Request to Import Summary Sheet - Topsoil, Sod, and Sand				
Date Of Request	**Material**	**Amount Requested (yds^3)**	**Source**	**Date of Agency Approval**
8/4/2021	Topsoil	2,000	Blackwell Pit (Breesport)	8/5/2021
8/11/2021	Sod	48,000 SF	Batavia Turf	8/12/2021
5/5/2023	Sand	5,000	Blackwell Pit (Breesport)	5/10/2023
8/25/2023	Topsoil	3,000	Blackwell Pit (Breesport)	8/28/2023
10/4/2023	Topsoil	3,000	Blackwell Pit (Breesport)	10/4/2023
10/27/2023	Topsoil	2,000	Blackwell Pit (Breesport)	10/27/2024

From: Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>
Sent: Thursday, August 5, 2021 12:00 PM
To: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>; Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; David Pratt <david.pratt@dec.ny.gov>; Stelmack, Mark J. <mark.stelmack@woodplc.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Larry Endicott <larry.endicott@reconservices.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; cyrs (cyrs@hunt-eas.com) <cyrs@hunt-eas.com>
Subject: RE: NYSDEC #c808022 - Request to Import Breesport Topsoil

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Aron,

The supporting data submitted on August 4, 2021 has been reviewed. The data results slightly exceed Unrestricted Use levels for zinc and PFOS but are below Restricted Residential Use levels for these compounds. All remaining data is below Unrestricted Use levels. **Authorization is hereby provided** for the import of topsoil for the Short-Term Response Action from Breesport Pit.

The topsoil shall be used for the temporary cover which will be placed on top of geotextile and surrounded by a fence. Furthermore, in accordance with the approved work plan, this material shall be managed appropriately for potential reuse or off-Site disposal in coordination with ECSD, NYSDEC and NYSDOH.

Thank you,

Nicole

Nicole M. Bonsteel, PE
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From: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>
Sent: Wednesday, August 4, 2021 4:28 PM

To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; David Pratt <david.pratt@dec.ny.gov>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; Stelmack, Mark J. <mark.stelmack@woodplc.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Larry Endicott <larry.endicott@reconservices.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; cyrs (cyrs@hunt-eas.com) <cyrs@hunt-eas.com>
Subject: NYSDEC #c808022 - Request to Import Breesport Topsoil

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Dear Tim,

Please find attached a DER-10 Request to Import topsoil from Breesport Pit . Topsoil will be used to construct the turf area for temporary outdoor physical education area for the STRA. As noted in the form, there were detections of zinc and PFOS above the allowable level for unrestricted use but not for restricted residential use. The lab has performed SPLP on the composite samples and we have requested PFAS analysis for the sample with the PFOS exceedance. Since this is for temporary cover on top of geotextile that will be surrounded by a fence, I am requesting approval to import for restricted residential use. I understand that ECSD concurrence may be needed for this request. These findings were shared with ECSD prior to submittal.

Best Regards,
Aron

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
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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: 2,000

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 Breesport Pit in Breesport, New York. Nine grab samples were collected for VOC analyses. Three composite samples were collected and analyzed for inorganics, SVOCs, PCBs, pesticides, herbicides and total and SPLP PFAs.

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):

BS-TP-2 had a detection of zinc of 110 mg/kg, above the allowable level for unrestricted use of 109 mg/kg but below the allowable for restricted residential use of 2,480 mg/kg. BS-TP-1 had a detection of PFOS of 1.1 mg/kg, above the allowable level for unrestricted use of 0.88 mg/kg but below the allowable level for restricted residential use of 3.7 mg/kg. All other detections were below the allowable levels for unrestricted use and restricted residential use.

Topsoil will be used to construct a temporary turf area for outdoor physical education at Elmira High School. Topsoil will be placed on approved imported fill underlain by geotextile fabric. When no longer needed , the turf area will be removed and materials will be managed for reuse or disposal in coordination with ECSD, NYSDEC and NYSDOH.

Data validation is pending.

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 Civil & Utility, LLC dba RL Callahan

Location where fill was obtained:

Edger Civil & Utility, LLC dba RL Callahan

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

NYSDEC MineID 80024

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 Report 180-124717-1 and 180-124717-2

The information provided on this form is accurate and complete.

Aron Krasnopoler Digitally signed by Aron Krasnopoler Date: 2021.08.04 16:15:35 -04'00'	4 August 2021
Signature	Date
Aron Krasnopoler	
Print Name	
B&B Engineers & Geologists of New York	
Firm	

Table 1
Request to Import

Former Sperry Remington
Elmira, New York

					Location	SSHS-IRM5A2-BP-TS-1A	SSHS-IRM5A2-BP-TS-1A	SSHS-IRM5A2-BP-TS-1B	SSHS-IRM5A2-BP-TS-1C	SSHS-IRM5A2-BP-TS-1
					Sample Name	SSHS-IRM5A2-BP-TS-1A	SSHS-IRM5A2-BP-TS-DUP 1A	SSHS-IRM5A2-BP-TS-1B	SSHS-IRM5A2-BP-TS-1C	SSHS-IRM5A2-BP-TS- DUP 1
					Sample Date	7/20/2021	7/20/2021	7/20/2021	7/20/2021	7/20/2021
					Lab Report	180-124717-1	180-124717-1	180-124717-1	180-124717-1	180-124717-2
Chem Group	**Chemical**	**Units**	**EQL**	DER-10 App5 Unrestricted	DER-10 App5 Rest. Res.					
PCBs	Arochlor 1016	mg/kg	0.0064			-	-	-	-	<0.0066U
	Arochlor 1221	mg/kg	0.007			-	-	-	-	<0.0072U
	Arochlor 1232	mg/kg	0.0048			-	-	-	-	<0.005U
	Arochlor 1242	mg/kg	0.0029			-	-	-	-	<0.003U
	Arochlor 1248	mg/kg	0.0048			-	-	-	-	<0.0049U
	Arochlor 1254	mg/kg	0.0061			-	-	-	-	<0.0061U
	Arochlor 1260	mg/kg	0.0056			-	-	-	-	<0.0058U
	Arochlor 1262	mg/kg	0.007			-	-	-	-	<0.0071U
	Arochlor 1268	mg/kg	0.0027			-	-	-	-	<0.0027U
	Total PCBs	mg/kg		0.1	1	-	-	-	-	<0.0484
Metals	Arsenic	mg/kg	1.1	13	16	-	-	-	-	7.3
	Barium	mg/kg	22	350	400	-	-	-	-	110
	Beryllium	mg/kg	0.43	7.2	47	-	-	-	-	0.46
	Cadmium	mg/kg	0.54	2.5	4.3	-	-	-	-	0.1J
	Chromium (hexavalent)	mg/kg	0.26	1	19	-	-	-	-	0.28J
	Chromium (III+VI)	mg/kg	0.54	30	180	-	-	-	-	11
	Copper	mg/kg	2.7	50	270	-	-	-	-	11
	Cyanide Total	mg/kg	0.34	27	27	-	-	-	-	0.45J
	Lead	mg/kg	1.1	63	400	-	-	-	-	21
	Manganese	mg/kg	1.6	1600	2000	-	-	-	-	470
	Mercury	mg/kg	0.032	0.18	0.73	-	-	-	-	0.042
	Nickel	mg/kg	4.3	30	130	-	-	-	-	18
	Selenium	mg/kg	0.56	3.9	4	-	-	-	-	<0.59U
	Silver	mg/kg	0.11	2	8.3	-	-	-	-	<0.12U
	Zinc	mg/kg	2.2	109	2480	-	-	-	-	56
SVOCs	1,4-Dioxane	mg/kg	0.012	0.1	0.1	<0.038U	<0.048U	<0.041U	<0.043U	<0.012U
	2-methylphenol	mg/kg	0.011	0.33	0.33	-	-	-	-	<0.011U
	4-methylphenol	mg/kg	0.012	0.33	0.33	-	-	-	-	<0.012U
	Acenaphthene	mg/kg	0.0023	20	98	-	-	-	-	<0.0023U
	Acenaphthylene	mg/kg	0.0034	100	100	-	-	-	-	0.0024J
	Anthracene	mg/kg	0.004	100	100	-	-	-	-	0.0023J
	Benz(a)anthracene	mg/kg	0.007	1	1	-	-	-	-	0.012
	Benzo(a) pyrene	mg/kg	0.0067	1	1	-	-	-	-	0.012
	Benzo(b)fluoranthene	mg/kg	0.008	1	1	-	-	-	-	0.019
	Benzo(g,h,i)perylene	mg/kg	0.008	100	100	-	-	-	-	0.012
	Benzo(k)fluoranthene	mg/kg	0.0047	0.8	1.7	-	-	-	-	0.0067J
	Chrysene	mg/kg	0.008	1	1	-	-	-	-	0.014
	Dibenz(a,h)anthracene	mg/kg	0.0051	0.33	0.33	-	-	-	-	<0.0051U
	Dibenzofuran	mg/kg	0.0017	7	59	-	-	-	-	<0.0017U
	Fluoranthene	mg/kg	0.008	100	100	-	-	-	-	0.023
	Fluorene	mg/kg	0.0016	30	100	-	-	-	-	<0.0016U
	Hexachlorobenzene	mg/kg	0.0029	0.33	1.2	-	-	-	-	<0.0029U
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.0077	0.5	0.5	-	-	-	-	0.011
	Naphthalene	mg/kg	0.003	12	12	-	-	-	-	0.0081
	Pentachlorophenol	mg/kg	0.064	0.8	0.8	-	-	-	-	<0.064U
	Phenanthrene	mg/kg	0.008	100	100	-	-	-	-	0.011
	Phenol	mg/kg	0.012	0.33	0.33	-	-	-	-	<0.012U
	Pyrene	mg/kg	0.008	100	100	-	-	-	-	0.023
	PAHs (Sum of total)	mg/kg				-	-	-	-	0.1599
VOCs	Benzene	mg/kg	0.0015	0.06	0.06	<0.0015U	<0.0019U	<0.0016U	<0.0017U	-
	Ethylbenzene	mg/kg	0.002	1	1	<0.002U	<0.0025U	<0.0022U	<0.0022U	-
	Toluene	mg/kg	0.0015	0.7	0.7	<0.0015U	<0.0019U	<0.0017U	<0.0017U	-
	Xylene Total	mg/kg	0.0077	0.26	1.6	<0.0077U	<0.0097U	<0.0084U	<0.0087U	-
	1,1,1-trichloroethane	mg/kg	0.0018	0.68	0.68	<0.0018U	<0.0023U	<0.0019U	<0.002U	-
	1,1-dichloroethane	mg/kg	0.0017	0.27	0.27	<0.0017U	<0.0022U	<0.0019U	<0.0019U	-
	1,1-dichloroethene	mg/kg	0.0024	0.33	0.33	<0.0024U	<0.0031U	<0.0026U	<0.0027U	-
	1,2-dichloroethane	mg/kg	0.0015	0.02	0.02	<0.0015U	<0.0019U	<0.0017U	<0.0017U	-
	Carbon tetrachloride	mg/kg	0.0022	0.76	0.76	<0.0022U	<0.0027U	<0.0024U	<0.0024U	-
	Chloroform	mg/kg	0.0019	0.37	0.37	0.002J	<0.0022U	0.0021J	0.0022J	-
	cis-1,2-dichloroethene	mg/kg	0.0016	0.25	0.25	<0.0016U	<0.002U	<0.0018U	<0.0018U	-
	Dichloromethane	mg/kg	0.0048	0.05	0.05	<0.0048U	0.011	<0.0052U	<0.0054U	-
	Tetrachloroethene	mg/kg	0.0021	1.3	1.3	<0.0021U	<0.0027U	<0.0023U	<0.0024U	-
	trans-1,2-dichloroethene	mg/kg	0.0019	0.19	0.19	<0.0019U	<0.0024U	<0.002U	<0.0021U	-
	Trichloroethene	mg/kg	0.0017	0.47	0.47	<0.0017U	<0.0021U	<0.0018U	<0.0019U	-
	Vinyl chloride	mg/kg	0.0038	0.02	0.02	<0.0038U	<0.0049U	<0.0042U	<0.0043U	-
	1,2-dichlorobenzene	mg/kg	0.0018	1.1	1.1	<0.0018U	<0.0023U	<0.002U	<0.002U	-
	1,3-dichlorobenzene	mg/kg	0.0033	2.4	2.4	<0.0033U	<0.0042U	<0.0036U	<0.0037U	-
	Chlorobenzene	mg/kg	0.0014	1.1	1.1	<0.0014U	<0.0018U	<0.0015U	<0.0016U	-
	Acetone	mg/kg	0.0041	0.05	0.05	<0.0041U	<0.0053U	<0.0045U	<0.0047U	-
	Methyl Ethyl Ketone	mg/kg	0.0027	0.12	0.12	<0.0027U	<0.0034U	<0.003U	<0.0031U	-
	Methyl-tert-butyl ether	mg/kg	0.0016	0.93	0.93	<0.0016U	<0.002U	<0.0017U	<0.0018U	-
	1,4-dichlorobenzene	mg/kg	0.0016	1.8	1.8	<0.0016U	<0.002U,*+	<0.0017U	<0.0018U	-
	1,2,4-trimethylbenzene	mg/kg	0.0018	3.6	3.6	<0.0018U	<0.0023U	<0.002U	<0.0021U	-
	1,3,5-trimethylbenzene	mg/kg	0.002	8.4	8.4	<0.002U	<0.0025U	<0.0022U	<0.0022U	-
	n-butylbenzene	mg/kg	0.0026	12	12	<0.0026U	<0.0034U	<0.0029U	<0.003U	-
	n-propylbenzene	mg/kg	0.0019	3.9	3.9	<0.0019U	<0.0024U	<0.0021U	<0.0021U	-
	sec-butylbenzene	mg/kg	0.0026	11	11	<0.0026U	<0.0033U	<0.0029U	<0.003U	-
	tert-butylbenzene	mg/kg	0.0022	5.9	5.9	<0.0022U	<0.0029U	<0.0025U	<0.0025U	-
PFAS	6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/kg	0.03			-	-	-	-	<0.03U
	8:2-Fluorotelomersulfonic acid	µg/kg	0.039			-	-	-	-	<0.039U
	NEtFOSAA	µg/kg	0.053			-	-	-	-	<0.053U
	NMeFOSAA	µg/kg	0.026			-	-	-	-	<0.026U
	Perfluorobutanesulfonic acid	µg/kg	0.042			-	-	-	-	<0.042U
	Perfluorobutanoic acid	µg/kg	0.057			-	-	-	-	0.13J
	Perfluorodecanesulfonic acid	µg/kg	0.058			-	-	-	-	<0.058U
	Perfluorodecanoic acid	µg/kg	0.22			-	-	-	-	0.09J
	Perfluorododecanoic acid	µg/kg	0.033			-	-	-	-	<0.033U
	Perfluoroheptanesulfonic acid	µg/kg	0.055			-	-	-	-	<0.055U
	Perfluoroheptanoic acid	µg/kg	0.22			-	-	-	-	0.12J
	Perfluorohexanesulfonic acid	µg/kg	0.032			-	-	-	-	<0.032U
	Perfluorohexanoic acid	µg/kg	0.22			-	-	-	-	0.14J
	Perfluorononanoic acid	µg/kg	0.22			-	-	-	-	0.093J
	Perfluorooctanesulfonamide	µg/kg	0.037			-	-	-	-	<0.037U
	Perfluorooctanesulfonic acid	µg/kg	0.22	0.88	3.7	-	-	-	-	0.69
	Perfluorooctanoate	µg/kg	0.22	0.66	1.1	-	-	-	-	0.36
	Perfluoropentanoic acid	µg/kg	0.051			-	-	-	-	0.11J
	Perfluorotetradecanoic acid	µg/kg	0.041			-	-	-	-	<0.041U
	Perfluorotridecanoic acid	µg/kg	0.023			-	-	-	-	<0.023U
	Perfluoroundecanoic acid	µg/kg	0.047			-	-	-	-	<0.047U
Pesticides	4,4-DDE	mg/kg	0.0004	0.0033	8.9	-	-	-	-	<0.00041U
	a-BHC	mg/kg	0.00048	0.02	0.02	-	-	-	-	<0.00049U
	Aldrin	mg/kg	0.00061	0.005	0.097	-	-	-	-	<0.00062U
	b-BHC	mg/kg	0.00054	0.036	0.09	-	-	-	-	<0.00055U
	Chlordane (cis)	mg/kg	0.00049			-	-	-	-	<0.0005U
	d-BHC	mg/kg	0.00062	0.04	0.25	-	-	-	-	<0.00063U
	DDD	mg/kg	0.00084	0.0033	13	-	-	-	-	<0.00085U
	DDT	mg/kg	0.0014	0.0033	7.9	-	-	-	-	<0.0014U
	Dieldrin	mg/kg	0.00049	0.005	0.1	-	-	-	-	<0.0005U
	Endosulfan I	mg/kg	0.00053	2.4	24	-	-	-	-	<0.00054U
	Endosulfan II	mg/kg	0.00043	2.4	24	-	-	-	-	<0.00044U
	Endosulfan sulphate	mg/kg	0.00051	2.4	24	-	-	-	-	<0.00052U
	Endrin	mg/kg	0.002	0.014	0.06	-	-	-	-	0.0019J
	g-BHC (Lindane)	mg/kg	0.00051	0.1	0.1	-	-	-	-	<0.00051U
	Heptachlor	mg/kg	0.00062	0.042	0.38	-	-	-	-	<0.00062U
Herbicides	2,4,5-TP (Silvex)	mg/kg	0.013	3.8	3.8	-	-	-	-	<0.013U

Notes:
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PFAS - Perfluoroalkyl substances
mg/kg - milligrams per kilogram
U - non detect at the value indicated
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased
I - Value is EMPC (estimated maximum possible concentration)
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported
Analyte concentrations detected above DER-10 App5 Unrestricted Use Screening Criteria are presented in light grey.
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark grey.

Table 1
Request to Import

Former Sperry Remington
Elmira, New York

						Location	SSHS-IRM5A2-BP-TS-1	SSHS-IRM5A2-BP-TS-2A	SSHS-IRM5A2-BP-TS-2B	SSHS-IRM5A2-BP-TS-2C	SSHS-IRM5A2-BP-TS-2
						Sample Name	SSHS-IRM5A2-BP-TS-1	SSHS-IRM5A2-BP-TS-2A	SSHS-IRM5A2-BP-TS-2B	SSHS-IRM5A2-BP-TS-2C	SSHS-IRM5A2-BP-TS-2
						Sample Date	7/20/2021	7/20/2021	7/20/2021	7/22/2021	7/20/2021
						Lab Report	180-124717-2	180-124717-1	180-124717-1	180-124717-1	180-124717-2
Chem Group	**Chemical**	**Units**	**EQL**	DER-10 App5 Unrestricted	DER-10 App5 Rest. Res.						
PCBs	Arochlor 1016	mg/kg	0.0064				<0.0064U	-	-	-	<0.0066U
	Arochlor 1221	mg/kg	0.007				<0.007U	-	-	-	<0.0072U
	Arochlor 1232	mg/kg	0.0048				<0.0048U	-	-	-	<0.0049U
	Arochlor 1242	mg/kg	0.0029				<0.0029U	-	-	-	<0.003U
	Arochlor 1248	mg/kg	0.0048				<0.0048U	-	-	-	<0.0049U
	Arochlor 1254	mg/kg	0.0061				0.055	-	-	-	<0.0061U
	Arochlor 1260	mg/kg	0.0056				<0.0056U	-	-	-	0.041
	Arochlor 1262	mg/kg	0.007				<0.007U	-	-	-	<0.0071U
	Arochlor 1268	mg/kg	0.0027				<0.0027U	-	-	-	<0.0027U
	Total PCBs	mg/kg		0.1	1		0.0756	-	-	-	0.06225
Metals	Arsenic	mg/kg	1.1	13	16		8.4	-	-	-	8.8
	Barium	mg/kg	22	350	400		99	-	-	-	110
	Beryllium	mg/kg	0.43	7.2	47		0.45	-	-	-	0.47
	Cadmium	mg/kg	0.54	2.5	4.3		0.092J	-	-	-	0.21J
	Chromium (hexavalent)	mg/kg	0.26	1	19		<0.26U	-	-	-	<0.26U
	Chromium (III+VI)	mg/kg	0.54	30	180		11	-	-	-	12
	Copper	mg/kg	2.7	50	270		11	-	-	-	12
	Cyanide Total	mg/kg	0.34	27	27		0.53	-	-	-	0.42J
	Lead	mg/kg	1.1	63	400		20	-	-	-	25
	Manganese	mg/kg	1.6	1600	2000		460	-	-	-	470
	Mercury	mg/kg	0.032	0.18	0.73		0.043	-	-	-	0.045
	Nickel	mg/kg	4.3	30	130		18	-	-	-	19
	Selenium	mg/kg	0.56	3.9	4		<0.56U	-	-	-	0.61J
	Silver	mg/kg	0.11	2	8.3		<0.11U	-	-	-	<0.11U
	Zinc	mg/kg	2.2	109	2480		55				63
SVOCs	1,4-Dioxane	mg/kg	0.012	0.1	0.1		<0.024U	<0.042U	<0.043U	<0.042U	<0.013U
	2-methylphenol	mg/kg	0.011	0.33	0.33		<0.022U	-	-	-	<0.012U
	4-methylphenol	mg/kg	0.012	0.33	0.33		<0.023U	-	-	-	<0.012U
	Acenaphthene	mg/kg	0.0023	20	98		<0.0045U	-	-	-	<0.0024U
	Acenaphthylene	mg/kg	0.0034	100	100		<0.0034U	-	-	-	0.0028J
	Anthracene	mg/kg	0.004	100	100		<0.004U	-	-	-	0.004J
	Benz(a)anthracene	mg/kg	0.007	1	1		<0.007U	-	-	-	0.03
	Benzo(a) pyrene	mg/kg	0.0067	1	1		<0.0067U	-	-	-	0.032
	Benzo(b)fluoranthene	mg/kg	0.008	1	1		0.0097J	-	-	-	0.056
	Benzo(g,h,i)perylene	mg/kg	0.008	100	100		0.0083J	-	-	-	0.036
	Benzo(k)fluoranthene	mg/kg	0.0047	0.8	1.7		<0.0047U	-	-	-	0.016
	Chrysene	mg/kg	0.008	1	1		0.0097J	-	-	-	0.039
	Dibenz(a,h)anthracene	mg/kg	0.0051	0.33	0.33		<0.0099U	-	-	-	0.0081J
	Dibenzofuran	mg/kg	0.0017	7	59		<0.0034U	-	-	-	<0.0018U
	Fluoranthene	mg/kg	0.008	100	100		0.014J	-	-	-	0.061
	Fluorene	mg/kg	0.0016	30	100		<0.0031U	-	-	-	<0.0016U
	Hexachlorobenzene	mg/kg	0.0029	0.33	1.2		<0.0056U	-	-	-	<0.0029U
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.0077	0.5	0.5		<0.0077U	-	-	-	0.032
	Napthalene	mg/kg	0.003	12	12		<0.003U	-	-	-	0.041
	Pentachlorophenol	mg/kg	0.064	0.8	0.8		<0.12U	-	-	-	<0.066U
	Phenanthrene	mg/kg	0.008	100	100		0.0067J	-	-	-	0.02
	Phenol	mg/kg	0.012	0.33	0.33		<0.024U	-	-	-	<0.012U
	Pyrene	mg/kg	0.008	100	100		0.011J	-	-	-	0.061
	PAHs (Sum of total)	mg/kg					0.08415				0.4397
VOCs	Benzene	mg/kg	0.0015	0.06	0.06		-	<0.0017U	<0.0017U	<0.0017U	-
	Ethylbenzene	mg/kg	0.002	1	1		-	<0.0022U	<0.0022U	<0.0022U	-
	Toluene	mg/kg	0.0015	0.7	0.7		-	<0.0017U	<0.0017U	<0.0017U	-
	Xylene Total	mg/kg	0.0077	0.26	1.6		-	<0.0086U	<0.0087U	<0.0086U	-
	1,1,1-trichloroethane	mg/kg	0.0018	0.68	0.68		-	<0.002U	<0.002U	<0.002U	-
	1,1-dichloroethane	mg/kg	0.0017	0.27	0.27		-	<0.0019U	<0.0019U	<0.0019U	-
	1,1-dichloroethene	mg/kg	0.0024	0.33	0.33		-	<0.0027U	<0.0027U	<0.0027U	-
	1,2-dichloroethane	mg/kg	0.0015	0.02	0.02		-	<0.0017U	<0.0017U	<0.0017U	-
	Carbon tetrachloride	mg/kg	0.0022	0.76	0.76		-	<0.0024U	<0.0024U	<0.0024U	-
	Chloroform	mg/kg	0.0019	0.37	0.37		-	0.0021J	<0.0019U	<0.0019U	-
	cis-1,2-dichloroethene	mg/kg	0.0016	0.25	0.25		-	<0.0018U	<0.0018U	<0.0018U	-
	Dichloromethane	mg/kg	0.0048	0.05	0.05		-	<0.0054U	<0.0054U	<0.0054U	-
	Tetrachloroethene	mg/kg	0.0021	1.3	1.3		-	<0.0024U	<0.0024U	<0.0024U	-
	trans-1,2-dichloroethene	mg/kg	0.0019	0.19	0.19		-	<0.0021U	<0.0021U	<0.0021U	-
	Trichloroethene	mg/kg	0.0017	0.47	0.47		-	<0.0019U	<0.0019U	<0.0019U	-
	Vinyl chloride	mg/kg	0.0038	0.02	0.02		-	<0.0043U	<0.0043U	<0.0043U	-
	1,2-dichlorobenzene	mg/kg	0.0018	1.1	1.1		-	<0.002U	<0.002U	<0.002U	-
	1,3-dichlorobenzene	mg/kg	0.0033	2.4	2.4		-	<0.0037U	<0.0037U	<0.0037U	-
	Chlorobenzene	mg/kg	0.0014	1.1	1.1		-	<0.0015U	<0.0016U	<0.0015U	-
	Acetone	mg/kg	0.0041	0.05	0.05		-	<0.0046U	<0.0047U	<0.0046U	-
	Methyl Ethyl Ketone	mg/kg	0.0027	0.12	0.12		-	<0.003U	<0.0031U	<0.003U	-
	Methyl-tert-butyl ether	mg/kg	0.0016	0.93	0.93		-	<0.0017U	<0.0018U	<0.0017U	-
	1,4-dichlorobenzene	mg/kg	0.0016	1.8	1.8		-	<0.0018U	<0.0018U	<0.0018U	-
	1,2,4-trimethylbenzene	mg/kg	0.0018	3.6	3.6		-	<0.002U	<0.0021U	<0.002U	-
	1,3,5-trimethylbenzene	mg/kg	0.002	8.4	8.4		-	<0.0022U	<0.0022U	<0.0022U	-
	n-butylbenzene	mg/kg	0.0026	12	12		-	<0.0029U	<0.003U	<0.0029U	-
	n-propylbenzene	mg/kg	0.0019	3.9	3.9		-	<0.0021U	<0.0021U	<0.0021U	-
	sec-butylbenzene	mg/kg	0.0026	11	11		-	<0.0029U	<0.003U	<0.0029U	-
	tert-butylbenzene	mg/kg	0.0022	5.9	5.9		-	<0.0025U	<0.0025U	<0.0025U	-
PFAS	6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/kg	0.03				0.46	-	-	-	<0.031U
	8:2-Fluorotelomersulfonic acid	µg/kg	0.039				<0.042U	-	-	-	<0.04U
	NEtFOSAA	µg/kg	0.053				<0.057U	-	-	-	<0.055U
	NMeFOSAA	µg/kg	0.026				<0.027U	-	-	-	0.027J
	Perfluorobutanesulfonic acid	µg/kg	0.042				<0.045U	-	-	-	<0.043U
	Perfluorobutanoic acid	µg/kg	0.057				0.11J	-	-	-	0.13J
	Perfluorodecanesulfonic acid	µg/kg	0.058				<0.062U	-	-	-	0.065J,I
	Perfluorodecanoic acid	µg/kg	0.22				0.089J	-	-	-	0.15J
	Perfluorododecanoic acid	µg/kg	0.033				<0.036U	-	-	-	<0.034U
	Perfluoroheptanesulfonic acid	µg/kg	0.055				<0.058U	-	-	-	<0.056U
	Perfluoroheptanoic acid	µg/kg	0.22				0.11J	-	-	-	0.09J
	Perfluorohexanesulfonic acid	µg/kg	0.032				<0.034U	-	-	-	<0.033U
	Perfluorohexanoic acid	µg/kg	0.22				0.13J	-	-	-	0.11J
	Perfluorononanoic acid	µg/kg	0.22				0.096J	-	-	-	0.13J
	Perfluorooctanesulfonamide	µg/kg	0.037				<0.039U	-	-	-	<0.038U
	Perfluorooctanesulfonic acid	µg/kg	0.22	0.88	3.7		0.58	-	-	-	1.1I
	Perfluorooctanoate	µg/kg	0.22	0.66	1.1		0.34	-	-	-	0.34
	Perfluoropentanoic acid	µg/kg	0.051				0.11J	-	-	-	0.12J
	Perfluorotetradecanoic acid	µg/kg	0.041				<0.044U	-	-	-	<0.042U
	Perfluorotridecanoic acid	µg/kg	0.023				<0.025U	-	-	-	0.024J
	Perfluoroundecanoic acid	µg/kg	0.047				<0.05U	-	-	-	0.072J
Pesticides	4,4-DDE	mg/kg	0.0004	0.0033	8.9		<0.00042U	-	-	-	<0.00042U
	a-BHC	mg/kg	0.00048	0.02	0.02		<0.00048U	-	-	-	<0.00051U
	Aldrin	mg/kg	0.00061	0.005	0.097		<0.00061U	-	-	-	<0.00064U
	b-BHC	mg/kg	0.00054	0.036	0.09		<0.00054U	-	-	-	<0.00056U
	Chlordane (cis)	mg/kg	0.00049				<0.00049U	-	-	-	<0.00052U
	d-BHC	mg/kg	0.00062	0.04	0.25		<0.00062U	-	-	-	<0.00065U
	DDD	mg/kg	0.00084	0.0033	13		<0.00084U	-	-	-	<0.00088U
	DDT	mg/kg	0.0014	0.0033	7.9		<0.0014U	-	-	-	<0.0015U
	Dieldrin	mg/kg	0.00049	0.005	0.1		<0.00049U	-	-	-	<0.00052U
	Endosulfan I	mg/kg	0.00053	2.4	24		<0.00053U	-	-	-	<0.00056U
	Endosulfan II	mg/kg	0.00043	2.4	24		<0.00043U	-	-	-	<0.00045U
	Endosulfan sulphate	mg/kg	0.00051	2.4	24		<0.00051U	-	-	-	<0.00053U
	Endrin	mg/kg	0.002	0.014	0.06		0.0013J,p	-	-	-	0.0018J,p
	g-BHC (Lindane)	mg/kg	0.00051	0.1	0.1		<0.00051U	-	-	-	<0.00053U
	Heptachlor	mg/kg	0.00062	0.042	0.38		<0.00062U	-	-	-	<0.00064U
Herbicides	2,4,5-TP (Silvex)	mg/kg	0.013	3.8	3.8		<0.013U	-	-	-	<0.013U

Notes:
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PFAS - Perfluoroalkyl substances
mg/kg - milligrams per kilogram
U - non detect at the value indicated
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased
I - Value is EMPC (estimated maximum possible concentration)
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported
Analyte concentrations detected above DER-10 App5 Unrestricted Use Screening Criteria are presented in light grey.
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark grey.

Table 1
Request to Import

Former Sperry Remington
Elmira, New York

					Location	SSHS-IRM5A2-BP-TS-3A	SSHS-IRM5A2-BP-TS-3B	SSHS-IRM5A2-BP-TS-3C	SSHS-IRM5A2-BP-TS-3
					Sample Name	SSHS-IRM5A2-BP-TS-3A	SSHS-IRM5A2-BP-TS-3B	SSHS-IRM5A2-BP-TS-3C	SSHS-IRM5A2-BP-TS-3
					Sample Date	7/20/2021	7/20/2021	7/20/2021	7/20/2021
Chem Group	**Chemical**	**Units**	**EQL**	DER-10 App5 Unrestricted	**Lab Report** / DER-10 App5 Rest. Res.	180-124717-1	180-124717-1	180-124717-1	180-124717-2
PCBs	Arochlor 1016	mg/kg	0.0064			-	-	-	<0.0066U
	Arochlor 1221	mg/kg	0.007			-	-	-	<0.0072U
	Arochlor 1232	mg/kg	0.0048			-	-	-	<0.005U
	Arochlor 1242	mg/kg	0.0029			-	-	-	<0.003U
	Arochlor 1248	mg/kg	0.0048			-	-	-	<0.0049U
	Arochlor 1254	mg/kg	0.0061			-	-	-	0.049
	Arochlor 1260	mg/kg	0.0056			-	-	-	<0.0058U
	Arochlor 1262	mg/kg	0.007			-	-	-	<0.0072U
	Arochlor 1268	mg/kg	0.0027			-	-	-	<0.0027U
	Total PCBs	mg/kg		0.1	1	-	-	-	0.0702
Metals	Arsenic	mg/kg	1.1	13	16	-	-	-	7.1
	Barium	mg/kg	22	350	400	-	-	-	110
	Beryllium	mg/kg	0.43	7.2	47	-	-	-	0.45
	Cadmium	mg/kg	0.54	2.5	4.3	-	-	-	0.12J
	Chromium (hexavalent)	mg/kg	0.26	1	19	-	-	-	<0.27U
	Chromium (III+VI)	mg/kg	0.54	30	180	-	-	-	11
	Copper	mg/kg	2.7	50	270	-	-	-	12
	Cyanide Total	mg/kg	0.34	27	27	-	-	-	<0.34U
	Lead	mg/kg	1.1	63	400	-	-	-	52
	Manganese	mg/kg	1.6	1600	2000	-	-	-	470
	Mercury	mg/kg	0.032	0.18	0.73	-	-	-	0.043
	Nickel	mg/kg	4.3	30	130	-	-	-	18
	Selenium	mg/kg	0.56	3.9	4	-	-	-	<0.56U
	Silver	mg/kg	0.11	2	8.3	-	-	-	<0.12U
	Zinc	mg/kg	2.2	109	2480	-	-	-	110
SVOCs	1,4-Dioxane	mg/kg	0.012	0.1	0.1	<0.041U	<0.043U	<0.043U	<0.013U
	2-methylphenol	mg/kg	0.011	0.33	0.33	-	-	-	<0.012U
	4-methylphenol	mg/kg	0.012	0.33	0.33	-	-	-	<0.012U
	Acenaphthene	mg/kg	0.0023	20	98	-	-	-	<0.0023U
	Acenaphthylene	mg/kg	0.0034	100	100	-	-	-	0.0029J
	Anthracene	mg/kg	0.004	100	100	-	-	-	0.0023J
	Benz(a)anthracene	mg/kg	0.007	1	1	-	-	-	0.01
	Benzo(a) pyrene	mg/kg	0.0067	1	1	-	-	-	0.012
	Benzo(b)fluoranthene	mg/kg	0.008	1	1	-	-	-	0.02
	Benzo(g,h,i)perylene	mg/kg	0.008	100	100	-	-	-	0.014
	Benzo(k)fluoranthene	mg/kg	0.0047	0.8	1.7	-	-	-	0.0056J
	Chrysene	mg/kg	0.008	1	1	-	-	-	0.014
	Dibenz(a,h)anthracene	mg/kg	0.0051	0.33	0.33	-	-	-	<0.0051U
	Dibenzofuran	mg/kg	0.0017	7	59	-	-	-	<0.0018U
	Fluoranthene	mg/kg	0.008	100	100	-	-	-	0.02
	Fluorene	mg/kg	0.0016	30	100	-	-	-	<0.0016U
	Hexachlorobenzene	mg/kg	0.0029	0.33	1.2	-	-	-	<0.0029U
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.0077	0.5	0.5	-	-	-	0.012
	Naphthalene	mg/kg	0.003	12	12	-	-	-	0.022
	Pentachlorophenol	mg/kg	0.064	0.8	0.8	-	-	-	<0.065U
	Phenanthrene	mg/kg	0.008	100	100	-	-	-	0.0091
	Phenol	mg/kg	0.012	0.33	0.33	-	-	-	<0.012U
	Pyrene	mg/kg	0.008	100	100	-	-	-	0.02
	PAHs (Sum of total)	mg/kg				-	-	-	0.1673
VOCs	Benzene	mg/kg	0.0015	0.06	0.06	<0.0016U	<0.0017U	<0.0017U	-
	Ethylbenzene	mg/kg	0.002	1	1	<0.0021U	<0.0023U	<0.0023U	-
	Toluene	mg/kg	0.0015	0.7	0.7	<0.0017U	<0.0018U	<0.0018U	-
	Xylene Total	mg/kg	0.0077	0.26	1.6	<0.0083U	<0.0088U	<0.0088U	-
	1,1,1-trichloroethane	mg/kg	0.0018	0.68	0.68	<0.0019U	<0.002U	<0.002U	-
	1,1-dichloroethane	mg/kg	0.0017	0.27	0.27	<0.0018U	<0.002U	<0.0019U	-
	1,1-dichloroethene	mg/kg	0.0024	0.33	0.33	<0.0026U	<0.0028U	<0.0027U	-
	1,2-dichloroethane	mg/kg	0.0015	0.02	0.02	<0.0017U	<0.0018U	<0.0018U	-
	Carbon tetrachloride	mg/kg	0.0022	0.76	0.76	<0.0023U	<0.0025U	<0.0025U	-
	Chloroform	mg/kg	0.0019	0.37	0.37	<0.0019U	0.0022J	<0.002U	-
	cis-1,2-dichloroethene	mg/kg	0.0016	0.25	0.25	<0.0017U	<0.0018U	<0.0018U	-
	Dichloromethane	mg/kg	0.0048	0.05	0.05	<0.0052U	<0.0055U	0.0087	-
	Tetrachloroethene	mg/kg	0.0021	1.3	1.3	<0.0023U	<0.0025U	<0.0024U	-
	trans-1,2-dichloroethene	mg/kg	0.0019	0.19	0.19	<0.002U	<0.0021U	<0.0021U	-
	Trichloroethene	mg/kg	0.0017	0.47	0.47	<0.0018U	<0.0019U	<0.0019U	-
	Vinyl chloride	mg/kg	0.0038	0.02	0.02	<0.0042U	<0.0044U	<0.0044U	-
	1,2-dichlorobenzene	mg/kg	0.0018	1.1	1.1	<0.0019U	<0.0021U	<0.002U	-
	1,3-dichlorobenzene	mg/kg	0.0033	2.4	2.4	<0.0036U	<0.0038U	<0.0037U	-
	Chlorobenzene	mg/kg	0.0014	1.1	1.1	<0.0015U	<0.0016U	<0.0016U	-
	Acetone	mg/kg	0.0041	0.05	0.05	<0.0045U	<0.0048U	<0.0047U	-
	Methyl Ethyl Ketone	mg/kg	0.0027	0.12	0.12	<0.0029U	<0.0031U	<0.0031U	-
	Methyl-tert-butyl ether	mg/kg	0.0016	0.93	0.93	<0.0017U	<0.0018U	<0.0018U	-
	1,4-dichlorobenzene	mg/kg	0.0016	1.8	1.8	<0.0017U	<0.0018U	<0.0018U,*+	-
	1,2,4-trimethylbenzene	mg/kg	0.0018	3.6	3.6	<0.002U	<0.0021U	<0.0021U	-
	1,3,5-trimethylbenzene	mg/kg	0.002	8.4	8.4	<0.0021U	<0.0023U	<0.0023U	-
	n-butylbenzene	mg/kg	0.0026	12	12	<0.0029U	<0.003U	<0.003U	-
	n-propylbenzene	mg/kg	0.0019	3.9	3.9	<0.0021U	<0.0022U	<0.0022U	-
	sec-butylbenzene	mg/kg	0.0026	11	11	<0.0028U	<0.003U	<0.003U	-
	tert-butylbenzene	mg/kg	0.0022	5.9	5.9	<0.0024U	<0.0026U	<0.0026U	-
PFAS	6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/kg	0.03			-	-	-	<0.034U
	8:2-Fluorotelomersulfonic acid	µg/kg	0.039			-	-	-	<0.043U
	NEtFOSAA	µg/kg	0.053			-	-	-	<0.06U
	NMeFOSAA	µg/kg	0.026			-	-	-	<0.029U
	Perfluorobutanesulfonic acid	µg/kg	0.042			-	-	-	<0.047U
	Perfluorobutanoic acid	µg/kg	0.057			-	-	-	<0.057U
	Perfluorodecanesulfonic acid	µg/kg	0.058			-	-	-	<0.065U
	Perfluorodecanoic acid	µg/kg	0.22			-	-	-	0.1J
	Perfluorododecanoic acid	µg/kg	0.033			-	-	-	<0.037U
	Perfluoroheptanesulfonic acid	µg/kg	0.055			-	-	-	<0.061U
	Perfluoroheptanoic acid	µg/kg	0.22			-	-	-	0.063J
	Perfluorohexanesulfonic acid	µg/kg	0.032			-	-	-	<0.036U
	Perfluorohexanoic acid	µg/kg	0.22			-	-	-	0.077J
	Perfluorononanoic acid	µg/kg	0.22			-	-	-	0.073J
	Perfluorooctanesulfonamide	µg/kg	0.037			-	-	-	<0.041U
	Perfluorooctanesulfonic acid	µg/kg	0.22	0.88	3.7	-	-	-	0.66I
	Perfluorooctanoate	µg/kg	0.22	0.66	1.1	-	-	-	0.17J
	Perfluoropentanoic acid	µg/kg	0.051			-	-	-	<0.051U
	Perfluorotetradecanoic acid	µg/kg	0.041			-	-	-	<0.046U
	Perfluorotridecanoic acid	µg/kg	0.023			-	-	-	<0.026U
	Perfluoroundecanoic acid	µg/kg	0.047			-	-	-	<0.052U
Pesticides	4,4-DDE	mg/kg	0.0004	0.0033	8.9	-	-	-	<0.00042U
	a-BHC	mg/kg	0.00048	0.02	0.02	-	-	-	<0.0005U
	Aldrin	mg/kg	0.00061	0.005	0.097	-	-	-	<0.00064U
	b-BHC	mg/kg	0.00054	0.036	0.09	-	-	-	<0.00056U
	Chlordane (cis)	mg/kg	0.00049			-	-	-	<0.00051U
	d-BHC	mg/kg	0.00062	0.04	0.25	-	-	-	<0.00065U
	DDD	mg/kg	0.00084	0.0033	13	-	-	-	<0.00088U
	DDT	mg/kg	0.0014	0.0033	7.9	-	-	-	<0.0015U
	Dieldrin	mg/kg	0.00049	0.005	0.1	-	-	-	<0.00051U
	Endosulfan I	mg/kg	0.00053	2.4	24	-	-	-	<0.00056U
	Endosulfan II	mg/kg	0.00043	2.4	24	-	-	-	<0.00045U
	Endosulfan sulphate	mg/kg	0.00051	2.4	24	-	-	-	<0.00053U
	Endrin	mg/kg	0.002	0.014	0.06	-	-	-	0.0022
	g-BHC (Lindane)	mg/kg	0.00051	0.1	0.1	-	-	-	<0.00053U
	Heptachlor	mg/kg	0.00062	0.042	0.38	-	-	-	<0.00064U
Herbicides	2,4,5- TP (Silvex)	mg/kg	0.013	3.8	3.8	-	-	-	<0.013U

Notes:
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PFAS - Perfluoroalkyl substances
mg/kg - milligrams per kilogram
U - non detect at the value indicated
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*+ - LCS and/or LCSD is outside acceptance limits, high biased
I - Value is EMPC (estimated maximum possible concentration)
p - The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported
Analyte concentrations detected above DER-10 App5 Unrestricted Use Screening Criteria are presented in light grey.
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark grey.

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-124717-1
Client Project/Site: Former Sperry Remington-Imported Topsoil

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

Attn: Mr. Aron Krasnopoler

Authorized for release by:
7/29/2021 6:08:21 PM

David Dunlap, Senior Project Manager
(412)963-2432
David.Dunlap@Eurofinset.com

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: 180-124717-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-124717-1

Comments
Notation was made to the coc regarding changes to the sample IDs.

Receipt
The samples were received on 7/21 and 23/21 at the Eurofins TestAmerica Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5º C, 1.8º C and 2.8º C.

The following sample (for volatiles analysis) was listed on the Chain of Custody (COC); however, no sample was received: SSHS-IRM5A2 BREESPORT TOPSOIL 2C (180-124717-10). The sample was re-collected and received on 7/23/21 at the Pittsburgh laboratory.

GC/MS VOA
Method 8260C: The laboratory control sample (LCS) for batch 180-365368 recovered above the control limits for the following analyte: 1,4-Dichlorobenzene. As this analyte was biased high in the LCS and was not detected in the associated samples, the results were reported.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-365191 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-365191 was above criteria for the following analytes: Methylene Chloride, N-Propylbenzene, and Tert-Butylbenzene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-365368 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-365368 was above criteria for the following analytes: 1,3,5-Trimethylbenzene, 1,4-Dichlorobenzene, Methylene Chloride, N-Propylbenzene, and Tert-Butylbenzene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-365575 was below criteria for the following analytes: 1,4-Dioxane and 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.

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

GC/MS Semi VOA
Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: SSHS-IRM5A2 BREESPORT TOPSOIL 1 (180-124717-1) and its matrix spikes. Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8082A: The continuing calibration verification (CCV) analyzed in batch 180-365185 (CCVIS 180-365195/56) was above criteria for aroclor 1260 on both columns. As the CCV was high and aroclor 1260 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.

Job ID: 180-124717-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

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.

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

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.

General Chemistry

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-22

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

Sample Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Solid	07/20/21 08:00	07/21/21 09:15
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Solid	07/20/21 08:10	07/21/21 09:15
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Solid	07/20/21 08:20	07/21/21 09:15
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Solid	07/20/21 00:00	07/21/21 09:15
180-124717-5	SSHS-IRM5A2 BREESPORT TOPSOIL 1A	Solid	07/20/21 08:30	07/21/21 09:15
180-124717-6	SSHS-IRM5A2 BREESPORT TOPSOIL 1B	Solid	07/20/21 08:35	07/21/21 09:15
180-124717-7	SSHS-IRM5A2 BREESPORT TOPSOIL 1C	Solid	07/20/21 08:40	07/21/21 09:15
180-124717-8	SSHS-IRM5A2 BREESPORT TOPSOIL 2A	Solid	07/20/21 08:45	07/21/21 09:15
180-124717-9	SSHS-IRM5A2 BREESPORT TOPSOIL 2B	Solid	07/20/21 08:50	07/21/21 09:15
180-124717-10	SSHS-IRM5A2 BREESPORT TOPSOIL 2C	Solid	07/22/21 07:15	07/23/21 08:50
180-124717-11	SSHS-IRM5A2 BREESPORT TOPSOIL 3A	Solid	07/20/21 09:00	07/21/21 09:15
180-124717-12	SSHS-IRM5A2 BREESPORT TOPSOIL 3B	Solid	07/20/21 09:05	07/21/21 09:15
180-124717-13	SSHS-IRM5A2 BREESPORT TOPSOIL 3C	Solid	07/20/21 09:10	07/21/21 09:15
180-124717-14	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A	Solid	07/20/21 00:00	07/21/21 09:15

Method Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

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 7196A	Chromium, Hexavalent	SW846	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	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 = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 — Lab Sample ID: 180-124717-1

Date Collected: 07/20/21 08:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 — Lab Sample ID: 180-124717-1

Date Collected: 07/20/21 08:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.6**

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	365595	07/26/21 08:32	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		2	1 mL	1 mL	365852	07/28/21 09:37	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.2 g	20.0 mL	365308	07/22/21 13:30	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			365391	07/23/21 18:40	DFE	TAL PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.1 g	20.0 mL	365164	07/21/21 15:17	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	365217	07/22/21 08:27	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	365218	07/22/21 08:28	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			365185	07/23/21 01:40	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.3 g	40.0 mL	365279	07/22/21 06:35	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			365566	07/26/21 22:12	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.10 g	100 mL	365255	07/22/21 09:55	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			365567	07/23/21 15:26	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.62 g	100 mL	365502	07/26/21 10:15	KEM	TAL PIT
Total/NA	Analysis	EPA 7471B		1			366018	07/28/21 13:00	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.47 g	100 mL	365337	07/22/21 16:32	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	365553	07/24/21 17:01	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.25 g	10 mL	366115	07/29/21 13:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			366211	07/29/21 15:42	CMR	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2 — Lab Sample ID: 180-124717-2

Date Collected: 07/20/21 08:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2
Lab Sample ID: 180-124717-2
Date Collected: 07/20/21 08:10
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 80.1

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	365595	07/26/21 08:32	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	365699	07/27/21 14:14	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.2 g	20.0 mL	365308	07/22/21 13:30	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			365391	07/23/21 19:28	DFE	TAL PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.4 g	20.0 mL	365164	07/21/21 15:17	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	365217	07/22/21 08:27	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	365218	07/22/21 08:28	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			365358	07/23/21 10:33	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.4 g	40.0 mL	365279	07/22/21 06:35	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			365566	07/26/21 22:32	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.16 g	100 mL	365255	07/22/21 09:55	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			365567	07/23/21 15:30	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.77 g	100 mL	365502	07/26/21 10:15	KEM	TAL PIT
Total/NA	Analysis	EPA 7471B		1			366018	07/28/21 13:01	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.54 g	100 mL	365337	07/22/21 16:32	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	365553	07/24/21 17:01	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.25 g	10 mL	366115	07/29/21 13:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			366211	07/29/21 15:44	CMR	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3
Lab Sample ID: 180-124717-3
Date Collected: 07/20/21 08:20
Matrix: Solid
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3
Lab Sample ID: 180-124717-3
Date Collected: 07/20/21 08:20
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 80.3

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	365595	07/26/21 08:32	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	365699	07/27/21 14:36	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.2 g	20.0 mL	365308	07/22/21 13:30	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			365391	07/23/21 19:44	DFE	TAL PIT
	Instrument ID: CHGC17									

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

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	20.0 mL	365164	07/21/21 15:17	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	365217	07/22/21 08:27	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	365218	07/22/21 08:28	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			365358	07/23/21 10:52	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.3 g	40.0 mL	365279	07/22/21 06:35	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			365566	07/26/21 22:51	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.14 g	100 mL	365255	07/22/21 09:55	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			365567	07/23/21 15:35	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.71 g	100 mL	365502	07/26/21 10:15	KEM	TAL PIT
Total/NA	Analysis	EPA 7471B		1			366018	07/28/21 13:01	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.49 g	100 mL	365337	07/22/21 16:32	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	365553	07/24/21 17:01	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.20 g	10 mL	366115	07/29/21 13:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			366211	07/29/21 15:45	CMR	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 — Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 — Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 82.0**

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	365595	07/26/21 08:32	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	365699	07/27/21 14:59	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.3 g	20.0 mL	365308	07/22/21 13:30	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			365391	07/23/21 19:59	DFE	TAL PIT
	Instrument ID: CHGC17									

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 — Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 82.0**

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	20.0 mL	365164	07/21/21 15:17	CSC	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	365217	07/22/21 08:27	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	365218	07/22/21 08:28	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			365185	07/23/21 02:37	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.2 g	40.0 mL	365279	07/22/21 06:35	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			365566	07/26/21 23:11	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.06 g	100 mL	365255	07/22/21 09:55	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			365567	07/23/21 15:39	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.63 g	100 mL	365502	07/26/21 10:15	KEM	TAL PIT
Total/NA	Analysis	EPA 7471B		1			366018	07/28/21 13:02	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.55 g	100 mL	365337	07/22/21 16:32	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	365553	07/24/21 17:01	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.24 g	10 mL	366115	07/29/21 13:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			366211	07/29/21 15:50	CMR	TAL PIT
	Instrument ID: SEAL2									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1A — Lab Sample ID: 180-124717-5

Date Collected: 07/20/21 08:30 **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1A — Lab Sample ID: 180-124717-5

Date Collected: 07/20/21 08:30 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 91.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1234 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 11:21	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1B — Lab Sample ID: 180-124717-6

Date Collected: 07/20/21 08:35 **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1B — Lab Sample ID: 180-124717-6

Date Collected: 07/20/21 08:35 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 84.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1107 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 11:47	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1C — Lab Sample ID: 180-124717-7

Date Collected: 07/20/21 08:40 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1C — Lab Sample ID: 180-124717-7

Date Collected: 07/20/21 08:40 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9893 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 12:12	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2A — Lab Sample ID: 180-124717-8

Date Collected: 07/20/21 08:45 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2A — Lab Sample ID: 180-124717-8

Date Collected: 07/20/21 08:45 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 85.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9377 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 12:38	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2B — Lab Sample ID: 180-124717-9

Date Collected: 07/20/21 08:50 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2B — Lab Sample ID: 180-124717-9

Date Collected: 07/20/21 08:50 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 81.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1052 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 13:04	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2C — Lab Sample ID: 180-124717-10

Date Collected: 07/22/21 07:15 — **Matrix: Solid**
Date Received: 07/23/21 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			365529	07/24/21 10:07	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2C — Lab Sample ID: 180-124717-10

Date Collected: 07/22/21 07:15 — **Matrix: Solid**
Date Received: 07/23/21 08:50 — **Percent Solids: 82.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1172 g	5 mL	365614	07/26/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365575	07/26/21 11:07	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3A — Lab Sample ID: 180-124717-11

Date Collected: 07/20/21 09:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3A — Lab Sample ID: 180-124717-11

Date Collected: 07/20/21 09:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1643 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 13:29	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3B — Lab Sample ID: 180-124717-12

Date Collected: 07/20/21 09:05 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3B — Lab Sample ID: 180-124717-12

Date Collected: 07/20/21 09:05 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 82.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9672 g	5 mL	365212	07/22/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365191	07/22/21 13:55	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3C — Lab Sample ID: 180-124717-13

Date Collected: 07/20/21 09:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3C — Lab Sample ID: 180-124717-13

Date Collected: 07/20/21 09:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 86.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.7639 g	5 mL	365380	07/23/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365368	07/23/21 10:12	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A — Lab Sample ID: 180-124717-14

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15

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			365317	07/22/21 14:03	SMW	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A — Lab Sample ID: 180-124717-14

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 73.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0081 g	5 mL	365380	07/23/21 06:00	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	365368	07/23/21 10:37	KLG	TAL PIT
	Instrument ID: CHHP11									

Laboratory References:

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

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Analyst References:

Lab: TAL PIT

- Batch Type: Cleanup
  - JMO = John Oravec
- Batch Type: Prep
  - CMR = Carl Reagle
  - CSC = Chayce Cockroft
  - KEM = Kimberly Mahoney
  - KLG = Kathy Gordon
  - PMH = Paloma Hoelzle
  - SNP = Sydney Prugh
  - TLP = Tara Peterson
- Batch Type: Analysis
  - CMR = Carl Reagle
  - DFE = David Eppinger
  - JAS = Jeremy Stundon
  - JMO = John Oravec
  - KEM = Kimberly Mahoney
  - KLG = Kathy Gordon
  - PMH = Paloma Hoelzle
  - RJG = Rob Good
  - SMW = Shelby Walters
  - SNR = Sabra Richart

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 **Lab Sample ID: 180-124717-1**
Date Collected: 07/20/21 08:00 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 83.6**

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		0.016	0.0045	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Acenaphthylene	ND		0.016	0.0034	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Anthracene	ND		0.016	0.0040	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Benzo[a]anthracene	ND		0.016	0.0070	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Benzo[a]pyrene	ND		0.016	0.0067	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Benzo[b]fluoranthene	**0.0097**	**J**	0.016	0.0038	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Benzo[g,h,i]perylene	**0.0083**	**J**	0.016	0.0034	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Benzo[k]fluoranthene	ND		0.016	0.0047	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Chrysene	**0.0097**	**J**	0.016	0.0086	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Dibenz(a,h)anthracene	ND		0.016	0.0099	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Dibenzofuran	ND		0.077	0.0034	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
1,4-Dioxane	ND		0.16	0.024	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Fluoranthene	**0.014**	**J**	0.016	0.0041	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Fluorene	ND		0.016	0.0031	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Hexachlorobenzene	ND		0.016	0.0056	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Indeno[1,2,3-cd]pyrene	ND		0.016	0.0077	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
2-Methylphenol	ND		0.077	0.022	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Methylphenol, 3 & 4	ND		0.077	0.023	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Naphthalene	ND		0.016	0.0030	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Pentachlorophenol	ND		0.40	0.12	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Phenanthrene	**0.0067**	**J**	0.016	0.0042	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Phenol	ND		0.077	0.024	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2
Pyrene	**0.011**	**J**	0.016	0.0037	mg/Kg	☼	07/26/21 08:32	07/28/21 09:37	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*37 - 107*	*07/26/21 08:32*	*07/28/21 09:37*	*2*
2-Fluorophenol (Surr)	*47*		*38 - 106*	*07/26/21 08:32*	*07/28/21 09:37*	*2*
Nitrobenzene-d5 (Surr)	*49*		*41 - 112*	*07/26/21 08:32*	*07/28/21 09:37*	*2*
Phenol-d5 (Surr)	*48*		*40 - 110*	*07/26/21 08:32*	*07/28/21 09:37*	*2*
Terphenyl-d14 (Surr)	*55*		*32 - 115*	*07/26/21 08:32*	*07/28/21 09:37*	*2*
2,4,6-Tribromophenol (Surr)	*40*		*22 - 116*	*07/26/21 08:32*	*07/28/21 09:37*	*2*

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	☼	07/22/21 13:30	07/23/21 18:40	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
beta-BHC	ND		0.0020	0.00054	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
cis-Chlordane	ND		0.0020	0.00049	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
4,4'-DDD	ND		0.0020	0.00084	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
delta-BHC	ND		0.0020	0.00062	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Dieldrin	ND		0.0020	0.00049	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Endosulfan I	ND		0.0020	0.00053	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Endosulfan sulfate	ND		0.0020	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Endrin	**0.0013**	**J p**	0.0020	0.00037	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
gamma-BHC (Lindane)	ND		0.0020	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	07/22/21 13:30	07/23/21 18:40	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 — Lab Sample ID: 180-124717-1

Date Collected: 07/20/21 08:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.6**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*35 - 144*	*07/22/21 13:30*	*07/23/21 18:40*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*35 - 144*	*07/22/21 13:30*	*07/23/21 18:40*	*1*
Tetrachloro-m-xylene	*86*		*40 - 113*	*07/22/21 13:30*	*07/23/21 18:40*	*1*
Tetrachloro-m-xylene	*83*		*40 - 113*	*07/22/21 13:30*	*07/23/21 18:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0064	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1221	ND		0.020	0.0070	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1232	ND		0.020	0.0048	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1248	ND		0.020	0.0048	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1254	**0.055**		0.020	0.0059	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1260	ND		0.020	0.0056	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1262	ND		0.020	0.0070	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	07/21/21 15:17	07/23/21 01:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*31 - 150*	*07/21/21 15:17*	*07/23/21 01:40*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*31 - 150*	*07/21/21 15:17*	*07/23/21 01:40*	*1*
Tetrachloro-m-xylene (Surr)	*102*		*20 - 150*	*07/21/21 15:17*	*07/23/21 01:40*	*1*
Tetrachloro-m-xylene (Surr)	*94*		*20 - 150*	*07/21/21 15:17*	*07/23/21 01:40*	*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	0.013	mg/Kg	☼	07/22/21 06:35	07/26/21 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*72*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:12*	*1*
2,4-Dichlorophenylacetic acid	*76*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:12*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.4**		1.1	0.43	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Barium	**99**		22	1.2	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Beryllium	**0.45**		0.43	0.025	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Cadmium	**0.092**	**J**	0.54	0.040	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Chromium	**11**		0.54	0.45	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Copper	**11**		2.7	2.5	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Lead	**20**		1.1	0.56	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Manganese	**460**		1.6	0.44	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Nickel	**18**		4.3	0.27	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Selenium	ND		1.1	0.56	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Silver	ND		0.54	0.11	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1
Zinc	**55**		2.2	1.7	mg/Kg	☼	07/22/21 09:55	07/23/21 15:26	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.043**		0.038	0.025	mg/Kg	☼	07/26/21 10:15	07/28/21 13:00	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 — Lab Sample ID: 180-124717-1

Date Collected: 07/20/21 08:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.6**

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.4**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**83.6**		0.1	0.1	%			07/22/21 14:03	1
Hexavalent chromium	ND		0.48	0.26	mg/Kg	☼	07/22/21 16:32	07/24/21 17:01	1
Cyanide, Total	**0.53**		0.48	0.26	mg/Kg	☼	07/29/21 13:45	07/29/21 15:42	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2 — Lab Sample ID: 180-124717-2

Date Collected: 07/20/21 08:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.1**

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		0.0082	0.0024	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Acenaphthylene	**0.0028**	**J**	0.0082	0.0018	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Anthracene	**0.0040**	**J**	0.0082	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Benzo[a]anthracene	**0.030**		0.0082	0.0037	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Benzo[a]pyrene	**0.032**		0.0082	0.0035	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Benzo[b]fluoranthene	**0.056**		0.0082	0.0020	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Benzo[g,h,i]perylene	**0.036**		0.0082	0.0018	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Benzo[k]fluoranthene	**0.016**		0.0082	0.0024	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Chrysene	**0.039**		0.0082	0.0045	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Dibenz(a,h)anthracene	**0.0081**	**J**	0.0082	0.0052	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Dibenzofuran	ND		0.040	0.0018	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
1,4-Dioxane	ND		0.082	0.013	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Fluoranthene	**0.061**		0.0082	0.0022	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Fluorene	ND		0.0082	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Hexachlorobenzene	ND		0.0082	0.0029	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Indeno[1,2,3-cd]pyrene	**0.032**		0.0082	0.0041	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
2-Methylphenol	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Methylphenol, 3 & 4	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Naphthalene	**0.041**		0.0082	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Pentachlorophenol	ND		0.21	0.066	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Phenanthrene	**0.020**		0.0082	0.0022	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Phenol	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1
Pyrene	**0.061**		0.0082	0.0019	mg/Kg	☼	07/26/21 08:32	07/27/21 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*37 - 107*	*07/26/21 08:32*	*07/27/21 14:14*	*1*
2-Fluorophenol (Surr)	*73*		*38 - 106*	*07/26/21 08:32*	*07/27/21 14:14*	*1*
Nitrobenzene-d5 (Surr)	*76*		*41 - 112*	*07/26/21 08:32*	*07/27/21 14:14*	*1*
Phenol-d5 (Surr)	*79*		*40 - 110*	*07/26/21 08:32*	*07/27/21 14:14*	*1*
Terphenyl-d14 (Surr)	*91*		*32 - 115*	*07/26/21 08:32*	*07/27/21 14:14*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*22 - 116*	*07/26/21 08:32*	*07/27/21 14:14*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0021	0.00064	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
alpha-BHC	ND		0.0021	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
beta-BHC	ND		0.0021	0.00056	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
cis-Chlordane	ND		0.0021	0.00052	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
4,4'-DDD	ND		0.0021	0.00088	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2 — Lab Sample ID: 180-124717-2

Date Collected: 07/20/21 08:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	ND		0.0021	0.00042	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
4,4'-DDT	ND		0.0021	0.0015	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
delta-BHC	ND		0.0021	0.00065	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Dieldrin	ND		0.0021	0.00052	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Endosulfan I	ND		0.0021	0.00056	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Endosulfan II	ND		0.0021	0.00045	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Endosulfan sulfate	ND		0.0021	0.00053	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Endrin	**0.0018**	**J p**	0.0021	0.00038	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
gamma-BHC (Lindane)	ND		0.0021	0.00053	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1
Heptachlor	ND		0.0021	0.00064	mg/Kg	☼	07/22/21 13:30	07/23/21 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:28*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:28*	*1*
Tetrachloro-m-xylene	*75*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:28*	*1*
Tetrachloro-m-xylene	*77*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:28*	*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	0.0066	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1221	ND		0.020	0.0072	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1232	ND		0.020	0.0049	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1242	ND		0.020	0.0030	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1248	ND		0.020	0.0049	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1254	ND		0.020	0.0061	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1260	**0.041**		0.020	0.0058	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1262	ND		0.020	0.0071	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	07/21/21 15:17	07/23/21 10:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*31 - 150*	*07/21/21 15:17*	*07/23/21 10:33*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*31 - 150*	*07/21/21 15:17*	*07/23/21 10:33*	*1*
Tetrachloro-m-xylene (Surr)	*103*		*20 - 150*	*07/21/21 15:17*	*07/23/21 10:33*	*1*
Tetrachloro-m-xylene (Surr)	*94*		*20 - 150*	*07/21/21 15:17*	*07/23/21 10:33*	*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	0.013	mg/Kg	☼	07/22/21 06:35	07/26/21 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*77*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:32*	*1*
2,4-Dichlorophenylacetic acid	*89*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:32*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.8**		1.1	0.42	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Barium	**110**		22	1.2	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Beryllium	**0.47**		0.43	0.025	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Cadmium	**0.21**	**J**	0.54	0.039	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Chromium	**12**		0.54	0.44	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Copper	**12**		2.7	2.5	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2 — Lab Sample ID: 180-124717-2

Date Collected: 07/20/21 08:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	25		1.1	0.55	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Manganese	470		1.6	0.44	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Nickel	19		4.3	0.27	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Selenium	0.61	J	1.1	0.55	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Silver	ND		0.54	0.11	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1
Zinc	63		2.2	1.7	mg/Kg	☼	07/22/21 09:55	07/23/21 15:30	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.032	0.021	mg/Kg	☼	07/26/21 10:15	07/28/21 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.9		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	80.1		0.1	0.1	%			07/22/21 14:03	1
Hexavalent chromium	ND		0.49	0.26	mg/Kg	☼	07/22/21 16:32	07/24/21 17:01	1
Cyanide, Total	0.42	J	0.50	0.27	mg/Kg	☼	07/29/21 13:45	07/29/21 15:44	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

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		0.0081	0.0023	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Acenaphthylene	0.0029	J	0.0081	0.0018	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Anthracene	0.0023	J	0.0081	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Benzo[a]anthracene	0.010		0.0081	0.0036	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Benzo[a]pyrene	0.012		0.0081	0.0035	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Benzo[b]fluoranthene	0.020		0.0081	0.0020	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Benzo[g,h,i]perylene	0.014		0.0081	0.0017	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Benzo[k]fluoranthene	0.0056	J	0.0081	0.0024	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Chrysene	0.014		0.0081	0.0045	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Dibenz(a,h)anthracene	ND		0.0081	0.0051	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Dibenzofuran	ND		0.040	0.0018	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
1,4-Dioxane	ND		0.080	0.013	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Fluoranthene	0.020		0.0081	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Fluorene	ND		0.0081	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Hexachlorobenzene	ND		0.0081	0.0029	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Indeno[1,2,3-cd]pyrene	0.012		0.0081	0.0040	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
2-Methylphenol	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Methylphenol, 3 & 4	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Naphthalene	0.022		0.0081	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Pentachlorophenol	ND		0.20	0.065	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Phenanthrene	0.0091		0.0081	0.0022	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Phenol	ND		0.040	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1
Pyrene	0.020		0.0081	0.0019	mg/Kg	☼	07/26/21 08:32	07/27/21 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*37 - 107*	*07/26/21 08:32*	*07/27/21 14:36*	*1*
2-Fluorophenol (Surr)	*75*		*38 - 106*	*07/26/21 08:32*	*07/27/21 14:36*	*1*

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	*77*		*41 - 112*	*07/26/21 08:32*	*07/27/21 14:36*	*1*
Phenol-d5 (Surr)	*78*		*40 - 110*	*07/26/21 08:32*	*07/27/21 14:36*	*1*
Terphenyl-d14 (Surr)	*115*		*32 - 115*	*07/26/21 08:32*	*07/27/21 14:36*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*22 - 116*	*07/26/21 08:32*	*07/27/21 14:36*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0021	0.00064	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
alpha-BHC	ND		0.0021	0.00050	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
beta-BHC	ND		0.0021	0.00056	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
cis-Chlordane	ND		0.0021	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
4,4'-DDD	ND		0.0021	0.00088	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
4,4'-DDE	ND		0.0021	0.00042	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
4,4'-DDT	ND		0.0021	0.0015	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
delta-BHC	ND		0.0021	0.00065	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Dieldrin	ND		0.0021	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Endosulfan I	ND		0.0021	0.00056	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Endosulfan II	ND		0.0021	0.00045	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Endosulfan sulfate	ND		0.0021	0.00053	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Endrin	**0.0022**		0.0021	0.00038	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
gamma-BHC (Lindane)	ND		0.0021	0.00053	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1
Heptachlor	ND		0.0021	0.00064	mg/Kg	☼	07/22/21 13:30	07/23/21 19:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*73*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:44*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:44*	*1*
Tetrachloro-m-xylene	*70*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:44*	*1*
Tetrachloro-m-xylene	*73*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0066	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1221	ND		0.020	0.0072	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1232	ND		0.020	0.0050	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1242	ND		0.020	0.0030	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1248	ND		0.020	0.0049	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1254	**0.049**		0.020	0.0061	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1260	ND		0.020	0.0058	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1262	ND		0.020	0.0072	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	07/21/21 15:17	07/23/21 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*93*		*31 - 150*	*07/21/21 15:17*	*07/23/21 10:52*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*31 - 150*	*07/21/21 15:17*	*07/23/21 10:52*	*1*
Tetrachloro-m-xylene (Surr)	*99*		*20 - 150*	*07/21/21 15:17*	*07/23/21 10:52*	*1*
Tetrachloro-m-xylene (Surr)	*88*		*20 - 150*	*07/21/21 15:17*	*07/23/21 10:52*	*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	0.013	mg/Kg	☼	07/22/21 06:35	07/26/21 22:51	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*66*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:51*	*1*
2,4-Dichlorophenylacetic acid	*74*		*48 - 127*	*07/22/21 06:35*	*07/26/21 22:51*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		1.1	0.43	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Barium	**110**		22	1.2	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Beryllium	**0.45**		0.44	0.025	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Cadmium	**0.12**	**J**	0.55	0.040	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Chromium	**11**		0.55	0.45	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Copper	**12**		2.7	2.5	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Lead	**52**		1.1	0.56	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Manganese	**470**		1.6	0.44	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Nickel	**18**		4.4	0.27	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Selenium	ND		1.1	0.56	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Silver	ND		0.55	0.12	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1
Zinc	**110**		2.2	1.7	mg/Kg	☼	07/22/21 09:55	07/23/21 15:35	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.043**		0.035	0.022	mg/Kg	☼	07/26/21 10:15	07/28/21 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.7**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**80.3**		0.1	0.1	%			07/22/21 14:03	1
Hexavalent chromium	ND		0.50	0.27	mg/Kg	☼	07/22/21 16:32	07/24/21 17:01	1
Cyanide, Total	ND		0.62	0.34	mg/Kg	☼	07/29/21 13:45	07/29/21 15:45	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 — Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 82.0**

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		0.0080	0.0023	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Acenaphthylene	**0.0024**	**J**	0.0080	0.0017	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Anthracene	**0.0023**	**J**	0.0080	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Benzo[a]anthracene	**0.012**		0.0080	0.0036	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Benzo[a]pyrene	**0.012**		0.0080	0.0035	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Benzo[b]fluoranthene	**0.019**		0.0080	0.0020	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Benzo[g,h,i]perylene	**0.012**		0.0080	0.0017	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Benzo[k]fluoranthene	**0.0067**	**J**	0.0080	0.0024	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Chrysene	**0.014**		0.0080	0.0044	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Dibenz(a,h)anthracene	ND		0.0080	0.0051	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Dibenzofuran	ND		0.039	0.0017	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
1,4-Dioxane	ND		0.080	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Fluoranthene	**0.023**		0.0080	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Fluorene	ND		0.0080	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Hexachlorobenzene	ND		0.0080	0.0029	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 **Lab Sample ID: 180-124717-4**
Date Collected: 07/20/21 00:00 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.011**		0.0080	0.0040	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Methylphenol, 3 & 4	ND		0.039	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Naphthalene	**0.0081**		0.0080	0.0016	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Pentachlorophenol	ND		0.20	0.064	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Phenanthrene	**0.011**		0.0080	0.0021	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Phenol	ND		0.039	0.012	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1
Pyrene	**0.023**		0.0080	0.0019	mg/Kg	☼	07/26/21 08:32	07/27/21 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*37 - 107*	*07/26/21 08:32*	*07/27/21 14:59*	*1*
2-Fluorophenol (Surr)	*74*		*38 - 106*	*07/26/21 08:32*	*07/27/21 14:59*	*1*
Nitrobenzene-d5 (Surr)	*76*		*41 - 112*	*07/26/21 08:32*	*07/27/21 14:59*	*1*
Phenol-d5 (Surr)	*77*		*40 - 110*	*07/26/21 08:32*	*07/27/21 14:59*	*1*
Terphenyl-d14 (Surr)	*85*		*32 - 115*	*07/26/21 08:32*	*07/27/21 14:59*	*1*
2,4,6-Tribromophenol (Surr)	*78*		*22 - 116*	*07/26/21 08:32*	*07/27/21 14:59*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00062	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
beta-BHC	ND		0.0020	0.00055	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
cis-Chlordane	ND		0.0020	0.00050	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
4,4'-DDD	ND		0.0020	0.00085	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
4,4'-DDE	ND		0.0020	0.00041	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Endosulfan sulfate	ND		0.0020	0.00052	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Endrin	**0.0019**	**J**	0.0020	0.00037	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
gamma-BHC (Lindane)	ND		0.0020	0.00051	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	07/22/21 13:30	07/23/21 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*58*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:59*	*1*
DCB Decachlorobiphenyl (Surr)	*62*		*35 - 144*	*07/22/21 13:30*	*07/23/21 19:59*	*1*
Tetrachloro-m-xylene	*67*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:59*	*1*
Tetrachloro-m-xylene	*65*		*40 - 113*	*07/22/21 13:30*	*07/23/21 19:59*	*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	0.0066	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1221	ND		0.020	0.0072	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1232	ND		0.020	0.0050	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1242	ND		0.020	0.0030	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1248	ND		0.020	0.0049	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1254	ND		0.020	0.0061	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.020	0.0058	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1262	ND		0.020	0.0071	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	07/21/21 15:17	07/23/21 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*31 - 150*	*07/21/21 15:17*	*07/23/21 02:37*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*31 - 150*	*07/21/21 15:17*	*07/23/21 02:37*	*1*
Tetrachloro-m-xylene (Surr)	*113*		*20 - 150*	*07/21/21 15:17*	*07/23/21 02:37*	*1*
Tetrachloro-m-xylene (Surr)	*106*		*20 - 150*	*07/21/21 15:17*	*07/23/21 02:37*	*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	0.013	mg/Kg	☼	07/22/21 06:35	07/26/21 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*71*		*48 - 127*	*07/22/21 06:35*	*07/26/21 23:11*	*1*
2,4-Dichlorophenylacetic acid	*80*		*48 - 127*	*07/22/21 06:35*	*07/26/21 23:11*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.3**		1.2	0.45	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Barium	**110**		23	1.2	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Beryllium	**0.46**		0.46	0.026	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Cadmium	**0.10**	**J**	0.58	0.042	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Chromium	**11**		0.58	0.47	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Copper	**11**		2.9	2.6	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Lead	**21**		1.2	0.59	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Manganese	**470**		1.7	0.47	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Nickel	**18**		4.6	0.29	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Selenium	ND		1.2	0.59	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Silver	ND		0.58	0.12	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1
Zinc	**56**		2.3	1.8	mg/Kg	☼	07/22/21 09:55	07/23/21 15:39	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.042**		0.038	0.025	mg/Kg	☼	07/26/21 10:15	07/28/21 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.0**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**82.0**		0.1	0.1	%			07/22/21 14:03	1
Hexavalent chromium	**0.28**	**J**	0.48	0.25	mg/Kg	☼	07/22/21 16:32	07/24/21 17:01	1
Cyanide, Total	**0.45**	**J**	0.51	0.28	mg/Kg	☼	07/29/21 13:45	07/29/21 15:50	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1A — Lab Sample ID: 180-124717-5

Date Collected: 07/20/21 08:30 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 91.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0041	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Benzene	ND		0.0053	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
2-Butanone (MEK)	ND		0.0053	0.0027	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Carbon tetrachloride	ND		0.0053	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Chloroform	**0.0020**	**J**	0.0053	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
cis-1,2-Dichloroethene	ND		0.0053	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,3-Dichlorobenzene	ND		0.0053	0.0033	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,1-Dichloroethane	ND		0.0053	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Ethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Methylene Chloride	ND		0.0053	0.0048	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Methyl tert-butyl ether	ND		0.0053	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
tert-Butylbenzene	ND		0.0053	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
trans-1,2-Dichloroethene	ND		0.0053	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	07/22/21 06:00	07/22/21 11:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 111*	*07/22/21 06:00*	*07/22/21 11:21*	*1*
Dibromofluoromethane (Surr)	*99*		*69 - 129*	*07/22/21 06:00*	*07/22/21 11:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 124*	*07/22/21 06:00*	*07/22/21 11:21*	*1*
Toluene-d8 (Surr)	*96*		*80 - 129*	*07/22/21 06:00*	*07/22/21 11:21*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.2**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**91.8**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1B — Lab Sample ID: 180-124717-6

Date Collected: 07/20/21 08:35 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 84.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.023	0.0045	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Benzene	ND		0.0058	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1B — Lab Sample ID: 180-124717-6

Date Collected: 07/20/21 08:35 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 84.1**

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		0.0058	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Carbon tetrachloride	ND		0.0058	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Chlorobenzene	ND		0.0058	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Chloroform	**0.0021**	**J**	0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
cis-1,2-Dichloroethene	ND		0.0058	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,2-Dichlorobenzene	ND		0.0058	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,3-Dichlorobenzene	ND		0.0058	0.0036	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,4-Dichlorobenzene	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,1-Dichloroethane	ND		0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,2-Dichloroethane	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,1-Dichloroethene	ND		0.0058	0.0026	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,4-Dioxane	ND		1.2	0.041	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Ethylbenzene	ND		0.0058	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Methylene Chloride	ND		0.0058	0.0052	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Methyl tert-butyl ether	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
n-Butylbenzene	ND		0.0058	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
N-Propylbenzene	ND		0.0058	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
sec-Butylbenzene	ND		0.0058	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
tert-Butylbenzene	ND		0.0058	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Tetrachloroethene	ND		0.0058	0.0023	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Toluene	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
trans-1,2-Dichloroethene	ND		0.0058	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,1,1-Trichloroethane	ND		0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Trichloroethene	ND		0.0058	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,2,4-Trimethylbenzene	ND		0.0058	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
1,3,5-Trimethylbenzene	ND		0.0058	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Vinyl chloride	ND		0.0058	0.0042	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1
Xylenes, Total	ND		0.012	0.0084	mg/Kg	☼	07/22/21 06:00	07/22/21 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 111*	*07/22/21 06:00*	*07/22/21 11:47*	*1*
Dibromofluoromethane (Surr)	*98*		*69 - 129*	*07/22/21 06:00*	*07/22/21 11:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*	*07/22/21 06:00*	*07/22/21 11:47*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*	*07/22/21 06:00*	*07/22/21 11:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15.9**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**84.1**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1C — Lab Sample ID: 180-124717-7

Date Collected: 07/20/21 08:40 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0047	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Benzene	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
2-Butanone (MEK)	ND		0.0060	0.0031	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Carbon tetrachloride	ND		0.0060	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1C
Lab Sample ID: 180-124717-7
Date Collected: 07/20/21 08:40 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0060	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Chloroform	**0.0022**	**J**	0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
cis-1,2-Dichloroethene	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,2-Dichlorobenzene	ND		0.0060	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,3-Dichlorobenzene	ND		0.0060	0.0037	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,4-Dichlorobenzene	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,1-Dichloroethane	ND		0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,2-Dichloroethane	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,1-Dichloroethene	ND		0.0060	0.0027	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,4-Dioxane	ND		1.2	0.043	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Ethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Methylene Chloride	ND		0.0060	0.0054	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Methyl tert-butyl ether	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
n-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
N-Propylbenzene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
sec-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
tert-Butylbenzene	ND		0.0060	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Tetrachloroethene	ND		0.0060	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Toluene	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
trans-1,2-Dichloroethene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,1,1-Trichloroethane	ND		0.0060	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Trichloroethene	ND		0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,2,4-Trimethylbenzene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
1,3,5-Trimethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Vinyl chloride	ND		0.0060	0.0043	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1
Xylenes, Total	ND		0.012	0.0087	mg/Kg	☼	07/22/21 06:00	07/22/21 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 111*	*07/22/21 06:00*	*07/22/21 12:12*	*1*
Dibromofluoromethane (Surr)	*97*		*69 - 129*	*07/22/21 06:00*	*07/22/21 12:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*67 - 124*	*07/22/21 06:00*	*07/22/21 12:12*	*1*
Toluene-d8 (Surr)	*97*		*80 - 129*	*07/22/21 06:00*	*07/22/21 12:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.7**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**83.3**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2A
Lab Sample ID: 180-124717-8
Date Collected: 07/20/21 08:45 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 85.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0046	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Benzene	ND		0.0059	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
2-Butanone (MEK)	ND		0.0059	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Carbon tetrachloride	ND		0.0059	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Chlorobenzene	ND		0.0059	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Chloroform	**0.0021**	**J**	0.0059	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2A — Lab Sample ID: 180-124717-8

Date Collected: 07/20/21 08:45 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 85.3**

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		0.0059	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,2-Dichlorobenzene	ND		0.0059	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,3-Dichlorobenzene	ND		0.0059	0.0037	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,4-Dichlorobenzene	ND		0.0059	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,1-Dichloroethane	ND		0.0059	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,2-Dichloroethane	ND		0.0059	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,1-Dichloroethene	ND		0.0059	0.0027	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,4-Dioxane	ND		1.2	0.042	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Ethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Methylene Chloride	ND		0.0059	0.0054	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Methyl tert-butyl ether	ND		0.0059	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
n-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
N-Propylbenzene	ND		0.0059	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
sec-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
tert-Butylbenzene	ND		0.0059	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Tetrachloroethene	ND		0.0059	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Toluene	ND		0.0059	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
trans-1,2-Dichloroethene	ND		0.0059	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,1,1-Trichloroethane	ND		0.0059	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Trichloroethene	ND		0.0059	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,2,4-Trimethylbenzene	ND		0.0059	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
1,3,5-Trimethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Vinyl chloride	ND		0.0059	0.0043	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1
Xylenes, Total	ND		0.012	0.0086	mg/Kg	☼	07/22/21 06:00	07/22/21 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 111*	*07/22/21 06:00*	*07/22/21 12:38*	*1*
Dibromofluoromethane (Surr)	*96*		*69 - 129*	*07/22/21 06:00*	*07/22/21 12:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*67 - 124*	*07/22/21 06:00*	*07/22/21 12:38*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*	*07/22/21 06:00*	*07/22/21 12:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.7**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**85.3**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2B — Lab Sample ID: 180-124717-9

Date Collected: 07/20/21 08:50 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 81.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0047	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Benzene	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
2-Butanone (MEK)	ND		0.0060	0.0031	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Carbon tetrachloride	ND		0.0060	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Chlorobenzene	ND		0.0060	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Chloroform	ND		0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
cis-1,2-Dichloroethene	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,2-Dichlorobenzene	ND		0.0060	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2B — Lab Sample ID: 180-124717-9

Date Collected: 07/20/21 08:50 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 81.3**

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		0.0060	0.0037	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,4-Dichlorobenzene	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,1-Dichloroethane	ND		0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,2-Dichloroethane	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,1-Dichloroethene	ND		0.0060	0.0027	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,4-Dioxane	ND		1.2	0.043	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Ethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Methylene Chloride	ND		0.0060	0.0054	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Methyl tert-butyl ether	ND		0.0060	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
n-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
N-Propylbenzene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
sec-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
tert-Butylbenzene	ND		0.0060	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Tetrachloroethene	ND		0.0060	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Toluene	ND		0.0060	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
trans-1,2-Dichloroethene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,1,1-Trichloroethane	ND		0.0060	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Trichloroethene	ND		0.0060	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,2,4-Trimethylbenzene	ND		0.0060	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
1,3,5-Trimethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Vinyl chloride	ND		0.0060	0.0043	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1
Xylenes, Total	ND		0.012	0.0087	mg/Kg	☼	07/22/21 06:00	07/22/21 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 111*	*07/22/21 06:00*	*07/22/21 13:04*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 129*	*07/22/21 06:00*	*07/22/21 13:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*67 - 124*	*07/22/21 06:00*	*07/22/21 13:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*	*07/22/21 06:00*	*07/22/21 13:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18.7**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**81.3**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2C — Lab Sample ID: 180-124717-10

Date Collected: 07/22/21 07:15 — **Matrix: Solid**
Date Received: 07/23/21 08:50 — **Percent Solids: 82.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0046	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Benzene	ND		0.0059	0.0017	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
2-Butanone (MEK)	ND		0.0059	0.0030	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Carbon tetrachloride	ND		0.0059	0.0024	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Chlorobenzene	ND		0.0059	0.0015	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Chloroform	ND		0.0059	0.0019	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
cis-1,2-Dichloroethene	ND		0.0059	0.0018	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,2-Dichlorobenzene	ND		0.0059	0.0020	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,3-Dichlorobenzene	ND		0.0059	0.0037	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,4-Dichlorobenzene	ND		0.0059	0.0018	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2C — Lab Sample ID: 180-124717-10

Date Collected: 07/22/21 07:15 — **Matrix: Solid**
Date Received: 07/23/21 08:50 — **Percent Solids: 82.3**

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		0.0059	0.0019	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,2-Dichloroethane	ND		0.0059	0.0017	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,1-Dichloroethene	ND		0.0059	0.0027	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,4-Dioxane	ND		1.2	0.042	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Ethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Methylene Chloride	ND		0.0059	0.0054	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Methyl tert-butyl ether	ND		0.0059	0.0017	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
n-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
N-Propylbenzene	ND		0.0059	0.0021	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
sec-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
tert-Butylbenzene	ND		0.0059	0.0025	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Tetrachloroethene	ND		0.0059	0.0024	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Toluene	ND		0.0059	0.0017	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
trans-1,2-Dichloroethene	ND		0.0059	0.0021	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,1,1-Trichloroethane	ND		0.0059	0.0020	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Trichloroethene	ND		0.0059	0.0019	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,2,4-Trimethylbenzene	ND		0.0059	0.0020	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
1,3,5-Trimethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Vinyl chloride	ND		0.0059	0.0043	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1
Xylenes, Total	ND		0.012	0.0086	mg/Kg	☼	07/26/21 06:00	07/26/21 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 111*	*07/26/21 06:00*	*07/26/21 11:07*	*1*
Dibromofluoromethane (Surr)	*100*		*69 - 129*	*07/26/21 06:00*	*07/26/21 11:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*67 - 124*	*07/26/21 06:00*	*07/26/21 11:07*	*1*
Toluene-d8 (Surr)	*95*		*80 - 129*	*07/26/21 06:00*	*07/26/21 11:07*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.7**		0.1	0.1	%			07/24/21 10:07	1
Percent Solids	**82.3**		0.1	0.1	%			07/24/21 10:07	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3A — Lab Sample ID: 180-124717-11

Date Collected: 07/20/21 09:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.023	0.0045	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Benzene	ND		0.0058	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
2-Butanone (MEK)	ND		0.0058	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Carbon tetrachloride	ND		0.0058	0.0023	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Chlorobenzene	ND		0.0058	0.0015	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Chloroform	ND		0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
cis-1,2-Dichloroethene	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,2-Dichlorobenzene	ND		0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,3-Dichlorobenzene	ND		0.0058	0.0036	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,4-Dichlorobenzene	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,1-Dichloroethane	ND		0.0058	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,2-Dichloroethane	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3A

Lab Sample ID: 180-124717-11
Date Collected: 07/20/21 09:00
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 83.9

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		0.0058	0.0026	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,4-Dioxane	ND		1.2	0.041	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Ethylbenzene	ND		0.0058	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Methylene Chloride	ND		0.0058	0.0052	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Methyl tert-butyl ether	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
n-Butylbenzene	ND		0.0058	0.0029	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
N-Propylbenzene	ND		0.0058	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
sec-Butylbenzene	ND		0.0058	0.0028	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
tert-Butylbenzene	ND		0.0058	0.0024	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Tetrachloroethene	ND		0.0058	0.0023	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Toluene	ND		0.0058	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
trans-1,2-Dichloroethene	ND		0.0058	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,1,1-Trichloroethane	ND		0.0058	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Trichloroethene	ND		0.0058	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,2,4-Trimethylbenzene	ND		0.0058	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
1,3,5-Trimethylbenzene	ND		0.0058	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Vinyl chloride	ND		0.0058	0.0042	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1
Xylenes, Total	ND		0.012	0.0083	mg/Kg	☼	07/22/21 06:00	07/22/21 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 111*	*07/22/21 06:00*	*07/22/21 13:29*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 129*	*07/22/21 06:00*	*07/22/21 13:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*67 - 124*	*07/22/21 06:00*	*07/22/21 13:29*	*1*
Toluene-d8 (Surr)	*95*		*80 - 129*	*07/22/21 06:00*	*07/22/21 13:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16.1**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**83.9**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3B

Lab Sample ID: 180-124717-12
Date Collected: 07/20/21 09:05
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 82.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0048	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Benzene	ND		0.0061	0.0017	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
2-Butanone (MEK)	ND		0.0061	0.0031	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Carbon tetrachloride	ND		0.0061	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Chlorobenzene	ND		0.0061	0.0016	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Chloroform	**0.0022**	**J**	0.0061	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
cis-1,2-Dichloroethene	ND		0.0061	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,2-Dichlorobenzene	ND		0.0061	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,3-Dichlorobenzene	ND		0.0061	0.0038	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,4-Dichlorobenzene	ND		0.0061	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,1-Dichloroethane	ND		0.0061	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,2-Dichloroethane	ND		0.0061	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,1-Dichloroethene	ND		0.0061	0.0028	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,4-Dioxane	ND		1.2	0.043	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3B — Lab Sample ID: 180-124717-12

Date Collected: 07/20/21 09:05 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 82.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.0061	0.0023	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Methylene Chloride	ND		0.0061	0.0055	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Methyl tert-butyl ether	ND		0.0061	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
n-Butylbenzene	ND		0.0061	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
N-Propylbenzene	ND		0.0061	0.0022	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
sec-Butylbenzene	ND		0.0061	0.0030	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
tert-Butylbenzene	ND		0.0061	0.0026	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Tetrachloroethene	ND		0.0061	0.0025	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Toluene	ND		0.0061	0.0018	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
trans-1,2-Dichloroethene	ND		0.0061	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,1,1-Trichloroethane	ND		0.0061	0.0020	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Trichloroethene	ND		0.0061	0.0019	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,2,4-Trimethylbenzene	ND		0.0061	0.0021	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
1,3,5-Trimethylbenzene	ND		0.0061	0.0023	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Vinyl chloride	ND		0.0061	0.0044	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1
Xylenes, Total	ND		0.012	0.0088	mg/Kg	☼	07/22/21 06:00	07/22/21 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 111*	*07/22/21 06:00*	*07/22/21 13:55*	*1*
Dibromofluoromethane (Surr)	*101*		*69 - 129*	*07/22/21 06:00*	*07/22/21 13:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 124*	*07/22/21 06:00*	*07/22/21 13:55*	*1*
Toluene-d8 (Surr)	*96*		*80 - 129*	*07/22/21 06:00*	*07/22/21 13:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17.6**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**82.4**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3C — Lab Sample ID: 180-124717-13

Date Collected: 07/20/21 09:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 86.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0047	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Benzene	ND		0.0061	0.0017	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
2-Butanone (MEK)	ND		0.0061	0.0031	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Carbon tetrachloride	ND		0.0061	0.0025	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Chlorobenzene	ND		0.0061	0.0016	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Chloroform	ND		0.0061	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
cis-1,2-Dichloroethene	ND		0.0061	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,2-Dichlorobenzene	ND		0.0061	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,3-Dichlorobenzene	ND		0.0061	0.0037	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,4-Dichlorobenzene	ND	*+	0.0061	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,1-Dichloroethane	ND		0.0061	0.0019	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,2-Dichloroethane	ND		0.0061	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,1-Dichloroethene	ND		0.0061	0.0027	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,4-Dioxane	ND		1.2	0.043	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Ethylbenzene	ND		0.0061	0.0023	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Methylene Chloride	**0.0087**		0.0061	0.0055	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3C — Lab Sample ID: 180-124717-13

Date Collected: 07/20/21 09:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 86.3**

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		0.0061	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
n-Butylbenzene	ND		0.0061	0.0030	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
N-Propylbenzene	ND		0.0061	0.0022	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
sec-Butylbenzene	ND		0.0061	0.0030	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
tert-Butylbenzene	ND		0.0061	0.0026	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Tetrachloroethene	ND		0.0061	0.0024	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Toluene	ND		0.0061	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
trans-1,2-Dichloroethene	ND		0.0061	0.0021	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,1,1-Trichloroethane	ND		0.0061	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Trichloroethene	ND		0.0061	0.0019	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,2,4-Trimethylbenzene	ND		0.0061	0.0021	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
1,3,5-Trimethylbenzene	ND		0.0061	0.0023	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Vinyl chloride	ND		0.0061	0.0044	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1
Xylenes, Total	ND		0.012	0.0088	mg/Kg	☼	07/23/21 06:00	07/23/21 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 111*	*07/23/21 06:00*	*07/23/21 10:12*	*1*
Dibromofluoromethane (Surr)	*98*		*69 - 129*	*07/23/21 06:00*	*07/23/21 10:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*	*07/23/21 06:00*	*07/23/21 10:12*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*	*07/23/21 06:00*	*07/23/21 10:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.7**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**86.3**		0.1	0.1	%			07/22/21 14:03	1

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A — Lab Sample ID: 180-124717-14

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 73.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.027	0.0053	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Benzene	ND		0.0068	0.0019	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
2-Butanone (MEK)	ND		0.0068	0.0034	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Carbon tetrachloride	ND		0.0068	0.0027	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Chlorobenzene	ND		0.0068	0.0018	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Chloroform	ND		0.0068	0.0022	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
cis-1,2-Dichloroethene	ND		0.0068	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,2-Dichlorobenzene	ND		0.0068	0.0023	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,3-Dichlorobenzene	ND		0.0068	0.0042	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,4-Dichlorobenzene	ND	*+	0.0068	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,1-Dichloroethane	ND		0.0068	0.0022	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,2-Dichloroethane	ND		0.0068	0.0019	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,1-Dichloroethene	ND		0.0068	0.0031	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,4-Dioxane	ND		1.4	0.048	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Ethylbenzene	ND		0.0068	0.0025	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Methylene Chloride	**0.011**		0.0068	0.0061	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Methyl tert-butyl ether	ND		0.0068	0.0020	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-1
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A **Lab Sample ID: 180-124717-14**
Date Collected: 07/20/21 00:00 **Matrix: Solid**
Date Received: 07/21/21 09:15 **Percent Solids: 73.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		0.0068	0.0034	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
N-Propylbenzene	ND		0.0068	0.0024	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
sec-Butylbenzene	ND		0.0068	0.0033	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
tert-Butylbenzene	ND		0.0068	0.0029	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Tetrachloroethene	ND		0.0068	0.0027	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Toluene	ND		0.0068	0.0019	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
trans-1,2-Dichloroethene	ND		0.0068	0.0024	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,1,1-Trichloroethane	ND		0.0068	0.0023	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Trichloroethene	ND		0.0068	0.0021	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,2,4-Trimethylbenzene	ND		0.0068	0.0023	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
1,3,5-Trimethylbenzene	ND		0.0068	0.0025	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Vinyl chloride	ND		0.0068	0.0049	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1
Xylenes, Total	ND		0.014	0.0097	mg/Kg	☼	07/23/21 06:00	07/23/21 10:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 111*	*07/23/21 06:00*	*07/23/21 10:37*	*1*
Dibromofluoromethane (Surr)	*97*		*69 - 129*	*07/23/21 06:00*	*07/23/21 10:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*67 - 124*	*07/23/21 06:00*	*07/23/21 10:37*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*	*07/23/21 06:00*	*07/23/21 10:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**26.1**		0.1	0.1	%			07/22/21 14:03	1
Percent Solids	**73.9**		0.1	0.1	%			07/22/21 14:03	1

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

Lab Sample ID: MB 180-365191/6 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365191

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0039	mg/Kg			07/22/21 09:13	1
Benzene	ND		0.0050	0.0014	mg/Kg			07/22/21 09:13	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			07/22/21 09:13	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			07/22/21 09:13	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			07/22/21 09:13	1
Chloroform	ND		0.0050	0.0016	mg/Kg			07/22/21 09:13	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			07/22/21 09:13	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			07/22/21 09:13	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			07/22/21 09:13	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			07/22/21 09:13	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			07/22/21 09:13	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			07/22/21 09:13	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			07/22/21 09:13	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			07/22/21 09:13	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			07/22/21 09:13	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			07/22/21 09:13	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			07/22/21 09:13	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/22/21 09:13	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			07/22/21 09:13	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/22/21 09:13	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			07/22/21 09:13	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			07/22/21 09:13	1
Toluene	ND		0.0050	0.0014	mg/Kg			07/22/21 09:13	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			07/22/21 09:13	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			07/22/21 09:13	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			07/22/21 09:13	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			07/22/21 09:13	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			07/22/21 09:13	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			07/22/21 09:13	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			07/22/21 09:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 111*		*07/22/21 09:13*	*1*
Dibromofluoromethane (Surr)	*96*		*69 - 129*		*07/22/21 09:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*67 - 124*		*07/22/21 09:13*	*1*
Toluene-d8 (Surr)	*96*		*80 - 129*		*07/22/21 09:13*	*1*

Lab Sample ID: LCS 180-365191/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365191

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0232		mg/Kg		58	28 - 150
Benzene	0.0400	0.0433		mg/Kg		108	73 - 123
2-Butanone (MEK)	0.0400	0.0349		mg/Kg		87	42 - 133
Carbon tetrachloride	0.0400	0.0411		mg/Kg		103	73 - 127
Chlorobenzene	0.0400	0.0413		mg/Kg		103	80 - 122
Chloroform	0.0400	0.0413		mg/Kg		103	74 - 121

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

Lab Sample ID: LCS 180-365191/3
Matrix: Solid
Analysis Batch: 365191

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	0.0436		mg/Kg		109	77 - 124
1,2-Dichlorobenzene	0.0400	0.0450		mg/Kg		112	79 - 125
1,3-Dichlorobenzene	0.0400	0.0449		mg/Kg		112	80 - 125
1,4-Dichlorobenzene	0.0400	0.0437		mg/Kg		109	80 - 125
1,1-Dichloroethane	0.0400	0.0417		mg/Kg		104	69 - 126
1,2-Dichloroethane	0.0400	0.0383		mg/Kg		96	72 - 124
1,1-Dichloroethene	0.0400	0.0453		mg/Kg		113	62 - 134
1,4-Dioxane	0.800	0.721	J	mg/Kg		90	28 - 150
Ethylbenzene	0.0400	0.0411		mg/Kg		103	80 - 122
Methylene Chloride	0.0400	0.0472		mg/Kg		118	68 - 128
Methyl tert-butyl ether	0.0400	0.0436		mg/Kg		109	50 - 136
n-Butylbenzene	0.0400	0.0456		mg/Kg		114	73 - 135
N-Propylbenzene	0.0400	0.0466		mg/Kg		116	75 - 130
sec-Butylbenzene	0.0400	0.0436		mg/Kg		109	73 - 134
tert-Butylbenzene	0.0400	0.0522		mg/Kg		131	73 - 133
Tetrachloroethene	0.0400	0.0402		mg/Kg		101	77 - 125
Toluene	0.0400	0.0392		mg/Kg		98	78 - 121
trans-1,2-Dichloroethene	0.0400	0.0448		mg/Kg		112	74 - 125
1,1,1-Trichloroethane	0.0400	0.0416		mg/Kg		104	72 - 135
Trichloroethene	0.0400	0.0429		mg/Kg		107	75 - 124
1,2,4-Trimethylbenzene	0.0400	0.0442		mg/Kg		111	80 - 128
1,3,5-Trimethylbenzene	0.0400	0.0462		mg/Kg		115	75 - 131
Vinyl chloride	0.0400	0.0465		mg/Kg		116	53 - 144
Xylenes, Total	0.0800	0.0818		mg/Kg		102	80 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 111*
Dibromofluoromethane (Surr)	*104*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*
Toluene-d8 (Surr)	*95*		*80 - 129*

Lab Sample ID: LCSD 180-365191/4
Matrix: Solid
Analysis Batch: 365191

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	0.0246		mg/Kg		62	28 - 150	6	39
Benzene	0.0400	0.0435		mg/Kg		109	73 - 123	1	20
2-Butanone (MEK)	0.0400	0.0353		mg/Kg		88	42 - 133	1	34
Carbon tetrachloride	0.0400	0.0398		mg/Kg		100	73 - 127	3	20
Chlorobenzene	0.0400	0.0412		mg/Kg		103	80 - 122	0	20
Chloroform	0.0400	0.0404		mg/Kg		101	74 - 121	2	20
cis-1,2-Dichloroethene	0.0400	0.0436		mg/Kg		109	77 - 124	0	20
1,2-Dichlorobenzene	0.0400	0.0444		mg/Kg		111	79 - 125	1	20
1,3-Dichlorobenzene	0.0400	0.0448		mg/Kg		112	80 - 125	0	20
1,4-Dichlorobenzene	0.0400	0.0436		mg/Kg		109	80 - 125	0	20
1,1-Dichloroethane	0.0400	0.0417		mg/Kg		104	69 - 126	0	20
1,2-Dichloroethane	0.0400	0.0376		mg/Kg		94	72 - 124	2	20

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

Lab Sample ID: LCSD 180-365191/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365191

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene			0.0400	0.0461		mg/Kg		115	62 - 134	2	20
1,4-Dioxane			0.800	0.832	J	mg/Kg		104	28 - 150	14	35
Ethylbenzene			0.0400	0.0413		mg/Kg		103	80 - 122	0	20
Methylene Chloride			0.0400	0.0462		mg/Kg		115	68 - 128	2	22
Methyl tert-butyl ether			0.0400	0.0388		mg/Kg		97	50 - 136	12	22
n-Butylbenzene			0.0400	0.0442		mg/Kg		111	73 - 135	3	20
N-Propylbenzene			0.0400	0.0408		mg/Kg		102	75 - 130	13	20
sec-Butylbenzene			0.0400	0.0424		mg/Kg		106	73 - 134	3	20
tert-Butylbenzene			0.0400	0.0464		mg/Kg		116	73 - 133	12	20
Tetrachloroethene			0.0400	0.0419		mg/Kg		105	77 - 125	4	20
Toluene			0.0400	0.0397		mg/Kg		99	78 - 121	1	20
trans-1,2-Dichloroethene			0.0400	0.0454		mg/Kg		113	74 - 125	1	20
1,1,1-Trichloroethane			0.0400	0.0404		mg/Kg		101	72 - 135	3	20
Trichloroethene			0.0400	0.0431		mg/Kg		108	75 - 124	0	20
1,2,4-Trimethylbenzene			0.0400	0.0430		mg/Kg		108	80 - 128	3	20
1,3,5-Trimethylbenzene			0.0400	0.0407		mg/Kg		102	75 - 131	13	20
Vinyl chloride			0.0400	0.0479		mg/Kg		120	53 - 144	3	20
Xylenes, Total			0.0800	0.0829		mg/Kg		104	80 - 123	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 111*
Dibromofluoromethane (Surr)	*100*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*90*		*67 - 124*
Toluene-d8 (Surr)	*96*		*80 - 129*

Lab Sample ID: MB 180-365368/8 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0039	mg/Kg			07/23/21 09:46	1
Benzene	ND		0.0050	0.0014	mg/Kg			07/23/21 09:46	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			07/23/21 09:46	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			07/23/21 09:46	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			07/23/21 09:46	1
Chloroform	ND		0.0050	0.0016	mg/Kg			07/23/21 09:46	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			07/23/21 09:46	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			07/23/21 09:46	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			07/23/21 09:46	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			07/23/21 09:46	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			07/23/21 09:46	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			07/23/21 09:46	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			07/23/21 09:46	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			07/23/21 09:46	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			07/23/21 09:46	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			07/23/21 09:46	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			07/23/21 09:46	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/23/21 09:46	1

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

Lab Sample ID: MB 180-365368/8 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365368

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			07/23/21 09:46	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/23/21 09:46	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			07/23/21 09:46	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			07/23/21 09:46	1
Toluene	ND		0.0050	0.0014	mg/Kg			07/23/21 09:46	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			07/23/21 09:46	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			07/23/21 09:46	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			07/23/21 09:46	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			07/23/21 09:46	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			07/23/21 09:46	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			07/23/21 09:46	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			07/23/21 09:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 111*		*07/23/21 09:46*	*1*
Dibromofluoromethane (Surr)	*97*		*69 - 129*		*07/23/21 09:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*67 - 124*		*07/23/21 09:46*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*07/23/21 09:46*	*1*

Lab Sample ID: LCS 180-365368/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0244		mg/Kg		61	28 - 150
Benzene	0.0400	0.0437		mg/Kg		109	73 - 123
2-Butanone (MEK)	0.0400	0.0359		mg/Kg		90	42 - 133
Carbon tetrachloride	0.0400	0.0405		mg/Kg		101	73 - 127
Chlorobenzene	0.0400	0.0416		mg/Kg		104	80 - 122
Chloroform	0.0400	0.0422		mg/Kg		106	74 - 121
cis-1,2-Dichloroethene	0.0400	0.0446		mg/Kg		112	77 - 124
1,2-Dichlorobenzene	0.0400	0.0471		mg/Kg		118	79 - 125
1,3-Dichlorobenzene	0.0400	0.0453		mg/Kg		113	80 - 125
1,4-Dichlorobenzene	0.0400	0.0517	*+	mg/Kg		129	80 - 125
1,1-Dichloroethane	0.0400	0.0423		mg/Kg		106	69 - 126
1,2-Dichloroethane	0.0400	0.0400		mg/Kg		100	72 - 124
1,1-Dichloroethene	0.0400	0.0457		mg/Kg		114	62 - 134
1,4-Dioxane	0.800	0.827	J	mg/Kg		103	28 - 150
Ethylbenzene	0.0400	0.0412		mg/Kg		103	80 - 122
Methylene Chloride	0.0400	0.0513		mg/Kg		128	68 - 128
Methyl tert-butyl ether	0.0400	0.0453		mg/Kg		113	50 - 136
n-Butylbenzene	0.0400	0.0433		mg/Kg		108	73 - 135
N-Propylbenzene	0.0400	0.0455		mg/Kg		114	75 - 130
sec-Butylbenzene	0.0400	0.0428		mg/Kg		107	73 - 134
tert-Butylbenzene	0.0400	0.0497		mg/Kg		124	73 - 133
Tetrachloroethene	0.0400	0.0403		mg/Kg		101	77 - 125
Toluene	0.0400	0.0389		mg/Kg		97	78 - 121
trans-1,2-Dichloroethene	0.0400	0.0455		mg/Kg		114	74 - 125

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

Lab Sample ID: LCS 180-365368/3 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365368

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			0.0400	0.0416		mg/Kg		104	72 - 135		
Trichloroethene			0.0400	0.0430		mg/Kg		108	75 - 124		
1,2,4-Trimethylbenzene			0.0400	0.0441		mg/Kg		110	80 - 128		
1,3,5-Trimethylbenzene			0.0400	0.0474		mg/Kg		119	75 - 131		
Vinyl chloride			0.0400	0.0449		mg/Kg		112	53 - 144		
Xylenes, Total			0.0800	0.0824		mg/Kg		103	80 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 111*
Dibromofluoromethane (Surr)	*108*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*98*		*67 - 124*
Toluene-d8 (Surr)	*97*		*80 - 129*

Lab Sample ID: LCSD 180-365368/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365368

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			0.0400	0.0209		mg/Kg		52	28 - 150	15	39
Benzene			0.0400	0.0434		mg/Kg		109	73 - 123	1	20
2-Butanone (MEK)			0.0400	0.0299		mg/Kg		75	42 - 133	18	34
Carbon tetrachloride			0.0400	0.0404		mg/Kg		101	73 - 127	0	20
Chlorobenzene			0.0400	0.0414		mg/Kg		103	80 - 122	1	20
Chloroform			0.0400	0.0413		mg/Kg		103	74 - 121	2	20
cis-1,2-Dichloroethene			0.0400	0.0433		mg/Kg		108	77 - 124	3	20
1,2-Dichlorobenzene			0.0400	0.0464		mg/Kg		116	79 - 125	2	20
1,3-Dichlorobenzene			0.0400	0.0459		mg/Kg		115	80 - 125	1	20
1,4-Dichlorobenzene			0.0400	0.0446		mg/Kg		112	80 - 125	15	20
1,1-Dichloroethane			0.0400	0.0420		mg/Kg		105	69 - 126	1	20
1,2-Dichloroethane			0.0400	0.0386		mg/Kg		96	72 - 124	4	20
1,1-Dichloroethene			0.0400	0.0458		mg/Kg		114	62 - 134	0	20
1,4-Dioxane			0.800	0.749	J	mg/Kg		94	28 - 150	10	35
Ethylbenzene			0.0400	0.0416		mg/Kg		104	80 - 122	1	20
Methylene Chloride			0.0400	0.0471		mg/Kg		118	68 - 128	9	22
Methyl tert-butyl ether			0.0400	0.0413		mg/Kg		103	50 - 136	9	22
n-Butylbenzene			0.0400	0.0472		mg/Kg		118	73 - 135	9	20
N-Propylbenzene			0.0400	0.0436		mg/Kg		109	75 - 130	4	20
sec-Butylbenzene			0.0400	0.0441		mg/Kg		110	73 - 134	3	20
tert-Butylbenzene			0.0400	0.0439		mg/Kg		110	73 - 133	12	20
Tetrachloroethene			0.0400	0.0418		mg/Kg		104	77 - 125	4	20
Toluene			0.0400	0.0397		mg/Kg		99	78 - 121	2	20
trans-1,2-Dichloroethene			0.0400	0.0452		mg/Kg		113	74 - 125	1	20
1,1,1-Trichloroethane			0.0400	0.0413		mg/Kg		103	72 - 135	1	20
Trichloroethene			0.0400	0.0441		mg/Kg		110	75 - 124	2	20
1,2,4-Trimethylbenzene			0.0400	0.0450		mg/Kg		113	80 - 128	2	20
1,3,5-Trimethylbenzene			0.0400	0.0432		mg/Kg		108	75 - 131	9	20
Vinyl chloride			0.0400	0.0443		mg/Kg		111	53 - 144	1	20
Xylenes, Total			0.0800	0.0836		mg/Kg		105	80 - 123	1	20

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

Lab Sample ID: LCSD 180-365368/4
Matrix: Solid
Analysis Batch: 365368

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*96*		*70 - 111*
Dibromofluoromethane (Surr)	*103*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*93*		*67 - 124*
Toluene-d8 (Surr)	*97*		*80 - 129*

Lab Sample ID: MB 180-365575/8
Matrix: Solid
Analysis Batch: 365575

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	0.0039	mg/Kg			07/26/21 10:42	1
Benzene	ND		0.0050	0.0014	mg/Kg			07/26/21 10:42	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			07/26/21 10:42	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			07/26/21 10:42	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			07/26/21 10:42	1
Chloroform	ND		0.0050	0.0016	mg/Kg			07/26/21 10:42	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			07/26/21 10:42	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			07/26/21 10:42	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			07/26/21 10:42	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			07/26/21 10:42	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			07/26/21 10:42	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			07/26/21 10:42	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			07/26/21 10:42	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			07/26/21 10:42	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			07/26/21 10:42	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			07/26/21 10:42	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			07/26/21 10:42	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/26/21 10:42	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			07/26/21 10:42	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			07/26/21 10:42	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			07/26/21 10:42	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			07/26/21 10:42	1
Toluene	ND		0.0050	0.0014	mg/Kg			07/26/21 10:42	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			07/26/21 10:42	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			07/26/21 10:42	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			07/26/21 10:42	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			07/26/21 10:42	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			07/26/21 10:42	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			07/26/21 10:42	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			07/26/21 10:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*70 - 111*		*07/26/21 10:42*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 129*		*07/26/21 10:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*67 - 124*		*07/26/21 10:42*	*1*
Toluene-d8 (Surr)	*102*		*80 - 129*		*07/26/21 10:42*	*1*

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

Lab Sample ID: LCS 180-365575/3
Matrix: Solid
Analysis Batch: 365575

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	0.0234		mg/Kg		58	28 - 150
Benzene	0.0400	0.0404		mg/Kg		101	73 - 123
2-Butanone (MEK)	0.0400	0.0339		mg/Kg		85	42 - 133
Carbon tetrachloride	0.0400	0.0369		mg/Kg		92	73 - 127
Chlorobenzene	0.0400	0.0392		mg/Kg		98	80 - 122
Chloroform	0.0400	0.0383		mg/Kg		96	74 - 121
cis-1,2-Dichloroethene	0.0400	0.0405		mg/Kg		101	77 - 124
1,2-Dichlorobenzene	0.0400	0.0406		mg/Kg		101	79 - 125
1,3-Dichlorobenzene	0.0400	0.0424		mg/Kg		106	80 - 125
1,4-Dichlorobenzene	0.0400	0.0432		mg/Kg		108	80 - 125
1,1-Dichloroethane	0.0400	0.0381		mg/Kg		95	69 - 126
1,2-Dichloroethane	0.0400	0.0362		mg/Kg		90	72 - 124
1,1-Dichloroethene	0.0400	0.0406		mg/Kg		102	62 - 134
1,4-Dioxane	0.800	0.706	J	mg/Kg		88	28 - 150
Ethylbenzene	0.0400	0.0385		mg/Kg		96	80 - 122
Methylene Chloride	0.0400	0.0478		mg/Kg		119	68 - 128
Methyl tert-butyl ether	0.0400	0.0396		mg/Kg		99	50 - 136
n-Butylbenzene	0.0400	0.0393		mg/Kg		98	73 - 135
N-Propylbenzene	0.0400	0.0505		mg/Kg		126	75 - 130
sec-Butylbenzene	0.0400	0.0436		mg/Kg		109	73 - 134
tert-Butylbenzene	0.0400	0.0451		mg/Kg		113	73 - 133
Tetrachloroethene	0.0400	0.0383		mg/Kg		96	77 - 125
Toluene	0.0400	0.0369		mg/Kg		92	78 - 121
trans-1,2-Dichloroethene	0.0400	0.0408		mg/Kg		102	74 - 125
1,1,1-Trichloroethane	0.0400	0.0376		mg/Kg		94	72 - 135
Trichloroethene	0.0400	0.0403		mg/Kg		101	75 - 124
1,2,4-Trimethylbenzene	0.0400	0.0436		mg/Kg		109	80 - 128
1,3,5-Trimethylbenzene	0.0400	0.0474		mg/Kg		118	75 - 131
Vinyl chloride	0.0400	0.0403		mg/Kg		101	53 - 144
Xylenes, Total	0.0800	0.0775		mg/Kg		97	80 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 111*
Dibromofluoromethane (Surr)	*105*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*98*		*67 - 124*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: LCSD 180-365575/4
Matrix: Solid
Analysis Batch: 365575

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	0.0211		mg/Kg		53	28 - 150	10	39
Benzene	0.0400	0.0420		mg/Kg		105	73 - 123	4	20
2-Butanone (MEK)	0.0400	0.0316		mg/Kg		79	42 - 133	7	34
Carbon tetrachloride	0.0400	0.0389		mg/Kg		97	73 - 127	5	20
Chlorobenzene	0.0400	0.0402		mg/Kg		100	80 - 122	3	20
Chloroform	0.0400	0.0390		mg/Kg		98	74 - 121	2	20

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

Lab Sample ID: LCSD 180-365575/4 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365575

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			0.0400	0.0408		mg/Kg		102	77 - 124	1	20
1,2-Dichlorobenzene			0.0400	0.0436		mg/Kg		109	79 - 125	7	20
1,3-Dichlorobenzene			0.0400	0.0435		mg/Kg		109	80 - 125	2	20
1,4-Dichlorobenzene			0.0400	0.0431		mg/Kg		108	80 - 125	0	20
1,1-Dichloroethane			0.0400	0.0399		mg/Kg		100	69 - 126	5	20
1,2-Dichloroethane			0.0400	0.0362		mg/Kg		91	72 - 124	0	20
1,1-Dichloroethene			0.0400	0.0430		mg/Kg		108	62 - 134	6	20
1,4-Dioxane			0.800	0.702	J	mg/Kg		88	28 - 150	0	35
Ethylbenzene			0.0400	0.0404		mg/Kg		101	80 - 122	5	20
Methylene Chloride			0.0400	0.0474		mg/Kg		118	68 - 128	1	22
Methyl tert-butyl ether			0.0400	0.0384		mg/Kg		96	50 - 136	3	22
n-Butylbenzene			0.0400	0.0445		mg/Kg		111	73 - 135	12	20
N-Propylbenzene			0.0400	0.0449		mg/Kg		112	75 - 130	12	20
sec-Butylbenzene			0.0400	0.0452		mg/Kg		113	73 - 134	4	20
tert-Butylbenzene			0.0400	0.0446		mg/Kg		112	73 - 133	1	20
Tetrachloroethene			0.0400	0.0411		mg/Kg		103	77 - 125	7	20
Toluene			0.0400	0.0388		mg/Kg		97	78 - 121	5	20
trans-1,2-Dichloroethene			0.0400	0.0424		mg/Kg		106	74 - 125	4	20
1,1,1-Trichloroethane			0.0400	0.0390		mg/Kg		97	72 - 135	4	20
Trichloroethene			0.0400	0.0425		mg/Kg		106	75 - 124	5	20
1,2,4-Trimethylbenzene			0.0400	0.0462		mg/Kg		115	80 - 128	6	20
1,3,5-Trimethylbenzene			0.0400	0.0449		mg/Kg		112	75 - 131	5	20
Vinyl chloride			0.0400	0.0405		mg/Kg		101	53 - 144	0	20
Xylenes, Total			0.0800	0.0826		mg/Kg		103	80 - 123	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 111*
Dibromofluoromethane (Surr)	*108*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*97*		*67 - 124*
Toluene-d8 (Surr)	*104*		*80 - 129*

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

Lab Sample ID: MB 180-365595/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365699 **Prep Batch: 365595**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Anthracene	ND		0.0067	0.0017	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Benzo[a]anthracene	ND		0.0067	0.0030	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Benzo[a]pyrene	ND		0.0067	0.0029	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Chrysene	ND		0.0067	0.0037	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Dibenz(a,h)anthracene	ND		0.0067	0.0043	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Dibenzofuran	ND		0.033	0.0015	mg/Kg		07/26/21 08:32	07/27/21 08:15	1

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

Lab Sample ID: MB 180-365595/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365699 **Prep Batch: 365595**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.067	0.010	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Fluorene	ND		0.0067	0.0013	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0033	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Phenol	ND		0.033	0.010	mg/Kg		07/26/21 08:32	07/27/21 08:15	1
Pyrene	ND		0.0067	0.0016	mg/Kg		07/26/21 08:32	07/27/21 08:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*37 - 107*	*07/26/21 08:32*	*07/27/21 08:15*	*1*
2-Fluorophenol (Surr)	*77*		*38 - 106*	*07/26/21 08:32*	*07/27/21 08:15*	*1*
Nitrobenzene-d5 (Surr)	*77*		*41 - 112*	*07/26/21 08:32*	*07/27/21 08:15*	*1*
Phenol-d5 (Surr)	*79*		*40 - 110*	*07/26/21 08:32*	*07/27/21 08:15*	*1*
Terphenyl-d14 (Surr)	*94*		*32 - 115*	*07/26/21 08:32*	*07/27/21 08:15*	*1*
2,4,6-Tribromophenol (Surr)	*80*		*22 - 116*	*07/26/21 08:32*	*07/27/21 08:15*	*1*

Lab Sample ID: LCS 180-365595/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365699 **Prep Batch: 365595**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.457		mg/Kg		69	48 - 101
Acenaphthylene	0.667	0.448		mg/Kg		67	45 - 104
Anthracene	0.667	0.492		mg/Kg		74	50 - 111
Benzo[a]anthracene	0.667	0.480		mg/Kg		72	48 - 100
Benzo[a]pyrene	0.667	0.442		mg/Kg		66	48 - 106
Benzo[b]fluoranthene	0.667	0.457		mg/Kg		69	46 - 100
Benzo[g,h,i]perylene	0.667	0.482		mg/Kg		72	47 - 105
Benzo[k]fluoranthene	0.667	0.483		mg/Kg		72	46 - 107
Chrysene	0.667	0.468		mg/Kg		70	48 - 100
Dibenz(a,h)anthracene	0.667	0.497		mg/Kg		75	47 - 106
Dibenzofuran	0.667	0.464		mg/Kg		70	49 - 100
1,4-Dioxane	0.667	0.377		mg/Kg		56	37 - 106
Fluoranthene	0.667	0.509		mg/Kg		76	52 - 100
Fluorene	0.667	0.478		mg/Kg		72	49 - 100
Hexachlorobenzene	0.667	0.484		mg/Kg		73	47 - 100
Indeno[1,2,3-cd]pyrene	0.667	0.515		mg/Kg		77	48 - 105
2-Methylphenol	0.667	0.449		mg/Kg		67	50 - 100
Methylphenol, 3 & 4	0.667	0.456		mg/Kg		68	51 - 100
Naphthalene	0.667	0.435		mg/Kg		65	49 - 100
Pentachlorophenol	1.33	1.03		mg/Kg		77	31 - 100
Phenanthrene	0.667	0.477		mg/Kg		72	48 - 106
Phenol	0.667	0.422		mg/Kg		63	49 - 100

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

Lab Sample ID: LCS 180-365595/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365699 **Prep Batch: 365595**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pyrene			0.667	0.479		mg/Kg		72	47 - 100		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*37 - 107*
2-Fluorophenol (Surr)	*62*		*38 - 106*
Nitrobenzene-d5 (Surr)	*62*		*41 - 112*
Phenol-d5 (Surr)	*61*		*40 - 110*
Terphenyl-d14 (Surr)	*71*		*32 - 115*
2,4,6-Tribromophenol (Surr)	*72*		*22 - 116*

Lab Sample ID: 180-124717-1 MS **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365852 **Prep Batch: 365595**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		0.777	0.711		mg/Kg	☼	92	48 - 101
Acenaphthylene	ND		0.777	0.699		mg/Kg	☼	90	45 - 104
Anthracene	ND		0.777	0.724		mg/Kg	☼	93	50 - 111
Benzo[a]anthracene	ND		0.777	0.730		mg/Kg	☼	94	48 - 100
Benzo[a]pyrene	ND		0.777	0.645		mg/Kg	☼	83	48 - 106
Benzo[b]fluoranthene	0.0097	J	0.777	0.654		mg/Kg	☼	83	46 - 100
Benzo[g,h,i]perylene	0.0083	J	0.777	0.756		mg/Kg	☼	96	47 - 105
Benzo[k]fluoranthene	ND		0.777	0.603		mg/Kg	☼	78	46 - 107
Chrysene	0.0097	J	0.777	0.686		mg/Kg	☼	87	48 - 100
Dibenz(a,h)anthracene	ND		0.777	0.802		mg/Kg	☼	103	47 - 106
Dibenzofuran	ND		0.777	0.717		mg/Kg	☼	92	49 - 100
1,4-Dioxane	ND		0.777	0.392		mg/Kg	☼	51	37 - 106
Fluoranthene	0.014	J	0.777	0.773		mg/Kg	☼	98	52 - 100
Fluorene	ND		0.777	0.740		mg/Kg	☼	95	49 - 100
Hexachlorobenzene	ND		0.777	0.664		mg/Kg	☼	85	47 - 100
Indeno[1,2,3-cd]pyrene	ND		0.777	0.817		mg/Kg	☼	105	48 - 105
2-Methylphenol	ND		0.777	0.690		mg/Kg	☼	89	50 - 100
Methylphenol, 3 & 4	ND		0.777	0.747		mg/Kg	☼	96	51 - 100
Naphthalene	ND		0.777	0.653		mg/Kg	☼	84	49 - 100
Pentachlorophenol	ND		1.55	1.33		mg/Kg	☼	86	31 - 100
Phenanthrene	0.0067	J	0.777	0.695		mg/Kg	☼	89	48 - 106
Phenol	ND		0.777	0.674		mg/Kg	☼	87	49 - 100
Pyrene	0.011	J	0.777	0.688		mg/Kg	☼	87	47 - 100

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*37 - 107*
2-Fluorophenol (Surr)	*82*		*38 - 106*
Nitrobenzene-d5 (Surr)	*82*		*41 - 112*
Phenol-d5 (Surr)	*88*		*40 - 110*
Terphenyl-d14 (Surr)	*86*		*32 - 115*
2,4,6-Tribromophenol (Surr)	*90*		*22 - 116*

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

Lab Sample ID: 180-124717-1 MSD **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365852 **Prep Batch: 365595**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		0.777	0.720		mg/Kg	☼	93	48 - 101	1	22
Acenaphthylene	ND		0.777	0.698		mg/Kg	☼	90	45 - 104	0	23
Anthracene	ND		0.777	0.717		mg/Kg	☼	92	50 - 111	1	26
Benzo[a]anthracene	ND		0.777	0.707		mg/Kg	☼	91	48 - 100	3	24
Benzo[a]pyrene	ND		0.777	0.622		mg/Kg	☼	80	48 - 106	4	21
Benzo[b]fluoranthene	0.0097	J	0.777	0.669		mg/Kg	☼	85	46 - 100	2	26
Benzo[g,h,i]perylene	0.0083	J	0.777	0.739		mg/Kg	☼	94	47 - 105	2	22
Benzo[k]fluoranthene	ND		0.777	0.560		mg/Kg	☼	72	46 - 107	7	18
Chrysene	0.0097	J	0.777	0.654		mg/Kg	☼	83	48 - 100	5	26
Dibenz(a,h)anthracene	ND		0.777	0.792		mg/Kg	☼	102	47 - 106	1	24
Dibenzofuran	ND		0.777	0.712		mg/Kg	☼	92	49 - 100	1	19
1,4-Dioxane	ND		0.777	0.382		mg/Kg	☼	49	37 - 106	3	40
Fluoranthene	0.014	J	0.777	0.751		mg/Kg	☼	95	52 - 100	3	26
Fluorene	ND		0.777	0.743		mg/Kg	☼	96	49 - 100	0	22
Hexachlorobenzene	ND		0.777	0.665		mg/Kg	☼	86	47 - 100	0	27
Indeno[1,2,3-cd]pyrene	ND		0.777	0.801		mg/Kg	☼	103	48 - 105	2	22
2-Methylphenol	ND		0.777	0.668		mg/Kg	☼	86	50 - 100	3	27
Methylphenol, 3 & 4	ND		0.777	0.710		mg/Kg	☼	91	51 - 100	5	24
Naphthalene	ND		0.777	0.634		mg/Kg	☼	82	49 - 100	3	28
Pentachlorophenol	ND		1.55	1.38		mg/Kg	☼	89	31 - 100	3	28
Phenanthrene	0.0067	J	0.777	0.709		mg/Kg	☼	90	48 - 106	2	27
Phenol	ND		0.777	0.648		mg/Kg	☼	83	49 - 100	4	30
Pyrene	0.011	J	0.777	0.686		mg/Kg	☼	87	47 - 100	0	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*37 - 107*
2-Fluorophenol (Surr)	*78*		*38 - 106*
Nitrobenzene-d5 (Surr)	*83*		*41 - 112*
Phenol-d5 (Surr)	*85*		*40 - 110*
Terphenyl-d14 (Surr)	*84*		*32 - 115*
2,4,6-Tribromophenol (Surr)	*88*		*22 - 116*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-365308/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
4,4'-DDD	ND		0.0017	0.00071	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		07/22/21 13:30	07/23/21 18:09	1

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

Lab Sample ID: MB 180-365308/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		0.0017	0.00045	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
Endosulfan sulfate	ND		0.0017	0.00043	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
Endrin	ND		0.0017	0.00031	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		07/22/21 13:30	07/23/21 18:09	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		07/22/21 13:30	07/23/21 18:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*96*		*35 - 144*	*07/22/21 13:30*	*07/23/21 18:09*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*35 - 144*	*07/22/21 13:30*	*07/23/21 18:09*	*1*
Tetrachloro-m-xylene	*89*		*40 - 113*	*07/22/21 13:30*	*07/23/21 18:09*	*1*
Tetrachloro-m-xylene	*84*		*40 - 113*	*07/22/21 13:30*	*07/23/21 18:09*	*1*

Lab Sample ID: LCS 180-365308/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.0333	0.0362		mg/Kg		109	49 - 128
alpha-BHC	0.0333	0.0334		mg/Kg		100	55 - 123
beta-BHC	0.0333	0.0346		mg/Kg		104	48 - 125
cis-Chlordane	0.0333	0.0325		mg/Kg		98	43 - 124
4,4'-DDD	0.0333	0.0308		mg/Kg		93	55 - 131
4,4'-DDE	0.0333	0.0362		mg/Kg		109	54 - 130
4,4'-DDT	0.0333	0.0296		mg/Kg		89	47 - 135
delta-BHC	0.0333	0.0319		mg/Kg		96	10 - 142
Dieldrin	0.0333	0.0323		mg/Kg		97	61 - 120
Endosulfan I	0.0333	0.0330		mg/Kg		99	46 - 128
Endosulfan II	0.0333	0.0272		mg/Kg		82	62 - 130
Endosulfan sulfate	0.0333	0.0341		mg/Kg		102	51 - 117
Endrin	0.0333	0.0319		mg/Kg		96	62 - 124
gamma-BHC (Lindane)	0.0333	0.0306		mg/Kg		92	54 - 127
Heptachlor	0.0333	0.0357		mg/Kg		107	42 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*84*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*87*		*35 - 144*
Tetrachloro-m-xylene	*88*		*40 - 113*
Tetrachloro-m-xylene	*83*		*40 - 113*

Lab Sample ID: 180-124717-1 MS **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		0.0393	0.0358		mg/Kg	☼	91	49 - 128
alpha-BHC	ND		0.0393	0.0351		mg/Kg	☼	89	55 - 123
beta-BHC	ND		0.0393	0.0348		mg/Kg	☼	89	48 - 125

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

Lab Sample ID: 180-124717-1 MS **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-Chlordane	ND		0.0393	0.0328		mg/Kg	☼	83	43 - 124
4,4'-DDD	ND		0.0393	0.0310		mg/Kg	☼	79	55 - 131
4,4'-DDE	ND		0.0393	0.0408		mg/Kg	☼	104	54 - 130
4,4'-DDT	ND		0.0393	0.0374		mg/Kg	☼	95	47 - 135
delta-BHC	ND		0.0393	0.0334		mg/Kg	☼	85	10 - 142
Dieldrin	ND		0.0393	0.0338		mg/Kg	☼	86	61 - 120
Endosulfan I	ND		0.0393	0.0331		mg/Kg	☼	84	46 - 128
Endosulfan II	ND		0.0393	0.0323		mg/Kg	☼	82	62 - 130
Endosulfan sulfate	ND		0.0393	0.0416		mg/Kg	☼	106	51 - 117
Endrin	0.0013	J p	0.0393	0.0306		mg/Kg	☼	75	62 - 124
gamma-BHC (Lindane)	ND		0.0393	0.0314		mg/Kg	☼	80	54 - 127
Heptachlor	ND		0.0393	0.0364		mg/Kg	☼	93	42 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*74*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*82*		*35 - 144*
Tetrachloro-m-xylene	*76*		*40 - 113*
Tetrachloro-m-xylene	*76*		*40 - 113*

Lab Sample ID: 180-124717-1 MSD **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365391 **Prep Batch: 365308**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND		0.0396	0.0354		mg/Kg	☼	89	49 - 128	1	15
alpha-BHC	ND		0.0396	0.0345		mg/Kg	☼	87	55 - 123	2	15
beta-BHC	ND		0.0396	0.0340		mg/Kg	☼	86	48 - 125	3	17
cis-Chlordane	ND		0.0396	0.0310		mg/Kg	☼	78	43 - 124	6	15
4,4'-DDD	ND		0.0396	0.0295		mg/Kg	☼	75	55 - 131	5	15
4,4'-DDE	ND		0.0396	0.0376		mg/Kg	☼	95	54 - 130	8	15
4,4'-DDT	ND		0.0396	0.0343		mg/Kg	☼	87	47 - 135	9	15
delta-BHC	ND		0.0396	0.0333		mg/Kg	☼	84	10 - 142	0	15
Dieldrin	ND		0.0396	0.0312		mg/Kg	☼	79	61 - 120	8	15
Endosulfan I	ND		0.0396	0.0320		mg/Kg	☼	81	46 - 128	3	15
Endosulfan II	ND		0.0396	0.0288		mg/Kg	☼	73	62 - 130	11	15
Endosulfan sulfate	ND		0.0396	0.0380		mg/Kg	☼	96	51 - 117	9	15
Endrin	0.0013	J p	0.0396	0.0294		mg/Kg	☼	71	62 - 124	4	15
gamma-BHC (Lindane)	ND		0.0396	0.0308		mg/Kg	☼	78	54 - 127	2	15
Heptachlor	ND		0.0396	0.0361		mg/Kg	☼	91	42 - 130	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*77*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*77*		*35 - 144*
Tetrachloro-m-xylene	*86*		*40 - 113*
Tetrachloro-m-xylene	*79*		*40 - 113*

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

Lab Sample ID: MB 180-365164/1-C **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365185 **Prep Batch: 365164**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1221	ND		0.017	0.0059	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1232	ND		0.017	0.0041	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1242	ND		0.017	0.0024	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1248	ND		0.017	0.0040	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1254	ND		0.017	0.0050	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1260	ND		0.017	0.0047	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1262	ND		0.017	0.0059	mg/Kg		07/21/21 15:17	07/23/21 00:06	1
PCB-1268	ND		0.017	0.0022	mg/Kg		07/21/21 15:17	07/23/21 00:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*117*		*31 - 150*	*07/21/21 15:17*	*07/23/21 00:06*	*1*
DCB Decachlorobiphenyl (Surr)	*115*		*31 - 150*	*07/21/21 15:17*	*07/23/21 00:06*	*1*
Tetrachloro-m-xylene (Surr)	*137*		*20 - 150*	*07/21/21 15:17*	*07/23/21 00:06*	*1*
Tetrachloro-m-xylene (Surr)	*127*		*20 - 150*	*07/21/21 15:17*	*07/23/21 00:06*	*1*

Lab Sample ID: LCS 180-365164/2-C **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365358 **Prep Batch: 365164**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.33	1.41		mg/Kg		106	61 - 125
PCB-1260	1.33	1.48		mg/Kg		111	57 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*114*		*31 - 150*
DCB Decachlorobiphenyl (Surr)	*112*		*31 - 150*
Tetrachloro-m-xylene (Surr)	*109*		*20 - 150*
Tetrachloro-m-xylene (Surr)	*102*		*20 - 150*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-365279/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365566 **Prep Batch: 365279**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		07/22/21 06:35	07/26/21 21:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*64*		*48 - 127*	*07/22/21 06:35*	*07/26/21 21:52*	*1*
2,4-Dichlorophenylacetic acid	*70*		*48 - 127*	*07/22/21 06:35*	*07/26/21 21:52*	*1*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 180-365279/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 365566 — **Prep Batch: 365279**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)			0.100	0.0585		mg/Kg		58	33 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*67*		*48 - 127*
2,4-Dichlorophenylacetic acid	*74*		*48 - 127*

Lab Sample ID: LCSD 180-365279/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 365566 — **Prep Batch: 365279**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)			0.100	0.0679		mg/Kg		68	33 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*74*		*48 - 127*
2,4-Dichlorophenylacetic acid	*75*		*48 - 127*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-365255/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 365567 — **Prep Batch: 365255**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.39	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Barium	ND		20	1.1	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Beryllium	ND		0.40	0.023	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Cadmium	ND		0.50	0.036	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Chromium	ND		0.50	0.41	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Copper	ND		2.5	2.3	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Lead	ND		1.0	0.51	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Manganese	ND		1.5	0.41	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Nickel	ND		4.0	0.25	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Selenium	ND		1.0	0.52	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Silver	ND		0.50	0.11	mg/Kg		07/22/21 09:55	07/23/21 14:22	1
Zinc	ND		2.0	1.6	mg/Kg		07/22/21 09:55	07/23/21 14:22	1

Lab Sample ID: LCS 180-365255/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 365567 — **Prep Batch: 365255**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic			100	102		mg/Kg		102	80 - 120		
Barium			100	98.2		mg/Kg		98	80 - 120		
Beryllium			50.0	50.2		mg/Kg		100	80 - 120		
Cadmium			50.0	48.9		mg/Kg		98	80 - 120		
Chromium			50.0	48.4		mg/Kg		97	80 - 120		
Copper			50.0	49.0		mg/Kg		98	80 - 120		

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

Lab Sample ID: LCS 180-365255/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365567 **Prep Batch: 365255**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	47.6		mg/Kg		95	80 - 120
Manganese	50.0	48.2		mg/Kg		96	80 - 120
Nickel	50.0	49.3		mg/Kg		99	80 - 120
Selenium	100	95.3		mg/Kg		95	80 - 120
Silver	25.0	24.2		mg/Kg		97	80 - 120
Zinc	25.0	24.2		mg/Kg		97	80 - 120

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-365502/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366018 **Prep Batch: 365502**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		07/26/21 10:15	07/28/21 12:44	1

Lab Sample ID: LCS 180-365502/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366018 **Prep Batch: 365502**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.419		mg/Kg		101	80 - 120

Method: 2540G - SM 2540G

Lab Sample ID: 180-124717-1 DU **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365317

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16.4		17.0		%		3	10
Percent Solids	83.6		83.0		%		0.7	10

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-365337/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365553 **Prep Batch: 365337**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		07/22/21 16:32	07/24/21 17:01	1

Lab Sample ID: LCSI 180-365337/3-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 365553 **Prep Batch: 365337**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	708	641		mg/Kg		90	80 - 120

Method: EPA 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 180-365337/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 365553 — **Prep Batch: 365337**

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	20.0	16.8		mg/Kg		84	80 - 120

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-366115/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 366211 — **Prep Batch: 366115**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		07/29/21 13:45	07/29/21 15:24	1

Lab Sample ID: HLCS 180-366115/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 366211 — **Prep Batch: 366115**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.260		mg/Kg		104	90 - 110

Lab Sample ID: LCS 180-366115/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 366211 — **Prep Batch: 366115**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	23.1	25.3		mg/Kg		110	17 - 163

Lab Sample ID: LLCS 180-366115/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 366211 — **Prep Batch: 366115**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0493		mg/Kg		99	90 - 110

GC/MS VOA

Analysis Batch: 365191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-5	SSHS-IRM5A2 BREESPORT TOPSOIL 1A	Total/NA	Solid	EPA 8260C	365212
180-124717-6	SSHS-IRM5A2 BREESPORT TOPSOIL 1B	Total/NA	Solid	EPA 8260C	365212
180-124717-7	SSHS-IRM5A2 BREESPORT TOPSOIL 1C	Total/NA	Solid	EPA 8260C	365212
180-124717-8	SSHS-IRM5A2 BREESPORT TOPSOIL 2A	Total/NA	Solid	EPA 8260C	365212
180-124717-9	SSHS-IRM5A2 BREESPORT TOPSOIL 2B	Total/NA	Solid	EPA 8260C	365212
180-124717-11	SSHS-IRM5A2 BREESPORT TOPSOIL 3A	Total/NA	Solid	EPA 8260C	365212
180-124717-12	SSHS-IRM5A2 BREESPORT TOPSOIL 3B	Total/NA	Solid	EPA 8260C	365212
MB 180-365191/6	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-365191/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-365191/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 365212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-5	SSHS-IRM5A2 BREESPORT TOPSOIL 1A	Total/NA	Solid	5035	
180-124717-6	SSHS-IRM5A2 BREESPORT TOPSOIL 1B	Total/NA	Solid	5035	
180-124717-7	SSHS-IRM5A2 BREESPORT TOPSOIL 1C	Total/NA	Solid	5035	
180-124717-8	SSHS-IRM5A2 BREESPORT TOPSOIL 2A	Total/NA	Solid	5035	
180-124717-9	SSHS-IRM5A2 BREESPORT TOPSOIL 2B	Total/NA	Solid	5035	
180-124717-11	SSHS-IRM5A2 BREESPORT TOPSOIL 3A	Total/NA	Solid	5035	
180-124717-12	SSHS-IRM5A2 BREESPORT TOPSOIL 3B	Total/NA	Solid	5035	

Analysis Batch: 365368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-13	SSHS-IRM5A2 BREESPORT TOPSOIL 3C	Total/NA	Solid	EPA 8260C	365380
180-124717-14	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A	Total/NA	Solid	EPA 8260C	365380
MB 180-365368/8	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-365368/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-365368/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 365380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-13	SSHS-IRM5A2 BREESPORT TOPSOIL 3C	Total/NA	Solid	5035	
180-124717-14	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A	Total/NA	Solid	5035	

Analysis Batch: 365575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-10	SSHS-IRM5A2 BREESPORT TOPSOIL 2C	Total/NA	Solid	EPA 8260C	365614
MB 180-365575/8	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-365575/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-365575/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 365614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-10	SSHS-IRM5A2 BREESPORT TOPSOIL 2C	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 365595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3541	

GC/MS Semi VOA (Continued)

Prep Batch: 365595 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3541	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3541	
MB 180-365595/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-365595/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	

Analysis Batch: 365699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 8270D LL	365595
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 8270D LL	365595
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 8270D LL	365595
MB 180-365595/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	365595
LCS 180-365595/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	365595

Analysis Batch: 365852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8270D LL	365595
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8270D LL	365595
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8270D LL	365595

GC Semi VOA

Prep Batch: 365164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3541	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3541	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3541	
MB 180-365164/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-365164/2-C	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 365185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8082A	365218
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 8082A	365218
MB 180-365164/1-C	Method Blank	Total/NA	Solid	EPA 8082A	365218

Cleanup Batch: 365217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3665A	365164
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3665A	365164
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3665A	365164
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3665A	365164
MB 180-365164/1-C	Method Blank	Total/NA	Solid	3665A	365164
LCS 180-365164/2-C	Lab Control Sample	Total/NA	Solid	3665A	365164

Cleanup Batch: 365218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3660B	365217
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3660B	365217

GC Semi VOA (Continued)

Cleanup Batch: 365218 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3660B	365217
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3660B	365217
MB 180-365164/1-C	Method Blank	Total/NA	Solid	3660B	365217
LCS 180-365164/2-C	Lab Control Sample	Total/NA	Solid	3660B	365217

Prep Batch: 365279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	8151A	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	8151A	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	8151A	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	8151A	
MB 180-365279/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-365279/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-365279/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Prep Batch: 365308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3541	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3541	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3541	
MB 180-365308/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-365308/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3541	

Analysis Batch: 365358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 8082A	365218
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 8082A	365218
LCS 180-365164/2-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	365218

Analysis Batch: 365391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8081B	365308
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 8081B	365308
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 8081B	365308
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 8081B	365308
MB 180-365308/1-A	Method Blank	Total/NA	Solid	EPA 8081B	365308
LCS 180-365308/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	365308
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8081B	365308
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8081B	365308

Analysis Batch: 365566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 8151A	365279
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 8151A	365279
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 8151A	365279
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 8151A	365279
MB 180-365279/1-A	Method Blank	Total/NA	Solid	EPA 8151A	365279
LCS 180-365279/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	365279

GC Semi VOA (Continued)

Analysis Batch: 365566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-365279/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	365279

Metals

Prep Batch: 365255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3050B	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3050B	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3050B	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3050B	
MB 180-365255/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-365255/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 365502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	7471B	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	7471B	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	7471B	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	7471B	
MB 180-365502/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-365502/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 365567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 6010C	365255
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 6010C	365255
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 6010C	365255
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 6010C	365255
MB 180-365255/1-A	Method Blank	Total/NA	Solid	EPA 6010C	365255
LCS 180-365255/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	365255

Analysis Batch: 366018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 7471B	365502
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 7471B	365502
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 7471B	365502
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 7471B	365502
MB 180-365502/1-A	Method Blank	Total/NA	Solid	EPA 7471B	365502
LCS 180-365502/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	365502

General Chemistry

Analysis Batch: 365317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	2540G	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	2540G	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	2540G	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	2540G	
180-124717-5	SSHS-IRM5A2 BREESPORT TOPSOIL 1A	Total/NA	Solid	2540G	
180-124717-6	SSHS-IRM5A2 BREESPORT TOPSOIL 1B	Total/NA	Solid	2540G	
180-124717-7	SSHS-IRM5A2 BREESPORT TOPSOIL 1C	Total/NA	Solid	2540G	
180-124717-8	SSHS-IRM5A2 BREESPORT TOPSOIL 2A	Total/NA	Solid	2540G	

General Chemistry (Continued)

Analysis Batch: 365317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-9	SSHS-IRM5A2 BREESPORT TOPSOIL 2B	Total/NA	Solid	2540G	
180-124717-11	SSHS-IRM5A2 BREESPORT TOPSOIL 3A	Total/NA	Solid	2540G	
180-124717-12	SSHS-IRM5A2 BREESPORT TOPSOIL 3B	Total/NA	Solid	2540G	
180-124717-13	SSHS-IRM5A2 BREESPORT TOPSOIL 3C	Total/NA	Solid	2540G	
180-124717-14	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1A	Total/NA	Solid	2540G	
180-124717-1 DU	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	2540G	

Prep Batch: 365337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	3060A	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	3060A	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	3060A	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	3060A	
MB 180-365337/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-365337/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-365337/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Analysis Batch: 365529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-10	SSHS-IRM5A2 BREESPORT TOPSOIL 2C	Total/NA	Solid	2540G	

Analysis Batch: 365553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 7196A	365337
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 7196A	365337
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 7196A	365337
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 7196A	365337
MB 180-365337/1-A	Method Blank	Total/NA	Solid	EPA 7196A	365337
LCSI 180-365337/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	365337
LCSS 180-365337/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	365337

Prep Batch: 366115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	9010C	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	9010C	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	9010C	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	9010C	
MB 180-366115/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-366115/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-366115/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-366115/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 366211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	EPA 9014	366115
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	EPA 9014	366115
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	EPA 9014	366115
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	EPA 9014	366115
MB 180-366115/4-A	Method Blank	Total/NA	Solid	EPA 9014	366115
HLCS 180-366115/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366115
LCS 180-366115/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366115

General Chemistry (Continued)

Analysis Batch: 366211 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-366115/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366115

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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:

no space between IRM5 and 2A, should be IRM5A2 as per Aron Krasnopoler. D. Dunlap 7/22/21

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)	SD (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - TCLP Pesticides	8151A - TCLP Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFAS	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs				Total Number of containers	Special Instructions/Note:
			Preservation Code:			FJ	N	N	N	N	N	N	N	N	N						
SSHS-IRM5 2A Breesport Topsoil 1	7/20/21	8:00	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 2	7/20/21	8:10	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 3	7/20/21	8:20	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil Dup 1	7/20/21	--	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 1A	7/20/21	8:30	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 1B	7/20/21	8:35	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 1C	7/20/21	8:40	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2A	7/20/21	8:45	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2B	7/20/21	8:50	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2C did not receive 2C D. Dunlap 7/21/21	7/20/21	8:55	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 3A	7/20/21	9:00	C	Solid	N	N	X													4	

180-124717 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 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
1		7/20/20 1600	Geosyntec		7/21/21 915	EMA Pit
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s): -	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.		**Analysis Requested**		Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN08321			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

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)	MS/MSD (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - DER-10 Pesticides	8151A - DER-10 Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SSHS-IRM5 2A Breesport Topsoil 3B	7/20/21	9:05	g	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 3C	7/20/21	9:10	g	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil Dup 1A	7/20/21	--	g	soild	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:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/20/21 1600	Geosyntec		7/21/21 915	FEDEX
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

urofins TestAmerica, Pittsburgh
)1 Alpha Drive RIDC Park
ittsburgh, PA 15238
hone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

Non Haz Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris M Maclaughlin	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: ~~412-523-0146~~ 2409387082	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

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 Sample (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - DER-10 Pesticides	8151A - DER-10 Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N	X	
SSHS-IRM5A2 Breesport Topsoil 2C	7/22/21	7:15	g	Solid	N	N	X										4	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

180-124717 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 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:
[illegible]	Date/Time: 7/22/21 / 1200	Company: Geosyntec	Received by: [illegible]
	Date/Time:	Company	Received by:
		Company	Received by:

Date/Time:	Company
7/23/21 850	Eng Pit
Date/Time:	Company
Date/Time:	Company

7/29/2021

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

180-124717 Field Sheet

Job: _____

Tracking # : 2515 3783 0277

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L-04 Corr. Factor: (+ / -) N/A °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 1688653

Cooler ID: _____

Temp Observed: 1.5 °C Corrected: 1.5 °C

From: Temp Blank ☒ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: NC Date: 7-21-21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample custody seal?	☐	☐	☒
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Samples w/o discrepancies?	☐	☒	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: NC Date: 7-21-21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☒	☐	☐
Log Release checked in TALS?	☒	☐	☐

Initials: NC Date: 7-21-21

WR3 60

Custody Seal
DATE
SIGNATURE
FedEx Ship Manager - Print Your Label(s)
ORIGIN ID:ELMA (240) 938-7056
CONSTRUCTION ENTRANCE - GEOSYNTEC
GEOSYNTEC CONSULTANTS
765 SOUTH MAIN STREET
ELMIRA, NY 14904
UNITED STATES US
SHIP DATE: 19JUL21
ACTWGT: 50.00 LB
CAD: 252144936/INET4340
DIMS: 36x18x12 IN
BILL SENDER
TO TESTAMERICA LABORATORY
WEST SACRAMENTO
880 RIVERSIDE PKWY
WEST SACRAMENTO CA 95605
(916) 373-5600 REF: MN08321
INV: 01
PO: 17 DEPT: 1751
560J20265/FE4A
FedEx Express
FedEx
TRK# 0201 2815 3783 0277
WED - 21 JUL AA
PRIORITY OVERNIGH
XH BLUA
95605
CA-US SMF
EXP 04/22
#5201616
eurofins
Environment Testing
TestAmerica
1688653

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-124717-1

Login Number: 124717
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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.	False	topsoil 2C not received
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-124717-2
Client Project/Site: Former Sperry Remington-Imported Topsoil

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

Attn: Mr. Aron Krasnopoler

Authorized for release by:
7/26/2021 12:09:57 PM

David Dunlap, Senior Project Manager
(412)963-2432
David.Dunlap@Eurofinset.com

LINKS

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Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

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: 180-124717-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-124717-2

Comments
Notation was made to the coc regarding changes to the sample IDs.

Receipt
The samples were received on 7/21 and 23/21 at the Eurofins TestAmerica Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5º C, 1.8º C and 2.8º C.

The following sample (for volatiles analysis) was listed on the Chain of Custody (COC); however, no sample was received: SSHS-IRM5A2 BREESPORT TOPSOIL 2C (180-124717-10). The sample was re-collected and received on 7/23/21 at the Pittsburgh laboratory.

LCMS
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. The associated samples were SSHS-IRM5A2 BREESPORT TOPSOIL 2 (180-124717-2) and SSHS-IRM5A2 BREESPORT TOPSOIL 3 (180-124717-3).

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

Definitions/Glossary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Florida	NELAP	E87570	06-30-22
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-22
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-22
New Jersey	NELAP	CA005	06-30-22
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-30-23
Texas	NELAP	T104704399-19-13	05-31-22
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442021-12	03-01-22
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-22
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Solid	07/20/21 08:00	07/21/21 09:15
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Solid	07/20/21 08:10	07/21/21 09:15
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Solid	07/20/21 08:20	07/21/21 09:15
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Solid	07/20/21 00:00	07/21/21 09:15

Method Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1 — Lab Sample ID: 180-124717-1

Date Collected: 07/20/21 08:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 83.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.03 g	10.0 mL	509093	07/21/21 19:46	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			509411	07/22/21 20:58	K1S	TAL SAC
	Instrument ID: A13									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2 — Lab Sample ID: 180-124717-2

Date Collected: 07/20/21 08:10 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.47 g	10.0 mL	509093	07/21/21 19:46	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			509411	07/22/21 21:26	K1S	TAL SAC
	Instrument ID: A13									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.01 g	10.0 mL	509093	07/21/21 19:46	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			509411	07/22/21 21:36	K1S	TAL SAC
	Instrument ID: A13									

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1 — Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.48 g	10.0 mL	509093	07/21/21 19:46	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			509411	07/22/21 21:45	K1S	TAL SAC
	Instrument ID: A13									

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:

Lab: TAL SAC

Batch Type: Prep

AM = Andrew Martin

Batch Type: Analysis

K1S = Kotechakon Sorndee

Client: Geosyntec Consultants, Inc.
Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1
Lab Sample ID: 180-124717-1
Date Collected: 07/20/21 08:00
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 83.6

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.11**	**J**	0.24	0.055	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluoropentanoic acid (PFPeA)	**0.11**	**J**	0.24	0.049	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorohexanoic acid (PFHxA)	**0.13**	**J**	0.24	0.037	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluoroheptanoic acid (PFHpA)	**0.11**	**J**	0.24	0.045	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorooctanoic acid (PFOA)	**0.34**		0.24	0.063	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorononanoic acid (PFNA)	**0.096**	**J**	0.24	0.026	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorodecanoic acid (PFDA)	**0.089**	**J**	0.24	0.057	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.050	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.036	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.025	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.044	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.045	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.034	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.24	0.058	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorooctanesulfonic acid (PFOS)	**0.58**		0.24	0.051	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.062	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
Perfluorooctanesulfonamide (FOSA)	ND		0.24	0.039	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.24	0.027	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.24	0.057	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
6:2 FTS	**0.46**		0.24	0.032	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1
8:2 FTS	ND		0.24	0.042	ug/Kg	☼	07/21/21 19:46	07/22/21 20:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C5 PFPeA	*69*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C2 PFHxA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C4 PFHpA	*74*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C4 PFOA	*73*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C5 PFNA	*72*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C2 PFDA	*82*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C2 PFUnA	*79*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C2 PFDoA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C2 PFTeDA	*64*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C3 PFBS	*87*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
18O2 PFHxS	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C4 PFOS	*83*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
13C8 FOSA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
d3-NMeFOSAA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
d5-NEtFOSAA	*86*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
M2-6:2 FTS	*120*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*
M2-8:2 FTS	*116*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:58*	*1*

Client: Geosyntec Consultants, Inc.
Project/Site: Former Sperry Remington-Imported Topsoil

Job ID: 180-124717-2

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 2
Date Collected: 07/20/21 08:10
Date Received: 07/21/21 09:15

Lab Sample ID: 180-124717-2
Matrix: Solid
Percent Solids: 80.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.13**	**J**	0.23	0.053	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluoropentanoic acid (PFPeA)	**0.12**	**J**	0.23	0.047	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorohexanoic acid (PFHxA)	**0.11**	**J**	0.23	0.035	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluoroheptanoic acid (PFHpA)	**0.090**	**J**	0.23	0.043	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorooctanoic acid (PFOA)	**0.34**		0.23	0.060	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorononanoic acid (PFNA)	**0.13**	**J**	0.23	0.025	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorodecanoic acid (PFDA)	**0.15**	**J**	0.23	0.055	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluoroundecanoic acid (PFUnA)	**0.072**	**J**	0.23	0.048	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.034	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorotridecanoic acid (PFTriA)	**0.024**	**J**	0.23	0.024	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.042	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.043	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.23	0.056	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	**I**	0.23	0.049	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorodecanesulfonic acid (PFDS)	**0.065**	**J I**	0.23	0.059	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.038	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	**0.027**	**J**	0.23	0.026	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.055	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
6:2 FTS	ND		0.23	0.031	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1
8:2 FTS	ND		0.23	0.040	ug/Kg	☼	07/21/21 19:46	07/22/21 21:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*61*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C5 PFPeA	*58*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C2 PFHxA	*80*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C4 PFHpA	*69*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C4 PFOA	*73*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C5 PFNA	*62*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C2 PFDA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C2 PFUnA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C2 PFDoA	*69*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C2 PFTeDA	*67*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C3 PFBS	*84*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
18O2 PFHxS	*73*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C4 PFOS	*78*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
13C8 FOSA	*72*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
d3-NMeFOSAA	*70*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
d5-NEtFOSAA	*79*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
M2-6:2 FTS	*123*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*
M2-8:2 FTS	*124*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:26*	*1*

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 3 — Lab Sample ID: 180-124717-3

Date Collected: 07/20/21 08:20 — **Matrix: Solid**
Date Received: 07/21/21 09:15 — **Percent Solids: 80.3**

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.25	0.057	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluoropentanoic acid (PFPeA)	ND		0.25	0.051	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorohexanoic acid (PFHxA)	**0.077**	**J**	0.25	0.039	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluoroheptanoic acid (PFHpA)	**0.063**	**J**	0.25	0.047	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.25	0.066	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorononanoic acid (PFNA)	**0.073**	**J**	0.25	0.027	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorodecanoic acid (PFDA)	**0.10**	**J**	0.25	0.060	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluoroundecanoic acid (PFUnA)	ND		0.25	0.052	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorododecanoic acid (PFDoA)	ND		0.25	0.037	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorotridecanoic acid (PFTriA)	ND		0.25	0.026	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.25	0.046	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.25	0.047	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.25	0.036	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.25	0.061	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorooctanesulfonic acid (PFOS)	**0.66**	**I**	0.25	0.053	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.25	0.065	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
Perfluorooctanesulfonamide (FOSA)	ND		0.25	0.041	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.25	0.029	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.25	0.060	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
6:2 FTS	ND		0.25	0.034	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1
8:2 FTS	ND		0.25	0.043	ug/Kg	☼	07/21/21 19:46	07/22/21 21:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*68*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C5 PFPeA	*64*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C2 PFHxA	*88*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C4 PFHpA	*73*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C4 PFOA	*81*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C5 PFNA	*70*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C2 PFDA	*85*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C2 PFUnA	*82*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C2 PFDoA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C2 PFTeDA	*67*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C3 PFBS	*87*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
18O2 PFHxS	*79*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C4 PFOS	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
13C8 FOSA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
d3-NMeFOSAA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
d5-NEtFOSAA	*83*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
M2-6:2 FTS	*143*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*
M2-8:2 FTS	*150*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:36*	*1*

Client: Geosyntec Consultants, Inc.
Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1
Lab Sample ID: 180-124717-4

Date Collected: 07/20/21 00:00
Matrix: Solid
Date Received: 07/21/21 09:15
Percent Solids: 82.0

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.13**	**J**	0.22	0.051	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluoropentanoic acid (PFPeA)	**0.11**	**J**	0.22	0.046	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorohexanoic acid (PFHxA)	**0.14**	**J**	0.22	0.034	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluoroheptanoic acid (PFHpA)	**0.12**	**J**	0.22	0.042	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorooctanoic acid (PFOA)	**0.36**		0.22	0.059	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorononanoic acid (PFNA)	**0.093**	**J**	0.22	0.024	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorodecanoic acid (PFDA)	**0.090**	**J**	0.22	0.053	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.047	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.033	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.023	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.041	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.042	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.032	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.22	0.055	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorooctanesulfonic acid (PFOS)	**0.69**		0.22	0.048	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.058	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
Perfluorooctanesulfonamide (FOSA)	ND		0.22	0.037	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.22	0.026	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.22	0.053	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
6:2 FTS	ND		0.22	0.030	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1
8:2 FTS	ND		0.22	0.039	ug/Kg	☼	07/21/21 19:46	07/22/21 21:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*66*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C5 PFPeA	*55*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C2 PFHxA	*74*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C4 PFHpA	*67*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C4 PFOA	*68*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C5 PFNA	*64*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C2 PFDA	*82*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C2 PFUnA	*74*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C2 PFDoA	*66*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C2 PFTeDA	*60*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C3 PFBS	*75*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
18O2 PFHxS	*68*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C4 PFOS	*71*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
13C8 FOSA	*71*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
d3-NMeFOSAA	*71*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
d5-NEtFOSAA	*80*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
M2-6:2 FTS	*98*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*
M2-8:2 FTS	*108*		*25 - 150*	*07/21/21 19:46*	*07/22/21 21:45*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-509093/1-A
Matrix: Solid
Analysis Batch: 509411

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.20	0.049	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
6:2 FTS	ND		0.20	0.027	ug/Kg		07/21/21 19:46	07/22/21 20:39	1
8:2 FTS	ND		0.20	0.035	ug/Kg		07/21/21 19:46	07/22/21 20:39	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C5 PFPeA	*66*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C2 PFHxA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C4 PFHpA	*73*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C4 PFOA	*75*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C5 PFNA	*72*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C2 PFDA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C2 PFUnA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C2 PFDoA	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C2 PFTeDA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C3 PFBS	*84*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
18O2 PFHxS	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C4 PFOS	*72*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
13C8 FOSA	*76*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
d3-NMeFOSAA	*78*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
d5-NEtFOSAA	*84*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
M2-6:2 FTS	*72*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*
M2-8:2 FTS	*77*		*25 - 150*	*07/21/21 19:46*	*07/22/21 20:39*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-509093/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.00	1.84		ug/Kg		92	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	1.97		ug/Kg		98	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	1.85		ug/Kg		93	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	1.92		ug/Kg		96	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	1.88		ug/Kg		94	72 - 132
Perfluorononanoic acid (PFNA)	2.00	1.92		ug/Kg		96	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	1.82		ug/Kg		91	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	2.03		ug/Kg		101	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	1.97		ug/Kg		98	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	1.83		ug/Kg		92	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	1.87		ug/Kg		93	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.77	1.48		ug/Kg		84	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.64		ug/Kg		90	62 - 122
Perfluoroheptanesulfonic Acid (PFHpS)	1.90	1.92		ug/Kg		101	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.91		ug/Kg		103	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	1.94		ug/Kg		101	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	2.07		ug/Kg		103	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.96		ug/Kg		98	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.00		ug/Kg		100	72 - 132
6:2 FTS	1.90	1.97		ug/Kg		104	73 - 139
8:2 FTS	1.92	2.05		ug/Kg		107	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*74*		*25 - 150*
13C5 PFPeA	*69*		*25 - 150*
13C2 PFHxA	*79*		*25 - 150*
13C4 PFHpA	*78*		*25 - 150*
13C4 PFOA	*81*		*25 - 150*
13C5 PFNA	*79*		*25 - 150*
13C2 PFDA	*83*		*25 - 150*
13C2 PFUnA	*86*		*25 - 150*
13C2 PFDoA	*87*		*25 - 150*
13C2 PFTeDA	*79*		*25 - 150*
13C3 PFBS	*87*		*25 - 150*
18O2 PFHxS	*86*		*25 - 150*
13C4 PFOS	*81*		*25 - 150*
13C8 FOSA	*78*		*25 - 150*
d3-NMeFOSAA	*84*		*25 - 150*
d5-NEtFOSAA	*86*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-509093/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	74		25 - 150
M2-8:2 FTS	80		25 - 150

Lab Sample ID: 180-124717-1 MS **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	0.11	J	2.30	2.31		ug/Kg	☼	96	76 - 136
Perfluoropentanoic acid (PFPeA)	0.11	J	2.30	2.21		ug/Kg	☼	91	69 - 129
Perfluorohexanoic acid (PFHxA)	0.13	J	2.30	2.30		ug/Kg	☼	94	71 - 131
Perfluoroheptanoic acid (PFHpA)	0.11	J	2.30	2.47		ug/Kg	☼	103	71 - 131
Perfluorooctanoic acid (PFOA)	0.34		2.30	2.46		ug/Kg	☼	92	72 - 132
Perfluorononanoic acid (PFNA)	0.096	J	2.30	2.28		ug/Kg	☼	95	73 - 133
Perfluorodecanoic acid (PFDA)	0.089	J	2.30	2.24		ug/Kg	☼	94	72 - 132
Perfluoroundecanoic acid (PFUnA)	ND		2.30	2.37		ug/Kg	☼	103	66 - 126
Perfluorododecanoic acid (PFDoA)	ND		2.30	2.39		ug/Kg	☼	104	71 - 131
Perfluorotridecanoic acid (PFTriA)	ND		2.30	2.27		ug/Kg	☼	99	71 - 131
Perfluorotetradecanoic acid (PFTeA)	ND		2.30	2.14		ug/Kg	☼	93	67 - 127
Perfluorobutanesulfonic acid (PFBS)	ND		2.03	1.79		ug/Kg	☼	88	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	ND		2.09	2.06		ug/Kg	☼	99	62 - 122
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.19	1.95		ug/Kg	☼	89	76 - 136
Perfluorooctanesulfonic acid (PFOS)	0.58		2.13	2.68		ug/Kg	☼	98	68 - 141
Perfluorodecanesulfonic acid (PFDS)	ND		2.21	2.01		ug/Kg	☼	91	71 - 131
Perfluorooctanesulfonamide (FOSA)	ND		2.30	2.37		ug/Kg	☼	103	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.30	2.57		ug/Kg	☼	112	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.30	2.05		ug/Kg	☼	89	72 - 132
6:2 FTS	0.46		2.18	2.20		ug/Kg	☼	80	73 - 139
8:2 FTS	ND		2.20	1.95		ug/Kg	☼	89	75 - 135

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	71		25 - 150
13C5 PFPeA	69		25 - 150
13C2 PFHxA	78		25 - 150
13C4 PFHpA	69		25 - 150
13C4 PFOA	74		25 - 150
13C5 PFNA	72		25 - 150
13C2 PFDA	81		25 - 150
13C2 PFUnA	83		25 - 150
13C2 PFDoA	73		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-124717-1 MS **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2 PFTeDA	67		25 - 150
13C3 PFBS	83		25 - 150
18O2 PFHxS	76		25 - 150
13C4 PFOS	80		25 - 150
13C8 FOSA	79		25 - 150
d3-NMeFOSAA	70		25 - 150
d5-NEtFOSAA	87		25 - 150
M2-6:2 FTS	109		25 - 150
M2-8:2 FTS	132		25 - 150

Lab Sample ID: 180-124717-1 MSD **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	0.11	J	2.26	2.27		ug/Kg	☼	95	76 - 136	2	30
Perfluoropentanoic acid (PFPeA)	0.11	J	2.26	2.18		ug/Kg	☼	92	69 - 129	1	30
Perfluorohexanoic acid (PFHxA)	0.13	J	2.26	2.19		ug/Kg	☼	91	71 - 131	5	30
Perfluoroheptanoic acid (PFHpA)	0.11	J	2.26	2.21		ug/Kg	☼	93	71 - 131	11	30
Perfluorooctanoic acid (PFOA)	0.34		2.26	2.48		ug/Kg	☼	94	72 - 132	1	30
Perfluorononanoic acid (PFNA)	0.096	J	2.26	2.31		ug/Kg	☼	98	73 - 133	1	30
Perfluorodecanoic acid (PFDA)	0.089	J	2.26	2.13		ug/Kg	☼	90	72 - 132	5	30
Perfluoroundecanoic acid (PFUnA)	ND		2.26	2.41		ug/Kg	☼	106	66 - 126	1	30
Perfluorododecanoic acid (PFDoA)	ND		2.26	2.54		ug/Kg	☼	112	71 - 131	6	30
Perfluorotridecanoic acid (PFTriA)	ND		2.26	2.37		ug/Kg	☼	105	71 - 131	4	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.26	2.20		ug/Kg	☼	97	67 - 127	2	30
Perfluorobutanesulfonic acid (PFBS)	ND		2.00	1.58		ug/Kg	☼	79	69 - 129	12	30
Perfluorohexanesulfonic acid (PFHxS)	ND		2.06	1.92		ug/Kg	☼	93	62 - 122	7	30
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.15	2.03		ug/Kg	☼	94	76 - 136	4	30
Perfluorooctanesulfonic acid (PFOS)	0.58		2.10	2.85		ug/Kg	☼	108	68 - 141	6	30
Perfluorodecanesulfonic acid (PFDS)	ND		2.18	1.95		ug/Kg	☼	90	71 - 131	3	30
Perfluorooctanesulfonamide (FOSA)	ND		2.26	2.37		ug/Kg	☼	105	77 - 137	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.26	2.52		ug/Kg	☼	111	72 - 132	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.26	2.24		ug/Kg	☼	99	72 - 132	9	30
6:2 FTS	0.46		2.14	2.18		ug/Kg	☼	80	73 - 139	1	30
8:2 FTS	ND		2.17	2.30		ug/Kg	☼	106	75 - 135	16	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFBA	62		25 - 150
13C5 PFPeA	61		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-124717-1 MSD **Client Sample ID: SSHS-IRM5A2 BREESPORT TOPSOIL 1**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 509411 **Prep Batch: 509093**

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 PFHxA	75		25 - 150
13C4 PFHpA	64		25 - 150
13C4 PFOA	68		25 - 150
13C5 PFNA	63		25 - 150
13C2 PFDA	73		25 - 150
13C2 PFUnA	76		25 - 150
13C2 PFDoA	61		25 - 150
13C2 PFTeDA	61		25 - 150
13C3 PFBS	80		25 - 150
18O2 PFHxS	65		25 - 150
13C4 PFOS	67		25 - 150
13C8 FOSA	66		25 - 150
d3-NMeFOSAA	62		25 - 150
d5-NEtFOSAA	72		25 - 150
M2-6:2 FTS	100		25 - 150
M2-8:2 FTS	110		25 - 150

Client: Geosyntec Consultants, Inc.
Job ID: 180-124717-2
Project/Site: Former Sperry Remington-Imported Topsoil

LCMS

Prep Batch: 509093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	SHAKE	
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	SHAKE	
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	SHAKE	
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	SHAKE	
MB 320-509093/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-509093/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	SHAKE	
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	SHAKE	

Analysis Batch: 509411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-124717-1	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	537 (modified)	509093
180-124717-2	SSHS-IRM5A2 BREESPORT TOPSOIL 2	Total/NA	Solid	537 (modified)	509093
180-124717-3	SSHS-IRM5A2 BREESPORT TOPSOIL 3	Total/NA	Solid	537 (modified)	509093
180-124717-4	SSHS-IRM5A2 BREESPORT TOPSOIL DUP 1	Total/NA	Solid	537 (modified)	509093
MB 320-509093/1-A	Method Blank	Total/NA	Solid	537 (modified)	509093
LCS 320-509093/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	509093
180-124717-1 MS	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	537 (modified)	509093
180-124717-1 MSD	SSHS-IRM5A2 BREESPORT TOPSOIL 1	Total/NA	Solid	537 (modified)	509093

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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:

no space between IRM5 and 2A, should be IRM5A2 as per Aron Krasnopoler. D. Dunlap 7/22/21

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)	SD (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - TCLP Pesticides	8151A - TCLP Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs				Total Number of containers	Special Instructions/Note:
			Preservation Code:			FJ	N	N	N	N	N	N	N	N	N						
SSHS-IRM5 2A Breesport Topsoil 1	7/20/21	8:00	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 2	7/20/21	8:10	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 3	7/20/21	8:20	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil Dup 1	7/20/21	--	C	Solid	N	N	X	X	X	X	X	X	X	X	X					5	
SSHS-IRM5 2A Breesport Topsoil 1A	7/20/21	8:30	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 1B	7/20/21	8:35	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 1C	7/20/21	8:40	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2A	7/20/21	8:45	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2B	7/20/21	8:50	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 2C did not receive 2C D. Dunlap 7/21/21	7/20/21	8:55	C	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 3A	7/20/21	9:00	C	Solid	N	N	X													4	

180-124717 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 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
1		7/20/21 1600	Geosyntec		7/21/21 915	EMA Pitt
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s): –	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.		**Analysis Requested**		Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN08321			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

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)	MS/MSD (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - DER-10 Pesticides	8151A - DER-10 Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs					Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	N	N	N	N	N	N	N	N	N						
SSHS-IRM5 2A Breesport Topsoil 3B	7/20/21	9:05	g	Solid	N	N	X														4	
SSHS-IRM5 2A Breesport Topsoil 3C	7/20/21	9:10	g	Solid	N	N	X														4	
SSHS-IRM5 2A Breesport Topsoil Dup 1A	7/20/21	--	g	soild	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:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/20/21 1600	Geosyntec		7/21/21 915	FedEx
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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:

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

Chain of Custody Record

Non Haz Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris M Maclaughlin	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: ~~412-523-0146~~ 2409387082	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

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 Sample (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - DER-10 Pesticides	8151A - DER-10 Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N	X	
SSHS-IRM5A2 Breesport Topsoil 2C	7/22/21	7:15	g	Solid	N	N	X										4	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

180-124717 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 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:
[illegible]	Date/Time: 7/22/21 / 1200	Company: Geosyntec	Received by: [illegible]
	Date/Time:	Company:	Received by:
		Company:	Received by:

Date/Time:	Company
7/23/21 850	Ent Pit
Date/Time:	Company
Date/Time:	Company

7/26/2021

ORIGIN ID:ELMA (240) 93[illegible]-7056
CONSTRUCTION ENTRANCE - GEOSYNTEC
GEOSYNTEC CONSULTANTS
765 SOUTH MAIN STREET

ELMIRA, NY 14904
UNITED STATES US

SHIP DA[illegible]9JUL21
ACTWGT[illegible]00 LB
CAD: 25[illegible]56/INET4
DIMS: 3[illegible]2 IN

BILL SEND:

TO TESTAMERICA (PITTSBURGH) LABORATOR

301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058 REF: MN08321
INV: 01
PO: 17 DEPT 1751

Fed

TUE - 20 JUL 10:30A
PRIORITY OVERNIGHT

1 of 3
TRK# 0201 2815 3778 1070
MASTER

FedEx
TRK# 0201 2815 3778 1070

WED - 21 JUL A[illegible] 5238
PRIORITY OVERNIGHT PIT

XH AGCA

1523
PA-US PI

Uncorrected temp 2.8 °C
Thermometer ID 17
CF 0 Initials 8
PT-WI-SR-001 effective 11/8/18

#5201616 07/20 56DJ2/0265/FE4A

RT 98 1 10:30 A 1070 07.21
FZ

180-124717 Waybill

7/16/2021

hip Manager - Print Your Label(s)

ORIGIN ID:ELMA (240) 938-7056
CONSTRUCTION ENTRANCE - GEOSYNTEC
GEOSYNTEC CONSULTANTS
765 SOUTH MAIN STREET
ELMIRA, NY 14904
UNITED STATES US

SHIP DATE: 21JUL21
ACTWGT: 50.00 LB
CAD: 252144956/INET4340
DIMS: 30x18x12 IN
BILL SENDER

TO TESTAMERICA (PITTSBURGH) LABORATORY

301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058
REF: MN08321
INV: 01
PO: 17
DEPT: 1751

FedEx Express
J211321033181uv

56DJ2/0265/FE4A

FedEx
TRK# 0201 2815 3818 4540

XH AGCA

FRI - 23 JUL AA
PRIORITY OVERNIGHT

PA-US

L 10:30A
15238
PIT

Uncorrected temp 18 °C
Thermometer ID 17
CF 0
Initials As

PT-WI-SR-001 effective 11/8/18

98 1 A
10:30 4540
07.23

180-124717 Waybill

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

180-124717 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - TCLP Pesticides	8151A - TCLP Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs			Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	FJ	N	N	N	N	N	N	N	N	N			X	
SSHS-IRM5 2A Breesport Topsoil 1	7/20/21	8:00	C	Solid	N	N	X	X	X	X	X	X	X	X	X	X			5	
SSHS-IRM5 2A Breesport Topsoil 2	7/20/21	8:10	C	Solid	N	N	X	X	X	X	X	X	X	X	X	X			5	
SSHS-IRM5 2A Breesport Topsoil 3	7/20/21	8:20	C	Solid	N	N	X	X	X	X	X	X	X	X	X	X			5	
SSHS-IRM5 2A Breesport Topsoil Dup 1	7/20/21	--	C	Solid	N	N	X	X	X	X	X	X	X	X	X	X			5	
SSHS-IRM5 2A Breesport Topsoil 1A	7/20/21	8:30	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 1B	7/20/21	8:35	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 1C	7/20/21	8:40	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 2A	7/20/21	8:45	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 2B	7/20/21	8:50	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 2C	7/20/21	8:55	C	Solid	N	N	X												4	
SSHS-IRM5 2A Breesport Topsoil 3A	7/20/21	9:00	C	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:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/20/21 1600	Geosyntec		7-21-21 09:50	ETASAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ (Yes) Δ No | Custody Seal No.: 168653 | Cooler Temperature(s) °C and Other Remarks: 1.5

Ver: 01/16/2019

COC ~~Set~~ and containers sample ID's don't match. where the COC has "2A", the containers "A2" ~~Logged~~ and labeled according to COC. NC 7-21-21

Page 24 of 29

7/26/2021

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

Chain of Custody Record

Non Haz
Waste Characterization

eurofins | Environment Testing TestAmerica

Client Information	Sampler: H Harris	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 412-522-9146	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 Day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN08321			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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 (Yes or No)	8260C-DER-10 VOA (TERRACORE)	8270D_LL DER-10 SVOC	8081B - DER-10 Pesticides	8151A - DER-10 Herbicides	6010C/7470B - DER-10 METALS	9014 - Cyanide	7196A-HEX CHROM	537.1(MOD) PFA'S	537.1(MOD) SPLP-E, PFAS	8082A - DER-10 PCBs				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SSHS-IRM5 2A Breesport Topsoil 3B	7/20/21	9:05	g	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil 3C	7/20/21	9:10	g	Solid	N	N	X													4	
SSHS-IRM5 2A Breesport Topsoil Dup 1A	7/20/21	--	g	soild	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:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] 7/20/21	7/20/21 1600	Geosyntec	[signature]	7-21-21 / 09:50	ETASAC
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.: 1688853	Cooler Temperature(s) °C and Other Remarks: 1.5

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

180-124717 Field Sheet

Job:

Tracking # : 2515 3783 0277

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L-04 Corr. Factor: (+ / -) N/A °C

Ice ✓ Wet ✓ Gel ____ Other ____

Cooler Custody Seal: 1688653

Cooler ID: ____

Temp Observed: 1.5 °C Corrected: 1.5 °C

From: Temp Blank ☒ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: NC Date: 7-21-21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample custody seal?	☐	☐	☒
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Samples w/o discrepancies?	☐	☒	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: NC Date: 7-21-21

Notes:

Trizma Lot #(s): ____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☒	☐	☐
Log Release checked in TALS?	☒	☐	☐

Initials: NC Date: 7-21-21

WR3 60

ORIGIN ID:ELMA (240) 938-7056
CONSTRUCTION ENTRANCE - GEOSYNTEC
GEOSYNTEC CONSULTANTS
765 SOUTH MAIN STREET
ELMIRA, NY 14904
UNITED STATES US
SHIP DATE: 19JUL21
ACTWGT: 50.00 LB
CAD: 252144936/INET4340
DIMS: 36x18x12 IN
BILL SENDER
TO TESTAMERICA LABORATORY
WEST SACRAMENTO
880 RIVERSIDE PKWY
WEST SACRAMENTO CA 95605
(916) 373-5600 REF: MN08321
INV: 01
PO: 17 DEPT: 1751
FedEx Express
FedEx
TRK# 0201 2815 3783 0277
WED - 21 JUL AA
PRIORITY OVERNIGH
XH BLUA
95605
CA-US SMF
EXP 04/22
560J20265/FE4A
FedEx Ship Manager - Print Your Label(s)
Custody Seal
DATE
SIGNATURE
eurofins
Environment Testing
TestAmerica
1688653

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-124717-2

Login Number: 124717
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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.	False	topsoil 2C not received
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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-124717-2

Login Number: 124717
List Number: 2
Creator: Cahill, Nicholas P

List Source: Eurofins TestAmerica, Sacramento
List Creation: 07/21/21 02:59 PM

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	1688653
Sample custody seals, if present, are intact.	N/A	
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.	False	IDs on containers do not match the COC. Logged in per COC.
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.	N/A	
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	

Miranda Stelmach

From: Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>
Sent: Thursday, August 12, 2021 4:05 PM
To: Schneider, Timothy A (DEC); Kaitlin Ouverson
Cc: Aron Krasnopoler; Paul Brookner; Melonie MacLaughlin; Bogardus, Sara (HEALTH); Bonsteel, Nicole M; Stelmack, Mark J.; Howe, Alexander; Shields, Lindsey; brandon.glowark@woodplc.com; Etter, Terry R.; Ian Masone; Miranda Stelmach; Amanda Castignetti; Tom Johnson; Grasmeyer, Luke; Cyr, Scott; Joe Magliocca (jmagliocca@elmiracityschools.com)
Subject: RE: NYSDEC #c808022 - Request to Import Batavia Turf (NAF STRA)

You don't often get email from andrew.millspaugh@sterlingenvironmental.com. Learn why this is important

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Tim,

We have reviewed the Request to Import Batavia Turf with ECSD and find it acceptable for use in the NAF STRA.

Thanks,

Andrew M. Millspaugh, P.E.
Sterling Environmental Engineering, P.C.
Cell: (518) 573-4378
andrew.millspaugh@sterlingenvironmental.com

From: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Sent: Thursday, August 12, 2021 2:10 PM
To: Kaitlin Ouverson <KOuverson@Geosyntec.com>
Cc: akrasnopoler@geosyntec.com; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; mark.stelmack@woodplc.com; Howe, Alexander <alexander.howe@woodplc.com>; Shields, Lindsey <lindsey.shields@woodplc.com>; brandon.glowark@woodplc.com; Etter, Terry R. <terry.etter@unisys.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Cyr, Scott <cyrs@hunt-eas.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>
Subject: RE: NYSDEC #c808022 - Request to Import Batavia Turf (NAF STRA)

Hi Kaitlin,

Thank you for the quick response. Based on the explanation below and preponderance of chemical results below Restricted Residential use criteria, the Agency approves the import of this material contingent upon ECSD's authorization to accept.

Best,

Tim

Timothy A. Schneider P.E.
Pronouns: he / him / his
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 | | |

This electronic message may contain privileged or confidential information. If you are not the intended recipient of this e-mail, please delete it from your system and advise the sender.

From: Kaitlin Ouverson <KOuverson@Geosyntec.com>
Sent: Thursday, August 12, 2021 12:02 PM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Cc: akrasnopoler@geosyntec.com; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; mark.stelmack@woodplc.com; Howe, Alexander <alexander.howe@woodplc.com>; Shields, Lindsey <lindsey.shields@woodplc.com>; brandon.glowark@woodplc.com; Etter, Terry R. <terry.etter@unisys.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda.Castignetti@SterlingEnvironmental.com; Tom Johnson <johnsont@sterlingenvironmental.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Cyr, Scott <cyrs@hunt-eas.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>
Subject: RE: NYSDEC #c808022 - Request to Import Batavia Turf (NAF STRA)

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Good Morning Tim-

Thank you for the quick response. We have reached out to TestAmerica for additional information regarding sample IRM5A2-SOD 2. There are two laboratory analyses performed for each sample (low-level and mid-level) by TestAmerica. The low-level analysis samples for IRM5A2-SOD-2 were identified by the laboratory to have low recovery that did not meet laboratory internal standards for reporting. As a result, the low-level analysis was not reported and the elevated detection limits for VOCs and 1,4-dioxane are based on the mid-level analysis.

There are six other grab samples analyzed for VOCs and 1,4-dioxane in this sample, and they all were consistently below laboratory reporting limits and the Unrestricted Use levels. As noted above, the elevated reporting limits result from a laboratory issue and are not a reflection of the sod sample in question. All other sod sample volatile results are below applicable criteria and consistent with one another. Given this information it is our professional judgement that the sod samples are acceptable to move forward with importing.

Please let us know if you have any additional questions. Thank you.

KAITLIN THELL OUVERSON | **GEOSYNTEC CONSULTANTS** | **B&B ENGINEERS & GEOLOGISTS OF NY** | O: 612.253.8213 | M: 612.708.8663

From: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Sent: Thursday, August 12, 2021 9:10 AM
To: Kaitlin Ouverson <KOuverson@Geosyntec.com>
Cc: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; Stelmack, Mark J. <mark.stelmack@woodplc.com>; Howe, Alexander <alexander.howe@woodplc.com>; Shields, Lindsey <lindsey.shields@woodplc.com>; brandon.glowark@woodplc.com; Etter, Terry R. <terry.etter@unisys.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Cyr, Scott <cyrs@hunt-eas.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>
Subject: Re: NYSDEC #c808022 - Request to Import Batavia Turf (NAF STRA)

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Hi Kaitlin,

Hope you are having a pleasant day.

Please provide an explanation for elevated reporting limits and professional justification to move forward.

The request to import sod presents elevated reporting limits (above RR criteria) for some VOCs and 1,4-dioxane in grab sample IRM5A2-SOD 2.

Best,

Tim

From: Kaitlin Ouverson <KOuverson@Geosyntec.com>
Sent: Wednesday, August 11, 2021 10:54 AM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>
Cc: akrasnopoler@geosyntec.com <akrasnopoler@geosyntec.com>; Paul Brookner <PBrookner@Geosyntec.com>; Melonie MacLaughlin <MMacLaughlin@Geosyntec.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; mark.stelmack@woodplc.com <mark.stelmack@woodplc.com>; Howe, Alexander <alexander.howe@woodplc.com>; Shields, Lindsey <lindsey.shields@woodplc.com>; brandon.glowark@woodplc.com <brandon.glowark@woodplc.com>; Etter, Terry R. <terry.etter@unisys.com>; Ian Masone <IMasone@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda.Castignetti@SterlingEnvironmental.com <Amanda.Castignetti@SterlingEnvironmental.com>; Tom Johnson <johnsont@sterlingenvironmental.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Cyr, Scott <cyrs@hunt-eas.com>; Joe Magliocca (jmagliocca@elmiracityschools.com) <jmagliocca@elmiracityschools.com>
Subject: NYSDEC #c808022 - Request to Import Batavia Turf (NAF STRA)

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Good Morning Tim-

Attached is a Request to Import sod from Batavia Turf in Elba, NY for the NAF STRA at the Former Sperry Remington Site – North Portion (#c808022). This request is being submitted for review and approval.

Note, the total chromium results exceed the Unrestricted Use standard but are below Restricted Resident Use standards. **We are copying ECSD to this request for concurrence before importing the sod to the site.**

Please let me know if you have any questions regarding this request, or if you need any additional information.

Respectfully,

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

Kaitlin Thell Ouverson, PE (MN,NY,WI)
Project Engineer
100 Washington Avenue South #1590 | Minneapolis, MN 55401
O: 612-253-8213 | M: 612-708-8663 | kouverson@geosyntec.com

Geosyntec Consultants, Inc. for project sites outside of NY

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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? 100-200

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

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? no

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? no

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

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

Samples were collected to import 48,000 square feet of sod. According to information provided by NYSDEC, approximately 340 square feet of sod is equivalent to 1 cubic yard of material. Therefore, the import quantity is approximately 140 cubic yards. Seven (7) grab samples and three (3) composite samples were collected from soil attached to Turf Type Tall Fescue . Grab samples were analyzed for VOCs. Composite samples were analyzed for PCBs, SVOCs, Inorganics, Herbicides, Pesticides and Pefluorinated Compounds.

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):

The composite sample has a detection of total chromium ranging between 5.5 mg/kg to 6.7 mg/kg, which is above the Appendix 5 allowable level for Unrestricted Use of 1 mg/kg but below the allowable level for Restricted Residential Use. Elevated reporting limits for various VOCs and 1,4-dioxane were observed in grab sample IRM5A2-SOD 2; however, all other VOC results and reporting limits are below the allowable levels for Unrestricted Use. All other detections were below the allowable levels for Unrestricted Use. See attached table for details.

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:

Batavia Turf

Location where fill was obtained:

6465 TRANSIT RD. ELBA, NY 14058

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

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

Batavia Turf grows and sells sod from a sod farm in Batavia, New York.

Provide a list of supporting documentation included with this request:

Analytical Report 180-125116-1 and 180-125116-2
Data Validation pending

The information provided on this form is accurate and complete.

Digitally signed by Kaitlin Thell Ouverson
Date: 2021.08.11 08:51:57 -05'00'

Signature

11 August 2021

Date

Kaitlin Ouverson

Print Name

B&B Engineers & Geologists of New York, P.C.

Firm

Revised August 2014

						Field_ID	SSHS-IRM5A2-SOD 1	SSHS-IRM5A2-SOD 2	SSHS-IRM5A2-SOD 3	SSHS-IRM5A2-SOD 4	SSHS-IRM5A2-SOD 5	SSHS-IRM5A2-SOD 6	SSHS-IRM5A2-SOD 7	SSHS-IRM5A2-SOD A	SSHS-IRM5A2-SOD B	SSHS-IRM5A2-SOD C
						Sampled Date	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021
						Lab Report Number	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-2	180-125116-2	180-125116-2
						LocCode	IRM5A2-SOD 1	IRM5A2-SOD 2	IRM5A2-SOD 3	IRM5A2-SOD 4	IRM5A2-SOD 5	IRM5A2-SOD 6	IRM5A2-SOD 7	IRM5A2-SOD A	IRM5A2-SOD B	IRM5A2-SOD C
Chem Group	**ChemName**	**Units**	**EQL**	**DER-10 App5 Rest. Res.**	**DER-10 App5 Unrestricted**											
PCBs	Arochlor 1016	mg/kg	0.0059			-	-	-	-	-	-	-	<0.0062U	<0.0059U,F1	<0.0061U
	Arochlor 1221	mg/kg	0.0064			-	-	-	-	-	-	-	<0.0067U	<0.0064U	<0.0067U
	Arochlor 1232	mg/kg	0.0044			-	-	-	-	-	-	-	<0.0046U	<0.0044U	<0.0046U
	Arochlor 1242	mg/kg	0.0027			-	-	-	-	-	-	-	<0.0028U	<0.0027U	<0.0028U
	Arochlor 1248	mg/kg	0.0044			-	-	-	-	-	-	-	<0.0046U	<0.0044U	<0.0045U
	Arochlor 1254	mg/kg	0.0054			-	-	-	-	-	-	-	<0.0057U	<0.0054U	<0.0057U
	Arochlor 1260	mg/kg	0.0052			-	-	-	-	-	-	-	<0.0054U	<0.0052U	<0.0054U
	Arochlor 1262	mg/kg	0.0064			-	-	-	-	-	-	-	<0.0067U	<0.0064U	<0.0066U
	Arochlor 1268	mg/kg	0.0024			-	-	-	-	-	-	-	<0.0024U	<0.0024U	<0.0025U
	Total PCBs	mg/kg		1	0.1	-	-	-	-	-	-	-	<0.0453	<0.0432	<0.0449
Inorganics	Arsenic	mg/kg	0.79	16	13	-	-	-	-	-	-	-	2.8	2.1	1.8
	Barium	mg/kg	16	400	350	-	-	-	-	-	-	-	28	28	23
	Beryllium	mg/kg	0.31	47	7.2	-	-	-	-	-	-	-	0.21J	0.21J	0.22J
	Cadmium	mg/kg	0.39	4.3	2.5	-	-	-	-	-	-	-	0.19J	0.2J	0.19J
	Chromium (hexavalent)	mg/kg	0.23	19	1	-	-	-	-	-	-	-	<0.24U	<0.23U	<0.25U
	Chromium (III+VI)	mg/kg	0.39	19	1	-	-	-	-	-	-	-	5.4	5.5	6.7
	Copper	mg/kg	2	270	50	-	-	-	-	-	-	-	20	23	29
	Cyanide Total	mg/kg	0.26	27	27	-	-	-	-	-	-	-	<0.3U	<0.3U	<0.26U
	Lead	mg/kg	0.83	400	63	-	-	-	-	-	-	-	12	9.4	6.5
	Manganese	mg/kg	1.2	2000	1600	-	-	-	-	-	-	-	430	440	280
	Mercury	mg/kg	0.018	0.73	0.18	-	-	-	-	-	-	-	0.023J	<0.018U	0.025J
	Nickel	mg/kg	3.1	130	30	-	-	-	-	-	-	-	5.4	4.9	5.7
	Selenium	mg/kg	0.41	4	3.9	-	-	-	-	-	-	-	<0.48U	<0.44U	<0.41U
	Silver	mg/kg	0.083	8.3	2	-	-	-	-	-	-	-	<0.099U	<0.089U	<0.083U
	Zinc	mg/kg	1.6	2480	109	-	-	-	-	-	-	-	55F1	52	56
SVOCs	1,4-Dioxane	mg/kg	0.011	0.1	0.1	<0.038U	<2.1U,*+	<0.037U	<0.038U	<0.04U	<0.038U	<0.039U	<0.012U	<0.011U	<0.012U
	2-methylphenol	mg/kg	0.01	0.33	0.33	-	-	-	-	-	-	-	<0.011U	<0.01U	<0.011U
	4-methylphenol	mg/kg	0.01	0.33	0.33	-	-	-	-	-	-	-	<0.011U	<0.01U	<0.011U
	Acenaphthene	mg/kg	0.0021	98	20	-	-	-	-	-	-	-	<0.0021U	<0.0021U	0.0037J
	Acenaphthylene	mg/kg	0.0072	100	100	-	-	-	-	-	-	-	0.0047J	0.0022J	0.028
	Anthracene	mg/kg	0.0018	100	100	-	-	-	-	-	-	-	0.003J	<0.0018U	0.014
	Benz(a)anthracene	mg/kg	0.0072	1	1	-	-	-	-	-	-	-	0.011	0.0042J	0.057
	Benzo(a) pyrene	mg/kg	0.0072	1	1	-	-	-	-	-	-	-	0.0099	0.0045J	0.054
	Benzo(b)fluoranthene	mg/kg	0.0072	1	1	-	-	-	-	-	-	-	0.017	0.007J	0.085
	Benzo(g,h,i)perylene	mg/kg	0.0072	100	100	-	-	-	-	-	-	-	0.011	0.0049J	0.049
	Benzo(k)fluoranthene	mg/kg	0.0072	1.7	0.8	-	-	-	-	-	-	-	0.0046J	0.0023J	0.023
	Chrysene	mg/kg	0.0072	1	1	-	-	-	-	-	-	-	0.011	0.0052J	0.052
	Dibenz(a,h)anthracene	mg/kg	0.0046	0.33	0.33	-	-	-	-	-	-	-	<0.0047U	<0.0046U	0.015
	Dibenzofuran	mg/kg	0.0016	59	7	-	-	-	-	-	-	-	<0.0016U	<0.0016U	<0.0017U
	Fluoranthene	mg/kg	0.0072	100	100	-	-	-	-	-	-	-	0.017	0.0077	0.055
	Fluorene	mg/kg	0.0014	100	30	-	-	-	-	-	-	-	<0.0015U	<0.0014U	0.0019J
	Hexachlorobenzene	mg/kg	0.0026	1.2	0.33	-	-	-	-	-	-	-	<0.0027U	<0.0026U	<0.0027U
	Indeno(1,2,3-cd)pyrene	mg/kg	0.0072	0.5	0.5	-	-	-	-	-	-	-	0.01	0.005J	0.048
	Naphthalene	mg/kg	0.0014	12	12	-	-	-	-	-	-	-	<0.0014U	<0.0014U	<0.0015U
	Pentachlorophenol	mg/kg	0.057	0.8	0.8	-	-	-	-	-	-	-	<0.06U	<0.057U	<0.061U
	Phenanthrene	mg/kg	0.0072	100	100	-	-	-	-	-	-	-	0.0049J	0.0041J	0.0077
	Phenol	mg/kg	0.011	0.33	0.33	-	-	-	-	-	-	-	<0.011U	<0.011U	<0.011U
	Pyrene	mg/kg	0.0072	100	100	-	-	-	-	-	-	-	0.013	0.0067J	0.047
	PAHs (Sum of total)	mg/kg				-	-	-	-	-	-	-	0.1209	0.0584	0.5374
VOCs	1,4-dichlorobenzene	mg/kg	0.0016	1.8	1.8	<0.0016U	<0.087U	<0.0016U	<0.0016U	<0.0017U	<0.0016U	<0.0017U	-	-	-
	1,1,1-trichloroethane	mg/kg	0.0018	0.68	0.68	<0.0018U	<0.097U	<0.0018U	<0.0018U	<0.0019U	<0.0018U	<0.0018U	-	-	-
	1,1-dichloroethane	mg/kg	0.0017	0.27	0.27	<0.0017U	<0.093U	<0.0017U	<0.0017U	<0.0018U	<0.0017U	<0.0018U	-	-	-
	1,1-dichloroethene	mg/kg	0.0024	0.33	0.33	<0.0024U	<0.13U	<0.0024U	<0.0024U	<0.0025U	<0.0024U	<0.0025U	-	-	-
	1,2,4-trimethylbenzene	mg/kg	0.0018	3.6	3.6	<0.0018U	<0.1U	<0.0018U	<0.0019U	<0.0019U	<0.0018U	<0.0019U	-	-	-
	1,2-dichlorobenzene	mg/kg	0.0018	1.1	1.1	<0.0018U	<0.098U	<0.0018U	<0.0018U	<0.0019U	<0.0018U	<0.0019U	-	-	-
	1,2-dichloroethane	mg/kg	0.0015	0.02	0.02	<0.0015U	<0.084U	<0.0015U	<0.0016U	<0.0016U	<0.0015U	<0.0016U	-	-	-
	1,3,5-trimethylbenzene	mg/kg	0.002	8.4	8.4	<0.002U	<0.11U	<0.002U	<0.002U	<0.0021U	<0.002U	<0.0021U	-	-	-
	1,3-dichlorobenzene	mg/kg	0.0032	2.4	2.4	<0.0033U	<0.18U	<0.0032U	<0.0033U	<0.0035U	<0.0033U	<0.0034U	-	-	-
	2,4,5-TP (Silvex)	mg/kg	0.012	3.8	3.8	-	-	-	-	-	-	-	<0.013U	<0.012U	<0.012U
	Acetone	mg/kg	0.0041	0.05	0.05	<0.0042U	<0.23U	<0.0041U	<0.0042U	<0.0044U	<0.0042U	<0.0043U	-	-	-
	Benzene	mg/kg	0.0015	0.06	0.06	<0.0015U	<0.082U	<0.0015U	<0.0015U	<0.0016U	<0.0015U	<0.0016U	-	-	-
	Carbon tetrachloride	mg/kg	0.0021	0.76	0.76	<0.0022U	<0.12U	<0.0021U	<0.0022U	<0.0023U	<0.0022U	<0.0022U	-	-	-
	Chlorobenzene	mg/kg	0.0014	1.1	1.1	<0.0014U	<0.076U	<0.0014U	<0.0014U	<0.0015U	<0.0014U	<0.0014U	-	-	-
	Chloroform	mg/kg	0.0017	0.37	0.37	<0.0017U,*+	<0.094U	<0.0017U,*+	<0.0017U,*+	<0.0018U,*+	<0.0017U,*+	<0.0018U,*+	-	-	-
	cis-1,2-dichloroethene	mg/kg	0.0016	0.25	0.25	<0.0016U	<0.088U	<0.0016U	<0.0016U	<0.0017U	<0.0016U	<0.0017U	-	-	-
	Dichloromethane	mg/kg	0.0047	0.05	0.05	0.0075	<0.26U	<0.0047U	<0.0049U	<0.005U	<0.0048U	0.005J	-	-	-

Table 1
Request to Reuse

Former Sperry Remington
Elmira, New York

						Field_ID	SSHS-IRM5A2-SOD 1	SSHS-IRM5A2-SOD 2	SSHS-IRM5A2-SOD 3	SSHS-IRM5A2-SOD 4	SSHS-IRM5A2-SOD 5	SSHS-IRM5A2-SOD 6	SSHS-IRM5A2-SOD 7	SSHS-IRM5A2-SOD A	SSHS-IRM5A2-SOD B	SSHS-IRM5A2-SOD C
						Sampled Date	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021	7/29/2021
						Lab Report Number	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-1	180-125116-2	180-125116-2	180-125116-2
						LocCode	IRM5A2-SOD 1	IRM5A2-SOD 2	IRM5A2-SOD 3	IRM5A2-SOD 4	IRM5A2-SOD 5	IRM5A2-SOD 6	IRM5A2-SOD 7	IRM5A2-SOD A	IRM5A2-SOD B	IRM5A2-SOD C
Chem Group	**ChemName**	**Units**	**EQL**	**DER-10 App5 Rest. Res.**	**DER-10 App5 Unrestricted**											
VOCs	Ethylbenzene	mg/kg	0.0019	1	1	<0.002U	<0.11U	<0.0019U	<0.002U	<0.0021U	<0.002U	<0.002U	-	-	-
	Methyl Ethyl Ketone	mg/kg	0.0027	0.12	0.12	<0.0027U	<0.13U	<0.0027U	<0.0027U	<0.0029U	<0.0027U	<0.0028U	-	-	-
	Methyl-tert-butyl ether	mg/kg	0.0015	0.93	0.93	<0.0016U	<0.085U	<0.0015U	<0.0016U	<0.0017U	<0.0016U	<0.0016U	-	-	-
	n-butylbenzene	mg/kg	0.0026	12	12	<0.0026U	<0.14U,*1	<0.0026U	<0.0027U	<0.0028U	<0.0027U	<0.0027U	-	-	-
	n-propylbenzene	mg/kg	0.0019	3.9	3.9	<0.0019U	<0.1U	<0.0019U	<0.0019U	<0.0021U	<0.0019U	<0.0021U	-	-	-
	sec-butylbenzene	mg/kg	0.0026	11	11	<0.0026U	<0.14U	<0.0026U	<0.0026U	<0.0028U	<0.0026U	<0.0027U	-	-	-
	tert-butylbenzene	mg/kg	0.0022	5.9	5.9	<0.0022U	<0.12U	<0.0022U	<0.0023U	<0.0024U	<0.0023U	<0.0023U	-	-	-
	Tetrachloroethene	mg/kg	0.0021	1.3	1.3	<0.0021U	<0.12U	<0.0021U	<0.0022U	<0.0023U	<0.0022U	<0.0022U	-	-	-
	Toluene	mg/kg	0.0015	0.7	0.7	<0.0015U	<0.084U	<0.0015U	<0.0016U	<0.0016U	<0.0015U	<0.0016U	-	-	-
	trans- 1,2-dichloroethene	mg/kg	0.0018	0.19	0.19	<0.0019U	<0.1U	<0.0018U	<0.0019U	<0.002U	<0.0019U	<0.0019U	-	-	-
	Trichloroethene	mg/kg	0.0016	0.47	0.47	<0.0017U	<0.091U	<0.0016U	<0.0017U	<0.0018U	<0.0017U	<0.0017U	-	-	-
	Vinyl chloride	mg/kg	0.0038	0.02	0.02	<0.0038U	<0.21U	<0.0038U	<0.0039U	<0.0041U	<0.0039U	<0.004U	-	-	-
	Xylene Total	mg/kg	0.0076	1.6	0.26	<0.0077U	<0.42U	<0.0076U	<0.0078U	<0.0081U	<0.0077U	<0.008U	-	-	-
PFAS	6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/kg	0.029			-	-	-	-	-	-	-	<0.029U	<0.029U	<0.031U
	8:2-Fluorotelomersulfonic acid	µg/kg	0.037			-	-	-	-	-	-	-	<0.037U	<0.037U	<0.04U
	NEtFOSAA	µg/kg	0.051			-	-	-	-	-	-	-	<0.051U	<0.051U	<0.055U
	NMeFOSAA	µg/kg	0.024			-	-	-	-	-	-	-	<0.024U	<0.025U	<0.027U
	Perfluorobutanesulfonic acid	µg/kg	0.04			-	-	-	-	-	-	-	<0.04U	<0.04U	<0.044U
	Perfluorobutanoic acid	µg/kg	0.049			-	-	-	-	-	-	-	<0.049U	<0.049U	<0.053U
	Perfluorodecanesulfonic acid	µg/kg	0.055			-	-	-	-	-	-	-	<0.055U	<0.055U	<0.06U
	Perfluorodecanoic acid	µg/kg	0.051			-	-	-	-	-	-	-	<0.051U	<0.051U	<0.055U
	Perfluorododecanoic acid	µg/kg	0.032			-	-	-	-	-	-	-	<0.032U	<0.032U	<0.035U
	Perfluoroheptanesulfonic acid	µg/kg	0.052			-	-	-	-	-	-	-	<0.052U	<0.052U	<0.057U
	Perfluoroheptanoic acid	µg/kg	0.04			-	-	-	-	-	-	-	<0.04U	<0.04U	<0.044U
	Perfluorohexanesulfonic acid	µg/kg	0.031			-	-	-	-	-	-	-	<0.031U	<0.031U	<0.033U
	Perfluorohexanoic acid	µg/kg	0.033			-	-	-	-	-	-	-	<0.033U	<0.033U	<0.036U
	Perfluorononanoic acid	µg/kg	0.21			-	-	-	-	-	-	-	0.038J	0.035J	0.034J
	Perfluorooctanesulfonamide	µg/kg	0.035			-	-	-	-	-	-	-	<0.035U	<0.035U	<0.038U
	Perfluorooctanesulfonic acid	µg/kg	0.21	3.7	0.88	-	-	-	-	-	-	-	0.097J	0.09J	0.11J
	Perfluorooctanoate	µg/kg	0.056	1.1	0.66	-	-	-	-	-	-	-	0.06J	<0.056U	<0.061U
	Perfluoropentanoic acid	µg/kg	0.043			-	-	-	-	-	-	-	<0.043U	<0.044U	<0.047U
	Perfluorotetradecanoic acid	µg/kg	0.039			-	-	-	-	-	-	-	<0.039U	<0.039U	<0.043U
	Perfluorotridecanoic acid	µg/kg	0.022			-	-	-	-	-	-	-	<0.022U	<0.022U	<0.024U
	Perfluoroundecanoic acid	µg/kg	0.045			-	-	-	-	-	-	-	<0.045U	<0.045U	<0.048U

Notes:
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U - non detect at the value indicated
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light grey.
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark grey.

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-125116-1
Client Project/Site: Former Sperry Remington-Imported Sod

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

Attn: Mr. Aron Krasnopoler

Authorized for release by:
8/9/2021 3:26:45 PM

David Dunlap, Senior Project Manager
(412)963-2432
David.Dunlap@Eurofinset.com

LINKS

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www.eurofinsus.com/Env

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: 180-125116-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125116-1

Comments
Notation was made to the coc regarding changes to the sample IDs.

Receipt
The samples were received on 7/30/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method 8260C: The following sample was analyzed from the medium level, methanol preserved terracore: SSHS-IRM5A2-SOD 2 (180-125116-2). Elevated reporting limits (RLs) are provided. Both vials of the low level, aqueous preserved terracores were analyzed but could not be reported due to all internal standard responses being below 10%, therefore the medium level terracore was analyzed and reported.

Method 8260C: The recovery of surrogate 4-Bromofluorobenzene was above the control limits in the method blank (MB 180-366465/9). As the surrogate was high and there were no target analytes detected in the method blank, the results were reported. The associated samples had all surrogate recoveries within the control limits.

Method 8260C: The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) for analytical batch 180-366465 recovered above the control limits for the following analyte: Chloroform. As this analyte was biased high in the LCS/LCSD and was not detected in the associated samples, the results were reported.

Method 8260C: The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) for analytical batch 180-366607 recovered above the control limits for the following analyte: Chloroform. As this analyte was biased high in the LCS/LCSD and was not detected in the associated samples, the results were reported. The recovery of surrogate4-Bromofluorobenzene was also 1% above the control limits in the laboratory control sample.

Method 8260C: The laboratory control sample (LCS) for preparation batch 180-366822 recovered above the control limits for the following analyte: 1,4-Dioxane. The recovery in the laboratory control sample duplicate (LCSD) was within the control limits. As this analyte was biased high in the LCS and was not detected in the associated samples, the results were reported.

Method 8260C: The RPD between the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 180-366822 was above the control limits for the following analyte: n-Butylbenzene. The recoveries were within the control limits.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-366465 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-366465 was above criteria for the following analytes: Chloroform and Methylene Chloride. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-366607 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-366607 was above criteria for the following analyte: Chloroform. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-366785 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.

Job ID: 180-125116-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

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 8082A: Sample SSHS-IRM5A2-SOD B (180-125116-9) had the recoveries of surrogate tetrachloro-m-xylene slightly below the control limits on both columns. The recoveries of decachlorobiphenyl were within the control limits.

Method 8082A: The matrix spike/matrix spike duplicate (MS/MSD) recoveries of sample SSHS-IRM5A2-SOD B (180-125116-9) were above the control limits for aroclor 1016. The RPD between the spikes and the recoveries of the laboratory control sample (LCS) 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
Method 6010C: The matrix spike/matrix spike duplicate (MS/MSD) of sample SSHS-IRM5A2-SOD A (180-125116-8) had the recoveries of zinc 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.

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

Definitions/Glossary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

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
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
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.
F1	MS and/or MSD recovery exceeds control limits.
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-22

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

Sample Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125116-1	SSHS-IRM5A2-SOD 1	Solid	07/29/21 11:00	07/30/21 09:00
180-125116-2	SSHS-IRM5A2-SOD 2	Solid	07/29/21 11:05	07/30/21 09:00
180-125116-3	SSHS-IRM5A2-SOD 3	Solid	07/29/21 11:10	07/30/21 09:00
180-125116-4	SSHS-IRM5A2-SOD 4	Solid	07/29/21 11:15	07/30/21 09:00
180-125116-5	SSHS-IRM5A2-SOD 5	Solid	07/29/21 11:20	07/30/21 09:00
180-125116-6	SSHS-IRM5A2-SOD 6	Solid	07/29/21 11:25	07/30/21 09:00
180-125116-7	SSHS-IRM5A2-SOD 7	Solid	07/29/21 11:30	07/30/21 09:00
180-125116-8	SSHS-IRM5A2-SOD A	Solid	07/29/21 11:00	07/30/21 09:00
180-125116-9	SSHS-IRM5A2-SOD B	Solid	07/29/21 11:15	07/30/21 09:00
180-125116-10	SSHS-IRM5A2-SOD C	Solid	07/29/21 11:30	07/30/21 09:00

Method Summary

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

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 7196A	Chromium, Hexavalent	SW846	TAL PIT
EPA 9014	Cyanide	SW846	TAL PIT
3050B	Preparation, Metals	SW846	TAL PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	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 = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD 1 — Lab Sample ID: 180-125116-1
Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 1 — Lab Sample ID: 180-125116-1
Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 90.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1943 g	5 mL	366652	08/03/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366607	08/03/21 11:39	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2-SOD 2 — Lab Sample ID: 180-125116-2
Date Collected: 07/29/21 11:05 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 2 — Lab Sample ID: 180-125116-2
Date Collected: 07/29/21 11:05 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 92.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0067 g	5 mL	366822	08/04/21 07:34	PJJ	TAL PIT
Total/NA	Analysis	EPA 8260C		1	0.1 mL	5 mL	366785	08/04/21 18:14	PJJ	TAL PIT
	Instrument ID: CHHP10									

Client Sample ID: SSHS-IRM5A2-SOD 3 — Lab Sample ID: 180-125116-3
Date Collected: 07/29/21 11:10 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 3 — Lab Sample ID: 180-125116-3
Date Collected: 07/29/21 11:10 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 92.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1752 g	5 mL	366497	08/02/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366465	08/02/21 15:34	KLG	TAL PIT
	Instrument ID: CHHP11									

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD 4 — Lab Sample ID: 180-125116-4

Date Collected: 07/29/21 11:15 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 4 — Lab Sample ID: 180-125116-4

Date Collected: 07/29/21 11:15 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1132 g	5 mL	366497	08/02/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366465	08/02/21 16:00	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2-SOD 5 — Lab Sample ID: 180-125116-5

Date Collected: 07/29/21 11:20 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 5 — Lab Sample ID: 180-125116-5

Date Collected: 07/29/21 11:20 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **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	5035			4.8006 g	5 mL	366497	08/02/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366465	08/02/21 16:25	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2-SOD 6 — Lab Sample ID: 180-125116-6

Date Collected: 07/29/21 11:25 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 6 — Lab Sample ID: 180-125116-6

Date Collected: 07/29/21 11:25 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 91.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0755 g	5 mL	366497	08/02/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366465	08/02/21 16:51	KLG	TAL PIT
	Instrument ID: CHHP11									

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD 7 — Lab Sample ID: 180-125116-7

Date Collected: 07/29/21 11:30 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD 7 — Lab Sample ID: 180-125116-7

Date Collected: 07/29/21 11:30 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 91.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.9228 g	5 mL	366652	08/03/21 06:30	KLG	TAL PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	366607	08/03/21 12:31	KLG	TAL PIT
	Instrument ID: CHHP11									

Client Sample ID: SSHS-IRM5A2-SOD A — Lab Sample ID: 180-125116-8

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD A — Lab Sample ID: 180-125116-8

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 87.1**

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	0.50 mL	366577	08/03/21 01:55	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	366583	08/03/21 12:23	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.0 g	20.0 mL	366355	07/30/21 14:05	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			366501	08/02/21 13:29	DFE	TAL PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.1 g	20.0 mL	366332	08/02/21 09:20	CBY	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	366590	08/03/21 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	366591	08/03/21 05:13	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			366600	08/03/21 17:37	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.1 g	40.0 mL	366668	08/03/21 07:00	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			367096	08/06/21 09:03	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.22 g	100 mL	366835	08/04/21 09:59	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367093	08/05/21 11:03	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	3050B			1.15 g	100 mL	367063	08/05/21 13:03	AMD	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367205	08/06/21 10:36	RJG	TAL PIT
	Instrument ID: C									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD A
Lab Sample ID: 180-125116-8
Date Collected: 07/29/21 11:00
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.71 g	100 mL	366695	08/03/21 11:10	MM1	TAL PIT
Total/NA	Analysis	EPA 7471B		1			367072	08/05/21 13:06	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.50 g	100 mL	366566	08/02/21 14:33	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	367059	08/05/21 13:09	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.21 g	10 mL	366921	08/04/21 16:12	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			367144	08/04/21 18:40	CMR	TAL PIT
	Instrument ID: SEAL1									

Client Sample ID: SSHS-IRM5A2-SOD B
Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD B
Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.8

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	0.50 mL	366577	08/03/21 01:55	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	366583	08/03/21 12:45	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.1 g	20.0 mL	366355	07/30/21 14:05	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			366501	08/02/21 13:45	DFE	TAL PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.0 g	20.0 mL	366332	08/02/21 09:20	CBY	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	366590	08/03/21 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	366591	08/03/21 05:13	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			366600	08/03/21 16:37	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.5 g	40.0 mL	366668	08/03/21 07:00	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			367096	08/06/21 09:22	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.29 g	100 mL	366835	08/04/21 09:59	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367093	08/05/21 11:53	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	3050B			1.29 g	100 mL	367063	08/05/21 13:03	AMD	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367205	08/06/21 10:59	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.75 g	100 mL	366695	08/03/21 11:10	MM1	TAL PIT
Total/NA	Analysis	EPA 7471B		1			367072	08/05/21 13:07	KEM	TAL PIT
	Instrument ID: HGZ									

Client Sample ID: SSHS-IRM5A2-SOD B
Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15 **Matrix: Solid**
Date Received: 07/30/21 09:00 **Percent Solids: 91.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.49 g	100 mL	366566	08/02/21 14:33	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	367059	08/05/21 13:10	PMH	TAL PIT
	Instrument ID: GEN10S									
Total/NA	Prep	9010C			0.20 g	10 mL	366921	08/04/21 16:12	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			367144	08/04/21 18:42	CMR	TAL PIT
	Instrument ID: SEAL1									

Client Sample ID: SSHS-IRM5A2-SOD C
Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30 **Matrix: Solid**
Date Received: 07/30/21 09:00

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			366399	07/31/21 10:39	SNR	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: SSHS-IRM5A2-SOD C
Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30 **Matrix: Solid**
Date Received: 07/30/21 09:00 **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	0.50 mL	366577	08/03/21 01:55	CSC	TAL PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	366583	08/03/21 13:07	JAS	TAL PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.2 g	20.0 mL	366355	07/30/21 14:05	CSC	TAL PIT
Total/NA	Analysis	EPA 8081B		1			366501	08/02/21 14:01	DFE	TAL PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	366332	08/02/21 09:20	CBY	TAL PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	366590	08/03/21 05:12	JMO	TAL PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	366591	08/03/21 05:13	JMO	TAL PIT
Total/NA	Analysis	EPA 8082A		1			366600	08/03/21 17:55	JMO	TAL PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.4 g	40.0 mL	366668	08/03/21 07:00	SNP	TAL PIT
Total/NA	Analysis	EPA 8151A		1			367096	08/06/21 09:42	JMO	TAL PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.47 g	100 mL	366835	08/04/21 09:59	TLP	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367093	08/05/21 11:57	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	3050B			1.40 g	100 mL	367063	08/05/21 13:03	AMD	TAL PIT
Total/NA	Analysis	EPA 6010C		1			367205	08/06/21 11:13	RJG	TAL PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.70 g	100 mL	366695	08/03/21 11:10	MM1	TAL PIT
Total/NA	Analysis	EPA 7471B		1			367072	08/05/21 13:08	KEM	TAL PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.49 g	100 mL	366566	08/02/21 14:33	PMH	TAL PIT
Total/NA	Analysis	EPA 7196A		1	25 mL	25 mL	367059	08/05/21 13:11	PMH	TAL PIT
	Instrument ID: GEN10S									

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD C
Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30
Matrix: Solid
Date Received: 07/30/21 09:00
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	9010C			0.24 g	10 mL	366921	08/04/21 16:12	CMR	TAL PIT
Total/NA	Analysis	EPA 9014		1			367144	08/04/21 18:44	CMR	TAL PIT
	Instrument ID: SEAL1									

Laboratory References:

TAL PIT = Eurofins 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
- AMD = Alysha Donlan
- CBY = Charles Yushinski
- CMR = Carl Reagle
- CSC = Chayce Cockroft
- KLG = Kathy Gordon
- MM1 = Mary Beth Miller
- PJJ = Patrick Journet
- PMH = Paloma Hoelzle
- SNP = Sydney Prugh
- TLP = Tara Peterson

Batch Type: Analysis
- CMR = Carl Reagle
- DFE = David Eppinger
- JAS = Jeremy Stundon
- JMO = John Oravec
- KEM = Kimberly Mahoney
- KLG = Kathy Gordon
- PJJ = Patrick Journet
- PMH = Paloma Hoelzle
- RJG = Rob Good
- SNR = Sabra Richart

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD 1 — Lab Sample ID: 180-125116-1

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 90.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0042	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Benzene	ND		0.0053	0.0015	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
2-Butanone (MEK)	ND		0.0053	0.0027	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Carbon tetrachloride	ND		0.0053	0.0022	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Chloroform	ND	*+	0.0053	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
cis-1,2-Dichloroethene	ND		0.0053	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,3-Dichlorobenzene	ND		0.0053	0.0033	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,1-Dichloroethane	ND		0.0053	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Ethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Methylene Chloride	**0.0075**		0.0053	0.0048	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Methyl tert-butyl ether	ND		0.0053	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
tert-Butylbenzene	ND		0.0053	0.0022	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
trans-1,2-Dichloroethene	ND		0.0053	0.0019	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	08/03/21 06:30	08/03/21 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 111*	*08/03/21 06:30*	*08/03/21 11:39*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 129*	*08/03/21 06:30*	*08/03/21 11:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*67 - 124*	*08/03/21 06:30*	*08/03/21 11:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 129*	*08/03/21 06:30*	*08/03/21 11:39*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.6**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**90.4**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 2 — Lab Sample ID: 180-125116-2

Date Collected: 07/29/21 11:05 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 92.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.2	0.23	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Benzene	ND		0.29	0.082	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1

Client Sample ID: SSHS-IRM5A2-SOD 2

Lab Sample ID: 180-125116-2
Date Collected: 07/29/21 11:05
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 92.4

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		0.29	0.15	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Carbon tetrachloride	ND		0.29	0.12	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Chlorobenzene	ND		0.29	0.076	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Chloroform	ND		0.29	0.094	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
cis-1,2-Dichloroethene	ND		0.29	0.088	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,2-Dichlorobenzene	ND		0.29	0.098	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,3-Dichlorobenzene	ND		0.29	0.18	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,4-Dichlorobenzene	ND		0.29	0.087	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,1-Dichloroethane	ND		0.29	0.093	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,2-Dichloroethane	ND		0.29	0.084	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,1-Dichloroethene	ND		0.29	0.13	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,4-Dioxane	ND	*+	58	2.1	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Ethylbenzene	ND		0.29	0.11	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Methylene Chloride	ND		0.29	0.26	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Methyl tert-butyl ether	ND		0.29	0.085	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
n-Butylbenzene	ND	*1	0.29	0.14	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
N-Propylbenzene	ND		0.29	0.10	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
sec-Butylbenzene	ND		0.29	0.14	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
tert-Butylbenzene	ND		0.29	0.12	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Tetrachloroethene	ND		0.29	0.12	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Toluene	ND		0.29	0.084	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
trans-1,2-Dichloroethene	ND		0.29	0.10	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,1,1-Trichloroethane	ND		0.29	0.097	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Trichloroethene	ND		0.29	0.091	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,2,4-Trimethylbenzene	ND		0.29	0.10	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
1,3,5-Trimethylbenzene	ND		0.29	0.11	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Vinyl chloride	ND		0.29	0.21	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1
Xylenes, Total	ND		0.58	0.42	mg/Kg	☼	08/04/21 07:34	08/04/21 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*66 - 118*	*08/04/21 07:34*	*08/04/21 18:14*	*1*
Dibromofluoromethane (Surr)	*84*		*61 - 116*	*08/04/21 07:34*	*08/04/21 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*58 - 129*	*08/04/21 07:34*	*08/04/21 18:14*	*1*
Toluene-d8 (Surr)	*83*		*62 - 115*	*08/04/21 07:34*	*08/04/21 18:14*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.6**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**92.4**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 3

Lab Sample ID: 180-125116-3
Date Collected: 07/29/21 11:10
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0041	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Benzene	ND		0.0052	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
2-Butanone (MEK)	ND		0.0052	0.0027	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Carbon tetrachloride	ND		0.0052	0.0021	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1

Client Sample ID: SSHS-IRM5A2-SOD 3

Lab Sample ID: 180-125116-3
Date Collected: 07/29/21 11:10
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0052	0.0014	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Chloroform	ND	*+	0.0052	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,2-Dichlorobenzene	ND		0.0052	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,3-Dichlorobenzene	ND		0.0052	0.0032	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,4-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,1-Dichloroethane	ND		0.0052	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,1-Dichloroethene	ND		0.0052	0.0024	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,4-Dioxane	ND		1.0	0.037	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Ethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Methylene Chloride	ND		0.0052	0.0047	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Methyl tert-butyl ether	ND		0.0052	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
n-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
N-Propylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
sec-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
tert-Butylbenzene	ND		0.0052	0.0022	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Toluene	ND		0.0052	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
trans-1,2-Dichloroethene	ND		0.0052	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,1,1-Trichloroethane	ND		0.0052	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1
Xylenes, Total	ND		0.010	0.0076	mg/Kg	☼	08/02/21 06:30	08/02/21 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 111*	*08/02/21 06:30*	*08/02/21 15:34*	*1*
Dibromofluoromethane (Surr)	*104*		*69 - 129*	*08/02/21 06:30*	*08/02/21 15:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 124*	*08/02/21 06:30*	*08/02/21 15:34*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*	*08/02/21 06:30*	*08/02/21 15:34*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.9**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**92.1**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 4

Lab Sample ID: 180-125116-4
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0042	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
2-Butanone (MEK)	ND		0.0054	0.0027	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Chloroform	ND	*+	0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1

Client Sample ID: SSHS-IRM5A2-SOD 4

Lab Sample ID: 180-125116-4
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 90.8

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		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Methylene Chloride	ND		0.0054	0.0049	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Toluene	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1
Xylenes, Total	ND		0.011	0.0078	mg/Kg	☼	08/02/21 06:30	08/02/21 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 111*	*08/02/21 06:30*	*08/02/21 16:00*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 129*	*08/02/21 06:30*	*08/02/21 16:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*67 - 124*	*08/02/21 06:30*	*08/02/21 16:00*	*1*
Toluene-d8 (Surr)	*96*		*80 - 129*	*08/02/21 06:30*	*08/02/21 16:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.2**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**90.8**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 5

Lab Sample ID: 180-125116-5
Date Collected: 07/29/21 11:20
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.023	0.0044	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Benzene	ND		0.0056	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
2-Butanone (MEK)	ND		0.0056	0.0029	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Carbon tetrachloride	ND		0.0056	0.0023	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Chlorobenzene	ND		0.0056	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Chloroform	ND	*+	0.0056	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
cis-1,2-Dichloroethene	ND		0.0056	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,2-Dichlorobenzene	ND		0.0056	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1

Client Sample ID: SSHS-IRM5A2-SOD 5

Lab Sample ID: 180-125116-5
Date Collected: 07/29/21 11:20
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 92.6

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		0.0056	0.0035	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,4-Dichlorobenzene	ND		0.0056	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,1-Dichloroethane	ND		0.0056	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,2-Dichloroethane	ND		0.0056	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,1-Dichloroethene	ND		0.0056	0.0025	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,4-Dioxane	ND		1.1	0.040	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Ethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Methylene Chloride	ND		0.0056	0.0051	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Methyl tert-butyl ether	ND		0.0056	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
n-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
N-Propylbenzene	ND		0.0056	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
sec-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
tert-Butylbenzene	ND		0.0056	0.0024	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Tetrachloroethene	ND		0.0056	0.0023	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Toluene	ND		0.0056	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
trans-1,2-Dichloroethene	ND		0.0056	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,1,1-Trichloroethane	ND		0.0056	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Trichloroethene	ND		0.0056	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,2,4-Trimethylbenzene	ND		0.0056	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
1,3,5-Trimethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Vinyl chloride	ND		0.0056	0.0041	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1
Xylenes, Total	ND		0.011	0.0081	mg/Kg	☼	08/02/21 06:30	08/02/21 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 111*	*08/02/21 06:30*	*08/02/21 16:25*	*1*
Dibromofluoromethane (Surr)	*99*		*69 - 129*	*08/02/21 06:30*	*08/02/21 16:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*	*08/02/21 06:30*	*08/02/21 16:25*	*1*
Toluene-d8 (Surr)	*97*		*80 - 129*	*08/02/21 06:30*	*08/02/21 16:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.4**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**92.6**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 6

Lab Sample ID: 180-125116-6
Date Collected: 07/29/21 11:25
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0042	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
2-Butanone (MEK)	ND		0.0054	0.0027	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Chloroform	ND	*+	0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1

Client Sample ID: SSHS-IRM5A2-SOD 6

Lab Sample ID: 180-125116-6
Date Collected: 07/29/21 11:25
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.9

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		0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,2-Dichloroethane	ND		0.0054	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Methylene Chloride	ND		0.0054	0.0048	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Toluene	ND		0.0054	0.0015	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	08/02/21 06:30	08/02/21 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 111*	*08/02/21 06:30*	*08/02/21 16:51*	*1*
Dibromofluoromethane (Surr)	*102*		*69 - 129*	*08/02/21 06:30*	*08/02/21 16:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*	*08/02/21 06:30*	*08/02/21 16:51*	*1*
Toluene-d8 (Surr)	*97*		*80 - 129*	*08/02/21 06:30*	*08/02/21 16:51*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.1**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**91.9**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD 7

Lab Sample ID: 180-125116-7
Date Collected: 07/29/21 11:30
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0043	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Benzene	ND		0.0055	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
2-Butanone (MEK)	ND		0.0055	0.0028	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Carbon tetrachloride	ND		0.0055	0.0022	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Chlorobenzene	ND		0.0055	0.0014	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Chloroform	ND	*+	0.0055	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
cis-1,2-Dichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,2-Dichlorobenzene	ND		0.0055	0.0019	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,3-Dichlorobenzene	ND		0.0055	0.0034	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,4-Dichlorobenzene	ND		0.0055	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,1-Dichloroethane	ND		0.0055	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1

Client Sample ID: SSHS-IRM5A2-SOD 7 — Lab Sample ID: 180-125116-7

Date Collected: 07/29/21 11:30 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 91.9**

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	0.0025	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,4-Dioxane	ND		1.1	0.039	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Ethylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Methylene Chloride	**0.0050**	**J**	0.0055	0.0050	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Methyl tert-butyl ether	ND		0.0055	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
n-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
N-Propylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
tert-Butylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Toluene	ND		0.0055	0.0016	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
trans-1,2-Dichloroethene	ND		0.0055	0.0019	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,1,1-Trichloroethane	ND		0.0055	0.0018	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Trichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0021	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Vinyl chloride	ND		0.0055	0.0040	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1
Xylenes, Total	ND		0.011	0.0080	mg/Kg	☼	08/03/21 06:30	08/03/21 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 111*	*08/03/21 06:30*	*08/03/21 12:31*	*1*
Dibromofluoromethane (Surr)	*101*		*69 - 129*	*08/03/21 06:30*	*08/03/21 12:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*	*08/03/21 06:30*	*08/03/21 12:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*	*08/03/21 06:30*	*08/03/21 12:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.1**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**91.9**		0.1	0.1	%			07/31/21 10:39	1

Client Sample ID: SSHS-IRM5A2-SOD A — Lab Sample ID: 180-125116-8

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 87.1**

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		0.0074	0.0021	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Acenaphthylene	**0.0047**	**J**	0.0074	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Anthracene	**0.0030**	**J**	0.0074	0.0019	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Benzo[a]anthracene	**0.011**		0.0074	0.0033	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Benzo[a]pyrene	**0.0099**		0.0074	0.0032	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Benzo[b]fluoranthene	**0.017**		0.0074	0.0018	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Benzo[g,h,i]perylene	**0.011**		0.0074	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Benzo[k]fluoranthene	**0.0046**	**J**	0.0074	0.0022	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Chrysene	**0.011**		0.0074	0.0041	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Dibenz(a,h)anthracene	ND		0.0074	0.0047	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Dibenzofuran	ND		0.037	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
1,4-Dioxane	ND		0.074	0.012	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Fluoranthene	**0.017**		0.0074	0.0020	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Fluorene	ND		0.0074	0.0015	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1

Client Sample ID: SSHS-IRM5A2-SOD A
Date Collected: 07/29/21 11:00
Date Received: 07/30/21 09:00

Lab Sample ID: 180-125116-8
Matrix: Solid
Percent Solids: 87.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		0.0074	0.0027	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Indeno[1,2,3-cd]pyrene	**0.010**		0.0074	0.0037	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
2-Methylphenol	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Methylphenol, 3 & 4	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Naphthalene	ND		0.0074	0.0014	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Pentachlorophenol	ND		0.19	0.060	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Phenanthrene	**0.0049**	**J**	0.0074	0.0020	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Phenol	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1
Pyrene	**0.013**		0.0074	0.0018	mg/Kg	☼	08/03/21 01:55	08/03/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*37 - 107*	*08/03/21 01:55*	*08/03/21 12:23*	*1*
2-Fluorophenol (Surr)	*71*		*38 - 106*	*08/03/21 01:55*	*08/03/21 12:23*	*1*
Nitrobenzene-d5 (Surr)	*79*		*41 - 112*	*08/03/21 01:55*	*08/03/21 12:23*	*1*
Phenol-d5 (Surr)	*79*		*40 - 110*	*08/03/21 01:55*	*08/03/21 12:23*	*1*
Terphenyl-d14 (Surr)	*82*		*32 - 115*	*08/03/21 01:55*	*08/03/21 12:23*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*22 - 116*	*08/03/21 01:55*	*08/03/21 12:23*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00059	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
alpha-BHC	ND		0.0020	0.00047	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
beta-BHC	ND		0.0020	0.00053	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
cis-Chlordane	ND		0.0020	0.00048	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
4,4'-DDD	ND		0.0020	0.00082	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
4,4'-DDE	ND		0.0020	0.00039	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Dieldrin	**0.0011**	**J p**	0.0020	0.00048	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Endosulfan II	ND		0.0020	0.00042	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Endosulfan sulfate	ND		0.0020	0.00050	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Endrin	ND		0.0020	0.00036	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
gamma-BHC (Lindane)	ND		0.0020	0.00049	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	07/30/21 14:05	08/02/21 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*35 - 144*	*07/30/21 14:05*	*08/02/21 13:29*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*35 - 144*	*07/30/21 14:05*	*08/02/21 13:29*	*1*
Tetrachloro-m-xylene	*92*		*40 - 113*	*07/30/21 14:05*	*08/02/21 13:29*	*1*
Tetrachloro-m-xylene	*91*		*40 - 113*	*07/30/21 14:05*	*08/02/21 13:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.019	0.0062	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1221	ND		0.019	0.0067	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1232	ND		0.019	0.0046	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1242	ND		0.019	0.0028	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1248	ND		0.019	0.0046	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1254	ND		0.019	0.0057	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1

Client Sample ID: SSHS-IRM5A2-SOD A — Lab Sample ID: 180-125116-8

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 87.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.019	0.0054	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1262	ND		0.019	0.0067	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1
PCB-1268	ND		0.019	0.0026	mg/Kg	☼	08/02/21 09:20	08/03/21 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*124*		*31 - 150*	*08/02/21 09:20*	*08/03/21 17:37*	*1*
DCB Decachlorobiphenyl (Surr)	*124*		*31 - 150*	*08/02/21 09:20*	*08/03/21 17:37*	*1*
Tetrachloro-m-xylene (Surr)	*133*		*20 - 150*	*08/02/21 09:20*	*08/03/21 17:37*	*1*
Tetrachloro-m-xylene (Surr)	*125*		*20 - 150*	*08/02/21 09:20*	*08/03/21 17:37*	*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	0.013	mg/Kg	☼	08/03/21 07:00	08/06/21 09:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*62*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:03*	*1*
2,4-Dichlorophenylacetic acid	*60*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:03*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.8**		0.94	0.37	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Barium	**28**		19	1.0	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Beryllium	**0.21**	**J**	0.38	0.022	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Cadmium	**0.19**	**J**	0.47	0.034	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Chromium	**5.8**		0.47	0.39	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Copper	**20**		2.4	2.2	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Lead	**12**		1.0	0.51	mg/Kg	☼	08/05/21 13:03	08/06/21 10:36	1
Manganese	**430**		1.4	0.38	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Nickel	**5.4**		3.8	0.23	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Selenium	ND		0.94	0.48	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Silver	ND		0.47	0.099	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1
Zinc	**55**	**F1**	1.9	1.5	mg/Kg	☼	08/04/21 09:59	08/05/21 11:03	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.023**	**J**	0.032	0.021	mg/Kg	☼	08/03/21 11:10	08/05/21 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.9**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**87.1**		0.1	0.1	%			07/31/21 10:39	1
Hexavalent chromium	ND		0.46	0.24	mg/Kg	☼	08/02/21 14:33	08/05/21 13:09	1
Cyanide, Total	ND		0.55	0.30	mg/Kg	☼	08/04/21 16:12	08/04/21 18:40	1

Client Sample ID: SSHS-IRM5A2-SOD B — Lab Sample ID: 180-125116-9

Date Collected: 07/29/21 11:15 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 91.8**

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		0.0072	0.0021	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1

Client Sample ID: SSHS-IRM5A2-SOD B

Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	**0.0022**	**J**	0.0072	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Anthracene	ND		0.0072	0.0018	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Benzo[a]anthracene	**0.0042**	**J**	0.0072	0.0032	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Benzo[a]pyrene	**0.0045**	**J**	0.0072	0.0031	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Benzo[b]fluoranthene	**0.0070**	**J**	0.0072	0.0018	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Benzo[g,h,i]perylene	**0.0049**	**J**	0.0072	0.0015	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Benzo[k]fluoranthene	**0.0023**	**J**	0.0072	0.0021	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Chrysene	**0.0052**	**J**	0.0072	0.0040	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Dibenz(a,h)anthracene	ND		0.0072	0.0046	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Dibenzofuran	ND		0.035	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
1,4-Dioxane	ND		0.071	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Fluoranthene	**0.0077**		0.0072	0.0019	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Fluorene	ND		0.0072	0.0014	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Hexachlorobenzene	ND		0.0072	0.0026	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Indeno[1,2,3-cd]pyrene	**0.0050**	**J**	0.0072	0.0035	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Naphthalene	ND		0.0072	0.0014	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Phenanthrene	**0.0041**	**J**	0.0072	0.0019	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Phenol	ND		0.035	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1
Pyrene	**0.0067**	**J**	0.0072	0.0017	mg/Kg	☼	08/03/21 01:55	08/03/21 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*37 - 107*	*08/03/21 01:55*	*08/03/21 12:45*	*1*
2-Fluorophenol (Surr)	*85*		*38 - 106*	*08/03/21 01:55*	*08/03/21 12:45*	*1*
Nitrobenzene-d5 (Surr)	*91*		*41 - 112*	*08/03/21 01:55*	*08/03/21 12:45*	*1*
Phenol-d5 (Surr)	*89*		*40 - 110*	*08/03/21 01:55*	*08/03/21 12:45*	*1*
Terphenyl-d14 (Surr)	*89*		*32 - 115*	*08/03/21 01:55*	*08/03/21 12:45*	*1*
2,4,6-Tribromophenol (Surr)	*75*		*22 - 116*	*08/03/21 01:55*	*08/03/21 12:45*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00056	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
beta-BHC	ND		0.0018	0.00050	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
4,4'-DDD	ND		0.0018	0.00077	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
4,4'-DDE	ND		0.0018	0.00037	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
delta-BHC	ND		0.0018	0.00057	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Endosulfan I	ND		0.0018	0.00049	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Endosulfan II	ND		0.0018	0.00040	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Endosulfan sulfate	ND		0.0018	0.00047	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Endrin	ND		0.0018	0.00034	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
gamma-BHC (Lindane)	ND		0.0018	0.00047	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	07/30/21 14:05	08/02/21 13:45	1

Client Sample ID: SSHS-IRM5A2-SOD B
Date Collected: 07/29/21 11:15
Date Received: 07/30/21 09:00

Lab Sample ID: 180-125116-9
Matrix: Solid
Percent Solids: 91.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*35 - 144*	*07/30/21 14:05*	*08/02/21 13:45*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*35 - 144*	*07/30/21 14:05*	*08/02/21 13:45*	*1*
Tetrachloro-m-xylene	*39*	*S1-*	*40 - 113*	*07/30/21 14:05*	*08/02/21 13:45*	*1*
Tetrachloro-m-xylene	*38*	*S1-*	*40 - 113*	*07/30/21 14:05*	*08/02/21 13:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	0.018	0.0059	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1221	ND		0.018	0.0064	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1232	ND		0.018	0.0044	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1242	ND		0.018	0.0027	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1248	ND		0.018	0.0044	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1254	ND		0.018	0.0054	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1260	ND		0.018	0.0052	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1262	ND		0.018	0.0064	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	08/02/21 09:20	08/03/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*124*		*31 - 150*	*08/02/21 09:20*	*08/03/21 16:37*	*1*
DCB Decachlorobiphenyl (Surr)	*121*		*31 - 150*	*08/02/21 09:20*	*08/03/21 16:37*	*1*
Tetrachloro-m-xylene (Surr)	*128*		*20 - 150*	*08/02/21 09:20*	*08/03/21 16:37*	*1*
Tetrachloro-m-xylene (Surr)	*119*		*20 - 150*	*08/02/21 09:20*	*08/03/21 16:37*	*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	0.012	mg/Kg	☼	08/03/21 07:00	08/06/21 09:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*66*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:22*	*1*
2,4-Dichlorophenylacetic acid	*63*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:22*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.1**		0.84	0.33	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Barium	**28**		17	0.91	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Beryllium	**0.21**	**J**	0.34	0.019	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Cadmium	**0.20**	**J**	0.42	0.031	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Chromium	**5.5**		0.42	0.35	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Copper	**23**		2.1	1.9	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Lead	**9.4**		0.84	0.43	mg/Kg	☼	08/05/21 13:03	08/06/21 10:59	1
Manganese	**440**		1.3	0.34	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Nickel	**4.9**		3.4	0.21	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Selenium	ND		0.84	0.44	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Silver	ND		0.42	0.089	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1
Zinc	**52**		1.7	1.3	mg/Kg	☼	08/04/21 09:59	08/05/21 11:53	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.029	0.018	mg/Kg	☼	08/03/21 11:10	08/05/21 13:07	1

Client Sample ID: SSHS-IRM5A2-SOD B

Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.2**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**91.8**		0.1	0.1	%			07/31/21 10:39	1
Hexavalent chromium	ND		0.44	0.23	mg/Kg	☼	08/02/21 14:33	08/05/21 13:10	1
Cyanide, Total	ND		0.54	0.30	mg/Kg	☼	08/04/21 16:12	08/04/21 18:42	1

Client Sample ID: SSHS-IRM5A2-SOD C

Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30
Matrix: Solid
Date Received: 07/30/21 09:00
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	**0.0037**	**J**	0.0076	0.0022	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Acenaphthylene	**0.028**		0.0076	0.0017	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Anthracene	**0.014**		0.0076	0.0020	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Benzo[a]anthracene	**0.057**		0.0076	0.0034	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Benzo[a]pyrene	**0.054**		0.0076	0.0033	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Benzo[b]fluoranthene	**0.085**		0.0076	0.0019	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Benzo[g,h,i]perylene	**0.049**		0.0076	0.0016	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Benzo[k]fluoranthene	**0.023**		0.0076	0.0023	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Chrysene	**0.052**		0.0076	0.0042	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Dibenz(a,h)anthracene	**0.015**		0.0076	0.0048	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Dibenzofuran	ND		0.037	0.0017	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
1,4-Dioxane	ND		0.076	0.012	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Fluoranthene	**0.055**		0.0076	0.0020	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Fluorene	**0.0019**	**J**	0.0076	0.0015	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Hexachlorobenzene	ND		0.0076	0.0027	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Indeno[1,2,3-cd]pyrene	**0.048**		0.0076	0.0038	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
2-Methylphenol	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Methylphenol, 3 & 4	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Naphthalene	ND		0.0076	0.0015	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Pentachlorophenol	ND		0.19	0.061	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Phenanthrene	**0.0077**		0.0076	0.0020	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Phenol	ND		0.037	0.011	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1
Pyrene	**0.047**		0.0076	0.0018	mg/Kg	☼	08/03/21 01:55	08/03/21 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*37 - 107*	*08/03/21 01:55*	*08/03/21 13:07*	*1*
2-Fluorophenol (Surr)	*71*		*38 - 106*	*08/03/21 01:55*	*08/03/21 13:07*	*1*
Nitrobenzene-d5 (Surr)	*73*		*41 - 112*	*08/03/21 01:55*	*08/03/21 13:07*	*1*
Phenol-d5 (Surr)	*78*		*40 - 110*	*08/03/21 01:55*	*08/03/21 13:07*	*1*
Terphenyl-d14 (Surr)	*93*		*32 - 115*	*08/03/21 01:55*	*08/03/21 13:07*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*22 - 116*	*08/03/21 01:55*	*08/03/21 13:07*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0019	0.00059	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
alpha-BHC	ND		0.0019	0.00047	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
beta-BHC	ND		0.0019	0.00052	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
cis-Chlordane	ND		0.0019	0.00048	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
4,4'-DDD	ND		0.0019	0.00082	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1

Client Sample ID: SSHS-IRM5A2-SOD C
Date Collected: 07/29/21 11:30
Date Received: 07/30/21 09:00

Lab Sample ID: 180-125116-10
Matrix: Solid
Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	ND		0.0019	0.00039	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
4,4'-DDT	ND		0.0019	0.0014	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
delta-BHC	ND		0.0019	0.00060	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Dieldrin	ND		0.0019	0.00048	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Endosulfan I	ND		0.0019	0.00052	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Endosulfan II	ND		0.0019	0.00042	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Endosulfan sulfate	ND		0.0019	0.00050	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Endrin	ND		0.0019	0.00036	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
gamma-BHC (Lindane)	ND		0.0019	0.00049	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1
Heptachlor	ND		0.0019	0.00060	mg/Kg	☼	07/30/21 14:05	08/02/21 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*94*		*35 - 144*	*07/30/21 14:05*	*08/02/21 14:01*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*35 - 144*	*07/30/21 14:05*	*08/02/21 14:01*	*1*
Tetrachloro-m-xylene	*93*		*40 - 113*	*07/30/21 14:05*	*08/02/21 14:01*	*1*
Tetrachloro-m-xylene	*91*		*40 - 113*	*07/30/21 14:05*	*08/02/21 14:01*	*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	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1221	ND		0.019	0.0067	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1232	ND		0.019	0.0046	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1242	ND		0.019	0.0028	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1248	ND		0.019	0.0045	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1254	ND		0.019	0.0057	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1260	ND		0.019	0.0054	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1262	ND		0.019	0.0066	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1
PCB-1268	ND		0.019	0.0025	mg/Kg	☼	08/02/21 09:20	08/03/21 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*31 - 150*	*08/02/21 09:20*	*08/03/21 17:55*	*1*
DCB Decachlorobiphenyl (Surr)	*100*		*31 - 150*	*08/02/21 09:20*	*08/03/21 17:55*	*1*
Tetrachloro-m-xylene (Surr)	*117*		*20 - 150*	*08/02/21 09:20*	*08/03/21 17:55*	*1*
Tetrachloro-m-xylene (Surr)	*108*		*20 - 150*	*08/02/21 09:20*	*08/03/21 17:55*	*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	0.012	mg/Kg	☼	08/03/21 07:00	08/06/21 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*60*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:42*	*1*
2,4-Dichlorophenylacetic acid	*57*		*48 - 127*	*08/03/21 07:00*	*08/06/21 09:42*	*1*

Method: EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.8**		0.79	0.31	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Barium	**23**		16	0.84	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Beryllium	**0.22**	**J**	0.31	0.018	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Cadmium	**0.19**	**J**	0.39	0.029	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Chromium	**6.7**		0.39	0.32	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Copper	**29**		2.0	1.8	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-1
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD C
Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.5**		0.83	0.42	mg/Kg	☼	08/05/21 13:03	08/06/21 11:13	1
Manganese	**280**		1.2	0.32	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Nickel	**5.7**		3.1	0.20	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Selenium	ND		0.79	0.41	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Silver	ND		0.39	0.083	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1
Zinc	**56**		1.6	1.2	mg/Kg	☼	08/04/21 09:59	08/05/21 11:57	1

Method: EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**	**J**	0.033	0.021	mg/Kg	☼	08/03/21 11:10	08/05/21 13:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.5**		0.1	0.1	%			07/31/21 10:39	1
Percent Solids	**86.5**		0.1	0.1	%			07/31/21 10:39	1
Hexavalent chromium	ND		0.46	0.25	mg/Kg	☼	08/02/21 14:33	08/05/21 13:11	1
Cyanide, Total	ND		0.48	0.26	mg/Kg	☼	08/04/21 16:12	08/04/21 18:44	1

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

Lab Sample ID: MB 180-366465/9 **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0039	mg/Kg			08/02/21 11:43	1
Benzene	ND		0.0050	0.0014	mg/Kg			08/02/21 11:43	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			08/02/21 11:43	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			08/02/21 11:43	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			08/02/21 11:43	1
Chloroform	ND		0.0050	0.0016	mg/Kg			08/02/21 11:43	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			08/02/21 11:43	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			08/02/21 11:43	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			08/02/21 11:43	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			08/02/21 11:43	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			08/02/21 11:43	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			08/02/21 11:43	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			08/02/21 11:43	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			08/02/21 11:43	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			08/02/21 11:43	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			08/02/21 11:43	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			08/02/21 11:43	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/02/21 11:43	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			08/02/21 11:43	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/02/21 11:43	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			08/02/21 11:43	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/02/21 11:43	1
Toluene	ND		0.0050	0.0014	mg/Kg			08/02/21 11:43	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			08/02/21 11:43	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			08/02/21 11:43	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			08/02/21 11:43	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/02/21 11:43	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			08/02/21 11:43	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			08/02/21 11:43	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			08/02/21 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*	*S1+*	*70 - 111*		*08/02/21 11:43*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 129*		*08/02/21 11:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*67 - 124*		*08/02/21 11:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*08/02/21 11:43*	*1*

Lab Sample ID: LCS 180-366465/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0400	0.0202		mg/Kg		50	28 - 150
Benzene	0.0400	0.0418		mg/Kg		104	73 - 123
2-Butanone (MEK)	0.0400	0.0318		mg/Kg		80	42 - 133
Carbon tetrachloride	0.0400	0.0397		mg/Kg		99	73 - 127
Chlorobenzene	0.0400	0.0394		mg/Kg		98	80 - 122
Chloroform	0.0400	0.0558	*+	mg/Kg		139	74 - 121

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

Lab Sample ID: LCS 180-366465/4
Matrix: Solid
Analysis Batch: 366465

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	0.0426		mg/Kg		107	77 - 124
1,2-Dichlorobenzene	0.0400	0.0435		mg/Kg		109	79 - 125
1,3-Dichlorobenzene	0.0400	0.0399		mg/Kg		100	80 - 125
1,4-Dichlorobenzene	0.0400	0.0476		mg/Kg		119	80 - 125
1,1-Dichloroethane	0.0400	0.0405		mg/Kg		101	69 - 126
1,2-Dichloroethane	0.0400	0.0371		mg/Kg		93	72 - 124
1,1-Dichloroethene	0.0400	0.0452		mg/Kg		113	62 - 134
1,4-Dioxane	0.800	0.694	J	mg/Kg		87	28 - 150
Ethylbenzene	0.0400	0.0394		mg/Kg		98	80 - 122
Methylene Chloride	0.0400	0.0465		mg/Kg		116	68 - 128
Methyl tert-butyl ether	0.0400	0.0404		mg/Kg		101	50 - 136
n-Butylbenzene	0.0400	0.0408		mg/Kg		102	73 - 135
N-Propylbenzene	0.0400	0.0421		mg/Kg		105	75 - 130
sec-Butylbenzene	0.0400	0.0398		mg/Kg		99	73 - 134
tert-Butylbenzene	0.0400	0.0487		mg/Kg		122	73 - 133
Tetrachloroethene	0.0400	0.0408		mg/Kg		102	77 - 125
Toluene	0.0400	0.0380		mg/Kg		95	78 - 121
trans-1,2-Dichloroethene	0.0400	0.0447		mg/Kg		112	74 - 125
1,1,1-Trichloroethane	0.0400	0.0407		mg/Kg		102	72 - 135
Trichloroethene	0.0400	0.0419		mg/Kg		105	75 - 124
1,2,4-Trimethylbenzene	0.0400	0.0406		mg/Kg		101	80 - 128
1,3,5-Trimethylbenzene	0.0400	0.0426		mg/Kg		107	75 - 131
Vinyl chloride	0.0400	0.0427		mg/Kg		107	53 - 144
Xylenes, Total	0.0800	0.0787		mg/Kg		98	80 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 111*
Dibromofluoromethane (Surr)	*107*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*95*		*67 - 124*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: LCSD 180-366465/5
Matrix: Solid
Analysis Batch: 366465

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	0.0230		mg/Kg		57	28 - 150	13	39
Benzene	0.0400	0.0420		mg/Kg		105	73 - 123	1	20
2-Butanone (MEK)	0.0400	0.0355		mg/Kg		89	42 - 133	11	34
Carbon tetrachloride	0.0400	0.0392		mg/Kg		98	73 - 127	1	20
Chlorobenzene	0.0400	0.0397		mg/Kg		99	80 - 122	1	20
Chloroform	0.0400	0.0551	*+	mg/Kg		138	74 - 121	1	20
cis-1,2-Dichloroethene	0.0400	0.0426		mg/Kg		107	77 - 124	0	20
1,2-Dichlorobenzene	0.0400	0.0469		mg/Kg		117	79 - 125	8	20
1,3-Dichlorobenzene	0.0400	0.0452		mg/Kg		113	80 - 125	13	20
1,4-Dichlorobenzene	0.0400	0.0443		mg/Kg		111	80 - 125	7	20
1,1-Dichloroethane	0.0400	0.0401		mg/Kg		100	69 - 126	1	20
1,2-Dichloroethane	0.0400	0.0380		mg/Kg		95	72 - 124	2	20

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

Lab Sample ID: LCSD 180-366465/5
Matrix: Solid
Analysis Batch: 366465

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	0.0448		mg/Kg		112	62 - 134	1	20
1,4-Dioxane			0.800	0.809	J	mg/Kg		101	28 - 150	15	35
Ethylbenzene			0.0400	0.0394		mg/Kg		99	80 - 122	0	20
Methylene Chloride			0.0400	0.0469		mg/Kg		117	68 - 128	1	22
Methyl tert-butyl ether			0.0400	0.0417		mg/Kg		104	50 - 136	3	22
n-Butylbenzene			0.0400	0.0419		mg/Kg		105	73 - 135	3	20
N-Propylbenzene			0.0400	0.0437		mg/Kg		109	75 - 130	4	20
sec-Butylbenzene			0.0400	0.0454		mg/Kg		114	73 - 134	13	20
tert-Butylbenzene			0.0400	0.0505		mg/Kg		126	73 - 133	4	20
Tetrachloroethene			0.0400	0.0390		mg/Kg		98	77 - 125	4	20
Toluene			0.0400	0.0370		mg/Kg		92	78 - 121	3	20
trans-1,2-Dichloroethene			0.0400	0.0435		mg/Kg		109	74 - 125	3	20
1,1,1-Trichloroethane			0.0400	0.0405		mg/Kg		101	72 - 135	1	20
Trichloroethene			0.0400	0.0426		mg/Kg		107	75 - 124	2	20
1,2,4-Trimethylbenzene			0.0400	0.0464		mg/Kg		116	80 - 128	13	20
1,3,5-Trimethylbenzene			0.0400	0.0449		mg/Kg		112	75 - 131	5	20
Vinyl chloride			0.0400	0.0417		mg/Kg		104	53 - 144	2	20
Xylenes, Total			0.0800	0.0787		mg/Kg		98	80 - 123	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 111*
Dibromofluoromethane (Surr)	*110*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*99*		*67 - 124*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: MB 180-366607/9
Matrix: Solid
Analysis Batch: 366607

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	0.0039	mg/Kg			08/03/21 11:13	1
Benzene	ND		0.0050	0.0014	mg/Kg			08/03/21 11:13	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			08/03/21 11:13	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			08/03/21 11:13	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			08/03/21 11:13	1
Chloroform	ND		0.0050	0.0016	mg/Kg			08/03/21 11:13	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			08/03/21 11:13	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			08/03/21 11:13	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			08/03/21 11:13	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			08/03/21 11:13	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			08/03/21 11:13	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			08/03/21 11:13	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			08/03/21 11:13	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			08/03/21 11:13	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			08/03/21 11:13	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			08/03/21 11:13	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			08/03/21 11:13	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/03/21 11:13	1

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

Lab Sample ID: MB 180-366607/9
Matrix: Solid
Analysis Batch: 366607

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		0.0050	0.0018	mg/Kg			08/03/21 11:13	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/03/21 11:13	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			08/03/21 11:13	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/03/21 11:13	1
Toluene	ND		0.0050	0.0014	mg/Kg			08/03/21 11:13	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			08/03/21 11:13	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			08/03/21 11:13	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			08/03/21 11:13	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/03/21 11:13	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			08/03/21 11:13	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			08/03/21 11:13	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			08/03/21 11:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 111*		*08/03/21 11:13*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 129*		*08/03/21 11:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*67 - 124*		*08/03/21 11:13*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*		*08/03/21 11:13*	*1*

Lab Sample ID: LCS 180-366607/4
Matrix: Solid
Analysis Batch: 366607

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	0.0207		mg/Kg		52	28 - 150
Benzene	0.0400	0.0392		mg/Kg		98	73 - 123
2-Butanone (MEK)	0.0400	0.0319		mg/Kg		80	42 - 133
Carbon tetrachloride	0.0400	0.0376		mg/Kg		94	73 - 127
Chlorobenzene	0.0400	0.0386		mg/Kg		97	80 - 122
Chloroform	0.0400	0.0555	*+	mg/Kg		139	74 - 121
cis-1,2-Dichloroethene	0.0400	0.0397		mg/Kg		99	77 - 124
1,2-Dichlorobenzene	0.0400	0.0412		mg/Kg		103	79 - 125
1,3-Dichlorobenzene	0.0400	0.0432		mg/Kg		108	80 - 125
1,4-Dichlorobenzene	0.0400	0.0444		mg/Kg		111	80 - 125
1,1-Dichloroethane	0.0400	0.0375		mg/Kg		94	69 - 126
1,2-Dichloroethane	0.0400	0.0368		mg/Kg		92	72 - 124
1,1-Dichloroethene	0.0400	0.0400		mg/Kg		100	62 - 134
1,4-Dioxane	0.800	0.758	J	mg/Kg		95	28 - 150
Ethylbenzene	0.0400	0.0385		mg/Kg		96	80 - 122
Methylene Chloride	0.0400	0.0423		mg/Kg		106	68 - 128
Methyl tert-butyl ether	0.0400	0.0402		mg/Kg		101	50 - 136
n-Butylbenzene	0.0400	0.0438		mg/Kg		109	73 - 135
N-Propylbenzene	0.0400	0.0438		mg/Kg		110	75 - 130
sec-Butylbenzene	0.0400	0.0437		mg/Kg		109	73 - 134
tert-Butylbenzene	0.0400	0.0427		mg/Kg		107	73 - 133
Tetrachloroethene	0.0400	0.0379		mg/Kg		95	77 - 125
Toluene	0.0400	0.0365		mg/Kg		91	78 - 121
trans-1,2-Dichloroethene	0.0400	0.0400		mg/Kg		100	74 - 125

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

Lab Sample ID: LCS 180-366607/4 **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366607

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			0.0400	0.0385		mg/Kg		96	72 - 135		
Trichloroethene			0.0400	0.0396		mg/Kg		99	75 - 124		
1,2,4-Trimethylbenzene			0.0400	0.0452		mg/Kg		113	80 - 128		
1,3,5-Trimethylbenzene			0.0400	0.0465		mg/Kg		116	75 - 131		
Vinyl chloride			0.0400	0.0337		mg/Kg		84	53 - 144		
Xylenes, Total			0.0800	0.0778		mg/Kg		97	80 - 123		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*	*S1+*	*70 - 111*
Dibromofluoromethane (Surr)	*115*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*104*		*67 - 124*
Toluene-d8 (Surr)	*105*		*80 - 129*

Lab Sample ID: LCSD 180-366607/5 **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366607

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			0.0400	0.0203		mg/Kg		51	28 - 150	2	39
Benzene			0.0400	0.0369		mg/Kg		92	73 - 123	6	20
2-Butanone (MEK)			0.0400	0.0292		mg/Kg		73	42 - 133	9	34
Carbon tetrachloride			0.0400	0.0357		mg/Kg		89	73 - 127	5	20
Chlorobenzene			0.0400	0.0365		mg/Kg		91	80 - 122	6	20
Chloroform			0.0400	0.0504	*+	mg/Kg		126	74 - 121	10	20
cis-1,2-Dichloroethene			0.0400	0.0370		mg/Kg		93	77 - 124	7	20
1,2-Dichlorobenzene			0.0400	0.0406		mg/Kg		102	79 - 125	1	20
1,3-Dichlorobenzene			0.0400	0.0401		mg/Kg		100	80 - 125	7	20
1,4-Dichlorobenzene			0.0400	0.0387		mg/Kg		97	80 - 125	14	20
1,1-Dichloroethane			0.0400	0.0356		mg/Kg		89	69 - 126	5	20
1,2-Dichloroethane			0.0400	0.0337		mg/Kg		84	72 - 124	9	20
1,1-Dichloroethene			0.0400	0.0381		mg/Kg		95	62 - 134	5	20
1,4-Dioxane			0.800	0.708	J	mg/Kg		89	28 - 150	7	35
Ethylbenzene			0.0400	0.0367		mg/Kg		92	80 - 122	5	20
Methylene Chloride			0.0400	0.0395		mg/Kg		99	68 - 128	7	22
Methyl tert-butyl ether			0.0400	0.0376		mg/Kg		94	50 - 136	7	22
n-Butylbenzene			0.0400	0.0430		mg/Kg		108	73 - 135	2	20
N-Propylbenzene			0.0400	0.0385		mg/Kg		96	75 - 130	13	20
sec-Butylbenzene			0.0400	0.0398		mg/Kg		100	73 - 134	9	20
tert-Butylbenzene			0.0400	0.0447		mg/Kg		112	73 - 133	5	20
Tetrachloroethene			0.0400	0.0362		mg/Kg		90	77 - 125	5	20
Toluene			0.0400	0.0346		mg/Kg		86	78 - 121	5	20
trans-1,2-Dichloroethene			0.0400	0.0380		mg/Kg		95	74 - 125	5	20
1,1,1-Trichloroethane			0.0400	0.0365		mg/Kg		91	72 - 135	5	20
Trichloroethene			0.0400	0.0380		mg/Kg		95	75 - 124	4	20
1,2,4-Trimethylbenzene			0.0400	0.0411		mg/Kg		103	80 - 128	9	20
1,3,5-Trimethylbenzene			0.0400	0.0395		mg/Kg		99	75 - 131	16	20
Vinyl chloride			0.0400	0.0310		mg/Kg		77	53 - 144	8	20
Xylenes, Total			0.0800	0.0745		mg/Kg		93	80 - 123	4	20

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

Lab Sample ID: LCSD 180-366607/5
Matrix: Solid
Analysis Batch: 366607

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*104*		*70 - 111*
Dibromofluoromethane (Surr)	*105*		*69 - 129*
1,2-Dichloroethane-d4 (Surr)	*97*		*67 - 124*
Toluene-d8 (Surr)	*98*		*80 - 129*

Lab Sample ID: MB 180-366822/1-A
Matrix: Solid
Analysis Batch: 366785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		1.0	0.20	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Benzene	ND		0.25	0.071	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
2-Butanone (MEK)	ND		0.25	0.13	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Carbon tetrachloride	ND		0.25	0.10	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Chlorobenzene	ND		0.25	0.065	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Chloroform	ND		0.25	0.081	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
cis-1,2-Dichloroethene	ND		0.25	0.076	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,2-Dichlorobenzene	ND		0.25	0.084	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,3-Dichlorobenzene	ND		0.25	0.15	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,4-Dichlorobenzene	ND		0.25	0.075	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,1-Dichloroethane	ND		0.25	0.080	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,2-Dichloroethane	ND		0.25	0.072	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,1-Dichloroethene	ND		0.25	0.11	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,4-Dioxane	ND		50	1.8	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Ethylbenzene	ND		0.25	0.093	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Methylene Chloride	ND		0.25	0.23	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Methyl tert-butyl ether	ND		0.25	0.074	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
n-Butylbenzene	ND		0.25	0.12	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
N-Propylbenzene	ND		0.25	0.089	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
sec-Butylbenzene	ND		0.25	0.12	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
tert-Butylbenzene	ND		0.25	0.11	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Tetrachloroethene	ND		0.25	0.10	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Toluene	ND		0.25	0.072	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
trans-1,2-Dichloroethene	ND		0.25	0.088	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,1,1-Trichloroethane	ND		0.25	0.084	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Trichloroethene	ND		0.25	0.079	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,2,4-Trimethylbenzene	ND		0.25	0.086	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
1,3,5-Trimethylbenzene	ND		0.25	0.093	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Vinyl chloride	ND		0.25	0.18	mg/Kg		08/04/21 07:34	08/04/21 12:52	1
Xylenes, Total	ND		0.50	0.36	mg/Kg		08/04/21 07:34	08/04/21 12:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*74*		*66 - 118*	*08/04/21 07:34*	*08/04/21 12:52*	*1*
Dibromofluoromethane (Surr)	*83*		*61 - 116*	*08/04/21 07:34*	*08/04/21 12:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*58 - 129*	*08/04/21 07:34*	*08/04/21 12:52*	*1*
Toluene-d8 (Surr)	*76*		*62 - 115*	*08/04/21 07:34*	*08/04/21 12:52*	*1*

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

Lab Sample ID: LCS 180-366822/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366785 **Prep Batch: 366822**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone			1.00	0.954	J	mg/Kg		95	25 - 150		
Benzene			0.500	0.477		mg/Kg		95	77 - 117		
2-Butanone (MEK)			1.00	1.08		mg/Kg		108	35 - 134		
Carbon tetrachloride			0.500	0.492		mg/Kg		98	61 - 135		
Chlorobenzene			0.500	0.445		mg/Kg		89	84 - 124		
Chloroform			0.500	0.527		mg/Kg		105	71 - 116		
cis-1,2-Dichloroethene			0.500	0.474		mg/Kg		95	71 - 119		
1,2-Dichlorobenzene			0.500	0.463		mg/Kg		93	76 - 116		
1,3-Dichlorobenzene			0.500	0.476		mg/Kg		95	77 - 117		
1,4-Dichlorobenzene			0.500	0.450		mg/Kg		90	80 - 120		
1,1-Dichloroethane			0.500	0.463		mg/Kg		93	62 - 119		
1,2-Dichloroethane			0.500	0.504		mg/Kg		101	60 - 139		
1,1-Dichloroethene			0.500	0.578		mg/Kg		116	58 - 127		
1,4-Dioxane			10.0	15.2	J *+	mg/Kg		152	10 - 150		
Ethylbenzene			0.500	0.483		mg/Kg		97	81 - 121		
Methylene Chloride			0.500	0.507		mg/Kg		101	65 - 128		
Methyl tert-butyl ether			0.500	0.534		mg/Kg		107	19 - 132		
n-Butylbenzene			0.500	0.509		mg/Kg		102	73 - 130		
N-Propylbenzene			0.500	0.461		mg/Kg		92	66 - 128		
sec-Butylbenzene			0.500	0.489		mg/Kg		98	64 - 128		
tert-Butylbenzene			0.500	0.472		mg/Kg		94	66 - 130		
Tetrachloroethene			0.500	0.447		mg/Kg		89	69 - 132		
Toluene			0.500	0.463		mg/Kg		93	83 - 123		
trans-1,2-Dichloroethene			0.500	0.445		mg/Kg		89	65 - 122		
1,1,1-Trichloroethane			0.500	0.467		mg/Kg		93	57 - 141		
Trichloroethene			0.500	0.461		mg/Kg		92	71 - 124		
1,2,4-Trimethylbenzene			0.500	0.497		mg/Kg		99	79 - 132		
1,3,5-Trimethylbenzene			0.500	0.490		mg/Kg		98	63 - 136		
Vinyl chloride			0.500	0.575		mg/Kg		115	47 - 140		
Xylenes, Total			1.00	0.949		mg/Kg		95	81 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*66 - 118*
Dibromofluoromethane (Surr)	*106*		*61 - 116*
1,2-Dichloroethane-d4 (Surr)	*114*		*58 - 129*
Toluene-d8 (Surr)	*101*		*62 - 115*

Lab Sample ID: LCSD 180-366822/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366785 **Prep Batch: 366822**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			1.00	0.969	J	mg/Kg		97	25 - 150	2	38
Benzene			0.500	0.463		mg/Kg		93	77 - 117	3	20
2-Butanone (MEK)			1.00	1.13		mg/Kg		113	35 - 134	5	32
Carbon tetrachloride			0.500	0.456		mg/Kg		91	61 - 135	8	23
Chlorobenzene			0.500	0.424		mg/Kg		85	84 - 124	5	20
Chloroform			0.500	0.499		mg/Kg		100	71 - 116	5	20

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

Lab Sample ID: LCSD 180-366822/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366785 **Prep Batch: 366822**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.500	0.458		mg/Kg		92	71 - 119	3	20
1,2-Dichlorobenzene	0.500	0.410		mg/Kg		82	76 - 116	12	20
1,3-Dichlorobenzene	0.500	0.423		mg/Kg		85	77 - 117	12	20
1,4-Dichlorobenzene	0.500	0.408		mg/Kg		82	80 - 120	10	20
1,1-Dichloroethane	0.500	0.447		mg/Kg		89	62 - 119	3	20
1,2-Dichloroethane	0.500	0.462		mg/Kg		92	60 - 139	9	20
1,1-Dichloroethene	0.500	0.558		mg/Kg		112	58 - 127	3	24
1,4-Dioxane	10.0	13.8	J	mg/Kg		138	10 - 150	10	40
Ethylbenzene	0.500	0.460		mg/Kg		92	81 - 121	5	20
Methylene Chloride	0.500	0.505		mg/Kg		101	65 - 128	0	30
Methyl tert-butyl ether	0.500	0.513		mg/Kg		103	19 - 132	4	25
n-Butylbenzene	0.500	0.409	*1	mg/Kg		82	73 - 130	22	20
N-Propylbenzene	0.500	0.475		mg/Kg		95	66 - 128	3	20
sec-Butylbenzene	0.500	0.422		mg/Kg		84	64 - 128	15	20
tert-Butylbenzene	0.500	0.438		mg/Kg		88	66 - 130	7	20
Tetrachloroethene	0.500	0.450		mg/Kg		90	69 - 132	1	20
Toluene	0.500	0.472		mg/Kg		94	83 - 123	2	21
trans-1,2-Dichloroethene	0.500	0.441		mg/Kg		88	65 - 122	1	20
1,1,1-Trichloroethane	0.500	0.445		mg/Kg		89	57 - 141	5	20
Trichloroethene	0.500	0.429		mg/Kg		86	71 - 124	7	20
1,2,4-Trimethylbenzene	0.500	0.458		mg/Kg		92	79 - 132	8	20
1,3,5-Trimethylbenzene	0.500	0.457		mg/Kg		91	63 - 136	7	20
Vinyl chloride	0.500	0.545		mg/Kg		109	47 - 140	5	32
Xylenes, Total	1.00	0.878		mg/Kg		88	81 - 121	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*66 - 118*
Dibromofluoromethane (Surr)	*103*		*61 - 116*
1,2-Dichloroethane-d4 (Surr)	*114*		*58 - 129*
Toluene-d8 (Surr)	*103*		*62 - 115*

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

Lab Sample ID: MB 180-366577/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366583 **Prep Batch: 366577**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Anthracene	ND		0.0067	0.0017	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Benzo[a]anthracene	ND		0.0067	0.0030	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Benzo[a]pyrene	ND		0.0067	0.0029	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Chrysene	ND		0.0067	0.0037	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Dibenz(a,h)anthracene	ND		0.0067	0.0043	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Dibenzofuran	ND		0.033	0.0015	mg/Kg		08/03/21 01:55	08/03/21 16:28	1

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

Lab Sample ID: MB 180-366577/1-A
Matrix: Solid
Analysis Batch: 366583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366577

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.067	0.010	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Fluorene	ND		0.0067	0.0013	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0033	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Phenol	ND		0.033	0.010	mg/Kg		08/03/21 01:55	08/03/21 16:28	1
Pyrene	ND		0.0067	0.0016	mg/Kg		08/03/21 01:55	08/03/21 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*37 - 107*	*08/03/21 01:55*	*08/03/21 16:28*	*1*
2-Fluorophenol (Surr)	*80*		*38 - 106*	*08/03/21 01:55*	*08/03/21 16:28*	*1*
Nitrobenzene-d5 (Surr)	*78*		*41 - 112*	*08/03/21 01:55*	*08/03/21 16:28*	*1*
Phenol-d5 (Surr)	*80*		*40 - 110*	*08/03/21 01:55*	*08/03/21 16:28*	*1*
Terphenyl-d14 (Surr)	*62*		*32 - 115*	*08/03/21 01:55*	*08/03/21 16:28*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*22 - 116*	*08/03/21 01:55*	*08/03/21 16:28*	*1*

Lab Sample ID: LCS 180-366577/2-A
Matrix: Solid
Analysis Batch: 366583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366577

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.606		mg/Kg		91	48 - 101
Acenaphthylene	0.667	0.596		mg/Kg		89	45 - 104
Anthracene	0.667	0.631		mg/Kg		95	50 - 111
Benzo[a]anthracene	0.667	0.612		mg/Kg		92	48 - 100
Benzo[a]pyrene	0.667	0.576		mg/Kg		86	48 - 106
Benzo[b]fluoranthene	0.667	0.616		mg/Kg		92	46 - 100
Benzo[g,h,i]perylene	0.667	0.604		mg/Kg		91	47 - 105
Benzo[k]fluoranthene	0.667	0.573		mg/Kg		86	46 - 107
Chrysene	0.667	0.574		mg/Kg		86	48 - 100
Dibenz(a,h)anthracene	0.667	0.657		mg/Kg		99	47 - 106
Dibenzofuran	0.667	0.606		mg/Kg		91	49 - 100
1,4-Dioxane	0.667	0.411		mg/Kg		62	37 - 106
Fluoranthene	0.667	0.656		mg/Kg		98	52 - 100
Fluorene	0.667	0.629		mg/Kg		94	49 - 100
Hexachlorobenzene	0.667	0.607		mg/Kg		91	47 - 100
Indeno[1,2,3-cd]pyrene	0.667	0.660		mg/Kg		99	48 - 105
2-Methylphenol	0.667	0.590		mg/Kg		89	50 - 100
Methylphenol, 3 & 4	0.667	0.607		mg/Kg		91	51 - 100
Naphthalene	0.667	0.597		mg/Kg		90	49 - 100
Pentachlorophenol	1.33	1.29		mg/Kg		97	31 - 100
Phenanthrene	0.667	0.613		mg/Kg		92	48 - 106
Phenol	0.667	0.581		mg/Kg		87	49 - 100

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

Lab Sample ID: LCS 180-366577/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366583 **Prep Batch: 366577**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pyrene			0.667	0.578		mg/Kg		87	47 - 100		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*37 - 107*
2-Fluorophenol (Surr)	*86*		*38 - 106*
Nitrobenzene-d5 (Surr)	*91*		*41 - 112*
Phenol-d5 (Surr)	*84*		*40 - 110*
Terphenyl-d14 (Surr)	*73*		*32 - 115*
2,4,6-Tribromophenol (Surr)	*96*		*22 - 116*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-366355/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366501 **Prep Batch: 366355**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
4,4'-DDD	ND		0.0017	0.00071	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Endosulfan sulfate	ND		0.0017	0.00043	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Endrin	ND		0.0017	0.00031	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		07/30/21 14:05	08/02/21 12:57	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		07/30/21 14:05	08/02/21 12:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*35 - 144*	*07/30/21 14:05*	*08/02/21 12:57*	*1*
DCB Decachlorobiphenyl (Surr)	*101*		*35 - 144*	*07/30/21 14:05*	*08/02/21 12:57*	*1*
Tetrachloro-m-xylene	*85*		*40 - 113*	*07/30/21 14:05*	*08/02/21 12:57*	*1*
Tetrachloro-m-xylene	*89*		*40 - 113*	*07/30/21 14:05*	*08/02/21 12:57*	*1*

Lab Sample ID: LCS 180-366355/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366501 **Prep Batch: 366355**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aldrin			0.0333	0.0334		mg/Kg		100	49 - 128		
alpha-BHC			0.0333	0.0331		mg/Kg		99	55 - 123		
beta-BHC			0.0333	0.0326		mg/Kg		98	48 - 125		
cis-Chlordane			0.0333	0.0299		mg/Kg		90	43 - 124		

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

Lab Sample ID: LCS 180-366355/2-A
Matrix: Solid
Analysis Batch: 366501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366355

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	0.0333	0.0349		mg/Kg		105	55 - 131
4,4'-DDE	0.0333	0.0418		mg/Kg		125	54 - 130
4,4'-DDT	0.0333	0.0246		mg/Kg		74	47 - 135
delta-BHC	0.0333	0.0312		mg/Kg		94	10 - 142
Dieldrin	0.0333	0.0333		mg/Kg		100	61 - 120
Endosulfan I	0.0333	0.0317		mg/Kg		95	46 - 128
Endosulfan II	0.0333	0.0308		mg/Kg		92	62 - 130
Endosulfan sulfate	0.0333	0.0360		mg/Kg		108	51 - 117
Endrin	0.0333	0.0336		mg/Kg		101	62 - 124
gamma-BHC (Lindane)	0.0333	0.0320		mg/Kg		96	54 - 127
Heptachlor	0.0333	0.0336		mg/Kg		101	42 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*92*		*35 - 144*
Tetrachloro-m-xylene	*89*		*40 - 113*
Tetrachloro-m-xylene	*86*		*40 - 113*

Lab Sample ID: 180-125116-10 MS
Matrix: Solid
Analysis Batch: 366501

Client Sample ID: SSHS-IRM5A2-SOD C
Prep Type: Total/NA
Prep Batch: 366355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		0.0381	0.0389		mg/Kg	☼	102	49 - 128
alpha-BHC	ND		0.0381	0.0391		mg/Kg	☼	103	55 - 123
beta-BHC	ND		0.0381	0.0371		mg/Kg	☼	98	48 - 125
cis-Chlordane	ND		0.0381	0.0353		mg/Kg	☼	93	43 - 124
4,4'-DDD	ND		0.0381	0.0363		mg/Kg	☼	95	55 - 131
4,4'-DDE	ND		0.0381	0.0489		mg/Kg	☼	129	54 - 130
4,4'-DDT	ND		0.0381	0.0311		mg/Kg	☼	82	47 - 135
delta-BHC	ND		0.0381	0.0375		mg/Kg	☼	99	10 - 142
Dieldrin	ND		0.0381	0.0383		mg/Kg	☼	101	61 - 120
Endosulfan I	ND		0.0381	0.0358		mg/Kg	☼	94	46 - 128
Endosulfan II	ND		0.0381	0.0353		mg/Kg	☼	93	62 - 130
Endosulfan sulfate	ND		0.0381	0.0399		mg/Kg	☼	105	51 - 117
Endrin	ND		0.0381	0.0371		mg/Kg	☼	98	62 - 124
gamma-BHC (Lindane)	ND		0.0381	0.0386		mg/Kg	☼	101	54 - 127
Heptachlor	ND		0.0381	0.0388		mg/Kg	☼	102	42 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*97*		*35 - 144*
Tetrachloro-m-xylene	*92*		*40 - 113*
Tetrachloro-m-xylene	*91*		*40 - 113*

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

Lab Sample ID: 180-125116-10 MSD **Client Sample ID: SSHS-IRM5A2-SOD C**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366501 **Prep Batch: 366355**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND		0.0378	0.0378		mg/Kg	☼	100	49 - 128	3	15
alpha-BHC	ND		0.0378	0.0370		mg/Kg	☼	98	55 - 123	6	15
beta-BHC	ND		0.0378	0.0362		mg/Kg	☼	96	48 - 125	3	17
cis-Chlordane	ND		0.0378	0.0341		mg/Kg	☼	90	43 - 124	4	15
4,4'-DDD	ND		0.0378	0.0370		mg/Kg	☼	98	55 - 131	2	15
4,4'-DDE	ND		0.0378	0.0476		mg/Kg	☼	126	54 - 130	3	15
4,4'-DDT	ND		0.0378	0.0309		mg/Kg	☼	82	47 - 135	1	15
delta-BHC	ND		0.0378	0.0360		mg/Kg	☼	95	10 - 142	4	15
Dieldrin	ND		0.0378	0.0377		mg/Kg	☼	100	61 - 120	1	15
Endosulfan I	ND		0.0378	0.0347		mg/Kg	☼	92	46 - 128	3	15
Endosulfan II	ND		0.0378	0.0356		mg/Kg	☼	94	62 - 130	1	15
Endosulfan sulfate	ND		0.0378	0.0388		mg/Kg	☼	103	51 - 117	3	15
Endrin	ND		0.0378	0.0373		mg/Kg	☼	99	62 - 124	0	15
gamma-BHC (Lindane)	ND		0.0378	0.0367		mg/Kg	☼	97	54 - 127	5	15
Heptachlor	ND		0.0378	0.0370		mg/Kg	☼	98	42 - 130	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*35 - 144*
DCB Decachlorobiphenyl (Surr)	*95*		*35 - 144*
Tetrachloro-m-xylene	*90*		*40 - 113*
Tetrachloro-m-xylene	*89*		*40 - 113*

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

Lab Sample ID: MB 180-366332/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366600 **Prep Batch: 366332**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1221	ND		0.017	0.0059	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1232	ND		0.017	0.0041	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1242	ND		0.017	0.0024	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1248	ND		0.017	0.0040	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1254	ND		0.017	0.0050	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1260	ND		0.017	0.0047	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1262	ND		0.017	0.0059	mg/Kg		08/02/21 09:20	08/03/21 16:17	1
PCB-1268	ND		0.017	0.0022	mg/Kg		08/02/21 09:20	08/03/21 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*31 - 150*	*08/02/21 09:20*	*08/03/21 16:17*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*31 - 150*	*08/02/21 09:20*	*08/03/21 16:17*	*1*
Tetrachloro-m-xylene (Surr)	*106*		*20 - 150*	*08/02/21 09:20*	*08/03/21 16:17*	*1*
Tetrachloro-m-xylene (Surr)	*99*		*20 - 150*	*08/02/21 09:20*	*08/03/21 16:17*	*1*

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

Lab Sample ID: LCS 180-366332/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366600 **Prep Batch: 366332**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			1.33	1.36		mg/Kg		102	61 - 125		
PCB-1260			1.33	1.39		mg/Kg		104	57 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*31 - 150*
DCB Decachlorobiphenyl (Surr)	*100*		*31 - 150*
Tetrachloro-m-xylene (Surr)	*109*		*20 - 150*
Tetrachloro-m-xylene (Surr)	*101*		*20 - 150*

Lab Sample ID: 180-125116-9 MS **Client Sample ID: SSHS-IRM5A2-SOD B**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366600 **Prep Batch: 366332**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1	1.41	1.78	F1	mg/Kg	☼	126	61 - 125		
PCB-1260	ND		1.41	1.55		mg/Kg	☼	110	57 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*107*		*31 - 150*
DCB Decachlorobiphenyl (Surr)	*106*		*31 - 150*
Tetrachloro-m-xylene (Surr)	*124*		*20 - 150*
Tetrachloro-m-xylene (Surr)	*119*		*20 - 150*

Lab Sample ID: 180-125116-9 MSD **Client Sample ID: SSHS-IRM5A2-SOD B**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 366600 **Prep Batch: 366332**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1	1.44	1.83	F1	mg/Kg	☼	127	61 - 125	3	40
PCB-1260	ND		1.44	1.70		mg/Kg	☼	118	57 - 122	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*100*		*31 - 150*
DCB Decachlorobiphenyl (Surr)	*99*		*31 - 150*
Tetrachloro-m-xylene (Surr)	*123*		*20 - 150*
Tetrachloro-m-xylene (Surr)	*116*		*20 - 150*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-366668/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 367096 **Prep Batch: 366668**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		08/03/21 07:00	08/06/21 07:45	1

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 180-366668/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367096 — **Prep Batch: 366668**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	56		48 - 127	08/03/21 07:00	08/06/21 07:45	1
2,4-Dichlorophenylacetic acid	53		48 - 127	08/03/21 07:00	08/06/21 07:45	1

Lab Sample ID: LCS 180-366668/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367096 — **Prep Batch: 366668**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Silvex (2,4,5-TP)			0.100	0.0456		mg/Kg		46	33 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	53		48 - 127
2,4-Dichlorophenylacetic acid	48		48 - 127

Lab Sample ID: LCSD 180-366668/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367274 — **Prep Batch: 366668**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silvex (2,4,5-TP)			0.100	0.0514		mg/Kg		51	33 - 140	12	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	56		48 - 127
2,4-Dichlorophenylacetic acid	57		48 - 127

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-366835/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367093 — **Prep Batch: 366835**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.39	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Barium	ND		20	1.1	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Beryllium	ND		0.40	0.023	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Cadmium	ND		0.50	0.036	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Chromium	ND		0.50	0.41	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Copper	ND		2.5	2.3	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Manganese	ND		1.5	0.41	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Nickel	ND		4.0	0.25	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Selenium	ND		1.0	0.52	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Silver	ND		0.50	0.11	mg/Kg		08/04/21 09:59	08/05/21 11:34	1
Zinc	ND		2.0	1.6	mg/Kg		08/04/21 09:59	08/05/21 11:34	1

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

Lab Sample ID: LCS 180-366835/2-A
Matrix: Solid
Analysis Batch: 367093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	103		mg/Kg		103	80 - 120
Barium	100	97.3		mg/Kg		97	80 - 120
Beryllium	50.0	50.1		mg/Kg		100	80 - 120
Cadmium	50.0	49.2		mg/Kg		98	80 - 120
Chromium	50.0	49.5		mg/Kg		99	80 - 120
Copper	50.0	48.7		mg/Kg		97	80 - 120
Manganese	50.0	48.7		mg/Kg		97	80 - 120
Nickel	50.0	49.3		mg/Kg		99	80 - 120
Selenium	100	94.8		mg/Kg		95	80 - 120
Silver	25.0	24.7		mg/Kg		99	80 - 120
Zinc	25.0	25.4		mg/Kg		102	80 - 120

Lab Sample ID: 180-125116-8 MS
Matrix: Solid
Analysis Batch: 367093

Client Sample ID: SSHS-IRM5A2-SOD A
Prep Type: Total/NA
Prep Batch: 366835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.8		93.3	89.6		mg/Kg	☼	93	75 - 125
Barium	28		93.3	121		mg/Kg	☼	99	75 - 125
Beryllium	0.21	J	46.6	42.6		mg/Kg	☼	91	75 - 125
Cadmium	0.19	J	46.6	42.0		mg/Kg	☼	90	75 - 125
Chromium	5.8		46.6	49.7		mg/Kg	☼	94	75 - 125
Copper	20		46.6	66.4		mg/Kg	☼	100	75 - 125
Manganese	430		46.6	598	4	mg/Kg	☼	351	75 - 125
Nickel	5.4		46.6	52.0		mg/Kg	☼	100	75 - 125
Selenium	ND		93.3	81.3		mg/Kg	☼	87	75 - 125
Silver	ND		23.3	21.3		mg/Kg	☼	91	75 - 125
Zinc	55	F1	23.3	90.8	F1	mg/Kg	☼	155	75 - 125

Lab Sample ID: 180-125116-8 MSD
Matrix: Solid
Analysis Batch: 367093

Client Sample ID: SSHS-IRM5A2-SOD A
Prep Type: Total/NA
Prep Batch: 366835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	2.8		93.3	87.4		mg/Kg	☼	91	75 - 125	3	20
Barium	28		93.3	115		mg/Kg	☼	93	75 - 125	5	20
Beryllium	0.21	J	46.6	41.7		mg/Kg	☼	89	75 - 125	2	20
Cadmium	0.19	J	46.6	41.3		mg/Kg	☼	88	75 - 125	2	20
Chromium	5.8		46.6	47.5		mg/Kg	☼	89	75 - 125	5	20
Copper	20		46.6	63.0		mg/Kg	☼	92	75 - 125	5	20
Manganese	430		46.6	523	4	mg/Kg	☼	191	75 - 125	13	20
Nickel	5.4		46.6	49.8		mg/Kg	☼	95	75 - 125	4	20
Selenium	ND		93.3	79.5		mg/Kg	☼	85	75 - 125	2	20
Silver	ND		23.3	20.9		mg/Kg	☼	90	75 - 125	2	20
Zinc	55	F1	23.3	85.4	F1	mg/Kg	☼	132	75 - 125	6	20

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

Lab Sample ID: MB 180-367063/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367205 — **Prep Batch: 367063**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.51	mg/Kg		08/05/21 13:03	08/06/21 10:18	1

Lab Sample ID: LCS 180-367063/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367205 — **Prep Batch: 367063**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	48.6		mg/Kg		97	80 - 120

Lab Sample ID: 180-125116-8 MS — **Client Sample ID: SSHS-IRM5A2-SOD A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367205 — **Prep Batch: 367063**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	12		51.2	61.5		mg/Kg	☼	97	75 - 125

Lab Sample ID: 180-125116-8 MSD — **Client Sample ID: SSHS-IRM5A2-SOD A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367205 — **Prep Batch: 367063**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	12		51.2	58.5		mg/Kg	☼	91	75 - 125	5	20

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-366695/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367072 — **Prep Batch: 366695**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		08/03/21 11:10	08/05/21 12:42	1

Lab Sample ID: LCS 180-366695/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 367072 — **Prep Batch: 366695**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.417	0.415		mg/Kg		99	80 - 120

Method: 2540G - SM 2540G

Lab Sample ID: 180-125116-10 DU — **Client Sample ID: SSHS-IRM5A2-SOD C**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 366399

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	13.5		13.1		%		3	10
Percent Solids	86.5		86.9		%		0.5	10

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-366566/1-A
Matrix: Solid
Analysis Batch: 367059

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366566

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		08/02/21 14:33	08/05/21 12:46	1

Lab Sample ID: LCSI 180-366566/3-A
Matrix: Solid
Analysis Batch: 367059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366566

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	722	599		mg/Kg		83	80 - 120

Lab Sample ID: LCSS 180-366566/2-A
Matrix: Solid
Analysis Batch: 367059

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366566

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent chromium	19.8	17.2		mg/Kg		87	80 - 120

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-366921/4-A
Matrix: Solid
Analysis Batch: 367144

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 366921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.27	mg/Kg		08/04/21 16:12	08/04/21 18:23	1

Lab Sample ID: HLCS 180-366921/2-A
Matrix: Solid
Analysis Batch: 367144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366921

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.250	0.259		mg/Kg		103	90 - 110

Lab Sample ID: LCS 180-366921/3-A
Matrix: Solid
Analysis Batch: 367144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	23.1	21.4		mg/Kg		93	17 - 163

Lab Sample ID: LLCS 180-366921/1-A
Matrix: Solid
Analysis Batch: 367144

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 366921

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0500	0.0493		mg/Kg		99	90 - 110

GC/MS VOA

Analysis Batch: 366465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-3	SSHS-IRM5A2-SOD 3	Total/NA	Solid	EPA 8260C	366497
180-125116-4	SSHS-IRM5A2-SOD 4	Total/NA	Solid	EPA 8260C	366497
180-125116-5	SSHS-IRM5A2-SOD 5	Total/NA	Solid	EPA 8260C	366497
180-125116-6	SSHS-IRM5A2-SOD 6	Total/NA	Solid	EPA 8260C	366497
MB 180-366465/9	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-366465/4	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-366465/5	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 366497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-3	SSHS-IRM5A2-SOD 3	Total/NA	Solid	5035	
180-125116-4	SSHS-IRM5A2-SOD 4	Total/NA	Solid	5035	
180-125116-5	SSHS-IRM5A2-SOD 5	Total/NA	Solid	5035	
180-125116-6	SSHS-IRM5A2-SOD 6	Total/NA	Solid	5035	

Analysis Batch: 366607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-1	SSHS-IRM5A2-SOD 1	Total/NA	Solid	EPA 8260C	366652
180-125116-7	SSHS-IRM5A2-SOD 7	Total/NA	Solid	EPA 8260C	366652
MB 180-366607/9	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-366607/4	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-366607/5	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 366652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-1	SSHS-IRM5A2-SOD 1	Total/NA	Solid	5035	
180-125116-7	SSHS-IRM5A2-SOD 7	Total/NA	Solid	5035	

Analysis Batch: 366785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-2	SSHS-IRM5A2-SOD 2	Total/NA	Solid	EPA 8260C	366822
MB 180-366822/1-A	Method Blank	Total/NA	Solid	EPA 8260C	366822
LCS 180-366822/2-A	Lab Control Sample	Total/NA	Solid	EPA 8260C	366822
LCSD 180-366822/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	366822

Prep Batch: 366822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-2	SSHS-IRM5A2-SOD 2	Total/NA	Solid	5035	
MB 180-366822/1-A	Method Blank	Total/NA	Solid	5035	
LCS 180-366822/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 180-366822/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 366577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3541	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3541	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3541	
MB 180-366577/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-366577/2-A	Lab Control Sample	Total/NA	Solid	3541	

GC/MS Semi VOA

Analysis Batch: 366583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 8270D LL	366577
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8270D LL	366577
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8270D LL	366577
MB 180-366577/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	366577
LCS 180-366577/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	366577

GC Semi VOA

Prep Batch: 366332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3541	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3541	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3541	
MB 180-366332/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-366332/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-125116-9 MS	SSHS-IRM5A2-SOD B	Total/NA	Solid	3541	
180-125116-9 MSD	SSHS-IRM5A2-SOD B	Total/NA	Solid	3541	

Prep Batch: 366355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3541	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3541	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3541	
MB 180-366355/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-366355/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-125116-10 MS	SSHS-IRM5A2-SOD C	Total/NA	Solid	3541	
180-125116-10 MSD	SSHS-IRM5A2-SOD C	Total/NA	Solid	3541	

Analysis Batch: 366501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 8081B	366355
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8081B	366355
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8081B	366355
MB 180-366355/1-A	Method Blank	Total/NA	Solid	EPA 8081B	366355
LCS 180-366355/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	366355
180-125116-10 MS	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8081B	366355
180-125116-10 MSD	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8081B	366355

Cleanup Batch: 366590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3665A	366332
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3665A	366332
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3665A	366332
180-125116-9 MS	SSHS-IRM5A2-SOD B	Total/NA	Solid	3665A	366332
180-125116-9 MSD	SSHS-IRM5A2-SOD B	Total/NA	Solid	3665A	366332

Cleanup Batch: 366591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3660B	366590
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3660B	366590
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3660B	366590

GC Semi VOA (Continued)

Cleanup Batch: 366591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-9 MS	SSHS-IRM5A2-SOD B	Total/NA	Solid	3660B	366590
180-125116-9 MSD	SSHS-IRM5A2-SOD B	Total/NA	Solid	3660B	366590

Analysis Batch: 366600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 8082A	366591
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8082A	366591
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8082A	366591
MB 180-366332/1-A	Method Blank	Total/NA	Solid	EPA 8082A	366332
LCS 180-366332/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	366332
180-125116-9 MS	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8082A	366591
180-125116-9 MSD	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8082A	366591

Prep Batch: 366668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	8151A	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	8151A	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	8151A	
MB 180-366668/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-366668/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-366668/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 367096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 8151A	366668
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 8151A	366668
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 8151A	366668
MB 180-366668/1-A	Method Blank	Total/NA	Solid	EPA 8151A	366668
LCS 180-366668/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	366668

Analysis Batch: 367274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-366668/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	366668

Metals

Prep Batch: 366695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	7471B	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	7471B	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	7471B	
MB 180-366695/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-366695/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 366835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3050B	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3050B	
MB 180-366835/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-366835/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 366835 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8 MS	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	
180-125116-8 MSD	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	

Prep Batch: 367063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3050B	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3050B	
MB 180-367063/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-367063/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-125116-8 MS	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	
180-125116-8 MSD	SSHS-IRM5A2-SOD A	Total/NA	Solid	3050B	

Analysis Batch: 367072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 7471B	366695
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 7471B	366695
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 7471B	366695
MB 180-366695/1-A	Method Blank	Total/NA	Solid	EPA 7471B	366695
LCS 180-366695/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	366695

Analysis Batch: 367093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	366835
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 6010C	366835
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 6010C	366835
MB 180-366835/1-A	Method Blank	Total/NA	Solid	EPA 6010C	366835
LCS 180-366835/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	366835
180-125116-8 MS	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	366835
180-125116-8 MSD	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	366835

Analysis Batch: 367205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	367063
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 6010C	367063
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 6010C	367063
MB 180-367063/1-A	Method Blank	Total/NA	Solid	EPA 6010C	367063
LCS 180-367063/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	367063
180-125116-8 MS	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	367063
180-125116-8 MSD	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 6010C	367063

General Chemistry

Analysis Batch: 366399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-1	SSHS-IRM5A2-SOD 1	Total/NA	Solid	2540G	
180-125116-2	SSHS-IRM5A2-SOD 2	Total/NA	Solid	2540G	
180-125116-3	SSHS-IRM5A2-SOD 3	Total/NA	Solid	2540G	
180-125116-4	SSHS-IRM5A2-SOD 4	Total/NA	Solid	2540G	
180-125116-5	SSHS-IRM5A2-SOD 5	Total/NA	Solid	2540G	
180-125116-6	SSHS-IRM5A2-SOD 6	Total/NA	Solid	2540G	

General Chemistry (Continued)

Analysis Batch: 366399 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-7	SSHS-IRM5A2-SOD 7	Total/NA	Solid	2540G	
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	2540G	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	2540G	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	2540G	
180-125116-10 DU	SSHS-IRM5A2-SOD C	Total/NA	Solid	2540G	

Prep Batch: 366566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	3060A	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	3060A	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	3060A	
MB 180-366566/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-366566/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-366566/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Prep Batch: 366921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	9010C	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	9010C	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	9010C	
MB 180-366921/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-366921/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-366921/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-366921/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 367059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 7196A	366566
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 7196A	366566
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 7196A	366566
MB 180-366566/1-A	Method Blank	Total/NA	Solid	EPA 7196A	366566
LCSI 180-366566/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	366566
LCSS 180-366566/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	366566

Analysis Batch: 367144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	EPA 9014	366921
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	EPA 9014	366921
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	EPA 9014	366921
MB 180-366921/4-A	Method Blank	Total/NA	Solid	EPA 9014	366921
HLCS 180-366921/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366921
LCS 180-366921/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366921
LLCS 180-366921/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	366921

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

IMPORT 1711

Client Information	Sampler: IAN MASONE	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 2409387056	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site- North	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

as previosuly discussed with Aron Krasnopoler
ID should be "IRM5A2" not "IRM52A"
D. Dunlap 7/30/21

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	537.1 (mod.) - SPLP-E, PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
SSHS-IRM52A - SOD1	7/29/21	1100	G	Solid	N		X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
SSHS-IRM52A - SOD2	7/29/21	1105	G		N		X	X	X	X	X	X	X	X	X	X				4	MM
SSHS-IRM52A - SOD3	7/29/21	1110	G				X													4	
SSHS-IRM52A - SOD4	7/29/21	1115	G				X													4	
SSHS-IRM52A - SOD5	7/29/21	1120	G				X													4	
SSHS-IRM52A - SOD6	7/29/21	1125	G				X													4	
SSHS-IRM52A - SOD7	7/29/21	1130	G				X													4	
SSHS-IRM52A - SODA	7/29/21	1100	COMP					X	X	X	X	X	X	X	X	X				5	
SSHS-IRM52A - SODB	7/29/21	1115	COMP					X	X	X	X	X	X	X	X	X				5	
SSHS-IRM52A - SODC	7/29/21	1130	COMP					X	X	X	X	X	X	X	X	X				5	

180-125116 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 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:

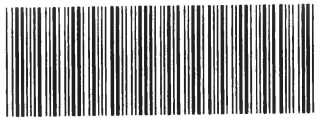
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] / Melanie	7/29/21 1700		[signature]	7/30/21 1900	ETA P.A
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019 8/9/2021

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes



180-125116 Field Sheet

Job: _____

Tracking # : 168951085313

SO / PO / FO / (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L-07 Corr. Factor: (+ / -) 0 °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal: Seal

Cooler ID: —

Temp Observed: 3.0 °C Corrected: 3.0 °C

From: Temp Blank ☐ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: JR Date: 7/31/21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Containers are not broken or leaking?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JR Date: 7/31/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☑	☐	☐

Initials: JR Date: 7/31/21

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-125116-1

Login Number: 125116
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 180-125116-2
Client Project/Site: Former Sperry Remington-Imported Sod

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

Attn: Mr. Aron Krasnopoler

Authorized for release by:
8/5/2021 7:42:19 AM

David Dunlap, Senior Project Manager
(412)963-2432
David.Dunlap@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

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: 180-125116-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-125116-2

Comments
Notation was made to the coc regarding changes to the sample IDs.

Receipt
The samples were received on 7/30/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5º C.

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

Definitions/Glossary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Qualifiers

LCMS

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Florida	NELAP	E87570	06-30-22
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-22
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	08-31-22
New Hampshire	NELAP	2997	04-18-22
New Jersey	NELAP	CA005	06-30-22
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-30-23
Texas	NELAP	T104704399-19-13	05-31-22
US Fish & Wildlife	US Federal Programs	58448	07-31-22
Utah	NELAP	CA000442021-12	03-01-22
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-22
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-125116-8	SSHS-IRM5A2-SOD A	Solid	07/29/21 11:00	07/30/21 09:00
180-125116-9	SSHS-IRM5A2-SOD B	Solid	07/29/21 11:15	07/30/21 09:00
180-125116-10	SSHS-IRM5A2-SOD C	Solid	07/29/21 11:30	07/30/21 09:00

Method Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD A — Lab Sample ID: 180-125116-8

Date Collected: 07/29/21 11:00 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 87.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.41 g	10.0 mL	512153	08/01/21 18:54	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			512744	08/04/21 04:52	JRB	TAL SAC
	Instrument ID: A17									

Client Sample ID: SSHS-IRM5A2-SOD B — Lab Sample ID: 180-125116-9

Date Collected: 07/29/21 11:15 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **Percent Solids: 91.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.11 g	10.0 mL	512153	08/01/21 18:54	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			512744	08/04/21 05:01	JRB	TAL SAC
	Instrument ID: A17									

Client Sample ID: SSHS-IRM5A2-SOD C — Lab Sample ID: 180-125116-10

Date Collected: 07/29/21 11:30 — **Matrix: Solid**
Date Received: 07/30/21 09:00 — **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	SHAKE			5.01 g	10.0 mL	512153	08/01/21 18:54	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			512744	08/04/21 05:10	JRB	TAL SAC
	Instrument ID: A17									

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:

Lab: TAL SAC

Batch Type: Prep

AM = Andrew Martin

Batch Type: Analysis

JRB = John Barnett

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD A
Lab Sample ID: 180-125116-8
Date Collected: 07/29/21 11:00
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 87.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.049	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.043	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.033	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.040	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorooctanoic acid (PFOA)	**0.060**	**J**	0.21	0.056	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorononanoic acid (PFNA)	**0.038**	**J**	0.21	0.023	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.051	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.045	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.039	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.040	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.21	0.052	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorooctanesulfonic acid (PFOS)	**0.097**	**J**	0.21	0.046	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.055	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.024	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.051	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
6:2 FTS	ND		0.21	0.029	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1
8:2 FTS	ND		0.21	0.037	ug/Kg	☼	08/01/21 18:54	08/04/21 04:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C5 PFPeA	*70*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C2 PFHxA	*65*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C4 PFHpA	*70*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C4 PFOA	*81*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C5 PFNA	*90*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C2 PFDA	*93*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C2 PFUnA	*87*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C2 PFDoA	*89*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C2 PFTeDA	*95*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C3 PFBS	*46*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
18O2 PFHxS	*74*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C4 PFOS	*73*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
13C8 FOSA	*76*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
d3-NMeFOSAA	*83*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
d5-NEtFOSAA	*94*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
M2-6:2 FTS	*118*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*
M2-8:2 FTS	*121*		*25 - 150*	*08/01/21 18:54*	*08/04/21 04:52*	*1*

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD B
Lab Sample ID: 180-125116-9
Date Collected: 07/29/21 11:15
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 91.8

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.049	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.044	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.033	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.040	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.056	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorononanoic acid (PFNA)	**0.035**	**J**	0.21	0.023	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.051	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.045	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.039	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.040	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.21	0.052	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorooctanesulfonic acid (PFOS)	**0.090**	**J**	0.21	0.046	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.055	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.025	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.051	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
6:2 FTS	ND		0.21	0.029	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1
8:2 FTS	ND		0.21	0.037	ug/Kg	☼	08/01/21 18:54	08/04/21 05:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*70*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C5 PFPeA	*74*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C2 PFHxA	*63*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C4 PFHpA	*68*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C4 PFOA	*79*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C5 PFNA	*93*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C2 PFDA	*89*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C2 PFUnA	*88*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C2 PFDoA	*91*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C2 PFTeDA	*91*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C3 PFBS	*47*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
18O2 PFHxS	*75*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C4 PFOS	*76*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
13C8 FOSA	*83*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
d3-NMeFOSAA	*92*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
d5-NEtFOSAA	*102*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
M2-6:2 FTS	*136*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*
M2-8:2 FTS	*146*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:01*	*1*

Client: Geosyntec Consultants, Inc.
Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

Client Sample ID: SSHS-IRM5A2-SOD C
Lab Sample ID: 180-125116-10
Date Collected: 07/29/21 11:30
Matrix: Solid
Date Received: 07/30/21 09:00
Percent Solids: 86.4

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.23	0.053	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.047	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.036	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.044	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorooctanoic acid (PFOA)	ND		0.23	0.061	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorononanoic acid (PFNA)	**0.034**	**J**	0.23	0.025	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.055	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.048	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.035	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.024	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.043	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.044	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.23	0.057	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorooctanesulfonic acid (PFOS)	**0.11**	**J**	0.23	0.050	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.060	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.038	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.027	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.055	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
6:2 FTS	ND		0.23	0.031	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1
8:2 FTS	ND		0.23	0.040	ug/Kg	☼	08/01/21 18:54	08/04/21 05:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*63*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C5 PFPeA	*63*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C2 PFHxA	*60*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C4 PFHpA	*65*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C4 PFOA	*78*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C5 PFNA	*81*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C2 PFDA	*85*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C2 PFUnA	*90*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C2 PFDoA	*81*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C2 PFTeDA	*83*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C3 PFBS	*45*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
18O2 PFHxS	*70*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C4 PFOS	*74*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
13C8 FOSA	*74*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
d3-NMeFOSAA	*82*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
d5-NEtFOSAA	*88*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
M2-6:2 FTS	*132*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*
M2-8:2 FTS	*138*		*25 - 150*	*08/01/21 18:54*	*08/04/21 05:10*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-512153/1-A
Matrix: Solid
Analysis Batch: 512279

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		0.20	0.049	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
6:2 FTS	ND		0.20	0.027	ug/Kg		08/01/21 18:54	08/02/21 11:45	1
8:2 FTS	ND		0.20	0.035	ug/Kg		08/01/21 18:54	08/02/21 11:45	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C5 PFPeA	*65*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C2 PFHxA	*67*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C4 PFHpA	*76*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C4 PFOA	*84*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C5 PFNA	*83*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C2 PFDA	*93*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C2 PFUnA	*95*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C2 PFDoA	*101*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C2 PFTeDA	*108*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C3 PFBS	*52*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
18O2 PFHxS	*82*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C4 PFOS	*86*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
13C8 FOSA	*86*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
d3-NMeFOSAA	*99*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
d5-NEtFOSAA	*107*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
M2-6:2 FTS	*93*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*
M2-8:2 FTS	*114*		*25 - 150*	*08/01/21 18:54*	*08/02/21 11:45*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-512153/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 512279 **Prep Batch: 512153**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.00	2.15		ug/Kg		107	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	2.35		ug/Kg		118	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	2.03		ug/Kg		102	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	2.18		ug/Kg		109	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	2.12		ug/Kg		106	72 - 132
Perfluorononanoic acid (PFNA)	2.00	1.94		ug/Kg		97	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	1.79		ug/Kg		89	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	1.85		ug/Kg		93	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	1.97		ug/Kg		99	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	1.84		ug/Kg		92	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	2.03		ug/Kg		102	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.77	1.92		ug/Kg		109	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.77		ug/Kg		97	62 - 122
Perfluoroheptanesulfonic Acid (PFHpS)	1.90	1.91		ug/Kg		100	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.96		ug/Kg		106	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	1.99		ug/Kg		103	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	1.99		ug/Kg		99	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.15		ug/Kg		107	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.95		ug/Kg		98	72 - 132
6:2 FTS	1.90	2.03		ug/Kg		107	73 - 139
8:2 FTS	1.92	2.07		ug/Kg		108	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*76*		*25 - 150*
13C5 PFPeA	*67*		*25 - 150*
13C2 PFHxA	*71*		*25 - 150*
13C4 PFHpA	*80*		*25 - 150*
13C4 PFOA	*86*		*25 - 150*
13C5 PFNA	*91*		*25 - 150*
13C2 PFDA	*96*		*25 - 150*
13C2 PFUnA	*102*		*25 - 150*
13C2 PFDoA	*100*		*25 - 150*
13C2 PFTeDA	*108*		*25 - 150*
13C3 PFBS	*56*		*25 - 150*
18O2 PFHxS	*80*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*92*		*25 - 150*
d3-NMeFOSAA	*102*		*25 - 150*
d5-NEtFOSAA	*113*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-512153/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 512279 **Prep Batch: 512153**

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	92		25 - 150
M2-8:2 FTS	107		25 - 150

QC Association Summary

Client: Geosyntec Consultants, Inc. Job ID: 180-125116-2
Project/Site: Former Sperry Remington-Imported Sod

LCMS

Prep Batch: 512153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	SHAKE	
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	SHAKE	
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	SHAKE	
MB 320-512153/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-512153/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 512279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-512153/1-A	Method Blank	Total/NA	Solid	537 (modified)	512153
LCS 320-512153/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	512153

Analysis Batch: 512744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-125116-8	SSHS-IRM5A2-SOD A	Total/NA	Solid	537 (modified)	512153
180-125116-9	SSHS-IRM5A2-SOD B	Total/NA	Solid	537 (modified)	512153
180-125116-10	SSHS-IRM5A2-SOD C	Total/NA	Solid	537 (modified)	512153

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

IMPORT 1711

Client Information	Sampler: IAN MASONE	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 2409387056	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4'th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 5 day			
State, Zip: MD, 21044				
Phone: 410-381-4333	PO #: MN0832I			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site- North	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

as previosuly discussed with Aron Krasnopoler
ID should be "IRM5A2" not "IRM52A"
D. Dunlap 7/30/21

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	537.1 (mod.) - SPLP-E, PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
SSHS-IRM52A - SOD1	7/29/21	1100	G	Solid	N		X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
SSHS-IRM52A - SOD2	7/29/21	1105	G		N		X	X	X	X	X	X	X	X	X	X				4	MM
SSHS-IRM52A - SOD3	7/29/21	1110	G				X													4	
SSHS-IRM52A - SOD4	7/29/21	1115	G				X													4	
SSHS-IRM52A - SOD5	7/29/21	1120	G				X													4	
SSHS-IRM52A - SOD6	7/29/21	1125	G				X													4	
SSHS-IRM52A - SOD7	7/29/21	1130	G				X													4	
SSHS-IRM52A - SODA	7/29/21	1100	COMP					X	X	X	X	X	X	X	X	X				5	
SSHS-IRM52A - SODB	7/29/21	1115	COMP					X	X	X	X	X	X	X	X	X				5	
SSHS-IRM52A - SODC	7/29/21	1130	COMP					X	X	X	X	X	X	X	X	X				5	

180-125116 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 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
[signature] / Melanie	7/29/21 1700		[signature]	7/30/21 1900	ETA P.A
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:

Ver: 01/16/2019 8/5/2021

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

180-125116 Field Sheet

Job: _____

Tracking # : 168951085313

SO / PO / FO / (SAT) / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L-07 Corr. Factor: (+ / -) 0 °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal: Seal

Cooler ID: —

Temp Observed: 3.0 °C Corrected: 3.0 °C

From: Temp Blank ☐ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: JR Date: 7/31/21

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample custody seal?	☐	☐	☒
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JR Date: 7/31/21

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☐	☐	☒
Log Release checked in TALS?	☒	☐	☐

Initials: JR Date: 7/31/21

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-125116-2

Login Number: 125116
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 180-125116-2

Login Number: 125116
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 07/31/21 01:57 PM

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	Seal
Sample custody seals, if present, are intact.	N/A	
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	3.0c
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	Received project as a subcontract.
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.	N/A	
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	

Miranda Stelmach

From: Howe, Alexander <alexander.howe@wsp.com>
Sent: Wednesday, May 10, 2023 4:27 PM
To: Aron Krasnopoler; Schneider, Timothy A (DEC); Bogardus, Sara (HEALTH); david.pratt@dec.ny.gov; Zappia, Kaleigh M (DEC); McCartney, W Scott; Bonsteel, Nicole; Whelan, Vincent
Cc: Etter, Terry R.; Jen Huha; Amanda McNally; Miranda Stelmach; Lawrence Endicott; Kyle Cunningham; 'cyrs (cyrs@hunt-eas.com)'; mdunn; Mike Fulkerson; Andrew Millspaugh; Amanda Castignetti; Grasmeyer, Luke
Subject: RE: NYSDEC #c808022 - DER-10 Request to Import Breesport Pit Sand

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you have any suspicion, please confirm with the sender verbally that this email is authentic. If you suspect fraud, click "Phish Alert Report."

Hello Aron,

We have reviewed your request to import 5,000 cubic yards of sand from Edger Breesport Pit located in Erin, NY and find it appropriate documentation to proceed.

Regards,

Alex

Alexander Howe, PG
Senior Geologist

M+ 1 207-776-8242

From: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>
Sent: Friday, May 5, 2023 3:48 PM
To: Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; david.pratt@dec.ny.gov; Zappia, Kaleigh M (DEC) <Kaleigh.Zappia@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; Bonsteel, Nicole <nicole.bonsteel@wsp.com>; Howe, Alexander <alexander.howe@wsp.com>; Whelan, Vincent <vincent.whelan@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Jen Huha <JHuha@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Lawrence Endicott <larry.endicott@keller-na.com>; Kyle Cunningham <kyle.cunningham@reconservices.com>; 'cyrs (cyrs@hunt-eas.com)' <cyrs@hunt-eas.com>; mdunn <mdunn@buildwelliver.com>; Mike Fulkerson <mfulkerson@buildwelliver.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>
Subject: NYSDEC #c808022 - DER-10 Request to Import Breesport Pit Sand

Hi Alex,

Please find attached a request to import 5,000 cubic yards of sand from the Edger Breesport Pit . Sand will be used for "clean" sand backfill beneath the infiltration galley and as bedding material for utilities.

Best Regards,
Aron

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Senior Engineer

10211 Wincopin Circle, 4th Floor
Columbia, MD 21044
Phone: 410-381-4333
Fax: 410-381-4499
Mobile: 202-550-7724

www.geosyntec.com

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-LAEmHhHzdJzBITWfa4Hgs7pbKI

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: 5,000

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? no

Does it contain less than 10%, by weight, material that would pass a size 80 sieve? no

Is this virgin material from a permitted mine or quarry? yes

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:

Discrete samples were analyzed for VOCs and composite samples were analyzed for SVOCs, inorganics, PCBs, pesticides, herbicides, and PFAS.

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):

Concentrations of VOCs, SVOCs, inorganics, PCBs, pesticides, herbicides, and PFAS were below DER-10 Appendix 5 Allowable Levels for Restricted Residential Use and Protection of Groundwater standards. See attached table.

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:

Blackwell Pit, St. Rte. 223, Erin, NY 14838

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

NYSDEC Permit ID 8-0732-00004/00001 (Mined Land ID 80024) Expiration 09/26/2026

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 Lab Report Nos. 180-153774-1 and 180-153774-2
Data validation is pending

The information provided on this form is accurate and complete.

	5 May 2023
Signature	Date
Aron Krasnopoler	
Print Name	
B&B Engineers and Geologists of New York, P.C.	
Firm	

Table 1
NAF Restoration Import Fill Data - Sand
Former Sperry Remington Site - North Portion
Elmira, NY

					Sample Name	NAFREST-BRP-SAND1A	NAFREST-BRP-SAND1B	NAFREST-BRP-SAND1C	NAFREST-BRP-SAND1D	NAFREST-BRP-SAND1E	NAFREST-BRP-SAND1F	NAFREST-BRP-SAND1G	NAFREST-BRP-SAND1H	NAFREST-BRP-SAND1I	NAFREST-BRP-SAND2A	NAFREST-BRP-SAND2A
					Location	NAFREST-BRP-SAND1A	NAFREST-BRP-SAND1B	NAFREST-BRP-SAND1C	NAFREST-BRP-SAND1D	NAFREST-BRP-SAND1E	NAFREST-BRP-SAND1F	NAFREST-BRP-SAND1G	NAFREST-BRP-SAND1H	NAFREST-BRP-SAND1I	NAFREST-BRP-DUP1A	NAFREST-BRP-SAND2A
					Sample Date	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023
					Lab Report	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-2	180-153774-2	180-153774-1	180-153774-1
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted											
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorobutanesulfonic acid (PFBS)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorobutanoic acid (PFBA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorodecanesulfonic acid (PFDS)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorodecanoic acid (PFDA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorododecanoic acid (PFDoA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluoroheptanoic acid (PFHpA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorohexanoic acid (PFHxA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorononanoic acid (PFNA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorooctanesulfonamide (PFOSA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	3.7	3.7	0.88	--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorooctanoic acid (PFOA)	ug/kg	1.1	1.1	0.66	--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluoropentanoic acid (PFPeA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorotetradecanoic acid (PFTeA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluorotridecanoic acid (PFTriA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
	Perfluoroundecanoic acid (PFUnA)	ug/kg				--	--	--	--	--	--	--	< 0.21 U	< 0.21 U	--	--
Metals	Arsenic	mg/kg	16	16	13	--	--	--	--	--	--	--	14	4.8	--	--
	Barium	mg/kg	820	400	350	--	--	--	--	--	--	--	120	31	--	--
	Beryllium	mg/kg	47	47	7.2	--	--	--	--	--	--	--	0.81	0.25	--	--
	Cadmium	mg/kg	7.5	4.3	2.5	--	--	--	--	--	--	--	0.16 J	0.049 J	--	--
	Chromium (III+VI)	mg/kg	19	36	22	--	--	--	--	--	--	--	13	8.8	--	--
	Chromium, Hexavalent	mg/kg	19	19	1	--	--	--	--	--	--	--	< 0.43 U	< 0.44 U	--	--
	Copper	mg/kg	1720	270	50	--	--	--	--	--	--	--	23	18	--	--
	Cyanide Total	mg/kg	40	27	27	--	--	--	--	--	--	--	< 0.31 U	< 0.35 U	--	--
	Lead	mg/kg	450	400	63	--	--	--	--	--	--	--	17	7.6	--	--
	Manganese	mg/kg	2000	2000	1600	--	--	--	--	--	--	--	710	270	--	--
	Mercury	mg/kg	0.73	0.73	0.18	--	--	--	--	--	--	--	< 0.026 U	< 0.028 U	--	--
	Nickel	mg/kg	130	130	30	--	--	--	--	--	--	--	27	17	--	--
	Selenium	mg/kg	4	4	3.9	--	--	--	--	--	--	--	0.40 J	< 0.51 U	--	--
	Silver	mg/kg	8.3	8.3	2	--	--	--	--	--	--	--	< 0.31 U	< 0.26 U	--	--
	Zinc	mg/kg	2480	2480	109	--	--	--	--	--	--	--	46	41	--	--
Herbicides	2,4,5-TP (Silvex)	mg/kg		3.8	3.8	--	--	--	--	--	--	--	< 0.022 U	< 0.021 U	--	--
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	14	13	0.0033	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	4,4'-DDE (p,p'-DDE)	mg/kg	17	8.9	0.0033	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	4,4'-DDT (p,p'-DDT)	mg/kg	136	7.9	0.0033	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Aldrin	mg/kg	0.19	0.097	0.005	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	alpha-BHC	mg/kg	0.02	0.02	0.02	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	alpha-Chlordane	mg/kg	2.9			--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	beta-BHC	mg/kg	0.09	0.09	0.036	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	delta-BHC	mg/kg	0.25	0.25	0.04	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Dieldrin	mg/kg	0.1	0.1	0.005	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Endosulfan I (alpha)	mg/kg	102	24	2.4	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Endosulfan II (beta)	mg/kg	102	24	2.4	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Endosulfan Sulfate	mg/kg	1000	24	2.4	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Endrin	mg/kg	0.06	0.06	0.014	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	0.1	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
	Heptachlor	mg/kg	0.38	0.38	0.042	--	--	--	--	--	--	--	< 0.0018 U	< 0.0018 U	--	--
PCBs	Aroclor 1016	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1221	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1232	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1242	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1248	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1254	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1260	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1262	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	Aroclor 1268	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
	PCBs	mg/kg	3.2	1	0.1	--	--	--	--	--	--	--	< 0.018 U	< 0.018 U	--	--
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	0.1	--	--	--	--	--	--	--	< 0.070 U	< 0.072 U	--	--
	2-Methylphenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	< 0.035 U	< 0.036 U	--	--
	4-methylphenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	< 0.035 U	< 0.036 U	--	--
	Acenaphthene	mg/kg	98	98	20	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Acenaphthylene	mg/kg	107	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Anthracene	mg/kg	1000	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Benz(a)anthracene	mg/kg	1	1	1	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Benzo(a)pyrene (BaP)	mg/kg	22	1	1	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Benzo(b)fluoranthene	mg/kg	1.7	1	1	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Benzo(g,h,i)perylene	mg/kg	1000	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Benzo(k)fluoranthene	mg/kg	1.7	1.7	0.8	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Chrysene	mg/kg	1	1	1	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Dibenz(a,h)anthracene	mg/kg	1000	0.33	0.33	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Dibenzofuran	mg/kg	210	59	7	--	--	--	--	--	--	--	< 0.035 U	< 0.036 U	--	--
	Fluoranthene	mg/kg	1000	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Fluorene	mg/kg	386	100	30	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Hexachlorobenzene	mg/kg	3.2	1.2	0.33	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Indeno (1,2,3-cd)pyrene	mg/kg	8.2	0.5	0.5	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Naphthalene	mg/kg	12	12	12	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Pentachlorophenol	mg/kg	0.8	0.8	0.8	--	--	--	--	--	--	--	< 0.18 U	< 0.18 U	--	--
	Phenanthrene	mg/kg	1000	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--
	Phenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	< 0.035 U	< 0.036 U	--	--
	Pyrene	mg/kg	1000	100	100	--	--	--	--	--	--	--	< 0.0071 U	< 0.0072 U	--	--

						Sample Name	NAFREST-BRP-SAND2B	NAFREST-BRP-SAND2B	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND3A	NAFREST-BRP-SAND3B	NAFREST-BRP-SAND3C	NAFREST-BRP-SAND4A	NAFREST-BRP-SAND4B	NAFREST-BRP-SAND4C	NAFREST-BRP-SAND5A
						Location	NAFREST-BRP-DUP1B	NAFREST-BRP-SAND2B	NAFREST-BRP-DUP1C	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND3A	NAFREST-BRP-SAND3B	NAFREST-BRP-SAND3C	NAFREST-BRP-SAND4A	NAFREST-BRP-SAND4B	NAFREST-BRP-SAND4C	NAFREST-BRP-SAND5A
						Sample Date	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023
						Lab Report	180-153774-1	180-153774-1	180-153774-2	180-153774-2	180-153774-1	180-153774-1	180-153774-2	180-153774-1	180-153774-1	180-153774-2	180-153774-1
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted												
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorobutanesulfonic acid (PFBS)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorobutanoic acid (PFBA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorodecanesulfonic acid (PFDS)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorodecanoic acid (PFDA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorododecanoic acid (PFDoA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluoroheptanoic acid (PFHpA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorohexanoic acid (PFHxA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorononanoic acid (PFNA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorooctanesulfonamide (PFOSA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	3.7	3.7	0.88	--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorooctanoic acid (PFOA)	ug/kg	1.1	1.1	0.66	--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluoropentanoic acid (PFPeA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorotetradecanoic acid (PFTeA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluorotridecanoic acid (PFTriA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
	Perfluoroundecanoic acid (PFUnA)	ug/kg				--	--	< 0.21 U	< 0.21 U	--	--	< 0.21 U	--	--	--	< 0.20 U	--
Metals	Arsenic	mg/kg	16	16	13	--	--	5.0	4.4	--	--	5.5	--	--	6.8	--	
	Barium	mg/kg	820	400	350	--	--	34	37	--	--	42	--	--	35 T	--	
	Beryllium	mg/kg	47	47	7.2	--	--	0.27 J	0.28	--	--	0.33 J	--	--	0.28	--	
	Cadmium	mg/kg	7.5	4.3	2.5	--	--	0.061 J	0.075 J	--	--	0.080 J	--	--	0.088 J	--	
	Chromium (III+VI)	mg/kg	19	36	22	--	--	9.0	9.9	--	--	11	--	--	9.8 T	--	
	Chromium, Hexavalent	mg/kg	19	19	1	--	--	< 0.43 U	< 0.44 U	--	--	< 0.43 U	--	--	< 0.43 U	--	
	Copper	mg/kg	1720	270	50	--	--	23	24	--	--	27	--	--	26	--	
	Cyanide Total	mg/kg	40	27	27	--	--	< 0.22 U	< 0.35 U	--	--	< 0.27 U	--	--	< 0.36 U	--	
	Lead	mg/kg	450	400	63	--	--	7.8	7.7	--	--	9.0	--	--	8.7 T	--	
	Manganese	mg/kg	2000	2000	1600	--	--	270	320	--	--	350	--	--	400 T	--	
	Mercury	mg/kg	0.73	0.73	0.18	--	--	< 0.030 U	< 0.035 U	--	--	< 0.032 U	--	--	< 0.029 U	--	
	Nickel	mg/kg	130	130	30	--	--	17	19	--	--	22	--	--	19 T	--	
	Selenium	mg/kg	4	4	3.9	--	--	< 0.70 U	0.46 J	--	--	< 0.90 U	--	--	0.28 J	--	
	Silver	mg/kg	8.3	8.3	2	--	--	< 0.35 U	< 0.31 U	--	--	< 0.45 U	--	--	< 0.28 U	--	
	Zinc	mg/kg	2480	2480	109	--	--	47	50	--	--	61	--	--	54 T	--	
Herbicides	2,4,5-TP (Silvex)	mg/kg		3.8	3.8	--	--	< 0.022 U	< 0.022 U	--	--	< 0.021 U	--	--	< 0.021 U	--	
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	14	13	0.0033	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	4,4'-DDE (p,p'-DDE)	mg/kg	17	8.9	0.0033	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	4,4'-DDT (p,p'-DDT)	mg/kg	136	7.9	0.0033	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	Aldrin	mg/kg	0.19	0.097	0.005	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	alpha-BHC	mg/kg	0.02	0.02	0.02	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	alpha-Chlordane	mg/kg	2.9			--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	beta-BHC	mg/kg	0.09	0.09	0.036	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	delta-BHC	mg/kg	0.25	0.25	0.04	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	Dieldrin	mg/kg	0.1	0.1	0.005	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	Endosulfan I (alpha)	mg/kg	102	24	2.4	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	Endosulfan II (beta)	mg/kg	102	24	2.4	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 UT	--	
	Endosulfan Sulfate	mg/kg	1000	24	2.4	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 UT	--	
	Endrin	mg/kg	0.06	0.06	0.014	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	0.1	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
	Heptachlor	mg/kg	0.38	0.38	0.042	--	--	< 0.0018 U	< 0.0018 U	--	--	< 0.0018 U	--	--	< 0.0018 U	--	
PCBs	Aroclor 1016	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1221	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1232	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1242	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1248	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1254	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1260	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 UT	--	
	Aroclor 1262	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	Aroclor 1268	mg/kg	NS	NS	NS	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
	PCBs	mg/kg	3.2	1	0.1	--	--	< 0.017 U	< 0.018 U	--	--	< 0.018 U	--	--	< 0.017 U	--	
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	0.1	--	--	< 0.070 U	< 0.071 U	--	--	< 0.070 U	--	--	< 0.071 U	--	
	2-Methylphenol	mg/kg	0.33	0.33	0.33	--	--	< 0.035 U	< 0.035 U	--	--	< 0.035 U	--	--	< 0.035 UT	--	
	4-methylphenol	mg/kg	0.33	0.33	0.33	--	--	< 0.035 U	< 0.035 U	--	--	< 0.035 U	--	--	< 0.035 U	--	
	Acenaphthene	mg/kg	98	98	20	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Acenaphthylene	mg/kg	107	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 UT	--	
	Anthracene	mg/kg	1000	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Benz(a)anthracene	mg/kg	1	1	1	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Benzo(a)pyrene (BaP)	mg/kg	22	1	1	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Benzo(b)fluoranthene	mg/kg	1.7	1	1	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Benzo(g,h,i)perylene	mg/kg	1000	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Benzo(k)fluoranthene	mg/kg	1.7	1.7	0.8	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Chrysene	mg/kg	1	1	1	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Dibenz(a,h)anthracene	mg/kg	1000	0.33	0.33	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Dibenzofuran	mg/kg	210	59	7	--	--	< 0.035 U	< 0.035 U	--	--	< 0.035 U	--	--	< 0.035 UT	--	
	Fluoranthene	mg/kg	1000	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Fluorene	mg/kg	386	100	30	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Hexachlorobenzene	mg/kg	3.2	1.2	0.33	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 UT	--	
	Indeno (1,2,3-cd)pyrene	mg/kg	8.2	0.5	0.5	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 UT	--	
	Naphthalene	mg/kg	12	12	12	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	
	Pentachlorophenol	mg/kg	0.8	0.8	0.8	--	--	< 0.18 U	< 0.18 U	--	--	< 0.18 U	--	--	< 0.18 UT	--	
	Phenanthrene	mg/kg	1000	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 UT	--	
	Phenol	mg/kg	0.33	0.33	0.33	--	--	< 0.035 U	< 0.035 U	--	--	< 0.035 U	--	--	< 0.035 U	--	
	Pyrene	mg/kg	1000	100	100	--	--	< 0.0071 U	< 0.0071 U	--	--	< 0.0071 U	--	--	< 0.0072 U	--	

Table 1
NAF Restoration Import Fill Data - Sand
Former Sperry Remington Site - North Portion
Elmira, NY

					Sample Name	NAFREST-BRP-SAND5B	NAFREST-BRP-SAND5C
					Location	NAFREST-BRP-SAND5B	NAFREST-BRP-SAND5C
					Sample Date	3/17/2023	3/17/2023
					Lab Report	180-153774-1	180-153774-2
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted		
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg				--	< 0.22 U
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg				--	< 0.22 U
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg				--	< 0.22 U
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg				--	< 0.22 U
	Perfluorobutanesulfonic acid (PFBS)	ug/kg				--	< 0.22 U
	Perfluorobutanoic acid (PFBA)	ug/kg				--	< 0.22 U
	Perfluorodecanesulfonic acid (PFDS)	ug/kg				--	< 0.22 U
	Perfluorodecanoic acid (PFDA)	ug/kg				--	< 0.22 U
	Perfluorododecanoic acid (PFDoA)	ug/kg				--	< 0.22 U
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg				--	< 0.22 U
	Perfluoroheptanoic acid (PFHpA)	ug/kg				--	< 0.22 U
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg				--	< 0.22 U
	Perfluorohexanoic acid (PFHxA)	ug/kg				--	< 0.22 U
	Perfluorononanoic acid (PFNA)	ug/kg				--	< 0.22 U
	Perfluorooctanesulfonamide (PFOSA)	ug/kg				--	< 0.22 U
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	3.7	3.7	0.88	--	< 0.22 U
	Perfluorooctanoic acid (PFOA)	ug/kg	1.1	1.1	0.66	--	< 0.22 U
	Perfluoropentanoic acid (PFPeA)	ug/kg				--	< 0.22 U
	Perfluorotetradecanoic acid (PFTeA)	ug/kg				--	< 0.22 U
	Perfluorotridecanoic acid (PFTriA)	ug/kg				--	< 0.22 U
	Perfluoroundecanoic acid (PFUnA)	ug/kg				--	< 0.22 U
Metals	Arsenic	mg/kg	16	16	13	--	5.2
	Barium	mg/kg	820	400	350	--	35
	Beryllium	mg/kg	47	47	7.2	--	0.29
	Cadmium	mg/kg	7.5	4.3	2.5	--	0.069 J
	Chromium (III+VI)	mg/kg	19	36	22	--	9.5
	Chromium, Hexavalent	mg/kg	19	19	1	--	< 0.43 U
	Copper	mg/kg	1720	270	50	--	22
	Cyanide Total	mg/kg	40	27	27	--	< 0.29 U
	Lead	mg/kg	450	400	63	--	12
	Manganese	mg/kg	2000	2000	1600	--	310
	Mercury	mg/kg	0.73	0.73	0.18	--	< 0.027 U
	Nickel	mg/kg	130	130	30	--	19
	Selenium	mg/kg	4	4	3.9	--	< 0.59 U
	Silver	mg/kg	8.3	8.3	2	--	< 0.29 U
	Zinc	mg/kg	2480	2480	109	--	47
Herbicides	2,4,5-TP (Silvex)	mg/kg		3.8	3.8	--	< 0.022 U
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	14	13	0.0033	--	< 0.0018 U
	4,4'-DDE (p,p'-DDE)	mg/kg	17	8.9	0.0033	--	< 0.0018 U
	4,4'-DDT (p,p'-DDT)	mg/kg	136	7.9	0.0033	--	< 0.0018 U
	Aldrin	mg/kg	0.19	0.097	0.005	--	< 0.0018 U
	alpha-BHC	mg/kg	0.02	0.02	0.02	--	< 0.0018 U
	alpha-Chlordane	mg/kg	2.9			--	< 0.0018 U
	beta-BHC	mg/kg	0.09	0.09	0.036	--	< 0.0018 U
	delta-BHC	mg/kg	0.25	0.25	0.04	--	< 0.0018 U
	Dieldrin	mg/kg	0.1	0.1	0.005	--	< 0.0018 U
	Endosulfan I (alpha)	mg/kg	102	24	2.4	--	< 0.0018 U
	Endosulfan II (beta)	mg/kg	102	24	2.4	--	< 0.0018 U
	Endosulfan Sulfate	mg/kg	1000	24	2.4	--	< 0.0018 U
	Endrin	mg/kg	0.06	0.06	0.014	--	< 0.0018 U
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	0.1	--	< 0.0018 U
	Heptachlor	mg/kg	0.38	0.38	0.042	--	< 0.0018 U
PCBs	Aroclor 1016	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1221	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1232	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1242	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1248	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1254	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1260	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1262	mg/kg	NS	NS	NS	--	< 0.018 U
	Aroclor 1268	mg/kg	NS	NS	NS	--	< 0.018 U
	PCBs	mg/kg	3.2	1	0.1	--	< 0.018 U
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	0.1	--	< 0.071 U
	2-Methylphenol	mg/kg	0.33	0.33	0.33	--	< 0.035 U
	4-methylphenol	mg/kg	0.33	0.33	0.33	--	< 0.035 U
	Acenaphthene	mg/kg	98	98	20	--	< 0.0071 U
	Acenaphthylene	mg/kg	107	100	100	--	< 0.0071 U
	Anthracene	mg/kg	1000	100	100	--	< 0.0071 U
	Benz(a)anthracene	mg/kg	1	1	1	--	< 0.0071 U
	Benzo(a)pyrene (BaP)	mg/kg	22	1	1	--	< 0.0071 U
	Benzo(b)fluoranthene	mg/kg	1.7	1	1	--	< 0.0071 U
	Benzo(g,h,i)perylene	mg/kg	1000	100	100	--	< 0.0071 U
	Benzo(k)fluoranthene	mg/kg	1.7	1.7	0.8	--	< 0.0071 U
	Chrysene	mg/kg	1	1	1	--	< 0.0071 U
	Dibenz(a,h)anthracene	mg/kg	1000	0.33	0.33	--	< 0.0071 U
	Dibenzofuran	mg/kg	210	59	7	--	< 0.035 U
	Fluoranthene	mg/kg	1000	100	100	--	< 0.0071 U
	Fluorene	mg/kg	386	100	30	--	< 0.0071 U
	Hexachlorobenzene	mg/kg	3.2	1.2	0.33	--	< 0.0071 U
	Indeno (1,2,3-cd)pyrene	mg/kg	8.2	0.5	0.5	--	< 0.0071 U
	Naphthalene	mg/kg	12	12	12	--	< 0.0071 U
	Pentachlorophenol	mg/kg	0.8	0.8	0.8	--	< 0.18 U
	Phenanthrene	mg/kg	1000	100	100	--	< 0.0071 U
	Phenol	mg/kg	0.33	0.33	0.33	--	< 0.035 U
	Pyrene	mg/kg	1000	100	100	--	< 0.0071 U

Table 1
NAF Restoration Import Fill Data - Sand
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-SAND1A	NAFREST-BRP-SAND1B	NAFREST-BRP-SAND1C	NAFREST-BRP-SAND1D	NAFREST-BRP-SAND1E	NAFREST-BRP-SAND1F	NAFREST-BRP-SAND1G	NAFREST-BRP-SAND1H	NAFREST-BRP-SAND1I	NAFREST-BRP-SAND2A	NAFREST-BRP-SAND2A
						Location	NAFREST-BRP-SAND1A	NAFREST-BRP-SAND1B	NAFREST-BRP-SAND1C	NAFREST-BRP-SAND1D	NAFREST-BRP-SAND1E	NAFREST-BRP-SAND1F	NAFREST-BRP-SAND1G	NAFREST-BRP-SAND1H	NAFREST-BRP-SAND1I	NAFREST-BRP-DUP1A	NAFREST-BRP-SAND2A
						Sample Date	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023
						Lab Report	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-1	180-153774-2	180-153774-2	180-153774-1	180-153774-1
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted												
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	0.68	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1,1-Dichloroethane	mg/kg	0.27	0.27	0.27	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1,1-Dichloroethene	mg/kg	0.33	0.33	0.33	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1,2-Dichloroethane	mg/kg	0.02	0.02	0.02	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	2.4	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	1.8	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	1.2-Dichlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Acetone	mg/kg	0.05	0.05	0.05	< 0.019 U	< 0.019 U	< 0.019 U	< 0.020 UT	< 0.019 U	< 0.020 U	< 0.017 U	--	--	< 0.020 U	< 0.020 U
	Benzene	mg/kg	0.06	0.06	0.06	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Carbon Tetrachloride	mg/kg	0.76	0.76	0.76	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Chlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Chloroform	mg/kg	0.37	0.37	0.37	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	0.25	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Dichloromethane	mg/kg	0.05	0.05	0.05	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Ethylbenzene	mg/kg	1	1	1	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	0.12	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	0.93	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Tetrachloroethene	mg/kg	1.3	1.3	1.3	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Toluene	mg/kg	0.7	0.7	0.7	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	0.19	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Trichloroethene	mg/kg	0.47	0.47	0.47	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Vinyl chloride	mg/kg	0.02	0.02	0.02	< 0.0047 U	< 0.0048 U	< 0.0047 U	< 0.0049 UT	< 0.0047 U	< 0.0049 U	< 0.0043 U	--	--	< 0.0050 U	< 0.0049 U
	Xylenes (Total)	mg/kg	1.6	1.6	0.26	< 0.0094 U	< 0.0096 U	< 0.0093 U	< 0.0098 UT	< 0.0093 U	< 0.0098 U	< 0.0086 U	--	--	< 0.010 U	< 0.0098 U

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in light
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in dark gray
Analyte concentrations detected above Protection of Groundwater Screening Criteria are presented in blue font

Table 1
NAF Restoration Import Fill Data - Sand
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-SAND2B	NAFREST-BRP-SAND2B	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND3A	NAFREST-BRP-SAND3B	NAFREST-BRP-SAND3C	NAFREST-BRP-SAND4A	NAFREST-BRP-SAND4B	NAFREST-BRP-SAND4C	NAFREST-BRP-SAND5A
						Location	NAFREST-BRP-DUP1B	NAFREST-BRP-SAND2B	NAFREST-BRP-DUP1C	NAFREST-BRP-SAND2C	NAFREST-BRP-SAND3A	NAFREST-BRP-SAND3B	NAFREST-BRP-SAND3C	NAFREST-BRP-SAND4A	NAFREST-BRP-SAND4B	NAFREST-BRP-SAND4C	NAFREST-BRP-SAND5A
						Sample Date	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023	3/17/2023
						Lab Report	180-153774-1	180-153774-1	180-153774-2	180-153774-2	180-153774-1	180-153774-1	180-153774-2	180-153774-1	180-153774-1	180-153774-2	180-153774-1
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted												
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	0.68	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 UT	< 0.0054 U	--	< 0.0052 U
	1,1-Dichloroethane	mg/kg	0.27	0.27	0.27	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	1,1-Dichloroethene	mg/kg	0.33	0.33	0.33	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	1,2-Dichloroethane	mg/kg	0.02	0.02	0.02	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	2.4	< 0.0050 U	< 0.0054 UT	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	1.8	< 0.0050 U	< 0.0054 UT	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	1.2-Dichlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Acetone	mg/kg	0.05	0.05	0.05	< 0.020 U	< 0.022 U	--	--	< 0.021 U	< 0.022 U	--	0.031 T	< 0.022 U	--	< 0.021 U
	Benzene	mg/kg	0.06	0.06	0.06	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Carbon Tetrachloride	mg/kg	0.76	0.76	0.76	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 UT	< 0.0054 U	--	< 0.0052 U
	Chlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Chloroform	mg/kg	0.37	0.37	0.37	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	0.25	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Dichloromethane	mg/kg	0.05	0.05	0.05	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Ethylbenzene	mg/kg	1	1	1	< 0.0050 U	< 0.0054 UT	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 UT	< 0.0054 U	--	< 0.0052 U
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	0.12	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	0.93	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Tetrachloroethene	mg/kg	1.3	1.3	1.3	< 0.0050 U	< 0.0054 UT	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 UT	< 0.0054 U	--	< 0.0052 U
	Toluene	mg/kg	0.7	0.7	0.7	< 0.0050 U	< 0.0054 UT	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	0.19	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Trichloroethene	mg/kg	0.47	0.47	0.47	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 U	< 0.0054 U	--	< 0.0052 U
	Vinyl chloride	mg/kg	0.02	0.02	0.02	< 0.0050 U	< 0.0054 U	--	--	< 0.0054 U	< 0.0054 U	--	< 0.0046 UT	< 0.0054 U	--	< 0.0052 U
	Xylenes (Total)	mg/kg	1.6	1.6	0.26	< 0.010 U	< 0.011 UT	--	--	< 0.011 U	< 0.011 U	--	< 0.0092 UT	< 0.011 U	--	< 0.010 U

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
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Table 1
NAF Restoration Import Fill Data - Sand
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-SAND5B	NAFREST-BRP-SAND5C
						Location	NAFREST-BRP-SAND5B	NAFREST-BRP-SAND5C
						Sample Date	3/17/2023	3/17/2023
						Lab Report	180-153774-1	180-153774-2
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted			
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	0.68	< 0.0051 U	--
	1,1-Dichloroethane	mg/kg	0.27	0.27	0.27	< 0.0051 U	--
	1,1-Dichloroethene	mg/kg	0.33	0.33	0.33	< 0.0051 U	--
	1,2-Dichloroethane	mg/kg	0.02	0.02	0.02	< 0.0051 U	--
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	2.4	< 0.0051 U	--
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	1.8	< 0.0051 U	--
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0051 U	--
	Acetone	mg/kg	0.05	0.05	0.05	< 0.020 U	--
	Benzene	mg/kg	0.06	0.06	0.06	< 0.0051 U	--
	Carbon Tetrachloride	mg/kg	0.76	0.76	0.76	< 0.0051 U	--
	Chlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0051 U	--
	Chloroform	mg/kg	0.37	0.37	0.37	< 0.0051 U	--
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	0.25	< 0.0051 U	--
	Dichloromethane	mg/kg	0.05	0.05	0.05	< 0.0051 U	--
	Ethylbenzene	mg/kg	1	1	1	< 0.0051 U	--
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	0.12	< 0.0051 U	--
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	0.93	< 0.0051 U	--
	Tetrachloroethene	mg/kg	1.3	1.3	1.3	< 0.0051 U	--
	Toluene	mg/kg	0.7	0.7	0.7	< 0.0051 U	--
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	0.19	< 0.0051 U	--
	Trichloroethene	mg/kg	0.47	0.47	0.47	< 0.0051 U	--
	Vinyl chloride	mg/kg	0.02	0.02	0.02	< 0.0051 U	--
	Xylenes (Total)	mg/kg	1.6	1.6	0.26	< 0.010 U	--

Notes
EQL - Estimated Quantitation Limit
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PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
EDGER CIVIL & UTILITY LLC
330 E 14TH ST
ELMIRA, NY 14903
(607) 481-0764

Facility:
BLACKWELL PIT
ST RTE 223
ERIN, NY 14838

Facility Location: in ERIN in CHEMUNG COUNTY **Village:** ERIN in CHEMUNG COUNTY
Facility Principal Reference Point: NYTM-E: 357.727 NYTM-N: 4670.75
Latitude: 42°10'33.5" Longitude: 76°43'21.5"
Project Location: NYS Rt 223
Authorized Activity: **Permit to mine unconsolidated material from a 33.8 acre permit term area within a 41.0 acre Life of Mine. Approved operations include crushing and screening.**

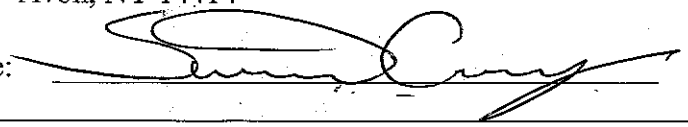
Permit Authorizations

Mined Land Reclamation - Under Article 23, Title 27
Permit ID 8-0732-00004/00001 (Mined Land ID 80024)
Renewal Effective Date: 9/27/2021 Expiration Date: 9/26/2026

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: STEVEN M ARMY, Deputy Regional Permit Administrator
Address: NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY 14414

Authorized Signature:  Date 9/27/2021

Distribution List

TOWN OF ERIN
Environmental Permits

Permit Components

MINED LAND RECLAMATION PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Permit Attachments

Permit Sign

MINED LAND RECLAMATION PERMIT CONDITIONS

1. Conformance With Plans All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such plans were approved by John P. Freeman, Mineral Resources Division on September 27, 2021 and consist of the following items:

- Mining Permit Application dated July 28, 2021.
- Organizational Report form dated July 28, 2021.
- Mined Land Use Plan Renewal dated August, 2021.
- Importation Request dated February, 2014.
- Mined Land Use Plan Expansion and Renewal dated July, 2006.
- Mined Land Use Plan with addendum received August 5, 1987.
- Mining Plan Map dated August, 2021.
- Reclamation Plan Map dated July, 2006.
- Cross Section A-A' dated July 2006.
- Cross Section B-B' dated July 2006.
- March 20, 2014 letter from Dan Sek to Jodi Edger.
- Landowner Consent Form dated July 14, 2006.

- Common Boundary Agreement dated July 9, 2006.
- February 5, 2002 letter from Robert Callahan to Nancy Barkan.
- August 8, 1990 letter from Robert L. Callahan to Mined Land Reclamation, NYSDEC.

2. **No Deviation From Approved Plan** The permittee shall not deviate or depart from the approved mined land use plan without approval by the Department of an alteration or modification thereto.

3. **Post Sign and Permit** The enclosed permit and permit sign must be conspicuously posted in a publicly accessible location at the project site. They must be visible, legible and protected from the elements at all times.

4. **No Offsite Materials at Mine** There shall be no importation of material originating from outside the limits of the life of mine, except as outlined in the Mined Land Use Plan or without prior approval from the Mined Land Reclamation Specialist.

5. **File Termination Notice** If the permittee discontinues operation, a termination notice must be filed within 30 days of termination of mining activities to the address below:

Regional Mined Land Reclamation Specialist
NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY14414

6. **Bond, Surety to Remain in Force** Any required reclamation bond or other surety, in an amount determined by the Department, shall be maintained in full force and effect. Such a bond or other surety shall not be terminated until the reclamation of the mined area is approved by the department in writing.

7. **Distance From Mine to Property Line** No land within 25 feet of any property or right-of- way boundary may be affected by any mining related activity. When mining is conducted below the level of adjacent property, the horizontal distance from the toe of the mine face to the nearest property or right-of-way boundary must be no less than 25 feet plus 1.5 times the depth of excavation.

8. **Maintain Area Markers for Permit Term** The permittee shall provide permanent markers such as stakes, posts or other devices acceptable to the Department to identify and delineate the permit area, as outlined on the approved Mining Plan Map. These markers are to be installed prior to the start of mining and shall be maintained for the duration of the permit term.

9. **Strip and Stockpile Soils for Reclamation** Prior to the excavation of previously undisturbed areas, topsoil and overburden shall be stripped, stockpiled separately, and used for reclamation of mined areas. These stockpiles shall be seeded to establish a vegetative cover within 30 days, or as soon as practicable following their construction. The permittee shall locate all overburden stockpiles within the permitted area of the approved Life of Mine. Sufficient quantities of topsoil must be retained on the site for use in reclamation, unless prior approval is granted by the Department.

10. **No Unpermitted Discharge Outside Limits of Mine** There shall be no natural swales or channels

or constructed features such as ditches, pipes, etc., that are capable of discharging waters to any offsite areas or to any areas outside the limits of the Life of Mine except those explicitly described and shown in the narrative and graphic portions of the approved Mined Land Use Plan. All silt laden water and storm water generated on, or running across, the site shall be retained within the approved project area. The permittee must comply with all applicable State Pollutant Discharge Elimination System (SPDES) permit requirements and provide necessary notifications for off-site point source discharges.

11. **Permit Does Not Apply to Structures and Safety Aspects** Unless expressly provided for, the issuance of this permit does not apply to any structures contained on the plans or in the specifications, nor does this permit apply to safety aspects of the operation and/or reclamation plan.

12. **Human or Archaeological Remains** If any human remains or archaeological remains are encountered during excavation, the permittee must immediately cease, or cause to cease, all work in the area of the remains and notify

Regional Permit Administrator
NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY14414

Work shall not resume until written permission to do so has been received from the Department.

13. **Fueling of Equipment and Reporting of Spills** Fueling of equipment shall be controlled to prevent spillage. Any spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the Department's Spill Hotline number (1-800-457-7362) within 2 hours. The permittee shall retain the Department's Spill Response number for immediate access in the permittee's office and at the mine site.

14. **Dust Control** Water or other approved dust palliatives must be applied to haulageways and other parts of the mine, as often as necessary, to prevent visible dust from leaving the mine property.

15. **Keep Roads Clean** The surface of any paved road that intersects with the entrance/exit to the mine and the entrance/exit areas shall be kept free of any spilled and/or tracked materials which can cause dust, slippery conditions or any other condition that is unhealthy or unsafe.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. **Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of

the permit upon request by a Department representative is a violation of this permit.

2. **Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 8 Headquarters
6274 E Avon-Lima Rd
Avon, NY14414

4. **Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Mined Land Reclamation.

5. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees,

and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

The New York State
Department of Environmental Conservation
has issued a

MINING PERMIT

pursuant to the Environmental Conservation Law for the mining operation being conducted on this site. For more information regarding the nature and extent of work approved, contact the Mined Land Reclamation Specialist shown below. Please refer to the mine file number shown when contacting the DEC.

Mine File Number 80024 Permit Expiration Date 9/26/26

DEC Contact Steve Army

Phone Number (585)226-5372

NOTE: THIS IS NOT A PERMIT

ML-1

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 4/20/2023 5:05:24 PM

JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-153774-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Pittsburgh and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Pittsburgh Project Manager or designee who has signed this report.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Job ID: 180-153774-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-153774-1

Receipt
The samples were received on 3/18/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.8º C, 2.9º C and 3.2º C.

GC/MS VOA
Method 8260C: Sample NAFREST-BRP-SAND1D (180-153774-4) had all internal standard (ISTD) responses below criteria. The sample was inadvertently not re-analyzed.

Method 8260C: The recovery of surrogate 4-Bromofluorobenzene for the following sample was above the control limits: NAFREST-BRP-SAND3B (180-153774-17). As the surrogate was high and there were no target analytes detected in the sample, the results were reported.

Method 8260C: The recovery of surrogate Toluene-d8 for the following sample was above the control limits: NAFREST-BRP-SAND5A (180-153774-22). As the surrogate was high and there were no target analytes detected in the sample, the results were reported.

Method 8260C: The laboratory control sample (LCS) for batch 180-429704 recovered above the control limits for the following analyte: N-Propylbenzene. As this analyte was biased high in the LCS and was not detected in the associated samples, the results were reported.

Method 8260C: The laboratory control sample (LCS) for batch 180-429834 recovered above the control limits for the following analyte: N-Propylbenzene. As this analyte was biased high in the LCS and was not detected in the associated samples, the results were reported.

Method 8260C: The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) for batch 180-429964 recovered above the control limits for the following analytes: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Ethylbenzene, n-Butylbenzene, N-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene, Tetrachloroethene, Toluene and/or Xylenes, Total. As these analytes were biased high in the LCS/LCSD and were not detected in the associated samples, the results were reported.

Method 8260C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-SAND4A (180-153774-19) had several recoveries and the RPD between the spikes for Vinyl chloride above the control limits. The spikes also had the recoveries of three surrogates above the control limits. The MSD had the internal standard responses of Fluorobenzene and Chlorobenzene-d5 slightly below criteria.

Method 8260C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-SAND4B (180-153774-20) had the recoveries of N-Propylbenzene above the control limits. The RPD between the spikes was within the control limits.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429704 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.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429704 was below criteria for the following analytes: Methylene Chloride and Methyl tert-butyl ether. 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429834 was below criteria for the following analytes: 2-Butanone, 1,4-Dioxane, Methyl tert-butyl ether, and 1,2-Dichloroethane-d4 (surrogate). 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429834 was above criteria for the following analytes: sec-Butylbenzene, N-Propylbenzene, n-Butylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, and Tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is

Job ID: 180-153774-1 (Continued)

Laboratory: Eurofins Pittsburgh (Continued)

considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429964 was above criteria for the following analytes: 1,2,4-Trimethylbenzene, 1,3,5-Trimethyelbenzene, 1,3-Dichlorobenzene, sec-Butylbenzene, N-Propylbenzene, n-Butylbenzene, tert-Butylbenzene, and Toluene-d8 (surrogate). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-429964 was below criteria for the following analytes: 1,2-Dichloroethane, 1,4-Dioxane, 2-Butanone, Methyl tert-butyl ether, and Methylene Chloride. 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/MS Semi VOA
Method 8270D LL: The recovery of surrogate 2-Fluorophenol was above the control limits for the following sample: NAFREST-BRP-DUP1C (180-153774-15). As the surrogate recovery was high and there were no target analytes detected in the sample, the results were reported.

Method 8270D LL: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: NAFREST-BRP-SAND1H (180-153774-8) and NAFREST-BRP-SAND4C (180-153774-21). Percent recoveries are based on the amount spiked.

Method 8270D LL: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-SAND4C (180-153774-21) had several recoveries below the control limits. The RPDs between the spikes and the recoveries of the laboratory control sample (LCS) 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 Semi VOA
Method 8081B: The continuing calibration verification (CCV) analyzed in batch 180-429660 (CCV 180-429660/30) was below criteria on column MR-1 for beta-BHC and on column MR-2 for4,4'-DDT and surrogate Decachlorobiphenyl.

Method 8081B: The continuing calibration verification (CCV) analyzed in batch 180-429660 (CCV 180-429660/54) was below criteria for several analytes on one or both columns. A reporting limit (RL) standard was analyzed, and the target analytes were detected. As the associated samples did not have these analytes detected, the results were reported.

Method 8081B: The matrix spike duplicate (MSD) of sample NAFREST-BRP-SAND4C (180-153774-21) had the recoveries of Endosulfan II and Endosulfan sulfate below the control limits. The RPDs between the spikes were above the control limits. The recoveries of the matrix spike (MS) and laboratory control sample (LCS) were within the control limits.

Method 8082A: The matrix spike (MS) of sample NAFREST-BRP-SAND4C (180-153774-21) had the recovery of aroclor 1260 above the control limits. The RPD between the spikes and the recoveries of the matrix spike duplicate (MSD) and laboratory control sample (LCS) were within the control limits.

Method 8151A: Samples NAFREST-BRP-DUP1C (180-153774-15) and NAFREST-BRP-SAND3C (180-153774-18) had the recoveries of surrogate 2,4-dichlorophenyl acetic acid below the control limits on column RTX-50. The recoveries on column RTX-1701 were within the control limits.

Method 8151A: The continuing calibration verification (CCV) analyzed in batch 180-430560 (CCV 180-430560/39 and 430560/50) were above criteria on column RTX-50 for surrogate 2,4-dichlorophenyl acetic acid.

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

Metals

Job ID: 180-153774-1 (Continued)

Laboratory: Eurofins Pittsburgh (Continued)

Method 6010C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-SAND4C (180-153774-21) had several recoveries and the RPD between the spikes for manganese outside of the control limits. 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.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	03-31-23

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

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-153774-1	NAFREST-BRP-SAND1A	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-2	NAFREST-BRP-SAND1B	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-3	NAFREST-BRP-SAND1C	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-4	NAFREST-BRP-SAND1D	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-5	NAFREST-BRP-SAND1E	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-6	NAFREST-BRP-SAND1F	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-7	NAFREST-BRP-SAND1G	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-8	NAFREST-BRP-SAND1H	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-9	NAFREST-BRP-SAND1I	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-10	NAFREST-BRP-SAND2A	Solid	03/17/23 14:50	03/18/23 08:40
180-153774-11	NAFREST-BRP-SAND2B	Solid	03/17/23 14:50	03/18/23 08:40
180-153774-12	NAFREST-BRP-SAND2C	Solid	03/17/23 14:50	03/18/23 08:40
180-153774-13	NAFREST-BRP-DUP1A	Solid	03/17/23 00:00	03/18/23 08:40
180-153774-14	NAFREST-BRP-DUP1B	Solid	03/17/23 00:00	03/18/23 08:40
180-153774-15	NAFREST-BRP-DUP1C	Solid	03/17/23 00:00	03/18/23 08:40
180-153774-16	NAFREST-BRP-SAND3A	Solid	03/17/23 14:55	03/18/23 08:40
180-153774-17	NAFREST-BRP-SAND3B	Solid	03/17/23 14:55	03/18/23 08:40
180-153774-18	NAFREST-BRP-SAND3C	Solid	03/17/23 14:55	03/18/23 08:40
180-153774-19	NAFREST-BRP-SAND4A	Solid	03/17/23 15:00	03/18/23 08:40
180-153774-20	NAFREST-BRP-SAND4B	Solid	03/17/23 15:00	03/18/23 08:40
180-153774-21	NAFREST-BRP-SAND4C	Solid	03/17/23 15:00	03/18/23 08:40
180-153774-22	NAFREST-BRP-SAND5A	Solid	03/17/23 15:05	03/18/23 08:40
180-153774-23	NAFREST-BRP-SAND5B	Solid	03/17/23 15:05	03/18/23 08:40
180-153774-24	NAFREST-BRP-SAND5C	Solid	03/17/23 15:05	03/18/23 08:40

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 6010C	Metals (ICP)	SW846	EET PIT
EPA 7471B	Mercury (CVAA)	SW846	EET PIT
2540G	SM 2540G	SM22	EET PIT
EPA 7196A	Chromium, Hexavalent	SW846	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
3050B	Preparation, Metals	SW846	EET PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	EET PIT
3660B	Sulfur Cleanup	SW846	EET PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	EET PIT
7471B	Preparation, Mercury	SW846	EET PIT
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET 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:

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1A
Lab Sample ID: 180-153774-1
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1A
Lab Sample ID: 180-153774-1
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8586 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 19:18	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1B
Lab Sample ID: 180-153774-2
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1B
Lab Sample ID: 180-153774-2
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.7362 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 19:46	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1C
Lab Sample ID: 180-153774-3
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1C
Lab Sample ID: 180-153774-3
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8458 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 20:13	C1K	EET PIT
	Instrument ID: CHHP4									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1D
Lab Sample ID: 180-153774-4
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1D
Lab Sample ID: 180-153774-4
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5721 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 20:42	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1E
Lab Sample ID: 180-153774-5
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1E
Lab Sample ID: 180-153774-5
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8778 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 14:12	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1F
Lab Sample ID: 180-153774-6
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1F
Lab Sample ID: 180-153774-6
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5749 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 14:40	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1G
Lab Sample ID: 180-153774-7
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1G
Lab Sample ID: 180-153774-7
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
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			6.2924 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 15:08	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.5 g	0.5 mL	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 16:40	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.5 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 20:37	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 12:34	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.0 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 21:16	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.87 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 19:47	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.87 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:13	RJG	EET PIT
	Instrument ID: C									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.84 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:56	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.53 g	100 mL	430369	03/25/23 11:11	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 15:59	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.35 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:53	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

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	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 17:02	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.0 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 20:53	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 12:52	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.2 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 21:36	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.06 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 19:52	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			1.06 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:19	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.78 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:55	RJR	EET PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.48 g	100 mL	430369	03/25/23 11:11	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 16:02	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.31 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:55	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-SAND2A
Lab Sample ID: 180-153774-10
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND2A
Lab Sample ID: 180-153774-10
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5559 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 13:44	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND2B
Lab Sample ID: 180-153774-11
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND2B
Lab Sample ID: 180-153774-11
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0065 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429964	03/22/23 12:51	PJJ	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.4

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	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 17:24	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.1 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 21:09	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.2 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 13:11	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.0 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 21:55	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.86 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 19:57	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.86 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:24	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.62 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:53	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.46 g	100 mL	430369	03/25/23 11:11	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 16:03	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.31 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:48	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-DUP1A
Lab Sample ID: 180-153774-13
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-DUP1A
Lab Sample ID: 180-153774-13
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4908 g	5 mL	429760	03/20/23 14:24	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 21:38	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-DUP1B
Lab Sample ID: 180-153774-14
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-DUP1B
Lab Sample ID: 180-153774-14
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
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	5035			5.3472 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 21:10	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
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	3541			15.4 g	0.5 mL	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 17:46	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.4 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 21:25	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.5 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 13:30	JMO	EET PIT
	Instrument ID: CHGC8									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
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	8151A			10.0 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 22:15	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.77 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 20:03	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.77 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:29	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.71 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:52	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.51 g	100 mL	430369	03/25/23 11:11	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 16:04	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.50 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:50	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-SAND3A
Lab Sample ID: 180-153774-16
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND3A
Lab Sample ID: 180-153774-16
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0604 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429834	03/21/23 14:44	SW1	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND3B
Lab Sample ID: 180-153774-17
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND3B
Lab Sample ID: 180-153774-17
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0064 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429834	03/21/23 15:22	SW1	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

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	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 18:08	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.0 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 21:41	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 13:48	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.0 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 22:34	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.60 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 20:08	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.60 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:34	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.67 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:51	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.49 g	100 mL	430369	03/25/23 11:11	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 16:05	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.40 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:52	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-SAND4A
Lab Sample ID: 180-153774-19
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND4A
Lab Sample ID: 180-153774-19
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
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	5035			5.8806 g	5 mL	429760	03/20/23 07:51	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429704	03/20/23 13:16	C1K	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND4B
Lab Sample ID: 180-153774-20
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429780	03/20/23 16:09	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND4B
Lab Sample ID: 180-153774-20
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0204 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429834	03/21/23 15:50	SW1	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40

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			429783	03/20/23 17:26	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 11:53	VVP	EET PIT
	Instrument ID: CH722									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 19:50	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.4 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 09:09	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.0 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 23:52	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.97 g	50 mL	429891	03/21/23 11:55	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 10:44	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	7471B			0.72 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:48	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.47 g	100 mL	430371	03/25/23 11:13	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 16:49	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.30 g	10 mL	430203	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:32	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-SAND5A
Lab Sample ID: 180-153774-22
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40

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			429783	03/20/23 17:26	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND5A
Lab Sample ID: 180-153774-22
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.1326 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429834	03/21/23 16:19	SW1	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND5B
Lab Sample ID: 180-153774-23
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40

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			429783	03/20/23 17:26	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND5B
Lab Sample ID: 180-153774-23
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
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	5035			5.3042 g	5 mL	429979	03/21/23 07:18	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	429834	03/21/23 16:47	SW1	EET PIT
	Instrument ID: CHHP4									

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40

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			429783	03/20/23 17:26	CMR	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

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	429736	03/20/23 10:41	AAS	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	429810	03/21/23 18:30	VVP	EET PIT
	Instrument ID: CH722									
Total/NA	Prep	3541			15.3 g	20.0 mL	429932	03/21/23 17:33	JSM	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	429960	03/22/23 21:56	JMO	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	429669	03/19/23 11:47	AAS	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	429682	03/20/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	429683	03/20/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	429687	03/20/23 14:25	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	8151A			10.1 g	40.0 mL	430121	03/23/23 01:00	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	430560	03/28/23 22:54	C1F	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.93 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430516	03/27/23 20:13	RJG	EET PIT
	Instrument ID: C									
Total/NA	Prep	3050B			0.93 g	50 mL	430196	03/23/23 11:31	JBP	EET PIT
Total/NA	Analysis	EPA 6010C		1			430657	03/28/23 14:40	RJG	EET PIT
	Instrument ID: C									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.79 g	100 mL	430857	03/30/23 12:33	RJR	EET PIT
Total/NA	Analysis	EPA 7471B		1			430888	03/30/23 18:54	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.55 g	100 mL	430367	03/25/23 11:08	BAC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	430884	03/30/23 14:54	BAC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.38 g	10 mL	430204	03/23/23 15:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			430326	03/24/23 11:57	CMR	EET PIT
	Instrument ID: SEAL1									

Laboratory References:

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

Analyst References:

Lab: EET PIT

Batch Type: Cleanup

JMO = John Oravec

Batch Type: Prep

AAS = Arianna Swick
BAC = Blase Cindric
CBY = Charles Yushinski
CMR = Carl Reagle
JBP = Jack Prothero
JSM = Joseph Moore
PJJ = Patrick Journet
RJR = Ron Rosenbaum

Batch Type: Analysis

BAC = Blase Cindric
C1F = Courtney Fenk
C1K = Chamaiporn Krisorn
CMR = Carl Reagle
JMO = John Oravec
PJJ = Patrick Journet
RJG = Rob Good
RJR = Ron Rosenbaum
SW1 = Sunan Wang-un
VVP = Vincent Piccolino

Client Sample ID: NAFREST-BRP-SAND1A
Lab Sample ID: 180-153774-1

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.1

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0037	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Benzene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
2-Butanone (MEK)	ND		0.0047	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Carbon tetrachloride	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Chlorobenzene	ND		0.0047	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Chloroform	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
cis-1,2-Dichloroethene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,2-Dichlorobenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,3-Dichlorobenzene	ND		0.0047	0.0029	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,4-Dichlorobenzene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,1-Dichloroethane	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,2-Dichloroethane	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,1-Dichloroethene	ND		0.0047	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,4-Dioxane	ND		0.94	0.033	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Ethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Methylene Chloride	ND		0.0047	0.0042	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Methyl tert-butyl ether	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
n-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
N-Propylbenzene	ND	*+	0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
sec-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
tert-Butylbenzene	ND		0.0047	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Tetrachloroethene	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Toluene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
trans-1,2-Dichloroethene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,1,1-Trichloroethane	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Trichloroethene	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,2,4-Trimethylbenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
1,3,5-Trimethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Vinyl chloride	ND		0.0047	0.0034	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1
Xylenes, Total	ND		0.0094	0.0068	mg/Kg	☼	03/20/23 07:51	03/20/23 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*60 - 124*	*03/20/23 07:51*	*03/20/23 19:18*	*1*
Dibromofluoromethane (Surr)	*112*		*69 - 126*	*03/20/23 07:51*	*03/20/23 19:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 135*	*03/20/23 07:51*	*03/20/23 19:18*	*1*
Toluene-d8 (Surr)	*122*		*67 - 134*	*03/20/23 07:51*	*03/20/23 19:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.9**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.1**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1B
Lab Sample ID: 180-153774-2

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0037	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Benzene	ND		0.0048	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1

Client Sample ID: NAFREST-BRP-SAND1B
Lab Sample ID: 180-153774-2
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.0048	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Carbon tetrachloride	ND		0.0048	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Chlorobenzene	ND		0.0048	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Chloroform	ND		0.0048	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
cis-1,2-Dichloroethene	ND		0.0048	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,2-Dichlorobenzene	ND		0.0048	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,3-Dichlorobenzene	ND		0.0048	0.0029	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,4-Dichlorobenzene	ND		0.0048	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,1-Dichloroethane	ND		0.0048	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,2-Dichloroethane	ND		0.0048	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,1-Dichloroethene	ND		0.0048	0.0022	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,4-Dioxane	ND		0.96	0.034	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Ethylbenzene	ND		0.0048	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Methylene Chloride	ND		0.0048	0.0043	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Methyl tert-butyl ether	ND		0.0048	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
n-Butylbenzene	ND		0.0048	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
N-Propylbenzene	ND	*+	0.0048	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
sec-Butylbenzene	ND		0.0048	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
tert-Butylbenzene	ND		0.0048	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Tetrachloroethene	ND		0.0048	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Toluene	ND		0.0048	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
trans-1,2-Dichloroethene	ND		0.0048	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,1,1-Trichloroethane	ND		0.0048	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Trichloroethene	ND		0.0048	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,2,4-Trimethylbenzene	ND		0.0048	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
1,3,5-Trimethylbenzene	ND		0.0048	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Vinyl chloride	ND		0.0048	0.0034	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1
Xylenes, Total	ND		0.0096	0.0069	mg/Kg	☼	03/20/23 07:51	03/20/23 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*60 - 124*	*03/20/23 07:51*	*03/20/23 19:46*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 126*	*03/20/23 07:51*	*03/20/23 19:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 135*	*03/20/23 07:51*	*03/20/23 19:46*	*1*
Toluene-d8 (Surr)	*124*		*67 - 134*	*03/20/23 07:51*	*03/20/23 19:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.8**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.2**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1C
Lab Sample ID: 180-153774-3
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0036	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Benzene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
2-Butanone (MEK)	ND		0.0047	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Carbon tetrachloride	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1

Client Sample ID: NAFREST-BRP-SAND1C
Lab Sample ID: 180-153774-3

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0047	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Chloroform	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
cis-1,2-Dichloroethene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,2-Dichlorobenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,3-Dichlorobenzene	ND		0.0047	0.0029	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,4-Dichlorobenzene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,1-Dichloroethane	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,2-Dichloroethane	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,1-Dichloroethene	ND		0.0047	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,4-Dioxane	ND		0.93	0.033	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Ethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Methylene Chloride	ND		0.0047	0.0042	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Methyl tert-butyl ether	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
n-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
N-Propylbenzene	ND	*+	0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
sec-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
tert-Butylbenzene	ND		0.0047	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Tetrachloroethene	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Toluene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
trans-1,2-Dichloroethene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,1,1-Trichloroethane	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Trichloroethene	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,2,4-Trimethylbenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
1,3,5-Trimethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Vinyl chloride	ND		0.0047	0.0034	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1
Xylenes, Total	ND		0.0093	0.0067	mg/Kg	☼	03/20/23 07:51	03/20/23 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*60 - 124*	*03/20/23 07:51*	*03/20/23 20:13*	*1*
Dibromofluoromethane (Surr)	*111*		*69 - 126*	*03/20/23 07:51*	*03/20/23 20:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 135*	*03/20/23 07:51*	*03/20/23 20:13*	*1*
Toluene-d8 (Surr)	*116*		*67 - 134*	*03/20/23 07:51*	*03/20/23 20:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.5**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.5**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1D
Lab Sample ID: 180-153774-4

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*3	0.020	0.0038	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Benzene	ND	*3	0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
2-Butanone (MEK)	ND	*3	0.0049	0.0025	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Carbon tetrachloride	ND	*3	0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Chlorobenzene	ND	*3	0.0049	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Chloroform	ND	*3	0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1

Client Sample ID: NAFREST-BRP-SAND1D
Lab Sample ID: 180-153774-4

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Method: SW846 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	*3	0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,2-Dichlorobenzene	ND	*3	0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,3-Dichlorobenzene	ND	*3	0.0049	0.0030	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,4-Dichlorobenzene	ND	*3	0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,1-Dichloroethane	ND	*3	0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,2-Dichloroethane	ND	*3	0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,1-Dichloroethene	ND	*3	0.0049	0.0022	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,4-Dioxane	ND	*3	0.98	0.035	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Ethylbenzene	ND	*3	0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Methylene Chloride	ND	*3	0.0049	0.0044	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Methyl tert-butyl ether	ND	*3	0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
n-Butylbenzene	ND	*3	0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
N-Propylbenzene	ND	*3 *+	0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
sec-Butylbenzene	ND	*3	0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
tert-Butylbenzene	ND	*3	0.0049	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Tetrachloroethene	ND	*3	0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Toluene	ND	*3	0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
trans-1,2-Dichloroethene	ND	*3	0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,1,1-Trichloroethane	ND	*3	0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Trichloroethene	ND	*3	0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,2,4-Trimethylbenzene	ND	*3	0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
1,3,5-Trimethylbenzene	ND	*3	0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Vinyl chloride	ND	*3	0.0049	0.0035	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1
Xylenes, Total	ND	*3	0.0098	0.0071	mg/Kg	☼	03/20/23 07:51	03/20/23 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*	*3*	*60 - 124*	*03/20/23 07:51*	*03/20/23 20:42*	*1*
Dibromofluoromethane (Surr)	*113*	*3*	*69 - 126*	*03/20/23 07:51*	*03/20/23 20:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*	*3*	*73 - 135*	*03/20/23 07:51*	*03/20/23 20:42*	*1*
Toluene-d8 (Surr)	*109*	*3*	*67 - 134*	*03/20/23 07:51*	*03/20/23 20:42*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.3**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.7**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1E
Lab Sample ID: 180-153774-5

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.019	0.0036	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Benzene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
2-Butanone (MEK)	ND		0.0047	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Carbon tetrachloride	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Chlorobenzene	ND		0.0047	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Chloroform	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
cis-1,2-Dichloroethene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,2-Dichlorobenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1

Client Sample ID: NAFREST-BRP-SAND1E
Lab Sample ID: 180-153774-5
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0047	0.0029	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,4-Dichlorobenzene	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,1-Dichloroethane	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,2-Dichloroethane	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,1-Dichloroethene	ND		0.0047	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,4-Dioxane	ND		0.93	0.033	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Ethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Methylene Chloride	ND		0.0047	0.0042	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Methyl tert-butyl ether	ND		0.0047	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
n-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
N-Propylbenzene	ND	*+	0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
sec-Butylbenzene	ND		0.0047	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
tert-Butylbenzene	ND		0.0047	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Tetrachloroethene	ND		0.0047	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Toluene	ND		0.0047	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
trans-1,2-Dichloroethene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,1,1-Trichloroethane	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Trichloroethene	ND		0.0047	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,2,4-Trimethylbenzene	ND		0.0047	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
1,3,5-Trimethylbenzene	ND		0.0047	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Vinyl chloride	ND		0.0047	0.0034	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1
Xylenes, Total	ND		0.0093	0.0067	mg/Kg	☼	03/20/23 07:51	03/20/23 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 124*	*03/20/23 07:51*	*03/20/23 14:12*	*1*
Dibromofluoromethane (Surr)	*97*		*69 - 126*	*03/20/23 07:51*	*03/20/23 14:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*73 - 135*	*03/20/23 07:51*	*03/20/23 14:12*	*1*
Toluene-d8 (Surr)	*122*		*67 - 134*	*03/20/23 07:51*	*03/20/23 14:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.8**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.2**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1F
Lab Sample ID: 180-153774-6
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0038	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Benzene	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
2-Butanone (MEK)	ND		0.0049	0.0025	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Carbon tetrachloride	ND		0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Chlorobenzene	ND		0.0049	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Chloroform	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
cis-1,2-Dichloroethene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,2-Dichlorobenzene	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,3-Dichlorobenzene	ND		0.0049	0.0030	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,4-Dichlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1

Client Sample ID: NAFREST-BRP-SAND1F
Lab Sample ID: 180-153774-6
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.5

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,2-Dichloroethane	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,1-Dichloroethene	ND		0.0049	0.0022	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,4-Dioxane	ND		0.98	0.035	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Ethylbenzene	ND		0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Methylene Chloride	ND		0.0049	0.0044	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Methyl tert-butyl ether	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
n-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
N-Propylbenzene	ND	*+	0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
sec-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
tert-Butylbenzene	ND		0.0049	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Tetrachloroethene	ND		0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Toluene	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
trans-1,2-Dichloroethene	ND		0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,1,1-Trichloroethane	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Trichloroethene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,2,4-Trimethylbenzene	ND		0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
1,3,5-Trimethylbenzene	ND		0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Vinyl chloride	ND		0.0049	0.0035	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1
Xylenes, Total	ND		0.0098	0.0071	mg/Kg	☼	03/20/23 07:51	03/20/23 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 124*	*03/20/23 07:51*	*03/20/23 14:40*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 126*	*03/20/23 07:51*	*03/20/23 14:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*74*		*73 - 135*	*03/20/23 07:51*	*03/20/23 14:40*	*1*
Toluene-d8 (Surr)	*117*		*67 - 134*	*03/20/23 07:51*	*03/20/23 14:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.5**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.5**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1G
Lab Sample ID: 180-153774-7
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.3

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.017	0.0034	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Benzene	ND		0.0043	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
2-Butanone (MEK)	ND		0.0043	0.0022	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Carbon tetrachloride	ND		0.0043	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Chlorobenzene	ND		0.0043	0.0011	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Chloroform	ND		0.0043	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
cis-1,2-Dichloroethene	ND		0.0043	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,2-Dichlorobenzene	ND		0.0043	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,3-Dichlorobenzene	ND		0.0043	0.0027	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,4-Dichlorobenzene	ND		0.0043	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,1-Dichloroethane	ND		0.0043	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,2-Dichloroethane	ND		0.0043	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1

Client Sample ID: NAFREST-BRP-SAND1G
Lab Sample ID: 180-153774-7

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.3

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0043	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,4-Dioxane	ND		0.86	0.030	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Ethylbenzene	ND		0.0043	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Methylene Chloride	ND		0.0043	0.0039	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Methyl tert-butyl ether	ND		0.0043	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
n-Butylbenzene	ND		0.0043	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
N-Propylbenzene	ND	*+	0.0043	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
sec-Butylbenzene	ND		0.0043	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
tert-Butylbenzene	ND		0.0043	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Tetrachloroethene	ND		0.0043	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Toluene	ND		0.0043	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
trans-1,2-Dichloroethene	ND		0.0043	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,1,1-Trichloroethane	ND		0.0043	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Trichloroethene	ND		0.0043	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,2,4-Trimethylbenzene	ND		0.0043	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
1,3,5-Trimethylbenzene	ND		0.0043	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Vinyl chloride	ND		0.0043	0.0031	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1
Xylenes, Total	ND		0.0086	0.0062	mg/Kg	☼	03/20/23 07:51	03/20/23 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 124*	*03/20/23 07:51*	*03/20/23 15:08*	*1*
Dibromofluoromethane (Surr)	*102*		*69 - 126*	*03/20/23 07:51*	*03/20/23 15:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*73 - 135*	*03/20/23 07:51*	*03/20/23 15:08*	*1*
Toluene-d8 (Surr)	*117*		*67 - 134*	*03/20/23 07:51*	*03/20/23 15:08*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**7.7**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**92.3**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0071	0.0020	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Acenaphthylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Benzo[a]anthracene	ND		0.0071	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Benzo[a]pyrene	ND		0.0071	0.0030	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Chrysene	ND		0.0071	0.0039	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Dibenz(a,h)anthracene	ND		0.0071	0.0045	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Dibenzofuran	ND		0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
1,4-Dioxane	ND		0.070	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Fluoranthene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Fluorene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Naphthalene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Pentachlorophenol	ND		0.18	0.056	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Phenanthrene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1
Pyrene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*35 - 105*	*03/20/23 10:41*	*03/21/23 16:40*	*1*
2-Fluorophenol (Surr)	*84*		*32 - 105*	*03/20/23 10:41*	*03/21/23 16:40*	*1*
Nitrobenzene-d5 (Surr)	*99*		*34 - 109*	*03/20/23 10:41*	*03/21/23 16:40*	*1*
Phenol-d5 (Surr)	*75*		*34 - 105*	*03/20/23 10:41*	*03/21/23 16:40*	*1*
Terphenyl-d14 (Surr)	*83*		*20 - 117*	*03/20/23 10:41*	*03/21/23 16:40*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*20 - 119*	*03/20/23 10:41*	*03/21/23 16:40*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
alpha-BHC	ND		0.0018	0.00043	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
beta-BHC	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
cis-Chlordane	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
4,4'-DDD	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Dieldrin	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Endosulfan sulfate	ND		0.0018	0.00081	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Endrin	ND		0.0018	0.00033	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
gamma-BHC (Lindane)	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1
Heptachlor	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*42 - 124*	*03/21/23 17:33*	*03/22/23 20:37*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*42 - 124*	*03/21/23 17:33*	*03/22/23 20:37*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*03/21/23 17:33*	*03/22/23 20:37*	*1*
Tetrachloro-m-xylene	*92*		*40 - 137*	*03/21/23 17:33*	*03/22/23 20:37*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1221	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1232	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1242	ND		0.018	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1248	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1254	ND		0.018	0.0053	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.018	0.0051	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1262	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	03/19/23 11:47	03/20/23 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*63 - 138*	*03/19/23 11:47*	*03/20/23 12:34*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*63 - 138*	*03/19/23 11:47*	*03/20/23 12:34*	*1*
Tetrachloro-m-xylene (Surr)	*91*		*55 - 135*	*03/19/23 11:47*	*03/20/23 12:34*	*1*
Tetrachloro-m-xylene (Surr)	*97*		*55 - 135*	*03/19/23 11:47*	*03/20/23 12:34*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.022	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*52*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:16*	*1*
2,4-Dichlorophenylacetic acid	*66*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:16*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		0.63	0.39	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Barium	**120**		13	2.2	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Beryllium	**0.81**		0.25	0.068	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Cadmium	**0.16**	**J**	0.31	0.046	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Chromium	**13**		0.31	0.28	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Copper	**23**		1.6	0.94	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Lead	**17**		0.63	0.54	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Manganese	**710**		0.94	0.17	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Nickel	**27**		2.5	0.32	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Selenium	**0.40**	**J**	0.63	0.29	mg/Kg	☼	03/23/23 11:31	03/28/23 14:13	1
Silver	ND		0.31	0.065	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1
Zinc	**46**		1.3	0.91	mg/Kg	☼	03/23/23 11:31	03/27/23 19:47	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.026	0.016	mg/Kg	☼	03/30/23 12:33	03/30/23 18:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.1**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**91.9**		0.1	0.1	%			03/20/23 16:09	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.43	0.23	mg/Kg	☼	03/25/23 11:11	03/30/23 15:59	1
Cyanide, Total (SW846 EPA 9014)	ND		0.31	0.24	mg/Kg	☼	03/23/23 15:15	03/24/23 11:53	1

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Method: SW846 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	☼	03/20/23 10:41	03/21/23 17:02	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.0072	0.0016	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Anthracene	ND		0.0072	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Benzo[a]anthracene	ND		0.0072	0.0033	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Benzo[a]pyrene	ND		0.0072	0.0031	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Benzo[b]fluoranthene	ND		0.0072	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Benzo[g,h,i]perylene	ND		0.0072	0.0016	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Benzo[k]fluoranthene	ND		0.0072	0.0022	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Chrysene	ND		0.0072	0.0040	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Dibenz(a,h)anthracene	ND		0.0072	0.0046	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Dibenzofuran	ND		0.036	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
1,4-Dioxane	ND		0.072	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Fluoranthene	ND		0.0072	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Fluorene	ND		0.0072	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Hexachlorobenzene	ND		0.0072	0.0026	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Indeno[1,2,3-cd]pyrene	ND		0.0072	0.0036	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
2-Methylphenol	ND		0.036	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Methylphenol, 3 & 4	ND		0.036	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Naphthalene	ND		0.0072	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Pentachlorophenol	ND		0.18	0.058	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Phenanthrene	ND		0.0072	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Phenol	ND		0.036	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1
Pyrene	ND		0.0072	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*35 - 105*	*03/20/23 10:41*	*03/21/23 17:02*	*1*
2-Fluorophenol (Surr)	*64*		*32 - 105*	*03/20/23 10:41*	*03/21/23 17:02*	*1*
Nitrobenzene-d5 (Surr)	*72*		*34 - 109*	*03/20/23 10:41*	*03/21/23 17:02*	*1*
Phenol-d5 (Surr)	*57*		*34 - 105*	*03/20/23 10:41*	*03/21/23 17:02*	*1*
Terphenyl-d14 (Surr)	*64*		*20 - 117*	*03/20/23 10:41*	*03/21/23 17:02*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*20 - 119*	*03/20/23 10:41*	*03/21/23 17:02*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
alpha-BHC	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
beta-BHC	ND		0.0018	0.00050	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
4,4'-DDD	ND		0.0018	0.00038	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
4,4'-DDE	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
delta-BHC	ND		0.0018	0.00057	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Endosulfan I	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Endosulfan II	ND		0.0018	0.00040	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Endosulfan sulfate	ND		0.0018	0.00083	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Endrin	ND		0.0018	0.00034	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
gamma-BHC (Lindane)	ND		0.0018	0.00047	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1
Heptachlor	ND		0.0018	0.00057	mg/Kg	☼	03/21/23 17:33	03/22/23 20:53	1

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9

Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*42 - 124*	*03/21/23 17:33*	*03/22/23 20:53*	*1*
DCB Decachlorobiphenyl (Surr)	*70*		*42 - 124*	*03/21/23 17:33*	*03/22/23 20:53*	*1*
Tetrachloro-m-xylene	*92*		*40 - 137*	*03/21/23 17:33*	*03/22/23 20:53*	*1*
Tetrachloro-m-xylene	*92*		*40 - 137*	*03/21/23 17:33*	*03/22/23 20:53*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1221	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1232	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1242	ND		0.018	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1248	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1254	ND		0.018	0.0053	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1260	ND		0.018	0.0051	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1262	ND		0.018	0.0062	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	03/19/23 11:47	03/20/23 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*63 - 138*	*03/19/23 11:47*	*03/20/23 12:52*	*1*
DCB Decachlorobiphenyl (Surr)	*102*		*63 - 138*	*03/19/23 11:47*	*03/20/23 12:52*	*1*
Tetrachloro-m-xylene (Surr)	*86*		*55 - 135*	*03/19/23 11:47*	*03/20/23 12:52*	*1*
Tetrachloro-m-xylene (Surr)	*93*		*55 - 135*	*03/19/23 11:47*	*03/20/23 12:52*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*54*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:36*	*1*
2,4-Dichlorophenylacetic acid	*74*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:36*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.8**		0.51	0.32	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Barium	**31**		10	1.8	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Beryllium	**0.25**		0.21	0.056	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Cadmium	**0.049**	**J**	0.26	0.038	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Chromium	**8.8**		0.26	0.23	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Copper	**18**		1.3	0.77	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Lead	**7.6**		0.51	0.45	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Manganese	**270**		0.77	0.14	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Nickel	**17**		2.1	0.26	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Selenium	ND		0.51	0.24	mg/Kg	☼	03/23/23 11:31	03/28/23 14:19	1
Silver	ND		0.26	0.053	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1
Zinc	**41**		1.0	0.74	mg/Kg	☼	03/23/23 11:31	03/27/23 19:52	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.028	0.018	mg/Kg	☼	03/30/23 12:33	03/30/23 18:55	1

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.0**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**92.0**		0.1	0.1	%			03/20/23 16:09	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.44	0.23	mg/Kg	☼	03/25/23 11:11	03/30/23 16:02	1
Cyanide, Total (SW846 EPA 9014)	ND		0.35	0.27	mg/Kg	☼	03/23/23 15:15	03/24/23 11:55	1

Client Sample ID: NAFREST-BRP-SAND2A
Lab Sample ID: 180-153774-10
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0038	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Benzene	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
2-Butanone (MEK)	ND		0.0049	0.0025	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Carbon tetrachloride	ND		0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Chlorobenzene	ND		0.0049	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Chloroform	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
cis-1,2-Dichloroethene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,2-Dichlorobenzene	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,3-Dichlorobenzene	ND		0.0049	0.0030	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,4-Dichlorobenzene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,1-Dichloroethane	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,2-Dichloroethane	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,1-Dichloroethene	ND		0.0049	0.0022	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,4-Dioxane	ND		0.98	0.035	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Ethylbenzene	ND		0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Methylene Chloride	ND		0.0049	0.0044	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Methyl tert-butyl ether	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
n-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
N-Propylbenzene	ND	*+	0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
sec-Butylbenzene	ND		0.0049	0.0024	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
tert-Butylbenzene	ND		0.0049	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Tetrachloroethene	ND		0.0049	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Toluene	ND		0.0049	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
trans-1,2-Dichloroethene	ND		0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,1,1-Trichloroethane	ND		0.0049	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Trichloroethene	ND		0.0049	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,2,4-Trimethylbenzene	ND		0.0049	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
1,3,5-Trimethylbenzene	ND		0.0049	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Vinyl chloride	ND		0.0049	0.0035	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1
Xylenes, Total	ND		0.0098	0.0071	mg/Kg	☼	03/20/23 07:51	03/20/23 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 124*	*03/20/23 07:51*	*03/20/23 13:44*	*1*
Dibromofluoromethane (Surr)	*99*		*69 - 126*	*03/20/23 07:51*	*03/20/23 13:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*73 - 135*	*03/20/23 07:51*	*03/20/23 13:44*	*1*
Toluene-d8 (Surr)	*111*		*67 - 134*	*03/20/23 07:51*	*03/20/23 13:44*	*1*

Client Sample ID: NAFREST-BRP-SAND2A
Lab Sample ID: 180-153774-10
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	8.3		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	91.7		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND2B
Lab Sample ID: 180-153774-11
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0042	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
2-Butanone (MEK)	ND		0.0054	0.0028	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Chloroform	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,3-Dichlorobenzene	ND	*+	0.0054	0.0033	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,4-Dichlorobenzene	ND	*+	0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,1-Dichloroethene	ND		0.0054	0.0025	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Ethylbenzene	ND	*+	0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Methylene Chloride	ND		0.0054	0.0049	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
n-Butylbenzene	ND	*+	0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
N-Propylbenzene	ND	*+	0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
sec-Butylbenzene	ND	*+	0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
tert-Butylbenzene	ND	*+	0.0054	0.0023	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Tetrachloroethene	ND	*+	0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Toluene	ND	*+	0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,2,4-Trimethylbenzene	ND	*+	0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
1,3,5-Trimethylbenzene	ND	*+	0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1
Xylenes, Total	ND	*+	0.011	0.0078	mg/Kg	☼	03/21/23 07:18	03/22/23 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*60 - 124*	*03/21/23 07:18*	*03/22/23 12:51*	*1*
Dibromofluoromethane (Surr)	*101*		*69 - 126*	*03/21/23 07:18*	*03/22/23 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 135*	*03/21/23 07:18*	*03/22/23 12:51*	*1*
Toluene-d8 (Surr)	*121*		*67 - 134*	*03/21/23 07:18*	*03/22/23 12:51*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	8.0		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	92.0		0.1	0.1	%			03/20/23 16:09	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.4

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0071	0.0020	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Acenaphthylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Benzo[a]anthracene	ND		0.0071	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Benzo[a]pyrene	ND		0.0071	0.0031	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Chrysene	ND		0.0071	0.0039	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Dibenz(a,h)anthracene	ND		0.0071	0.0045	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Dibenzofuran	ND		0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
1,4-Dioxane	ND		0.071	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Fluoranthene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Fluorene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Naphthalene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Phenanthrene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1
Pyrene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*35 - 105*	*03/20/23 10:41*	*03/21/23 17:24*	*1*
2-Fluorophenol (Surr)	*76*		*32 - 105*	*03/20/23 10:41*	*03/21/23 17:24*	*1*
Nitrobenzene-d5 (Surr)	*83*		*34 - 109*	*03/20/23 10:41*	*03/21/23 17:24*	*1*
Phenol-d5 (Surr)	*67*		*34 - 105*	*03/20/23 10:41*	*03/21/23 17:24*	*1*
Terphenyl-d14 (Surr)	*70*		*20 - 117*	*03/20/23 10:41*	*03/21/23 17:24*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*20 - 119*	*03/20/23 10:41*	*03/21/23 17:24*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
beta-BHC	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
4,4'-DDD	ND		0.0018	0.00038	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
4,4'-DDE	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
delta-BHC	ND		0.0018	0.00057	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Endosulfan I	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Endosulfan II	ND		0.0018	0.00040	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Endosulfan sulfate	ND		0.0018	0.00082	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Endrin	ND		0.0018	0.00034	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
gamma-BHC (Lindane)	ND		0.0018	0.00046	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:09	1

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
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Percent Solids: 92.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:09*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:09*	*1*
Tetrachloro-m-xylene	*94*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:09*	*1*
Tetrachloro-m-xylene	*94*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:09*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1221	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1232	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1242	ND		0.018	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1248	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1254	ND		0.018	0.0053	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1260	ND		0.018	0.0051	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1262	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	03/19/23 11:47	03/20/23 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*63 - 138*	*03/19/23 11:47*	*03/20/23 13:11*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*63 - 138*	*03/19/23 11:47*	*03/20/23 13:11*	*1*
Tetrachloro-m-xylene (Surr)	*86*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:11*	*1*
Tetrachloro-m-xylene (Surr)	*91*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:11*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.022	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*59*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:55*	*1*
2,4-Dichlorophenylacetic acid	*57*		*48 - 127*	*03/23/23 01:00*	*03/28/23 21:55*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.4**		0.63	0.39	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Barium	**37**		13	2.2	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Beryllium	**0.28**		0.25	0.069	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Cadmium	**0.075**	**J**	0.31	0.046	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Chromium	**9.9**		0.31	0.29	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Copper	**24**		1.6	0.95	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Lead	**7.7**		0.63	0.55	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Manganese	**320**		0.94	0.17	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Nickel	**19**		2.5	0.32	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Selenium	**0.46**	**J**	0.63	0.29	mg/Kg	☼	03/23/23 11:31	03/28/23 14:24	1
Silver	ND		0.31	0.065	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1
Zinc	**50**		1.3	0.91	mg/Kg	☼	03/23/23 11:31	03/27/23 19:57	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.035	0.022	mg/Kg	☼	03/30/23 12:33	03/30/23 18:53	1

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**7.6**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**92.4**		0.1	0.1	%			03/20/23 16:09	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.44	0.23	mg/Kg	☼	03/25/23 11:11	03/30/23 16:03	1
Cyanide, Total (SW846 EPA 9014)	ND		0.35	0.27	mg/Kg	☼	03/23/23 15:15	03/24/23 11:48	1

Client Sample ID: NAFREST-BRP-DUP1A
Lab Sample ID: 180-153774-13
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.4

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0039	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Benzene	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Chloroform	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Ethylbenzene	ND		0.0050	0.0018	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
N-Propylbenzene	ND	*+	0.0050	0.0018	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Toluene	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
trans-1,2-Dichloroethene	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg	☼	03/20/23 14:24	03/20/23 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*60 - 124*	*03/20/23 14:24*	*03/20/23 21:38*	*1*
Dibromofluoromethane (Surr)	*109*		*69 - 126*	*03/20/23 14:24*	*03/20/23 21:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*73 - 135*	*03/20/23 14:24*	*03/20/23 21:38*	*1*
Toluene-d8 (Surr)	*121*		*67 - 134*	*03/20/23 14:24*	*03/20/23 21:38*	*1*

Client Sample ID: NAFREST-BRP-DUP1A
Lab Sample ID: 180-153774-13
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	8.6		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	91.4		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-DUP1B
Lab Sample ID: 180-153774-14
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.9

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0039	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Benzene	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
2-Butanone (MEK)	ND		0.0050	0.0026	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Chloroform	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,4-Dioxane	ND		1.0	0.036	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
N-Propylbenzene	ND	*+	0.0050	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Toluene	ND		0.0050	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1
Xylenes, Total	ND		0.010	0.0073	mg/Kg	☼	03/20/23 07:51	03/20/23 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 124*	*03/20/23 07:51*	*03/20/23 21:10*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 126*	*03/20/23 07:51*	*03/20/23 21:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*73 - 135*	*03/20/23 07:51*	*03/20/23 21:10*	*1*
Toluene-d8 (Surr)	*118*		*67 - 134*	*03/20/23 07:51*	*03/20/23 21:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	7.1		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	92.9		0.1	0.1	%			03/20/23 16:09	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.3

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0071	0.0020	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Acenaphthylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Benzo[a]anthracene	ND		0.0071	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Benzo[a]pyrene	ND		0.0071	0.0030	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Chrysene	ND		0.0071	0.0039	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Dibenz(a,h)anthracene	ND		0.0071	0.0045	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Dibenzofuran	ND		0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
1,4-Dioxane	ND		0.070	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Fluoranthene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Fluorene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Naphthalene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Phenanthrene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1
Pyrene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*35 - 105*	*03/20/23 10:41*	*03/21/23 17:46*	*1*
2-Fluorophenol (Surr)	*127*	*S1+*	*32 - 105*	*03/20/23 10:41*	*03/21/23 17:46*	*1*
Nitrobenzene-d5 (Surr)	*88*		*34 - 109*	*03/20/23 10:41*	*03/21/23 17:46*	*1*
Phenol-d5 (Surr)	*102*		*34 - 105*	*03/20/23 10:41*	*03/21/23 17:46*	*1*
Terphenyl-d14 (Surr)	*74*		*20 - 117*	*03/20/23 10:41*	*03/21/23 17:46*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*20 - 119*	*03/20/23 10:41*	*03/21/23 17:46*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
alpha-BHC	ND		0.0018	0.00043	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
beta-BHC	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
cis-Chlordane	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
4,4'-DDD	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Dieldrin	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Endosulfan sulfate	ND		0.0018	0.00081	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Endrin	ND		0.0018	0.00033	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
gamma-BHC (Lindane)	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1
Heptachlor	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 21:25	1

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15

Date Collected: 03/17/23 00:00
Matrix: Solid

Date Received: 03/18/23 08:40
Percent Solids: 92.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:25*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:25*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:25*	*1*
Tetrachloro-m-xylene	*92*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:25*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1221	ND		0.017	0.0062	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1232	ND		0.017	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1242	ND		0.017	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1248	ND		0.017	0.0042	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1254	ND		0.017	0.0052	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1260	ND		0.017	0.0050	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1262	ND		0.017	0.0061	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1
PCB-1268	ND		0.017	0.0023	mg/Kg	☼	03/19/23 11:47	03/20/23 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*101*		*63 - 138*	*03/19/23 11:47*	*03/20/23 13:30*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*63 - 138*	*03/19/23 11:47*	*03/20/23 13:30*	*1*
Tetrachloro-m-xylene (Surr)	*94*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:30*	*1*
Tetrachloro-m-xylene (Surr)	*99*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:30*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.022	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*44*	*S1-*	*48 - 127*	*03/23/23 01:00*	*03/28/23 22:15*	*1*
2,4-Dichlorophenylacetic acid	*57*		*48 - 127*	*03/23/23 01:00*	*03/28/23 22:15*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.0**		0.70	0.44	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Barium	**34**		14	2.5	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Beryllium	**0.27**	**J**	0.28	0.077	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Cadmium	**0.061**	**J**	0.35	0.052	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Chromium	**9.0**		0.35	0.32	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Copper	**23**		1.8	1.1	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Lead	**7.8**		0.70	0.61	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Manganese	**270**		1.1	0.20	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Nickel	**17**		2.8	0.35	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Selenium	ND		0.70	0.32	mg/Kg	☼	03/23/23 11:31	03/28/23 14:29	1
Silver	ND		0.35	0.073	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1
Zinc	**47**		1.4	1.0	mg/Kg	☼	03/23/23 11:31	03/27/23 20:03	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.030	0.019	mg/Kg	☼	03/30/23 12:33	03/30/23 18:52	1

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**7.7**		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	**92.3**		0.1	0.1	%			03/20/23 16:09	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.43	0.23	mg/Kg	☼	03/25/23 11:11	03/30/23 16:04	1
Cyanide, Total (SW846 EPA 9014)	ND		0.22	0.16	mg/Kg	☼	03/23/23 15:15	03/24/23 11:50	1

Client Sample ID: NAFREST-BRP-SAND3A
Lab Sample ID: 180-153774-16
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.1

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0042	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
2-Butanone (MEK)	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Chloroform	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,2-Dichloroethane	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Methylene Chloride	ND		0.0054	0.0048	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
N-Propylbenzene	ND	*+	0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Toluene	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	03/21/23 07:18	03/21/23 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*60 - 124*	*03/21/23 07:18*	*03/21/23 14:44*	*1*
Dibromofluoromethane (Surr)	*116*		*69 - 126*	*03/21/23 07:18*	*03/21/23 14:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*73 - 135*	*03/21/23 07:18*	*03/21/23 14:44*	*1*
Toluene-d8 (Surr)	*118*		*67 - 134*	*03/21/23 07:18*	*03/21/23 14:44*	*1*

Client Sample ID: NAFREST-BRP-SAND3A
Lab Sample ID: 180-153774-16
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	7.9		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	92.1		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND3B
Lab Sample ID: 180-153774-17
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0042	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
2-Butanone (MEK)	ND		0.0054	0.0028	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Chloroform	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,1-Dichloroethene	ND		0.0054	0.0025	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Methylene Chloride	ND		0.0054	0.0049	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
N-Propylbenzene	ND	*+	0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
sec-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Toluene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1
Xylenes, Total	ND		0.011	0.0078	mg/Kg	☼	03/21/23 07:18	03/21/23 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*	*S1+*	*60 - 124*	*03/21/23 07:18*	*03/21/23 15:22*	*1*
Dibromofluoromethane (Surr)	*123*		*69 - 126*	*03/21/23 07:18*	*03/21/23 15:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 135*	*03/21/23 07:18*	*03/21/23 15:22*	*1*
Toluene-d8 (Surr)	*133*		*67 - 134*	*03/21/23 07:18*	*03/21/23 15:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	8.0		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	92.0		0.1	0.1	%			03/20/23 16:09	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0071	0.0020	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Acenaphthylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Benzo[a]anthracene	ND		0.0071	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Benzo[a]pyrene	ND		0.0071	0.0030	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Chrysene	ND		0.0071	0.0039	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Dibenz(a,h)anthracene	ND		0.0071	0.0045	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Dibenzofuran	ND		0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
1,4-Dioxane	ND		0.070	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Fluoranthene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Fluorene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Naphthalene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Pentachlorophenol	ND		0.18	0.056	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Phenanthrene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1
Pyrene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*35 - 105*	*03/20/23 10:41*	*03/21/23 18:08*	*1*
2-Fluorophenol (Surr)	*81*		*32 - 105*	*03/20/23 10:41*	*03/21/23 18:08*	*1*
Nitrobenzene-d5 (Surr)	*94*		*34 - 109*	*03/20/23 10:41*	*03/21/23 18:08*	*1*
Phenol-d5 (Surr)	*73*		*34 - 105*	*03/20/23 10:41*	*03/21/23 18:08*	*1*
Terphenyl-d14 (Surr)	*79*		*20 - 117*	*03/20/23 10:41*	*03/21/23 18:08*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*20 - 119*	*03/20/23 10:41*	*03/21/23 18:08*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
beta-BHC	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
4,4'-DDD	ND		0.0018	0.00038	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
4,4'-DDE	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
delta-BHC	ND		0.0018	0.00057	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Endosulfan I	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Endosulfan II	ND		0.0018	0.00040	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Endosulfan sulfate	ND		0.0018	0.00082	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Endrin	ND		0.0018	0.00034	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
gamma-BHC (Lindane)	ND		0.0018	0.00046	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:41	1

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:41*	*1*
DCB Decachlorobiphenyl (Surr)	*62*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:41*	*1*
Tetrachloro-m-xylene	*87*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:41*	*1*
Tetrachloro-m-xylene	*87*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:41*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1221	ND		0.018	0.0062	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1232	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1242	ND		0.018	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1248	ND		0.018	0.0042	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1254	ND		0.018	0.0053	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1260	ND		0.018	0.0050	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1262	ND		0.018	0.0062	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	03/19/23 11:47	03/20/23 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*63 - 138*	*03/19/23 11:47*	*03/20/23 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*96*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:48*	*1*
Tetrachloro-m-xylene (Surr)	*104*		*55 - 135*	*03/19/23 11:47*	*03/20/23 13:48*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*46*	*S1-*	*48 - 127*	*03/23/23 01:00*	*03/28/23 22:34*	*1*
2,4-Dichlorophenylacetic acid	*61*		*48 - 127*	*03/23/23 01:00*	*03/28/23 22:34*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**		0.90	0.56	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Barium	**42**		18	3.2	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Beryllium	**0.33**	**J**	0.36	0.098	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Cadmium	**0.080**	**J**	0.45	0.066	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Chromium	**11**		0.45	0.41	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Copper	**27**		2.2	1.4	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Lead	**9.0**		0.90	0.78	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Manganese	**350**		1.3	0.25	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Nickel	**22**		3.6	0.45	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Selenium	ND		0.90	0.41	mg/Kg	☼	03/23/23 11:31	03/28/23 14:34	1
Silver	ND		0.45	0.093	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1
Zinc	**61**		1.8	1.3	mg/Kg	☼	03/23/23 11:31	03/27/23 20:08	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.032	0.020	mg/Kg	☼	03/30/23 12:33	03/30/23 18:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**6.9**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids (SM22 2540G)	**93.1**		0.1	0.1	%			03/20/23 16:09	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.43	0.23	mg/Kg	☼	03/25/23 11:11	03/30/23 16:05	1
Cyanide, Total (SW846 EPA 9014)	ND		0.27	0.20	mg/Kg	☼	03/23/23 15:15	03/24/23 11:52	1

Client Sample ID: NAFREST-BRP-SAND4A
Lab Sample ID: 180-153774-19
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.9

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.031**	**F1**	0.018	0.0036	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Benzene	ND		0.0046	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
2-Butanone (MEK)	ND		0.0046	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Carbon tetrachloride	ND	F1	0.0046	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Chlorobenzene	ND		0.0046	0.0012	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Chloroform	ND		0.0046	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
cis-1,2-Dichloroethene	ND		0.0046	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,2-Dichlorobenzene	ND		0.0046	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,3-Dichlorobenzene	ND		0.0046	0.0028	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,4-Dichlorobenzene	ND		0.0046	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,1-Dichloroethane	ND		0.0046	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,2-Dichloroethane	ND		0.0046	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,1-Dichloroethene	ND		0.0046	0.0021	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,4-Dioxane	ND		0.92	0.032	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Ethylbenzene	ND	F1	0.0046	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Methylene Chloride	ND		0.0046	0.0041	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Methyl tert-butyl ether	ND		0.0046	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
n-Butylbenzene	ND		0.0046	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
N-Propylbenzene	ND	F1 *+	0.0046	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
sec-Butylbenzene	ND	F1	0.0046	0.0023	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
tert-Butylbenzene	ND		0.0046	0.0019	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Tetrachloroethene	ND	F1	0.0046	0.0018	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Toluene	ND		0.0046	0.0013	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
trans-1,2-Dichloroethene	ND		0.0046	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,1,1-Trichloroethane	ND	F1	0.0046	0.0015	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Trichloroethene	ND		0.0046	0.0014	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,2,4-Trimethylbenzene	ND	F1	0.0046	0.0016	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
1,3,5-Trimethylbenzene	ND	F1	0.0046	0.0017	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Vinyl chloride	ND	F2	0.0046	0.0033	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1
Xylenes, Total	ND	F1	0.0092	0.0066	mg/Kg	☼	03/20/23 07:51	03/20/23 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 124*	*03/20/23 07:51*	*03/20/23 13:16*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 126*	*03/20/23 07:51*	*03/20/23 13:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*75*		*73 - 135*	*03/20/23 07:51*	*03/20/23 13:16*	*1*
Toluene-d8 (Surr)	*112*		*67 - 134*	*03/20/23 07:51*	*03/20/23 13:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**7.1**		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND4A
Lab Sample ID: 180-153774-19
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.9

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids (SM22 2540G)	92.9		0.1	0.1	%			03/20/23 16:09	1

Client Sample ID: NAFREST-BRP-SAND4B
Lab Sample ID: 180-153774-20
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.7

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.022	0.0042	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
2-Butanone (MEK)	ND		0.0054	0.0028	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Chloroform	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,1-Dichloroethene	ND		0.0054	0.0025	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,4-Dioxane	ND		1.1	0.038	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Methylene Chloride	ND		0.0054	0.0049	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
N-Propylbenzene	ND	F1 *+	0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
sec-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Toluene	ND		0.0054	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1
Xylenes, Total	ND		0.011	0.0078	mg/Kg	☼	03/21/23 07:18	03/21/23 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*60 - 124*	*03/21/23 07:18*	*03/21/23 15:50*	*1*
Dibromofluoromethane (Surr)	*111*		*69 - 126*	*03/21/23 07:18*	*03/21/23 15:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*73 - 135*	*03/21/23 07:18*	*03/21/23 15:50*	*1*
Toluene-d8 (Surr)	*129*		*67 - 134*	*03/21/23 07:18*	*03/21/23 15:50*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	8.3		0.1	0.1	%			03/20/23 16:09	1
Percent Solids (SM22 2540G)	91.7		0.1	0.1	%			03/20/23 16:09	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Method: SW846 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	☼	03/20/23 10:41	03/21/23 11:53	1
Acenaphthylene	ND	F1	0.0072	0.0016	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Anthracene	ND		0.0072	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Benzo[a]anthracene	ND		0.0072	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Benzo[a]pyrene	ND		0.0072	0.0031	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Benzo[b]fluoranthene	ND		0.0072	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Benzo[g,h,i]perylene	ND		0.0072	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Benzo[k]fluoranthene	ND		0.0072	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Chrysene	ND		0.0072	0.0040	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Dibenz(a,h)anthracene	ND		0.0072	0.0046	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Dibenzofuran	ND	F1	0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
1,4-Dioxane	ND		0.071	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Fluoranthene	ND		0.0072	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Fluorene	ND		0.0072	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Hexachlorobenzene	ND	F1	0.0072	0.0026	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Indeno[1,2,3-cd]pyrene	ND	F1	0.0072	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
2-Methylphenol	ND	F1	0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Naphthalene	ND		0.0072	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Pentachlorophenol	ND	F1	0.18	0.057	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Phenanthrene	ND	F1	0.0072	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1
Pyrene	ND		0.0072	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*42*		*35 - 105*	*03/20/23 10:41*	*03/21/23 11:53*	*1*
2-Fluorophenol (Surr)	*46*		*32 - 105*	*03/20/23 10:41*	*03/21/23 11:53*	*1*
Nitrobenzene-d5 (Surr)	*66*		*34 - 109*	*03/20/23 10:41*	*03/21/23 11:53*	*1*
Phenol-d5 (Surr)	*40*		*34 - 105*	*03/20/23 10:41*	*03/21/23 11:53*	*1*
Terphenyl-d14 (Surr)	*83*		*20 - 117*	*03/20/23 10:41*	*03/21/23 11:53*	*1*
2,4,6-Tribromophenol (Surr)	*52*		*20 - 119*	*03/20/23 10:41*	*03/21/23 11:53*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
beta-BHC	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
4,4'-DDD	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
delta-BHC	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Endosulfan II	ND	F2 F1	0.0018	0.00039	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Endosulfan sulfate	ND	F2 F1	0.0018	0.00082	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Endrin	ND		0.0018	0.00033	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
gamma-BHC (Lindane)	ND		0.0018	0.00046	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 19:50	1

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*42 - 124*	*03/21/23 17:33*	*03/22/23 19:50*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*42 - 124*	*03/21/23 17:33*	*03/22/23 19:50*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*03/21/23 17:33*	*03/22/23 19:50*	*1*
Tetrachloro-m-xylene	*92*		*40 - 137*	*03/21/23 17:33*	*03/22/23 19:50*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1221	ND		0.017	0.0061	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1232	ND		0.017	0.0042	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1242	ND		0.017	0.0025	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1248	ND		0.017	0.0042	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1254	ND		0.017	0.0052	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1260	ND	F1	0.017	0.0049	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1262	ND		0.017	0.0061	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1
PCB-1268	ND		0.017	0.0023	mg/Kg	☼	03/19/23 11:47	03/20/23 09:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*63 - 138*	*03/19/23 11:47*	*03/20/23 09:09*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*63 - 138*	*03/19/23 11:47*	*03/20/23 09:09*	*1*
Tetrachloro-m-xylene (Surr)	*98*		*55 - 135*	*03/19/23 11:47*	*03/20/23 09:09*	*1*
Tetrachloro-m-xylene (Surr)	*105*		*55 - 135*	*03/19/23 11:47*	*03/20/23 09:09*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.021	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*48*	*p*	*48 - 127*	*03/23/23 01:00*	*03/28/23 23:52*	*1*
2,4-Dichlorophenylacetic acid	*72*		*48 - 127*	*03/23/23 01:00*	*03/28/23 23:52*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.8**		0.55	0.35	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Barium	**35**	**F1**	11	2.0	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Beryllium	**0.28**		0.22	0.060	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Cadmium	**0.088**	**J**	0.28	0.040	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Chromium	**9.8**	**F1**	0.28	0.25	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Copper	**26**		1.4	0.83	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Lead	**8.7**	**F1**	0.55	0.48	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Manganese	**400**	**F2**	0.83	0.15	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Nickel	**19**	**F1**	2.2	0.28	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Selenium	**0.28**	**J**	0.55	0.25	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Silver	ND		0.28	0.057	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1
Zinc	**54**	**F1**	1.1	0.80	mg/Kg	☼	03/21/23 11:55	03/27/23 10:44	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.029	0.019	mg/Kg	☼	03/30/23 12:33	03/30/23 18:48	1

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**6.5**		0.1	0.1	%			03/20/23 17:26	1
Percent Solids (SM22 2540G)	**93.5**		0.1	0.1	%			03/20/23 17:26	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.43	0.23	mg/Kg	☼	03/25/23 11:13	03/30/23 16:49	1
Cyanide, Total (SW846 EPA 9014)	ND		0.36	0.27	mg/Kg	☼	03/23/23 15:15	03/24/23 11:32	1

Client Sample ID: NAFREST-BRP-SAND5A
Lab Sample ID: 180-153774-22
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.4

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.021	0.0041	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Benzene	ND		0.0052	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
2-Butanone (MEK)	ND		0.0052	0.0027	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Carbon tetrachloride	ND		0.0052	0.0021	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Chlorobenzene	ND		0.0052	0.0014	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Chloroform	ND		0.0052	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,2-Dichlorobenzene	ND		0.0052	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,3-Dichlorobenzene	ND		0.0052	0.0032	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,4-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,1-Dichloroethane	ND		0.0052	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,1-Dichloroethene	ND		0.0052	0.0024	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,4-Dioxane	ND		1.0	0.037	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Ethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Methylene Chloride	ND		0.0052	0.0047	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Methyl tert-butyl ether	ND		0.0052	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
n-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
N-Propylbenzene	ND	*+	0.0052	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
sec-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
tert-Butylbenzene	ND		0.0052	0.0022	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Toluene	ND		0.0052	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
trans-1,2-Dichloroethene	ND		0.0052	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,1,1-Trichloroethane	ND		0.0052	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1
Xylenes, Total	ND		0.010	0.0075	mg/Kg	☼	03/21/23 07:18	03/21/23 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*60 - 124*	*03/21/23 07:18*	*03/21/23 16:19*	*1*
Dibromofluoromethane (Surr)	*116*		*69 - 126*	*03/21/23 07:18*	*03/21/23 16:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 135*	*03/21/23 07:18*	*03/21/23 16:19*	*1*
Toluene-d8 (Surr)	*141*	*S1+*	*67 - 134*	*03/21/23 07:18*	*03/21/23 16:19*	*1*

Client Sample ID: NAFREST-BRP-SAND5A
Lab Sample ID: 180-153774-22

Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	6.6		0.1	0.1	%			03/20/23 17:26	1
Percent Solids (SM22 2540G)	93.4		0.1	0.1	%			03/20/23 17:26	1

Client Sample ID: NAFREST-BRP-SAND5B
Lab Sample ID: 180-153774-23

Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.6

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.020	0.0040	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Benzene	ND		0.0051	0.0014	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
2-Butanone (MEK)	ND		0.0051	0.0026	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Carbon tetrachloride	ND		0.0051	0.0021	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Chlorobenzene	ND		0.0051	0.0013	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Chloroform	ND		0.0051	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
cis-1,2-Dichloroethene	ND		0.0051	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,2-Dichlorobenzene	ND		0.0051	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,3-Dichlorobenzene	ND		0.0051	0.0031	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,4-Dichlorobenzene	ND		0.0051	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,1-Dichloroethane	ND		0.0051	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,1-Dichloroethene	ND		0.0051	0.0023	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,4-Dioxane	ND		1.0	0.036	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Ethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Methylene Chloride	ND		0.0051	0.0046	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Methyl tert-butyl ether	ND		0.0051	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
n-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
N-Propylbenzene	ND	*+	0.0051	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
tert-Butylbenzene	ND		0.0051	0.0021	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Tetrachloroethene	ND		0.0051	0.0020	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Toluene	ND		0.0051	0.0015	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
trans-1,2-Dichloroethene	ND		0.0051	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,1,1-Trichloroethane	ND		0.0051	0.0017	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Trichloroethene	ND		0.0051	0.0016	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Vinyl chloride	ND		0.0051	0.0037	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1
Xylenes, Total	ND		0.010	0.0073	mg/Kg	☼	03/21/23 07:18	03/21/23 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*60 - 124*	*03/21/23 07:18*	*03/21/23 16:47*	*1*
Dibromofluoromethane (Surr)	*111*		*69 - 126*	*03/21/23 07:18*	*03/21/23 16:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 135*	*03/21/23 07:18*	*03/21/23 16:47*	*1*
Toluene-d8 (Surr)	*124*		*67 - 134*	*03/21/23 07:18*	*03/21/23 16:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	7.4		0.1	0.1	%			03/20/23 17:26	1
Percent Solids (SM22 2540G)	92.6		0.1	0.1	%			03/20/23 17:26	1

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24

Date Collected: 03/17/23 15:05
Matrix: Solid

Date Received: 03/18/23 08:40
Percent Solids: 91.6

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0071	0.0020	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Acenaphthylene	ND		0.0071	0.0016	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Anthracene	ND		0.0071	0.0018	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Benzo[a]anthracene	ND		0.0071	0.0032	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Benzo[a]pyrene	ND		0.0071	0.0031	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Benzo[b]fluoranthene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Benzo[g,h,i]perylene	ND		0.0071	0.0015	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Benzo[k]fluoranthene	ND		0.0071	0.0021	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Chrysene	ND		0.0071	0.0039	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Dibenz(a,h)anthracene	ND		0.0071	0.0045	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Dibenzofuran	ND		0.035	0.013	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
1,4-Dioxane	ND		0.071	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Fluoranthene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Fluorene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Hexachlorobenzene	ND		0.0071	0.0025	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Indeno[1,2,3-cd]pyrene	ND		0.0071	0.0035	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
2-Methylphenol	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Methylphenol, 3 & 4	ND		0.035	0.010	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Naphthalene	ND		0.0071	0.0014	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Pentachlorophenol	ND		0.18	0.057	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Phenanthrene	ND		0.0071	0.0019	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Phenol	ND		0.035	0.011	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1
Pyrene	ND		0.0071	0.0017	mg/Kg	☼	03/20/23 10:41	03/21/23 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*35 - 105*	*03/20/23 10:41*	*03/21/23 18:30*	*1*
2-Fluorophenol (Surr)	*75*		*32 - 105*	*03/20/23 10:41*	*03/21/23 18:30*	*1*
Nitrobenzene-d5 (Surr)	*79*		*34 - 109*	*03/20/23 10:41*	*03/21/23 18:30*	*1*
Phenol-d5 (Surr)	*65*		*34 - 105*	*03/20/23 10:41*	*03/21/23 18:30*	*1*
Terphenyl-d14 (Surr)	*70*		*20 - 117*	*03/20/23 10:41*	*03/21/23 18:30*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*20 - 119*	*03/20/23 10:41*	*03/21/23 18:30*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0018	0.00055	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
alpha-BHC	ND		0.0018	0.00044	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
beta-BHC	ND		0.0018	0.00049	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
cis-Chlordane	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
4,4'-DDD	ND		0.0018	0.00037	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
4,4'-DDE	ND		0.0018	0.00036	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
4,4'-DDT	ND		0.0018	0.0013	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
delta-BHC	ND		0.0018	0.00057	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Dieldrin	ND		0.0018	0.00045	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Endosulfan I	ND		0.0018	0.00048	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Endosulfan II	ND		0.0018	0.00039	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Endosulfan sulfate	ND		0.0018	0.00082	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Endrin	ND		0.0018	0.00033	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
gamma-BHC (Lindane)	ND		0.0018	0.00046	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1
Heptachlor	ND		0.0018	0.00056	mg/Kg	☼	03/21/23 17:33	03/22/23 21:56	1

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24

Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*96*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:56*	*1*
DCB Decachlorobiphenyl (Surr)	*69*		*42 - 124*	*03/21/23 17:33*	*03/22/23 21:56*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:56*	*1*
Tetrachloro-m-xylene	*93*		*40 - 137*	*03/21/23 17:33*	*03/22/23 21:56*	*1*

Method: SW846 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	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1221	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1232	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1242	ND		0.018	0.0026	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1248	ND		0.018	0.0043	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1254	ND		0.018	0.0054	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1260	ND		0.018	0.0051	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1262	ND		0.018	0.0063	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1
PCB-1268	ND		0.018	0.0024	mg/Kg	☼	03/19/23 11:47	03/20/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*63 - 138*	*03/19/23 11:47*	*03/20/23 14:25*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*63 - 138*	*03/19/23 11:47*	*03/20/23 14:25*	*1*
Tetrachloro-m-xylene (Surr)	*88*		*55 - 135*	*03/19/23 11:47*	*03/20/23 14:25*	*1*
Tetrachloro-m-xylene (Surr)	*92*		*55 - 135*	*03/19/23 11:47*	*03/20/23 14:25*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.022	0.012	mg/Kg	☼	03/23/23 01:00	03/28/23 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*83*		*48 - 127*	*03/23/23 01:00*	*03/28/23 22:54*	*1*
2,4-Dichlorophenylacetic acid	*92*		*48 - 127*	*03/23/23 01:00*	*03/28/23 22:54*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.2**		0.59	0.37	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Barium	**35**		12	2.1	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Beryllium	**0.29**		0.23	0.064	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Cadmium	**0.069**	**J**	0.29	0.043	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Chromium	**9.5**		0.29	0.27	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Copper	**22**		1.5	0.89	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Lead	**12**		0.59	0.51	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Manganese	**310**		0.88	0.16	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Nickel	**19**		2.3	0.30	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Selenium	ND		0.59	0.27	mg/Kg	☼	03/23/23 11:31	03/28/23 14:40	1
Silver	ND		0.29	0.061	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1
Zinc	**47**		1.2	0.85	mg/Kg	☼	03/23/23 11:31	03/27/23 20:13	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.027	0.018	mg/Kg	☼	03/30/23 12:33	03/30/23 18:54	1

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**8.4**		0.1	0.1	%			03/20/23 17:26	1
Percent Solids (SM22 2540G)	**91.6**		0.1	0.1	%			03/20/23 17:26	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.43	0.23	mg/Kg	☼	03/25/23 11:08	03/30/23 14:54	1
Cyanide, Total (SW846 EPA 9014)	ND		0.29	0.22	mg/Kg	☼	03/23/23 15:15	03/24/23 11:57	1

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

Lab Sample ID: MB 180-429704/7
Matrix: Solid
Analysis Batch: 429704

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	0.0039	mg/Kg			03/20/23 12:20	1
Benzene	ND		0.0050	0.0014	mg/Kg			03/20/23 12:20	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			03/20/23 12:20	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			03/20/23 12:20	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			03/20/23 12:20	1
Chloroform	ND		0.0050	0.0016	mg/Kg			03/20/23 12:20	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			03/20/23 12:20	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			03/20/23 12:20	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			03/20/23 12:20	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			03/20/23 12:20	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			03/20/23 12:20	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			03/20/23 12:20	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			03/20/23 12:20	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			03/20/23 12:20	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			03/20/23 12:20	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			03/20/23 12:20	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			03/20/23 12:20	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/20/23 12:20	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			03/20/23 12:20	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/20/23 12:20	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			03/20/23 12:20	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			03/20/23 12:20	1
Toluene	ND		0.0050	0.0014	mg/Kg			03/20/23 12:20	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			03/20/23 12:20	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			03/20/23 12:20	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			03/20/23 12:20	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			03/20/23 12:20	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			03/20/23 12:20	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			03/20/23 12:20	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			03/20/23 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*60 - 124*		*03/20/23 12:20*	*1*
Dibromofluoromethane (Surr)	*115*		*69 - 126*		*03/20/23 12:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*73 - 135*		*03/20/23 12:20*	*1*
Toluene-d8 (Surr)	*127*		*67 - 134*		*03/20/23 12:20*	*1*

Lab Sample ID: LCS 180-429704/6
Matrix: Solid
Analysis Batch: 429704

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	0.0528		mg/Kg		132	23 - 170		
Benzene			0.0400	0.0393		mg/Kg		98	77 - 120		
2-Butanone (MEK)			0.0400	0.0379		mg/Kg		95	39 - 157		
Carbon tetrachloride			0.0400	0.0413		mg/Kg		103	73 - 130		
Chlorobenzene			0.0400	0.0416		mg/Kg		104	79 - 122		
Chloroform			0.0400	0.0369		mg/Kg		92	73 - 126		

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

Lab Sample ID: LCS 180-429704/6
Matrix: Solid
Analysis Batch: 429704

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	0.0410		mg/Kg		102	77 - 118
1,2-Dichlorobenzene	0.0400	0.0395		mg/Kg		99	76 - 120
1,3-Dichlorobenzene	0.0400	0.0440		mg/Kg		110	77 - 121
1,4-Dichlorobenzene	0.0400	0.0424		mg/Kg		106	79 - 120
1,1-Dichloroethane	0.0400	0.0387		mg/Kg		97	73 - 124
1,2-Dichloroethane	0.0400	0.0344		mg/Kg		86	64 - 140
1,1-Dichloroethene	0.0400	0.0411		mg/Kg		103	55 - 136
1,4-Dioxane	0.800	0.611	J	mg/Kg		76	18 - 166
Ethylbenzene	0.0400	0.0437		mg/Kg		109	79 - 119
Methylene Chloride	0.0400	0.0338		mg/Kg		84	67 - 131
Methyl tert-butyl ether	0.0400	0.0322		mg/Kg		80	58 - 132
n-Butylbenzene	0.0400	0.0445		mg/Kg		111	64 - 136
N-Propylbenzene	0.0400	0.0516	*+	mg/Kg		129	71 - 127
sec-Butylbenzene	0.0400	0.0478		mg/Kg		120	65 - 130
tert-Butylbenzene	0.0400	0.0490		mg/Kg		123	69 - 133
Tetrachloroethene	0.0400	0.0468		mg/Kg		117	71 - 121
Toluene	0.0400	0.0442		mg/Kg		111	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0407		mg/Kg		102	75 - 122
1,1,1-Trichloroethane	0.0400	0.0410		mg/Kg		102	72 - 134
Trichloroethene	0.0400	0.0420		mg/Kg		105	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0476		mg/Kg		119	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0490		mg/Kg		123	69 - 131
Vinyl chloride	0.0400	0.0362		mg/Kg		90	64 - 134
Xylenes, Total	0.0800	0.0860		mg/Kg		108	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*60 - 124*
Dibromofluoromethane (Surr)	*93*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*84*		*73 - 135*
Toluene-d8 (Surr)	*108*		*67 - 134*

Lab Sample ID: 180-153774-19 MS
Matrix: Solid
Analysis Batch: 429704

Client Sample ID: NAFREST-BRP-SAND4A
Prep Type: Total/NA
Prep Batch: 429760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	0.031	F1	0.0422	0.0488		mg/Kg	☼	42	23 - 170
Benzene	ND		0.0422	0.0429		mg/Kg	☼	102	77 - 120
2-Butanone (MEK)	ND		0.0422	0.0367		mg/Kg	☼	87	39 - 157
Carbon tetrachloride	ND	F1	0.0422	0.0458		mg/Kg	☼	108	73 - 130
Chlorobenzene	ND		0.0422	0.0457		mg/Kg	☼	108	79 - 122
Chloroform	ND		0.0422	0.0413		mg/Kg	☼	98	73 - 126
cis-1,2-Dichloroethene	ND		0.0422	0.0448		mg/Kg	☼	106	77 - 118
1,2-Dichlorobenzene	ND		0.0422	0.0416		mg/Kg	☼	99	76 - 120
1,3-Dichlorobenzene	ND		0.0422	0.0469		mg/Kg	☼	111	77 - 121
1,4-Dichlorobenzene	ND		0.0422	0.0444		mg/Kg	☼	105	79 - 120
1,1-Dichloroethane	ND		0.0422	0.0415		mg/Kg	☼	98	73 - 124
1,2-Dichloroethane	ND		0.0422	0.0358		mg/Kg	☼	85	64 - 140

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

Lab Sample ID: 180-153774-19 MS
Matrix: Solid
Analysis Batch: 429704

Client Sample ID: NAFREST-BRP-SAND4A
Prep Type: Total/NA
Prep Batch: 429760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		0.0422	0.0451		mg/Kg	☼	107	55 - 136
1,4-Dioxane	ND		0.845	0.679	J	mg/Kg	☼	80	18 - 166
Ethylbenzene	ND	F1	0.0422	0.0481		mg/Kg	☼	114	79 - 119
Methylene Chloride	ND		0.0422	0.0366		mg/Kg	☼	87	67 - 131
Methyl tert-butyl ether	ND		0.0422	0.0322		mg/Kg	☼	76	58 - 132
n-Butylbenzene	ND		0.0422	0.0487		mg/Kg	☼	115	64 - 136
N-Propylbenzene	ND	F1 *+	0.0422	0.0563	F1	mg/Kg	☼	133	71 - 127
sec-Butylbenzene	ND	F1	0.0422	0.0522		mg/Kg	☼	124	65 - 130
tert-Butylbenzene	ND		0.0422	0.0545		mg/Kg	☼	129	69 - 133
Tetrachloroethene	ND	F1	0.0422	0.0512		mg/Kg	☼	121	71 - 121
Toluene	ND		0.0422	0.0484		mg/Kg	☼	115	76 - 120
trans-1,2-Dichloroethene	ND		0.0422	0.0445		mg/Kg	☼	105	75 - 122
1,1,1-Trichloroethane	ND	F1	0.0422	0.0458		mg/Kg	☼	108	72 - 134
Trichloroethene	ND		0.0422	0.0456		mg/Kg	☼	108	69 - 118
1,2,4-Trimethylbenzene	ND	F1	0.0422	0.0519		mg/Kg	☼	123	74 - 127
1,3,5-Trimethylbenzene	ND	F1	0.0422	0.0539		mg/Kg	☼	128	69 - 131
Vinyl chloride	ND	F2	0.0422	0.0304		mg/Kg	☼	72	64 - 134
Xylenes, Total	ND	F1	0.0845	0.0953		mg/Kg	☼	113	78 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*60 - 124*
Dibromofluoromethane (Surr)	*127*	*S1+*	*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*115*		*73 - 135*
Toluene-d8 (Surr)	*148*	*S1+*	*67 - 134*

Lab Sample ID: 180-153774-19 MSD
Matrix: Solid
Analysis Batch: 429704

Client Sample ID: NAFREST-BRP-SAND4A
Prep Type: Total/NA
Prep Batch: 429760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	0.031	F1	0.0388	0.0386	*3 F1	mg/Kg	☼	19	23 - 170	23	35
Benzene	ND		0.0388	0.0412	*3	mg/Kg	☼	106	77 - 120	4	20
2-Butanone (MEK)	ND		0.0388	0.0281	*3	mg/Kg	☼	72	39 - 157	27	33
Carbon tetrachloride	ND	F1	0.0388	0.0561	*3 F1	mg/Kg	☼	145	73 - 130	20	21
Chlorobenzene	ND		0.0388	0.0417	*3	mg/Kg	☼	107	79 - 122	9	20
Chloroform	ND		0.0388	0.0385	*3	mg/Kg	☼	99	73 - 126	7	20
cis-1,2-Dichloroethene	ND		0.0388	0.0422	*3	mg/Kg	☼	109	77 - 118	6	20
1,2-Dichlorobenzene	ND		0.0388	0.0434		mg/Kg	☼	112	76 - 120	4	20
1,3-Dichlorobenzene	ND		0.0388	0.0438		mg/Kg	☼	113	77 - 121	7	20
1,4-Dichlorobenzene	ND		0.0388	0.0424		mg/Kg	☼	109	79 - 120	4	20
1,1-Dichloroethane	ND		0.0388	0.0414	*3	mg/Kg	☼	107	73 - 124	0	20
1,2-Dichloroethane	ND		0.0388	0.0303	*3	mg/Kg	☼	78	64 - 140	17	20
1,1-Dichloroethene	ND		0.0388	0.0520	*3	mg/Kg	☼	134	55 - 136	14	21
1,4-Dioxane	ND		0.776	0.654	J *3	mg/Kg	☼	84	18 - 166	4	40
Ethylbenzene	ND	F1	0.0388	0.0470	*3 F1	mg/Kg	☼	121	79 - 119	2	20
Methylene Chloride	ND		0.0388	0.0414	*3	mg/Kg	☼	107	67 - 131	12	32
Methyl tert-butyl ether	ND		0.0388	0.0399	*3	mg/Kg	☼	103	58 - 132	22	24
n-Butylbenzene	ND		0.0388	0.0527		mg/Kg	☼	136	64 - 136	8	21

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

Lab Sample ID: 180-153774-19 MSD
Matrix: Solid
Analysis Batch: 429704

Client Sample ID: NAFREST-BRP-SAND4A
Prep Type: Total/NA
Prep Batch: 429760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Propylbenzene	ND	F1 *+	0.0388	0.0522	F1	mg/Kg	☼	134	71 - 127	8	20
sec-Butylbenzene	ND	F1	0.0388	0.0534	F1	mg/Kg	☼	138	65 - 130	2	20
tert-Butylbenzene	ND		0.0388	0.0490		mg/Kg	☼	126	69 - 133	11	23
Tetrachloroethene	ND	F1	0.0388	0.0477	*3 F1	mg/Kg	☼	123	71 - 121	7	21
Toluene	ND		0.0388	0.0436	*3	mg/Kg	☼	112	76 - 120	10	20
trans-1,2-Dichloroethene	ND		0.0388	0.0457	*3	mg/Kg	☼	118	75 - 122	3	20
1,1,1-Trichloroethane	ND	F1	0.0388	0.0560	*3 F1	mg/Kg	☼	144	72 - 134	20	20
Trichloroethene	ND		0.0388	0.0410	*3	mg/Kg	☼	106	69 - 118	11	20
1,2,4-Trimethylbenzene	ND	F1	0.0388	0.0527	F1	mg/Kg	☼	136	74 - 127	2	20
1,3,5-Trimethylbenzene	ND	F1	0.0388	0.0541	F1	mg/Kg	☼	139	69 - 131	0	20
Vinyl chloride	ND	F2	0.0388	0.0440	*3 F2	mg/Kg	☼	113	64 - 134	37	23
Xylenes, Total	ND	F1	0.0776	0.0987	*3 F1	mg/Kg	☼	127	78 - 118	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*144*	**3 S1+*	*60 - 124*
Dibromofluoromethane (Surr)	*129*	**3 S1+*	*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*104*	**3*	*73 - 135*
Toluene-d8 (Surr)	*148*	**3 S1+*	*67 - 134*

Lab Sample ID: MB 180-429834/13
Matrix: Solid
Analysis Batch: 429834

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	0.0039	mg/Kg			03/21/23 14:16	1
Benzene	ND		0.0050	0.0014	mg/Kg			03/21/23 14:16	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			03/21/23 14:16	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			03/21/23 14:16	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			03/21/23 14:16	1
Chloroform	ND		0.0050	0.0016	mg/Kg			03/21/23 14:16	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			03/21/23 14:16	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			03/21/23 14:16	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			03/21/23 14:16	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			03/21/23 14:16	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			03/21/23 14:16	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			03/21/23 14:16	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			03/21/23 14:16	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			03/21/23 14:16	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			03/21/23 14:16	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			03/21/23 14:16	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			03/21/23 14:16	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/21/23 14:16	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			03/21/23 14:16	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/21/23 14:16	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			03/21/23 14:16	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			03/21/23 14:16	1
Toluene	ND		0.0050	0.0014	mg/Kg			03/21/23 14:16	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			03/21/23 14:16	1

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

Lab Sample ID: MB 180-429834/13
Matrix: Solid
Analysis Batch: 429834

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	0.0017	mg/Kg			03/21/23 14:16	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			03/21/23 14:16	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			03/21/23 14:16	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			03/21/23 14:16	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			03/21/23 14:16	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			03/21/23 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*60 - 124*		*03/21/23 14:16*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 126*		*03/21/23 14:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 135*		*03/21/23 14:16*	*1*
Toluene-d8 (Surr)	*111*		*67 - 134*		*03/21/23 14:16*	*1*

Lab Sample ID: LCS 180-429834/19
Matrix: Solid
Analysis Batch: 429834

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	0.0427		mg/Kg		107	23 - 170
Benzene	0.0400	0.0369		mg/Kg		92	77 - 120
2-Butanone (MEK)	0.0400	0.0292		mg/Kg		73	39 - 157
Carbon tetrachloride	0.0400	0.0396		mg/Kg		99	73 - 130
Chlorobenzene	0.0400	0.0406		mg/Kg		101	79 - 122
Chloroform	0.0400	0.0348		mg/Kg		87	73 - 126
cis-1,2-Dichloroethene	0.0400	0.0374		mg/Kg		94	77 - 118
1,2-Dichlorobenzene	0.0400	0.0377		mg/Kg		94	76 - 120
1,3-Dichlorobenzene	0.0400	0.0438		mg/Kg		110	77 - 121
1,4-Dichlorobenzene	0.0400	0.0416		mg/Kg		104	79 - 120
1,1-Dichloroethane	0.0400	0.0362		mg/Kg		91	73 - 124
1,2-Dichloroethane	0.0400	0.0291		mg/Kg		73	64 - 140
1,1-Dichloroethene	0.0400	0.0394		mg/Kg		98	55 - 136
1,4-Dioxane	0.800	0.497	J	mg/Kg		62	18 - 166
Ethylbenzene	0.0400	0.0436		mg/Kg		109	79 - 119
Methylene Chloride	0.0400	0.0305		mg/Kg		76	67 - 131
Methyl tert-butyl ether	0.0400	0.0260		mg/Kg		65	58 - 132
n-Butylbenzene	0.0400	0.0472		mg/Kg		118	64 - 136
N-Propylbenzene	0.0400	0.0541	*+	mg/Kg		135	71 - 127
sec-Butylbenzene	0.0400	0.0499		mg/Kg		125	65 - 130
tert-Butylbenzene	0.0400	0.0520		mg/Kg		130	69 - 133
Tetrachloroethene	0.0400	0.0474		mg/Kg		119	71 - 121
Toluene	0.0400	0.0432		mg/Kg		108	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0384		mg/Kg		96	75 - 122
1,1,1-Trichloroethane	0.0400	0.0401		mg/Kg		100	72 - 134
Trichloroethene	0.0400	0.0400		mg/Kg		100	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0491		mg/Kg		123	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0513		mg/Kg		128	69 - 131
Vinyl chloride	0.0400	0.0330		mg/Kg		83	64 - 134
Xylenes, Total	0.0800	0.0858		mg/Kg		107	78 - 118

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

Lab Sample ID: LCS 180-429834/19
Matrix: Solid
Analysis Batch: 429834

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*109*		*60 - 124*
Dibromofluoromethane (Surr)	*98*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 135*
Toluene-d8 (Surr)	*125*		*67 - 134*

Lab Sample ID: MB 180-429964/15
Matrix: Solid
Analysis Batch: 429964

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	0.0039	mg/Kg			03/22/23 12:23	1
Benzene	ND		0.0050	0.0014	mg/Kg			03/22/23 12:23	1
2-Butanone (MEK)	ND		0.0050	0.0025	mg/Kg			03/22/23 12:23	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			03/22/23 12:23	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			03/22/23 12:23	1
Chloroform	ND		0.0050	0.0016	mg/Kg			03/22/23 12:23	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			03/22/23 12:23	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			03/22/23 12:23	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			03/22/23 12:23	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			03/22/23 12:23	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			03/22/23 12:23	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			03/22/23 12:23	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			03/22/23 12:23	1
1,4-Dioxane	ND		1.0	0.035	mg/Kg			03/22/23 12:23	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			03/22/23 12:23	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			03/22/23 12:23	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			03/22/23 12:23	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/22/23 12:23	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			03/22/23 12:23	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			03/22/23 12:23	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			03/22/23 12:23	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			03/22/23 12:23	1
Toluene	ND		0.0050	0.0014	mg/Kg			03/22/23 12:23	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			03/22/23 12:23	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			03/22/23 12:23	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			03/22/23 12:23	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			03/22/23 12:23	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			03/22/23 12:23	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			03/22/23 12:23	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			03/22/23 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*103*		*60 - 124*		*03/22/23 12:23*	*1*
Dibromofluoromethane (Surr)	*98*		*69 - 126*		*03/22/23 12:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 135*		*03/22/23 12:23*	*1*
Toluene-d8 (Surr)	*119*		*67 - 134*		*03/22/23 12:23*	*1*

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

Lab Sample ID: LCS 180-429964/12
Matrix: Solid
Analysis Batch: 429964

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	0.0351		mg/Kg		88	23 - 170		
Benzene			0.0400	0.0403		mg/Kg		101	77 - 120		
2-Butanone (MEK)			0.0400	0.0276		mg/Kg		69	39 - 157		
Carbon tetrachloride			0.0400	0.0428		mg/Kg		107	73 - 130		
Chlorobenzene			0.0400	0.0474		mg/Kg		119	79 - 122		
Chloroform			0.0400	0.0381		mg/Kg		95	73 - 126		
cis-1,2-Dichloroethene			0.0400	0.0397		mg/Kg		99	77 - 118		
1,2-Dichlorobenzene			0.0400	0.0469		mg/Kg		117	76 - 120		
1,3-Dichlorobenzene			0.0400	0.0539	*+	mg/Kg		135	77 - 121		
1,4-Dichlorobenzene			0.0400	0.0515	*+	mg/Kg		129	79 - 120		
1,1-Dichloroethane			0.0400	0.0394		mg/Kg		99	73 - 124		
1,2-Dichloroethane			0.0400	0.0317		mg/Kg		79	64 - 140		
1,1-Dichloroethene			0.0400	0.0416		mg/Kg		104	55 - 136		
1,4-Dioxane			0.800	0.590	J	mg/Kg		74	18 - 166		
Ethylbenzene			0.0400	0.0505	*+	mg/Kg		126	79 - 119		
Methylene Chloride			0.0400	0.0327		mg/Kg		82	67 - 131		
Methyl tert-butyl ether			0.0400	0.0281		mg/Kg		70	58 - 132		
n-Butylbenzene			0.0400	0.0585	*+	mg/Kg		146	64 - 136		
N-Propylbenzene			0.0400	0.0650	*+	mg/Kg		162	71 - 127		
sec-Butylbenzene			0.0400	0.0610	*+	mg/Kg		152	65 - 130		
tert-Butylbenzene			0.0400	0.0638	*+	mg/Kg		160	69 - 133		
Tetrachloroethene			0.0400	0.0513	*+	mg/Kg		128	71 - 121		
Toluene			0.0400	0.0484	*+	mg/Kg		121	76 - 120		
trans-1,2-Dichloroethene			0.0400	0.0425		mg/Kg		106	75 - 122		
1,1,1-Trichloroethane			0.0400	0.0433		mg/Kg		108	72 - 134		
Trichloroethene			0.0400	0.0447		mg/Kg		112	69 - 118		
1,2,4-Trimethylbenzene			0.0400	0.0598	*+	mg/Kg		150	74 - 127		
1,3,5-Trimethylbenzene			0.0400	0.0619	*+	mg/Kg		155	69 - 131		
Vinyl chloride			0.0400	0.0497		mg/Kg		124	64 - 134		
Xylenes, Total			0.0800	0.101	*+	mg/Kg		126	78 - 118		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*60 - 124*
Dibromofluoromethane (Surr)	*109*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 135*
Toluene-d8 (Surr)	*132*		*67 - 134*

Lab Sample ID: LCSD 180-429964/13
Matrix: Solid
Analysis Batch: 429964

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	0.0324		mg/Kg		81	23 - 170	8	35
Benzene			0.0400	0.0369		mg/Kg		92	77 - 120	9	20
2-Butanone (MEK)			0.0400	0.0288		mg/Kg		72	39 - 157	4	33
Carbon tetrachloride			0.0400	0.0369		mg/Kg		92	73 - 130	15	21
Chlorobenzene			0.0400	0.0426		mg/Kg		107	79 - 122	11	20
Chloroform			0.0400	0.0322		mg/Kg		81	73 - 126	17	20

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

Lab Sample ID: LCSD 180-429964/13
Matrix: Solid
Analysis Batch: 429964

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
cis-1,2-Dichloroethene			0.0400	0.0356		mg/Kg		89	77 - 118	11	20
1,2-Dichlorobenzene			0.0400	0.0403		mg/Kg		101	76 - 120	15	20
1,3-Dichlorobenzene			0.0400	0.0460		mg/Kg		115	77 - 121	16	20
1,4-Dichlorobenzene			0.0400	0.0434		mg/Kg		109	79 - 120	17	20
1,1-Dichloroethane			0.0400	0.0336		mg/Kg		84	73 - 124	16	20
1,2-Dichloroethane			0.0400	0.0302		mg/Kg		76	64 - 140	5	20
1,1-Dichloroethene			0.0400	0.0354		mg/Kg		89	55 - 136	16	21
1,4-Dioxane			0.800	0.587	J	mg/Kg		73	18 - 166	0	40
Ethylbenzene			0.0400	0.0450		mg/Kg		113	79 - 119	12	20
Methylene Chloride			0.0400	0.0291		mg/Kg		73	67 - 131	12	32
Methyl tert-butyl ether			0.0400	0.0260		mg/Kg		65	58 - 132	8	24
n-Butylbenzene			0.0400	0.0480		mg/Kg		120	64 - 136	20	21
N-Propylbenzene			0.0400	0.0533	*+	mg/Kg		133	71 - 127	20	20
sec-Butylbenzene			0.0400	0.0504		mg/Kg		126	65 - 130	19	20
tert-Butylbenzene			0.0400	0.0528		mg/Kg		132	69 - 133	19	23
Tetrachloroethene			0.0400	0.0470		mg/Kg		117	71 - 121	9	21
Toluene			0.0400	0.0441		mg/Kg		110	76 - 120	9	20
trans-1,2-Dichloroethene			0.0400	0.0366		mg/Kg		91	75 - 122	15	20
1,1,1-Trichloroethane			0.0400	0.0360		mg/Kg		90	72 - 134	18	20
Trichloroethene			0.0400	0.0404		mg/Kg		101	69 - 118	10	20
1,2,4-Trimethylbenzene			0.0400	0.0502		mg/Kg		126	74 - 127	17	20
1,3,5-Trimethylbenzene			0.0400	0.0521		mg/Kg		130	69 - 131	17	20
Vinyl chloride			0.0400	0.0464		mg/Kg		116	64 - 134	7	23
Xylenes, Total			0.0800	0.0895		mg/Kg		112	78 - 118	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*60 - 124*
Dibromofluoromethane (Surr)	*82*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 135*
Toluene-d8 (Surr)	*110*		*67 - 134*

Lab Sample ID: 180-153774-20 MS
Matrix: Solid
Analysis Batch: 429834

Client Sample ID: NAFREST-BRP-SAND4B
Prep Type: Total/NA
Prep Batch: 429979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		0.0418	0.0499		mg/Kg	☼	119	23 - 170
Benzene	ND		0.0418	0.0409		mg/Kg	☼	98	77 - 120
2-Butanone (MEK)	ND		0.0418	0.0360		mg/Kg	☼	86	39 - 157
Carbon tetrachloride	ND		0.0418	0.0431		mg/Kg	☼	103	73 - 130
Chlorobenzene	ND		0.0418	0.0435		mg/Kg	☼	104	79 - 122
Chloroform	ND		0.0418	0.0384		mg/Kg	☼	92	73 - 126
cis-1,2-Dichloroethene	ND		0.0418	0.0419		mg/Kg	☼	100	77 - 118
1,2-Dichlorobenzene	ND		0.0418	0.0407		mg/Kg	☼	97	76 - 120
1,3-Dichlorobenzene	ND		0.0418	0.0453		mg/Kg	☼	108	77 - 121
1,4-Dichlorobenzene	ND		0.0418	0.0436		mg/Kg	☼	104	79 - 120
1,1-Dichloroethane	ND		0.0418	0.0390		mg/Kg	☼	93	73 - 124
1,2-Dichloroethane	ND		0.0418	0.0337		mg/Kg	☼	81	64 - 140

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

Lab Sample ID: 180-153774-20 MS
Matrix: Solid
Analysis Batch: 429834

Client Sample ID: NAFREST-BRP-SAND4B
Prep Type: Total/NA
Prep Batch: 429979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		0.0418	0.0424		mg/Kg	☼	101	55 - 136
1,4-Dioxane	ND		0.835	0.579	J	mg/Kg	☼	69	18 - 166
Ethylbenzene	ND		0.0418	0.0465		mg/Kg	☼	111	79 - 119
Methylene Chloride	ND		0.0418	0.0338		mg/Kg	☼	81	67 - 131
Methyl tert-butyl ether	ND		0.0418	0.0312		mg/Kg	☼	75	58 - 132
n-Butylbenzene	ND		0.0418	0.0480		mg/Kg	☼	115	64 - 136
N-Propylbenzene	ND	F1 *+	0.0418	0.0551	F1	mg/Kg	☼	132	71 - 127
sec-Butylbenzene	ND		0.0418	0.0511		mg/Kg	☼	122	65 - 130
tert-Butylbenzene	ND		0.0418	0.0528		mg/Kg	☼	127	69 - 133
Tetrachloroethene	ND		0.0418	0.0496		mg/Kg	☼	119	71 - 121
Toluene	ND		0.0418	0.0463		mg/Kg	☼	111	76 - 120
trans-1,2-Dichloroethene	ND		0.0418	0.0426		mg/Kg	☼	102	75 - 122
1,1,1-Trichloroethane	ND		0.0418	0.0433		mg/Kg	☼	104	72 - 134
Trichloroethene	ND		0.0418	0.0442		mg/Kg	☼	106	69 - 118
1,2,4-Trimethylbenzene	ND		0.0418	0.0505		mg/Kg	☼	121	74 - 127
1,3,5-Trimethylbenzene	ND		0.0418	0.0528		mg/Kg	☼	126	69 - 131
Vinyl chloride	ND		0.0418	0.0357		mg/Kg	☼	85	64 - 134
Xylenes, Total	ND		0.0835	0.0917		mg/Kg	☼	110	78 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*60 - 124*
Dibromofluoromethane (Surr)	*107*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 135*
Toluene-d8 (Surr)	*130*		*67 - 134*

Lab Sample ID: 180-153774-20 MSD
Matrix: Solid
Analysis Batch: 429834

Client Sample ID: NAFREST-BRP-SAND4B
Prep Type: Total/NA
Prep Batch: 429979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		0.0412	0.0461		mg/Kg	☼	112	23 - 170	8	35
Benzene	ND		0.0412	0.0386		mg/Kg	☼	94	77 - 120	6	20
2-Butanone (MEK)	ND		0.0412	0.0330		mg/Kg	☼	80	39 - 157	9	33
Carbon tetrachloride	ND		0.0412	0.0406		mg/Kg	☼	99	73 - 130	6	21
Chlorobenzene	ND		0.0412	0.0408		mg/Kg	☼	99	79 - 122	6	20
Chloroform	ND		0.0412	0.0366		mg/Kg	☼	89	73 - 126	5	20
cis-1,2-Dichloroethene	ND		0.0412	0.0397		mg/Kg	☼	96	77 - 118	5	20
1,2-Dichlorobenzene	ND		0.0412	0.0388		mg/Kg	☼	94	76 - 120	5	20
1,3-Dichlorobenzene	ND		0.0412	0.0445		mg/Kg	☼	108	77 - 121	2	20
1,4-Dichlorobenzene	ND		0.0412	0.0423		mg/Kg	☼	103	79 - 120	3	20
1,1-Dichloroethane	ND		0.0412	0.0366		mg/Kg	☼	89	73 - 124	6	20
1,2-Dichloroethane	ND		0.0412	0.0313		mg/Kg	☼	76	64 - 140	7	20
1,1-Dichloroethene	ND		0.0412	0.0410		mg/Kg	☼	99	55 - 136	3	21
1,4-Dioxane	ND		0.824	0.578	J	mg/Kg	☼	70	18 - 166	0	40
Ethylbenzene	ND		0.0412	0.0443		mg/Kg	☼	108	79 - 119	5	20
Methylene Chloride	ND		0.0412	0.0327		mg/Kg	☼	79	67 - 131	3	32
Methyl tert-butyl ether	ND		0.0412	0.0286		mg/Kg	☼	69	58 - 132	9	24
n-Butylbenzene	ND		0.0412	0.0465		mg/Kg	☼	113	64 - 136	3	21

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

Lab Sample ID: 180-153774-20 MSD
Client Sample ID: NAFREST-BRP-SAND4B
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429834
Prep Batch: 429979

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-Propylbenzene	ND	F1 *+	0.0412	0.0536	F1	mg/Kg	☼	130	71 - 127	3	20
sec-Butylbenzene	ND		0.0412	0.0501		mg/Kg	☼	122	65 - 130	2	20
tert-Butylbenzene	ND		0.0412	0.0519		mg/Kg	☼	126	69 - 133	2	23
Tetrachloroethene	ND		0.0412	0.0466		mg/Kg	☼	113	71 - 121	6	21
Toluene	ND		0.0412	0.0442		mg/Kg	☼	107	76 - 120	5	20
trans-1,2-Dichloroethene	ND		0.0412	0.0406		mg/Kg	☼	98	75 - 122	5	20
1,1,1-Trichloroethane	ND		0.0412	0.0412		mg/Kg	☼	100	72 - 134	5	20
Trichloroethene	ND		0.0412	0.0422		mg/Kg	☼	102	69 - 118	5	20
1,2,4-Trimethylbenzene	ND		0.0412	0.0493		mg/Kg	☼	120	74 - 127	2	20
1,3,5-Trimethylbenzene	ND		0.0412	0.0522		mg/Kg	☼	127	69 - 131	1	20
Vinyl chloride	ND		0.0412	0.0341		mg/Kg	☼	83	64 - 134	5	23
Xylenes, Total	ND		0.0824	0.0867		mg/Kg	☼	105	78 - 118	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*60 - 124*
Dibromofluoromethane (Surr)	*105*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*86*		*73 - 135*
Toluene-d8 (Surr)	*127*		*67 - 134*

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

Lab Sample ID: MB 180-429736/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429810
Prep Batch: 429736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0034	0.00096	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Acenaphthylene	ND		0.0034	0.00073	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Anthracene	ND		0.0034	0.00087	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Benzo[a]anthracene	ND		0.0034	0.0015	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Benzo[a]pyrene	ND		0.0034	0.0014	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Benzo[b]fluoranthene	ND		0.0034	0.00082	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Benzo[g,h,i]perylene	ND		0.0034	0.00072	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Benzo[k]fluoranthene	ND		0.0034	0.0010	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Chrysene	ND		0.0034	0.0019	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Dibenz(a,h)anthracene	ND		0.0034	0.0021	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Dibenzofuran	ND		0.017	0.0062	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
1,4-Dioxane	ND		0.033	0.0052	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Fluoranthene	ND		0.0034	0.00088	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Fluorene	ND		0.0034	0.00066	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Hexachlorobenzene	ND		0.0034	0.0012	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Indeno[1,2,3-cd]pyrene	ND		0.0034	0.0017	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
2-Methylphenol	ND		0.017	0.0048	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Methylphenol, 3 & 4	ND		0.017	0.0049	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Naphthalene	ND		0.0034	0.00065	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Pentachlorophenol	ND		0.085	0.027	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Phenanthrene	ND		0.0034	0.00090	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Phenol	ND		0.017	0.0051	mg/Kg		03/20/23 10:41	03/21/23 10:03	1
Pyrene	ND		0.0034	0.00079	mg/Kg		03/20/23 10:41	03/21/23 10:03	1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*72*		*35 - 105*	*03/20/23 10:41*	*03/21/23 10:03*	*1*
2-Fluorophenol (Surr)	*90*		*32 - 105*	*03/20/23 10:41*	*03/21/23 10:03*	*1*
Nitrobenzene-d5 (Surr)	*91*		*34 - 109*	*03/20/23 10:41*	*03/21/23 10:03*	*1*
Phenol-d5 (Surr)	*86*		*34 - 105*	*03/20/23 10:41*	*03/21/23 10:03*	*1*
Terphenyl-d14 (Surr)	*76*		*20 - 117*	*03/20/23 10:41*	*03/21/23 10:03*	*1*
2,4,6-Tribromophenol (Surr)	*74*		*20 - 119*	*03/20/23 10:41*	*03/21/23 10:03*	*1*

Lab Sample ID: LCS 180-429736/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429810
Prep Batch: 429736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.333	0.244		mg/Kg		73	41 - 100
Acenaphthylene	0.333	0.238		mg/Kg		71	45 - 100
Anthracene	0.333	0.242		mg/Kg		73	47 - 100
Benzo[a]anthracene	0.333	0.236		mg/Kg		71	47 - 100
Benzo[a]pyrene	0.333	0.229		mg/Kg		69	45 - 101
Benzo[b]fluoranthene	0.333	0.215		mg/Kg		65	44 - 100
Benzo[g,h,i]perylene	0.333	0.235		mg/Kg		71	45 - 103
Benzo[k]fluoranthene	0.333	0.213		mg/Kg		64	43 - 100
Chrysene	0.333	0.219		mg/Kg		66	44 - 100
Dibenz(a,h)anthracene	0.333	0.240		mg/Kg		72	46 - 107
Dibenzofuran	0.333	0.228		mg/Kg		68	47 - 100
1,4-Dioxane	0.333	0.202		mg/Kg		61	10 - 133
Fluoranthene	0.333	0.242		mg/Kg		73	49 - 102
Fluorene	0.333	0.234		mg/Kg		70	46 - 100
Hexachlorobenzene	0.333	0.221		mg/Kg		66	45 - 101
Indeno[1,2,3-cd]pyrene	0.333	0.236		mg/Kg		71	48 - 104
2-Methylphenol	0.333	0.231		mg/Kg		69	43 - 101
Methylphenol, 3 & 4	0.333	0.231		mg/Kg		69	43 - 104
Naphthalene	0.333	0.229		mg/Kg		69	43 - 100
Pentachlorophenol	0.667	0.449		mg/Kg		67	34 - 112
Phenanthrene	0.333	0.227		mg/Kg		68	46 - 100
Phenol	0.333	0.233		mg/Kg		70	42 - 103
Pyrene	0.333	0.239		mg/Kg		72	44 - 102

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	*65*		*35 - 105*
2-Fluorophenol (Surr)	*84*		*32 - 105*
Nitrobenzene-d5 (Surr)	*81*		*34 - 109*
Phenol-d5 (Surr)	*70*		*34 - 105*
Terphenyl-d14 (Surr)	*69*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*68*		*20 - 119*

Lab Sample ID: 180-153774-21 MS
Client Sample ID: NAFREST-BRP-SAND4C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429810
Prep Batch: 429736

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		0.708	0.333		mg/Kg	☼	47	41 - 100
Acenaphthylene	ND	F1	0.708	0.329		mg/Kg	☼	46	45 - 100

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

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 429810

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429736

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	ND		0.708	0.353		mg/Kg	☼	50	47 - 100
Benzo[a]anthracene	ND		0.708	0.338		mg/Kg	☼	48	47 - 100
Benzo[a]pyrene	ND		0.708	0.336		mg/Kg	☼	47	45 - 101
Benzo[b]fluoranthene	ND		0.708	0.313		mg/Kg	☼	44	44 - 100
Benzo[g,h,i]perylene	ND		0.708	0.329		mg/Kg	☼	47	45 - 103
Benzo[k]fluoranthene	ND		0.708	0.322		mg/Kg	☼	45	43 - 100
Chrysene	ND		0.708	0.318		mg/Kg	☼	45	44 - 100
Dibenz(a,h)anthracene	ND		0.708	0.329		mg/Kg	☼	46	46 - 107
Dibenzofuran	ND	F1	0.708	0.317	F1	mg/Kg	☼	45	47 - 100
1,4-Dioxane	ND		0.708	0.284		mg/Kg	☼	40	10 - 133
Fluoranthene	ND		0.708	0.347		mg/Kg	☼	49	49 - 102
Fluorene	ND		0.708	0.326		mg/Kg	☼	46	46 - 100
Hexachlorobenzene	ND	F1	0.708	0.295	F1	mg/Kg	☼	42	45 - 101
Indeno[1,2,3-cd]pyrene	ND	F1	0.708	0.332	F1	mg/Kg	☼	47	48 - 104
2-Methylphenol	ND	F1	0.708	0.300	F1	mg/Kg	☼	42	43 - 101
Methylphenol, 3 & 4	ND		0.708	0.311		mg/Kg	☼	44	43 - 104
Naphthalene	ND		0.708	0.309		mg/Kg	☼	44	43 - 100
Pentachlorophenol	ND	F1	1.42	0.438	F1	mg/Kg	☼	31	34 - 112
Phenanthrene	ND	F1	0.708	0.321	F1	mg/Kg	☼	45	46 - 100
Phenol	ND		0.708	0.305		mg/Kg	☼	43	42 - 103
Pyrene	ND		0.708	0.337		mg/Kg	☼	48	44 - 102

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*35 - 105*
2-Fluorophenol (Surr)	*62*		*32 - 105*
Nitrobenzene-d5 (Surr)	*70*		*34 - 109*
Phenol-d5 (Surr)	*56*		*34 - 105*
Terphenyl-d14 (Surr)	*59*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*53*		*20 - 119*

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 429810

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429736

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		0.703	0.356		mg/Kg	☼	51	41 - 100	7	22
Acenaphthylene	ND	F1	0.703	0.280	F1	mg/Kg	☼	40	45 - 100	16	23
Anthracene	ND		0.703	0.388		mg/Kg	☼	55	47 - 100	9	26
Benzo[a]anthracene	ND		0.703	0.374		mg/Kg	☼	53	47 - 100	10	24
Benzo[a]pyrene	ND		0.703	0.365		mg/Kg	☼	52	45 - 101	8	21
Benzo[b]fluoranthene	ND		0.703	0.339		mg/Kg	☼	48	44 - 100	8	26
Benzo[g,h,i]perylene	ND		0.703	0.332		mg/Kg	☼	47	45 - 103	1	22
Benzo[k]fluoranthene	ND		0.703	0.357		mg/Kg	☼	51	43 - 100	10	18
Chrysene	ND		0.703	0.344		mg/Kg	☼	49	44 - 100	8	26
Dibenz(a,h)anthracene	ND		0.703	0.351		mg/Kg	☼	50	46 - 107	7	24
Dibenzofuran	ND	F1	0.703	0.341		mg/Kg	☼	48	47 - 100	7	19
1,4-Dioxane	ND		0.703	0.189		mg/Kg	☼	27	10 - 133	40	40
Fluoranthene	ND		0.703	0.371		mg/Kg	☼	53	49 - 102	7	26

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

Lab Sample ID: 180-153774-21 MSD
Client Sample ID: NAFREST-BRP-SAND4C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429810
Prep Batch: 429736

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene	ND		0.703	0.349		mg/Kg	☼	50	46 - 100	7	22
Hexachlorobenzene	ND	F1	0.703	0.348		mg/Kg	☼	49	45 - 101	16	27
Indeno[1,2,3-cd]pyrene	ND	F1	0.703	0.343		mg/Kg	☼	49	48 - 104	3	22
2-Methylphenol	ND	F1	0.703	0.316		mg/Kg	☼	45	43 - 101	5	27
Methylphenol, 3 & 4	ND		0.703	0.310		mg/Kg	☼	44	43 - 104	0	24
Naphthalene	ND		0.703	0.333		mg/Kg	☼	47	43 - 100	7	28
Pentachlorophenol	ND	F1	1.41	0.492		mg/Kg	☼	35	34 - 112	12	28
Phenanthrene	ND	F1	0.703	0.362		mg/Kg	☼	51	46 - 100	12	27
Phenol	ND		0.703	0.323		mg/Kg	☼	46	42 - 103	6	30
Pyrene	ND		0.703	0.376		mg/Kg	☼	53	44 - 102	11	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*35 - 105*
2-Fluorophenol (Surr)	*66*		*32 - 105*
Nitrobenzene-d5 (Surr)	*74*		*34 - 109*
Phenol-d5 (Surr)	*59*		*34 - 105*
Terphenyl-d14 (Surr)	*66*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*62*		*20 - 119*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-429932/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429960
Prep Batch: 429932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
4,4'-DDD	ND		0.0017	0.00035	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Endosulfan sulfate	ND		0.0017	0.00077	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Endrin	ND		0.0017	0.00031	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		03/21/23 17:33	03/22/23 18:15	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		03/21/23 17:33	03/22/23 18:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*112*		*42 - 124*	*03/21/23 17:33*	*03/22/23 18:15*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 124*	*03/21/23 17:33*	*03/22/23 18:15*	*1*
Tetrachloro-m-xylene	*98*		*40 - 137*	*03/21/23 17:33*	*03/22/23 18:15*	*1*
Tetrachloro-m-xylene	*98*		*40 - 137*	*03/21/23 17:33*	*03/22/23 18:15*	*1*

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

Lab Sample ID: LCS 180-429932/2-A
Matrix: Solid
Analysis Batch: 429960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 429932

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.0333	0.0278		mg/Kg		83	60 - 131		
alpha-BHC			0.0333	0.0267		mg/Kg		80	67 - 125		
beta-BHC			0.0333	0.0276		mg/Kg		83	63 - 123		
cis-Chlordane			0.0333	0.0282		mg/Kg		85	57 - 120		
4,4'-DDD			0.0333	0.0360		mg/Kg		108	64 - 131		
4,4'-DDE			0.0333	0.0370		mg/Kg		111	57 - 132		
4,4'-DDT			0.0333	0.0280		mg/Kg		84	54 - 117		
delta-BHC			0.0333	0.0240		mg/Kg		72	50 - 134		
Dieldrin			0.0333	0.0347		mg/Kg		104	64 - 127		
Endosulfan I			0.0333	0.0273		mg/Kg		82	55 - 131		
Endosulfan II			0.0333	0.0334		mg/Kg		100	61 - 130		
Endosulfan sulfate			0.0333	0.0352		mg/Kg		106	57 - 132		
Endrin			0.0333	0.0351		mg/Kg		105	66 - 125		
gamma-BHC (Lindane)			0.0333	0.0270		mg/Kg		81	69 - 124		
Heptachlor			0.0333	0.0277		mg/Kg		83	62 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*74*		*42 - 124*
Tetrachloro-m-xylene	*90*		*40 - 137*
Tetrachloro-m-xylene	*88*		*40 - 137*

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 429960

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429932

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin	ND		0.0354	0.0309		mg/Kg	☼	87	60 - 131		
alpha-BHC	ND		0.0354	0.0296		mg/Kg	☼	84	67 - 125		
beta-BHC	ND		0.0354	0.0300		mg/Kg	☼	85	63 - 123		
cis-Chlordane	ND		0.0354	0.0303		mg/Kg	☼	86	57 - 120		
4,4'-DDD	ND		0.0354	0.0390		mg/Kg	☼	110	64 - 131		
4,4'-DDE	ND		0.0354	0.0399		mg/Kg	☼	113	57 - 132		
4,4'-DDT	ND		0.0354	0.0273		mg/Kg	☼	77	54 - 117		
delta-BHC	ND	F1	0.0354	0.0229		mg/Kg	☼	65	50 - 134		
Dieldrin	ND		0.0354	0.0378		mg/Kg	☼	107	64 - 127		
Endosulfan I	ND		0.0354	0.0293		mg/Kg	☼	83	55 - 131		
Endosulfan II	ND	F2 F1	0.0354	0.0294		mg/Kg	☼	83	61 - 130		
Endosulfan sulfate	ND	F2 F1	0.0354	0.0239		mg/Kg	☼	67	57 - 132		
Endrin	ND		0.0354	0.0382		mg/Kg	☼	108	66 - 125		
gamma-BHC (Lindane)	ND		0.0354	0.0296		mg/Kg	☼	84	69 - 124		
Heptachlor	ND		0.0354	0.0310		mg/Kg	☼	87	62 - 133		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*72*		*42 - 124*
Tetrachloro-m-xylene	*95*		*40 - 137*
Tetrachloro-m-xylene	*93*		*40 - 137*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 429960

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429932

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND		0.0354	0.0286		mg/Kg	☼	81	60 - 131	8	40
alpha-BHC	ND		0.0354	0.0274		mg/Kg	☼	77	67 - 125	8	40
beta-BHC	ND		0.0354	0.0273		mg/Kg	☼	77	63 - 123	9	40
cis-Chlordane	ND		0.0354	0.0281		mg/Kg	☼	79	57 - 120	8	40
4,4'-DDD	ND		0.0354	0.0310		mg/Kg	☼	87	64 - 131	23	40
4,4'-DDE	ND		0.0354	0.0331		mg/Kg	☼	94	57 - 132	19	40
4,4'-DDT	ND		0.0354	0.0225		mg/Kg	☼	63	54 - 117	19	40
delta-BHC	ND	F1	0.0354	0.0189		mg/Kg	☼	53	50 - 134	19	40
Dieldrin	ND		0.0354	0.0317		mg/Kg	☼	90	64 - 127	18	40
Endosulfan I	ND		0.0354	0.0255		mg/Kg	☼	72	55 - 131	14	40
Endosulfan II	ND	F2 F1	0.0354	0.0173	F2 F1	mg/Kg	☼	49	61 - 130	52	40
Endosulfan sulfate	ND	F2 F1	0.0354	0.0128	F2 F1	mg/Kg	☼	36	57 - 132	61	40
Endrin	ND		0.0354	0.0312		mg/Kg	☼	88	66 - 125	20	40
gamma-BHC (Lindane)	ND		0.0354	0.0276		mg/Kg	☼	78	69 - 124	7	40
Heptachlor	ND		0.0354	0.0283		mg/Kg	☼	80	62 - 133	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*64*		*42 - 124*
Tetrachloro-m-xylene	*88*		*40 - 137*
Tetrachloro-m-xylene	*86*		*40 - 137*

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

Lab Sample ID: MB 180-429669/1-A
Matrix: Solid
Analysis Batch: 429687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 429669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.0083	0.0027	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1221	ND		0.0083	0.0030	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1232	ND		0.0083	0.0020	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1242	ND		0.0083	0.0012	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1248	ND		0.0083	0.0020	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1254	ND		0.0083	0.0025	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1260	ND		0.0083	0.0024	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1262	ND		0.0083	0.0029	mg/Kg		03/19/23 11:47	03/20/23 07:55	1
PCB-1268	ND		0.0083	0.0011	mg/Kg		03/19/23 11:47	03/20/23 07:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*116*		*63 - 138*	*03/19/23 11:47*	*03/20/23 07:55*	*1*
DCB Decachlorobiphenyl (Surr)	*106*		*63 - 138*	*03/19/23 11:47*	*03/20/23 07:55*	*1*
Tetrachloro-m-xylene (Surr)	*105*		*55 - 135*	*03/19/23 11:47*	*03/20/23 07:55*	*1*
Tetrachloro-m-xylene (Surr)	*113*		*55 - 135*	*03/19/23 11:47*	*03/20/23 07:55*	*1*

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

Lab Sample ID: LCS 180-429669/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429687
Prep Batch: 429669

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			0.667	0.614		mg/Kg		92	43 - 136		
PCB-1260			0.667	0.683		mg/Kg		102	55 - 128		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*102*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*92*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*95*		*55 - 135*

Lab Sample ID: 180-153774-21 MS
Client Sample ID: NAFREST-BRP-SAND4C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429687
Prep Batch: 429669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016	ND		1.39	1.62		mg/Kg	☼	117	43 - 136		
PCB-1260	ND	F1	1.39	1.81	F1	mg/Kg	☼	130	55 - 128		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*109*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*111*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*110*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*116*		*55 - 135*

Lab Sample ID: 180-153774-21 MSD
Client Sample ID: NAFREST-BRP-SAND4C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 429687
Prep Batch: 429669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1.39	1.37		mg/Kg	☼	98	43 - 136	17	40
PCB-1260	ND	F1	1.39	1.42		mg/Kg	☼	102	55 - 128	24	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*95*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*94*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*98*		*55 - 135*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-430121/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 430911
Prep Batch: 430121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		03/23/23 01:00	03/31/23 11:08	1

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 180-430121/1-A
Matrix: Solid
Analysis Batch: 430911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430121

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*51*		*48 - 127*	*03/23/23 01:00*	*03/31/23 11:08*	*1*
2,4-Dichlorophenylacetic acid	*55*		*48 - 127*	*03/23/23 01:00*	*03/31/23 11:08*	*1*

Lab Sample ID: LCS 180-430121/2-A
Matrix: Solid
Analysis Batch: 430560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430121

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP)			0.100	0.0579		mg/Kg		58	33 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*48*		*48 - 127*
2,4-Dichlorophenylacetic acid	*51*		*48 - 127*

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 430560

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP)	ND		0.107	0.0679		mg/Kg	☼	63	33 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*50*		*48 - 127*
2,4-Dichlorophenylacetic acid	*62*		*48 - 127*

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 430560

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430121

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		0.107	0.0709		mg/Kg	☼	66	33 - 140	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*54*		*48 - 127*
2,4-Dichlorophenylacetic acid	*61*		*48 - 127*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-429891/1-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 429891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.63	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Barium	ND		20	3.6	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Beryllium	ND		0.40	0.11	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Cadmium	ND		0.50	0.073	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Chromium	ND		0.50	0.46	mg/Kg		03/21/23 11:55	03/27/23 09:08	1

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

Lab Sample ID: MB 180-429891/1-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 429891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.5	1.5	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Lead	ND		1.0	0.87	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Manganese	ND		1.5	0.28	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Nickel	ND		4.0	0.50	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Selenium	ND		1.0	0.46	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Silver	ND		0.50	0.10	mg/Kg		03/21/23 11:55	03/27/23 09:08	1
Zinc	ND		2.0	1.5	mg/Kg		03/21/23 11:55	03/27/23 09:08	1

Lab Sample ID: LCS 180-429891/2-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 429891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	113		mg/Kg		113	80 - 120
Barium	100	107		mg/Kg		107	80 - 120
Beryllium	50.0	54.9		mg/Kg		110	80 - 120
Cadmium	50.0	54.0		mg/Kg		108	80 - 120
Chromium	50.0	53.5		mg/Kg		107	80 - 120
Copper	50.0	54.3		mg/Kg		109	80 - 120
Lead	50.0	53.5		mg/Kg		107	80 - 120
Manganese	50.0	53.1		mg/Kg		106	80 - 120
Nickel	50.0	53.2		mg/Kg		106	80 - 120
Selenium	100	107		mg/Kg		107	80 - 120
Silver	25.0	26.1		mg/Kg		105	80 - 120
Zinc	25.0	28.3		mg/Kg		113	80 - 120

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429891

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	6.8		69.4	65.0		mg/Kg	☼	84	75 - 125
Barium	35	F1	69.4	90.8		mg/Kg	☼	80	75 - 125
Beryllium	0.28		34.7	27.8		mg/Kg	☼	79	75 - 125
Cadmium	0.088	J	34.7	29.2		mg/Kg	☼	84	75 - 125
Chromium	9.8	F1	34.7	37.4		mg/Kg	☼	80	75 - 125
Copper	26		34.7	53.7		mg/Kg	☼	80	75 - 125
Lead	8.7	F1	34.7	38.1		mg/Kg	☼	85	75 - 125
Manganese	400	F2	34.7	410	4	mg/Kg	☼	29	75 - 125
Nickel	19	F1	34.7	48.6		mg/Kg	☼	86	75 - 125
Selenium	0.28	J	69.4	58.0		mg/Kg	☼	83	75 - 125
Silver	ND		17.4	14.5		mg/Kg	☼	84	75 - 125
Zinc	54	F1	17.4	66.2	F1	mg/Kg	☼	69	75 - 125

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

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 429891

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	6.8		69.4	61.2		mg/Kg	☼	78	75 - 125	6	20
Barium	35	F1	69.4	80.1	F1	mg/Kg	☼	64	75 - 125	13	20
Beryllium	0.28		34.7	26.4		mg/Kg	☼	75	75 - 125	5	20
Cadmium	0.088	J	34.7	28.0		mg/Kg	☼	80	75 - 125	4	20
Chromium	9.8	F1	34.7	33.9	F1	mg/Kg	☼	69	75 - 125	10	20
Copper	26		34.7	52.6		mg/Kg	☼	77	75 - 125	2	20
Lead	8.7	F1	34.7	34.4	F1	mg/Kg	☼	74	75 - 125	10	20
Manganese	400	F2	34.7	305	4 F2	mg/Kg	☼	-271	75 - 125	29	20
Nickel	19	F1	34.7	44.1	F1	mg/Kg	☼	73	75 - 125	10	20
Selenium	0.28	J	69.4	56.4		mg/Kg	☼	81	75 - 125	3	20
Silver	ND		17.4	13.8		mg/Kg	☼	80	75 - 125	5	20
Zinc	54	F1	17.4	61.3	F1	mg/Kg	☼	40	75 - 125	8	20

Lab Sample ID: MB 180-430196/1-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.63	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Barium	ND		20	3.6	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Beryllium	ND		0.40	0.11	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Cadmium	ND		0.50	0.073	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Chromium	ND		0.50	0.46	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Copper	ND		2.5	1.5	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Lead	ND		1.0	0.87	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Manganese	ND		1.5	0.28	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Nickel	ND		4.0	0.50	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Silver	ND		0.50	0.10	mg/Kg		03/23/23 11:31	03/27/23 19:10	1
Zinc	ND		2.0	1.5	mg/Kg		03/23/23 11:31	03/27/23 19:10	1

Lab Sample ID: MB 180-430196/1-A
Matrix: Solid
Analysis Batch: 430657

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430196

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		1.0	0.46	mg/Kg		03/23/23 11:31	03/28/23 13:36	1

Lab Sample ID: LCS 180-430196/2-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	100	108		mg/Kg		108	80 - 120
Barium	100	106		mg/Kg		106	80 - 120
Beryllium	50.0	52.1		mg/Kg		104	80 - 120
Cadmium	50.0	53.0		mg/Kg		106	80 - 120
Chromium	50.0	50.5		mg/Kg		101	80 - 120
Copper	50.0	53.0		mg/Kg		106	80 - 120
Lead	50.0	50.7		mg/Kg		101	80 - 120

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

Lab Sample ID: LCS 180-430196/2-A
Matrix: Solid
Analysis Batch: 430516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	50.0	52.1		mg/Kg		104	80 - 120
Nickel	50.0	52.9		mg/Kg		106	80 - 120
Silver	25.0	26.3		mg/Kg		105	80 - 120
Zinc	25.0	25.7		mg/Kg		103	80 - 120

Lab Sample ID: LCS 180-430196/2-A
Matrix: Solid
Analysis Batch: 430657

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430196

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	100	109		mg/Kg		109	80 - 120

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-430857/1-A
Matrix: Solid
Analysis Batch: 430888

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		03/30/23 12:33	03/30/23 18:43	1

Lab Sample ID: LCS 180-430857/2-A
Matrix: Solid
Analysis Batch: 430888

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.417	0.411		mg/Kg		99	80 - 120

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 430888

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430857

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.149	0.161		mg/Kg	☼	108	80 - 120

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 430888

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430857

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.134	0.143		mg/Kg	☼	107	80 - 120	12	20

Method: 2540G - SM 2540G

Lab Sample ID: 180-153774-8 DU
Matrix: Solid
Analysis Batch: 429780

Client Sample ID: NAFREST-BRP-SAND1H
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	8.1		7.9		%		3	10
Percent Solids	91.9		92.1		%		0.3	10

Method: 2540G - SM 2540G

Lab Sample ID: 180-153774-18 DU
Matrix: Solid
Analysis Batch: 429780

Client Sample ID: NAFREST-BRP-SAND3C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	6.9		7.3		%		5	10
Percent Solids	93.1		92.7		%		0.4	10

Lab Sample ID: 180-153774-21 DU
Matrix: Solid
Analysis Batch: 429783

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	6.5		7.0		%		8	10
Percent Solids	93.5		93.0		%		0.6	10

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-430367/1-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430367

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		03/25/23 11:08	03/30/23 14:26	1

Lab Sample ID: LCSI 180-430367/3-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430367

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	622		mg/Kg		88	80 - 120

Lab Sample ID: LCSS 180-430367/2-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430367

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	18.0		mg/Kg		90	80 - 120

Lab Sample ID: MB 180-430369/1-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		03/25/23 11:10	03/30/23 15:29	1

Lab Sample ID: LCSI 180-430369/3-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430369

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	647		mg/Kg		91	80 - 120

Method: EPA 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 180-430369/2-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430369

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	18.0		mg/Kg		90	80 - 120

Lab Sample ID: MB 180-430371/1-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430371

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		03/25/23 11:13	03/30/23 16:40	1

Lab Sample ID: LCSI 180-430371/3-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430371

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	657		mg/Kg		93	80 - 120

Lab Sample ID: LCSS 180-430371/2-A
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430371

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	17.3		mg/Kg		87	80 - 120

Lab Sample ID: 180-153774-21 MSI
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND		766	717		mg/Kg	☼	94	75 - 125

Lab Sample ID: 180-153774-21 MSS
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430371

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND		21.7	19.2		mg/Kg	☼	88	75 - 125

Lab Sample ID: 180-153774-21 DU
Matrix: Solid
Analysis Batch: 430884

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430371

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hexavalent chromium	ND		ND		mg/Kg	☼	NC	20

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-430203/4-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.38	mg/Kg		03/23/23 15:15	03/24/23 10:49	1

Lab Sample ID: HLCS 180-430203/2-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430203

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.250		mg/Kg		100	90 - 110

Lab Sample ID: LCS 180-430203/3-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	120	106		mg/Kg		88	17 - 163

Lab Sample ID: LLCS 180-430203/1-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430203

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0495		mg/Kg		99	90 - 110

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430203

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		6.11	4.64		mg/Kg	☼	76	75 - 125

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 430203

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		6.48	4.86		mg/Kg	☼	75	75 - 125	5	20

Lab Sample ID: MB 180-430204/4-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 430204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.38	mg/Kg		03/23/23 15:15	03/24/23 11:43	1

Lab Sample ID: HLCS 180-430204/2-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430204

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.251		mg/Kg		100	90 - 110

Client: Geosyntec Consultants Inc
Job ID: 180-153774-1
Project/Site: Former Sperry Remington-Imported Fill

Method: EPA 9014 - Cyanide

Lab Sample ID: LCS 180-430204/3-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	120	115		mg/Kg		96	17 - 163

Lab Sample ID: LLCS 180-430204/1-A
Matrix: Solid
Analysis Batch: 430326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 430204

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0511		mg/Kg		102	90 - 110

GC/MS VOA

Analysis Batch: 429704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-1	NAFREST-BRP-SAND1A	Total/NA	Solid	EPA 8260C	429760
180-153774-2	NAFREST-BRP-SAND1B	Total/NA	Solid	EPA 8260C	429760
180-153774-3	NAFREST-BRP-SAND1C	Total/NA	Solid	EPA 8260C	429760
180-153774-4	NAFREST-BRP-SAND1D	Total/NA	Solid	EPA 8260C	429760
180-153774-5	NAFREST-BRP-SAND1E	Total/NA	Solid	EPA 8260C	429760
180-153774-6	NAFREST-BRP-SAND1F	Total/NA	Solid	EPA 8260C	429760
180-153774-7	NAFREST-BRP-SAND1G	Total/NA	Solid	EPA 8260C	429760
180-153774-10	NAFREST-BRP-SAND2A	Total/NA	Solid	EPA 8260C	429760
180-153774-13	NAFREST-BRP-DUP1A	Total/NA	Solid	EPA 8260C	429760
180-153774-14	NAFREST-BRP-DUP1B	Total/NA	Solid	EPA 8260C	429760
180-153774-19	NAFREST-BRP-SAND4A	Total/NA	Solid	EPA 8260C	429760
MB 180-429704/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-429704/6	Lab Control Sample	Total/NA	Solid	EPA 8260C	
180-153774-19 MS	NAFREST-BRP-SAND4A	Total/NA	Solid	EPA 8260C	429760
180-153774-19 MSD	NAFREST-BRP-SAND4A	Total/NA	Solid	EPA 8260C	429760

Prep Batch: 429760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-1	NAFREST-BRP-SAND1A	Total/NA	Solid	5035	
180-153774-2	NAFREST-BRP-SAND1B	Total/NA	Solid	5035	
180-153774-3	NAFREST-BRP-SAND1C	Total/NA	Solid	5035	
180-153774-4	NAFREST-BRP-SAND1D	Total/NA	Solid	5035	
180-153774-5	NAFREST-BRP-SAND1E	Total/NA	Solid	5035	
180-153774-6	NAFREST-BRP-SAND1F	Total/NA	Solid	5035	
180-153774-7	NAFREST-BRP-SAND1G	Total/NA	Solid	5035	
180-153774-10	NAFREST-BRP-SAND2A	Total/NA	Solid	5035	
180-153774-13	NAFREST-BRP-DUP1A	Total/NA	Solid	5035	
180-153774-14	NAFREST-BRP-DUP1B	Total/NA	Solid	5035	
180-153774-19	NAFREST-BRP-SAND4A	Total/NA	Solid	5035	
180-153774-19 MS	NAFREST-BRP-SAND4A	Total/NA	Solid	5035	
180-153774-19 MSD	NAFREST-BRP-SAND4A	Total/NA	Solid	5035	

Analysis Batch: 429834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-16	NAFREST-BRP-SAND3A	Total/NA	Solid	EPA 8260C	429979
180-153774-17	NAFREST-BRP-SAND3B	Total/NA	Solid	EPA 8260C	429979
180-153774-20	NAFREST-BRP-SAND4B	Total/NA	Solid	EPA 8260C	429979
180-153774-22	NAFREST-BRP-SAND5A	Total/NA	Solid	EPA 8260C	429979
180-153774-23	NAFREST-BRP-SAND5B	Total/NA	Solid	EPA 8260C	429979
MB 180-429834/13	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-429834/19	Lab Control Sample	Total/NA	Solid	EPA 8260C	
180-153774-20 MS	NAFREST-BRP-SAND4B	Total/NA	Solid	EPA 8260C	429979
180-153774-20 MSD	NAFREST-BRP-SAND4B	Total/NA	Solid	EPA 8260C	429979

Analysis Batch: 429964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-11	NAFREST-BRP-SAND2B	Total/NA	Solid	EPA 8260C	429979
MB 180-429964/15	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-429964/12	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-429964/13	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

GC/MS VOA

Prep Batch: 429979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-11	NAFREST-BRP-SAND2B	Total/NA	Solid	5035	
180-153774-16	NAFREST-BRP-SAND3A	Total/NA	Solid	5035	
180-153774-17	NAFREST-BRP-SAND3B	Total/NA	Solid	5035	
180-153774-20	NAFREST-BRP-SAND4B	Total/NA	Solid	5035	
180-153774-22	NAFREST-BRP-SAND5A	Total/NA	Solid	5035	
180-153774-23	NAFREST-BRP-SAND5B	Total/NA	Solid	5035	
180-153774-20 MS	NAFREST-BRP-SAND4B	Total/NA	Solid	5035	
180-153774-20 MSD	NAFREST-BRP-SAND4B	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 429736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3541	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3541	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3541	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3541	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3541	
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3541	
MB 180-429736/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-429736/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	

Analysis Batch: 429810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 8270D LL	429736
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 8270D LL	429736
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 8270D LL	429736
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 8270D LL	429736
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 8270D LL	429736
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8270D LL	429736
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 8270D LL	429736
MB 180-429736/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	429736
LCS 180-429736/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	429736
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8270D LL	429736
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8270D LL	429736

GC Semi VOA

Prep Batch: 429669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3541	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3541	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3541	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3541	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3541	
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3541	
MB 180-429669/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-429669/2-A	Lab Control Sample	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 429669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	

Cleanup Batch: 429682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3665A	429669
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3665A	429669
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3665A	429669
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3665A	429669
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3665A	429669
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3665A	429669
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3665A	429669
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3665A	429669
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3665A	429669

Cleanup Batch: 429683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3660B	429682
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3660B	429682
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3660B	429682
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3660B	429682
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3660B	429682
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3660B	429682
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3660B	429682
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3660B	429682
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3660B	429682

Analysis Batch: 429687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 8082A	429683
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 8082A	429683
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 8082A	429683
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 8082A	429683
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 8082A	429683
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8082A	429683
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 8082A	429683
MB 180-429669/1-A	Method Blank	Total/NA	Solid	EPA 8082A	429669
LCS 180-429669/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	429669
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8082A	429683
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8082A	429683

Prep Batch: 429932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3541	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3541	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3541	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3541	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3541	
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3541	
MB 180-429932/1-A	Method Blank	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 429932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-429932/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3541	

Analysis Batch: 429960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 8081B	429932
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 8081B	429932
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 8081B	429932
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 8081B	429932
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 8081B	429932
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8081B	429932
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 8081B	429932
MB 180-429932/1-A	Method Blank	Total/NA	Solid	EPA 8081B	429932
LCS 180-429932/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	429932
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8081B	429932
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8081B	429932

Prep Batch: 430121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	8151A	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	8151A	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	8151A	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	8151A	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	8151A	
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	8151A	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	8151A	
MB 180-430121/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-430121/2-A	Lab Control Sample	Total/NA	Solid	8151A	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	8151A	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	8151A	

Analysis Batch: 430560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 8151A	430121
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 8151A	430121
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 8151A	430121
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 8151A	430121
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 8151A	430121
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8151A	430121
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 8151A	430121
LCS 180-430121/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	430121
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8151A	430121
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 8151A	430121

Analysis Batch: 430911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-430121/1-A	Method Blank	Total/NA	Solid	EPA 8151A	430121

Metals

Prep Batch: 429891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3050B	
MB 180-429891/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-429891/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	3050B	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	3050B	

Prep Batch: 430196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3050B	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3050B	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3050B	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3050B	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3050B	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3050B	
MB 180-430196/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-430196/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 430516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 6010C	430196
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 6010C	430196
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 6010C	430196
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 6010C	430196
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 6010C	430196
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 6010C	429891
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 6010C	430196
MB 180-429891/1-A	Method Blank	Total/NA	Solid	EPA 6010C	429891
MB 180-430196/1-A	Method Blank	Total/NA	Solid	EPA 6010C	430196
LCS 180-429891/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	429891
LCS 180-430196/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	430196
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 6010C	429891
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 6010C	429891

Analysis Batch: 430657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 6010C	430196
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 6010C	430196
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 6010C	430196
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 6010C	430196
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 6010C	430196
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 6010C	430196
MB 180-430196/1-A	Method Blank	Total/NA	Solid	EPA 6010C	430196
LCS 180-430196/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	430196

Prep Batch: 430857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	7471B	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	7471B	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	7471B	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	7471B	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 430857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	7471B	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	7471B	
MB 180-430857/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-430857/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	7471B	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	7471B	

Analysis Batch: 430888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 7471B	430857
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 7471B	430857
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 7471B	430857
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 7471B	430857
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 7471B	430857
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7471B	430857
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 7471B	430857
MB 180-430857/1-A	Method Blank	Total/NA	Solid	EPA 7471B	430857
LCS 180-430857/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	430857
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7471B	430857
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7471B	430857

General Chemistry

Analysis Batch: 429780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-1	NAFREST-BRP-SAND1A	Total/NA	Solid	2540G	
180-153774-2	NAFREST-BRP-SAND1B	Total/NA	Solid	2540G	
180-153774-3	NAFREST-BRP-SAND1C	Total/NA	Solid	2540G	
180-153774-4	NAFREST-BRP-SAND1D	Total/NA	Solid	2540G	
180-153774-5	NAFREST-BRP-SAND1E	Total/NA	Solid	2540G	
180-153774-6	NAFREST-BRP-SAND1F	Total/NA	Solid	2540G	
180-153774-7	NAFREST-BRP-SAND1G	Total/NA	Solid	2540G	
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	2540G	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	2540G	
180-153774-10	NAFREST-BRP-SAND2A	Total/NA	Solid	2540G	
180-153774-11	NAFREST-BRP-SAND2B	Total/NA	Solid	2540G	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	2540G	
180-153774-13	NAFREST-BRP-DUP1A	Total/NA	Solid	2540G	
180-153774-14	NAFREST-BRP-DUP1B	Total/NA	Solid	2540G	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	2540G	
180-153774-16	NAFREST-BRP-SAND3A	Total/NA	Solid	2540G	
180-153774-17	NAFREST-BRP-SAND3B	Total/NA	Solid	2540G	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	2540G	
180-153774-19	NAFREST-BRP-SAND4A	Total/NA	Solid	2540G	
180-153774-20	NAFREST-BRP-SAND4B	Total/NA	Solid	2540G	
180-153774-8 DU	NAFREST-BRP-SAND1H	Total/NA	Solid	2540G	
180-153774-18 DU	NAFREST-BRP-SAND3C	Total/NA	Solid	2540G	

Analysis Batch: 429783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	2540G	

General Chemistry (Continued)

Analysis Batch: 429783 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-22	NAFREST-BRP-SAND5A	Total/NA	Solid	2540G	
180-153774-23	NAFREST-BRP-SAND5B	Total/NA	Solid	2540G	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	2540G	
180-153774-21 DU	NAFREST-BRP-SAND4C	Total/NA	Solid	2540G	

Prep Batch: 430203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	9010C	
MB 180-430203/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-430203/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-430203/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-430203/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	9010C	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	9010C	

Prep Batch: 430204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	9010C	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	9010C	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	9010C	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	9010C	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	9010C	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	9010C	
MB 180-430204/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-430204/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-430204/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-430204/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 430326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 9014	430204
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 9014	430204
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 9014	430204
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 9014	430204
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 9014	430204
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 9014	430203
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 9014	430204
MB 180-430203/4-A	Method Blank	Total/NA	Solid	EPA 9014	430203
MB 180-430204/4-A	Method Blank	Total/NA	Solid	EPA 9014	430204
HLCS 180-430203/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430203
HLCS 180-430204/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430204
LCS 180-430203/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430203
LCS 180-430204/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430204
LLCS 180-430203/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430203
LLCS 180-430204/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	430204
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 9014	430203
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 9014	430203

Prep Batch: 430367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	3060A	

General Chemistry (Continued)

Prep Batch: 430367 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-430367/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-430367/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-430367/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Prep Batch: 430369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	3060A	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	3060A	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	3060A	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	3060A	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	3060A	
MB 180-430369/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-430369/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-430369/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Prep Batch: 430371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	3060A	
MB 180-430371/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-430371/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-430371/2-A	Lab Control Sample	Total/NA	Solid	3060A	
180-153774-21 MSI	NAFREST-BRP-SAND4C	Total/NA	Solid	3060A	
180-153774-21 MSS	NAFREST-BRP-SAND4C	Total/NA	Solid	3060A	
180-153774-21 DU	NAFREST-BRP-SAND4C	Total/NA	Solid	3060A	

Analysis Batch: 430884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	EPA 7196A	430369
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	EPA 7196A	430369
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	EPA 7196A	430369
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	EPA 7196A	430369
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	EPA 7196A	430369
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7196A	430371
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	EPA 7196A	430367
MB 180-430367/1-A	Method Blank	Total/NA	Solid	EPA 7196A	430367
MB 180-430369/1-A	Method Blank	Total/NA	Solid	EPA 7196A	430369
MB 180-430371/1-A	Method Blank	Total/NA	Solid	EPA 7196A	430371
LCSI 180-430367/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430367
LCSI 180-430369/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430369
LCSI 180-430371/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430371
LCSS 180-430367/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430367
LCSS 180-430369/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430369
LCSS 180-430371/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	430371
180-153774-21 MSI	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7196A	430371
180-153774-21 MSS	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7196A	430371
180-153774-21 DU	NAFREST-BRP-SAND4C	Total/NA	Solid	EPA 7196A	430371

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

Chain of Custody Record

180-153774 Chain of Custody

eurofins Environment Testing Testamerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	COC No.: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com	Page: Page 1 of 3
Company: Geosyntec Consultants, Inc.			Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:		
City: Columbia	TAT Requested (days): 3 Day		
State, Zip: MD, 21044	PO #: MN0832		
Phone:	WO #:		
Email: akrasnopoler@geosyntec.com	Project #: 18013464		
Project Name: Former Sperry Remington Site-	SSOW#:		
Site:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	5PLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND1A	3/17/23	1445	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND1B	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1C	3/17/23	1445	C	Solid	N	N	X													4	
NAFREST-BRP-SAND1D	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1E	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1F	3/17/23	1445	C	Solid	N	N	X													4	
NAFREST-BRP-SAND1G	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1H	3/17/23	1445	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND1I	3/17/23	1445	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND2A	3/17/23	1450	G	Solid	N	N	X													4	
NAFREST-BRP-SAND2B	3/17/23	1450	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	Date/Time	Company	Received by	Date/Time	Company
Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 0840	EUFINWE
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.

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No.: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND2C	3/17/23	1450	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-DUP1A	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1B	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1C	3/17/23		C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND3A	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3B	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3C	3/17/23	1455	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND4A	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4B	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4C	3/17/23	1500	C	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	
NAFREST-BRP-SAND5A	3/17/23	1505	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	Date/Time	Company	Received by	Date/Time	Company
Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 0840	EFI/ANE
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:

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 3 of 3
Company: Geosyntec Consultants, Inc.				Job #:

Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:	Analysis Requested
City: Columbia	TAT Requested (days): 3 Day	
State, Zip: MD, 21044	PO #: MN0832	
Phone:	WO #:	
Email: akrasnopoler@geosyntec.com	Project #: 18013464	
Project Name: Former Sperry Remington Site-	SSOW#:	
Site:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N		
NAFREST-BRP-SAND5B	3/17/02	1505	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND5C	3/17/23	1505	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	

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
1	Zach Miller	3/17/23 16:40	Geosyntec		3/18/23 0840	EPA
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	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:

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-153774 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N		
NAFREST-BRP-SAND1A	3/17/23	1445	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND1B	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1C	3/17/23	1445	C	Solid	N	N	X										4	
NAFREST-BRP-SAND1D	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1E	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1F	3/17/23	1445	C	Solid	N	N	X										4	
NAFREST-BRP-SAND1G	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1H	3/17/23	1445	G	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-SAND1I	3/17/23	1445	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-SAND2A	3/17/23	1450	G	Solid	N	N	X										4	
NAFREST-BRP-SAND2B	3/17/23	1450	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:	Date/Time:	Company	Received by:	Date/Time:	Company
	Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 09:10	EETSAC
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND2C	3/17/23	1450	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-DUP1A	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1B	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1C	3/17/23		C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND3A	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3B	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3C	3/17/23	1455	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND4A	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4B	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4C	3/17/23	1500	C	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	
NAFREST-BRP-SAND5A	3/17/23	1505	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:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 09:10	EEFSAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 3 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND5B	3/17/02	1505	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND5C	3/17/23	1505	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

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:

	Date/Time	Company		Date/Time	Company
Relinquished by: Zach Miller	3/17/23 16:40	Geosyntec	Received by:	3-18-23 09:10	EETSAC
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: 1.7

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

180-153774 Field Sheet

Tracking # : 3957 3806 9769

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: IR-04 Corr. Factor: (+ / -) 0 °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 1869265

Cooler ID: _____

Temp Observed: 1.7 °C Corrected: 1.7 °C

From: Temp Blank ☒ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: NC Date: 3-18-23

Unpacking/Labeling The Samples	Yes	No	NA
COC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample custody seal?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Is the Field Sampler's name on COC?	☒	☐	☐
Samples require splitting/compositing?	☐	☐	☒
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JG Date: 3/18/23

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☐	☒	☐
Log Release checked in TALS?	☐	☐	☒

Initials: JG Date: 3/18/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-153774-1

Login Number: 153774
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-153774-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Pittsburgh and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Pittsburgh Project Manager or designee who has signed this report.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
David Dunlap, Senior Project Manager
David.Dunlap@et.eurofinsus.com
(412)963-2432

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Job ID: 180-153774-2

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-153774-2

Receipt
The samples were received on 3/18/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.7º C, 2.8º C, 2.9º C and 3.2º C.

LCMS
Method 537 (modified): The transition mass ratio was outside of the established ratio limit for Perfluorododecanoic acid (PFDoA) in (CCVL 320-662102/5) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

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

Definitions/Glossary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-23
Arkansas DEQ	State	88-0691	06-17-23
California	State	2897	01-22-24
Colorado	State	CA0004	08-31-23
Florida	NELAP	E87570	06-30-23
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-23
Louisiana	NELAP	01944	06-30-23
Louisiana (All)	NELAP	01944	06-30-23
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-23 *
Nevada	State	CA00044	07-31-23
New Hampshire	NELAP	2997	04-18-23
New Jersey	NELAP	CA005	06-30-23
New York	NELAP	11666	04-01-23
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-19-13	05-31-23
US Fish & Wildlife	US Federal Programs	58448	04-30-23
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442021-12	02-28-23 *
Virginia	NELAP	460278	03-14-23 *
Washington	State	C581	05-05-23
West Virginia (DW)	State	9930C	12-31-23
Wisconsin	State	998204680	08-31-23
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-153774-8	NAFREST-BRP-SAND1H	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-9	NAFREST-BRP-SAND1I	Solid	03/17/23 14:45	03/18/23 08:40
180-153774-12	NAFREST-BRP-SAND2C	Solid	03/17/23 14:50	03/18/23 08:40
180-153774-15	NAFREST-BRP-DUP1C	Solid	03/17/23 00:00	03/18/23 08:40
180-153774-18	NAFREST-BRP-SAND3C	Solid	03/17/23 14:55	03/18/23 08:40
180-153774-21	NAFREST-BRP-SAND4C	Solid	03/17/23 15:00	03/18/23 08:40
180-153774-24	NAFREST-BRP-SAND5C	Solid	03/17/23 15:05	03/18/23 08:40

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.07 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 07:12	K1S	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.23 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 07:23	K1S	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.14 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 07:45	K1S	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
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	SHAKE			5.25 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 07:56	K1S	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.06 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 08:07	K1S	EET SAC
	Instrument ID: A9									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.28 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 08:18	K1S	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.07 g	10.0 mL	661966	03/19/23 20:00	FX	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	662108	03/21/23 08:52	K1S	EET SAC
	Instrument ID: A9									

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:

Lab: EET SAC

Batch Type: Prep

FX = Fong Xiong

Batch Type: Analysis

K1S = Kotechakon Sorndee

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1H
Lab Sample ID: 180-153774-8
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.049	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.033	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.041	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.057	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.045	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.041	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.053	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.21	0.046	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.056	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.025	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
6:2 FTS	ND		0.21	0.029	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1
8:2 FTS	ND		0.21	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 07:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*54*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C5 PFPeA	*89*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C2 PFHxA	*98*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C4 PFHpA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C4 PFOA	*86*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C5 PFNA	*85*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C2 PFDA	*87*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C2 PFUnA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C2 PFDoA	*98*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C2 PFTeDA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C3 PFBS	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
18O2 PFHxS	*81*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C4 PFOS	*80*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
13C8 FOSA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
d3-NMeFOSAA	*101*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
d5-NEtFOSAA	*118*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
M2-6:2 FTS	*67*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*
M2-8:2 FTS	*82*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:12*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND1I
Lab Sample ID: 180-153774-9
Date Collected: 03/17/23 14:45
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.048	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.043	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.055	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.030	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.21	0.045	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.054	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.034	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
6:2 FTS	ND		0.21	0.028	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1
8:2 FTS	ND		0.21	0.036	ug/Kg	☼	03/19/23 20:00	03/21/23 07:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*62*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C5 PFPeA	*94*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C2 PFHxA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C4 PFHpA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C4 PFOA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C5 PFNA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C2 PFDA	*95*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C2 PFUnA	*104*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C2 PFDoA	*106*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C2 PFTeDA	*101*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C3 PFBS	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
18O2 PFHxS	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C4 PFOS	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
13C8 FOSA	*96*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
d3-NMeFOSAA	*108*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
d5-NEtFOSAA	*122*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
M2-6:2 FTS	*74*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*
M2-8:2 FTS	*75*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:23*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND2C
Lab Sample ID: 180-153774-12
Date Collected: 03/17/23 14:50
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.048	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.043	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.033	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.056	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.21	0.045	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.055	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
6:2 FTS	ND		0.21	0.028	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1
8:2 FTS	ND		0.21	0.037	ug/Kg	☼	03/19/23 20:00	03/21/23 07:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*63*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C5 PFPeA	*93*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C2 PFHxA	*102*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C4 PFHpA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C4 PFOA	*92*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C5 PFNA	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C2 PFDA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C2 PFUnA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C2 PFDoA	*106*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C2 PFTeDA	*99*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C3 PFBS	*86*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
18O2 PFHxS	*85*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C4 PFOS	*82*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
13C8 FOSA	*93*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
d3-NMeFOSAA	*104*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
d5-NEtFOSAA	*116*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
M2-6:2 FTS	*74*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*
M2-8:2 FTS	*77*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:45*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-DUP1C
Lab Sample ID: 180-153774-15
Date Collected: 03/17/23 00:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 92.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.047	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.042	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.055	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.043	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.030	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.21	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.054	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.034	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
6:2 FTS	ND		0.21	0.028	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1
8:2 FTS	ND		0.21	0.036	ug/Kg	☼	03/19/23 20:00	03/21/23 07:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*64*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C5 PFPeA	*86*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C2 PFHxA	*99*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C4 PFHpA	*95*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C4 PFOA	*87*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C5 PFNA	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C2 PFDA	*83*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C2 PFUnA	*101*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C2 PFDoA	*102*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C2 PFTeDA	*101*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C3 PFBS	*85*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
18O2 PFHxS	*81*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C4 PFOS	*81*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
13C8 FOSA	*90*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
d3-NMeFOSAA	*104*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
d5-NEtFOSAA	*114*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
M2-6:2 FTS	*70*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*
M2-8:2 FTS	*80*		*25 - 150*	*03/19/23 20:00*	*03/21/23 07:56*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND3C
Lab Sample ID: 180-153774-18
Date Collected: 03/17/23 14:55
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.21	0.049	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.033	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.056	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.045	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.022	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.039	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.21	0.046	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.055	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.051	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
6:2 FTS	ND		0.21	0.029	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1
8:2 FTS	ND		0.21	0.037	ug/Kg	☼	03/19/23 20:00	03/21/23 08:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*62*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C5 PFPeA	*81*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C2 PFHxA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C4 PFHpA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C4 PFOA	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C5 PFNA	*78*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C2 PFDA	*80*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C2 PFUnA	*90*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C2 PFDoA	*100*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C2 PFTeDA	*94*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C3 PFBS	*78*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
18O2 PFHxS	*76*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C4 PFOS	*73*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
13C8 FOSA	*82*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
d3-NMeFOSAA	*99*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
d5-NEtFOSAA	*107*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
M2-6:2 FTS	*65*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*
M2-8:2 FTS	*71*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:07*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND4C
Lab Sample ID: 180-153774-21
Date Collected: 03/17/23 15:00
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 93.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.047	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.042	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.054	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.049	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.043	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.053	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.049	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
6:2 FTS	ND		0.20	0.027	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1
8:2 FTS	ND		0.20	0.035	ug/Kg	☼	03/19/23 20:00	03/21/23 08:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*57*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C5 PFPeA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C2 PFHxA	*100*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C4 PFHpA	*93*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C4 PFOA	*89*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C5 PFNA	*83*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C2 PFDA	*90*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C2 PFUnA	*98*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C2 PFDoA	*104*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C2 PFTeDA	*94*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C3 PFBS	*87*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
18O2 PFHxS	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C4 PFOS	*75*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
13C8 FOSA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
d3-NMeFOSAA	*108*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
d5-NEtFOSAA	*120*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
M2-6:2 FTS	*68*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*
M2-8:2 FTS	*81*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:18*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-SAND5C
Lab Sample ID: 180-153774-24
Date Collected: 03/17/23 15:05
Matrix: Solid
Date Received: 03/18/23 08:40
Percent Solids: 91.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.22	0.050	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.044	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.033	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.041	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorooctanoic acid (PFOA)	ND		0.22	0.057	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.024	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.045	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.032	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.023	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.040	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.041	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.031	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.053	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.22	0.046	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.056	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
Perfluorooctanesulfonamide (FOSA)	ND		0.22	0.036	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.22	0.025	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.22	0.052	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
6:2 FTS	ND		0.22	0.029	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1
8:2 FTS	ND		0.22	0.038	ug/Kg	☼	03/19/23 20:00	03/21/23 08:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*62*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C5 PFPeA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C2 PFHxA	*93*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C4 PFHpA	*92*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C4 PFOA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C5 PFNA	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C2 PFDA	*88*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C2 PFUnA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C2 PFDoA	*95*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C2 PFTeDA	*95*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C3 PFBS	*84*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
18O2 PFHxS	*82*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C4 PFOS	*79*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
13C8 FOSA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
d3-NMeFOSAA	*103*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
d5-NEtFOSAA	*103*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
M2-6:2 FTS	*66*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*
M2-8:2 FTS	*79*		*25 - 150*	*03/19/23 20:00*	*03/21/23 08:52*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-661966/1-A
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 661966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.049	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
6:2 FTS	ND		0.20	0.027	ug/Kg		03/19/23 20:00	03/21/23 05:43	1
8:2 FTS	ND		0.20	0.035	ug/Kg		03/19/23 20:00	03/21/23 05:43	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*67*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C5 PFPeA	*96*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C2 PFHxA	*99*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C4 PFHpA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C4 PFOA	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C5 PFNA	*91*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C2 PFDA	*95*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C2 PFUnA	*102*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C2 PFDoA	*108*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C2 PFTeDA	*104*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C3 PFBS	*97*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
18O2 PFHxS	*99*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C4 PFOS	*92*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
13C8 FOSA	*103*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
d3-NMeFOSAA	*117*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
d5-NEtFOSAA	*125*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
M2-6:2 FTS	*83*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*
M2-8:2 FTS	*86*		*25 - 150*	*03/19/23 20:00*	*03/21/23 05:43*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-661966/2-A
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 661966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.24		ug/Kg		112	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	2.15		ug/Kg		107	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	2.05		ug/Kg		103	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	2.10		ug/Kg		105	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	2.17		ug/Kg		108	72 - 132
Perfluorononanoic acid (PFNA)	2.00	2.11		ug/Kg		106	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	1.94		ug/Kg		97	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	2.08		ug/Kg		104	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	2.18		ug/Kg		109	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	2.11		ug/Kg		106	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	2.03		ug/Kg		102	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.78	1.85		ug/Kg		104	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.81		ug/Kg		99	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.02		ug/Kg		106	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.80		ug/Kg		97	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	2.27		ug/Kg		118	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	1.84		ug/Kg		92	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.90		ug/Kg		95	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.79		ug/Kg		89	72 - 132
6:2 FTS	1.90	2.14		ug/Kg		112	73 - 139
8:2 FTS	1.92	1.87		ug/Kg		98	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*57*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*97*		*25 - 150*
13C4 PFHpA	*95*		*25 - 150*
13C4 PFOA	*89*		*25 - 150*
13C5 PFNA	*88*		*25 - 150*
13C2 PFDA	*91*		*25 - 150*
13C2 PFUnA	*101*		*25 - 150*
13C2 PFDoA	*102*		*25 - 150*
13C2 PFTeDA	*99*		*25 - 150*
13C3 PFBS	*94*		*25 - 150*
18O2 PFHxS	*97*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*99*		*25 - 150*
d3-NMeFOSAA	*105*		*25 - 150*
d5-NEtFOSAA	*118*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-661966/2-A
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 661966

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	*81*		*25 - 150*
M2-8:2 FTS	*85*		*25 - 150*

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 661966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	ND		2.07	2.25		ug/Kg	☼	109	76 - 136
Perfluoropentanoic acid (PFPeA)	ND		2.07	2.19		ug/Kg	☼	105	69 - 129
Perfluorohexanoic acid (PFHxA)	ND		2.07	2.20		ug/Kg	☼	106	71 - 131
Perfluoroheptanoic acid (PFHpA)	ND		2.07	2.13		ug/Kg	☼	103	71 - 131
Perfluorooctanoic acid (PFOA)	ND		2.07	2.20		ug/Kg	☼	106	72 - 132
Perfluorononanoic acid (PFNA)	ND		2.07	2.16		ug/Kg	☼	104	73 - 133
Perfluorodecanoic acid (PFDA)	ND		2.07	2.05		ug/Kg	☼	99	72 - 132
Perfluoroundecanoic acid (PFUnA)	ND		2.07	2.12		ug/Kg	☼	102	66 - 126
Perfluorododecanoic acid (PFDoA)	ND		2.07	2.22		ug/Kg	☼	107	71 - 131
Perfluorotridecanoic acid (PFTriA)	ND		2.07	2.20		ug/Kg	☼	106	71 - 131
Perfluorotetradecanoic acid (PFTeA)	ND		2.07	2.10		ug/Kg	☼	101	67 - 127
Perfluorobutanesulfonic acid (PFBS)	ND		1.84	1.90		ug/Kg	☼	103	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	ND		1.89	1.88		ug/Kg	☼	100	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.98	1.96		ug/Kg	☼	99	76 - 136
Perfluorooctanesulfonic acid (PFOS)	ND		1.93	1.91		ug/Kg	☼	99	68 - 141
Perfluorodecanesulfonic acid (PFDS)	ND		2.00	2.49		ug/Kg	☼	125	71 - 131
Perfluorooctanesulfonamide (FOSA)	ND		2.07	2.03		ug/Kg	☼	98	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.07	1.86		ug/Kg	☼	90	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.07	1.90		ug/Kg	☼	92	72 - 132
6:2 FTS	ND		1.97	2.24		ug/Kg	☼	113	73 - 139
8:2 FTS	ND		1.99	2.16		ug/Kg	☼	109	75 - 135

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	*68*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*97*		*25 - 150*
13C4 PFHpA	*96*		*25 - 150*
13C4 PFOA	*88*		*25 - 150*
13C5 PFNA	*86*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*104*		*25 - 150*
13C2 PFDoA	*104*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-153774-21 MS
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 661966

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2 PFTeDA	101		25 - 150
13C3 PFBS	83		25 - 150
18O2 PFHxS	86		25 - 150
13C4 PFOS	79		25 - 150
13C8 FOSA	93		25 - 150
d3-NMeFOSAA	106		25 - 150
d5-NEtFOSAA	110		25 - 150
M2-6:2 FTS	67		25 - 150
M2-8:2 FTS	71		25 - 150

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 661966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	ND		2.03	2.16		ug/Kg	☼	106	76 - 136	4	30
Perfluoropentanoic acid (PFPeA)	ND		2.03	2.09		ug/Kg	☼	103	69 - 129	4	30
Perfluorohexanoic acid (PFHxA)	ND		2.03	2.00		ug/Kg	☼	99	71 - 131	9	30
Perfluoroheptanoic acid (PFHpA)	ND		2.03	2.09		ug/Kg	☼	103	71 - 131	2	30
Perfluorooctanoic acid (PFOA)	ND		2.03	2.07		ug/Kg	☼	102	72 - 132	6	30
Perfluorononanoic acid (PFNA)	ND		2.03	2.17		ug/Kg	☼	107	73 - 133	1	30
Perfluorodecanoic acid (PFDA)	ND		2.03	1.91		ug/Kg	☼	94	72 - 132	7	30
Perfluoroundecanoic acid (PFUnA)	ND		2.03	2.05		ug/Kg	☼	101	66 - 126	3	30
Perfluorododecanoic acid (PFDoA)	ND		2.03	2.16		ug/Kg	☼	106	71 - 131	3	30
Perfluorotridecanoic acid (PFTriA)	ND		2.03	2.03		ug/Kg	☼	100	71 - 131	8	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.03	2.03		ug/Kg	☼	100	67 - 127	3	30
Perfluorobutanesulfonic acid (PFBS)	ND		1.80	1.82		ug/Kg	☼	101	69 - 129	4	30
Perfluorohexanesulfonic acid (PFHxS)	ND		1.85	1.78		ug/Kg	☼	96	62 - 122	5	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.93	2.08		ug/Kg	☼	108	76 - 136	6	30
Perfluorooctanesulfonic acid (PFOS)	ND		1.88	1.78		ug/Kg	☼	95	68 - 141	7	30
Perfluorodecanesulfonic acid (PFDS)	ND		1.95	2.41		ug/Kg	☼	123	71 - 131	4	30
Perfluorooctanesulfonamide (FOSA)	ND		2.03	1.92		ug/Kg	☼	95	77 - 137	6	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.03	1.62		ug/Kg	☼	80	72 - 132	14	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.03	1.74		ug/Kg	☼	86	72 - 132	8	30
6:2 FTS	ND		1.93	2.18		ug/Kg	☼	113	73 - 139	3	30
8:2 FTS	ND		1.94	1.89		ug/Kg	☼	97	75 - 135	13	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFBA	70		25 - 150
13C5 PFPeA	87		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-153774-21 MSD
Matrix: Solid
Analysis Batch: 662108

Client Sample ID: NAFREST-BRP-SAND4C
Prep Type: Total/NA
Prep Batch: 661966

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 PFHxA	95		25 - 150
13C4 PFHpA	97		25 - 150
13C4 PFOA	88		25 - 150
13C5 PFNA	81		25 - 150
13C2 PFDA	89		25 - 150
13C2 PFUnA	94		25 - 150
13C2 PFDoA	104		25 - 150
13C2 PFTeDA	100		25 - 150
13C3 PFBS	85		25 - 150
18O2 PFHxS	83		25 - 150
13C4 PFOS	74		25 - 150
13C8 FOSA	90		25 - 150
d3-NMeFOSAA	111		25 - 150
d5-NEtFOSAA	112		25 - 150
M2-6:2 FTS	68		25 - 150
M2-8:2 FTS	77		25 - 150

QC Association Summary

Client: Geosyntec Consultants Inc
Job ID: 180-153774-2
Project/Site: Former Sperry Remington-Imported Fill

LCMS

Prep Batch: 661966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	SHAKE	
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	SHAKE	
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	SHAKE	
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	SHAKE	
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	SHAKE	
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	SHAKE	
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	SHAKE	
MB 320-661966/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-661966/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	SHAKE	
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	SHAKE	

Analysis Batch: 662108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-153774-8	NAFREST-BRP-SAND1H	Total/NA	Solid	537 (modified)	661966
180-153774-9	NAFREST-BRP-SAND1I	Total/NA	Solid	537 (modified)	661966
180-153774-12	NAFREST-BRP-SAND2C	Total/NA	Solid	537 (modified)	661966
180-153774-15	NAFREST-BRP-DUP1C	Total/NA	Solid	537 (modified)	661966
180-153774-18	NAFREST-BRP-SAND3C	Total/NA	Solid	537 (modified)	661966
180-153774-21	NAFREST-BRP-SAND4C	Total/NA	Solid	537 (modified)	661966
180-153774-24	NAFREST-BRP-SAND5C	Total/NA	Solid	537 (modified)	661966
MB 320-661966/1-A	Method Blank	Total/NA	Solid	537 (modified)	661966
LCS 320-661966/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	661966
180-153774-21 MS	NAFREST-BRP-SAND4C	Total/NA	Solid	537 (modified)	661966
180-153774-21 MSD	NAFREST-BRP-SAND4C	Total/NA	Solid	537 (modified)	661966

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

Chain of Custody Record

180-153774 Chain of Custody

eurofins Environment Testing Testamerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	COC No.: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com	Page: Page 1 of 3
Company: Geosyntec Consultants, Inc.			Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:		
City: Columbia	TAT Requested (days): 3 Day		
State, Zip: MD, 21044			
Phone:	PO #: MN0832		
Email: akrasnopoler@geosyntec.com	WO #:		
Project Name: Former Sperry Remington Site-	Project #: 18013464		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	9PLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND1A	3/17/23	1445	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND1B	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1C	3/17/23	1445	C	Solid	N	N	X													4	
NAFREST-BRP-SAND1D	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1E	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1F	3/17/23	1445	C	Solid	N	N	X													4	
NAFREST-BRP-SAND1G	3/17/23	1445	G	Solid	N	N	X													4	
NAFREST-BRP-SAND1H	3/17/23	1445	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND1I	3/17/23	1445	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND2A	3/17/23	1450	G	Solid	N	N	X													4	
NAFREST-BRP-SAND2B	3/17/23	1450	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	Date/Time	Company	Received by	Date/Time	Company
Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 0840	EUFINWE
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:

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No.: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND2C	3/17/23	1450	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-DUP1A	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1B	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1C	3/17/23		C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND3A	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3B	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3C	3/17/23	1455	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND4A	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4B	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4C	3/17/23	1500	C	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	
NAFREST-BRP-SAND5A	3/17/23	1505	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	Date/Time	Company	Received by	Date/Time	Company
Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 0840	EFI/ANE
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.

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 3 of 3
Company: Geosyntec Consultants, Inc.				Job #:

Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:	Analysis Requested
City: Columbia	TAT Requested (days): 3 Day	
State, Zip: MD, 21044	PO #: MN0832	
Phone:	WO #:	
Email: akrasnopoler@geosyntec.com	Project #: 18013464	
Project Name: Former Sperry Remington Site-	SSOW#:	
Site:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N		
NAFREST-BRP-SAND5B	3/17/02	1505	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND5C	3/17/23	1505	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	

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
1	Zach Miller	3/17/23 16:40	Geosyntec		3/18/23 0840	EPA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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.

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-153774 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N		
NAFREST-BRP-SAND1A	3/17/23	1445	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND1B	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1C	3/17/23	1445	C	Solid	N	N	X										4	
NAFREST-BRP-SAND1D	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1E	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1F	3/17/23	1445	C	Solid	N	N	X										4	
NAFREST-BRP-SAND1G	3/17/23	1445	G	Solid	N	N	X										4	
NAFREST-BRP-SAND1H	3/17/23	1445	G	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-SAND1I	3/17/23	1445	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-SAND2A	3/17/23	1450	G	Solid	N	N	X										4	
NAFREST-BRP-SAND2B	3/17/23	1450	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:	Date/Time:	Company	Received by:	Date/Time:	Company
	Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 09:10	EETSAC
	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: 1.7

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND2C	3/17/23	1450	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-DUP1A	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1B	3/17/23		G	Solid	N	N	X													4	
NAFREST-BRP-DUP1C	3/17/23		C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND3A	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3B	3/17/23	1455	G	Solid	N	N	X													4	
NAFREST-BRP-SAND3C	3/17/23	1455	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-SAND4A	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4B	3/17/23	1500	G	Solid	N	Y	X													12	
NAFREST-BRP-SAND4C	3/17/23	1500	C	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	
NAFREST-BRP-SAND5A	3/17/23	1505	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)

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 09:10	EEFSAC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 1.7

Ver: 01/16/2019

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
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Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 3 of 3
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 3 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-SAND5B	3/17/02	1505	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-SAND5C	3/17/23	1505	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
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G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

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

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Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Zach Miller	3/17/23 16:40	Geosyntec		3-18-23 09:10	EETSAC
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: 1.7

Ver: 01/16/2019

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

180-153774 Field Sheet

Tracking # : 3957 3806 9769

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: IR-04 Corr. Factor: (+ / -) 0 °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 1869265

Cooler ID: _____

Temp Observed: 1.7 °C Corrected: 1.7 °C

From: Temp Blank ☒ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: NC Date: 3-18-23

Unpacking/Labeling The Samples	Yes	No	NA
COC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample custody seal?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Is the Field Sampler's name on COC?	☒	☐	☐
Samples require splitting/compositing?	☐	☐	☒
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JG Date: 3/18/23

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☐	☒	☐
Log Release checked in TALS?	☐	☐	☒

Initials: JG Date: 3/18/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-153774-2

Login Number: 153774
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-153774-2

Login Number: 153774
List Number: 2
Creator: Guzman, Juan

List Source: Eurofins Sacramento

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	1869265
Sample custody seals, if present, are intact.	N/A	
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	1.7
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	Received project as a subcontract.
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.	N/A	
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	

From: Howe, Alexander <alexander.howe@wsp.com>
Sent: Tuesday, November 22, 2022 3:09 PM
To: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Bonsteel, Nicole M <nicole.bonsteel@wsp.com>; Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; 'david.pratt@dec.ny.gov' <david.pratt@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; 'Surani, Shaun J (HEALTH)' <shaun.surani@health.ny.gov>; Whelan, Vincent <vincent.whelan@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Paul Brookner <PBrookner@Geosyntec.com>; Paul Botek <PBotek@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Lawrence Endicott <larry.endicott@keller-na.com>; 'cyrs (cyrs@hunt-eas.com)' <cyrs@hunt-eas.com>; Kyle Cunningham <kyle.cunningham@reconservices.com>; 'Mike Dunn' <MDunn@buildwelliver.com>; 'Mike Fulkerson' <mfulkerson@buildwelliver.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; 'grasmeyerl@hunt-eas.com' <grasmeyerl@hunt-eas.com>
Subject: RE: NYSDEC #c808022 - DER-10 Request to Import Lawrenceville Quarry PennDOT 2A

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you have any suspicion, please confirm with the sender verbally that this email is authentic. If you suspect fraud, click "Phish Alert Report."

Hello Aron,

We have reviewed your request to import 37,000 cubic yards of the Lawrenceville Quarry PennDOT 2A material from the Glenn O. Hawbaker, Inc., Lawrenceville Quarry located in Tioga, PA and find it appropriate documentation to proceed. As noted, Proctor 91, 107, and 108 are excluded from this authorization.

Regards,

Alex

Alexander Howe, PG
Senior Geologist

M+ 1 207-776-8242

From: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>
Sent: Monday, November 21, 2022 2:05 PM
To: Howe, Alexander <alexander.howe@woodplc.com>; Amanda McNally <AMcNally@Geosyntec.com>; Bonsteel, Nicole M <nicole.bonsteel2@woodplc.com>; Schneider, Timothy A (DEC) <timothy.schneider@dec.ny.gov>; 'david.pratt@dec.ny.gov' <david.pratt@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@woodplc.com>; 'Surani, Shaun J (HEALTH)' <shaun.surani@health.ny.gov>

Cc: Etter, Terry R. <terry.etter@unisys.com>; Paul Brookner <PBrookner@Geosyntec.com>; Paul Botek <PBotek@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Lawrence Endicott <larry.endicott@keller-na.com>; 'cyrs (cyrs@hunt-eas.com)' <cyrs@hunt-eas.com>; Kyle Cunningham <kyle.cunningham@reconservices.com>; 'Mike Dunn' <MDunn@buildwelliver.com>; 'Mike Fulkerson' <mfulkerson@buildwelliver.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; 'grasmeyerl@hunt-eas.com' <grasmeyerl@hunt-eas.com>
Subject: RE: NYSDEC #c808022 - DER-10 Request to Import Lawrenceville Quarry PennDOT 2A

CAUTION: External email. Please do not click on links/attachments unless you know the content is genuine and safe.

Hello Alex,

Please find attached a request to import the next 37,000 cubic yards of the Lawrenceville Quarry PennDOT 2A material (Proctors 86 to 125) for Agency review. Proctors 71 and 84 are excluded from this request.

Best Regards,
Aron

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Senior Engineer

10211 Wincopin Circle, 4th Floor
Columbia, MD 21044
Phone: 410-381-4333
Fax: 410-381-4499
Mobile: 202-550-7724
www.geosyntec.com

B&B Engineers & Geologists of new york, p.c.
an affiliate of Geosyntec Consultants

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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: 3,000

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? no

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

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

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

Samples were collected from the Breesport Pit in Breesport, New York. Three composite samples were collected and analyzed for inorganics, SVOCs, VOCs, PCBs, pesticides, herbicides and total and SPLP PFAs.

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):

All detections were below the allowable levels for restricted residential use.

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 Civil & Utility, LLC

Location where fill was obtained:

Blackwell Pit, St Rte 223, Erin, NY 14838

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

NYSDEC Mine ID 80024

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 Report 180-160629-1 and 180-160629-2

The information provided on this form is accurate and complete.

Aron Krasnopoler

Digitally signed by Aron Krasnopoler
Date: 2023.08.25 10:51:38 -04'00'

Signature

25 August 2023

Date

Aron Krasnopoler

Print Name

B&B Engineers and Geologists of New York, P.C.

Firm

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-TS1A	NAFREST-BRP-TS1B	NAFREST-BRP-TS1C	NAFREST-BRP-TS1D	NAFREST-BRP-TS1E	NAFREST-BRP-TS1F	NAFREST-BRP-TS1G	NAFREST-BRP-TS1H	NAFREST-BRP-TS1I	NAFREST-BRP-TS2A
						Location	NAFREST-BRP-TS1A	NAFREST-BRP-TS1B	NAFREST-BRP-TS1C	NAFREST-BRP-TS1D	NAFREST-BRP-TS1E	NAFREST-BRP-TS1F	NAFREST-BRP-TS1G	NAFREST-BRP-TS1H	NAFREST-BRP-TS1I	NAFREST-BRP-TS2A
						Sample Date	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023
						Lab Report	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 Appx5 Resr. Res.	DER-10 Appx5 Unrestricted											
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluorobutanesulfonic acid (PFBS)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluorobutanoic acid (PFBA)	ug/kg				--	--	--	--	--	--	--	--	0.14 J	0.16 J	--
	Perfluorodecanesulfonic acid (PFDS)	ug/kg				--	--	--	--	--	--	--	--	0.092 J	0.11 J	--
	Perfluorodecanoic acid (PFDA)	ug/kg				--	--	--	--	--	--	--	--	0.11 J	0.11 J	--
	Perfluorododecanoic acid (PFDoA)	ug/kg				--	--	--	--	--	--	--	--	0.033 J	0.036 J	--
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluoroheptanoic acid (PFHpA)	ug/kg				--	--	--	--	--	--	--	--	0.091 J	0.10 J	--
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluorohexanoic acid (PFHxA)	ug/kg				--	--	--	--	--	--	--	--	0.16 J	0.18 J	--
	Perfluorononanoic acid (PFNA)	ug/kg				--	--	--	--	--	--	--	--	0.093 J	0.10 J	--
	Perfluorooctanesulfonamide (PFOSA)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	3.7	3.7	0.88	--	--	--	--	--	--	--	--	0.99	1.3	--
	Perfluorooctanoic acid (PFOA)	ug/kg	1.1	1.1	0.66	--	--	--	--	--	--	--	--	0.33	0.38	--
	Perfluoropentanoic acid (PFPeA)	ug/kg				--	--	--	--	--	--	--	--	0.17 J	0.19 J	--
	Perfluorotetradecanoic acid (PFTeA)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluorotridecanoic acid (PFTriA)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
	Perfluoroundecanoic acid (PFUnA)	ug/kg				--	--	--	--	--	--	--	--	< 0.22 U	< 0.23 U	--
Metals	Arsenic	mg/kg	16	16	13	--	--	--	--	--	--	--	--	6.9	7.0	--
	Barium	mg/kg	820	400	350	--	--	--	--	--	--	--	--	71	68	--
	Beryllium	mg/kg	47	47	7.2	--	--	--	--	--	--	--	--	0.37	0.38	--
	Cadmium	mg/kg	7.5	4.3	2.5	--	--	--	--	--	--	--	--	0.14 J	0.14 J	--
	Chromium (III+VI)	mg/kg	19	19	22	--	--	--	--	--	--	--	--	14	14	--
	Chromium, Hexavalent	mg/kg	19	19	1	--	--	--	--	--	--	--	--	< 0.49 UT	< 0.49 UT	--
	Copper	mg/kg	1720	270	50	--	--	--	--	--	--	--	--	20	21	--
	Cyanide Total	mg/kg	40	27	27	--	--	--	--	--	--	--	--	< 0.23 U	< 0.20 U	--
	Lead	mg/kg	450	400	63	--	--	--	--	--	--	--	--	22	24	--
	Manganese	mg/kg	2000	2000	1600	--	--	--	--	--	--	--	--	410	400	--
	Mercury	mg/kg	0.73	0.73	0.18	--	--	--	--	--	--	--	--	0.032 J	0.029 J	--
	Nickel	mg/kg	130	130	30	--	--	--	--	--	--	--	--	19	20	--
	Selenium	mg/kg	4	4	3.9	--	--	--	--	--	--	--	--	< 0.82 U	0.35 J	--
	Silver	mg/kg	8.3	8.3	2	--	--	--	--	--	--	--	--	< 0.41 U	< 0.37 U	--
	Zinc	mg/kg	2480	2480	109	--	--	--	--	--	--	--	--	71	73	--
Herbicides	2,4,5-TP (Silvex)	mg/kg		3.8	3.8	--	--	--	--	--	--	--	--	< 0.024 U	< 0.024 U	--
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	14	13	0.0033	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	4,4'-DDE (p,p'-DDE)	mg/kg	17	8.9	0.0033	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	4,4'-DDT (p,p'-DDT)	mg/kg	136	7.9	0.0033	--	--	--	--	--	--	--	--	< 0.0020 U	0.0092	--
	Aldrin	mg/kg	0.19	0.097	0.005	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	alpha-BHC	mg/kg	0.02	0.02	0.02	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	alpha-Chlordane	mg/kg	2.9			--	--	--	--	--	--	--	--	0.0018 JP	0.0025 P	--
	beta-BHC	mg/kg	0.09	0.09	0.036	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	delta-BHC	mg/kg	0.25	0.25	0.04	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Dieldrin	mg/kg	0.1	0.1	0.005	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Endosulfan I (alpha)	mg/kg	102	24	2.4	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Endosulfan II (beta)	mg/kg	102	24	2.4	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Endosulfan Sulfate	mg/kg	1000	24	2.4	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Endrin	mg/kg	0.06	0.06	0.014	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	0.1	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
	Heptachlor	mg/kg	0.38	0.38	0.042	--	--	--	--	--	--	--	--	< 0.0020 U	< 0.0020 U	--
PCBs	Aroclor 1016	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1221	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1232	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1242	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1248	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1254	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1260	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1262	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	Aroclor 1268	mg/kg	NS	NS	NS	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
	PCBs	mg/kg	3.2	1	0.1	--	--	--	--	--	--	--	--	< 0.020 U	< 0.020 U	--
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	0.1	--	--	--	--	--	--	--	--	< 0.080 U	< 0.080 U	--
	2-Methylphenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	--	< 0.039 U	< 0.040 U	--
	4-methylphenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	--	0.029 J	0.043	--
	Acenaphthene	mg/kg	98	98	20	--	--	--	--	--	--	--	--	< 0.0080 U	0.0027 J	--
	Acenaphthylene	mg/kg	107	100	100	--	--	--	--	--	--	--	--	0.0029 J	0.0048 J	--
	Anthracene	mg/kg	1000	100	100	--	--	--	--	--	--	--	--	0.0063 J	0.011	--
	Benz(a)anthracene	mg/kg	1	1	1	--	--	--	--	--	--	--	--	0.033	0.050	--
	Benzo(a)pyrene (BaP)	mg/kg	22	1	1	--	--	--	--	--	--	--	--	0.037	0.059	--
	Benzo(b)fluoranthene	mg/kg	1.7	1	1	--	--	--	--	--	--	--	--	0.042	0.066	--
	Benzo(g,h,i)perylene	mg/kg	1000	100	100	--	--	--	--	--	--	--	--	0.037	0.057	--
	Benzo(k)fluoranthene	mg/kg	1.7	1.7	0.8	--	--	--	--	--	--	--	--	0.018	0.032	--
	Chrysene	mg/kg	1	1	1	--	--	--	--	--	--	--	--	0.037	0.059	--
	Dibenz(a,h)anthracene	mg/kg	1000	0.33	0.33	--	--	--	--	--	--	--	--	0.0087	0.016	--
	Dibenzofuran	mg/kg	210	59	7	--	--	--	--	--	--	--	--	< 0.039 U	< 0.040 U	--
	Fluoranthene	mg/kg	1000	100	100	--	--	--	--	--	--	--	--	0.047	0.083	--
	Fluorene	mg/kg	386	100	30	--	--	--	--	--	--	--	--	< 0.0080 U	0.0035 J	--
	Hexachlorobenzene	mg/kg	3.2	1.2	0.33	--	--	--	--	--	--	--	--	< 0.0080 U	< 0.0080 U	--
	Indeno (1,2,3-cd)pyrene	mg/kg	8.2	0.5	0.5	--	--	--	--	--	--	--	--	0.030	0.048	--
	Naphthalene	mg/kg	12	12	12	--	--	--	--	--	--	--	--	< 0.0080 U	< 0.0080 U	--
	Pentachlorophenol	mg/kg	0.8	0.8	0.8	--	--	--	--	--	--	--	--	< 0.20 U	< 0.20 U	--
	Phenanthrene	mg/kg	1000	100	100	--	--	--	--	--	--	--	--	0.027	0.057	--
	Phenol	mg/kg	0.33	0.33	0.33	--	--	--	--	--	--	--	--	< 0.039 U	< 0.040 U	--
	Pyrene	mg/kg	1000	100	100	--	--	--	--	--	--	--	--	0.066	0.12	--
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	0.68	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	1,1-Dichloroethane	mg/kg	0.27	0.27	0.27	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	1,1-Dichloroethene	mg/kg	0.33	0.33	0.33	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	1,2-Dichloroethane	mg/kg	0.02	0.02	0.02	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-TS2B	NAFREST-BRP-TS2C	NAFREST-BRP-TS3A	NAFREST-BRP-TS3A	NAFREST-BRP-TS3B	NAFREST-BRP-TS3B	NAFREST-BRP-TS3C	NAFREST-BRP-TS3C
						Location	NAFREST-BRP-TS2B	NAFREST-BRP-TS2C	NAFREST-BRP-TS-DUP1A	NAFREST-BRP-TS3A	NAFREST-BRP-TS-DUP1B	NAFREST-BRP-TS3B	NAFREST-BRP-TS-DUP1C	NAFREST-BRP-TS3C
						Sample Date	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023
						Lab Report	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	IER-10 App5 Rest. Res.	IER-10 App5 Unrestricted									
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.24 U	< 0.24 U
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorobutanesulfonic acid (PFBS)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorobutanoic acid (PFBA)	ug/kg				--	0.15 J	--	--	--	--	--	0.10 J	0.13 J
	Perfluorodecanesulfonic acid (PFDS)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorodecanoic acid (PFDA)	ug/kg				--	0.085 J	--	--	--	--	--	0.059 J	0.068 J
	Perfluorododecanoic acid (PFDoA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluoroheptanoic acid (PFHpA)	ug/kg				--	0.079 J	--	--	--	--	--	0.073 J	0.086 J
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorohexanoic acid (PFHxA)	ug/kg				--	0.32	--	--	--	--	--	0.12 J	0.15 J
	Perfluorononanoic acid (PFNA)	ug/kg				--	0.072 J	--	--	--	--	--	0.062 J	0.068 J
	Perfluorooctanesulfonamide (PFOSA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	3.7	3.7	0.88	--	0.99	--	--	--	--	--	0.67	0.72
	Perfluorooctanoic acid (PFOA)	ug/kg	1.1	1.1	0.66	--	0.29	--	--	--	--	--	0.23	0.25
	Perfluoropentanoic acid (PFPeA)	ug/kg				--	0.19 J	--	--	--	--	--	0.15 J	0.16 J
	Perfluorotetradecanoic acid (PFTeA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluorotridecanoic acid (PFTrDA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
	Perfluoroundecanoic acid (PFUnA)	ug/kg				--	< 0.23 U	--	--	--	--	--	< 0.21 U	< 0.24 U
Metals	Arsenic	mg/kg	16	16	13	--	7.2	--	--	--	--	--	7.5	8.0
	Barium	mg/kg	820	400	350	--	75	--	--	--	--	--	74	81
	Beryllium	mg/kg	47	47	7.2	--	0.40	--	--	--	--	--	0.39	0.41
	Cadmium	mg/kg	7.5	4.3	2.5	--	0.12 J	--	--	--	--	--	0.10 J	0.12 J
	Chromium (III+VI)	mg/kg	19	19	22	--	14	--	--	--	--	--	14	14
	Chromium, Hexavalent	mg/kg	19	19	1	--	< 0.47 U	--	--	--	--	--	< 0.47 U	< 0.48 U
	Copper	mg/kg	1720	270	50	--	24	--	--	--	--	--	20	22
	Cyanide Total	mg/kg	40	27	27	--	< 0.22 UT	--	--	--	--	--	< 0.19 U	< 0.23 U
	Lead	mg/kg	450	400	63	--	24	--	--	--	--	--	20	22
	Manganese	mg/kg	2000	2000	1600	--	430	--	--	--	--	--	430	470
	Mercury	mg/kg	0.73	0.73	0.18	--	0.051	--	--	--	--	--	0.089	0.047
	Nickel	mg/kg	130	130	30	--	21	--	--	--	--	--	21	21
	Selenium	mg/kg	4	4	3.9	--	0.60 J	--	--	--	--	--	< 0.85 U	< 0.91 U
	Silver	mg/kg	8.3	8.3	2	--	< 0.45 U	--	--	--	--	--	< 0.43 U	< 0.45 U
	Zinc	mg/kg	2480	2480	109	--	74 T	--	--	--	--	--	67	74
Herbicides	2,4,5-TP (Silvex)	mg/kg		3.8	3.8	--	< 0.024 U	--	--	--	--	--	< 0.023 U	< 0.024 U
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	14	13	0.0033	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	4,4'-DDE (p,p'-DDE)	mg/kg	17	8.9	0.0033	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	4,4'-DDT (p,p'-DDT)	mg/kg	136	7.9	0.0033	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Aldrin	mg/kg	0.19	0.097	0.005	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	alpha-BHC	mg/kg	0.02	0.02	0.02	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	alpha-Chlordane	mg/kg	2.9			--	< 0.0020 U	--	--	--	--	--	0.00073 JP	0.0014 JP
	beta-BHC	mg/kg	0.09	0.09	0.036	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	delta-BHC	mg/kg	0.25	0.25	0.04	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Dieldrin	mg/kg	0.1	0.1	0.005	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Endosulfan I (alpha)	mg/kg	102	24	2.4	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Endosulfan II (beta)	mg/kg	102	24	2.4	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Endosulfan Sulfate	mg/kg	1000	24	2.4	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Endrin	mg/kg	0.06	0.06	0.014	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	0.1	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
	Heptachlor	mg/kg	0.38	0.38	0.042	--	< 0.0020 U	--	--	--	--	--	< 0.0020 U	< 0.0020 U
PCBs	Aroclor 1016	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1221	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1232	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1242	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1248	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1254	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1260	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1262	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	Aroclor 1268	mg/kg	NS	NS	NS	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
	PCBs	mg/kg	3.2	1	0.1	--	< 0.020 U	--	--	--	--	--	< 0.019 U	< 0.020 U
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	0.1	--	< 0.080 U	--	--	--	--	--	< 0.078 U	< 0.078 U
	2-Methylphenol	mg/kg	0.33	0.33	0.33	--	< 0.040 U	--	--	--	--	--	< 0.038 U	< 0.038 U
	4-methylphenol	mg/kg	0.33	0.33	0.33	--	0.024 J	--	--	--	--	--	0.017 J	0.018 J
	Acenaphthene	mg/kg	98	98	20	--	0.0025 J	--	--	--	--	--	0.0029 J	0.044
	Acenaphthylene	mg/kg	107	100	100	--	0.0061 J	--	--	--	--	--	0.0034 J	0.0047 J
	Anthracene	mg/kg	1000	100	100	--	0.011	--	--	--	--	--	0.0099	0.097
	Benz(a)anthracene	mg/kg	1	1	1	--	0.046	--	--	--	--	--	0.032	0.20
	Benzo(a)pyrene (BaP)	mg/kg	22	1	1	--	0.051	--	--	--	--	--	0.036	0.17
	Benzo(b)fluoranthene	mg/kg	1.7	1	1	--	0.067	--	--	--	--	--	0.039	0.20
	Benzo(g,h,i)perylene	mg/kg	1000	100	100	--	0.043	--	--	--	--	--	0.034	0.16
	Benzo(k)fluoranthene	mg/kg	1.7	1.7	0.8	--	0.025	--	--	--	--	--	0.018	0.073
	Chrysene	mg/kg	1	1	1	--	0.050	--	--	--	--	--	0.036	0.19
	Dibenz(a,h)anthracene	mg/kg	1000	0.33	0.33	--	0.010	--	--	--	--	--	0.0064 J	0.042
	Dibenzofuran	mg/kg	210	59	7	--	< 0.040 U	--	--	--	--	--	< 0.038 U	0.018 J
	Fluoranthene	mg/kg	1000	100	100	--	0.070	--	--	--	--	--	0.046	0.31
	Fluorene	mg/kg	386	100	30	--	0.0021 J	--	--	--	--	--	0.0030 J	0.036
	Hexachlorobenzene	mg/kg	3.2	1.2	0.33	--	< 0.0080 U	--	--	--	--	--	< 0.0078 U	< 0.0078 U
	Indeno (1,2,3-cd)pyrene	mg/kg	8.2	0.5	0.5	--	0.035	--	--	--	--	--	0.029	0.13
	Naphthalene	mg/kg	12	12	12	--	< 0.0080 U	--	--	--	--	--	0.0015 J	0.0086
	Pentachlorophenol	mg/kg	0.8	0.8	0.8	--	< 0.20 UT	--	--	--	--	--	< 0.20 U	< 0.20 U
	Phenanthrene	mg/kg	1000	100	100	--	0.036	--	--	--	--	--	0.033	0.34
	Phenol	mg/kg	0.33	0.33	0.33	--	< 0.040 U	--	--	--	--	--	< 0.038 U	< 0.038 U
	Pyrene	mg/kg	1000	100	100	--	0.090	--	--	--	--	--	0.066	0.42
	1,1,1-Trichloroethane	mg/kg	0.68	0.68	0.68	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--	--
	1,1-Dichloroethane	mg/kg	0.27	0.27	0.27	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--	--
	1,1-Dichloroethene	mg/kg	0.33	0.33	0.33	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--	--
	1,2-Dichloroethane	mg/kg	0.02	0.02	0.02	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--	--

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-TS1A	NAFREST-BRP-TS1B	NAFREST-BRP-TS1C	NAFREST-BRP-TS1D	NAFREST-BRP-TS1E	NAFREST-BRP-TS1F	NAFREST-BRP-TS1G	NAFREST-BRP-TS1H	NAFREST-BRP-TS1I	NAFREST-BRP-TS2A
						Location	NAFREST-BRP-TS1A	NAFREST-BRP-TS1B	NAFREST-BRP-TS1C	NAFREST-BRP-TS1D	NAFREST-BRP-TS1E	NAFREST-BRP-TS1F	NAFREST-BRP-TS1G	NAFREST-BRP-TS1H	NAFREST-BRP-TS1I	NAFREST-BRP-TS2A
						Sample Date	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023
						Lab Report	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted											
VOCs	1,3-Dichlorobenzene	mg/kg	2.4	2.4	2.4	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	1.8	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Acetone	mg/kg	0.05	0.05	0.05	< 0.029 U	< 0.029 U	< 0.028 U	< 0.030 U	< 0.028 U	< 0.027 U	< 0.026 U	--	--	< 0.027 U
	Benzene	mg/kg	0.06	0.06	0.06	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	Carbon Tetrachloride	mg/kg	0.76	0.76	0.76	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Chlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Chloroform	mg/kg	0.37	0.37	0.37	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	0.25	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	Dichloroethane	mg/kg	0.05	0.05	0.05	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	Ethylbenzene	mg/kg	1	1	1	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	0.12	< 0.029 U	< 0.029 U	< 0.028 U	< 0.030 U	< 0.028 U	< 0.027 U	< 0.026 U	--	--	< 0.027 U
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	0.93	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	Tetrachloroethene	mg/kg	1.3	1.3	1.3	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Toluene	mg/kg	0.7	0.7	0.7	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 UT
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	0.19	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Trichloroethene	mg/kg	0.47	0.47	0.47	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 U	< 0.0053 U	--	--	< 0.0054 U
	Vinyl chloride	mg/kg	0.02	0.02	0.02	< 0.0057 U	< 0.0058 U	< 0.0056 U	< 0.0060 U	< 0.0056 U	< 0.0055 UT	< 0.0053 U	--	--	< 0.0054 U
	Xylenes (Total)	mg/kg	1.6	1.6	0.26	< 0.011 U	< 0.012 U	< 0.011 U	< 0.012 U	< 0.011 U	< 0.011 U	< 0.011 U	--	--	< 0.011 U

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^ e - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
* e - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray
Analyte concentrations detected above Protection of Groundwater Screening Criteria are presented in blue font

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

						Sample Name	NAFREST-BRP-TS2B	NAFREST-BRP-TS2C	NAFREST-BRP-TS3A	NAFREST-BRP-TS3A	NAFREST-BRP-TS3B	NAFREST-BRP-TS3B	NAFREST-BRP-TS3C	NAFREST-BRP-TS3C
						Location	NAFREST-BRP-TS2B	NAFREST-BRP-TS2C	NAFREST-BRP-TS-DUP1A	NAFREST-BRP-TS3A	NAFREST-BRP-TS-DUP1B	NAFREST-BRP-TS3B	NAFREST-BRP-TS-DUP1C	NAFREST-BRP-TS3C
						Sample Date	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023	8/9/2023
						Lab Report	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291	1801606291
Chemical Group	**Chemical**	**Units**	ELMIRA PROTECTION OF GROUND-WATER	DER-10 App5 Rest. Res.	DER-10 App5 Unrestricted									
VOCs	1,3-Dichlorobenzene	mg/kg	2.4	2.4	2.4	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	1.8	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Acetone	mg/kg	0.05	0.05	0.05	< 0.027 U	--	< 0.026 U	< 0.026 U	< 0.027 U	< 0.026 U	--	--
	Benzene	mg/kg	0.06	0.06	0.06	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Carbon Tetrachloride	mg/kg	0.76	0.76	0.76	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Chlorobenzene	mg/kg	1.1	1.1	1.1	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Chloroform	mg/kg	0.37	0.37	0.37	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	0.25	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Dichloromethane	mg/kg	0.05	0.05	0.05	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Ethylbenzene	mg/kg	1	1	1	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	0.12	< 0.027 U	--	< 0.026 U	< 0.026 U	< 0.027 U	< 0.026 U	--	--
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	0.93	< 0.0053 UT	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Tetrachloroethene	mg/kg	1.3	1.3	1.3	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Toluene	mg/kg	0.7	0.7	0.7	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	0.19	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Trichloroethene	mg/kg	0.47	0.47	0.47	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Vinyl chloride	mg/kg	0.02	0.02	0.02	< 0.0053 U	--	< 0.0052 U	< 0.0052 U	< 0.0054 U	< 0.0053 U	--	--
	Xylenes (Total)	mg/kg	1.6	1.6	0.26	< 0.011 U	--	< 0.010 U	< 0.010 U	< 0.011 U	< 0.011 U	--	--

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
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Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray
Analyte concentrations detected above Protection of Groundwater Screening Criteria are presented in blue font

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-160629-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Job ID: 180-160629-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-160629-1

Comments
The containers received at the Sacramento laboratory were labeled as NAFREST-GRD-1G and NAFREST-GRD-1H instead of the IDs on the COC NAFREST-GRD-1H and NAFREST-GRD-1I. As discussed with the sampler, NAFREST-GRD-1G was to be identified as NAFREST-GRD-1H and NAFREST-GRD-1H was to be identified as NAFREST-GRD-1I as they would have been sequentially sampled along with the composite sample containers collected for the Pittsburgh laboratory analysis.

Receipt
The samples were received on 8/10/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9º C, 1.2º C, 3.8º C and 4.8º C.

GC/MS VOA
Method 8260C: The recovery of surrogate 1,2-Dichloroethane-d4 was slightly above the control limits for the following sample: NAFREST-BRP-TS1B (180-160629-2). As the recovery was high and there were no target analytes detected above the reporting limit, the results were reported.

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 180-443450 recovered slightly below the control limits for the following analyte: Vinyl chloride. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analyte recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the analyte had it been present. Since the affected target analyte was not detected in the associated samples, the results were reported. The recovery in the laboratory control sample (LCS) was within the control limits.

Method 8260C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-TS2A (180-160629-10) had several recoveries and the RPD between the spikes for 1,4-Dioxane above the control limits. The recoveries of the laboratory control sample (LCS) were within the control limits.

Method 8260C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-TS2B (180-160629-11) had several recoveries above the control limits. The RPDs between the spikes and the recoveries of the laboratory control sample (LCS) were within the control limits.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443142 was below criteria for the following analyte: 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443142 was above criteria for the following analytes: 1,4-Dioxane and Methylene Chloride. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443333 was below criteria for the following analyte: 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443333 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443450 was below criteria for the following analyte: Vinyl chloride. 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 8260C: The continuing calibration verification (CCV) analyzed in batch 180-443142 was above criteria for the following analytes: 1,4-Dioxane and Acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected

Job ID: 180-160629-1 (Continued)

Laboratory: Eurofins Pittsburgh (Continued)

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 8270D LL: The continuing calibration verification (CCV) analyzed in batch 180-443312 was above criteria for the following analyte: Nitrobenzene-d5 (surrogate). As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8270D LL: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-TS2C (180-160629-12) had the recoveries of Pentachlorophenol below the control limits. The RPD between the spikes and the recovery of the laboratory control sample (LCS) 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 Semi VOA
Method 8081B: The continuing calibration verification (CCV) analyzed in batch 180-443743 (CCVIS 180-443743/4) was below criteria on column MR-1 for the following analyte: beta-BHC. Results were reported from column MR-2 which met criteria.

Method 8081B: The continuing calibration verification (CCV) analyzed in batch 180-443743 (CCVIS 180-443743/4) was above criteria on column MR-2 for the following analyte: Decachlorobiphenyl (surrogate). The associated sample surrogate recoveries were within the control limits.

Method 8082A: The continuing calibration verification (CCV) analyzed in batch 180-443315 (CCVIS 180-443315/47) was above criteria for aroclor 1016 on both columns. As the CCV was high and aroclor 1016 was not detected in the associated sample, the results were reported.

Method 8082A: The continuing calibration verification (CCV) analyzed in batch 180-443315 (CCVIS 180-443315/47) was above criteria for surrogate tetrachloro-m-xylene on both columns. The associated sample surrogate recoveries were within the control limits.

Method 8151A: Sample NAFREST-BRP-TS-DUP1C (180-160629-18) had the recovery of surrogate 2,4-dichlorophenyl acetic acid above the control limits on column RTX-1701. The recovery on column RTX-50 was within the control limits.

Method 8151A: The continuing calibration verifications (CCV) analyzed in batch180-443432 were above criteria on column RTX-50 for the following analyte: surrogate 2,4-dichlorophenyl acetic acid. The associated sample surrogate recoveries were within the control limits.

Method 8151A: The continuing calibration verification (CCV) analyzed in batch 180-443432 (CCVRT 180-443432/1) was above criteria on column RTX-1701 for the following analyte: silvex (2,4,5-TP). The results were reported from column RTX-50 which met criteria.

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

Metals
Method 6010C: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-TS2C (180-160629-12) had the recoveries of zinc below 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.

General Chemistry
Method 7196A: The soluble, insoluble, and post-digestion spike (PDS) recoveries were below criteria for sample NAFREST-BRP-TS1H (180-160629-8) Acceptable laboratory control sample (LCS) soluble and insoluble analysis data demonstrate that the analytical system was operating in control; therefore, this condition is most likely due to a matrix effect. An oxidation reduction potential (ORP) test was performed and the associated ORP chart is included in the report. The sample was re-analyzed and again had the spike recoveries below criteria. Results of both analyses were reported.

Method 7196A: The soluble, insoluble, and post-digestion spike (PDS) recoveries were below criteria for sample NAFREST-BRP-TS1I

Job ID: 180-160629-1 (Continued)

Laboratory: Eurofins Pittsburgh (Continued)

(180-160629-9) Acceptable laboratory control sample (LCS) soluble and insoluble analysis data demonstrate that the analytical system was operating in control; therefore, this condition is most likely due to a matrix effect. An oxidation reduction potential (ORP) test was performed and the associated ORP chart is included in the report. The sample was re-analyzed and again had the spike recoveries below criteria. Results of both analyses were reported.

Method 9014: The matrix spike/matrix spike duplicate (MS/MSD) of sample NAFREST-BRP-TS2C (180-160629-12) had the recoveries of cyanide below the control limits. The RPD between the spikes and the recoveries of the laboratory control samples were within the control limits.

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
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

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

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control 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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-24

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

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-160629-1	NAFREST-BRP-TS1A	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-2	NAFREST-BRP-TS1B	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-3	NAFREST-BRP-TS1C	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-4	NAFREST-BRP-TS1D	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-5	NAFREST-BRP-TS1E	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-6	NAFREST-BRP-TS1F	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-7	NAFREST-BRP-TS1G	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-8	NAFREST-BRP-TS1H	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-9	NAFREST-BRP-TS1I	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-10	NAFREST-BRP-TS2A	Solid	08/09/23 15:50	08/10/23 09:49
180-160629-11	NAFREST-BRP-TS2B	Solid	08/09/23 15:50	08/10/23 09:49
180-160629-12	NAFREST-BRP-TS2C	Solid	08/09/23 15:50	08/10/23 09:49
180-160629-13	NAFREST-BRP-TS3A	Solid	08/09/23 15:55	08/10/23 09:49
180-160629-14	NAFREST-BRP-TS3B	Solid	08/09/23 15:55	08/10/23 09:49
180-160629-15	NAFREST-BRP-TS3C	Solid	08/09/23 15:55	08/10/23 09:49
180-160629-16	NAFREST-BRP-TS-DUP1A	Solid	08/09/23 00:00	08/10/23 09:49
180-160629-17	NAFREST-BRP-TS-DUP1B	Solid	08/09/23 00:00	08/10/23 09:49
180-160629-18	NAFREST-BRP-TS-DUP1C	Solid	08/09/23 00:00	08/10/23 09:49

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 6010C	Metals (ICP)	SW846	EET PIT
EPA 7471B	Mercury (CVAA)	SW846	EET PIT
2540G	SM 2540G	SM22	EET PIT
EPA 7196A	Chromium, Hexavalent	SW846	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
3050B	Preparation, Metals	SW846	EET PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	EET PIT
3660B	Sulfur Cleanup	SW846	EET PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	EET PIT
7471B	Preparation, Mercury	SW846	EET PIT
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET 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:

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1A
Lab Sample ID: 180-160629-1
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443100	08/10/23 15:10	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1A
Lab Sample ID: 180-160629-1
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2262 g	5 mL	443198	08/11/23 07:31	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443142	08/11/23 09:54	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1B
Lab Sample ID: 180-160629-2
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443100	08/10/23 15:10	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1B
Lab Sample ID: 180-160629-2
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
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			5.2262 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 11:57	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1C
Lab Sample ID: 180-160629-3
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443100	08/10/23 15:10	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1C
Lab Sample ID: 180-160629-3
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3032 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 12:20	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1D
Lab Sample ID: 180-160629-4
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443100	08/10/23 15:10	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1D
Lab Sample ID: 180-160629-4
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0034 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 12:42	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1E
Lab Sample ID: 180-160629-5
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443100	08/10/23 15:10	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1E
Lab Sample ID: 180-160629-5
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3059 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 13:05	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1F
Lab Sample ID: 180-160629-6
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1F
Lab Sample ID: 180-160629-6
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4628 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443450	08/15/23 12:01	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1G
Lab Sample ID: 180-160629-7
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1G
Lab Sample ID: 180-160629-7
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.6634 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 14:58	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	443193	08/11/23 09:03	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	443312	08/14/23 07:21	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	443743	08/17/23 09:32	SMW	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	443313	08/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	443314	08/14/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	443315	08/14/23 23:21	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.0 g	40.0 mL	443304	08/14/23 00:15	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	443432	08/15/23 09:46	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.73 g	50 mL	443183	08/11/23 09:50	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			443474	08/14/23 12:36	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.67 g	100 mL	443174	08/11/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			443293	08/12/23 09:03	MTW	EET PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.47 g	100 mL	443485	08/15/23 08:50	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 13:20	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	3060A			2.51 g	100 mL	443486	08/15/23 09:00	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 14:07	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.53 g	10 mL	443408	08/14/23 16:45	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			443560	08/14/23 17:14	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	443193	08/11/23 09:03	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	443312	08/14/23 08:04	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.0 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	443743	08/17/23 09:48	SMW	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.0 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	443313	08/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	443314	08/14/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	443315	08/14/23 23:39	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.0 g	40.0 mL	443304	08/14/23 00:15	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	443432	08/15/23 10:06	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.82 g	50 mL	443183	08/11/23 09:50	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			443474	08/14/23 12:41	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.61 g	100 mL	443174	08/11/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			443293	08/12/23 09:04	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.47 g	100 mL	443487	08/15/23 09:02	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 14:37	CMC	EET PIT
	Instrument ID: RAPID-T									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.52 g	100 mL	443489	08/15/23 09:03	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 15:04	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.60 g	10 mL	443408	08/14/23 16:45	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			443560	08/14/23 17:16	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS2A
Lab Sample ID: 180-160629-10
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS2A
Lab Sample ID: 180-160629-10
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.4608 g	5 mL	443198	08/11/23 07:31	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443142	08/11/23 14:47	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS2B
Lab Sample ID: 180-160629-11
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS2B
Lab Sample ID: 180-160629-11
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
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	5035			5.5567 g	5 mL	443198	08/11/23 07:31	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443142	08/11/23 15:09	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	0.5 mL	443193	08/11/23 09:03	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	443312	08/14/23 06:15	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	443743	08/17/23 08:45	SMW	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	443313	08/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	443314	08/14/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	443315	08/14/23 22:28	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.0 g	40.0 mL	443304	08/14/23 00:15	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	443432	08/15/23 10:25	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.67 g	50 mL	443183	08/11/23 09:50	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			443474	08/14/23 12:11	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.64 g	100 mL	443174	08/11/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			443293	08/12/23 09:05	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.54 g	100 mL	443487	08/15/23 09:02	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 14:42	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.55 g	10 mL	443408	08/14/23 16:45	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			443560	08/14/23 17:18	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS3A
Lab Sample ID: 180-160629-13
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS3A
Lab Sample ID: 180-160629-13
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
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			5.6034 g	5 mL	443198	08/11/23 07:31	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443142	08/11/23 17:45	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS3B
Lab Sample ID: 180-160629-14
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS3B
Lab Sample ID: 180-160629-14
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5576 g	5 mL	443198	08/11/23 07:31	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443142	08/11/23 18:53	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
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	3541			15.2 g	0.5 mL	443193	08/11/23 09:03	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	443312	08/14/23 08:26	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	443743	08/17/23 10:03	SMW	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.1 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	443313	08/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	443314	08/14/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	443315	08/14/23 23:56	JMO	EET PIT
	Instrument ID: CHGC20									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
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	8151A			10.0 g	40.0 mL	443304	08/14/23 00:15	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	443432	08/15/23 11:22	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.65 g	50 mL	443183	08/11/23 09:50	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			443474	08/14/23 12:46	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.63 g	100 mL	443174	08/11/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			443293	08/12/23 09:08	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.48 g	100 mL	443487	08/15/23 09:02	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 14:44	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.51 g	10 mL	443408	08/14/23 16:45	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			443560	08/14/23 17:22	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS-DUP1A
Lab Sample ID: 180-160629-16
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS-DUP1A
Lab Sample ID: 180-160629-16
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.5689 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 15:21	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS-DUP1B
Lab Sample ID: 180-160629-17
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS-DUP1B
Lab Sample ID: 180-160629-17
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
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	5035			5.4432 g	5 mL	443382	08/14/23 07:40	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	443333	08/14/23 15:43	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49

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			443103	08/10/23 15:31	CMC	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	0.5 mL	443193	08/11/23 09:03	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	443312	08/14/23 09:09	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.3 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	443743	08/17/23 10:19	SMW	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	3541			15.3 g	20.0 mL	443201	08/11/23 09:36	VJC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	443313	08/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	443314	08/14/23 05:09	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	443315	08/15/23 00:14	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.1 g	40.0 mL	443304	08/14/23 00:15	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	443432	08/15/23 11:41	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.69 g	50 mL	443183	08/11/23 09:50	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			443474	08/14/23 12:51	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.62 g	100 mL	443174	08/11/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			443293	08/12/23 09:09	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.48 g	100 mL	443487	08/15/23 09:02	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	443850	08/17/23 14:45	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.61 g	10 mL	443408	08/14/23 16:45	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			443560	08/14/23 17:24	CMR	EET PIT
	Instrument ID: SEAL1									

Laboratory References:
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Analyst References:

Lab: EET PIT

- Batch Type: Cleanup
  - JMO = John Oravec
- Batch Type: Prep
  - CBY = Charles Yushinski
  - CMC = Candace California
  - CMR = Carl Reagle
  - MTW = Michael Wesoloski
  - PJJ = Patrick Journet
  - S1Z = Sage Ziviello
  - VJC = Vincent Cervone
- Batch Type: Analysis
  - AAS = Ariana Swick
  - CMC = Candace California
  - CMR = Carl Reagle
  - JMO = John Oravec
  - MTW = Michael Wesoloski
  - PJJ = Patrick Journet
  - SMW = Shelby Walters
  - VVP = Vincent Piccolino

Client Sample ID: NAFREST-BRP-TS1A
Lab Sample ID: 180-160629-1

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.029	0.0045	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Benzene	ND		0.0057	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
2-Butanone (MEK)	ND		0.029	0.0029	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Carbon tetrachloride	ND		0.0057	0.0023	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Chlorobenzene	ND		0.0057	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Chloroform	ND		0.0057	0.0038	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
cis-1,2-Dichloroethene	ND		0.0057	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,2-Dichlorobenzene	ND		0.0057	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,3-Dichlorobenzene	ND		0.0057	0.0035	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,4-Dichlorobenzene	ND		0.0057	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,1-Dichloroethane	ND		0.0057	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,2-Dichloroethane	ND		0.0057	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,1-Dichloroethene	ND		0.0057	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,4-Dioxane	ND		1.1	0.087	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Ethylbenzene	ND		0.0057	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Methylene Chloride	ND		0.0057	0.0052	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Methyl tert-butyl ether	ND		0.0057	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
n-Butylbenzene	ND		0.0057	0.0028	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
N-Propylbenzene	ND		0.0057	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
sec-Butylbenzene	ND		0.0057	0.0028	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
tert-Butylbenzene	ND		0.0057	0.0024	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Tetrachloroethene	ND		0.0057	0.0023	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Toluene	ND		0.0057	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
trans-1,2-Dichloroethene	ND		0.0057	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,1,1-Trichloroethane	ND		0.0057	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Trichloroethene	ND		0.0057	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,2,4-Trimethylbenzene	ND		0.0057	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
1,3,5-Trimethylbenzene	ND		0.0057	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Vinyl chloride	ND		0.0057	0.0041	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1
Xylenes, Total	ND		0.011	0.0083	mg/Kg	☼	08/11/23 07:31	08/11/23 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 124*	*08/11/23 07:31*	*08/11/23 09:54*	*1*
Dibromofluoromethane (Surr)	*100*		*69 - 126*	*08/11/23 07:31*	*08/11/23 09:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*73 - 135*	*08/11/23 07:31*	*08/11/23 09:54*	*1*
Toluene-d8 (Surr)	*93*		*67 - 134*	*08/11/23 07:31*	*08/11/23 09:54*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.5**		0.1	0.1	%			08/10/23 15:10	1
Percent Solids (SM22 2540G)	**83.5**		0.1	0.1	%			08/10/23 15:10	1

Client Sample ID: NAFREST-BRP-TS1B
Lab Sample ID: 180-160629-2

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 82.8

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.029	0.0045	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Benzene	ND		0.0058	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1

Client Sample ID: NAFREST-BRP-TS1B
Lab Sample ID: 180-160629-2

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 82.8

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.029	0.0029	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Carbon tetrachloride	ND		0.0058	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Chlorobenzene	ND		0.0058	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Chloroform	ND		0.0058	0.0039	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
cis-1,2-Dichloroethene	ND		0.0058	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,2-Dichlorobenzene	ND		0.0058	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,3-Dichlorobenzene	ND		0.0058	0.0036	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,4-Dichlorobenzene	ND		0.0058	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,1-Dichloroethane	ND		0.0058	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,2-Dichloroethane	ND		0.0058	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,1-Dichloroethene	ND		0.0058	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,4-Dioxane	ND		1.2	0.088	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Ethylbenzene	ND		0.0058	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Methylene Chloride	ND		0.0058	0.0052	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Methyl tert-butyl ether	ND		0.0058	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
n-Butylbenzene	ND		0.0058	0.0029	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
N-Propylbenzene	ND		0.0058	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
sec-Butylbenzene	ND		0.0058	0.0028	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
tert-Butylbenzene	ND		0.0058	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Tetrachloroethene	ND		0.0058	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Toluene	ND		0.0058	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
trans-1,2-Dichloroethene	ND		0.0058	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,1,1-Trichloroethane	ND		0.0058	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Trichloroethene	ND		0.0058	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,2,4-Trimethylbenzene	ND		0.0058	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
1,3,5-Trimethylbenzene	ND		0.0058	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Vinyl chloride	ND		0.0058	0.0042	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1
Xylenes, Total	ND		0.012	0.0083	mg/Kg	☼	08/14/23 07:40	08/14/23 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 124*	*08/14/23 07:40*	*08/14/23 11:57*	*1*
Dibromofluoromethane (Surr)	*114*		*69 - 126*	*08/14/23 07:40*	*08/14/23 11:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*136*	*S1+*	*73 - 135*	*08/14/23 07:40*	*08/14/23 11:57*	*1*
Toluene-d8 (Surr)	*96*		*67 - 134*	*08/14/23 07:40*	*08/14/23 11:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**17.2**		0.1	0.1	%			08/10/23 15:10	1
Percent Solids (SM22 2540G)	**82.8**		0.1	0.1	%			08/10/23 15:10	1

Client Sample ID: NAFREST-BRP-TS1C
Lab Sample ID: 180-160629-3

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.7

Method: SW846 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	☼	08/14/23 07:40	08/14/23 12:20	1
Benzene	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
2-Butanone (MEK)	ND		0.028	0.0029	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Carbon tetrachloride	ND		0.0056	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1

Client Sample ID: NAFREST-BRP-TS1C
Lab Sample ID: 180-160629-3

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.7

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.0056	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Chloroform	ND		0.0056	0.0038	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
cis-1,2-Dichloroethene	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,2-Dichlorobenzene	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,3-Dichlorobenzene	ND		0.0056	0.0035	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,4-Dichlorobenzene	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,1-Dichloroethane	ND		0.0056	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,2-Dichloroethane	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,1-Dichloroethene	ND		0.0056	0.0025	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,4-Dioxane	ND		1.1	0.085	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Ethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Methylene Chloride	ND		0.0056	0.0051	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Methyl tert-butyl ether	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
n-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
N-Propylbenzene	ND		0.0056	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
sec-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
tert-Butylbenzene	ND		0.0056	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Tetrachloroethene	ND		0.0056	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Toluene	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
trans-1,2-Dichloroethene	ND		0.0056	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,1,1-Trichloroethane	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Trichloroethene	ND		0.0056	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,2,4-Trimethylbenzene	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
1,3,5-Trimethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Vinyl chloride	ND		0.0056	0.0041	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1
Xylenes, Total	ND		0.011	0.0081	mg/Kg	☼	08/14/23 07:40	08/14/23 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*60 - 124*	*08/14/23 07:40*	*08/14/23 12:20*	*1*
Dibromofluoromethane (Surr)	*106*		*69 - 126*	*08/14/23 07:40*	*08/14/23 12:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*73 - 135*	*08/14/23 07:40*	*08/14/23 12:20*	*1*
Toluene-d8 (Surr)	*95*		*67 - 134*	*08/14/23 07:40*	*08/14/23 12:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.3**		0.1	0.1	%			08/10/23 15:10	1
Percent Solids (SM22 2540G)	**83.7**		0.1	0.1	%			08/10/23 15:10	1

Client Sample ID: NAFREST-BRP-TS1D
Lab Sample ID: 180-160629-4

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.3

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.030	0.0047	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Benzene	ND		0.0060	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
2-Butanone (MEK)	ND		0.030	0.0030	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Carbon tetrachloride	ND		0.0060	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Chlorobenzene	ND		0.0060	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Chloroform	ND		0.0060	0.0040	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1

Client Sample ID: NAFREST-BRP-TS1D
Lab Sample ID: 180-160629-4
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.3

Method: SW846 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		0.0060	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,2-Dichlorobenzene	ND		0.0060	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,3-Dichlorobenzene	ND		0.0060	0.0037	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,4-Dichlorobenzene	ND		0.0060	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,1-Dichloroethane	ND		0.0060	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,2-Dichloroethane	ND		0.0060	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,1-Dichloroethene	ND		0.0060	0.0027	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,4-Dioxane	ND		1.2	0.091	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Ethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Methylene Chloride	ND		0.0060	0.0054	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Methyl tert-butyl ether	ND		0.0060	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
n-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
N-Propylbenzene	ND		0.0060	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
sec-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
tert-Butylbenzene	ND		0.0060	0.0025	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Tetrachloroethene	ND		0.0060	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Toluene	ND		0.0060	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
trans-1,2-Dichloroethene	ND		0.0060	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,1,1-Trichloroethane	ND		0.0060	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Trichloroethene	ND		0.0060	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,2,4-Trimethylbenzene	ND		0.0060	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
1,3,5-Trimethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Vinyl chloride	ND		0.0060	0.0043	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1
Xylenes, Total	ND		0.012	0.0087	mg/Kg	☼	08/14/23 07:40	08/14/23 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 124*	*08/14/23 07:40*	*08/14/23 12:42*	*1*
Dibromofluoromethane (Surr)	*113*		*69 - 126*	*08/14/23 07:40*	*08/14/23 12:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*132*		*73 - 135*	*08/14/23 07:40*	*08/14/23 12:42*	*1*
Toluene-d8 (Surr)	*99*		*67 - 134*	*08/14/23 07:40*	*08/14/23 12:42*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.7**		0.1	0.1	%			08/10/23 15:10	1
Percent Solids (SM22 2540G)	**83.3**		0.1	0.1	%			08/10/23 15:10	1

Client Sample ID: NAFREST-BRP-TS1E
Lab Sample ID: 180-160629-5
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Method: SW846 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	☼	08/14/23 07:40	08/14/23 13:05	1
Benzene	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
2-Butanone (MEK)	ND		0.028	0.0029	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Carbon tetrachloride	ND		0.0056	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Chlorobenzene	ND		0.0056	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Chloroform	ND		0.0056	0.0038	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
cis-1,2-Dichloroethene	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,2-Dichlorobenzene	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1

Client Sample ID: NAFREST-BRP-TS1E
Lab Sample ID: 180-160629-5

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		0.0056	0.0035	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,4-Dichlorobenzene	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,1-Dichloroethane	ND		0.0056	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,2-Dichloroethane	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,1-Dichloroethene	ND		0.0056	0.0025	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,4-Dioxane	ND		1.1	0.085	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Ethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Methylene Chloride	ND		0.0056	0.0051	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Methyl tert-butyl ether	ND		0.0056	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
n-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
N-Propylbenzene	ND		0.0056	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
sec-Butylbenzene	ND		0.0056	0.0028	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
tert-Butylbenzene	ND		0.0056	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Tetrachloroethene	ND		0.0056	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Toluene	ND		0.0056	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
trans-1,2-Dichloroethene	ND		0.0056	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,1,1-Trichloroethane	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Trichloroethene	ND		0.0056	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,2,4-Trimethylbenzene	ND		0.0056	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
1,3,5-Trimethylbenzene	ND		0.0056	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Vinyl chloride	ND		0.0056	0.0040	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1
Xylenes, Total	ND		0.011	0.0081	mg/Kg	☼	08/14/23 07:40	08/14/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 124*	*08/14/23 07:40*	*08/14/23 13:05*	*1*
Dibromofluoromethane (Surr)	*102*		*69 - 126*	*08/14/23 07:40*	*08/14/23 13:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*124*		*73 - 135*	*08/14/23 07:40*	*08/14/23 13:05*	*1*
Toluene-d8 (Surr)	*96*		*67 - 134*	*08/14/23 07:40*	*08/14/23 13:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.2**		0.1	0.1	%			08/10/23 15:10	1
Percent Solids (SM22 2540G)	**83.8**		0.1	0.1	%			08/10/23 15:10	1

Client Sample ID: NAFREST-BRP-TS1F
Lab Sample ID: 180-160629-6

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.9

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.027	0.0043	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Benzene	ND		0.0055	0.0015	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
2-Butanone (MEK)	ND		0.027	0.0028	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Carbon tetrachloride	ND		0.0055	0.0022	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Chlorobenzene	ND		0.0055	0.0014	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Chloroform	ND		0.0055	0.0037	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
cis-1,2-Dichloroethene	ND		0.0055	0.0016	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,2-Dichlorobenzene	ND		0.0055	0.0018	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,3-Dichlorobenzene	ND		0.0055	0.0034	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,4-Dichlorobenzene	ND		0.0055	0.0016	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1

Client Sample ID: NAFREST-BRP-TS1F
Lab Sample ID: 180-160629-6
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.9

Method: SW846 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	0.0017	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,2-Dichloroethane	ND		0.0055	0.0016	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,1-Dichloroethene	ND		0.0055	0.0025	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,4-Dioxane	ND		1.1	0.083	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Ethylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Methylene Chloride	ND		0.0055	0.0049	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Methyl tert-butyl ether	ND		0.0055	0.0016	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
n-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
N-Propylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
sec-Butylbenzene	ND		0.0055	0.0027	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
tert-Butylbenzene	ND		0.0055	0.0023	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Tetrachloroethene	ND		0.0055	0.0022	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Toluene	ND		0.0055	0.0016	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
trans-1,2-Dichloroethene	ND		0.0055	0.0019	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,1,1-Trichloroethane	ND		0.0055	0.0018	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Trichloroethene	ND		0.0055	0.0017	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,2,4-Trimethylbenzene	ND		0.0055	0.0019	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
1,3,5-Trimethylbenzene	ND		0.0055	0.0020	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Vinyl chloride	ND	*-	0.0055	0.0039	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1
Xylenes, Total	ND		0.011	0.0079	mg/Kg	☼	08/14/23 07:40	08/15/23 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*60 - 124*	*08/14/23 07:40*	*08/15/23 12:01*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 126*	*08/14/23 07:40*	*08/15/23 12:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*73 - 135*	*08/14/23 07:40*	*08/15/23 12:01*	*1*
Toluene-d8 (Surr)	*99*		*67 - 134*	*08/14/23 07:40*	*08/15/23 12:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.1**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**83.9**		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS1G
Lab Sample ID: 180-160629-7
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Method: SW846 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	☼	08/14/23 07:40	08/14/23 14:58	1
Benzene	ND		0.0053	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
2-Butanone (MEK)	ND		0.026	0.0027	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Carbon tetrachloride	ND		0.0053	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Chloroform	ND		0.0053	0.0035	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
cis-1,2-Dichloroethene	ND		0.0053	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,3-Dichlorobenzene	ND		0.0053	0.0032	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,1-Dichloroethane	ND		0.0053	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1

Client Sample ID: NAFREST-BRP-TS1G
Lab Sample ID: 180-160629-7
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.8

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,4-Dioxane	ND		1.1	0.080	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Ethylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Methylene Chloride	ND		0.0053	0.0048	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Methyl tert-butyl ether	ND		0.0053	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
tert-Butylbenzene	ND		0.0053	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
trans-1,2-Dichloroethene	ND		0.0053	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1
Xylenes, Total	ND		0.011	0.0076	mg/Kg	☼	08/14/23 07:40	08/14/23 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 124*	*08/14/23 07:40*	*08/14/23 14:58*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 126*	*08/14/23 07:40*	*08/14/23 14:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 135*	*08/14/23 07:40*	*08/14/23 14:58*	*1*
Toluene-d8 (Surr)	*104*		*67 - 134*	*08/14/23 07:40*	*08/14/23 14:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.2**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**83.8**		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.2

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0080	0.0023	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Acenaphthylene	**0.0029**	**J**	0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Anthracene	**0.0063**	**J**	0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Benzo[a]anthracene	**0.033**		0.0080	0.0036	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Benzo[a]pyrene	**0.037**		0.0080	0.0034	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Benzo[b]fluoranthene	**0.042**		0.0080	0.0020	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Benzo[g,h,i]perylene	**0.037**		0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Benzo[k]fluoranthene	**0.018**		0.0080	0.0024	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Chrysene	**0.037**		0.0080	0.0044	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Dibenz(a,h)anthracene	**0.0087**		0.0080	0.0051	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Dibenzofuran	ND		0.039	0.015	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
1,4-Dioxane	ND		0.080	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Fluoranthene	**0.047**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Fluorene	ND		0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.2

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		0.0080	0.0029	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Indeno[1,2,3-cd]pyrene	**0.030**		0.0080	0.0040	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Methylphenol, 3 & 4	**0.029**	**J**	0.039	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Naphthalene	ND		0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Pentachlorophenol	ND		0.20	0.064	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Phenanthrene	**0.027**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Phenol	ND		0.039	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1
Pyrene	**0.066**		0.0080	0.0019	mg/Kg	☼	08/11/23 09:03	08/14/23 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*35 - 105*	*08/11/23 09:03*	*08/14/23 07:21*	*1*
2-Fluorophenol (Surr)	*59*		*32 - 105*	*08/11/23 09:03*	*08/14/23 07:21*	*1*
Nitrobenzene-d5 (Surr)	*76*		*34 - 109*	*08/11/23 09:03*	*08/14/23 07:21*	*1*
Phenol-d5 (Surr)	*62*		*34 - 105*	*08/11/23 09:03*	*08/14/23 07:21*	*1*
Terphenyl-d14 (Surr)	*79*		*20 - 117*	*08/11/23 09:03*	*08/14/23 07:21*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*20 - 119*	*08/11/23 09:03*	*08/14/23 07:21*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
beta-BHC	ND		0.0020	0.00055	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
cis-Chlordane	**0.0018**	**J p**	0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
4,4'-DDD	ND		0.0020	0.00042	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
4,4'-DDE	ND		0.0020	0.00041	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Endosulfan sulfate	ND		0.0020	0.00091	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Endrin	ND		0.0020	0.00037	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
gamma-BHC (Lindane)	ND		0.0020	0.00051	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*113*		*42 - 124*	*08/11/23 09:36*	*08/17/23 09:32*	*1*
DCB Decachlorobiphenyl (Surr)	*116*		*42 - 124*	*08/11/23 09:36*	*08/17/23 09:32*	*1*
Tetrachloro-m-xylene	*105*		*40 - 137*	*08/11/23 09:36*	*08/17/23 09:32*	*1*
Tetrachloro-m-xylene	*106*		*40 - 137*	*08/11/23 09:36*	*08/17/23 09:32*	*1*

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0065	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1221	ND		0.020	0.0070	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1232	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1248	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1254	ND		0.020	0.0060	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8

Date Collected: 08/09/23 15:45
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 83.2

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	ND		0.020	0.0057	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1262	ND		0.020	0.0070	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	08/11/23 09:36	08/14/23 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:21*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:21*	*1*
Tetrachloro-m-xylene (Surr)	*127*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:21*	*1*
Tetrachloro-m-xylene (Surr)	*126*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:21*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.013	mg/Kg	☼	08/14/23 00:15	08/15/23 09:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*88*		*48 - 127*	*08/14/23 00:15*	*08/15/23 09:46*	*1*
2,4-Dichlorophenylacetic acid	*111*		*48 - 127*	*08/14/23 00:15*	*08/15/23 09:46*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.9**		0.82	0.52	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Barium	**71**		16	2.9	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Beryllium	**0.37**		0.33	0.090	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Cadmium	**0.14**	**J**	0.41	0.060	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Chromium	**14**		0.41	0.37	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Copper	**20**		2.1	1.2	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Lead	**22**		0.82	0.72	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Manganese	**410**		1.2	0.23	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Nickel	**19**		3.3	0.41	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Selenium	ND		0.82	0.38	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Silver	ND		0.41	0.086	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1
Zinc	**71**		1.6	1.2	mg/Kg	☼	08/11/23 09:50	08/14/23 12:36	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.032**	**J**	0.036	0.023	mg/Kg	☼	08/11/23 09:25	08/12/23 09:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.8**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**83.2**		0.1	0.1	%			08/10/23 15:31	1
Hexavalent chromium (SW846 EPA 7196A)	ND	F1	0.49	0.26	mg/Kg	☼	08/15/23 08:50	08/17/23 13:20	1
Hexavalent chromium (SW846 EPA 7196A)	ND	F1	0.48	0.25	mg/Kg	☼	08/15/23 09:00	08/17/23 14:07	1
Cyanide, Total (SW846 EPA 9014)	ND		0.23	0.17	mg/Kg	☼	08/14/23 16:45	08/14/23 17:14	1

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0027**	**J**	0.0080	0.0023	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Acenaphthylene	**0.0048**	**J**	0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Anthracene	**0.011**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Benzo[a]anthracene	**0.050**		0.0080	0.0036	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Benzo[a]pyrene	**0.059**		0.0080	0.0035	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Benzo[b]fluoranthene	**0.066**		0.0080	0.0020	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Benzo[g,h,i]perylene	**0.057**		0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Benzo[k]fluoranthene	**0.032**		0.0080	0.0024	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Chrysene	**0.059**		0.0080	0.0044	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Dibenz(a,h)anthracene	**0.016**		0.0080	0.0051	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Dibenzofuran	ND		0.040	0.015	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
1,4-Dioxane	ND		0.080	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Fluoranthene	**0.083**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Fluorene	**0.0035**	**J**	0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Hexachlorobenzene	ND		0.0080	0.0029	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Indeno[1,2,3-cd]pyrene	**0.048**		0.0080	0.0040	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
2-Methylphenol	ND		0.040	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Methylphenol, 3 & 4	**0.043**		0.040	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Naphthalene	ND		0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Pentachlorophenol	ND		0.20	0.064	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Phenanthrene	**0.057**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Phenol	ND		0.040	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1
Pyrene	**0.12**		0.0080	0.0019	mg/Kg	☼	08/11/23 09:03	08/14/23 08:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*35 - 105*	*08/11/23 09:03*	*08/14/23 08:04*	*1*
2-Fluorophenol (Surr)	*74*		*32 - 105*	*08/11/23 09:03*	*08/14/23 08:04*	*1*
Nitrobenzene-d5 (Surr)	*92*		*34 - 109*	*08/11/23 09:03*	*08/14/23 08:04*	*1*
Phenol-d5 (Surr)	*81*		*34 - 105*	*08/11/23 09:03*	*08/14/23 08:04*	*1*
Terphenyl-d14 (Surr)	*103*		*20 - 117*	*08/11/23 09:03*	*08/14/23 08:04*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*20 - 119*	*08/11/23 09:03*	*08/14/23 08:04*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
beta-BHC	ND		0.0020	0.00055	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
cis-Chlordane	**0.0025**	**p**	0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
4,4'-DDD	ND		0.0020	0.00042	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
4,4'-DDE	ND		0.0020	0.00041	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
4,4'-DDT	**0.0092**		0.0020	0.0014	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Endosulfan sulfate	ND		0.0020	0.00092	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Endrin	ND		0.0020	0.00037	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
gamma-BHC (Lindane)	ND		0.0020	0.00052	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1
Heptachlor	ND		0.0020	0.00063	mg/Kg	☼	08/11/23 09:36	08/17/23 09:48	1

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9

Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*96*		*42 - 124*	*08/11/23 09:36*	*08/17/23 09:48*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*42 - 124*	*08/11/23 09:36*	*08/17/23 09:48*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*08/11/23 09:36*	*08/17/23 09:48*	*1*
Tetrachloro-m-xylene	*96*		*40 - 137*	*08/11/23 09:36*	*08/17/23 09:48*	*1*

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0065	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1221	ND		0.020	0.0071	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1232	ND		0.020	0.0049	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1248	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1254	ND		0.020	0.0060	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1260	ND		0.020	0.0057	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1262	ND		0.020	0.0070	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	08/11/23 09:36	08/14/23 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:39*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:39*	*1*
Tetrachloro-m-xylene (Surr)	*116*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:39*	*1*
Tetrachloro-m-xylene (Surr)	*116*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:39*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.013	mg/Kg	☼	08/14/23 00:15	08/15/23 10:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*95*		*48 - 127*	*08/14/23 00:15*	*08/15/23 10:06*	*1*
2,4-Dichlorophenylacetic acid	*114*		*48 - 127*	*08/14/23 00:15*	*08/15/23 10:06*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.0**		0.73	0.46	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Barium	**68**		15	2.6	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Beryllium	**0.38**		0.29	0.080	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Cadmium	**0.14**	**J**	0.37	0.054	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Chromium	**14**		0.37	0.33	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Copper	**21**		1.8	1.1	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Lead	**24**		0.73	0.64	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Manganese	**400**		1.1	0.20	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Nickel	**20**		2.9	0.37	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Selenium	**0.35**	**J**	0.73	0.34	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Silver	ND		0.37	0.076	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1
Zinc	**73**		1.5	1.1	mg/Kg	☼	08/11/23 09:50	08/14/23 12:41	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**	**J**	0.039	0.025	mg/Kg	☼	08/11/23 09:25	08/12/23 09:04	1

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.5**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**83.5**		0.1	0.1	%			08/10/23 15:31	1
Hexavalent chromium (SW846 EPA 7196A)	ND	F1	0.49	0.26	mg/Kg	☼	08/15/23 09:02	08/17/23 14:37	1
Hexavalent chromium (SW846 EPA 7196A)	ND	F1	0.48	0.25	mg/Kg	☼	08/15/23 09:03	08/17/23 15:04	1
Cyanide, Total (SW846 EPA 9014)	ND		0.20	0.15	mg/Kg	☼	08/14/23 16:45	08/14/23 17:16	1

Client Sample ID: NAFREST-BRP-TS2A
Lab Sample ID: 180-160629-10
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.3

Method: SW846 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	☼	08/11/23 07:31	08/11/23 14:47	1
Benzene	ND	F1	0.0054	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
2-Butanone (MEK)	ND		0.027	0.0027	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Chloroform	ND	F1	0.0054	0.0036	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
cis-1,2-Dichloroethene	ND	F1	0.0054	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,1-Dichloroethane	ND	F1	0.0054	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,2-Dichloroethane	ND	F1	0.0054	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,4-Dioxane	ND	F2 F1	1.1	0.081	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Methylene Chloride	ND	F1	0.0054	0.0048	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Methyl tert-butyl ether	ND	F1	0.0054	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Toluene	ND	F1	0.0054	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	08/11/23 07:31	08/11/23 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*60 - 124*	*08/11/23 07:31*	*08/11/23 14:47*	*1*
Dibromofluoromethane (Surr)	*105*		*69 - 126*	*08/11/23 07:31*	*08/11/23 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*130*		*73 - 135*	*08/11/23 07:31*	*08/11/23 14:47*	*1*
Toluene-d8 (Surr)	*91*		*67 - 134*	*08/11/23 07:31*	*08/11/23 14:47*	*1*

Client Sample ID: NAFREST-BRP-TS2A
Lab Sample ID: 180-160629-10

Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.7		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	85.3		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS2B
Lab Sample ID: 180-160629-11

Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 84.2

Method: SW846 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	☼	08/11/23 07:31	08/11/23 15:09	1
Benzene	ND	F1	0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
2-Butanone (MEK)	ND		0.027	0.0027	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Carbon tetrachloride	ND		0.0053	0.0022	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Chloroform	ND	F1	0.0053	0.0036	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
cis-1,2-Dichloroethene	ND	F1	0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,3-Dichlorobenzene	ND		0.0053	0.0033	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,1-Dichloroethane	ND	F1	0.0053	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,2-Dichloroethane	ND	F1	0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,4-Dioxane	ND		1.1	0.081	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Ethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Methylene Chloride	ND	F1	0.0053	0.0048	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Methyl tert-butyl ether	ND	F1	0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
tert-Butylbenzene	ND		0.0053	0.0023	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
trans-1,2-Dichloroethene	ND		0.0053	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	08/11/23 07:31	08/11/23 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*60 - 124*	*08/11/23 07:31*	*08/11/23 15:09*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 126*	*08/11/23 07:31*	*08/11/23 15:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*73 - 135*	*08/11/23 07:31*	*08/11/23 15:09*	*1*
Toluene-d8 (Surr)	*89*		*67 - 134*	*08/11/23 07:31*	*08/11/23 15:09*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	15.8		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	84.2		0.1	0.1	%			08/10/23 15:31	1

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0025**	**J**	0.0080	0.0023	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Acenaphthylene	**0.0061**	**J**	0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Anthracene	**0.011**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Benzo[a]anthracene	**0.046**		0.0080	0.0036	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Benzo[a]pyrene	**0.051**		0.0080	0.0035	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Benzo[b]fluoranthene	**0.067**		0.0080	0.0020	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Benzo[g,h,i]perylene	**0.043**		0.0080	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Benzo[k]fluoranthene	**0.025**		0.0080	0.0024	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Chrysene	**0.050**		0.0080	0.0044	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Dibenz(a,h)anthracene	**0.010**		0.0080	0.0051	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Dibenzofuran	ND		0.040	0.015	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
1,4-Dioxane	ND		0.080	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Fluoranthene	**0.070**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Fluorene	**0.0021**	**J**	0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Hexachlorobenzene	ND		0.0080	0.0029	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Indeno[1,2,3-cd]pyrene	**0.035**		0.0080	0.0040	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
2-Methylphenol	ND		0.040	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Methylphenol, 3 & 4	**0.028**	**J**	0.040	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Naphthalene	ND		0.0080	0.0016	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Pentachlorophenol	ND	F1	0.20	0.064	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Phenanthrene	**0.036**		0.0080	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Phenol	ND		0.040	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1
Pyrene	**0.090**		0.0080	0.0019	mg/Kg	☼	08/11/23 09:03	08/14/23 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*35 - 105*	*08/11/23 09:03*	*08/14/23 06:15*	*1*
2-Fluorophenol (Surr)	*63*		*32 - 105*	*08/11/23 09:03*	*08/14/23 06:15*	*1*
Nitrobenzene-d5 (Surr)	*81*		*34 - 109*	*08/11/23 09:03*	*08/14/23 06:15*	*1*
Phenol-d5 (Surr)	*67*		*34 - 105*	*08/11/23 09:03*	*08/14/23 06:15*	*1*
Terphenyl-d14 (Surr)	*83*		*20 - 117*	*08/11/23 09:03*	*08/14/23 06:15*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*20 - 119*	*08/11/23 09:03*	*08/14/23 06:15*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
alpha-BHC	ND		0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
beta-BHC	ND		0.0020	0.00055	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
cis-Chlordane	ND		0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
4,4'-DDD	ND		0.0020	0.00042	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
delta-BHC	ND		0.0020	0.00063	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Dieldrin	ND		0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Endosulfan I	ND		0.0020	0.00054	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Endosulfan II	ND		0.0020	0.00044	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Endosulfan sulfate	ND		0.0020	0.00091	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Endrin	ND		0.0020	0.00037	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
gamma-BHC (Lindane)	ND		0.0020	0.00051	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1
Heptachlor	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 08:45	1

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12

Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	91		42 - 124	08/11/23 09:36	08/17/23 08:45	1
DCB Decachlorobiphenyl (Surr)	95		42 - 124	08/11/23 09:36	08/17/23 08:45	1
Tetrachloro-m-xylene	88		40 - 137	08/11/23 09:36	08/17/23 08:45	1
Tetrachloro-m-xylene	88		40 - 137	08/11/23 09:36	08/17/23 08:45	1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0065	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1221	ND		0.020	0.0070	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1232	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1248	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1254	ND		0.020	0.0060	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1260	ND		0.020	0.0056	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1262	ND		0.020	0.0070	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	08/11/23 09:36	08/14/23 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		63 - 138	08/11/23 09:36	08/14/23 22:28	1
DCB Decachlorobiphenyl (Surr)	82		63 - 138	08/11/23 09:36	08/14/23 22:28	1
Tetrachloro-m-xylene (Surr)	101		55 - 135	08/11/23 09:36	08/14/23 22:28	1
Tetrachloro-m-xylene (Surr)	102		55 - 135	08/11/23 09:36	08/14/23 22:28	1

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.013	mg/Kg	☼	08/14/23 00:15	08/15/23 10:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	81		48 - 127	08/14/23 00:15	08/15/23 10:25	1
2,4-Dichlorophenylacetic acid	103		48 - 127	08/14/23 00:15	08/15/23 10:25	1

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**		0.89	0.56	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Barium	**75**		18	3.2	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Beryllium	**0.40**		0.36	0.097	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Cadmium	**0.12**	**J**	0.45	0.066	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Chromium	**14**		0.45	0.41	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Copper	**24**		2.2	1.4	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Lead	**24**		0.89	0.78	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Manganese	**430**		1.3	0.25	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Nickel	**21**		3.6	0.45	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Selenium	**0.60**	**J**	0.89	0.41	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Silver	ND		0.45	0.093	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1
Zinc	**74**	**F1**	1.8	1.3	mg/Kg	☼	08/11/23 09:50	08/14/23 12:11	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.051**		0.037	0.024	mg/Kg	☼	08/11/23 09:25	08/12/23 09:05	1

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.5**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**83.5**		0.1	0.1	%			08/10/23 15:31	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.47	0.25	mg/Kg	☼	08/15/23 09:02	08/17/23 14:42	1
Cyanide, Total (SW846 EPA 9014)	ND	F1	0.22	0.17	mg/Kg	☼	08/14/23 16:45	08/14/23 17:18	1

Client Sample ID: NAFREST-BRP-TS3A
Lab Sample ID: 180-160629-13
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.4

Method: SW846 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	☼	08/11/23 07:31	08/11/23 17:45	1
Benzene	ND		0.0052	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
2-Butanone (MEK)	ND		0.026	0.0027	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Carbon tetrachloride	ND		0.0052	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Chlorobenzene	ND		0.0052	0.0014	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Chloroform	ND		0.0052	0.0035	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,2-Dichlorobenzene	ND		0.0052	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,3-Dichlorobenzene	ND		0.0052	0.0032	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,4-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,1-Dichloroethane	ND		0.0052	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,1-Dichloroethene	ND		0.0052	0.0024	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,4-Dioxane	ND		1.0	0.079	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Ethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Methylene Chloride	ND		0.0052	0.0047	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Methyl tert-butyl ether	ND		0.0052	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
n-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
N-Propylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
sec-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
tert-Butylbenzene	ND		0.0052	0.0022	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Toluene	ND		0.0052	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
trans-1,2-Dichloroethene	ND		0.0052	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,1,1-Trichloroethane	ND		0.0052	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1
Xylenes, Total	ND		0.010	0.0075	mg/Kg	☼	08/11/23 07:31	08/11/23 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*60 - 124*	*08/11/23 07:31*	*08/11/23 17:45*	*1*
Dibromofluoromethane (Surr)	*108*		*69 - 126*	*08/11/23 07:31*	*08/11/23 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*128*		*73 - 135*	*08/11/23 07:31*	*08/11/23 17:45*	*1*
Toluene-d8 (Surr)	*96*		*67 - 134*	*08/11/23 07:31*	*08/11/23 17:45*	*1*

Client Sample ID: NAFREST-BRP-TS3A
Lab Sample ID: 180-160629-13
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.6		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	85.4		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS3B
Lab Sample ID: 180-160629-14
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.0

Method: SW846 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	☼	08/11/23 07:31	08/11/23 18:53	1
Benzene	ND		0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
2-Butanone (MEK)	ND		0.026	0.0027	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Carbon tetrachloride	ND		0.0053	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Chloroform	ND		0.0053	0.0035	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
cis-1,2-Dichloroethene	ND		0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,3-Dichlorobenzene	ND		0.0053	0.0033	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,1-Dichloroethane	ND		0.0053	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,4-Dioxane	ND		1.1	0.080	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Ethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Methylene Chloride	ND		0.0053	0.0048	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Methyl tert-butyl ether	ND		0.0053	0.0016	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
tert-Butylbenzene	ND		0.0053	0.0022	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
trans-1,2-Dichloroethene	ND		0.0053	0.0019	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1
Xylenes, Total	ND		0.011	0.0076	mg/Kg	☼	08/11/23 07:31	08/11/23 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*60 - 124*	*08/11/23 07:31*	*08/11/23 18:53*	*1*
Dibromofluoromethane (Surr)	*111*		*69 - 126*	*08/11/23 07:31*	*08/11/23 18:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*73 - 135*	*08/11/23 07:31*	*08/11/23 18:53*	*1*
Toluene-d8 (Surr)	*102*		*67 - 134*	*08/11/23 07:31*	*08/11/23 18:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	15.0		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	85.0		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15

Date Collected: 08/09/23 15:55
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 84.7

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.044**		0.0078	0.0022	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Acenaphthylene	**0.0047**	**J**	0.0078	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Anthracene	**0.097**		0.0078	0.0020	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Benzo[a]anthracene	**0.20**		0.0078	0.0035	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Benzo[a]pyrene	**0.17**		0.0078	0.0034	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Benzo[b]fluoranthene	**0.20**		0.0078	0.0019	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Benzo[g,h,i]perylene	**0.16**		0.0078	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Benzo[k]fluoranthene	**0.073**		0.0078	0.0023	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Chrysene	**0.19**		0.0078	0.0043	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Dibenz(a,h)anthracene	**0.042**		0.0078	0.0050	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Dibenzofuran	**0.018**	**J**	0.038	0.014	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
1,4-Dioxane	ND		0.078	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Fluoranthene	**0.31**		0.0078	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Fluorene	**0.036**		0.0078	0.0015	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Hexachlorobenzene	ND		0.0078	0.0028	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Indeno[1,2,3-cd]pyrene	**0.13**		0.0078	0.0039	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
2-Methylphenol	ND		0.038	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Methylphenol, 3 & 4	**0.018**	**J**	0.038	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Naphthalene	**0.0086**		0.0078	0.0015	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Pentachlorophenol	ND		0.20	0.062	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Phenanthrene	**0.34**		0.0078	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Phenol	ND		0.038	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1
Pyrene	**0.42**		0.0078	0.0018	mg/Kg	☼	08/11/23 09:03	08/14/23 08:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*35 - 105*	*08/11/23 09:03*	*08/14/23 08:26*	*1*
2-Fluorophenol (Surr)	*65*		*32 - 105*	*08/11/23 09:03*	*08/14/23 08:26*	*1*
Nitrobenzene-d5 (Surr)	*84*		*34 - 109*	*08/11/23 09:03*	*08/14/23 08:26*	*1*
Phenol-d5 (Surr)	*71*		*34 - 105*	*08/11/23 09:03*	*08/14/23 08:26*	*1*
Terphenyl-d14 (Surr)	*89*		*20 - 117*	*08/11/23 09:03*	*08/14/23 08:26*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*20 - 119*	*08/11/23 09:03*	*08/14/23 08:26*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00061	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
beta-BHC	ND		0.0020	0.00054	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
cis-Chlordane	**0.0014**	**J p**	0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
4,4'-DDD	ND		0.0020	0.00041	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
4,4'-DDE	ND		0.0020	0.00040	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
delta-BHC	ND		0.0020	0.00062	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Dieldrin	ND		0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Endosulfan I	ND		0.0020	0.00053	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Endosulfan sulfate	ND		0.0020	0.00090	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Endrin	ND		0.0020	0.00037	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
gamma-BHC (Lindane)	ND		0.0020	0.00050	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1
Heptachlor	ND		0.0020	0.00061	mg/Kg	☼	08/11/23 09:36	08/17/23 10:03	1

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15

Date Collected: 08/09/23 15:55
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 84.7

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*110*		*42 - 124*	*08/11/23 09:36*	*08/17/23 10:03*	*1*
DCB Decachlorobiphenyl (Surr)	*116*		*42 - 124*	*08/11/23 09:36*	*08/17/23 10:03*	*1*
Tetrachloro-m-xylene	*106*		*40 - 137*	*08/11/23 09:36*	*08/17/23 10:03*	*1*
Tetrachloro-m-xylene	*105*		*40 - 137*	*08/11/23 09:36*	*08/17/23 10:03*	*1*

Method: SW846 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	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1221	ND		0.020	0.0069	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1232	ND		0.020	0.0048	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1248	ND		0.020	0.0047	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1254	ND		0.020	0.0059	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1260	ND		0.020	0.0056	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1262	ND		0.020	0.0069	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1
PCB-1268	ND		0.020	0.0026	mg/Kg	☼	08/11/23 09:36	08/14/23 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*104*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:56*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*63 - 138*	*08/11/23 09:36*	*08/14/23 23:56*	*1*
Tetrachloro-m-xylene (Surr)	*134*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:56*	*1*
Tetrachloro-m-xylene (Surr)	*134*		*55 - 135*	*08/11/23 09:36*	*08/14/23 23:56*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.013	mg/Kg	☼	08/14/23 00:15	08/15/23 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*77*		*48 - 127*	*08/14/23 00:15*	*08/15/23 11:22*	*1*
2,4-Dichlorophenylacetic acid	*90*		*48 - 127*	*08/14/23 00:15*	*08/15/23 11:22*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.0**		0.91	0.57	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Barium	**81**		18	3.2	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Beryllium	**0.41**		0.36	0.099	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Cadmium	**0.12**	**J**	0.45	0.067	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Chromium	**14**		0.45	0.41	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Copper	**22**		2.3	1.4	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Lead	**22**		0.91	0.79	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Manganese	**470**		1.4	0.25	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Nickel	**21**		3.6	0.46	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Selenium	ND		0.91	0.42	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Silver	ND		0.45	0.094	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1
Zinc	**74**		1.8	1.3	mg/Kg	☼	08/11/23 09:50	08/14/23 12:46	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.047**		0.037	0.024	mg/Kg	☼	08/11/23 09:25	08/12/23 09:08	1

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 84.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**15.3**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**84.7**		0.1	0.1	%			08/10/23 15:31	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.48	0.25	mg/Kg	☼	08/15/23 09:02	08/17/23 14:44	1
Cyanide, Total (SW846 EPA 9014)	ND		0.23	0.18	mg/Kg	☼	08/14/23 16:45	08/14/23 17:22	1

Client Sample ID: NAFREST-BRP-TS-DUP1A
Lab Sample ID: 180-160629-16
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.9

Method: SW846 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	☼	08/14/23 07:40	08/14/23 15:21	1
Benzene	ND		0.0052	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
2-Butanone (MEK)	ND		0.026	0.0027	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Carbon tetrachloride	ND		0.0052	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Chlorobenzene	ND		0.0052	0.0014	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Chloroform	ND		0.0052	0.0035	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
cis-1,2-Dichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,2-Dichlorobenzene	ND		0.0052	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,3-Dichlorobenzene	ND		0.0052	0.0032	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,4-Dichlorobenzene	ND		0.0052	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,1-Dichloroethane	ND		0.0052	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,2-Dichloroethane	ND		0.0052	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,1-Dichloroethene	ND		0.0052	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,4-Dioxane	ND		1.0	0.079	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Ethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Methylene Chloride	ND		0.0052	0.0047	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Methyl tert-butyl ether	ND		0.0052	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
n-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
N-Propylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
sec-Butylbenzene	ND		0.0052	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
tert-Butylbenzene	ND		0.0052	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Tetrachloroethene	ND		0.0052	0.0021	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Toluene	ND		0.0052	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
trans-1,2-Dichloroethene	ND		0.0052	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,1,1-Trichloroethane	ND		0.0052	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Trichloroethene	ND		0.0052	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,2,4-Trimethylbenzene	ND		0.0052	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
1,3,5-Trimethylbenzene	ND		0.0052	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Vinyl chloride	ND		0.0052	0.0038	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1
Xylenes, Total	ND		0.010	0.0075	mg/Kg	☼	08/14/23 07:40	08/14/23 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*60 - 124*	*08/14/23 07:40*	*08/14/23 15:21*	*1*
Dibromofluoromethane (Surr)	*93*		*69 - 126*	*08/14/23 07:40*	*08/14/23 15:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 135*	*08/14/23 07:40*	*08/14/23 15:21*	*1*
Toluene-d8 (Surr)	*101*		*67 - 134*	*08/14/23 07:40*	*08/14/23 15:21*	*1*

Client Sample ID: NAFREST-BRP-TS-DUP1A
Lab Sample ID: 180-160629-16
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.1		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	85.9		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS-DUP1B
Lab Sample ID: 180-160629-17
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.7

Method: SW846 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	☼	08/14/23 07:40	08/14/23 15:43	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
2-Butanone (MEK)	ND		0.027	0.0027	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Chloroform	ND		0.0054	0.0036	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,2-Dichloroethane	ND		0.0054	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,4-Dioxane	ND		1.1	0.081	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Methylene Chloride	ND		0.0054	0.0048	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Toluene	ND		0.0054	0.0015	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	08/14/23 07:40	08/14/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 124*	*08/14/23 07:40*	*08/14/23 15:43*	*1*
Dibromofluoromethane (Surr)	*103*		*69 - 126*	*08/14/23 07:40*	*08/14/23 15:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*73 - 135*	*08/14/23 07:40*	*08/14/23 15:43*	*1*
Toluene-d8 (Surr)	*99*		*67 - 134*	*08/14/23 07:40*	*08/14/23 15:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.3		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	85.7		0.1	0.1	%			08/10/23 15:31	1

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18

Date Collected: 08/09/23 00:00
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 85.2

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0029**	**J**	0.0078	0.0022	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Acenaphthylene	**0.0034**	**J**	0.0078	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Anthracene	**0.0099**		0.0078	0.0020	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Benzo[a]anthracene	**0.032**		0.0078	0.0035	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Benzo[a]pyrene	**0.036**		0.0078	0.0034	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Benzo[b]fluoranthene	**0.039**		0.0078	0.0019	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Benzo[g,h,i]perylene	**0.034**		0.0078	0.0017	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Benzo[k]fluoranthene	**0.018**		0.0078	0.0023	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Chrysene	**0.036**		0.0078	0.0043	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Dibenz(a,h)anthracene	**0.0064**	**J**	0.0078	0.0050	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Dibenzofuran	ND		0.038	0.014	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
1,4-Dioxane	ND		0.078	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Fluoranthene	**0.046**		0.0078	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Fluorene	**0.0030**	**J**	0.0078	0.0015	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Hexachlorobenzene	ND		0.0078	0.0028	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Indeno[1,2,3-cd]pyrene	**0.029**		0.0078	0.0039	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
2-Methylphenol	ND		0.038	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Methylphenol, 3 & 4	**0.017**	**J**	0.038	0.011	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Naphthalene	**0.0015**	**J**	0.0078	0.0015	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Pentachlorophenol	ND		0.20	0.062	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Phenanthrene	**0.033**		0.0078	0.0021	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Phenol	ND		0.038	0.012	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1
Pyrene	**0.066**		0.0078	0.0018	mg/Kg	☼	08/11/23 09:03	08/14/23 09:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*35 - 105*	*08/11/23 09:03*	*08/14/23 09:09*	*1*
2-Fluorophenol (Surr)	*64*		*32 - 105*	*08/11/23 09:03*	*08/14/23 09:09*	*1*
Nitrobenzene-d5 (Surr)	*82*		*34 - 109*	*08/11/23 09:03*	*08/14/23 09:09*	*1*
Phenol-d5 (Surr)	*70*		*34 - 105*	*08/11/23 09:03*	*08/14/23 09:09*	*1*
Terphenyl-d14 (Surr)	*83*		*20 - 117*	*08/11/23 09:03*	*08/14/23 09:09*	*1*
2,4,6-Tribromophenol (Surr)	*57*		*20 - 119*	*08/11/23 09:03*	*08/14/23 09:09*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
alpha-BHC	ND		0.0020	0.00047	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
beta-BHC	ND		0.0020	0.00053	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
cis-Chlordane	**0.00073**	**J p**	0.0020	0.00048	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
4,4'-DDD	ND		0.0020	0.00040	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
4,4'-DDE	ND		0.0020	0.00039	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Endosulfan II	ND		0.0020	0.00042	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Endosulfan sulfate	ND		0.0020	0.00088	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Endrin	ND		0.0020	0.00036	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
gamma-BHC (Lindane)	ND		0.0020	0.00049	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	08/11/23 09:36	08/17/23 10:19	1

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*42 - 124*	*08/11/23 09:36*	*08/17/23 10:19*	*1*
DCB Decachlorobiphenyl (Surr)	*110*		*42 - 124*	*08/11/23 09:36*	*08/17/23 10:19*	*1*
Tetrachloro-m-xylene	*101*		*40 - 137*	*08/11/23 09:36*	*08/17/23 10:19*	*1*
Tetrachloro-m-xylene	*102*		*40 - 137*	*08/11/23 09:36*	*08/17/23 10:19*	*1*

Method: SW846 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	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1221	ND		0.019	0.0068	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1232	ND		0.019	0.0047	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1242	ND		0.019	0.0028	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1248	ND		0.019	0.0046	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1254	ND		0.019	0.0058	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1262	ND		0.019	0.0067	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1
PCB-1268	ND		0.019	0.0026	mg/Kg	☼	08/11/23 09:36	08/15/23 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*63 - 138*	*08/11/23 09:36*	*08/15/23 00:14*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*63 - 138*	*08/11/23 09:36*	*08/15/23 00:14*	*1*
Tetrachloro-m-xylene (Surr)	*126*		*55 - 135*	*08/11/23 09:36*	*08/15/23 00:14*	*1*
Tetrachloro-m-xylene (Surr)	*126*		*55 - 135*	*08/11/23 09:36*	*08/15/23 00:14*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.013	mg/Kg	☼	08/14/23 00:15	08/15/23 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*97*		*48 - 127*	*08/14/23 00:15*	*08/15/23 11:41*	*1*
2,4-Dichlorophenylacetic acid	*132*	*S1+*	*48 - 127*	*08/14/23 00:15*	*08/15/23 11:41*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.5**		0.85	0.53	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Barium	**74**		17	3.0	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Beryllium	**0.39**		0.34	0.093	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Cadmium	**0.10**	**J**	0.43	0.062	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Chromium	**14**		0.43	0.39	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Copper	**20**		2.1	1.3	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Lead	**20**		0.85	0.74	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Manganese	**430**		1.3	0.24	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Nickel	**21**		3.4	0.43	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Selenium	ND		0.85	0.39	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Silver	ND		0.43	0.088	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1
Zinc	**67**		1.7	1.2	mg/Kg	☼	08/11/23 09:50	08/14/23 12:51	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.089**		0.037	0.024	mg/Kg	☼	08/11/23 09:25	08/12/23 09:09	1

Client: Geosyntec Consultants Inc
Job ID: 180-160629-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**14.8**		0.1	0.1	%			08/10/23 15:31	1
Percent Solids (SM22 2540G)	**85.2**		0.1	0.1	%			08/10/23 15:31	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.47	0.25	mg/Kg	☼	08/15/23 09:02	08/17/23 14:45	1
Cyanide, Total (SW846 EPA 9014)	ND		0.19	0.15	mg/Kg	☼	08/14/23 16:45	08/14/23 17:24	1

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

Lab Sample ID: MB 180-443142/7
Matrix: Solid
Analysis Batch: 443142

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg			08/11/23 09:32	1
Benzene	ND		0.0050	0.0014	mg/Kg			08/11/23 09:32	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg			08/11/23 09:32	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			08/11/23 09:32	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			08/11/23 09:32	1
Chloroform	ND		0.0050	0.0034	mg/Kg			08/11/23 09:32	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			08/11/23 09:32	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			08/11/23 09:32	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			08/11/23 09:32	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			08/11/23 09:32	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			08/11/23 09:32	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			08/11/23 09:32	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			08/11/23 09:32	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg			08/11/23 09:32	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			08/11/23 09:32	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			08/11/23 09:32	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			08/11/23 09:32	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/11/23 09:32	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			08/11/23 09:32	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/11/23 09:32	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			08/11/23 09:32	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/11/23 09:32	1
Toluene	ND		0.0050	0.0014	mg/Kg			08/11/23 09:32	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			08/11/23 09:32	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			08/11/23 09:32	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			08/11/23 09:32	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/11/23 09:32	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			08/11/23 09:32	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			08/11/23 09:32	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			08/11/23 09:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*60 - 124*		*08/11/23 09:32*	*1*
Dibromofluoromethane (Surr)	*110*		*69 - 126*		*08/11/23 09:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*126*		*73 - 135*		*08/11/23 09:32*	*1*
Toluene-d8 (Surr)	*105*		*67 - 134*		*08/11/23 09:32*	*1*

Lab Sample ID: LCS 180-443142/3
Matrix: Solid
Analysis Batch: 443142

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	0.0800	0.0633		mg/Kg		79	23 - 170
Benzene	0.0400	0.0419		mg/Kg		105	77 - 120
2-Butanone (MEK)	0.0800	0.0462		mg/Kg		58	39 - 157
Carbon tetrachloride	0.0400	0.0397		mg/Kg		99	73 - 130
Chlorobenzene	0.0400	0.0364		mg/Kg		91	79 - 122
Chloroform	0.0400	0.0433		mg/Kg		108	73 - 126

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

Lab Sample ID: LCS 180-443142/3
Matrix: Solid
Analysis Batch: 443142

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	0.0404		mg/Kg		101	77 - 118
1,2-Dichlorobenzene	0.0400	0.0385		mg/Kg		96	76 - 120
1,3-Dichlorobenzene	0.0400	0.0383		mg/Kg		96	77 - 121
1,4-Dichlorobenzene	0.0400	0.0388		mg/Kg		97	79 - 120
1,1-Dichloroethane	0.0400	0.0415		mg/Kg		104	73 - 124
1,2-Dichloroethane	0.0400	0.0423		mg/Kg		106	64 - 140
1,1-Dichloroethene	0.0400	0.0386		mg/Kg		97	55 - 136
1,4-Dioxane	0.800	1.03		mg/Kg		129	18 - 166
Ethylbenzene	0.0400	0.0379		mg/Kg		95	79 - 119
Methylene Chloride	0.0400	0.0457		mg/Kg		114	67 - 131
Methyl tert-butyl ether	0.0400	0.0411		mg/Kg		103	58 - 132
n-Butylbenzene	0.0400	0.0428		mg/Kg		107	64 - 136
N-Propylbenzene	0.0400	0.0389		mg/Kg		97	71 - 127
sec-Butylbenzene	0.0400	0.0409		mg/Kg		102	65 - 130
tert-Butylbenzene	0.0400	0.0386		mg/Kg		96	69 - 133
Tetrachloroethene	0.0400	0.0360		mg/Kg		90	71 - 121
Toluene	0.0400	0.0393		mg/Kg		98	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0409		mg/Kg		102	75 - 122
1,1,1-Trichloroethane	0.0400	0.0410		mg/Kg		103	72 - 134
Trichloroethene	0.0400	0.0372		mg/Kg		93	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0415		mg/Kg		104	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0416		mg/Kg		104	69 - 131
Vinyl chloride	0.0400	0.0414		mg/Kg		103	64 - 134
Xylenes, Total	0.0800	0.0752		mg/Kg		94	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 124*
Dibromofluoromethane (Surr)	*105*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*117*		*73 - 135*
Toluene-d8 (Surr)	*106*		*67 - 134*

Lab Sample ID: LCSD 180-443142/4
Matrix: Solid
Analysis Batch: 443142

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	0.0800	0.0606		mg/Kg		76	23 - 170	4	35
Benzene	0.0400	0.0413		mg/Kg		103	77 - 120	1	20
2-Butanone (MEK)	0.0800	0.0468		mg/Kg		59	39 - 157	1	33
Carbon tetrachloride	0.0400	0.0387		mg/Kg		97	73 - 130	3	21
Chlorobenzene	0.0400	0.0363		mg/Kg		91	79 - 122	0	20
Chloroform	0.0400	0.0425		mg/Kg		106	73 - 126	2	20
cis-1,2-Dichloroethene	0.0400	0.0404		mg/Kg		101	77 - 118	0	20
1,2-Dichlorobenzene	0.0400	0.0381		mg/Kg		95	76 - 120	1	20
1,3-Dichlorobenzene	0.0400	0.0379		mg/Kg		95	77 - 121	1	20
1,4-Dichlorobenzene	0.0400	0.0374		mg/Kg		93	79 - 120	4	20
1,1-Dichloroethane	0.0400	0.0412		mg/Kg		103	73 - 124	1	20
1,2-Dichloroethane	0.0400	0.0415		mg/Kg		104	64 - 140	2	20

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

Lab Sample ID: LCSD 180-443142/4
Matrix: Solid
Analysis Batch: 443142

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	0.0389		mg/Kg		97	55 - 136	1	21
1,4-Dioxane			0.800	1.00		mg/Kg		125	18 - 166	3	40
Ethylbenzene			0.0400	0.0375		mg/Kg		94	79 - 119	1	20
Methylene Chloride			0.0400	0.0459		mg/Kg		115	67 - 131	0	32
Methyl tert-butyl ether			0.0400	0.0411		mg/Kg		103	58 - 132	0	24
n-Butylbenzene			0.0400	0.0413		mg/Kg		103	64 - 136	3	21
N-Propylbenzene			0.0400	0.0380		mg/Kg		95	71 - 127	3	20
sec-Butylbenzene			0.0400	0.0398		mg/Kg		100	65 - 130	3	20
tert-Butylbenzene			0.0400	0.0382		mg/Kg		95	69 - 133	1	23
Tetrachloroethene			0.0400	0.0358		mg/Kg		89	71 - 121	1	21
Toluene			0.0400	0.0387		mg/Kg		97	76 - 120	1	20
trans-1,2-Dichloroethene			0.0400	0.0408		mg/Kg		102	75 - 122	0	20
1,1,1-Trichloroethane			0.0400	0.0401		mg/Kg		100	72 - 134	2	20
Trichloroethene			0.0400	0.0363		mg/Kg		91	69 - 118	2	20
1,2,4-Trimethylbenzene			0.0400	0.0408		mg/Kg		102	74 - 127	2	20
1,3,5-Trimethylbenzene			0.0400	0.0414		mg/Kg		104	69 - 131	0	20
Vinyl chloride			0.0400	0.0398		mg/Kg		99	64 - 134	4	23
Xylenes, Total			0.0800	0.0751		mg/Kg		94	78 - 118	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*60 - 124*
Dibromofluoromethane (Surr)	*105*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*115*		*73 - 135*
Toluene-d8 (Surr)	*106*		*67 - 134*

Lab Sample ID: 180-160629-10 MS
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2A
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	ND		0.0908	0.0925		mg/Kg	☼	102	23 - 170		
Benzene	ND	F1	0.0454	0.0581	F1	mg/Kg	☼	128	77 - 120		
2-Butanone (MEK)	ND		0.0908	0.102		mg/Kg	☼	112	39 - 157		
Carbon tetrachloride	ND		0.0454	0.0508		mg/Kg	☼	112	73 - 130		
Chlorobenzene	ND		0.0454	0.0507		mg/Kg	☼	112	79 - 122		
Chloroform	ND	F1	0.0454	0.0617	F1	mg/Kg	☼	136	73 - 126		
cis-1,2-Dichloroethene	ND	F1	0.0454	0.0567	F1	mg/Kg	☼	125	77 - 118		
1,2-Dichlorobenzene	ND		0.0454	0.0532		mg/Kg	☼	117	76 - 120		
1,3-Dichlorobenzene	ND		0.0454	0.0498		mg/Kg	☼	110	77 - 121		
1,4-Dichlorobenzene	ND		0.0454	0.0500		mg/Kg	☼	110	79 - 120		
1,1-Dichloroethane	ND	F1	0.0454	0.0587	F1	mg/Kg	☼	129	73 - 124		
1,2-Dichloroethane	ND	F1	0.0454	0.0671	F1	mg/Kg	☼	148	64 - 140		
1,1-Dichloroethene	ND		0.0454	0.0525		mg/Kg	☼	116	55 - 136		
1,4-Dioxane	ND	F2 F1	0.908	2.05	F1	mg/Kg	☼	225	18 - 166		
Ethylbenzene	ND		0.0454	0.0511		mg/Kg	☼	113	79 - 119		
Methylene Chloride	ND	F1	0.0454	0.0693	F1	mg/Kg	☼	153	67 - 131		
Methyl tert-butyl ether	ND	F1	0.0454	0.0696	F1	mg/Kg	☼	153	58 - 132		
n-Butylbenzene	ND		0.0454	0.0416		mg/Kg	☼	92	64 - 136		

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

Lab Sample ID: 180-160629-10 MS
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2A
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-Propylbenzene	ND		0.0454	0.0500		mg/Kg	☼	110	71 - 127
sec-Butylbenzene	ND		0.0454	0.0465		mg/Kg	☼	102	65 - 130
tert-Butylbenzene	ND		0.0454	0.0495		mg/Kg	☼	109	69 - 133
Tetrachloroethene	ND		0.0454	0.0469		mg/Kg	☼	103	71 - 121
Toluene	ND	F1	0.0454	0.0556	F1	mg/Kg	☼	123	76 - 120
trans-1,2-Dichloroethene	ND		0.0454	0.0547		mg/Kg	☼	120	75 - 122
1,1,1-Trichloroethane	ND		0.0454	0.0552		mg/Kg	☼	122	72 - 134
Trichloroethene	ND		0.0454	0.0488		mg/Kg	☼	107	69 - 118
1,2,4-Trimethylbenzene	ND		0.0454	0.0558		mg/Kg	☼	123	74 - 127
1,3,5-Trimethylbenzene	ND		0.0454	0.0557		mg/Kg	☼	123	69 - 131
Vinyl chloride	ND		0.0454	0.0543		mg/Kg	☼	120	64 - 134
Xylenes, Total	ND		0.0908	0.101		mg/Kg	☼	111	78 - 118

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*60 - 124*
Dibromofluoromethane (Surr)	*101*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*118*		*73 - 135*
Toluene-d8 (Surr)	*100*		*67 - 134*

Lab Sample ID: 180-160629-10 MSD
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2A
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		0.0879	0.0787		mg/Kg	☼	89	23 - 170	16	35
Benzene	ND	F1	0.0440	0.0552	F1	mg/Kg	☼	126	77 - 120	5	20
2-Butanone (MEK)	ND		0.0879	0.0880		mg/Kg	☼	100	39 - 157	15	33
Carbon tetrachloride	ND		0.0440	0.0492		mg/Kg	☼	112	73 - 130	3	21
Chlorobenzene	ND		0.0440	0.0462		mg/Kg	☼	105	79 - 122	9	20
Chloroform	ND	F1	0.0440	0.0587	F1	mg/Kg	☼	133	73 - 126	5	20
cis-1,2-Dichloroethene	ND	F1	0.0440	0.0538	F1	mg/Kg	☼	122	77 - 118	5	20
1,2-Dichlorobenzene	ND		0.0440	0.0498		mg/Kg	☼	113	76 - 120	7	20
1,3-Dichlorobenzene	ND		0.0440	0.0476		mg/Kg	☼	108	77 - 121	5	20
1,4-Dichlorobenzene	ND		0.0440	0.0468		mg/Kg	☼	107	79 - 120	7	20
1,1-Dichloroethane	ND	F1	0.0440	0.0558	F1	mg/Kg	☼	127	73 - 124	5	20
1,2-Dichloroethane	ND	F1	0.0440	0.0606		mg/Kg	☼	138	64 - 140	10	20
1,1-Dichloroethene	ND		0.0440	0.0506		mg/Kg	☼	115	55 - 136	4	21
1,4-Dioxane	ND	F2 F1	0.879	0.927	J F2	mg/Kg	☼	105	18 - 166	75	40
Ethylbenzene	ND		0.0440	0.0468		mg/Kg	☼	107	79 - 119	9	20
Methylene Chloride	ND	F1	0.0440	0.0658	F1	mg/Kg	☼	150	67 - 131	5	32
Methyl tert-butyl ether	ND	F1	0.0440	0.0642	F1	mg/Kg	☼	146	58 - 132	8	24
n-Butylbenzene	ND		0.0440	0.0380		mg/Kg	☼	86	64 - 136	9	21
N-Propylbenzene	ND		0.0440	0.0482		mg/Kg	☼	110	71 - 127	4	20
sec-Butylbenzene	ND		0.0440	0.0443		mg/Kg	☼	101	65 - 130	5	20
tert-Butylbenzene	ND		0.0440	0.0481		mg/Kg	☼	109	69 - 133	3	23
Tetrachloroethene	ND		0.0440	0.0424		mg/Kg	☼	96	71 - 121	10	21
Toluene	ND	F1	0.0440	0.0514		mg/Kg	☼	117	76 - 120	8	20
trans-1,2-Dichloroethene	ND		0.0440	0.0520		mg/Kg	☼	118	75 - 122	5	20

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

Lab Sample ID: 180-160629-10 MSD
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2A
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		0.0440	0.0537		mg/Kg	☼	122	72 - 134	3	20
Trichloroethene	ND		0.0440	0.0460		mg/Kg	☼	105	69 - 118	6	20
1,2,4-Trimethylbenzene	ND		0.0440	0.0538		mg/Kg	☼	122	74 - 127	4	20
1,3,5-Trimethylbenzene	ND		0.0440	0.0541		mg/Kg	☼	123	69 - 131	3	20
Vinyl chloride	ND		0.0440	0.0531		mg/Kg	☼	121	64 - 134	2	23
Xylenes, Total	ND		0.0879	0.0929		mg/Kg	☼	106	78 - 118	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 124*
Dibromofluoromethane (Surr)	*107*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*125*		*73 - 135*
Toluene-d8 (Surr)	*105*		*67 - 134*

Lab Sample ID: 180-160629-11 MS
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2B
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		0.0883	0.0784		mg/Kg	☼	89	23 - 170
Benzene	ND	F1	0.0441	0.0549	F1	mg/Kg	☼	124	77 - 120
2-Butanone (MEK)	ND		0.0883	0.0877		mg/Kg	☼	99	39 - 157
Carbon tetrachloride	ND		0.0441	0.0492		mg/Kg	☼	112	73 - 130
Chlorobenzene	ND		0.0441	0.0467		mg/Kg	☼	106	79 - 122
Chloroform	ND	F1	0.0441	0.0582	F1	mg/Kg	☼	132	73 - 126
cis-1,2-Dichloroethene	ND	F1	0.0441	0.0546	F1	mg/Kg	☼	124	77 - 118
1,2-Dichlorobenzene	ND		0.0441	0.0503		mg/Kg	☼	114	76 - 120
1,3-Dichlorobenzene	ND		0.0441	0.0484		mg/Kg	☼	110	77 - 121
1,4-Dichlorobenzene	ND		0.0441	0.0483		mg/Kg	☼	109	79 - 120
1,1-Dichloroethane	ND	F1	0.0441	0.0556	F1	mg/Kg	☼	126	73 - 124
1,2-Dichloroethane	ND	F1	0.0441	0.0620	F1	mg/Kg	☼	141	64 - 140
1,1-Dichloroethene	ND		0.0441	0.0512		mg/Kg	☼	116	55 - 136
1,4-Dioxane	ND		0.883	1.26		mg/Kg	☼	142	18 - 166
Ethylbenzene	ND		0.0441	0.0479		mg/Kg	☼	109	79 - 119
Methylene Chloride	ND	F1	0.0441	0.0650	F1	mg/Kg	☼	147	67 - 131
Methyl tert-butyl ether	ND	F1	0.0441	0.0663	F1	mg/Kg	☼	150	58 - 132
n-Butylbenzene	ND		0.0441	0.0435		mg/Kg	☼	99	64 - 136
N-Propylbenzene	ND		0.0441	0.0477		mg/Kg	☼	108	71 - 127
sec-Butylbenzene	ND		0.0441	0.0465		mg/Kg	☼	105	65 - 130
tert-Butylbenzene	ND		0.0441	0.0484		mg/Kg	☼	110	69 - 133
Tetrachloroethene	ND		0.0441	0.0441		mg/Kg	☼	100	71 - 121
Toluene	ND		0.0441	0.0510		mg/Kg	☼	116	76 - 120
trans-1,2-Dichloroethene	ND		0.0441	0.0513		mg/Kg	☼	116	75 - 122
1,1,1-Trichloroethane	ND		0.0441	0.0531		mg/Kg	☼	120	72 - 134
Trichloroethene	ND		0.0441	0.0477		mg/Kg	☼	108	69 - 118
1,2,4-Trimethylbenzene	ND		0.0441	0.0527		mg/Kg	☼	119	74 - 127
1,3,5-Trimethylbenzene	ND		0.0441	0.0527		mg/Kg	☼	119	69 - 131
Vinyl chloride	ND		0.0441	0.0508		mg/Kg	☼	115	64 - 134
Xylenes, Total	ND		0.0883	0.0953		mg/Kg	☼	108	78 - 118

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

Lab Sample ID: 180-160629-11 MS
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2B
Prep Type: Total/NA
Prep Batch: 443198

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*96*		*60 - 124*
Dibromofluoromethane (Surr)	*105*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*123*		*73 - 135*
Toluene-d8 (Surr)	*101*		*67 - 134*

Lab Sample ID: 180-160629-11 MSD
Matrix: Solid
Analysis Batch: 443142

Client Sample ID: NAFREST-BRP-TS2B
Prep Type: Total/NA
Prep Batch: 443198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND		0.0891	0.0779		mg/Kg	☼	87	23 - 170	1	35
Benzene	ND	F1	0.0445	0.0544	F1	mg/Kg	☼	122	77 - 120	1	20
2-Butanone (MEK)	ND		0.0891	0.0834		mg/Kg	☼	94	39 - 157	5	33
Carbon tetrachloride	ND		0.0445	0.0494		mg/Kg	☼	111	73 - 130	0	21
Chlorobenzene	ND		0.0445	0.0457		mg/Kg	☼	103	79 - 122	2	20
Chloroform	ND	F1	0.0445	0.0583	F1	mg/Kg	☼	131	73 - 126	0	20
cis-1,2-Dichloroethene	ND	F1	0.0445	0.0541	F1	mg/Kg	☼	122	77 - 118	1	20
1,2-Dichlorobenzene	ND		0.0445	0.0496		mg/Kg	☼	111	76 - 120	1	20
1,3-Dichlorobenzene	ND		0.0445	0.0474		mg/Kg	☼	106	77 - 121	2	20
1,4-Dichlorobenzene	ND		0.0445	0.0474		mg/Kg	☼	106	79 - 120	2	20
1,1-Dichloroethane	ND	F1	0.0445	0.0552		mg/Kg	☼	124	73 - 124	1	20
1,2-Dichloroethane	ND	F1	0.0445	0.0608		mg/Kg	☼	137	64 - 140	2	20
1,1-Dichloroethene	ND		0.0445	0.0506		mg/Kg	☼	114	55 - 136	1	21
1,4-Dioxane	ND		0.891	1.11		mg/Kg	☼	125	18 - 166	13	40
Ethylbenzene	ND		0.0445	0.0472		mg/Kg	☼	106	79 - 119	1	20
Methylene Chloride	ND	F1	0.0445	0.0658	F1	mg/Kg	☼	148	67 - 131	1	32
Methyl tert-butyl ether	ND	F1	0.0445	0.0655	F1	mg/Kg	☼	147	58 - 132	1	24
n-Butylbenzene	ND		0.0445	0.0449		mg/Kg	☼	101	64 - 136	3	21
N-Propylbenzene	ND		0.0445	0.0471		mg/Kg	☼	106	71 - 127	1	20
sec-Butylbenzene	ND		0.0445	0.0470		mg/Kg	☼	105	65 - 130	1	20
tert-Butylbenzene	ND		0.0445	0.0483		mg/Kg	☼	108	69 - 133	0	23
Tetrachloroethene	ND		0.0445	0.0436		mg/Kg	☼	98	71 - 121	1	21
Toluene	ND		0.0445	0.0499		mg/Kg	☼	112	76 - 120	2	20
trans-1,2-Dichloroethene	ND		0.0445	0.0519		mg/Kg	☼	117	75 - 122	1	20
1,1,1-Trichloroethane	ND		0.0445	0.0528		mg/Kg	☼	118	72 - 134	1	20
Trichloroethene	ND		0.0445	0.0486		mg/Kg	☼	109	69 - 118	2	20
1,2,4-Trimethylbenzene	ND		0.0445	0.0519		mg/Kg	☼	117	74 - 127	1	20
1,3,5-Trimethylbenzene	ND		0.0445	0.0523		mg/Kg	☼	117	69 - 131	1	20
Vinyl chloride	ND		0.0445	0.0501		mg/Kg	☼	113	64 - 134	1	23
Xylenes, Total	ND		0.0891	0.0935		mg/Kg	☼	105	78 - 118	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*98*		*60 - 124*
Dibromofluoromethane (Surr)	*108*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*127*		*73 - 135*
Toluene-d8 (Surr)	*103*		*67 - 134*

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

Lab Sample ID: MB 180-443333/7
Matrix: Solid
Analysis Batch: 443333

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg			08/14/23 11:11	1
Benzene	ND		0.0050	0.0014	mg/Kg			08/14/23 11:11	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg			08/14/23 11:11	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			08/14/23 11:11	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			08/14/23 11:11	1
Chloroform	ND		0.0050	0.0034	mg/Kg			08/14/23 11:11	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			08/14/23 11:11	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			08/14/23 11:11	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			08/14/23 11:11	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			08/14/23 11:11	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			08/14/23 11:11	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			08/14/23 11:11	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			08/14/23 11:11	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg			08/14/23 11:11	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			08/14/23 11:11	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			08/14/23 11:11	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			08/14/23 11:11	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/14/23 11:11	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			08/14/23 11:11	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/14/23 11:11	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			08/14/23 11:11	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/14/23 11:11	1
Toluene	ND		0.0050	0.0014	mg/Kg			08/14/23 11:11	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			08/14/23 11:11	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			08/14/23 11:11	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			08/14/23 11:11	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/14/23 11:11	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			08/14/23 11:11	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			08/14/23 11:11	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			08/14/23 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*60 - 124*		*08/14/23 11:11*	*1*
Dibromofluoromethane (Surr)	*106*		*69 - 126*		*08/14/23 11:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*73 - 135*		*08/14/23 11:11*	*1*
Toluene-d8 (Surr)	*93*		*67 - 134*		*08/14/23 11:11*	*1*

Lab Sample ID: LCS 180-443333/3
Matrix: Solid
Analysis Batch: 443333

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	0.0800	0.0577		mg/Kg		72	23 - 170
Benzene	0.0400	0.0415		mg/Kg		104	77 - 120
2-Butanone (MEK)	0.0800	0.0503		mg/Kg		63	39 - 157
Carbon tetrachloride	0.0400	0.0380		mg/Kg		95	73 - 130
Chlorobenzene	0.0400	0.0358		mg/Kg		90	79 - 122
Chloroform	0.0400	0.0425		mg/Kg		106	73 - 126

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

Lab Sample ID: LCS 180-443333/3
Matrix: Solid
Analysis Batch: 443333

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	0.0405		mg/Kg		101	77 - 118
1,2-Dichlorobenzene	0.0400	0.0374		mg/Kg		94	76 - 120
1,3-Dichlorobenzene	0.0400	0.0367		mg/Kg		92	77 - 121
1,4-Dichlorobenzene	0.0400	0.0360		mg/Kg		90	79 - 120
1,1-Dichloroethane	0.0400	0.0408		mg/Kg		102	73 - 124
1,2-Dichloroethane	0.0400	0.0430		mg/Kg		107	64 - 140
1,1-Dichloroethene	0.0400	0.0367		mg/Kg		92	55 - 136
1,4-Dioxane	0.800	1.15		mg/Kg		144	18 - 166
Ethylbenzene	0.0400	0.0370		mg/Kg		92	79 - 119
Methylene Chloride	0.0400	0.0443		mg/Kg		111	67 - 131
Methyl tert-butyl ether	0.0400	0.0429		mg/Kg		107	58 - 132
n-Butylbenzene	0.0400	0.0396		mg/Kg		99	64 - 136
N-Propylbenzene	0.0400	0.0366		mg/Kg		92	71 - 127
sec-Butylbenzene	0.0400	0.0380		mg/Kg		95	65 - 130
tert-Butylbenzene	0.0400	0.0373		mg/Kg		93	69 - 133
Tetrachloroethene	0.0400	0.0351		mg/Kg		88	71 - 121
Toluene	0.0400	0.0377		mg/Kg		94	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0396		mg/Kg		99	75 - 122
1,1,1-Trichloroethane	0.0400	0.0404		mg/Kg		101	72 - 134
Trichloroethene	0.0400	0.0373		mg/Kg		93	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0389		mg/Kg		97	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0390		mg/Kg		97	69 - 131
Vinyl chloride	0.0400	0.0288		mg/Kg		72	64 - 134
Xylenes, Total	0.0800	0.0734		mg/Kg		92	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*60 - 124*
Dibromofluoromethane (Surr)	*102*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*111*		*73 - 135*
Toluene-d8 (Surr)	*98*		*67 - 134*

Lab Sample ID: LCSD 180-443333/4
Matrix: Solid
Analysis Batch: 443333

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	0.0800	0.0647		mg/Kg		81	23 - 170	11	35
Benzene	0.0400	0.0424		mg/Kg		106	77 - 120	2	20
2-Butanone (MEK)	0.0800	0.0560		mg/Kg		70	39 - 157	11	33
Carbon tetrachloride	0.0400	0.0387		mg/Kg		97	73 - 130	2	21
Chlorobenzene	0.0400	0.0364		mg/Kg		91	79 - 122	2	20
Chloroform	0.0400	0.0437		mg/Kg		109	73 - 126	3	20
cis-1,2-Dichloroethene	0.0400	0.0411		mg/Kg		103	77 - 118	2	20
1,2-Dichlorobenzene	0.0400	0.0388		mg/Kg		97	76 - 120	4	20
1,3-Dichlorobenzene	0.0400	0.0377		mg/Kg		94	77 - 121	3	20
1,4-Dichlorobenzene	0.0400	0.0375		mg/Kg		94	79 - 120	4	20
1,1-Dichloroethane	0.0400	0.0415		mg/Kg		104	73 - 124	2	20
1,2-Dichloroethane	0.0400	0.0448		mg/Kg		112	64 - 140	4	20

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

Lab Sample ID: LCSD 180-443333/4
Matrix: Solid
Analysis Batch: 443333

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	0.0373		mg/Kg		93	55 - 136	2	21
1,4-Dioxane			0.800	1.22		mg/Kg		153	18 - 166	6	40
Ethylbenzene			0.0400	0.0368		mg/Kg		92	79 - 119	0	20
Methylene Chloride			0.0400	0.0458		mg/Kg		115	67 - 131	3	32
Methyl tert-butyl ether			0.0400	0.0455		mg/Kg		114	58 - 132	6	24
n-Butylbenzene			0.0400	0.0402		mg/Kg		101	64 - 136	2	21
N-Propylbenzene			0.0400	0.0370		mg/Kg		92	71 - 127	1	20
sec-Butylbenzene			0.0400	0.0388		mg/Kg		97	65 - 130	2	20
tert-Butylbenzene			0.0400	0.0380		mg/Kg		95	69 - 133	2	23
Tetrachloroethene			0.0400	0.0349		mg/Kg		87	71 - 121	1	21
Toluene			0.0400	0.0381		mg/Kg		95	76 - 120	1	20
trans-1,2-Dichloroethene			0.0400	0.0391		mg/Kg		98	75 - 122	1	20
1,1,1-Trichloroethane			0.0400	0.0413		mg/Kg		103	72 - 134	2	20
Trichloroethene			0.0400	0.0377		mg/Kg		94	69 - 118	1	20
1,2,4-Trimethylbenzene			0.0400	0.0398		mg/Kg		100	74 - 127	2	20
1,3,5-Trimethylbenzene			0.0400	0.0396		mg/Kg		99	69 - 131	2	20
Vinyl chloride			0.0400	0.0301		mg/Kg		75	64 - 134	4	23
Xylenes, Total			0.0800	0.0737		mg/Kg		92	78 - 118	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*60 - 124*
Dibromofluoromethane (Surr)	*106*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*119*		*73 - 135*
Toluene-d8 (Surr)	*102*		*67 - 134*

Lab Sample ID: MB 180-443450/7
Matrix: Solid
Analysis Batch: 443450

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg			08/15/23 11:38	1
Benzene	ND		0.0050	0.0014	mg/Kg			08/15/23 11:38	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg			08/15/23 11:38	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			08/15/23 11:38	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			08/15/23 11:38	1
Chloroform	ND		0.0050	0.0034	mg/Kg			08/15/23 11:38	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			08/15/23 11:38	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			08/15/23 11:38	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			08/15/23 11:38	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			08/15/23 11:38	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			08/15/23 11:38	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			08/15/23 11:38	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			08/15/23 11:38	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg			08/15/23 11:38	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			08/15/23 11:38	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			08/15/23 11:38	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			08/15/23 11:38	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/15/23 11:38	1

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

Lab Sample ID: MB 180-443450/7
Matrix: Solid
Analysis Batch: 443450

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		0.0050	0.0018	mg/Kg			08/15/23 11:38	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			08/15/23 11:38	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			08/15/23 11:38	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			08/15/23 11:38	1
Toluene	ND		0.0050	0.0014	mg/Kg			08/15/23 11:38	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			08/15/23 11:38	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			08/15/23 11:38	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			08/15/23 11:38	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			08/15/23 11:38	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			08/15/23 11:38	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			08/15/23 11:38	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			08/15/23 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*60 - 124*		*08/15/23 11:38*	*1*
Dibromofluoromethane (Surr)	*110*		*69 - 126*		*08/15/23 11:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*125*		*73 - 135*		*08/15/23 11:38*	*1*
Toluene-d8 (Surr)	*103*		*67 - 134*		*08/15/23 11:38*	*1*

Lab Sample ID: LCS 180-443450/3
Matrix: Solid
Analysis Batch: 443450

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	0.0476		mg/Kg		119	23 - 170
Benzene	0.0400	0.0400		mg/Kg		100	77 - 120
2-Butanone (MEK)	0.0400	0.0391		mg/Kg		98	39 - 157
Carbon tetrachloride	0.0400	0.0378		mg/Kg		94	73 - 130
Chlorobenzene	0.0400	0.0378		mg/Kg		94	79 - 122
Chloroform	0.0400	0.0412		mg/Kg		103	73 - 126
cis-1,2-Dichloroethene	0.0400	0.0387		mg/Kg		97	77 - 118
1,2-Dichlorobenzene	0.0400	0.0382		mg/Kg		95	76 - 120
1,3-Dichlorobenzene	0.0400	0.0394		mg/Kg		99	77 - 121
1,4-Dichlorobenzene	0.0400	0.0390		mg/Kg		98	79 - 120
1,1-Dichloroethane	0.0400	0.0389		mg/Kg		97	73 - 124
1,2-Dichloroethane	0.0400	0.0380		mg/Kg		95	64 - 140
1,1-Dichloroethene	0.0400	0.0355		mg/Kg		89	55 - 136
1,4-Dioxane	0.800	0.737	J	mg/Kg		92	18 - 166
Ethylbenzene	0.0400	0.0395		mg/Kg		99	79 - 119
Methylene Chloride	0.0400	0.0446		mg/Kg		112	67 - 131
Methyl tert-butyl ether	0.0400	0.0349		mg/Kg		87	58 - 132
n-Butylbenzene	0.0400	0.0434		mg/Kg		109	64 - 136
N-Propylbenzene	0.0400	0.0411		mg/Kg		103	71 - 127
sec-Butylbenzene	0.0400	0.0427		mg/Kg		107	65 - 130
tert-Butylbenzene	0.0400	0.0413		mg/Kg		103	69 - 133
Tetrachloroethene	0.0400	0.0368		mg/Kg		92	71 - 121
Toluene	0.0400	0.0403		mg/Kg		101	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0379		mg/Kg		95	75 - 122

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

Lab Sample ID: LCS 180-443450/3
Matrix: Solid
Analysis Batch: 443450

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			0.0400	0.0394		mg/Kg		99	72 - 134		
Trichloroethene			0.0400	0.0360		mg/Kg		90	69 - 118		
1,2,4-Trimethylbenzene			0.0400	0.0432		mg/Kg		108	74 - 127		
1,3,5-Trimethylbenzene			0.0400	0.0436		mg/Kg		109	69 - 131		
Vinyl chloride			0.0400	0.0287		mg/Kg		72	64 - 134		
Xylenes, Total			0.0800	0.0778		mg/Kg		97	78 - 118		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*60 - 124*
Dibromofluoromethane (Surr)	*83*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*100*		*73 - 135*
Toluene-d8 (Surr)	*107*		*67 - 134*

Lab Sample ID: LCSD 180-443450/4
Matrix: Solid
Analysis Batch: 443450

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	0.0407		mg/Kg		102	23 - 170	16	35
Benzene			0.0400	0.0368		mg/Kg		92	77 - 120	8	20
2-Butanone (MEK)			0.0400	0.0356		mg/Kg		89	39 - 157	9	33
Carbon tetrachloride			0.0400	0.0346		mg/Kg		87	73 - 130	9	21
Chlorobenzene			0.0400	0.0343		mg/Kg		86	79 - 122	10	20
Chloroform			0.0400	0.0376		mg/Kg		94	73 - 126	9	20
cis-1,2-Dichloroethene			0.0400	0.0356		mg/Kg		89	77 - 118	8	20
1,2-Dichlorobenzene			0.0400	0.0351		mg/Kg		88	76 - 120	8	20
1,3-Dichlorobenzene			0.0400	0.0358		mg/Kg		90	77 - 121	10	20
1,4-Dichlorobenzene			0.0400	0.0352		mg/Kg		88	79 - 120	10	20
1,1-Dichloroethane			0.0400	0.0359		mg/Kg		90	73 - 124	8	20
1,2-Dichloroethane			0.0400	0.0338		mg/Kg		85	64 - 140	12	20
1,1-Dichloroethene			0.0400	0.0323		mg/Kg		81	55 - 136	9	21
1,4-Dioxane			0.800	0.701	J	mg/Kg		88	18 - 166	5	40
Ethylbenzene			0.0400	0.0357		mg/Kg		89	79 - 119	10	20
Methylene Chloride			0.0400	0.0412		mg/Kg		103	67 - 131	8	32
Methyl tert-butyl ether			0.0400	0.0321		mg/Kg		80	58 - 132	9	24
n-Butylbenzene			0.0400	0.0395		mg/Kg		99	64 - 136	9	21
N-Propylbenzene			0.0400	0.0374		mg/Kg		93	71 - 127	10	20
sec-Butylbenzene			0.0400	0.0386		mg/Kg		96	65 - 130	10	20
tert-Butylbenzene			0.0400	0.0376		mg/Kg		94	69 - 133	9	23
Tetrachloroethene			0.0400	0.0336		mg/Kg		84	71 - 121	9	21
Toluene			0.0400	0.0367		mg/Kg		92	76 - 120	9	20
trans-1,2-Dichloroethene			0.0400	0.0347		mg/Kg		87	75 - 122	9	20
1,1,1-Trichloroethane			0.0400	0.0357		mg/Kg		89	72 - 134	10	20
Trichloroethene			0.0400	0.0327		mg/Kg		82	69 - 118	10	20
1,2,4-Trimethylbenzene			0.0400	0.0393		mg/Kg		98	74 - 127	9	20
1,3,5-Trimethylbenzene			0.0400	0.0397		mg/Kg		99	69 - 131	10	20
Vinyl chloride			0.0400	0.0249	*-	mg/Kg		62	64 - 134	14	23
Xylenes, Total			0.0800	0.0713		mg/Kg		89	78 - 118	9	20

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

Lab Sample ID: LCSD 180-443450/4
Matrix: Solid
Analysis Batch: 443450

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*96*		*60 - 124*
Dibromofluoromethane (Surr)	*79*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 135*
Toluene-d8 (Surr)	*102*		*67 - 134*

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

Lab Sample ID: MB 180-443193/1-A
Matrix: Solid
Analysis Batch: 443312

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443193

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0067	0.0019	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Acenaphthylene	ND		0.0067	0.0015	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Anthracene	ND		0.0067	0.0017	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Benzo[a]anthracene	ND		0.0067	0.0030	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Benzo[a]pyrene	ND		0.0067	0.0029	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Benzo[b]fluoranthene	ND		0.0067	0.0016	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Benzo[g,h,i]perylene	ND		0.0067	0.0014	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Benzo[k]fluoranthene	ND		0.0067	0.0020	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Chrysene	ND		0.0067	0.0037	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Dibenz(a,h)anthracene	ND		0.0067	0.0043	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Dibenzofuran	ND		0.033	0.012	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
1,4-Dioxane	ND		0.067	0.010	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Fluoranthene	ND		0.0067	0.0018	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Fluorene	ND		0.0067	0.0013	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Hexachlorobenzene	ND		0.0067	0.0024	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Indeno[1,2,3-cd]pyrene	ND		0.0067	0.0033	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
2-Methylphenol	ND		0.033	0.0096	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Methylphenol, 3 & 4	ND		0.033	0.0098	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Naphthalene	ND		0.0067	0.0013	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Pentachlorophenol	ND		0.17	0.054	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Phenanthrene	ND		0.0067	0.0018	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Phenol	ND		0.033	0.010	mg/Kg		08/11/23 09:03	08/14/23 05:32	1
Pyrene	ND		0.0067	0.0016	mg/Kg		08/11/23 09:03	08/14/23 05:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*59*		*35 - 105*	*08/11/23 09:03*	*08/14/23 05:32*	*1*
2-Fluorophenol (Surr)	*57*		*32 - 105*	*08/11/23 09:03*	*08/14/23 05:32*	*1*
Nitrobenzene-d5 (Surr)	*70*		*34 - 109*	*08/11/23 09:03*	*08/14/23 05:32*	*1*
Phenol-d5 (Surr)	*65*		*34 - 105*	*08/11/23 09:03*	*08/14/23 05:32*	*1*
Terphenyl-d14 (Surr)	*69*		*20 - 117*	*08/11/23 09:03*	*08/14/23 05:32*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*20 - 119*	*08/11/23 09:03*	*08/14/23 05:32*	*1*

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

Lab Sample ID: LCS 180-443193/2-A
Matrix: Solid
Analysis Batch: 443312

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443193

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.667	0.488		mg/Kg		73	41 - 100
Acenaphthylene	0.667	0.521		mg/Kg		78	45 - 100
Anthracene	0.667	0.500		mg/Kg		75	47 - 100
Benzo[a]anthracene	0.667	0.532		mg/Kg		80	47 - 100
Benzo[a]pyrene	0.667	0.509		mg/Kg		76	45 - 101
Benzo[b]fluoranthene	0.667	0.463		mg/Kg		69	44 - 100
Benzo[g,h,i]perylene	0.667	0.687		mg/Kg		103	45 - 103
Benzo[k]fluoranthene	0.667	0.408		mg/Kg		61	43 - 100
Chrysene	0.667	0.515		mg/Kg		77	44 - 100
Dibenz(a,h)anthracene	0.667	0.706		mg/Kg		106	46 - 107
Dibenzofuran	0.667	0.443		mg/Kg		66	47 - 100
1,4-Dioxane	0.667	0.565		mg/Kg		85	10 - 133
Fluoranthene	0.667	0.386		mg/Kg		58	49 - 102
Fluorene	0.667	0.433		mg/Kg		65	46 - 100
Hexachlorobenzene	0.667	0.485		mg/Kg		73	45 - 101
Indeno[1,2,3-cd]pyrene	0.667	0.672		mg/Kg		101	48 - 104
2-Methylphenol	0.667	0.544		mg/Kg		82	43 - 101
Methylphenol, 3 & 4	0.667	0.562		mg/Kg		84	43 - 104
Naphthalene	0.667	0.480		mg/Kg		72	43 - 100
Pentachlorophenol	1.33	0.707		mg/Kg		53	34 - 112
Phenanthrene	0.667	0.487		mg/Kg		73	46 - 100
Phenol	0.667	0.535		mg/Kg		80	42 - 103
Pyrene	0.667	0.624		mg/Kg		94	44 - 102

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*35 - 105*
2-Fluorophenol (Surr)	*82*		*32 - 105*
Nitrobenzene-d5 (Surr)	*86*		*34 - 109*
Phenol-d5 (Surr)	*84*		*34 - 105*
Terphenyl-d14 (Surr)	*86*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*73*		*20 - 119*

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443312

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.0025	J	0.794	0.470		mg/Kg	☼	59	41 - 100
Acenaphthylene	0.0061	J	0.794	0.508		mg/Kg	☼	63	45 - 100
Anthracene	0.011		0.794	0.500		mg/Kg	☼	62	47 - 100
Benzo[a]anthracene	0.046		0.794	0.577		mg/Kg	☼	67	47 - 100
Benzo[a]pyrene	0.051		0.794	0.568		mg/Kg	☼	65	45 - 101
Benzo[b]fluoranthene	0.067		0.794	0.527		mg/Kg	☼	58	44 - 100
Benzo[g,h,i]perylene	0.043		0.794	0.676		mg/Kg	☼	80	45 - 103
Benzo[k]fluoranthene	0.025		0.794	0.464		mg/Kg	☼	55	43 - 100
Chrysene	0.050		0.794	0.553		mg/Kg	☼	63	44 - 100
Dibenz(a,h)anthracene	0.010		0.794	0.657		mg/Kg	☼	82	46 - 107
Dibenzofuran	ND		0.794	0.432		mg/Kg	☼	54	47 - 100

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

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443312

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		0.794	0.406		mg/Kg	☼	51	10 - 133
Fluoranthene	0.070		0.794	0.490		mg/Kg	☼	53	49 - 102
Fluorene	0.0021	J	0.794	0.425		mg/Kg	☼	53	46 - 100
Hexachlorobenzene	ND		0.794	0.454		mg/Kg	☼	57	45 - 101
Indeno[1,2,3-cd]pyrene	0.035		0.794	0.649		mg/Kg	☼	77	48 - 104
2-Methylphenol	ND		0.794	0.489		mg/Kg	☼	62	43 - 101
Methylphenol, 3 & 4	0.028	J	0.794	0.513		mg/Kg	☼	61	43 - 104
Naphthalene	ND		0.794	0.413		mg/Kg	☼	52	43 - 100
Pentachlorophenol	ND	F1	1.59	0.506	F1	mg/Kg	☼	32	34 - 112
Phenanthrene	0.036		0.794	0.561		mg/Kg	☼	66	46 - 100
Phenol	ND		0.794	0.439		mg/Kg	☼	55	42 - 103
Pyrene	0.090		0.794	0.729		mg/Kg	☼	80	44 - 102

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*35 - 105*
2-Fluorophenol (Surr)	*73*		*32 - 105*
Nitrobenzene-d5 (Surr)	*81*		*34 - 109*
Phenol-d5 (Surr)	*78*		*34 - 105*
Terphenyl-d14 (Surr)	*92*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*72*		*20 - 119*

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443312

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443193

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	0.0025	J	0.783	0.479		mg/Kg	☼	61	41 - 100	2	22
Acenaphthylene	0.0061	J	0.783	0.520		mg/Kg	☼	66	45 - 100	2	23
Anthracene	0.011		0.783	0.517		mg/Kg	☼	65	47 - 100	3	26
Benzo[a]anthracene	0.046		0.783	0.603		mg/Kg	☼	71	47 - 100	4	24
Benzo[a]pyrene	0.051		0.783	0.561		mg/Kg	☼	65	45 - 101	1	21
Benzo[b]fluoranthene	0.067		0.783	0.528		mg/Kg	☼	59	44 - 100	0	26
Benzo[g,h,i]perylene	0.043		0.783	0.714		mg/Kg	☼	86	45 - 103	6	22
Benzo[k]fluoranthene	0.025		0.783	0.437		mg/Kg	☼	53	43 - 100	6	18
Chrysene	0.050		0.783	0.577		mg/Kg	☼	67	44 - 100	4	26
Dibenz(a,h)anthracene	0.010		0.783	0.680		mg/Kg	☼	86	46 - 107	3	24
Dibenzofuran	ND		0.783	0.437		mg/Kg	☼	56	47 - 100	1	19
1,4-Dioxane	ND		0.783	0.434		mg/Kg	☼	55	10 - 133	7	40
Fluoranthene	0.070		0.783	0.497		mg/Kg	☼	55	49 - 102	1	26
Fluorene	0.0021	J	0.783	0.433		mg/Kg	☼	55	46 - 100	2	22
Hexachlorobenzene	ND		0.783	0.457		mg/Kg	☼	58	45 - 101	1	27
Indeno[1,2,3-cd]pyrene	0.035		0.783	0.686		mg/Kg	☼	83	48 - 104	5	22
2-Methylphenol	ND		0.783	0.486		mg/Kg	☼	62	43 - 101	1	27
Methylphenol, 3 & 4	0.028	J	0.783	0.514		mg/Kg	☼	62	43 - 104	0	24
Naphthalene	ND		0.783	0.434		mg/Kg	☼	55	43 - 100	5	28
Pentachlorophenol	ND	F1	1.57	0.519	F1	mg/Kg	☼	33	34 - 112	3	28
Phenanthrene	0.036		0.783	0.553		mg/Kg	☼	66	46 - 100	1	27
Phenol	ND		0.783	0.430		mg/Kg	☼	55	42 - 103	2	30

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

Lab Sample ID: 180-160629-12 MSD
Client Sample ID: NAFREST-BRP-TS2C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 443312
Prep Batch: 443193

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene	0.090		0.783	0.720		mg/Kg	☼	80	44 - 102	1	27

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*35 - 105*
2-Fluorophenol (Surr)	*77*		*32 - 105*
Nitrobenzene-d5 (Surr)	*88*		*34 - 109*
Phenol-d5 (Surr)	*77*		*34 - 105*
Terphenyl-d14 (Surr)	*93*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*75*		*20 - 119*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-443201/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 443743
Prep Batch: 443201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
4,4'-DDD	ND		0.0017	0.00035	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Endosulfan sulfate	ND		0.0017	0.00077	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Endrin	ND		0.0017	0.00031	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		08/11/23 09:36	08/17/23 08:14	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		08/11/23 09:36	08/17/23 08:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*116*		*42 - 124*	*08/11/23 09:36*	*08/17/23 08:14*	*1*
DCB Decachlorobiphenyl (Surr)	*122*		*42 - 124*	*08/11/23 09:36*	*08/17/23 08:14*	*1*
Tetrachloro-m-xylene	*95*		*40 - 137*	*08/11/23 09:36*	*08/17/23 08:14*	*1*
Tetrachloro-m-xylene	*99*		*40 - 137*	*08/11/23 09:36*	*08/17/23 08:14*	*1*

Lab Sample ID: LCS 180-443201/5-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 443743
Prep Batch: 443201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	0.0333	0.0300		mg/Kg		90	60 - 131
alpha-BHC	0.0333	0.0291		mg/Kg		87	67 - 125
beta-BHC	0.0333	0.0250		mg/Kg		75	63 - 123
cis-Chlordane	0.0333	0.0299		mg/Kg		90	57 - 120

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

Lab Sample ID: LCS 180-443201/5-A
Matrix: Solid
Analysis Batch: 443743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	0.0333	0.0304		mg/Kg		91	64 - 131
4,4'-DDE	0.0333	0.0317		mg/Kg		95	57 - 132
4,4'-DDT	0.0333	0.0316		mg/Kg		95	54 - 117
delta-BHC	0.0333	0.0231		mg/Kg		69	50 - 134
Dieldrin	0.0333	0.0338		mg/Kg		101	64 - 127
Endosulfan I	0.0333	0.0304		mg/Kg		91	55 - 131
Endosulfan II	0.0333	0.0337		mg/Kg		101	61 - 130
Endosulfan sulfate	0.0333	0.0311		mg/Kg		93	57 - 132
Endrin	0.0333	0.0341		mg/Kg		102	66 - 125
gamma-BHC (Lindane)	0.0333	0.0285		mg/Kg		86	69 - 124
Heptachlor	0.0333	0.0275		mg/Kg		82	62 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*119*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*123*		*42 - 124*
Tetrachloro-m-xylene	*98*		*40 - 137*
Tetrachloro-m-xylene	*99*		*40 - 137*

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443743

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	ND		0.0399	0.0381		mg/Kg	☼	95	60 - 131
alpha-BHC	ND		0.0399	0.0366		mg/Kg	☼	92	67 - 125
beta-BHC	ND		0.0399	0.0349		mg/Kg	☼	87	63 - 123
cis-Chlordane	ND		0.0399	0.0384		mg/Kg	☼	96	57 - 120
4,4'-DDD	ND		0.0399	0.0391		mg/Kg	☼	98	64 - 131
4,4'-DDE	ND		0.0399	0.0379		mg/Kg	☼	95	57 - 132
4,4'-DDT	ND		0.0399	0.0406		mg/Kg	☼	102	54 - 117
delta-BHC	ND		0.0399	0.0302		mg/Kg	☼	76	50 - 134
Dieldrin	ND		0.0399	0.0394		mg/Kg	☼	99	64 - 127
Endosulfan I	ND		0.0399	0.0384		mg/Kg	☼	96	55 - 131
Endosulfan II	ND		0.0399	0.0398		mg/Kg	☼	100	61 - 130
Endosulfan sulfate	ND		0.0399	0.0388		mg/Kg	☼	97	57 - 132
Endrin	ND		0.0399	0.0399		mg/Kg	☼	100	66 - 125
gamma-BHC (Lindane)	ND		0.0399	0.0360		mg/Kg	☼	90	69 - 124
Heptachlor	ND		0.0399	0.0350		mg/Kg	☼	88	62 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*113*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*116*		*42 - 124*
Tetrachloro-m-xylene	*109*		*40 - 137*
Tetrachloro-m-xylene	*105*		*40 - 137*

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

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443743

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443201

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND		0.0397	0.0366		mg/Kg	☼	92	60 - 131	4	40
alpha-BHC	ND		0.0397	0.0351		mg/Kg	☼	89	67 - 125	4	40
beta-BHC	ND		0.0397	0.0328		mg/Kg	☼	83	63 - 123	6	40
cis-Chlordane	ND		0.0397	0.0398		mg/Kg	☼	100	57 - 120	4	40
4,4'-DDD	ND		0.0397	0.0384		mg/Kg	☼	97	64 - 131	2	40
4,4'-DDE	ND		0.0397	0.0370		mg/Kg	☼	93	57 - 132	2	40
4,4'-DDT	ND		0.0397	0.0385		mg/Kg	☼	97	54 - 117	5	40
delta-BHC	ND		0.0397	0.0289		mg/Kg	☼	73	50 - 134	4	40
Dieldrin	ND		0.0397	0.0387		mg/Kg	☼	98	64 - 127	2	40
Endosulfan I	ND		0.0397	0.0386		mg/Kg	☼	97	55 - 131	1	40
Endosulfan II	ND		0.0397	0.0375		mg/Kg	☼	95	61 - 130	6	40
Endosulfan sulfate	ND		0.0397	0.0376		mg/Kg	☼	95	57 - 132	3	40
Endrin	ND		0.0397	0.0383		mg/Kg	☼	96	66 - 125	4	40
gamma-BHC (Lindane)	ND		0.0397	0.0337		mg/Kg	☼	85	69 - 124	7	40
Heptachlor	ND		0.0397	0.0337		mg/Kg	☼	85	62 - 133	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*97*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*100*		*42 - 124*
Tetrachloro-m-xylene	*95*		*40 - 137*
Tetrachloro-m-xylene	*91*		*40 - 137*

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

Lab Sample ID: MB 180-443201/1-A
Matrix: Solid
Analysis Batch: 443315

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1221	ND		0.017	0.0059	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1232	ND		0.017	0.0041	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1242	ND		0.017	0.0024	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1248	ND		0.017	0.0040	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1254	ND		0.017	0.0050	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1260	ND		0.017	0.0047	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1262	ND		0.017	0.0059	mg/Kg		08/11/23 09:36	08/14/23 22:10	1
PCB-1268	ND		0.017	0.0022	mg/Kg		08/11/23 09:36	08/14/23 22:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*73*		*63 - 138*	*08/11/23 09:36*	*08/14/23 22:10*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*63 - 138*	*08/11/23 09:36*	*08/14/23 22:10*	*1*
Tetrachloro-m-xylene (Surr)	*72*		*55 - 135*	*08/11/23 09:36*	*08/14/23 22:10*	*1*
Tetrachloro-m-xylene (Surr)	*76*		*55 - 135*	*08/11/23 09:36*	*08/14/23 22:10*	*1*

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

Lab Sample ID: LCS 180-443201/2-A
Matrix: Solid
Analysis Batch: 443315

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443201

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016			1.33	1.12		mg/Kg		84	43 - 136		
PCB-1260			1.33	0.951		mg/Kg		71	55 - 128		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*87*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*81*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*91*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*92*		*55 - 135*

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443315

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
PCB-1016	ND		1.57	1.74		mg/Kg	☼	111	43 - 136		
PCB-1260	ND		1.57	1.40		mg/Kg	☼	90	55 - 128		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*85*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*112*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*113*		*55 - 135*

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443315

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443201

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1.55	1.78		mg/Kg	☼	115	43 - 136	2	40
PCB-1260	ND		1.55	1.37		mg/Kg	☼	89	55 - 128	2	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*85*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*116*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*116*		*55 - 135*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-443304/1-A
Matrix: Solid
Analysis Batch: 443432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		08/14/23 00:15	08/15/23 09:27	1

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: MB 180-443304/1-A
Matrix: Solid
Analysis Batch: 443432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443304

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	79		48 - 127	08/14/23 00:15	08/15/23 09:27	1
2,4-Dichlorophenylacetic acid	87		48 - 127	08/14/23 00:15	08/15/23 09:27	1

Lab Sample ID: LCS 180-443304/2-A
Matrix: Solid
Analysis Batch: 443432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443304

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP)			0.100	0.0832		mg/Kg		83	33 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	78		48 - 127
2,4-Dichlorophenylacetic acid	85		48 - 127

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443432

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443304

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP)	ND		0.120	0.121		mg/Kg	☼	101	33 - 140		

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	98		48 - 127
2,4-Dichlorophenylacetic acid	120		48 - 127

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443432

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443304

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		0.120	0.103		mg/Kg	☼	86	33 - 140	16	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	86		48 - 127
2,4-Dichlorophenylacetic acid	102		48 - 127

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-443183/1-A
Matrix: Solid
Analysis Batch: 443474

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443183

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.96	0.60	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Barium	ND		19	3.4	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Beryllium	ND		0.38	0.10	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Cadmium	ND		0.48	0.071	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Chromium	ND		0.48	0.44	mg/Kg		08/11/23 09:50	08/14/23 11:51	1

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

Lab Sample ID: MB 180-443183/1-A
Matrix: Solid
Analysis Batch: 443474

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443183

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.4	1.5	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Lead	ND		0.96	0.84	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Manganese	ND		1.4	0.27	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Nickel	ND		3.8	0.48	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Selenium	ND		0.96	0.44	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Silver	ND		0.48	0.10	mg/Kg		08/11/23 09:50	08/14/23 11:51	1
Zinc	ND		1.9	1.4	mg/Kg		08/11/23 09:50	08/14/23 11:51	1

Lab Sample ID: LCS 180-443183/2-A
Matrix: Solid
Analysis Batch: 443474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443183

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	94.3	94.7		mg/Kg		100	80 - 120
Barium	94.3	93.0		mg/Kg		99	80 - 120
Beryllium	47.2	48.5		mg/Kg		103	80 - 120
Cadmium	47.2	46.0		mg/Kg		98	80 - 120
Chromium	47.2	47.1		mg/Kg		100	80 - 120
Copper	47.2	46.5		mg/Kg		98	80 - 120
Lead	47.2	46.6		mg/Kg		99	80 - 120
Manganese	47.2	45.5		mg/Kg		97	80 - 120
Nickel	47.2	47.1		mg/Kg		100	80 - 120
Selenium	94.3	95.9		mg/Kg		102	80 - 120
Silver	23.6	22.3		mg/Kg		95	80 - 120
Zinc	23.6	23.7		mg/Kg		101	80 - 120

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443474

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443183

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	7.2		90.8	92.3		mg/Kg	☼	94	75 - 125
Barium	75		90.8	154		mg/Kg	☼	87	75 - 125
Beryllium	0.40		45.4	43.7		mg/Kg	☼	95	75 - 125
Cadmium	0.12	J	45.4	38.8		mg/Kg	☼	85	75 - 125
Chromium	14		45.4	54.7		mg/Kg	☼	89	75 - 125
Copper	24		45.4	64.3		mg/Kg	☼	89	75 - 125
Lead	24		45.4	67.4		mg/Kg	☼	97	75 - 125
Manganese	430		45.4	487	4	mg/Kg	☼	122	75 - 125
Nickel	21		45.4	67.5		mg/Kg	☼	102	75 - 125
Selenium	0.60	J	90.8	85.8		mg/Kg	☼	94	75 - 125
Silver	ND		22.7	20.4		mg/Kg	☼	90	75 - 125
Zinc	74	F1	22.7	90.8	F1	mg/Kg	☼	72	75 - 125

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

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443474

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443183

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	7.2		98.2	98.4		mg/Kg	☼	93	75 - 125	6	20
Barium	75		98.2	161		mg/Kg	☼	88	75 - 125	4	20
Beryllium	0.40		49.1	45.8		mg/Kg	☼	92	75 - 125	5	20
Cadmium	0.12	J	49.1	41.2		mg/Kg	☼	84	75 - 125	6	20
Chromium	14		49.1	56.0		mg/Kg	☼	85	75 - 125	2	20
Copper	24		49.1	64.2		mg/Kg	☼	82	75 - 125	0	20
Lead	24		49.1	67.8		mg/Kg	☼	90	75 - 125	1	20
Manganese	430		49.1	504	4	mg/Kg	☼	148	75 - 125	3	20
Nickel	21		49.1	67.3		mg/Kg	☼	94	75 - 125	0	20
Selenium	0.60	J	98.2	91.0		mg/Kg	☼	92	75 - 125	6	20
Silver	ND		24.6	21.6		mg/Kg	☼	88	75 - 125	5	20
Zinc	74	F1	24.6	89.5	F1	mg/Kg	☼	62	75 - 125	1	20

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-443174/1-A
Matrix: Solid
Analysis Batch: 443293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		08/11/23 09:25	08/12/23 09:01	1

Lab Sample ID: LCS 180-443174/2-A
Matrix: Solid
Analysis Batch: 443293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.417	0.435		mg/Kg		104	80 - 120

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443293

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443174

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.051		0.187	0.243		mg/Kg	☼	102	80 - 120

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443293

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443174

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.051		0.179	0.223		mg/Kg	☼	96	80 - 120	9	20

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-443485/1-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		08/15/23 08:50	08/17/23 13:07	1

Lab Sample ID: LCSI 180-443485/3-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443485

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	613		mg/Kg		87	80 - 120

Lab Sample ID: LCSS 180-443485/2-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443485

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	20.3		mg/Kg		102	80 - 120

Lab Sample ID: 180-160629-8 MSI
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	847	474	F1	mg/Kg	☼	56	75 - 125

Lab Sample ID: 180-160629-8 MSS
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	23.7	0.712	F1	mg/Kg	☼	3	75 - 125

Lab Sample ID: 180-160629-8 DU
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443485

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hexavalent chromium	ND	F1	ND		mg/Kg	☼	NC	20

Lab Sample ID: MB 180-443486/1-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		08/15/23 09:00	08/17/23 14:04	1

Lab Sample ID: LCSI 180-443486/3-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443486

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	615		mg/Kg		87	80 - 120

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: LCSS 180-443486/2-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443486

Analyte			Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium			20.0	20.5		mg/Kg		103	80 - 120		

Lab Sample ID: 180-160629-8 MSI
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium	ND	F1	851	467	F1	mg/Kg	☼	55	75 - 125		

Lab Sample ID: 180-160629-8 MSS
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443486

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium	ND	F1	23.7	ND	F1	mg/Kg	☼	-1	75 - 125		

Lab Sample ID: 180-160629-8 DU
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443486

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Hexavalent chromium	ND	F1		ND		mg/Kg	☼			NC	20

Lab Sample ID: 180-160629-8 DU
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1H
Prep Type: Total/NA
Prep Batch: 443486

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Hexavalent chromium	ND	F1		ND		mg/Kg	☼			NC	20

Lab Sample ID: MB 180-443487/1-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443487

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		08/15/23 09:02	08/17/23 14:34	1

Lab Sample ID: LCSI 180-443487/3-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443487

Analyte			Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium			708	607		mg/Kg		86	80 - 120		

Lab Sample ID: LCSS 180-443487/2-A
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443487

Analyte			Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium			20.0	20.4		mg/Kg		102	80 - 120		

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: 180-160629-9 MSI
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	838	274	F1	mg/Kg	☼	33	75 - 125

Lab Sample ID: 180-160629-9 MSS
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	23.8	1.05	F1	mg/Kg	☼	4	75 - 125

Lab Sample ID: 180-160629-9 DU
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443487

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hexavalent chromium	ND	F1	ND		mg/Kg	☼	NC	20

Lab Sample ID: MB 180-443489/1-A
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443489

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		08/15/23 09:03	08/17/23 15:02	1

Lab Sample ID: LCSI 180-443489/3-A
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443489

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	619		mg/Kg		87	80 - 120

Lab Sample ID: LCSS 180-443489/2-A
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443489

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	20.5		mg/Kg		103	80 - 120

Lab Sample ID: 180-160629-9 MSI
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443489

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	838	264	F1	mg/Kg	☼	32	75 - 125

Lab Sample ID: 180-160629-9 MSS
Matrix: Solid
Analysis Batch: 443850
Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443489

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	ND	F1	24.0	ND	F1	mg/Kg	☼	-1	75 - 125

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: 180-160629-9 DU
Matrix: Solid
Analysis Batch: 443850

Client Sample ID: NAFREST-BRP-TS1I
Prep Type: Total/NA
Prep Batch: 443489

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hexavalent chromium	ND	F1	ND		mg/Kg	☼	NC	20

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-443408/4-A
Matrix: Solid
Analysis Batch: 443560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 443408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.20	0.15	mg/Kg		08/14/23 16:45	08/14/23 17:05	1

Lab Sample ID: HLCS 180-443408/2-A
Matrix: Solid
Analysis Batch: 443560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443408

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.268		mg/Kg		107	90 - 110

Lab Sample ID: LCS 180-443408/3-A
Matrix: Solid
Analysis Batch: 443564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443408

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	48.0	46.0		mg/Kg		96	17 - 163

Lab Sample ID: LLCS 180-443408/1-A
Matrix: Solid
Analysis Batch: 443560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 443408

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0500		mg/Kg		100	90 - 110

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 443560

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443408

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	F1	2.18	1.23	F1	mg/Kg	☼	57	75 - 125

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 443560

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 443408

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	F1	2.18	1.26	F1	mg/Kg	☼	58	75 - 125	2	20

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Analysis Batch: 443142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-1	NAFREST-BRP-TS1A	Total/NA	Solid	EPA 8260C	443198
180-160629-10	NAFREST-BRP-TS2A	Total/NA	Solid	EPA 8260C	443198
180-160629-11	NAFREST-BRP-TS2B	Total/NA	Solid	EPA 8260C	443198
180-160629-13	NAFREST-BRP-TS3A	Total/NA	Solid	EPA 8260C	443198
180-160629-14	NAFREST-BRP-TS3B	Total/NA	Solid	EPA 8260C	443198
MB 180-443142/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-443142/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-443142/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	
180-160629-10 MS	NAFREST-BRP-TS2A	Total/NA	Solid	EPA 8260C	443198
180-160629-10 MSD	NAFREST-BRP-TS2A	Total/NA	Solid	EPA 8260C	443198
180-160629-11 MS	NAFREST-BRP-TS2B	Total/NA	Solid	EPA 8260C	443198
180-160629-11 MSD	NAFREST-BRP-TS2B	Total/NA	Solid	EPA 8260C	443198

Prep Batch: 443198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-1	NAFREST-BRP-TS1A	Total/NA	Solid	5035	
180-160629-10	NAFREST-BRP-TS2A	Total/NA	Solid	5035	
180-160629-11	NAFREST-BRP-TS2B	Total/NA	Solid	5035	
180-160629-13	NAFREST-BRP-TS3A	Total/NA	Solid	5035	
180-160629-14	NAFREST-BRP-TS3B	Total/NA	Solid	5035	
180-160629-10 MS	NAFREST-BRP-TS2A	Total/NA	Solid	5035	
180-160629-10 MSD	NAFREST-BRP-TS2A	Total/NA	Solid	5035	
180-160629-11 MS	NAFREST-BRP-TS2B	Total/NA	Solid	5035	
180-160629-11 MSD	NAFREST-BRP-TS2B	Total/NA	Solid	5035	

Analysis Batch: 443333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-2	NAFREST-BRP-TS1B	Total/NA	Solid	EPA 8260C	443382
180-160629-3	NAFREST-BRP-TS1C	Total/NA	Solid	EPA 8260C	443382
180-160629-4	NAFREST-BRP-TS1D	Total/NA	Solid	EPA 8260C	443382
180-160629-5	NAFREST-BRP-TS1E	Total/NA	Solid	EPA 8260C	443382
180-160629-7	NAFREST-BRP-TS1G	Total/NA	Solid	EPA 8260C	443382
180-160629-16	NAFREST-BRP-TS-DUP1A	Total/NA	Solid	EPA 8260C	443382
180-160629-17	NAFREST-BRP-TS-DUP1B	Total/NA	Solid	EPA 8260C	443382
MB 180-443333/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-443333/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-443333/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 443382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-2	NAFREST-BRP-TS1B	Total/NA	Solid	5035	
180-160629-3	NAFREST-BRP-TS1C	Total/NA	Solid	5035	
180-160629-4	NAFREST-BRP-TS1D	Total/NA	Solid	5035	
180-160629-5	NAFREST-BRP-TS1E	Total/NA	Solid	5035	
180-160629-6	NAFREST-BRP-TS1F	Total/NA	Solid	5035	
180-160629-7	NAFREST-BRP-TS1G	Total/NA	Solid	5035	
180-160629-16	NAFREST-BRP-TS-DUP1A	Total/NA	Solid	5035	
180-160629-17	NAFREST-BRP-TS-DUP1B	Total/NA	Solid	5035	

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Analysis Batch: 443450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-6	NAFREST-BRP-TS1F	Total/NA	Solid	EPA 8260C	443382
MB 180-443450/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-443450/3	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-443450/4	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

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Prep Batch: 443193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3541	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3541	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3541	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3541	
MB 180-443193/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-443193/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3541	

Analysis Batch: 443312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 8270D LL	443193
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 8270D LL	443193
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8270D LL	443193
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 8270D LL	443193
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 8270D LL	443193
MB 180-443193/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	443193
LCS 180-443193/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	443193
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8270D LL	443193
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8270D LL	443193

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Prep Batch: 443201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3541	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3541	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3541	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3541	
MB 180-443201/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-443201/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCS 180-443201/5-A	Lab Control Sample	Total/NA	Solid	3541	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3541	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3541	

Prep Batch: 443304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	8151A	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	8151A	

GC Semi VOA (Continued)

Prep Batch: 443304 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	8151A	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	8151A	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	8151A	
MB 180-443304/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-443304/2-A	Lab Control Sample	Total/NA	Solid	8151A	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	8151A	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	8151A	

Cleanup Batch: 443313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3665A	443201
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3665A	443201
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3665A	443201
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3665A	443201
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3665A	443201
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3665A	443201
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3665A	443201

Cleanup Batch: 443314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3660B	443313
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3660B	443313
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3660B	443313
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3660B	443313
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3660B	443313
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3660B	443313
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3660B	443313

Analysis Batch: 443315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 8082A	443314
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 8082A	443314
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8082A	443314
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 8082A	443314
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 8082A	443314
MB 180-443201/1-A	Method Blank	Total/NA	Solid	EPA 8082A	443201
LCS 180-443201/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	443201
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8082A	443314
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8082A	443314

Analysis Batch: 443432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 8151A	443304
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 8151A	443304
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8151A	443304
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 8151A	443304
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 8151A	443304
MB 180-443304/1-A	Method Blank	Total/NA	Solid	EPA 8151A	443304
LCS 180-443304/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	443304
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8151A	443304
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8151A	443304

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Analysis Batch: 443743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 8081B	443201
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 8081B	443201
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8081B	443201
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 8081B	443201
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 8081B	443201
MB 180-443201/1-A	Method Blank	Total/NA	Solid	EPA 8081B	443201
LCS 180-443201/5-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	443201
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8081B	443201
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 8081B	443201

Metals

Prep Batch: 443174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	7471B	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	7471B	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	7471B	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	7471B	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	7471B	
MB 180-443174/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-443174/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	7471B	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	7471B	

Prep Batch: 443183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3050B	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3050B	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3050B	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3050B	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3050B	
MB 180-443183/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-443183/2-A	Lab Control Sample	Total/NA	Solid	3050B	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	3050B	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	3050B	

Analysis Batch: 443293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7471B	443174
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7471B	443174
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 7471B	443174
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 7471B	443174
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 7471B	443174
MB 180-443174/1-A	Method Blank	Total/NA	Solid	EPA 7471B	443174
LCS 180-443174/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	443174
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 7471B	443174
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 7471B	443174

Analysis Batch: 443474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 6010C	443183

Metals (Continued)

Analysis Batch: 443474 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 6010C	443183
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 6010C	443183
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 6010C	443183
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 6010C	443183
MB 180-443183/1-A	Method Blank	Total/NA	Solid	EPA 6010C	443183
LCS 180-443183/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	443183
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 6010C	443183
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 6010C	443183

General Chemistry

Analysis Batch: 443100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-1	NAFREST-BRP-TS1A	Total/NA	Solid	2540G	
180-160629-2	NAFREST-BRP-TS1B	Total/NA	Solid	2540G	
180-160629-3	NAFREST-BRP-TS1C	Total/NA	Solid	2540G	
180-160629-4	NAFREST-BRP-TS1D	Total/NA	Solid	2540G	
180-160629-5	NAFREST-BRP-TS1E	Total/NA	Solid	2540G	

Analysis Batch: 443103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-6	NAFREST-BRP-TS1F	Total/NA	Solid	2540G	
180-160629-7	NAFREST-BRP-TS1G	Total/NA	Solid	2540G	
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	2540G	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	2540G	
180-160629-10	NAFREST-BRP-TS2A	Total/NA	Solid	2540G	
180-160629-11	NAFREST-BRP-TS2B	Total/NA	Solid	2540G	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	2540G	
180-160629-13	NAFREST-BRP-TS3A	Total/NA	Solid	2540G	
180-160629-14	NAFREST-BRP-TS3B	Total/NA	Solid	2540G	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	2540G	
180-160629-16	NAFREST-BRP-TS-DUP1A	Total/NA	Solid	2540G	
180-160629-17	NAFREST-BRP-TS-DUP1B	Total/NA	Solid	2540G	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	2540G	

Prep Batch: 443408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	9010C	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	9010C	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	9010C	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	9010C	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	9010C	
MB 180-443408/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-443408/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-443408/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-443408/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	9010C	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	9010C	

General Chemistry

Prep Batch: 443485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
MB 180-443485/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-443485/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-443485/2-A	Lab Control Sample	Total/NA	Solid	3060A	
180-160629-8 MSI	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
180-160629-8 MSS	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
180-160629-8 DU	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	

Prep Batch: 443486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
MB 180-443486/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-443486/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-443486/2-A	Lab Control Sample	Total/NA	Solid	3060A	
180-160629-8 MSI	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
180-160629-8 MSS	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	
180-160629-8 DU	NAFREST-BRP-TS1H	Total/NA	Solid	3060A	

Prep Batch: 443487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	3060A	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	3060A	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	3060A	
MB 180-443487/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-443487/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-443487/2-A	Lab Control Sample	Total/NA	Solid	3060A	
180-160629-9 MSI	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
180-160629-9 MSS	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
180-160629-9 DU	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	

Prep Batch: 443489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
MB 180-443489/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-443489/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-443489/2-A	Lab Control Sample	Total/NA	Solid	3060A	
180-160629-9 MSI	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
180-160629-9 MSS	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	
180-160629-9 DU	NAFREST-BRP-TS1I	Total/NA	Solid	3060A	

Analysis Batch: 443560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 9014	443408
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 9014	443408
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 9014	443408
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 9014	443408
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 9014	443408
MB 180-443408/4-A	Method Blank	Total/NA	Solid	EPA 9014	443408
HLCS 180-443408/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	443408
LLCS 180-443408/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	443408

General Chemistry (Continued)

Analysis Batch: 443560 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 9014	443408
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 9014	443408

Analysis Batch: 443564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-443408/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	443408

Analysis Batch: 443850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443485
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443486
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443487
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443489
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	EPA 7196A	443487
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	EPA 7196A	443487
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	EPA 7196A	443487
MB 180-443485/1-A	Method Blank	Total/NA	Solid	EPA 7196A	443485
MB 180-443486/1-A	Method Blank	Total/NA	Solid	EPA 7196A	443486
MB 180-443487/1-A	Method Blank	Total/NA	Solid	EPA 7196A	443487
MB 180-443489/1-A	Method Blank	Total/NA	Solid	EPA 7196A	443489
LCSI 180-443485/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443485
LCSI 180-443486/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443486
LCSI 180-443487/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443487
LCSI 180-443489/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443489
LCSS 180-443485/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443485
LCSS 180-443486/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443486
LCSS 180-443487/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443487
LCSS 180-443489/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	443489
180-160629-8 MSI	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443485
180-160629-8 MSI	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443486
180-160629-8 MSS	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443485
180-160629-8 MSS	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443486
180-160629-9 MSI	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443487
180-160629-9 MSI	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443489
180-160629-9 MSS	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443487
180-160629-9 MSS	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443489
180-160629-8 DU	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443485
180-160629-8 DU	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443486
180-160629-8 DU	NAFREST-BRP-TS1H	Total/NA	Solid	EPA 7196A	443486
180-160629-9 DU	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443487
180-160629-9 DU	NAFREST-BRP-TS1I	Total/NA	Solid	EPA 7196A	443489

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site	SSOW#:			

Analysis Requested

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS					
Preservation Code:							FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS1A	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1B	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1C	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1D	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1E	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1F	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1G	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1H	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X					6
NAFREST-BRP-TS1I	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X					6
NAFREST-BRP-TS2A	8/9/23	1550	G	Solid	N	Y	X														12
NAFREST-BRP-TS2B	8/9/23	1550	G	Solid	N	Y	X														12

180-160629 Chain of Custody

Preservation Codes:

	M - Hexane
)H	N - None
Acetate	O - AsNaO2
ıc Acid	P - Na2O4S
HSO4	Q - Na2SO3
ıOH	R - Na2S2O3
nchlor	S - H2SO4
scorbic Acid	T - TSP Dodecahydrate
	U - Acetone
l Water	V - MCAA
:DTA	W - pH 4-5
:DA	Z - other (specify)
ər:	

Special Instructions/Note:

Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.

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
Zach Miller	8/9/23 17:00	Geosyntec		8/10/23 0949	EPTME
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

Ver: 01/16/2019

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:

Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:
City: Columbia	TAT Requested (days): 10 Day
State, Zip: MD, 21044	PO #: MN0832
Phone:	WO #:
Email: akrasnopoler@geosyntec.com	Project #: 18013464
Project Name: Former Sperry Remington Site-	SSOW#:
Site:	

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS2C	8/9/23	1550	G	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS3A	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3B	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3C	8/9/23	1555	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS-DUP1A	8/9/23	-	G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1B	8/9/23	-	G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1C	8/9/23	-	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

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: Zach Miller	Date/Time: 8/9/23 17:00	Company: Geosyntec	Received by:	Date/Time: 8/10/23 0944	Company: EPI
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:

Ver 01/16/2019

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-160629 Chain of Custody

Preservation Codes.

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS			Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	FJ	N	N	N	N	N	N	N	N	N			X	
NAFREST-BRP-TS1A	8/9/23	1545	G	Solid	N	N	X												4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS1B	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1C	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1D	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1E	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1F	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1G	8/9/23	1545	G	Solid	N	N	X												4	
NAFREST-BRP-TS1H	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X			6	
NAFREST-BRP-TS1I	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X			6	
NAFREST-BRP-TS2A	8/9/23	1550	G	Solid	N	Y	X												12	
NAFREST-BRP-TS2B	8/9/23	1550	G	Solid	N	Y	X												12	

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
1	Zach Miller	8/9/23 1700	Geosyntec		08/10/23 1000	EETSac
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 1 2

Ver: 01/16/2019

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS				Total Number of containers	Special Instructions/Note.
			Preservation Code:		X	X	FJ	N	N	N	N	N	N	N	N	N				X	
NAFREST-BRP-TS2C	8/9/23	1550	G	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS3A	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3B	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3C	8/9/23	1555	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS-DUP1A	8/9/23		G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1B	8/9/23		G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1C	8/9/23		G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

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
1	Zach Miller	8/9/23 17:00	Geosyntec		08/10/23 1000	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 1.2

Ver: 01/16/2019

eurofins | Environment Testing

Sacramento
Sample Receiving Notes

Tracking # 772976547455

Job _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC

Therm ID L04 Corr Factor (+ /) NA °C

Ice ✓ Wet_____ Gel_____ Other_____

Cooler Custody Seal 2212304

Cooler ID _____

Temp Observed 1.2 °C Corrected 1.2 °C
From Temp Blank ☐ Sample ☒

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials DM Date 08/10/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
COC is complete w/o discrepancies	☒	☐	☐
Sample custody seal?	☐	☐	☒
Sample containers have legible labels?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Is the Field Sampler's name on COC?	☒	☐	☐
Samples w/o discrepancies?	☐	☒	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials SD Date 8/10/23

Notes
0.9 Spike ID
NA FKCST BRS TSIC
had a have H+I

Trizma Lot #(s) _____

Ammonium
Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
NCM Filed?	☒	☐	☐
Samples received within hold time?	☐	☐	☒
Log Release checked in TALS?	☐	☐	☒

Initials DM Date 8/10/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-160629-1

Login Number: 160629
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-160629-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
David Dunlap, Senior Project Manager
David.Dunlap@et.eurofinsus.com
(412)963-2432

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Job ID: 180-160629-2

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-160629-2

Comments
The containers received at the Sacramento laboratory were labeled as NAFREST-GRD-1G and NAFREST-GRD-1H instead of the IDs on the COC NAFREST-GRD-1H and NAFREST-GRD-1I. As discussed with the sampler, NAFREST-GRD-1G was to be identified as NAFREST-GRD-1H and NAFREST-GRD-1H was to be identified as NAFREST-GRD-1I as they would have been sequentially sampled along with the composite sample containers collected for the Pittsburgh laboratory analysis.

Receipt
The samples were received on 8/10/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9º C, 1.2º C, 3.8º C and 4.8º C.

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

Definitions/Glossary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Qualifiers

LCMS

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-24
California	State	2897	01-22-24
Colorado	State	CA0004	08-31-23
Florida	NELAP	E87570	06-30-24
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-23
Louisiana (All)	NELAP	01944	06-30-24
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-24
Nevada	State	CA00044	07-31-24
New Hampshire	NELAP	2997	04-18-24
New Jersey	NELAP	CA005	06-30-24
New York	NELAP	11666	04-01-24
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-19-13	05-31-24
US Fish & Wildlife	US Federal Programs	58448	04-30-24
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442021-12	02-28-24
Virginia	NELAP	460278	03-14-24
Washington	State	C581	05-05-24
West Virginia (DW)	State	9930C	12-31-23
Wisconsin	State	998204680	08-31-23
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-160629-8	NAFREST-BRP-TS1H	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-9	NAFREST-BRP-TS1I	Solid	08/09/23 15:45	08/10/23 09:49
180-160629-12	NAFREST-BRP-TS2C	Solid	08/09/23 15:50	08/10/23 09:49
180-160629-15	NAFREST-BRP-TS3C	Solid	08/09/23 15:55	08/10/23 09:49
180-160629-18	NAFREST-BRP-TS-DUP1C	Solid	08/09/23 00:00	08/10/23 09:49

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.42 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	699269	08/16/23 16:52	C1P	EET SAC
	Instrument ID: A18									
Total/NA	Prep	SHAKE	RA		5.42 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	699581	08/18/23 15:03	JTD	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9
Date Collected: 08/09/23 15:45
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.26 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	699269	08/16/23 17:03	C1P	EET SAC
	Instrument ID: A18									
Total/NA	Prep	SHAKE	RA		5.26 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	699581	08/18/23 15:20	JTD	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12
Date Collected: 08/09/23 15:50
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.28 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	699269	08/16/23 17:14	C1P	EET SAC
	Instrument ID: A18									
Total/NA	Prep	SHAKE	RA		5.28 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	699581	08/18/23 15:36	JTD	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15
Date Collected: 08/09/23 15:55
Matrix: Solid
Date Received: 08/10/23 09:49
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	SHAKE			5.01 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	699269	08/16/23 17:48	C1P	EET SAC
	Instrument ID: A18									
Total/NA	Prep	SHAKE	RA		5.01 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	699581	08/18/23 16:26	JTD	EET SAC
	Instrument ID: A9									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-160629-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18

Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.46 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	699269	08/16/23 18:10	C1P	EET SAC
	Instrument ID: A18									
Total/NA	Prep	SHAKE	RA		5.46 g	10.0 mL	699041	08/15/23 19:05	PV	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	699581	08/18/23 16:43	JTD	EET SAC
	Instrument ID: A9									

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:

Lab: EET SAC

Batch Type: Prep

PV = Pheng Vue

Batch Type: Analysis

C1P = Chawaporn Photiboon

JTD = Jennifer Doan

Client Sample ID: NAFREST-BRP-TS1H
Lab Sample ID: 180-160629-8

Date Collected: 08/09/23 15:45
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 83.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.14**	**J**	0.22	0.051	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluoropentanoic acid (PFPeA)	**0.17**	**J**	0.22	0.045	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorohexanoic acid (PFHxA)	**0.16**	**J**	0.22	0.034	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluoroheptanoic acid (PFHpA)	**0.091**	**J**	0.22	0.042	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorooctanoic acid (PFOA)	**0.33**		0.22	0.059	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorononanoic acid (PFNA)	**0.093**	**J**	0.22	0.024	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorodecanoic acid (PFDA)	**0.11**	**J**	0.22	0.053	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.047	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorododecanoic acid (PFDoA)	**0.033**	**J**	0.22	0.033	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.023	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.041	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.042	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.032	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.054	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorodecanesulfonic acid (PFDS)	**0.092**	**J**	0.22	0.058	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
Perfluorooctanesulfonamide (FOSA)	ND		0.22	0.037	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.22	0.025	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.22	0.053	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
6:2 FTS	ND		0.22	0.030	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1
8:2 FTS	ND		0.22	0.039	ug/Kg	☼	08/15/23 19:05	08/16/23 16:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C5 PFPeA	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C2 PFHxA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C4 PFHpA	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C4 PFOA	*89*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C5 PFNA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C2 PFDA	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C2 PFUnA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C2 PFDoA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C2 PFTeDA	*66*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C3 PFBS	*72*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
18O2 PFHxS	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C4 PFOS	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
13C8 FOSA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
d3-NMeFOSAA	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
d5-NEtFOSAA	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
M2-6:2 FTS	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*
M2-8:2 FTS	*91*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:52*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.99**		0.22	0.048	ug/Kg	☼	08/15/23 19:05	08/18/23 15:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*69*		*25 - 150*	*08/15/23 19:05*	*08/18/23 15:03*	*1*

Client Sample ID: NAFREST-BRP-TS1I
Lab Sample ID: 180-160629-9

Date Collected: 08/09/23 15:45
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 83.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.16**	**J**	0.23	0.052	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluoropentanoic acid (PFPeA)	**0.19**	**J**	0.23	0.047	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorohexanoic acid (PFHxA)	**0.18**	**J**	0.23	0.035	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluoroheptanoic acid (PFHpA)	**0.10**	**J**	0.23	0.043	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorooctanoic acid (PFOA)	**0.38**		0.23	0.060	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorononanoic acid (PFNA)	**0.10**	**J**	0.23	0.025	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorodecanoic acid (PFDA)	**0.11**	**J**	0.23	0.055	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.048	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorododecanoic acid (PFDoA)	**0.036**	**J**	0.23	0.034	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.024	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.042	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.043	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.056	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorodecanesulfonic acid (PFDS)	**0.11**	**J**	0.23	0.059	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.038	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.026	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.055	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
6:2 FTS	ND		0.23	0.031	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1
8:2 FTS	ND		0.23	0.040	ug/Kg	☼	08/15/23 19:05	08/16/23 17:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C5 PFPeA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C2 PFHxA	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C4 PFHpA	*88*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C4 PFOA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C5 PFNA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C2 PFDA	*90*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C2 PFUnA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C2 PFDoA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C2 PFTeDA	*72*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C3 PFBS	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
18O2 PFHxS	*82*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C4 PFOS	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
13C8 FOSA	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
d3-NMeFOSAA	*75*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
d5-NEtFOSAA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
M2-6:2 FTS	*87*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*
M2-8:2 FTS	*94*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:03*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**1.3**		0.23	0.049	ug/Kg	☼	08/15/23 19:05	08/18/23 15:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*60*		*25 - 150*	*08/15/23 19:05*	*08/18/23 15:20*	*1*

Client Sample ID: NAFREST-BRP-TS2C
Lab Sample ID: 180-160629-12

Date Collected: 08/09/23 15:50
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 83.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.15**	**J**	0.23	0.052	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluoropentanoic acid (PFPeA)	**0.19**	**J**	0.23	0.047	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorohexanoic acid (PFHxA)	**0.32**		0.23	0.035	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluoroheptanoic acid (PFHpA)	**0.079**	**J**	0.23	0.043	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorooctanoic acid (PFOA)	**0.29**		0.23	0.060	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorononanoic acid (PFNA)	**0.072**	**J**	0.23	0.025	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorodecanoic acid (PFDA)	**0.085**	**J**	0.23	0.054	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.048	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.034	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.024	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.042	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.043	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.056	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.059	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.037	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.026	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.054	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
6:2 FTS	ND		0.23	0.031	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1
8:2 FTS	ND		0.23	0.040	ug/Kg	☼	08/15/23 19:05	08/16/23 17:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C5 PFPeA	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C2 PFHxA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C4 PFHpA	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C4 PFOA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C5 PFNA	*89*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C2 PFDA	*88*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C2 PFUnA	*82*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C2 PFDoA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C2 PFTeDA	*70*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C3 PFBS	*73*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
18O2 PFHxS	*82*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C4 PFOS	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
13C8 FOSA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
d3-NMeFOSAA	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
d5-NEtFOSAA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
M2-6:2 FTS	*99*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*
M2-8:2 FTS	*104*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:14*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.99**		0.23	0.049	ug/Kg	☼	08/15/23 19:05	08/18/23 15:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*67*		*25 - 150*	*08/15/23 19:05*	*08/18/23 15:36*	*1*

Client Sample ID: NAFREST-BRP-TS3C
Lab Sample ID: 180-160629-15

Date Collected: 08/09/23 15:55
Matrix: Solid

Date Received: 08/10/23 09:49
Percent Solids: 84.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.13**	**J**	0.24	0.054	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluoropentanoic acid (PFPeA)	**0.16**	**J**	0.24	0.048	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorohexanoic acid (PFHxA)	**0.15**	**J**	0.24	0.037	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluoroheptanoic acid (PFHpA)	**0.086**	**J**	0.24	0.045	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorooctanoic acid (PFOA)	**0.25**		0.24	0.062	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorononanoic acid (PFNA)	**0.068**	**J**	0.24	0.026	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorodecanoic acid (PFDA)	**0.068**	**J**	0.24	0.057	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluoroundecanoic acid (PFUnA)	ND		0.24	0.049	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorododecanoic acid (PFDoA)	ND		0.24	0.035	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.025	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.044	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.045	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.034	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.058	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.24	0.061	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
Perfluorooctanesulfonamide (FOSA)	ND		0.24	0.039	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.24	0.027	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.24	0.057	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
6:2 FTS	ND		0.24	0.032	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1
8:2 FTS	ND		0.24	0.041	ug/Kg	☼	08/15/23 19:05	08/16/23 17:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C5 PFPeA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C2 PFHxA	*82*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C4 PFHpA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C4 PFOA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C5 PFNA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C2 PFDA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C2 PFUnA	*82*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C2 PFDoA	*77*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C3 PFBS	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
18O2 PFHxS	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C4 PFOS	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
13C8 FOSA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
d3-NMeFOSAA	*75*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
d5-NEtFOSAA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
M2-6:2 FTS	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*
M2-8:2 FTS	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 17:48*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.72**		0.24	0.051	ug/Kg	☼	08/15/23 19:05	08/18/23 16:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*77*		*25 - 150*	*08/15/23 19:05*	*08/18/23 16:26*	*1*

Client Sample ID: NAFREST-BRP-TS-DUP1C
Lab Sample ID: 180-160629-18
Date Collected: 08/09/23 00:00
Matrix: Solid
Date Received: 08/10/23 09:49
Percent Solids: 85.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.10**	**J**	0.21	0.049	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluoropentanoic acid (PFPeA)	**0.15**	**J**	0.21	0.044	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorohexanoic acid (PFHxA)	**0.12**	**J**	0.21	0.033	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluoroheptanoic acid (PFHpA)	**0.073**	**J**	0.21	0.041	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorooctanoic acid (PFOA)	**0.23**		0.21	0.057	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorononanoic acid (PFNA)	**0.062**	**J**	0.21	0.024	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorodecanoic acid (PFDA)	**0.059**	**J**	0.21	0.052	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.045	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.032	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.023	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.040	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.041	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.031	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.053	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.21	0.056	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
Perfluorooctanesulfonamide (FOSA)	ND		0.21	0.035	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.21	0.025	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.21	0.052	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
6:2 FTS	ND		0.21	0.029	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1
8:2 FTS	ND		0.21	0.038	ug/Kg	☼	08/15/23 19:05	08/16/23 18:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C5 PFPeA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C2 PFHxA	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C4 PFHpA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C4 PFOA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C5 PFNA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C2 PFDA	*89*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C2 PFUnA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C2 PFDoA	*76*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C2 PFTeDA	*75*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C3 PFBS	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
18O2 PFHxS	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C4 PFOS	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
13C8 FOSA	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
d3-NMeFOSAA	*77*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
d5-NEtFOSAA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
M2-6:2 FTS	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*
M2-8:2 FTS	*85*		*25 - 150*	*08/15/23 19:05*	*08/16/23 18:10*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.67**		0.21	0.046	ug/Kg	☼	08/15/23 19:05	08/18/23 16:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*61*		*25 - 150*	*08/15/23 19:05*	*08/18/23 16:43*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-699041/1-A
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 699041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.049	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
6:2 FTS	ND		0.20	0.027	ug/Kg		08/15/23 19:05	08/16/23 16:07	1
8:2 FTS	ND		0.20	0.035	ug/Kg		08/15/23 19:05	08/16/23 16:07	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*35*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C5 PFPeA	*78*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C2 PFHxA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C4 PFHpA	*89*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C4 PFOA	*88*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C5 PFNA	*83*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C2 PFDA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C2 PFUnA	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C2 PFDoA	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C2 PFTeDA	*70*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C3 PFBS	*80*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
18O2 PFHxS	*89*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C4 PFOS	*84*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
13C8 FOSA	*86*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
d3-NMeFOSAA	*79*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
d5-NEtFOSAA	*81*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
M2-6:2 FTS	*93*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*
M2-8:2 FTS	*95*		*25 - 150*	*08/15/23 19:05*	*08/16/23 16:07*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-699041/2-A
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.97		ug/Kg		99	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	1.87		ug/Kg		93	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	1.85		ug/Kg		92	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	1.82		ug/Kg		91	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	2.00		ug/Kg		100	72 - 132
Perfluorononanoic acid (PFNA)	2.00	1.81		ug/Kg		90	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	1.80		ug/Kg		90	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	1.93		ug/Kg		96	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	2.07		ug/Kg		103	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	2.04		ug/Kg		102	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	1.88		ug/Kg		94	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.78	1.71		ug/Kg		96	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.52		ug/Kg		83	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.75		ug/Kg		92	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.70		ug/Kg		92	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	1.62		ug/Kg		84	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	1.92		ug/Kg		96	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.83		ug/Kg		91	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.78		ug/Kg		89	72 - 132
6:2 FTS	1.90	1.71		ug/Kg		90	73 - 139
8:2 FTS	1.92	1.72		ug/Kg		90	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*33*		*25 - 150*
13C5 PFPeA	*73*		*25 - 150*
13C2 PFHxA	*81*		*25 - 150*
13C4 PFHpA	*80*		*25 - 150*
13C4 PFOA	*82*		*25 - 150*
13C5 PFNA	*83*		*25 - 150*
13C2 PFDA	*85*		*25 - 150*
13C2 PFUnA	*81*		*25 - 150*
13C2 PFDoA	*72*		*25 - 150*
13C2 PFTeDA	*72*		*25 - 150*
13C3 PFBS	*76*		*25 - 150*
18O2 PFHxS	*88*		*25 - 150*
13C4 PFOS	*85*		*25 - 150*
13C8 FOSA	*83*		*25 - 150*
d3-NMeFOSAA	*82*		*25 - 150*
d5-NEtFOSAA	*81*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-699041/2-A
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699041

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	88		25 - 150
M2-8:2 FTS	93		25 - 150

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.15	J	2.39	2.41		ug/Kg	☼	95	76 - 136
Perfluoropentanoic acid (PFPeA)	0.19	J	2.39	2.32		ug/Kg	☼	89	69 - 129
Perfluorohexanoic acid (PFHxA)	0.32		2.39	2.59		ug/Kg	☼	95	71 - 131
Perfluoroheptanoic acid (PFHpA)	0.079	J	2.39	2.21		ug/Kg	☼	89	71 - 131
Perfluorooctanoic acid (PFOA)	0.29		2.39	2.55		ug/Kg	☼	95	72 - 132
Perfluorononanoic acid (PFNA)	0.072	J	2.39	2.24		ug/Kg	☼	91	73 - 133
Perfluorodecanoic acid (PFDA)	0.085	J	2.39	2.45		ug/Kg	☼	99	72 - 132
Perfluoroundecanoic acid (PFUnA)	ND		2.39	2.34		ug/Kg	☼	98	66 - 126
Perfluorododecanoic acid (PFDoA)	ND		2.39	2.49		ug/Kg	☼	104	71 - 131
Perfluorotridecanoic acid (PFTriA)	ND		2.39	2.39		ug/Kg	☼	100	71 - 131
Perfluorotetradecanoic acid (PFTeA)	ND		2.39	2.47		ug/Kg	☼	104	67 - 127
Perfluorobutanesulfonic acid (PFBS)	ND		2.12	1.97		ug/Kg	☼	93	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	ND		2.18	1.98		ug/Kg	☼	91	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.28	2.23		ug/Kg	☼	98	76 - 136
Perfluorodecanesulfonic acid (PFDS)	ND		2.30	2.16		ug/Kg	☼	94	71 - 131
Perfluorooctanesulfonamide (FOSA)	ND		2.39	2.39		ug/Kg	☼	100	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.39	2.27		ug/Kg	☼	95	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.39	2.20		ug/Kg	☼	92	72 - 132
6:2 FTS	ND		2.27	1.99		ug/Kg	☼	87	73 - 139
8:2 FTS	ND		2.29	2.15		ug/Kg	☼	94	75 - 135

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFBA	76		25 - 150
13C5 PFPeA	75		25 - 150
13C2 PFHxA	77		25 - 150
13C4 PFHpA	81		25 - 150
13C4 PFOA	85		25 - 150
13C5 PFNA	85		25 - 150
13C2 PFDA	81		25 - 150
13C2 PFUnA	83		25 - 150
13C2 PFDoA	75		25 - 150
13C2 PFTeDA	68		25 - 150
13C3 PFBS	77		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
18O2 PFHxS	82		25 - 150
13C4 PFOS	79		25 - 150
13C8 FOSA	79		25 - 150
d3-NMeFOSAA	71		25 - 150
d5-NEtFOSAA	79		25 - 150
M2-6:2 FTS	86		25 - 150
M2-8:2 FTS	88		25 - 150

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	0.15	J	2.35	2.39		ug/Kg	☼	96	76 - 136	1	30
Perfluoropentanoic acid (PFPeA)	0.19	J	2.35	2.37		ug/Kg	☼	93	69 - 129	2	30
Perfluorohexanoic acid (PFHxA)	0.32		2.35	2.65		ug/Kg	☼	99	71 - 131	2	30
Perfluoroheptanoic acid (PFHpA)	0.079	J	2.35	2.32		ug/Kg	☼	95	71 - 131	5	30
Perfluorooctanoic acid (PFOA)	0.29		2.35	2.62		ug/Kg	☼	99	72 - 132	2	30
Perfluorononanoic acid (PFNA)	0.072	J	2.35	2.31		ug/Kg	☼	95	73 - 133	3	30
Perfluorodecanoic acid (PFDA)	0.085	J	2.35	2.46		ug/Kg	☼	101	72 - 132	0	30
Perfluoroundecanoic acid (PFUnA)	ND		2.35	2.25		ug/Kg	☼	96	66 - 126	4	30
Perfluorododecanoic acid (PFDoA)	ND		2.35	2.63		ug/Kg	☼	112	71 - 131	5	30
Perfluorotridecanoic acid (PFTriA)	ND		2.35	2.42		ug/Kg	☼	103	71 - 131	1	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.35	2.29		ug/Kg	☼	98	67 - 127	7	30
Perfluorobutanesulfonic acid (PFBS)	ND		2.09	2.08		ug/Kg	☼	100	69 - 129	5	30
Perfluorohexanesulfonic acid (PFHxS)	ND		2.14	1.96		ug/Kg	☼	92	62 - 122	1	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.24	2.26		ug/Kg	☼	101	76 - 136	1	30
Perfluorodecanesulfonic acid (PFDS)	ND		2.27	1.95		ug/Kg	☼	86	71 - 131	10	30
Perfluorooctanesulfonamide (FOSA)	ND		2.35	2.29		ug/Kg	☼	98	77 - 137	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.35	2.27		ug/Kg	☼	97	72 - 132	0	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.35	2.27		ug/Kg	☼	96	72 - 132	3	30
6:2 FTS	ND		2.24	2.00		ug/Kg	☼	89	73 - 139	1	30
8:2 FTS	ND		2.26	2.14		ug/Kg	☼	95	75 - 135	1	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFBA	79		25 - 150
13C5 PFPeA	81		25 - 150
13C2 PFHxA	80		25 - 150
13C4 PFHpA	84		25 - 150
13C4 PFOA	84		25 - 150
13C5 PFNA	87		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 699269

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 PFDA	86		25 - 150
13C2 PFUnA	84		25 - 150
13C2 PFDoA	77		25 - 150
13C2 PFTeDA	70		25 - 150
13C3 PFBS	80		25 - 150
18O2 PFHxS	84		25 - 150
13C4 PFOS	83		25 - 150
13C8 FOSA	85		25 - 150
d3-NMeFOSAA	75		25 - 150
d5-NEtFOSAA	79		25 - 150
M2-6:2 FTS	87		25 - 150
M2-8:2 FTS	90		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances - RA

Lab Sample ID: 180-160629-12 MS
Matrix: Solid
Analysis Batch: 699581

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS) - RA	0.99		2.22	3.33		ug/Kg	☼	105	68 - 141

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFOS - RA	69		25 - 150

Lab Sample ID: 180-160629-12 MSD
Matrix: Solid
Analysis Batch: 699581

Client Sample ID: NAFREST-BRP-TS2C
Prep Type: Total/NA
Prep Batch: 699041

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS) - RA	0.99		2.19	2.98		ug/Kg	☼	91	68 - 141	11	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFOS - RA	75		25 - 150

LCMS

Prep Batch: 699041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	SHAKE	
180-160629-8 - RA	NAFREST-BRP-TS1H	Total/NA	Solid	SHAKE	
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	SHAKE	
180-160629-9 - RA	NAFREST-BRP-TS1I	Total/NA	Solid	SHAKE	
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	
180-160629-12 - RA	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	SHAKE	
180-160629-15 - RA	NAFREST-BRP-TS3C	Total/NA	Solid	SHAKE	
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	SHAKE	
180-160629-18 - RA	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	SHAKE	
MB 320-699041/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-699041/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	
180-160629-12 MS - RA	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	
180-160629-12 MSD - RA	NAFREST-BRP-TS2C	Total/NA	Solid	SHAKE	

Analysis Batch: 699269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8	NAFREST-BRP-TS1H	Total/NA	Solid	537 (modified)	699041
180-160629-9	NAFREST-BRP-TS1I	Total/NA	Solid	537 (modified)	699041
180-160629-12	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041
180-160629-15	NAFREST-BRP-TS3C	Total/NA	Solid	537 (modified)	699041
180-160629-18	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	537 (modified)	699041
MB 320-699041/1-A	Method Blank	Total/NA	Solid	537 (modified)	699041
LCS 320-699041/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	699041
180-160629-12 MS	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041
180-160629-12 MSD	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041

Analysis Batch: 699581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-160629-8 - RA	NAFREST-BRP-TS1H	Total/NA	Solid	537 (modified)	699041
180-160629-9 - RA	NAFREST-BRP-TS1I	Total/NA	Solid	537 (modified)	699041
180-160629-12 - RA	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041
180-160629-15 - RA	NAFREST-BRP-TS3C	Total/NA	Solid	537 (modified)	699041
180-160629-18 - RA	NAFREST-BRP-TS-DUP1C	Total/NA	Solid	537 (modified)	699041
180-160629-12 MS - RA	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041
180-160629-12 MSD - RA	NAFREST-BRP-TS2C	Total/NA	Solid	537 (modified)	699041

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site	SSOW#:			

Analysis Requested

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS					
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS1A	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1B	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1C	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1D	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1E	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1F	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1G	8/9/23	1545	G	Solid	N	N	X														4
NAFREST-BRP-TS1H	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X					6
NAFREST-BRP-TS1I	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X					6
NAFREST-BRP-TS2A	8/9/23	1550	G	Solid	N	Y	X														12
NAFREST-BRP-TS2B	8/9/23	1550	G	Solid	N	Y	X														12

180-160629 Chain of Custody

vation Codes:

	M - Hexane
)H	N - None
Acetate	O - AsNaO2
ıc Acid	P - Na2O4S
HSO4	Q - Na2SO3
ıOH	R - Na2S2O3
nchlor	S - H2SO4
scorbic Acid	T - TSP Dodecahydrate
	U - Acetone
I Water	V - MCAA
:DTA	W - pH 4-5
:DA	Z - other (specify)
ər:	

Special Instructions/Note:

Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.

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
Zach Miller	8/9/23 17:00	Geosyntec		8/10/23 0949	EPTME
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

Ver: 01/16/2019

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8/21/2023

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.		**Analysis Requested**		Job #:
Address: 10211 Wincopin Circle 4th 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): 10 Day			
State, Zip: MD, 21044				
Phone:	PC #: MN0832			Other:
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	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)	8260C - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS2C	8/9/23	1550	G	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS3A	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3B	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3C	8/9/23	1555	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS-DUP1A	8/9/23	-	G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1B	8/9/23	-	G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1C	8/9/23	-	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

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: Zach Miller	Date/Time: 8/9/23 17:00	Company: Geosyntec	Received by:	Date/Time: 8/10/23 0944	Company: EPI
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:

Ver 01/16/2019

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-160629 Chain of Custody

Preservation Codes.

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS1A	8/9/23	1545	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS1B	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1C	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1D	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1E	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1F	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1G	8/9/23	1545	G	Solid	N	N	X													4	
NAFREST-BRP-TS1H	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS1I	8/9/23	1545	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS2A	8/9/23	1550	G	Solid	N	Y	X													12	
NAFREST-BRP-TS2B	8/9/23	1550	G	Solid	N	Y	X													12	

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
Zach Miller [signature]	8/9/23 17:00	Geosyntec	D S Monsignor	08/10/23 1000	EETSac
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: 12

Ver: 01/16/2019

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

Chain of Custody Record

IMPORT

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 2 of 2
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 10 Day			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS				Total Number of containers	Special Instructions/Note.
			Preservation Code:		X	X	FJ	N	N	N	N	N	N	N	N	N				X	
NAFREST-BRP-TS2C	8/9/23	1550	G	Solid	N	Y		X	X	X	X	X	X	X	X	X				12	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS3A	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3B	8/9/23	1555	G	Solid	N	N	X													4	
NAFREST-BRP-TS3C	8/9/23	1555	G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS-DUP1A	8/9/23		G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1B	8/9/23		G	Solid	N	N	X													4	
NAFREST-BRP-TS-DUP1C	8/9/23		G	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

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
	Zach Miller	8/9/23 17:00	Geosyntec		08/10/23 1000	
	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: 1.2

Ver: 01/16/2019

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8/21/2023

eurofins | Environment Testing

Sacramento
Sample Receiving Notes

Tracking # 772976547455

Job _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC

Therm ID L04 Corr Factor (+ /) NA °C

Ice ✓ Wet ____ Gel ____ Other ____

Cooler Custody Seal 2212304

Cooler ID ____

Temp Observed 1.2 °C Corrected 1.2 °C
From Temp Blank ☐ Sample ☒

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials DM Date 08/10/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
COC is complete w/o discrepancies	☒	☐	☐
Sample custody seal?	☐	☐	☒
Sample containers have legible labels?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Is the Field Sampler's name on COC?	☒	☐	☐
Samples w/o discrepancies?	☐	☒	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials DM Date 8/10/23

Notes
0.9 Sme ID
NA FKCST BRS TSIC
had have H+I

Trizma Lot #(s) ____

Ammonium Acetate Lot #(s) ____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
NCM Filed?	☒	☐	☐
Samples received within hold time?	☐	☐	☒
Log Release checked in TALS?	☐	☐	☒

Initials DM Date 8/10/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-160629-2

Login Number: 160629
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-160629-2

Login Number: 160629
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 08/10/23 08:17 PM

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	2212304
Sample custody seals, if present, are intact.	N/A	
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	1.2C
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.	False	Refer to Job Narrative for details.
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.	N/A	
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	

From: Glowark, Brandon <brandon.glowark@wsp.com>
Sent: Wednesday, October 4, 2023 11:13 AM
To: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>; Zappia, Kaleigh M (DEC) <Kaleigh.Zappia@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; david.pratt@dec.ny.gov; Bonsteel, Nicole <nicole.bonsteel@wsp.com>; Howe, Alexander <alexander.howe@wsp.com>; Whelan, Vincent <vincent.whelan@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Jen Huha <JHuha@Geosyntec.com>; Kaitlin Ouverson <KOuverson@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Jordyn Confer <jconfer@edgerinc.com>; Cyr, Scott <cyrs@hunt-eas.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; mdunn <mdunn@buildwelliver.com>; Mike Fulkerson <mfulkerson@buildwelliver.com>; Aubri York <AMosier@buildwelliver.com>
Subject: RE: NYSDEC #c808022 - DER-10 Requests to Import Breesport Topsoil for NAF Restoration/Improvements

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Hello Aron,

We have reviewed your request to import 3000 cubic yards of topsoil from the Edger Breesport Pit for NAF restoration and improvements, and find it appropriate documentation to proceed, as long as the imported topsoil meet ECSD required specifications.

Thanks,

Brandon

Brandon Glowark
Technical Professional II

M+ 1 412-304-2038

WSP USA Environment & Infrastructure Inc.
11 Stanwix Street, Suite 950
Pittsburgh, Pennsylvania
15220 USA

wsp.com

From: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>
Sent: Wednesday, October 4, 2023 9:03 AM
To: Zappia, Kaleigh M (DEC) <Kaleigh.Zappia@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>;

david.pratt@dec.ny.gov; Bonsteel, Nicole <nicole.bonsteel@wsp.com>; Howe, Alexander <alexander.howe@wsp.com>; Whelan, Vincent <vincent.whelan@wsp.com>; Glowark, Brandon <brandon.glowark@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Jen Huha <JHuha@Geosyntec.com>; Kaitlin Ouverson <KOuverson@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Jordyn Confer <jconfer@edgerinc.com>; Cyr, Scott <cyrs@hunt-eas.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; mdunn <mdunn@buildwelliver.com>; Mike Fulkerson <mfulkerson@buildwelliver.com>; Aubri York <AMosier@buildwelliver.com>
Subject: RE: NYSDEC #c808022 - DER-10 Requests to Import Breesport Topsoil for NAF Restoration/Improvements

Hi Kaleigh and Scott,

Please find attached a DER-10 Request to Import the next 3,000 cubic yards of topsoil from the Edger Breesport Pit (Blackwell Pit Mined Land ID 80024) for NAF restoration and improvements. This request is for restoration of the EHS softball field.

Best Regards,
Aron

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Senior Engineer

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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: 3,000

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? no

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

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

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

Samples were collected from the Breesport Pit in Breesport, New York. Three composite samples were collected and analyzed for inorganics, SVOCs, PCBs, pesticides, herbicides and total and SPLP PFAs and six grab samples were collected and analyzed for VOCs.

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):

All detections were below the allowable levels for restricted residential use.

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 Civil & Utility, LLC dba RL Callahan

Location where fill was obtained:

Blackwell Pit, St Rte 223, Erin, NY 14838

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

NYSDEC MineID 80024

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 Report 180-162029-1 and 180-162029-2

The information provided on this form is accurate and complete.

Aron Krasnopoler

Digitally signed by Aron Krasnopoler
Date: 2023.10.04 08:41:07 -04'00'

Signature

4 October 2023

Date

Aron Krasnopoler

Print Name

B&B Engineers and Geologists of New York, P.C.

Firm

					Sample Name	NAFREST-BRP-TS4A	NAFREST-BRP-TS4B	NAFREST-BRP-TS4C	NAFREST-BRP-TS5A	NAFREST-BRP-TS5B	NAFREST-BRP-TS5C
					Location	NAFREST-BRP-TS4A	NAFREST-BRP-TS4B	NAFREST-BRP-TS4C	NAFREST-BRP-TS5A	NAFREST-BRP-TS5B	NAFREST-BRP-TS5C
					Sample Date	9/7/2023	9/7/2023	9/7/2023	9/7/2023	9/7/2023	9/7/2023
					Lab Report	180-162029-1	180-162029-1	180-162029-1/2	180-162029-1	180-162029-1	180-162029-1/2
Chemical Group	**Chemical**	**Units**	DER-10 App5 Unrestricted	DER-10 App5 Rest. Res.							
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	N-ethylperfluorooctanesulfonamidoacetic acid (NetFOSAA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorobutanesulfonic acid (PFBS)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorobutanoic acid (PFBA)	ug/kg			--	--	0.087 J	--	--	0.12 J
	Perfluorodecanesulfonic acid (PFDS)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorodecanoic acid (PFDA)	ug/kg			--	--	< 0.23 U	--	--	0.070 J
	Perfluorododecanoic acid (PFDoA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluoroheptanoic acid (PFHpA)	ug/kg			--	--	0.053 J	--	--	0.067 J
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorohexanoic acid (PFHxA)	ug/kg			--	--	0.28	--	--	0.38
	Perfluorononanoic acid (PFNA)	ug/kg			--	--	0.047 J	--	--	0.064 J
	Perfluorooctanesulfonamide (PFOSA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	--	--	0.42	--	--	0.49
	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	--	--	0.17 J	--	--	0.24
	Perfluoropentanoic acid (PFPeA)	ug/kg			--	--	0.12 J	--	--	0.17 J
	Perfluorotetradecanoic acid (PFTeA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluorotridecanoic acid (PFTriA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
	Perfluoroundecanoic acid (PFUnA)	ug/kg			--	--	< 0.23 U	--	--	< 0.22 U
Metals	Arsenic	mg/kg	13	16	--	--	6.1	--	--	5.5
	Barium	mg/kg	350	400	--	--	82	--	--	88
	Beryllium	mg/kg	7.2	47	--	--	0.42 J	--	--	0.36 J
	Cadmium	mg/kg	2.5	4.3	--	--	0.35 J	--	--	0.40 J
	Chromium (III+VI)	mg/kg	19	22	--	--	12	--	--	13
	Chromium, Hexavalent	mg/kg	1	19	--	--	< 0.47 U	--	--	< 0.47 U
	Copper	mg/kg	50	270	--	--	19	--	--	20
	Cyanide Total	mg/kg	27	27	--	--	< 0.47 U	--	--	< 0.47 U
	Lead	mg/kg	63	400	--	--	22	--	--	24
	Manganese	mg/kg	1600	2000	--	--	450	--	--	620
	Mercury	mg/kg	0.18	0.73	--	--	< 0.036 U	--	--	< 0.036 U
	Nickel	mg/kg	30	130	--	--	18	--	--	19
	Selenium	mg/kg	3.9	4	--	--	< 1.2 UT	--	--	< 1.1 UT
	Silver	mg/kg	2	8.3	--	--	< 0.59 U	--	--	< 0.53 U
	Zinc	mg/kg	109	2480	--	--	75	--	--	71
Herbicides	2,4,5-TP (Silvex)	mg/kg	3.8	3.8	--	--	< 0.023 U	--	--	< 0.023 U
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	0.0033	13	--	--	< 0.0020 U	--	--	< 0.0019 U
	4,4'-DDE (p,p'-DDE)	mg/kg	0.0033	8.9	--	--	0.00043 JP	--	--	0.00057 JP
	4,4'-DDT (p,p'-DDT)	mg/kg	0.0033	7.9	--	--	< 0.0020 U	--	--	< 0.0019 U
	Aldrin	mg/kg	0.005	0.097	--	--	< 0.0020 U	--	--	< 0.0019 U
	alpha-BHC	mg/kg	0.02	0.02	--	--	< 0.0020 U	--	--	< 0.0019 U
	alpha-Chlordane	mg/kg			--	--	< 0.0020 U	--	--	0.00088 JP
	beta-BHC	mg/kg	0.036	0.09	--	--	< 0.0020 U	--	--	< 0.0019 U
	delta-BHC	mg/kg	0.04	0.25	--	--	< 0.0020 U	--	--	0.00090 J
	Dieldrin	mg/kg	0.005	0.1	--	--	< 0.0020 U	--	--	< 0.0019 U
	Endosulfan I (alpha)	mg/kg	2.4	24	--	--	< 0.0020 U	--	--	< 0.0019 U
	Endosulfan II (beta)	mg/kg	2.4	24	--	--	< 0.0020 U	--	--	< 0.0019 U
	Endosulfan Sulfate	mg/kg	2.4	24	--	--	< 0.0020 U	--	--	< 0.0019 U
	Endrin	mg/kg	0.014	0.06	--	--	< 0.0020 U	--	--	< 0.0019 U
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	--	--	< 0.0020 U	--	--	< 0.0019 U
	Heptachlor	mg/kg	0.042	0.38	--	--	< 0.0020 U	--	--	< 0.0019 U
PCBs	Aroclor 1016	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1221	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1232	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1242	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1248	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1254	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1260	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1262	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	Aroclor 1268	mg/kg	NS	NS	--	--	< 0.020 U	--	--	< 0.019 U
	PCBs	mg/kg	0.1	1	--	--	< 0.020 U	--	--	< 0.019 U
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	--	--	< 0.078 U	--	--	< 0.15 U
	2-Methylphenol	mg/kg	0.33	0.33	--	--	< 0.039 U	--	--	< 0.077 U
	4-methylphenol	mg/kg	0.33	0.33	--	--	< 0.039 U	--	--	< 0.077 U
	Acenaphthene	mg/kg	20	98	--	--	0.0034 J	--	--	< 0.016 U
	Acenaphthylene	mg/kg	100	100	--	--	0.0051 J	--	--	0.0076 J
	Anthracene	mg/kg	100	100	--	--	0.0086	--	--	0.012 J
	Benz(a)anthracene	mg/kg	1	1	--	--	0.029	--	--	0.037
	Benzo(a)pyrene (BaP)	mg/kg	1	1	--	--	0.038	--	--	0.043
	Benzo(b)fluoranthene	mg/kg	1	1	--	--	0.042	--	--	0.052
	Benzo(g,h,i)perylene	mg/kg	100	100	--	--	0.029	--	--	0.038
	Benzo(k)fluoranthene	mg/kg	0.8	1.7	--	--	0.019	--	--	0.025
	Chrysene	mg/kg	1	1	--	--	0.037	--	--	0.049
	Dibenz(a,h)anthracene	mg/kg	0.33	0.33	--	--	0.0078 J	--	--	0.011 J
	Dibenzofuran	mg/kg	7	59	--	--	< 0.039 U	--	--	< 0.077 U
	Fluoranthene	mg/kg	100	100	--	--	0.049	--	--	0.070
	Fluorene	mg/kg	30	100	--	--	0.0034 J	--	--	< 0.016 U
	Hexachlorobenzene	mg/kg	0.33	1.2	--	--	< 0.0079 U	--	--	< 0.016 U
	Indeno (1,2,3-cd)pyrene	mg/kg	0.5	0.5	--	--	0.025	--	--	0.029
	Naphthalene	mg/kg	12	12	--	--	< 0.0079 U	--	--	< 0.016 U
	Pentachlorophenol	mg/kg	0.8	0.8	--	--	< 0.20 U	--	--	< 0.39 U
	Phenanthrene	mg/kg	100	100	--	--	0.026	--	--	0.034
	Phenol	mg/kg	0.33	0.33	--	--	< 0.039 U	--	--	< 0.077 U
	Pyrene	mg/kg	100	100	--	--	0.042	--	--	0.059
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	1,1-Dichloroethane	mg/kg	0.27	0.27	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	1,1-Dichloroethene	mg/kg	0.33	0.33	< 0.0050 UT	< 0.0051 UT	--	< 0.0051 UT	< 0.0051 UT	--
	1,2-Dichloroethane	mg/kg	0.02	0.02	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Acetone	mg/kg	0.05	0.05	< 0.025 U	< 0.026 U	--	< 0.026 U	< 0.026 U	--
	Benzene	mg/kg	0.06	0.06	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Carbon Tetrachloride	mg/kg	0.76	0.76	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Chlorobenzene	mg/kg	1.1	1.1	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Chloroform	mg/kg	0.37	0.37	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Dichloromethane	mg/kg	0.05	0.05	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Ethylbenzene	mg/kg	1	1	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	< 0.025 U	< 0.026 U	--	< 0.026 U	< 0.026 U	--
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Tetrachloroethene	mg/kg	1.3	1.3	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Toluene	mg/kg	0.7	0.7	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Trichloroethene	mg/kg	0.47	0.47	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Vinyl chloride	mg/kg	0.02	0.02	< 0.0050 U	< 0.0051 U	--	< 0.0051 U	< 0.0051 U	--
	Xylenes (Total)	mg/kg	0.26	1.6	< 0.010 U	< 0.010 U	--	< 0.010 U	< 0.010 U	--

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

				Sample Name	NAFREST-BRP-TS6A	NAFREST-BRP-TS6B	NAFREST-BRP-TS6C
				Location	NAFREST-BRP-TS6A	NAFREST-BRP-TS6B	NAFREST-BRP-TS6C
				Sample Date	9/7/2023	9/7/2023	9/7/2023
				Lab Report	180-162029-1	180-162029-1	180-162029-1/2
Chemical Group	**Chemical**	**Units**	DER-10 App5 Unrestricted	DER-10 App5 Rest. Res.			
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg			--	--	< 0.22 U
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg			--	--	< 0.22 U
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg			--	--	< 0.22 U
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			--	--	< 0.22 U
	Perfluorobutanesulfonic acid (PFBS)	ug/kg			--	--	< 0.22 U
	Perfluorobutanoic acid (PFBA)	ug/kg			--	--	0.11 J
	Perfluorodecanesulfonic acid (PFDS)	ug/kg			--	--	< 0.22 U
	Perfluorodecanoic acid (PFDA)	ug/kg			--	--	< 0.22 U
	Perfluorododecanoic acid (PFDoA)	ug/kg			--	--	< 0.22 U
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg			--	--	< 0.22 U
	Perfluoroheptanoic acid (PFHpA)	ug/kg			--	--	0.057 J
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			--	--	< 0.22 U
	Perfluorohexanoic acid (PFHxA)	ug/kg			--	--	0.36
	Perfluorononanoic acid (PFNA)	ug/kg			--	--	0.050 J
	Perfluorooctanesulfonamide (PFOSA)	ug/kg			--	--	< 0.22 U
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	--	--	0.38
	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	--	--	0.19 J
	Perfluoropentanoic acid (PFPeA)	ug/kg			--	--	0.16 J
	Perfluorotetradecanoic acid (PFTeA)	ug/kg			--	--	< 0.22 U
	Perfluorotridecanoic acid (PFTriA)	ug/kg			--	--	< 0.22 U
	Perfluoroundecanoic acid (PFUnA)	ug/kg			--	--	< 0.22 U
Metals	Arsenic	mg/kg	13	16	--	--	5.1
	Barium	mg/kg	350	400	--	--	67
	Beryllium	mg/kg	7.2	47	--	--	0.37 J
	Cadmium	mg/kg	2.5	4.3	--	--	0.35 J
	Chromium (III+VI)	mg/kg	19	22	--	--	12
	Chromium, Hexavalent	mg/kg	1	19	--	--	< 0.47 U
	Copper	mg/kg	50	270	--	--	21
	Cyanide Total	mg/kg	27	27	--	--	< 0.51 U
	Lead	mg/kg	63	400	--	--	18
	Manganese	mg/kg	1600	2000	--	--	430
	Mercury	mg/kg	0.18	0.73	--	--	< 0.037 U
	Nickel	mg/kg	30	130	--	--	18
	Selenium	mg/kg	3.9	4	--	--	< 0.99 UT
	Silver	mg/kg	2	8.3	--	--	< 0.49 U
	Zinc	mg/kg	109	2480	--	--	67
Herbicides	2,4,5-TP (Silvex)	mg/kg	3.8	3.8	--	--	< 0.023 U
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	0.0033	13	--	--	< 0.0020 U
	4,4'-DDE (p,p'-DDE)	mg/kg	0.0033	8.9	--	--	0.00097 JP
	4,4'-DDT (p,p'-DDT)	mg/kg	0.0033	7.9	--	--	< 0.0020 U
	Aldrin	mg/kg	0.005	0.097	--	--	< 0.0020 U
	alpha-BHC	mg/kg	0.02	0.02	--	--	< 0.0020 U
	alpha-Chlordane	mg/kg			--	--	0.00059 JP
	beta-BHC	mg/kg	0.036	0.09	--	--	< 0.0020 U
	delta-BHC	mg/kg	0.04	0.25	--	--	0.00083 J
	Dieldrin	mg/kg	0.005	0.1	--	--	< 0.0020 U
	Endosulfan I (alpha)	mg/kg	2.4	24	--	--	< 0.0020 U
	Endosulfan II (beta)	mg/kg	2.4	24	--	--	< 0.0020 U
	Endosulfan Sulfate	mg/kg	2.4	24	--	--	< 0.0020 U
	Endrin	mg/kg	0.014	0.06	--	--	< 0.0020 U
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	--	--	< 0.0020 U
	Heptachlor	mg/kg	0.042	0.38	--	--	< 0.0020 U
PCBs	Aroclor 1016	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1221	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1232	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1242	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1248	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1254	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1260	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1262	mg/kg	NS	NS	--	--	< 0.019 U
	Aroclor 1268	mg/kg	NS	NS	--	--	< 0.019 U
	PCBs	mg/kg	0.1	1	--	--	< 0.019 U
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	--	--	< 0.077 U
	2-Methylphenol	mg/kg	0.33	0.33	--	--	< 0.038 U
	4-methylphenol	mg/kg	0.33	0.33	--	--	< 0.038 U
	Acenaphthene	mg/kg	20	98	--	--	< 0.0078 U
	Acenaphthylene	mg/kg	100	100	--	--	0.0093
	Anthracene	mg/kg	100	100	--	--	0.0093
	Benz(a)anthracene	mg/kg	1	1	--	--	0.031
	Benzo(a)pyrene (BaP)	mg/kg	1	1	--	--	0.037
	Benzo(b)fluoranthene	mg/kg	1	1	--	--	0.047
	Benzo(g,h,i)perylene	mg/kg	100	100	--	--	0.033
	Benzo(k)fluoranthene	mg/kg	0.8	1.7	--	--	0.020
	Chrysene	mg/kg	1	1	--	--	0.044
	Dibenz(a,h)anthracene	mg/kg	0.33	0.33	--	--	0.0076 J
	Dibenzofuran	mg/kg	7	59	--	--	< 0.038 U
	Fluoranthene	mg/kg	100	100	--	--	0.058
	Fluorene	mg/kg	30	100	--	--	0.0030 J
	Hexachlorobenzene	mg/kg	0.33	1.2	--	--	< 0.0078 U
	Indeno (1,2,3-cd)pyrene	mg/kg	0.5	0.5	--	--	0.028
	Naphthalene	mg/kg	12	12	--	--	< 0.0078 U
	Pentachlorophenol	mg/kg	0.8	0.8	--	--	< 0.20 U
	Phenanthrene	mg/kg	100	100	--	--	0.025
	Phenol	mg/kg	0.33	0.33	--	--	< 0.038 U
	Pyrene	mg/kg	100	100	--	--	0.050
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	< 0.0048 U	< 0.0054 U	--
	1,1-Dichloroethane	mg/kg	0.27	0.27	< 0.0048 U	< 0.0054 U	--
	1,1-Dichloroethene	mg/kg	0.33	0.33	< 0.0048 UT	< 0.0054 UT	--
	1,2-Dichloroethane	mg/kg	0.02	0.02	< 0.0048 U	< 0.0054 U	--
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	< 0.0048 U	< 0.0054 U	--
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	< 0.0048 U	< 0.0054 U	--
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	< 0.0048 U	< 0.0054 U	--
	Acetone	mg/kg	0.05	0.05	< 0.024 U	< 0.027 U	--
	Benzene	mg/kg	0.06	0.06	< 0.0048 U	< 0.0054 U	--
	Carbon Tetrachloride	mg/kg	0.76	0.76	< 0.0048 U	< 0.0054 U	--
	Chlorobenzene	mg/kg	1.1	1.1	< 0.0048 U	< 0.0054 U	--
	Chloroform	mg/kg	0.37	0.37	< 0.0048 U	< 0.0054 U	--
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	< 0.0048 U	< 0.0054 U	--
	Dichloromethane	mg/kg	0.05	0.05	< 0.0048 U	< 0.0054 U	--
	Ethylbenzene	mg/kg	1	1	< 0.0048 U	< 0.0054 U	--
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	< 0.024 U	< 0.027 U	--
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	< 0.0048 U	< 0.0054 U	--
	Tetrachloroethene	mg/kg	1.3	1.3	< 0.0048 U	< 0.0054 U	--
	Toluene	mg/kg	0.7	0.7	< 0.0048 U	< 0.0054 U	--
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	< 0.0048 U	< 0.0054 U	--
	Trichloroethene	mg/kg	0.47	0.47	< 0.0048 U	< 0.0054 U	--
	Vinyl chloride	mg/kg	0.02	0.02	< 0.0048 U	< 0.0054 U	--
	Xylenes (Total)	mg/kg	0.26	1.6	< 0.0096 U	< 0.011 U	--

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated
Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray
Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-162029-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Job ID: 180-162029-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-162029-1

Receipt
The samples were received on 9/8/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.6º C, 2.3º C, 3.2º C, 3.3º C and 5.8º C.

GC/MS VOA
Method 8260C: The RPD between the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 180-446011 was above the control limits for the following analyte: 1,1-Dichloroethene. The recoveries were within the control limits.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 180-446011 was outside above criteria for the following analytes: Acetone, 2-Butanone, and 1,4-Dioxane. 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 8270D LL: The following sample was diluted due to the nature of the sample matrix (the sample extract was slightly viscous): NAFREST-BRP-TS5C (180-162029-6). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8081B: The continuing calibration verification (CCV) analyzed in batch 180-447816 (CCVIS 180-447816/4) was below criteria on both columns for delta-BHC and beta-BHC. 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. Only the laboratory control sample/laboratory control sample duplicate (LCS/LCSD were analyzed in this batch and were within the control limits.

Method 8082A: The continuing calibration verification (CCV) analyzed in batch 180-446497 (CCV 180-446497/4) was below criteria for aroclor 1248 on column RTX-CLP1. Aroclor 1248 was not detected in the associated samples on either column.

Method 8082A: The continuing calibration verification (CCV) analyzed in batch 180-446497 (CCVIS 180-446497/27) was below criteria for aroclors 1016 and 1260 on both columns. A reporting limit (RL) standard was analyzed, and both aroclors were detected. Since the associated samples did not have either aroclor detected, the results were reported. Surrogate tetrachloro-m-xylene was also below criteria on column RTX-CLP2. The associated sample surrogate recoveries were within the control limits.

Method 8151A: The continuing calibration verifications (CCV) analyzed in batch180-446784 were above criteria on one or both columns for the following analytes: silvex (2,4,5-TP) and surrogate 2,4-dichlorophenyl acetic acid. As the CCVs were high, all surrogate and LCS recoveries were within the control limits, and there were no target analytes 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
Method 6010C: The continuing calibration verification (CCV) associated with batch 180-447798 (CCV 180-447798/85) recovered 1% above the control limit for selenium. As the samples associated with this CCV did not have selenium detected, the results were reported.

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.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control 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.

GC 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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-24

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

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-162029-1	NAFREST-BRP-TS4A	Solid	09/07/23 13:00	09/08/23 09:00
180-162029-2	NAFREST-BRP-TS4B	Solid	09/07/23 13:00	09/08/23 09:00
180-162029-3	NAFREST-BRP-TS4C	Solid	09/07/23 13:00	09/08/23 09:00
180-162029-4	NAFREST-BRP-TS5A	Solid	09/07/23 13:05	09/08/23 09:00
180-162029-5	NAFREST-BRP-TS5B	Solid	09/07/23 13:05	09/08/23 09:00
180-162029-6	NAFREST-BRP-TS5C	Solid	09/07/23 13:05	09/08/23 09:00
180-162029-7	NAFREST-BRP-TS6A	Solid	09/07/23 13:10	09/08/23 09:00
180-162029-8	NAFREST-BRP-TS6B	Solid	09/07/23 13:10	09/08/23 09:00
180-162029-9	NAFREST-BRP-TS6C	Solid	09/07/23 13:10	09/08/23 09:00

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 6010C	Metals (ICP)	SW846	EET PIT
EPA 7471B	Mercury (CVAA)	SW846	EET PIT
2540G	SM 2540G	SM22	EET PIT
EPA 7196A	Chromium, Hexavalent	SW846	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
3050B	Preparation, Metals	SW846	EET PIT
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	EET PIT
3660B	Sulfur Cleanup	SW846	EET PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	EET PIT
7471B	Preparation, Mercury	SW846	EET PIT
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET 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:

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS4A
Lab Sample ID: 180-162029-1
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS4A
Lab Sample ID: 180-162029-1
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8263 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 23:40	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS4B
Lab Sample ID: 180-162029-2
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS4B
Lab Sample ID: 180-162029-2
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.7625 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 21:47	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00

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			446224	09/12/23 11:55	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

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	446307	09/13/23 06:57	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	446459	09/14/23 13:10	VVP	EET PIT
	Instrument ID: CH732									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	20.0 mL	446310	09/13/23 07:02	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	446466	09/14/23 09:37	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.1 g	20.0 mL	446403	09/13/23 14:00	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	446453	09/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	446454	09/14/23 05:10	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	446497	09/14/23 20:34	JMO	EET PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.1 g	40.0 mL	446440	09/13/23 23:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	446784	09/18/23 14:21	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.50 g	50 mL	446101	09/11/23 12:40	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			447798	09/27/23 18:24	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.65 g	100 mL	446073	09/11/23 11:30	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			446215	09/12/23 08:51	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.50 g	100 mL	446237	09/12/23 12:48	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	446692	09/15/23 11:31	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.25 mL	10 mL	446417	09/13/23 15:00	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			446436	09/13/23 17:16	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS5A
Lab Sample ID: 180-162029-4
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS5A
Lab Sample ID: 180-162029-4
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
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	5035			5.6869 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 22:09	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS5B
Lab Sample ID: 180-162029-5
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS5B
Lab Sample ID: 180-162029-5
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
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	5035			5.7787 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 22:32	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00

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			446252	09/12/23 14:45	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
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			15.1 g	0.5 mL	446307	09/13/23 06:57	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		2	1 mL	1 mL	446459	09/14/23 13:32	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.4 g	20.0 mL	446310	09/13/23 07:02	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	446466	09/14/23 09:54	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.2 g	20.0 mL	446403	09/13/23 14:00	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	446453	09/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	446454	09/14/23 05:10	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	446497	09/14/23 20:52	JMO	EET PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.2 g	40.0 mL	446440	09/13/23 23:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	446784	09/18/23 14:41	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.55 g	50 mL	446101	09/11/23 12:40	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			447798	09/27/23 18:29	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.65 g	100 mL	446073	09/11/23 11:30	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			446215	09/12/23 08:52	RJR	EET PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
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	3060A			2.50 g	100 mL	446237	09/12/23 12:48	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	446692	09/15/23 11:32	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.25 mL	10 mL	446417	09/13/23 15:00	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			446436	09/13/23 17:21	CMR	EET PIT
	Instrument ID: SEAL1									

Client Sample ID: NAFREST-BRP-TS6A
Lab Sample ID: 180-162029-7
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS6A
Lab Sample ID: 180-162029-7
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.8862 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 22:54	PJJ	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS6B
Lab Sample ID: 180-162029-8
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00

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			446261	09/12/23 16:00	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS6B
Lab Sample ID: 180-162029-8
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3625 g	5 mL	446017	09/09/23 11:34	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	446011	09/09/23 23:17	PJJ	EET PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00

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			446224	09/12/23 11:55	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
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			15.1 g	0.5 mL	446307	09/13/23 06:57	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	446459	09/14/23 13:54	VVP	EET PIT
	Instrument ID: CH732									
Total/NA	Prep	3541			15.1 g	20.0 mL	446310	09/13/23 07:02	VJC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	446466	09/14/23 10:11	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.1 g	20.0 mL	446403	09/13/23 14:00	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	446453	09/14/23 05:08	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	446454	09/14/23 05:10	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	446497	09/14/23 21:11	JMO	EET PIT
	Instrument ID: CHGC16									
Total/NA	Prep	8151A			10.1 g	40.0 mL	446440	09/13/23 23:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	446784	09/18/23 15:00	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			0.59 g	50 mL	446101	09/11/23 12:40	S1Z	EET PIT
Total/NA	Analysis	EPA 6010C		1			447798	09/27/23 18:34	AAS	EET PIT
	Instrument ID: Q									
Total/NA	Prep	7471B			0.62 g	100 mL	446073	09/11/23 11:30	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			446215	09/12/23 08:53	RJR	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.49 g	100 mL	446237	09/12/23 12:48	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	446692	09/15/23 11:38	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.23 mL	10 mL	446417	09/13/23 15:00	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			446436	09/13/23 17:22	CMR	EET PIT
	Instrument ID: SEAL1									

Laboratory References:
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Analyst References:

Lab: EET PIT

Batch Type: Cleanup

JMO = John Oravec

Batch Type: Prep

CBY = Charles Yushinski
CMC = Candace California
CMR = Carl Reagle
DVC = Daniel Capodanno
MTW = Michael Wesoloski
PJJ = Patrick Journet
S1Z = Sage Ziviello
VJC = Vincent Cervone

Batch Type: Analysis

AAS = Ariana Swick
CMC = Candace California
CMR = Carl Reagle
CRL = Craig Tronzo
JMO = John Oravec
PJJ = Patrick Journet
RJR = Ron Rosenbaum
SMW = Shelby Walters
VVP = Vincent Piccolino

Client Sample ID: NAFREST-BRP-TS4A
Lab Sample ID: 180-162029-1

Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.8

Method: SW846 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	☼	09/09/23 11:34	09/09/23 23:40	1
Benzene	ND		0.0050	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Chloroform	ND		0.0050	0.0034	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,1-Dichloroethene	ND	*1	0.0050	0.0023	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Toluene	ND		0.0050	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg	☼	09/09/23 11:34	09/09/23 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*60 - 124*	*09/09/23 11:34*	*09/09/23 23:40*	*1*
Dibromofluoromethane (Surr)	*91*		*69 - 126*	*09/09/23 11:34*	*09/09/23 23:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 135*	*09/09/23 11:34*	*09/09/23 23:40*	*1*
Toluene-d8 (Surr)	*74*		*67 - 134*	*09/09/23 11:34*	*09/09/23 23:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**14.2**		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	**85.8**		0.1	0.1	%			09/12/23 16:00	1

Client Sample ID: NAFREST-BRP-TS4B
Lab Sample ID: 180-162029-2

Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: SW846 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	☼	09/09/23 11:34	09/09/23 21:47	1
Benzene	ND		0.0051	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1

Client Sample ID: NAFREST-BRP-TS4B
Lab Sample ID: 180-162029-2
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.026	0.0026	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Carbon tetrachloride	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Chlorobenzene	ND		0.0051	0.0013	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Chloroform	ND		0.0051	0.0034	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
cis-1,2-Dichloroethene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,2-Dichlorobenzene	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,3-Dichlorobenzene	ND		0.0051	0.0032	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,4-Dichlorobenzene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,1-Dichloroethane	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,1-Dichloroethene	ND	*1	0.0051	0.0023	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,4-Dioxane	ND		1.0	0.078	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Ethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Methylene Chloride	ND		0.0051	0.0046	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Methyl tert-butyl ether	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
n-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
N-Propylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
tert-Butylbenzene	ND		0.0051	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Tetrachloroethene	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Toluene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
trans-1,2-Dichloroethene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,1,1-Trichloroethane	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Trichloroethene	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Vinyl chloride	ND		0.0051	0.0037	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1
Xylenes, Total	ND		0.010	0.0074	mg/Kg	☼	09/09/23 11:34	09/09/23 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*60 - 124*	*09/09/23 11:34*	*09/09/23 21:47*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 126*	*09/09/23 11:34*	*09/09/23 21:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*73 - 135*	*09/09/23 11:34*	*09/09/23 21:47*	*1*
Toluene-d8 (Surr)	*76*		*67 - 134*	*09/09/23 11:34*	*09/09/23 21:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**15.4**		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	**84.6**		0.1	0.1	%			09/12/23 16:00	1

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0034**	**J**	0.0079	0.0023	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Acenaphthylene	**0.0051**	**J**	0.0079	0.0017	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Anthracene	**0.0086**		0.0079	0.0020	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Benzo[a]anthracene	**0.029**		0.0079	0.0035	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: SW846 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	**0.038**		0.0079	0.0034	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Benzo[b]fluoranthene	**0.042**		0.0079	0.0019	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Benzo[g,h,i]perylene	**0.029**		0.0079	0.0017	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Benzo[k]fluoranthene	**0.019**		0.0079	0.0023	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Chrysene	**0.037**		0.0079	0.0043	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Dibenz(a,h)anthracene	**0.0078**	**J**	0.0079	0.0050	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Dibenzofuran	ND		0.039	0.014	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
1,4-Dioxane	ND		0.078	0.012	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Fluoranthene	**0.049**		0.0079	0.0021	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Fluorene	**0.0034**	**J**	0.0079	0.0015	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Hexachlorobenzene	ND		0.0079	0.0028	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Indeno[1,2,3-cd]pyrene	**0.025**		0.0079	0.0039	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
2-Methylphenol	ND		0.039	0.011	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Methylphenol, 3 & 4	ND		0.039	0.011	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Naphthalene	ND		0.0079	0.0015	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Pentachlorophenol	ND		0.20	0.063	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Phenanthrene	**0.026**		0.0079	0.0021	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Phenol	ND		0.039	0.012	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1
Pyrene	**0.042**		0.0079	0.0019	mg/Kg	☼	09/13/23 06:57	09/14/23 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*35 - 105*	*09/13/23 06:57*	*09/14/23 13:10*	*1*
2-Fluorophenol (Surr)	*52*		*32 - 105*	*09/13/23 06:57*	*09/14/23 13:10*	*1*
Nitrobenzene-d5 (Surr)	*59*		*34 - 109*	*09/13/23 06:57*	*09/14/23 13:10*	*1*
Phenol-d5 (Surr)	*57*		*34 - 105*	*09/13/23 06:57*	*09/14/23 13:10*	*1*
Terphenyl-d14 (Surr)	*57*		*20 - 117*	*09/13/23 06:57*	*09/14/23 13:10*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*20 - 119*	*09/13/23 06:57*	*09/14/23 13:10*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
beta-BHC	ND		0.0020	0.00053	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
cis-Chlordane	ND		0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
4,4'-DDD	ND		0.0020	0.00041	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
4,4'-DDE	**0.00043**	**J p**	0.0020	0.00039	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
delta-BHC	ND		0.0020	0.00061	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Endosulfan sulfate	ND		0.0020	0.00089	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Endrin	ND		0.0020	0.00036	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
gamma-BHC (Lindane)	ND		0.0020	0.00050	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1
Heptachlor	ND		0.0020	0.00060	mg/Kg	☼	09/13/23 07:02	09/14/23 09:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*42 - 124*	*09/13/23 07:02*	*09/14/23 09:37*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 124*	*09/13/23 07:02*	*09/14/23 09:37*	*1*
Tetrachloro-m-xylene	*88*		*40 - 137*	*09/13/23 07:02*	*09/14/23 09:37*	*1*

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3

Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*40 - 137*	*09/13/23 07:02*	*09/14/23 09:37*	*1*

Method: SW846 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	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1221	ND		0.020	0.0069	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1232	ND		0.020	0.0048	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1242	ND		0.020	0.0029	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1248	ND		0.020	0.0047	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1254	ND		0.020	0.0059	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1260	ND		0.020	0.0056	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1262	ND		0.020	0.0069	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1
PCB-1268	ND		0.020	0.0026	mg/Kg	☼	09/13/23 14:00	09/14/23 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*	*09/13/23 14:00*	*09/14/23 20:34*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*63 - 138*	*09/13/23 14:00*	*09/14/23 20:34*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*55 - 135*	*09/13/23 14:00*	*09/14/23 20:34*	*1*
Tetrachloro-m-xylene (Surr)	*83*		*55 - 135*	*09/13/23 14:00*	*09/14/23 20:34*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.013	mg/Kg	☼	09/13/23 23:30	09/18/23 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*101*		*48 - 127*	*09/13/23 23:30*	*09/18/23 14:21*	*1*
2,4-Dichlorophenylacetic acid	*126*		*48 - 127*	*09/13/23 23:30*	*09/18/23 14:21*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.1**		1.2	0.74	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Barium	**82**		24	4.2	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Beryllium	**0.42**	**J**	0.47	0.13	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Cadmium	**0.35**	**J**	0.59	0.087	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Chromium	**12**		0.59	0.54	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Copper	**19**		3.0	1.8	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Lead	**22**		1.2	1.0	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Manganese	**450**		1.8	0.33	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Nickel	**18**		4.7	0.60	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Selenium	ND	^+	1.2	0.54	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Silver	ND		0.59	0.12	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1
Zinc	**75**		2.4	1.7	mg/Kg	☼	09/11/23 12:40	09/27/23 18:24	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.036	0.023	mg/Kg	☼	09/11/23 11:30	09/12/23 08:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**15.4**		0.1	0.1	%			09/12/23 11:55	1
Percent Solids (SM22 2540G)	**84.6**		0.1	0.1	%			09/12/23 11:55	1

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium (SW846 EPA 7196A)	ND		0.47	0.25	mg/Kg	☼	09/12/23 12:48	09/15/23 11:31	1
Cyanide, Total (SW846 EPA 9014)	ND		0.47	0.36	mg/Kg	☼	09/13/23 15:00	09/13/23 17:16	1

Client Sample ID: NAFREST-BRP-TS5A
Lab Sample ID: 180-162029-4
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 86.1

Method: SW846 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	☼	09/09/23 11:34	09/09/23 22:09	1
Benzene	ND		0.0051	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
2-Butanone (MEK)	ND		0.026	0.0026	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Carbon tetrachloride	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Chlorobenzene	ND		0.0051	0.0013	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Chloroform	ND		0.0051	0.0034	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
cis-1,2-Dichloroethene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,2-Dichlorobenzene	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,3-Dichlorobenzene	ND		0.0051	0.0031	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,4-Dichlorobenzene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,1-Dichloroethane	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,1-Dichloroethene	ND	*1	0.0051	0.0023	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,4-Dioxane	ND		1.0	0.077	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Ethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Methylene Chloride	ND		0.0051	0.0046	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Methyl tert-butyl ether	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
n-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
N-Propylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
tert-Butylbenzene	ND		0.0051	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Tetrachloroethene	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Toluene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
trans-1,2-Dichloroethene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,1,1-Trichloroethane	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Trichloroethene	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Vinyl chloride	ND		0.0051	0.0037	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1
Xylenes, Total	ND		0.010	0.0074	mg/Kg	☼	09/09/23 11:34	09/09/23 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*60 - 124*	*09/09/23 11:34*	*09/09/23 22:09*	*1*
Dibromofluoromethane (Surr)	*96*		*69 - 126*	*09/09/23 11:34*	*09/09/23 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*73 - 135*	*09/09/23 11:34*	*09/09/23 22:09*	*1*
Toluene-d8 (Surr)	*82*		*67 - 134*	*09/09/23 11:34*	*09/09/23 22:09*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**13.9**		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	**86.1**		0.1	0.1	%			09/12/23 16:00	1

Client Sample ID: NAFREST-BRP-TS5B
Lab Sample ID: 180-162029-5

Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.2

Method: SW846 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	☼	09/09/23 11:34	09/09/23 22:32	1
Benzene	ND		0.0051	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
2-Butanone (MEK)	ND		0.026	0.0026	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Carbon tetrachloride	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Chlorobenzene	ND		0.0051	0.0013	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Chloroform	ND		0.0051	0.0034	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
cis-1,2-Dichloroethene	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,2-Dichlorobenzene	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,3-Dichlorobenzene	ND		0.0051	0.0032	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,4-Dichlorobenzene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,1-Dichloroethane	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,2-Dichloroethane	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,1-Dichloroethene	ND	*1	0.0051	0.0023	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,4-Dioxane	ND		1.0	0.078	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Ethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Methylene Chloride	ND		0.0051	0.0046	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Methyl tert-butyl ether	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
n-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
N-Propylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
sec-Butylbenzene	ND		0.0051	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
tert-Butylbenzene	ND		0.0051	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Tetrachloroethene	ND		0.0051	0.0021	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Toluene	ND		0.0051	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
trans-1,2-Dichloroethene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,1,1-Trichloroethane	ND		0.0051	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Trichloroethene	ND		0.0051	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,2,4-Trimethylbenzene	ND		0.0051	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
1,3,5-Trimethylbenzene	ND		0.0051	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Vinyl chloride	ND		0.0051	0.0037	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1
Xylenes, Total	ND		0.010	0.0074	mg/Kg	☼	09/09/23 11:34	09/09/23 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*60 - 124*	*09/09/23 11:34*	*09/09/23 22:32*	*1*
Dibromofluoromethane (Surr)	*96*		*69 - 126*	*09/09/23 11:34*	*09/09/23 22:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*73 - 135*	*09/09/23 11:34*	*09/09/23 22:32*	*1*
Toluene-d8 (Surr)	*78*		*67 - 134*	*09/09/23 11:34*	*09/09/23 22:32*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**15.8**		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	**84.2**		0.1	0.1	%			09/12/23 16:00	1

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6

Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.016	0.0045	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Acenaphthylene	**0.0076**	**J**	0.016	0.0034	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**0.012**	**J**	0.016	0.0040	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Benzo[a]anthracene	**0.037**		0.016	0.0070	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Benzo[a]pyrene	**0.043**		0.016	0.0067	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Benzo[b]fluoranthene	**0.052**		0.016	0.0038	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Benzo[g,h,i]perylene	**0.038**		0.016	0.0033	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Benzo[k]fluoranthene	**0.025**		0.016	0.0046	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Chrysene	**0.049**		0.016	0.0086	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Dibenz(a,h)anthracene	**0.011**	**J**	0.016	0.0099	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Dibenzofuran	ND		0.077	0.029	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
1,4-Dioxane	ND		0.15	0.024	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Fluoranthene	**0.070**		0.016	0.0041	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Fluorene	ND		0.016	0.0030	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Hexachlorobenzene	ND		0.016	0.0055	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Indeno[1,2,3-cd]pyrene	**0.029**		0.016	0.0077	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
2-Methylphenol	ND		0.077	0.022	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Methylphenol, 3 & 4	ND		0.077	0.023	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Naphthalene	ND		0.016	0.0030	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Pentachlorophenol	ND		0.39	0.12	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Phenanthrene	**0.034**		0.016	0.0042	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Phenol	ND		0.077	0.023	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2
Pyrene	**0.059**		0.016	0.0037	mg/Kg	☼	09/13/23 06:57	09/14/23 13:32	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*35 - 105*	*09/13/23 06:57*	*09/14/23 13:32*	*2*
2-Fluorophenol (Surr)	*58*		*32 - 105*	*09/13/23 06:57*	*09/14/23 13:32*	*2*
Nitrobenzene-d5 (Surr)	*70*		*34 - 109*	*09/13/23 06:57*	*09/14/23 13:32*	*2*
Phenol-d5 (Surr)	*66*		*34 - 105*	*09/13/23 06:57*	*09/14/23 13:32*	*2*
Terphenyl-d14 (Surr)	*69*		*20 - 117*	*09/13/23 06:57*	*09/14/23 13:32*	*2*
2,4,6-Tribromophenol (Surr)	*82*		*20 - 119*	*09/13/23 06:57*	*09/14/23 13:32*	*2*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0019	0.00059	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
alpha-BHC	ND		0.0019	0.00047	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
beta-BHC	ND		0.0019	0.00052	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
cis-Chlordane	**0.00088**	**J p**	0.0019	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
4,4'-DDD	ND		0.0019	0.00040	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
4,4'-DDE	**0.00057**	**J p**	0.0019	0.00039	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
4,4'-DDT	ND		0.0019	0.0014	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
delta-BHC	**0.00090**	**J**	0.0019	0.00060	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Dieldrin	ND		0.0019	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Endosulfan I	ND		0.0019	0.00051	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Endosulfan II	ND		0.0019	0.00042	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Endosulfan sulfate	ND		0.0019	0.00087	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Endrin	ND		0.0019	0.00035	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
gamma-BHC (Lindane)	ND		0.0019	0.00049	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1
Heptachlor	ND		0.0019	0.00059	mg/Kg	☼	09/13/23 07:02	09/14/23 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*86*		*42 - 124*	*09/13/23 07:02*	*09/14/23 09:54*	*1*

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6

Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 124*	*09/13/23 07:02*	*09/14/23 09:54*	*1*
Tetrachloro-m-xylene	*86*		*40 - 137*	*09/13/23 07:02*	*09/14/23 09:54*	*1*
Tetrachloro-m-xylene	*84*		*40 - 137*	*09/13/23 07:02*	*09/14/23 09:54*	*1*

Method: SW846 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	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1221	ND		0.019	0.0068	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1232	ND		0.019	0.0047	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1242	ND		0.019	0.0028	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1248	ND		0.019	0.0046	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1254	ND		0.019	0.0058	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1262	ND		0.019	0.0068	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1
PCB-1268	ND		0.019	0.0026	mg/Kg	☼	09/13/23 14:00	09/14/23 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*93*		*63 - 138*	*09/13/23 14:00*	*09/14/23 20:52*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*63 - 138*	*09/13/23 14:00*	*09/14/23 20:52*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*55 - 135*	*09/13/23 14:00*	*09/14/23 20:52*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*55 - 135*	*09/13/23 14:00*	*09/14/23 20:52*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.013	mg/Kg	☼	09/13/23 23:30	09/18/23 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*90*		*48 - 127*	*09/13/23 23:30*	*09/18/23 14:41*	*1*
2,4-Dichlorophenylacetic acid	*119*		*48 - 127*	*09/13/23 23:30*	*09/18/23 14:41*	*1*

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**		1.1	0.67	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Barium	**88**		21	3.8	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Beryllium	**0.36**	**J**	0.42	0.12	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Cadmium	**0.40**	**J**	0.53	0.078	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Chromium	**13**		0.53	0.48	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Copper	**20**		2.7	1.6	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Lead	**24**		1.1	0.92	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Manganese	**620**		1.6	0.30	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Nickel	**19**		4.2	0.53	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Selenium	ND	^+	1.1	0.49	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Silver	ND		0.53	0.11	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1
Zinc	**71**		2.1	1.5	mg/Kg	☼	09/11/23 12:40	09/27/23 18:29	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.036	0.023	mg/Kg	☼	09/11/23 11:30	09/12/23 08:52	1

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**14.3**		0.1	0.1	%			09/12/23 14:45	1
Percent Solids (SM22 2540G)	**85.7**		0.1	0.1	%			09/12/23 14:45	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.47	0.25	mg/Kg	☼	09/12/23 12:48	09/15/23 11:32	1
Cyanide, Total (SW846 EPA 9014)	ND		0.47	0.35	mg/Kg	☼	09/13/23 15:00	09/13/23 17:21	1

Client Sample ID: NAFREST-BRP-TS6A
Lab Sample ID: 180-162029-7
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 88.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.024	0.0038	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Benzene	ND		0.0048	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
2-Butanone (MEK)	ND		0.024	0.0024	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Carbon tetrachloride	ND		0.0048	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Chlorobenzene	ND		0.0048	0.0013	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Chloroform	ND		0.0048	0.0032	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
cis-1,2-Dichloroethene	ND		0.0048	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,2-Dichlorobenzene	ND		0.0048	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,3-Dichlorobenzene	ND		0.0048	0.0030	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,4-Dichlorobenzene	ND		0.0048	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,1-Dichloroethane	ND		0.0048	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,2-Dichloroethane	ND		0.0048	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,1-Dichloroethene	ND	*1	0.0048	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,4-Dioxane	ND		0.96	0.073	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Ethylbenzene	ND		0.0048	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Methylene Chloride	ND		0.0048	0.0043	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Methyl tert-butyl ether	ND		0.0048	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
n-Butylbenzene	ND		0.0048	0.0024	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
N-Propylbenzene	ND		0.0048	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
sec-Butylbenzene	ND		0.0048	0.0024	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
tert-Butylbenzene	ND		0.0048	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Tetrachloroethene	ND		0.0048	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Toluene	ND		0.0048	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
trans-1,2-Dichloroethene	ND		0.0048	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,1,1-Trichloroethane	ND		0.0048	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Trichloroethene	ND		0.0048	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,2,4-Trimethylbenzene	ND		0.0048	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
1,3,5-Trimethylbenzene	ND		0.0048	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Vinyl chloride	ND		0.0048	0.0035	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1
Xylenes, Total	ND		0.0096	0.0069	mg/Kg	☼	09/09/23 11:34	09/09/23 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*60 - 124*	*09/09/23 11:34*	*09/09/23 22:54*	*1*
Dibromofluoromethane (Surr)	*101*		*69 - 126*	*09/09/23 11:34*	*09/09/23 22:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*73 - 135*	*09/09/23 11:34*	*09/09/23 22:54*	*1*
Toluene-d8 (Surr)	*79*		*67 - 134*	*09/09/23 11:34*	*09/09/23 22:54*	*1*

Client Sample ID: NAFREST-BRP-TS6A
Lab Sample ID: 180-162029-7

Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 88.2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	11.8		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	88.2		0.1	0.1	%			09/12/23 16:00	1

Client Sample ID: NAFREST-BRP-TS6B
Lab Sample ID: 180-162029-8

Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.8

Method: SW846 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	☼	09/09/23 11:34	09/09/23 23:17	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
2-Butanone (MEK)	ND		0.027	0.0028	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Chloroform	ND		0.0054	0.0036	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,2-Dichloroethane	ND		0.0054	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,1-Dichloroethene	ND	*1	0.0054	0.0025	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,4-Dioxane	ND		1.1	0.082	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Methylene Chloride	ND		0.0054	0.0049	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
sec-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Toluene	ND		0.0054	0.0016	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0019	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1
Xylenes, Total	ND		0.011	0.0078	mg/Kg	☼	09/09/23 11:34	09/09/23 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*60 - 124*	*09/09/23 11:34*	*09/09/23 23:17*	*1*
Dibromofluoromethane (Surr)	*95*		*69 - 126*	*09/09/23 11:34*	*09/09/23 23:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 135*	*09/09/23 11:34*	*09/09/23 23:17*	*1*
Toluene-d8 (Surr)	*77*		*67 - 134*	*09/09/23 11:34*	*09/09/23 23:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	14.2		0.1	0.1	%			09/12/23 16:00	1
Percent Solids (SM22 2540G)	85.8		0.1	0.1	%			09/12/23 16:00	1

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: SW846 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	☼	09/13/23 06:57	09/14/23 13:54	1
Acenaphthylene	**0.0093**		0.0078	0.0017	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Anthracene	**0.0093**		0.0078	0.0020	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Benzo[a]anthracene	**0.031**		0.0078	0.0035	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Benzo[a]pyrene	**0.037**		0.0078	0.0034	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Benzo[b]fluoranthene	**0.047**		0.0078	0.0019	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Benzo[g,h,i]perylene	**0.033**		0.0078	0.0017	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Benzo[k]fluoranthene	**0.020**		0.0078	0.0023	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Chrysene	**0.044**		0.0078	0.0043	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Dibenz(a,h)anthracene	**0.0076**	**J**	0.0078	0.0050	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Dibenzofuran	ND		0.038	0.014	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
1,4-Dioxane	ND		0.077	0.012	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Fluoranthene	**0.058**		0.0078	0.0020	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Fluorene	**0.0030**	**J**	0.0078	0.0015	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Hexachlorobenzene	ND		0.0078	0.0028	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Indeno[1,2,3-cd]pyrene	**0.028**		0.0078	0.0038	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
2-Methylphenol	ND		0.038	0.011	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Methylphenol, 3 & 4	ND		0.038	0.011	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Naphthalene	ND		0.0078	0.0015	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Pentachlorophenol	ND		0.20	0.062	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Phenanthrene	**0.025**		0.0078	0.0021	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Phenol	ND		0.038	0.012	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1
Pyrene	**0.050**		0.0078	0.0018	mg/Kg	☼	09/13/23 06:57	09/14/23 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*35 - 105*	*09/13/23 06:57*	*09/14/23 13:54*	*1*
2-Fluorophenol (Surr)	*54*		*32 - 105*	*09/13/23 06:57*	*09/14/23 13:54*	*1*
Nitrobenzene-d5 (Surr)	*62*		*34 - 109*	*09/13/23 06:57*	*09/14/23 13:54*	*1*
Phenol-d5 (Surr)	*60*		*34 - 105*	*09/13/23 06:57*	*09/14/23 13:54*	*1*
Terphenyl-d14 (Surr)	*59*		*20 - 117*	*09/13/23 06:57*	*09/14/23 13:54*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*20 - 119*	*09/13/23 06:57*	*09/14/23 13:54*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0020	0.00060	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
alpha-BHC	ND		0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
beta-BHC	ND		0.0020	0.00053	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
cis-Chlordane	**0.00059**	**J p**	0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
4,4'-DDD	ND		0.0020	0.00041	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
4,4'-DDE	**0.00097**	**J p**	0.0020	0.00039	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
4,4'-DDT	ND		0.0020	0.0014	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
delta-BHC	**0.00083**	**J**	0.0020	0.00061	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Dieldrin	ND		0.0020	0.00048	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Endosulfan I	ND		0.0020	0.00052	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Endosulfan II	ND		0.0020	0.00043	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Endosulfan sulfate	ND		0.0020	0.00089	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Endrin	ND		0.0020	0.00036	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
gamma-BHC (Lindane)	ND		0.0020	0.00050	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1
Heptachlor	ND		0.0020	0.00061	mg/Kg	☼	09/13/23 07:02	09/14/23 10:11	1

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9

Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	97		42 - 124	09/13/23 07:02	09/14/23 10:11	1
DCB Decachlorobiphenyl (Surr)	94		42 - 124	09/13/23 07:02	09/14/23 10:11	1
Tetrachloro-m-xylene	93		40 - 137	09/13/23 07:02	09/14/23 10:11	1
Tetrachloro-m-xylene	88		40 - 137	09/13/23 07:02	09/14/23 10:11	1

Method: SW846 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	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1221	ND		0.019	0.0068	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1232	ND		0.019	0.0047	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1242	ND		0.019	0.0028	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1248	ND		0.019	0.0046	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1254	ND		0.019	0.0058	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1260	ND		0.019	0.0055	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1262	ND		0.019	0.0068	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1
PCB-1268	ND		0.019	0.0026	mg/Kg	☼	09/13/23 14:00	09/14/23 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	98		63 - 138	09/13/23 14:00	09/14/23 21:11	1
DCB Decachlorobiphenyl (Surr)	96		63 - 138	09/13/23 14:00	09/14/23 21:11	1
Tetrachloro-m-xylene (Surr)	86		55 - 135	09/13/23 14:00	09/14/23 21:11	1
Tetrachloro-m-xylene (Surr)	90		55 - 135	09/13/23 14:00	09/14/23 21:11	1

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.023	0.013	mg/Kg	☼	09/13/23 23:30	09/18/23 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	93		48 - 127	09/13/23 23:30	09/18/23 15:00	1
2,4-Dichlorophenylacetic acid	124		48 - 127	09/13/23 23:30	09/18/23 15:00	1

Method: SW846 EPA 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**		0.99	0.62	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Barium	**67**		20	3.5	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Beryllium	**0.37**	**J**	0.40	0.11	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Cadmium	**0.35**	**J**	0.49	0.073	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Chromium	**12**		0.49	0.45	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Copper	**21**		2.5	1.5	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Lead	**18**		0.99	0.86	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Manganese	**430**		1.5	0.27	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Nickel	**18**		4.0	0.50	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Selenium	ND	^+	0.99	0.46	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Silver	ND		0.49	0.10	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1
Zinc	**67**		2.0	1.4	mg/Kg	☼	09/11/23 12:40	09/27/23 18:34	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.037	0.024	mg/Kg	☼	09/11/23 11:30	09/12/23 08:53	1

Client: Geosyntec Consultants Inc
Job ID: 180-162029-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**14.3**		0.1	0.1	%			09/12/23 11:55	1
Percent Solids (SM22 2540G)	**85.7**		0.1	0.1	%			09/12/23 11:55	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.47	0.25	mg/Kg	☼	09/12/23 12:48	09/15/23 11:38	1
Cyanide, Total (SW846 EPA 9014)	ND		0.51	0.39	mg/Kg	☼	09/13/23 15:00	09/13/23 17:22	1

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

Lab Sample ID: MB 180-446011/12
Matrix: Solid
Analysis Batch: 446011

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg			09/09/23 15:48	1
Benzene	ND		0.0050	0.0014	mg/Kg			09/09/23 15:48	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg			09/09/23 15:48	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			09/09/23 15:48	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			09/09/23 15:48	1
Chloroform	ND		0.0050	0.0034	mg/Kg			09/09/23 15:48	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			09/09/23 15:48	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			09/09/23 15:48	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			09/09/23 15:48	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			09/09/23 15:48	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			09/09/23 15:48	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			09/09/23 15:48	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			09/09/23 15:48	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg			09/09/23 15:48	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			09/09/23 15:48	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			09/09/23 15:48	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			09/09/23 15:48	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			09/09/23 15:48	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			09/09/23 15:48	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			09/09/23 15:48	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			09/09/23 15:48	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			09/09/23 15:48	1
Toluene	ND		0.0050	0.0014	mg/Kg			09/09/23 15:48	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			09/09/23 15:48	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			09/09/23 15:48	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			09/09/23 15:48	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			09/09/23 15:48	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			09/09/23 15:48	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			09/09/23 15:48	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			09/09/23 15:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*60 - 124*		*09/09/23 15:48*	*1*
Dibromofluoromethane (Surr)	*100*		*69 - 126*		*09/09/23 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*73 - 135*		*09/09/23 15:48*	*1*
Toluene-d8 (Surr)	*82*		*67 - 134*		*09/09/23 15:48*	*1*

Lab Sample ID: LCS 180-446011/8
Matrix: Solid
Analysis Batch: 446011

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	0.0540		mg/Kg		135	23 - 170		
Benzene			0.0400	0.0374		mg/Kg		94	77 - 120		
2-Butanone (MEK)			0.0400	0.0483		mg/Kg		121	39 - 157		
Carbon tetrachloride			0.0400	0.0395		mg/Kg		99	73 - 130		
Chlorobenzene			0.0400	0.0359		mg/Kg		90	79 - 122		
Chloroform			0.0400	0.0403		mg/Kg		101	73 - 126		

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

Lab Sample ID: LCS 180-446011/8
Matrix: Solid
Analysis Batch: 446011

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	0.0375		mg/Kg		94	77 - 118
1,2-Dichlorobenzene	0.0400	0.0363		mg/Kg		91	76 - 120
1,3-Dichlorobenzene	0.0400	0.0369		mg/Kg		92	77 - 121
1,4-Dichlorobenzene	0.0400	0.0356		mg/Kg		89	79 - 120
1,1-Dichloroethane	0.0400	0.0396		mg/Kg		99	73 - 124
1,2-Dichloroethane	0.0400	0.0394		mg/Kg		99	64 - 140
1,1-Dichloroethene	0.0400	0.0361		mg/Kg		90	55 - 136
1,4-Dioxane	0.800	0.937	J	mg/Kg		117	18 - 166
Ethylbenzene	0.0400	0.0361		mg/Kg		90	79 - 119
Methylene Chloride	0.0400	0.0367		mg/Kg		92	67 - 131
Methyl tert-butyl ether	0.0400	0.0360		mg/Kg		90	58 - 132
n-Butylbenzene	0.0400	0.0373		mg/Kg		93	64 - 136
N-Propylbenzene	0.0400	0.0350		mg/Kg		87	71 - 127
sec-Butylbenzene	0.0400	0.0349		mg/Kg		87	65 - 130
tert-Butylbenzene	0.0400	0.0352		mg/Kg		88	69 - 133
Tetrachloroethene	0.0400	0.0391		mg/Kg		98	71 - 121
Toluene	0.0400	0.0366		mg/Kg		92	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0373		mg/Kg		93	75 - 122
1,1,1-Trichloroethane	0.0400	0.0366		mg/Kg		92	72 - 134
Trichloroethene	0.0400	0.0383		mg/Kg		96	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0352		mg/Kg		88	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0356		mg/Kg		89	69 - 131
Vinyl chloride	0.0400	0.0378		mg/Kg		94	64 - 134
Xylenes, Total	0.0800	0.0708		mg/Kg		89	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 124*
Dibromofluoromethane (Surr)	*96*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 135*
Toluene-d8 (Surr)	*90*		*67 - 134*

Lab Sample ID: LCSD 180-446011/9
Matrix: Solid
Analysis Batch: 446011

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	0.0497		mg/Kg		124	23 - 170	8	35
Benzene	0.0400	0.0379		mg/Kg		95	77 - 120	1	20
2-Butanone (MEK)	0.0400	0.0440		mg/Kg		110	39 - 157	9	33
Carbon tetrachloride	0.0400	0.0393		mg/Kg		98	73 - 130	0	21
Chlorobenzene	0.0400	0.0364		mg/Kg		91	79 - 122	1	20
Chloroform	0.0400	0.0399		mg/Kg		100	73 - 126	1	20
cis-1,2-Dichloroethene	0.0400	0.0387		mg/Kg		97	77 - 118	3	20
1,2-Dichlorobenzene	0.0400	0.0361		mg/Kg		90	76 - 120	0	20
1,3-Dichlorobenzene	0.0400	0.0371		mg/Kg		93	77 - 121	1	20
1,4-Dichlorobenzene	0.0400	0.0359		mg/Kg		90	79 - 120	1	20
1,1-Dichloroethane	0.0400	0.0400		mg/Kg		100	73 - 124	1	20
1,2-Dichloroethane	0.0400	0.0386		mg/Kg		97	64 - 140	2	20

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

Lab Sample ID: LCSD 180-446011/9
Matrix: Solid
Analysis Batch: 446011

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	0.0285	*1	mg/Kg		71	55 - 136	23	21
1,4-Dioxane			0.800	0.758	J	mg/Kg		95	18 - 166	21	40
Ethylbenzene			0.0400	0.0363		mg/Kg		91	79 - 119	1	20
Methylene Chloride			0.0400	0.0357		mg/Kg		89	67 - 131	3	32
Methyl tert-butyl ether			0.0400	0.0346		mg/Kg		87	58 - 132	4	24
n-Butylbenzene			0.0400	0.0377		mg/Kg		94	64 - 136	1	21
N-Propylbenzene			0.0400	0.0350		mg/Kg		88	71 - 127	0	20
sec-Butylbenzene			0.0400	0.0354		mg/Kg		89	65 - 130	2	20
tert-Butylbenzene			0.0400	0.0360		mg/Kg		90	69 - 133	2	23
Tetrachloroethene			0.0400	0.0411		mg/Kg		103	71 - 121	5	21
Toluene			0.0400	0.0375		mg/Kg		94	76 - 120	2	20
trans-1,2-Dichloroethene			0.0400	0.0386		mg/Kg		96	75 - 122	3	20
1,1,1-Trichloroethane			0.0400	0.0382		mg/Kg		95	72 - 134	4	20
Trichloroethene			0.0400	0.0378		mg/Kg		94	69 - 118	1	20
1,2,4-Trimethylbenzene			0.0400	0.0360		mg/Kg		90	74 - 127	2	20
1,3,5-Trimethylbenzene			0.0400	0.0365		mg/Kg		91	69 - 131	2	20
Vinyl chloride			0.0400	0.0385		mg/Kg		96	64 - 134	2	23
Xylenes, Total			0.0800	0.0723		mg/Kg		90	78 - 118	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*60 - 124*
Dibromofluoromethane (Surr)	*93*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*89*		*73 - 135*
Toluene-d8 (Surr)	*88*		*67 - 134*

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

Lab Sample ID: MB 180-446307/1-A
Matrix: Solid
Analysis Batch: 446459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0034	0.00096	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Acenaphthylene	ND		0.0034	0.00073	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Anthracene	ND		0.0034	0.00087	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Benzo[a]anthracene	ND		0.0034	0.0015	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Benzo[a]pyrene	ND		0.0034	0.0014	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Benzo[b]fluoranthene	ND		0.0034	0.00082	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Benzo[g,h,i]perylene	ND		0.0034	0.00072	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Benzo[k]fluoranthene	ND		0.0034	0.0010	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Chrysene	ND		0.0034	0.0019	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Dibenz(a,h)anthracene	ND		0.0034	0.0021	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Dibenzofuran	ND		0.017	0.0062	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
1,4-Dioxane	ND		0.033	0.0052	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Fluoranthene	ND		0.0034	0.00088	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Fluorene	ND		0.0034	0.00066	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Hexachlorobenzene	ND		0.0034	0.0012	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Indeno[1,2,3-cd]pyrene	ND		0.0034	0.0017	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
2-Methylphenol	ND		0.017	0.0048	mg/Kg		09/13/23 06:57	09/14/23 06:40	1

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

Lab Sample ID: MB 180-446307/1-A
Matrix: Solid
Analysis Batch: 446459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylphenol, 3 & 4	ND		0.017	0.0049	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Naphthalene	ND		0.0034	0.00065	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Pentachlorophenol	ND		0.085	0.027	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Phenanthrene	ND		0.0034	0.00090	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Phenol	ND		0.017	0.0051	mg/Kg		09/13/23 06:57	09/14/23 06:40	1
Pyrene	ND		0.0034	0.00079	mg/Kg		09/13/23 06:57	09/14/23 06:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*35 - 105*	*09/13/23 06:57*	*09/14/23 06:40*	*1*
2-Fluorophenol (Surr)	*59*		*32 - 105*	*09/13/23 06:57*	*09/14/23 06:40*	*1*
Nitrobenzene-d5 (Surr)	*64*		*34 - 109*	*09/13/23 06:57*	*09/14/23 06:40*	*1*
Phenol-d5 (Surr)	*59*		*34 - 105*	*09/13/23 06:57*	*09/14/23 06:40*	*1*
Terphenyl-d14 (Surr)	*56*		*20 - 117*	*09/13/23 06:57*	*09/14/23 06:40*	*1*
2,4,6-Tribromophenol (Surr)	*72*		*20 - 119*	*09/13/23 06:57*	*09/14/23 06:40*	*1*

Lab Sample ID: LCS 180-446307/2-A
Matrix: Solid
Analysis Batch: 446459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.333	0.208		mg/Kg		62	41 - 100
Acenaphthylene	0.333	0.222		mg/Kg		67	45 - 100
Anthracene	0.333	0.207		mg/Kg		62	47 - 100
Benzo[a]anthracene	0.333	0.211		mg/Kg		63	47 - 100
Benzo[a]pyrene	0.333	0.223		mg/Kg		67	45 - 101
Benzo[b]fluoranthene	0.333	0.195		mg/Kg		58	44 - 100
Benzo[g,h,i]perylene	0.333	0.216		mg/Kg		65	45 - 103
Benzo[k]fluoranthene	0.333	0.190		mg/Kg		57	43 - 100
Chrysene	0.333	0.217		mg/Kg		65	44 - 100
Dibenz(a,h)anthracene	0.333	0.220		mg/Kg		66	46 - 107
Dibenzofuran	0.333	0.211		mg/Kg		63	47 - 100
1,4-Dioxane	0.333	0.212		mg/Kg		63	10 - 133
Fluoranthene	0.333	0.219		mg/Kg		66	49 - 102
Fluorene	0.333	0.214		mg/Kg		64	46 - 100
Hexachlorobenzene	0.333	0.218		mg/Kg		65	45 - 101
Indeno[1,2,3-cd]pyrene	0.333	0.217		mg/Kg		65	48 - 104
2-Methylphenol	0.333	0.201		mg/Kg		60	43 - 101
Methylphenol, 3 & 4	0.333	0.213		mg/Kg		64	43 - 104
Naphthalene	0.333	0.214		mg/Kg		64	43 - 100
Pentachlorophenol	0.667	0.448		mg/Kg		67	34 - 112
Phenanthrene	0.333	0.198		mg/Kg		59	46 - 100
Phenol	0.333	0.211		mg/Kg		63	42 - 103
Pyrene	0.333	0.207		mg/Kg		62	44 - 102

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*35 - 105*
2-Fluorophenol (Surr)	*67*		*32 - 105*
Nitrobenzene-d5 (Surr)	*63*		*34 - 109*

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

Lab Sample ID: LCS 180-446307/2-A
Matrix: Solid
Analysis Batch: 446459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446307

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5 (Surr)	*62*		*34 - 105*
Terphenyl-d14 (Surr)	*58*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*70*		*20 - 119*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-446310/1-A
Matrix: Solid
Analysis Batch: 446466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446310

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
4,4'-DDD	ND		0.0017	0.00035	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Endosulfan sulfate	ND		0.0017	0.00077	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Endrin	ND		0.0017	0.00031	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		09/13/23 07:02	09/14/23 08:46	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		09/13/23 07:02	09/14/23 08:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*42 - 124*	*09/13/23 07:02*	*09/14/23 08:46*	*1*
DCB Decachlorobiphenyl (Surr)	*110*		*42 - 124*	*09/13/23 07:02*	*09/14/23 08:46*	*1*
Tetrachloro-m-xylene	*105*		*40 - 137*	*09/13/23 07:02*	*09/14/23 08:46*	*1*
Tetrachloro-m-xylene	*101*		*40 - 137*	*09/13/23 07:02*	*09/14/23 08:46*	*1*

Lab Sample ID: LCS 180-446310/2-A
Matrix: Solid
Analysis Batch: 447816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446310

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	0.0333	0.0293		mg/Kg		88	60 - 131
alpha-BHC	0.0333	0.0281		mg/Kg		84	67 - 125
beta-BHC	0.0333	0.0239		mg/Kg		72	63 - 123
cis-Chlordane	0.0333	0.0278		mg/Kg		84	57 - 120
4,4'-DDD	0.0333	0.0300		mg/Kg		90	64 - 131
4,4'-DDE	0.0333	0.0304		mg/Kg		91	57 - 132
4,4'-DDT	0.0333	0.0289		mg/Kg		87	54 - 117
delta-BHC	0.0333	0.0222		mg/Kg		67	50 - 134
Dieldrin	0.0333	0.0334		mg/Kg		100	64 - 127
Endosulfan I	0.0333	0.0285		mg/Kg		86	55 - 131

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

Lab Sample ID: LCS 180-446310/2-A
Matrix: Solid
Analysis Batch: 447816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Endosulfan II			0.0333	0.0318		mg/Kg		95	61 - 130		
Endosulfan sulfate			0.0333	0.0303		mg/Kg		91	57 - 132		
Endrin			0.0333	0.0316		mg/Kg		95	66 - 125		
gamma-BHC (Lindane)			0.0333	0.0254		mg/Kg		76	69 - 124		
Heptachlor			0.0333	0.0278		mg/Kg		83	62 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*110*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*119*		*42 - 124*
Tetrachloro-m-xylene	*91*		*40 - 137*
Tetrachloro-m-xylene	*92*		*40 - 137*

Lab Sample ID: LCSD 180-446310/3-A
Matrix: Solid
Analysis Batch: 447816

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 446310

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin			0.0333	0.0269		mg/Kg		81	60 - 131	9	40
alpha-BHC			0.0333	0.0262		mg/Kg		79	67 - 125	7	40
beta-BHC			0.0333	0.0222		mg/Kg		67	63 - 123	8	40
cis-Chlordane			0.0333	0.0260		mg/Kg		78	57 - 120	7	40
4,4'-DDD			0.0333	0.0270		mg/Kg		81	64 - 131	10	40
4,4'-DDE			0.0333	0.0273		mg/Kg		82	57 - 132	11	40
4,4'-DDT			0.0333	0.0267		mg/Kg		80	54 - 117	8	40
delta-BHC			0.0333	0.0206		mg/Kg		62	50 - 134	8	40
Dieldrin			0.0333	0.0303		mg/Kg		91	64 - 127	10	40
Endosulfan I			0.0333	0.0270		mg/Kg		81	55 - 131	5	40
Endosulfan II			0.0333	0.0289		mg/Kg		87	61 - 130	10	40
Endosulfan sulfate			0.0333	0.0279		mg/Kg		84	57 - 132	8	40
Endrin			0.0333	0.0292		mg/Kg		88	66 - 125	8	40
gamma-BHC (Lindane)			0.0333	0.0237		mg/Kg		71	69 - 124	7	40
Heptachlor			0.0333	0.0258		mg/Kg		77	62 - 133	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*100*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*103*		*42 - 124*
Tetrachloro-m-xylene	*85*		*40 - 137*
Tetrachloro-m-xylene	*89*		*40 - 137*

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

Lab Sample ID: MB 180-446403/1-C
Matrix: Solid
Analysis Batch: 446497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1221	ND		0.017	0.0059	mg/Kg		09/13/23 14:00	09/14/23 19:00	1

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

Lab Sample ID: MB 180-446403/1-C
Matrix: Solid
Analysis Batch: 446497

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446403

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	ND		0.017	0.0041	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1242	ND		0.017	0.0024	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1248	ND		0.017	0.0040	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1254	ND		0.017	0.0050	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1260	ND		0.017	0.0047	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1262	ND		0.017	0.0059	mg/Kg		09/13/23 14:00	09/14/23 19:00	1
PCB-1268	ND		0.017	0.0022	mg/Kg		09/13/23 14:00	09/14/23 19:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*121*		*63 - 138*	*09/13/23 14:00*	*09/14/23 19:00*	*1*
DCB Decachlorobiphenyl (Surr)	*125*		*63 - 138*	*09/13/23 14:00*	*09/14/23 19:00*	*1*
Tetrachloro-m-xylene (Surr)	*95*		*55 - 135*	*09/13/23 14:00*	*09/14/23 19:00*	*1*
Tetrachloro-m-xylene (Surr)	*97*		*55 - 135*	*09/13/23 14:00*	*09/14/23 19:00*	*1*

Lab Sample ID: LCS 180-446403/2-C
Matrix: Solid
Analysis Batch: 446497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446403

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1.33	1.14		mg/Kg		86	43 - 136
PCB-1260	1.33	1.00		mg/Kg		75	55 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*109*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*109*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*93*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*94*		*55 - 135*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-446440/1-A
Matrix: Solid
Analysis Batch: 446784

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446440

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		09/13/23 23:30	09/18/23 11:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*94*		*48 - 127*	*09/13/23 23:30*	*09/18/23 11:48*	*1*
2,4-Dichlorophenylacetic acid	*90*		*48 - 127*	*09/13/23 23:30*	*09/18/23 11:48*	*1*

Lab Sample ID: LCS 180-446440/2-A
Matrix: Solid
Analysis Batch: 446784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446440

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silvex (2,4,5-TP)	0.200	0.163	p	mg/Kg		81	33 - 140

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 180-446440/2-A
Matrix: Solid
Analysis Batch: 446784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446440

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*113*		*48 - 127*
2,4-Dichlorophenylacetic acid	*112*		*48 - 127*

Method: EPA 6010C - Metals (ICP)

Lab Sample ID: MB 180-446101/1-A
Matrix: Solid
Analysis Batch: 447798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.63	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Barium	ND		20	3.6	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Beryllium	ND		0.40	0.11	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Cadmium	ND		0.50	0.073	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Chromium	ND		0.50	0.46	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Copper	ND		2.5	1.5	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Lead	ND		1.0	0.87	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Manganese	ND		1.5	0.28	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Nickel	ND		4.0	0.50	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Selenium	ND		1.0	0.46	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Silver	ND		0.50	0.10	mg/Kg		09/11/23 12:40	09/27/23 17:04	1
Zinc	ND		2.0	1.5	mg/Kg		09/11/23 12:40	09/27/23 17:04	1

Lab Sample ID: LCS 180-446101/2-A
Matrix: Solid
Analysis Batch: 447798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	98.0	95.2		mg/Kg		97	80 - 120
Barium	98.0	92.4		mg/Kg		94	80 - 120
Beryllium	49.0	48.4		mg/Kg		99	80 - 120
Cadmium	49.0	48.7		mg/Kg		99	80 - 120
Chromium	49.0	45.4		mg/Kg		93	80 - 120
Copper	49.0	45.6		mg/Kg		93	80 - 120
Lead	49.0	45.1		mg/Kg		92	80 - 120
Manganese	49.0	46.6		mg/Kg		95	80 - 120
Nickel	49.0	43.7		mg/Kg		89	80 - 120
Selenium	98.0	99.2		mg/Kg		101	80 - 120
Silver	24.5	22.1		mg/Kg		90	80 - 120
Zinc	24.5	24.0		mg/Kg		98	80 - 120

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-446073/1-A
Matrix: Solid
Analysis Batch: 446215

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		09/11/23 11:30	09/12/23 08:48	1

Method: EPA 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 180-446073/2-A
Matrix: Solid
Analysis Batch: 446215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446073

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.417	0.418		mg/Kg		100	80 - 120		

Method: 2540G - SM 2540G

Lab Sample ID: 180-162029-3 DU
Matrix: Solid
Analysis Batch: 446224

Client Sample ID: NAFREST-BRP-TS4C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	15.4			14.3		%				7	10
Percent Solids	84.6			85.7		%				1	10

Lab Sample ID: 180-162029-9 DU
Matrix: Solid
Analysis Batch: 446224

Client Sample ID: NAFREST-BRP-TS6C
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	14.3			13.8		%				4	10
Percent Solids	85.7			86.2		%				0.6	10

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-446237/1-A
Matrix: Solid
Analysis Batch: 446692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		09/12/23 12:48	09/15/23 11:14	1

Lab Sample ID: LCSI 180-446237/3-A
Matrix: Solid
Analysis Batch: 446692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446237

Analyte			Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium			708	690		mg/Kg		97	80 - 120		

Lab Sample ID: LCSS 180-446237/2-A
Matrix: Solid
Analysis Batch: 446692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446237

Analyte			Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexavalent chromium			20.0	22.2		mg/Kg		111	80 - 120		

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-446417/4-A
Matrix: Solid
Analysis Batch: 446436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.38	mg/Kg		09/13/23 15:00	09/13/23 17:07	1

Method: EPA 9014 - Cyanide

Lab Sample ID: HLCS 180-446417/2-A
Matrix: Solid
Analysis Batch: 446436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446417

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.251		mg/Kg		101	90 - 110

Lab Sample ID: LCS 180-446417/3-A
Matrix: Solid
Analysis Batch: 446436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	120	108		mg/Kg		90	17 - 163

Lab Sample ID: LLCS 180-446417/1-A
Matrix: Solid
Analysis Batch: 446436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446417

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0479		mg/Kg		96	90 - 110

GC/MS VOA

Analysis Batch: 446011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-1	NAFREST-BRP-TS4A	Total/NA	Solid	EPA 8260C	446017
180-162029-2	NAFREST-BRP-TS4B	Total/NA	Solid	EPA 8260C	446017
180-162029-4	NAFREST-BRP-TS5A	Total/NA	Solid	EPA 8260C	446017
180-162029-5	NAFREST-BRP-TS5B	Total/NA	Solid	EPA 8260C	446017
180-162029-7	NAFREST-BRP-TS6A	Total/NA	Solid	EPA 8260C	446017
180-162029-8	NAFREST-BRP-TS6B	Total/NA	Solid	EPA 8260C	446017
MB 180-446011/12	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-446011/8	Lab Control Sample	Total/NA	Solid	EPA 8260C	
LCSD 180-446011/9	Lab Control Sample Dup	Total/NA	Solid	EPA 8260C	

Prep Batch: 446017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-1	NAFREST-BRP-TS4A	Total/NA	Solid	5035	
180-162029-2	NAFREST-BRP-TS4B	Total/NA	Solid	5035	
180-162029-4	NAFREST-BRP-TS5A	Total/NA	Solid	5035	
180-162029-5	NAFREST-BRP-TS5B	Total/NA	Solid	5035	
180-162029-7	NAFREST-BRP-TS6A	Total/NA	Solid	5035	
180-162029-8	NAFREST-BRP-TS6B	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 446307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3541	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3541	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3541	
MB 180-446307/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-446307/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 446459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 8270D LL	446307
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 8270D LL	446307
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 8270D LL	446307
MB 180-446307/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	446307
LCS 180-446307/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	446307

GC Semi VOA

Prep Batch: 446310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3541	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3541	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3541	
MB 180-446310/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-446310/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-446310/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Prep Batch: 446403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3541	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 446403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3541	
MB 180-446403/1-C	Method Blank	Total/NA	Solid	3541	
LCS 180-446403/2-C	Lab Control Sample	Total/NA	Solid	3541	

Prep Batch: 446440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	8151A	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	8151A	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	8151A	
MB 180-446440/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-446440/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Cleanup Batch: 446453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3665A	446403
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3665A	446403
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3665A	446403
MB 180-446403/1-C	Method Blank	Total/NA	Solid	3665A	446403
LCS 180-446403/2-C	Lab Control Sample	Total/NA	Solid	3665A	446403

Cleanup Batch: 446454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3660B	446453
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3660B	446453
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3660B	446453
MB 180-446403/1-C	Method Blank	Total/NA	Solid	3660B	446453
LCS 180-446403/2-C	Lab Control Sample	Total/NA	Solid	3660B	446453

Analysis Batch: 446466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 8081B	446310
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 8081B	446310
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 8081B	446310
MB 180-446310/1-A	Method Blank	Total/NA	Solid	EPA 8081B	446310

Analysis Batch: 446497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 8082A	446454
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 8082A	446454
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 8082A	446454
MB 180-446403/1-C	Method Blank	Total/NA	Solid	EPA 8082A	446454
LCS 180-446403/2-C	Lab Control Sample	Total/NA	Solid	EPA 8082A	446454

Analysis Batch: 446784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 8151A	446440
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 8151A	446440
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 8151A	446440
MB 180-446440/1-A	Method Blank	Total/NA	Solid	EPA 8151A	446440
LCS 180-446440/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	446440

GC Semi VOA

Analysis Batch: 447816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-446310/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	446310
LCSD 180-446310/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	446310

Metals

Prep Batch: 446073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	7471B	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	7471B	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	7471B	
MB 180-446073/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-446073/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 446101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3050B	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3050B	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3050B	
MB 180-446101/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 180-446101/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 446215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 7471B	446073
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 7471B	446073
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 7471B	446073
MB 180-446073/1-A	Method Blank	Total/NA	Solid	EPA 7471B	446073
LCS 180-446073/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	446073

Analysis Batch: 447798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 6010C	446101
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 6010C	446101
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 6010C	446101
MB 180-446101/1-A	Method Blank	Total/NA	Solid	EPA 6010C	446101
LCS 180-446101/2-A	Lab Control Sample	Total/NA	Solid	EPA 6010C	446101

General Chemistry

Analysis Batch: 446224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	2540G	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	2540G	
180-162029-3 DU	NAFREST-BRP-TS4C	Total/NA	Solid	2540G	
180-162029-9 DU	NAFREST-BRP-TS6C	Total/NA	Solid	2540G	

Prep Batch: 446237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	3060A	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	3060A	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	3060A	
MB 180-446237/1-A	Method Blank	Total/NA	Solid	3060A	

General Chemistry (Continued)

Prep Batch: 446237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSI 180-446237/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-446237/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Analysis Batch: 446252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	2540G	

Analysis Batch: 446261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-1	NAFREST-BRP-TS4A	Total/NA	Solid	2540G	
180-162029-2	NAFREST-BRP-TS4B	Total/NA	Solid	2540G	
180-162029-4	NAFREST-BRP-TS5A	Total/NA	Solid	2540G	
180-162029-5	NAFREST-BRP-TS5B	Total/NA	Solid	2540G	
180-162029-7	NAFREST-BRP-TS6A	Total/NA	Solid	2540G	
180-162029-8	NAFREST-BRP-TS6B	Total/NA	Solid	2540G	

Prep Batch: 446417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	9010C	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	9010C	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	9010C	
MB 180-446417/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-446417/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-446417/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-446417/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 446436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 9014	446417
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 9014	446417
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 9014	446417
MB 180-446417/4-A	Method Blank	Total/NA	Solid	EPA 9014	446417
HLCS 180-446417/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	446417
LCS 180-446417/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	446417
LLCS 180-446417/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	446417

Analysis Batch: 446692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	EPA 7196A	446237
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	EPA 7196A	446237
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	EPA 7196A	446237
MB 180-446237/1-A	Method Blank	Total/NA	Solid	EPA 7196A	446237
LCSI 180-446237/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	446237
LCSS 180-446237/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	446237

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

Chain of Custody Record

TOPSOIL

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Z Miller	Dunlap, David A		180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 703-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitnc Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	637.1 (mod.) - PFAS	SPLP-E, 637.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS4A	9/7/23	1300	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS4B	9/7/23	1300	G	Solid	N	N	X													4	
NAFREST-BRP-TS4C	9/7/23	1300	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS5A	9/7/23	1305	G	Solid	N	N	X													4	
NAFREST-BRP-TS5B	9/7/23	1305	G	Solid	N	N	X													4	
NAFREST-BRP-TS5C	9/7/23	1305	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS6A	9/7/23	1310	G	Solid	N	N	X													4	
NAFREST-BRP-TS6B	9/7/23	1310	G	Solid	N	N	X													4	
NAFREST-BRP-TS6C	9/7/23	1310	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

180-162029 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 than 1 month)

☐ 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
[signature]	9/7/23/1700	Geosyntec	[signature]	9/8/23 0900	EPHNE
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.

Ver: 01/16/2019

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9/29/2023

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

Chain of Custody Record

TOPSOIL

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-162029 Chain of Custody

Preservation Codes.

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	FJ	N	N	N	N	N	N	N	N	N	X	
NAFREST-BRP-TS4A	9/7/23	1300	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS4B	9/7/23	1300	G	Solid	N	N	X										4	
~~NAFREST-BRP-TS4C~~	~~9/7/23~~	~~1300~~	~~C~~	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-TS5A	9/7/23	1305	G	Solid	N	N	X										4	
NAFREST-BRP-TS5B	9/7/23	1305	G	Solid	N	N	X										4	
NAFREST-BRP-TS5C	9/7/23	1305	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-TS6A	9/7/23	1310	G	Solid	N	N	X										4	
NAFREST-BRP-TS6B	9/7/23	1310	G	Solid	N	N	X										4	
NAFREST-BRP-TS6C	9/7/23	1310	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	

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: 9/7/23/1700	Company Geosyntec	Received by:	Date/Time: 9/8/23 1030	Company
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: 3.7

Ver: 01/16/2019

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9/29/2023

eurofins | Environment Testing

Sacramento
Sample Receiving Notes

Loc 180
162029

Tracking # 7733 1025 2897

Job _____ _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC

Therm ID 102 Corr Factor (+/-) _____ °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal _____

Cooler ID _____

Temp Observed 3.2 °C Corrected 3.2 °C
From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials _____ Date. 9/6/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☑	☐
Is the Field Sampler's name on COC?	☑	☐	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials GP Date. 9823

Notes._____

Trizma Lot #(s) _____

Ammonium
Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☑	☐	☐

Initials. GP Date: 9-8-23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-162029-1

Login Number: 162029
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/21/2023 5:30:47 PM

JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-162029-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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9/21/2023 5:30:47 PM

Authorized for release by
David Dunlap, Senior Project Manager
David.Dunlap@et.eurofinsus.com
(412)963-2432

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Job ID: 180-162029-2

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-162029-2

Receipt
The samples were received on 9/8/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.6º C, 2.3º C, 3.2º C, 3.3º C and 5.8º C.

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

Definitions/Glossary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Qualifiers

LCMS

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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-24
California	State	2897	01-22-24
Colorado	State	CA0004	08-31-24
Florida	NELAP	E87570	06-30-24
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-23
Louisiana (All)	NELAP	01944	06-30-24
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-24
Nevada	State	CA00044	07-31-24
New Hampshire	NELAP	2997	04-18-24
New Jersey	NELAP	CA005	06-30-24
New York	NELAP	11666	04-01-24
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-19-13	05-31-24
US Fish & Wildlife	US Federal Programs	58448	04-30-24
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442021-12	02-29-24
Virginia	NELAP	460278	03-14-24
Washington	State	C581	05-05-24
West Virginia (DW)	State	9930C	12-31-23
Wisconsin	State	998204680	08-31-24
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-162029-3	NAFREST-BRP-TS4C	Solid	09/07/23 13:00	09/08/23 09:00
180-162029-6	NAFREST-BRP-TS5C	Solid	09/07/23 13:05	09/08/23 09:00
180-162029-9	NAFREST-BRP-TS6C	Solid	09/07/23 13:10	09/08/23 09:00

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.03 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	705437	09/13/23 02:07	RS1	EET SAC
	Instrument ID: A15									
Total/NA	Prep	SHAKE	RA		5.03 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	707561	09/20/23 13:26	S1M	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6
Date Collected: 09/07/23 13:05
Matrix: Solid
Date Received: 09/08/23 09:00
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	SHAKE			5.37 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	705437	09/13/23 02:17	RS1	EET SAC
	Instrument ID: A15									
Total/NA	Prep	SHAKE	RA		5.37 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	707561	09/20/23 13:43	S1M	EET SAC
	Instrument ID: A9									

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
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	SHAKE			5.38 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	705437	09/13/23 02:27	RS1	EET SAC
	Instrument ID: A15									
Total/NA	Prep	SHAKE	RA		5.38 g	10.0 mL	705075	09/11/23 04:41	SJ	EET SAC
Total/NA	Analysis	537 (modified)	RA	1	1 mL	1 mL	707561	09/20/23 13:59	S1M	EET SAC
	Instrument ID: A9									

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:

Lab: EET SAC

Batch Type: Prep

SJ = Serena Johnson

Batch Type: Analysis

RS1 = Rungtip Sanjumnai

S1M = Sudarat Mongkol

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS4C
Lab Sample ID: 180-162029-3
Date Collected: 09/07/23 13:00
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 84.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.087**	**J**	0.23	0.054	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluoropentanoic acid (PFPeA)	**0.12**	**J**	0.23	0.048	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorohexanoic acid (PFHxA)	**0.28**		0.23	0.036	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluoroheptanoic acid (PFHpA)	**0.053**	**J**	0.23	0.045	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.23	0.062	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorononanoic acid (PFNA)	**0.047**	**J**	0.23	0.026	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.056	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.049	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.035	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.025	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.043	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.045	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.034	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.058	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.061	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.039	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.027	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.056	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
6:2 FTS	ND		0.23	0.032	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1
8:2 FTS	ND		0.23	0.041	ug/Kg	☼	09/11/23 04:41	09/13/23 02:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C5 PFPeA	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C2 PFHxA	*97*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C4 PFHpA	*99*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C4 PFOA	*100*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C5 PFNA	*103*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C2 PFDA	*102*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C2 PFUnA	*99*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C2 PFDoA	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C2 PFTeDA	*83*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C3 PFBS	*92*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
18O2 PFHxS	*97*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C4 PFOS	*97*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
13C8 FOSA	*107*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
d3-NMeFOSAA	*91*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
d5-NEtFOSAA	*113*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
M2-6:2 FTS	*81*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*
M2-8:2 FTS	*106*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:07*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.42**		0.23	0.051	ug/Kg	☼	09/11/23 04:41	09/20/23 13:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*80*		*25 - 150*	*09/11/23 04:41*	*09/20/23 13:26*	*1*

Client Sample ID: NAFREST-BRP-TS5C
Lab Sample ID: 180-162029-6

Date Collected: 09/07/23 13:05
Matrix: Solid

Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.12**	**J**	0.22	0.050	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluoropentanoic acid (PFPeA)	**0.17**	**J**	0.22	0.045	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorohexanoic acid (PFHxA)	**0.38**		0.22	0.034	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluoroheptanoic acid (PFHpA)	**0.067**	**J**	0.22	0.041	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorooctanoic acid (PFOA)	**0.24**		0.22	0.058	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorononanoic acid (PFNA)	**0.064**	**J**	0.22	0.024	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorodecanoic acid (PFDA)	**0.070**	**J**	0.22	0.052	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.046	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.033	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.023	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.040	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.041	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.032	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.053	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.057	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
Perfluorooctanesulfonamide (FOSA)	ND		0.22	0.036	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.22	0.025	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.22	0.052	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
6:2 FTS	ND		0.22	0.029	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1
8:2 FTS	ND		0.22	0.038	ug/Kg	☼	09/11/23 04:41	09/13/23 02:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C5 PFPeA	*89*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C2 PFHxA	*91*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C4 PFHpA	*96*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C4 PFOA	*96*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C5 PFNA	*98*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C2 PFDA	*97*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C2 PFUnA	*95*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C2 PFDoA	*91*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C2 PFTeDA	*85*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C3 PFBS	*84*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
18O2 PFHxS	*94*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C4 PFOS	*94*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
13C8 FOSA	*104*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
d3-NMeFOSAA	*86*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
d5-NEtFOSAA	*113*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
M2-6:2 FTS	*85*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*
M2-8:2 FTS	*105*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:17*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.49**		0.22	0.047	ug/Kg	☼	09/11/23 04:41	09/20/23 13:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*72*		*25 - 150*	*09/11/23 04:41*	*09/20/23 13:43*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS6C
Lab Sample ID: 180-162029-9
Date Collected: 09/07/23 13:10
Matrix: Solid
Date Received: 09/08/23 09:00
Percent Solids: 85.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.11**	**J**	0.22	0.050	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluoropentanoic acid (PFPeA)	**0.16**	**J**	0.22	0.044	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorohexanoic acid (PFHxA)	**0.36**		0.22	0.034	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluoroheptanoic acid (PFHpA)	**0.057**	**J**	0.22	0.041	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorooctanoic acid (PFOA)	**0.19**	**J**	0.22	0.057	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorononanoic acid (PFNA)	**0.050**	**J**	0.22	0.024	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.052	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.046	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.033	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.023	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.040	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.041	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.031	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.053	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.056	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
Perfluorooctanesulfonamide (FOSA)	ND		0.22	0.036	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.22	0.025	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.22	0.052	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
6:2 FTS	ND		0.22	0.029	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1
8:2 FTS	ND		0.22	0.038	ug/Kg	☼	09/11/23 04:41	09/13/23 02:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C5 PFPeA	*89*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C2 PFHxA	*90*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C4 PFHpA	*90*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C4 PFOA	*92*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C5 PFNA	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C2 PFDA	*97*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C2 PFUnA	*90*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C2 PFDoA	*82*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C3 PFBS	*82*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
18O2 PFHxS	*86*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C4 PFOS	*84*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
13C8 FOSA	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
d3-NMeFOSAA	*79*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
d5-NEtFOSAA	*102*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
M2-6:2 FTS	*78*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*
M2-8:2 FTS	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 02:27*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	**0.38**		0.22	0.047	ug/Kg	☼	09/11/23 04:41	09/20/23 13:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFOS	*71*		*25 - 150*	*09/11/23 04:41*	*09/20/23 13:59*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-705075/1-A
Matrix: Solid
Analysis Batch: 705437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 705075

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.049	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
6:2 FTS	ND		0.20	0.027	ug/Kg		09/11/23 04:41	09/13/23 00:04	1
8:2 FTS	ND		0.20	0.035	ug/Kg		09/11/23 04:41	09/13/23 00:04	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C5 PFPeA	*92*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C2 PFHxA	*96*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C4 PFHpA	*103*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C4 PFOA	*103*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C5 PFNA	*103*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C2 PFDA	*101*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C2 PFUnA	*100*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C2 PFDoA	*104*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C3 PFBS	*93*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
18O2 PFHxS	*99*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C4 PFOS	*99*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
13C8 FOSA	*111*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
d3-NMeFOSAA	*103*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
d5-NEtFOSAA	*116*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
M2-6:2 FTS	*80*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*
M2-8:2 FTS	*101*		*25 - 150*	*09/11/23 04:41*	*09/13/23 00:04*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-705075/2-A
Matrix: Solid
Analysis Batch: 705437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 705075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.96		ug/Kg		98	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	2.16		ug/Kg		108	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	2.04		ug/Kg		102	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	2.20		ug/Kg		110	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	2.08		ug/Kg		104	72 - 132
Perfluorononanoic acid (PFNA)	2.00	2.07		ug/Kg		104	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	2.23		ug/Kg		111	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	2.02		ug/Kg		101	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	2.30		ug/Kg		115	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	2.14		ug/Kg		107	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	2.07		ug/Kg		103	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.78	1.86		ug/Kg		105	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.75		ug/Kg		96	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.05		ug/Kg		108	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.89		ug/Kg		102	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	1.86		ug/Kg		96	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	2.18		ug/Kg		109	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.09		ug/Kg		104	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.26		ug/Kg		113	72 - 132
6:2 FTS	1.90	2.01		ug/Kg		106	73 - 139
8:2 FTS	1.92	1.95		ug/Kg		102	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*104*		*25 - 150*
13C5 PFPeA	*99*		*25 - 150*
13C2 PFHxA	*106*		*25 - 150*
13C4 PFHpA	*106*		*25 - 150*
13C4 PFOA	*107*		*25 - 150*
13C5 PFNA	*109*		*25 - 150*
13C2 PFDA	*106*		*25 - 150*
13C2 PFUnA	*109*		*25 - 150*
13C2 PFDoA	*103*		*25 - 150*
13C2 PFTeDA	*93*		*25 - 150*
13C3 PFBS	*104*		*25 - 150*
18O2 PFHxS	*106*		*25 - 150*
13C4 PFOS	*104*		*25 - 150*
13C8 FOSA	*113*		*25 - 150*
d3-NMeFOSAA	*105*		*25 - 150*
d5-NEtFOSAA	*114*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-705075/2-A
Matrix: Solid
Analysis Batch: 705437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 705075

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	89		25 - 150
M2-8:2 FTS	105		25 - 150

Client: Geosyntec Consultants Inc
Job ID: 180-162029-2
Project/Site: Former Sperry Remington-Imported Fill

LCMS

Prep Batch: 705075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	SHAKE	
180-162029-3 - RA	NAFREST-BRP-TS4C	Total/NA	Solid	SHAKE	
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	SHAKE	
180-162029-6 - RA	NAFREST-BRP-TS5C	Total/NA	Solid	SHAKE	
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	SHAKE	
180-162029-9 - RA	NAFREST-BRP-TS6C	Total/NA	Solid	SHAKE	
MB 320-705075/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-705075/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 705437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3	NAFREST-BRP-TS4C	Total/NA	Solid	537 (modified)	705075
180-162029-6	NAFREST-BRP-TS5C	Total/NA	Solid	537 (modified)	705075
180-162029-9	NAFREST-BRP-TS6C	Total/NA	Solid	537 (modified)	705075
MB 320-705075/1-A	Method Blank	Total/NA	Solid	537 (modified)	705075
LCS 320-705075/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	705075

Analysis Batch: 707561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-162029-3 - RA	NAFREST-BRP-TS4C	Total/NA	Solid	537 (modified)	705075
180-162029-6 - RA	NAFREST-BRP-TS5C	Total/NA	Solid	537 (modified)	705075
180-162029-9 - RA	NAFREST-BRP-TS6C	Total/NA	Solid	537 (modified)	705075

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

Chain of Custody Record

TOPSOIL

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
	Z Miller	Dunlap, David A		180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 703-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitnc Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N					
NAFREST-BRP-TS4A	9/7/23	1300	G	Solid	N	N	X													4	Containers for PFAS sent directly to Eurofins Sacramento Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS4B	9/7/23	1300	G	Solid	N	N	X													4	
NAFREST-BRP-TS4C	9/7/23	1300	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS5A	9/7/23	1305	G	Solid	N	N	X													4	
NAFREST-BRP-TS5B	9/7/23	1305	G	Solid	N	N	X													4	
NAFREST-BRP-TS5C	9/7/23	1305	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	
NAFREST-BRP-TS6A	9/7/23	1310	G	Solid	N	N	X													4	
NAFREST-BRP-TS6B	9/7/23	1310	G	Solid	N	N	X													4	
NAFREST-BRP-TS6C	9/7/23	1310	C	Solid	N	N		X	X	X	X	X	X	X	X	X				6	

180-162029 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 than 1 month)

☐ 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
	[signature]	9/7/23/1700	Geosyntec	[signature]	9/8/23 0900	EPHNE
	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.

Ver: 01/16/2019

Page 1 of 1

9/21/2023

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

Chain of Custody Record

TOPSOIL

eurofins

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656 1
Client Contact: Mr Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-162029 Chain of Custody

Preservation Codes:

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	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 DER-10 VOA (terracore)	8270D_LL DER-10 SVOC	8081B DER-10 Pesticides	8082A DER-10 PCBs	8151A DER-10 Herbicides	6010C, 7471B DER-10 Metals	9014 Cyanide	7196A Hexavalent Chromium	537 1 (mod.) PFAS	SPLP-E, 537 1 (mod.) PFAS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N		
NAFREST-BRP-TS4A	9/7/23	1300	G	Solid	N	N	X										4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS4B	9/7/23	1300	G	Solid	N	N	X										4	
~~NAFREST-BRP-TS4C~~	~~9/7/23~~	~~1300~~	~~C~~	~~Solid~~	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-TS5A	9/7/23	1305	G	Solid	N	N	X										4	
NAFREST-BRP-TS5B	9/7/23	1305	G	Solid	N	N	X										4	
NAFREST-BRP-TS5C	9/7/23	1305	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	
NAFREST-BRP-TS6A	9/7/23	1310	G	Solid	N	N	X										4	
NAFREST-BRP-TS6B	9/7/23	1310	G	Solid	N	N	X										4	
NAFREST-BRP-TS6C	9/7/23	1310	C	Solid	N	N		X	X	X	X	X	X	X	X	X	6	

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: 9/7/23/1700	Company Geosyntec	Received by:	Date/Time: 9/8/23 1030	Company Eurofins
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: 3.7

Ver: 01/16/2019

eurofins | Environment Testing

Sacramento
Sample Receiving Notes

Loc 180
162029

Tracking # 7733 1025 2897

Job _____ _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC

Therm ID 102 Corr Factor (+/-) _____ °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal _____

Cooler ID _____

Temp Observed 3.2 °C Corrected 3.2 °C
From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials _____ Date. 9/8/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☑	☐
Is the Field Sampler's name on COC?	☑	☐	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials GP Date. 9823

Notes._____

Trizma Lot #(s) _____

Ammonium
Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☑	☐	☐

Initials. GP Date: 9-8-23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-162029-2

Login Number: 162029
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-162029-2

Login Number: 162029
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 09/08/23 02:09 PM

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.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	3.2
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.	N/A	
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	

From: Glowark, Brandon <brandon.glowark@wsp.com>
Sent: Friday, October 27, 2023 4:14 PM
To: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>; Zappia, Kaleigh M (DEC) <Kaleigh.Zappia@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; david.pratt@dec.ny.gov; Bonsteel, Nicole <nicole.bonsteel@wsp.com>; Howe, Alexander <alexander.howe@wsp.com>; Whelan, Vincent <vincent.whelan@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Jen Huha <JHuha@Geosyntec.com>; Kaitlin Ouverson <KOuverson@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Miranda Stelmach <MStelmach@Geosyntec.com>; Jordyn Confer <jconfer@edgerinc.com>; Cyr, Scott <cyrs@hunt-eas.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; mdunn <mdunn@buildwelliver.com>; Mike Fulkerson <mfulkerson@buildwelliver.com>; Aubri York <AMosier@buildwelliver.com>
Subject: RE: NYSDEC #c808022 - DER-10 Requests to Import Breesport Topsoil for NAF Restoration/Improvements

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. If you have any suspicion, please confirm with the sender verbally that this email is authentic. If you suspect fraud, click "Phish Alert Report."

As Miranda reminds me 2000 cubic yards per the previous submittal, sorry for the confusion.

Have a great weekend.

-Brandon

Brandon Glowark
Technical Professional II

M+ 1 412-304-2038

WSP USA Environment & Infrastructure Inc.
11 Stanwix Street, Suite 950
Pittsburgh, Pennsylvania
15220 USA

wsp.com

From: Glowark, Brandon
Sent: Friday, October 27, 2023 4:12 PM
To: 'Aron Krasnopoler' <AKrasnopoler@Geosyntec.com>; Zappia, Kaleigh M (DEC) <Kaleigh.Zappia@dec.ny.gov>; McCartney, W Scott <w.scott.mccartney@wsp.com>; Bogardus, Sara (HEALTH) <Sara.Bogardus@health.ny.gov>; david.pratt@dec.ny.gov; Bonsteel, Nicole <nicole.bonsteel@wsp.com>; Howe, Alexander <alexander.howe@wsp.com>; Whelan, Vincent <vincent.whelan@wsp.com>
Cc: Etter, Terry R. <terry.etter@unisys.com>; Jen Huha <JHuha@Geosyntec.com>; Kaitlin Ouverson <KOuverson@Geosyntec.com>; Amanda McNally <AMcNally@Geosyntec.com>; Miranda Stelmach

<MStelmach@Geosyntec.com>; Jordyn Confer <jconfer@edgerinc.com>; Cyr, Scott <cyrs@hunt-eas.com>; Grasmeyer, Luke <grasmeyerl@hunt-eas.com>; Andrew Millspaugh <Andrew.Millspaugh@sterlingenvironmental.com>; Amanda Castignetti <Amanda.Castignetti@SterlingEnvironmental.com>; mdunn <mdunn@buildwelliver.com>; Mike Fulkerson <mfulkerson@buildwelliver.com>; Aubri York <AMosier@buildwelliver.com>
Subject: RE: NYSDEC #c808022 - DER-10 Requests to Import Breesport Topsoil for NAF Restoration/Improvements

Hello Aron,

We have reviewed your request to import 3000 cubic yards of topsoil from the Edger Breesport Pit for NAF restoration and improvements, and find it appropriate documentation to proceed, as long as the imported topsoil meet ECSD required specifications. It is noted that the VOC samples were collected as grab samples via the COCs provided within the import request (Import Request Form stated all samples were composite).

Thanks,

Brandon

Brandon Glowark
Technical Professional II

M+ 1 412-304-2038

WSP USA Environment & Infrastructure Inc.
11 Stanwix Street, Suite 950
Pittsburgh, Pennsylvania
15220 USA

wsp.com

From: Aron Krasnopoler <AKrasnopoler@Geosyntec.com>
Sent: Friday, October 27, 2023 10:28 AM
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Subject: RE: NYSDEC #c808022 - DER-10 Requests to Import Breesport Topsoil for NAF Restoration/Improvements

Hi Kaleigh,

Please find attached a DER-10 Request to Import the next 2,000 cubic yards of topsoil from the Edger Breesport Pit (Blackwell Pit Mined Land ID 80024) for NAF restoration and improvements. This request is for restoration of the EHS practice fields and areas outside of the baseball and softball fields.

Best Regards,
Aron

Aron Krasnopoler, Ph. D., P.E. (MD, NY)
Senior Engineer

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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: 2,000

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? no

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

Is this virgin material from a permitted mine or quarry? yes

Is this material recycled concrete or brick from a DEC registered processing facility? no

SECTION 3 - SAMPLING

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

Samples were collected from the Breesport Pit in Breesport, New York. Two composite samples were collected and analyzed for inorganics, SVOCs, VOCs, PCBs, pesticides, herbicides and total and SPLP PFAs.

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):

All detections were below the allowable levels for restricted residential use.

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 Civil & Utility, LLC dba RL Callahan

Location where fill was obtained:

Blackwell Pit, St Rte 223, Erin, NY 14838

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

NYSDEC MineID 80024

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 Report 180-163871-1 and 180-163871-2

The information provided on this form is accurate and complete.

Aron Krasnopoler

Digitally signed by Aron Krasnopoler
Date: 2023.10.27 09:42:19 -04'00'

Signature

26 October 2023

Date

Aron Krasnopoler

Print Name

B&B Engineers and Geologists of New York, P.C.

Firm

					Sample Name	NAFREST-BRP-TS7A	NAFREST-BRP-TS7B	NAFREST-BRP-TS7C	NAFREST-BRP-TS8A	NAFREST-BRP-TS8A	NAFREST-BRP-TS8B
					Location	NAFREST-BRP-TS7A	NAFREST-BRP-TS7B	NAFREST-BRP-TS7C	NAFREST-BRP-TSDUP2A	NAFREST-BRP-TS8A	NAFREST-BRP-TSDUP2B
					Sample Date	10/13/2023	10/13/2023	10/13/2023	10/13/2023	10/13/2023	10/13/2023
					Lab Report	180-163871-1	180-163871-1	180-163871-1/2	180-163871-1	180-163871-1	180-163871-1
Chemical Group	**Chemical**	**Units**	DER-10 App5 Unrestricted	DER-10 App5 Rstr. Res.							
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg			--	--	< 0.24 U	--	--	--	
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg			--	--	< 0.24 U	--	--	--	
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg			--	--	< 0.24 U	--	--	--	
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluorobutanesulfonic acid (PFBS)	ug/kg			--	--	0.051 J,EMPC	--	--	--	
	Perfluorobutanoic acid (PFBA)	ug/kg			--	--	0.20 J	--	--	--	
	Perfluorodecanesulfonic acid (PFDS)	ug/kg			--	--	0.070 J	--	--	--	
	Perfluorodecanoic acid (PFDA)	ug/kg			--	--	0.14 J	--	--	--	
	Perfluorododecanoic acid (PFDoA)	ug/kg			--	--	0.042 J	--	--	--	
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluoroheptanoic acid (PFHpA)	ug/kg			--	--	0.15 J	--	--	--	
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluorohexanoic acid (PFHxA)	ug/kg			--	--	0.79	--	--	--	
	Perfluorononanoic acid (PFNA)	ug/kg			--	--	0.12 J	--	--	--	
	Perfluorooctanesulfonamide (PFOSA)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	--	--	1.2 EMPC	--	--	--	
	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	--	--	0.48	--	--	--	
	Perfluoropentanoic acid (PFPeA)	ug/kg			--	--	0.24	--	--	--	
	Perfluorotetradecanoic acid (PFTeA)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluorotridecanoic acid (PFTriA)	ug/kg			--	--	< 0.24 U	--	--	--	
	Perfluoroundecanoic acid (PFUnA)	ug/kg			--	--	0.051 J	--	--	--	
Metals	Arsenic	mg/kg	13	16	--	--	7.2	--	--	--	
	Barium	mg/kg	350	400	--	--	87	--	--	--	
	Beryllium	mg/kg	7.2	47	--	--	0.44 J	--	--	--	
	Cadmium	mg/kg	2.5	4.3	--	--	0.13 J	--	--	--	
	Chromium (III+VI)	mg/kg	30	180	--	--	19	--	--	--	
	Chromium, Hexavalent	mg/kg	1	19	--	--	< 0.50 U	--	--	--	
	Copper	mg/kg	50	270	--	--	24	--	--	--	
	Cyanide Total	mg/kg	27	27	--	--	0.31	--	--	--	
	Lead	mg/kg	63	400	--	--	24	--	--	--	
	Manganese	mg/kg	1600	2000	--	--	420	--	--	--	
	Mercury	mg/kg	0.18	0.73	--	--	0.053	--	--	--	
	Nickel	mg/kg	30	130	--	--	18	--	--	--	
	Selenium	mg/kg	3.9	4	--	--	< 6.0 U	--	--	--	
	Silver	mg/kg	2	8.3	--	--	< 1.2 UT	--	--	--	
	Zinc	mg/kg	109	2480	--	--	90	--	--	--	
Herbicides	2,4,5-TP (Silvex)	mg/kg	3.8	3.8	--	--	< 0.025 U	--	--	--	
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	0.0033	13	--	--	< 0.0021 U	--	--	--	
	4,4'-DDE (p,p'-DDE)	mg/kg	0.0033	8.9	--	--	< 0.0021 U	--	--	--	
	4,4'-DDT (p,p'-DDT)	mg/kg	0.0033	7.9	--	--	< 0.0021 U	--	--	--	
	Aldrin	mg/kg	0.005	0.097	--	--	< 0.0021 U	--	--	--	
	alpha-BHC	mg/kg	0.02	0.02	--	--	< 0.0021 U	--	--	--	
	alpha-Chlordane	mg/kg			--	--	< 0.0021 U	--	--	--	
	beta-BHC	mg/kg	0.036	0.09	--	--	< 0.0021 U	--	--	--	
	delta-BHC	mg/kg	0.04	0.25	--	--	< 0.0021 U	--	--	--	
	Dieldrin	mg/kg	0.005	0.1	--	--	< 0.0021 U	--	--	--	
	Endosulfan I (alpha)	mg/kg	2.4	24	--	--	< 0.0021 U	--	--	--	
	Endosulfan II (beta)	mg/kg	2.4	24	--	--	< 0.0021 U	--	--	--	
	Endosulfan Sulfate	mg/kg	2.4	24	--	--	< 0.0021 U	--	--	--	
	Endrin	mg/kg	0.014	0.06	--	--	< 0.0021 U	--	--	--	
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	--	--	< 0.0021 UT	--	--	--	
	Heptachlor	mg/kg	0.042	0.38	--	--	< 0.0021 U	--	--	--	
PCBs	Aroclor 1016	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1221	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1232	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1242	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1248	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1254	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1260	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1262	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	Aroclor 1268	mg/kg	NS	NS	--	--	< 0.021 U	--	--	--	
	PCBs	mg/kg	0.1	1	--	--	< 0.021 U	--	--	--	
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	--	--	< 0.083 U	--	--	--	
	2-Methylphenol	mg/kg	0.33	0.33	--	--	< 0.041 U	--	--	--	
	4-methylphenol	mg/kg	0.33	0.33	--	--	0.020 J	--	--	--	
	Acenaphthene	mg/kg	20	98	--	--	0.0034 J	--	--	--	
	Acenaphthylene	mg/kg	100	100	--	--	0.0084	--	--	--	
	Anthracene	mg/kg	100	100	--	--	0.0099	--	--	--	
	Benz(a)anthracene	mg/kg	1	1	--	--	0.037	--	--	--	
	Benzo(a)pyrene (BaP)	mg/kg	1	1	--	--	0.038	--	--	--	
	Benzo(b)fluoranthene	mg/kg	1	1	--	--	0.048	--	--	--	
	Benzo(g,h,i)perylene	mg/kg	100	100	--	--	0.028	--	--	--	
	Benzo(k)fluoranthene	mg/kg	0.8	1.7	--	--	0.020	--	--	--	
	Chrysene	mg/kg	1	1	--	--	0.042	--	--	--	
	Dibenz(a,h)anthracene	mg/kg	0.33	0.33	--	--	0.0063 J	--	--	--	
	Dibenzofuran	mg/kg	7	59	--	--	< 0.041 U	--	--	--	
	Fluoranthene	mg/kg	100	100	--	--	0.074	--	--	--	
	Fluorene	mg/kg	30	100	--	--	0.0054 J	--	--	--	
	Hexachlorobenzene	mg/kg	0.33	1.2	--	--	< 0.0084 U	--	--	--	
	Indeno (1,2,3-cd)pyrene	mg/kg	0.5	0.5	--	--	0.024	--	--	--	
	Naphthalene	mg/kg	12	12	--	--	0.0026 J	--	--	--	
	Pentachlorophenol	mg/kg	0.8	0.8	--	--	< 0.21 U	--	--	--	
	Phenanthrene	mg/kg	100	100	--	--	0.036	--	--	--	
	Phenol	mg/kg	0.33	0.33	--	--	< 0.041 U	--	--	--	
	Pyrene	mg/kg	100	100	--	--	0.058	--	--	--	
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,1-Dichloroethane	mg/kg	0.27	0.27	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,1-Dichloroethene	mg/kg	0.33	0.33	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,2-Dichloroethane	mg/kg	0.02	0.02	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Acetone	mg/kg	0.05	0.05	< 0.029 U	< 0.030 U	--	< 0.027 U	< 0.028 U	< 0.031 U	
	Benzene	mg/kg	0.06	0.06	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Carbon Tetrachloride	mg/kg	0.76	0.76	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Chlorobenzene	mg/kg	1.1	1.1	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Chloroform	mg/kg	0.37	0.37	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Dichloromethane	mg/kg	0.05	0.05	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Ethylbenzene	mg/kg	1	1	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	< 0.029 U	< 0.030 U	--	< 0.027 U	< 0.028 U	< 0.031 U	
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Tetrachloroethene	mg/kg	1.3	1.3	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Toluene	mg/kg	0.7	0.7	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Trichloroethene	mg/kg	0.47	0.47	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Vinyl chloride	mg/kg	0.02	0.02	< 0.0059 U	< 0.0060 U	--	< 0.0053 U	< 0.0057 U	< 0.0062 U	
	Xylenes (Total)	mg/kg	0.26	1.6	< 0.012 U	< 0.012 U	--	< 0.011 U	< 0.011 U	< 0.012 U	

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
EMPC - estimated maximum possible concentration
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated

Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray

Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray

Table 1
NAF Restoration Import Fill Data - Topsoil
Former Sperry Remington Site - North Portion
Elmira, NY

				Sample Name	NAFREST-BRP-TS8B	NAFREST-BRP-TS8C	NAFREST-BRP-TS8C
				Location	NAFREST-BRP-TS8B	NAFREST-BRP-TSDUP2C	NAFREST-BRP-TS8C
				Sample Date	10/13/2023	10/13/2023	10/13/2023
				Lab Report	180-163871-1	180-163871-1/2	180-163871-1/2
Chemical Group	**Chemical**	**Units**	DER-10 App5 Unrestricted	DER-10 App5 Rest. Res.			
PFAS	1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2)	ug/kg			--	< 0.23 U	< 0.23 U
	1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2)	ug/kg			--	< 0.23 U	< 0.23 U
	2-(N-methyl perfluorooctanesulfonamido) acetic acid	ug/kg			--	< 0.23 U	< 0.23 U
	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluorobutanesulfonic acid (PFBS)	ug/kg			--	0.045 J	0.047 J
	Perfluorobutanoic acid (PFBA)	ug/kg			--	0.19 J	0.23
	Perfluorodecanesulfonic acid (PFDS)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluorodecanoic acid (PFDA)	ug/kg			--	0.11 J	0.12 J
	Perfluorododecanoic acid (PFDoA)	ug/kg			--	0.050 J	0.038 J
	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluoroheptanoic acid (PFHpA)	ug/kg			--	0.11 J	0.13 J
	Perfluorohexanesulfonic acid (PFHxS)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluorohexanoic acid (PFHxA)	ug/kg			--	0.51	0.50
	Perfluorononanoic acid (PFNA)	ug/kg			--	0.11 J	0.12 J
	Perfluorooctanesulfonamide (PFOSA)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	--	1.0 EMPC	1.1 EMPC
	Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	--	0.41	0.46
	Perfluoropentanoic acid (PFPeA)	ug/kg			--	0.25	0.36
	Perfluorotetradecanoic acid (PFTeA)	ug/kg			--	< 0.23 U	< 0.23 U
	Perfluorotridecanoic acid (PFTriA)	ug/kg			--	0.025 J	< 0.23 U
	Perfluoroundecanoic acid (PFUnA)	ug/kg			--	0.048 J	0.048 J
Metals	Arsenic	mg/kg	13	16	--	7.0	5.3
	Barium	mg/kg	350	400	--	95	84
	Beryllium	mg/kg	7.2	47	--	0.47 J	0.42 J
	Cadmium	mg/kg	2.5	4.3	--	0.17 J	< 0.54 U
	Chromium (III+VI)	mg/kg	30	180	--	18	17
	Chromium, Hexavalent	mg/kg	1	19	--	< 0.49 U	< 0.49 U
	Copper	mg/kg	50	270	--	21	21
	Cyanide Total	mg/kg	27	27	--	0.27	0.31
	Lead	mg/kg	63	400	--	22	19
	Manganese	mg/kg	1600	2000	--	440	410
	Mercury	mg/kg	0.18	0.73	--	0.078	0.058
	Nickel	mg/kg	30	130	--	18	18
	Selenium	mg/kg	3.9	4	--	< 5.7 U	< 5.4 U
	Silver	mg/kg	2	8.3	--	< 1.1 UT	< 1.1 UT
	Zinc	mg/kg	109	2480	--	84	79
Herbicides	2,4,5-TP (Silvex)	mg/kg	3.8	3.8	--	< 0.025 U	< 0.024 U
Organochlorine Pesticides	4,4'-DDD (p,p'-DDD)	mg/kg	0.0033	13	--	< 0.0021 U	< 0.0021 U
	4,4'-DDE (p,p'-DDE)	mg/kg	0.0033	8.9	--	< 0.0021 U	< 0.0021 U
	4,4'-DDT (p,p'-DDT)	mg/kg	0.0033	7.9	--	< 0.0021 U	< 0.0021 U
	Aldrin	mg/kg	0.005	0.097	--	< 0.0021 U	< 0.0021 U
	alpha-BHC	mg/kg	0.02	0.02	--	< 0.0021 U	< 0.0021 U
	alpha-Chlordane	mg/kg			--	0.0045 P	0.0052 P
	beta-BHC	mg/kg	0.036	0.09	--	< 0.0021 U	< 0.0021 U
	delta-BHC	mg/kg	0.04	0.25	--	< 0.0021 U	< 0.0021 U
	Dieldrin	mg/kg	0.005	0.1	--	< 0.0021 U	< 0.0021 U
	Endosulfan I (alpha)	mg/kg	2.4	24	--	< 0.0021 U	< 0.0021 U
	Endosulfan II (beta)	mg/kg	2.4	24	--	< 0.0021 U	< 0.0021 U
	Endosulfan Sulfate	mg/kg	2.4	24	--	< 0.0021 U	< 0.0021 U
	Endrin	mg/kg	0.014	0.06	--	< 0.0021 U	< 0.0021 U
	gamma-BHC (Lindane)	mg/kg	0.1	0.1	--	< 0.0021 U	< 0.0021 U
	Heptachlor	mg/kg	0.042	0.38	--	< 0.0021 U	< 0.0021 U
PCBs	Aroclor 1016	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1221	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1232	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1242	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1248	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1254	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1260	mg/kg	NS	NS	--	0.0096 J	0.056
	Aroclor 1262	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	Aroclor 1268	mg/kg	NS	NS	--	< 0.020 U	< 0.020 U
	PCBs	mg/kg	0.1	1	--	0.01	0.07
SVOCs	1,4-Dioxane	mg/kg	0.1	0.1	--	< 0.081 U	< 0.080 U
	2-Methylphenol	mg/kg	0.33	0.33	--	< 0.040 U	< 0.040 U
	4-methylphenol	mg/kg	0.33	0.33	--	0.019 J	0.018 J
	Acenaphthene	mg/kg	20	98	--	< 0.0081 U	0.013
	Acenaphthylene	mg/kg	100	100	--	0.0043 J	0.0076 J
	Anthracene	mg/kg	100	100	--	0.0045 J	0.017
	Benz(a)anthracene	mg/kg	1	1	--	0.022	0.046
	Benzo(a)pyrene (BaP)	mg/kg	1	1	--	0.026	0.046
	Benzo(b)fluoranthene	mg/kg	1	1	--	0.031	0.054
	Benzo(g,h,i)perylene	mg/kg	100	100	--	0.020	0.031
	Benzo(k)fluoranthene	mg/kg	0.8	1.7	--	0.012	0.023
	Chrysene	mg/kg	1	1	--	0.027	0.049
	Dibenz(a,h)anthracene	mg/kg	0.33	0.33	--	< 0.0081 U	0.0089
	Dibenzofuran	mg/kg	7	59	--	< 0.040 U	< 0.040 U
	Fluoranthene	mg/kg	100	100	--	0.045	0.10
	Fluorene	mg/kg	30	100	--	< 0.0081 U	0.012
	Hexachlorobenzene	mg/kg	0.33	1.2	--	< 0.0081 U	< 0.0081 U
	Indeno (1,2,3-cd)pyrene	mg/kg	0.5	0.5	--	0.017	0.026
	Naphthalene	mg/kg	12	12	--	< 0.0081 U	0.037
	Pentachlorophenol	mg/kg	0.8	0.8	--	< 0.21 U	< 0.20 U
	Phenanthrene	mg/kg	100	100	--	0.016	0.060
	Phenol	mg/kg	0.33	0.33	--	< 0.040 U	< 0.040 U
	Pyrene	mg/kg	100	100	--	0.039	0.078
VOCs	1,1,1-Trichloroethane	mg/kg	0.68	0.68	< 0.0054 U	--	--
	1,1-Dichloroethane	mg/kg	0.27	0.27	< 0.0054 U	--	--
	1,1-Dichloroethene	mg/kg	0.33	0.33	< 0.0054 U	--	--
	1,2-Dichloroethane	mg/kg	0.02	0.02	< 0.0054 U	--	--
	1,3-Dichlorobenzene	mg/kg	2.4	2.4	< 0.0054 U	--	--
	1,4-Dichlorobenzene	mg/kg	1.8	1.8	< 0.0054 U	--	--
	1,2-Dichlorobenzene	mg/kg	1.1	1.1	< 0.0054 U	--	--
	Acetone	mg/kg	0.05	0.05	< 0.027 U	--	--
	Benzene	mg/kg	0.06	0.06	< 0.0054 U	--	--
	Carbon Tetrachloride	mg/kg	0.76	0.76	< 0.0054 U	--	--
	Chlorobenzene	mg/kg	1.1	1.1	< 0.0054 U	--	--
	Chloroform	mg/kg	0.37	0.37	< 0.0054 U	--	--
	cis-1,2-Dichloroethene	mg/kg	0.25	0.25	< 0.0054 U	--	--
	Dichloromethane	mg/kg	0.05	0.05	< 0.0054 U	--	--
	Ethylbenzene	mg/kg	1	1	< 0.0054 U	--	--
	Methyl Ethyl Ketone	mg/kg	0.12	0.12	< 0.027 U	--	--
	Methyl-tert-butyl ether	mg/kg	0.93	0.93	< 0.0054 U	--	--
	Tetrachloroethene	mg/kg	1.3	1.3	< 0.0054 U	--	--
	Toluene	mg/kg	0.7	0.7	< 0.0054 U	--	--
	trans-1,2-Dichloroethene	mg/kg	0.19	0.19	< 0.0054 U	--	--
	Trichloroethene	mg/kg	0.47	0.47	< 0.0054 U	--	--
	Vinyl chloride	mg/kg	0.02	0.02	< 0.0054 U	--	--
	Xylenes (Total)	mg/kg	0.26	1.6	< 0.011 U	--	--

Notes
EQL - Estimated Quantitation Limit
PCBs - Polychlorinated Biphenyls
SVOCs - Semivolatile Organic Compounds
VOCs - Volatile Organic Compounds
PAH - Polycyclic Aromatic Hydrocarbons
PFAS - Per- and Polyfluoroalkyl Substances
mg/kg - milligrams per kilogram
µg/kg - micrograms per kilogram
^+ - Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
* - ISTD response or retention time outside acceptable limits
*+ - LCS and/or LCSD is outside acceptance limits, high biased
*1 - LCS/LCSD RPD exceeds control limits
B - Compound detected in method blank
EMPC - estimated maximum possible concentration
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.
T - Indicates that a quality control parameter has exceeded laboratory limits
U - non detect at the value indicated

Analyte concentrations detected above DER-10 App5 Restricted Residential Screening Criteria are presented in dark gray

Analyte concentrations detected above DER-10 App5 Unrestricted Screening Criteria are presented in light gray

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1 2 3 4 5 6 7 8 9 10 11 12 13 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-163871-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
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Job ID: 180-163871-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-163871-1

Receipt
The samples were received on 10/14/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.9º C, 5.2º C and 5.7º C.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) analyzed in batch 180-449436 was above criteria for the following analyte: Pentachlorophenol. 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 8081B: The internal standards 1-bromo-2-nitrobenzene and dibutylchlorendate eluted outside the retention time window on both columns for the matrix spike duplicate (MSD) of sample following sample: NAFREST-BRP-TS7C (180-163871-3). This retention time shift was taken into account when reviewing the sample for target analytes.

Method 8081B: The matrix spike (MS) of sample NAFREST-BRP-TS7C (180-163871-3) had the recovery of gamma-BHC (Lindane) below the control limits. The RPD between the spikes and the recoveries of the matrix spike duplicate (MSD) and laboratory control sample (LCS) were within the control limits.

Method 8151A: The continuing calibration verifications (CCV) analyzed in batch 180-449383 were above criteria on column RTX-50 for the following analytes: silvex (2,4,5-TP) and surrogate 2,4-dichlorophenyl acetic acid. The results were reported from column RTX-1701 which met criteria.

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

Metals
Method 6010D: The Reporting Limit Check Standard (CRI) associated with batch 410-434754 (CRI 410-434754/10) recovered above the control limits for silver. As the CRI was high and silver 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.

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
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11182	04-01-24

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

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-24

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-163871-1	NAFREST-BRP-TS7A	Solid	10/13/23 13:30	10/14/23 09:25
180-163871-2	NAFREST-BRP-TS7B	Solid	10/13/23 13:30	10/14/23 09:25
180-163871-3	NAFREST-BRP-TS7C	Solid	10/13/23 13:30	10/14/23 09:25
180-163871-4	NAFREST-BRP-TS8A	Solid	10/13/23 13:35	10/14/23 09:25
180-163871-5	NAFREST-BRP-TS8B	Solid	10/13/23 13:35	10/14/23 09:25
180-163871-6	NAFREST-BRP-TS8C	Solid	10/13/23 13:35	10/14/23 09:25
180-163871-7	NAFREST-BRP-TSDUP2A	Solid	10/13/23 00:00	10/14/23 09:25
180-163871-8	NAFREST-BRP-TSDUP2B	Solid	10/13/23 00:00	10/14/23 09:25
180-163871-9	NAFREST-BRP-TSDUP2C	Solid	10/13/23 00:00	10/14/23 09:25

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
EPA 8260C	Volatile Organic Compounds by GC/MS	SW846	EET PIT
EPA 8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
6010D	Metals (ICP)	SW846	ELLE
EPA 7471B	Mercury (CVAA)	SW846	EET PIT
2540G	SM 2540G	SM22	EET PIT
EPA 7196A	Chromium, Hexavalent	SW846	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
3050B	Preparation, Metals	SW846	ELLE
3060A	Alkaline Digestion (Chromium, Hexavalent)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
3541	Automated Soxhlet Extraction (Low Level)	SW846	EET PIT
3660B	Sulfur Cleanup	SW846	EET PIT
3665A	Sulfuric Acid/Permanganate Cleanup	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	EET PIT
7471B	Preparation, Mercury	SW846	EET PIT
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET 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:

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Client Sample ID: NAFREST-BRP-TS7A
Lab Sample ID: 180-163871-1
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS7A
Lab Sample ID: 180-163871-1
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3065 g	5 mL	449264	10/15/23 07:45	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/15/23 22:35	SW1	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS7B
Lab Sample ID: 180-163871-2
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS7B
Lab Sample ID: 180-163871-2
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.2236 g	5 mL	449345	10/16/23 02:04	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/16/23 03:17	SW1	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

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	449385	10/17/23 06:06	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	449427	10/17/23 17:24	VVP	EET PIT
	Instrument ID: CHMSD7									

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

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	20.0 mL	449465	10/17/23 14:23	DVC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	449636	10/19/23 09:40	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.0 g	20.0 mL	449598	10/18/23 14:50	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	449661	10/19/23 07:57	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	449662	10/19/23 07:58	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	449642	10/20/23 00:45	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.0 g	40.0 mL	449268	10/15/23 22:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	449383	10/17/23 08:15	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.04 g	100 mL	434288	10/23/23 03:25	UAMX	ELLE
Total/NA	Analysis	6010D		1			434754	10/23/23 19:01	T8CQ	ELLE
	Instrument ID: T75 - 27278									
Total/NA	Prep	7471B			0.64 g	100 mL	449366	10/17/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			449576	10/18/23 10:10	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.51 g	100 mL	449557	10/18/23 11:05	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	449813	10/20/23 11:53	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.61 g	10 mL	449810	10/20/23 16:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			450206	10/23/23 17:11	CMR	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: NAFREST-BRP-TS8A
Lab Sample ID: 180-163871-4
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS8A
Lab Sample ID: 180-163871-4
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.3064 g	5 mL	449264	10/15/23 07:45	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/15/23 23:22	SW1	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS8B
Lab Sample ID: 180-163871-5
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS8B
Lab Sample ID: 180-163871-5
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.7725 g	5 mL	449264	10/15/23 07:45	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/15/23 23:46	SW1	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	0.5 mL	449385	10/17/23 06:06	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	449427	10/17/23 17:46	VVP	EET PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.1 g	20.0 mL	449465	10/17/23 14:23	DVC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	449774	10/20/23 10:59	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.0 g	20.0 mL	449598	10/18/23 14:50	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	449661	10/19/23 07:57	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	449662	10/19/23 07:58	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	449642	10/20/23 01:03	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.1 g	40.0 mL	449268	10/15/23 22:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	449383	10/17/23 08:34	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.14 g	100 mL	434288	10/23/23 03:25	UAMX	ELLE
Total/NA	Analysis	6010D		1			434754	10/23/23 19:32	T8CQ	ELLE
	Instrument ID: T75 - 27278									
Total/NA	Prep	7471B			0.60 g	100 mL	449366	10/17/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			449576	10/18/23 10:11	MTW	EET PIT
	Instrument ID: HGZ									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3060A			2.49 g	100 mL	449557	10/18/23 11:05	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	449813	10/20/23 11:55	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.56 g	10 mL	449810	10/20/23 16:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			450206	10/23/23 17:11	CMR	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: NAFREST-BRP-TSDUP2A
Lab Sample ID: 180-163871-7
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TSDUP2A
Lab Sample ID: 180-163871-7
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.6034 g	5 mL	449264	10/15/23 07:45	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/16/23 00:10	SW1	EET PIT
	Instrument ID: CHHP3									

Client Sample ID: NAFREST-BRP-TSDUP2B
Lab Sample ID: 180-163871-8
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TSDUP2B
Lab Sample ID: 180-163871-8
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.0344 g	5 mL	449264	10/15/23 07:45	PJJ	EET PIT
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	449263	10/16/23 00:33	SW1	EET PIT
	Instrument ID: CHHP3									

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 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			449262	10/15/23 10:05	CRL	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

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	449385	10/17/23 06:06	VJC	EET PIT
Total/NA	Analysis	EPA 8270D LL		1	1 mL	1 mL	449427	10/17/23 18:07	VVP	EET PIT
	Instrument ID: CHMSD7									
Total/NA	Prep	3541			15.3 g	20.0 mL	449465	10/17/23 14:23	DVC	EET PIT
Total/NA	Analysis	EPA 8081B		1	1 mL	1 mL	449774	10/20/23 11:16	SMW	EET PIT
	Instrument ID: CHGC17									
Total/NA	Prep	3541			15.3 g	20.0 mL	449598	10/18/23 14:50	DVC	EET PIT
Total/NA	Cleanup	3665A			2 mL	2 mL	449661	10/19/23 07:57	JMO	EET PIT
Total/NA	Cleanup	3660B			2 mL	2 mL	449662	10/19/23 07:58	JMO	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	449642	10/20/23 01:21	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	8151A			10.0 g	40.0 mL	449268	10/15/23 22:30	CBY	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	449383	10/17/23 08:54	JMO	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	3050B			1.08 g	100 mL	434288	10/23/23 03:25	UAMX	ELLE
Total/NA	Analysis	6010D		1			434754	10/23/23 19:14	T8CQ	ELLE
	Instrument ID: T75 - 27278									
Total/NA	Prep	7471B			0.60 g	100 mL	449366	10/17/23 09:25	MTW	EET PIT
Total/NA	Analysis	EPA 7471B		1			449576	10/18/23 10:12	MTW	EET PIT
	Instrument ID: HGZ									
Total/NA	Prep	3060A			2.53 g	100 mL	449557	10/18/23 11:05	CMC	EET PIT
Total/NA	Analysis	EPA 7196A		1	4 mL	4 mL	449813	10/20/23 11:57	CMC	EET PIT
	Instrument ID: RAPID-T									
Total/NA	Prep	9010C			0.55 g	10 mL	449810	10/20/23 16:15	CMR	EET PIT
Total/NA	Analysis	EPA 9014		1			450206	10/23/23 17:14	CMR	EET PIT
	Instrument ID: SHAMU									

Laboratory References:

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Analyst References:

Lab: EET PIT
- Batch Type: Cleanup
  - JMO = John Oravec
- Batch Type: Prep
  - CBY = Charles Yushinski
  - CMC = Candace California
  - CMR = Carl Reagle
  - DVC = Daniel Capodanno
  - MTW = Michael Wesoloski
  - PJJ = Patrick Journet
  - VJC = Vincent Cervone
- Batch Type: Analysis
  - CMC = Candace California
  - CMR = Carl Reagle
  - CRL = Craig Tronzo
  - JMO = John Oravec
  - MTW = Michael Wesoloski
  - SMW = Shelby Walters
  - SW1 = Sunan Wang-un
  - VVP = Vincent Piccolino

Lab: ELLE
- Batch Type: Prep
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - T8CQ = Sera Bargo

Client Sample ID: NAFREST-BRP-TS7A
Lab Sample ID: 180-163871-1

Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.029	0.0046	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Benzene	ND		0.0059	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
2-Butanone (MEK)	ND		0.029	0.0030	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Carbon tetrachloride	ND		0.0059	0.0024	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Chlorobenzene	ND		0.0059	0.0015	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Chloroform	ND		0.0059	0.0039	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
cis-1,2-Dichloroethene	ND		0.0059	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,2-Dichlorobenzene	ND		0.0059	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,3-Dichlorobenzene	ND		0.0059	0.0036	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,4-Dichlorobenzene	ND		0.0059	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,1-Dichloroethane	ND		0.0059	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,2-Dichloroethane	ND		0.0059	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,1-Dichloroethene	ND		0.0059	0.0027	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,4-Dioxane	ND		1.2	0.089	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Ethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Methylene Chloride	ND		0.0059	0.0053	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Methyl tert-butyl ether	ND		0.0059	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
n-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
N-Propylbenzene	ND		0.0059	0.0021	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
sec-Butylbenzene	ND		0.0059	0.0029	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
tert-Butylbenzene	ND		0.0059	0.0025	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Tetrachloroethene	ND		0.0059	0.0024	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Toluene	ND		0.0059	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
trans-1,2-Dichloroethene	ND		0.0059	0.0021	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,1,1-Trichloroethane	ND		0.0059	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Trichloroethene	ND		0.0059	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,2,4-Trimethylbenzene	ND		0.0059	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
1,3,5-Trimethylbenzene	ND		0.0059	0.0022	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Vinyl chloride	ND		0.0059	0.0042	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1
Xylenes, Total	ND		0.012	0.0085	mg/Kg	☼	10/15/23 07:45	10/15/23 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*		*60 - 124*	*10/15/23 07:45*	*10/15/23 22:35*	*1*
Dibromofluoromethane (Surr)	*90*		*69 - 126*	*10/15/23 07:45*	*10/15/23 22:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*73 - 135*	*10/15/23 07:45*	*10/15/23 22:35*	*1*
Toluene-d8 (Surr)	*83*		*67 - 134*	*10/15/23 07:45*	*10/15/23 22:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**19.8**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**80.2**		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TS7B
Lab Sample ID: 180-163871-2

Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 79.6

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.030	0.0047	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Benzene	ND		0.0060	0.0017	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1

Client Sample ID: NAFREST-BRP-TS7B
Lab Sample ID: 180-163871-2
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 79.6

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		0.030	0.0031	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Carbon tetrachloride	ND		0.0060	0.0024	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Chlorobenzene	ND		0.0060	0.0016	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Chloroform	ND		0.0060	0.0040	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
cis-1,2-Dichloroethene	ND		0.0060	0.0018	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,2-Dichlorobenzene	ND		0.0060	0.0020	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,3-Dichlorobenzene	ND		0.0060	0.0037	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,4-Dichlorobenzene	ND		0.0060	0.0018	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,1-Dichloroethane	ND		0.0060	0.0019	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,2-Dichloroethane	ND		0.0060	0.0017	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,1-Dichloroethene	ND		0.0060	0.0027	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,4-Dioxane	ND		1.2	0.091	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Ethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Methylene Chloride	ND		0.0060	0.0054	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Methyl tert-butyl ether	ND		0.0060	0.0018	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
n-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
N-Propylbenzene	ND		0.0060	0.0021	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
sec-Butylbenzene	ND		0.0060	0.0030	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
tert-Butylbenzene	ND		0.0060	0.0025	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Tetrachloroethene	ND		0.0060	0.0024	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Toluene	ND		0.0060	0.0017	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
trans-1,2-Dichloroethene	ND		0.0060	0.0021	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,1,1-Trichloroethane	ND		0.0060	0.0020	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Trichloroethene	ND		0.0060	0.0019	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,2,4-Trimethylbenzene	ND		0.0060	0.0021	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
1,3,5-Trimethylbenzene	ND		0.0060	0.0022	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Vinyl chloride	ND		0.0060	0.0043	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1
Xylenes, Total	ND		0.012	0.0087	mg/Kg	☼	10/16/23 02:04	10/16/23 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*60 - 124*	*10/16/23 02:04*	*10/16/23 03:17*	*1*
Dibromofluoromethane (Surr)	*102*		*69 - 126*	*10/16/23 02:04*	*10/16/23 03:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*73 - 135*	*10/16/23 02:04*	*10/16/23 03:17*	*1*
Toluene-d8 (Surr)	*93*		*67 - 134*	*10/16/23 02:04*	*10/16/23 03:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**20.4**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**79.6**		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.0034**	**J**	0.0084	0.0024	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Acenaphthylene	**0.0084**		0.0084	0.0018	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Anthracene	**0.0099**		0.0084	0.0022	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Benzo[a]anthracene	**0.037**		0.0084	0.0038	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Method: SW846 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	**0.038**		0.0084	0.0036	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Benzo[b]fluoranthene	**0.048**		0.0084	0.0020	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Benzo[g,h,i]perylene	**0.028**		0.0084	0.0018	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Benzo[k]fluoranthene	**0.020**		0.0084	0.0025	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Chrysene	**0.042**		0.0084	0.0046	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Dibenz(a,h)anthracene	**0.0063**	**J**	0.0084	0.0053	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Dibenzofuran	ND		0.041	0.015	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
1,4-Dioxane	ND		0.083	0.013	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Fluoranthene	**0.074**		0.0084	0.0022	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Fluorene	**0.0054**	**J**	0.0084	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Hexachlorobenzene	ND		0.0084	0.0030	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Indeno[1,2,3-cd]pyrene	**0.024**		0.0084	0.0041	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
2-Methylphenol	ND		0.041	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Methylphenol, 3 & 4	**0.020**	**J**	0.041	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Naphthalene	**0.0026**	**J**	0.0084	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Pentachlorophenol	ND		0.21	0.067	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Phenanthrene	**0.036**		0.0084	0.0022	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Phenol	ND		0.041	0.013	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1
Pyrene	**0.058**		0.0084	0.0020	mg/Kg	☼	10/17/23 06:06	10/17/23 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*35 - 105*	*10/17/23 06:06*	*10/17/23 17:24*	*1*
2-Fluorophenol (Surr)	*60*		*32 - 105*	*10/17/23 06:06*	*10/17/23 17:24*	*1*
Nitrobenzene-d5 (Surr)	*59*		*34 - 109*	*10/17/23 06:06*	*10/17/23 17:24*	*1*
Phenol-d5 (Surr)	*66*		*34 - 105*	*10/17/23 06:06*	*10/17/23 17:24*	*1*
Terphenyl-d14 (Surr)	*59*		*20 - 117*	*10/17/23 06:06*	*10/17/23 17:24*	*1*
2,4,6-Tribromophenol (Surr)	*57*		*20 - 119*	*10/17/23 06:06*	*10/17/23 17:24*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0021	0.00065	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
alpha-BHC	ND		0.0021	0.00051	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
beta-BHC	ND		0.0021	0.00057	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
cis-Chlordane	ND		0.0021	0.00052	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
4,4'-DDD	ND		0.0021	0.00044	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
4,4'-DDE	ND		0.0021	0.00042	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
4,4'-DDT	ND		0.0021	0.0015	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
delta-BHC	ND		0.0021	0.00066	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Dieldrin	ND		0.0021	0.00052	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Endosulfan I	ND		0.0021	0.00056	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Endosulfan II	ND		0.0021	0.00046	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Endosulfan sulfate	ND		0.0021	0.00095	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Endrin	ND		0.0021	0.00039	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
gamma-BHC (Lindane)	ND	F1	0.0021	0.00054	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1
Heptachlor	ND		0.0021	0.00065	mg/Kg	☼	10/17/23 14:23	10/19/23 09:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*59*	*p*	*42 - 124*	*10/17/23 14:23*	*10/19/23 09:40*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*42 - 124*	*10/17/23 14:23*	*10/19/23 09:40*	*1*
Tetrachloro-m-xylene	*84*		*40 - 137*	*10/17/23 14:23*	*10/19/23 09:40*	*1*

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*86*		*40 - 137*	*10/17/23 14:23*	*10/19/23 09:40*	*1*

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.021	0.0068	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1221	ND		0.021	0.0074	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1232	ND		0.021	0.0051	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1242	ND		0.021	0.0030	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1248	ND		0.021	0.0050	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1254	ND		0.021	0.0062	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1260	ND		0.021	0.0059	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1262	ND		0.021	0.0073	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1
PCB-1268	ND		0.021	0.0028	mg/Kg	☼	10/18/23 14:50	10/20/23 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	*106*		*63 - 138*	*10/18/23 14:50*	*10/20/23 00:45*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 138*	*10/18/23 14:50*	*10/20/23 00:45*	*1*
Tetrachloro-m-xylene (Surr)	*102*		*55 - 135*	*10/18/23 14:50*	*10/20/23 00:45*	*1*
Tetrachloro-m-xylene (Surr)	*99*		*55 - 135*	*10/18/23 14:50*	*10/20/23 00:45*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.025	0.014	mg/Kg	☼	10/15/23 22:30	10/17/23 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	*80*		*48 - 127*	*10/15/23 22:30*	*10/17/23 08:15*	*1*
2,4-Dichlorophenylacetic acid	*80*		*48 - 127*	*10/15/23 22:30*	*10/17/23 08:15*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**		3.6	1.7	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Barium	**87**		0.60	0.18	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Beryllium	**0.44**	**J**	0.60	0.12	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Cadmium	**0.13**	**J**	0.60	0.12	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Chromium	**19**		1.8	0.72	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Copper	**24**		2.4	0.92	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Lead	**24**		1.8	0.72	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Manganese	**420**		1.2	0.48	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Nickel	**18**		1.2	0.48	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Selenium	ND		6.0	1.8	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Silver	ND	^3+	1.2	0.48	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1
Zinc	**90**		2.4	0.96	mg/Kg	☼	10/23/23 03:25	10/23/23 19:01	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.053**		0.039	0.025	mg/Kg	☼	10/17/23 09:25	10/18/23 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**19.8**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**80.2**		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium (SW846 EPA 7196A)	ND		0.50	0.26	mg/Kg	☼	10/18/23 11:05	10/20/23 11:53	1
Cyanide, Total (SW846 EPA 9014)	**0.31**		0.20	0.16	mg/Kg	☼	10/20/23 16:15	10/23/23 17:11	1

Client Sample ID: NAFREST-BRP-TS8A
Lab Sample ID: 180-163871-4
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 83.2

Method: SW846 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	☼	10/15/23 07:45	10/15/23 23:22	1
Benzene	ND		0.0057	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
2-Butanone (MEK)	ND		0.028	0.0029	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Carbon tetrachloride	ND		0.0057	0.0023	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Chlorobenzene	ND		0.0057	0.0015	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Chloroform	ND		0.0057	0.0038	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
cis-1,2-Dichloroethene	ND		0.0057	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,2-Dichlorobenzene	ND		0.0057	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,3-Dichlorobenzene	ND		0.0057	0.0035	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,4-Dichlorobenzene	ND		0.0057	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,1-Dichloroethane	ND		0.0057	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,2-Dichloroethane	ND		0.0057	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,1-Dichloroethene	ND		0.0057	0.0026	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,4-Dioxane	ND		1.1	0.086	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Ethylbenzene	ND		0.0057	0.0021	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Methylene Chloride	ND		0.0057	0.0051	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Methyl tert-butyl ether	ND		0.0057	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
n-Butylbenzene	ND		0.0057	0.0028	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
N-Propylbenzene	ND		0.0057	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
sec-Butylbenzene	ND		0.0057	0.0028	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
tert-Butylbenzene	ND		0.0057	0.0024	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Tetrachloroethene	ND		0.0057	0.0023	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Toluene	ND		0.0057	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
trans-1,2-Dichloroethene	ND		0.0057	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,1,1-Trichloroethane	ND		0.0057	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Trichloroethene	ND		0.0057	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,2,4-Trimethylbenzene	ND		0.0057	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
1,3,5-Trimethylbenzene	ND		0.0057	0.0021	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Vinyl chloride	ND		0.0057	0.0041	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1
Xylenes, Total	ND		0.011	0.0082	mg/Kg	☼	10/15/23 07:45	10/15/23 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*		*60 - 124*	*10/15/23 07:45*	*10/15/23 23:22*	*1*
Dibromofluoromethane (Surr)	*86*		*69 - 126*	*10/15/23 07:45*	*10/15/23 23:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*75*		*73 - 135*	*10/15/23 07:45*	*10/15/23 23:22*	*1*
Toluene-d8 (Surr)	*90*		*67 - 134*	*10/15/23 07:45*	*10/15/23 23:22*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**16.8**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**83.2**		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TS8B
Lab Sample ID: 180-163871-5
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.7

Method: SW846 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	☼	10/15/23 07:45	10/15/23 23:46	1
Benzene	ND		0.0054	0.0015	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
2-Butanone (MEK)	ND		0.027	0.0027	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Carbon tetrachloride	ND		0.0054	0.0022	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Chlorobenzene	ND		0.0054	0.0014	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Chloroform	ND		0.0054	0.0036	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
cis-1,2-Dichloroethene	ND		0.0054	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,2-Dichlorobenzene	ND		0.0054	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,3-Dichlorobenzene	ND		0.0054	0.0033	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,4-Dichlorobenzene	ND		0.0054	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,1-Dichloroethane	ND		0.0054	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,2-Dichloroethane	ND		0.0054	0.0015	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,1-Dichloroethene	ND		0.0054	0.0024	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,4-Dioxane	ND		1.1	0.081	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Ethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Methylene Chloride	ND		0.0054	0.0048	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Methyl tert-butyl ether	ND		0.0054	0.0016	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
n-Butylbenzene	ND		0.0054	0.0027	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
N-Propylbenzene	ND		0.0054	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
sec-Butylbenzene	ND		0.0054	0.0026	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
tert-Butylbenzene	ND		0.0054	0.0023	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Tetrachloroethene	ND		0.0054	0.0022	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Toluene	ND		0.0054	0.0015	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
trans-1,2-Dichloroethene	ND		0.0054	0.0019	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,1,1-Trichloroethane	ND		0.0054	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Trichloroethene	ND		0.0054	0.0017	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,2,4-Trimethylbenzene	ND		0.0054	0.0018	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
1,3,5-Trimethylbenzene	ND		0.0054	0.0020	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Vinyl chloride	ND		0.0054	0.0039	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	10/15/23 07:45	10/15/23 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*		*60 - 124*	*10/15/23 07:45*	*10/15/23 23:46*	*1*
Dibromofluoromethane (Surr)	*84*		*69 - 126*	*10/15/23 07:45*	*10/15/23 23:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*74*		*73 - 135*	*10/15/23 07:45*	*10/15/23 23:46*	*1*
Toluene-d8 (Surr)	*89*		*67 - 134*	*10/15/23 07:45*	*10/15/23 23:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**19.3**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**80.7**		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.013**		0.0081	0.0023	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Acenaphthylene	**0.0076**	**J**	0.0081	0.0018	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**0.017**		0.0081	0.0021	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Benzo[a]anthracene	**0.046**		0.0081	0.0036	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Benzo[a]pyrene	**0.046**		0.0081	0.0035	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Benzo[b]fluoranthene	**0.054**		0.0081	0.0020	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Benzo[g,h,i]perylene	**0.031**		0.0081	0.0017	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Benzo[k]fluoranthene	**0.023**		0.0081	0.0024	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Chrysene	**0.049**		0.0081	0.0045	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Dibenz(a,h)anthracene	**0.0089**		0.0081	0.0051	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Dibenzofuran	ND		0.040	0.015	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
1,4-Dioxane	ND		0.080	0.013	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Fluoranthene	**0.10**		0.0081	0.0021	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Fluorene	**0.012**		0.0081	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Hexachlorobenzene	ND		0.0081	0.0029	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Indeno[1,2,3-cd]pyrene	**0.026**		0.0081	0.0040	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
2-Methylphenol	ND		0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Methylphenol, 3 & 4	**0.018**	**J**	0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Naphthalene	**0.037**		0.0081	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Pentachlorophenol	ND		0.20	0.065	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Phenanthrene	**0.060**		0.0081	0.0022	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Phenol	ND		0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1
Pyrene	**0.078**		0.0081	0.0019	mg/Kg	☼	10/17/23 06:06	10/17/23 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*35 - 105*	*10/17/23 06:06*	*10/17/23 17:46*	*1*
2-Fluorophenol (Surr)	*58*		*32 - 105*	*10/17/23 06:06*	*10/17/23 17:46*	*1*
Nitrobenzene-d5 (Surr)	*63*		*34 - 109*	*10/17/23 06:06*	*10/17/23 17:46*	*1*
Phenol-d5 (Surr)	*66*		*34 - 105*	*10/17/23 06:06*	*10/17/23 17:46*	*1*
Terphenyl-d14 (Surr)	*63*		*20 - 117*	*10/17/23 06:06*	*10/17/23 17:46*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*20 - 119*	*10/17/23 06:06*	*10/17/23 17:46*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0021	0.00063	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
alpha-BHC	ND		0.0021	0.00050	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
beta-BHC	ND		0.0021	0.00056	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
cis-Chlordane	**0.0052**	**p**	0.0021	0.00051	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
4,4'-DDD	ND		0.0021	0.00042	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
4,4'-DDE	ND		0.0021	0.00041	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
4,4'-DDT	ND		0.0021	0.0015	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
delta-BHC	ND		0.0021	0.00064	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Dieldrin	ND		0.0021	0.00051	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Endosulfan I	ND		0.0021	0.00055	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Endosulfan II	ND		0.0021	0.00045	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Endosulfan sulfate	ND		0.0021	0.00093	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Endrin	ND		0.0021	0.00038	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
gamma-BHC (Lindane)	ND		0.0021	0.00052	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1
Heptachlor	ND		0.0021	0.00063	mg/Kg	☼	10/17/23 14:23	10/20/23 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*42 - 124*	*10/17/23 14:23*	*10/20/23 10:59*	*1*

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	88		42 - 124	10/17/23 14:23	10/20/23 10:59	1
Tetrachloro-m-xylene	103		40 - 137	10/17/23 14:23	10/20/23 10:59	1
Tetrachloro-m-xylene	107		40 - 137	10/17/23 14:23	10/20/23 10:59	1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0066	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1221	ND		0.020	0.0072	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1232	ND		0.020	0.0050	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1242	ND		0.020	0.0030	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1248	ND		0.020	0.0049	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1254	ND		0.020	0.0061	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1260	**0.056**		0.020	0.0058	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1262	ND		0.020	0.0072	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	10/18/23 14:50	10/20/23 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	101		63 - 138	10/18/23 14:50	10/20/23 01:03	1
DCB Decachlorobiphenyl (Surr)	90		63 - 138	10/18/23 14:50	10/20/23 01:03	1
Tetrachloro-m-xylene (Surr)	91		55 - 135	10/18/23 14:50	10/20/23 01:03	1
Tetrachloro-m-xylene (Surr)	88		55 - 135	10/18/23 14:50	10/20/23 01:03	1

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.024	0.013	mg/Kg	☼	10/15/23 22:30	10/17/23 08:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	99		48 - 127	10/15/23 22:30	10/17/23 08:34	1
2,4-Dichlorophenylacetic acid	100		48 - 127	10/15/23 22:30	10/17/23 08:34	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**		3.2	1.5	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Barium	**84**		0.54	0.16	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Beryllium	**0.42**	**J**	0.54	0.11	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Cadmium	ND		0.54	0.11	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Chromium	**17**		1.6	0.64	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Copper	**21**		2.1	0.83	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Lead	**19**		1.6	0.64	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Manganese	**410**		1.1	0.43	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Nickel	**18**		1.1	0.43	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Selenium	ND		5.4	1.6	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Silver	ND	^3+	1.1	0.43	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1
Zinc	**79**		2.1	0.86	mg/Kg	☼	10/23/23 03:25	10/23/23 19:32	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.058**		0.040	0.026	mg/Kg	☼	10/17/23 09:25	10/18/23 10:11	1

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**18.1**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**81.9**		0.1	0.1	%			10/15/23 10:05	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.49	0.26	mg/Kg	☼	10/18/23 11:05	10/20/23 11:55	1
Cyanide, Total (SW846 EPA 9014)	**0.31**		0.22	0.17	mg/Kg	☼	10/20/23 16:15	10/23/23 17:11	1

Client Sample ID: NAFREST-BRP-TSDUP2A
Lab Sample ID: 180-163871-7
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 83.7

Method: SW846 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	☼	10/15/23 07:45	10/16/23 00:10	1
Benzene	ND		0.0053	0.0015	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
2-Butanone (MEK)	ND		0.027	0.0027	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Carbon tetrachloride	ND		0.0053	0.0022	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Chlorobenzene	ND		0.0053	0.0014	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Chloroform	ND		0.0053	0.0036	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
cis-1,2-Dichloroethene	ND		0.0053	0.0016	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,2-Dichlorobenzene	ND		0.0053	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,3-Dichlorobenzene	ND		0.0053	0.0033	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,4-Dichlorobenzene	ND		0.0053	0.0016	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,1-Dichloroethane	ND		0.0053	0.0017	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,2-Dichloroethane	ND		0.0053	0.0015	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,1-Dichloroethene	ND		0.0053	0.0024	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,4-Dioxane	ND		1.1	0.081	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Ethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Methylene Chloride	ND		0.0053	0.0048	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Methyl tert-butyl ether	ND		0.0053	0.0016	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
n-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
N-Propylbenzene	ND		0.0053	0.0019	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
sec-Butylbenzene	ND		0.0053	0.0026	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
tert-Butylbenzene	ND		0.0053	0.0022	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Tetrachloroethene	ND		0.0053	0.0021	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Toluene	ND		0.0053	0.0015	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
trans-1,2-Dichloroethene	ND		0.0053	0.0019	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,1,1-Trichloroethane	ND		0.0053	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Trichloroethene	ND		0.0053	0.0017	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,2,4-Trimethylbenzene	ND		0.0053	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
1,3,5-Trimethylbenzene	ND		0.0053	0.0020	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Vinyl chloride	ND		0.0053	0.0038	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1
Xylenes, Total	ND		0.011	0.0077	mg/Kg	☼	10/15/23 07:45	10/16/23 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*60 - 124*	*10/15/23 07:45*	*10/16/23 00:10*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 126*	*10/15/23 07:45*	*10/16/23 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*73 - 135*	*10/15/23 07:45*	*10/16/23 00:10*	*1*
Toluene-d8 (Surr)	*99*		*67 - 134*	*10/15/23 07:45*	*10/16/23 00:10*	*1*

Client Sample ID: NAFREST-BRP-TSDUP2A
Lab Sample ID: 180-163871-7
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 83.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	16.3		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	83.7		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TSDUP2B
Lab Sample ID: 180-163871-8
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.0

Method: SW846 EPA 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.031	0.0048	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Benzene	ND		0.0062	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
2-Butanone (MEK)	ND		0.031	0.0032	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Carbon tetrachloride	ND		0.0062	0.0025	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Chlorobenzene	ND		0.0062	0.0016	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Chloroform	ND		0.0062	0.0042	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
cis-1,2-Dichloroethene	ND		0.0062	0.0019	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,2-Dichlorobenzene	ND		0.0062	0.0021	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,3-Dichlorobenzene	ND		0.0062	0.0038	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,4-Dichlorobenzene	ND		0.0062	0.0019	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,1-Dichloroethane	ND		0.0062	0.0020	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,2-Dichloroethane	ND		0.0062	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,1-Dichloroethene	ND		0.0062	0.0028	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,4-Dioxane	ND		1.2	0.094	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Ethylbenzene	ND		0.0062	0.0023	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Methylene Chloride	ND		0.0062	0.0056	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Methyl tert-butyl ether	ND		0.0062	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
n-Butylbenzene	ND		0.0062	0.0031	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
N-Propylbenzene	ND		0.0062	0.0022	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
sec-Butylbenzene	ND		0.0062	0.0031	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
tert-Butylbenzene	ND		0.0062	0.0026	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Tetrachloroethene	ND		0.0062	0.0025	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Toluene	ND		0.0062	0.0018	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
trans-1,2-Dichloroethene	ND		0.0062	0.0022	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,1,1-Trichloroethane	ND		0.0062	0.0021	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Trichloroethene	ND		0.0062	0.0019	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,2,4-Trimethylbenzene	ND		0.0062	0.0021	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
1,3,5-Trimethylbenzene	ND		0.0062	0.0023	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Vinyl chloride	ND		0.0062	0.0045	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1
Xylenes, Total	ND		0.012	0.0090	mg/Kg	☼	10/15/23 07:45	10/16/23 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*60 - 124*	*10/15/23 07:45*	*10/16/23 00:33*	*1*
Dibromofluoromethane (Surr)	*90*		*69 - 126*	*10/15/23 07:45*	*10/16/23 00:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*73 - 135*	*10/15/23 07:45*	*10/16/23 00:33*	*1*
Toluene-d8 (Surr)	*95*		*67 - 134*	*10/15/23 07:45*	*10/16/23 00:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	20.0		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	80.0		0.1	0.1	%			10/15/23 10:05	1

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

Method: SW846 EPA 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0081	0.0023	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Acenaphthylene	**0.0043**	**J**	0.0081	0.0018	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Anthracene	**0.0045**	**J**	0.0081	0.0021	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Benzo[a]anthracene	**0.022**		0.0081	0.0036	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Benzo[a]pyrene	**0.026**		0.0081	0.0035	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Benzo[b]fluoranthene	**0.031**		0.0081	0.0020	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Benzo[g,h,i]perylene	**0.020**		0.0081	0.0017	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Benzo[k]fluoranthene	**0.012**		0.0081	0.0024	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Chrysene	**0.027**		0.0081	0.0045	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Dibenz(a,h)anthracene	ND		0.0081	0.0052	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Dibenzofuran	ND		0.040	0.015	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
1,4-Dioxane	ND		0.081	0.013	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Fluoranthene	**0.045**		0.0081	0.0021	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Fluorene	ND		0.0081	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Hexachlorobenzene	ND		0.0081	0.0029	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Indeno[1,2,3-cd]pyrene	**0.017**		0.0081	0.0040	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
2-Methylphenol	ND		0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Methylphenol, 3 & 4	**0.019**	**J**	0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Naphthalene	ND		0.0081	0.0016	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Pentachlorophenol	ND		0.21	0.065	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Phenanthrene	**0.016**		0.0081	0.0022	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Phenol	ND		0.040	0.012	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1
Pyrene	**0.039**		0.0081	0.0019	mg/Kg	☼	10/17/23 06:06	10/17/23 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*35 - 105*	*10/17/23 06:06*	*10/17/23 18:07*	*1*
2-Fluorophenol (Surr)	*61*		*32 - 105*	*10/17/23 06:06*	*10/17/23 18:07*	*1*
Nitrobenzene-d5 (Surr)	*63*		*34 - 109*	*10/17/23 06:06*	*10/17/23 18:07*	*1*
Phenol-d5 (Surr)	*69*		*34 - 105*	*10/17/23 06:06*	*10/17/23 18:07*	*1*
Terphenyl-d14 (Surr)	*64*		*20 - 117*	*10/17/23 06:06*	*10/17/23 18:07*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*20 - 119*	*10/17/23 06:06*	*10/17/23 18:07*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0021	0.00063	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
alpha-BHC	ND		0.0021	0.00050	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
beta-BHC	ND		0.0021	0.00055	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
cis-Chlordane	**0.0045**	**p**	0.0021	0.00051	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
4,4'-DDD	ND		0.0021	0.00042	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
4,4'-DDE	ND		0.0021	0.00041	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
4,4'-DDT	ND		0.0021	0.0014	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
delta-BHC	ND		0.0021	0.00064	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Dieldrin	ND		0.0021	0.00051	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Endosulfan I	ND		0.0021	0.00055	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Endosulfan II	ND		0.0021	0.00045	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Endosulfan sulfate	ND		0.0021	0.00093	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Endrin	ND		0.0021	0.00038	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
gamma-BHC (Lindane)	ND		0.0021	0.00052	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1
Heptachlor	ND		0.0021	0.00063	mg/Kg	☼	10/17/23 14:23	10/20/23 11:16	1

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9

Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*42 - 124*	*10/17/23 14:23*	*10/20/23 11:16*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*42 - 124*	*10/17/23 14:23*	*10/20/23 11:16*	*1*
Tetrachloro-m-xylene	*93*		*40 - 137*	*10/17/23 14:23*	*10/20/23 11:16*	*1*
Tetrachloro-m-xylene	*100*		*40 - 137*	*10/17/23 14:23*	*10/20/23 11:16*	*1*

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.020	0.0066	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1221	ND		0.020	0.0071	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1232	ND		0.020	0.0049	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1242	ND		0.020	0.0030	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1248	ND		0.020	0.0048	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1254	ND		0.020	0.0061	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1260	**0.0096**	**J**	0.020	0.0057	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1262	ND		0.020	0.0071	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1
PCB-1268	ND		0.020	0.0027	mg/Kg	☼	10/18/23 14:50	10/20/23 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*106*		*63 - 138*	*10/18/23 14:50*	*10/20/23 01:21*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*63 - 138*	*10/18/23 14:50*	*10/20/23 01:21*	*1*
Tetrachloro-m-xylene (Surr)	*100*		*55 - 135*	*10/18/23 14:50*	*10/20/23 01:21*	*1*
Tetrachloro-m-xylene (Surr)	*96*		*55 - 135*	*10/18/23 14:50*	*10/20/23 01:21*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.025	0.014	mg/Kg	☼	10/15/23 22:30	10/17/23 08:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*111*		*48 - 127*	*10/15/23 22:30*	*10/17/23 08:54*	*1*
2,4-Dichlorophenylacetic acid	*113*		*48 - 127*	*10/15/23 22:30*	*10/17/23 08:54*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.0**		3.4	1.6	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Barium	**95**		0.57	0.17	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Beryllium	**0.47**	**J**	0.57	0.11	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Cadmium	**0.17**	**J**	0.57	0.11	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Chromium	**18**		1.7	0.69	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Copper	**21**		2.3	0.88	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Lead	**22**		1.7	0.69	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Manganese	**440**		1.1	0.46	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Nickel	**18**		1.1	0.46	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Selenium	ND		5.7	1.7	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Silver	ND	^3+	1.1	0.46	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1
Zinc	**84**		2.3	0.91	mg/Kg	☼	10/23/23 03:25	10/23/23 19:14	1

Method: SW846 EPA 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.078**		0.041	0.026	mg/Kg	☼	10/17/23 09:25	10/18/23 10:12	1

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (SM22 2540G)	**19.0**		0.1	0.1	%			10/15/23 10:05	1
Percent Solids (SM22 2540G)	**81.0**		0.1	0.1	%			10/15/23 10:05	1
Hexavalent chromium (SW846 EPA 7196A)	ND		0.49	0.26	mg/Kg	☼	10/18/23 11:05	10/20/23 11:57	1
Cyanide, Total (SW846 EPA 9014)	**0.27**		0.22	0.17	mg/Kg	☼	10/20/23 16:15	10/23/23 17:14	1

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

Lab Sample ID: MB 180-449263/7
Matrix: Solid
Analysis Batch: 449263

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.025	0.0039	mg/Kg			10/15/23 17:23	1
Benzene	ND		0.0050	0.0014	mg/Kg			10/15/23 17:23	1
2-Butanone (MEK)	ND		0.025	0.0025	mg/Kg			10/15/23 17:23	1
Carbon tetrachloride	ND		0.0050	0.0020	mg/Kg			10/15/23 17:23	1
Chlorobenzene	ND		0.0050	0.0013	mg/Kg			10/15/23 17:23	1
Chloroform	ND		0.0050	0.0034	mg/Kg			10/15/23 17:23	1
cis-1,2-Dichloroethene	ND		0.0050	0.0015	mg/Kg			10/15/23 17:23	1
1,2-Dichlorobenzene	ND		0.0050	0.0017	mg/Kg			10/15/23 17:23	1
1,3-Dichlorobenzene	ND		0.0050	0.0031	mg/Kg			10/15/23 17:23	1
1,4-Dichlorobenzene	ND		0.0050	0.0015	mg/Kg			10/15/23 17:23	1
1,1-Dichloroethane	ND		0.0050	0.0016	mg/Kg			10/15/23 17:23	1
1,2-Dichloroethane	ND		0.0050	0.0014	mg/Kg			10/15/23 17:23	1
1,1-Dichloroethene	ND		0.0050	0.0023	mg/Kg			10/15/23 17:23	1
1,4-Dioxane	ND		1.0	0.076	mg/Kg			10/15/23 17:23	1
Ethylbenzene	ND		0.0050	0.0019	mg/Kg			10/15/23 17:23	1
Methylene Chloride	ND		0.0050	0.0045	mg/Kg			10/15/23 17:23	1
Methyl tert-butyl ether	ND		0.0050	0.0015	mg/Kg			10/15/23 17:23	1
n-Butylbenzene	ND		0.0050	0.0025	mg/Kg			10/15/23 17:23	1
N-Propylbenzene	ND		0.0050	0.0018	mg/Kg			10/15/23 17:23	1
sec-Butylbenzene	ND		0.0050	0.0025	mg/Kg			10/15/23 17:23	1
tert-Butylbenzene	ND		0.0050	0.0021	mg/Kg			10/15/23 17:23	1
Tetrachloroethene	ND		0.0050	0.0020	mg/Kg			10/15/23 17:23	1
Toluene	ND		0.0050	0.0014	mg/Kg			10/15/23 17:23	1
trans-1,2-Dichloroethene	ND		0.0050	0.0018	mg/Kg			10/15/23 17:23	1
1,1,1-Trichloroethane	ND		0.0050	0.0017	mg/Kg			10/15/23 17:23	1
Trichloroethene	ND		0.0050	0.0016	mg/Kg			10/15/23 17:23	1
1,2,4-Trimethylbenzene	ND		0.0050	0.0017	mg/Kg			10/15/23 17:23	1
1,3,5-Trimethylbenzene	ND		0.0050	0.0019	mg/Kg			10/15/23 17:23	1
Vinyl chloride	ND		0.0050	0.0036	mg/Kg			10/15/23 17:23	1
Xylenes, Total	ND		0.010	0.0072	mg/Kg			10/15/23 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*60 - 124*		*10/15/23 17:23*	*1*
Dibromofluoromethane (Surr)	*94*		*69 - 126*		*10/15/23 17:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 135*		*10/15/23 17:23*	*1*
Toluene-d8 (Surr)	*83*		*67 - 134*		*10/15/23 17:23*	*1*

Lab Sample ID: LCS 180-449263/4
Matrix: Solid
Analysis Batch: 449263

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	0.0423		mg/Kg		106	23 - 170
Benzene	0.0400	0.0362		mg/Kg		90	77 - 120
2-Butanone (MEK)	0.0400	0.0407		mg/Kg		102	39 - 157
Carbon tetrachloride	0.0400	0.0335		mg/Kg		84	73 - 130
Chlorobenzene	0.0400	0.0364		mg/Kg		91	79 - 122
Chloroform	0.0400	0.0392		mg/Kg		98	73 - 126

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

Lab Sample ID: LCS 180-449263/4
Matrix: Solid
Analysis Batch: 449263

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	0.0377		mg/Kg		94	77 - 118
1,2-Dichlorobenzene	0.0400	0.0357		mg/Kg		89	76 - 120
1,3-Dichlorobenzene	0.0400	0.0342		mg/Kg		85	77 - 121
1,4-Dichlorobenzene	0.0400	0.0348		mg/Kg		87	79 - 120
1,1-Dichloroethane	0.0400	0.0367		mg/Kg		92	73 - 124
1,2-Dichloroethane	0.0400	0.0384		mg/Kg		96	64 - 140
1,1-Dichloroethene	0.0400	0.0373		mg/Kg		93	55 - 136
1,4-Dioxane	0.800	0.722	J	mg/Kg		90	18 - 166
Ethylbenzene	0.0400	0.0367		mg/Kg		92	79 - 119
Methylene Chloride	0.0400	0.0370		mg/Kg		92	67 - 131
Methyl tert-butyl ether	0.0400	0.0374		mg/Kg		94	58 - 132
n-Butylbenzene	0.0400	0.0370		mg/Kg		92	64 - 136
N-Propylbenzene	0.0400	0.0340		mg/Kg		85	71 - 127
sec-Butylbenzene	0.0400	0.0349		mg/Kg		87	65 - 130
tert-Butylbenzene	0.0400	0.0333		mg/Kg		83	69 - 133
Tetrachloroethene	0.0400	0.0329		mg/Kg		82	71 - 121
Toluene	0.0400	0.0378		mg/Kg		95	76 - 120
trans-1,2-Dichloroethene	0.0400	0.0386		mg/Kg		97	75 - 122
1,1,1-Trichloroethane	0.0400	0.0346		mg/Kg		86	72 - 134
Trichloroethene	0.0400	0.0339		mg/Kg		85	69 - 118
1,2,4-Trimethylbenzene	0.0400	0.0352		mg/Kg		88	74 - 127
1,3,5-Trimethylbenzene	0.0400	0.0352		mg/Kg		88	69 - 131
Vinyl chloride	0.0400	0.0401		mg/Kg		100	64 - 134
Xylenes, Total	0.0800	0.0730		mg/Kg		91	78 - 118

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*60 - 124*
Dibromofluoromethane (Surr)	*104*		*69 - 126*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 135*
Toluene-d8 (Surr)	*98*		*67 - 134*

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

Lab Sample ID: MB 180-449385/1-A
Matrix: Solid
Analysis Batch: 449436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.0034	0.00096	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Acenaphthylene	ND		0.0034	0.00073	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Anthracene	ND		0.0034	0.00087	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Benzo[a]anthracene	ND		0.0034	0.0015	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Benzo[a]pyrene	ND		0.0034	0.0014	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Benzo[b]fluoranthene	ND		0.0034	0.00082	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Benzo[g,h,i]perylene	ND		0.0034	0.00072	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Benzo[k]fluoranthene	ND		0.0034	0.0010	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Chrysene	ND		0.0034	0.0019	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Dibenz(a,h)anthracene	ND		0.0034	0.0021	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Dibenzofuran	ND		0.017	0.0062	mg/Kg		10/17/23 06:06	10/17/23 14:08	1

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

Lab Sample ID: MB 180-449385/1-A
Matrix: Solid
Analysis Batch: 449436

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449385

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.033	0.0052	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Fluoranthene	ND		0.0034	0.00088	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Fluorene	ND		0.0034	0.00066	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Hexachlorobenzene	ND		0.0034	0.0012	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Indeno[1,2,3-cd]pyrene	ND		0.0034	0.0017	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
2-Methylphenol	ND		0.017	0.0048	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Methylphenol, 3 & 4	ND		0.017	0.0049	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Naphthalene	ND		0.0034	0.00065	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Pentachlorophenol	ND		0.085	0.027	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Phenanthrene	ND		0.0034	0.00090	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Phenol	ND		0.017	0.0051	mg/Kg		10/17/23 06:06	10/17/23 14:08	1
Pyrene	ND		0.0034	0.00079	mg/Kg		10/17/23 06:06	10/17/23 14:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*35 - 105*	*10/17/23 06:06*	*10/17/23 14:08*	*1*
2-Fluorophenol (Surr)	*81*		*32 - 105*	*10/17/23 06:06*	*10/17/23 14:08*	*1*
Nitrobenzene-d5 (Surr)	*88*		*34 - 109*	*10/17/23 06:06*	*10/17/23 14:08*	*1*
Phenol-d5 (Surr)	*83*		*34 - 105*	*10/17/23 06:06*	*10/17/23 14:08*	*1*
Terphenyl-d14 (Surr)	*81*		*20 - 117*	*10/17/23 06:06*	*10/17/23 14:08*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*20 - 119*	*10/17/23 06:06*	*10/17/23 14:08*	*1*

Lab Sample ID: LCS 180-449385/2-A
Matrix: Solid
Analysis Batch: 449436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	0.333	0.208		mg/Kg		62	41 - 100
Acenaphthylene	0.333	0.216		mg/Kg		65	45 - 100
Anthracene	0.333	0.211		mg/Kg		63	47 - 100
Benzo[a]anthracene	0.333	0.217		mg/Kg		65	47 - 100
Benzo[a]pyrene	0.333	0.221		mg/Kg		66	45 - 101
Benzo[b]fluoranthene	0.333	0.212		mg/Kg		64	44 - 100
Benzo[g,h,i]perylene	0.333	0.207		mg/Kg		62	45 - 103
Benzo[k]fluoranthene	0.333	0.196		mg/Kg		59	43 - 100
Chrysene	0.333	0.207		mg/Kg		62	44 - 100
Dibenz(a,h)anthracene	0.333	0.218		mg/Kg		65	46 - 107
Dibenzofuran	0.333	0.199		mg/Kg		60	47 - 100
1,4-Dioxane	0.333	0.189		mg/Kg		57	10 - 133
Fluoranthene	0.333	0.219		mg/Kg		66	49 - 102
Fluorene	0.333	0.207		mg/Kg		62	46 - 100
Hexachlorobenzene	0.333	0.198		mg/Kg		59	45 - 101
Indeno[1,2,3-cd]pyrene	0.333	0.219		mg/Kg		66	48 - 104
2-Methylphenol	0.333	0.228		mg/Kg		68	43 - 101
Methylphenol, 3 & 4	0.333	0.252		mg/Kg		76	43 - 104
Naphthalene	0.333	0.204		mg/Kg		61	43 - 100
Pentachlorophenol	0.667	0.464		mg/Kg		70	34 - 112
Phenanthrene	0.333	0.204		mg/Kg		61	46 - 100
Phenol	0.333	0.217		mg/Kg		65	42 - 103

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

Lab Sample ID: LCS 180-449385/2-A
Matrix: Solid
Analysis Batch: 449436

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449385

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Pyrene			0.333	0.217		mg/Kg		65	44 - 102		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*57*		*35 - 105*
2-Fluorophenol (Surr)	*64*		*32 - 105*
Nitrobenzene-d5 (Surr)	*67*		*34 - 109*
Phenol-d5 (Surr)	*66*		*34 - 105*
Terphenyl-d14 (Surr)	*57*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*55*		*20 - 119*

Lab Sample ID: LCSD 180-449385/3-A
Matrix: Solid
Analysis Batch: 449436

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 449385

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			0.333	0.220		mg/Kg		66	41 - 100	6	22
Acenaphthylene			0.333	0.233		mg/Kg		70	45 - 100	8	23
Anthracene			0.333	0.222		mg/Kg		66	47 - 100	5	26
Benzo[a]anthracene			0.333	0.231		mg/Kg		69	47 - 100	6	24
Benzo[a]pyrene			0.333	0.227		mg/Kg		68	45 - 101	3	21
Benzo[b]fluoranthene			0.333	0.216		mg/Kg		65	44 - 100	2	26
Benzo[g,h,i]perylene			0.333	0.217		mg/Kg		65	45 - 103	4	22
Benzo[k]fluoranthene			0.333	0.204		mg/Kg		61	43 - 100	4	18
Chrysene			0.333	0.220		mg/Kg		66	44 - 100	6	26
Dibenz(a,h)anthracene			0.333	0.226		mg/Kg		68	46 - 107	4	24
Dibenzofuran			0.333	0.214		mg/Kg		64	47 - 100	7	19
1,4-Dioxane			0.333	0.198		mg/Kg		59	10 - 133	4	40
Fluoranthene			0.333	0.229		mg/Kg		69	49 - 102	4	26
Fluorene			0.333	0.224		mg/Kg		67	46 - 100	8	22
Hexachlorobenzene			0.333	0.210		mg/Kg		63	45 - 101	6	27
Indeno[1,2,3-cd]pyrene			0.333	0.235		mg/Kg		70	48 - 104	7	22
2-Methylphenol			0.333	0.227		mg/Kg		68	43 - 101	1	27
Methylphenol, 3 & 4			0.333	0.252		mg/Kg		75	43 - 104	0	24
Naphthalene			0.333	0.215		mg/Kg		64	43 - 100	5	28
Pentachlorophenol			0.667	0.506		mg/Kg		76	34 - 112	9	28
Phenanthrene			0.333	0.213		mg/Kg		64	46 - 100	5	27
Phenol			0.333	0.218		mg/Kg		66	42 - 103	0	30
Pyrene			0.333	0.225		mg/Kg		67	44 - 102	3	27

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*35 - 105*
2-Fluorophenol (Surr)	*64*		*32 - 105*
Nitrobenzene-d5 (Surr)	*69*		*34 - 109*
Phenol-d5 (Surr)	*68*		*34 - 105*
Terphenyl-d14 (Surr)	*59*		*20 - 117*
2,4,6-Tribromophenol (Surr)	*60*		*20 - 119*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-449465/1-A
Matrix: Solid
Analysis Batch: 449636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.0017	0.00052	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
alpha-BHC	ND		0.0017	0.00041	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
beta-BHC	ND		0.0017	0.00046	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
cis-Chlordane	ND		0.0017	0.00042	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
4,4'-DDD	ND		0.0017	0.00035	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
4,4'-DDE	ND		0.0017	0.00034	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
4,4'-DDT	ND		0.0017	0.0012	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
delta-BHC	ND		0.0017	0.00053	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Dieldrin	ND		0.0017	0.00042	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Endosulfan I	ND		0.0017	0.00045	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Endosulfan II	ND		0.0017	0.00037	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Endosulfan sulfate	ND		0.0017	0.00077	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Endrin	ND		0.0017	0.00031	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
gamma-BHC (Lindane)	ND		0.0017	0.00043	mg/Kg		10/17/23 14:23	10/19/23 09:06	1
Heptachlor	ND		0.0017	0.00052	mg/Kg		10/17/23 14:23	10/19/23 09:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*95*		*42 - 124*	*10/17/23 14:23*	*10/19/23 09:06*	*1*
DCB Decachlorobiphenyl (Surr)	*112*		*42 - 124*	*10/17/23 14:23*	*10/19/23 09:06*	*1*
Tetrachloro-m-xylene	*100*		*40 - 137*	*10/17/23 14:23*	*10/19/23 09:06*	*1*
Tetrachloro-m-xylene	*101*		*40 - 137*	*10/17/23 14:23*	*10/19/23 09:06*	*1*

Lab Sample ID: LCS 180-449465/2-A
Matrix: Solid
Analysis Batch: 449636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	0.0333	0.0284		mg/Kg		85	60 - 131
alpha-BHC	0.0333	0.0274		mg/Kg		82	67 - 125
beta-BHC	0.0333	0.0275		mg/Kg		83	63 - 123
cis-Chlordane	0.0333	0.0298		mg/Kg		89	57 - 120
4,4'-DDD	0.0333	0.0274		mg/Kg		82	64 - 131
4,4'-DDE	0.0333	0.0330		mg/Kg		99	57 - 132
4,4'-DDT	0.0333	0.0261		mg/Kg		78	54 - 117
delta-BHC	0.0333	0.0253		mg/Kg		76	50 - 134
Dieldrin	0.0333	0.0324		mg/Kg		97	64 - 127
Endosulfan I	0.0333	0.0297		mg/Kg		89	55 - 131
Endosulfan II	0.0333	0.0316		mg/Kg		95	61 - 130
Endosulfan sulfate	0.0333	0.0303		mg/Kg		91	57 - 132
Endrin	0.0333	0.0321		mg/Kg		96	66 - 125
gamma-BHC (Lindane)	0.0333	0.0266		mg/Kg		80	69 - 124
Heptachlor	0.0333	0.0274		mg/Kg		82	62 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*98*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*110*		*42 - 124*
Tetrachloro-m-xylene	*99*		*40 - 137*
Tetrachloro-m-xylene	*100*		*40 - 137*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: 180-163871-3 MS
Client Sample ID: NAFREST-BRP-TS7C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 449636
Prep Batch: 449465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	ND		0.0413	0.0275		mg/Kg	☼	67	60 - 131
alpha-BHC	ND		0.0413	0.0276		mg/Kg	☼	67	67 - 125
beta-BHC	ND		0.0413	0.0270		mg/Kg	☼	65	63 - 123
cis-Chlordane	ND		0.0413	0.0391		mg/Kg	☼	95	57 - 120
4,4'-DDD	ND		0.0413	0.0290		mg/Kg	☼	70	64 - 131
4,4'-DDE	ND		0.0413	0.0324		mg/Kg	☼	79	57 - 132
4,4'-DDT	ND		0.0413	0.0294		mg/Kg	☼	71	54 - 117
delta-BHC	ND		0.0413	0.0259		mg/Kg	☼	63	50 - 134
Dieldrin	ND		0.0413	0.0291		mg/Kg	☼	71	64 - 127
Endosulfan I	ND		0.0413	0.0285		mg/Kg	☼	69	55 - 131
Endosulfan II	ND		0.0413	0.0291		mg/Kg	☼	71	61 - 130
Endosulfan sulfate	ND		0.0413	0.0276		mg/Kg	☼	67	57 - 132
Endrin	ND		0.0413	0.0307		mg/Kg	☼	74	66 - 125
gamma-BHC (Lindane)	ND	F1	0.0413	0.0269	F1	mg/Kg	☼	65	69 - 124
Heptachlor	ND		0.0413	0.0276		mg/Kg	☼	67	62 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*55*		*42 - 124*
DCB Decachlorobiphenyl (Surr)	*79*		*42 - 124*
Tetrachloro-m-xylene	*76*		*40 - 137*
Tetrachloro-m-xylene	*79*		*40 - 137*

Lab Sample ID: 180-163871-3 MSD
Client Sample ID: NAFREST-BRP-TS7C
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 449636
Prep Batch: 449465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND		0.0402	0.0300	*3	mg/Kg	☼	75	60 - 131	9	40
alpha-BHC	ND		0.0402	0.0292	*3	mg/Kg	☼	73	67 - 125	5	40
beta-BHC	ND		0.0402	0.0291	*3	mg/Kg	☼	72	63 - 123	7	40
cis-Chlordane	ND		0.0402	0.0383	*3	mg/Kg	☼	95	57 - 120	2	40
4,4'-DDD	ND		0.0402	0.0321	*3	mg/Kg	☼	80	64 - 131	10	40
4,4'-DDE	ND		0.0402	0.0354	*3	mg/Kg	☼	88	57 - 132	9	40
4,4'-DDT	ND		0.0402	0.0323	*3	mg/Kg	☼	80	54 - 117	10	40
delta-BHC	ND		0.0402	0.0281	*3	mg/Kg	☼	70	50 - 134	8	40
Dieldrin	ND		0.0402	0.0329	*3	mg/Kg	☼	82	64 - 127	12	40
Endosulfan I	ND		0.0402	0.0306	*3	mg/Kg	☼	76	55 - 131	7	40
Endosulfan II	ND		0.0402	0.0329	*3	mg/Kg	☼	82	61 - 130	12	40
Endosulfan sulfate	ND		0.0402	0.0314	*3	mg/Kg	☼	78	57 - 132	13	40
Endrin	ND		0.0402	0.0350	*3	mg/Kg	☼	87	66 - 125	13	40
gamma-BHC (Lindane)	ND	F1	0.0402	0.0287	*3	mg/Kg	☼	71	69 - 124	7	40
Heptachlor	ND		0.0402	0.0298	*3	mg/Kg	☼	74	62 - 133	8	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*65*	*3	*42 - 124*
DCB Decachlorobiphenyl (Surr)	*92*	*3	*42 - 124*
Tetrachloro-m-xylene	*84*	*3	*40 - 137*
Tetrachloro-m-xylene	*85*	*3	*40 - 137*

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

Lab Sample ID: MB 180-449598/1-A
Matrix: Solid
Analysis Batch: 449642

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.017	0.0054	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1221	ND		0.017	0.0059	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1232	ND		0.017	0.0041	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1242	ND		0.017	0.0024	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1248	ND		0.017	0.0040	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1254	ND		0.017	0.0050	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1260	ND		0.017	0.0047	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1262	ND		0.017	0.0059	mg/Kg		10/18/23 14:50	10/19/23 19:45	1
PCB-1268	ND		0.017	0.0022	mg/Kg		10/18/23 14:50	10/19/23 19:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*100*		*63 - 138*	*10/18/23 14:50*	*10/19/23 19:45*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*63 - 138*	*10/18/23 14:50*	*10/19/23 19:45*	*1*
Tetrachloro-m-xylene (Surr)	*121*		*55 - 135*	*10/18/23 14:50*	*10/19/23 19:45*	*1*
Tetrachloro-m-xylene (Surr)	*121*		*55 - 135*	*10/18/23 14:50*	*10/19/23 19:45*	*1*

Lab Sample ID: LCS 180-449598/2-A
Matrix: Solid
Analysis Batch: 449642

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1.33	1.30		mg/Kg		97	43 - 136
PCB-1260	1.33	1.13		mg/Kg		85	55 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*106*		*63 - 138*
DCB Decachlorobiphenyl (Surr)	*96*		*63 - 138*
Tetrachloro-m-xylene (Surr)	*104*		*55 - 135*
Tetrachloro-m-xylene (Surr)	*103*		*55 - 135*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-449268/1-A
Matrix: Solid
Analysis Batch: 449383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	ND		0.020	0.011	mg/Kg		10/15/23 22:30	10/17/23 06:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*83*		*48 - 127*	*10/15/23 22:30*	*10/17/23 06:39*	*1*
2,4-Dichlorophenylacetic acid	*74*		*48 - 127*	*10/15/23 22:30*	*10/17/23 06:39*	*1*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 180-449268/2-A
Matrix: Solid
Analysis Batch: 449383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449268

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Silvex (2,4,5-TP)			0.100	0.0725	p	mg/Kg		73	33 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*101*		*48 - 127*
2,4-Dichlorophenylacetic acid	*93*		*48 - 127*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-434288/1-A
Matrix: Solid
Analysis Batch: 434754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 434288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0	1.4	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Barium	ND		0.50	0.15	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Beryllium	ND		0.50	0.10	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Cadmium	ND		0.50	0.10	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Chromium	ND		1.5	0.60	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Copper	ND		2.0	0.77	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Lead	ND		1.5	0.60	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Manganese	ND		1.0	0.40	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Nickel	ND		1.0	0.40	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Selenium	ND		5.0	1.5	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Silver	ND	^3+	1.0	0.40	mg/Kg		10/23/23 03:25	10/23/23 18:55	1
Zinc	ND		2.0	0.80	mg/Kg		10/23/23 03:25	10/23/23 18:55	1

Lab Sample ID: LCS 410-434288/2-A
Matrix: Solid
Analysis Batch: 434754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 434288

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic			50.0	49.4		mg/Kg		99	80 - 120		
Barium			50.0	50.8		mg/Kg		102	80 - 120		
Beryllium			5.00	4.68		mg/Kg		94	80 - 120		
Cadmium			5.00	5.07		mg/Kg		101	80 - 120		
Chromium			50.0	51.1		mg/Kg		102	80 - 120		
Copper			50.0	49.4		mg/Kg		99	80 - 120		
Lead			5.00	4.20		mg/Kg		84	80 - 120		
Manganese			50.0	50.0		mg/Kg		100	80 - 120		
Nickel			50.0	49.9		mg/Kg		100	80 - 120		
Selenium			10.0	10.1		mg/Kg		101	80 - 120		
Silver			5.00	5.57	^3+	mg/Kg		111	80 - 120		
Zinc			50.0	49.0		mg/Kg		98	80 - 120		

Method: EPA 7471B - Mercury (CVAA)

Lab Sample ID: MB 180-449366/1-A
Matrix: Solid
Analysis Batch: 449576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.033	0.021	mg/Kg		10/17/23 09:25	10/18/23 09:41	1

Lab Sample ID: LCS 180-449366/2-A
Matrix: Solid
Analysis Batch: 449576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.417	0.384		mg/Kg		92	80 - 120

Method: EPA 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-449557/1-A
Matrix: Solid
Analysis Batch: 449813

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	ND		0.40	0.21	mg/Kg		10/18/23 11:05	10/20/23 11:24	1

Lab Sample ID: LCSI 180-449557/3-A
Matrix: Solid
Analysis Batch: 449813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449557

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	708	748		mg/Kg		106	80 - 120

Lab Sample ID: LCSS 180-449557/2-A
Matrix: Solid
Analysis Batch: 449813

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449557

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec Limits
Hexavalent chromium	20.0	20.8		mg/Kg		104	80 - 120

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-449810/4-A
Matrix: Solid
Analysis Batch: 450206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 449810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50	0.38	mg/Kg		10/20/23 16:15	10/23/23 17:07	1

Lab Sample ID: HLCS 180-449810/2-A
Matrix: Solid
Analysis Batch: 450206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449810

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.242		mg/Kg		97	90 - 110

Client: Geosyntec Consultants Inc
Job ID: 180-163871-1
Project/Site: Former Sperry Remington-Imported Fill

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: LCS 180-449810/3-A
Matrix: Solid
Analysis Batch: 450206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	120	126		mg/Kg		105	17 - 163

Lab Sample ID: LLCS 180-449810/1-A
Matrix: Solid
Analysis Batch: 450206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 449810

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0473		mg/Kg		95	90 - 110

GC/MS VOA

Analysis Batch: 449263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-1	NAFREST-BRP-TS7A	Total/NA	Solid	EPA 8260C	449264
180-163871-2	NAFREST-BRP-TS7B	Total/NA	Solid	EPA 8260C	449345
180-163871-4	NAFREST-BRP-TS8A	Total/NA	Solid	EPA 8260C	449264
180-163871-5	NAFREST-BRP-TS8B	Total/NA	Solid	EPA 8260C	449264
180-163871-7	NAFREST-BRP-TSDUP2A	Total/NA	Solid	EPA 8260C	449264
180-163871-8	NAFREST-BRP-TSDUP2B	Total/NA	Solid	EPA 8260C	449264
MB 180-449263/7	Method Blank	Total/NA	Solid	EPA 8260C	
LCS 180-449263/4	Lab Control Sample	Total/NA	Solid	EPA 8260C	

Prep Batch: 449264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-1	NAFREST-BRP-TS7A	Total/NA	Solid	5035	
180-163871-4	NAFREST-BRP-TS8A	Total/NA	Solid	5035	
180-163871-5	NAFREST-BRP-TS8B	Total/NA	Solid	5035	
180-163871-7	NAFREST-BRP-TSDUP2A	Total/NA	Solid	5035	
180-163871-8	NAFREST-BRP-TSDUP2B	Total/NA	Solid	5035	

Prep Batch: 449345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-2	NAFREST-BRP-TS7B	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 449385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3541	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3541	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3541	
MB 180-449385/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-449385/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-449385/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 449427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8270D LL	449385
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 8270D LL	449385
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 8270D LL	449385

Analysis Batch: 449436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-449385/1-A	Method Blank	Total/NA	Solid	EPA 8270D LL	449385
LCS 180-449385/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270D LL	449385
LCSD 180-449385/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270D LL	449385

GC Semi VOA

Prep Batch: 449268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	8151A	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	8151A	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	8151A	
MB 180-449268/1-A	Method Blank	Total/NA	Solid	8151A	

GC Semi VOA (Continued)

Prep Batch: 449268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-449268/2-A	Lab Control Sample	Total/NA	Solid	8151A	

Analysis Batch: 449383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8151A	449268
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 8151A	449268
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 8151A	449268
MB 180-449268/1-A	Method Blank	Total/NA	Solid	EPA 8151A	449268
LCS 180-449268/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	449268

Prep Batch: 449465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3541	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3541	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3541	
MB 180-449465/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-449465/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-163871-3 MS	NAFREST-BRP-TS7C	Total/NA	Solid	3541	
180-163871-3 MSD	NAFREST-BRP-TS7C	Total/NA	Solid	3541	

Prep Batch: 449598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3541	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3541	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3541	
MB 180-449598/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-449598/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 449636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8081B	449465
MB 180-449465/1-A	Method Blank	Total/NA	Solid	EPA 8081B	449465
LCS 180-449465/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	449465
180-163871-3 MS	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8081B	449465
180-163871-3 MSD	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8081B	449465

Analysis Batch: 449642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 8082A	449662
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 8082A	449662
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 8082A	449662
MB 180-449598/1-A	Method Blank	Total/NA	Solid	EPA 8082A	449598
LCS 180-449598/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	449598

Cleanup Batch: 449661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3665A	449598
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3665A	449598
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3665A	449598

GC Semi VOA

Cleanup Batch: 449662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3660B	449661
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3660B	449661
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3660B	449661

Analysis Batch: 449774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 8081B	449465
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 8081B	449465

Metals

Prep Batch: 434288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3050B	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3050B	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3050B	
MB 410-434288/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-434288/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 434754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	6010D	434288
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	6010D	434288
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	6010D	434288
MB 410-434288/1-A	Method Blank	Total/NA	Solid	6010D	434288
LCS 410-434288/2-A	Lab Control Sample	Total/NA	Solid	6010D	434288

Prep Batch: 449366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	7471B	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	7471B	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	7471B	
MB 180-449366/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 180-449366/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 449576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 7471B	449366
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 7471B	449366
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 7471B	449366
MB 180-449366/1-A	Method Blank	Total/NA	Solid	EPA 7471B	449366
LCS 180-449366/2-A	Lab Control Sample	Total/NA	Solid	EPA 7471B	449366

General Chemistry

Analysis Batch: 449262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-1	NAFREST-BRP-TS7A	Total/NA	Solid	2540G	
180-163871-2	NAFREST-BRP-TS7B	Total/NA	Solid	2540G	
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	2540G	
180-163871-4	NAFREST-BRP-TS8A	Total/NA	Solid	2540G	
180-163871-5	NAFREST-BRP-TS8B	Total/NA	Solid	2540G	

General Chemistry (Continued)

Analysis Batch: 449262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	2540G	
180-163871-7	NAFREST-BRP-TSDUP2A	Total/NA	Solid	2540G	
180-163871-8	NAFREST-BRP-TSDUP2B	Total/NA	Solid	2540G	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	2540G	

Prep Batch: 449557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	3060A	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	3060A	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	3060A	
MB 180-449557/1-A	Method Blank	Total/NA	Solid	3060A	
LCSI 180-449557/3-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 180-449557/2-A	Lab Control Sample	Total/NA	Solid	3060A	

Prep Batch: 449810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	9010C	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	9010C	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	9010C	
MB 180-449810/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-449810/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-449810/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-449810/1-A	Lab Control Sample	Total/NA	Solid	9010C	

Analysis Batch: 449813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 7196A	449557
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 7196A	449557
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 7196A	449557
MB 180-449557/1-A	Method Blank	Total/NA	Solid	EPA 7196A	449557
LCSI 180-449557/3-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	449557
LCSS 180-449557/2-A	Lab Control Sample	Total/NA	Solid	EPA 7196A	449557

Analysis Batch: 450206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	EPA 9014	449810
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	EPA 9014	449810
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	EPA 9014	449810
MB 180-449810/4-A	Method Blank	Total/NA	Solid	EPA 9014	449810
HLCS 180-449810/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	449810
LCS 180-449810/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	449810
LLCS 180-449810/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	449810

Eurofins 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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Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044	PO #: MN0832			
Phone:	WO#:			
Email: akrasnopoler@geosyntec.com	Project #: 18013464			
Project Name: Former Sperry Remington Site-	SSOW#:			
Site:				

Analysis Requested

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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				
Preservation Code:					X	X	FJ	N	N	N	N	N	N	N	N	N				4
NAFREST-BRP-TS7A	10/13/23	1330	G	Solid	N	N	X													4
NAFREST-BRP-TS7B	10/13/23	1330	G	Solid	N	N	X													4
NAFREST-BRP-TS7C	10/13/23	1330	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7
NAFREST-BRP-TS8A	10/13/23	1335	G	Solid	N	N	X													4
NAFREST-BRP-TS8B	10/13/23	1335	G	Solid	N	N	X													4
NAFREST-BRP-TS8C	10/13/23	1335	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7
NAFREST-BRP-TSDUP2A	10/13/23	-	G	Solid	N	N	X													4
NAFREST-BRP-TSDUP2B	10/13/23	-	G	Solid	N	N	X													4
NAFREST-BRP-TSDUP2C	10/13/23	-	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7

180-163871 Chain of Custody

Preservation Codes:

HCL	M - Hexane
NaOH	N - None
Zn Acetate	O - AsNaO2
Nitric Acid	P - Na2O4S
NaHSO4	Q - Na2SO3
MeOH	R - Na2S2O3
Amchlor	S - H2SO4
Ascorbic Acid	T - TSP Dodecahydrate
e	U - Acetone
I Water	V - MCAA
EDTA	W - pH 4-5
DA	Z - other (specify)
r:	

Special Instructions/Note:

Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.

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: Zach Miller	Date/Time: 10/13/23 17:00	Company: Geosyntec	Received by:	Date/Time: 10/14/23 0925	Company: EPITNE
	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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10/26/2023

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
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Chain of Custody Record

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Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-163871 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS			Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N				
NAFREST-BRP-TS7A	10/13/23	1330	G	Solid	N	N	X												4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS7B	10/13/23	1330	G	Solid	N	N	X												4	
NAFREST-BRP-TS7C	10/13/23	1330	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	
NAFREST-BRP-TS8A	10/13/23	1335	G	Solid	N	N	X												4	
NAFREST-BRP-TS8B	10/13/23	1335	G	Solid	N	N	X												4	
NAFREST-BRP-TS8C	10/13/23	1335	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	
NAFREST-BRP-TSDUP2A	10/13/23	-	G	Solid	N	N	X												4	
NAFREST-BRP-TSDUP2B	10/13/23	-	G	Solid	N	N	X												4	
NAFREST-BRP-TSDUP2C	10/13/23	-	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	

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
1	Zach Miller	10/13/23 17:00	Geosyntec		10/14/23 0940	Eurofins
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 5.2

Ver: 01/16/2019

Eurofins 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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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-497715.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: David.Dunlap@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - New York		Job #: 180-163871-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/24/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Former Sperry Remington-Imported Fill	Project #: 18013464			
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, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	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)	6010D/3050B As,Ba,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,ZnLanca	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
NAFREST-BRP-TS7C (180-163871-3)	10/13/23	13:30 Eastern		Solid			X	1	
NAFREST-BRP-TS8C (180-163871-6)	10/13/23	13:35 Eastern		Solid			X	1	
NAFREST-BRP-TSDUP2C (180-163871-9)	10/13/23	Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
[signature]	10-17-23 1700	EPittwe			
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 10/18/23 09:35	Company: EUST

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R:5.2, 4.4 C:4.8, 4.0

Ver: 06/08/2021

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Sacramento Sample Receiving Notes (SSRN)

Job _ 180-163871 Field Sheet ___

Tracking # 7736 7539 7180

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal Cooler Custody Seal Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm ID CR2 Corr Factor (+ / -) _____ °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal Seal

Cooler ID _____

Temp Observed 5.2 °C Corrected 5.2 °C

From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials MN Date 10/14/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☑	☐	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials MN Date 10/14/23

Notes _____

Trizma Lot #(s) _____

Ammonium Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☐	☐	☑

Initials MN Date 10/14/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-163871-1

Login Number: 163871
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-163871-1

Login Number: 163871
List Number: 3
Creator: McBeth, Jessica

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/18/23 02:29 PM

Question	Answer	Comment
The cooler's custody seal is 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 acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Aron Krasnopoler
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 10/24/2023 8:36:46 AM

JOB DESCRIPTION

Former Sperry Remington-Imported Fill

JOB NUMBER

180-163871-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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10/24/2023 8:36:46 AM

Authorized for release by
David Dunlap, Senior Project Manager
David.Dunlap@et.eurofinsus.com
(412)963-2432

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Job ID: 180-163871-2

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-163871-2

Receipt
The samples were received on 10/14/2023 at the Eurofins Pittsburgh, PA and Sacramento, CA laboratories; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.9º C, 5.2º C and 5.7º C.

LCMS
Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits for the following samples: NAFREST-BRP-TS7C (180-163871-3), NAFREST-BRP-TS8C (180-163871-6), and NAFREST-BRP-TSDUP2C (180-163871-9). The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte:

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

Definitions/Glossary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-24
California	State	2897	01-22-24
Colorado	State	CA00044	08-31-24
Florida	NELAP	E87570	06-30-24
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-23
Louisiana (All)	NELAP	01944	06-30-24
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-24
Nevada	State	CA00044	07-31-24
New Hampshire	NELAP	2997	04-18-24
New Jersey	NELAP	CA005	06-30-24
New York	NELAP	11666	04-01-24
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-23-17	05-31-24
US Fish & Wildlife	US Federal Programs	58448	04-30-24
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-29-24
Virginia	NELAP	460278	03-14-24
Washington	State	C581	05-05-24
West Virginia (DW)	State	9930C	12-31-23
Wisconsin	State	998204680	08-31-24
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-163871-3	NAFREST-BRP-TS7C	Solid	10/13/23 13:30	10/14/23 09:25
180-163871-6	NAFREST-BRP-TS8C	Solid	10/13/23 13:35	10/14/23 09:25
180-163871-9	NAFREST-BRP-TSDUP2C	Solid	10/13/23 00:00	10/14/23 09:25

Method Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.13 g	10.0 mL	713362	10/15/23 19:45	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	714822	10/22/23 07:46	S1C	EET SAC
	Instrument ID: A23									

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.42 g	10.0 mL	713362	10/15/23 19:45	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	714822	10/22/23 07:57	S1C	EET SAC
	Instrument ID: A23									

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.39 g	10.0 mL	713362	10/15/23 19:45	PV	EET SAC
Total/NA	Analysis	537 (modified)		1	1 mL	1 mL	714822	10/22/23 08:08	S1C	EET SAC
	Instrument ID: A23									

Laboratory References:
EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Analyst References:
Lab: EET SAC
Batch Type: Prep
PV = Pheng Vue
Batch Type: Analysis
S1C = Sudarat Chanprathad

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS7C
Lab Sample ID: 180-163871-3
Date Collected: 10/13/23 13:30
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 80.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.20**	**J**	0.24	0.056	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluoropentanoic acid (PFPeA)	**0.34**		0.24	0.050	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorohexanoic acid (PFHxA)	**0.79**		0.24	0.038	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluoroheptanoic acid (PFHpA)	**0.15**	**J**	0.24	0.046	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorooctanoic acid (PFOA)	**0.48**		0.24	0.064	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorononanoic acid (PFNA)	**0.12**	**J**	0.24	0.027	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorodecanoic acid (PFDA)	**0.14**	**J**	0.24	0.058	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluoroundecanoic acid (PFUnA)	**0.051**	**J**	0.24	0.051	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorododecanoic acid (PFDoA)	**0.042**	**J**	0.24	0.036	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorotridecanoic acid (PFTriA)	ND		0.24	0.026	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.045	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorobutanesulfonic acid (PFBS)	**0.051**	**J I**	0.24	0.046	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.035	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.060	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorooctanesulfonic acid (PFOS)	**1.2**	**I**	0.24	0.052	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorodecanesulfonic acid (PFDS)	**0.070**	**J**	0.24	0.063	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
Perfluorooctanesulfonamide (FOSA)	ND		0.24	0.040	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.24	0.028	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.24	0.058	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
6:2 FTS	ND		0.24	0.033	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1
8:2 FTS	ND		0.24	0.043	ug/Kg	☼	10/15/23 19:45	10/22/23 07:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*70*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C5 PFPeA	*59*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C2 PFHxA	*81*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C4 PFHpA	*83*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C4 PFOA	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C5 PFNA	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C2 PFDA	*74*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C2 PFUnA	*80*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C2 PFDoA	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C3 PFBS	*70*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
18O2 PFHxS	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C4 PFOS	*75*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
13C8 FOSA	*79*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
d3-NMeFOSAA	*83*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
d5-NEtFOSAA	*105*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
M2-6:2 FTS	*91*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*
M2-8:2 FTS	*87*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:46*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TS8C
Lab Sample ID: 180-163871-6
Date Collected: 10/13/23 13:35
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.23**		0.23	0.052	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluoropentanoic acid (PFPeA)	**0.36**		0.23	0.046	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorohexanoic acid (PFHxA)	**0.50**		0.23	0.035	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluoroheptanoic acid (PFHpA)	**0.13**	**J**	0.23	0.043	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorooctanoic acid (PFOA)	**0.46**		0.23	0.060	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorononanoic acid (PFNA)	**0.12**	**J**	0.23	0.025	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorodecanoic acid (PFDA)	**0.12**	**J**	0.23	0.054	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluoroundecanoic acid (PFUnA)	**0.048**	**J**	0.23	0.047	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorododecanoic acid (PFDoA)	**0.038**	**J**	0.23	0.034	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.024	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.042	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorobutanesulfonic acid (PFBS)	**0.047**	**J**	0.23	0.043	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.055	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorooctanesulfonic acid (PFOS)	**1.1**	**I**	0.23	0.048	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.059	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.037	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.026	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.054	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
6:2 FTS	ND		0.23	0.030	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1
8:2 FTS	ND		0.23	0.039	ug/Kg	☼	10/15/23 19:45	10/22/23 07:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*68*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C5 PFPeA	*58*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C2 PFHxA	*81*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C4 PFHpA	*79*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C4 PFOA	*77*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C5 PFNA	*76*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C2 PFDA	*74*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C2 PFUnA	*76*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C2 PFDoA	*76*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C2 PFTeDA	*71*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C3 PFBS	*69*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
18O2 PFHxS	*77*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C4 PFOS	*75*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
13C8 FOSA	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
d3-NMeFOSAA	*87*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
d5-NEtFOSAA	*99*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
M2-6:2 FTS	*85*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*
M2-8:2 FTS	*94*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:57*	*1*

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

Client Sample ID: NAFREST-BRP-TSDUP2C
Lab Sample ID: 180-163871-9
Date Collected: 10/13/23 00:00
Matrix: Solid
Date Received: 10/14/23 09:25
Percent Solids: 81.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.19**	**J**	0.23	0.053	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluoropentanoic acid (PFPeA)	**0.25**		0.23	0.047	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorohexanoic acid (PFHxA)	**0.51**		0.23	0.036	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluoroheptanoic acid (PFHpA)	**0.11**	**J**	0.23	0.044	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorooctanoic acid (PFOA)	**0.41**		0.23	0.061	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorononanoic acid (PFNA)	**0.11**	**J**	0.23	0.025	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorodecanoic acid (PFDA)	**0.11**	**J**	0.23	0.055	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluoroundecanoic acid (PFUnA)	**0.048**	**J**	0.23	0.048	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorododecanoic acid (PFDoA)	**0.050**	**J**	0.23	0.034	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorotridecanoic acid (PFTriA)	**0.025**	**J**	0.23	0.024	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.042	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorobutanesulfonic acid (PFBS)	**0.045**	**J**	0.23	0.044	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.033	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.056	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorooctanesulfonic acid (PFOS)	**1.0**	**I**	0.23	0.049	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.060	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
Perfluorooctanesulfonamide (FOSA)	ND		0.23	0.038	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.23	0.026	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.23	0.055	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
6:2 FTS	ND		0.23	0.031	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1
8:2 FTS	ND		0.23	0.040	ug/Kg	☼	10/15/23 19:45	10/22/23 08:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*61*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C5 PFPeA	*55*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C2 PFHxA	*74*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C4 PFHpA	*72*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C4 PFOA	*76*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C5 PFNA	*72*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C2 PFDA	*74*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C2 PFUnA	*75*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C2 PFDoA	*71*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C2 PFTeDA	*66*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C3 PFBS	*64*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
18O2 PFHxS	*75*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C4 PFOS	*72*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
13C8 FOSA	*80*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
d3-NMeFOSAA	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
d5-NEtFOSAA	*92*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
M2-6:2 FTS	*82*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*
M2-8:2 FTS	*94*		*25 - 150*	*10/15/23 19:45*	*10/22/23 08:08*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-713362/1-A
Matrix: Solid
Analysis Batch: 714822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 713362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.20	0.046	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.041	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.031	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.038	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.053	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.022	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.048	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.042	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.030	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.021	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.037	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.038	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.029	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.049	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.043	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.052	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
Perfluorooctanesulfonamide (FOSA)	ND		0.20	0.033	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.023	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.048	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
6:2 FTS	ND		0.20	0.027	ug/Kg		10/15/23 19:45	10/22/23 07:12	1
8:2 FTS	ND		0.20	0.035	ug/Kg		10/15/23 19:45	10/22/23 07:12	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C5 PFPeA	*67*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C2 PFHxA	*83*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C4 PFHpA	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C4 PFOA	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C5 PFNA	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C2 PFDA	*83*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C2 PFUnA	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C2 PFDoA	*83*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C2 PFTeDA	*76*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C3 PFBS	*78*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
18O2 PFHxS	*84*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C4 PFOS	*79*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
13C8 FOSA	*87*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
d3-NMeFOSAA	*107*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
d5-NEtFOSAA	*116*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
M2-6:2 FTS	*103*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*
M2-8:2 FTS	*105*		*25 - 150*	*10/15/23 19:45*	*10/22/23 07:12*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-713362/2-A
Matrix: Solid
Analysis Batch: 714822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 713362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.82		ug/Kg		91	76 - 136
Perfluoropentanoic acid (PFPeA)	2.00	1.83		ug/Kg		91	69 - 129
Perfluorohexanoic acid (PFHxA)	2.00	1.96		ug/Kg		98	71 - 131
Perfluoroheptanoic acid (PFHpA)	2.00	1.89		ug/Kg		95	71 - 131
Perfluorooctanoic acid (PFOA)	2.00	2.04		ug/Kg		102	72 - 132
Perfluorononanoic acid (PFNA)	2.00	2.05		ug/Kg		103	73 - 133
Perfluorodecanoic acid (PFDA)	2.00	1.95		ug/Kg		98	72 - 132
Perfluoroundecanoic acid (PFUnA)	2.00	2.02		ug/Kg		101	66 - 126
Perfluorododecanoic acid (PFDoA)	2.00	2.03		ug/Kg		102	71 - 131
Perfluorotridecanoic acid (PFTriA)	2.00	1.99		ug/Kg		99	71 - 131
Perfluorotetradecanoic acid (PFTeA)	2.00	1.94		ug/Kg		97	67 - 127
Perfluorobutanesulfonic acid (PFBS)	1.78	1.87		ug/Kg		105	69 - 129
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.74		ug/Kg		96	62 - 122
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.85		ug/Kg		97	76 - 136
Perfluorooctanesulfonic acid (PFOS)	1.86	1.79		ug/Kg		96	68 - 141
Perfluorodecanesulfonic acid (PFDS)	1.93	1.96		ug/Kg		102	71 - 131
Perfluorooctanesulfonamide (FOSA)	2.00	2.01		ug/Kg		100	77 - 137
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.74		ug/Kg		87	72 - 132
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.89		ug/Kg		95	72 - 132
6:2 FTS	1.90	1.88		ug/Kg		99	73 - 139
8:2 FTS	1.92	1.72		ug/Kg		90	75 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*73*		*25 - 150*
13C5 PFPeA	*67*		*25 - 150*
13C2 PFHxA	*86*		*25 - 150*
13C4 PFHpA	*90*		*25 - 150*
13C4 PFOA	*85*		*25 - 150*
13C5 PFNA	*84*		*25 - 150*
13C2 PFDA	*82*		*25 - 150*
13C2 PFUnA	*83*		*25 - 150*
13C2 PFDoA	*79*		*25 - 150*
13C2 PFTeDA	*76*		*25 - 150*
13C3 PFBS	*76*		*25 - 150*
18O2 PFHxS	*82*		*25 - 150*
13C4 PFOS	*83*		*25 - 150*
13C8 FOSA	*89*		*25 - 150*
d3-NMeFOSAA	*105*		*25 - 150*
d5-NEtFOSAA	*105*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-713362/2-A
Matrix: Solid
Analysis Batch: 714822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 713362

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	97		25 - 150
M2-8:2 FTS	104		25 - 150

Lab Sample ID: LCSD 320-713362/3-A
Matrix: Solid
Analysis Batch: 714822

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 713362

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			2.00	1.74		ug/Kg		87	76 - 136	5	30
Perfluoropentanoic acid (PFPeA)			2.00	2.02		ug/Kg		101	69 - 129	10	30
Perfluorohexanoic acid (PFHxA)			2.00	1.95		ug/Kg		97	71 - 131	1	30
Perfluoroheptanoic acid (PFHpA)			2.00	2.01		ug/Kg		100	71 - 131	6	30
Perfluorooctanoic acid (PFOA)			2.00	2.00		ug/Kg		100	72 - 132	2	30
Perfluorononanoic acid (PFNA)			2.00	2.07		ug/Kg		103	73 - 133	1	30
Perfluorodecanoic acid (PFDA)			2.00	2.06		ug/Kg		103	72 - 132	5	30
Perfluoroundecanoic acid (PFUnA)			2.00	1.96		ug/Kg		98	66 - 126	3	30
Perfluorododecanoic acid (PFDoA)			2.00	2.06		ug/Kg		103	71 - 131	2	30
Perfluorotridecanoic acid (PFTriA)			2.00	1.97		ug/Kg		99	71 - 131	1	30
Perfluorotetradecanoic acid (PFTeA)			2.00	2.06		ug/Kg		103	67 - 127	6	30
Perfluorobutanesulfonic acid (PFBS)			1.78	1.88		ug/Kg		106	69 - 129	0	30
Perfluorohexanesulfonic acid (PFHxS)			1.82	1.66		ug/Kg		91	62 - 122	5	30
Perfluoroheptanesulfonic acid (PFHpS)			1.91	1.88		ug/Kg		99	76 - 136	2	30
Perfluorooctanesulfonic acid (PFOS)			1.86	1.82		ug/Kg		98	68 - 141	2	30
Perfluorodecanesulfonic acid (PFDS)			1.93	1.99		ug/Kg		103	71 - 131	1	30
Perfluorooctanesulfonamide (FOSA)			2.00	1.96		ug/Kg		98	77 - 137	3	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			2.00	1.87		ug/Kg		93	72 - 132	7	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			2.00	2.02		ug/Kg		101	72 - 132	6	30
6:2 FTS			1.90	1.82		ug/Kg		95	73 - 139	3	30
8:2 FTS			1.92	1.77		ug/Kg		92	75 - 135	2	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C4 PFBA	27		25 - 150
13C5 PFPeA	65		25 - 150
13C2 PFHxA	87		25 - 150
13C4 PFHpA	85		25 - 150
13C4 PFOA	83		25 - 150
13C5 PFNA	81		25 - 150
13C2 PFDA	81		25 - 150
13C2 PFUnA	86		25 - 150
13C2 PFDoA	83		25 - 150

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-713362/3-A
Matrix: Solid
Analysis Batch: 714822

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 713362

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C2 PFTeDA	82		25 - 150
13C3 PFBS	76		25 - 150
18O2 PFHxS	86		25 - 150
13C4 PFOS	83		25 - 150
13C8 FOSA	90		25 - 150
d3-NMeFOSAA	111		25 - 150
d5-NEtFOSAA	111		25 - 150
M2-6:2 FTS	101		25 - 150
M2-8:2 FTS	97		25 - 150

QC Association Summary

Client: Geosyntec Consultants Inc
Job ID: 180-163871-2
Project/Site: Former Sperry Remington-Imported Fill

LCMS

Prep Batch: 713362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	SHAKE	
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	SHAKE	
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	SHAKE	
MB 320-713362/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-713362/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
LCSD 320-713362/3-A	Lab Control Sample Dup	Total/NA	Solid	SHAKE	

Analysis Batch: 714822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-163871-3	NAFREST-BRP-TS7C	Total/NA	Solid	537 (modified)	713362
180-163871-6	NAFREST-BRP-TS8C	Total/NA	Solid	537 (modified)	713362
180-163871-9	NAFREST-BRP-TSDUP2C	Total/NA	Solid	537 (modified)	713362
MB 320-713362/1-A	Method Blank	Total/NA	Solid	537 (modified)	713362
LCS 320-713362/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	713362
LCSD 320-713362/3-A	Lab Control Sample Dup	Total/NA	Solid	537 (modified)	713362

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

Chain of Custody Record

TOPSOIL

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Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044	PO #: MN0832			
Phone:	WO#:			
Email: akrasnopoler@geosyntec.com	Project #: 18013464			
Project Name: Former Sperry Remington Site-	SSOW#:			
Site:				

Analysis Requested

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)	8280C - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS				Total Number of containers
Preservation Code:					X	X	FJ	N	N	N	N	N	N	N	N	N				
NAFREST-BRP-TS7A	10/13/23	1330	G	Solid	N	N	X													4
NAFREST-BRP-TS7B	10/13/23	1330	G	Solid	N	N	X													4
NAFREST-BRP-TS7C	10/13/23	1330	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7
NAFREST-BRP-TS8A	10/13/23	1335	G	Solid	N	N	X													4
NAFREST-BRP-TS8B	10/13/23	1335	G	Solid	N	N	X													4
NAFREST-BRP-TS8C	10/13/23	1335	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7
NAFREST-BRP-TSDUP2A	10/13/23	-	G	Solid	N	N	X													4
NAFREST-BRP-TSDUP2B	10/13/23	-	G	Solid	N	N	X													4
NAFREST-BRP-TSDUP2C	10/13/23	-	C	Solid	N	N		X	X	X	X	X	X	X	X	X				7

180-163871 Chain of Custody

Preservation Codes:

HCL	M - Hexane
NaOH	N - None
Zn Acetate	O - AsNaO2
Nitric Acid	P - Na2O4S
NaHSO4	Q - Na2SO3
MeOH	R - Na2S2O3
Amchlor	S - H2SO4
Ascorbic Acid	T - TSP Dodecahydrate
e	U - Acetone
I Water	V - MCAA
EDTA	W - pH 4-5
DA	Z - other (specify)
r:	

Special Instructions/Note:

Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.

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: Zach Miller	Date/Time: 10/13/23 17:00	Company: Geosyntec	Received by:	Date/Time: 10/14/23 0925	Company: EPITNE
	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

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10/24/2023

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

Chain of Custody Record

TOPSOIL

eurofins | Environment Testing TestAmerica

Client Information	Sampler: Z Miller	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-45857-9656.1
Client Contact: Mr. Aron Krasnopoler	Phone: 708-248-3888	E-Mail: david.dunlap@testamericainc.com		Page: Page 1 of 1
Company: Geosyntec Consultants, Inc.				Job #:
Address: 10211 Wincopin Circle 4th Floor	Due Date Requested:			
City: Columbia	TAT Requested (days): 7-DAY			
State, Zip: MD, 21044				
Phone:	PO #: MN0832			
Email: akrasnopoler@geosyntec.com	WO #:			
Project Name: Former Sperry Remington Site-	Project #: 18013464			
Site:	SSOW#:			

Analysis Requested

180-163871 Chain of Custody

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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 - DER-10 VOA (terracore)	8270D_LL - DER-10 SVOC	8081B - DER-10 Pesticides	8082A - DER-10 PCBs	8151A - DER-10 Herbicides	6010C, 7471B - DER-10 Metals	9014 - Cyanide	7196A - Hexavalent Chromium	537.1 (mod.) - PFAS	SPLP-E, 537.1 (mod.) - PFAS			Total Number of containers	Special Instructions/Note:
			Preservation Code:				FJ	N	N	N	N	N	N	N	N	N				
NAFREST-BRP-TS7A	10/13/23	1330	G	Solid	N	N	X												4	Containers for PFAS sent directly to Eurofins Sacramento. Pittsburgh will log all samples/analyses.
NAFREST-BRP-TS7B	10/13/23	1330	G	Solid	N	N	X												4	
NAFREST-BRP-TS7C	10/13/23	1330	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	
NAFREST-BRP-TS8A	10/13/23	1335	G	Solid	N	N	X												4	
NAFREST-BRP-TS8B	10/13/23	1335	G	Solid	N	N	X												4	
NAFREST-BRP-TS8C	10/13/23	1335	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	
NAFREST-BRP-TSDUP2A	10/13/23	-	G	Solid	N	N	X												4	
NAFREST-BRP-TSDUP2B	10/13/23	-	G	Solid	N	N	X												4	
NAFREST-BRP-TSDUP2C	10/13/23	-	C	Solid	N	N		X	X	X	X	X	X	X	X	X			7	

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
1	Zach Miller	10/13/23 17:00	Geosyntec		10/14/23 0940	Eurofins
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☑ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 5.2

Ver: 01/16/2019

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Dunlap, David A	Carrier Tracking No(s):	COC No: 180-497715.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: David.Dunlap@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - New York		Job #: 180-163871-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/24/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Former Sperry Remington-Imported Fill	Project #: 18013464			
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, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	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)	6010D/3050B As,Ba,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,ZnLanca	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
NAFREST-BRP-TS7C (180-163871-3)	10/13/23	13:30 Eastern		Solid			X	1	
NAFREST-BRP-TS8C (180-163871-6)	10/13/23	13:35 Eastern		Solid			X	1	
NAFREST-BRP-TSDUP2C (180-163871-9)	10/13/23	Eastern		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***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) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
[signature]	10-17-23 1700	EPittwe			
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 10/18/23 09:35	Company: EUST

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R:5.2, 4.4 C:4.8, 4.0

Ver: 06/08/2021

eurofins | Environment Testing

Sacramento Sample Receiving Notes (SSRN)

Job _ 180-163871 Field Sheet ___

Tracking # 7736 7539 7180

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal Cooler Custody Seal Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm ID CR2 Corr Factor (+ / -) _____ °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal Seal

Cooler ID _____

Temp Observed 5.2 °C Corrected 5.2 °C

From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials MN Date 10/14/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☑	☐	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials MN Date 10/14/23

Notes _____

Trizma Lot #(s) _____

Ammonium Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☐	☐	☑

Initials MN Date 10/14/23

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-163871-2

Login Number: 163871
List Number: 1
Creator: Dunlap, David A

List Source: Eurofins 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	

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-163871-2

Login Number: 163871
List Number: 2
Creator: Medeiros, Ryan M

List Source: Eurofins Sacramento
List Creation: 10/14/23 02:31 PM

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	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
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	5.2 C
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.	N/A	
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	