	Total/NA	Solid	5035	
180-81524-10	BR-SC-110	Total/NA	Solid	5035	
180-81524-11	BR-SC-111	Total/NA	Solid	5035	
180-81524-12	BR-SC-112	Total/NA	Solid	5035	
180-81524-13	BR-SC-113	Total/NA	Solid	5035	

Analysis Batch: 256028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-21	TRIP BLANK-1	Total/NA	Water	EPA 8260C	
MB 180-256028/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-256028/9	Lab Control Sample	Total/NA	Water	EPA 8260C	

GC/MS Semi VOA

Prep Batch: 255870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	3541	
180-81524-15	BR-SC-115	Total/NA	Solid	3541	
180-81524-16	BR-SC-116	Total/NA	Solid	3541	
180-81524-17	BR-SC-117	Total/NA	Solid	3541	
180-81524-19	DUP-01-08302018	Total/NA	Solid	3541	
180-81524-20	DUP-02-08302018	Total/NA	Solid	3541	
MB 180-255870/1-A	Method Blank	Total/NA	Solid	3541	

GC/MS Semi VOA (Continued)

Prep Batch: 255870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-255870/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 256050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 8270D LL	255870
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 8270D LL	255870
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 8270D LL	255870
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 8270D LL	255870
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 8270D LL	255870
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 8270D LL	255870
MB 180-255870/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	255870
LCS 180-255870/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	255870

Prep Batch: 256076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-18	BR-SC-118	Total/NA	Solid	3541	
MB 180-256076/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-256076/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3541	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3541	

Analysis Batch: 256177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 8270D LL	256076
MB 180-256076/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	256076
LCS 180-256076/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	256076
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 8270D LL	256076
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 8270D LL	256076

GC Semi VOA

Prep Batch: 256123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	3541	
180-81524-14 - RA	BR-SC-114	Total/NA	Solid	3541	
180-81524-15	BR-SC-115	Total/NA	Solid	3541	
180-81524-15 - RA	BR-SC-115	Total/NA	Solid	3541	
180-81524-16	BR-SC-116	Total/NA	Solid	3541	
180-81524-16 - RA	BR-SC-116	Total/NA	Solid	3541	
180-81524-17	BR-SC-117	Total/NA	Solid	3541	
180-81524-18	BR-SC-118	Total/NA	Solid	3541	
180-81524-19	DUP-01-08302018	Total/NA	Solid	3541	
180-81524-20	DUP-02-08302018	Total/NA	Solid	3541	
180-81524-20 - RA	DUP-02-08302018	Total/NA	Solid	3541	
MB 180-256123/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-256123/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-256123/3-A	Lab Control Sample	Total/NA	Solid	3541	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3541	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3541	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 256123 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3541	

Cleanup Batch: 256229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	3665A	256123
180-81524-15	BR-SC-115	Total/NA	Solid	3665A	256123
180-81524-16	BR-SC-116	Total/NA	Solid	3665A	256123
180-81524-17	BR-SC-117	Total/NA	Solid	3665A	256123
180-81524-18	BR-SC-118	Total/NA	Solid	3665A	256123
180-81524-19	DUP-01-08302018	Total/NA	Solid	3665A	256123
180-81524-20	DUP-02-08302018	Total/NA	Solid	3665A	256123
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3665A	256123
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3665A	256123

Cleanup Batch: 256230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	3660B	256229
180-81524-15	BR-SC-115	Total/NA	Solid	3660B	256229
180-81524-16	BR-SC-116	Total/NA	Solid	3660B	256229
180-81524-17	BR-SC-117	Total/NA	Solid	3660B	256229
180-81524-18	BR-SC-118	Total/NA	Solid	3660B	256229
180-81524-19	DUP-01-08302018	Total/NA	Solid	3660B	256229
180-81524-20	DUP-02-08302018	Total/NA	Solid	3660B	256229
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3660B	256229
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3660B	256229

Prep Batch: 256239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	8151A	
180-81524-15	BR-SC-115	Total/NA	Solid	8151A	
180-81524-16	BR-SC-116	Total/NA	Solid	8151A	
180-81524-17	BR-SC-117	Total/NA	Solid	8151A	
180-81524-18	BR-SC-118	Total/NA	Solid	8151A	
180-81524-19	DUP-01-08302018	Total/NA	Solid	8151A	
180-81524-20	DUP-02-08302018	Total/NA	Solid	8151A	
MB 180-256239/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-256239/2-A	Lab Control Sample	Total/NA	Solid	8151A	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	8151A	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	8151A	

Analysis Batch: 256258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 8082A	256230
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 8082A	256230
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 8082A	256230
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 8082A	256230
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 8082A	256230
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 8082A	256230
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 8082A	256230
MB 180-256123/1-A	Method Blank	Total/NA	Solid	EPA 8082A	256123
LCS 180-256123/3-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	256123

GC Semi VOA (Continued)

Analysis Batch: 256258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 8082A	256230
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 8082A	256230

Analysis Batch: 256318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 8081B	256123
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 8081B	256123
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 8081B	256123
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 8081B	256123
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 8081B	256123
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 8081B	256123
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 8081B	256123
MB 180-256123/1-A	Method Blank	Total/NA	Solid	EPA 8081B	256123
LCS 180-256123/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	256123
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 8081B	256123
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 8081B	256123

Analysis Batch: 256412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 8151A	256239
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 8151A	256239
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 8151A	256239
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 8151A	256239
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 8151A	256239
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 8151A	256239
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 8151A	256239
MB 180-256239/1-A	Method Blank	Total/NA	Solid	EPA 8151A	256239
LCS 180-256239/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	256239
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 8151A	256239
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 8151A	256239

Analysis Batch: 256421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14 - RA	BR-SC-114	Total/NA	Solid	EPA 8081B	256123
180-81524-15 - RA	BR-SC-115	Total/NA	Solid	EPA 8081B	256123
180-81524-16 - RA	BR-SC-116	Total/NA	Solid	EPA 8081B	256123
180-81524-20 - RA	DUP-02-08302018	Total/NA	Solid	EPA 8081B	256123

Metals

Prep Batch: 255868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	3050B	
180-81524-15	BR-SC-115	Total/NA	Solid	3050B	
180-81524-16	BR-SC-116	Total/NA	Solid	3050B	
180-81524-17	BR-SC-117	Total/NA	Solid	3050B	
180-81524-18	BR-SC-118	Total/NA	Solid	3050B	
180-81524-19	DUP-01-08302018	Total/NA	Solid	3050B	
180-81524-20	DUP-02-08302018	Total/NA	Solid	3050B	
MB 180-255868/1-A	Method Blank	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 255868 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-255868/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	3050B	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	3050B	

Prep Batch: 255992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	7471B	
180-81524-15	BR-SC-115	Total/NA	Solid	7471B	
180-81524-16	BR-SC-116	Total/NA	Solid	7471B	
180-81524-17	BR-SC-117	Total/NA	Solid	7471B	
180-81524-18	BR-SC-118	Total/NA	Solid	7471B	
180-81524-19	DUP-01-08302018	Total/NA	Solid	7471B	
180-81524-20	DUP-02-08302018	Total/NA	Solid	7471B	
MB 180-255992/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-255992/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	7471B	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	7471B	

Analysis Batch: 256083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 7471B	255992
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 7471B	255992
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 7471B	255992
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 7471B	255992
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 7471B	255992
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 7471B	255992
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 7471B	255992
MB 180-255992/1-A	Method Blank	Total/NA	Solid	EPA 7471B	255992
LCS 180-255992/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	255992
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 7471B	255992
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 7471B	255992

Analysis Batch: 256140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 6010C	255868
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 6010C	255868
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 6010C	255868
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 6010C	255868
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 6010C	255868
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 6010C	255868
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 6010C	255868
MB 180-255868/1-A	Method Blank	Total/NA	Solid	EPA 6010C	255868
LCS 180-255868/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	255868
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 6010C	255868
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 6010C	255868

General Chemistry

Analysis Batch: 255805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-1	BR-SC-101	Total/NA	Solid	2540G	
180-81524-2	BR-SC-102	Total/NA	Solid	2540G	
180-81524-3	BR-SC-103	Total/NA	Solid	2540G	
180-81524-4	BR-SC-104	Total/NA	Solid	2540G	
180-81524-5	BR-SC-105	Total/NA	Solid	2540G	
180-81524-6	BR-SC-106	Total/NA	Solid	2540G	
180-81524-7	BR-SC-107	Total/NA	Solid	2540G	
180-81524-8	BR-SC-108	Total/NA	Solid	2540G	
180-81524-9	BR-SC-109	Total/NA	Solid	2540G	
180-81524-10	BR-SC-110	Total/NA	Solid	2540G	
180-81524-11	BR-SC-111	Total/NA	Solid	2540G	
180-81524-12	BR-SC-112	Total/NA	Solid	2540G	
180-81524-13	BR-SC-113	Total/NA	Solid	2540G	
180-81524-14	BR-SC-114	Total/NA	Solid	2540G	
180-81524-15	BR-SC-115	Total/NA	Solid	2540G	
180-81524-16	BR-SC-116	Total/NA	Solid	2540G	
180-81524-17	BR-SC-117	Total/NA	Solid	2540G	
180-81524-18	BR-SC-118	Total/NA	Solid	2540G	
180-81524-19	DUP-01-08302018	Total/NA	Solid	2540G	
180-81524-20	DUP-02-08302018	Total/NA	Solid	2540G	
180-81524-3 DU	BR-SC-103	Total/NA	Solid	2540G	
180-81524-20 DU	DUP-02-08302018	Total/NA	Solid	2540G	

Prep Batch: 256068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	9010C	
180-81524-15	BR-SC-115	Total/NA	Solid	9010C	
180-81524-16	BR-SC-116	Total/NA	Solid	9010C	
180-81524-17	BR-SC-117	Total/NA	Solid	9010C	
180-81524-18	BR-SC-118	Total/NA	Solid	9010C	
180-81524-19	DUP-01-08302018	Total/NA	Solid	9010C	
180-81524-20	DUP-02-08302018	Total/NA	Solid	9010C	
MB 180-256068/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-256068/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-256068/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-256068/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-81524-18 MS	BR-SC-118	Total/NA	Solid	9010C	
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	9010C	

Analysis Batch: 256129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-81524-14	BR-SC-114	Total/NA	Solid	EPA 9014	256068
180-81524-15	BR-SC-115	Total/NA	Solid	EPA 9014	256068
180-81524-16	BR-SC-116	Total/NA	Solid	EPA 9014	256068
180-81524-17	BR-SC-117	Total/NA	Solid	EPA 9014	256068
180-81524-18	BR-SC-118	Total/NA	Solid	EPA 9014	256068
180-81524-19	DUP-01-08302018	Total/NA	Solid	EPA 9014	256068
180-81524-20	DUP-02-08302018	Total/NA	Solid	EPA 9014	256068
MB 180-256068/4-A	Method Blank	Total/NA	Solid	EPA 9014	256068
HLCS 180-256068/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	256068
LCS 180-256068/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	256068

General Chemistry (Continued)

Analysis Batch: 256129 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-256068/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	256068
180-81524-18 MS	BR-SC-118	Total/NA	Solid	EPA 9014	256068
180-81524-18 MSD	BR-SC-118	Total/NA	Solid	EPA 9014	256068

ca Pittsburgh
ia Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

180-81524 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Shawn Ranna + Emma Mcalister	Lab PM:	COC No: Breesport Pit
Client Contact: Aron Krasnopoler	Phone: 4125524758	E-Mail: david.dunlap@testamerica	Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.			Job #:
Address: 10211 Wincopin Circle, Floor 4	Due Date Requested:		
City: Columbia, MD	TAT Requested (days): Rush [3days]		
State, Zip: MD, 21044	PO #: MN0832D		
Phone: (202) 550-7724	WO #:		
Email: akrasnopoler@geosyntec.com	Project #:		
Project Name: Former Sperry Remington Site - North IRM	SSOW#:		
Site: Breesport Pit			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOA-Select List	6010C, 7471B, 9014 - Select ICP Metals, Mercury, Cyanide	8082A, 8270D, PCBs, Select BNA	8260C - VOA-Select List (Trip Blanks only)	Herbicides and Pesticides	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	A	N	X	
BR-SC-101	08/30/18	1010	G	Solid	N	N	X					4	
BR-SC-102		1015	G	Solid	N	N	X					4	
BR-SC-103		1020	G	Solid	N	N	X					4	
BR-SC-104		1025	G	Solid	N	N	X					4	
BR-SC-105		1030	G	Solid	N	N	X					4	
BR-SC-106		1035	G	Solid	N	N	X					4	
BR-SC-107		1040	G	Solid	N	N	X					4	
BR-SC-108		1045	G	Solid	N	N	X					4	
BR-SC-109		1050	G	Solid	N	N	X					4	
BR-SC-110		1055	G	Solid	N	N	X					4	
BR-SC-111		1100	G	Solid	N	N	X					4	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Shawn Ranna	Date/Time: 8/30/2018 / 1800	Company: Geosyntec	Received by:	Date/Time: 8/31/18 1000	Company: TMPitz
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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9/12/2018

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ashwin Ranna + Emma MacAlister	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: Breesport Pit
Client Contact: Aron Krasnopoler	Phone: 4125524758	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle, Floor 4	Due Date Requested:			
City: Columbia, MD	TAT Requested (days): Rush 3 days			
State, Zip: MD, 21044				
Phone: (202) 550-7724	PO #: MN0832D			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site - North IRM	Project #:			
Site: Breesport Pit	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOA-Select List	6010C, 7471B, 9014 - Select ICP Metals, Mercury, Cyanide	8082A, 8270D, PCBs, Select BNA	8260C - VOA-Select List (Trip Blanks only)	Pesticides and Herbicides	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	A			
BR-SC-112	8/30/2018	1105	G	Solid	N	N	X					4	
BR-SC-113		1110	G	Solid	N	N	X					4	
BR-SC-114		0945	C	Solid	N	N		X	X		X	2	
BR-SC-115		0950	C	Solid	N	N		X	X		X	2	
BR-SC-116		0955	C	Solid	N	N		X	X		X	2	
BR-SC-117		1000	C	Solid	N	N		X	X		X	2	
BR-SC-118		1005	C	Solid	N	Y		X	X		X	4	Perform MS/MSD-1
DUP-01-08302018		—	C	Solid	N	N		X	X		X	2	
DUP-02-08302018		—	C	Solid	N	N		X	X		X	2	
Trip blank-1	—	—		Water	N					X			
				Solid	N								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Ashwin Ranna	8/30/2018/1800	Geosyntec		9/1/18 1000	TA Pitt
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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9/12/2018

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-81524-1

Login Number: 81524
List Number: 1
Creator: Say, Thomas C

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Geosyntec consultants

180A Market Place Blvd.
Knoxville, TN 37922
PH 865.330.0037
www.geosyntec.com

Memorandum

Date:	12 September 2018
To:	Aron Krasnopoler
From:	Mary Tyler
CC:	J. Caprio
Subject:	**Stage 2A Data Validation - Level IV Data Deliverable, TestAmerica Job ID 180-81524-1**

SITE: Former Sperry Remington Site-Breesport Pit

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eighteen solid samples, including one sample for matrix spike/matrix spike duplicate (MS/MSD) analyses, two field duplicate samples and one trip blank, collected August 30, 2018, as part of the Former Sperry Remington Site-Breesport project. The analyses were performed at TestAmerica Laboratories, Inc., Pittsburgh, Pennsylvania. The samples were analyzed for the following tests:

- Volatile Organic Compounds (VOCs) by EPA Methods 5035/8260C and 5030C/8260C
- Semivolatile Organic Compounds (SVOCs) by EPA Methods 3541/8270D
- Organochlorine Pesticides by EPA Methods 3541/8081B
- Polychlorinated Biphenyls (PCBs) by EPA Methods 3541/8082A
- Silvex (2,4,5-TP) by EPA Method 8151A
- Metals by EPA Methods 3050B/6010C
- Mercury by EPA Method 7471B
- Total Cyanide by EPA Methods 9010C/9014
- Total Solids by Standard Method 2540G

EXECUTIVE SUMMARY

Based on this Stage 2A data validation covering the quality control (QC) parameters listed below, the data as qualified are usable for meeting project objectives. The qualified data should be used within the limitations of the qualifications.

The data were validated using the Quality Assurance Project Plan (QAPP) for Former Sperry Remington Facility Industrial Outfall Site, Elmira, New York, NYSDEC Site I.D. # 808043, NY09-2480-04, July 7, 2010, Revised November 11, 2010, USEPA Contract Laboratory Program

National Functional Guidelines for Superfund Organic Methods Data Review, January 2017 (EPA 540-R-2017-002), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (EPA 540-R-2017-001), the pertinent methods referenced by the laboratory report and professional and technical judgment.

The following samples were analyzed and validated at a Stage 2A level in the data set:

Laboratory ID	Client ID
180-81524-1	BR-SC-101
180-81524-2	BR-SC-102
180-81524-3	BR-SC-103
180-81524-4	BR-SC-104
180-81524-5	BR-SC-105
180-81524-6	BR-SC-106
180-81524-7	BR-SC-107
180-81524-8	BR-SC-108
180-81524-9	BR-SC-109
180-81524-10	BR-SC-110
180-81524-11	BR-SC-111
180-81524-12	BR-SC-112

Laboratory ID	Client ID
180-81524-13	BR-SC-113
180-81524-14	BR-SC-114
180-81524-15	BR-SC-115
180-81524-16	BR-SC-116
180-81524-17	BR-SC-117
180-81524-18	BR-SC-118
180-81524-18 MS	BR-SC-118 MS
180-81524-18 MSD	BR-SC-118 MSD
180-81524-19	DUP-01-08302018
180-81524-20	DUP-02-08302018
180-81524-21	TRIP BLANK-1

The samples were received at the laboratory within the criteria of 0-6°C. No sample preservation issues were noted by the laboratory.

The following issues were noted with the chain of custody (COC):

- Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.
- The collection dates and times were not documented on the COC for the field duplicate samples. The laboratory logged both samples with collection dates and times of 8/30/18, 00:00.
- The collection time was not documented on the COC for the trip blank. The laboratory logged the trip blank with a collection time of 00:00

The solids data, used to report the samples on a dry weight basis, were not validated.

1.0 VOLATILE ORGANIC COMPOUNDS

The samples were analyzed for VOCs by EPA methods 5035/8260C and 5030C/8260C.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Trip Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The VOC data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this sample set is 100%.

The narrative indicated that the percent differences (%Ds) for 1,4-dioxane in the continuing calibration verification (CCV) in batch 255768 and acetone in the CCV in batch 256028 were high and outside the method specified acceptance criteria, with high biases. Since 1,4-dioxane and acetone were not detected in the associated samples and based on professional and technical judgment, no qualifications were applied to the data.

The narrative indicated that the %Ds for acetone and 2-butanone in the CCV in batch 255768 were high and outside the method specified acceptance criteria, with low biases. Since the %Ds were within the validation guidance acceptance criteria of 40%D, and based on professional and technical judgment, no qualifications were applied to the data.

1.2 Holding Times

The holding times for the VOC analysis of a preserved solid sample collected as a terracore are 48 hours until laboratory receipt and 14 days from sample collection to analysis. The holding time for the VOC analysis of a preserved water sample is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 255768 and 256028). VOCs were not detected in the method blanks above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS and one LCS/LCS duplicate (LCSD) pair were reported. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

1.6 Surrogates

Acceptable surrogate recoveries were reported.

1.7 Trip Blank

A trip blank accompanied the samples, TRIP BLANK-1. VOCs were not detected in the trip blank above the MDLs.

1.8 Field Duplicate

Two field duplicate samples were collected with the sample set, but not analyzed for VOCs.

1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the amount of sample extracted.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

2.0 SEMIVOLATILE ORGANIC COMPOUNDS

The samples were analyzed for SVOCs by EPA methods 3541/8270D.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
⊗ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The SVOC data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

The narrative indicated that the %D for pentachlorophenol in the CCV in batch 256177 was high and outside the method specified acceptance criteria, with a low bias. Since the %D was within the validation guidance acceptance criteria of 50%D, and based on professional and technical judgment, no qualifications were applied to the data.

2.2 Holding Times

The holding times for SVOC analysis of solid samples are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two method blanks were reported (batches 256076 and 255870). SVOCs were not detected in the method blanks above the MDLs.

2.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

2.6 Surrogates

Acceptable surrogate recoveries were reported.

2.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively, with the following exceptions.

The field duplicate RPDs or concentration differences for the following compounds were outside the acceptance criteria for field duplicate pair BR-SC-118/DUP-01-08302018: Benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, chrysene, fluoranthene, phenanthrene and pyrene. Therefore, the concentrations of these compounds in field duplicate pair BR-SC-118/DUP-01-08302018 were J qualified as estimated.

The field duplicate RPDs or concentration differences for the following compounds were outside the acceptance criteria for field duplicate pair BR-SC-117/DUP-02-08302018: Anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno[1,2,3-cd]pyrene,

phenanthrene and pyrene. Therefore, the concentrations of these compounds in field duplicate pair BR-SC-117/DUP-02-08302018 were J qualified as estimated.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	RPD	Validation Concentration (mg/kg)	Validation Qualifier*	Reason Code**
BR-SC-118	Benzo[a]-anthracene	0.031	NA	115	0.031	J	7
DUP-01-08302018	Benzo[a]-anthracene	0.0083	NA		0.0083	J	7
BR-SC-118	Benzo[a]-pyrene	0.034	NA	102	0.034	J	7
DUP-01-08302018	Benzo[a]-pyrene	0.011	NA		0.011	J	7
BR-SC-118	Benzo[b]-fluoranthene	0.045	NA	110	0.045	J	7
DUP-01-08302018	Benzo[b]-fluoranthene	0.013	NA		0.013	J	7
BR-SC-118	Chrysene	0.039	NA	105	0.039	J	7
DUP-01-08302018	Chrysene	0.012	NA		0.012	J	7
BR-SC-118	Fluoranthene	0.06	NA	112	0.06	J	7
DUP-01-08302018	Fluoranthene	0.017	NA		0.017	J	7
BR-SC-118	Phenanthrene	0.03	NA	100	0.03	J	7
DUP-01-08302018	Phenanthrene	0.01	NA		0.01	J	7
BR-SC-118	Pyrene	0.05	NA	113	0.05	J	7
DUP-01-08302018	Pyrene	0.014	NA		0.014	J	7
BR-SC-117	Anthracene	0.0053	J	NC	0.0053	J	7
DUP-02-08302018	Anthracene	0.024	NA		0.024	J	7
BR-SC-117	Benzo[a]anthracene	0.02	NA	156	0.02	J	7
DUP-02-08302018	Benzo[a]anthracene	0.16	NA		0.16	J	7
BR-SC-117	Benzo[a]pyrene	0.022	NA	154	0.022	J	7
DUP-02-08302018	Benzo[a]pyrene	0.17	NA		0.17	J	7
BR-SC-117	Benzo[b]fluoranthene	0.029	NA	153	0.029	J	7

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	RPD	Validation Concentration (mg/kg)	Validation Qualifier*	Reason Code**
DUP-02-08302018	Benzo[b]fluoranthene	0.22	NA		0.22	J	7
BR-SC-117	Benzo[g,h,i]perylene	0.017	NA	154	0.017	J	7
DUP-02-08302018	Benzo[g,h,i]perylene	0.13	NA		0.13	J	7
BR-SC-117	Benzo[k]fluoranthene	0.008	NA	167	0.008	J	7
DUP-02-08302018	Benzo[k]fluoranthene	0.090	NA		0.090	J	7
BR-SC-117	Chrysene	0.023	NA	162	0.023	J	7
DUP-02-08302018	Chrysene	0.22	NA		0.22	J	7
BR-SC-117	Dibenz(a,h)anthracene	0.0039	J	NC	0.0039	J	7
DUP-02-08302018	Dibenz(a,h)anthracene	0.028	NA		0.028	J	7
BR-SC-117	Fluoranthene	0.039	NA	164	0.039	J	7
DUP-02-08302018	Fluoranthene	0.40	NA		0.40	J	7
BR-SC-117	Indeno[1,2,3-cd]pyrene	0.015	NA	152	0.015	J	7
DUP-02-08302018	Indeno[1,2,3-cd]pyrene	0.11	NA		0.11	J	7
BR-SC-117	Phenanthrene	0.021	NA	154	0.021	J	7
DUP-02-08302018	Phenanthrene	0.16	NA		0.16	J	7
BR-SC-117	Pyrene	0.032	NA	159	0.032	J	7
DUP-02-08302018	Pyrene	0.28	NA		0.28	J	7

mg/kg-milligrams per kilogram
J-the result is less than the reporting limit (RL) but greater than or equal to the MDL and the concentration is an approximate value
NA-not applicable
NC-not calculable
* Validation qualifiers are defined in Attachment 1 at the end of this report
**Reason codes are defined in Attachment 2 at the end of this report

2.8 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported for sample BR-SC-115 due to the dilution analyzed.

2.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

3.0 ORGANOCHLORINE PESTICIDES

The samples were analyzed for organochlorine pesticides by EPA Methods 3541/8081B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
✓ Method Blank
✓ Matrix Spike/Matrix Spike Duplicate
✓ Laboratory Control Sample
✓ Surrogates
✓ Field Duplicate
✓ Sensitivity
✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The organochlorine pesticides data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

The %Ds for aldrin and cis-chlordane on both gas chromatography (GC) columns and endosulfan I on column CLP-1 in batch 256318 were high and outside the method specified acceptance

criteria, with high biases. Since aldrin and endosulfan I were not detected in the associated samples and based on professional and technical judgment, no qualifications were applied to the aldrin and endosulfan I data. The samples were reanalyzed for cis-chlordane; the CCV associated with the reanalysis had acceptable cis-chlordane results.

The concentrations of cis-chlordane in samples BR-SC-114, BR-SC-115, BR-SC-116, BR-SC-117, BR-SC-118, DUP-01-08302018 and DUP-02-08302018 were flagged with 'p', indicating that the RPD between the primary and confirmation GC column is >40%; the lower value was reported. Therefore, based on professional and technical judgment, the concentrations of cis-chlordane in samples BR-SC-114, BR-SC-115, BR-SC-116, BR-SC-117, BR-SC-118, DUP-01-08302018 and DUP-02-08302018 were J qualified as estimated.

Sample ID	Compound	Laboratory Concentration (mg/kg)	Laboratory Flag	Validation Concentration (mg/kg)	Validation Qualifier	Reason Code
BR-SC-114	cis-Chlordane	0.0020	p	0.0020	J	13
BR-SC-115	cis-Chlordane	0.0025	p	0.0025	J	13
BR-SC-116	cis-Chlordane	0.0034	p	0.0034	J	13
BR-SC-117	cis-Chlordane	0.0015	J,p	0.0015	J	13
BR-SC-118	cis-Chlordane	0.00098	J,p	0.00098	J	13
DUP-01-08302018	cis-Chlordane	0.0015	J,p	0.0015	J	13
DUP-02-08302018	cis-Chlordane	0.0030	p	0.0030	J	13

mg/kg-milligrams per kilogram
p-laboratory flag indicating that the RPD between the primary and confirmation GC column is >40%; the lower value was reported
J-result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

3.2 Holding Times

The holding times for the organochlorine pesticides analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 256123). The organochlorine pesticides were not detected in the method blank above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

3.6 Surrogates

Acceptable surrogate recoveries were reported.

3.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

3.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

3.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

4.0 POLYCHLORINATED BIPHENYLS

The samples were analyzed for PCBs by EPA Methods 3541/8082A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues

were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

4.1 Overall Assessment

The PCB data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

The narrative indicated that the %Ds for three peaks in the PCB 1248 CCV and one peak in the PCB 1016 CCV on GC column CLP-1 in batch 256258 were high and outside the method specified acceptance criteria, with high biases. Based on professional and technical judgment and because the average PCB 1248 and PCB 1016 %Ds in these CCVs were acceptable, no qualifications were applied to the data.

4.2 Holding Times

The holding times for the PCB analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 256123). PCBs were not detected in the method blank above the MDLs.

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using

sample BR-SC-118. The recovery results were within the laboratory specified acceptance criteria. The PCB 1260 RPD was high and outside the laboratory specified acceptance criteria. Since PCB 1260 was not detected in sample BR-SC-118, no qualifications were applied to the data.

4.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

4.6 Surrogates

Acceptable surrogate recoveries were reported.

4.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

4.8 Sensitivity

The samples were reported to the MDLs. No elevated non-detect results were reported.

4.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

5.0 SILVEX

The samples were analyzed for the herbicide silvex (2,4,5-TP) by EPA Method 8151A.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

✓ Overall Assessment

- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

5.1 Overall Assessment

The silvex data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for analysis, for this sample set is 100%.

5.2 Holding Times

The holding times for the herbicide analysis of solids are 14 days from sample collection to extraction and 40 days from extraction to analysis. The holding times were met for the sample analyses.

5.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 256239). Silvex was not detected in the method blank above the MDL.

5.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria.

5.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

5.6 Surrogates

Acceptable surrogate recoveries were reported.

5.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

5.8 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported.

5.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No other discrepancies were identified between the level IV report and the EDD.

6.0 METALS

The samples were analyzed for metals by EPA methods 3050B/6010C (Mercury evaluated separately in Section 7.0, below).

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

6.1 Overall Assessment

The metals data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

6.2 Holding Times

The holding time for metals analysis of solid samples is 180 days from sample collection to analysis. The holding time was met for the sample analyses.

6.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255868). The metals were not detected in the method blank above the MDLs.

6.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exception.

The recoveries of manganese were outside the laboratory specified acceptance criteria. Since the concentration of manganese in sample BR-SC-118 was more than four times the spike amount, no qualifications were applied to the data, based on professional and technical judgment.

6.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

6.6 Laboratory Duplicate

A laboratory duplicate was not reported with the sample set.

6.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

6.8 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

6.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

7.0 MERCURY

The samples were analyzed for mercury by EPA method 7471B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised over the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

7.1 Overall Assessment

The mercury data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total

number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

7.2 Holding Times

The holding time for the mercury analysis of solid samples is 28 days from sample collection to analysis. The holding time was met for the sample analyses.

7.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 255992). Mercury was not detected in the method blank above the MDL.

7.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria.

7.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery result was within the laboratory specified acceptance criteria.

7.6 Laboratory Duplicate

A laboratory duplicate was not reported.

7.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

7.8 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

7.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

8.0 TOTAL CYANIDE

The samples were analyzed for total cyanide by EPA Methods 9010C/9014.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Equipment Blank
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

8.1 Overall Assessment

The cyanide data reported in this package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this sample set is 100%.

8.2 Holding Times

The holding time for the cyanide analysis of solid samples is 14 days from sample collection to analysis. The holding time was met for the sample analyses.

8.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One method blank was reported (batch 256068). Cyanide was not detected in the method blank above the MDL.

8.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported, using sample BR-SC-118. The recovery and RPD results were within the laboratory specified acceptance criteria.

8.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

8.6 Laboratory Duplicate

A laboratory duplicate was not reported.

8.7 Field Duplicate

Two field duplicate samples were collected with the sample set, DUP-01-08302018 and DUP-02-08302018. Acceptable precision [RPD <40% for results greater than five times the reporting limit (RL) and ±2 times the RL for results less than five times the RL] was demonstrated between the field duplicates and the original samples, BR-SC-118 and BR-SC-117, respectively.

8.8 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

8.9 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level IV report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level IV report and the EDD.

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher that the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower that the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other

RPD-relative percent difference

Aron Krasnopoler

From: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Sent: Friday, June 8, 2018 4:49 PM
To: Aron Krasnopoler; Schilling, Bernette (DEC); Foti, Scott J (DEC); Williams, Scott F (DEC)
Cc: Ashwin Ranna; john.geary (john.geary@reconservices.com)
Subject: RE: Request to Import Fill Material - Former Sperry Remington Site- North Portion IRM #2

Hi Aron,

I have reviewed your request to import up to 10,000 cu. yd. of soil from the No.4 Pile at Brewer's Pit dated 4 June 2018.

Validated data meets DER-10 import criteria for restricted residential site use. Therefore you are authorized to proceed, provided that the material imported to the site is consistent with the data provided.

If you have questions, please contact me.

Regards,

Tim

Timothy A. Schneider P.E.
Professional Engineer 1, Division of Environmental Remediation

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414
P: (585) 226-5480 | F: (585) 226-8139 | timothy.schneider@dec.ny.gov

www.dec.ny.gov |

From: Aron Krasnopoler [mailto:AKrasnopoler@Geosyntec.com]
Sent: Monday, June 04, 2018 2:46 PM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Schilling, Bernette (DEC) <bernette.schilling@dec.ny.gov>; Foti, Scott J (DEC) <scott.foti@dec.ny.gov>; Williams, Scott F (DEC) <Scott.Williams@dec.ny.gov>
Cc: Ashwin Ranna <ARanna@Geosyntec.com>; john.geary (john.geary@reconservices.com) <john.geary@reconservices.com>
Subject: Request to Import Fill Material - Former Sperry Remington Site- North Portion IRM #2

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear Tim,

Please find attached for your review a request to import 10,000 cubic yards from Brewer's Pit in Horseheads, NY. Analytical reports and data validation are included.

Best Regards,
Aron Krasnopoler

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Project Engineer

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Aron Krasnopoler

From: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Sent: Tuesday, September 18, 2018 10:45 AM
To: Aron Krasnopoler; Schilling, Bernette (DEC); Foti, Scott J (DEC); Williams, Scott F (DEC)
Cc: Ashwin Ranna; Jason Plumley (jplumley.welliver@gmail.com); Cyr, Scott (cyrs@hunt-eas.com); 'Mike Dunn'; Tom Johnson; Amanda.Castignetti@SterlingEnvironmental.com
Subject: RE: Request to Import Topsoil and Additional Fill Material - Former Sperry Remington Site- North Portion IRM #2

Hi Aron,

The request to import an additional 4000 cy of fill from the Brewers pit is approved.

The request to import topsoil from the Blackwell Pit is not approved. The supporting data contained in this request was collected at the Breesport Pit.

Also regarding topsoil, as you are aware we have experienced some difficulty establishing turf at EHS, other sites in the area have recently had topsoil delivered with questionable qualities to establish rapid and robust turf. While our program simply requires topsoil to support vegetative growth/turf, care should be taken to select material that will provide the greatest potential for that success and avoid call backs.

Tim

From: Aron Krasnopoler [mailto:AKrasnopoler@Geosyntec.com]
Sent: Monday, September 17, 2018 2:26 PM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Schilling, Bernette (DEC) <bernette.schilling@dec.ny.gov>; Foti, Scott J (DEC) <scott.foti@dec.ny.gov>; Williams, Scott F (DEC) <Scott.Williams@dec.ny.gov>
Cc: Ashwin Ranna <ARanna@Geosyntec.com>
Subject: Request to Import Topsoil and Additional Fill Material - Former Sperry Remington Site- North Portion IRM #2

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Dear Tim,

Please find attached for your review requests to import 4,000 cubic yards of topsoil from Blackwell Pit in Erin, NY and an additional 4,000 cubic yards from Brewer's Pit in Horseheads, NY for IRM #2 for the Former Sperry Remington Site – North Portion in Elmira, NY. Analytical reports and data validation are included.

Best Regards,
Aron Krasnopoler

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Project Engineer

10211 Wincopin Circle, 4th Floor
Columbia, MD 21044
Phone: 410-381-4333
Fax: 410-381-4499
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Aron Krasnopoler

From: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Sent: Thursday, September 20, 2018 4:57 PM
To: Aron Krasnopoler; Schilling, Bernette (DEC); Foti, Scott J (DEC); Williams, Scott F (DEC)
Cc: Ashwin Ranna; Jason Plumley (jplumley.welliver@gmail.com); Cyr, Scott (cyrs@hunt-eas.com); 'Mike Dunn'; Tom Johnson; Amanda.Castignetti@SterlingEnvironmental.com
Subject: RE: Request to Import Topsoil and Additional Fill Material - Former Sperry Remington Site- North Portion IRM #2

Hi Aron,

I have reviewed your request to import up to 4000 cy of topsoil from the Breesport Pit at 36 Blackwell Drive in Breesport NY. Provided that the chemical quality of the topsoil imported is consistent with the validated data provided, approval and notice to proceed is granted.

Regards,

Timothy A. Schneider P.E.
Professional Engineer 1, Division of Environmental Remediation

New York State Department of Environmental Conservation
6274 East Avon-Lima Road, Avon, NY 14414
P: (585) 226-5480 | F: (585) 226-8139 | timothy.schneider@dec.ny.gov

www.dec.ny.gov | | |

From: Aron Krasnopoler [mailto:AKrasnopoler@Geosyntec.com]
Sent: Tuesday, September 18, 2018 11:03 AM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Schilling, Bernette (DEC) <bernette.schilling@dec.ny.gov>; Foti, Scott J (DEC) <scott.foti@dec.ny.gov>; Williams, Scott F (DEC) <Scott.Williams@dec.ny.gov>
Cc: Ashwin Ranna <ARanna@Geosyntec.com>; Jason Plumley (jplumley.welliver@gmail.com) <jplumley.welliver@gmail.com>; Cyr, Scott (cyrs@hunt-eas.com) <cyrs@hunt-eas.com>; 'Mike Dunn' <mdunn@elmiracityschools.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Amanda.Castignetti@SterlingEnvironmental.com
Subject: RE: Request to Import Topsoil and Additional Fill Material - Former Sperry Remington Site- North Portion IRM #2

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Dear Tim,

I apologize for confusing the location of the topsoil source. I contacted Edger Enterprises to get the correct information and have corrected the request to import form for your further review.

Sincerely,
Aron Krasnopoler

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Project Engineer

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Subject: RE: Request to Import Topsoil and Additional Fill Material - Former Sperry Remington Site- North Portion IRM #2

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Project Engineer

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